



Documentation and the data life cycle in the PMIP4-CMIP6 Database

Jean-Yves Peterschmitt (1), Sébastien Denvil (2), Guillaume Levavasseur (2), Mark Greenslade (2), and Atef Ben Nasser (2)

(1) CNRS, LSCE / IPSL, Gif-sur-Yvette, France (jean-yves.peterschmitt@lsce.ipsl.fr), (2) IPSL, UPMC, Paris, France

The Paleoclimate Modelling Intercomparison Project (PMIP) is a long standing initiative that has provided an efficient mechanism for coordinating paleoclimate modelling activities. The resulting model output database is used not only by climate modellers, but also by ecological niche modellers and other multidisciplinary research dealing with environment and society.

The fourth phase (PMIP4) has started in 2015 and the 19 modelling groups involved will run all or part of the following experiments: Last Millennium, Mid-Holocene, Last Glacial Maximum, Last Interglacial, Mid Pliocene, transient simulations and sensitivity experiments. PMIP4 follows the CMIP6 (Coupled Model Intercomparison Project) requirements, which makes it possible to use the CMIP6 database model data distribution tools (Earth System Grid Federation).

We will present the latest list of the PMIP4 participating groups and the status of the experiments they are running, and give an outline of the data life cycle in the database.

The first CMIP6 data files should be distributed on the ESGF network in mid-2018, but there is a long way from the raw model output to data files being cited in publications using PIDs (Persistent Identifiers), with lots of intermediate QC (Quality Control) steps to validate the data and document errors. The documentation is an important component of the QC and we will also present how the es-doc project will be used to document the PMIP4 models and the PMIP4 experiments.

References:

- * PMIP4: <https://pmip4.lsce.ipsl.fr>
- * ESGF: <https://esgf.llnl.gov>
- * es-doc: <https://es-doc.org>
- * PrePARE: https://cmor.llnl.gov/mydoc_cmip6_validator/
- * QC: <https://readthedocs.org/projects/qa-dkrz>
- * PID: https://esgf-data.dkrz.de/projects/esgf-dkrz/datacart_pid