

Report by NOAA/NCEI on maintenance issues to SCUFN

Jennifer Jencks

Director

IHO Data Centre for Digital Bathymetry

jennifer.jencks@noaa.gov

Chris Slater

Lead Software Developer

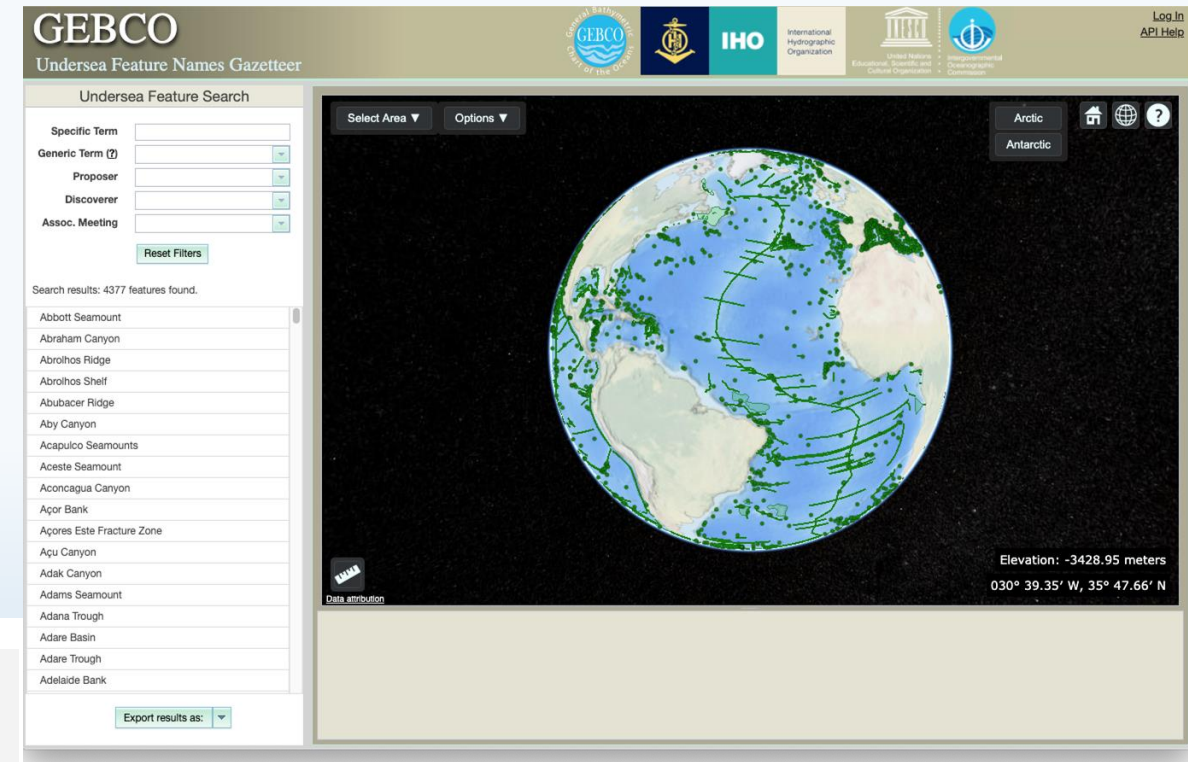
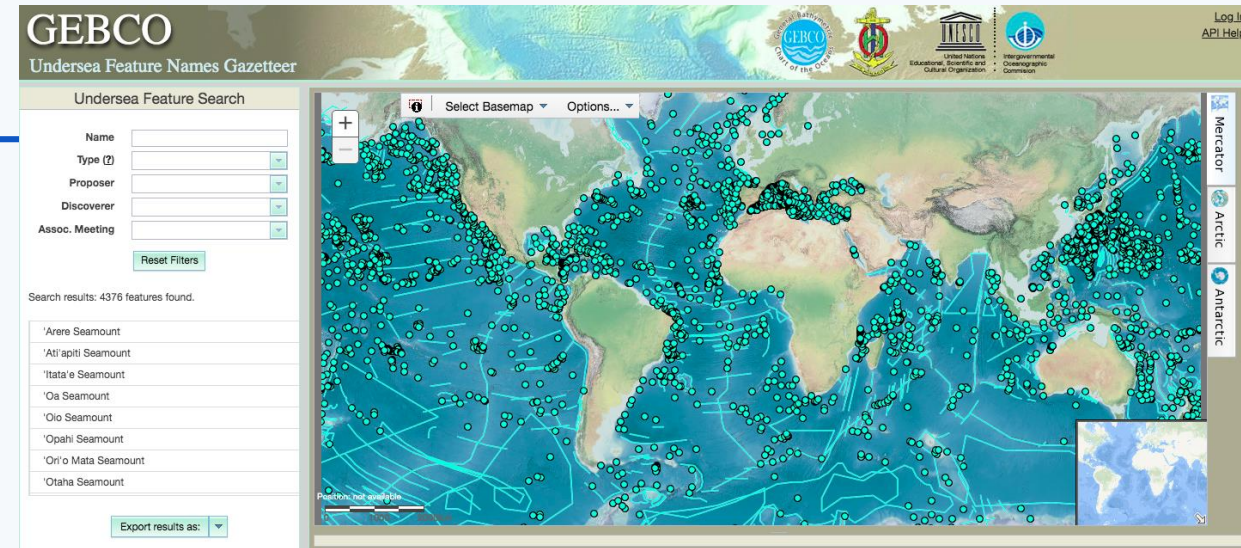
NOAA NCEI/CIRES

chris.slater@noaa.gov



Introduction

1. NOAA NCEI has hired a third software developer since SCUFN32.
2. The software development team began addressing Gazetteer issues and enhancement requests in March 2020.
3. The updates made to Gazetteer v4.1.3 have now addressed ALL outstanding issues.
 - SCUFN32-07.1A identified 23 areas of improvement for the previous version of the Gazetteer.
 - Three additional requests for improvement were made via email in 2019.



