



Is the position of the model domain over the target area related to the results of a regional climate model?

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Since many years, much effort was put into determining and reducing uncertainties in global climate models. For regional climate models this kind of effort was not so intense and coordinated. Most studies so far concentrated on the influence of domain sizes or the treatment of the lateral boundary conditions. In this study a shifting of the model domain up to four gridboxes is established to investigate uncertainties due to the decision on the positioning of the model domain over the target area. All simulations were performed at a horizontal resolution of 0.5° (approx. 55 km) over Europe with a domain-size of 81×91 gridboxes. The forcing at the lateral boundaries came from the ERA-15 reanalysis dataset and ECHAM5 simulations of the 20th century. The integration periods for the first forcing were 10 years (1979-1988) and for the latter 20 years (1950-1969). First results of the analysis focusing on differences in temperature patterns and the mean flow will be shown.