

Four Factor Analysis: Pete Lien and Sons, Inc. – Rapid City

Pete Lien and Sons operates a lime plant in Rapid City, South Dakota. The Wind Cave National Park is approximately 55 kilometers south southwest and the Badlands National Park is approximately 70 kilometers east southeast of the facility. DENR modeled the rotary kiln stack based on actual emissions for calendar year 2002. The modeling was conducted in order to estimate the visibility impacts of the kiln's air emissions on the Wind Cave and Badlands National Parks.

EPA promulgated the CALPUFF modeling system as a *Guideline Model* for Class I impact assessments and other long range transport applications or near field applications involving complex flows (U.S. EPA, 2000). The model is also recommended by both the Federal Land Managers (FLM) Air Quality Workgroup (FLAG, 2010) and the Interagency Workgroup on Air Quality Modeling (IWAQM, 1998). As described in EPA's Guideline on Air Quality Models (Appendix W of 40 CFR Part 51), long-range transport is defined as modeling with source receptor distances greater than 50 kilometers.

The CALPUFF modeling system consists of a meteorological data pre-processor (CALMET), the air dispersion model (CALPUFF), and post-processor program (CALPOST). DENR's modeling analysis was performed with EPA's approved Version 5.8 of the CALMET and CALPUFF models. Version 6.221 of CALPOST was used because it contains the FLM-approved implementation of Visibility Method 8 (FLAG, 2008).

Table I-1 displays the modeled emission rates, again based on actual data for calendar year 2002. The other stack parameters are available for review in the CALPUFF control file included as Appendix I-1.

Table I-1 – Wet Kilns Actual and Projected Emissions

Unit	Filterable PM ₁₀	SO ₂	NO _x
Rotary Kiln	0.1 pounds/hour	1.0 pounds/hour	68.7 pounds/hour

DENR calculated emission rates for condensible particulate matter 10 microns in diameter or less (PM₁₀) emissions and speciation of the filterable and condensible fraction of PM₁₀, as shown in Table I-2. The speciation is based on recommendations for modeling PM₁₀ speciation for Coal-fired Rotary Lime Kilns controlled by Fabric Filter. Workbooks and instructions are available for several types of lime kilns at the following National Park Service website:

<http://www.nature.nps.gov/air/permits/ect/ectCementKiln.cfm>

Table I-2 – PM₁₀ Speciation

Particle Size (microns)	CALPUFF Species Designation	Mass Fraction of Total PM ₁₀
Condensable Inorganic ¹	SO ₄	0.19
10-6	PM ₈₀₀	0.20
6-2.5	PM ₄₂₅	0.20
2.5-1.25	PM ₁₈₇	0.38

Particle Size (microns)	CALPUFF Species Designation	Mass Fraction of Total PM ₁₀
1.25-0.625	PM081	0.02

¹ – Assumed less than 1 micron.

DENR used the preprocessed CALMET.dat modeling files for calendar years 2002, 2006, and 2007, as submitted with the Modeling Report for a BART Assessment of the Big Stone I Coal-Fired Power Plant, Big Stone City, South Dakota in October 2009. Detailed discussion of the development of the data processing and CALMET settings used is available in the report (see Appendix B of this document). The CALMET processing was reviewed and approved by EPA and follows EPA's recommended CALMET switches issued August 31, 2009.

Regulatory default and or recommended visibility modeling settings were used in the CALPUFF input files for the technical options. Table I-3 lists key user-defined CALPUFF settings that were selected as well as the applicable default settings.

Table I-3 – Key CALPUFF Switch Settings

Parameter	Description	Default Value	DENR Value	Notes
Group 1 – General Options				
NSPEC	Number of chemical species	5	10	Particulate matter speciation discussed above
NSE	Number of species emitted	3	8	
METFM	Meteorological data format	1	1	1 = CALMET file
PGTIME	Pasquill-Gifford (PG) averaging time	60	60	Minutes
MGAUSS	Near-field vertical distribution	1	1	1 = Gaussian
MCTADJ	Terrain adjustments to plume path	3	3	3 = Partial plume path adjustment
MCHEM	Chemical mechanism flag	1	1	1 = MESOPUFF II chemistry
MDISP	Method for dispersion coefficients	3	3	3 = PG for rural and McElroy-Pooler (MP) for urban
MREG	Regulatory default checks	1	1	1 = Technical options must conform to EPA Long Range Transport guidance
SYTDEP	Equations used to determine sigma-y and -z	550	550	Puff size (m) beyond which equations (Heffter) are used to determine sigma y and z

Parameter	Description	Default Value	DENR Value	Notes
MHFTSZ	Heffter equation for sigma z	0	0	0 = Not use Heffter

Receptor locations and elevations for the potentially affected Class I areas were obtained from the National Park Service's Nature and Science website. The modeled receptor grids for each potentially affected Class I are shown relative to the source location in Figure I-1 along with the surface roughness lengths. The receptors numbered 1 through 189 in the modeling files correspond to the Wind Cave National Park and receptors numbered 1 through 289 correspond to the Badlands National Park.

To allow chemical transformations within CALPUFF with the recommended chemistry scheme (MESOPUFF II), the model required input of background ozone and ammonia. For ozone, hourly data collected from EPA's Air Quality System and Clean Air Status and Trends Network (CASTNET) databases was used. For any hour that was missing ozone data, the CALPUFF default value of 80 parts per billion was substituted.

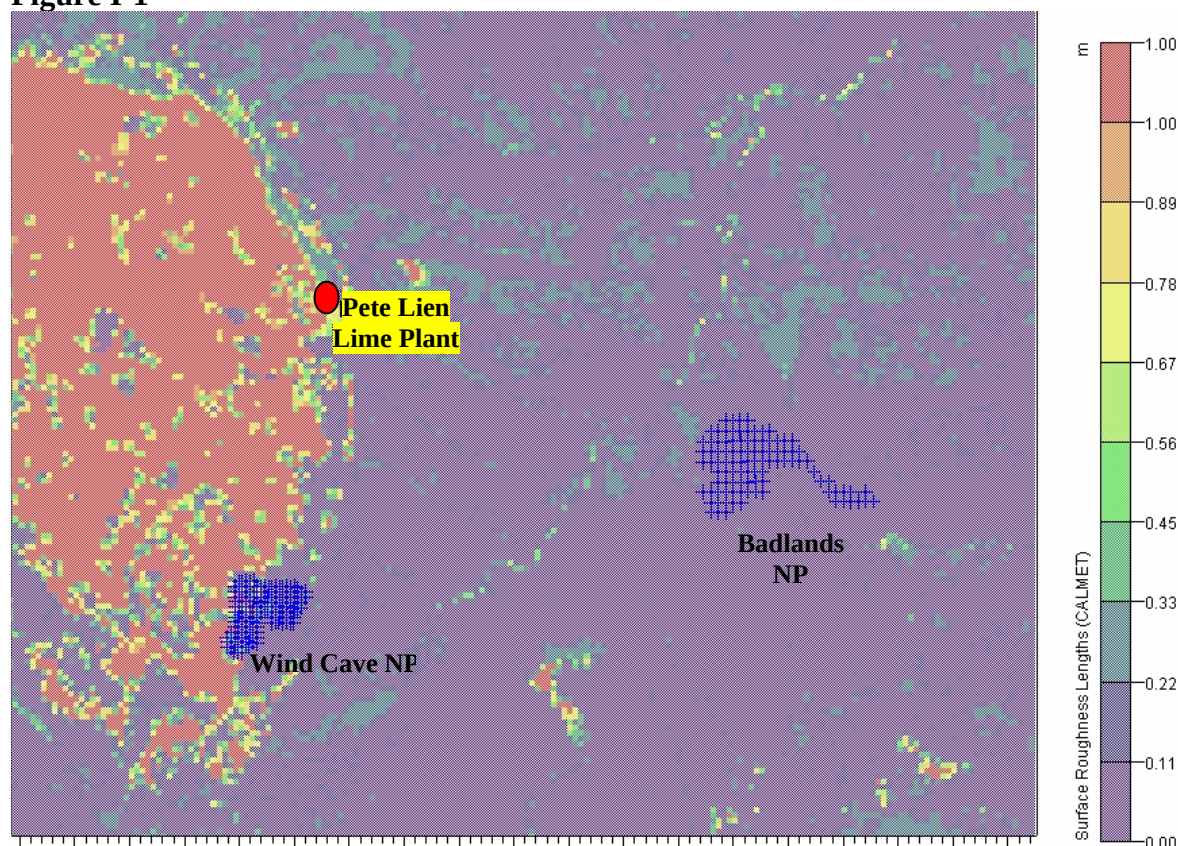
Along with ozone data, monthly average ammonia background values are required by the model. The background ammonia concentration used for the analysis was based on IWAQM Phase II guidance document (USEPA, 1998) list of suggested values. This document provides the following values for background ammonia concentrations:

1. Grasslands – 10 parts per billion;
2. Forest – 0.5 parts per billion; and
3. Arid Lands at 20°C – 1 parts per billion.

The chemical equilibrium between particle-phase ammonium nitrate and gas-phase nitric acid and ammonia has a fast reaction rate. Therefore, the local ammonia concentrations in the Class I areas themselves are the relevant factor of interest, not the ammonia concentrations across the entire domain. At the Wind Cave National Park the predominant land use is forest, while at the Badlands National Park the predominant land use is barren land and tundra (arid). A background ammonia concentration of 1.0 part per billion was used for both National Parks.

POSTUTIL is a post processing program used to process the concentrations generated by CALPUFF. POSTUTIL occurs prior to the visibility processing in CALPOST and allows the user to sum the contributions of sources from different CALPUFF simulations into a total concentration file. In addition, it contains options to scale the concentrations from different modeled species (e.g., different particle sizes) into species dependent size distributions for the particulate matter. For example, emission rates for each total particulate particle size category (e.g., PM₈₀₀, PM₄₂₅) were modeled in CALPUFF and, in the POSTUTIL stage; these are redistributed into the light scattering groups input into CALPOST.

Figure I-1



POSTUTIL requires the user to input the fractional distribution of the particulate emissions. DENR used the fractional distribution shown in Table I-4, based on the information in the National Park Service workbook for particulate matter speciation.

Table I-4 – PM₁₀ Speciation

CALPUFF Inputs Total Particulate Sizes	POSTUTIL Group	Fractional Distribution POSTUTIL Inputs			
		PMC ¹	SOA ²	EC ³	SOIL ⁴
SO ₄	SO ₄ (Sulfates)				
PM ₈₀₀	100% PM Coarse (filterable)	1.00	0.00	0.00	0.00
PM ₄₂₅	100% PM Coarse (filterable)	1.00	0.00	0.00	0.00
PM ₁₈₇	100% SOIL (filterable)	0.00	0.00	0.00	1.00
PM ₀₈₁	1.6% SOA (condense) and 98% EC (filterable)	0.00	0.016	0.984	0.00

¹ – PM Coarse means filterable particulates between 10 and 2.5 microns;

² – SOIL means filterable fine particulates (between 2.5 and 0.625 microns);

³ – SOA means Secondary organic aerosol; and

⁴ – EC means filterable fine particulates smaller than 0.625 microns.

Class I impacts for the kiln's different PM₁₀ size fractions and primary sulfate impacts were summed using the POSTUTIL program and distributed into the POSTUTIL groups with known

light extinction values (e.g., PM coarse, PM fine) prior to running CALPOST. Appendix I-2 contains an example POSTUTIL output file. This output file shows all of the POSTUTIL options employed for the analysis.

Calculations of the impact of the simulated plume particulate matter component concentrations on light extinction were carried out with the CALPOST postprocessor following the FLAG 2008 and 2010 guidance. In CALPOST, the IMPROVE algorithm as proposed by FLAG 2008 is implemented as CALPOST Method 8. The FLAG 2008 and methodology is included in CALPOST V6.221 Level 080724, which has been reviewed and approved by the FLMs. This version of CALPOST is publicly available on the TRC's CALPUFF website <http://www.src.com/calpuff/calpuff1.htm> and was used for this analysis.

Default settings or settings recommended under regulatory guidance were used in the CALPOST input files for the technical options. Table I-5 lists key user-defined CALPOST settings selected as well as the applicable default settings. A full CALPOST control file is included as Appendix I-3.

Table I-5 – CALPOST Switch Settings

Parameter	Description	Default Value	DENR Value	Notes
Group 1				
ASPEC	Species to process	No Default	VISIB	Visibility processing
Group 2				
MFRH	Particle growth curve f(RH)	4	4	4 = IMPROVE (2006) f(RH) tabulations for sea salt and for sulfate and nitrate particles
RHMAX	Maximum relative humidity (%) in growth curve	98	95	FLAG (2008) guidance
Modeled Species				
LVSO4	Include sulfate	T	T	
LVNO3	Include nitrate	T	T	
LVNO2	Include nitrogen dioxide absorption	T	T	
LVOC	Include organic carbon	T	T	
LVPMC	Include coarse particulates	T	T	
LVPMF	Include fine particulates	T	T	
LVEC	Include elemental carbon	T	T	
Extinction Efficiency				
EEPMC	Particulate matter coarse	0.6	0.6	
EEPMF	Particulate matter fine	1.0	1.0	

Parameter	Description	Default Value	DENR Value	Notes
EEPMCBK	Particulate matter coarse background	0.6	0.6	Background particulate species
EESO4	Ammonium sulfate	3.0	3.0	
EENO3	Ammonium nitrate	3.0	3.0	
EEOC	Organic carbon	4.0	4.0	
EESOIL	Soil	1.0	1.0	
EEEC	Elemental carbon	10.0	10.0	

DENR modeled three years of meteorological data to compare the visibility impacts predicted at the Badlands or Wind Cave National Parks. The results are displayed in Table I-6. The values in Table I-6 represent the eighth highest modeled impact per year.

Table I-6 – Summary – 8th High Modeled Delta-Deciview

Year	Delta-Deciview	
	Wind Cave	Badlands
2002	0.05	0.06
2006	0.06	0.05
2007	0.07	0.05

Appendix I-1 – CALPUFF Control File

CALPUFF

Version: 5.8

Level: 070623

Clock time: 08:20:32
Date: 01-06-2011

Internal Coordinate Transformations by --- COORDLIB Version: 1.98
Level: 060911

Run Title:

Based on Aug 2010 runs but , MSAM=99, sl2p5=10
Calmet.dat files from BS oct2009 submittal
Calpuff v5.8, Calpost v 6, postutil speciate

INPUT GROUP: 1 -- General run control parameters

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

METRUN = 0 - Run period explicitly defined below
METRUN = 1 - Run all periods in met. file

Starting date: Year (IBYR) -- No default ! IBYR = 2006 !
(used only if Month (IBMO) -- No default ! IBMO = 1 !
METRUN = 0) Day (IBDY) -- No default ! IBDY = 1 !
Hour (IBHR) -- No default ! IBHR = 1 !

Base time zone (XBTZ) -- No default ! XBTZ = 7 !
PST = 8., MST = 7.
CST = 6., EST = 5.

Length of run (hours) (IRLG) -- No default ! IRLG = 8736 !

Number of chemical species (NSPEC)
Default: 5 ! NSPEC = 10 !

Number of chemical species
to be emitted (NSE) Default: 3 ! NSE = 7 !

Flag to stop run after
SETUP phase (ITEST) Default: 2 ! ITEST = 2 !
(Used to allow checking

of the model inputs, files, etc.)

ITEST = 1 - STOPS program after SETUP phase

ITEST = 2 - Continues with execution of program
after SETUP

Restart Configuration:

Control flag (MRESTART) Default: 0 ! MRESTART = 0 !

0 = Do not read or write a restart file

1 = Read a restart file at the beginning of
the run

2 = Write a restart file during run

3 = Read a restart file at beginning of run
and write a restart file during run

Number of periods in Restart
output cycle (NRESPD) Default: 0 ! NRESPD = 500 !

0 = File written only at last period

>0 = File updated every NRESPD periods

Meteorological Data Format (METFM)

Default: 1 ! METFM = 1 !

METFM = 1 - CALMET binary file (CALMET.MET)

METFM = 2 - ISC ASCII file (ISCMET.MET)

METFM = 3 - AUSPLUME ASCII file (PLMMET.MET)

METFM = 4 - CTDM plus tower file (PROFILE.DAT) and
surface parameters file (SURFACE.DAT)

METFM = 5 - AERMET tower file (PROFILE.DAT) and
surface parameters file (SURFACE.DAT)

Meteorological Profile Data Format (MPRFFM)

(used only for METFM = 1, 2, 3)

Default: 1 ! MPRFFM = 1 !

MPRFFM = 1 - CTDM plus tower file (PROFILE.DAT)

MPRFFM = 2 - AERMET tower file (PROFILE.DAT)

PG sigma-y is adjusted by the factor (AVET/PGTIME)**0.2

Averaging Time (minutes) (AVET)

Default: 60.0 ! AVET = 60 !

PG Averaging Time (minutes) (PGTIME)

Default: 60.0 ! PGTIME = 60 !

!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: 1956 2055

 INPUT GROUP: 2 -- Technical options

!	Vertical distribution used in the near field (MGAUSS)	Default: 1	! MGAUSS = 1
	0 = uniform 1 = Gaussian		
!	Terrain adjustment method (MCTADJ)	Default: 3	! MCTADJ = 3
	0 = no adjustment 1 = ISC-type of terrain adjustment 2 = simple, CALPUFF-type of terrain adjustment 3 = partial plume path adjustment		
!	Subgrid-scale complex terrain flag (MCTSG)	Default: 0	! MCTSG = 0
	0 = not modeled 1 = modeled		
!	Near-field puffs modeled as elongated slugs? (MSLUG)	Default: 0	! MSLUG = 0
	0 = no 1 = yes (slug model used)		
!	Transitional plume rise modeled? (MTRANS)	Default: 1	! MTRANS = 1
	0 = no (i.e., final rise only) 1 = yes (i.e., transitional rise computed)		
	Stack tip downwash? (MTIP)	Default: 1	! MTIP = 1 !
	0 = no (i.e., no stack tip downwash) 1 = yes (i.e., use stack tip downwash)		
	Method used to simulate building downwash? (MBDW)	Default: 1	! MBDW = 1 !
	1 = ISC method 2 = PRIME method		
!	Vertical wind shear modeled above stack top? (MSHEAR)	Default: 0	! MSHEAR = 0
	0 = no (i.e., vertical wind shear not modeled) 1 = yes (i.e., vertical wind shear modeled)		
	Puff splitting allowed? (MSPLIT)	Default: 0	! MSPLIT = 0

```

!
    0 = no (i.e., puffs not split)
    1 = yes (i.e., puffs are split)

Chemical mechanism flag (MCHEM)          Default: 1      ! MCHEM = 1
!
    0 = chemical transformation not
        modeled
    1 = transformation rates computed
        internally (MESOPUFF II scheme)
    2 = user-specified transformation
        rates used
    3 = transformation rates computed
        internally (RIVAD/ARM3 scheme)
    4 = secondary organic aerosol formation
        computed (MESOPUFF II scheme for OH)

Aqueous phase transformation flag (MAQCHEM)
(Used only if MCHEM = 1, or 3)          Default: 0      ! MAQCHEM =
0 !
    0 = aqueous phase transformation
        not modeled
    1 = transformation rates adjusted
        for aqueous phase reactions

Wet removal modeled ? (MWET)            Default: 1      ! MWET = 1 !
    0 = no
    1 = yes

Dry deposition modeled ? (MDRY)          Default: 1      ! MDRY = 1 !
    0 = no
    1 = yes
    (dry deposition method specified
     for each species in Input Group 3)

Gravitational settling (plume tilt)
modeled ? (MTILT)                        Default: 0      ! MTILT = 0
!
    0 = no
    1 = yes
    (puff center falls at the gravitational
     settling velocity for 1 particle species)

Restrictions:
- MDRY   = 1
- NSPEC  = 1 (must be particle species as well)
- sg     = 0 GEOMETRIC STANDARD DEVIATION in Group 8 is
              set to zero for a single particle diameter

Method used to compute dispersion
coefficients (MDISP)                     Default: 3      ! MDISP = 3
!

    1 = dispersion coefficients computed from measured values
        of turbulence, sigma v, sigma w
    2 = dispersion coefficients from internally calculated

```

```

        sigma v, sigma w using micrometeorological variables
        (u*, w*, L, etc.)
3 = PG dispersion coefficients for RURAL areas (computed using
    the ISCST multi-segment approximation) and MP coefficients
in
    urban areas
4 = same as 3 except PG coefficients computed using
    the MESOPUFF II eqns.
5 = CTDM sigmas used for stable and neutral conditions.
    For unstable conditions, sigmas are computed as in
    MDISP = 3, described above. MDISP = 5 assumes that
    measured values are read

Sigma-v/sigma-theta, sigma-w measurements used? (MTURBVW)
(Used only if MDISP = 1 or 5)          Default: 3      ! MTURBVW =
3 !
    1 = use sigma-v or sigma-theta measurements
        from PROFILE.DAT to compute sigma-y
        (valid for METFM = 1, 2, 3, 4, 5)
    2 = use sigma-w measurements
        from PROFILE.DAT to compute sigma-z
        (valid for METFM = 1, 2, 3, 4, 5)
    3 = use both sigma-(v/theta) and sigma-w
        from PROFILE.DAT to compute sigma-y and sigma-z
        (valid for METFM = 1, 2, 3, 4, 5)
    4 = use sigma-theta measurements
        from PLMMET.DAT to compute sigma-y
        (valid only if METFM = 3)

Back-up method used to compute dispersion
when measured turbulence data are
missing (MDISP2)                      Default: 3      ! MDISP2 = 3
!
(used only if MDISP = 1 or 5)
    2 = dispersion coefficients from internally calculated
        sigma v, sigma w using micrometeorological variables
        (u*, w*, L, etc.)
    3 = PG dispersion coefficients for RURAL areas (computed using
        the ISCST multi-segment approximation) and MP coefficients
in
    urban areas
    4 = same as 3 except PG coefficients computed using
        the MESOPUFF II eqns.

[DIAGNOSTIC FEATURE]
Method used for Lagrangian timescale for Sigma-y
(used only if MDISP=1,2 or MDISP2=1,2)
(MTAULY)                          Default: 0      ! MTAULY = 0
!
    0 = Draxler default 617.284 (s)
    1 = Computed as Lag. Length / (.75 q) -- after SCIPUFF
    10 <Direct user input (s)          -- e.g., 306.9

[DIAGNOSTIC FEATURE]
Method used for Advective-Decay timescale for Turbulence
(used only if MDISP=2 or MDISP2=2)

```

```

0 !      (MTAUADV)                                Default: 0      ! MTAUADV =
      0 = No turbulence advection
      1 = Computed (OPTION NOT IMPLEMENTED)
      10 <Direct user input (s)  -- e.g., 300

Method used to compute turbulence sigma-v &
sigma-w using micrometeorological variables
(Used only if MDISP = 2 or MDISP2 = 2)
!      (MCTURB)                                Default: 1      ! MCTURB = 1
      1 = Standard CALPUFF subroutines
      2 = AERMOD subroutines

PG sigma-y,z adj. for roughness?      Default: 0      ! MROUGH = 0
!      (MROUGH)
      0 = no
      1 = yes

Partial plume penetration of          Default: 1      ! MPARTL = 1
!      elevated inversion?
      (MPARTL)
      0 = no
      1 = yes

Strength of temperature inversion      Default: 0      ! MTINV = 0
!      provided in PROFILE.DAT extended records?
      (MTINV)
      0 = no (computed from measured/default gradients)
      1 = yes

PDF used for dispersion under convective conditions?
                                         Default: 0      ! MPDF = 0 !
      (MPDF)
      0 = no
      1 = yes

Sub-Grid TIBL module used for shore line?
                                         Default: 0      ! MSGTIBL =
0 !      (MSGTIBL)
      0 = no
      1 = yes

Boundary conditions (concentration) modeled?
                                         Default: 0      ! MBCON = 0
!      (MBCON)
      0 = no
      1 = yes, using formatted BCON.DAT file
      2 = yes, using unformatted CONC.DAT file

```

Note: MBCON > 0 requires that the last species modeled

be 'BCON'. Mass is placed in species BCON when generating boundary condition puffs so that clean air entering the modeling domain can be simulated in the same way as polluted air. Specify zero emission of species BCON for all regular sources.

Individual source contributions saved?

Default: 0 ! MSOURCE =

1 !

(MSOURCE)

0 = no

1 = yes

Analyses of fogging and icing impacts due to emissions from arrays of mechanically-forced cooling towers can be performed using CALPUFF in conjunction with a cooling tower emissions processor (CTEMISS) and its associated postprocessors. Hourly emissions of water vapor and temperature from each cooling tower cell are computed for the current cell configuration and ambient conditions by CTEMISS. CALPUFF models the dispersion of these emissions and provides cloud information in a specialized format for further analysis. Output to FOG.DAT is provided in either 'plume mode' or 'receptor mode' format.

Configure for FOG Model output?

Default: 0 ! MFOG = 0 !

(MFOG)

0 = no

1 = yes - report results in PLUME Mode format

2 = yes - report results in RECEPTOR Mode format

Test options specified to see if they conform to regulatory values? (MREG)

Default: 1 ! MREG = 1 !

0 = NO checks are made

1 = Technical options must conform to USEPA

Long Range Transport (LRT) guidance

METFM 1 or 2

AVET 60. (min)

PGTIME 60. (min)

MGAUSS 1

MCTADJ 3

MTRANS 1

MTIP 1

MCHEM 1 or 3 (if modeling SOx, NOx)

MWET 1

MDRY 1

MDISP 2 or 3

MPDF 0 if MDISP=3

1 if MDISP=2

MROUGH 0

MPARTL 1

SYTDEP 550. (m)

MHFTSZ 0

SVMIN 0.5 (m/s)

!END!

INPUT GROUP: 3a, 3b -- Species list

Subgroup (3a)

The following species are modeled:

```
! CSPEC =      S02 !           !END!  
! CSPEC =      S04 !           !END!  
! CSPEC =      NOX !           !END!  
! CSPEC =      HN03 !          !END!  
! CSPEC =      N03 !           !END!  
! CSPEC =      PM800 !         !END!  
! CSPEC =      PM425 !         !END!  
! CSPEC =      PM187 !         !END!  
! CSPEC =      PM081 !         !END!  
! CSPEC =      PM056 !         !END!
```

OUTPUT GROUP SPECIES NUMBER	NAME	MODELED (0=NO, 1=YES)	EMITTED (0=NO, 1=YES)	Dry DEPOSITED (0=NO, 1=COMPUTED-GAS 2=COMPUTED- 3=USER-SPECIFIED)
(0=NONE, (Limit: 12 1=1st CGRUP, Characters PARTICLE 2=2nd CGRUP, in length) 3= etc.)				
!	S02 =	1,	1,	1,
0 !				
!	S04 =	1,	1,	2,
0 !				
!	NOX =	1,	1,	1,
0 !				
!	HN03 =	1,	0,	1,
0 !				
!	N03 =	1,	0,	2,
0 !				
!	PM800 =	1,	1,	2,
0 !				
!	PM425 =	1,	1,	2,
0 !				

```

!      PM187  =      1,      1,      2,
0 !
!      PM081  =      1,      1,      2,
0 !
!      PM056  =      1,      0,      2,
0 !

```

!END!

Note: The last species in (3a) must be 'BCON' when using the boundary condition option (MBCON > 0). Species BCON should typically be modeled as inert (no chem transformation or removal).

----- Subgroup (3b) -----

The following names are used for Species-Groups in which results for certain species are combined (added) prior to output. The CGRUP name will be used as the species name in output files. Use this feature to model specific particle-size distributions by treating each size-range as a separate species. Order must be consistent with 3(a) above.

----- INPUT GROUP: 4 -- Map Projection and Grid control parameters -----

Projection for all (X,Y):

Map projection
(PMAP)

Default: UTM ! PMAP = LCC !

UTM : Universal Transverse Mercator
TTM : Tangential Transverse Mercator
LCC : Lambert Conformal Conic
PS : Polar Stereographic
EM : Equatorial Mercator
LAZA : Lambert Azimuthal Equal Area

False Easting and Northing (km) at the projection origin
(Used only if PMAP= TTM, LCC, or LAZA)

(FEAST) Default=0.0 ! FEAST = 0 !
(FNORTH) Default=0.0 ! FNORTH = 0 !

UTM zone (1 to 60)

(Used only if PMAP=UTM)

(IUTMZN) No Default ! IUTMZN = 0 !

Hemisphere for UTM projection?
 (Used only if PMAP=UTM)
 (UTMHEM) Default: N ! UTMHEM = N !
 N : Northern hemisphere projection
 S : Southern hemisphere projection

Latitude and Longitude (decimal degrees) of projection origin
 (Used only if PMAP= TTM, LCC, PS, EM, or LAZA)
 (RLAT0) No Default ! RLAT0 = 40N !
 (RLON0) No Default ! RLON0 = 98W !

 TTM : RLON0 identifies central (true N/S) meridian of
 projection RLAT0 selected for convenience
 LCC : RLON0 identifies central (true N/S) meridian of
 projection RLAT0 selected for convenience
 PS : RLON0 identifies central (grid N/S) meridian of
 projection RLAT0 selected for convenience
 EM : RLON0 identifies central meridian of projection
 RLAT0 is REPLACED by 0.0N (Equator)
 LAZA: RLON0 identifies longitude of tangent-point of mapping
 plane
 RLAT0 identifies latitude of tangent-point of mapping
 plane

Matching parallel(s) of latitude (decimal degrees) for projection
 (Used only if PMAP= LCC or PS)
 (XLAT1) No Default ! XLAT1 = 20N !
 (XLAT2) No Default ! XLAT2 = 60N !

 LCC : Projection cone slices through Earth's surface at
 XLAT1 and XLAT2
 PS : Projection plane slices through Earth at XLAT1
 (XLAT2 is not used)

 Note: Latitudes and longitudes should be positive, and include a
 letter N,S,E, or W indicating north or south latitude, and
 east or west longitude. For example,
 35.9 N Latitude = 35.9N
 118.7 E Longitude = 118.7E

Datum-region

The Datum-Region for the coordinates is identified by a character
 string. Many mapping products currently available use the model
 of the Earth known as the World Geodetic System 1984 (WGS-84). Other
 local models may be in use, and their selection in CALMET will make its
 output consistent with local mapping products. The list of Datum-
 Regions with

official transformation parameters is provided by the National Imagery and Mapping Agency (NIMA).

NIMA Datum - Regions(Examples)

```

-----
WGS-84      WGS-84 Reference Ellipsoid and Geoid, Global coverage
(WGS84)
NAS-C       NORTH AMERICAN 1927 Clarke 1866 Spheroid, MEAN FOR
CONUS (NAD27)
NAR-C       NORTH AMERICAN 1983 GRS 80 Spheroid, MEAN FOR CONUS
(NAD83)
NWS-84      NWS 6370KM Radius, Sphere
ESR-S       ESRI REFERENCE 6371KM Radius, Sphere

```

Datum-region for output coordinates
 (DATUM) Default: WGS-84 ! DATUM = NWS-84 !

METEOROLOGICAL Grid:

Rectangular grid defined for projection PMAP,
 with X the Easting and Y the Northing coordinate

No. X grid cells (NX)	No default	! NX = 313 !
No. Y grid cells (NY)	No default	! NY = 181 !
No. vertical layers (NZ)	No default	! NZ = 10 !
Grid spacing (DGRIDKM)	No default	! DGRIDKM = 4 !
	Units: km	

Cell face heights
 (ZFACE(nz+1)) No defaults
 Units: m

! ZFACE = 0.0, 20.0, 40.0, 80.0, 160.0, 320.0, 640.0, 1200.0,
 2000.0, 3000.0, 4000.0 !

Reference Coordinates
 of SOUTHWEST corner of
 grid cell(1, 1):

X coordinate (XORIGKM)	No default	! XORIGKM = -506
Y coordinate (YORIGKM)	No default	! YORIGKM = 298
	Units: km	

COMPUTATIONAL Grid:

The computational grid is identical to or a subset of the MET.
 grid.

The lower left (LL) corner of the computational grid is at grid
 point

(IBCOMP, JBCOMP) of the MET. grid. The upper right (UR) corner
 of the

computational grid is at grid point (IECOMP, JECOMP) of the MET. grid.

The grid spacing of the computational grid is the same as the MET. grid.

!	X index of LL corner (IBCOMP)	No default	! IBCOMP = 1
	(1 <= IBCOMP <= NX)		
!	Y index of LL corner (JBCOMP)	No default	! JBCOMP = 1
	(1 <= JBCOMP <= NY)		
120 !	X index of UR corner (IECOMP)	No default	! IECOMP =
	(1 <= IECOMP <= NX)		
120 !	Y index of UR corner (JECOMP)	No default	! JECOMP =
	(1 <= JECOMP <= NY)		

SAMPLING Grid (GRIDDED RECEPTORS):

The lower left (LL) corner of the sampling grid is at grid point (IBSAMP, JBSAMP) of the MET. grid. The upper right (UR) corner of the sampling grid is at grid point (IESAMP, JESAMP) of the MET. grid. The sampling grid must be identical to or a subset of the computational grid. It may be a nested grid inside the computational grid. The grid spacing of the sampling grid is DGRIDKM/MESHDN.

!	Logical flag indicating if gridded receptors are used (LSAMP)	Default: T	! LSAMP = T
	(T=yes, F=no)		
!	X index of LL corner (IBSAMP)	No default	! IBSAMP = 1
	(IBCOMP <= IBSAMP <= IECOMP)		
!	Y index of LL corner (JBSAMP)	No default	! JBSAMP = 1
	(JBCOMP <= JBSAMP <= JECOMP)		
75 !	X index of UR corner (IESAMP)	No default	! IESAMP =
	(IBCOMP <= IESAMP <= IECOMP)		
75 !	Y index of UR corner (JESAMP)	No default	! JESAMP =
	(JBCOMP <= JESAMP <= JECOMP)		

are specified in Input Group 0)

Mass balance for each species
reported hourly?

(IMBAL) Default: 0 ! IMBAL = 0

!

0 = no

1 = yes (MASSBAL.DAT filename is
specified in Input Group 0)

LINE PRINTER OUTPUT OPTIONS:

Print concentrations (ICPRT) Default: 0 ! ICPRT = 0

!

Print dry fluxes (IDPRT) Default: 0 ! IDPRT = 0

!

Print wet fluxes (IWPRT) Default: 0 ! IWPRT = 0

!

(0 = Do not print, 1 = Print)

Concentration print interval
(ICFRQ) in hours Default: 1 ! ICFRQ = 1

!

Dry flux print interval
(IDFRQ) in hours Default: 1 ! IDFRQ = 1

!

Wet flux print interval
(IWFRQ) in hours Default: 1 ! IWFRQ = 1

!

Units for Line Printer 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	

Messages tracking progress of run
written to the screen ?

(IMESG) Default: 2 ! IMESG = 2

!

0 = no

1 = yes (advection step, puff ID)

2 = yes (YYYYJJJHH, # old puffs, # emitted puffs)

SPECIES (or GROUP for combined species) LIST FOR OUTPUT OPTIONS

	----- CONCENTRATIONS -----	----- DRY FLUXES -----
----- WET FLUXES -----	-- MASS FLUX --	
SPECIES		
/GROUP	PRINTED? SAVED ON DISK?	PRINTED? SAVED ON DISK?

PRINTED?	SAVED ON DISK?	SAVED ON DISK?			
-----	-----	-----	-----	-----	-----
!	S02 =	1,	1,	1,	1,
1,	1,	1	!		
!	S04 =	1,	1,	1,	1,
1,	1,	1	!		
!	NOX =	1,	1,	1,	1,
1,	1,	1	!		
!	HNO3 =	1,	1,	1,	1,
1,	1,	1	!		
!	NO3 =	1,	1,	1,	1,
1,	1,	1	!		
!	PM800 =	1,	1,	1,	1,
1,	1,	0	!		
!	PM425 =	1,	1,	1,	1,
1,	1,	0	!		
!	PM187 =	1,	1,	1,	1,
1,	1,	0	!		
!	PM081 =	1,	1,	1,	1,
1,	1,	0	!		
!	PM056 =	1,	1,	1,	1,
1,	1,	0	!		

Note: Species BCON (for MBCON > 0) does not need to be saved on disk.

