26. The AMIS Coastal Risk Atlas: A Transboundary Web Platform for Multi-Hazard Assessment and Climate Adaptation

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Coastal areas of the Western Mediterranean are exposed to interacting hazards, including erosion, marine flooding, extreme waves, cliff instability and ground deformation. Their assessment is often hindered by fragmented datasets, heterogeneous spatial units and different information standards across administrative boundaries. This paper presents the AMIS Coastal Risk Atlas, an open-access bilingual web platform developed within the Interreg Italy-France Maritime Programme. The Atlas integrates morphological, meteo-marine, geological, land-use and satellite-derived information for Tuscany, Liguria, Sardinia, Corsica and the French departments of Alpes-Maritimes and Var. Coastal sectors provide a shared spatial framework through which information on beach width, shoreline evolution, coastal type, susceptibility and urban exposure is organised. Scenario-dependent layers represent significant wave height, storm surge, run-up and wave power under RCP4.5 and RCP8.5 climate pathways and for multiple return periods. The platform also incorporates selected historical storms, EMODnet coastal products, Copernicus Coastal Zones land cover and European Ground Motion Service observations. A modular architecture based on interoperable geospatial services enables interactive mapping, technical pop-ups, time-series visualisation and structured natural-language queries of storm-wave statistics. The Atlas provides a consistent transboundary screening environment and an entry point to coastal digital twins while supporting research, risk communication and evidence-informed adaptation planning.