

ICOLMDZOR_v7

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ICOLMDZOR_v7_work is a configuration under construction. Contact one of the persons in charge before first use.

Person in charge: Josefina Ghattas, Arnaud Caubel

1. Description

ICOLMDZOR is a configuration coupling DYNAMICO, LMDZ physics and ORCHIDEE.

1.1. Computing centers

ICOLMDZOR_v7_work is currently only maintained at irene/TGCC.

1.2. Compilation

Compilation is done using a script compilation_icolmdzor.sh available in modipsl/config/ICOLMDZOR. The script detects on which computing center the installation is done and sources modules needed for compilation. The same modules will be sourced during run time by libIGCM. The module file is set in the folder modipsl/config/ICOLMDZOR/ARCH/.

1.3. Running

- The resolution is given by the parameters RESOL_NBP and RESOL_ATM_Z set in dynamico.card. Input files for resolution RESOL_NBP=40 and RESOL_NBP=160 exist on the shared repository.
- Output level and frequency for LMDZ and ORCHIDEE is set in corresponding comp.card : lmdz.card, orchidee.card and stomate.card

2. Quick installation guide

```
# Install modipsl
svn co http://forge.ipsl.jussieu.fr/igcmg/svn/modipsl/trunk modipsl
cd modipsl/util

# Download and compile configuration ICOLMDZOR_v7_work
./model ICOLMDZOR_v7_work
cd ../config/ICOLMDZOR_v7
./compile_icolmdzor.sh [-debug, ...]

# Experiment setup
cp EXPERIMENT/ICOLMDZOR/highresmip/config.card .      # => modify at least JobName=MyJobname, DateBegin, DateEnd in config.
../../libIGCM/ins_job
cd MyJobname

# Modify default setup:
# for example change atmospheric resolution nbp, output level, parameter setup or input files

ccc_msub Job_MyJobname
```

3. Trick to prepare a run directory corresponding to a predefined experiment

If you need for development purpose work directly in the run directory without launching with libIGCM, you can prepare the run directory using following:

```
# Prepare the main job as above

# In the main Job_MyJobname, add exit after the line
echo "#      DIR BEFORE RUN EXECUTION      #"
exit

# Launch the job:
ccc_msub Job_MyJobname
```

```
# Find the path to the run directory
grep RUN_DIR Script_Output_MyJobname.0001

# All input files and executables now exist in the RUN_DIR but you need to write the job to launch yourself
```