DRAFT of Cook book - Repository of Typical Cases

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Version 1.0

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Introduction

The names of undersea features beyond territorial waters (12 nautical miles) are approved annually by the Sub-Committee on Undersea Features Names (SCUFN). The Cook Book - Repository of Typical Cases is intended to supplement the SCUFN B-6 publication "Standardization of Undersea Feature Names" and the Generic Terms website: http://scufnterm.org. This document is a useful proposals collection in terms of examples to consider in the submission proposal process.

Recently the developing of new technologies and systems exploring and mapping the ocean floor with the detection of the undersea features to a very high resolution and topographic detail in a shorter time than in the past. It has been increased the collection of data and consequentely the detection of new undersea features thanks to a particular interest to know the ocean floor in terms of sustainable development in the UN Decade of Ocean Science and the developing of the SEABED 2030 Project and the GEBCO (the General Bathymetric Chart of the Oceans), a joint project of the International Hydrographic Organization (IHO) and the Intergovernmental Oceanographic Commission (IOC). In particular these data have been collected in order to know the ocean seabed, to update and improve the global gridded bathymetry data set and the GEBCO Gazetteer of undersea features names. The Cook Book - Repository of Typical Cases was born to help at different level and role, considering all needs to this developing of available seafloor data obtained by bathymetric surveys and the growth of the GEBCO undersea feature name proposals. As the number of undersea feature name proposals submitted to SCUFN has been increasing over the years, the more complete the proposal, the more consistent and rapid will be the response of SCUFN, thus avoiding having to make additional requests to the proposer. In fact in line with the increasing of new submitted undersea feature names there are two main needs: the correct name of the proposal undersea feature (generic and specific terms) and the perfectly good role of SCUFN in the different steps of analysis and evaluation of undersea features proposal before the approval, acceptance and the inserting in the GEBCO Gazetteer of Undersea Feature Names. This Cook book is developing to support the proposer to submit an undersea feature name proposal form completed with all available and reliable information in order to better define the submarine feature and than a more rapid response and acceptance of SCUFN.

The Cook Book – Repository of Typical Cases is an additional section of B-6 Standardization of Undersea Feature Names and contains examples of typical cases of undersea feature names extracted from the past undersea feature proposals in order to show an example of each case of undersea feature names. The Cook Book is a "living document" that will be continually updated and expanded as new typical cases are highlight by SCUFN and as the sense of best practices evolves.

How to use this cookbook

There have been many precedents to the application of the B-6 publication by SCUFN. The document is intended to highlight these precedents in order to guide the decision-making process by future SCUFN meetings.

It contains Typical Cases for assigning the Generic Terms and Specific Terms, considering the difficulties to compile the undersea feature name proposal in order to follow a green line review.

The Annex provides guidelines on Generic Terms for undersea feature name proposals and is intended to assist proposers with the selecting the most appropriate Generic Terms. It describes basic concepts for assigning Generic Terms with respect to dimensions, morphology and water depth, and provides useful suggestions for distinguishing the characteristics of undersea features that can be quite subtle. It also gives detailed information for each Generic Term in the B-6 publication.

The Cook Book - Repository of Typical Cases V 1.0 contains 37 examples of undersea feature name typical cases and its Annex, the "Cook Book for Generic Terms of undersea feature names" V 1.1.

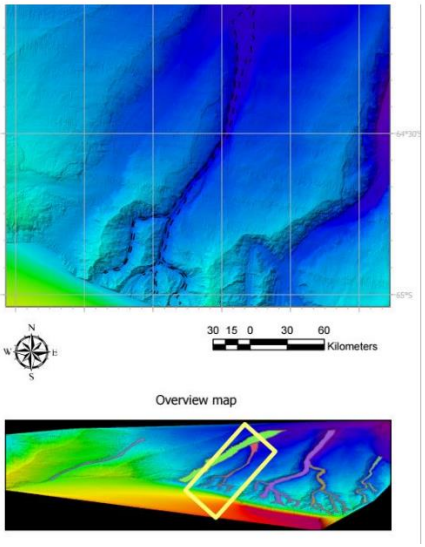
Cook Book list

1. **Title: Canyons vs Canyon**

   Criteria: Existence of tributary

   Decision Made: If a tributary canyon exists, the whole undersea features is named canyons

   Example: Jeffrey canyons (SCUFN33/15)



2. Title: Canyons vs Canyon

Criteria: Existence of tributary

Decision Made: If a tributary canyon exists, the whole undersea features is named canyons (the geometry of the feature to be revised and simplified to encompass all the branches)

Example: Boongorang canyons (SCUFN33/18)

INFORMATION

PROPOSED NAME
Boongorang CANYONS

PROPOSER INFORMATION
AHO

COORDINATES
Show coordinates

SUBMIT DATE
2020

MEETING
SCUFN-33

OCEAN

FEATURE DESCRIPTION
Maximum Depth : 3564m
Minimum Depth : 2983m
Total Relief : 348m
Steepness : 0.005 is the slope of the valley axis.
Shape : Submarine canyon with asymmetrical cross section and flat floor. Straight to slightly sinuous with several tributaries near its landward end.
Dimension : 36 km wide and > 114 km long

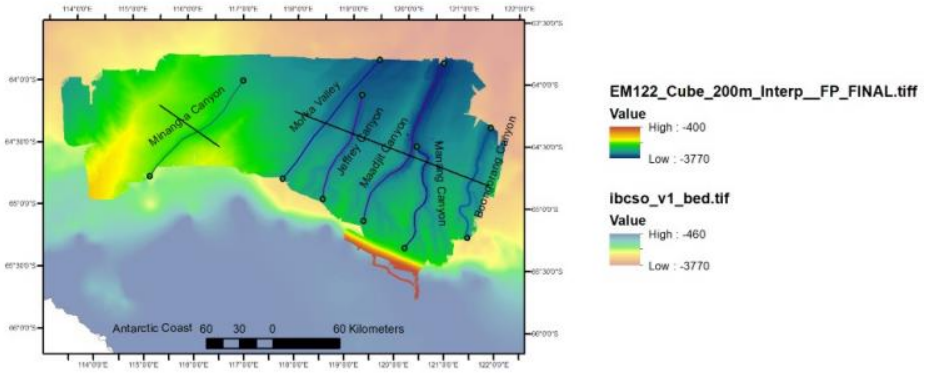
REASON
Boongorang means "blowing in the wind" in the language of the Noongar people who are the indigenous people of the part of Australia that was adjacent to the Sabrina Coast before continental break up and drift. The name was chosen because canyon was mapped while bad weather delayed planned activities.

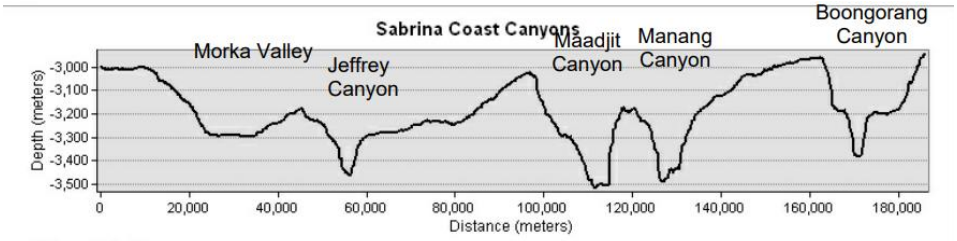
DISCOVERER
Philip E O'Brien, Leanne Armand, RV Investigator

DISCOVER DATE
14 February 2017

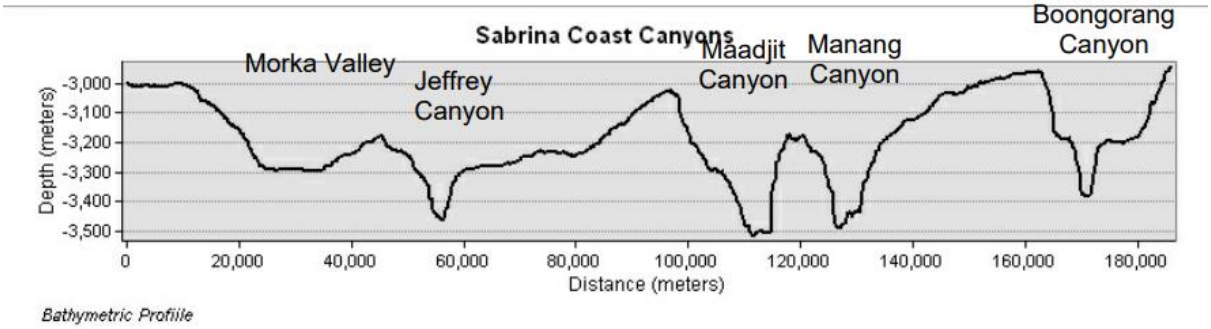
HISTORY
GENERIC TERM CHANGED TO [CANYONS] AND THE GEOMETRY OF THE FEATURE TO BE REVISED AND SIMPLIFIED TO ENCOMPASS ALL THE BRANCHES.

Close

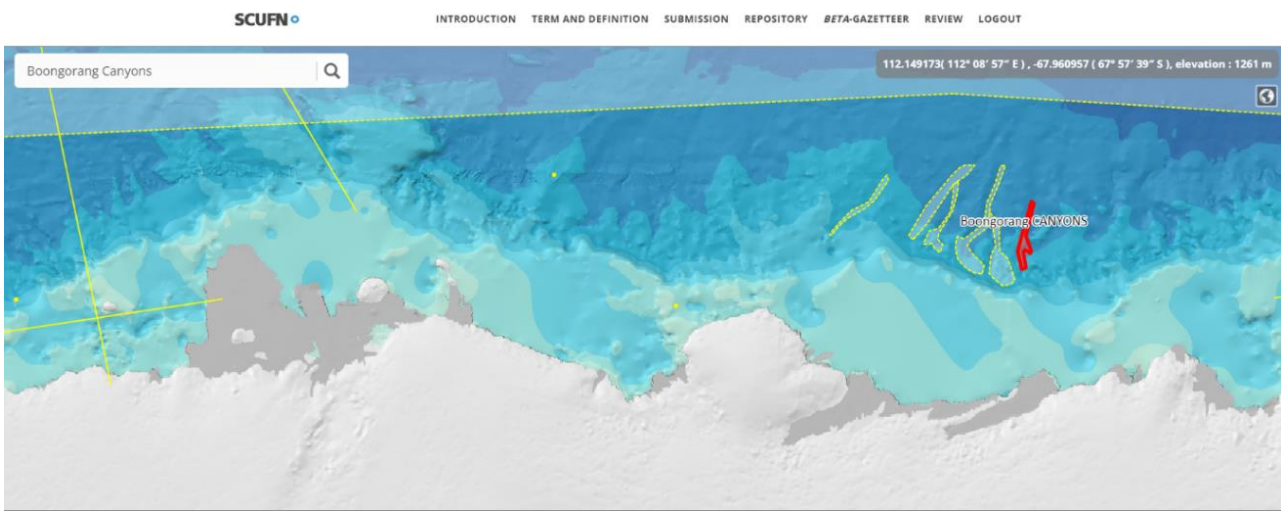




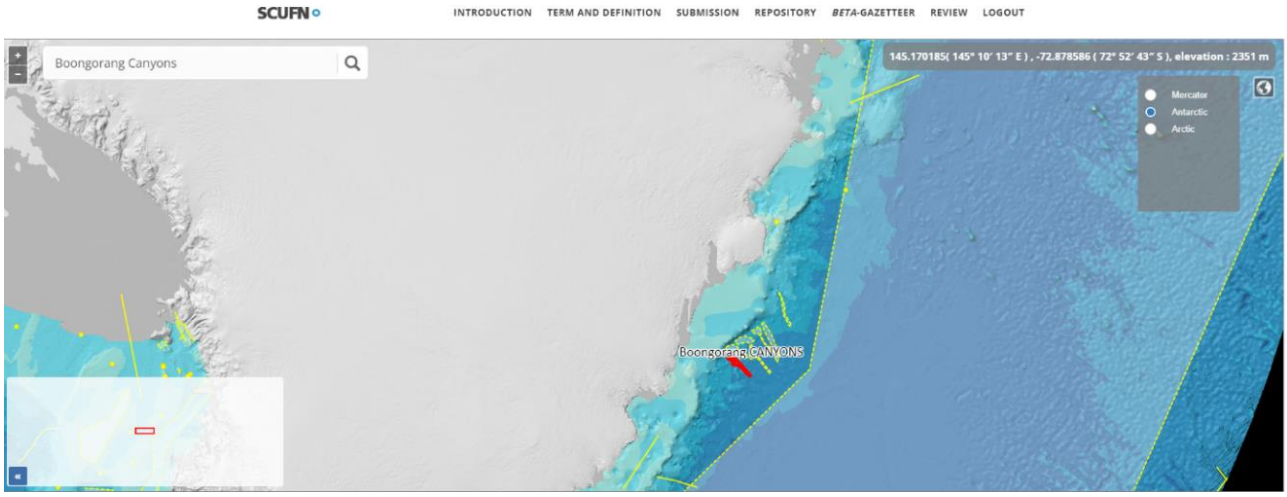
Bathymetric Profiile



Bathymetric Profiile



Mercator projection



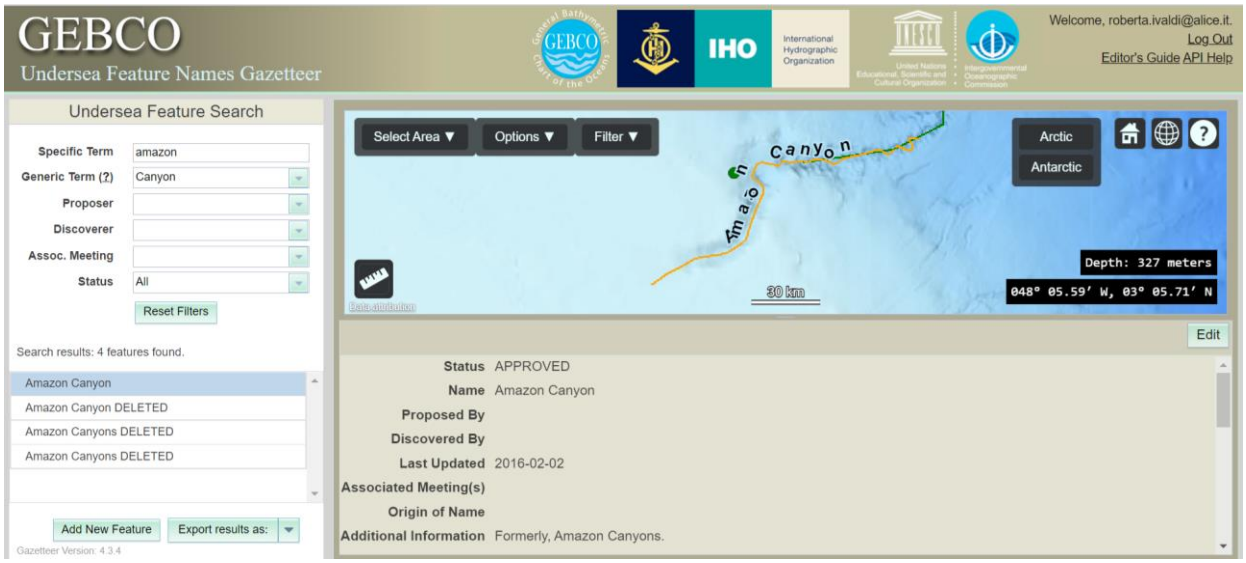
Beta Gazetteer Antarctic does not load the feature (here it is red because I highlighted with the mouse cursor). Furthermore, the regional map (left bottom) does not display.

