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



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



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

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

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

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

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

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

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

     (These are only used if METRUN = 0)

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

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

5 = every 5th period processed, etc.)

Species & Concentration/Deposition Information

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

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

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

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

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

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

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

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

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

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

Source information

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

Plume Model Output Processing Options

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

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

Receptor information

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

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

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

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

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

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

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

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

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

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

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

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

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

!END!

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

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

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

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

(NGXRECP) -- Default: 1

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

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

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

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

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

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

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

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

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

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

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

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

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

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


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

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

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

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

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

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

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

Additional inputs used for MVISBK = 1:

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

Additional inputs used for MVISBK = 6,8:

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

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

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

Additional inputs used for MVISBK = 7:

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

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

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

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

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

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

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

Additional inputs used for MVISBK = 8:

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

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

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

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

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

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

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

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

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

3.82, 3.76, 3.77, 3.93 !

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

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

!END!

INPUT GROUP: 3 -- Output options

Documentation

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

Output Units

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

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

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

Averaging time(s) reported

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

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

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

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

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

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

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

Types of tabulations reported
---

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

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

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

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

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

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

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

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

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

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

5) Selected day table(s)

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

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

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

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

Plot output options

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

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

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

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

Auxiliary Output Files (for subsequent analyses)

Visibility

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

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

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

Additional Debug Output

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

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

!END!

NOTICE: Starting year in control file sets the expected century for the simulation. All YY years are converted to YYYY years in the range: 1952 2051

