

CIESM Congress Session : Basin-wide variability

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Moderator's Synthesis

During the session on *Basin-wide variability* the conveners discussed a variety of topics, ranging from impacts of different land-surface exchanges schemes and of strait dynamics at Gibraltar on the Mediterranean thermohaline circulation, to basin-wide geostrophic descriptions, up to the suggestion of existence of teleconnections between Mediterranean dynamics and the Bay of Biscay dynamics.

Thus, variability on the basin wide scale has been interpreted and discussed from the point of view of a number of interrelated disciplines: physics (oceanographic and atmospheric), biology and biogeochemistry. These studies have been carried out both by using models as well as observations.

The discussion further evolved on the identification of the role of “trends” vs the role of “oscillations”, the role of the different forcings, atmospheric and boundary conditions (e.g. strait dynamics, river inflow), the effects of a warmer and saltier Mediterranean on the Mediterranean Outflowing Water (MOW), the implication for stratification, thermohaline circulation and ventilation and the implications for biogeochemical and biological dynamics.