Intern:
Organis

ngdc.noaa.gov/gazetteer/

Issue A.14: Editor name

The Editor name should be shown under “Editor” for all status, whether APPROVED, PENDING, EDIT or READY.

The image displays four overlapping screenshots of the IHO Name Bank interface, illustrating the 'Test Bank READY [29817]' entry in different statuses: APPROVED, PENDING, EDIT, and READY. Each screenshot highlights the 'Latest Editor' field with a red circle and the 'Status' field with a blue circle.

APPROVED Status:

- Status: APPROVED
- Name: Test Bank
- Proposed By: [blank]
- Discovered By: [blank]
- Last Updated: 2020-11-04
- Associated Meeting(s): [blank]
- Origin of Name: [blank]
- Additional Information: [blank]
- Minimum Depth (m): [blank]
- Maximum Depth (m): [blank]
- Total Relief (m): [blank]
- Dimension/Size: [blank]
- Geometry (?): Primary Geometry: POINT (0 0)
- Secondary Geometry: [blank]
- Latest Editor: test.admin
- Editor's Remarks: [blank]

PENDING Status:

- Status: PENDING
- Name: Test Bank
- Proposed By: [blank]
- Discovered By: [blank]
- Last Updated: 2020-11-04
- Associated Meeting(s): [blank]
- Origin of Name: [blank]
- Additional Information: [blank]
- Minimum Depth (m): [blank]
- Maximum Depth (m): [blank]
- Total Relief (m): [blank]
- Dimension/Size: [blank]
- Geometry (?): Primary Geometry: POINT (0 0)
- Secondary Geometry: [blank]
- Latest Editor: test.admin
- Editor's Remarks: [blank]

EDIT Status:

- Status: EDIT
- Name: Test Bank
- Proposed By: [blank]
- Discovered By: [blank]
- Last Updated: 2020-11-04
- Associated Meeting(s): [blank]
- Origin of Name: [blank]
- Additional Information: [blank]
- Minimum Depth (m): [blank]
- Maximum Depth (m): [blank]
- Total Relief (m): [blank]
- Dimension/Size: [blank]
- Geometry (?): Primary Geometry: POINT (0 0)
- Secondary Geometry: [blank]
- Latest Editor: test.admin
- Editor's Remarks: [blank]

READY Status:

- Status: READY
- Name: Test Bank
- Proposed By: [blank]
- Discovered By: [blank]
- Last Updated: 2020-11-04
- Associated Meeting(s): [blank]
- Origin of Name: [blank]
- Additional Information: [blank]
- Minimum Depth (m): [blank]
- Maximum Depth (m): [blank]
- Total Relief (m): [blank]
- Dimension/Size: [blank]
- Geometry (?): Primary Geometry: POINT (0 0)
- Secondary Geometry: [blank]
- Latest Editor: test.admin
- Editor's Remarks: [blank]



Issue A.16: Display of Information – Associated Meeting

The ability to enter up to three associated meetings, shown on same line, in order to trace back the history of a name if needed.

Select Area ▼ Options ▼ Filter ▼

Arctic
Antarctic

Test Bank READY [29817]

Elevation: -4970.12 meters
000° 28.67' W, 00° 05.31' S

10 km

Cancel Save

Status EDIT

Specific Term Test

Generic Term Bank

Proposer

Year of Proposal

Discoverer

Year of Discovery

Associated Meeting(s)

- ☐ SCUFN-26
- ☐ SCUFN-27
- ☐ SCUFN-28
- ☒ SCUFN-29
- ☒ SCUFN-30
- ☒ SCUFN-31

Origin of Name

Additional Information

Minimum Depth (m)

Maximum Depth (m)

Select Area ▼ Options ▼ Filter ▼

Arctic
Antarctic

Test Bank EDIT [29818]

Elevation: -4953.48 meters
000° 29.86' W, 00° 13.71' S

10 km

Edit Hold Submit Delete

Status EDIT

Name Test Bank

Proposed By

Discovered By

Last Updated 2020-11-04

Associated Meeting(s) SCUFN-29 SCUFN-30 SCUFN-31

Origin of Name

Additional Information

Minimum Depth (m)

Maximum Depth (m)

Total Relief (m)

