Quick Start Guide at NCCS

- Create Source Directory

```
cd $HOME
cvs -z3 -d:ext:$USER@sourcemotel.gsfc.nasa.gov:/cvsroot/esma co -r GEOSagcm_MAP_Supported_Version_1p2 GEOSGCM
```

- Set Module Environment (in .cshrc or .login)

On Palm/Explore

```
module purge
module load intel-comp.8.1.034
module load mpt.1.12.0.nas
module load scsl.1.5.1.1
setenv BASEDIR /share/ESMA/baselibs/v2_2rp2.34meta
setenv LD_LIBRARY_PATH ${LD_LIBRARY_PATH}:${BASEDIR}/Linux/lib
setenv GEOSUTIL $HOME/GEOSGCM/src/Shared/GEOS_Util
```

On Discover

```
module purge
module load comp/intel-9.1.042
module load lib/mkl-9.0.017
module load mpi/scali-5.3
setenv BASEDIR /usr/local/other/baselibs/v2_2rp2_213_9.1.042meta_new
setenv LD_LIBRARY_PATH ${LD_LIBRARY_PATH}:${BASEDIR}/Linux/lib
setenv GEOSUTIL $HOME/GEOSGCM/src/Shared/GEOS_Util
```

- Build

```
cd $HOME/GEOSGCM/src
gmake install
```

- Experiment Directory (scripts)

```
cd $HOME/GEOSGCM/src/Application
./makexp (See Using makexp Slide)
mkdir -p $HOME/geos5/e0247
cd $HOME/geos5/e0247
```

- Run directory (work/scratch space)

```
mkdir $NOBACKUP/e0247
cd $NOBACKUP/e0247
ln -s $HOME/GEOSGCM/src/Application/GEOSgcm.x .
```

On Palm/Explore

```
cp /explore/nobackup/projects/map/GEOS-5.0_restarts/144x91/* .
```

On Discover

```
cp /gpfsm/dnb1/wputman/GEOS-5.0_restarts/* .
```

- Submit the job

```
cd $HOME/geos5/e0247
qsub run.script
```

Using makexp *(run.script gneration)*

- Execute makexp

  cd $HOME/GEOSGCM/src/Application
  ./makexp

- Response to prompted input

```
Enter the Experiment ID: EXPID
e0247
Enter the Configuration Layout: NX NY
2 4
Enter the Model Resolution: IM JM
144 91

Enter path for Experiment Home Directory: /explore/nobackup/wputman/GEOS-5/e0247 (Default)
~/geos5/e0247
Enter path for GEOS_Util Installation to use: /explore/nobackup/wputman/GEOS-5/GEOSGCM/src/Shared/GEOS_Util (Default)
~/GEOSGCM/src/Shared/GEOS_Util
Enter your GROUP ID: k3002 (Default)
k3002
Creating run.script for Experiment e0247 ...
Creating regress.script for Experiment e0247 ...

Checking for $HOME/GEOSGCM/src/Shared/GEOS_Util directory ...
Done.

You must now copy GCM Initial Conditions into: $NOBACKUP/e0247
in addition to your GEOSgcm.x executable and a set of Chemistry RC files.
You should modify the Chemistry RC files to reflect the type of Aerosols you want.
```

- Your run.script is now ready in:

  $HOME/GEOSGCM/src/Application and $HOME/geos5/e0247