



The Climate mode of the Local Model and its relevance for model analysis and verification.

A.Will, U.Schättler, K.Keuler, A.Block, U.Böhm and B.Rockel

Environmental Meteorology, University of Cottbus (will@tu-cottbus.de/*49 355 691128)

Many Numerical Weather Prediction Models cannot be integrated over time scales much longer than several weeks, which is much shorter than the time scale of stationary weather statistics. On the other hand, most regional climate models are not designed for operational weather prediction.

In the last years the CLM-Community developed the climate version of the non-hydrostatic Local Model of the DWD, called CLM. Every major version of the LM and CLM are identical. The climate mode opens new possibilities for verification of model components against observations and theory (conservation principles) and the experience in NWP opens new possibilities to study the parameterisations needed in the climate mode.

The CLM has been integrated over decades using ERA15 and ECHAM5 data as boundary conditions and the results have been compared with different types of data derived from observations and results of other regional climate models. An overview of the main features of the CLM will be given and selected results of long time integrations of the CLM relevant for NWP will be presented. Special aspects of the CLM results are presented in more detail in other sessions by the author and the coauthors.