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



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



  Run Title:
    Cleco, Brame Energy Center, NESBITT
    BRETON WILDERNESS AREA CALPOST 2001
    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  =  2001  !
                    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  =  2001  !
                    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*0, 40*1!

--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 = BRET !

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 = 3.5, 3.3, 3.3, 3.3,
                             3.4, 3.6, 3.8, 3.8,
                             3.6, 3.4, 3.4, 3.5 !
```

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 = 3.01, 3.01, 3.01, 3.01,
                             3.01, 3.01, 3.01, 3.01,
                             3.01, 3.01, 3.01, 3.01 !
(BKOC)   -- No default     ! BKOC  = 1.78, 1.78, 1.78, 1.78,
                             1.78, 1.78, 1.78, 1.78,
                             1.78, 1.78, 1.78, 1.78 !
(BKSOIL) -- No default     ! BKSOIL= 0.48, 0.48, 0.48, 0.48,
                             0.48, 0.48, 0.48, 0.48,
                             0.48, 0.48, 0.48, 0.48 !
(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= 0.19, 0.19, 0.19, 0.19,
0.19, 0.19, 0.19, 0.19,
0.19, 0.19, 0.19, 0.19 !

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= 4.08, 3.82, 3.79, 3.74,
3.94, 4.12, 4.41, 4.37,
4.18, 3.92, 3.93, 4.06 !

Large ammonium sulfate and ammonium nitrate particle sizes
(RHFLRG) -- No default ! RHFLRG= 2.91, 2.76, 2.74, 2.72,
2.83, 2.94, 3.10, 3.07,
2.97, 2.82, 2.83, 2.90 !

Sea salt particles
(RHFSEA) -- No default ! RHFSEA= 4.10, 3.89, 3.87, 3.85,
4.02, 4.21, 4.44, 4.38,

4.23, 3.99, 4.01, 4.11 !

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: 1951 2050

****
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: 2001
month: 1
day: 1
Julian day: 0
Time at start of run - hour(0-23): 0
- minute: 0
- second: 0

Run ending date -- year: 2001
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

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
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
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: BRET

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 .4080E+01
2 .3820E+01
3 .3790E+01
4 .3740E+01
5 .3940E+01
6 .4120E+01
7 .4410E+01
8 .4370E+01
9 .4180E+01
10 .3920E+01
11 .3930E+01
12 .4060E+01

Monthly RH factor for large particles:
1 .2910E+01
2 .2760E+01
3 .2740E+01

4	.2720E+01
5	.2830E+01
6	.2940E+01
7	.3100E+01
8	.3070E+01
9	.2970E+01
10	.2820E+01
11	.2830E+01
12	.2900E+01

Monthly RH factor for sea salt:

1	.4100E+01
2	.3890E+01
3	.3870E+01
4	.3850E+01
5	.4020E+01
6	.4210E+01
7	.4440E+01
8	.4380E+01
9	.4230E+01
10	.3990E+01
11	.4010E+01
12	.4110E+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	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
2	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
3	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
4	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
5	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
6	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
7	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
8	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
9	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
10	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
11	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00
12	.2300E+00	.1000E+00	.3010E+01	.1780E+01	.4800E+00	.2000E-01	.1900E+00

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, Nesbitt
ALM-step1
Repartitioning of NO3/HNO3

Averaging time for values reported from model:
1 HOUR

Number of averaging periods in file from model:
8752

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 = 2000 12 31
ishr,ismin,issec = 23 0 0
ieyr,iemo,iedy = 2001 12 31
iehr,iemin,iesec = 15 0 0
nper = 8752
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 =
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 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 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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
a,b,LSCALE = 0.00000000E+00 0.00000000E+00 F
LBACK = F
MVISBK = 8
MVISCHECK = 1
AREANAME =BRET
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       = 2000 366
mshr,mssec        = 23 0
nsecdt (period)   = 3600
xbtz              = 6.00000000
mnper,nszout,mavgpd = 8752 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 1

INPUT FILES

Default Name	Unit No.	File Name and Path
CALPOST.INP	5	CT_NESBITT_01D_BRET.inp
MODEL.DAT	4	pu_nesbitt_01d.flx

OUTPUT FILES

Default Name	Unit No.	File Name and Path
CALPOST.LST	8	ct_nesbitt_01d_bret.lst

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****

CALPOST Version 6.221 Level 080724

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****

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)
2000 366 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 1 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 2 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 3 23 81 777.710 -1118.013 D 0.492 23.376 23.868 2.10 0.248 0.232 0.001
0.004 0.001 0.004 0.001 4.080 2.910 4.100
2001 4 23 120 785.506 -1068.610 D 0.478 23.376 23.855 2.05 0.299 0.165 0.002
0.005 0.001 0.006 0.001 4.080 2.910 4.100
2001 5 23 82 779.971 -1115.939 D 0.638 23.376 24.015 2.73 0.361 0.261 0.002
0.006 0.002 0.007 0.000 4.080 2.910 4.100
2001 6 23 120 785.506 -1068.610 D 0.002 23.376 23.378 0.01 0.001 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100

2001 7 23 120 785.506 -1068.610 D 0.086 23.376 23.463 0.37 0.040 0.043 0.000
0.000 0.000 0.000 0.002 4.080 2.910 4.100
2001 8 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 9 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 10 23 81 777.710 -1118.013 D 0.001 23.376 23.378 0.00 0.001 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 11 23 81 777.710 -1118.013 D 0.005 23.376 23.382 0.02 0.004 0.001 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 12 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 13 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 14 23 120 785.506 -1068.610 D 0.045 23.376 23.421 0.19 0.036 0.009 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 15 23 81 777.710 -1118.013 D 0.005 23.376 23.381 0.02 0.004 0.001 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 16 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 17 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 18 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 19 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 20 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 21 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 22 23 120 785.506 -1068.610 D 0.003 23.376 23.380 0.01 0.002 0.001 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 23 23 81 777.710 -1118.013 D 0.179 23.376 23.556 0.77 0.131 0.046 0.000
0.001 0.000 0.001 0.000 4.080 2.910 4.100
2001 24 23 81 777.710 -1118.013 D 0.005 23.376 23.381 0.02 0.003 0.002 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 25 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 26 23 120 785.506 -1068.610 D 0.053 23.376 23.430 0.23 0.040 0.013 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 27 23 120 785.506 -1068.610 D 0.014 23.376 23.391 0.06 0.010 0.004 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 28 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 29 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 30 23 81 777.710 -1118.013 D 0.114 23.376 23.491 0.49 0.065 0.044 0.000
0.001 0.000 0.002 0.001 4.080 2.910 4.100
2001 31 23 81 777.710 -1118.013 D 0.000 23.376 23.376 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.080 2.910 4.100
2001 32 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 33 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 34 23 120 785.506 -1068.610 D 0.245 23.114 23.359 1.06 0.153 0.087 0.001
0.002 0.000 0.002 0.000 3.820 2.760 3.890

2001 35 23 81 777.710 -1118.013 D 0.323 23.114 23.438 1.40 0.170 0.146 0.001
0.002 0.001 0.003 0.000 3.820 2.760 3.890
2001 36 23 120 785.506 -1068.610 D 0.036 23.114 23.150 0.16 0.027 0.008 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 37 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 38 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 39 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 40 23 120 785.506 -1068.610 D 0.049 23.114 23.163 0.21 0.030 0.018 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 41 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 42 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 43 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 44 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 45 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 46 23 81 777.710 -1118.013 D 0.014 23.114 23.128 0.06 0.008 0.005 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 47 23 82 779.971 -1115.939 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 48 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 49 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 50 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 51 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 52 23 81 777.710 -1118.013 D 0.673 23.114 23.788 2.91 0.521 0.138 0.002
0.005 0.001 0.006 0.000 3.820 2.760 3.890
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0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 54 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 55 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
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2001 56 23 120 785.506 -1068.610 D 0.008 23.114 23.122 0.03 0.006 0.002 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 57 23 120 785.506 -1068.610 D 0.001 23.114 23.115 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 58 23 81 777.710 -1118.013 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 59 23 84 781.422 -1113.936 D 0.000 23.114 23.114 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.820 2.760 3.890
2001 60 23 85 785.607 -1106.067 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.790 2.740 3.870
2001 61 23 120 785.506 -1068.610 D 0.005 23.085 23.091 0.02 0.002 0.003 0.000
0.000 0.000 0.000 0.000 3.790 2.740 3.870
2001 62 23 81 777.710 -1118.013 D 0.285 23.085 23.371 1.24 0.186 0.085 0.001
0.004 0.001 0.005 0.002 3.790 2.740 3.870

2001 63 23 81 777.710 -1118.013 D 0.007 23.085 23.092 0.03 0.004 0.002 0.000
0.000 0.000 0.000 0.000 3.790 2.740 3.870
2001 64 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 65 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 66 23 120 785.506 -1068.610 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 67 23 120 785.506 -1068.610 D 0.007 23.085 23.093 0.03 0.006 0.001 0.000
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2001 68 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 69 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 70 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 71 23 82 779.971 -1115.939 D 0.098 23.085 23.184 0.43 0.044 0.051 0.000
0.001 0.000 0.001 0.002 3.790 2.740 3.870
2001 72 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 73 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.790 2.740 3.870
2001 74 23 88 791.229 -1096.193 D 0.060 23.085 23.145 0.26 0.027 0.027 0.000
0.001 0.000 0.002 0.002 3.790 2.740 3.870
2001 75 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 76 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 77 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 78 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 79 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 80 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 81 23 120 785.506 -1068.610 D 0.006 23.085 23.091 0.03 0.005 0.001 0.000
0.000 0.000 0.000 0.000 3.790 2.740 3.870
2001 82 23 120 785.506 -1068.610 D 0.053 23.085 23.138 0.23 0.037 0.015 0.000
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2001 83 23 81 777.710 -1118.013 D 0.284 23.085 23.369 1.23 0.203 0.077 0.000
0.001 0.000 0.002 0.000 3.790 2.740 3.870
2001 84 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 85 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 86 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 87 23 81 777.710 -1118.013 D 0.000 23.085 23.085 0.00 0.000 0.000 0.000
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2001 88 23 81 777.710 -1118.013 D 0.899 23.085 23.984 3.89 0.650 0.235 0.002
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2001 89 23 81 777.710 -1118.013 D 1.451 23.085 24.536 6.28 1.025 0.398 0.003
0.009 0.003 0.011 0.000 3.790 2.740 3.870
2001 90 23 81 777.710 -1118.013 D 0.972 23.085 24.057 4.21 0.595 0.356 0.002
0.007 0.002 0.009 0.001 3.790 2.740 3.870

2001 91 23 120 785.506 -1068.610 D 0.001 23.042 23.043 0.01 0.001 0.001 0.000
0.000 0.000 0.000 0.000 3.740 2.720 3.850
2001 92 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.740 2.720 3.850
2001 93 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 94 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 95 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 96 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 97 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 98 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 99 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 100 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 101 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 102 23 120 785.506 -1068.610 D 0.001 23.042 23.042 0.00 0.001 0.000 0.000
0.000 0.000 0.000 0.000 3.740 2.720 3.850
2001 103 23 120 785.506 -1068.610 D 0.004 23.042 23.046 0.02 0.004 0.000 0.000
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2001 104 23 87 789.783 -1098.197 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.740 2.720 3.850
2001 105 23 81 777.710 -1118.013 D 0.095 23.042 23.136 0.41 0.085 0.009 0.000
0.000 0.000 0.000 0.000 3.740 2.720 3.850
2001 106 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 107 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 108 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 109 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 110 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 111 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 112 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 113 23 120 785.506 -1068.610 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 114 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 115 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 116 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 117 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 118 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 119 23 81 777.710 -1118.013 D 0.000 23.042 23.042 0.00 0.000 0.000 0.000
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2001 121 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 122 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 123 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 124 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
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2001 125 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 126 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
