

SCAR 2022 Standing Committee on Antarctic Geographic Information



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- IBSCO 2 released:

International Bathymetric Chart of the Southern Ocean Version 2

- New marine data services online: Marine reflection seismics
- SCAGI Gazetteer and more

International Bathymetric Chart of the Southern Ocean Version 2 (IBSCO 2)



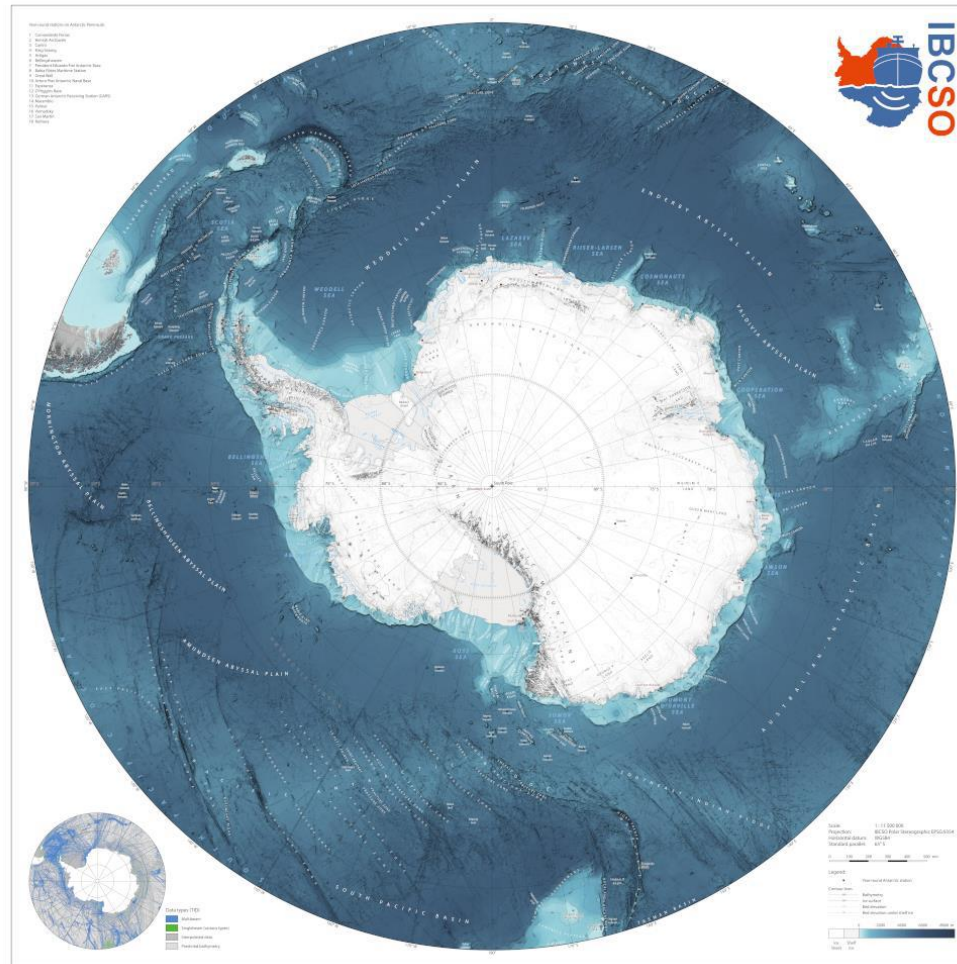
- IBSCO is the authoritative map of the Southern Ocean with the largest database of depth measurements. With billions of soundings contributed by organisations across the globe, it portrays the Southern Ocean seafloor in so-far unprecedented detail
- IBSCO is a regional mapping project of the General Bathymetric Chart of the Ocean (GEBCO) supported by the Nippon Foundation – GEBCO Seabed 2030 Project
- GEBCO is a project under the auspices of the International Hydrographic Organization (IHO) and the Intergovernmental Oceanographic Commission (IOC) with the goal to produce the authoritative map of the world's oceans
- The IBSCO Project is also an integral part of the Antarctic research community and an expert group of the Scientific Committee on Antarctic Research (SCAR). For further information see <http://www.ibcso.org>

IBSCO version 2



Poster version
with detailed
information

<https://ibcsco.org/ibcsco-v2/>



INTERNATIONAL BATHYMETRIC CHART OF THE SOUTHERN OCEAN (IBCSO)
Version 2

General Information

The International Bathymetric Chart of the Southern Ocean (IBCSO) is a project that aims to provide a comprehensive and accurate bathymetric chart of the Southern Ocean. The chart is based on a combination of satellite altimetry, ship-based bathymetry, and other data sources. The chart is available in a digital format and can be accessed online.

