

MarineRegions.org - a world reference for marine placenames and Maritime Boundaries

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Marine Regions is a global geographic database containing georeferenced geoobjects on (i) marine placenames and (ii) maritime boundaries. The database containing both types of information is accessible through MarineRegions.org and by various web service applications.

The marine placenames gazetteer started with geographic, mainly marine names such as seas, sandbanks, seamounts, ridges, bays or even standard sampling stations used in marine research. The geographic cover initially focused on the Belgian Continental Shelf and the Scheldt Estuary, but gradually more regional and global geographic information were added. The gazetteer now includes almost 50,000 placenames, including national, regional as well as global marine gazetteers such as the GEBCO and ACUF gazetteers.

The basis for the Maritime Boundaries dataset is the United Nations Convention on the Law of the Sea (UNCLOS), which was signed in 1982 and came into force in 1994. This convention has defined a series of maritime zones (internal waters, archipelagic waters, territorial sea, contiguous zone, exclusive economic zone and continental shelf) and establishes the degree of rights and obligations of a country in each of those areas. The Exclusive Economic Zone (EEZ) is a country's basic geo-unit for the management of marine natural resources. Despite the strategic significance of EEZs, a standard georeferenced product with maritime boundaries was not available at the global level (Claus *et al.*, 2014), until it was developed and made available by the Flanders Marine Institute (VLIZ) in 2006 (Deckers and Vanden Berghe, 2006). Importantly, the Maritime Boundaries database is regularly updated with the latest international treaties. The latest version,



Fig. 1 - Marine Regions Logo.

Version 10, was launched in February 2018 by the portal website MarineRegions.org and has already been downloaded 2173 times (as of April 2018).

The Maritime Boundaries is the most popular product available at Marineregions.org. In all its different versions, the product has been downloaded more than 50,000 times, representing 65% of the total downloads. These boundaries and other derived products are used in many projects related to bio-geographic research and conservation, such as the World Register of Marine Species (WoRMS), The Sea Around Us (Pauly and Zeller, 2015), Global Fishing Watch or The Ocean Health Index (Halpern, 2012).

The MarineRegions products are accessible by the website MarineRegions.org, which offers a map viewer, a search page and a download page. Marine Regions also provides several web services which allow the user to have direct access to the geographic data, maps and metadata from a GIS desktop or other applications.

References

- CLAUS, S.; DE HAUWERE, N.; VANHOORNE, B.; DECKERS, P.; SOUZA DIAS, F.; HERNANDEZ, F.; MEES, J. (2014). *Marine Regions: Towards a global standard for georeferenced marine names and boundaries*. Mar. Geod. 37(2): 99-125.
- DECKERS, P., AND E. VANDEN BERGHE, 2006. *The VLIZ maritime boundaries geodatabase as a bio-geographical tool*. Book of Abstracts ICES 2006 Annual Science Conference, Maastricht, The Netherlands
- PAULY D. AND ZELLER D. (EDITORS), 2015. *Sea Around Us Concepts, Design and Data* (searoundsus.org)
- HALPERN, B. S. ET AL. *An index to assess the health and benefits of the global ocean*. Nature Nature 488, 615-620 (30 August 2012).