

EMODnet PP: Portugal presence

Sara Almeida, Instituto Hidrográfico (Portugal), sara.almeida@hidrografico.pt

Eric Magalhães, AT (Portugal)

José Aguiar, Instituto Hidrográfico (Portugal)

“The overall objective of EMODnet Physics is to provide access to archived and near real-time data on the physical conditions of European seas and oceans based on observation of the sea, such as wave height and period; temperature of the water column; wind speed and direction; ...sea-level; data from

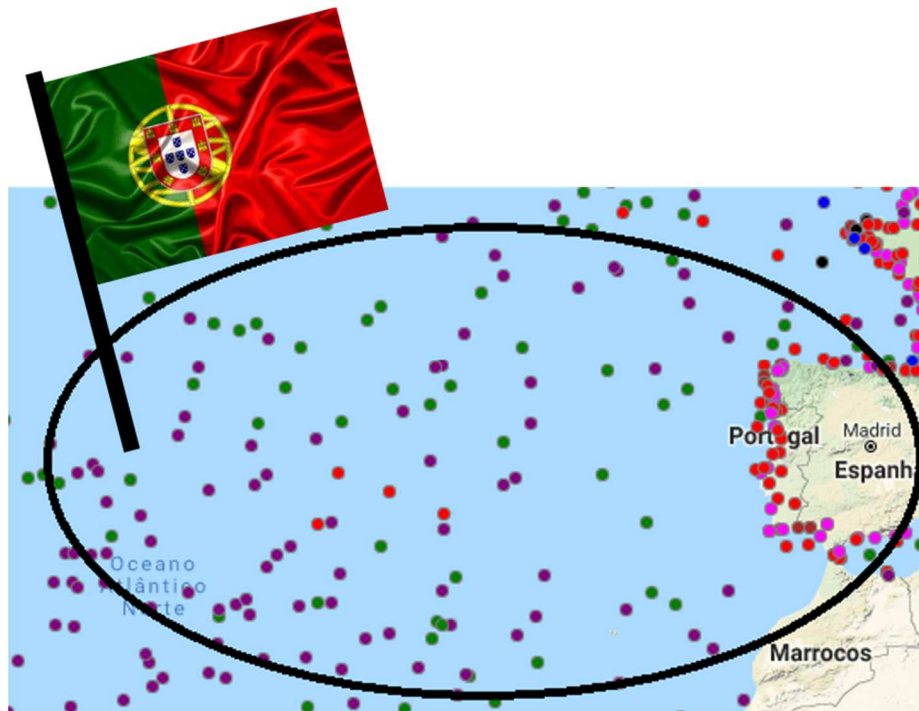


Figure 1: EMODnet PP – data from Portuguese waters

rivers” from the portal, www.emodnet.eu/physics.

Due to the national responsibility of managing the existing observation system network, Hidrografico was present at EMODnet from the launch of the pilot portal for Physical Parameters in 2011. Since then, another three Portuguese entities began contributing to the this general purpose: two Centers from Universities - Azores and Lisbon - and the national environmental agency. This provided access to a wider range of in-situ measurements.

Hidrografico manages a network with a variety of fixed stations with several oceanographic and meteorological monitoring capabilities. The mutiparametric buoys component of the network comprises four platforms installed in deep waters near Leixões, Nazaré (two units) and Faro. They collect data on wave dynamics, sea surface temperature, wind speed and direction, air temperature and atmospheric pressure. Data is collected up to a depth of 2000 m.

Near real time data from five tide gauges, distributed along the continental coast, and from three HF Radar stations measuring of surface currents are made available through the IBIRoos’ Assembly Center (Puertos del Estado) and, subsequently, to the EMODnet portal.

The Center for Climate, Meteorology and Global Change Studies from the University of Azores, contributes with near real time data from waverider buoys with wave parameters and sea surface temperature. They are spread geographically in the North Atlantic Ocean over six islands.

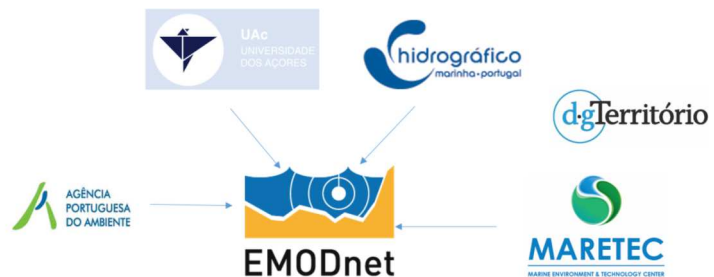


Figure 2: Portuguese data providers

Maretec (Research Centre of IST for Marine, Environment and Technology) from University of Lisbon, assembles and provides data from the river stations, regarding the water flow.

The pertinent point is that data made available to the EMODnet portal follows standard automatic quality control procedures so as to provide marine data that is harmonised consistent. This allows for the interoperability from a variety of sources, which proved to be an added value for the users as a single point of entry allows for a multitude of uses.

Near future

Before the end of 2018, Hidrografico intends to aggregate two new providers, both from Madeira Island. The APRAM (Administração dos Portos da Região Autónoma da Madeira) with wave parameters and sea surface temperature from Madeira buoys and the Oceanic Observatory of Madeira with HF Radar data from two platforms, Calheta and Camara de Lobos.

And from it's own resources, Hidrografico intends to include the HF radar stations, covering the Lisbon area, in the system.

References:

<http://www.emodnet-physics.eu/portal/>

<http://www.uac.pt/>

<http://www.maretec.org>

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