



## **Up to which extent can the Mediterranean be isolated from global sea level rise?**

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During the last decades, Mediterranean sea level has been rising at a lower rate than the global ocean. Also, some authors have claimed that during the XXI century the likely increase of the salinity in the basin (i.e. the decrease of the halosteric component of sea level), could partially compensate the projected global sea level rise. These claims have generated confusion on the fate of Mediterranean sea level under climate change.

In this presentation we will argue that changes in the salinity of the Mediterranean Sea do not have a significant impact on the basin averaged sea level. Furthermore we use a novel approach to combine the information from global and regional models to generate a large ensemble of Mediterranean sea level projections for the XXI century. Our results suggest that under all the scenarios the Mediterranean sea level will rise approximately at the same rate than the NE Atlantic. The projections also show that, in turn, the NE Atlantic sea level will be between 5 and 35 cm higher than global sea level by the end of the XXI century.