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

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

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

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

Base time zone (Group 1): 6.0

Every period of data processed -- NREP = 1

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

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

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

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

Discrete Receptors Processed

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

Visibility Processing Selected

Visibility Options are Checked for FLAG 2008

Class I Area: CACR

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

Species name for modeled particulates
coarse: PMC
fine: PMF

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

Background Extinction Calculation Method 8

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

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

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

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

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

Rayleigh scattering extinction (1/Mm): 11.00

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

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

Optional output file for visibility 1

Create file of DAILY (24 hour) Delta-Deciview

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

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

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

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

Plot file option
Plot files created: F

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

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

Visibility Species

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

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

CALPUFF 5.8.4 130731

CLECO, Brame, Rodemacher II
ALM-step1
Repartitioning of NO3/HNO3

Averaging time for values reported from model:
1 HOUR

Number of averaging periods in file from model:

```
     8753

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



QA Information -- Internal Representation of Data

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

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

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

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

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

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

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

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

Source Names
UNIT 2

INPUT FILES

Default Name	Unit No.	File Name and Path
CALPOST.INP	5	CT_RODE_EDSI_02C_CACR.INP
MODEL.DAT	4	pu_rode_edsi_02c.flx

OUTPUT FILES

Default Name	Unit No.	File Name and Path
CALPOST.LST	8	ct_rode_edsi_02c_cacr.lst

****
****

CALPOST Version 6.221 Level 080724

****
****

24HR VISIBILITY

VISIB BOESNCFG

(1/Mega-m)

START TIME Modeled Extinction by Species
Small Large SSalt
YEAR DAY HR RECEPTOR COORDINATES (km) TYPE BEXT(Model) BEXT(BKG) BEXT(Total)
%CHANGE bxSO4 bxNO3 bxOC bxEC bxPMC bxPMF bxNO2 F(RH) F(RH) F(RH)
2001 365 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 1 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 2 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 3 23 35 273.293 -614.653 D 0.151 22.161 22.312 0.68 0.029 0.118 0.003
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 4 23 9 272.589 -616.522 D 0.252 22.161 22.413 1.14 0.071 0.166 0.004
0.000 0.000 0.000 0.011 3.850 2.770 3.900
2002 5 23 2 271.090 -617.494 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 6 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 7 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 8 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 9 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 10 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 11 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 12 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 13 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 14 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 15 23 35 273.293 -614.653 D 0.338 22.161 22.499 1.52 0.050 0.264 0.014
0.000 0.000 0.001 0.009 3.850 2.770 3.900
2002 16 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 17 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 18 23 3 271.855 -617.469 D 0.001 22.161 22.162 0.01 0.001 0.001 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 19 23 9 272.589 -616.522 D 0.116 22.161 22.277 0.53 0.041 0.072 0.003
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 20 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 21 23 20 261.830 -615.022 D 1.038 22.161 23.198 4.68 0.236 0.745 0.035
0.001 0.001 0.002 0.019 3.850 2.770 3.900
2002 22 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 23 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 24 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 25 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 26 23 35 273.293 -614.653 D 1.016 22.161 23.176 4.58 0.373 0.603 0.037
0.001 0.001 0.002 0.000 3.850 2.770 3.900
2002 27 23 35 273.293 -614.653 D 0.010 22.161 22.171 0.05 0.003 0.007 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 28 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 29 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 30 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 31 23 1 270.326 -617.519 D 0.000 22.161 22.161 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.850 2.770 3.900
2002 32 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 33 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 34 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 35 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 36 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 37 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 38 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 39 23 35 273.293 -614.653 D 0.398 21.835 22.233 1.82 0.139 0.249 0.009
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 40 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 41 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 42 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 43 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 44 23 18 260.302 -615.069 D 0.106 21.835 21.941 0.49 0.035 0.067 0.004
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 45 23 35 273.293 -614.653 D 0.107 21.835 21.941 0.49 0.029 0.073 0.004
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 46 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 47 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 48 23 8 271.825 -616.547 D 3.131 21.835 24.965 14.34 0.376 2.565 0.124
0.002 0.003 0.006 0.055 3.440 2.530 3.520
2002 49 23 35 273.293 -614.653 D 0.132 21.835 21.967 0.60 0.012 0.106 0.007
0.000 0.000 0.000 0.006 3.440 2.530 3.520
2002 50 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 51 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 52 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 53 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 54 23 35 273.293 -614.653 D 0.014 21.835 21.849 0.06 0.011 0.002 0.001
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 55 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 56 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 57 23 1 270.326 -617.519 D 0.000 21.835 21.835 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 58 23 18 260.302 -615.069 D 0.251 21.835 22.086 1.15 0.067 0.177 0.006
0.000 0.000 0.000 0.000 3.440 2.530 3.520
2002 59 23 18 260.302 -615.069 D 1.338 21.835 23.173 6.13 0.195 1.044 0.054
0.001 0.002 0.002 0.040 3.440 2.530 3.520
2002 60 23 18 260.302 -615.069 D 0.054 21.600 21.654 0.25 0.005 0.044 0.002
0.000 0.000 0.000 0.003 3.140 2.370 3.310
2002 61 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 62 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 63 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 64 23 3 271.855 -617.469 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 65 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 66 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 67 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 68 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 69 23 18 260.302 -615.069 D 0.531 21.600 22.131 2.46 0.097 0.402 0.014
0.000 0.000 0.001 0.016 3.140 2.370 3.310
2002 70 23 18 260.302 -615.069 D 0.017 21.600 21.617 0.08 0.006 0.011 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 71 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 72 23 35 273.293 -614.653 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 73 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 74 23 3 271.855 -617.469 D 0.016 21.600 21.616 0.08 0.006 0.010 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 75 23 3 271.855 -617.469 D 0.676 21.600 22.276 3.13 0.263 0.398 0.010
0.000 0.000 0.000 0.003 3.140 2.370 3.310
2002 76 23 1 270.326 -617.519 D 0.130 21.600 21.730 0.60 0.058 0.070 0.001
0.000 0.000 0.000 0.001 3.140 2.370 3.310
2002 77 23 3 271.855 -617.469 D 0.273 21.600 21.873 1.26 0.050 0.198 0.010
0.000 0.000 0.000 0.015 3.140 2.370 3.310
2002 78 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 79 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 80 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 81 23 9 272.589 -616.522 D 0.470 21.600 22.070 2.18 0.230 0.217 0.022
0.000 0.001 0.001 0.000 3.140 2.370 3.310
2002 82 23 35 273.293 -614.653 D 0.028 21.600 21.628 0.13 0.015 0.011 0.001
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 83 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 84 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 85 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 86 23 9 272.589 -616.522 D 0.251 21.600 21.851 1.16 0.123 0.116 0.011
0.000 0.000 0.001 0.000 3.140 2.370 3.310
2002 87 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 88 23 1 270.326 -617.519 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 89 23 3 271.855 -617.469 D 0.000 21.600 21.600 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 90 23 3 271.855 -617.469 D 0.034 21.600 21.634 0.16 0.025 0.007 0.002
0.000 0.000 0.000 0.000 3.140 2.370 3.310
2002 91 23 35 273.293 -614.653 D 0.028 21.680 21.708 0.13 0.021 0.006 0.002

0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 92 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 93 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 94 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 95 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 96 23 19 261.066 -615.046 D 1.341 21.680 23.020 6.18 0.230 0.971 0.076
0.001 0.002 0.003 0.056 3.240 2.430 3.410
2002 97 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 98 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 99 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 100 23 3 271.855 -617.469 D 0.256 21.680 21.935 1.18 0.203 0.042 0.010
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 101 23 35 273.293 -614.653 D 0.085 21.680 21.765 0.39 0.054 0.028 0.002
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 102 23 3 271.855 -617.469 D 0.188 21.680 21.868 0.87 0.140 0.041 0.006
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 103 23 9 272.589 -616.522 D 0.122 21.680 21.802 0.56 0.071 0.048 0.003
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 104 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 105 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 106 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 107 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 108 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 109 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 110 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 111 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 112 23 3 271.855 -617.469 D 1.523 21.680 23.203 7.03 0.709 0.727 0.069
0.001 0.002 0.003 0.012 3.240 2.430 3.410
2002 113 23 35 273.293 -614.653 D 0.001 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 114 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 115 23 18 260.302 -615.069 D 0.109 21.680 21.789 0.50 0.055 0.052 0.002
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 116 23 18 260.302 -615.069 D 0.166 21.680 21.846 0.77 0.024 0.126 0.008
0.000 0.000 0.000 0.007 3.240 2.430 3.410
2002 117 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 118 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 119 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 120 23 1 270.326 -617.519 D 0.000 21.680 21.680 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.240 2.430 3.410
2002 121 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 122 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 123 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 124 23 3 271.855 -617.469 D 0.210 22.015 22.226 0.95 0.155 0.047 0.007
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 125 23 35 273.293 -614.653 D 0.019 22.015 22.035 0.09 0.013 0.006 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 126 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 127 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 128 23 3 271.855 -617.469 D 0.000 22.015 22.016 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 129 23 35 273.293 -614.653 D 0.072 22.015 22.088 0.33 0.032 0.038 0.001
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 130 23 18 260.302 -615.069 D 0.374 22.015 22.389 1.70 0.100 0.260 0.011
0.000 0.000 0.000 0.002 3.660 2.680 3.830
2002 131 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 132 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 133 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 134 23 1 270.326 -617.519 D 0.642 22.015 22.657 2.92 0.465 0.126 0.046
0.001 0.001 0.002 0.002 3.660 2.680 3.830
2002 135 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 136 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 137 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 138 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 139 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 140 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 141 23 18 260.302 -615.069 D 0.534 22.015 22.549 2.43 0.298 0.192 0.037
0.001 0.001 0.002 0.003 3.660 2.680 3.830
2002 142 23 35 273.293 -614.653 D 0.001 22.015 22.016 0.00 0.001 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 143 23 35 273.293 -614.653 D 0.001 22.015 22.017 0.01 0.001 0.001 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 144 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 145 23 1 270.326 -617.519 D 0.000 22.015 22.015 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 146 23 35 273.293 -614.653 D 0.004 22.015 22.019 0.02 0.002 0.001 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 147 23 35 273.293 -614.653 D 0.105 22.015 22.120 0.47 0.038 0.064 0.002

0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 148 23 67 271.705 -612.860 D 0.001 22.015 22.016 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 149 23 9 272.589 -616.522 D 0.059 22.015 22.074 0.27 0.045 0.012 0.001
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 150 23 18 260.302 -615.069 D 0.001 22.015 22.016 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 151 23 1 270.326 -617.519 D 0.006 22.015 22.021 0.03 0.004 0.002 0.000
0.000 0.000 0.000 0.000 3.660 2.680 3.830
2002 152 23 9 272.589 -616.522 D 0.131 22.055 22.187 0.60 0.070 0.059 0.003
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 153 23 35 273.293 -614.653 D 0.002 22.055 22.058 0.01 0.002 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 154 23 35 273.293 -614.653 D 0.000 22.055 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 155 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 156 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 157 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 158 23 2 271.090 -617.494 D 0.000 22.055 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 159 23 3 271.855 -617.469 D 0.268 22.055 22.324 1.22 0.132 0.125 0.009
0.000 0.000 0.000 0.001 3.710 2.710 3.880
2002 160 23 35 273.293 -614.653 D 0.942 22.055 22.998 4.27 0.385 0.490 0.040
0.001 0.001 0.002 0.023 3.710 2.710 3.880
2002 161 23 35 273.293 -614.653 D 0.200 22.055 22.255 0.91 0.126 0.064 0.007
0.000 0.000 0.000 0.002 3.710 2.710 3.880
2002 162 23 35 273.293 -614.653 D 0.060 22.055 22.115 0.27 0.052 0.003 0.004