3. **Title: Canyon vs Canyons**

Criteria: Existence of an elongated depression

Decision Made: If a narrow, steep-sided depression exist, the undersea feature is named canyon

Example: Amazon canyon (SCUFN28/30)

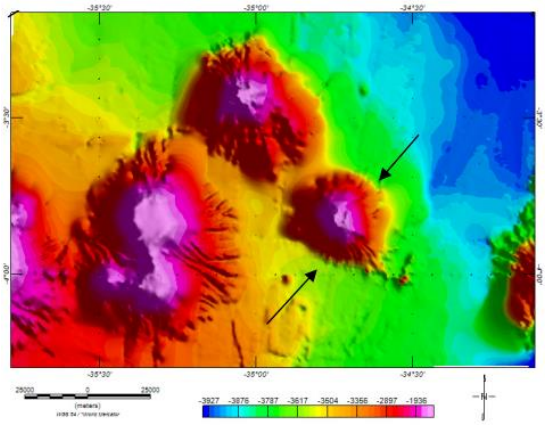


4. Title: Seamount vs Guyot

Criteria: Existence of a seamount

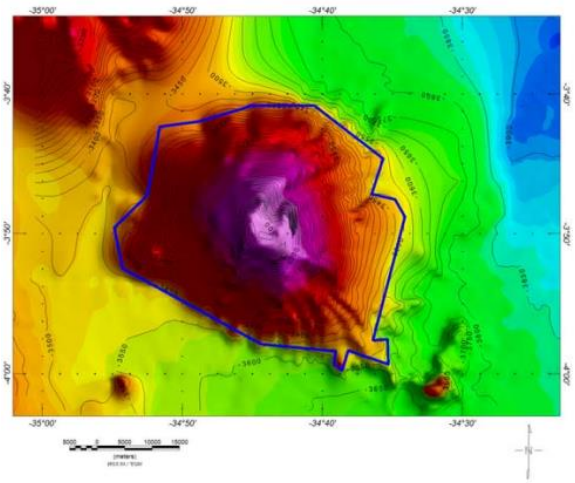
Decision Made: If a seamount has a flat top, the undersea feature is named guyot

Example: Baião Guyot SCUFN28/20 (Seamount corrected as Guyot)

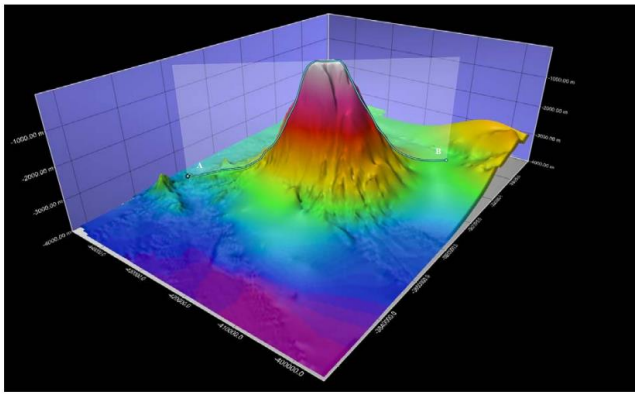


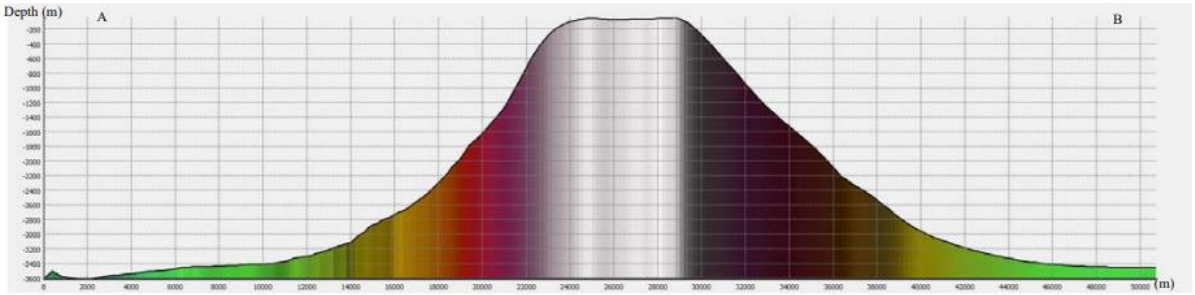
Bathymetric map of the Seamount (interval contour: 50 m)

Delimitation of the polygon

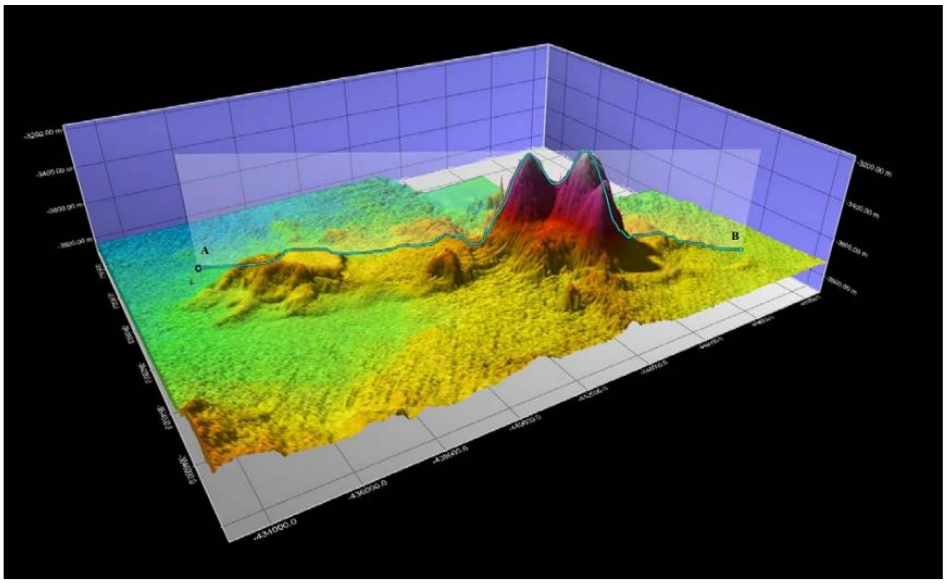


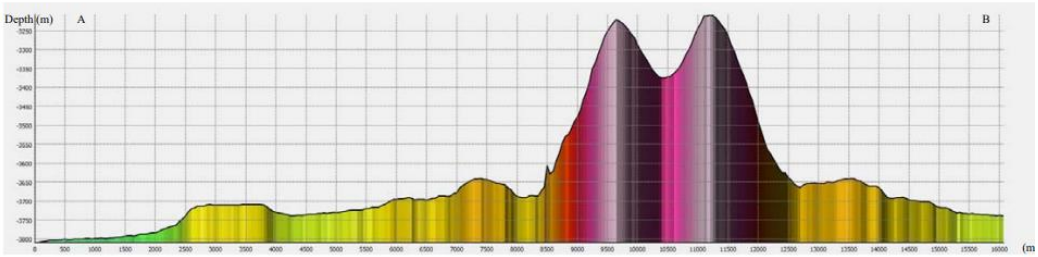
3D Model





Additional Information	This feature has a conical shape with a smooth flat top, and a steepness up to 30°.
Minimum Depth (m)	48
Maximum Depth (m)	3600
Total Relief (m)	3552
Dimension/Size	~ 38 km x 33 km





Additional Information	This feature has a conical and elongated shape, and a steepness up to 38°.
Minimum Depth (m)	3177
Maximum Depth (m)	3741
Total Relief (m)	564
Dimension/Size	~ 14 km x 8 km

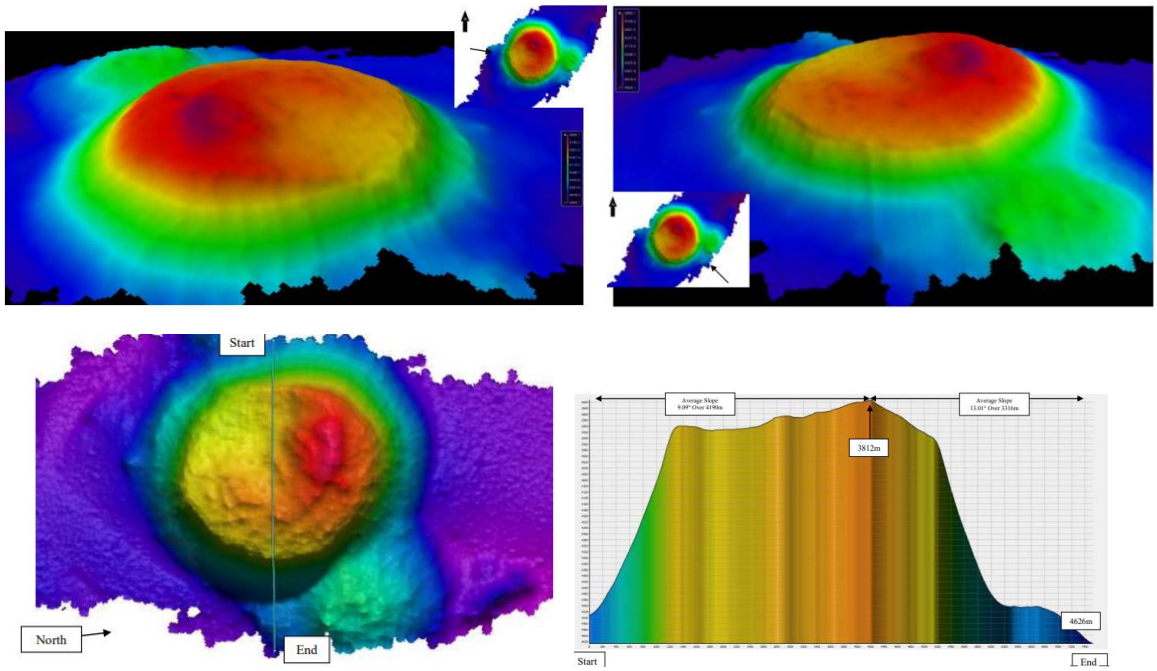
In the proposal only one point is detected as the minimum depth while the minimum depth are two points. In the Beta Gazetteer there are 42 points of the polygon, in the proposal there are one point as minimum depth and 48 point of the polygon. In the GEBCO Gazetteer there aren't points.

5. **Title: Knoll vs Guyot**

Criteria: Existence of a distinct elevation less than 1000 m

Decision Made: If a relief with rounded profile exists, the undersea feature is named knoll

Example: Tell Qarqur Knoll (SCUFN29/14)



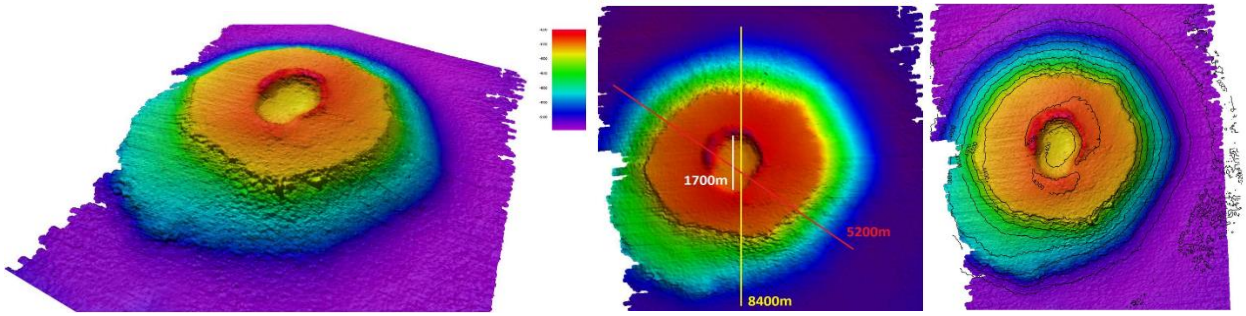
During the meeting some concerns were raised on the specific term for Tell Qarqur Guyot as the archaeological site at the origin of this specific term is located in a war zone in Syria at the moment.

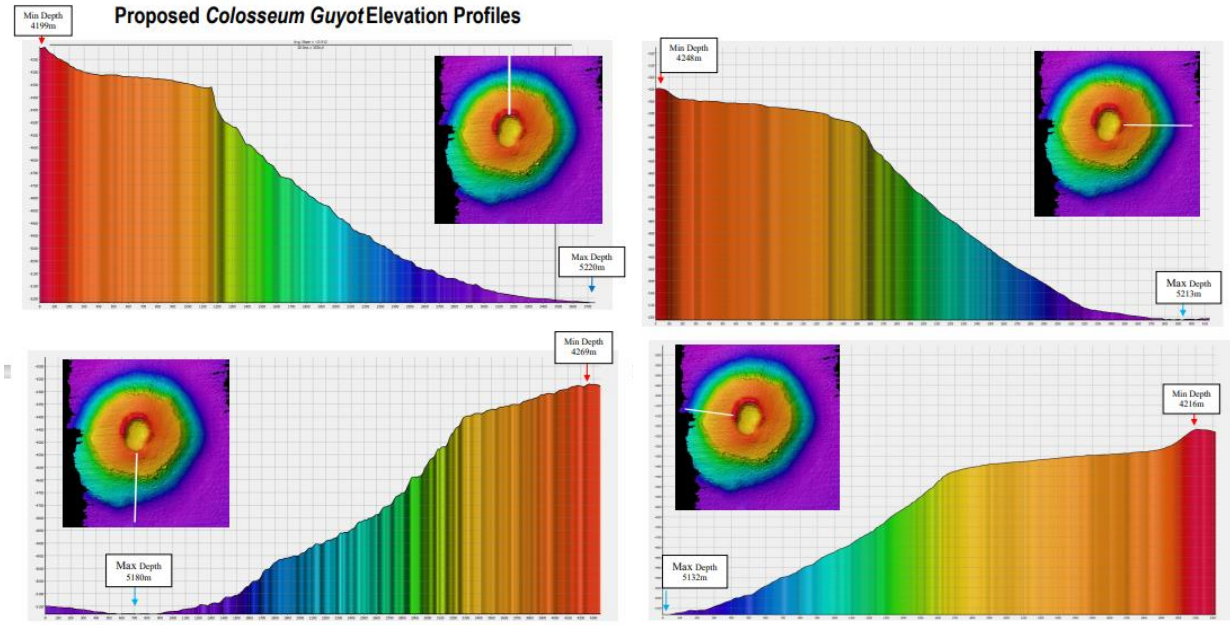
6. **Title: Guyot**

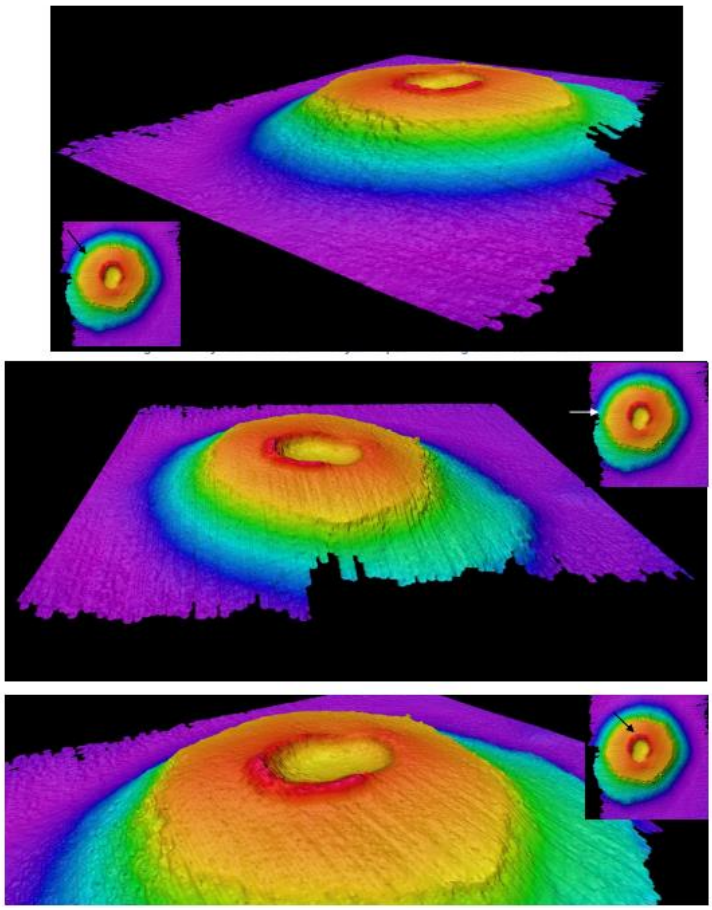
Criteria: Existence of relief more than 1000 m

Decision Made: If a seamount with a flat top exists, the undersea feature is named Guyot

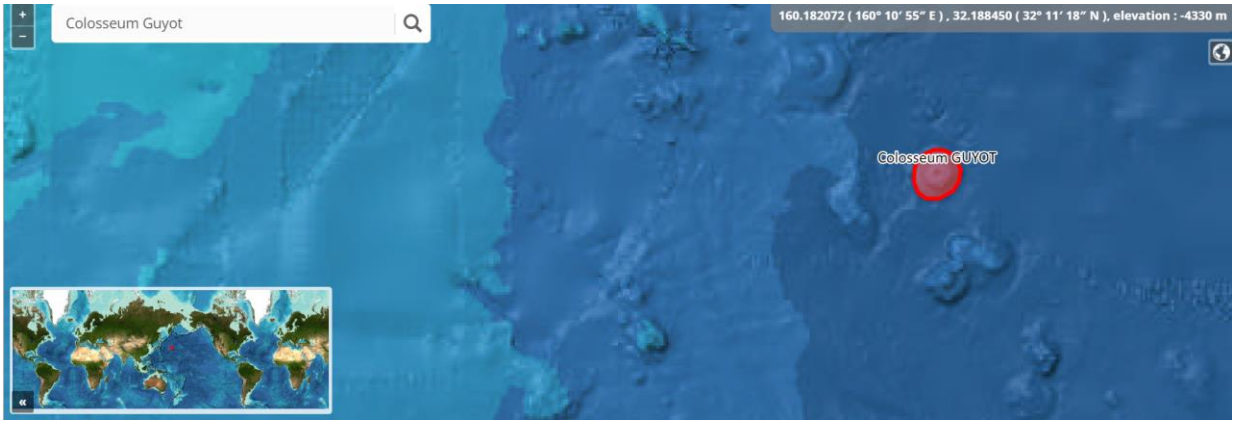
Example: Colosseum Guyot (SCUFN29/11)







3D model Colosseum Guyot



INFORMATION

PROPOSED NAME
Colosseum GUYOT

PROPOSER INFORMATION
SCHMIDT OCEAN INSTITUTE

COORDINATES
Show coordinates

SUBMIT DATE
2016

MEETING
SCUFN-29

OCEAN

FEATURE DESCRIPTION
Maximum Depth : 5220m
Minimum Depth : 4198m
Total Relief : 1022m
Steepness : Average Slope 19°
Shape : Circular
Dimension : 8400m (North/South)

REASON
Named from the resemblance of this feature to a Roman amphitheatre viewed from above, such as the Colosseum in Rome, Italy, due to the distinct flat top that features a central crater.

