

## **Report to the GEBCO Sub-committee on Undersea Feature Names on Part I of the Review and Enhancement of the GEBCO Gazetteer of Undersea Feature Names and Data Base Carried out by the National Geophysical Data Center (NGDC)**

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### **I. Background**

The GEBCO Undersea Feature Names Gazetteer was, until recently, managed by the International Hydrographic Bureau (IHB) using custom developed software that did not easily lend itself to the geographic display or management of the undersea feature names. As the software developer has since stopped supporting the custom software, an alternative management tool and database structure was necessary to keep the Gazetteer updated and available to the public. To this end, the National Geophysical Data Center (NGDC) migrated the GEBCO Undersea Feature Names Gazetteer to a geospatially enabled relational Oracle data base. With the resulting new ability to view the undersea features and associated metadata graphically, many discrepancies and errors became apparent in the Gazetteer. Building on the previous valuable efforts of the British Oceanographic Data Center (BODC) and the Alfred Wegener Institute (AWI) to identify Gazetteer issues and propose solutions, NGDC undertook Part I of a comprehensive and detailed review of the Gazetteer to identify issues and correct major errors. Interest from organizations such as Google and ESRI to geospatially display the feature names fueled the timely completion of Part I of this project.

The objectives of Part I of this project include identifying and correcting errors present in the 2011 version of the Excel Gazetteer spreadsheet and updating a limited number of feature geometries. Part II of this project, contingent on adequate resources, will focus on correcting remaining errors and further enhancing and adding additional feature geometries. A web service based on the new database with an interface allowing search and display of the undersea features will be available through the GEBCO website by the end of 2011.

### **II. Data, procedures, and resources**

The 2011 Microsoft Excel version of the GEBCO Gazetteer was used as the main resource and standard for this project. In general, the database was updated to match information in the 2011

spreadsheet unless anomalies or discrepancies were discovered. Geometries were often updated to match or be close to BODC suggested changes in the report of their own review (see **SCUFN21-09.A**) of the Gazetteer and proposals by Ralf Krockner at AWI for features included in the SCAR Composite Gazetteer on Antarctica (see **SCUFN21-09.2A and SCUFN21-09.2A**). Other resources included SCUFN meeting reports, original feature proposals, and people involved in feature proposals and/or SCUFN meetings.

### **III. Updates to the Gazetteer and database**

#### **a. General database updates**

A number of minor changes were made to the database, particularly in the text fields. All fields in the database were updated to be as grammatically correct and descriptive as possible. For example, duplicate spaces, bad punctuation, and capitalization errors were corrected throughout. Many of the suggestions were in accordance with previous suggestions by the BODC. **Many of these changes are not yet reflected in the latest version of the Excel version of the Gazetteer.**

The GEBCO Gazetteer database was originally populated in 2007 using the 2007 version of the Excel Gazetteer. Updates during this project were made accordingly; for example, new features since 2007 were added into the Gazetteer database. During the initial database population, several fields were consistently populated incorrectly; most notably, accreditation, proposer, and discoverer. Comparisons were made between the database and the 2007 and 2011 Excel spreadsheets to confirm these issues. Since these errors followed a pattern in most cases, corrections to the database were automated, checked, and completed relatively efficiently. The Excel spreadsheet remains accurate.

The database itself was cleaned up and consolidated to be as simple as possible given the time and scope of the initial review. Duplicate entries were removed and their associated objects re-associated, names were standardized, and tables were simplified. The database still has some superfluous entries, but this initial review took care of the larger overlaps.

Another addition worth noting is the integration of a **secondary geometry** field designated by the database column header “SHAPE2.” This new field allows for the geographic definition of a feature using multiple shapes. For example, a bank can now be defined primarily as a point and secondarily as a polygon (e.g., Congress Bank). Having both shape definitions is helpful. Where applicable and available, secondary geometries were inserted into the database but many more need to be added.

The reserve section of the GEBCO Gazetteer and database also underwent review and updating. The review and update procedures used for the published portion of the gazetteer were used for the reserve section. All “Unnamed” features were deleted from the reserve section of the database except for those which are designated in the 2011 reserve spreadsheet.

#### **b. Geometry updates**

With the help of Michel Huet, 198 features were approved in the database with enhanced geometries. Each set of changes preserve the original SCUFN endpoints, simply adding points in the middle to better define their shape. Please note that, although these geometry changes are now

visible in the database, **the changes have not yet been included in the 2011 version of the Excel Gazetteer.**

Admiralteystvo Trough	Charlie-Gibbs Fracture Zone	Grand Cess Canyon
Aegis Spur	Chile Trench	Great Abaco Canyon
Aleutian Trench	Cocos Ridge	Great Bahama Canyon
Algerian Basin	Collette Spur	Guilcher Levee
Alula-Fartak Trough	Corveiro Canyon	Habibas Escarpment
Amirante Trench	Côte d'Ivoire Escarpment	Heezen Fracture Zone
Amirante Banks	Cretan-Rhodes Ridge	Heirtzler Fracture Zone
Anegada Ridge	Crozon Canyon	Hellenic Trench
Angola Basin	Dampier Ridge	Henry Trough
Arguin Canyon	Dangeart Canyon	Hermine Canyon
Ars Canyon	Delesse Spur	Herodotus Trough
Aucklands Escarpment	Diamantina Escarpment	Houtman Canyon
Baeyer Canyon	Dirck Hartog Ridge	Hovgaard Ridge
Bahama Ridge	Douarnenez Canyon	Indus Canyon
Baldaque da Silva Passage	Drygalski Canyon	Investigator Ridge
Baoulé Canyon	Dubinín Trough	Jan Mayen Ridge
Belle-Ile Canyon	East Indiaman Ridge	Jan Mayen Fracture Zone
Black Mud Canyon	East Mediterranean Ridge	Japan Trench
Blake Ridge	East Pacific Rise	Java Ridge
Blake Canyon	East Scotia Ridge	Kallinago Trough
Bode Verde Fracture Zone	Emerald Fracture Zone	Keathley Canyon
Bounty Seachannel	Emperor Seamount Chain	Kermadec Trench
Bowers Ridge	Engaño Canyon	Knipovich Ridge
Broken Ridge	Eucla Canyon	Koppe Canyon
Bryant Canyon	Falkland Escarpment	Küre Escarpment
Campbell Escarpment	Fimbul Canyon	Kuril-Kamchatka Trench
Campeche Escarpment	Fleming Ridge	Kyushu-Palau Ridge
Cap Ferret Canyon	Florida Valley	La Rochelle Canyon
Cape Range Escarpment	Foundation Seamounts	La Romanche Fracture Zone
Carlsberg Ridge	Fowlers Canyon	Labrador Trough
Carnarvon Canyon	Gaillard Spur	Lamjaybir Canyon
Caroline Seamounts	Gakkel Ridge	Lampaul Canyon
Cayman Ridge	Galicia Escarpment	Le Trou Sans Fond Canyon
Ceará Ridge	Gardiner Seamounts	Lomonosov Ridge
Cedros Trench	Gauss Fracture Zone	Lord Howe Rise
Central Indian Ridge	Gazelle Fracture Zone	Louisville Ridge
Chagos-Laccadive Ridge	Geraldton Canyon	Macquarie Ridge
Chain Ridge		

Magellan Seamounts	Ouessant Canyon	Shatsky Rise
Marcus-Wake Seamount Group	Pabillo Canyon	Sonja Ridge
Mariana Trench	Pacific-Antarctic Ridge	Sonne Ridge
Marie-Galante Canyon	Palau Trench	South New Hebrides Trench
Menard Fracture Zone	Papagayos Ridge	South Scotia Ridge
Mendocino Fracture Zone	Penhors Canyon	Southeast Indian Ridge
Mid-Atlantic Ridge	Peru Trench	Southwest Indian Ridge
Mid-Pacific Seamounts	Peru-Chile Trench	St. Croix Ridge
Middle America Trench	Petite Sole Canyon	St. Kitts Valley
Mona Trough	Petrock Valley	Sunda Trench
Mona Spur	Pioneer Fracture Zone	Tabou Canyon
Montserrat Valley	Pornic Canyon	Tanoûdêrt Canyon
Moonless Seamounts	Porthos Canyon	Tonga Trench
Moresby Canyon	Porto Valley	Umnak Canyon
Nansen Basin	Pribylov Canyon	Valencia Trough
Nazaré Canyon	Puerto Rico Trench	Vema Seachannel
Neumayer Canyon	Puysegur Trench	Viaud Ridge
New Caledonia Trough	Redonda Valley	Wallaby-Cuvier Escarpment
New Guinea Trench	Rochebonne Canyon	Walvis Ridge
Ninetyeast Ridge	Rockall Trough	West Mariana Ridge
North Scotia Ridge	Rockall Bank	West Melanesian Trench
Northwest Atlantic Mid-Ocean Channel	Sables-d'Olonne Canyon	Whidbey Canyon
Norwegian Trough	Saikaido Seamount Chain	Yap Trench
Novaya Zemlya Trough	Saint-Nazaire Canyon	Yeu Canyon
Nullarbor Canyon	São Gabriel Valley	Yucatán Escarpment
Ogasawara Ridge	São Rafael Canyon	Zenkevich Rise
Ometepec Canyon	Saya de Malha Bank	Zhemchug Spur
Ontong Java Rise	Sculpin Ridge	Zhemchug Canyon
	Setúbal Canyon	
	Shamrock Canyon	

**c. Other Gazetteer/database changes**

Some anomalous features were modified in the database and/or Excel spreadsheet with the review and approval of Michel Huet and Lisa Taylor. A summary table of the notes and actions surrounding these features appears below. All issues described here have been resolved as listed.

Name	LeVoir Notes/Questions	Huet/Schenke Notes	Actions
<b>Adare Seamounts</b>	Should this be added to the reserve section? It is not in the current version. Details about changes to "Adare Ridge" are present in SCUFN19 (2006) but actions concerning the changes are unclear in this and following reports.	It is correct that an action was missing in SCUFN19 report (2006) to remove Adare Seamounts from the Gazetteer when the two ridges mentioned in the 2nd paragraph of section 10.2 have been named and accepted. These two ridges were accepted as East Adare Ridge and West Adare Ridge at SCUFN21 (2008). However, SCUFN forgot to include an action to drop Adare Seamounts.	Deleted Adare Seamounts from Gazetteer and reserve section.
<b>Almirante Câmara Seamount</b>	The 2011 spreadsheet needs to be updated with the correct coordinates. Currently, the spreadsheet incorrectly lists W coordinate as E. The SCUFN21 report is correct.	I have corrected the hemisphere from E to W in the Excel Gazetteer.	Hemisphere information corrected in the Excel Gazetteer.
<b>Anashkin Seamount</b>	SCUFN18 report needs to be updated to include the correct coordinates. They need to be changed from N and W to S and E, respectively, in accordance w/ SCUFN18-4.2B proposal.	I have corrected the hemisphere from N and W to S and E in the Excel Gazetteer and the report of SCUFN18. Please add under Proposal "HDNO, Russia (2004)".	Hemisphere information corrected by Michel in Excel Gazetteer. Proposal changed.