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2001 127 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 128 23 120 785.506 -1068.610 D 0.001 23.246 23.247 0.00 0.001 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 129 23 120 785.506 -1068.610 D 0.001 23.246 23.247 0.00 0.001 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 130 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 131 23 120 785.506 -1068.610 D 0.005 23.246 23.251 0.02 0.004 0.001 0.000
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2001 132 23 120 785.506 -1068.610 D 0.161 23.246 23.407 0.69 0.148 0.012 0.000
0.001 0.000 0.001 0.000 3.940 2.830 4.020
2001 133 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 134 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
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2001 135 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
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2001 136 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 137 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
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2001 138 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 139 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 140 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 141 23 120 785.506 -1068.610 D 0.016 23.246 23.262 0.07 0.013 0.002 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 142 23 120 785.506 -1068.610 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 143 23 120 785.506 -1068.610 D 0.002 23.246 23.248 0.01 0.002 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 144 23 120 785.506 -1068.610 D 0.113 23.246 23.359 0.49 0.107 0.002 0.000
0.001 0.000 0.002 0.000 3.940 2.830 4.020
2001 145 23 120 785.506 -1068.610 D 0.002 23.246 23.248 0.01 0.002 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 146 23 120 785.506 -1068.610 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
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2001 147 23 81 777.710 -1118.013 D 0.000 23.246 23.246 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.940 2.830 4.020
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0.001 0.000 0.001 0.000 3.940 2.830 4.020
2001 149 23 120 785.506 -1068.610 D 0.097 23.246 23.343 0.42 0.088 0.008 0.000
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0.000 0.000 0.000 0.000 3.940 2.830 4.020
2001 151 23 120 785.506 -1068.610 D 0.098 23.246 23.344 0.42 0.095 0.002 0.000
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2001 152 23 120 785.506 -1068.610 D 0.168 23.442 23.610 0.71 0.154 0.011 0.000
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0.000 0.000 0.000 0.000 4.120 2.940 4.210
2001 154 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.120 2.940 4.210
2001 155 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.120 2.940 4.210
2001 156 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.120 2.940 4.210
2001 157 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.120 2.940 4.210
2001 158 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
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2001 159 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.120 2.940 4.210
2001 160 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
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2001 161 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
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2001 162 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
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0.000 0.000 0.000 0.000 4.120 2.940 4.210
2001 169 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.120 2.940 4.210
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0.000 0.000 0.000 0.000 4.120 2.940 4.210
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0.000 0.000 0.000 0.000 4.120 2.940 4.210
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0.000 0.000 0.000 0.000 4.120 2.940 4.210
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2001 176 23 81 777.710 -1118.013 D 0.000 23.442 23.442 0.00 0.000 0.000 0.000
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2001 182 23 81 777.710 -1118.013 D 0.000 23.733 23.733 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.410 3.100 4.440
2001 183 23 116 788.252 -1072.109 D 0.000 23.733 23.733 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.410 3.100 4.440
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2001 197 23 81 777.710 -1118.013 D 0.000 23.733 23.733 0.00 0.000 0.000 0.000
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2001 198 23 81 777.710 -1118.013 D 0.000 23.733 23.733 0.00 0.000 0.000 0.000
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2001 199 23 81 777.710 -1118.013 D 0.000 23.733 23.733 0.00 0.000 0.000 0.000
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2001 200 23 81 777.710 -1118.013 D 0.000 23.733 23.733 0.00 0.000 0.000 0.000
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2001 201 23 81 777.710 -1118.013 D 0.000 23.733 23.733 0.00 0.000 0.000 0.000
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2001 202 23 120 785.506 -1068.610 D 0.000 23.733 23.733 0.00 0.000 0.000 0.000
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2001 208 23 81 777.710 -1118.013 D 0.000 23.733 23.733 0.00 0.000 0.000 0.000
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0.000 0.000 0.000 0.000 4.370 3.070 4.380
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0.000 0.000 0.000 0.000 4.370 3.070 4.380
2001 215 23 81 777.710 -1118.013 D 0.000 23.684 23.684 0.00 0.000 0.000 0.000
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2001 216 23 81 777.710 -1118.013 D 0.000 23.684 23.684 0.00 0.000 0.000 0.000
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2001 218 23 81 777.710 -1118.013 D 0.000 23.684 23.684 0.00 0.000 0.000 0.000
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2001 220 23 81 777.710 -1118.013 D 0.000 23.684 23.684 0.00 0.000 0.000 0.000
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2001 222 23 81 777.710 -1118.013 D 0.000 23.684 23.684 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.370 3.070 4.380
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0.001 0.000 0.001 0.000 4.370 3.070 4.380
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0.000 0.000 0.000 0.000 4.370 3.070 4.380
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2001 236 23 81 777.710 -1118.013 D 0.000 23.684 23.684 0.00 0.000 0.000 0.000
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2001 237 23 81 777.710 -1118.013 D 0.000 23.684 23.684 0.00 0.000 0.000 0.000
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2001 238 23 120 785.506 -1068.610 D 0.001 23.684 23.685 0.01 0.001 0.000 0.000
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2001 244 23 81 777.710 -1118.013 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.180 2.970 4.230
2001 245 23 117 788.168 -1071.180 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.180 2.970 4.230
2001 246 23 120 785.506 -1068.610 D 0.018 23.493 23.512 0.08 0.015 0.003 0.000
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2001 247 23 120 785.506 -1068.610 D 0.024 23.493 23.518 0.10 0.022 0.002 0.000
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2001 248 23 120 785.506 -1068.610 D 0.005 23.493 23.498 0.02 0.004 0.000 0.000
0.000 0.000 0.000 0.000 4.180 2.970 4.230
2001 249 23 117 788.168 -1071.180 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.180 2.970 4.230
2001 250 23 81 777.710 -1118.013 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.180 2.970 4.230
2001 251 23 81 777.710 -1118.013 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.180 2.970 4.230
2001 252 23 120 785.506 -1068.610 D 0.003 23.493 23.496 0.01 0.003 0.000 0.000
0.000 0.000 0.000 0.000 4.180 2.970 4.230
2001 253 23 120 785.506 -1068.610 D 0.001 23.493 23.494 0.00 0.001 0.000 0.000
0.000 0.000 0.000 0.000 4.180 2.970 4.230
2001 254 23 81 777.710 -1118.013 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
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2001 255 23 81 777.710 -1118.013 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
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2001 256 23 81 777.710 -1118.013 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
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2001 258 23 81 777.710 -1118.013 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
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2001 259 23 120 785.506 -1068.610 D 0.001 23.493 23.494 0.00 0.001 0.000 0.000
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2001 260 23 120 785.506 -1068.610 D 0.002 23.493 23.495 0.01 0.002 0.000 0.000
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2001 261 23 81 777.710 -1118.013 D 0.000 23.493 23.493 0.00 0.000 0.000 0.000
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0.002 0.001 0.002 0.000 4.180 2.970 4.230
2001 263 23 81 777.710 -1118.013 D 0.006 23.493 23.499 0.02 0.005 0.001 0.000
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2001 274 23 81 777.710 -1118.013 D 0.000 23.221 23.221 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.920 2.820 3.990
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2001 278 23 120 785.506 -1068.610 D 0.000 23.221 23.222 0.00 0.000 0.000 0.000
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2001 279 23 81 777.710 -1118.013 D 0.000 23.221 23.221 0.00 0.000 0.000 0.000
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2001 280 23 81 777.710 -1118.013 D 0.000 23.221 23.221 0.00 0.000 0.000 0.000
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2001 285 23 81 777.710 -1118.013 D 0.000 23.221 23.221 0.00 0.000 0.000 0.000
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2001 289 23 81 777.710 -1118.013 D 0.000 23.221 23.221 0.00 0.000 0.000 0.000
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0.000 0.000 0.000 0.000 3.920 2.820 3.990
2001 305 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 306 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 307 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 308 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 309 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 310 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 311 23 120 785.506 -1068.610 D 0.001 23.235 23.236 0.00 0.001 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 312 23 120 785.506 -1068.610 D 0.005 23.235 23.240 0.02 0.003 0.002 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 313 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 314 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010

2001 315 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 316 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 317 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 318 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 319 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 320 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 321 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 322 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 323 23 81 777.710 -1118.013 D 0.097 23.235 23.332 0.42 0.077 0.019 0.000
0.000 0.000 0.001 0.000 3.930 2.830 4.010
2001 324 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 325 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 326 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 327 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 328 23 120 785.506 -1068.610 D 0.060 23.235 23.295 0.26 0.046 0.011 0.000
0.001 0.000 0.001 0.000 3.930 2.830 4.010
2001 329 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 330 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 331 23 81 777.710 -1118.013 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 332 23 120 785.506 -1068.610 D 0.000 23.235 23.235 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.930 2.830 4.010
2001 333 23 120 785.506 -1068.610 D 0.581 23.235 23.817 2.50 0.404 0.163 0.002
0.005 0.001 0.006 0.001 3.930 2.830 4.010
2001 334 23 120 785.506 -1068.610 D 0.875 23.235 24.110 3.76 0.563 0.295 0.002
0.006 0.002 0.007 0.001 3.930 2.830 4.010
2001 335 23 120 785.506 -1068.610 D 0.722 23.365 24.087 3.09 0.576 0.135 0.001
0.004 0.001 0.005 0.000 4.060 2.900 4.110
2001 336 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 337 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 338 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 339 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 340 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 341 23 120 785.506 -1068.610 D 0.040 23.365 23.405 0.17 0.027 0.012 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 342 23 81 777.710 -1118.013 D 0.045 23.365 23.410 0.19 0.031 0.014 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110

2001 343 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 344 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 345 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 346 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 347 23 87 789.783 -1098.197 D 0.169 23.365 23.534 0.72 0.080 0.081 0.001
0.002 0.000 0.002 0.003 4.060 2.900 4.110
2001 348 23 84 781.422 -1113.936 D 0.001 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 349 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 350 23 91 791.701 -1092.404 D 0.108 23.365 23.473 0.46 0.091 0.014 0.000
0.001 0.000 0.001 0.000 4.060 2.900 4.110
2001 351 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 352 23 120 785.506 -1068.610 D 0.230 23.365 23.595 0.98 0.184 0.040 0.001
0.002 0.001 0.002 0.000 4.060 2.900 4.110
2001 353 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 354 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 355 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 356 23 81 777.710 -1118.013 D 0.036 23.365 23.401 0.15 0.008 0.027 0.000
0.000 0.000 0.000 0.001 4.060 2.900 4.110
2001 357 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 358 23 81 777.710 -1118.013 D 0.000 23.365 23.365 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 359 23 120 785.506 -1068.610 D 0.257 23.365 23.622 1.10 0.137 0.113 0.001
0.002 0.001 0.003 0.000 4.060 2.900 4.110
2001 360 23 120 785.506 -1068.610 D 0.018 23.365 23.383 0.08 0.009 0.009 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 361 23 120 785.506 -1068.610 D 0.054 23.365 23.418 0.23 0.026 0.027 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110
2001 362 23 120 785.506 -1068.610 D 0.492 23.365 23.857 2.11 0.293 0.191 0.001
0.003 0.001 0.003 0.000 4.060 2.900 4.110
2001 363 23 81 777.710 -1118.013 D 0.035 23.365 23.400 0.15 0.023 0.011 0.000
0.000 0.000 0.000 0.000 4.060 2.900 4.110

--- 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)
2001 89 23 81 777.710 -1118.013 D 1.451 23.085 24.536 6.28 1.025 0.398 0.003
0.009 0.003 0.011 0.000 3.790 2.740 3.870 1
2001 229 23 120 785.506 -1068.610 D 1.362 23.684 25.045 5.75 1.272 0.073 0.002
0.006 0.002 0.007 0.000 4.370 3.070 4.380 2
2001 191 23 120 785.506 -1068.610 D 1.323 23.733 25.056 5.57 1.058 0.234 0.003
0.010 0.003 0.012 0.002 4.410 3.100 4.440 3
2001 190 23 120 785.506 -1068.610 D 1.237 23.733 24.970 5.21 1.199 0.018 0.002

