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APPLIED GEOMORPHOLOGICAL MAPPING ADDRESSED TO COASTAL ENVIRONMENT: EXPERIENCE AND VALIDATION IN LIGURIA (ITALY)

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The high anthropic impact on coastal environment, which is currently still increasing, is one of the most strategic factors in the Italian and in particular Ligurian land management. In this regards, since 2000, Liguria Region was one of the first Italian administrations to provide a land planning tool named “Coastal Landscape Coordination Plan” (*Piano Territoriale di Coordinamento Paesistico*). More recently Liguria Region started to prepare the “Coastal Marine Environment Protection Plan” (*Piano di Tutela dell'Ambiente Marino Costiero*), at present day applied only in two sample areas, specifically aimed to coastal zoning of geomorphological hazard and risk.

Just the experience of these land-plans has shown a need to use new tools of analysis and interpretation of the territory, through a multidisciplinary approach that addresses both the problems of littoral plain and the rocky coast dynamics and their interactions with anthropic interventions.

Based on this assumption, in this research we will present four examples of coastal geomorphological mapping at different scale, representing some of the main Ligurian morpho-types and dynamic conditions:

- 1) Bonassola – Levanto, eastern Liguria, rocky coast and embayed beach;
- 2) Genova city, central Liguria, techno coast;
- 3) Noli-Spotorno, western Liguria, littoral plain;
- 4) Sanremo -Tre Ponti, western Liguria, pocket beach.

This work was carried out in the framework of the University of Genoa research project “Geomorphological mapping addressed to coastal zone: application, test and validation in Liguria” (PRA 2014-15). For the maps preparation it was applied a new proposal of geomorphological legend, currently in testing phase by the Working Group “Coastal morphodynamics” of the Italian Association of Physical Geography and Geomorphology (AIGeo), in the framework of cooperation with the Institute for the Protection and Environmental Research (ISPRA) for the “Geomorphological Map of Italy” updating.

