From: "Moorer, Tom C." <TCMOORER@southernco.com>
To: "Mark Notich" <mdn@nrc.gov>,"Michael R Sackschewsky" <michael.sackschewsky@pnl.gov>
Date: 7/18/2007 11:35:20 AM
Subject: MACCS2 Input and Output File Revisions

<<VOUT.TXT>> <<VMET.INP>> <<VSITE.INP>> <<VCHRONC.INP>>
<<VEARLY.INP>>
<<VATMOS.INP>>
Mark:

The attached files represent the current input and output information for the MACCS2 run. They include the changes made in support of our recent teleconference with Van Ramsdell and Al Toblin. We will also be revising Chapter 7 of the ER to include this information in the next revision (Rev. 3) this Fall.

This information will be formally submitted for the docket in the next few days. This advance copy is provided to expedite your review. I hope that this resolves all of Van's questions regarding Chapter 7 issues.

TCM

Thomas C. Moorer
Southern Nuclear Development
Project Manager - Environmental
(205) 992-5807 (office)
(205) 902-7847 (cell)
(205) 438-1886 (LINC)
(205) 992-6108 (FAX)

Hearing Identifier: Vogtle_Public
Email Number: 451

Mail Envelope Properties (46B1A2DA.HQGWDO01.TWGWPO04.200.2000014.1.D4FF7.1)

Subject: MACCS2 Input and Output File Revisions
Creation Date: 7/18/2007 11:35:20 AM
From: "Moorer, Tom C." <TCMOORER@southernco.com>

Created By: TCMOORER@southernco.com

Recipients
"Mark Notich" <mdn@nrc.gov>
"Michael R Sackschewsky" <michael.sackschewsky@pnl.gov>

Post Office	**Route**
TWGWPO04.HQGWDO01	nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	828	7/18/2007 11:35:20 AM
VOUT.TXT	457043	8/2/2007 9:24:42 AM
VMET.INP	166621	8/2/2007 9:24:42 AM
VSITE.INP	10454	8/2/2007 9:24:42 AM
VCHRONC.INP	13308	8/2/2007 9:24:42 AM
VEARLY.INP	13611	8/2/2007 9:24:42 AM
VATMOS.INP	20308	8/2/2007 9:24:42 AM
Mime.822	956482	8/2/2007 9:24:42 AM

Options
Priority: Standard
Reply Requested: No
Return Notification: None
None

Concealed Subject: No
Security: Standard

```
MACCS2 14-JUL-07  09:28:11   VERSION 1.13.1:  last revised 1/8/04, K. McFadden
P1:  ATMOS USER INPUT (UNIT 24) = V.ATM
P2:  EARLY USER INPUT (UNIT 25) = V.ERL
P3: CHRONC USER INPUT (UNIT 26) = V.CHR
P4:  METEOROLOGY DATA (UNIT 28) = V.MET
P5:   SITE DATA INPUT (UNIT 29) = V.SIT
P6:       LIST OUTPUT (UNIT 06) = V.OUT



USER INPUT IS READ FROM UNIT 24
RECORD IDENTIFIER FIELDS  11 CHARACTERS LONG ARE EXPECTED.
THE FIRST 100 COLUMNS OF EACH INPUT RECORD ARE PROCESSED.
THE MAXIMUM NUMBER OF IDENTIFIER RECORDS THAT MAY BE SAVED AS THE BASE CASE IS
1000.

RECORD
NUMBER                          RECORD

     ********************************************************************************
     * FILE NAME:   VATMOS.INP
     *
     * GENERAL DESCRIPTIVE TITLE DESCRIBING THIS "ATMOS" INPUT
     *
   1  RIATNAM1001 'ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000'
     *
     ********************************************************************************
     * GEOMETRY DATA BLOCK, LOADED BY INPGEO, STORED IN /GEOM/
     *
     * NUMBER OF RADIAL SPATIAL ELEMENTS
     *
   2  GENUMRAD001 10
     *
     * SPATIAL ENDPOINT DISTANCES IN MILES    [SEE SIT FILE]
     *
     *        END001   1     2     3     4     5
     *        END002  10    20    30    40    50
     *
     * SPATIAL ENDPOINT DISTANCES IN KILOMETERS
     *
   3  GESPAEND001   1.6093    3.2187    4.8280    6.4374    8.0467
   4  GESPAEND002  16.0935   32.1869   48.2804   64.3739   80.4674
     ********************************************************************************
     * NUCLIDE DATA BLOCK, LOADED BY INPISO, STORED IN /ISOGRP/, /ISONAM/
     *
     * Number of pseudo-stable nuclides (used to truncate the decay chains)
     *                                        [1:page 5-7]
   5  ISNUMSTB001      27
     *
     * List of pseudo-stable nuclides
     *                                        [1:page 5-7]
   6  ISNAMSTB001     I-129    (daughter of Te-129 and Te-129m)
   7  ISNAMSTB002     Xe-131m  (daughter of I-131)
   8  ISNAMSTB003     Xe-133m  (daughter of I-133)
   9  ISNAMSTB004     Xe-135m  (daughter of I-135)
  10  ISNAMSTB005     Cs-135   (daughter of Xe-135 and Xe-135m)
```

```
11  ISNAMSTB006     Sm-147   (daughter of Pm-147)
12  ISNAMSTB007     U-234    (daughter of Pu-238)
13  ISNAMSTB008     U-235    (daughter of Pu-239)
14  ISNAMSTB009     U-236    (daughter of Pu-240)
15  ISNAMSTB010     U-237    (daughter of Pu-241)
16  ISNAMSTB011     Np-237   (daughter of Am-241)
17  ISNAMSTB012     Rb-87    (daughter of Kr-87)
18  ISNAMSTB013     Ba-137m  (daughter of Cs-137)
19  ISNAMSTB014     Rb-88    (daughter of Kr-88)
20  ISNAMSTB015     Y-91m    (daughter of Sr-91)
21  ISNAMSTB016     Zr-93    (daughter of Y-93)
22  ISNAMSTB017     Nb-93m   (daughter of Zr-93)
23  ISNAMSTB018     Nb-95m   (daughter of Zr-95)
24  ISNAMSTB019     Nb-97    (daughter of Zr-97 and Nb-97m)
25  ISNAMSTB020     Nb-97m   (daughter of Zr-97)
26  ISNAMSTB021     Tc-99    (daughter of Mo-99)
27  ISNAMSTB022     Rh-103m  (daughter of Ru-103)
28  ISNAMSTB023     Rh-106   (daughter of Ru-106)
29  ISNAMSTB024     Te-131   (daughter of Te-131m)
30  ISNAMSTB025     Pr-144   (daughter of Ce-144 and Pr-144m)
31  ISNAMSTB026     Pr-144m  (daughter of Ce-144)
32  ISNAMSTB027     Pm-147   (daughter of Nd-147)
    *
    * Number of radioactive nuclides to be considered
    *
33  ISNUMISO001 60
    *
    * NUMBER OF NUCLIDE GROUPS
    *
34  ISMAXGRP001  9
    *
    * WET AND DRY DEPOSITION FLAGS FOR EACH NUCLIDE GROUP
    *
    *            WETDEP     DRYDEP
    *
35  ISDEPFLA001    .FALSE.   .FALSE.
36  ISDEPFLA002    .TRUE.    .TRUE.
37  ISDEPFLA003    .TRUE.    .TRUE.
38  ISDEPFLA004    .TRUE.    .TRUE.
39  ISDEPFLA005    .TRUE.    .TRUE.
40  ISDEPFLA006    .TRUE.    .TRUE.
41  ISDEPFLA007    .TRUE.    .TRUE.
42  ISDEPFLA008    .TRUE.    .TRUE.
43  ISDEPFLA009    .TRUE.    .TRUE.
    *
    * NUCLIDE GROUP DATA FOR 9 NUCLIDE GROUPS
    *  (SAME AS 1150 EXCEPT LOWER CASE NUCNAM, NO PARENT OR HALFLIFE [1:page 5-7]
    *            NUCNAM    IGROUP
    *
44  ISOTPGRP001     Co-58       6
45  ISOTPGRP002     Co-60       6
46  ISOTPGRP003     Kr-85       1
47  ISOTPGRP004     Kr-85m      1
48  ISOTPGRP005     Kr-87       1
49  ISOTPGRP006     Kr-88       1
50  ISOTPGRP007     Rb-86       3
```

```
 51  ISOTPGRP008     Sr-89       5
 52  ISOTPGRP009     Sr-90       5
 53  ISOTPGRP010     Sr-91       5
 54  ISOTPGRP011     Sr-92       5
 55  ISOTPGRP012     Y-90        7
 56  ISOTPGRP013     Y-91        7
 57  ISOTPGRP014     Y-92        7
 58  ISOTPGRP015     Y-93        7
 59  ISOTPGRP016     Zr-95       7
 60  ISOTPGRP017     Zr-97       7
 61  ISOTPGRP018     Nb-95       7
 62  ISOTPGRP019     Mo-99       6
 63  ISOTPGRP020     Tc-99m      6
 64  ISOTPGRP021     Ru-103      6
 65  ISOTPGRP022     Ru-105      6
 66  ISOTPGRP023     Ru-106      6
 67  ISOTPGRP024     Rh-105      6
 68  ISOTPGRP025     Sb-127      4
 69  ISOTPGRP026     Sb-129      4
 70  ISOTPGRP027     Te-127      4
 71  ISOTPGRP028     Te-127m     4
 72  ISOTPGRP029     Te-129      4
 73  ISOTPGRP030     Te-129m     4
 74  ISOTPGRP031     Te-131m     4
 75  ISOTPGRP032     Te-132      4
 76  ISOTPGRP033     I-131       2
 77  ISOTPGRP034     I-132       2
 78  ISOTPGRP035     I-133       2
 79  ISOTPGRP036     I-134       2
 80  ISOTPGRP037     I-135       2
 81  ISOTPGRP038     Xe-133      1
 82  ISOTPGRP039     Xe-135      1
 83  ISOTPGRP040     Cs-134      3
 84  ISOTPGRP041     Cs-136      3
 85  ISOTPGRP042     Cs-137      3
 86  ISOTPGRP043     Ba-139      9
 87  ISOTPGRP044     Ba-140      9
 88  ISOTPGRP045     La-140      7
 89  ISOTPGRP046     La-141      7
 90  ISOTPGRP047     La-142      7
 91  ISOTPGRP048     Ce-141      8
 92  ISOTPGRP049     Ce-143      8
 93  ISOTPGRP050     Ce-144      8
 94  ISOTPGRP051     Pr-143      7
 95  ISOTPGRP052     Nd-147      7
 96  ISOTPGRP053     Np-239      8
 97  ISOTPGRP054     Pu-238      8
 98  ISOTPGRP055     Pu-239      8
 99  ISOTPGRP056     Pu-240      8
100  ISOTPGRP057     Pu-241      8
101  ISOTPGRP058     Am-241      7
102  ISOTPGRP059     Cm-242      7
103  ISOTPGRP060     Cm-244      7
   ******************************************************************************
   * WET DEPOSITION DATA BLOCK, LOADED BY INPWET, STORED IN /WETCON/
   *
```

```
   * WASHOUT COEFFICIENT NUMBER ONE, LINEAR FACTOR
   *
104  WDCWASH1001  9.5E-5   (JON HELTON AFTER JONES, 1986)
   *
   * WASHOUT COEFFICIENT NUMBER TWO, EXPONENTIAL FACTOR
   *
105  WDCWASH2001  0.8      (JON HELTON AFTER JONES, 1986)
   ********************************************************************************
   * DRY DEPOSITION DATA BLOCK, LOADED BY INPDRY, STORED IN /DRYCON/
   *
   * NUMBER OF PARTICLE SIZE GROUPS
   *
106  DDNPSGRP001   3
   *
   * DEPOSITION VELOCITY OF EACH PARTICLE SIZE GROUP (M/S)
   *
107  DDVDEPOS001   0.0     0.01     0.001    (values from URD)
   *  First value is for volatile iodine (5% of total; see PSDIST002)
   *  Second value is for particulate iodine (95% ; see PSDIST002)
   *  Third value is for all other particulates except iodine (see PSDIST 3-9)
   ********************************************************************************
   * DISPERSION PARAMETER DATA BLOCK, LOADED BY INPDIS, STORED IN /DISPY/, /DISPZ/
   *
   * # of distances in plume-size tables--which can be used as an alternative to the power-law model:
   * (to utilize the power-law model, set NUM_DIST to zero or delete the following data card)
   *
108  NUM_DIST001   0
   *
   * SIGMA = A * X ** B
   *
   * Taken from URD
   * P-G CLASS:          A          B          C          D          E          F
109  DPCYSIGA001        0.3658     0.2751     0.2089     0.1474     0.1046     0.0722
110  DPCYSIGB001        0.9031     0.9031     0.9031     0.9031     0.9031     0.9031
111  DPCZSIGA001        2.47E-4    0.078      0.144      0.368      0.2517     0.184
112  DPCZSIGB001        2.118      1.085      0.911      0.6764     0.6720     0.6546
   *
   *  LINEAR SCALING FACTOR FOR SIGMA-Y FUNCTION, NORMALLY 1
   *
113  DPYSCALE001    1.
   *
   *  LINEAR SCALING FACTOR FOR SIGMA-Z FUNCTION,
   *  NORMALLY USED FOR SURFACE ROUGHNESS LENGTH CORRECTION.
   *  (Z1 / Z0) ** 0.2,   FROM CRAC2 WE HAVE  (10 CM / 3 CM) ** 0.2 = 1.27
   *
114  DPZSCALE001    1.27
   ******************************************************************************** *
   * EXPANSION FACTOR DATA BLOCK, LOADED BY INPEXP, STORED IN /EXPAND/
   *
   * TIME BASE FOR EXPANSION FACTOR (SECONDS)
   *
115  PMTIMBAS001    180.   (from Westinghouse ATMOS file)
   *
   * BREAK POINT FOR FORMULA CHANGE (SECONDS)
   *
116  PMBRKPNT001   3600.   (1 HOUR)
```

```
    *
    * EXPONENTIAL EXPANSION FACTOR NUMBER 1
    *
117  PMXPFAC1001      0.2
    *
    * EXPONENTIAL EXPANSION FACTOR NUMBER 2
    *
118  PMXPFAC2001      0.25
    ********************************************************************************
    * PLUME RISE DATA BLOCK, LOADED BY INPLRS, STORED IN /PLUMRS/
    *
    * SCALING FACTOR FOR THE CRITICAL WIND SPEED FOR ENTRAINMENT OF A BOUYANT
PLUME
    * (USED BY FUNCTION CAUGHT)
    *
119  PRSCLCRW001   1.
    *
    * SCALING FACTOR FOR THE A-D STABILITY PLUME RISE FORMULA
    * (USED BY FUNCTION PLMRIS)
    *
120  PRSCLADP001   1.
    *
    * SCALING FACTOR FOR THE E-F STABILITY PLUME RISE FORMULA
    * (USED BY FUNCTION PLMRIS)
    *
121  PRSCLEFP001   1.
    ********************************************************************************
    * RELEASE DATA BLOCK, LOADED BY INPREL, STORED IN /ATNAM2/, /MULREL/
    ********************** RELEASE DATA BLOCK *************
    *
    *    Vogtle ESP CONTAINMENT VESSEL (DCD REV16 P.3.8-1)
    *       height 215'4" (65.63 meters)  X  width 130' (39.62 meters)
    *
    * Initial value of sigma-y for each plume
    *
122  SIGYINIT001   9.21   9.21   9.21   9.21  *(initial sigma-y = W/4.3)
    *
    * Initial value of sigma-z for each plume
    *
123  SIGZINIT001  30.53  30.53  30.53  30.53  *(initial sigma-z = H/2.15)
    *
    * Building height (meters)
    *
124  WEBUILDH001  65.63  65.63  65.63  65.63  *(Height of Vogtle ESP containment)
    *
    * PARTICLE SIZE DISTRIBUTION OF EACH NUCLIDE GROUP
    * YOU MUST SPECIFY A COLUMN OF DATA FOR EACH OF THE PARTICLE SIZE GROUPS
    *
125  RDPSDIST001      0.0    0.0    1.0
126  RDPSDIST002      0.05   0.95   0.0
127  RDPSDIST003      0.0    0.0    1.0
128  RDPSDIST004      0.0    0.0    1.0
129  RDPSDIST005      0.0    0.0    1.0
130  RDPSDIST006      0.0    0.0    1.0
131  RDPSDIST007      0.0    0.0    1.0
132  RDPSDIST008      0.0    0.0    1.0
```

```
133  RDPSDIST009     0.0    0.0    1.0
   *
   * AP1000 CORE INVENTORY, END-OF-CYCLE from AP1000 DCD, Rev 12 (in Rev 14)
   *
   *
   *            NUCNAM       CORINV (Bq)
   *
134  RDCORINV001    Co-58        0.0
135  RDCORINV002    Co-60        0.0
136  RDCORINV003    Kr-85        3.92E+16
137  RDCORINV004    Kr-85m       9.73E+17
138  RDCORINV005    Kr-87        1.88E+18
139  RDCORINV006    Kr-88        2.64E+18
140  RDCORINV007    Rb-86        8.47E+15
141  RDCORINV008    Sr-89        3.57E+18
142  RDCORINV009    Sr-90        3.07E+17
143  RDCORINV010    Sr-91        4.44E+18
144  RDCORINV011    Sr-92        4.77E+18
145  RDCORINV012    Y-90         3.20E+17
146  RDCORINV013    Y-91         4.59E+18
147  RDCORINV014    Y-92         4.81E+18
148  RDCORINV015    Y-93         5.51E+18
149  RDCORINV016    Zr-95        6.14E+18
150  RDCORINV017    Zr-97        6.07E+18
151  RDCORINV018    Nb-95        6.18E+18
152  RDCORINV019    Mo-99        6.81E+18
153  RDCORINV020    Tc-99m       5.96E+18
154  RDCORINV021    Ru-103       5.37E+18
155  RDCORINV022    Ru-105       3.64E+18
156  RDCORINV023    Ru-106       1.76E+18
157  RDCORINV024    Rh-105       3.33E+18
158  RDCORINV025    Sb-127       3.81E+17
159  RDCORINV026    Sb-129       1.15E+18
160  RDCORINV027    Te-127       3.77E+17
161  RDCORINV028    Te-127m      4.88E+16
162  RDCORINV029    Te-129       1.12E+18
163  RDCORINV030    Te-129m      1.67E+17
164  RDCORINV031    Te-131m      5.18E+17
165  RDCORINV032    Te-132       5.11E+18
166  RDCORINV033    I-131        3.56E+18
167  RDCORINV034    I-132        5.18E+18
168  RDCORINV035    I-133        7.36E+18
169  RDCORINV036    I-134        8.07E+18
170  RDCORINV037    I-135        6.88E+18
171  RDCORINV038    Xe-133       7.03E+18
172  RDCORINV039    Xe-135       1.79E+18
173  RDCORINV040    Cs-134       7.18E+17
174  RDCORINV041    Cs-136       2.05E+17
175  RDCORINV042    Cs-137       4.18E+17
176  RDCORINV043    Ba-139       6.59E+18
177  RDCORINV044    Ba-140       6.33E+18
178  RDCORINV045    La-140       6.73E+18
179  RDCORINV046    La-141       5.99E+18
180  RDCORINV047    La-142       5.81E+18
181  RDCORINV048    Ce-141       6.03E+18
182  RDCORINV049    Ce-143       5.62E+18
```

```
183  RDCORINV050     Ce-144        4.55E+18
184  RDCORINV051     Pr-143        5.40E+18
185  RDCORINV052     Nd-147        2.40E+18
186  RDCORINV053     Np-239        7.14E+19
187  RDCORINV054     Pu-238        1.42E+16
188  RDCORINV055     Pu-239        1.25E+15
189  RDCORINV056     Pu-240        1.83E+15
190  RDCORINV057     Pu-241        4.11E+17
191  RDCORINV058     Am-241        4.63E+14
192  RDCORINV059     Cm-242        1.09E+17
193  RDCORINV060     Cm-244        1.346E+16
   *


   *
194  RDCORSCA001   1.000
   *
195  RDAPLFRC001   PARENT      (apply rel fracs the same as prior versions)
   *
   ********************************************************************************
   * OUTPUT CONTROL DATA BLOCK, LOADED BY INPOPT, STORED IN /STOPME/, /ATMOPT/
   *
   * FLAG TO INDICATE THAT THIS IS THE LAST PROGRAM IN THE SERIES TO BE RUN
   *
196  OCENDAT1001  .FALSE. (SET THIS VALUE TO .TRUE. TO SKIP EARLY AND CHRONC)
   *
197  OCIDEBUG001  0
   *
   * NAME OF THE NUCLIDE TO BE LISTED ON THE DISPERSION LISTINGS
   *
   *OCNUCOUT001  Cs-137
   *
   *            NUM0              NO TABLES OUTPUT=0
198  TYPE0NUMBER      0
   *
   *            INDREL   INDRAD
   *TYPE0OUT001      1        4
   *TYPE0OUT002      1       10        XCCDF
   ********************************************************************************
   * METEOROLOGICAL SAMPLING DATA BLOCK
   *
   * METEOROLOGICAL SAMPLING OPTION CODE:
   *
   * METCOD = 1, USER SPECIFIED DAY AND HOUR IN THE YEAR (FROM MET FILE),
   *         2, WEATHER CATEGORY BIN SAMPLING,
   *         3, 120 HOURS OF WEATHER SPECIFIED ON THE ATMOS USER INPUT FILE,
   *         4, CONSTANT MET (BOUNDARY WEATHER USED FROM THE START),
   *         5, STRATIFIED RANDOM SAMPLES FOR EACH DAY OF THE YEAR.
   *
199  M1METCOD001  2
   *
   * LAST SPATIAL INTERVAL FOR MEASURED WEATHER
   *
200  M2LIMSPA001  10                    (ADJUSTED FOR RADIAL INTVL)
   *
   * BOUNDARY WEATHER MIXING LAYER HEIGHT
   *
```

```
201  M2BNDMXH001  1500.  (METERS; used by Westinghouse)
   *
   * BOUNDARY WEATHER STABILITY CLASS INDEX
   *
202  M2IBDSTB001  4      (D-STABILITY; Westinghouse used 6 for F class)
   *
   * BOUNDARY WEATHER RAIN RATE
   *
203  M2BNDRAN001  0.     (MM/HR)
   *
   * BOUNDARY WEATHER WIND SPEED
   *
204  M2BNDWND001  2.0     (M/S; used by Westinghouse)
   *
   * NUMBER OF RAIN DISTANCE INTERVALS FOR BINNING
   *
205  M4NRNINT001    5
   *                                nureg 4551 [4:page a-9]
   * ENDPOINTS OF THE RAIN DISTANCE INTERVALS (KILOMETERS)
   *
   * NOTE:   THESE MUST BE CHOSEN TO MATCH THE SPATIAL ENDPOINT DISTANCES
   * SPECIFIED FOR ARRAY SPAEND (10 % ERROR IS ALLOWED).
   *
206  M4RNDSTS001  3.22  8.05  16.09  48.28  80.47  KM
   *
   * NUMBER OF RAIN INTENSITIY BREAKPOINTS
   *
207  M4NRINTN001   3
   *
   * RAIN INTENSITY BREAKPOINTS FOR WEATHER BINNING (MILLIMETERS PER HOUR)
   *
208  M4RNRATE001   2.  4.  6.
   *
   * NUMBER OF SAMPLES PER BIN
   *
209  M4NSMPLS001  4  (THIS NUMBER SHOULD BE SET TO AT LEAST 4 WHEN METCOD=2)
   *
   * INITIAL SEED FOR RANDOM NUMBER GENERATOR
   *
210  M4IRSEED001   79
   ********************** RELEASE DATA BLOCK *************
   * SOURCE TERM NUMBER 1 OF 6
   *
211  RDATNAM2001 'CFI'
212  RDOALARM001 2924. * value provided by Westinghouse for all source terms
213  RDNUMREL001 4 *four plume segments
214  RDMAXRIS001 1 *first plume segment carries greatest risk
215  RDREFTIM001 0.5 0.5 0.5 0.5
216  RDPLHEAT001 0.0 0.0 0.0 0.0 *neglects buoyant plume rise
217  RDPLHITE001  0.  0.  0.  0.  *Release height of each plume (meters above grade)
218  RDPLUDUR001 29666. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
219  RDPDELAY001 2924. 32590. 86420. 172800. *start at Table 49-2 values
   * XE/KR I CS TE(SB) SR RU(MO) LA CE BA
220  RDRELFRC001 5.40E-1 3.19E-3 3.18E-3 4.18E-4 2.11E-2 9.11E-3 3.53E-3 2.64E-5 1.62E-2
221  RDRELFRC002 2.58E-1 1.35E-4 1.35E-4 1.67E-5 6.50E-4 1.68E-4 4.53E-3 1.68E-5 3.40E-4
222  RDRELFRC003 8.40E-2 0.00E0 0.00E0 4.47E-6 0.00E0 0.00E0 6.00E-3 2.17E-5 0.00E0
```

```
  223  RDRELFRC004 3.83E-2 0.00E0 0.00E0 1.57E-6 0.00E0 0.00E0 5.22E-3 1.89E-5 0.00E0
       .
******** TERMINATOR RECORD ENCOUNTERED -- END OF BASE CASE USER INPUT ********


USER INPUT PROCESSING SUMMARY - BASE CASE

NUMBER OF RECORDS READ                        =  430
NUMBER OF BLANK OR COMMENT RECORDS READ        =  206
NUMBER OF TERMINATOR RECORDS                   =    1
NUMBER OF RECORDS PROCESSED                    =  223
    NUMBER OF PROCESSED RECORDS DUPLICATED     =    0
    NUMBER OF PROCESSED RECORDS SORTED         =  223
*****************************************************************************************************



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

RELEASED INVENTORY OF ALL PLUMES

Kr-85	2.12E+16	1.01E+16	3.29E+15	1.50E+15
Kr-85m	2.45E+17	2.85E+16	9.19E+14	1.02E+13
Kr-87	6.90E+16	2.29E+14	2.15E+10	2.05E+04
Kr-88	4.28E+17	2.21E+16	1.87E+14	2.44E+11
Rb-86	2.67E+13	1.12E+12	0.00E+00	0.00E+00
Sr-89	7.51E+16	2.30E+15	0.00E+00	0.00E+00
Sr-90	6.48E+15	2.00E+14	0.00E+00	0.00E+00
Sr-91	6.54E+16	1.04E+15	0.00E+00	0.00E+00
Sr-92	2.85E+16	8.52E+13	0.00E+00	0.00E+00
Y-90	1.41E+15	1.27E+15	1.40E+15	9.41E+14
Y-91	1.62E+16	2.07E+16	2.71E+16	2.33E+16
Y-92	3.85E+16	1.76E+15	9.86E+13	7.81E+11
Y-93	1.39E+16	9.51E+15	4.52E+15	7.57E+14
Zr-95	2.16E+16	2.76E+16	3.64E+16	3.13E+16
Zr-97	1.75E+16	1.55E+16	1.11E+16	3.60E+15
Nb-95	2.18E+16	2.80E+16	3.71E+16	3.22E+16
Mo-99	5.89E+16	9.87E+14	0.00E+00	0.00E+00
Tc-99m	5.37E+16	9.31E+14	0.00E+00	0.00E+00
Ru-103	4.87E+16	8.93E+14	0.00E+00	0.00E+00
Ru-105	1.54E+16	6.82E+13	0.00E+00	0.00E+00
Ru-106	1.60E+16	2.95E+14	0.00E+00	0.00E+00
Rh-105	2.97E+16	4.82E+14	0.00E+00	0.00E+00
Sb-127	1.53E+14	5.73E+12	1.37E+12	4.02E+11
Sb-129	2.18E+14	2.01E+12	4.90E+10	3.66E+08
Te-127	1.55E+14	5.93E+12	1.46E+12	4.43E+11
Te-127m	2.04E+13	8.16E+11	2.19E+11	7.68E+10
Te-129	2.72E+14	3.94E+12	5.30E+11	1.65E+11
Te-129m	6.98E+13	2.78E+12	7.34E+11	2.53E+11
Te-131m	1.93E+14	6.25E+12	1.18E+12	2.39E+11
Te-132	2.04E+15	7.53E+13	1.77E+13	5.02E+12
I-131	1.12E+16	4.57E+14	1.29E+11	6.21E+10
I-132	5.35E+15	8.65E+13	1.82E+13	5.17E+12
I-133	1.99E+16	6.22E+14	0.00E+00	0.00E+00
I-134	5.21E+14	1.63E+10	0.00E+00	0.00E+00
I-135	1.31E+16	2.13E+14	0.00E+00	0.00E+00
Xe-133	3.70E+18	1.68E+18	5.03E+17	2.01E+17
Xe-135	6.68E+17	1.58E+17	1.65E+16	1.20E+15
Cs-134	2.28E+15	9.69E+13	0.00E+00	0.00E+00
Cs-136	6.45E+14	2.68E+13	0.00E+00	0.00E+00
Cs-137	1.33E+15	5.64E+13	0.00E+00	0.00E+00
Ba-139	8.94E+15	1.91E+12	0.00E+00	0.00E+00
Ba-140	1.01E+17	2.08E+15	0.00E+00	0.00E+00
La-140	3.01E+16	2.44E+16	2.45E+16	1.41E+16

La-141	8.86E+15	2.28E+15	2.16E+14	2.73E+12
La-142	2.23E+15	4.75E+13	7.56E+10	1.36E+06
Ce-141	2.20E+14	2.24E+14	3.04E+14	2.60E+14
Ce-143	1.34E+14	7.03E+13	6.63E+13	3.49E+13
Ce-144	1.20E+14	7.63E+13	9.84E+13	8.55E+13
Pr-143	1.89E+16	2.37E+16	3.05E+16	2.52E+16
Nd-147	8.36E+15	1.05E+16	1.33E+16	1.09E+16
Np-239	1.77E+15	1.01E+15	1.09E+15	7.04E+14
Pu-238	3.77E+11	2.45E+11	3.25E+11	2.95E+11
Pu-239	3.30E+10	2.11E+10	2.72E+10	2.38E+10
Pu-240	4.83E+10	3.08E+10	3.97E+10	3.46E+10
Pu-241	1.09E+13	6.90E+12	8.92E+12	7.77E+12
Am-241	1.63E+12	2.10E+12	2.78E+12	2.42E+12
Cm-242	3.84E+14	4.93E+14	6.51E+14	5.64E+14
Cm-244	4.75E+13	6.10E+13	8.07E+13	7.02E+13

READING FROM A WEATHER FILE WITH THE FOLLOWING HEADER:
DAY HR DR SPS RN (Julian Date, Hour, Direction, Speed, Stability, Precipitation
BLANK LINE
METEOROLOGICAL DATA FILE CONTAINS 463 HOURS OF OBSERVED RAIN DATA.
ACCUMULATED RAIN MEASUREMENTS TOTALED 32.74 INCHES FOR THE YEAR.
CONSTANT LID HEIGHTS (M) FOR 4 SEASONS = 1500 1500 1500 1500
NON-ZERO WINDSPEEDS LESS THAN 0.5 M/S ARE SET TO 0.5 M/S
NUMTRI= 139

* * * * 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 5 INTERVAL ENDPOINTS ARE 3 8 16 48 80
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	0.060	0.069	0.091	0.077	0.077	0.044	0.019	0.042	0.044	0.054	0.054	0.104	0.094	0.083	0.044	0.046	481	5.4909
2 B 4	0.022	0.053	0.068	0.122	0.112	0.070	0.048	0.073	0.070	0.036	0.057	0.082	0.091	0.031	0.043	0.022	645	7.3630
3 D 1	0.022	0.065	0.043	0.087	0.087	0.065	0.065	0.000	0.022	0.065	0.130	0.043	0.043	0.065	0.087	0.109	46	0.5251
4 D 2	0.046	0.052	0.058	0.074	0.058	0.066	0.062	0.064	0.104	0.072	0.060	0.088	0.068	0.044	0.038	0.042	498	5.6849
5 D 3	0.048	0.055	0.076	0.076	0.069	0.056	0.066	0.069	0.121	0.089	0.073	0.056	0.057	0.027	0.026	0.036	768	8.7671
6 D 4	0.025	0.062	0.089	0.082	0.088	0.046	0.042	0.083	0.094	0.058	0.097	0.078	0.046	0.029	0.051	0.031	650	7.4201
7 D 5	0.013	0.079	0.118	0.053	0.132	0.145	0.066	0.039	0.105	0.118	0.026	0.039	0.000	0.000	0.039	0.026	76	0.8676

8 D 6 0.000 0.000 0.250 0.000 0.250 0.000 0.000 0.000 0.000 0.000 0.000 0.250 0.000 0.000 0.250 0.000 4 0.0457
9 E 1 0.124 0.046 0.046 0.065 0.092 0.046 0.046 0.033 0.072 0.052 0.026 0.065 0.065 0.059 0.052 0.111 153 1.7466
10 E 2 0.081 0.072 0.091 0.078 0.074 0.038 0.044 0.029 0.047 0.050 0.072 0.055 0.062 0.065 0.056 0.084 678 7.7397
11 E 3 0.067 0.060 0.092 0.069 0.081 0.050 0.031 0.048 0.041 0.069 0.063 0.062 0.050 0.053 0.085 0.079 682 7.7854
12 E 4 0.019 0.047 0.099 0.030 0.068 0.068 0.058 0.088 0.079 0.118 0.082 0.047 0.025 0.019 0.123 0.030 365 4.1667
13 F 1 0.056 0.056 0.074 0.074 0.071 0.063 0.051 0.036 0.061 0.036 0.081 0.068 0.086 0.077 0.048 0.063 607 6.9292
14 F 2 0.057 0.093 0.121 0.127 0.085 0.060 0.031 0.041 0.044 0.028 0.039 0.064 0.062 0.058 0.039 0.051 1351 15.4224
15 F 3 0.068 0.093 0.084 0.037 0.031 0.031 0.031 0.068 0.080 0.046 0.121 0.105 0.068 0.043 0.040 0.053 323 3.6872
16 F 4 0.000 0.097 0.065 0.065 0.032 0.000 0.032 0.161 0.065 0.097 0.194 0.000 0.032 0.000 0.000 0.161 31 0.3539
17 R1 3 0.080 0.111 0.057 0.043 0.037 0.006 0.034 0.034 0.088 0.063 0.071 0.114 0.051 0.068 0.097 0.048 352 4.0183
18 R1 8 0.102 0.119 0.017 0.051 0.051 0.017 0.051 0.085 0.017 0.017 0.034 0.051 0.153 0.119 0.068 0.051 59 0.6735
19 R1 16 0.092 0.101 0.025 0.034 0.034 0.017 0.084 0.034 0.067 0.084 0.059 0.076 0.067 0.067 0.067 0.092 119 1.3584
20 R1 48 0.097 0.073 0.063 0.031 0.010 0.014 0.024 0.045 0.094 0.087 0.087 0.076 0.101 0.056 0.069 0.073 288 3.2877
21 R1 80 0.063 0.095 0.100 0.036 0.023 0.018 0.000 0.009 0.050 0.072 0.113 0.109 0.086 0.086 0.068 0.072 221 2.5228
22 R2 3 0.045 0.000 0.045 0.061 0.015 0.030 0.045 0.061 0.152 0.045 0.091 0.121 0.061 0.045 0.076 0.106 66 0.7534
23 R2 8 0.333 0.333 0.000 0.000 0.333 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 3 0.0342
24 R2 16 0.105 0.158 0.000 0.000 0.105 0.105 0.000 0.000 0.105 0.053 0.053 0.211 0.000 0.000 0.053 0.053 19 0.2169
25 R2 48 0.091 0.073 0.127 0.109 0.109 0.055 0.073 0.000 0.109 0.018 0.018 0.073 0.036 0.073 0.018 0.018 55 0.6279
26 R2 80 0.059 0.118 0.176 0.078 0.078 0.039 0.039 0.020 0.078 0.059 0.000 0.039 0.059 0.039 0.059 0.059 51 0.5822
27 R3 3 0.000 0.000 0.000 0.063 0.063 0.000 0.000 0.125 0.188 0.063 0.063 0.125 0.125 0.000 0.188 0.000 16 0.1826
29 R3 16 0.000 0.200 0.000 0.200 0.000 0.000 0.000 0.000 0.000 0.200 0.000 0.000 0.200 0.000 0.000 0.200 5 0.0571
30 R3 48 0.000 0.000 0.222 0.333 0.111 0.000 0.000 0.000 0.000 0.000 0.000 0.111 0.111 0.000 0.000 0.111 9 0.1027
31 R3 80 0.111 0.000 0.444 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.222 0.111 0.000 0.000 0.000 0.111 9 0.1027
32 R4 3 0.100 0.075 0.025 0.025 0.025 0.050 0.000 0.150 0.100 0.075 0.125 0.075 0.000 0.025 0.100 0.050 40 0.4566
33 R4 8 0.000 0.200 0.000 0.000 0.000 0.200 0.200 0.000 0.000 0.200 0.000 0.200 0.000 0.000 0.000 0.000 5 0.0571
34 R4 16 0.000 0.111 0.000 0.000 0.111 0.000 0.000 0.111 0.000 0.000 0.111 0.000 0.222 0.000 0.111 0.222 9 0.1027
35 R4 48 0.135 0.081 0.054 0.108 0.054 0.000 0.027 0.054 0.000 0.000 0.054 0.108 0.108 0.027 0.054 0.135 37 0.4224
36 R4 80 0.103 0.128 0.000 0.077 0.077 0.000 0.026 0.051 0.051 0.026 0.000 0.000 0.077 0.077 0.128 0.179 39 0.4452

37 ALL 0.057 0.071 0.085 0.079 0.072 0.049 0.042 0.052 0.070 0.057 0.068 0.073 0.065 0.051 0.055 0.055 8760

* * * * 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 5 INTERVAL ENDPOINTS ARE 3 8 16 48 80

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	29	33	44	37	37	21	9	20	21	26	26	50	45	40	21	22	481	5.4909
2 B 4	14	34	44	79	72	45	31	47	45	23	37	53	59	20	28	14	645	7.3630
3 D 1	1	3	2	4	4	3	3	0	1	3	6	2	2	3	4	5	46	0.5251
4 D 2	23	26	29	37	29	33	31	32	52	36	30	44	34	22	19	21	498	5.6849
5 D 3	37	42	58	58	53	43	51	53	93	68	56	43	44	21	20	28	768	8.7671
6 D 4	16	40	58	53	57	30	27	54	61	38	63	51	30	19	33	20	650	7.4201
7 D 5	1	6	9	4	10	11	5	3	8	9	2	3	0	0	3	2	76	0.8676
8 D 6	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	4	0.0457
9 E 1	19	7	7	10	14	7	7	5	11	8	4	10	10	9	8	17	153	1.7466
10 E 2	55	49	62	53	50	26	30	20	32	34	49	37	42	44	38	57	678	7.7397
11 E 3	46	41	63	47	55	34	21	33	28	47	43	42	34	36	58	54	682	7.7854
12 E 4	7	17	36	11	25	25	21	32	29	43	30	17	9	7	45	11	365	4.1667
13 F 1	34	34	45	45	43	38	31	22	37	22	49	41	52	47	29	38	607	6.9292
14 F 2	77	125	164	172	115	81	42	55	59	38	53	86	84	78	53	69	1351	15.4224
15 F 3	22	30	27	12	10	10	10	22	26	15	39	34	22	14	13	17	323	3.6872
16 F 4	0	3	2	2	1	0	1	5	2	3	6	0	1	0	0	5	31	0.3539
17 R1 3	28	39	20	15	13	2	12	12	31	22	25	40	18	24	34	17	352	4.0183
18 R1 8	6	7	1	3	3	1	3	5	1	1	2	3	9	7	4	3	59	0.6735
19 R1 16	11	12	3	4	4	2	10	4	8	10	7	9	8	8	8	11	119	1.3584
20 R1 48	28	21	18	9	3	4	7	13	27	25	25	22	29	16	20	21	288	3.2877
21 R1 80	14	21	22	8	5	4	0	2	11	16	25	24	19	19	15	16	221	2.5228
22 R2 3	3	0	3	4	1	2	3	4	10	3	6	8	4	3	5	7	66	0.7534
23 R2 8	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0.0342
24 R2 16	2	3	0	0	2	2	0	0	2	1	1	4	0	0	1	1	19	0.2169
25 R2 48	5	4	7	6	6	3	4	0	6	1	1	4	2	4	1	1	55	0.6279
26 R2 80	3	6	9	4	4	2	2	1	4	3	0	2	3	2	3	3	51	0.5822
27 R3 3	0	0	0	1	1	0	0	2	3	1	1	2	2	0	3	0	16	0.1826
28 R3 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0000
29 R3 16	0	1	0	1	0	0	0	0	0	1	0	0	1	0	0	1	5	0.0571
30 R3 48	0	0	2	3	1	0	0	0	0	0	0	1	1	0	0	1	9	0.1027
31 R3 80	1	0	4	0	0	0	0	0	0	0	2	1	0	0	0	1	9	0.1027
32 R4 3	4	3	1	1	1	2	0	6	4	3	5	3	0	1	4	2	40	0.4566
33 R4 8	0	1	0	0	0	1	1	0	0	1	0	1	0	0	0	0	5	0.0571
34 R4 16	0	1	0	0	1	0	0	1	0	0	1	0	2	0	1	2	9	0.1027
35 R4 48	5	3	2	4	2	0	1	2	0	0	2	4	4	1	2	5	37	0.4224
36 R4 80	4	5	0	3	3	0	1	2	2	1	0	0	3	3	5	7	39	0.4452

* * * * SUMMARIES * * * *

R	115	128	92	66	51	25	44	54	109	89	103	128	105	88	106	99	1402	16.0046
B	43	67	88	116	109	66	40	67	66	49	63	103	104	60	49	36	1126	12.8539
D	78	117	157	156	154	120	117	142	215	154	157	144	110	65	80	76	2042	23.3105
E	127	114	168	121	144	92	79	90	100	132	126	106	95	96	149	139	1878	21.4384
F	133	192	238	231	169	129	84	104	124	78	147	161	159	139	95	129	2312	26.3927
1	54	44	54	59	61	48	41	27	49	33	59	53	64	59	41	60	806	9.2009
2	167	208	267	266	199	143	105	111	145	114	134	171	165	154	118	155	2622	29.9315
3	122	138	180	150	150	105	89	124	166	150	162	165	140	101	104	113	2159	24.6461
4	36	89	132	135	144	91	73	135	131	98	129	115	97	46	103	49	1603	18.2991
5	2	10	17	13	18	20	12	6	14	18	9	9	2	0	6	3	159	1.8151
6	0	1	1	1	4	0	0	0	0	0	0	1	0	0	1	0	9	0.1027

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

BIN	DIRECTION																TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1	0.060	0.069	0.091	0.077	0.077	0.044	0.019	0.042	0.044	0.054	0.054	0.104	0.094	0.083	0.044	0.046	1.000000
2	0.022	0.053	0.068	0.122	0.112	0.070	0.048	0.073	0.070	0.036	0.057	0.082	0.091	0.031	0.043	0.022	1.000000
3	0.022	0.065	0.043	0.087	0.087	0.065	0.065	0.000	0.022	0.065	0.130	0.043	0.043	0.065	0.087	0.109	1.000000
4	0.046	0.052	0.058	0.074	0.058	0.066	0.062	0.064	0.104	0.072	0.060	0.088	0.068	0.044	0.038	0.042	1.000000
5	0.048	0.055	0.076	0.076	0.069	0.056	0.066	0.069	0.121	0.089	0.073	0.056	0.057	0.027	0.026	0.036	1.000000
6	0.025	0.062	0.089	0.082	0.088	0.046	0.042	0.083	0.094	0.058	0.097	0.078	0.046	0.029	0.051	0.031	1.000000
7	0.013	0.079	0.118	0.053	0.132	0.145	0.066	0.039	0.105	0.118	0.026	0.039	0.000	0.000	0.039	0.026	1.000000
8	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	1.000000
9	0.124	0.046	0.046	0.065	0.092	0.046	0.046	0.033	0.072	0.052	0.026	0.065	0.065	0.059	0.052	0.111	1.000000
10	0.081	0.072	0.091	0.078	0.074	0.038	0.044	0.029	0.047	0.050	0.072	0.055	0.062	0.065	0.056	0.084	1.000000
11	0.067	0.060	0.092	0.069	0.081	0.050	0.031	0.048	0.041	0.069	0.063	0.062	0.050	0.053	0.085	0.079	1.000000
12	0.019	0.047	0.099	0.030	0.068	0.068	0.058	0.088	0.079	0.118	0.082	0.047	0.025	0.019	0.123	0.030	1.000000
13	0.056	0.056	0.074	0.074	0.071	0.063	0.051	0.036	0.061	0.036	0.081	0.068	0.086	0.077	0.048	0.063	1.000000
14	0.057	0.093	0.121	0.127	0.085	0.060	0.031	0.041	0.044	0.028	0.039	0.064	0.062	0.058	0.039	0.051	1.000000
15	0.068	0.093	0.084	0.037	0.031	0.031	0.031	0.068	0.080	0.046	0.121	0.105	0.068	0.043	0.040	0.053	1.000000
16	0.000	0.097	0.065	0.065	0.032	0.000	0.032	0.161	0.065	0.097	0.194	0.000	0.032	0.000	0.000	0.161	1.000000
17	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000
18	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000
19	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000
20	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000
21	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000
22	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000
23	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000
24	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000
25	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000
26	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063	0.073	0.091	0.075	0.063	0.076	0.071	1.000000

```
  27  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  28  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  29  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  30  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  31  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  32  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  33  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  34  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  35  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  36  0.082  0.091  0.066  0.047  0.036  0.018  0.031  0.039  0.078  0.063  0.073  0.091  0.075  0.063
0.076  0.071  1.000000
  37  0.057  0.071  0.085  0.079  0.072  0.049  0.042  0.052  0.070  0.057  0.068  0.073  0.065  0.051
0.055  0.055  1.000000