<b>Barcoo Bank</b>	Not sure what to do about this one. This feature is not in the 2011 spreadsheet, but it IS listed in the 2007 version and was found in the database. It is briefly mentioned in SCUFN 16 (2003), so it was presumably approved before then, but no actions are listed.	Barcoo Bank was taken from GEBCO 5.10 in 1988, but incorrectly entered N instead of S in the GEBCO Gazetteer. It was wrongly removed from the Gazetteer between May and November 2008. Barcoo Bank must be re-included in the Gazetteer, as follows: Coordinates: 32°35' S - 156°15' E; Chart references: GEBCO 5.10, INT 60, INT 602; Remarks: Named Seamount on INT Charts. Shown as Barcoo Tablemount in ACUF Gazetteer. Remove the text in the Remarks section for Bardin Seamount, i.e. "Shown as Barcoo Tablemount in ACUF Gazetteer."	Barcoo Bank attributes updated in database and Excel Gazetteer.
<b>Baronie Mountains</b>	Feature not present in spreadsheet, but is in online Gazetteer. Not mentioned in SCUFN or BODC reports, but IS listed in 2007 spreadsheet (?). "Mountains" is not a SCUFN-approved feature type, may be a duplicate of Baronie Seamounts.		This feature was deleted because it is a duplicate of Baronie Seamounts.
<b>Beiersdorf Peak</b>	Should this feature be approved? It is listed in both the 2011 approved features spreadsheet and the 2011 reserve section. SCUFN23 (2010) lists it as a reserve feature contingent on additional data.	SCUFN-23 decision was to include Beiersdorf Peak in the Reserve Section, not in the Gazetteer. It was included in the Gazetteer by mistake.	Removed from the Excel gazetter and included in the reserve section.
<b>Bob Fisher Ridge</b>	Badly ordered points, BODC suggested reordering.		Approved re-ordered points myself and published in the database. This is an example; re-ordering points where obvious occurred in multiple cases.

<b>Brouwer Trough</b>	Changed one coordinate to match spreadsheet. SCUFN 14 (2001) coordinates were inconsistent with morphology. Has not been officially approved by SCUFN in reports, only suggested by BODC.		Feature updated in the database to match spreadsheet.
<b>Cabliers/Câblie rs Bank</b>	Câblie rs Bank may be a duplicate of Cabliers Bank (they have exactly the same attributes) but are not reported by BODC.		Kept Câblie rs bank and delete the other one.
<b>Calarca Reef</b>	Should this feature be in the Gazetteer? It is not in the 2011 version of the spreadsheet, the SCUFN reports, BODC reports, or the reserve section, but was originally found approved and published with 2007 spreadsheet details in the database. Could not find any record of its approval or rejection from the database/Gazetteer anywhere.	Calarca Reef was removed from the Gazetteer by SCUFN22 (2009).	Removed from the database and reserve section.
<b>Caroline Seamounts</b>	Why isn't this in the 2011 spreadsheet? It IS in the 2007 version, as well as published in the online Gazetteer. It's not in SCUFN reports, but published in the BODC reports as a priority feature for geometry changes (which are also in approval for you).	It is correct that Caroline Seamounts was wrongly removed from the Gazetteer between May and November 2008. It must be re-included in the Gazetteer, as follows: Coordinates: As in the revised geometry (formerly, 7°15' N - 144°00' E to 6°00' N - 157°15' E); Chart reference: GEBCO 5.18; Remarks: Shown as Ridge in the ACUF Gazetteer.	Michel made these corrections to the Excel Gazetteer. Feature also approved with updated geometry and the correct attributes in the database.
<b>Cascadia Basin</b>	Should this be in the Gazetteer? There doesn't seem to be any supporting documentation for its approval. It's in the 2011 spreadsheet, but it is NOT in the 2007 spreadsheet, SCUFN reports, BODC reports, or reserve section. It was not originally in the database and had to be added to it.	Cascadia Basin was taken from GEBCO 5.03 / GEBCO 5.07 in 1988, when the GEBCO Gazetteer was first established. It was never removed from the Gazetteer (it was in the September 2007 version of the Excel Gazetteer).	Added and approved in the database.

<b>Chirikov Seamount</b>	A general question about accreditations: This is an example of a feature where the accreditation says SCUFN, Apr. 1987, but this seems early compared to many of the SCUFN accreditations. When did SCUFN begin?	It should read "SCGN (Apr 1985)". SCGN (Sub-Committee on Geographical Names and Nomenclature of Ocean Bottom Features), the predecessor of SCUFN, was established in 1975 and hold meetings in 1975, 1976, 1978, 1980, 1981, 1985, 1987, 1989, 1991 and 1993. From then, the sub-committee has been named SCUFN. The following should added for Chirikov Knoll: Proposal: Dr. G. Agapova, IOAN, RU, Mar. 1987 Chart reference: GEBCO 5.03	Accreditations and proposals updated. SCUFN accreditations dated 1993 and before were changed to SCGN, no other dates changed.
<b>Constantine Bank</b>	Mentioned in SCUFN15 (2002) as a reserve feature, SCUFN23 (2010) called for its removal from the reserve section.		Deleted from reserve section in accordance with SCUFN23.
<b>Croisic Canyon</b>	Should this instance be deleted from the database? Looks to be an exact duplicate of "Le Croisic." Both are in the 2007 spreadsheet and the database, but "Croisic" is not in the 2011 spreadsheet. However, there is no suggestion for its removal in the SCUFN or BODC reports.	As I mentioned in my e-mail to you of 1 April, sending the March 2011 Excel Gazetteer, "Croisic Canyon has been removed as it was a duplicate of Le Croisic Canyon, which is the right name."	Croisic Canyon deleted from the database.
<b>Daigo-Kashima Seamount</b>	Spelling discrepancy: Name is "Daigo-Kasima" in database. All other attributes match. Feature is nowhere in SCUFN or BODC reports. Which to use?	Correct spelling is Daigo-Kashima. See Doc. SCUFN23-03.1G.	Spelling changed in database.
<b>Daiichi-Kashima Seamount</b>	Spelling discrepancy: Name is "Daiiti-Kasima" in database. All other attributes match. Not addressed directly in SCUFN or BODC reports, though Daiichi-Kashima is referred to and Daiiti-Kasima is not. Which to use?	Correct spelling is Daiichi-Kashima. See Doc. SCUFN23-03.1G.	Spelling changed in database.



<b>Daiichi-Kinan Seamount</b>	Spelling discrepancy: Name is "Daiiti-Kinan" in database. All other attributes match. Nowhere in SCUFN or BODC reports. Which to use?	Correct spelling is Daiichi-Kinan. See Doc. SCUFN23-03.1G.	Spelling changed in database.
<b>Daini-Atsumi Knoll</b>	Should this feature be in the Gazetteer? It is not in the 2011 version of the spreadsheet, the SCUFN reports, BODC reports, or the reserve section, but was originally found approved and published with 2007 spreadsheet details in the database. Could not find any record of its approval or rejection from the database/Gazetteer anywhere.	Another name which was wrongly removed from the Gazetteer between May and November 2008. It must be re-included in the Gazetteer, with details as in the September 2007 Excel Gazetteer. I have done that for the current Excel Gazetteer.	Current Excel Gazetteer updated by Michel. The feature is now also approved in the database.
<b>Daiyon-Kasima Seamount</b>	Could be a possible duplicate of Daiyon-Kashima Seamount (feature 717, in SCUFN16). Daiyon-Kashima is mentioned in SCUFN 19/20 as having a bad coordinate that was fixed (coordinates not specified in reports), not mentioned by BODC. This feature contains a coordinate slightly different than Daiyon-Kashima so this could be the fix. Which, if either, should be deleted from the database?	Correct spelling is Daiyon-Kashima, with details as in the March 2011 Excel Gazetteer. Delete Daiyon-Kasima Seamount from the database.	Daiyon-Kashima Seamount exists in the database as it does in the Excel spreadsheet. Daiyon-Kasima Seamount deleted from the database.
<b>Danil'chuk Seamount</b>	Details are in SCUFN 20 (2007) as a reserved feature pending a new contour map, and re-addressed in SCUFN 23 (2010) as being the same as Dibner Seamount (a new feature). For some reason found approved.		Removed from the database in accordance with SCUFN23.
<b>Day Canyon</b>	Changes in reserve are in the 2010 spreadsheet but can't be verified because they are not in SCUFN or BODC reports.		Changes approved in the database, but are not in SCUFN reports.

<b>Endracht Seamount</b>	Same location as Eendracht Seamounts. The remarks suggest its removal and Lisa agrees - should it be deleted as suggested in the remarks?	Correct spelling is Eendracht. Delete Endracht Seamount. Keep Eendracht Seamounts, with following amendments: Chart references: GEBCO 5.09, INT 708, INT 70, INT 73 History: Named after the early 17th Century Dutch wooden-hulled sailing ship Eendracht , launched in 1615 in the service of the Dutch East India Company. It was captained by Dirk Hartog when he made the second recorded landfall by a European on Australian soil, in 1616. Remarks: Mapped by L-DGO's Vema, SIO's Argo (1965).	Endracht Seamounts deleted. Attributes updated for Eendracht Seamounts in database and Excel Gazetteer.
<b>Fukujin Seamount</b>	Not in database prior to review but is not listed as a new or reserve feature in any reports or reserve section. Is also not in 2007 spreadsheet (presumably approved after that?).		Added into database.
<b>Geisha Guyots</b>	SCUFN21 (2008) lists "Geisha" as an unacceptable name. The feature is duplicated in Japanese Guyots. The report suggests leaving the feature in with "see Japanese Guyots" in the remarks section. Should this entry just be deleted entirely and/or change the remarks to "renamed as Japanese Guyots"?	Keep Geisha Guyots in the database with the remarks changed to "Renamed as Japanese Guyots".	Remarks for Geisha Guyots updated in the database and Excel Gazetteer.
<b>Gilbert Seamount</b>	Remarks ("Not shown on GEBCO 5.03") would imply that we should then delete that chart.		Both chart & remarks deleted.
<b>Gordin Guyot</b>	Duplicate feature in database only - not mentioned by SCUFN or BODC. Feature 1170 looks wrong; no guyot at location (Cascadia basin). Matches attributes except coordinates (-128 46.666667) and charts (INT 801; GEBCO 5.03; INT 50; GEBCO 5.07).		Feature 1170 deleted.

<b>Gorontalo Basin</b>	Not in database prior to review but is not listed as a new or reserve feature in any reports or reserve section. Is also not in 2007 spreadsheet (presumably approved after that?).		Added into database.
<b>Gorringe Ridge</b>	Not in database prior to review but is not listed as a new or reserve feature in any reports or reserve section. Is also not in 2007 spreadsheet (presumably approved after that?).		Added into database.
<b>Gorynych Hills</b>	Spelling discrepancy: Name is "Gorinich" in database. All other attributes match. Gorinich is referred to in SCUFN20 (2007) and Gorynych is not, no record of change. Feature originally proposed by Dobrolubova, Russia. Which name to use?	Correct spelling is Gorynych, from the proposal (SCUFN20-06.7A) and from SCUFN20 report. Amend Proposal to read "Dr. G.V. Agapova and Dr. K.O. Dobrolyubova, Geological Institute, Russian Academy of Sciences, May 2007".	Spelling and proposer updated in the database and Excel Gazetteer.
<b>Grattan Bank</b>	Not in database prior to review but is not listed as a new or reserve feature in any reports or reserve section. Is also not in 2007 spreadsheet (presumably approved after that?).		Added into database.
<b>Hukutoku Seamount</b>	Should this be in the Gazetteer? It's in the database and the 2007 spreadsheet but not in the 2011 version, and there is no record of its removal in the SCUFN or BODC reports.	Hukutoku Seamount (24°03' N - 141°37' E) should be in the GEBCO Gazetteer. This name has been in the Gazetteer since its creation in 1988, taken from INT Chart 510, and disappeared by mistake for a reason I don't know (this happened at a time we had problems at the IHB with the Gazetteer management programme).	Hukutoku Seamount to remain published in the database. Excel Gazetteer updated.
<b>Hukuzin Seamount</b>	Should this be in the Gazetteer? It's in the database and the 2007 spreadsheet but not in the 2011 version, and there is no record of its removal in the SCUFN or BODC reports.	Same as above. Hukuzin Seamount (21°56' N - 143°28' E) should be in the GEBCO Gazetteer. This name has been in the Gazetteer since its creation in 1988, taken from INT Chart 510. I have re-introduced Hukuzin Seamount in the Gazetteer spreadsheet.	Hukuzin Seamount to remain published in the database. Excel Gazetteer updated.

