

## **Temperature in Belgian marine waters: from monitoring to management through modelling**

Georges Pichot, Virginie Pison and J. Ozer

Management Unit of North Sea Mathematical Models, Brussels, Belgium

E-mail: G.Pichot@mumm.ac.be, V.Pison@mumm.ac.be

Temperature plays an important role in hydrodynamic and biological processes in the North Sea. Since 1984, MUMM collects temperature data in the Belgian coastal waters. In this paper, the temperature is taken just as an example to illustrate how monitoring and modelling are combined to help the management of this maritime zone. Topics that will be addressed include:

- i) Collection of the data and their incorporation (with metadata) in a data base that includes statistical and spatial analysis tools (used, amongst others, for the quality control of the data);
- ii) the development and application of operational hydrodynamic models and pre-operational biochemical models for the area of interest;
- iii) an assessment of the quality of the marine environment;
- iv) implementation of the necessary regulations to protect and/or restore this environment.