******** BEGINNING OF CHANGE CASE   1 USER INPUT ********
     ********************** RELEASE DATA BLOCK *************
     * SOURCE TERM NUMBER 2 OF 6
     *
  224  RDATNAM2001 'CFE'
********   RECORD NUMBER   224 REPLACES RECORD NUMBER   211   ********
  225  RDOALARM001 3004.
********   RECORD NUMBER   225 REPLACES RECORD NUMBER   212   ********
  226  RDNUMREL001 4 *four plume segments
********   RECORD NUMBER   226 REPLACES RECORD NUMBER   213   ********
  227  RDMAXRIS001 1 *first plume segment carries greatest risk
********   RECORD NUMBER   227 REPLACES RECORD NUMBER   214   ********
     *RDREFTIM001 *defined in source term 1
     *RDPLHEAT001 *defined in source term 1
     *RDPLHITE001 *defined in source term 1
  228  RDPLUDUR001 16806. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
********   RECORD NUMBER   228 REPLACES RECORD NUMBER   218   ********
  229  RDPDELAY001 3004. 19810. 89970. 176300. *start at Table 49-2 seconds after scram
********   RECORD NUMBER   229 REPLACES RECORD NUMBER   219   ********
     * XE/KR I CS TE(SB) SR RU(MO) LA CE BA
  230  RDRELFRC001 4.16E-1 5.53E-2 5.37E-2 1.23E-3 3.14E-3 1.16E-2 5.57E-5 9.54E-7 4.63E-3
********   RECORD NUMBER   230 REPLACES RECORD NUMBER   220   ********
  231  RDRELFRC002 4.05E-1 1.26E-3 1.21E-3 1.61E-4 3.43E-4 2.58E-3 9.66E-6 4.56E-8 6.45E-4
********   RECORD NUMBER   231 REPLACES RECORD NUMBER   221   ********
  232  RDRELFRC003 1.08E-1 0.00E0 0.00E0 0.00E0    0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
********   RECORD NUMBER   232 REPLACES RECORD NUMBER   222   ********
  233  RDRELFRC004 3.43E-2 0.00E0 0.00E0 6.04E-7   0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
********   RECORD NUMBER   233 REPLACES RECORD NUMBER   223   ********
     .
******** TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE   1 USER INPUT ********

USER INPUT PROCESSING SUMMARY - CHANGE CASE   1
```

NUMBER OF RECORDS CHANGED = 10
NUMBER OF RECORDS ADDED = 0
****

RELEASED INVENTORY OF ALL PLUMES

Kr-85	1.63E+16	1.59E+16	4.23E+15	1.34E+15
Kr-85m	2.48E+17	7.76E+16	1.01E+15	7.88E+12
Kr-87	1.39E+17	2.49E+15	1.61E+10	1.08E+04
Kr-88	5.07E+17	8.24E+16	1.89E+14	1.72E+11
Rb-86	4.53E+14	1.01E+13	0.00E+00	0.00E+00
Sr-89	1.12E+16	1.22E+15	0.00E+00	0.00E+00
Sr-90	9.64E+14	1.05E+14	0.00E+00	0.00E+00
Sr-91	1.11E+16	7.08E+14	0.00E+00	0.00E+00
Sr-92	6.66E+15	1.11E+14	0.00E+00	0.00E+00
Y-90	4.97E+13	1.41E+13	0.00E+00	0.00E+00
Y-91	2.63E+14	4.64E+13	0.00E+00	0.00E+00
Y-92	4.69E+15	3.25E+14	0.00E+00	0.00E+00
Y-93	2.47E+14	2.59E+13	0.00E+00	0.00E+00
Zr-95	3.42E+14	5.90E+13	0.00E+00	0.00E+00
Zr-97	2.97E+14	3.81E+13	0.00E+00	0.00E+00
Nb-95	3.44E+14	5.97E+13	0.00E+00	0.00E+00
Mo-99	7.64E+16	1.57E+16	0.00E+00	0.00E+00
Tc-99m	6.88E+16	1.47E+16	0.00E+00	0.00E+00
Ru-103	6.21E+16	1.37E+16	0.00E+00	0.00E+00
Ru-105	2.57E+16	1.82E+15	0.00E+00	0.00E+00
Ru-106	2.04E+16	4.54E+15	0.00E+00	0.00E+00
Rh-105	3.83E+16	7.83E+15	0.00E+00	0.00E+00
Sb-127	4.58E+14	5.67E+13	0.00E+00	1.54E+11
Sb-129	8.51E+14	3.43E+13	0.00E+00	1.20E+08
Te-127	4.59E+14	5.82E+13	0.00E+00	1.69E+11
Te-127m	6.00E+13	7.86E+12	0.00E+00	2.95E+10
Te-129	9.97E+14	5.38E+13	0.00E+00	6.33E+10
Te-129m	2.06E+14	2.68E+13	0.00E+00	9.71E+10
Te-131m	5.92E+14	6.54E+13	0.00E+00	8.99E+10
Te-132	6.11E+15	7.50E+14	0.00E+00	1.91E+12
I-131	1.95E+17	4.32E+15	0.00E+00	2.40E+10
I-132	1.14E+17	1.01E+15	0.00E+00	1.97E+12
I-133	3.66E+17	6.54E+15	0.00E+00	0.00E+00
I-134	3.64E+16	2.52E+12	0.00E+00	0.00E+00
I-135	2.73E+17	2.88E+15	0.00E+00	0.00E+00
Xe-133	2.88E+18	2.69E+18	6.44E+17	1.79E+17
Xe-135	6.43E+17	3.28E+17	1.96E+16	1.00E+15
Cs-134	3.86E+16	8.68E+14	0.00E+00	0.00E+00
Cs-136	1.09E+16	2.42E+14	0.00E+00	0.00E+00
Cs-137	2.24E+16	5.06E+14	0.00E+00	0.00E+00
Ba-139	6.20E+15	2.16E+13	0.00E+00	0.00E+00
Ba-140	2.91E+16	3.99E+15	0.00E+00	0.00E+00
La-140	1.90E+15	7.21E+14	0.00E+00	0.00E+00
La-141	1.91E+14	9.08E+12	0.00E+00	0.00E+00
La-142	7.79E+13	4.99E+11	0.00E+00	0.00E+00
Ce-141	6.46E+12	5.17E+11	0.00E+00	0.00E+00
Ce-143	5.02E+12	2.06E+11	0.00E+00	0.00E+00
Ce-144	4.34E+12	2.07E+11	0.00E+00	0.00E+00

```
Pr-143     2.99E+14   5.10E+13   0.00E+00   0.00E+00
Nd-147     1.33E+14   2.26E+13   0.00E+00   0.00E+00
Np-239     6.55E+13   2.86E+12   0.00E+00   0.00E+00
Pu-238     1.36E+10   6.57E+08   0.00E+00   0.00E+00
Pu-239     1.19E+09   5.71E+07   0.00E+00   0.00E+00
Pu-240     1.75E+09   8.35E+07   0.00E+00   0.00E+00
Pu-241     3.92E+11   1.87E+10   0.00E+00   0.00E+00
Am-241     2.58E+10   4.47E+09   0.00E+00   0.00E+00
Cm-242     6.07E+12   1.05E+12   0.00E+00   0.00E+00
Cm-244     7.50E+11   1.30E+11   0.00E+00   0.00E+00


******** BEGINNING OF CHANGE CASE   2 USER INPUT ********
     ********************** RELEASE DATA BLOCK *************
     * SOURCE TERM NUMBER 3 OF 6
     *
  234  RDATNAM2001 'IC'
********   RECORD NUMBER   234 REPLACES RECORD NUMBER   211   ********
  235  RDOALARM001 4378.
********   RECORD NUMBER   235 REPLACES RECORD NUMBER   212   ********
  236  RDNUMREL001 4 *four plume segments
********   RECORD NUMBER   236 REPLACES RECORD NUMBER   213   ********
  237  RDMAXRIS001 1 *first plume segment carries greatest risk
********   RECORD NUMBER   237 REPLACES RECORD NUMBER   214   ********
     *RDREFTIM001 *defined in source term 1
     *RDPLHEAT001 *defined in source term 1
     *RDPLHITE001 *defined in source term 1
  238  RDPLUDUR001 36000. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
********   RECORD NUMBER   238 REPLACES RECORD NUMBER   218   ********
  239  RDPDELAY001 4378. 84810. 134400. 177600. *start at Table 49-2 seconds after scram
********   RECORD NUMBER   239 REPLACES RECORD NUMBER   219   ********
     * XE/KR I CS TE(SB) SR RU(MO) LA CE BA
  240  RDRELFRC001 9.83E-4 1.20E-5 1.15E-5 8.04E-7 1.07E-5 1.31E-5 1.35E-6 5.85E-9 1.20E-5
********   RECORD NUMBER   240 REPLACES RECORD NUMBER   220   ********
  241  RDRELFRC002 4.93E-4 0.00E0 0.00E0 4.83E-9 0.00E0 0.00E0 6.00E-9 3.20E-11 0.00E0
********   RECORD NUMBER   241 REPLACES RECORD NUMBER   221   ********
  242  RDRELFRC003 3.94E-4 0.00E0 0.00E0 1.21E-9 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
********   RECORD NUMBER   242 REPLACES RECORD NUMBER   222   ********
  243  RDRELFRC004 7.72E-4 0.00E0 0.00E0 6.04E-10 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
********   RECORD NUMBER   243 REPLACES RECORD NUMBER   223   ********
     .
******** TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE   2 USER INPUT ********

USER INPUT PROCESSING SUMMARY - CHANGE CASE   2
NUMBER OF RECORDS CHANGED            =   10
NUMBER OF RECORDS ADDED              =    0
*****************************************************************************************************


RELEASED INVENTORY OF ALL PLUMES
Kr-85      3.85E+13   1.93E+13   1.54E+13   3.03E+13
Kr-85m     3.66E+14   5.78E+12   5.48E+11   1.68E+11
Kr-87      6.24E+13   1.61E+08   7.05E+04   2.00E+02
Kr-88      5.69E+14   1.22E+12   3.39E+10   3.55E+09
```

Rb-86	9.65E+10	0.00E+00	0.00E+00	0.00E+00
Sr-89	3.81E+13	0.00E+00	0.00E+00	0.00E+00
Sr-90	3.28E+12	0.00E+00	0.00E+00	0.00E+00
Sr-91	3.02E+13	0.00E+00	0.00E+00	0.00E+00
Sr-92	1.04E+13	0.00E+00	0.00E+00	0.00E+00
Y-90	6.18E+11	1.41E+09	0.00E+00	0.00E+00
Y-91	6.23E+12	2.72E+10	0.00E+00	0.00E+00
Y-92	1.73E+13	1.08E+08	0.00E+00	0.00E+00
Y-93	4.86E+12	4.66E+09	0.00E+00	0.00E+00
Zr-95	8.27E+12	3.64E+10	0.00E+00	0.00E+00
Zr-97	6.35E+12	1.13E+10	0.00E+00	0.00E+00
Nb-95	8.34E+12	3.71E+10	0.00E+00	0.00E+00
Mo-99	8.36E+13	0.00E+00	0.00E+00	0.00E+00
Tc-99m	7.67E+13	0.00E+00	0.00E+00	0.00E+00
Ru-103	7.00E+13	0.00E+00	0.00E+00	0.00E+00
Ru-105	1.81E+13	0.00E+00	0.00E+00	0.00E+00
Ru-106	2.30E+13	0.00E+00	0.00E+00	0.00E+00
Rh-105	4.21E+13	0.00E+00	0.00E+00	0.00E+00
Sb-127	2.92E+11	1.49E+09	3.36E+08	1.53E+08
Sb-129	3.41E+11	5.68E+07	1.56E+06	1.14E+05
Te-127	2.96E+11	1.58E+09	3.64E+08	1.69E+08
Te-127m	3.93E+10	2.36E+08	5.92E+07	2.95E+07
Te-129	4.45E+11	5.77E+08	1.30E+08	6.33E+07
Te-129m	1.34E+11	7.94E+08	1.96E+08	9.71E+07
Te-131m	3.61E+11	1.29E+09	2.36E+08	8.92E+07
Te-132	3.89E+12	1.92E+10	4.25E+09	1.91E+09
I-131	4.18E+13	1.38E+08	4.34E+07	2.41E+07
I-132	1.29E+13	1.97E+10	4.38E+09	1.96E+09
I-133	7.18E+13	0.00E+00	0.00E+00	0.00E+00
I-134	7.11E+11	0.00E+00	0.00E+00	0.00E+00
I-135	4.30E+13	0.00E+00	0.00E+00	0.00E+00
Xe-133	6.68E+15	2.96E+15	2.19E+15	4.02E+15
Xe-135	1.11E+15	1.00E+14	2.80E+13	2.19E+13
Cs-134	8.26E+12	0.00E+00	0.00E+00	0.00E+00
Cs-136	2.33E+12	0.00E+00	0.00E+00	0.00E+00
Cs-137	4.81E+12	0.00E+00	0.00E+00	0.00E+00
Ba-139	3.47E+12	0.00E+00	0.00E+00	0.00E+00
Ba-140	7.49E+13	0.00E+00	0.00E+00	0.00E+00
La-140	1.58E+13	2.47E+10	0.00E+00	0.00E+00
La-141	2.70E+12	2.33E+08	0.00E+00	0.00E+00
La-142	4.79E+11	9.25E+04	0.00E+00	0.00E+00
Ce-141	6.21E+10	3.64E+08	0.00E+00	0.00E+00
Ce-143	2.89E+10	9.87E+07	0.00E+00	0.00E+00
Ce-144	2.66E+10	1.45E+08	0.00E+00	0.00E+00
Pr-143	7.19E+12	3.05E+10	0.00E+00	0.00E+00
Nd-147	3.19E+12	1.34E+10	0.00E+00	0.00E+00
Np-239	3.87E+11	1.61E+09	0.00E+00	0.00E+00
Pu-238	8.39E+07	4.71E+05	0.00E+00	0.00E+00
Pu-239	7.32E+06	4.02E+04	0.00E+00	0.00E+00
Pu-240	1.07E+07	5.86E+04	0.00E+00	0.00E+00
Pu-241	2.40E+09	1.31E+07	0.00E+00	0.00E+00
Am-241	6.25E+08	2.78E+06	0.00E+00	0.00E+00
Cm-242	1.47E+11	6.51E+08	0.00E+00	0.00E+00
Cm-244	1.82E+10	8.07E+07	0.00E+00	0.00E+00

```
******** BEGINNING OF CHANGE CASE   3 USER INPUT ********
     ********************** RELEASE DATA BLOCK *************
     * SOURCE TERM NUMBER 4 OF 6
     *
  244  RDATNAM2001 'BP'
********   RECORD NUMBER   244 REPLACES RECORD NUMBER   211   ********
  245  RDOALARM001 31890.
********   RECORD NUMBER   245 REPLACES RECORD NUMBER   212   ********
  246  RDNUMREL001 4 *four plume segments
********   RECORD NUMBER   246 REPLACES RECORD NUMBER   213   ********
  247  RDMAXRIS001 1 *first plume segment carries greatest risk
********   RECORD NUMBER   247 REPLACES RECORD NUMBER   214   ********
     *RDREFTIM001 *defined in source term 1
     *RDPLHEAT001 *defined in source term 1
     *RDPLHITE001 *defined in source term 1
  248  RDPLUDUR001 14550. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
********   RECORD NUMBER   248 REPLACES RECORD NUMBER   218   ********
  249  RDPDELAY001 31890. 46440. 86490. 172800. *start at Table 49-2 seconds after scram
********   RECORD NUMBER   249 REPLACES RECORD NUMBER   219   ********
     * XE/KR I CS TE(SB) SR RU(MO) LA CE BA
  250  RDRELFRC001 1.00E0 1.69E-1 1.62E-1 6.27E-3 3.57E-3 4.48E-2 1.30E-4 3.19E-6 8.93E-3
********   RECORD NUMBER   250 REPLACES RECORD NUMBER   220   ********
  251  RDRELFRC002 0.00E0 4.64E-2 3.38E-2 3.12E-3 0.00E0 0.00E0 0.00E0 0.00E0 2.00E-6
********   RECORD NUMBER   251 REPLACES RECORD NUMBER   221   ********
  252  RDRELFRC003 0.00E0 2.31E-1 6.60E-2 5.32E-3 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
********   RECORD NUMBER   252 REPLACES RECORD NUMBER   222   ********
  253  RDRELFRC004 0.00E0 2.80E-3 9.96E-3 1.57E-3 0.00E0 0.00E0 0.00E0 1.00E-6 0.00E0
********   RECORD NUMBER   253 REPLACES RECORD NUMBER   223   ********
     .
******** TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE   3 USER INPUT ********

USER INPUT PROCESSING SUMMARY - CHANGE CASE   3
NUMBER OF RECORDS CHANGED            =   10
NUMBER OF RECORDS ADDED              =    0
*****************************************************************************************************
```

RELEASED INVENTORY OF ALL PLUMES

Kr-85	3.92E+16	0.00E+00	0.00E+00	0.00E+00
Kr-85m	1.81E+17	0.00E+00	0.00E+00	0.00E+00
Kr-87	5.00E+15	0.00E+00	0.00E+00	0.00E+00
Kr-88	1.86E+17	0.00E+00	0.00E+00	0.00E+00
Rb-86	1.35E+15	2.78E+14	5.34E+14	7.77E+13
Sr-89	1.27E+16	0.00E+00	0.00E+00	0.00E+00
Sr-90	1.10E+15	0.00E+00	0.00E+00	0.00E+00
Sr-91	7.17E+15	0.00E+00	0.00E+00	0.00E+00
Sr-92	1.05E+15	0.00E+00	0.00E+00	0.00E+00
Y-90	1.59E+14	0.00E+00	0.00E+00	0.00E+00
Y-91	6.18E+14	0.00E+00	0.00E+00	0.00E+00
Y-92	3.24E+15	0.00E+00	0.00E+00	0.00E+00
Y-93	3.40E+14	0.00E+00	0.00E+00	0.00E+00
Zr-95	7.94E+14	0.00E+00	0.00E+00	0.00E+00
Zr-97	5.05E+14	0.00E+00	0.00E+00	0.00E+00
Nb-95	8.03E+14	0.00E+00	0.00E+00	0.00E+00

Mo-99	2.72E+17	0.00E+00	0.00E+00	0.00E+00
Tc-99m	2.55E+17	0.00E+00	0.00E+00	0.00E+00
Ru-103	2.39E+17	0.00E+00	0.00E+00	0.00E+00
Ru-105	2.98E+16	0.00E+00	0.00E+00	0.00E+00
Ru-106	7.88E+16	0.00E+00	0.00E+00	0.00E+00
Rh-105	1.35E+17	0.00E+00	0.00E+00	0.00E+00
Sb-127	2.20E+15	1.04E+15	1.63E+15	4.02E+14
Sb-129	1.26E+15	2.03E+14	5.81E+13	3.66E+11
Te-127	2.26E+15	1.09E+15	1.74E+15	4.43E+14
Te-127m	3.06E+14	1.52E+14	2.60E+14	7.68E+13
Te-129	2.01E+15	5.52E+14	6.30E+14	1.65E+14
Te-129m	1.04E+15	5.17E+14	8.74E+14	2.53E+14
Te-131m	2.53E+15	1.07E+15	1.41E+15	2.39E+14
Te-132	2.91E+16	1.36E+16	2.10E+16	5.02E+15
I-131	5.79E+17	1.55E+17	7.41E+17	8.30E+15
I-132	6.17E+16	1.50E+16	2.18E+16	5.17E+15
I-133	8.66E+17	1.88E+17	6.46E+17	3.52E+15
I-134	2.51E+14	2.67E+11	2.01E+08	1.43E-02
I-135	3.72E+17	4.89E+16	7.57E+16	7.43E+13
Xe-133	6.68E+18	2.33E+16	1.54E+17	2.28E+15
Xe-135	1.09E+18	7.37E+16	2.21E+17	5.96E+14
Cs-134	1.16E+17	2.43E+16	4.73E+16	7.14E+15
Cs-136	3.24E+16	6.66E+15	1.27E+16	1.82E+15
Cs-137	6.77E+16	1.41E+16	2.76E+16	4.16E+15
Ba-139	2.48E+14	1.62E+09	0.00E+00	0.00E+00
Ba-140	5.51E+16	1.22E+13	0.00E+00	0.00E+00
La-140	1.03E+16	3.29E+12	0.00E+00	0.00E+00
La-141	1.14E+14	0.00E+00	0.00E+00	0.00E+00
La-142	5.67E+12	0.00E+00	0.00E+00	0.00E+00
Ce-141	2.24E+13	0.00E+00	0.00E+00	5.75E+12
Ce-143	1.43E+13	0.00E+00	0.00E+00	1.85E+12
Ce-144	1.45E+13	0.00E+00	0.00E+00	4.53E+12
Pr-143	6.86E+14	0.00E+00	0.00E+00	3.58E+11
Nd-147	3.03E+14	0.00E+00	0.00E+00	0.00E+00
Np-239	1.99E+14	0.00E+00	0.00E+00	3.73E+13
Pu-238	4.54E+10	0.00E+00	0.00E+00	1.42E+10
Pu-239	4.00E+09	0.00E+00	0.00E+00	1.26E+09
Pu-240	5.84E+09	0.00E+00	0.00E+00	1.83E+09
Pu-241	1.31E+12	0.00E+00	0.00E+00	4.11E+11
Am-241	6.02E+10	0.00E+00	0.00E+00	3.98E+06
Cm-242	1.41E+13	0.00E+00	0.00E+00	0.00E+00
Cm-244	1.75E+12	0.00E+00	0.00E+00	0.00E+00

```
******** BEGINNING OF CHANGE CASE   4 USER INPUT ********
     ********************** RELEASE DATA BLOCK *************
     * SOURCE TERM NUMBER 5 OF 6
     *
  254  RDATNAM2001 'CI'
********   RECORD NUMBER   254 REPLACES RECORD NUMBER   211   ********
  255  RDOALARM001 101.
********   RECORD NUMBER   255 REPLACES RECORD NUMBER   212   ********
  256  RDNUMREL001 4 *four plume segments
********   RECORD NUMBER   256 REPLACES RECORD NUMBER   213   ********
  257  RDMAXRIS001 1 *first plume segment carries greatest risk
********   RECORD NUMBER   257 REPLACES RECORD NUMBER   214   ********
```

```
     *RDREFTIM001 *defined in source term 1
     *RDPLHEAT001 *defined in source term 1
     *RDPLHITE001 *defined in source term 1
  258  RDPLUDUR001 36000. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
********   RECORD NUMBER   258 REPLACES RECORD NUMBER   218   ********
  259  RDPDELAY001 101. 50020. 136400. 211700. *start at Table 49-2 seconds after scram
********   RECORD NUMBER   259 REPLACES RECORD NUMBER   219   ********
     * XE/KR I CS TE(SB) SR RU(MO) LA CE BA
  260  RDRELFRC001 5.73E-1 4.56E-2 2.10E-2 1.64E-3 2.03E-2 4.04E-2 2.39E-4 2.97E-6 3.16E-2
********   RECORD NUMBER   260 REPLACES RECORD NUMBER   220   ********
  261  RDRELFRC002 1.13E-1 0.00E0 0.00E0 1.15E-5 0.00E0 0.00E0 1.00E-7 0.00E0 0.00E0
********   RECORD NUMBER   261 REPLACES RECORD NUMBER   221   ********
  262  RDRELFRC003 5.66E-2 0.0E0 0.00E0 8.10E-5 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
********   RECORD NUMBER   262 REPLACES RECORD NUMBER   222   ********
  263  RDRELFRC004 2.74E-2 0.0E0 0.00E0 1.27E-5 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
********   RECORD NUMBER   263 REPLACES RECORD NUMBER   223   ********
     .
******** TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE   4 USER INPUT ********

USER INPUT PROCESSING SUMMARY - CHANGE CASE   4
NUMBER OF RECORDS CHANGED            =   10
NUMBER OF RECORDS ADDED              =    0
*****************************************************************************************************
```

RELEASED INVENTORY OF ALL PLUMES

Kr-85	2.25E+16	4.43E+15	2.22E+15	1.07E+15
Kr-85m	2.56E+17	5.91E+15	7.23E+13	1.38E+12
Kr-87	6.95E+16	7.15E+12	7.49E+06	4.05E+01
Kr-88	4.43E+17	2.96E+15	4.25E+12	1.25E+10
Rb-86	1.76E+14	0.00E+00	0.00E+00	0.00E+00
Sr-89	7.23E+16	0.00E+00	0.00E+00	0.00E+00
Sr-90	6.23E+15	0.00E+00	0.00E+00	0.00E+00
Sr-91	6.25E+16	0.00E+00	0.00E+00	0.00E+00
Sr-92	2.68E+16	0.00E+00	0.00E+00	0.00E+00
Y-90	4.03E+14	2.61E+10	0.00E+00	0.00E+00
Y-91	1.17E+15	4.55E+11	0.00E+00	0.00E+00
Y-92	3.12E+16	1.19E+10	0.00E+00	0.00E+00
Y-93	9.33E+14	1.51E+11	0.00E+00	0.00E+00
Zr-95	1.46E+15	6.09E+11	0.00E+00	0.00E+00
Zr-97	1.18E+15	2.80E+11	0.00E+00	0.00E+00
Nb-95	1.48E+15	6.18E+11	0.00E+00	0.00E+00
Mo-99	2.61E+17	0.00E+00	0.00E+00	0.00E+00
Tc-99m	2.38E+17	0.00E+00	0.00E+00	0.00E+00
Ru-103	2.16E+17	0.00E+00	0.00E+00	0.00E+00
Ru-105	6.71E+16	0.00E+00	0.00E+00	0.00E+00
Ru-106	7.11E+16	0.00E+00	0.00E+00	0.00E+00
Rh-105	1.31E+17	0.00E+00	0.00E+00	0.00E+00
Sb-127	6.02E+14	3.80E+12	2.24E+13	3.00E+12
Sb-129	8.42E+14	6.38E+11	9.56E+10	5.23E+08
Te-127	6.07E+14	3.98E+12	2.43E+13	3.35E+12
Te-127m	8.01E+13	5.62E+11	3.96E+12	6.21E+11
Te-129	1.05E+15	1.92E+12	8.66E+12	1.32E+12
Te-129m	2.74E+14	1.90E+12	1.31E+13	2.02E+12

```
Te-131m    7.56E+14   3.85E+12   1.56E+13   1.51E+12
Te-132     8.02E+15   4.97E+13   2.83E+14   3.69E+13
I-131      1.59E+17   2.46E+11   2.92E+12   5.33E+11
I-132      5.83E+16   5.10E+13   2.92E+14   3.80E+13
I-133      2.84E+17   0.00E+00   0.00E+00   0.00E+00
I-134      6.91E+15   0.00E+00   0.00E+00   0.00E+00
I-135      1.85E+17   0.00E+00   0.00E+00   0.00E+00
Xe-133     3.93E+18   7.16E+17   3.14E+17   1.36E+17
Xe-135     7.64E+17   4.79E+16   3.85E+15   3.78E+14
Cs-134     1.51E+16   0.00E+00   0.00E+00   0.00E+00
Cs-136     4.26E+15   0.00E+00   0.00E+00   0.00E+00
Cs-137     8.78E+15   0.00E+00   0.00E+00   0.00E+00
Ba-139     1.66E+16   0.00E+00   0.00E+00   0.00E+00
Ba-140     1.98E+17   0.00E+00   0.00E+00   0.00E+00
La-140     1.80E+16   4.86E+11   0.00E+00   0.00E+00
La-141     5.90E+14   2.14E+10   0.00E+00   0.00E+00
La-142     1.45E+14   1.19E+08   0.00E+00   0.00E+00
Ce-141     2.21E+13   2.87E+09   0.00E+00   0.00E+00
Ce-143     1.50E+13   0.00E+00   0.00E+00   0.00E+00
Ce-144     1.35E+13   0.00E+00   0.00E+00   0.00E+00
Pr-143     1.28E+15   5.19E+11   0.00E+00   0.00E+00
Nd-147     5.66E+14   2.28E+11   0.00E+00   0.00E+00
Np-239     1.99E+14   0.00E+00   0.00E+00   0.00E+00
Pu-238     4.23E+10   1.85E+05   0.00E+00   0.00E+00
Pu-239     3.72E+09   0.00E+00   0.00E+00   0.00E+00
Pu-240     5.44E+09   3.08E+02   0.00E+00   0.00E+00
Pu-241     1.22E+12   0.00E+00   0.00E+00   0.00E+00
Am-241     1.11E+11   4.63E+07   0.00E+00   0.00E+00
Cm-242     2.60E+13   1.09E+10   0.00E+00   0.00E+00
Cm-244     3.22E+12   1.35E+09   0.00E+00   0.00E+00


******** BEGINNING OF CHANGE CASE   5 USER INPUT ********
     ********************** RELEASE DATA BLOCK *************
     * SOURCE TERM NUMBER 6 OF 6
     *
  264  RDATNAM2001 'CFL'
********   RECORD NUMBER   264 REPLACES RECORD NUMBER   211   ********
  265  RDOALARM001 2922.
********   RECORD NUMBER   265 REPLACES RECORD NUMBER   212   ********
  266  RDNUMREL001 4 *four plume segments
********   RECORD NUMBER   266 REPLACES RECORD NUMBER   213   ********
  267  RDMAXRIS001 3 *third segment is largest noble gas/i/cs release
********   RECORD NUMBER   267 REPLACES RECORD NUMBER   214   ********
     *RDREFTIM001 *defined in source term 1
     *RDPLHEAT001 *defined in source term 1
     *RDPLHITE001 *defined in source term 1
  268  RDPLUDUR001 23438. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
********   RECORD NUMBER   268 REPLACES RECORD NUMBER   218   ********
  269  RDPDELAY001 2922. 26360. 108000. 194400. *start at Table 49-2 seconds after scram
********   RECORD NUMBER   269 REPLACES RECORD NUMBER   219   ********
     * XE/KR I CS TE(SB) SR RU(MO) LA CE BA
  270  RDRELFRC001 3.36E-4 1.20E-5 1.15E-5 1.00E-6 1.57E-5 1.68E-5 9.96E-7 7.41E-9 1.61E-5
********   RECORD NUMBER   270 REPLACES RECORD NUMBER   220   ********
  271  RDRELFRC002 1.19E-3 5.00E-8 3.23E-8 1.75E-8 1.04E-6 2.90E-7 1.07E-5 4.05E-8 6.60E-7
********   RECORD NUMBER   271 REPLACES RECORD NUMBER   221   ********
```

```
  272  RDRELFRC003 9.79E-1 2.13E-5 1.16E-5 2.47E-5 2.39E-3 1.26E-3 9.75E-2 3.68E-4 2.25E-3
********   RECORD NUMBER   272 REPLACES RECORD NUMBER   222   ********
  273  RDRELFRC004 0.00E0 0.00E0 2.56E-7 1.20E-5 4.42E-4 1.55E-4 4.39E-2 1.66E-4 3.46E-4
********   RECORD NUMBER   273 REPLACES RECORD NUMBER   223   ********
      .
******** TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE   5 USER INPUT ********

USER INPUT PROCESSING SUMMARY - CHANGE CASE   5
NUMBER OF RECORDS CHANGED            =   10
NUMBER OF RECORDS ADDED              =    0
*****************************************************************************************************
```

RELEASED INVENTORY OF ALL PLUMES

Kr-85	1.32E+13	4.67E+13	3.84E+16	0.00E+00
Kr-85m	1.74E+14	1.72E+14	4.24E+15	0.00E+00
Kr-87	6.88E+13	2.71E+12	9.54E+09	0.00E+00
Kr-88	3.29E+14	1.55E+14	5.04E+14	0.00E+00
Rb-86	9.68E+10	2.68E+08	9.31E+10	1.98E+09
Sr-89	5.59E+13	3.69E+12	8.36E+15	1.53E+15
Sr-90	4.82E+12	3.19E+11	7.34E+14	1.36E+14
Sr-91	5.18E+13	1.88E+12	8.26E+14	2.65E+13
Sr-92	2.65E+13	2.12E+11	1.48E+12	5.89E+08
Y-90	5.13E+11	3.04E+12	2.16E+16	7.48E+15
Y-91	4.61E+12	4.88E+13	4.40E+17	1.96E+17
Y-92	2.60E+13	5.37E+12	5.30E+14	2.09E+12
Y-93	4.15E+12	2.53E+13	4.86E+16	4.22E+15
Zr-95	6.10E+12	6.53E+13	5.89E+17	2.62E+17
Zr-97	5.12E+12	3.92E+13	1.41E+17	2.37E+16
Nb-95	6.15E+12	6.61E+13	6.02E+17	2.71E+17
Mo-99	1.10E+14	1.74E+12	5.94E+15	5.68E+14
Tc-99m	9.93E+13	1.63E+12	5.71E+15	5.47E+14
Ru-103	8.99E+13	1.54E+12	6.59E+15	7.97E+14
Ru-105	3.24E+13	1.54E+11	1.94E+13	5.64E+10
Ru-106	2.96E+13	5.10E+11	2.21E+15	2.72E+14
Rh-105	5.51E+13	8.55E+11	2.44E+15	1.88E+14
Sb-127	3.70E+11	6.08E+09	7.24E+12	2.94E+12
Sb-129	5.99E+11	2.79E+09	1.03E+11	1.07E+09
Te-127	3.72E+11	6.27E+09	7.78E+12	3.26E+12
Te-127m	4.88E+10	8.55E+08	1.21E+12	5.87E+11
Te-129	7.25E+11	4.85E+09	2.74E+12	1.25E+12
Te-129m	1.67E+11	2.91E+09	4.04E+12	1.92E+12
Te-131m	4.72E+11	6.82E+09	5.70E+12	1.59E+12
Te-132	4.93E+12	8.02E+10	9.26E+13	3.63E+13
I-131	4.21E+13	1.71E+11	6.77E+13	4.92E+11
I-132	2.18E+13	8.67E+10	9.54E+13	3.74E+13
I-133	7.71E+13	2.44E+11	4.88E+13	0.00E+00
I-134	3.89E+12	2.37E+07	1.65E+02	0.00E+00
I-135	5.39E+13	9.45E+10	3.73E+12	0.00E+00
Xe-133	2.31E+15	7.82E+15	5.68E+18	0.00E+00
Xe-135	4.56E+14	8.32E+14	1.22E+17	0.00E+00
Cs-134	8.26E+12	2.32E+10	8.32E+12	1.83E+11
Cs-136	2.34E+12	6.44E+09	2.20E+12	4.61E+10
Cs-137	4.81E+12	1.35E+10	4.85E+12	1.07E+11

Ba-139	1.37E+13	8.86E+09	3.37E+08	2.97E+02
Ba-140	1.01E+14	4.06E+12	1.32E+16	1.92E+15
La-140	1.31E+13	5.90E+13	3.65E+17	1.08E+17
La-141	2.91E+12	7.29E+12	1.22E+15	7.95E+12
La-142	9.30E+11	2.44E+11	8.30E+10	7.69E+05
Ce-141	5.99E+10	5.26E+11	5.01E+15	2.21E+15
Ce-143	3.82E+10	1.76E+11	9.92E+14	2.70E+14
Ce-144	3.37E+10	1.84E+11	1.67E+15	7.51E+14
Pr-143	5.33E+12	5.63E+13	4.89E+17	2.09E+17
Nd-147	2.36E+12	2.49E+13	2.13E+17	9.02E+16
Np-239	5.03E+11	2.49E+12	1.71E+16	5.75E+15
Pu-238	1.06E+08	5.88E+08	5.56E+12	2.61E+12
Pu-239	9.27E+06	5.07E+07	4.62E+11	2.09E+11
Pu-240	1.36E+07	7.41E+07	6.74E+11	3.04E+11
Pu-241	3.05E+09	1.66E+10	1.51E+14	6.82E+13
Am-241	4.61E+08	4.95E+09	4.51E+13	2.03E+13
Cm-242	1.08E+11	1.16E+12	1.06E+16	4.74E+15
Cm-244	1.34E+10	1.44E+11	1.31E+15	5.91E+14

USER INPUT IS READ FROM UNIT 25
RECORD IDENTIFIER FIELDS 11 CHARACTERS LONG ARE EXPECTED.
THE FIRST 100 COLUMNS OF EACH INPUT RECORD ARE PROCESSED.
THE MAXIMUM NUMBER OF IDENTIFIER RECORDS THAT MAY BE SAVED AS THE BASE CASE IS 1000.

```
RECORD
NUMBER                          RECORD

     ********************************************************************************
     * FILE NAME:  VEARLY.INP
     *
     * DESCRIPTIVE TITLE DESCRIBING THIS "EARLY" INPUT FILE
     *
   1  MIEANAM1001  'SNC AP1000 EARLY FILE – 95% Evacuation'
   2  DCF_FILE001 'C:\MACCS2\DOSDATA.INP' (DCF file of MACCS 1.5.11.1)
     *
     *          ORGNAM        ORGFLG
     *
   3  MIORGDEF001  'A-SKIN'        .TRUE.
   4  MIORGDEF002  'A-RED MARR'    .TRUE.
   5  MIORGDEF003  'A-LUNGS'       .TRUE.
   6  MIORGDEF004  'A-THYROIDH'    .TRUE.
   7  MIORGDEF005  'A-STOMACH'     .TRUE.
   8  MIORGDEF006  'A-LOWER LI'    .FALSE.  (does not contribute to early fatalities)
   9  MIORGDEF007  'L-EDEWBODY'    .TRUE.
  10  MIORGDEF008  'L-RED MARR'    .TRUE.
  11  MIORGDEF009  'L-BONE SUR'    .TRUE.
  12  MIORGDEF010  'L-BREAST'      .TRUE.
  13  MIORGDEF011  'L-LUNGS'       .TRUE.
  14  MIORGDEF012  'L-THYROID'     .TRUE.
  15  MIORGDEF013  'L-LOWER LI'    .TRUE.
  16  MIORGDEF014  'L-BLAD WAL'    .TRUE.
  17  MIORGDEF015  'L-LIVER'       .FALSE.
  18  MIORGDEF016  'L-THYROIDH'    .TRUE.
     *
```

```
  * FLAG TO INDICATE THAT THIS IS THE LAST PROGRAM IN THE SERIES TO BE RUN
  *
19  MIENDAT2001  .FALSE.    (SET THIS VALUE TO .TRUE. TO SKIP CHRONC)
  *
  * DISPERSION MODEL OPTION CODE:  1  *  STRAIGHT LINE
  *                                2  *  WIND-SHIFT WITH ROTATION
  *                                3  *  WIND-SHIFT WITHOUT ROTATION
  *
20  MIIPLUME001  1 * URD used 1
  *
  * NUMBER OF FINE GRID SUBDIVISIONS USED BY THE MODEL
  *
21  MINUMFIN001  7    (3, 5 OR 7 ALLOWED)
  *
  * LEVEL OF DEBUG OUTPUT REQUIRED, NORMAL RUNS SHOULD SPECIFY ZERO
  *
22  MIIPRINT001  0
  *
  * LOGICAL FLAG SIGNIFYING THAT THE BREAKDOWN OF RISK BY WEATHER CATEGORY
  * BIN ARE TO BE PRESENTED TO SHOW THEIR RELATIVE CONTRIBUTION TO THE MEAN
  *
  *           RISBIN
  *
23  MIRISCAT001   .FALSE.
  *
  * FLAG INDICATING IF WIND-ROSES FROM ATMOS ARE TO BE OVERRIDDEN
  *
24  MIOVRRID001  .FALSE.  (USE THE WIND ROSE CALCULATED FOR EACH WEATHER BIN)
  ******************************************************************************
  * POPULATION DISTRIBUTION DATA BLOCK, LOADED BY INPOPU, STORED IN /POPDAT/
  *
25  PDPOPFLG001  FILE
  *
  ******************************************************************************
  * SHIELDING AND EXPOSURE FACTORS, LOADED BY INDFAC, STORED IN /EADFAC/
  *
  * THREE VALUES OF EACH PROTECTION FACTOR ARE SUPPLIED,
  * ONE FOR EACH TYPE OF ACTIVTY:
  *
  * ACTIVITY TYPE:
  *    1 - EVACUEES WHILE MOVING
  *    2 - NORMAL ACTIVITY IN SHELTERING AND EVACUATION ZONE
  *    3 - SHELTERED ACTIVITY
  *
  * CLOUD SHIELDING FACTOR
  *
  *   SITE       GG   PB   SEQ  SUR  ZION
  *   SHELTERING  0.7  0.5  0.65 0.6  0.5
  *
  *          EVACUEES  NORMAL  SHELTER
  *
26  SECSFACT001      0.75     0.75     0.75   *  use URD values
  *
  * PROTECTION FACTOR FOR INHALATION
  *
27  SEPROTIN001      0.4     0.4      0.4  * URD Values*
```

```
  *
  * BREATHING RATE (CUBIC METERS PER SECOND)
  *
28  SEBRRATE001  3.3E-4  3.3E-4  3.3E-4 *URD values
  *
  * SKIN PROTECTION FACTOR
  *
29  SESKPFAC001  1.0      0.41     0.33    * VALUES FOR NORMAL ACTIVITY AND
  *                                 SHELTERING SELECTED BY NRC STAFF
  *
  * GROUND SHIELDING FACTOR
  *
  *    SITE        GG   PB   SEQ  SUR  ZION
  *    SHELTERING  0.25 0.1  0.2  0.2  0.1
  *
30  SEGSHFAC001      0.33    0.33    0.33   * URD values
  *
  *
  * RESUSPENSION INHALATION MODEL CONCENTRATION COEFFICIENT (/METER)
  *
  *   RESCON = 1.E-4 IS APPROPRIATE FOR MECHANICAL RESUSPENSION BY VEHICLES.
  *   RESHAF = 2.11 DAYS CAUSES 1.E-4 TO DECAY IN ONE WEEK TO 1.E-5, THE VALUE
  *   OF RESCON USED IN THE FIRST TERM OF THE LONG-TERM RESUSPENSION EQUATION
  *   USED IN CHRONC.
  *
31  SERESCON001   1.E-4     (RESUSPENSION IS TURNED ON)
  *
  * RESUSPENSION CONCENTRATION COEFFICIENT HALF-LIFE (SEC)
  *
32  SERESHAF001   1.82E5    (2.11 DAYS)
  ******************************************************************************
  * EVACUATION ZONE DATA BLOCK, LOADED BY EVNETW, STORED IN /NETWOR/, /EOPTIO/
  *
  * SPECIFIC DESCRIPTION OF THE EMERGENCY RESPONSE SCENARIO BEING USED
  *
33  EZEANAM2001  '95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION'
  *
  * THE TYPE OF WEIGHTING TO BE APPLIED TO THE EMERGENCY RESPONSE SCENARIOS
  * YOU MUST SUPPLY A VALUE OF 'TIME' OR 'PEOPLE'
  *
34  EZWTNAME001  'PEOPLE'
  *
  * WEIGHTING FRACTION APPLICABLE TO THIS SCENARIO
  *
35  EZWTFRAC001  0.95 *95% of people evacuated
  *
  * LAST RING IN THE MOVEMENT ZONE
  *
36  EZLASMOV001     6    (10 miles)
  *
  *  Flag defining the time at which evacuees "enter" the destination element
  *
37  TRAVELPOINT   'CENTERPOINT' (new option implemented at MACCS2 v. 1.11f)
  *TRAVELPOINT   'BOUNDARY'    (Westinghouse used BOUNDARY)
  *
  * RADIAL EVACUATION SPEED (M/S) = speed to exit EPZ, 30 min after alarm
```

```
    *
 38  EZESPEED001   2.20 2.20 2.20 *(based on 125-42 min for all zones to clear EPZ,
    *                              in 2010, extrapolated for 2040 population)
 39  EZEVATYP001     'RADIAL'
 40  EZDURBEG001    86400.0
 41  EZDURMID001    0.0
 42  EZREFPNT001     'ALARM'
 43  EZNUMEVA001       6
 44  EZDLTSHL001  2520. 2520. 2520. 2520. 2520. 2520. (42 MINUTES DELAY, 95% MOBILIZATION)
 45  EZDLTEVA001     0.    0.    0.    0.    0.    0.

