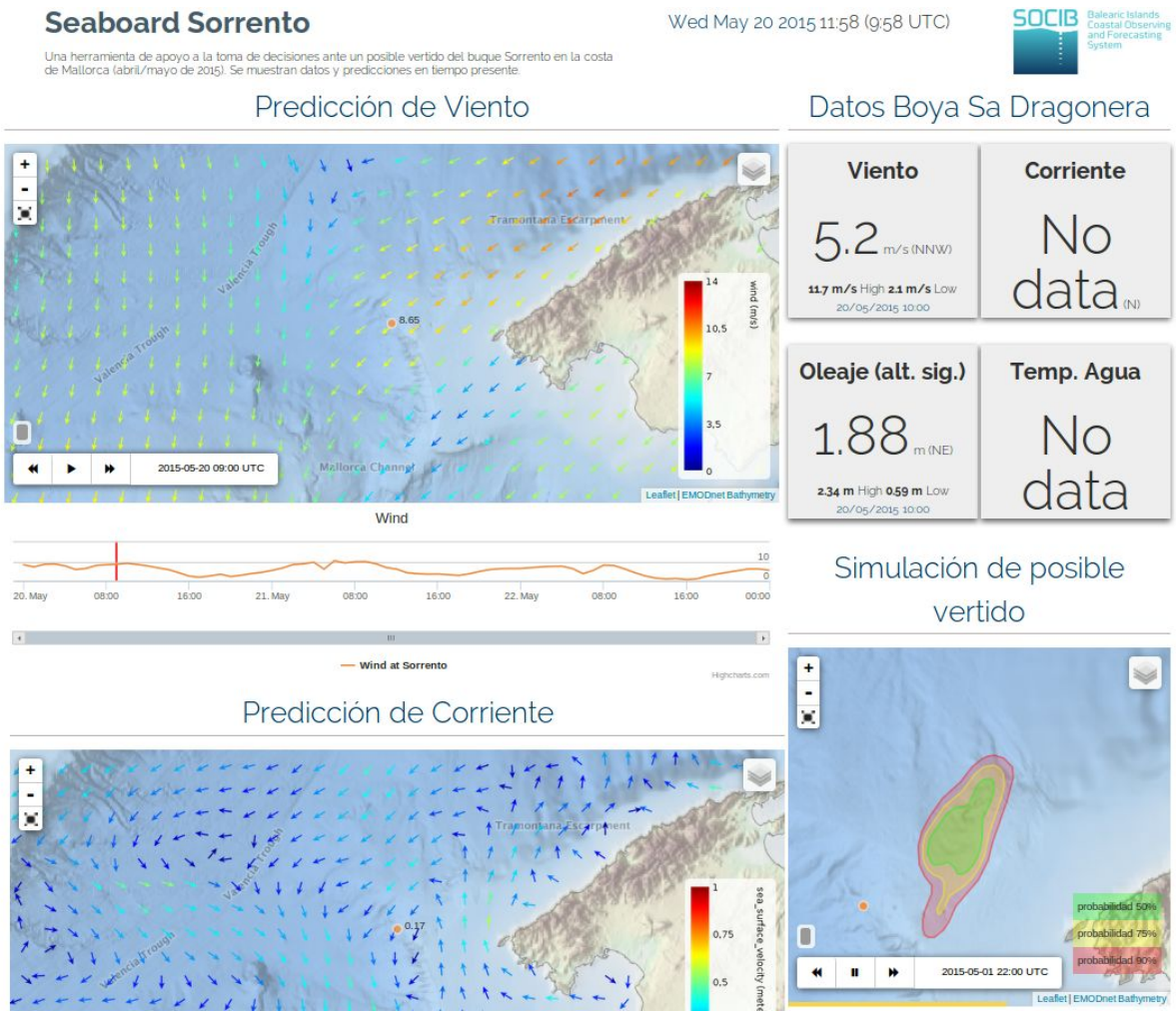
"Seaboard Sorrento" a support decision-making tool for the Sorrento vessel accident in Mallorca

August 2015

Description

On April 28, 2015, a fire broke out on a ferry sailing from Palma de Mallorca to Valencia. The ferry was at about 20 nautical miles off the coast of Palma de Mallorca. More than 150 passengers and the crew were quickly evacuated.

Following the emergency situation and fearing a possible spill, SOCIB together with researchers from the IMEDEA (CSIC-UIB) and in collaboration with Puertos del Estado, has developed an integrated tool - Sorrento Seaboard - which summarizes in a single operation screen the new scientific capabilities to support decision making at sea and on the coasts, associated with accidental marine spills.



These systems have been developed over more than 20 years of research in physical and operational oceanography at IMEDEA. These operating systems were employed in the Prestige oil spill in 2002 and Don Pedro in 2007 and later in 2009, were extended at the ICTS SOCIB, in collaboration with Puertos del Estado and SASEMAR (TOSCA and MEDESS4MS projects). These systems are part of the structural commitment of SOCIB to promote actions that combine scientific excellence and relevance in a context of innovation and technological development, the results are in line with the expectations and needs of society.