IBCSO Data Sources

The IBCSO data is derived from a variety of sources, including satellite altimetry, ship-based bathymetry, and other data sources. The data is processed and quality-controlled to ensure accuracy and consistency.

IBCSO Data Products

The IBCSO data is available in a variety of formats, including digital bathymetric charts, bathymetric profiles, and bathymetric maps. The data is also available in a format that can be used for scientific research and analysis.

IBCSO Data Users

The IBCSO data is used by a wide range of users, including scientists, researchers, and the general public. The data is used for a variety of purposes, including understanding the ocean's bathymetry, studying ocean circulation, and assessing the impact of climate change on the ocean.

IBCSO Data Availability

The IBCSO data is available to the public and is freely accessible. The data is also available to researchers and scientists for use in their work.

IBCSO Data Updates

The IBCSO data is updated regularly to ensure that it remains current and accurate. The updates are based on new data sources and improvements in data processing techniques.

IBCSO Data Contact

For more information about the IBCSO data, please contact the IBCSO Data Manager at ibcsco@awi.de.

IBCSO Data Acknowledgments

The IBCSO data is a product of the International Bathymetric Chart of the Southern Ocean (IBCSO) project. The project is supported by the German Research Foundation (DFG) and the Helmholtz Association.

IBCSO Data License

The IBCSO data is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike license (CC BY-NC-SA). This license allows users to share and adapt the data, provided that they give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

IBCSO Data Disclaimer

The IBCSO data is provided as a service to the public and is not intended to be used for legal or other purposes. The data is provided "as is" and without any warranty of accuracy or completeness. The user assumes all responsibility for the use of the data.

IBCSO Data Credits

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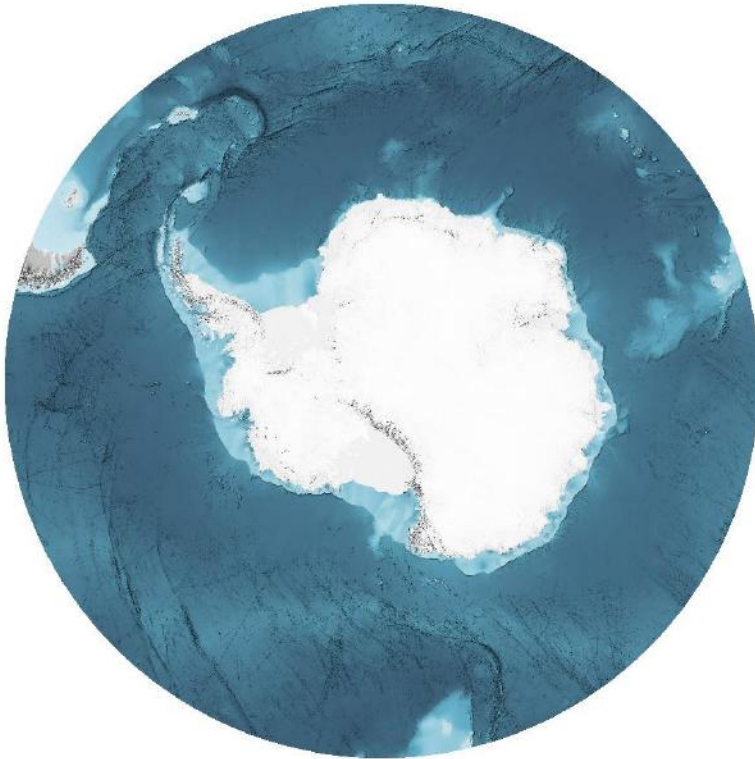
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International Bathymetric Chart of the Southern Ocean Version 2 (IBSCO 2)



- The IBCSO v2 is a digital bathymetric model (DBM) for the area south of 50° S with special emphasis on the bathymetry of the Southern Ocean
- IBCSO v2 has a resolution of 500 m × 500 m in a Polar Stereographic projection (EPSG: 9354)
- Pooling data from 22 countries
- 25.5 billion soundings, 6 times as many as for IBCSO v1
- The total data coverage of the seafloor is 23.79% with a multibeam-only data coverage of 22.32%. The remaining 1.47% include singlebeam and other data