    ************************************************************************
    * SHELTER AND RELOCATION ZONE DATA BLOCK, LOADED BY INPEMR,
    *                                 STORED IN /INPSRZ/, /RELOCA/
    *
    * DURATION OF THE EMERGENCY PHASE (SECONDS FROM PLUME ARRIVAL)
    *
 46  SRENDEMP001  604800.   (ONE WEEK)
    *
    * CRITICAL ORGAN FOR RELOCATION DECISIONS
    *
 47  SRCRIORG001 'L-EDEWBODY'
    *
    * HOT SPOT RELOCATION TIME (SECONDS FROM PLUME ARRIVAL)
    *
 48  SRTIMHOT001  43200.    (ONE HALF DAY)
    *
    * NORMAL RELOCATION TIME (SECONDS FROM PLUME ARRIVAL)
    *
 49  SRTIMNRM001  86400.    (ONE DAY)
    *
    * HOT SPOT RELOCATION DOSE CRITERION THRESHOLD (SIEVERTS)
    *
 50  SRDOSHOT001  0.5    (50 REM DOSE TO WHOLE BODY IN 1 WEEK TRIGGERS RELOCATION)
    *
    * NORMAL RELOCATION DOSE CRITERION THRESHOLD (SIEVERTS)
    *
 51  SRDOSNRM001  0.25   (25 REM DOSE TO WHOLE BODY IN 1 WEEK TRIGGERS
RELOCATION)
    ******************************************************************************
    * EARLY FATALITY MODEL PARAMETERS, LOADED BY INEFAT, STORED IN /EFATAL/
    *
    * NUMBER OF EARLY FATALITY EFFECTS
    *
 52  EFNUMEFA001   2
    *
    *          ORGNAM       EFFACA   EFFACB   EFFTHR
    *
 53  EFATAGRP001 'A-RED MARR'      3.8      5.0    1.5
 54  EFATAGRP002 'A-LUNGS'        10.0      7.0    5.0
    ******************************************************************************
    * EARLY INJURY MODEL PARAMETERS, LOADED BY INEINJ, STORED IN /EINJUR/
    *
    * NUMBER OF EARLY INJURY EFFECTS
    *
 55  EINUMEIN001  0
```

```
*
*          EINAME          ORGNAM   EISUSC EITHRE EIFACA EIFACB
*
*EINJUGRP001 'PRODROMAL VOMIT' 'A-STOMACH'  1.     .5     2.     3.
*EINJUGRP002 'DIARRHEA'        'A-STOMACH'  1.     1.     3.     2.5
*EINJUGRP003 'PNEUMONITIS'     'A-LUNGS'    1.     5.    10.     7.
*EINJUGRP004 'SKIN ERYTHEMA'   'A-SKIN'     1.     3.     6.     5.
*EINJUGRP005 'TRANSEPIDERMAL'  'A-SKIN'     1.    10.    20.     5.
*EINJUGRP006 'THYROIDITIS'     'A-THYROIDH' 1.    40.   240.     2.
*EINJUGRP007 'HYPOTHYROIDISM'  'A-THYROIDH' 1.     2.    60.     1.3
*******************************************************************************
* ACUTE EXPOSURE CANCER PARAMETERS, LOADED BY INACAN STORED IN /ACANCR/.
*
* NUMBER OF ACUTE EXPOSURE CANCER EFFECTS
*
56  LCNUMACA001   1
*
* THRESHOLD DOSE FOR APPLYING THE DOSE DEPENDENT REDUCTION FACTOR
*
57  LCDDTHRE001   0.2  (LOWEST DOSE FOR WHICH DDREFA WILL BE APPLIED)
*
* DOSE THRESHOLD FOR LINEAR DOSE RESPONSE (Sv)
*
58  LCACTHRE001   0.0  (LINEAR-QUADRATIC MODEL IS NOT BEING USED)
*
*          ACNAME     ORGNAM  ACSUSC DOSEFA DOSEFB CFRISK   CIRISK  DDREFA
*
59  LCANCERS001 'OTHER'    'L-EDEWBODY'  1.0   1.0   0.0   0.12    0.16      2.0
*******************************************************************************
* RESULT 1 OPTIONS BLOCK, LOADED BY INOUT1, STORED IN /INOUT1/
* TOTAL NUMBER OF A GIVEN EFFECT (LATENT CANCER, EARLY DEATH, EARLY INJURY)
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
60  TYPE1NUMBER    5
*
61  TYPE1OUT001    'CAN FAT/TOTAL'              1  10       (0 to 50 miles)
62  TYPE1OUT002    'CAN FAT/TOTAL'              1   6       (0 to 10 miles)
63  TYPE1OUT003    'ERL FAT/TOTAL'              1  10       (0 to 50 miles)
64  TYPE1OUT004    'ERL FAT/TOTAL'              1   2       (0 to  2 miles)
65  TYPE1OUT005    'ERL FAT/TOTAL'              1   1       (0 to  1 miles)
*******************************************************************************
* RESULT 2 OPTIONS BLOCK, LOADED BY INOUT2, STORED IN /INOUT2/
* FURTHEST DISTANCE AT WHICH A GIVEN RISK OF EARLY DEATH IS EXCEEDED.
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
66  TYPE2NUMBER  0
*
*          FATALITY RISK THRESHOLD
*
*TYPE2OUT001  0.
*******************************************************************************
* RESULT 3 OPTIONS BLOCK, LOADED BY INOUT3, STORED IN /INOUT3/
* NUMBER OF PEOPLE WHOSE DOSE TO A GIVEN ORGAN EXCEEDS A GIVEN THRESHOLD.
*
```

```
    * NUMBER OF DESIRED RESULTS OF THIS TYPE
    *
  67  TYPE3NUMBER  0
    *
    *             ORGAN NAME   DOSE THRESHOLD (Sv)
    *
    *TYPE3OUT001    'A-RED MARR'       1.5
    *TYPE3OUT002    'A-LUNGS'          5.0
    *TYPE3OUT003    'L-EDEWBODY'       0.05
    ********************************************************************************
    * RESULT 4 OPTIONS BLOCK, LOADED BY INOUT4, STORED IN /INOUT4/
    * 360 DEGREE AVERAGE RISK OF A GIVEN EFFECT AT A GIVEN DISTANCE.
    *
    * POSSIBLE TYPES OF EFFECTS ARE:
    *
    *   'ERL FAT/TOTAL'
    *   'ERL INJ/INJURY NAME'
    *   'CAN FAT/CANCER NAME'
    *   'CAN FAT/TOTAL'
    *
    * NUMBER OF DESIRED RESULTS OF THIS TYPE
    *
  68  TYPE4NUMBER  0
    *
    *          RADIAL INDEX   TYPE OF EFFECT
    *
    *TYPE4OUT001       1        'ERL FAT/TOTAL'
    *TYPE4OUT002       2        'ERL FAT/TOTAL'
    *TYPE4OUT003       3        'ERL FAT/TOTAL'
    *TYPE4OUT004       5        'ERL FAT/TOTAL'
    *TYPE4OUT005       6        'ERL FAT/TOTAL'
    ********************************************************************************
    * RESULT 5 OPTIONS BLOCK, LOADED BY INOUT5, STORED IN /INOUT5/
    *
    * TOTAL POPULATION DOSE TO A GIVEN ORGAN BETWEEN TWO DISTANCES.
    *
    * NUMBER OF DESIRED RESULTS OF THIS TYPE
    *
  69  TYPE5NUMBER     2
    *
    *           ORGAN      I1DIS5     I2DIS5
    *
  70  TYPE5OUT001 'L-EDEWBODY'      1          6          (0-10 MILES)
  71  TYPE5OUT002 'L-EDEWBODY'      1         10          (0-50 MILES)
    ********************************************************************************
    * RESULT 6 OPTIONS BLOCK, LOADED BY INOUT6, STORED IN /INOUT6/
    *
    * CENTERLINE DOSE TO AN ORGAN VS DIST BY PATHWAY, PATHWAY NAMES ARE AS
FOLLOWS:
    *
    *  PATHWAY NAME:
    *    'CLD'     - CLOUDSHINE
    *    'GRD'     - GROUNDSHINE
    *    'INH ACU' - "ACUTE DOSE EQUIVALENT" FROM DIRECT INHALATION OF THE CLOUD
    *    'INH LIF' - "LIFETIME DOSE COMMITMENT" FROM DIRECT INHALATION OF THE CLOUD
    *    'RES ACU' - "ACUTE DOSE EQUIVALENT" FROM RESUSPENSION INHALATION
```

```
    *    'RES LIF' - "LIFETIME DOSE COMMITMENT" FROM RESUSPENSION INHALATION
    *    'TOT ACU' - "ACUTE DOSE EQUIVALENT" FROM ALL PATHWAYS
    *    'TOT LIF' - "LIFETIME DOSE COMMITMENT" FROM ALL PATHWAYS
    *
    * NUMBER OF DESIRED RESULTS OF THIS TYPE
    *
  72  TYPE6NUMBER     0
    *
    *           ORGNAM        PATHNM      I1DIS6   I2DIS6
    *
    *TYPE6OUT001  'A-RED MARR'    'TOT ACU'      1       19     (0-50 MILES)
    *TYPE6OUT002  'A-LUNGS'       'TOT ACU'      1       19     (0-50 MILES)
    *TYPE6OUT003  'L-EDEWBODY'    'TOT LIF'      1       26     (0-1000 MILES)
    ********************************************************************************
    * RESULT 7 OPTIONS BLOCK, LOADED BY INOUT7, STORED IN /INOUT7/
    *
    * CENTERLINE RISK OF A GIVEN EFFECT VS DISTANCE
    *
    * NUMBER OF DESIRED RESULTS OF THIS TYPE
    *
  73  TYPE7NUMBER   0
    *
    *                 NAME          I1DIS7       I2DIS7
    *
    *TYPE7OUT001     'ERL FAT/TOTAL'        1          10       (0-50 MILES)
    *TYPE7OUT002     'CAN FAT/TOTAL'        1          10       (0-50 MILES)
    ********************************************************************************
    * RESULT 8 OPTIONS BLOCK, LOADED BY INOUT8, STORED IN /INOUT8/
    *
    * POPULATION WEIGHTED FATALITY RISK BETWEEN 2 DISTANCES
    *
    * NUMBER OF DESIRED RESULTS OF THIS TYPE
    *
  74  TYPE8NUMBER   6
    *
    *              NAME       I1DIS8  I2DIS8
    *
  75  TYPE8OUT001 'ERL FAT/TOTAL'   1      10     NOCCDF  (0-50 MILES)
  76  TYPE8OUT002 'ERL FAT/TOTAL'   1       2     NOCCDF  (0- 2 MILES)
  77  TYPE8OUT003 'ERL FAT/TOTAL'   1       1     NOCCDF  (0- 1 MILES)
  78  TYPE8OUT004 'ERL FAT/TOTAL'   3       3     NOCCDF  (2- 3 MILES)
  79  TYPE8OUT005 'CAN FAT/TOTAL'   1      10     NOCCDF  (0-50 MILES)
  80  TYPE8OUT006 'CAN FAT/TOTAL'   1       6     NOCCDF  (0-10 MILES)
    ********************************************************************************
    * RESULT A OPTIONS BLOCK, LOADED BY INOUTA, STORED IN /INOUTA/
    *
    * peak dose to a given organ
    *
    *          NUMA
  81  TYPEANUMBER   1
    *
    *            ORGNAM    I1DISA  I2DISA
  82  TYPEAOUT001 'L-EDEWBODY'  1       1    CCDF
    *
  83  NUMB
******** WARNING -- RECORD IDENTIFIER HAS   4 CHARACTERS INSTEAD OF 11 CHARACTERS
```

```
********
  84  TYPEBNUMBER   0
      .
******** TERMINATOR RECORD ENCOUNTERED -- END OF BASE CASE USER INPUT ********


USER INPUT PROCESSING SUMMARY - BASE CASE

NUMBER OF RECORDS READ                        =  362
NUMBER OF BLANK OR COMMENT RECORDS READ        =  277
NUMBER OF TERMINATOR RECORDS                   =    1
NUMBER OF RECORDS PROCESSED                    =   84
    NUMBER OF PROCESSED RECORDS DUPLICATED     =    0
    NUMBER OF PROCESSED RECORDS SORTED         =   84
*****************************************************************************************************



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
Am using a DOSFAC/DOSFAC2/IDCF2 dose factor file

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



USING THE FOLLOWING SITE DATA FILE:

 SECPOP2000 V3.12  MACCS2 Site Data File for Vogtle + transients projected to ye
 Lat: 33d 8'31" Long:  81d45'45" Population multiplier: 1.0000   10/06/2006
  10 SPATIAL INTERVALS
  16 WIND DIRECTIONS
   7 CROP CATEGORIES
   4 WATER PATHWAY ISOTOPES
   1 WATERSHEDS
  97 ECONOMIC REGIONS
 SPATIAL DISTANCES     KILOMETERS
    1.6093    3.2187    4.8280    6.4374    8.0467   16.0935   32.1869   48.2804
   64.3739   80.4674
 POPULATION
        0.       69.        0.        0.        0.        0.     8727.    92192.
```

28873. 22032.
0. 0. 0. 0. 0. 0. 4594. 14508.
7731. 13488.
0. 0. 0. 0. 0. 0. 0. 9309.
5508. 10769.
0. 0. 0. 0. 0. 0. 774. 13423.
12596. 11961.
0. 0. 0. 0. 0. 13. 735. 3547.
1805. 3263.
0. 0. 0. 22. 1. 346. 249. 6077.
7848. 12492.
0. 0. 0. 19. 17. 281. 336. 344.
869. 11149.
0. 0. 34. 0. 0. 991. 881. 7749.
3263. 7071.
0. 0. 0. 0. 25. 315. 2322. 1938.
4168. 69610.
0. 0. 0. 0. 3. 58. 609. 5337.
2694. 9893.
0. 7. 0. 7. 1. 193. 859. 737.
2006. 7607.
0. 0. 19. 79. 22. 763. 9211. 797.
5609. 5525.
0. 0. 70. 9. 4. 392. 4333. 1613.
4660. 3290.
0. 0. 90. 0. 86. 226. 4262. 10681.
12014. 22397.
0. 50. 0. 156. 122. 156. 12373. 142545.
353009. 27595.
0. 0. 0. 0. 0. 91. 4875. 140058.
60057. 10509.
LAND FRACTION
0.00 0.00 0.99 0.00 0.00 0.98 0.98 0.98 0.98 0.98
0.00 0.00 0.00 0.00 0.00 0.00 0.98 0.98 0.98 0.98
0.91 0.00 0.00 0.00 0.00 0.00 0.00 0.99 0.98 0.99
0.91 0.00 0.00 0.00 0.99 0.00 0.99 0.99 0.99 0.99
0.91 0.00 0.00 0.00 0.00 0.99 1.00 0.99 0.99 0.98
0.91 0.91 0.91 0.91 0.91 0.92 0.99 1.00 0.91 0.85
0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.96 0.89 0.82
0.91 0.00 0.91 0.00 0.00 0.91 0.91 0.91 0.91 0.93
0.91 0.91 0.00 0.00 0.91 0.91 0.93 0.92 0.94 0.99
0.91 0.91 0.00 0.00 0.91 0.91 0.96 1.00 0.99 0.99
0.91 0.91 0.00 0.91 0.91 0.91 0.92 0.97 0.96 0.98
0.91 0.00 0.91 0.91 0.91 0.91 0.91 0.91 0.97 0.98
0.91 0.00 0.91 0.91 0.91 0.91 0.91 0.92 0.99 0.99
0.00 0.00 0.91 0.91 0.91 0.91 0.85 0.80 0.92 0.96
0.00 0.91 0.00 0.91 0.91 0.90 0.76 0.74 0.97 0.98
0.00 0.00 0.00 0.00 0.00 0.97 0.95 0.89 0.98 0.99
REGION INDEX
1 2 2 2 2 3 4 5 6 7
1 8 8 8 8 910111213
1141414141516171819
1202020202122232425
1262626262728293031
1323232323334353637
1383838383940414243

1444444444546474849
1505050505152535455
1565656565758596061
1626262626364656667
1686868686970717273
1747474747576777879
1808080808182838485
1868686868788899091
1929292929394959697
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
CROP SEASON AND SHARE
1 PASTURE 90. 270. 0.4100
2 STORED FORAGE 150. 240. 0.1300
3 GRAINS 150. 240. 0.2100
4 GRN LEAFY VEGETABLES 150. 240. 0.0020
5 OTHER FOOD CROPS 150. 240. 0.0040
6 LEGUMES AND SEEDS 150. 240. 0.1500
7 ROOTS AND TUBERS 150. 240. 0.0030
WATERSHED DEFINITION -- INITIAL AND ANNUAL WASHOFF AND INGESTION FACTORS
1 Sr-89 5.00E-06 0.0
2 Sr-90 5.00E-06 0.0
3 Cs-134 5.00E-06 0.0
4 Cs-137 5.00E-06 0.0
REGIONAL ECONOMIC DATA

1	EXCLUSION	.214	0.001	4971.0	14888.0	143897.0
2	REGION_02	.331	0.252	1065.0	3848.0	80147.0
3	REGION_03	.327	0.002	1067.0	3003.0	86571.0
4	REGION_04	.327	0.002	1067.0	3003.0	86571.0
5	REGION_05	.327	0.002	1067.0	3003.0	86571.2
6	REGION_06	.364	0.017	1027.3	3086.3	85815.6
7	REGION_07	.468	0.097	763.3	4024.3	86190.3
8	REGION_08	.000	0.000	0.0	0.0	0.0
9	REGION_09	.000	0.000	0.0	0.0	0.0
10	REGION_10	.327	0.002	1067.0	3003.0	86571.0
11	REGION_11	.327	0.002	1067.0	3003.0	86571.0
12	REGION_12	.327	0.002	1067.0	3003.0	86571.0
13	REGION_13	.315	0.005	858.5	3170.5	85006.6
14	REGION_14	.000	0.000	0.0	0.0	0.0
15	REGION_15	.000	0.000	0.0	0.0	0.0
16	REGION_16	.000	0.000	0.0	0.0	0.0

17	REGION_17	.329	0.159	1065.7	3534.0	82534.3
18	REGION_18	.243	0.074	1119.9	6538.0	104101.4
19	REGION_19	.164	0.003	1046.3	9118.2	121204.5
20	REGION_20	.331	0.252	1065.0	3848.0	80147.0
21	REGION_21	.000	0.000	0.0	0.0	0.0
22	REGION_22	.331	0.252	1065.0	3848.0	80147.0
23	REGION_23	.331	0.252	1065.0	3848.0	80147.0
24	REGION_24	.277	0.131	981.5	5407.5	100054.8
25	REGION_25	.109	0.015	1139.1	11472.1	138770.2
26	REGION_26	.000	0.000	0.0	0.0	0.0
27	REGION_27	.331	0.252	1065.0	3848.0	80147.0
28	REGION_28	.231	0.149	485.0	2877.2	83330.2
29	REGION_29	.283	0.203	787.0	3382.7	81672.6
30	REGION_30	.247	0.078	716.8	4608.5	100922.2
31	REGION_31	.302	0.048	853.0	5113.6	104661.1
32	REGION_32	.214	0.001	4971.0	14888.0	143897.0
33	REGION_33	.222	0.019	4689.9	14094.3	139324.5
34	REGION_34	.163	0.075	275.8	2704.7	87813.1
35	REGION_35	.162	0.078	84.0	2206.0	85531.0
36	REGION_36	.107	0.041	84.5	2789.9	83824.1
37	REGION_37	.145	0.007	243.6	3442.7	83083.6
38	REGION_38	.214	0.001	4971.0	14888.0	143897.0
39	REGION_39	.214	0.001	4971.0	14888.0	143897.0
40	REGION_40	.077	0.028	4095.0	12799.2	131784.3
41	REGION_41	.105	0.057	1871.6	6954.9	105898.1
42	REGION_42	.097	0.034	86.6	2912.1	83506.2
43	REGION_43	.059	0.000	252.6	3687.0	82558.9
44	REGION_44	.214	0.001	4971.0	14888.0	143897.0
45	REGION_45	.214	0.001	4971.0	14888.0	143897.0
46	REGION_46	.075	0.027	4130.2	12894.8	132165.3
47	REGION_47	.040	0.034	3921.0	12399.0	129247.0
48	REGION_48	.040	0.034	3919.1	12394.5	129223.2
49	REGION_49	.140	0.013	1659.3	6804.9	104062.8
50	REGION_50	.214	0.001	4971.0	14888.0	143897.0
51	REGION_51	.214	0.001	4971.0	14888.0	143897.0
52	REGION_52	.193	0.011	3746.7	11842.2	127607.4
53	REGION_53	.080	0.030	3545.0	11426.9	124445.9
54	REGION_54	.108	0.031	2984.3	10214.6	121352.5
55	REGION_55	.243	0.027	1071.2	5772.9	105572.3
56	REGION_56	.214	0.001	4971.0	14888.0	143897.0
57	REGION_57	.214	0.001	4971.0	14888.0	143897.0
58	REGION_58	.308	0.000	2579.7	8833.1	112664.4
59	REGION_59	.381	0.000	727.0	4142.0	88467.0
60	REGION_60	.347	0.034	784.4	4286.9	91108.1
61	REGION_61	.240	0.107	692.0	3950.5	95403.3
62	REGION_62	.214	0.001	4971.0	14888.0	143897.0
63	REGION_63	.214	0.001	4971.0	14888.0	143897.0
64	REGION_64	.222	0.001	4778.3	14400.1	141380.3
65	REGION_65	.327	0.000	2092.0	7598.3	106295.1
66	REGION_66	.257	0.141	2006.6	6914.3	105976.2
67	REGION_67	.250	0.233	969.1	3969.4	92895.2
68	REGION_68	.214	0.001	4971.0	14888.0	143897.0
69	REGION_69	.214	0.001	4971.0	14888.0	143897.0
70	REGION_70	.214	0.001	4971.0	14888.0	143897.0
71	REGION_71	.214	0.001	4971.0	14888.0	143897.0
72	REGION_72	.166	0.333	1593.4	10683.1	122616.1

```
  73 REGION_73      .219 0.359    342.5    7373.4  104993.8
  74 REGION_74      .214 0.001   4971.0   14888.0  143897.0
  75 REGION_75      .214 0.001   4971.0   14888.0  143897.0
  76 REGION_76      .214 0.001   4971.0   14888.0  143897.0
  77 REGION_77      .205 0.064   4336.7   14130.8  140041.0
  78 REGION_78      .145 0.462    343.4    9363.9  115765.8
  79 REGION_79      .247 0.343    272.7    7345.8  103055.8
  80 REGION_80      .214 0.001   4971.0   14888.0  143897.0
  81 REGION_81      .214 0.001   4971.0   14888.0  143897.0
  82 REGION_82      .141 0.001   3521.8   11365.6  129080.4
  83 REGION_83      .088 0.001   2452.0    8770.0  118158.2
  84 REGION_84      .329 0.140    630.7    5364.1   97969.9
  85 REGION_85      .595 0.027    645.2    3859.5   92133.0
  86 REGION_86      .214 0.001   4971.0   14888.0  143897.0
  87 REGION_87      .203 0.001   4667.1   14115.3  140542.7
  88 REGION_88      .039 0.000   1469.0    6372.9  108068.8
  89 REGION_89      .014 0.000    981.0    5190.0  103103.1
  90 REGION_90      .523 0.013    890.5    3564.9   88208.1
  91 REGION_91      .556 0.030    879.3    3475.5   86076.3
  92 REGION_92      .000 0.000      0.0       0.0       0.0
  93 REGION_93      .325 0.002   1066.2    3022.3   86717.2
  94 REGION_94      .288 0.002   1056.3    3275.5   88631.1
  95 REGION_95      .218 0.002   1036.9    3767.8   92352.3
  96 REGION_96      .526 0.084    936.4    3909.6   83919.0
  97 REGION_97      .522 0.098   1324.4    5422.0   86588.9
POPULATION


******** BEGINNING OF CHANGE CASE   1 USER INPUT ********
     ********************************************************************************
     * EMERGENCY RESPONSE SCENARIO NUMBER 2
     ********************************************************************************
     * EVACUATION ZONE DATA BLOCK, LOADED BY EVNETW, STORED IN /NETWOR/, /EOPTIO/
     *
     * SPECIFIC DESCRIPTION OF THE EMERGENCY RESPONSE SCENARIO BEING USED
     *
  85  EZEANAM2001  'NO EVACUATION'
********   RECORD NUMBER    85 REPLACES RECORD NUMBER    33   ********
     *
     * WEIGHTING FRACTION APPLICABLE TO THIS SCENARIO
     *
  86  EZWTFRAC001  0.05 *5% of people relocated but not evacuated
********   RECORD NUMBER    86 REPLACES RECORD NUMBER    35   ********
     *
     * LAST RING IN THE MOVEMENT ZONE
     *
  87  EZLASMOV001     0   (A ZERO TURNS OFF THE EVACUATION MODEL)
********   RECORD NUMBER    87 REPLACES RECORD NUMBER    36   ********
     .
******** TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE   1 USER INPUT ********

USER INPUT PROCESSING SUMMARY - CHANGE CASE   1
NUMBER OF RECORDS CHANGED            =    3
NUMBER OF RECORDS ADDED              =    0
**********************************************************************************************
```

NO EVACUATION REQUESTED

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

NUMB

USER INPUT IS READ FROM UNIT 26
RECORD IDENTIFIER FIELDS 11 CHARACTERS LONG ARE EXPECTED.
THE FIRST 100 COLUMNS OF EACH INPUT RECORD ARE PROCESSED.
THE MAXIMUM NUMBER OF IDENTIFIER RECORDS THAT MAY BE SAVED AS THE BASE CASE IS 1000.

```
RECORD
NUMBER                          RECORD

     ********************************************************************************
     ********************************************************************************
     * FILE NAME Vchronc.inp
     *
     * DESCRIPTIVE TITLE DESCRIBING THIS "CHRONC" INPUT FILE
     *
   1  CHCHNAME001  'SNC AP1000 CHRONC FILE'
     ********************************************************************************
     * EMERGENCY RESPONSE COST DATA BLOCK
     *
     * DAILY COST FOR A PERSON WHO IS EVACUATED (DOLLARS/PERSON-DAY)
     * ESCALATED FROM $27/DAY IN 1986 TO
     *   ESCALATED FROM $27/DAY IN 1986 TO 49.64 in 2006 {FACTOR OF 1.8385036} FROM
     *   WWW.BLS.GOV/CPI/HOME.HTM, INFLATION CALCULATOR
   2  CHEVACST001  49.64   (INCLUDES FOOD AND HOUSING COSTS BUT NOT LOST INCOME)
     *
     * DAILY COST FOR A PERSON WHO IS RELOCATED (DOLLARS/PERSON-DAY)
     *   ESCALATED '86 TO '06, FACTOR = 1.8385036
   3  CHRELCST001  49.64   (INCLUDES FOOD AND HOUSING COSTS BUT NOT LOST INCOME)
     ********************************************************************************
     * LONG TERM PROTECTIVE ACTION DATA BLOCK
     *
     * Duration of the intermediate phase period--at version 1.11c TMIPND is no
     * longer processed.  The new input variable DUR_INTPHAS is the period's
     * duration, not the time after plume arrival at which the period ends.
     *
   4  DUR_INTPHAS   0.0    (in seconds)   (no intermediate phase)
     *
     * LONG-TERM PHASE DOSE PROJECTION PERIOD, THE DURATION OF THE EXPOSURE
     * PERIOD OVER WHICH THE LONG-TERM DOSE CRITERION IS EVALUATED (SECONDS)
     *
   5  CHTMPACT001   1.58E8            (5 YEARS)
     *
     * DOSE CRITERION FOR INTERMEDIATE PHASE RELOCATION (Sv)
     *
   6  CHDSCRTI001   1.0E5             (NO INTERMEDIATE PHASE RELOCATION)
     *
```

```
    * DOSE CRITERION FOR LONG-TERM PHASE RELOCATION (Sv)
    *
  7  CHDSCRLT001    0.04
    *
    * CRITICAL ORGAN NAME FOR LONG-TERM ACTIONS
    *
  8  CHCRTOCR001 'L-EDEWBODY'
    *
    * Long Term Exposure Period    Previously permanently set to:
    *    one million years = 3.15 E13 seconds
    *    MACCS2 allowable range is 3.15E7 to 1.E10
    *
  9  CHEXPTIM001    1.E10
    ******************************************************************************
    * DECONTAMINATION PLAN DATA BLOCK
    *
    * NUMBER OF LEVELS OF DECONTAMINATION
    *
 10  CHLVLDEC001  2
    *
    * DECONTAMINATION TIMES CORRESPONDING TO THE LVLDEC LEVELS OF
DECONTAMINATION
    *  (SECONDS)
    *
 11  CHTIMDEC001   5.184E6  1.0368E7    (60, 120 DAYS)
    *
    * DOSE REDUCTION FACTORS CORRESPONDING TO THE LVLDEC LEVELS OF
DECONTAMINATION
    *
 12  CHDSRFCT001   3.      15.
    *
    * COST OF FARM DECONTAMINATION PER FARMLAND UNIT AREA (DOLLARS/HECTARE)
    *  FOR THE VARIOUS LEVELS OF DECONTAMINATION
    *
    *CHCDFRM0001   562.5   1250. ESCALATED '86 TO '06
    *       FACTOR = 1.8385036
 13  CHCDFRM0001    1034.16  2298.13
    *
    * COST OF NONFARM DECONTAMINATION PER RESIDENT PERSON (DOLLARS/PERSON)
    *  FOR THE VARIOUS LEVELS OF DECONTAMINATION
    *
    *CHCDNFRM001   3000.   8000.  ESCALATED '86 TO '06
    *       FACTOR = 1.8385036
 14  CHCDNFRM001  5515.51  14708.03
    *
    * FRACTION OF FARMLAND DECONTAMINATION COST DUE TO LABOR
    *  FOR THE VARIOUS DECONTAMINATION LEVELS
    *
 15  CHFRFDL0001  .3      .35
    *
    * FRACTION OF NON-FARM DECONTAMINATION COST DUE TO LABOR
    *  FOR THE VARIOUS DECONTAMINATION LEVELS
    *
 16  CHFRNFDL001  .7      .5
    *
    * FRACTION OF TIME WORKERS IN FARM AREAS SPEND IN CONTAMINATED AREAS
```

```
    *  FOR THE VARIOUS DECONTAMINATION LEVELS
    *
  17  CHTFWKF0001  .10     .33
    *
    * FRACTION OF TIME WORKERS IN NON-FARM AREAS SPEND IN CONTAMINATED AREAS
    *  FOR THE VARIOUS DECONTAMINATION LEVELS
    *
  18  CHTFWKNF001  .33     .33
    *
    * AVERAGE COST OF DECONTAMINATION LABOR (DOLLARS/MAN-YEAR)
    *
    *CHDLBCST001   35000.  ESCALATED '86 TO '06
    *       FACTOR = 1.8385036
  19  CHDLBCST001    64347.63
    ******************************************************************************
    * INTERDICTION COST DATA BLOCK
    *
    * DEPRECIATION (DETERIORATION) RATE DURING INTERDICTION PERIOD (PER YEAR)
    *
  20  CHDPRATE001    .20   (VALUE OBTAINED FROM WASH-1400, APPENDIX 6)
    *
    * INVESTMENT INCOME RETURN (DISCOUNT RATE) DURING INTERDICTION PERIOD (PER
YEAR)
    * THIS VALUE SHOULD BE DERIVED AS A REAL RETURN RATE ADJUSTED FOR INFLATION
    *
  21  CHDSRATE001    .12   (VALUE OBTAINED FROM WASH-1400, APPENDIX 6)
    *
    * POPULATION RELOCATION COST (DOLLARS/PERSON):
    *  ALTERNATIVE HOUSING, MOVING COSTS, AND LOST INCOME FOR PEOPLE IN
    *  AREAS WHICH REQUIRE DECONTAMINATION, INTERDICTION, OR CONDEMNATION
    *
    *CHPOPCST001   5000.  ESCALATED '86 TO '06
    *       FACTOR = 1.8385036
  22  CHPOPCST001    9192.52
    ******************************************************************************
    * GROUNDSHINE WEATHERING DEFINITION DATA BLOCK
    *
    * NUMBER OF TERMS IN THE GROUNDSHINE WEATHERING RELATIONSHIP (EITHER 1 OR 2)
    *
  23  CHNGWTRM001   2
    *
    * GROUNDSHINE WEATHERING COEFFICIENTS
    *
  24  CHGWCOEF001   0.5    0.5          (JON HELTON)
    *
    * HALF LIVES CORRESPONDING TO THE GROUNDSHINE WEATHERING COEFFICIENTS (S)
    *
  25  CHTGWHLF001   1.6E7  2.8E9         (JON HELTON)
    ******************************************************************************
    * RESUSPENSION WEATHERING DEFINITION DATA BLOCK
    *
    * NUMBER OF TERMS IN THE RESUSPENSION WEATHERING RELATIONSHIP
    *
  26  CHNRWTRM001    3
    *
    * RESUSPENSION CONCENTRATION COEFFICIENTS   (/ METER)
```

```
     *  RELATIONSHIP BETWEEN GROUND CONCENTRATION AND INSTANTANEOUS AIR CONC.
     *
  27  CHRWCOEF001  1.0E-5   1.0E-7   1.0E-9  (VALUES HERE SELECTED BY JON HELTON)
     *
     * HALF-LIVES CORRESPONDING TO THE RESUSPENSION CONCENTRATION COEFFICIENTS
(S)
     *
  28  CHTRWHLF001  1.6E7    1.6E8    1.6E9   (6 MONTHS, 5 YEARS, 50 YEARS)
     ********************************************************************************
     * SITE REGION DESCRIPTION DATA BLOCK
     *
     * FRACTION OF AREA THAT IS LAND IN THE REGION
     *
  29  CHFRACLD001   0.95   (ROUGH GUESS VALUE, SITE FILE OVERRIDES THIS VALUE)
     *
     * FRACTION OF LAND DEVOTED TO FARMING IN THE REGION
     *
  30  CHFRCFRM001   0.382  (VIRGINIA STATE VALUE, SITE FILE OVERRIDES THIS VALUE)
     *
     * AVERAGE VALUE OF ANNUAL FARM PRODUCTION IN THE REGION (DOLLARS/HECTARE)
     *  (CASH RECEIPTS FROM FARMING PLUS VALUE OF HOME CONSUMPTION)/(LAND IN
FARMS)
     *
  31  CHFRMPRD001   371.0  (VIRGINIA STATE VALUE, SITE FILE OVERRIDES THIS VALUE)
     *
     * FRACTION OF FARM PRODUCTION RESULTING FROM DAIRY PRODUCTION IN THE
REGION
     *  (VALUE OF MILK PRODUCED)/(CASH RECEIPTS FROM FARMING PLUS HOME
CONSUMPTION)
     *
  32  CHDPFRCT001   0.198  (VIRGINIA STATE VALUE, SITE FILE OVERRIDES THIS VALUE)
     *
     * VALUE OF FARM WEALTH (DOLLARS/HECTARE)
     *  (AVERAGE VALUE PER HECTARE OF FARM LAND AND BUILDINGS TO 50 MILES)
     *
     *CHVALWF0001   2541.  ESCALATED '03 TO '06
     *       FACTOR = 1.0951087
  33  CHVALWF0001   2782.67  * FARM SIZE/AREA WEIGHTED AVERAGE FOR GA/SC
     *                    COUNTIES WITHIN 50 MILE RADIUS TAKING SRS INTO ACCOUNT
     *
     * FRACTION OF FARM WEALTH IN IMPROVEMENTS FOR THE REGION
     *
  34  CHFRFIM0001   0.25  * SURRY
     *
     * NON-FARM WEALTH, PROPERTY AND IMPROVEMENTS FOR THE REGION
(DOLLARS/PERSON)
     *  THE VALUE OF ALL RESIDENTIAL, BUSINESS, AND PUBLIC ASSETS WHICH WOULD BE
     *  LOST IN THE EVENT OF PERMANENT INTERDICTION (CONDEMNATION) OF THE AREA
     *
     *CHVALWNF001  107602.  ESCALATED 2003 TO 2006
     *       FACTOR = 1.0951087
  35  CHVALWNF001  117836.  * POPULATION/AREA WEIGHTED AVERAGE FOR GA/SC
     *                    COUNTIES WITHIN 50 MILE RADIUS
     *
     * FRACTION OF NON-FARM WEALTH IN IMPROVEMENTS FOR THE REGION
     *
```

```
36  CHFRNFIM001   0.8
    ******************************************************************************
37  CHFDPATH001 'NEW'
    *
    * name of the COMIDA2 binary output file
    *
38  BIN_FILE001 'C:\MACCS2\SAMP_A.BIN'   (binary data file of 1/04)
    *
    * Dose limits triggering first year crop disposal of the separate
    * milk and non-milk components of the diet, corresponding in purpose,
    * more or less, to the MACCS 1.5 input variables PSCMLK and PSCOTH
    *
    * For NUREG-1150 calculations, the maximum allowable ground concentrations for
    * production of milk and non-milk crops contaminated by an accident occurring
    * in the growing season were derived based on an assumed maximum allowable
    * dose of 5 rem effective or 15 rem thyroid, per the 1982 FDA guidance that's
    * reprinted in the 1992 EPA PAG Manual.  For purposes of comparison against
    * the prior results, it is being assumed, for simplicity, that milk and
    * non-milk crops contribute equally to the first year dose.  Thus, the 5 rem
    * effective dose limit used in NUREG-1150 is equally split between milk and
    * non-milk crops, with 2.5 rem allowed for each.  Similarly, the 15 rem
    * thyroid limit is split into 7.5 and 7.5 rem for the milk and non-milk
    * portions of the diet.
    *
    * SUPPORTING DOCUMENT FOR GUIDANCE LEVELS FOR RADIONUCLIDES IN DOMESTIC
AND
    * DOMESTIC FOODS, July, 2004, FDA (www.cfsan.fda.gov/~dms/nucleve2.html, see
    * especially Section II) revises limits from 5/15 rem (effective/thyroid) to
    * 0.5/5 rem.  The latter is incorporated below.
    *
    *           effective     thyroid  (doses in sieverts)
39  DOSEMILK001    0.0025         0.025
40  DOSEOTHR001    0.0025         0.025
    *
    * Annual dose limits for the subsequent year's (i.e., after the first year)
    * interdiction of BOTH the milk and non-milk (combined) components of the diet
    *
    * Note: the long-term food critera, GCMAXR, used for NUREG-1150 wre based on
    * an ingestion dose integrated from zero to infinity.  It is not possible to
    * translate those parameter values into corresponding annual dose limits, as is
    * required by the COMIDA2-based food model.  The "total" dose limits used in
    * NUREG-1150 for "root uptake", 0.5 rem effective and 1.5 rem thyroid, are used
    * here as annual dose limits for interdiction of food production in years the
    * years subsequent to the accident.
    *
    *           effective     thyroid  (doses in sieverts)
41  DOSELONG001    0.005          0.015
    *
    ******************************************************************************
    *
    * NUMBER OF NUCLIDES IN THE WATER INGESTION PATHWAY MODEL
    *
42  CHNUMWPI001    4
    *
    * TABLE OF NUCLIDE DEFINITIONS IN THE WATER INGESTION PATHWAY MODEL
    *
```

```
    * IF A SITE DATA FILE IS DEFINED, THE DATA DEFINING THE WATERSHED INGESTION
    *  FACTOR IS SUPERSEDED BY THE CORRESPONDING DATA IN THE SITE DATA FILE
    *
    *                    INITIAL     ANNUAL    INGESTION FACTOR
    *          WATER      WASHOFF     WASHOFF    ((Bq INGESTED)/
    *         NUCLIDE     FRACTION     RATE       (Bq IN WATER))
    *
    *          NAMWPI      WSHFRI      WSHRTA         WINGF
 43 CHWTRISO001   Sr-89       0.01       0.004         5.0E-6
 44 CHWTRISO002   Sr-90       0.01       0.004         5.0E-6
 45 CHWTRISO003   Cs-134      0.005      0.001         5.0E-6
 46 CHWTRISO004   Cs-137      0.005      0.001         5.0E-6
    ********************************************************************************
    * SPECIAL OPTIONS DATA BLOCK
    *
    * DETAILED PRINT OPTION CONTROL SWITCHES, LOOK AT THE CODE BEFORE TURNING
ON!!
    *        KSWDSC
    *
 47 CHKSWTCH001   0
    ********************************************************************************
    * DEFINE THE TYPE 9 RESULTS
    *
    * LONG-TERM POPULATION DOSE IN A GIVEN REGION BROKEN DOWN BY THE 12
PATHWAYS
    *
    * NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED
    * FOR EACH RESULT YOU REQUEST, THE CODE WILL PRODUCE A SET OF 12
    *
 48 TYPE9NUMBER   2      (UP TO 10 ALLOWED)
    *
    *            ORGNAM       INNER      OUTER
    *
 49 TYPE9OUT001   'L-EDEWBODY'      1         6     (0-10 MILES)
 50 TYPE9OUT002   'L-EDEWBODY'      1        10     (0-50 MILES)
    ********************************************************************************
    * ECONOMIC COST RESULTS IN A REGION BROKEN DOWN BY 12 TYPES OF COSTS
    *
    * NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED
    * FOR EACH RESULT YOU REQUEST, THE CODE WILL PRODUCE A SET OF 12
    *
 51 TYP10NUMBER   1      (UP TO 10 ALLOWED)
    *
    *            INNER      OUTER
    *
 52 TYP10OUT001      1         10   (0-50 MILES)
    ********************************************************************************
    * DEFINE A FLAG THAT CONTROLS THE PRODUCTION OF THE ACTION DISTANCE RESULTS
    *
    * SPECIFYING A VALUE OF .TRUE. TURNS ON ALL 8 OF THE ACTION DISTANCE RESULTS,
    * A VALUE OF .FALSE. WILL ELIMINATE THE ACTION DISTANCE RESULTS FROM THE
OUTPUT.
    *
 53 TYP11FLAG11  .FALSE.
    ********************************************************************************
    * IMPACTED AREA/POPULATION RESULTS IN A REGION BROKEN DOWN BY 6 TYPES OF
```

```
IMPACTS
     *
     * NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED
     * FOR EACH RESULT YOU REQUEST, THE CODE WILL PRODUCE A SET OF 8
     *
  54  TYP12NUMBER   1      (UP TO 10 ALLOWED)
     *
     *            INNER      OUTER
     *
  55  TYP12OUT001      1          10   (0-50 MILES)
     ******************************************************************************
     * Maximal annual food ingestion dose to an individual, requested by IXOT13
     *
     * This result is calculated after accounting for temporary or
     * permanent interdiction.  It is only available for the "new" food model.
     *
     * NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED
     *
  56  TYP13NUMBER   0  (UP TO 10 ALLOWED)
     *
     * IRAD13 is the radial spatial interval at which results are requested
     *
     * ORGN13 is the name of the organ for which results are requested
     *  (allowable values for ORGN13 are 'EFFECTIVE' or 'THYROID')
     *
     *         IRAD13   ORGN13
     *
     *TYP13OUT001   2    EFFECTIVE
     *TYP13OUT002   4    EFFECTIVE
     *TYP13OUT003   6    EFFECTIVE
     *TYP13OUT004   9    EFFECTIVE
     .
******** TERMINATOR RECORD ENCOUNTERED -- END OF BASE CASE USER INPUT ********


USER INPUT PROCESSING SUMMARY - BASE CASE

NUMBER OF RECORDS READ                        =  336
NUMBER OF BLANK OR COMMENT RECORDS READ        =  279
NUMBER OF TERMINATOR RECORDS                   =    1
NUMBER OF RECORDS PROCESSED                    =   56
    NUMBER OF PROCESSED RECORDS DUPLICATED     =    0
    NUMBER OF PROCESSED RECORDS SORTED         =   56
*****************************************************************************************


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


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

1 CANCER EFFECTS ARE DEFINED IN THE MODEL.

INDEX	CANCER EFFECT	ORGAN	ALPHA	BETA	CFRISK	CIRISK
1	OTHER	L-EDEWBODY	1.000E+00	0.000E+00	1.200E-01	1.600E-01

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 = 0.330

RESUSPENSION PROTECTION FACTOR = 0.400

BREATHING RATE (CUBIC M/S) = 3.300E-04

DISPERSION MODEL FLAG IS 1

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	0.0603	0.0686	0.0915	0.0769	0.0769	0.0437	0.0187	0.0416	0.0437	0.0541	0.0541	0.1040	0.0936	0.0832	0.0437	0.0457
2	0.0217	0.0527	0.0682	0.1225	0.1116	0.0698	0.0481	0.0729	0.0698	0.0357	0.0574	0.0822	0.0915	0.0310	0.0434	0.0217
3	0.0217	0.0652	0.0435	0.0870	0.0870	0.0652	0.0652	0.0000	0.0217	0.0652	0.1304	0.0435	0.0435	0.0652	0.0870	0.1087
4	0.0462	0.0522	0.0582	0.0743	0.0582	0.0663	0.0622	0.0643	0.1044	0.0723	0.0602	0.0884	0.0683	0.0442	0.0382	0.0422
5	0.0482	0.0547	0.0755	0.0755	0.0690	0.0560	0.0664	0.0690	0.1211	0.0885	0.0729	0.0560	0.0573	0.0273	0.0260	0.0365
6	0.0246	0.0615	0.0892	0.0815	0.0877	0.0462	0.0415	0.0831	0.0938	0.0585	0.0969	0.0785	0.0462	0.0292	0.0508	0.0308
7	0.0132	0.0789	0.1184	0.0526	0.1316	0.1447	0.0658	0.0395	0.1053	0.1184	0.0263	0.0395	0.0000	0.0000	0.0395	0.0263
8	0.0000	0.0000	0.2500	0.0000	0.2500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2500	0.0000	0.0000	0.2500	0.0000
9	0.1242	0.0458	0.0458	0.0654	0.0915	0.0458	0.0458	0.0327	0.0719	0.0523	0.0261	0.0654	0.0654	0.0588	0.0523	0.1111
10	0.0811	0.0723	0.0914	0.0782	0.0737	0.0383	0.0442	0.0295	0.0472	0.0501	0.0723	0.0546	0.0619	0.0649	0.0560	0.0841
11	0.0674	0.0601	0.0924	0.0689	0.0806	0.0499	0.0308	0.0484	0.0411	0.0689	0.0630	0.0616	0.0499	0.0528	0.0850	0.0792
12	0.0192	0.0466	0.0986	0.0301	0.0685	0.0685	0.0575	0.0877	0.0795	0.1178	0.0822	0.0466	0.0247	0.0192	0.1233	0.0301
13	0.0560	0.0560	0.0741	0.0741	0.0708	0.0626	0.0511	0.0362	0.0610	0.0362	0.0807	0.0675	0.0857	0.0774	0.0478	0.0626
14	0.0570	0.0925	0.1214	0.1273	0.0851	0.0600	0.0311	0.0407	0.0437	0.0281	0.0392	0.0637	0.0622	0.0577	0.0392	0.0511
15	0.0681	0.0929	0.0836	0.0372	0.0310	0.0310	0.0310	0.0681	0.0805	0.0464	0.1207	0.1053	0.0681	0.0433	0.0402	0.0526
16	0.0000	0.0968	0.0645	0.0645	0.0323	0.0000	0.0323	0.1613	0.0645	0.0968	0.1935	0.0000	0.0323	0.0000	0.0000	0.1613
17	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635	0.0735	0.0913	0.0749	0.0628	0.0756	0.0706
18	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635	0.0735	0.0913	0.0749	0.0628	0.0756	0.0706
19	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635	0.0735	0.0913	0.0749			

0.0628 0.0756 0.0706
20 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
21 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
22 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
23 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
24 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
25 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
26 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
27 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
28 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
29 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
30 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
31 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
32 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
33 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
34 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
35 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
36 0.0820 0.0913 0.0656 0.0471 0.0364 0.0178 0.0314 0.0385 0.0777 0.0635 0.0735 0.0913 0.0749
0.0628 0.0756 0.0706
37 0.0566 0.0705 0.0848 0.0788 0.0716 0.0493 0.0416 0.0522 0.0701 0.0573 0.0680 0.0733 0.0654
0.0511 0.0547 0.0547
38 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
39 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
40 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
41 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

Processing a Site Data File with Header: SECPOP2000 V3.12 MACCS2 Site Data File for Vogtle + transients projected to ye
Lat: 33d 8'31" Long: 81d45'45" Population multiplier: 1.0000 10/06/2006

THIS PROGRAM CURRENTLY ALLOWS THE GENERATION OF UP TO 394 RESULTS

YOU HAVE REQUESTED 14 RESULTS FROM "EARLY" COMPOSED OF:

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

YOU HAVE REQUESTED 55 RESULTS FROM "CHRONC" COMPOSED OF:

34 RESULTS OF TYPE 9
13 RESULTS OF TYPE 10
0 RESULTS OF TYPE 11
8 RESULTS OF TYPE 12
0 RESULTS OF TYPE 13

TRIAL	DAY	HOUR	BIN	PRBMET
1	153	16	21	6.31E-03

WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED.

