README concerning the dataset ECHAm5 available via DKRZ /pool/data resources

Date: 27 April 2022

TITLE OF THE DATASET

ECHAM5 MPI-M Atmosphere Model Version 5 initial and boundary condition data

PATH TO THE DATASET

/pool/data/ECHAM5

OWNER/PRODUCER OF THE DATASET

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DATA USAGE LICENSE

Data generated by MPI-M is provided under the CC-BY-NC-SA 4.0 license (https://creativecommons.org/licenses/by-nc-sa/4.0/). Their usage is restricted accordingly. Other data sets may come with different licenses, detailed in the files' metadata. There is no specific citation available for this data set. Individual subsets come under their own citation, detailed in the files' metadata.

CONTENT OF THE DATASET

ECHAM5 data is provided as climatology or time-series, either globally/zonally uniform or as spatial distribution data, in different horizontal and vertical or spectral-band resolutions. It also contains instructions and scripts for generating or processing ECHAM5 compatible data.

Boundary data for time-dependent quantities (historical and scenario) is available for at least 1850 - 2100. Several subsets (e.g. solar irradiation) comprise additional periods. Data is provided in NetCDF format, except for the scripts and some text files (e.g. Land Cover Types, Measuring Station Lists). Contents (variable selection) and format (gridding) of the data files is specific to ECHAM5 requirements.

DATA USAGE SCENARIOS

Access to this data is essential for all users of ECHAM5 in the versions provided by MPI-M. Though ECHAM5 applications may at some point be ported to ICON, for the upcoming years many institutions associated with DKRZ will depend on it (see https://mpimet.mpg.de/en/science/models/mpi-esm/echam)

Model use requires consent to our software license agreement (https://mpimet.mpg.de/fileadmin/projekte/ICON-ESM/mpi-m sla 201202.pdf)

METHODSUSED FOR DATA CREATION

This project comprises the input and model state data required for common ECHAM5 setups and intercomparison projects, created and compiled by different ECHAM5 developers and users. Contact data owner/responsible contact for more information

ISSUES

No

VOLUME OF THE DATASET (AND POSSIBLE CHANGES THEREOF)

Data volume: The current data volume is 0.05 TB. A total of 0.1TB has been granted.

TIME HORIZONOF THE DATASET ON / POOL/DATA

There is additional 0.03 TB of preparation scripts and base input data scheduled for addition that has so far been used and provided in dedicated project storage, but is of common interest. The data will have to be permanently made available.