

GEBCO (General Bathymetric Chart of the Oceans) **NERC's Involvement in International Mapping**

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GEBCO's aim is to provide the most authoritative, publicly-available bathymetry for the world's oceans. It operates under the joint auspices of the Intergovernmental Oceanographic Commission (IOC) and the International Hydrographic Organization (IHO).

Recognising the importance of the availability of high quality digital global ocean bathymetry data, the Natural Environment Research Council (NERC) has funded work for GEBCO since 1990 through the roles of:



- The GEBCO Digital Atlas Manager at BODC to maintain and update the **GEBCO** Digital Atlas
 - The GEBCO Bathymetric Editor at NOCS to identify new bathymetric data sets for GEBCO and be involved in mapping activities

From use in ocean modelling, cable and route planning to publication in maps, printed atlases and reports this work has helped provide bathymetry data to a diverse spectrum of users ranging from the scientific and academic communities to industry in the UK and worldwide.

GEBCO Digital Atlas

Originally published in chart form, the GEBCO bathymetric chart series are now maintained at BODC, on behalf of GEBCO, in the form of a digital atlas - the GEBCO Digital Atlas (GDA).

The latest release was published in 2003. It includes a set of bathymetric contours, coastlines, trackline control data and the first release of the GEBCO One Minute Grid - a global bathymetric grid with a one arc-minute spacing.

The GDA is accompanied by a Microsoft® Windows software interface, developed at BODC, for viewing and accessing the data.



The GDA is used by over 1000 organisations in 96 countries. Through a web application, the **GEBCO One Minute Grid is now freely** available online with over 7,000 downloads of data since 2004.

🕢 GEBCO DIGITAL ATLAS









NERC staff at NOCS are involved in bathymetric mapping work and through the role of the GEBCO Bathymetric Editor have made major contributions to the GDA. This has been achieved through the release of bathymetric contour compilations for the Northeast Atlantic area and the development of the GEBCO One Minute Grid for the North Atlantic.

Updating the GEBCO Digital Atlas



As more detailed bathymetry data becomes available, these need to be integrated into the GEBCO Digital Atlas to continually update the data sets. The GDA manager's role involves carrying out quality control checks on the new data sets received and incorporating them into the GDA.

The latest release of the GDA includes update material provided by a number of the **IOC** Regional Ocean Mapping Projects.

NERC staff at BODC are involved in an IHO/IOC initiative to improve the GEBCO One Minute Grid in shallow water areas using sounding point data requested from **IHO** Member States.

GEBCO's range of other activities includes:

• Training a new generation of scientists and hydrographers in ocean bathymetry through the Nippon Foundation/GEBCO Training Project.



• Development and maintenance of the IHO-IOC Gazetteer of Geographic Names of Undersea Features - through the work of the GEBCO Sub-Committee on Undersea Feature Names.



• Development of a GEBCO World Map - due for release in December 2006.

Find out more about GEBCO

GEBCO's web site: **GEBCO** at **BODC**: **GEBCO** at NOCS: **GEBCO** Digital Atlas: **GEBCO One Minute Grid:**

www.gebco.net www.bodc.ac.uk/projects/international/gebco/ www.noc.soton.ac.uk/gg/gebco/ www.bodc.ac.uk/products/bodc_products/gebco/ www.bodc.ac.uk/data/online_delivery/gebco/

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