

Contributing Project/Organization	Regional Data Set (including reference/link where available)
Alaska Fisheries Science Center of the US National Oceanic and Atmospheric Administration's National Marine Fisheries Service	Bathymetry data from the Alaska bathymetry compilations for the Aleutian Islands, central Gulf of Alaska and Norton Sound. <a href="https://www.afsc.noaa.gov/RACE/groundfish/Bathymetry/default.htm">https://www.afsc.noaa.gov/RACE/groundfish/Bathymetry/default.htm</a>
Arndt NE Greenland model	Digital bathymetric model of NE Greenland Arndt, J E, W Jokat, B Dorschel, R Myklebust, J A Dowdeswell and J Evans (2015). A new bathymetry of the Northeast Greenland continental shelf: Constraints on glacial and other processes. <i>Geochemistry, Geophysics, Geosystems</i> . 16. <a href="doi:10.1002/2015GC005931">doi:10.1002/2015GC005931</a>
Baltic Sea Bathymetry Database (BSBD) team	Baltic Sea Hydrographic Commission (2013). Baltic Sea Bathymetry Database version 0.9.3 Downloaded from <a href="http://data.bshc.pro/">http://data.bshc.pro/</a>
Bureau of Ocean Energy Management (BOEM)	Northern Gulf of Mexico Deepwater Bathymetry Grid from 3D Seismic <a href="https://www.boem.gov/Gulf-of-Mexico-Deepwater-Bathymetry/">https://www.boem.gov/Gulf-of-Mexico-Deepwater-Bathymetry/</a>
Canadian Hydrographic Service	Non-Navigational (NONNA-100) Bathymetric Data: represent all currently validated, digital bathymetric sources acquired by CHS, combined at a resolution of approximately 100 metres. Contains information licensed under the Open Government Licence – Canada. <a href="https://open.canada.ca/data/en/dataset/d3881c4c-650d-4070-bf9b-1e00aabf0a1d">https://open.canada.ca/data/en/dataset/d3881c4c-650d-4070-bf9b-1e00aabf0a1d</a>
Deep Reef Explorer ( <a href="http://www.deepreef.org">www.deepreef.org</a> )	High-resolution depth model for the Great Barrier Reef – 30 Beaman, R J (2018). High-resolution depth model for the Great Barrier Reef - 30 m. Geoscience Australia, Canberra, Australia. <a href="http://pid.geoscience.gov.au/dataset/115066">http://pid.geoscience.gov.au/dataset/115066</a>

Deep Reef Explorer ( <a href="http://www.deepreef.org">www.deepreef.org</a> )	High-resolution depth model for the Northern Australia – 100m, V3 Beaman, R J (2010). Project 3D-GBR: A high-resolution depth model for the Great Barrier Reef and Coral Sea. Marine and Tropical Sciences Research Facility (MTSRF) Project 2.5i.1a Final Report, MTSRF, Cairns, Australia, pp. 13 plus Appendix 1 (Internal Report). <a href="https://www.deepreef.org/bathymetry/65-3dgbr-bathy.html">https://www.deepreef.org/bathymetry/65-3dgbr-bathy.html</a>
EMODnet	The EMODnet Digital Bathymetry (DTM) 2018. A multilayer bathymetric product for Europe's sea basins, based upon more than 9400 bathymetric survey data sets and Composite DTMs gathered from 49 data providers from 24 countries. EMODnet Bathymetry Consortium (2018): EMODnet Digital Bathymetry (DTM): <a href="http://doi.org/10.12770/18ff0d48-b203-4a65-94a9-5fd8b0ec35f6">http://doi.org/10.12770/18ff0d48-b203-4a65-94a9-5fd8b0ec35f6</a>
Geological Survey of Israel	Hall, J K (2002). Bathymetric compilations of the seas around Israel I: The Caspian and Black Seas. Geological Survey of Israel, Current Research, Vol. 13, December 2002.
Geomar	Bathymetric grid for part of the Red Sea region and the South East Pacific region: <a href="https://doi.org/10.1594/PANGAEA.860374">https://doi.org/10.1594/PANGAEA.860374</a> and <a href="https://doi.org/10.1594/PANGAEA.785515">https://doi.org/10.1594/PANGAEA.785515</a>
Geoscience Australia	High-resolution depth model for Northern Australia - 30 m (2018) <a href="https://ecat.ga.gov.au/geonetwork/srv/eng/catalog.search#/metadata/121620">https://ecat.ga.gov.au/geonetwork/srv/eng/catalog.search#/metadata/121620</a>
Geoscience Australia	50m Multibeam Dataset of Australia 2012. Wilson, O, C Buchanan and M Spinoccia (2012). 50m Multibeam Dataset of Australia 2012 <a href="https://ecat.ga.gov.au/geonetwork/srv/eng/catalog.search#/metadata/73842">https://ecat.ga.gov.au/geonetwork/srv/eng/catalog.search#/metadata/73842</a>