WARNING!! WARNING!! WARNING!! WARNING!!

```
For Julian Day 153, selecting COMIDA2 results # 4 of 9
      2      154       4      18   1.68E-03
For Julian Day 154, selecting COMIDA2 results # 4 of 9
      3      154      18      24   5.42E-04
For Julian Day 154, selecting COMIDA2 results # 4 of 9
      4      160      10       1   1.37E-02
For Julian Day 160, selecting COMIDA2 results # 4 of 9
      5      160      15       2   1.84E-02
For Julian Day 160, selecting COMIDA2 results # 4 of 9
      6      162       4      25   1.57E-03
For Julian Day 162, selecting COMIDA2 results # 4 of 9
      7      162       9      32   1.14E-03
For Julian Day 162, selecting COMIDA2 results # 4 of 9
      8      167       3      26   1.46E-03
For Julian Day 167, selecting COMIDA2 results # 5 of 9
      9      169       1       6   1.86E-02
For Julian Day 169, selecting COMIDA2 results # 5 of 9
     10      173      18       3   1.31E-03
For Julian Day 173, selecting COMIDA2 results # 5 of 9
     11      174       8       4   1.42E-02
For Julian Day 174, selecting COMIDA2 results # 5 of 9
     12      175       7       9   4.37E-03
For Julian Day 175, selecting COMIDA2 results # 5 of 9
     13      179       3      12   1.04E-02
For Julian Day 179, selecting COMIDA2 results # 5 of 9
     14      180      12      20   8.22E-03
For Julian Day 180, selecting COMIDA2 results # 5 of 9
     15      182       9      19   3.40E-03
For Julian Day 182, selecting COMIDA2 results # 5 of 9
     16      182      14      17   1.00E-02
For Julian Day 182, selecting COMIDA2 results # 5 of 9
     17      183       6      33   1.43E-04
For Julian Day 183, selecting COMIDA2 results # 5 of 9
     18      183      19      10   1.93E-02
For Julian Day 183, selecting COMIDA2 results # 5 of 9
     19      186      24      31   2.57E-04
For Julian Day 186, selecting COMIDA2 results # 5 of 9
     20      187       2      31   2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9
     21      187       4      31   2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9
     22      187       6      30   2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9
     23      187       8      30   2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9
     24      187      10      30   2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9
```

25 187 12 29 1.43E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9
26 187 13 29 1.43E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9
27 187 21 33 1.43E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9
28 192 18 22 1.88E-03
For Julian Day 192, selecting COMIDA2 results # 6 of 9
29 193 4 36 1.11E-03
For Julian Day 193, selecting COMIDA2 results # 6 of 9
30 193 12 35 1.06E-03
For Julian Day 193, selecting COMIDA2 results # 6 of 9
31 193 16 34 2.57E-04
For Julian Day 193, selecting COMIDA2 results # 6 of 9
32 193 17 33 1.43E-04
For Julian Day 193, selecting COMIDA2 results # 6 of 9
33 193 18 32 1.14E-03
For Julian Day 193, selecting COMIDA2 results # 6 of 9
34 193 21 27 4.57E-04
For Julian Day 193, selecting COMIDA2 results # 6 of 9
35 197 7 35 1.06E-03
For Julian Day 197, selecting COMIDA2 results # 6 of 9
36 197 12 34 2.57E-04
For Julian Day 197, selecting COMIDA2 results # 6 of 9
37 197 13 33 1.43E-04
For Julian Day 197, selecting COMIDA2 results # 6 of 9
38 197 17 17 1.00E-02
For Julian Day 197, selecting COMIDA2 results # 6 of 9
39 200 15 19 3.40E-03
For Julian Day 200, selecting COMIDA2 results # 6 of 9
40 205 18 21 6.31E-03
For Julian Day 205, selecting COMIDA2 results # 6 of 9
41 210 20 18 1.68E-03
For Julian Day 210, selecting COMIDA2 results # 6 of 9
42 213 8 5 2.19E-02
For Julian Day 213, selecting COMIDA2 results # 6 of 9
43 222 22 11 1.95E-02
For Julian Day 222, selecting COMIDA2 results # 7 of 9
44 226 3 10 1.93E-02
For Julian Day 226, selecting COMIDA2 results # 7 of 9
45 226 7 36 1.11E-03
For Julian Day 226, selecting COMIDA2 results # 7 of 9
46 232 2 27 4.57E-04
For Julian Day 232, selecting COMIDA2 results # 7 of 9
47 236 10 1 1.37E-02
For Julian Day 236, selecting COMIDA2 results # 7 of 9
48 239 24 13 1.73E-02
For Julian Day 239, selecting COMIDA2 results # 7 of 9
49 248 2 14 3.86E-02
For Julian Day 248, selecting COMIDA2 results # 7 of 9
50 249 3 15 9.22E-03
For Julian Day 249, selecting COMIDA2 results # 7 of 9

TRIAL DAY HOUR BIN PRBMET
51 252 5 9 4.37E-03

For Julian Day 252, selecting COMIDA2 results # 7 of 9
52 252 12 36 1.11E-03
For Julian Day 252, selecting COMIDA2 results # 7 of 9
53 252 16 35 1.06E-03
For Julian Day 252, selecting COMIDA2 results # 7 of 9
54 257 6 16 8.85E-04
For Julian Day 257, selecting COMIDA2 results # 8 of 9
55 262 22 18 1.68E-03
For Julian Day 262, selecting COMIDA2 results # 8 of 9
56 264 10 20 8.22E-03
For Julian Day 264, selecting COMIDA2 results # 8 of 9
57 265 1 7 2.17E-03
For Julian Day 265, selecting COMIDA2 results # 8 of 9
58 266 15 5 2.19E-02
For Julian Day 266, selecting COMIDA2 results # 8 of 9
59 271 11 3 1.31E-03
For Julian Day 271, selecting COMIDA2 results # 8 of 9
60 272 9 26 1.46E-03
For Julian Day 272, selecting COMIDA2 results # 8 of 9
61 272 14 24 5.42E-04
For Julian Day 272, selecting COMIDA2 results # 8 of 9
62 276 7 14 3.86E-02
For Julian Day 276, selecting COMIDA2 results # 8 of 9
63 277 13 32 1.14E-03
For Julian Day 277, selecting COMIDA2 results # 8 of 9
64 284 7 9 4.37E-03
For Julian Day 284, selecting COMIDA2 results # 8 of 9
65 297 17 11 1.95E-02
For Julian Day 297, selecting COMIDA2 results # 9 of 9
66 298 12 4 1.42E-02
For Julian Day 298, selecting COMIDA2 results # 9 of 9
67 306 4 22 1.88E-03
For Julian Day 306, selecting COMIDA2 results # 9 of 9
68 307 13 2 1.84E-02
For Julian Day 307, selecting COMIDA2 results # 9 of 9
69 312 4 13 1.73E-02
For Julian Day 312, selecting COMIDA2 results # 9 of 9
70 314 10 15 9.22E-03
For Julian Day 314, selecting COMIDA2 results # 9 of 9
71 314 13 16 8.85E-04
For Julian Day 314, selecting COMIDA2 results # 9 of 9
72 336 9 13 1.73E-02
For Julian Day 336, selecting COMIDA2 results # 1 of 9
73 342 12 4 1.42E-02
For Julian Day 342, selecting COMIDA2 results # 1 of 9
74 344 15 7 2.17E-03
For Julian Day 344, selecting COMIDA2 results # 1 of 9
75 348 16 6 1.86E-02
For Julian Day 348, selecting COMIDA2 results # 1 of 9
76 349 21 16 8.85E-04
For Julian Day 349, selecting COMIDA2 results # 1 of 9
77 354 19 25 1.57E-03
For Julian Day 354, selecting COMIDA2 results # 1 of 9
78 355 9 24 5.42E-04
For Julian Day 355, selecting COMIDA2 results # 1 of 9
79 355 10 23 1.14E-04

For Julian Day 355, selecting COMIDA2 results # 1 of 9
80 359 16 5 2.19E-02
For Julian Day 359, selecting COMIDA2 results # 1 of 9
81 360 5 14 3.86E-02
For Julian Day 360, selecting COMIDA2 results # 1 of 9
82 362 9 10 1.93E-02
For Julian Day 362, selecting COMIDA2 results # 1 of 9
83 362 23 12 1.04E-02
For Julian Day 362, selecting COMIDA2 results # 1 of 9
84 2 19 29 1.43E-04
For Julian Day 2, selecting COMIDA2 results # 1 of 9
85 2 22 17 1.00E-02
For Julian Day 2, selecting COMIDA2 results # 1 of 9
86 8 10 3 1.31E-03
For Julian Day 8, selecting COMIDA2 results # 1 of 9
87 9 7 20 8.22E-03
For Julian Day 9, selecting COMIDA2 results # 1 of 9
88 9 13 18 1.68E-03
For Julian Day 9, selecting COMIDA2 results # 1 of 9
89 14 14 36 1.11E-03
For Julian Day 14, selecting COMIDA2 results # 1 of 9
90 14 19 34 2.57E-04
For Julian Day 14, selecting COMIDA2 results # 1 of 9
91 15 1 23 1.14E-04
For Julian Day 15, selecting COMIDA2 results # 1 of 9
92 15 2 22 1.88E-03
For Julian Day 15, selecting COMIDA2 results # 1 of 9
93 17 9 21 6.31E-03
For Julian Day 17, selecting COMIDA2 results # 1 of 9
94 18 3 35 1.06E-03
For Julian Day 18, selecting COMIDA2 results # 1 of 9
95 18 6 34 2.57E-04
For Julian Day 18, selecting COMIDA2 results # 1 of 9
96 18 7 32 1.14E-03
For Julian Day 18, selecting COMIDA2 results # 1 of 9
97 23 12 29 1.43E-04
For Julian Day 23, selecting COMIDA2 results # 1 of 9
98 26 4 11 1.95E-02
For Julian Day 26, selecting COMIDA2 results # 1 of 9
99 31 14 8 1.14E-04
For Julian Day 31, selecting COMIDA2 results # 1 of 9
100 32 11 22 1.88E-03
For Julian Day 32, selecting COMIDA2 results # 2 of 9

TRIAL DAY HOUR BIN PRBMET
101 33 6 19 3.40E-03
For Julian Day 33, selecting COMIDA2 results # 2 of 9
102 38 15 8 1.14E-04
For Julian Day 38, selecting COMIDA2 results # 2 of 9
103 40 22 25 1.57E-03
For Julian Day 40, selecting COMIDA2 results # 2 of 9
104 41 5 24 5.42E-04
For Julian Day 41, selecting COMIDA2 results # 2 of 9
105 41 6 23 1.14E-04
For Julian Day 41, selecting COMIDA2 results # 2 of 9

```
      106        41        12         4   1.42E-02
For Julian Day  41, selecting COMIDA2 results # 2 of 9
      107        43        10         6   1.86E-02
For Julian Day  43, selecting COMIDA2 results # 2 of 9
      108        43        24        12   1.04E-02
For Julian Day  43, selecting COMIDA2 results # 2 of 9
      109        48        16        21   6.31E-03
For Julian Day  48, selecting COMIDA2 results # 2 of 9
      110        53        16         1   1.37E-02
For Julian Day  53, selecting COMIDA2 results # 2 of 9
      111        59        15         8   1.14E-04
For Julian Day  59, selecting COMIDA2 results # 2 of 9
      112        59        17         7   2.17E-03
For Julian Day  59, selecting COMIDA2 results # 2 of 9
      113        61        13         1   1.37E-02
For Julian Day  61, selecting COMIDA2 results # 2 of 9
      114        72        11         2   1.84E-02
For Julian Day  72, selecting COMIDA2 results # 2 of 9
      115        72        23        31   2.57E-04
For Julian Day  72, selecting COMIDA2 results # 2 of 9
      116        73         2        30   2.57E-04
For Julian Day  73, selecting COMIDA2 results # 2 of 9
      117        73         4        27   4.57E-04
For Julian Day  73, selecting COMIDA2 results # 2 of 9
      118        76         7        15   9.22E-03
For Julian Day  76, selecting COMIDA2 results # 2 of 9
      119        84         1        26   1.46E-03
For Julian Day  84, selecting COMIDA2 results # 2 of 9
      120        84         5        26   1.46E-03
For Julian Day  84, selecting COMIDA2 results # 2 of 9
      121        84        10        25   1.57E-03
For Julian Day  84, selecting COMIDA2 results # 2 of 9
      122        84        17        19   3.40E-03
For Julian Day  84, selecting COMIDA2 results # 2 of 9
      123        92        20        14   3.86E-02
For Julian Day  92, selecting COMIDA2 results # 3 of 9
      124        93        12         6   1.86E-02
For Julian Day  93, selecting COMIDA2 results # 3 of 9
      125        95        18         8   1.14E-04
For Julian Day  95, selecting COMIDA2 results # 3 of 9
      126        99        16         7   2.17E-03
For Julian Day  99, selecting COMIDA2 results # 3 of 9
      127       101        24        15   9.22E-03
For Julian Day 101, selecting COMIDA2 results # 3 of 9
      128       102         2        12   1.04E-02
For Julian Day 102, selecting COMIDA2 results # 3 of 9
      129       103        20        13   1.73E-02
For Julian Day 103, selecting COMIDA2 results # 3 of 9
      130       107         4        11   1.95E-02
For Julian Day 107, selecting COMIDA2 results # 3 of 9
      131       111        23        10   1.93E-02
For Julian Day 111, selecting COMIDA2 results # 3 of 9
      132       120        13        27   4.57E-04
For Julian Day 120, selecting COMIDA2 results # 3 of 9
      133       120        16        17   1.00E-02
For Julian Day 120, selecting COMIDA2 results # 3 of 9
```

```
     134       120        20        20   8.22E-03
For Julian Day 120, selecting COMIDA2 results # 3 of 9
     135       124        12         5   2.19E-02
For Julian Day 124, selecting COMIDA2 results # 3 of 9
     136       141        20        16   8.85E-04
For Julian Day 141, selecting COMIDA2 results # 4 of 9
     137       147         6         9   4.37E-03
For Julian Day 147, selecting COMIDA2 results # 4 of 9
     138       148         8         3   1.31E-03
For Julian Day 148, selecting COMIDA2 results # 4 of 9
     139       150        12         2   1.84E-02
For Julian Day 150, selecting COMIDA2 results # 4 of 9
```

WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED.

WARNING!! WARNING!! WARNING!! WARNING!!

For Julian Day 153, selecting COMIDA2 results # 4 of 9
For Julian Day 154, selecting COMIDA2 results # 4 of 9
For Julian Day 154, selecting COMIDA2 results # 4 of 9
For Julian Day 160, selecting COMIDA2 results # 4 of 9
For Julian Day 160, selecting COMIDA2 results # 4 of 9
For Julian Day 162, selecting COMIDA2 results # 4 of 9
For Julian Day 162, selecting COMIDA2 results # 4 of 9
For Julian Day 167, selecting COMIDA2 results # 5 of 9
For Julian Day 169, selecting COMIDA2 results # 5 of 9
For Julian Day 173, selecting COMIDA2 results # 5 of 9
For Julian Day 174, selecting COMIDA2 results # 5 of 9
For Julian Day 175, selecting COMIDA2 results # 5 of 9
For Julian Day 179, selecting COMIDA2 results # 5 of 9
For Julian Day 180, selecting COMIDA2 results # 5 of 9
For Julian Day 182, selecting COMIDA2 results # 5 of 9
For Julian Day 182, selecting COMIDA2 results # 5 of 9
For Julian Day 183, selecting COMIDA2 results # 5 of 9
For Julian Day 183, selecting COMIDA2 results # 5 of 9
For Julian Day 186, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 192, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 200, selecting COMIDA2 results # 6 of 9
For Julian Day 205, selecting COMIDA2 results # 6 of 9
For Julian Day 210, selecting COMIDA2 results # 6 of 9
For Julian Day 213, selecting COMIDA2 results # 6 of 9
For Julian Day 222, selecting COMIDA2 results # 7 of 9
For Julian Day 226, selecting COMIDA2 results # 7 of 9
For Julian Day 226, selecting COMIDA2 results # 7 of 9
For Julian Day 232, selecting COMIDA2 results # 7 of 9
For Julian Day 236, selecting COMIDA2 results # 7 of 9

```
For Julian Day 239, selecting COMIDA2 results # 7 of 9
For Julian Day 248, selecting COMIDA2 results # 7 of 9
For Julian Day 249, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 257, selecting COMIDA2 results # 8 of 9
For Julian Day 262, selecting COMIDA2 results # 8 of 9
For Julian Day 264, selecting COMIDA2 results # 8 of 9
For Julian Day 265, selecting COMIDA2 results # 8 of 9
For Julian Day 266, selecting COMIDA2 results # 8 of 9
For Julian Day 271, selecting COMIDA2 results # 8 of 9
For Julian Day 272, selecting COMIDA2 results # 8 of 9
For Julian Day 272, selecting COMIDA2 results # 8 of 9
For Julian Day 276, selecting COMIDA2 results # 8 of 9
For Julian Day 277, selecting COMIDA2 results # 8 of 9
For Julian Day 284, selecting COMIDA2 results # 8 of 9
For Julian Day 297, selecting COMIDA2 results # 9 of 9
For Julian Day 298, selecting COMIDA2 results # 9 of 9
For Julian Day 306, selecting COMIDA2 results # 9 of 9
For Julian Day 307, selecting COMIDA2 results # 9 of 9
For Julian Day 312, selecting COMIDA2 results # 9 of 9
For Julian Day 314, selecting COMIDA2 results # 9 of 9
For Julian Day 314, selecting COMIDA2 results # 9 of 9
For Julian Day 336, selecting COMIDA2 results # 1 of 9
For Julian Day 342, selecting COMIDA2 results # 1 of 9
For Julian Day 344, selecting COMIDA2 results # 1 of 9
For Julian Day 348, selecting COMIDA2 results # 1 of 9
For Julian Day 349, selecting COMIDA2 results # 1 of 9
For Julian Day 354, selecting COMIDA2 results # 1 of 9
For Julian Day 355, selecting COMIDA2 results # 1 of 9
For Julian Day 355, selecting COMIDA2 results # 1 of 9
For Julian Day 359, selecting COMIDA2 results # 1 of 9
For Julian Day 360, selecting COMIDA2 results # 1 of 9
For Julian Day 362, selecting COMIDA2 results # 1 of 9
For Julian Day 362, selecting COMIDA2 results # 1 of 9
For Julian Day   2, selecting COMIDA2 results # 1 of 9
For Julian Day   2, selecting COMIDA2 results # 1 of 9
For Julian Day   8, selecting COMIDA2 results # 1 of 9
For Julian Day   9, selecting COMIDA2 results # 1 of 9
For Julian Day   9, selecting COMIDA2 results # 1 of 9
For Julian Day  14, selecting COMIDA2 results # 1 of 9
For Julian Day  14, selecting COMIDA2 results # 1 of 9
For Julian Day  15, selecting COMIDA2 results # 1 of 9
For Julian Day  15, selecting COMIDA2 results # 1 of 9
For Julian Day  17, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  23, selecting COMIDA2 results # 1 of 9
For Julian Day  26, selecting COMIDA2 results # 1 of 9
For Julian Day  31, selecting COMIDA2 results # 1 of 9
For Julian Day  32, selecting COMIDA2 results # 2 of 9
For Julian Day  33, selecting COMIDA2 results # 2 of 9
For Julian Day  38, selecting COMIDA2 results # 2 of 9
For Julian Day  40, selecting COMIDA2 results # 2 of 9
```

```
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  43, selecting COMIDA2 results # 2 of 9
For Julian Day  43, selecting COMIDA2 results # 2 of 9
For Julian Day  48, selecting COMIDA2 results # 2 of 9
For Julian Day  53, selecting COMIDA2 results # 2 of 9
For Julian Day  59, selecting COMIDA2 results # 2 of 9
For Julian Day  59, selecting COMIDA2 results # 2 of 9
For Julian Day  61, selecting COMIDA2 results # 2 of 9
For Julian Day  72, selecting COMIDA2 results # 2 of 9
For Julian Day  72, selecting COMIDA2 results # 2 of 9
For Julian Day  73, selecting COMIDA2 results # 2 of 9
For Julian Day  73, selecting COMIDA2 results # 2 of 9
For Julian Day  76, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  92, selecting COMIDA2 results # 3 of 9
For Julian Day  93, selecting COMIDA2 results # 3 of 9
For Julian Day  95, selecting COMIDA2 results # 3 of 9
For Julian Day  99, selecting COMIDA2 results # 3 of 9
For Julian Day 101, selecting COMIDA2 results # 3 of 9
For Julian Day 102, selecting COMIDA2 results # 3 of 9
For Julian Day 103, selecting COMIDA2 results # 3 of 9
For Julian Day 107, selecting COMIDA2 results # 3 of 9
For Julian Day 111, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 124, selecting COMIDA2 results # 3 of 9
For Julian Day 141, selecting COMIDA2 results # 4 of 9
For Julian Day 147, selecting COMIDA2 results # 4 of 9
For Julian Day 148, selecting COMIDA2 results # 4 of 9
For Julian Day 150, selecting COMIDA2 results # 4 of 9
```

WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED.

WARNING!! WARNING!! WARNING!! WARNING!!

For Julian Day 153, selecting COMIDA2 results # 4 of 9
For Julian Day 154, selecting COMIDA2 results # 4 of 9
For Julian Day 154, selecting COMIDA2 results # 4 of 9
For Julian Day 160, selecting COMIDA2 results # 4 of 9
For Julian Day 160, selecting COMIDA2 results # 4 of 9
For Julian Day 162, selecting COMIDA2 results # 4 of 9
For Julian Day 162, selecting COMIDA2 results # 4 of 9
For Julian Day 167, selecting COMIDA2 results # 5 of 9
For Julian Day 169, selecting COMIDA2 results # 5 of 9
For Julian Day 173, selecting COMIDA2 results # 5 of 9
For Julian Day 174, selecting COMIDA2 results # 5 of 9
For Julian Day 175, selecting COMIDA2 results # 5 of 9
For Julian Day 179, selecting COMIDA2 results # 5 of 9
For Julian Day 180, selecting COMIDA2 results # 5 of 9
For Julian Day 182, selecting COMIDA2 results # 5 of 9
For Julian Day 182, selecting COMIDA2 results # 5 of 9
For Julian Day 183, selecting COMIDA2 results # 5 of 9
For Julian Day 183, selecting COMIDA2 results # 5 of 9
For Julian Day 186, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 192, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 200, selecting COMIDA2 results # 6 of 9
For Julian Day 205, selecting COMIDA2 results # 6 of 9
For Julian Day 210, selecting COMIDA2 results # 6 of 9
For Julian Day 213, selecting COMIDA2 results # 6 of 9
For Julian Day 222, selecting COMIDA2 results # 7 of 9
For Julian Day 226, selecting COMIDA2 results # 7 of 9
For Julian Day 226, selecting COMIDA2 results # 7 of 9
For Julian Day 232, selecting COMIDA2 results # 7 of 9
For Julian Day 236, selecting COMIDA2 results # 7 of 9

```
For Julian Day 239, selecting COMIDA2 results # 7 of 9
For Julian Day 248, selecting COMIDA2 results # 7 of 9
For Julian Day 249, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 257, selecting COMIDA2 results # 8 of 9
For Julian Day 262, selecting COMIDA2 results # 8 of 9
For Julian Day 264, selecting COMIDA2 results # 8 of 9
For Julian Day 265, selecting COMIDA2 results # 8 of 9
For Julian Day 266, selecting COMIDA2 results # 8 of 9
For Julian Day 271, selecting COMIDA2 results # 8 of 9
For Julian Day 272, selecting COMIDA2 results # 8 of 9
For Julian Day 272, selecting COMIDA2 results # 8 of 9
For Julian Day 276, selecting COMIDA2 results # 8 of 9
For Julian Day 277, selecting COMIDA2 results # 8 of 9
For Julian Day 284, selecting COMIDA2 results # 8 of 9
For Julian Day 297, selecting COMIDA2 results # 9 of 9
For Julian Day 298, selecting COMIDA2 results # 9 of 9
For Julian Day 306, selecting COMIDA2 results # 9 of 9
For Julian Day 307, selecting COMIDA2 results # 9 of 9
For Julian Day 312, selecting COMIDA2 results # 9 of 9
For Julian Day 314, selecting COMIDA2 results # 9 of 9
For Julian Day 314, selecting COMIDA2 results # 9 of 9
For Julian Day 336, selecting COMIDA2 results # 1 of 9
For Julian Day 342, selecting COMIDA2 results # 1 of 9
For Julian Day 344, selecting COMIDA2 results # 1 of 9
For Julian Day 348, selecting COMIDA2 results # 1 of 9
For Julian Day 349, selecting COMIDA2 results # 1 of 9
For Julian Day 354, selecting COMIDA2 results # 1 of 9
For Julian Day 355, selecting COMIDA2 results # 1 of 9
For Julian Day 355, selecting COMIDA2 results # 1 of 9
For Julian Day 359, selecting COMIDA2 results # 1 of 9
For Julian Day 360, selecting COMIDA2 results # 1 of 9
For Julian Day 362, selecting COMIDA2 results # 1 of 9
For Julian Day 362, selecting COMIDA2 results # 1 of 9
For Julian Day   2, selecting COMIDA2 results # 1 of 9
For Julian Day   2, selecting COMIDA2 results # 1 of 9
For Julian Day   8, selecting COMIDA2 results # 1 of 9
For Julian Day   9, selecting COMIDA2 results # 1 of 9
For Julian Day   9, selecting COMIDA2 results # 1 of 9
For Julian Day  14, selecting COMIDA2 results # 1 of 9
For Julian Day  14, selecting COMIDA2 results # 1 of 9
For Julian Day  15, selecting COMIDA2 results # 1 of 9
For Julian Day  15, selecting COMIDA2 results # 1 of 9
For Julian Day  17, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  23, selecting COMIDA2 results # 1 of 9
For Julian Day  26, selecting COMIDA2 results # 1 of 9
For Julian Day  31, selecting COMIDA2 results # 1 of 9
For Julian Day  32, selecting COMIDA2 results # 2 of 9
For Julian Day  33, selecting COMIDA2 results # 2 of 9
For Julian Day  38, selecting COMIDA2 results # 2 of 9
For Julian Day  40, selecting COMIDA2 results # 2 of 9
```

```
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  43, selecting COMIDA2 results # 2 of 9
For Julian Day  43, selecting COMIDA2 results # 2 of 9
For Julian Day  48, selecting COMIDA2 results # 2 of 9
For Julian Day  53, selecting COMIDA2 results # 2 of 9
For Julian Day  59, selecting COMIDA2 results # 2 of 9
For Julian Day  59, selecting COMIDA2 results # 2 of 9
For Julian Day  61, selecting COMIDA2 results # 2 of 9
For Julian Day  72, selecting COMIDA2 results # 2 of 9
For Julian Day  72, selecting COMIDA2 results # 2 of 9
For Julian Day  73, selecting COMIDA2 results # 2 of 9
For Julian Day  73, selecting COMIDA2 results # 2 of 9
For Julian Day  76, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  92, selecting COMIDA2 results # 3 of 9
For Julian Day  93, selecting COMIDA2 results # 3 of 9
For Julian Day  95, selecting COMIDA2 results # 3 of 9
For Julian Day  99, selecting COMIDA2 results # 3 of 9
For Julian Day 101, selecting COMIDA2 results # 3 of 9
For Julian Day 102, selecting COMIDA2 results # 3 of 9
For Julian Day 103, selecting COMIDA2 results # 3 of 9
For Julian Day 107, selecting COMIDA2 results # 3 of 9
For Julian Day 111, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 124, selecting COMIDA2 results # 3 of 9
For Julian Day 141, selecting COMIDA2 results # 4 of 9
For Julian Day 147, selecting COMIDA2 results # 4 of 9
For Julian Day 148, selecting COMIDA2 results # 4 of 9
For Julian Day 150, selecting COMIDA2 results # 4 of 9
```

WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED.

WARNING!! WARNING!! WARNING!! WARNING!!

For Julian Day 153, selecting COMIDA2 results # 4 of 9
For Julian Day 154, selecting COMIDA2 results # 4 of 9
For Julian Day 154, selecting COMIDA2 results # 4 of 9
For Julian Day 160, selecting COMIDA2 results # 4 of 9
For Julian Day 160, selecting COMIDA2 results # 4 of 9
For Julian Day 162, selecting COMIDA2 results # 4 of 9
For Julian Day 162, selecting COMIDA2 results # 4 of 9
For Julian Day 167, selecting COMIDA2 results # 5 of 9
For Julian Day 169, selecting COMIDA2 results # 5 of 9
For Julian Day 173, selecting COMIDA2 results # 5 of 9
For Julian Day 174, selecting COMIDA2 results # 5 of 9
For Julian Day 175, selecting COMIDA2 results # 5 of 9
For Julian Day 179, selecting COMIDA2 results # 5 of 9
For Julian Day 180, selecting COMIDA2 results # 5 of 9
For Julian Day 182, selecting COMIDA2 results # 5 of 9
For Julian Day 182, selecting COMIDA2 results # 5 of 9
For Julian Day 183, selecting COMIDA2 results # 5 of 9
For Julian Day 183, selecting COMIDA2 results # 5 of 9
For Julian Day 186, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 192, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 200, selecting COMIDA2 results # 6 of 9
For Julian Day 205, selecting COMIDA2 results # 6 of 9
For Julian Day 210, selecting COMIDA2 results # 6 of 9
For Julian Day 213, selecting COMIDA2 results # 6 of 9
For Julian Day 222, selecting COMIDA2 results # 7 of 9
For Julian Day 226, selecting COMIDA2 results # 7 of 9
For Julian Day 226, selecting COMIDA2 results # 7 of 9
For Julian Day 232, selecting COMIDA2 results # 7 of 9
For Julian Day 236, selecting COMIDA2 results # 7 of 9

```
For Julian Day 239, selecting COMIDA2 results # 7 of 9
For Julian Day 248, selecting COMIDA2 results # 7 of 9
For Julian Day 249, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 257, selecting COMIDA2 results # 8 of 9
For Julian Day 262, selecting COMIDA2 results # 8 of 9
For Julian Day 264, selecting COMIDA2 results # 8 of 9
For Julian Day 265, selecting COMIDA2 results # 8 of 9
For Julian Day 266, selecting COMIDA2 results # 8 of 9
For Julian Day 271, selecting COMIDA2 results # 8 of 9
For Julian Day 272, selecting COMIDA2 results # 8 of 9
For Julian Day 272, selecting COMIDA2 results # 8 of 9
For Julian Day 276, selecting COMIDA2 results # 8 of 9
For Julian Day 277, selecting COMIDA2 results # 8 of 9
For Julian Day 284, selecting COMIDA2 results # 8 of 9
For Julian Day 297, selecting COMIDA2 results # 9 of 9
For Julian Day 298, selecting COMIDA2 results # 9 of 9
For Julian Day 306, selecting COMIDA2 results # 9 of 9
For Julian Day 307, selecting COMIDA2 results # 9 of 9
For Julian Day 312, selecting COMIDA2 results # 9 of 9
For Julian Day 314, selecting COMIDA2 results # 9 of 9
For Julian Day 314, selecting COMIDA2 results # 9 of 9
For Julian Day 336, selecting COMIDA2 results # 1 of 9
For Julian Day 342, selecting COMIDA2 results # 1 of 9
For Julian Day 344, selecting COMIDA2 results # 1 of 9
For Julian Day 348, selecting COMIDA2 results # 1 of 9
For Julian Day 349, selecting COMIDA2 results # 1 of 9
For Julian Day 354, selecting COMIDA2 results # 1 of 9
For Julian Day 355, selecting COMIDA2 results # 1 of 9
For Julian Day 355, selecting COMIDA2 results # 1 of 9
For Julian Day 359, selecting COMIDA2 results # 1 of 9
For Julian Day 360, selecting COMIDA2 results # 1 of 9
For Julian Day 362, selecting COMIDA2 results # 1 of 9
For Julian Day 362, selecting COMIDA2 results # 1 of 9
For Julian Day   2, selecting COMIDA2 results # 1 of 9
For Julian Day   2, selecting COMIDA2 results # 1 of 9
For Julian Day   8, selecting COMIDA2 results # 1 of 9
For Julian Day   9, selecting COMIDA2 results # 1 of 9
For Julian Day   9, selecting COMIDA2 results # 1 of 9
For Julian Day  14, selecting COMIDA2 results # 1 of 9
For Julian Day  14, selecting COMIDA2 results # 1 of 9
For Julian Day  15, selecting COMIDA2 results # 1 of 9
For Julian Day  15, selecting COMIDA2 results # 1 of 9
For Julian Day  17, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  23, selecting COMIDA2 results # 1 of 9
For Julian Day  26, selecting COMIDA2 results # 1 of 9
For Julian Day  31, selecting COMIDA2 results # 1 of 9
For Julian Day  32, selecting COMIDA2 results # 2 of 9
For Julian Day  33, selecting COMIDA2 results # 2 of 9
For Julian Day  38, selecting COMIDA2 results # 2 of 9
For Julian Day  40, selecting COMIDA2 results # 2 of 9
```

```
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  43, selecting COMIDA2 results # 2 of 9
For Julian Day  43, selecting COMIDA2 results # 2 of 9
For Julian Day  48, selecting COMIDA2 results # 2 of 9
For Julian Day  53, selecting COMIDA2 results # 2 of 9
For Julian Day  59, selecting COMIDA2 results # 2 of 9
For Julian Day  59, selecting COMIDA2 results # 2 of 9
For Julian Day  61, selecting COMIDA2 results # 2 of 9
For Julian Day  72, selecting COMIDA2 results # 2 of 9
For Julian Day  72, selecting COMIDA2 results # 2 of 9
For Julian Day  73, selecting COMIDA2 results # 2 of 9
For Julian Day  73, selecting COMIDA2 results # 2 of 9
For Julian Day  76, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  92, selecting COMIDA2 results # 3 of 9
For Julian Day  93, selecting COMIDA2 results # 3 of 9
For Julian Day  95, selecting COMIDA2 results # 3 of 9
For Julian Day  99, selecting COMIDA2 results # 3 of 9
For Julian Day 101, selecting COMIDA2 results # 3 of 9
For Julian Day 102, selecting COMIDA2 results # 3 of 9
For Julian Day 103, selecting COMIDA2 results # 3 of 9
For Julian Day 107, selecting COMIDA2 results # 3 of 9
For Julian Day 111, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 124, selecting COMIDA2 results # 3 of 9
For Julian Day 141, selecting COMIDA2 results # 4 of 9
For Julian Day 147, selecting COMIDA2 results # 4 of 9
For Julian Day 148, selecting COMIDA2 results # 4 of 9
For Julian Day 150, selecting COMIDA2 results # 4 of 9
```

WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED.

WARNING!! WARNING!! WARNING!! WARNING!!

For Julian Day 153, selecting COMIDA2 results # 4 of 9
For Julian Day 154, selecting COMIDA2 results # 4 of 9
For Julian Day 154, selecting COMIDA2 results # 4 of 9
For Julian Day 160, selecting COMIDA2 results # 4 of 9
For Julian Day 160, selecting COMIDA2 results # 4 of 9
For Julian Day 162, selecting COMIDA2 results # 4 of 9
For Julian Day 162, selecting COMIDA2 results # 4 of 9
For Julian Day 167, selecting COMIDA2 results # 5 of 9
For Julian Day 169, selecting COMIDA2 results # 5 of 9
For Julian Day 173, selecting COMIDA2 results # 5 of 9
For Julian Day 174, selecting COMIDA2 results # 5 of 9
For Julian Day 175, selecting COMIDA2 results # 5 of 9
For Julian Day 179, selecting COMIDA2 results # 5 of 9
For Julian Day 180, selecting COMIDA2 results # 5 of 9
For Julian Day 182, selecting COMIDA2 results # 5 of 9
For Julian Day 182, selecting COMIDA2 results # 5 of 9
For Julian Day 183, selecting COMIDA2 results # 5 of 9
For Julian Day 183, selecting COMIDA2 results # 5 of 9
For Julian Day 186, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 187, selecting COMIDA2 results # 5 of 9
For Julian Day 192, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 193, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 197, selecting COMIDA2 results # 6 of 9
For Julian Day 200, selecting COMIDA2 results # 6 of 9
For Julian Day 205, selecting COMIDA2 results # 6 of 9
For Julian Day 210, selecting COMIDA2 results # 6 of 9
For Julian Day 213, selecting COMIDA2 results # 6 of 9
For Julian Day 222, selecting COMIDA2 results # 7 of 9
For Julian Day 226, selecting COMIDA2 results # 7 of 9
For Julian Day 226, selecting COMIDA2 results # 7 of 9
For Julian Day 232, selecting COMIDA2 results # 7 of 9
For Julian Day 236, selecting COMIDA2 results # 7 of 9

```
For Julian Day 239, selecting COMIDA2 results # 7 of 9
For Julian Day 248, selecting COMIDA2 results # 7 of 9
For Julian Day 249, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 252, selecting COMIDA2 results # 7 of 9
For Julian Day 257, selecting COMIDA2 results # 8 of 9
For Julian Day 262, selecting COMIDA2 results # 8 of 9
For Julian Day 264, selecting COMIDA2 results # 8 of 9
For Julian Day 265, selecting COMIDA2 results # 8 of 9
For Julian Day 266, selecting COMIDA2 results # 8 of 9
For Julian Day 271, selecting COMIDA2 results # 8 of 9
For Julian Day 272, selecting COMIDA2 results # 8 of 9
For Julian Day 272, selecting COMIDA2 results # 8 of 9
For Julian Day 276, selecting COMIDA2 results # 8 of 9
For Julian Day 277, selecting COMIDA2 results # 8 of 9
For Julian Day 284, selecting COMIDA2 results # 8 of 9
For Julian Day 297, selecting COMIDA2 results # 9 of 9
For Julian Day 298, selecting COMIDA2 results # 9 of 9
For Julian Day 306, selecting COMIDA2 results # 9 of 9
For Julian Day 307, selecting COMIDA2 results # 9 of 9
For Julian Day 312, selecting COMIDA2 results # 9 of 9
For Julian Day 314, selecting COMIDA2 results # 9 of 9
For Julian Day 314, selecting COMIDA2 results # 9 of 9
For Julian Day 336, selecting COMIDA2 results # 1 of 9
For Julian Day 342, selecting COMIDA2 results # 1 of 9
For Julian Day 344, selecting COMIDA2 results # 1 of 9
For Julian Day 348, selecting COMIDA2 results # 1 of 9
For Julian Day 349, selecting COMIDA2 results # 1 of 9
For Julian Day 354, selecting COMIDA2 results # 1 of 9
For Julian Day 355, selecting COMIDA2 results # 1 of 9
For Julian Day 355, selecting COMIDA2 results # 1 of 9
For Julian Day 359, selecting COMIDA2 results # 1 of 9
For Julian Day 360, selecting COMIDA2 results # 1 of 9
For Julian Day 362, selecting COMIDA2 results # 1 of 9
For Julian Day 362, selecting COMIDA2 results # 1 of 9
For Julian Day   2, selecting COMIDA2 results # 1 of 9
For Julian Day   2, selecting COMIDA2 results # 1 of 9
For Julian Day   8, selecting COMIDA2 results # 1 of 9
For Julian Day   9, selecting COMIDA2 results # 1 of 9
For Julian Day   9, selecting COMIDA2 results # 1 of 9
For Julian Day  14, selecting COMIDA2 results # 1 of 9
For Julian Day  14, selecting COMIDA2 results # 1 of 9
For Julian Day  15, selecting COMIDA2 results # 1 of 9
For Julian Day  15, selecting COMIDA2 results # 1 of 9
For Julian Day  17, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  18, selecting COMIDA2 results # 1 of 9
For Julian Day  23, selecting COMIDA2 results # 1 of 9
For Julian Day  26, selecting COMIDA2 results # 1 of 9
For Julian Day  31, selecting COMIDA2 results # 1 of 9
For Julian Day  32, selecting COMIDA2 results # 2 of 9
For Julian Day  33, selecting COMIDA2 results # 2 of 9
For Julian Day  38, selecting COMIDA2 results # 2 of 9
For Julian Day  40, selecting COMIDA2 results # 2 of 9
```

```
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  41, selecting COMIDA2 results # 2 of 9
For Julian Day  43, selecting COMIDA2 results # 2 of 9
For Julian Day  43, selecting COMIDA2 results # 2 of 9
For Julian Day  48, selecting COMIDA2 results # 2 of 9
For Julian Day  53, selecting COMIDA2 results # 2 of 9
For Julian Day  59, selecting COMIDA2 results # 2 of 9
For Julian Day  59, selecting COMIDA2 results # 2 of 9
For Julian Day  61, selecting COMIDA2 results # 2 of 9
For Julian Day  72, selecting COMIDA2 results # 2 of 9
For Julian Day  72, selecting COMIDA2 results # 2 of 9
For Julian Day  73, selecting COMIDA2 results # 2 of 9
For Julian Day  73, selecting COMIDA2 results # 2 of 9
For Julian Day  76, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  84, selecting COMIDA2 results # 2 of 9
For Julian Day  92, selecting COMIDA2 results # 3 of 9
For Julian Day  93, selecting COMIDA2 results # 3 of 9
For Julian Day  95, selecting COMIDA2 results # 3 of 9
For Julian Day  99, selecting COMIDA2 results # 3 of 9
For Julian Day 101, selecting COMIDA2 results # 3 of 9
For Julian Day 102, selecting COMIDA2 results # 3 of 9
For Julian Day 103, selecting COMIDA2 results # 3 of 9
For Julian Day 107, selecting COMIDA2 results # 3 of 9
For Julian Day 111, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 120, selecting COMIDA2 results # 3 of 9
For Julian Day 124, selecting COMIDA2 results # 3 of 9
For Julian Day 141, selecting COMIDA2 results # 4 of 9
For Julian Day 147, selecting COMIDA2 results # 4 of 9
For Julian Day 148, selecting COMIDA2 results # 4 of 9
For Julian Day 150, selecting COMIDA2 results # 4 of 9
```

WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED.

WARNING!! WARNING!! WARNING!! WARNING!!

