```
*****************************************************************************************************************
**********
                                    CALPOST  Version 6.221        Level 080724
*****************************************************************************************************************
**********



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



  Run Title:
    Cleco, Brame Energy Center - Rodemacher II Refined Baseline
    CANEY CREEK WILDERNESS AREA CALPOST 2002
    VISIBILITY METHOD 8

 ------------------------------------------------------------------------------

 INPUT GROUP: 1 -- General run control parameters
 --------------

     Option to run all periods found
     in the met. file(s)  (METRUN)       Default: 0   ! METRUN =   1  !

        METRUN = 0 - Run period explicitly defined below
        METRUN = 1 - Run all periods in CALPUFF data file(s)

     Starting date:    Year   (ISYR)  --    No default   ! ISYR  =  2002  !
                    Month  (ISMO)  --    No default   ! ISMO  =  1  !
                    Day    (ISDY)  --    No default   ! ISDY  =  1  !
     Starting time:    Hour   (ISHR)  --    No default   ! ISHR  =  0  !
                    Minute (ISMIN) --    No default   ! ISMIN =  0  !
                    Second (ISSEC) --    No default   ! ISSEC =  0  !

     Ending date:      Year   (IEYR)  --    No default   ! IEYR  =  2002  !
                    Month  (IEMO)  --    No default   ! IEMO  =  12  !
                    Day    (IEDY)  --    No default   ! IEDY  =  31  !
     Ending time:      Hour   (IEHR)  --    No default   ! IEHR  =  0  !
                    Minute (IEMIN) --    No default   ! IEMIN =  0  !
                    Second (IESEC) --    No default   ! IESEC =  0  !

     (These are only used if METRUN = 0)

     All times are in the base time zone of the CALPUFF simulation.
     CALPUFF Dataset Version 2.1 contains the zone, but earlier versions
     do not, and the zone must be specified here.  The zone is the
     number of hours that must be ADDED to the time to obtain UTC (or GMT).
     Identify the Base Time Zone for the CALPUFF simulation
                        (BTZONE) -- No default   ! BTZONE = 6.0 !

     Process every period of data?
                         (NREP) -- Default: 1   ! NREP  =  1  !
      (1 = every period processed,
       2 = every 2nd period processed,
```

5 = every 5th period processed, etc.)

Species & Concentration/Deposition Information

Species to process (ASPEC) -- No default ! ASPEC = VISIB !
(ASPEC = VISIB for visibility processing)

Layer/deposition code (ILAYER) -- Default: 1 ! ILAYER = 1 !
'1' for CALPUFF concentrations,
'-1' for dry deposition fluxes,
'-2' for wet deposition fluxes,
'-3' for wet+dry deposition fluxes.

Scaling factors of the form: -- Defaults: ! A = 0.0 !
X(new) = X(old) * A + B A = 0.0 ! B = 0.0 !
(NOT applied if A = B = 0.0) B = 0.0

Add Hourly Background Concentrations/Fluxes?
(LBACK) -- Default: F ! LBACK = F !

Source of NO2 when ASPEC=NO2 (above) or LVNO2=T (Group 2) may be
from CALPUFF NO2 concentrations OR from a fraction of CALPUFF NOx
concentrations. Specify the fraction of NOx that is treated as NO2
either as a constant or as a table of fractions that depend on the
magnitude of the NOx concentration:
(NO2CALC) -- Default: 1 ! NO2CALC = 1 !
0 = Use NO2 directly (NO2 must be in file)
1 = Specify a single NO2/NOx ratio (RNO2NOX)
2 = Specify a table NO2/NOx ratios (TNO2NOX)
(NOTE: Scaling Factors must NOT be used with NO2CALC=2)

Single NO2/NOx ratio (0.0 to 1.0) for treating some
or all NOx as NO2, where [NO2] = [NOX] * RNO2NOX
(used only if NO2CALC = 1)
(RNO2NOX) -- Default: 1.0 ! RNO2NOX = 1.0 !

Table of NO2/NOx ratios that vary with NOx concentration.
Provide 14 NOx concentrations (ug/m**3) and the corresponding
NO2/NOx ratio, with NOx increasing in magnitude. The ratio used
for a particular NOx concentration is interpolated from the values
provided in the table. The ratio for the smallest tabulated NOx
concentration (the first) is used for all NOx concentrations less
than the smallest tabulated value, and the ratio for the largest
tabulated NOx concentration (the last) is used for all NOx
concentrations greater than the largest tabulated value.
(used only if NO2CALC = 2)

NOx concentration(ug / m3)
(CNOX) -- No default
! CNOX = 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0,
8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0 !

NO2/NOx ratio for each NOx concentration:
(TNO2NOX) -- No default

```
! TNO2NOX = 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,
        1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0 !


Source information
------------------

  Option to process source contributions:
      0 =  Process only total reported contributions
      1 =  Sum all individual source contributions and process
      2 =  Run in TRACEBACK mode to identify source
         contributions at a SINGLE receptor
                (MSOURCE) -- Default: 0   ! MSOURCE =  0  !


Plume Model Output Processing Options
-------------------------------------

  Output from models other than CALPUFF and CALGRID can be written in
  the CONC.DAT format and processed by CALPOST.  Plume models such as
  AERMOD typically do not treat CALM hours, and do not include such hours
  in multiple-hour averages, with specific rules about how many calm hours
  can be removed from an average.  This treatment is known as CALM
  PROCESSING.  Calm periods are identified from wind speeds in the
  meteorological data file for the application, which must be identified
  in Input Group 0 as the single-point meteorological data file MET1DAT.
      0 =  Option is not used for CALPUFF/CALGRID output files
      1 =  Apply CALM processing procedures to multiple-hour averages
              (MCALMPRO) -- Default: 0   ! MCALMPRO =  0  !

  Format of Single-point Met File
      1 =  AERMOD/AERMET SURFACE file
               (MET1FMT) -- Default: 1   ! MET1FMT =  1  !


Receptor information
--------------------

  Gridded receptors processed?    (LG) -- Default: F   ! LG  = F  !
  Discrete receptors processed?   (LD) -- Default: F   ! LD  = T  !
  CTSG Complex terrain receptors processed?
                        (LCT) -- Default: F   ! LCT = F  !

--Report results by DISCRETE receptor RING?
  (only used when LD = T)     (LDRING) -- Default: F   ! LDRING = F  !

--Select range of DISCRETE receptors (only used when LD = T):

  Select ALL DISCRETE receptors by setting NDRECP flag to -1;
                    OR
  Select SPECIFIC DISCRETE receptors by entering a flag (0,1) for each
    0 = discrete receptor not processed
    1 = discrete receptor processed
  using repeated value notation to select blocks of receptors:
    23*1, 15*0, 12*1
  Flag for all receptors after the last one assigned is set to 0
```

(NDRECP) -- Default: -1
! NDRECP = 80*1, 40*0!

--Select range of GRIDDED receptors (only used when LG = T):

X index of LL corner (IBGRID) -- Default: -1 ! IBGRID = -1 !
(-1 OR 1 <= IBGRID <= NX)

Y index of LL corner (JBGRID) -- Default: -1 ! JBGRID = -1 !
(-1 OR 1 <= JBGRID <= NY)

X index of UR corner (IEGRID) -- Default: -1 ! IEGRID = -1 !
(-1 OR 1 <= IEGRID <= NX)

Y index of UR corner (JEGRID) -- Default: -1 ! JEGRID = -1 !
(-1 OR 1 <= JEGRID <= NY)

Note: Entire grid is processed if IBGRID=JBGRID=IEGRID=JEGRID=-1

--Specific gridded receptors can also be excluded from CALPOST processing by filling a processing grid array with 0s and 1s. If the processing flag for receptor index (i,j) is 1 (ON), that receptor will be processed if it lies within the range delineated by IBGRID, JBGRID,IEGRID,JEGRID and if LG=T. If it is 0 (OFF), it will not be processed in the run. By default, all array values are set to 1 (ON).

