



A map of the morphological characteristics of the Italian seas

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The description and mapping of geomorphological features of a sea basin constitute a knowledge base used to understand the basin genesis and evolution as well as the sediment dynamics. All of the information on the seabed geomorphology was essential for the activities foreseen by the Marine Strategy Framework Directive (MSFD), under which the project has been carried out.

Through the interpretation and analysis of the bathymetry made available by IIMM (Navy Hydrographic Institute), the physiography of the sea basins, as well as the morphological elements characterizing them, have been identified. Maps and data from previous studies, particularly geological data collected during the surveys for the Italian geological mapping project (CARG Project), have been used to support the interpretation of bathymetric data.

The results of the analysis are shown in a map which represents the areas of continental shelf, continental slope and bathyal plain and the main morphotypes (canyons, morphological highs and banks, isolated hills and seamounts, ridges, slope changes) of the Italian marine basins. The map created provides an overview, at national scale, of the geomorphological features of marine basins and is the knowledge base required for all those disciplines that have the study of the sea and coastal environments as their object.

The reference database of the map has been created by GIS applications, since the aim is to have a nationwide knowledge base which can be updated with data from subsequent studies and new oceanographic cruises.