Exercise 5.

Do a startup run. Change the atm/lnd timestep to 900 seconds. (Default value is 1800). Run 1 month. Be sure all time steps are compatible. Be sure to update your README.case file to keep track of your changes. Review logs to verify time step changes.

900 seconds = 15 minutes, or 4 x per hour

24hours * 4 timesteps x per hour = 96 coupling intervals per day

1. ./create_newcase -case ~/cases/b.day2.5 -res T31_gx3v7 -mach yellowstone -compset B_1850_CN

cd ~/cases/b.day2.5

2. ./xmlchange STOP_N=1,STOP_OPTION=nmonths,RUN_TYPE=startup

3. ./xmlchange -file env_run.xml –id ATM_NCPL -val 96

4. ./cesm_setup

5. Manually update README.case

6. ./b.day2.5.build

7. ./b.day2.5.submit

NOTE: this is a startup run, and not a hybrid, note the different initial conditions across the model components.

Exercise 6:

Branch from Exercise.5. Include all Exercise 5 modifications. Change the snow albedoes in the ice model. Did you check the documentation? Run 1 month. If you like, resubmit and continue the run for 1 more month.

1. ./create_newcase -case ~/cases/b.day2.6 -res T31_gx3v7 -mach yellowstone -compset B_1850_CN

cd ~/cases/b.day2.6

2. ./xmlchange STOP_N=1,STOP_OPTION=nmonths

3. ./xmlchange -file env_run.xml –id ATM_NCPL -val 96

4. ./xmlchange -file env_run.xml -id CICE_NAMELIST_OPTS –val albsnowi=.315,albsnowv=.455
(this is one line)

5. ./xmlchange RUN_TYPE=branch,RUN_REFCASE=b.day2.5,RUN_REFDATE=0001-02-01,GET_REFCASE=FALSE
(this is one line)

6. ./cesm_setup

7. Update README.case

8. ./b.day2.6.build

9. cp /glade/scratch/$LOGNAME/archive/b.day2.5/rest/0001-02-01-00000/* /glade/scratch/$LOGNAME/b.day2.6/run/.
(this is one line)

10. ./b.day2.6.submit

Notes: restart files may still be in exercise 5 rundir, you can copy them from this space too. Also, if the students are hybrid starting from a different date, the date stamp will be different than the above example.