Geoscience Australia	Australian Bathymetry and Topography Grid, June 2009. ANZLIC unique identifier: ANZCW0703013116, Geoscience Australia. Whiteway, T, (2009). Australian Bathymetry and Topography Grid, June 2009. Scale 1:5000000. Geoscience Australia, Canberra. <a href="http://dx.doi.org/10.4225/25/53D99B6581B9A">http://dx.doi.org/10.4225/25/53D99B6581B9A</a> .
Geoscience Australia	MH370 - Phase One Data Release: <a href="http://marine.projects.ga.gov.au/mh370-phase-one-data-release.html">http://marine.projects.ga.gov.au/mh370-phase-one-data-release.html</a>
Global Multi-resolution Topography Data Synthesis (GMRT)	GMRT version 3.5. A multi-resolutional compilation of edited multibeam sonar data collected by scientists and institutions worldwide, that is reviewed, processed and gridded by the MGDS Team and merged into a single continuously updated compilation of global elevation data, provided at 15 arc sec resolution to GEBCO. <a href="https://www.gmrt.org/">https://www.gmrt.org/</a>
Global Sea Mineral Resources NV (GSR), DEME Group, Belgium	Bathymetric grid, based on multibeam data, supplied to GEBCO for a region of the North Pacific, 1800 km southwest of the Mexican Baja Peninsula.
IceBridge BedMachine Greenland	IceBridge BedMachine Greenland, Version 3, -80 - 10°E; 60-90°N: Bed topography/bathymetry map of Greenland based on mass conservation, multi-beam data, and other techniques. Morlighem, M, C N Williams, E Rignot, L An, J E Arndt, J L Bamber, G Catania, N Chauché, J A Dowdeswell, B Dorschel, I Fenty, K Hogan, I Howat, A Hubbard, M Jakobsson, T M Jordan, K K Kjeldsen, R Millan, L Mayer, J Mouginot, B P Y Noël, C O'Cofaigh, S Palmer, S Rysgaard, H Seroussi, M J Siegert, P Slabon, F Straneo, M R van den Broeke, W Weinrebe, M Wood and Zinglersen (2017). BedMachine v3: Complete Bed Topography and Ocean Bathymetry Mapping of Greenland From Multibeam Echo Sounding Combined With Mass Conservation. <i>Geophysical Research Letters</i> 44, 11,051-011,061, doi:10.1002/2017GL074954 <a href="http://nsidc.org/data&gt;IDBMG4">http://nsidc.org/data&gt;IDBMG4</a>