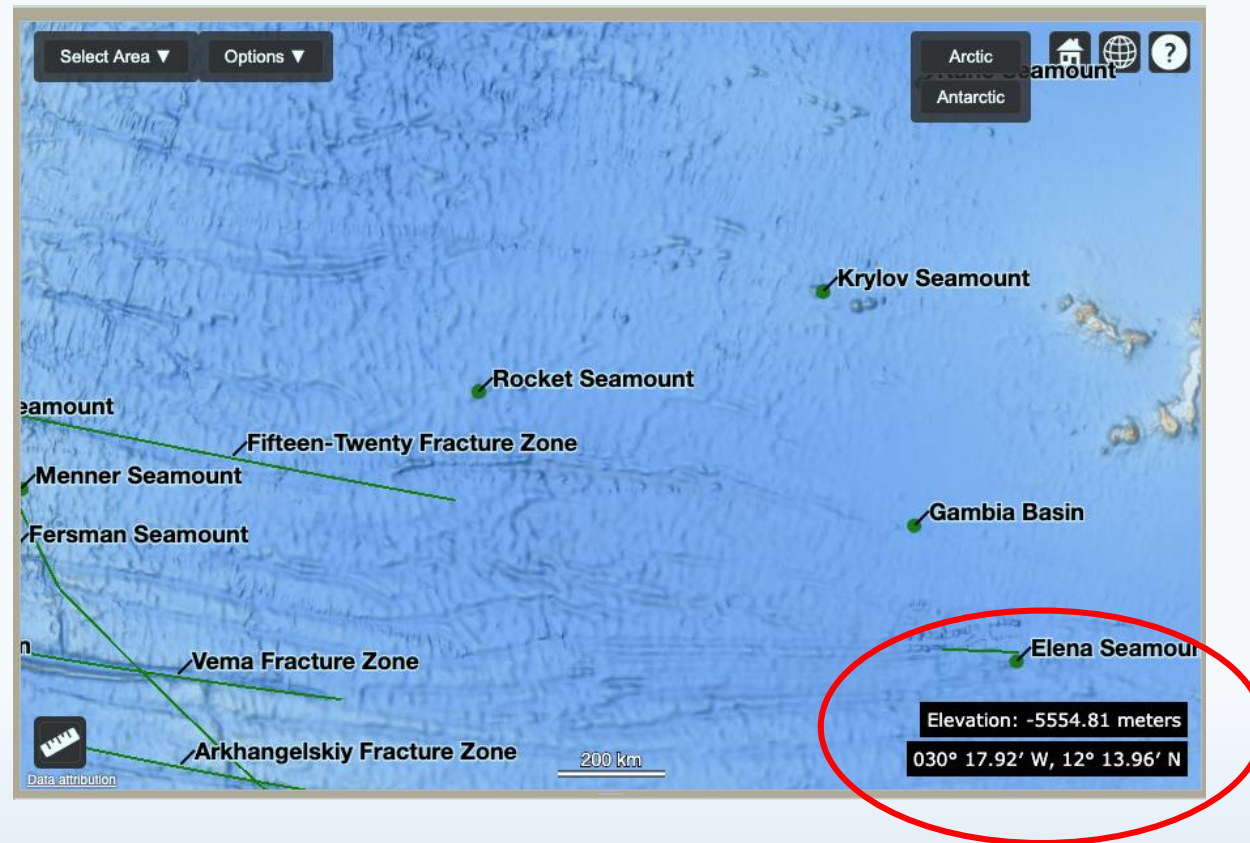
Dimension/Size

Geometry (?) Primary Geometry: POINT (0 0)



Issue A.17: Display of Depth on the Chart Background.

Add depth display in meters as an option, that is, Long, Lat, Depth, using the GEBCO gridded bathymetry database.



Issue B.3: Feature Type List.

If, during the editing of a feature type, one clicks on the “return” key to start a new line, this change is not reflected in the updated text on display.

Admin Home Generic Term List

Create Generic Term

Generic Term *

Definition

Line 1
Line 2
Line 3

Create

Admin Home Generic Term List New Generic Term

Show Generic Term

Generic Term 29819 created

Generic Term Test Term

Definition This is a test to show that multiple lines are supported

Line 1
Line 2
Line 3

Last Updated 2020-11-04

Edit Delete



Issue B.5: Feature Types List.

When the description of a Feature Type is not provided because reference is made to another Feature Type, there should be a hyperlink from the relevant word to the actual description for that Feature Type.

Admin Home New Generic Term

Generic Term List

NOTE: Terms written in CAPITALS in the definitions are themselves defined elsewhere in the list.

Filter By Generic Term

Generic Term	Definition	Last Updated
Calderas	A group of CALDERA (s).	2015-02-25
Canyon	An elongated, narrow, steep-sided depression that generally deepens down-slope.	2014-05-02
Canyon Province	See PROVINCE . In this case, the PROVINCE contains CANYON (s).	2019-04-10
Canyons	A group of CANYON (s).	2015-02-25
Cap	See BANK . Note: this generic term is used for some features in the GEBCO Gazetteer and/or in other gazetteers. It is kept in this list to facilitate harmonization between gazetteers. However, it is considered obsolete and its use is not recommended for new feature names.	2015-02-26
Channel	See SEA CHANNEL . Note: this generic term is used for some features in the GEBCO Gazetteer and/or in other gazetteers. It is kept in this list to facilitate harmonization between gazetteers. However, it is considered obsolete and its use is not recommended for new feature names.	2015-02-26
Cone	See FAN . Note: this generic term is used for some features in the GEBCO Gazetteer and/or in other gazetteers. It is kept in this list to facilitate harmonization between gazetteers. However, it is	2015-02-26