For Julian Day 152, selecting COMIDA2 results # 4 of 9
For Julian Day 152, selecting COMIDA2 results # 4 of 9
For Julian Day 153, selecting COMIDA2 results # 4 of 9
For Julian Day 159, selecting COMIDA2 results # 4 of 9
For Julian Day 159, selecting COMIDA2 results # 4 of 9
For Julian Day 160, selecting COMIDA2 results # 4 of 9
For Julian Day 161, selecting COMIDA2 results # 4 of 9
For Julian Day 165, selecting COMIDA2 results # 4 of 9
For Julian Day 167, selecting COMIDA2 results # 5 of 9
For Julian Day 172, selecting COMIDA2 results # 5 of 9
For Julian Day 173, selecting COMIDA2 results # 5 of 9
For Julian Day 174, selecting COMIDA2 results # 5 of 9
For Julian Day 177, selecting COMIDA2 results # 5 of 9
For Julian Day 179, selecting COMIDA2 results # 5 of 9
For Julian Day 181, selecting COMIDA2 results # 5 of 9
For Julian Day 181, selecting COMIDA2 results # 5 of 9
For Julian Day 181, selecting COMIDA2 results # 5 of 9
For Julian Day 182, selecting COMIDA2 results # 5 of 9
For Julian Day 185, selecting COMIDA2 results # 5 of 9
For Julian Day 185, selecting COMIDA2 results # 5 of 9
For Julian Day 185, selecting COMIDA2 results # 5 of 9
For Julian Day 185, selecting COMIDA2 results # 5 of 9
For Julian Day 186, selecting COMIDA2 results # 5 of 9
For Julian Day 186, selecting COMIDA2 results # 5 of 9
For Julian Day 186, selecting COMIDA2 results # 5 of 9
For Julian Day 186, selecting COMIDA2 results # 5 of 9
For Julian Day 186, selecting COMIDA2 results # 5 of 9
For Julian Day 191, selecting COMIDA2 results # 5 of 9
For Julian Day 191, selecting COMIDA2 results # 5 of 9
For Julian Day 192, selecting COMIDA2 results # 6 of 9
For Julian Day 192, selecting COMIDA2 results # 6 of 9
For Julian Day 192, selecting COMIDA2 results # 6 of 9
For Julian Day 192, selecting COMIDA2 results # 6 of 9
For Julian Day 192, selecting COMIDA2 results # 6 of 9
For Julian Day 196, selecting COMIDA2 results # 6 of 9
For Julian Day 196, selecting COMIDA2 results # 6 of 9
For Julian Day 196, selecting COMIDA2 results # 6 of 9
For Julian Day 196, selecting COMIDA2 results # 6 of 9
For Julian Day 199, selecting COMIDA2 results # 6 of 9
For Julian Day 204, selecting COMIDA2 results # 6 of 9
For Julian Day 209, selecting COMIDA2 results # 6 of 9
For Julian Day 212, selecting COMIDA2 results # 6 of 9
For Julian Day 221, selecting COMIDA2 results # 6 of 9
For Julian Day 224, selecting COMIDA2 results # 7 of 9
For Julian Day 225, selecting COMIDA2 results # 7 of 9
For Julian Day 230, selecting COMIDA2 results # 7 of 9
For Julian Day 235, selecting COMIDA2 results # 7 of 9

```
For Julian Day 238, selecting COMIDA2 results # 7 of 9
For Julian Day 246, selecting COMIDA2 results # 7 of 9
For Julian Day 247, selecting COMIDA2 results # 7 of 9
For Julian Day 250, selecting COMIDA2 results # 7 of 9
For Julian Day 251, selecting COMIDA2 results # 7 of 9
For Julian Day 251, selecting COMIDA2 results # 7 of 9
For Julian Day 255, selecting COMIDA2 results # 7 of 9
For Julian Day 261, selecting COMIDA2 results # 8 of 9
For Julian Day 263, selecting COMIDA2 results # 8 of 9
For Julian Day 263, selecting COMIDA2 results # 8 of 9
For Julian Day 265, selecting COMIDA2 results # 8 of 9
For Julian Day 270, selecting COMIDA2 results # 8 of 9
For Julian Day 271, selecting COMIDA2 results # 8 of 9
For Julian Day 271, selecting COMIDA2 results # 8 of 9
For Julian Day 275, selecting COMIDA2 results # 8 of 9
For Julian Day 276, selecting COMIDA2 results # 8 of 9
For Julian Day 283, selecting COMIDA2 results # 8 of 9
For Julian Day 296, selecting COMIDA2 results # 9 of 9
For Julian Day 297, selecting COMIDA2 results # 9 of 9
For Julian Day 304, selecting COMIDA2 results # 9 of 9
For Julian Day 306, selecting COMIDA2 results # 9 of 9
For Julian Day 310, selecting COMIDA2 results # 9 of 9
For Julian Day 313, selecting COMIDA2 results # 9 of 9
For Julian Day 313, selecting COMIDA2 results # 9 of 9
For Julian Day 335, selecting COMIDA2 results # 1 of 9
For Julian Day 341, selecting COMIDA2 results # 1 of 9
For Julian Day 343, selecting COMIDA2 results # 1 of 9
For Julian Day 347, selecting COMIDA2 results # 1 of 9
For Julian Day 348, selecting COMIDA2 results # 1 of 9
For Julian Day 353, selecting COMIDA2 results # 1 of 9
For Julian Day 354, selecting COMIDA2 results # 1 of 9
For Julian Day 354, selecting COMIDA2 results # 1 of 9
For Julian Day 358, selecting COMIDA2 results # 1 of 9
For Julian Day 358, selecting COMIDA2 results # 1 of 9
For Julian Day 361, selecting COMIDA2 results # 1 of 9
For Julian Day 361, selecting COMIDA2 results # 1 of 9
For Julian Day   1, selecting COMIDA2 results # 1 of 9
For Julian Day   1, selecting COMIDA2 results # 1 of 9
For Julian Day   7, selecting COMIDA2 results # 1 of 9
For Julian Day   8, selecting COMIDA2 results # 1 of 9
For Julian Day   8, selecting COMIDA2 results # 1 of 9
For Julian Day  13, selecting COMIDA2 results # 1 of 9
For Julian Day  13, selecting COMIDA2 results # 1 of 9
For Julian Day  13, selecting COMIDA2 results # 1 of 9
For Julian Day  13, selecting COMIDA2 results # 1 of 9
For Julian Day  16, selecting COMIDA2 results # 1 of 9
For Julian Day  16, selecting COMIDA2 results # 1 of 9
For Julian Day  16, selecting COMIDA2 results # 1 of 9
For Julian Day  17, selecting COMIDA2 results # 1 of 9
For Julian Day  22, selecting COMIDA2 results # 1 of 9
For Julian Day  24, selecting COMIDA2 results # 1 of 9
For Julian Day  30, selecting COMIDA2 results # 1 of 9
For Julian Day  31, selecting COMIDA2 results # 1 of 9
For Julian Day  31, selecting COMIDA2 results # 1 of 9
For Julian Day  37, selecting COMIDA2 results # 2 of 9
For Julian Day  39, selecting COMIDA2 results # 2 of 9
```

```
For Julian Day  39, selecting COMIDA2 results # 2 of 9
For Julian Day  39, selecting COMIDA2 results # 2 of 9
For Julian Day  40, selecting COMIDA2 results # 2 of 9
For Julian Day  42, selecting COMIDA2 results # 2 of 9
For Julian Day  42, selecting COMIDA2 results # 2 of 9
For Julian Day  47, selecting COMIDA2 results # 2 of 9
For Julian Day  52, selecting COMIDA2 results # 2 of 9
For Julian Day  58, selecting COMIDA2 results # 2 of 9
For Julian Day  58, selecting COMIDA2 results # 2 of 9
For Julian Day  60, selecting COMIDA2 results # 2 of 9
For Julian Day  71, selecting COMIDA2 results # 2 of 9
For Julian Day  71, selecting COMIDA2 results # 2 of 9
For Julian Day  71, selecting COMIDA2 results # 2 of 9
For Julian Day  71, selecting COMIDA2 results # 2 of 9
For Julian Day  75, selecting COMIDA2 results # 2 of 9
For Julian Day  82, selecting COMIDA2 results # 2 of 9
For Julian Day  82, selecting COMIDA2 results # 2 of 9
For Julian Day  83, selecting COMIDA2 results # 2 of 9
For Julian Day  83, selecting COMIDA2 results # 2 of 9
For Julian Day  91, selecting COMIDA2 results # 2 of 9
For Julian Day  92, selecting COMIDA2 results # 3 of 9
For Julian Day  94, selecting COMIDA2 results # 3 of 9
For Julian Day  98, selecting COMIDA2 results # 3 of 9
For Julian Day 100, selecting COMIDA2 results # 3 of 9
For Julian Day 100, selecting COMIDA2 results # 3 of 9
For Julian Day 102, selecting COMIDA2 results # 3 of 9
For Julian Day 105, selecting COMIDA2 results # 3 of 9
For Julian Day 110, selecting COMIDA2 results # 3 of 9
For Julian Day 119, selecting COMIDA2 results # 3 of 9
For Julian Day 119, selecting COMIDA2 results # 3 of 9
For Julian Day 119, selecting COMIDA2 results # 3 of 9
For Julian Day 123, selecting COMIDA2 results # 3 of 9
For Julian Day 140, selecting COMIDA2 results # 4 of 9
For Julian Day 145, selecting COMIDA2 results # 4 of 9
For Julian Day 147, selecting COMIDA2 results # 4 of 9
For Julian Day 149, selecting COMIDA2 results # 4 of 9
```

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 1 OF 6:
CFI

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY" WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION 0.950

COHORT 2 = NO EVACUATION 0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM "CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

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

14-JUL-07 09:28:11 PAGE 1 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 7.04E+02 2.91E+02 1.99E+03 3.09E+03 4.91E+03 5.65E+03 8.43E+03 2.57E-04 39
CAN FAT/TOTAL 0-16.1 km 1.0000 1.28E+01 8.83E+00 2.64E+01 3.73E+01 6.44E+01 7.33E+01 1.22E+02 2.34E-05 31
ERL FAT/TOTAL 0-80.5 km 0.0046 2.12E-04 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 8.02E-02 1.31E-03 65
ERL FAT/TOTAL 0-3.2 km 0.0046 2.12E-04 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 8.02E-02 1.31E-03 65
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 1.89E+02 1.30E+02 3.75E+02 5.12E+02 9.30E+02 1.06E+03 2.02E+03 2.34E-05 31
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 1.09E+04 4.28E+03 3.23E+04 4.95E+04 7.18E+04 7.54E+04 1.04E+05 8.42E-05 29

POPULATION WEIGHTED RISK
ERL FAT/TOTAL 0-80.5 km 0.0046 1.67E-10 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 6.30E-08 1.31E-03 65
ERL FAT/TOTAL 0-3.2 km 0.0046 1.68E-06 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 6.36E-04 1.31E-03 65
ERL FAT/TOTAL 0-1.6 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

ERL FAT/TOTAL 3.2-4.8 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 5.28E-04 2.08E-04 1.43E-03 2.25E-03 3.86E-03 4.69E-03 6.54E-03 2.57E-04 39
CAN FAT/TOTAL 0-16.1 km 0.9667 1.05E-03 6.42E-04 2.48E-03 3.53E-03 7.59E-03 9.97E-03 1.31E-02 1.66E-03 65

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 5.40E+00 3.24E+00 1.42E+01 2.03E+01 NOT-FOUND NOT-FOUND 2.33E+01 1.95E-02 65

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 1 OF 6:
CFI

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

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION

14-JUL-07 09:28:11 PAGE 2 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 5.04E+02 1.89E+02 1.32E+03 2.18E+03 3.95E+03 4.94E+03 7.61E+03 2.57E-04 39
CAN FAT/TOTAL 0-16.1 km 0.8311 1.68E+00 1.84E-01 4.77E+00 8.95E+00 2.11E+01 3.02E+01 4.32E+01 5.71E-04 80
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
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
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 0.8311 1.83E+01 2.97E+00 5.24E+01 9.11E+01 1.88E+02 2.36E+02 3.61E+02 5.71E-04 80
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 7.58E+03 2.92E+03 2.16E+04 3.26E+04 5.72E+04 6.95E+04 8.77E+04 5.42E-04 73

POPULATION WEIGHTED RISK
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
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
ERL FAT/TOTAL 0-1.6 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
ERL FAT/TOTAL 3.2-4.8 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 3.96E-04 1.50E-04 1.06E-03 1.60E-03 2.98E-03 3.63E-03 5.98E-03 2.57E-04 39
CAN FAT/TOTAL 0-16.1 km 0.8311 3.55E-04 3.88E-05 9.94E-04 1.90E-03 4.62E-03 6.11E-03 9.13E-03 5.71E-04 80

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 3.26E+00 1.66E+00 8.56E+00 1.12E+01 NOT-FOUND NOT-FOUND 1.46E+01 1.95E-02 65

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 1 OF 6:
CFI

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

COHORT 2 = NO EVACUATION

14-JUL-07 09:28:11 PAGE 3 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 5.39E+02 2.18E+02 1.37E+03 2.23E+03 4.16E+03 5.12E+03 7.85E+03 2.57E-04 39
CAN FAT/TOTAL 0-16.1 km 0.9667 3.71E+01 1.76E+01 9.65E+01 1.33E+02 2.41E+02 2.91E+02 4.41E+02 1.66E-03 65
ERL FAT/TOTAL 0-80.5 km 0.0046 4.24E-03 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 1.60E+00 1.31E-03 65
ERL FAT/TOTAL 0-3.2 km 0.0046 4.24E-03 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 1.60E+00 1.31E-03 65
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 0.9667 3.25E+02 1.77E+02 8.31E+02 1.17E+03 2.10E+03 2.42E+03 3.73E+03 1.66E-03 65
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 7.88E+03 3.24E+03 2.19E+04 3.29E+04 5.72E+04 6.95E+04 8.86E+04 5.42E-04 73

POPULATION WEIGHTED RISK
ERL FAT/TOTAL 0-80.5 km 0.0046 3.34E-09 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 1.26E-06 1.31E-03 65
ERL FAT/TOTAL 0-3.2 km 0.0046 3.37E-05 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 1.27E-02 1.31E-03 65
ERL FAT/TOTAL 0-1.6 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
ERL FAT/TOTAL 3.2-4.8 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 4.24E-04 1.74E-04 1.10E-03 1.70E-03 3.00E-03 3.64E-03 6.17E-03 2.57E-04 39
CAN FAT/TOTAL 0-16.1 km 0.9667 7.83E-03 3.68E-03 2.03E-02 2.98E-02 5.21E-02 5.86E-02 9.31E-02 1.66E-03 65

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 4.43E+01 2.81E+01 1.01E+02 1.12E+02 1.43E+02 1.59E+02 1.89E+02 1.57E-03 77

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 1 OF 6:
CFI

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

14-JUL-07 09:28:11 PAGE 4 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 1.99E+02 7.83E+01 5.29E+02 8.46E+02 1.33E+03 1.55E+03 2.41E+03 7.86E-05 29
CAN FAT/TOTAL 0-16.1 km 1.0000 9.30E+00 6.84E+00 1.69E+01 2.41E+01 5.37E+01 6.86E+01 1.21E+02 2.34E-05 31

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 1.55E+02 1.11E+02 2.93E+02 4.09E+02 8.99E+02 1.06E+03 2.01E+03 2.34E-05 31
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 3.32E+03 1.34E+03 8.81E+03 1.36E+04 2.43E+04 2.82E+04 4.02E+04 7.86E-05 29

POPULATION WEIGHTED RISK
CAN FAT/TOTAL 0-80.5 km 1.0000 1.31E-04 4.54E-05 3.66E-04 5.79E-04 1.01E-03 1.08E-03 1.53E-03 7.86E-05 45
CAN FAT/TOTAL 0-16.1 km 0.9346 3.25E-04 2.69E-04 7.17E-04 7.95E-04 1.01E-03 1.05E-03 1.46E-03 4.07E-05 30

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 0.9966 9.35E-02 8.26E-02 1.16E-01 1.26E-01 1.52E-01 1.65E-01 1.97E-01 1.11E-03 52

L-EDEWBODY POP. DOSE (Sv) 0-16.1 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 1.55E+02 1.11E+02 2.93E+02 4.09E+02 8.99E+02 1.06E+03 2.01E+03 2.34E-05 31
LONG-TERM DIRECT EXPOSURE PATHWAYS 0.9346 2.57E+01 2.17E+01 5.51E+01 6.32E+01 7.76E+01 8.29E+01 1.15E+02 4.07E-05 30
TOTAL INGESTION PATHWAYS DOSE 1.0000 1.11E+02 6.70E+01 2.39E+02 3.47E+02 7.92E+02 1.03E+03 1.98E+03 2.34E-05 31
LONG-TERM GROUNDSHINE DOSE 0.9346 1.25E+01 9.06E+00 2.98E+01 3.50E+01 5.03E+01 5.66E+01 8.58E+01 4.07E-05 30
LONG-TERM RESUSPENSION DOSE 0.9346 1.32E+01 1.11E+01 2.89E+01 3.34E+01 4.48E+01 5.02E+01 5.36E+01 1.51E-03 135
WATER INGESTION DOSE 1.0000 1.03E+02 5.41E+01 2.32E+02 3.35E+02 7.78E+02 1.03E+03 1.98E+03 2.34E-05 31
POP.-DEPENDENT DECONTAMINATION DOSE 0.8924 1.76E+01 8.03E+00 4.89E+01 7.07E+01 1.08E+02 1.24E+02 2.24E+02 1.08E-05 26
FARM-DEPENDENT DECONTAMINATION DOSE 0.9293 4.59E-01 8.87E-02 1.36E+00 1.99E+00 4.55E+00 5.12E+00 5.69E+00 4.00E-04 114

INGESTION OF GRAINS 0.9734 3.20E-01 2.64E-01 6.94E-01 8.21E-01 1.08E+00 1.16E+00 1.61E+00 1.79E-04 85
INGESTION OF LEAF VEG 0.9734 2.06E+00 1.38E+00 4.41E+00 5.79E+00 1.01E+01 1.11E+01 1.70E+01 1.79E-04 85
INGESTION OF ROOT CROPS 0.9734 1.29E+00 9.38E-01 2.84E+00 3.63E+00 6.38E+00 7.82E+00 1.09E+01 1.79E-04 85
INGESTION OF FRUITS 0.9734 6.75E-01 5.45E-01 1.33E+00 1.64E+00 2.31E+00 2.57E+00 3.66E+00 1.79E-04 85
INGESTION OF LEGUMES 0.9734 2.20E+00 1.34E+00 5.16E+00 7.16E+00 1.12E+01 1.33E+01 2.06E+01 1.79E-04 85
INGESTION OF BEEF 0.9734 5.34E-01 3.02E-01 1.29E+00 2.05E+00 3.03E+00 3.19E+00 3.92E+00 3.14E-04 108
INGESTION OF MILK 0.9734 1.13E+00 6.66E-01 2.78E+00 3.85E+00 5.49E+00 5.86E+00 7.43E+00 4.45E-04 93
INGESTION OF POULTRY 0.9734 1.86E-01 1.43E-01 4.13E-01 5.20E-01 6.42E-01 7.03E-01 8.19E-01 1.62E-03 130
INGESTION OF OTHER MEAT CROPS 0.9734 1.86E-01 1.19E-01 4.44E-01 5.87E-01 8.12E-01 8.90E-01 1.07E+00 5.99E-04 73

L-EDEWBODY POP. DOSE (Sv) 0-80.5 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 3.32E+03 1.34E+03 8.81E+03 1.36E+04 2.43E+04 2.82E+04 4.02E+04 7.86E-05 29
LONG-TERM DIRECT EXPOSURE PATHWAYS 1.0000 2.77E+03 9.47E+02 7.83E+03 1.16E+04 2.05E+04 2.19E+04 3.24E+04 7.86E-05 45
TOTAL INGESTION PATHWAYS DOSE 1.0000 3.18E+02 2.33E+02 6.43E+02 8.30E+02 1.22E+03 1.39E+03 2.29E+03 9.36E-06 26
LONG-TERM GROUNDSHINE DOSE 1.0000 1.43E+03 4.71E+02 3.86E+03 6.32E+03 1.16E+04 1.34E+04 2.08E+04 6.28E-04 47
LONG-TERM RESUSPENSION DOSE 1.0000 1.34E+03 4.74E+02 3.77E+03 5.84E+03 1.01E+04 1.13E+04 1.67E+04 4.85E-04 12
WATER INGESTION DOSE 1.0000 1.43E+02 8.14E+01 3.36E+02 4.63E+02 9.10E+02 1.08E+03 2.02E+03 2.34E-05 31

	PROB NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	PEAK CONS	PEAK PROB	PEAK TRIAL
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km										
POP.-DEPENDENT DECONTAMINATION DOSE	0.9626	2.25E+02	3.88E+01	4.16E+02	9.46E+02	3.53E+03	5.00E+03	1.33E+04	8.42E-05	29
FARM-DEPENDENT DECONTAMINATION DOSE	0.9865	2.95E+00	1.12E+00	7.91E+00	1.19E+01	2.24E+01	2.67E+01	5.25E+01	1.19E-04	119
INGESTION OF GRAINS	1.0000	6.62E+00	5.69E+00	1.29E+01	1.68E+01	2.71E+01	3.07E+01	4.59E+01	1.94E-05	19
INGESTION OF LEAF VEG	1.0000	3.63E+01	2.36E+01	8.03E+01	1.09E+02	1.60E+02	1.89E+02	3.07E+02	1.03E-04	119
INGESTION OF ROOT CROPS	1.0000	2.11E+01	1.35E+01	4.66E+01	6.89E+01	1.08E+02	1.19E+02	1.98E+02	1.03E-04	119
INGESTION OF FRUITS	1.0000	1.36E+01	1.09E+01	2.72E+01	3.54E+01	5.50E+01	6.18E+01	9.43E+01	1.94E-05	19
INGESTION OF LEGUMES	1.0000	3.36E+01	2.01E+01	7.51E+01	1.13E+02	2.00E+02	2.23E+02	3.73E+02	1.03E-04	119
INGESTION OF BEEF	1.0000	2.22E+01	1.73E+01	4.41E+01	5.36E+01	7.32E+01	8.35E+01	1.06E+02	5.99E-04	4
INGESTION OF MILK	1.0000	3.35E+01	2.91E+01	6.07E+01	7.44E+01	1.03E+02	1.12E+02	1.77E+02	8.42E-05	45
INGESTION OF POULTRY	1.0000	4.96E+00	4.24E+00	9.05E+00	1.07E+01	1.47E+01	1.68E+01	2.56E+01	1.28E-03	13
INGESTION OF OTHER MEAT CROPS	1.0000	3.60E+00	3.05E+00	6.17E+00	7.98E+00	1.17E+01	1.31E+01	1.67E+01	1.08E-03	72
ECONOMIC COST MEASURES ($) 0-80.5 km										
TOTAL ECONOMIC COSTS	1.0000	1.19E+09	3.05E+08	2.87E+09	4.95E+09	1.63E+10	2.05E+10	2.47E+10	1.08E-03	44
POP.-DEPENDENT COSTS	0.9678	1.09E+09	2.21E+08	2.80E+09	4.81E+09	1.62E+10	2.02E+10	2.41E+10	1.10E-04	119
FARM-DEPENDENT COSTS	1.0000	9.91E+07	6.16E+07	2.35E+08	3.32E+08	5.08E+08	5.27E+08	5.95E+08	4.85E-04	51
POP.-DEPENDENT DECONTAMINATION COST	0.9626	3.52E+08	6.78E+07	7.49E+08	1.65E+09	5.23E+09	7.11E+09	9.35E+09	1.10E-04	119
FARM-DEPENDENT DECONTAMINATION COST	0.9865	1.77E+07	9.28E+06	4.45E+07	5.73E+07	8.28E+07	9.41E+07	1.74E+08	1.03E-04	119
POP.-DEPENDENT INTERDICTION COST	0.9626	7.31E+08	1.49E+08	2.00E+09	3.47E+09	1.01E+10	1.07E+10	1.48E+10	1.10E-04	119
FARM-DEPENDENT INTERDICTION COST	0.9993	1.33E+07	6.51E+06	3.38E+07	4.62E+07	7.09E+07	7.57E+07	9.46E+07	4.85E-04	51
POP.-DEPENDENT CONDEMNATION COST	0.0062	3.42E+04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E+06	1.38E+07	2.33E-04 27
FARM-DEPENDENT CONDEMNATION COST	0.9840	2.41E+07	8.17E+06	6.28E+07	1.13E+08	2.16E+08	2.35E+08	2.94E+08	7.92E-04	14
EMERGENCY PHASE COST	0.9441	4.47E+06	1.00E+06	5.74E+06	3.13E+07	5.26E+07	6.73E+07	1.58E+08	7.99E-04	68
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	1.0000	6.19E+05	2.91E+05	1.69E+06	2.18E+06	3.03E+06	3.16E+06	3.77E+06	2.85E-04	51
CROP DISPOSAL COST	1.0000	4.34E+07	2.65E+07	1.02E+08	1.09E+08	1.26E+08	1.35E+08	2.12E+08	8.18E-05	45

AFFECTED AREA/POPULATION 0-80.5 km
FARM DECONTAMINATION (HECTARES) 0.9865 1.47E+04 8.09E+03 3.55E+04 4.76E+04 6.98E+04 7.52E+04 1.25E+05 1.03E-04 119
POP. DECONTAMINATION (INDIVIDUALS) 0.9626 4.46E+04 9.51E+03 1.17E+05 2.18E+05 6.16E+05 7.17E+05 9.03E+05 1.73E-03 44
FARM INTERDICTION (HECTARES) 0.9993 3.02E+04 2.03E+04 7.30E+04 9.55E+04 1.17E+05 1.25E+05 1.60E+05 4.85E-04 51
POP. INTERDICTION (INDIVIDUALS) 0.9626 4.46E+04 9.51E+03 1.17E+05 2.18E+05 6.16E+05 7.17E+05 9.03E+05 1.73E-03 44
FARM CONDEMNATION (HECTARES) 0.9840 3.34E+03 8.68E+02 8.46E+03 1.74E+04 3.48E+04 4.12E+04 5.45E+04 6.13E-04 14
POP. CONDEMNATION (INDIVIDUALS) 0.0062 2.76E-01 0.00E+00 0.00E+00 0.00E+00 0.00E+00 8.98E+00 9.00E+01 2.33E-04 27
MILK DISPOSAL AREA (HECTARES) 1.0000 3.38E+04 2.36E+04 8.20E+04 1.02E+05 1.29E+05 1.43E+05 2.07E+05 4.85E-04 51
CROP DISPOSAL AREA (HECTARES) 1.0000 3.01E+04 1.47E+04 8.03E+04 1.03E+05 1.30E+05 1.43E+05 2.07E+05 4.85E-04 51

SOURCE TERM 1 OF 6:
CFI

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km

PEOPLE FRACTION = 0.9500 0.0500

OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC RESULTS	
X	PROB>=X	X	PROB>=X	X	PROB>=X	X	PROB>=X
1.00E-06	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-07	9.97E-01
2.00E-06	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-07	9.97E-01
3.00E-06	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-07	9.97E-01
5.00E-06	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-07	9.97E-01
7.00E-06	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-07	9.97E-01
1.00E-05	1.00E+00	1.00E-05	1.00E+00	1.00E-04	1.00E+00	1.00E-06	9.97E-01
2.00E-05	1.00E+00	2.00E-05	1.00E+00	2.00E-04	1.00E+00	2.00E-06	9.97E-01
3.00E-05	1.00E+00	3.00E-05	1.00E+00	3.00E-04	1.00E+00	3.00E-06	9.97E-01
5.00E-05	1.00E+00	5.00E-05	1.00E+00	5.00E-04	1.00E+00	5.00E-06	9.97E-01
7.00E-05	1.00E+00	7.00E-05	1.00E+00	7.00E-04	1.00E+00	7.00E-06	9.97E-01
1.00E-04	1.00E+00	1.00E-04	1.00E+00	1.00E-03	1.00E+00	1.00E-05	9.97E-01
2.00E-04	1.00E+00	2.00E-04	1.00E+00	2.00E-03	1.00E+00	2.00E-05	9.97E-01
3.00E-04	1.00E+00	3.00E-04	1.00E+00	3.00E-03	1.00E+00	3.00E-05	9.97E-01
5.00E-04	1.00E+00	5.00E-04	1.00E+00	5.00E-03	1.00E+00	5.00E-05	9.97E-01
7.00E-04	1.00E+00	7.00E-04	1.00E+00	7.00E-03	1.00E+00	7.00E-05	9.97E-01
1.00E-03	1.00E+00	1.00E-03	1.00E+00	1.00E-02	1.00E+00	1.00E-04	9.97E-01
2.00E-03	1.00E+00	2.00E-03	1.00E+00	2.00E-02	1.00E+00	2.00E-04	9.97E-01
3.00E-03	1.00E+00	3.00E-03	1.00E+00	3.00E-02	1.00E+00	3.00E-04	9.97E-01
5.00E-03	1.00E+00	5.00E-03	1.00E+00	5.00E-02	1.00E+00	5.00E-04	9.97E-01
7.00E-03	1.00E+00	7.00E-03	1.00E+00	7.00E-02	1.00E+00	7.00E-04	9.97E-01
1.00E-02	1.00E+00	1.00E-02	1.00E+00	1.00E-01	1.00E+00	1.00E-03	9.97E-01
2.00E-02	1.00E+00	2.00E-02	9.99E-01	2.00E-01	1.00E+00	2.00E-03	9.97E-01
3.00E-02	1.00E+00	3.00E-02	9.79E-01	3.00E-01	1.00E+00	3.00E-03	9.97E-01
5.00E-02	1.00E+00	5.00E-02	9.79E-01	5.00E-01	1.00E+00	5.00E-03	9.97E-01
7.00E-02	1.00E+00	7.00E-02	9.79E-01	7.00E-01	1.00E+00	7.00E-03	9.97E-01
1.00E-01	1.00E+00	1.00E-01	9.60E-01	1.00E+00	1.00E+00	1.00E-02	9.97E-01
2.00E-01	1.00E+00	2.00E-01	9.00E-01	2.00E+00	1.00E+00	2.00E-02	9.95E-01
3.00E-01	1.00E+00	3.00E-01	8.00E-01	3.00E+00	1.00E+00	3.00E-02	9.93E-01
5.00E-01	9.79E-01	5.00E-01	7.48E-01	5.00E+00	9.81E-01	5.00E-02	9.55E-01
7.00E-01	9.05E-01	7.00E-01	7.44E-01	7.00E+00	9.42E-01	7.00E-02	6.65E-01
1.00E+00	8.57E-01	1.00E+00	6.53E-01	1.00E+01	8.48E-01	1.00E-01	3.59E-01
2.00E+00	6.31E-01	2.00E+00	4.52E-01	2.00E+01	6.55E-01	1.97E-01	1.11E-03
3.00E+00	5.30E-01	3.00E+00	3.39E-01	3.00E+01	4.74E-01	N.D.	N.D.
5.00E+00	3.59E-01	5.00E+00	2.43E-01	5.00E+01	2.65E-01	N.D.	N.D.
7.00E+00	2.44E-01	7.00E+00	1.47E-01	7.00E+01	2.05E-01	N.D.	N.D.
1.00E+01	1.82E-01	1.00E+01	7.44E-02	1.00E+02	1.07E-01	N.D.	N.D.
2.00E+01	5.57E-02	1.46E+01	1.95E-02	1.89E+02	1.57E-03	N.D.	N.D.
2.33E+01	1.95E-02	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 2 OF 6:
CFE

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY" WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION 0.950

COHORT 2 = NO EVACUATION 0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM "CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

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

14-JUL-07 09:28:11 PAGE 7 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 4.38E+02 1.70E+02 1.17E+03 1.98E+03 3.48E+03 4.03E+03 6.29E+03 1.94E-05 21
CAN FAT/TOTAL 0-16.1 km 1.0000 1.85E+01 1.16E+01 3.61E+01 4.92E+01 1.22E+02 1.67E+02 3.04E+02 1.30E-05 32
ERL FAT/TOTAL 0-80.5 km 0.0075 8.79E-05 0.00E+00 0.00E+00 0.00E+00 0.00E+00 2.56E-03 1.32E-01 1.29E-04 77
ERL FAT/TOTAL 0-3.2 km 0.0075 8.79E-05 0.00E+00 0.00E+00 0.00E+00 0.00E+00 2.56E-03 1.32E-01 1.29E-04 77
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 2.94E+02 1.90E+02 5.72E+02 7.88E+02 2.19E+03 3.03E+03 5.07E+03 1.30E-05 32
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 7.19E+03 2.75E+03 2.02E+04 3.17E+04 5.56E+04 6.21E+04 1.05E+05 1.94E-05 21

POPULATION WEIGHTED RISK
ERL FAT/TOTAL 0-80.5 km 0.0075 6.91E-11 0.00E+00 0.00E+00 0.00E+00 0.00E+00 1.52E-09 1.04E-07 1.29E-04 77
ERL FAT/TOTAL 0-3.2 km 0.0075 6.98E-07 0.00E+00 0.00E+00 0.00E+00 0.00E+00 1.52E-05 1.05E-03 1.29E-04 77
ERL FAT/TOTAL 0-1.6 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

ERL FAT/TOTAL 3.2-4.8 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 3.19E-04 1.17E-04 9.00E-04 1.45E-03 2.45E-03 2.78E-03 4.24E-03 1.94E-05 21
CAN FAT/TOTAL 0-16.1 km 0.9729 1.07E-03 7.28E-04 2.51E-03 3.29E-03 5.57E-03 6.49E-03 9.14E-03 9.42E-04 75

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 4.83E+00 3.26E+00 1.09E+01 1.21E+01 1.53E+01 1.69E+01 2.42E+01 1.57E-03 77

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 2 OF 6:
CFE

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

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION

14-JUL-07 09:28:11 PAGE 8 PROB QUANTILES PEAK PEAK PEAK

		NON-ZERO	MEAN	50TH	90TH	95TH	99TH	99.5TH	CONS PROB	TRIAL
HEALTH EFFECTS CASES										
CAN FAT/TOTAL	0-80.5 km	1.0000	1.29E+02	4.48E+01	3.16E+02	5.98E+02	1.10E+03	1.30E+03	1.95E+03	9.42E-04 75
CAN FAT/TOTAL	0-16.1 km	0.8236	1.53E+00	2.09E-01	4.67E+00	8.14E+00	1.55E+01	1.93E+01	3.50E+01	9.42E-04 75
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
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
ERL FAT/TOTAL	0-1.6 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
POPULATION DOSE (Sv)										
L-EDEWBODY TOT LIF	0-16.1 km	0.8236	1.71E+01	3.31E+00	5.33E+01	8.60E+01	1.73E+02	2.14E+02	3.06E+02	9.42E-04 75
L-EDEWBODY TOT LIF	0-80.5 km	1.0000	2.03E+03	7.39E+02	5.12E+03	9.98E+03	2.02E+04	2.47E+04	3.13E+04	4.77E-04 1
POPULATION WEIGHTED RISK										
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
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
ERL FAT/TOTAL	0-1.6 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
ERL FAT/TOTAL	3.2-4.8 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	1.01E-04	3.54E-05	2.46E-04	4.82E-04	9.89E-04	1.13E-03	1.53E-03	9.42E-04 75
CAN FAT/TOTAL	0-16.1 km	0.8236	3.24E-04	4.33E-05	1.01E-03	1.87E-03	3.62E-03	4.60E-03	7.40E-03	9.42E-04 75
PEAK DOSE FOUND ON SPATIAL GRID (Sv)										
L-EDEWBODY	0-1.6 km	1.0000	3.67E+00	2.45E+00	8.62E+00	1.04E+01	1.35E+01	1.50E+01	1.81E+01	1.57E-03 77

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 2 OF 6:
CFE

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

COHORT 2 = NO EVACUATION

14-JUL-07 09:28:11 PAGE 9 PROB QUANTILES PEAK PEAK PEAK

		NON-ZERO	MEAN	50TH	90TH	95TH	99TH	99.5TH	CONS	PROB	TRIAL
HEALTH EFFECTS CASES											
CAN FAT/TOTAL	0-80.5 km	1.0000	1.45E+02	5.58E+01	3.49E+02	6.42E+02	1.10E+03	1.31E+03	2.06E+03	9.42E-04	75
CAN FAT/TOTAL	0-16.1 km	0.9729	1.80E+01	6.77E+00	5.01E+01	7.65E+01	1.12E+02	1.22E+02	1.96E+02	1.19E-04	77
ERL FAT/TOTAL	0-80.5 km	0.0075	1.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-02	2.64E+00	1.29E-04	77
ERL FAT/TOTAL	0-3.2 km	0.0075	1.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-02	2.64E+00	1.29E-04	77
ERL FAT/TOTAL	0-1.6 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
POPULATION DOSE (Sv)											
L-EDEWBODY TOT LIF	0-16.1 km	0.9729	1.64E+02	8.09E+01	4.36E+02	6.69E+02	1.03E+03	1.11E+03	1.69E+03	1.19E-04	77
L-EDEWBODY TOT LIF	0-80.5 km	1.0000	2.18E+03	8.57E+02	5.32E+03	1.02E+04	2.09E+04	2.52E+04	3.19E+04	4.77E-04	1
POPULATION WEIGHTED RISK											
ERL FAT/TOTAL	0-80.5 km	0.0075	1.38E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-08	2.08E-06	1.29E-04	77
ERL FAT/TOTAL	0-3.2 km	0.0075	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04	2.10E-02	1.29E-04	77
ERL FAT/TOTAL	0-1.6 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
ERL FAT/TOTAL	3.2-4.8 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	1.14E-04	4.50E-05	2.75E-04	4.92E-04	1.03E-03	1.17E-03	1.62E-03	9.42E-04	75
CAN FAT/TOTAL	0-16.1 km	0.9729	3.81E-03	1.37E-03	1.03E-02	1.54E-02	2.86E-02	3.12E-02	4.13E-02	1.19E-04	77
PEAK DOSE FOUND ON SPATIAL GRID (Sv)											
L-EDEWBODY	0-1.6 km	1.0000	2.48E+01	1.52E+01	6.03E+01	7.15E+01	8.36E+01	8.94E+01	1.40E+02	1.57E-03	77

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 2 OF 6:
CFE

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

14-JUL-07 09:28:11 PAGE 10 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 3.09E+02 1.15E+02 7.92E+02 1.30E+03 2.50E+03 2.98E+03 4.65E+03 1.94E-05 21
CAN FAT/TOTAL 0-16.1 km 1.0000 1.62E+01 1.02E+01 3.07E+01 4.43E+01 1.21E+02 1.67E+02 3.04E+02 1.30E-05 32

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 2.69E+02 1.63E+02 5.13E+02 7.59E+02 2.17E+03 3.01E+03 5.06E+03 1.30E-05 32
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 5.14E+03 1.93E+03 1.31E+04 2.22E+04 4.02E+04 4.96E+04 7.76E+04 1.94E-05 21

POPULATION WEIGHTED RISK
CAN FAT/TOTAL 0-80.5 km 1.0000 2.17E-04 7.20E-05 6.01E-04 1.03E-03 1.71E-03 2.04E-03 3.00E-03 1.10E-04 8
CAN FAT/TOTAL 0-16.1 km 0.9345 5.75E-04 4.86E-04 1.19E-03 1.41E-03 2.03E-03 2.18E-03 3.23E-03 6.05E-05 121

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 0.8737 1.05E-01 1.03E-01 1.32E-01 1.47E-01 NOT-FOUND NOT-FOUND 1.88E-01 1.00E-02 133

L-EDEWBODY POP. DOSE (Sv) 0-16.1 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 2.69E+02 1.63E+02 5.13E+02 7.59E+02 2.17E+03 3.01E+03 5.06E+03 1.30E-05 32
LONG-TERM DIRECT EXPOSURE PATHWAYS 0.9345 4.54E+01 3.62E+01 1.03E+02 1.15E+02 1.50E+02 1.69E+02 2.55E+02 6.05E-05 121
TOTAL INGESTION PATHWAYS DOSE 1.0000 2.17E+02 1.04E+02 4.69E+02 7.28E+02 2.16E+03 3.01E+03 5.06E+03 1.30E-05 32
LONG-TERM GROUNDSHINE DOSE 0.9345 4.42E+01 3.55E+01 1.01E+02 1.14E+02 1.49E+02 1.67E+02 2.55E+02 6.05E-05 121
LONG-TERM RESUSPENSION DOSE 0.9345 1.22E+00 8.88E-01 2.78E+00 3.42E+00 5.21E+00 6.12E+00 1.37E+01 2.28E-04 51
WATER INGESTION DOSE 1.0000 2.14E+02 1.01E+02 4.65E+02 7.27E+02 2.14E+03 2.84E+03 5.06E+03 1.30E-05 32
POP.-DEPENDENT DECONTAMINATION DOSE 0.8236 7.11E+00 2.24E+00 2.00E+01 2.81E+01 4.85E+01 5.96E+01 1.21E+02 6.05E-05 121
FARM-DEPENDENT DECONTAMINATION DOSE 0.8632 2.08E-01 3.40E-02 9.25E-01 1.19E+00 1.81E+00 2.07E+00 3.27E+00 2.85E-05 71

INGESTION OF GRAINS 0.9748 9.45E-02 4.56E-02 2.57E-01 3.26E-01 4.44E-01 5.07E-01 9.46E-01 2.00E-04 51
INGESTION OF LEAF VEG 0.9748 4.68E-01 2.30E-01 1.20E+00 1.49E+00 2.08E+00 2.17E+00 2.95E+00 2.85E-05 71
INGESTION OF ROOT CROPS 0.9748 2.60E-01 1.46E-01 6.54E-01 7.88E-01 1.04E+00 1.10E+00 1.67E+00 2.85E-05 71
INGESTION OF FRUITS 0.9748 3.71E-01 1.83E-01 1.01E+00 1.26E+00 2.03E+00 2.15E+00 2.86E+00 1.79E-04 85
INGESTION OF LEGUMES 0.9748 4.71E-01 2.62E-01 1.15E+00 1.54E+00 2.48E+00 2.88E+00 3.55E+00 2.85E-05 71
INGESTION OF BEEF 0.9748 5.07E-01 3.02E-01 1.24E+00 1.65E+00 2.66E+00 3.06E+00 4.31E+00 1.12E-04 109
INGESTION OF MILK 0.9748 3.80E-01 1.71E-01 1.06E+00 1.31E+00 2.07E+00 2.30E+00 3.23E+00 2.80E-05 103
INGESTION OF POULTRY 0.9748 2.00E-01 7.14E-02 5.02E-01 1.00E+00 1.68E+00 2.04E+00 2.44E+00 1.51E-03 62
INGESTION OF OTHER MEAT CROPS 0.9748 4.95E-02 2.09E-02 1.20E-01 2.04E-01 5.11E-01 5.68E-01 7.02E-01 1.28E-03 68

L-EDEWBODY POP. DOSE (Sv) 0-80.5 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 5.14E+03 1.93E+03 1.31E+04 2.22E+04 4.02E+04 4.96E+04 7.76E+04 1.94E-05 21
LONG-TERM DIRECT EXPOSURE PATHWAYS 1.0000 4.60E+03 1.52E+03 1.22E+04 2.17E+04 3.67E+04 4.25E+04 6.35E+04 1.10E-04 8
TOTAL INGESTION PATHWAYS DOSE 1.0000 3.75E+02 2.54E+02 7.00E+02 9.48E+02 2.41E+03 3.12E+03 5.29E+03 2.34E-05 31
LONG-TERM GROUNDSHINE DOSE 1.0000 4.46E+03 1.48E+03 1.19E+04 2.11E+04 3.56E+04 4.06E+04 6.20E+04 1.10E-04 8
LONG-TERM RESUSPENSION DOSE 1.0000 1.39E+02 4.68E+01 3.67E+02 6.36E+02 1.05E+03 1.13E+03 3.13E+03 1.94E-05 31
WATER INGESTION DOSE 1.0000 2.68E+02 1.41E+02 5.80E+02 8.67E+02 2.28E+03 3.05E+03 5.09E+03 1.30E-05 32

	PROB NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	PEAK CONS	PEAK PROB	PEAK TRIAL
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km										
POP.-DEPENDENT DECONTAMINATION DOSE	0.9372	1.72E+02	1.82E+01	3.36E+02	7.01E+02	3.22E+03	4.50E+03	1.38E+04	1.94E-05	21
FARM-DEPENDENT DECONTAMINATION DOSE	0.9601	1.18E+00	2.66E-01	3.46E+00	6.42E+00	1.20E+01	1.57E+01	4.38E+01	2.85E-05	99
INGESTION OF GRAINS	1.0000	5.32E+00	2.99E+00	1.29E+01	1.72E+01	2.48E+01	2.80E+01	3.52E+01	9.42E-04	124
INGESTION OF LEAF VEG	1.0000	1.11E+01	8.44E+00	2.31E+01	2.92E+01	3.85E+01	4.31E+01	5.41E+01	2.85E-05	99
INGESTION OF ROOT CROPS	1.0000	8.51E+00	5.89E+00	1.88E+01	2.36E+01	3.38E+01	3.75E+01	4.84E+01	9.42E-04	124
INGESTION OF FRUITS	1.0000	1.24E+01	8.87E+00	2.77E+01	3.43E+01	5.11E+01	5.61E+01	7.07E+01	9.42E-04	124
INGESTION OF LEGUMES	1.0000	9.87E+00	8.04E+00	1.93E+01	2.35E+01	3.16E+01	3.34E+01	6.52E+01	2.85E-05	99
INGESTION OF BEEF	1.0000	2.35E+01	1.84E+01	4.83E+01	6.01E+01	9.21E+01	1.03E+02	1.25E+02	4.00E-04	114
INGESTION OF MILK	1.0000	2.05E+01	1.42E+01	4.20E+01	5.38E+01	8.21E+01	1.00E+02	1.66E+02	4.77E-04	109
INGESTION OF POULTRY	1.0000	1.18E+01	7.75E+00	2.74E+01	3.25E+01	4.24E+01	4.75E+01	5.80E+01	4.85E-04	64
INGESTION OF OTHER MEAT CROPS	1.0000	4.36E+00	2.91E+00	1.02E+01	1.21E+01	1.81E+01	2.09E+01	2.63E+01	9.42E-04	107
ECONOMIC COST MEASURES ($) 0-80.5 km										
TOTAL ECONOMIC COSTS	1.0000	1.10E+09	3.07E+08	2.59E+09	4.58E+09	1.45E+10	1.94E+10	3.22E+10	1.94E-05	20
POP.-DEPENDENT COSTS	0.9378	9.38E+08	1.51E+08	2.39E+09	4.49E+09	1.43E+10	1.92E+10	3.16E+10	1.94E-05	20
FARM-DEPENDENT COSTS	1.0000	1.57E+08	1.25E+08	2.90E+08	3.57E+08	5.24E+08	5.65E+08	7.40E+08	1.02E-04	45
POP.-DEPENDENT DECONTAMINATION COST	0.9372	3.22E+08	4.93E+07	7.38E+08	1.57E+09	5.42E+09	7.49E+09	1.26E+10	7.86E-05	45
FARM-DEPENDENT DECONTAMINATION COST	0.9601	1.07E+07	5.35E+06	2.99E+07	4.17E+07	7.22E+07	8.23E+07	1.44E+08	1.03E-04	120
POP.-DEPENDENT INTERDICTION COST	0.9372	6.12E+08	1.04E+08	1.55E+09	2.90E+09	1.00E+10	1.11E+10	2.18E+10	1.94E-05	20
FARM-DEPENDENT INTERDICTION COST	1.0000	3.05E+07	2.59E+07	5.61E+07	6.58E+07	8.50E+07	9.40E+07	1.18E+08	8.06E-05	7
POP.-DEPENDENT CONDEMNATION COST	0.1785	3.10E+06	0.00E+00	6.09E+06	1.22E+07	6.38E+07	9.28E+07	1.46E+09	7.98E-05	35
FARM-DEPENDENT CONDEMNATION COST	0.9806	3.31E+07	4.44E+06	1.01E+08	1.67E+08	3.23E+08	3.62E+08	5.23E+08	5.99E-04	47
EMERGENCY PHASE COST	0.7788	2.52E+05	3.51E+04	4.58E+05	1.36E+06	3.31E+06	3.63E+06	4.20E+06	1.66E-03	65
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	1.0000	1.22E+06	1.06E+06	2.38E+06	2.89E+06	3.21E+06	3.31E+06	3.77E+06	2.85E-04	51
CROP DISPOSAL COST	1.0000	8.18E+07	7.33E+07	1.27E+08	1.44E+08	1.95E+08	2.03E+08	2.25E+08	1.14E-04	51

AFFECTED AREA/POPULATION 0-80.5 km
FARM DECONTAMINATION (HECTARES) 0.9601 9.07E+03 4.15E+03 2.48E+04 3.36E+04 5.59E+04 6.45E+04 9.14E+04 1.03E-04 120
POP. DECONTAMINATION (INDIVIDUALS) 0.9372 3.48E+04 6.03E+03 9.73E+04 1.72E+05 5.33E+05 5.76E+05 9.03E+05 7.86E-05 45
FARM INTERDICTION (HECTARES) 1.0000 5.99E+04 5.15E+04 1.04E+05 1.13E+05 1.38E+05 1.50E+05 2.01E+05 4.85E-04 51
POP. INTERDICTION (INDIVIDUALS) 0.9372 3.48E+04 6.03E+03 9.73E+04 1.72E+05 5.33E+05 5.76E+05 9.03E+05 7.86E-05 45
FARM CONDEMNATION (HECTARES) 0.9806 5.26E+03 2.99E+02 1.42E+04 2.87E+04 6.41E+04 7.90E+04 1.23E+05 5.99E-04 47
POP. CONDEMNATION (INDIVIDUALS) 0.1785 2.23E+01 0.00E+00 5.47E+01 7.81E+01 3.97E+02 6.27E+02 1.24E+04 7.98E-05 35
MILK DISPOSAL AREA (HECTARES) 1.0000 6.68E+04 5.94E+04 1.12E+05 1.27E+05 1.70E+05 1.93E+05 2.25E+05 4.85E-04 51
CROP DISPOSAL AREA (HECTARES) 1.0000 6.51E+04 5.70E+04 1.07E+05 1.16E+05 1.40E+05 1.52E+05 2.03E+05 4.85E-04 51

