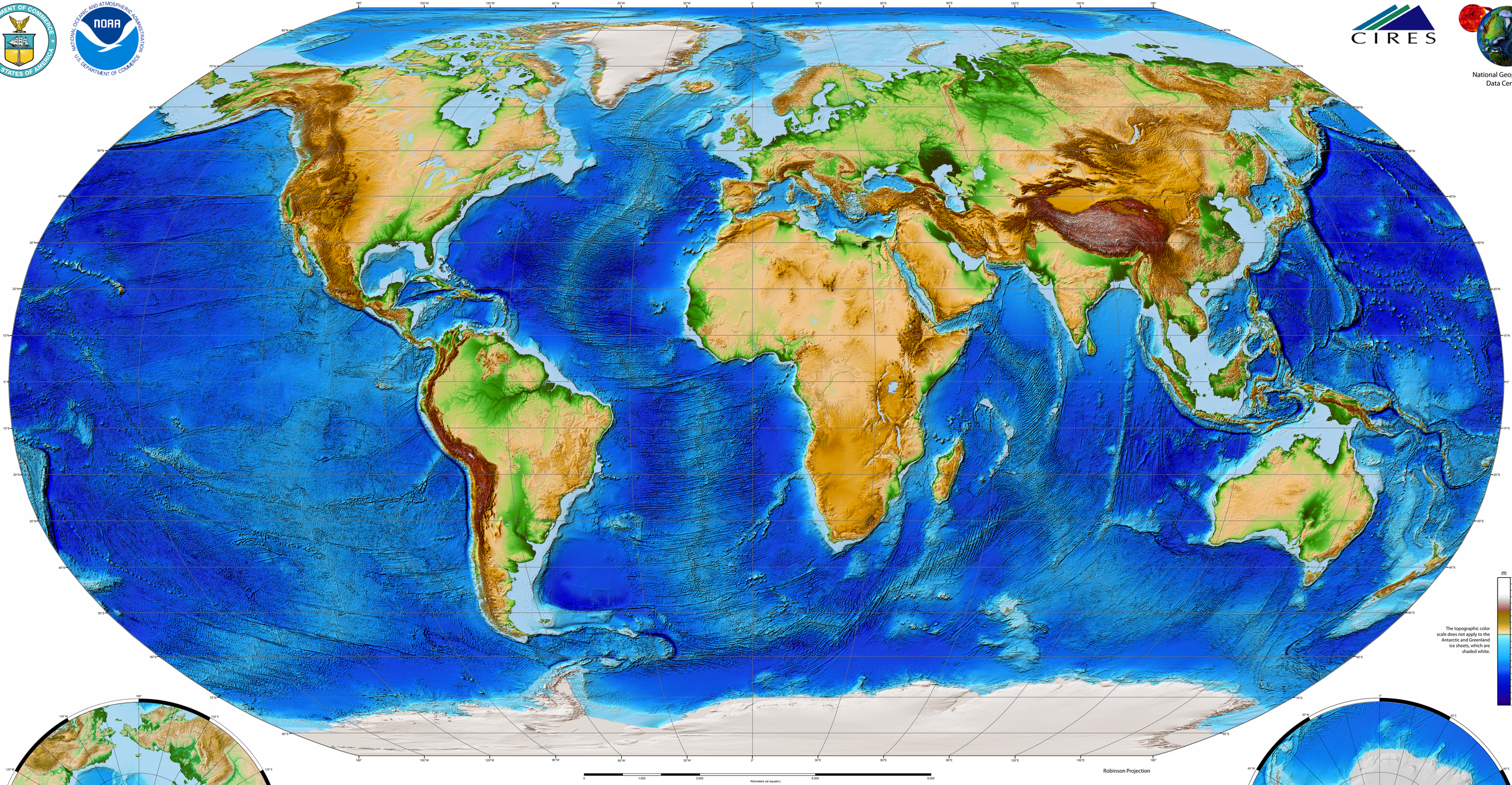
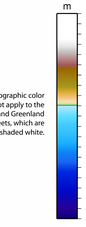
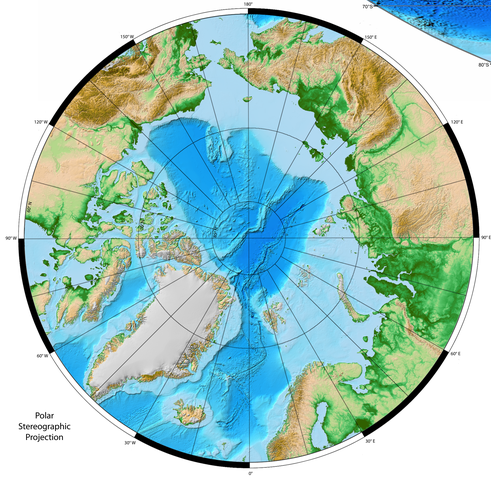


Robinson Projection



The topographic color scale does not apply to the Antarctic and Greenland ice sheets, which are shaded white.



