



# British Oceanographic Data Centre

NATURAL ENVIRONMENT RESEARCH COUNCIL



The British Oceanographic Data Centre is a national facility for storing and distributing data concerning the marine environment.

We are part of the Intergovernmental Oceanographic Commission's network of data centres.

The centre provides a resource for science, education and industry, as well as the wider public.

## Experience and Expertise

- We deal with biological, chemical, physical and geophysical data.
- Our databases contain measurements of nearly 10,000 different variables.
- Our staff are scientists with direct experience of marine data collection and analysis, working alongside information technology specialists.

## Pioneering approach

- BODC was one of the first data centres to work alongside scientists during multidisciplinary research projects to provide a service during the life of the project, as well as in the future.
- We produce innovative marine data products and digital atlases.
- We are involved in real-time data management and initiatives intended to increase the accessibility of environmental data.

## Storage solutions

- One of the challenges of data management is to ensure that data collected now can still be used well into the future without reference to the originator.
- BODC stores data in formats that should be unaffected by changes in technology.
- We include information detailing how the data were collected, analysed and processed so that users understand the quality of the data.
- BODC rescues vulnerable datasets.

## Developing Technologies

- BODC is committed to technological development to improve the process of searching for data and their delivery in a form required by the user.
- Central to this is the assembly of an internationally agreed data dictionary and the adoption of the latest e-Science techniques to join together distributed data.

## Maximising the use of marine data

BODC holds a wealth of publicly accessible data collected using a wide variety of instruments and samplers, for example:

- water bottle samples
- shipboard underway measurements
- moored instruments
- optical instruments
- biological trawls
- CTDs
- core x-ray images
- drifting buoys and floats
- sediment traps
- biological production measurements
- benthic fauna trawls
- bottom landers
- zooplankton and phytoplankton analyses
- towed undulators
- camera images
- moored and shipboard current profilers
- atmospheric/oceanographic chemistry measurements
- sediment cores
- wave recorders
- biogeochemical analyses
- tide gauge and bottom pressure recorders
- HF radar

