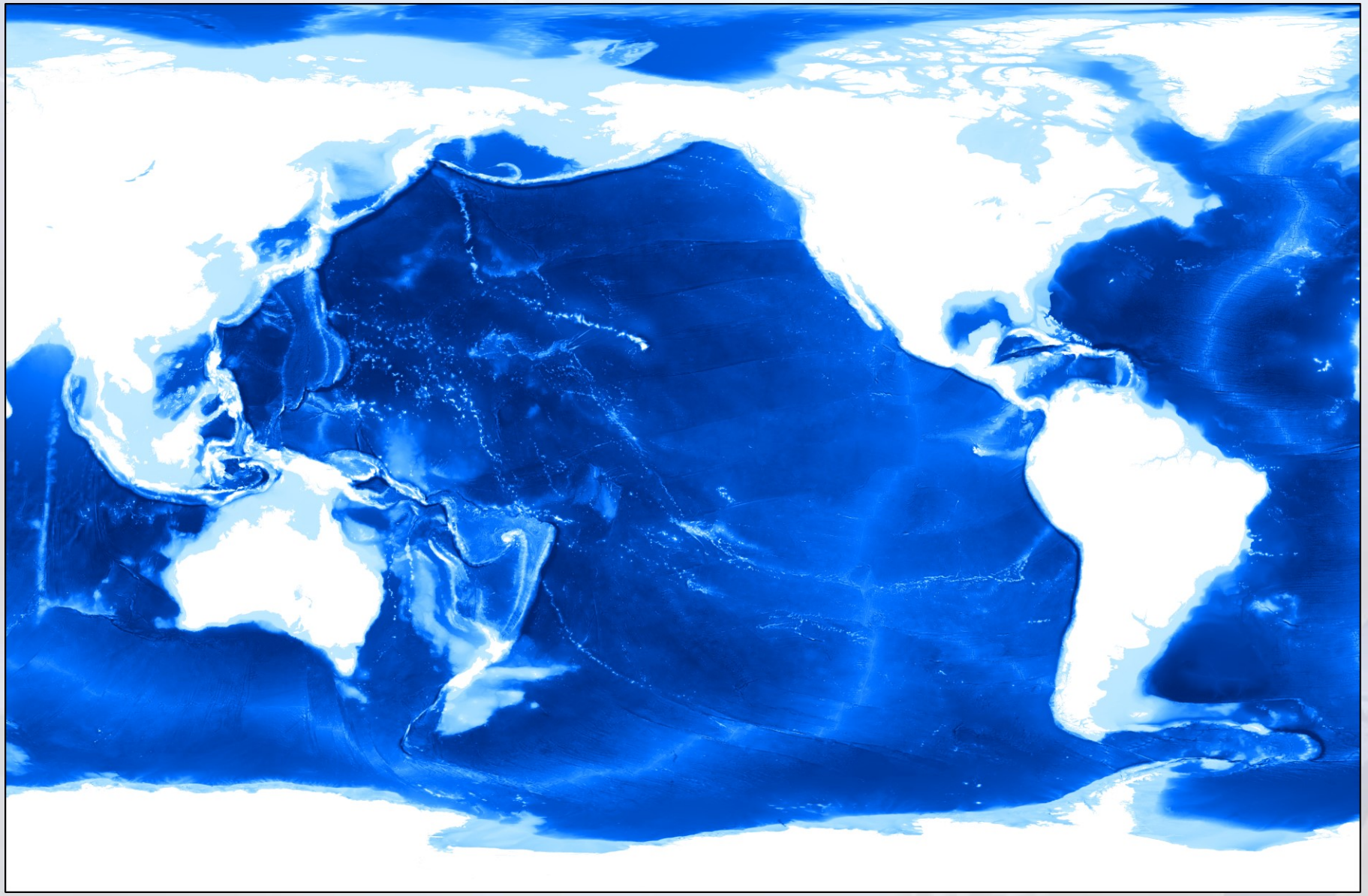
THE NIPPON FOUNDATION-GEBCO SEABED 2030

Evgenia Bazhenova

Seabed 2030 Project
South and West Pacific regional data centre

National Institute of Water and Atmospheric Research, Wellington

https://www.seabed2030.gebco.net



GEBCO_2020 grid

15arc-sec (~500m) cell size

Formats:

