



Probabilistic evaluation of oceanic and atmospheric predictions using the MiKlip system

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The German research programme MiKlip (Mittelfristige Klimaprognosen) has developed a system for decadal climate predictions. This contribution looks at the probabilistic evaluation of the ocean and the atmosphere using the MiKlip prediction system. The simulations are based on the MPI-ESM model output (LR/MR) of the baseline 0 and baseline 1 MiKlip system which differ in the way the initial conditions in atmosphere and ocean are generated. As basis observational data we include ORAS4, ERA40 and ERA-INTERIM reanalyses from ECMWF for the period 1961-2009. We analyse multi-year averages of sea water potential temperature as well as atmospheric temperature. The results show that for prediction year 2-5 there are areas of positive skill in the ocean until 3,000 m depth which are also robust and comparable in strength but not in pattern to mid and upper tropospheric temperatures. These predictable signals seem to be almost lost for prediction year 7-10. The skill of the different baseline experiments will be compared and assessed.