```
0.007  0.002  0.009  0.000  4.410 3.100 4.440    4
2001  90 23    81       777.710 -1118.013   D     0.972     23.085     24.057     4.21   0.595  0.356  0.002
0.007  0.002  0.009  0.001  3.790 2.740 3.870    5
2001  88 23    81       777.710 -1118.013   D     0.899     23.085     23.984     3.89   0.650  0.235  0.002
0.005  0.001  0.006  0.000  3.790 2.740 3.870    6
2001 334 23   120       785.506 -1068.610   D     0.875     23.235     24.110     3.76   0.563  0.295  0.002
0.006  0.002  0.007  0.001  3.930 2.830 4.010    7
2001 230 23   120       785.506 -1068.610   D     0.846     23.684     24.530     3.57   0.750  0.084  0.001
0.004  0.001  0.005  0.000  4.370 3.070 4.380    8
2001 335 23   120       785.506 -1068.610   D     0.722     23.365     24.087     3.09   0.576  0.135  0.001
0.004  0.001  0.005  0.000  4.060 2.900 4.110    9
2001  52 23    81       777.710 -1118.013   D     0.673     23.114     23.788     2.91   0.521  0.138  0.002
0.005  0.001  0.006  0.000  3.820 2.760 3.890   10
2001   5 23    82       779.971 -1115.939   D     0.638     23.376     24.015     2.73   0.361  0.261  0.002
0.006  0.002  0.007  0.000  4.080 2.910 4.100   11
2001 228 23   120       785.506 -1068.610   D     0.626     23.684     24.309     2.64   0.600  0.019  0.001
0.002  0.001  0.003  0.000  4.370 3.070 4.380   12
2001 333 23   120       785.506 -1068.610   D     0.581     23.235     23.817     2.50   0.404  0.163  0.002
0.005  0.001  0.006  0.001  3.930 2.830 4.010   13
2001 224 23    85       785.607 -1106.067   D     0.591     23.684     24.275     2.49   0.540  0.045  0.001
0.002  0.001  0.002  0.000  4.370 3.070 4.380   14
2001 186 23   120       785.506 -1068.610   D     0.584     23.733     24.317     2.46   0.557  0.022  0.000
0.001  0.000  0.002  0.000  4.410 3.100 4.440   15
2001 362 23   120       785.506 -1068.610   D     0.492     23.365     23.857     2.11   0.293  0.191  0.001
0.003  0.001  0.003  0.000  4.060 2.900 4.110   16
2001   3 23    81       777.710 -1118.013   D     0.492     23.376     23.868     2.10   0.248  0.232  0.001
0.004  0.001  0.004  0.001  4.080 2.910 4.100   17
2001   4 23   120       785.506 -1068.610   D     0.478     23.376     23.855     2.05   0.299  0.165  0.002
0.005  0.001  0.006  0.001  4.080 2.910 4.100   18
2001 193 23    81       777.710 -1118.013   D     0.353     23.733     24.086     1.49   0.315  0.032  0.001
0.002  0.001  0.002  0.000  4.410 3.100 4.440   19
2001  35 23    81       777.710 -1118.013   D     0.323     23.114     23.438     1.40   0.170  0.146  0.001
0.002  0.001  0.003  0.000  3.820 2.760 3.890   20
2001 225 23    81       777.710 -1118.013   D     0.325     23.684     24.009     1.37   0.295  0.027  0.000
0.001  0.000  0.001  0.000  4.370 3.070 4.380   21
2001  62 23    81       777.710 -1118.013   D     0.285     23.085     23.371     1.24   0.186  0.085  0.001
0.004  0.001  0.005  0.002  3.790 2.740 3.870   22