Admin Home Generic Term List New Generic Term

Show Generic Term

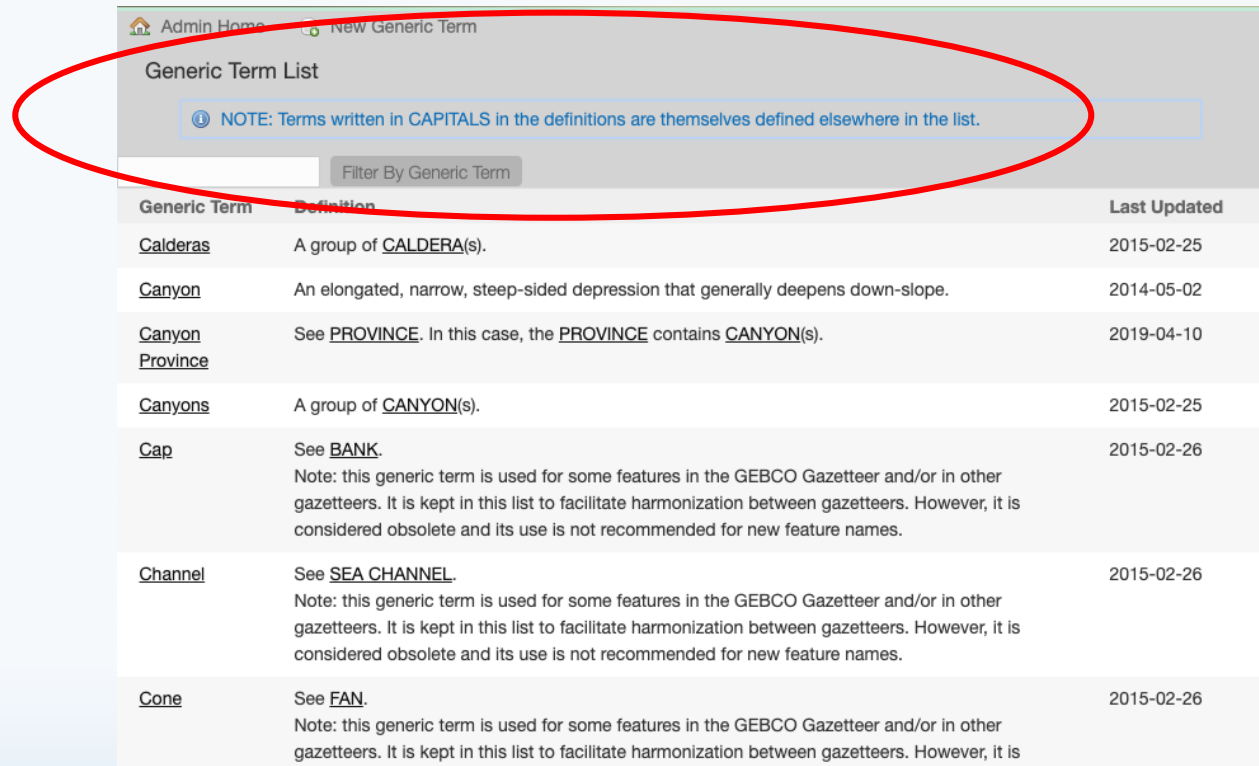
Generic Term	Bank
Definition	An elevation of the seafloor, at depths generally less than 200 m, but sufficient for safe surface navigation, commonly found on the CONTINENTAL SHELF or near an island.
Last Updated	2015-02-27

Edit Delete



Issue B.6: Feature Type List.

The following “Note” should be included at the top of each page: “NOTE: Terms written in CAPITALS in the definitions are themselves defined elsewhere in the list.”



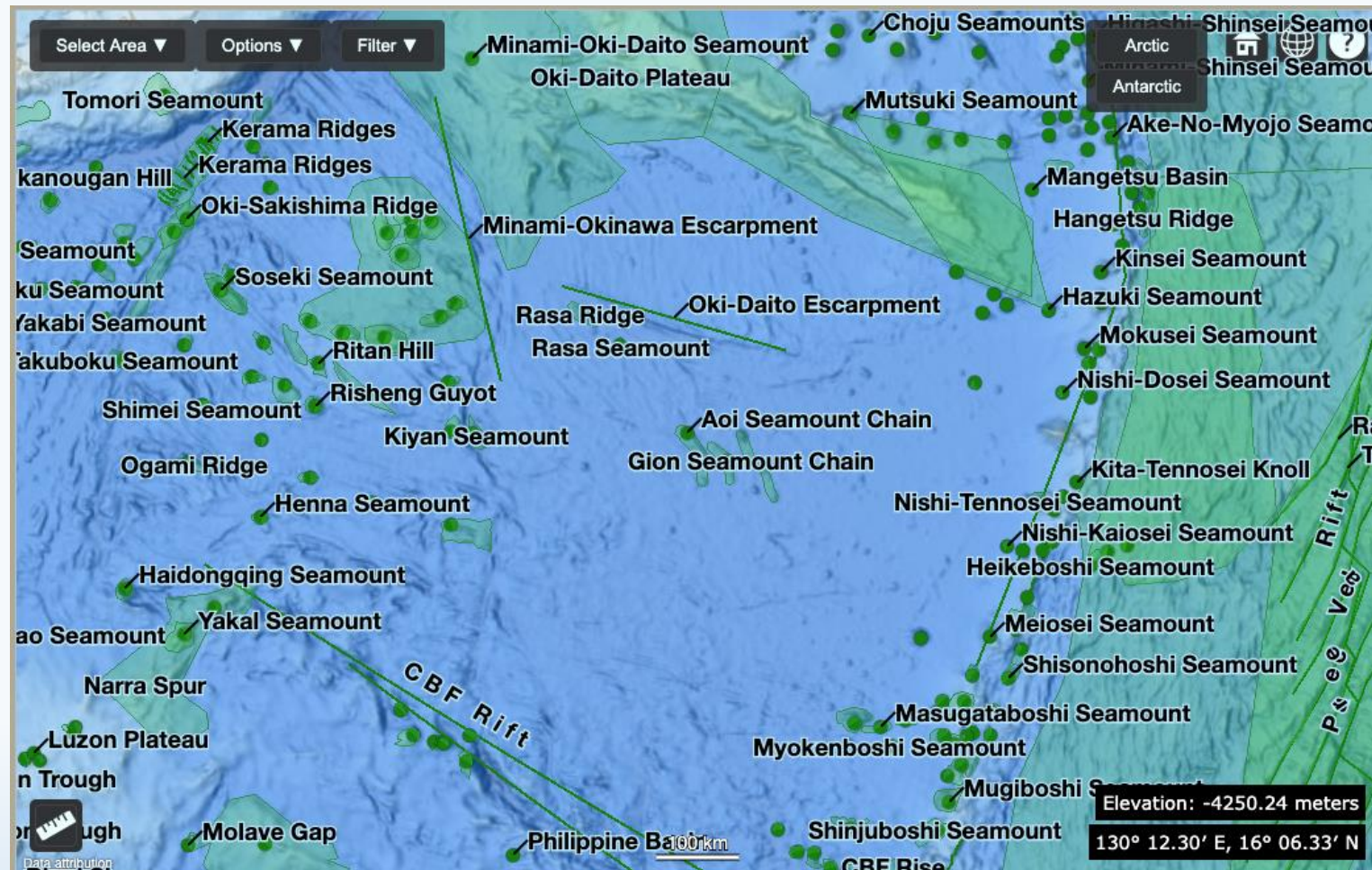
The screenshot shows a web application interface for a 'Generic Term List'. At the top, there are links for 'Admin Home' and 'New Generic Term'. Below these is the title 'Generic Term List'. A blue box with a red oval around it contains the note: 'NOTE: Terms written in CAPITALS in the definitions are themselves defined elsewhere in the list.' Below the note is a search bar and a 'Filter By Generic Term' button. The main content is a table with three columns: 'Generic Term', 'Definition', and 'Last Updated'.

