



Comparison of regional climate models in the Carpathian basin using control run experiments

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Expected regional climate change in the Carpathian basin is modelled by 4 different regional climate models (RCM). Two of them (RegCM and PRECIS) are run by the Department of Meteorology, Eotvos Lorand University, Budapest, the other two RCMs are run by the Hungarian Meteorological Service: ALADIN and REMO. In this poster, control runs of RegCM and PRECIS are compared for the 1961-1990 period. For the validation, monthly data sets of the Climate Research Unit (CRU) of the University of East Anglia are used. Model PRECIS developed at the UK Met Office, Hadley Centre uses the boundary conditions from the European Centre for Medium-Range Weather Forecast (ECMWF) reanalysis datasets (ERA-40) and the HadCM3 GCM. The horizontal resolution of PRECIS is 25 km and it uses 19 vertical levels. Model RegCM3 was developed by Giorgi et al. in ICTP. We used the ERA-40 Reanalysis data as boundary conditions. The horizontal resolution of RegCM is 10 km and it runs with 23 vertical levels. Both RCMs are 3-dimensional, sigma-coordinate, primitive equation models.