 --- Number of days with Extinction Change  =>   5.0 % :        4
 --- Number of days with Extinction Change  =>  10.0 % :        0
 ---            Largest Extinction Change  =              6.28 %

*****************************************************************************************************************
**********
                                  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

116 788.252 -1072.109 D 0.050 23.339 23.389 0.22

--- Number of recs with Extinction Change > 1.0 % : 0
--- Largest Extinction Change = 0.22 %

****
****
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)
2000 366 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 4.060 2.900 4.110
2001 1 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 4.080 2.910 4.100
2001 2 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 4.080 2.910 4.100
2001 3 23 81 777.710 -1118.013 D 8.700 8.491 0.208 50.36 47.27 0.24 0.72 0.22 0.90 0.29 4.080 2.910 4.100
2001 4 23 120 785.506 -1068.610 D 8.694 8.491 0.203 62.43 34.58 0.33 0.97 0.29 1.21 0.19 4.080 2.910 4.100
2001 5 23 82 779.971 -1115.939 D 8.761 8.491 0.269 56.52 40.92 0.29 0.87 0.26 1.09 0.04 4.080 2.910 4.100
2001 6 23 120 785.506 -1068.610 D 8.492 8.491 0.001 68.45 30.17 0.16 0.45 0.14 0.57 0.03 4.080 2.910 4.100
2001 7 23 120 785.506 -1068.610 D 8.528 8.491 0.037 46.41 50.07 0.12 0.35 0.11 0.44 2.51 4.080 2.910 4.100
2001 8 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 4.080 2.910 4.100
2001 9 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 4.080 2.910 4.100
2001 10 23 81 777.710 -1118.013 D 8.492 8.491 0.000 73.89 24.28 0.17 0.54 0.16 0.68 0.27 4.080 2.910 4.100
2001 11 23 81 777.710 -1118.013 D 8.494 8.491 0.002 72.75 25.52 0.18 0.51 0.15 0.63 0.27 4.080 2.910 4.100
2001 12 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 4.080 2.910 4.100

