Climate prediction

The Climate Prediction group aims to develop regional and global climate prediction capability for time scales ranging from a few weeks to a few decades into the future (sub-seasonal to decadal climate prediction).

This objective relies on expanding our understanding of the climate processes through a deep analysis of the strengths and weaknesses of state-of-the-art climate forecast systems in comparison with the most up-to-date observational datasets, and on exploiting these detailed analyses to refine the representation of climate processes in our climate forecast systems and as well as their initialization.

Although our primary tool is the EC-Earth European climate model, we also make frequent use of large multi-model databases made available in the context of cooperative international projects (CMIP, SPECS, NMME…) for process analysis. To achieve our objectives, we rely on a wide variety of expertise, both in terms of on climate processes and regions within our group: from the stratosphere down to the deep ocean and from tropical to polar latitudes, as well as on expertise on climate modelling and data assimilation. We have contributed in the past and plan to continue contributing to near-operational climate prediction exercises: on decadal and on seasonal time scales.

Objectives
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