



IHO

International
Hydrographic
Organization



My Andrea © Safebridge GmbH

CITIZEN SOURCED DATA

HELP REVEAL THE DEEP AND SHARE YOUR DATA

CROWDSOURCED DEPTH INFORMATION

Privately-owned ships can participate in increasing our knowledge of the ocean by sharing depth measurements from navigation instruments while out at sea. Known as Crowdsourced Bathymetry (CSB), this information can help identify uncharted features such as seamounts and canyons, verify charted information and help fill the spaces on charts where no data exists.

SUPERYACHTS explore the world's oceans, often in areas where data is sparse, non-existent or of poor quality. These are exactly the places where contributions to global seafloor mapping efforts can have the greatest impact.

To minimise effort on the part of the ship's crew, data collection and contribution of data can occur by using either built-in navigation software systems that are participating in the CSB initiative or through a small hardware data logger that can be interfaced to the ship's GNSS and depth sounder. Routinely measured parameters such as under keel depth and position

can then be stored, uploaded and contributed to local and global mapping initiatives. These contributions can also benefit navigational safety, detect unknown hazards and aid other mariners and ocean scientists.

Navigational incidents involving superyachts are often quashed by confidentiality agreements which deny lessons to be learnt or shallows to be reported to the hydrographic offices. By contributing data, superyachts can help avoid groundings or environmental damage and make the oceans a safer place for all.



Monaco harbour © IHO Secretariat



MY Gene Machine © Captain Gow

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.”



Roquebrune-Cap-Martin © IHO Secretariat

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.



Photo MY Cloudbreak © Cloudbreak

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.

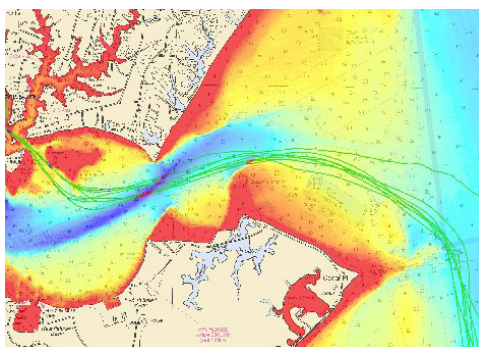
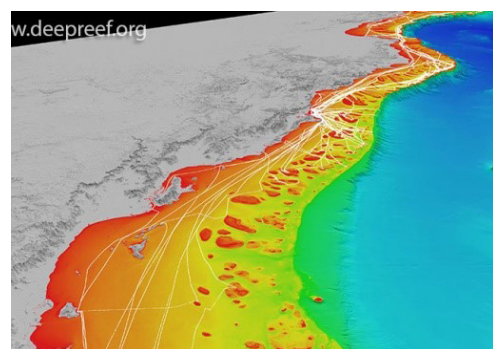


Image courtesy of NOAA

3D view of northern Great Barrier Reef showing all vessel tracks as of December 2019.



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