```
g5_modules_perl_wrapper: Setting BASEDIR and modules for discover28
Files /etc/SuSE-release and /gpfsm/dswdev/pchakrab/builds/g591p8/Linux/etc/SuSE-release are equivalent.
anapsas=; anassi=; anagsi=1; fulldas=1;

        ------------------------------------------
         fvSETUP - The fvDAS Experiment Setup Tool
               Finite-Volume DAS Version 5_9_1_p8
        ------------------------------------------

--------
BINARIES
--------

         Using binaries located at /gpfsm/dswdev/pchakrab/builds/g591p8/Linux
         having CVS tag GEOSadas-5_9_1_p8 in DAS mode


--------------
G5GCM SETTINGS
--------------
         The following parameters are GEOS-5 GCM specific settings.

         PARAMETER             DFLT      DESCRIPTION
         ---------------       ----      -------------------------------------------
         AGCM Resolution       b72      Atmosphere Horizontal and Vertical Resolution
         OGCM Resolution       c34      Ocean Horizontal and Vertical Resolution
                                          where Ocean Horizontal Resolution is either
                                          c : 1-deg (360x180); e.g. Reynolds
                                          f : 1/8-deg (2880x1440); e.g. OSTIA

  AGCM Resolution? [b72] C180
  OGCM Resolution? [c34] f34

-----
EXPID
-----
         This is a short string which will serve as an identifier
         for labeling all output files produced during this
         experiment.

         DEFAULT NAME: u000_C180
         DEFAULT DESC: u000_C180,GEOSadas-5_9_1_p8,1st_try

 EXPID? [u000_C180] g591p8
EXPDSC? [g591p8,GEOSadas-5_9_1_p8,1st_try]

------
FVHOME
------
         This is the HOME directory for your fvDAS experiment.
         Resource files, restarts and system output will be stored
         under this directory. Usually it will contain subdiretories:

         ana/        first guess/analysis output
         daotovs/    daotovs field output
         diag/       diagnostic field output
         etc/        listings and other odds & ends
         fcst/       forecast run directory
         fvInput/    process required inputs
         obs/        post-analysis ODS files
         prog/       prognostic field output
         recycle/    latest restart files
         rs/         restart files
         run/        resource files

         DEFAULT: /discover/nobackup/pchakrab/g591p8
```

```
FVHOME? [/discover/nobackup/pchakrab/g591p8]
 The directory /discover/nobackup/pchakrab/g591p8 does not exist. Create it now? [y]
  Processing nodes (1:Nehalem, 2:Westmere)? [2]

-------------------------
Analysis Update Frequency
-------------------------

         PARAMETER   DEFAULT     DESCRIPTION
         ---------   -------     -----------------------------------------------------------
         varcase     1           1=IAU (default); 2=IAU w/ IBC; 3=no IAU; 4=4d-var; 5=FGAT
         varwindow   360         Variational assimilation time window (min)
         varoffset   180         Offset from beginning of analysis time (min)

  Which case of variational analysis? [1]
  Window of the variational analysis (min)? [360]

-------
FVINPUT
-------
         Please enter the directory where the boundary conditions
         (SST, topography, O3, H2O, etc) and other inputs are kept.

         Default: /discover/nobackup/projects/gmao/share/gmao_ops/fvInput_4dvar

         Also, if (near) real-time run, enter directory where real-time
         boundary conditions are (SST):

         Default: /discover/nobackup/projects/gmao/share/gmao_ops/fvInput_4dvar/g5gcm/bcs/realtime/
OSTIA_REYNOLDS

      FVINPUT? [/discover/nobackup/projects/gmao/share/gmao_ops/fvInput_4dvar]
REAL TIME BCS? [/discover/nobackup/projects/gmao/share/gmao_ops/fvInput_4dvar/g5gcm/bcs/realtime/
OSTIA_REYNOLDS]

-------------
EXTERNAL DATA
-------------

         Enter directory location for external data sets.

    g5chem? [/discover/nobackup/projects/gmao/share/gmao_ops/fvInput_4dvar/g5chem]
     PIESA? [/discover/nobackup/projects/gmao/share/gmao_ops/fvInput_4dvar/PIESA]

------------------
INITIAL CONDITIONS
------------------

         The following start-up data files are needed for a simulation:

              catch_internal_rst:
              fvcore_internal_rst:
              irrad_internal_rst:
              lake_internal_rst:
              landice_internal_rst:
              moist_import_rst:
              moist_internal_rst:
              pchem_internal_rst:
              saltwater_import_rst:
              saltwater_internal_rst:
              solar_internal_rst:
              surf_import_rst:
              turb_import_rst:
              turb_internal_rst:
              rst.lcv:             File containing date of restarts

         Typically these files are copied from previously spun-up
```

```
         runs to "/discover/nobackup/pchakrab/g591p8/recycle".

