Regional Climate Modeling in South-Asia

<u>Bodo.Ahrens@iau.uni-frankfurt.de</u>, Institute for Atmosphere and Environment, Goethe-University Frankfurt

As a part of the EC project BRAHMATWINN (http://www.brahmatwinn.uni-jena.de) downscaling of global climate simulations from the ECHAM5 model is carried out in a European and a South-Asian computational domain. One method applied is dynamical downscaling. To this end, the regional climate model CLM (http://www.clm-community.eu/) is used to simulate today's climate (1960-2000) and future climate projections (2000-2100). Whereas the European simulations are already running, the South-Asian are still to be done. The domain includes the Himalayan mountains, the Indian subcontinent and most of the Arabian peninsula. Using a grid resolution of 0.44° and 20 vertical layers the domain matches 147x121x20 grid points. The climate of the 20th century (1960-2000) and three climate scenarios (IPCC climate scenarios A1B, A2 and B1) are modeled, all forced by the corresponding scenario runs from the ECHAM5 global climate model. Especially, the monsoon variability and the parameterization of convection will be investigated.