<b>Katsuura Canyon</b>	The ordering of these points looks like it may be wrong. The proposal for the feature does not list the same coordinates that are in the spreadsheet. No mention by BODC. Not sure what is correct.	There was a typo in the SCUFN-21 report. In accordance with the proposal for Katsuura Canyon, the 3rd position should be 34°35' N - 141°05' E.	Excel Gazetteer, SCUFN21 report, and database updated with revised coordinate.
<b>Koka Seamount</b>	Should feature 1631 be deleted? It looks wrong (strange location, by Saudi Arabia) and it is not listed in the SCUFN reports or the 2011 spreadsheet.	There is only one Koka Seamount in the GEBCO Gazetteer, at 27°05.0' N - 138°46.0' E. Any other Koka Seamount in the database should be deleted.	Duplicate feature deleted.
<b>Komahasi Seamount</b>	Removed from the database as it is fairly clearly a duplicate of "Komahashi Seamount" (same coordinates) and is not in the 2011 spreadsheet. Mentioned in SCUFN16 (2003) as a possible duplicate.		Feature deleted.
<b>Le Trou Sans Fond Canyon</b>	Accreditation is May 2003, but SCUFN report is dated April 2003. This discrepancy is similar in several other features as well. Should all such features be changed?	You are right. SCUFN-16 took place on 10-12 April 2003. As a result, the Accreditation date for Le Trou Sans Fond Canyon should be changed to April 2003. I have corrected the Gazetteer spreadsheet. From a quick search, it seems that this was the only name taken from the SCUFN-16 report with the wrong accreditation date.	Features accredited "SCUFN, May 2003" were changed to "SCUFN, April 2003". Excel Gazetteer corrected.

<b>Manus Trench</b>	Should this feature be in the Gazetteer? It's approved in the database and in the 2007 version of the spreadsheet, but not in the 2011 version or the reserve section. No record of its rejection in SCUFN, but BODC mentions that it might be the same as West Melanesian Trench.	Manu Trench and West Melanesian Trench relate to the same feature. For some reason, they were both included in the initial version of the GEBCO Gazetteer in 1988, with the remark "See also (the other name)" for both names. At SCUFN-15 in 2002, it was acknowledged that West Melanesian Trench was the appropriate name by adding in Remarks for that name "Wrongly shown as "Manus Trench" on GEBCO 5.10". However, it was not until 2008 that Manus Trench was removed from the Gazetteer spreadsheet. Manus Trench should therefore be removed from the database.	Manus Trench deleted from the database.
<b>Matsu Seamount</b>	Name is spelled "Matu Seamount" in database. Which is correct?	Matsu Seamount is correct. See Doc. SCUFN23-03.1G "Japanese Spelling Rules", by Yas Ohara. The Gazetteer spreadsheet was corrected in August 2010.	Spelling corrected in database.
<b>Maud Hill</b>	Should this feature be in the reserve section? It's in the database reserve section but not in 2011 spreadsheet, 2011 reserve section, or any SCUFN/BODC reports. Looks like same location as Maud Rise.	[MH] Don't know where Maud Hill came from. It does not appear in any GEBCO Gazetteer nor any Reserve Section since 2003. There was a Maud Seamount proposed on same location that Maud Rise at SCUFN-12 in 1997, but it was not accepted. [HWS] I remember, it was discussed sometime ago, to name the small peak on the Maud Rise the Maud Hill, since the name was used in publications. But this idea was dropped, so delete Maud Hill.	Deleted from the database.

<b>Medée Hakuho Mud Volcano</b>	Was the generic term "mud volcano" accepted by the guiding committee? The feature is no longer listed in the 2011 reserve section (and IS in the 2011 Gazetteer) so presumably so, but there are no details of this approval in the SCUFN23 report.	Yes, the new generic term "Mud Volcano" was approved by the GEBCO Guiding Committee at their 2010 meeting in Lima. See § 64 of the Minutes "The Committee had approved the terms 'Mud Volcano' and 'Rift' ...". As the GGC meeting was held after SCUFN-23, this information could not appear in the report of SCUFN-23.	"Mud Volcano" added to feature types (with description listed in SCUFN23), and Medée Hakuho Mud Volcano approved.
<b>Meiji Seamount</b>	Name is "Meizi Seamount" in database. No notes by SCUFN or BODC. Which is correct?	Meiji Seamount is correct. See Doc. SCUFN23-03.1G "Japanese Spelling Rules", by Yas Ohara. The Gazetteer spreadsheet was corrected in August 2010.	Spelling corrected in database.
<b>Mogi Fan</b>	Same as "Le Trou Sans Fond Canyon" issue. Accreditation is April 2008, but the SCUFN report is dated May 2008. This discrepancy is similar in several other features as well.	Agreed. Accreditation date should be May 2008. From a quick search through the Gazetteer spreadsheet, it seems that this was the only name taken from the 2008 SCUFN meeting with wrong date.	Features accredited "SCUFN, April 2008" were changed to "SCUFN, May 2008". Excel Gazetteer corrected.
<b>Musashi Bank</b>	Spelled "Musasi" in database. Which should it be?	Musashi is correct. Same as for Meiji and Matsu.	Spelling corrected in database.
<b>Ojin Guyot</b>	Is it "Ojin" or "Ōjin"? Only briefly mentioned in SCUFN16 (2003) as Ojin.	Ojin is correct. Same as for Musashi, Meiji and Matsu.	Spelling corrected in database.
<b>Oki-Daito Terrace</b>	Should this feature be in the Gazetteer? It's approved in the database and in the 2007 version of the spreadsheet, but not in the 2011 version or the reserve section. No record of its rejection in SCUFN or BODC reports, looks like it was approved in SCUFN15 (2002).	Oki-Daito Terrace (25°20' N - 131°00' E to 25°00' N - 131°40' E) was accepted by SCUFN-14 in 2001, subject to JCUFN's endorsement which was confirmed at SCUFN-15 in 2002. It was removed by mistake sometime in 2008. It should be in the GEBCO Gazetteer.	Name re-included in the Excel Gazetteer and is in the database with the correct attributes.

<b>Olchaengi Knoll</b>	Should it be "Knoll" or "Knolls"? The feature type in the SCUFN23 (2010) report is listed as "Knolls" but with some discussion over whether to use "knoll" instead. Unclear which was chosen.	It should be Olchaengi Knolls, as in the SCUFN-23 report.	Excel Gazetteer and database updated to say "Knolls."
<b>Onnuri Basin</b>	Should the spreadsheet coordinates be updated (latitude to to 37°45'N instead of 38°45')? It does not match the coordinate in SCUFN20 (2007) report or the original proposal. Database coordinate now matches the SCUFN report and original proposal and looks correct.	You are right. The latitude should be 37°45'N as in the SCUFN-20 report (2007), instead of 38°45'N as at present in the Gazetteer spreadsheet.	Excel Gazetteer spreadsheet corrected and database updated with the correct coordinate.
<b>Philippines Trench</b>	Is the name "Philippines" (as listed in the spreadsheet) or "Philippine" (as listed in the SCUFN21 (2008) report and database)?	[MH] The correct name is Philippine Trench. It's a typo as this name was included in the Gazetteer spreadsheet from the SCUFN-21 report. [HWS] I think the name "Philippine Trench" is correct, compare Philippine Sea, Philippine Republic, Philippine Revolution, Philippine Sea Plate, etc.	Name is now correct in the database and the Excel Gazetteer.
<b>Quiberon Ridge</b>	The SCUFN14 (2001) report lists 2 sets of coordinates for this feature. Which should be used? There are also discrepancies between 2007 spreadsheet and 2010 spreadsheet.	I agree that the SCUFN-14 report is confusing. The 1st set of coordinates (46°23'.5N - 06°05'.0W to 46°29'.7N - 05°30'.7W) were those proposed by the proposer. The 2nd set of coordinates (46°28'N - 5°30'W to 46°36'N - 5°50'W) are those accepted by the meeting at SCUFN-14. This should have been made more clear. The coordinates in the 2011 spreadsheet are therefore correct.	Database updated to match 2011 spreadsheet.
<b>Rio De La Plata Canyon</b>	Possible duplicate, not noted by BODC. Two in both spreadsheet and database. Same attributes except spelling (Río De La Plata vs. Rio De La Plata). Which to use?	Correct spelling is Río De La Plata, i.e. with an accent on 'i', as in the 2007 Gazetteer spreadsheet (although it was wrongly placed after Ryusei). Delete the duplicate Rio De La Plata.	Duplicate "Rio De La Plata" deleted from spreadsheet and database.

<b>Siribesi Seamount</b>	Should this feature be in the Gazetteer? It's not in the 2011 spreadsheet or the 2011 reserve section, but is in the database. No mention of its rejection from the Gazetteer in any reports (SCUFN or BODC).	Same as Hukuzin Seamount and Hukutoku Seamount. Siribesi Seamount (43°33' N - 139°44' E) should be in the GEBCO Gazetteer. This name has been in the Gazetteer since its creation in 1988, taken from INT Chart 511.	Siribesi Seamount re-introduced into the Gazetteer spreadsheet.
<b>Syoyo Seamount</b>	What should be done with this feature? It's in the database and 2007 spreadsheet, but not in 2011 spreadsheet or reserve section. No record of its existence in the SCUFN or BODC reports.	Same as above. Syoyo Seamount (22°29' N - 142°59' E) should be in the GEBCO Gazetteer. This name has been in the Gazetteer since its creation in 1988, taken from INT Chart 510.	Syoyo Seamount re-introduced into the Gazetteer spreadsheet.
<b>Takuyo-Daiichi Seamount</b>	How should this be spelled? Name is "Takuyo-Daiiti" in the database. All other attributes match. Briefly mentioned in SCUFN16 (2003) as Takuyo-Daiiti but nowhere else.	Takuyo-Daiichi Seamount is correct. See Doc. SCUFN23-03.1G "Japanese Spelling Rules", by Yas Ohara. The Gazetteer spreadsheet was corrected in August 2010.	Spelling corrected in database.
<b>Traena Deep</b>	Duplicate feature (in both 2011 spreadsheet and database), same attributes except for slight difference in name ("Traena" vs. "Træna"). No mention by BODC. Which to use?	Correct spelling is Træna after the Norwegian municipality. It should therefore be Træna Deep. Same for Træna Bank. Remove any duplicate name(s) from the database. Add under History for both names "Named after the municipality of Træna in Nordland county, Norway".	Duplicate feature "Traena Deep" deleted from database and Gazetteer spreadsheet. "Traena Bank" updated to "Træna Bank." History fields updated.
<b>Wust Seamount</b>	Possible duplicates (in both 2011 spreadsheet and Gazetteer), slightly different spelling ("Wust" and "Wüst"). Same locations, not mentioned by BODC. Which to use?	[MH] Correct spelling is Wüst Seamount. Accented characters are not a problem. There are many names with accented characters in the Gazetteer, e.g. Beaugé Promontory, Belém Ridge, Lapérouse FZ, Macció Norte Terrace etc. Remove the duplicate Wust Seamount from the database. [HWS] One could replace it with Wuest in order to overcome the problem with mutated vowel (umlaut), Wuest is a German name.	Duplicate feature Wust Seamount deleted from the Gazetteer spreadsheet and database.



