

Exercise 6.

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.day2.6 -res T31_gx3v7  
-mach yellowstone -compset B_1850_CN
```

```
cd ~/cases/b.day2.6
```

```
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.day2.6.build
```

```
7. ./b.day2.6.submit
```

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

Exercise 7:

Branch from Exercise.6. Include all Exercise 6 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.day2.7 -res T31_gx3v7 -
mach yellowstone -compset B_1850_CN
```

```
cd ~/cases/b.day2.7
```

```
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.day2.6,RUN_REFDATE=0001-02-
01,GET_REFCASE=FALSE
    (this is one line)
```

```
6. ./cesm_setup
```

```
7. Update README.case
```

```
8. ./b.day2.7.build
```

```
9. cp /glade/scratch/$LOGNAME/archive/b.day2.6/rest/0001-02-
01-00000/* /glade/scratch/$LOGNAME/b.day2.7/run/
    (this is one line)
```

```
10. ./b.day2.7.submit
```

Notes: restart files may still be in exercise 6 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.