```
+ source /lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/var_defns.sh
++ RUN_ENVIR=community
++ MACHINE=LINUX
++ ACCOUNT=OW_UFS
++ WORKFLOW_MANAGER=none
++ SCHED=none
++ PARTITION_DEFAULT=
++ CLUSTERS_DEFAULT=
++ QUEUE_DEFAULT=
++ PARTITION_HPSS=
++ CLUSTERS_HPSS=
++ QUEUE_HPSS=
++ PARTITION_FCST=
++ CLUSTERS_FCST=
++ QUEUE_FCST=
++ RUN_CMD_UTILS='srun -n 12'
++ RUN_CMD_POST='srun -n 12'
++ USE_CRON_TO_RELAUNCH=FALSE
++ CRON_RELAUNCH_INTVL_MNTS=03
++ EXPT_BASEDIR=/lcrc/project/OW_UFS/UFS_TestCase
++ EXPT_SUBDIR=TEST_US_EAST_COAST_3km
++ COMINgfs=/base/path/of/directory/containing/gfs/input/files
++ STMP=/base/path/of/directory/containing/model/input/and/raw/output/files
++ NET=rrfs
++ envir=para
++ RUN=experiment_name
++ PTMP=/base/path/of/directory/containing/postprocessed/output/files
++ DOT_OR_USCORE=_
++ EXPT_CONFIG_FN=config.sh
++ RGNL_GRID_NML_FN=regional_grid.nml
++ DATA_TABLE_FN=data_table
++ DIAG_TABLE_FN=diag_table
++ FIELD_TABLE_FN=field_table
++ FV3_NML_BASE_SUITE_FN=input.nml.FV3
++ FV3_NML_YAML_CONFIG_FN=FV3.input.yml
++ FV3_NML_BASE_ENS_FN=input.nml.base_ens
++ MODEL_CONFIG_FN=model_configure
++ NEMS_CONFIG_FN=nems.configure
++ FV3_EXEC_FN=NEMS.exe
++ WFLOW_XML_FN=FV3LAM_wflow.xml
++ GLOBAL_VAR_DEFNS_FN=var_defns.sh
++ EXTRN_MDL_ICS_VAR_DEFNS_FN=extrn_mdl_ics_var_defns.sh
++ EXTRN_MDL_LBCS_VAR_DEFNS_FN=extrn_mdl_lbcs_var_defns.sh
++ WFLOW_LAUNCH_SCRIPT_FN=launch_FV3LAM_wflow.sh
```

++ WFLOW_LAUNCH_LOG_FN=log.launch_FV3LAM_wflow
++ DATE_FIRST_CYCL=20190615
++ DATE_LAST_CYCL=20190615
++ CYCL_HRS=00
++ FCST_LEN_HRS=24
++ EXTRN_MDL_NAME_ICS=FV3GFS
++ EXTRN_MDL_NAME_LBCS=FV3GFS
++ LBC_SPEC_INTVL_HRS=6
++ FV3GFS_FILE_FMT_ICS=grib2
++ FV3GFS_FILE_FMT_LBCS=grib2
++ NOMADS=FALSE
++ NOMADS_file_type=nemsio
++ USE_USER_STAGED_EXTRN_FILES=TRUE
++ EXTRN_MDL_SOURCE_BASEDIR_ICS=/lcrc/project/OW_UFS/UFS_ICBC
++ EXTRN_MDL_FILES_ICS=gfs.pgrb2.0p25.f000
++ EXTRN_MDL_SOURCE_BASEDIR_LBCS=/lcrc/project/OW_UFS/UFS_ICBC
++ EXTRN_MDL_FILES_LBCS=("gfs.pgrb2.0p25.f006" "gfs.pgrb2.0p25.f012" "gfs.pgrb2.0p25.f018" "gfs.pgrb2.0p25.f024" "gfs.pgrb2.0p25.f030" "gfs.pgrb2.0p25.f036" "gfs.pgrb2.0p25.f042" "gfs.pgrb2.0p25.f048")
++ CCPP_PHYS_SUITE=FV3_GFS_v15p2
++ GRID_GEN_METHOD=ESGgrid
++ GFDLgrid_LON_T6_CTR=
++ GFDLgrid_LAT_T6_CTR=
++ GFDLgrid_RES=
++ GFDLgrid_STRETCH_FAC=
++ GFDLgrid_REFINE_RATIO=
++ GFDLgrid_ISTART_OF_RGNL_DOM_ON_T6G=
++ GFDLgrid_IEND_OF_RGNL_DOM_ON_T6G=
++ GFDLgrid_JSTART_OF_RGNL_DOM_ON_T6G=
++ GFDLgrid_JEND_OF_RGNL_DOM_ON_T6G=
++ GFDLgrid_USE_GFDLgrid_RES_IN_FILENAMES=
++ ESGgrid_LON_CTR=-75.966
++ ESGgrid_LAT_CTR=35.917
++ ESGgrid_DELX=3000.0
++ ESGgrid_DELY=3000.0
++ ESGgrid_NX=407
++ ESGgrid_NY=563
++ ESGgrid_WIDE_HALO_WIDTH=6
++ DT_ATMOS=300
++ LAYOUT_X=5
++ LAYOUT_Y=2
++ BLOCKSIZE=40
++ QUILTING=TRUE
++ PRINT_ESMF=FALSE

