

Hands on tutorial session 1: First steps with the model (update on the last section)

The LMDZ team

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1 Preparing things for tomorrow's course (updated)

Tomorrow you will need to run the model (at 48×36 -L39 resolution) and investigate the outputs. To prepare things for that you must, in a dedicated directory, run the model for 1 day instead of 5.

- go to LMDZtesting/modips1/modeles/LMDZ5 and use the file called:

```
bench_lmdz_48x36x39.tar.gz
```

to create a new experiment:

```
mv BENCH48x36x39 BENCH48x36x39_old
tar -xf bench_lmdz_48x36x39.tar.gz
cd BENCH48x36x39
```

- make sure that `nday=1` in `run.def`
- to avoid recompiling the code, just create a link to the executable you have already compiled before:

```
ln -s ../BENCH48x36x39_old/gcm.e .
```

- open the `config.def` files and after the section where the outputs are defined:

```
phys_out_filekeys=      y      y      y      y      n
phys_out_filenames=    histmth histday histhf  histins histLES
phys_out_filetimesteps= 5day   1day   1TS    6hr    6hr
phys_out_filelevels=   10     5     1     4     4
phys_out_filetypes=    ave(X)  ave(X)  inst(X) inst(X) inst(X)
```

add these lines:

```
flag_vitu= 0 0 1 0 0
flag_vitv= 0 0 1 0 0
flag_du_gwd_hines= 0 0 1 0 0
flag_dv_gwd_hines= 0 0 1 0 0
flag_duoro= 0 0 1 0 0
flag_dvoro= 0 0 1 0 0
flag_dulif= 0 0 1 0 0
```

```
flag_dvlif= 0 0 1 0 0
flag_dthin= 0 0 1 0 0
flag_dtoro= 0 0 1 0 0
flag_dtlif= 0 0 1 0 0
```

```
ok_hines=y
```

- Run the model using `./gcm.e > listing`.