

Initial Tests of WRF-NMM for Use as a Regional Seasonal Forecast Model

Christopher J. Anderson, Iowa State University, Ames, IA
Chungu Lu and John A. McGinley, NOAA/ESRL/GSD, Boulder, CO

The WRF NMM model will be one of many regional models that participate in the Multi-RCM Ensemble Downscaling of Multi-GCM Seasonal Forecasts (MRED) project. To our knowledge this is among the first application of the WRF NMM core for integrations beyond a few days.

The WRF NMM model code will be obtained from the WRF community repository. However, efforts will be made to use a model setup that is similar to NCEP's operational WRF NMM.

Results from a preliminary seasonal simulation will be presented. This simulation will differ from the experimental design in that the boundary and initial conditions will be provided by the NCEP/DOE AMIP-II Reanalysis dataset rather than from a forecast made by a global model. We have chosen the period of 1 November 2005 – 1 May 2006 for this test period. During this time a number of atmospheric rivers impinged upon the Sierra Nevada Mountains, leading to more than three times the climatological liquid water accumulation during December 2005.