MACCS2 10/29/2009 17:21:36 Version 2.4.0.1 : 9/10/08 172136.137
P1: ATMOS USER INPUT (UNIT 24) = f:\NBixler\WinMACCS Projects\IndianPointPalla\Input\Atmos1.inp

P2: EARLY USER INPUT (UNIT 25) = f:\NBixler\WinMACCS Projects\IndianPointPalla\Input\Early1.inp

P3: CHRONC USER INPUT (UNIT 26) = f:\NBixler\WinMACCS Projects\IndianPointPalla\Input\Chronc1.inp

P4: METEOROLOGY DATA (UNIT 28) = f:\NBixler\WinMACCS Projects\IndianPointPalla\Data\meti.inp

P5: SITE DATA INPUT (UNIT 29) = f:\NBixler\WinMACCS Projects\IndianPointPalla\Data\sitei.inp

P6: LIST OUTPUT (UNIT 06) = f:\NBixler\WinMACCS Projects\IndianPointPalla\Output\Model1.out

USER INPUT IS READ FROM UNIT 24
RECORD IDENTIFIER FIELDS 11 CHARACTERS LONG ARE EXPECTED.
THE FIRST 499 COLUMNS OF EACH INPUT RECORD ARE PROCESSED.

RECORD
NUMBER RECORD

* File created using WinMACCS version 3.4.5 10/29/2009 5:21:34 PM

*

```
   * Identifies this MACCS calculation

1  RIATNAM1001      'ATMOS INPUT FOR IPEC CALCULATIONS'

   *

   * NUMRAD, Number of Radial Spatial Elements

2  GENUMRAD001      15

   *

   * SPAEND, Spatial Endpoint Distances (km)

3  GESPAEND001      0.3219

4  GESPAEND002      1.6093

5  GESPAEND003      3.2187
```

6	GESPAEND004	4.828
7	GESPAEND005	6.4374
8	GESPAEND006	8.0467
9	GESPAEND007	9.6561
10	GESPAEND008	11.2654
11	GESPAEND009	12.8748
12	GESPAEND010	14.4841
13	GESPAEND011	16.0935
14	GESPAEND012	32.1869

15 GESPAEND013 48.2804

16 GESPAEND014 64.3739

17 GESPAEND015 80.4674

*

* NUMCOR, Number of angular compass directions

18 GENUMCOR001 16

*

* NUMISO, Number of Nuclides

19 ISNUMISO001 60

```
    *
    * MAXGRP, Number of Element Groups
20  ISMAXGRP001      9
    *
    * WETDEP, DRYDEP, Wet and Dry Deposition Flags for Each Nuclide Group
21  ISDEPFLA001      .FALSE. .FALSE.
22  ISDEPFLA002      .TRUE.  .TRUE.
23  ISDEPFLA003      .TRUE.  .TRUE.
24  ISDEPFLA004      .TRUE.  .TRUE.
25  ISDEPFLA005      .TRUE.  .TRUE.
```

```
26  ISDEPFLA006      .TRUE.  .TRUE.

27  ISDEPFLA007      .TRUE.  .TRUE.

28  ISDEPFLA008      .TRUE.  .TRUE.

29  ISDEPFLA009      .TRUE.  .TRUE.

    *

    * NUMSTB_ZERO = 0

30  ISNUMSTB001      0

    *

    * NUMSTB, Number of Pseudostable Radionuclides

31  ISNUMSTB001      27
```

******** RECORD NUMBER 31 REPLACES RECORD NUMBER 30 ********
*

* NAMSTB, List of Pseudostable Radionuclides

32 ISNAMSTB001 I-129

33 ISNAMSTB002 Xe-131m

34 ISNAMSTB003 Xe-133m

35 ISNAMSTB004 Xe-135m

36 ISNAMSTB005 Cs-135

37 ISNAMSTB006 Sm-147

38 ISNAMSTB007 U-234

39 ISNAMSTB008 U-235

40 ISNAMSTB009 U-236

41 ISNAMSTB010 U-237

42 ISNAMSTB011 Np-237

43 ISNAMSTB012 Rb-87

44 ISNAMSTB013 Ba-137m

45 ISNAMSTB014 Rb-88

46 ISNAMSTB015 Y-91m

47 ISNAMSTB016 Zr-93

48	ISNAMSTB017	Nb-93m
49	ISNAMSTB018	Nb-95m
50	ISNAMSTB019	Nb-97
51	ISNAMSTB020	Nb-97m
52	ISNAMSTB021	Tc-99
53	ISNAMSTB022	Rh-103m
54	ISNAMSTB023	Rh-106
55	ISNAMSTB024	Te-131
56	ISNAMSTB025	Pr-144

```
57  ISNAMSTB026      Pr-144m

58  ISNAMSTB027      Pm-147

    *

    * NUCNAM, IGROUP, Chemical group associated with each nuclide

59  ISOTPGRP001      Co-58   6

60  ISOTPGRP002      Co-60   6

61  ISOTPGRP003      Kr-85   1

62  ISOTPGRP004      Kr-85m  1

63  ISOTPGRP005      Kr-87   1
```

64	ISOTPGRP006	Kr-88	1
65	ISOTPGRP007	Rb-86	3
66	ISOTPGRP008	Sr-89	5
67	ISOTPGRP009	Sr-90	5
68	ISOTPGRP010	Sr-91	5
69	ISOTPGRP011	Sr-92	5
70	ISOTPGRP012	Y-90	7
71	ISOTPGRP013	Y-91	7
72	ISOTPGRP014	Y-92	7

73	ISOTPGRP015	Y-93	7
74	ISOTPGRP016	Zr-95	7
75	ISOTPGRP017	Zr-97	7
76	ISOTPGRP018	Nb-95	7
77	ISOTPGRP019	Mo-99	6
78	ISOTPGRP020	Tc-99m	6
79	ISOTPGRP021	Ru-103	6
80	ISOTPGRP022	Ru-105	6
81	ISOTPGRP023	Ru-106	6

82	ISOTPGRP024	Rh-105	6
83	ISOTPGRP025	Sb-127	4
84	ISOTPGRP026	Sb-129	4
85	ISOTPGRP027	Te-127	4
86	ISOTPGRP028	Te-127m	4
87	ISOTPGRP029	Te-129	4
88	ISOTPGRP030	Te-129m	4
89	ISOTPGRP031	Te-131m	4
90	ISOTPGRP032	Te-132	4

91	ISOTPGRP033	I-131	2
92	ISOTPGRP034	I-132	2
93	ISOTPGRP035	I-133	2
94	ISOTPGRP036	I-134	2
95	ISOTPGRP037	I-135	2
96	ISOTPGRP038	Xe-133	1
97	ISOTPGRP039	Xe-135	1
98	ISOTPGRP040	Cs-134	3
99	ISOTPGRP041	Cs-136	3

100	ISOTPGRP042	Cs-137	3
101	ISOTPGRP043	Ba-139	9
102	ISOTPGRP044	Ba-140	9
103	ISOTPGRP045	La-140	7
104	ISOTPGRP046	La-141	7
105	ISOTPGRP047	La-142	7
106	ISOTPGRP048	Ce-141	8
107	ISOTPGRP049	Ce-143	8
108	ISOTPGRP050	Ce-144	8

109	ISOTPGRP051	Pr-143	7
110	ISOTPGRP052	Nd-147	7
111	ISOTPGRP053	Np-239	8
112	ISOTPGRP054	Pu-238	8
113	ISOTPGRP055	Pu-239	8
114	ISOTPGRP056	Pu-240	8
115	ISOTPGRP057	Pu-241	8
116	ISOTPGRP058	Am-241	7
117	ISOTPGRP059	Cm-242	7

```
118  ISOTPGRP060      Cm-244  7

     *

     * CWASH1, Washout Coefficient Number One, Linear Factor

119  WDCWASH1001      9.5E-5

     *

     * CWASH2, Washout Coefficient Number Two, Exponential Factor

120  WDCWASH2001      0.8

     *

     * NPSGRP, Number of Particle Size Groups

121  DDNPSGRP001      1
```

```
     *
     * VDEPOS, Dry Deposition Velocities for Each Particle Size Group (m/sec)
122  DDVDEPOS001      0.01
     *
     * CYSIGA, Dispersion function parameter
123  DPCYSIGA001      0.3658
124  DPCYSIGA002      0.2751
125  DPCYSIGA003      0.2089
126  DPCYSIGA004      0.1474
```

127 DPCYSIGA005 0.1046

128 DPCYSIGA006 0.0722

*

* CYSIGB, Dispersion function parameter

129 DPCYSIGB001 0.9031

130 DPCYSIGB002 0.9031

131 DPCYSIGB003 0.9031

132 DPCYSIGB004 0.9031

133 DPCYSIGB005 0.9031

134 DPCYSIGB006 0.9031

```
     *
     * CZSIGA, Dispersion function parameter
135  DPCZSIGA001      2.5E-4
136  DPCZSIGA002      1.9E-3
137  DPCZSIGA003      0.2
138  DPCZSIGA004      0.3
139  DPCZSIGA005      0.4
140  DPCZSIGA006      0.2
     *
```

```
     * CZSIGB, Dispersion function parameter

141  DPCZSIGB001      2.125

142  DPCZSIGB002      1.6021

143  DPCZSIGB003      0.8543

144  DPCZSIGB004      0.6532

145  DPCZSIGB005      0.6021

146  DPCZSIGB006      0.6020

     *

     * YSCALE, linear scaling factor for sigma-y

147  DPYSCALE001      1.
```

```
     *
     * ZSCALE, linear scaling factor for sigma-z
148  DPZSCALE001      1.27
     *
     * DISPMD - dispersion long-range model
149  DPDISPMD001      LRDIST
     *
     * MNDMOD, plume meander model
150  PMMNDMOD001      OLD
```

```
     *
     * TIMBAS, time base expansion factor (sec)
151  PMTIMBAS001      600.
     *
     * BRKPNT, breakpoint for formula change (sec)
152  PMBRKPNT001      3600.
     *
     * XPFAC1, Expansion factor 1
153  PMXPFAC1001      0.2
     *
```

```
     * XPFAC2, Expansion factor 2

154  PMXPFAC2001      0.25

     *

     * SCLCRW, scaling factor for entrainment of buoyant plume

155  PRSCLCRW001      1.

     *

     * SCLADP, scaling factor for the a-d stability plume rise formula

156  PRSCLADP001      1.

     *

     * SCLEFP, scaling factor for the e-f stability plume rise formula
```

```
157  PRSCLEFP001      1.

     *

     * BUILDH, building height (meters)

158  WEBUILDH001      66.8

     *

     * SIGYINIT, initial value of sigma-y for each of the plumes (meters)

159  SIGYINIT001      9.9

     *

     * SIGZINIT, initial value of sigma-z for each of the plumes (meters)

160  SIGZINIT001      31.1
```

```
      *
      * ATNAM2, specific descriptive text describing this particular source term
  161 RDATNAM2001      NCF
      *
      * OALARM, time after accident initiation that off-site alarm is initiated
(sec)
  162 RDOALARM001      1.66E+04
      *
      * NUMREL, number of plumes
  163 RDNUMREL001      1
      *
```

```
     * MAXRIS, selection of risk-dominant plume segment

164  RDMAXRIS001      1

     *

     * REFTIM, representative time point for dispersion and radioactive decay

165  RDREFTIM001      0.5

     *

     * PLM_HEAT, plume rise model legacy heat

166  RDPLMMOD001      HEAT

     *

     * PLHEAT, heat content of each release segment (watts)
```

```
167  RDPLHEAT001      9.20E+05

     *

     * BRGSMD, Briggs plume rise model

168  RDBRGSMD001      ORIGINAL

     *

     * PLHITE, height of each plume segment at release (meters)

169  RDPLHITE001      30.

     *

     * PLUDUR, duration of each plume segment (sec)

170  RDPLUDUR001      8.64E+04
```

```
     *
     * PDELAY, time of release for each plume from xxxx (sec)
171  RDPDELAY001      0.00E+00
     *
     * PSDIST, particle size distribution of each element group
172  RDPSDIST001      1.
173  RDPSDIST002      1.
174  RDPSDIST003      1.
175  RDPSDIST004      1.
176  RDPSDIST005      1.
```

177 RDPSDIST006 1.

178 RDPSDIST007 1.

179 RDPSDIST008 1.

180 RDPSDIST009 1.

*

* CORINV, inventory of each radionuclide present in the facility at the time of accident initiation (becquerels)

181 RDCORINV001 Co-58 3.04E+16

182 RDCORINV002 Co-60 2.32E+16

183 RDCORINV003 Kr-85 3.84E+16

184	RDCORINV004	Kr-85m	8.48E+17
185	RDCORINV005	Kr-87	1.63E+18
186	RDCORINV006	Kr-88	2.29E+18
187	RDCORINV007	Rb-86	8.31E+15
188	RDCORINV008	Sr-89	3.08E+18
189	RDCORINV009	Sr-90	3.05E+17
190	RDCORINV010	Sr-91	3.87E+18
191	RDCORINV011	Sr-92	4.19E+18
192	RDCORINV012	Y-90	3.18E+17

193	RDCORINV013	Y-91	3.98E+18
194	RDCORINV014	Y-92	4.19E+18
195	RDCORINV015	Y-93	4.85E+18
196	RDCORINV016	Zr-95	5.38E+18
197	RDCORINV017	Zr-97	5.41E+18
198	RDCORINV018	Nb-95	5.45E+18
199	RDCORINV019	Mo-99	6.11E+18
200	RDCORINV020	Tc-99m	5.34E+18
201	RDCORINV021	Ru-103	4.89E+18

202	RDCORINV022	Ru-105	3.36E+18
203	RDCORINV023	Ru-106	1.71E+18
204	RDCORINV024	Rh-105	3.09E+18
205	RDCORINV025	Sb-127	3.47E+17
206	RDCORINV026	Sb-129	1.04E+18
207	RDCORINV027	Te-127	3.43E+17
208	RDCORINV028	Te-127m	4.50E+16
209	RDCORINV029	Te-129	1.02E+18
210	RDCORINV030	Te-129m	1.50E+17

211	RDCORINV031	Te-131m	4.64E+17
212	RDCORINV032	Te-132	4.57E+18
213	RDCORINV033	I-131	3.20E+18
214	RDCORINV034	I-132	4.64E+18
215	RDCORINV035	I-133	6.56E+18
216	RDCORINV036	I-134	7.19E+18
217	RDCORINV037	I-135	6.11E+18
218	RDCORINV038	Xe-133	6.28E+18
219	RDCORINV039	Xe-135	1.67E+18

220	RDCORINV040	Cs-134	7.19E+17
221	RDCORINV041	Cs-136	2.10E+17
222	RDCORINV042	Cs-137	4.15E+17
223	RDCORINV043	Ba-139	5.83E+18
224	RDCORINV044	Ba-140	5.62E+18
225	RDCORINV045	La-140	6.04E+18
226	RDCORINV046	La-141	5.34E+18
227	RDCORINV047	La-142	5.17E+18
228	RDCORINV048	Ce-141	5.31E+18

