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&amp_interp_nml
  data_set = 'reynolds_oi'
  date_out_of_range = 'climo'
  interp_oi_sst = .true.
  no_anom_sst = .false.
  use_ncep_ice = .false.
  use_ncep_sst = .true.
/

&atmos_model_nml
  blocksize = 32
  ccpp_suite = 'FV3_RRFS_v1alpha'
  chksum_debug = .false.
  dycore_only = .false.
  fdiag = 1
/

&cires_ugwp_nml
  knob_ugwp_azdir = 2, 4, 4, 4
  knob_ugwp_doaxyz = 1
  knob_ugwp_doheat = 1
  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_version = 0
  knob_ugwp_wvspec = 1, 25, 25, 25
  launch_level = 25
/

&diag_manager_nml
  prepend_date = .false.
/

&external_ic_nml
  checker_tr = .false.
  filtered_terrain = .true.
  gfs_dwinds = .true.
  levp = 65
  nt_checker = 0
/

&fms_io_nml
  checksum_required = .false.
  max_files_r = 100
  max_files_w = 100
/

&fms_nml
  clock_grain = 'ROUTINE'
  domains_stack_size = 3000000
  print_memory_usage = .false.
/

&fv_core_nml
  a_imp = 1.0
  adjust_dry_mass = .false.
  agrid_vel_rst = .true.
  bc_update_interval = 3
  beta = 0.0
  consv_am = .false.
  consv_te = 0.0

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d2_bg = 0.0
d2_bg_k1 = 0.2
d2_bg_k2 = 0.04
d4_bg = 0.15
d_con = 1.0
d_ext = 0.0
dddmp = 0.1
delt_max = 0.008
dnats = 0
do_sat_adj = .false.
do_schmidt = .true.
do_vort_damp = .true.
dwind_2d = .false.
external_eta = .true.
external_ic = .true.
fill = .true.
full_zs_filter = .false.
fv_debug = .false.
fv_sg_adj = 300
gfs_phil = .false.
hord_dp = -6
hord_mt = 6
hord_tm = 6
hord_tr = 10
hord_vt = 6
hydrostatic = .false.
io_layout = 1, 1
k_split = 4
ke_bg = 0.0
kord_mt = 9
kord_tm = -9
kord_tr = 9
kord_wz = 9
layout = 10, 10
make_nh = .true.
mountain = .false.
n_split = 5
n_sponge = 24
n_zs_filter = 0
na_init = 1
ncep_ic = .false.
nggps_ic = .true.
no_dycore = .false.
nord = 2
nord_zs_filter = 4
npx = 311
npy = 311
npz = 64
nrows_blend = 10
ntiles = 1
nudge_qv = .false.
nwat = 6
p_fac = 0.1
phys_hydrostatic = .false.
print_freq = 6
range_warn = .true.
read_increment = .false.
regional = .true.
res_latlon_dynamics = 'fv3_increment.nc'
reset_eta = .false.
rf_cutoff = 2000.0
stretch_fac = 0.999
target_lat = 34.5
target_lon = -97.5
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tau = 5.0
use_hydro_pressure = .false.
vtdm4 = 0.075
warm_start = .false.
z_tracer = .true.
/