Generic Term	Definition	Last Updated
<u>Calderas</u>	A group of <u>CALDERA</u> (s).	2015-02-25
<u>Canyon</u>	An elongated, narrow, steep-sided depression that generally deepens down-slope.	2014-05-02
<u>Canyon Province</u>	See <u>PROVINCE</u> . In this case, the <u>PROVINCE</u> contains <u>CANYON</u> (s).	2019-04-10
<u>Canyons</u>	A group of <u>CANYON</u> (s).	2015-02-25
<u>Cap</u>	See <u>BANK</u> . Note: this generic term is used for some features in the GEBCO Gazetteer and/or in other gazetteers. It is kept in this list to facilitate harmonization between gazetteers. However, it is considered obsolete and its use is not recommended for new feature names.	2015-02-26
<u>Channel</u>	See <u>SEA CHANNEL</u> . Note: this generic term is used for some features in the GEBCO Gazetteer and/or in other gazetteers. It is kept in this list to facilitate harmonization between gazetteers. However, it is considered obsolete and its use is not recommended for new feature names.	2015-02-26
<u>Cone</u>	See <u>FAN</u> . Note: this generic term is used for some features in the GEBCO Gazetteer and/or in other gazetteers. It is kept in this list to facilitate harmonization between gazetteers. However, it is	2015-02-26