International Bathymetric Chart of the Arctic Ocean (IBCAO)	IBCAO v3 bathymetric grid, 180°W-180°E; 64°N-90°N: The grid for the Arctic Ocean area is based on the IBCAO V13 data base as documented in: Jakobsson, M, L A Mayer, B Coakley, J A Dowdeswell, S Forbes, B Fridman, H Hodnesdal, R Noormets, R Pedersen, M Rebesco, H-W Schenke, Y Zarayskaya, D Accettella, A Armstrong, R M Anderson, P Bienhoff, A Camerlenghi, I Church, M Edwards, J V Gardner, J K Hall, B Hell, O B Hestvik, Y Kristoffersen, C Marcussen, R Mohammad, D Mosher, S V Nghiem, M T Pedrosa, P G Travaglini and P Weatherall (2012). The International Bathymetric Chart of the Arctic Ocean (IBCAO) Version 3.0. Geophysical Research Letters, <a href="https://doi.org/10.1029/2012GL052219">doi: 10.1029/2012GL052219</a>
International Bathymetric Chart of the Southern Ocean (IBCSO)	IBCSO v1 bathymetric grid, 180°W-180°E; 60S-90°S: The grid for the Southern Ocean area is based on the IBCSO V1 data base as documented in the source list: <a href="https://www.scar.org/science/ibcs/o/resources/">https://www.scar.org/science/ibcs/o/resources/</a> . Arndt, J E, H W Schenke, M Jakobsson, F Nitsche, G Buys, B Goleby, M Rebesco, F Bohoyo, J K Hong, J Black, R Greku, G Udintsev, F Barrios, W Reynoso-Peralta, T Morishita and R Wigley (2013). The International Bathymetric Chart of the Southern Ocean (IBCSO) Version 1.0 - A new bathymetric compilation covering circum-Antarctic waters. Geophysical Research Letters, <a href="https://doi.org/10.1002/grl.50413">doi: 10.1002/grl.50413</a>
Israeli Ministry of National Infrastructure, Energy and water Resources	Israel EEZ. Hall J K, S Lippman, G Tibor, M Gardosh, A R Sade, H Sade, A Golan, G Amit, L Gur-Arie and I Nissim. A New Bathymetric Map for the Israeli EEZ: Preliminary Results. <a href="http://www.energy.gov.il">www.energy.gov.il</a>
Japan Oceanographic Data Center (JODC) of the Japan Coast Guard	Japan Coast Guard Grid for the North Western Pacific Ocean. Provided at 30 arc-second intervals, The grid for this area was originally developed from the following source data:: Multibeam data from the Japan Coast Guard, A pre-prepared 500m interval grid based on measured sounding data: J-EGG500 grid JODC-Expert Grid data for Geographic -500m <a href="http://www.jodc.go.jp/data_set/jodc/jegg_intro.html">www.jodc.go.jp/data_set/jodc/jegg_intro.html</a>

National Institute of Water and Atmospheric Research Ltd (NIWA). Wellington	New Zealand Bathymetry compilation - 250 m. Mitchell, J S, K A Mackay, H L Neil, E J Mackay, A Pallentin and P Notman (2012). Undersea New Zealand, 1:5,000,000. NIWA Chart, Miscellaneous Series No. 92
NOAA Alaskan fisheries	Digitized chart soundings, Alaska. Proofed digitized historical chart soundings from “smooth sheets” covering Alaskan waters. Zimmermann, M, A De Robertis and O Ormseth (2018). Verification of historical smooth sheet bathymetry for the Gulf of Alaska - Integrated Ecosystem Research Program. Deep Sea Research Part II: Topical Studies in Oceanography. <a href="https://doi.org/10.1016/j.dsr2.2018.06.006">doi:10.1016/j.dsr2.2018.06.006</a> . Zimmermann, M and M Prescott (2018). Bathymetry and Canyons of the Eastern Bering Sea Slope. Geosciences. 8. 184. <a href="https://doi.org/10.3390/geosciences8050184">doi:10.3390/geosciences8050184</a> . <a href="https://noaa.maps.arcgis.com/home/item.html?id=c41002831ed34ce0b63727ed7d3636cc">https://noaa.maps.arcgis.com/home/item.html?id=c41002831ed34ce0b63727ed7d3636cc</a>
Norwegian Hydrographic Service (NHS)	Svalbard bathymetry grid. Released in 2016, this dataset includes modern multibeam data from surveys up until autumn 2015. Data is gridded to 10x10 m. <a href="https://www.kartverket.no/">https://www.kartverket.no/</a>
Norwegian Polar Institute (NPI)	Svalbard topography grid. New topographical data of Svalbard with updated glacial fronts from satellite imaging. <a href="https://toposvalbard.npolar.no/">https://toposvalbard.npolar.no/</a> and <a href="http://www.npolar.no/no/">http://www.npolar.no/no/</a>
Nunaoil A/S	New bathymetry models in Baffin Bay, Northeast and Western Greenland. <a href="http://nunaoil.gl/">http://nunaoil.gl/</a>
Olex AS, Norway ( <a href="http://www.olex.no">www.olex.no</a> )	Data supplied to GEBCO for: Areas of the North Atlantic off the west coast of Africa; Areas of the Northwest European Continental Shelf;The Arctic Ocean area.