#### IV. For review by Full Sub-Committee

##### a. Changes to Feature Coordinates proposed by Ralf Kroker, AWI (SCUFN21-09.2A and SCUFN21-09.2A: Comparison between the GEBCO Gazetteer and the SCAR Composite Gazetteer on Antarctica (CGA) – Proposals for changes to the GEBCO Gazetteer) or NGDC

The proposed coordinate changes alter the endpoints or the primary geometric shape of the features. They are preserved in a reserve state in the database and can be viewed easily with an NGDC-developed web map service. Links to URLs for viewing the “before” and “after” geometries are included in the table below. In the viewer, proposed geometries appear in red and current geometries appear in green. These features will be visible in the map service until they are approved in the database with the new geometries. (Note: Please contact [john.c.cartwright@noaa.gov](mailto:john.c.cartwright@noaa.gov) for viewer support).

Name	LeVoir Notes/Questions	View Geometries (w/ contours)	View Geometries (no contours)
<b>Amundsen Abyssal Plain</b>	AWI: Originally a point (now a poly) so the "endpoints" are not approved by SCUFN. No suggestions from BODC. Left in approval. Same feature as Bellingshausen Basin/Abyssal Plain - V. STAGPOOLE, H.W SCHENKE and K. DOBROLYUBOVA agreed to progress this issue (SCUFN23).	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=123">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=123</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=123">http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=123</a>
<b>Anderle Knoll</b>	AWI: Point location moved, looks better. Put into approval.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=135">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=135</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=135">http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=135</a>
<b>Antarctic Canyon</b>	AWI: changed from pt-->linestring, and feature is not present in BODC or SCUFN reports. Changes look decent, submitted for approval.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=157">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=157</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=157">http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=157</a>
<b>Australian-Antarctic Basin</b>	AWI: changed from line-->poly, feature is not present in BODC reports. Changes look ok, left in approval.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=245">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=245</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=245">http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=245</a>
<b>Axthelm Seamount</b>	AWI: Location changed. Not approved by SCUFN or in BODC reports, but is an improvement. Submitted for approval.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=252">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=252</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=252">http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=252</a>
<b>Behaim Seamount</b>	AWI: Point location change looks good, but doesn't match SCUFN "endpoints," only a single point.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=303">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=303</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=303">http://maps.ngdc.noaa.gov/viewers/ufn_previe w.html?featureId=303</a>

<b>Bellingshausen Abyssal Plain</b>	AWI: More points than defined by SCUFN, and feature is not present in BODC report. Changes look decent, though went from line-->poly so the endpoints are not approved by SCUFN. Same feature as Bellingshausen Basin/Amundsen Abyssal Plain - V. STAGPOOLE, H.W SCHENKE and K. DOBROLYUBOVA agreed to progress this issue (SCUFN23).	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=313">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=313</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=313">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=313</a>
<b>Bruce Ridge</b>	AWI: Additional point that is not consistent with SCUFN endpoints and change is not suggested in BODC reports, though it looks fairly accurate.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=421">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=421</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=421">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=421</a>
<b>Bruns Knoll</b>	AWI: Doesn't match SCUFN "endpoints," only a single point. Not in BODC reports, but point location change looks good.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=422">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=422</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=422">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=422</a>
<b>Bungenstok Plateau</b>	AWI: proposed geometry provided by Ralf Krockner but not mentioned in his reports: (SCUFN21-09.2A and SCUFN21-09.2A: Comparison between the GEBCO Gazetteer and the SCAR Composite Gazetteer on Antarctica (CGA) – Proposals for changes to the GEBCO Gazetteer). This feature is not in SCUFN reports, BODC reports, or listed in the reserve section. Details are in the 2010 spreadsheet, though there have also been additional geometry changes made (from a linestring to a polygon).	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=5008">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=5008</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=5008">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=5008</a>
<b>Charcot Fan</b>	AWI: Geometry updates do not match SCUFN endpoints and are not in BODC reports, but look more accurate. Submitted for approval.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=571">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=571</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=571">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=571</a>
<b>Chile Ridge</b>	AWI: Geometry updates do not match SCUFN endpoints (pt-->line) and are not in BODC reports, but look more accurate. Submitted for approval.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=590">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=590</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=590">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=590</a>
<b>Congo Canyon</b>	NGDC: Endpoints changed by NGDC.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=651">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=651</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=651">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=651</a>
<b>Crary Fan</b>	AWI: Geometry updates don't match SCUFN endpoints (pt-->line) and are not in BODC reports but look ok. Submitted for approval.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=676">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=676</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=676">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=676</a>
<b>Deutschland Canyon</b>	AWI: Changed from point to a linestring, does not appear to be in BODC reports. Changes are an improvement.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=778">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=778</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=778">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=778</a>
<b>Drygalski Basin</b>	AWI: Point location moved, looks ok. Put into approval. Should eventually be a polygon.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=830">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=830</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=830">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=830</a>

<b>Ellsworth Bank</b>	AWI: Point location change looks good, but doesn't match SCUFN "endpoints," only a single point.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=889">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=889</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=889">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=889</a>
<b>Eltanin Fracture Zone System</b>	AWI: Changed from a line to a polygon Looks good. Endpoints of polygon are the same as the original line.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=890">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=890</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=890">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=890</a>
<b>Enderby Abyssal Plain</b>	AWI: Changed from a linestring to a polygon. Changes look good. In approval for committee.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=908">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=908</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=908">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=908</a>
<b>Endurance Ridge</b>	AWI: Changed from a point to linestring. Changes look good.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=912">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=912</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=912">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=912</a>
<b>Explora Knoll</b>	AWI: Location changed, looks more accurate. Not in SCUFN or BODC.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=949">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=949</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=949">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=949</a>
<b>Filchner Trough</b>	NGDC: Changed endpoints because one was partially on land.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1001">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1001</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1001">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1001</a>
<b>Glacier Rise</b>	AWI: Endpoints changed; looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1146">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1146</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1146">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1146</a>
<b>Great Barrier Reef</b>	NGDC: Changed from linestring to polygon using satellite imagery, in reserve, changes look ok. BODC suggestions and SCUFN endpoints are line, which is not an approved type for a reef, not used. Polygon in approval for committee.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1194">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1194</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1194">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1194</a>
<b>Gunnerus Ridge</b>	AWI: Shape changed from a point to a linestring. Looks accurate. No suggestions from SCUFN or BODC.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1228">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1228</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1228">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1228</a>
<b>Heiskanen Knoll</b>	AWI: Point location changed, looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1293">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1293</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1293">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1293</a>
<b>Hero Fracture Zone</b>	AWI: Changed from point to linestring, looks better. Not noted by BODC.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1305">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1305</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1305">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1305</a>
<b>Hillary Canyon</b>	AWI: Changed from point to linestring, looks better. Not noted by BODC.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1324">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1324</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1324">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1324</a>
<b>Hooker Basin</b>	AWI: Point location changed, could be an improvement.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1353">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1353</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1353">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1353</a>
<b>Hudson Canyon</b>	AWI: Changed from point to linestring, looks better. proposed geometry provided by Ralf Krockner but not mentioned in his reports: (SCUFN21-09.2A and SCUFN21-09.2A: Comparison between the GEBCO Gazetteer and the SCAR Composite Gazetteer on Antarctica (CGA) – Proposals for changes to the GEBCO	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1370">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1370</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1370">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1370</a>

	Gazetteer) Not noted by BODC.		
<b>Imhof Knoll</b>	AWI: Point location changed, looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1398">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1398</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1398">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1398</a>
<b>Kainan Maru Seamounts</b>	AWI: Point location changed by, looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1506">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1506</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1506">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1506</a>
<b>Kerguelen Plateau</b>	AWI: Changed to a polygon. Looks good.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1565">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1565</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1565">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1565</a>
<b>Ligeti Ridge</b>	AWI: Geometry changed from point to a linestring. Looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1758">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1758</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1758">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1758</a>
<b>Loper Seachannel</b>	AWI: Geometry changed from point to a linestring. Looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1782">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1782</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1782">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1782</a>
<b>Lyll Basin</b>	AWI: slight change in coordinate, not noted by BODC. Could be an improvement.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1801">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1801</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1801">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1801</a>
<b>Maud Rise</b>	AWI: Changed from point to poly. No suggestions from BODC. Looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1908">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=1908</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1908">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1908</a>
<b>Pennell Bank</b>	AWI: Point location changed, looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2398">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2398</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2398">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2398</a>
<b>Polarstern Canyon</b>	AWI: Changed from a point to a linestring. No mention by BODC. Changes looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2466">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2466</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2466">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2466</a>
<b>Powell Basin</b>	AWI: Slight change in point location. Could be an improvement.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2488">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2488</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2488">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2488</a>
<b>Rennick Trough</b>	AWI: Changed from a point to a linestring, looks better. No suggestions from BODC.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2571">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2571</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2571">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2571</a>
<b>San Martin Canyon</b>	AWI: Changed geometry from point to a linestring, looks better. No suggestions from BODC.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2701">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2701</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2701">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2701</a>
<b>Sanae Canyon</b>	AWI: Changed geometry from a point to a linestring, looks better. No suggestions from BODC.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2711">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2711</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2711">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2711</a>
<b>South Orkney Trough</b>	AWI: Database reserve feature marks a different trough than what the spreadsheet coordinates outline. SCUFN15 (2002) has spreadsheet coordinates. Which is correct?	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2927">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2927</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2927">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2927</a>
<b>South Sandwich Trench</b>	AWI: Geometry changed from point to a linestring. Looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2929">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2929</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2929">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2929</a>

<b>South Shetland Trough</b>	AWI: Changed location of linestring and endpoints, no suggestions from BODC. ML reviewed. Endpoints are marked improvement. In approval for committee.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2931">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=2931</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2931">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=2931</a>
<b>Umitaka Seamount</b>	AWI: Change in point location looks better. No suggestion from BODC.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=3210">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=3210</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=3210">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=3210</a>
<b>Weddell Abyssal Plain</b>	AWI: Changed from linestring to polygon. Not noted by BODC. Looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=3318">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=3318</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=3318">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=3318</a>
<b>Wegener Canyon</b>	AWI: Changed from a point to a linestring. Not notes by BODC. Looks better.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=3319">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=3319</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=3319">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=3319</a>
<b>Yelcho Canyon</b>	AWI: Changed from point to linestring, could be an improvement. No suggestions from BODC. In approval for committee.	<a href="http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=3394">http://maps.ngdc.noaa.gov/viewers/ufn.html?featureId=3394</a>	<a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=3394">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=3394</a>

#### b. Features needing further geometry review

These features have geometries requiring serious review and revision by SCUFN (**high priority**). There are either no suggested changes for these features at this time, or the suggested changes also look incorrect. Some have been unpublished in the database.

