

## Project title

### **Long-term simulations with improved and extended REMO versions**

## Principal investigator

Prof. Dr. Heiko Paeth

Institute of Geography and Geology

University of Würzburg

Am Hubland

97074 Würzburg

Tel.: +49 931 318 4688

Email: heiko.paeth@uni-wuerzburg.de

## Abstract

The climate modelling group at the University of Würzburg is currently working on the development of different extensions and improvements for the regional climate model REMO hosted by GERICS. Together with various national and international project partners and for a wide range of domains (Germany, The Mediterranean, Africa, Central Asia, South Asia, and Mainland Southeast Asia) we plan to improve and test the new interactive vegetation scheme, a multilayer soil scheme – optionally combined with an irrigation scheme -, the coupling with a lake model, as well as convection permitting simulations.

After checking the benefits and improving the disadvantages of the new model versions for shorter time periods we also want to calculate long-term simulations targeting future greenhouse gas and, optionally, land use and land cover scenarios.

The required storage resources of individual experiments within the respective projects are based on the postprocessing of selected variables. To perform an effective postprocessing, there is the need that we can store one entire year of raw model in- and output (required storage resources are given in brackets below) as well. We also need not only tape but also data storage in order to provide direct access to the model setups and recalculations as model development is very intense in these issues.