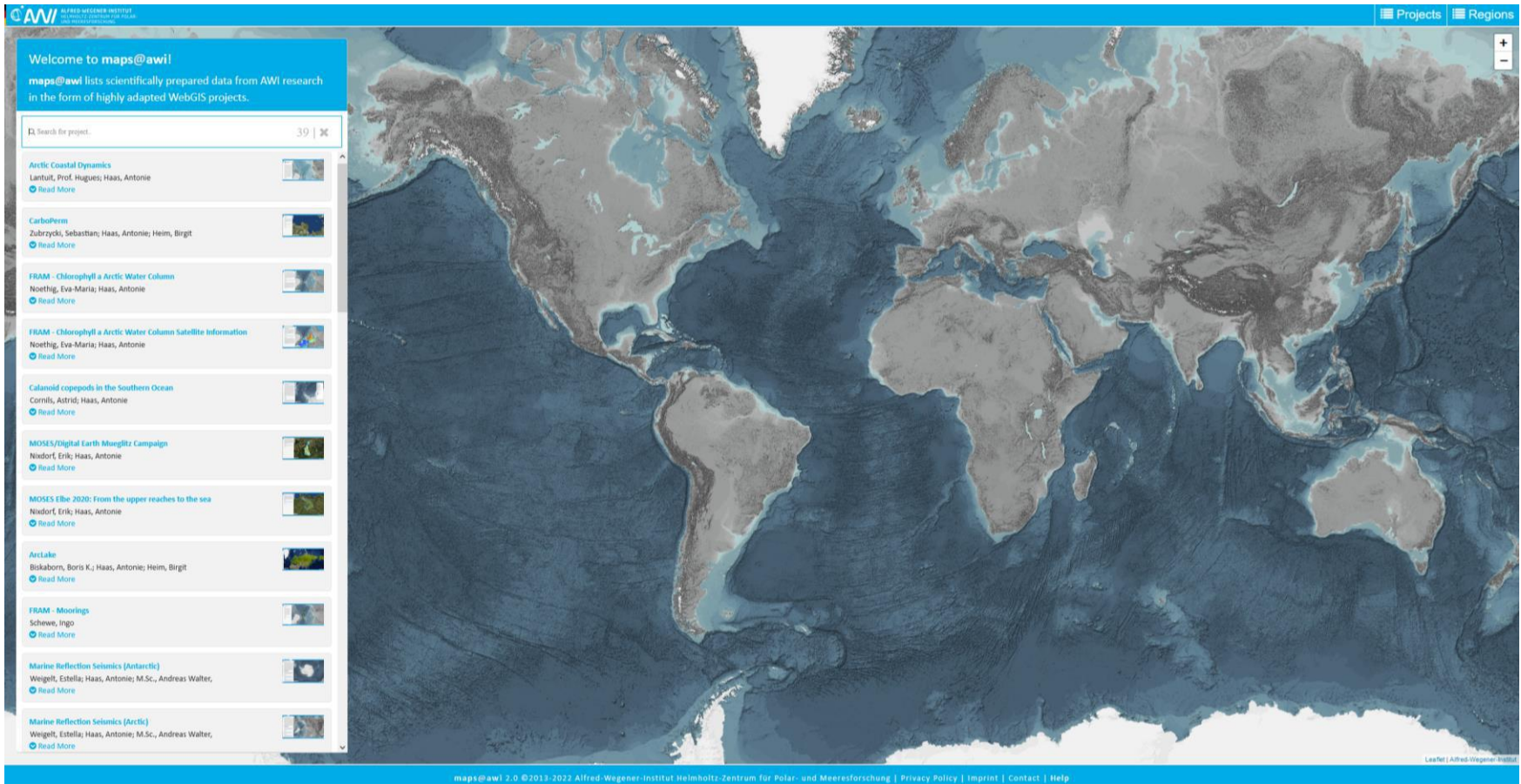
IBSCO 2 ice surface



IBSCO 2 bedrock

map and more doi: [10.1594/PANGAEA.937574](https://doi.org/10.1594/PANGAEA.937574)

nature scientific data publication doi: [10.1038/s41597-022-01366-7](https://doi.org/10.1038/s41597-022-01366-7)



