CMIP6

So once you login to the NCAR Cheyenne machine, you can get the data at:

`cd /glade/collections/cmip/CMIP6/CMIP/NCAR/CESM2/historical/r10i1p1f1/`

for the first ensemble member. There are several folders within this directory for each of the variables of interest. For the surface_snow_thickness, the variable name is snd. You can find the files for the historical run here:

`/glade/collections/cmip/CMIP6/CMIP/NCAR/CESM2/historical/r10i1p1f1/LImon/snd/gn/latest`

4:52

There are four files within this directory:

snd_LImon_CESM2_historical_r10i1p1f1_gn_185001-189912.nc

snd_LImon_CESM2_historical_r10i1p1f1_gn_195001-199912.nc

snd_LImon_CESM2_historical_r10i1p1f1_gn_190001-194912.nc

snd_LImon_CESM2_historical_r10i1p1f1_gn_200001-201412.nc

for the historical 164 years. You can just look at the last file (2000 to 2014) data for the historical run.

4:54

The future runs are here:

`cd`
`/glade/collections/cmip/CMIP6/ScenarioMIP/NCAR/CESM2/ssp585/r10i1p1f1/LImon/snd/gn/latest`

4:54

This directory has 2 files:

snd_LImon_CESM2_ssp585_r10i1p1f1_gn_201501-206412.nc

snd_LImon_CESM2_ssp585_r10i1p1f1_gn_206501-210012.nc

You can just use the second file and subset the data for the last 15 years (2086 to 2100) for the comparison to the historical run

```
                    peizhihao — ssh -Y peizhi@cheyenne.ucar.edu — 80×24
Creating component namelists
Finished creating component namelists
Check case OK
submit_jobs case.run
Submit job case.run
Submitting job script qsub -q regular -l walltime=12:00:00 -A UCUB0096 -v ARGS_F
OR_SCRIPT='--resubmit' .case.run
Submitted job id is 5291853.chadmin1.ib0.cheyenne.ucar.edu
Submit job case.st_archive
Submitting job script qsub -q share -l walltime=0:20:00 -A UCUB0096  -W depend=a
fterok:5291853.chadmin1.ib0.cheyenne.ucar.edu -v ARGS_FOR_SCRIPT='--resubmit' ca
se.st_archive
Submitted job id is 5291855.chadmin1.ib0.cheyenne.ucar.edu
Submitted job case.run with id 5291853.chadmin1.ib0.cheyenne.ucar.edu
Submitted job case.st_archive with id 5291855.chadmin1.ib0.cheyenne.ucar.edu
[peizhi@cheyenne3:~/cases/B1850_2X> qstat -u peizhi                            ]
                                                      Req'd  Req'd   Elap
Job ID          Username Queue    Jobname    SessID NDS TSK Memory Time  S Time
--------------- -------- -------- ---------- ------ --- --- ------ ----- - -----
5291855.chadmin peizhi   shareex  st_archive    --    1   1     -- 00:20 H   --

5291853.chadmin peizhi   regular  run.B1850_    --   16 576     -- 12:00 Q   --

peizhi@cheyenne3:~/cases/B1850_2X> █
```