++ WRTCMP_write_groups=1
++ WRTCMP_write_tasks_per_group=2
++ WRTCMP_output_grid=lambert_conformal
++ WRTCMP_cen_lon=-75.966
++ WRTCMP_cen_lat=35.917
++ WRTCMP_lon_lwr_left=-82.0
++ WRTCMP_lat_lwr_left=28.0
++ WRTCMP_lon_upr_rght=
++ WRTCMP_lat_upr_rght=
++ WRTCMP_dlon=
++ WRTCMP_dlat=
++ WRTCMP_stdlat1=35.917
++ WRTCMP_stdlat2=35.917
++ WRTCMP_nx=402
++ WRTCMP_ny=558
++ WRTCMP_dx=3000.0
++ WRTCMP_dy=3000.0
++ PREDEF_GRID_NAME=US_EAST_COAST
++ PREEXISTING_DIR_METHOD=rename
++ VERBOSE=TRUE
++ RUN_TASK_MAKE_GRID=TRUE
++ GRID_DIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/grid
++ RUN_TASK_MAKE_OROG=TRUE
++ OROG_DIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/orog
++ RUN_TASK_MAKE_SFC_CLIMO=TRUE
++ SFC_CLIMO_DIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/sfc_climo
++ SFC_CLIMO_FIELDS=("facsf" "maximum_snow_albedo" "slope_type" "snowfree_albedo" "soil_type" "substrate_temperature" "vegetation_greenness" "vegetation_type")
++ FIXgsm=/lcrc/project/OW_UFS/UFS_Static/fix_am
++ TOPO_DIR=/lcrc/project/OW_UFS/UFS_Static/fix_orog
++ SFC_CLIMO_INPUT_DIR=/lcrc/project/OW_UFS/UFS_Static/sfc_climo
++ FNGLAC=global_glacier.2x2.grb
++ FNMXIC=global_maxice.2x2.grb
++ FNTSFC=RTGSST.1982.2012.monthly.clim.grb
++ FNSNOC=global_snoclim.1.875.grb
++ FNZORC=igbp
++ FNAISC=CFSR.SEAICE.1982.2012.monthly.clim.grb
++ FNSMCC=global_soilmgldas.t126.384.190.grb
++ FNMSKH=seaice_newland.grb
++ FIXgsm_FILES_TO_COPY_TO_FIXam=("global_glacier.2x2.grb" "global_maxice.2x2.grb" "RTGSST.1982.2012.monthly.clim.grb" "global_snoclim.1.875.grb" "CFSR.SEAICE.1982.2012.monthly.clim.grb" "global_soilmgldas.t126.384.190.grb" "seaice_newland.grb" "global_climaeropac_global.txt" "fix_co2_proj/global_co2historicaldata_2010.txt"

"fix_co2_proj/global_co2historicaldata_2011.txt"
"fix_co2_proj/global_co2historicaldata_2012.txt"
"fix_co2_proj/global_co2historicaldata_2013.txt"
"fix_co2_proj/global_co2historicaldata_2014.txt"
"fix_co2_proj/global_co2historicaldata_2015.txt"
"fix_co2_proj/global_co2historicaldata_2016.txt"
"fix_co2_proj/global_co2historicaldata_2017.txt"
"fix_co2_proj/global_co2historicaldata_2018.txt" "global_co2historicaldata_glob.txt"
"co2monthlycyc.txt" "global_h2o_pltc.f77" "global_hyblev.l65.txt" "global_zorclim.1x1.grb"
"global_sfc_emissivity_idx.txt" "global_solarconstant_noaa_an.txt"
"ozprdlos_2015_new_sbuvO3_tclm15_nuchem.f77")
++ FV3_NML_VARNAME_TO_FIXam_FILES_MAPPING=("FNGLAC | global_glacier.2x2.grb"
"FNMXIC | global_maxice.2x2.grb" "FNTSFC | RTGSST.1982.2012.monthly.clim.grb" "FNSNOC |
global_snoclim.1.875.grb" "FNAISC | CFSR.SEAICE.1982.2012.monthly.clim.grb" "FNSMCC |
global_soilmgldas.t126.384.190.grb" "FNMSKH | seaice_newland.grb")
++ FV3_NML_VARNAME_TO_SFC_CLIMO_FIELD_MAPPING=("FNALBC | snowfree_albedo"
"FNALBC2 | facsf" "FNTG3C | substrate_temperature" "FNVEGC | vegetation_greenness"
"FNVETC | vegetation_type" "FNSOTC | soil_type" "FNVMNC | vegetation_greenness"
"FNVMXC | vegetation_greenness" "FNSLPC | slope_type" "FNABSC |
maximum_snow_albedo")
++ CYCLEDIR_LINKS_TO_FIXam_FILES_MAPPING=("aerosol.dat |
global_climaeropac_global.txt" "co2historicaldata_2010.txt |
fix_co2_proj/global_co2historicaldata_2010.txt" "co2historicaldata_2011.txt |
fix_co2_proj/global_co2historicaldata_2011.txt" "co2historicaldata_2012.txt |
fix_co2_proj/global_co2historicaldata_2012.txt" "co2historicaldata_2013.txt |
fix_co2_proj/global_co2historicaldata_2013.txt" "co2historicaldata_2014.txt |
fix_co2_proj/global_co2historicaldata_2014.txt" "co2historicaldata_2015.txt |
fix_co2_proj/global_co2historicaldata_2015.txt" "co2historicaldata_2016.txt |
fix_co2_proj/global_co2historicaldata_2016.txt" "co2historicaldata_2017.txt |
fix_co2_proj/global_co2historicaldata_2017.txt" "co2historicaldata_2018.txt |
fix_co2_proj/global_co2historicaldata_2018.txt" "co2historicaldata_glob.txt |
global_co2historicaldata_glob.txt" "co2monthlycyc.txt | co2monthlycyc.txt"
"global_h2oprdlos.f77 | global_h2o_pltc.f77" "global_zorclim.1x1.grb |
global_zorclim.1x1.grb" "sfc_emissivity_idx.txt | global_sfc_emissivity_idx.txt"
"solarconstant_noaa_an.txt | global_solarconstant_noaa_an.txt" "global_o3prdlos.f77
| ozprdlos_2015_new_sbuvO3_tclm15_nuchem.f77")
++ MAKE_GRID_TN=make_grid
++ MAKE_OROG_TN=make_orog
++ MAKE_SFC_CLIMO_TN=make_sfc_climo
++ GET_EXTRN_ICS_TN=get_extrn_ics
++ GET_EXTRN_LBCS_TN=get_extrn_lbcs
++ MAKE_ICS_TN=make_ics
++ MAKE_LBCS_TN=make_lbcs
++ RUN_FCST_TN=run_fcst