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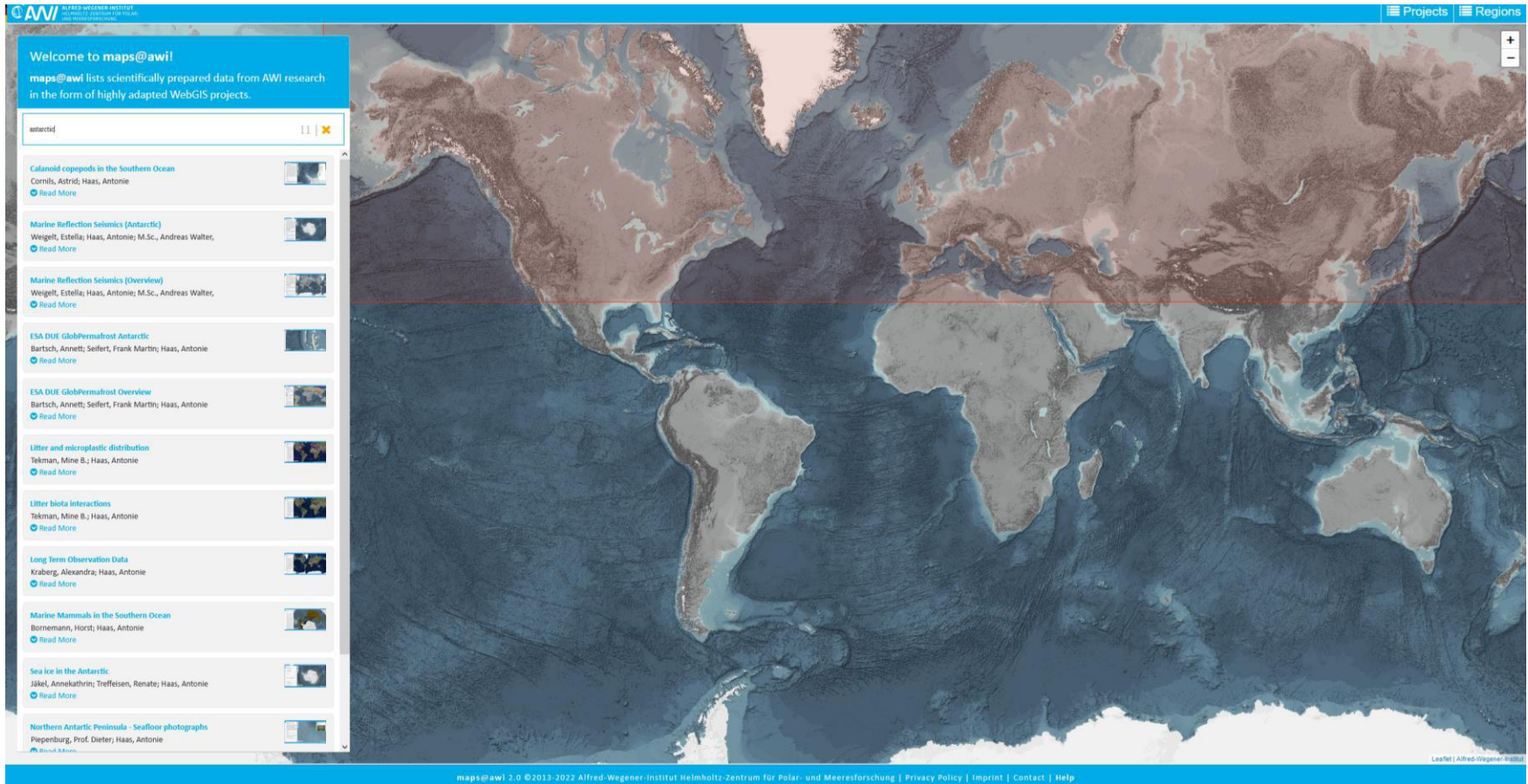
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antarctic

