

## DATA MANAGEMENT GROUP

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**The Data Management Group (DMG) is a separate group within the department of Physical Oceanography, funded by NWO-ALW and NIOZ.**

**It has a national role as data centre for the academic oceanographic community. It also serves as the National Antarctic Data Centre (NADC).**

**The main tasks of the DMG are to:**

- \* **assist scientists during all phases of a project with data management**
- \* **archive and keep available and accessible all relevant data of NWO-ALW and NIOZ cruises.**

In 2006 the DMG participated actively in several national and international oceanographic data management projects, while continuing to work on the day-to-day activities for the National Cruise Programme and the institute.

One of the highlights of the activities of the DMG in 2006 was the work carried out in the first phase of the national NODC-i project. In this first phase, the DMG successfully implemented a pilot 'data view' on the NIOZ Centralized Oceanographic Data and Information System (CODIS) database, enabling other project partners to access the NIOZ data holdings. The NODC-i project aims to build a national, distributed system of interconnected databases, offering the users seamless access to all partner databases. At the end of 2006, the second phase of this important national project was formally approved.

The DMG has updated the NIOZ Common Data Index (CDI) entries as part of the EU-SeadataNet proj-

ect (the successor to the EU-SeaSearch project). The CDI format provides the meta data of all CTD profiles in the CODIS data base, allowing these CTD data to be viewed and queried through the SeaDataNet/SeaSearch CDI interface at <http://www.sea-search.net/-cdi/welcome.htm>. The CDI interface also provides direct access to the data in the CODIS database.

Meanwhile, the day to day work of populating the CODIS data base continued, resulting in an increase of over 20% in contents. The CODIS hydrological database contained 5848 CTD profiles and 1675 sample bottle casts from 142 different research cruises by the end of the year.

COREBASE is another asset of the DMG. COREBASE is an online archive of stored sediment cores, developed in close cooperation with the Department of Marine Chemistry and Geology, to give a detailed inventory of the cores,

their status and the analyses, performed on those cores. COREBASE also contains high resolution images of sediment cores obtained from the XRF-CoreScanner.

Both the CODIS and the COREBASE database prove to be very popular and continue to be used with an increasing frequency. This year, the COREBASE database was accessed 274 times per day on average and the CODIS database 471 times per day.

DMG staff participated in a series of national and international meetings related to oceanographic and Antarctic data management. At these meetings, DMG staff members gave 32 oral presentations and presented 6 posters on various aspects of scientific data management. Three members of the DMG staff took an introductory course on ArcGIS, organized by and at the NIOZ.

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The DMG also maintains a series of databases and project websites and pages. A part of these are dynamically linked. This activity includes the daily update of the cruise diary pages on the NIOZ website [www.nioz.nl/cruises](http://www.nioz.nl/cruises). The actual position of RV Pelagia is dynamically obtained from SCRIPPS Institution of Oceanography and shown on an online map. In addition to this, the software to gain an overview of the archive CDs and DVDs was improved and support was given for the in-house developed mooring software.

Another ongoing activity is assistance of scientists with data handling questions. Many requests for data and (graphical) data products, both from within the institute as from outside, were answered. These requests are very diverse and range from questions on the availability of data from scientists within the institute to answering data request from foreign authorities and other data centres. Answering these requests fits perfectly in the end-to-end data man-

agement philosophy, adopted by the DMG since its inception.

Staff of the DMG participated in the LOCO IW (64PE248) and the ARCHIMEDES (64PE251) cruises onboard RV Pelagia, as well as in several 13-hours cruises within the Marsdiep-project. Part of the post processing of the CTD data for these and other cruises, was carried out by the DMG.

All relevant digital data, collected during the Pelagia cruises, have been archived on DVD-RAM and are stored in a safe, for use in case of permanent loss of data by the scientist. Following technical developments and due to the increased size of the collected datasets, the DMG has stopped using CDs for data archiving and has completely transferred to using DVDs. Developments concerning the expected lifetime of both CDs and DVDs are closely watched.

Furthermore, web sites for the secretariats of the NODC and the International Research Ship Operators' Meeting (ISOM) are maintained by the DMG.

The DMG represents NIOZ and the Dutch academic oceanographic community within the National Oceanographic Data Committee (NODC). The DMG representative is the NODC Chairman.

As participant in the NODC, NIOZ actively participates in international projects and organizations such as the EU-SeaDataNet project, the IOC Committee on International Oceanographic Data and Information Exchange (IODE) and the ICES-Working Group on Marine Data Management.

An additional task of the DMG is the development and maintenance of the Netherlands Antarctic Data Inventory (NADI, <http://www.nadi.nl>) for the Antarctic research projects in the Netherlands. Taco de Bruin is the Chief Officer of the Joint Committee on Antarctic Data Management (JCADM), which currently has representation from 30 countries. He is also one of the co-chairs of the International Polar Year Subcommittee on Data Policy and Management.