Number of gridded receptor rows provided in Subgroup (1a) to identify specific gridded receptors to process
(NGONOFF) -- Default: 0 ! NGONOFF = 0 !

!END!

Subgroup (1a) -- Specific gridded receptors included/excluded
---

Specific gridded receptors are excluded from CALPOST processing by filling a processing grid array with 0s and 1s. A total of NGONOFF lines are read here. Each line corresponds to one 'row' in the sampling grid, starting with the NORTHERNMOST row that contains receptors that you wish to exclude, and finishing with row 1 to the SOUTH (no intervening rows may be skipped). Within a row, each receptor position is assigned either a 0 or 1, starting with the westernmost receptor.
0 = gridded receptor not processed
1 = gridded receptor processed

Repeated value notation may be used to select blocks of receptors:
23*1, 15*0, 12*1

Because all values are initially set to 1, any receptors north of the first row entered, or east of the last value provided in a row, remain ON.

(NGXRECP) -- Default: 1

INPUT GROUP: 2 -- Visibility Parameters (ASPEC = VISIB)

Test visibility options specified to see
if they conform to FLAG 2008 configuration?
(MVISCHECK) -- Default: 1 ! MVISCHECK = 1 !

0 = NO checks are made
1 = Technical options must conform to FLAG 2008 visibility guidance
ASPEC = VISIB
LVNO2 = T
NO2CALC = 1
RNO2NOX = 1.0
MVISBK = 8
M8_MODE = 5

Some of the data entered for use with the FLAG 2008 configuration
are specific to the Class I area being evaluated. These values can
be checked within the CALPOST user interface when the name of the
Class I area is provided.

Name of Class I Area (used for QA purposes only)
(AREANAME) -- Default: User ! AREANAME = CACR !

Particle growth curve f(RH) for hygroscopic species
(MFRH) -- Default: 4 ! MFRH = 4 !

1 = IWAQM (1998) f(RH) curve (originally used with MVISBK=1)
2 = FLAG (2000) f(RH) tabulation
3 = EPA (2003) f(RH) tabulation
4 = IMPROVE (2006) f(RH) tabulations for sea salt, and for small and
large SULFATE and NITRATE particles;
Used in Visibility Method 8 (MVISBK = 8 with M8_MODE = 1, 2, or 3)

Maximum relative humidity (%) used in particle growth curve
(RHMAX) -- Default: 98 ! RHMAX = 95 !

Modeled species to be included in computing the light extinction
Include SULFATE? (LVSO4) -- Default: T ! LVSO4 = T !
Include NITRATE? (LVNO3) -- Default: T ! LVNO3 = T !
Include ORGANIC CARBON? (LVOC) -- Default: T ! LVOC = T !
Include COARSE PARTICLES? (LVPMC) -- Default: T ! LVPMC = T !
Include FINE PARTICLES? (LVPMF) -- Default: T ! LVPMF = T !
Include ELEMENTAL CARBON? (LVEC) -- Default: T ! LVEC = T !
Include NO2 absorption? (LVNO2) -- Default: F ! LVNO2 = T !
With Visibility Method 8 -- Default: T
FLAG (2008)

And, when ranking for TOP-N, TOP-50, and Exceedance tables,
Include BACKGROUND? (LVBK) -- Default: T ! LVBK = T !

```
   Species name used for particulates in MODEL.DAT file
            COARSE    (SPECPMC) -- Default: PMC ! SPECPMC = PMC !
            FINE      (SPECPMF) -- Default: PMF ! SPECPMF = PMF !

Extinction Efficiency (1/Mm per ug/m**3)
----------------------------------------
   MODELED particulate species:
         PM  COARSE      (EEPMC) -- Default: 0.6   ! EEPMC  = 0.6 !
         PM  FINE        (EEPMF) -- Default: 1.0   ! EEPMF  = 1 !
   BACKGROUND particulate species:
         PM  COARSE    (EEPMCBK) -- Default: 0.6   ! EEPMCBK = 0.6 !
   Other species:
         AMMONIUM SULFATE (EESO4) -- Default: 3.0   ! EESO4  = 3 !
         AMMONIUM NITRATE (EENO3) -- Default: 3.0   ! EENO3  = 3 !
         ORGANIC CARBON   (EEOC)  -- Default: 4.0   ! EEOC   = 4 !
         SOIL            (EESOIL)-- Default: 1.0   ! EESOIL = 1 !
         ELEMENTAL CARBON (EEEC)  -- Default: 10.   ! EEEC   = 10 !
         NO2 GAS         (EENO2) -- Default: .1755 ! EENO2  = 0.1755 !
   Visibility Method 8:
         AMMONIUM SULFATE (EESO4S)   Set Internally (small)
         AMMONIUM SULFATE (EESO4L)   Set Internally (large)
         AMMONIUM NITRATE (EENO3S)   Set Internally (small)
         AMMONIUM NITRATE (EENO3L)   Set Internally (large)
         ORGANIC CARBON   (EEOCS)    Set Internally (small)
         ORGANIC CARBON   (EEOCL)    Set Internally (large)
         SEA SALT         (EESALT)   Set Internally

Background Extinction Computation
---------------------------------

   Method used for the 24h-average of percent change of light extinction:
   Hourly ratio of source light extinction / background light extinction
   is averaged?              (LAVER) -- Default: F   ! LAVER = F  !


   Method used for background light extinction
                     (MVISBK) -- Default: 8   ! MVISBK =  8  !
                              FLAG (2008)

      1 =  Supply single light extinction and hygroscopic fraction
         - Hourly F(RH) adjustment applied to hygroscopic background
           and modeled sulfate and nitrate
      2 =  Background extinction from speciated PM concentrations (A)
         - Hourly F(RH) adjustment applied to observed and modeled sulfate
           and nitrate
         - F(RH) factor is capped at F(RHMAX)
      3 =  Background extinction from speciated PM concentrations (B)
         - Hourly F(RH) adjustment applied to observed and modeled sulfate
           and nitrate
         - Receptor-hour excluded if RH>RHMAX
         - Receptor-day excluded if fewer than 6 valid receptor-hours
      4 =  Read hourly transmissometer background extinction measurements
         - Hourly F(RH) adjustment applied to modeled sulfate and nitrate
         - Hour excluded if measurement invalid (missing, interference,
           or large RH)
         - Receptor-hour excluded if RH>RHMAX
```

- Receptor-day excluded if fewer than 6 valid receptor-hours

5 = Read hourly nephelometer background extinction measurements
- Rayleigh extinction value (BEXTRAY) added to measurement
- Hourly F(RH) adjustment applied to modeled sulfate and nitrate
- Hour excluded if measurement invalid (missing, interference, or large RH)
- Receptor-hour excluded if RH>RHMAX
- Receptor-day excluded if fewer than 6 valid receptor-hours

6 = Background extinction from speciated PM concentrations
- FLAG (2000) monthly RH adjustment factor applied to observed and and modeled sulfate and nitrate

7 = Use observed weather or prognostic weather information for background extinction during weather events; otherwise, use Method 2
- Hourly F(RH) adjustment applied to modeled sulfate and nitrate
- F(RH) factor is capped at F(RHMAX)
- During observed weather events, compute Bext from visual range if using an observed weather data file, or
- During prognostic weather events, use Bext from the prognostic weather file
- Use Method 2 for hours without a weather event

8 = Background extinction from speciated PM concentrations using the IMPROVE (2006) variable extinction efficiency formulation (MFRH must be set to 4)
- Split between small and large particle concentrations of SULFATES, NITRATES, and ORGANICS is a function of concentration and different extinction efficiencies are used for each
- Source-induced change in visibility includes the increase in extinction of the background aerosol due to the change in the extinction efficiency that now depends on total concentration.
- Fsmall(RH) and Flarge(RH) adjustments for small and large particles are applied to observed and modeled sulfate and nitrate concentrations
- Fsalt(RH) adjustment for sea salt is applied to background sea salt concentrations
- F(RH) factors are capped at F(RHMAX)
- RH for Fsmall(RH), Flarge(RH), and Fsalt(RH) may be obtained from hourly data as in Method 2 or from the FLAG monthly RH adjustment factor used for Method 6 where EPA F(RH) tabulation is used to infer RH, or monthly Fsmall, Flarge, and Fsalt RH adjustment factors can be directly entered.
  Furthermore, a monthly RH factor may be applied to either hourly concentrations or daily concentrations to obtain the 24-hour extinction.
  These choices are made using the M8_MODE selection.