DISCOVERER
Leighton Rolley (Hydrographer) – (Employee of Schmidt Ocean Institute)

DISCOVER DATE
17th November 2015

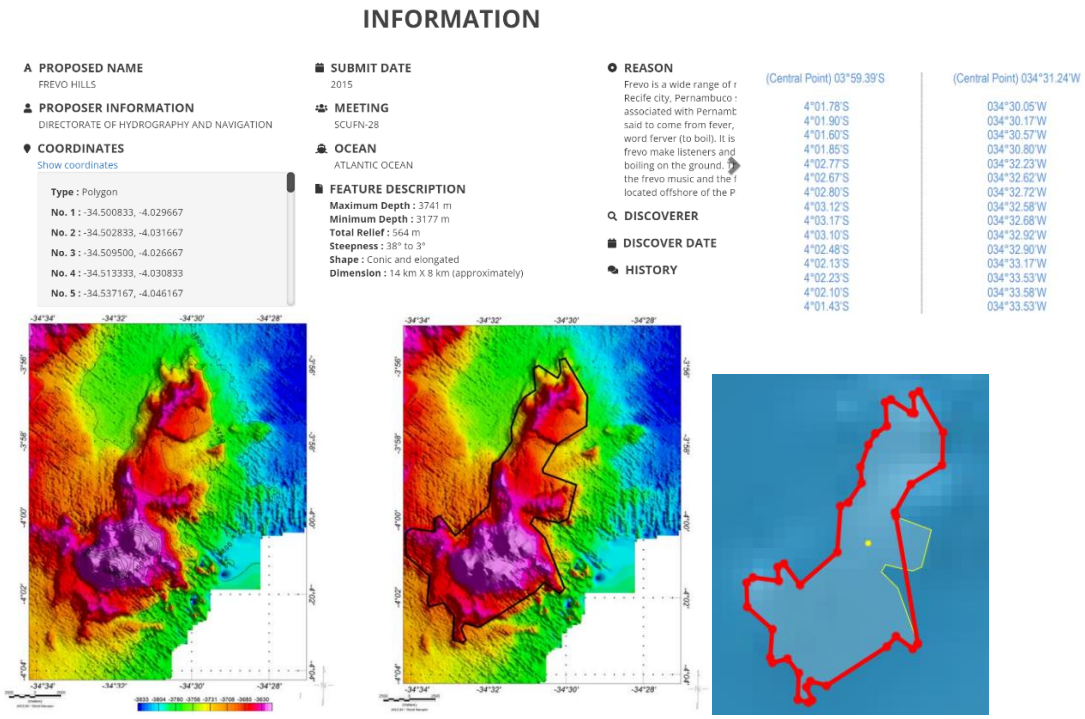
HISTORY

7. **Title: Hills vs Hill**

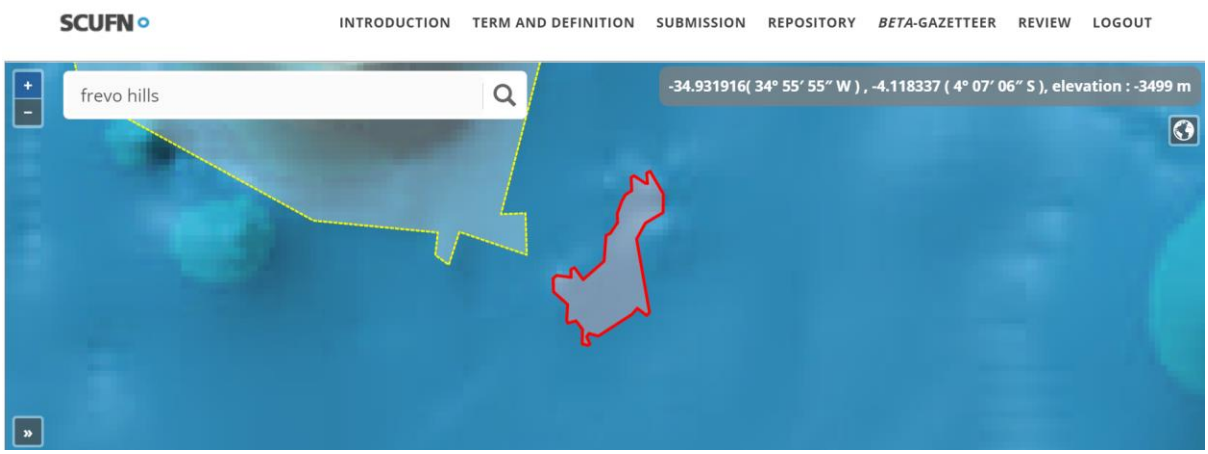
Criteria: Existence of hills

Decision Made: If the hills are a multiple feature, the whole undersea feature is named hills. Proposal generic term “Hill” is accepted with the generic term changed to “Hills”

Example: Frevo Hills (SCUFN28/22)



42vs48 points



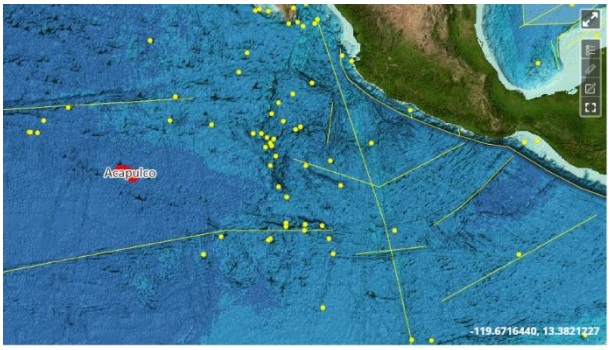
In the Beta Gazetteer the polygon is composed 42 points

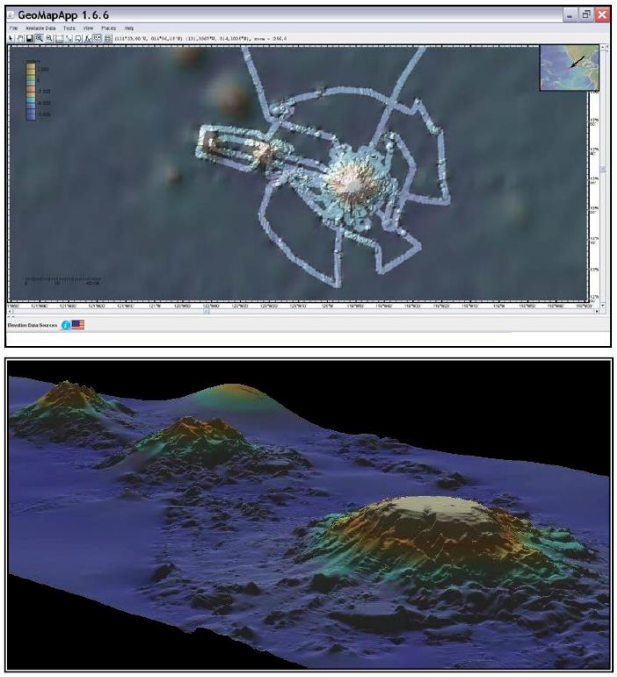
8. Title: Seamounts vs Seamount

Criteria: Existence of seamounts

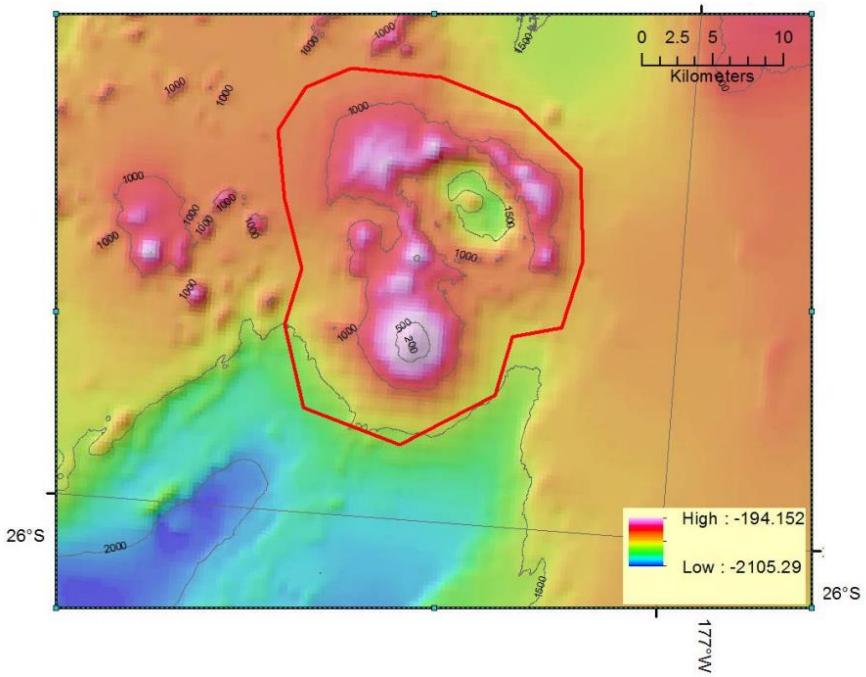
Decision Made: If the seamounts are a multiple feature, the whole undersea feature is named seamounts

Example: Acapulco Seamounts (SCUFN22/12)
Monowai Seamounts (SCUFN29/36)





Acapulco Seamounts



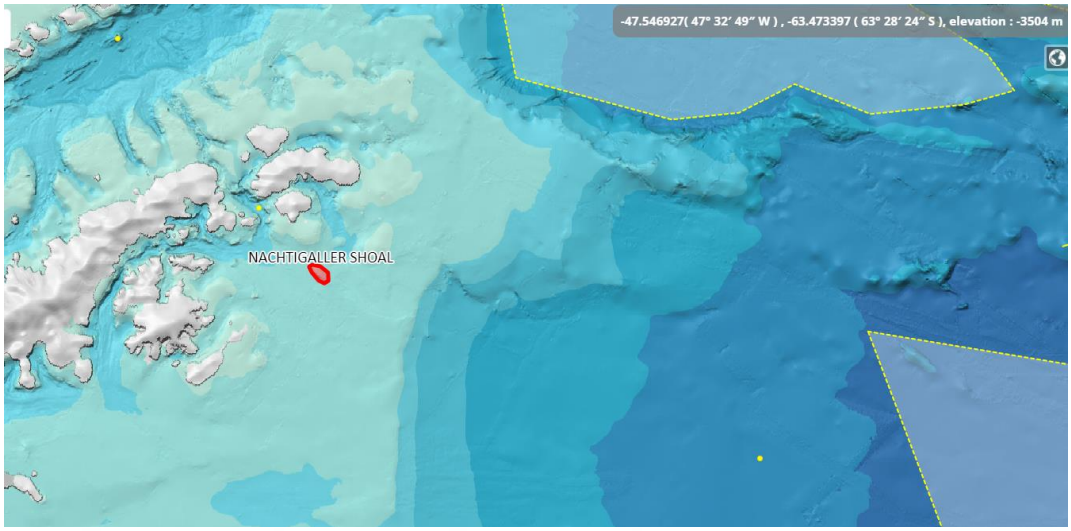
Monowai Seamounts

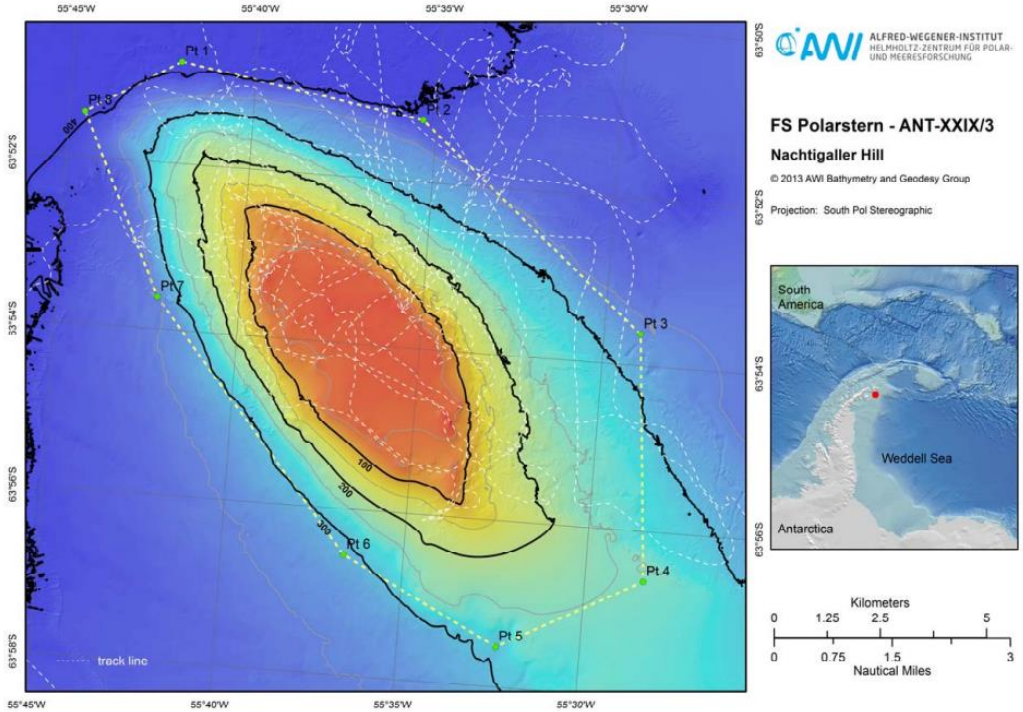
9. Title: Shoal vs Hill

Criteria: Existence of relief less than1000 m

Decision Made: If a depositional relief exists, the whole undersea features is named shoal

Example: Nachtigaller Shoal (SCUFN27/03)





Proposal remarks The hill (ACCEPTED as SHOAL) was discovered during Expedition ANT XXIX/3 with the German RV Polarstern Publisheds as: The influence of the geo-morphological and sedimentological settings on the distribution of epibenthic assemblages on a flat topped hill on the over-deepened shelf of the Western Weddell Sea

10.Title: Knoll vs Hill

Criteria: Existence of a distinct elevation less than1000 m above the surrounding relief as measured from the deepest isobath that surrounds most of the feature

Decision Made: If the relief less than 1000 exists with a rounded profile, the undersea feature is named Knoll Pending to be discussed at SCUFN-35.1 NZGB response to SCUFN

Example: Farr Knoll (SCUFN34/VTC01/33)

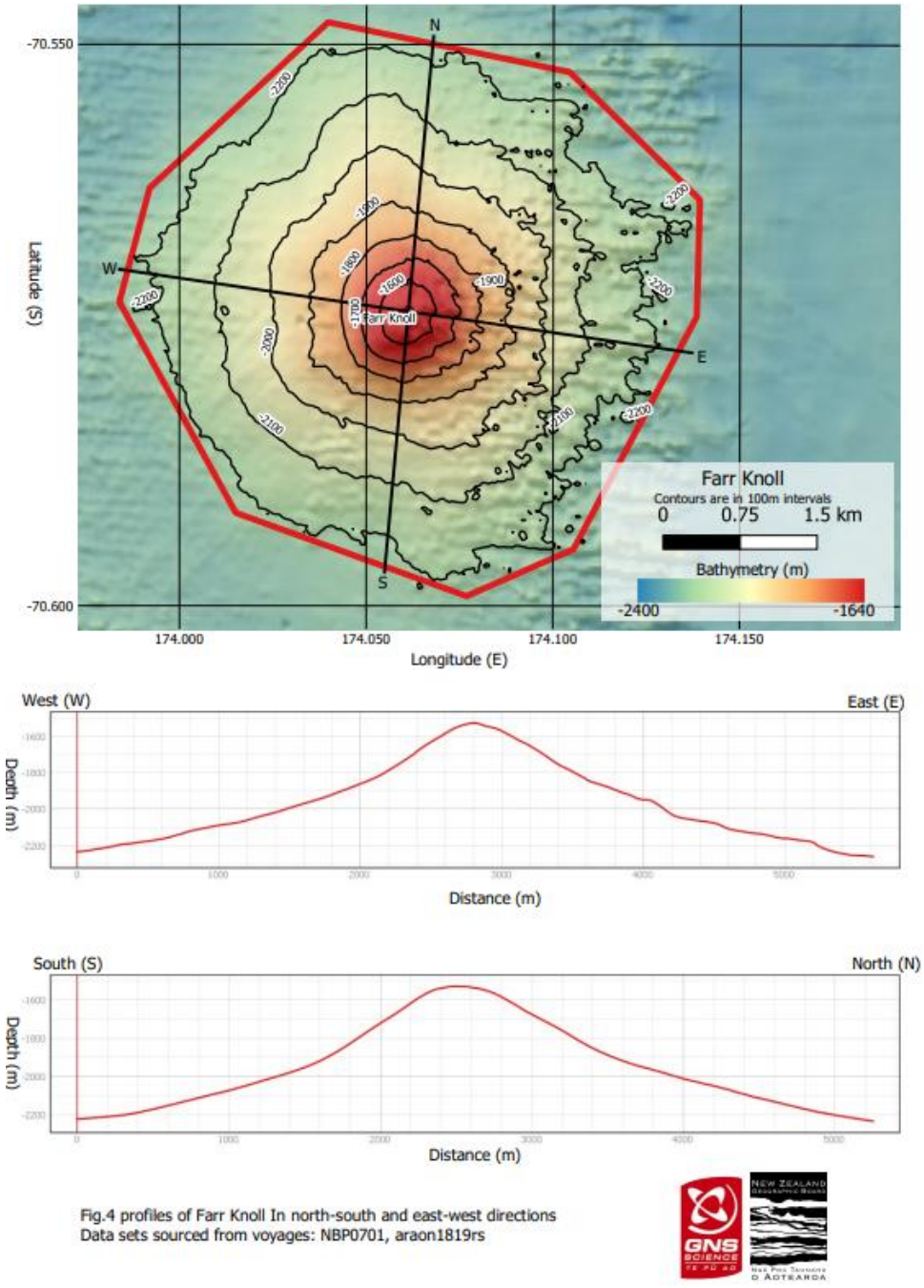
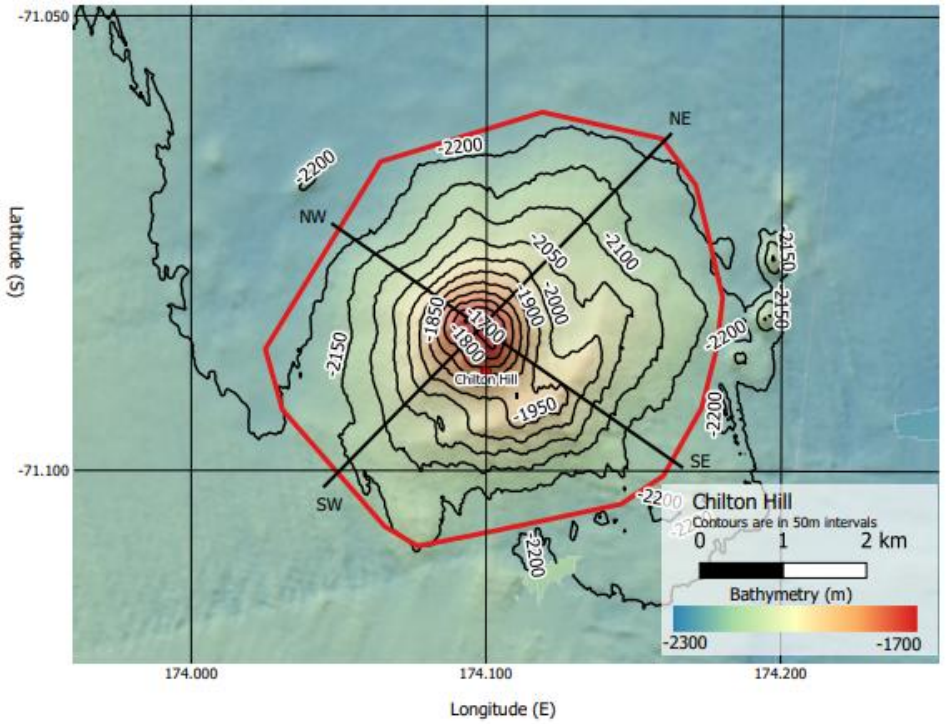
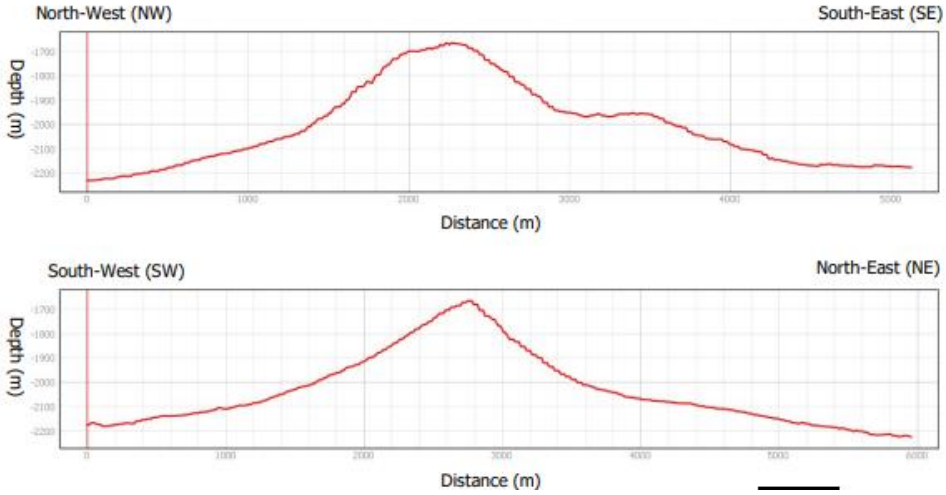
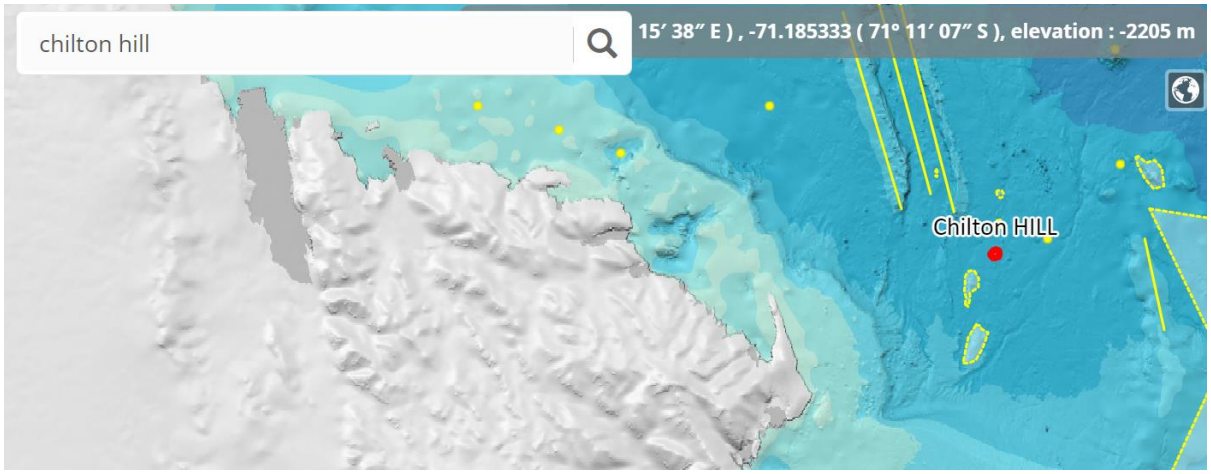
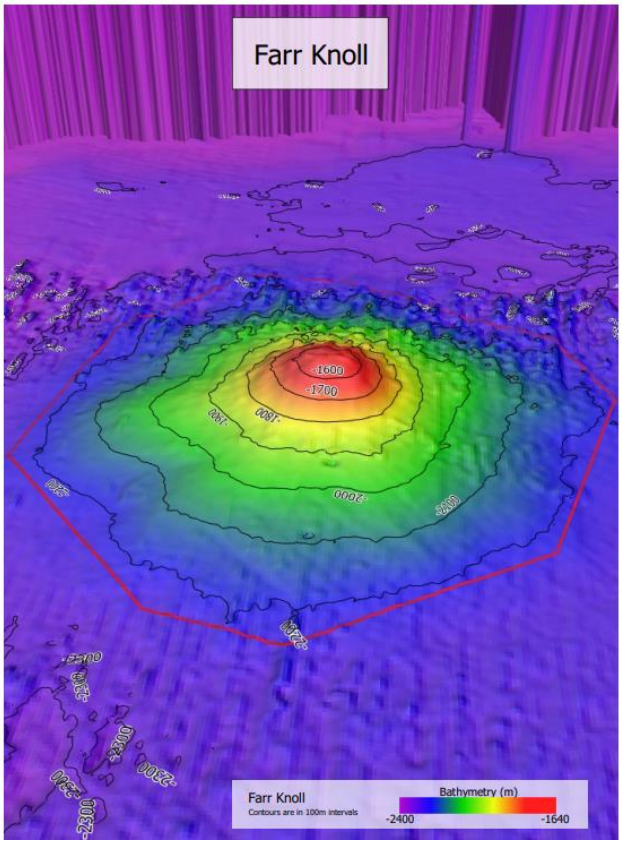