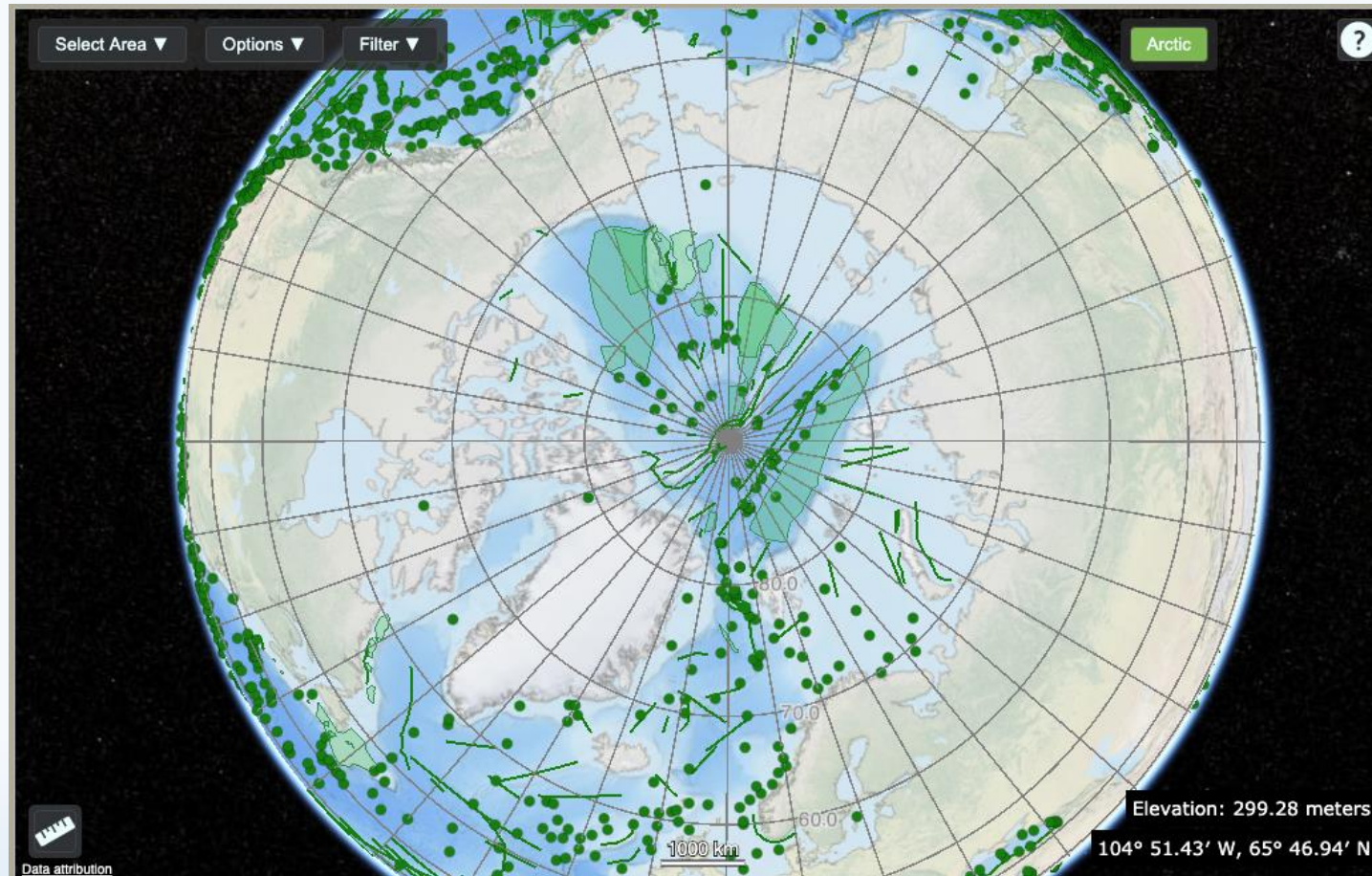
Additional Enhancements

Improve 3D Earth map colors and reduce label clutter in complex areas.



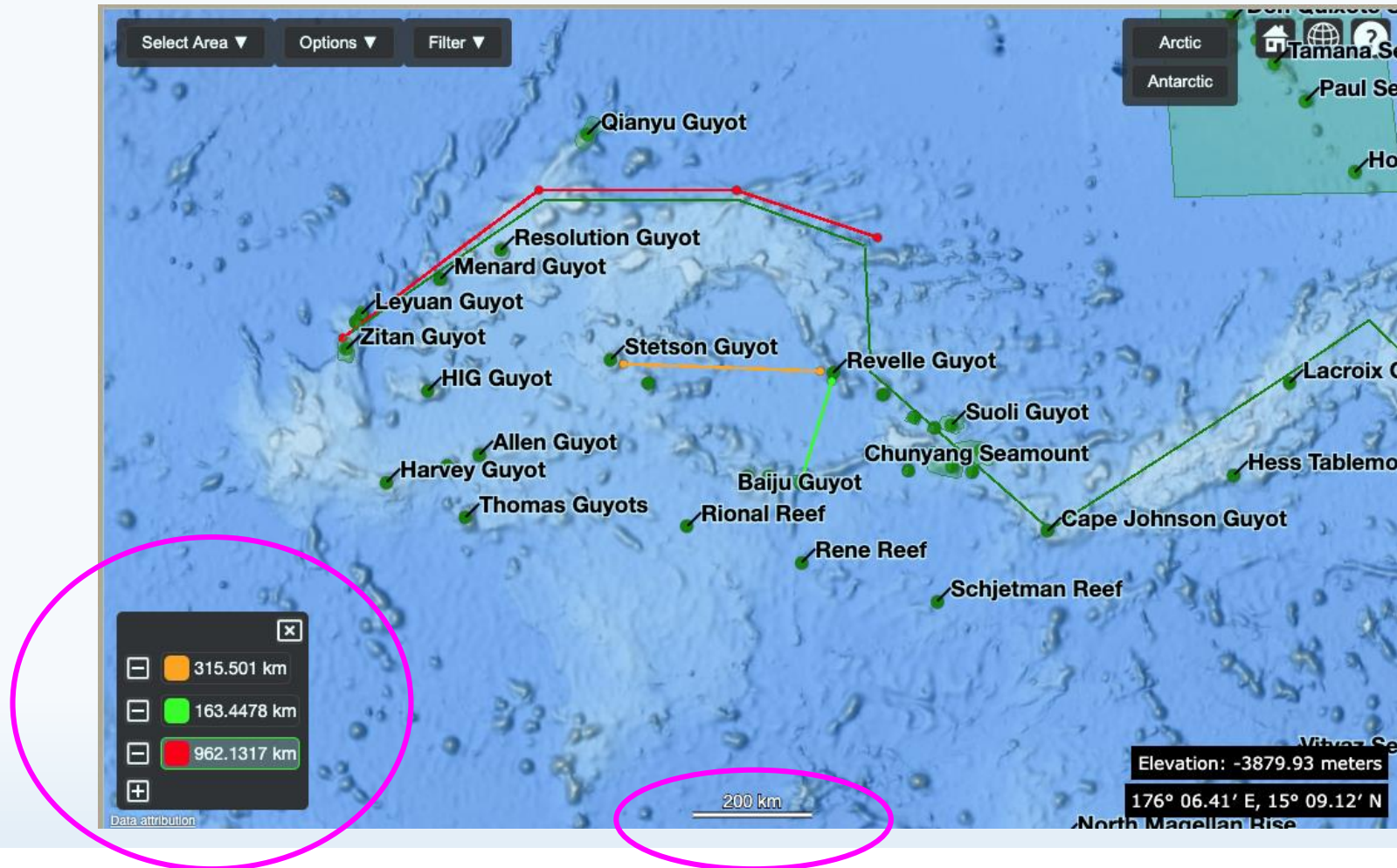
Additional Enhancements

Improved polar view navigation.



