Wikiprint Book

Title: 1. What is a configuration?

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Table of Content

The configurations

Click on the name of any model configuration for more details.

1. What is a configuration?

The IPSL climate modeling suite offers various configurations described in the mod.def file in modipsl/util. Each configuration consists of one or several model components (including the OASIS coupler) and tools. Tools are, for example, libIGCM, XIOS or IOIPSL. The supported configurations use specific versions of each model component. It is however possible to change the version of a model components and the version of the tools. To do so, you must change mod.def.

The supported configurations are maintained and updated by the working groups at the IPSL Climate Modeling Center. See the supported configurations below and click on the links for details.

2. **IPSLCM5**

- IPSLCM5_v5 : the reference coupled model used for CMIP5 simulations including atmosphere, land, ocean, sea ice and carbon cycle
- Details on the CMIP5 model and its history (between 2010 and 2012) can be found (in French) ■(pasword required at least) and ■here for its history.

3. **IPSLCM6**

- IPSLCM6 : the coupled model under development for CMIP6 simulations including atmosphere, land, ocean, sea ice and carbon cycle, OASIS3-MCT, XIOS and parallelism based on MPMD mode with hybrid parallelism (MPI/OPenMP) for LMDZ, ORCHIDEE and INCA components.

4. **LMDZOR**

LMDZOR: forced configuration with the atmosphere LMDZ and land surface ORCHIDEE. 2 versions are currently maintained:

- LMDZOR_v5: Using LMDZ5 trunk and ORCHIDEE version CMIP5
- LMDZOR_v5.2: Using same LMDZ5 and the trunk ORCHIDEE

5. **LMDZORINCA**

- LMDZORINCA_v5: the atmosphere-land version of IPSLCM5 including tropospheric chemistry
- LMDZORINCA_v6: the atmosphere-land version of IPSLCM6 including tropospheric chemistry

6. **LMDZREPR**

LMDZREPR_v5: the atmosphere-land version of IPSLCM5 including stratospheric chemistry

7. **IPSLCM5CHT**

IPSLCM5CHT_v5: reference coupled model including tropospheric chemistry

8. **IPSLCM5CHS**

IPSLCM5CHS_v5: reference coupled model including stratospheric chemistry

9. **NEMO**

NEMO: ocean-only version including sea ice and marine biogeochemistry

10. **ORCHIDEE_OL**

ORCHIDEE_OL: offline configurations with the land surface model ORCHIDEE. 3 differents version are available:

- ORCHIDEE_SVN_AR5: using version CMIP5 of ORCHIDEE
- ORCHIDEE_TAG: using the tag 1.9.6 of ORCHIDEE
- ORCHIDEE_trunk: using the latest version of the trunk ORCHIDEE

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