.netcdf
.geotiff
.asc

https://www.gebco.net

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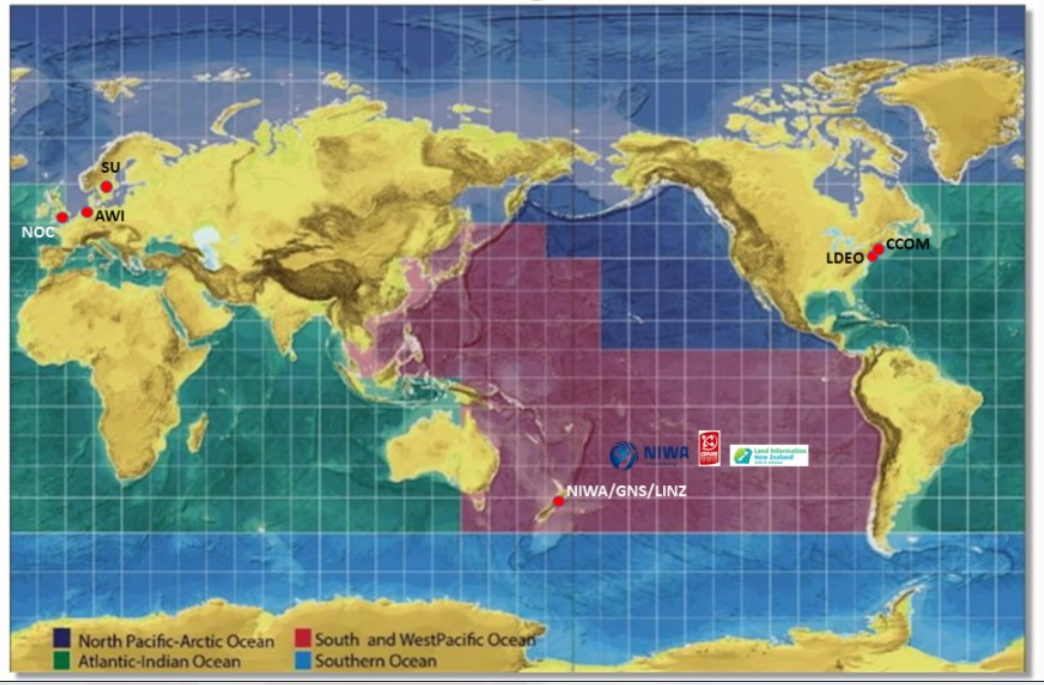
NIWA
Taihoro Nukurangi

Geospatial Data



Nippon Foundation-GEBCO Seabed 2030 project:
South and West Pacific Ocean regional data centre

Seabed 2030 has four Regional Centers who compile bathymetry data for their areas,
and a Global Center (based at the British Oceanographic Data Centre) that produces the global **GEBCO** grid.

South and West Pacific Ocean regional data centre (SaWPaC) held its inaugural workshop on March 3-6, 2019, in Wellington.

SaWPaC story map

Online resources for the mapping community

This public platform is being developed for discovering bathymetric data coverage in the Pacific region.