<b>Name</b>	<b>LeVoi Notes</b>
<b>Agulhas Ridge</b>	Endpoints are ok, but looks bad. Can't find in SCUFN reports, but changes in reserve (which could also be improved) match proposed changes in BODC docs (ufn_additional points). Unpublished.
<b>Akademik Federov Canyon</b>	Approved endpoints could be improved upon, changes not in SCUFN or BODC reports (reserved copy removed). Published geometry does not match well with GEBCO bathy.
<b>Andaman-Nicobar Ridge</b>	Feature appears to be on land. Unpublished. No details in SCUFN or BODC.
<b>Antipodes Fracture Zone</b>	SCUFN endpoints could be improved upon. New geometry (in reserve; could also be improved) is not in SCUFN or BODC reports.
<b>Ascension Fracture Zone</b>	Points changed (changes in reserve) to match BODC suggestions and SCUFN endpoints, but endpoints could be improved upon.
<b>Astrid Ridge</b>	Changed from point to a linestring. Changes in reserve could possibly be improved. Does not appear to be in BODC reports.
<b>Berkner Bank</b>	Feature changed from line to a point by unknown, still could be inaccurate (changes in reserve). Can't find in SCUFN or BODC reports.
<b>Bode Verde Fracture Zone</b>	Geometry changes approved, comments from Hans-Werner Schenke suggest additional possible improvements.
<b>Campbell Escarpment</b>	Geometry updated in database review, but endpoints could be better.

<b>Charlie-Gibbs Fracture Zone</b>	The new geometry is slightly off, should be more north and extended east (comments from Hans-Werner Schenke).
<b>Chile Trench</b>	Should the endpoints be extended farther north?
<b>Congo Fan</b>	Unpublished. Geometry could definitely be improved. No proposed coordinates look accurate.
<b>Dawson-Lambton Trough</b>	On land, unpublished.
<b>Discovery Guyot</b>	Location looks wrong. Unpublished. Outside of Discovery Seamounts region.
<b>Dolmah Seamount</b>	Location looks wrong. Unpublished.
<b>Endeavour Spur</b>	Does not look like a spur really at all.
<b>Endurance Canyon</b>	Changed from a point to linestring by unknown. Changes in reserve could be improved upon.
<b>Eucla Canyon</b>	Unpublished because approved points look strange.
<b>Falkland Escarpment</b>	Endpoints could be extended.
<b>Falmouth Valley</b>	Endpoints could be better.
<b>Fernão Oulmo Ridge</b>	Unpublished because geometry looks bad.
<b>Freedden Bank</b>	On land, unpublished.
<b>Gageo Reef</b>	Secondary geometry polygon looks like points may need to be reordered/reconsidered.
<b>Galapagos Fracture Zone</b>	Looks like endpoints may extend out too far.
<b>Gelendzhik Guyot</b>	There does not appear to be a guyot here - unpublished.
<b>George Walker Seamount</b>	There does not appear to be a seamount here.
<b>Hayes Bank</b>	Unpublished because geometry looks bad (partly on land and more a trough than a bank).
<b>Hooikaika Seamount</b>	Seamount location looks off.
<b>Hutchinson Seamount</b>	Seamount location looks off.
<b>Ice Sphinx Hole</b>	Does not look like a hole.
<b>Jan Mayen Ridge</b>	Geometry revisions are already approved in the database and are an improvement, but endpoints could be better.
<b>Jelbart Basin</b>	Unpublished because feature is on land.

<b>Johs Van Hurtere Hills</b>	Unpublished because these are topographic features on both the ETOPO1 and GEBCO 08 backgrounds.
<b>Kiselev Seamount</b>	This geometry seems too expansive to be defined as a single seamount. Found in reserve and approved according to SCUFN23 (2010).
<b>Kosminskaya Fracture Zone</b>	Geometry could be expanded on.
<b>Kvitkuven Bank</b>	Feature is on land, unpublished.
<b>Lena Canyon</b>	Does not look much like a canyon.
<b>Loudoun Seamount</b>	No seamount here.
<b>Malahoff Seamount</b>	No seamount here. Checked with GEBCO 08.
<b>Man Trough</b>	One endpoint is on land.
<b>Maryland Seamount</b>	No seamount here. Checked with GEBCO 08.
<b>McDonald Bank</b>	Feature is on land, unpublished.
<b>Nicobar Fan</b>	Geometry should be revised.
<b>Norsel Bank</b>	Feature is on land, unpublished.
<b>Piip Seamount</b>	No seamount here (checked with GEBCO).
<b>Pitman Fracture Zone</b>	Does not match morphology.
<b>Prince Albert I Bank</b>	On land, unpublished.
<b>Quar Basin</b>	On land, unpublished.
<b>Queirós Fracture Zone</b>	Does not look like a fracture zone.
<b>Sever Spur</b>	Geometry looks incorrect.
<b>St. Croix Ridge</b>	The new, revised geometry crosses the island of Saint Croix (on land). Clearly, this island is on the ridge. Unpublished.
<b>Suhm Abyssal Plain</b>	Looks a lot more like a ridge than an abyssal plain at this location.
<b>Tehuelche Fracture Zone</b>	Endpoints could be improved, does not look much like a F.Z.
<b>Tuamotu Fracture Zone</b>	Not much of a fracture zone.
<b>Uruguay Canyon</b>	Does not look like a canyon at all.

<b>Voyager Seamounts</b>	Geometry could be more accurate... perhaps points are in the incorrect order?
<b>Weiken Basin</b>	Feature is on land, unpublished.
<b>Wilder Seamount</b>	No seamount at this location.

The following features simply need to have their coordinates slightly adjusted; for example, a seamount whose primary position lies slightly next to it instead of on the summit. These features are considered **lower priority**.

<b>Feature Name</b>	<b>Notes</b>
<b>Afanasij Nikitin Seamount</b>	Seamount location is a bit off.
<b>Africana Seamount</b>	Seamount location is a bit off.
<b>Agafonov Seamount</b>	Locations seems like it may be slightly off. In SCUFN 20 report (2007) and approved in SCUFN23 (2010).
<b>Aguila Fracture Zone</b>	Looks like trace of nothing.
<b>Almirante Leite Bank</b>	Location looks a bit off.
<b>Anton Leonov Seamount</b>	A rather unremarkable seamount, if this location is accurate.
<b>Aquarius Seachannel</b>	Doesn't look like it's marking anything.
<b>Arafura Seachannel</b>	Does not look very prominent to me...
<b>Aru Seachannel</b>	An unremarkable seachannel.
<b>Bean Seamount</b>	Kind of ridge-y for a seamount.
<b>Belgica Bank</b>	Is there a bank here?
<b>Bergen Bank</b>	No bank here?
<b>Berlanga Ridge</b>	Does not look much like a ridge.
<b>Bernard Seamount</b>	Location a bit off.
<b>Beryx Guyot</b>	Location a bit off.
<b>Betty Guyot</b>	Location off.
<b>Bissau Knoll</b>	No knoll?
<b>Bjornoya Bank</b>	No bank here?
<b>Brouwer Seamount</b>	Seamount location a bit off.
<b>Brown Seamount</b>	Seamount location a bit off.
<b>Byrd Canyon</b>	Not much of a canyon.
<b>Cape Range Escarpment</b>	Changes modified to match SCUFN endpoints and to be closer to BODC suggestions, though the endpoints could be more accurate.
<b>Carnarvon Terrace</b>	Endpoints look a bit off, also should be a point/polygon.
<b>Carnegie Ridge</b>	Does not look like a ridge.
<b>Ceduna Canyon</b>	Not much of a canyon.
<b>Central Bank</b>	Bank location off.
<b>Champlain Seamount</b>	Seamount a bit off.
<b>Charcot Canyon</b>	Not much of a canyon
<b>Charlotte Bank</b>	Location a bit off.



<b>Chelan Seamount</b>	Location a bit off.
<b>Chirikov Knoll</b>	Location seems a bit off.
<b>Daiyon-Kashima Seamount</b>	Location off. Mentioned in SCUFN 19/20 as having a bad coordinate that was fixed.
<b>Davey Bank</b>	Location may be slightly off.
<b>Davie Seamount</b>	Location a bit off.
<b>De Veuster Seamount</b>	Location a bit off.
<b>Dehlinger Seamount</b>	Location a bit off.
<b>Dogger Bank</b>	No bank here?
<b>Dohrn Bank</b>	No bank here?
<b>Earhart Seamount</b>	Location a bit off.
<b>Emden Deep</b>	SCUFN21 (2008): Position to be revised (H.W. Schenke).
<b>Endeavour Seamount</b>	Location way off.
<b>Euphemia Seamount</b>	Location off.
<b>Fugløy Bank</b>	Where is the bank?
<b>Graciosa Terrace</b>	Should be a point/polygon, and points are oddly arranged.
<b>Grand Banks of Newfoundland Banks</b>	Polygon, and don't look much like banks at all on the bathymetry.
<b>Hecht Seamount</b>	Location off.
<b>Henderson Seamount</b>	Location off.
<b>Herald Valley</b>	Doesn't look like there's a valley here.
<b>Huddell Seamount</b>	Location off.
<b>Imperial Eagle Seamount</b>	Location off.
<b>Johannsen Seamount</b>	Location off.
<b>Jones Seamount</b>	This feature is a possible duplicate; the one with coordinates 43°33' N 132°55' W looks off.
<b>Joo Seamount</b>	Location slightly off.
<b>Kant Seamount</b>	An unremarkable seamount
<b>Kern Seamount</b>	Location off.
<b>Koebu Guyot</b>	Location a bit off.
<b>Litke Passage</b>	Geometry could possibly be improved
<b>Macnab Seamount</b>	Location off.
<b>Maher Seamount</b>	Location off.
<b>Mapmakers Seamount</b>	Location off.
<b>Marie Byrd Seamount</b>	Location off
<b>Marshall Seamount</b>	Location off.
<b>Meiyo Seamount</b>	Location off.
<b>Meiyo-Daini Seamount</b>	Location off.
<b>Morphey Guyot</b>	Location off.
<b>Motrokhov Seamount</b>	Location off.
<b>Moua Pihaa Seamount</b>	Location off.
<b>Muromtsev Seamount</b>	Location off.
<b>Niobe Seamount</b>	Location slightly off.
<b>Nishinoomote Seamount</b>	Location slightly off.

<b>Ob' Seamount</b>	Location slightly off.
<b>Okina Seamount</b>	New feature, details in SCUFN21 (2008). Location a bit off.
<b>Panzarini Seamount</b>	Location slightly off.
<b>Persey Bank</b>	Point/poly
<b>Researcher Seamount</b>	Location slightly off.
<b>Samarin Seamount</b>	Location off.
<b>Shoyo Seamount</b>	Location looks off.
<b>Sovereign Seamount</b>	Location off.
<b>Stearns Seamount</b>	Location off.
<b>Takuyo-Daigo Seamount</b>	Point. New feature, details in SCUFN22 (2009).
<b>Titov Seamount</b>	Location off.
<b>Trinidad Seamount</b>	Location off.
<b>Vance Seamount</b>	Location off.
<b>Vines Bank</b>	Location looks off.
<b>Yukhov Seamount</b>	Location seems like it may be off.
<b>Yuryaku Guyot</b>	Location off.

