Report on Marine Regions activities

Report for SCUFN-37 meeting, Jeju, June 2024 Britt Lonneville, Salvador Fernandez Bejarano, Lawrence Whatley, Lennert Schepers, Bart Vanhoorne (VLIZ)

Undersea features

GEBCO-SCUFN and ACUF gazetteers were both integrated in Marine Regions in 2014. Both gazetteers are regularly updated and the issues found are reported yearly to SCUFN. The main facts about the 2024 updates are explained in the following sections below.

1. GEBCO update

133 new features added to Marine Regions, mainly from SCUFN-36 but also from SCUFN-34.

Issues found:

a. For several features, the Generic Type seems to have changed since their initial integration in the Marine Regions database (in order to align with external gazetteers such as ACUF/NZGB?). In a few cases, the new Generic Type does not correspond to the feature type in the parallel database, so it is unclear if and how the feature should be adjusted in the Marine Regions gazetteer. Could you please provide clarity?

Generic Type (old)	Generic Type (new)	Feature Type	featureId	Specific Term
Seachannel/Sea Channel	Channel	Seachannel (ACUF/NZGB)	2522	Pūkākī
		Seachannel (ACUF)	381	Bounty
		Seachannel (ACUF)	6175	Hikurangi
		Seachannel (NZGB)	6181	Karitāne
Plain	Abyssal Plain	Plain (ACUF)	2737	Sardino-Balearic

- b. For the feature Niglik Valley (featureId = 889981), it is not entirely clear if the Generic Type of the given feature can be considered similar to the Feature Designation (submarine valley(s)) for the feature with identical name in the ACUF gazetteer (UFI = -154665). For now, we have integrated them under the same MRGID. Could you please confirm or deny?
- c. For the feature Tingmiark Valley (featureId = 889980), it is not entirely clear if the Generic Type of the given feature can be considered similar to the Feature Designation (submarine valley(s)) for the feature with identical name in the ACUF gazetteer (UFI = 155795). For now, we have integrated them under the same MRGID. Could you please confirm or deny?

d. For feature Benham Bank (featureId = 889703) it is not entirely clear if the Generic Type of the given feature can be considered similar to the Feature Designation in the ACUF gazetteer (seamount, UFI = -152581). Because both classifications diverge significantly, this object has not yet been integrated into the Marine Regions database. Could you please provide clarity?

2. ACUF update

5 new features added to Marine Regions.

<u>Issues found:</u>

- a. See issue 1.a
- b. See issue 1.b
- c. See issue 1.c
- d. See issue 1.d
- e. Please also refer to previous reports for outstanding issues.

General overview Undersea Features in Marine Regions

There are in total 12045 undersea features records in Marine Regions. The main sources for these features are the GEBCO, ACUF, SCAR, New Zealand and Canada gazetteers. Some features belong into more than one context.

Gazetteer - context	Total	
ACUF Gazetteer	5918	
GEBCO Gazetteer	5072	
Canada Gazetteer	2258	
SCAR-MarBIN	773	
New Zealand Gazetteer	821	
Other	680	

Data products updates

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Other updates

UN Ocean Decade activities: Marine Regions submitted a UN Ocean Decade Action entitled 'From global gazetteer to global community', which was endorsed in June 2023. The Action kicked off with a thorough quality control exercise, which resulted in a dashboard, at the end of 2023. In May 2024, the Editorial Community – being one of the five areas of action identified in the project – met for the first time for an introductory meeting.

mregions R package under review: the updated mregions R package, which combines Marine Regions gazetteer and data product functions is submitted to rOpenSci and is currently under review. The package includes all (new) RESTful services provided for the gazetteer.

Short-term future activities

UN Ocean Decade activities: activities linked to the proposed UN Ocean Decade Action (gap analysis, editorial community meetings, links to other Ocean Decade Actions...) will continue in the coming years.

Maritime Boundaries v12 derived products: Marine Regions plans on updating various products depending on the Maritime Boundaries v12 datasets (e.g. High Seas, Extended Continental Shelves,...).