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 163 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 164 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 165 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 166 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 167 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 168 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 169 23 3 271.855 -617.469 D 0.172 22.055 22.228 0.78 0.139 0.015 0.015
0.000 0.000 0.001 0.002 3.710 2.710 3.880
2002 170 23 66 270.940 -612.885 D 0.392 22.055 22.447 1.78 0.258 0.105 0.024
0.000 0.001 0.001 0.003 3.710 2.710 3.880
2002 171 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 172 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 173 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 174 23 1 270.326 -617.519 D 0.000 22.055 22.055 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 175 23 3 271.855 -617.469 D 0.010 22.055 22.065 0.04 0.007 0.003 0.000

0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 176 23 3 271.855 -617.469 D 0.085 22.055 22.140 0.38 0.052 0.031 0.001
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 177 23 35 273.293 -614.653 D 0.010 22.055 22.065 0.05 0.008 0.002 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 178 23 9 272.589 -616.522 D 0.367 22.055 22.422 1.66 0.326 0.032 0.008
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 179 23 67 271.705 -612.860 D 0.025 22.055 22.080 0.11 0.019 0.005 0.000
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 180 23 35 273.293 -614.653 D 0.119 22.055 22.175 0.54 0.051 0.061 0.005
0.000 0.000 0.000 0.001 3.710 2.710 3.880
2002 181 23 35 273.293 -614.653 D 0.252 22.055 22.307 1.14 0.174 0.069 0.007
0.000 0.000 0.000 0.000 3.710 2.710 3.880
2002 182 23 1 270.326 -617.519 D 0.039 21.881 21.920 0.18 0.023 0.015 0.001
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 183 23 35 273.293 -614.653 D 0.061 21.881 21.942 0.28 0.041 0.018 0.001
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 184 23 2 271.090 -617.494 D 0.470 21.881 22.352 2.15 0.363 0.096 0.010
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 185 23 18 260.302 -615.069 D 0.117 21.881 21.998 0.53 0.089 0.025 0.002
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 186 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 187 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 188 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 189 23 2 271.090 -617.494 D 0.002 21.881 21.883 0.01 0.002 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 190 23 3 271.855 -617.469 D 0.016 21.881 21.897 0.07 0.013 0.002 0.001
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 191 23 3 271.855 -617.469 D 0.008 21.881 21.889 0.04 0.007 0.001 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 192 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 193 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 194 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 195 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 196 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 197 23 3 271.855 -617.469 D 0.002 21.881 21.883 0.01 0.001 0.001 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 198 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 199 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 200 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 201 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 202 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 203 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 204 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 205 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 206 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 207 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 208 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 209 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 210 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 211 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 212 23 1 270.326 -617.519 D 0.000 21.881 21.881 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.490 2.590 3.690
2002 213 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 214 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 215 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 216 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 217 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 218 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 219 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 220 23 18 260.302 -615.069 D 0.009 21.896 21.904 0.04 0.008 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 221 23 36 260.273 -614.148 D 0.782 21.896 22.678 3.57 0.297 0.456 0.026
0.000 0.001 0.001 0.000 3.510 2.600 3.680
2002 222 23 18 260.302 -615.069 D 0.185 21.896 22.081 0.84 0.155 0.010 0.017
0.000 0.000 0.001 0.001 3.510 2.600 3.680
2002 223 23 35 273.293 -614.653 D 0.222 21.896 22.118 1.02 0.144 0.064 0.013
0.000 0.000 0.001 0.000 3.510 2.600 3.680
2002 224 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 225 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 226 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 227 23 35 273.293 -614.653 D 0.013 21.896 21.909 0.06 0.008 0.003 0.000
0.000 0.000 0.000 0.002 3.510 2.600 3.680
2002 228 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 229 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 230 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 231 23 9 272.589 -616.522 D 0.004 21.896 21.899 0.02 0.003 0.000 0.000

0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 232 23 35 273.293 -614.653 D 0.931 21.896 22.827 4.25 0.620 0.280 0.028
0.000 0.001 0.001 0.001 3.510 2.600 3.680
2002 233 23 3 271.855 -617.469 D 0.839 21.896 22.735 3.83 0.777 0.024 0.035
0.001 0.001 0.002 0.000 3.510 2.600 3.680
2002 234 23 35 273.293 -614.653 D 0.115 21.896 22.010 0.52 0.104 0.007 0.004
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 235 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 236 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 237 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 238 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 239 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 240 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 241 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 242 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 243 23 1 270.326 -617.519 D 0.000 21.896 21.896 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.510 2.600 3.680
2002 244 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 245 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 246 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 247 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 248 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 249 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 250 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 251 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 252 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 253 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 254 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 255 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 256 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 257 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 258 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 259 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 260 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 261 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 262 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 263 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 264 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 265 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 266 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 267 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 268 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 269 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 270 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 271 23 1 270.326 -617.519 D 0.000 22.067 22.067 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 272 23 18 260.302 -615.069 D 0.285 22.067 22.352 1.29 0.254 0.016 0.013
0.000 0.000 0.001 0.000 3.730 2.710 3.820
2002 273 23 35 273.293 -614.653 D 0.240 22.067 22.308 1.09 0.133 0.099 0.007
0.000 0.000 0.000 0.000 3.730 2.710 3.820
2002 274 23 35 273.293 -614.653 D 0.578 22.056 22.635 2.62 0.312 0.235 0.027
0.000 0.001 0.001 0.002 3.720 2.690 3.760
2002 275 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 276 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 277 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 278 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 279 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 280 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 281 23 3 271.855 -617.469 D 0.013 22.056 22.070 0.06 0.005 0.008 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 282 23 18 260.302 -615.069 D 0.005 22.056 22.061 0.02 0.001 0.004 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 283 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 284 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 285 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 286 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 287 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 288 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 289 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 290 23 9 272.589 -616.522 D 0.273 22.056 22.329 1.24 0.186 0.078 0.008
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 291 23 9 272.589 -616.522 D 0.018 22.056 22.074 0.08 0.000 0.009 0.000
0.000 0.000 0.000 0.009 3.720 2.690 3.760
2002 292 23 3 271.855 -617.469 D 0.027 22.056 22.083 0.12 0.010 0.017 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 293 23 18 260.302 -615.069 D 0.050 22.056 22.107 0.23 0.009 0.041 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 294 23 1 270.326 -617.519 D 0.008 22.056 22.065 0.04 0.003 0.006 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 295 23 2 271.090 -617.494 D 0.002 22.056 22.058 0.01 0.001 0.001 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 296 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 297 23 3 271.855 -617.469 D 0.371 22.056 22.428 1.68 0.188 0.173 0.008
0.000 0.000 0.000 0.001 3.720 2.690 3.760
2002 298 23 3 271.855 -617.469 D 0.018 22.056 22.074 0.08 0.009 0.009 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 299 23 1 270.326 -617.519 D 0.002 22.056 22.058 0.01 0.001 0.001 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 300 23 18 260.302 -615.069 D 0.053 22.056 22.110 0.24 0.012 0.038 0.000
0.000 0.000 0.000 0.002 3.720 2.690 3.760
2002 301 23 78 269.383 -612.012 D 0.066 22.056 22.123 0.30 0.013 0.051 0.000
0.000 0.000 0.000 0.002 3.720 2.690 3.760
2002 302 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 303 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 304 23 1 270.326 -617.519 D 0.000 22.056 22.056 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.720 2.690 3.760
2002 305 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 306 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 307 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 308 23 3 271.855 -617.469 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 309 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 310 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 311 23 9 272.589 -616.522 D 0.049 22.027 22.076 0.22 0.022 0.025 0.002
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 312 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 313 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 314 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 315 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 316 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 317 23 35 273.293 -614.653 D 0.013 22.027 22.040 0.06 0.004 0.008 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 318 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 319 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 320 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 321 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 322 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 323 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 324 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 325 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 326 23 9 272.589 -616.522 D 0.194 22.027 22.221 0.88 0.090 0.095 0.008
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 327 23 35 273.293 -614.653 D 0.167 22.027 22.194 0.76 0.050 0.113 0.004
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 328 23 3 271.855 -617.469 D 0.009 22.027 22.036 0.04 0.004 0.005 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 329 23 3 271.855 -617.469 D 0.003 22.027 22.030 0.01 0.001 0.002 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 330 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 331 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 332 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 333 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 334 23 1 270.326 -617.519 D 0.000 22.027 22.027 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.680 2.670 3.770
2002 335 23 3 271.855 -617.469 D 0.003 22.185 22.188 0.02 0.001 0.002 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 336 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 337 23 3 271.855 -617.469 D 0.017 22.185 22.202 0.08 0.006 0.010 0.000
0.000 0.000 0.000 0.001 3.880 2.790 3.930
2002 338 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 339 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 340 23 3 271.855 -617.469 D 0.130 22.185 22.315 0.59 0.043 0.084 0.003
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 341 23 9 272.589 -616.522 D 2.556 22.185 24.741 11.52 0.942 1.553 0.052
0.001 0.001 0.002 0.004 3.880 2.790 3.930
2002 342 23 18 260.302 -615.069 D 0.148 22.185 22.333 0.67 0.066 0.080 0.003
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 343 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000

0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 344 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 345 23 1 270.326 -617.519 D 1.866 22.185 24.051 8.41 0.671 1.145 0.042
0.001 0.001 0.002 0.004 3.880 2.790 3.930
2002 346 23 3 271.855 -617.469 D 0.001 22.185 22.186 0.01 0.000 0.001 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 347 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 348 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 349 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 350 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 351 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 352 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 353 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 354 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 355 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 356 23 3 271.855 -617.469 D 0.006 22.185 22.191 0.03 0.003 0.003 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 357 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 358 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 359 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 360 23 3 271.855 -617.469 D 0.177 22.185 22.362 0.80 0.050 0.123 0.004
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 361 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 362 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930
2002 363 23 1 270.326 -617.519 D 0.000 22.185 22.185 0.00 0.000 0.000 0.000
0.000 0.000 0.000 0.000 3.880 2.790 3.930

--- Ranked Daily Visibility Change ---
START TIME Modeled Extinction by Species
Small Large SSalt
YEAR DAY HR RECEPTOR COORDINATES (km) TYPE BEXT(Model) BEXT(BKG) BEXT(Total)
%CHANGE bxSO4 bxNO3 bxOC bxEC bxPMC bxPMF bxNO2 F(RH) F(RH) F(RH)
2002 48 23 8 271.825 -616.547 D 3.131 21.835 24.965 14.34 0.376 2.565 0.124
0.002 0.003 0.006 0.055 3.440 2.530 3.520 1
2002 341 23 9 272.589 -616.522 D 2.556 22.185 24.741 11.52 0.942 1.553 0.052
0.001 0.001 0.002 0.004 3.880 2.790 3.930 2
2002 345 23 1 270.326 -617.519 D 1.866 22.185 24.051 8.41 0.671 1.145 0.042
0.001 0.001 0.002 0.004 3.880 2.790 3.930 3
2002 112 23 3 271.855 -617.469 D 1.523 21.680 23.203 7.03 0.709 0.727 0.069
0.001 0.002 0.003 0.012 3.240 2.430 3.410 4