### c. Features needing geometry changes to match primary type

Almost one third of features in the Gazetteer (1045 total) do not have the appropriate geometry to best define their shape. For example, a ridges defined by a single point or an abyssal plain defined by a line. In Part II of this project, these features should be updated with coordinates to match their primary shape.

Abraham Canyon	Aktivneset Continental	Alice Gap
Abrolhos Ridge	Slope	Almeida Carvalho
Abubacer Ridge	Alagoas Seamounts	Seamounts
Aceste Seamount	Alaska Plain	Almería Canyon
Adak Canyon	Albanov Bank	Almirante Brown Canyon
Adare Basin	Albatross Plateau	Alpha Ridge
Admiralteystvo Rise	Alborán Ridge	Alsek Valley
Africana Rise	Alborán Basin	Althoff Seamount
Agadir Canyon	Alborán Seachannel	Alvarado Ridge
Agattu Canyon	Alcock Rise	Alvares Cabral Seachannel
Agulhas Basin	Aleutian Ridge	Amami Rise
Agulhas Plateau	Aleutian Rise	Amami Sankaku Basin
Ajaccio Canyon	Aleutian Basin	Amanogawa Seamounts
Akademiï Nauk Rise	Alexandria Canyon	Amazon Canyons
Akhziv Canyon	Alger Canyons	Amazon Cone
Aki-No-Nanakusa	Algerian Basin	Ameghino Canyon
Seamounts	Algerian-Tyrrhenian Trough	Amirante Banks
	Alicante Canyon	Amirante Basin

Amlia Basin	Aubert De La Rüe	Biscay Abyssal Plain
Amlia Canyon	Seamounts	Bizerte Valley
Amukta Canyon	Aurora Canyon	Blackfin Ridge
Amundsen Abyssal Plain	Australian-Antarctic	Blake Abyssal Plain
Amundsen Trough	Discordance	Blake Basin
Amundsen Ridges	Aves Ridge	Blake Escarpment
Anaximander Seamounts	Azores-Biscay Rise	Blake Plateau
Andaman Basin	Bahama Basin	Blanes Canyon
Andaman-Nicobar Ridge	Bahia Seamounts	Bodega Canyon
Angola Abyssal Plain	Bahía Blanca Canyon	Bonaire Basin
Angola Basin	Baja California Seamount	Bone Basin
Animal Basin	Province	Boomerang Seamount
Animal Banks	Baker Seachannel	Borchgrevink Trench
Anita Conti Seamounts	Bali Basin	Boreas Abyssal Plain
Annaba Canyons	Balleny Seamounts	Bounty Plateau
Anschütz-Kämpfe Trough	Banderas Canyon	Bourcart Canyon
Antalya Basin	Bando Basin	Bowers Canyon
Antalya Canyon	Barbados Basin	Bowers Basin
Anton Bruun Rise	Barbados Ridge	Bowers Canyon
Apulian Plateau	Barcelona Canyon	Bowie Canyon
Aquitaine Shelf	Barents Abyssal Plain	Brasilian Abyssal Plain
Arabian Basin	Baronie Seamounts	Brazil Basin
Arafura Shelf	Barracuda Ridge	Brenner Seamounts
Arbatax Canyon	Barren Ridge	Bristol Canyon
Arena Canyon	Bartlett Seamounts	Britannia Guyots
Argentina Rise	Bartolomeu Dias Terrace	Brooks Banks
Argentine Abyssal Plain	Batavia Rise	Brunt Basin
Argentine Basin	Bathymetrists Seamounts	Buffon Canyon
Argo Abyssal Plain	Bauer Basin	Bunce Seamounts
Argolikos Basin	Bauer Escarpment	Cabo Creus Canyon
Armoricaian Fan	Beata Ridge	Calabar Canyon
Arosa Canyon	Beirut Escarpment	Calabrian Rise
Aru Basin	Bejaia Canyons	Calvi Canyon
Aruba Gap	Belém Ridge	Calypso Hills
Ashmore Reef	Bellona Valley	Campbell Plateau
Asquith Rise	Bengal Fan	Campeche Salt Dome
Astoria Canyon	Benidorm Canyon	Province
Astoria Fan	Bering Canyon	Canada Abyssal Plain
Atka Basin	Berlanga Ridge	Canada Basin
Atlantis II Seamounts	Bermuda Rise	Canary Basin
Atwater Valley	Bijagós Canyon	Çandarlı Basin

Çandarlı Shelf	Chukchi Abyssal Plain	Del Toro Canyon
Cannes Canyon	Chukchi Plateau	Delan Basin
Cap Breton Canyon	Chuo Seamount	Delfin Basin
Cap Ferret Valley	Cipangu Basin	Delgada Canyon
Cape Abyssal Plain	Civitavecchia Valley	Delgada Fan
Cape Basin	Clark Basin	Dellwood Knolls
Cape Verde Abyssal Plain	Clipperton Ridge	Dellwood Seamounts
Cape Verde Plateau	Clipperton Seamounts	Demerara Abyssal Plain
Caprera Canyon	Cocos Basin	Demerara Plateau
Carbonara Ridge	Cocos Keeling Rise	Deryugin Basin
Carbonara Valley	Coiba Ridge	Des Moines Canyon
Carlisle Canyon	Colbeck Basin	Desbarres Canyon
Carmen Basin	Colombia Basin	Descobridores Hills
Carnarvon Terrace	Colón Ridge	Detroit Rise
Carnegie Ridge	Colville Ridge	Deutschland Canyon
Cartagena Canyon	Comoro Basin	Devonport Seamount Chain
Cascadia Basin	Conducia Canyon	Diamantina (East) Zone
Cascadia Seachannel	Congo Fan	Diogo de Teive Hills
Cassis Canyon	Conrad Rise	Discovery Seamounts
Castelsardo Canyon	Cook Canyon	Donna Ridge
Catalina Basin	Cooper Ridge	Drygalski Seamounts
Caucasus Escarpment	Coral Basin	Drygalski Basin
Ceará Plateau	Corner Seamounts	East Alborán Basin
Ceará Seamounts	Corsica Trough	East Caroline Basin
Ceará Abyssal Plain	Corso-Ligurian Basin	East Cortes Basin
Cedros Escarpment	Crary Fan	East Mariana Basin
Cefalu Basin	Cretan Trough	East Mariana Ridge
Celebes Basin	Crimea Escarpment	East Pacific Rise
Central Pacific Basin	Crozet Basin	East Tasman Saddle
Challenger Plateau	Cuvier Abyssal Plain	East Tasman Plateau
Charcot Fan	Cuvier Canyon	East Thulean Rise
Charcot Seamounts	Cuvier Plateau	Eauripik Rise
Chatham Rise	Cyprus Basin	Ebro Escarpment
Chaucer Seamounts	Dakar Canyon	Eel Canyon
Chichagov Seamount	Daly Canyon	Eendracht Seamounts
Chile Basin	Davis Seamounts	Egadi Valley
Chile Rise	Dawson-Lambton Trough	Egas Moniz Hills
Chinook Trough	De Covilhao Trough	Eickelberg Ridge
Choffat Valley	De Gerlache Seamounts	Eirik Ridge
Choju Seamounts	De Santarém-Escobar Bank	Ekström Basin
Chorokh Canyon	Del Cano Rise	El Kebir Canyon

Emerald Basin	Galapagos Rise	Guaymas Basin
Emery Basin	Galeria Canyon	Guelta Canyon
Enggano Basin	Galite Channel	Guevara Seamounts
Eötvös Escarpment	Galite Plateau	Guiana Plateau
Equatorial Seachannel	Gallego Rise	Guide Ridge
Ermak Plateau	Gallieni Rise	Guinea Abyssal Plain
Erromango Basin	Gambia Basin	Gulden Draak Rise
Essaouira Promontory	Gangwon Plateau	Gulf of Alaska Seamount
Etienne Canyon	Gardar Ridge	Province
Euxine Abyssal Plain	Gardiner Seamounts	Gustaf Adolf Trough
Exmouth Plateau	Gascoyne Plain	Hahajima Seamount
Faial Passage	Gata Canyon	Halmahera Basin
Falkland Plateau	Geba Canyon	Haru-No-Nanakusa
Farallón Basin	Geelvinck Basin	Seamounts
Faroe Bank Seachannel	Gela Basin	Hatteras Abyssal Plain
Faroe-Shetland Channel	Gemini Seamounts	Hatteras Canyon
Fawn Trough	Gengo Seamounts	Hatton-Rockall Basin
Felibres Hills	Genova Canyons	Hawaiian Trough
Feni Ridge	Georgia Basin	Hawley Ridge
Fernando de Noronha	Girard Ridge	Hayes Bank
Abyssal Plain	Glacier Rise	Hecataeus Ridge
Fernando de Noronha	Glomar Challenger Basin	Heck Canyon
Ridge	Gnitsevich Seamounts	Herald Valley
Fernão Barreto Ridge	Gökova Trough	Herodotus Basin
Ferradura Abyssal Plain	Golden Bo'sunbird	Herodotus Rise
Fiji Plateau	Seamounts	Heron Valley
Finike Trough	Gonone Canyon	Hespérides Trough
Finisterre Valley	Gorda Ridges	Hess Rise
Florida Abyssal Plain	Gorda Valley	Hikurangi Terrace
Flying Fish Seamounts	Gorontalo Basin	Hikurangi Trough
Fonera Canyon	Gorringe Ridge	Hirondelle Basin
Formentera Valley	Gorynych Hills	Hispaniola Trough
Foundation Seamounts	Gotland Basin	Hjort Trench
Foxe Basin	Graciosa Terrace	Hodgkins Seamounts
Franklin Seamount	Grand Banks of	Hofmann Trough
Franklin Shoal	Newfoundland Banks	Hook Ridge
Fraser Seamount	Grand Rhône Canyon	Hooker Basin
Frederick Reefs	Greenland Abyssal Plain	Horizon Channel
French Frigate Shoals	Greenland-Iceland Rise	Horseshoe Seamounts
Fundian Valley	Grimaldi Seamounts	Houtz Bank
Gago Coutinho Rise	Guatemala Basin	Hunter Channel

