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## Impacts of different RCP scenarios on ALADIN-Climate regional climate model projections over Hungary

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The KlimAdat national project was started in 2016 to create a complex database of detailed meteorological information aiming to support local climate change impact studies in different sectors, adaptation strategies and related decision making. Besides observation data its primary basis will be ALADIN-Climate and REMO regional climate model simulations achieved by the Hungarian Meteorological Service and this set of projections will be extended by members of the Euro-CORDEX ensemble in order to quantify the projection uncertainties.

This study is focusing on analysis of the ALADIN-Climate model projections driven with RCP4.5 and RCP8.5 scenarios. Firstly, the CNRM-CM5 global model outputs were downscaled to 50 km horizontal resolution over the EURO-CORDEX domain with ALADIN-Climate Version 5.2. Then using these results as lateral boundary conditions, 10 km experiments were prepared on a domain covering Central and South-Eastern Europe.

The presentation aims to introduce the behaviour of these simulations achieved by different scenarios and at different spatial resolution from the aspect of temperature and precipitation change over Hungary. Special attention will be put on the differences in extreme indices. Finally, our 10 km resolution simulations are compared with EURO-CORDEX results to specify their place in a larger ensemble.