Fortunately the accident did lead lead to any oil spill. After an inspection of its structure, the damaged ship could finally be towed to the Port of Sagunto, north of Valencia.

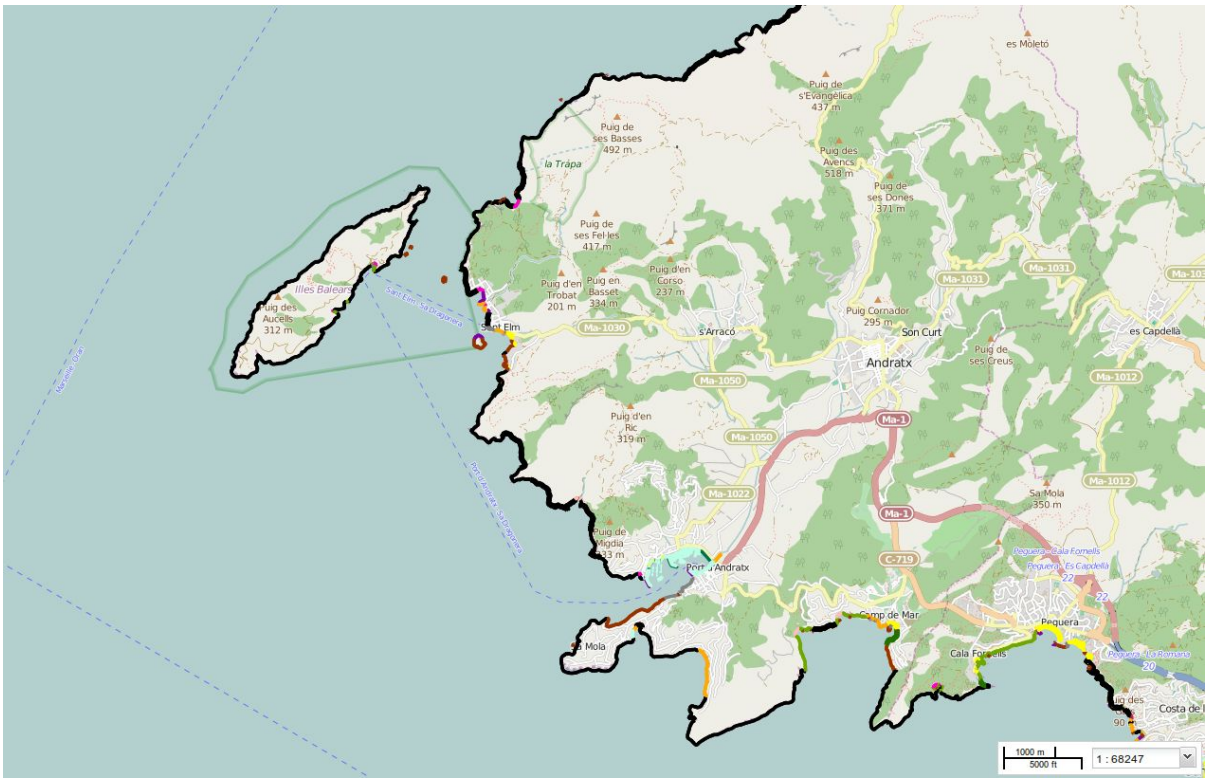
End Users

SASEMAR, the Maritime Security and Rescue Society (in Spanish: Sociedad de Salvamento y Seguridad Marítima, http://www.salvamentomaritimo.es/), responsible for the actions at sea.

The regional Balearic Government (DG Emergencies) for the actions when pollution reach the coastline.

CMEMS Added-Value

1. Crucial *in situ* data including wind, currents and wave height were also acquired from the mooring located west of Sa Dragonera island (39.56° N, 2.10° E) and maintained by Puertos del Estado. The data provided by this mooring are available through the in situ TAC. The figure show the location of Sa Dragonera.
2. The high-resolution hydrodynamical model covering the Balearic Sea area uses the forecast provided by the Mediterranean Sea Forecasting Centre (MFC) for its initialisation and its boundary conditions.
3. Satellite altimetry data in the Mediterranean Sea, proving information on the large-scale currents



Close-up view of the western part of Mallorca Island. Sa Dragonera is the island located on the left. The color along the coastline indicates the type of coast. (Source : http://gis.socib.es/sacosta/composer).

In specific, the CMEMS products used are:

- Mediterranean Sea- In-Situ Near Real Time Observations (INSITU_MED_NRT_OBSERVATIONS_013_035).

- Mediterranean Sea Physics Analysis and Forecast (MEDSEA_ANALYSIS_FORECAST_PHYS_006_001_a).
- Mediterranean Sea Gridded Sea Level Anomalies Reference Change Correction (SEALEVEL_MED_REF20YTO7Y_L4_OBSERVATIONS_008_035).