The GEBCO_2014 Grid

In December 2014 GEBCO released its latest global bathymetric model, the GEBCO_2014 grid. The grid is a global terrain model for oceans and land at 30 arc-second intervals and is shown in Fig. 1. The grid uses as a base the SRTM30_plus_v5 data set - a gridded data set developed from a database of ship-track soundings with interpolation between soundings guided by satellite-derived gravity data. Where they improve on this model, data sets generated by other methods have been included in the GEBCO_2014 grid.

This release of the GEBCO_2014 grid is a substantial update to the previous version (GEBCO_08). Approximately 90% of ocean grid cells (not area) have been updated in GEBCO_2014 compared with the previous release, including both new bathymetric data sets and grids and interpolated depth values.

The latest GEBCO grid has greatly benefited from contributions from regional bathymetric projects and other data providers including: the International Bathymetric Chart of the Arctic Ocean (IBCAO) v3; the International Bathymetric Chart of the Southern Ocean (IBCSO) v1; EMODnet 2013, and the Baltic Sea Bathymetry Data Base.

Comparisons between GEBCO_2014 and the previous release, GEBCO_08, in some of the updated areas are shown in Figs. 3, 4 and 5 showing the improvements that these new data sets are making to the global GEBCO grid.

The GEBCO grid is accompanied by a Source Identifier (SID) grid indicating which cells are based on soundings or existing grids and which are interpolated. The SID grid is shown in Fig. 2 along with a key identifying the data sets included in the GEBCO_2014 grid.

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Comparisons between GEBCO_08 and GEBCO_2014 in the some of the regions updated in this release


GEBCO's gridded data sets: www.gebco.net/data_and_products/gridded_bathymetry_data/
GEBCO's data sets and products: www.gebco.net/data_and_products/
Regional mapping: www.gebco.net/regional_mapping/
Undersea Feature Names: www.gebco.net/data_and_products/undersea_feature_names/
Web services: www.gebco.net/data_and_products/gebco_web_services/
GEBCO world map: www.gebco.net/data_and_products/gebco_world_map/
IHO-IoC GEBCO Cook Book: www.gebco.net/data_and_products/gebco_cook_book/
Nippon Foundation/GEBCO training project: www.gebco.net/training/training_project/