



IBIROOS

A banner image for IBI-ROOS featuring a satellite in orbit, a yellow buoy, and a research vessel on the right. The text 'IBI-ROOS' is in large orange letters, and 'Iberia-Biscay-Ireland Regional Operational Oceanographic System' is in smaller orange letters below it.

IBI-ROOS

Iberia-Biscay-Ireland Regional Operational Oceanographic System

IBI-ROOS report EuroGOOS Annual meeting BELSPO, Brussels

20th May 2015

Julien Mader, Manuel Ruiz Villarreal (incoming IBI Co-chairs)

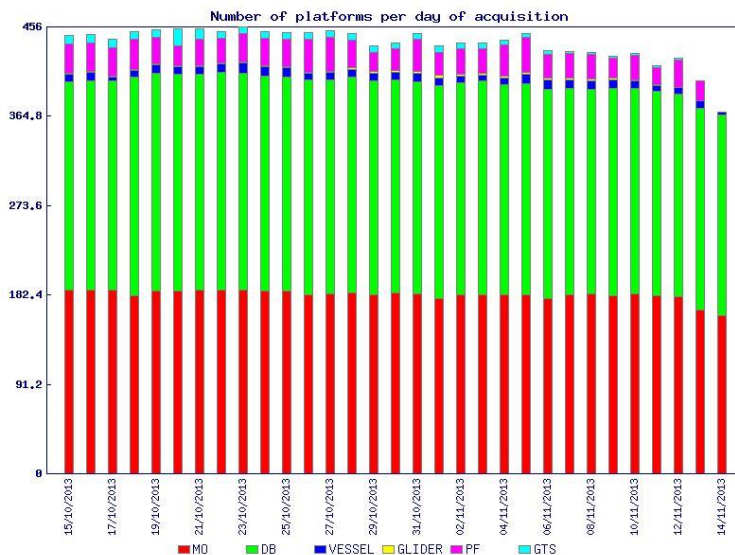
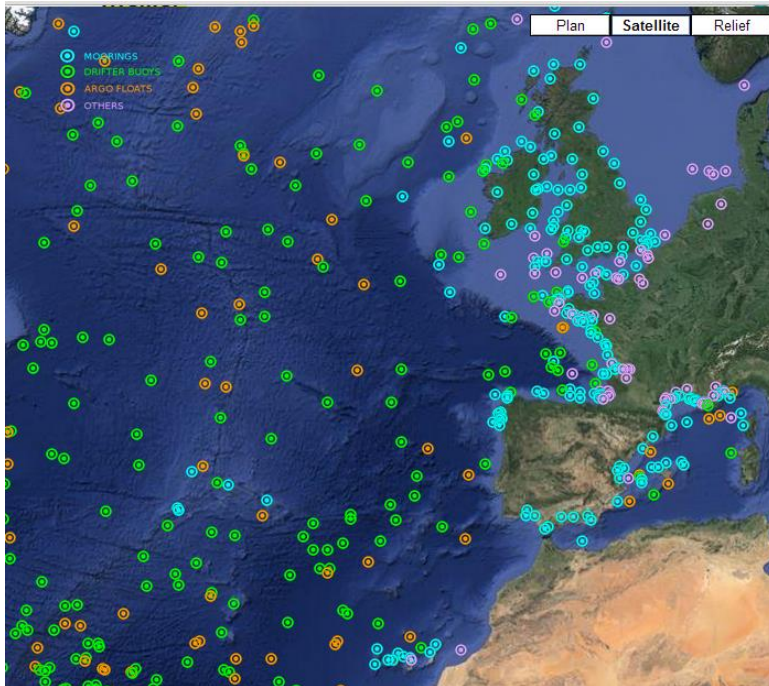
<http://www.ibi-roos.eu>