Scripps Institution of Oceanography	SRTM15+ v1 Olson, C J, J J Becker and D T Sandwell (2016). SRTM15+: Data fusion of Shuttle Radar Topography Mission (SRTM) land topography with measured and estimated seafloor topography ( <a href="#">NCEI Accession 0150537</a> ). Data resampled to cell registered format for GEBCO.
Service Hydrographique et Océanographique de la Marine (shom), France	Bathymetric data supplied in the form of grids, largely from multibeam and Lidar bathymetric surveys and transect cruises in areas of the Pacific, Atlantic and Indian Oceans, from the data holdings and cruises of shom. <a href="https://data.shom.fr/">https://data.shom.fr/</a>
South West Indian Ocean Bathymetry Compilation (SWIOBC)	Dorschel, B, L Jensen, J E Arndt, G-J Brummer, H de Haas, A Fielies, D Franke, W Jokat, R Krocker, D Kroon, J Pätzold, R R. Schneider, V Spieß, H Stollhofen, G Uenzelmann-Neben, M Watkeys and E Wiles (2018). The Southwest Indian Ocean Bathymetric Compilation (SwIOBC). <i>Geochemistry, Geophysics, Geosystems</i> 19, no. 3 (March 2018): 968–76. <a href="https://doi.org/10.1002/2017GC007274">https://doi.org/10.1002/2017GC007274</a>
University of Alaska Fairbanks and its College of Fisheries and Ocean Sciences	Alaska Region Digital Elevation Model (ARDEM) Version 2.0. Danielson, S L, E L Dobbins, M Jakobsson, M A Johnson, T J Weingartner, W J Williams and Y Zarayskaya (2015), Sounding the northern seas, <i>Eos</i> , 96, <a href="https://doi.org/10.1029/2015EO040975">doi:10.1029/2015EO040975</a>
University of New Hampshire and its Center for Coastal and Ocean Mapping/Joint Hydrographic Center (UNH/CCOM-JHC)	United States Atlantic Law of the sea bathymetric grid, version 2017 <a href="https://ccom.unh.edu/theme/law-sea/law-of-the-sea-data/atlantic">https://ccom.unh.edu/theme/law-sea/law-of-the-sea-data/atlantic</a>
US-Extended Continental Shelf (ECS) cruises	Cruise data in: Gulf of Alaska; Necker Ridge; Kingman Palmyra; Mendocino <a href="https://www.ngdc.noaa.gov/mgg/ecs/cruises.html">https://www.ngdc.noaa.gov/mgg/ecs/cruises.html</a>

## Multibeam Survey Data

Source	Description and Reference (where available)
IHO DCDB	Bathymetric Soundings extracted from the data maintained by the International Hydrographic Organization (IHO) Data Center for Digital Bathymetry (DCDB) at the US National Centers for Environmental Information (NCEI). <a href="https://www.ngdc.noaa.gov/ihodc/">https://www.ngdc.noaa.gov/ihodc/</a>
Alfred Wegener Institute (AWI)	81 Cruises of Multibeam data in the Atlantic and Indian Ocean region. 11 Cruises of multibeam data in the South and West Pacific: <a href="https://www.awi.de/en/">https://www.awi.de/en/</a>
British Antarctic Survey (BAS)	Multibeam data from three cruises of the RRS James Clark Ross. <a href="https://www.bas.ac.uk/">https://www.bas.ac.uk/</a>
Dufek (Sonne)	2 cruises in the Atlantic Ocean.
Fugro	8 Cruises of Multibeam data in the Atlantic and Indian Ocean region.
Indian Ocean Bathymetric Compilation	102 Cruises of Multibeam data in the Atlantic and Indian Ocean region.
Irish Marine Institute	3 Cruises of Multibeam data in the Atlantic and Indian Ocean region.