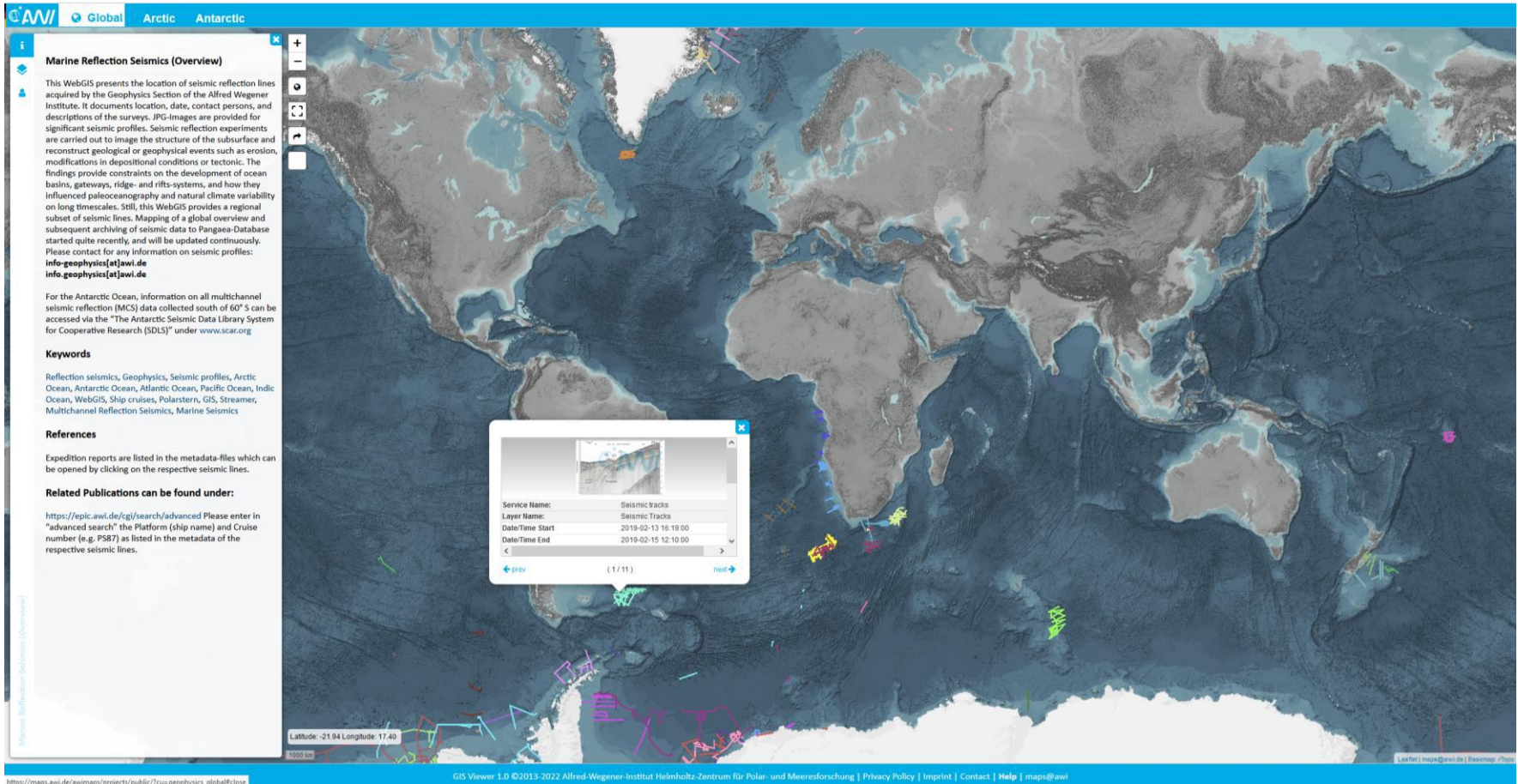
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Filtering by keywords lists the resulting projects

