

Project: **937**

Project title: **Influence of land-use transformations on local and regional climate in Germany**

Principal investigator: **Merja Toelle**

Report period: **2021-01-01 to 2021-12-31**

Convection-permitting simulations were completed with the regional climate model COSMO-CLM with a tested configuration based on COSMO-DE over the ALP-3 domain in Europe. The CCLM model version used was CCLM5-0-15. The evaluation simulation was forced with ERA-Interim reanalysis data for the period 1999 to 2015, where the year 1999 was for model spin-up. The historical simulations were conducted from 1993 to 2005, where the first three years were for model spin-up. Furthermore, future simulations were done based on MPI-ESM-LR RCP8.5. All of the simulations were direct downscaling experiments. No intermediate nest was applied. First papers on the hindcast simulation results published. New manuscripts are currently written based on the projection results. CMORization of the simulation results and uploading to ESGF is ongoing.