



COASTAL OBSERVATIONS & FORECASTS

PREVIMER

A coastal operational oceanography system coupled to the Copernicus Marine Service

THE CHALLENGE

Our coastal zones are subject to **increasing anthropogenic pressure**. **Monitoring systems** are required to protect them, prevent or mitigate risks and to ensure a sustainable management of their resources.



COASTAL OBSERVATIONS & FORECASTS

PREVIMER is a partnership between **Ifremer** (French Research Institute for Exploitation of the Sea), **SHOM** (French Hydrographic Office) and several major French institutions.

PREVIMER provides coastal observations, analyses and 4 days forecasts for the French coasts: **currents, water levels, waves, temperature, salinity, turbidity, nutrients and plankton concentrations**. The service includes information based on **in situ, satellite observations and numerical simulations**.

PRODUCTS & SERVICES

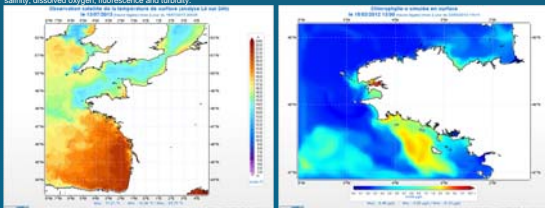
PREVIMER products and services are used by French marine environment monitoring and maritime safety agencies, for **professionals** (e.g. fish and shellfish farming industry), **local authorities, consultants and scientists**.

COUPLED TO THE COPERNICUS MARINE SERVICE

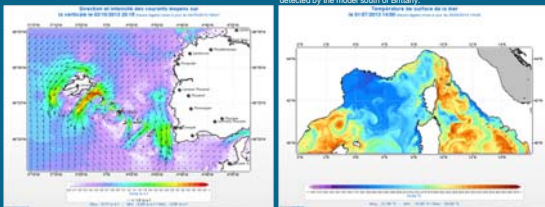
PREVIMER coastal models need boundary and initial conditions. They are coupled to the Copernicus/MyOcean modelling. This allows a **seamless description of the ocean from the open sea down to the coastal zone**.



Large MAREL buoy (MOLIT) monitoring bottom and surface temperature, salinity, observed oxygen, fluorescence and turbidity. Coastal profiler measuring temperature and salinity (Arvor-C profiler).



Sea surface temperature from satellite observation, 2013 July 13th. Chlorophyll from ecosystem model, 2012 March 15th at 13:00. A bloom is detected by the model south of Brittany.



Currents from hydrodynamical model, 2013 October 3rd at 20:15. Sea surface temperature from hydrodynamical modeling, 2013 July 1st at 14:00.

www.previmer.org

Project co-funded by the European Union and coordinated by Ifremer and SHOM

