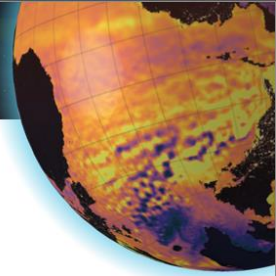


## The ICATMAR's Operational Oceanography Service: a new tool for maritime governance

During the last decade, the Government of Catalonia has implemented a new approach to maritime governance along the Catalan Coast, in the North-Western Mediterranean Sea. Starting with the management of fisheries, several co-management committees have been created with the equal participation of the Government, NGOs, scientists and the involved economic sectors. The Catalan Institute of Research for Marine Governance (ICATMAR), a joint initiative between the Government of Catalonia and the Institut de Ciències del Mar (CSIC), was created with the objective to provide oceanographic information to these committees and to the society. After some years of functioning, the need for information about the physical conditions of the ocean led to the creation of the ICATMAR's Operational Oceanography Service in 2022. ICATMAR's Operational Oceanography Service has deployed a coastal observing system designed to fill the existing gaps. Such a system is composed of a network of seven HF radar antennae that, together with the three antennae previously deployed by other institutions, covers the whole Catalan Coast. The HF radar network is complemented with five planned moored buoys uniformly distributed along the coast measuring meteorological parameters; waves; surface temperature and salinity; and velocity profiles. The observing system also includes the regular deployment of CODE, SVP and Argo drifters. Besides, ICATMAR's Operational Oceanography Service is also developing a forecasting system for the physical Essential Ocean Variables (EOV). Predictions from this system, which relies on different high resolution (~800 m) models of the Catalan Sea and the Gulf of Lions, will be released in three different phases. The first phase will be based on a dynamical downscaling from CMEMS predictions (end of 2024); the second will include the assimilation of ICATMAR's coastal observing system (2026); and the third will be based on coupled hydrodynamical and wave models. ICATMAR's commitment with the society, as well as its participation in co-management committees, have required to explore different approaches to transfer oceanographic information. A cornerstone of these activities is the development of different visualization tools for both physical EOV (<https://icatmar.cat/observacions/>) and fisheries (<https://icatmar.cat/pesquer-overview/>, <https://icatmar.cat/pesquer/>), which are being tested not only by the co-management committees but also by other users. Although ICATMAR's focus is regional, we not only collaborate with Catalan and neighbor institutions but also we contribute to different European and international initiatives with the aim to address the UNESCO's Sustainable Development Goals.



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