Additional inputs used for MVISBK = 1:

Background light extinction (1/Mm)
(BEXTBK) -- No default ! BEXTBK = 12 !
Percentage of particles affected by relative humidity
(RHFRAC) -- No default ! RHFRAC = 10 !

Additional inputs used for MVISBK = 6,8:

Extinction coefficients for hygroscopic species (modeled and background) are computed using a monthly RH adjustment factor

in place of an hourly RH factor (VISB.DAT file is NOT needed).
Enter the 12 monthly factors here (RHFAC). Month 1 is January.

```
(RHFAC)  -- No default     ! RHFAC = 3.3, 3.0, 2.7, 2.8,
                             3.2, 3.2, 3.0, 3.0,
                             3.2, 3.2, 3.1, 3.3 !
```

Additional inputs used for MVISBK = 7:

The weather data file (DATSAV abbreviated space-delimited) that is identified as VSRN.DAT may contain data for more than one station. Identify the stations that are needed in the order in which they will be used to obtain valid weather and visual range. The first station that contains valid data for an hour will be used. Enter up to MXWSTA (set in PARAMS file) integer station IDs of up to 6 digits each as variable IDWSTA, and enter the corresponding time zone for each, as variable TZONE (= UTC-LST).

A prognostic weather data file with Bext for weather events may be used in place of the observed weather file. Identify this as the VSRN.DAT file and use a station ID of IDWSTA = 999999, and TZONE = 0.

NOTE: TZONE identifies the time zone used in the dataset. The DATSAV abbreviated space-delimited data usually are prepared with UTC time rather than local time, so TZONE is typically set to zero.

```
(IDWSTA)   -- No default   * IDWSTA = 000000 *
(TZONE)    -- No default   * TZONE =      0. *
```

Additional inputs used for MVISBK = 2,3,6,7,8:

Background extinction coefficients are computed from monthly CONCENTRATIONS of ammonium sulfate (BKSO4), ammonium nitrate (BKNO3), coarse particulates (BKPMC), organic carbon (BKOC), soil (BKSOIL), and elemental carbon (BKEC). Month 1 is January.
(ug/m**3)

```
(BKSO4)  -- No default     ! BKSO4 = 0.23, 0.23, 0.23, 0.23,
                             0.23, 0.23, 0.23, 0.23,
                             0.23, 0.23, 0.23, 0.23 !
(BKNO3)  -- No default     ! BKNO3 = 0.10, 0.10, 0.10, 0.10,
                             0.10, 0.10, 0.10, 0.10,
                             0.10, 0.10, 0.10, 0.10 !
(BKPMC)  -- No default     ! BKPMC = 3.00, 3.00, 3.00, 3.00,
                             3.00, 3.00, 3.00, 3.00,
                             3.00, 3.00, 3.00, 3.00 !
(BKOC)   -- No default     ! BKOC  = 1.80, 1.80, 1.80, 1.80,
                             1.80, 1.80, 1.80, 1.80,
                             1.80, 1.80, 1.80, 1.80 !
(BKSOIL) -- No default     ! BKSOIL= 0.50, 0.50, 0.50, 0.50,
                             0.50, 0.50, 0.50, 0.50,
                             0.50, 0.50, 0.50, 0.50 !
(BKEC)   -- No default     ! BKEC  = 0.02, 0.02, 0.02, 0.02,
                             0.02, 0.02, 0.02, 0.02,
                             0.02, 0.02, 0.02, 0.02 !
```

Additional inputs used for MVISBK = 8:

Extinction coefficients for hygroscopic species (modeled and background) may be computed using hourly RH values and hourly modeled concentrations, or using monthly RH values inferred from the RHFAC adjustment factors and either hourly or daily modeled concentrations, or using monthly RHFSML, RHFLRG, and RHFSEA adjustment factors and either hourly or daily modeled concentrations.

(M8_MODE) -- Default: 5 ! M8_MODE= 5 !
FLAG (2008)

1 = Use hourly RH values from VISB.DAT file with hourly modeled and monthly background concentrations.
2 = Use monthly RH from monthly RHFAC and EPA (2003) f(RH) tabulation with hourly modeled and monthly background concentrations. (VISB.DAT file is NOT needed).
3 = Use monthly RH from monthly RHFAC with EPA (2003) f(RH) tabulation with daily modeled and monthly background concentrations. (VISB.DAT file is NOT needed).
4 = Use monthly RHFSML, RHFLRG, and RHFSEA with hourly modeled and monthly background concentrations. (VISB.DAT file is NOT needed).
5 = Use monthly RHFSML, RHFLRG, and RHFSEA with daily modeled and monthly background concentrations. (VISB.DAT file is NOT needed).

Background extinction coefficients are computed from monthly CONCENTRATIONS of sea salt (BKSALT). Month 1 is January. (ug/m**3)

(BKSALT) -- No default ! BKSALT= 0.03, 0.03, 0.03, 0.03,
0.03, 0.03, 0.03, 0.03,
0.03, 0.03, 0.03, 0.03 !

Extinction coefficients for hygroscopic species (modeled and background) can be computed using monthly RH adjustment factors in place of an hourly RH factor (VISB.DAT file is NOT needed). Enter the 12 monthly factors here (RHFSML,RHFLRG,RHFSEA). Month 1 is January. (Used if M8_MODE = 4 or 5)

Small ammonium sulfate and ammonium nitrate particle sizes
(RHFSML) -- No default ! RHFSML= 3.85, 3.44, 3.14, 3.24,
3.66, 3.71, 3.49, 3.51,
3.73, 3.72, 3.68, 3.88 !

Large ammonium sulfate and ammonium nitrate particle sizes
(RHFLRG) -- No default ! RHFLRG= 2.77, 2.53, 2.37, 2.43,
2.68, 2.71, 2.59, 2.60,
2.71, 2.69, 2.67, 2.79 !

Sea salt particles
(RHFSEA) -- No default ! RHFSEA= 3.90, 3.52, 3.31, 3.41,
3.83, 3.88, 3.69, 3.68,

3.82, 3.76, 3.77, 3.93 !

Additional inputs used for MVISBK = 2,3,5,6,7,8:

Extinction due to Rayleigh scattering is added (1/Mm)
(BEXTRAY) -- Default: 10.0 ! BEXTRAY = 11 !

!END!

INPUT GROUP: 3 -- Output options

Documentation

Documentation records contained in the header of the
CALPUFF output file may be written to the list file.
Print documentation image?
(LDOC) -- Default: F ! LDOC = F !

Output Units

Units for All Output (IPRTU) -- Default: 1 ! IPRTU = 3 !

	for Concentration	for Deposition
1 =	g/m**3	g/m**2/s
2 =	mg/m**3	mg/m**2/s
3 =	ug/m**3	ug/m**2/s
4 =	ng/m**3	ng/m**2/s
5 =	Odour Units	

Visibility: extinction expressed in 1/Mega-meters (IPRTU is ignored)

Averaging time(s) reported

1-pd averages (L1PD) -- Default: T ! L1PD = F !
(pd = averaging period of model output)

1-hr averages (L1HR) -- Default: T ! L1HR = F !

3-hr averages (L3HR) -- Default: T ! L3HR = F !

24-hr averages (L24HR) -- Default: T ! L24HR = T !

Run-length averages (LRUNL) -- Default: T ! LRUNL = F !

User-specified averaging time in hours, minutes, seconds
- results for this averaging time are reported if it is not zero

(NAVGH) -- Default: 0 ! NAVGH = 0 !
(NAVGM) -- Default: 0 ! NAVGM = 0 !
(NAVGS) -- Default: 0 ! NAVGS = 0 !