Hydrate Knolls	Kaiwhata Bank	Lapérouse Fracture Zone
Iberian Abyssal Plain	Kalaniopuu Basin	Lapulapu Ridge
Ibiza Seachannel	Kamehameha Basin	Larsen Basin
Iceland Basin	Kanaga Basin	Lastres Canyon
Iceland-Faeroe Rise	Kane Basin	Latakia Basin
Icelandic Plateau	Kane Passage	Lau Basin
Ignacio Canyon	Karin Seamount	Lau Ridge
Il Catalano Canyon	Karma Seamounts	Laurentian Channel
Île Rousse Canyon	Katsuura Basin	Leclaire Rise
Independence Knolls	Kefallinia Valley	Leeuwin Canyon
Indispensable Reefs	Kene Plateau	Les Sorelles Reefs
Indus Fan	Kenn Reefs	L'Espérance Seamounts
Inguri Canyon	Kero Niuni Canyon	L'Espoir Ridge
Institut Okeanologii Rise	Khadra Canyon	Lesvos Basin
Ionian Gap	Kikai Basin	L'Hirondelle Sul Basin
Ionian Basin	Kikladhes Plateau	Lichte Trough
Irminger Basin	Kingman Basin	Linosa Trough
Isengard Ridge	Kings Trough	Lisboa Canyon
Islas Orcadas Rise	Kita-Amami Seamounts	Little America Basin
Istanbul Bogazi Canyon	Kita-Daito Basin	Llanes Canyon
Izu-Ogasawara Rise	Kizilirmak Canyon	Lombok Basin
Izu-Ogasawara Trench	Kodiak Seamounts	Lord Howe Rise
Jama Valley	Kodori Canyon	Lowreenne Borderland
Japan Basin	Komandor Basin	Luzon Plateau
Japan Rise	Korean Plateau	Lyall Basin
Jarrafa Trough	Krusenstern Trough	MacKenzie Trough
Jelbart Basin	Kucherov Terrace	Madagascar Basin
Jingu Basin	Kuenen Rise	Madagascar Plateau
João Leonardes Hills	Kumani Canyon	Madeira Abyssal Plain
João Pessoa Plateau	Kumano Basin	Madeira Rise
João Valadão Ridge	Kurchatov Trough	Madingley Rise
Joban Seamount Chain	Kuril Basin	Magdalena Escarpment
Johs Van Hurtere Hills	La Coruña Seamounts	Magellan Rise
JOIDES Basin	La Jolla Canyon	Magellan Seamounts
Joseph Gilbert Seamount	La Renaiçença Hills	Magonis Valley
Juan de Fuca Canyon	La Romanche Passage	Mahi Mahi Fracture Zone
Juan de Fuca Ridge	Labrador Basin	Maimón Basin
Junieh Canyon	Lacaze-Duthiers Canyon	Maimonide Ridge
Jussieu Canyon	Lamarck Canyon	Makarov Basin
Kainan Maru Seamounts	Lameyre Ridge	Makassar Basin
Kaitoku Seamounts	Landes Plateau	Maldive Ridge

Mallorca Channel	Melita Valley	Monterey Fan
Malpelo Ridge	Meloria Shoals	Montpellier Canyon
Malta Channel	Melville Trough	Moonless Seamounts
Malta Plateau	Memba Canyon	Mor-Bihan Fan
Malta Trough	Menard Ridge	Mornington Abyssal Plain
Mandela Fracture Zone	Mendelevv Abyssal Plain	Moshesh Fracture Zone
Mandingo Canyon	Mendelevv Rise	Mozambique Basin
Manganari Canyon	Mendocino Escarpment	Mozambique Plateau
Mangetsu Basin	Mendocino Ridge	Muertos Trough
Manihiki Plateau	Mendoza Rise	Mukluk Channel
Manning Seamounts	Menez Gwen Hills	Mungo Park Seamounts
Manowari Trough	Mentawai Basin	Murman Rise
Manus Basin	Mentawai Ridge	Muroto Valley
Mar Del Plata Canyon	Mercator Basin	Murray Canyon
Maranhao Seamounts	Meriadzek Terrace	Murray Canyon
Marcus-Wake Seamount Group	Meric-Evros Fan	Musicians Seamounts
Margarethe Seamounts	Messina Canyon	Mussau Trough
Marie Byrd Canyon	Meteor Rise	Nacala Canyon
Marmara Trough	Meteor Seamounts	Nadezhda Basin
Marosszky Passage	Metundo Canyon	Namibia Abyssal Plain
Marseille Canyon	Mexico Basin	Nansei-Daito Basin
Marshall Seamounts	Mid-Adriatic Basin	Nansei-Shoto Ridge
Martin Behaim Seamounts	Middle Mariana Ridge	Nansei-Shoto Trench
Marty Canyon	Mid-Indian Ocean Basin	Nansen Basin
Mary Celeste Seamounts	Mid-Pacific Seamounts	Nanto-Daito Basin
Mascarene Basin	Milne Seamounts	Napoli Canyon
Mascarene Plain	Minerva Reefs	Nares Abyssal Plain
Mascarene Plateau	Mirtoon Basin	Naturaliste Plateau
Mataro Canyon	Mississippi Fan	Navarin Canyon
Mathematicians Seamounts	Misurata Valley	Nazimov Guyots
Maury Channel	Mitin Ridge	Necker Ridge
Mawson Canyon	Mocalenga Canyon	New Britain Trench
Maxwell Fracture Zone	Mocambo Canyon	New England Seamounts
Mazatlán Basin	Mogi Fan	New Guinea Basin
Medina Escarpment	Möller Trough	Newfoundland Basin
Medina Seachannel	Mono Rise	Newfoundland Ridge
Medina (Malta) Ridge	Monsoon Rise	Newfoundland Seamounts
Medjumbe Canyon	Montebello Saddle	Nias Basin
Meihano Bank	Montecristo Ridge	Nicaragua Rise
Melanesian Basin	Montecristo Trough	Nicobar Fan
	Monterey Canyon	Nicobar-Simeulue Basin

Niger Fan	Orange Fan	Pitiusas Canyon
Nikolay Dyatel Terrace	Oristano Canyon	Pliny Trench
Nile Fan	Orosei Canyon	Pochnoi Canyon
Nitinat Fan	Orozco Fracture Zone	Pocklington Trough
Niuni Canyon	Ortelius Fracture Zone	Polarsirkel Valley
Nordenskjöld Basin	Osborn Plateau	Polarstern Plateau
Norfolk Ridge	Otranto Valley	Pole Abyssal Plain
Norfolk Trough	Oualo Canyon	Popcorn Ridge
North American Basin	Pacific-Antarctic Rise	Porcupine Abyssal Plain
North Banda Basin	Palamos Canyon	Portimão Canyon
North Fiji Basin	Palawan Trough	Portlock Reefs
North Ikaria Basin	Palmer Basin	Porto Canyon
North Magellan Rise	Palomares Canyon	Posada Canyon
North New Hebrides Trench	Panama Basin	Posadovsky Canyon
North Norfolk Basin	Panama Fracture Zone	Powell Basin
North Tokelau Basin	Pantalon Canyon	Princess Elizabeth Trough
North Trinco Canyon	Pantelleria Trough	Princesse Alice Bank
Northampton Seamounts	Pantelleria Valley	Príncipes de Avis Hills
Northeast Georgia Rise	Papua Abyssal Plain	Protector Basin
Northwest Georgia Rise	Papua Plateau	Ptolemy Basin
Northwest Pacific Basin	Para Abyssal Plain	Ptolemy Seamounts
Northwind Abyssal Plain	Parnaíba Ridge	Ptolemy Trench
Norwegian Basin	Patton Escarpment	Quar Basin
Noyes Canyon	Patton Seamounts	Queensland Plateau
Noyo Canyon	Paul du Chaillu Seamounts	Quirra Seamounts
Nurra Escarpment	Pedro Nunes Seamounts	Raff Seamounts
Oates Canyon	Peloponnisos-Cretan Ridge	Raitt Rise
Ob' Hole	Penrhyn Basin	Ramon Llull Valley
Obruchev Rise	Pernambuco Abyssal Plain	Randall Seamounts
Oceanographer Canyon	Pernambuco Seachannel	Rano Rahi Seamounts
Ogasawara Plateau	Pernambuco Seamounts	Rapano Ridge
Ogasawara Rise	Perth Basin	Rassokho Seamounts
Oki Ridge	Perth Canyon	Rat Island Canyon
Oki-Daito Rise	Peru Basin	Raukumara Plain
Okinawa Trough	Pescadero Trough	Recife Plateau
Oman Abyssal Plain	Petalcalco Canyon	Reinga Ridge
Ona Basin	Peters Ridge	Revelle Rise
Onnuri Basin	Petit Rhône Canyon	Revere Channel
Ontong Java Rise	Philippi Canyon	Rhodes Basin
Orange Canyon	Philippine Basin	Rhône Fan
	Pierre Brazza Seamounts	Richard Hills



Riiser-Larsen Basin	San José Canyon	Shatsky Rise
Rinner Trough	San Lorenzo Canyon	Shikoku Basin
Río De La Plata Canyon	San Martin Seamounts	SHOM Seamounts
Rio Grande Abyssal Plain	San Nicolas Basin	Shona Ridge
Rio Grande Fan	San Pablo Canyon	Shortland Canyon
Rio Grande Gap	San Pedro Mártir Basin	Siberia Abyssal Plain
Rio Grande Plateau	San Quintín Basin	Sicily-Malta Escarpment
Ritscher Canyon	San Vito Canyon	Sierra Leone Basin
Rivera Fracture Zone	Sangage Canyon	Sierra Leone Rise
Robbie Ridge	Santa Catarina Plateau	Sigsbee Escarpment
Rockall Bank	Santa Cruz Basin	Simpson Seamounts
Rockall Plateau	Santa Lucia Escarpment	Sirte Abyssal Plain
Roggeveen Basin	Santa Maria Hills	Sirte Rise
Roggeveen Rise	Santa Monica Canyon	Sitito-Ozima Ridge
Ronne Basin	Santander Canyon	Skerki Channel
Roo Rise	São Miguel Hole	Snowden Seamounts
Ross Canyon	São Paulo Channel	Sofu Basin
Rovuma Canyon	São Paulo Plateau	Soledad Basin
Rowley Reefs	Sardinia-Corsica Trough	Soledad Canyon
Roya Canyon	Sardino-Balearic Plain	Somali Abyssal Plain
Royal Trough	Sarmiento Ridge	Soquel Canyon
Ryabov Seamounts	Satsuma Seamount	Sørbakken Slope
Saenal Basin	Savu Basin	South Adriatic Basin
Saeteok Bank	Saya de Malha Bank	South Alborán Basin
Sagone Canyon	Schoppe Ridge	South Australian Basin
Sagres Terrace	Schwabenland Canyon	South Banda Basin
Saharan Fan	Scott Canyon	South China Basin
Saharan Seamounts	Scott Seachannel	South Fiji Basin
Sahul Banks	Scott Seamounts	South Fiji Ridge
Sahul Shelf	Seadragon Ridge	South Makassar Basin
Saint Georges Canyon	Seamap Channel	South Norfolk Basin
Saint-Tropez Canyon	Sedna Ridges	South Skiros Basin
Sakarya Canyon	Seine Abyssal Plain	South Solomon Trench
Salerno Valley	Selkirk Rise	South Tasman Rise
Salsipuedes Basin	Seram Trough	South Tasman Saddle
Samoa Basin	Serranilla Gap	South Trinco Canyon
San Antioco Canyon	Sète Canyon	Southwest Pacific Basin
San Antonio Canyon	Sewell Rise	Spar Fracture Zone
San Clemente Basin	Shackleton Canyon	Spartivento Canyons
San Diego Trough	Shaka Fracture Zone	St. Croix Basin
San Feliu Valley	Shaka Ridge	Stalemate Canyon