SOURCE TERM 2 OF 6:
CFE

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km

PEOPLE FRACTION = 0.9500 0.0500

OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC RESULTS	
X	PROB>=X	X	PROB>=X	X	PROB>=X	X	PROB>=X
1.00E-06	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-07	8.16E-01
2.00E-06	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-07	8.05E-01
3.00E-06	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-07	8.05E-01
5.00E-06	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-07	8.05E-01
7.00E-06	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-07	8.05E-01
1.00E-05	1.00E+00	1.00E-05	1.00E+00	1.00E-04	1.00E+00	1.00E-06	8.05E-01
2.00E-05	1.00E+00	2.00E-05	1.00E+00	2.00E-04	1.00E+00	2.00E-06	8.05E-01
3.00E-05	1.00E+00	3.00E-05	1.00E+00	3.00E-04	1.00E+00	3.00E-06	8.05E-01
5.00E-05	1.00E+00	5.00E-05	1.00E+00	5.00E-04	1.00E+00	5.00E-06	8.05E-01
7.00E-05	1.00E+00	7.00E-05	1.00E+00	7.00E-04	1.00E+00	7.00E-06	8.05E-01
1.00E-04	1.00E+00	1.00E-04	1.00E+00	1.00E-03	1.00E+00	1.00E-05	8.05E-01
2.00E-04	1.00E+00	2.00E-04	1.00E+00	2.00E-03	1.00E+00	2.00E-05	8.05E-01
3.00E-04	1.00E+00	3.00E-04	1.00E+00	3.00E-03	1.00E+00	3.00E-05	8.05E-01
5.00E-04	1.00E+00	5.00E-04	1.00E+00	5.00E-03	1.00E+00	5.00E-05	8.05E-01
7.00E-04	1.00E+00	7.00E-04	1.00E+00	7.00E-03	1.00E+00	7.00E-05	8.05E-01
1.00E-03	1.00E+00	1.00E-03	1.00E+00	1.00E-02	1.00E+00	1.00E-04	8.05E-01
2.00E-03	1.00E+00	2.00E-03	1.00E+00	2.00E-02	1.00E+00	2.00E-04	8.05E-01
3.00E-03	1.00E+00	3.00E-03	1.00E+00	3.00E-02	1.00E+00	3.00E-04	8.05E-01
5.00E-03	1.00E+00	5.00E-03	1.00E+00	5.00E-02	1.00E+00	5.00E-04	8.05E-01
7.00E-03	1.00E+00	7.00E-03	1.00E+00	7.00E-02	1.00E+00	7.00E-04	8.05E-01
1.00E-02	1.00E+00	1.00E-02	1.00E+00	1.00E-01	1.00E+00	1.00E-03	8.05E-01
2.00E-02	1.00E+00	2.00E-02	1.00E+00	2.00E-01	1.00E+00	2.00E-03	8.05E-01
3.00E-02	1.00E+00	3.00E-02	9.82E-01	3.00E-01	1.00E+00	3.00E-03	8.05E-01
5.00E-02	1.00E+00	5.00E-02	9.54E-01	5.00E-01	1.00E+00	5.00E-03	8.05E-01
7.00E-02	1.00E+00	7.00E-02	9.28E-01	7.00E-01	1.00E+00	7.00E-03	8.05E-01
1.00E-01	1.00E+00	1.00E-01	9.27E-01	1.00E+00	1.00E+00	1.00E-02	8.03E-01
2.00E-01	9.68E-01	2.00E-01	8.90E-01	2.00E+00	9.27E-01	2.00E-02	7.84E-01
3.00E-01	9.27E-01	3.00E-01	8.57E-01	3.00E+00	8.75E-01	3.00E-02	7.35E-01
5.00E-01	9.08E-01	5.00E-01	7.77E-01	5.00E+00	8.10E-01	5.00E-02	6.90E-01
7.00E-01	8.39E-01	7.00E-01	7.39E-01	7.00E+00	7.49E-01	7.00E-02	6.66E-01
1.00E+00	7.81E-01	1.00E+00	7.20E-01	1.00E+01	7.24E-01	1.00E-01	6.11E-01
2.00E+00	6.89E-01	2.00E+00	5.82E-01	2.00E+01	3.93E-01	1.88E-01	1.00E-02
3.00E+00	5.46E-01	3.00E+00	4.30E-01	3.00E+01	2.76E-01	N.D.	N.D.
5.00E+00	3.20E-01	5.00E+00	2.71E-01	5.00E+01	1.81E-01	N.D.	N.D.
7.00E+00	2.41E-01	7.00E+00	1.87E-01	7.00E+01	6.20E-02	N.D.	N.D.
1.00E+01	1.80E-01	1.00E+01	6.38E-02	1.00E+02	1.57E-03	N.D.	N.D.
2.00E+01	1.57E-03	1.81E+01	1.57E-03	1.40E+02	1.57E-03	N.D.	N.D.
2.42E+01	1.57E-03	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 3 OF 6:
IC

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY" WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION 0.950

COHORT 2 = NO EVACUATION 0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM "CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

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

14-JUL-07 09:28:11 PAGE 13 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 8.05E-01 2.55E-01 1.72E+00 3.08E+00 1.06E+01 1.22E+01 2.78E+01 8.42E-05 29
CAN FAT/TOTAL 0-16.1 km 1.0000 7.62E-02 4.41E-02 1.74E-01 2.45E-01 5.05E-01 5.53E-01 9.06E-01 1.94E-05 31
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
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
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 1.27E+00 7.57E-01 2.97E+00 4.08E+00 7.63E+00 8.67E+00 1.51E+01 1.94E-05 31
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 1.34E+01 4.24E+00 3.08E+01 5.13E+01 1.66E+02 2.32E+02 4.63E+02 8.42E-05 29

POPULATION WEIGHTED RISK
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
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
ERL FAT/TOTAL 0-1.6 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

ERL FAT/TOTAL 3.2-4.8 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 4.39E-07 1.02E-07 8.37E-07 1.73E-06 7.05E-06 1.01E-05 2.07E-05 8.42E-05 29
CAN FAT/TOTAL 0-16.1 km 0.9652 5.00E-06 1.47E-06 1.31E-05 2.11E-05 4.50E-05 5.57E-05 1.26E-04 1.94E-05 31

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 2.42E-02 2.18E-02 4.62E-02 5.77E-02 7.21E-02 7.35E-02 8.14E-02 1.43E-04 27

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 3 OF 6:
IC

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

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION

14-JUL-07 09:28:11 PAGE 14 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 1.20E-01 4.32E-02 2.63E-01 5.14E-01 1.23E+00 1.69E+00 2.63E+00 7.99E-04 68
CAN FAT/TOTAL 0-16.1 km 0.8087 7.02E-04 1.04E-04 2.11E-03 3.29E-03 7.60E-03 8.67E-03 1.39E-02 1.43E-04 136
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
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
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 0.8087 1.17E-02 1.73E-03 3.43E-02 5.49E-02 1.28E-01 1.58E-01 2.32E-01 1.43E-04 136
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 2.01E+00 7.16E-01 4.37E+00 8.62E+00 1.98E+01 2.85E+01 4.39E+01 7.99E-04 68

POPULATION WEIGHTED RISK
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
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
ERL FAT/TOTAL 0-1.6 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
ERL FAT/TOTAL 3.2-4.8 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 9.46E-08 3.34E-08 2.11E-07 4.09E-07 9.54E-07 1.19E-06 2.07E-06 7.99E-04 68
CAN FAT/TOTAL 0-16.1 km 0.8087 1.48E-07 2.25E-08 4.47E-07 6.90E-07 1.44E-06 1.81E-06 2.94E-06 1.43E-04 136

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 1.80E-03 1.04E-03 4.00E-03 4.89E-03 NOT-FOUND NOT-FOUND 9.81E-03 1.95E-02 65

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 3 OF 6:
IC

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

COHORT 2 = NO EVACUATION

14-JUL-07 09:28:11 PAGE 15 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 1.32E-01 5.23E-02 2.84E-01 5.47E-01 1.30E+00 1.80E+00 2.69E+00 7.99E-04 68
CAN FAT/TOTAL 0-16.1 km 0.9652 1.25E-02 4.99E-03 3.39E-02 4.76E-02 7.86E-02 8.91E-02 1.50E-01 1.66E-03 65
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
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
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 0.9652 2.08E-01 8.33E-02 5.80E-01 8.11E-01 1.31E+00 1.55E+00 2.50E+00 1.66E-03 65
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 2.20E+00 8.50E-01 4.71E+00 9.06E+00 2.05E+01 2.87E+01 4.48E+01 7.99E-04 68

POPULATION WEIGHTED RISK
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
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
ERL FAT/TOTAL 0-1.6 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
ERL FAT/TOTAL 3.2-4.8 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 1.04E-07 4.02E-08 2.35E-07 4.33E-07 9.66E-07 1.19E-06 2.11E-06 7.99E-04 68
CAN FAT/TOTAL 0-16.1 km 0.9652 2.63E-06 1.03E-06 7.38E-06 1.04E-05 1.67E-05 2.05E-05 3.16E-05 1.66E-03 65

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 2.42E-02 1.57E-02 5.27E-02 7.46E-02 NOT-FOUND NOT-FOUND 1.30E-01 1.95E-02 65

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 3 OF 6:
IC

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

14-JUL-07 09:28:11 PAGE 16 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 6.84E-01 1.96E-01 1.42E+00 2.56E+00 1.00E+01 1.12E+01 2.62E+01 8.42E-05 29
CAN FAT/TOTAL 0-16.1 km 1.0000 7.49E-02 4.30E-02 1.68E-01 2.38E-01 5.05E-01 5.51E-01 9.00E-01 1.94E-05 31

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 1.25E+00 7.32E-01 2.95E+00 4.01E+00 7.62E+00 8.63E+00 1.50E+01 1.94E-05 31
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 1.14E+01 3.30E+00 2.47E+01 4.25E+01 1.48E+02 2.06E+02 4.37E+02 8.42E-05 29

POPULATION WEIGHTED RISK
CAN FAT/TOTAL 0-80.5 km 1.0000 3.44E-07 5.80E-08 6.11E-07 1.21E-06 6.69E-06 9.70E-06 1.94E-05 8.42E-05 29
CAN FAT/TOTAL 0-16.1 km 0.9369 4.73E-06 1.34E-06 1.23E-05 2.01E-05 4.44E-05 5.55E-05 1.24E-04 1.94E-05 31

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 2.13E-02 1.85E-02 4.33E-02 5.06E-02 5.53E-02 5.75E-02 7.62E-02 1.43E-04 27

L-EDEWBODY POP. DOSE (Sv) 0-16.1 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 1.25E+00 7.32E-01 2.95E+00 4.01E+00 7.62E+00 8.63E+00 1.50E+01 1.94E-05 31
LONG-TERM DIRECT EXPOSURE PATHWAYS 0.9369 3.73E-01 1.10E-01 9.99E-01 1.48E+00 3.56E+00 4.39E+00 9.82E+00 1.94E-05 31
TOTAL INGESTION PATHWAYS DOSE 1.0000 8.75E-01 4.47E-01 2.11E+00 2.92E+00 5.21E+00 5.70E+00 8.73E+00 8.42E-05 45
LONG-TERM GROUNDSHINE DOSE 0.9369 3.27E-01 9.83E-02 8.49E-01 1.31E+00 3.31E+00 3.86E+00 8.61E+00 1.94E-05 31
LONG-TERM RESUSPENSION DOSE 0.9369 4.61E-02 1.32E-02 1.22E-01 1.98E-01 4.40E-01 5.46E-01 1.21E+00 1.94E-05 31
WATER INGESTION DOSE 1.0000 9.13E-02 5.24E-02 2.04E-01 3.02E-01 7.09E-01 8.38E-01 1.71E+00 2.34E-05 31
POP.-DEPENDENT DECONTAMINATION DOSE 0.0000 1.97E-06 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 9.56E-02 1.17E-05 27
FARM-DEPENDENT DECONTAMINATION DOSE 0.0344 1.57E-05 0.00E+00 0.00E+00 0.00E+00 4.20E-04 5.17E-04 2.21E-03 3.77E-05 27

INGESTION OF GRAINS 1.0000 2.45E-02 4.93E-03 7.12E-02 9.84E-02 2.06E-01 2.29E-01 3.53E-01 8.42E-05 45
INGESTION OF LEAF VEG 1.0000 5.75E-02 1.81E-02 1.40E-01 2.50E-01 5.28E-01 5.73E-01 8.90E-01 8.42E-05 45
INGESTION OF ROOT CROPS 1.0000 3.66E-02 1.22E-02 1.02E-01 1.39E-01 2.89E-01 3.19E-01 4.84E-01 8.42E-05 45
INGESTION OF FRUITS 1.0000 4.81E-02 1.05E-02 1.34E-01 1.88E-01 3.46E-01 4.05E-01 6.81E-01 8.42E-05 45
INGESTION OF LEGUMES 1.0000 3.69E-02 1.68E-02 9.37E-02 1.32E-01 2.50E-01 3.02E-01 4.41E-01 8.42E-05 45
INGESTION OF BEEF 1.0000 2.37E-01 9.53E-02 6.93E-01 8.15E-01 1.12E+00 1.25E+00 2.41E+00 1.81E-05 24
INGESTION OF MILK 1.0000 2.74E-01 1.16E-01 7.30E-01 9.74E-01 2.04E+00 2.17E+00 3.45E+00 7.46E-05 35
INGESTION OF POULTRY 1.0000 5.00E-02 1.95E-02 1.29E-01 2.07E-01 3.49E-01 4.03E-01 7.33E-01 8.42E-05 45
INGESTION OF OTHER MEAT CROPS 1.0000 1.88E-02 1.46E-02 3.89E-02 4.97E-02 8.09E-02 9.20E-02 1.44E-01 8.42E-05 45

L-EDEWBODY POP. DOSE (Sv) 0-80.5 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 1.14E+01 3.30E+00 2.47E+01 4.25E+01 1.48E+02 2.06E+02 4.37E+02 8.42E-05 29
LONG-TERM DIRECT EXPOSURE PATHWAYS 1.0000 7.30E+00 1.26E+00 1.28E+01 2.58E+01 1.35E+02 2.01E+02 4.12E+02 8.42E-05 29
TOTAL INGESTION PATHWAYS DOSE 1.0000 4.09E+00 1.57E+00 1.06E+01 2.12E+01 3.31E+01 3.63E+01 5.16E+01 4.85E-04 51
LONG-TERM GROUNDSHINE DOSE 1.0000 6.40E+00 1.10E+00 1.12E+01 2.22E+01 1.17E+02 1.54E+02 3.61E+02 8.42E-05 29
LONG-TERM RESUSPENSION DOSE 1.0000 9.04E-01 1.52E-01 1.61E+00 3.15E+00 1.54E+01 2.24E+01 5.10E+01 8.42E-05 29
WATER INGESTION DOSE 1.0000 1.21E-01 6.94E-02 2.85E-01 3.87E-01 7.89E-01 1.00E+00 1.78E+00 9.36E-06 26

	PROB NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	PEAK CONS	PEAK PROB	PEAK TRIAL
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km										
POP.-DEPENDENT DECONTAMINATION DOSE	0.0000	1.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-02	1.17E-05	27
FARM-DEPENDENT DECONTAMINATION DOSE	0.0344	1.57E-05	0.00E+00	0.00E+00	0.00E+00	4.20E-04	5.17E-04	2.21E-03	3.77E-05	27
INGESTION OF GRAINS	1.0000	1.42E-01	3.23E-02	3.83E-01	8.62E-01	1.32E+00	1.51E+00	2.36E+00	4.85E-04	51
INGESTION OF LEAF VEG	1.0000	3.32E-01	5.89E-02	1.00E+00	2.09E+00	3.59E+00	4.17E+00	7.64E+00	1.19E-04	60
INGESTION OF ROOT CROPS	1.0000	2.00E-01	5.04E-02	5.17E-01	1.11E+00	1.90E+00	2.18E+00	3.22E+00	4.85E-04	51
INGESTION OF FRUITS	1.0000	2.76E-01	6.24E-02	7.26E-01	1.58E+00	2.85E+00	3.23E+00	4.55E+00	4.85E-04	51
INGESTION OF LEGUMES	1.0000	1.88E-01	5.11E-02	4.56E-01	1.08E+00	1.85E+00	2.13E+00	2.89E+00	4.85E-04	51
INGESTION OF BEEF	1.0000	1.14E+00	4.48E-01	2.67E+00	5.81E+00	9.18E+00	1.03E+01	1.35E+01	4.85E-04	51
INGESTION OF MILK	1.0000	1.33E+00	6.98E-01	3.19E+00	5.95E+00	8.93E+00	1.01E+01	1.31E+01	4.85E-04	51
INGESTION OF POULTRY	1.0000	2.91E-01	6.55E-02	9.29E-01	1.55E+00	3.05E+00	3.41E+00	4.93E+00	4.85E-04	51
INGESTION OF OTHER MEAT CROPS	1.0000	7.61E-02	3.74E-02	2.05E-01	3.36E-01	6.08E-01	7.10E-01	1.02E+00	1.19E-04	60
ECONOMIC COST MEASURES ($) 0-80.5 km										
TOTAL ECONOMIC COSTS	0.7495	3.21E+05	6.71E+04	8.60E+05	1.27E+06	5.22E+06	5.64E+06	7.55E+06	7.91E-05	30
POP.-DEPENDENT COSTS	0.0000	2.93E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E+06	1.17E-05	27
FARM-DEPENDENT COSTS	0.7495	3.21E+05	6.71E+04	8.60E+05	1.27E+06	5.22E+06	5.64E+06	7.55E+06	7.91E-05	30
POP.-DEPENDENT DECONTAMINATION COST	0.0000	7.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E+05	1.17E-05	27
FARM-DEPENDENT DECONTAMINATION COST	0.0344	3.54E+02	0.00E+00	0.00E+00	0.00E+00	1.14E+04	1.23E+04	4.10E+04	3.77E-05	27
POP.-DEPENDENT INTERDICTION COST	0.0000	2.14E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E+06	1.17E-05	27
FARM-DEPENDENT INTERDICTION COST	0.7006	2.90E+04	4.69E+03	7.33E+04	1.09E+05	5.06E+05	5.30E+05	7.29E+05	7.68E-05	30
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	0.7489	1.33E+03	2.47E+01	1.33E+03	6.12E+03	1.79E+04	7.11E+04	8.41E+04	3.84E-05	30
CROP DISPOSAL COST	0.7006	2.90E+05	4.69E+04	8.05E+05	1.21E+06	5.05E+06	5.32E+06	6.93E+06	1.58E-04	30

AFFECTED AREA/POPULATION 0-80.5 km
FARM DECONTAMINATION (HECTARES) 0.0344 3.42E-01 0.00E+00 0.00E+00 0.00E+00
7.49E+00 7.77E+00 3.96E+01 3.77E-05 27
POP. DECONTAMINATION (INDIVIDUALS) 0.0000 1.42E-03 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 6.90E+01 1.17E-05 27
FARM INTERDICTION (HECTARES) 0.7006 6.71E+01 9.56E+00 1.57E+02 2.30E+02
1.06E+03 1.13E+03 1.69E+03 7.68E-05 30
POP. INTERDICTION (INDIVIDUALS) 0.0000 1.42E-03 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 6.90E+01 1.17E-05 27
FARM CONDEMNATION (HECTARES) 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
POP. CONDEMNATION (INDIVIDUALS) 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 AREA (HECTARES) 0.7489 1.39E+02 1.44E+01 2.73E+02 8.70E+02
1.07E+03 1.12E+03 1.45E+03 3.84E-05 30
CROP DISPOSAL AREA (HECTARES) 0.7006 6.71E+01 9.56E+00 1.57E+02 2.30E+02
1.06E+03 1.13E+03 1.69E+03 7.68E-05 30

SOURCE TERM 3 OF 6:
IC

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km

PEOPLE FRACTION = 0.9500 0.0500

OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC RESULTS	
X	PROB>=X	X	PROB>=X	X	PROB>=X	X	PROB>=X
1.00E-08	1.00E+00	1.00E-09	1.00E+00	1.00E-08	1.00E+00	1.00E-08	1.00E+00
2.00E-08	1.00E+00	2.00E-09	1.00E+00	2.00E-08	1.00E+00	2.00E-08	1.00E+00
3.00E-08	1.00E+00	3.00E-09	1.00E+00	3.00E-08	1.00E+00	3.00E-08	1.00E+00
5.00E-08	1.00E+00	5.00E-09	1.00E+00	5.00E-08	1.00E+00	5.00E-08	1.00E+00
7.00E-08	1.00E+00	7.00E-09	1.00E+00	7.00E-08	1.00E+00	7.00E-08	1.00E+00
1.00E-07	1.00E+00	1.00E-08	1.00E+00	1.00E-07	1.00E+00	1.00E-07	1.00E+00
2.00E-07	1.00E+00	2.00E-08	1.00E+00	2.00E-07	1.00E+00	2.00E-07	1.00E+00
3.00E-07	1.00E+00	3.00E-08	1.00E+00	3.00E-07	1.00E+00	3.00E-07	1.00E+00
5.00E-07	1.00E+00	5.00E-08	1.00E+00	5.00E-07	1.00E+00	5.00E-07	1.00E+00
7.00E-07	1.00E+00	7.00E-08	1.00E+00	7.00E-07	1.00E+00	7.00E-07	1.00E+00
1.00E-06	1.00E+00	1.00E-07	1.00E+00	1.00E-06	1.00E+00	1.00E-06	1.00E+00
2.00E-06	1.00E+00	2.00E-07	1.00E+00	2.00E-06	1.00E+00	2.00E-06	1.00E+00
3.00E-06	1.00E+00	3.00E-07	1.00E+00	3.00E-06	1.00E+00	3.00E-06	1.00E+00
5.00E-06	1.00E+00	5.00E-07	1.00E+00	5.00E-06	1.00E+00	5.00E-06	1.00E+00
7.00E-06	1.00E+00	7.00E-07	1.00E+00	7.00E-06	1.00E+00	7.00E-06	1.00E+00
1.00E-05	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-05	1.00E+00
2.00E-05	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-05	1.00E+00
3.00E-05	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-05	1.00E+00
5.00E-05	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-05	1.00E+00
7.00E-05	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-05	1.00E+00
1.00E-04	1.00E+00	1.00E-05	9.98E-01	1.00E-04	1.00E+00	1.00E-04	9.99E-01
2.00E-04	9.76E-01	2.00E-05	9.62E-01	2.00E-04	9.85E-01	2.00E-04	9.75E-01
3.00E-04	9.70E-01	3.00E-05	9.62E-01	3.00E-04	9.75E-01	3.00E-04	9.70E-01
5.00E-04	9.70E-01	5.00E-05	9.62E-01	5.00E-04	9.64E-01	5.00E-04	9.70E-01
7.00E-04	9.70E-01	7.00E-05	9.22E-01	7.00E-04	9.64E-01	7.00E-04	9.70E-01
1.00E-03	9.52E-01	1.00E-04	9.21E-01	1.00E-03	9.45E-01	1.00E-03	9.33E-01
2.00E-03	8.94E-01	2.00E-04	8.45E-01	2.00E-03	8.90E-01	2.00E-03	8.72E-01
3.00E-03	8.67E-01	3.00E-04	8.07E-01	3.00E-03	8.60E-01	3.00E-03	8.48E-01
5.00E-03	8.48E-01	5.00E-04	7.26E-01	5.00E-03	8.25E-01	5.00E-03	8.48E-01
7.00E-03	7.55E-01	7.00E-04	6.65E-01	7.00E-03	7.32E-01	7.00E-03	7.55E-01
1.00E-02	7.06E-01	1.00E-03	5.12E-01	1.00E-02	6.39E-01	1.00E-02	6.78E-01
2.00E-02	5.37E-01	2.00E-03	3.31E-01	2.00E-02	4.38E-01	2.00E-02	4.81E-01
3.00E-02	3.82E-01	3.00E-03	2.68E-01	3.00E-02	3.33E-01	3.00E-02	3.32E-01
5.00E-02	7.81E-02	5.00E-03	4.63E-02	5.00E-02	1.10E-01	5.00E-02	6.23E-02
7.00E-02	2.75E-02	7.00E-03	2.10E-02	7.00E-02	6.03E-02	7.00E-02	1.43E-04
8.14E-02	1.43E-04	9.81E-03	1.95E-02	1.00E-01	2.10E-02	7.62E-02	1.43E-04
N.D.	N.D.	N.D.	N.D.	1.30E-01	1.95E-02	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 4 OF 6:
BP

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY" WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION 0.950

COHORT 2 = NO EVACUATION 0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM "CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

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

14-JUL-07 09:28:11 PAGE 19 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 1.30E+03 5.50E+02 3.54E+03 5.32E+03 8.56E+03 9.92E+03 1.62E+04 1.94E-05 20
CAN FAT/TOTAL 0-16.1 km 1.0000 7.66E+01 5.68E+01 1.38E+02 1.85E+02 4.73E+02 5.90E+02 1.09E+03 1.30E-05 32
ERL FAT/TOTAL 0-80.5 km 0.0618 1.62E-02 0.00E+00 0.00E+00 9.50E-03 5.99E-01 1.01E+00 2.35E+00 1.29E-04 77
ERL FAT/TOTAL 0-3.2 km 0.0493 1.56E-02 0.00E+00 0.00E+00 0.00E+00 5.99E-01 1.01E+00 2.35E+00 1.29E-04 77
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 1.20E+03 8.60E+02 2.12E+03 2.89E+03 7.47E+03 9.67E+03 1.82E+04 1.30E-05 32
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 1.96E+04 8.35E+03 5.59E+04 7.96E+04 1.15E+05 1.26E+05 2.47E+05 1.94E-05 21

POPULATION WEIGHTED RISK
ERL FAT/TOTAL 0-80.5 km 0.0618 1.28E-08 0.00E+00 0.00E+00 7.46E-09 4.28E-07 7.86E-07 1.85E-06 1.29E-04 77
ERL FAT/TOTAL 0-3.2 km 0.0493 1.24E-04 0.00E+00 0.00E+00 0.00E+00 4.27E-03 7.86E-03 1.86E-02 1.29E-04 77
ERL FAT/TOTAL 0-1.6 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

ERL FAT/TOTAL 3.2-4.8 km 0.0106 2.97E-06 0.00E+00 0.00E+00 0.00E+00 2.16E-05 1.56E-04 2.19E-03 9.85E-05 77
CAN FAT/TOTAL 0-80.5 km 1.0000 9.15E-04 3.52E-04 2.67E-03 3.83E-03 6.42E-03 7.15E-03 1.04E-02 1.94E-05 20
CAN FAT/TOTAL 0-16.1 km 0.9779 2.80E-03 1.41E-03 7.10E-03 1.05E-02 1.83E-02 2.20E-02 3.54E-02 9.42E-04 75

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 1.75E+01 1.11E+01 4.00E+01 5.09E+01 5.90E+01 6.29E+01 8.90E+01 1.57E-03 77

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 4 OF 6:
BP

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

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION

14-JUL-07 09:28:11 PAGE 20 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 5.79E+02 1.97E+02 1.41E+03 2.64E+03 5.67E+03 6.87E+03 9.96E+03 1.08E-03 18
CAN FAT/TOTAL 0-16.1 km 0.8159 7.17E+00 8.77E-01 2.32E+01 3.94E+01 7.09E+01 9.41E+01 1.50E+02 9.42E-04 75
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
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
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 0.8159 6.39E+01 1.16E+01 1.96E+02 3.18E+02 6.36E+02 7.61E+02 1.25E+03 9.42E-04 75
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 7.67E+03 2.83E+03 2.17E+04 3.40E+04 6.46E+04 7.57E+04 9.81E+04 1.08E-03 18

POPULATION WEIGHTED RISK
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
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
ERL FAT/TOTAL 0-1.6 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
ERL FAT/TOTAL 3.2-4.8 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 4.55E-04 1.55E-04 1.08E-03 2.13E-03 4.60E-03 5.62E-03 7.83E-03 1.08E-03 18
CAN FAT/TOTAL 0-16.1 km 0.8159 1.51E-03 1.84E-04 4.76E-03 8.05E-03 1.64E-02 2.08E-02 3.16E-02 9.42E-04 75

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 1.41E+01 9.79E+00 3.58E+01 4.61E+01 5.74E+01 6.14E+01 6.89E+01 1.57E-03 77

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 4 OF 6:
BP

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

COHORT 2 = NO EVACUATION

14-JUL-07 09:28:11 PAGE 21 PROB QUANTILES PEAK PEAK PEAK

		NON-ZERO	MEAN	50TH	90TH	95TH	99TH	99.5TH	CONS	PROB	TRIAL
HEALTH EFFECTS CASES											
CAN FAT/TOTAL	0-80.5 km	1.0000	6.29E+02	2.33E+02	1.50E+03	2.67E+03	5.84E+03	7.14E+03	1.02E+04	9.42E-04	75
CAN FAT/TOTAL	0-16.1 km	0.9779	5.72E+01	2.18E+01	1.51E+02	2.30E+02	3.85E+02	4.49E+02	5.89E+02	9.42E-04	65
ERL FAT/TOTAL	0-80.5 km	0.0618	3.25E-01	0.00E+00	0.00E+00	1.89E-01	1.20E+01	2.01E+01	4.70E+01	1.29E-04	77
ERL FAT/TOTAL	0-3.2 km	0.0493	3.12E-01	0.00E+00	0.00E+00	0.00E+00	1.20E+01	2.01E+01	4.70E+01	1.29E-04	77
ERL FAT/TOTAL	0-1.6 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
POPULATION DOSE (Sv)											
L-EDEWBODY TOT LIF	0-16.1 km	0.9779	5.09E+02	2.19E+02	1.34E+03	2.08E+03	3.29E+03	3.72E+03	6.00E+03	1.19E-04	77
L-EDEWBODY TOT LIF	0-80.5 km	1.0000	8.11E+03	3.16E+03	2.20E+04	3.50E+04	6.97E+04	7.80E+04	9.96E+04	1.08E-03	18
POPULATION WEIGHTED RISK											
ERL FAT/TOTAL	0-80.5 km	0.0618	2.55E-07	0.00E+00	0.00E+00	1.31E-07	8.63E-06	1.50E-05	3.69E-05	1.29E-04	77
ERL FAT/TOTAL	0-3.2 km	0.0493	2.48E-03	0.00E+00	0.00E+00	0.00E+00	8.61E-02	1.50E-01	3.73E-01	1.29E-04	77
ERL FAT/TOTAL	0-1.6 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
ERL FAT/TOTAL	3.2-4.8 km	0.0106	5.94E-05	0.00E+00	0.00E+00	0.00E+00	5.34E-04	2.59E-03	4.39E-02	9.85E-05	77
CAN FAT/TOTAL	0-80.5 km	1.0000	4.95E-04	1.80E-04	1.13E-03	2.18E-03	4.61E-03	5.63E-03	8.05E-03	9.42E-04	75
CAN FAT/TOTAL	0-16.1 km	0.9779	1.21E-02	4.55E-03	3.32E-02	4.91E-02	8.35E-02	9.71E-02	1.24E-01	9.42E-04	65
PEAK DOSE FOUND ON SPATIAL GRID (Sv)											
L-EDEWBODY	0-1.6 km	1.0000	8.02E+01	4.99E+01	2.00E+02	2.72E+02	3.63E+02	4.00E+02	4.69E+02	1.57E-03	77

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 4 OF 6:
BP

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

14-JUL-07 09:28:11 PAGE 22 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 7.15E+02 3.25E+02 1.93E+03 2.71E+03 4.39E+03 5.15E+03 9.51E+03 1.94E-05 21
CAN FAT/TOTAL 0-16.1 km 1.0000 6.69E+01 4.52E+01 1.25E+02 1.76E+02 4.71E+02 5.90E+02 1.09E+03 1.30E-05 32

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 1.12E+03 7.61E+02 2.03E+03 2.85E+03 7.43E+03 9.59E+03 1.82E+04 1.30E-05 32
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 1.19E+04 5.44E+03 3.22E+04 4.50E+04 7.46E+04 8.50E+04 1.59E+05 1.94E-05 21

POPULATION WEIGHTED RISK
CAN FAT/TOTAL 0-80.5 km 1.0000 4.58E-04 1.81E-04 1.26E-03 1.91E-03 3.02E-03 3.20E-03 5.06E-03 1.94E-05 21
CAN FAT/TOTAL 0-16.1 km 0.9191 7.56E-04 6.32E-04 1.61E-03 2.02E-03 2.23E-03 2.32E-03 3.03E-03 8.06E-06 24

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 0.4224 3.29E-02 0.00E+00 1.01E-01 1.07E-01 1.23E-01 1.31E-01 1.78E-01 1.43E-04 32

L-EDEWBODY POP. DOSE (Sv) 0-16.1 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 1.12E+03 7.61E+02 2.03E+03 2.85E+03 7.43E+03 9.59E+03 1.82E+04 1.30E-05 32
LONG-TERM DIRECT EXPOSURE PATHWAYS 0.9191 5.97E+01 5.13E+01 1.18E+02 1.35E+02 1.83E+02 2.01E+02 2.39E+02 8.06E-06 24
TOTAL INGESTION PATHWAYS DOSE 1.0000 1.04E+03 6.81E+02 2.01E+03 2.83E+03 7.14E+03 9.44E+03 1.82E+04 1.30E-05 32
LONG-TERM GROUNDSHINE DOSE 0.9191 5.93E+01 5.10E+01 1.18E+02 1.34E+02 1.83E+02 2.01E+02 2.39E+02 8.06E-06 24
LONG-TERM RESUSPENSION DOSE 0.9191 3.89E-01 2.84E-01 9.55E-01 1.17E+00 1.78E+00 2.02E+00 2.50E+00 8.06E-06 95
WATER INGESTION DOSE 1.0000 1.04E+03 6.77E+02 2.01E+03 2.83E+03 7.14E+03 9.44E+03 1.82E+04 1.30E-05 32
POP.-DEPENDENT DECONTAMINATION DOSE 0.9127 1.63E+01 1.02E+01 3.83E+01 5.17E+01 8.18E+01 9.13E+01 1.22E+02 8.06E-06 24
FARM-DEPENDENT DECONTAMINATION DOSE 0.6132 2.31E-01 5.68E-02 6.31E-01 1.21E+00 2.34E+00 2.68E+00 4.16E+00 2.05E-03 68

INGESTION OF GRAINS 0.6732 7.13E-02 2.43E-02 1.91E-01 3.23E-01 7.27E-01 8.75E-01 1.19E+00 1.77E-03 18
INGESTION OF LEAF VEG 0.6732 1.90E-01 9.43E-02 4.85E-01 7.02E-01 1.11E+00 1.17E+00 1.75E+00 3.36E-05 92
INGESTION OF ROOT CROPS 0.6732 1.27E-01 5.83E-02 3.31E-01 5.38E-01 1.03E+00 1.22E+00 1.57E+00 1.77E-03 18
INGESTION OF FRUITS 0.6732 3.69E-01 1.92E-01 8.72E-01 1.33E+00 2.59E+00 3.06E+00 4.22E+00 4.00E-04 68
INGESTION OF LEGUMES 0.6732 2.10E-01 1.07E-01 5.29E-01 8.36E-01 1.21E+00 1.34E+00 2.10E+00 3.36E-05 92
INGESTION OF BEEF 0.6732 4.49E-01 1.33E-01 1.21E+00 2.02E+00 3.07E+00 3.18E+00 4.46E+00 4.58E-06 115
INGESTION OF MILK 0.6732 2.97E-01 8.67E-02 7.79E-01 1.19E+00 2.05E+00 2.12E+00 2.95E+00 4.58E-06 115
INGESTION OF POULTRY 0.6732 1.31E-01 4.24E-02 3.82E-01 5.70E-01 1.10E+00 1.37E+00 1.90E+00 1.77E-03 18
INGESTION OF OTHER MEAT CROPS 0.6732 2.06E-02 6.41E-03 6.17E-02 8.45E-02 1.71E-01 2.19E-01 1.04E+00 2.85E-05 111

L-EDEWBODY POP. DOSE (Sv) 0-80.5 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 1.19E+04 5.44E+03 3.22E+04 4.50E+04 7.46E+04 8.50E+04 1.59E+05 1.94E-05 21
LONG-TERM DIRECT EXPOSURE PATHWAYS 1.0000 9.70E+03 3.86E+03 2.84E+04 3.85E+04 6.37E+04 7.20E+04 1.07E+05 1.94E-05 21
TOTAL INGESTION PATHWAYS DOSE 1.0000 1.40E+03 9.87E+02 2.72E+03 3.75E+03 8.16E+03 1.03E+04 1.86E+04 2.34E-05 31
LONG-TERM GROUNDSHINE DOSE 1.0000 9.57E+03 3.78E+03 2.81E+04 3.82E+04 6.34E+04 7.19E+04 1.07E+05 1.94E-05 21
LONG-TERM RESUSPENSION DOSE 1.0000 1.32E+02 5.31E+01 3.60E+02 5.35E+02 8.12E+02 9.13E+02 1.38E+03 1.01E-05 25
WATER INGESTION DOSE 1.0000 1.30E+03 8.46E+02 2.55E+03 3.61E+03 8.12E+03 1.03E+04 1.86E+04 2.34E-05 31

	PROB NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	PEAK CONS	PEAK PROB	PEAK TRIAL
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km										
POP.-DEPENDENT DECONTAMINATION DOSE	0.9983	8.09E+02	1.91E+02	1.81E+03	3.36E+03	1.02E+04	1.39E+04	4.51E+04	1.94E-05	21
FARM-DEPENDENT DECONTAMINATION DOSE	0.9949	3.73E+00	1.09E+00	1.03E+01	1.61E+01	2.79E+01	3.18E+01	5.33E+01	1.10E-04	119
INGESTION OF GRAINS	0.9997	4.88E+00	1.72E+00	1.34E+01	1.81E+01	2.50E+01	2.79E+01	3.11E+01	1.08E-05	27
INGESTION OF LEAF VEG	0.9997	9.26E+00	6.32E+00	2.15E+01	2.60E+01	3.34E+01	3.58E+01	5.41E+01	8.63E-05	63
INGESTION OF ROOT CROPS	0.9997	7.43E+00	3.77E+00	2.02E+01	2.50E+01	3.40E+01	3.70E+01	4.23E+01	1.66E-03	130
INGESTION OF FRUITS	0.9997	1.50E+01	1.11E+01	3.19E+01	3.91E+01	5.13E+01	5.24E+01	6.39E+01	1.08E-05	27
INGESTION OF LEGUMES	0.9997	9.06E+00	6.82E+00	1.94E+01	2.37E+01	3.18E+01	3.36E+01	4.06E+01	4.77E-04	93
INGESTION OF BEEF	0.9997	1.90E+01	1.33E+01	4.11E+01	5.36E+01	7.98E+01	9.08E+01	1.61E+02	1.10E-04	119
INGESTION OF MILK	0.9997	1.49E+01	9.37E+00	3.53E+01	4.93E+01	7.60E+01	8.45E+01	1.31E+02	2.57E-04	101
INGESTION OF POULTRY	0.9997	9.91E+00	4.44E+00	2.69E+01	3.14E+01	3.69E+01	3.95E+01	7.39E+01	8.63E-05	63
INGESTION OF OTHER MEAT CROPS	0.9997	3.02E+00	1.05E+00	7.48E+00	1.30E+01	2.36E+01	2.73E+01	3.24E+01	1.66E-03	98
ECONOMIC COST MEASURES ($) 0-80.5 km										
TOTAL ECONOMIC COSTS	1.0000	3.43E+09	1.21E+09	8.88E+09	1.43E+10	3.08E+10	3.48E+10	6.64E+10	8.42E-05	52
POP.-DEPENDENT COSTS	0.9983	3.14E+09	9.58E+08	8.46E+09	1.42E+10	2.99E+10	3.41E+10	6.57E+10	8.42E-05	52
FARM-DEPENDENT COSTS	1.0000	2.88E+08	2.45E+08	4.98E+08	5.83E+08	7.47E+08	7.91E+08	9.43E+08	5.76E-04	1
POP.-DEPENDENT DECONTAMINATION COST	0.9983	1.03E+09	3.02E+08	2.87E+09	4.78E+09	9.66E+09	1.04E+10	1.33E+10	2.24E-04	20
FARM-DEPENDENT DECONTAMINATION COST	0.9949	3.11E+07	2.61E+07	5.87E+07	7.25E+07	1.06E+08	1.17E+08	1.97E+08	1.10E-04	119
POP.-DEPENDENT INTERDICTION COST	0.9983	2.06E+09	6.19E+08	4.93E+09	9.56E+09	2.02E+10	2.38E+10	5.32E+10	1.94E-05	21
FARM-DEPENDENT INTERDICTION COST	0.9997	4.22E+07	3.59E+07	7.16E+07	8.26E+07	1.06E+08	1.13E+08	1.42E+08	4.00E-04	139
POP.-DEPENDENT CONDEMNATION COST	0.6197	4.69E+07	3.74E+06	6.86E+07	1.08E+08	3.90E+08	1.03E+09	1.75E+10	8.42E-05	89
FARM-DEPENDENT CONDEMNATION COST	1.0000	1.02E+08	5.18E+07	2.73E+08	3.65E+08	5.20E+08	5.40E+08	7.48E+08	2.34E-05	20
EMERGENCY PHASE COST	0.9329	3.56E+06	6.45E+05	4.49E+06	9.35E+06	4.87E+07	5.90E+07	1.55E+08	9.42E-04	75
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	1.0000	1.71E+06	1.41E+06	2.87E+06	3.05E+06	3.21E+06	3.28E+06	3.80E+06	4.95E-05	3
CROP DISPOSAL COST	1.0000	1.11E+08	1.04E+08	1.50E+08	1.76E+08	2.08E+08	2.14E+08	2.56E+08	4.06E-05	3

AFFECTED AREA/POPULATION 0-80.5 km

FARM DECONTAMINATION (HECTARES) 0.9949 2.55E+04 2.25E+04 4.49E+04 5.42E+04 7.47E+04 8.29E+04 1.19E+05 4.77E-04 93

POP. DECONTAMINATION (INDIVIDUALS) 0.9983 1.01E+05 3.17E+04 2.78E+05 5.49E+05 7.53E+05 8.09E+05 9.03E+05 1.73E-03 1

FARM INTERDICTION (HECTARES) 0.9997 7.61E+04 7.26E+04 1.12E+05 1.24E+05 1.58E+05 1.75E+05 2.19E+05 4.00E-04 139

POP. INTERDICTION (INDIVIDUALS) 0.9983 1.01E+05 3.17E+04 2.78E+05 5.49E+05 7.53E+05 8.09E+05 9.03E+05 1.73E-03 1

FARM CONDEMNATION (HECTARES) 1.0000 1.63E+04 6.62E+03 5.02E+04 6.38E+04 1.01E+05 1.05E+05 1.45E+05 1.81E-05 20

POP. CONDEMNATION (INDIVIDUALS) 0.6197 3.87E+02 2.40E+01 4.11E+02 7.42E+02 3.16E+03 9.71E+03 1.55E+05 8.42E-05 89

MILK DISPOSAL AREA (HECTARES) 1.0000 9.31E+04 8.30E+04 1.26E+05 1.45E+05 1.99E+05 2.03E+05 2.29E+05 3.83E-05 3

CROP DISPOSAL AREA (HECTARES) 1.0000 9.24E+04 8.23E+04 1.25E+05 1.42E+05 1.94E+05 2.03E+05 2.29E+05 3.83E-05 3

SOURCE TERM 4 OF 6:
BP

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km

PEOPLE FRACTION = 0.9500 0.0500

OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC RESULTS	
X	PROB>=X	X	PROB>=X	X	PROB>=X	X	PROB>=X
1.00E-05	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-08	4.22E-01
2.00E-05	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-08	4.22E-01
3.00E-05	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-08	4.22E-01
5.00E-05	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-08	4.22E-01
7.00E-05	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-08	4.22E-01
1.00E-04	1.00E+00	1.00E-05	1.00E+00	1.00E-04	1.00E+00	1.00E-07	4.22E-01
2.00E-04	1.00E+00	2.00E-05	1.00E+00	2.00E-04	1.00E+00	2.00E-07	4.22E-01
3.00E-04	1.00E+00	3.00E-05	1.00E+00	3.00E-04	1.00E+00	3.00E-07	4.22E-01
5.00E-04	1.00E+00	5.00E-05	1.00E+00	5.00E-04	1.00E+00	5.00E-07	4.22E-01
7.00E-04	1.00E+00	7.00E-05	1.00E+00	7.00E-04	1.00E+00	7.00E-07	4.22E-01
1.00E-03	1.00E+00	1.00E-04	1.00E+00	1.00E-03	1.00E+00	1.00E-06	4.22E-01
2.00E-03	1.00E+00	2.00E-04	1.00E+00	2.00E-03	1.00E+00	2.00E-06	4.22E-01
3.00E-03	1.00E+00	3.00E-04	1.00E+00	3.00E-03	1.00E+00	3.00E-06	4.22E-01
5.00E-03	1.00E+00	5.00E-04	1.00E+00	5.00E-03	1.00E+00	5.00E-06	4.22E-01
7.00E-03	1.00E+00	7.00E-04	1.00E+00	7.00E-03	1.00E+00	7.00E-06	4.22E-01
1.00E-02	1.00E+00	1.00E-03	1.00E+00	1.00E-02	1.00E+00	1.00E-05	4.22E-01
2.00E-02	1.00E+00	2.00E-03	1.00E+00	2.00E-02	1.00E+00	2.00E-05	4.22E-01
3.00E-02	1.00E+00	3.00E-03	1.00E+00	3.00E-02	1.00E+00	3.00E-05	4.22E-01
5.00E-02	1.00E+00	5.00E-03	1.00E+00	5.00E-02	1.00E+00	5.00E-05	4.22E-01
7.00E-02	1.00E+00	7.00E-03	1.00E+00	7.00E-02	1.00E+00	7.00E-05	4.22E-01
1.00E-01	1.00E+00	1.00E-02	1.00E+00	1.00E-01	1.00E+00	1.00E-04	4.22E-01
2.00E-01	1.00E+00	2.00E-02	1.00E+00	2.00E-01	1.00E+00	2.00E-04	4.22E-01
3.00E-01	1.00E+00	3.00E-02	1.00E+00	3.00E-01	1.00E+00	3.00E-04	4.22E-01
5.00E-01	9.32E-01	5.00E-02	1.00E+00	5.00E-01	1.00E+00	5.00E-04	4.22E-01
7.00E-01	9.09E-01	7.00E-02	1.00E+00	7.00E-01	1.00E+00	7.00E-04	4.22E-01
1.00E+00	9.08E-01	1.00E-01	1.00E+00	1.00E+00	1.00E+00	1.00E-03	4.22E-01
2.00E+00	8.39E-01	2.00E-01	9.32E-01	2.00E+00	1.00E+00	2.00E-03	4.22E-01
3.00E+00	7.84E-01	3.00E-01	9.27E-01	3.00E+00	1.00E+00	3.00E-03	4.22E-01
5.00E+00	7.20E-01	5.00E-01	9.08E-01	5.00E+00	9.27E-01	5.00E-03	4.22E-01
7.00E+00	6.89E-01	7.00E-01	8.90E-01	7.00E+00	9.10E-01	7.00E-03	4.22E-01
1.00E+01	5.53E-01	1.00E+00	8.57E-01	1.00E+01	8.77E-01	1.00E-02	4.22E-01
2.00E+01	2.87E-01	2.00E+00	7.77E-01	2.00E+01	7.67E-01	2.00E-02	4.22E-01
3.00E+01	1.90E-01	3.00E+00	7.32E-01	3.00E+01	7.27E-01	3.00E-02	3.83E-01
5.00E+01	6.06E-02	5.00E+00	7.00E-01	5.00E+01	4.99E-01	5.00E-02	3.11E-01
7.00E+01	1.57E-03	7.00E+00	6.83E-01	7.00E+01	3.71E-01	7.00E-02	2.55E-01
8.90E+01	1.57E-03	1.00E+01	4.90E-01	1.00E+02	2.76E-01	1.00E-01	1.07E-01
N.D.	N.D.	2.00E+01	2.41E-01	2.00E+02	1.00E-01	1.78E-01	1.43E-04
N.D.	N.D.	3.00E+01	1.63E-01	3.00E+02	4.01E-02	N.D.	N.D.
N.D.	N.D.	5.00E+01	4.01E-02	4.69E+02	1.57E-03	N.D.	N.D.
N.D.	N.D.	6.89E+01	1.57E-03	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 5 OF 6:
CI