2001 13 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 14 23 120 785.506 -1068.610 D 8.511 8.491 0.019 79.72 19.24 0.12 0.34
0.10 0.43 0.05 4.080 2.910 4.100
2001 15 23 81 777.710 -1118.013 D 8.494 8.491 0.002 80.14 18.91 0.10 0.31 0.09
0.39 0.06 4.080 2.910 4.100
2001 16 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 17 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 18 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 19 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 20 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 21 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 22 23 120 785.506 -1068.610 D 8.493 8.491 0.001 70.45 28.41 0.13 0.39
0.12 0.49 0.00 4.080 2.910 4.100
2001 23 23 81 777.710 -1118.013 D 8.568 8.491 0.076 73.29 25.46 0.15 0.43 0.13
0.54 0.00 4.080 2.910 4.100
2001 24 23 81 777.710 -1118.013 D 8.494 8.491 0.002 65.61 33.04 0.15 0.47 0.14
0.58 0.00 4.080 2.910 4.100
2001 25 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 26 23 120 785.506 -1068.610 D 8.514 8.491 0.023 74.50 23.70 0.21 0.62
0.19 0.77 0.02 4.080 2.910 4.100
2001 27 23 120 785.506 -1068.610 D 8.498 8.491 0.006 69.88 28.59 0.18 0.52
0.16 0.65 0.02 4.080 2.910 4.100
2001 28 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 29 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 30 23 81 777.710 -1118.013 D 8.540 8.491 0.049 56.79 38.93 0.36 1.08 0.32
1.35 1.18 4.080 2.910 4.100
2001 31 23 81 777.710 -1118.013 D 8.491 8.491 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.080 2.910 4.100
2001 32 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 33 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 34 23 120 785.506 -1068.610 D 8.484 8.379 0.105 62.53 35.60 0.22 0.64
0.19 0.81 0.01 3.820 2.760 3.890
2001 35 23 81 777.710 -1118.013 D 8.518 8.379 0.139 52.63 45.13 0.26 0.77 0.23
0.97 0.01 3.820 2.760 3.890
2001 36 23 120 785.506 -1068.610 D 8.394 8.379 0.016 75.16 22.48 0.28 0.82
0.25 1.02 0.00 3.820 2.760 3.890
2001 37 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 38 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 39 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 40 23 120 785.506 -1068.610 D 8.400 8.379 0.021 60.93 37.04 0.14 0.41
0.12 0.51 0.85 3.820 2.760 3.890

2001 41 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 42 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 43 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 44 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 45 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 46 23 81 777.710 -1118.013 D 8.385 8.379 0.006 58.26 38.75 0.09 0.27 0.08
0.34 2.20 3.820 2.760 3.890
2001 47 23 82 779.971 -1115.939 D 8.379 8.379 0.000 27.72 69.35 0.00 0.00 0.00
0.00 2.98 3.820 2.760 3.890
2001 48 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 49 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 50 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 51 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 52 23 81 777.710 -1118.013 D 8.666 8.379 0.287 77.44 20.49 0.23 0.69 0.21
0.86 0.07 3.820 2.760 3.890
2001 53 23 81 777.710 -1118.013 D 8.406 8.379 0.028 81.39 17.28 0.15 0.46 0.14
0.57 0.01 3.820 2.760 3.890
2001 54 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 55 23 81 777.710 -1118.013 D 8.379 8.379 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.820 2.760 3.890
2001 56 23 120 785.506 -1068.610 D 8.382 8.379 0.003 73.85 25.29 0.07 0.23
0.07 0.29 0.20 3.820 2.760 3.890
2001 57 23 120 785.506 -1068.610 D 8.379 8.379 0.000 69.45 30.01 0.07 0.16
0.05 0.21 0.03 3.820 2.760 3.890
2001 58 23 81 777.710 -1118.013 D 8.379 8.379 0.000 65.62 36.72 0.00 0.00 0.00
0.00 1.06 3.820 2.760 3.890
2001 59 23 84 781.422 -1113.936 D 8.379 8.379 0.000 57.14 35.71 0.00 0.00 0.00
0.00 0.26 3.820 2.760 3.890
2001 60 23 85 785.607 -1106.067 D 8.366 8.366 0.000 6.25 40.62 0.00 0.00 0.00
0.00 10.66 3.790 2.740 3.870
2001 61 23 120 785.506 -1068.610 D 8.368 8.366 0.002 32.50 64.79 0.03 0.06
0.02 0.08 2.53 3.790 2.740 3.870
2001 62 23 81 777.710 -1118.013 D 8.489 8.366 0.123 65.23 29.93 0.48 1.42 0.43
1.77 0.75 3.790 2.740 3.870
2001 63 23 81 777.710 -1118.013 D 8.369 8.366 0.003 63.02 32.16 0.52 1.57 0.47
1.96 0.29 3.790 2.740 3.870
2001 64 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 65 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 66 23 120 785.506 -1068.610 D 8.366 8.366 0.000 77.84 19.32 0.00 0.35
0.10 0.43 0.00 3.790 2.740 3.870
2001 67 23 120 785.506 -1068.610 D 8.369 8.366 0.003 82.29 16.89 0.10 0.29
0.09 0.36 0.00 3.790 2.740 3.870
2001 68 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870

2001 69 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 70 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 71 23 82 779.971 -1115.939 D 8.409 8.366 0.043 44.74 51.29 0.27 0.80 0.24
1.01 1.64 3.790 2.740 3.870
2001 72 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 73 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 74 23 88 791.229 -1096.193 D 8.392 8.366 0.026 45.68 44.82 0.75 2.23 0.67
2.80 3.03 3.790 2.740 3.870
2001 75 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 76 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 77 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 78 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 79 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 80 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 81 23 120 785.506 -1068.610 D 8.369 8.366 0.003 87.62 10.82 0.18 0.54
0.16 0.68 0.00 3.790 2.740 3.870
2001 82 23 120 785.506 -1068.610 D 8.389 8.366 0.023 69.40 29.10 0.17 0.52
0.16 0.65 0.00 3.790 2.740 3.870
2001 83 23 81 777.710 -1118.013 D 8.488 8.366 0.122 71.51 27.00 0.17 0.51 0.15
0.64 0.01 3.790 2.740 3.870
2001 84 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 85 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 86 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 87 23 81 777.710 -1118.013 D 8.366 8.366 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.790 2.740 3.870
2001 88 23 81 777.710 -1118.013 D 8.748 8.366 0.382 72.29 26.15 0.18 0.53 0.16
0.67 0.02 3.790 2.740 3.870
2001 89 23 81 777.710 -1118.013 D 8.976 8.366 0.609 70.69 27.47 0.21 0.63 0.19
0.79 0.01 3.790 2.740 3.870
2001 90 23 81 777.710 -1118.013 D 8.779 8.366 0.412 61.19 36.65 0.25 0.73 0.22
0.91 0.05 3.790 2.740 3.870
2001 91 23 120 785.506 -1068.610 D 8.348 8.347 0.001 60.19 38.12 0.21 0.60
0.18 0.76 0.00 3.740 2.720 3.850
2001 92 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 93 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 94 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 95 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 96 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850

2001 97 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 98 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 99 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 100 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 101 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 102 23 120 785.506 -1068.610 D 8.347 8.347 0.000 90.08 9.21 0.07 0.22
0.06 0.27 0.02 3.740 2.720 3.850
2001 103 23 120 785.506 -1068.610 D 8.349 8.347 0.002 92.36 7.07 0.07 0.19
0.06 0.24 0.01 3.740 2.720 3.850
2001 104 23 87 789.783 -1098.197 D 8.347 8.347 0.000 50.00 3.12 0.00 0.01 0.00
0.01 0.00 3.740 2.720 3.850
2001 105 23 81 777.710 -1118.013 D 8.388 8.347 0.041 89.33 9.58 0.12 0.37 0.11
0.46 0.04 3.740 2.720 3.850
2001 106 23 81 777.710 -1118.013 D 8.347 8.347 0.000 76.88 25.16 0.00 0.06
0.02 0.08 0.00 3.740 2.720 3.850
2001 107 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 108 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 109 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 110 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 111 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 112 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 113 23 120 785.506 -1068.610 D 8.347 8.347 0.000 85.19 14.71 0.00 0.01
0.00 0.01 0.49 3.740 2.720 3.850
2001 114 23 81 777.710 -1118.013 D 8.347 8.347 0.000 87.15 12.50 0.00 0.00
0.00 0.00 0.53 3.740 2.720 3.850
2001 115 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 116 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 117 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 118 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 119 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 120 23 81 777.710 -1118.013 D 8.347 8.347 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.740 2.720 3.850
2001 121 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 122 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 123 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 124 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020