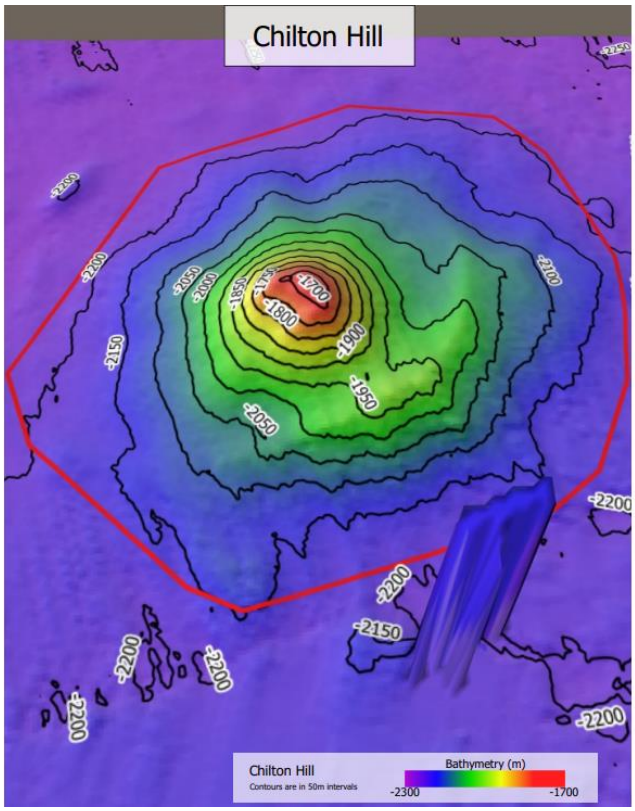
Fig.4 profiles of Farr Knoll In north-south and east-west directions
Data sets sourced from voyages: NBP0701, araon1819rs


-71.050
-71.100
Latitude (S)
174.000
174.100
174.200
Longitude (E)
NE
NW
SW
SE
-2200
-2150
-2100
-2050
-2000
-1950
-1900
-1850
-1800
-1750
Chilton Hill
Chilton Hill
Contours are in 50m intervals
0 1 2 km
Bathymetry (m)
-2300
-1700

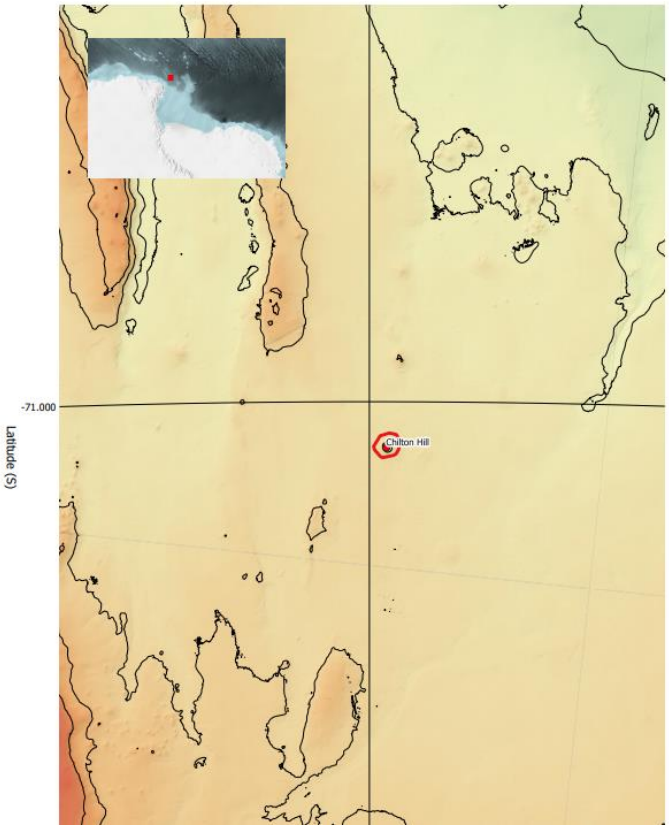

North-West (NW)
South-East (SE)
Depth (m)
Distance (m)
South-West (SW)
North-East (NE)
Depth (m)
Distance (m)


chilton hill
15′ 38″ E) , -71.185333 (71° 11′ 07″ S), elevation : -2205 m
Chilton HILL





The profile of Chilton Hill and Farr Knoll are different. Chilton Hill is not the same shape SCUFN34/VTC01/32



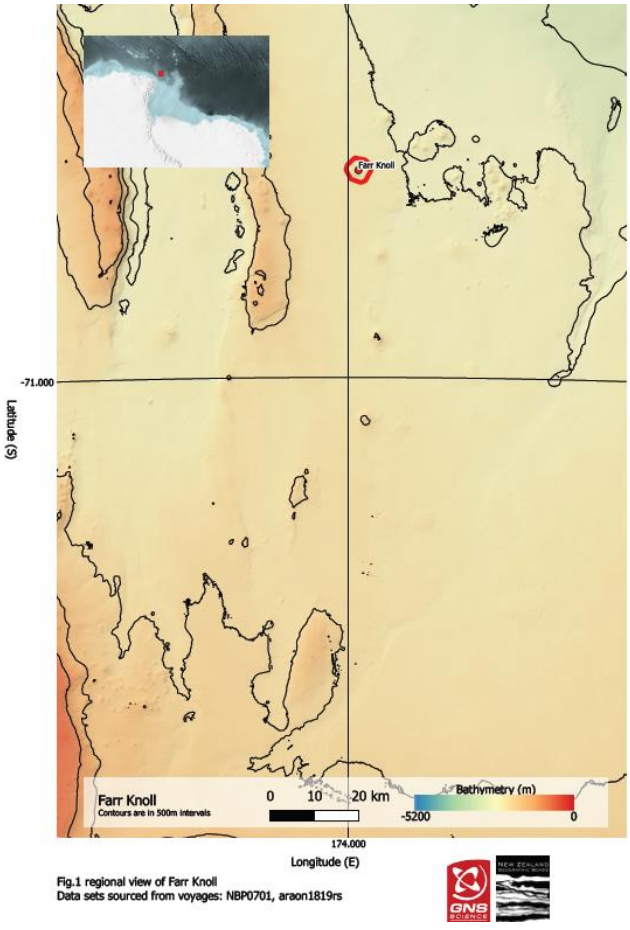


Fig.1 regional view of Farr Knoll
Data sets sourced from voyages: NBP0701, araon1819rs

11.Title: Ridge vs Escarpment

Criteria: Existence of an elongated and steep slope feature

Decision Made: If an elongated elevation of varying complexity and size and steep sides, the whole undersea feature is named ridge

Example: Sechosech Ridge (SCUFN31/134)

Action SCUFN31/135 was come from the reviewing of some undersea feature name proposals that include ESCARPMENT and RIDGE, in particular, Sechosech RIDGE proposed by the Republic of Palau. There were discussions that Sechosech "RIDGE" may be better named Sechosech "ESCARPMENT".

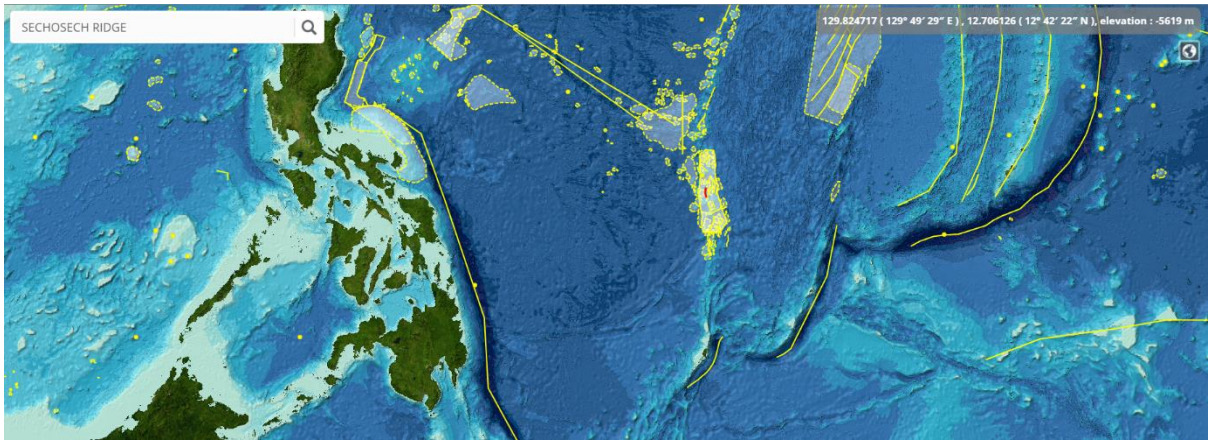
RIDGE: An elongated elevation of varying complexity and size, generally having steep sides (Generic term group, SCUFN32-06.1A).

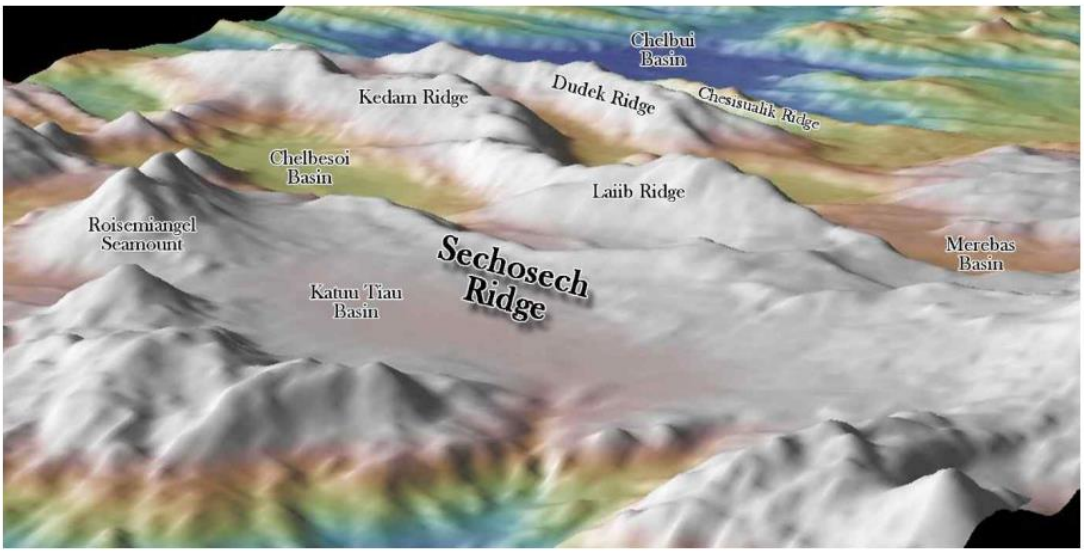
ESCARPMENT: An elongated, characteristically linear, steep slope separating horizontal or gently sloping areas of the seafloor (B-6 Edition 4.1)

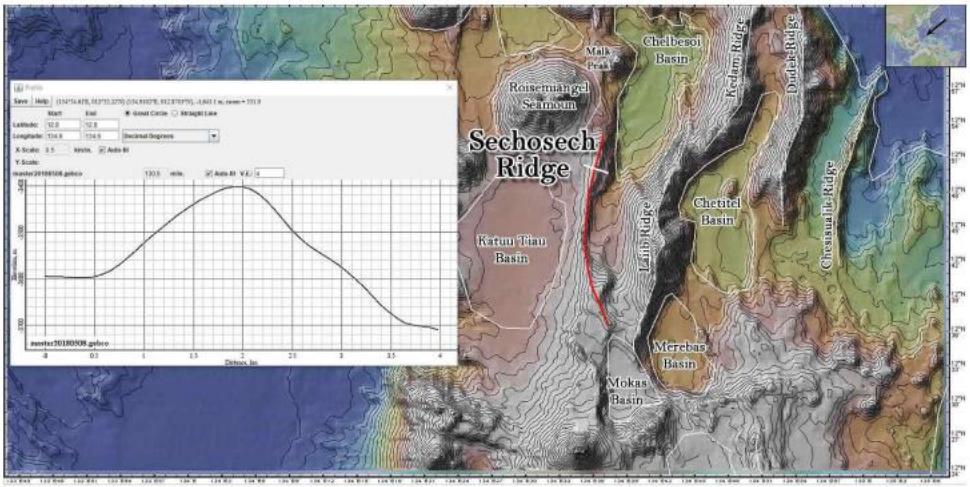
Length to width ratio 3:1

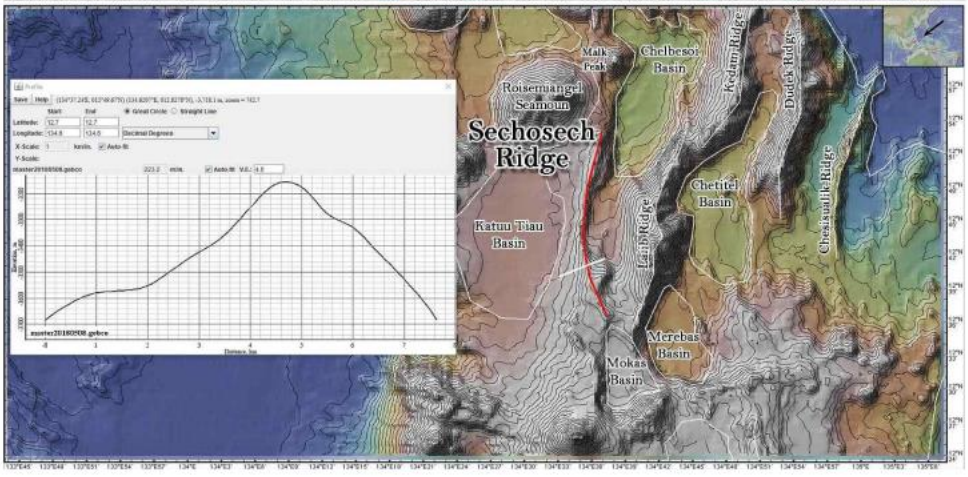
Feature Description:	Maximum Depth :	4400 m	Steepness :	N/A
	Minimum Depth :	2901 m	Shape :	Elongated
	Total Relief :	1499 m	Dimension/Size :	31 km in length