++ RUN_POST_TN=run_post
++ NNODES_MAKE_GRID=1
++ NNODES_MAKE_OROG=1
++ NNODES_MAKE_SFC_CLIMO=2
++ NNODES_GET_EXTRN_ICS=1
++ NNODES_GET_EXTRN_LBCS=1
++ NNODES_MAKE_ICS=4
++ NNODES_MAKE_LBCS=4
++ NNODES_RUN_FCST=1
++ NNODES_RUN_POST=2
++ PPN_MAKE_GRID=24
++ PPN_MAKE_OROG=24
++ PPN_MAKE_SFC_CLIMO=24
++ PPN_GET_EXTRN_ICS=1
++ PPN_GET_EXTRN_LBCS=1
++ PPN_MAKE_ICS=12
++ PPN_MAKE_LBCS=12
++ PPN_RUN_FCST=24
++ PPN_RUN_POST=24
++ WTIME_MAKE_GRID=00:20:00
++ WTIME_MAKE_OROG=00:20:00
++ WTIME_MAKE_SFC_CLIMO=00:20:00
++ WTIME_GET_EXTRN_ICS=00:45:00
++ WTIME_GET_EXTRN_LBCS=00:45:00
++ WTIME_MAKE_ICS=00:30:00
++ WTIME_MAKE_LBCS=00:30:00
++ WTIME_RUN_FCST=06:00:00
++ WTIME_RUN_POST=00:15:00
++ MAXTRIES_MAKE_GRID=1
++ MAXTRIES_MAKE_OROG=1
++ MAXTRIES_MAKE_SFC_CLIMO=1
++ MAXTRIES_GET_EXTRN_ICS=1
++ MAXTRIES_GET_EXTRN_LBCS=1
++ MAXTRIES_MAKE_ICS=1
++ MAXTRIES_MAKE_LBCS=1
++ MAXTRIES_RUN_FCST=1
++ MAXTRIES_RUN_POST=1
++ USE_CUSTOM_POST_CONFIG_FILE=FALSE
++ CUSTOM_POST_CONFIG_FP=
++ DO_ENSEMBLE=FALSE
++ NUM_ENS_MEMBERS=1
++ DO_SHUM=FALSE
++ DO_SPPT=FALSE
++ DO_SKEB=FALSE

++ SHUM_MAG=-999.0
++ SHUM_LSCALE=150000
++ SHUM_TSCALE=21600
++ SHUM_INT=3600
++ SPPT_MAG=-999.0
++ SPPT_LSCALE=150000
++ SPPT_TSCALE=21600
++ SPPT_INT=3600
++ SKEB_MAG=-999.0
++ SKEB_LSCALE=150000
++ SKEB_TSCALE=21600
++ SKEB_INT=3600
++ SKEB_VDOF=10
++ USE_ZMTNBLCK=false
++ HALO_BLEND=10
++ USE_FVCOM=FALSE
++ FVCOM_DIR=/user/defined/dir/to/fvcom/data
++ FVCOM_FILE=fvcom.nc
++ COMPILER=intel
++
WFLOW_LAUNCH_SCRIPT_FP=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/launch_FV3LAM_wflow.sh
++
WFLOW_LAUNCH_LOG_FP=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/log.launch_FV3LAM_wflow
++ CRONTAB_LINE=
++ SR_WX_APP_TOP_DIR=/lcrc/project/OW_UFS/ufs-srweather-app
++ HOMErrfs=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow
++ USHDIR=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush
++ SCRIPTSDIR=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/scripts
++ JOBSDIR=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/jobs
++ SORCDIR=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/sorc
++ SRC_DIR=/lcrc/project/OW_UFS/ufs-srweather-app/src
++ PARMDIR=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/parm
++ MODULES_DIR=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/modulefiles
++ EXECDIR=/lcrc/project/OW_UFS/ufs-srweather-app/bin
++ FIXrrfs=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/fix
++ FIXam=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/fix_am
++ FIXLAM=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/fix_lam
++ FIXgsm=/lcrc/project/OW_UFS/UFS_Static/fix_am
++ COMROOT=
++ COMOUT_BASEDIR=
++ TEMPLATE_DIR=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/templates
++ UFS_WTHR_MDL_DIR=/lcrc/project/OW_UFS/ufs-srweather-app/src/ufs_weather_model

++ UFS_UTILS_DIR=/lcrc/project/OW_UFS/ufs-srweather-app/src/UFS_UTILS
++ SFC_CLIMO_INPUT_DIR=/lcrc/project/OW_UFS/UFS_Static/sfc_climo
++ TOPO_DIR=/lcrc/project/OW_UFS/UFS_Static/fix_orog
++ EMC_POST_DIR=/lcrc/project/OW_UFS/ufs-srweather-app/src/EMC_post
++ EXPTDIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km
++ LOGDIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/log
++ CYCLE_BASEDIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km
++ GRID_DIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/grid
++ OROG_DIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/orog
++ SFC_CLIMO_DIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/sfc_climo
++ NDIGITS_ENSMEM_NAMES=0
++ ENSMEM_NAMES=("")
++ FV3_NML_ENSMEM_FPS=("")
++
GLOBAL_VAR_DEFNS_FP=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/var_defns.sh
++ DATA_TABLE_TMPL_FN=data_table
++ DIAG_TABLE_TMPL_FN=diag_table.FV3_GFS_v15p2
++ FIELD_TABLE_TMPL_FN=field_table.FV3_GFS_v15p2
++ MODEL_CONFIG_TMPL_FN=model_configure
++ NEMS_CONFIG_TMPL_FN=nems.configure
++
DATA_TABLE_TMPL_FP=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/templates/data_table
++
DIAG_TABLE_TMPL_FP=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/templates/diag_table.FV3_GFS_v15p2
++
FIELD_TABLE_TMPL_FP=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/templates/field_table.FV3_GFS_v15p2
++
FV3_NML_BASE_SUITE_FP=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/templates/input.nml.FV3
++
FV3_NML_YAML_CONFIG_FP=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/templates/FV3.input.yml
++
FV3_NML_BASE_ENS_FP=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/input.nml.base_ens
++
MODEL_CONFIG_TMPL_FP=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/templates/model_configure
++
NEMS_CONFIG_TMPL_FP=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/te