2001 125 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 126 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 127 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 128 23 120 785.506 -1068.610 D 8.436 8.435 0.000 97.51 2.13 0.05 0.13
0.04 0.17 0.00 3.940 2.830 4.020
2001 129 23 120 785.506 -1068.610 D 8.436 8.435 0.000 91.59 7.98 0.08 0.13
0.04 0.16 0.00 3.940 2.830 4.020
2001 130 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 131 23 120 785.506 -1068.610 D 8.437 8.435 0.002 83.13 15.72 0.12 0.40
0.12 0.50 0.00 3.940 2.830 4.020
2001 132 23 120 785.506 -1068.610 D 8.505 8.435 0.069 91.56 7.54 0.10 0.31
0.09 0.39 0.00 3.940 2.830 4.020
2001 133 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 134 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 135 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 136 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 137 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 138 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 139 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 140 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 141 23 120 785.506 -1068.610 D 8.442 8.435 0.007 82.14 15.35 0.06 0.17
0.05 0.21 2.01 3.940 2.830 4.020
2001 142 23 120 785.506 -1068.610 D 8.436 8.435 0.000 95.78 2.20 0.31 0.71
0.21 0.88 0.00 3.940 2.830 4.020
2001 143 23 120 785.506 -1068.610 D 8.436 8.435 0.001 90.63 7.48 0.21 0.66
0.20 0.83 0.00 3.940 2.830 4.020
2001 144 23 120 785.506 -1068.610 D 8.484 8.435 0.049 94.75 2.15 0.36 1.07
0.32 1.33 0.02 3.940 2.830 4.020
2001 145 23 120 785.506 -1068.610 D 8.436 8.435 0.001 96.14 2.06 0.22 0.61
0.19 0.77 0.00 3.940 2.830 4.020
2001 146 23 120 785.506 -1068.610 D 8.436 8.435 0.000 95.37 2.61 0.20 0.59
0.18 0.74 0.00 3.940 2.830 4.020
2001 147 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 148 23 120 785.506 -1068.610 D 8.493 8.435 0.058 95.99 2.16 0.21 0.64
0.19 0.80 0.01 3.940 2.830 4.020
2001 149 23 120 785.506 -1068.610 D 8.477 8.435 0.042 90.61 7.80 0.18 0.55
0.17 0.69 0.00 3.940 2.830 4.020
2001 150 23 81 777.710 -1118.013 D 8.435 8.435 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.940 2.830 4.020
2001 151 23 120 785.506 -1068.610 D 8.478 8.435 0.042 96.20 1.76 0.24 0.71
0.21 0.88 0.00 3.940 2.830 4.020
2001 152 23 120 785.506 -1068.610 D 8.591 8.519 0.071 91.96 6.35 0.20 0.59
0.18 0.73 0.00 4.120 2.940 4.210

2001 153 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 154 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 155 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 156 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 157 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 158 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 159 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 160 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 161 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 162 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 163 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 164 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 165 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 166 23 81 777.710 -1118.013 D 8.610 8.519 0.091 68.37 30.32 0.15 0.45
0.14 0.56 0.00 4.120 2.940 4.210
2001 167 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 168 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 169 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 170 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 171 23 120 785.506 -1068.610 D 8.520 8.519 0.000 92.26 7.28 0.07 0.17
0.05 0.22 0.00 4.120 2.940 4.210
2001 172 23 120 785.506 -1068.610 D 8.526 8.519 0.006 90.37 9.45 0.02 0.06
0.02 0.08 0.00 4.120 2.940 4.210
2001 173 23 81 777.710 -1118.013 D 8.533 8.519 0.014 70.82 29.04 0.02 0.05
0.02 0.06 0.00 4.120 2.940 4.210
2001 174 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 175 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 176 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 177 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 178 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 179 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 180 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210

2001 181 23 81 777.710 -1118.013 D 8.519 8.519 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.120 2.940 4.210
2001 182 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 183 23 116 788.252 -1072.109 D 8.643 8.643 0.000 87.50 0.00 0.00 0.01
0.00 0.01 0.00 4.410 3.100 4.440
2001 184 23 120 785.506 -1068.610 D 8.646 8.643 0.003 91.61 8.13 0.03 0.09
0.03 0.12 0.00 4.410 3.100 4.440
2001 185 23 120 785.506 -1068.610 D 8.674 8.643 0.031 94.55 4.86 0.07 0.21
0.06 0.26 0.00 4.410 3.100 4.440
2001 186 23 120 785.506 -1068.610 D 8.886 8.643 0.243 95.43 3.84 0.09 0.25
0.08 0.32 0.00 4.410 3.100 4.440
2001 187 23 120 785.506 -1068.610 D 8.751 8.643 0.108 95.86 3.49 0.08 0.22
0.07 0.28 0.00 4.410 3.100 4.440
2001 188 23 120 785.506 -1068.610 D 8.674 8.643 0.031 98.76 0.67 0.07 0.19
0.06 0.24 0.00 4.410 3.100 4.440
2001 189 23 120 785.506 -1068.610 D 8.721 8.643 0.078 97.24 1.06 0.20 0.59
0.18 0.73 0.00 4.410 3.100 4.440
2001 190 23 120 785.506 -1068.610 D 9.151 8.643 0.508 96.93 1.47 0.19 0.56
0.17 0.70 0.00 4.410 3.100 4.440
2001 191 23 120 785.506 -1068.610 D 9.185 8.643 0.542 79.97 17.73 0.25 0.73
0.22 0.92 0.19 4.410 3.100 4.440
2001 192 23 81 777.710 -1118.013 D 8.697 8.643 0.054 93.28 5.21 0.18 0.52 0.16
0.65 0.00 4.410 3.100 4.440
2001 193 23 81 777.710 -1118.013 D 8.790 8.643 0.147 89.44 8.99 0.18 0.54 0.16
0.68 0.01 4.410 3.100 4.440
2001 194 23 81 777.710 -1118.013 D 8.660 8.643 0.017 72.85 26.02 0.13 0.39
0.12 0.49 0.00 4.410 3.100 4.440
2001 195 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 196 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 197 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 198 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 199 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 200 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 201 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 202 23 120 785.506 -1068.610 D 8.643 8.643 0.000 95.83 0.00 0.00 0.26
0.08 0.32 0.00 4.410 3.100 4.440
2001 203 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 204 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 205 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 206 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 207 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 208 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440