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY" WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION 0.950

COHORT 2 = NO EVACUATION 0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM "CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

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

14-JUL-07 09:28:11 PAGE 25 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 5.05E+02 2.03E+02 1.14E+03 2.19E+03 4.54E+03 5.46E+03 8.26E+03 7.99E-04 68
CAN FAT/TOTAL 0-16.1 km 1.0000 1.76E+01 1.17E+01 3.84E+01 5.27E+01 8.98E+01 1.04E+02 1.93E+02 2.34E-05 31
ERL FAT/TOTAL 0-80.5 km 0.0241 5.12E-03 0.00E+00 0.00E+00 0.00E+00 1.67E-02 1.36E-01 1.71E+00 1.31E-03 65
ERL FAT/TOTAL 0-3.2 km 0.0237 5.12E-03 0.00E+00 0.00E+00 0.00E+00 1.67E-02 1.36E-01 1.71E+00 1.31E-03 65
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 2.63E+02 1.78E+02 5.47E+02 7.51E+02 1.29E+03 1.56E+03 3.22E+03 2.34E-05 31
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 7.61E+03 3.13E+03 1.78E+04 3.36E+04 7.09E+04 7.83E+04 1.12E+05 8.42E-05 29

POPULATION WEIGHTED RISK
ERL FAT/TOTAL 0-80.5 km 0.0241 4.03E-09 0.00E+00 0.00E+00 0.00E+00 1.55E-08 1.23E-07 1.34E-06 1.31E-03 65
ERL FAT/TOTAL 0-3.2 km 0.0237 4.06E-05 0.00E+00 0.00E+00 0.00E+00 1.55E-04 1.23E-03 1.36E-02 1.31E-03 65
ERL FAT/TOTAL 0-1.6 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

ERL FAT/TOTAL 3.2-4.8 km 0.0004 7.15E-09 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 2.94E-05 9.85E-05 77
CAN FAT/TOTAL 0-80.5 km 1.0000 3.68E-04 1.34E-04 8.78E-04 1.62E-03 3.41E-03 4.09E-03 6.36E-03 7.99E-04 68
CAN FAT/TOTAL 0-16.1 km 0.9606 1.37E-03 6.99E-04 3.48E-03 4.86E-03 1.01E-02 1.09E-02 1.65E-02 1.43E-04 136

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 5.81E+00 3.87E+00 1.22E+01 1.52E+01 NOT-FOUND NOT-FOUND 3.08E+01 1.95E-02 65

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 5 OF 6:
CI

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

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION

14-JUL-07 09:28:11 PAGE 26 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 2.86E+02 9.75E+01 6.35E+02 1.13E+03 3.13E+03 4.12E+03 7.21E+03 7.99E-04 68
CAN FAT/TOTAL 0-16.1 km 0.8087 2.27E+00 2.31E-01 6.94E+00 1.17E+01 3.20E+01 3.60E+01 5.46E+01 1.43E-04 136
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 0.00E+00 0
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
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 0.8087 2.32E+01 3.67E+00 7.08E+01 1.10E+02 2.39E+02 2.79E+02 4.55E+02 1.43E-04 136
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 3.98E+03 1.45E+03 8.90E+03 1.70E+04 4.11E+04 5.20E+04 8.11E+04 7.99E-04 68

POPULATION WEIGHTED RISK
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 0.00E+00 0
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
ERL FAT/TOTAL 0-1.6 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
ERL FAT/TOTAL 3.2-4.8 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
CAN FAT/TOTAL 0-80.5 km 1.0000 2.25E-04 7.61E-05 4.76E-04 8.95E-04 2.29E-03 3.05E-03 5.67E-03 7.99E-04 68
CAN FAT/TOTAL 0-16.1 km 0.8087 4.79E-04 4.70E-05 1.37E-03 2.46E-03 6.18E-03 7.79E-03 1.15E-02 1.43E-04 136

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 3.67E+00 2.34E+00 7.84E+00 1.15E+01 NOT-FOUND NOT-FOUND 1.98E+01 1.95E-02 65

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 5 OF 6:
CI

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

COHORT 2 = NO EVACUATION

14-JUL-07 09:28:11 PAGE 27 PROB QUANTILES PEAK PEAK PEAK

		NON-ZERO PROB	MEAN	50TH	90TH	95TH	99TH	99.5TH	CONS	TRIAL
HEALTH EFFECTS CASES										
CAN FAT/TOTAL	0-80.5 km	1.0000	3.25E+02	1.26E+02	7.21E+02	1.25E+03	3.16E+03	4.33E+03	7.42E+03	7.99E-04 68
CAN FAT/TOTAL	0-16.1 km	0.9606	4.17E+01	1.45E+01	1.16E+02	1.70E+02	2.78E+02	3.15E+02	5.09E+02	1.19E-04 77
ERL FAT/TOTAL	0-80.5 km	0.0241	1.02E-01	0.00E+00	0.00E+00	0.00E+00	3.42E-01	3.13E+00	3.42E+01	1.31E-03 65
ERL FAT/TOTAL	0-3.2 km	0.0237	1.02E-01	0.00E+00	0.00E+00	0.00E+00	3.42E-01	3.13E+00	3.42E+01	1.31E-03 65
ERL FAT/TOTAL	0-1.6 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
POPULATION DOSE (Sv)										
L-EDEWBODY TOT LIF	0-16.1 km	0.9606	3.66E+02	1.48E+02	1.02E+03	1.39E+03	2.33E+03	2.66E+03	4.52E+03	1.66E-03 65
L-EDEWBODY TOT LIF	0-80.5 km	1.0000	4.32E+03	1.69E+03	9.30E+03	1.88E+04	4.11E+04	5.20E+04	8.28E+04	7.99E-04 68
POPULATION WEIGHTED RISK										
ERL FAT/TOTAL	0-80.5 km	0.0241	8.05E-08	0.00E+00	0.00E+00	0.00E+00	2.62E-07	2.25E-06	2.69E-05	1.31E-03 65
ERL FAT/TOTAL	0-3.2 km	0.0237	8.13E-04	0.00E+00	0.00E+00	0.00E+00	2.62E-03	2.25E-02	2.71E-01	1.31E-03 65
ERL FAT/TOTAL	0-1.6 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
ERL FAT/TOTAL	3.2-4.8 km	0.0004	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-04	9.85E-05 77
CAN FAT/TOTAL	0-80.5 km	1.0000	2.56E-04	9.90E-05	5.65E-04	9.69E-04	2.42E-03	3.27E-03	5.83E-03	7.99E-04 68
CAN FAT/TOTAL	0-16.1 km	0.9606	8.80E-03	3.05E-03	2.52E-02	3.61E-02	5.93E-02	6.86E-02	1.08E-01	1.19E-04 77
PEAK DOSE FOUND ON SPATIAL GRID (Sv)										
L-EDEWBODY	0-1.6 km	1.0000	4.41E+01	2.92E+01	8.98E+01	1.19E+02	NOT-FOUND	NOT-FOUND	2.40E+02	1.95E-02 65

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 5 OF 6:
CI

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

14-JUL-07 09:28:11 PAGE 28 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 2.17E+02 8.18E+01 5.23E+02 9.46E+02 2.02E+03 2.15E+03 3.16E+03 8.42E-05 29
CAN FAT/TOTAL 0-16.1 km 1.0000 1.34E+01 9.26E+00 2.67E+01 3.79E+01 7.61E+01 1.00E+02 1.92E+02 2.34E-05 31

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 2.23E+02 1.49E+02 4.45E+02 6.43E+02 1.23E+03 1.51E+03 3.21E+03 2.34E-05 31
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 3.62E+03 1.38E+03 8.51E+03 1.55E+04 3.13E+04 3.36E+04 5.26E+04 8.42E-05 29

POPULATION WEIGHTED RISK
CAN FAT/TOTAL 0-80.5 km 1.0000 1.42E-04 4.65E-05 3.62E-04 6.75E-04 1.15E-03 1.28E-03 2.03E-03 1.81E-05 23
CAN FAT/TOTAL 0-16.1 km 0.9329 4.75E-04 3.52E-04 1.04E-03 1.17E-03 1.51E-03 1.68E-03 2.70E-03 5.50E-06 25

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 0.9297 1.19E-01 1.04E-01 1.24E-01 1.33E-01 1.59E-01 1.71E-01 1.88E-01 2.17E-03 57

L-EDEWBODY POP. DOSE (Sv) 0-16.1 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 2.23E+02 1.49E+02 4.45E+02 6.43E+02 1.23E+03 1.51E+03 3.21E+03 2.34E-05 31
LONG-TERM DIRECT EXPOSURE PATHWAYS 0.9329 3.75E+01 2.79E+01 8.60E+01 1.02E+02 1.16E+02 1.23E+02 2.14E+02 5.50E-06 25
TOTAL INGESTION PATHWAYS DOSE 1.0000 1.70E+02 9.89E+01 3.74E+02 5.55E+02 1.15E+03 1.45E+03 3.21E+03 2.34E-05 31
LONG-TERM GROUNDSHINE DOSE 0.9329 3.42E+01 2.50E+01 7.92E+01 9.99E+01 1.14E+02 1.21E+02 2.10E+02 5.50E-06 25
LONG-TERM RESUSPENSION DOSE 0.9329 3.29E+00 2.72E+00 7.52E+00 8.67E+00 1.04E+01 1.07E+01 1.23E+01 1.98E-04 1
WATER INGESTION DOSE 1.0000 1.65E+02 9.15E+01 3.70E+02 5.46E+02 1.15E+03 1.45E+03 3.21E+03 2.34E-05 31
POP.-DEPENDENT DECONTAMINATION DOSE 0.8127 1.50E+01 3.97E+00 4.28E+01 6.36E+01 1.13E+02 1.30E+02 3.33E+02 5.50E-06 25
FARM-DEPENDENT DECONTAMINATION DOSE 0.8323 1.48E-01 7.45E-02 3.13E-01 4.50E-01 1.94E+00 2.30E+00 3.41E+00 2.85E-04 70

INGESTION OF GRAINS 0.9484 1.75E-01 1.16E-01 4.25E-01 6.08E-01 8.18E-01 8.91E-01 1.02E+00 1.97E-03 49
INGESTION OF LEAF VEG 0.9484 1.37E+00 1.08E+00 2.81E+00 3.47E+00 5.34E+00 6.05E+00 1.00E+01 9.67E-06 78
INGESTION OF ROOT CROPS 0.9484 8.21E-01 7.00E-01 1.70E+00 2.19E+00 3.27E+00 3.86E+00 6.08E+00 9.67E-06 78
INGESTION OF FRUITS 0.9484 4.29E-01 3.23E-01 1.01E+00 1.20E+00 1.79E+00 2.02E+00 2.71E+00 9.67E-06 78
INGESTION OF LEGUMES 0.9484 1.53E+00 1.13E+00 3.26E+00 4.00E+00 6.87E+00 8.00E+00 1.22E+01 9.67E-06 78
INGESTION OF BEEF 0.9484 2.80E-01 1.48E-01 7.29E-01 9.09E-01 1.15E+00 1.24E+00 2.08E+00 2.85E-05 111
INGESTION OF MILK 0.9484 5.19E-01 4.15E-01 1.05E+00 1.24E+00 1.81E+00 2.08E+00 3.64E+00 9.67E-06 78
INGESTION OF POULTRY 0.9484 1.49E-01 2.22E-02 6.38E-01 9.05E-01 1.19E+00 1.30E+00 1.74E+00 4.85E-04 64
INGESTION OF OTHER MEAT CROPS 0.9484 7.32E-02 3.56E-02 1.99E-01 3.01E-01 4.22E-01 4.88E-01 6.30E-01 9.70E-04 98

L-EDEWBODY POP. DOSE (Sv) 0-80.5 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 3.62E+03 1.38E+03 8.51E+03 1.55E+04 3.13E+04 3.36E+04 5.26E+04 8.42E-05 29
LONG-TERM DIRECT EXPOSURE PATHWAYS 1.0000 3.01E+03 9.80E+02 7.61E+03 1.36E+04 2.84E+04 3.09E+04 4.31E+04 1.81E-05 23
TOTAL INGESTION PATHWAYS DOSE 1.0000 3.56E+02 2.54E+02 7.16E+02 9.32E+02 1.76E+03 2.12E+03 3.55E+03 2.34E-05 31
LONG-TERM GROUNDSHINE DOSE 1.0000 2.69E+03 8.75E+02 6.90E+03 1.23E+04 2.58E+04 3.03E+04 3.86E+04 1.81E-05 23
LONG-TERM RESUSPENSION DOSE 1.0000 3.21E+02 1.06E+02 8.31E+02 1.43E+03 3.02E+03 3.28E+03 4.65E+03 2.40E-04 15
WATER INGESTION DOSE 1.0000 2.16E+02 1.20E+02 5.12E+02 6.90E+02 1.33E+03 1.73E+03 3.28E+03 2.34E-05 31

	PROB NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	PEAK CONS	PEAK PROB	PEAK TRIAL
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km										
POP.-DEPENDENT DECONTAMINATION DOSE	0.8789	2.50E+02	2.31E+01	4.26E+02	8.90E+02	4.93E+03	6.80E+03	1.84E+04	8.42E-05	29
FARM-DEPENDENT DECONTAMINATION DOSE	0.9447	1.62E+00	3.43E-01	4.90E+00	7.37E+00	1.42E+01	1.77E+01	5.81E+01	2.85E-05	99
INGESTION OF GRAINS	1.0000	6.06E+00	4.52E+00	1.22E+01	1.45E+01	2.08E+01	2.25E+01	3.57E+01	3.45E-05	132
INGESTION OF LEAF VEG	1.0000	2.49E+01	2.04E+01	4.94E+01	6.20E+01	9.35E+01	1.05E+02	2.15E+02	2.85E-05	99
INGESTION OF ROOT CROPS	1.0000	1.66E+01	1.27E+01	3.19E+01	3.88E+01	5.86E+01	6.85E+01	1.30E+02	2.85E-05	99
INGESTION OF FRUITS	1.0000	1.31E+01	1.04E+01	2.71E+01	3.19E+01	4.07E+01	4.52E+01	7.53E+01	3.45E-05	132
INGESTION OF LEGUMES	1.0000	2.62E+01	1.95E+01	5.49E+01	7.32E+01	1.10E+02	1.25E+02	2.61E+02	2.85E-05	99
INGESTION OF BEEF	1.0000	1.94E+01	1.31E+01	4.03E+01	5.31E+01	7.69E+01	8.37E+01	1.39E+02	1.43E-04	136
INGESTION OF MILK	1.0000	1.98E+01	1.36E+01	4.00E+01	5.22E+01	9.06E+01	1.05E+02	1.91E+02	2.85E-05	99
INGESTION OF POULTRY	1.0000	8.58E+00	7.19E+00	1.68E+01	2.08E+01	2.70E+01	3.02E+01	4.57E+01	1.14E-04	59
INGESTION OF OTHER MEAT CROPS	1.0000	4.74E+00	3.18E+00	1.04E+01	1.29E+01	2.05E+01	2.24E+01	2.61E+01	1.51E-03	81
ECONOMIC COST MEASURES ($) 0-80.5 km										
TOTAL ECONOMIC COSTS	1.0000	1.02E+09	2.29E+08	2.17E+09	4.20E+09	1.88E+10	2.08E+10	2.69E+10	8.42E-05	29
POP.-DEPENDENT COSTS	0.8805	8.78E+08	7.81E+07	1.98E+09	4.10E+09	1.87E+10	2.07E+10	2.65E+10	8.42E-05	29
FARM-DEPENDENT COSTS	1.0000	1.42E+08	1.13E+08	2.63E+08	3.23E+08	4.70E+08	5.09E+08	6.38E+08	2.34E-05	19
POP.-DEPENDENT DECONTAMINATION COST	0.8789	2.88E+08	2.51E+07	5.89E+08	1.20E+09	5.21E+09	7.18E+09	1.07E+10	1.94E-05	19
FARM-DEPENDENT DECONTAMINATION COST	0.9447	1.13E+07	3.74E+06	3.38E+07	4.87E+07	7.18E+07	7.69E+07	1.14E+08	1.19E-04	119
POP.-DEPENDENT INTERDICTION COST	0.8789	5.89E+08	5.61E+07	1.31E+09	2.80E+09	1.01E+10	1.08E+10	1.64E+10	7.86E-05	29
FARM-DEPENDENT INTERDICTION COST	0.9999	2.79E+07	2.45E+07	5.23E+07	6.02E+07	7.33E+07	7.60E+07	9.26E+07	1.19E-04	2
POP.-DEPENDENT CONDEMNATION COST	0.0744	5.43E+05	0.00E+00	0.00E+00	4.04E+06	1.19E+07	1.70E+07	5.02E+07	9.49E-04	25
FARM-DEPENDENT CONDEMNATION COST	0.9505	2.50E+07	4.94E+06	6.61E+07	1.25E+08	2.27E+08	2.52E+08	4.01E+08	2.34E-05	19
EMERGENCY PHASE COST	0.8026	1.32E+06	1.82E+05	2.58E+06	3.73E+06	3.13E+07	3.33E+07	4.68E+07	1.19E-04	77
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	1.0000	1.20E+06	1.05E+06	2.33E+06	2.83E+06	3.10E+06	NOT-FOUND	3.13E+06	5.73E-03	9
CROP DISPOSAL COST	1.0000	7.64E+07	6.90E+07	1.14E+08	1.23E+08	1.46E+08	NOT-FOUND	1.54E+08	6.04E-03	9

AFFECTED AREA/POPULATION 0-80.5 km
FARM DECONTAMINATION (HECTARES) 0.9447 1.00E+04 3.34E+03 2.92E+04 4.35E+04 6.72E+04 7.52E+04 9.37E+04 1.08E-03 44
POP. DECONTAMINATION (INDIVIDUALS) 0.8789 3.55E+04 3.09E+03 8.59E+04 1.79E+05 6.21E+05 7.35E+05 9.03E+05 1.64E-03 19
FARM INTERDICTION (HECTARES) 0.9999 5.77E+04 5.22E+04 1.02E+05 1.10E+05 1.30E+05 1.40E+05 1.45E+05 3.68E-03 4
POP. INTERDICTION (INDIVIDUALS) 0.8789 3.55E+04 3.09E+03 8.59E+04 1.79E+05 6.21E+05 7.35E+05 9.03E+05 1.64E-03 19
FARM CONDEMNATION (HECTARES) 0.9505 3.57E+03 7.11E+02 7.94E+03 2.25E+04 3.80E+04 4.46E+04 6.11E+04 2.11E-05 19
POP. CONDEMNATION (INDIVIDUALS) 0.0744 4.11E+00 0.00E+00 0.00E+00 2.53E+01 8.37E+01 1.27E+02 3.28E+02 9.49E-04 25
MILK DISPOSAL AREA (HECTARES) 1.0000 6.50E+04 6.31E+04 1.13E+05 1.32E+05 NOT-FOUND NOT-FOUND 1.45E+05 3.25E-02 1
CROP DISPOSAL AREA (HECTARES) 1.0000 6.12E+04 5.50E+04 1.08E+05 1.26E+05 NOT-FOUND NOT-FOUND 1.45E+05 2.67E-02 1

SOURCE TERM 5 OF 6:
CI

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km

PEOPLE FRACTION = 0.9500 0.0500

OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC RESULTS	
X	PROB>=X	X	PROB>=X	X	PROB>=X	X	PROB>=X
1.00E-06	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-07	9.30E-01
2.00E-06	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-07	9.30E-01
3.00E-06	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-07	9.30E-01
5.00E-06	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-07	9.30E-01
7.00E-06	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-07	9.29E-01
1.00E-05	1.00E+00	1.00E-05	1.00E+00	1.00E-04	1.00E+00	1.00E-06	9.29E-01
2.00E-05	1.00E+00	2.00E-05	1.00E+00	2.00E-04	1.00E+00	2.00E-06	9.28E-01
3.00E-05	1.00E+00	3.00E-05	1.00E+00	3.00E-04	1.00E+00	3.00E-06	9.28E-01
5.00E-05	1.00E+00	5.00E-05	1.00E+00	5.00E-04	1.00E+00	5.00E-06	9.28E-01
7.00E-05	1.00E+00	7.00E-05	1.00E+00	7.00E-04	1.00E+00	7.00E-06	9.28E-01
1.00E-04	1.00E+00	1.00E-04	1.00E+00	1.00E-03	1.00E+00	1.00E-05	9.28E-01
2.00E-04	1.00E+00	2.00E-04	1.00E+00	2.00E-03	1.00E+00	2.00E-05	9.16E-01
3.00E-04	1.00E+00	3.00E-04	1.00E+00	3.00E-03	1.00E+00	3.00E-05	9.16E-01
5.00E-04	1.00E+00	5.00E-04	1.00E+00	5.00E-03	1.00E+00	5.00E-05	9.13E-01
7.00E-04	1.00E+00	7.00E-04	1.00E+00	7.00E-03	1.00E+00	7.00E-05	9.13E-01
1.00E-03	1.00E+00	1.00E-03	1.00E+00	1.00E-02	1.00E+00	1.00E-04	9.13E-01
2.00E-03	1.00E+00	2.00E-03	1.00E+00	2.00E-02	1.00E+00	2.00E-04	9.13E-01
3.00E-03	1.00E+00	3.00E-03	1.00E+00	3.00E-02	1.00E+00	3.00E-04	9.13E-01
5.00E-03	1.00E+00	5.00E-03	1.00E+00	5.00E-02	1.00E+00	5.00E-04	9.13E-01
7.00E-03	1.00E+00	7.00E-03	1.00E+00	7.00E-02	1.00E+00	7.00E-04	9.13E-01
1.00E-02	1.00E+00	1.00E-02	1.00E+00	1.00E-01	1.00E+00	1.00E-03	9.13E-01
2.00E-02	1.00E+00	2.00E-02	9.98E-01	2.00E-01	1.00E+00	2.00E-03	9.13E-01
3.00E-02	9.99E-01	3.00E-02	9.73E-01	3.00E-01	9.89E-01	3.00E-03	9.13E-01
5.00E-02	9.98E-01	5.00E-02	9.62E-01	5.00E-01	9.62E-01	5.00E-03	9.13E-01
7.00E-02	9.98E-01	7.00E-02	9.62E-01	7.00E-01	9.62E-01	7.00E-03	9.13E-01
1.00E-01	9.96E-01	1.00E-01	9.62E-01	1.00E+00	9.62E-01	1.00E-02	9.13E-01
2.00E-01	9.62E-01	2.00E-01	9.21E-01	2.00E+00	9.24E-01	2.00E-02	9.13E-01
3.00E-01	9.24E-01	3.00E-01	8.59E-01	3.00E+00	9.07E-01	3.00E-02	9.12E-01
5.00E-01	8.88E-01	5.00E-01	8.25E-01	5.00E+00	8.45E-01	5.00E-02	9.12E-01
7.00E-01	8.45E-01	7.00E-01	8.06E-01	7.00E+00	8.25E-01	7.00E-02	8.78E-01
1.00E+00	8.25E-01	1.00E+00	7.26E-01	1.00E+01	7.49E-01	1.00E-01	7.16E-01
2.00E+00	7.25E-01	2.00E+00	5.26E-01	2.00E+01	6.01E-01	1.88E-01	2.17E-03
3.00E+00	5.51E-01	3.00E+00	4.61E-01	3.00E+01	4.93E-01	N.D.	N.D.
5.00E+00	4.53E-01	5.00E+00	3.11E-01	5.00E+01	3.31E-01	N.D.	N.D.
7.00E+00	3.29E-01	7.00E+00	1.23E-01	7.00E+01	2.53E-01	N.D.	N.D.
1.00E+01	1.90E-01	1.00E+01	6.37E-02	1.00E+02	6.69E-02	N.D.	N.D.
2.00E+01	2.10E-02	1.98E+01	1.95E-02	2.00E+02	2.10E-02	N.D.	N.D.
3.00E+01	1.95E-02	N.D.	N.D.	2.40E+02	1.95E-02	N.D.	N.D.
3.08E+01	1.95E-02	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 6 OF 6:
CFL

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY" WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION 0.950

COHORT 2 = NO EVACUATION 0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM "CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

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

14-JUL-07 09:28:11 PAGE 31 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 1.05E+03 4.20E+02 2.68E+03 4.23E+03 7.72E+03 9.32E+03 1.53E+04 2.28E-04 137
CAN FAT/TOTAL 0-16.1 km 1.0000 8.45E+00 4.81E+00 1.99E+01 2.81E+01 4.98E+01 5.89E+01 1.09E+02 1.08E-05 97
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
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
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 1.41E+02 8.02E+01 3.26E+02 4.67E+02 8.52E+02 1.00E+03 1.82E+03 1.08E-05 97
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 1.59E+04 6.63E+03 4.13E+04 6.93E+04 1.05E+05 1.13E+05 1.57E+05 2.28E-04 137

POPULATION WEIGHTED RISK
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
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
ERL FAT/TOTAL 0-1.6 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

ERL FAT/TOTAL 3.2-4.8 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 7.44E-04 3.10E-04 1.83E-03 3.05E-03 6.18E-03 7.31E-03 1.20E-02 2.28E-04 137
CAN FAT/TOTAL 0-16.1 km 0.9681 3.18E-04 2.83E-04 7.00E-04 7.75E-04 9.82E-04 1.05E-03 1.36E-03 2.28E-04 137

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 5.42E-02 5.16E-02 5.97E-02 6.36E-02 NOT-FOUND NOT-FOUND 7.23E-02 1.73E-02 69

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 6 OF 6:
CFL

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

COHORT 1 = 95% EVACUATION WITHIN 10 MILES– 24-HOUR RELOCATION

14-JUL-07 09:28:11 PAGE 32 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 6.79E+02 2.54E+02 1.62E+03 3.01E+03 7.08E+03 7.86E+03 1.42E+04 2.28E-04 137
CAN FAT/TOTAL 0-16.1 km 0.7982 9.91E-04 1.55E-04 2.99E-03 5.35E-03 9.68E-03 1.10E-02 1.95E-02 1.27E-04 2
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
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
ERL FAT/TOTAL 0-1.6 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

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 0.7982 1.65E-02 2.57E-03 4.98E-02 8.89E-02 1.36E-01 1.57E-01 3.24E-01 1.27E-04 2
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 9.81E+03 3.68E+03 2.38E+04 4.68E+04 8.35E+04 9.48E+04 1.39E+05 2.28E-04 137

POPULATION WEIGHTED RISK
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
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
ERL FAT/TOTAL 0-1.6 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
ERL FAT/TOTAL 3.2-4.8 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 5.34E-04 2.02E-04 1.28E-03 2.38E-03 5.16E-03 6.16E-03 1.12E-02 2.28E-04 137
CAN FAT/TOTAL 0-16.1 km 0.7982 2.09E-07 3.25E-08 6.53E-07 1.13E-06 2.12E-06 2.42E-06 4.11E-06 1.27E-04 2

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 1.0000 3.88E-03 2.29E-03 9.00E-03 1.11E-02 NOT-FOUND NOT-FOUND 1.48E-02 1.73E-02 69

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation

SOURCE TERM 6 OF 6:
CFL

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

COHORT 2 = NO EVACUATION

14-JUL-07 09:28:11 PAGE 33 PROB QUANTILES PEAK PEAK PEAK

		NON-ZERO	MEAN	50TH	90TH	95TH	99TH	99.5TH	CONS PROB	TRIAL
HEALTH EFFECTS CASES										
CAN FAT/TOTAL	0-80.5 km	1.0000	6.79E+02	2.54E+02	1.62E+03	3.01E+03	7.08E+03	7.86E+03	1.43E+04	2.28E-04	137
CAN FAT/TOTAL	0-16.1 km	0.9669	6.04E-01	3.07E-02	1.62E+00	3.25E+00	9.26E+00	1.32E+01	2.32E+01	1.94E-03	42
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
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
ERL FAT/TOTAL	0-1.6 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
POPULATION DOSE (Sv)											
L-EDEWBODY TOT LIF	0-16.1 km	0.9669	9.10E+00	5.10E-01	2.65E+01	5.20E+01	1.29E+02	1.72E+02	2.79E+02	1.94E-03	42
L-EDEWBODY TOT LIF	0-80.5 km	1.0000	9.82E+03	3.69E+03	2.38E+04	4.68E+04	8.35E+04	9.48E+04	1.39E+05	2.28E-04	137
POPULATION WEIGHTED RISK											
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
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
ERL FAT/TOTAL	0-1.6 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
ERL FAT/TOTAL	3.2-4.8 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	5.34E-04	2.02E-04	1.28E-03	2.38E-03	5.16E-03	6.16E-03	1.12E-02	2.28E-04	137
CAN FAT/TOTAL	0-16.1 km	0.9669	1.27E-04	6.36E-06	3.59E-04	7.03E-04	1.96E-03	2.57E-03	4.91E-03	1.94E-03	42
PEAK DOSE FOUND ON SPATIAL GRID (Sv)											
L-EDEWBODY	0-1.6 km	1.0000	5.86E-02	4.74E-02	1.03E-01	1.36E-01	NOT-FOUND	NOT-FOUND	2.27E-01	1.86E-02	107

DATE AND TIME OF RUN = MACCS2 14-JUL-07 09:28:11 VERSION 1.13.1: last revised 1/8/04, K. McFadden
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS – AP1000
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE – 95% Evacuation
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 6 OF 6:
CFL

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

14-JUL-07 09:28:11 PAGE 34 PROB QUANTILES PEAK PEAK PEAK
NON-ZERO MEAN 50TH 90TH 95TH 99TH 99.5TH CONS PROB TRIAL
HEALTH EFFECTS CASES
CAN FAT/TOTAL 0-80.5 km 1.0000 3.67E+02 1.43E+02 1.01E+03 1.35E+03 2.96E+03 3.32E+03 7.06E+03 8.42E-05 29
CAN FAT/TOTAL 0-16.1 km 1.0000 8.42E+00 4.75E+00 1.99E+01 2.81E+01 4.98E+01 5.89E+01 1.09E+02 1.08E-05 97

POPULATION DOSE (Sv)
L-EDEWBODY TOT LIF 0-16.1 km 1.0000 1.40E+02 7.94E+01 3.26E+02 4.67E+02 8.52E+02 1.00E+03 1.82E+03 1.08E-05 97
L-EDEWBODY TOT LIF 0-80.5 km 1.0000 6.11E+03 2.32E+03 1.49E+04 2.22E+04 4.94E+04 6.78E+04 1.18E+05 8.42E-05 29

POPULATION WEIGHTED RISK
CAN FAT/TOTAL 0-80.5 km 1.0000 2.11E-04 8.18E-05 6.20E-04 8.05E-04 1.12E-03 1.22E-03 1.65E-03 4.85E-04 51
CAN FAT/TOTAL 0-16.1 km 0.9324 3.11E-04 2.78E-04 6.70E-04 7.63E-04 9.78E-04 1.05E-03 1.20E-03 1.28E-03 47

PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km 0.9977 4.75E-02 4.20E-02 5.13E-02 5.21E-02 5.39E-02 5.47E-02 5.61E-02 1.46E-03 60

L-EDEWBODY POP. DOSE (Sv) 0-16.1 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 1.40E+02 7.94E+01 3.26E+02 4.67E+02 8.52E+02 1.00E+03 1.82E+03 1.08E-05 97
LONG-TERM DIRECT EXPOSURE PATHWAYS 0.9324 2.46E+01 2.15E+01 5.25E+01 6.01E+01 7.65E+01 8.23E+01 9.51E+01 1.28E-03 47
TOTAL INGESTION PATHWAYS DOSE 1.0000 1.57E+01 1.16E+01 2.93E+01 4.02E+01 8.03E+01 9.78E+01 1.92E+02 2.34E-05 31
LONG-TERM GROUNDSHINE DOSE 0.9324 3.72E+00 2.80E+00 8.31E+00 1.07E+01 1.54E+01 1.80E+01 3.07E+01 2.28E-04 137
LONG-TERM RESUSPENSION DOSE 0.9324 2.08E+01 1.75E+01 4.39E+01 5.26E+01 6.75E+01 7.17E+01 8.92E+01 8.34E-05 45
WATER INGESTION DOSE 1.0000 1.24E+01 7.97E+00 2.72E+01 3.79E+01 7.73E+01 9.23E+01 1.92E+02 2.34E-05 31
POP.-DEPENDENT DECONTAMINATION DOSE 0.9322 9.68E+01 3.50E+01 2.59E+02 3.97E+02 7.55E+02 9.03E+02 1.69E+03 1.08E-05 97
FARM-DEPENDENT DECONTAMINATION DOSE 0.8947 3.13E+00 2.15E+00 7.45E+00 1.00E+01 1.45E+01 1.70E+01 2.57E+01 1.79E-04 85

INGESTION OF GRAINS 0.8968 1.43E-01 6.01E-02 3.57E-01 4.30E-01 5.42E-01 5.73E-01 1.11E+00 1.08E-05 17
INGESTION OF LEAF VEG 0.8968 1.16E+00 6.22E-01 3.04E+00 3.45E+00 4.63E+00 5.13E+00 8.68E+00 1.08E-05 17
INGESTION OF ROOT CROPS 0.8968 3.13E-01 2.49E-01 6.99E-01 7.86E-01 1.02E+00 1.08E+00 1.88E+00 1.08E-05 17
INGESTION OF FRUITS 0.8968 2.86E-01 1.25E-01 7.57E-01 8.74E-01 1.10E+00 1.18E+00 2.18E+00 1.08E-05 17
INGESTION OF LEGUMES 0.8968 4.19E-01 3.31E-01 8.56E-01 1.05E+00 1.96E+00 2.09E+00 2.80E+00 6.06E-05 122
INGESTION OF BEEF 0.8968 1.44E-01 6.27E-02 3.66E-01 4.63E-01 7.35E-01 9.22E-01 1.39E+00 6.06E-05 122
INGESTION OF MILK 0.8968 7.88E-01 4.68E-01 2.02E+00 2.34E+00 3.11E+00 3.30E+00 3.98E+00 5.71E-04 9
INGESTION OF POULTRY 0.8968 1.69E-02 1.11E-02 3.61E-02 4.97E-02 1.01E-01 1.08E-01 1.35E-01 5.71E-04 9
INGESTION OF OTHER MEAT CROPS 0.8968 3.80E-02 2.69E-02 8.72E-02 1.18E-01 2.05E-01 2.30E-01 3.07E-01 1.79E-04 85

L-EDEWBODY POP. DOSE (Sv) 0-80.5 km
TOTAL LONG-TERM PATHWAYS DOSE 1.0000 6.11E+03 2.32E+03 1.49E+04 2.22E+04 4.94E+04 6.78E+04 1.18E+05 8.42E-05 29
LONG-TERM DIRECT EXPOSURE PATHWAYS 1.0000 4.47E+03 1.72E+03 1.18E+04 1.56E+04 2.43E+04 2.79E+04 3.50E+04 4.85E-04 51
TOTAL INGESTION PATHWAYS DOSE 1.0000 8.43E+01 5.42E+01 1.84E+02 2.37E+02 3.56E+02 4.07E+02 6.36E+02 8.06E-05 33
LONG-TERM GROUNDSHINE DOSE 1.0000 1.34E+03 5.46E+02 3.71E+03 5.09E+03 7.03E+03 7.84E+03 9.95E+03 1.08E-03 69
LONG-TERM RESUSPENSION DOSE 1.0000 3.13E+03 1.24E+03 9.09E+03 1.19E+04 1.97E+04 2.16E+04 2.87E+04 4.85E-04 51
WATER INGESTION DOSE 1.0000 1.70E+01 1.13E+01 3.68E+01 4.89E+01 9.91E+01 1.10E+02 2.02E+02 6.93E-05 30

	PROB NON-ZERO	MEAN	QUANTILES 50TH	90TH	95TH	99TH	99.5TH	PEAK CONS	PEAK PROB	PEAK TRIAL
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km										
POP.-DEPENDENT DECONTAMINATION DOSE	1.0000	1.53E+03	2.85E+02	2.94E+03	5.84E+03	2.61E+04	3.40E+04	8.74E+04	8.42E-05	29
FARM-DEPENDENT DECONTAMINATION DOSE	1.0000	2.98E+01	1.49E+01	7.12E+01	1.04E+02	1.90E+02	2.26E+02	6.12E+02	1.03E-04	119
INGESTION OF GRAINS	1.0000	3.43E+00	1.58E+00	9.00E+00	1.10E+01	1.60E+01	1.88E+01	2.82E+01	2.40E-04	15
INGESTION OF LEAF VEG	1.0000	2.98E+01	1.14E+01	8.12E+01	1.02E+02	1.35E+02	1.52E+02	2.48E+02	8.63E-05	33
INGESTION OF ROOT CROPS	1.0000	6.02E+00	3.71E+00	1.30E+01	1.67E+01	2.96E+01	3.28E+01	4.92E+01	2.40E-04	15
INGESTION OF FRUITS	1.0000	6.75E+00	3.35E+00	1.69E+01	2.21E+01	3.32E+01	3.74E+01	5.57E+01	2.40E-04	15
INGESTION OF LEGUMES	1.0000	6.90E+00	5.13E+00	1.39E+01	1.92E+01	3.25E+01	3.80E+01	6.38E+01	1.03E-04	119
INGESTION OF BEEF	1.0000	2.20E+00	1.34E+00	4.93E+00	6.89E+00	1.17E+01	1.40E+01	3.15E+01	1.03E-04	119
INGESTION OF MILK	1.0000	1.15E+01	6.67E+00	2.60E+01	3.80E+01	7.83E+01	9.25E+01	1.54E+02	1.81E-05	19
INGESTION OF POULTRY	1.0000	2.37E-01	1.67E-01	4.27E-01	6.31E-01	1.26E+00	1.66E+00	2.47E+00	1.03E-04	119
INGESTION OF OTHER MEAT CROPS	1.0000	4.93E-01	3.65E-01	9.05E-01	1.21E+00	2.20E+00	2.59E+00	6.89E+00	1.03E-04	119
ECONOMIC COST MEASURES ($) 0-80.5 km										
TOTAL ECONOMIC COSTS	1.0000	3.09E+09	1.00E+09	8.48E+09	1.46E+10	2.96E+10	3.11E+10	3.91E+10	8.42E-05	29
POP.-DEPENDENT COSTS	1.0000	2.97E+09	9.30E+08	8.34E+09	1.46E+10	2.96E+10	3.11E+10	3.87E+10	8.42E-05	29
FARM-DEPENDENT COSTS	1.0000	1.23E+08	7.53E+07	2.89E+08	4.08E+08	7.07E+08	7.59E+08	8.87E+08	1.06E-03	44
POP.-DEPENDENT DECONTAMINATION COST	1.0000	1.02E+09	3.08E+08	2.70E+09	4.97E+09	1.03E+10	1.09E+10	1.35E+10	4.85E-04	51
FARM-DEPENDENT DECONTAMINATION COST	1.0000	5.75E+07	4.92E+07	1.09E+08	1.35E+08	2.11E+08	2.37E+08	3.30E+08	1.03E-04	119
POP.-DEPENDENT INTERDICTION COST	1.0000	1.92E+09	6.11E+08	4.90E+09	9.45E+09	1.68E+10	2.03E+10	2.70E+10	8.42E-05	29
FARM-DEPENDENT INTERDICTION COST	1.0000	8.13E+06	4.76E+06	2.06E+07	2.66E+07	3.93E+07	4.54E+07	6.11E+07	5.71E-05	57
POP.-DEPENDENT CONDEMNATION COST	0.0009	4.45E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E+06	2.89E-04	27
FARM-DEPENDENT CONDEMNATION COST	0.9672	3.36E+07	5.80E+06	8.40E+07	1.56E+08	4.04E+08	5.04E+08	6.21E+08	1.06E-03	44
EMERGENCY PHASE COST	0.9990	2.90E+07	8.75E+06	7.97E+07	1.55E+08	2.11E+08	2.17E+08	2.81E+08	8.06E-06	79
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	0.9889	8.43E+04	1.59E+03	1.66E+05	5.33E+05	1.52E+06	2.04E+06	3.12E+06	2.85E-04	51
CROP DISPOSAL COST	0.9887	2.39E+07	5.49E+06	8.15E+07	1.04E+08	1.23E+08	1.32E+08	2.11E+08	8.18E-05	45

AFFECTED AREA/POPULATION 0-80.5 km

FARM DECONTAMINATION (HECTARES)	1.0000	3.82E+04	3.33E+04	6.59E+04	8.09E+04	1.10E+05	1.19E+05	1.77E+05	1.19E-04	2
POP. DECONTAMINATION (INDIVIDUALS)	1.0000	1.05E+05	3.44E+04	2.89E+05	5.58E+05	7.53E+05	7.94E+05	9.48E+05	4.85E-04	51
FARM INTERDICTION (HECTARES)	1.0000	4.00E+04	3.47E+04	7.05E+04	8.56E+04	1.12E+05	1.20E+05	1.77E+05	1.19E-04	2
POP. INTERDICTION (INDIVIDUALS)	1.0000	1.05E+05	3.44E+04	2.89E+05	5.58E+05	7.53E+05	7.94E+05	9.48E+05	4.85E-04	51
FARM CONDEMNATION (HECTARES)	0.9672	4.96E+03	7.99E+02	1.28E+04	2.41E+04	7.49E+04	8.88E+04	1.32E+05	4.85E-04	51
POP. CONDEMNATION (INDIVIDUALS)	0.0009	3.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E+01	3.14E-04	27
MILK DISPOSAL AREA (HECTARES)	0.9889	5.12E+03	9.03E+02	1.32E+04	2.48E+04	7.49E+04	8.88E+04	1.32E+05	4.85E-04	51
CROP DISPOSAL AREA (HECTARES)	0.9887	1.67E+04	1.56E+03	6.53E+04	8.87E+04	1.19E+05	1.30E+05	1.77E+05	4.85E-04	51

SOURCE TERM 6 OF 6:
CFL

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)
L-EDEWBODY 0-1.6 km

PEOPLE FRACTION = 0.9500 0.0500

OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC RESULTS	
X	PROB>=X	X	PROB>=X	X	PROB>=X	X	PROB>=X
1.00E-08	1.00E+00	1.00E-10	1.00E+00	1.00E-08	1.00E+00	1.00E-08	9.98E-01
2.00E-08	1.00E+00	2.00E-10	1.00E+00	2.00E-08	1.00E+00	2.00E-08	9.98E-01
3.00E-08	1.00E+00	3.00E-10	1.00E+00	3.00E-08	1.00E+00	3.00E-08	9.98E-01
5.00E-08	1.00E+00	5.00E-10	1.00E+00	5.00E-08	1.00E+00	5.00E-08	9.98E-01
7.00E-08	1.00E+00	7.00E-10	1.00E+00	7.00E-08	1.00E+00	7.00E-08	9.98E-01
1.00E-07	1.00E+00	1.00E-09	1.00E+00	1.00E-07	1.00E+00	1.00E-07	9.98E-01
2.00E-07	1.00E+00	2.00E-09	1.00E+00	2.00E-07	1.00E+00	2.00E-07	9.98E-01
3.00E-07	1.00E+00	3.00E-09	1.00E+00	3.00E-07	1.00E+00	3.00E-07	9.98E-01
5.00E-07	1.00E+00	5.00E-09	1.00E+00	5.00E-07	1.00E+00	5.00E-07	9.98E-01
7.00E-07	1.00E+00	7.00E-09	1.00E+00	7.00E-07	1.00E+00	7.00E-07	9.98E-01
1.00E-06	1.00E+00	1.00E-08	1.00E+00	1.00E-06	1.00E+00	1.00E-06	9.98E-01
2.00E-06	1.00E+00	2.00E-08	1.00E+00	2.00E-06	1.00E+00	2.00E-06	9.98E-01
3.00E-06	1.00E+00	3.00E-08	1.00E+00	3.00E-06	1.00E+00	3.00E-06	9.98E-01
5.00E-06	1.00E+00	5.00E-08	1.00E+00	5.00E-06	1.00E+00	5.00E-06	9.98E-01
7.00E-06	1.00E+00	7.00E-08	1.00E+00	7.00E-06	1.00E+00	7.00E-06	9.98E-01
1.00E-05	1.00E+00	1.00E-07	1.00E+00	1.00E-05	1.00E+00	1.00E-05	9.98E-01
2.00E-05	1.00E+00	2.00E-07	1.00E+00	2.00E-05	1.00E+00	2.00E-05	9.98E-01
3.00E-05	1.00E+00	3.00E-07	1.00E+00	3.00E-05	1.00E+00	3.00E-05	9.98E-01
5.00E-05	1.00E+00	5.00E-07	1.00E+00	5.00E-05	1.00E+00	5.00E-05	9.98E-01
7.00E-05	1.00E+00	7.00E-07	1.00E+00	7.00E-05	1.00E+00	7.00E-05	9.98E-01
1.00E-04	1.00E+00	1.00E-06	1.00E+00	1.00E-04	1.00E+00	1.00E-04	9.98E-01
2.00E-04	1.00E+00	2.00E-06	1.00E+00	2.00E-04	1.00E+00	2.00E-04	9.98E-01
3.00E-04	1.00E+00	3.00E-06	1.00E+00	3.00E-04	1.00E+00	3.00E-04	9.98E-01
5.00E-04	1.00E+00	5.00E-06	1.00E+00	5.00E-04	1.00E+00	5.00E-04	9.98E-01
7.00E-04	1.00E+00	7.00E-06	1.00E+00	7.00E-04	1.00E+00	7.00E-04	9.98E-01
1.00E-03	1.00E+00	1.00E-05	1.00E+00	1.00E-03	1.00E+00	1.00E-03	9.98E-01
2.00E-03	1.00E+00	2.00E-05	9.86E-01	2.00E-03	1.00E+00	2.00E-03	9.98E-01
3.00E-03	9.98E-01	3.00E-05	9.31E-01	3.00E-03	1.00E+00	3.00E-03	9.98E-01
5.00E-03	9.98E-01	5.00E-05	9.29E-01	5.00E-03	9.86E-01	5.00E-03	9.98E-01
7.00E-03	9.98E-01	7.00E-05	9.29E-01	7.00E-03	9.86E-01	7.00E-03	9.98E-01
1.00E-02	9.98E-01	1.00E-04	9.29E-01	1.00E-02	9.48E-01	1.00E-02	9.98E-01
2.00E-02	9.98E-01	2.00E-04	8.54E-01	2.00E-02	8.12E-01	2.00E-02	9.98E-01
3.00E-02	9.98E-01	3.00E-04	8.13E-01	3.00E-02	7.22E-01	3.00E-02	9.98E-01
5.00E-02	7.04E-01	5.00E-04	7.98E-01	5.00E-02	4.79E-01	5.00E-02	3.51E-01
7.00E-02	1.76E-02	7.00E-04	7.56E-01	7.00E-02	3.37E-01	5.61E-02	1.46E-03
7.23E-02	1.73E-02	1.00E-03	7.49E-01	1.00E-01	1.09E-01	N.D.	N.D.
N.D.	N.D.	2.00E-03	5.40E-01	2.00E-01	1.86E-02	N.D.	N.D.
N.D.	N.D.	3.00E-03	4.29E-01	2.27E-01	1.86E-02	N.D.	N.D.
N.D.	N.D.	5.00E-03	3.88E-01	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	7.00E-03	2.05E-01	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	1.00E-02	7.42E-02	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	1.48E-02	1.73E-02	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Successful completion of MACCS2 was achieved!
This job required a total of 37.750 CPU seconds

