



A new assimilation tidal model for the Mediterranean Sea

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The tides for the Mediterranean Sea are described through a high resolution model developed by assimilation of data into the global TPXO7.1 ocean tide model. The following eight principal constituents M2, S2, N2, K2, K1, O1, P1 and Q1 are included in the model. Data from 64 coastal tide-gauge stations around Mediterranean were analysed for this purpose. TOPEX/Poseidon data with all corrections applied except for the ocean tides, and bathymetry from ETOPO2 were used for development of the model. Comparisons were carried out with other global or regional models. Furthermore an assessment was yielded comparing JASON-1 altimetry corrected for ocean tides using our model with other published global or regional models.