

CLM3.5 Quickstart guide

Quickstart guide to using CLM3.5

This is a short description of how to use the CLM3.5 public release.

Download source and datasets

1. Register and login to the Earth System Grid (ESG) and download the three tar-files needed (source-code, NCEPDATA, and inputdatasets). [ESG CLM3.5 website](#)
2. Decompress (gunzip) each using:

```
gunzip clm3.5_rel3.code.c070524.tar.gz
gunzip clm3.5_inputdata.c070517.tar.gz
gunzip clm3.5_Qian.T62.NCEPDATA.c051024.tar.gz
```

3. Un-archive each using:

```
tar xvf clm3.5_rel3.code.c070524.tar
tar xvf clm3.5_inputdata.c070517.tar.gz
tar xvf clm3.5_Qian.T62.NCEPDATA.c051024
```

Running the model

1. cd clm3.5/bld
2. Edit either the run-pc.csh or run-ibm.csh scripts (depending on platform you are running on).
3. Make sure a valid account number is in the script (on NCAR supercomputers).
4. Put clmroot as the root path to where you installed clm3.5.
5. Put CSMDATA as the root path to where you installed the clm3.5 datasets.
6. Submit the script to the batch system.

Running on bluevista

7. When you edit run-ibm.csh make sure you put your account number in the job que commands (under #BSUB -P).
8. To submit use:

```
bsub < run-ibm.csh
```

9. The results from the simulation will appear in /ptmp/\$USER/clmrun.

Running with modifications

10. Edit the run script to change the case name (output will then appear in /ptmp/\$USER/\$case).

```
set case = clmrun
```

11. Edit the run script and make relevant configuration changes (either change settings in the script or add valid configure script options to the configure line).

```
cfgdir/configure $flags || echo "configure failed" & exit 1
```

12. Edit the run script and make relevant namelist changes.
13. Remove the \$blddir/config_cache.xml file – to enable the script to redo the configuration (\$blddir will be /ptmp/\$USER/\$case/bld).
14. Add code modifications by putting modified code into clm3.5/bld/usr.src.
15. Submit your run script again.

Running the test-suite

16. cd clm3.5/test/system
17. Edit test_driver.sh to put the correct path for dataroot in it.
18. Submit the script by simply running it (will work on bluevista or blueice and submit itself to the queuing system):

```
test_driver.sh
```

19. If your machine is not available in the list – you'll have to edit test_driver.sh for the correct paths, datasets, and batch commands.
20. If you need to run on a new platform – you'll also have to edit the Makefile.in and configure scripts in the clm3.5/bld directory.

