
Andrew Goodwillie and the MARGINS Database team - Marine Geoscience Data System, Lamont-Doherty Earth Observatory

The MARGINS database group (http://www.marine-geo.org/margins/) would like to thank the following investigators for contributing information and data since the last newsletter report for a number of MARGINS-funded field programs.

In the Gulf of California area, Gorman and Lizarralde provided OBS operations information, CTD data and ship track navigation for cruise BAJA02NH. Sub-bottom profiler data can be downloaded for SCO03NH (Gaherty). Lonsdale made available ship track navigation for seismic work aboard a Mexican vessel (Ulloa2006).

For the Papua New Guinea Focus Site, Andrea Ogston contributed BLISP data, raw and processed CTD data, ship track navigation, and gravity and magnetic files for the suite of VANC legs.

Steve Kuehl and Clark Alexander provided core location and CHIRP track information for their three Waipaoa New Zealand legs KM0502, KM0503, TAN0613.

Doug Wiens gave access to bathymetric grids, CTD station and OBS deployment/recovery information, seismic and ship track navigation for the Wacoma and Kaiyo IBM cruises (W0404A, W0405A, KY03-06).

For the Central America TicoFlux project, Fisher, Silver and Underwood contributed sediment mineralogical composition, heatflow data, and edited multibeam bathymetry data as well as sub-bottom profiler data (VANC02MV, EW0104). Seismic field data tapes were received from Silver and will be available for download soon. Ship track positions compiled for the Gorman BAJA02NH dual-ship OBS cruise.

Program information for the Abers/Fischer land-based TUCAN broadband seismometer project is available, including station locations and links to the IRIS repository for seismic data. Also, information for the Dixon/Schwartz 2000 and 2003 Costa Rica GPS campaigns, including monument locations can be viewed.

New Developments

Much work has gone into improving the ease-of-use of the GeoMapApp data exploration and visualisation application and on expanding its data content. Rock geochemistry data from the EarthChem database for each of the Focus Sites can be accessed through GeoMapApp with the capability to plot samples in map view, to colour and scale the symbols based upon selected geochemical parameters, and graph geochemical variables. An interface to marine gravity, magnetics, and bathymetry data provides access to the full NGDC GMT holdings along with the capability to download the MGD77 files. Users can import their own grids and data tables and build customised maps. GeoMapApp, a platform-independent Java application, can be downloaded from http://www.geomapapp.org.

Based upon feedback, the packet of standardised cruise information metadata forms that is available for PIs to document their marine expeditions has been further improved to facilitate the capture of cruise information. These forms can be downloaded from http://www.marine-geo.org/metadata_forms.html. For upcoming field programs, we ask PIs to identify one person who will be responsible for liaising with the MARGINS database group for the field program.

The database search interface (Data Link) has been improved with searches speeded up by a factor of about 100.

With IRIS and UNAVCO we are actively working on ways to allow inter-operability between our databases (http://www.iris.edu/). Web Feature Service (WFS) layers can now be viewed in GeoMapApp, and controlled vocabularies are being put in place.

We welcome new contributions of data from your MARGINS-funded work. Contact us (http://www.marine-geo.org/contact.html) prior to your upcoming field expedition and we will help identify what metadata forms are needed for documenting your field program. We are actively seeking contributions from land programs and for older programs, both marine and land.

Workshops and Outreach

With funding from MARGINS and Ridge, a workshop to promote the international exchange of data is being organised and will be held in May 9-11, 2007 in Kiel (http://www.nsf-margins.org/Datawkshp07/).

In October, 2006, we ran a day-long workshop for two dozen high-school teachers on how GeoMapApp could be used in their classrooms. The teachers’ enthusiasm and feedback were tremendous. The Fall 2006 AGU meeting attracted a large number of people to our MGDS information booth where they were given a tour of the database and a demonstration of GeoMapApp application software.

International Data Exchange Workshop

Building a Global Data Network for Studies of Earth Processes at the World’s Plate Boundaries

May 9-11, 2007, Kiel, Germany

• Co-sponsored by MARGINS, InterMARGINS, Ridge2000, and InterRidge
• Goal is the development of new partnerships among marine geoscientists and data centers within the broader international community to establish improved access and exchange of data sets for research of active processes along plate boundaries.

Visit the workshop Website for meeting report and data links:

http://www.nsf-margins.org/Datawkshp07/