Types of tabulations reported
---

1) Visibility: daily visibility tabulations are always reported
for the selected receptors when ASPEC = VISIB.
In addition, any of the other tabulations listed
below may be chosen to characterize the light
extinction coefficients.
[List file or Plot/Analysis File]

2) Top 50 table for each averaging time selected
[List file only]
(LT50) -- Default: T ! LT50 = F !

3) Top 'N' table for each averaging time selected
[List file or Plot file]
(LTOPN) -- Default: F ! LTOPN = F !

-- Number of 'Top-N' values at each receptor
selected (NTOP must be <= 4)
(NTOP) -- Default: 4 ! NTOP = 4 !

-- Specific ranks of 'Top-N' values reported
(NTOP values must be entered)
(ITOP(4) array) -- Default: ! ITOP = 1,2,3,4 !
1,2,3,4

4) Threshold exceedance counts for each receptor and each averaging
time selected
[List file or Plot file]
(LEXCD) -- Default: F ! LEXCD = F !

-- Identify the threshold for each averaging time by assigning a
non-negative value (output units).

-- Default: -1.0
Threshold for 1-hr averages (THRESH1) ! THRESH1 = -1.0 !
Threshold for 3-hr averages (THRESH3) ! THRESH3 = -1.0 !
Threshold for 24-hr averages (THRESH24) ! THRESH24 = -1.0 !
Threshold for NAVG-hr averages (THRESHN) ! THRESHN = -1.0 !

-- Counts for the shortest averaging period selected can be
tallied daily, and receptors that experience more than NCOUNT
counts over any NDAY period will be reported. This type of
exceedance violation output is triggered only if NDAY > 0.

Accumulation period(Days)
(NDAY) -- Default: 0 ! NDAY = 0 !
Number of exceedances allowed
(NCOUNT) -- Default: 1 ! NCOUNT = 1 !

5) Selected day table(s)

Echo Option -- Many records are written each averaging period
selected and output is grouped by day
[List file or Plot file]
(LECHO) -- Default: F ! LECHO = F !

Timeseries Option -- Averages at all selected receptors for
each selected averaging period are written to timeseries files.
Each file contains one averaging period, and all receptors are
written to a single record each averaging time.
[TSERIES_ASPEC_ttHR_CONC_TSUNAM.DAT files]
(LTIME) -- Default: F ! LTIME = F !

Peak Value Option -- Averages at all selected receptors for
each selected averaging period are screened and the peak value
each period is written to timeseries files.
Each file contains one averaging period.
[PEAKVAL_ASPEC_ttHR_CONC_TSUNAM.DAT files]
(LPEAK) -- Default: F ! LPEAK = F !

-- Days selected for output
(IECHO(366)) -- Default: 366*0
! IECHO = 366*0 !
(366 values must be entered)

Plot output options

Plot files can be created for the Top-N, Exceedance, and Echo
tables selected above. Two formats for these files are available,
DATA and GRID. In the DATA format, results at all receptors are
listed along with the receptor location [x,y,val1,val2,...].
In the GRID format, results at only gridded receptors are written,
using a compact representation. The gridded values are written in
rows (x varies), starting with the most southern row of the grid.
The GRID format is given the .GRD extension, and includes headers
compatible with the SURFER(R) plotting software.

A plotting and analysis file can also be created for the daily
peak visibility summary output, in DATA format only.

Generate Plot file output in addition to writing tables
to List file?
(LPLT) -- Default: F ! LPLT = F !

Use GRID format rather than DATA format,
when available?
(LGRD) -- Default: F ! LGRD = F !

Auxiliary Output Files (for subsequent analyses)

Visibility

A separate output file may be requested that contains the change in visibility at each selected receptor when ASPEC = VISIB. This file can be processed to construct visibility measures that are not available in CALPOST.

Output file with the visibility change at each receptor?
(MDVIS) -- Default: 0 ! MDVIS = 1 !

0 = Do Not create file
1 = Create file of DAILY (24 hour) Delta-Deciview
2 = Create file of DAILY (24 hour) Extinction Change (%)
3 = Create file of HOURLY Delta-Deciview
4 = Create file of HOURLY Extinction Change (%)

Additional Debug Output

Output selected information to List file for debugging?
(LDEBUG) -- Default: F ! LDEBUG = F !

Output hourly extinction information to REPORT.HRV? (Visibility Method 7)
(LVEXTHR) -- Default: F ! LVEXTHR = F !

!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: 1952 2051

****
CALPOST Version 6.221 Level 080724
****

CALPOST Control File Input Summary ----------

Replace run data with data in Puff file 1=Y: 1
Run starting date -- year: 2002
month: 1
day: 1
Julian day: 0
Time at start of run - hour(0-23): 0
- minute: 0
- second: 0

Run ending date -- year: 2002
month: 12
day: 31
Julian day: 0
Time at end of run - hour(0-23): 0
- minute: 0
- second: 0

Base time zone (Group 1): 6.0

Every period of data processed -- NREP = 1

Species & Concentration/Deposition Information
Species: VISIB
Layer of processed data: 1
(>0=conc, -1=dry flux, -2=wet flux, -3=wet & dry flux)
Multiplicative scaling factor: 0.0000E+00
Additive scaling factor: 0.0000E+00
Hourly background values used?: F

SAMPLER option
Processing method: 0
0= SAMPLER option not used
1= Report total modeled impact (list file)
2= TRACEBACK mode (DAT files)
3= TRACEBACK mode with sampling factor (DAT files)

Source information
Source contribution processing: 0
0= No source contributions
1= Contributions are summed
2= TRACEBACK mode for 1 receptor
3= Reported TOTAL is processed

Receptor information
Gridded receptors processed?: F
Discrete receptors processed?: T
CTSG Complex terrain receptors processed?: F

Discrete Receptors Processed

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Visibility Processing Selected

Visibility Options are Checked for FLAG 2008

Class I Area: CACR

Extinction Computation includes:
SULFATES
NITRATES
NO2 GAS
Fraction CALPUFF NOx used as NO2 : 1.000
ORGANIC CARBON
ELEMENTAL CARBON
COARSE PARTICLES
FINE PARTICLES
BACKGROUND
Particle f(RH) growth curve(s) : IMPROVE (2006) Tables
Max. RH % for particle growth (%): 95.000

Species name for modeled particulates
coarse: PMC
fine: PMF

Extinction Efficiency (1/Mm per ug/m**3)
ammonium sulfate S: 2.2000
ammonium sulfate L: 4.8000
ammonium nitrate S: 2.4000
ammonium nitrate L: 5.1000
organic carbon S: 2.8000
organic carbon L: 6.1000
sea salt: 1.7000
NO2 gas: 0.1755
soil: 1.0000
elemental carbon: 10.0000
MODELED coarse PM: 0.6000
MODELED fine PM: 1.0000
BACKGRND coarse PM: 0.6000

Background Extinction Calculation Method 8

Method 8 Mode: 5
(24-hr avg conc. with monthly F(RH) data)

Monthly RH factor for small particles:
1 .3850E+01
2 .3440E+01
3 .3140E+01
4 .3240E+01
5 .3660E+01
6 .3710E+01
7 .3490E+01
8 .3510E+01
9 .3730E+01
10 .3720E+01
11 .3680E+01
12 .3880E+01

Monthly RH factor for large particles:
1 .2770E+01
2 .2530E+01
3 .2370E+01
4 .2430E+01

5 .2680E+01
6 .2710E+01
7 .2590E+01
8 .2600E+01
9 .2710E+01
10 .2690E+01
11 .2670E+01
12 .2790E+01

Monthly RH factor for sea salt:
1 .3900E+01
2 .3520E+01
3 .3310E+01
4 .3410E+01
5 .3830E+01
6 .3880E+01
7 .3690E+01
8 .3680E+01
9 .3820E+01
10 .3760E+01
11 .3770E+01
12 .3930E+01

Rayleigh scattering extinction (1/Mm): 11.00

Monthly background conc. (ug/m**3):

