



Mussel rafts in the ría de Vigo

The Project

Operational oceanography of the Atlantic coast of the Iberian Peninsula is obviously a problem that transcends frontiers. The Ocean Observatory will strengthen the observational infrastructure along the Iberian margin of the Euro-region, Galicia-Northern Portugal, in order to obtain continuous meteorological, oceanographic and biological data, complemented by predictive models. The Observatory will benefit from the establishment of a unified management model. The operational nature of the institutes involved will guarantee the future sustainability of the observatory as well as the availability of data and models to all the other participants, present and future, and to the end users.

Participants

- ▷ Consellería de Medio Ambiente, Territorio e Infraestructuras (MeteoGalicia)
- ▷ Instituto Tecnolóxico para o control do Medio Mariño de Galicia (INTECMAR)
- ▷ Instituto Español de Oceanografía (IEO)
- ▷ Instituto de Investigacións Mariñas (CSI-IIM)
- ▷ Centro Tecnológico del Mar (CETMAR)
- ▷ Grupo de Oceanografía Física da Universidade de Vigo (GOFUVI)
- ▷ Centro Interdisciplinar de Investigación Marinha e Ambiental (CIIMAR)
- ▷ Instituto de Engenharia de Sistemas e Computadores do Porto (INESCP)
- ▷ Instituto de Engenharia Mecânica e Gestão Industrial (INEGI)
- ▷ Faculdade de Engenharia da Universidade do Porto (FEUP)
- ▷ Instituto Hidrográfico (IH)
- ▷ Universidade de Aveiro (UA)
- ▷ Faculdade de Ciências da Universidade do Porto (FCUP)

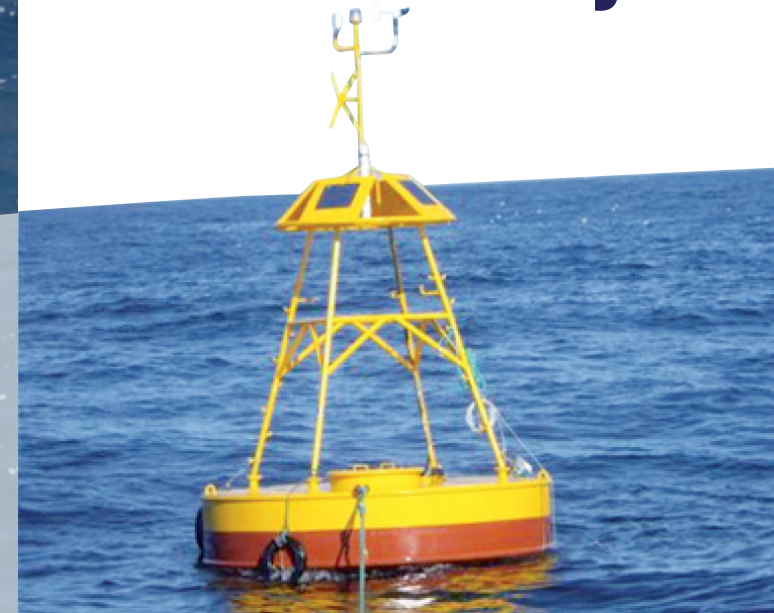
Coordination

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Iberian Margin Ocean Observatory



www.observatorioraia.org



Introduction

The principal objective of the project is the development of an ocean observatory made up of a cross-frontier infrastructure of ocean observation and by an extensive network of operational oceanography based on the monitoring and prediction of the ocean environment through the use of numerical models and the construction and development of new oceanographic-meteorological platforms.

The project has a clear goal of structurization in regard to the consolidation of operational oceanography of the Iberian Margin given the economic importance of the activities developed in these zones (maritime transport, leisure, fishing, marine accidents, etc.), which will benefit and be strengthened through the information, services and products provided by the observatory.

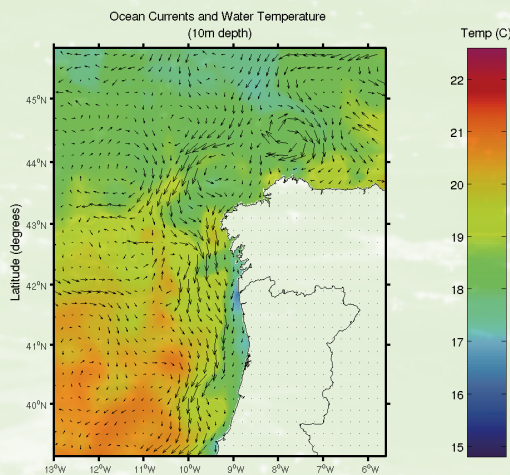
The consolidation of this infrastructure dedicated to the observation of the marine environment will place Galicia and Northern Portugal amongst the leading regions of the world in respect of the level of monitoring and modelling of the coastal zone.



Marine observation grid (green: present grid; red: to be implemented during RAIA)

Objectives

- ▷ Development of new technologies that will allow construction, completion and consolidation of cross-frontier ocean observation
- ▷ Adapt and validate operational ocean models that reproduce the regional ocean dynamics,
- ▷ Establish a platform of cross-frontier interoperability for the management and distribution of the data.
- ▷ Develop a management model for the cross-frontier ocean observatory.
- ▷ Develop and implement a wide range of products for the end users (current and mixing predictions, spill propagation models, larval dispersion models, sea state prediction, water quality forecasting etc.)

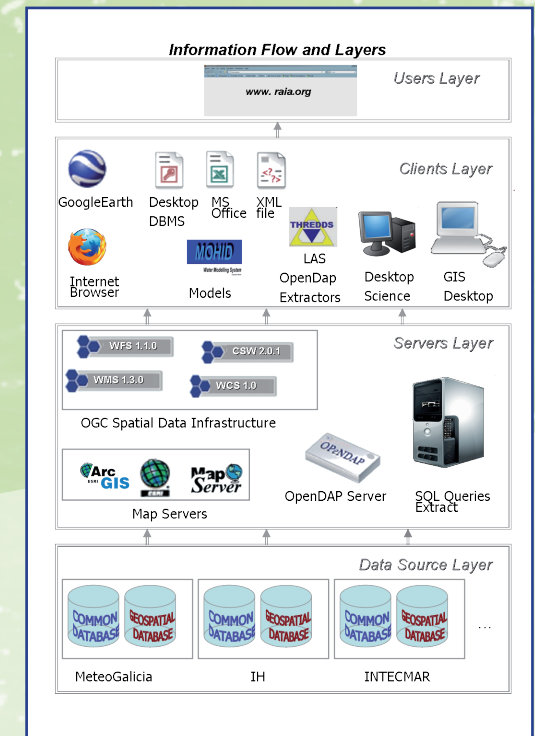


Hydrodynamic model - surface temperature and currents.

Results

It is intended to achieve the consolidation of a marine observatory in which both operational institutes and end users will participate to ensure the long term continuity of the system and to improve the trans-national organization and coordination of operational oceanography.

The improved knowledge of the marine environment in the cross-frontier region of Galicia and Northern Portugal will have a positive impact in environmental, economic and scientific areas such as maritime safety, the inter-tidal zone, the quality of coastal waters, conservation of the coast, and so on.



Information transfer scheme