&fv_grid_nml
  grid_file = 'INPUT/grid_spec.nc'
/

&gfs_physics_nml
  bl_mynn_edmf = 1
  bl_mynn_edmf_mom = 1
  bl_mynn_tkeadvect = .true.
  cal_pre = .false.
  cdmkgwd = 3.5, 0.25
  cnvcld = .false.
  cnvgwd = .false.
  cplflx = .false.
  debug = .false.
  do_deep = .false.
  do_mynnedmf = .true.
  do_mynnsfclay = .false.
  do_sfcperfs = .false.
  do_shum = .true.
  do_skeb = .true.
  do_sppt = .true.
  dspheat = .true.
  effr_in = .true.
  fhcyc = 0.0
  fh1wr = 1200.0
  fhswr = 1200.0
  fhzero = 1.0
  h2o_phys = .true.
  hybedmf = .false.
  iaer = 111
  ialb = 1
  iau_delthrs = 6
  iau_inc_files = ''
  iaufhrs = 30
  icloud_bl = 1
  ico2 = 2
  iems = 1
  imfdeepcnv = -1
  imfshalcnv = -1
  imp_physics = 8
  iopt_alb = 2
  iopt_btr = 1
  iopt_crs = 1
  iopt_dveg = 2
  iopt_frz = 1
  iopt_inf = 1
  iopt_rad = 1
  iopt_run = 1
  iopt_sfc = 1
  iopt_snf = 4
  iopt_stc = 1
  iopt_tbot = 2
  isol = 2
  isot = 1
  isubc_lw = 2
  isubc_sw = 2
  ivegsrsc = 1
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ldiag3d = .false.
lheatstrg = .false.
lradar = .true.
lsm = 2
lsoil_lsm = 4
ltaerosol = .true.
lwhtr = .true.
ncld = 5
nsradar_reset = 3600
nst_anl = .true.
nstf_name = 2, 1, 0, 0, 0
oz_phys = .false.
oz_phys_2015 = .true.
pdfcld = .false.
pre_rad = .false.
prslrd0 = 0.0
random_clds = .false.
redrag = .true.
satmedmf = .false.
shal_cnv = .false.
swhtr = .true.
trans_trac = .true.
ttendlim = -999
use_ufo = .true.
/

&interpolator_nml
  interp_method = 'conserve_great_circle'
/

&nam_sfcsperts
  iseed_sfc = 0
  nsfcspert = 6
  pertalb = -999.0
  pertlai = -999.0
  pertshc = -999.0
  pertvegf = -999.0
  pertz0 = -999.0
  pertzt = -999.0
  sfc_lscale = 500000
  sfc_tau = 21600
  sppt_land = .false.
/

&nam_stochy
  iseed_shum = 2
  iseed_skeb = 3
  iseed_sppt = 1
  new_lscale = .true.
  shum = 0.006
  shum_lscale = 150000
  shum_tau = 21600
  shumint = 3600
  skeb = 0.5
  skeb_lscale = 150000
  skeb_tau = 21600
  skeb_vdof = 10
  skebint = 3600
  skebnorm = 1
  sppt = 1.0
  sppt_logit = .true.
  sppt_lscale = 150000
  sppt_sfclimit = .false.
  sppt_tau = 21600

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    spptint = 3600
    use_zmtnbck = .false.
/

&namsfc
  fabs1 = 99999
  fais1 = 99999
  faiss = 99999
  fnacna = ''
  fnaisc = '../fix_am/CFSR.SEAICE.1982.2012.monthly.clim.grb'
  fnglac = '../fix_am/global_glacier.2x2.grb'
  fnmskh = '../fix_am/seaice_newland.grb'
  fnmxic = '../fix_am/global_maxice.2x2.grb'
  fnsbcc = '../fix_am/global_soilmgldas.t126.384.190.grb'
  fnsnoa = ''
  fnsnoc = '../fix_am/global_snoclim.1.875.grb'
  fntsfa = ''
  fntsfc = '../fix_am/RTGSST.1982.2012.monthly.clim.grb'
  fnzorc = 'igbp'
  fsicl = 99999
  fsics = 99999
  fslpl = 99999
  fsmcl = 99999, 99999, 99999
  fsnol = 99999
  fsnos = 99999
  fsotl = 99999
  ftsfl = 99999
  ftsfs = 90
  fvetl = 99999
  fvmnl = 99999
  fvmxl = 99999
  ldebug = .true.
/

&surf_map_nml
  cd2 = -1
  cd4 = 0.12
  max_slope = 0.4
  n_del2_strong = 0
  n_del2_weak = 2
  n_del4 = 1
  peak_fac = 1.0
  zero_ocean = .false.
/
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