Changing Dates of a Run

Either use the `xmlchange` function or open the env_run.xml and edit directly to alter:

```
./xmlchange RUN_STARTDATE=$run_start
./xmlchange STOP_OPTION=$stop_option
./xmlchange STOP_N=$stop_n
```

These are by default `RUN_STARTDATE` = 2005-01-01, `STOP_OPTION` = ndays, and `STOP_N` = 5, the recommended "out-of-the-box" test set-up.

`RUN_STARTDATE` has format YYYY-MM-DD. *** Be sure to change the meteorological forcing files used and that emissions cover the dates specified***.

`STOP_OPTION` has many options including ndays, nmonths, or nyears (see `env_run.xml` for more options). `STOP_N` will stop after the specified number of `STOP_OPTION` increments. For example the default:

```
STOP_OPTION = ndays
STOP_N = 5
```

will stop simulations after 5 days. Depending on your set-up and computational resources, it is usually recommended to run 6 to 12 months at a time, after testing phase with 5-days is complete and the experimental runs are begun.

You will also need to point to **initialization** files by updating the path by adding the following to `user_nl_cam`:

```
&cam_initfiles_nl
 ncdata = '$path_to_init_file'
/
```

as well as the land initialization in `user_nl_clm`:

```
finidat = '$path_to_init_file'
use_init_interp = .true.
```

Publicly available initialization files from CESM2 are available, check out this page: Restart Files

Initialization files are written out from a previous CESM1 simulation and specify initial states of chemical fields, instead of spinning up from zero. Another option is to use the default initialization file, perform a one-year spin up and re-initialize with the output from that simulation to minimize the initial condition influence.

> Some initialization files can be found on Cheyenne mass storage system (HPSS):
>
> Every year from 1993-2015: /home/buchholz/CESM206_CAMchem_longrun_fmerra_branchbase
>
> Every year from 1975-1993: /home/buchholz/CESM206_CAMchem_longrun_fmerra