

Allegato III – FILE DI INPUT

FILE .INP

Diffusione Cianuri 2024 Definitivo

INPUT GROUP: 0: Input and output file names

! METDAT =CALMET.DAT !
! NMETDAT =1 !
! CONDAT =CONC.DAT !
! DEBUG =DEBUG.DAT !
!END!

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !

! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO !!END!
! CSPEC = CU !!END!
! CSPEC = EPICLORIDRIN !!END!
! CSPEC = HCN !!END!
! CSPEC = NI !!END!
! CSPEC = PD !!END!
! CSPEC = SN !!END!
! CSPEC = ZN !!END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !
! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !
! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !

! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESHDN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !

! RGR = 10 !

! REACTR = 8 !

! NINT = 9 !

! IVEG = 1 !

!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !

! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !

! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !

! RNITE1 = 0.2 !

! RNITE2 = 2 !

! RNITE3 = 2 !

! MH2O2 = 1 !

! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !

! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !

! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !

! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !

!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !

! MHFTSZ = 0 !

! JSUP = 5 !

! CONK1 = 0.01 !

! CONK2 = 0.1 !

! TBD = 0.5 !

! IURB1 = 10 !

! IURB2 = 19 !

! XMXLEN = 1 !

! XSAMLEN = 1 !

! MXNEW = 99 !

! MXSAM = 99 !

! NCOUNT = 2 !

! SYMIN = 1 !

! SZMIN = 1 !

! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !

! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
 ! CDIV = 0, 0 !
 ! WSCALM = 0.5 !
 ! XMAXZI = 3000 !
 ! XMINZI = 50 !
 ! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
 ! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
 ! PTG0 = 0.02, 0.035 !
 ! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
 ! SL2PF = 10 !
 ! NSPLIT = 3 !
 ! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
 ! ZISPLIT = 100 !
 ! ROLDMAX = 0.25 !
 ! NSPLITH = 5 !
 ! SYSPLITH = 1 !
 ! SHSPLITH = 2 !
 ! CNSPLITH = 1E-07 !
 ! EPSSLUG = 0.0001 !
 ! EPSAREA = 1E-06 !
 ! DSRISE = 1 !
 ! HTMINBC = 500 !
 ! RSAMPBC = 10 !
 ! MDEPBC = 1 !
 !END!

 INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 4 !
 ! IPTU = 1 !
 ! NSPT1 = 8 !
 ! NPT2 = 0 !
 !END!

Subgroup 13b Point source constant data

! SRCNAM = EC1 !
 ! X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
 0, 0, 0, 0.01389, 0, 0, 0, 0 ! Source Constant data
 ! SIGYZI = 0, 0 !
 ! FMFAC = 1 !
 ! ZPLTFM = 0 !
 !END!

! SRCNAM = EC3 !
 ! X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,
 0, 0, 0, 0.01389, 0, 0, 0, 0 ! Source Constant data
 ! SIGYZI = 0, 0 !
 ! FMFAC = 1 !
 ! ZPLTFM = 0 !
 !END!

! SRCNAM = EC4 !
! X = 679.637, 4853.562, 15, 68, 0.75, 13.7, 298, 1.0,
0, 0, 0, 0.01389, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC6 !
! X = 679.647, 4853.559, 15, 68, 0.4, 12.1, 298, 1.0,
0, 0, 0, 0.00347, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC1 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,
86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

! SRCNAM = EC3 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EC4 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,

100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EC6 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
15, 15, 15, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 15, 15, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
57.56, 54.07, 44.21, 49.61, 65.3, 79,
86.83, 95.02, 100.32, 106.8, 106.4, 106.94,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 57.56, 54.07, 44.21, 49.61, 65.3, 79 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EC6 !
! IVARY = 1 !
! COBALTO = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! CU = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! EPICLORIDRINA = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! HCN = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! NI = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,

1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! PD = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! SN = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! ZN = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0!
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates
Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a

! NVL1 = 0 !

! IVLU = 1 !

! NSVL1 = 0 !

! NVL2 = 0 !

!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

Diffusione Epicloridrina 2024 Definitivo

INPUT GROUP: 0: Input and output file names

! METDAT =CALMET.DAT !
! NMETDAT =1 !
! CONDAT =CONC.DAT !
! DEBUG =DEBUG.DAT !
!END!

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !

! MPDF = 0!
! MSGTIBL = 0!
! MBCON = 0!
! MSOURCE = 0!
! MFOG = 0!
! MREG = 0!
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO !!END!
! CSPEC = CU !!END!
! CSPEC = EPICLORIDRIN !!END!
! CSPEC = HCN !!END!
! CSPEC = NI !!END!
! CSPEC = PD !!END!
! CSPEC = SN !!END!
! CSPEC = ZN !!END!

! COBALTO = 1, 1, 0, 0!
! CU = 1, 1, 0, 0!
! EPICLORIDRIN = 1, 1, 0, 0!
! HCN = 1, 1, 0, 0!
! NI = 1, 1, 0, 0!
! PD = 1, 1, 0, 0!
! SN = 1, 1, 0, 0!
! ZN = 1, 1, 0, 0!
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZ = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !

! JESAMP = 31 !
! MESHDN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !

! RGR = 10 !

! REACTR = 8 !

! NINT = 9 !

! IVEG = 1 !

!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !

! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !

! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !

! RNITE1 = 0.2 !

! RNITE2 = 2 !

! RNITE3 = 2 !

! MH2O2 = 1 !

! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !

! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !

! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !

! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !

!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !

! MHFTSZ = 0 !

! JSUP = 5 !

! CONK1 = 0.01 !

! CONK2 = 0.1 !

! TBD = 0.5 !

! IURB1 = 10 !

! IURB2 = 19 !

! XMXLEN = 1 !

! XSAMLEN = 1 !

! MXNEW = 99 !

! MXSAM = 99 !

! NCOUNT = 2 !

! SYMIN = 1 !

! SZMIN = 1 !

! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !

! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !

! CDIV = 0, 0 !

! WSCALM = 0.5 !
 ! XMAXZI = 3000 !
 ! XMINZI = 50 !
 ! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
 ! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
 ! PTG0 = 0.02, 0.035 !
 ! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
 ! SL2PF = 10 !
 ! NSPLIT = 3 !
 ! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
 ! ZISPLIT = 100 !
 ! ROLDMAX = 0.25 !
 ! NSPLITH = 5 !
 ! SYSPLITH = 1 !
 ! SHSPLITH = 2 !
 ! CNSPLITH = 1E-07 !
 ! EPSSLUG = 0.0001 !
 ! EPSAREA = 1E-06 !
 ! DSRISE = 1 !
 ! HTMINBC = 500 !
 ! RSAMPBC = 10 !
 ! MDEPBC = 1 !
 !END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 1 !
 ! IPTU = 1 !
 ! NSPT1 = 8 !
 ! NPT2 = 0 !
 !END!

Subgroup 13b Point source constant data

! SRCNAM = Ec9 !
 ! X = 679.567, 4853.54, 11, 65, 0.4, 12.1, 298, 0.0,
 0, 0, 0.00556, 0, 0, 0, 0, 0 ! Source Constant data
 ! SIGYZI = 0, 0 !
 ! FMFAC = 1 !
 ! ZPLTFM = 0 !
 !END!

Subgroup 13c Building dimension data for sources subject to downwash

Subgroup 13d Point sources variable emissions data

! SRCNAM = Ec9 !
 ! IVARY = 1 !
 ! COBALTO = 0, 0, 0, 0, 0, 0,
 0, 0, 1, 1, 1, 1,
 0, 1, 1, 1, 1, 0,
 0, 0, 0, 0, 0, 0 !
 !END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! CU = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! EPICLORIDRINA = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! HCN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! NI = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! PD = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! SN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! ZN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,

0, 0, 0, 0, 0, 0, 0 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates
Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data
Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors
!END!
! X = 679.873, 4853.608, 73, 2 ! !END!
! X = 679.77, 4853.604, 71, 2 ! !END!
! X = 679.763, 4853.536, 69, 2 ! !END!
! X = 679.761, 4853.457, 66, 2 ! !END!
! X = 679.75, 4853.397, 64, 2 ! !END!
! X = 679.652, 4853.422, 66, 2 ! !END!
! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

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INPUT GROUP: 0: Input and output file names

! METDAT =CALMET.DAT !
! NMETDAT =1 !
! CONDAT =CONC.DAT !
! DEBUG =DEBUG.DAT !
!END!

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !

! MPDF = 0!
! MSGTIBL = 0!
! MBCON = 0!
! MSOURCE = 0!
! MFOG = 0!
! MREG = 0!
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO !!END!
! CSPEC = CU !!END!
! CSPEC = EPICLORIDRIN !!END!
! CSPEC = HCN !!END!
! CSPEC = NI !!END!
! CSPEC = PD !!END!
! CSPEC = SN !!END!
! CSPEC = ZN !!END!

! COBALTO = 1, 1, 0, 0!
! CU = 1, 1, 0, 0!
! EPICLORIDRIN = 1, 1, 0, 0!
! HCN = 1, 1, 0, 0!
! NI = 1, 1, 0, 0!
! PD = 1, 1, 0, 0!
! SN = 1, 1, 0, 0!
! ZN = 1, 1, 0, 0!
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZ = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !

! JESAMP = 31 !
! MESHDN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !

```

!WSCALM = 0.5 !
!XMAXZI = 3000 !
!XMINZI = 50 !
!WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
!PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
!PTG0 = 0.02, 0.035 !
!PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
!SL2PF = 10 !
!NSPLIT = 3 !
!IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
!ZISPLIT = 100 !
!ROLDMAX = 0.25 !
!NSPLITH = 5 !
!SYSPLITH = 1 !
!SHSPLITH = 2 !
!CNSPLITH = 1E-07 !
!EPSSLUG = 0.0001 !
!EPSAREA = 1E-06 !
!DSRISE = 1 !
!HTMINBC = 500 !
!RSAMPBC = 10 !
!MDEPBC = 1 !
!END!

```

```

-----
INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters
-----

```

Subgroup 13a

```

!NPT1 = 3 !
!IPTU = 1 !
!NSPT1 = 0 !
!NPT2 = 0 !
!END!

```

Subgroup 13b Point source constant data

```

!SRCNAM = EC1 !
!X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0, 0.02778, 0, 0 ! Source Constant data
!SIGYZI = 0, 0 !
!FMFAC = 1 !
!ZPLTFM = 0 !
!END!

```

```

!SRCNAM = EC2 !
!X = 679.633, 4853.567, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0, 0.02778, 0, 0 ! Source Constant data
!SIGYZI = 0, 0 !
!FMFAC = 1 !
!ZPLTFM = 0 !
!END!

```

```

!SRCNAM = EC3 !
!X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,

```

0, 0, 0, 0, 0, 0.02778, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC1 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,
86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

! SRCNAM = EC2 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EC3 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a

! NAR1 = 0 !
! IARU = 1 !

! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a

! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a

! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors
!END!

! X = 679.873, 4853.608, 73, 2 ! !END!
! X = 679.77, 4853.604, 71, 2 ! !END!
! X = 679.763, 4853.536, 69, 2 ! !END!
! X = 679.761, 4853.457, 66, 2 ! !END!
! X = 679.75, 4853.397, 64, 2 ! !END!
! X = 679.652, 4853.422, 66, 2 ! !END!
! X = 679.519, 4853.445, 64, 2 ! !END!
! X = 679.633, 4853.701, 69, 2 ! !END!
! X = 679.416, 4853.593, 62, 2 ! !END!

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INPUT GROUP: 0: Input and output file names

! METDAT =CALMET.DAT !
! NMETDAT =1 !
! CONDAT =CONC.DAT !
! DEBUG =DEBUG.DAT !
!END!

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !

! MPDF = 0!
! MSGTIBL = 0!
! MBCON = 0!
! MSOURCE = 0!
! MFOG = 0!
! MREG = 0!
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO !!END!
! CSPEC = CU !!END!
! CSPEC = EPICLORIDRIN !!END!
! CSPEC = HCN !!END!
! CSPEC = NI !!END!
! CSPEC = PD !!END!
! CSPEC = SN !!END!
! CSPEC = ZN !!END!

! COBALTO = 1, 1, 0, 0!
! CU = 1, 1, 0, 0!
! EPICLORIDRIN = 1, 1, 0, 0!
! HCN = 1, 1, 0, 0!
! NI = 1, 1, 0, 0!
! PD = 1, 1, 0, 0!
! SN = 1, 1, 0, 0!
! ZN = 1, 1, 0, 0!
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !

! JESAMP = 31 !
! MESHDN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !

```

!WSCALM = 0.5 !
!XMAXZI = 3000 !
!XMINZI = 50 !
!WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
!PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
!PTG0 = 0.02, 0.035 !
!PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
!SL2PF = 10 !
!NSPLIT = 3 !
!IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
!ZISPLIT = 100 !
!ROLDMAX = 0.25 !
!NSPLITH = 5 !
!SYSPLITH = 1 !
!SHSPLITH = 2 !
!CNSPLITH = 1E-07 !
!EPSSLUG = 0.0001 !
!EPSAREA = 1E-06 !
!DSRISE = 1 !
!HTMINBC = 500 !
!RSAMPBC = 10 !
!MDEPBC = 1 !
!END!

```

```

-----
INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters
-----

```

Subgroup 13a

```

!NPT1 = 6 !
!IPTU = 1 !
!NSPT1 = 16 !
!NPT2 = 0 !
!END!

```

Subgroup 13b Point source constant data

```

!SRCNAM = EC1 !
!X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0.00556, 0, 0, 0, 0, 0, 0 ! Source Constant data
!SIGYZI = 0, 0 !
!FMFAC = 1 !
!ZPLTFM = 0 !
!END!

```

```

!SRCNAM = EC2 !
!X = 679.633, 4853.567, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0.00556, 0, 0, 0, 0, 0, 0 ! Source Constant data
!SIGYZI = 0, 0 !
!FMFAC = 1 !
!ZPLTFM = 0 !
!END!

```

```

!SRCNAM = EC3 !
!X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,

```

0, 0.00556, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC4 !
! X = 679.637, 4853.562, 15, 68, 0.75, 13.7, 298, 1.0,
0, 0.00556, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EI1 !
! X = 679.665, 4853.611, 16, 69, 0.4, 12.1, 298, 1.0,
0, 0.00417, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = Ec8 !
! X = 679.572, 4853.537, 11, 65, 0.4, 15.4, 293, 0.0,
0, 0.0036, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC1 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,
86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

! SRCNAM = EC2 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,

86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EC3 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EC4 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EI1 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 15, 15, 15, 15,
15, 15, 16.7, 16.7, 16.7, 16.9,
16.9, 16.7, 16.7, 16.7, 16.7, 16.7,
16.7, 16.9, 15, 15, 15, 15, 15, 15, 16.7, 16.7, 16.7, 16.9 !
! WIDTH = 90.3, 98.86, 104.42, 106.8, 106.4, 106.94,
104.41, 98.7, 55, 58.33, 59.89, 59.63,
57.56, 54.07, 20.94, 17.51, 22.6, 79,
90.3, 33.24, 34.88, 35.47, 35.62, 35.85,
35.63, 98.7, 55, 58.33, 59.89, 59.63, 57.56, 54.07, 20.94, 17.51, 22.6, 79 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EI1 !
! IVARY = 1 !
! COBALTO = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EI1 !

! IVARY = 1 !
! CU = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = E1 !
! IVARY = 1 !
! EPICLORIDRINA = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = E1 !
! IVARY = 1 !
! HCN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = E1 !
! IVARY = 1 !
! NI = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = E1 !
! IVARY = 1 !
! PD = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = E1 !
! IVARY = 1 !
! SN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = E1 !
! IVARY = 1 !
! ZN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !

!END!

! SRCNAM = Ec8 !

! IVARY = 1 !

! COBALTO = 0, 0, 0, 0, 0, 0,

0, 0, 1, 1, 1, 1,

0, 1, 1, 1, 1, 0,

0, 0, 0, 0, 0, 0 !

!END!

! SRCNAM = Ec8 !

! IVARY = 1 !

! CU = 0, 0, 0, 0, 0, 0,

0, 0, 1, 1, 1, 1,

0, 1, 1, 1, 1, 0,

0, 0, 0, 0, 0, 0 !

!END!

! SRCNAM = Ec8 !

! IVARY = 1 !

! EPICLORIDRINA = 0, 0, 0, 0, 0, 0,

0, 0, 1, 1, 1, 1,

0, 1, 1, 1, 1, 0,

0, 0, 0, 0, 0, 0 !

!END!

! SRCNAM = Ec8 !

! IVARY = 1 !

! HCN = 0, 0, 0, 0, 0, 0,

0, 0, 1, 1, 1, 1,

0, 1, 1, 1, 1, 0,

0, 0, 0, 0, 0, 0 !

!END!

! SRCNAM = Ec8 !

! IVARY = 1 !

! NI = 0, 0, 0, 0, 0, 0,

0, 0, 1, 1, 1, 1,

0, 1, 1, 1, 1, 0,

0, 0, 0, 0, 0, 0 !

!END!

! SRCNAM = Ec8 !

! IVARY = 1 !

! PD = 0, 0, 0, 0, 0, 0,

0, 0, 1, 1, 1, 1,

0, 1, 1, 1, 1, 0,

0, 0, 0, 0, 0, 0 !

!END!

! SRCNAM = Ec8 !

! IVARY = 1 !

! SN = 0, 0, 0, 0, 0, 0,

0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! ZN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

Diffusione Stagno 2024 Definitivo

INPUT GROUP: 0: Input and output file names

! METDAT =CALMET.DAT !
! NMETDAT =1 !
! CONDAT =CONC.DAT !
! DEBUG =DEBUG.DAT !
!END!

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !

! MPDF = 0!
! MSGTIBL = 0!
! MBCON = 0!
! MSOURCE = 0!
! MFOG = 0!
! MREG = 0!
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO !!END!
! CSPEC = CU !!END!
! CSPEC = EPICLORIDRIN !!END!
! CSPEC = HCN !!END!
! CSPEC = NI !!END!
! CSPEC = PD !!END!
! CSPEC = SN !!END!
! CSPEC = ZN !!END!

! COBALTO = 1, 1, 0, 0!
! CU = 1, 1, 0, 0!
! EPICLORIDRIN = 1, 1, 0, 0!
! HCN = 1, 1, 0, 0!
! NI = 1, 1, 0, 0!
! PD = 1, 1, 0, 0!
! SN = 1, 1, 0, 0!
! ZN = 1, 1, 0, 0!
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !

! JESAMP = 31 !
! MESHDN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !

```

! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !
! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

```

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

```

! NPT1 = 3 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

```

Subgroup 13b Point source constant data

```

! SRCNAM = EC1 !
! X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0, 0, 0.01111, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

```

```

! SRCNAM = EC3 !
! X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,
0, 0, 0, 0, 0, 0, 0.01111, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

```

```

! SRCNAM = Ec8 !
! X = 679.572, 4853.537, 11, 65, 0.4, 15.4, 293, 0.0,

```


0, 0, 0, 0, 0, 0, 0.0036, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC1 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,
86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

! SRCNAM = EC3 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = Ec8 !
! IVARY = 1 !
! COBALTO = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! CU = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! EPICLORIDRINA = 0, 0, 0, 0, 0, 0,

0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! HCN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! NI = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! PD = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! SN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! ZN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !

!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a

! NLINES = 0 !

! ILNU = 1 !

! NSLN1 = 0 !

! NLN2 = 0 !

!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a

! NVL1 = 0 !

! IVLU = 1 !

! NSVL1 = 0 !

! NVL2 = 0 !

!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

Diffusione Nichel EC1

INPUT GROUP: 0: Input and output file names

! METDAT =CALMET.DAT !
! NMETDAT =1 !
! CONDAT =CONC.DAT !
! DEBUG =DEBUG.DAT !
!END!

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !

! MPDF = 0!
! MSGTIBL = 0!
! MBCON = 0!
! MSOURCE = 0!
! MFOG = 0!
! MREG = 0!
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO !!END!
! CSPEC = CU !!END!
! CSPEC = EPICLORIDRIN !!END!
! CSPEC = HCN !!END!
! CSPEC = NI !!END!
! CSPEC = PD !!END!
! CSPEC = SN !!END!
! CSPEC = ZN !!END!

! COBALTO = 1, 1, 0, 0!
! CU = 1, 1, 0, 0!
! EPICLORIDRIN = 1, 1, 0, 0!
! HCN = 1, 1, 0, 0!
! NI = 1, 1, 0, 0!
! PD = 1, 1, 0, 0!
! SN = 1, 1, 0, 0!
! ZN = 1, 1, 0, 0!
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZ = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !

! JESAMP = 31 !
! MESHDN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !

```

! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !
! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

```

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

```

! NPT1 = 1 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

```

Subgroup 13b Point source constant data

```

! SRCNAM = EC1 !
! X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0.00055, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

```

Subgroup 13c Building dimension data for sources subject to downwash

```

! SRCNAM = EC1 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,

```


86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EC1 !
! IVARY = 1 !
! COBALTO = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! CU = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! EPICLORIDRINA = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! HCN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! NI = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! PD = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! SN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! ZN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

Diffusione Nichel EC2

INPUT GROUP: 0: Input and output file names

! METDAT =CALMET.DAT !
! NMETDAT =1 !
! CONDAT =CONC.DAT !
! DEBUG =DEBUG.DAT !
!END!

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !

! MPDF = 0!
! MSGTIBL = 0!
! MBCON = 0!
! MSOURCE = 0!
! MFOG = 0!
! MREG = 0!
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO !!END!
! CSPEC = CU !!END!
! CSPEC = EPICLORIDRIN !!END!
! CSPEC = HCN !!END!
! CSPEC = NI !!END!
! CSPEC = PD !!END!
! CSPEC = SN !!END!
! CSPEC = ZN !!END!

! COBALTO = 1, 1, 0, 0!
! CU = 1, 1, 0, 0!
! EPICLORIDRIN = 1, 1, 0, 0!
! HCN = 1, 1, 0, 0!
! NI = 1, 1, 0, 0!
! PD = 1, 1, 0, 0!
! SN = 1, 1, 0, 0!
! ZN = 1, 1, 0, 0!
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !

! JESAMP = 31 !
! MESHDN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !

```

! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !
! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

```

```

-----
INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters
-----

```

Subgroup 13a

```

! NPT1 = 1 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

```

Subgroup 13b Point source constant data

```

! SRCNAM = EC2 !
! X = 679.633, 4853.567, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0.00055, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

```

Subgroup 13c Building dimension data for sources subject to downwash

```

! SRCNAM = EC2 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,

```


86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EC2 !
! IVARY = 1 !
! COBALTO = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! CU = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! EPICLORIDRINA = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! HCN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! NI = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! PD = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! SN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! ZN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

Diffusione Nichel EC3

INPUT GROUP: 0: Input and output file names

! METDAT =CALMET.DAT !
! NMETDAT =1 !
! CONDAT =CONC.DAT !
! DEBUG =DEBUG.DAT !
!END!

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !

! MPDF = 0!
! MSGTIBL = 0!
! MBCON = 0!
! MSOURCE = 0!
! MFOG = 0!
! MREG = 0!
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO !!END!
! CSPEC = CU !!END!
! CSPEC = EPICLORIDRIN !!END!
! CSPEC = HCN !!END!
! CSPEC = NI !!END!
! CSPEC = PD !!END!
! CSPEC = SN !!END!
! CSPEC = ZN !!END!

! COBALTO = 1, 1, 0, 0!
! CU = 1, 1, 0, 0!
! EPICLORIDRIN = 1, 1, 0, 0!
! HCN = 1, 1, 0, 0!
! NI = 1, 1, 0, 0!
! PD = 1, 1, 0, 0!
! SN = 1, 1, 0, 0!
! ZN = 1, 1, 0, 0!
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !

! JESAMP = 31 !
! MESHDN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !

! WSCALM = 0.5 !
 ! XMAXZI = 3000 !
 ! XMINZI = 50 !
 ! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
 ! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
 ! PTG0 = 0.02, 0.035 !
 ! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
 ! SL2PF = 10 !
 ! NSPLIT = 3 !
 ! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
 ! ZISPLIT = 100 !
 ! ROLDMAX = 0.25 !
 ! NSPLITH = 5 !
 ! SYSPLITH = 1 !
 ! SHSPLITH = 2 !
 ! CNSPLITH = 1E-07 !
 ! EPSSLUG = 0.0001 !
 ! EPSAREA = 1E-06 !
 ! DSRISE = 1 !
 ! HTMINBC = 500 !
 ! RSAMPBC = 10 !
 ! MDEPBC = 1 !
 !END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 1 !
 ! IPTU = 1 !
 ! NSPT1 = 8 !
 ! NPT2 = 0 !
 !END!

Subgroup 13b Point source constant data

! SRCNAM = EC3 !
 ! X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,
 0, 0, 0, 0, 0.000555, 0, 0, 0 ! Source Constant data
 ! SIGYZI = 0, 0 !
 ! FMFAC = 1 !
 ! ZPLTFM = 0 !
 !END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC3 !
 ! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 15, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
 ! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
 100.56, 95.23, 87, 76.13, 64.74, 48.94,
 31.66, 26.27, 32.42, 49.61, 65.3, 76,

86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EC3 !
! IVARY = 1 !
! COBALTO = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! CU = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! EPICLORIDRINA = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! HCN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! NI = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! PD = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! SN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! ZN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

Diffusione Cobalto EC2 - 1.5g/h

INPUT GROUP: 0: Input and output file names

! METDAT =CALMET.DAT !
! NMETDAT =1 !
! CONDAT =CONC.DAT !
! DEBUG =DEBUG.DAT !
!END!

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !

! MTINV = 0!
! MPDF = 0!
! MSGTIBL = 0!
! MBCON = 0!
! MSOURCE = 0!
! MFOG = 0!
! MREG = 0!
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO !!END!
! CSPEC = CU !!END!
! CSPEC = EPICLORIDRIN !!END!
! CSPEC = HCN !!END!
! CSPEC = NI !!END!
! CSPEC = PD !!END!
! CSPEC = SN !!END!
! CSPEC = ZN !!END!

! COBALTO = 1, 1, 0, 0!
! CU = 1, 1, 0, 0!
! EPICLORIDRIN = 1, 1, 0, 0!
! HCN = 1, 1, 0, 0!
! NI = 1, 1, 0, 0!
! PD = 1, 1, 0, 0!
! SN = 1, 1, 0, 0!
! ZN = 1, 1, 0, 0!
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !

! IESAMP = 31 !
! JESAMP = 31 !
! MESHDN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !

! RGR = 10 !

! REACTR = 8 !

! NINT = 9 !

! IVEG = 1 !

!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !

! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !

! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !

! RNITE1 = 0.2 !

! RNITE2 = 2 !

! RNITE3 = 2 !

! MH2O2 = 1 !

! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !

! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !

! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !

! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !

!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !

! MHFTSZ = 0 !

! JSUP = 5 !

! CONK1 = 0.01 !

! CONK2 = 0.1 !

! TBD = 0.5 !

! IURB1 = 10 !

! IURB2 = 19 !

! XMXLEN = 1 !

! XSAMLEN = 1 !

! MXNEW = 99 !

! MXSAM = 99 !

! NCOUNT = 2 !

! SYMIN = 1 !

! SZMIN = 1 !

! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !

! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !

! CDIV = 0, 0 !
 ! WSCALM = 0.5 !
 ! XMAXZI = 3000 !
 ! XMINZI = 50 !
 ! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
 ! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
 ! PTG0 = 0.02, 0.035 !
 ! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
 ! SL2PF = 10 !
 ! NSPLIT = 3 !
 ! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
 ! ZISPLIT = 100 !
 ! ROLDMAX = 0.25 !
 ! NSPLITH = 5 !
 ! SYSPLITH = 1 !
 ! SHSPLITH = 2 !
 ! CNSPLITH = 1E-07 !
 ! EPSSLUG = 0.0001 !
 ! EPSAREA = 1E-06 !
 ! DSRISE = 1 !
 ! HTMINBC = 500 !
 ! RSAMPBC = 10 !
 ! MDEPBC = 1 !
 !END!

 INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 1 !
 ! IPTU = 1 !
 ! NSPT1 = 8 !
 ! NPT2 = 0 !
 !END!

Subgroup 13b Point source constant data

! SRCNAM = EC2 !
 ! X = 679.633, 4853.567, 15, 68, 0.8, 12.1, 298, 1.0,
 0.000416, 0, 0, 0, 0, 0, 0, 0 ! Source Constant data
 ! SIGYZI = 0, 0 !
 ! FMFAC = 1 !
 ! ZPLTFM = 0 !
 !END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC2 !
 ! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 15, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
 ! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
 100.56, 95.23, 87, 76.13, 64.74, 48.94,

31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EC2 !
! IVARY = 1 !
! COBALTO = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! CU = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! EPICLORIDRINA = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! HCN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! NI = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! PD = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! SN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! ZN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

FILE .LST

Diffusione Cianuri 2024 Definitivo

CALPUFF Version: 6.42 Level: 110325

Clock time: 11:54:57

Date: 09-02-2024

Internal Coordinate Transformations by --- COORDLIB Version: 1.99 Level: 070921

Control File Type: CALPUFF.INP 1.0

Run Title:

Diffusione Cianuri 2024 Definitivo

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1972 2071

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO ! !END!
! CSPEC = CU ! !END!
! CSPEC = EPICLORIDRIN ! !END!
! CSPEC = HCN ! !END!
! CSPEC = NI ! !END!
! CSPEC = PD ! !END!
! CSPEC = SN ! !END!
! CSPEC = ZN ! !END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !

! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !
! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESH DN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !

! IWPRT = 0 !
! ICFRQ = 1 !
! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !
! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !

! ZISPLIT = 100 !
! ROLDMAX = 0.25 !
! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 4 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

Subgroup 13b Point source constant data

! SRCNAM = EC1 !
! X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0.01389, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC3 !
! X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,
0, 0, 0, 0.01389, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC4 !
! X = 679.637, 4853.562, 15, 68, 0.75, 13.7, 298, 1.0,
0, 0, 0, 0.01389, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC6 !
! X = 679.647, 4853.559, 15, 68, 0.4, 12.1, 298, 1.0,
0, 0, 0, 0.00347, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC1 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,
86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

! SRCNAM = EC3 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EC4 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EC6 !

```

! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
15, 15, 15, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 15, 15, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
57.56, 54.07, 44.21, 49.61, 65.3, 79,
86.83, 95.02, 100.32, 106.8, 106.4, 106.94,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 57.56, 54.07, 44.21, 49.61, 65.3, 79 !
!END!

```

Subgroup 13d Point sources variable emissions data

```

! SRCNAM =      EC6 !
! IVARY = 1 !
! COBALTO = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0 !
!END!

```

```

! SRCNAM =      EC6 !
! IVARY = 1 !
! CU = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0 !
!END!

```

```

! SRCNAM =      EC6 !
! IVARY = 1 !
! EPICLORIDRINA = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0 !
!END!

```

```

! SRCNAM =      EC6 !
! IVARY = 1 !
! HCN = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0 !
!END!

```

```

! SRCNAM =      EC6 !
! IVARY = 1 !
! NI = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,

```

1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! PD = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! SN = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = EC6 !
! IVARY = 1 !
! ZN = 0, 0, 0, 0, 0, 0,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1,
0, 0, 0, 0, 0, 0!
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates
Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !

! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a

! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

**** CONFIRMATION OF CONTROL DATA ****

----- INPUT GROUP 1 -----

metrun = 1

ibyr = 0

ibmo = 0

ibdy = 0

ibhr = 0

ibsec = 0

ibdathr = 0

ieyr = 0

iemo = 0

iedy = 0

iehr = 0

iesec = 0

iedathr = 0
nsecdt = 3600
irlg = 0
iavg = 1
xbtz = 0.00000000E+00
abtz = UTC+0000
nspec = 8
nse = 8
itest = 2
metfm = 1
mprffm = 1
mrestart= 0
nrespd = 0
avet = 60.0000000
pgtime = 60.0000000
ioutu = 1
iovers = 2

----- INPUT GROUP 2 -----

mgauss = 1
mctadj = 3
mctsg = 0
mslug = 0
mtrans = 1
mchem = 0
maqchem = 0
mlwc = 0
mwet = 0
mdry = 0
mtilt = 0
mdisp = 3
mdisp2 = 3
mturbvw = 3
mtauly = 0.00000000E+00
mtauadv = 0
mcturb = 1
mrrough = 0
mtip = 1
mbdw = 1
mshear = 0
mrise = 1
msplit = 0
mpartl = 1
mpartlba = 1
mtinv = 0
mpdf = 0
msgtibl = 0
mbcon = 0

msource= 0
mfog = 0
mreg = 0

----- INPUT GROUP 3 -----

SPECIES: COBALTO j: 1 isplst(-,j) = 1 1 0 GROUP: COBALTO
SPECIES: CU j: 2 isplst(-,j) = 1 1 0 GROUP: CU
SPECIES: EPICLORIDRIN j: 3 isplst(-,j) = 1 1 0 GROUP: EPICLORIDRIN
SPECIES: HCN j: 4 isplst(-,j) = 1 1 0 GROUP: HCN
SPECIES: NI j: 5 isplst(-,j) = 1 1 0 GROUP: NI
SPECIES: PD j: 6 isplst(-,j) = 1 1 0 GROUP: PD
SPECIES: SN j: 7 isplst(-,j) = 1 1 0 GROUP: SN
SPECIES: ZN j: 8 isplst(-,j) = 1 1 0 GROUP: ZN

----- INPUT GROUP 4 -----

pmap = UTM
datum = WGS-84
daten = 02-21-2003
utmhem = N
iutmzn = 32
nx = 40
ny = 40
nz = 8
zface = 0.00000000E+00 20.0000000 50.0000000 100.000000 200.000000 500.000000 1000.00000
2000.00000 4000.00000
dgridkm = 0.100000001
xorigkm = 677.698975
yorigkm = 4851.60303
iutmzn = 32
ibcomp = 10
jbcomp = 10
iecomp = 31
jcomp = 31
lsamp = T
ibsamp = 10
jbsamp = 10
iesamp = 31
jesamp = 31
meshdn = 1

----- INPUT GROUP 5 -----

icon = 1
idry = 0
iwet = 0
it2d = 0
irho = 0

ivis = 0
lcomprs = F
icprt = 0
idprt = 0
iwprt = 0
icfrq = 1
idfrq = 1
iwfrq = 1
(note: i_frq values converted to timesteps)
iprtu = 1
imesg = 2
imflx = 0
imbal = 0
inrise = 0
iqaplot = 0
ipftrak = 0
ldebug = F
ipfdeb = 1
npfdeb = 1
nn1 = 1
nn2 = 10

GROUP: COBALTO j: 1 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: CU j: 2 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: EPICLORIDRIN j: 3 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: HCN j: 4 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: NI j: 5 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: PD j: 6 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: SN j: 7 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: ZN j: 8 ioutop(-,j) = 0 1 0 0 0 0 0

----- INPUT GROUP 6 -----

----- Subgroup (6a) -----

nhill = 0
nctrec = 0
mhill = 1
xhill2m= 1.00000000
zhill2m= 1.00000000
xctdmkm= 0.00000000E+00
yctdmkm= 0.00000000E+00

----- Subgroup (6b) -----

CTDM-type terrain file read

----- Subgroup (6c) -----

CTDM-type receptor file read

----- INPUT GROUP 7 -----

SPECIES: COBALTO j: 1 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: CU j: 2 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: HCN j: 4 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: NI j: 5 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: PD j: 6 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: SN j: 7 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: ZN j: 8 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

----- INPUT GROUP 8 -----

SPECIES: COBALTO j: 1 dryp(-,j) = -999.00 -999.00
SPECIES: CU j: 2 dryp(-,j) = -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryp(-,j) = -999.00 -999.00
SPECIES: HCN j: 4 dryp(-,j) = -999.00 -999.00
SPECIES: NI j: 5 dryp(-,j) = -999.00 -999.00
SPECIES: PD j: 6 dryp(-,j) = -999.00 -999.00
SPECIES: SN j: 7 dryp(-,j) = -999.00 -999.00
SPECIES: ZN j: 8 dryp(-,j) = -999.00 -999.00

----- INPUT GROUP 9 -----

rcutr = 30.0000000
rgr = 10.0000000
reactr = 8.00000000
pconst = 2.30000001E-08
bmin = 1.00000001E-07
bmax = 2.49999994E-06
qswmax = 600.000000
dconst1 = 2.00000000
dconst2 = 0.666666687
dconst3 = 4.79999988E-04
dconst4 = 0.666666687
nint = 9
iveg = 1

----- INPUT GROUP 10 -----

SPECIES: COBALTO j: 1 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: CU j: 2 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: EPICLORIDRIN j: 3 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: HCN j: 4 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: NI j: 5 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: PD j: 6 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: SN j: 7 wa(-,j) = 0.000E+00 0.000E+00

SPECIES: ZN j: 8 wa(-,j) = 0.000E+00 0.000E+00

----- INPUT GROUP 11 -----

moz = 0
bcko3m = 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
mnh3 = 0
mavgnh3 = 1
bcknh3m = 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
rnite1 = 0.200000003
rnite2 = 2.00000000
rnite3 = 2.00000000
mh2o2 = 1
bckh2o2m = 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
bckpmf = 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
ofrac = 0.150000006 0.150000006 0.200000003 0.200000003
= 0.200000003 0.200000003 0.200000003 0.200000003
= 0.200000003 0.200000003 0.200000003 0.150000006
vcnx = 50.0000000 50.0000000 50.0000000 50.0000000
= 50.0000000 50.0000000 50.0000000 50.0000000
= 50.0000000 50.0000000 50.0000000 50.0000000

----- INPUT GROUP 12 -----

sytdep = 550.000000
mhftsz = 0
jsup = 5
conk1 = 9.99999978E-03
conk2 = 0.100000001
iurb1 = 10
iurb2 = 19

anemht = 10.0000000
isigmav = 1
imixctdm = 0
ilanduin = 20
z0in = 0.250000000
xlaiin = 3.00000000
elevin = 0.00000000E+00
xlatin = -999.000000
xlonin = -999.000000

xmxlen = 1.00000000
mxnew = 99
xsamlen = 1.00000000
mxsam = 99
ncount = 2
sl2pf = 10.0000000
wscalm = 0.499994993
cddiv = 0.00000000E+00 0.00000000E+00

wscat = 1.53999996 top for class 1
wscat = 3.08999991 top for class 2
wscat = 5.13999987 top for class 3
wscat = 8.22999954 top for class 4
wscat = 10.8000002 top for class 5

Over LAND

svmin = 0.500000000 for stability 1
svmin = 0.500000000 for stability 2
svmin = 0.500000000 for stability 3
svmin = 0.500000000 for stability 4
svmin = 0.500000000 for stability 5
svmin = 0.500000000 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

Over WATER

svmin = 0.370000005 for stability 1
svmin = 0.370000005 for stability 2
svmin = 0.370000005 for stability 3
svmin = 0.370000005 for stability 4
svmin = 0.370000005 for stability 5
svmin = 0.370000005 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

symin = 1.00000000
szmin = 1.00000000
szcap_m = 5000000.00
xminzi = 50.0000000
xmaxzi = 3000.00000

plx0 = 7.00000003E-02 for stability 1
plx0 = 7.00000003E-02 for stability 2
plx0 = 0.100000001 for stability 3
plx0 = 0.150000006 for stability 4
plx0 = 0.349999994 for stability 5
plx0 = 0.550000012 for stability 6

ptg0 = 1.99999996E-02 for stability 5
ptg0 = 3.50000001E-02 for stability 6

ppc = 0.500000000 for stability 1
ppc = 0.500000000 for stability 2
ppc = 0.500000000 for stability 3
ppc = 0.500000000 for stability 4
ppc = 0.349999994 for stability 5
ppc = 0.349999994 for stability 6
tbd = 0.500000000

tibldist = 1.00000000 10.0000000 9.00000000

nlutibl = 4

nsplit = 3

iresplit = 0 0 0 0

= 0 0 0 0

= 0 0 0 0

= 0 0 0 0

= 0 1 0 0

= 0 0 0 0

zisplit = 100.000000

roldmax = 0.250000000

nsplith = 5

sysplith = 1.00000000

shsplith = 2.00000000

cnsplith = 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07

1.00000001E-07 1.00000001E-07 1.00000001E-07

epsslug = 9.99999975E-05

epsarea = 9.99999997E-07

dsrise = 1.00000000

trajincl = 20.0000000

mdepbc = 1

htminbc = 500.000000

rsampbc = 10.0000000

----- INPUT GROUP 13 -----

npt1 = 4

iptu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s

by factor: 1.00000000

nspt1 = 8

npt2 = 0

cnampt1 = EC1 EC3 EC4 EC6
xpt1grd = 19.3200684 19.3603516 19.3804932 19.4799805
ypt1grd = 19.6582031 19.6191406 19.5898438 19.5605469
htstak = 15.0000000 15.0000000 15.0000000 15.0000000
elstak = 68.0000000 68.0000000 68.0000000 68.0000000
diam = 0.800000012 0.750000000 0.750000000 0.400000006
exitw = 12.1000004 13.6999998 13.6999998 12.1000004
tstak = 298.000000 298.000000 298.000000 298.000000
idownw = 1 1 1 1
syipt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
szypt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
fmfpt1 = 1.00000000 1.00000000 1.00000000 1.00000000
zplatpt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00

pt. source: EC1 number: 1
qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 1.38900001E-02 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 62.8600006 76.0000000 86.8300018 95.0199966 100.320000 106.800003 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 62.8600006 76.0000000
bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC3 number: 2
qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 1.38900001E-02 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000
bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC4 number: 3
qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 1.38900001E-02 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982

49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
 102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
 26.2700005 32.4199982 49.6100006 65.3000031 76.0000000

bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
 15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC6 number: 4

qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 3.47000011E-03 0.00000000E+00
 0.00000000E+00 0.00000000E+00 0.00000000E+00

bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 57.5600014 54.0699997 44.2099991
 49.6100006 65.3000031 79.0000000 86.8300018 95.0199966 100.320000 106.800003 106.400002
 106.940002 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 57.5600014
 54.0699997 44.2099991 49.6100006 65.3000031 79.0000000

bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 15.0000000 15.0000000
 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000
 15.0000000 15.0000000 16.8999996 16.8999996 16.8999996

emission factors for species: COBALTO

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: CU

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: EPICLORIDRIN

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: HCN

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: NI

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
-------	-------	-------	-------	-------	-------

```
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
0.000 0.000 0.000 0.000 0.000 0.000
```

emission factors for species: PD

IVARY = 1

```
0.000 0.000 0.000 0.000 0.000 0.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
0.000 0.000 0.000 0.000 0.000 0.000
```

emission factors for species: SN

IVARY = 1

```
0.000 0.000 0.000 0.000 0.000 0.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
0.000 0.000 0.000 0.000 0.000 0.000
```

emission factors for species: ZN

IVARY = 1

```
0.000 0.000 0.000 0.000 0.000 0.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
0.000 0.000 0.000 0.000 0.000 0.000
```

----- INPUT GROUP 14 -----

nar1 = 0

iaru = 1 units = g/s/m^2

converted to g/s/m^2, odour_units*m/s,
or Bq/s/m^2 by factor: 1.00000000

nsar1 = 0

nar2 = 0

----- INPUT GROUP 15 -----

nln2 = 0

nlines = 0

ilnu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsln1 = 0

xl = 0.00000000E+00

hbl = 0.00000000E+00

wbl = 0.00000000E+00

wml = 0.00000000E+00

dxl = 0.00000000E+00

fprimel = 0.00000000E+00

mxnseg = 7

nlrise = 6

----- INPUT GROUP 16 -----

nvl1 = 0
ivlu = 1 units = g/s
converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000
nsvl1 = 0
nvl2 = 0

----- INPUT GROUP 17 -----

nrec = 9
nrgrp = 0
xng yng zng elevng group
21.7401123 20.0488281 2.00000000 73.0000000 -----
20.7104492 20.0097656 2.00000000 71.0000000 -----
20.6402588 19.3310547 2.00000000 69.0000000 -----
20.6201172 18.5400391 2.00000000 66.0000000 -----
20.5102539 17.9394531 2.00000000 64.0000000 -----
19.5300293 18.1884766 2.00000000 66.0000000 -----
18.2000732 18.4179688 2.00000000 64.0000000 -----
19.3402100 20.9814453 2.00000000 69.0000000 -----
17.1704102 19.8974609 2.00000000 62.0000000 -----

--

INPUT FILES

Default Name Unit No. File Name and Path

CALPUFF.INP 1 calpuff.inp
(CALMET Domain: 1) MASTER
CALMET.DAT 100 calmet.dat

--

OUTPUT FILES

Default Name Unit No. File Name and Path

CALPUFF.LST 2 calpuff.lst
CONC.DAT 8 conc.dat

SETNEST: Setup results for nested CALMET grids

Properties of each CALMET domain grid

Domain = 1
Origin(m) = 677699.000 4851603.00
nx,ny,cell(m) = 40 40 100.000000
Nest Factor = 1
Offset nx0,ny0= 0.00000000E+00 0.00000000E+00
Corner coordinates in outermost grid units:
LL Corner = 0.00000000E+00 0.00000000E+00
UR Corner = 40.0000000 40.0000000
Horizontal splitting parameters for domain:
SYSPLITH(m) = 100.000000
SHSPLITH(m/s) = 5.55555560E-02

REVISED CONTROL DATA
Running All Met Periods

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 2022
ibmo = 1
ibdy = 1
ibhr = 0
ibsec = 0
nsecdt = 3600
irlg = 8760
ibdathr = 202200100
iedathr = 202300100
iesec = 0

(End-times in other data files are NOT checked)

LAST PERIOD PROCESSED ENDS AT:

Year: 2023 Month: 1 Day: 1 Julian day: 1 Hour: 0 Second: 0

End of run -- Clock time: 12:08:41

Date: 09-02-2024

Elapsed Clock Time: 824.0 (seconds)

CPU Time: 813.0 (seconds)

Diffusione Epicloridrina 2024 Definitivo

CALPUFF Version: 6.42 Level: 110325

Clock time: 15:01:06

Date: 09-02-2024

Internal Coordinate Transformations by --- COORDLIB Version: 1.99 Level: 070921

Control File Type: CALPUFF.INP 1.0

Run Title:

Diffusione Epicloridrina 2024 Definitivo

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1972 2071

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO ! !END!
! CSPEC = CU ! !END!
! CSPEC = EPICLORIDRIN ! !END!
! CSPEC = HCN ! !END!
! CSPEC = NI ! !END!
! CSPEC = PD ! !END!
! CSPEC = SN ! !END!
! CSPEC = ZN ! !END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !
! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !

! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESH DN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !

! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !
! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !

! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 1 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

Subgroup 13b Point source constant data

! SRCNAM = Ec9 !
! X = 679.567, 4853.54, 11, 65, 0.4, 12.1, 298, 0.0,
0, 0, 0.00556, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

Subgroup 13d Point sources variable emissions data

! SRCNAM = Ec9 !
! IVARY = 1 !
! COBALTO = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! CU = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! EPICLORIDRINA = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! HCN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! NI = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! PD = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! SN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec9 !
! IVARY = 1 !
! ZN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a

! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a

! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a

! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!
! X = 679.416, 4853.593, 62, 2 ! !END!

**** CONFIRMATION OF CONTROL DATA ****

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 0
ibmo = 0
ibdy = 0
ibhr = 0
ibsec = 0
ibdathr = 0
ieyr = 0
iemo = 0
iedy = 0
iehr = 0
iesec = 0
iedathr = 0
nsecdt = 3600
irlg = 0
iavg = 1
xbtz = 0.00000000E+00
abtz = UTC+0000
nspec = 8
nse = 8
itest = 2
metfm = 1
mprffm = 1
mrestart = 0
nrespd = 0
avet = 60.0000000
pgtime = 60.0000000
ioutu = 1
iovers = 2

----- INPUT GROUP 2 -----

mgauss = 1
mctadj = 3
mctsg = 0
mslug = 0
mtrans = 1
mchem = 0
maqchem = 0
mlwc = 0
mwet = 0

mdry = 0
mtilt = 0
mdisp = 3
mdisp2 = 3
mturbvw = 3
mtauly = 0.00000000E+00
mtauadv = 0
mcturb = 1
mrrough = 0
mtip = 1
mbdw = 1
mshear = 0
mrise = 1
msplit = 0
mpartl = 1
mpartlba = 1
mtinv = 0
mpdf = 0
msgtibl = 0
mbcon = 0
msource = 0
mfog = 0
mreg = 0

----- INPUT GROUP 3 -----

SPECIES: COBALTO j: 1 isplst(-,j) = 1 1 0 GROUP: COBALTO
SPECIES: CU j: 2 isplst(-,j) = 1 1 0 GROUP: CU
SPECIES: EPICLORIDRIN j: 3 isplst(-,j) = 1 1 0 GROUP: EPICLORIDRIN
SPECIES: HCN j: 4 isplst(-,j) = 1 1 0 GROUP: HCN
SPECIES: NI j: 5 isplst(-,j) = 1 1 0 GROUP: NI
SPECIES: PD j: 6 isplst(-,j) = 1 1 0 GROUP: PD
SPECIES: SN j: 7 isplst(-,j) = 1 1 0 GROUP: SN
SPECIES: ZN j: 8 isplst(-,j) = 1 1 0 GROUP: ZN

----- INPUT GROUP 4 -----

pmap = UTM
datum = WGS-84
daten = 02-21-2003
utmhem = N
iutmzn = 32
nx = 40
ny = 40
nz = 8
zface = 0.00000000E+00 20.0000000 50.0000000 100.000000 200.000000 500.000000 1000.00000
2000.00000 4000.00000
dgridkm = 0.100000001
xorigkm = 677.698975

yorigkm = 4851.60303
iutmzn = 32
ibcomp = 10
jbcomp = 10
iecomp = 31
jecom = 31
lsamp = T
ibsamp = 10
jbsamp = 10
iesamp = 31
jesamp = 31
meshdn = 1

----- INPUT GROUP 5 -----

icon = 1
idry = 0
iwet = 0
it2d = 0
irho = 0
ivis = 0
lcomprs = F
icprt = 0
idprt = 0
iwprt = 0
icfrq = 1
idfrq = 1
iwfrq = 1
(note: i_frq values converted to timesteps)
iprtu = 1
imesg = 2
imflx = 0
imbal = 0
inrise = 0
iqaplot = 0
ipftrak = 0
ldebug = F
ipfdeb = 1
npfdeb = 1
nn1 = 1
nn2 = 10

GROUP: COBALTO j: 1 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: CU j: 2 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: EPICLORIDRIN j: 3 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: HCN j: 4 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: NI j: 5 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: PD j: 6 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: SN j: 7 ioutop(-,j) = 0 1 0 0 0 0 0

GROUP: ZN j: 8 ioutop(-,j) = 0 1 0 0 0 0

----- INPUT GROUP 6 -----

----- Subgroup (6a) -----

nhill = 0
nctrec = 0
mhill = 1
xhill2m= 1.00000000
zhill2m= 1.00000000
xctdmkm= 0.00000000E+00
yctdmkm= 0.00000000E+00

----- Subgroup (6b) -----

CTDM-type terrain file read

----- Subgroup (6c) -----

CTDM-type receptor file read

----- INPUT GROUP 7 -----

SPECIES: COBALTO j: 1 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: CU j: 2 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: HCN j: 4 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: NI j: 5 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: PD j: 6 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: SN j: 7 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: ZN j: 8 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

----- INPUT GROUP 8 -----

SPECIES: COBALTO j: 1 dryp(-,j) = -999.00 -999.00
SPECIES: CU j: 2 dryp(-,j) = -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryp(-,j) = -999.00 -999.00
SPECIES: HCN j: 4 dryp(-,j) = -999.00 -999.00
SPECIES: NI j: 5 dryp(-,j) = -999.00 -999.00
SPECIES: PD j: 6 dryp(-,j) = -999.00 -999.00
SPECIES: SN j: 7 dryp(-,j) = -999.00 -999.00
SPECIES: ZN j: 8 dryp(-,j) = -999.00 -999.00

----- INPUT GROUP 9 -----

rcutr = 30.0000000
rgr = 10.0000000
reactr = 8.00000000

pconst = 2.30000001E-08
bmin = 1.00000001E-07
bmax = 2.49999994E-06
qswmax = 600.000000
dconst1 = 2.00000000
dconst2 = 0.666666687
dconst3 = 4.79999988E-04
dconst4 = 0.666666687
nint = 9
iveg = 1

----- INPUT GROUP 10 -----

SPECIES: COBALTO j: 1 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: CU j: 2 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: EPICLORIDRIN j: 3 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: HCN j: 4 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: NI j: 5 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: PD j: 6 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: SN j: 7 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: ZN j: 8 wa(-,j) = 0.000E+00 0.000E+00

----- INPUT GROUP 11 -----

moz = 0
bcko3m = 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
mnh3 = 0
mavgnh3 = 1
bcknh3m = 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
rnite1 = 0.200000003
rnite2 = 2.00000000
rnite3 = 2.00000000
mh2o2 = 1
bckh2o2m = 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
bckpmf = 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
ofrac = 0.150000006 0.150000006 0.200000003 0.200000003
= 0.200000003 0.200000003 0.200000003 0.200000003
= 0.200000003 0.200000003 0.200000003 0.150000006
vcnx = 50.0000000 50.0000000 50.0000000 50.0000000
= 50.0000000 50.0000000 50.0000000 50.0000000
= 50.0000000 50.0000000 50.0000000 50.0000000

----- INPUT GROUP 12 -----

sytdep = 550.000000
mhftsz = 0
jsup = 5
conk1 = 9.99999978E-03
conk2 = 0.100000001
iurb1 = 10
iurb2 = 19

anemht = 10.0000000
isigmav = 1
imixctdm = 0
ilanduin = 20
z0in = 0.250000000
xlaiin = 3.00000000
elevin = 0.00000000E+00
xlatin = -999.000000
xlonin = -999.000000

xmxlen = 1.00000000
mxnew = 99
xsamlen = 1.00000000
mxsam = 99
ncount = 2
sl2pf = 10.0000000
wscaln = 0.499994993
cddiv = 0.00000000E+00 0.00000000E+00

wscat = 1.53999996 top for class 1
wscat = 3.08999991 top for class 2
wscat = 5.13999987 top for class 3
wscat = 8.22999954 top for class 4
wscat = 10.8000002 top for class 5

Over LAND
svmin = 0.500000000 for stability 1
svmin = 0.500000000 for stability 2
svmin = 0.500000000 for stability 3
svmin = 0.500000000 for stability 4
svmin = 0.500000000 for stability 5
svmin = 0.500000000 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

Over WATER

svmin = 0.370000005 for stability 1
svmin = 0.370000005 for stability 2
svmin = 0.370000005 for stability 3
svmin = 0.370000005 for stability 4
svmin = 0.370000005 for stability 5
svmin = 0.370000005 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

symin = 1.00000000
szmin = 1.00000000
szcap_m = 5000000.00
xminzi = 50.0000000
xmaxzi = 3000.00000

plx0 = 7.00000003E-02 for stability 1
plx0 = 7.00000003E-02 for stability 2
plx0 = 0.100000001 for stability 3
plx0 = 0.150000006 for stability 4
plx0 = 0.349999994 for stability 5
plx0 = 0.550000012 for stability 6

ptg0 = 1.99999996E-02 for stability 5
ptg0 = 3.50000001E-02 for stability 6

ppc = 0.500000000 for stability 1
ppc = 0.500000000 for stability 2
ppc = 0.500000000 for stability 3
ppc = 0.500000000 for stability 4
ppc = 0.349999994 for stability 5
ppc = 0.349999994 for stability 6
tbd = 0.500000000
tibldist = 1.00000000 10.0000000 9.00000000
nlutibl = 4
nsplit = 3
iresplit = 0 0 0 0
 = 0 0 0 0
 = 0 0 0 0
 = 0 0 0 0
 = 0 1 0 0
 = 0 0 0 0
zisplit = 100.000000
roldmax = 0.250000000

nsplith = 5
sysplith = 1.00000000
shsplith = 2.00000000
cnsplith = 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07
1.00000001E-07 1.00000001E-07 1.00000001E-07
epsslug = 9.99999975E-05
epsarea = 9.99999997E-07
dsrise = 1.00000000
trajincl = 20.0000000
mdepbc = 1
htminbc = 500.000000
rsampbc = 10.0000000

----- INPUT GROUP 13 -----

npt1 = 1
iptu = 1 units = g/s
converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000
nspt1 = 8
npt2 = 0

cnampt1 = EC9
xpt1grd = 18.6804199
ypt1grd = 19.3701172
htstak = 11.0000000
elstak = 65.0000000
diam = 0.400000006
exitw = 12.1000004
tstak = 298.000000
idownw = 0
syipt1 = 0.00000000E+00
szypt1 = 0.00000000E+00
fmfpt1 = 1.00000000
zplatpt1 = 0.00000000E+00

pt. source: EC9 number: 1
qstak = 0.00000000E+00 0.00000000E+00 5.55999996E-03 0.00000000E+00 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00

emission factors for species: COBALTO

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: CU

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000

0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: EPICLORIDRIN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: HCN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: NI

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: PD

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: SN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: ZN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

----- INPUT GROUP 14 -----

nar1 = 0

iaru = 1 units = g/s/m^2

converted to g/s/m^2, odour_units*m/s,
or Bq/s/m^2 by factor: 1.00000000

nsar1 = 0

nar2 = 0

----- INPUT GROUP 15 -----

nln2 = 0
 nlines = 0
 ilnu = 1 units = g/s
 converted to g/s, odour_units*m3/s, or Bq/s
 by factor: 1.00000000
 nsln1 = 0
 xl = 0.00000000E+00
 hbl = 0.00000000E+00
 wbl = 0.00000000E+00
 wml = 0.00000000E+00
 dxl = 0.00000000E+00
 fprimel = 0.00000000E+00
 mxnseg = 7
 nlrise = 6

----- INPUT GROUP 16 -----

nvl1 = 0
 ivlu = 1 units = g/s
 converted to g/s, odour_units*m3/s, or Bq/s
 by factor: 1.00000000
 nsvl1 = 0
 nvl2 = 0

----- INPUT GROUP 17 -----

nrec = 9
 nrgrp = 0

xng	yng	zng	elevng	group
21.7401123	20.0488281	2.00000000	73.0000000	-----
20.7104492	20.0097656	2.00000000	71.0000000	-----
20.6402588	19.3310547	2.00000000	69.0000000	-----
20.6201172	18.5400391	2.00000000	66.0000000	-----
20.5102539	17.9394531	2.00000000	64.0000000	-----
19.5300293	18.1884766	2.00000000	66.0000000	-----
18.2000732	18.4179688	2.00000000	64.0000000	-----
19.3402100	20.9814453	2.00000000	69.0000000	-----
17.1704102	19.8974609	2.00000000	62.0000000	-----

--

INPUT FILES

Default Name Unit No. File Name and Path

CALPUFF.INP 1 calpuff.inp
(CALMET Domain: 1) MASTER
CALMET.DAT 100 calmet.dat

--
OUTPUT FILES

Default Name Unit No. File Name and Path

CALPUFF.LST 2 calpuff.lst
CONC.DAT 8 conc.dat

SETNEST: Setup results for nested CALMET grids

Properties of each CALMET domain grid

Domain = 1
Origin(m) = 677699.000 4851603.00
nx,ny,cell(m) = 40 40 100.000000
Nest Factor = 1
Offset nx0,ny0= 0.00000000E+00 0.00000000E+00
Corner coordinates in outermost grid units:
LL Corner = 0.00000000E+00 0.00000000E+00
UR Corner = 40.0000000 40.0000000
Horizontal splitting parameters for domain:
SYSPLITH(m) = 100.000000
SHSPLITH(m/s) = 5.55555560E-02

REVISED CONTROL DATA

Running All Met Periods

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 2022
ibmo = 1
ibdy = 1
ibhr = 0
ibsec = 0
nsecdt = 3600
irlg = 8760

ibdathr = 202200100
iedathr = 202300100
iesec = 0

(End-times in other data files are NOT checked)

LAST PERIOD PROCESSED ENDS AT:

Year: 2023 Month: 1 Day: 1 Julian day: 1 Hour: 0 Second: 0

End of run -- Clock time: 15:02:53

Date: 09-02-2024

Elapsed Clock Time: 107.0 (seconds)

CPU Time: 104.2 (seconds)

Diffusione Palladio 2024 Definitivo

CALPUFF Version: 6.42 Level: 110325

Clock time: 12:49:37

Date: 09-02-2024

Internal Coordinate Transformations by --- COORDLIB Version: 1.99 Level: 070921

Control File Type: CALPUFF.INP 1.0

Run Title:

Diffusione Palladio 2024 Definitivo

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1972 2071

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO ! !END!
! CSPEC = CU ! !END!
! CSPEC = EPICLORIDRIN ! !END!
! CSPEC = HCN ! !END!
! CSPEC = NI ! !END!
! CSPEC = PD ! !END!
! CSPEC = SN ! !END!
! CSPEC = ZN ! !END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !
! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !

! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESH DN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !

! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !
! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !

! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 3 !
! IPTU = 1 !
! NSPT1 = 0 !
! NPT2 = 0 !
!END!

Subgroup 13b Point source constant data

! SRCNAM = EC1 !
! X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0, 0.02778, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC2 !
! X = 679.633, 4853.567, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0, 0.02778, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC3 !
! X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,
0, 0, 0, 0, 0, 0.02778, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC1 !

! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,
86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

! SRCNAM = EC2 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EC3 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a

! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a

! NLINES = 0 !

! ILNU = 1 !

! NSLN1 = 0 !

! NLN2 = 0 !

!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a

! NVL1 = 0 !

! IVLU = 1 !

! NSVL1 = 0 !

! NVL2 = 0 !

!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

**** CONFIRMATION OF CONTROL DATA ****

----- INPUT GROUP 1 -----

metrun = 1

ibyr = 0
ibmo = 0
ibdy = 0
ibhr = 0
ibsec = 0
ibdathr = 0
ieyr = 0
iemo = 0
iedy = 0
iehr = 0
iesec = 0
iedathr = 0
nsecdt = 3600
irlg = 0
iavg = 1
xbtz = 0.00000000E+00
abtz = UTC+0000
nspec = 8
nse = 8
itest = 2
metfm = 1
mprffm = 1
mrestart= 0
nrespd = 0
avet = 60.0000000
pgtime = 60.0000000
ioutu = 1
iovers = 2

----- INPUT GROUP 2 -----

mgauss = 1
mctadj = 3
mctsg = 0
mslug = 0
mtrans = 1
mchem = 0
maqchem = 0
mlwc = 0
mwet = 0
mdry = 0
mtilt = 0
mdisp = 3
mdisp2 = 3
mturbvw = 3
mtauly = 0.00000000E+00
mtauadv = 0
mcturb = 1
mrrough = 0

mtip = 1
mbdw = 1
mshear = 0
mrise = 1
msplit = 0
mpartl = 1
mpartlba = 1
mtinv = 0
mpdf = 0
msgtibl = 0
mbcon = 0
msource = 0
mfog = 0
mreg = 0

----- INPUT GROUP 3 -----

SPECIES: COBALTO j: 1 isplst(-,j) = 1 1 0 GROUP: COBALTO
SPECIES: CU j: 2 isplst(-,j) = 1 1 0 GROUP: CU
SPECIES: EPICLORIDRIN j: 3 isplst(-,j) = 1 1 0 GROUP: EPICLORIDRIN
SPECIES: HCN j: 4 isplst(-,j) = 1 1 0 GROUP: HCN
SPECIES: NI j: 5 isplst(-,j) = 1 1 0 GROUP: NI
SPECIES: PD j: 6 isplst(-,j) = 1 1 0 GROUP: PD
SPECIES: SN j: 7 isplst(-,j) = 1 1 0 GROUP: SN
SPECIES: ZN j: 8 isplst(-,j) = 1 1 0 GROUP: ZN

----- INPUT GROUP 4 -----

pmap = UTM
datum = WGS-84
daten = 02-21-2003
utmhem = N
iutmzn = 32
nx = 40
ny = 40
nz = 8
zface = 0.00000000E+00 20.0000000 50.0000000 100.000000 200.000000 500.000000 1000.00000
2000.00000 4000.00000
dgridkm = 0.100000001
xorigkm = 677.698975
yorigkm = 4851.60303
iutmzn = 32
ibcomp = 10
jbcomp = 10
iecomp = 31
jecomp = 31
lsamp = T
ibsamp = 10
jbsamp = 10

iesamp = 31
jesamp = 31
meshdn = 1

----- INPUT GROUP 5 -----

icon = 1
idry = 0
iwet = 0
it2d = 0
irho = 0
ivis = 0
lcomprs = F
icprt = 0
idprt = 0
iwpert = 0
icfrq = 1
idfrq = 1
iwfrq = 1
(note: i_frq values converted to timesteps)
iprtu = 1
imesg = 2
imflx = 0
imbal = 0
inrise = 0
iqaplot = 0
ipftrak = 0
ldebug = F
ipfdeb = 1
npfdeb = 1
nn1 = 1
nn2 = 10

GROUP: COBALTO j: 1 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: CU j: 2 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: EPICLORIDRIN j: 3 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: HCN j: 4 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: NI j: 5 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: PD j: 6 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: SN j: 7 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: ZN j: 8 ioutop(-,j) = 0 1 0 0 0 0 0

----- INPUT GROUP 6 -----

----- Subgroup (6a) -----

nhill = 0
nctrec = 0
mhill = 1

xhill2m= 1.00000000
zhill2m= 1.00000000
xctdmkm= 0.00000000E+00
yctdmkm= 0.00000000E+00

----- Subgroup (6b) -----

CTDM-type terrain file read

----- Subgroup (6c) -----

CTDM-type receptor file read

----- INPUT GROUP 7 -----

SPECIES: COBALTO j: 1 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: CU j: 2 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: HCN j: 4 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: NI j: 5 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: PD j: 6 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: SN j: 7 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: ZN j: 8 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

----- INPUT GROUP 8 -----

SPECIES: COBALTO j: 1 dryp(-,j) = -999.00 -999.00
SPECIES: CU j: 2 dryp(-,j) = -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryp(-,j) = -999.00 -999.00
SPECIES: HCN j: 4 dryp(-,j) = -999.00 -999.00
SPECIES: NI j: 5 dryp(-,j) = -999.00 -999.00
SPECIES: PD j: 6 dryp(-,j) = -999.00 -999.00
SPECIES: SN j: 7 dryp(-,j) = -999.00 -999.00
SPECIES: ZN j: 8 dryp(-,j) = -999.00 -999.00

----- INPUT GROUP 9 -----

rcutr = 30.0000000
rgr = 10.0000000
reactr = 8.00000000
pconst = 2.30000001E-08
bmin = 1.00000001E-07
bmax = 2.49999994E-06
qswmax = 600.000000
dconst1 = 2.00000000
dconst2 = 0.666666687
dconst3 = 4.79999988E-04
dconst4 = 0.666666687
nint = 9

iveg = 1

----- INPUT GROUP 10 -----

SPECIES: COBALTO j: 1 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: CU j: 2 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: EPICLORIDRIN j: 3 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: HCN j: 4 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: NI j: 5 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: PD j: 6 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: SN j: 7 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: ZN j: 8 wa(-,j) = 0.000E+00 0.000E+00

----- INPUT GROUP 11 -----

moz = 0
bcko3m = 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
mnh3 = 0
mavgnh3 = 1
bcknh3m = 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
rnite1 = 0.200000003
rnite2 = 2.00000000
rnite3 = 2.00000000
mh2o2 = 1
bckh2o2m = 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
bckpmf = 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
ofrac = 0.150000006 0.150000006 0.200000003 0.200000003
= 0.200000003 0.200000003 0.200000003 0.200000003
= 0.200000003 0.200000003 0.200000003 0.150000006
vcnx = 50.0000000 50.0000000 50.0000000 50.0000000
= 50.0000000 50.0000000 50.0000000 50.0000000
= 50.0000000 50.0000000 50.0000000 50.0000000

