

Data from ship logger to onshore viewer

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The Belgian Marine Data Centre (BMDC, www.mumm.ac.be/datacentre) serves as national repository and processing centre for marine and environmental data, collected in the framework of national and international research and monitoring programmes. It ensures the data flow between data producers and end-users on a national and international level following international standards. The data cover most domains of oceanology as there are: physico-chemical measurements, optical properties of seawater, biodiversity, hydrodynamics, sedimentology, geology, geography and human interest. Most of the datasets relate to the Belgian Continental Shelf, the Scheldt estuary and its surrounding areas.

The integrated database on the quality of the marine environment contains the results of in situ measurements and observations and laboratory analyses of air, water, sediment and biota samples. Actually, historical data collected during the first phases of modern Belgian oceanography, Project Sea (1970-1976) and the Concerted Research Actions (1977-1982), are being digitized and imported. This will extend the range of time for which data is available, making it possible to perform long-term environmental change detection.

To disseminate high resolution data, the database is extended to refer to and document profiles, time series, trajectories... Also predictions of operational models at given locations are being processed for storage and for comparison with real measurements.

The BMDC is a node of the European SeaDataNet infrastructure (www.seadatanet.org), through which the data are made available on a European level in a standard way enabling the usage of common software packages like Ocean Data View (ODV).

As partner of the European project Geo-Seas, MUMM works on the archival of geological data according to international standards with regards to vocabularies and formats. This enables dissemination of data through the Geo-Seas portal (www.geoseas.eu) and usage of common tools, such as borehole viewers and interactive 3D seabed viewers.

During data processing, basic information on a measurement or gear deployment (e.g. location and time) often appeared to be missing or inaccurate. Unanticipated events or anomalies during acquisition are of importance for the subsequent processing and interpretation of marine data. In order to simplify the work for scientists onboard and data managers onshore, the data centre is also involved in the elaboration of a common software package used for logging events onboard, based on an ontology. This software, EARS (Eurofleets Automatic Reporting System) is produced in the frame of the European project Eurofleets (www.eurofleets.eu).