```
2002  96 23    19       261.066  -615.046   D     1.341     21.680     23.020     6.18   0.230  0.971  0.076
0.001  0.002  0.003  0.056  3.240 2.430 3.410    5
2002  59 23    18       260.302  -615.069   D     1.338     21.835     23.173     6.13   0.195  1.044  0.054
0.001  0.002  0.002  0.040  3.440 2.530 3.520    6
2002  21 23    20       261.830  -615.022   D     1.038     22.161     23.198     4.68   0.236  0.745  0.035
0.001  0.001  0.002  0.019  3.850 2.770 3.900    7
2002  26 23    35       273.293  -614.653   D     1.016     22.161     23.176     4.58   0.373  0.603  0.037
0.001  0.001  0.002  0.000  3.850 2.770 3.900    8
2002 160 23    35       273.293  -614.653   D     0.942     22.055     22.998     4.27   0.385  0.490  0.040
0.001  0.001  0.002  0.023  3.710 2.710 3.880    9
2002 232 23    35       273.293  -614.653   D     0.931     21.896     22.827     4.25   0.620  0.280  0.028
0.000  0.001  0.001  0.001  3.510 2.600 3.680   10
2002 233 23     3       271.855  -617.469   D     0.839     21.896     22.735     3.83   0.777  0.024  0.035
0.001  0.001  0.002  0.000  3.510 2.600 3.680   11
2002 221 23    36       260.273  -614.148   D     0.782     21.896     22.678     3.57   0.297  0.456  0.026
0.000  0.001  0.001  0.000  3.510 2.600 3.680   12
2002  75 23     3       271.855  -617.469   D     0.676     21.600     22.276     3.13   0.263  0.398  0.010
0.000  0.000  0.000  0.003  3.140 2.370 3.310   13
2002 134 23     1       270.326  -617.519   D     0.642     22.015     22.657     2.92   0.465  0.126  0.046
0.001  0.001  0.002  0.002  3.660 2.680 3.830   14
2002 274 23    35       273.293  -614.653   D     0.578     22.056     22.635     2.62   0.312  0.235  0.027
0.000  0.001  0.001  0.002  3.720 2.690 3.760   15
2002  69 23    18       260.302  -615.069   D     0.531     21.600     22.131     2.46   0.097  0.402  0.014
0.000  0.000  0.001  0.016  3.140 2.370 3.310   16
2002 141 23    18       260.302  -615.069   D     0.534     22.015     22.549     2.43   0.298  0.192  0.037
0.001  0.001  0.002  0.003  3.660 2.680 3.830   17
2002  81 23     9       272.589  -616.522   D     0.470     21.600     22.070     2.18   0.230  0.217  0.022
0.000  0.001  0.001  0.000  3.140 2.370 3.310   18
2002 184 23     2       271.090  -617.494   D     0.470     21.881     22.352     2.15   0.363  0.096  0.010
0.000  0.000  0.000  0.000  3.490 2.590 3.690   19
2002  39 23    35       273.293  -614.653   D     0.398     21.835     22.233     1.82   0.139  0.249  0.009
0.000  0.000  0.000  0.000  3.440 2.530 3.520   20
2002 170 23    66       270.940  -612.885   D     0.392     22.055     22.447     1.78   0.258  0.105  0.024
0.000  0.001  0.001  0.003  3.710 2.710 3.880   21
2002 130 23    18       260.302  -615.069   D     0.374     22.015     22.389     1.70   0.100  0.260  0.011
0.000  0.000  0.000  0.002  3.660 2.680 3.830   22