----- INPUT GROUP 12 -----

sytdep = 550.000000
mhftsz = 0
jsup = 5
conk1 = 9.99999978E-03
conk2 = 0.100000001
iurb1 = 10

iurb2 = 19

anemht = 10.0000000

isigmav = 1

imixctdm = 0

ilanduin = 20

z0in = 0.250000000

xlaiin = 3.00000000

elevin = 0.00000000E+00

xlatin = -999.000000

xlonin = -999.000000

xmxlen = 1.00000000

mxnew = 99

xsamlen = 1.00000000

mxsam = 99

ncount = 2

sl2pf = 10.0000000

wscalm = 0.499994993

cdiv = 0.00000000E+00 0.00000000E+00

wscat = 1.53999996 top for class 1

wscat = 3.08999991 top for class 2

wscat = 5.13999987 top for class 3

wscat = 8.22999954 top for class 4

wscat = 10.8000002 top for class 5

Over LAND

svmin = 0.500000000 for stability 1

svmin = 0.500000000 for stability 2

svmin = 0.500000000 for stability 3

svmin = 0.500000000 for stability 4

svmin = 0.500000000 for stability 5

svmin = 0.500000000 for stability 6

swmin = 0.200000003 for stability 1

swmin = 0.119999997 for stability 2

swmin = 7.99999982E-02 for stability 3

swmin = 5.99999987E-02 for stability 4

swmin = 2.99999993E-02 for stability 5

swmin = 1.60000008E-02 for stability 6

Over WATER

svmin = 0.370000005 for stability 1

svmin = 0.370000005 for stability 2

svmin = 0.370000005 for stability 3

svmin = 0.370000005 for stability 4

svmin = 0.370000005 for stability 5

svmin = 0.370000005 for stability 6

swmin = 0.200000003 for stability 1

swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

symin = 1.00000000
szmin = 1.00000000
szcap_m = 5000000.00
xminzi = 50.0000000
xmaxzi = 3000.00000

plx0 = 7.00000003E-02 for stability 1
plx0 = 7.00000003E-02 for stability 2
plx0 = 0.100000001 for stability 3
plx0 = 0.150000006 for stability 4
plx0 = 0.349999994 for stability 5
plx0 = 0.550000012 for stability 6

ptg0 = 1.99999996E-02 for stability 5
ptg0 = 3.50000001E-02 for stability 6

ppc = 0.500000000 for stability 1
ppc = 0.500000000 for stability 2
ppc = 0.500000000 for stability 3
ppc = 0.500000000 for stability 4
ppc = 0.349999994 for stability 5
ppc = 0.349999994 for stability 6
tbd = 0.500000000

tibldist = 1.00000000 10.0000000 9.00000000

nlutibl = 4

nsplit = 3

iresplit = 0 0 0 0

= 0 0 0 0

= 0 0 0 0

= 0 0 0 0

= 0 1 0 0

= 0 0 0 0

zisplit = 100.000000

roldmax = 0.250000000

nsplith = 5

sysplith = 1.00000000

shsplith = 2.00000000

cnsplith = 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07

1.00000001E-07 1.00000001E-07 1.00000001E-07

epsslug = 9.99999975E-05

epsarea = 9.99999997E-07

dsrise = 1.00000000

trajincl = 20.0000000

mdepbc = 1
htminbc = 500.000000
rsampbc = 10.0000000

----- INPUT GROUP 13 -----

npt1 = 3
iptu = 1 units = g/s
converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000
nspt1 = 0
npt2 = 0

cnampt1 = EC1 EC2 EC3
xpt1grd = 19.3200684 19.3402100 19.3603516
ypt1grd = 19.6582031 19.6386719 19.6191406
htstak = 15.0000000 15.0000000 15.0000000
elstak = 68.0000000 68.0000000 68.0000000
diam = 0.800000012 0.800000012 0.750000000
exitw = 12.1000004 12.1000004 13.6999998
tstak = 298.000000 298.000000 298.000000
idownw = 1 1 1
syipt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00
szypt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00
fmfpt1 = 1.00000000 1.00000000 1.00000000
zplatpt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00

pt. source: EC1 number: 1
qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
2.77800001E-02 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 62.8600006 76.0000000 86.8300018 95.0199966 100.320000 106.800003 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 62.8600006 76.0000000
bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC2 number: 2
qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
2.77800001E-02 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000

bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC3 number: 3

qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
2.77800001E-02 0.00000000E+00 0.00000000E+00

bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000

bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

----- INPUT GROUP 14 -----

nar1 = 0
iaru = 1 units = g/s/m^2
converted to g/s/m^2, odour_units*m/s,
or Bq/s/m^2 by factor: 1.00000000
nsar1 = 0
nar2 = 0

----- INPUT GROUP 15 -----

nln2 = 0
nlines = 0
ilnu = 1 units = g/s
converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000
nsln1 = 0
xl = 0.00000000E+00
hbl = 0.00000000E+00
wbl = 0.00000000E+00
wml = 0.00000000E+00
dxl = 0.00000000E+00
fprimel = 0.00000000E+00
mxnseg = 7
nlrise = 6

----- INPUT GROUP 16 -----

nvl1 = 0
ivlu = 1 units = g/s
converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000
nsvl1 = 0
nvl2 = 0

----- INPUT GROUP 17 -----

nrec = 9
nrgpr = 0
xng yng zng elevng group
21.7401123 20.0488281 2.00000000 73.0000000 -----
20.7104492 20.0097656 2.00000000 71.0000000 -----
20.6402588 19.3310547 2.00000000 69.0000000 -----
20.6201172 18.5400391 2.00000000 66.0000000 -----
20.5102539 17.9394531 2.00000000 64.0000000 -----
19.5300293 18.1884766 2.00000000 66.0000000 -----
18.2000732 18.4179688 2.00000000 64.0000000 -----
19.3402100 20.9814453 2.00000000 69.0000000 -----
17.1704102 19.8974609 2.00000000 62.0000000 -----

--
INPUT FILES

Default Name	Unit No.	File Name and Path
CALPUFF.INP	1	calpuff.inp
(CALMET Domain: 1) MASTER		
CALMET.DAT	100	calmet.dat

--
OUTPUT FILES

Default Name	Unit No.	File Name and Path
CALPUFF.LST	2	calpuff.lst
CONC.DAT	8	conc.dat

SETNEST: Setup results for nested CALMET grids

Properties of each CALMET domain grid

Domain = 1
Origin(m) = 677699.000 4851603.00
nx,ny,cell(m) = 40 40 100.000000
Nest Factor = 1
Offset nx0,ny0= 0.00000000E+00 0.00000000E+00
Corner coordinates in outermost grid units:
LL Corner = 0.00000000E+00 0.00000000E+00
UR Corner = 40.0000000 40.0000000
Horizontal splitting parameters for domain:
SYSPLITH(m) = 100.000000
SHSPLITH(m/s) = 5.55555560E-02

REVISED CONTROL DATA
Running All Met Periods

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 2022
ibmo = 1
ibdy = 1
ibhr = 0
ibsec = 0
nsecdt = 3600
irlg = 8760
ibdathr = 202200100
iedathr = 202300100
iesec = 0

(End-times in other data files are NOT checked)

LAST PERIOD PROCESSED ENDS AT:

Year: 2023 Month: 1 Day: 1 Julian day: 1 Hour: 0 Second: 0

End of run -- Clock time: 13:00:35
Date: 09-02-2024

Elapsed Clock Time: 658.0 (seconds)

CPU Time: 649.9 (seconds)

Diffusione Rame 2024 Definitivo

CALPUFF Version: 6.42 Level: 110325

Clock time: 14:16:45

Date: 09-02-2024

Internal Coordinate Transformations by --- COORDLIB Version: 1.99 Level: 070921

Control File Type: CALPUFF.INP 1.0

Run Title:

Diffusione Rame 2024 Definitivo

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1972 2071

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO ! !END!
! CSPEC = CU ! !END!
! CSPEC = EPICLORIDRIN ! !END!
! CSPEC = HCN ! !END!
! CSPEC = NI ! !END!
! CSPEC = PD ! !END!
! CSPEC = SN ! !END!
! CSPEC = ZN ! !END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !
! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !

! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESH DN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !

! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !
! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !

! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 6 !
! IPTU = 1 !
! NSPT1 = 16 !
! NPT2 = 0 !
!END!

Subgroup 13b Point source constant data

! SRCNAM = EC1 !
! X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0.00556, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC2 !
! X = 679.633, 4853.567, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0.00556, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC3 !
! X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,
0, 0.00556, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC4 !
! X = 679.637, 4853.562, 15, 68, 0.75, 13.7, 298, 1.0,

0, 0.00556, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EI1 !
! X = 679.665, 4853.611, 16, 69, 0.4, 12.1, 298, 1.0,
0, 0.00417, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = Ec8 !
! X = 679.572, 4853.537, 11, 65, 0.4, 15.4, 293, 0.0,
0, 0.0036, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC1 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,
86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

! SRCNAM = EC2 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

! SRCNAM = EC3 !
 ! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 15, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
 ! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
 100.56, 95.23, 87, 76.13, 64.74, 48.94,
 31.66, 26.27, 32.42, 49.61, 65.3, 76,
 86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
 100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
 !END!

! SRCNAM = EC4 !
 ! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 15, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
 ! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
 100.56, 95.23, 87, 76.13, 64.74, 48.94,
 31.66, 26.27, 32.42, 49.61, 65.3, 76,
 86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
 100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
 !END!

! SRCNAM = EI1 !
 ! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
 16.9, 16.9, 15, 15, 15, 15,
 15, 15, 16.7, 16.7, 16.7, 16.9,
 16.9, 16.7, 16.7, 16.7, 16.7, 16.7,
 16.7, 16.9, 15, 15, 15, 15, 15, 15, 16.7, 16.7, 16.7, 16.9 !
 ! WIDTH = 90.3, 98.86, 104.42, 106.8, 106.4, 106.94,
 104.41, 98.7, 55, 58.33, 59.89, 59.63,
 57.56, 54.07, 20.94, 17.51, 22.6, 79,
 90.3, 33.24, 34.88, 35.47, 35.62, 35.85,
 35.63, 98.7, 55, 58.33, 59.89, 59.63, 57.56, 54.07, 20.94, 17.51, 22.6, 79 !
 !END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EI1 !
 ! IVARY = 1 !
 ! COBALTO = 0, 0, 0, 0, 0, 0,
 0, 0, 1, 1, 1, 1,
 0, 1, 1, 1, 1, 0,
 0, 0, 0, 0, 0, 0 !
 !END!

! SRCNAM = EI1 !

! IVARY = 1 !
! CU = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EI1 !
! IVARY = 1 !
! EPICLORIDRINA = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EI1 !
! IVARY = 1 !
! HCN = 0, 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EI1 !
! IVARY = 1 !
! NI = 0, 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EI1 !
! IVARY = 1 !
! PD = 0, 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EI1 !
! IVARY = 1 !
! SN = 0, 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = EI1 !
! IVARY = 1 !

!ZN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

!SRCNAM = Ec8!
!IVARY = 1!
!COBALTO = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

!SRCNAM = Ec8!
!IVARY = 1!
!CU = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

!SRCNAM = Ec8!
!IVARY = 1!
!EPICLORIDRINA = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

!SRCNAM = Ec8!
!IVARY = 1!
!HCN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

!SRCNAM = Ec8!
!IVARY = 1!
!NI = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

!SRCNAM = Ec8!
!IVARY = 1!
!PD = 0, 0, 0, 0, 0, 0,

0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! SN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! ZN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0!
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a

! NVL1 = 0 !

! IVLU = 1 !

! NSVL1 = 0 !

! NVL2 = 0 !

!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

**** CONFIRMATION OF CONTROL DATA ****

----- INPUT GROUP 1 -----

metrun = 1

ibyr = 0

ibmo = 0

ibdy = 0

ibhr = 0

ibsec = 0

ibdathr = 0

ieyr = 0

iemo = 0

iedy = 0

iehr = 0

iesec = 0

iedathr = 0

nsecdt = 3600

irlg = 0

iavg = 1

xbtz = 0.00000000E+00

abtz = UTC+0000

nspec = 8

nse = 8
itest = 2
metfm = 1
mprffm = 1
mrestart= 0
nrespd = 0
avet = 60.0000000
pgtime = 60.0000000
ioutu = 1
iovers = 2

----- INPUT GROUP 2 -----

mgauss = 1
mctadj = 3
mctsg = 0
mslug = 0
mtrans = 1
mchem = 0
maqchem = 0
mlwc = 0
mwet = 0
mdry = 0
mtilt = 0
mdisp = 3
mdisp2 = 3
mturbvw = 3
mtauly = 0.00000000E+00
mtauadv = 0
mcturb = 1
mrrough = 0
mtip = 1
mbdw = 1
mshear = 0
mrise = 1
msplit = 0
mpartl = 1
mpartlba = 1
mtinv = 0
mpdf = 0
msgtibl = 0
mbcon = 0
msource = 0
mfog = 0
mreg = 0

----- INPUT GROUP 3 -----

SPECIES: COBALTO j: 1 isplst(-,j) = 1 1 0 GROUP: COBALTO

SPECIES: CU j: 2 isplst(-,j) = 1 1 0 GROUP: CU
SPECIES: EPICLORIDRIN j: 3 isplst(-,j) = 1 1 0 GROUP: EPICLORIDRIN
SPECIES: HCN j: 4 isplst(-,j) = 1 1 0 GROUP: HCN
SPECIES: NI j: 5 isplst(-,j) = 1 1 0 GROUP: NI
SPECIES: PD j: 6 isplst(-,j) = 1 1 0 GROUP: PD
SPECIES: SN j: 7 isplst(-,j) = 1 1 0 GROUP: SN
SPECIES: ZN j: 8 isplst(-,j) = 1 1 0 GROUP: ZN

----- INPUT GROUP 4 -----

pmap = UTM
datum = WGS-84
daten = 02-21-2003
utmhem = N
iutmzn = 32
nx = 40
ny = 40
nz = 8
zface = 0.00000000E+00 20.0000000 50.0000000 100.000000 200.000000 500.000000 1000.00000
2000.00000 4000.00000
dgridkm = 0.100000001
xorigkm = 677.698975
yorigkm = 4851.60303
iutmzn = 32
ibcomp = 10
jbcomp = 10
iecomp = 31
jcomp = 31
lsamp = T
ibsamp = 10
jbsamp = 10
iesamp = 31
jesamp = 31
meshdn = 1

----- INPUT GROUP 5 -----

icon = 1
idry = 0
iwet = 0
it2d = 0
irho = 0
ivis = 0
lcomprs = F
icprt = 0
idprt = 0
iwprt = 0
icfrq = 1
idfrq = 1

iwfrq = 1
(note: i_frq values converted to timesteps)
iprtu = 1
imesg = 2
imflx = 0
imbal = 0
inrise = 0
iqaplot = 0
ipftrak = 0
ldebug = F
ipfdeb = 1
npfdeb = 1
nn1 = 1
nn2 = 10

GROUP: COBALTO j: 1 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: CU j: 2 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: EPICLORIDRIN j: 3 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: HCN j: 4 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: NI j: 5 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: PD j: 6 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: SN j: 7 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: ZN j: 8 ioutop(-,j) = 0 1 0 0 0 0 0

----- INPUT GROUP 6 -----

----- Subgroup (6a) -----

nhill = 0
nctrec = 0
mhill = 1
xhill2m= 1.000000000
zhill2m= 1.000000000
xctdmkm= 0.000000000E+00
yctdmkm= 0.000000000E+00

----- Subgroup (6b) -----

CTDM-type terrain file read

----- Subgroup (6c) -----

CTDM-type receptor file read

----- INPUT GROUP 7 -----

SPECIES: COBALTO j: 1 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: CU j: 2 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

SPECIES: HCN j: 4 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
 SPECIES: NI j: 5 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
 SPECIES: PD j: 6 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
 SPECIES: SN j: 7 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
 SPECIES: ZN j: 8 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

----- INPUT GROUP 8 -----

SPECIES: COBALTO j: 1 dryp(-,j) = -999.00 -999.00
 SPECIES: CU j: 2 dryp(-,j) = -999.00 -999.00
 SPECIES: EPICLORIDRIN j: 3 dryp(-,j) = -999.00 -999.00
 SPECIES: HCN j: 4 dryp(-,j) = -999.00 -999.00
 SPECIES: NI j: 5 dryp(-,j) = -999.00 -999.00
 SPECIES: PD j: 6 dryp(-,j) = -999.00 -999.00
 SPECIES: SN j: 7 dryp(-,j) = -999.00 -999.00
 SPECIES: ZN j: 8 dryp(-,j) = -999.00 -999.00

----- INPUT GROUP 9 -----

rcutr = 30.0000000
 rgr = 10.0000000
 reactr = 8.00000000
 pconst = 2.30000001E-08
 bmin = 1.00000001E-07
 bmax = 2.49999994E-06
 qswmax = 600.000000
 dconst1 = 2.00000000
 dconst2 = 0.666666687
 dconst3 = 4.79999988E-04
 dconst4 = 0.666666687
 nint = 9
 iveg = 1

----- INPUT GROUP 10 -----

SPECIES: COBALTO j: 1 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: CU j: 2 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: EPICLORIDRIN j: 3 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: HCN j: 4 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: NI j: 5 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: PD j: 6 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: SN j: 7 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: ZN j: 8 wa(-,j) = 0.000E+00 0.000E+00

----- INPUT GROUP 11 -----

moz = 0
 bcko3m = 80.0000000 80.0000000 80.0000000 80.0000000
 = 80.0000000 80.0000000 80.0000000 80.0000000

```

      = 80.0000000 80.0000000 80.0000000 80.0000000
mnh3  = 0
mavgnh3 = 1
bcknh3m = 10.0000000 10.0000000 10.0000000 10.0000000
      = 10.0000000 10.0000000 10.0000000 10.0000000
      = 10.0000000 10.0000000 10.0000000 10.0000000
rnite1 = 0.200000003
rnite2 = 2.00000000
rnite3 = 2.00000000
mh2o2  = 1
bckh2o2m = 1.00000000 1.00000000 1.00000000 1.00000000
      = 1.00000000 1.00000000 1.00000000 1.00000000
      = 1.00000000 1.00000000 1.00000000 1.00000000
bckpmf = 1.00000000 1.00000000 1.00000000 1.00000000
      = 1.00000000 1.00000000 1.00000000 1.00000000
      = 1.00000000 1.00000000 1.00000000 1.00000000
ofrac  = 0.150000006 0.150000006 0.200000003 0.200000003
      = 0.200000003 0.200000003 0.200000003 0.200000003
      = 0.200000003 0.200000003 0.200000003 0.150000006
vcnx   = 50.0000000 50.0000000 50.0000000 50.0000000
      = 50.0000000 50.0000000 50.0000000 50.0000000
      = 50.0000000 50.0000000 50.0000000 50.0000000

```

----- INPUT GROUP 12 -----

```

sytdcp = 550.000000
mhftsz = 0
jsup   = 5
conk1  = 9.99999978E-03
conk2  = 0.100000001
iurb1  = 10
iurb2  = 19

```

```

anemht = 10.0000000
isigmav = 1
imixctdm = 0
ilanduin = 20
z0in    = 0.250000000
xlaiin  = 3.000000000
elevin  = 0.00000000E+00
xlatin  = -999.000000
xlonin  = -999.000000

```

```

mxmflen = 1.000000000
mxnew   = 99
xsamlen = 1.000000000
mxsam   = 99
ncount  = 2
sl2pf   = 10.0000000

```

wscalm = 0.499994993
cdiv = 0.00000000E+00 0.00000000E+00

wscat = 1.53999996 top for class 1
wscat = 3.08999991 top for class 2
wscat = 5.13999987 top for class 3
wscat = 8.22999954 top for class 4
wscat = 10.8000002 top for class 5

Over LAND

svmin = 0.500000000 for stability 1
svmin = 0.500000000 for stability 2
svmin = 0.500000000 for stability 3
svmin = 0.500000000 for stability 4
svmin = 0.500000000 for stability 5
svmin = 0.500000000 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

Over WATER

svmin = 0.370000005 for stability 1
svmin = 0.370000005 for stability 2
svmin = 0.370000005 for stability 3
svmin = 0.370000005 for stability 4
svmin = 0.370000005 for stability 5
svmin = 0.370000005 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

symin = 1.00000000
szmin = 1.00000000
szcap_m = 5000000.00
xminzi = 50.0000000
xmaxzi = 3000.00000

plx0 = 7.00000003E-02 for stability 1
plx0 = 7.00000003E-02 for stability 2
plx0 = 0.100000001 for stability 3
plx0 = 0.150000006 for stability 4
plx0 = 0.349999994 for stability 5
plx0 = 0.550000012 for stability 6

ptg0 = 1.99999996E-02 for stability 5
ptg0 = 3.50000001E-02 for stability 6

ppc = 0.500000000 for stability 1
ppc = 0.500000000 for stability 2
ppc = 0.500000000 for stability 3
ppc = 0.500000000 for stability 4
ppc = 0.349999994 for stability 5
ppc = 0.349999994 for stability 6
tbd = 0.500000000

tibldist = 1.00000000 10.0000000 9.00000000

nlutibl = 4

nsplit = 3

iresplit = 0 0 0

= 0 0 0

= 0 0 0

= 0 0 0

= 0 1 0

= 0 0 0

zisplit = 100.000000

roldmax = 0.250000000

nsplith = 5

sysplith = 1.00000000

shsplith = 2.00000000

cnsplith = 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07
1.00000001E-07 1.00000001E-07 1.00000001E-07

epsslug = 9.99999975E-05

epsarea = 9.9999997E-07

dsrise = 1.00000000

trajincl = 20.0000000

mdepbc = 1

htminbc = 500.000000

rsampbc = 10.0000000

----- INPUT GROUP 13 -----

npt1 = 6

iptu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s

by factor: 1.00000000

nspt1 = 16

npt2 = 0

cnampt1 = EC1 EC2 EC3 EC4 EI1 EC8

xpt1grd = 19.3200684 19.3402100 19.3603516 19.3804932 19.6600342 18.7304688

ypt1grd = 19.6582031 19.6386719 19.6191406 19.5898438 20.0781250 19.3408203

htstak = 15.0000000 15.0000000 15.0000000 15.0000000 16.0000000 11.0000000

elstak = 68.0000000 68.0000000 68.0000000 68.0000000 69.0000000 65.0000000

diam = 0.800000012 0.800000012 0.750000000 0.750000000 0.400000006 0.400000006
exitw = 12.1000004 12.1000004 13.6999998 13.6999998 12.1000004 15.3999996
tstak = 298.000000 298.000000 298.000000 298.000000 298.000000 293.000000
idownw = 1 1 1 1 1 0
syipt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00
szipt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00
fmfpt1 = 1.00000000 1.00000000 1.00000000 1.00000000 1.00000000 1.00000000
zplatpt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00

pt. source: EC1 number: 1

qstak = 0.00000000E+00 5.55999996E-03 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 62.8600006 76.0000000 86.8300018 95.0199966 100.320000 106.800003 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 62.8600006 76.0000000
bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC2 number: 2

qstak = 0.00000000E+00 5.55999996E-03 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000
bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC3 number: 3

qstak = 0.00000000E+00 5.55999996E-03 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000

bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC4 number: 4

qstak = 0.00000000E+00 5.55999996E-03 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00

bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000

bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EI1 number: 5

qstak = 0.00000000E+00 4.17000009E-03 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00

bwidth = 90.3000031 98.8600006 104.419998 106.800003 106.400002 106.940002 104.410004
98.6999969 55.0000000 58.3300018 59.8899994 59.6300011 57.5600014 54.0699997 20.9400005
17.5100002 22.6000004 79.0000000 90.3000031 33.2400017 34.8800011 35.4700012 35.6199989
35.8499985 35.6300011 98.6999969 55.0000000 58.3300018 59.8899994 59.6300011 57.5600014
54.0699997 20.9400005 17.5100002 22.6000004 79.0000000

bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 15.0000000 15.0000000 15.0000000 15.0000000 15.0000000 15.0000000 16.7000008
16.7000008 16.7000008 16.8999996 16.8999996 16.7000008 16.7000008 16.7000008 16.7000008
16.7000008 16.7000008 16.8999996 15.0000000 15.0000000 15.0000000 15.0000000 15.0000000
15.0000000 16.7000008 16.7000008 16.7000008 16.8999996

emission factors for species: COBALTO

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: CU

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: EPICLORIDRIN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000