Steffansson Basin	Theta Passage	Valencia Basin
Stoechades Canyon	Thomas Guyots	Valinco Canyon
Storegga Slope	Tiburón Basin	Valle Inclan Saddle
Storfjord Seachannel	Tiki Basin	Vamizi Canyon
Storneset Slope	Tinro Basin	Vancouver Knolls
Strabo Trench	Titanic Canyon	Var Canyon
Suakin Trough	Tobago Basin	Vasco da Gama Seamounts
Suhm Abyssal Plain	Tongue of the Ocean	Vasco Gil Sodre Basin
Suhm Hills	Trough	Vema Gap
Suitcase Seamounts	Tore Seamounts	Venezuela Basin
Sulcis Escarpment	Torge Plateau	Vening Meinesz Rise
Sulu Basin	Torrelavega Canyon	Vening Meinesz Seamounts
Sulzberger Basin	Tortosa Canyon	Verde Canyon
Suna Canyon	Toyama Fan	Vestbakken Slope
Sunda Trough	Tramontana Escarpment	Victor Hensen Knolls
Supan Seamount	Transkei Basin	Vitória-Trindade Seamounts
Sur Canyon	Tregrosse Reefs	Vizcaino Canyon
Surveyor Channel	Tres Mariás Basin	Vöring Plateau
Surveyor Gap	Trincomalee Canyon	Voyager Seamounts
Sverdrup Canyon	Trindade Seachannel	Wachusett Ridge
Svyatogor Rise	Trinidad Canyon	Wallaby Saddle
Taggia Canyon	Tripolitanian Valley	Walls Plateau
Tagus Basin	Tryal Ridge	Ward Basin
Tahoma Canyon	Tsushima Basin	Weber Basin
Taiwan Banks	Tuamotu Fracture Zone	Weiken Basin
Tamayo Fracture Zone	Tulum Terrace	West Aves Apron
Tampen Borderland	Tumaco Hills	West Caroline Basin
Tanabata Seamounts	Tunge Canyon	West Cayman Rise
Tanadak Basin	Tunisian Plateau	West European Basin
Taney Seamounts	Turneffe Escarpment	West Mariana Basin
Tanner Basin	Tyrrhenian Basin	West Scotia Ridge
Taranto Valley	Ulleung Plateau	West Thulean Rise
Tarragona Canyon	Ulm Plateau	Whales Bay Deeps
Tasman Abyssal Plain	Umnak Basin	Wharton Basin
Tasman Basin	Umnak Plateau	Whiting Terrace
Tatar Trough	Umvoto Rise	Whitney Ridge
Tejo Basin	Unalaska Basin	Whittard Seachannel
Tenmei Hills	Ustica Ridge	Wild Canyon
Terra Nova Canyon	Ustica Trough	Wilkes Fracture Zone
Teulada Canyon	Vada Shoals	Wilkins Canyon
The Gully Canyon	Valdivia Abyssal Plain	Willaumez-Manus Rise

Wilson Canyon  
 Woodlark Basin  
 Wrangel Abyssal Plain  
 Wrecks Reefs  
 Wyville-Thomson Ridge  
 Yaghan Basin  
 Yakutat Valley  
 Yamato Bank

Yamato Basin  
 Yamato Rise  
 Yaquina Trough  
 Yermak Plateau  
 Yesilirmak Fan  
 Yucatán Basin  
 Yucatán Borderland  
 Yucatán Shelf

Yunaska Canyon  
 Yupanqui Basin  
 Yusuf Ridge  
 Zahrani Canyon  
 Zambezi Canyon  
 Zenith Plateau  
 Zenkevich Rise  
 Zhilinsky Rise

**d. Remaining questions and actions for the sub-committee**

Following is a list of features for which there are outstanding questions or are in need of small updates. These issues will need to be addressed in Part II of this project.

Name	LeVoir Notes/Questions	Huet/Schenke Notes	Actions
<b>Albatross Bank</b>	Two of this feature in both spreadsheet and gazetteer - which to use? Reported in the BODC report as a possible duplicate feature (report_for_scufn_pw.doc).		Review duplicate features.
<b>Bowers Canyon</b>	Two of this feature in both spreadsheet and gazetteer - which to use? Reported in the BODC report as a possible duplicate feature (report_for_scufn_pw.doc).		Review duplicate features.
<b>Bungo Seamount</b>	Coordinates in 2010 spreadsheet are wrong (same as the feature listed above it). BODC lists this feature as having missing hemisphere information.		Feature found and left with coordinates from 2007 spreadsheet. Michel: Update 2011 spreadsheet.
<b>Carnegie Ridge</b>	Duplicates in database only. Duplicates in name, but they are located in completely different locations and have completely different geometries (feature 511 looks like a seamount and 509 actually looks like a ridge).		Review duplicate features and their geometries.

<b>Durham Seamount</b>	Notation for accreditation in spreadsheets is ACUF (292).		Added simply as ACUF. Someone from ACUF should handle this issue.
<b>Ewing Seamount</b>	May be a duplicate, but different locations completely. Not mentioned by BODC or SCUFN.		Review duplicate features.
<b>Godaigo Guyot</b>	Notation for accreditation in spreadsheets is ACUF (208) Added as ACUF.		Added simply as ACUF. Someone from ACUF should handle this issue.
<b>Guadalupe Arrugado</b>	Where did this feature come from, and should it be approved or officially added to the reserve section? It is only in the reserve section of database, but is not in any spreadsheet (2007, 2011, reserve section) or any report.	This name was introduced in the 1st edition of the GEBCO Gazetteer in 1988, taken from INT chart 802. It appears in a 2003 Reserve Section, with the remark "Arrugado is not a recognized generic term. Name to be confirmed." Then, nothing. Also, I have found nothing in the SCUFN reports about this name. To be added to the Reserve Section, for consideration at SCUFN-24.	Added to database reserve section. Feature should be reviewed at SCUFN24.
<b>Guafu Fracture Zone</b>	What are the correct coordinates for this feature? SCUFN23 calls for it to be moved from the reserve section to the gazetteer, but one coordinate listed is invalid (45°74' S 93°71' W). Couldn't find the correct coordinates in the SCUFN reports.	The coordinate 39°64'S given for Mocha F.Z. is also invalid. All these coordinates were taken from SHOA Letter 13000/7/175 of 30 July 2011 (see SCUFN23-07.1B). I have sent an e-mail to Juan Cuneo at SHOA, who signed that letter, asking for clarification.	Feature requires further clarification and review.
<b>Hawaiian Ridge</b>	Technical difficulties viewing the original and revised geometries in the NGDC web interface (URL <a href="http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1272">http://maps.ngdc.noaa.gov/viewers/ufn_preview.html?featureId=1272</a> ). Please be in touch with John Cartwright for the fix.	The red line (revised geometry) does not show up.	Once revised geometry is reviewed, it can be approved in the database. Revised geometry currently in a reserve state.
<b>Jones Seamount</b>	Possible duplicate, also reported by BODC. Different locations.		Review duplicate features.

<b>Karin Seamount</b>	Should this be "seamounts"? Looks like several features.	[MH] Karin Seamount has been in the GEBCO Gazetteer since its creation in 1988, when it had the same single position as in the ACUF Gazetteer, i.e. 17°55' N - 168°58' W. At the 11th SCUFN meeting in 1995, the position of Karin Seamount was revised, resulting in the following in the meeting report: 18°00' N - 169°00' W and 15°36' N - 167°30' W. To be frank, the 2nd pair of coordinates, i.e. 15°36' N - 167°30' W, look suspect to me. This 2nd position is so far away from the 1st position that the feature should better be called a ridge. I therefore suspect that there is a typo in the report of SCUFN-11 regarding the 2nd position, e.g. could be 17°36' N instead of 15°36' N. However I don't know how to check that. May be Hans Werner can check the position(s) and extend of the feature from the best bathymetry available? Also the 1st revised position at SCUFN-11 , i.e. 18°00' N - 169°00' W, is very close to the original position and its coordinates look less accurate as they seem to have been rounded. As a result, for the time being I suggest keeping the original position only as in ACUF Gazetteer, i.e. 17°55' N - 168°58' W, until further clarification. I have updated the Gazetteer spreadsheet accordingly. [HWS] GeoMapApp: There is a large seamount on the position 17°55'N; 168°58'W, as a part of a long seamount chain trending in NW to SE direction, the SE-point of the seamount chain has the coordinate 15°36'N, 167°30'W, there are three positions given in the GEBCO Digital Atlas. As a result: I do not think that the more than 200 km extended NW to SE trending feature should be named "Karin Seamount"	Coordinates updated in the spreadsheet and database to be a single point as suggested. Linear geometry as approved by SCUFN11 put into a reserve state in the database. Feature requires further consideration by the SCUFN committee.
<b>Kiwi Seamount</b>	Could be duplicates; in both spreadsheet and database twice, with different attributes and locations. Also reported by BODC.		Review duplicate features.
<b>Komandor Basin</b>	Notation for accreditation in spreadsheets is ACUF ( 209). Added as ACUF.		Added simply as ACUF. Someone from ACUF should handle this issue.
<b>Malaguana-Gadao Ridge</b>	Notation for accreditation in spreadsheets is ACUF ( 292). Added as ACUF.		Added simply as ACUF. Someone from ACUF should handle this issue.

<b>Mocha Fracture Zone</b>	Coordinates are invalid. Not in SCUFN reports. New coordinate proposed by myself (39°34' S instead of 39°64' S) and left in approval. What should be done?	You are right. There were invalid coordinates for Mocha FZ and Guafo FZ, in SHOA's letter of 30 July 2010. I asked for clarification in my e-mail of 12 May to SHOA. No response to date. I have sent a reminder on 12 July (hidden copy to you). Your proposal for 39°34'S instead of 39°64'S is fine for the time being.	Proposed coordinate approved for the time being, feature requires future discussion by committee.
<b>Murray Canyon</b>	Three of this feature name, all with different attributes in different location. Also mentioned by BODC.		Review duplicate features.
<b>Navarin Canyon</b>	Notation for accreditation in spreadsheets is ACUF ( 124). Added as ACUF.		Added simply as ACUF. Someone from ACUF should handle this issue.
<b>Penguin Bank</b>	Could be duplicates; in both spreadsheet and database twice, with different attributes and locations. Also reported by BODC.		Review duplicate features.
<b>Pervenets Canyon</b>	Notation for accreditation in spreadsheets is ACUF ( 214). Added as ACUF.		Added simply as ACUF. Someone from ACUF should handle this issue.
<b>Petrel Bank</b>	Could be duplicates; in both spreadsheet and database twice, with different attributes and locations. Also reported by BODC.		Review duplicate features.
<b>Santa Lucia Bank</b>	Could be duplicates; in both spreadsheet and database twice, with different attributes and locations. Also reported by BODC.		Review duplicate features.
<b>Svyatogor Rise</b>	Duplicates with different coordinates but otherwise same attributes in database. SCUFN20 (2007) attributes preserved in the database, extra feature (3035) deleted. No note about this from BODC.		Review duplicate features.

<b>Terror Fracture Zone</b>	Is in both the 2011 spreadsheet and the 2011 reserve section. Should it be published?	This question was accidentally omitted from the initial database review; therefore, no additional comments at this time and requires review.	Feature requires review.
<b>Tomaszeski Seamount</b>	There are two of this feature listed in the 2011 Excel reserve section.		The reserve section spreadsheet should be updated.
<b>West Florida Escarpment</b>	Endpoints are the same, but needs to be approved yet.	This feature was accidentally omitted from the initial database review; it simply requires review and approval of the revised geometry.	Approve new geometry.