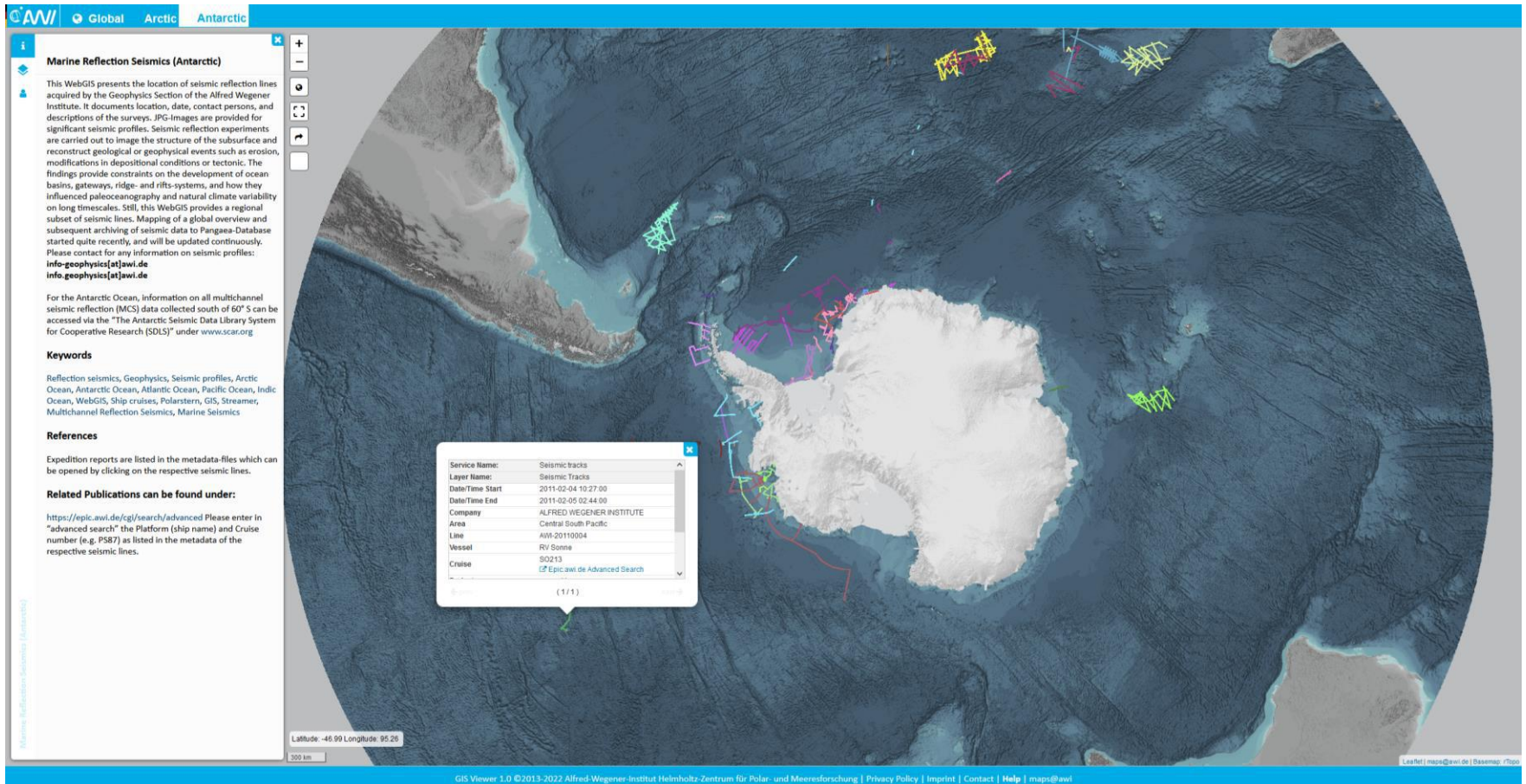
copepods, permafrost, litter and microplastics distribution, litter biota interaction, long term observation, marine mammals, sea ice, seafloor photography...

NEW: Global Marine Reflection Seismics



Beside descriptive information all project data is visualized in spatial context

NEW: Antarctic Marine Reflection Seismics



PopUp windows provide descriptive metadata and more information like data access and so on

- Validation of gazetteer features ~~ongoing~~ done :
 - Jörn Siemers a former member of the „Ständige Ausschuss für geographische Namen (StAGN)*“ reviewed the already given feature names by end of 2020. The edited list was send to J. Muller
 - Prof. Andreas Läufer (BGR) is the new person of contact for the StAGN to approve new Antarctic feature names
- Increase visibility of national SCAR activities due to publishing online project descriptions
- New Antarctic permafrost data in 2023/24

A large, jagged iceberg floats in the ocean. The iceberg's surface is highly textured with various ridges, grooves, and sharp edges. The water around the base of the iceberg is a deep blue, while the sky above is a heavy, greyish-blue. In the distance, other smaller ice floes are visible on the horizon.

Thank you!

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