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Decadal prediction in the Mediterranean region

Virginie GUEMAS

Institut Català de Ciències del Clima (IC3) - Centre National de Recherches Météorologiques (CNRM), France, virginie.guemas@ic3.cat
Javier García-Serrano, Annarita Mariotti, Francisco Doblas-Reyes
Presenter : Virginie Guemas

The Mediterranean region is projected to be among the most heavily affected by climate change with significant regional warming and drying by the end of the century but on shorter timescales internal variability might enhance or compensate externally forced changes, as already seen during the 20th century. Here we compare the multi-model climate predictions produced within the framework of the CMIP5 (Coupled Model Intercomparison Project Phase 5) project with historical simulations to assess the level of decadal climate prediction skill in the Mediterranean region beyond that originating from the external radiatively forced climate signal. We evaluate the performance of the multi-model ensemble (MME) in predicting temperature and precipitation as well as their seasonal dependence. The added-value from initialization is then related to the ability of the MME to capture the linkage between the Atlantic Multidecadal Oscillation and those regional climate variables.