         FVICS is the directory where these start-up files are
         located. Answer "later" if you prefer to copy these files
         later.

         DEFAULT: /archive/u/jstassi/restarts/591/DE2880xPE1440

FVICS? [/archive/u/jstassi/restarts/591/DE2880xPE1440]

  Starting year-month-day? [20120315]
  Starting hour-min-sec? [210000]
  Name of experiment where ICs come from: [C180_e572p3_fp]

---------------
ADM-TLM Defaults
---------------

  Sensitivity exps use analyses             from:  /archive/u/pchakrab/g591p8/ana/Y%y4/M%m2/
g591p8.asm.eta.%y4%m2%d2_%h2z.nc4

  Note: when doing sensitivity against forecast, template resembles something like:
        ..../prog/Y%y4/M%m2/%s.prog.eta.%y4%m2%d2_%h2z+%y4%m2%d2_%h2z.nc4
 Run model-adjoint-related applications (0=no,1=yes)? [0]

-----------------------------
Analysis Sensitivity Defaults
-----------------------------

              Verifying experiment id: g591p8

 Run analysis-sensitivity applications (0=no,1=yes)? [0]

----------
TIME RANGE
----------
         The following parameters control the time length of the
         whole experiment, as well as the size of each job segment,
         and the number of CPU's to use:

         PARAMETER   DEFAULT     DESCRIPTION
         ---------   -------     ---------------------------------------
         NYMD_end    20120317    Ending year-month-day
         FHOURS      123        Length (in hours) of FORECAST run segments
         NSEGS       1           Number of DAS segments per PBS job
         NX          4           Number of PEs in the zonal direction
         NY          24           Number of PEs in the meridional direction
         NICKNAME    g5das       Job nickname (max 5 characters)
         SPLITEXE    1           Split executable mode
         ASYNFRQ     030000      Freq of asynoptic background

         NOTE: The actual experiment starting date/time is determined
               by the dynamics restart file.

  Ending year-month-day? [20120317]
  Length of FORECAST run segments (in hours)? [123]
  Number of one-day DAS segments per PBS job? [1]
  Number of PEs in the zonal direction (NX)? [4]
  Number of PEs in the meridional direction (NY)? [24]
  Job nickname? [g5das]
  Run in split executable mode (1=yes;0=no)? [1]
  Frequency of background fields (hour-min-sec)? [030000]

------------
GSI SETTINGS
------------
         The following parameters are GSI specific settings.
```

```
        PARAMETER   DEFAULT     DESCRIPTION
        ---------   -------     ---------------------------------------
        SPECRES     254          Spectral truncation
        SIGLEVS     72          Analysis sigma levels
        GSIGRDS     NA          GSI horizontal grid
        GEOSGRD     d           GEOS-5 native grid resolution (a,b,c,d,e)
        NX          12           number of pes in the zonal direction
        NY          4           number of pes in the meridional direction

  Triangular spectral truncation? [254]
  Analysis vertical levels (sig))? [72]
  GSI grid resolution? [NA]
  GEOS grid resolution instead? [d]
  Number of procs in the zonal direction (NX)? [12]
  Number of procs in the meridional direction (NY)? [4]

------------------------
OBSERVING SYSTEM CLASSES
------------------------

  Merra obsclass files only (y/n)? [n]
  Filter out obsolete data sets (y/n)? [y]

     obclass               Data Description
     ----------------      -------------------------
     ssi_prep_bufr         NCEP Conventional Data in bufr format (specific exp)
     ncep_osbuv8_bufr
     ncep_spssmi_bufr      NCEP SSMI Data in bufr format
     ncep_sptrmm_bufr      NCEP TRMM Data in bufr format
     ncep_1bamua_bufr      NCEP Satellite AMSUA Data (bufr)
     ncep_1bamub_bufr      NCEP Satellite AMSUB Data (bufr)
     ncep_1bhrs2_bufr      NCEP Satellite HIRS2 Data (bufr)