IBI members

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- **AZTI/Spain**
- **MeteoGalicia / Spain**
- **Euskalmet-Basque Meteorological Agency / Spain**
- **IEO / Spain**
- **Ifremer /France**
- **Instituto Hidrografico /Portugal**
- **INTECMAR/ Spain**
- **IPIMAR / Portugal**
- **Irish Marine Institute/ Ireland**
- **IST / Portugal**
- **Mercator-Ocean/France**
- **SHOM/ France**
- **Météo-France/ France**
- **CNRS France**
- **Puertos Del Estado/Spain**
- **NERC / UK**
- **CETMEF/France**
- **MetOffice / UK**
- **Universidade dos Açores, Portugal**

- **Potential members**
- **Centre for Environment, Fisheries & Aquaculture Science (CEFAS)/UK**
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Real Time access to In situ observing systems in the IBI-ROOS region



- 19 partners cooperate for the provision of operational Oceanography services
- A total number of 456 platforms is presently reporting to the IBI-ROOS region Real-time data delivery system
- Multiplatform real time observing system that is composed mainly by Drifters, Tidal gauges/Moorings and Argo observations.
- But also 9 Vessels delivering data in real time mode. 2 Ferryboxes, Gliders, Fishing vessels, 7 HF radar systems.

IBIROOS Explorer

The screenshot displays the IBI-ROOS Explorer web interface. At the top, there are logos for the European Global Ocean Observing System and various national meteorological and oceanographic centers, including Ifremer, METEO GALICIA, euskalmet, azti, Marine Institute, METEO FRANCE, and the National Oceanography Centre. The main content area features a satellite map of the Mediterranean Sea and surrounding landmasses. A text overlay in the center of the map reads: "Simultaneous access to forecast, real time and historical data. Information can be mixed." To the right of the map is a sidebar with three data selection sections: "Forecast Data", "Real Time Data", and "Historical Data". Each section contains a list of parameters with checkboxes, such as Waves, Sea Level, Water Temperature, Wind, Currents, Air Pressure, Air Temperature, and Salinity. The "Forecast Data" section is circled in red. At the bottom of the interface, there are logos for the Spanish Government (GOBIERNO DE ESPAÑA) and the Ministry of Development (MINISTERIO DE FOMENTO), along with a copyright notice for Imagery ©2013 NASA, TerraMetrics - Terms of Use.

Simultaneous access to forecast,
real time and historical data.
Information can be mixed.

- Forecast Data
 - Waves Atlantic
 - Sea Level
 - Water Temperature
 - Wind
 - Currents
 - Salinity
- Real Time Data
 - Waves
 - Wind
 - Water Temperature
 - Currents
 - Sea Level
 - Air Pressure
 - Air Temperature
 - Salinity
- Historical Data
 - Waves
 - Wind
 - Water Temperature
 - Sea level
 - Currents
 - Salinity

Status of regional and coastal ocean analysis and forecasting oceanography systems including interfaces with Copernicus Marine Service.

- Many of the IBI partners have a **well developed modeling and forecasting system**. Links exist between such systems and the Copernicus Marine Service but should be reinforced in the future.
- ROOSs and EuroGOOS, through the working groups (Science advisory and/or Coastal modelling), also Scientific Technical Advisory Committee of Copernicus?, should play a role to reinforce a coordinated **feedback from the intermediate users to the Copernicus Marine Service**.
- There was a common view that **model intercomparison** in the IBI region especially at **coastal scales** should be promoted. A possible multi-model ensemble approach was discussed to showcase all of the available models in the IBI region.

Applications and services (observations and models): status and new downstream services.

