



IHO

International
Hydrographic
Organization



CITIZEN SOURCED DATA

HELP REVEAL THE DEEP AND SHARE YOUR DATA

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CROWDSOURCED DEPTH INFORMATION

Private sector vessels involved in offshore survey, subsea inspection and marine construction can participate in increasing our knowledge of the ocean by sharing depth measurements from navigation instruments while transiting between projects. Known as Crowdsourced Bathymetry (CSB), this data can help identify uncharted features such as seamounts and canyons, verify charted information, and help fill the gaps where no data exists.

SPECIALIZED SURVEY, INSPECTION AND CONSTRUCTION VESSELS

The private sector owns and operates specialized vessels that support the exploration and development of ocean resources, as well as the construction, operation, and maintenance of subsea infrastructure, all contributing to a sustainable blue economy. By the nature of the work, these vessels sometimes operate in remote regions of the world that are inadequately explored and poorly understood. It is in these places where there is often very limited bathymetric information and where contributions to global seafloor mapping efforts can have the greatest impact.

With minimal impact on vessel operations, this contribution of data can occur by using existing Safety of Life at Sea (SOLAS) electronic

chart systems, navigation software systems participating in the CSB initiative or through a small hardware data logger that can be interfaced to the ship's NMEA data bus. Routinely measured parameters such as depth and position can then be stored, uploaded and contributed to local and global mapping initiatives. In addition to improving the global knowledge of the seafloor, these contributions could also benefit navigational safety, detect unknown hazards, and aid scientists in planning their research.

If project data are considered proprietary and cannot be shared, then bathymetry data acquired during transits and/or between projects would still provide valuable contributions that help improve our understanding of the world's oceans.



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DR. MATHIAS JONAS IHO SECRETARY-GENERAL

“Getting to know the ocean is the greatest mapping adventure of our times. Many underwater mountain ranges, volcanoes, canyons have yet to be discovered and named.”

CONTRIBUTING DATA

The IHO’s Data Centre for Digital Bathymetry (DCDB) accepts CSB data contributions through organizations, companies or universities that serve as data aggregators and / or liaisons between mariners (data collectors) and the DCDB. These “trusted nodes” help the CSB effort in a variety of ways ranging from supplying data logging equipment or software, providing technical support to vessels, downloading data from data loggers, aggregating collected data and facilitating data transfer. The IHO DCDB will help identify the best-suited “trusted node” type for you.



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Contributed data should include depth, position and time stamp. While additional information is encouraged, data does not need to include vessel name, IMO number or anything else with the vessel identification prior to uploading to the IHO DCDB database. By contributing data to the IHO DCDB, the provider will not be held liable for the data submitted.

FIND OUT MORE

Further information about collecting or contributing data can be found at the IHO DCDB website (ngdc.noaa.gov/iho/), via the IHO B12 Guidance on CSB document (iho.int/en/bathymetric-publications) or by contacting representatives of the IHO CSB Working Group at bathydata@iho.int

Visit seabed2030.org to learn more about the Nippon Foundation-GEBCO Seabed 2030 project, which aims to bring together all available bathymetric data to produce the definitive map of the **world ocean floor by 2030**.

NOAA’s Bay Hydro II crowdsourced bathymetry test tracks in green overlaid on multibeam survey data demonstrates how changes can be detected.

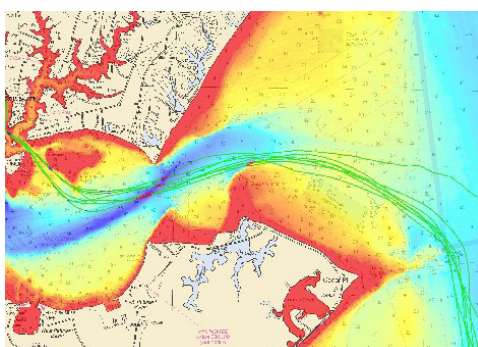
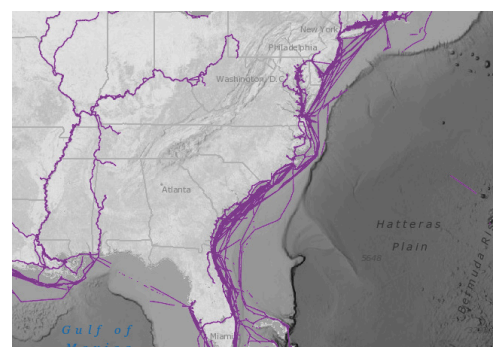


Image courtesy of NOAA

Data Centre for Digital Bathymetry (DCDB) Viewer showing vessel tracks of crowdsourced bathymetry data collected off the east coast of the United States and contributed via the IHO DCDB.



IHO DCDB

