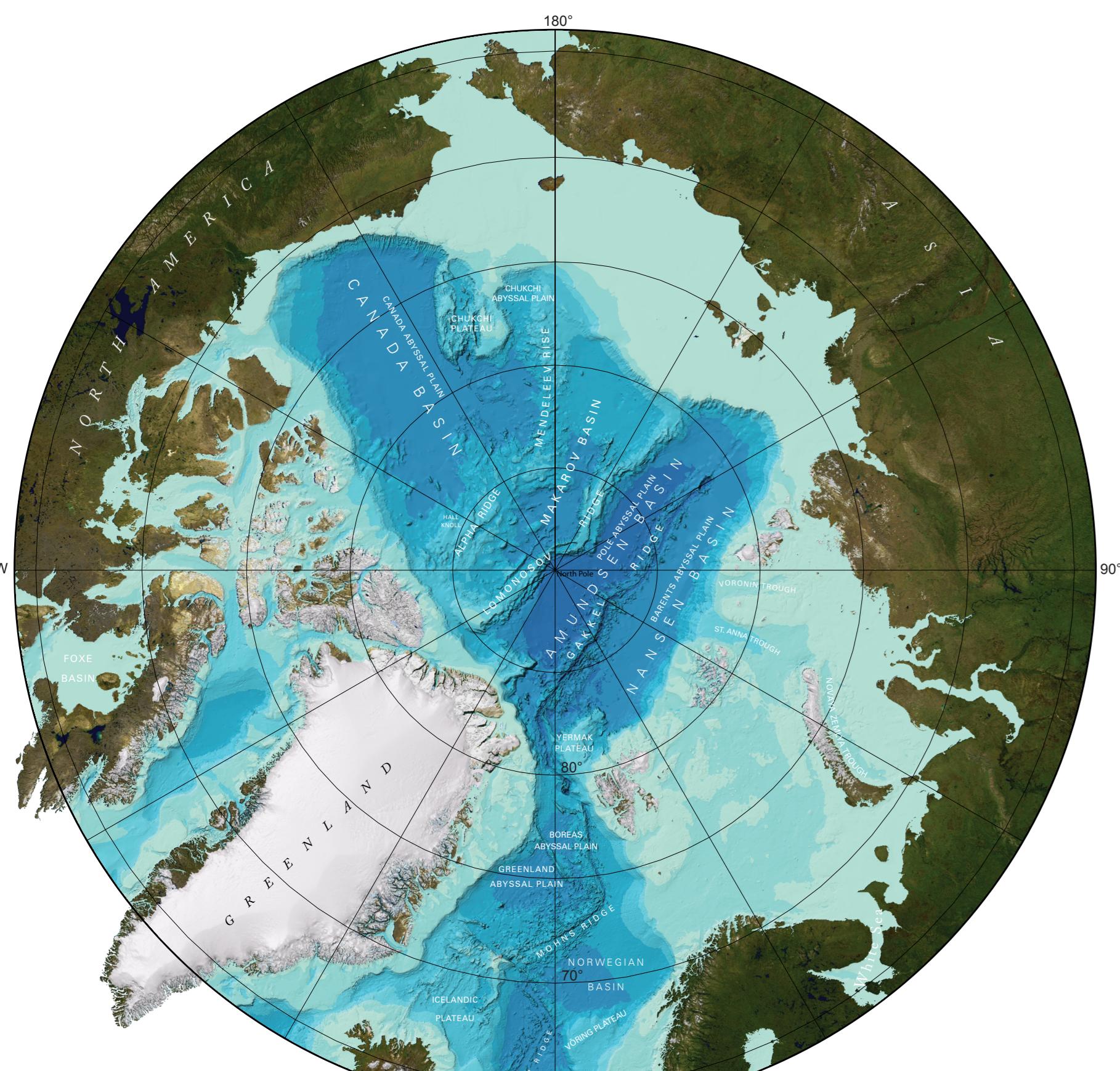


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GENERAL BATHYMETRIC CHART OF THE OCEANS (GEBCO) WORLD OCEAN BATHYMETRY



BACKGROUND

The GEBCO community consists of an international group of experts in seafloor mapping who work on the development of a range of bathymetric data sets and products. The GEBCO Digital Atlas is a collection of publicly-available bathymetry for the world's oceans. It operates under the joint authority of the International Hydrographic Organization (IHO) and the International Hydrographic Organization (IHO).