mplates/nems.configure
++ CCPP_PHYS_SUITE_FN=suite_FV3_GFS_v15p2.xml
++
CCPP_PHYS_SUITE_IN_CCPP_FP=/lcrc/project/OW_UFS/ufs-srweather-app/src/ufs_weather_model/FV3/ccpp/suites/suite_FV3_GFS_v15p2.xml
++
CCPP_PHYS_SUITE_FP=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/suite_FV3_GFS_v15p2.xml
++
DATA_TABLE_FP=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/data_table
++
FIELD_TABLE_FP=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/field_table
++ FV3_NML_FN=input.nml
++ FV3_NML_FP=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/input.nml
++
NEMS_CONFIG_FP=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/nems.configure
++ FV3_EXEC_FP=/lcrc/project/OW_UFS/ufs-srweather-app/bin/NEMS.exe
++
LOAD_MODULES_RUN_TASK_FP=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/load_modules_run_task.sh
++ GTYPE=regional
++ TILE_RGNL=7
++ NH0=0
++ NH3=3
++ NH4=4
++ LON_CTR=-75.966
++ LAT_CTR=35.917
++ NX=407
++ NY=563
++ NHW=6
++ STRETCH_FAC=0.999
++ RES_IN_FIXLAM_FILENAMES=
++ CRES=C3339
++ DEL_ANGLE_X_SG=0.0134898241
++ DEL_ANGLE_Y_SG=0.0134898241
++ NEG_NX_OF_DOM_WITH_WIDE_HALO=-419
++ NEG_NY_OF_DOM_WITH_WIDE_HALO=-575
++ OZONE_PARAM=ozphys_2015
++ EXTRN_MDL_SYSBASEDIR_ICS=
++ EXTRN_MDL_SYSBASEDIR_LBCS=
++ EXTRN_MDL_LBCS_OFFSET_HRS=0
++ LBC_SPEC_FCST_HRS=(6 12 18 24)
++ NUM_CYCLES=1

```
++ ALL_CDATES=("2019061500")
++ USE_FVCOM=FALSE
++ FVCOM_DIR=/user/defined/dir/to/fvcom/data
++ FVCOM_FILE=fvcom.nc
++ NCORES_PER_NODE=
++ PE_MEMBER01=12
++ RUN_CMD_FCST='srun -n 720'
+ export CDATE=2019061500
+ CDATE=2019061500
+ export CYCLE_DIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500
+ CYCLE_DIR=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500
+ export SLASH_ENSMEM_SUBDIR=
+ SLASH_ENSMEM_SUBDIR=
+ export ENSMEM_INDX=
+ ENSMEM_INDX=
+ /lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/jobs/JREGIONAL_RUN_FCST

========================================================================
Entering script:    "JREGIONAL_RUN_FCST"
In directory:       "/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/jobs"

This is the J-job script for the task that runs a forecast with FV3 for
the specified cycle.
========================================================================

========================================================================
Entering script:    "exregional_run_fcst.sh"
In directory:       "/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/scripts"

This is the ex-script for the task that runs a forecast with FV3 for the
specified cycle.
========================================================================

The arguments to the script in file

  "/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/scripts/exregional_run_fcst.sh"

have been set as follows:

  declare -- cdate="2019061500"
  declare -- cycle_dir="/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500"
  declare -- ensmem_indx=""
```

```
   declare -- slash_ensmem_subdir=""

Creating links in the INPUT subdirectory of the current run directory to
the grid and (filtered) orography files ...

Creating links with names that FV3 looks for in the INPUT subdirectory
of the current run directory (run_dir), where
   run_dir = "/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500"
...

Creating links in the current run directory (run_dir) to fixed (i.e.
static) files in the FIXam directory:
   FIXam = "/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/fix_am"
   run_dir = "/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500"

Creating links in the current run directory to cycle-independent model
input files in the main experiment directory...
++ readlink -f
/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/create_model_configure_file.s
h
+ local
scrfunc_fp=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/create_model_con
figure_file.sh
++ basename
/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/create_model_configure_file.s
h
+ local scrfunc_fn=create_model_configure_file.sh
++ dirname
/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/create_model_configure_file.s
h
+ local scrfunc_dir=/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush
+ local func_name=create_model_configure_file
+ valid_args=(cdate run_dir nthreads)
+ local valid_args
+ process_args valid_args cdate=2019061500 nthreads=1
run_dir=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500
+ print_input_args valid_args

The arguments to function "create_model_configure_file" in file


"/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/create_model_configure_file.
sh"
```