Associated Features:	This feature is within the Kobayashi Basin and Ridge Province




Chelbui
Basin
Kedam Ridge
Dudek Ridge
Chesisualik Ridge
Chelbesoi
Basin
Laiib Ridge
Roisemiangel
Seamount
Sechosech
Ridge
Merebas
Basin
Katuu Tiau
Basin


Malk
Peak
Chelbesoi
Basin
Kedam Ridge
Dudek Ridge
Roisemiangel
Seamount
Sechosech
Ridge
Chetitel
Basin
Chesisualik Ridge
Katuu Tiau
Basin
Laiib Ridge
Merebas
Basin
Mokas
Basin


Malk
Peak
Chelbesoi
Basin
Kedam Ridge
Dudek Ridge
Roisemiangel
Seamount
Sechosech
Ridge
Chetitel
Basin
Chesisualik Ridge
Katuu Tiau
Basin
Laiib Ridge
Merebas
Basin
Mokas
Basin

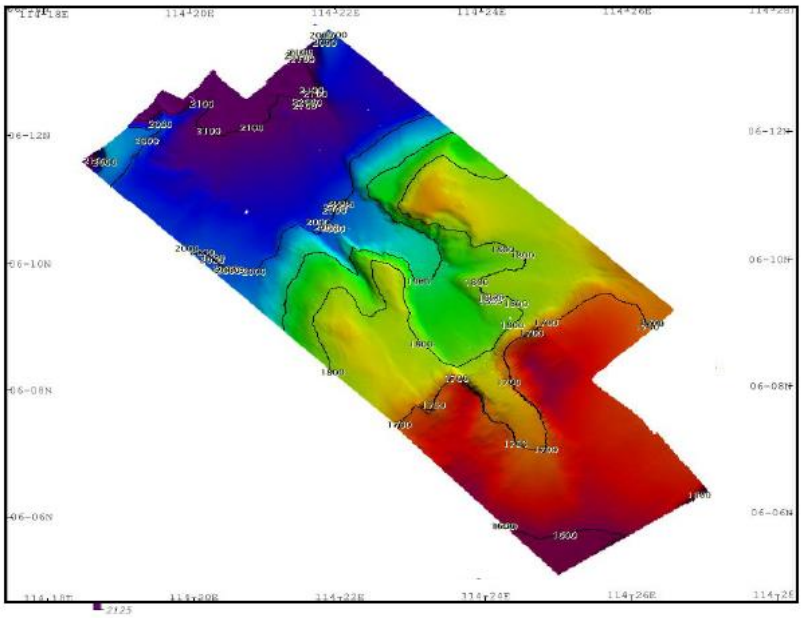
12.Title: Canyon vs Valley

Criteria: Existence of an elongated depression deepens downslope

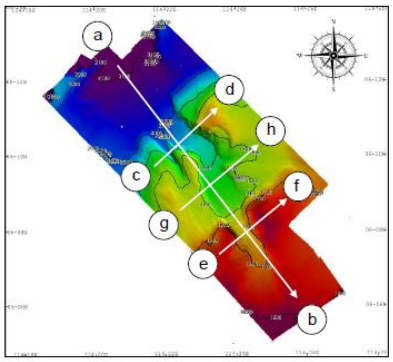
Decision Made: If the elongated, narrow steep-side depression, the whole undersea feature is named canyon

Example: Anggerik Canyon (SCUFN 35.1/248)

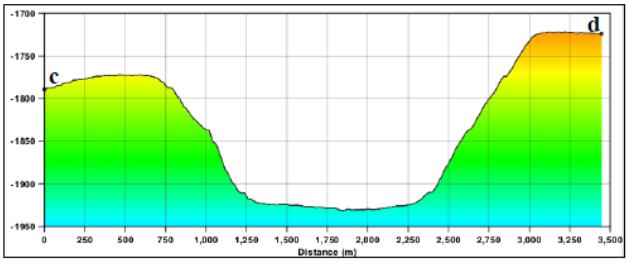
CANYON: An elongated, narrow, steep-sided depression that generally deepens down-slope. (B-6 Ed.4.1)
VALLEY: An elongated depression that generally widens and deepens down-slope. (B-6 Ed.4.1)



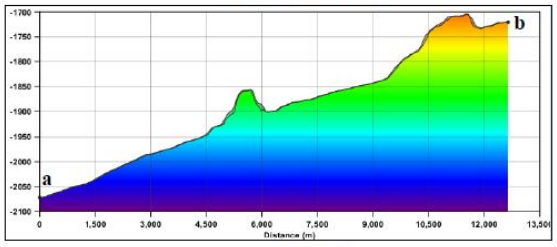
Bathymetric surface of the Anggerik Canyon (Contours are in between 1700m to 2000m)



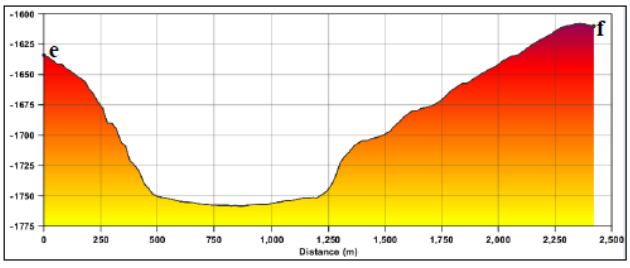
Cross Profile of Anggerik Canyon



Cross Profile C to D



Cross Profile A to B



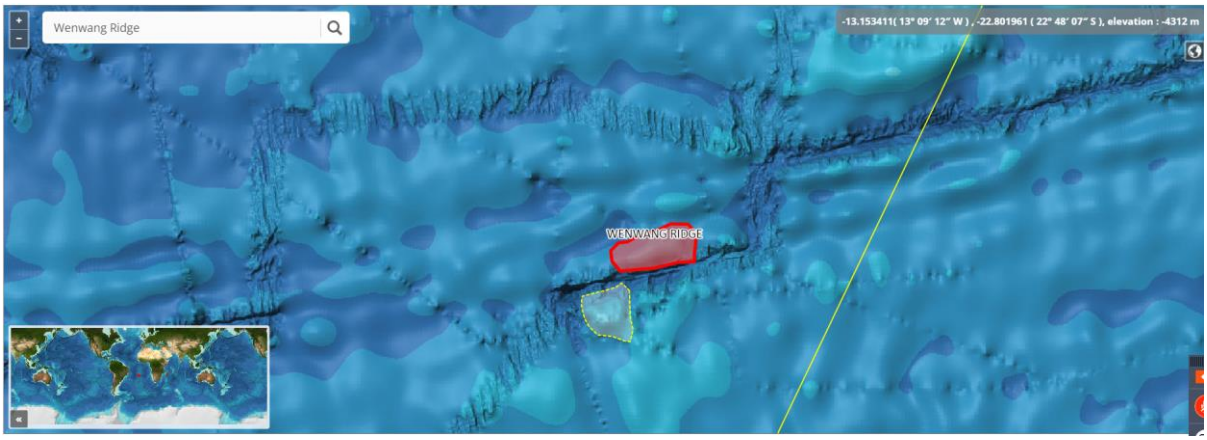
Cross Profile E to F

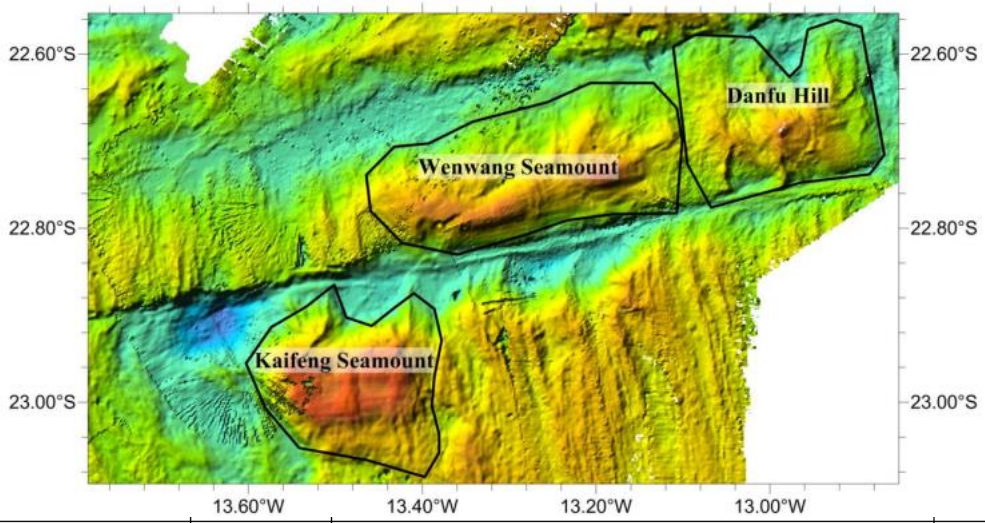
13.Title: Ridge vs Seamount and Hill

Criteria: Existence of two reliefs

Decision Made: If two reliefs exists and are part of a unique feature, the whole undersea features is named ridge

Example: Wenwang RIDGE (SCUFN31/172)





SCUFN31/172		Proposal for Wenwang [~~Seamount~~] is ACCEPTED, with the generic term changed to Ridge, and polygon to be extended to Danfu Hill in one feature.	Decision
SCUFN31/173		Proposal for Danfu Hill is NOT ACCEPTED.	Decision

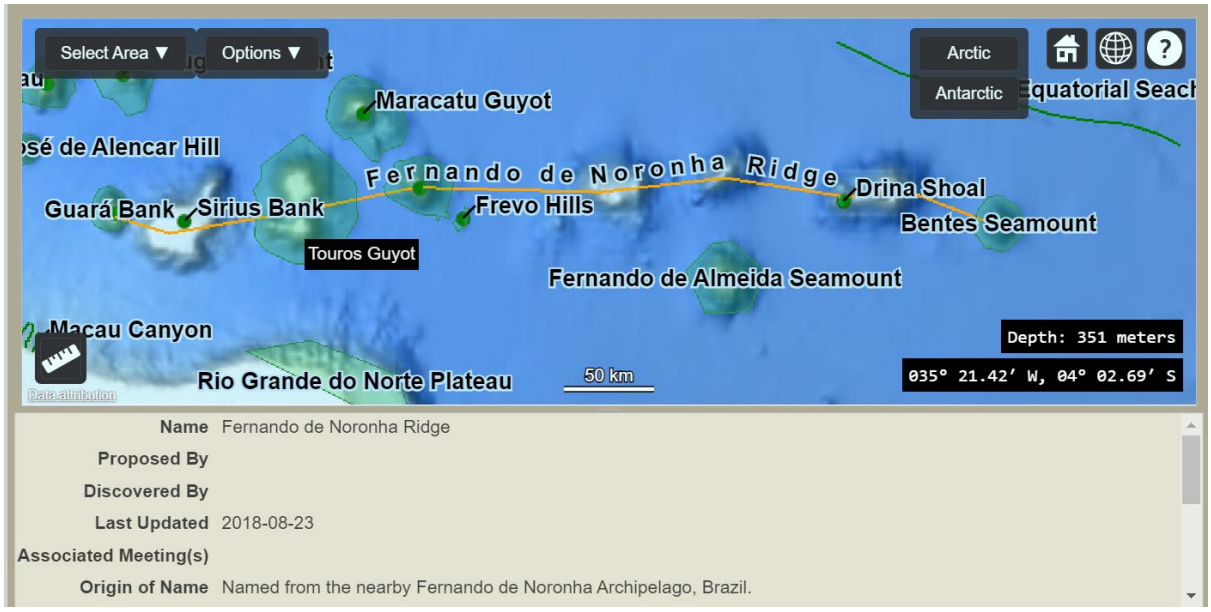
Based on your definition, seamount is a distinct, isolated or comparatively isolated elevation greater than 1000 m above the surrounding relief as measured from the deepest isobath that surrounds most of the feature. In this case, any isolated features have greater than 1,000 m height can be defined as a seamount. If you think about a large oceanic plateau or a rise, it has an isolated feature with more than 1,000 m in height. So, we need to a phrase to restrict the feature to avoid any misconception. If I remember correctly, that's the reason why we put a phrase 'generally equidimensional elevation' in the definition. Also, a word 'generally' has a flexibility to define various types of features like conical, irregular, or rectangular shape etc. Therefore, I suggest keeping the definition of a seamount as it is, and we can decide a feature whether it is qualified as a seamount during the meeting. Roberta will also continue to add specific cases for consistent decisions.

14.Title: Ridge

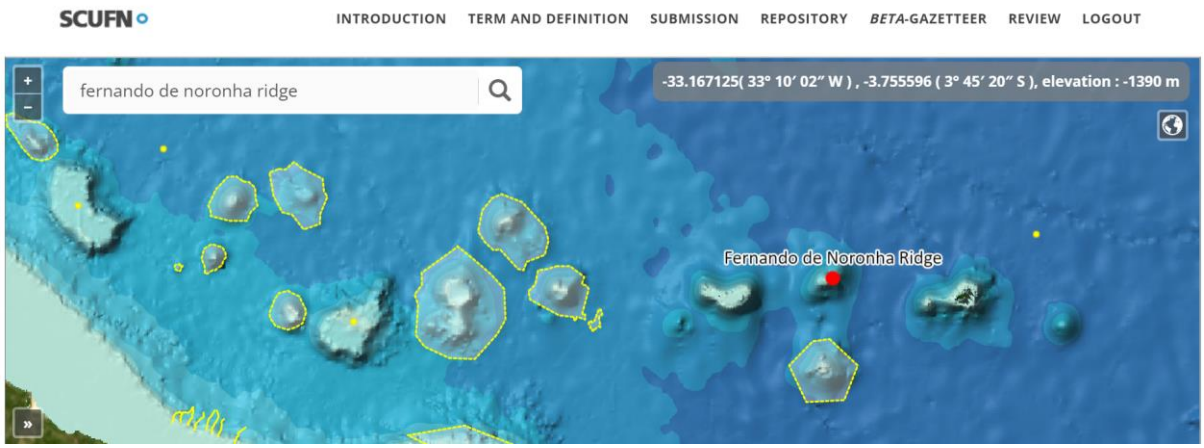
Criteria: Existence of a Ridge constitutes by several undersea features Banks, Guyots, Hills, Shoal and Sea mount

Decision Made: If the relief exists and is part of a complex feature, the whole undersea feature is named ridge (Fernando de Noronha Ridge with Guarà Bank, Sirius Bank, Touros Guyot, Baião Guyot, Frevo Hills, Drina Shoal and Bentes Seamount)

Example: Fernando de Noronha Ridge (SCUFN 27/86)



To be correct Beta Gazetteer

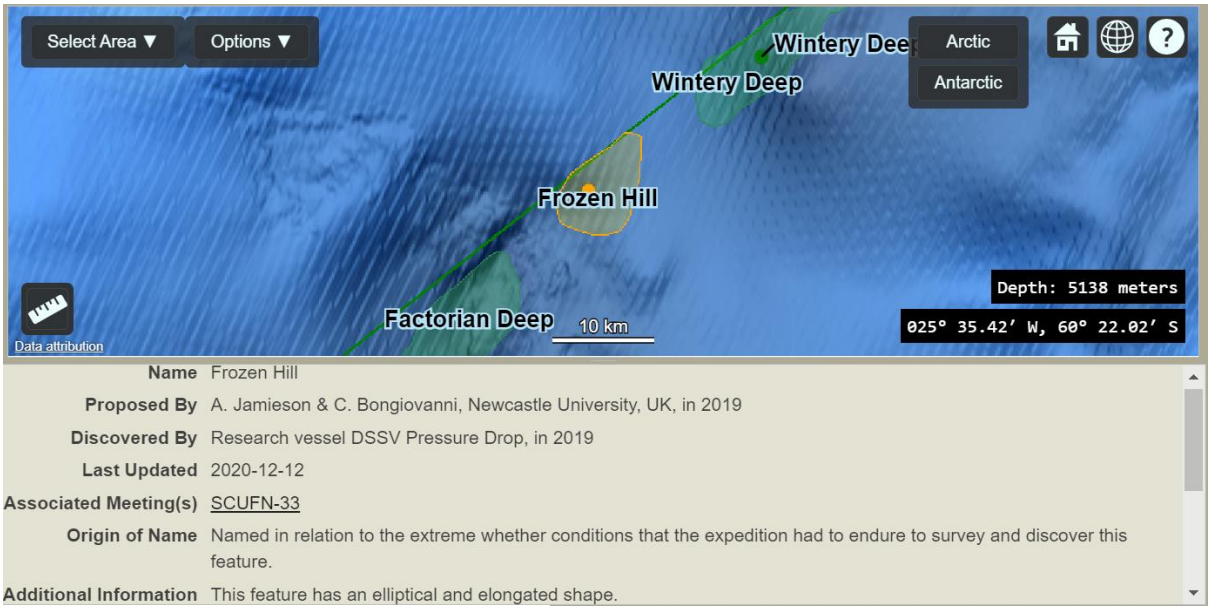


15.Title: Hill vs Ridge

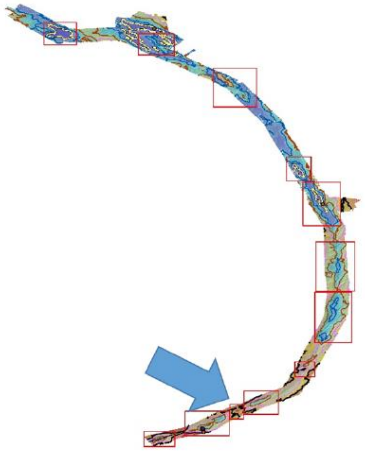
Criteria: Existence of a distinct elevation less than1000 m above the surrounding relief as measured from the deepest isobath that surrounds most of the feature

Decision Made: If the relief exists and is part of a unique feature, the whole undersea feature is named hill (the proposal polygon is reduced)

Example: Frozen Hill (SCUFN 33/22)



Name	Frozen Hill
Proposed By	A. Jamieson & C. Bongiovanni, Newcastle University, UK, in 2019
Discovered By	Research vessel DSSV Pressure Drop, in 2019
Last Updated	2020-12-12
Associated Meeting(s)	SCUFN-33
Origin of Name	Named in relation to the extreme whether conditions that the expedition had to endure to survey and discover this feature.
Additional Information	This feature has an elliptical and elongated shape.



