

```

&time_control
run_days           = 0,
run_hours          = 0,
run_minutes        = 0,
run_seconds        = 0,
start_year         = 2030, 2030, 2004, 2004
start_month        = 08, 08, 09, 09,
start_day          = 30, 30, 05, 05,
start_hour         = 00, 00, 00, 00,
start_minute       = 00, 00, 00, 00,
start_second       = 00, 00, 00, 00,
end_year           = 2030, 2030, 2004, 2004,
end_month          = 09, 09, 09, 09,
end_day            = 06, 06, 11, 11,
end_hour           = 00, 00, 06, 06,
end_minute         = 00, 00, 00, 00,
end_second         = 00, 00, 00, 00,
interval_seconds   = 21600
input_from_file    = .true.,.true.,.true.,.true.,
history_interval   = 60, 60, 60, 30,
frames_per_outfile = 1, 1, 1000, 1000,
restart
= .false.,          ! re-initialization
restart_interval    = 7200,
io_form_history     = 2
io_form_restart     = 2
io_form_input       = 2
io_form_boundary    = 2
io_form_auxinput4   = 2
io_form_auxinput2   = 2
io_form_auxinput6   =
2                   ! biogenic
io_form_auxinput7   = 0
io_form_auxinput5   = 2
! io_form_auxinput12 =
2                   ! re-initialization
auxinput5_interval_m = 60, 60, 60, 60
! auxinput6_interval_h = 24,
24,                ! biogenic
auxinput1_inname    = "met_em.d<domain>.<date>"
auxinput6_inname    =
! biogenic
! auxinput12_inname =
! re-initialization
"wrf_chem_input"    = 0
debug_level         =
force_use_old_data   =
= .true.,            ! suggested by mgavidia
/

&domains

time_step           =
40,                 ! 3600/(dx/1000*6) < integer
time_step_fract_num = 0,
time_step_fract_den = 1,
max_dom             = 2,
s_we                = 1, 1, 1, 1,
e_we                = 90, 151, 118, 100,
s_sn                = 1, 1, 1, 1,
e_sn                = 60, 121, 118, 100,
s_vert              = 1, 1, 1, 1,
e_vert              = 35, 35, 35, 35,
num_metgrid_levels  = 27
num_metgrid_soil_levels = 4
dx                  = 15000, 3000, 3000, 1000,
dy                  = 15000, 3000, 3000, 1000,
grid_id             = 1, 2, 3, 4,
parent_id           = 1, 1, 2, 3,
i_parent_start      = 1, 30, 34, 33,
j_parent_start      = 1, 20, 34, 33,
parent_grid_ratio    = 1, 5, 3, 3,
parent_time_step_ratio = 1, 5, 3, 3,
feedback            = 0,
smooth_option       = 0
p_top_requested      = 5000
zap_close_levels     = 50
interp_type         = 1
t_extrap_type       = 2
force_sfc_in_vinterp = 0
use_levels_below_ground = .true.

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use_surface                = .true.
lagrange_order             = 1
sfcp_to_sfcp              = .true.,
/

&physics
  mp_physics                = 10,    10,    2,    2,    !
Morrison double-moment scheme = 10
  progn                    = 1,      1,      0,      0,
  ra_lw_physics            = 1,      1,      1,      1,    !
RRTM = 1
  ra_sw_physics            = 4,      4,      2,      2,    !
RRTMG shortwave
  radt                    = 15,      3,     15,    15,
  sf_sfclay_physics        = 1,      1,      1,      1,    !
  sf_surface_physics       = 2,      2,      2,      2,    !
Noah Land Surface Model = 2
  bl_pbl_physics           = 8,      8,      1,      1,    !
boulac = 8
! topo_wind                = 2,      2,      2,      2,    ! to
reduce winds intensity
  bldt                    = 0,      0,      0,      0,
  cu_physics               = 5,      5,      5,      0,    !