	(NH4)2SO4	(NH4)NO3	PM-C	OC	SOIL	EC	SEA SALT
1	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
2	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
3	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
4	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
5	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
6	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
7	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
8	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
9	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
10	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
11	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01
12	.2300E+00	.1000E+00	.3000E+01	.1800E+01	.5000E+00	.2000E-01	.3000E-01

Optional output file for visibility 1

Create file of DAILY (24 hour) Delta-Deciview

Output options
Units requested for output: (1/Mega-m)

Averaging time(s) selected
User-specified averaging time (hr:mm:ss): 0: 0: 0
1-pd averages: F
1-hr averages: F
3-hr averages: F
24-hr averages: T

User-specified averages: F
Length of run averages: F

Output components selected
Top-50: F
Top-N values at each receptor: F
Exceedance counts at each receptor: F
Output selected information for debugging: F
Echo tables for selected days: F
Time-series for selected days: F
Peak value Time-series for selected days: F

Plot file option
Plot files created: F

MAPSPEC: Species Mapping
Number of species-levels in file : 9
Number of species-levels processed: 10

Input ID	Processing ID	Name	
1	1	SO2	1
2	2	SO4	1
3	3	NOX	1
4	4	HNO3	1
5	5	NO3	1
6	6	PMC	1
7	7	PMF	1
8	8	EC	1
9	9	SOA	1

Visibility Species

	Processing ID	Name	
sulfate	2	SO4	1
no2gas	10	NO2	1
noxgas	3	NOX	1
nitrate	5	NO3	1
specpmf	7	PMF	1
specpmc	6	PMC	1
orgcarb	9	SOA	1
lmncarb	8	EC	1

IDENTIFICATION OF PROCESSED MODEL FILE ----------

CALPUFF 5.8.4 130731

Cleco, Brame Energy Center - Rodemacher II Refined Baseline
ALM-step1
Repartitioning of NO3/HNO3

Averaging time for values reported from model:
1 HOUR

Number of averaging periods in file from model:

```
     8753

Chemical species names for each layer in model:
SO2          1
SO4          1
NOX          1
HNO3         1
NO3          1
PMC          1
PMF          1
EC           1
SOA          1



QA Information -- Internal Representation of Data

CONTENTS OF CONTROL FILE -----------------------
 METRUN              = 1
    (so times in model output file are used)
 isyr,ismo,isdy      = 2001 12 31
 ishr,ismin,issec    = 23 0 0
 ieyr,iemo,iedy      = 2002 12 31
 iehr,iemin,iesec    = 16 0 0
 nper                = 8753
 aspec,ilayer        =VISIB       1
 asplv               =VISIB  BOESNCFG
 NO2CALC             = 1
   RNO2NOX           = 1.00000000
 MSOURCE             = 0
 MCALMPRO            = 0
 MET1FMT             = 1
 LG,LD,LCT,LDRING    = F T F F
 IBGRID,IEGRID       = -1 -1
 JBGRID,JEGRID       = -1 -1
 NDRECP              =
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 a,b,LSCALE          = 0.00000000E+00 0.00000000E+00 F
 LBACK               = F
 MVISBK              = 8
 MVISCHECK           = 1
 AREANAME            =CACR
 MFRH                = 4
 RHMAX,BEXTRAY       = 95.0000000 11.0000000
 RHFRAC,BEXTBK       = 10.0000000 12.0000000
 LVSO4,LVNO3,LVNO2   = T T T
 LVOC,LVEC           = T T
 LVPMC,LVPMF,LVBK    = T T T
 SPECPMC,SPECPMF     =PMC         PMF
 EEPMC,EEPMF,EEPMCBK = 0.600000024 1.00000000 0.600000024
 EESO4,EENO3,EEOC    = 3.00000000 3.00000000 4.00000000
 EESO4S,EENO3S,EEOCS = 2.20000005 2.40000010 2.79999995
 EESO4L,EENO3L,EEOCL = 4.80000019 5.09999990 6.09999990
 EESOIL,EEEC,EENO2   = 1.00000000 10.0000000 0.175500005
```

```
navg,ntop          = 0 4
navgh,navgm,navgs   = 0 0 0
itop = 1 2 3 4
L[1,3,24]HR         = F F T
LNAVG, LRUNL        = F F
LT50, LTOPN, LEXCD  = F F F
LECHO, LTIME, LPEAK = F F F
THRESH1             = -1.00000000
THRESH3             = -1.00000000
THRESH24            = -1.00000000
THRESHN             = -1.00000000
LPLT, LGRD          = F F
MDVIS               = 1
LDEBUG              = F
LCTSG               = F

CONTENTS OF HEADER OF MODEL OUTPUT FILE ---------
model :   CALPUFF     5.8.4       130731
msyr,mjsday      = 2001 365
mshr,mssec       = 23 0
nsecdt (period)  = 3600
xbtz             = 6.00000000
mnper,nszout,mavgpd = 8753 9 1
xorigkm,yorigkm,nssta =  -951.547058 -1646.63708 0
ielmet,jelmet = 462 376
delx,dely,nz = 4.00000000 4.00000000 1
iastar,iastop,jastar,jastop = 288 451 117 274
isastr,isastp,jsastr,jsastp = 1 462 1 376
(computed) ngx,ngy  = 462 376
meshdn,npts,nareas  = 1 1 0
nlines,nvols        = 0 0
ndrec,nctrec,LSGRID = 120 0 F

Discrete Receptors (n,x,y,z):
1 270.325867 -617.518921 365.000000
2 271.090393 -617.494019 365.000000
3 271.854797 -617.469116 368.000000
4 268.767273 -616.646362 411.000000
5 269.531677 -616.621704 462.000000
6 270.295959 -616.597046 431.000000
7 271.060364 -616.572144 518.000000
8 271.824768 -616.547241 487.000000
9 272.589050 -616.522339 396.000000
10 265.680481 -615.822632 518.000000
11 266.444763 -615.798218 523.000000
12 267.209045 -615.773682 548.000000
13 267.973328 -615.749146 579.000000
14 268.737610 -615.724487 547.000000
15 269.501892 -615.699829 538.000000
16 270.266174 -615.675049 640.000000
17 271.030334 -615.650269 608.000000
18 260.301697 -615.069458 335.000000
19 261.065857 -615.045532 431.000000
20 261.830139 -615.021606 457.000000
21 262.594299 -614.997559 414.000000
22 263.358459 -614.973511 426.000000
```

23	264.122742	-614.949341	426.000000
24	264.886902	-614.924927	388.000000
25	265.651062	-614.900635	388.000000
26	266.415344	-614.876343	365.000000
27	267.179504	-614.851807	386.000000
28	267.943665	-614.827271	396.000000
29	268.707825	-614.802612	426.000000
30	269.471985	-614.777954	446.000000
31	270.236267	-614.753174	441.000000
32	271.000427	-614.728394	457.000000
33	271.764587	-614.703491	465.000000
34	272.528748	-614.678589	442.000000
35	273.293030	-614.653442	426.000000
36	260.272888	-614.147583	304.000000
37	261.036926	-614.123657	304.000000
38	261.801086	-614.099731	319.000000
39	262.565247	-614.075684	334.000000
40	263.329407	-614.051636	370.000000
41	264.093567	-614.027344	405.000000
42	264.857605	-614.003052	409.000000
43	265.621765	-613.978760	450.000000
44	266.385803	-613.954346	518.000000
45	267.149963	-613.929932	609.000000
46	267.914124	-613.905396	534.000000
47	268.678162	-613.880737	517.000000
48	269.442200	-613.856079	575.000000
49	270.206360	-613.831299	600.000000
50	270.970520	-613.806519	609.000000
51	271.734558	-613.781616	609.000000
52	272.498596	-613.756714	561.000000
53	261.008118	-613.201782	335.000000
54	261.772156	-613.177856	432.000000
55	262.536194	-613.153809	487.000000
56	263.300232	-613.129639	499.000000
57	264.064270	-613.105469	514.000000
58	264.828308	-613.081177	442.000000
59	265.592346	-613.056885	439.000000
60	266.356384	-613.032471	395.000000
61	267.120422	-613.007935	400.000000
62	267.884460	-612.983521	426.000000
63	268.648499	-612.958862	487.000000
64	269.412415	-612.934204	548.000000
65	270.176453	-612.909424	548.000000
66	270.940491	-612.884644	548.000000
67	271.704529	-612.859741	535.000000
68	261.743225	-612.255981	304.000000
69	262.507141	-612.231812	334.000000
70	263.271179	-612.207764	396.000000
71	264.035095	-612.183594	457.000000
72	264.799011	-612.159302	457.000000
73	265.563049	-612.135010	426.000000
74	266.326965	-612.110596	411.000000
75	267.090881	-612.086182	406.000000
76	267.854797	-612.061646	396.000000
77	268.618713	-612.036987	401.000000
78	269.382629	-612.012329	397.000000

