Anomalous deep areas reported in the North Pacific Ocean (166° 30'E, 55°N)

Anomalous deep areas have been reported in the GEBCO_2022 Grid in the region 166° 30'E, 55°N – off Bering Island. In this area, the GEBCO_2022 Grid is largely based on a database of ship-track soundings with interpolation between soundings guided by satellite-derived gravity data. The anomalously deep regions appear to be based on interpolation.

Further details about the development of the GEBCO_2022 Grid can be found in the data set's <u>documentation</u>.



Figure 1. GEBCO_2022 Grid for part of the North Pacific Ocean region.



Figure 2. The GEBCO_2020 Type Identifier (TID) Grid – this indicates the type of data that the corresponding cell in the bathymetric grid is based on.

A list of the Type Identifier (TID) codes can be found on GEBCO's web site: <u>https://www.gebco.net/data_and_products/gridded_bathymetry_data/gebco_2022/</u>.

- Code 11 = Multibeam depth value collected by a multibeam echo-sounder
- Code 17 = Combination of direct measurement methods
- Code 40 = Predicted based on satellite-derived gravity data depth value is an interpolated value guided by satellite-derived gravity data
- Code 44 = Bathymetric sounding depth value at this location is constrained by bathymetric sounding(s) within a gridded data set where interpolation between sounding points is guided by satellite-derived gravity data