

### Exercise 3:

Repeat Exercise 2, except BRANCH from the end of Exercise.2.

Turn off ice runoff in the land model and quadruple CO2. Run 1 month.

```
1. create_newcase -case ~/b.day2.3 -res T31_gx3v7 -mach bluefire
   -compset B_1850_CN
```

```
   cd ~/b.day2.3
```

Notes: can't clone exercise 2. exercise 2 is a hybrid and exercise 3 is a branch.  
too many subtle script differences

```
2. xmlchange -file env_run.xml -id INFO_DEBUG -val 2
   xmlchange -file env_run.xml -id STOP_N -val 1
   xmlchange -file env_run.xml -id STOP_OPTION -val nmonths
```

```
3. vi (or emacs) env_run.xml to change LOGDIR to /ptmp/$CCSMUSER/logs/$CASE, or
   xmlchange -file env_run.xml -id LOGDIR -val '/ptmp/$CCSMUSER/logs/$CASE'
```

```
4. xmlchange -file env_conf.xml -id CCSM_CO2_PPMV -val 1138.8
```

```
5. xmlchange -file env_conf.xml -id CLM_NAMELIST_OPTS -val ice_runoff=.false., or
   don't specify anything for ice_runoff...default value is false
```

\*\*\*Stuff for FOR BRANCH

```
6. xmlchange -file env_conf.xml -id RUN_TYPE -val branch
7. xmlchange -file env_conf.xml -id RUN_REFDATE -val 0001-02-01
8. xmlchange -file env_conf.xml -id RUN_REFCASE -val b.day2.2
9. xmlchange -file env_conf.xml -id GET_REFCASE -val FALSE
***end Stuff for FOR BRANCH
```

NOTES: steps 7 and 8 refer to the restart files created at the end of exercise 2.  
if the students run a different time length, then they can restart from  
whatever restart files they have.

```
10. configure -case
```

```
11. Manually update your README.case file to reflect changes
```

```
12. b.day2.3.bluefire.build
```

\*\*\*Stuff for FOR BRANCH

```
13. cp /ptmp/$LOGNAME/archive/b.day2.2/rest/0001-02-01-00000/rpointer*
   /ptmp/$LOGNAME/b.day2.3/run/.
   cp /ptmp/$LOGNAME/archive/b.day2.2/rest/0001-02-01-00000/b.day2.2*
   /ptmp/$LOGNAME/b.day2.3/run/.
```

Notes: restart files may still be in exercise 2 rundir, you can copy them from  
this space too. Also, if the students are branching from a different date,  
the date stamp will be different than the above example.

\*\*\*end Stuff for FOR BRANCH

14. Edit `b.day2.3.bluefire.run` and add the following to BSUB lines:

a) `#BSUB -P 37591059`

b) `#BSUB -U 37591059#1`

Note this is for tutorial purposes ONLY.

15. `b.day2.3.bluefire.submit`