

Climate and numerical weather prediction models

The development of climate and numerical weather prediction models will be discussed. The first versions of these models were very early on using computers. In the beginning, these models were developed by two different research communities with different techniques and aims. The current development is that they are merging into one model framework called seamless prediction, i.e. the same numerical model of the atmosphere/land/ocean system should be able to predict the weather on timescales of 10-days and climate predictions on annual, decadal and centennial timescales. Climate models are also developing into so-called Earth System Models that include e.g. interactive carbon cycle. Briefly numerical methods, grids and computational demands will also be discussed as well as how the experiments that will be the base for the conclusions in the next IPCC (Intergovernmental Panel for Climate Change) report are performed.