



## PRECOC

### PREDICTING COASTAL OCEAN CONDITIONS

For the past decade, the development of coastal operational oceanography has focused principally on establishing numerical forecasting systems. The PREMIMER project is therefore now producing operational predictions of the environmental conditions for the French coastal zone: currents, temperature, salinity, sea state and water quality. Pilot projects, such as Previcot, Girac and Clara, some of which were aimed at commercialising operational products, are beginning to exploit these predictions to meet a broad range of needs from assisting the maritime and marine industries (aquaculture and civil engineering) to tracking drifting objects at sea. Users demand to know the quality of the predictions and require access to a reliability index or error bar.

#### Spin-offs and future developments

The PRECOC project perfected the tools for real-time evaluation of how the operational systems perform and integrated these into the PREVIMER production chain. This module for prediction quality control ultimately improved the forecasts by adjusting the parameters of the numerical models.

The tools that feature are readily exportable and have been adapted to different operational systems. An automatic method for detecting and monitoring ocean eddies and a real-time method for correcting in real-time how the trajectory of a slick or drifting object is calculated have also been developed.

- 3 publications in peer-reviewed journals
- 3 papers presented at international symposia
- Systems developed and introduced for managing coastal water quality in different urban areas (Cannes, Toulon, Marseille and Sète)
- Impact analysis produced of marine renewable energy installations
- CURDRIFT software for predicting pollution drift validated.

#### Partners

##### COM\_PROJECTS\_CATEGORIE\_PARTNER\_ENTREPRISES

Actimar, Brest [Project Developer]

##### Research centers

Ifremer, Brest  
Mines Paris - PSL

#### Funder

Agence Nationale de la Recherche

#### Labelisation

2005

#### Overall budget

348 K€