79 261.714294 -611.334106 322.000000
80 262.478088 -611.309937 334.000000
81 777.710144 -1118.01306 0.00000000E+00
82 779.970764 -1115.93896 0.00000000E+00
83 780.696716 -1114.93750 0.00000000E+00
84 781.422424 -1113.93604 0.00000000E+00
85 785.606995 -1106.06689 0.00000000E+00
86 789.226868 -1101.05811 0.00000000E+00
87 789.783264 -1098.19727 0.00000000E+00
88 791.229431 -1096.19348 1.00000000
89 791.145813 -1095.26416 1.00000000
90 791.784729 -1093.33289 1.00000000
91 791.700989 -1092.40356 1.00000000
92 792.339539 -1090.47253 1.00000000
93 792.255920 -1089.54321 1.00000000
94 792.172058 -1088.61401 1.00000000
95 792.088196 -1087.68494 1.00000000
96 792.004456 -1086.75574 0.00000000E+00
97 791.920715 -1085.82666 0.00000000E+00
98 791.753235 -1083.96826 0.00000000E+00
99 792.558533 -1083.89575 1.00000000
100 792.474670 -1082.96667 1.00000000
101 791.585754 -1082.11023 0.00000000E+00
102 792.390930 -1082.03760 1.00000000
103 791.502014 -1081.18127 0.00000000E+00
104 792.307068 -1081.10864 1.00000000
105 791.418152 -1080.25220 1.00000000
106 791.334412 -1079.32324 1.00000000
107 790.445862 -1078.46667 0.00000000E+00
108 791.250549 -1078.39417 1.00000000
109 790.362244 -1077.53772 0.00000000E+00
110 791.166931 -1077.46521 1.00000000
111 790.278625 -1076.60876 0.00000000E+00
112 790.194885 -1075.67993 0.00000000E+00
113 790.111267 -1074.75098 1.00000000
114 789.223206 -1073.89453 0.00000000E+00
115 789.139709 -1072.96558 0.00000000E+00
116 788.251770 -1072.10913 0.00000000E+00
117 788.168274 -1071.18030 1.00000000
118 787.280823 -1070.32373 0.00000000E+00
119 786.393372 -1069.46704 0.00000000E+00
120 785.506165 -1068.61035 0.00000000E+00

Surface Met Station UTMs (n,x,y):

Control-file POINT Sources : 1
EMARB-file POINT Sources : 0
Control-file AREA Sources : 0
EMARB-file AREA Sources : 0
Control-file LINE Sources : 0
EMARB-file LINE Sources : 0
Control-file VOLUME Sources: 0
EMARB-file VOLUME Sources : 0

Source Names
UNIT 2

INPUT FILES

Default Name	Unit No.	File Name and Path
CALPOST.INP	5	CT_RODEMACHER_BASE_02F_CACR.INP
MODEL.DAT	4	pu_rodemacher_base_02f.flx

OUTPUT FILES

Default Name	Unit No.	File Name and Path
CALPOST.LST	8	ct_rodemacher_base_02f_cacr.lst

****
****

CALPOST Version 6.221 Level 080724

****
****

24HR VISIBILITY

VISIB BOESNCFG

(1/Mega-m)

START TIME Modeled Extinction by Species
Small Large SSalt
YEAR DAY HR RECEPTOR COORDINATES (km) TYPE BEXT(Model) BEXT(BKG) BEXT(Total)
%CHANGE bxSO4 bxNO3 bxOC bxEC bxPMC bxPMF bxNO2 F(RH) F(RH) F(RH)
2001 365 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 1 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 2 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 3 23 35 273.293 -614.653 D 0.175 22.161 22.336 0.79 0.055 0.118 0.001
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 4 23 9 272.589 -616.522 D 0.312 22.161 22.473 1.41 0.134 0.166 0.001
0.000 0.000 0.001 0.011 3.850 2.770 3.900
2002 5 23 2 271.090 -617.494 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 6 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 7 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 8 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 9 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 10 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 11 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 12 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 13 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 14 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 15 23 35 273.293 -614.653 D 0.377 22.161 22.538 1.70 0.096 0.265 0.003
0.001 0.002 0.002 0.009 3.850 2.770 3.900
2002 16 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 17 23 2 271.090 -617.494 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 18 23 3 271.855 -617.469 D 0.002 22.161 22.162 0.01 0.001 0.001 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 19 23 9 272.589 -616.522 D 0.152 22.161 22.313 0.69 0.078 0.072 0.001
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 20 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 21 23 20 261.830 -615.022 D 1.229 22.161 23.390 5.55 0.449 0.744 0.007
0.002 0.004 0.005 0.019 3.850 2.770 3.900
2002 22 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 23 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 24 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 25 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 26 23 35 273.293 -614.653 D 1.329 22.161 23.490 6.00 0.709 0.602 0.007
0.002 0.004 0.005 0.000 3.850 2.770 3.900
2002 27 23 35 273.293 -614.653 D 0.013 22.161 22.174 0.06 0.007 0.007 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 28 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 29 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 30 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 31 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
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0.001 0.002 0.002 0.002 3.710 2.710 3.880
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0.001 0.003 0.003 0.003 3.710 2.710 3.880
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2002 310 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 311 23 9 272.589 -616.522 D 0.068 22.027 22.095 0.31 0.042 0.025 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 312 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 313 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 314 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 315 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 316 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 317 23 35 273.293 -614.653 D 0.017 22.027 22.044 0.08 0.008 0.008 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 318 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 319 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 320 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 321 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 322 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 323 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 324 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 325 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 326 23 9 272.589 -616.522 D 0.270 22.027 22.297 1.22 0.171 0.095 0.002
0.000 0.001 0.001 0.000 3.680 2.670 3.770
2002 327 23 35 273.293 -614.653 D 0.210 22.027 22.237 0.95 0.095 0.113 0.001
0.000 0.000 0.001 0.000 3.680 2.670 3.770
2002 328 23 3 271.855 -617.469 D 0.013 22.027 22.040 0.06 0.008 0.005 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 329 23 3 271.855 -617.469 D 0.004 22.027 22.031 0.02 0.003 0.002 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 330 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 331 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 332 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 333 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 334 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 335 23 3 271.855 -617.469 D 0.004 22.185 22.189 0.02 0.002 0.002 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 336 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 337 23 3 271.855 -617.469 D 0.022 22.185 22.207 0.10 0.011 0.010 0.000
0.000 0.000 0.000 0.001 3.880 2.790 3.930
2002 338 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 339 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 340 23 3 271.855 -617.469 D 0.167 22.185 22.352 0.75 0.082 0.083 0.001
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 341 23 9 272.589 -616.522 D 3.376 22.185 25.560 15.22 1.794 1.551 0.010
0.003 0.006 0.007 0.004 3.880 2.790 3.930
2002 342 23 18 260.302 -615.069 D 0.205 22.185 22.390 0.93 0.124 0.079 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 343 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 344 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 345 23 1 270.326 -617.519 D 2.445 22.185 24.630 11.02 1.277 1.143 0.008
0.002 0.005 0.006 0.004 3.880 2.790 3.930
2002 346 23 3 271.855 -617.469 D 0.001 22.185 22.186 0.01 0.000 0.001 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 347 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 348 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 349 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 350 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 351 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 352 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 353 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 354 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 355 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 356 23 3 271.855 -617.469 D 0.009 22.185 22.193 0.04 0.005 0.003 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 357 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 358 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 359 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 360 23 3 271.855 -617.469 D 0.220 22.185 22.405 0.99 0.094 0.123 0.001
0.000 0.000 0.001 0.000 3.880 2.790 3.930
2002 361 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 362 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 363 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930