Polar Stereographic Projection

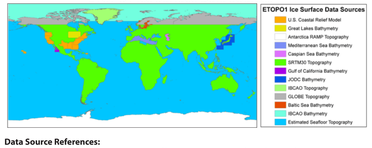
ETOPO1 Ice Surface Global Relief Model

Pamela R. Medley, Cooperative Institute for Research in Environmental Science (CIRES), University of Colorado at Boulder, 2009

ETOPO1 is a 1 arc-minute global relief model of Earth's surface that integrates land topography and ocean bathymetry. It was built from numerous global and regional data sets, and is available in "Ice Surface" (top of Antarctic and Greenland ice sheets) and "Bedrock" (base of the ice sheets) versions. All data sets were converted to WGS 84 geographic coordinates before building ETOPO1. ETOPO1 was designed to support tsunami forecasting, modeling and warning, as well as ocean circulation modeling and Earth visualization.

A color, shaded-relief image of Earth from ETOPO1 Ice Surface, is displayed above. The image was created with Generic Mapping Tools (GMT; http://gmt.soest.hawaii.edu/) using three color palettes: blues for ocean depths and above sea-level lakes; greens and browns for dry land areas; and shades of white for the Antarctic and Greenland ice sheets, and other glaciers greater than 100 km^2 using the GLIMS Glacier Database at the National Snow and Ice Data Center (NSIDC) (http://nsidc.org/data/nsidc-0272.html).

ETOPO1 Ice Surface Data Sources



Data Source References:

U.S. Coastal Relief Model	http://www.ngdc.noaa.gov/mgg/coastal/coastal.html
Great Lakes Bathymetry	http://www.ngdc.noaa.gov/mgg/greatlakes/greatlakes.html
Antarctica RAMP Topography	http://nsidc.org/data/nsidc-0082.html
Mediterranean Sea Bathymetry	http://www.ifremer.fr/drogm_uk/Realisation/carto/Mediterranee/index.html
Caspian Sea Bathymetry	http://www.caspianenvironment.org/dim/menuS.htm
SRTM30 Topography	http://www2.jpl.nasa.gov/srtm/
Gulf of California Bathymetry	http://www.ngdc.noaa.gov/mgg/bathymetry/multibeam.html
JODC Bathymetry	http://www.jodc.go.jp/data_set/jodc/jegg_intro.html
Globe Topography	http://www.ngdc.noaa.gov/mgg/topo/globe.html
Baltic Sea Bathymetry	http://www.iowarnemuende.de/research/en_iowtopo.html
IBCAO Bathymetry	http://www.ibcao.org
GEBCO/Est. Seafloor Bathymetry	http://topex.ucsd.edu/marine_topo/

Web Access:

ETOPO1 - http://www.ngdc.noaa.gov/mgg/global/global.html

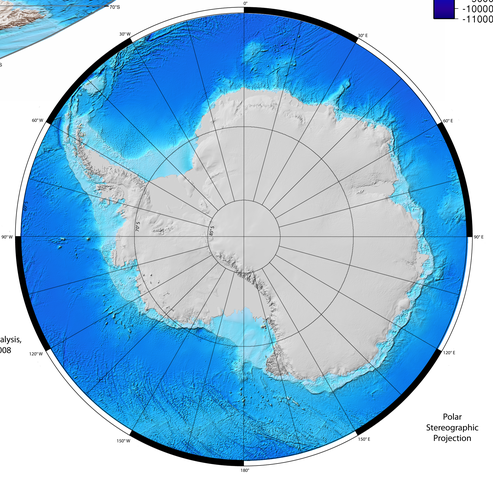
Poster - ftp://ftp.ngdc.noaa.gov/mgg/global/relief/ETOPO1/posters/etopo1_wallmap_at.pdf
ftp://ftp.ngdc.noaa.gov/mgg/global/relief/ETOPO1/posters/etopo1_wallmap_pac.pdf

Citation:

ETOPO1 Global Relief Model
Amante, C. and B. W. Eakins, ETOPO1 1 Arc-Minute Global Relief Model: Procedures, Data Sources and Analysis, National Geophysical Data Center, NESDIS, NOAA, U.S. Department of Commerce, Boulder, CO, August 2008

ETOPO1 Image
Varner J. and E. Lim, CIRES, University of Colorado at Boulder, 2008

ETOPO1 Poster
Medley, P. R., CIRES, University of Colorado at Boulder, 2009



Polar Stereographic Projection