 --- Number of days with Extinction Change  =>   5.0 % :        6
 --- Number of days with Extinction Change  =>  10.0 % :        2
 ---            Largest Extinction Change  =              14.34 %

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


                                    Run-Length VISIBILITY


                                      VISIB  BOESNCFG


                                      (1/Mega-m)
```

RECEPTOR COORDINATES (km) TYPE BEXT(Model) BEXT(BKG) BEXT(Total) %CHANGE

1 270.326 -617.519 D 0.081 21.955 22.036 0.37

--- Number of recs with Extinction Change > 1.0 % : 0
--- Largest Extinction Change = 0.37 %

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

24HR VISIBILITY

VISIB BOESNCFG

(deciview)

START TIME % of Modeled Extinction by Species
Small Large SSalt
YEAR DAY HR RECEPTOR COORDINATES (km) TYPE DV(Total) DV(BKG) DELTA DV %_SO4 %_NO3 %_OC %_EC %_PMC %_PMF %_NO2 F(RH) F(RH) F(RH)
2001 365 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.880 2.790 3.930
2002 1 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 2 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 3 23 35 273.293 -614.653 D 8.025 7.957 0.068 19.20 78.47 2.07 0.04 0.06 0.09 0.07 3.850 2.770 3.900
2002 4 23 9 272.589 -616.522 D 8.071 7.957 0.113 28.02 65.83 1.75 0.03 0.05 0.08 4.24 3.850 2.770 3.900
2002 5 23 2 271.090 -617.494 D 7.957 7.957 0.000 35.00 65.00 0.00 0.01 0.02 0.03 1.90 3.850 2.770 3.900
2002 6 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 7 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 8 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 9 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 10 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 11 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 12 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.850 2.770 3.900
2002 13 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.850 2.770 3.900
2002 14 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 15 23 35 273.293 -614.653 D 8.109 7.957 0.151 14.71 78.03 4.11 0.07 0.12
0.19 2.78 3.850 2.770 3.900
2002 16 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 17 23 1 270.326 -617.519 D 7.957 7.957 0.000 53.91 45.70 0.00 0.01 0.02
0.03 0.25 3.850 2.770 3.900
2002 18 23 3 271.855 -617.469 D 7.958 7.957 0.001 46.95 51.59 0.97 0.02 0.03
0.04 0.42 3.850 2.770 3.900
2002 19 23 9 272.589 -616.522 D 8.010 7.957 0.052 35.47 61.81 2.34 0.04 0.07
0.11 0.16 3.850 2.770 3.900
2002 20 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 21 23 20 261.830 -615.022 D 8.415 7.957 0.458 22.74 71.78 3.38 0.06 0.09
0.15 1.80 3.850 2.770 3.900
2002 22 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 23 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 24 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 25 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 26 23 35 273.293 -614.653 D 8.405 7.957 0.448 36.70 59.35 3.60 0.06 0.10
0.16 0.03 3.850 2.770 3.900
2002 27 23 35 273.293 -614.653 D 7.962 7.957 0.005 33.37 62.89 3.40 0.06 0.10
0.15 0.04 3.850 2.770 3.900
2002 28 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 29 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 30 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 31 23 1 270.326 -617.519 D 7.957 7.957 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.850 2.770 3.900
2002 32 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 33 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 34 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 35 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 36 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 37 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 38 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 39 23 35 273.293 -614.653 D 7.990 7.809 0.181 34.94 62.58 2.26 0.04 0.06
0.10 0.02 3.440 2.530 3.520
2002 40 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 41 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.440 2.530 3.520
2002 42 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 43 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 44 23 18 260.302 -615.069 D 7.858 7.809 0.048 32.76 62.82 4.03 0.07 0.11
0.18 0.03 3.440 2.530 3.520
2002 45 23 35 273.293 -614.653 D 7.858 7.809 0.049 27.50 68.22 3.90 0.07 0.11
0.18 0.03 3.440 2.530 3.520
2002 46 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 47 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 48 23 8 271.825 -616.547 D 9.149 7.809 1.340 12.01 81.94 3.95 0.07 0.11
0.18 1.74 3.440 2.530 3.520
2002 49 23 35 273.293 -614.653 D 7.869 7.809 0.060 9.00 80.32 5.65 0.10 0.16
0.26 4.52 3.440 2.530 3.520
2002 50 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 51 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 52 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 53 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 54 23 35 273.293 -614.653 D 7.816 7.809 0.006 78.86 16.89 3.90 0.07 0.11
0.18 0.00 3.440 2.530 3.520
2002 55 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 56 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 57 23 1 270.326 -617.519 D 7.809 7.809 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.440 2.530 3.520
2002 58 23 18 260.302 -615.069 D 7.924 7.809 0.114 26.77 70.48 2.52 0.04 0.07
0.11 0.00 3.440 2.530 3.520
2002 59 23 18 260.302 -615.069 D 8.404 7.809 0.595 14.61 78.05 4.00 0.07 0.11
0.18 2.98 3.440 2.530 3.520
2002 60 23 18 260.302 -615.069 D 7.726 7.701 0.025 10.08 80.51 2.84 0.05 0.08
0.13 6.31 3.140 2.370 3.310
2002 61 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 62 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 63 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 64 23 3 271.855 -617.469 D 7.701 7.701 0.000 45.89 52.41 2.14 0.04 0.07
0.11 0.00 3.140 2.370 3.310
2002 65 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 66 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 67 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 68 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 69 23 18 260.302 -615.069 D 7.944 7.701 0.243 18.33 75.66 2.72 0.05 0.08

0.12 3.04 3.140 2.370 3.310
2002 70 23 18 260.302 -615.069 D 7.709 7.701 0.008 34.81 62.53 1.10 0.02 0.03
0.05 1.46 3.140 2.370 3.310
2002 71 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 72 23 35 273.293 -614.653 D 7.701 7.701 0.000 42.13 54.88 2.78 0.05 0.08
0.12 0.00 3.140 2.370 3.310
2002 73 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 74 23 3 271.855 -617.469 D 7.709 7.701 0.008 36.01 61.20 1.64 0.03 0.05
0.07 0.99 3.140 2.370 3.310
2002 75 23 3 271.855 -617.469 D 8.009 7.701 0.308 38.93 58.96 1.52 0.03 0.04
0.07 0.46 3.140 2.370 3.310
2002 76 23 1 270.326 -617.519 D 7.761 7.701 0.060 44.23 54.01 1.08 0.02 0.03
0.05 0.57 3.140 2.370 3.310
2002 77 23 3 271.855 -617.469 D 7.827 7.701 0.126 18.30 72.41 3.55 0.06 0.10
0.16 5.41 3.140 2.370 3.310
2002 78 23 1 270.326 -617.519 D 7.701 7.701 0.000 6.25 43.75 0.00 0.00 0.01
0.01 60.95 3.140 2.370 3.310
2002 79 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 80 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 81 23 9 272.589 -616.522 D 7.916 7.701 0.215 48.91 46.09 4.58 0.08 0.13
0.21 0.00 3.140 2.370 3.310
2002 82 23 35 273.293 -614.653 D 7.714 7.701 0.013 55.14 40.00 4.45 0.08 0.13
0.20 0.00 3.140 2.370 3.310
2002 83 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 84 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 85 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 86 23 9 272.589 -616.522 D 7.817 7.701 0.116 49.07 46.03 4.46 0.08 0.13
0.20 0.03 3.140 2.370 3.310
2002 87 23 1 270.326 -617.519 D 7.701 7.701 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.140 2.370 3.310
2002 88 23 1 270.326 -617.519 D 7.701 7.701 0.000 34.84 57.18 0.80 0.02 0.03
0.04 6.98 3.140 2.370 3.310
2002 89 23 3 271.855 -617.469 D 7.701 7.701 0.000 0.84 88.55 0.00 0.00 0.00
0.00 10.65 3.140 2.370 3.310
2002 90 23 3 271.855 -617.469 D 7.717 7.701 0.016 73.94 19.47 6.03 0.10 0.17
0.27 0.01 3.140 2.370 3.310
2002 91 23 35 273.293 -614.653 D 7.751 7.738 0.013 74.43 19.65 5.42 0.09 0.15