have been set as follows:

```
   declare -- cdate="2019061500"
   declare -- run_dir="/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500"
   declare -- nthreads="1"
+ local write_groups write_tasks_per_group cen_lon cen_lat lon_lwr_left lat_lwr_left lon_upr_rght lat_upr_rght stdlat1 stdlat2 nx ny dx dy dlon dlat yyyy mm dd hh quilting print_esmf settings model_config_fp
+ write_groups=
+ write_tasks_per_group=
+ cen_lon=
+ cen_lat=
+ lon_lwr_left=
+ lat_lwr_left=
+ lon_upr_rght=
+ lat_upr_rght=
+ stdlat1=
+ stdlat2=
+ nx=
+ ny=
+ dx=
+ dy=
+ dlon=
+ dlat=
+ '[' TRUE = TRUE ']'
+ write_groups=1
+ write_tasks_per_group=2
+ cen_lon=-75.966
+ cen_lat=35.917
+ lon_lwr_left=-82.0
+ lat_lwr_left=28.0
+ '[' lambert_conformal = lambert_conformal ']'
+ stdlat1=35.917
+ stdlat2=35.917
+ nx=402
+ ny=558
+ dx=3000.0
+ dy=3000.0
+ yyyy=2019
+ mm=06
+ dd=15
+ hh=00
++ echo_lowercase TRUE
```

```
+ quilting=true
++ echo_lowercase FALSE
+ print_esmf=false
+ print_info_msg TRUE '
Creating a model configuration file ("model_configure") in the specified
run directory (run_dir):
   run_dir = "/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500"'

Creating a model configuration file ("model_configure") in the specified
run directory (run_dir):
   run_dir = "/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500"
+ settings='    '\''PE_MEMBER01'\'': 12
   '\''start_year'\'': 2019
   '\''start_month'\'': 06
   '\''start_day'\'': 15
   '\''start_hour'\'': 00
   '\''nhours_fcst'\'': 24
   '\''dt_atmos'\'': 300
   '\''atmos_nthreads'\'': 1
   '\''ncores_per_node'\'':
   '\''quilting'\'': true
   '\''print_esmf'\'': false
   '\''output_grid'\'': lambert_conformal
   '\''write_groups'\'': 1
   '\''write_tasks_per_group'\'': 2
   '\''cen_lon'\'': -75.966
   '\''cen_lat'\'': 35.917
   '\''lon1'\'': -82.0
   '\''lat1'\'': 28.0
   '\''stdlat1'\'': 35.917
   '\''stdlat2'\'': 35.917
   '\''nx'\'': 402
   '\''ny'\'': 558
   '\''dx'\'': 3000.0
   '\''dy'\'': 3000.0
   '\''lon2'\'':
   '\''lat2'\'':
   '\''dlon'\'':
   '\''dlat'\'': '
+ print_info_msg TRUE '
The variable "settings" specifying values to be used in the "model_configure"
file has been set as follows:
#-----------------------------------------------------------------------
settings =
```

```
  \''PE_MEMBER01'\'': 12
  \''start_year'\'': 2019
  \''start_month'\'': 06
  \''start_day'\'': 15
  \''start_hour'\'': 00
  \''nhours_fcst'\'': 24
  \''dt_atmos'\'': 300
  \''atmos_nthreads'\'': 1
  \''ncores_per_node'\'':
  \''quilting'\'': true
  \''print_esmf'\'': false
  \''output_grid'\'': lambert_conformal
  \''write_groups'\'': 1
  \''write_tasks_per_group'\'': 2
  \''cen_lon'\'': -75.966
  \''cen_lat'\'': 35.917
  \''lon1'\'': -82.0
  \''lat1'\'': 28.0
  \''stdlat1'\'': 35.917
  \''stdlat2'\'': 35.917
  \''nx'\'': 402
  \''ny'\'': 558
  \''dx'\'': 3000.0
  \''dy'\'': 3000.0
  \''lon2'\'':
  \''lat2'\'':
  \''dlon'\'':
  \''dlat'\'': '
```

The variable "settings" specifying values to be used in the "model_configure"
file has been set as follows:

```
#-----------------------------------------------------------------------
settings =
  'PE_MEMBER01': 12
  'start_year': 2019
  'start_month': 06
  'start_day': 15
  'start_hour': 00
  'nhours_fcst': 24
  'dt_atmos': 300
  'atmos_nthreads': 1
  'ncores_per_node':
  'quilting': true
  'print_esmf': false
```

'output_grid': lambert_conformal
'write_groups': 1
'write_tasks_per_group': 2
'cen_lon': -75.966
'cen_lat': 35.917
'lon1': -82.0
'lat1': 28.0
'stdlat1': 35.917
'stdlat2': 35.917
'nx': 402
'ny': 558
'dx': 3000.0
'dy': 3000.0
'lon2':
'lat2':
'dlon':
'dlat':
+
model_config_fp=/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500/model_configure
+ /lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/fill_jinja_template.py -q -u '
'\''PE_MEMBER01'\'': 12
'\''start_year'\'': 2019
'\''start_month'\'': 06
'\''start_day'\'': 15
'\''start_hour'\'': 00
'\''nhours_fcst'\'': 24
'\''dt_atmos'\'': 300
'\''atmos_nthreads'\'': 1
'\''ncores_per_node'\'':
'\''quilting'\'': true
'\''print_esmf'\'': false
'\''output_grid'\'': lambert_conformal
'\''write_groups'\'': 1
'\''write_tasks_per_group'\'': 2
'\''cen_lon'\'': -75.966
'\''cen_lat'\'': 35.917
'\''lon1'\'': -82.0
'\''lat1'\'': 28.0
'\''stdlat1'\'': 35.917
'\''stdlat2'\'': 35.917
'\''nx'\'': 402
'\''ny'\'': 558
'\''dx'\'': 3000.0

```
  '\"dy'\": 3000.0
  '\"lon2'\":
  '\"lat2'\":
  '\"dlon'\":
  '\"dlat'\":                                                    '                                                    -t
/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/ush/templates/model_configure -o
/lcrc/project/OW_UFS/UFS_TestCase/TEST_US_EAST_COAST_3km/2019061500/model_configur
e
srun: Warning: can't honor --ntasks-per-node set to 24 which doesn't match the requested tasks
720 with the number of requested nodes 10. Ignoring --ntasks-per-node.


* . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * . * .
        PROGRAM nems          HAS BEGUN. COMPILED            0.00         ORG: np23
        STARTING DATE-TIME    NOV 11,2021    15:31:34.294    315    THU      2459530


 af nems config,num_restart_interval=                  1
 af nems config,restart_interval=                  0
 af nems config,quilting= T calendar=julian iau_offset=                  0
 af nems config,ideflate=                  0 nbits=                  0
 af  nems  config,quilting=  T  write_groups=                          1                          2
calendar=juliancalendar_type=                -99
 af nems config,num_files=                  2
 num_file=                  1 filename_base= dyn output_file= netcdf
 num_file=                  2 filename_base= phy output_file= netcdf
 af nems config,nfhout,nsout=                  1                60                 1                -1
 output_grid=lambert_conformal
 cen_lon=    -75.9660034          cen_lat=      35.9169998
 stdlat1=      35.9169998          stdlat2=      35.9169998
 lon1=    -82.0000000          lat1=      28.0000000
 nx=               402    ny=               558
 dx=      3000.00000          dy=      3000.00000
 af nems config,dt_atmos=               300 nfhmax=                24
 in fcst comp init, ntasks=                  10
NOTE from PE         0: MPP_DOMAINS_SET_STACK_SIZE: stack size set to        32768.
&MPP_IO_NML
 HEADER_BUFFER_VAL=16384          ,
 GLOBAL_FIELD_ON_ROOT_PE=T,
 IO_CLOCKS_ON=F,
 SHUFFLE=0                ,
 DEFLATE_LEVEL=-1               ,
 CF_COMPLIANCE=F,
 /
```

