Climate Variability and Change
The Climate Variability and Change (CVC) group undertakes fundamental research to (1) understand climate variability and (2) forecast the climate variations from one month to multiple decades into the future, both at global and regional scales. These objectives are addressed by expanding our understanding of the climate and biogeochemical processes through a deep exploration of climate-related datasets, and on exploiting these detailed analyses to refine the representation of fundamental processes in the models. 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. We have contributed in the past and plan to continue contributing to near-operational climate prediction exercises: on decadal and seasonal time scales.

Objectives

- 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).
- To improve the fidelity of Earth System Models and build trust in future projections, to thus develop better mitigation and adaptation methods.