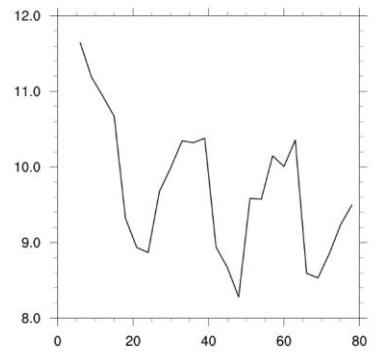
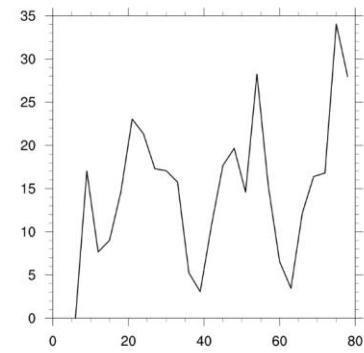


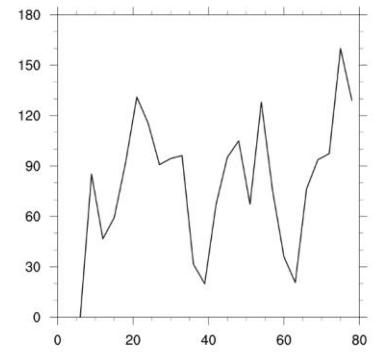
sulf(ug/m3):MUM



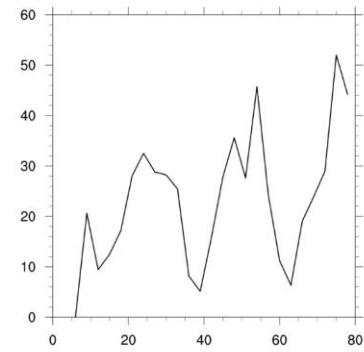
BC(ug/m3):MUM



SO2(ppbv):MUM

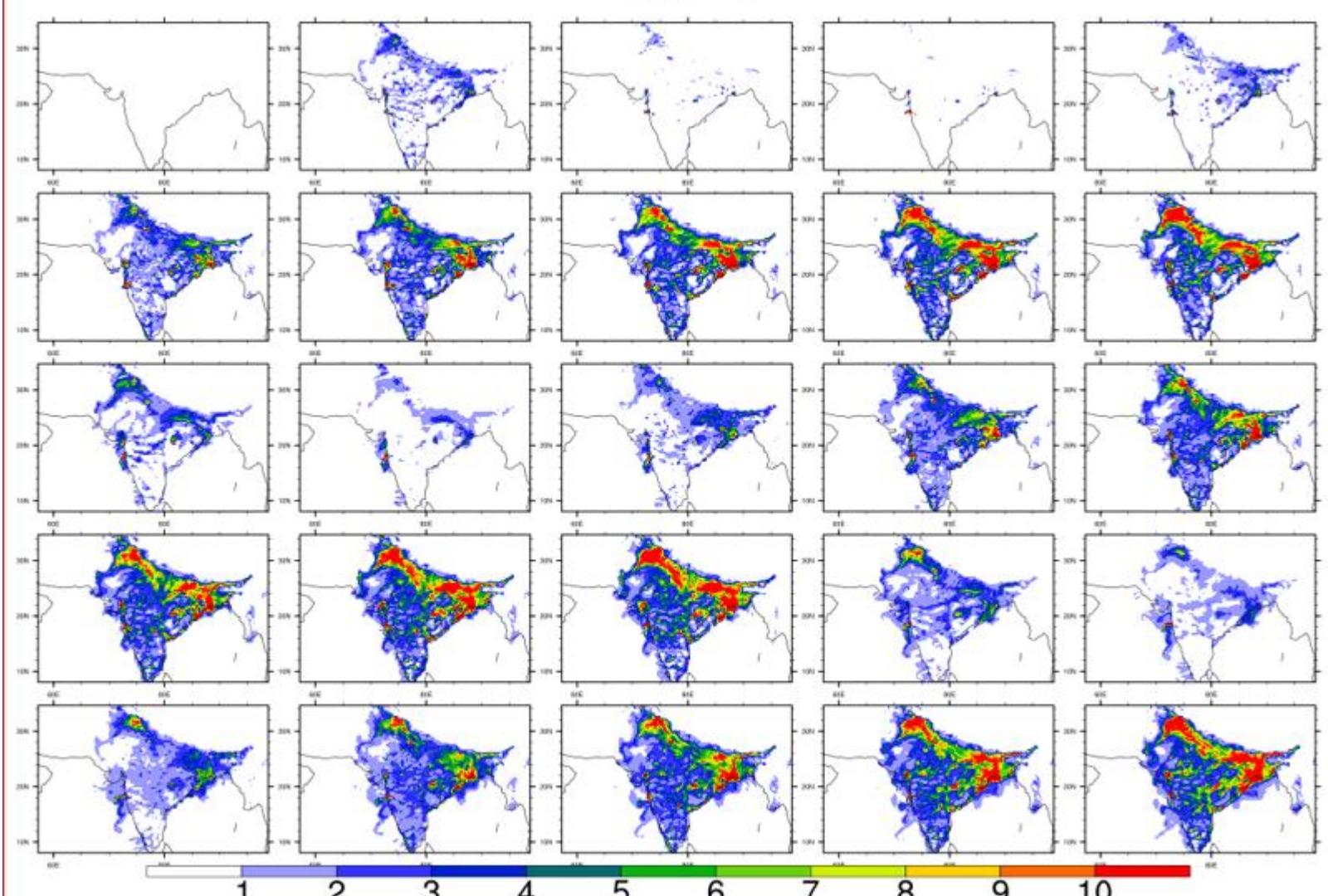


OC(ug/m3):MUM



Time in Hour

BC(ug/m3)