2001 209 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 210 23 81 777.710 -1118.013 D 8.643 8.643 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.410 3.100 4.440
2001 211 23 120 785.506 -1068.610 D 8.656 8.643 0.014 91.78 7.50 0.08 0.25
0.08 0.31 0.00 4.410 3.100 4.440
2001 212 23 120 785.506 -1068.610 D 8.645 8.643 0.002 91.81 7.81 0.05 0.13
0.04 0.16 0.00 4.410 3.100 4.440
2001 213 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 214 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 215 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 216 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 217 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 218 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 219 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 220 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 221 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 222 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 223 23 120 785.506 -1068.610 D 8.624 8.622 0.002 90.92 8.88 0.02 0.04
0.01 0.06 0.07 4.370 3.070 4.380
2001 224 23 85 785.607 -1106.067 D 8.868 8.622 0.246 91.45 7.67 0.10 0.28 0.09
0.36 0.05 4.370 3.070 4.380
2001 225 23 81 777.710 -1118.013 D 8.758 8.622 0.136 90.82 8.33 0.10 0.29 0.09
0.36 0.02 4.370 3.070 4.380
2001 226 23 81 777.710 -1118.013 D 8.634 8.622 0.012 97.61 2.19 0.02 0.07 0.02
0.09 0.00 4.370 3.070 4.380
2001 227 23 120 785.506 -1068.610 D 8.640 8.622 0.018 97.79 1.80 0.05 0.14
0.04 0.18 0.00 4.370 3.070 4.380
2001 228 23 120 785.506 -1068.610 D 8.883 8.622 0.261 95.91 3.02 0.12 0.37
0.11 0.46 0.00 4.370 3.070 4.380
2001 229 23 120 785.506 -1068.610 D 9.181 8.622 0.559 93.41 5.35 0.14 0.43
0.13 0.54 0.00 4.370 3.070 4.380
2001 230 23 120 785.506 -1068.610 D 8.973 8.622 0.351 88.68 9.96 0.16 0.47
0.14 0.59 0.01 4.370 3.070 4.380
2001 231 23 120 785.506 -1068.610 D 8.683 8.622 0.061 92.68 6.90 0.05 0.14
0.04 0.18 0.01 4.370 3.070 4.380
2001 232 23 81 777.710 -1118.013 D 8.656 8.622 0.034 79.40 19.87 0.09 0.25
0.08 0.32 0.00 4.370 3.070 4.380
2001 233 23 81 777.710 -1118.013 D 8.622 8.622 0.000 87.50 8.04 0.00 0.14 0.04
0.17 0.00 4.370 3.070 4.380
2001 234 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 235 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 236 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380

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0.00 0.00 4.370 3.070 4.380
2001 238 23 120 785.506 -1068.610 D 8.623 8.622 0.001 89.44 9.11 0.15 0.47
0.14 0.58 0.09 4.370 3.070 4.380
2001 239 23 120 785.506 -1068.610 D 8.624 8.622 0.002 90.27 9.34 0.03 0.10
0.03 0.13 0.12 4.370 3.070 4.380
2001 240 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 241 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 242 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 243 23 81 777.710 -1118.013 D 8.622 8.622 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.370 3.070 4.380
2001 244 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 245 23 117 788.168 -1071.180 D 8.541 8.541 0.000 59.38 45.31 0.00 0.00
0.00 0.00 0.99 4.180 2.970 4.230
2001 246 23 120 785.506 -1068.610 D 8.549 8.541 0.008 84.15 15.74 0.01 0.03
0.01 0.04 0.01 4.180 2.970 4.230
2001 247 23 120 785.506 -1068.610 D 8.552 8.541 0.010 89.98 9.95 0.01 0.02
0.01 0.03 0.00 4.180 2.970 4.230
2001 248 23 120 785.506 -1068.610 D 8.543 8.541 0.002 94.41 5.53 0.01 0.02
0.01 0.02 0.00 4.180 2.970 4.230
2001 249 23 117 788.168 -1071.180 D 8.541 8.541 0.000 83.82 13.97 0.00 0.00
0.00 0.00 0.00 4.180 2.970 4.230
2001 250 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
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0.00 0.00 4.180 2.970 4.230
2001 252 23 120 785.506 -1068.610 D 8.543 8.541 0.001 88.34 11.42 0.03 0.07
0.02 0.09 0.00 4.180 2.970 4.230
2001 253 23 120 785.506 -1068.610 D 8.542 8.541 0.000 79.38 20.57 0.00 0.07
0.02 0.09 0.00 4.180 2.970 4.230
2001 254 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 255 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 256 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 257 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 258 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 259 23 120 785.506 -1068.610 D 8.542 8.541 0.000 95.19 3.40 0.14 0.46
0.14 0.58 0.00 4.180 2.970 4.230
2001 260 23 120 785.506 -1068.610 D 8.542 8.541 0.001 88.76 10.07 0.13 0.39
0.12 0.49 0.00 4.180 2.970 4.230
2001 261 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 262 23 120 785.506 -1068.610 D 8.657 8.541 0.116 89.39 8.79 0.21 0.62
0.19 0.78 0.01 4.180 2.970 4.230
2001 263 23 81 777.710 -1118.013 D 8.544 8.541 0.002 84.02 14.40 0.18 0.54
0.16 0.68 0.00 4.180 2.970 4.230
2001 264 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230

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0.00 0.00 4.180 2.970 4.230
2001 266 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 267 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 268 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 269 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 270 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 271 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
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0.00 0.00 4.180 2.970 4.230
2001 273 23 81 777.710 -1118.013 D 8.541 8.541 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.180 2.970 4.230
2001 274 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 275 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 276 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 277 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 278 23 120 785.506 -1068.610 D 8.425 8.425 0.000 32.05 65.91 0.00 0.00
0.00 0.00 1.85 3.920 2.820 3.990
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0.00 0.00 1.53 3.920 2.820 3.990
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0.00 0.00 3.920 2.820 3.990
2001 281 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 282 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 283 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 284 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 285 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 286 23 120 785.506 -1068.610 D 8.473 8.425 0.048 91.70 6.44 0.20 0.58
0.18 0.73 0.17 3.920 2.820 3.990
2001 287 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 288 23 120 785.506 -1068.610 D 8.445 8.425 0.020 80.23 16.82 0.34 1.02
0.31 1.27 0.01 3.920 2.820 3.990
2001 289 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 290 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 291 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 292 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990

2001 293 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 294 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 295 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 296 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 297 23 120 785.506 -1068.610 D 8.442 8.425 0.017 68.41 24.26 0.63 1.87
0.56 2.34 1.93 3.920 2.820 3.990
2001 298 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 299 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 300 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 301 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 302 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 303 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 304 23 81 777.710 -1118.013 D 8.425 8.425 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.920 2.820 3.990
2001 305 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 306 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 307 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 308 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 309 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 310 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 311 23 120 785.506 -1068.610 D 8.431 8.431 0.000 61.81 36.81 0.17 0.50
0.15 0.63 0.00 3.930 2.830 4.010
2001 312 23 120 785.506 -1068.610 D 8.433 8.431 0.002 63.51 34.94 0.19 0.54
0.16 0.67 0.00 3.930 2.830 4.010
2001 313 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 314 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 315 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 316 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 317 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 318 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 319 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 320 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010