Seabed 2030 Open Data Layers and Applications

Explore bathymetric data coverage

Web viewer | How-to guide

Contact Us

Email: pacific@seabed2030.org

Seabed 2030 on the NIWA web page

https://seabed2030.gebco.net/pacific

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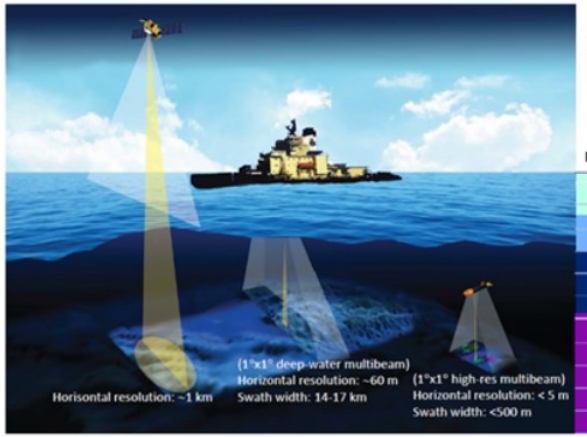
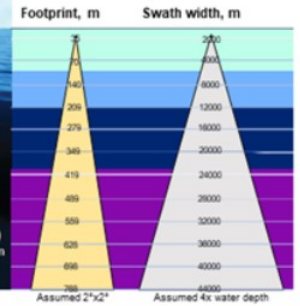
SaWPaC StoryMap

Nippon Foundation-GEBCO Seabed 2030 project // South & West Pacific regional data centre

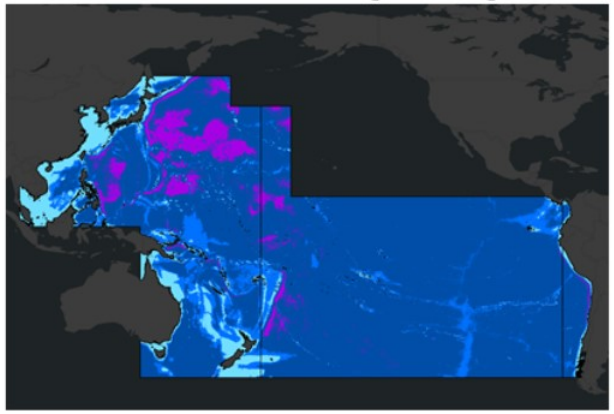


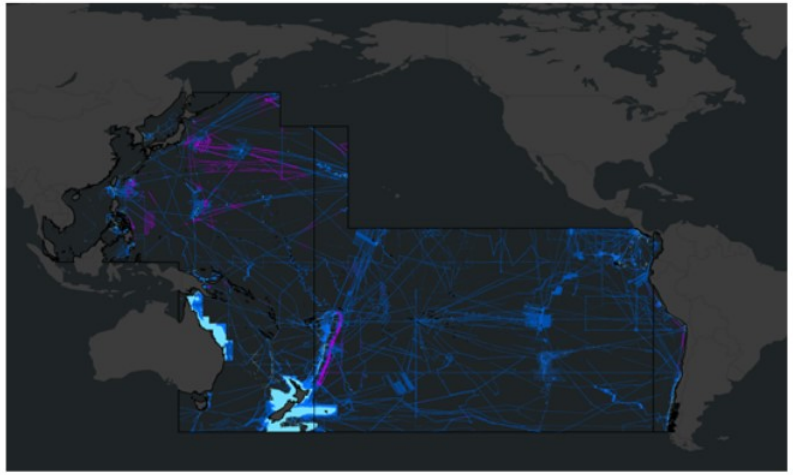
Seabed 2030 target grid resolution is based on the average beam footprint for a specified depth range of a modern multibeam system installed on a surface vessel.



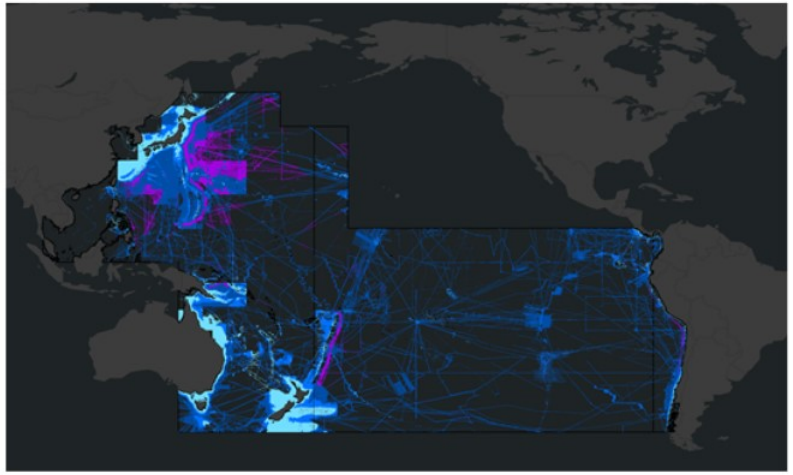
Depth Range	Target grid resolution
0 – 1500 m	100 × 100 m
1500 – 3000 m	200 × 200 m
3000 – 5750 m	400 × 400 m
5750 – 11000 m	800 × 800 m