0.24 0.01 3.240 2.430 3.410
2002 92 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 93 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 94 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 95 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 96 23 19 261.066 -615.046 D 8.338 7.738 0.600 17.18 72.46 5.64 0.10 0.16
0.25 4.20 3.240 2.430 3.410
2002 97 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.240 2.430 3.410
2002 98 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 99 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 100 23 3 271.855 -617.469 D 7.855 7.738 0.117 79.25 16.41 3.98 0.07 0.11
0.18 0.00 3.240 2.430 3.410
2002 101 23 35 273.293 -614.653 D 7.777 7.738 0.039 63.89 33.00 2.84 0.05 0.08
0.13 0.01 3.240 2.430 3.410
2002 102 23 3 271.855 -617.469 D 7.824 7.738 0.086 74.38 21.96 3.36 0.06 0.09
0.15 0.00 3.240 2.430 3.410
2002 103 23 9 272.589 -616.522 D 7.794 7.738 0.056 57.91 39.16 2.68 0.05 0.08
0.12 0.00 3.240 2.430 3.410
2002 104 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 105 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 106 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 107 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 108 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 109 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 110 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 111 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 112 23 3 271.855 -617.469 D 8.417 7.738 0.679 46.53 47.74 4.52 0.08 0.13
0.20 0.80 3.240 2.430 3.410
2002 113 23 35 273.293 -614.653 D 7.738 7.738 0.000 59.23 37.67 2.79 0.05 0.08
0.13 0.00 3.240 2.430 3.410
2002 114 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 115 23 18 260.302 -615.069 D 7.788 7.738 0.050 50.21 47.64 1.96 0.03 0.06
0.09 0.01 3.240 2.430 3.410
2002 116 23 18 260.302 -615.069 D 7.814 7.738 0.076 14.40 75.91 5.09 0.09 0.14
0.23 4.13 3.240 2.430 3.410
2002 117 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 118 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 119 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 120 23 1 270.326 -617.519 D 7.738 7.738 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.240 2.430 3.410
2002 121 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 122 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 123 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 124 23 3 271.855 -617.469 D 7.987 7.892 0.095 73.83 22.45 3.34 0.06 0.09
0.15 0.08 3.660 2.680 3.830
2002 125 23 35 273.293 -614.653 D 7.900 7.892 0.009 65.97 31.22 2.55 0.04 0.07

0.12 0.03 3.660 2.680 3.830
2002 126 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 127 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 128 23 3 271.855 -617.469 D 7.892 7.892 0.000 70.95 25.39 3.12 0.06 0.09
0.14 0.35 3.660 2.680 3.830
2002 129 23 35 273.293 -614.653 D 7.924 7.892 0.033 44.94 53.23 1.36 0.02 0.04
0.06 0.35 3.660 2.680 3.830
2002 130 23 18 260.302 -615.069 D 8.060 7.892 0.168 26.76 69.71 2.87 0.05 0.08
0.13 0.40 3.660 2.680 3.830
2002 131 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 132 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 133 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 134 23 1 270.326 -617.519 D 8.179 7.892 0.287 72.38 19.63 7.10 0.12 0.20
0.32 0.24 3.660 2.680 3.830
2002 135 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 136 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 137 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 138 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 139 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 140 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 141 23 18 260.302 -615.069 D 8.131 7.892 0.240 55.90 35.98 6.88 0.12 0.19
0.31 0.62 3.660 2.680 3.830
2002 142 23 35 273.293 -614.653 D 7.892 7.892 0.000 60.18 32.54 6.65 0.12 0.19
0.30 0.00 3.660 2.680 3.830
2002 143 23 35 273.293 -614.653 D 7.892 7.892 0.001 60.39 36.07 3.24 0.06 0.09
0.15 0.00 3.660 2.680 3.830
2002 144 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 145 23 1 270.326 -617.519 D 7.892 7.892 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.660 2.680 3.830
2002 146 23 35 273.293 -614.653 D 7.893 7.892 0.002 59.35 39.53 1.01 0.02 0.03
0.05 0.00 3.660 2.680 3.830
2002 147 23 35 273.293 -614.653 D 7.939 7.892 0.047 36.21 61.66 1.95 0.03 0.05
0.09 0.00 3.660 2.680 3.830
2002 148 23 67 271.705 -612.860 D 7.892 7.892 0.000 65.88 32.19 1.29 0.02 0.04
0.06 0.42 3.660 2.680 3.830
2002 149 23 9 272.589 -616.522 D 7.918 7.892 0.027 76.79 21.26 1.78 0.03 0.05
0.08 0.00 3.660 2.680 3.830
2002 150 23 18 260.302 -615.069 D 7.892 7.892 0.000 75.66 23.89 0.54 0.01 0.02
0.03 0.00 3.660 2.680 3.830
2002 151 23 1 270.326 -617.519 D 7.894 7.892 0.003 70.35 26.33 3.05 0.05 0.09
0.14 0.00 3.660 2.680 3.830
2002 152 23 9 272.589 -616.522 D 7.969 7.910 0.059 52.96 44.66 2.19 0.04 0.06
0.10 0.00 3.710 2.710 3.880
2002 153 23 35 273.293 -614.653 D 7.911 7.910 0.001 71.98 22.03 5.46 0.10 0.15

0.25 0.01 3.710 2.710 3.880
2002 154 23 35 273.293 -614.653 D 7.910 7.910 0.000 66.23 26.95 5.92 0.10 0.16
0.26 0.01 3.710 2.710 3.880
2002 155 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 156 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 157 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 158 23 2 271.090 -617.494 D 7.910 7.910 0.000 91.62 6.86 1.29 0.02 0.03
0.06 0.00 3.710 2.710 3.880
2002 159 23 3 271.855 -617.469 D 8.031 7.910 0.121 49.27 46.59 3.31 0.06 0.09
0.15 0.53 3.710 2.710 3.880
2002 160 23 35 273.293 -614.653 D 8.328 7.910 0.418 40.90 52.00 4.23 0.07 0.12
0.19 2.49 3.710 2.710 3.880
2002 161 23 35 273.293 -614.653 D 8.000 7.910 0.090 63.10 32.07 3.48 0.06 0.10
0.16 1.04 3.710 2.710 3.880
2002 162 23 35 273.293 -614.653 D 7.937 7.910 0.027 87.83 4.25 7.23 0.13 0.20
0.33 0.03 3.710 2.710 3.880
2002 163 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 164 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 165 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 166 23 1 270.326 -617.519 D 7.910 7.910 0.000 87.50 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 167 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 168 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 169 23 3 271.855 -617.469 D 7.987 7.910 0.078 80.53 8.52 8.95 0.16 0.25
0.40 1.19 3.710 2.710 3.880
2002 170 23 66 270.940 -612.885 D 8.086 7.910 0.176 65.90 26.75 6.04 0.11 0.17
0.27 0.76 3.710 2.710 3.880
2002 171 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 172 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 173 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 174 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.710 2.710 3.880
2002 175 23 3 271.855 -617.469 D 7.914 7.910 0.004 70.43 26.69 2.64 0.05 0.07
0.12 0.00 3.710 2.710 3.880
2002 176 23 3 271.855 -617.469 D 7.948 7.910 0.038 61.65 36.63 1.58 0.03 0.04
0.07 0.00 3.710 2.710 3.880
2002 177 23 35 273.293 -614.653 D 7.914 7.910 0.005 76.16 22.49 1.24 0.02 0.03
0.06 0.00 3.710 2.710 3.880
2002 178 23 9 272.589 -616.522 D 8.075 7.910 0.165 88.99 8.64 2.17 0.04 0.06
0.10 0.01 3.710 2.710 3.880
2002 179 23 67 271.705 -612.860 D 7.921 7.910 0.011 77.67 20.30 1.86 0.03 0.05
0.08 0.00 3.710 2.710 3.880
2002 180 23 35 273.293 -614.653 D 7.964 7.910 0.054 42.89 51.33 4.17 0.07 0.12
0.19 1.23 3.710 2.710 3.880
2002 181 23 35 273.293 -614.653 D 8.023 7.910 0.114 69.27 27.55 2.91 0.05 0.08

0.13 0.00 3.710 2.710 3.880
2002 182 23 1 270.326 -617.519 D 7.848 7.830 0.018 59.38 39.15 1.33 0.02 0.04
0.06 0.03 3.490 2.590 3.690
2002 183 23 35 273.293 -614.653 D 7.858 7.830 0.028 68.32 30.20 1.26 0.02 0.04
0.06 0.11 3.490 2.590 3.690
2002 184 23 2 271.090 -617.494 D 8.043 7.830 0.213 77.25 20.32 2.18 0.04 0.06
0.10 0.05 3.490 2.590 3.690
2002 185 23 18 260.302 -615.069 D 7.884 7.830 0.053 76.52 21.62 1.71 0.03 0.05
0.08 0.00 3.490 2.590 3.690
2002 186 23 1 270.326 -617.519 D 7.830 7.830 0.000 64.06 26.56 0.00 0.02 0.02
0.04 0.00 3.490 2.590 3.690
2002 187 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 188 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 189 23 2 271.090 -617.494 D 7.831 7.830 0.001 88.45 6.00 5.06 0.09 0.14
0.23 0.00 3.490 2.590 3.690
2002 190 23 3 271.855 -617.469 D 7.838 7.830 0.007 84.30 11.54 3.82 0.07 0.11
0.17 0.00 3.490 2.590 3.690
2002 191 23 3 271.855 -617.469 D 7.834 7.830 0.004 81.88 14.99 2.86 0.05 0.08
0.13 0.00 3.490 2.590 3.690
2002 192 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 193 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 194 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 195 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 196 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 197 23 3 271.855 -617.469 D 7.831 7.830 0.001 34.33 55.34 1.73 0.03 0.05
0.08 8.41 3.490 2.590 3.690
2002 198 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 199 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 200 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 201 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 202 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 203 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 204 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 205 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 206 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 207 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 208 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 209 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.490 2.590 3.690
2002 210 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 211 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 212 23 1 270.326 -617.519 D 7.830 7.830 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.490 2.590 3.690
2002 213 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 214 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 215 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 216 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 217 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 218 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 219 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 220 23 18 260.302 -615.069 D 7.841 7.837 0.004 90.42 3.20 5.86 0.10 0.16
0.26 0.00 3.510 2.600 3.680
2002 221 23 36 260.273 -614.148 D 8.188 7.837 0.351 38.01 58.36 3.29 0.06 0.09
0.15 0.05 3.510 2.600 3.680
2002 222 23 18 260.302 -615.069 D 7.921 7.837 0.084 83.88 5.55 9.27 0.16 0.26
0.42 0.46 3.510 2.600 3.680
2002 223 23 35 273.293 -614.653 D 7.938 7.837 0.101 64.57 28.90 5.85 0.10 0.16
0.26 0.15 3.510 2.600 3.680
2002 224 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 225 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 226 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 227 23 35 273.293 -614.653 D 7.843 7.837 0.006 59.42 20.77 1.76 0.03 0.05
0.08 17.88 3.510 2.600 3.680
2002 228 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 229 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 230 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 231 23 9 272.589 -616.522 D 7.839 7.837 0.002 93.31 1.83 4.44 0.08 0.12
0.20 0.00 3.510 2.600 3.680
2002 232 23 35 273.293 -614.653 D 8.253 7.837 0.416 66.55 30.03 3.00 0.05 0.08
0.14 0.15 3.510 2.600 3.680
2002 233 23 3 271.855 -617.469 D 8.213 7.837 0.376 92.68 2.82 4.13 0.07 0.12
0.19 0.00 3.510 2.600 3.680
2002 234 23 35 273.293 -614.653 D 7.889 7.837 0.052 90.68 5.69 3.33 0.06 0.09
0.15 0.00 3.510 2.600 3.680
2002 235 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 236 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 237 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.510 2.600 3.680
2002 238 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 239 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 240 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 241 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 242 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 243 23 1 270.326 -617.519 D 7.837 7.837 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.510 2.600 3.680
2002 244 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 245 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 246 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 247 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 248 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 249 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 250 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 251 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 252 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 253 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 254 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 255 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 256 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 257 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 258 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 259 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 260 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 261 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 262 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 263 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 264 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 265 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.730 2.710 3.820
2002 266 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 267 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 268 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 269 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 270 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 271 23 1 270.326 -617.519 D 7.915 7.915 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.730 2.710 3.820
2002 272 23 18 260.302 -615.069 D 8.043 7.915 0.128 89.45 5.53 4.61 0.08 0.13
0.21 0.00 3.730 2.710 3.820
2002 273 23 35 273.293 -614.653 D 8.023 7.915 0.108 55.38 41.33 3.01 0.05 0.08
0.14 0.00 3.730 2.710 3.820
2002 274 23 35 273.293 -614.653 D 8.169 7.910 0.259 53.98 40.64 4.61 0.08 0.13
0.21 0.35 3.720 2.690 3.760
2002 275 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 276 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 277 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 278 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 279 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 280 23 1 270.326 -617.519 D 7.910 7.910 0.000 63.94 36.14 0.00 0.00 0.00
0.00 0.02 3.720 2.690 3.760
2002 281 23 3 271.855 -617.469 D 7.916 7.910 0.006 39.95 59.98 0.05 0.00 0.00
0.00 0.01 3.720 2.690 3.760
2002 282 23 18 260.302 -615.069 D 7.912 7.910 0.002 19.88 74.30 0.35 0.01 0.01
0.02 5.43 3.720 2.690 3.760
2002 283 23 1 270.326 -617.519 D 7.910 7.910 0.000 25.00 28.12 0.00 0.00 0.00
0.00 0.14 3.720 2.690 3.760
2002 284 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 285 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 286 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 287 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 288 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 289 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 290 23 9 272.589 -616.522 D 8.033 7.910 0.123 68.11 28.67 2.88 0.05 0.08
0.13 0.07 3.720 2.690 3.760
2002 291 23 9 272.589 -616.522 D 7.918 7.910 0.008 0.47 51.78 0.02 0.00 0.00
0.00 47.74 3.720 2.690 3.760
2002 292 23 3 271.855 -617.469 D 7.922 7.910 0.012 35.51 64.12 0.12 0.00 0.00
0.01 0.24 3.720 2.690 3.760
2002 293 23 18 260.302 -615.069 D 7.933 7.910 0.023 18.34 81.44 0.03 0.00 0.00

0.00 0.19 3.720 2.690 3.760
2002 294 23 1 270.326 -617.519 D 7.914 7.910 0.004 32.29 67.49 0.07 0.00 0.00
0.00 0.14 3.720 2.690 3.760
2002 295 23 2 271.090 -617.494 D 7.911 7.910 0.001 34.30 65.59 0.03 0.00 0.00
0.00 0.04 3.720 2.690 3.760
2002 296 23 1 270.326 -617.519 D 7.910 7.910 0.000 56.79 43.84 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 297 23 3 271.855 -617.469 D 8.077 7.910 0.167 50.67 46.69 2.07 0.04 0.06
0.09 0.39 3.720 2.690 3.760
2002 298 23 3 271.855 -617.469 D 7.918 7.910 0.008 50.57 47.65 1.46 0.03 0.04
0.07 0.18 3.720 2.690 3.760
2002 299 23 1 270.326 -617.519 D 7.911 7.910 0.001 35.77 63.21 0.37 0.01 0.01
0.02 0.64 3.720 2.690 3.760