Multi-scale Kain-Fritsch scheme = 11, GRELL 3D = 5
  cudt                    = 0,      0,      0,      0,
  isfflx                  = 1,
  ifsnow                  = 0,
  icloud                  = 1,
  surface_input_source     = 1,
  num_soil_layers          = 4,
  sf_urban_physics         = 1,                                !
Urban canopy model 3-category UCM = 1
  mp_zero_out              = 2,
  mp_zero_out_thresh       = 1.e-8,
  maxiens                  = 1,
  maxens                   = 3,
  maxens2                   = 3,
  maxens3                   = 16,
  ensdim                   = 144,
  cu_rad_feedback          = .true.,
/

&fdda
/

&dynamics
  rk_ord                   = 3,
  w_damping                = 1,
  diff_opt                 = 1,
  km_opt                   = 4,
  base_temp                = 290.,
  damp_opt                 = 0,
  zdamp                    = 5000., 5000., 5000.,
5000.,
  dampcoef                 = 0.01, 0.01, 0.01, 0.01,
  diff_6th_opt             = 0,
  diff_6th_factor          = 0.12,
  khdif                    = 0,      0,      0,      0,
  kvdif                    = 0,      0,      0,      0,
  non_hydrostatic          = .true., .true., .true., .true.,
  moist_adv_opt            = 2,      2,      2,      2,
  scalar_adv_opt           = 2,      2,      2,      2,
  chem_adv_opt             = 2,      2,      2,      2,
  tke_adv_opt              = 2,      2,      2,      2,
  time_step_sound          = 4,      4,      4,      4,
  h_mom_adv_order          = 5,      5,      5,      5,
  v_mom_adv_order          = 3,      3,      3,      3,
  h_sca_adv_order          = 5,      5,      5,      5,
  v_sca_adv_order          = 3,      3,      3,      3,
  hybrid_opt               = 0,
  use_theta_m              = 0,
/

&bdy_control
  spec_bdy_width           = 5,
  spec_zone                = 1,
  relax_zone               = 4,
  specified

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= .true., .false.,.false.,.false.,
periodic_x
= .false.,.false.,.false.,.false.,
symmetric_xs
= .false.,.false.,.false.,.false.,
symmetric_xe
= .false.,.false.,.false.,.false.,
open_xs
= .false.,.false.,.false.,.false.,
open_xe
= .false.,.false.,.false.,.false.,
periodic_y
= .false.,.false.,.false.,.false.,
symmetric_ys
= .false.,.false.,.false.,.false.,
symmetric_ye
= .false.,.false.,.false.,.false.,
open_ys
= .false.,.false.,.false.,.false.,
open_ye
= .false.,.false.,.false.,.false.,
nested
= .false., .true., .true.,.true.,
/

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&grib2
/

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&chem
kemit = 1, ! Number
of vertical levels
chem_opt = 6, 6, ! CBMZ
chemical mechanism without DMS = 6
bioemdt = 15, 15, !
biogenic in minutes
photdt = 15, 15,
chemdt = 2, 2,
io_style_emissions = 1,
emiss_inpt_opt = 102, 102,
emiss_opt = 4, 4,
chem_in_opt = 0, 0,
phot_opt = 2, 2,
gas_drydep_opt = 1, 1,
aer_drydep_opt = 1, 1,
bio_emiss_opt = 3, ! MEGAN
2
ne_area = 70, ! MEGAN
2 No of chemical species
dust_opt = 0,
dmsemiss_opt = 0,
seas_opt = 0,
gas_bc_opt = 1, 1,
gas_ic_opt = 1, 1,
aer_bc_opt = 1, 1,
aer_ic_opt = 1, 1,
gaschem_onoff = 1, 1,
aerchem_onoff = 1, 1,
wetscav_onoff = 0, 0,
cldchem_onoff = 0, 0,
vertmix_onoff = 1, 1,
chem_conv_tr = 1, 1,
biomass_burn_opt = 1, 1,
plumerisefire_frq = 30, 30,
aer_ra_feedback = 0, 0,
have_bcs_chem = .false., .false.,
/

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&namelist_quilt
nio_tasks_per_group = 0,
nio_groups = 1,
/

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