Seabed/GEBCO 2030 target coverage





Seabed/GEBCO_2019 coverage



Seabed/GEBCO_2020 (draft) coverage

Seabed 2030 S&W Pacific regional contributors in 2019

[Full list of GEBCO_2020 data contributors]

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New S&W Pacific/Seabed 2030 regional contributors in 2020

CSIRO

USGS science for a changing world

SIOExplorer

Potential future partners of Seabed 2030 in the Pacific region

AUS SEABED

Ifremer

DeSCET PROJECT

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Seabed 2030 S&W Pacific regional contributors / ENC data

Hydrographic Authority, Land Information New Zealand (LINZ)
Korea Hydrographic and Oceanographic Administration (KHOA), Republic of Korea
East Asia Hydrographic Commission (EAHC)
Chilean Navy Hydrographic and Oceanographic Service (SHOA), Chile
Directorate of Hydrography and Navigation (DHN), Peru
Instituto Oceanographico de la Armada (INOCAR), Ecuador
Hydrographic Department, Royal Thai Navy (HDRTN)

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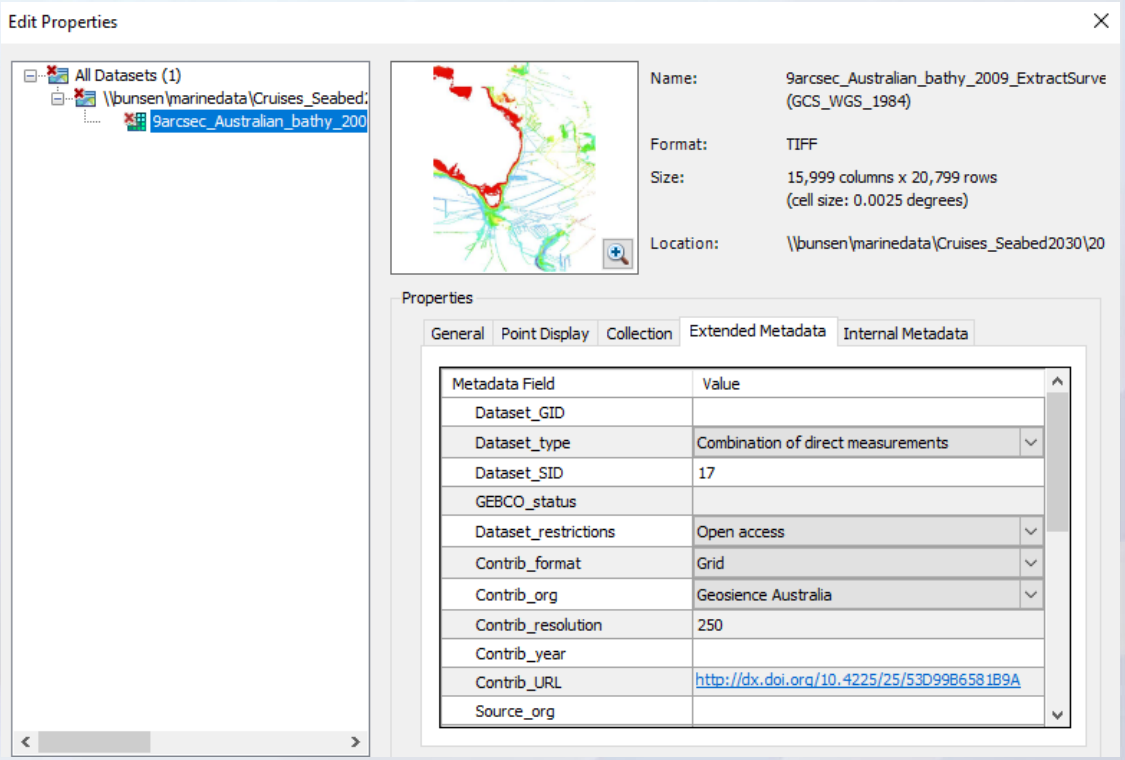
SaWPaC/ Seabed 2030 metadata management