- The IBI-ROOS community is very active in the development of new applications and services. Of particular note at the recent annual meeting in Galway (April 15th-16th 2015) were:
- New services developed at IST on coupled hydrological, estuarine, coastal ocean modelling.
- Services for aquaculture and fisheries
 - The ASIMUTH HAB forecast and bulletin <http://www.asimuth.eu/en-ie/Pages/default.aspx>
 - Models for carrying capacity, pathogen, offshore aquaculture siting (IMI)

R&D activities from members

- IBI-ROOS have successfully completed several Interreg and EC funded research projects including:
 - EasyCo: focus on biogeochemical modeling <http://www.project-easy.info/>
 - ARCOPOL: focus on oil spill modeling and awareness <http://www.arcopol.eu/home.aspx>
 - ASIMUTH: developed to provide real time HAB bulletins to the Aquaculture industry
<http://www.asimuth.eu/en-ie/Pages/default.aspx>
- There is considerable collaboration at national and cross-regional level including the RAI A observatory project in Galicia/Portugal <http://www.marnaraia.com/> , the Lorea project in Euskadi/Aquitaine, SE Bay of Biscay and the SmartBay project in Ireland www.smartbay.ie .
- IBI-ROOS partners also collaborated on submitting a project on coordination of Atlantic coastal observatories (MyCoast) which was not selected for Interreg funding but which we intend to resubmit (included as Workshop in Atlantic Stakeholders Workshop (2015), Porto)
- IBI-ROOS is involved in FixO3 Fixed Point Open Ocean Observatory network.
- IBI-ROOS will be heavily involved in JERICO Next (September 2015).
- IBI-ROOS will have a number of R&D activities within the AtlantOS project

Contribution to EuroGOOS WGs.

- IBI-ROOS is active in TPWG and EPWG at present. IBI has also attended recent meetings of the SAWG and DATAMEQ. IBI has proposed several new members for the various activities of EuroGOOS including MSFD white paper.

ROOS visibility and dissemination

- Developing the IBI portal (with MyOcean project support) which can be viewed at <http://www.ibiexplorer.eu/>
- IBI-ROOS pilot task in EMODnet Physics for implementing HF Radar data demonstrating a catalogue of data services following OGC standards and interoperable
- Individual member agencies of IBI-ROOS continually promote the activities of their organizations and the IBI-ROOS system

Imminent activities

- New IBI-ROOS plan (2015-2020)
- Work out how to define user requirements in new Copernicus Marine Service (Scientific Technical Advisory Committee of Copernicus??)
- Work on Observing system requirements
- Look for opportunities for coordinating coastal observatories

- IBI Plan:
- **Background 1-2 pages: Manuel**
- Description
- Issues of relevance
- Scientific research and development
- Growth and jobs:11% of Portugal's GDP, Galician Study, (Update table with current figures)
- Good Env. Status: and other policies (IMP, Blue Growth, MSFD, other)
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- EGOOS Model : based on strategy 2014-2020
- **Priorities: Glenn**
- Assist EuroGOOS in defining research priorities
- Influencing initiatives at European level (including call topics)
- Develop relevant services to IBI member states
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- **Foster Cooperation: Glenn**
- Methodology for interaction with EuroGOOS (WG,TT reps at Board meetings)
- Overarching initiatives
- Within IBI Community (missing expertise eg. satellite observations)
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- **Co-production: Sylvie**
- Data Exchange (describe current status and required future evolution)
- Interoperability and harmonisation (OGC, Inspire compliance) all data types
- Sharing best practices
- MSFD
- Multi-model Ensemble (WMS and WFS and future evolution)
- Operational validation (to define model skill)
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- **Sustained Observation: Julien**
- Multiplatform observing system: Combination of MS and EC funding
- Phys (incl. wind and waves) and BGC measurements
- HF radar at strategic points
- Gliders
- FBox (more lines)
- RECOPECA
- RV data in NRT and delayed
- EuroARGO (Bio-Argo)
- Coastal Observatories
- New technologies
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- **Sustainable services (including modelling system): Rodrigo**
- MSFD response
- Emergency response
- Services to aquaculture and fisheries
- Ocean energy
- Tourism and recreation
- Coastal forecasting (cross-cutting) Expert interpretation and Bulletins
- Support to science
- Support to private sector