



Assessing the quality of a pre-operational model for the portuguese coast

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A pre-operational model of the western Iberia coastal circulation is presented using MOHID. The model consists in downscaling the Mercator PSY2v2r1 solution (1/15° resolution) and coupling an offline atmospheric forecasting model (MM5 using domains with 27 km and 9 km resolution) fed with GFS predictions. Within a ten day spin-up, the model evolves and adjusts to the fully developed Mercator initial and forcing fields, allowing the formation of the typical circulation patterns of the area, such as the Iberian Poleward Current, the surface countercurrent, and the Mediterranean water veins. Using nesting techniques, tide (FES2004) and finer resolution (0.06° and 0.02°) appear as potential added values over the Mercator PSY2v2r1 solution. Analysis against tidal stations, *in situ* data and SST remote-sensing imagery allows intercomparison of both solutions.