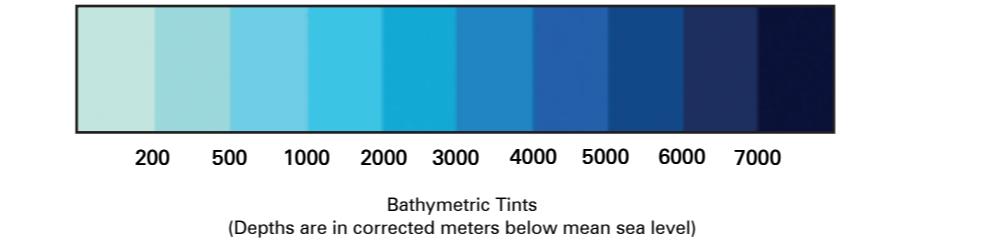
First proposed at the VI International Congress on Geography held in 1899 in Berlin, the General Bathymetric Chart of the Oceans was established in 1963 under the auspices of the International Hydrographic Organization (IHO) to promote the exchange of bathymetric data from all cruises and expeditions, regardless of their national origin, to facilitate the preparation of a general bathymetric chart of the world ocean. This intent was realized as oceanographic and hydrographic organizations, governments, and universities around the world, and academia have supplied the data on which five printed editions of GEBCO were produced.

As part of the transition to digital cartography, the depth contours of the GEBCO Fifth Edition were digitized and put onto a CD-ROM (the GEBCO Digital Atlas). As new bathymetric data became available, and new versions of the GDA were published, the GEBCO Digital Atlas was updated. The GEBCO Digital Atlas is now combining quality-controlled ship depth soundings with interpolation between them to produce a global bathymetric grid. The grid was originally developed by Walter H. Smith and David T. Sandwell. The Arctic Ocean and areas above 64°N in the grid portrayed by the International Bathymetric Chart of the Arctic Ocean (IBCAO) is the source of much of the World Ocean bathymetry that is the base for the printed map and the underlying data for the GEBCO Digital Atlas.

Future editions of the GDA are dependent upon continuing contributions of data from the seafaring community. It is hoped that wide dissemination of this map will encourage the use of the GEBCO Digital Atlas and other products such as the GDA, and will result in contributions of new bathymetric data to GEBCO. Further information on GEBCO can be found at www.gebco.net.

JOINT ICG - IHO GUIDING COMMITTEE FOR GEBCO 2010

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Mercator Projection – Scale 1:35 000 000 at the Equator
Depths in corrected meters

MAP PRODUCTION

With the advent of the GEBCO Digital Atlas (GDA), it was intended that the GDA would form the basis of any future printed versions of GEBCO. It is recognized that the GDA is not suitable for use in navigation or for scientific or tourism purposes; the GDA is the ideal means of disseminating bathymetric information to the scientific and general public. The GEBCO Digital Atlas map is still the preferred representation. This map, at a scale of 1:2.35 million, is the second GEBCO printed publication based on the GEBCO Digital Atlas.