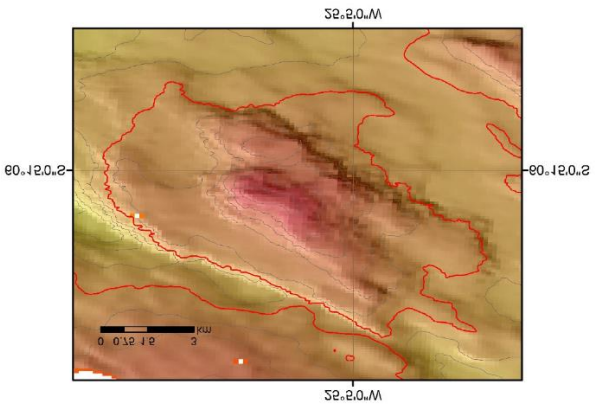
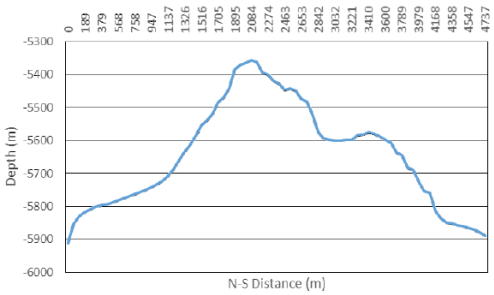
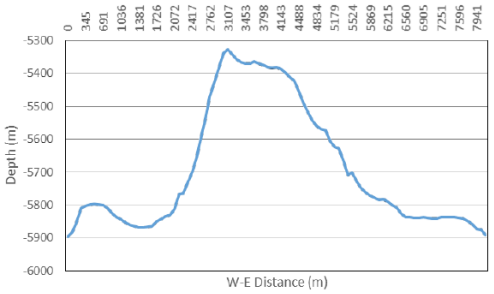
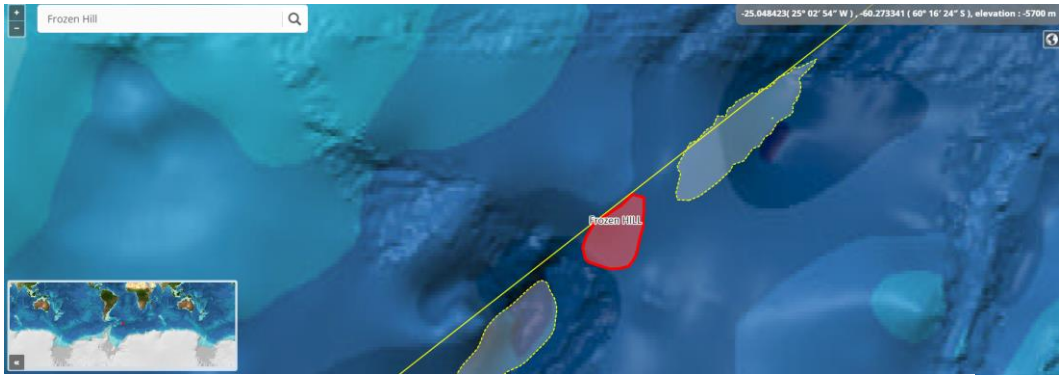


Figure 1. Position of the Frozen Ridge (Blue Arrow) within the South Sandwich Trench.







INFORMATION

PROPOSED NAME
Frozen HILL

PROPOSER INFORMATION
NEWCASTLE UNIVERSITY

COORDINATES
Show coordinates

Type : Polygon
No. 1 : -25.137010, -60.276860
No. 2 : -25.154420, -60.273810
No. 3 : -25.163220, -60.270250
No. 4 : -25.170470, -60.256460
No. 5 : -25.166620, -60.251310

Close

SUBMIT DATE
2020

MEETING
SCUFN-33

OCEAN

FEATURE DESCRIPTION
Maximum Depth : 5900m
Minimum Depth : 5336m
Total Relief : 564m
Steepness : 1/4 at summit
Shape : Elliptical elongated
Dimension : 4.8 x 8.2km

REASON
Named in honour of the extreme condition that the expedition had to endure to discover this feature.

DISCOVERER
Cassandra Bongiovanni/ DSSV Pressure Drop

DISCOVER DATE
February 2019

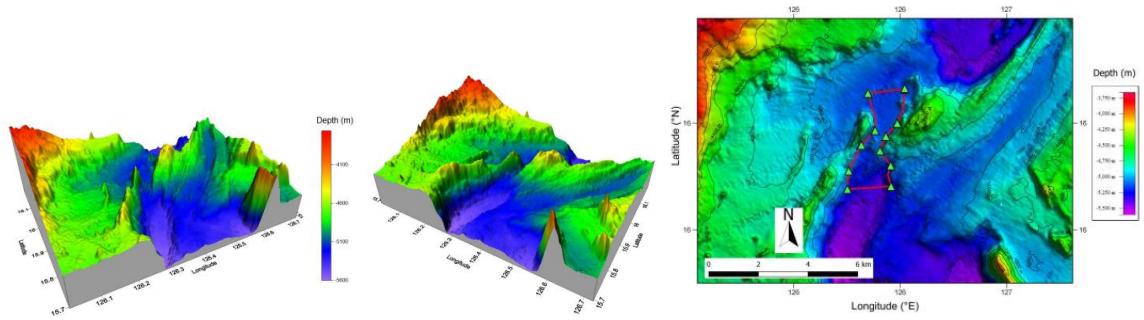
HISTORY
THE GENERIC TERM CHANGED TO [HILL] AND NUMBER OF POLYGON COORDINATES TO BE REDUCED.

16.Title: Gap vs Saddle

Criteria: Existence of a narrow break in a rise or a ridge

Decision made: If a steepness break exist, the undersea feature named gap

Example: Molave Gap (SCUFN31/195)

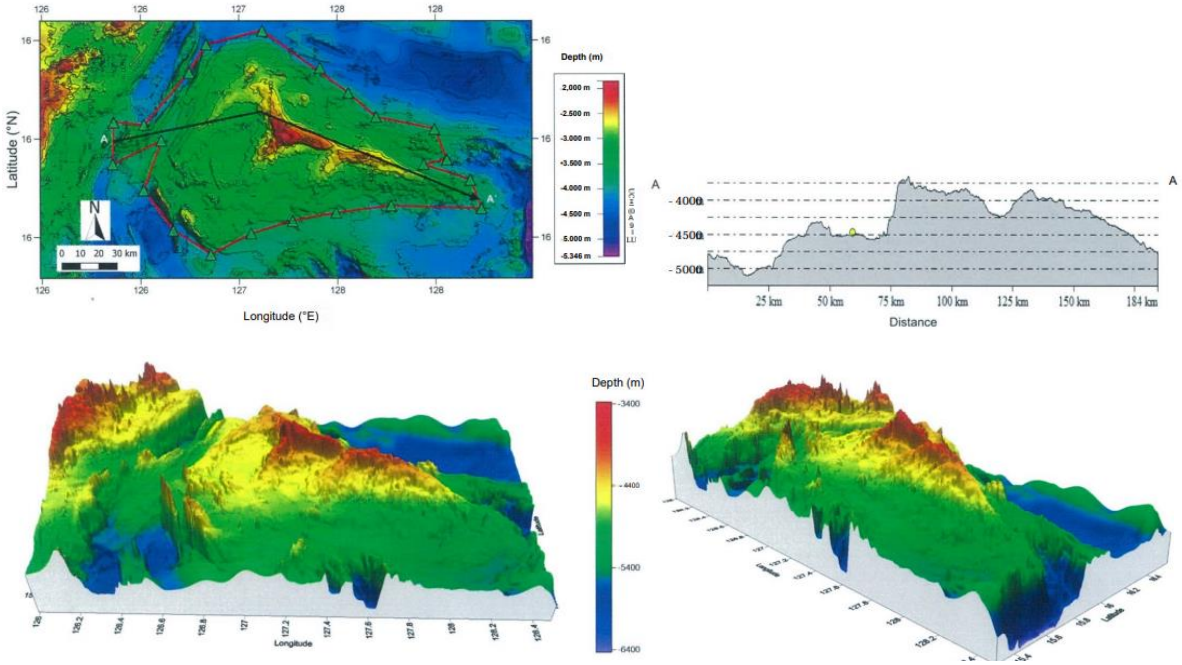


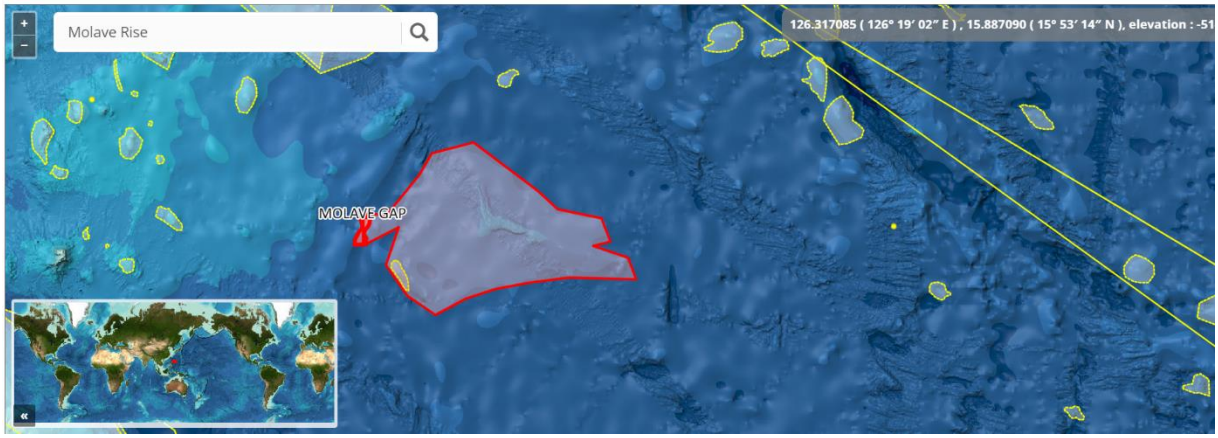
17.Title: Rise vs Spur

Criteria: Existence of a broad elevationA broad elevation that generally rises gently and smoothly from the surrounding relief.

Decision made: if the relief rises gently and smooting from surrounding relief, the undersea feature named rise

Example: Molave Rise (SCUFN31/196)





18.Title: Specific term sensitive

Criteria: Specific term is not compliant with rule B-6-II-A.4, the hystory of the ship is considered as sensitive

Decision Made: The specific term to be changed and the proposal is pending for two years

Example: Indy Maru] Seamount (SCUFN29/15) and McVay Seamount (SCUFN29/16)

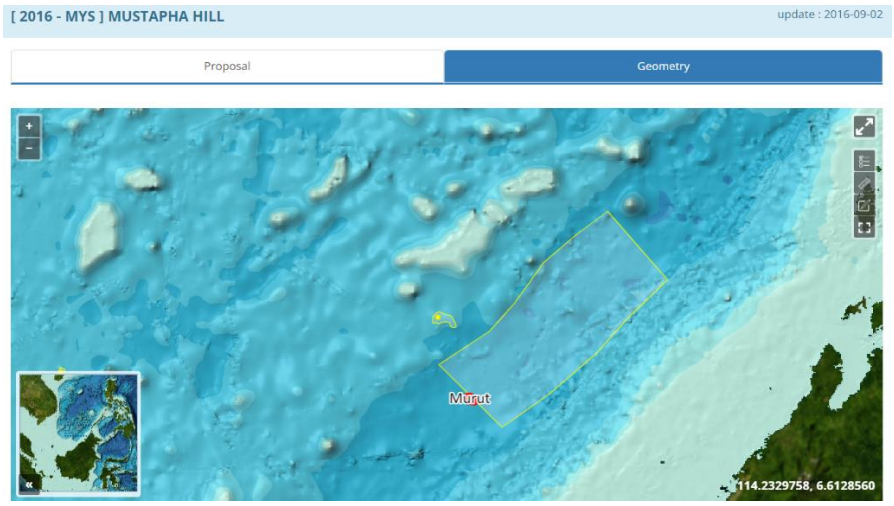
Indy Maru is changed by proposer and accepted by SCUFN as Cenotaph Seamount (SCUFN30/12) and McVay Seamount is changed and accepted as Nautilus Seamount (SCUFN30/13)

19.Title: Specific term sensitive

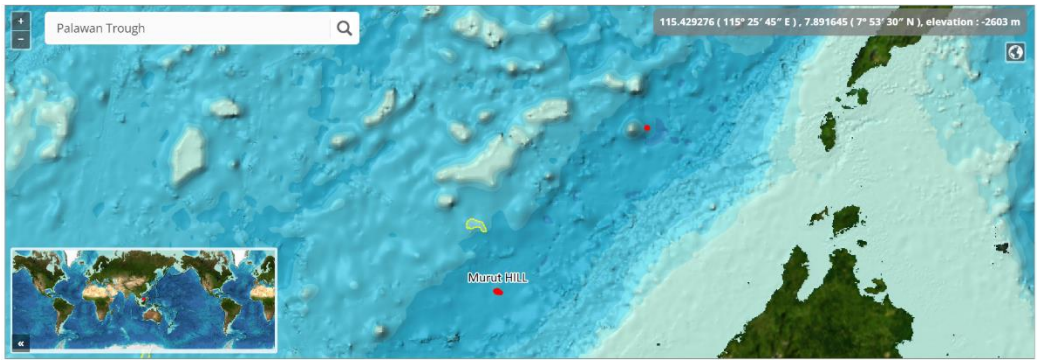
Criteria: Specific term is not compliant with rule B-6-II-A.4, the term is a politician

Decision Made: The specific term to be changed and and the proposal is pending for two years

Example: Mustapha Hill (SCUFN29/60)
Mustapha Hill is changed by proposer and accepted by SCUFN as Murut Hill (SCUFN30/)



In the proposal (2016) the geometry is updated with the accepted specific name (SCUFN 30/)
In the Beta Gazetteer the Palawan Trough is only a point



20.Title: Specific term to avoid duplication

Criteria: Specific term to avoid duplication with the already existing feature in the GEBCO Gazetteer

Decision Made: The specific term was accepted as Rose-Marie Thompson instead Thompson

Example: Rose-Marie Thompson Seamount (SCUFN 29/55)

21.Title: Specific term to avoid duplication

Criteria: Specific term to avoid duplication because several features already in the GEBCO Gazetteer have Ptolemy as specific term

Decision made: the language spelling was different and there would be no confusion

Example: Ptolémée Seamount (SCUFN29/17)

22.Title: Specific term in Antarctica

Criteria: Specific term is not compliant with the rule B-6-II-A.2, A.3, A.4 (i.e. geographical feature, ship, expedition, explorer, …)

Decision Made: The specific term was accepted as an exception, since there are similar terms that have already been considered previously in the GEBCO Gazetteer but t is recommended again, that as far as possible the specific terms should have some relations with marine sciences.

Example: Phobos Seamount (SCUFN 30/14)

Specific term is not compliant with rule B-6-II-A.6, because in the case of names in the vicinity of Antarctica, it is recommended that specific terms should relate to the Antarctic region, explorers, researchers or vessels.

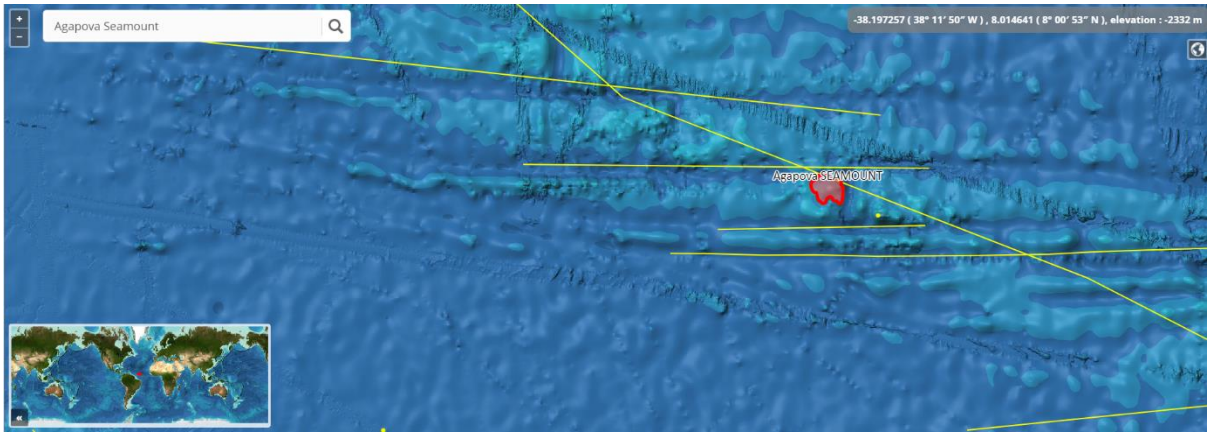
23.Title: List of reserved specific-terms, for naming an important undersea feature

Criteria: During SCUFN 29 the offer made by the proposer (i.e. by the Schmidt Ocean Institute) to SCUFN Members to use the List of Reserved-Specific Terms for a couple of features if desired. SCUFN 31/220 action to insert in the list of specific term in memory of Galina Agapova, an important marine scientist who made an exemplary contribution to GEBCO SCUFN since 1974 to 2007

Decision Made: The reserved specific terms of two outstanding scientists were recognized by SCUFN 34 the “Agapova Seamount”, proposed by the Geological Institute of the Russian Academy of Science (GINRAS), in memory of Ms Galina Vladimirovna Agapova (1930- 2018);

- the “Walter Munk Guyot”, proposed by the Scripps Institution of Oceanography at the University of California San Diego, USA, in memory of the legendary oceanographer/geophysicist Dr Munk (1917-2019).

