



CESM Postprocessing

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Quick look tools.

```
module load ncview
```

```
module load nco
```

```
module load netcdf
```

```
ncview file.nc
```

```
ncra files.nc files_avg.nc
```

```
ncdump -h file.nc | less
```

```
ncdiff file1.nc file2.nc diff.nc
```

Some canned plots.

```
cd ~/PWS2019/day1  
    ice_north.ncl / ice_south.ncl  
    ice_north.py / ice_south.py  
module load ncl  
ncl ice_north.ncl
```

Some canned plots (2).

Open a DAV (casper) window:

```
execdav
```

```
module load python
```

Open python virtual environment:

```
ncar_pylib
```

```
python ice_north.py
```


https://github.com/NCAR/CESM_postprocessing/wiki/cheyenne-and-DAV-quick-start-guide

GitHub, Inc. [US] | https://github.com/NCAR/CESM_postprocessing/wiki/cheyenne-and-DAV-quick-start-guide

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cheyenne and DAV quick start guide

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Cheyenne and DAV Quick-Start Guide

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NCAR Cheyenne/DAV users may follow these steps to get started in using the CESM python based post processing tools:

1. Set up your shell environment with variable POSTPROCESS_PATH to point to the pre-installed virtualenv and an alias to activate the virtualenv on cheyenne before running create_postprocess. This step only needs to be done once.

For tcsh users, in your .tcshrc add the following lines:

```
### CESM Postprocessing
setenv POSTPROCESS_PATH /glade/p/cesm/postprocessing
alias cesm_pp_activate 'source $POSTPROCESS_PATH/cesm-env2/bin/activate.csh'
```

For bash or ksh users, in your .profile add the following lines:

```
### CESM Postprocessing
export POSTPROCESS_PATH=/glade/p/cesm/postprocessing
alias cesm_pp_activate='. $POSTPROCESS_PATH/cesm-env2/bin/activate'
```

Home

[Cheyenne and DAV Quick Start Guide](#)

* NO LONGER SUPPORTED as of 9/20/18 * [Cheyenne and Geyser Quick Start Guide \(v0.3.z\)](#)

[Processor-counts, load-balancing and memory management on Cheyenne and Geyser](#)

[CESM Python Post Processing User's Guide](#)

[CESM Python Post Processing Developer's Guide](#)

[CESM Python Post Processing](#)

CESM Postprocessing Quick Start

`cesm_pp_activate`

`create_postprocess --caseroot $CASEROOT --with-dav
/glade/p/cesm/postprocess_dav`

Edit `env_postprocess.xml` for standalone case.

Edit `env_diags_($comp).xml` file.

`sbatch ($comp)_averages`

Check logs in logs subdirectory.

`sbatch ($comp)_diagnostics`

* I will have ascii instructions in:

`~/PWS2019/day1/polar3.txt and polar4.txt`

CESM Postprocessing Exercise

1. Set up standalone post-processing for your first model case. Note, you have only 5 days in your simulation.
2. Run the diagnostic suite for your component of interest (atm, ice, lnd, ocn).
3. Copy the html files back to your laptop and use a web browser to look at them.

CESM Postprocessing

Exercise cont

But Dave, I only have 5 days! That's o.k. because like a cooking show, I have already baked some simulations for you!

`/glade/p/cesm/pcwg/PWS2019_data/day1/polar_case1`

`/glade/p/cesm/pcwg/PWS2019_data/day1/polar_case2`



CESM Postprocessing

Exercise cont

4. Set up standalone post-processing for your second model case. Note, you have only 5 days in your simulation.
5. Run the diagnostic suite, but this time comparing polar_case2 back to polar_case1, for your component of interest (atm, ice, lnd, ocn).
6. Copy the html files back to your laptop and use a web browser to look at them.

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Exercise cont

What if my diagnostics did not come out? Again, like a cooking show, I have already baked some diagnostic plots for you:

http://webext.cgd.ucar.edu/polar_tutorial/polar_case1

http://webext.cgd.ucar.edu/polar_tutorial/polar_case2

