



APPENDIX L.1

Sample CAMx Control Script

APPENDIX L.1: Sample CAMx Control Script

&CAMx_Control

Run_Message = 'ARDEQ_camxv7_cb6r4DMS, 20160101, 2016v1',

!--- Model clock control ---

Time_Zone = 0, ! (0=UTC,5=EST,6=CST,7=MST,8=PST)

Restart = .true.,

Start_Date_Hour = 2016,01,01,0000, ! (YYYY,MM,DD,HHmm)

End_Date_Hour = 2016,01,01,2400, ! (YYYY,MM,DD,HHmm)

Maximum_Timestep = 15., ! minutes

Met_Input_Frequency = 60., ! minutes

Ems_Input_Frequency = 60., ! minutes

Output_Frequency = 60., ! minutes

!--- Map projection parameters ---

Map_Projection = 'LAMBERT', ! (LAMBERT,POLAR,UTM,LATLON)

UTM_Zone = 0,

Longitude_Pole = -97., ! deg (west<0,south<0)

Latitude_Pole = 40., ! deg (west<0,south<0)

True_Latitude1 = 33., ! deg (west<0,south<0)

True_Latitude2 = 45., ! deg (west<0,south<0)

!--- Parameters for the master (first) grid ---

Number_of_Grids = 2,

Master_SW_XCoord = -2952., ! km or deg, SW corner of cell(1,1)

Master_SW_YCoord = -2772., ! km or deg, SW corner of cell (1,1)

Master_Cell_XSize = 36., ! km or deg

Master_Cell_YSize = 36., ! km or deg

Master_Grid_Columns = 172,

Master_Grid_Rows = 148,

Number_of_Layers = 35,

!--- Parameters for the 12km grid ---

Nest_Meshing_Factor(2) = 3, ! Cell size relative to master grid

Nest_Beg_I_Index(2) = 16, ! Relative to master grid

Nest_End_I_Index(2) = 147, ! Relative to master grid

Nest_Beg_J_Index(2) = 33, ! Relative to master grid

Nest_End_J_Index(2) = 114, ! Relative to master grid

!--- Model options ---

```
Diagnostic_Error_Check = .false., ! True = will stop after st timestep
Advection_Solver       = 'PPM',   ! (PPM,BOTT)
Chemistry_Solver       = 'EBI',   ! (EBI,IEH,LSODE)
PiG_Submodel           = 'None',  ! (None,GREASD,IRON)
Probing_Tool           = 'None',  ! (None,SA,DDM,PA,RTRAC)
Chemistry              = .true.,  ! (FALSE -- Inert )
Drydep_Model           = 'ZHANG03', ! (NONE,WESELY89,ZHANG03)
Bidi_NH3_Drydep        = .false.,
Wet_Deposition         = .true.,
ACM2_Diffusion         = .false.,
Super_Stepping         = .true.,
Gridded_Emissions     = .true.,
Point_Emissions        = .true.,
Ignore_Emission_Dates = .true.,
Flexi_Nest             = .false., ! allow flexi-nest of input files including restart
Inline_Ix_Emissions    = .true.,
```

!--- Output specifications ---

```
Root_Output_Name                                     =
'/root/RAID3/camx/output/ARDEQ_camxv7_cb6r4DMS.20160101.2016v1',
Average_Output_3D      = .false.,
Output_3D_Grid(1)      = .false., ! Set Average_Output_3D = .false.
Output_Species_Names    = 'ALL',
```

!--- Input files ---

```
Chemistry_Parameters           = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/chem/CAMx7.0.chemparam.CB6r4_CF2E_NH3Rscale
0',
Photolysis_Rates               = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/tuv/36US3/rate.20160101.36US3.do.CB6.txt'
Ozone_Column                   = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/o3map/36US3/ozcol.20160101.36US3.txt',
Initial_Conditions             = '',
Boundary_Conditions            = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/icbc/36US3/bndr.20160101.36US3.35L.HEMIS_cb6.e
pa.camx',
Master_Grid_Restart            =
'/root/RAID3/camx/output/ARDEQ_camxv7_cb6r4DMS.20151231.2016v1.inst',
Nested_Grid_Restart            =
'/root/RAID3/camx/output/ARDEQ_camxv7_cb6r4DMS.20151231.2016v1.finst',
PiG_Restart                    = "",
```

Surface_Grid(1) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/36US3/landuse.151221.36US3.zhang.camx.salt',
 Met3D_Grid(1) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/36US3/met3d.160101.36US3.35.wrf.camx',
 Met2D_Grid(1) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/36US3/met2d.160101.36US3.35.wrf.camx',
 Vdiff_Grid(1) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/36US3/vdif.160101.36US3.35.wrf.camx.0.1.YSU.kvpatch',
 Cloud_Grid(1) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/36US3/clra.160101.36US3.35.wrf.camx',
 Surface_Grid(2) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/12US2/camx.lu.12us2_buffer.20160101.watermask.bin',
 Met3D_Grid(2) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/12US2/camx.3d.12us2_buffer.20160101.bin',
 Met2D_Grid(2) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/12US2/camx.2d.12us2_buffer.20160101.bin',
 Vdiff_Grid(2) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/12US2/camx.kvpatch.12us2_buffer.20160101.bin.YSU',
 Cloud_Grid(2) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/met/12US2/camx.cr.12us2_buffer.20160101.bin',
 Emiss_Grid(1,1) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/afdust_adj/camx_area.afdust_adj.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,2) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/ag/camx_area.ag.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,3) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/airports/camx_area.airports.20160101_36us3_from_12us1_2016fi_16j.bin',
 Emiss_Grid(1,4) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/nonpt/camx_area.nonpt.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,5) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/nonroad/camx_area.nonroad.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,6) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/np_oilgas/camx_area.np_oilgas.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,7) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/onroad_cadj/camx_area.onroad_ca_adj.20160101_36us3_cmaq_cb6_2016fh_16j.bin',

