



## **Evaluation of a CMIP5 Derived Single-Model, Single-Forcing and Single-Scenario Dynamical Global Wave Climate Model Ensemble**

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In this study the global present wave climate (from 2071 to 2005), as reproduced by a 7-member “coherent” ensemble of dynamical wave climate projection (single-model, single-forcing, and single-scenario) is evaluated. The individual ensemble members and the ensemble are evaluated by comparison against: the ERA-Interim and the corrected ERA-40 ECMWF (European Centre for Medium-Range Weather Forecasts) reanalyzes, a large set of in-situ buoy data, and remote sensing altimetry data. The agreement between the control run and the reanalyzes, the buoy data, and the remote sensed wave heights is investigated in order to assess the ability of the ensemble to reproduce present global wave climate, and hence to further produce realistic results of the global wave climate for the twenty first century. The ensemble intra-model variability is also investigated.