Data type	code
Land	0
Direct measurements	
Singlebeam - depth value collected by a single beam echo-sounder	10
Multibeam - depth value collected by a multibeam echo-sounder	11
Seismic - depth value collected by seismic methods	12
Isolated sounding - depth value that is not part of a regular survey or trackline	13
ENC sounding - depth value extracted from an Electronic Navigation Chart (ENC)	14
Lidar - depth derived from a bathymetric lidar sensor	15
Depth measured by optical light sensor	16
Combination of direct measurement methods	17
In-direct Methods	
Predicted based on satellite-derived gravity data	20
Interpolated based on a computer algorithm	21
Digital bathymetric contours from charts	22
Digital bathymetric contours from ENCs	23
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	24
Unknown	
Pre-generated grid - depth value is taken from a pre-generated grid that is based on mixed source data types, e.g. single beam, multibeam, interpolation etc.	30
Unknown source - depth value from an unknown source	31
Steering points - depth value used to constrain the grid in areas of poor data coverage	32



ESRI Bathymetric Information System

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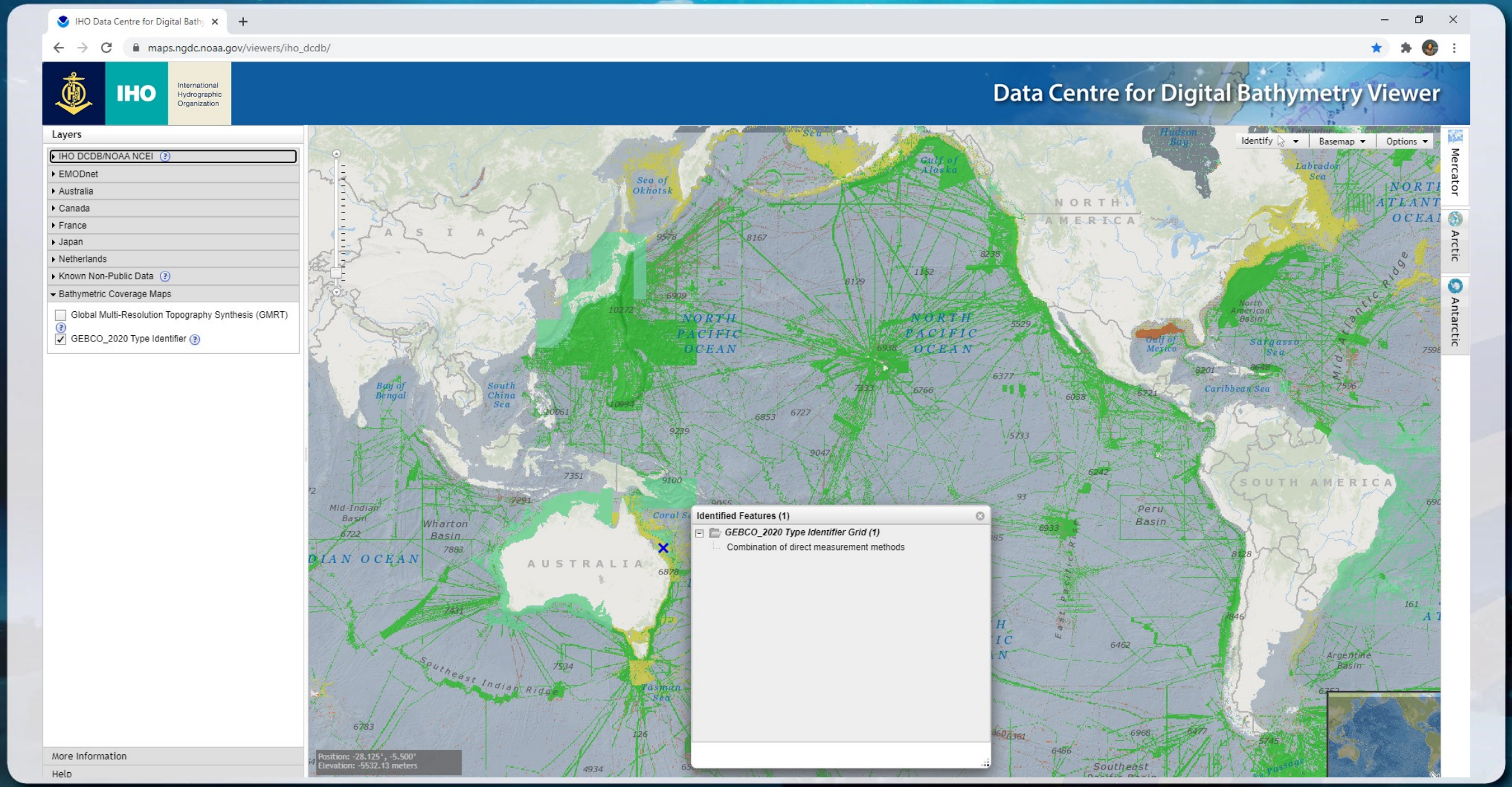
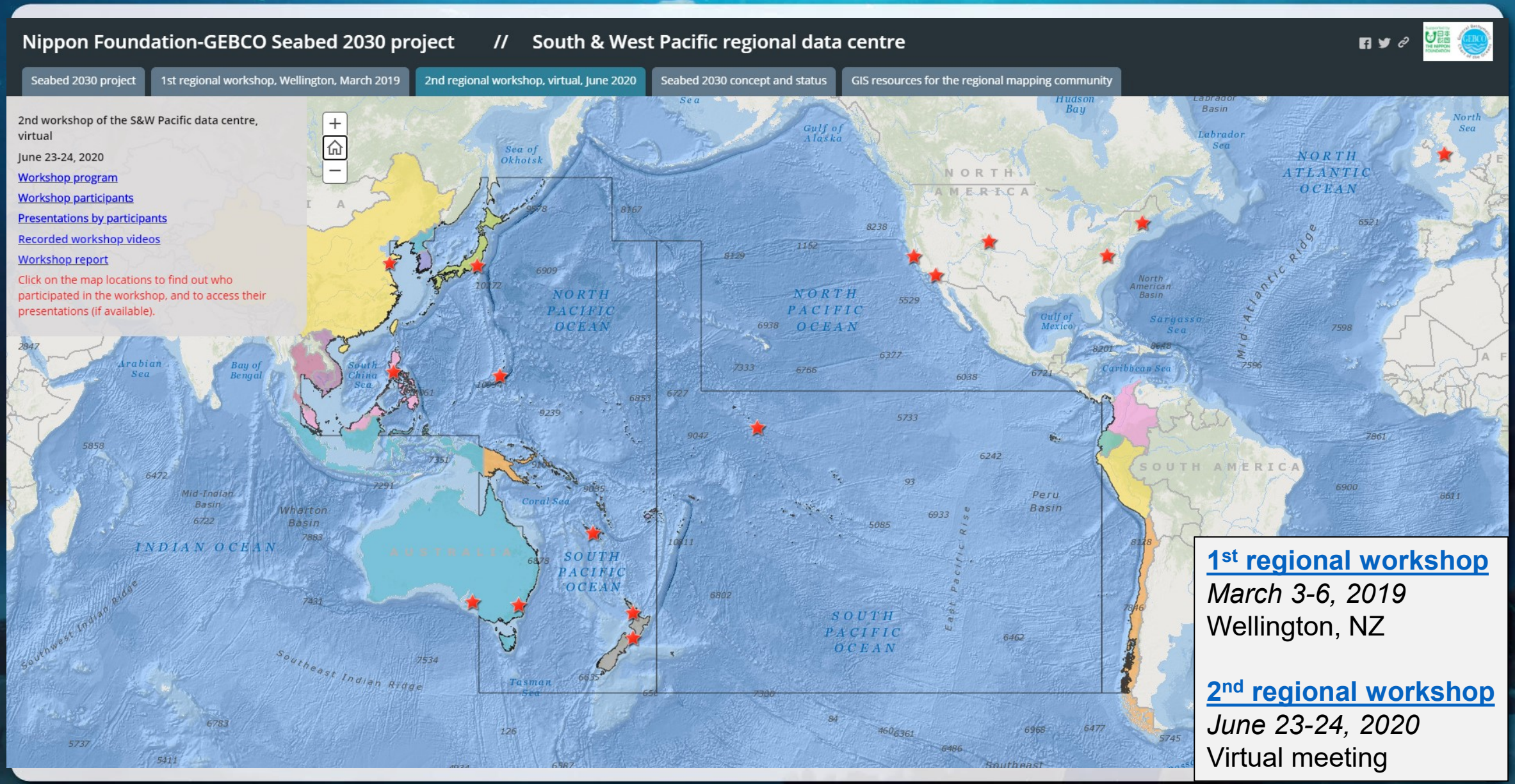
GEBCO_2020 TID grid

