

European Marine Observation and Data Network (EMODNET): a two-way opportunity for nannoworkers with the project

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The experience of past years in the marine geology community, including geological habitat mapping, a field shared with marine biologists, evidenced a lack of information concerning the water column and planktonic assemblages. In particular, habitat mapping, which focuses on benthic biocoenoses and their relation with the substrate, is limited to only a few characteristics (depth, hard vs soft bottom, and sediment grainsize).

Altogether, it appears that scientists in each discipline approach their field as an isolated item that is separated from the surrounding environment. Geologists consider deposits that underlie the seafloor and stop at the sediment/water interface, and habitat mappers start from the sediment/water interface and limit their study to benthic assemblages, regardless of what overlies them.

This approach does not take into account the role that planktonic assemblages and the dynamics acting along the water column play in supplying material to the seafloor, influencing chemical equilibrium of waters at the sea bottom, and the composition of sediments.

Since 2009, the European Marine Observation and Data Network Project (<http://www.emodnet.eu/>) has aimed at the production of harmonized maps that incorporate multiple features of European seas. The project is subdivided into bathymetry, geology, biology, physics, chemistry, seabed habitats, and human activities lots, each of them managed through a portal and an additional coastal mapping project.

The Geological Survey of Italy participates in the Geology Lot and contributes its knowledge of geological features, such as sediment grain size, sedimentation rate, lithology, stratigraphy, tectonics, geohazards (volcanism, seismicity, submarine landslides, and tsunamis), georesources, and coastal evolution.

The Biology Lot considers data on numerous marine species, including nanoplankton. However, this lot has not begun yet, and there is space for expanding and developing the contribution that planktonic assemblages might provide to the community.