Output time step at every 3hr

&time_control

```
run_days = 3,
run_hours = 0,
run_minutes = 0,
run_seconds = 0,
start_year = 2017, 2000, 2000,
start_month = 01, 01, 01,
start_day = 01, 24, 24,
start_hour = 00, 12, 12,
start_minute = 00, 00, 00,
start_second = 00, 00, 00,
end_year = 2017, 2000, 2000,
end_month = 01, 01, 01,
end_day = 08, 25, 25,
end_hour = 00, 12, 12,
end_minute = 00, 00, 00,
end_second = 00, 00, 00,
interval_seconds = 10800
input_from_file = .true.,.true.,.true.,
history_interval = 180, 60, 60,
frames_per_outfile = 1000, 1000, 1000,
restart = .false.,
restart_interval = 4320,
io_form_history = 2
io_form_restart = 2
io_form_input = 2
io_form_boundary = 2
debug_level = 0
auxinput4_inname = "wrflowinp_d<domain>",


```

```
auxinput4_interval_m = 180,
io_form_auxinput4 = 2
auxinput6_inname = "wrfbiochemi_d<domain>",
io_form_auxinput6 = 2
auxinput5_inname = "wrfchemi_<hr>z_d<domain>",
frames_per_auxinput5 = 12
auxinput5_interval_m = 60,
io_form_auxinput5 = 2
auxinput7_inname =
"wrffirechemi_d<domain>_<date>",
frames_per_auxinput7 = 1,
auxinput7_interval_m = 60,
io_form_auxinput7 = 2
auxinput8_inname =
'wrfchemi_gocart_bg_d<domain>',
frames_per_auxinput8 = 1,
io_form_auxinput8 = 2,
/

```

&domains

```
time_step = 120,
time_step_fract_num = 0,
time_step_fract_den = 1,
```

```
max_dom = 1,
e_we = 351, 112, 94,
e_sn = 245, 97, 91,
e_vert = 31, 30, 30,
p_top_requested = 5000,
num_metgrid_levels = 32,
num_metgrid_soil_levels = 4,
dx = 12000, 10000,
3333.33,
dy = 12000, 10000,
3333.33,
grid_id = 1, 2, 3,
parent_id = 0, 1, 2,
i_parent_start = 1, 31, 30,
j_parent_start = 1, 17, 30,
parent_grid_ratio = 1, 3, 3,
parent_time_step_ratio = 1, 3, 3,
feedback = 1,
smooth_option = 0
/
```

&chem

```

emiss_inpt_opt      = 111,
emiss_opt          = 6,
kemit              = 1,
chem_in_opt        = 0,
bioemdt            = 30,
chemdt              = 30.,
io_style_emissions = 1,
phot_opt            = 0,
bio_emiss_opt       = 1,
ne_area              = 104,
chem_opt             = 300,
dust_opt             = 1,
dmsemis_opt         = 0,
seas_opt             = 1,
chem_conv_tr        = 0,
biomass_burn_opt    = 3,
plumerisefire_fraq = 150,
aer_ra_feedback     = 1,
have_bcs_chem       = .false.,
gas_bc_opt          = 101,
gas_ic_opt          = 101,
aer_bc_opt          = 101,
aer_ic_opt          = 101,
aerchem_onoff       = 1
chemdiag            = 1
/

```

&physics

```
mp_physics          = 3, 3, 3,
```

```

ra_lw_physics      = 1, 1, 1,
ra_sw_physics      = 1, 1, 1,
radt                = 60, 30, 30,
sf_sfclay_physics   = 1, 1, 1,
sf_surface_physics  = 2, 2, 2,
bl_pbl_physics      = 1, 1, 1,
bldt                = 0, 0, 0,
cu_physics          = 1, 1, 0,
cudt                = 5, 5, 5,
isfflx               = 1,
ifsnow               = 1,
icloud               = 1,
surface_input_source = 3,
num_soil_layers     = 4,
num_land_cat        = 28,
sf_urban_physics    = 0, 0, 0,
sst_update           = 1,
/

```

&dynamics

```

w_damping            = 0,
diff_opt              = 1, 1, 1,
km_opt                = 4, 4, 4,
diff_6th_opt          = 0, 0, 0,
diff_6th_factor       = 0.12, 0.12, 0.12,
base_temp             = 290.
damp_opt              = 0,
zdamp                 = 5000., 5000., 5000.,

```

```

dampcoef             = 0.2, 0.2, 0.2
khdif                = 0, 0, 0,
kvdif                = 0, 0, 0,
non_hydrostatic       = .true., .true., .true.,
moist_adv_opt         = 1, 1, 1,
scalar_adv_opt        = 1, 1, 1,
/

```

&bdy_control

```

spec_bdy_width        = 5,
spec_zone              = 1,
relax_zone             = 4,
specified              = .true., .false., .false.,
nested                = .false., .true., .true.,
/

```

&grib2

```
/
```

&namelist_quilt

```
nio_tasks_per_group = 0,
nio_groups          = 1,
/

```