README concerning the dataset ICON-CLM available via DKRZ /pool/data resources

Date: 22 April 2022

T I T L E   O F   T H E   D A T A S E T

ICON-CLM initial and boundary conditions and evaluation

P A T H   T O   T H E   D A T A S E T

/pool/data/ICON-CLM

O W N E R / P R O D U C E R   O F   T H E   D A T A S E T

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D A T A   U S A G E   L I C E N S E

The reformatted data has no special license.

For license information of the original ERAInterim and ERA5 data
see: https://docs.dkrz.de/doc/dataservices/
finding_and_accessing_data/era_data/index.html#era-data

C O N T E N T   O F   T H E   D A T A S E T

At the moment the project contains input data necessary for the
configuration of standardized
ICON-CLM simulations. It also contains CMIP6 aerosol data (70 GB)
that will be tested in ICONCLM
as soon as the new aerosol scheme is available. Furthermore, model
output (~ 345 GB)
from a first reference run with ICON-CLM is stored in the project.
This data will be used for
comparisons with test runs for new versions and configurations of
the model. This part will be
extended soon by model output from further reference evaluations on
different grid resolutions
(12 km, 3km)

D A T A   U S A G E   S C E N A R I O S

This project enables sustainable access to initial and boundary data
needed for standard
ICON-CLM experiments. The data is used directly at DKRZ by the
runtime environment of ICON-CLM,
but can also be copied to other HPC systems in case ICON-CLM input
data is needed
there. The data is needed by anybody who wants to perform evaluation
runs (or climate
simulations) with ICON-CLM. It also provides results of standardized
reference simulations which
serve as reference for further model developments and future model

versions.

Therefore, anybody running evaluation runs (reanalysis driven simulations) with ICON-CLM requires access to this data (at DKRZ, but data can also be copied to other HPC Systems in case the simulation
should be produced somewhere else).
The results of the test simulations will be analysed and compared by the CLM-Community
evaluation group to assess new versions of the model and provide recommended set ups to the
users.

METHODS USED FOR DATA CREATION

The datasets were/are created by members of the CLM-Community to be specifically used by
ICON-CLM. Please contact the data responsible persons for more information.

ISSUES

No

VOLUME OF THE DATASET (AND POSSIBLE CHANGES THEREOF)

Current volume: 51 TB, expected increase over the next 5 years: 25 TB

TIME HORIZON OF THE DATASET ON /POOL/DATA

We expect that the test simulations will start at the beginning of 2022. For this and the necessary
input and boundary data, we require 51 TB of storage, plus 5 TB for each additional year after
2022. ICON-CLM is at the beginning of its life cycle and will be used by the scientific community
in the next decades. Therefore, we apply for 5 years of storage allocation. Especially in the first
years many changes and new developments are expected that require careful testing and
evaluation of the model.