AN ONLINE MARINE ENVIRONMENTAL DATABASE DEVELOPED FOR SCIENTISTS AND DECISION MAKERS

Mia Devolder[1], Karien De Cauwer[1], Siegrid Jans[1] and Serge Scory[1]

[1] Royal Belgian Institute of Natural Sciences, Management Unit of Mathematical Models of the North Sea (MUMM), Gulledelle 100, 1200 Brussels, Belgium
E-mail: bmdc@mumm.ac.be

The Belgian Marine Data Centre (BMDC) is created within MUMM to store and validate scientific data obtained by different data producers and to disseminate the results to the public. Therefore an online marine database was developed that is run as a permanent public activity.

The challenge: integrating many data types in one database

A wide range of physical, chemical or biological data at sea, from, e.g. salinity to community structures through contaminant concentrations in biological tissues or optical properties of the seawater are stored in one database. This design offers an easier cross–handling of different data types, from different sources.

From a data base to an information system

Data, especially those collected at sea, require considerable resources for their collection and analysis and present valuable information on the state of the marine ecosystem. It is therefore of the utmost importance to preserve the data in the best possible condition for their present uses and for the future. This requires a database with a high quality control level, using modern technologies in the first place. However, the use of the archived information by the scientist, policy makers and the public in general is as important.

Therefore, an online access to the database is available. By specifying his selection criteria in a request form, the user can download the data he is looking for. Once the results are obtained, a spatial analysis tool is freely and online available for the visualization of the results on an interactive map.

The system is online available at http://www.mumm.ac.be/datacentre.

Demonstration

During the demonstration, data selection and retrieval, visualization and spatial analysis possibilities of the BMDC's marine database will be demonstrated.