0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: HCN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: NI

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: PD

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: SN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: ZN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

pt. source: EC8 number: 6

qstak = 0.00000000E+00 3.59999994E-03 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00

emission factors for species: COBALTO

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: CU

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: EPICLORIDRIN

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: HCN

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: NI

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: PD

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: SN

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: ZN

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

----- INPUT GROUP 14 -----

nar1 = 0

iaru = 1 units = g/s/m^2

converted to g/s/m^2, odour_units*m/s,
or Bq/s/m^2 by factor: 1.00000000

nsar1 = 0

nar2 = 0

----- INPUT GROUP 15 -----

nln2 = 0


```

nlines = 0
ilnu = 1 units = g/s
    converted to g/s, odour_units*m3/s, or Bq/s
    by factor: 1.00000000
nsln1 = 0
xl = 0.00000000E+00
hbl = 0.00000000E+00
wbl = 0.00000000E+00
wml = 0.00000000E+00
dxl = 0.00000000E+00
fprimel = 0.00000000E+00
mxnseg = 7
nlrise = 6

```

----- INPUT GROUP 16 -----

```

nvl1 = 0
ivlu = 1 units = g/s
    converted to g/s, odour_units*m3/s, or Bq/s
    by factor: 1.00000000
nsvl1 = 0
nvl2 = 0

```

----- INPUT GROUP 17 -----

```

nrec = 9
nrgrp = 0
xng yng zng elevng group
21.7401123 20.0488281 2.00000000 73.0000000 -----
20.7104492 20.0097656 2.00000000 71.0000000 -----
20.6402588 19.3310547 2.00000000 69.0000000 -----
20.6201172 18.5400391 2.00000000 66.0000000 -----
20.5102539 17.9394531 2.00000000 64.0000000 -----
19.5300293 18.1884766 2.00000000 66.0000000 -----
18.2000732 18.4179688 2.00000000 64.0000000 -----
19.3402100 20.9814453 2.00000000 69.0000000 -----
17.1704102 19.8974609 2.00000000 62.0000000 -----

```

--

INPUT FILES

```

Default Name  Unit No.  File Name and Path
-----
CALPUFF.INP   1      calpuff.inp
(CALMET Domain: 1 ) MASTER

```

CALMET.DAT 100 calmet.dat

--

OUTPUT FILES

Default Name Unit No. File Name and Path

Default Name	Unit No.	File Name and Path
CALPUFF.LST	2	calpuff.lst
CONC.DAT	8	conc.dat

SETNEST: Setup results for nested CALMET grids

Properties of each CALMET domain grid

Domain = 1
Origin(m) = 677699.000 4851603.00
nx,ny,cell(m) = 40 40 100.000000
Nest Factor = 1
Offset nx0,ny0= 0.00000000E+00 0.00000000E+00
Corner coordinates in outermost grid units:
LL Corner = 0.00000000E+00 0.00000000E+00
UR Corner = 40.0000000 40.0000000
Horizontal splitting parameters for domain:
SYSPLITH(m) = 100.000000
SHSPLITH(m/s) = 5.55555560E-02

REVISED CONTROL DATA

Running All Met Periods

INPUT GROUP 1

metrun = 1
ibyr = 2022
ibmo = 1
ibdy = 1
ibhr = 0
ibsec = 0
nsecdt = 3600
irlg = 8760
ibdathr = 202200100
iedathr = 202300100
iesec = 0

(End-times in other data files are NOT checked)

LAST PERIOD PROCESSED ENDS AT:

Year: 2023 Month: 1 Day: 1 Julian day: 1 Hour: 0 Second: 0

End of run -- Clock time: 14:34:29

Date: 09-02-2024

Elapsed Clock Time: 1064.0 (seconds)

CPU Time: 1053.0 (seconds)

Diffusione Stagno 2024 Definitivo

CALPUFF Version: 6.42 Level: 110325

Clock time: 14:42:09

Date: 09-02-2024

Internal Coordinate Transformations by --- COORDLIB Version: 1.99 Level: 070921

Control File Type: CALPUFF.INP 1.0

Run Title:

Diffusione Stagno 2024 Definitivo

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1972 2071

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO ! !END!
! CSPEC = CU ! !END!
! CSPEC = EPICLORIDRIN ! !END!
! CSPEC = HCN ! !END!
! CSPEC = NI ! !END!
! CSPEC = PD ! !END!
! CSPEC = SN ! !END!
! CSPEC = ZN ! !END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !
! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !

! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESH DN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !

! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !
! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !

! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 3 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

Subgroup 13b Point source constant data

! SRCNAM = EC1 !
! X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0, 0, 0.01111, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = EC3 !
! X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,
0, 0, 0, 0, 0, 0, 0.01111, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

! SRCNAM = Ec8 !
! X = 679.572, 4853.537, 11, 65, 0.4, 15.4, 293, 0.0,
0, 0, 0, 0, 0, 0, 0.0036, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC1 !

! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,
86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

! SRCNAM = EC3 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = Ec8 !
! IVARY = 1 !
! COBALTO = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! CU = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! EPICLORIDRINA = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! HCN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! NI = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! PD = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! SN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

! SRCNAM = Ec8 !
! IVARY = 1 !
! ZN = 0, 0, 0, 0, 0, 0,
0, 0, 1, 1, 1, 1,
0, 1, 1, 1, 1, 0,
0, 0, 0, 0, 0, 0 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !

!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a

! NLINES = 0 !

! ILNU = 1 !

! NSLN1 = 0 !

! NLN2 = 0 !

!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a

! NVL1 = 0 !

! IVLU = 1 !

! NSVL1 = 0 !

! NVL2 = 0 !

!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

**** CONFIRMATION OF CONTROL DATA ****

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 0
ibmo = 0
ibdy = 0
ibhr = 0
ibsec = 0
ibdathr = 0
ieyr = 0
iemo = 0
iedy = 0
iehr = 0
iesec = 0
iedathr = 0
nsecdt = 3600
irlg = 0
iavg = 1
xbtz = 0.00000000E+00
abtz = UTC+0000
nspec = 8
nse = 8
itest = 2
metfm = 1
mprffm = 1
mrestart = 0
nrespd = 0
avet = 60.0000000
pgtime = 60.0000000
ioutu = 1
iovers = 2

----- INPUT GROUP 2 -----

mgauss = 1
mctadj = 3
mctsg = 0
mslug = 0
mtrans = 1
mchem = 0
maqchem = 0
mlwc = 0
mwet = 0
mdry = 0
mtilt = 0
mdisp = 3
mdisp2 = 3
mturbvw = 3
mtauly = 0.00000000E+00
mtauadv = 0

mcturb = 1
mrrough = 0
mtip = 1
mbdw = 1
mshear = 0
mrise = 1
msplit = 0
mpartl = 1
mpartlba = 1
mtinv = 0
mpdf = 0
msgtibl = 0
mbcon = 0
msource = 0
mfog = 0
mreg = 0

----- INPUT GROUP 3 -----

SPECIES: COBALTO j: 1 isplst(-,j) = 1 1 0 GROUP: COBALTO
SPECIES: CU j: 2 isplst(-,j) = 1 1 0 GROUP: CU
SPECIES: EPICLORIDRIN j: 3 isplst(-,j) = 1 1 0 GROUP: EPICLORIDRIN
SPECIES: HCN j: 4 isplst(-,j) = 1 1 0 GROUP: HCN
SPECIES: NI j: 5 isplst(-,j) = 1 1 0 GROUP: NI
SPECIES: PD j: 6 isplst(-,j) = 1 1 0 GROUP: PD
SPECIES: SN j: 7 isplst(-,j) = 1 1 0 GROUP: SN
SPECIES: ZN j: 8 isplst(-,j) = 1 1 0 GROUP: ZN

----- INPUT GROUP 4 -----

pmap = UTM
datum = WGS-84
daten = 02-21-2003
utmhem = N
iutmzn = 32
nx = 40
ny = 40
nz = 8
zface = 0.00000000E+00 20.0000000 50.0000000 100.000000 200.000000 500.000000 1000.00000
2000.00000 4000.00000
dgridkm = 0.100000001
xorigkm = 677.698975
yorigkm = 4851.60303
iutmzn = 32
ibcomp = 10
jbcomp = 10
iecomp = 31
jecomp = 31
lsamp = T

ibsamp = 10
jbsamp = 10
iesamp = 31
jesamp = 31
meshdn = 1

----- INPUT GROUP 5 -----

icon = 1
idry = 0
iwet = 0
it2d = 0
irho = 0
ivis = 0
lcomprs = F
icprt = 0
idprt = 0
iwprt = 0
icfrq = 1
idfrq = 1
iwfrq = 1
(note: i_frq values converted to timesteps)
iprtu = 1
imesg = 2
imflx = 0
imbal = 0
inrise = 0
iqaplot = 0
ipftrak = 0
ldebug = F
ipfdeb = 1
npfdeb = 1
nn1 = 1
nn2 = 10

GROUP: COBALTO j: 1 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: CU j: 2 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: EPICLORIDRIN j: 3 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: HCN j: 4 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: NI j: 5 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: PD j: 6 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: SN j: 7 ioutop(-,j) = 0 1 0 0 0 0 0
GROUP: ZN j: 8 ioutop(-,j) = 0 1 0 0 0 0 0

----- INPUT GROUP 6 -----

----- Subgroup (6a) -----

nhill = 0

nctrec = 0
mhill = 1
xhill2m= 1.00000000
zhill2m= 1.00000000
xctdmkm= 0.00000000E+00
yctdmkm= 0.00000000E+00

----- Subgroup (6b) -----

CTDM-type terrain file read

----- Subgroup (6c) -----

CTDM-type receptor file read

----- INPUT GROUP 7 -----

SPECIES: COBALTO j: 1 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: CU j: 2 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: HCN j: 4 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: NI j: 5 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: PD j: 6 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: SN j: 7 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: ZN j: 8 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

----- INPUT GROUP 8 -----

SPECIES: COBALTO j: 1 dryp(-,j) = -999.00 -999.00
SPECIES: CU j: 2 dryp(-,j) = -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryp(-,j) = -999.00 -999.00
SPECIES: HCN j: 4 dryp(-,j) = -999.00 -999.00
SPECIES: NI j: 5 dryp(-,j) = -999.00 -999.00
SPECIES: PD j: 6 dryp(-,j) = -999.00 -999.00
SPECIES: SN j: 7 dryp(-,j) = -999.00 -999.00
SPECIES: ZN j: 8 dryp(-,j) = -999.00 -999.00

----- INPUT GROUP 9 -----

rcutr = 30.0000000
rgr = 10.0000000
reactr = 8.00000000
pconst = 2.30000001E-08
bmin = 1.00000001E-07
bmax = 2.49999994E-06
qswmax = 600.000000
dconst1 = 2.00000000
dconst2 = 0.666666687
dconst3 = 4.79999988E-04

dconst4 = 0.666666687
nint = 9
iveg = 1

----- INPUT GROUP 10 -----

SPECIES: COBALTO j: 1 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: CU j: 2 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: EPICLORIDRIN j: 3 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: HCN j: 4 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: NI j: 5 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: PD j: 6 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: SN j: 7 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: ZN j: 8 wa(-,j) = 0.000E+00 0.000E+00

----- INPUT GROUP 11 -----

moz = 0
bcko3m = 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
mnh3 = 0
mavgnh3 = 1
bcknh3m = 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
rnite1 = 0.200000003
rnite2 = 2.00000000
rnite3 = 2.00000000
mh2o2 = 1
bckh2o2m = 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
bckpmf = 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
= 1.00000000 1.00000000 1.00000000 1.00000000
ofrac = 0.150000006 0.150000006 0.200000003 0.200000003
= 0.200000003 0.200000003 0.200000003 0.200000003
= 0.200000003 0.200000003 0.200000003 0.150000006
vcnx = 50.0000000 50.0000000 50.0000000 50.0000000
= 50.0000000 50.0000000 50.0000000 50.0000000
= 50.0000000 50.0000000 50.0000000 50.0000000

----- INPUT GROUP 12 -----

sytdep = 550.000000
mhftsz = 0
jsup = 5
conk1 = 9.99999978E-03

conk2 = 0.100000001

iurb1 = 10

iurb2 = 19

anemht = 10.0000000

isigmav = 1

imixctdm = 0

ilanduin = 20

z0in = 0.250000000

xlaiin = 3.00000000

elevin = 0.00000000E+00

xlain = -999.000000

xlonin = -999.000000

xmxlen = 1.00000000

mxnew = 99

xsamlen = 1.00000000

mxsam = 99

ncount = 2

sl2pf = 10.0000000

wscalm = 0.499994993

cdiv = 0.00000000E+00 0.00000000E+00

wscat = 1.53999996 top for class 1

wscat = 3.08999991 top for class 2

wscat = 5.13999987 top for class 3

wscat = 8.22999954 top for class 4

wscat = 10.8000002 top for class 5

Over LAND

svmin = 0.500000000 for stability 1

svmin = 0.500000000 for stability 2

svmin = 0.500000000 for stability 3

svmin = 0.500000000 for stability 4

svmin = 0.500000000 for stability 5

svmin = 0.500000000 for stability 6

swmin = 0.200000003 for stability 1

swmin = 0.119999997 for stability 2

swmin = 7.99999982E-02 for stability 3

swmin = 5.99999987E-02 for stability 4

swmin = 2.99999993E-02 for stability 5

swmin = 1.60000008E-02 for stability 6

Over WATER

svmin = 0.370000005 for stability 1

svmin = 0.370000005 for stability 2

svmin = 0.370000005 for stability 3

svmin = 0.370000005 for stability 4

svmin = 0.370000005 for stability 5

svmin = 0.370000005 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

symin = 1.00000000
szmin = 1.00000000
szcap_m = 5000000.00
xminzi = 50.0000000
xmaxzi = 3000.00000

plx0 = 7.00000003E-02 for stability 1
plx0 = 7.00000003E-02 for stability 2
plx0 = 0.100000001 for stability 3
plx0 = 0.150000006 for stability 4
plx0 = 0.349999994 for stability 5
plx0 = 0.550000012 for stability 6

ptg0 = 1.99999996E-02 for stability 5
ptg0 = 3.50000001E-02 for stability 6

ppc = 0.500000000 for stability 1
ppc = 0.500000000 for stability 2
ppc = 0.500000000 for stability 3
ppc = 0.500000000 for stability 4
ppc = 0.349999994 for stability 5
ppc = 0.349999994 for stability 6
tbd = 0.500000000

tibldist = 1.00000000 10.0000000 9.00000000

nlutibl = 4

nsplit = 3

iresplit = 0 0 0 0

= 0 0 0 0

= 0 0 0 0

= 0 0 0 0

= 0 1 0 0

= 0 0 0 0

zisplit = 100.000000

roldmax = 0.250000000

nsplith = 5

sysplith = 1.00000000

shsplith = 2.00000000

cnsplith = 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07

1.00000001E-07 1.00000001E-07 1.00000001E-07

epsslug = 9.99999975E-05

epsarea = 9.99999997E-07

dsrise = 1.00000000
trajincl = 20.0000000
mdepbc = 1
htminbc = 500.000000
rsampbc = 10.0000000

----- INPUT GROUP 13 -----

npt1 = 3
iptu = 1 units = g/s
converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000
nspt1 = 8
npt2 = 0

cnampt1 = EC1 EC3 EC8
xpt1grd = 19.3200684 19.3603516 18.7304688
ypt1grd = 19.6582031 19.6191406 19.3408203
htstak = 15.0000000 15.0000000 11.0000000
elstak = 68.0000000 68.0000000 65.0000000
diam = 0.800000012 0.750000000 0.400000006
exitw = 12.1000004 13.6999998 15.3999996
tstak = 298.000000 298.000000 293.000000
idownw = 1 1 0
syipt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00
szypt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00
fmfpt1 = 1.00000000 1.00000000 1.00000000
zplatpt1 = 0.00000000E+00 0.00000000E+00 0.00000000E+00

pt. source: EC1 number: 1
qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 1.11100003E-02 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 62.8600006 76.0000000 86.8300018 95.0199966 100.320000 106.800003 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 62.8600006 76.0000000
bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC3 number: 2
qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 1.11100003E-02 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002

102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000
bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

pt. source: EC8 number: 3
qstak = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 3.59999994E-03 0.00000000E+00

emission factors for species: COBALTO

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: CU

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: EPICLORIDRIN

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: HCN

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: NI

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: PD

IVARY = 1

0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1.000	1.000	1.000	1.000
0.000	1.000	1.000	1.000	1.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000

emission factors for species: SN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

emission factors for species: ZN

IVARY = 1

0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 1.000 1.000 1.000 1.000
0.000 1.000 1.000 1.000 1.000 0.000
0.000 0.000 0.000 0.000 0.000 0.000

----- INPUT GROUP 14 -----

nar1 = 0

iaru = 1 units = g/s/m^2

converted to g/s/m^2, odour_units*m/s,
or Bq/s/m^2 by factor: 1.00000000

nsar1 = 0

nar2 = 0

----- INPUT GROUP 15 -----

nln2 = 0

nlines = 0

ilnu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsln1 = 0

xl = 0.00000000E+00

hbl = 0.00000000E+00

wbl = 0.00000000E+00

wml = 0.00000000E+00

dxl = 0.00000000E+00

fprimel = 0.00000000E+00

mxnseg = 7

nlrise = 6

----- INPUT GROUP 16 -----

nvl1 = 0

ivlu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsvl1 = 0

nvl2 = 0

----- INPUT GROUP 17 -----

nrec = 9
nrgp = 0
xng yng zng elevng group
21.7401123 20.0488281 2.00000000 73.0000000 -----
20.7104492 20.0097656 2.00000000 71.0000000 -----
20.6402588 19.3310547 2.00000000 69.0000000 -----
20.6201172 18.5400391 2.00000000 66.0000000 -----
20.5102539 17.9394531 2.00000000 64.0000000 -----
19.5300293 18.1884766 2.00000000 66.0000000 -----
18.2000732 18.4179688 2.00000000 64.0000000 -----
19.3402100 20.9814453 2.00000000 69.0000000 -----
17.1704102 19.8974609 2.00000000 62.0000000 -----

--

INPUT FILES

Default Name	Unit No.	File Name and Path
CALPUFF.INP	1	calpuff.inp
(CALMET Domain: 1) MASTER		
CALMET.DAT	100	calmet.dat

--

OUTPUT FILES

Default Name	Unit No.	File Name and Path
CALPUFF.LST	2	calpuff.lst
CONC.DAT	8	conc.dat

SETNEST: Setup results for nested CALMET grids

Properties of each CALMET domain grid

Domain = 1
Origin(m) = 677699.000 4851603.00
nx,ny,cell(m) = 40 40 100.000000
Nest Factor = 1
Offset nx0,ny0= 0.00000000E+00 0.00000000E+00
Corner coordinates in outermost grid units:
LL Corner = 0.00000000E+00 0.00000000E+00

UR Corner = 40.0000000 40.0000000
Horizontal splitting parameters for domain:
SYSPLITH(m) = 100.000000
SHSPLITH(m/s) = 5.55555560E-02

REVISED CONTROL DATA
Running All Met Periods

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 2022
ibmo = 1
ibdy = 1
ibhr = 0
ibsec = 0
nsecdt = 3600
irlg = 8760
ibdathr = 202200100
iedathr = 202300100
iesec = 0

(End-times in other data files are NOT checked)

LAST PERIOD PROCESSED ENDS AT:

Year: 2023 Month: 1 Day: 1 Julian day: 1 Hour: 0 Second: 0

End of run -- Clock time: 14:51:14

Date: 09-02-2024

Elapsed Clock Time: 545.0 (seconds)

CPU Time: 537.0 (seconds)

Diffusione Nichel EC1

CALPUFF Version: 6.42 Level: 110325

Clock time: 10:27:46

Date: 03-14-2025

Internal Coordinate Transformations by --- COORDLIB Version: 1.99 Level: 070921

Control File Type: CALPUFF.INP 1.0

Run Title:

Diffusione Nichel EC1

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
! END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1972 2071

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO ! !END!
! CSPEC = CU ! !END!
! CSPEC = EPICLORIDRIN ! !END!
! CSPEC = HCN ! !END!
! CSPEC = NI ! !END!
! CSPEC = PD ! !END!
! CSPEC = SN ! !END!
! CSPEC = ZN ! !END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !
! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !

! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESH DN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !

! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !
! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !

! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 1 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

Subgroup 13b Point source constant data

! SRCNAM = EC1 !
! X = 679.631, 4853.569, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0.00055, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC1 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 62.86, 76,
86.83, 95.02, 100.32, 106.8, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 62.86, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EC1 !
! IVARY = 1 !
! COBALTO = 0.15, 0.15, 0.15, 0.575, 1, 1,

1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! CU = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! EPICLORIDRINA = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! HCN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! NI = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! PD = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC1 !
! IVARY = 1 !
! SN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,

1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

!SRCNAM = EC1 !
!IVARY = 1 !
!ZN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
!NAR1 = 0 !
!IARU = 1 !
!NSAR1 = 0 !
!NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
!NLINES = 0 !
!ILNU = 1 !
!NSLN1 = 0 !
!NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
!NVL1 = 0 !
!IVLU = 1 !
!NSVL1 = 0 !
!NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

**** CONFIRMATION OF CONTROL DATA ****

----- INPUT GROUP 1 -----

metrun = 1

ibyr = 0

ibmo = 0

ibdy = 0

ibhr = 0

ibsec = 0

ibdathr = 0

ieyr = 0

iemo = 0

iedy = 0

iehr = 0

iesec = 0

iedathr = 0

nsecdt = 3600

irlg = 0

iavg = 1

xbtz = 0.00000000E+00

abtz = UTC+0000

nspec = 8

nse = 8

itest = 2

metfm = 1

mprffm = 1

mrestart= 0

nrespd = 0

avet = 60.0000000

pgtime = 60.0000000

ioutu = 1

iovers = 2

----- INPUT GROUP 2 -----

mgauss = 1
mctadj = 3
mctsg = 0
mslug = 0
mtrans = 1
mchem = 0
maqchem = 0
mlwc = 0
mwet = 0
mdry = 0
mtilt = 0
mdisp = 3
mdisp2 = 3
mturbvw = 3
mtauly = 0.00000000E+00
mtauadv = 0
mcturb = 1
mrrough = 0
mtip = 1
mbdw = 1
mshear = 0
mrise = 1
msplit = 0
mpartl = 1
mpartlba = 1
mtinv = 0
mpdf = 0
msgtibl = 0
mbcon = 0
msource = 0
mfog = 0
mreg = 0

----- INPUT GROUP 3 -----

SPECIES: COBALTO j: 1 isplst(-,j) = 1 1 0 GROUP: COBALTO
SPECIES: CU j: 2 isplst(-,j) = 1 1 0 GROUP: CU
SPECIES: EPICLORIDRIN j: 3 isplst(-,j) = 1 1 0 GROUP: EPICLORIDRIN
SPECIES: HCN j: 4 isplst(-,j) = 1 1 0 GROUP: HCN
SPECIES: NI j: 5 isplst(-,j) = 1 1 0 GROUP: NI
SPECIES: PD j: 6 isplst(-,j) = 1 1 0 GROUP: PD
SPECIES: SN j: 7 isplst(-,j) = 1 1 0 GROUP: SN
SPECIES: ZN j: 8 isplst(-,j) = 1 1 0 GROUP: ZN

----- INPUT GROUP 4 -----

pmap = UTM
datum = WGS-84
daten = 02-21-2003
utmhem = N
iutmzn = 32
nx = 40
ny = 40
nz = 8
zface = 0.00000000E+00 20.0000000 50.0000000 100.000000 200.000000 500.000000 1000.00000
2000.00000 4000.00000
dgridkm = 0.100000001
xorigkm = 677.698975
yorigkm = 4851.60303
iutmzn = 32
ibcomp = 10
jbcomp = 10
iecomp = 31
jcomp = 31
lsamp = T
ibsamp = 10
jbsamp = 10
iesamp = 31
jesamp = 31
meshdn = 1

----- INPUT GROUP 5 -----

icon = 1
idry = 0
iwet = 0
it2d = 0
irho = 0
ivis = 0
lcomprs = F
icprt = 0
idprt = 0
iwprt = 0
icfrq = 1
idfrq = 1
iwfrq = 1
(note: i_frq values converted to timesteps)
iprtu = 1
imesg = 2
imflx = 0
imbal = 0
inrise = 0
iqaplot = 0
ipftrak = 0

ldebug = F
ipfdeb = 1
npfdeb = 1
nn1 = 1
nn2 = 10

GROUP: COBALTO j: 1 ioutop(-,j) = 0 1 0 0 0 0
GROUP: CU j: 2 ioutop(-,j) = 0 1 0 0 0 0
GROUP: EPICLORIDRIN j: 3 ioutop(-,j) = 0 1 0 0 0 0
GROUP: HCN j: 4 ioutop(-,j) = 0 1 0 0 0 0
GROUP: NI j: 5 ioutop(-,j) = 0 1 0 0 0 0
GROUP: PD j: 6 ioutop(-,j) = 0 1 0 0 0 0
GROUP: SN j: 7 ioutop(-,j) = 0 1 0 0 0 0
GROUP: ZN j: 8 ioutop(-,j) = 0 1 0 0 0 0

----- INPUT GROUP 6 -----

----- Subgroup (6a) -----

nhill = 0
nctrec = 0
mhill = 1
xhill2m= 1.00000000
zhill2m= 1.00000000
xctdmkm= 0.00000000E+00
yctdmkm= 0.00000000E+00

----- Subgroup (6b) -----

CTDM-type terrain file read

----- Subgroup (6c) -----

CTDM-type receptor file read

----- INPUT GROUP 7 -----

SPECIES: COBALTO j: 1 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: CU j: 2 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: HCN j: 4 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: NI j: 5 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: PD j: 6 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: SN j: 7 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: ZN j: 8 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

----- INPUT GROUP 8 -----

SPECIES: COBALTO j: 1 dryp(-,j) = -999.00 -999.00

SPECIES: CU j: 2 dryp(-,j) = -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryp(-,j) = -999.00 -999.00
SPECIES: HCN j: 4 dryp(-,j) = -999.00 -999.00
SPECIES: NI j: 5 dryp(-,j) = -999.00 -999.00
SPECIES: PD j: 6 dryp(-,j) = -999.00 -999.00
SPECIES: SN j: 7 dryp(-,j) = -999.00 -999.00
SPECIES: ZN j: 8 dryp(-,j) = -999.00 -999.00

----- INPUT GROUP 9 -----

rcutr = 30.0000000
rgr = 10.0000000
reactr = 8.00000000
pconst = 2.30000001E-08
bmin = 1.00000001E-07
bmax = 2.49999994E-06
qswmax = 600.000000
dconst1 = 2.00000000
dconst2 = 0.666666687
dconst3 = 4.79999988E-04
dconst4 = 0.666666687
nint = 9
iveg = 1

----- INPUT GROUP 10 -----

SPECIES: COBALTO j: 1 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: CU j: 2 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: EPICLORIDRIN j: 3 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: HCN j: 4 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: NI j: 5 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: PD j: 6 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: SN j: 7 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: ZN j: 8 wa(-,j) = 0.000E+00 0.000E+00

----- INPUT GROUP 11 -----

moz = 0
bcko3m = 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
mnh3 = 0
mavgnh3 = 1
bcknh3m = 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
rnite1 = 0.200000003
rnite2 = 2.00000000
rnite3 = 2.00000000

```

mh2o2 = 1
bckh2o2m = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
bckpmf = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
ofrac = 0.150000006 0.150000006 0.200000003 0.200000003
        = 0.200000003 0.200000003 0.200000003 0.200000003
        = 0.200000003 0.200000003 0.200000003 0.150000006
vcnx = 50.0000000 50.0000000 50.0000000 50.0000000
       = 50.0000000 50.0000000 50.0000000 50.0000000
       = 50.0000000 50.0000000 50.0000000 50.0000000

```

----- INPUT GROUP 12 -----

```

sytdp = 550.000000
mhftsz = 0
jsup = 5
conk1 = 9.99999978E-03
conk2 = 0.100000001
iurb1 = 10
iurb2 = 19

```

```

anemht = 10.0000000
isigmav = 1
imixctdm = 0
ilanduin = 20
z0in = 0.250000000
xlaiin = 3.00000000
elevin = 0.00000000E+00
xlatin = -999.000000
xlonin = -999.000000

```

```

mxmflen = 1.00000000
mxnew = 99
xsamlen = 1.00000000
mxsam = 99
ncount = 2
sl2pf = 10.0000000
wscalm = 0.499994993
cdiv = 0.00000000E+00 0.00000000E+00

```

```

wscat = 1.53999996 top for class 1
wscat = 3.08999991 top for class 2
wscat = 5.13999987 top for class 3
wscat = 8.22999954 top for class 4
wscat = 10.8000002 top for class 5

```

Over LAND

svmin = 0.500000000 for stability 1
svmin = 0.500000000 for stability 2
svmin = 0.500000000 for stability 3
svmin = 0.500000000 for stability 4
svmin = 0.500000000 for stability 5
svmin = 0.500000000 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

Over WATER

svmin = 0.370000005 for stability 1
svmin = 0.370000005 for stability 2
svmin = 0.370000005 for stability 3
svmin = 0.370000005 for stability 4
svmin = 0.370000005 for stability 5
svmin = 0.370000005 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

symin = 1.00000000
szmin = 1.00000000
szcap_m = 5000000.00
xminzi = 50.0000000
xmaxzi = 3000.00000

plx0 = 7.00000003E-02 for stability 1
plx0 = 7.00000003E-02 for stability 2
plx0 = 0.100000001 for stability 3
plx0 = 0.150000006 for stability 4
plx0 = 0.349999994 for stability 5
plx0 = 0.550000012 for stability 6

ptg0 = 1.99999996E-02 for stability 5
ptg0 = 3.50000001E-02 for stability 6

ppc = 0.500000000 for stability 1
ppc = 0.500000000 for stability 2
ppc = 0.500000000 for stability 3
ppc = 0.500000000 for stability 4
ppc = 0.349999994 for stability 5

```

ppc   = 0.349999994  for stability 6
tbd   = 0.500000000
tibldist = 1.00000000 10.0000000 9.00000000
nlutibl = 4
nsplit = 3
iresplit = 0 0 0 0
        = 0 0 0 0
        = 0 0 0 0
        = 0 0 0 0
        = 0 1 0 0
        = 0 0 0 0
zisplit = 100.000000
roldmax = 0.250000000
nsplith = 5
sysplith = 1.00000000
shsplith = 2.00000000
cnsplith = 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07
1.00000001E-07 1.00000001E-07 1.00000001E-07
epsslug = 9.99999975E-05
epsarea = 9.99999997E-07
dsrise  = 1.00000000
trajincl = 20.0000000
mdepbc  = 1
htminbc = 500.000000
rsampbc = 10.0000000

```

----- INPUT GROUP 13 -----

```

npt1   = 1
iptu   = 1 units = g/s
        converted to g/s, odour_units*m3/s, or Bq/s
        by factor: 1.00000000
nspt1  = 8
npt2   = 0

```

```

cnampt1 = EC1
xpt1grd = 19.3200684
ypt1grd = 19.6582031
htstak  = 15.0000000
elstak  = 68.0000000
diam    = 0.800000012
exitw   = 12.1000004
tstak   = 298.000000
idownw  = 1
syipt1  = 0.00000000E+00
szypt1  = 0.00000000E+00
fmfpt1  = 1.00000000
zplatpt1 = 0.00000000E+00

```



```

pt. source: EC1      number: 1
qstak  = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 5.49999997E-04
0.00000000E+00 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 62.8600006 76.0000000 86.8300018 95.0199966 100.320000 106.800003 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 62.8600006 76.0000000
bht    = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996
emission factors for species: COBALTO
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: CU
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: EPICLORIDRIN
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: HCN
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: NI
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: PD
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150

```

emission factors for species: SN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: ZN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

----- INPUT GROUP 14 -----

nar1 = 0

iaru = 1 units = g/s/m^2

converted to g/s/m^2, odour_units*m/s,
or Bq/s/m^2 by factor: 1.00000000

nsar1 = 0

nar2 = 0

----- INPUT GROUP 15 -----

nln2 = 0

nlines = 0

ilnu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsln1 = 0

xl = 0.00000000E+00

hbl = 0.00000000E+00

wbl = 0.00000000E+00

wml = 0.00000000E+00

dxl = 0.00000000E+00

fprimel = 0.00000000E+00

mxnseg = 7

nlrise = 6

----- INPUT GROUP 16 -----

nv11 = 0

ivlu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsvl1 = 0

nv12 = 0

----- INPUT GROUP 17 -----

```
nrec  = 9
nrgrp = 0
xng   yng   zng   elevng   group
21.7401123 20.0488281 2.00000000 73.0000000 -----
20.7104492 20.0097656 2.00000000 71.0000000 -----
20.6402588 19.3310547 2.00000000 69.0000000 -----
20.6201172 18.5400391 2.00000000 66.0000000 -----
20.5102539 17.9394531 2.00000000 64.0000000 -----
19.5300293 18.1884766 2.00000000 66.0000000 -----
18.2000732 18.4179688 2.00000000 64.0000000 -----
19.3402100 20.9814453 2.00000000 69.0000000 -----
17.1704102 19.8974609 2.00000000 62.0000000 -----
```

--

INPUT FILES

Default Name Unit No. File Name and Path

```
-----
CALPUFF.INP    1    calpuff.inp
(CALMET Domain: 1 ) MASTER
CALMET.DAT    100    calmet.dat
```

--

OUTPUT FILES

Default Name Unit No. File Name and Path

```
-----
CALPUFF.LST    2    calpuff.lst
CONC.DAT       8    conc.dat
```

SETNEST: Setup results for nested CALMET grids

Properties of each CALMET domain grid

```
Domain    = 1
Origin(m) = 677699.000 4851603.00
nx,ny,cell(m) = 40 40 100.000000
Nest Factor = 1
Offset nx0,ny0= 0.00000000E+00 0.00000000E+00
```

Corner coordinates in outermost grid units:
LL Corner = 0.00000000E+00 0.00000000E+00
UR Corner = 40.00000000 40.00000000
Horizontal splitting parameters for domain:
SYSPLITH(m) = 100.000000
SHSPLITH(m/s) = 5.55555560E-02

REVISED CONTROL DATA
Running All Met Periods

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 2022
ibmo = 1
ibdy = 1
ibhr = 0
ibsec = 0
nsecdt = 3600
irlg = 8760
ibdathr = 202200100
iedathr = 202300100
iesec = 0

(End-times in other data files are NOT checked)

LAST PERIOD PROCESSED ENDS AT:

Year: 2023 Month: 1 Day: 1 Julian day: 1 Hour: 0 Second: 0

End of run -- Clock time: 10:30:34
Date: 03-14-2025

Elapsed Clock Time: 168.0 (seconds)

CPU Time: 41.9 (seconds)

Diffusione Nichel EC2

CALPUFF Version: 6.42 Level: 110325

Clock time: 10:47:39

Date: 03-14-2025

Internal Coordinate Transformations by --- COORDLIB Version: 1.99 Level: 070921

Control File Type: CALPUFF.INP 1.0

Run Title:

Diffusione Nichel EC2

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1972 2071

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO ! !END!
! CSPEC = CU ! !END!
! CSPEC = EPICLORIDRIN ! !END!
! CSPEC = HCN ! !END!
! CSPEC = NI ! !END!
! CSPEC = PD ! !END!
! CSPEC = SN ! !END!
! CSPEC = ZN ! !END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !
! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !

! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESH DN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !

! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !
! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !

! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 1 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

Subgroup 13b Point source constant data

! SRCNAM = EC2 !
! X = 679.633, 4853.567, 15, 68, 0.8, 12.1, 298, 1.0,
0, 0, 0, 0, 0.00055, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC2 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EC2 !
! IVARY = 1 !
! COBALTO = 0.15, 0.15, 0.15, 0.575, 1, 1,

1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! CU = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! EPICLORIDRINA = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! HCN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! NI = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! PD = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! SN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,

1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! ZN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
! NAR1 = 0 !
! IARU = 1 !
! NSAR1 = 0 !
! NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
! NLINES = 0 !
! ILNU = 1 !
! NSLN1 = 0 !
! NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
! NVL1 = 0 !
! IVLU = 1 !
! NSVL1 = 0 !
! NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

**** CONFIRMATION OF CONTROL DATA ****

----- INPUT GROUP 1 -----

metrun = 1

ibyr = 0

ibmo = 0

ibdy = 0

ibhr = 0

ibsec = 0

ibdathr = 0

ieyr = 0

iemo = 0

iedy = 0

iehr = 0

iesec = 0

iedathr = 0

nsecdt = 3600

irlg = 0

iavg = 1

xbtz = 0.00000000E+00

abtz = UTC+0000

nspec = 8

nse = 8

itest = 2

metfm = 1

mprffm = 1

mrestart= 0

nrespd = 0

avet = 60.0000000

pgtime = 60.0000000

ioutu = 1

iovers = 2

----- INPUT GROUP 2 -----

mgauss = 1
mctadj = 3
mctsg = 0
mslug = 0
mtrans = 1
mchem = 0
maqchem = 0
mlwc = 0
mwet = 0
mdry = 0
mtilt = 0
mdisp = 3
mdisp2 = 3
mturbvw = 3
mtauly = 0.00000000E+00
mtauadv = 0
mcturb = 1
mrrough = 0
mtip = 1
mbdw = 1
mshear = 0
mrise = 1
msplit = 0
mpartl = 1
mpartlba = 1
mtinv = 0
mpdf = 0
msgtibl = 0
mbcon = 0
msource = 0
mfog = 0
mreg = 0

----- INPUT GROUP 3 -----

SPECIES: COBALTO j: 1 isplst(-,j) = 1 1 0 GROUP: COBALTO
SPECIES: CU j: 2 isplst(-,j) = 1 1 0 GROUP: CU
SPECIES: EPICLORIDRIN j: 3 isplst(-,j) = 1 1 0 GROUP: EPICLORIDRIN
SPECIES: HCN j: 4 isplst(-,j) = 1 1 0 GROUP: HCN
SPECIES: NI j: 5 isplst(-,j) = 1 1 0 GROUP: NI
SPECIES: PD j: 6 isplst(-,j) = 1 1 0 GROUP: PD
SPECIES: SN j: 7 isplst(-,j) = 1 1 0 GROUP: SN
SPECIES: ZN j: 8 isplst(-,j) = 1 1 0 GROUP: ZN

----- INPUT GROUP 4 -----

pmap = UTM
datum = WGS-84
daten = 02-21-2003
utmhem = N
iutmzn = 32
nx = 40
ny = 40
nz = 8
zface = 0.00000000E+00 20.0000000 50.0000000 100.000000 200.000000 500.000000 1000.00000
2000.00000 4000.00000
dgridkm = 0.100000001
xorigkm = 677.698975
yorigkm = 4851.60303
iutmzn = 32
ibcomp = 10
jbcomp = 10
iecomp = 31
jecom = 31
lsamp = T
ibsamp = 10
jbsamp = 10
iesamp = 31
jesamp = 31
meshdn = 1

----- INPUT GROUP 5 -----

icon = 1
idry = 0
iwet = 0
it2d = 0
irho = 0
ivis = 0
lcomprs = F
icprt = 0
idprt = 0
iwprt = 0
icfrq = 1
idfrq = 1
iwfrq = 1
(note: i_frq values converted to timesteps)
iprtu = 1
imesg = 2
imflx = 0
imbal = 0
inrise = 0
iqaplot = 0
ipftrak = 0

ldebug = F
ipfdeb = 1
npfdeb = 1
nn1 = 1
nn2 = 10

GROUP: COBALTO j: 1 ioutop(-,j) = 0 1 0 0 0 0
GROUP: CU j: 2 ioutop(-,j) = 0 1 0 0 0 0
GROUP: EPICLORIDRIN j: 3 ioutop(-,j) = 0 1 0 0 0 0
GROUP: HCN j: 4 ioutop(-,j) = 0 1 0 0 0 0
GROUP: NI j: 5 ioutop(-,j) = 0 1 0 0 0 0
GROUP: PD j: 6 ioutop(-,j) = 0 1 0 0 0 0
GROUP: SN j: 7 ioutop(-,j) = 0 1 0 0 0 0
GROUP: ZN j: 8 ioutop(-,j) = 0 1 0 0 0 0

----- INPUT GROUP 6 -----

----- Subgroup (6a) -----

nhill = 0
nctrec = 0
mhill = 1
xhill2m= 1.00000000
zhill2m= 1.00000000
xctdmkm= 0.00000000E+00
yctdmkm= 0.00000000E+00

----- Subgroup (6b) -----

CTDM-type terrain file read

----- Subgroup (6c) -----

CTDM-type receptor file read

----- INPUT GROUP 7 -----

SPECIES: COBALTO j: 1 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: CU j: 2 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: HCN j: 4 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: NI j: 5 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: PD j: 6 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: SN j: 7 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: ZN j: 8 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

----- INPUT GROUP 8 -----

SPECIES: COBALTO j: 1 dryp(-,j) = -999.00 -999.00

SPECIES: CU j: 2 dryp(-,j) = -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryp(-,j) = -999.00 -999.00
SPECIES: HCN j: 4 dryp(-,j) = -999.00 -999.00
SPECIES: NI j: 5 dryp(-,j) = -999.00 -999.00
SPECIES: PD j: 6 dryp(-,j) = -999.00 -999.00
SPECIES: SN j: 7 dryp(-,j) = -999.00 -999.00
SPECIES: ZN j: 8 dryp(-,j) = -999.00 -999.00

----- INPUT GROUP 9 -----

rcutr = 30.0000000
rgr = 10.0000000
reactr = 8.00000000
pconst = 2.30000001E-08
bmin = 1.00000001E-07
bmax = 2.49999994E-06
qswmax = 600.000000
dconst1 = 2.00000000
dconst2 = 0.666666687
dconst3 = 4.79999988E-04
dconst4 = 0.666666687
nint = 9
iveg = 1

----- INPUT GROUP 10 -----

SPECIES: COBALTO j: 1 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: CU j: 2 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: EPICLORIDRIN j: 3 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: HCN j: 4 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: NI j: 5 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: PD j: 6 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: SN j: 7 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: ZN j: 8 wa(-,j) = 0.000E+00 0.000E+00

----- INPUT GROUP 11 -----

moz = 0
bcko3m = 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
mnh3 = 0
mavgnh3 = 1
bcknh3m = 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
rnite1 = 0.200000003
rnite2 = 2.00000000
rnite3 = 2.00000000

```

mh2o2 = 1
bckh2o2m = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
bckpmf = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
ofrac = 0.150000006 0.150000006 0.200000003 0.200000003
        = 0.200000003 0.200000003 0.200000003 0.200000003
        = 0.200000003 0.200000003 0.200000003 0.150000006
vcnx = 50.0000000 50.0000000 50.0000000 50.0000000
       = 50.0000000 50.0000000 50.0000000 50.0000000
       = 50.0000000 50.0000000 50.0000000 50.0000000

```

----- INPUT GROUP 12 -----

```

sytdp = 550.000000
mhftsz = 0
jsup = 5
conk1 = 9.99999978E-03
conk2 = 0.100000001
iurb1 = 10
iurb2 = 19

```

```

anemht = 10.0000000
isigmav = 1
imixctdm = 0
ilanduin = 20
z0in = 0.250000000
xlaiin = 3.00000000
elevin = 0.00000000E+00
xlatin = -999.000000
xlonin = -999.000000

```

```

mxmflen = 1.00000000
mxnew = 99
xsamlen = 1.00000000
mxsam = 99
ncount = 2
sl2pf = 10.0000000
wscalm = 0.499994993
cdiv = 0.00000000E+00 0.00000000E+00

```

```

wscat = 1.53999996 top for class 1
wscat = 3.08999991 top for class 2
wscat = 5.13999987 top for class 3
wscat = 8.22999954 top for class 4
wscat = 10.8000002 top for class 5

```

Over LAND

svmin = 0.500000000 for stability 1
svmin = 0.500000000 for stability 2
svmin = 0.500000000 for stability 3
svmin = 0.500000000 for stability 4
svmin = 0.500000000 for stability 5
svmin = 0.500000000 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

Over WATER

svmin = 0.370000005 for stability 1
svmin = 0.370000005 for stability 2
svmin = 0.370000005 for stability 3
svmin = 0.370000005 for stability 4
svmin = 0.370000005 for stability 5
svmin = 0.370000005 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

symin = 1.00000000
szmin = 1.00000000
szcap_m = 5000000.00
xminzi = 50.0000000
xmaxzi = 3000.00000

plx0 = 7.00000003E-02 for stability 1
plx0 = 7.00000003E-02 for stability 2
plx0 = 0.100000001 for stability 3
plx0 = 0.150000006 for stability 4
plx0 = 0.349999994 for stability 5
plx0 = 0.550000012 for stability 6

ptg0 = 1.99999996E-02 for stability 5
ptg0 = 3.50000001E-02 for stability 6

ppc = 0.500000000 for stability 1
ppc = 0.500000000 for stability 2
ppc = 0.500000000 for stability 3
ppc = 0.500000000 for stability 4
ppc = 0.349999994 for stability 5

```

ppc   = 0.349999994  for stability 6
tbd   = 0.500000000
tibldist = 1.00000000 10.0000000 9.00000000
nlutibl = 4
nsplit = 3
iresplit = 0 0 0 0
        = 0 0 0 0
        = 0 0 0 0
        = 0 0 0 0
        = 0 1 0 0
        = 0 0 0 0
zisplit = 100.000000
roldmax = 0.250000000
nsplith = 5
sysplith = 1.00000000
shsplith = 2.00000000
cnsplith = 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07
1.00000001E-07 1.00000001E-07 1.00000001E-07
epsslug = 9.99999975E-05
epsarea = 9.99999997E-07
dsrise  = 1.00000000
trajincl = 20.0000000
mdepbc  = 1
htminbc = 500.000000
rsampbc = 10.0000000