229	RDCORINV049	Ce-143	4.96E+18
230	RDCORINV050	Ce-144	4.19E+18
231	RDCORINV051	Pr-143	4.78E+18
232	RDCORINV052	Nd-147	2.13E+18
233	RDCORINV053	Np-239	6.56E+19
234	RDCORINV054	Pu-238	1.44E+16
235	RDCORINV055	Pu-239	1.22E+15
236	RDCORINV056	Pu-240	1.83E+15
237	RDCORINV057	Pu-241	4.12E+17

```
  238  RDCORINV058      Am-241  4.92E+14

  239  RDCORINV059      Cm-242  1.23E+17

  240  RDCORINV060      Cm-244  1.33E+16

       *

       * CORSCA, scaling factor to adjust the core inventory

  241  RDCORSCA001      1.0

       *

       * APLFRC, Specifies how release fractions are applied to daughter ingrowth
products

  242  RDAPLFRC001      PARENT
```

```
*
```

```
* GRPNAM, user assigned name of each chemical group.  May have been imported
from MelMACCS
```

```
*ISGRPNAM001     Xe/Kr
```

```
*ISGRPNAM002     I
```

```
*ISGRPNAM003     Cs
```

```
*ISGRPNAM004     Te
```

```
*ISGRPNAM005     Sr
```

```
*ISGRPNAM006     Ru
```

```
*ISGRPNAM007     La
```

```
*ISGRPNAM008     Ce
```

```
      *ISGRPNAM009     Ba

      *

      * RELFRC, release fractions for each of the plume segments for each chemical
group

  243  RDRELFRC001      9.3E-05 3.9E-06 1.6E-06 1.2E-06 3.7E-08 2.4E-07 2.1E-09
1.8E-08 1.1E-07

      *

      * ENDAT1, flag indicating whether only atmos is run

  244  OCENDAT1001      .FALSE.

      *

      * IDEBUG, specifies set of debug results to report
```

```
245  OCIDEBUG001      0

     *

     * NUCOUT, name of the nuclide to be listed on the dispersion listings

246  OCNUCOUT001      Cs-137

     *

     * METCOD, meteorological sampling option code

247  M1METCOD001      2

     *

     * LIMSPA, last spatial interval for measured weather

248  M2LIMSPA001      15
```

```
     *
     * BNDMXH, boundary weather mixing layer height (meters)
249  M2BNDMXH001      1000.
     *
     * IBDSTB, boundary weather stability class index
250  M2IBDSTB001      4
     *
     * BNDRAN, boundary weather rain rate (mm/hr)
251  M2BNDRAN001      0.
     *
```

```
      * BNDWND, boundary weather wind speed (m/sec)

  252 M2BNDWND001      5.

      *

      * MAXHGT, if equal DAY_AND_NIGHT, then time of sunrise/sunset is used to
calculate max mixing height. DAY_ONLY uses MACCS2 1.12 model

  253 M1MAXHGT001      DAY_ONLY

      *

      * NRNINT, number of rain distance intervals for binning

  254 M4NRNINT001      6

      *

      * RNDSTS, endpoints of the rain distance intervals (km)
```

```
255  M4RNDSTS001      3.23

256  M4RNDSTS002      6.45

257  M4RNDSTS003      11.29

258  M4RNDSTS004      16.13

259  M4RNDSTS005      32.26

260  M4RNDSTS006      64.52

     *

     * NRINTN, number of rain intensity breakpoints

261  M4NRINTN001      3
```

```
     *
     * RNRATE, rain intensity breakpoints for weather binning (mm/hr)
262  M4RNRATE001      2.
263  M4RNRATE002      4.
264  M4RNRATE003      6.
     *
     * NSMPLS_BIN, number of samples per bin
265  M4NSMPLS001      4
     *
     * IRSEED, initial seed for random number generator
```

```
  266  M4IRSEED001      79


       *


       * ATMOS_ZERO = 0


  267  TYPE0NUMBER      0


       *


       * NUM_DIST2, used for Dispersion Power Law (always 0)


  268  NUM_DIST001      0


       .


******** TERMINATOR RECORD ENCOUNTERED -- END OF BASE CASE USER INPUT ********


USER INPUT PROCESSING SUMMARY - BASE CASE

NUMBER OF RECORDS READ                          =  415
NUMBER OF BLANK OR COMMENT RECORDS READ         =  146
NUMBER OF TERMINATOR RECORDS                    =    1
NUMBER OF RECORDS PROCESSED                     =  268
     NUMBER OF PROCESSED RECORDS DUPLICATED     =    1
     NUMBER OF PROCESSED RECORDS SORTED         =  267
```

****
****

Decay Chain # Ba-139

Decay Chain # Ba-140   La-140
Fraction of Ba-140 going to La-140 in this chain = 1.000000

Decay Chain # Ce-143   Pr-143
Fraction of Ce-143 going to Pr-143 in this chain = 1.000000

Decay Chain # Ce-144

Decay Chain # Cm-242   Pu-238
Fraction of Cm-242 going to Pu-238 in this chain = 1.000000

Decay Chain # Cm-244   Pu-240
Fraction of Cm-244 going to Pu-240 in this chain = 1.000000

Decay Chain # Co-58

Decay Chain # Co-60

Decay Chain # Cs-134

Decay Chain # Cs-136

Decay Chain # Cs-137

Decay Chain # I-133   Xe-133
Fraction of I-133   going to Xe-133 in this chain = 0.971000

Decay Chain # I-134

Decay Chain # I-135   Xe-135
Fraction of I-135   going to Xe-135 in this chain = 0.846000

Decay Chain # Kr-85m   Kr-85
Fraction of Kr-85m going to Kr-85   in this chain = 0.211000

Decay Chain # Kr-87

Decay Chain # Kr-88

Decay Chain # La-141   Ce-141
Fraction of La-141 going to Ce-141 in this chain = 1.000000

Decay Chain # La-142

Decay Chain # Mo-99   Tc-99m
Fraction of Mo-99   going to Tc-99m in this chain = 0.876000

Decay Chain # Nd-147

Decay Chain # Np-239   Pu-239
Fraction of Np-239 going to Pu-239 in this chain = 1.000000

Decay Chain # Pu-241   Am-241
Fraction of Pu-241 going to Am-241 in this chain = 1.000000

Decay Chain # Rb-86

Decay Chain # Ru-103

Decay Chain # Ru-105   Rh-105
Fraction of Ru-105 going to Rh-105 in this chain = 1.000000

Decay Chain # Ru-106

Decay Chain # Sb-127   Te-127
Fraction of Sb-127 going to Te-127 in this chain = 0.824000

Decay Chain # Sb-127   Te-127m Te-127
Fraction of Sb-127 going to Te-127m in this chain = 0.176000
Fraction of Sb-127 going to Te-127 in this chain = 0.171776
Fraction of Te-127m going to Te-127 in this chain = 0.976000

Decay Chain # Sb-129   Te-129
Fraction of Sb-129 going to Te-129 in this chain = 0.775000

Decay Chain # Sb-129   Te-129m Te-129
Fraction of Sb-129 going to Te-129m in this chain = 0.225000
Fraction of Sb-129 going to Te-129 in this chain = 0.146250
Fraction of Te-129m going to Te-129 in this chain = 0.650000

Decay Chain # Sr-89

Decay Chain # Sr-90   Y-90
Fraction of Sr-90   going to Y-90   in this chain = 1.000000

Decay Chain # Sr-91   Y-91
Fraction of Sr-91   going to Y-91   in this chain = 0.422000

Decay Chain # Sr-92   Y-92
Fraction of Sr-92   going to Y-92   in this chain = 1.000000

Decay Chain # Te-131m I-131
Fraction of Te-131m going to I-131   in this chain = 0.778000

Decay Chain # Te-132   I-132
Fraction of Te-132 going to I-132   in this chain = 1.000000

Decay Chain # Y-93

Decay Chain # Zr-95   Nb-95
Fraction of Zr-95   going to Nb-95   in this chain = 0.993000

Decay Chain # Zr-97

Using distance dispersion model for sigma-y/sigma-z

Using OLD Plume Meander model for sigma-y

THE HEAT PLUME BUOYANCY MODEL IS BEING USED

RELEASED INVENTORY OF ALL PLUMES

Rel #	1
Co-58	7.26E+09
Co-60	5.57E+09
Kr-85	3.57E+12
Kr-85m	1.23E+13
Kr-87	2.19E+11

Kr-88	1.14E+13
Rb-86	1.31E+10
Sr-89	1.13E+11
Sr-90	1.13E+10
Sr-91	5.97E+10
Sr-92	7.20E+09
Y-90	1.96E+09
Y-91	8.55E+09
Y-92	2.56E+10
Y-93	4.47E+09
Zr-95	1.12E+10
Zr-97	6.94E+09
Nb-95	1.14E+10
Mo-99	1.29E+12
Tc-99m	1.21E+12
Ru-103	1.16E+12
Ru-105	1.24E+11
Ru-106	4.10E+11
Rh-105	6.60E+11
Sb-127	3.81E+11
Sb-129	1.82E+11
Te-127	3.92E+11
Te-127m	5.41E+10
Te-129	3.09E+11
Te-129m	1.79E+11
Te-131m	4.22E+11
Te-132	4.93E+12
I-131	1.20E+13
I-132	5.41E+12
I-133	1.72E+13
I-134	2.12E+09
I-135	6.77E+12
Xe-133	5.48E+14
Xe-135	6.85E+13
Cs-134	1.15E+12
Cs-136	3.27E+11
Cs-137	6.64E+11
Ba-139	1.54E+09
Ba-140	6.02E+11
La-140	1.24E+11
La-141	1.35E+09
La-142	4.93E+07
Ce-141	9.46E+10
Ce-143	6.94E+10
Ce-144	7.53E+10
Pr-143	1.18E+10
Nd-147	4.33E+09
Np-239	1.02E+12
Pu-238	2.59E+08
Pu-239	2.20E+07
Pu-240	3.29E+07
Pu-241	7.42E+09
Am-241	1.05E+06
Cm-242	2.58E+08
Cm-244	2.79E+07

MAXIMUM HEIGHT PLUME RISE FLAG = DAY_ONLY

READING FROM A WEATHER FILE WITH THE FOLLOWING HEADER:
INDIAN POINT ENERGY CENTER METEOROLOGICAL DATAFILE
Input file for the MACCS2 model using the average years of 2000-2004
Weather file uses 60 minute intervals
Weather file uses 16 wind directions
METEOROLOGICAL DATA FILE CONTAINS 1235 PERIODS OF OBSERVED RAIN DATA.

ACCUMULATED RAIN MEASUREMENTS TOTALED 31.84 INCHES FOR THE YEAR.
MORNING LID HEIGHTS (M) FOR 4 SEASONS = 1100 1400 1400 1200
AFTERNOON LID HEIGHTS (M) FOR 4 SEASONS = 1100 1400 1400 1200
NON-ZERO WINDSPEEDS LESS THAN 0.5 M/S ARE SET TO 0.5 M/S
NUMTRI= 127

* * * * METEOROLOGICAL BIN SUMMARY * * * *

BIN PRIORITIES
RI XX - RAIN INTENSITY I WITHIN THE INTERVAL ENDING AT XX
INTERVAL ENDPOINTS ARE IN KILOMETERS FROM THE ACCIDENT SITE, THE 6 INTERVAL ENDPOINTS ARE 3 6 11 16 32 65
RAIN INTENSITIES ARE IN MILLIMETERS OF RAIN PER HOUR, THE 3 INTENSITY BREAKPOINTS ARE 2.0 4.0 6.0
S V - INITIAL WEATHER CONDITIONS WITH STABILITY CLASS S AND WIND SPEED INTERVAL V
STABILITY CLASSES ARE B = A/B, D = C/D, E = E, AND F = F
WIND SPEED INTERVALS ARE IN METERS PER SECOND, 1 (0-1), 2 (1-2), 3 (2-3), 4 (3-5), 5 (5-7), 6 (GT 7)

