Development of coastal marine services for tackling coastal risks in the Atlantic Area : the value of regional cooperation, by Manuel Ruiz-Villarreal, Julien Mader and Mycoast partners (AZTI, IEO, INTECMAR, IMI, USC, SHOM, PdE, Ifremer, CEFAS, IST, PML, Marine Scotland, MeteoGalicia, IH)

Abstract (1591 characters)

Operational oceanography relies on cooperative effort towards ocean observing systems providing data and modeling products to support final users in the marine sector. In the last years, the IBIROOS community has demonstrated marine services in different areas through regional cooperation with support of different EU and Interreg projects. The development and demonstration of marine services has been achieved with a high level of member cooperation in the support of the observing system and the dissemination of data and also in the joint development and validation of coastal forecasts.

In the Mycoast project, we have proven that marine services can be jointly developed and demonstrated. Success was based on determination of mature existing tools to select those that could be advanced among partners during the project time. Major efforts were in improving the software for efficient use by different partners and in upgrading it for ingestion of in-situ and model data in standard interoperable OGC services.

Demonstration of the tools in pilot actions showed that Mycoast tools are effective in supporting final users and relocatable among different regions. Pilot demonstrations of tackling coastal risks include: coastal protection (extreme events and flood risk warning tool for municipalities), coastal pollution (mapping tool for marine litter and waste water dispersion), search and rescue and oil spill (with demonstration in real transboundary exercises), harbor operation and marine renewable energy and offshore aquaculture (weather window tool to support operations).