PANGAEA

The information system Pangaea is a digital library with open access to archive, distribute and publish geo-referenced data from basic research in earth and environmental sciences.

In 1993 the research institutes AWI and MARUM established a data archive for the scientific community, initially funded by the German Ministry for Research and Technology (BMBF).

A web-server enabled access through the Internet via the domain 'Pangaea' is available since 1998. Since then the system is used by national and international projects and individual scientists to digitize scientific data and make data publicly available.

In 2000 the World Data Center for Marine Environmental Sciences (WDC-MARE) was founded as part of the WDC-system of ICSU (International Council of Science). WDC-MARE uses the information system Pangaea as its central archive. The long-term operation of WDC-MARE and Pangaea is ensured through a commitment of AWI and MARUM.

The Pangaea data model ensures complete data documentation which is crucial for the understanding of the data by the users of the library. Those *metadata* include the geographical coordinates of the site of investigation, the principle investigator and a definition of the measured parameters. References, methods, quality flags, date/time, elevation and comments/descriptions are optional to complete the metadescription. Data under a moratorium or unpublished data can be password protected.

PANGAEA assigns globally unique and persistent digital identifiers (DOI) to data sets. DOIs are used by major journals such as e.g. NATURE and serve for the unique identification and location of an electronic resource and make electronic documents citable. WDC-MARE hosted data are therefore citable which gives makes data resources additionally reliable and valuable.

Our metadata is provided in various formats and can be accessed via our web portal at http://www.pangaea.de or standard exchange interfaces. OAI (Open Archive Initiative) compliant metadata are provided in several xml-formats (DC, DIF, ISO) for harvesting e.g. by portals or search engines. By serving biogeography and biodiversity data via a DiGIR interface, our data can also used by museums and collection of the biodiversity community.

Internet:
http://www.pangaea.de/