2002 300 23 18 260.302 -615.069 D 7.934 7.910 0.024 23.42 71.87 0.26 0.00 0.01
0.01 4.43 3.720 2.690 3.760
2002 301 23 78 269.383 -612.012 D 7.940 7.910 0.030 20.00 77.03 0.20 0.00 0.01
0.01 2.74 3.720 2.690 3.760
2002 302 23 1 270.326 -617.519 D 7.910 7.910 0.000 17.19 71.09 0.00 0.00 0.00
0.00 0.26 3.720 2.690 3.760
2002 303 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 304 23 1 270.326 -617.519 D 7.910 7.910 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.720 2.690 3.760
2002 305 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 306 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 307 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 308 23 3 271.855 -617.469 D 7.897 7.897 0.000 1.90 85.55 0.00 0.00 0.00
0.00 12.07 3.680 2.670 3.770
2002 309 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 310 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 311 23 9 272.589 -616.522 D 7.919 7.897 0.022 44.81 51.75 3.15 0.05 0.09
0.14 0.00 3.680 2.670 3.770
2002 312 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 313 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 314 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 315 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 316 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 317 23 35 273.293 -614.653 D 7.903 7.897 0.006 33.24 63.56 2.94 0.05 0.08
0.13 0.00 3.680 2.670 3.770
2002 318 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 319 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 320 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 321 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.680 2.670 3.770
2002 322 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 323 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 324 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 325 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 326 23 9 272.589 -616.522 D 7.984 7.897 0.088 46.42 49.06 4.11 0.07 0.12
0.19 0.04 3.680 2.670 3.770
2002 327 23 35 273.293 -614.653 D 7.973 7.897 0.076 29.90 67.36 2.51 0.04 0.07
0.11 0.01 3.680 2.670 3.770
2002 328 23 3 271.855 -617.469 D 7.901 7.897 0.004 42.04 55.15 2.56 0.04 0.07
0.12 0.02 3.680 2.670 3.770
2002 329 23 3 271.855 -617.469 D 7.898 7.897 0.001 45.39 52.05 2.32 0.04 0.07
0.10 0.02 3.680 2.670 3.770
2002 330 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 331 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 332 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 333 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 334 23 1 270.326 -617.519 D 7.897 7.897 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.680 2.670 3.770
2002 335 23 3 271.855 -617.469 D 7.970 7.968 0.002 27.94 68.04 3.58 0.06 0.10
0.16 0.11 3.880 2.790 3.930
2002 336 23 1 270.326 -617.519 D 7.968 7.968 0.000 16.94 75.49 0.56 0.01 0.01
0.02 7.63 3.880 2.790 3.930
2002 337 23 3 271.855 -617.469 D 7.976 7.968 0.008 33.08 57.97 0.38 0.01 0.01
0.02 8.54 3.880 2.790 3.930
2002 338 23 1 270.326 -617.519 D 7.968 7.968 0.000 93.75 26.56 0.00 0.00 0.00
0.00 0.64 3.880 2.790 3.930
2002 339 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 340 23 3 271.855 -617.469 D 8.027 7.968 0.059 33.13 64.16 2.20 0.04 0.06
0.10 0.32 3.880 2.790 3.930
2002 341 23 9 272.589 -616.522 D 9.059 7.968 1.091 36.86 60.76 2.03 0.04 0.06
0.09 0.16 3.880 2.790 3.930
2002 342 23 18 260.302 -615.069 D 8.035 7.968 0.066 44.25 53.79 1.71 0.03 0.05
0.08 0.09 3.880 2.790 3.930
2002 343 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 344 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 345 23 1 270.326 -617.519 D 8.776 7.968 0.808 35.95 61.38 2.24 0.04 0.06
0.10 0.23 3.880 2.790 3.930
2002 346 23 3 271.855 -617.469 D 7.969 7.968 0.001 8.28 77.17 0.16 0.00 0.00
0.01 14.35 3.880 2.790 3.930
2002 347 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 348 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 349 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00

0.00 0.00 3.880 2.790 3.930
2002 350 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 351 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 352 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 353 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 354 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 355 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 356 23 3 271.855 -617.469 D 7.971 7.968 0.003 45.93 52.09 1.78 0.03 0.05
0.08 0.03 3.880 2.790 3.930
2002 357 23 1 270.326 -617.519 D 7.968 7.968 0.000 74.25 25.88 0.00 0.00 0.00
0.00 0.87 3.880 2.790 3.930
2002 358 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 359 23 1 270.326 -617.519 D 7.968 7.968 0.000 24.51 74.34 1.97 0.04 0.07
0.11 0.27 3.880 2.790 3.930
2002 360 23 3 271.855 -617.469 D 8.048 7.968 0.080 27.99 69.47 2.12 0.04 0.06
0.10 0.23 3.880 2.790 3.930
2002 361 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 362 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930
2002 363 23 1 270.326 -617.519 D 7.968 7.968 0.000 0.00 0.00 0.00 0.00 0.00
0.00 0.00 3.880 2.790 3.930

--- Ranked Daily Visibility Change ---
START TIME % of Modeled Extinction by Species
Small Large SSalt
YEAR DAY HR RECEPTOR COORDINATES (km) TYPE DV(Total) DV(BKG) DELTA DV %_SO4
%_NO3 %_OC %_EC %_PMC %_PMF %_NO2 F(RH) F(RH) F(RH)
2002 48 23 8 271.825 -616.547 D 9.149 7.809 1.340 12.01 81.94 3.95 0.07 0.11
0.18 1.74 3.440 2.530 3.520 1
2002 341 23 9 272.589 -616.522 D 9.059 7.968 1.091 36.86 60.76 2.03 0.04 0.06
0.09 0.16 3.880 2.790 3.930 2
2002 345 23 1 270.326 -617.519 D 8.776 7.968 0.808 35.95 61.38 2.24 0.04 0.06
0.10 0.23 3.880 2.790 3.930 3
2002 112 23 3 271.855 -617.469 D 8.417 7.738 0.679 46.53 47.74 4.52 0.08 0.13
0.20 0.80 3.240 2.430 3.410 4
2002 96 23 19 261.066 -615.046 D 8.338 7.738 0.600 17.18 72.46 5.64 0.10 0.16
0.25 4.20 3.240 2.430 3.410 5
2002 59 23 18 260.302 -615.069 D 8.404 7.809 0.595 14.61 78.05 4.00 0.07 0.11
0.18 2.98 3.440 2.530 3.520 6
2002 21 23 20 261.830 -615.022 D 8.415 7.957 0.458 22.74 71.78 3.38 0.06 0.09
0.15 1.80 3.850 2.770 3.900 7
2002 26 23 35 273.293 -614.653 D 8.405 7.957 0.448 36.70 59.35 3.60 0.06 0.10
0.16 0.03 3.850 2.770 3.900 8
2002 160 23 35 273.293 -614.653 D 8.328 7.910 0.418 40.90 52.00 4.23 0.07 0.12
0.19 2.49 3.710 2.710 3.880 9
2002 232 23 35 273.293 -614.653 D 8.253 7.837 0.416 66.55 30.03 3.00 0.05 0.08
0.14 0.15 3.510 2.600 3.680 10

2002 233 23 3 271.855 -617.469 D 8.213 7.837 0.376 92.68 2.82 4.13 0.07 0.12
0.19 0.00 3.510 2.600 3.680 11
2002 221 23 36 260.273 -614.148 D 8.188 7.837 0.351 38.01 58.36 3.29 0.06 0.09
0.15 0.05 3.510 2.600 3.680 12
2002 75 23 3 271.855 -617.469 D 8.009 7.701 0.308 38.93 58.96 1.52 0.03 0.04
0.07 0.46 3.140 2.370 3.310 13
2002 134 23 1 270.326 -617.519 D 8.179 7.892 0.287 72.38 19.63 7.10 0.12 0.20
0.32 0.24 3.660 2.680 3.830 14
2002 274 23 35 273.293 -614.653 D 8.169 7.910 0.259 53.98 40.64 4.61 0.08 0.13
0.21 0.35 3.720 2.690 3.760 15
2002 69 23 18 260.302 -615.069 D 7.944 7.701 0.243 18.33 75.66 2.72 0.05 0.08
0.12 3.04 3.140 2.370 3.310 16
2002 141 23 18 260.302 -615.069 D 8.131 7.892 0.240 55.90 35.98 6.88 0.12 0.19
0.31 0.62 3.660 2.680 3.830 17
2002 81 23 9 272.589 -616.522 D 7.916 7.701 0.215 48.91 46.09 4.58 0.08 0.13
0.21 0.00 3.140 2.370 3.310 18
2002 184 23 2 271.090 -617.494 D 8.043 7.830 0.213 77.25 20.32 2.18 0.04 0.06
0.10 0.05 3.490 2.590 3.690 19
2002 39 23 35 273.293 -614.653 D 7.990 7.809 0.181 34.94 62.58 2.26 0.04 0.06
0.10 0.02 3.440 2.530 3.520 20
2002 170 23 66 270.940 -612.885 D 8.086 7.910 0.176 65.90 26.75 6.04 0.11 0.17
0.27 0.76 3.710 2.710 3.880 21
2002 130 23 18 260.302 -615.069 D 8.060 7.892 0.168 26.76 69.71 2.87 0.05 0.08
0.13 0.40 3.660 2.680 3.830 22

--- Number of days with Delta-Deciview => 0.50: 6
--- Number of days with Delta-Deciview => 1.00: 2
--- Largest Delta-Deciview = 1.340

****
****

CALPOST Version 6.221 Level 080724

****
****

Run-Length VISIBILITY

VISIB BOESNCFG

(deciview)

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

1 270.326 -617.519 D 7.901 7.864 0.037

--- Number of recs with Delta-Deciview > 0.10: 0
--- Largest Delta-Deciview = 0.037