Wikiprint Book

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Tools developed by IPSL and IPSL partners

Many software programs are developed at IPSL (see list below).

1. libIGCM

Detailed information about how to use and implement **libIGCM** for the IPSL configurations can be found ■here.

2. modipsl

modipsl is a suite of scripts which allow you to :

- obtain a given model configuration from a server;
- compile a configuration on a specific machine.

More information on how to retrieve and use modipsl can be found here?.

3. XIOS

XIOS (XIOS stands for XML-IO-SERVER) is a library which allows you to manage I/Os in climate models in a flexible and efficient way. More information can be found ■here.

4. IOIPSL and REBUILD

4.1. IOIPSL

IOIPSL is an I/O library for the IPSL models. This library is not being further developed (except to fix bugs). The XIOS library will replace IOIPSL in the IPSL models.

4.2. Rebuild

Rebuild is a tool which allows you to concatenate a number of model output files (NetCDF). At the end of a simulation, files for each process are assembled to a global grid into one final output file. Rebuild is developed at IPSL and is a fortran code included in IOIPSL extended version.
For each machine a Rebuild executable is provided in the shared tools folder. You can also compile your own executable adapted to your machine, see how to install here.

5. AddNoise

AddNoise allows you to apply an equi-distributed white noise which amplitude can be specified in a restart file in order to prepare ensemble experiments.

6. FAST/ATLAS

7. WEB applications

■http://webservices.ipsl.fr/

7.1. Trusting

■http://webservices.ipsl.fr/trusting/

7.2. Intermonitoring

■http://webservices.ipsl.fr/monitoring/

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8. OASIS

OASIS is a tool developed at Cerfacs (Toulouse, France) which allows you to couple different climate model components. It allows the synchronized exchange of information between the model components. OASIS is used in the IPSL Earth System model to couple NEMO (the ocean model) and LMDZ (the atmospheric model). The modipsl and libIGCM tools manage the OASIS' setup and compilation.

More information on OASIS is available ■here.