--- Ranked Daily Visibility Change ---
START TIME Modeled Extinction by Species
Small Large SSalt
YEAR DAY HR RECEPTOR COORDINATES (km) TYPE BEXT(Model) BEXT(BKG) BEXT(Total)
%CHANGE bxSO4 bxNO3 bxOC bxEC bxPMC bxPMF bxNO2 F(RH) F(RH) F(RH)
2002 48 23 8 271.825 -616.547 D 3.397 21.835 25.232 15.56 0.715 2.565 0.024
0.007 0.014 0.017 0.055 3.440 2.530 3.520 1
2002 341 23 9 272.589 -616.522 D 3.376 22.185 25.560 15.22 1.794 1.551 0.010
0.003 0.006 0.007 0.004 3.880 2.790 3.930 2
2002 345 23 1 270.326 -617.519 D 2.445 22.185 24.630 11.02 1.277 1.143 0.008
0.002 0.005 0.006 0.004 3.880 2.790 3.930 3
2002 112 23 3 271.855 -617.469 D 2.118 21.680 23.798 9.77 1.351 0.721 0.014
0.004 0.008 0.010 0.012 3.240 2.430 3.410 4

```
2002 233 23    3      271.855  -617.469   D     1.522    21.896    23.418    6.95   1.481  0.023  0.007
0.002  0.004  0.005  0.000  3.510 2.600 3.680   5
2002  96 23   19      261.066  -615.046   D     1.502    21.680    23.182    6.93   0.438  0.970  0.015
0.004  0.008  0.011  0.056  3.240 2.430 3.410   6
2002  59 23   18      260.302  -615.069   D     1.482    21.835    23.317    6.79   0.372  1.044  0.011
0.003  0.006  0.008  0.040  3.440 2.530 3.520   7
2002 232 23   35      273.293  -614.653   D     1.474    21.896    23.370    6.73   1.179  0.279  0.005
0.002  0.003  0.004  0.001  3.510 2.600 3.680   8
2002  26 23   35      273.293  -614.653   D     1.329    22.161    23.490    6.00   0.709  0.602  0.007
0.002  0.004  0.005  0.000  3.850 2.770 3.900   9
2002 160 23   35      273.293  -614.653   D     1.265    22.055    23.321    5.74   0.733  0.489  0.008
0.002  0.004  0.006  0.023  3.710 2.710 3.880  10
2002  21 23   20      261.830  -615.022   D     1.229    22.161    23.390    5.55   0.449  0.744  0.007
0.002  0.004  0.005  0.019  3.850 2.770 3.900  11
2002 221 23   36      260.273  -614.148   D     1.035    21.896    22.930    4.73   0.565  0.456  0.005
0.001  0.003  0.004  0.000  3.510 2.600 3.680  12
2002 134 23    1      270.326  -617.519   D     1.034    22.015    23.049    4.69   0.884  0.125  0.009
0.002  0.005  0.006  0.002  3.660 2.680 3.830  13
2002  75 23    3      271.855  -617.469   D     0.907    21.600    22.507    4.20   0.501  0.398  0.002
0.001  0.001  0.001  0.003  3.140 2.370 3.310  14
2002 274 23   35      273.293  -614.653   D     0.843    22.056    22.900    3.82   0.594  0.234  0.005
0.001  0.003  0.004  0.002  3.720 2.690 3.760  15
2002 184 23    3      271.855  -617.469   D     0.792    21.881    22.673    3.62   0.691  0.095  0.002
0.001  0.001  0.001  0.000  3.490 2.590 3.690  16
2002 141 23   18      260.302  -615.069   D     0.781    22.015    22.796    3.55   0.568  0.192  0.007
0.002  0.004  0.005  0.003  3.660 2.680 3.830  17
2002  81 23    9      272.589  -616.522   D     0.663    21.600    22.263    3.07   0.437  0.214  0.004
0.001  0.002  0.003  0.000  3.140 2.370 3.310  18
2002 178 23    9      272.589  -616.522   D     0.657    22.055    22.712    2.98   0.621  0.032  0.002
0.000  0.001  0.001  0.000  3.710 2.710 3.880  19
2002  69 23   18      260.302  -615.069   D     0.611    21.600    22.211    2.83   0.185  0.402  0.003
0.001  0.002  0.002  0.016  3.140 2.370 3.310  20
2002 170 23   67      271.705  -612.860   D     0.610    22.055    22.666    2.77   0.491  0.104  0.005
0.001  0.003  0.003  0.003  3.710 2.710 3.880  21
2002 297 23    3      271.855  -617.469   D     0.536    22.056    22.593    2.43   0.358  0.173  0.002
0.000  0.001  0.001  0.001  3.720 2.690 3.760  22

 --- Number of days with Extinction Change  =>   5.0 % :       11
 --- Number of days with Extinction Change  =>  10.0 % :        3
 ---            Largest Extinction Change  =              15.56 %

*******************************************************************************************************************
**********
                                  CALPOST  Version 6.221        Level 080724
*******************************************************************************************************************
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                                  Run-Length VISIBILITY


                                    VISIB  BOESNCFG


                                    (1/Mega-m)
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RECEPTOR COORDINATES (km) TYPE BEXT(Model) BEXT(BKG) BEXT(Total) %CHANGE

1 270.326 -617.519 D 0.109 21.955 22.064 0.50

--- Number of recs with Extinction Change > 1.0 % : 0
--- Largest Extinction Change = 0.50 %

****
****
CALPOST Version 6.221 Level 080724
****
****

24HR VISIBILITY

VISIB BOESNCFG

(deciview)

START TIME % of Modeled Extinction by Species
Small Large SSalt
YEAR DAY HR RECEPTOR COORDINATES (km) TYPE DV(Total) DV(BKG) DELTA DV %_SO4 %_NO3 %_OC %_EC %_PMC %_PMF %_NO2 F(RH) F(RH) F(RH)
2001 365 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.880 2.790 3.930
2002 1 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 2 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 3 23 35 273.293 -614.653 D 8.036 7.957 0.079 31.43 67.61 0.35 0.10 0.20 0.25 0.06 3.850 2.770 3.900
2002 4 23 9 272.589 -616.522 D 8.097 7.957 0.140 42.87 52.99 0.28 0.08 0.16 0.20 3.43 3.850 2.770 3.900
2002 5 23 2 271.090 -617.494 D 7.957 7.957 0.000 46.43 46.43 0.00 0.02 0.05 0.06 1.36 3.850 2.770 3.900
2002 6 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 7 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 8 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 9 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 10 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 11 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 12 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 13 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.850 2.770 3.900
2002 14 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 15 23 35 273.293 -614.653 D 8.126 7.957 0.169 25.41 70.25 0.73 0.20 0.41
0.52 2.48 3.850 2.770 3.900
2002 16 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 17 23 2 271.090 -617.494 D 7.957 7.957 0.000 66.52 30.36 0.00 0.02 0.05
0.06 0.16 3.850 2.770 3.900
2002 18 23 3 271.855 -617.469 D 7.958 7.957 0.001 62.96 36.43 0.12 0.04 0.08
0.10 0.30 3.850 2.770 3.900
2002 19 23 9 272.589 -616.522 D 8.026 7.957 0.068 51.65 47.33 0.35 0.10 0.20
0.25 0.12 3.850 2.770 3.900
2002 20 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 21 23 20 261.830 -615.022 D 8.497 7.957 0.540 36.50 60.54 0.56 0.15 0.31
0.40 1.52 3.850 2.770 3.900
2002 22 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 23 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 24 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 25 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 26 23 35 273.293 -614.653 D 8.540 7.957 0.583 53.31 45.29 0.54 0.15 0.30
0.39 0.02 3.850 2.770 3.900
2002 27 23 35 273.293 -614.653 D 7.963 7.957 0.006 49.52 49.11 0.52 0.14 0.29
0.38 0.03 3.850 2.770 3.900
2002 28 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 29 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 30 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 31 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 32 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 33 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 34 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 35 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 36 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 37 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 38 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 39 23 35 273.293 -614.653 D 8.044 7.809 0.234 51.05 48.06 0.34 0.09 0.19
