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Study of water masses variability in the Mediterranean Sea using in-situ data / NEMO-Med12 model.

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In the past 10 years, numerous observation programs in the Mediterranean deployed autonomous platforms (moorings, argo floats, gliders) and thus considerably increased the number of in-situ observations and the data coverage. In this study, we analyse time series built with profile data on interannual scales. Sorting data in regional boxes, we follow the evolution of different water masses in the basin and generate indexes to characterize their evolution. We then put those indexes in relation with external (atmospheric) forcings and present an intercomparison with the NEMO-Med12 model to estimate both the skill of the model and the relevance of the data-sampling in reproducing the evolution of water masses properties.