Example: Agapova Seamount (SCUFN 34/VTC01/78); Walter Munk Guyot (SCUFN 34/VTC01/82).



INFORMATION

PROPOSED NAME
Agapova SEAMOUNT

PROPOSER INFORMATION
GINRAS

COORDINATES
Show coordinates

Type : Polygon
No. 1 : -38.131700, 8.138800
No. 2 : -38.111000, 8.147500
No. 3 : -38.093500, 8.136300
No. 4 : -38.080000, 8.100500
No. 5 : -38.083500, 8.078300

SUBMIT DATE
2021

MEETING
SCUFN-34

OCEAN

FEATURE DESCRIPTION
Maximum Depth : 3000 m
Minimum Depth : 1578,9 m
Total Relief : 1400 m
Steepness : in some places more than 30 degrees
Shape :
Dimension : 24 x 16 km

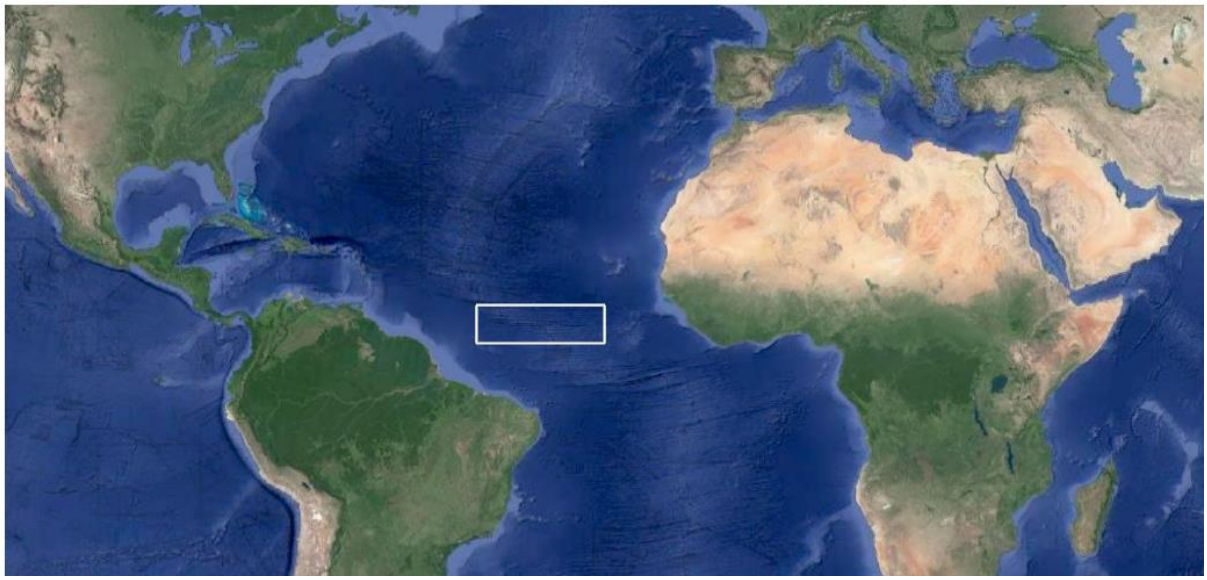
REASON
The name is given in memory of Galina Vladimirovna Agapova (1930-2018), marine geomorphologist and cartographer, worked in the Russian Academy of Sciences since 1955. She participated in many expeditions on the Black, Caspian, Mediterranean, Pacific and Atlantic Oceans, in the discoveries and researches of many seamounts, ridges and other underwater features of bottom topography. Author of more than 100 scientific papers and bathymetric, geological and tectonic maps, including 5th edition of GEBCO, International Geological and Geophysical Atlases of the Indian, Atlantic and Pacific Oceans, the International Tectonic Map of the World etc. Agapova G.V. since 1974 to 2007 worked at the GEBCO Subcommittee on the nomenclature and terminology of the underwater relief forms (GEBCO-SCGN, now SCUFN), participated in the creation of the Guidelines on Standardization and the GEBCO Gazetteer.

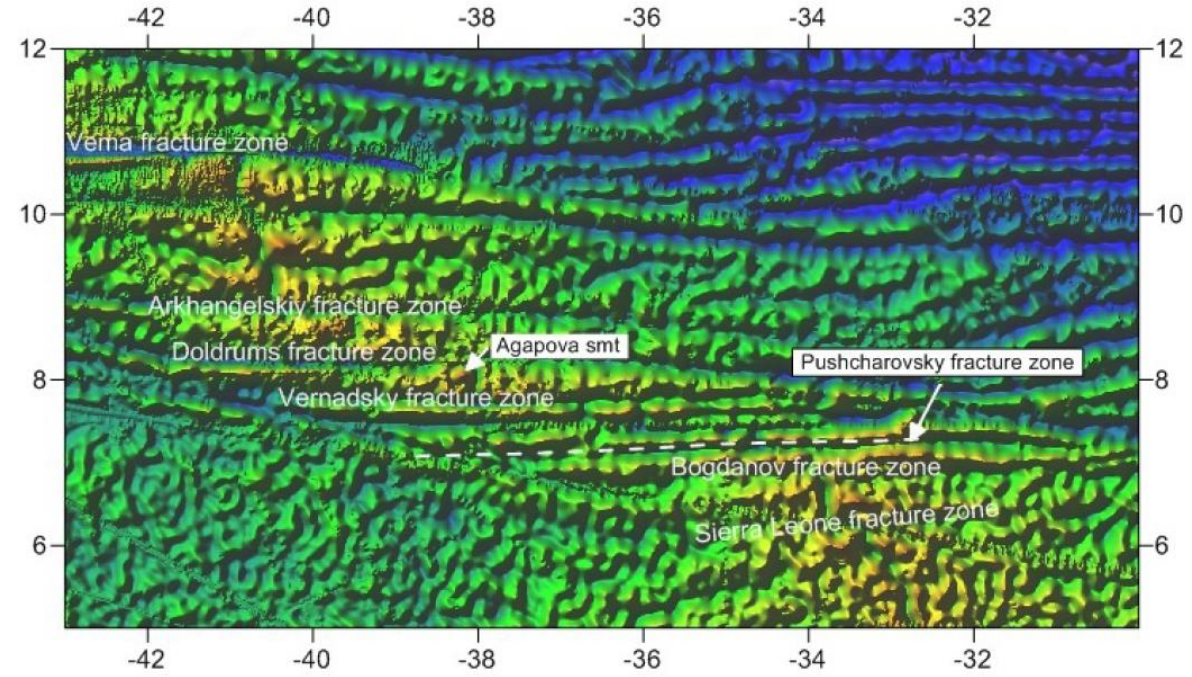
DISCOVERER

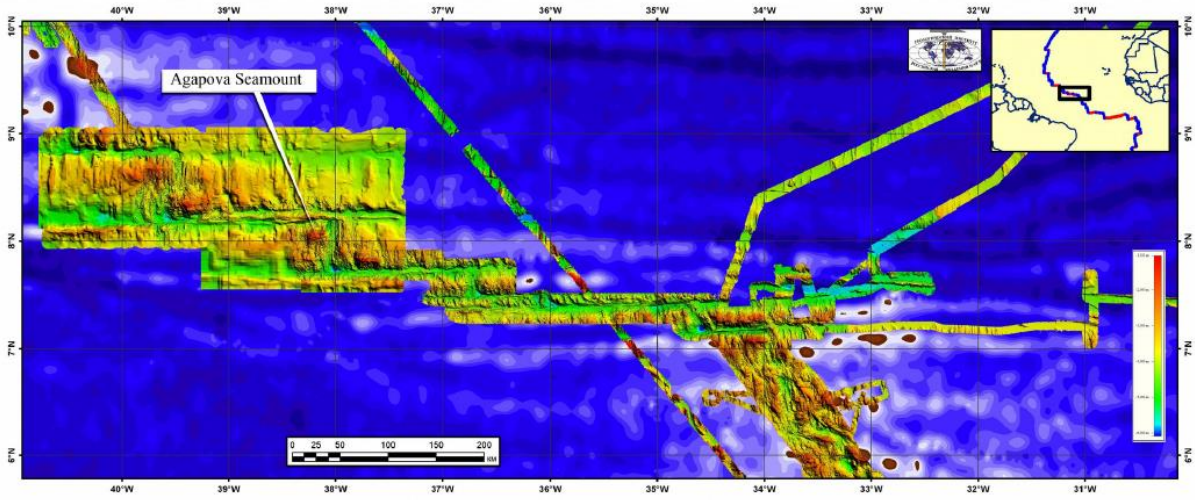
DISCOVER DATE

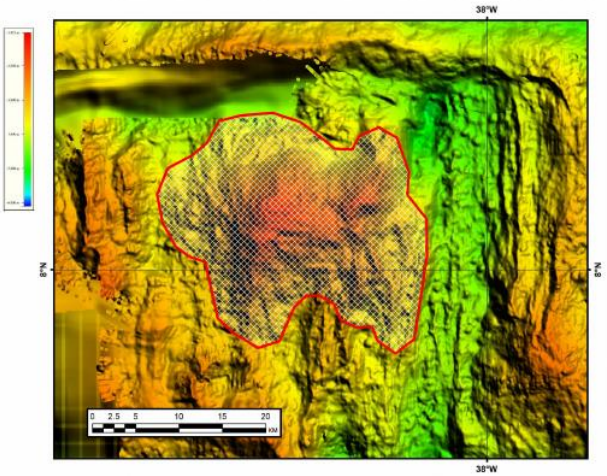
HISTORY

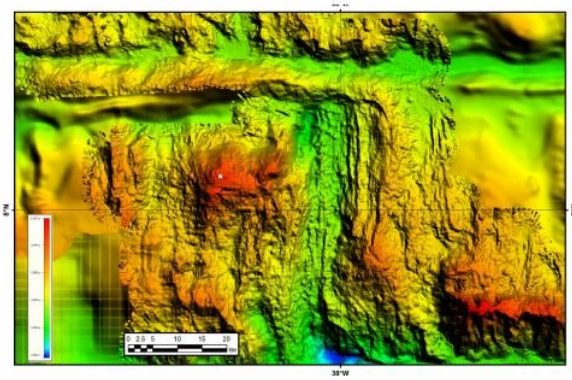
Close

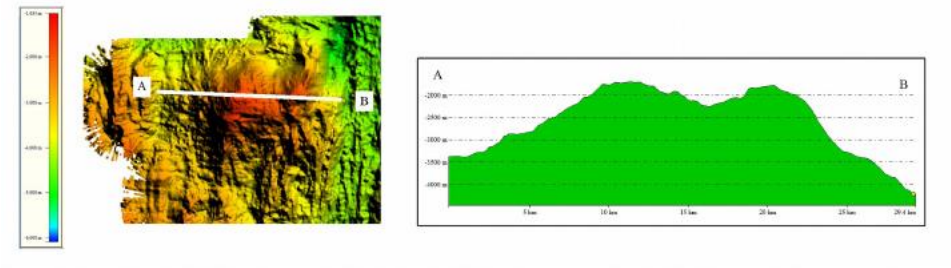


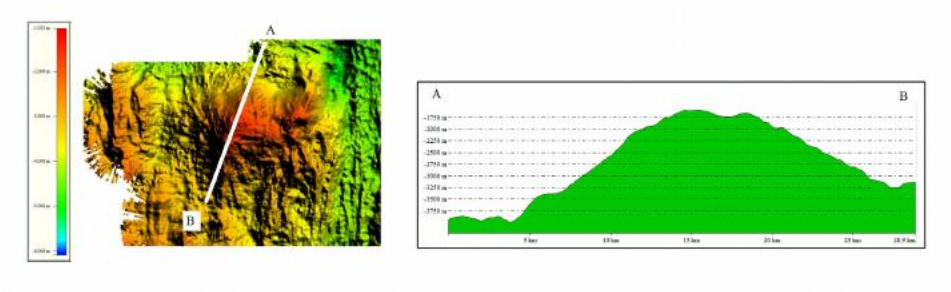

-42
-40
-38
-36
-34
-32
12
10
8
6
Vema fracture zone
Arkhangelskiy fracture zone
Doldrums fracture zone
Agapova smt
Vernadsky fracture zone
Pushcharovsky fracture zone
Bogdanov fracture zone
Sierra Leone fracture zone

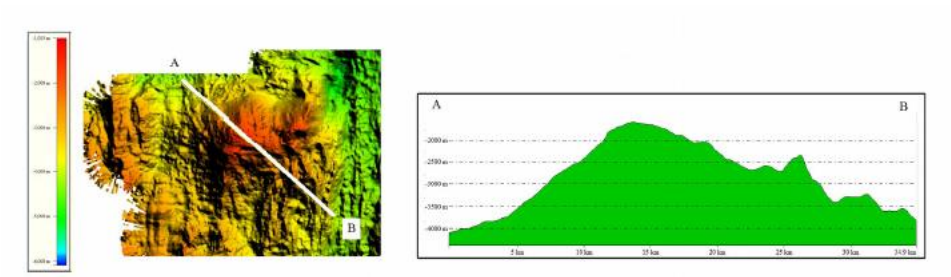

Agapova Seamount

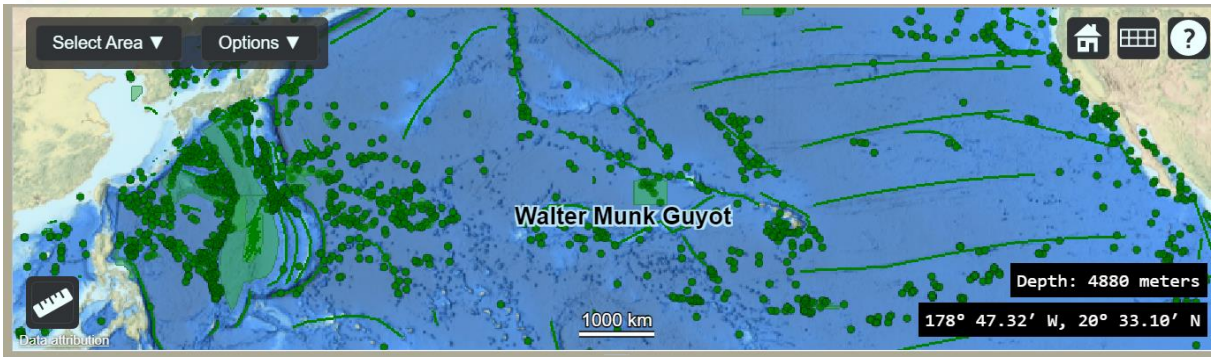




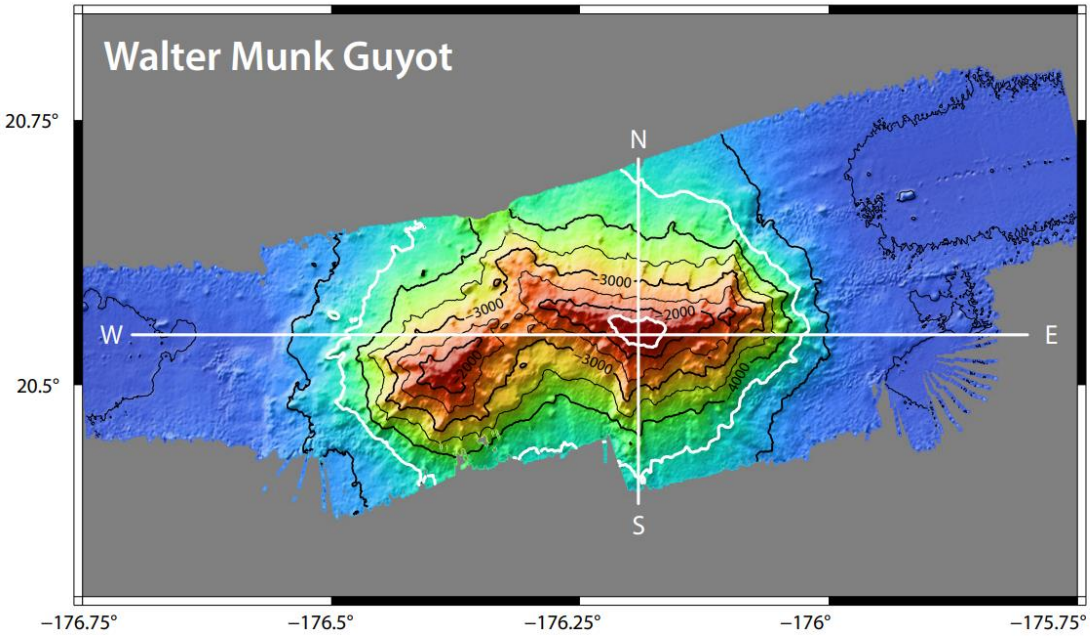


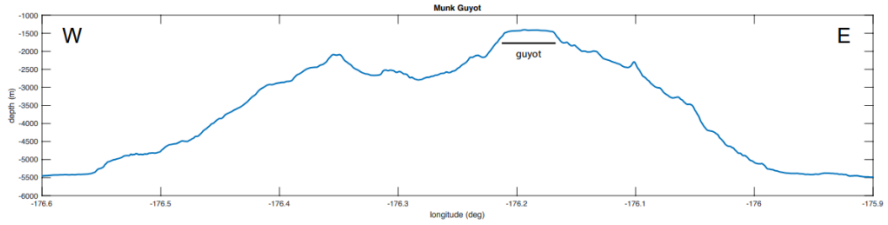


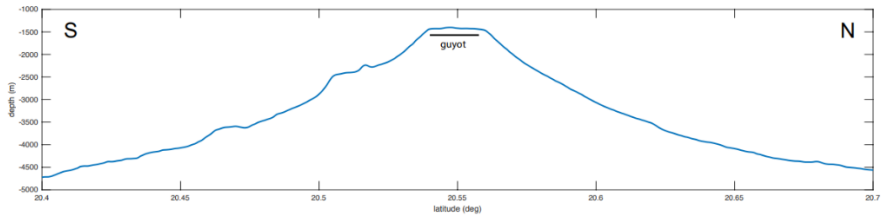




Name	Walter Munk Guyot
Proposed By	B. Appelgate, Scripps Institution of Oceanography, USA, in 2019
Discovered By	U.S. research Vessel "Sally Ride", in 2019
Last Updated	2022-02-28
Associated Meeting(s)	SCUFN-34.1
Origin of Name	Named after Dr. Walter Munk (1917-2019), a legendary American oceanographer whose body of work had profound implications throughout our science and society. Dr. Munk's contributions to science throughout the latter half of the 20th century and into the present century were measured not only in terms of the new knowledge his research yielded, but in


Walter Munk Guyot
20.75°
20.5°
N
S
W
E
3000
2000
3000
3000
4000
−176.75°
−176.5°
−176.25°
−176°
−175.75°


Munk Guyot
W
E
guyot
depth (m)
longitude (deg)


S
N
guyot
depth (m)
latitude (deg)

24.Title: Ambiguity of feature

Criteria: Existence of feature closed to another

Decision Made: Provide relevant complementary data to resolve the ambiguity.

