Data and Analyse

Table of Content

1. Data

1.1. Start with CMIP archives

We highly recommend to read the user's guide of CMIP projects available at: ■https://pcmdi.llnl.gov/mips/

1.2. Access CMIP archives

CMIP archives are available through the ESPRI platform including CICLAD and ClimServ? machines. You can create an account on ESPRI mesocentre to transparently log to CICLAD or ClimServ? at ■https://meso-account.ipsl.fr/.

1.3. Dive into CMIP archives at IPSL

The IPSL-CM model produces CMIP-compliant files. The CMIP convention include the CF convention with additional rules from the WIP panel (ex. a CMIP file must describe only one variable). Once the IPSL-CM data are quality checked, the CMIP-compliant files are migrated to a dedicated filesystem at TGCC following the CMIP directory structure. This part of the TGCC filesystem is read-only mounted on the ESPRI mesocentre. On CICLAD and ClimServ?, the CMIP data archives are then available under :

`/bdd/CMIP6`

`/bdd/CMIP5`

The CMIP data from the other GCMs are downloaded at the IDRIS and IPSL. They are organized in the same CMIP directory structure and transparently available in the same `/bdd` root.

Example: `/bdd/CMIP5/output/IPSL` provides access to the **whole** IPSL-CM data production for CMIP5 exercice. `/bdd/CMIP5/output/BCC` provides access to BCC data requested by the IPSL community.

We adopted an "on-demand" process to add CMIP data from other GCM. Please send your request at `glipsl@ipsl.fr` with the following template:

```
cat < EOF > my_template.txt
project=CMIP5
experiments=historical amip
models=IPSL-CM5A-LR CNRM-CM5
ensembles=all
variables[atmos][3hr]=cltc tas
variables[land][fx]=sftgif
variables[seaIce][mon]=sic evap
EOF
```

1.4. What's a dataset?

A "dataset" (as defined by ESGF) is **one** version of a data set resulting from a single simulation (i.e., characterised by a unique option of each CMIP facet before the version such as the institute, the model, the domain, the experiment, the frequency, the ensemble, etc.).

Examples: CMIP5 dataset: `CMIP5/output1/IPSL/IPSL-CM5A-LR/ 1pctCO2/mon/atmos/Amon/r1i1p1/v20110427`

A dataset is the finest granularity for ESGF publication.

2. Analyse