```

----- INPUT GROUP 13 -----

```

npt1   = 1
iptu   = 1 units = g/s
        converted to g/s, odour_units*m3/s, or Bq/s
        by factor: 1.00000000
nspt1  = 8
npt2   = 0

cnampt1 = EC2
xpt1grd = 19.3402100
ypt1grd = 19.6386719
htstak  = 15.0000000
elstak  = 68.0000000
diam    = 0.800000012
exitw   = 12.1000004
tstak   = 298.000000
idownw  = 1
syipt1  = 0.00000000E+00
szypt1  = 0.00000000E+00
fmfpt1  = 1.00000000
zplatpt1 = 0.00000000E+00

```

```

pt. source: EC2      number: 1
qstak  = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 5.49999997E-04
0.00000000E+00 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000
bht    = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996
emission factors for species: COBALTO
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: CU
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: EPICLORIDRIN
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: HCN
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: NI
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: PD
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150

```

emission factors for species: SN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: ZN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

----- INPUT GROUP 14 -----

nar1 = 0

iaru = 1 units = g/s/m^2

converted to g/s/m^2, odour_units*m/s,
or Bq/s/m^2 by factor: 1.00000000

nsar1 = 0

nar2 = 0

----- INPUT GROUP 15 -----

nln2 = 0

nlines = 0

ilnu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsln1 = 0

xl = 0.00000000E+00

hbl = 0.00000000E+00

wbl = 0.00000000E+00

wml = 0.00000000E+00

dxl = 0.00000000E+00

fprimel = 0.00000000E+00

mxnseg = 7

nlrise = 6

----- INPUT GROUP 16 -----

nv11 = 0

ivlu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsv11 = 0

nv12 = 0

----- INPUT GROUP 17 -----

```
nrec   = 9
nrgrp  = 0
xng    yng    zng    elevng    group
21.7401123 20.0488281 2.00000000 73.0000000 -----
20.7104492 20.0097656 2.00000000 71.0000000 -----
20.6402588 19.3310547 2.00000000 69.0000000 -----
20.6201172 18.5400391 2.00000000 66.0000000 -----
20.5102539 17.9394531 2.00000000 64.0000000 -----
19.5300293 18.1884766 2.00000000 66.0000000 -----
18.2000732 18.4179688 2.00000000 64.0000000 -----
19.3402100 20.9814453 2.00000000 69.0000000 -----
17.1704102 19.8974609 2.00000000 62.0000000 -----
```

--

INPUT FILES

Default Name Unit No. File Name and Path

```
-----
CALPUFF.INP    1    calpuff.inp
(CALMET Domain: 1 ) MASTER
CALMET.DAT    100    calmet.dat
```

--

OUTPUT FILES

Default Name Unit No. File Name and Path

```
-----
CALPUFF.LST    2    calpuff.lst
CONC.DAT       8    conc.dat
```

SETNEST: Setup results for nested CALMET grids

Properties of each CALMET domain grid

```
Domain    = 1
Origin(m) = 677699.000 4851603.00
nx,ny,cell(m) = 40 40 100.000000
Nest Factor = 1
Offset nx0,ny0= 0.00000000E+00 0.00000000E+00
```

Corner coordinates in outermost grid units:
LL Corner = 0.00000000E+00 0.00000000E+00
UR Corner = 40.00000000 40.00000000
Horizontal splitting parameters for domain:
SYSPLITH(m) = 100.000000
SHSPLITH(m/s) = 5.55555560E-02

REVISED CONTROL DATA
Running All Met Periods

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 2022
ibmo = 1
ibdy = 1
ibhr = 0
ibsec = 0
nsecdt = 3600
irlg = 8760
ibdathr = 202200100
iedathr = 202300100
iesec = 0

(End-times in other data files are NOT checked)

LAST PERIOD PROCESSED ENDS AT:

Year: 2023 Month: 1 Day: 1 Julian day: 1 Hour: 0 Second: 0

End of run -- Clock time: 10:50:28
Date: 03-14-2025

Elapsed Clock Time: 169.0 (seconds)

CPU Time: 37.6 (seconds)

Diffusione Nichel EC3

CALPUFF Version: 6.42 Level: 110325

Clock time: 16:38:35

Date: 03-14-2025

Internal Coordinate Transformations by --- COORDLIB Version: 1.99 Level: 070921

Control File Type: CALPUFF.INP 1.0

Run Title:

Diffusione Nichel EC3

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1972 2071

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO ! !END!
! CSPEC = CU ! !END!
! CSPEC = EPICLORIDRIN ! !END!
! CSPEC = HCN ! !END!
! CSPEC = NI ! !END!
! CSPEC = PD ! !END!
! CSPEC = SN ! !END!
! CSPEC = ZN ! !END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !
! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !

! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESH DN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !

! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !
! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !

! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 1 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

Subgroup 13b Point source constant data

! SRCNAM = EC3 !
! X = 679.635, 4853.565, 15, 68, 0.75, 13.7, 298, 1.0,
0, 0, 0, 0, 0.000555, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC3 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EC3 !
! IVARY = 1 !
! COBALTO = 0.15, 0.15, 0.15, 0.575, 1, 1,

1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! CU = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! EPICLORIDRINA = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! HCN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! NI = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! PD = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC3 !
! IVARY = 1 !
! SN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,

1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

!SRCNAM = EC3 !
!IVARY = 1 !
!ZN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
!NAR1 = 0 !
!IARU = 1 !
!NSAR1 = 0 !
!NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
!NLINES = 0 !
!ILNU = 1 !
!NSLN1 = 0 !
!NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
!NVL1 = 0 !
!IVLU = 1 !
!NSVL1 = 0 !
!NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

**** CONFIRMATION OF CONTROL DATA ****

----- INPUT GROUP 1 -----

metrun = 1

ibyr = 0

ibmo = 0

ibdy = 0

ibhr = 0

ibsec = 0

ibdathr = 0

ieyr = 0

iemo = 0

iedy = 0

iehr = 0

iesec = 0

iedathr = 0

nsecdt = 3600

irlg = 0

iavg = 1

xbtz = 0.00000000E+00

abtz = UTC+0000

nspec = 8

nse = 8

itest = 2

metfm = 1

mprffm = 1

mrestart= 0

nrespd = 0

avet = 60.0000000

pgtime = 60.0000000

ioutu = 1

iovers = 2

----- INPUT GROUP 2 -----

mgauss = 1
mctadj = 3
mctsg = 0
mslug = 0
mtrans = 1
mchem = 0
maqchem = 0
mlwc = 0
mwet = 0
mdry = 0
mtilt = 0
mdisp = 3
mdisp2 = 3
mturbvw = 3
mtauly = 0.00000000E+00
mtauadv = 0
mcturb = 1
mrrough = 0
mtip = 1
mbdw = 1
mshear = 0
mrise = 1
msplit = 0
mpartl = 1
mpartlba = 1
mtinv = 0
mpdf = 0
msgtibl = 0
mbcon = 0
msource = 0
mfog = 0
mreg = 0

----- INPUT GROUP 3 -----

SPECIES: COBALTO j: 1 isplst(-,j) = 1 1 0 GROUP: COBALTO
SPECIES: CU j: 2 isplst(-,j) = 1 1 0 GROUP: CU
SPECIES: EPICLORIDRIN j: 3 isplst(-,j) = 1 1 0 GROUP: EPICLORIDRIN
SPECIES: HCN j: 4 isplst(-,j) = 1 1 0 GROUP: HCN
SPECIES: NI j: 5 isplst(-,j) = 1 1 0 GROUP: NI
SPECIES: PD j: 6 isplst(-,j) = 1 1 0 GROUP: PD
SPECIES: SN j: 7 isplst(-,j) = 1 1 0 GROUP: SN
SPECIES: ZN j: 8 isplst(-,j) = 1 1 0 GROUP: ZN

----- INPUT GROUP 4 -----

pmap = UTM
datum = WGS-84
daten = 02-21-2003
utmhem = N
iutmzn = 32
nx = 40
ny = 40
nz = 8
zface = 0.00000000E+00 20.0000000 50.0000000 100.000000 200.000000 500.000000 1000.00000
2000.00000 4000.00000
dgridkm = 0.100000001
xorigkm = 677.698975
yorigkm = 4851.60303
iutmzn = 32
ibcomp = 10
jbcomp = 10
iecomp = 31
jcomp = 31
lsamp = T
ibsamp = 10
jbsamp = 10
iesamp = 31
jesamp = 31
meshdn = 1

----- INPUT GROUP 5 -----

icon = 1
idry = 0
iwet = 0
it2d = 0
irho = 0
ivis = 0
lcomprs = F
icprt = 0
idprt = 0
iwprt = 0
icfrq = 1
idfrq = 1
iwfrq = 1
(note: i_frq values converted to timesteps)
iprtu = 1
imesg = 2
imflx = 0
imbal = 0
inrise = 0
iqaplot = 0
ipftrak = 0

ldebug = F
ipfdeb = 1
npfdeb = 1
nn1 = 1
nn2 = 10

GROUP: COBALTO j: 1 ioutop(-,j) = 0 1 0 0 0 0
GROUP: CU j: 2 ioutop(-,j) = 0 1 0 0 0 0
GROUP: EPICLORIDRIN j: 3 ioutop(-,j) = 0 1 0 0 0 0
GROUP: HCN j: 4 ioutop(-,j) = 0 1 0 0 0 0
GROUP: NI j: 5 ioutop(-,j) = 0 1 0 0 0 0
GROUP: PD j: 6 ioutop(-,j) = 0 1 0 0 0 0
GROUP: SN j: 7 ioutop(-,j) = 0 1 0 0 0 0
GROUP: ZN j: 8 ioutop(-,j) = 0 1 0 0 0 0

----- INPUT GROUP 6 -----

----- Subgroup (6a) -----

nhill = 0
nctrec = 0
mhill = 1
xhill2m= 1.00000000
zhill2m= 1.00000000
xctdmkm= 0.00000000E+00
yctdmkm= 0.00000000E+00

----- Subgroup (6b) -----

CTDM-type terrain file read

----- Subgroup (6c) -----

CTDM-type receptor file read

----- INPUT GROUP 7 -----

SPECIES: COBALTO j: 1 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: CU j: 2 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: HCN j: 4 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: NI j: 5 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: PD j: 6 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: SN j: 7 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: ZN j: 8 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

----- INPUT GROUP 8 -----

SPECIES: COBALTO j: 1 dryp(-,j) = -999.00 -999.00

SPECIES: CU j: 2 dryp(-,j) = -999.00 -999.00
 SPECIES: EPICLORIDRIN j: 3 dryp(-,j) = -999.00 -999.00
 SPECIES: HCN j: 4 dryp(-,j) = -999.00 -999.00
 SPECIES: NI j: 5 dryp(-,j) = -999.00 -999.00
 SPECIES: PD j: 6 dryp(-,j) = -999.00 -999.00
 SPECIES: SN j: 7 dryp(-,j) = -999.00 -999.00
 SPECIES: ZN j: 8 dryp(-,j) = -999.00 -999.00

----- INPUT GROUP 9 -----

rcutr = 30.0000000
 rgr = 10.0000000
 reactr = 8.00000000
 pconst = 2.30000001E-08
 bmin = 1.00000001E-07
 bmax = 2.49999994E-06
 qswmax = 600.000000
 dconst1 = 2.00000000
 dconst2 = 0.666666687
 dconst3 = 4.79999988E-04
 dconst4 = 0.666666687
 nint = 9
 iveg = 1

----- INPUT GROUP 10 -----

SPECIES: COBALTO j: 1 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: CU j: 2 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: EPICLORIDRIN j: 3 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: HCN j: 4 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: NI j: 5 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: PD j: 6 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: SN j: 7 wa(-,j) = 0.000E+00 0.000E+00
 SPECIES: ZN j: 8 wa(-,j) = 0.000E+00 0.000E+00

----- INPUT GROUP 11 -----

moz = 0
 bcko3m = 80.0000000 80.0000000 80.0000000 80.0000000
 = 80.0000000 80.0000000 80.0000000 80.0000000
 = 80.0000000 80.0000000 80.0000000 80.0000000
 mnh3 = 0
 mavgnh3 = 1
 bcknh3m = 10.0000000 10.0000000 10.0000000 10.0000000
 = 10.0000000 10.0000000 10.0000000 10.0000000
 = 10.0000000 10.0000000 10.0000000 10.0000000
 rnite1 = 0.200000003
 rnite2 = 2.00000000
 rnite3 = 2.00000000

```

mh2o2 = 1
bckh2o2m = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
bckpmf = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
ofrac = 0.150000006 0.150000006 0.200000003 0.200000003
        = 0.200000003 0.200000003 0.200000003 0.200000003
        = 0.200000003 0.200000003 0.200000003 0.150000006
vcnx = 50.0000000 50.0000000 50.0000000 50.0000000
       = 50.0000000 50.0000000 50.0000000 50.0000000
       = 50.0000000 50.0000000 50.0000000 50.0000000

```

----- INPUT GROUP 12 -----

```

sytdp = 550.000000
mhftsz = 0
jsup = 5
conk1 = 9.99999978E-03
conk2 = 0.100000001
iurb1 = 10
iurb2 = 19

```

```

anemht = 10.0000000
isigmav = 1
imixctdm = 0
ilanduin = 20
z0in = 0.250000000
xlaiin = 3.00000000
elevin = 0.00000000E+00
xlatin = -999.000000
xlonin = -999.000000

```

```

mxmflen = 1.00000000
mxnew = 99
xsamlen = 1.00000000
mxsam = 99
ncount = 2
sl2pf = 10.0000000
wscalm = 0.499994993
cdiv = 0.00000000E+00 0.00000000E+00

```

```

wscat = 1.53999996 top for class 1
wscat = 3.08999991 top for class 2
wscat = 5.13999987 top for class 3
wscat = 8.22999954 top for class 4
wscat = 10.8000002 top for class 5

```

Over LAND

svmin = 0.500000000 for stability 1
svmin = 0.500000000 for stability 2
svmin = 0.500000000 for stability 3
svmin = 0.500000000 for stability 4
svmin = 0.500000000 for stability 5
svmin = 0.500000000 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

Over WATER

svmin = 0.370000005 for stability 1
svmin = 0.370000005 for stability 2
svmin = 0.370000005 for stability 3
svmin = 0.370000005 for stability 4
svmin = 0.370000005 for stability 5
svmin = 0.370000005 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

symin = 1.00000000
szmin = 1.00000000
szcap_m = 5000000.00
xminzi = 50.0000000
xmaxzi = 3000.00000

plx0 = 7.00000003E-02 for stability 1
plx0 = 7.00000003E-02 for stability 2
plx0 = 0.100000001 for stability 3
plx0 = 0.150000006 for stability 4
plx0 = 0.349999994 for stability 5
plx0 = 0.550000012 for stability 6

ptg0 = 1.99999996E-02 for stability 5
ptg0 = 3.50000001E-02 for stability 6

ppc = 0.500000000 for stability 1
ppc = 0.500000000 for stability 2
ppc = 0.500000000 for stability 3
ppc = 0.500000000 for stability 4
ppc = 0.349999994 for stability 5

```

ppc   = 0.349999994  for stability 6
tbd   = 0.500000000
tibldist = 1.00000000 10.0000000 9.00000000
nlutibl = 4
nsplit = 3
iresplit = 0 0 0 0
        = 0 0 0 0
        = 0 0 0 0
        = 0 0 0 0
        = 0 1 0 0
        = 0 0 0 0
zisplit = 100.000000
roldmax = 0.250000000
nsplith = 5
sysplith = 1.00000000
shsplith = 2.00000000
cnsplith = 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07
1.00000001E-07 1.00000001E-07 1.00000001E-07
epsslug = 9.99999975E-05
epsarea = 9.99999997E-07
dsrise  = 1.00000000
trajincl = 20.0000000
mdepbc  = 1
htminbc = 500.000000
rsampbc = 10.0000000

```

----- INPUT GROUP 13 -----

```

npt1   = 1
iptu   = 1 units = g/s
        converted to g/s, odour_units*m3/s, or Bq/s
        by factor: 1.00000000
nspt1  = 8
npt2   = 0

cnampt1 = EC3
xpt1grd = 19.3603516
ypt1grd = 19.6191406
htstak  = 15.0000000
elstak  = 68.0000000
diam    = 0.750000000
exitw   = 13.69999998
tstak   = 298.000000
idownw  = 1
syipt1  = 0.00000000E+00
szypt1  = 0.00000000E+00
fmfpt1  = 1.00000000
zplatpt1 = 0.00000000E+00

```



```

pt. source: EC3      number: 1
qstak  = 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00 5.54999977E-04
0.00000000E+00 0.00000000E+00 0.00000000E+00
bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000
bht    = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996
emission factors for species: COBALTO
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: CU
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: EPICLORIDRIN
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: HCN
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: NI
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150
emission factors for species: PD
IVARY = 1
0.150 0.150 0.150 0.575 1.000 1.000
1.000 1.000 1.000 1.000 1.000 1.000
1.000 1.000 1.000 1.000 1.000 0.150
0.150 0.150 0.150 0.150 0.150 0.150

```

emission factors for species: SN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: ZN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

----- INPUT GROUP 14 -----

nar1 = 0

iaru = 1 units = g/s/m^2

converted to g/s/m^2, odour_units*m/s,
or Bq/s/m^2 by factor: 1.00000000

nsar1 = 0

nar2 = 0

----- INPUT GROUP 15 -----

nln2 = 0

nlines = 0

ilnu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsln1 = 0

xl = 0.00000000E+00

hbl = 0.00000000E+00

wbl = 0.00000000E+00

wml = 0.00000000E+00

dxl = 0.00000000E+00

fprimel = 0.00000000E+00

mxnseg = 7

nlrise = 6

----- INPUT GROUP 16 -----

nv11 = 0

ivlu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsvl1 = 0

nv12 = 0

----- INPUT GROUP 17 -----

```
nrec   = 9
nrgrp  = 0
xng    yng    zng    elevng    group
21.7401123 20.0488281 2.00000000 73.0000000 -----
20.7104492 20.0097656 2.00000000 71.0000000 -----
20.6402588 19.3310547 2.00000000 69.0000000 -----
20.6201172 18.5400391 2.00000000 66.0000000 -----
20.5102539 17.9394531 2.00000000 64.0000000 -----
19.5300293 18.1884766 2.00000000 66.0000000 -----
18.2000732 18.4179688 2.00000000 64.0000000 -----
19.3402100 20.9814453 2.00000000 69.0000000 -----
17.1704102 19.8974609 2.00000000 62.0000000 -----
```

--

INPUT FILES

Default Name Unit No. File Name and Path

```
-----
CALPUFF.INP    1    calpuff.inp
(CALMET Domain: 1 ) MASTER
CALMET.DAT    100    calmet.dat
```

--

OUTPUT FILES

Default Name Unit No. File Name and Path

```
-----
CALPUFF.LST    2    calpuff.lst
CONC.DAT       8    conc.dat
```

SETNEST: Setup results for nested CALMET grids

Properties of each CALMET domain grid

```
Domain    = 1
Origin(m) = 677699.000 4851603.00
nx,ny,cell(m) = 40 40 100.000000
Nest Factor = 1
Offset nx0,ny0= 0.00000000E+00 0.00000000E+00
```

Corner coordinates in outermost grid units:
LL Corner = 0.00000000E+00 0.00000000E+00
UR Corner = 40.00000000 40.00000000
Horizontal splitting parameters for domain:
SYSPLITH(m) = 100.000000
SHSPLITH(m/s) = 5.55555560E-02

REVISED CONTROL DATA
Running All Met Periods

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 2022
ibmo = 1
ibdy = 1
ibhr = 0
ibsec = 0
nsecdt = 3600
irlg = 8760
ibdathr = 202200100
iedathr = 202300100
iesec = 0

(End-times in other data files are NOT checked)

LAST PERIOD PROCESSED ENDS AT:

Year: 2023 Month: 1 Day: 1 Julian day: 1 Hour: 0 Second: 0

End of run -- Clock time: 16:41:23
Date: 03-14-2025

Elapsed Clock Time: 168.0 (seconds)

CPU Time: 25.8 (seconds)

Diffusione Cobalto EC2

CALPUFF Version: 6.42 Level: 110325

Clock time: 15:26:56

Date: 03-14-2025

Internal Coordinate Transformations by --- COORDLIB Version: 1.99 Level: 070921

Control File Type: CALPUFF.INP 1.0

Run Title:

Diffusione Cobalto EC2 - 1.5g/h

INPUT GROUP: 1: General run control parameters

! METRUN = 1 !
! IBYR = 2022 !
! IBMO = 1 !
! IBDY = 1 !
! IBHR = 1 !
! IBMIN = 0 !
! IBSEC = 0 !
! IRLG = 8760 !
! ABTZ = UTC+0000 !
! NSPEC = 8 !
! NSE = 8 !
! ITEST = 2 !
! MRESTART = 0 !
! NRESPD = 0 !
! AVET = 60 !
! PGTIME = 60 !
! METFM = 1 !
! MPRFFM = 1 !
! IOUTU = 1 !
! IOVERS = 2 !
!END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1972 2071

INPUT GROUP: 2: Technical options

! MGAUSS = 1 !
! MCTADJ = 3 !
! MCTSG = 0 !
! MSLUG = 0 !
! MTRANS = 1 !
! MTIP = 1 !
! MBDW = 1 !
! MSHEAR = 0 !
! MSPLIT = 0 !
! MCHEM = 0 !
! MWET = 0 !
! MDRY = 0 !
! MDISP = 3 !
! MROUGH = 0 !
! MPARTL = 1 !
! MTINV = 0 !
! MPDF = 0 !
! MSGTIBL = 0 !
! MBCON = 0 !
! MSOURCE = 0 !
! MFOG = 0 !
! MREG = 0 !
!END!

INPUT GROUP: 3a, 3b: Species list

! CSPEC = COBALTO ! !END!
! CSPEC = CU ! !END!
! CSPEC = EPICLORIDRIN ! !END!
! CSPEC = HCN ! !END!
! CSPEC = NI ! !END!
! CSPEC = PD ! !END!
! CSPEC = SN ! !END!
! CSPEC = ZN ! !END!

! COBALTO = 1, 1, 0, 0 !
! CU = 1, 1, 0, 0 !
! EPICLORIDRIN = 1, 1, 0, 0 !
! HCN = 1, 1, 0, 0 !
! NI = 1, 1, 0, 0 !

! PD = 1, 1, 0, 0 !
! SN = 1, 1, 0, 0 !
! ZN = 1, 1, 0, 0 !
!END!