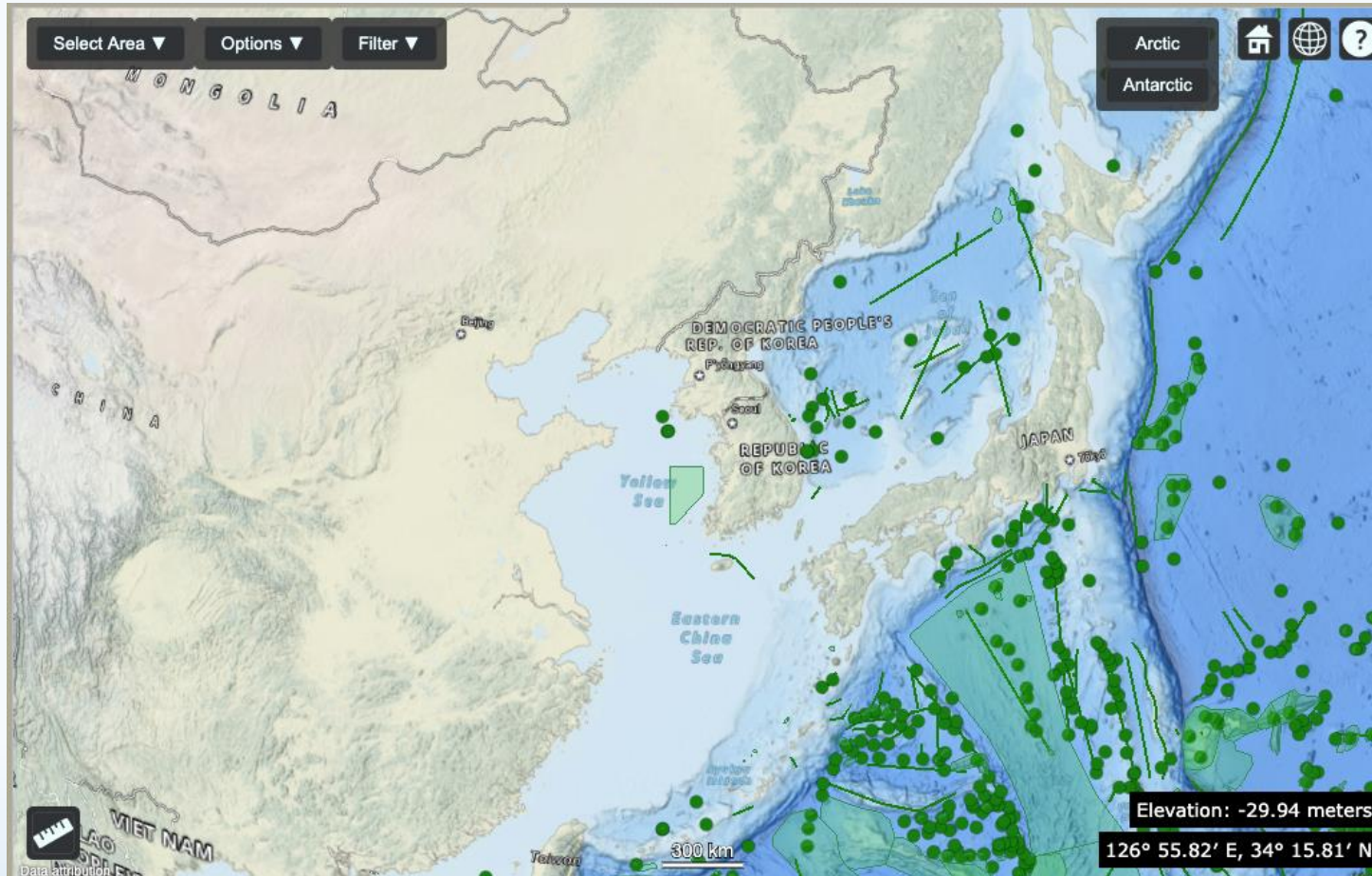
Additional Enhancements

Added display scale and measure tool.