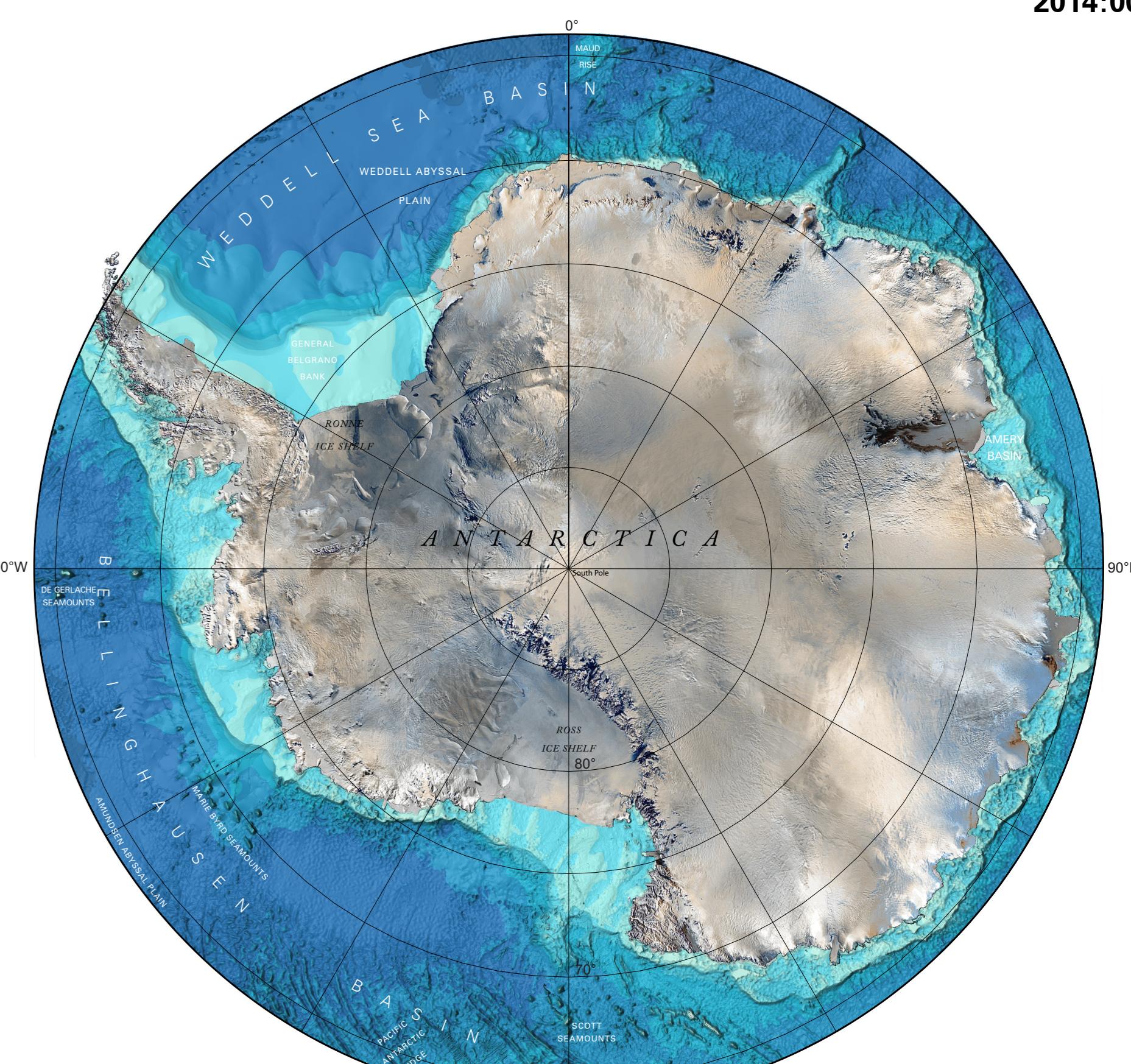
The map, initially as a working project at the Center for Coastal and Ocean Mapping of the University of New Hampshire, USA, is now complete. The map is based on the GEBCO 08 bathymetric grid (20 arc second resolution) available through the GEBCO website (www.gebco.net). The bathymetry is geometrically colored with tint boundaries at 200m, 500m, and every 1000m.

Bathymetric source data and compilation are described at www.gebco.net. Lineament data are from the GEBCO 08 bathymetric grid. Shorelines are from World Vector Shoreline (National Geophysical Data Center, NOAA). Land areas are from the GEBCO 08 bathymetric grid. Data merging and cartographic projections were done with Geomedia Professional (ESRI). Final layout was drafted with Adobe Illustrator.

This map is produced and printed with support from the Nippon Foundation of the University of New Hampshire, Two-time cartographic awards, High Morris and National Award for the distribution of the GEBCO/Nippon Foundation training program in Ocean Mapping at the Center for Coastal and Ocean Mapping, UNH Joint Hydrographic Center of the University of New Hampshire, USA.

REFERENCES

General Bathymetric Chart of the Oceans (GEBCO) www.gebco.net
Blue Marble satellite mosaic, NASA's Earth Observatory, www.earthobservatory.nasa.gov
Data merging and cartographic projections were done with Geomedia Professional (ESRI).
Dr Martin Jakobsson, Stockholm University, Sweden
Dr Hans-Werner Schenke, Alfred Wegener Institute (AWI), Germany
Mr Peter Lippmann, National Oceanography Centre, UK
Dr Natascia Turko, Inst. of Russian Academy of Science, Russian Federation
LCDR James D. Miller, US Navy Hydrographic Office, USA
LCDR Abubaker Mushtaha, Nigerian Navy Hydrographic Office, Nigeria



ANTARCTICA

Polar Stereographic Projection

Scale 1:2,000,000 at 75° South Latitude