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&amip_interp_nml
  data_set = "reynolds_oi"
  date_out_of_range = "climo"
  interp_oi_sst = .true.
  no_anom_sst = .false.
  use_ncep_sst = .true.
/
&atmos_model_nml
  blocksize = 32
  ccpp_suite = "FV3_GFS_v15p2"
  fdia = 1.0
  fhmax = 384.0
/
&cires_ugwp_nml
  knob_ugwp_azdir = 2, 4, 4, 4
  knob_ugwp_dokdis = 1
  knob_ugwp_effac = 1, 1, 1, 1
  knob_ugwp_ndx4lh = 1
  knob_ugwp_solver = 2
  knob_ugwp_source = 1, 1, 0, 0
  knob_ugwp_stoch = 0, 0, 0, 0
  knob_ugwp_wvspec = 1, 25, 25, 25
  launch_level = 25
/
&coupler_nml
/
&diag_manager_nml
  prepend_date = .false.
/
&external_ic_nml
  levp = 65
/
&fms_io_nml
  checksum_required = .false.
  max_files_r = 100
  max_files_w = 100
/
&fms_nml
  clock_grain = "ROUTINE"
  domains_stack_size = 3000000
/
&fv_core_nml
  a_imp = 1.0
  agrid_vel_rst = .true.
  consv_te = 1.0
  d2_bg_k1 = 0.15
  d2_bg_k2 = 0.02
  d4_bg = 0.12
  d_con = 1.0
  d_ext = 0.0
  dddmp = 0.1
  deltat_max = 0.002
  dnats = 1
  do_sat_adj = .true.
  do_vort_damp = .true.
  external_eta = .true.
  external_ic = .false.
  fill = .true.
  fv_sg_adj = 450
  grid_type = -1
  hord_dp = -5
  hord_mt = 5
  hord_tm = 5
  hord_tr = 8
  hord_vt = 5
  hydrostatic = .false.
  k_split = 2
  kord_mt = 9
  kord_tm = -9
  kord_tr = 9

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kord_wz = 9
layout = 4, 4
make_nh = .false.
mountain = .true.
n_split = 6
n_sponge = 10
na_init = 0
nggps_ic = .false.
nord = 2
npx = 385
npy = 385
npz = 64
ntiles = 6
nudge_qv = .true.
nwat = 6
p_fac = 0.1
phys_hydrostatic = .false.
print_freq = 6
rf_cutoff = 7.5e2
tau = 10.0
vtdm4 = 0.02
warm_start = .true.
z_tracer = .true.
/
&fv_grid_nml
  grid_file = "INPUT/grid_spec.nc"
/
&fv_nwp_nudge_nml
/
&gfdl_cloud_microphysics_nml
  c_cracw = 0.8
  c_paut = 0.5
  c_pgacs = 0.01
  c_psaci = 0.05
  ccn_l = 300.
  ccn_o = 100.
  do_sedi_heat = .false.
  dw_land = 0.16
  fast_sat_adj = .true.
  fix_negative = .true.
  icloud_f = 1
  qi0_crt = 8.0e-5
  ql_mlt = 1.0e-3
  rh_inc = 0.30
  rh_inr = 0.30
  rh_ins = 0.30
  tau_l2v = 225.
  use_ccn = .true.
  vg_max = 12.0
  vi_max = 1.0
  vs_max = 2.0
  z_slope_ice = .true.
/
&gfs_physics_nml
  cdmbgwd = 1.0, 1.2
  cnvcld = .true.
  cnvgwd = .true.
  dspheat = .true.
  effr_in = .true.
  fhcyc = 24.0
  fhzero = 6.0
  h2o_phys = .true.
  hybedmf = .true.
  iaer = 111
  ialb = 1
  ico2 = 2
  iems = 1
  imfdeepcnv = 2
  imfshalcnv = 2
  imp_physics = 11
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isol = 2
isot = 1
isubc_lw = 2
isubc_sw = 2
ivegsr = 1
lgfdlmpgrad = .true.
ncl = 5
nst_anl = .true.
nstf_name = 2, 0, 0, 0, 0
oz_phys = .false.
oz_phys_2015 = .true.
prautco = 0.00015, 0.00015
psautco = 0.0008, 0.0005
redrag = .true.
shal_cnv = .true.
trans_trac = .true.
use_ufo = .true.
/
&interpolator_nml
  interp_method = "conserve_great_circle"
/
&mpp_io_nml
/
&nam_physics_nml
/
&nam_sfcpts
/
&nam_stochy
  iseed_shum = 2021092016012
  iseed_skeb = 2021092016011
  iseed_sppt = 2021092016013
  lat_s = 768
  lon_s = 1536
  ntrunc = 766
  shum = 0.005
  shum_lscale = 500000.0
  shum_tau = 21600.0
  skeb = 0.3
  skeb_lscale = 500000.0
  skeb_npass = 30
  skeb_tau = 21600.0
  sppt = 0.5
  sppt_logit = .true.
  sppt_lscale = 500000.0
  sppt_sfclimit = .true.
  sppt_tau = 21600.0
  use_zmtbnlck = .true.
/
&namsfc
  fabsl = 99999
  faisl = 99999
  faiss = 99999
  fnabsc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_mxsnoalb.uariz.t766.1536.768.rg.grb"
  fnaisc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/CFSR.SEAICE.1982.2012.monthly.clim.grb"
  fnalbc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_snowfree_albedo.bosu.t766.1536.768.rg.grb"
  fnalbc2 = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_albedo4.1x1.grb"
  fnlglac = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_glacier.2x2.grb"
  fnmskh = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_slmask.t1534.3072.1536.grb"
  fnmxic = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_maxice.2x2.grb"
  fnslpc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_slope.1x1.grb"
  fnsmcc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_soilmgldas.statsgo.t766.1536.768.grb"
  fnsnoc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_snoclim.1.875.grb"
  fnsotc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_soiltype.statsgo.t766.1536.768.rg.grb"
  fntg3c = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_tg3clim.2.6x1.5.grb"
  fntsfc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/RTGSST.1982.2012.monthly.clim.grb"
  fnveg = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_vegfrac.0.144.decpercent.grb"
  fnvetc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_vegtype.igbp.t766.1536.768.rg.grb"
  fnvmnc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_shdmin.0.144x0.144.grb"
  fnvmxc = "/home/mpiuser/ufs/inputs/ufs_inputdata/global/fix/fix_am.v20191213/global_shdmax.0.144x0.144.grb"
  fnzorc = "igbp"

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fsicl = 99999
fslpl = 99999
fsnol = 99999.0
fsotl = 99999.0
ftsfs = 90.0
fvctl = 99999
fvmdl = 99999
fvmxl = 99999
/
&nest_nml
/
&surf_map_nml
/
&test_case_nml
/
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