Example: Proposal for Tāwhatiwhati Guyot is NOT ACCEPTED due to the existence of L'Atalante Seamount in the vicinity which is likely to be the same feature (SCUFN27/36)

25.Title: Dual name adoption

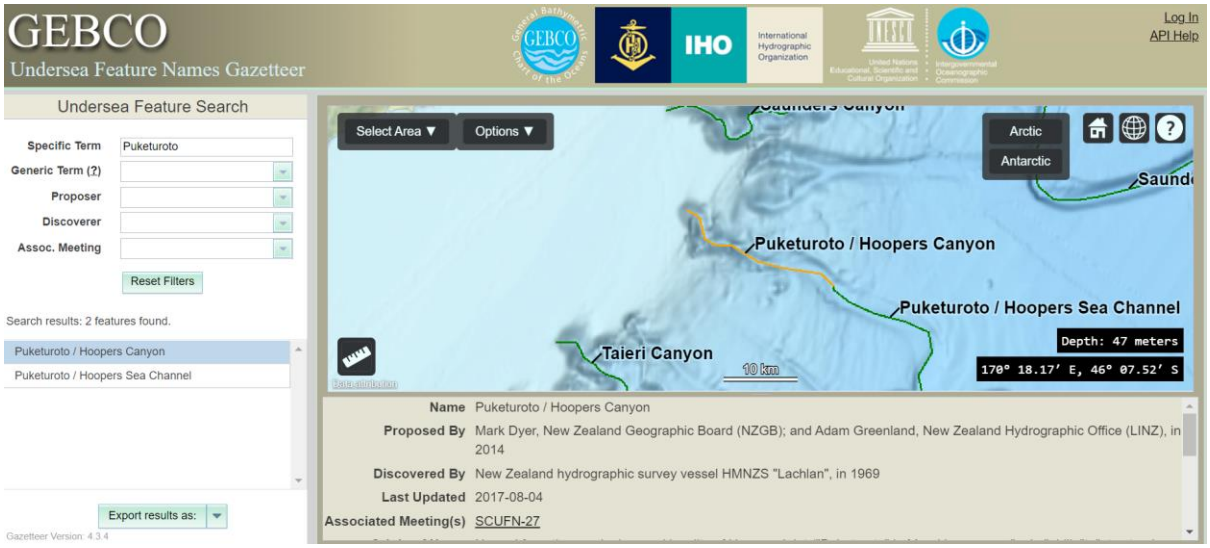
Criteria: Existence of two names

Decision Made: both names separated by a hyphon

Example: Puketuroto-Hoopers Canyon and Puketuroto-Hoopers Sea Channel (SCUFN27/66)

Named from the nearby bay and locality of Hoopers Inlet ("Puketuroto" in Maori language - "puke": hill; "tu": to stand; "roto": inland or lake), New Zealand. Considering that it is not possible to use either Puketuroro or Hoopers, proposals for the specific terms of Puketuroto/Hoopers Canyon and Channel specific terms are agreed provided the features are designated by both names separated by a hyphon, as Puketuroto-Hoopers, rather than by a “/”.

The GEBCO Gazetteer contains “/” rather than “-“



26.Title: New specific term vs Scientific publication feature

Criteria: Existence of a specific term well known in scientific publications

Decision Made: Proposal for Gongchou Seamount is NOT ACCEPTED since it appears that the feature is already well known in scientific publications as Vinogradov Seamount. (Terrapub, 1995 and JGR, 2003)

Example: Gongchou Seamount is NOT ACCEPTED (SCUFN27/31)

Suggestion: Creation of new proposal using Vinogradov as specific term

27.Title: New specific term vs scientific paper name

Criteria: Existence of a specific term in scientific papers with negative connotation

Decision Made: The feature named Poverty Canyon in scientific papers is accepted with a new specific term in association of an other feature and in relation with Māori history

Example: Māhia Canyon (SCUFN34/VTC01/40) and (SCUFN35.1/163)

The feature had been named Poverty Canyon in scientific papers published in 2004 and 2010. However, the NZGB did not consider Poverty Canyon to be an appropriate name because of the negative connotations of the word 'Poverty'. The NZGB altered Poverty Canyon to Māhia Canyon and assigned it as an official undersea feature name on 16 July 2020. Māhia Canyon is named in association with Māhia Peninsula, a geographic feature on the nearby mainland. Māhia Peninsula was so named because it resembled a place in the Māori homeland, Hawaiki.

SCUFN comment:
Renaming features established in the scientific literature, even those with some negative connotations of history, makes no sense and will cause future confusion. Upslope, the name of the bay was officially gazetted as Turanganui-a-Kiwa / Poverty Bay (sic) by the New Zealand Geographic Board in 2019. If it's ok to officially retain the name 'Povery Bay' (sic), why not 'Poverty Canyon'? See also 'Poverty Debris Avalanche' and 'Poverty Gullies' on Figure 1 of the proposal

Feedback from New Zealand:
SCUFN is asked to be aware:
- of the poor connotations and cultural sensitivities associated with culturally inappropriate feature names,
- of the negative cultural impact and colonial overlay that a 'Poverty' name incites;
- that names are changing to recognise indigenous peoples' explorations and original names for geographic features, andNew Zealand scientists have no issues with Poverty Canyon having been altered to Māhia Canyon.

Also:
- the canyon is not hydrographically connected to Tūranganui-a-Kiwa / Poverty Bay,
- the canyon is closely geographically associated with Māhia Peninsula, which is a significant feature on nearby land. Noting that 'Poverty Debris Avalanche' and 'Poverty Gullies' are not official undersea feature names as they are not named for recognised feature types. Their publication in one scientific manuscript does not give sufficient justification to use or compare as associated names.

28.Title: Specific term used in scientific publication

Criteria: Existence of specific term for this feature in international peer-review scientific publications

Decision Made: New specific term is proposed, instead Shennong Seamount

Example: Huangjin Ridge (SCUFN31/168)

In SCUFN31/168 the proposal for Shennong Seamount is kept as PENDING. In accordance with B-6, Introduction, 2.ii), SCUFN invites CCUFN to consider the possibility of changing the name (such as “Hat Ridge”) already known for this feature in international peer-review scientific publications. Decision SCUFN32

29.Title: Specific term as Princess' name

Criteria: Specific term with connotation to royal sovereignty

Decision Made: NOT ACCEPTED (resubmitted with a New group feature names and as Knoll instead Hill) Complete. Gazetteer updated 24 Aug 2019

Example: Tianshou Hill, Tianyang Hill, Tianrong Hill (SCUFN32/160, SCUFN32/161 and SCUFN32/162)

30.Title: Specific term without connection to the feature

Criteria: Existence of specific term in relation to research, geography and feature

Decision Made: New specific term is proposed, Huangjin (the feature is close to Huangjin Cove) instead Lierlang, to create an appropriate or to be ligned/grouped with other similar categories in application of the guidance.

Example: Huangjin Ridge (SCUFN31/165)

Huangjin Ridge (originally proposed as Lierlang Ridge)	SCUFN31/165	Lierlang Ridge kept as PENDING, with the specific term to be modified to be in relation to Antarctic research, geography, and features.	New specific term Huangjin proposed from a nearby Huangjin Cove (e-mail from Li Sihai 1st Sept 2020). Name Huangjin Ridge considered at SCUFN34-VTC01 (kept as PENDING …).

31.Title: Specific term as central point

Criteria: Specific term referring to a potential center point of the position of the feature

Decision Made: Kept as PENDING: the specific term of seamount named the central point of the cardinal points

Example: Longbei Seamount SCUFN31/153 and Longnan Seamount SCUFN31/154

Longbei Seamount	SCUFN31/153	…kept as PENDING, with the proposal form modified to display Longtou Seamount and under the conditions that Longtou Seamount is submitted at SCUFN32 (Longtou Seamount is the central point of the cardinal points used for the specific term).	Proposal for Longtou Seamount submitted to SCUFN. Both Longbei Seamount and Longtou Seamount considered at SCUFN34-VTC01 (kept as PENDING…).
Longnan Seamount	SCUFN31/154	…kept as PENDING, with the proposal form modified to display Longtou Seamount and under the conditions that Longtou Seamount is submitted at SCUFN32 (Longtou Seamount is the central point of the cardinal points used for the specific term).	Proposal for Longtou Seamount submitted to SCUFN. Both Longnan Seamount and Longtou Seamount considered at SCUFN34-VTC01 (kept as PENDING…).

32.Title: Undersea feature already named in the GEBCO Gazetteer

Criteria: The feature is already named as Le Gouic Seamount in the GEBCO Gazetteer

Decision Made: The Proposal, Tropiquito Seamount, is NOT AACCEPTED

Example: (SCUFN33/34)

33.Title: Specific term double meaning

Criteria: Specific term has a double meaning and one is the name of private company

Decision Made: The specific term Triton is changed and the feature accepted as Wintery Deep

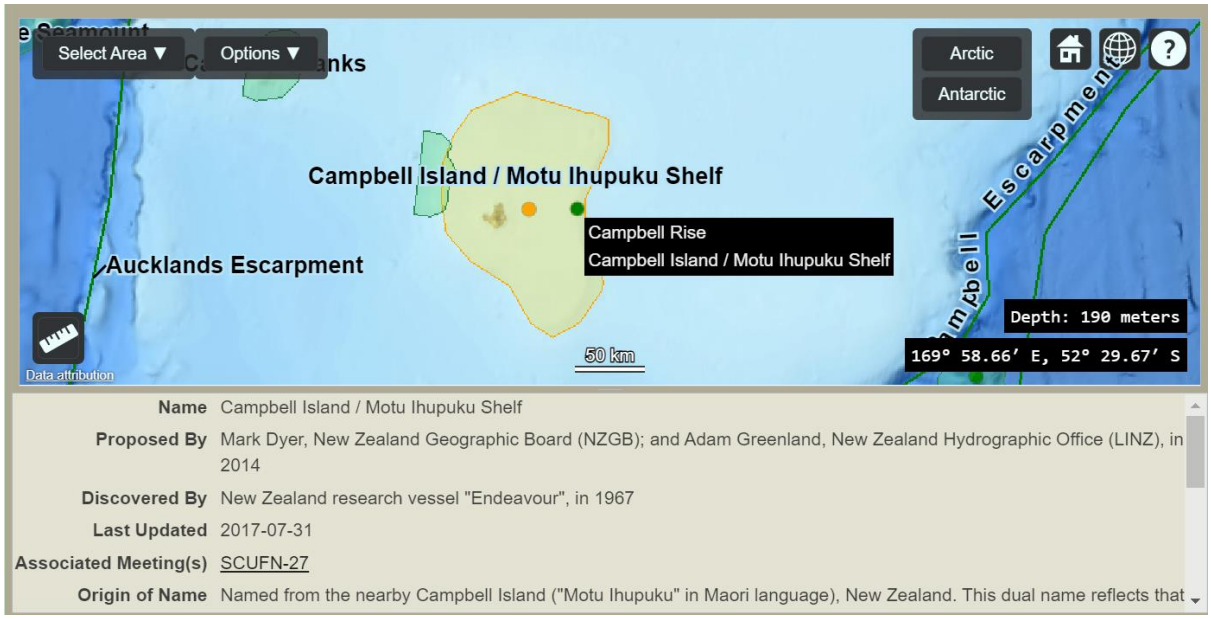
Example: Wintery Deep (SCUFN33/30)

34.Title: Generic terms as part of specific – dual term

Criteria: The feature name Campbell Island/Motu Ihupuku Shelf has the generic terms Island and Motu that are already part of the specific dual term

Decision Made: The generic term and specific term reflect the dual name that of associated land feature, Campbell Island / Motu Ihupuku, which was made official in New Zealand Ngai Tahu Claims Settlement Act 1998. As additional information the name first appeared on Oceanic Bathymetry (OBS) chart Campbell in 1967.

Example: Campbell Island/Motu Ihupuku Shelf (SCUFN27/68)



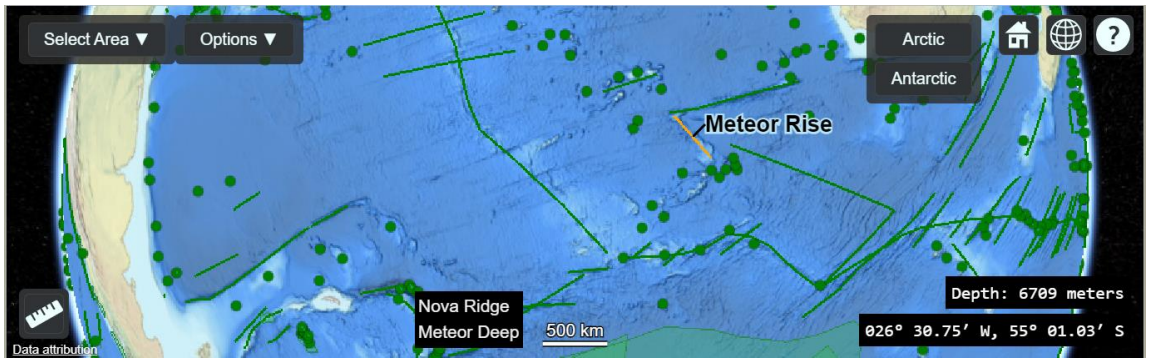
Name	Campbell Island / Motu Ihupuku Shelf
Proposed By	Mark Dyer, New Zealand Geographic Board (NZGB); and Adam Greenland, New Zealand Hydrographic Office (LINZ), in 2014
Discovered By	New Zealand research vessel "Endeavour", in 1967
Last Updated	2017-07-31
Associated Meeting(s)	SCUFN-27
Origin of Name	Named from the nearby Campbell Island ("Motu Ihupuku" in Maori language), New Zealand. This dual name reflects that

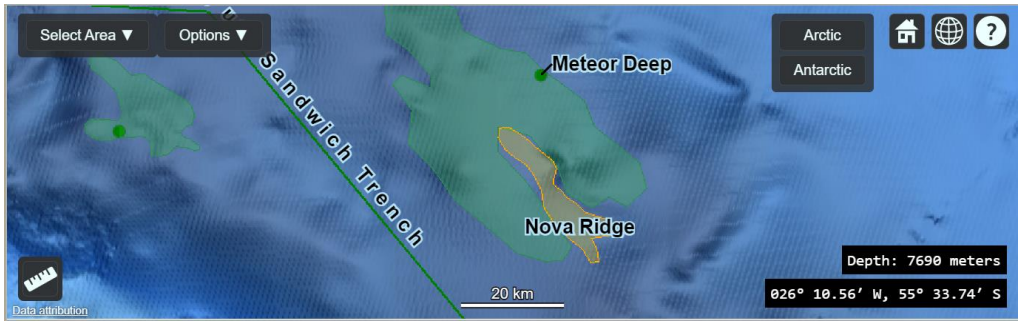
35.Title: Specific term as potential confusion between features

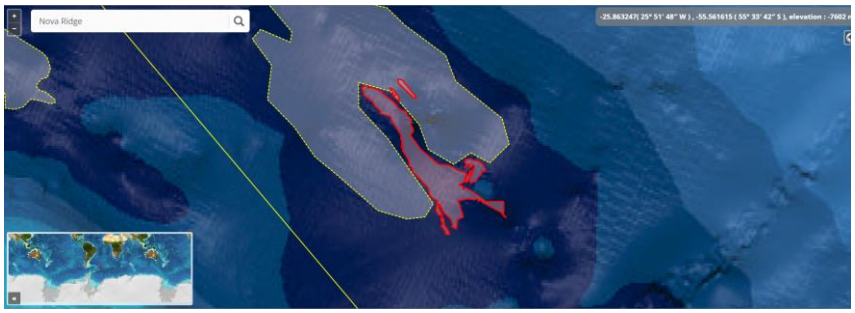
Criteria: An identical specific term to two features could create confusion when the generic term of features are similar features. I.e. Proposal Meteor Ridge (SCUFN 33/26) could be confuse to Meteor Rise (in the GEBCO Gazetteer)

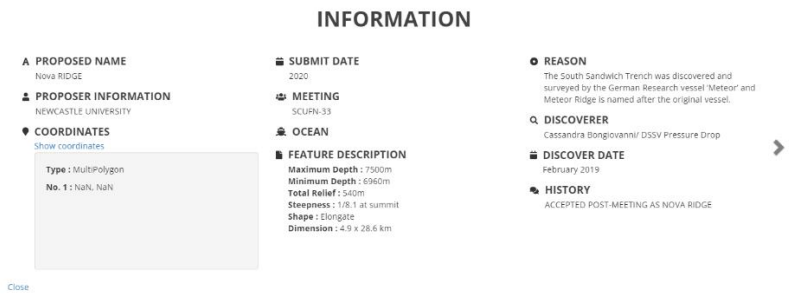
Decision Made: The specific term is changed and new name accepted as Nova Ridge

Example: Meteor Ridge (SCUFN 33/26)









Suggestion: change the reason in the BETA Gazetteer and harmonize the polygon in two gazetteers.

36.Title: Specific term politically sentitive

Criteria: Application of SCUFN TORs paragraph 2.10

Decision Made: The Sub-Committee will not consider undersea feature name proposals that are politically sensitive, it is pending a new specific term to be submitted by the proposer in relation with marine research. The generic term was changed in hills instead hill

Example: Layang-Layang Hills (SCUFN29/61)

37.Title: Feature with conflict of naming

Criteria: The feature was submitted by two or more proposals and proposers

Decision Made: The proposal was kept as pending, in application of B-6 to be solved by authorities involved

Example: Kinabalu Seamount (SCUFN29/59) and Yinqing Seamount (SCUFN29/129); Barnaba Seamount (SCUFN31/187)