NOTE from PE 0: MPP_IO_SET_STACK_SIZE: stack size set to 131072.
NOTE from PE 0: MPP_DOMAINS_SET_STACK_SIZE: stack size set to 1800200.
StartTime= 2019 6 15 0 0 0
CurrTime = 2019 6 15 0 0 0
StopTime = 2019 6 16 0 0 0
num_atmos_calls= 288 time_init= 2019 6 15
0 0 0 time_atmos= 2019 6 15
0 0 0 time_end= 2019 6 16
0 0 0 dt_atmos= 300 Run_length= 86400
frestart= 24 0 0 0 0
0 0 0 0 0 restart_endfcst= T total_inttime=
86400
atmosphere_init: current_time_seconds = 0.0
Using n_split from the namelist: 008
Off center implicit scheme param= 1.00000000
p_fac= 0.100000001
Using n_sponge : 030
Using non_ortho : T
Starting PEs : 10
Starting Threads : 1
Cubed-sphere, single face domain decomposition
whalo = 3, ehalo = 3, shalo = 3, nhalo = 3
X-AXIS = 82 81 81 81 82
Y-AXIS = 282 281
Cubed-sphere, single face domain decomposition
whalo = 1, ehalo = 1, shalo = 1, nhalo = 1
X-AXIS = 82 81 81 81 82
Y-AXIS = 282 281
ncnst= 9 num_prog= 9 pnats= 0 dnats=
1 num_family= 0

Bounded domain: nested = F , regional = T
==>Note from fv_grid_tools_mod(read_grid): read atmosphere grid from mosaic version grid
MAX AREA (m*m): 0.89956827511924E+07 MIN AREA (m*m):
0.89739370314801E+07
GLOBAL AREA (m*m): 0.20590685089061E+13 IDEAL GLOBAL AREA (m*m):
0.51009649655132E+15

Cubed-Sphere Grid Stats : 408 x 564 x 1
2987.0678710937500 3004.9870605468750 2997.6609418367980
2987.0678710937500 3004.9870605468750
Grid Length : min: 2987.07 max: 3004.99 avg: 2997.66
min/max: 0.99
Deviation from Orthogonal : min: 0.00 max: 0.26 avg: 0.06

Aspect Ratio : min: 1.00 max: 1.01 avg: 1.00

da_max/da_min= 1.0024232084129818
da_max_c/da_min_c= 1.0015413508509869

Divergence damping Coefficients
For small dt= 37.5000000
External mode del-2 (m**2/s)= 0.0000000000000000
Internal mode del-2 SMAG dimensionless coeff= 0.100000001
Internal mode del-2 background diff= 0.0000000000000000
Internal mode del-6 background diff= 0.150000006
tracer del-2 diff= 0.00000000
Vorticity del-4 (m**4/s)= 12079.732806257969
beta= 0.00000000

