

MORPHODYNAMICS OF COASTAL AREAS REPRESENTED IN THE NEW GEOMORPHOLOGIC MAP OF ITALY: DRAW THE LANDFORMS OF THE PAST TO OUTLINE THE FUTURE

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ABSTRACT: In the framework of the revision of Italian geomorphological legend (CARG Project) published in 1994 by the National Geological Service, the AIGeo-Working Group Coastal Morphodynamic (WGCM) dealt with the revision of the legend concerning the landforms of the coast. The aims of the work were the updating of the symbology on the basis of the post-1994 results in the geomorphological researches and creating a legend more vocated to the solution of the problems of applied geomorphology and more suitable to be managed in GIS environment.

The WGCM started from the critical analysis of the classifications of coastal landforms proposed during the last century and it continued through a scientific discussion on the work that the members of the group performed by means of 12 case studies in which a correlation between landforms, processes and, dynamics was made.

The geomorphological legend proposed by the WGCM has to be considered as a starting point and a work in progress. It remains, indeed, open so that new data can be added and updated as required. Besides, the WGCM tried to contribute to the morphodynamic classification of the coasts around the Mediterranean basin.

KEYWORDS: Coastal dynamics, coastal geomorphology, geomorphological mapping, Mediterranean coast

1. INTRODUCTION

The geomorphological map is the basic tool for the representation of landforms of earth topographic relief and, as such, is currently the document present in most of the activities of environmental planning carried out in Italy at the various institutional levels, from the national to the municipal one, with particular reference to the evaluation of geomorphological hazards and the mitigation of the associated risks.

The geomorphological mapping in Italy has reached

high levels of scientific value in the description and analysis of the landscape and in returning correct territorial data from the dimensional point of view, as well as providing the necessary geomorphological information useful for the applied purposes in different scientific sectors, such as hydraulics, forestry sciences, agronomy, environmental engineering, architecture, landscape ecology, etc.

Besides, thanks to the capability to represent the state of activity of landforms, and of associated processes of course, the geomorphological mapping is the