2001 321 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 322 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 323 23 81 777.710 -1118.013 D 8.472 8.431 0.042 79.21 19.40 0.15 0.45
0.14 0.57 0.08 3.930 2.830 4.010
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0.00 0.00 3.930 2.830 4.010
2001 325 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 326 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 327 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 328 23 120 785.506 -1068.610 D 8.457 8.431 0.026 76.97 18.26 0.51 1.51
0.46 1.89 0.41 3.930 2.830 4.010
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0.00 0.00 3.930 2.830 4.010
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0.00 0.00 3.930 2.830 4.010
2001 331 23 81 777.710 -1118.013 D 8.431 8.431 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.930 2.830 4.010
2001 332 23 120 785.506 -1068.610 D 8.431 8.431 0.000 10.00 59.06 0.00 0.00
0.00 0.00 30.31 3.930 2.830 4.010
2001 333 23 120 785.506 -1068.610 D 8.678 8.431 0.247 69.43 28.13 0.27 0.81
0.24 1.01 0.11 3.930 2.830 4.010
2001 334 23 120 785.506 -1068.610 D 8.800 8.431 0.370 64.38 33.70 0.22 0.64
0.19 0.81 0.06 3.930 2.830 4.010
2001 335 23 120 785.506 -1068.610 D 8.791 8.486 0.304 79.71 18.72 0.18 0.54
0.16 0.68 0.00 4.060 2.900 4.110
2001 336 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 337 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 338 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 339 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 340 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 341 23 120 785.506 -1068.610 D 8.503 8.486 0.017 68.04 31.26 0.03 0.09
0.03 0.11 0.45 4.060 2.900 4.110
2001 342 23 81 777.710 -1118.013 D 8.506 8.486 0.019 68.64 30.60 0.04 0.11
0.03 0.14 0.44 4.060 2.900 4.110
2001 343 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 344 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 345 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 346 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 347 23 87 789.783 -1098.197 D 8.559 8.486 0.072 47.35 47.96 0.33 0.97
0.29 1.21 1.90 4.060 2.900 4.110
2001 348 23 84 781.422 -1113.936 D 8.487 8.486 0.000 52.36 45.75 0.27 0.63
0.19 0.78 0.09 4.060 2.900 4.110

2001 349 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 350 23 91 791.701 -1092.404 D 8.533 8.486 0.046 84.51 12.76 0.29 0.87
0.26 1.09 0.21 4.060 2.900 4.110
2001 351 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 352 23 120 785.506 -1068.610 D 8.584 8.486 0.098 80.19 17.31 0.29 0.85
0.26 1.06 0.04 4.060 2.900 4.110
2001 353 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 354 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 355 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 356 23 81 777.710 -1118.013 D 8.502 8.486 0.015 23.71 74.49 0.00 0.00
0.00 0.00 1.80 4.060 2.900 4.110
2001 357 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 358 23 81 777.710 -1118.013 D 8.486 8.486 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 4.060 2.900 4.110
2001 359 23 120 785.506 -1068.610 D 8.596 8.486 0.109 53.45 44.08 0.27 0.81
0.24 1.01 0.14 4.060 2.900 4.110
2001 360 23 120 785.506 -1068.610 D 8.494 8.486 0.008 50.17 47.87 0.23 0.67
0.20 0.84 0.01 4.060 2.900 4.110
2001 361 23 120 785.506 -1068.610 D 8.509 8.486 0.023 47.67 50.59 0.20 0.60
0.18 0.75 0.00 4.060 2.900 4.110
2001 362 23 120 785.506 -1068.610 D 8.695 8.486 0.209 59.62 38.81 0.18 0.54
0.16 0.68 0.01 4.060 2.900 4.110
2001 363 23 81 777.710 -1118.013 D 8.501 8.486 0.015 66.16 32.11 0.20 0.59
0.18 0.74 0.01 4.060 2.900 4.110

--- 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)
2001 89 23 81 777.710 -1118.013 D 8.976 8.366 0.609 70.69 27.47 0.21 0.63 0.19
0.79 0.01 3.790 2.740 3.870 1
2001 229 23 120 785.506 -1068.610 D 9.181 8.622 0.559 93.41 5.35 0.14 0.43
0.13 0.54 0.00 4.370 3.070 4.380 2
2001 191 23 120 785.506 -1068.610 D 9.185 8.643 0.542 79.97 17.73 0.25 0.73
0.22 0.92 0.19 4.410 3.100 4.440 3
2001 190 23 120 785.506 -1068.610 D 9.151 8.643 0.508 96.93 1.47 0.19 0.56
0.17 0.70 0.00 4.410 3.100 4.440 4
2001 90 23 81 777.710 -1118.013 D 8.779 8.366 0.412 61.19 36.65 0.25 0.73 0.22
0.91 0.05 3.790 2.740 3.870 5
2001 88 23 81 777.710 -1118.013 D 8.748 8.366 0.382 72.29 26.15 0.18 0.53 0.16
0.67 0.02 3.790 2.740 3.870 6
2001 334 23 120 785.506 -1068.610 D 8.800 8.431 0.370 64.38 33.70 0.22 0.64
0.19 0.81 0.06 3.930 2.830 4.010 7
2001 230 23 120 785.506 -1068.610 D 8.973 8.622 0.351 88.68 9.96 0.16 0.47
0.14 0.59 0.01 4.370 3.070 4.380 8
2001 335 23 120 785.506 -1068.610 D 8.791 8.486 0.304 79.71 18.72 0.18 0.54
0.16 0.68 0.00 4.060 2.900 4.110 9
2001 52 23 81 777.710 -1118.013 D 8.666 8.379 0.287 77.44 20.49 0.23 0.69 0.21

0.86 0.07 3.820 2.760 3.890 10
2001 5 23 82 779.971 -1115.939 D 8.761 8.491 0.269 56.52 40.92 0.29 0.87 0.26
1.09 0.04 4.080 2.910 4.100 11
2001 228 23 120 785.506 -1068.610 D 8.883 8.622 0.261 95.91 3.02 0.12 0.37
0.11 0.46 0.00 4.370 3.070 4.380 12
2001 333 23 120 785.506 -1068.610 D 8.678 8.431 0.247 69.43 28.13 0.27 0.81
0.24 1.01 0.11 3.930 2.830 4.010 13
2001 224 23 85 785.607 -1106.067 D 8.868 8.622 0.246 91.45 7.67 0.10 0.28 0.09
0.36 0.05 4.370 3.070 4.380 14
2001 186 23 120 785.506 -1068.610 D 8.886 8.643 0.243 95.43 3.84 0.09 0.25
0.08 0.32 0.00 4.410 3.100 4.440 15
2001 362 23 120 785.506 -1068.610 D 8.695 8.486 0.209 59.62 38.81 0.18 0.54
0.16 0.68 0.01 4.060 2.900 4.110 16
2001 3 23 81 777.710 -1118.013 D 8.700 8.491 0.208 50.36 47.27 0.24 0.72 0.22
0.90 0.29 4.080 2.910 4.100 17
2001 4 23 120 785.506 -1068.610 D 8.694 8.491 0.203 62.43 34.58 0.33 0.97 0.29
1.21 0.19 4.080 2.910 4.100 18
2001 193 23 81 777.710 -1118.013 D 8.790 8.643 0.147 89.44 8.99 0.18 0.54 0.16
0.68 0.01 4.410 3.100 4.440 19
2001 35 23 81 777.710 -1118.013 D 8.518 8.379 0.139 52.63 45.13 0.26 0.77 0.23
0.97 0.01 3.820 2.760 3.890 20
2001 225 23 81 777.710 -1118.013 D 8.758 8.622 0.136 90.82 8.33 0.10 0.29 0.09
0.36 0.02 4.370 3.070 4.380 21
2001 62 23 81 777.710 -1118.013 D 8.489 8.366 0.123 65.23 29.93 0.48 1.42 0.43
1.77 0.75 3.790 2.740 3.870 22

--- Number of days with Delta-Deciview => 0.50: 4
--- Number of days with Delta-Deciview => 1.00: 0
--- Largest Delta-Deciview = 0.609

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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

116 788.252 -1072.109 D 8.497 8.475 0.022

--- Number of recs with Delta-Deciview > 0.10: 0
--- Largest Delta-Deciview = 0.022