Source	Description and Reference (where available)
Geological Institute, Russian Academy of Sciences (GINRAS)	Knipovich Ridge. Multibeam data from four surveys with RV Akademik Nikolaj Strakhov of the Knipovich Ridge. Updated since IBCAO v3 with higher resolution. Zayonchek A V, H Brekke, S Yu. Sokolov, A O Mazarovich, K O Dobrolyubova, V N Efimov, A S Abramova, Yu A Zaraiskaya, A V Kokhan, E A Moroz, A A Peive, N P Chamov and K P Yampol'skii (2010). The Structure of Continent-Ocean transition zone at North-West Barents Sea Margin (results of 24-26-th cruises of RV "Akademik Nikolaj Strakhov", 2006-2009) // Structure and evolution of the Lithosphere. Contribution of Russia to International Polar Year. Vol.4. M Paulsen. pp.111-157. <a href="http://atlantic.ginras.ru/download/exp/grd/grd_data.html">http://atlantic.ginras.ru/download/exp/grd/grd_data.html</a>
Greenland Institute of Natural Resources	Crowd source data and multibeam data from Weinrebe Poseidon cruise. <a href="http://www.natur.gl/en/">http://www.natur.gl/en/</a>
Japan Agency for Marine-Earth Science and Technology (JAMSTEC)	22 cruises of MBES data in the South and West Pacific Ocean region. Data and Sample Research System for Whole Cruise Information in JAMSTEC. <a href="http://www.godac.jamstec.go.jp/darwin/e">http://www.godac.jamstec.go.jp/darwin/e</a>
Korea Polar Research Institute (KOPRI)	Multibeam data from Araon cruise ARA02B. <a href="https://eng.kopri.re.kr/">https://eng.kopri.re.kr/</a>
MARUM - Center for Marine Environmental Sciences, University of Bremen	Multibeam data from two cruises of the RV Heincke. <a href="https://www.marum.de/en/index.html">https://www.marum.de/en/index.html</a>
NASA-OMG	Multibeam mapping carried out by the Ocean Melting Greenland Project (OMG). Fenty, I, J K Willis, A Khazendar, S Dinardo, R Forsberg, I Fukumori, D Holland, M Jakobsson, D Moller, J

Source	Description and Reference (where available)
	Morison, A Münchow, E Rignot, M Schodlok, A F Thompson, K Tinto, M Rutherford and N Trenholm (2016). Oceans Melting Greenland: Early results from NASA's ocean-ice mission in Greenland. <i>Oceanography</i> 29(4):72-83, <a href="https://doi.org/10.5670/oceanog.2016.100">https://doi.org/10.5670/oceanog.2016.100</a> . <a href="https://omg.jpl.nasa.gov/portal/">https://omg.jpl.nasa.gov/portal/</a>
OET-Nautilus	US Non – ECS Nautilus west coast cruises 20 Cruises of Multibeam data in the North Pacific <a href="https://nautiluslive.org/expedition-map">https://nautiluslive.org/expedition-map</a>
Stockholm University, Geological Sciences	Multibeam data from icebreaker Oden expeditions, e.g. Petermann 2015, SWERUS-C3 2014 and LOMROG 2012. Also included is the Vega expedition in 2013, with Explorer of Sweden. <a href="https://www.su.se/geo/english/">https://www.su.se/geo/english/</a> Oden Mapping data: <a href="https://oden.geo.su.se/">https://oden.geo.su.se/</a>
TelePost Greenland A/S	Multibeam data from South Greenland on the RV OGS Explora. <a href="https://telepost.gl/">https://telepost.gl/</a>
The University Centre in Svalbard (UNIS)	Multibeam data from Svalbard, from four cruises on the RV Helmer Hanssen. <a href="https://www.unis.no/">https://www.unis.no/</a>
US-Extended Continental Shelf (ECS) cruises	Cruise data in: Gulf of Alaska; Necker Ridge; Kingman Palmyra; Mendocino <a href="https://www.ngdc.noaa.gov/mgg/ecs/cruises.html">https://www.ngdc.noaa.gov/mgg/ecs/cruises.html</a>

## Other contributions

Source	Description and Reference (where available)
Member States of the International Hydrographic Organization (IHO)	Bathymetric soundings extracted from Electronic Navigation Charts (ENCs) provided by IHO Member States. Access further details about ENC contributions made to GEBCO. <a href="http://www.gebco.net/data_and_products/gridded_bathymetry_data/shallow_water_bathymetry">www.gebco.net/data_and_products/gridded_bathymetry_data/shallow_water_bathymetry</a>
Geological Survey of Denmark and Greenland (GEUS)	Singlebeam data from BB2012, Baffin Bay, Greenland. <a href="https://eng.geus.dk/">https://eng.geus.dk/</a>
National Geospatial-Intelligence Agency (NGA)	Singlebeam data in Melville Bay, Greenland.
South African Navy Hydrographic Office	ENC data for South African Waters
US Navy	Singlebeam data in Arctic region from US Navy submarines USS New Hampshire, USS Connecticut and USS Topeka. <a href="https://www.navy.mil/">https://www.navy.mil/</a>