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Algero-Provençal and Levantine Basin case studies for the evaluation of an high resolution model implemented on the Mediterranean Sea

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An high resolution model has been implemented on the whole Mediterranean Basin. The model has an horizontal resolution of 1/16x1/16 degrees and 72 unevenly spaced vertical levels. The model has been run from 1st January 1997 until the end of year 2000 with 6hrs interactive atmospheric forcing. In this work we focus the attention on the results in two representative regions: the Algero-Provençal for the western Mediterranean and the Levantine for the eastern basin. The model results have been compared when possible with in situ data (XBT, ARGO) showing the model capabilities in representing the temperature distribution in different seasons. Experiments with different vertical mixing schemes have been performed in order to better understand the capabilities of the model in reproducing the vertical stratification.