



## Integration of GEBCO and ACUF gazetteers into Marine Regions

Report for SCUFN-28 meeting, October 2015

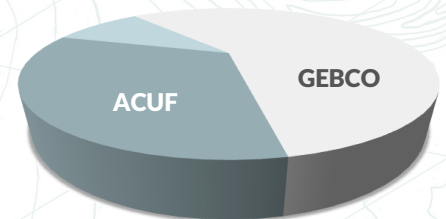
In 2014 VLIZ worked towards completing the register of undersea features within the Marine Regions database by updating and integrating GEBCO and ACUF gazetteers. The main challenges arose from the efforts to standardize the different geometries employed by ACUF (points) and GEBCO (polygons, lines and points), as well as the diverse nomenclature used for place types (e.g.: Seamounts vs. Seamount Group; Sea Channel vs. Seachannel).

### Summary of the methodology

1. Compare names and coordinates: identifying the existing features in Marine Regions and the new features.
2. Link unique identifiers:
  - GEBCO: FeatureID
  - ACUF: Unique Feature Identifier (UFI)
  - Marine Regions: GeoObject ID (MRGID)
3. Add or update additional information: synonyms, information about discovery and origin of name, physical characteristics, SCUFN associated meeting, etc. If coordinates in ACUF are different, we also provide them under "Notes".
4. Update hierarchical information (Part of, etc.).

### Results

- There are currently 6754 undersea features in Marine Regions:
  - 3820 are sourced from GEBCO,
  - 2313 come from ACUF,
  - The remaining 621 have been obtained from other sources.
- During the last 2014 update, Marine Regions incorporated 184 new features from GEBCO and 2313 from ACUF.
- We added 3318 new synonyms (mainly coming from ACUF) to 1368 existing features.
- Over 6000 notes with additional information were added to more than 2600 existing undersea features.
- We made a link to GEBCO WMS (MRGID–GEBCO FeatureID) to display the geometry and location of each feature in the Marine Regions interface.
- 26 undersea features had been removed from GEBCO gazetteer. We kept this features but a comment was made in the notes field.



An example of the different possible updates to an existing feature can be seen in the example in next page: several synonyms and notes, feature geometry, etc.



## Future actions

Marine Regions will soon be updated with new changes from GEBO and ACUF. Modifications or proposals from meeting SCUFN-27 are not yet included within our database. Following a similar approach, new features will be added and existing features will be updated with additional synonyms or information.

## Request

Marine Regions would like to make hold of a complete list of GEBCO undersea features with their unique FeatureID. In the past, we could retrieve this information from the WFS provided by GEBCO, but this is no longer working. This would facilitate future Marine Region updates.

Names	Language	Name	Name source
English	Southwest Indian Ridge	IHO-IOC GEBCO Gazetteer of Undersea Feature Names (2002-10-01)	
English	South West Indian Ridge	US BGN Advisory Committee on Undersea Features (ACUF)	
Japanese	Nansei Indoyō-kairai	US BGN Advisory Committee on Undersea Features (ACUF)	
Japanese	Nansei-Indoyou-kairai	US BGN Advisory Committee on Undersea Features (ACUF)	
English	Southwest Indian Ocean Ridge	US BGN Advisory Committee on Undersea Features (ACUF)	
English	West Indian Ridge	US BGN Advisory Committee on Undersea Features (ACUF)	
Russian	Zapadno-Indiyskiy Khrebet	US BGN Advisory Committee on Undersea Features (ACUF)	
Russian	Западно-Индийский Хребет	US BGN Advisory Committee on Undersea Features (ACUF)	
Japanese	南西インド洋海嶺	US BGN Advisory Committee on Undersea Features (ACUF)	

### PlaceType

Ridge

**Latitude** 44° 3' 2.8" S (-44.05078945°)

**Longitude** 37° 56' 46.7" E (37.94630462°)

**Min. Lat** 54° 45' 0" S (-54.75°)

**Min. Long** 0° 0' 0" E (0°)

**Max. Lat** 27° 0' 0" S (-27°)

**Max. Long** 66° 30' 0" E (66.5°)

**Source** IHO-IOC GEBCO Gazetteer of Undersea Feature Names (2014-06-01 - current version), available online at <http://www.ngdc.noaa.gov/gazetteer/>

**Notes** **Previous coordinates:** Lat: -40.875; Long: 33.25; minLat: -54.75; minLong: 0; maxLat: -27; maxLong: 66.5

**GEBCO: discoverer and year of discovery:** Origin of name: Named from its location in the southwestern part of the Indian Ocean.

**Coordinates in ACUF:** Latitude: -43; Longitude: 40

**ACUF unique id (UFI):** -155600

**Relations** Part of [Indian Ocean](#) (IHO Sea Area) [\[view hierarchy\]](#)  
Part of [Bouvet Exclusive Economic Zone](#) (EEZ) [\[view hierarchy\]](#)

### Map

