



## 1 Mercator Ocean forecasting products: an assessment by the users

**Sophie Baudel** (1) , Monique Gasc (1), Vincent Toumazou (2) , Gaëtan Vinay (2)

(1) CLS, France, (2) Mercator Ocean, France (sbaudel@cls.fr/Fax: +33 5 61 39 38 99)

Mercator Ocean is a French public initiative aimed to develop ocean forecast operational systems based on ocean physical models assimilating routinely remote sensing and *in situ* data. The other essential and subsequent mission, in the European context of marine core services implementation, is to allow downstream applications. The community of Mercator ocean products users reaches now 250 people, among them about a hundred professional teams, contributing by their feed-back to the systems and products improvement. The aim of this presentation is to describe the fields of uses and users, with a particular attention on the users feed-back.

Mercator Ocean makes its products available through two different ways: data files targeting professional uses and maps on the web targeting the general public.

### *Data files*

The use of data files containing the Mercator outputs 3D fields is the most important criteria to evaluate the impact of the usefulness of our products.

The number of our numerical products users reaches about 100 teams, divided into 2 groups.

The first one concerns mainly the institutional users among them the sponsors of the Mercator Ocean Public Interest Group, but also several national institutions outside France (Spain, Portugal, Canada, Ireland). Thirteen users need the data for operational issues, among them: the French Navy for operational knowledge of the oceanic environment (underwater acoustic detection and coastal modelling), the French Mete-

orological Office for both seasonal forecasting and pollutant drift modelling, the Department of Fisheries and Oceans, Canada, implementing surface current drift models for search and rescue applications and icebergs drifting, the Spanish Meteorological Office and the Irish Marine Institute for coastal modelling, etc. Among the second group of our numerical products users, there are private companies using the data for fishery and offshore industry, ship routing, coastal modelling.

### ***Maps on the web***

Every week, more than 3000 maps are updated describing 3D modelled ocean: now-cast, forecast for up to 14 days and hindcast, temperature, salinity, surface current and other ocean parameters at different depths. On an amount of 150 users (end of December 2006), 60% are private people. Among them, there is a great majority of ordinary on-lookers people interested by meteorology and oceanography or practising sailing or other sea-related leisure. The other 40% are institutional users using the maps for environment and security monitoring, meteorological applications (e.g. sea temperature conditions for hurricane generation).

A survey of our users made in October 2006 shows the satisfaction of being useful. There is a demand for improving our products: a better visibility on the quality of the data (quality indicator), a larger choice in the resolution both spatial (higher resolution near the coast) and temporal (higher resolution for drifting models or lower resolution – weekly, monthly, annual averages- for research purposes) and an easier downloading access system.

More information on: [www.mercator-ocean.eu](http://www.mercator-ocean.eu)