INPUT GROUP: 4: Map Projection and Grid control parameters

! PMAP = UTM !
! IUTMZN = 32 !
! UTMHEM = N !
! DATUM = WGS-84 !
Meteorological grid
! NX = 40 !
! NY = 40 !
! NZ = 8 !
! DGRIDKM = 0.1 !
! ZFACE = 0,20,50,100,200,500,1000,2000,4000!
! XORIGKM = 677.699 !
! YORIGKM = 4851.603 !
Computational grid
! IBCOMP = 10 !
! JBCOMP = 10 !
! IECOMP = 31 !
! JECOMP = 31 !
Sampling grid
! LSAMP = T !
! IBSAMP = 10 !
! JBSAMP = 10 !
! IESAMP = 31 !
! JESAMP = 31 !
! MESH DN = 1 !
!END!

INPUT GROUP: 5: Output Options

! ICON = 1 !
! IDRY = 0 !
! IWET = 0 !
! IT2D = 0 !
! IRHO = 0 !
! IVIS = 0 !
! LCOMPRS = F !
! IQAPLOT = 0 !
! IMFLX = 0 !
! IMBAL = 0 !
! ICPRT = 0 !
! IDPRT = 0 !
! IWPRT = 0 !
! ICFRQ = 1 !

! IDFRQ = 1 !
! IWFRQ = 1 !
! IPRTU = 1 !
! IMESG = 2 !
! COBALTO = 0, 1, 0, 0, 0, 0, 0 !
! CU = 0, 1, 0, 0, 0, 0, 0 !
! EPICLORIDRIN = 0, 1, 0, 0, 0, 0, 0 !
! HCN = 0, 1, 0, 0, 0, 0, 0 !
! NI = 0, 1, 0, 0, 0, 0, 0 !
! PD = 0, 1, 0, 0, 0, 0, 0 !
! SN = 0, 1, 0, 0, 0, 0, 0 !
! ZN = 0, 1, 0, 0, 0, 0, 0 !
! LDEBUG = F !
! IPFDEB = 1 !
! NPFDEB = 1 !
! NN1 = 1 !
! NN2 = 10 !
!END!

INPUT GROUP: 6a,6b,6c: Subgrid scale complex terrain inputs

! NHILL = 0 !
! NCTREC = 0 !
! MHILL = 1 !
! XHILL2M = 1 !
! ZHILL2M = 1 !
! XCTDMKM = 0 !
! YCTDMKM = 0 !
!END!

INPUT GROUP: 7: Chemical parameters for dry deposition of gases

!END!

INPUT GROUP: 8: Size parameters for dry deposition of particles

!END!

INPUT GROUP: 9: Miscellaneous dry deposition parameters

! RCUTR = 30 !
! RGR = 10 !
! REACTR = 8 !
! NINT = 9 !
! IVEG = 1 !
!END!

INPUT GROUP: 10: Wet Deposition Parameters

!END!

INPUT GROUP: 11: Chemistry Parameters

! MOZ = 0 !
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !
! BCKNH3 = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 !
! RNITE1 = 0.2 !
! RNITE2 = 2 !
! RNITE3 = 2 !
! MH2O2 = 1 !
! BCKH2O2 = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! BCKPMF = 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 !
! OFRAC = 0.15, 0.15, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.2, 0.15 !
! VCNX = 50, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50 !
!END!

INPUT GROUP: 12: Misc. Dispersion and Computational Parameters

! SYTDEP = 550 !
! MHFTSZ = 0 !
! JSUP = 5 !
! CONK1 = 0.01 !
! CONK2 = 0.1 !
! TBD = 0.5 !
! IURB1 = 10 !
! IURB2 = 19 !
! XMXLEN = 1 !
! XSAMLEN = 1 !
! MXNEW = 99 !
! MXSAM = 99 !
! NCOUNT = 2 !
! SYMIN = 1 !
! SZMIN = 1 !
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37, 0.37 !
! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !
! CDIV = 0, 0 !
! WSCALM = 0.5 !
! XMAXZI = 3000 !
! XMINZI = 50 !
! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !
! PLX0 = 0.07, 0.07, 0.1, 0.15, 0.35, 0.55 !
! PTG0 = 0.02, 0.035 !
! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35 !
! SL2PF = 10 !
! NSPLIT = 3 !
! IRESPLIT = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0 !
! ZISPLIT = 100 !
! ROLDMAX = 0.25 !

! NSPLITH = 5 !
! SYSPLITH = 1 !
! SHSPLITH = 2 !
! CNSPLITH = 1E-07 !
! EPSSLUG = 0.0001 !
! EPSAREA = 1E-06 !
! DSRISE = 1 !
! HTMINBC = 500 !
! RSAMPBC = 10 !
! MDEPBC = 1 !
!END!

INPUT GROUP: 13a, 13b, 13c, 13d: Point source parameters

Subgroup 13a

! NPT1 = 1 !
! IPTU = 1 !
! NSPT1 = 8 !
! NPT2 = 0 !
!END!

Subgroup 13b Point source constant data

! SRCNAM = EC2 !
! X = 679.633, 4853.567, 15, 68, 0.8, 12.1, 298, 1.0,
0.000416, 0, 0, 0, 0, 0, 0, 0 ! Source Constant data
! SIGYZI = 0, 0 !
! FMFAC = 1 !
! ZPLTFM = 0 !
!END!

Subgroup 13c Building dimension data for sources subject to downwash

! SRCNAM = EC2 !
! HEIGHT = 16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9,
16.9, 15, 16.9, 16.9, 16.9, 16.9,
16.9, 16.9, 16.9, 16.9, 16.9, 16.9, 15, 16.9, 16.9, 16.9, 16.9 !
! WIDTH = 86.83, 95.02, 100.32, 102.57, 102.18, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94,
31.66, 26.27, 32.42, 49.61, 65.3, 76,
86.83, 95.02, 100.32, 102.57, 106.4, 102.84,
100.56, 95.23, 87, 76.13, 64.74, 48.94, 31.66, 26.27, 32.42, 49.61, 65.3, 76 !
!END!

Subgroup 13d Point sources variable emissions data

! SRCNAM = EC2 !
! IVARY = 1 !
! COBALTO = 0.15, 0.15, 0.15, 0.575, 1, 1,

1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! CU = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! EPICLORIDRINA = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! HCN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! NI = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! PD = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

! SRCNAM = EC2 !
! IVARY = 1 !
! SN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,

1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

!SRCNAM = EC2 !
!IVARY = 1 !
!ZN = 0.15, 0.15, 0.15, 0.575, 1, 1,
1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.15,
0.15, 0.15, 0.15, 0.15, 0.15, 0.15 !
!END!

INPUT GROUP: 14a, 14b, 14c, 14d: Area source parameters

Subgroup 14a
!NAR1 = 0 !
!IARU = 1 !
!NSAR1 = 0 !
!NAR2 = 0 !
!END!

Subgroup 14b Area source constant data

Subgroup 14c Area source coordinates

Subgroup 14d Area sources variable emissions data

INPUT GROUP: 15a, 15b, 15c: Line source parameters

Subgroup 15a
!NLINES = 0 !
!ILNU = 1 !
!NSLN1 = 0 !
!NLN2 = 0 !
!END!

INPUT GROUP: 16a, 16b, 16c: Volume source parameters

Subgroup 16a
!NVL1 = 0 !
!IVLU = 1 !
!NSVL1 = 0 !
!NVL2 = 0 !
!END!

Subgroup 16b Volume source constant data

Subgroup 16c Volume sources variable emissions data

INPUT GROUP: 17a, 17b: Non-gridded (discrete) receptor information

! NREC = 9 ! Number of non-gridded receptors

!END!

! X = 679.873, 4853.608, 73, 2 ! !END!

! X = 679.77, 4853.604, 71, 2 ! !END!

! X = 679.763, 4853.536, 69, 2 ! !END!

! X = 679.761, 4853.457, 66, 2 ! !END!

! X = 679.75, 4853.397, 64, 2 ! !END!

! X = 679.652, 4853.422, 66, 2 ! !END!

! X = 679.519, 4853.445, 64, 2 ! !END!

! X = 679.633, 4853.701, 69, 2 ! !END!

! X = 679.416, 4853.593, 62, 2 ! !END!

**** CONFIRMATION OF CONTROL DATA ****

----- INPUT GROUP 1 -----

metrun = 1

ibyr = 0

ibmo = 0

ibdy = 0

ibhr = 0

ibsec = 0

ibdathr = 0

ieyr = 0

iemo = 0

iedy = 0

iehr = 0

iesec = 0

iedathr = 0

nsecdt = 3600

irlg = 0

iavg = 1

xbtz = 0.00000000E+00

abtz = UTC+0000

nspec = 8

nse = 8

itest = 2

metfm = 1

mprffm = 1

mrestart= 0

nrespd = 0

avet = 60.0000000

pgtime = 60.0000000

ioutu = 1

iovers = 2

----- INPUT GROUP 2 -----

mgauss = 1
mctadj = 3
mctsg = 0
mslug = 0
mtrans = 1
mchem = 0
maqchem = 0
mlwc = 0
mwet = 0
mdry = 0
mtilt = 0
mdisp = 3
mdisp2 = 3
mturbvw = 3
mtauly = 0.00000000E+00
mtauadv = 0
mcturb = 1
mrrough = 0
mtip = 1
mbdw = 1
mshear = 0
mrise = 1
msplit = 0
mpartl = 1
mpartlba = 1
mtinv = 0
mpdf = 0
msgtibl = 0
mbcon = 0
msource = 0
mfog = 0
mreg = 0

----- INPUT GROUP 3 -----

SPECIES: COBALTO j: 1 isplst(-,j) = 1 1 0 GROUP: COBALTO
SPECIES: CU j: 2 isplst(-,j) = 1 1 0 GROUP: CU
SPECIES: EPICLORIDRIN j: 3 isplst(-,j) = 1 1 0 GROUP: EPICLORIDRIN
SPECIES: HCN j: 4 isplst(-,j) = 1 1 0 GROUP: HCN
SPECIES: NI j: 5 isplst(-,j) = 1 1 0 GROUP: NI
SPECIES: PD j: 6 isplst(-,j) = 1 1 0 GROUP: PD
SPECIES: SN j: 7 isplst(-,j) = 1 1 0 GROUP: SN
SPECIES: ZN j: 8 isplst(-,j) = 1 1 0 GROUP: ZN

----- INPUT GROUP 4 -----

pmap = UTM
datum = WGS-84
daten = 02-21-2003
utmhem = N
iutmzn = 32
nx = 40
ny = 40
nz = 8
zface = 0.00000000E+00 20.0000000 50.0000000 100.000000 200.000000 500.000000 1000.00000
2000.00000 4000.00000
dgridkm = 0.100000001
xorigkm = 677.698975
yorigkm = 4851.60303
iutmzn = 32
ibcomp = 10
jbcomp = 10
iecomp = 31
jecom = 31
lsamp = T
ibsamp = 10
jbsamp = 10
iesamp = 31
jesamp = 31
meshdn = 1

----- INPUT GROUP 5 -----

icon = 1
idry = 0
iwet = 0
it2d = 0
irho = 0
ivis = 0
lcomprs = F
icprt = 0
idprt = 0
iwprt = 0
icfrq = 1
idfrq = 1
iwfrq = 1
(note: i_frq values converted to timesteps)
iprtu = 1
imesg = 2
imflx = 0
imbal = 0
inrise = 0
iqaplot = 0
ipftrak = 0

ldebug = F
ipfdeb = 1
npfdeb = 1
nn1 = 1
nn2 = 10

GROUP: COBALTO j: 1 ioutop(-,j) = 0 1 0 0 0 0
GROUP: CU j: 2 ioutop(-,j) = 0 1 0 0 0 0
GROUP: EPICLORIDRIN j: 3 ioutop(-,j) = 0 1 0 0 0 0
GROUP: HCN j: 4 ioutop(-,j) = 0 1 0 0 0 0
GROUP: NI j: 5 ioutop(-,j) = 0 1 0 0 0 0
GROUP: PD j: 6 ioutop(-,j) = 0 1 0 0 0 0
GROUP: SN j: 7 ioutop(-,j) = 0 1 0 0 0 0
GROUP: ZN j: 8 ioutop(-,j) = 0 1 0 0 0 0

----- INPUT GROUP 6 -----

----- Subgroup (6a) -----

nhill = 0
nctrec = 0
mhill = 1
xhill2m= 1.00000000
zhill2m= 1.00000000
xctdmkm= 0.00000000E+00
yctdmkm= 0.00000000E+00

----- Subgroup (6b) -----

CTDM-type terrain file read

----- Subgroup (6c) -----

CTDM-type receptor file read

----- INPUT GROUP 7 -----

SPECIES: COBALTO j: 1 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: CU j: 2 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: HCN j: 4 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: NI j: 5 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: PD j: 6 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: SN j: 7 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00
SPECIES: ZN j: 8 dryg(-,j) = -999.00 -999.00 -999.00 -999.00 -999.00

----- INPUT GROUP 8 -----

SPECIES: COBALTO j: 1 dryp(-,j) = -999.00 -999.00

SPECIES: CU j: 2 dryp(-,j) = -999.00 -999.00
SPECIES: EPICLORIDRIN j: 3 dryp(-,j) = -999.00 -999.00
SPECIES: HCN j: 4 dryp(-,j) = -999.00 -999.00
SPECIES: NI j: 5 dryp(-,j) = -999.00 -999.00
SPECIES: PD j: 6 dryp(-,j) = -999.00 -999.00
SPECIES: SN j: 7 dryp(-,j) = -999.00 -999.00
SPECIES: ZN j: 8 dryp(-,j) = -999.00 -999.00

----- INPUT GROUP 9 -----

rcutr = 30.0000000
rgr = 10.0000000
reactr = 8.00000000
pconst = 2.30000001E-08
bmin = 1.00000001E-07
bmax = 2.49999994E-06
qswmax = 600.000000
dconst1 = 2.00000000
dconst2 = 0.666666687
dconst3 = 4.79999988E-04
dconst4 = 0.666666687
nint = 9
iveg = 1

----- INPUT GROUP 10 -----

SPECIES: COBALTO j: 1 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: CU j: 2 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: EPICLORIDRIN j: 3 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: HCN j: 4 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: NI j: 5 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: PD j: 6 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: SN j: 7 wa(-,j) = 0.000E+00 0.000E+00
SPECIES: ZN j: 8 wa(-,j) = 0.000E+00 0.000E+00

----- INPUT GROUP 11 -----

moz = 0
bcko3m = 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
= 80.0000000 80.0000000 80.0000000 80.0000000
mnh3 = 0
mavgnh3 = 1
bcknh3m = 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
= 10.0000000 10.0000000 10.0000000 10.0000000
rnite1 = 0.200000003
rnite2 = 2.00000000
rnite3 = 2.00000000

```

mh2o2 = 1
bckh2o2m = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
bckpmf = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
          = 1.00000000 1.00000000 1.00000000 1.00000000
ofrac = 0.150000006 0.150000006 0.200000003 0.200000003
        = 0.200000003 0.200000003 0.200000003 0.200000003
        = 0.200000003 0.200000003 0.200000003 0.150000006
vcnx = 50.0000000 50.0000000 50.0000000 50.0000000
       = 50.0000000 50.0000000 50.0000000 50.0000000
       = 50.0000000 50.0000000 50.0000000 50.0000000

```

----- INPUT GROUP 12 -----

```

sytdp = 550.000000
mhftsz = 0
jsup = 5
conk1 = 9.99999978E-03
conk2 = 0.100000001
iurb1 = 10
iurb2 = 19

```

```

anemht = 10.0000000
isigmav = 1
imixctdm = 0
ilanduin = 20
z0in = 0.250000000
xlaiin = 3.00000000
elevin = 0.00000000E+00
xlatin = -999.000000
xlonin = -999.000000

```

```

mxmflen = 1.00000000
mxnew = 99
xsamlen = 1.00000000
mxsam = 99
ncount = 2
sl2pf = 10.0000000
wscalm = 0.499994993
cdiv = 0.00000000E+00 0.00000000E+00

```

```

wscat = 1.53999996 top for class 1
wscat = 3.08999991 top for class 2
wscat = 5.13999987 top for class 3
wscat = 8.22999954 top for class 4
wscat = 10.8000002 top for class 5

```

Over LAND

svmin = 0.500000000 for stability 1
svmin = 0.500000000 for stability 2
svmin = 0.500000000 for stability 3
svmin = 0.500000000 for stability 4
svmin = 0.500000000 for stability 5
svmin = 0.500000000 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

Over WATER

svmin = 0.370000005 for stability 1
svmin = 0.370000005 for stability 2
svmin = 0.370000005 for stability 3
svmin = 0.370000005 for stability 4
svmin = 0.370000005 for stability 5
svmin = 0.370000005 for stability 6
swmin = 0.200000003 for stability 1
swmin = 0.119999997 for stability 2
swmin = 7.99999982E-02 for stability 3
swmin = 5.99999987E-02 for stability 4
swmin = 2.99999993E-02 for stability 5
swmin = 1.60000008E-02 for stability 6

symin = 1.00000000
szmin = 1.00000000
szcap_m = 5000000.00
xminzi = 50.0000000
xmaxzi = 3000.00000

plx0 = 7.00000003E-02 for stability 1
plx0 = 7.00000003E-02 for stability 2
plx0 = 0.100000001 for stability 3
plx0 = 0.150000006 for stability 4
plx0 = 0.349999994 for stability 5
plx0 = 0.550000012 for stability 6

ptg0 = 1.99999996E-02 for stability 5
ptg0 = 3.50000001E-02 for stability 6

ppc = 0.500000000 for stability 1
ppc = 0.500000000 for stability 2
ppc = 0.500000000 for stability 3
ppc = 0.500000000 for stability 4
ppc = 0.349999994 for stability 5

```

ppc   = 0.349999994  for stability 6
tbd   = 0.500000000
tibldist = 1.00000000 10.0000000 9.00000000
nlutibl = 4
nsplit = 3
iresplit = 0 0 0 0
        = 0 0 0 0
        = 0 0 0 0
        = 0 0 0 0
        = 0 1 0 0
        = 0 0 0 0
zisplit = 100.000000
roldmax = 0.250000000
nsplith = 5
sysplith = 1.00000000
shsplith = 2.00000000
cnsplith = 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07 1.00000001E-07
1.00000001E-07 1.00000001E-07 1.00000001E-07
epsslug = 9.99999975E-05
epsarea = 9.99999997E-07
dsrise  = 1.00000000
trajincl = 20.0000000
mdepbc  = 1
htminbc = 500.000000
rsampbc = 10.0000000

```

----- INPUT GROUP 13 -----

```

npt1   = 1
iptu   = 1 units = g/s
        converted to g/s, odour_units*m3/s, or Bq/s
        by factor: 1.00000000
nspt1  = 8
npt2   = 0

cnampt1 = EC2
xpt1grd = 19.3402100
ypt1grd = 19.6386719
htstak  = 15.0000000
elstak  = 68.0000000
diam    = 0.800000012
exitw   = 12.1000004
tstak   = 298.000000
idownw  = 1
syipt1  = 0.00000000E+00
szypt1  = 0.00000000E+00
fmfpt1  = 1.00000000
zplatpt1 = 0.00000000E+00

```

pt. source: EC2 number: 1

qstak = 4.15999995E-04 0.00000000E+00 0.00000000E+00 0.00000000E+00 0.00000000E+00
0.00000000E+00 0.00000000E+00 0.00000000E+00

bwidth = 86.8300018 95.0199966 100.320000 102.570000 102.180000 102.839996 100.559998
95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998 26.2700005 32.4199982
49.6100006 65.3000031 76.0000000 86.8300018 95.0199966 100.320000 102.570000 106.400002
102.839996 100.559998 95.2300034 87.0000000 76.1299973 64.7399979 48.9399986 31.6599998
26.2700005 32.4199982 49.6100006 65.3000031 76.0000000

bht = 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 15.0000000 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996 16.8999996
15.0000000 16.8999996 16.8999996 16.8999996 16.8999996

emission factors for species: COBALTO

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: CU

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: EPICLORIDRIN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: HCN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: NI

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: PD

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: SN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

emission factors for species: ZN

IVARY = 1

0.150	0.150	0.150	0.575	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	0.150
0.150	0.150	0.150	0.150	0.150	0.150

----- INPUT GROUP 14 -----

nar1 = 0

iaru = 1 units = g/s/m^2

converted to g/s/m^2, odour_units*m/s,
or Bq/s/m^2 by factor: 1.00000000

nsar1 = 0

nar2 = 0

----- INPUT GROUP 15 -----

nln2 = 0

nlines = 0

ilnu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsln1 = 0

xl = 0.00000000E+00

hbl = 0.00000000E+00

wbl = 0.00000000E+00

wml = 0.00000000E+00

dxl = 0.00000000E+00

fprimel = 0.00000000E+00

mxnseg = 7

nlrise = 6

----- INPUT GROUP 16 -----

nv11 = 0

ivlu = 1 units = g/s

converted to g/s, odour_units*m3/s, or Bq/s
by factor: 1.00000000

nsvl1 = 0

nv12 = 0

----- INPUT GROUP 17 -----

```
nrec   = 9
nrgrp  = 0
xng    yng    zng    elevng    group
21.7401123 20.0488281 2.00000000 73.0000000 -----
20.7104492 20.0097656 2.00000000 71.0000000 -----
20.6402588 19.3310547 2.00000000 69.0000000 -----
20.6201172 18.5400391 2.00000000 66.0000000 -----
20.5102539 17.9394531 2.00000000 64.0000000 -----
19.5300293 18.1884766 2.00000000 66.0000000 -----
18.2000732 18.4179688 2.00000000 64.0000000 -----
19.3402100 20.9814453 2.00000000 69.0000000 -----
17.1704102 19.8974609 2.00000000 62.0000000 -----
```

--

INPUT FILES

Default Name Unit No. File Name and Path

```
-----
CALPUFF.INP    1    calpuff.inp
(CALMET Domain: 1 ) MASTER
CALMET.DAT    100    calmet.dat
```

--

OUTPUT FILES

Default Name Unit No. File Name and Path

```
-----
CALPUFF.LST    2    calpuff.lst
CONC.DAT       8    conc.dat
```

SETNEST: Setup results for nested CALMET grids

Properties of each CALMET domain grid

```
Domain    = 1
Origin(m) = 677699.000 4851603.00
nx,ny,cell(m) = 40 40 100.000000
Nest Factor = 1
Offset nx0,ny0= 0.00000000E+00 0.00000000E+00
```

Corner coordinates in outermost grid units:
LL Corner = 0.00000000E+00 0.00000000E+00
UR Corner = 40.00000000 40.00000000
Horizontal splitting parameters for domain:
SYSPLITH(m) = 100.000000
SHSPLITH(m/s) = 5.55555560E-02

REVISED CONTROL DATA
Running All Met Periods

----- INPUT GROUP 1 -----

metrun = 1
ibyr = 2022
ibmo = 1
ibdy = 1
ibhr = 0
ibsec = 0
nsecdt = 3600
irlg = 8760
ibdathr = 202200100
iedathr = 202300100
iesec = 0

(End-times in other data files are NOT checked)

LAST PERIOD PROCESSED ENDS AT:

Year: 2023 Month: 1 Day: 1 Julian day: 1 Hour: 0 Second: 0

End of run -- Clock time: 15:29:46
Date: 03-14-2025

Elapsed Clock Time: 170.0 (seconds)

CPU Time: 28.5 (seconds)