OPTIONS FOR PRINTING "DEBUG" QUANTITIES (much output)

Logical for debug output (LDEBUG)	Default: F	!
LDEBUG = F !		
First puff to track (IPFDEB)	Default: 1	!
IPFDEB = 1 !		
Number of puffs to track (NPFDEB)	Default: 1	!
NPFDEB = 100 !		
Met. period to start output (NN1)	Default: 1	! NN1 =
1 !		
Met. period to end output (NN2)	Default: 10	! NN2 =
10 !		
!END!		

.....

Number of special complex terrain
receptors (NCTREC) Default: 0 !
NCTREC = 0 !

- 1 = Hill and Receptor data created by CTDM processors & read from HILL.DAT and HILLRCT.DAT files
- 2 = Hill data created by OPTHILL & input below in Subgroup (6b); Receptor data in Subgroup (6c)

Factor to convert vertical dimensions Default: 1.0 !
ZHILL2M = 1.0 !
to meters (MHILL=1)

YCTDMKM	Y-origin of CTDM system relative to CALPUFF coordinate system, in Kilometers (MHILL=1)	No Default	!
= 0.0			!

! END !

1 **

HILL information

HILL		XC	YC	THETAH	ZGRID	RELIEF	EXPO 1
EXPO 2	SCALE	1	SCALE 2	AMAX1	AMAX2		
NO.		(km)	(km)	(deg.)	(m)	(m)	(m)
(m)	(m)		(m)	(m)	(m)		
----		----	----	-----	-----	-----	-----

Subgroup (6c)

COMPLEX TERRAIN RECEPTOR INFORMATION

	XRCT (km)	YRCT (km)	ZRCT (m)	XHH
	-----	-----	-----	-----

1
Description of Complex Terrain Variables:
XC, YC = Coordinates of center of hill
THETAH = Orientation of major axis of hill (clockwise from North)
ZGRID = Height of the 0 of the grid above mean sea level
RELIEF = Height of the crest of the hill above the grid
elevation
EXPO 1 = Hill-shape exponent for the major axis
EXPO 2 = Hill-shape exponent for the major axis
SCALE 1 = Horizontal length scale along the major axis
SCALE 2 = Horizontal length scale along the minor axis
AMAX = Maximum allowed axis length for the major axis
BMAX = Maximum allowed axis length for the major axis

XRCT, YRCT = Coordinates of the complex terrain receptors
ZRCT = Height of the ground (MSL) at the complex terrain Receptor
XHH = Hill number associated with each complex terrain
receptor
(NOTE: MUST BE ENTERED AS A REAL NUMBER)

**

NOTE: DATA for each hill and CTSG receptor are treated as a separate
input subgroup and therefore must end with an input group terminator.

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

SPECIES MESOPHYLL RESISTANCE NAME (s/cm)	DIFFUSIVITY HENRY'S LAW (cm**2/s) (dimensionless)	ALPHA STAR LAW COEFFICIENT	REACTIVITY
-----	-----	-----	-----
! HN03 =	0.1628,	1,	18,

```

0,      8E-8 !
!      NOX =    0.1656,      1,      8,
5,      3.5 !
!      SO2 =    0.1509,      1000,      8,
0,      0.04 !

```

!END!

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

For SINGLE SPECIES, the mean and standard deviation are used to compute a deposition velocity for NINT (see group 9) size-ranges, and these are then averaged to obtain a mean deposition velocity.

For GROUPED SPECIES, the size distribution should be explicitly specified (by the 'species' in the group), and the standard deviation for each should be entered as 0. The model will then use the deposition velocity for the stated mean diameter.

	SPECIES NAME	GEOMETRIC MASS MEAN DIAMETER (microns)	GEOMETRIC STANDARD DEVIATION (microns)
!	N03 =	0.48,	2 !
!	PM056 =	0.5625,	0 !
!	PM081 =	0.8125,	0 !
!	PM187 =	1.875,	0 !
!	PM425 =	4.25,	0 !
!	PM800 =	8,	0 !
!	S04 =	0.48,	2 !

!END!

INPUT GROUP: 9 -- Miscellaneous dry deposition parameters

Reference cuticle resistance (s/cm)
(RCUTR) Default: 30 ! RCUTR = 30 !

Reference ground resistance (s/cm)
(RGR) Default: 10 ! RGR = 10 !

Reference pollutant reactivity
(REACTR) Default: 8 ! REACTR = 8 !

Number of particle-size intervals used to

evaluate effective particle deposition velocity
(NINT) Default: 9 ! NINT = 9 !

Vegetation state in unirrigated areas
(IVEG) Default: 1 ! IVEG = 1 !
IVEG=1 for active and unstressed vegetation
IVEG=2 for active and stressed vegetation
IVEG=3 for inactive vegetation

!END!

INPUT GROUP: 10 -- Wet Deposition Parameters

Scavenging Coefficient -- Units: (sec)**(-1)

Pollutant	Liquid Precip.	Frozen Precip.
! HNO3 =	6.00E-05,	0.00E00 !
! NO3 =	1.00E-04,	3.00E-05 !
! NOX =	0.00E00,	0.00E00 !
! PM056 =	1.00E-04,	3.00E-05 !
! PM081 =	1.00E-04,	3.00E-05 !
! PM187 =	1.00E-04,	3.00E-05 !
! PM425 =	1.00E-04,	3.00E-05 !
! PM800 =	1.00E-04,	3.00E-05 !
! SO2 =	3.00E-05,	0.00E00 !
! SO4 =	1.00E-04,	3.00E-05 !

!END!

INPUT GROUP: 11 -- Chemistry Parameters

Ozone data input option (MOZ) Default: 1 ! MOZ = 1
!

(Used only if MCHM = 1, 3, or 4)
0 = use a monthly background ozone value
1 = read hourly ozone concentrations from
the OZONE.DAT data file

Monthly ozone concentrations
(Used only if MCHM = 1, 3, or 4 and
MOZ = 0 or MOZ = 1 and all hourly O3 data missing)
(BCKO3) in ppb Default: 12*80.
! BCKO3 = 80, 80, 80, 80, 80, 80, 80, 80, 80, 80, 80 !

	Clean Marine (surface)											
.5	BCKPMF	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
.25	OFRAC	.25	.25	.30	.30	.30	.30	.30	.30	.30	.30	.30
50.	VCNX	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.
	Urban - low biogenic (controls present)											
30.	BCKPMF	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.
.20	OFRAC	.20	.20	.25	.25	.25	.25	.25	.25	.20	.20	.20
4.	VCNX	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
	Urban - high biogenic (controls present)											
60.	BCKPMF	60.	60.	60.	60.	60.	60.	60.	60.	60.	60.	60.
.25	OFRAC	.25	.25	.30	.30	.30	.55	.55	.55	.35	.35	.35
15.	VCNX	15.	15.	15.	15.	15.	15.	15.	15.	15.	15.	15.
	Regional Plume											
20.	BCKPMF	20.	20.	20.	20.	20.	20.	20.	20.	20.	20.	20.
.20	OFRAC	.20	.20	.25	.35	.25	.40	.40	.40	.30	.30	.30
15.	VCNX	15.	15.	15.	15.	15.	15.	15.	15.	15.	15.	15.
	Urban - no controls present											
100.	BCKPMF	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
.30	OFRAC	.30	.30	.35	.35	.35	.55	.55	.55	.35	.35	.35
2.	VCNX	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
	Default: Clean Continental											
1.00,	! BCKPMF =	1.00,	1.00,	1.00,	1.00,	1.00,	1.00,	1.00,	1.00,	1.00,	1.00,	1.00,
0.20,	! OFRAC =	0.15,	0.15,	0.20,	0.20,	0.20,	0.20,	0.20,	0.20,	0.20,	0.20,	0.15 !
50.00,	! VCNX =	50.00,	50.00,	50.00,	50.00,	50.00,	50.00,	50.00,	50.00,	50.00,	50.00,	50.00,

!END!

INPUT GROUP: 12 -- Misc. Dispersion and Computational Parameters

```

-----

Horizontal size of puff (m) beyond which
time-dependent dispersion equations (Heffter)
are used to determine sigma-y and
sigma-z (SYTDEP)                                Default: 550.    !
SYTDEP = 550 !

Switch for using Heffter equation for sigma z
as above (0 = Not use Heffter; 1 = use Heffter
(MHFTSZ)                                Default: 0      !
MHFTSZ = 0 !

Stability class used to determine plume
growth rates for puffs above the boundary
layer (JSUP)                                Default: 5      ! JSUP
= 5 !

Vertical dispersion constant for stable
conditions (k1 in Eqn. 2.7-3) (CONK1)        Default: 0.01   !
CONK1 = 0.01 !

Vertical dispersion constant for neutral/
unstable conditions (k2 in Eqn. 2.7-4)
(CONK2)                                Default: 0.1     !
CONK2 = 0.1 !

Factor for determining Transition-point from
Schulman-Scire to Huber-Snyder Building Downwash
scheme (SS used for Hs < Hb + TBD * HL)
(TBD)                                Default: 0.5     ! TBD
= 0.5 !
    TBD < 0 ==> always use Huber-Snyder
    TBD = 1.5 ==> always use Schulman-Scire
    TBD = 0.5 ==> ISC Transition-point

Range of land use categories for which
urban dispersion is assumed
(IURB1, IURB2)                                Default: 10      !
IURB1 = 10 !
                                           19      !
IURB2 = 19 !

Site characterization parameters for single-point Met data files
-----
(needed for METFM = 2,3,4,5)

Land use category for modeling domain
(ILANDUIN)                                Default: 20      !
ILANDUIN = 20 !

Roughness length (m) for modeling domain
(Z0IN)                                Default: 0.25    ! Z0IN
= .25 !

Leaf area index for modeling domain
(XLAIIN)                                Default: 3.0     !

```

XLAIIN = 3.0 !

Elevation above sea level (m)
(ELEVIN) Default: 0.0 !
ELEVIN = .0 !

Latitude (degrees) for met location
(XLATIN) Default: -999. !
XLATIN = -999.0 !

Longitude (degrees) for met location
(XLONIN) Default: -999. !
XLONIN = -999.0 !

Specialized information for interpreting single-point Met data
files -----

Anemometer height (m) (Used only if METFM = 2,3)
(ANEMHT) Default: 10. !
ANEMHT = 10.0 !

Form of lateral turbulence data in PROFILE.DAT file
(Used only if METFM = 4,5 or MTURBVW = 1 or 3)
(ISIGMAV) Default: 1 !
ISIGMAV = 1 !
0 = read sigma-theta
1 = read sigma-v

Choice of mixing heights (Used only if METFM = 4)
(IMIXCTDM) Default: 0 !
IMIXCTDM = 0 !
0 = read PREDICTED mixing heights
1 = read OBSERVED mixing heights

Maximum length of a slug (met. grid units)
(XMXLEN) Default: 1.0 !
XMXLEN = 1 !

Maximum travel distance of a puff/slug (in
grid units) during one sampling step
(XSAMLEN) Default: 1.0 !
XSAMLEN = 1 !

Maximum Number of slugs/puffs release from
one source during one time step
(MXNEW) Default: 99 !
MXNEW = 99 !

Maximum Number of sampling steps for
one puff/slug during one time step
(MXSAM) Default: 99 !
MXSAM = 99 !

Number of iterations used when computing
the transport wind for a sampling step
that includes gradual rise (for CALMET
and PROFILE winds)

(NCOUNT) Default: 2 !
 NCOUNT = 2 !

Minimum sigma y for a new puff/slug (m)
 (SYMIN) Default: 1.0 !
 SYMIN = 1 !

Minimum sigma z for a new puff/slug (m)
 (SZMIN) Default: 1.0 !
 SZMIN = 1 !

Default minimum turbulence velocities sigma-v and sigma-w
 for each stability class over land and over water (m/s)
 (SVMIN(12) and SWMIN(12))

WATER			LAND								
Stab Class :			A	B	C	D	E	F	A	B	C
D	E	F									
---	---	---	---	---	---	---	---	---	---	---	---
Default SVMIN :			.50,	.50,	.50,	.50,	.50,	.50,	.37,	.37,	.37,
.37,	.37,	.37									
Default SWMIN :			.20,	.12,	.08,	.06,	.03,	.016,	.20,	.12,	.08,
.06,	.03,	.016									
! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.5 ! ! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06, 0.03, 0.016 !											

Divergence criterion for dw/dz across puff
 used to initiate adjustment for horizontal
 convergence (1/s)
 Partial adjustment starts at CDIV(1), and
 full adjustment is reached at CDIV(2)
 (CDIV(2)) Default: 0.0,0.0 !
 CDIV = 0.01, 0.01 !

Minimum wind speed (m/s) allowed for
 non-calm conditions. Also used as minimum
 speed returned when using power-law
 extrapolation toward surface
 (WSCALM) Default: 0.5 !
 WSCALM = 0.5 !

Maximum mixing height (m)
 (XMAXZI) Default: 3000. !
 XMAXZI = 3000 !

Minimum mixing height (m)
 (XMINZI) Default: 50. !
 XMINZI = 50 !

Default wind speed classes --
 5 upper bounds (m/s) are entered;
 the 6th class has no upper limit

```

(WSCAT(5))
8.23, 10.8 (10.8+)

Default :
ISC RURAL : 1.54, 3.09, 5.14,

Wind Speed Class : 1      2      3      4
5
---
---
! WSCAT = 1.54, 3.09, 5.14,
8.23, 10.8 !

Default wind speed profile power-law
exponents for stabilities 1-6
(PLX0(6))
Default : ISC RURAL values
ISC RURAL : .07, .07, .10, .15,
.35, .55
ISC URBAN : .15, .15, .20, .25,
.30, .30

Stability Class :  A      B      C      D
E      F
---
---
! PLX0 = 0.07, 0.07, 0.1,
0.15, 0.35, 0.55 !

Default potential temperature gradient
for stable classes E, F (degK/m)
(PTG0(2))
Default: 0.020, 0.035
! PTG0 = 0.02, 0.035 !

Default plume path coefficients for
each stability class (used when option
for partial plume height terrain adjustment
is selected -- MCTADJ=3)
(PPC(6))
Stability Class :  A      B      C      D
E      F
Default PPC : .50, .50, .50,
.50, .35, .35
---
---
! PPC = 0.5, 0.5, 0.5, 0.5,
0.35, 0.35 !

Slug-to-puff transition criterion factor
equal to sigma-y/length of slug
(SL2PF)
Default: 10.      ! SL2PF
= 10 !

Puff-splitting control variables -----

VERTICAL SPLIT
-----

Number of puffs that result every time a puff
is split - nsplit=2 means that 1 puff splits
into 2

```

(NSPLIT) Default: 3 !
 NSPLIT = 3 !

Time(s) of a day when split puffs are eligible to
 be split once again; this is typically set once
 per day, around sunset before nocturnal shear develops.
 24 values: 0 is midnight (00:00) and 23 is 11 PM (23:00)
 0=do not re-split 1=eligible for re-split
 (IRESPLIT(24)) Default: Hour 17 = 1
 ! IRESPLIT = 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0 !

Split is allowed only if last hour's mixing
 height (m) exceeds a minimum value
 (ZISPLIT) Default: 100. !
 ZISPLIT = 100 !

Split is allowed only if ratio of last hour's
 mixing ht to the maximum mixing ht experienced
 by the puff is less than a maximum value (this
 postpones a split until a nocturnal layer develops)
 (ROLDMAX) Default: 0.25 !
 ROLDMAX = 0.25 !

HORIZONTAL SPLIT -----

Number of puffs that result every time a puff
 is split - nsplith=5 means that 1 puff splits
 into 5
 (NSPLITH) Default: 5 !
 NSPLITH = 5 !

Minimum sigma-y (Grid Cells Units) of puff
 before it may be split
 (SYSPLITH) Default: 1.0 !
 SYSPLITH = 1 !

Minimum puff elongation rate (SYSPLITH/hr) due to
 wind shear, before it may be split
 (SHSPLITH) Default: 2. !
 SHSPLITH = 2 !

Minimum concentration (g/m³) of each
 species in puff before it may be split
 Enter array of NSPEC values; if a single value is
 entered, it will be used for ALL species
 (CNSPLITH) Default: 1.0E-07 !
 CNSPLITH = 1E-7 !

Integration control variables -----

Fractional convergence criterion for numerical SLUG
 sampling integration
 (EPSSLUG) Default: 1.0e-04 !
 EPSSLUG = 0.0001 !

```

        Fractional convergence criterion for numerical AREA
        source integration
        (EPSAREA)                                Default:  1.0e-06  !
EPSAREA = 1E-6 !

        Trajectory step-length (m) used for numerical rise
        integration
        (DSRISE)                                Default:  1.0      !
DSRISE = 1 !

        Boundary Condition (BC) Puff control variables -----
-----

        Minimum height (m) to which BC puffs are mixed as they are
emitted
        (MBCON=2 ONLY). Actual height is reset to the current mixing
height
        at the release point if greater than this minimum.
        (HTMINBC)                                Default:  500.    *
HTMINBC = *

        Search radius (km) about a receptor for sampling nearest BC
puff.
        BC puffs are typically emitted with a spacing of one grid cell
        length, so the search radius should be greater than DGRIDKM.
        (RSAMPBC)                                Default:  10.     *
RSAMPBC = *

        Near-Surface depletion adjustment to concentration profile used
when
        sampling BC puffs?
        (MDEPBC)                                Default:  1      *
MDEPBC = *
        0 = Concentration is NOT adjusted for depletion
        1 = Adjust Concentration for depletion

!END!

-----
-----

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

-----
Subgroup (13a)
-----

        Number of point sources with
        parameters provided below      (NPT1)  No default  ! NPT1 = 1 !

        Units used for point source
        emissions below                  (IPTU)  Default: 1  ! IPTU = 1 !
            1 =          g/s
            2 =          kg/hr

```

3 = lb/hr
 4 = tons/yr
 5 = Odour Unit * m**3/s (vol. flux of odour compound)
 6 = Odour Unit * m**3/min
 7 = metric tons/yr

Number of source-species combinations with variable emissions scaling factors provided below in (13d) (NSPT1) Default: 0 ! NSPT1 = 0 !

Number of point sources with variable emission parameters provided in external file (NPT2) No default ! NPT2 = 0 !

(If NPT2 > 0, these point source emissions are read from the file: PTEMARB.DAT)

!END!

 Subgroup (13b)

a
 POINT SOURCE: CONSTANT DATA

b	c	X	Y	Stack	Base	Stack	Exit	Exit
Bldg.	Emission	Coordinate	Coordinate	Height	Elevation	Diameter	Vel.	
No.	Dwash	Rates						
Temp.		(km)	(km)	(m)	(m)	(m)	(m/s)	(deg.
K)								

1 ! SRCNAM = KILN4 !
 1 ! X = -398.123, 440.913, 22.9, 1055.0, 1.47, 20.79,
 547.0, 0.0, 0.0127, 0.003, 8.65,
 0, 0, 0.0032, 0.0032, 0.006, 0.0002, 0 !
 1 ! ZPLTFM = 0.0 !
 1 ! FMFAC = 1.0 ! !END!

 a
 Data for each source are treated as a separate input subgroup and therefore must end with an input group terminator.
 SRCNAM is a 12-character name for a source (No default)
 X is an array holding the source data listed by the column headings (No default)
 SIGYZI is an array holding the initial sigma-y and sigma-z (m)

(Default: 0.,0.)
 ZPLTFM is the platform height (m) for sources influenced by an isolated structure that has a significant open area between the surface and the bulk of the structure, such as an offshore oil platform. The Base Elevation is that of the surface (ground or ocean), and the Stack Height is the release height above the Base (not above the platform). Building heights entered in Subgroup 13c must be those of the buildings on the platform, measured from the platform deck. ZPLTFM is used only with MBDW=1 (ISC downwash method) for sources with building downwash. (Default: 0.0)
 FMFAC is a vertical momentum flux factor (0. or 1.0) used to represent the effect of rain-caps or other physical configurations that reduce momentum rise associated with the actual exit velocity. (Default: 1.0 -- full momentum used)

b
 0. = No building downwash modeled
 1. = Downwash modeled for buildings resting on the surface
 2. = Downwash modeled for buildings raised above the surface
 (ZPLTFM > 0.)
 NOTE: must be entered as a REAL number (i.e., with decimal point)

c
 An emission rate must be entered for every pollutant modeled. Enter emission rate of zero for secondary pollutants that are modeled, but not emitted. Units are specified by IPTU (e.g. 1 for g/s).

 Subgroup (13c)

BUILDING DIMENSION DATA FOR SOURCES SUBJECT TO DOWNWASH -----

Source
 a
 No. Effective building height, width, length and X/Y offset (in meters) every 10 degrees. LENGTH, XBADJ, and YBADJ are only needed for MBDW=2 (PRIME downwash option)

a
 Building height, width, length, and X/Y offset from the source
 are treated
 as a separate input subgroup for each source and therefore must
 end with
 an input group terminator. The X/Y offset is the position,
 relative to the
 stack, of the center of the upwind face of the projected
 building, with the
 x-axis pointing along the flow direction.

 Subgroup (13d)

a
 POINT SOURCE: VARIABLE EMISSIONS DATA

Use this subgroup to describe temporal variations in the emission
 rates given in 13b. Factors entered multiply the rates in 13b.
 Skip sources here that have constant emissions. For more
 elaborate
 variation in source parameters, use PTEMARB.DAT and NPT2 > 0.

IVARY determines the type of variation, and is source-specific:
 (IVARY) Default: 0

0 =	Constant	
1 =	Diurnal cycle (24 scaling factors: hours 1-24)	
2 =	Monthly cycle (12 scaling factors: months 1-12)	
3 =	Hour & Season (4 groups of 24 hourly scaling	
		factors,
		where first group is DEC-JAN-FEB)
4 =	Speed & Stab. (6 groups of 6 scaling factors,	
		where
		first group is Stability Class A,
		and the speed classes have upper
		bounds (m/s) defined in Group 12
5 =	Temperature (12 scaling factors, where	
temperature		classes have upper bounds (C) of:
		0, 5, 10, 15, 20, 25, 30, 35, 40,
		45, 50, 50+)

a
 Data for each species are treated as a separate input subgroup
 and therefore must end with an input group terminator.

INPUT GROUPS: 14a, 14b, 14c, 14d -- Area source parameters

Subgroup (14a)

Number of polygon area sources with
parameters specified below (NAR1) No default ! NAR1 = 0 !

Units used for area source
emissions below (IARU) Default: 1 ! IARU = 1 !

1 = g/m**2/s
2 = kg/m**2/hr
3 = lb/m**2/hr
4 = tons/m**2/yr
5 = Odour Unit * m/s (vol. flux/m**2 of odour
compound)
6 = Odour Unit * m/min
7 = metric tons/m**2/yr

Number of source-species
combinations with variable
emissions scaling factors
provided below in (14d) (NSAR1) Default: 0 ! NSAR1 = 0 !

Number of buoyant polygon area sources
with variable location and emission
parameters (NAR2) No default ! NAR2 = 0 !
(If NAR2 > 0, ALL parameter data for
these sources are read from the file: BAEMARB.DAT)

!END!

Subgroup (14b)

a

AREA SOURCE: CONSTANT DATA

Source No.	Effect. Height (m)	Base Elevation (m)	Initial Sigma z (m)	Emission Rates
-----	-----	-----	-----	-----

b

a

Data for each source are treated as a separate input subgroup
and therefore must end with an input group terminator.

b

An emission rate must be entered for every pollutant modeled.
Enter emission rate of zero for secondary pollutants that are
modeled, but not emitted. Units are specified by IARU
(e.g. 1 for g/m**2/s).

Subgroup (14c)

COORDINATES (km) FOR EACH VERTEX(4) OF EACH POLYGON

Source No. Ordered list of X followed by list of Y, grouped by source a

-

a
Data for each source are treated as a separate input subgroup
and therefore must end with an input group terminator.

Subgroup (14d)

a
AREA SOURCE: VARIABLE EMISSIONS DATA

Use this subgroup to describe temporal variations in the emission
rates given in 14b. Factors entered multiply the rates in 14b.
Skip sources here that have constant emissions. For more
elaborate variation in source parameters, use BAEMARB.DAT and NAR2 > 0.

IVARY determines the type of variation, and is source-specific:
(IVARY) Default: 0
0 = Constant
1 = Diurnal cycle (24 scaling factors: hours 1-24)
2 = Monthly cycle (12 scaling factors: months 1-12)
3 = Hour & Season (4 groups of 24 hourly scaling
factors, where first group is DEC-JAN-FEB)
4 = Speed & Stab. (6 groups of 6 scaling factors,
where first group is Stability Class A,
 and the speed classes have upper
 bounds (m/s) defined in Group 12
5 = Temperature (12 scaling factors, where
temperature classes have upper bounds (C) of:
 0, 5, 10, 15, 20, 25, 30, 35, 40,
 45, 50, 50+)

a
Data for each species are treated as a separate input subgroup
and therefore must end with an input group terminator.

INPUT GROUPS: 15a, 15b, 15c -- Line source parameters

Subgroup (15a)

Number of buoyant line sources
with variable location and emission
parameters (NLN2) No default ! NLN2
= 0 !

(If NLN2 > 0, ALL parameter data for
these sources are read from the file: LNEARB.DAT)

Number of buoyant line sources (NLINES) No default !
NLINES = 0 !

Units used for line source
emissions below (ILNU) Default: 1 !
ILNU = 1 !
1 = g/s
2 = kg/hr
3 = lb/hr
4 = tons/yr
5 = Odour Unit * m**3/s (vol. flux of odour compound)
6 = Odour Unit * m**3/min
7 = metric tons/yr

Number of source-species
combinations with variable
emissions scaling factors
provided below in (15c) (NSLN1) Default: 0 ! NSLN1 = 0 !

Maximum number of segments used to model
each line (MXNSEG) Default: 7 !
MXNSEG = 7 !

The following variables are required only if NLINES > 0. They
are used in the buoyant line source plume rise calculations.

Number of distances at which Default: 6 !
NLRISE = 6 !
transitional rise is computed

Average building length (XL) No default ! XL
= 0.0 !
(in meters)

Average building height (HBL) No default ! HBL
= 0.0 !

(in meters)

Average building width (WBL) No default ! WBL
 = 0.0 ! (in meters)

Average line source width (WML) No default ! WML
 = 0.0 ! (in meters)

Average separation between buildings (DXL) No default ! DXL
 = 0.0 ! (in meters)

Average buoyancy parameter (FPRIMEL) No default !
 FPRIMEL = 0 ! (in m**4/s**3)

!END!

 Subgroup (15b)

BUOYANT LINE SOURCE: CONSTANT DATA

a

Source Base No. Elevation (m)	Beg. X Emission Coordinate Rates (km)	Beg. Y Coordinate (km)	End. X Coordinate (km)	End. Y Coordinate (km)	Release Height (m)
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----

a
 Data for each source are treated as a separate input subgroup
 and therefore must end with an input group terminator.

b
 An emission rate must be entered for every pollutant modeled.
 Enter emission rate of zero for secondary pollutants that are
 modeled, but not emitted. Units are specified by ILNTU
 (e.g. 1 for g/s).

 Subgroup (15c)

BUOYANT LINE SOURCE: VARIABLE EMISSIONS DATA

a

Use this subgroup to describe temporal variations in the emission

rates given in 15b. Factors entered multiply the rates in 15b.
Skip sources here that have constant emissions.

IVARY determines the type of variation, and is source-specific:
(IVARY) Default: 0

0 =	Constant	
1 =	Diurnal cycle (24 scaling factors: hours 1-24)	
2 =	Monthly cycle (12 scaling factors: months 1-12)	
3 =	Hour & Season (4 groups of 24 hourly scaling	

factors,

4 =	Speed & Stab. (6 groups of 6 scaling factors,	where first group is DEC-JAN-FEB)
-----	---	-----------------------------------

where

5 =	Temperature (12 scaling factors, where	first group is Stability Class A,
-----	--	-----------------------------------

temperature

		and the speed classes have upper
		bounds (m/s) defined in Group 12
		classes have upper bounds (C) of:
		0, 5, 10, 15, 20, 25, 30, 35, 40,
		45, 50, 50+)

a

Data for each species are treated as a separate input subgroup
and therefore must end with an input group terminator.

INPUT GROUPS: 16a, 16b, 16c -- Volume source parameters

Subgroup (16a)

Number of volume sources with
parameters provided in 16b,c (NVL1) No default ! NVL1 = 0 !

Units used for volume source
emissions below in 16b (IVLU) Default: 1 ! IVLU = 1 !

1 =	g/s
2 =	kg/hr
3 =	lb/hr
4 =	tons/yr
5 =	Odour Unit * m**3/s (vol. flux of odour compound)
6 =	Odour Unit * m**3/min
7 =	metric tons/yr

Number of source-species
combinations with variable
emissions scaling factors

provided below in (16c) (NSVL1) Default: 0 ! NSVL1 = 0 !

Number of volume sources with
variable location and emission
parameters (NVL2) No default ! NVL2 = 0 !

(If NVL2 > 0, ALL parameter data for
these sources are read from the VOLEMARB.DAT file(s))

!END!

Subgroup (16b)

a
VOLUME SOURCE: CONSTANT DATA

b

	X	Y	Effect.	Base	Initial	Initial
Emission	Coordinate	Coordinate	Height	Elevation	Sigma y	Sigma z
Rates	(km)	(km)	(m)	(m)	(m)	(m)
	-----	-----	-----	-----	-----	-----

a
Data for each source are treated as a separate input subgroup
and therefore must end with an input group terminator.

b
An emission rate must be entered for every pollutant modeled.
Enter emission rate of zero for secondary pollutants that are
modeled, but not emitted. Units are specified by IVLU
(e.g. 1 for g/s).

Subgroup (16c)

a
VOLUME SOURCE: VARIABLE EMISSIONS DATA

Use this subgroup to describe temporal variations in the emission
rates given in 16b. Factors entered multiply the rates in 16b.
Skip sources here that have constant emissions. For more
elaborate variation in source parameters, use VOLEMARB.DAT and NVL2 > 0.

IVARY determines the type of variation, and is source-specific:
(IVARY) Default: 0

0 = Constant
1 = Diurnal cycle (24 scaling factors: hours 1-24)
2 = Monthly cycle (12 scaling factors: months 1-12)

factors, 3 = Hour & Season (4 groups of 24 hourly scaling
 where 4 = Speed & Stab. (6 groups of 6 scaling factors,
 first group is Stability Class A,
 and the speed classes have upper
 bounds (m/s) defined in Group 12
 temperature 5 = Temperature (12 scaling factors, where
 classes have upper bounds (C) of:
 0, 5, 10, 15, 20, 25, 30, 35, 40,
 45, 50, 50+)

 a
 Data for each species are treated as a separate input subgroup
 and therefore must end with an input group terminator.

 INPUT GROUPS: 17a & 17b -- Non-gridded (discrete) receptor information

 Subgroup (17a)

Number of non-gridded receptors (NREC) No default ! NREC = 289
 !
 !END!

 Subgroup (17b)

a
 NON-GRIDDED (DISCRETE) RECEPTOR DATA

Receptor No.	X Coordinate (km)	Y Coordinate (km)	Ground Elevation (m)	Height Above Ground (m)	b
-----	-----	-----	-----	-----	
1 ! X =	-416.171,	380.781,	1280.0,	0.0 !	
!END!					
2 ! X =	-415.541,	380.742,	1280.0,	0.0 !	
!END!					
3 ! X =	-414.911,	380.702,	1271.0,	0.0 !	
!END!					
4 ! X =	-417.376,	381.730,	1280.0,	0.0 !	

!END!					
5	!	X =	-416.746,	381.690,	1280.0, 0.0 !
!END!					
6	!	X =	-416.116,	381.651,	1280.0, 0.0 !
!END!					
7	!	X =	-415.486,	381.611,	1280.0, 0.0 !
!END!					
8	!	X =	-414.856,	381.571,	1219.0, 0.0 !
!END!					
9	!	X =	-414.226,	381.532,	1219.0, 0.0 !
!END!					
10	!	X =	-413.596,	381.492,	1252.0, 0.0 !
!END!					
11	!	X =	-417.321,	382.599,	1280.0, 0.0 !
!END!					
12	!	X =	-416.691,	382.559,	1280.0, 0.0 !
!END!					
13	!	X =	-416.062,	382.520,	1280.0, 0.0 !
!END!					
14	!	X =	-415.432,	382.480,	1280.0, 0.0 !
!END!					
15	!	X =	-414.801,	382.440,	1244.0, 0.0 !
!END!					
16	!	X =	-414.171,	382.401,	1244.0, 0.0 !
!END!					
17	!	X =	-413.541,	382.361,	1236.0, 0.0 !
!END!					
18	!	X =	-412.912,	382.322,	1226.0, 0.0 !
!END!					
19	!	X =	-412.281,	382.282,	1209.0, 0.0 !
!END!					
20	!	X =	-417.266,	383.469,	1341.0, 0.0 !
!END!					
21	!	X =	-416.637,	383.429,	1330.0, 0.0 !
!END!					
22	!	X =	-416.007,	383.389,	1307.0, 0.0 !
!END!					
23	!	X =	-415.377,	383.349,	1280.0, 0.0 !
!END!					
24	!	X =	-414.747,	383.310,	1274.0, 0.0 !
!END!					
25	!	X =	-414.117,	383.270,	1271.0, 0.0 !
!END!					
26	!	X =	-413.487,	383.230,	1274.0, 0.0 !
!END!					
27	!	X =	-412.857,	383.191,	1280.0, 0.0 !
!END!					
28	!	X =	-412.227,	383.152,	1224.0, 0.0 !
!END!					
29	!	X =	-416.582,	384.298,	1341.0, 0.0 !
!END!					
30	!	X =	-415.952,	384.258,	1336.0, 0.0 !
!END!					
31	!	X =	-415.322,	384.218,	1290.0, 0.0 !
!END!					
32	!	X =	-414.692,	384.178,	1256.0, 0.0 !
!END!					

33 ! X =	-414.062,	384.139,	1219.0,	0.0 !
!END!				
34 ! X =	-413.432,	384.099,	1219.0,	0.0 !
!END!				
35 ! X =	-412.803,	384.060,	1219.0,	0.0 !
!END!				
36 ! X =	-412.172,	384.020,	1177.0,	0.0 !
!END!				
37 ! X =	-415.897,	385.127,	1340.0,	0.0 !
!END!				
38 ! X =	-415.267,	385.087,	1290.0,	0.0 !
!END!				
39 ! X =	-414.637,	385.048,	1280.0,	0.0 !
!END!				
40 ! X =	-414.008,	385.008,	1280.0,	0.0 !
!END!				
41 ! X =	-413.378,	384.969,	1219.0,	0.0 !
!END!				
42 ! X =	-412.748,	384.929,	1271.0,	0.0 !
!END!				
43 ! X =	-412.118,	384.890,	1251.0,	0.0 !
!END!				
44 ! X =	-415.842,	385.996,	1334.0,	0.0 !
!END!				
45 ! X =	-415.213,	385.957,	1298.0,	0.0 !
!END!				
46 ! X =	-414.583,	385.917,	1280.0,	0.0 !
!END!				
47 ! X =	-413.953,	385.878,	1280.0,	0.0 !
!END!				
48 ! X =	-413.323,	385.838,	1280.0,	0.0 !
!END!				
49 ! X =	-412.694,	385.799,	1280.0,	0.0 !
!END!				
50 ! X =	-412.064,	385.759,	1219.0,	0.0 !
!END!				
51 ! X =	-409.545,	385.602,	1186.0,	0.0 !
!END!				
52 ! X =	-408.915,	385.563,	1158.0,	0.0 !
!END!				
53 ! X =	-408.286,	385.524,	1140.0,	0.0 !
!END!				
54 ! X =	-407.655,	385.485,	1145.0,	0.0 !
!END!				
55 ! X =	-407.026,	385.446,	1152.0,	0.0 !
!END!				
56 ! X =	-406.396,	385.407,	1158.0,	0.0 !
!END!				
57 ! X =	-405.767,	385.369,	1158.0,	0.0 !
!END!				
58 ! X =	-415.787,	386.865,	1344.0,	0.0 !
!END!				
59 ! X =	-415.158,	386.826,	1294.0,	0.0 !
!END!				
60 ! X =	-414.528,	386.786,	1280.0,	0.0 !
!END!				
61 ! X =	-413.898,	386.746,	1280.0,	0.0 !