https://maps.ngdc.noaa.gov/viewers/iho_dcdb/



SaWPaC StoryMap



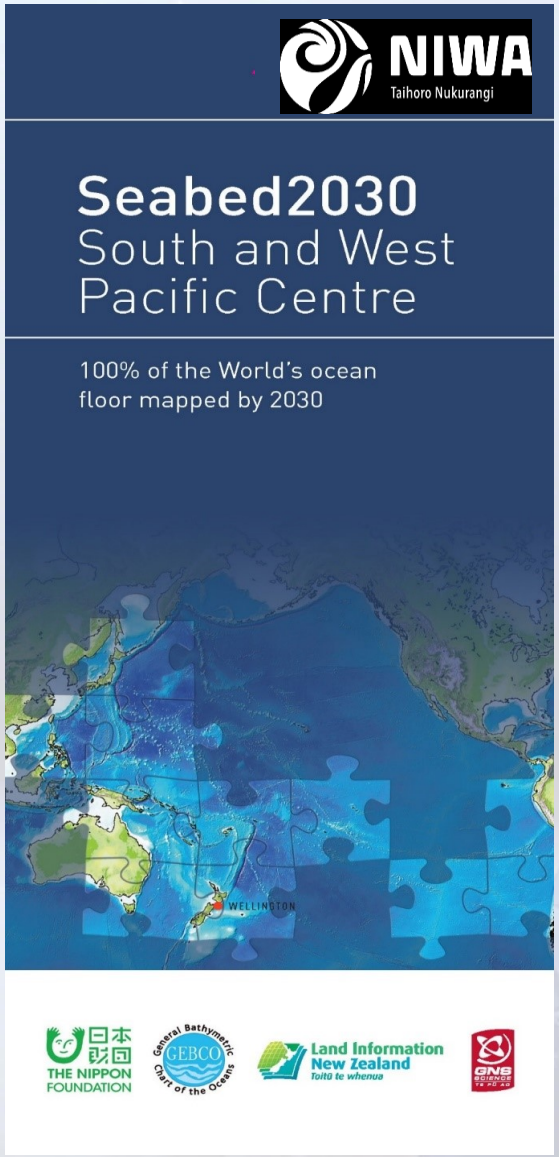
Seabed 2030 South and West Pacific centre

Online resources

https://seabed2030.gebco.net/pacific

E-mail: pacific@seabed2030.org

@seabed2030



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