

Table S1. List of the samples analyzed for prokaryotic abundance and/or bacterioplankton community composition, reporting the corresponding available spatial and physico-chemical characteristics.

Table S2. Total number of OTUs and Shannon index of the samples analyzed by ARISA fingerprinting at the University of Milan.

Figure S1. Sections of salinity in the Mediterranean Sea 1 from the Meteor cruise M84/3.

The top left panel shows the Mediterranean Sea map with the hydrographic stations sampled during the cruise (red dots), stations sampled by the University of Milan for epi- and bathypelagic waters (green dots) and stations sampled by IEO at a finer scale in the vertical profiles (black circles). The top right panel is a meridional section from the Adriatic Sea to the Ionian Sea (shown as a light gray line on the map). The lower panel is the zonal section from the coast of Lebanon in the Eastern Mediterranean Sea to the Strait of Gibraltar (shown as a dark gray line on the map). The depth and color scales are identical for both panels, where the top 500 m in each section is slightly expanded and the collected samples are marked by green stars (University of Milan dataset) and black circles (IEO dataset).