

The CLM-Community has performed regional climate simulations with the COSMO-CLM model at multiple domains as part of the CORDEX-CORE framework. Through CCLM2ESGF these simulations will be published on the DKRZ ESGF-node for a worldwide distribution. The model simulations are run at 0.22 horizontal resolution over the domains Africa (AFR-22), South Asia (WAS-22) and Australia (AUS-22), where for each domain three different Global Climate Models (GCMs) have been dynamical downscaled for the historical period and two different future emission scenarios (RCP2.6 and RCP8.5). In addition, for each domain an evaluation run is performed, where the ERA-INTERIM reanalysis is downscaled for minimum 30 years. A fraction of the model output has been transformed to meet international standards through a Climate Model Output Rewriting (CMOR) program, which allows the model results to be easily used for model comparison and in research projects by different groups worldwide. This is the main motivation to publish the COSMO-CLM model results on an ESGF-node, as well as that if the model results are published on an ESGF-node by the end of 2019, they will be included in the IPCC Assessment Report 6 (AR6) model Atlas, which will present the status of the climate change results for all CORDEX domain. The estimated storage size for the CMORized COSMO-CLM simulations for the three domains is 150TB.