     ncep_1bhrs3_bufr      NCEP Satellite HIRS3 Data (bufr)
     ncep_1bmsu_bufr       NCEP Satellite MSU Data (bufr)
     ncep_ssmit_bufr       NCEP Satellite SSM/I Data (bufr)
     ncep_prep_bufr        NCEP Conventional Data in bufr format (ops)
     gmao_airs_bufr        GMAO Version of NESDIS AMSU-A AIRS
     merra_ers1            ERS-1 scatterometer for MERRA
     merra_1bamua_bufr     MERRA - Satellite AMSUA Data (bufr)
     merra_1bamub_bufr     MERRA - Satellite AMSUB Data (bufr)
     merra_1bhrs2_bufr     MERRA - Satellite HIRS2 Data (bufr)
     merra_1bhrs3_bufr     MERRA - Satellite HIRS3 Data (bufr)
     merra_1bmsu_bufr      MERRA - Satellite MSU Data (bufr)
     merra_1bssu_bufr      MERRA - Satellite SSU Data (bufr)
     merra_ssmit08_bufr    MERRA - F08 Wentz SSM/I brightness temperatures
     merra_ssmit10_bufr    MERRA - F10 Wentz SSM/I brightness temperatures
     merra_ssmit11_bufr    MERRA - F11 Wentz SSM/I brightness temperatures
     merra_ssmit13_bufr    MERRA - F13 Wentz SSM/I brightness temperatures
     merra_ssmit14_bufr    MERRA - F14 Wentz SSM/I brightness temperatures
     merra_ssmit15_bufr    MERRA - F15 Wentz SSM/I brightness temperatures
     merra_cdas_prep_bufr  NCEP Conventional Data in bufr format (ops)
     merra_goesnd_prep_bufr
     merra_nmodis_prep_bufr  MERRA - NESDIS MODIS winds
     merra_prof_prep_bufr  MERRA - Profilers
     ncep_tcvitals         NCEP Vital files for Tropical Storms
     merra_ers2            ERS-2 scatterometer for MERRA
     merra_wspd_bufr       MERRA Wentz Speeds
     merra_gprofp08_bufr
     merra_gprofp10_bufr
     merra_gprofp11_bufr
     merra_gprofp13_bufr   MERRA GPROF F13 Precip
     merra_gprofp14_bufr   MERRA GPROF F14 Precip
     merra_gprofp15_bufr
     merra_tmil_bufr       MERRA TRMM Land Precip
     merra_tmio_bufr       MERRA TRMM Ocean Precip
     merra_qscat_jpl       QuickScat from JPL
```

```
     merra_airs_bufr       MERRA Version of NESDIS AMSU-A AIRS
     ncep_mhs_bufr
     ncep_1bhrs4_bufr      NCEP Satellite HIRS4 Data (bufr)
     ncep_airs_bufr
     ncep_amsre_bufr
     ncep_geoimr_bufr
     ncep_goesfv_bufr
     ncep_gome_bufr
     ncep_gpsipw_bufr
     ncep_gpsro_bufr
     ncep_mtiasi_bufr
     ncep_atms_bufr
     ncep_cris_bufr
     ncep_satwnd_bufr
     ncep_sevcsr_bufr
     ncep_avcsam_bufr
     ncep_avcspm_bufr
     ncep_mls_bufr         NCEP MLS
     disc_airs_bufr
     disc_amsua_bufr
     merra_sfcland_prep_bufr  MERRA Surf Land Conv Obs
     merra_upa_prep_bufr   MERRA Upper-Air Conv Obs
     merra_acars_prep_bufr  MERRA ACARS Conv Obs
     merra_aircft_prep_bufr  MERRA AirCraft Conv Obs
     merra_satwnd_prep_bufr  MERRA Sat Winds Conv Obs
     merra_satwnd00_prep_bufr
     merra_satwnd12_prep_bufr
     merra_satwnd18_prep_bufr
     merra_sfcship_prep_bufr  MERRA Ship Conv Obs
     merra_sfcbog00_prep_bufr
     merra_sfcbog12_prep_bufr
     aura_mlsoz_bufr       MLS standard (not near-realtime) Ozone from AURA in BUFR ("o3lev")
     aura_mlsoz_text       MLS standard (not near-realtime) Ozone from AURA in text ("o3levtext")
     aura_omi_bufr         OMI Ozone from AURA in BUFR

NOTE: Earlier SSI/GSI exp used what are the following classes:
      ssi_obs,ssi_prep,ncep_osbuv,ncep_spssmi,ncep_sptrmm


  DEFAULT:
ssi_prep_bufr,ncep_osbuv8_bufr,ncep_spssmi_bufr,ncep_sptrmm_bufr,ncep_1bamua_bufr,ncep_1bamub_bufr,ncep_1bhrs2

OBSERVING SYSTEM CLASSES? ncep_prep_bufr

-----------------
CHECKING OBSYSTEM
-----------------

     1   will not check the existence of requested observing files
     2   will check the given time period and classes within the observing
           database resource file definition (DEFAULT)
     3   will physically check the existence of specified data from mass storage

CHECKING OBSYSTEM? [2]
Soft checking observing system files...

