

# A MAP OF THE MEDITERRANEAN SEA FOR FISHERY PURPOSES USING GOOGLE EARTH

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## Abstract

A chart of the Mediterranean, using Google Earth, is being developed with the objective to help fisheries scientists easily place the different georeferenced features related to fisheries (undersea features, MPAs, jurisdictions, etc.). The map is an open tool and can be improved by users. This tool has been developed in the framework of the activities of UNEP RAC/SPA

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The UNEP Regional Activity Centre for Specially Protected Areas (RAC/SPA) in compliance with the Mediterranean SPA/BD Protocol, undertook an initiative to promote the establishment of a Specially Protected Areas of Mediterranean Importance (SPAMIs) network, including Mediterranean high seas. In that context, along with the project "Fisheries management/conservation and step-relief areas in the Mediterranean open seas, including deep seas" [1,2], the UNEP RAC/SPA has promoted the development of a geographic tool related to fisheries to help scientists and other potential users working with georeferenced information coming from different sources. Google Earth has been chosen as a user friendly and free software in order to develop such a tool as it will facilitate access to the general public. The map presented has several folders containing the following information:

- Bathymetry. Isobaths of 50, 100, 200, 1000, 2000, 3000, 4000 and 5000 m depth are included. The information has been obtained from GEBCO [3].
- Jurisdictions. It contains information about: internal waters, historical bays, territorial waters, archaeological contiguous area, fishing protection zones, ecological protection zones, exclusive economic zones, high seas, and other particular jurisdictions [4].
- MPAs. Including: UNEP RAC/SPA SPAMIS, GFCM FRAs (Fishing Restricted Areas), MPAs for cetacean conservation, proposals for tuna sanctuaries and any other MPA appeared in MEDPAN and MPAGLOBAL websites. About 280 MPAs are included. In most cases associated to the website that contains its description
- Undersea features. Includes all geomorphological features with a published name. About 35 types of features (the most common, seamounts, canyons, ridges, plains, etc.). The map contains about 450 georeferenced geographical localizations.
- Boundaries, subareas and grids. Contains the different subareas defined by FAO for statistical purposes, and GFCM. It also contains the 10 and 50 km grids promoted by the European Union for environmental purposes.
- Sea surface temperature (SST) and surface primary productivity in terms of chlorophyll-a concentration. Charts of summer and winter averaged temperature and productivity from 2003 to 2008, as well as the main isolines [5]. When possible the georeferenced element is associated to additional information with a link. This map aspires to be an operational tool for marine scientists working in the Mediterranean. It is posted in the public domain and feedback from users, for comments, corrections and additions is expected.

## References

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