Emiss_Grid(1,8) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/onroad/camx_area.onroad.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,9) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/onroad_can/camx_area.onroad_can.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,10) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/onroad_mex/camx_area.onroad_mex.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,11) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/othafdust_adj/camx_area.othafdust_adj.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,12) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/othar/camx_area.othar.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,13) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/othptdust_adj/camx_area.othptdust_adj.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,14) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/ptnonipm/camx_area.ptnonipm.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,15) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/pt_oilgas/camx_area.pt_oilgas.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,16) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/rail/camx_area.rail.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,17) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/36us3/rwc/camx_area.rwc.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,18) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/natural/beis/36us3/camx_area.beis.20160101_36us3_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(1,19) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/natural/oceanic/36us3/oceanic_DMS_NA_PCL_PSO4.20160101.36us3.bin',
 Emiss_Grid(1,20) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/natural/wbd/36us3/wbd.20160101.36us3.bin',
 Emiss_Grid(1,21) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/fires/merged_fires/area/36us3/camx_area.fires_all.20160101.36us3.epa2016v1_cmaq_cb6_2016fh_16j.bin',

 Point_Sources(1) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/point/36us3/cmv_c1c2/point.camx.cmv_c1c2.36US3_2016fh_16j.20160101.bin',

Point_Sources(2) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/point/36us3/cmv_c3/point.camx.cmv_c3.36US3_2016fh_16j.20160101.bin',
 Point_Sources(3) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/point/36us3/othpt/point.camx.othpt.36us3_cmaq_cb6_2016fh_16j.20160101.bin',
 Point_Sources(4) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/point/36us3/ptegu/point.camx.ptegu.12US1_cmaq_cb6_2016fi_16j.20160101.bin',
 Point_Sources(5) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/point/36us3/ptnonipm/point.camx.ptnonipm.36us3_cmaq_cb6_2016fh_16j.20160101.bin',
 Point_Sources(6) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/point/36us3/pt_oilgas/point.camx.pt_oilgas.36us3_cmaq_cb6_2016fh_16j.20160101.bin',
 Point_Sources(7) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/natural/lnox/lnox.20160101.36us3.swap12us2_buffer.bin',
 Point_Sources(8) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/fires/merged_fires/point/36us3_ptswap_12us2/mrgpt.fires.36us3_ptswap_12us2.epa2016v1_cmaq_cb6_2016fh_16j.20160101.bin',

 Emiss_Grid(2,1) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/af_dust_adj/camx_area.afdust_adj.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(2,2) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/ag/camx_area.ag.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(2,3) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/airports/camx_area.airports.20160101_12US2_wbuffer_cmaq_cb6_2016fi_16j.bin',
 Emiss_Grid(2,4) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/nonpt/camx_area.nonpt.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(2,5) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/nonroad/camx_area.nonroad.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(2,6) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/np_oilgas/camx_area.np_oilgas.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
 Emiss_Grid(2,7) = '/run/media/root/ADEQ-Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/onroad_ca_adj/camx_area.onroad_ca_adj.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',

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Emiss_Grid(2,8) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/on
road/camx_area.onroad.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,9) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/on
road_can/camx_area.onroad_can.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,10) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/on
road_mex/camx_area.onroad_mex.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,11) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/ot
hafdust_adj/camx_area.othafdust_adj.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,12) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/ot
har/camx_area.othar.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,13) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/ot
hptdust_adj/camx_area.othptdust_adj.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,14) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/pt
nonipm/camx_area.ptnonipm.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,15) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/pt
_oilgas/camx_area.pt_oilgas.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,16) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/rai
l/camx_area.rail.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,17) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/2016v1/area/12US2_wbuffer/rw
c/camx_area.rwc.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,18) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/natural/beis/12US2_wbuffer/ca
mx_area.beis.20160101_12US2_wbuffer_cmaq_cb6_2016fh_16j.bin',
Emiss_Grid(2,19) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/natural/oceanic/12US2_wbuffer
/oceanic_DMS_NA_PCL_PSO4.20160101.12us2_buffer.bin',
Emiss_Grid(2,20) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/natural/wbd/12US2_wbuffer/wb
d.20160101.12us2_buffer.bin',
Emiss_Grid(2,21) = '/run/media/root/ADEQ-
Arkansas/ADEQ_AR_2020/camx/inputs/emissions/camx_ready/fires/merged_fires/area/12US2_
wbuffer/emis2d.fires.20160101.12US2_buffer.epa2016v1_cmaq_cb6_2016fh_16j.camx',

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&END

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