--------------
RADCOR SETTING
--------------
         Choose from among the following RADCOR options:

         VALUE         DESCRIPTION
         -----         -----------
         NONE          neither NCEP nor Haimberger-hradcor
         NCEP          standard NCEP (correct type 52, CORUSVAI~F)
         NCEP_VAI      NCEP radcor but do not correct type 52 CORUSVAI~T
         HAIMB_HRAD    Apply both Haimberger homogenization and 'hradcor'
```

```
         HAIMB         No NCEP RADCOR, apply Haimberger homogenization
                          but do not apply 'hradcor' correction.

  Which RADCOR option? [NONE]

-----------
FORECASTING
-----------
         The following parameters control the writing of initial
         conditions (a.k.a. restart files) for subsequent production
         of forecasting runs.

         PARAMETER   DEFAULT     DESCRIPTION
         ---------   -------     -----------------------------------------
         FCST_frq       0        frequency in days to write restarts;
                                  "0" means never
         FCST_beg       0        date (YYYYMMDD) to begin writing restarts;
                                  "0" means beginning of run
         FCST_hrs      12        array of integers up to 24 numbers;
                                 Example: 0,6,12,18 will write restarts
                                 at 0z, 6z, 12z, and 18z of any selected day.
                                 "-1" means do not write restarts

         You can also choose to have the forecast restart files staged to:

                        /discover/nobackup/pchakrab/g591p8/fcst

         in additions to their regular archival to mass storage.

  Frequency (in days) for writing restarts? [0]

------------
FVGCM OUTPUT
------------

         The FVGCM model can produce output of PROGNOSTIC fields
         (instantaneous) and DIAGNOSTIC fields (average):

         PARAMETER   DEFAULT    DESCRIPTION
         ---------   -------    -----------------------------------------------
         NDOUT       030000     Freq (HHMMSS) to output PROGNOSTIC fields
         NGOUT2D     010000     Freq (HHMMSS) to output (2D) DIAGNOSTIC fields
         NGOUT       030000     Freq (HHMMSS) to output (3D) DIAGNOSTIC fields
         IM          576        Dimension of output in zonal direction
         JM          361         Dimension of output in meridional direction

  Frequency for PROGNOSTIC fields? [030000]
  Frequency for surface (2D) DIAGNOSTIC fields? [010000]
  Frequency for upper air (3D) DIAGNOSTIC fields? [030000]
  Dimension of output in zonal direction? [576]
  Dimension of output in meridional direction? [361]

  ------------------
  DIAGNOSTICS OUTPUT
  ------------------
           You can also control the output of individual quantities
           by editing file: "diag.rc" in GEOS-4; and "HISTORY.rc" in GEOS-5.
           From here you can only control the output of PROG/2D/3D as a group,
           or in the case of GEOS-5, the conversion of output with lcv2prs.

  Would you like 2D diagnostics? [y]
  Would you like 3D diagnostics? [y]
  Would you like to compress diagnostics output files? [n]

--------------
GOCART TRACERS
--------------
```

```
  Include GOCART tracers (CO,CO2,aerosols,etc) (y/n)? [y]
  Do Aerosol Analysis (y/n)? [y] n

-------
HISTORY
-------

  Which HISTORY template?
  -----------------------
        HISTORY.AGCM.rc.tmpl
        HISTORY.rc.tmpl
        HISTORY_G5NCEP.rc.tmpl
        HISTORY_GloPac.rc.tmpl
        HISTORY_MERRA_CFIO.rc.tmpl
        HISTORY_YOTC_ANA.rc.tmpl

  DEFAULT: HISTORY.rc.tmpl

  Which template? [HISTORY.rc.tmpl]
  Using HISTORY template: HISTORY.rc.tmpl

----------------
Forecast HISTORY
----------------

  Which Forecast HISTORY template?