in fv_restart ncnst= 9
FV_RESTART: 1 F F
Tracer sphum initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
Tracer liq_wat initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
Tracer rainwat initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
Tracer ice_wat initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
Tracer snowwat initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
Tracer graupel initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
Tracer o3mr initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
Tracer sgs_tke initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
Tracer cld_amt initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
Calling get_external_ic
NOTE from PE 0: Using external_IC::get_nggps_ic which is valid only for data which has been horizontally interpolated to the current cubed-sphere grid
enter get_nggps_ic is= 1 ie= 82 js= 283 je= 563 isd= -2 ied= 85 jsd= 280 jed= 566
enter get_nggps_ic is= 83 ie= 163 js= 283 je= 563 isd= 80 ied= 166 jsd= 280 jed= 566
enter get_nggps_ic is= 83 ie= 163 js= 1 je= 282 isd= 80 ied= 166 jsd= -2 jed= 285
NOTE from PE 0: External_IC::get_nggps_ic - use externally-generated, filtered terrain and NCEP pressure levels (no vertical remapping)
enter get_nggps_ic is= 1 ie= 82 js= 1 je= 282 isd= -2 ied= 85 jsd= -2 jed= 285
NOTE from PE 0: ==> External_ic::get_nggps_ic: using control file gfs_ctrl.nc for NGGPS IC

```
 enter get_nggps_ic is= 164 ie= 244 js=       1 je= 282 isd= 161 ied= 247 jsd=    -2 jed= 285
 enter get_nggps_ic is= 326 ie= 407 js= 283 je= 563 isd= 323 ied= 410 jsd= 280 jed= 566
 enter get_nggps_ic is= 164 ie= 244 js= 283 je= 563 isd= 161 ied= 247 jsd= 280 jed= 566
 enter get_nggps_ic is= 245 ie= 325 js= 283 je= 563 isd= 242 ied= 328 jsd= 280 jed= 566
 enter get_nggps_ic is= 245 ie= 325 js=       1 je= 282 isd= 242 ied= 328 jsd=    -2 jed= 285
 enter get_nggps_ic is= 326 ie= 407 js=       1 je= 282 isd= 323 ied= 410 jsd=    -2 jed= 285
NOTE from PE          0: ==> External_ic::get_nggps_ic: using tiled data file oro_data.nc for NGGPS
IC
NOTE from PE          0: ==> External_ic::get_nggps_ic: using tiled data file sfc_data.nc for NGGPS
IC
NOTE from PE          0: ==> External_ic::get_nggps_ic: using tiled data file gfs_data.nc for NGGPS
IC
Tracer sphum initialized with surface value of 0.100000E+31 and vertical multiplier of
1.000000
Tracer liq_wat initialized with surface value of 0.100000E+31 and vertical multiplier of
1.000000
Tracer rainwat initialized with surface value of 0.100000E+31 and vertical multiplier of
1.000000
Tracer ice_wat initialized with surface value of 0.100000E+31 and vertical multiplier of
1.000000
Tracer snowwat initialized with surface value of 0.100000E+31 and vertical multiplier of
1.000000
Tracer graupel initialized with surface value of 0.100000E+31 and vertical multiplier of
1.000000
Tracer o3mr initialized with surface value of 0.100000E+31 and vertical multiplier of      1.000000
Tracer sgs_tke initialized with surface value of 0.100000E+31 and vertical multiplier of
1.000000
Tracer cld_amt initialized with surface value of 0.100000E+31 and vertical multiplier of
1.000000
NOTE from PE          0: MPP_IO_SET_STACK_SIZE: stack size set to        1521390.
NOTE from PE          0: MPP_IO_SET_STACK_SIZE: stack size set to        1526184.
   ptop & ks        20.0000000                        21
 GFS ak(1)=      0.00000000          ak(2)=      20.0000000
 regional_bc_data file_name=INPUT/gfs_bndy.tile7.000.nc
   opened BC file INPUT/gfs_bndy.tile7.000.nc
NOTE from PE          0:    opened grid file INPUT/grid.tile7.halo4.nc
 topo filename=INPUT/oro_data.tile7.halo4.nc
 regional_bc_data file_name=INPUT/gfs_bndy.tile7.000.nc
   opened BC file INPUT/gfs_bndy.tile7.000.nc
   WARNING: Tracer sgs_tke_bottom not in input file
   WARNING: Tracer sgs_tke_left not in input file
   WARNING: Tracer cld_amt_bottom not in input file
   WARNING: Tracer cld_amt_left not in input file
 sphum =                    1
```

```
clwmr =                    2
  o3mr =                   7
ncnst =                    9
ntracers =                 9
done remap_scalar_nggps_regional_bc
done remap_scalar_nggps_regional_bc
done remap_dwinds
sphum =                    1
clwmr =                    2
  o3mr =                   7
ncnst =                    9
ntracers =                 9
In remap_scalar:
ncnst =                    9
nwat =                     6
sphum       =              1
clwmr       =              2
  o3mr      =              7
liq_aero =    -2147483646
ice_aero =    -2147483646
rainwat =                  3
ice_wat =                  4
snowwat =                  5
graupel =                  6
done remap_dwinds
regional_bc_data file_name=INPUT/gfs_bndy.tile7.006.nc
  opened BC file INPUT/gfs_bndy.tile7.006.nc
  WARNING: Tracer sgs_tke_bottom not in input file
  WARNING: Tracer sgs_tke_left not in input file
  WARNING: Tracer cld_amt_bottom not in input file
  WARNING: Tracer cld_amt_left not in input file
done remap_scalar_nggps_regional_bc
done remap_scalar_nggps_regional_bc
done remap_dwinds
done remap_dwinds
delz_model    -44.2028542          -9346.62305
sphum_model      1.71937812E-02      0.00000000
liq_wat_model    6.15000143E-04      0.00000000
ice_wat_model    4.49107320E-05      0.00000000
PS_model (mb)    1022.64453           849.490112
PT_model      300.161987           201.411682
Global Area=     2059068508906.0640
ZS_model     1565.82239          -4.51876163           107.543930
ZS_data      1722.19995          -7.37500000           107.542999
```

ZS_diff (m) 196.868896 -291.614197 9.33641335E-04
PS_diff (mb) 33.4378128 -22.0258598 -1.86595030E-03
done remap_scalar
done remap_dwinds
PS max = 1022.64453 min = 849.490112
T max = 300.161987 min = 201.411682
W max = 0.628245711 min = -0.762291074
SPHUM max = 1.71937812E-02 min = 0.00000000
TS max = 301.399994 min = 280.899994
liq_wat max = 6.14622200E-04 min = 0.00000000
ice_wat max = 4.48931351E-05 min = 0.00000000
rainwat max = 0.00000000 min = 0.00000000
snowwat max = 0.00000000 min = 0.00000000
graupel max = 0.00000000 min = 0.00000000
O3MR max = 1.52342782E-05 min = 5.72986725E-09
IC generated from the specified external source
in fv_restart ncnst= 9