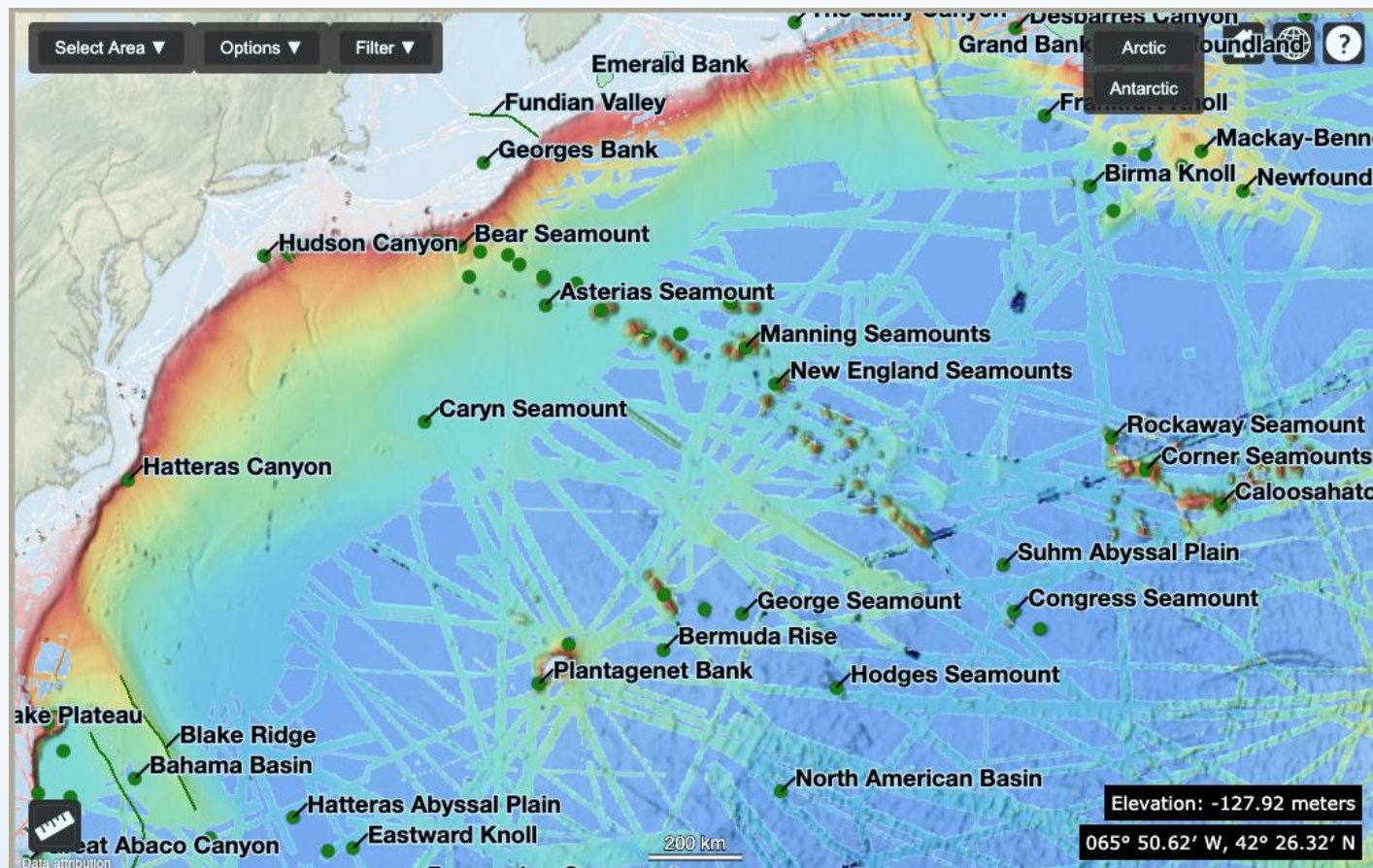
Additional Enhancements

Added boundaries and world name layers that are compliant with UN recognized names.



Additional Enhancements

Added NOAA NCEI's Multibeam Bathymetry Mosaic ArcGIS image service to the Gazetteer. The service provides a color shaded relief visualization of gridded multibeam data from the entire NCEI/DCDB archive.



Gazetteer V5.0 - Spring, 2021

Significant changes are needed in the current GEBCO Gazetteer in order to support the KHOA Beta-Gazetteer integration and simplify future development.

The goals for the upcoming development cycle include:

- Updating the API (Application Programming Interface) to be cohesive and flexible for future enhancements
- Adding integration points to the API for Beta-Gazetteer integration
- Adding standards-based authentication, OAuth, in order to provide easier and more secure integration with the Beta-Gazetteer
- Providing API documentation for use by KHOA's software developers
- Supporting KHOA's developers as they develop and test the Beta-Gazetteer integration
- Updating the user interface to use a modern and more maintainable framework, Vue.js



Gazetteer V5.0 - Spring, 2021

Care will be taken when designing and developing the API in v5.0 of GEBCO Gazetteer.

The new API should allow the Beta-Gazetteer and the GEBCO Gazetteer to evolve independently, minimizing tightly coupled development efforts.

This can be achieved by adhering to the following rules when enhancing the API:

- Changes to the API will only consist of additions, which will be considered optional. Users of the API can omit these additions to maintain functionality between Gazetteer versions.
- Existing features of the API will remain consistent between Gazetteer versions.
- The API will have its own version, independent of the Gazetteer version, which will only be updated if major changes are needed where backwards compatibility can not be maintained. This should be extremely rare.
- Should major changes be needed in the API, a new version will be created and the older API version will be deprecated, but maintained for some period of time.



Recommendations

1. SCUFN Members continue to test the improvements made to date and notify the IHO DCDB of any issues.
2. SCUFN members provide support and feedback when needed during development of the GEBCO Gazetteer and KHOA Beta-Gazetteer integration.



Justification & Impacts

1. It should be understood that continued improvements and enhancements of the Gazetteer will remain incremental. Annual funding of 40K/year has been secured and will be used to:
 - a. Perform annual maintenance and upgrades (when necessary)
 - b. Implement a limited number of requested enhancements
 - c. Progress the development of the GEBCO Gazetteer and KHOA Beta-Gazetteer integration



Actions required of SCUFN

SCUFN is invited to:

- a. note this paper;
- b. consider the Recommendations and Impacts listed.