  --------------------------------
        GCMPROG.rc.tmpl
        GCMPROG_GloPac.rc.tmpl
        GCMTRAJ.rc.tmpl
        GCMTRAJ_apert.rc.tmpl

  DEFAULT: GCMPROG.rc.tmpl

  Which template? [GCMPROG.rc.tmpl]
  Using Forecast HISTORY template: GCMPROG.rc.tmpl

--------
Group ID
--------

Sp Code|  Org  | Sponsor            | Research
-------+-------+--------------------+---------------------------------
 g0620 | 610.1 | Michele Rienecker  | GMAO - Systems and Data Synthesis

select group: [g0620]


Setting up FVHOME directory for g591p8 experiment ...
fvsetup: Writing to /discover/nobackup/pchakrab/g591p8/fcst/saverst.rc: @SAVERSTHRS
sed -i  -e 's/@EXPID/g591p8/' -e 's/@EXPDSC/g591p8,GEOSadas-5_9_1_p8,1st_try/' -e 's/@CORES_PER_NODE/12/'
-e 's/@FREQ2D/010000/' -e 's/@FREQ3D/030000/' -e 's/@ASYNFRQ/030000/' -e 's/@TRILNLON/72/' -e 's/
@TRILNLAT/46/' -e 's/@TRAJNLON/72/' -e 's/@TRAJNLAT/46/' -e 's/@HIST_IM/576/' -e 's/@HIST_JM/361/' -e 's/
@HIST_PERT_IM/288/' -e 's/@HIST_PERT_JM/181/' -e 's/@BKGRES/ /' -e 's/@COMPRESS/#/' -e 's/@4DVAR/#/' -e
's/@4ASEN/#/' -e 's/@FV3TRAJ/ /' -e 's/@FVTRAJ/#/' /discover/nobackup/pchakrab/g591p8/run/HISTORY.rc.tmpl
/gpfsm/dswdev/pchakrab/builds/g591p8/Linux/bin/edhist.pl /discover/nobackup/pchakrab/g591p8/run/
HISTORY.rc.tmpl -i -rD -XP  -Xpm gaas -Xpm _gas_N
WARNING: tavg1_2d_lfo_Nx-.nbits is commented.
WARNING: inst1_2d_lfo_Nx-.nbits is commented.
WARNING: inst3_3d_wxmd_Cp+-.resolution is commented.

WARNING: multiple values found:
WARNING   * inst3_3d_wxmd_Cp+-.resolution = 576 361,
WARNING   * inst3_3d_wxmd_Cp+-.resolution = 540 361,
WARNING  second value replaces the first
```

```
WARNING: inst3_3d_asm_Cp+-.resolution is commented.

WARNING: multiple values found:
WARNING   * inst3_3d_asm_Cp+-.resolution = 576 361,
WARNING   * inst3_3d_asm_Cp+-.resolution = 540 361,
WARNING  second value replaces the first

WARNING: inst3_3d_asm_Cp+-.ref_date is commented.
WARNING: tavg3_3d_ext_Np+- 'DUSCATCOEF' field is commented.
WARNING: tavg3_3d_ext_Np+- 'SSSCATCOEF' field is commented.
WARNING: tavg3_3d_ext_Np+- 'BCSCATCOEF' field is commented.
WARNING: tavg3_3d_ext_Np+- 'OCSCATCOEF' field is commented.
WARNING: tavg3_3d_ext_Np+- 'SUSCATCOEF' field is commented.
WARNING: inst1_2d_hwl_Nx+-.ref_date is commented.
WARNING: asm.eta.ref_date is commented.
WARNING: asm.eta.ref_time is commented.
fvsetup: Writing to /discover/nobackup/pchakrab/g591p8/run/saverst.rc: @SAVERSTHRS
./fvsetup: Cannot find resource file /gpfsm/dswdev/pchakrab/builds/g591p8/Linux/etc/CARMA_GridComp.rc
./fvsetup: Cannot find resource file /gpfsm/dswdev/pchakrab/builds/g591p8/Linux/etc/CARMA_Registry.rc
/gpfsm/dswdev/pchakrab/builds/g591p8/Linux/bin/vED /gpfsm/dswdev/pchakrab/builds/g591p8/Linux/etc/
Chem_Registry.rc -o /discover/nobackup/pchakrab/g591p8/run/gocart/Chem_Registry.rc

The following resource files are missing:
- CARMA_GridComp.rc
- CARMA_Registry.rc

Continue without missing resource files? [y]

Edit COLLECTIONS list in run/HISTORY.rc.tmpl (y/n)? [n]
/discover/nobackup/pchakrab/g591p8/run/HISTORY.rc.tmpl is ready.


Edit COLLECTIONS list in fcst/HISTORY.rc.tmpl (y/n)? [n]
/discover/nobackup/pchakrab/g591p8/fcst/HISTORY.rc.tmpl is ready.

/gpfsm/dswdev/pchakrab/builds/g591p8/Linux/bin/copy_restarts.pl -nymd 20120315 -nhms 210000 -d /archive/u/
jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03 -dmget -expid C180_e572p3_fp -dest /discover/nobackup/
pchakrab/g591p8/recycle -newid g591p8 -copy -noprompt -bf 3 -X gaas_bkg_sfc -X agcm_import
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.catch_internal_rst.20120315_21z.bin
                    to /discover/nobackup/pchakrab/g591p8/recycle/
g591p8.catch_internal_rst.20120315_21z.bin
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.fvcore_internal_rst.20120315_21z.bin
                    to /discover/nobackup/pchakrab/g591p8/recycle/
g591p8.fvcore_internal_rst.20120315_21z.bin
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.gocart_internal_rst.20120315_21z.bin
                    to /discover/nobackup/pchakrab/g591p8/recycle/
g591p8.gocart_internal_rst.20120315_21z.bin
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.lake_internal_rst.20120315_21z.bin
                    to /discover/nobackup/pchakrab/g591p8/recycle/
g591p8.lake_internal_rst.20120315_21z.bin
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.landice_internal_rst.20120315_21z.bin
                    to /discover/nobackup/pchakrab/g591p8/recycle/
g591p8.landice_internal_rst.20120315_21z.bin
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.moist_internal_rst.20120315_21z.bin
                    to /discover/nobackup/pchakrab/g591p8/recycle/
g591p8.moist_internal_rst.20120315_21z.bin
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.pchem_internal_rst.20120315_21z.bin
                    to /discover/nobackup/pchakrab/g591p8/recycle/
g591p8.pchem_internal_rst.20120315_21z.bin
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
```

```
C180_e572p3_fp.rst.lcv.20120315_21z.bin
                    to /discover/nobackup/pchakrab/g591p8/recycle/g591p8.rst.lcv.20120315_21z.bin
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.saltwater_internal_rst.20120315_21z.bin
                    to /discover/nobackup/pchakrab/g591p8/recycle/
g591p8.saltwater_internal_rst.20120315_21z.bin
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.ana_satbang_rst.20120315_21z.txt
                    to /discover/nobackup/pchakrab/g591p8/recycle/g591p8.ana_satbang_rst.20120315_21z.txt
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.ana_satbias_rst.20120315_21z.txt
                    to /discover/nobackup/pchakrab/g591p8/recycle/g591p8.ana_satbias_rst.20120315_21z.txt
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.bkg03_eta_rst.20120315_21z.nc4
                    to /discover/nobackup/pchakrab/g591p8/recycle/g591p8.bkg03_eta_rst.20120315_21z.nc4
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.bkg03_sfc_rst.20120315_21z.nc4
                    to /discover/nobackup/pchakrab/g591p8/recycle/g591p8.bkg03_sfc_rst.20120315_21z.nc4
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.bkg06_eta_rst.20120316_00z.nc4
                    to /discover/nobackup/pchakrab/g591p8/recycle/g591p8.bkg06_eta_rst.20120316_00z.nc4
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.bkg06_sfc_rst.20120316_00z.nc4
                    to /discover/nobackup/pchakrab/g591p8/recycle/g591p8.bkg06_sfc_rst.20120316_00z.nc4
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.bkg09_eta_rst.20120316_03z.nc4
                    to /discover/nobackup/pchakrab/g591p8/recycle/g591p8.bkg09_eta_rst.20120316_03z.nc4
copy_restarts.pl: copy /archive/u/jstassi/restarts/591/DE2880xPE1440/rs/Y2012/M03/
C180_e572p3_fp.bkg09_sfc_rst.20120316_03z.nc4
                    to /discover/nobackup/pchakrab/g591p8/recycle/g591p8.bkg09_sfc_rst.20120316_03z.nc4
  Cannot find irrad_internal_rst restart.
  BOOTSTRAP irrad_internal_rst (y/n)? [y]
  BOOTSTRAP: irrad_internal_rst
  Cannot find moist_import_rst restart.
  BOOTSTRAP moist_import_rst (y/n)? [y]
  BOOTSTRAP: moist_import_rst
  Cannot find saltwater_import_rst restart.
  BOOTSTRAP saltwater_import_rst (y/n)? [y]
  BOOTSTRAP: saltwater_import_rst
  Cannot find solar_internal_rst restart.
  BOOTSTRAP solar_internal_rst (y/n)? [y]
  BOOTSTRAP: solar_internal_rst
  Cannot find surf_import_rst restart.
  BOOTSTRAP surf_import_rst (y/n)? [y]
  BOOTSTRAP: surf_import_rst
  Cannot find turb_internal_rst restart.
  BOOTSTRAP turb_internal_rst (y/n)? [y]
  BOOTSTRAP: turb_internal_rst
  Cannot find turb_import_rst restart.
  BOOTSTRAP turb_import_rst (y/n)? [y]
  BOOTSTRAP: turb_import_rst
    DAO=1; GFLAG=1; proot=/archive/u/pchakrab; mhost=discover28.nccs.nasa.gov
Writing /discover/nobackup/pchakrab/g591p8/run/FVDAS_Run_Config
sed -e 3i"#PBS -W group_list=g0620" -e 3i"#" < /gpfsm/dswdev/pchakrab/builds/g591p8/Linux/etc/
ana_aod.j.tmpl > /discover/nobackup/pchakrab/g591p8/run/gaas/ana_aod.j.tmpl
/gpfsm/dswdev/pchakrab/builds/g591p8/Linux/bin/monthly_means_setup.pl -expid g591p8 -fvhome /discover/
nobackup/pchakrab/g591p8 -fvroot /gpfsm/dswdev/pchakrab/builds/g591p8/Linux -gid g0620
mkdir /discover/nobackup/pchakrab/g591p8/run/monthly_plots
mkdir /discover/nobackup/pchakrab/g591p8/run/monthly_plots/plot

replaceLabels < /gpfsm/dswdev/pchakrab/builds/g591p8/Linux/bin/monthly_means_prefetch.j.tmpl
replaceLabels > /discover/nobackup/pchakrab/g591p8/run/monthly_means_prefetch.j
replaceLabels: _QUEUEFLAG_ => PBS -q datamove
replaceLabels: _PROCID_ => :proc=neha
replaceLabels: _WALLTIME_ => PBS -l walltime=12:00:00
replaceLabels: _GROUPLIST_ => PBS -W group_list=g0620
```

```
replaceLabels < /gpfsm/dswdev/pchakrab/builds/g591p8/Linux/bin/monthly_means.j.tmpl
replaceLabels > /discover/nobackup/pchakrab/g591p8/run/monthly_means.j
replaceLabels: _QUEUEFLAG_ => PBS -q general
replaceLabels: _PROCID_ => :proc=neha
replaceLabels: _WALLTIME_ => PBS -l walltime=12:00:00
replaceLabels: _GROUPLIST_ => PBS -W group_list=g0620

replaceLabels < /gpfsm/dswdev/pchakrab/builds/g591p8/Linux/bin/monthly_plots.j.tmpl
replaceLabels > /discover/nobackup/pchakrab/g591p8/run/monthly_plots/monthly_plots.j
replaceLabels: _QUEUEFLAG_ => PBS -q general
replaceLabels: _PROCID_ => :proc=neha
replaceLabels: _WALLTIME_ => PBS -l walltime=12:00:00
replaceLabels: _GROUPLIST_ => PBS -W group_list=g0620
/gpfsm/dswdev/pchakrab/builds/g591p8/Linux/bin/write_mm_rc_arc.pl -H /discover/nobackup/pchakrab/g591p8/
run/HISTORY.rc.tmpl -inarc /discover/nobackup/pchakrab/g591p8/run/silo.arc -outrc /discover/nobackup/
pchakrab/g591p8/run/monthly_means.rc -outarc /discover/nobackup/pchakrab/g591p8/run/monthly_means.arc
/gpfsm/dswdev/pchakrab/builds/g591p8/Linux/bin/edhist.pl -plot /discover/nobackup/pchakrab/g591p8/run -o /
discover/nobackup/pchakrab/g591p8/run/monthly_plots -order /discover/nobackup/pchakrab/g591p8/run/
HISTORY.rc.tmpl
WARNING: tavg1_2d_lfo_Nx.nbits is commented.
WARNING: inst1_2d_lfo_Nx.nbits is commented.
WARNING: inst3_3d_asm_Cp+-.ref_date is commented.
WARNING: tavg3_3d_ext_Np+- 'DUSCATCOEF' field is commented.
WARNING: tavg3_3d_ext_Np+- 'SSSCATCOEF' field is commented.
WARNING: tavg3_3d_ext_Np+- 'BCSCATCOEF' field is commented.
WARNING: tavg3_3d_ext_Np+- 'OCSCATCOEF' field is commented.
WARNING: tavg3_3d_ext_Np+- 'SUSCATCOEF' field is commented.
WARNING: inst1_2d_hwl_Nx+-.ref_date is commented.
WARNING: asm.eta.ref_date is commented.
WARNING: asm.eta.ref_time is commented.

replaceLabels < /gpfsm/dswdev/pchakrab/builds/g591p8/Linux/etc/das_plot.tmpl
replaceLabels > /discover/nobackup/pchakrab/g591p8/run/monthly_plots/plot/gcm_plot.tmpl
replaceLabels: _EXPID_ => g591p8
replaceLabels: _GROUPLIST_ => PBS -W group_list=g0620

-------------------
CERES Configuration
-------------------

  Edit files in run directory for CERES configuration (y/n)? [n]
removing /discover/nobackup/pchakrab/g591p8/run/GEOS_ChemGridComp.rc~
removing /discover/nobackup/pchakrab/g591p8/run/HISTORY.rc.tmpl~
removing /discover/nobackup/pchakrab/g591p8/fcst/GEOS_ChemGridComp.rc~

------
REVIEW
------
         The job script, namelists and resources for your
         experiments have been created. At this point you
         can edit the following files and customize the
         default configuration:

         Archiving Rules: silo.arc mstorage.arc
              Job Script: g5das.j
               Resources: Chem_Registry_apert.rc fv4dvar.ccmrun.namelist.tmpl fvgcm.ccmflags.namelist
fvpsas.rc gsi_atms_beamwidth.rc gmao_airs_bufr.tbl gmao_global_aeroinfo.rc gmao_global_anavinfo.rc
gmao_global_blacklist.rc gmao_global_coinfo.rc gmao_global_convinfo.rc gmao_global_hybens_locinfo.l72.rc
gmao_global_insituinfo.rc gmao_global_ozinfo.rc gmao_global_pcpinfo.rc gmao_global_satinfo.rc
gmao_global_scaninfo.rc gsi_sens.rc.tmpl noreplay.acq odsmatch.rc prepobs_acarsqc.merra.parm
prepobs_cqc_statbge prepobs_cqcbufr.merra.parm prepobs_errtable.global prepobs_landc prepobs_oiqc.oberrs
prepobs_prep.bufrtable prepobs_prepacqc.merra.parm prepobs_prevents.merra.parm prepobs_profcqc.merra.parm
prepobs_waypoints sac.nl.tmpl vtrack.ctl.tmpl vtrack.rc vtx.ctl.tmpl inst2d_met_x.rc inst3d_met_p.rc
tavg2d_met_x.rc tavg3d_cld_p.rc tavg3d_cld_v.rc tavg3d_dyn_p.rc tavg3d_dyn_v.rc tavg3d_met_e.rc
tavg3d_mst_p.rc tavg3d_mst_v.rc tavg3d_prs_v.rc tavg3d_tmp_p.rc tavg3d_tmp_v.rc tavg3d_wnd_p.rc
tavg3d_wnd_v.rc Chem_Registry_apert.rc GSI_GridComp.rc.tmpl gsi.rc.tmpl
               Namelists: AGCM.rc.tmpl CAP.rc.tmpl ExtData.rc.tmpl GEOS_ChemGridComp.rc GCMPROG.rc.tmpl
```

```
HISTORY.rc.tmpl OBS_GridComp.rc.tmpl saverst.rc

         Enter:

          "e"   to edit these files with emacs
          "x"   to edit these files with xemacs
          "v"   to edit these files with vi
          "Q"   to quit, WITHOUT archiving configuration files (DEFAULT)
          "q"   to quit, archiving configuration files

Which? [Q]

-----------
SAVE INPUTS
-----------

  Experiment ID:  g591p8
  Save the inputs for this experiment (y/n)? [y]
  Experiment description: [g591p8, agrid/ogrid=C180/f34]
  Output file written: /discover/nobackup/pchakrab/SavedInputs/g591p8.input

Hit <cr> to continue ...

        ------------------------------------------
         fvSETUP - The fvDAS Experiment Setup Tool
        ------------------------------------------

---------
ALL DONE!
---------
         Well done! This completes your fvDAS experiment setup.
         For starting your data assimilation experiment please enter:

            cd /discover/nobackup/pchakrab/g591p8/run
            qsub  g5das.j

         This script will carry out the assimilation experiment  by means
         of several job segments, each 1 simulation day(s) long.

-----------
FORECASTING
-----------

         Your forecast initial conditions will NOT be automatically staged.
         Before running forecasts, you will need to retrieve your initial
         conditions (a.k.a. restart files) from mass storage.

         After you complete your data assimilation experiment you can
         produce forecasts by entering:

            qsub  /discover/nobackup/pchakrab/g591p8/fcst/g5fcst.j

         This script will carry out the forecast runs by means of several
         job segments (one per initial conditions), each 123 simulation
         hour(s) long.

         The output location is discover28.nccs.nasa.gov under /archive/u/pchakrab/g591p8

Checking the mask on discover28.nccs.nasa.gov...
fvDAS v5_9_1_p8 setup on Fri Mar 29 11:15:27 EDT 2013 by pchakrab.
```