WIND DIRECTION

METBIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	TOTAL	PER CENT
1 B 3	0.188	0.119	0.117	0.070	0.057	0.018	0.004	0.000	0.000	0.004	0.012	0.022	0.043	0.086	0.102	0.159	511	5.8333
2 B 4	0.207	0.138	0.097	0.117	0.117	0.076	0.014	0.000	0.000	0.000	0.000	0.014	0.007	0.014	0.062	0.138	145	1.6553
4 D 2	0.152	0.107	0.073	0.043	0.038	0.002	0.005	0.000	0.000	0.005	0.014	0.047	0.100	0.123	0.140	0.152	422	4.8174
5 D 3	0.103	0.128	0.135	0.101	0.068	0.038	0.014	0.002	0.000	0.009	0.011	0.030	0.071	0.088	0.090	0.113	1024	11.6895
6 D 4	0.092	0.130	0.154	0.140	0.171	0.041	0.027	0.003	0.000	0.007	0.007	0.027	0.038	0.031	0.034	0.096	292	3.3333
9 E 1	0.136	0.182	0.091	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045	0.091	0.000	0.182	0.227	22	0.2511
10 E 2	0.109	0.087	0.056	0.021	0.007	0.005	0.001	0.000	0.001	0.014	0.039	0.091	0.117	0.178	0.140	0.133	1479	16.8836
11 E 3	0.124	0.121	0.090	0.065	0.054	0.013	0.005	0.004	0.000	0.040	0.053	0.046	0.083	0.092	0.095	0.116	846	9.6575
12 E 4	0.064	0.191	0.085	0.149	0.043	0.043	0.085	0.000	0.000	0.021	0.021	0.128	0.000	0.021	0.085	0.064	47	0.5365
13 F 1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.200	0.000	0.200	0.600	5	0.0571
14 F 2	0.043	0.035	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.014	0.071	0.156	0.142	0.177	0.234	0.113	141	1.6096
15 F 3	0.000	0.077	0.077	0.000	0.000	0.000	0.000	0.000	0.000	0.231	0.077	0.077	0.077	0.231	0.077	0.077	13	0.1484
17 R1 3	0.115	0.083	0.065	0.044	0.020	0.005	0.001	0.001	0.000	0.021	0.041	0.093	0.115	0.116	0.148	0.134	1175	13.4132
18 R1 6	0.112	0.030	0.030	0.022	0.007	0.000	0.000	0.007	0.000	0.015	0.015	0.082	0.164	0.142	0.187	0.187	134	1.5297
19 R1 11	0.125	0.075	0.083	0.056	0.019	0.000	0.000	0.003	0.000	0.008	0.039	0.061	0.106	0.144	0.119	0.161	360	4.1096
20 R1 16	0.144	0.119	0.066	0.021	0.012	0.004	0.000	0.000	0.000	0.016	0.021	0.082	0.119	0.128	0.107	0.160	243	2.7740
21 R1 32	0.153	0.125	0.060	0.035	0.013	0.006	0.000	0.003	0.000	0.007	0.020	0.069	0.112	0.131	0.135	0.131	695	7.9338
22 R1 65	0.135	0.122	0.085	0.029	0.023	0.007	0.003	0.000	0.000	0.007	0.017	0.044	0.092	0.137	0.133	0.167	1024	11.6895
23 R2 3	0.111	0.044	0.089	0.044	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.067	0.156	0.156	0.089	0.222	45	0.5137
24 R2 6	0.000	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.200						

```
0.200 0.000 0.200 0.200      5     0.0571
25 R2 11  0.067 0.067 0.000 0.133 0.000 0.000 0.000 0.000 0.000 0.000 0.067 0.067
0.133 0.200 0.133 0.133     15     0.1712
26 R2 16  0.167 0.167 0.167 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.167
0.000 0.333 0.000 0.000      6     0.0685
27 R2 32  0.077 0.154 0.077 0.038 0.038 0.000 0.000 0.000 0.000 0.000 0.000 0.038
0.115 0.231 0.115 0.115     26     0.2968
28 R2 65  0.111 0.111 0.000 0.111 0.000 0.028 0.000 0.000 0.000 0.000 0.000 0.000
0.028 0.111 0.306 0.194     36     0.4110
29 R3  3  0.111 0.000 0.000 0.111 0.000 0.000 0.000 0.000 0.000 0.000 0.111 0.000
0.111 0.222 0.222 0.111      9     0.1027
30 R3  6  0.000 0.000 0.667 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.333      3     0.0342
31 R3 11  0.500 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 0.500 0.000      2     0.0228
32 R3 16  0.000 0.000 0.000 0.500 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.500      2     0.0228
33 R3 32  0.286 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.143 0.000 0.286 0.286      7     0.0799
34 R3 65  0.000 0.100 0.200 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.400 0.100 0.100 0.100     10     0.1142
35 R4  3  0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.333 0.333 0.333      6     0.0685
37 R4 11  1.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.000      1     0.0114
38 R4 16  1.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.000      1     0.0114
39 R4 32  1.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.000      2     0.0228
40 R4 65  0.333 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.167 0.000 0.500      6     0.0685
41 ALL    0.125 0.106 0.082 0.052 0.035 0.013 0.005 0.001 0.000 0.014 0.028 0.061
0.095 0.121 0.123 0.138   8760   100.0000


                              * * * * METEOROLOGICAL BIN SUMMARY * * * *
  BIN PRIORITIES
    RI XX - RAIN INTENSITY I WITHIN THE INTERVAL ENDING AT XX
              INTERVAL ENDPOINTS ARE IN KILOMETERS FROM THE ACCIDENT SITE, THE 6
INTERVAL ENDPOINTS ARE    3   6  11  16  32  65
              RAIN INTENSITIES ARE IN MILLIMETERS OF RAIN PER HOUR, THE 3 INTENSITY
BREAKPOINTS ARE         2.0  4.0  6.0
    S   V - INITIAL WEATHER CONDITIONS WITH STABILITY CLASS S AND WIND SPEED
INTERVAL V
              STABILITY CLASSES ARE B = A/B, D = C/D, E = E, AND F = F
              WIND SPEED INTERVALS ARE IN METERS PER SECOND (M/S), 1 (0-1), 2 (1-2),
3 (2-3), 4 (3-5), 5 (5-7), 6 (GT 7)

                                          WIND DIRECTION


  METBIN    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15
 16 TOTAL   PER CENT
 1 B   3    96   61   60   36   29    9    2    0    0    2    6   11   22   44   52
  81  511     5.8333
 2 B   4    30   20   14   17   17   11    2    0    0    0    0    2    1    2    9
  20  145     1.6553
 3 D   1     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
   0    0     0.0000
 4 D   2    64   45   31   18   16    1    2    0    0    2    6   20   42   52   59
  64  422     4.8174
 5 D   3   105  131  138  103   70   39   14    2    0    9   11   31   73   90   92
 116 1024    11.6895
```

```
 6 D   4    27   38   45   41   50   12    8    1    0    2    2    8   11    9   10
  28  292     3.3333
 7 D   5     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
   0    0     0.0000
 8 D   6     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
   0    0     0.0000
 9 E   1     3    4    2    1    0    0    0    0    0    0    0    1    2    0    4
   5   22     0.2511
10 E   2   161  129   83   31   11    7    2    0    1   21   58  135  173  263  207
 197 1479    16.8836
11 E   3   105  102   76   55   46   11    4    3    0   34   45   39   70   78   80
  98  846     9.6575
12 E   4     3    9    4    7    2    2    4    0    0    1    1    6    0    1    4
   3   47     0.5365
13 F   1     0    0    0    0    0    0    0    0    0    0    0    0    1    0    1
   3    5     0.0571
14 F   2     6    5    1    1    0    0    0    0    0    2   10   22   20   25   33
  16  141     1.6096
15 F   3     0    1    1    0    0    0    0    0    0    3    1    1    1    3    1
   1   13     0.1484
16 F   4     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
   0    0     0.0000
17 R1  3   135   97   76   52   23    6    1    1    0   25   48  109  135  136  174
 157 1175    13.4132
18 R1  6    15    4    4    3    1    0    0    1    0    2    2   11   22   19   25
  25  134     1.5297
19 R1 11    45   27   30   20    7    0    0    1    0    3   14   22   38   52   43
  58  360     4.1096
20 R1 16    35   29   16    5    3    1    0    0    0    4    5   20   29   31   26
  39  243     2.7740
21 R1 32   106   87   42   24    9    4    0    2    0    5   14   48   78   91   94
  91  695     7.9338
22 R1 65   138  125   87   30   24    7    3    0    0    7   17   45   94  140  136
 171 1024    11.6895
23 R2  3     5    2    4    2    0    0    0    0    0    0    1    3    7    7    4
  10   45     0.5137
24 R2  6     0    1    0    0    0    0    0    0    0    0    0    1    1    0    1
   1    5     0.0571
25 R2 11     1    1    0    2    0    0    0    0    0    0    1    1    2    3    2
   2   15     0.1712
26 R2 16     1    1    1    0    0    0    0    0    0    0    0    1    0    2    0
   0    6     0.0685
27 R2 32     2    4    2    1    1    0    0    0    0    0    0    1    3    6    3
   3   26     0.2968
28 R2 65     4    4    0    4    0    1    0    0    0    0    0    0    1    4   11
   7   36     0.4110
29 R3  3     1    0    0    1    0    0    0    0    0    0    1    0    1    2    2
   1    9     0.1027
30 R3  6     0    0    2    0    0    0    0    0    0    0    0    0    0    0    0
   1    3     0.0342
31 R3 11     1    0    0    0    0    0    0    0    0    0    0    0    0    0    1
   0    2     0.0228
32 R3 16     0    0    0    1    0    0    0    0    0    0    0    0    0    0    0
   1    2     0.0228
33 R3 32     2    0    0    0    0    0    0    0    0    0    0    0    1    0    2
   2    7     0.0799
34 R3 65     0    1    2    0    0    0    0    0    0    0    0    0    4    1    1
   1   10     0.1142
35 R4  3     0    0    0    0    0    0    0    0    0    0    0    0    0    2    2
   2    6     0.0685
36 R4  6     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
   0    0     0.0000
37 R4 11     1    0    0    0    0    0    0    0    0    0    0    0    0    0    0
```

```
   0    1     0.0114
38 R4 16     1    0    0    0    0    0    0    0    0    0    0    0    0    0    0
   0    1     0.0114
39 R4 32     2    0    0    0    0    0    0    0    0    0    0    0    0    0    0
   0    2     0.0228
40 R4 65     2    0    0    0    0    0    0    0    0    0    0    0    1    0
   3    6     0.0685
```

* * * * SUMMARIES * * * *

```
   R      497  383  266  145   68   19    4    5    0   46  103  262  416  497  527
575 3813   43.5274
   B      126   81   74   53   46   20    4    0    0    2    6   13   23   46   61
101  656    7.4886
   D      196  214  214  162  136   52   24    3    0   13   19   59  126  151  161
208 1738   19.8402
   E      272  244  165   94   59   20   10    3    1   56  104  181  245  342  295
303 2394   27.3288
   F        6    6    2    1    0    0    0    0    0    5   11   23   22   28   35
 20  159    1.8151
     1      3    4    2    1    0    0    0    0    0    0    0    1    3    0    5
  8   27    0.3082
     2    253  192  128   54   28    9    4    0    1   25   75  178  238  349  303
291 2128   24.2922
     3    284  282  262  190  144   58   20    5    0   48   62   81  163  206  221
282 2308   26.3470
     4     60   67   63   65   69   25   14    1    0    3    3   16   12   12   23
 51  484    5.5251
     5      0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  0    0    0.0000
     6      0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  0    0    0.0000
```

* * * * * BIN WINDROSE SUMMARY * * * * *

```
  BIN                              DIRECTION
         1      2      3      4      5      6      7      8      9     10     11
 12     13     14     15     16     TOTAL
    1  0.188  0.119  0.117  0.070  0.057  0.018  0.004  0.000  0.000  0.004  0.012
0.022  0.043  0.086  0.102  0.159  1.000000
    2  0.207  0.138  0.097  0.117  0.117  0.076  0.014  0.000  0.000  0.000  0.000
0.014  0.007  0.014  0.062  0.138  1.000000
    3  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.000  0.000  0.000  0.000  0.000000
    4  0.152  0.107  0.073  0.043  0.038  0.002  0.005  0.000  0.000  0.005  0.014
0.047  0.100  0.123  0.140  0.152  1.000000
    5  0.103  0.128  0.135  0.101  0.068  0.038  0.014  0.002  0.000  0.009  0.011
0.030  0.071  0.088  0.090  0.113  1.000000
    6  0.092  0.130  0.154  0.140  0.171  0.041  0.027  0.003  0.000  0.007  0.007
0.027  0.038  0.031  0.034  0.096  1.000000
    7  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.000  0.000  0.000  0.000  0.000000
    8  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.000  0.000  0.000  0.000  0.000000
    9  0.136  0.182  0.091  0.045  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.045  0.091  0.000  0.182  0.227  1.000000
   10  0.109  0.087  0.056  0.021  0.007  0.005  0.001  0.000  0.001  0.014  0.039
0.091  0.117  0.178  0.140  0.133  1.000000
   11  0.124  0.121  0.090  0.065  0.054  0.013  0.005  0.004  0.000  0.040  0.053
0.046  0.083  0.092  0.095  0.116  1.000000
   12  0.064  0.191  0.085  0.149  0.043  0.043  0.085  0.000  0.000  0.021  0.021
```

```
0.128  0.000  0.021  0.085  0.064  1.000000
   13  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.200  0.000  0.200  0.600  1.000000
   14  0.043  0.035  0.007  0.007  0.000  0.000  0.000  0.000  0.000  0.014  0.071
0.156  0.142  0.177  0.234  0.113  1.000000
   15  0.000  0.077  0.077  0.000  0.000  0.000  0.000  0.000  0.000  0.231  0.077
0.077  0.077  0.231  0.077  0.077  1.000000
   16  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.000  0.000  0.000  0.000  0.000000
   17  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   18  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   19  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   20  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   21  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   22  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   23  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   24  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   25  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   26  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   27  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   28  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   29  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   30  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   31  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   32  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   33  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   34  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   35  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   36  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   37  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   38  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   39  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   40  0.130  0.100  0.070  0.038  0.018  0.005  0.001  0.001  0.000  0.012  0.027
0.069  0.109  0.130  0.138  0.151  1.000000
   41  0.125  0.106  0.082  0.052  0.035  0.013  0.005  0.001  0.000  0.014  0.028
0.061  0.095  0.121  0.123  0.138  1.000000
```

******** WARNING -- THE FOLLOWING RECORDS WERE NEVER ACCESSED ********

OCNUCOUT001 Cs-137

USER INPUT IS READ FROM UNIT 25
RECORD IDENTIFIER FIELDS 11 CHARACTERS LONG ARE EXPECTED.
THE FIRST 499 COLUMNS OF EACH INPUT RECORD ARE PROCESSED.

RECORD
NUMBER RECORD

* File created using WinMACCS version 3.4.5 10/29/2009 5:21:34 PM

*

* DCF_FILE - Identifies the DCF file to be used for the MACCS calculation

1 DCF_FILE001 'f:\NBixler\WinMACCS Projects\IndianPointPalla\Data\DOSDATA.INP'

*

* EANAM1 - Identifies the EARLY calculation

2 MIEANAM1001 'EARLY.IN, IPEC INPUT FROM THE EVACUATION TIME ESTIMATES'

*

```
   * ENDAT2 - control flag allowing execution of ATMOS and EARLY without CHRONC

3  MIENDAT2001      .FALSE.

   *

   * IPLUME - dispersion code option

4  MIIPLUME001      2

   *

   * NUMFIN - number of fine-grid subdivisions used by model

5  MINUMFIN001      7

   *

   * IPRINT - amount of output desired
```

```
  6  MIIPRINT001      0

     *

     * POPFLG - is population uniform or defined by Site Data File.

  7  PDPOPFLG001      FILE

     *

     * ORGNAM_DOSFAC, ORGFLG_DOSFAC - list of organs to be included in the
calculations using DOSFAC DCF file

  8  MIORGDEF001      A-SKIN  .TRUE.

  9  MIORGDEF002      'A-RED MARR'    .TRUE.

 10  MIORGDEF003      A-LUNGS .TRUE.
```

```
11  MIORGDEF004      A-THYROIDH      .TRUE.

12  MIORGDEF005      A-STOMACH       .TRUE.

13  MIORGDEF006      'A-LOWER LI'    .FALSE.

14  MIORGDEF007      L-EDEWBODY      .TRUE.

15  MIORGDEF008      'L-RED MARR'    .TRUE.

16  MIORGDEF009      'L-BONE SUR'    .TRUE.

17  MIORGDEF010      L-BREAST        .TRUE.

18  MIORGDEF011      L-LUNGS .TRUE.

19  MIORGDEF012      L-THYROID       .TRUE.
```

```
   20  MIORGDEF013      'L-LOWER LI'    .TRUE.

   21  MIORGDEF014      'L-BLAD WAL'    .TRUE.

   22  MIORGDEF015      L-LIVER .FALSE.

   23  MIORGDEF016      L-THYROIDH      .TRUE.

       *

       * RISCAT - Output relative contribution of each weather category bins

   24  MIRISCAT001      .FALSE.

       *

       * OVRRID - Flag indicating if Wind Rose defaults from ATMOS are to be
overridden

   25  MIOVRRID001      .FALSE.
```

```
    *
    * CSFACT - Cloudshine shielding factor
26  SECSFACT001      1.
27  SECSFACT002      0.75
28  SECSFACT003      0.6
    *
    * PROTIN - Inhalation protection factor
29  SEPROTIN001      1.
30  SEPROTIN002      0.41
```

31 SEPROTIN003 0.33

*

* BRRATE - Breathing rates

32 SEBRRATE001 2.66E-4

33 SEBRRATE002 2.66E-4

34 SEBRRATE003 2.66E-4

*

* SKPFAC - skin protection factors

35 SESKPFAC001 1.0

36 SESKPFAC002 0.41

37 SESKPFAC003 0.33

*

* GSHFAC - groundshine shielding factors

38 SEGSHFAC001 0.5

39 SEGSHFAC002 0.4

40 SEGSHFAC003 0.2

*

* RESCON - Initial value for emergency-phase resuspension concentration factor.

41 SERESCON001 1.E-4

```
       *

       * RESHAF - Emergency-phase resuspension concentration coefficient weathering
half-life.

   42  SERESHAF001      1.82E5

       *

       * EANAM2 - Name of emergency response scenario

   43  EZEANAM2001      'NO EVACUATION, RELOCATION MODELS APPLY EVERYWHE'

       *

       * WTNAME - type of weighting factor to be used in generating weighted sum of
results

   44  EZWTNAME001      PEOPLE

       *
```

```
       * WTFRAC - weighting fraction applied to results of emergency response
scenario

   45  EZWTFRAC001      1.00

       *

       * LASMOV2  (used for no evacuation), always 0

   46  EZLASMOV001      0

       *

       * ENDEMP - duration of the emergency-phase period, seconds

   47  SRENDEMP001      604800.

       *

       * CRIORG - critical organ for relocation decisions during emergency-phase
period
```

```
48  SRCRIORG001      L-EDEWBODY

    *

    * TIMHOT - hot-spot relocation action time, seconds after plume arrival

49  SRTIMHOT001      43200.

    *

    * TIMNRM - Normal Relocation Time (Seconds from Plume Arrival)

50  SRTIMNRM001      86400.

    *

    * DOSHOT - Hot-Spot Relocation Dose Threshold (Sieverts)

51  SRDOSHOT001      0.5
```

```
*

* DOSNRM - Normal Relocation Dose Threshold (Sieverts)

52  SRDOSNRM001      0.25

*

* NUMEFA - Number of Early Fatality Effects

53  EFNUMEFA001      2

*

* ORGNAM2, EFFACA, EFFACB, EFFTHR Early Fatality Effects - target organ,
alpha factor and beta factor for hazard function, and threshold dose (Sieverts)

54  EFATAGRP001      'A-RED MARR'    3.8     5.0     1.5

55  EFATAGRP002      A-LUNGS 10.0    7.0     5.0
```

```
      *

      * NUMEIN - Number of Early Injury Effects

   56 EINUMEIN001      7

      *

      * ORGNAM3, EINAME, EISUSC, EITHRE, EIFACA, EIFACB Early Injury Effects -
name, target organ, affected population fract, threshold dose, alpha factor, beta
factor.

   57 EINJUGRP001      'PRODROMAL VOMIT'       A-STOMACH       1.      .5      2.
3.

   58 EINJUGRP002      DIARRHEA        A-STOMACH       1.      1.      3.      2.5

   59 EINJUGRP003      PNEUMONITIS     A-LUNGS 1.      5.      10.     7.

   60 EINJUGRP004      'SKIN ERYTHEMA' A-SKIN  1.      3.      6.      5.
```

61 EINJUGRP005 TRANSEPIDERMAL A-SKIN 1. 10. 20. 5.

62 EINJUGRP006 THYROIDITIS A-THYROIDH 1. 40. 240. 2.

63 EINJUGRP007 HYPOTHYROIDISM A-THYROIDH 1. 2. 60. 1.3

*

* NUMACA - number of latent cancer effects

64 LCNUMACA001 7

*

* ACTHRE - dose threshold for linear dose response, Sieverts

65 LCACTHRE001 0.0

*

* DDTHRE - dose threshold for applying dose-dependent reduction factor, DDREFA

66 LCDDTHRE001 0.2

*

* ACNAME, ORGNAM4, ACSUSC, DOSEFA, DOSEFB, CFRISK, CIRISK, DDREFA - Latent Cancer Effects Parameters

67 LCANCERS001 LEUKEMIA 'L-RED MARR' 1.0 1.0 0.0 9.70E-3 0.0 2.0

68 LCANCERS002 BONE 'L-BONE SUR' 1.0 1.0 0.0 9.00E-4 0.0 2.0

69 LCANCERS003 BREAST L-BREAST 1.0 1.0 0.0 5.40E-3 1.7E-2 1.0

70 LCANCERS004 LUNG L-LUNGS 1.0 1.0 0.0 1.55E-2 0.0 2.0

71 LCANCERS005 THYROID L-THYROIDH 1.0 1.0 0.0 7.20E-4 7.2E-3 1.0

```
   72  LCANCERS006      GI      'L-LOWER LI'    1.0     1.0     0.0     3.36E-2 0.0
2.0

   73  LCANCERS007      OTHER   L-EDEWBODY      1.0     1.0     0.0     2.76E-2 0.0
2.0

       *

       * NUM1=0

   74  TYPE1NUMBER      0

       *

       * NUM1 - Number of results of type 1

   75  TYPE1NUMBER      4

********    RECORD NUMBER     75 REPLACES RECORD NUMBER     74    ********
       *
```

```
    * NAME1, I1DIS1, I2DIS1, CCDF1 - Health-Effect Cases

76  TYPE1OUT001      'ERL FAT/TOTAL' 1       15      NONE

77  TYPE1OUT002      'CAN FAT/TOTAL' 1       15      NONE

78  TYPE1OUT003      'CAN FAT/TOTAL' 1       11      NONE

79  TYPE1OUT004      'ERL FAT/TOTAL' 1       11      NONE

    *

    * NUM2=0

80  TYPE2NUMBER      0

    *

    * NUM3=0
```

```
81  TYPE3NUMBER      0

    *

    * NUM4=0

82  TYPE4NUMBER      0

    *

    * NUM4 - Number of results of type 4

83  TYPE4NUMBER      3

********    RECORD NUMBER     83 REPLACES RECORD NUMBER     82    ********
    *

    * I1DIS4, NAME4, CCDF4 - Average Individual Risk

84  TYPE4OUT001      1       'ERL FAT/TOTAL' NONE
```

```
85  TYPE4OUT002      2       'ERL FAT/TOTAL' NONE

86  TYPE4OUT003      3       'ERL FAT/TOTAL' NONE

    *

    * NUM5 =0

87  TYPE5NUMBER      0

    *

    * NUM5 - Number of results of type 5

88  TYPE5NUMBER      1

********    RECORD NUMBER     88 REPLACES RECORD NUMBER     87    ********
        *
```

```
    * NAME5, I1DIS5, CCDF5 - Population Dose

89  TYPE5OUT001      L-EDEWBODY      1       15      NONE

    *

    * NUM6 =0

90  TYPE6NUMBER      0

    *

    * NUM7=0

91  TYPE7NUMBER      0

    *

    * NUM8=0
```

```
92  TYPE8NUMBER      0

    *

    * NUM8 - Number of results of type 8

93  TYPE8NUMBER      2

********   RECORD NUMBER    93 REPLACES RECORD NUMBER    92   ********
    *

    * NAME8, I1DIS8, I2DIS8, CCDF8 - Population-Weighted Risk

94  TYPE8OUT001      'ERL FAT/TOTAL' 1       3       NONE

95  TYPE8OUT002      'CAN FAT/TOTAL' 1       11      NONE

    *

    * NUMA=0
```

```
96  TYPEANUMBER       0

    *

    * NUMB =0

97  TYPEBNUMBER       0

    *

    * NUMB - Number of results of type B

98  TYPEBNUMBER       20

********    RECORD NUMBER     98 REPLACES RECORD NUMBER     97    ********
    *

    * NAMEB, IRAD_B, IANG_B, CCDFB - Peak Dose at an (r, theta) Location

99  TYPEBOUT001       L-EDEWBODY        1        1        NONE
```

100	TYPEBOUT002	L-EDEWBODY	2	1	NONE
101	TYPEBOUT003	L-EDEWBODY	3	1	NONE
102	TYPEBOUT004	L-EDEWBODY	4	1	NONE
103	TYPEBOUT005	L-EDEWBODY	5	1	NONE
104	TYPEBOUT006	L-EDEWBODY	6	1	NONE
105	TYPEBOUT007	L-EDEWBODY	7	1	NONE
106	TYPEBOUT008	L-EDEWBODY	8	1	NONE
107	TYPEBOUT009	L-EDEWBODY	9	1	NONE
108	TYPEBOUT010	L-EDEWBODY	10	1	NONE

109	TYPEBOUT011	L-EDEWBODY	1	9	NONE
110	TYPEBOUT012	L-EDEWBODY	2	9	NONE
111	TYPEBOUT013	L-EDEWBODY	3	9	NONE
112	TYPEBOUT014	L-EDEWBODY	4	9	NONE
113	TYPEBOUT015	L-EDEWBODY	5	9	NONE
114	TYPEBOUT016	L-EDEWBODY	6	9	NONE
115	TYPEBOUT017	L-EDEWBODY	7	9	NONE
116	TYPEBOUT018	L-EDEWBODY	8	9	NONE
117	TYPEBOUT019	L-EDEWBODY	9	9	NONE

```
118  TYPEBOUT020       L-EDEWBODY       10       9        NONE

     *

     * NUMC=0

119  TYPECNUMBER       0

     *

     * NUMD = 0

120  TYPEDNUMBER       0

     *

     * DOSMOD, dose model, LNT, AT or PL

121  LCDOSMOD001       LNT
```

```
     *
     * KIMODL, KI model
122  EZKIMODL001      NOKI
     *
     * EFFACY,  KI Ingestion
123  EZEFFACY001      0.
     *
     * POPFRAC, KI Ingestion
124  EZPOPFRC001      0.
     .
```

******** TERMINATOR RECORD ENCOUNTERED -- END OF BASE CASE USER INPUT ********

USER INPUT PROCESSING SUMMARY - BASE CASE

NUMBER OF RECORDS READ = 248
NUMBER OF BLANK OR COMMENT RECORDS READ = 123
NUMBER OF TERMINATOR RECORDS = 1
NUMBER OF RECORDS PROCESSED = 124
NUMBER OF PROCESSED RECORDS DUPLICATED = 5
NUMBER OF PROCESSED RECORDS SORTED = 119
****
****

READING DCF FILE:f:\NBixler\WinMACCS Projects\IndianPointPalla\Data\DOSDATA.INP

DCF FILE is of type :MACCS F
Am using a DOSFAC/DOSFAC2/IDCF2 dose factor file

The list of defined organs is as follows (A- is ACUTE and L- is LIFETIME):
A-SKIN
A-RED MARR
A-LUNGS
A-THYROIDH
A-STOMACH
L-EDEWBODY
L-RED MARR
L-BONE SUR
L-BREAST
L-LUNGS
L-THYROID
L-LOWER LI
L-BLAD WAL
L-THYROIDH

READING FROM A DOSE CONVERSION FILE WITH THE FOLLOWING HEADER:
MACCS File DOSDATA.INP: Changed by D. CHANIN25-JUN-92, 09:53:47
Seven new organs added with MACCS Version 1.5.11.1

NO EVACUATION REQUESTED

USING THE FOLLOWING SITE DATA FILE:

MACCS2 Site Data File for Indian Point Energy Center

SITE FILE

15 SPATIAL INTERVALS

16 WIND DIRECTIONS

7 CROP CATEGORIES

4 WATER PATHWAY ISOTOPES

1 WATERSHEDS

21 ECONOMIC REGIONS

SPATIAL DISTANCES KILOMETERS

0.3219 1.6093 3.2187 4.8280 6.4374 8.0467 9.6561 11.2654

12.8748 14.4841 16.0935 32.1869 48.2804 64.3739 80.4674

POPULATION

6.	0.	271.	2059.	2501.	909.	931.	1223.
1389.	1503.	1696.	22955.	30654.	39620.	51057.0	
16.	7.	170.	1943.	2912.	2051.	1177.	1388.
1577.	1798.	1913.	28140.	39917.	56226.	67213.0	
17.	193.	883.	2131.	2964.	3843.	3910.	3059.
2464.	1998.	1915.	29419.	53692.	62559.	41261.0	
17.	364.	1275.	2132.	2977.	3453.	4507.	5282.
6140.	6960.	7279.	74856.	119073.	152175.	176338.0	
17.	390.	1218.	2138.	2934.	3792.	4424.	5513.
5587.	7201.	8076.	118335.	156720.	200581.	208394.0	
17.	409.	1256.	2136.	2970.	3592.	3698.	3857.

5734. 6783. 7409. 121515. 144267. 54180. 34361.0

17. 410. 1274. 2138. 2872. 3808. 4537. 5279.

6284. 7194. 8060. 111946. 87735. 236426. 379990.0

17. 360. 1268. 1645. 882. 495. 15. 1442.

948. 1911. 3214. 98326. 481703. 1380249. 1218170.0

17. 400. 701. 246. 124. 620. 1538. 3253.

4129. 4455. 5138. 135211. 1164596. 3732339. 3164306.0

17. 377. 562. 500. 1700. 2882. 3544. 4187.

4873. 5517. 6159. 202605. 395389. 922649. 1034467.0

17. 217. 187. 1566. 2274. 2916. 3574. 4188.

4361. 5358. 6138. 183372. 276902. 197362. 246076.0

9. 0. 620. 1623. 2197. 2924. 3550. 4014.

4196. 4255. 4335. 64428. 209197. 109102. 85849.0

3. 0. 855. 1602. 2267. 2815. 2368. 1787.

1423. 1775. 2030. 32026. 50974. 61380. 57384.0

2. 0. 938. 1624. 2245. 1341. 1135. 1419.

1505. 1756. 2071. 32528. 54577. 57977. 29719.0

2. 45. 974. 1589. 1933. 972. 1140. 1351.

1541. 1781. 2093. 32572. 54557. 24046. 22317.0

3. 50. 809. 1051. 1587. 740. 1204. 1407.

1620. 1787. 2028. 31660. 32569. 27599. 34374.0

LAND FRACTION

0.37 0.00 0.23 0.96 0.99 0.94 0.78 0.87 0.85 0.81 0.82 0.83 0.94 0.94 0.93

0.92 0.02 0.13 0.91 0.97 0.98 1.00 1.00 0.98 0.99 0.94 0.95 0.99 0.99 0.98

1.00 0.47 0.69 1.00 0.99 1.00 0.98 0.96 0.95 1.00 0.94 0.91 0.94 0.95 0.96

1.00 0.89 0.99 1.00 0.99 0.90 0.96 0.95 0.96 0.96 0.97 0.91 0.92 0.95 0.98

1.00 0.95 0.95 1.00 0.98 0.99 0.94 0.99 0.87 0.99 0.99 0.92 0.97 0.97 0.78

1.00 1.00 0.98 1.00 0.99 0.93 0.79 0.69 0.89 0.93 0.91 0.97 0.95 0.27 0.12

1.00 1.00 0.99 1.00 0.96 0.99 0.96 0.95 0.98 0.99 0.99 0.93 0.53 0.48 0.98

1.00 0.88 0.99 0.77 0.29 0.13 0.00 0.26 0.16 0.30 0.43 0.77 0.70 0.79 0.82

1.00 0.97 0.55 0.12 0.05 0.21 0.43 0.77 0.85 0.81 0.83 0.84 0.87 0.81 0.59

1.00 0.92 0.44 0.31 0.75 0.99 0.99 0.99 1.00 1.00 1.00 0.99 0.99 0.93 0.92

1.00 0.53 0.18 0.96 1.00 1.00 1.00 0.99 0.89 0.97 0.99 0.98 0.93 0.90 0.94

0.52 0.00 0.64 1.00 0.97 1.00 0.99 0.95 0.91 0.92 0.94 0.94 0.93 0.97 0.94

0.19 0.00 0.88 0.99 1.00 1.00 1.00 0.98 0.86 0.95 0.97 0.97 0.98 0.97 0.97

0.13 0.00 0.96 1.00 1.00 0.99 0.94 0.99 0.91 0.94 0.99 0.98 0.99 0.97 0.95

0.14 0.14 1.00 0.98 0.99 0.98 0.94 0.94 0.93 0.95 1.00 0.98 0.99 0.99 0.96

0.20 0.16 0.83 0.57 0.65 0.75 0.99 0.98 0.98 0.95 0.97 0.96 0.96 0.99 0.96

REGION INDEX

202120202014141414131406060606

202120202014141414141414060606

202020202020201414141414060303

202020202020202020202020010104

202020202020202020202020010104

202020202020202020202020010117

202020202020202020202020011217

202020202020212020202020201212

202020202116161616161616021511

202020161616161616161602020510

202016161616161616161616080707

202116161616161616161613080909

202116161616131313131313130909

202116161613131313131313131318

201616161613131313131313131818

201616162013131313131313191919

WATERSHED INDEX

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CROP SEASON AND SHARE

1	PASTURE	90.	270.	0.0162
2	STORED FORAGE	150.	240.	0.0480
3	GRAINS	150.	240.	0.0079
4	GRN LEAFY VEGETABLES	150.	240.	0.0005
5	OTHER FOOD CROPS	150.	240.	0.0036
6	LEGUMES AND SEEDS	150.	240.	0.0002
7	ROOTS AND TUBERS	150.	240.	0.0018

WATERSHED DEFINITION -- INITIAL AND ANNUAL WASHOFF AND INGESTION FACTORS

1	Sr-89	5.00E-06
2	Sr-90	5.00E-06
3	Cs-134	5.00E-06

4 Cs-137 5.00E-06

REGIONAL ECONOMIC DATA

01	FAIRFIELD	0.032	0.008	5831.0	66592.0	232659.0
02	BERGEN	0.009	0.000	14568.0	124496.0	205863.0
03	LITCHFIELD	0.159	0.371	795.0	22373.0	148522.0
04	NEWHAVEN	0.067	0.029	5439.0	36942.0	144105.0
05	ESSEX	0.002	0.000	11903.0	120139.0	147351.0
06	DUTCHESS	0.219	0.207	698.0	16206.0	129000.0
07	MORRIS	0.057	0.006	6005.0	67365.0	213389.0
08	PASSAIC	0.013	0.000	9836.0	81944.0	121880.0

09	SUSSEX	0.226	0.311	483.0	18496.0	136197.0
10	UNION	0.003	0.000	91646.0	243939.0	160860.0
11	KINGS	0.000	0.000	0.0	0.0	104714.0
12	NASSAU	0.006	0.000	18237.0	88422.0	192755.0
13	ORANGE	0.207	0.288	1516.0	13148.0	113976.0
14	PUTNAM	0.045	0.000	892.0	24525.0	154926.0
15	QUEENS	0.000	0.000	0.0	0.0	169126.0
16	ROCKLAND	0.011	0.047	6365.5	62517.0	163105.0
17	SUFFOLK	0.058	0.000	14567.0	54566.0	149615.0
18	SULLIVAN	0.103	0.233	1466.0	7911.0	104859.0
19	ULSTER	0.116	0.043	1019.0	9908.0	104090.0

```
  20 WESTCHESTER   0.036     0.009    2206.0   39116.0  217278.0


  21 WATER         0.000     0.000       0.0       0.0       0.0


 END


POPULATION


******** WARNING -- THE FOLLOWING RECORDS WERE NEVER ACCESSED ********
       EZEFFACY001      0.



       EZPOPFRC001      0.




USER INPUT IS READ FROM UNIT 26
RECORD IDENTIFIER FIELDS  11 CHARACTERS LONG ARE EXPECTED.
THE FIRST 499 COLUMNS OF EACH INPUT RECORD ARE PROCESSED.

RECORD
NUMBER                                        RECORD
       * File created using WinMACCS version 3.4.5 10/29/2009 5:21:35 PM



       *
```

```
   * CHNAME - description

1  CHCHNAME001      'CHRONC.IN - IPEC, "New" COMIDA2-Based Food Model'

   *

   * EVACST - daily cost

2  CHEVACST001      46.7

   *

   * RELCST - daily cost due to intermediate

3  CHRELCST001      46.7

   *

   * DUR_INTPHAS, intermediate-phase period
```

```
4  DUR_INTPHAS      0.0

   *

   * TMPACT - long term dose period

5  CHTMPACT001      1.58E8

   *

   * DSCRTI - dose criterion for phase

6  CHDSCRTI001      1.0E5

   *

   * DSCRLT - dose criterion for habitation

7  CHDSCRLT001      0.04
```

```
    *
    * EXPTIM - long term exposure period
 8  CHEXPTIM001      9.45E8
    *
    * CRTOCR - critical organ
 9  CHCRTOCR001      L-EDEWBODY
    *
    * LVLDEC - number of decontamination levels
10  CHLVLDEC001      2
    *
```

```
    * TIMDEC - time for each level

11  CHTIMDEC001      5.184E6

12  CHTIMDEC002      1.0368E7

    *

    * DSRFCT - effectiveness of decontamination

13  CHDSRFCT001      3.

14  CHDSRFCT002      15.

    *

    * CDFRM - farmland decontamination cost

15  CHCDFRM0001      972.
```

```
16  CHCDFRM0002      2160.

    *

    * CDNFRM - nonfarmland decontamination cost

17  CHCDNFRM001      5184.

18  CHCDNFRM002      13824.

    *

    * FRFDL - fraction farmland cost due labor

19  CHFRFDL0001      .3

20  CHFRFDL0002      .35

    *
```

* FRNFDL - fraction nonfarmland cost due labor

21 CHFRNFDL001 .7

22 CHFRNFDL002 .5

*

* TFWKF - fraction time farmland worker

23 CHTFWKF0001 .10

24 CHTFWKF0002 .33

*

* TFWKNF - fraction time nonfarmland worker

```
25  CHTFWKNF001      .33

26  CHTFWKNF002      .33

    *

    * DLBCST - labor cost decontamination worker

27  CHDLBCST001      60480.

    *

    * DPRATE - depreciation rate applies to improvements

28  CHDPRATE001      .20

    *

    * DSRATE - rate of return
```

```
29  CHDSRATE001      .12

    *

    * POPCST - Per capita removal cost

30  CHPOPCST001      8640.

    *

    * NGWTRM - number weathering terms

31  CHNGWTRM001      2

    *

    * GWCOEF - groundshine coefficient

32  CHGWCOEF001      0.5
```

33 CHGWCOEF002 0.5

*

* TGWHLF - groundshine half lives

34 CHTGWHLF001 1.6E7

35 CHTGWHLF002 2.8E9

*

* NRWTRM - number resuspension terms

36 CHNRWTRM001 3

*

* RWCOEF - resuspension coefficient

```
37  CHRWCOEF001      1.0E-5

38  CHRWCOEF002      1.0E-7

39  CHRWCOEF003      1.0E-9

    *

    * TRWHLF - resuspension half lives

40  CHTRWHLF001      1.6E7

41  CHTRWHLF002      1.6E8

42  CHTRWHLF003      1.6E9

    *
```

```
    * VALWF - value of farm wealth

43  CHVALWF0001      50071.

    *

    * FRFIM - fraction of farm wealth due improvements

44  CHFRFIM0001      0.25

    *

    * VALWNF - value of nonfarm wealth

45  CHVALWNF001      163631.

    *

    * FRNFIM - fraction nonfarm wealth due improvements
```

```
   46  CHFRNFIM001      0.8

       *

       * FDPATH, value = OLD, NEW or OFF to use models MACCS food, Comida2 or no
food model respectively

   47  CHFDPATH001      NEW

       *

       * COMIDA2_INP - use for premade comida2

   48  BIN_FILE001      'f:\NBixler\WinMACCS
Projects\IndianPointPalla\Data\SAMP_A.BIN'

       *

       * DOSEMILK

   49  DOSEMILK001      0.025
```

50 DOSEMILK002 0.075

*

* DOSEOTHR

51 DOSEOTHR001 0.025

52 DOSEOTHR002 0.075

*

* DOSELONG

53 DOSELONG001 0.005

54 DOSELONG002 0.015

*

```
    * NUMWPI - size of array NAMWPI

55  CHNUMWPI001      4

    *

    * popflg=FILE,NAMWPI, WSHFRI, WSHRTA, WINGF - water ingestion data

56  CHWTRISO001      Sr-89   0.01    0.004   0.

57  CHWTRISO002      Sr-90   0.01    0.004   0.

58  CHWTRISO003      Cs-134  0.005   0.001   0.

59  CHWTRISO004      Cs-137  0.005   0.001   0.

    *
```

```
    * KSWTCH - chronc output diagnostic switch

60  CHKSWTCH001      0

    *

    * FRACLD_FILE - popflg=FILE, dummy variable

61  CHFRACLD001      1.0

    *

    * FRCFRM_FILE - popflg = FILE, dummy variable

62  CHFRCFRM001      1.0

    *

    * FRMPRD_FILE - popflg=FILE, dummy variable
```

63 CHFRMPRD001 0.0

*

* DPFRCT_FILE - popflg=FILE, dummy variable

64 CHDPFRCT001 0.0

*

* LPROTIN - Inhalation protection factor used in CHRONC

65 CHLPROTIN01 0.41

*

* LBRRATE - Breathing rate used in CHRONC

66 CHLBRRATE01 2.66E-04

```
     *
     * LGSHFAC - groundshine shielding factor used in CHRONC
67   CHLGSHFAC01      0.4
     *
     * NXUM9=0
68   TYPE9NUMBER      0
     *
     * NXUM9, number of type9 results
69   TYPE9NUMBER      1
********    RECORD NUMBER    69 REPLACES RECORD NUMBER    68    ********
     *
```

```
     * ORGNAM7, IX1DS9, IX2DS9, CCDF9 - Population Dose

70   TYPE9OUT001      L-EDEWBODY      1       15      NONE

     *

     * NXUM10=0

71   TYP10NUMBER      0

     *

     * NXUM10, number of type10 results

72   TYP10NUMBER      1

********    RECORD NUMBER     72 REPLACES RECORD NUMBER     71    ********
        *

        *  I1DS10, I2DS10, CCDF10 - Economic Cost
```

```
73  TYP10OUT001      1       15      NONE

    *

    * FLAG11 - Action Distance

74  TYP11FLAG11      .FALSE. NONE

    *

    * NUM12=0

75  TYP12NUMBER      0

    *

    * NUM13=0

76  TYP13NUMBER      0
```

.

******** TERMINATOR RECORD ENCOUNTERED -- END OF BASE CASE USER INPUT ********

USER INPUT PROCESSING SUMMARY - BASE CASE

NUMBER OF RECORDS READ = 190
NUMBER OF BLANK OR COMMENT RECORDS READ = 113
NUMBER OF TERMINATOR RECORDS = 1
NUMBER OF RECORDS PROCESSED = 76
NUMBER OF PROCESSED RECORDS DUPLICATED = 2
NUMBER OF PROCESSED RECORDS SORTED = 74

****

READING COMIDA2 FILE: f:\NBixler\WinMACCS Projects\IndianPointPalla\Data\SAMP_A.BIN

COMIDA2 binary file header =
COMIDA2 01/14/2004 13:06:02 Version 1.11.1, 01/12/2004

COMIDA2 descriptive title =
MACCS File DOSDATA.INP: Changed by D. CHANIN25-JUN-92, 09:53:47

Seven new organs added with MACCS Version 1.5.11.1

COMIDA2 LASTSTOR = 9

A SITE DATA FILE IS BEING USED FOR BOTH "EARLY" AND "CHRONC"

7 CANCER EFFECTS ARE DEFINED IN THE MODEL.

INDEX	CANCER EFFECT	ORGAN	ALPHA	BETA	CFRISK	CIRISK
1	LEUKEMIA	L-RED MARR	1.000E+00	0.000E+00	9.700E-03	0.000E+00
2	BONE	L-BONE SUR	1.000E+00	0.000E+00	9.000E-04	0.000E+00
3	BREAST	L-BREAST	1.000E+00	0.000E+00	5.400E-03	1.700E-02
4	LUNG	L-LUNGS	1.000E+00	0.000E+00	1.550E-02	0.000E+00
5	THYROID	L-THYROIDH	1.000E+00	0.000E+00	7.200E-04	7.200E-03
6	GI	L-LOWER LI	1.000E+00	0.000E+00	3.360E-02	0.000E+00
7	OTHER	L-EDEWBODY	1.000E+00	0.000E+00	2.760E-02	0.000E+00

TIME OF HOTSPOT RELOCATION IS 4.3200E+04.

TIME OF NORMAL RETURN IS 8.640E+04 AND THE EMERGENCY PHASE ENDS AT 6.048E+05.

GROUNDSHINE SHIELDING FACTOR = 0.400

RESUSPENSION PROTECTION FACTOR = 0.410

BREATHING RATE (CUBIC M/S) = 2.660E-04

DISPERSION MODEL FLAG IS 2

WINDROSE PROBABILITIES BY WIND DIRECTION AND MET BIN NUMBER

BIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	0.1879	0.1194	0.1174	0.0705	0.0568	0.0176	0.0039	0.0000	0.0000	0.0039	0.0117	0.0215	0.0431	0.0861	0.1018	0.1585
2	0.2069	0.1379	0.0966	0.1172	0.1172	0.0759	0.0138	0.0000	0.0000	0.0000	0.0000	0.0138	0.0069	0.0138	0.0621	0.1379
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.1517	0.1066	0.0735	0.0427	0.0379	0.0024	0.0047	0.0000	0.0000	0.0047	0.0142	0.0474	0.0995	0.1232	0.1398	0.1517
5	0.1025	0.1279	0.1348	0.1006	0.0684	0.0381	0.0137	0.0020	0.0000	0.0088	0.0107	0.0303	0.0713	0.0879	0.0898	0.1133
6	0.0925	0.1301	0.1541	0.1404	0.1712	0.0411	0.0274	0.0034	0.0000	0.0068	0.0068	0.0274	0.0377	0.0308	0.0342	0.0959
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
9	0.1364	0.1818	0.0909	0.0455	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0455	0.0909	0.0000	0.1818	0.2273
10	0.1089	0.0872	0.0561	0.0210	0.0074	0.0047	0.0014	0.0000	0.0007	0.0142	0.0392	0.0913	0.1170	0.1778	0.1400	0.1332
11	0.1241	0.1206	0.0898	0.0650	0.0544	0.0130	0.0047	0.0035	0.0000	0.0402	0.0532	0.0461	0.0827	0.0922	0.0946	0.1158
12	0.0638	0.1915	0.0851	0.1489	0.0426	0.0426	0.0851	0.0000	0.0000	0.0213	0.0213	0.1277	0.0000	0.0213	0.0851	0.0638
13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2000	0.0000	0.2000	0.6000
14	0.0426	0.0355	0.0071	0.0071	0.0000	0.0000	0.0000	0.0000	0.0000	0.0142	0.0709	0.1560	0.1418	0.1773	0.2340	0.1135
15	0.0000	0.0769	0.0769	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2308	0.0769	0.0769	0.0769	0.2308	0.0769	0.0769
16	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
17	0.1303	0.1004	0.0698	0.0380	0.0178	0.0050	0.0010	0.0013	0.0000	0.0121	0.0270	0.0687	0.1091	0.1303	0.1382	0.1508
18	0.1303	0.1004	0.0698	0.0380	0.0178	0.0050	0.0010	0.0013	0.0000	0.0121	0.0270	0.0687	0.1091	0.1303	0.1382	0.1508
19	0.1303	0.1004	0.0698	0.0380	0.0178	0.0050	0.0010	0.0013	0.0000	0.0121	0.0270	0.0687	0.1091	0.1303	0.1382	0.1508
20	0.1303	0.1004	0.0698	0.0380	0.0178	0.0050	0.0010	0.0013	0.0000	0.0121	0.0270	0.0687	0.1091	0.1303	0.1382	0.1508
21	0.1303	0.1004	0.0698	0.0380	0.0178	0.0050	0.0010	0.0013	0.0000	0.0121	0.0270	0.0687	0.1091	0.1303	0.1382	0.1508
22	0.1303	0.1004	0.0698	0.0380	0.0178	0.0050	0.0010	0.0013	0.0000	0.0121	0.0270	0.0687	0.1091	0.1303	0.1382	0.1508
23	0.1303	0.1004	0.0698	0.0380	0.0178	0.0050	0.0010	0.0013	0.0000	0.0121	0.0270	0.0687	0.1091	0.1303	0.1382	0.1508
24	0.1303	0.1004	0.0698	0.0380	0.0178	0.0050	0.0010	0.0013	0.0000	0.0121	0.0270	0.0687	0.1091	0.1303	0.1382	0.1508
25	0.1303	0.1004	0.0698	0.0380	0.0178	0.0050	0.0010	0.0013	0.0000	0.0121	0.0270					

0.0687 0.1091 0.1303 0.1382 0.1508
   26 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   27 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   28 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   29 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   30 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   31 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   32 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   33 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   34 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   35 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   36 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   37 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   38 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   39 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   40 0.1303 0.1004 0.0698 0.0380 0.0178 0.0050 0.0010 0.0013 0.0000 0.0121 0.0270
0.0687 0.1091 0.1303 0.1382 0.1508
   41 0.1252 0.1059 0.0823 0.0519 0.0353 0.0127 0.0048 0.0013 0.0001 0.0139 0.0277
0.0614 0.0950 0.1215 0.1232 0.1378

Processing a Site Data File with Header: MACCS2 Site Data File for Indian Point
Energy Center
 SITE FILE

THIS PROGRAM CURRENTLY ALLOWS THE GENERATION OF UP TO 3394 RESULTS

YOU HAVE REQUESTED 30 RESULTS FROM "EARLY" COMPOSED OF:

   4 RESULTS OF TYPE 1
   0 RESULTS OF TYPE 2
   0 RESULTS OF TYPE 3
   3 RESULTS OF TYPE 4
   1 RESULTS OF TYPE 5
   0 RESULTS OF TYPE 6
   0 RESULTS OF TYPE 7
   2 RESULTS OF TYPE 8
   0 RESULTS OF TYPE A
  20 RESULTS OF TYPE B
   0 RESULTS OF TYPE C
   0 RESULTS OF TYPE D

YOU HAVE REQUESTED   30 RESULTS FROM "CHRONC" COMPOSED OF:

  17 RESULTS OF TYPE 9
  13 RESULTS OF TYPE 10
   0 RESULTS OF TYPE 11
   0 RESULTS OF TYPE 12

0 RESULTS OF TYPE 13

TRIAL	DAY	PERIOD	BIN	PRBMET
1	154	6	9	6.28E-04

WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED

WHEN USING Original MACCS2 1.12 plume meander model.

WARNING!!

A 10 HOUR RELEASE DURATION IS BEING USED BY ATMOS FOR CALCULATING
THE EXPANSION FACTOR OF PLUME # 1 INSTEAD OF THE USER-SUPPLIED 24.00 HOURS

For Julian Day 154, selecting COMIDA2 results # 4 of 9
2 154 24 18 3.82E-03
For Julian Day 154, selecting COMIDA2 results # 4 of 9
3 155 16 21 1.98E-02
For Julian Day 155, selecting COMIDA2 results # 4 of 9
4 161 10 1 1.46E-02
For Julian Day 161, selecting COMIDA2 results # 4 of 9
5 162 3 13 1.43E-04
For Julian Day 162, selecting COMIDA2 results # 4 of 9
6 162 5 13 1.43E-04
For Julian Day 162, selecting COMIDA2 results # 4 of 9
7 163 23 29 2.57E-04
For Julian Day 163, selecting COMIDA2 results # 4 of 9
8 164 8 24 1.43E-04
For Julian Day 164, selecting COMIDA2 results # 4 of 9
9 164 14 4 1.20E-02
For Julian Day 164, selecting COMIDA2 results # 4 of 9
10 168 4 35 1.71E-04
For Julian Day 168, selecting COMIDA2 results # 5 of 9
11 168 5 35 1.71E-04
For Julian Day 168, selecting COMIDA2 results # 5 of 9
12 169 8 33 2.00E-04
For Julian Day 169, selecting COMIDA2 results # 5 of 9
13 169 9 33 2.00E-04
For Julian Day 169, selecting COMIDA2 results # 5 of 9
14 169 11 32 1.14E-04
For Julian Day 169, selecting COMIDA2 results # 5 of 9
15 169 12 30 1.14E-04
For Julian Day 169, selecting COMIDA2 results # 5 of 9
16 176 2 15 3.71E-04
For Julian Day 176, selecting COMIDA2 results # 5 of 9
17 177 2 13 1.43E-04
For Julian Day 177, selecting COMIDA2 results # 5 of 9
18 179 7 28 1.03E-03
For Julian Day 179, selecting COMIDA2 results # 5 of 9
19 179 13 25 4.28E-04
For Julian Day 179, selecting COMIDA2 results # 5 of 9
20 179 14 23 1.28E-03
For Julian Day 179, selecting COMIDA2 results # 5 of 9
21 179 22 13 1.43E-04
For Julian Day 179, selecting COMIDA2 results # 5 of 9

	22	180	3	14	4.02E-03

For Julian Day 180, selecting COMIDA2 results # 5 of 9

	23	185	21	24	1.43E-04

For Julian Day 185, selecting COMIDA2 results # 5 of 9

	24	186	20	10	4.22E-02

For Julian Day 186, selecting COMIDA2 results # 5 of 9

	25	190	2	20	6.93E-03

For Julian Day 190, selecting COMIDA2 results # 5 of 9

	26	191	23	22	2.92E-02

For Julian Day 191, selecting COMIDA2 results # 5 of 9

	27	200	13	27	7.42E-04

For Julian Day 200, selecting COMIDA2 results # 6 of 9

	28	200	14	26	1.71E-04

For Julian Day 200, selecting COMIDA2 results # 6 of 9

	29	202	19	26	1.71E-04

For Julian Day 202, selecting COMIDA2 results # 6 of 9

	30	203	20	31	1.14E-04

For Julian Day 203, selecting COMIDA2 results # 6 of 9

	31	203	21	30	1.14E-04

For Julian Day 203, selecting COMIDA2 results # 6 of 9

	32	205	8	28	1.03E-03

For Julian Day 205, selecting COMIDA2 results # 6 of 9

	33	205	11	25	4.28E-04

For Julian Day 205, selecting COMIDA2 results # 6 of 9

	34	208	9	19	1.03E-02

For Julian Day 208, selecting COMIDA2 results # 6 of 9

	35	210	24	9	6.28E-04

For Julian Day 210, selecting COMIDA2 results # 6 of 9

	36	214	5	17	3.35E-02

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	37	214	7	40	1.71E-04

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	38	214	8	40	1.71E-04

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	39	214	10	40	1.71E-04

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	40	214	12	40	1.71E-04

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	41	214	13	39	1.14E-04

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	42	214	14	39	1.14E-04

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	43	214	15	38	1.14E-04

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	44	214	16	37	1.14E-04

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	45	214	17	35	1.71E-04

For Julian Day 214, selecting COMIDA2 results # 6 of 9

	46	222	5	14	4.02E-03

For Julian Day 222, selecting COMIDA2 results # 7 of 9

	47	224	23	28	1.03E-03

For Julian Day 224, selecting COMIDA2 results # 7 of 9

	48	225	2	27	7.42E-04

For Julian Day 225, selecting COMIDA2 results # 7 of 9

	49	225	6	24	1.43E-04

For Julian Day 225, selecting COMIDA2 results # 7 of 9

	50	225	17	35	1.71E-04

For Julian Day 225, selecting COMIDA2 results # 7 of 9

TRIAL	DAY	PERIOD	BIN	PRBMET
51	226	14	1	1.46E-02

For Julian Day 226, selecting COMIDA2 results # 7 of 9

```
         52        239          6          34   2.85E-04
For Julian Day 239, selecting COMIDA2 results # 7 of 9
         53        239          8          34   2.85E-04
For Julian Day 239, selecting COMIDA2 results # 7 of 9
         54        239         10          33   2.00E-04
For Julian Day 239, selecting COMIDA2 results # 7 of 9
         55        239         12          32   1.14E-04
For Julian Day 239, selecting COMIDA2 results # 7 of 9
         56        239         13          30   1.14E-04
For Julian Day 239, selecting COMIDA2 results # 7 of 9
         57        239         14          29   2.57E-04
For Julian Day 239, selecting COMIDA2 results # 7 of 9
         58        243         17          21   1.98E-02
For Julian Day 243, selecting COMIDA2 results # 7 of 9
         59        252          8           4   1.20E-02
For Julian Day 252, selecting COMIDA2 results # 7 of 9
         60        253          8          34   2.85E-04
For Julian Day 253, selecting COMIDA2 results # 7 of 9
         61        253         12          34   2.85E-04
For Julian Day 253, selecting COMIDA2 results # 7 of 9
         62        253         13          33   2.00E-04
For Julian Day 253, selecting COMIDA2 results # 7 of 9
         63        253         15          31   1.14E-04
For Julian Day 253, selecting COMIDA2 results # 7 of 9
         64        254         12           2   4.14E-03
For Julian Day 254, selecting COMIDA2 results # 7 of 9
         65        258         22          18   3.82E-03
For Julian Day 258, selecting COMIDA2 results # 8 of 9
         66        261         16          22   2.92E-02
For Julian Day 261, selecting COMIDA2 results # 8 of 9
         67        262          5          29   2.57E-04
For Julian Day 262, selecting COMIDA2 results # 8 of 9
         68        263         16          23   1.28E-03
For Julian Day 263, selecting COMIDA2 results # 8 of 9
         69        263         17          29   2.57E-04
For Julian Day 263, selecting COMIDA2 results # 8 of 9
         70        263         22          25   4.28E-04
For Julian Day 263, selecting COMIDA2 results # 8 of 9
         71        264         13           1   1.46E-02
For Julian Day 264, selecting COMIDA2 results # 8 of 9
         72        271          6          27   7.42E-04
For Julian Day 271, selecting COMIDA2 results # 8 of 9
         73        271          7          26   1.71E-04
For Julian Day 271, selecting COMIDA2 results # 8 of 9
         74        272         15          23   1.28E-03
For Julian Day 272, selecting COMIDA2 results # 8 of 9
         75        273          6          12   1.34E-03
For Julian Day 273, selecting COMIDA2 results # 8 of 9
         76        274         11           5   2.92E-02
For Julian Day 274, selecting COMIDA2 results # 8 of 9
         77        274         22           9   6.28E-04
For Julian Day 274, selecting COMIDA2 results # 8 of 9
         78        279         10          19   1.03E-02
For Julian Day 279, selecting COMIDA2 results # 8 of 9
         79        280         22          10   4.22E-02
For Julian Day 280, selecting COMIDA2 results # 8 of 9
         80        284         10           4   1.20E-02
For Julian Day 284, selecting COMIDA2 results # 8 of 9
         81        286         20          14   4.02E-03
For Julian Day 286, selecting COMIDA2 results # 8 of 9
         82        289          3          15   3.71E-04
For Julian Day 289, selecting COMIDA2 results # 9 of 9
         83        295          8          11   2.41E-02
```

For Julian Day 295, selecting COMIDA2 results # 9 of 9
84 304 9 6 8.33E-03
For Julian Day 304, selecting COMIDA2 results # 9 of 9
85 313 24 10 4.22E-02
For Julian Day 313, selecting COMIDA2 results # 9 of 9
86 315 24 20 6.93E-03
For Julian Day 315, selecting COMIDA2 results # 9 of 9
87 325 21 18 3.82E-03
For Julian Day 325, selecting COMIDA2 results # 9 of 9
88 329 18 17 3.35E-02
For Julian Day 329, selecting COMIDA2 results # 9 of 9
89 339 9 21 1.98E-02
For Julian Day 339, selecting COMIDA2 results # 1 of 9
90 340 24 12 1.34E-03
For Julian Day 340, selecting COMIDA2 results # 1 of 9
91 348 11 17 3.35E-02
For Julian Day 348, selecting COMIDA2 results # 1 of 9
92 349 16 11 2.41E-02
For Julian Day 349, selecting COMIDA2 results # 1 of 9
93 349 22 5 2.92E-02
For Julian Day 349, selecting COMIDA2 results # 1 of 9
94 355 3 12 1.34E-03
For Julian Day 355, selecting COMIDA2 results # 1 of 9
95 361 4 6 8.33E-03
For Julian Day 361, selecting COMIDA2 results # 1 of 9
96 24 24 11 2.41E-02
For Julian Day 24, selecting COMIDA2 results # 1 of 9
97 30 7 20 6.93E-03
For Julian Day 30, selecting COMIDA2 results # 1 of 9
98 33 4 12 1.34E-03
For Julian Day 33, selecting COMIDA2 results # 2 of 9
99 41 8 15 3.71E-04
For Julian Day 41, selecting COMIDA2 results # 2 of 9
100 42 16 5 2.92E-02
For Julian Day 42, selecting COMIDA2 results # 2 of 9

TRIAL DAY PERIOD BIN PRBMET
101 46 15 2 4.14E-03
For Julian Day 46, selecting COMIDA2 results # 2 of 9
102 53 19 19 1.03E-02
For Julian Day 53, selecting COMIDA2 results # 2 of 9
103 55 15 4 1.20E-02
For Julian Day 55, selecting COMIDA2 results # 2 of 9
104 55 19 9 6.28E-04
For Julian Day 55, selecting COMIDA2 results # 2 of 9
105 56 5 22 2.92E-02
For Julian Day 56, selecting COMIDA2 results # 2 of 9
106 62 16 6 8.33E-03
For Julian Day 62, selecting COMIDA2 results # 2 of 9
107 69 10 6 8.33E-03
For Julian Day 69, selecting COMIDA2 results # 2 of 9
108 72 14 21 1.98E-02
For Julian Day 72, selecting COMIDA2 results # 2 of 9
109 79 21 18 3.82E-03
For Julian Day 79, selecting COMIDA2 results # 2 of 9
110 80 21 23 1.28E-03
For Julian Day 80, selecting COMIDA2 results # 2 of 9
111 83 3 10 4.22E-02
For Julian Day 83, selecting COMIDA2 results # 2 of 9
112 83 14 2 4.14E-03
For Julian Day 83, selecting COMIDA2 results # 2 of 9
113 93 18 17 3.35E-02

```
For Julian Day  93, selecting COMIDA2 results # 3 of 9
        114        100          8          20   6.93E-03
For Julian Day 100, selecting COMIDA2 results # 3 of 9
        115        101          5          22   2.92E-02
For Julian Day 101, selecting COMIDA2 results # 3 of 9
        116        106          2          15   3.71E-04
For Julian Day 106, selecting COMIDA2 results # 3 of 9
        117        109         19          11   2.41E-02
For Julian Day 109, selecting COMIDA2 results # 3 of 9
        118        110         18           5   2.92E-02
For Julian Day 110, selecting COMIDA2 results # 3 of 9
        119        119         12           1   1.46E-02
For Julian Day 119, selecting COMIDA2 results # 3 of 9
        120        125         14           2   4.14E-03
For Julian Day 125, selecting COMIDA2 results # 3 of 9
        121        130          2          14   4.02E-03
For Julian Day 130, selecting COMIDA2 results # 3 of 9
        122        132         15          25   4.28E-04
For Julian Day 132, selecting COMIDA2 results # 3 of 9
        123        134         16          28   1.03E-03
For Julian Day 134, selecting COMIDA2 results # 3 of 9
        124        144          5          19   1.03E-02
For Julian Day 144, selecting COMIDA2 results # 4 of 9
        125        144         15          24   1.43E-04
For Julian Day 144, selecting COMIDA2 results # 4 of 9
        126        147         17          27   7.42E-04
For Julian Day 147, selecting COMIDA2 results # 4 of 9
        127        147         18          26   1.71E-04
For Julian Day 147, selecting COMIDA2 results # 4 of 9

  "ATMOS"  DESCRIPTION = ATMOS INPUT FOR IPEC CALCULATIONS

  "EARLY"  DESCRIPTION = EARLY.IN, IPEC INPUT FROM THE EVACUATION TIME ESTIMATES

  "CHRONC" DESCRIPTION = CHRONC.IN - IPEC, "New" COMIDA2-Based Food Model


SOURCE TERM  1 OF  1:
    NCF

OVERALL RESULTS OBTAINED BY COMBINING 1 EMERGENCY RESPONSE COHORTS FROM "EARLY" WITH
THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:


FRACTION OF THE PEOPLE

              ------
    COHORT 1 = NO EVACUATION, RELOCATION MODELS APPLY EVERYWHE
               1.000

AND THEN MERGING THE 1 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM "CHRONC"
DESCRIBED BELOW:

    COHORT 2 = CHRONC.IN - IPEC, "New" COMIDA2-Based Food Model


RESULTS WHICH ARE PRODUCED ONLY BY "EARLY" OR ONLY BY "CHRONC" ARE PRESENTED IN
LATER SECTIONS.

                                          PROB                            QUANTILES
                          PEAK       PEAK  PEAK
                                        NON-ZERO   MEAN       50TH       90TH       95TH
     99TH      99.5TH     CONSEQ      PROB  TRIAL
```

HEALTH EFFECTS CASES

ERL FAT/TOTAL	0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0
CAN FAT/TOTAL	0-80.5 km	1.0000	1.02E+00	8.54E-01	1.84E+00	2.17E+00	2.78E+00	3.06E+00	8.40E+00	2.85E-05	85
CAN FAT/TOTAL	0-16.1 km	1.0000	7.00E-01	6.31E-01	1.11E+00	1.27E+00	1.75E+00	2.00E+00	2.59E+00	5.71E-05	4
ERL FAT/TOTAL	0-16.1 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0

AVERAGE INDIVIDUAL RISK

		PEAK	PEAK	PROB PEAK NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	CONSEQ	PROB	TRIAL
ERL FAT/TOTAL	0-0.3 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0
ERL FAT/TOTAL	0.3-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0
ERL FAT/TOTAL	1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0

POPULATION DOSE (Sv)

		PEAK	PEAK	PROB PEAK NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	CONSEQ	PROB	TRIAL
L-EDEWBODY TOT LIF	0-80.5 km	1.0000	2.28E+01	1.97E+01	3.84E+01	4.89E+01	6.27E+01	6.94E+01	1.88E+02	2.85E-05	85		

POPULATION WEIGHTED RISK

		PEAK	PEAK	PROB PEAK NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	CONSEQ	PROB	TRIAL
ERL FAT/TOTAL	0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0
CAN FAT/TOTAL	0-16.1 km	1.0000	1.76E-06	1.40E-06	3.10E-06	3.46E-06	4.48E-06	5.00E-06	6.60E-06	5.71E-05	4		

DOSE FOUND AT (R,THETA) LOCATION (Sv)

		PEAK	PEAK	PROB PEAK NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	CONSEQ	PROB	TRIAL
L-EDEWBODY (N)	0-0.3 km	0.4987	1.21E-02	0.00E+00	3.65E-02	5.28E-02	7.05E-02	7.15E-02	7.69E-02	1.71E-04	46		
L-EDEWBODY (N)	0.3-1.6 km	0.4162	1.89E-03	0.00E+00	6.87E-03	1.12E-02	1.66E-02	1.97E-02	2.91E-02	2.74E-03	4		
L-EDEWBODY (N)	1.6-3.2 km	0.4162	5.50E-04	0.00E+00	2.22E-03	3.52E-03	5.47E-03	6.30E-03	9.15E-03	2.74E-03	4		
L-EDEWBODY (N)	3.2-4.8 km	0.3879	2.48E-04	0.00E+00	1.04E-03	1.72E-03	2.49E-03	2.78E-03	3.80E-03	5.58E-05	19		
L-EDEWBODY (N)	4.8-6.4 km	0.3879	1.42E-04	0.00E+00	6.02E-04	1.03E-03	1.25E-03	1.37E-03	2.05E-03	5.58E-05	19		
L-EDEWBODY (N)	6.4-8.0 km	0.3879	9.12E-05	0.00E+00	3.14E-04	6.97E-04	9.57E-04	1.02E-03	1.29E-03	5.58E-05	19		
L-EDEWBODY (N)	8.0-9.7 km	0.3879	6.31E-05	0.00E+00	1.70E-04	4.62E-04	7.05E-04	7.27E-04	9.40E-04	1.49E-05	43		
L-EDEWBODY (N)	9.7-11.3 km	0.3879	4.70E-05	0.00E+00	1.43E-04	3.40E-04	5.42E-04	6.22E-04	7.06E-04	2.74E-03	4		
L-EDEWBODY (N)	11.3-12.9 km	0.3879	3.56E-05	0.00E+00	9.15E-05	2.65E-04	3.91E-04	4.46E-04	5.05E-04	1.49E-05	42		

L-EDEWBODY	(N)	12.9-14.5 km	0.3879	2.80E-05	0.00E+00	6.63E-05	2.13E-04	3.11E-04	3.57E-04
4.03E-04	2.74E-03	4							
L-EDEWBODY	(S)	0-0.3 km	0.0444	4.35E-04	0.00E+00	0.00E+00	0.00E+00	2.05E-02	2.39E-02
6.76E-02	2.85E-05	24							
L-EDEWBODY	(S)	0.3-1.6 km	0.0297	3.25E-05	0.00E+00	0.00E+00	0.00E+00	1.53E-03	2.40E-03
1.13E-02	2.85E-05	24							
L-EDEWBODY	(S)	1.6-3.2 km	0.0297	7.68E-06	0.00E+00	0.00E+00	0.00E+00	3.59E-04	5.53E-04
3.28E-03	2.85E-05	24							
L-EDEWBODY	(S)	3.2-4.8 km	0.0201	3.20E-06	0.00E+00	0.00E+00	0.00E+00	1.32E-04	2.31E-04
1.49E-03	2.85E-05	24							
L-EDEWBODY	(S)	4.8-6.4 km	0.0201	1.75E-06	0.00E+00	0.00E+00	0.00E+00	8.26E-05	1.14E-04
8.31E-04	2.85E-05	85							
L-EDEWBODY	(S)	6.4-8.0 km	0.0201	1.05E-06	0.00E+00	0.00E+00	0.00E+00	5.08E-05	7.37E-05
3.63E-04	2.85E-05	85							
L-EDEWBODY	(S)	8.0-9.7 km	0.0201	7.15E-07	0.00E+00	0.00E+00	0.00E+00	3.34E-05	4.76E-05
1.78E-04	2.85E-05	85							
L-EDEWBODY	(S)	9.7-11.3 km	0.0201	5.19E-07	0.00E+00	0.00E+00	0.00E+00	2.43E-05	3.34E-05
1.11E-04	2.85E-05	85							
L-EDEWBODY	(S)	11.3-12.9 km	0.0201	3.94E-07	0.00E+00	0.00E+00	0.00E+00	1.58E-05	2.69E-05
7.99E-05	2.85E-05	85							
L-EDEWBODY	(S)	12.9-14.5 km	0.0201	3.06E-07	0.00E+00	0.00E+00	0.00E+00	1.30E-05	2.05E-05
6.18E-05	2.85E-05	85							

**** Indicates that the value is outside resolution of the analysis.
Optionally increase number of trials for better resolution.

"ATMOS" DESCRIPTION = ATMOS INPUT FOR IPEC CALCULATIONS

"EARLY" DESCRIPTION = EARLY.IN, IPEC INPUT FROM THE EVACUATION TIME ESTIMATES

SOURCE TERM 1 OF 1:
NCF

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS BEING APPLIED

COHORT 1 = NO EVACUATION, RELOCATION MODELS APPLY EVERYWHE

			PROB		QUANTILES				
	PEAK	PEAK	PEAK NON-ZERO	MEAN	50TH	90TH	95TH	99TH	99.5TH
	CONSEQ	PROB	TRIAL						
HEALTH EFFECTS CASES									
ERL FAT/TOTAL	0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0									
CAN FAT/TOTAL	0-80.5 km	1.0000	7.20E-02	5.95E-02	1.18E-01	1.40E-01	2.03E-01	2.14E-01	4.67E-01
2.85E-05	85								
CAN FAT/TOTAL	0-16.1 km	1.0000	5.17E-02	4.44E-02	9.13E-02	1.08E-01	1.38E-01	1.53E-01	2.05E-01
5.71E-05	4								
ERL FAT/TOTAL	0-16.1 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0									

			PROB		QUANTILES				
	PEAK	PEAK	PEAK NON-ZERO	MEAN	50TH	90TH	95TH	99TH	99.5TH
	CONSEQ	PROB	TRIAL						
AVERAGE INDIVIDUAL RISK									
ERL FAT/TOTAL	0-0.3 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0									
ERL FAT/TOTAL	0.3-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0									

ERL FAT/TOTAL	1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0

			PROB		QUANTILES			
	PEAK	PEAK	PEAK NON-ZERO	MEAN	50TH	90TH	95TH	99TH
99.5TH	CONSEQ	PROB	TRIAL					
POPULATION DOSE (Sv)								
L-EDEWBODY TOT LIF	0-80.5 km	1.0000	1.57E+00	1.28E+00	3.01E+00	3.37E+00	4.38E+00	4.90E+00
1.03E+01	2.85E-05	85						

			PROB		QUANTILES			
	PEAK	PEAK	PEAK NON-ZERO	MEAN	50TH	90TH	95TH	99TH
99.5TH	CONSEQ	PROB	TRIAL					
POPULATION WEIGHTED RISK								
ERL FAT/TOTAL	0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0							
CAN FAT/TOTAL	0-16.1 km	1.0000	1.32E-07	1.18E-07	2.34E-07	2.98E-07	3.89E-07	4.36E-07
5.24E-07	5.71E-05	4						

			PROB		QUANTILES			
	PEAK	PEAK	PEAK NON-ZERO	MEAN	50TH	90TH	95TH	99TH
99.5TH	CONSEQ	PROB	TRIAL					
DOSE FOUND AT (R,THETA) LOCATION (Sv)								
L-EDEWBODY (N)	0-0.3 km	0.4987	1.59E-03	0.00E+00	4.62E-03	5.85E-03	8.57E-03	9.81E-03
1.45E-02	2.74E-03	4						
L-EDEWBODY (N)	0.3-1.6 km	0.4162	2.24E-04	0.00E+00	6.81E-04	1.02E-03	1.50E-03	1.78E-03
3.27E-03	2.74E-03	4						
L-EDEWBODY (N)	1.6-3.2 km	0.4162	6.62E-05	0.00E+00	2.08E-04	3.25E-04	5.17E-04	6.14E-04
1.11E-03	2.74E-03	4						
L-EDEWBODY (N)	3.2-4.8 km	0.3879	2.97E-05	0.00E+00	9.34E-05	1.63E-04	2.47E-04	2.76E-04
4.66E-04	2.74E-03	4						
L-EDEWBODY (N)	4.8-6.4 km	0.3879	1.69E-05	0.00E+00	5.41E-05	1.03E-04	1.50E-04	1.77E-04
2.60E-04	1.67E-04	20						
L-EDEWBODY (N)	6.4-8.0 km	0.3879	1.09E-05	0.00E+00	3.12E-05	6.72E-05	9.51E-05	1.06E-04
1.68E-04	1.67E-04	20						
L-EDEWBODY (N)	8.0-9.7 km	0.3879	7.49E-06	0.00E+00	1.96E-05	4.42E-05	7.16E-05	8.66E-05
1.18E-04	2.74E-03	4						
L-EDEWBODY (N)	9.7-11.3 km	0.3879	5.58E-06	0.00E+00	1.78E-05	3.31E-05	5.29E-05	6.20E-05
9.54E-05	2.74E-03	4						
L-EDEWBODY (N)	11.3-12.9 km	0.3879	4.20E-06	0.00E+00	9.78E-06	2.53E-05	3.87E-05	4.45E-05
6.90E-05	2.74E-03	4						
L-EDEWBODY (N)	12.9-14.5 km	0.3879	3.38E-06	0.00E+00	9.16E-06	2.06E-05	2.98E-05	3.92E-05
5.59E-05	2.74E-03	4						
L-EDEWBODY (S)	0-0.3 km	0.0444	6.46E-05	0.00E+00	0.00E+00	0.00E+00	3.01E-03	3.49E-03
6.98E-03	2.67E-06	13						
L-EDEWBODY (S)	0.3-1.6 km	0.0297	6.02E-06	0.00E+00	0.00E+00	0.00E+00	3.19E-04	4.19E-04
9.78E-04	2.85E-05	24						
L-EDEWBODY (S)	1.6-3.2 km	0.0297	1.56E-06	0.00E+00	0.00E+00	0.00E+00	1.01E-04	1.13E-04
2.91E-04	2.85E-05	24						
L-EDEWBODY (S)	3.2-4.8 km	0.0201	6.49E-07	0.00E+00	0.00E+00	0.00E+00	3.46E-05	5.10E-05
1.34E-04	2.85E-05	24						
L-EDEWBODY (S)	4.8-6.4 km	0.0201	3.56E-07	0.00E+00	0.00E+00	0.00E+00	2.08E-05	2.55E-05
7.40E-05	2.85E-05	85						
L-EDEWBODY (S)	6.4-8.0 km	0.0201	2.17E-07	0.00E+00	0.00E+00	0.00E+00	1.07E-05	1.37E-05
3.18E-05	2.85E-05	85						
L-EDEWBODY (S)	8.0-9.7 km	0.0201	1.47E-07	0.00E+00	0.00E+00	0.00E+00	7.78E-06	1.03E-05
2.03E-05	1.91E-06	8						
L-EDEWBODY (S)	9.7-11.3 km	0.0201	1.08E-07	0.00E+00	0.00E+00	0.00E+00	5.67E-06	8.08E-06
1.44E-05	1.91E-06	8						
L-EDEWBODY (S)	11.3-12.9 km	0.0201	8.11E-08	0.00E+00	0.00E+00			

0.00E+00 3.78E-06 6.08E-06 1.17E-05 1.91E-06   8
 L-EDEWBODY (S)   12.9-14.5 km 0.0201 6.66E-08 0.00E+00 0.00E+00
0.00E+00 3.23E-06 5.10E-06 9.20E-06 1.91E-06   8

 **** Indicates that the value is outside resolution of the analysis.
 Optionally increase number of trials for better resolution.

  "ATMOS" DESCRIPTION = ATMOS INPUT FOR IPEC CALCULATIONS

  "EARLY" DESCRIPTION = EARLY.IN, IPEC INPUT FROM THE EVACUATION TIME ESTIMATES

  "CHRONC" DESCRIPTION = CHRONC.IN - IPEC, "New" COMIDA2-Based Food Model

SOURCE TERM 1 OF 1:
    NCF

RESULTS FROM THE "CHRONC" MODULE ALONE

    COHORT 2 = CHRONC.IN - IPEC, "New" COMIDA2-Based Food Model

			PROB			QUANTILES	
	PEAK	PEAK	PEAK NON-ZERO	MEAN	50TH	90TH	95TH
99TH	99.5TH	CONSEQ	PROB	TRIAL			
HEALTH EFFECTS CASES							
CAN FAT/TOTAL	0-80.5 km	1.0000	9.45E-01	8.03E-01	1.64E+00		
2.07E+00	2.65E+00	2.95E+00	7.93E+00	2.85E-05	85		
CAN FAT/TOTAL	0-16.1 km	1.0000	6.48E-01	5.79E-01	1.07E+00		
1.20E+00	1.59E+00	1.80E+00	2.39E+00	5.71E-05	4		

			PROB			QUANTILES	
	PEAK	PEAK	PEAK NON-ZERO	MEAN	50TH	90TH	95TH
99TH	99.5TH	CONSEQ	PROB	TRIAL			
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF	0-80.5 km	1.0000	2.12E+01	1.68E+01	3.54E+01		
4.37E+01	5.97E+01	6.64E+01	1.77E+02	2.85E-05	85		

			PROB			QUANTILES	
	PEAK	PEAK	PEAK NON-ZERO	MEAN	50TH	90TH	95TH
99TH	99.5TH	CONSEQ	PROB	TRIAL			
POPULATION WEIGHTED RISK							
CAN FAT/TOTAL	0-16.1 km	1.0000	1.63E-06	1.34E-06	2.91E-06		
3.29E-06	4.17E-06	4.62E-06	6.07E-06	5.71E-05	4		

			PROB			QUANTILES	
	PEAK	PEAK	PEAK NON-ZERO	MEAN	50TH	90TH	95TH
99TH	99.5TH	CONSEQ	PROB	TRIAL			
DOSE FOUND AT (R,THETA) LOCATION (Sv)							
L-EDEWBODY (N)	0-0.3 km	0.4987	1.05E-02	0.00E+00	2.89E-02		
5.04E-02	5.76E-02	6.10E-02	7.06E-02	1.71E-04	46		
L-EDEWBODY (N)	0.3-1.6 km	0.4162	1.67E-03	0.00E+00	6.13E-03		
1.04E-02	1.52E-02	1.79E-02	2.59E-02	2.74E-03	4		
L-EDEWBODY (N)	1.6-3.2 km	0.4162	4.84E-04	0.00E+00	2.03E-03		
3.20E-03	4.37E-03	5.01E-03	8.04E-03	2.74E-03	4		
L-EDEWBODY (N)	3.2-4.8 km	0.3879	2.19E-04	0.00E+00	1.01E-03		
1.33E-03	2.28E-03	2.67E-03	3.34E-03	5.58E-05	19		
L-EDEWBODY (N)	4.8-6.4 km	0.3879	1.25E-04	0.00E+00	5.42E-04		
9.08E-04	1.12E-03	1.18E-03	1.85E-03	1.49E-05	14		

L-EDEWBODY (N)	6.4-8.0 km	0.3879	8.04E-05	0.00E+00	3.12E-04	6.08E-04	8.51E-04	9.43E-04	1.15E-03	1.49E-05	41
L-EDEWBODY (N)	8.0-9.7 km	0.3879	5.56E-05	0.00E+00	1.69E-04	3.95E-04	5.91E-04	6.55E-04	8.52E-04	1.49E-05	43
L-EDEWBODY (N)	9.7-11.3 km	0.3879	4.14E-05	0.00E+00	1.36E-04	3.15E-04	4.14E-04	4.65E-04	6.23E-04	1.49E-05	43
L-EDEWBODY (N)	11.3-12.9 km	0.3879	3.14E-05	0.00E+00	8.78E-05	2.30E-04	3.13E-04	3.26E-04	4.58E-04	1.49E-05	42
L-EDEWBODY (N)	12.9-14.5 km	0.3879	2.46E-05	0.00E+00	6.63E-05	2.00E-04	2.77E-04	3.03E-04	3.60E-04	1.49E-05	42
L-EDEWBODY (S)	0-0.3 km	0.0444	3.71E-04	0.00E+00	0.00E+00	0.00E+00	1.52E-02	2.15E-02	6.21E-02	2.85E-05	24
L-EDEWBODY (S)	0.3-1.6 km	0.0297	2.64E-05	0.00E+00	0.00E+00	0.00E+00	1.20E-03	2.03E-03	1.03E-02	2.85E-05	24
L-EDEWBODY (S)	1.6-3.2 km	0.0297	6.12E-06	0.00E+00	0.00E+00	0.00E+00	2.85E-04	4.58E-04	2.99E-03	2.85E-05	24
L-EDEWBODY (S)	3.2-4.8 km	0.0201	2.55E-06	0.00E+00	0.00E+00	0.00E+00	1.19E-04	2.00E-04	1.35E-03	2.85E-05	24
L-EDEWBODY (S)	4.8-6.4 km	0.0201	1.39E-06	0.00E+00	0.00E+00	0.00E+00	6.49E-05	1.03E-04	7.57E-04	2.85E-05	85
L-EDEWBODY (S)	6.4-8.0 km	0.0201	8.37E-07	0.00E+00	0.00E+00	0.00E+00	3.68E-05	6.13E-05	3.31E-04	2.85E-05	85
L-EDEWBODY (S)	8.0-9.7 km	0.0201	5.67E-07	0.00E+00	0.00E+00	0.00E+00	2.54E-05	3.91E-05	1.63E-04	2.85E-05	85
L-EDEWBODY (S)	9.7-11.3 km	0.0201	4.11E-07	0.00E+00	0.00E+00	0.00E+00	1.75E-05	2.82E-05	1.02E-04	2.85E-05	85
L-EDEWBODY (S)	11.3-12.9 km	0.0201	3.13E-07	0.00E+00	0.00E+00	0.00E+00	1.30E-05	2.02E-05	7.35E-05	2.85E-05	85
L-EDEWBODY (S)	12.9-14.5 km	0.0201	2.39E-07	0.00E+00	0.00E+00	0.00E+00	1.02E-05	1.52E-05	5.70E-05	2.85E-05	85

		PEAK	PEAK	PROB PEAK NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	CONSEQ	PROB	TRIAL
L-EDEWBODY	POP. DOSE (SV)	0-80.5 km											
TOTAL LONG-TERM PATHWAYS DOSE				1.0000	2.12E+01	1.68E+01	3.54E+01	4.37E+01	5.97E+01	6.64E+01	1.77E+02	2.85E-05	85
LONG-TERM DIRECT EXPOSURE PATHWAYS				1.0000	2.03E+01	1.52E+01	3.49E+01	4.34E+01	5.97E+01	6.64E+01	1.77E+02	2.85E-05	85
TOTAL INGESTION PATHWAYS DOSE				1.0000	8.98E-01	5.80E-01	2.19E+00	2.57E+00	3.28E+00	3.50E+00	3.59E+00	3.81E-03	66
LONG-TERM GROUNDSHINE DOSE				1.0000	1.97E+01	1.48E+01	3.36E+01	4.07E+01	5.69E+01	6.31E+01	1.72E+02	2.85E-05	85
LONG-TERM RESUSPENSION DOSE				1.0000	6.15E-01	5.18E-01	1.06E+00	1.23E+00	1.71E+00	1.97E+00	5.36E+00	2.85E-05	85
WATER INGESTION DOSE				1.0000	2.16E-02	2.11E-02	3.36E-02	3.76E-02	4.86E-02	5.50E-02	6.14E-02	2.74E-03	4
POP.-DEPENDENT DECONTAMINATION DOSE				0.2701	1.85E-03	0.00E+00	7.68E-03	1.17E-02	1.76E-02	2.14E-02	2.30E-02	4.11E-03	4
FARM-DEPENDENT DECONTAMINATION DOSE				0.2701	1.98E-07	0.00E+00	8.21E-07	1.17E-06	1.76E-06	2.19E-06	2.41E-06	4.11E-03	4
INGESTION OF GRAINS				1.0000	2.58E-02	1.73E-02	6.92E-02	7.71E-02	9.71E-02	1.01E-01	1.01E-01	3.81E-03	66
INGESTION OF LEAF VEG				1.0000	5.67E-02	2.11E-02	1.55E-01	2.75E-01	3.77E-01	4.18E-01	4.35E-01	3.81E-03	66
INGESTION OF ROOT CROPS				1.0000	3.40E-02	2.32E-02	8.91E-02	1.03E-01	1.20E-01	1.28E-01	1.32E-01	3.81E-03	66
INGESTION OF FRUITS				1.0000	5.02E-02	3.35E-02	1.13E-01	1.27E-01	1.65E-01	1.85E-01	1.94E-01	3.81E-03	66
INGESTION OF LEGUMES				1.0000	2.91E-02	2.02E-02	7.59E-02	8.68E-02	1.06E-01	1.11E-01	1.13E-01	3.81E-03	66
INGESTION OF BEEF				1.0000	2.66E-01	1.72E-01	6.36E-01						

7.15E-01	7.76E-01	8.04E-01	9.76E-01	1.14E-04	1			
INGESTION OF MILK				1.0000	3.14E-01	1.96E-01	7.76E-01	
8.89E-01	1.03E+00	1.05E+00	1.17E+00	1.14E-04	1			
INGESTION OF POULTRY				1.0000	8.18E-02	3.19E-02	2.27E-01	
3.21E-01	5.05E-01	5.44E-01	5.61E-01	3.81E-03	66			
INGESTION OF OTHER MEAT CROPS				1.0000	1.87E-02	1.17E-02	4.08E-02	
6.86E-02	9.54E-02	1.04E-01	1.06E-01	3.81E-03	66			

	PEAK	PEAK	PROB PEAK NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH
99TH	99.5TH	CONSEQ	PROB	TRIAL				
ECONOMIC COST MEASURES ($)		0-80.5 km						
TOTAL ECONOMIC COSTS			0.6461	5.11E+04	9.76E+02	1.81E+05		
3.10E+05	3.38E+05	3.50E+05	4.43E+05	5.71E-05	4			
POP.-DEPENDENT COSTS			0.2701	4.89E+04	0.00E+00	1.81E+05	****	
****	****	3.74E+05	6.41E-02	3				
FARM-DEPENDENT COSTS			0.6461	2.20E+03	4.06E+02	7.48E+03		
1.18E+04	2.32E+04	2.81E+04	6.92E+04	5.71E-05	4			
POP.-DEPENDENT DECONTAMINATION COST			0.2701	1.15E+04	0.00E+00	4.64E+04	****	
****	****	8.81E+04	6.41E-02	3				
FARM-DEPENDENT DECONTAMINATION COST			0.2701	9.47E+00	0.00E+00	3.97E+01	****	
****	****	7.12E+01	6.41E-02	3				
POP.-DEPENDENT INTERDICTION COST			0.2701	3.74E+04	0.00E+00	1.81E+05	****	
****	****	2.86E+05	6.41E-02	3				
FARM-DEPENDENT INTERDICTION COST			0.6461	2.19E+03	4.05E+02	7.47E+03		
1.18E+04	2.32E+04	2.81E+04	6.92E+04	5.71E-05	4			
POP.-DEPENDENT CONDEMNATION COST			0.0000	0.00E+00	0.00E+00	0.00E+00		
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
FARM-DEPENDENT CONDEMNATION COST			0.0000	0.00E+00	0.00E+00	0.00E+00		
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
EMERGENCY PHASE COST			0.0000	0.00E+00	0.00E+00	0.00E+00		
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
INTERMEDIATE PHASE COST			0.0000	0.00E+00	0.00E+00	0.00E+00		
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
MILK DISPOSAL COST			0.0000	0.00E+00	0.00E+00	0.00E+00		
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
CROP DISPOSAL COST			0.5964	2.78E-03	4.30E-04	7.49E-03		
1.13E-02	2.55E-02	7.12E-02	8.38E-02	1.48E-03	4			

**** Indicates that the value is outside resolution of the analysis.
Optionally increase number of trials for better resolution.

Successful completion of MACCS2 was achieved!
This job required a total of 1.688 CPU seconds

Input processing required 0.078 CPU seconds
Simulation required 1.547 CPU seconds
Output processing required 0.063 CPU seconds