fv_restart u = 6100544593737708739
fv_restart v = -7975640403653261366
fv_restart w = 880327515854074181
fv_restart delp = 2278228297924144150
fv_restart phis = 6659748240864510110
fv_restart pt = 7834881370379459540
fv_restart q(prog) nq = 9 5850929921602310574
fv_restart sphum = -8632004858511167937
fv_restart liq_wat = -6691811665401529308
fv_restart rainwat = 0
fv_restart ice_wat = -2991411306475834179
fv_restart snowwat = 0
fv_restart graupel = 0
fv_restart o3mr = 5719413678281290382
fv_restart sgs_tke = 0
fv_restart cld_amt = 0
ZS 1565.82239 -4.51876163 107.543938
PS 1022.73218 849.490112 1006.64410
T 300.161987 201.411682 294.494781
sphum 1.71937812E-02 0.00000000 9.73480754E-03
liq_wat 6.14622200E-04 0.00000000 5.79444714E-10
rainwat 0.00000000 0.00000000 0.00000000
ice_wat 4.48931351E-05 0.00000000 0.00000000
snowwat 0.00000000 0.00000000 0.00000000
graupel 0.00000000 0.00000000 0.00000000
o3mr 1.52342782E-05 5.72986725E-09 8.47697308E-08

```
 sgs_tke      0.00000000              0.00000000              0.00000000
 cld_amt      0.00000000              0.00000000              0.00000000
 U    max =        52.7138977           min =      -43.2832298
 V    max =        63.3426018           min =      -42.7607880
 W      0.628245711          -0.762291074           -2.13600672E-03

 mp_top=                    1 pfull=    0.379150778
 Mean specific humidity (mg/kg) above 75 mb=      2.46985173
 Total surface pressure (mb) =        1006.64862
 mean dry surface pressure =        1004.49817
 Total Water Vapor (kg/m**2) =       21.9121246
 --- Micro Phys water substances (kg/m**2) ---
 Total cloud water=       1.58411637E-02
 Total rain    water=       0.00000000
 Total cloud ice    =      4.12193360E-04
 Total snow             =      0.00000000
 Total graupel       =      0.00000000
 ------------------------------------------------
NOTE from PE          0: READING FROM SST_restart DISABLED
 Before adi: W max =       0.628245711           min =    -0.762291074
NOTE from PE          0: Performing adiabatic init      1 times
 Rayleigh_Super tau=      5.00000000
                   1    0.379150778
                   2    0.963871598
                   3      1.76542616
                   4      2.67225790
                   5      3.70624995
                   6      4.88725281
                   7      6.23670864
                   8      7.77857113
                   9      9.53982735
                  10      11.5509300
                  11      13.8462181
                  12      16.4643364
                  13      19.4486904
                  14      22.8478794
                  15      26.7161369
                  16      31.1137390
                  17      36.1073532
                  18      41.7703247
                  19      48.1828461
                  20      55.4319000
                  21      63.6109734
                  22      72.8196259
```

Rayleigh friction E-folding time (days):

1	0.379150778	5.40480709
2	0.963871598	8.29093456
3	1.76542616	14.5280170
4	2.67225790	26.7301331
5	3.70624995	55.2723618
6	4.88725281	146.805038
7	6.23670864	784.069458

FATAL from PE 1: set_group_update: mpp_domains_stack overflow, call mpp_domains_set_stack_size(2004931) from all PEs.

application called MPI_Abort(MPI_COMM_WORLD, 1) - process 1

FATAL from PE 2: set_group_update: mpp_domains_stack overflow, call mpp_domains_set_stack_size(2004931) from all PEs.

application called MPI_Abort(MPI_COMM_WORLD, 1) - process 2

FATAL from PE 8: set_group_update: mpp_domains_stack overflow, call mpp_domains_set_stack_size(1998775) from all PEs.

application called MPI_Abort(MPI_COMM_WORLD, 1) - process 8

FATAL from PE 6: set_group_update: mpp_domains_stack overflow, call mpp_domains_set_stack_size(1998775) from all PEs.

application called MPI_Abort(MPI_COMM_WORLD, 1) - process 6

FATAL from PE 3: set_group_update: mpp_domains_stack overflow, call mpp_domains_set_stack_size(2004931) from all PEs.

application called MPI_Abort(MPI_COMM_WORLD, 1) - process 3

FATAL from PE 7: set_group_update: mpp_domains_stack overflow, call mpp_domains_set_stack_size(1998775) from all PEs.

application called MPI_Abort(MPI_COMM_WORLD, 1) - process 7
srun: Job step aborted: Waiting up to 32 seconds for job step to finish.
slurmstepd: error: *** STEP 2276352.0 ON knl-0165 CANCELLED AT 2021-11-11T15:43:28 ***
srun: error: knl-0167: tasks 144-215: Killed
srun: error: knl-0169: tasks 288-359: Killed
srun: error: knl-0172: tasks 504-575: Killed
srun: error: knl-0174: tasks 648-719: Killed

srun: error: knl-0168: tasks 216-287: Killed
srun: error: knl-0173: tasks 576-647: Killed
srun: error: knl-0171: tasks 432-503: Killed
srun: error: knl-0170: tasks 360-431: Killed
srun: error: knl-0166: tasks 72-143: Killed
srun: error: knl-0165: tasks 0-71: Killed

ERROR:
  From script: "exregional_run_fcst.sh"
  Full path to script:
"/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/scripts/exregional_run_fcst.sh"
Call to executable to run FV3-LAM forecast returned with nonzero exit
code.
Exiting with nonzero status.

ERROR:
  From script: "JREGIONAL_RUN_FCST"
  Full path to script:
"/lcrc/project/OW_UFS/ufs-srweather-app/regional_workflow/jobs/JREGIONAL_RUN_FCST"
Call to ex-script corresponding to J-job "JREGIONAL_RUN_FCST" failed.
Exiting with nonzero status.