Repository for shared files and shared tools

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1. Repository for shared files IGCM

The files needed to run the models (initial conditions, boundary conditions, forcings) are stored in IGCM directory at shared accounts. The shared accounts from the different computing centres are regularly synchronized. The synchronization procedure between different computing centers is done manually on demand. The `IGCM` folder exists at TGCC, at IDRIS, at IPSL and at LSCE(part of IGCM only). If you need to add or modify a file on these spaces, contact the group Plateforme. The `IGCM` directory is located in the storage spaces of each computing centers.

This common directory is defined in `libIGCM/libIGCM_sys`, by the variable `R_IN`. We're not allowed to publish on the wiki the complete path at national computer centers but you can find it in modipsl/libIGCM/libIGCM_sys.

- At TGCC : **R_IN = igcmg** shared space in work
- At IDRIS : **R_IN = rech/psl/commun/IGCM** on the workdir
- At LSCE, obelix : **R_IN=/home/orchideeshare/igcmg/IGCM**
- At IPSL, ciclad/climserv : **R_IN=/projsu/igcmg/IGCM**
- There is also an access available on the web : ■https://vesg.ipsl.upmc.fr/thredds/catalog/igcmg/IGCM/catalog.html

In IGCM, the following sub directories exist:

   `IGCM/ATM` -> input files for the atmospheric model LMDZ

- `IGCM/ATM/LIMIT` -> Boundary condition files limit.nc files need by LMDZ model for several initial boundaries files (ice and sea surface temperature).
- `IGCM/ATM/NUDGING_FILES` -> Nudging files for LMDZ

   `IGCM/SRF` -> input files for the land surface model ORCHIDEE.

- `IGCM/SRF/METEO` -> forcing files for ORCHIDEE offline
- `IGCM/CHM` -> Input files for the chemistry model INCA
- `IGCM/OCE` -> Input files for the ocean system NEMO (OPA, LIM, PISCES)
- `IGCM/CPL` -> Input files for the coupler OASIS
- `IGCM/RESTART` -> Restart files for reference simulations

Some more files for nudging of LMDZ can be found at TGCC. [Read more here](#).

2. Common tools

2.1. General environment

On each computing center, a directory MachineEnvironment with one subdirectory per computing center is installed. In each of them there are files to help you to properly setup the environment which will allow you to use the IPSL models and tools on this specific computing center.
Read the web page of a specific computing center to know how install your environment:

- [TGCC](#): at home igcmg space
- [IDRIS](#): at work psl/common space
- [IPSL(Ciclad/ClimServ)](#): currently not installed
- [LSCE(obelix)](#): at home orchideeshare igcmg

2.2. Rebuild

When the model is in parallel mode and the parallel I/O are not activated (working without XIOS server), the outputs are truncated into different files (one per MPI process), each of them only containing part of the computation domain. The rebuild phase allows to reconstruct the complete file covering the whole domain.

The rebuild tools are used by the IPSL models in the post-processing phase. The rebuild can also be done interactively.

Tools are stored :

- at irene : `ccc_home -u igcmg`/Tools/irene/rebuild/modipsl_IOIPSL_PLUS_v2_2_4/bin/rebuild
- at obelix :
- at jean zay :

2.3. Post processing tools

The fast and atlas tools used by the post processing are also stored on a shared space. Others files required by fast and atlas are stored in database directory.

- At TGCC: `ccc_home -u igcmg`/Tools/fast/
- At IDRIS: