

Inca How To
28 may 2013

News

- There is a new tag for libIGCM : libIGCM_v2.0 → on curie add the group number on job's header. It ask the question with the command `ins_job`

```
Hit Enter or give project ID (default is gen2201):
```

- `ccc_quota` → give your score on storedir

```
[p24cozic@curie71]$ ccc_quota
```

Filesystem	volume (TB)	inodes	non_files	files<32M	files<1G
avg_fsize (MB)	score	score_detail			
store	5.363	6510	17.77%	56.12%	73.17%
1051	6/20	3/6	, 0/7	, 0/3	, 3/4

Inca.def

- Parameter file → PARAM/inca.def
 - `climatological` → n = use 10m forcing, y= use 10m calculate
 - `freq_write_chem` → indicate in seconds output frequency (inca_avgr file)
 - `feedb` → 1= aerosol effect on climate, 0= no aerosol effect on climate
- Possibility to add new parameters

Aerosols

- Since rev 1759 (`svn info` to know with which version you are running)
 - To deactivate aerosol effect on climate
 - `aerosol_couple=n` (in `lmdz.card`)
 - `flag_aerosol=0` (in `lmdz.card`)
 - `feedb=0` (in `inca.card`)
 - other aerosols parameters (in `lmdz.card`)
 - `ok_ade` (direct effect)
 - `ok_aie` (indirect effect)
 - `read_climoz` (read ozone climatology)
 - `ok_cdnc` (Cloud droplet number concentration)
 -

Monitoring your simulation

There is a new tool for this : RunChecker.job

```
Path/to/libIGCM/RunChecker.job [-u user] [-p path]  
job_name
```

-u user : starts the checker for the simulation of another user

-p path : absolute path of the directory containing the config.card for this simulation

curie > ../../../../libIGCM/RunChecker.job -p .

```

=====
Where do we run ? curie71
Linux curie71 2.6.32-220.23.1.el6.Bull.28.8.x86_64 #1 SMP Thu Jul 5 16:46:35 CEST 2012 x86_64 x86_64 x86_64 GNU/Linux
=====

```

```

sys source curie Intel X-64 lib.
Target user = p86maf
CURFEV13 p86maf curie .
Submit: >.<

```

```

Data: >/ccc/store/cont003/dsm/p86maf/IGCM_OUT/IPSLCM5A/DEVT/pdControl/CURFEV13<
Rebuild: >/ccc/scratch/cont003/dsm/p86maf/REBUILD/IPSLCM5A/CURFEV13<
Post: >/ccc/scratch/cont003/dsm/p86maf/IGCM_OUT/IPSLCM5A/DEVT/pdControl/CURFEV13/Out<
Work: >/ccc/work/cont003/dsm/p86maf/IGCM_OUT/IPSLCM5A/DEVT/pdControl/CURFEV13<

```

```

=====
| JobName = CURFEV13 | run.card : 16/02/13 17:32:31 | | | | |
|---|---|---|---|---|---|
| Date Begin - DateEnd | PeriodState | Current Period | CumulPeriod | Nb | Pending Rebuilds |
|-----|-----|-----|-----|-----|-----|
| 2000-01-01 - 2009-12-31 | Running | 2004-02-01 - 2004-02-28 | 50 | 8 : 20030601 : 20040101 |
|-----|-----|-----|-----|-----|-----|
|                               |                               |                               |                               |                               |                               |
|                               |                               |                               |                               |                               |                               |
|                               |                               |                               |                               |                               |                               |
|                               |                               |                               |                               |                               |                               |
|                               |                               |                               |                               |                               |                               |
|                               |                               |                               |                               |                               |                               |
|                               |                               |                               |                               |                               |                               |
|                               |                               |                               |                               |                               |                               |
|                               |                               |                               |                               |                               |                               |
|                               |                               |                               |                               |                               |                               |
|-----|-----|-----|-----|-----|-----|

```

```

16/02/13 17:34:50
curie > █

```

```
[labetoul@curie71 libIGCM]$ ./RunChecker.job -j 40 -u p86maf v5.rcp85MR1
```

```
Where do we run ? curie71
```

```
Linux curie71 2.6.32-220.23.1.bl6.Bull.28.8.x86_64 #1 SMP Thu Jul 5 16:46:35 CEST 2012 x86_64 x86_64 x86_64 GNU/Linux
```

```
sys source curie Intel X-64 lib.
```

```
Target user = p86maf
```

```
Submit: >/ccc/work/cont003/dsm/p86maf/CURIE/CMIP5/R1414/IPSLCM5A_20120731/modipsl/config/IPSLCM5A/v5.rcp85MR1<
```

```
Data: >/ccc/store/cont003/dsm/p86maf/IGCM_OUT/IPSLCM5A-MR/PROD/rcp85/v5.rcp85MR1<
```

```
Rebuild: >/ccc/scratch/cont003/dsm/p86maf/REBUILD/IPSLCM5A-MR/v5.rcp85MR1<
```

```
Post: >/ccc/scratch/cont003/dsm/p86maf/IGCM_OUT/IPSLCM5A-MR/PROD/rcp85/v5.rcp85MR1/Out<
```

```
Work: >/ccc/work/cont003/dsm/p86maf/IGCM_OUT/IPSLCM5A-MR/PROD/rcp85/v5.rcp85MR1<
```

```
JobName = v5.rcp85MR1
```

```
a run.card : 12/12/12 04:26:36
```

Date Begin - DateEnd	PeriodState	Current Period	CumulPeriod	Pending Rebuilds Nb : from : to
2101-01-01 - 2300-12-31	Fatal	2139-08-01 - 2139-08-31	464	4 : 21200601 : 21390701

Rebuild	Pack_Output	Pack_Restart	Pack_Debug	Monitoring	Atlas
21190630 : 480	21011231 : 32	21011231 : 1	21011231 : 1	2110	SE_2101_2110
21191231 : 480	21021231 : 32	21021231 : 1	21021231 : 1		SE_2121_2130
21200630 : 405	21031231 : 32	21031231 : 1	21031231 : 1		
21201231 : 403	21041231 : 32	21041231 : 1	21041231 : 1		
21210630 : 480	21051231 : 32	21051231 : 1	21051231 : 1		
21211231 : 480	21061231 : 32	21061231 : 1	21061231 : 1		
...
21341231 : 480	21321231 : 32	21321231 : 1	21321231 : 1		
21350630 : 480	21331231 : 32	21331231 : 1	21331231 : 1		
21351231 : 480	21341231 : 0	21341231 : 1	21341231 : 1		
21360630 : 480	21351231 : 1	21351231 : 1	21351231 : 1		
21361231 : 480	21361231 : 1	21361231 : 1	21361231 : 1		
21370630 : 480	21371231 : 1	21371231 : 1	21371231 : 1		
21371231 : 480	21381231 : 1	21381231 : 1	21381231 : 1		
21380630 : 480	:	:	:		
21381231 : 480	:	:	:		
21390630 : 480	:	:	:		

```
12/12/12 15:06:33
```

```
[labetoul@curie71 libIGCM]$
```

Porting on curie

- Verify your environment (fcm / netcdf / ferret)
- Minimum to compile :
 - LMDZ/arch/arch-X64_CURIE.fcm / path
 - INCA/arch/arch-X64_CURIE.fcm / path
- → extract LMDZORINCA_v5 and change only LMDZ/libf/ and INCA/src/ directories
- → be careful
 - for INP/inca_....inp if you change it report difference in INP/inca_...def
 - For configuration scripts if you were using LMDZORINCA and not _v5, report difference in the new config (do not use anymore old config)

- Warning : nudge on old LMDZ rev (1628 and before) doesn't work on curie

My advice : include your modifications in the last version.