I recommend that you start with the following structure for running the dynamical cores on the NCAR high performance computing system. You can customize things to your liking as you become familiar with the model.

1) An overview of the file system: where to put code, run the model, and store the output. Where ever you see "userID" that means your login ID i.e. "gerber" for me.

`/blhome/userID`

This is a place for codes, scripts, etc., but not data. This is backed up, but small. We put the model code here, and any scripts for running and analyzing the output.

`/ptmp/userID`

This is a place to run the models and analyze output, but is not backed up. Data can be deleted from here if not used.

Model output, etc., can be archived on the "mass storage system," or MSS. I believe CISL has user guides for using the MSS. It does require an account, as there is a charge for data storage.

2) Get the codes, scripts, etc. Here we copy the key files from directory. I'm first going to suggest this rather quick and dirty way to get going. In a separate write up I'll explain how to compile the core on your own.

Start in your home directory:

```
> cd
```

Create a place to put all the climate model related stuff:

```
> mkdir models
```

Get the code from my home directory. I've already compiled it and produced executables. I suggest to put it in a subdirectory "code"

```
> mkdir models/code/
> cp -r /blhome/gerber/models/code/memphis models/code/
```

Get the scripts to run the model. I suggest to store them in a new "jobs" subdirectory.

```
> mkdir models/jobs
> mpdir model/jobs/job.output
> cp /blhome/gerber/models/jobs/template.iterate.ibm models/jobs/
> cp /blhome/gerber/models/jobs/create_runscript.csh models/jobs/
```

The directory job.output will be where the code writes out the standard output and errors when its running in the queue. Lastly, get the parameters for a few basic runs:

```
> mkdir models/run_parameters
```

This is the standard Held-Suarez simulation, for the spectral model, run at T42 horizontal resolution with 20 evenly space sigma levels:

```
> cp -r /blhome/gerber/models/run_parameters/t42l20e_hs models/run_parameters/
```

This is the Polvani-Kushner GCM, with gamma = 2 and no topography (Integration 3 of Gerber and Polvani 2009 (hereafter GP09)

```
cp -r /blhome/gerber/models/run_parameters/t42l40pk_g2 models/run_parameters/
```

This is the Polvani-Kushner GCM, with gamma = 4 and no topography (integration 5 of GP09)

```
cp -r /blhome/gerber/models/run_parameters/t42l40pk_g4 models/run_parameters/
```

The Polvani-Kushner GCM, gamma = 2 and wave number 2 topography of height 3000 (integration 8 of GP09)

```
cp -r /blhome/gerber/models/run_parameters/t42l40pk_g2_k2h300 models/run_parameters/
```

The Polvani-Kushner GCM, gamma = 4 and wave number 2 topography of height 3000 (integration 9 of GP09)

```
cp -r /blhome/gerber/models/run_parameters/t42l40pk_g4_k2h300 models/run_parameters/
```

Lastly, make a place for the model output

```
mkdir /ptmp/userID/model_ouput
```

Now you should be ready to run the core. Go to the next write up.