!END!					
62	!	X =	-413.269,	386.707,	1280.0, 0.0 !
!END!					
63	!	X =	-412.639,	386.668,	1280.0, 0.0 !
!END!					
64	!	X =	-412.009,	386.628,	1220.0, 0.0 !
!END!					
65	!	X =	-409.491,	386.471,	1219.0, 0.0 !
!END!					
66	!	X =	-408.861,	386.432,	1158.0, 0.0 !
!END!					
67	!	X =	-408.232,	386.393,	1153.0, 0.0 !
!END!					
68	!	X =	-407.602,	386.354,	1156.0, 0.0 !
!END!					
69	!	X =	-406.972,	386.315,	1158.0, 0.0 !
!END!					
70	!	X =	-406.343,	386.276,	1157.0, 0.0 !
!END!					
71	!	X =	-405.713,	386.238,	1219.0, 0.0 !
!END!					
72	!	X =	-415.733,	387.735,	1341.0, 0.0 !
!END!					
73	!	X =	-415.103,	387.695,	1306.0, 0.0 !
!END!					
74	!	X =	-414.473,	387.655,	1304.0, 0.0 !
!END!					
75	!	X =	-413.844,	387.616,	1341.0, 0.0 !
!END!					
76	!	X =	-413.214,	387.576,	1289.0, 0.0 !
!END!					
77	!	X =	-412.585,	387.537,	1272.0, 0.0 !
!END!					
78	!	X =	-411.955,	387.497,	1219.0, 0.0 !
!END!					
79	!	X =	-411.326,	387.458,	1280.0, 0.0 !
!END!					
80	!	X =	-410.696,	387.419,	1280.0, 0.0 !
!END!					
81	!	X =	-410.066,	387.380,	1220.0, 0.0 !
!END!					
82	!	X =	-409.437,	387.341,	1218.0, 0.0 !
!END!					
83	!	X =	-408.807,	387.301,	1184.0, 0.0 !
!END!					
84	!	X =	-408.178,	387.262,	1158.0, 0.0 !
!END!					
85	!	X =	-407.548,	387.223,	1158.0, 0.0 !
!END!					
86	!	X =	-406.918,	387.185,	1158.0, 0.0 !
!END!					
87	!	X =	-406.289,	387.146,	1158.0, 0.0 !
!END!					
88	!	X =	-405.660,	387.107,	1212.0, 0.0 !
!END!					
89	!	X =	-415.678,	388.604,	1411.0, 0.0 !
!END!					

90 ! X =	-415.048,	388.564,	1341.0,	0.0 !
!END!				
91 ! X =	-414.419,	388.524,	1348.0,	0.0 !
!END!				
92 ! X =	-413.789,	388.485,	1347.0,	0.0 !
!END!				
93 ! X =	-413.160,	388.445,	1297.0,	0.0 !
!END!				
94 ! X =	-412.531,	388.406,	1284.0,	0.0 !
!END!				
95 ! X =	-411.901,	388.366,	1284.0,	0.0 !
!END!				
96 ! X =	-411.271,	388.327,	1280.0,	0.0 !
!END!				
97 ! X =	-410.642,	388.288,	1236.0,	0.0 !
!END!				
98 ! X =	-410.012,	388.249,	1219.0,	0.0 !
!END!				
99 ! X =	-409.383,	388.210,	1221.0,	0.0 !
!END!				
100 ! X =	-408.753,	388.170,	1202.0,	0.0 !
!END!				
101 ! X =	-408.124,	388.131,	1158.0,	0.0 !
!END!				
102 ! X =	-407.494,	388.092,	1158.0,	0.0 !
!END!				
103 ! X =	-406.865,	388.054,	1158.0,	0.0 !
!END!				
104 ! X =	-406.235,	388.015,	1219.0,	0.0 !
!END!				
105 ! X =	-405.606,	387.976,	1219.0,	0.0 !
!END!				
106 ! X =	-404.976,	387.937,	1191.0,	0.0 !
!END!				
107 ! X =	-404.347,	387.899,	1152.0,	0.0 !
!END!				
108 ! X =	-415.623,	389.473,	1402.0,	0.0 !
!END!				
109 ! X =	-414.994,	389.433,	1402.0,	0.0 !
!END!				
110 ! X =	-414.364,	389.394,	1402.0,	0.0 !
!END!				
111 ! X =	-413.735,	389.354,	1376.0,	0.0 !
!END!				
112 ! X =	-413.105,	389.315,	1341.0,	0.0 !
!END!				
113 ! X =	-412.476,	389.275,	1336.0,	0.0 !
!END!				
114 ! X =	-411.846,	389.236,	1322.0,	0.0 !
!END!				
115 ! X =	-411.217,	389.197,	1280.0,	0.0 !
!END!				
116 ! X =	-410.588,	389.157,	1274.0,	0.0 !
!END!				
117 ! X =	-409.958,	389.118,	1274.0,	0.0 !
!END!				
118 ! X =	-409.329,	389.079,	1280.0,	0.0 !

!END!				
119 ! X =	-408.700,	389.040,	1219.0,	0.0 !
!END!				
120 ! X =	-408.070,	389.001,	1177.0,	0.0 !
!END!				
121 ! X =	-407.440,	388.962,	1158.0,	0.0 !
!END!				
122 ! X =	-406.811,	388.923,	1163.0,	0.0 !
!END!				
123 ! X =	-406.182,	388.884,	1219.0,	0.0 !
!END!				
124 ! X =	-405.553,	388.845,	1165.0,	0.0 !
!END!				
125 ! X =	-404.923,	388.807,	1166.0,	0.0 !
!END!				
126 ! X =	-404.293,	388.768,	1158.0,	0.0 !
!END!				
127 ! X =	-415.568,	390.342,	1402.0,	0.0 !
!END!				
128 ! X =	-414.939,	390.302,	1402.0,	0.0 !
!END!				
129 ! X =	-414.309,	390.263,	1451.0,	0.0 !
!END!				
130 ! X =	-413.680,	390.223,	1360.0,	0.0 !
!END!				
131 ! X =	-413.051,	390.184,	1341.0,	0.0 !
!END!				
132 ! X =	-412.422,	390.144,	1341.0,	0.0 !
!END!				
133 ! X =	-411.792,	390.105,	1341.0,	0.0 !
!END!				
134 ! X =	-411.163,	390.065,	1288.0,	0.0 !
!END!				
135 ! X =	-410.534,	390.026,	1280.0,	0.0 !
!END!				
136 ! X =	-409.904,	389.987,	1280.0,	0.0 !
!END!				
137 ! X =	-409.275,	389.948,	1280.0,	0.0 !
!END!				
138 ! X =	-408.646,	389.909,	1273.0,	0.0 !
!END!				
139 ! X =	-408.016,	389.870,	1280.0,	0.0 !
!END!				
140 ! X =	-407.387,	389.831,	1201.0,	0.0 !
!END!				
141 ! X =	-406.758,	389.792,	1211.0,	0.0 !
!END!				
142 ! X =	-406.128,	389.753,	1219.0,	0.0 !
!END!				
143 ! X =	-405.499,	389.714,	1219.0,	0.0 !
!END!				
144 ! X =	-404.869,	389.676,	1214.0,	0.0 !
!END!				
145 ! X =	-404.240,	389.637,	1170.0,	0.0 !
!END!				
146 ! X =	-403.611,	389.598,	1158.0,	0.0 !
!END!				

147 ! X =	-415.513,	391.211,	1402.0,	0.0 !
!END!				
148 ! X =	-414.884,	391.172,	1455.0,	0.0 !
!END!				
149 ! X =	-414.255,	391.132,	1402.0,	0.0 !
!END!				
150 ! X =	-413.626,	391.092,	1399.0,	0.0 !
!END!				
151 ! X =	-412.996,	391.053,	1390.0,	0.0 !
!END!				
152 ! X =	-412.367,	391.014,	1350.0,	0.0 !
!END!				
153 ! X =	-411.738,	390.974,	1341.0,	0.0 !
!END!				
154 ! X =	-411.109,	390.935,	1283.0,	0.0 !
!END!				
155 ! X =	-410.480,	390.896,	1289.0,	0.0 !
!END!				
156 ! X =	-409.850,	390.856,	1291.0,	0.0 !
!END!				
157 ! X =	-409.221,	390.817,	1291.0,	0.0 !
!END!				
158 ! X =	-408.592,	390.778,	1280.0,	0.0 !
!END!				
159 ! X =	-407.963,	390.739,	1280.0,	0.0 !
!END!				
160 ! X =	-407.333,	390.700,	1219.0,	0.0 !
!END!				
161 ! X =	-406.704,	390.661,	1218.0,	0.0 !
!END!				
162 ! X =	-406.075,	390.623,	1252.0,	0.0 !
!END!				
163 ! X =	-405.446,	390.584,	1219.0,	0.0 !
!END!				
164 ! X =	-404.816,	390.545,	1189.0,	0.0 !
!END!				
165 ! X =	-404.187,	390.507,	1158.0,	0.0 !
!END!				
166 ! X =	-403.558,	390.468,	1153.0,	0.0 !
!END!				
167 ! X =	-415.458,	392.080,	1445.0,	0.0 !
!END!				
168 ! X =	-414.829,	392.041,	1402.0,	0.0 !
!END!				
169 ! X =	-414.200,	392.001,	1462.0,	0.0 !
!END!				
170 ! X =	-413.571,	391.961,	1402.0,	0.0 !
!END!				
171 ! X =	-412.942,	391.922,	1441.0,	0.0 !
!END!				
172 ! X =	-412.313,	391.883,	1395.0,	0.0 !
!END!				
173 ! X =	-411.683,	391.843,	1341.0,	0.0 !
!END!				
174 ! X =	-411.054,	391.804,	1320.0,	0.0 !
!END!				
175 ! X =	-410.425,	391.765,	1322.0,	0.0 !

!END!					
176 ! X =	-409.796,	391.725,	1296.0,	0.0 !	
!END!					
177 ! X =	-409.167,	391.686,	1280.0,	0.0 !	
!END!					
178 ! X =	-408.538,	391.647,	1276.0,	0.0 !	
!END!					
179 ! X =	-407.909,	391.608,	1274.0,	0.0 !	
!END!					
180 ! X =	-407.279,	391.569,	1280.0,	0.0 !	
!END!					
181 ! X =	-406.650,	391.530,	1269.0,	0.0 !	
!END!					
182 ! X =	-406.021,	391.492,	1217.0,	0.0 !	
!END!					
183 ! X =	-405.392,	391.453,	1210.0,	0.0 !	
!END!					
184 ! X =	-404.762,	391.414,	1173.0,	0.0 !	
!END!					
185 ! X =	-414.775,	392.910,	1402.0,	0.0 !	
!END!					
186 ! X =	-414.145,	392.870,	1387.0,	0.0 !	
!END!					
187 ! X =	-413.516,	392.831,	1346.0,	0.0 !	
!END!					
188 ! X =	-412.887,	392.791,	1341.0,	0.0 !	
!END!					
189 ! X =	-412.259,	392.752,	1341.0,	0.0 !	
!END!					
190 ! X =	-333.610,	400.508,	853.0,	0.0 !	
!END!					
191 ! X =	-332.353,	400.444,	865.0,	0.0 !	
!END!					
192 ! X =	-331.096,	400.381,	850.0,	0.0 !	
!END!					
193 ! X =	-333.521,	402.248,	853.0,	0.0 !	
!END!					
194 ! X =	-332.265,	402.184,	853.0,	0.0 !	
!END!					
195 ! X =	-331.009,	402.121,	853.0,	0.0 !	
!END!					
196 ! X =	-329.753,	402.057,	852.0,	0.0 !	
!END!					
197 ! X =	-328.496,	401.995,	853.0,	0.0 !	
!END!					
198 ! X =	-312.162,	401.199,	791.0,	0.0 !	
!END!					
199 ! X =	-310.906,	401.139,	789.0,	0.0 !	
!END!					
200 ! X =	-309.649,	401.080,	789.0,	0.0 !	
!END!					
201 ! X =	-308.393,	401.021,	792.0,	0.0 !	
!END!					
202 ! X =	-307.136,	400.962,	789.0,	0.0 !	
!END!					
203 ! X =	-305.880,	400.904,	768.0,	0.0 !	
!END!					

204 ! X =	-334.689,	404.051,	853.0,	0.0 !
!END!				
205 ! X =	-333.433,	403.987,	853.0,	0.0 !
!END!				
206 ! X =	-332.177,	403.924,	853.0,	0.0 !
!END!				
207 ! X =	-330.921,	403.860,	853.0,	0.0 !
!END!				
208 ! X =	-329.665,	403.797,	860.0,	0.0 !
!END!				
209 ! X =	-328.409,	403.734,	910.0,	0.0 !
!END!				
210 ! X =	-327.153,	403.672,	853.0,	0.0 !
!END!				
211 ! X =	-325.897,	403.609,	848.0,	0.0 !
!END!				
212 ! X =	-324.641,	403.547,	853.0,	0.0 !
!END!				
213 ! X =	-313.336,	402.999,	792.0,	0.0 !
!END!				
214 ! X =	-312.080,	402.939,	792.0,	0.0 !
!END!				
215 ! X =	-310.824,	402.879,	792.0,	0.0 !
!END!				
216 ! X =	-309.567,	402.820,	792.0,	0.0 !
!END!				
217 ! X =	-307.055,	402.702,	792.0,	0.0 !
!END!				
218 ! X =	-332.089,	405.664,	853.0,	0.0 !
!END!				
219 ! X =	-330.834,	405.600,	853.0,	0.0 !
!END!				
220 ! X =	-329.578,	405.537,	853.0,	0.0 !
!END!				
221 ! X =	-328.322,	405.474,	853.0,	0.0 !
!END!				
222 ! X =	-327.067,	405.412,	914.0,	0.0 !
!END!				
223 ! X =	-325.811,	405.349,	853.0,	0.0 !
!END!				
224 ! X =	-324.555,	405.287,	853.0,	0.0 !
!END!				
225 ! X =	-314.509,	404.799,	810.0,	0.0 !
!END!				
226 ! X =	-313.253,	404.739,	828.0,	0.0 !
!END!				
227 ! X =	-332.002,	407.404,	852.0,	0.0 !
!END!				
228 ! X =	-330.746,	407.340,	852.0,	0.0 !
!END!				
229 ! X =	-329.491,	407.277,	851.0,	0.0 !
!END!				
230 ! X =	-328.235,	407.215,	852.0,	0.0 !
!END!				
231 ! X =	-326.980,	407.152,	853.0,	0.0 !
!END!				
232 ! X =	-325.725,	407.090,	853.0,	0.0 !

!END!					
233	!	X =	-324.469,	407.027,	853.0, 0.0 !
!END!					
234	!	X =	-315.681,	406.599,	823.0, 0.0 !
!END!					
235	!	X =	-334.424,	409.271,	845.0, 0.0 !
!END!					
236	!	X =	-333.168,	409.207,	828.0, 0.0 !
!END!					
237	!	X =	-331.914,	409.144,	835.0, 0.0 !
!END!					
238	!	X =	-330.658,	409.080,	848.0, 0.0 !
!END!					
239	!	X =	-329.404,	409.017,	843.0, 0.0 !
!END!					
240	!	X =	-328.148,	408.954,	844.0, 0.0 !
!END!					
241	!	X =	-326.894,	408.892,	851.0, 0.0 !
!END!					
242	!	X =	-325.638,	408.829,	853.0, 0.0 !
!END!					
243	!	X =	-324.384,	408.767,	853.0, 0.0 !
!END!					
244	!	X =	-323.128,	408.706,	900.0, 0.0 !
!END!					
245	!	X =	-321.873,	408.644,	853.0, 0.0 !
!END!					
246	!	X =	-320.618,	408.583,	849.0, 0.0 !
!END!					
247	!	X =	-319.363,	408.521,	845.0, 0.0 !
!END!					
248	!	X =	-318.108,	408.461,	853.0, 0.0 !
!END!					
249	!	X =	-316.853,	408.400,	841.0, 0.0 !
!END!					
250	!	X =	-334.335,	411.011,	842.0, 0.0 !
!END!					
251	!	X =	-333.080,	410.947,	810.0, 0.0 !
!END!					
252	!	X =	-331.826,	410.883,	803.0, 0.0 !
!END!					
253	!	X =	-330.571,	410.820,	825.0, 0.0 !
!END!					
254	!	X =	-329.316,	410.757,	814.0, 0.0 !
!END!					
255	!	X =	-328.061,	410.694,	807.0, 0.0 !
!END!					
256	!	X =	-326.807,	410.632,	846.0, 0.0 !
!END!					
257	!	X =	-325.552,	410.569,	852.0, 0.0 !
!END!					
258	!	X =	-324.298,	410.507,	853.0, 0.0 !
!END!					
259	!	X =	-323.043,	410.446,	853.0, 0.0 !
!END!					
260	!	X =	-321.788,	410.384,	853.0, 0.0 !
!END!					

261 ! X =	-320.533,	410.323,	853.0,	0.0 !
!END!				
262 ! X =	-319.279,	410.261,	911.0,	0.0 !
!END!				
263 ! X =	-318.024,	410.201,	853.0,	0.0 !
!END!				
264 ! X =	-334.246,	412.751,	847.0,	0.0 !
!END!				
265 ! X =	-332.992,	412.687,	792.0,	0.0 !
!END!				
266 ! X =	-331.738,	412.623,	792.0,	0.0 !
!END!				
267 ! X =	-330.483,	412.560,	803.0,	0.0 !
!END!				
268 ! X =	-329.229,	412.497,	794.0,	0.0 !
!END!				
269 ! X =	-327.975,	412.434,	796.0,	0.0 !
!END!				
270 ! X =	-326.720,	412.372,	828.0,	0.0 !
!END!				
271 ! X =	-325.466,	412.309,	851.0,	0.0 !
!END!				
272 ! X =	-324.212,	412.247,	853.0,	0.0 !
!END!				
273 ! X =	-322.957,	412.186,	853.0,	0.0 !
!END!				
274 ! X =	-321.703,	412.124,	853.0,	0.0 !
!END!				
275 ! X =	-320.448,	412.063,	914.0,	0.0 !
!END!				
276 ! X =	-319.194,	412.001,	924.0,	0.0 !
!END!				
277 ! X =	-332.904,	414.427,	809.0,	0.0 !
!END!				
278 ! X =	-331.650,	414.363,	792.0,	0.0 !
!END!				
279 ! X =	-330.396,	414.300,	792.0,	0.0 !
!END!				
280 ! X =	-329.142,	414.237,	792.0,	0.0 !
!END!				
281 ! X =	-327.888,	414.174,	792.0,	0.0 !
!END!				
282 ! X =	-326.634,	414.112,	841.0,	0.0 !
!END!				
283 ! X =	-325.380,	414.049,	853.0,	0.0 !
!END!				
284 ! X =	-324.126,	413.987,	853.0,	0.0 !
!END!				
285 ! X =	-322.871,	413.926,	869.0,	0.0 !
!END!				
286 ! X =	-330.308,	416.040,	796.0,	0.0 !
!END!				
287 ! X =	-329.055,	415.977,	829.0,	0.0 !
!END!				
288 ! X =	-327.801,	415.914,	853.0,	0.0 !
!END!				
289 ! X =	-326.547,	415.852,	860.0,	0.0 !

!END!

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

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

metrun = 0
ibyr = 2006
ibmo = 1
ibdy = 1
ibhr = 1
irlg = 8736
xbtz = 7.00000000
nspec = 10
nse = 7
itest = 2
metfm = 1
mprffm = 1
mrestart= 0
nrespd = 500
avet = 60.0000000
pgtime = 60.0000000

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

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

Technical options must conform to USEPA
Long Range Transport (LRT) guidance

```

METFM      1 or 2
AVET       60. (min)
PGTIME     60. (min)
MGAUSS     1
MCTADJ     3
MTRANS     1
MTIP       1
MCHEM      1 or 3 (if modeling SOx, NOx)
MWET       1
MDRY       1
MDISP      2 or 3
MPDF       0 if MDISP=3
           1 if MDISP=2
MROUGH     0
MPARTL     1
SYTDEP     550. (m)
MHFTSZ     0
SVMIN      0.5 (m/s)

```

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

```

SPECIES: S02      j: 1  isplst(-,j) =  1  1  1  GROUP: S02
SPECIES: S04      j: 2  isplst(-,j) =  1  1  2  GROUP: S04
SPECIES: NOX      j: 3  isplst(-,j) =  1  1  1  GROUP: NOX
SPECIES: HN03     j: 4  isplst(-,j) =  1  0  1  GROUP: HN03
SPECIES: N03      j: 5  isplst(-,j) =  1  0  2  GROUP: N03
SPECIES: PM800    j: 6  isplst(-,j) =  1  1  2  GROUP: PM800
SPECIES: PM425    j: 7  isplst(-,j) =  1  1  2  GROUP: PM425
SPECIES: PM187    j: 8  isplst(-,j) =  1  1  2  GROUP: PM187
SPECIES: PM081    j: 9  isplst(-,j) =  1  1  2  GROUP: PM081
SPECIES: PM056    j:10  isplst(-,j) =  1  0  2  GROUP: PM056

```

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

```

pmap      = LCC
datum     = NWS-84
daten     = 02-21-2003
feast     = 0.00000000E+00
fnorth    = 0.00000000E+00
rlat0     = 40.0000000
rlon0     = 98.0000000
xlat1     = 20.0000000
xlat2     = 60.0000000
nx        = 313
ny        = 181
nz        = 10
zface     = 0.00000000E+00 20.0000000 40.0000000 80.0000000 160.000000
320.000000 640.000000 1200.00000 2000.00000 3000.00000 4000.00000
dgridkm   = 4.00000000
xorigkm   = -506.000000
yorigkm   = 298.000000
iutmzn    = 0
ibcomp    = 1
jbcomp    = 1
iecomp    = 120
jecomps   = 120
lsamp     = T

```

ibsamp = 1
jbsamp = 1
iesamp = 75
jesamp = 75
meshdn = 1

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

icon = 1
idry = 1
iwet = 1
ivis = 1
lcomprs = T
icprt = 0
idprt = 0
iwprt = 0
icfrq = 1
idfrq = 1
iwfrq = 1
iprtu = 3
imesg = 2
imflx = 0
imbal = 0
iqaplot = 1
ldebug = F
ipfdeb = 1
npfdeb = 100
nn1 = 1
nn2 = 10

GROUP: S02	j: 1	ioutop(-,j) =	1 1 1 1 1 1 1
GROUP: S04	j: 2	ioutop(-,j) =	1 1 1 1 1 1 1
GROUP: NOX	j: 3	ioutop(-,j) =	1 1 1 1 1 1 1
GROUP: HN03	j: 4	ioutop(-,j) =	1 1 1 1 1 1 1
GROUP: N03	j: 5	ioutop(-,j) =	1 1 1 1 1 1 1
GROUP: PM800	j: 6	ioutop(-,j) =	1 1 1 1 1 1 0
GROUP: PM425	j: 7	ioutop(-,j) =	1 1 1 1 1 1 0
GROUP: PM187	j: 8	ioutop(-,j) =	1 1 1 1 1 1 0
GROUP: PM081	j: 9	ioutop(-,j) =	1 1 1 1 1 1 0
GROUP: PM056	j: 10	ioutop(-,j) =	1 1 1 1 1 1 0

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

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

nhill = 0
nctrec = 0
mhill = 2
xhill2m= 1.00000000
zhill2m= 1.00000000
xctdmkm= 0.00000000E+00
yctdmkm= 0.00000000E+00

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

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

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

SPECIES: S02	j:	1	dryg(-,j) =	0.15	1000.00	
8.00 0.00 0.04						
SPECIES: S04	j:	2	dryg(-,j) =	-999.00	-999.00	-
999.00 -999.00 -999.00						
SPECIES: NOX	j:	3	dryg(-,j) =	0.17	1.00	
8.00 5.00 3.50						
SPECIES: HN03	j:	4	dryg(-,j) =	0.16	1.00	
18.00 0.00 0.00						
SPECIES: N03	j:	5	dryg(-,j) =	-999.00	-999.00	-
999.00 -999.00 -999.00						
SPECIES: PM800	j:	6	dryg(-,j) =	-999.00	-999.00	-
999.00 -999.00 -999.00						
SPECIES: PM425	j:	7	dryg(-,j) =	-999.00	-999.00	-
999.00 -999.00 -999.00						
SPECIES: PM187	j:	8	dryg(-,j) =	-999.00	-999.00	-
999.00 -999.00 -999.00						
SPECIES: PM081	j:	9	dryg(-,j) =	-999.00	-999.00	-
999.00 -999.00 -999.00						
SPECIES: PM056	j:	10	dryg(-,j) =	-999.00	-999.00	-
999.00 -999.00 -999.00						

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

SPECIES: S02	j:	1	dryp(-,j) =	-999.00	-999.00
SPECIES: S04	j:	2	dryp(-,j) =	0.48	2.00
SPECIES: NOX	j:	3	dryp(-,j) =	-999.00	-999.00
SPECIES: HN03	j:	4	dryp(-,j) =	-999.00	-999.00
SPECIES: N03	j:	5	dryp(-,j) =	0.48	2.00
SPECIES: PM800	j:	6	dryp(-,j) =	8.00	0.00
SPECIES: PM425	j:	7	dryp(-,j) =	4.25	0.00
SPECIES: PM187	j:	8	dryp(-,j) =	1.88	0.00
SPECIES: PM081	j:	9	dryp(-,j) =	0.81	0.00
SPECIES: PM056	j:	10	dryp(-,j) =	0.56	0.00

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

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

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

SPECIES: S02	j:	1	wa(-,j) =	3.000E-05	0.000E+00
--------------	----	---	-----------	-----------	-----------

SPECIES: S04	j: 2	wa(-,j) =	1.000E-04	3.000E-05
SPECIES: NOX	j: 3	wa(-,j) =	0.000E+00	0.000E+00
SPECIES: HN03	j: 4	wa(-,j) =	6.000E-05	0.000E+00
SPECIES: N03	j: 5	wa(-,j) =	1.000E-04	3.000E-05
SPECIES: PM800	j: 6	wa(-,j) =	1.000E-04	3.000E-05
SPECIES: PM425	j: 7	wa(-,j) =	1.000E-04	3.000E-05
SPECIES: PM187	j: 8	wa(-,j) =	1.000E-04	3.000E-05
SPECIES: PM081	j: 9	wa(-,j) =	1.000E-04	3.000E-05
SPECIES: PM056	j: 10	wa(-,j) =	1.000E-04	3.000E-05

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

```

moz      = 1
bcko3m   = 80.00000000 80.00000000 80.00000000 80.00000000
          = 80.00000000 80.00000000 80.00000000 80.00000000
          = 80.00000000 80.00000000 80.00000000 80.00000000
bcknh3m  = 1.000000000 1.000000000 1.000000000 1.000000000
          = 1.000000000 1.000000000 1.000000000 1.000000000
          = 1.000000000 1.000000000 1.000000000 1.000000000
rnite1   = 0.2000000003
rnite2   = 2.000000000
rnite3   = 2.000000000
mh2o2    = 1
bckh2o2m = 1.000000000 1.000000000 1.000000000 1.000000000
          = 1.000000000 1.000000000 1.000000000 1.000000000
          = 1.000000000 1.000000000 1.000000000 1.000000000
bckpmf   = 1.000000000 1.000000000 1.000000000 1.000000000
          = 1.000000000 1.000000000 1.000000000 1.000000000
          = 1.000000000 1.000000000 1.000000000 1.000000000
ofrac    = 0.1500000006 0.1500000006 0.2000000003 0.2000000003
          = 0.2000000003 0.2000000003 0.2000000003 0.2000000003
          = 0.2000000003 0.2000000003 0.2000000003 0.1500000006
vcnx     = 50.00000000 50.00000000 50.00000000 50.00000000
          = 50.00000000 50.00000000 50.00000000 50.00000000
          = 50.00000000 50.00000000 50.00000000 50.00000000

```

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

```

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

anemht   = 10.00000000
isigmav  = 1
imixctdm = 0
ilanduin = 20
z0in     = 0.2500000000
xlaiin   = 3.000000000
elevin   = 0.000000000E+00
xlatin   = -999.000000
xlonin   = -999.000000

xmxmlen  = 1.000000000

```

mxnew = 99
xsamlen = 1.00000000
mxsam = 99
ncount = 2
sl2pf = 10.0000000
wscaln = 0.499994993
cddiv = 9.99999978E-03 9.99999978E-03

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

Over LAND

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

Over WATER

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

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

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

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

```

ppc      = 0.500000000 for stability 1
ppc      = 0.500000000 for stability 2
ppc      = 0.500000000 for stability 3
ppc      = 0.500000000 for stability 4
ppc      = 0.349999994 for stability 5
ppc      = 0.349999994 for stability 6
tbd      = 0.500000000
tibldist = 1.00000000 10.0000000 9.00000000
nsplit   = 3
iresplit = 0 0 0 0
          = 0 0 0 0
          = 0 0 0 0
          = 0 0 0 0
          = 0 1 0 0
          = 0 0 0 0
zisplit  = 100.000000
roldmax  = 0.250000000
nsplith  = 5
sysplith = 4000.00000
shsplith = 2.22222233
cnsplith = 9.99999994E-09 9.99999994E-09 9.99999994E-09 9.99999994E-
09 9.99999994E-09 9.99999994E-09 9.99999994E-09 9.99999994E-09
9.99999994E-09 9.99999994E-09
epsslug  = 9.99999975E-05
epsarea  = 1.000000001E-07
dsrise   = 1.000000000
trajincl = 20.00000000
mdepbc   = 1
htminbc  = 500.000000
rsampbc  = 10.0000000

```

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

```

npt1     = 1
iptu     = 1 units = g/s
          converted to g/s by factor: 1.00000000
nspt1    = 0
npt2     = 0

cnampt1  = KILN4
xpt1grd  = 26.9692535
ypt1grd  = 35.7282486
htstak   = 22.8999996
elstak   = 1055.00000
diam     = 1.47000003
exitw    = 20.7900009
tstak    = 547.000000
idownw   = 0
syipt1   = 0.00000000E+00
szypt1   = 0.00000000E+00
fmfpt1   = 1.00000000
zplatpt1 = 0.00000000E+00

pt. source: KILN4 number: 1
qstak    = 1.26999998E-02 3.000000003E-03 8.64999962 0.00000000E+00
0.00000000E+00 3.19999992E-03 3.19999992E-03 6.00000005E-03
1.99999995E-04 0.00000000E+00

```

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

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

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

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

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

nvl1 = 0
ivlu = 1 units = g/s
converted to g/s by factor: 1.00000000
nsvl1 = 0
nvl2 = 0

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

nrec = 289
xng = 22.4572525 22.6147537 22.7722473 22.1559982 22.3134995
22.4710007 22.6285019 22.7860031 22.9434967 23.1009979 22.1697464
22.3272476 22.4844971 22.6419983 22.7997513 22.9572525 23.1147537
23.2720032 23.4297485 22.1835022 22.3407516 22.4982529 22.6557465
22.8132477 22.9707489 23.1282501 23.2857513 23.4432526 22.3544998
22.5120010 22.6695023 22.8270035 22.9844971 23.1419983 23.2992477
23.4570007 22.5257492 22.6832504 22.8407516 22.9980011 23.1555023
23.3130035 23.4704971 22.5394974 22.6967468 22.8542480 23.0117493
23.1692505 23.3264999 23.4840012 24.1137466 24.2712479 24.4284973
24.5862503 24.7434998 24.9010010 25.0582504 22.5532532 22.7105026
22.8679962 23.0254974 23.1827469 23.3402481 23.4977493 24.1272507
24.2847519 24.4420013 24.5995026 24.7570038 24.9142532 25.0717468
22.5667496 22.7242508 22.8817520 23.0390015 23.1965027 23.3537521
23.5112534 23.6685028 23.8259964 23.9834976 24.1407471 24.2982483
24.4554977 24.6129990 24.7705002 24.9277496 25.0849991 22.5804977
22.7379990 22.8952484 23.0527496 23.2099991 23.3672485 23.5247498
23.6822510 23.8395004 23.9970016 24.1542511 24.3117523 24.4690018
24.6265030 24.7837524 24.9412537 25.0985031 25.2559967 25.4132538

22.5942535	22.7515030	22.9089966	23.0662537	23.2237473	23.3809967
23.5384979	23.6957474	23.8529968	24.0104980	24.1677475	24.3249969
24.4824982	24.6399994	24.7972488	24.9544983	25.1117477	25.2692490
25.4267502	22.6080017	22.7652512	22.9227524	23.0800018	23.2372513
23.3945007	23.5520020	23.7092514	23.8665009	24.0240021	24.1812515
24.3385010	24.4960022	24.6532516	24.8105011	24.9680023	25.1252518
25.2827530	25.4400024	25.5972519	22.6217499	22.7789993	22.9362488
23.0934982	23.2509995	23.4082489	23.5654984	23.7227478	23.8799973
24.0374985	24.1947479	24.3519974	24.5092468	24.6667480	24.8239975
24.9812469	25.1384964	25.2959976	25.4532471	25.6104965	22.6354980
22.7927475	22.9499969	23.1072464	23.2645035	23.4217529	23.5792465
23.7365036	23.8937531	24.0510025	24.2082520	24.3655014	24.5227509
24.6802521	24.8375015	24.9947510	25.1520004	25.3095016	22.8062515
22.9637527	23.1210022	23.2782516	23.4352493	43.0975037	43.4117508
43.7259979	43.1197510	43.4337463	43.7477493	44.0617523	44.3759995
48.4595032	48.7734985	49.0877533	49.4017487	49.7160034	50.0299988
42.8277512	43.1417465	43.4557495	43.7697525	44.0837479	44.3977509
44.7117462	45.0257492	45.3397522	48.1660004	48.4800034	48.7939987
49.1082535	49.7362518	43.4777527	43.7914963	44.1054993	44.4195023
44.7332535	45.0472488	45.3612518	47.8727493	48.1867523	43.4994965
43.8134995	44.1272507	44.4412537	44.7549973	45.0687485	45.3827515
47.5797501	42.8939972	43.2080002	43.5214996	43.8355026	44.1490021
44.4629974	44.7764969	45.0904999	45.4039993	45.7180023	46.0317535
46.3454971	46.6592484	46.9729996	47.2867508	42.9162521	43.2300034
43.5435028	43.8572464	44.1709976	44.4847488	44.7982483	45.1119995
45.4254990	45.7392502	46.0530014	46.3667526	46.6802521	46.9940033
42.9384995	43.2519989	43.5654984	43.8792496	44.1927490	44.5062485
44.8199997	45.1334991	45.4469986	45.7607498	46.0742493	46.3880005
46.7014999	43.2740021	43.5875015	43.9010010	44.2145004	44.5279999
44.8414993	45.1549988	45.4684982	45.7822495	43.9229965	44.2362518
44.5497513	44.8632507				
yng	=	20.6952515	20.6855011	20.6754990	20.9325027
20.9127502	20.9027481	20.8927536	20.8830032	20.8730011	21.1497498
21.1397476	21.1299973	21.1200027	21.1100006	21.1002502	21.0902481
21.0804977	21.0705032	21.3672485	21.3572464	21.3472519	21.3372498
21.3274994	21.3174973	21.3075027	21.2977524	21.2880020	21.5745010
21.5644989	21.5544968	21.5445023	21.5347519	21.5247498	21.5149994
21.5049973	21.7817535	21.7717514	21.7620010	21.7519989	21.7422485
21.7322464	21.7225037	21.9990005	21.9892502	21.9792480	21.9694977
21.9595032	21.9497528	21.9397507	21.9004974	21.8907471	21.8809967
21.8712463	21.8615036	21.8517532	21.8422470	22.2162476	22.2064972
22.1965027	22.1865005	22.1767502	22.1669998	22.1569977	22.1177521
22.1080017	22.0982513	22.0885010	22.0787506	22.0690002	22.0595016
22.4337463	22.4237518	22.4137497	22.4039993	22.3939972	22.3842468
22.3742523	22.3645020	22.3547516	22.3450012	22.3352509	22.3252487
22.3154984	22.3057480	22.2962494	22.2864990	22.2767487	22.6510010
22.6409988	22.6309967	22.6212463	22.6112518	22.6015015	22.5914993
22.5817490	22.5719986	22.5622482	22.5524979	22.5425034	22.5327530
22.5230026	22.5134964	22.5037537	22.4940033	22.4842529	22.4747467
22.8682480	22.8582535	22.8485031	22.8385010	22.8287506	22.8187485
22.8089981	22.7992477	22.7892532	22.7795029	22.7697525	22.7600021
22.7502518	22.7405014	22.7307510	22.7210007	22.7112503	22.7017517
22.6920013	23.0855026	23.0755005	23.0657501	23.0557480	23.0459976
23.0360031	23.0262527	23.0162506	23.0065002	22.9967499	22.9869995
22.9772491	22.9674988	22.9577484	22.9479980	22.9382477	22.9284973
22.9189987	22.9092484	22.8994980	23.3027496	23.2929993	23.2829971
23.2730026	23.2632523	23.2535019	23.2434998	23.2337494	23.2239990

[illegible]

1402.000000	1402.000000	1402.000000	1376.000000	1341.000000	1336.000000
1322.000000	1280.000000	1274.000000	1274.000000	1280.000000	1219.000000
1177.000000	1158.000000	1163.000000	1219.000000	1165.000000	1166.000000
1158.000000	1402.000000	1402.000000	1451.000000	1360.000000	1341.000000
1341.000000	1341.000000	1288.000000	1280.000000	1280.000000	1280.000000
1273.000000	1280.000000	1201.000000	1211.000000	1219.000000	1219.000000
1214.000000	1170.000000	1158.000000	1402.000000	1455.000000	1402.000000
1399.000000	1390.000000	1350.000000	1341.000000	1283.000000	1289.000000
1291.000000	1291.000000	1280.000000	1280.000000	1219.000000	1218.000000
1252.000000	1219.000000	1189.000000	1158.000000	1153.000000	1445.000000
1402.000000	1462.000000	1402.000000	1441.000000	1395.000000	1341.000000
1320.000000	1322.000000	1296.000000	1280.000000	1276.000000	1274.000000
1280.000000	1269.000000	1217.000000	1210.000000	1173.000000	1402.000000
1387.000000	1346.000000	1341.000000	1341.000000	853.000000	865.000000
850.000000	853.000000	853.000000	853.000000	852.000000	853.000000
791.000000	789.000000	789.000000	792.000000	789.000000	768.000000
853.000000	853.000000	853.000000	853.000000	860.000000	910.000000
853.000000	848.000000	853.000000	792.000000	792.000000	792.000000
792.000000	792.000000	853.000000	853.000000	853.000000	853.000000
914.000000	853.000000	853.000000	810.000000	828.000000	852.000000
852.000000	851.000000	852.000000	853.000000	853.000000	853.000000
823.000000	845.000000	828.000000	835.000000	848.000000	843.000000
844.000000	851.000000	853.000000	853.000000	900.000000	853.000000
849.000000	845.000000	853.000000	841.000000	842.000000	810.000000
803.000000	825.000000	814.000000	807.000000	846.000000	852.000000
853.000000	853.000000	853.000000	853.000000	911.000000	853.000000
847.000000	792.000000	792.000000	803.000000	794.000000	796.000000
828.000000	851.000000	853.000000	853.000000	853.000000	914.000000
924.000000	809.000000	792.000000	792.000000	792.000000	792.000000
841.000000	853.000000	853.000000	869.000000	796.000000	829.000000
853.000000	860.000000				

----- ----- INPUT FILES

Default Name	Unit No.	File Name and Path
CALPUFF.INP	1	CALPUFF.INP
CALMET.DAT	7	G:\BIGSTO~1\OCT200~1\06\MEC7B6~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MEC7B2~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MEC7BE~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MET200~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MET200~2.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MET200~3.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MET200~4.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MECBB2~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MECBBE~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MEDBBA~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MEDBB6~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MEDBB2~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MECFB6~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MECFB2~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MECFBE~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MEDFBA~1.DAT
(----)	7	G:\BIGSTO~1\OCT200~1\06\MEDFB6~1.DAT

(----)	7	G:\BIGST0~1\OCT200~1\06\MEDFB2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC3C6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC3C2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC3CE~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3CA~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3C6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3C2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC7C6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC7C2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC7CE~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7CA~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7C6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7C2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MECBC6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MECBC2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MECBCE~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDBCA~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDBC6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDBC2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MECF6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MECF2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MECFCE~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDFCA~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDFC6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDFC2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC3D6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC3D2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC3DE~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3DA~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3D6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3D2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC7D6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC7D2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC7DE~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7DA~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7D6~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7D2~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC3B0~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC3B4~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3B8~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3BC~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3B0~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED3B4~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC7B0~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEC7B4~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7B8~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7BC~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7B0~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MED7B4~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MECBB0~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MECBB4~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDBB8~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDBBC~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDBB0~1.DAT
(----)	7	G:\BIGST0~1\OCT200~1\06\MEDBB4~1.DAT
OZONE.DAT	22	E:\RCVIS\GCC\RUNINP~1\OZONE\OZONE2~2.DAT

OUTPUT FILES

Default Name	Unit No.	File Name and Path
-----	-----	-----
CALPUFF.LST	2	06_ES.LST
CONC.DAT	8	CONC.DAT
DFLX.DAT	9	DFLX.DAT
WFLX.DAT	10	WFLX.DAT
VISB.DAT	11	VISB.DAT

LAST DAY/HOUR PROCESSED:

Year: 2006 Month: 12 Day: 31 Julian day: 365 Hour: 0

End of run -- Clock time: 10:08:31

Date: 01-06-2011

Elapsed Clock Time: 6479.0 (seconds)

CPU Time: 6479.0 (seconds)

Appendix I-2 – POSTUTIL Control File

POSTUTIL Version 1.58

Level 080407

Run Title:

Generated by CALPUFF View - Version 4.0.0 - 01/06/2011

Note: provide NMET lines of the form * UTLMET = name * *END*
 or * MET1D = name * *END*
 or * M2DRHU = name * *END*
 (and) * M2DTMP = name * *END*
 (and) * M2DRHO = name * *END*

and NFILES lines of the form * MODDAT = name * *END*
where the * should be replaced with an exclamation point,
the special delimiter character.

INPUT GROUP: 1 -- General run control parameters

Starting date: Year (ISYR) -- No default ! ISYR = 2006 !
 Month (ISMO) -- No default ! ISMO = 1 !
 Day (ISDY) -- No default ! ISDY = 1 !
 Hour (ISHR) -- No default ! ISHR = 2 !

Number of periods to process
 (NPER) -- No default ! NPER = 8734 !

Number of species to process from CALPUFF runs
 (NSPECINP) -- No default ! NSPECINP = 10
!

Number of species to write to output file
 (NSPECOUT) -- No default ! NSPECOUT = 14
!

Number of species to compute from those modeled
(must be no greater than NSPECOUT)
 (NSPECCMP) -- No default ! NSPECCMP = 4
!

When multiple files are used, a species name may appear in more than one file. Data for this species will be summed (appropriate if the CALPUFF runs use different source groups). If this summing is not appropriate, remove duplicate species from the file(s).

Stop run if duplicate species names
are found? (MDUPLCT) Default: 0 ! MDUPLCT = 0 !
0 = no (i.e., duplicate species are summed)
1 = yes (i.e., run is halted)

Data for each species in a CALPUFF data file may also be scaled as they are read. This can be done to alter the emission rate of all sources that were modeled in a particular CALPUFF application. The scaling factor for each species is entered in Subgroup (2d), for each file for which scaling is requested.

Number of CALPUFF data files that will be scaled
(must be no greater than NFILES)
(NSCALED) Default: 0 ! NSCALED = 0 !

Ammonia-Limiting Method Option to recompute the HNO₃/NO₃ concentration

partition prior to performing other actions is controlled by MNITRATE.

This option will NOT alter any deposition fluxes contained in the CALPUFF

file(s). Three partition selections are provided. The first two are typically used in sequence (POSTUTIL is run more than once). The first

selection (MNITRATE=1) computes the partition for the TOTAL (all sources)

concentration fields (SO₄, NO₃, HNO₃; NH₃), and the second

(MNITRATE=2)

uses this partition (from the previous application of POSTUTIL) to compute the partition for individual source groups. The third selection

(MNITRATE=3) can be used instead in a single POSTUTIL application if a

file of background concentrations is provided (BCKGALM in Input Group 0).

Required information for MNITRATE=1 includes:

species NO₃, HNO₃, and SO₄

NH₃ concentration(s)

met. data file for RH and T

Required information for MNITRATE=2 includes:

species NO₃ and HNO₃ for a source group

species NO₃ALL and HNO₃ALL for all source groups, properly partitioned

Required information for MNITRATE=3 includes:

species NO₃, HNO₃, and SO₄ for a source group

species NO₃, HNO₃, SO₄ and TNH₃ from the background BCKGALM

file

If TNH3 is not in the background BCKGALM file, monthly TNH3 concentrations are used (BCKTNH3)
TNH3= total NH3 = NH3gaseous+NH3particulate

Recompute the HNO3/N03 partition for concentrations?
(MNITRATE) Default: 0 ! MNITRATE = 0 !
0 = no
1 = yes, for all sources combined
2 = yes, for a source group
3 = yes, ALM application in one step

SOURCE OF AMMONIA:

Ammonia may be available as a modeled species in the CALPUFF files, and it may or may not be appropriate to use it for repartitioning N03/HN03 (in option MNITRATE=1 or MNITRATE=3). Its use is controlled by NH3TYP.
When NH3 is listed as a processed species in Subgroup (2a), as one of the NSPECINP ASPECI entries, and the right option is chosen for NH3TYP, the NH3 modeled values from the CALPUFF concentration files will be used in the chemical equilibrium calculation.

NH3TYP also controls when monthly background ammonia values are used. Both gaseous (NH3) and total (TNH3=NH3gaseous+NH3particulate) ammonia can be provided monthly as BCKNH3/BCKTNH3.

What is the input source of Ammonia?
(NH3TYP) No Default * NH3TYP = *
0 = No background will be used.
ONLY NH3 or TNH3 from the concentration files listed in Subgroup (2a&2b) as a processed species will be used.
(Cannot be used with MNITRATE=3)

1 = NH3 Monthly averaged background (BCKNH3) listed below will be added to NH3 from concentration files listed in Subgroup (2a)

2 = NH3 from background concentration file BCKGALM will be added to NH3 from concentration files listed in Subgroup (2a&2b)
(ONLY possible for MNITRATE=3)

3 = NH3 Monthly averaged background (BCKNH3) listed below will be used alone.

4 = NH3 from background concentration file BCKGALM will be used alone
(ONLY possible for MNITRATE=3)

| OPTION | NH3 or TNH3 CONC | BCKNH3 or BCKTNH3 | TNH3/BCKGALM or BCKTNH3 |

0	X	0	0
1	X	X	0
2	X	0	X
3	0	X	0
4	0	0	X

Default monthly (12 values) background ammonia concentration (ppb) used for HN03/N03 partition (need to choose one or the other):

Gaseous NH3 (BCKNH3) Default: -999
! BCKNH3 = 12*10 !

Total TNH3 (BCKTNH3) Default: -999
! BCKTNH3 = 12*10 !

If a single value is entered, this is used for all 12 months.
Month 1 is JANUARY, Month 12 is DECEMBER.

!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: 1956 2055

INPUT GROUP: 2 -- Species Processing Information

Subgroup (2a)

The following NSPECINP species will be processed:

```

! ASPECI =          S04 !          !END!
! ASPECI =          HN03 !          !END!
! ASPECI =          N03 !          !END!
! ASPECI =          PM425 !          !END!
! ASPECI =          S02 !          !END!
! ASPECI =          NOX !          !END!
! ASPECI =          PM800 !          !END!
! ASPECI =          PM187 !          !END!
! ASPECI =          PM081 !          !END!
! ASPECI =          PM056 !          !END!

```

Subgroup (2b)

The following NSPECOUT species will be written:

```

! ASPECO =          S04 !          !END!
! ASPECO =          HN03 !          !END!
! ASPECO =          N03 !          !END!
! ASPECO =          PM425 !          !END!
! ASPECO =          S02 !          !END!
! ASPECO =          NOX !          !END!
! ASPECO =          PM800 !          !END!
! ASPECO =          PM187 !          !END!
! ASPECO =          PM081 !          !END!
! ASPECO =          PM056 !          !END!
! ASPECO =          SOIL !          !END!
! ASPECO =          SOA !          !END!
! ASPECO =          EC !          !END!
! ASPECO =          PMC !          !END!

```

Subgroup (2c)

The following NSPECCMP species will be computed by scaling and summing one or more of the processed input species. Identify the name(s) of the computed species and provide the scaling factors for each of the NSPECINP input species (NSPECCMP groups of NSPECINP+1 lines each):

```

! CSPECCMP=SOIL !
!   PM425 = 0 !
!   PM800 = 0 !
!   PM187 = 1 !
!   PM081 = 0 !
!   PM056 = 0 !
!END!
! CSPECCMP=SOA !
!   PM425 = 0 !
!   PM800 = 0 !
!   PM187 = 0 !
!   PM081 = 0.016 !
!   PM056 = 0 !

```

```

!END!
! CSPECCMP=EC !
!      PM425 = 0 !
!      PM800 = 0 !
!      PM187 = 0 !
!      PM081 = 0.984 !
!      PM056 = 0 !
!END!
! CSPECCMP=PMC !
!      PM425 = 1 !
!      PM800 = 1 !
!      PM187 = 0 !
!      PM081 = 0 !
!      PM056 = 0 !
!END!

```

```

*****
*****

```

POSTUTIL Version 1.58

Level 080407

```

*****
*****

```

POSTUTIL Control File Input Summary -----

```

Run starting date -- year: 2006
                    month: 1
                    day: 1
                    Julian day: 1
time beginning - hour(0-23): 1
                - second: 0
Run length (periods): 8734

```

Note: the length of a period is controlled by
the averaging time selected in the model

Partition between HN03 and N03 is NOT computed
and 1-step Ammonia Limiting Method is not used

Species needed from input file --

```

S04
HN03
N03
PM425
S02
NOX
PM800
PM187
PM081
PM056

```

Species written to output file --

```

S04

```

HN03
 N03
 PM425
 S02
 NOX
 PM800
 PM187
 PM081
 PM056
 SOIL
 SOA
 EC
 PMC

Species computed from input species --

SOIL =
 0.000000E+00 * S04
 0.000000E+00 * HN03
 0.000000E+00 * N03
 0.000000E+00 * PM425
 0.000000E+00 * S02
 0.000000E+00 * NOX
 0.000000E+00 * PM800
 1.000000E+00 * PM187
 0.000000E+00 * PM081
 0.000000E+00 * PM056

SOA =
 0.000000E+00 * S04
 0.000000E+00 * HN03
 0.000000E+00 * N03
 0.000000E+00 * PM425
 0.000000E+00 * S02
 0.000000E+00 * NOX
 0.000000E+00 * PM800
 0.000000E+00 * PM187
 1.600000E-02 * PM081
 0.000000E+00 * PM056

EC =
 0.000000E+00 * S04
 0.000000E+00 * HN03
 0.000000E+00 * N03
 0.000000E+00 * PM425
 0.000000E+00 * S02
 0.000000E+00 * NOX
 0.000000E+00 * PM800
 0.000000E+00 * PM187
 9.840000E-01 * PM081
 0.000000E+00 * PM056

PMC =
 0.000000E+00 * S04
 0.000000E+00 * HN03
 0.000000E+00 * N03
 1.000000E+00 * PM425

```

0.000000E+00 * SO2
0.000000E+00 * NOX
1.000000E+00 * PM800
0.000000E+00 * PM187
0.000000E+00 * PM081
0.000000E+00 * PM056

```

PROCESSED MODEL FILE ----- Number 1

CALPUFF 5.8 070623

Based on Aug 2010 runs but , MSAM=99, sl2p5=10
 Calmet.dat files from BS oct2009 submittal
 Calpuff v5.8, Calpost v 6, postutil speciate

Averaging time for values reported from model:
 1 HOUR

Number of averaging periods in file from model:
 8736

Chemical species names for each layer in model:

```

SO2      1
SO4      1
NOX      1
HNO3     1
NO3      1
PM800    1
PM425    1
PM187    1
PM081    1
PM056    1

```

```

msyr,mjsday      = 2006 1
mshr,mssec       = 0 0
nsecdt (period)  = 3600
mnper,nszout,mavgpd = 8736 10 1
xorigkm,yorigkm,nstas = -506.000031 298.000000 250
ielmet,jelmet    = 313 181
delx,dely,nz     = 4.00000000 4.00000000 1
iastar,iastop,jastar,jastop = 1 120 1 120
isastr,isastp,jsastr,jsastp = 1 75 1 75
(computed) ngx,ngy = 75 75
meshdn,npts,nareas = 1 1 0
nlines,nvols      = 0 0
ndrec,nctrec,LSGRID = 289 0 T

```

Source names stored (all files):
 type: pt1 - KILN4

Chemical species names written to new file:

S04	1
HN03	1
N03	1
PM425	1
S02	1
NOX	1
PM800	1
PM187	1
PM081	1
PM056	1
SOIL	1
SOA	1
EC	1
PMC	1

 INPUT FILES

Default Name -----	Unit No. -----	File Name and Path -----
POSTUTIL.INP	5	POSTUTPM.INP
CALPUFF.DAT	10	CONC.DAT

 OUTPUT FILES

Default Name -----	Unit No. -----	File Name and Path -----
POSTUTIL.LST	7	POSTUTPM.LST
MODEL.DAT	8	CONCPM.DAT

Skipping periods in data files
 Start Time 2006 1 1 0
 Data File --- Skipped Periods
 1 1

Skipping periods in background pollutant files
 Start Time 2006 1 1 0
 Data File --- Skipped Periods
 2 0

 RUN MESSAGES EXTRACTED FROM THE DOS WINDOW

 Processing 8734 periods

 Finished 8734 of 8734 periods

Appendix I-3 – CALPOST Control File

CALPOST Version 6.221

Level 080724

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

Run Title:

Generated by CALPUFF View - Version 4.0.0 - 01/06/2011
Visibility Run for VISIB

INPUT GROUP: 1 -- General run control parameters

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

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

Starting date: Year (ISYR) -- No default ! ISYR = 2006
!
Month (ISMO) -- No default ! ISMO = 1 !
Day (ISDY) -- No default ! ISDY = 1 !
Starting time: Hour (ISHR) -- No default ! ISHR = 1 !
Minute (ISMIN) -- No default ! ISMIN = 0 !
Second (ISSEC) -- No default ! ISSEC = 0 !

Ending date: Year (IEYR) -- No default ! IEYR = 2006
!
Month (IEMO) -- No default ! IEMO = 12 !
Day (IEDY) -- No default ! IEDY = 30 !
Ending time: Hour (IEHR) -- No default ! IEHR = 23 !
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 = 7 !

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 LVN02=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 !

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 NO_x concentration (the last) is used for all NO_x concentrations greater than the largest tabulated value.
(used only if NO₂CALC = 2)

NO_x concentration(ug / m³)
(CNOX) -- No default
! CNOX = 1,2,3,4,5,6,7,8,9,10,11,12,13,14 !

NO₂/NO_x ratio for each NO_x concentration:
(TNO2NOX) -- No default
! TNO2NOX = 1,1,1,1,1,1,1,1,1,1,1,1,1,1 !

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 = 189*0,100*1
!

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

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

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

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

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

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

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

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

!END!

```

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

Specific gridded receptors are excluded from CALPOST processing by filling a processing grid array with 0s and 1s. A total of NGONOFF lines are read here. Each line corresponds to one 'row' in the sampling grid, starting with the NORTHERNMOST row that contains receptors that you wish to exclude, and finishing with row 1 to the SOUTH (no intervening rows may be skipped). Within a row, each receptor position is assigned either a 0 or 1, starting with the westernmost receptor.

0 = gridded receptor not processed

1 = gridded receptor processed

Repeated value notation may be used to select blocks of receptors:

23*1, 15*0, 12*1

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

(NGXRECP) -- Default: 1

* NGXRECP = *

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

LVN02 = T

N02CALC = 1

RN02NOX = 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 =

Badlands NP !

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? (LVS04) -- Default: T ! LVS04 = T !
 Include NITRATE? (LVN03) -- Default: T ! LVN03 = 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? (LVN02) -- Default: F ! LVN02 = 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 =
 SOIL !

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 = 1.0 !
 BACKGROUND particulate species:
 PM COARSE (EEPMCBK) -- Default: 0.6 ! EEPMCBK = 0.6
 !
 Other species:
 AMMONIUM SULFATE (EES04) -- Default: 3.0 ! EES04 = 3.0 !
 AMMONIUM NITRATE (EEN03) -- Default: 3.0 ! EEN03 = 3.0 !
 ORGANIC CARBON (EEOC) -- Default: 4.0 ! EEOC = 4.0 !
 SOIL (EESOIL) -- Default: 1.0 ! EESOIL = 1.0
 !
 ELEMENTAL CARBON (EEEC) -- Default: 10. ! EEEC = 10.0 !
 NO2 GAS (EEN02) -- Default: .1755 ! EEN02 =
 0.1755 !

Visibility Method 8:

AMMONIUM SULFATE (EES04S) Set Internally (small)
 AMMONIUM SULFATE (EES04L) Set Internally (large)
 AMMONIUM NITRATE (EEN03S) Set Internally (small)
 AMMONIUM NITRATE (EEN03L) Set Internally (large)
 ORGANIC CARBON (EE0CS) Set Internally (small)
 ORGANIC CARBON (EE0CL) 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
background
 - Hourly F(RH) adjustment applied to hygroscopic and modeled sulfate and nitrate
- (A) 2 = Background extinction from speciated PM concentrations
 - Hourly F(RH) adjustment applied to observed and modeled sulfate and nitrate
 - F(RH) factor is capped at F(RHMAX)
- (B) 3 = Background extinction from speciated PM concentrations
 - 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

observed and
for
use Method 2
nitrate
visual range
prognostic
using
formulation
of
concentration
each
increase in
in the
concentration.
large
and
background
obtained
monthly RH
tabulation
Fsalt RH
either hourly
24-hour

- FLAG (2000) monthly RH adjustment factor applied to and modeled sulfate and nitrate
- 7 = Use observed weather or prognostic weather information background extinction during weather events; otherwise,
- 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 if using an observed weather data file, or
- During prognostic weather events, use Bext from the weather file
- Use Method 2 for hours without a weather event
- 8 = Background extinction from speciated PM concentrations the IMPROVE (2006) variable extinction efficiency (MFRH must be set to 4)
- Split between small and large particle concentrations SULFATES, NITRATES, and ORGANICS is a function of and different extinction efficiencies are used for
- Source-induced change in visibility includes the extinction of the background aerosol due to the change extinction efficiency that now depends on total
- Fsmall(RH) and Flarge(RH) adjustments for small and particles are applied to observed and modeled sulfate nitrate concentrations
- Fsalt(RH) adjustment for sea salt is applied to sea salt concentrations
- F(RH) factors are capped at F(RHMAX)
- RH for Fsmall(RH), Flarge(RH), and Fsalt(RH) may be from hourly data as in Method 2 or from the FLAG adjustment factor used for Method 6 where EPA F(RH) is used to infer RH, or monthly Fsmall, Flarge, and adjustment factors can be directly entered. Furthermore, a monthly RH factor may be applied to concentrations or daily concentrations to obtain the 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 = *
Percentage of particles affected by relative humidity
(RHFRAC) -- No default * RHFRAC = *

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 =
2.8,2.8,2.8,2.6,2.8,2.7,2.4,2.4,2.3,2.3,2.9,2.8 !

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 = *
(TZONE) -- No default * TZONE = *

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

Background extinction coefficients are computed from monthly CONCENTRATIONS of ammonium sulfate (BKS04), ammonium nitrate (BKN03), coarse particulates (BKPMC), organic carbon (BKOC), soil (BKS0IL), and elemental carbon (BKEC). Month 1 is January. (ug/m**3)

```

      (BKS04)  -- No default      ! BKS04 =
0.12,0.12,0.12,0.12,0.12,0.12,0.12,0.12,0.12,0.12,0.12,0.12 !
      (BKN03)  -- No default      ! BKN03 =
0.1,0.1,0.1,0.1,0.1,0.1,0.1,0.1,0.1,0.1,0.1,0.1 !
      (BKPMC)  -- No default      ! BKPMC = 3,3,3,3,3,3,3,3,3,3,3,3 !
      (BKOC)   -- No default      ! BKOC =
0.6,0.6,0.6,0.6,0.6,0.6,0.6,0.6,0.6,0.6,0.6,0.6 !
      (BKSOIL) -- No default      ! BKSOIL =
0.5,0.5,0.5,0.5,0.5,0.5,0.5,0.5,0.5,0.5,0.5,0.5 !
      (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 =
0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01 !

```

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 =
2.94,2.96,3.01,2.87,3.1,2.91,2.64,2.59,2.56,2.58,3.11,2.98 !

Large ammonium sulfate and ammonium nitrate particle sizes
(RHFLRG) -- No default      ! RHFLRG =
2.31,2.31,2.31,2.21,2.34,2.25,2.08,2.05,2.02,2.05,2.38,2.33 !

Sea salt particles
(RHFSEA) -- No default      ! RHFSEA =
3.37,3.33,3.27,3.05,3.25,3.15,2.89,2.81,2.74,2.82,3.41,3.38 !

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 = 1 !
      for
      Concentration      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)

```



```

!           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_tthHR_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_tthHR_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 = T !

Use GRID format rather than DATA format, when available?

(LGRD) -- Default: F ! LGRD = F !

Auxiliary Output Files (for subsequent analyses)

Visibility

This A separate output file may be requested that contains the change in visibility at each selected receptor when ASPEC = VISIB.
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: 1956 2055

CALPOST Version 6.221

Level 080724

CALPOST Control File Input Summary -----

Replace run data with data in Puff file 1=Y: 0

Run starting date -- year: 2006

month: 1

day: 1

Julian day: 1

Time at start of run - hour(0-23): 1

- minute: 0

- second: 0

Run ending date -- year: 2006

month: 12

day: 30

Julian day: 364

Time at end of run - hour(0-23): 23

- minute: 0

- second: 0

Base time zone (Group 1): 7.0

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

[illegible]

Visibility Processing Selected

Visibility Options are Checked for FLAG 2008

Class I Area: BADLANDS NP

Extinction Computation includes:

SULFATES

NITRATES

N02 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: SOIL

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	.2940E+01
2	.2960E+01
3	.3010E+01
4	.2870E+01
5	.3100E+01
6	.2910E+01
7	.2640E+01
8	.2590E+01
9	.2560E+01
10	.2580E+01
11	.3110E+01
12	.2980E+01

Monthly RH factor for large particles:

1	.2310E+01
2	.2310E+01
3	.2310E+01
4	.2210E+01
5	.2340E+01
6	.2250E+01
7	.2080E+01
8	.2050E+01
9	.2020E+01
10	.2050E+01
11	.2380E+01
12	.2330E+01

Monthly RH factor for sea salt:

1	.3370E+01
2	.3330E+01
3	.3270E+01
4	.3050E+01
5	.3250E+01
6	.3150E+01
7	.2890E+01
8	.2810E+01
9	.2740E+01
10	.2820E+01
11	.3410E+01
12	.3380E+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	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
2	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
3	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
4	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
5	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
6	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
7	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
8	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
9	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
10	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
11	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-01						
12	.1200E+00	.1000E+00	.3000E+01	.6000E+00	.5000E+00	.2000E-01
.1000E-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: T
 Top-N values at each receptor: T
 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

Top "n" table control

Number of "top" values at each receptor: 4
Specific ranks of "top" values reported: 1 2 3 4

Plot file option

Plot files created: T
Plot file format is DATA: .DAT

MAPSPEC: Species Mapping

Number of species-levels in file : 14

Number of species-levels processed: 15

Input ID	Processing ID	Name	
1	1	S04	1
2	2	HN03	1
3	3	N03	1
4	4	PM425	1
5	5	S02	1
6	6	NOX	1
7	7	PM800	1
8	8	PM187	1
9	9	PM081	1
10	10	PM056	1
11	11	SOIL	1
12	12	SOA	1
13	13	EC	1
14	14	PMC	1

Visibility Species			
	Processing ID	Name	
sulfate	1	S04	1
no2gas	15	N02	1
noxgas	6	NOX	1
nitrate	3	N03	1
specpmf	11	SOIL	1
specpmc	14	PMC	1
orgcarb	12	SOA	1
lmncarb	13	EC	1

IDENTIFICATION OF PROCESSED MODEL FILE -----

CALPUFF 5.8 070623

Generated by CALPUFF View - Version 4.0.0 - 01/06/2011

Averaging time for values reported from model:
1 HOUR

Number of averaging periods in file from model:
8734

Chemical species names for each layer in model:
S04 1

HN03	1
N03	1
PM425	1
S02	1
NOX	1
PM800	1
PM187	1
PM081	1
PM056	1
SOIL	1
SOA	1
EC	1
PMC	1

QA Information -- Internal Representation of Data

CONTENTS OF CONTROL FILE -----

[illegible]

```

RHMAX, BEXTRAY      = 95.0000000 11.0000000
RHFRAC, BEXTBK      = 0.00000000E+00 0.00000000E+00
LVS04, LVN03, LVN02 = T T T
LVOC, LVEC          = T T
LVPMC, LVPMF, LVBK  = T T T
SPECPMC, SPECPMF    =PMC          SOIL
EELPMC, EELPMF, EELPMCBK = 0.600000024 1.00000000 0.600000024
EES04, EEN03, EEOC   = 3.00000000 3.00000000 4.00000000
EES04S, EEN03S, EEOCS = 2.20000005 2.40000010 2.79999995
EES04L, EEN03L, EEOCL = 4.80000019 5.09999990 6.09999990
EES0IL, EEEEC, EEN02 = 1.00000000 10.0000000 0.17500005
navg, ntop          = 0 4
navgh, navgm, navgs = 0 0 0
itop = 1 2 3 4
L[1,3,24]HR         = F F T
LNAV, LRUNL         = F F
LT50, LTOPN, LEXCD  = T T F
LECHO, LTIME, LPEAK = F F F
THRESH1             = -1.00000000
THRESH3             = -1.00000000
THRESH24            = -1.00000000
THRESHN             = -1.00000000
LPLT, LGRD          = T F
MDVIS               = 1
LDEBUG              = F
LCTSG               = F

```

CONTENTS OF HEADER OF MODEL OUTPUT FILE -----

```

model : CALPUFF      5.8      070623
msyr,mjsday         = 2006 1
mshr,mssec          = 1 0
nsecdt (period)     = 3600
xbtz                = 7.00000000
mnper,nszout,mavgpd = 8734 14 1
xorigkm,yorigkm,nssta = -506.000031 298.000000 0
ielmet,jelmet       = 313 181
delx,dely,nz        = 4.00000000 4.00000000 1
iastar,iastop,jastar,jastop = 1 120 1 120
isastr,isastp,jsastr,jsastp = 1 75 1 75
(computed) ngx,ngy   = 75 75
meshdn,npts,nareas   = 1 1 0
nlines,nvols         = 0 0
ndrec,nctrec,LSGRID = 289 0 T

```

Discrete Receptors (n,x,y,z):

```

1 -416.171021 380.781006 1280.00000
2 -415.541016 380.742004 1280.00000
3 -414.911041 380.701996 1271.00000
4 -417.376038 381.730011 1280.00000
5 -416.746033 381.690002 1280.00000
6 -416.116028 381.651001 1280.00000
7 -415.486023 381.610992 1280.00000
8 -414.856018 381.571014 1219.00000
9 -414.226044 381.532013 1219.00000
10 -413.596039 381.492004 1252.00000
11 -417.321045 382.598999 1280.00000
12 -416.691040 382.558990 1280.00000

```

13	-416.062042	382.519989	1280.00000
14	-415.432037	382.480011	1280.00000
15	-414.801025	382.440002	1244.00000
16	-414.171021	382.401001	1244.00000
17	-413.541016	382.360992	1236.00000
18	-412.912018	382.321991	1226.00000
19	-412.281036	382.282013	1209.00000
20	-417.266022	383.468994	1341.00000
21	-416.637024	383.428986	1330.00000
22	-416.007019	383.389008	1307.00000
23	-415.377045	383.348999	1280.00000
24	-414.747040	383.309998	1274.00000
25	-414.117035	383.269989	1271.00000
26	-413.487030	383.230011	1274.00000
27	-412.857025	383.191010	1280.00000
28	-412.227020	383.152008	1224.00000
29	-416.582031	384.298004	1341.00000
30	-415.952026	384.257996	1336.00000
31	-415.322021	384.217987	1290.00000
32	-414.692017	384.178009	1256.00000
33	-414.062042	384.139008	1219.00000
34	-413.432037	384.098999	1219.00000
35	-412.803040	384.059998	1219.00000
36	-412.172028	384.019989	1177.00000
37	-415.897034	385.127014	1340.00000
38	-415.267029	385.087006	1290.00000
39	-414.637024	385.048004	1280.00000
40	-414.008026	385.007996	1280.00000
41	-413.378021	384.968994	1219.00000
42	-412.748016	384.928986	1271.00000
43	-412.118042	384.890015	1251.00000
44	-415.842041	385.996002	1334.00000
45	-415.213043	385.957001	1298.00000
46	-414.583038	385.916992	1280.00000
47	-413.953033	385.877991	1280.00000
48	-413.323029	385.838013	1280.00000
49	-412.694031	385.799011	1280.00000
50	-412.064026	385.759003	1219.00000
51	-409.545044	385.601990	1186.00000
52	-408.915039	385.562988	1158.00000
53	-408.286041	385.523987	1140.00000
54	-407.655029	385.484985	1145.00000
55	-407.026031	385.446014	1152.00000
56	-406.396027	385.407013	1158.00000
57	-405.767029	385.368988	1158.00000
58	-415.787018	386.864990	1344.00000
59	-415.158020	386.825989	1294.00000
60	-414.528046	386.786011	1280.00000
61	-413.898041	386.746002	1280.00000
62	-413.269043	386.707001	1280.00000
63	-412.639038	386.667999	1280.00000
64	-412.009033	386.627991	1220.00000
65	-409.491028	386.471008	1219.00000
66	-408.861023	386.432007	1158.00000
67	-408.232025	386.393005	1153.00000
68	-407.602020	386.354004	1156.00000
69	-406.972015	386.315002	1158.00000

70	-406.343018	386.276001	1157.00000
71	-405.713043	386.238007	1219.00000
72	-415.733032	387.734985	1341.00000
73	-415.103027	387.695007	1306.00000
74	-414.473022	387.654999	1304.00000
75	-413.844025	387.615997	1341.00000
76	-413.214020	387.575989	1289.00000
77	-412.585022	387.536987	1272.00000
78	-411.955017	387.497009	1219.00000
79	-411.326019	387.458008	1280.00000
80	-410.696045	387.419006	1280.00000
81	-410.066040	387.380005	1220.00000
82	-409.437042	387.341003	1218.00000
83	-408.807037	387.300995	1184.00000
84	-408.178040	387.261993	1158.00000
85	-407.548035	387.222992	1158.00000
86	-406.918030	387.184998	1158.00000
87	-406.289032	387.145996	1158.00000
88	-405.660034	387.106995	1212.00000
89	-415.678040	388.604004	1411.00000
90	-415.048035	388.563995	1341.00000
91	-414.419037	388.523987	1348.00000
92	-413.789032	388.484985	1347.00000
93	-413.160034	388.445007	1297.00000
94	-412.531036	388.406006	1284.00000
95	-411.901031	388.365997	1284.00000
96	-411.271027	388.326996	1280.00000
97	-410.642029	388.287994	1236.00000
98	-410.012024	388.248993	1219.00000
99	-409.383026	388.209991	1221.00000
100	-408.753021	388.170013	1202.00000
101	-408.124023	388.131012	1158.00000
102	-407.494019	388.092010	1158.00000
103	-406.865021	388.053986	1158.00000
104	-406.235016	388.015015	1219.00000
105	-405.606018	387.976013	1219.00000
106	-404.976044	387.937012	1191.00000
107	-404.347015	387.898987	1152.00000
108	-415.623016	389.472992	1402.00000
109	-414.994019	389.433014	1402.00000
110	-414.364044	389.394012	1402.00000
111	-413.735016	389.354004	1376.00000
112	-413.105042	389.315002	1341.00000
113	-412.476044	389.274994	1336.00000
114	-411.846039	389.235992	1322.00000
115	-411.217041	389.196991	1280.00000
116	-410.588043	389.157013	1274.00000
117	-409.958038	389.118011	1274.00000
118	-409.329041	389.079010	1280.00000
119	-408.700043	389.040009	1219.00000
120	-408.070038	389.001007	1177.00000
121	-407.440033	388.962006	1158.00000
122	-406.811035	388.923004	1163.00000
123	-406.182037	388.884003	1219.00000
124	-405.553040	388.845001	1165.00000
125	-404.923035	388.807007	1166.00000
126	-404.293030	388.768005	1158.00000

127	-415.568024	390.342010	1402.00000
128	-414.939026	390.302002	1402.00000
129	-414.309021	390.263000	1451.00000
130	-413.680023	390.222992	1360.00000
131	-413.051025	390.183990	1341.00000
132	-412.422028	390.144012	1341.00000
133	-411.792023	390.105011	1341.00000
134	-411.163025	390.065002	1288.00000
135	-410.534027	390.026001	1280.00000
136	-409.904022	389.987000	1280.00000
137	-409.275024	389.947998	1280.00000
138	-408.646027	389.908997	1273.00000
139	-408.016022	389.869995	1280.00000
140	-407.387024	389.830994	1201.00000
141	-406.758026	389.791992	1211.00000
142	-406.128021	389.752991	1219.00000
143	-405.499023	389.713989	1219.00000
144	-404.869019	389.675995	1214.00000
145	-404.240021	389.636993	1170.00000
146	-403.611023	389.597992	1158.00000
147	-415.513031	391.210999	1402.00000
148	-414.884033	391.171997	1455.00000
149	-414.255035	391.131989	1402.00000
150	-413.626038	391.092010	1399.00000
151	-412.996033	391.053009	1390.00000
152	-412.367035	391.014008	1350.00000
153	-411.738037	390.973999	1341.00000
154	-411.109039	390.934998	1283.00000
155	-410.480042	390.895996	1289.00000
156	-409.850037	390.855988	1291.00000
157	-409.221039	390.816986	1291.00000
158	-408.592041	390.778015	1280.00000
159	-407.963043	390.739014	1280.00000
160	-407.333038	390.700012	1219.00000
161	-406.704041	390.661011	1218.00000
162	-406.075043	390.622986	1252.00000
163	-405.446045	390.584015	1219.00000
164	-404.816040	390.545013	1189.00000
165	-404.187042	390.506989	1158.00000
166	-403.558044	390.467987	1153.00000
167	-415.458038	392.079987	1445.00000
168	-414.829041	392.040985	1402.00000
169	-414.200043	392.001007	1462.00000
170	-413.571045	391.960999	1402.00000
171	-412.942017	391.921997	1441.00000
172	-412.313019	391.882996	1395.00000
173	-411.683044	391.842987	1341.00000
174	-411.054016	391.803986	1320.00000
175	-410.425018	391.765015	1322.00000
176	-409.796021	391.725006	1296.00000
177	-409.167023	391.686005	1280.00000
178	-408.538025	391.647003	1276.00000
179	-407.909027	391.608002	1274.00000
180	-407.279022	391.569000	1280.00000
181	-406.650024	391.529999	1269.00000
182	-406.021027	391.492004	1217.00000
183	-405.392029	391.453003	1210.00000

184	-404.762024	391.414001	1173.000000
185	-414.775024	392.910004	1402.000000
186	-414.145020	392.869995	1387.000000
187	-413.516022	392.830994	1346.000000
188	-412.887024	392.790985	1341.000000
189	-412.259033	392.752014	1341.000000
190	-333.610016	400.507996	853.000000
191	-332.353027	400.444000	865.000000
192	-331.096039	400.381012	850.000000
193	-333.521027	402.247986	853.000000
194	-332.265045	402.183990	853.000000
195	-331.009033	402.121002	853.000000
196	-329.753021	402.057007	852.000000
197	-328.496033	401.994995	853.000000
198	-312.162018	401.199005	791.000000
199	-310.906036	401.139008	789.000000
200	-309.649017	401.079987	789.000000
201	-308.393036	401.020996	792.000000
202	-307.136017	400.962006	789.000000
203	-305.880035	400.903992	768.000000
204	-334.689026	404.050995	853.000000
205	-333.433044	403.987000	853.000000
206	-332.177032	403.924011	853.000000
207	-330.921021	403.859985	853.000000
208	-329.665039	403.796997	860.000000
209	-328.409027	403.734009	910.000000
210	-327.153046	403.671997	853.000000
211	-325.897034	403.609009	848.000000
212	-324.641022	403.546997	853.000000
213	-313.336029	402.998993	792.000000
214	-312.080017	402.938995	792.000000
215	-310.824036	402.878998	792.000000
216	-309.567017	402.820007	792.000000
217	-307.055023	402.701996	792.000000
218	-332.089020	405.664001	853.000000
219	-330.834045	405.600006	853.000000
220	-329.578033	405.536987	853.000000
221	-328.322021	405.473999	853.000000
222	-327.067017	405.411987	914.000000
223	-325.811035	405.348999	853.000000
224	-324.555023	405.286987	853.000000
225	-314.509033	404.799011	810.000000
226	-313.253021	404.739014	828.000000
227	-332.002045	407.403992	852.000000
228	-330.746033	407.339996	852.000000
229	-329.491028	407.277008	851.000000
230	-328.235016	407.214996	852.000000
231	-326.980042	407.152008	853.000000
232	-325.725037	407.089996	853.000000
233	-324.469025	407.027008	853.000000
234	-315.681030	406.598999	823.000000
235	-334.424042	409.270996	845.000000
236	-333.168030	409.207001	828.000000
237	-331.914032	409.144012	835.000000
238	-330.658020	409.079987	848.000000
239	-329.404022	409.016998	843.000000
240	-328.148041	408.954010	844.000000

241	-326.894043	408.891998	851.000000
242	-325.638031	408.829010	853.000000
243	-324.384033	408.766998	853.000000
244	-323.128021	408.705994	900.000000
245	-321.873016	408.644012	853.000000
246	-320.618042	408.583008	849.000000
247	-319.363037	408.520996	845.000000
248	-318.108032	408.460999	853.000000
249	-316.853027	408.399994	841.000000
250	-334.335022	411.010986	842.000000
251	-333.080017	410.946991	810.000000
252	-331.826019	410.882996	803.000000
253	-330.571045	410.820007	825.000000
254	-329.316040	410.756989	814.000000
255	-328.061035	410.694000	807.000000
256	-326.807037	410.631989	846.000000
257	-325.552032	410.569000	852.000000
258	-324.298035	410.506989	853.000000
259	-323.043030	410.446014	853.000000
260	-321.788025	410.384003	853.000000
261	-320.533020	410.322998	853.000000
262	-319.279022	410.260986	911.000000
263	-318.024017	410.200989	853.000000
264	-334.246033	412.751007	847.000000
265	-332.992035	412.687012	792.000000
266	-331.738037	412.622986	792.000000
267	-330.483032	412.559998	803.000000
268	-329.229034	412.497009	794.000000
269	-327.975037	412.433990	796.000000
270	-326.720032	412.372009	828.000000
271	-325.466034	412.308990	851.000000
272	-324.212036	412.247009	853.000000
273	-322.957031	412.186005	853.000000
274	-321.703033	412.123993	853.000000
275	-320.448029	412.062988	914.000000
276	-319.194031	412.001007	924.000000
277	-332.904022	414.427002	809.000000
278	-331.650024	414.363007	792.000000
279	-330.396027	414.299988	792.000000
280	-329.142029	414.237000	792.000000
281	-327.888031	414.174011	792.000000
282	-326.634033	414.112000	841.000000
283	-325.380035	414.049011	853.000000
284	-324.126038	413.987000	853.000000
285	-322.871033	413.925995	869.000000
286	-330.308044	416.040009	796.000000
287	-329.055023	415.976990	829.000000
288	-327.801025	415.914001	853.000000
289	-326.547028	415.851990	860.000000

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
KILN4

***** NOTICE *****
Gridded receptor range reset to NGX by NGY

INPUT FILES

Default Name	Unit No.	File Name and Path
CALPOST.INP	5	visib.inp
MODEL.DAT	4	CONCPM.DAT

OUTPUT FILES

Default Name	Unit No.	File Name and Path
CALPOST.LST	8	06ESPLS_POST\VISIB\VISIB.LST
(TOPN)	11	
06ESPLS_POST\VISIB\RANK()_SPECIES_ttHR_CONC_V.DAT		
(VIS24)	11	
06ESPLS_POST\VISIB\DAI LY_VISIB_VISIB.DAT		
(Delta-VIS)	34	Z:\MODELE~1\RH2011\PLS\DAT\06ESBL.DAT

CALPOST Version 6.221

Level 080724

VISIB BOESNCFG

TOP-50 24 HOUR AVERAGE EXTINCTION VALUES

STARTING				BEXT	BEXT					
YEAR DAY TIME RECEPTOR TYPE	BOESNCFG	BACKGND	%CHNG	DELTA DV	RH-					
FAC COORDINATES (km)										
2006 82 0100 (0, 204) D	16.976	16.818	0.943	0.094						
0.000 -334.689 404.051										
2006 82 0100 (0, 235) D	16.976	16.818	0.943	0.094						

0.000	-334.424	409.271				
2006	82 0100 (	0, 250) D	16.975	16.818	0.939	0.093
0.000	-334.335	411.011				
2006	82 0100 (	0, 264) D	16.974	16.818	0.933	0.093
0.000	-334.246	412.751				
2006	82 0100 (	0, 236) D	16.970	16.818	0.905	0.090
0.000	-333.168	409.207				
2006	82 0100 (	0, 205) D	16.970	16.818	0.905	0.090
0.000	-333.433	403.987				
2006	82 0100 (	0, 251) D	16.969	16.818	0.900	0.090
0.000	-333.080	410.947				
2006	82 0100 (	0, 193) D	16.969	16.818	0.899	0.089
0.000	-333.521	402.248				
2006	82 0100 (	0, 190) D	16.967	16.818	0.889	0.089
0.000	-333.610	400.508				
2006	82 0100 (	0, 265) D	16.967	16.818	0.887	0.088
0.000	-332.992	412.687				
2006	82 0100 (	0, 277) D	16.965	16.818	0.875	0.087
0.000	-332.904	414.427				
2006	82 0100 (	0, 227) D	16.964	16.818	0.871	0.087
0.000	-332.002	407.404				
2006	82 0100 (	0, 218) D	16.964	16.818	0.871	0.087
0.000	-332.089	405.664				
2006	82 0100 (	0, 206) D	16.963	16.818	0.867	0.086
0.000	-332.177	403.924				
2006	82 0100 (	0, 237) D	16.963	16.818	0.866	0.086
0.000	-331.914	409.144				
2006	82 0100 (	0, 194) D	16.962	16.818	0.860	0.086
0.000	-332.265	402.184				
2006	82 0100 (	0, 252) D	16.961	16.818	0.856	0.085
0.000	-331.826	410.883				
2006	82 0100 (	0, 191) D	16.961	16.818	0.852	0.085
0.000	-332.353	400.444				
2006	82 0100 (	0, 266) D	16.960	16.818	0.845	0.084
0.000	-331.738	412.623				
2006	82 0100 (	0, 278) D	16.958	16.818	0.836	0.083
0.000	-331.650	414.363				
2006	82 0100 (	0, 219) D	16.958	16.818	0.833	0.083
0.000	-330.834	405.600				
2006	82 0100 (	0, 228) D	16.957	16.818	0.831	0.083
0.000	-330.746	407.340				
2006	82 0100 (	0, 207) D	16.957	16.818	0.830	0.083
0.000	-330.921	403.860				
2006	82 0100 (	0, 238) D	16.957	16.818	0.827	0.082
0.000	-330.658	409.080				
2006	82 0100 (	0, 195) D	16.956	16.818	0.824	0.082
0.000	-331.009	402.121				
2006	82 0100 (	0, 253) D	16.955	16.818	0.819	0.082
0.000	-330.571	410.820				
2006	82 0100 (	0, 192) D	16.955	16.818	0.815	0.081
0.000	-331.096	400.381				
2006	82 0100 (	0, 267) D	16.954	16.818	0.812	0.081
0.000	-330.483	412.560				
2006	82 0100 (	0, 279) D	16.953	16.818	0.804	0.080
0.000	-330.396	414.300				
2006	325 0100 (	0, 288) D	16.951	16.870	0.480	0.048
0.000	-327.801	415.914				

2006	82	0100	(0, 220) D	16.951	16.818	0.795	0.079
0.000	-329.578	405.537					
2006	325	0100	(0, 289) D	16.951	16.870	0.479	0.048
0.000	-326.547	415.852					
2006	82	0100	(0, 208) D	16.951	16.818	0.793	0.079
0.000	-329.665	403.797					
2006	82	0100	(0, 229) D	16.951	16.818	0.793	0.079
0.000	-329.491	407.277					
2006	82	0100	(0, 239) D	16.950	16.818	0.790	0.079
0.000	-329.404	409.017					
2006	82	0100	(0, 196) D	16.950	16.818	0.788	0.078
0.000	-329.753	402.057					
2006	82	0100	(0, 286) D	16.950	16.818	0.788	0.078
0.000	-330.308	416.040					
2006	82	0100	(0, 254) D	16.950	16.818	0.785	0.078
0.000	-329.316	410.757					
2006	82	0100	(0, 268) D	16.948	16.818	0.776	0.077
0.000	-329.229	412.497					
2006	325	0100	(0, 287) D	16.948	16.870	0.459	0.046
0.000	-329.055	415.977					
2006	82	0100	(0, 280) D	16.946	16.818	0.765	0.076
0.000	-329.142	414.237					
2006	82	0100	(0, 209) D	16.945	16.818	0.760	0.076
0.000	-328.409	403.734					
2006	82	0100	(0, 230) D	16.945	16.818	0.759	0.076
0.000	-328.235	407.215					
2006	82	0100	(0, 221) D	16.945	16.818	0.757	0.075
0.000	-328.322	405.474					
2006	82	0100	(0, 287) D	16.945	16.818	0.756	0.075
0.000	-329.055	415.977					
2006	82	0100	(0, 240) D	16.945	16.818	0.756	0.075
0.000	-328.148	408.954					
2006	82	0100	(0, 197) D	16.944	16.818	0.750	0.075
0.000	-328.496	401.995					
2006	82	0100	(0, 255) D	16.944	16.818	0.750	0.075
0.000	-328.061	410.694					
2006	82	0100	(0, 269) D	16.942	16.818	0.742	0.074
0.000	-327.975	412.434					
2006	325	0100	(0, 286) D	16.942	16.870	0.425	0.042
0.000	-330.308	416.040					

CALPOST Version 6.221

Level 080724

VISIB BOESNCFG

4 RANKED 24 HOUR AVERAGE EXTINCTION VALUES AT EACH DISCRETE
RECEPTOR (YEAR, DAY, START TIME) (1/Mega-m)

RECEPTOR	COORDINATES (km)	1 RANK	2
RANK	3 RANK	4 RANK	
190	-333.610 400.508	1.6967E+01 (2006, 082, 0100)	1.6913E+01

(2006,083,0100)	1.6906E+01	(2006,058,0100)	1.6905E+01	(2006,334,0100)
191	-332.353	400.444	1.6961E+01	(2006,082,0100) 1.6914E+01
(2006,083,0100)	1.6910E+01	(2006,058,0100)	1.6907E+01	(2006,334,0100)
192	-331.096	400.381	1.6955E+01	(2006,082,0100) 1.6915E+01
(2006,083,0100)	1.6905E+01	(2006,334,0100)	1.6903E+01	(2006,058,0100)
193	-333.521	402.248	1.6969E+01	(2006,082,0100) 1.6912E+01
(2006,083,0100)	1.6905E+01	(2006,334,0100)	1.6904E+01	(2006,125,0100)
194	-332.265	402.184	1.6962E+01	(2006,082,0100) 1.6913E+01
(2006,083,0100)	1.6906E+01	(2006,334,0100)	1.6903E+01	(2006,329,0100)
195	-331.009	402.121	1.6956E+01	(2006,082,0100) 1.6913E+01
(2006,083,0100)	1.6906E+01	(2006,334,0100)	1.6903E+01	(2006,329,0100)
196	-329.753	402.057	1.6950E+01	(2006,082,0100) 1.6914E+01
(2006,083,0100)	1.6906E+01	(2006,334,0100)	1.6903E+01	(2006,329,0100)
197	-328.496	401.995	1.6944E+01	(2006,082,0100) 1.6915E+01
(2006,083,0100)	1.6906E+01	(2006,334,0100)	1.6903E+01	(2006,329,0100)
198	-312.162	401.199	1.6917E+01	(2006,083,0100) 1.6907E+01
(2006,328,0100)	1.6899E+01	(2006,334,0100)	1.6899E+01	(2006,329,0100)
199	-310.906	401.139	1.6917E+01	(2006,083,0100) 1.6906E+01
(2006,328,0100)	1.6899E+01	(2006,334,0100)	1.6899E+01	(2006,329,0100)
200	-309.649	401.080	1.6917E+01	(2006,083,0100) 1.6906E+01
(2006,328,0100)	1.6899E+01	(2006,334,0100)	1.6898E+01	(2006,329,0100)
201	-308.393	401.021	1.6916E+01	(2006,083,0100) 1.6907E+01
(2006,328,0100)	1.6899E+01	(2006,334,0100)	1.6898E+01	(2006,329,0100)
202	-307.136	400.962	1.6916E+01	(2006,083,0100) 1.6906E+01
(2006,328,0100)	1.6899E+01	(2006,334,0100)	1.6898E+01	(2006,329,0100)
203	-305.880	400.904	1.6915E+01	(2006,083,0100) 1.6903E+01
(2006,328,0100)	1.6897E+01	(2006,329,0100)	1.6896E+01	(2006,334,0100)
204	-334.689	404.051	1.6976E+01	(2006,082,0100) 1.6909E+01
(2006,083,0100)	1.6906E+01	(2006,325,0100)	1.6905E+01	(2006,125,0100)
205	-333.433	403.987	1.6970E+01	(2006,082,0100) 1.6910E+01
(2006,083,0100)	1.6906E+01	(2006,325,0100)	1.6905E+01	(2006,334,0100)
206	-332.177	403.924	1.6963E+01	(2006,082,0100) 1.6911E+01
(2006,083,0100)	1.6906E+01	(2006,334,0100)	1.6906E+01	(2006,325,0100)
207	-330.921	403.860	1.6957E+01	(2006,082,0100) 1.6911E+01
(2006,083,0100)	1.6906E+01	(2006,334,0100)	1.6905E+01	(2006,325,0100)
208	-329.665	403.797	1.6951E+01	(2006,082,0100) 1.6912E+01
(2006,083,0100)	1.6908E+01	(2006,328,0100)	1.6907E+01	(2006,334,0100)
209	-328.409	403.734	1.6945E+01	(2006,082,0100) 1.6917E+01
(2006,328,0100)	1.6915E+01	(2006,334,0100)	1.6913E+01	(2006,083,0100)
210	-327.153	403.672	1.6939E+01	(2006,082,0100) 1.6913E+01
(2006,083,0100)	1.6910E+01	(2006,328,0100)	1.6907E+01	(2006,334,0100)
211	-325.897	403.609	1.6933E+01	(2006,082,0100) 1.6914E+01
(2006,083,0100)	1.6911E+01	(2006,328,0100)	1.6906E+01	(2006,334,0100)
212	-324.641	403.547	1.6928E+01	(2006,082,0100) 1.6914E+01
(2006,083,0100)	1.6913E+01	(2006,328,0100)	1.6907E+01	(2006,334,0100)
213	-313.336	402.999	1.6915E+01	(2006,083,0100) 1.6909E+01
(2006,328,0100)	1.6900E+01	(2006,329,0100)	1.6900E+01	(2006,334,0100)
214	-312.080	402.939	1.6915E+01	(2006,083,0100) 1.6908E+01
(2006,328,0100)	1.6900E+01	(2006,329,0100)	1.6900E+01	(2006,334,0100)
215	-310.824	402.879	1.6915E+01	(2006,083,0100) 1.6908E+01
(2006,328,0100)	1.6900E+01	(2006,334,0100)	1.6899E+01	(2006,329,0100)
216	-309.567	402.820	1.6914E+01	(2006,083,0100) 1.6907E+01
(2006,328,0100)	1.6899E+01	(2006,334,0100)	1.6899E+01	(2006,329,0100)
217	-307.055	402.702	1.6914E+01	(2006,083,0100) 1.6906E+01
(2006,328,0100)	1.6899E+01	(2006,334,0100)	1.6898E+01	(2006,329,0100)
218	-332.089	405.664	1.6964E+01	(2006,082,0100) 1.6913E+01
(2006,328,0100)	1.6911E+01	(2006,325,0100)	1.6909E+01	(2006,083,0100)

219	-330.834	405.600	1.6958E+01	(2006,082,0100)	1.6915E+01
(2006,328,0100)	1.6910E+01	(2006,325,0100)	1.6909E+01	(2006,083,0100)	
220	-329.578	405.537	1.6951E+01	(2006,082,0100)	1.6916E+01
(2006,328,0100)	1.6910E+01	(2006,083,0100)	1.6910E+01	(2006,325,0100)	
221	-328.322	405.474	1.6945E+01	(2006,082,0100)	1.6918E+01
(2006,328,0100)	1.6911E+01	(2006,083,0100)	1.6910E+01	(2006,325,0100)	
222	-327.067	405.412	1.6940E+01	(2006,082,0100)	1.6930E+01
(2006,328,0100)	1.6916E+01	(2006,334,0100)	1.6914E+01	(2006,325,0100)	
223	-325.811	405.349	1.6934E+01	(2006,082,0100)	1.6920E+01
(2006,328,0100)	1.6912E+01	(2006,083,0100)	1.6909E+01	(2006,325,0100)	
224	-324.555	405.287	1.6928E+01	(2006,082,0100)	1.6921E+01
(2006,328,0100)	1.6912E+01	(2006,083,0100)	1.6908E+01	(2006,325,0100)	
225	-314.509	404.799	1.6913E+01	(2006,083,0100)	1.6912E+01
(2006,328,0100)	1.6902E+01	(2006,334,0100)	1.6901E+01	(2006,329,0100)	
226	-313.253	404.739	1.6914E+01	(2006,328,0100)	1.6913E+01
(2006,083,0100)	1.6904E+01	(2006,334,0100)	1.6901E+01	(2006,329,0100)	
227	-332.002	407.404	1.6964E+01	(2006,082,0100)	1.6923E+01
(2006,328,0100)	1.6916E+01	(2006,325,0100)	1.6907E+01	(2006,329,0100)	
228	-330.746	407.340	1.6957E+01	(2006,082,0100)	1.6924E+01
(2006,328,0100)	1.6916E+01	(2006,325,0100)	1.6907E+01	(2006,083,0100)	
229	-329.491	407.277	1.6951E+01	(2006,082,0100)	1.6925E+01
(2006,328,0100)	1.6915E+01	(2006,325,0100)	1.6908E+01	(2006,083,0100)	
230	-328.235	407.215	1.6945E+01	(2006,082,0100)	1.6926E+01
(2006,328,0100)	1.6915E+01	(2006,325,0100)	1.6909E+01	(2006,083,0100)	
231	-326.980	407.152	1.6939E+01	(2006,082,0100)	1.6926E+01
(2006,328,0100)	1.6915E+01	(2006,325,0100)	1.6909E+01	(2006,083,0100)	
232	-325.725	407.090	1.6934E+01	(2006,082,0100)	1.6926E+01
(2006,328,0100)	1.6914E+01	(2006,325,0100)	1.6910E+01	(2006,083,0100)	
233	-324.469	407.027	1.6928E+01	(2006,082,0100)	1.6926E+01
(2006,328,0100)	1.6913E+01	(2006,325,0100)	1.6910E+01	(2006,083,0100)	
234	-315.681	406.599	1.6915E+01	(2006,328,0100)	1.6911E+01
(2006,083,0100)	1.6905E+01	(2006,325,0100)	1.6904E+01	(2006,334,0100)	
235	-334.424	409.271	1.6976E+01	(2006,082,0100)	1.6928E+01
(2006,328,0100)	1.6923E+01	(2006,325,0100)	1.6908E+01	(2006,329,0100)	
236	-333.168	409.207	1.6970E+01	(2006,082,0100)	1.6925E+01
(2006,328,0100)	1.6921E+01	(2006,325,0100)	1.6908E+01	(2006,329,0100)	
237	-331.914	409.144	1.6963E+01	(2006,082,0100)	1.6927E+01
(2006,328,0100)	1.6921E+01	(2006,325,0100)	1.6908E+01	(2006,329,0100)	
238	-330.658	409.080	1.6957E+01	(2006,082,0100)	1.6930E+01
(2006,328,0100)	1.6922E+01	(2006,325,0100)	1.6908E+01	(2006,329,0100)	
239	-329.404	409.017	1.6950E+01	(2006,082,0100)	1.6929E+01
(2006,328,0100)	1.6921E+01	(2006,325,0100)	1.6908E+01	(2006,329,0100)	
240	-328.148	408.954	1.6945E+01	(2006,082,0100)	1.6929E+01
(2006,328,0100)	1.6920E+01	(2006,325,0100)	1.6907E+01	(2006,329,0100)	
241	-326.894	408.892	1.6939E+01	(2006,082,0100)	1.6929E+01
(2006,328,0100)	1.6921E+01	(2006,325,0100)	1.6907E+01	(2006,329,0100)	
242	-325.638	408.829	1.6933E+01	(2006,082,0100)	1.6929E+01
(2006,328,0100)	1.6920E+01	(2006,325,0100)	1.6907E+01	(2006,083,0100)	
243	-324.384	408.767	1.6928E+01	(2006,082,0100)	1.6928E+01
(2006,328,0100)	1.6919E+01	(2006,325,0100)	1.6908E+01	(2006,083,0100)	
244	-323.128	408.706	1.6935E+01	(2006,328,0100)	1.6924E+01
(2006,082,0100)	1.6923E+01	(2006,325,0100)	1.6914E+01	(2006,334,0100)	
245	-321.873	408.644	1.6925E+01	(2006,328,0100)	1.6919E+01
(2006,082,0100)	1.6917E+01	(2006,325,0100)	1.6908E+01	(2006,083,0100)	
246	-320.618	408.583	1.6923E+01	(2006,328,0100)	1.6916E+01
(2006,325,0100)	1.6915E+01	(2006,082,0100)	1.6908E+01	(2006,083,0100)	
247	-319.363	408.521	1.6920E+01	(2006,328,0100)	1.6914E+01

(2006,325,0100)	1.6910E+01	(2006,082,0100)	1.6908E+01	(2006,083,0100)
248	-318.108	408.461	1.6920E+01	(2006,328,0100) 1.6914E+01
(2006,325,0100)	1.6908E+01	(2006,083,0100)	1.6908E+01	(2006,334,0100)
249	-316.853	408.400	1.6917E+01	(2006,328,0100) 1.6912E+01
(2006,325,0100)	1.6908E+01	(2006,083,0100)	1.6906E+01	(2006,334,0100)
250	-334.335	411.011	1.6975E+01	(2006,082,0100) 1.6933E+01
(2006,328,0100)	1.6930E+01	(2006,325,0100)	1.6910E+01	(2006,329,0100)
251	-333.080	410.947	1.6969E+01	(2006,082,0100) 1.6926E+01
(2006,328,0100)	1.6925E+01	(2006,325,0100)	1.6910E+01	(2006,329,0100)
252	-331.826	410.883	1.6961E+01	(2006,082,0100) 1.6924E+01
(2006,328,0100)	1.6924E+01	(2006,325,0100)	1.6909E+01	(2006,329,0100)
253	-330.571	410.820	1.6955E+01	(2006,082,0100) 1.6928E+01
(2006,328,0100)	1.6926E+01	(2006,325,0100)	1.6909E+01	(2006,329,0100)
254	-329.316	410.757	1.6950E+01	(2006,082,0100) 1.6924E+01
(2006,328,0100)	1.6924E+01	(2006,325,0100)	1.6909E+01	(2006,329,0100)
255	-328.061	410.694	1.6944E+01	(2006,082,0100) 1.6922E+01
(2006,325,0100)	1.6922E+01	(2006,328,0100)	1.6909E+01	(2006,329,0100)
256	-326.807	410.632	1.6938E+01	(2006,082,0100) 1.6928E+01
(2006,328,0100)	1.6927E+01	(2006,325,0100)	1.6908E+01	(2006,329,0100)
257	-325.552	410.569	1.6933E+01	(2006,082,0100) 1.6927E+01
(2006,328,0100)	1.6926E+01	(2006,325,0100)	1.6908E+01	(2006,329,0100)
258	-324.298	410.507	1.6928E+01	(2006,082,0100) 1.6926E+01
(2006,328,0100)	1.6925E+01	(2006,325,0100)	1.6908E+01	(2006,329,0100)
259	-323.043	410.446	1.6924E+01	(2006,325,0100) 1.6924E+01
(2006,328,0100)	1.6923E+01	(2006,082,0100)	1.6907E+01	(2006,329,0100)
260	-321.788	410.384	1.6923E+01	(2006,325,0100) 1.6922E+01
(2006,328,0100)	1.6919E+01	(2006,082,0100)	1.6907E+01	(2006,334,0100)
261	-320.533	410.323	1.6922E+01	(2006,325,0100) 1.6920E+01
(2006,328,0100)	1.6914E+01	(2006,082,0100)	1.6907E+01	(2006,334,0100)
262	-319.279	410.261	1.6927E+01	(2006,328,0100) 1.6927E+01
(2006,325,0100)	1.6915E+01	(2006,334,0100)	1.6910E+01	(2006,082,0100)
263	-318.024	410.201	1.6919E+01	(2006,325,0100) 1.6917E+01
(2006,328,0100)	1.6907E+01	(2006,334,0100)	1.6906E+01	(2006,082,0100)
264	-334.246	412.751	1.6974E+01	(2006,082,0100) 1.6939E+01
(2006,325,0100)	1.6935E+01	(2006,328,0100)	1.6911E+01	(2006,329,0100)
265	-332.992	412.687	1.6967E+01	(2006,082,0100) 1.6929E+01
(2006,325,0100)	1.6923E+01	(2006,328,0100)	1.6911E+01	(2006,329,0100)
266	-331.738	412.623	1.6960E+01	(2006,082,0100) 1.6928E+01
(2006,325,0100)	1.6921E+01	(2006,328,0100)	1.6911E+01	(2006,329,0100)
267	-330.483	412.560	1.6954E+01	(2006,082,0100) 1.6930E+01
(2006,325,0100)	1.6922E+01	(2006,328,0100)	1.6910E+01	(2006,329,0100)
268	-329.229	412.497	1.6948E+01	(2006,082,0100) 1.6928E+01
(2006,325,0100)	1.6919E+01	(2006,328,0100)	1.6910E+01	(2006,329,0100)
269	-327.975	412.434	1.6942E+01	(2006,082,0100) 1.6927E+01
(2006,325,0100)	1.6918E+01	(2006,328,0100)	1.6910E+01	(2006,329,0100)
270	-326.720	412.372	1.6937E+01	(2006,082,0100) 1.6931E+01
(2006,325,0100)	1.6921E+01	(2006,328,0100)	1.6910E+01	(2006,329,0100)
271	-325.466	412.309	1.6933E+01	(2006,325,0100) 1.6932E+01
(2006,082,0100)	1.6923E+01	(2006,328,0100)	1.6909E+01	(2006,329,0100)
272	-324.212	412.247	1.6932E+01	(2006,325,0100) 1.6927E+01
(2006,082,0100)	1.6922E+01	(2006,328,0100)	1.6909E+01	(2006,329,0100)
273	-322.957	412.186	1.6931E+01	(2006,325,0100) 1.6923E+01
(2006,082,0100)	1.6920E+01	(2006,328,0100)	1.6908E+01	(2006,329,0100)
274	-321.703	412.124	1.6929E+01	(2006,325,0100) 1.6918E+01
(2006,082,0100)	1.6918E+01	(2006,328,0100)	1.6908E+01	(2006,329,0100)
275	-320.448	412.063	1.6936E+01	(2006,325,0100) 1.6924E+01
(2006,328,0100)	1.6915E+01	(2006,334,0100)	1.6914E+01	(2006,082,0100)

276	-319.194	412.001	1.6936E+01	(2006,325,0100)	1.6924E+01
(2006,328,0100)	1.6916E+01	(2006,334,0100)	1.6910E+01	(2006,082,0100)	
277	-332.904	414.427	1.6965E+01	(2006,082,0100)	1.6940E+01
(2006,325,0100)	1.6922E+01	(2006,328,0100)	1.6912E+01	(2006,329,0100)	
278	-331.650	414.363	1.6958E+01	(2006,082,0100)	1.6935E+01
(2006,325,0100)	1.6917E+01	(2006,328,0100)	1.6912E+01	(2006,329,0100)	
279	-330.396	414.300	1.6953E+01	(2006,082,0100)	1.6934E+01
(2006,325,0100)	1.6916E+01	(2006,328,0100)	1.6912E+01	(2006,329,0100)	
280	-329.142	414.237	1.6946E+01	(2006,082,0100)	1.6933E+01
(2006,325,0100)	1.6915E+01	(2006,328,0100)	1.6912E+01	(2006,329,0100)	
281	-327.888	414.174	1.6941E+01	(2006,082,0100)	1.6932E+01
(2006,325,0100)	1.6913E+01	(2006,328,0100)	1.6911E+01	(2006,329,0100)	
282	-326.634	414.112	1.6940E+01	(2006,325,0100)	1.6936E+01
(2006,082,0100)	1.6918E+01	(2006,328,0100)	1.6911E+01	(2006,329,0100)	
283	-325.380	414.049	1.6941E+01	(2006,325,0100)	1.6931E+01
(2006,082,0100)	1.6918E+01	(2006,328,0100)	1.6911E+01	(2006,329,0100)	
284	-324.126	413.987	1.6939E+01	(2006,325,0100)	1.6926E+01
(2006,082,0100)	1.6916E+01	(2006,328,0100)	1.6910E+01	(2006,329,0100)	
285	-322.871	413.926	1.6940E+01	(2006,325,0100)	1.6922E+01
(2006,082,0100)	1.6916E+01	(2006,328,0100)	1.6910E+01	(2006,329,0100)	
286	-330.308	416.040	1.6950E+01	(2006,082,0100)	1.6942E+01
(2006,325,0100)	1.6913E+01	(2006,329,0100)	1.6911E+01	(2006,328,0100)	
287	-329.055	415.977	1.6948E+01	(2006,325,0100)	1.6945E+01
(2006,082,0100)	1.6913E+01	(2006,328,0100)	1.6913E+01	(2006,329,0100)	
288	-327.801	415.914	1.6951E+01	(2006,325,0100)	1.6940E+01
(2006,082,0100)	1.6915E+01	(2006,328,0100)	1.6913E+01	(2006,329,0100)	
289	-326.547	415.852	1.6951E+01	(2006,325,0100)	1.6935E+01
(2006,082,0100)	1.6914E+01	(2006,328,0100)	1.6912E+01	(2006,329,0100)	

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 bxS04 bxN03 bxOC bxEC bxPMC bxPMF bxN02

F(RH) F(RH) F(RH)

2006 1 1 190 -333.610 400.508 D 0.001 16.784

16.785 0.01 0.000 0.001 0.000 0.000 0.000 0.000 0.000

2.940 2.310 3.370

2006 2 1 202 -307.136 400.962 D 0.078 16.784

16.862 0.47 0.000 0.074 0.000 0.000 0.000 0.000 0.004

2.940 2.310 3.370

2006	3	1	204		-334.689	404.051	D	0.024	16.784
16.808		0.14	0.000	0.023	0.000	0.000	0.000	0.000	0.001
2.940	2.310	3.370							
2006	4	1	190		-333.610	400.508	D	0.007	16.784
16.791		0.04	0.000	0.005	0.000	0.000	0.000	0.000	0.001
2.940	2.310	3.370							
2006	5	1	190		-333.610	400.508	D	0.018	16.784
16.802		0.11	0.000	0.016	0.000	0.000	0.000	0.000	0.002
2.940	2.310	3.370							
2006	6	1	191		-332.353	400.444	D	0.022	16.784
16.806		0.13	0.000	0.018	0.000	0.000	0.000	0.000	0.003
2.940	2.310	3.370							
2006	7	1	288		-327.801	415.914	D	0.062	16.784
16.846		0.37	0.000	0.061	0.000	0.000	0.000	0.000	0.001
2.940	2.310	3.370							
2006	8	1	203		-305.880	400.904	D	0.000	16.784
16.784		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	9	1	209		-328.409	403.734	D	0.020	16.784
16.804		0.12	0.000	0.019	0.000	0.000	0.000	0.000	0.001
2.940	2.310	3.370							
2006	10	1	288		-327.801	415.914	D	0.069	16.784
16.853		0.41	0.000	0.062	0.000	0.000	0.000	0.000	0.007
2.940	2.310	3.370							
2006	11	1	217		-307.055	402.702	D	0.001	16.784
16.785		0.01	0.000	0.001	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	12	1	190		-333.610	400.508	D	0.000	16.784
16.784		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	13	1	289		-326.547	415.852	D	0.022	16.784
16.806		0.13	0.000	0.018	0.000	0.000	0.000	0.000	0.003
2.940	2.310	3.370							
2006	14	1	289		-326.547	415.852	D	0.003	16.784
16.787		0.02	0.000	0.002	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	15	1	289		-326.547	415.852	D	0.003	16.784
16.787		0.02	0.000	0.002	0.000	0.000	0.000	0.000	0.001
2.940	2.310	3.370							
2006	16	1	190		-333.610	400.508	D	0.000	16.784
16.784		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	17	1	264		-334.246	412.751	D	0.005	16.784
16.789		0.03	0.000	0.005	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	18	1	264		-334.246	412.751	D	0.056	16.784
16.840		0.33	0.000	0.051	0.000	0.000	0.000	0.000	0.004
2.940	2.310	3.370							
2006	19	1	190		-333.610	400.508	D	0.003	16.784
16.788		0.02	0.000	0.003	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	20	1	235		-334.424	409.271	D	0.063	16.784
16.847		0.38	0.000	0.056	0.000	0.000	0.000	0.000	0.007
2.940	2.310	3.370							
2006	21	1	209		-328.409	403.734	D	0.033	16.784
16.817		0.20	0.000	0.027	0.000	0.000	0.000	0.000	0.005
2.940	2.310	3.370							

2006	22	1	222		-327.067	405.412	D	0.031	16.784
16.815		0.18	0.000	0.027	0.000	0.000	0.000	0.000	0.004
2.940	2.310	3.370							
2006	23	1	276		-319.194	412.001	D	0.029	16.784
16.813		0.17	0.000	0.024	0.000	0.000	0.000	0.000	0.005
2.940	2.310	3.370							
2006	24	1	190		-333.610	400.508	D	0.001	16.784
16.785		0.01	0.000	0.001	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	25	1	288		-327.801	415.914	D	0.001	16.784
16.785		0.01	0.000	0.001	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	26	1	264		-334.246	412.751	D	0.005	16.784
16.789		0.03	0.000	0.005	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	27	1	190		-333.610	400.508	D	0.050	16.784
16.834		0.30	0.000	0.048	0.000	0.000	0.000	0.000	0.002
2.940	2.310	3.370							
2006	28	1	203		-305.880	400.904	D	0.004	16.784
16.788		0.02	0.000	0.004	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	29	1	190		-333.610	400.508	D	0.000	16.784
16.784		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.940	2.310	3.370							
2006	30	1	222		-327.067	405.412	D	0.029	16.784
16.813		0.17	0.000	0.025	0.000	0.000	0.000	0.000	0.004
2.940	2.310	3.370							
2006	31	1	276		-319.194	412.001	D	0.025	16.784
16.810		0.15	0.000	0.023	0.000	0.000	0.000	0.000	0.002
2.940	2.310	3.370							
2006	32	1	190		-333.610	400.508	D	0.010	16.793
16.803		0.06	0.000	0.008	0.000	0.000	0.000	0.000	0.001
2.960	2.310	3.330							
2006	33	1	190		-333.610	400.508	D	0.007	16.793
16.801		0.04	0.000	0.006	0.000	0.000	0.000	0.000	0.001
2.960	2.310	3.330							
2006	34	1	190		-333.610	400.508	D	0.013	16.793
16.807		0.08	0.000	0.011	0.000	0.000	0.000	0.000	0.002
2.960	2.310	3.330							
2006	35	1	264		-334.246	412.751	D	0.033	16.793
16.827		0.20	0.000	0.031	0.000	0.000	0.000	0.000	0.003
2.960	2.310	3.330							
2006	36	1	190		-333.610	400.508	D	0.000	16.793
16.793		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	37	1	190		-333.610	400.508	D	0.001	16.793
16.794		0.00	0.000	0.001	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	38	1	190		-333.610	400.508	D	0.002	16.793
16.796		0.01	0.000	0.002	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	39	1	264		-334.246	412.751	D	0.002	16.793
16.796		0.01	0.000	0.002	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	40	1	191		-332.353	400.444	D	0.007	16.793
16.801		0.04	0.000	0.007	0.000	0.000	0.000	0.000	0.001
2.960	2.310	3.330							

2006	41	1	190		-333.610	400.508	D	0.000	16.793
16.793		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	42	1	190		-333.610	400.508	D	0.000	16.793
16.793		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	43	1	276		-319.194	412.001	D	0.017	16.793
16.810		0.10	0.000	0.014	0.000	0.000	0.000	0.000	0.003
2.960	2.310	3.330							
2006	44	1	222		-327.067	405.412	D	0.029	16.793
16.823		0.18	0.000	0.025	0.000	0.000	0.000	0.000	0.004
2.960	2.310	3.330							
2006	45	1	202		-307.136	400.962	D	0.000	16.793
16.793		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	46	1	190		-333.610	400.508	D	0.000	16.793
16.793		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	47	1	190		-333.610	400.508	D	0.000	16.793
16.793		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	48	1	190		-333.610	400.508	D	0.031	16.793
16.824		0.18	0.000	0.031	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	49	1	264		-334.246	412.751	D	0.034	16.793
16.828		0.20	0.000	0.034	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	50	1	276		-319.194	412.001	D	0.104	16.793
16.897		0.62	0.000	0.096	0.000	0.000	0.000	0.000	0.007
2.960	2.310	3.330							
2006	51	1	209		-328.409	403.734	D	0.066	16.793
16.860		0.40	0.000	0.056	0.000	0.000	0.000	0.000	0.010
2.960	2.310	3.330							
2006	52	1	276		-319.194	412.001	D	0.076	16.793
16.870		0.45	0.000	0.064	0.000	0.000	0.000	0.000	0.012
2.960	2.310	3.330							
2006	53	1	289		-326.547	415.852	D	0.092	16.793
16.885		0.55	0.000	0.075	0.000	0.000	0.000	0.000	0.016
2.960	2.310	3.330							
2006	54	1	217		-307.055	402.702	D	0.062	16.793
16.856		0.37	0.000	0.058	0.000	0.000	0.000	0.000	0.004
2.960	2.310	3.330							
2006	55	1	287		-329.055	415.977	D	0.007	16.793
16.800		0.04	0.000	0.005	0.000	0.000	0.000	0.000	0.002
2.960	2.310	3.330							
2006	56	1	190		-333.610	400.508	D	0.000	16.793
16.793		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							
2006	57	1	190		-333.610	400.508	D	0.024	16.793
16.818		0.14	0.000	0.023	0.000	0.000	0.000	0.000	0.001
2.960	2.310	3.330							
2006	58	1	191		-332.353	400.444	D	0.116	16.793
16.910		0.69	0.000	0.104	0.000	0.000	0.000	0.000	0.012
2.960	2.310	3.330							
2006	59	1	289		-326.547	415.852	D	0.001	16.793
16.794		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.960	2.310	3.330							

2006	60	1	190		-333.610	400.508	D	0.003	16.818
16.821		0.02	0.000	0.002	0.000	0.000	0.000	0.000	0.001
3.010	2.310	3.270							
2006	61	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	62	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	63	1	203		-305.880	400.904	D	0.003	16.818
16.821		0.02	0.000	0.003	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	64	1	190		-333.610	400.508	D	0.002	16.818
16.819		0.01	0.000	0.002	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	65	1	264		-334.246	412.751	D	0.002	16.818
16.819		0.01	0.000	0.002	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	66	1	289		-326.547	415.852	D	0.001	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	67	1	276		-319.194	412.001	D	0.004	16.818
16.821		0.02	0.000	0.004	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	68	1	277		-332.904	414.427	D	0.007	16.818
16.824		0.04	0.000	0.006	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	69	1	264		-334.246	412.751	D	0.009	16.818
16.827		0.06	0.000	0.008	0.000	0.000	0.000	0.000	0.001
3.010	2.310	3.270							
2006	70	1	190		-333.610	400.508	D	0.037	16.818
16.855		0.22	0.000	0.036	0.000	0.000	0.000	0.000	0.001
3.010	2.310	3.270							
2006	71	1	286		-330.308	416.040	D	0.005	16.818
16.822		0.03	0.000	0.005	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	72	1	204		-334.689	404.051	D	0.017	16.818
16.835		0.10	0.000	0.017	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	73	1	276		-319.194	412.001	D	0.051	16.818
16.868		0.30	0.000	0.044	0.000	0.000	0.000	0.000	0.006
3.010	2.310	3.270							
2006	74	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	75	1	264		-334.246	412.751	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	76	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	77	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	78	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							

2006	79	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	80	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	81	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	82	1	204		-334.689	404.051	D	0.159	16.818
16.976		0.94	0.000	0.158	0.000	0.000	0.000	0.000	0.001
3.010	2.310	3.270							
2006	83	1	198		-312.162	401.199	D	0.100	16.818
16.917		0.59	0.000	0.099	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	84	1	286		-330.308	416.040	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	85	1	190		-333.610	400.508	D	0.005	16.818
16.823		0.03	0.000	0.005	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	86	1	190		-333.610	400.508	D	0.002	16.818
16.819		0.01	0.000	0.001	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	87	1	203		-305.880	400.904	D	0.001	16.818
16.818		0.00	0.000	0.001	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	88	1	190		-333.610	400.508	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	89	1	244		-323.128	408.706	D	0.006	16.818
16.824		0.04	0.000	0.006	0.000	0.000	0.000	0.000	0.001
3.010	2.310	3.270							
2006	90	1	235		-334.424	409.271	D	0.000	16.818
16.818		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.010	2.310	3.270							
2006	91	1	204		-334.689	404.051	D	0.003	16.743
16.746		0.02	0.000	0.003	0.000	0.000	0.000	0.000	0.000
2.870	2.210	3.050							
2006	92	1	192		-331.096	400.381	D	0.007	16.743
16.750		0.04	0.000	0.007	0.000	0.000	0.000	0.000	0.000
2.870	2.210	3.050							
2006	93	1	204		-334.689	404.051	D	0.012	16.743
16.755		0.07	0.000	0.011	0.000	0.000	0.000	0.000	0.001
2.870	2.210	3.050							
2006	94	1	190		-333.610	400.508	D	0.000	16.743
16.743		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.870	2.210	3.050							
2006	95	1	276		-319.194	412.001	D	0.028	16.743
16.771		0.17	0.000	0.026	0.000	0.000	0.000	0.000	0.002
2.870	2.210	3.050							
2006	96	1	198		-312.162	401.199	D	0.010	16.743
16.753		0.06	0.000	0.008	0.000	0.000	0.000	0.000	0.002
2.870	2.210	3.050							
2006	97	1	190		-333.610	400.508	D	0.000	16.743
16.743		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.870	2.210	3.050							

2006 98 1 190	-333.610	400.508	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 99 1 190	-333.610	400.508	D	0.055	16.743
16.798 0.33 0.000 0.049 0.000 0.000 0.000 0.000 0.006					
2.870 2.210 3.050					
2006 100 1 217	-307.055	402.702	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 101 1 192	-331.096	400.381	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 102 1 191	-332.353	400.444	D	0.008	16.743
16.751 0.05 0.000 0.007 0.000 0.000 0.000 0.000 0.001					
2.870 2.210 3.050					
2006 103 1 289	-326.547	415.852	D	0.004	16.743
16.747 0.02 0.000 0.003 0.000 0.000 0.000 0.000 0.001					
2.870 2.210 3.050					
2006 104 1 276	-319.194	412.001	D	0.019	16.743
16.762 0.11 0.000 0.016 0.000 0.000 0.000 0.000 0.002					
2.870 2.210 3.050					
2006 105 1 264	-334.246	412.751	D	0.003	16.743
16.746 0.02 0.000 0.002 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 106 1 235	-334.424	409.271	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 107 1 203	-305.880	400.904	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 108 1 201	-308.393	401.021	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 109 1 190	-333.610	400.508	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 110 1 190	-333.610	400.508	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 111 1 190	-333.610	400.508	D	0.055	16.743
16.798 0.33 0.000 0.050 0.000 0.000 0.000 0.000 0.005					
2.870 2.210 3.050					
2006 112 1 289	-326.547	415.852	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 113 1 190	-333.610	400.508	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 114 1 190	-333.610	400.508	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 115 1 235	-334.424	409.271	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					
2006 116 1 277	-332.904	414.427	D	0.000	16.743
16.743 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.870 2.210 3.050					

2006 117 1 204	-334.689	404.051	D	0.030	16.743
16.773 0.18 0.000	0.028	0.000	0.000	0.000	0.001
2.870 2.210 3.050					
2006 118 1 190	-333.610	400.508	D	0.000	16.743
16.743 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.870 2.210 3.050					
2006 119 1 190	-333.610	400.508	D	0.000	16.743
16.743 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.870 2.210 3.050					
2006 120 1 190	-333.610	400.508	D	0.000	16.743
16.743 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.870 2.210 3.050					
2006 121 1 286	-330.308	416.040	D	0.004	16.862
16.866 0.02 0.000	0.004	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 122 1 289	-326.547	415.852	D	0.001	16.862
16.863 0.00 0.000	0.001	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 123 1 262	-319.279	410.261	D	0.018	16.862
16.881 0.11 0.000	0.015	0.000	0.000	0.000	0.003
3.100 2.340 3.250					
2006 124 1 264	-334.246	412.751	D	0.022	16.862
16.884 0.13 0.000	0.022	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 125 1 264	-334.246	412.751	D	0.044	16.862
16.906 0.26 0.000	0.043	0.000	0.000	0.000	0.001
3.100 2.340 3.250					
2006 126 1 286	-330.308	416.040	D	0.000	16.862
16.863 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 127 1 264	-334.246	412.751	D	0.001	16.862
16.863 0.00 0.000	0.001	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 128 1 190	-333.610	400.508	D	0.000	16.862
16.863 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 129 1 190	-333.610	400.508	D	0.000	16.862
16.862 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 130 1 222	-327.067	405.412	D	0.014	16.862
16.876 0.08 0.000	0.010	0.000	0.000	0.000	0.003
3.100 2.340 3.250					
2006 131 1 190	-333.610	400.508	D	0.000	16.862
16.862 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 132 1 190	-333.610	400.508	D	0.003	16.862
16.865 0.02 0.000	0.003	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 133 1 190	-333.610	400.508	D	0.001	16.862
16.863 0.01 0.000	0.001	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 134 1 190	-333.610	400.508	D	0.000	16.862
16.863 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 135 1 190	-333.610	400.508	D	0.003	16.862
16.865 0.02 0.000	0.003	0.000	0.000	0.000	0.000
3.100 2.340 3.250					

2006 136 1 286	-330.308	416.040	D	0.030	16.862
16.892 0.18 0.000	0.028	0.000	0.000	0.000	0.002
3.100 2.340 3.250					
2006 137 1 222	-327.067	405.412	D	0.029	16.862
16.892 0.17 0.000	0.025	0.000	0.000	0.000	0.004
3.100 2.340 3.250					
2006 138 1 264	-334.246	412.751	D	0.007	16.862
16.870 0.04 0.000	0.006	0.000	0.000	0.000	0.001
3.100 2.340 3.250					
2006 139 1 204	-334.689	404.051	D	0.000	16.862
16.862 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 140 1 264	-334.246	412.751	D	0.000	16.862
16.863 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 141 1 202	-307.136	400.962	D	0.000	16.862
16.863 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 142 1 190	-333.610	400.508	D	0.000	16.862
16.862 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 143 1 191	-332.353	400.444	D	0.001	16.862
16.864 0.01 0.000	0.001	0.000	0.000	0.000	0.001
3.100 2.340 3.250					
2006 144 1 190	-333.610	400.508	D	0.000	16.862
16.863 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 145 1 288	-327.801	415.914	D	0.009	16.862
16.872 0.06 0.000	0.007	0.000	0.000	0.000	0.002
3.100 2.340 3.250					
2006 146 1 190	-333.610	400.508	D	0.000	16.862
16.862 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 147 1 190	-333.610	400.508	D	0.000	16.862
16.862 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 148 1 190	-333.610	400.508	D	0.001	16.862
16.863 0.01 0.000	0.000	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 149 1 289	-326.547	415.852	D	0.003	16.862
16.865 0.02 0.000	0.003	0.000	0.000	0.000	0.000
3.100 2.340 3.250					
2006 150 1 190	-333.610	400.508	D	0.025	16.862
16.887 0.15 0.000	0.022	0.000	0.000	0.000	0.002
3.100 2.340 3.250					
2006 151 1 203	-305.880	400.904	D	0.020	16.862
16.883 0.12 0.000	0.019	0.000	0.000	0.000	0.002
3.100 2.340 3.250					
2006 152 1 217	-307.055	402.702	D	0.001	16.765
16.766 0.01 0.000	0.001	0.000	0.000	0.000	0.000
2.910 2.250 3.150					
2006 153 1 190	-333.610	400.508	D	0.000	16.765
16.765 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.910 2.250 3.150					
2006 154 1 204	-334.689	404.051	D	0.000	16.765
16.765 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.910 2.250 3.150					

2006 155	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 156	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 157	1	190		-333.610	400.508	D	0.015	16.765
16.780	0.09	0.000	0.012	0.000	0.000	0.000	0.000	0.003
2.910	2.250	3.150						
2006 158	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 159	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 160	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 161	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 162	1	276		-319.194	412.001	D	0.005	16.765
16.770	0.03	0.000	0.004	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 163	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 164	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 165	1	264		-334.246	412.751	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 166	1	264		-334.246	412.751	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 167	1	190		-333.610	400.508	D	0.001	16.765
16.766	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 168	1	190		-333.610	400.508	D	0.023	16.765
16.788	0.14	0.000	0.015	0.000	0.000	0.000	0.000	0.007
2.910	2.250	3.150						
2006 169	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 170	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 171	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 172	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 173	1	235		-334.424	409.271	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						

2006 174	1	190		-333.610	400.508	D	0.004	16.765
16.769	0.02	0.000	0.003	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 175	1	192		-331.096	400.381	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 176	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 177	1	288		-327.801	415.914	D	0.024	16.765
16.789	0.14	0.000	0.020	0.000	0.000	0.000	0.000	0.004
2.910	2.250	3.150						
2006 178	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 179	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 180	1	277		-332.904	414.427	D	0.001	16.765
16.766	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 181	1	190		-333.610	400.508	D	0.000	16.765
16.765	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.910	2.250	3.150						
2006 182	1	190		-333.610	400.508	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 183	1	204		-334.689	404.051	D	0.007	16.624
16.631	0.04	0.000	0.006	0.000	0.000	0.000	0.000	0.001
2.640	2.080	2.890						
2006 184	1	190		-333.610	400.508	D	0.002	16.624
16.626	0.01	0.000	0.002	0.000	0.000	0.000	0.000	0.001
2.640	2.080	2.890						
2006 185	1	235		-334.424	409.271	D	0.001	16.624
16.625	0.01	0.000	0.001	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 186	1	235		-334.424	409.271	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 187	1	190		-333.610	400.508	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 188	1	204		-334.689	404.051	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 189	1	264		-334.246	412.751	D	0.000	16.624
16.625	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 190	1	190		-333.610	400.508	D	0.000	16.624
16.625	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 191	1	250		-334.335	411.011	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 192	1	277		-332.904	414.427	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						

2006 193	1	243		-324.384	408.767	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 194	1	190		-333.610	400.508	D	0.001	16.624
16.625	0.01	0.000	0.001	0.000	0.000	0.000	0.000	0.001
2.640	2.080	2.890						
2006 195	1	192		-331.096	400.381	D	0.005	16.624
16.630	0.03	0.000	0.004	0.000	0.000	0.000	0.000	0.002
2.640	2.080	2.890						
2006 196	1	264		-334.246	412.751	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 197	1	190		-333.610	400.508	D	0.001	16.624
16.625	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 198	1	190		-333.610	400.508	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 199	1	190		-333.610	400.508	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 200	1	204		-334.689	404.051	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 201	1	190		-333.610	400.508	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 202	1	190		-333.610	400.508	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 203	1	190		-333.610	400.508	D	0.003	16.624
16.628	0.02	0.000	0.002	0.000	0.000	0.000	0.000	0.001
2.640	2.080	2.890						
2006 204	1	190		-333.610	400.508	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 205	1	190		-333.610	400.508	D	0.001	16.624
16.625	0.01	0.000	0.000	0.000	0.000	0.000	0.000	0.001
2.640	2.080	2.890						
2006 206	1	190		-333.610	400.508	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 207	1	264		-334.246	412.751	D	0.000	16.624
16.625	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 208	1	289		-326.547	415.852	D	0.005	16.624
16.629	0.03	0.000	0.002	0.000	0.000	0.000	0.000	0.003
2.640	2.080	2.890						
2006 209	1	204		-334.689	404.051	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 210	1	190		-333.610	400.508	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						
2006 211	1	264		-334.246	412.751	D	0.000	16.624
16.624	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.640	2.080	2.890						

2006 212 1 190	-333.610	400.508	D	0.000	16.624
16.624 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.640 2.080 2.890					
2006 213 1 190	-333.610	400.508	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 214 1 190	-333.610	400.508	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 215 1 204	-334.689	404.051	D	0.001	16.598
16.599 0.01 0.000 0.001 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 216 1 235	-334.424	409.271	D	0.001	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 217 1 191	-332.353	400.444	D	0.007	16.598
16.605 0.04 0.000 0.003 0.000 0.000 0.000 0.000 0.004					
2.590 2.050 2.810					
2006 218 1 190	-333.610	400.508	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 219 1 190	-333.610	400.508	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 220 1 277	-332.904	414.427	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 221 1 191	-332.353	400.444	D	0.026	16.598
16.624 0.16 0.000 0.016 0.000 0.000 0.000 0.000 0.010					
2.590 2.050 2.810					
2006 222 1 264	-334.246	412.751	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 223 1 264	-334.246	412.751	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 224 1 264	-334.246	412.751	D	0.002	16.598
16.600 0.01 0.000 0.001 0.000 0.000 0.000 0.000 0.001					
2.590 2.050 2.810					
2006 225 1 190	-333.610	400.508	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 226 1 276	-319.194	412.001	D	0.016	16.598
16.614 0.10 0.000 0.013 0.000 0.000 0.000 0.000 0.003					
2.590 2.050 2.810					
2006 227 1 190	-333.610	400.508	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 228 1 264	-334.246	412.751	D	0.001	16.598
16.598 0.00 0.000 0.001 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 229 1 289	-326.547	415.852	D	0.001	16.598
16.598 0.00 0.000 0.001 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					
2006 230 1 190	-333.610	400.508	D	0.000	16.598
16.598 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.590 2.050 2.810					

2006 231	1	190		-333.610	400.508	D	0.000	16.598
16.598	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 232	1	190		-333.610	400.508	D	0.000	16.598
16.598	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 233	1	190		-333.610	400.508	D	0.000	16.598
16.598	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 234	1	190		-333.610	400.508	D	0.000	16.598
16.598	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 235	1	190		-333.610	400.508	D	0.005	16.598
16.603	0.03	0.000	0.001	0.000	0.000	0.000	0.000	0.004
2.590	2.050	2.810						
2006 236	1	286		-330.308	416.040	D	0.001	16.598
16.599	0.01	0.000	0.000	0.000	0.000	0.000	0.000	0.001
2.590	2.050	2.810						
2006 237	1	264		-334.246	412.751	D	0.006	16.598
16.603	0.03	0.000	0.004	0.000	0.000	0.000	0.000	0.001
2.590	2.050	2.810						
2006 238	1	264		-334.246	412.751	D	0.001	16.598
16.599	0.01	0.000	0.001	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 239	1	190		-333.610	400.508	D	0.000	16.598
16.598	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 240	1	190		-333.610	400.508	D	0.000	16.598
16.598	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 241	1	190		-333.610	400.508	D	0.000	16.598
16.598	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 242	1	190		-333.610	400.508	D	0.000	16.598
16.598	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 243	1	202		-307.136	400.962	D	0.000	16.598
16.598	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.590	2.050	2.810						
2006 244	1	190		-333.610	400.508	D	0.000	16.581
16.581	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.560	2.020	2.740						
2006 245	1	190		-333.610	400.508	D	0.009	16.581
16.591	0.06	0.000	0.008	0.000	0.000	0.000	0.000	0.001
2.560	2.020	2.740						
2006 246	1	190		-333.610	400.508	D	0.000	16.581
16.581	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.560	2.020	2.740						
2006 247	1	264		-334.246	412.751	D	0.034	16.581
16.615	0.20	0.000	0.030	0.000	0.000	0.000	0.000	0.003
2.560	2.020	2.740						
2006 248	1	190		-333.610	400.508	D	0.000	16.581
16.581	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.560	2.020	2.740						
2006 249	1	190		-333.610	400.508	D	0.000	16.581
16.581	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.560	2.020	2.740						

2006 250 1 191	-332.353	400.444	D	0.007	16.581
16.588 0.04 0.000 0.005 0.000 0.000 0.000 0.000 0.001					
2.560 2.020 2.740					
2006 251 1 190	-333.610	400.508	D	0.000	16.581
16.581 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 252 1 190	-333.610	400.508	D	0.000	16.581
16.581 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 253 1 190	-333.610	400.508	D	0.000	16.581
16.581 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 254 1 204	-334.689	404.051	D	0.007	16.581
16.588 0.04 0.000 0.007 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 255 1 190	-333.610	400.508	D	0.032	16.581
16.614 0.20 0.000 0.029 0.000 0.000 0.000 0.000 0.003					
2.560 2.020 2.740					
2006 256 1 203	-305.880	400.904	D	0.000	16.581
16.582 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 257 1 190	-333.610	400.508	D	0.000	16.581
16.581 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 258 1 277	-332.904	414.427	D	0.001	16.581
16.582 0.00 0.000 0.001 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 259 1 190	-333.610	400.508	D	0.008	16.581
16.589 0.05 0.000 0.007 0.000 0.000 0.000 0.000 0.001					
2.560 2.020 2.740					
2006 260 1 190	-333.610	400.508	D	0.004	16.581
16.585 0.03 0.000 0.003 0.000 0.000 0.000 0.000 0.001					
2.560 2.020 2.740					
2006 261 1 190	-333.610	400.508	D	0.000	16.581
16.581 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 262 1 204	-334.689	404.051	D	0.070	16.581
16.651 0.42 0.000 0.065 0.000 0.000 0.000 0.000 0.005					
2.560 2.020 2.740					
2006 263 1 190	-333.610	400.508	D	0.000	16.581
16.581 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 264 1 204	-334.689	404.051	D	0.000	16.581
16.581 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 265 1 190	-333.610	400.508	D	0.000	16.581
16.581 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 266 1 190	-333.610	400.508	D	0.000	16.581
16.581 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.560 2.020 2.740					
2006 267 1 288	-327.801	415.914	D	0.020	16.581
16.601 0.12 0.000 0.016 0.000 0.000 0.000 0.000 0.004					
2.560 2.020 2.740					
2006 268 1 276	-319.194	412.001	D	0.004	16.581
16.586 0.03 0.000 0.004 0.000 0.000 0.000 0.000 0.001					
2.560 2.020 2.740					

2006 269 1 289	-326.547	415.852	D	0.003	16.581
16.584 0.02 0.000 0.001 0.000 0.000 0.000 0.000 0.001					
2.560 2.020 2.740					
2006 270 1 190	-333.610	400.508	D	0.012	16.581
16.593 0.07 0.000 0.009 0.000 0.000 0.000 0.000 0.003					
2.560 2.020 2.740					
2006 271 1 276	-319.194	412.001	D	0.012	16.581
16.594 0.07 0.000 0.010 0.000 0.000 0.000 0.000 0.002					
2.560 2.020 2.740					
2006 272 1 190	-333.610	400.508	D	0.008	16.581
16.589 0.05 0.000 0.006 0.000 0.000 0.000 0.000 0.001					
2.560 2.020 2.740					
2006 273 1 276	-319.194	412.001	D	0.038	16.581
16.620 0.23 0.000 0.031 0.000 0.000 0.000 0.000 0.007					
2.560 2.020 2.740					
2006 274 1 204	-334.689	404.051	D	0.009	16.593
16.602 0.06 0.000 0.005 0.000 0.000 0.000 0.000 0.005					
2.580 2.050 2.820					
2006 275 1 190	-333.610	400.508	D	0.005	16.593
16.598 0.03 0.000 0.005 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 276 1 190	-333.610	400.508	D	0.003	16.593
16.596 0.02 0.000 0.003 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 277 1 190	-333.610	400.508	D	0.000	16.593
16.593 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 278 1 190	-333.610	400.508	D	0.000	16.593
16.593 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 279 1 264	-334.246	412.751	D	0.000	16.593
16.593 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 280 1 222	-327.067	405.412	D	0.017	16.593
16.609 0.10 0.000 0.012 0.000 0.000 0.000 0.000 0.004					
2.580 2.050 2.820					
2006 281 1 190	-333.610	400.508	D	0.000	16.593
16.593 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 282 1 190	-333.610	400.508	D	0.000	16.593
16.593 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 283 1 190	-333.610	400.508	D	0.003	16.593
16.596 0.02 0.000 0.002 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 284 1 190	-333.610	400.508	D	0.000	16.593
16.593 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 285 1 190	-333.610	400.508	D	0.000	16.593
16.593 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 286 1 190	-333.610	400.508	D	0.000	16.593
16.593 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					
2006 287 1 204	-334.689	404.051	D	0.012	16.593
16.605 0.07 0.000 0.012 0.000 0.000 0.000 0.000 0.000					
2.580 2.050 2.820					

2006 288 1 288	-327.801	415.914	D	0.000	16.593
16.593 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.580 2.050 2.820					
2006 289 1 285	-322.871	413.926	D	0.014	16.593
16.607 0.09 0.000	0.013	0.000	0.000	0.000	0.002
2.580 2.050 2.820					
2006 290 1 190	-333.610	400.508	D	0.000	16.593
16.593 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.580 2.050 2.820					
2006 291 1 276	-319.194	412.001	D	0.008	16.593
16.601 0.05 0.000	0.008	0.000	0.000	0.000	0.000
2.580 2.050 2.820					
2006 292 1 190	-333.610	400.508	D	0.027	16.593
16.620 0.16 0.000	0.023	0.000	0.000	0.000	0.005
2.580 2.050 2.820					
2006 293 1 190	-333.610	400.508	D	0.071	16.593
16.664 0.43 0.000	0.066	0.000	0.000	0.000	0.005
2.580 2.050 2.820					
2006 294 1 190	-333.610	400.508	D	0.000	16.593
16.593 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.580 2.050 2.820					
2006 295 1 190	-333.610	400.508	D	0.007	16.593
16.600 0.04 0.000	0.006	0.000	0.000	0.000	0.001
2.580 2.050 2.820					
2006 296 1 209	-328.409	403.734	D	0.072	16.593
16.665 0.44 0.000	0.062	0.000	0.000	0.000	0.009
2.580 2.050 2.820					
2006 297 1 190	-333.610	400.508	D	0.018	16.593
16.611 0.11 0.000	0.016	0.000	0.000	0.000	0.002
2.580 2.050 2.820					
2006 298 1 217	-307.055	402.702	D	0.000	16.593
16.593 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.580 2.050 2.820					
2006 299 1 276	-319.194	412.001	D	0.015	16.593
16.607 0.09 0.000	0.012	0.000	0.000	0.000	0.002
2.580 2.050 2.820					
2006 300 1 276	-319.194	412.001	D	0.027	16.593
16.620 0.16 0.000	0.021	0.000	0.000	0.000	0.006
2.580 2.050 2.820					
2006 301 1 209	-328.409	403.734	D	0.068	16.593
16.661 0.41 0.000	0.058	0.000	0.000	0.000	0.009
2.580 2.050 2.820					
2006 302 1 289	-326.547	415.852	D	0.000	16.593
16.593 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.580 2.050 2.820					
2006 303 1 203	-305.880	400.904	D	0.014	16.593
16.606 0.08 0.000	0.012	0.000	0.000	0.000	0.002
2.580 2.050 2.820					
2006 304 1 190	-333.610	400.508	D	0.017	16.593
16.610 0.10 0.000	0.017	0.000	0.000	0.000	0.001
2.580 2.050 2.820					
2006 305 1 191	-332.353	400.444	D	0.020	16.870
16.891 0.12 0.000	0.018	0.000	0.000	0.000	0.003
3.110 2.380 3.410					
2006 306 1 276	-319.194	412.001	D	0.027	16.870
16.897 0.16 0.000	0.024	0.000	0.000	0.000	0.003
3.110 2.380 3.410					

2006 307 1 190	-333.610	400.508	D	0.032	16.870
16.902 0.19 0.000	0.029	0.000	0.000	0.000	0.003
3.110 2.380 3.410					
2006 308 1 276	-319.194	412.001	D	0.006	16.870
16.877 0.04 0.000	0.006	0.000	0.000	0.000	0.001
3.110 2.380 3.410					
2006 309 1 276	-319.194	412.001	D	0.001	16.870
16.871 0.00 0.000	0.001	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 310 1 244	-323.128	408.706	D	0.036	16.870
16.906 0.21 0.000	0.027	0.000	0.000	0.000	0.008
3.110 2.380 3.410					
2006 311 1 289	-326.547	415.852	D	0.016	16.870
16.887 0.10 0.000	0.012	0.000	0.000	0.000	0.004
3.110 2.380 3.410					
2006 312 1 222	-327.067	405.412	D	0.010	16.870
16.881 0.06 0.000	0.005	0.000	0.000	0.000	0.005
3.110 2.380 3.410					
2006 313 1 190	-333.610	400.508	D	0.000	16.870
16.870 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 314 1 190	-333.610	400.508	D	0.000	16.870
16.870 0.00 0.000	0.000	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 315 1 190	-333.610	400.508	D	0.010	16.870
16.880 0.06 0.000	0.007	0.000	0.000	0.000	0.002
3.110 2.380 3.410					
2006 316 1 288	-327.801	415.914	D	0.004	16.870
16.874 0.02 0.000	0.003	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 317 1 289	-326.547	415.852	D	0.002	16.870
16.873 0.01 0.000	0.002	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 318 1 203	-305.880	400.904	D	0.015	16.870
16.885 0.09 0.000	0.014	0.000	0.000	0.000	0.001
3.110 2.380 3.410					
2006 319 1 204	-334.689	404.051	D	0.005	16.870
16.875 0.03 0.000	0.005	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 320 1 286	-330.308	416.040	D	0.014	16.870
16.885 0.08 0.000	0.013	0.000	0.000	0.000	0.001
3.110 2.380 3.410					
2006 321 1 264	-334.246	412.751	D	0.002	16.870
16.872 0.01 0.000	0.002	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 322 1 277	-332.904	414.427	D	0.005	16.870
16.875 0.03 0.000	0.005	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 323 1 190	-333.610	400.508	D	0.005	16.870
16.875 0.03 0.000	0.005	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 324 1 286	-330.308	416.040	D	0.004	16.870
16.875 0.03 0.000	0.004	0.000	0.000	0.000	0.000
3.110 2.380 3.410					
2006 325 1 288	-327.801	415.914	D	0.081	16.870
16.951 0.48 0.000	0.076	0.000	0.000	0.000	0.005
3.110 2.380 3.410					

2006 326 1 289	-326.547	415.852	D	0.002	16.870
16.872 0.01 0.000 0.001 0.000 0.000 0.000 0.000 0.001					
3.110 2.380 3.410					
2006 327 1 277	-332.904	414.427	D	0.002	16.870
16.872 0.01 0.000 0.001 0.000 0.000 0.000 0.000 0.000					
3.110 2.380 3.410					
2006 328 1 244	-323.128	408.706	D	0.065	16.870
16.935 0.39 0.000 0.054 0.000 0.000 0.000 0.000 0.010					
3.110 2.380 3.410					
2006 329 1 286	-330.308	416.040	D	0.043	16.870
16.913 0.25 0.000 0.042 0.000 0.000 0.000 0.000 0.001					
3.110 2.380 3.410					
2006 330 1 203	-305.880	400.904	D	0.019	16.870
16.889 0.11 0.000 0.018 0.000 0.000 0.000 0.000 0.001					
3.110 2.380 3.410					
2006 331 1 190	-333.610	400.508	D	0.000	16.870
16.870 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
3.110 2.380 3.410					
2006 332 1 190	-333.610	400.508	D	0.000	16.870
16.870 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
3.110 2.380 3.410					
2006 333 1 190	-333.610	400.508	D	0.000	16.870
16.870 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
3.110 2.380 3.410					
2006 334 1 222	-327.067	405.412	D	0.046	16.870
16.916 0.27 0.000 0.041 0.000 0.000 0.000 0.000 0.004					
3.110 2.380 3.410					
2006 335 1 190	-333.610	400.508	D	0.016	16.804
16.821 0.10 0.000 0.013 0.000 0.000 0.000 0.000 0.003					
2.980 2.330 3.380					
2006 336 1 190	-333.610	400.508	D	0.000	16.804
16.804 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000					
2.980 2.330 3.380					
2006 337 1 264	-334.246	412.751	D	0.018	16.804
16.822 0.11 0.000 0.016 0.000 0.000 0.000 0.000 0.002					
2.980 2.330 3.380					
2006 338 1 190	-333.610	400.508	D	0.010	16.804
16.815 0.06 0.000 0.009 0.000 0.000 0.000 0.000 0.001					
2.980 2.330 3.380					
2006 339 1 222	-327.067	405.412	D	0.029	16.804
16.833 0.17 0.000 0.023 0.000 0.000 0.000 0.000 0.006					
2.980 2.330 3.380					
2006 340 1 190	-333.610	400.508	D	0.001	16.804
16.806 0.01 0.000 0.001 0.000 0.000 0.000 0.000 0.000					
2.980 2.330 3.380					
2006 341 1 264	-334.246	412.751	D	0.025	16.804
16.830 0.15 0.000 0.024 0.000 0.000 0.000 0.000 0.001					
2.980 2.330 3.380					
2006 342 1 288	-327.801	415.914	D	0.004	16.804
16.808 0.02 0.000 0.003 0.000 0.000 0.000 0.000 0.001					
2.980 2.330 3.380					
2006 343 1 190	-333.610	400.508	D	0.044	16.804
16.849 0.26 0.000 0.039 0.000 0.000 0.000 0.000 0.005					
2.980 2.330 3.380					
2006 344 1 288	-327.801	415.914	D	0.017	16.804
16.821 0.10 0.000 0.016 0.000 0.000 0.000 0.000 0.000					
2.980 2.330 3.380					

2006 345 1 209	-328.409	403.734	D	0.065	16.804
16.869 0.38 0.000	0.059	0.000	0.000	0.000	0.005
2.980 2.330 3.380					
2006 346 1 191	-332.353	400.444	D	0.033	16.804
16.837 0.19 0.000	0.026	0.000	0.000	0.000	0.006
2.980 2.330 3.380					
2006 347 1 209	-328.409	403.734	D	0.010	16.804
16.814 0.06 0.000	0.008	0.000	0.000	0.000	0.002
2.980 2.330 3.380					
2006 348 1 190	-333.610	400.508	D	0.004	16.804
16.808 0.02 0.000	0.003	0.000	0.000	0.000	0.001
2.980 2.330 3.380					
2006 349 1 262	-319.279	410.261	D	0.021	16.804
16.825 0.12 0.000	0.017	0.000	0.000	0.000	0.003
2.980 2.330 3.380					
2006 350 1 209	-328.409	403.734	D	0.036	16.804
16.840 0.21 0.000	0.032	0.000	0.000	0.000	0.004
2.980 2.330 3.380					
2006 351 1 276	-319.194	412.001	D	0.059	16.804
16.863 0.35 0.000	0.056	0.000	0.000	0.000	0.003
2.980 2.330 3.380					
2006 352 1 276	-319.194	412.001	D	0.000	16.804
16.804 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.980 2.330 3.380					
2006 353 1 276	-319.194	412.001	D	0.005	16.804
16.810 0.03 0.000	0.005	0.000	0.000	0.000	0.001
2.980 2.330 3.380					
2006 354 1 203	-305.880	400.904	D	0.000	16.804
16.805 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.980 2.330 3.380					
2006 355 1 276	-319.194	412.001	D	0.014	16.804
16.818 0.08 0.000	0.012	0.000	0.000	0.000	0.001
2.980 2.330 3.380					
2006 356 1 191	-332.353	400.444	D	0.028	16.804
16.833 0.17 0.000	0.025	0.000	0.000	0.000	0.003
2.980 2.330 3.380					
2006 357 1 286	-330.308	416.040	D	0.019	16.804
16.823 0.11 0.000	0.017	0.000	0.000	0.000	0.002
2.980 2.330 3.380					
2006 358 1 235	-334.424	409.271	D	0.025	16.804
16.830 0.15 0.000	0.020	0.000	0.000	0.000	0.005
2.980 2.330 3.380					
2006 359 1 276	-319.194	412.001	D	0.063	16.804
16.868 0.38 0.000	0.055	0.000	0.000	0.000	0.008
2.980 2.330 3.380					
2006 360 1 204	-334.689	404.051	D	0.046	16.804
16.851 0.28 0.000	0.040	0.000	0.000	0.000	0.007
2.980 2.330 3.380					
2006 361 1 204	-334.689	404.051	D	0.039	16.804
16.843 0.23 0.000	0.036	0.000	0.000	0.000	0.002
2.980 2.330 3.380					
2006 362 1 204	-334.689	404.051	D	0.000	16.804
16.805 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.980 2.330 3.380					
2006 363 1 190	-333.610	400.508	D	0.000	16.804
16.804 0.00 0.000	0.000	0.000	0.000	0.000	0.000
2.980 2.330 3.380					

--- 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	bxS04	bxN03	bxOC	bxEC	bxPMC	bxPMF	bxN02	
F(RH)	F(RH)	F(RH)							
2006	82	1	204	-334.689	404.051	D	0.159	16.818	
16.976	0.94	0.000	0.158	0.000	0.000	0.000	0.000	0.001	
3.010	2.310	3.270	1						
2006	58	1	191	-332.353	400.444	D	0.116	16.793	
16.910	0.69	0.000	0.104	0.000	0.000	0.000	0.000	0.012	
2.960	2.310	3.330	2						
2006	50	1	276	-319.194	412.001	D	0.104	16.793	
16.897	0.62	0.000	0.096	0.000	0.000	0.000	0.000	0.007	
2.960	2.310	3.330	3						
2006	83	1	198	-312.162	401.199	D	0.100	16.818	
16.917	0.59	0.000	0.099	0.000	0.000	0.000	0.000	0.000	
3.010	2.310	3.270	4						
2006	53	1	289	-326.547	415.852	D	0.092	16.793	
16.885	0.55	0.000	0.075	0.000	0.000	0.000	0.000	0.016	
2.960	2.310	3.330	5						
2006	325	1	288	-327.801	415.914	D	0.081	16.870	
16.951	0.48	0.000	0.076	0.000	0.000	0.000	0.000	0.005	
3.110	2.380	3.410	6						
2006	2	1	202	-307.136	400.962	D	0.078	16.784	
16.862	0.47	0.000	0.074	0.000	0.000	0.000	0.000	0.004	
2.940	2.310	3.370	7						
2006	52	1	276	-319.194	412.001	D	0.076	16.793	
16.870	0.45	0.000	0.064	0.000	0.000	0.000	0.000	0.012	
2.960	2.310	3.330	8						
2006	296	1	209	-328.409	403.734	D	0.072	16.593	
16.665	0.44	0.000	0.062	0.000	0.000	0.000	0.000	0.009	
2.580	2.050	2.820	9						
2006	293	1	190	-333.610	400.508	D	0.071	16.593	
16.664	0.43	0.000	0.066	0.000	0.000	0.000	0.000	0.005	
2.580	2.050	2.820	10						
2006	262	1	204	-334.689	404.051	D	0.070	16.581	
16.651	0.42	0.000	0.065	0.000	0.000	0.000	0.000	0.005	
2.560	2.020	2.740	11						
2006	301	1	209	-328.409	403.734	D	0.068	16.593	
16.661	0.41	0.000	0.058	0.000	0.000	0.000	0.000	0.009	
2.580	2.050	2.820	12						
2006	10	1	288	-327.801	415.914	D	0.069	16.784	
16.853	0.41	0.000	0.062	0.000	0.000	0.000	0.000	0.007	
2.940	2.310	3.370	13						
2006	51	1	209	-328.409	403.734	D	0.066	16.793	
16.860	0.40	0.000	0.056	0.000	0.000	0.000	0.000	0.010	
2.960	2.310	3.330	14						
2006	328	1	244	-323.128	408.706	D	0.065	16.870	
16.935	0.39	0.000	0.054	0.000	0.000	0.000	0.000	0.010	
3.110	2.380	3.410	15						
2006	359	1	276	-319.194	412.001	D	0.063	16.804	
16.868	0.38	0.000	0.055	0.000	0.000	0.000	0.000	0.008	
2.980	2.330	3.380	16						
2006	345	1	209	-328.409	403.734	D	0.065	16.804	

16.869	0.38	0.000	0.059	0.000	0.000	0.000	0.000	0.005
2.980	2.330	3.380	17					
2006	20	1	235	-334.424	409.271	D	0.063	16.784
16.847	0.38	0.000	0.056	0.000	0.000	0.000	0.000	0.007
2.940	2.310	3.370	18					
2006	54	1	217	-307.055	402.702	D	0.062	16.793
16.856	0.37	0.000	0.058	0.000	0.000	0.000	0.000	0.004
2.960	2.310	3.330	19					
2006	7	1	288	-327.801	415.914	D	0.062	16.784
16.846	0.37	0.000	0.061	0.000	0.000	0.000	0.000	0.001
2.940	2.310	3.370	20					
2006	351	1	276	-319.194	412.001	D	0.059	16.804
16.863	0.35	0.000	0.056	0.000	0.000	0.000	0.000	0.003
2.980	2.330	3.380	21					
2006	111	1	190	-333.610	400.508	D	0.055	16.743
16.798	0.33	0.000	0.050	0.000	0.000	0.000	0.000	0.005
2.870	2.210	3.050	22					

--- Number of days with Extinction Change => 5.0 % : 0
 --- Number of days with Extinction Change => 10.0 % : 0
 --- Largest Extinction Change = 0.94 %

 CALPOST Version 6.221
 Level 080724

VISIBILITY
 Run-Length
 VISIB BOESNCFG
 (1/Mega-m)

RECEPTOR	COORDINATES (km)	TYPE	BEXT(Model)	BEXT(BKG)
190	-333.610 400.508	D	0.008	16.736
16.744	0.05			

--- Number of recs with Extinction Change > 1.0 % : 0
 --- Largest Extinction Change = 0.05 %

 CALPOST Version 6.221
 Level 080724


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(deciview)
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START TIME

% of Modeled Extinction by Species

Small Large SSalt

YEAR	DAY	HR	RECEPTOR	COORDINATES (km)	TYPE	DV(Total)	DV(BKG)
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DELTA DV %_S04 %_N03 %_OC %_EC %_PMC %_PMF %_N02 F(RH) F(RH)

F (RH)

2006	1	1	190	-333.610	400.508	D	5.179	5.178
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0.001	0.23	94.73	0.00	0.02	0.01	0.04	4.91	2.940	2.310
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3.370

2006	2	1	202	-307.136	400.962	D	5.225	5.178
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0.047	0.17	95.13	0.00	0.01	0.01	0.03	4.64	2.940	2.310
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3.370

2006	3	1	204	-334.689	404.051	D	5.193	5.178
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0.014	0.19	96.11	0.00	0.01	0.01	0.03	3.65	2.940	2.310
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3.370

2006	4	1	190	-333.610	400.508	D	5.182	5.178
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0.004	0.40	80.14	0.00	0.03	0.05	0.09	19.30	2.940	2.310
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3.370

2006	5	1	190	-333.610	400.508	D	5.189	5.178
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0.011	0.26	87.73	0.00	0.02	0.03	0.05	11.90	2.940	2.310
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3.370

2006	6	1	191	-332.353	400.444	D	5.191	5.178
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0.013	0.32	85.39	0.00	0.02	0.04	0.07	14.17	2.940	2.310
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3.370

2006	7	1	288	-327.801	415.914	D	5.215	5.178
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0.037	0.18	98.62	0.00	0.01	0.01	0.03	1.16	2.940	2.310
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3.370

2006	8	1	203	-305.880	400.904	D	5.179	5.178
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0.000	0.12	99.54	0.00	0.01	0.01	0.02	0.25	2.940	2.310
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3.370

2006	9	1	209	-328.409	403.734	D	5.190	5.178
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0.012	0.17	93.74	0.00	0.01	0.02	0.03	6.03	2.940	2.310
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3.370

2006	10	1	288	-327.801	415.914	D	5.219	5.178
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0.041 0.30 89.46 0.00 0.02 0.04 0.06 10.11 2.940 2.310

3.370

2006	11	1	217	-307.055	402.702	D	5.179	5.178
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0.001	0.42	85.30	0.00	0.03	0.04	0.09	14.06	2.940	2.310
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3.370

2006	12	1	190	-333.610	400.508	D	5.179	5.178
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0.000	0.41	83.73	0.00	0.03	0.04	0.09	15.57	2.940	2.310
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3.370

2006	13	1	289	-326.547	415.852	D	5.191	5.178
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0.013	0.34	84.00	0.00	0.02	0.04	0.07	15.52	2.940	2.310
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3.370

2006	14	1	289	-326.547	415.852	D	5.180	5.178
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0.002	0.36	94.60	0.00	0.02	0.02	0.07	4.94	2.940	2.310
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3.370

2006 0.002 3.370	15 0.77	1 69.66	289 69.66	-326.547 0.00	415.852 0.08	D 0.16	5.180 29.25	5.178 2.310
2006 0.000 3.370	16 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.178 0.00	5.178 2.310
2006 0.003 3.370	17 0.29	1 92.84	264 92.84	-334.246 0.00	412.751 0.02	D 0.06	5.182 6.78	5.178 2.310
2006 0.033 3.370	18 0.25	1 92.33	264 92.33	-334.246 0.00	412.751 0.03	D 0.05	5.212 7.32	5.178 2.310
2006 0.002 3.370	19 0.31	1 88.86	190 88.86	-333.610 0.00	400.508 0.03	D 0.06	5.181 10.71	5.178 2.310
2006 0.038 3.370	20 0.30	1 88.68	235 88.68	-334.424 0.00	409.271 0.03	D 0.06	5.216 10.91	5.178 2.310
2006 0.020 3.370	21 0.38	1 83.70	209 83.70	-328.409 0.00	403.734 0.05	D 0.08	5.198 15.77	5.178 2.310
2006 0.018 3.370	22 0.27	1 87.44	222 87.44	-327.067 0.00	405.412 0.03	D 0.06	5.197 12.18	5.178 2.310
2006 0.017 3.370	23 0.35	1 82.78	276 82.78	-319.194 0.00	412.001 0.05	D 0.08	5.196 16.73	5.178 2.310
2006 0.001 3.370	24 0.20	1 92.21	190 92.21	-333.610 0.00	400.508 0.02	D 0.04	5.179 7.55	5.178 2.310
2006 0.001 3.370	25 0.16	1 94.24	288 94.24	-327.801 0.00	415.914 0.02	D 0.03	5.179 5.46	5.178 2.310
2006 0.003 3.370	26 0.70	1 93.02	264 93.02	-334.246 0.00	412.751 0.07	D 0.13	5.182 6.04	5.178 2.310
2006 0.030 3.370	27 0.21	1 95.61	190 95.61	-333.610 0.00	400.508 0.02	D 0.04	5.208 4.11	5.178 2.310
2006 0.002 3.370	28 0.16	1 98.25	203 98.25	-305.880 0.00	400.904 0.01	D 0.03	5.181 1.57	5.178 2.310
2006 0.000 3.370	29 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.178 0.00	5.178 2.310
2006 0.017 3.370	30 0.31	1 85.11	222 85.11	-327.067 0.00	405.412 0.04	D 0.07	5.196 14.45	5.178 2.310
2006 0.015 3.370	31 0.22	1 90.33	276 90.33	-319.194 0.00	412.001 0.03	D 0.04	5.194 9.37	5.178 2.310
2006 0.006 3.330	32 0.32	1 85.40	190 85.40	-333.610 0.00	400.508 0.04	D 0.07	5.190 14.16	5.184 2.310
2006 0.004 3.330	33 0.39	1 83.40	190 83.40	-333.610 0.00	400.508 0.05	D 0.08	5.188 16.06	5.184 2.310

2006 0.008 3.330	34 0.37	1 81.42	190 81.42	-333.610 0.00	400.508 0.05	D 0.08	5.192 18.07	5.184 2.310
2006 0.020 3.330	35 0.25	1 92.10	264 92.10	-334.246 0.00	412.751 0.02	D 0.04	5.204 7.57	5.184 2.310
2006 0.000 3.330	36 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.184 0.00	5.184 2.310
2006 0.000 3.330	37 0.31	1 85.02	190 85.02	-333.610 0.00	400.508 0.04	D 0.07	5.184 14.67	5.184 2.310
2006 0.001 3.330	38 0.25	1 89.15	190 89.15	-333.610 0.00	400.508 0.03	D 0.05	5.185 10.48	5.184 2.310
2006 0.001 3.330	39 0.13	1 99.51	264 99.51	-334.246 0.00	412.751 0.01	D 0.02	5.186 0.32	5.184 2.310
2006 0.004 3.330	40 0.20	1 91.56	191 91.56	-332.353 0.00	400.444 0.02	D 0.04	5.188 8.17	5.184 2.310
2006 0.000 3.330	41 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.184 0.00	5.184 2.310
2006 0.000 3.330	42 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.184 0.00	5.184 2.310
2006 0.010 3.330	43 0.38	1 80.97	276 80.97	-319.194 0.00	412.001 0.05	D 0.08	5.194 18.50	5.184 2.310
2006 0.018 3.330	44 0.33	1 84.41	222 84.41	-327.067 0.00	405.412 0.04	D 0.07	5.202 15.12	5.184 2.310
2006 0.000 3.330	45 0.39	1 82.81	202 82.81	-307.136 0.00	400.962 0.03	D 0.05	5.184 10.87	5.184 2.310
2006 0.000 3.330	46 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.184 0.00	5.184 2.310
2006 0.000 3.330	47 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.184 0.00	5.184 2.310
2006 0.018 3.330	48 0.19	1 99.42	190 99.42	-333.610 0.00	400.508 0.01	D 0.03	5.202 0.35	5.184 2.310
2006 0.020 3.330	49 0.15	1 99.51	264 99.51	-334.246 0.00	412.751 0.01	D 0.02	5.204 0.30	5.184 2.310
2006 0.062 3.330	50 0.20	1 92.72	276 92.72	-319.194 0.00	412.001 0.02	D 0.04	5.246 7.01	5.184 2.310
2006 0.040 3.330	51 0.35	1 84.34	209 84.34	-328.409 0.00	403.734 0.04	D 0.07	5.224 15.17	5.184 2.310
2006 0.045 3.330	52 0.33	1 83.97	276 83.97	-319.194 0.00	412.001 0.04	D 0.07	5.229 15.57	5.184 2.310

2006 0.055 3.330	53 0.39	1 81.64	289 81.64	-326.547 0.00	415.852 0.05	D 0.08	5.239 2.960	5.184 2.310
2006 0.037 3.330	54 0.24	1 92.57	217 92.57	-307.055 0.00	402.702 0.03	D 0.04	5.221 2.960	5.184 2.310
2006 0.004 3.330	55 0.60	1 67.85	287 67.85	-329.055 0.00	415.977 0.08	D 0.13	5.188 2.960	5.184 2.310
2006 0.000 3.330	56 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.184 2.960	5.184 2.310
2006 0.014 3.330	57 0.20	1 97.41	190 97.41	-333.610 0.00	400.508 0.01	D 0.03	5.198 2.33	5.184 2.960
2006 0.069 3.330	58 0.29	1 89.57	191 89.57	-332.353 0.00	400.444 0.03	D 0.06	5.253 2.960	5.184 2.310
2006 0.000 3.330	59 0.61	1 67.53	289 67.53	-326.547 0.00	415.852 0.08	D 0.13	5.184 2.960	5.184 2.310
2006 0.002 3.270	60 0.59	1 70.35	190 70.35	-333.610 0.00	400.508 0.07	D 0.12	5.200 28.81	5.198 3.010
2006 0.000 3.270	61 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010
2006 0.000 3.270	62 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010
2006 0.002 3.270	63 0.21	1 99.67	203 99.67	-305.880 0.00	400.904 0.01	D 0.03	5.200 0.05	5.198 3.010
2006 0.001 3.270	64 0.39	1 97.38	190 97.38	-333.610 0.00	400.508 0.04	D 0.07	5.199 2.06	5.198 3.010
2006 0.001 3.270	65 0.16	1 97.62	264 97.62	-334.246 0.00	412.751 0.02	D 0.03	5.199 2.11	5.198 3.010
2006 0.000 3.270	66 1.17	1 73.76	289 73.76	-326.547 0.00	415.852 0.13	D 0.23	5.199 24.50	5.198 3.010
2006 0.002 3.270	67 0.24	1 95.10	276 95.10	-319.194 0.00	412.001 0.02	D 0.05	5.201 4.59	5.198 3.010
2006 0.004 3.270	68 0.30	1 95.27	277 95.27	-332.904 0.00	414.427 0.03	D 0.05	5.202 4.33	5.198 3.010
2006 0.006 3.270	69 0.30	1 88.36	264 88.36	-334.246 0.00	412.751 0.04	D 0.06	5.204 11.22	5.198 3.010
2006 0.022 3.270	70 0.18	1 96.44	190 96.44	-333.610 0.00	400.508 0.02	D 0.03	5.220 3.31	5.198 3.010
2006 0.003 3.270	71 0.22	1 99.75	286 99.75	-330.308 0.00	416.040 0.01	D 0.02	5.201 0.01	5.198 3.010

2006 0.010 3.270	72 0.24	1 97.96	204 97.96	-334.689 0.00	404.051 0.01	D 0.02	5.209 1.75	5.198 3.010	5.198 2.310
2006 0.030 3.270	73 0.31	1 87.62	276 87.62	-319.194 0.00	412.001 0.02	D 0.06	5.228 11.95	5.198 3.010	5.198 2.310
2006 0.000 3.270	74 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010	5.198 2.310
2006 0.000 3.270	75 0.25	1 99.81	264 99.81	-334.246 0.00	412.751 0.01	D 0.02	5.199 0.08	5.198 3.010	5.198 2.310
2006 0.000 3.270	76 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010	5.198 2.310
2006 0.000 3.270	77 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010	5.198 2.310
2006 0.000 3.270	78 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010	5.198 2.310
2006 0.000 3.270	79 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010	5.198 2.310
2006 0.000 3.270	80 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010	5.198 2.310
2006 0.000 3.270	81 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010	5.198 2.310
2006 0.094 3.270	82 0.19	1 99.43	204 99.43	-334.689 0.00	404.051 0.01	D 0.02	5.292 0.35	5.198 3.010	5.198 2.310
2006 0.059 3.270	83 0.23	1 99.65	198 99.65	-312.162 0.00	401.199 0.01	D 0.02	5.257 0.09	5.198 3.010	5.198 2.310
2006 0.000 3.270	84 0.27	1 99.53	286 99.53	-330.308 0.00	416.040 0.01	D 0.02	5.198 0.00	5.198 3.010	5.198 2.310
2006 0.003 3.270	85 0.26	1 97.69	190 97.69	-333.610 0.00	400.508 0.01	D 0.03	5.202 1.98	5.198 3.010	5.198 2.310
2006 0.001 3.270	86 0.18	1 95.45	190 95.45	-333.610 0.00	400.508 0.02	D 0.04	5.199 4.35	5.198 3.010	5.198 2.310
2006 0.000 3.270	87 0.16	1 97.67	203 97.67	-305.880 0.00	400.904 0.02	D 0.03	5.199 2.11	5.198 3.010	5.198 2.310
2006 0.000 3.270	88 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.198 0.00	5.198 3.010	5.198 2.310
2006 0.004 3.270	89 0.20	1 89.86	244 89.86	-323.128 0.00	408.706 0.02	D 0.04	5.202 9.87	5.198 3.010	5.198 2.310
2006 0.000 3.270	90 0.00	1 99.06	235 99.06	-334.424 0.00	409.271 0.01	D 0.03	5.198 0.00	5.198 3.010	5.198 2.310

2006 0.002 3.050	91 0.22	1 0.00	204 98.04	-334.689 0.00	404.051 0.01	D 0.02	5.156 1.69	5.154 2.210
2006 0.004 3.050	92 0.24	1 0.00	192 99.37	-331.096 0.00	400.381 0.01	D 0.03	5.158 0.35	5.154 2.210
2006 0.007 3.050	93 0.20	1 0.00	204 91.73	-334.689 0.00	404.051 0.02	D 0.04	5.161 7.99	5.154 2.210
2006 0.000 3.050	94 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.154 0.00	5.154 2.210
2006 0.017 3.050	95 0.28	1 0.00	276 91.20	-319.194 0.00	412.001 0.03	D 0.05	5.171 8.41	5.154 2.210
2006 0.006 3.050	96 0.24	1 0.00	198 83.50	-312.162 0.00	401.199 0.02	D 0.05	5.160 16.17	5.154 2.210
2006 0.000 3.050	97 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.154 0.00	5.154 2.210
2006 0.000 3.050	98 0.00	1 0.00	190 0.00	-333.610 0.00	400.508 0.00	D 0.00	5.154 0.00	5.154 2.210
2006 0.033 3.050	99 0.49	1 0.00	190 89.12	-333.610 0.00	400.508 0.04	D 0.09	5.187 10.22	5.154 2.210
2006 0.000 3.050	100 1.00	1 0.00	217 73.64	-307.055 0.00	402.702 0.09	D 0.21	5.154 25.15	5.154 2.210
2006 0.000 3.050	101 0.21	1 0.00	192 96.07	-331.096 0.00	400.381 0.01	D 0.04	5.154 3.61	5.154 2.210
2006 0.005 3.050	102 0.33	1 0.00	191 88.79	-332.353 0.00	400.444 0.04	D 0.07	5.159 10.75	5.154 2.210
2006 0.002 3.050	103 0.81	1 0.00	289 66.46	-326.547 0.00	415.852 0.10	D 0.17	5.156 32.40	5.154 2.210
2006 0.011 3.050	104 0.29	1 0.00	276 87.24	-319.194 0.00	412.001 0.04	D 0.06	5.165 12.36	5.154 2.210
2006 0.002 3.050	105 0.99	1 0.00	264 87.28	-334.246 0.00	412.751 0.11	D 0.18	5.156 11.39	5.154 2.210
2006 0.000 3.050	106 0.44	1 0.00	235 99.22	-334.424 0.00	409.271 0.02	D 0.05	5.154 0.00	5.154 2.210
2006 0.000 3.050	107 0.24	1 0.00	203 98.70	-305.880 0.00	400.904 0.00	D 0.03	5.154 0.23	5.154 2.210
2006 0.000 3.050	108 0.00	1 0.00	201 50.00	-308.393 0.00	401.021 0.00	D 0.01	5.154 0.11	5.154 2.210
2006 0.000 3.050	109 0.00	1 0.00	190 59.38	-333.610 0.00	400.508 0.00	D 0.01	5.154 0.07	5.154 2.210

2006 110	1	190	-333.610	400.508	D	5.154	5.154
0.000	0.21	86.04	0.00	0.02	0.03	0.06	12.06 2.870 2.210
3.050							
2006 111	1	190	-333.610	400.508	D	5.187	5.154
0.033	0.30	90.84	0.00	0.02	0.03	0.06	8.75 2.870 2.210
3.050							
2006 112	1	289	-326.547	415.852	D	5.154	5.154
0.000	0.25	99.80	0.00	0.01	0.01	0.03	0.00 2.870 2.210
3.050							
2006 113	1	190	-333.610	400.508	D	5.154	5.154
0.000	0.38	94.89	0.00	0.02	0.01	0.05	3.73 2.870 2.210
3.050							
2006 114	1	190	-333.610	400.508	D	5.154	5.154
0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00 2.870 2.210
3.050							
2006 115	1	235	-334.424	409.271	D	5.154	5.154
0.000	0.17	97.57	0.00	0.01	0.01	0.02	0.00 2.870 2.210
3.050							
2006 116	1	277	-332.904	414.427	D	5.154	5.154
0.000	0.40	99.30	0.00	0.01	0.01	0.03	0.00 2.870 2.210
3.050							
2006 117	1	204	-334.689	404.051	D	5.172	5.154
0.018	0.35	95.02	0.00	0.02	0.03	0.06	4.51 2.870 2.210
3.050							
2006 118	1	190	-333.610	400.508	D	5.154	5.154
0.000	0.30	88.03	0.00	0.02	0.04	0.07	11.02 2.870 2.210
3.050							
2006 119	1	190	-333.610	400.508	D	5.154	5.154
0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00 2.870 2.210
3.050							
2006 120	1	190	-333.610	400.508	D	5.154	5.154
0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00 2.870 2.210
3.050							
2006 121	1	286	-330.308	416.040	D	5.227	5.225
0.002	0.28	99.59	0.00	0.01	0.01	0.04	0.09 3.100 2.340
3.250							
2006 122	1	289	-326.547	415.852	D	5.225	5.225
0.000	0.55	93.24	0.00	0.03	0.02	0.09	6.05 3.100 2.340
3.250							
2006 123	1	262	-319.279	410.261	D	5.236	5.225
0.011	0.43	81.90	0.00	0.03	0.05	0.09	17.51 3.100 2.340
3.250							
2006 124	1	264	-334.246	412.751	D	5.238	5.225
0.013	0.23	98.68	0.00	0.01	0.01	0.03	1.04 3.100 2.340
3.250							
2006 125	1	264	-334.246	412.751	D	5.251	5.225
0.026	0.23	98.17	0.00	0.01	0.01	0.03	1.55 3.100 2.340
3.250							
2006 126	1	286	-330.308	416.040	D	5.225	5.225
0.000	0.58	99.88	0.00	0.01	0.01	0.02	0.01 3.100 2.340
3.250							
2006 127	1	264	-334.246	412.751	D	5.225	5.225
0.000	2.34	89.70	0.00	0.12	0.18	0.36	7.38 3.100 2.340
3.250							
2006 128	1	190	-333.610	400.508	D	5.225	5.225
0.000	0.30	92.97	0.00	0.02	0.02	0.05	6.60 3.100 2.340
3.250							

2006 129	1	190	-333.610	400.508	D	5.225	5.225
0.000	0.00	0.00	0.00	0.00	0.00	0.00	3.100 2.340
3.250							
2006 130	1	222	-327.067	405.412	D	5.233	5.225
0.008	0.46	77.02	0.00	0.03	0.06	0.09	22.34 3.100 2.340
3.250							
2006 131	1	190	-333.610	400.508	D	5.225	5.225
0.000	0.00	0.00	0.00	0.00	0.00	0.00	3.100 2.340
3.250							
2006 132	1	190	-333.610	400.508	D	5.227	5.225
0.002	0.39	99.47	0.00	0.02	0.01	0.04	0.10 3.100 2.340
3.250							
2006 133	1	190	-333.610	400.508	D	5.226	5.225
0.001	0.31	98.69	0.00	0.01	0.01	0.04	0.99 3.100 2.340
3.250							
2006 134	1	190	-333.610	400.508	D	5.225	5.225
0.000	0.41	83.15	0.00	0.03	0.04	0.08	16.00 3.100 2.340
3.250							
2006 135	1	190	-333.610	400.508	D	5.227	5.225
0.002	0.36	90.07	0.00	0.02	0.04	0.07	9.46 3.100 2.340
3.250							
2006 136	1	286	-330.308	416.040	D	5.243	5.225
0.018	0.50	92.89	0.00	0.03	0.04	0.08	6.46 3.100 2.340
3.250							
2006 137	1	222	-327.067	405.412	D	5.242	5.225
0.017	0.39	84.32	0.00	0.02	0.04	0.08	15.15 3.100 2.340
3.250							
2006 138	1	264	-334.246	412.751	D	5.229	5.225
0.004	1.05	77.95	0.00	0.06	0.10	0.19	20.64 3.100 2.340
3.250							
2006 139	1	204	-334.689	404.051	D	5.225	5.225
0.000	0.00	92.19	0.00	0.02	0.02	0.06	0.00 3.100 2.340
3.250							
2006 140	1	264	-334.246	412.751	D	5.225	5.225
0.000	1.45	98.52	0.00	0.04	0.05	0.13	0.00 3.100 2.340
3.250							
2006 141	1	202	-307.136	400.962	D	5.225	5.225
0.000	0.60	99.82	0.00	0.02	0.01	0.05	0.00 3.100 2.340
3.250							
2006 142	1	190	-333.610	400.508	D	5.225	5.225
0.000	0.00	0.00	0.00	0.00	0.00	0.00	3.100 2.340
3.250							
2006 143	1	191	-332.353	400.444	D	5.226	5.225
0.001	1.40	43.93	0.00	0.10	0.11	0.26	54.28 3.100 2.340
3.250							
2006 144	1	190	-333.610	400.508	D	5.225	5.225
0.000	1.40	26.46	0.00	0.10	0.16	0.29	71.73 3.100 2.340
3.250							
2006 145	1	288	-327.801	415.914	D	5.231	5.225
0.006	0.82	74.95	0.00	0.05	0.09	0.15	23.93 3.100 2.340
3.250							
2006 146	1	190	-333.610	400.508	D	5.225	5.225
0.000	0.00	0.00	0.00	0.00	0.00	0.00	3.100 2.340
3.250							
2006 147	1	190	-333.610	400.508	D	5.225	5.225
0.000	0.00	0.00	0.00	0.00	0.00	0.00	3.100 2.340
3.250							

2006 148	1	190	-333.610	400.508	D	5.226	5.225
0.001	0.20	51.00	0.00 0.01	0.01 0.03		48.66 3.100	2.340
3.250							
2006 149	1	289	-326.547	415.852	D	5.227	5.225
0.002	0.41	90.59	0.00 0.02	0.03 0.07		8.84 3.100	2.340
3.250							
2006 150	1	190	-333.610	400.508	D	5.240	5.225
0.015	0.54	90.36	0.00 0.03	0.04 0.09		8.94 3.100	2.340
3.250							
2006 151	1	203	-305.880	400.904	D	5.237	5.225
0.012	0.37	91.02	0.00 0.02	0.03 0.06		8.49 3.100	2.340
3.250							
2006 152	1	217	-307.055	402.702	D	5.168	5.167
0.001	0.19	99.52	0.00 0.01	0.01 0.03		0.21 2.910	2.250
3.150							
2006 153	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 154	1	204	-334.689	404.051	D	5.167	5.167
0.000	13.97	69.85	0.00 0.65	0.94 1.98		11.08 2.910	2.250
3.150							
2006 155	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 156	1	190	-333.610	400.508	D	5.167	5.167
0.000	1.64	66.38	0.00 0.09	0.11 0.27		31.59 2.910	2.250
3.150							
2006 157	1	190	-333.610	400.508	D	5.176	5.167
0.009	0.92	79.21	0.00 0.06	0.09 0.17		19.56 2.910	2.250
3.150							
2006 158	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 159	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 160	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 161	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 162	1	276	-319.194	412.001	D	5.170	5.167
0.003	0.41	93.41	0.00 0.02	0.03 0.05		6.11 2.910	2.250
3.150							
2006 163	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 164	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 165	1	264	-334.246	412.751	D	5.167	5.167
0.000	1.56	76.56	0.00 0.06	0.05 0.17		8.16 2.910	2.250
3.150							
2006 166	1	264	-334.246	412.751	D	5.167	5.167
0.000	1.63	95.47	0.00 0.08	0.06 0.22		2.56 2.910	2.250
3.150							

2006 167	1	190	-333.610	400.508	D	5.167	5.167
0.000	1.67	85.06	0.00 0.08	0.09 0.24		12.79 2.910	2.250
3.150							
2006 168	1	190	-333.610	400.508	D	5.181	5.167
0.014	0.92	66.49	0.00 0.06	0.11 0.19		32.22 2.910	2.250
3.150							
2006 169	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 170	1	190	-333.610	400.508	D	5.167	5.167
0.000	1.87	96.83	0.00 0.07	0.11 0.21		0.84 2.910	2.250
3.150							
2006 171	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 172	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 173	1	235	-334.424	409.271	D	5.167	5.167
0.000	3.35	87.84	0.00 0.16	0.26 0.47		8.19 2.910	2.250
3.150							
2006 174	1	190	-333.610	400.508	D	5.169	5.167
0.002	1.48	85.74	0.00 0.08	0.12 0.25		12.30 2.910	2.250
3.150							
2006 175	1	192	-331.096	400.381	D	5.167	5.167
0.000	0.45	99.26	0.00 0.02	0.01 0.04		0.00 2.910	2.250
3.150							
2006 176	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 177	1	288	-327.801	415.914	D	5.181	5.167
0.014	0.63	83.46	0.00 0.04	0.07 0.13		15.67 2.910	2.250
3.150							
2006 178	1	190	-333.610	400.508	D	5.167	5.167
0.000	8.33	76.04	0.00 0.43	0.63 1.30		0.39 2.910	2.250
3.150							
2006 179	1	190	-333.610	400.508	D	5.167	5.167
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.910	2.250
3.150							
2006 180	1	277	-332.904	414.427	D	5.167	5.167
0.000	7.45	82.78	0.00 0.34	0.50 1.01		7.89 2.910	2.250
3.150							
2006 181	1	190	-333.610	400.508	D	5.167	5.167
0.000	10.29	87.21	0.00 0.35	0.44 1.02		0.24 2.910	2.250
3.150							
2006 182	1	190	-333.610	400.508	D	5.083	5.083
0.000	0.48	98.29	0.00 0.02	0.03 0.07		1.36 2.640	2.080
2.890							
2006 183	1	204	-334.689	404.051	D	5.087	5.083
0.004	2.78	78.64	0.00 0.15	0.24 0.44		17.76 2.640	2.080
2.890							
2006 184	1	190	-333.610	400.508	D	5.084	5.083
0.001	0.48	72.80	0.00 0.03	0.05 0.10		26.51 2.640	2.080
2.890							
2006 185	1	235	-334.424	409.271	D	5.083	5.083
0.001	0.83	89.24	0.00 0.04	0.06 0.12		9.64 2.640	2.080
2.890							

2006 186	1	235	-334.424	409.271	D	5.083	5.083
0.000	1.20	96.63	0.00 0.03	0.02 0.10		0.00 2.640	2.080
2.890							
2006 187	1	190	-333.610	400.508	D	5.083	5.083
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.640	2.080
2.890							
2006 188	1	204	-334.689	404.051	D	5.083	5.083
0.000	9.38	25.00	0.00 0.60	0.58 1.80		62.28 2.640	2.080
2.890							
2006 189	1	264	-334.246	412.751	D	5.083	5.083
0.000	7.30	89.82	0.00 0.34	0.40 0.99		1.13 2.640	2.080
2.890							
2006 190	1	190	-333.610	400.508	D	5.083	5.083
0.000	2.05	97.23	0.00 0.10	0.11 0.29		0.43 2.640	2.080
2.890							
2006 191	1	250	-334.335	411.011	D	5.083	5.083
0.000	2.08	88.54	0.00 0.08	0.06 0.24		0.00 2.640	2.080
2.890							
2006 192	1	277	-332.904	414.427	D	5.083	5.083
0.000	14.06	82.70	0.00 0.63	0.71 1.79		0.20 2.640	2.080
2.890							
2006 193	1	243	-324.384	408.767	D	5.083	5.083
0.000	3.12	46.88	0.00 0.14	0.16 0.42		0.00 2.640	2.080
2.890							
2006 194	1	190	-333.610	400.508	D	5.083	5.083
0.001	2.63	44.23	0.00 0.19	0.29 0.57		52.15 2.640	2.080
2.890							
2006 195	1	192	-331.096	400.381	D	5.086	5.083
0.003	0.74	69.99	0.00 0.05	0.08 0.16		28.97 2.640	2.080
2.890							
2006 196	1	264	-334.246	412.751	D	5.083	5.083
0.000	26.86	63.56	0.00 1.27	1.77 3.73		2.01 2.640	2.080
2.890							
2006 197	1	190	-333.610	400.508	D	5.083	5.083
0.000	10.57	38.89	0.00 0.66	0.79 2.00		47.18 2.640	2.080
2.890							
2006 198	1	190	-333.610	400.508	D	5.083	5.083
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.640	2.080
2.890							
2006 199	1	190	-333.610	400.508	D	5.083	5.083
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.640	2.080
2.890							
2006 200	1	204	-334.689	404.051	D	5.083	5.083
0.000	6.33	93.11	0.00 0.27	0.15 0.81		0.38 2.640	2.080
2.890							
2006 201	1	190	-333.610	400.508	D	5.083	5.083
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.640	2.080
2.890							
2006 202	1	190	-333.610	400.508	D	5.083	5.083
0.000	0.14	85.87	0.00 0.01	0.02 0.04		14.86 2.640	2.080
2.890							
2006 203	1	190	-333.610	400.508	D	5.085	5.083
0.002	2.00	61.77	0.00 0.14	0.22 0.41		35.46 2.640	2.080
2.890							
2006 204	1	190	-333.610	400.508	D	5.083	5.083
0.000	6.60	91.16	0.00 0.24	0.28 0.71		0.23 2.640	2.080
2.890							

2006 205 1	190	-333.610	400.508	D	5.083	5.083
0.001 4.45	37.90	0.00 0.23	0.36 0.69	56.34	2.640	2.080
2.890						
2006 206 1	190	-333.610	400.508	D	5.083	5.083
0.000 9.38	84.38	0.00 0.31	0.25 0.88	0.00	2.640	2.080
2.890						
2006 207 1	264	-334.246	412.751	D	5.083	5.083
0.000 2.40	50.06	0.00 0.17	0.25 0.51	46.90	2.640	2.080
2.890						
2006 208 1	289	-326.547	415.852	D	5.086	5.083
0.003 1.46	47.04	0.00 0.11	0.20 0.32	50.87	2.640	2.080
2.890						
2006 209 1	204	-334.689	404.051	D	5.083	5.083
0.000 5.32	91.89	0.00 0.26	0.28 0.77	0.35	2.640	2.080
2.890						
2006 210 1	190	-333.610	400.508	D	5.083	5.083
0.000 0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.640	2.080
2.890						
2006 211 1	264	-334.246	412.751	D	5.083	5.083
0.000 11.51	54.19	0.00 0.72	0.82 2.07	30.41	2.640	2.080
2.890						
2006 212 1	190	-333.610	400.508	D	5.083	5.083
0.000 7.12	85.85	0.00 0.41	0.34 1.14	4.71	2.640	2.080
2.890						
2006 213 1	190	-333.610	400.508	D	5.067	5.067
0.000 0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810						
2006 214 1	190	-333.610	400.508	D	5.067	5.067
0.000 1.83	89.12	0.00 0.07	0.03 0.19	8.70	2.590	2.050
2.810						
2006 215 1	204	-334.689	404.051	D	5.067	5.067
0.001 1.28	73.19	0.00 0.09	0.15 0.28	25.00	2.590	2.050
2.810						
2006 216 1	235	-334.424	409.271	D	5.067	5.067
0.000 1.78	45.09	0.00 0.13	0.19 0.38	52.41	2.590	2.050
2.810						
2006 217 1	191	-332.353	400.444	D	5.071	5.067
0.004 1.18	42.52	0.00 0.09	0.16 0.27	55.77	2.590	2.050
2.810						
2006 218 1	190	-333.610	400.508	D	5.067	5.067
0.000 0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810						
2006 219 1	190	-333.610	400.508	D	5.067	5.067
0.000 0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810						
2006 220 1	277	-332.904	414.427	D	5.067	5.067
0.000 0.00	82.81	0.00 0.03	0.06 0.10	9.09	2.590	2.050
2.810						
2006 221 1	191	-332.353	400.444	D	5.082	5.067
0.016 0.90	61.09	0.00 0.06	0.12 0.20	37.62	2.590	2.050
2.810						
2006 222 1	264	-334.246	412.751	D	5.067	5.067
0.000 1.08	98.44	0.00 0.03	0.03 0.09	0.00	2.590	2.050
2.810						
2006 223 1	264	-334.246	412.751	D	5.067	5.067
0.000 1.13	92.55	0.00 0.06	0.07 0.17	6.02	2.590	2.050
2.810						

2006 224	1	264	-334.246	412.751	D	5.068	5.067
0.001	3.00	42.03	0.00 0.20	0.29 0.61	53.91	2.590	2.050
2.810							
2006 225	1	190	-333.610	400.508	D	5.067	5.067
0.000	1.04	98.44	0.00 0.04	0.02 0.11	0.07	2.590	2.050
2.810							
2006 226	1	276	-319.194	412.001	D	5.076	5.067
0.010	0.43	82.92	0.00 0.03	0.05 0.10	16.46	2.590	2.050
2.810							
2006 227	1	190	-333.610	400.508	D	5.067	5.067
0.000	0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810							
2006 228	1	264	-334.246	412.751	D	5.067	5.067
0.000	4.61	82.94	0.00 0.25	0.22 0.71	11.28	2.590	2.050
2.810							
2006 229	1	289	-326.547	415.852	D	5.067	5.067
0.000	1.36	98.45	0.00 0.06	0.04 0.15	0.01	2.590	2.050
2.810							
2006 230	1	190	-333.610	400.508	D	5.067	5.067
0.000	0.63	99.46	0.00 0.02	0.01 0.06	0.00	2.590	2.050
2.810							
2006 231	1	190	-333.610	400.508	D	5.067	5.067
0.000	0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810							
2006 232	1	190	-333.610	400.508	D	5.067	5.067
0.000	6.22	91.28	0.00 0.31	0.39 0.91	0.62	2.590	2.050
2.810							
2006 233	1	190	-333.610	400.508	D	5.067	5.067
0.000	2.47	96.40	0.00 0.11	0.08 0.31	0.03	2.590	2.050
2.810							
2006 234	1	190	-333.610	400.508	D	5.067	5.067
0.000	0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810							
2006 235	1	190	-333.610	400.508	D	5.070	5.067
0.003	3.30	20.08	0.00 0.24	0.39 0.72	75.27	2.590	2.050
2.810							
2006 236	1	286	-330.308	416.040	D	5.067	5.067
0.001	1.77	10.99	0.00 0.14	0.23 0.41	86.44	2.590	2.050
2.810							
2006 237	1	264	-334.246	412.751	D	5.070	5.067
0.003	0.87	76.66	0.00 0.06	0.11 0.19	22.12	2.590	2.050
2.810							
2006 238	1	264	-334.246	412.751	D	5.067	5.067
0.001	0.38	88.88	0.00 0.02	0.04 0.06	10.69	2.590	2.050
2.810							
2006 239	1	190	-333.610	400.508	D	5.067	5.067
0.000	0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810							
2006 240	1	190	-333.610	400.508	D	5.067	5.067
0.000	0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810							
2006 241	1	190	-333.610	400.508	D	5.067	5.067
0.000	0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810							
2006 242	1	190	-333.610	400.508	D	5.067	5.067
0.000	0.00	0.00	0.00 0.00	0.00 0.00	0.00	2.590	2.050
2.810							

2006 243	1	202	-307.136	400.962	D	5.067	5.067
0.000	0.95	47.01	0.00 0.08	0.11 0.23		51.43 2.590	2.050
2.810							
2006 244	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							
2006 245	1	190	-333.610	400.508	D	5.063	5.057
0.006	0.33	85.25	0.00 0.02	0.04 0.07		14.29 2.560	2.020
2.740							
2006 246	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.59	71.48	0.00 0.04	0.08 0.13		27.80 2.560	2.020
2.740							
2006 247	1	264	-334.246	412.751	D	5.077	5.057
0.020	0.29	90.37	0.00 0.02	0.03 0.06		9.22 2.560	2.020
2.740							
2006 248	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							
2006 249	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							
2006 250	1	191	-332.353	400.444	D	5.061	5.057
0.004	0.77	78.02	0.00 0.05	0.08 0.16		20.92 2.560	2.020
2.740							
2006 251	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							
2006 252	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							
2006 253	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							
2006 254	1	204	-334.689	404.051	D	5.061	5.057
0.004	0.52	95.24	0.00 0.03	0.03 0.08		4.10 2.560	2.020
2.740							
2006 255	1	190	-333.610	400.508	D	5.076	5.057
0.020	0.50	89.64	0.00 0.03	0.05 0.10		9.68 2.560	2.020
2.740							
2006 256	1	203	-305.880	400.904	D	5.057	5.057
0.000	2.03	97.40	0.00 0.08	0.12 0.24		0.05 2.560	2.020
2.740							
2006 257	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							
2006 258	1	277	-332.904	414.427	D	5.057	5.057
0.000	0.68	95.91	0.00 0.04	0.03 0.12		3.28 2.560	2.020
2.740							
2006 259	1	190	-333.610	400.508	D	5.062	5.057
0.005	1.05	88.66	0.00 0.06	0.08 0.18		9.98 2.560	2.020
2.740							
2006 260	1	190	-333.610	400.508	D	5.059	5.057
0.003	0.50	71.16	0.00 0.04	0.07 0.12		28.09 2.560	2.020
2.740							
2006 261	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							

2006 262	1	204	-334.689	404.051	D	5.099	5.057
0.042	0.25	92.99	0.00 0.02	0.03 0.05		6.67 2.560	2.020
2.740							
2006 263	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							
2006 264	1	204	-334.689	404.051	D	5.057	5.057
0.000	0.62	83.89	0.00 0.04	0.06 0.13		15.11 2.560	2.020
2.740							
2006 265	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.560	2.020
2.740							
2006 266	1	190	-333.610	400.508	D	5.057	5.057
0.000	0.00	75.00	0.00 0.03	0.06 0.10		24.07 2.560	2.020
2.740							
2006 267	1	288	-327.801	415.914	D	5.069	5.057
0.012	0.41	81.06	0.00 0.03	0.06 0.09		18.35 2.560	2.020
2.740							
2006 268	1	276	-319.194	412.001	D	5.059	5.057
0.003	0.28	86.80	0.00 0.02	0.04 0.06		12.80 2.560	2.020
2.740							
2006 269	1	289	-326.547	415.852	D	5.058	5.057
0.002	1.00	53.76	0.00 0.08	0.14 0.24		44.77 2.560	2.020
2.740							
2006 270	1	190	-333.610	400.508	D	5.064	5.057
0.007	0.40	77.82	0.00 0.03	0.06 0.10		21.60 2.560	2.020
2.740							
2006 271	1	276	-319.194	412.001	D	5.064	5.057
0.007	0.35	81.28	0.00 0.03	0.05 0.08		18.21 2.560	2.020
2.740							
2006 272	1	190	-333.610	400.508	D	5.062	5.057
0.005	0.36	80.81	0.00 0.03	0.05 0.09		18.67 2.560	2.020
2.740							
2006 273	1	276	-319.194	412.001	D	5.080	5.057
0.023	0.38	81.29	0.00 0.03	0.05 0.09		18.16 2.560	2.020
2.740							
2006 274	1	204	-334.689	404.051	D	5.070	5.064
0.006	1.08	50.08	0.00 0.09	0.13 0.26		48.36 2.580	2.050
2.820							
2006 275	1	190	-333.610	400.508	D	5.067	5.064
0.003	1.81	96.97	0.00 0.10	0.10 0.28		0.74 2.580	2.050
2.820							
2006 276	1	190	-333.610	400.508	D	5.066	5.064
0.002	0.64	87.40	0.00 0.04	0.05 0.12		11.76 2.580	2.050
2.820							
2006 277	1	190	-333.610	400.508	D	5.064	5.064
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.580	2.050
2.820							
2006 278	1	190	-333.610	400.508	D	5.064	5.064
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.580	2.050
2.820							
2006 279	1	264	-334.246	412.751	D	5.064	5.064
0.000	1.27	94.83	0.00 0.07	0.06 0.20		3.58 2.580	2.050
2.820							
2006 280	1	222	-327.067	405.412	D	5.074	5.064
0.010	0.64	74.67	0.00 0.05	0.07 0.15		24.42 2.580	2.050
2.820							

2006 281	1	190	-333.610	400.508	D	5.064	5.064
0.000	0.00	0.00	0.00	0.00	0.00	0.00	2.580 2.050
2.820							
2006 282	1	190	-333.610	400.508	D	5.064	5.064
0.000	0.00	0.00	0.00	0.00	0.00	0.00	2.580 2.050
2.820							
2006 283	1	190	-333.610	400.508	D	5.065	5.064
0.002	0.43	90.08	0.00	0.03	0.05	0.09	9.31 2.580 2.050
2.820							
2006 284	1	190	-333.610	400.508	D	5.064	5.064
0.000	0.00	0.00	0.00	0.00	0.00	0.00	2.580 2.050
2.820							
2006 285	1	190	-333.610	400.508	D	5.064	5.064
0.000	0.23	91.18	0.00	0.02	0.03	0.05	8.73 2.580 2.050
2.820							
2006 286	1	190	-333.610	400.508	D	5.064	5.064
0.000	0.00	0.00	0.00	0.00	0.00	0.00	2.580 2.050
2.820							
2006 287	1	204	-334.689	404.051	D	5.071	5.064
0.007	0.18	95.89	0.00	0.01	0.02	0.04	3.86 2.580 2.050
2.820							
2006 288	1	288	-327.801	415.914	D	5.064	5.064
0.000	0.24	88.03	0.00	0.02	0.03	0.05	11.50 2.580 2.050
2.820							
2006 289	1	285	-322.871	413.926	D	5.073	5.064
0.009	0.36	87.94	0.00	0.02	0.04	0.07	11.57 2.580 2.050
2.820							
2006 290	1	190	-333.610	400.508	D	5.064	5.064
0.000	0.00	0.00	0.00	0.00	0.00	0.00	2.580 2.050
2.820							
2006 291	1	276	-319.194	412.001	D	5.069	5.064
0.005	0.23	96.68	0.00	0.02	0.02	0.05	3.01 2.580 2.050
2.820							
2006 292	1	190	-333.610	400.508	D	5.080	5.064
0.016	0.34	82.81	0.00	0.03	0.05	0.08	16.71 2.580 2.050
2.820							
2006 293	1	190	-333.610	400.508	D	5.106	5.064
0.043	0.18	93.08	0.00	0.01	0.02	0.04	6.68 2.580 2.050
2.820							
2006 294	1	190	-333.610	400.508	D	5.064	5.064
0.000	0.00	0.00	0.00	0.00	0.00	0.00	2.580 2.050
2.820							
2006 295	1	190	-333.610	400.508	D	5.068	5.064
0.004	0.30	83.40	0.00	0.02	0.04	0.07	16.16 2.580 2.050
2.820							
2006 296	1	209	-328.409	403.734	D	5.107	5.064
0.043	0.28	86.49	0.00	0.02	0.04	0.06	13.10 2.580 2.050
2.820							
2006 297	1	190	-333.610	400.508	D	5.075	5.064
0.011	0.33	88.19	0.00	0.02	0.04	0.07	11.35 2.580 2.050
2.820							
2006 298	1	217	-307.055	402.702	D	5.064	5.064
0.000	0.18	99.82	0.00	0.01	0.01	0.02	0.07 2.580 2.050
2.820							
2006 299	1	276	-319.194	412.001	D	5.073	5.064
0.009	0.28	84.77	0.00	0.02	0.04	0.07	14.82 2.580 2.050
2.820							

2006 300	1	276	-319.194	412.001	D	5.080	5.064
0.016	0.41	76.27	0.00 0.03	0.06 0.10		23.13 2.580	2.050
2.820							
2006 301	1	209	-328.409	403.734	D	5.105	5.064
0.041	0.29	85.86	0.00 0.02	0.04 0.07		13.72 2.580	2.050
2.820							
2006 302	1	289	-326.547	415.852	D	5.064	5.064
0.000	0.39	78.21	0.00 0.03	0.06 0.10		21.45 2.580	2.050
2.820							
2006 303	1	203	-305.880	400.904	D	5.072	5.064
0.008	0.28	87.64	0.00 0.02	0.03 0.06		11.97 2.580	2.050
2.820							
2006 304	1	190	-333.610	400.508	D	5.074	5.064
0.010	0.16	96.00	0.00 0.01	0.02 0.03		3.77 2.580	2.050
2.820							
2006 305	1	191	-332.353	400.444	D	5.242	5.230
0.012	0.29	87.22	0.00 0.02	0.03 0.06		12.38 3.110	2.380
3.410							
2006 306	1	276	-319.194	412.001	D	5.246	5.230
0.016	0.24	89.80	0.00 0.02	0.03 0.05		9.88 3.110	2.380
3.410							
2006 307	1	190	-333.610	400.508	D	5.249	5.230
0.019	0.28	90.11	0.00 0.02	0.03 0.05		9.51 3.110	2.380
3.410							
2006 308	1	276	-319.194	412.001	D	5.233	5.230
0.004	0.27	88.14	0.00 0.02	0.03 0.05		11.49 3.110	2.380
3.410							
2006 309	1	276	-319.194	412.001	D	5.230	5.230
0.000	0.64	86.80	0.00 0.04	0.07 0.12		12.25 3.110	2.380
3.410							
2006 310	1	244	-323.128	408.706	D	5.251	5.230
0.021	0.55	76.17	0.00 0.04	0.07 0.11		23.06 3.110	2.380
3.410							
2006 311	1	289	-326.547	415.852	D	5.239	5.230
0.010	0.71	74.47	0.00 0.05	0.07 0.14		24.57 3.110	2.380
3.410							
2006 312	1	222	-327.067	405.412	D	5.236	5.230
0.006	0.99	52.24	0.00 0.07	0.12 0.20		46.39 3.110	2.380
3.410							
2006 313	1	190	-333.610	400.508	D	5.230	5.230
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 3.110	2.380
3.410							
2006 314	1	190	-333.610	400.508	D	5.230	5.230
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 3.110	2.380
3.410							
2006 315	1	190	-333.610	400.508	D	5.236	5.230
0.006	0.51	74.85	0.00 0.03	0.06 0.10		24.43 3.110	2.380
3.410							
2006 316	1	288	-327.801	415.914	D	5.232	5.230
0.002	0.29	86.74	0.00 0.02	0.04 0.06		12.86 3.110	2.380
3.410							
2006 317	1	289	-326.547	415.852	D	5.231	5.230
0.001	0.47	78.46	0.00 0.03	0.06 0.10		20.87 3.110	2.380
3.410							
2006 318	1	203	-305.880	400.904	D	5.239	5.230
0.009	0.28	95.03	0.00 0.01	0.02 0.04		4.62 3.110	2.380
3.410							

2006 319	1	204	-334.689	404.051	D	5.233	5.230
0.003	0.20	98.83	0.00 0.01	0.01 0.03		0.91 3.110	2.380
3.410							
2006 320	1	286	-330.308	416.040	D	5.238	5.230
0.008	0.33	90.20	0.00 0.02	0.03 0.06		9.35 3.110	2.380
3.410							
2006 321	1	264	-334.246	412.751	D	5.231	5.230
0.001	0.17	97.62	0.00 0.01	0.01 0.03		2.12 3.110	2.380
3.410							
2006 322	1	277	-332.904	414.427	D	5.233	5.230
0.003	0.18	98.62	0.00 0.01	0.01 0.03		1.15 3.110	2.380
3.410							
2006 323	1	190	-333.610	400.508	D	5.233	5.230
0.003	0.24	99.02	0.00 0.01	0.02 0.04		0.68 3.110	2.380
3.410							
2006 324	1	286	-330.308	416.040	D	5.232	5.230
0.003	0.27	95.33	0.00 0.02	0.02 0.05		4.30 3.110	2.380
3.410							
2006 325	1	288	-327.801	415.914	D	5.278	5.230
0.048	0.20	94.16	0.00 0.01	0.02 0.04		5.58 3.110	2.380
3.410							
2006 326	1	289	-326.547	415.852	D	5.231	5.230
0.001	0.74	70.28	0.00 0.05	0.09 0.15		28.71 3.110	2.380
3.410							
2006 327	1	277	-332.904	414.427	D	5.231	5.230
0.001	0.52	73.28	0.00 0.04	0.05 0.11		25.97 3.110	2.380
3.410							
2006 328	1	244	-323.128	408.706	D	5.268	5.230
0.038	0.37	83.48	0.00 0.02	0.04 0.07		16.02 3.110	2.380
3.410							
2006 329	1	286	-330.308	416.040	D	5.255	5.230
0.025	0.21	98.19	0.00 0.01	0.01 0.03		1.55 3.110	2.380
3.410							
2006 330	1	203	-305.880	400.904	D	5.241	5.230
0.011	0.17	96.65	0.00 0.01	0.01 0.03		3.13 3.110	2.380
3.410							
2006 331	1	190	-333.610	400.508	D	5.230	5.230
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 3.110	2.380
3.410							
2006 332	1	190	-333.610	400.508	D	5.230	5.230
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 3.110	2.380
3.410							
2006 333	1	190	-333.610	400.508	D	5.230	5.230
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 3.110	2.380
3.410							
2006 334	1	222	-327.067	405.412	D	5.257	5.230
0.027	0.22	90.78	0.00 0.01	0.03 0.04		8.91 3.110	2.380
3.410							
2006 335	1	190	-333.610	400.508	D	5.200	5.191
0.010	0.39	83.31	0.00 0.03	0.05 0.08		16.16 2.980	2.330
3.380							
2006 336	1	190	-333.610	400.508	D	5.191	5.191
0.000	0.00	0.00	0.00 0.00	0.00 0.00		0.00 2.980	2.330
3.380							
2006 337	1	264	-334.246	412.751	D	5.201	5.191
0.011	0.28	87.00	0.00 0.02	0.03 0.06		12.62 2.980	2.330
3.380							

2006 338	1	190	-333.610	400.508	D	5.197	5.191
0.006	0.32	85.96	0.00 0.02	0.04 0.06		13.61 2.980	2.330
3.380							
2006 339	1	222	-327.067	405.412	D	5.208	5.191
0.017	0.41	79.49	0.00 0.03	0.05 0.09		19.93 2.980	2.330
3.380							
2006 340	1	190	-333.610	400.508	D	5.191	5.191
0.001	0.35	82.81	0.00 0.02	0.04 0.07		16.62 2.980	2.330
3.380							
2006 341	1	264	-334.246	412.751	D	5.206	5.191
0.015	0.16	95.62	0.00 0.01	0.01 0.03		4.17 2.980	2.330
3.380							
2006 342	1	288	-327.801	415.914	D	5.193	5.191
0.002	0.34	83.86	0.00 0.02	0.04 0.07		15.68 2.980	2.330
3.380							
2006 343	1	190	-333.610	400.508	D	5.217	5.191
0.026	0.36	88.95	0.00 0.02	0.04 0.07		10.55 2.980	2.330
3.380							
2006 344	1	288	-327.801	415.914	D	5.200	5.191
0.010	0.21	96.91	0.00 0.01	0.01 0.03		2.82 2.980	2.330
3.380							
2006 345	1	209	-328.409	403.734	D	5.229	5.191
0.038	0.20	91.94	0.00 0.01	0.02 0.04		7.78 2.980	2.330
3.380							
2006 346	1	191	-332.353	400.444	D	5.210	5.191
0.019	0.39	80.64	0.00 0.03	0.05 0.08		18.81 2.980	2.330
3.380							
2006 347	1	209	-328.409	403.734	D	5.196	5.191
0.006	0.44	78.76	0.00 0.03	0.05 0.09		20.62 2.980	2.330
3.380							
2006 348	1	190	-333.610	400.508	D	5.193	5.191
0.002	0.44	77.71	0.00 0.03	0.05 0.09		21.67 2.980	2.330
3.380							
2006 349	1	262	-319.279	410.261	D	5.203	5.191
0.012	0.32	84.92	0.00 0.02	0.04 0.07		14.64 2.980	2.330
3.380							
2006 350	1	209	-328.409	403.734	D	5.212	5.191
0.021	0.27	88.70	0.00 0.02	0.03 0.06		10.93 2.980	2.330
3.380							
2006 351	1	276	-319.194	412.001	D	5.226	5.191
0.035	0.17	94.54	0.00 0.01	0.02 0.03		5.23 2.980	2.330
3.380							
2006 352	1	276	-319.194	412.001	D	5.191	5.191
0.000	0.00	90.62	0.00 0.01	0.01 0.02		0.33 2.980	2.330
3.380							
2006 353	1	276	-319.194	412.001	D	5.194	5.191
0.003	0.22	90.04	0.00 0.01	0.02 0.05		9.65 2.980	2.330
3.380							
2006 354	1	203	-305.880	400.904	D	5.191	5.191
0.000	0.20	91.41	0.00 0.01	0.02 0.03		6.07 2.980	2.330
3.380							
2006 355	1	276	-319.194	412.001	D	5.199	5.191
0.008	0.20	91.03	0.00 0.01	0.03 0.04		8.69 2.980	2.330
3.380							
2006 356	1	191	-332.353	400.444	D	5.207	5.191
0.017	0.24	89.27	0.00 0.02	0.03 0.05		10.40 2.980	2.330
3.380							

2006	357	1	286	-330.308	416.040	D	5.202	5.191
0.011	0.28	89.97	0.00	0.02	0.03	0.06	9.64	2.980
3.380								
2006	358	1	235	-334.424	409.271	D	5.206	5.191
0.015	0.38	81.27	0.00	0.03	0.05	0.08	18.20	2.980
3.380								
2006	359	1	276	-319.194	412.001	D	5.228	5.191
0.038	0.30	86.65	0.00	0.02	0.04	0.06	12.92	2.980
3.380								
2006	360	1	204	-334.689	404.051	D	5.218	5.191
0.028	0.34	85.25	0.00	0.02	0.04	0.07	14.28	2.980
3.380								
2006	361	1	204	-334.689	404.051	D	5.214	5.191
0.023	0.20	94.25	0.00	0.01	0.02	0.04	5.48	2.980
3.380								
2006	362	1	204	-334.689	404.051	D	5.191	5.191
0.000	0.21	97.08	0.00	0.01	0.00	0.02	0.48	2.980
3.380								
2006	363	1	190	-333.610	400.508	D	5.191	5.191
0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.980
3.380								

--- Ranked Daily Visibility Change ---

START TIME

% of Modeled Extinction by Species

YEAR	DAY	HR	RECEPTOR	COORDINATES (km)	TYPE	Small DV(Total)	Large DV(BKG)	SSalt F(RH)
DELTA	DV	%_S04	%_N03	%_OC	%_EC	%_PMC	%_PMF	%_N02
2006	82	1	204	-334.689	404.051	D	5.292	5.198
0.094	0.19	99.43	0.00	0.01	0.01	0.02	0.35	3.010
3.270	1							
2006	58	1	191	-332.353	400.444	D	5.253	5.184
0.069	0.29	89.57	0.00	0.02	0.03	0.06	10.03	2.960
3.330	2							
2006	50	1	276	-319.194	412.001	D	5.246	5.184
0.062	0.20	92.72	0.00	0.01	0.02	0.04	7.01	2.960
3.330	3							
2006	83	1	198	-312.162	401.199	D	5.257	5.198
0.059	0.23	99.65	0.00	0.01	0.01	0.02	0.09	3.010
3.270	4							
2006	53	1	289	-326.547	415.852	D	5.239	5.184
0.055	0.39	81.64	0.00	0.03	0.05	0.08	17.81	2.960
3.330	5							
2006	325	1	288	-327.801	415.914	D	5.278	5.230
0.048	0.20	94.16	0.00	0.01	0.02	0.04	5.58	3.110
3.410	6							
2006	2	1	202	-307.136	400.962	D	5.225	5.178
0.047	0.17	95.13	0.00	0.01	0.01	0.03	4.64	2.940
3.370	7							
2006	52	1	276	-319.194	412.001	D	5.229	5.184
0.045	0.33	83.97	0.00	0.02	0.04	0.07	15.57	2.960
3.330	8							
2006	296	1	209	-328.409	403.734	D	5.107	5.064
0.043	0.28	86.49	0.00	0.02	0.04	0.06	13.10	2.580
2.820	9							
2006	293	1	190	-333.610	400.508	D	5.106	5.064

0.043	0.18	93.08	0.00	0.01	0.02	0.04	6.68	2.580	2.050
2.820	10								
2006	262	1	204	-334.689	404.051	D	5.099	5.057	
0.042	0.25	92.99	0.00	0.02	0.03	0.05	6.67	2.560	2.020
2.740	11								
2006	301	1	209	-328.409	403.734	D	5.105	5.064	
0.041	0.29	85.86	0.00	0.02	0.04	0.07	13.72	2.580	2.050
2.820	12								
2006	10	1	288	-327.801	415.914	D	5.219	5.178	
0.041	0.30	89.46	0.00	0.02	0.04	0.06	10.11	2.940	2.310
3.370	13								
2006	51	1	209	-328.409	403.734	D	5.224	5.184	
0.040	0.35	84.34	0.00	0.02	0.04	0.07	15.17	2.960	2.310
3.330	14								
2006	359	1	276	-319.194	412.001	D	5.228	5.191	
0.038	0.30	86.65	0.00	0.02	0.04	0.06	12.92	2.980	2.330
3.380	15								
2006	345	1	209	-328.409	403.734	D	5.229	5.191	
0.038	0.20	91.94	0.00	0.01	0.02	0.04	7.78	2.980	2.330
3.380	16								
2006	328	1	244	-323.128	408.706	D	5.268	5.230	
0.038	0.37	83.48	0.00	0.02	0.04	0.07	16.02	3.110	2.380
3.410	17								
2006	20	1	235	-334.424	409.271	D	5.216	5.178	
0.038	0.30	88.68	0.00	0.02	0.03	0.06	10.91	2.940	2.310
3.370	18								
2006	54	1	217	-307.055	402.702	D	5.221	5.184	
0.037	0.24	92.57	0.00	0.01	0.03	0.04	7.11	2.960	2.310
3.330	19								
2006	7	1	288	-327.801	415.914	D	5.215	5.178	
0.037	0.18	98.62	0.00	0.01	0.01	0.03	1.16	2.940	2.310
3.370	20								
2006	351	1	276	-319.194	412.001	D	5.226	5.191	
0.035	0.17	94.54	0.00	0.01	0.02	0.03	5.23	2.980	2.330
3.380	21								
2006	111	1	190	-333.610	400.508	D	5.187	5.154	
0.033	0.30	90.84	0.00	0.02	0.03	0.06	8.75	2.870	2.210
3.050	22								

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--- Number of days with Delta-Deciview => 0.50:      0
--- Number of days with Delta-Deciview => 1.00:      0
--- Largest Delta-Deciview =                0.094

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CALPOST Version 6.221

Level 080724

Run-Length

VISIBILITY

VISIB BOESNCFG

(deciview)

DELTA DV	RECEPTOR	COORDINATES (km)	TYPE	DV(Total)	DV(BKG)
0.005	190	-333.610 400.508	D	5.154	5.149

--- Number of recs with Delta-Deciview > 0.10: 0
--- Largest Delta-Deciview = 0.005

CALPOST Version 6.221

Level 080724

SUMMARY SECTION

VISIB BOESNCFG

(1/Mega-m)

RECEPTOR FOR RANK	COORDINATES (km) FOR AVERAGE PERIOD	TYPE	PEAK (YEAR, DAY, START TIME)
204 RANK 1	-334.689 404.051 24 HOUR	DISCRETE	1.6976E+01 (2006, 082, 0100)
287 RANK 2	-329.055 415.977 24 HOUR	DISCRETE	1.6945E+01 (2006, 082, 0100)
264 RANK 3	-334.246 412.751 24 HOUR	DISCRETE	1.6935E+01 (2006, 328, 0100)
275 RANK 4	-320.448 412.063 24 HOUR	DISCRETE	1.6914E+01 (2006, 082, 0100)

RUN MESSAGES EXTRACTED FROM THE DOS WINDOW

CALPOST Application Completed
Last Period Processed ENDS at:
Year: 2006 Month: 12 Day: 30 Julian day: 364 Hour: 23 Second:
0