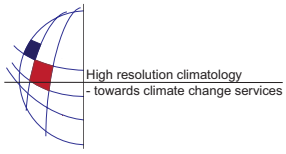
EMS Annual Meeting Abstracts
Vol. 7, EMS2010-405, 2010
10th EMS / 8th ECAC



Analysis of uncertainties in ENSEMBLES regional climate models outputs over the Czech Republic

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The goal of present study is to analyze sources of uncertainties in regional climate model outputs over the area of the Czech Republic. We concentrate on 30-year mean seasonal air temperature and precipitation amounts simulated by a suit of regional climate models from the project ENSEMBLES (http://ensembles-eu.metoffice.com/). We use the analysis of variance to assess the relative contributions from the driving data and the regional model itself to the total variance of the multi-model ensemble. The results are shown for the reference period (1961-1990) and for two future time periods (2021-2050, 2069-2098). In case of seasonal mean air temperature, the main source of uncertainty is the regional model, except for the winter season. Concerning precipitation amounts, the contributions from GCM and RCM are rather comparable. The work was supported by the grant SVV-2010-261308.