0.25 0.02 3.440 2.530 3.520
2002 40 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 41 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.440 2.530 3.520
2002 42 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 43 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 44 23 18 260.302 -615.069 D 7.871 7.809 0.062 49.00 49.38 0.63 0.17 0.35
0.45 0.02 3.440 2.530 3.520
2002 45 23 35 273.293 -614.653 D 7.869 7.809 0.059 42.69 55.68 0.63 0.17 0.35
0.45 0.02 3.440 2.530 3.520
2002 46 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 47 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 48 23 8 271.825 -616.547 D 9.255 7.809 1.446 21.06 75.51 0.72 0.20 0.40
0.51 1.61 3.440 2.530 3.520
2002 49 23 35 273.293 -614.653 D 7.872 7.809 0.063 16.31 76.66 1.06 0.29 0.59
0.76 4.31 3.440 2.530 3.520
2002 50 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 51 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 52 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 53 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 54 23 35 273.293 -614.653 D 7.820 7.809 0.011 88.84 10.01 0.45 0.13 0.25
0.33 0.00 3.440 2.530 3.520
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0.47 0.01 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.71 3.75 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.240 2.430 3.410
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0.00 0.00 3.660 2.680 3.830
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0.00 0.00 3.660 2.680 3.830
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0.00 0.00 3.660 2.680 3.830
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0.00 0.00 3.660 2.680 3.830
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0.00 0.00 3.660 2.680 3.830
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0.00 0.00 3.660 2.680 3.830
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0.00 0.00 3.710 2.710 3.880
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2002 347 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 348 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 349 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.880 2.790 3.930
2002 350 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 351 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 352 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 353 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 354 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 355 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 356 23 3 271.855 -617.469 D 7.972 7.968 0.004 62.22 37.13 0.25 0.07 0.14
0.18 0.02 3.880 2.790 3.930
2002 357 23 1 270.326 -617.519 D 7.968 7.968 0.000 84.76 15.78 0.00 0.00 0.00
0.00 0.54 3.880 2.790 3.930
2002 358 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 359 23 1 270.326 -617.519 D 7.968 7.968 0.000 37.63 60.11 0.53 0.10 0.21
0.27 0.22 3.880 2.790 3.930
2002 360 23 3 271.855 -617.469 D 8.067 7.968 0.099 42.91 56.04 0.34 0.09 0.19
0.24 0.19 3.880 2.790 3.930
2002 361 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 362 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 363 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930

--- Ranked Daily Visibility Change ---
START TIME % of Modeled Extinction by Species
Small Large SSalt
YEAR DAY HR RECEPTOR COORDINATES (km) TYPE DV(Total) DV(BKG) DELTA DV %_SO4
%_NO3 %_OC %_EC %_PMC %_PMF %_NO2 F(RH) F(RH) F(RH)
2002 48 23 8 271.825 -616.547 D 9.255 7.809 1.446 21.06 75.51 0.72 0.20 0.40
0.51 1.61 3.440 2.530 3.520 1
2002 341 23 9 272.589 -616.522 D 9.385 7.968 1.416 53.14 45.96 0.30 0.08 0.17
0.22 0.12 3.880 2.790 3.930 2
2002 345 23 1 270.326 -617.519 D 9.014 7.968 1.046 52.23 46.73 0.34 0.09 0.19
0.24 0.18 3.880 2.790 3.930 3
2002 112 23 3 271.855 -617.469 D 8.670 7.738 0.932 63.75 34.04 0.64 0.18 0.36
0.46 0.58 3.240 2.430 3.410 4
2002 233 23 3 271.855 -617.469 D 8.509 7.837 0.672 97.32 1.54 0.45 0.12 0.25
0.32 0.00 3.510 2.600 3.680 5
2002 96 23 19 261.066 -615.046 D 8.408 7.738 0.670 29.16 64.56 0.99 0.27 0.55
0.71 3.75 3.240 2.430 3.410 6
2002 59 23 18 260.302 -615.069 D 8.466 7.809 0.657 25.08 70.41 0.71 0.20 0.40
0.51 2.69 3.440 2.530 3.520 7
2002 232 23 35 273.293 -614.653 D 8.489 7.837 0.652 80.00 18.96 0.37 0.10 0.21
0.27 0.09 3.510 2.600 3.680 8
2002 26 23 35 273.293 -614.653 D 8.540 7.957 0.583 53.31 45.29 0.54 0.15 0.30
0.39 0.02 3.850 2.770 3.900 9
2002 160 23 35 273.293 -614.653 D 8.468 7.910 0.558 57.94 38.62 0.62 0.17 0.35
0.45 1.85 3.710 2.710 3.880 10

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2002  21 23    20       261.830  -615.022   D     8.497     7.957     0.540  36.50  60.54   0.56   0.15   0.31
0.40   1.52  3.850 2.770 3.900   11
2002 221 23    36       260.273  -614.148   D     8.299     7.837     0.462  54.62  44.09   0.49   0.13   0.27
0.35   0.04  3.510 2.600 3.680   12
2002 134 23     1       270.326  -617.519   D     8.350     7.892     0.459  85.54  12.09   0.87   0.24   0.49
0.62   0.15  3.660 2.680 3.830   13
2002  75 23     3       271.855  -617.469   D     8.113     7.701     0.411  55.19  43.90   0.22   0.06   0.12
0.16   0.35  3.140 2.370 3.310   14
2002 274 23    35       273.293  -614.653   D     8.285     7.910     0.375  70.38  27.79   0.62   0.17   0.35
0.45   0.24  3.720 2.690 3.760   15
2002 184 23     3       271.855  -617.469   D     8.186     7.830     0.356  87.29  12.03   0.26   0.07   0.14
0.18   0.03  3.490 2.590 3.690   16
2002 141 23    18       260.302  -615.069   D     8.240     7.892     0.349  72.69  24.53   0.93   0.26   0.52
0.66   0.42  3.660 2.680 3.830   17
2002  81 23     9       272.589  -616.522   D     8.003     7.701     0.302  66.00  32.36   0.64   0.18   0.36
0.46   0.00  3.140 2.370 3.310   18
2002 178 23     9       272.589  -616.522   D     8.203     7.910     0.293  94.57   4.82   0.24   0.07   0.13
0.17   0.00  3.710 2.710 3.880   19
2002  69 23    18       260.302  -615.069   D     7.980     7.701     0.279  30.33  65.83   0.47   0.13   0.26
0.34   2.64  3.140 2.370 3.310   20
2002 170 23    67       271.705  -612.860   D     8.183     7.910     0.273  80.49  17.07   0.76   0.21   0.43
0.55   0.49  3.710 2.710 3.880   21
2002 297 23     3       271.855  -617.469   D     8.150     7.910     0.240  66.69  32.32   0.28   0.08   0.16
0.20   0.27  3.720 2.690 3.760   22

 --- Number of days with Delta-Deciview  =>   0.50:       11
 --- Number of days with Delta-Deciview  =>   1.00:        3
 ---            Largest Delta-Deciview  =            1.446

*******************************************************************************************************************
**********
                                  CALPOST  Version 6.221        Level 080724
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                                  Run-Length VISIBILITY


                                    VISIB  BOESNCFG


                                      (deciview)


          RECEPTOR    COORDINATES (km)  TYPE  DV(Total)    DV(BKG)  DELTA DV

             1       270.326  -617.519   D     7.914      7.864      0.050

 --- Number of recs with Delta-Deciview  >    0.10:        0
 ---            Largest Delta-Deciview  =            0.050
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