

README concerning the CCLM-EVAL dataset available via DKRZ resource /pool/data

(Date: 28/10/2021)

Title of the Dataset

COSMO-CLM and ICON-CLM initial and boundary conditions as well as condensed results of the evaluation experiments COPAT and COPAT2 (EVAL Working Group of CLM-Community)

Path to the dataset

/pool/data/CLMcom/CCLM-EVAL

Owner / producer of the dataset

Members of CLM-Community

Data usage license

The data are provided for use with the ICON-CLM and COSMO-CLM models. By agreeing to the CLM-Community agreement (become member of CLM-Community: <https://wiki.coast.hzg.de/clmcom/become-a-member-105349265.html>), the reuse of the CCLM-EVAL dataset available via /pool/data is permitted.

Content of the dataset

COPAT/: files produced in the COordinated PARAMeter Testing (COPAT) initiative of the CLM-community: parameter testing with COSMO-CLM 5.0.

subdirectories 'ANA_CON0??': condensed result of 12 km resolution simulations

subdirectories 'ANA_CON502*': reference simulations with the standard setup of COSMO-CLM version 4.8 produced on different HPC platforms

subdirectories 'ANA_CON502_ETHZ_mem*': ensemble of reference simulations with the standard setup of COSMO-CLM version 4.8 and different initial times

subdirectories 'ANA_CON6??': test simulations with promising combinations of new parameter settings from the COPAT workflow (see CLM-community internal wiki https://redc.clm-community.eu/projects/eval/wiki/Coordinated_Evaluation_Project_-_COSMO50-CLM_Phase3)

subdirectory 'BSSmod': modified BrierSkillScore data and scripts/tool to calculate the Scores and produce the plots

subdirectories 'CON069','CON502','CON611': output variables of the reference simulations and the simulations with final recommended setup of COPAT

subdirectories 'configuration' and 'configuration_069': configuration files for set up of the model in different spatial resolutions (0.44°, 1/6°)

subdirectory 'ETOOL_v2.3': Evaluation tool used for COPAT

subdirectory 'external_parameters/': external parameter file for the recommended version of COSMO-CLM5.0.

subdirectories 'plots*': final plots produced by the COPAT initiative

COPAT2/: files belonging to the CLM-Community common efforts of COPAT2: parameter testing of COSMO-CLM6.0 and ICON-CLM

subdirectory 'check_obs': results of evaluations of observational datasets used in COAPT2

subdirectories 'config?': configuration files for reference simulations and the final recommended versions

subdirectories 'eval?': evaluation results of the analyzed test simulations

subdirectories 'eval_combined': comparison results of the final recommended versions of COSMO-CLM and ICON-CLM simulations

subdirectories 'external_parameters?': external parameter files for COSMO-CLM6.0 and ICON-CLM

subdirectories 'forcing?': ready to use forcing data for the evaluation period for COPAT2 simulations for contributions to COPAT2

subdirectory 'observationalData': collection of observational data which were used / will be used for the configuration tests. These datasets are quite useful for ICON-CLM and COSMO-CLM model evaluation.

subdirectory 'output?': data of simulations of COPAT2 with COSMO-CLM and ICON-CLM

Data usage scenarios

The data are provided for the use with ICON-CLM and COSMO-CLM model. The data are the basis for setups of ICON-CLM and COSMO-CLM. Anybody running the models of the CLM-Community requires access to the data. The coordinated configuration experiments for the new versions COSMO6.0 and the ICON-CLM shall make use of this storage in /pool/data.

Methods used for data creation

Regional atmospheric models and evaluation software of the CLM-Community.

Issues

n/a

Volume of the dataset and possible changes

44TB and up to 30TB for the new model versions of COSMO-CLM and ICON-CLM.

Time horizon of the dataset

The data are in use and should be stored for the next 5 years. The content of the directories will be adjusted to the common tasks of the CLM-Community which are not connected to other projects.