Input processing required 0.109 CPU seconds
Simulation required 36.930 CPU seconds
Output processing required 0.711 CPU seconds

```
DAY HR DR SPS RN (Julian Date, Hour, Direction, Speed, Stability, Precipitation)
BLANK LINE
  1  1  6 147  0
  1  2  5 137  0
  1  3  3 177  0
  1  4  4 157  0
  1  5  3 167  0
  1  6  6 177  0
  1  7  6 127  0
  1  8  8  87  0
  1  9  8 205  0
  1 10  9 234  0
  1 11 12 173  0
  1 12 14 174  0
  1 13 11 132  0
  1 14 13 251  0
  1 15 13 213  0
  1 16 14 214  0
  1 17 12 185  0
  1 18 12 216  0
  1 19 12 256  0
  1 20 12 276  0
  1 21 12 285  0
  1 22 12 315  0
  1 23 13 385  0
  1 24 13 335  0
  2  1 12 385  0
  2  2 12 355  0
  2  3 12 464  0
  2  4 12 494  0
  2  5 12 494  0
  2  6 12 524  0
  2  7 12 494  0
  2  8 12 474  0
  2  9 12 454  0
  2 10 12 464  0
  2 11 12 454  0
  2 12 12 424  2
  2 13 12 534  0
  2 14 12 424  1
  2 15 13 304  1
  2 16 12 374  1
  2 17 12 344  1
  2 18 13 335  0
  2 19 13 325  0
  2 20 13 265 17
  2 21 14 265  0
  2 22 15 246  3
  2 23  3 326 55
  2 24  8  94 13
  3  1  7 295  4
  3  2  7 285  0
  3  3  7 254  0
  3  4  6 214  0
  3  5  6 294  0
  3  6  5 214  0
  3  7  5 304  0
  3  8  4 284  0
  3  9  4 384  0
  3 10  5 424  0
```

```
3 11  5 513  0
3 12  5 423  0
3 13  4 481  0
3 14  4 471  0
3 15  4 442  0
3 16  5 384  0
3 17  4 304  0
3 18  5 175  0
3 19  5 255  0
3 20  5 255  0
3 21  5 265  0
3 22  5 285  0
3 23  6 275  0
3 24  5 345  0
4  1  6 325  0
4  2  5 255  0
4  3  5 265  0
4  4  5 325  0
4  5  5 215  0
4  6  5 225  0
4  7  6 315  0
4  8  6 314  0
4  9  7 494  0
4 10  7 413  0
4 11  7 361  0
4 12  6 401  0
4 13  5 401  0
4 14  5 371  0
4 15  6 342  0
4 16  7 344  0
4 17  6 284  0
4 18  6 205  0
4 19  6 225  0
4 20  5 155  0
4 21  4 165  0
4 22  5 205  0
4 23  5 155  0
4 24  5 175  0
5  1  5 155  0
5  2  5 155  0
5  3  6 265  0
5  4  5 225  0
5  5  5 175  0
5  6  5 215  0
5  7  6 195  0
5  8  6 204  0
5  9  6 254  0
5 10  8 294  0
5 11  8 174  0
5 12  8 173  0
5 13  4 211  0
5 14  6 282  0
5 15  6 223  0
5 16  7 234  0
5 17  6 174  0
5 18  4 145  0
5 19  4 126  0
5 20  3 137  0
5 21  4  57  0
5 22  4 117  0
```

```
5 23  3 107  0
5 24  3 107  0
6  1  4 147  0
6  2  1  87  0
6  3  3 137  0
6  4  7  57  0
6  5  4  77  0
6  6  5 147  0
6  7  3 107  0
6  8  2  87  0
6  9  3  77  0
6 10  5 155  0
6 11  2 174  0
6 12  2 231  0
6 13  2 293  0
6 14  2 342  0
6 15  1 322  0
6 16  1 213  0
6 17  1 154  0
6 18  2 116  0
6 19 13  76  0
6 20  1  87  0
6 21  1 137  0
6 22  1 217  0
6 23  1 217  0
6 24  1 146  0
7  1  1  86  0
7  2  5  56  0
7  3  1 176  0
7  4  6  56  0
7  5 16  76  0
7  6  2  86  0
7  7  1  86  0
7  8  2 186  0
7  9  5 174  0
7 10  3 264  0
7 11  3 313  0
7 12  3 274  0
7 13  4 244  0
7 14  3 244  0
7 15  3 214  0
7 16  2 254  0
7 17  4  84  0
7 18  2 196  0
7 19  2 126  0
7 20 16 197  0
7 21 16  97  0
7 22  1 187  0
7 23 16 317  0
7 24 16 176  0
8  1  1 215  0
8  2 15 147  0
8  3 14 227  0
8  4  1 146  0
8  5 13  97  0
8  6 16  87  0
8  7 10  97  0
8  8  9  67  0
8  9 11 116  0
8 10 16  54  0
```

```
  8 11 15  74  0
  8 12 15 153  0
  8 13 15 222  0
  8 14 16 294  0
  8 15 16 324  0
  8 16  1 374  0
  8 17  1 195  0
  8 18 16 166  0
  8 19 15 206  0
  8 20 16 146  0
  8 21 15 286  0
  8 22 16 176  0
  8 23 16 216  0
  8 24 16 176  0
  9  1  1 147  0
  9  2  1 227  0
  9  3 16 256  0
  9  4  1 176  0
  9  5  2 206  0
  9  6  2 266  0
  9  7  3 335  0
  9  8  2 305  0
  9  9  1 245  0
  9 10  3 224  1
  9 11  5 215  3
  9 12  5 245  1
  9 13  5 184  0
  9 14  1 255  2
  9 15  1 245  2
  9 16  3 214  0
  9 17  6 155  0
  9 18  4 245  0
  9 19  6 305  0
  9 20  6 355  0
  9 21  6 295  0
  9 22  6 344  0
  9 23  6 295  0
  9 24  6 225  0
 10  1  6 245  0
 10  2  7 305  0
 10  3  7 255  0
 10  4  8 375  0
 10  5  8 345  0
 10  6  9 345  0
 10  7  9 345  0
 10  8 10 254  0
 10  9 10 354  0
 10 10 10 503  0
 10 11 10 352  0
 10 12  9 282  0
 10 13  8 372  0
 10 14  8 342  0
 10 15  8 302  0
 10 16  8 224  0
 10 17  7 174  0
 10 18  6 115  0
 10 19  4 146  0
 10 20  3 126  0
 10 21  4 167  0
 10 22  3 177  0
```

```
10 23  3 186  0
10 24  3 187  0
11  1  3 146  0
11  2  4 136  0
11  3  4 156  0
11  4  4  86  0
11  5  5 116  0
11  6  5 176  0
11  7  5 116  0
11  8  5  95  0
11  9  6 214  0
11 10  6 214  0
11 11  7 184  0
11 12  7 213  0
11 13  6 252  0
11 14  5 273  0
11 15  4 253  0
11 16  3 224  0
11 17  3 174  0
11 18  2 176  0
11 19  1 176  0
11 20  1 217  0
11 21  1 167  0
11 22  1 137  0
11 23  3 147  0
11 24  3 137  0
12  1  4 167  0
12  2  2 177  0
12  3  3 177  0
12  4  4 167  0
12  5  3 167  0
12  6 16  77  0
12  7  2 227  0
12  8  2 207  0
12  9  3 206  0
12 10  3 204  0
12 11  4 293  0
12 12  4 353  0
12 13  4 351  0
12 14  3 383  0
12 15  3 383  0
12 16  2 344  0
12 17  2 225  0
12 18  1 166  0
12 19  1 167  0
12 20 16 157  0
12 21 15 137  0
12 22 16 226  0
12 23 15 156  0
12 24 15 176  0
13  1 16 147  0
13  2 12  77  0
13  3  9  76  0
13  4 11  37  0
13  5  6  47  0
13  6 15 117  0
13  7 12  87  0
13  8 15 177  0
13  9 16 137  0
13 10 16 204  0
```

```
13 11  1 313  0
13 12  1 383  0
13 13  2 473  0
13 14  3 453  0
13 15  2 422  0
13 16  1 374  0
13 17  1 235  0
13 18 16 156  0
13 19 16 156  0
13 20 16 176  0
13 21 16 196  0
13 22 16 186  0
13 23 16 206  0
13 24 16 176  0
14  1 16 106  0
14  2 16 216  0
14  3  2 176  0
14  4  1 166  0
14  5  2 136  0
14  6  4 155  0
14  7  2 135  0
14  8  1 105  0
14  9  7  85  0
14 10 15  64  0
14 11  4 134  0
14 12  4 263  0
14 13  1 224  0
14 14 16 224  0
14 15  1 234  0
14 16  1 234  0
14 17 16 165  0
14 18 16 215  0
14 19 16 155  0
14 20 15 285  0
14 21  2 305 28
14 22 16  45 15
14 23 16  95  3
14 24 16 175  1
15  1  1 185  0
15  2  3 165 13
15  3  4 275 36
15  4  3 195  2
15  5  4 205  0
15  6  6 305  0
15  7  5 175  0
15  8  6 165  0
15  9  7 314  0
15 10  7 394  0
15 11  8 412  0
15 12  8 412  0
15 13  8 361  0
15 14  8 412  0
15 15  8 314  0
15 16  8 174  0
15 17  8 265  0
15 18  9 145  0
15 19  4  87  0
15 20  5 147  0
15 21  5 207  0
15 22 14  87  0
```

```
15 23  2  87  0
15 24  2  47  0
16  1 11  47  0
16  2  3  77  0
16  3 16  47  0
16  4 12  87  0
16  5  7 107  0
16  6  8  67  0
16  7  4  47  0
16  8  5  57  0
16  9 16  47  0
16 10 15 274  0
16 11 15 334  0
16 12 15 334  0
16 13  1 252  0
16 14  2 202  0
16 15  1 204  0
16 16  1 234  0
16 17  1 154  0
16 18  1 176  0
16 19  1  87  0
16 20  6  37  0
16 21 14 147  0
16 22 15 167  0
16 23 16 117  0
16 24 11  47  0
17  1 13 147  0
17  2 11  87  0
17  3  9 177  0
17  4  6 107  0
17  5 13 157  0
17  6  5  57  0
17  7 11 107  0
17  8 13  87  0
17  9 14 147  0
17 10 12 185  0
17 11 13 224  0
17 12 13 235  0
17 13 14 265  0
17 14 14 281  0
17 15 15 494  0
17 16 15 146  1
17 17 15 325  1
17 18 15 305  0
17 19 15 295  0
17 20 15 295  2
17 21 16 205  0
17 22 16 255  0
17 23  1 185  0
17 24  1 195  0
18  1  1 315  1
18  2  2 305  0
18  3  3 345  0
18  4  2 395  0
18  5  2 315  0
18  6  2 305  0
18  7  1 275 51
18  8  1 175 24
18  9  3 175  5
18 10  2 415  0
```

```
18 11  2 455  0
18 12  3 465  0
18 13  4 414  0
18 14  3 514  0
18 15  4 464  0
18 16  4 514  0
18 17  5 315  0
18 18  5 215  0
18 19  5 156  0
18 20  5 146  0
18 21  5 137  0
18 22  6 177  0
18 23  6 177  0
18 24  6 177  0
19  1  6 166  0
19  2  6 136  0
19  3  6 196  0
19  4  7 276  0
19  5  7 306  0
19  6  6 176  0
19  7  6 136  0
19  8  7 166  0
19  9  7 254  0
19 10  8 293  0
19 11  7 313  0
19 12  7 204  0
19 13  7 234  0
19 14 12 134  0
19 15 16 164  0
19 16  2 184  0
19 17  2 114  0
19 18  2 146  0
19 19  2 157  0
19 20  2 177  0
19 21  3 167  0
19 22  2 147  0
19 23  2 147  0
19 24 16 147  0
20  1  1 157  0
20  2  2 137  0
20  3  1  97  0
20  4 16 137  0
20  5  2  87  0
20  6 11  87  0
20  7  9  57  0
20  8 16  97  0
20  9 16 116  0
20 10  2 204  0
20 11  1 204  0
20 12  1 244  0
20 13  2 383  0
20 14  3 324  0
20 15  3 213  0
20 16  3 384  0
20 17  3 134  0
20 18  3 105  0
20 19  1  86  0
20 20 16 147  0
20 21 16 117  0
20 22  1 107  0
```

```
20 23  1 117  0
20 24  1 156  0
21  1 16 166  0
21  2  1 176  0
21  3  1 136  0
21  4  1 126  0
21  5  1 156  0
21  6  2 195  0
21  7  2 175  0
21  8  2 285  0
21  9  2 174  0
21 10  4 234  0
21 11  3 422  0
21 12  3 423  0
21 13  3 303  0
21 14  2 303  0
21 15  2 333  0
21 16  3 254  0
21 17  1 154  0
21 18 16 146  0
21 19 16 216  0
21 20 16 216  0
21 21 16 206  0
21 22 16 235  0
21 23 16 225  0
21 24 16 285  0
22  1 15 235  0
22  2 14 225  0
22  3 15 215  0
22  4 15 235  0
22  5 16 215  0
22  6 15 185  0
22  7 15 195  0
22  8 14 195  0
22  9 15 335  0
22 10 14 234  0
22 11 15 284  0
22 12 15 204  0
22 13 16 264  0
22 14 15 294  0
22 15 14 322  0
22 16 16 614  0
22 17 16 594  0
22 18 15 465  0
22 19 15 305  0
22 20 15 435  0
22 21 15 385  0
22 22 15 425  0
22 23 14 355  0
22 24 14 305  0
23  1 15 345  0
23  2 14 245  0
23  3 13 175  0
23  4 14 175  0
23  5 14 235  0
23  6 14 295  0
23  7 15 265  0
23  8 15 375  0
23  9 15 354  0
23 10 16 454  0
```

```
23 11 16 524  1
23 12 16 405  0
23 13  4 375 22
23 14  5 305 64
23 15  6  44  9
23 16  1 155 14
23 17 15 185  8
23 18 15 255  8
23 19 15 145  2
23 20 15 335  2
23 21 15 305  8
23 22 15 415  6
23 23 16 355  8
23 24 16 215  6
24  1 16 325 11
24  2 16 255  6
24  3 15 355 12
24  4 16 285  0
24  5  4 215  9
24  6  3 185  1
24  7  5 225  0
24  8  5 345  1
24  9  5 304  0
24 10  5 354  0
24 11  5 424  0
24 12  5 412  0
24 13  4 422  0
24 14  5 412  0
24 15  5 382  0
24 16  5 363  0
24 17  5 284  0
24 18  4 245  0
24 19  5 255  0
24 20  6 285  0
24 21  6 265  0
24 22  4 175  0
24 23  5 145  0
24 24  5 136  0
25  1  6 197  0
25  2  5 166  0
25  3  6 146  0
25  4  5 126  0
25  5  5 136  0
25  6  6 136  0
25  7  6 156  0
25  8  3  66  0
25  9  3 154  0
25 10  1 164  0
25 11  4 224  0
25 12  4 273  0
25 13  5 251  0
25 14  4 331  0
25 15  3 312  0
25 16  4 364  0
25 17  4 255  0
25 18  3 196  0
25 19  4 146  0
25 20  4 157  0
25 21  5 136  0
25 22  3 127  0
```

```
25 23  5 106  0
25 24  5 126  0
26  1  6 187  0
26  2  6 167  0
26  3 10 146  0
26  4 11 285  0
26  5 11 265  0
26  6 11 275  0
26  7 11 265  0
26  8 12 275  0
26  9 12 343  0
26 10 12 362  0
26 11 12 272  0
26 12 12 271  0
26 13 11 292  0
26 14 14 271  0
26 15 11 194  0
26 16 14 134  0
26 17 14 194  0
26 18 13 176  0
26 19 13 206  0
26 20 12 147  0
26 21 13 206  0
26 22 13 206  0
26 23 13 196  0
26 24 13 157  0
27  1 14 117  0
27  2 14 117  0
27  3 12 107  0
27  4  7  47  0
27  5  5  97  0
27  6  2 187  0
27  7 15  56  0
27  8 14  45  0
27  9  9 144  0
27 10 10 174  0
27 11  1 155  0
27 12  1 224  0
27 13  3 304  0
27 14  2 302  0
27 15  3 251  0
27 16  3 243  0
27 17  2 174  0
27 18 16 195  0
27 19  1 186  0
27 20  1 296  0
27 21  2 247  0
27 22  2 277  0
27 23  2 186  0
27 24  3 117  0
28  1  2 187  0
28  2  3 216  0
28  3  3 216  0
28  4  4 156  0
28  5  4 166  0
28  6  4  96  0
28  7  4 156  0
28  8  4 176  0
28  9  5 155  0
28 10  5 224  0
```

```
28 11  6 392  0
28 12  6 392  0
28 13  4 401  0
28 14  4 382  0
28 15  4 342  0
28 16  4 314  0
28 17  3 254  0
28 18  2 126  0
28 19  3 147  0
28 20  2 227  0
28 21  3 186  0
28 22  3 186  0
28 23  3 166  0
28 24  3 156  0
29  1  4 156  0
29  2  3 126  0
29  3  3 167  0
29  4  4 136  0
29  5  5  96  0
29  6  2 176  0
29  7 15  56  0
29  8  2 227  0
29  9  4 166  0
29 10  5 194  0
29 11  5 214  0
29 12  5 252  0
29 13  4 253  0
29 14  5 193  0
29 15  3 134  0
29 16 11 184  0
29 17 11 184  0
29 18 12  85  0
29 19 13 195  0
29 20 13 265  0
29 21 13 275  0
29 22 13 345  0
29 23 13 435  0
29 24 13 344  0
30  1 14 304  0
30  2 13 254  0
30  3 13 294  0
30  4 13 354  0
30  5 12 354  0
30  6 12 404  0
30  7 12 374  0
30  8 12 434  0
30  9 12 454  0
30 10 12 404  0
30 11 12 394  0
30 12 11 364  0
30 13 12 464  0
30 14 12 394  0
30 15 12 214  1
30 16 12 265  2
30 17 12 225  1
30 18 12 255  1
30 19 12 335  1
30 20 12 305  1
30 21 12 315  0
30 22 12 305  1
```

```
30 23 11 365  1
30 24 11 255  0
31  1 12 375  0
31  2 12 335  0
31  3 12 305  0
31  4 12 385  1
31  5 12 505  0
31  6 12 505  0
31  7 12 614  0
31  8 12 574  0
31  9 12 684  0
31 10 12 604  1
31 11 12 464  1
31 12 12 494  0
31 13 11 424  0
31 14 12 754  0
31 15 12 554  0
31 16 12 545  0
31 17 12 564  0
31 18 12 505  1
31 19 12 515  0
31 20 12 405  4
31 21 12 525  8
31 22 12 365  1
31 23 11 435  0
31 24 11 345  0
32  1 11 355 10
32  2 12 425  5
32  3 12 424  2
32  4 12 424  7
32  5 13 464  8
32  6 12 314  5
32  7 13 344  3
32  8 12 344  8
32  9 12 304  6
32 10 12 384  3
32 11 12 354 10
32 12 12 224 22
32 13  9 294 11
32 14 11 274  9
32 15 11 274  5
32 16 10 254  7
32 17  9 155  3
32 18  8 245  5
32 19  9 264  1
32 20  8 225  4
32 21  9 205  2
32 22  8 175  0
32 23  8 155  0
32 24  8 115  0
33  1  8 165  0
33  2  7 185  1
33  3  7 214  0
33  4  7 165  0
33  5  7 225  0
33  6  7 224  0
33  7  7 125  0
33  8  4 134  1
33  9  5 234  0
33 10  5 274  0
```

```
33 11  6 304  0
33 12  6 334  0
33 13  4 304  0
33 14  4 274  0
33 15  2 324  0
33 16  3 403  0
33 17  2 314  0
33 18  2 265  0
33 19  3 255  0
33 20  4 315  0
33 21  3 305  0
33 22  4 304  0
33 23  3 225  0
33 24  3 165  0
34  1  3 105  0
34  2  3 165  0
34  3  4 165  0
34  4  3 205  0
34  5  3 215  0
34  6  3 185  0
34  7  4 135  0
34  8  2 124  0
34  9 16 154  0
34 10 16 215  0
34 11 15  74  0
34 12 13 164  0
34 13  1 263  0
34 14 16 272  0
34 15  1 322  0
34 16  1 293  0
34 17  2 204  0
34 18 16 135  0
34 19 16 156  0
34 20  1 146  0
34 21  1 136  0
34 22  1 176  0
34 23  1 216  0
34 24  1 237  0
35  1 15  96  0
35  2 16 145  0
35  3  1 175  0
35  4  2 335  0
35  5  2 415  1
35  6  2 365  1
35  7  3 385  0
35  8  2 375  1
35  9  4 405  4
35 10  5 235  0
35 11  6 514  0
35 12  6 533  0
35 13  6 471  0
35 14  6 672  0
35 15  6 523  0
35 16  5 464  0
35 17  5 434  0
35 18  5 265  0
35 19  5 156  0
35 20  5 186  0
35 21  6 157  0
35 22  6 196  0
```

```
35 23  7 206  0
35 24  7 166  0
36  1  8 147  0
36  2 11  55  0
36  3 10 395  0
36  4  9 226  0
36  5 10 126  0
36  6  8 127  0
36  7  6  87  0
36  8  8 267  0
36  9 12 165  0
36 10 12 271  0
36 11 12 272  0
36 12 12 223  0
36 13 12 241  0
36 14 13 222  0
36 15 14 144  0
36 16 10 144  0
36 17 12 124  0
36 18 14  76  0
36 19  2  97  0
36 20  2 137  0
36 21  3 137  0
36 22  2 157  0
36 23 10  37  0
36 24 13  77  0
37  1 12 147  0
37  2  8  97  0
37  3  3 147  0
37  4  4 187  0
37  5  5 167  0
37  6  4 137  0
37  7  4 107  0
37  8  4  87  0
37  9  4 175  0
37 10  3 313  0
37 11  5 351  0
37 12  4 412  0
37 13  4 341  0
37 14  4 341  0
37 15  3 332  0
37 16  4 304  0
37 17  3 214  0
37 18  2 156  0
37 19  2 187  0
37 20  3 257  0
37 21  4 176  0
37 22  4 196  0
37 23  3 196  0
37 24  3 146  0
38  1  3 176  0
38  2  3 166  0
38  3  2 206  0
38  4  3 176  0
38  5  4 146  0
38  6  2 176  0
38  7  3 187  0
38  8  3 216  0
38  9  3 194  0
38 10  4 363  0
```

```
38 11  3 502  0
38 12  3 463  0
38 13  2 632  0
38 14  3 632  0
38 15  3 793  0
38 16  3 634  0
38 17  3 454  0
38 18  3 365  0
38 19  3 345  0
38 20  4 245  0
38 21  3 235  0
38 22  3 295  0
38 23  3 235  0
38 24  3 215  0
39  1  3 265  0
39  2  3 235  0
39  3  4 265  0
39  4  4 195  0
39  5  4 205  0
39  6  4 176  0
39  7  4 196  0
39  8  4 145  0
39  9  4 314  0
39 10  5 222  0
39 11  5 302  0
39 12  7 302  0
39 13  5 301  0
39 14  6 312  0
39 15  5 302  0
39 16  5 234  0
39 17  5 154  0
39 18  4 156  0
39 19  4 156  0
39 20  4 177  0
39 21 11 167  0
39 22 10  87  0
39 23 11 117  0
39 24 11 167  0
40  1 13 117  0
40  2 11 197  0
40  3 13 177  0
40  4 13 196  0
40  5 12 206  0
40  6 13 136  0
40  7 11 136  0
40  8 11 135  0
40  9 12 154  0
40 10 12 134  0
40 11 14 133  0
40 12  2 133  0
40 13  2 213  0
40 14  3 134  0
40 15  3 174  0
40 16  2 214  0
40 17  6 115  0
40 18  5  75  0
40 19  3 136  0
40 20  4 117  0
40 21  4 136  0
40 22  4 187  0
```

```
40 23  3 166  0
40 24  3 146  0
41  1  5  86  0
41  2 14  86  0
41  3  3  66  0
41  4  4 137  0
41  5  5 137  0
41  6  5 207  0
41  7  4 166  8
41  8  1 157  7
41  9 11 305  1
41 10 11 254  0
41 11 11 144  0
41 12 11 184  0
41 13 15 164  0
41 14 16 202  0
41 15 10 134  0
41 16 13 163  0
41 17 15 194  0
41 18 16 135  0
41 19 16 156  0
41 20 15 217  0
41 21 14 147  0
41 22 15 246  0
41 23 15 195  0
41 24 15 245  0
42  1 14 215  0
42  2 13 175  0
42  3 13 165  0
42  4 10 155  0
42  5 11 155  0
42  6 12 156  0
42  7 13 156  0
42  8 14 145  0
42  9  9 114  0
42 10  9 174  0
42 11  9 144  0
42 12  9 124  0
42 13 16 163  0
42 14  1 263  0
42 15  1 273  0
42 16  1 263  0
42 17 16 274  0
42 18  1 135  0
42 19 16 186  0
42 20 16 156  0
42 21 16 155  0
42 22  1 176  0
42 23  1 146  0
42 24  2 146  0
43  1 16 176  0
43  2  1 116  0
43  3 16 215  0
43  4  1 195  0
43  5 16 145  0
43  6  2 205  0
43  7  1 255  0
43  8  1 205  0
43  9  2 284  0
43 10  2 444  0
```

```
43 11  2 573  0
43 12  2 742  0
43 13  2 682  0
43 14  4 702  0
43 15  6 583  0
43 16  6 564  0
43 17  6 504  0
43 18  6 414  0
43 19  7 494  0
43 20  6 334  0
43 21  6 464  0
43 22  7 554  0
43 23  7 465  0
43 24  7 375  0
44  1  6 235  0
44  2  5 205  0
44  3  5 185  0
44  4  6 305  0
44  5  4 175  0
44  6  3 216  0
44  7  3 246  0
44  8  4 214  0
44  9  5 313  0
44 10  6 472  0
44 11  6 451  0
44 12  6 551  0
44 13  6 471  0
44 14  6 461  0
44 15  7 591  0
44 16  6 552  0
44 17  7 454  0
44 18  8 385  0
44 19  7 295  0
44 20  7 255  0
44 21  8 235  0
44 22  8 315  0
44 23  9 385  0
44 24  8 335  0
45  1  8 275  0
45  2  9 165  0
45  3  9 155  0
45  4 11 165  0
45  5 11 255  0
45  6 10 275  0
45  7  9 255  0
45  8 10 184  0
45  9 12 174  0
45 10 12 212  0
45 11  8 174  0
45 12  8 193  0
45 13  8 322  0
45 14  7 143  0
45 15  9 173  0
45 16  9 204  0
45 17  6 174  0
45 18  5 125  0
45 19  6 206  0
45 20  7 186  0
45 21  8  67  0
45 22  3 117  0
```

```
45 23  5  67  0
45 24 11  97  0
46  1 13  47  0
46  2  5 127  0
46  3  7  67  0
46  4 12  77  0
46  5  6  77  0
46  6  6  77  0
46  7  5  57  0
46  8 11  57  0
46  9 16  65  0
46 10  1 141  0
46 11 16 133  0
46 12 16 184  0
46 13  3 214  0
46 14 16 172  0
46 15  1 212  0
46 16  2 163  0
46 17  2 214  0
46 18  1 165  0
46 19  2 206  0
46 20  1 197  0
46 21  1 167  0
46 22 16 216  0
46 23  1 186  0
46 24  1 126  0
47  1  1  67  0
47  2 16  37  0
47  3  3  77  0
47  4 12  27  0
47  5 14 117  0
47  6 12 137  0
47  7 12  47  0
47  8 13  87  0
47  9 15  74  0
47 10  1 162  0
47 11  1 272  0
47 12  1 462  0
47 13  3 411  0
47 14  3 341  0
47 15  2 302  0
47 16  3 334  0
47 17  2 244  0
47 18  3 265  0
47 19  3 146  0
47 20  2  97  0
47 21  2 177  0
47 22  2 217  0
47 23  2 197  0
47 24  2 197  0
48  1  3 207  0
48  2 14  87  0
48  3  1 126  0
48  4  1 146  0
48  5  2 256  0
48  6  2 136  0
48  7  1 117  0
48  8  1 206  0
48  9 16 135  0
48 10 16  93  0
```

```
48 11  3 392  0
48 12  3 323  0
48 13  3 311  0
48 14  2 451  0
48 15  2 472  0
48 16  2 504  0
48 17  2 294  0
48 18  2 654  0
48 19  1 225  0
48 20  2 105  0
48 21 15 135  5
48 22 15 205  1
48 23 16 165  0
48 24 16 295  0
49  1  1 255  0
49  2  1 265  0
49  3  3 465  1
49  4  2 355  4
49  5  4 195  1
49  6  8 215  0
49  7  8 105  0
49  8  1  65  0
49  9 10 224  0
49 10  9 354  0
49 11  9 263  0
49 12  9 312  0
49 13  8 214  0
49 14  8 293  0
49 15  8 311  0
49 16  7 174  0
49 17  6 174  0
49 18  7 145  0
49 19  7 165  0
49 20  8 176  0
49 21 10 156  0
49 22 12 126  0
49 23 11 226  0
49 24 11 346  0
50  1 13 255  0
50  2 13 225  0
50  3 13 145  0
50  4 13 225  0
50  5 13 255  0
50  6 14 185  0
50  7 14 165  0
50  8 14 264  0
50  9 14 324  0
50 10  1 304  0
50 11  2 324  0
50 12  2 603  0
50 13  4 402  0
50 14  5 503  0
50 15  5 461  0
50 16  7 563  0
50 17  7 574  0
50 18  7 464  0
50 19  7 374  0
50 20  8 344  0
50 21  8 434  0
50 22  8 424  0
```

```
50 23  8 414  0
50 24  8 305  0
51  1  9 344  0
51  2  9 324  0
51  3  9 224  0
51  4  9 134  0
51  5  4  65  0
51  6  8 225  0
51  7  8 205  0
51  8  9 164  0
51  9 10 254  0
51 10 12 173  0
51 11  9 224  0
51 12  9 223  0
51 13 10 171  0
51 14  7 291  0
51 15  7 234  0
51 16  6 303  0
51 17  8 234  0
51 18  7 155  0
51 19  7 136  0
51 20  7 136  0
51 21  4 107  0
51 22  2 177  0
51 23  3 127  0
51 24  3 157  0
52  1  6 156  0
52  2  5 125  0
52  3  3 185  0
52  4  4 135  0
52  5  4 215  0
52  6  6 255  0
52  7  8 334  0
52  8  9 234  0
52  9 10 334  0
52 10 11 294  0
52 11 11 284  0
52 12 11 233  0
52 13  9 274  0
52 14 10 244  0
52 15  9 254  0
52 16  9 304  0
52 17  9 224  0
52 18 10 125  0
52 19  7 145  0
52 20  9 185  0
52 21  9 444  3
52 22  7 255  0
52 23  8 245  0
52 24  8 465  0
53  1 10 535  0
53  2  9 494  0
53  3  9 385  0
53  4  9 365  0
53  5  8 315  0
53  6  9 325  0
53  7  8 275  0
53  8  8 394  0
53  9  9 463  0
53 10 10 421  0
```

```
53 11  9 461  0
53 12  9 422  0
53 13  8 382  0
53 14  9 451  0
53 15  8 361  0
53 16 11 251  0
53 17  9 264  0
53 18 11 235  0
53 19 11 145  0
53 20 10  86  0
53 21 12 135  0
53 22 16  85  0
53 23  2 107  0
53 24  2 147  0
54  1 13 247  0
54  2 14 166  0
54  3 14 146  0
54  4 13 196  0
54  5 13 196  0
54  6 12 176  0
54  7 12 196  0
54  8 11 245  0
54  9 11 234  0
54 10 11 204  0
54 11 13 354  0
54 12 13 412  0
54 13  3 223  0
54 14  1 201  0
54 15  6 214  0
54 16 11  94  0
54 17 14 174  0
54 18 14 215  0
54 19 14 185  0
54 20 13 264  0
54 21 12 315  0
54 22 12 255  0
54 23 13 304  0
54 24 13 185  0
55  1 11 174  0
55  2 14 194  0
55  3 13 234  0
55  4 14 274  0
55  5  9 255  0
55  6 10 314  0
55  7  9 254  0
55  8 11 215  0
55  9 10 284  0
55 10 10 224  3
55 11 11 204  3
55 12 11 252  0
55 13  9 204  0
55 14  9 292  0
55 15  9 302  0
55 16  9 302  0
55 17  8 224  0
55 18  8 145  0
55 19  7 146  0
55 20  8 166  0
55 21  8  76  0
55 22  2  76  0
```

```
55 23  5  47  0
55 24  5  37  0
56  1 16  47  0
56  2  2  87  0
56  3 12 127  0
56  4 10  37  0
56  5 14 107  0
56  6 14  87  0
56  7  7 137  0
56  8 12  47  0
56  9 16  94  0
56 10  1 183  0
56 11  2 331  0
56 12  2 361  0
56 13  2 441  0
56 14  3 452  0
56 15  4 391  0
56 16  4 424  0
56 17  3 254  0
56 18  3 275  0
56 19  3 155  0
56 20  3 175  0
56 21  4 135  0
56 22  6 146  0
56 23  4 136  0
56 24  4 235  0
57  1  8 205  0
57  2  8 185  0
57  3 12 146  0
57  4 10 295  0
57  5 12 155  0
57  6 11 296  0
57  7 11 225  0
57  8 12 244  0
57  9 12 422  0
57 10 13 321  0
57 11 11 221  0
57 12 11 184  0
57 13 15 201  0
57 14 14 181  0
57 15  5 184  0
57 16  2 193  0
57 17  1 124  0
57 18 15  55  0
57 19 15 166  0
57 20 14 187  0
57 21 16 275  0
57 22 16 265  0
57 23 16 215  0
57 24 16 135  0
58  1 15 136  0
58  2 16 126  0
58  3 15 196  0
58  4 15 176  0
58  5 16 136  0
58  6 15 196  0
58  7 15 186  0
58  8 15 225  0
58  9  1 264  0
58 10  1 214  0
```

```
58 11  1 243  0
58 12  1 282  0
58 13  3 323  0
58 14  3 384  0
58 15  3 424  0
58 16  3 264  0
58 17  3 214  0
58 18  1 135  0
58 19  1 216  0
58 20  1 235  0
58 21  2 175  0
58 22  1 186  0
58 23  1 275  0
58 24  1 425  0
59  1  2 385  0
59  2  2 415  0
59  3  2 455  0
59  4  3 464  0
59  5  2 335  0
59  6  2 305  1
59  7  2 475  1
59  8  2 384  0
59  9  3 514  0
59 10  3 534  0
59 11  4 651  0
59 12  4 631  0
59 13  5 701  0
59 14  5 771  0
59 15  5 713  0
59 16  5 653  0
59 17  5 564  0
59 18  5 525  0
59 19  5 325  0
59 20  5 275  0
59 21  4 235  0
59 22  5 265  0
59 23  4 335  0
59 24  4 285  0
60  1  4 265  0
60  2  4 265  0
60  3  4 295  0
60  4  5 345  0
60  5  5 385  0
60  6  5 305  0
60  7  5 265  0
60  8  5 414  0
60  9  5 553  0
60 10  6 532  0
60 11  5 481  0
60 12  5 481  0
60 13  5 471  0
60 14  6 561  0
60 15  6 511  0
60 16  6 532  0
60 17  6 434  0
60 18  5 315  0
60 19  5 166  0
60 20  6 166  0
60 21  6 166  0
60 22  6 136  0
```

```
60 23  6 206  0
60 24  6 196  0
61  1  4 116  0
61  2  4 136  0
61  3  4 147  0
61  4  6 107  0
61  5  4  57  0
61  6  3 137  0
61  7  3 167  0
61  8  3 187  0
61  9  3 233  0
61 10  2 194  0
61 11  6 154  0
61 12  6 193  0
61 13  3 182  0
61 14  3 321  0
61 15  3 341  0
61 16  4 233  0
61 17 16 254  0
61 18 16 205  0
61 19 15 226  0
61 20 15 465  0
61 21 15 345  0
61 22 15 325  0
61 23 16 285  0
61 24 16 305  0
62  1 16 275  0
62  2 16 196  0
62  3 16 276  0
62  4 16 406  0
62  5 16 345  0
62  6  1 305  0
62  7  1 465  0
62  8  2 514  0
62  9 16 594  0
62 10  1 584  0
62 11  1 653  0
62 12  4 694  1
62 13  5 665  1
62 14  5 614  0
62 15  5 641  0
62 16  5 722  0
62 17  6 594  0
62 18  6 614  0
62 19  6 495  0
62 20  5 484  0
62 21  5 315  0
62 22  6 505  0
62 23  6 465  0
62 24  5 335  0
63  1  5 295  0
63  2  5 255  0
63  3  5 225  0
63  4  4 195  0
63  5  4 175  0
63  6  4 145  0
63  7  4 136  0
63  8  5 304  0
63  9  7 382  0
63 10  6 341  0
```

```
63 11  6 312  0
63 12  6 381  0
63 13  6 371  0
63 14  7 361  0
63 15  5 281  0
63 16  7 333  0
63 17  7 224  0
63 18  5 145  0
63 19  9 136  0
63 20  3  67  0
63 21  4  77  0
63 22  5 207  0
63 23 11  87  0
63 24 11  87  0
64  1  9  77  0
64  2 11  57  0
64  3 13  87  0
64  4 11  77  0
64  5 12 187  0
64  6 12 157  0
64  7 13 316  0
64  8 13 274  0
64  9 13 292  0
64 10 14 331  0
64 11 15 311  0
64 12 15 421  0
64 13 15 541  0
64 14 16 341  0
64 15 16 203  0
64 16 16 284  0
64 17 15 364  0
64 18 15 305  0
64 19 15 265  0
64 20 15 335  0
64 21 15 255  0
64 22 15 265  0
64 23 14 195  0
64 24 14 215  0
65  1 14 215  0
65  2 13 105  0
65  3 14 176  0
65  4 14 146  0
65  5 15 106  0
65  6 14  87  0
65  7 16 147  0
65  8  7 295  0
65  9  5  94  0
65 10 16  84  0
65 11 15 103  0
65 12  2 303  0
65 13  3 481  0
65 14  3 541  0
65 15  3 561  0
65 16  4 361  0
65 17  4 344  0
65 18  5 185  0
65 19  4 146  0
65 20  4 185  0
65 21  4 176  0
65 22  4 176  0
```

```
65 23  5 185  0
65 24  5 155  0
66  1  6 305  0
66  2  7 384  0
66  3  7 315  0
66  4  7 275  0
66  5  8 365  0
66  6  9 374  0
66  7  9 324  0
66  8  9 504  0
66  9 10 522  0
66 10 10 591  0
66 11 10 491  0
66 12  9 541  0
66 13  9 511  0
66 14  9 461  0
66 15  9 461  0
66 16  9 413  0
66 17 10 364  0
66 18 11 305  0
66 19 11 305  0
66 20 11 315  0
66 21 12 285  0
66 22 12 285  0
66 23 12 305  0
66 24 11 265  0
67  1 11 266  0
67  2 11 256  0
67  3 11 365  0
67  4 11 355  0
67  5 11 365  0
67  6 11 325  0
67  7 12 275  0
67  8 12 524  0
67  9 12 431  0
67 10 12 411  0
67 11 13 391  0
67 12 11 391  0
67 13 12 341  0
67 14 12 313  0
67 15 14 401  0
67 16 13 391  0
67 17 14 254  0
67 18 12 255  0
67 19 12 245  0
67 20 13 275  0
67 21 14 215  0
67 22 14 265  0
67 23 14 295  0
67 24 14 305  0
68  1 13 335  0
68  2 13 404  0
68  3 13 345  0
68  4 13 305  0
68  5 13 254  0
68  6 13 334  0
68  7 13 214  0
68  8 10 185  7
68  9 11 254  3
68 10 10 214 14
```

```
68 11 12 204  3
68 12 12 144  1
68 13 14 204  0
68 14 13 124  0
68 15  9 274  0
68 16  8 414  0
68 17  8 344  0
68 18  8 384  0
68 19  8 284  0
68 20  7 294  0
68 21  7 254  0
68 22  7 164  0
68 23  6 194  0
68 24  6 194  0
69  1  5 234  0
69  2  6 214  0
69  3  6 274  0
69  4  6 214  0
69  5  6 274  0
69  6  7 214  0
69  7  5 164  0
69  8  5 164  0
69  9  5 224  0
69 10  7 213  0
69 11  8 282  0
69 12  8 301  0
69 13  6 301  0
69 14  6 281  0
69 15  7 382  0
69 16  7 373  0
69 17  6 304  0
69 18  7 205  0
69 19  5 125  0
69 20  5 146  0
69 21  7 216  0
69 22  7 145  0
69 23  6 175  0
69 24  6 225  0
70  1 10 165  0
70  2 10 225  0
70  3 12 135  0
70  4  8 305  0
70  5  9 325  0
70  6  9 315  0
70  7  9 295  0
70  8  9 234  0
70  9 11 254  0
70 10 12 212  0
70 11  8 252  0
70 12  8 244  0
70 13 10 251  0
70 14  4 282  0
70 15  2 342  0
70 16  3 212  0
70 17  5 274  0
70 18  3 145  0
70 19  4 116  0
70 20  5 136  0
70 21  2  57  0
70 22  5 177  0
```

```
70 23  6 207  0
70 24  6 186  0
71  1  9 305  0
71  2  9 335  0
71  3  8 316  0
71  4  8 236  0
71  5  5  86  0
71  6 11 145  0
71  7 11 135  0
71  8  8 294  0
71  9 11 362  0
71 10 10 382  0
71 11  9 232  0
71 12 10 214  0
71 13  8 163  0
71 14 10 281  0
71 15  8 292  0
71 16  9 293  0
71 17  3 144  0
71 18 10  45  0
71 19 10 105  0
71 20  1  67  0
71 21  6  47  0
71 22 13 127  0
71 23  2  47  0
71 24  6  47  0
72  1  8  67  0
72  2 12  87  0
72  3 12 197  0
72  4 12 236  0
72  5 12 256  0
72  6 12 296  0
72  7 13 425  0
72  8 13 424  0
72  9 12 374  0
72 10 13 344  0
72 11 13 311  0
72 12 13 292  0
72 13 13 242  0
72 14 10 333  0
72 15 12 383  0
72 16 12 304  0
72 17 13 294  0
72 18 13 305  0
72 19 12 325  0
72 20 12 364  0
72 21 12 364  0
72 22 12 384  0
72 23 11 314  0
72 24 11 374  0
73  1 12 505  0
73  2 12 455  0
73  3 10 415  0
73  4  9 285 23
73  5 12 365 33
73  6 13 515 21
73  7 13 395  2
73  8 13 305  1
73  9 13 275  0
73 10 15 475  0
```

```
73 11 16 515  0
73 12 16 465  0
73 13 16 485  0
73 14 16 504  0
73 15  1 574  0
73 16  1 424  1
73 17  7 444  0
73 18  7 544  0
73 19  6 274  0
73 20  5 185  0
73 21  4 355  0
73 22  5 395  0
73 23  4 345  0
73 24  5 374  0
74  1  5 394  0
74  2  5 404  0
74  3  5 474  0
74  4  5 444  0
74  5  5 474  0
74  6  5 304  0
74  7  5 384  0
74  8  5 334  0
74  9  5 354  0
74 10  5 274  0
74 11  6 344  0
74 12  7 372  0
74 13  8 374  0
74 14  8 341  0
74 15  9 393  0
74 16  9 343  0
74 17  9 224  0
74 18 13  65  0
74 19  1  76  0
74 20 16 137  0
74 21 14  97  0
74 22 16 156  0
74 23  2 157  0
74 24 13 137  0
75  1 14 217  0
75  2 11 127  0
75  3 11 147  0
75  4 12 177  0
75  5 12 197  0
75  6 13 157  0
75  7 13 197  0
75  8 13 294  0
75  9 14 303  0
75 10 14 311  0
75 11 15 281  0
75 12 16 244  0
75 13  2 241  0
75 14  2 251  0
75 15  2 342  0
75 16  2 282  0
75 17  3 274  0
75 18  3 165  0
75 19  3 146  0
75 20  2 127  0
75 21  3 157  0
75 22  1 266  0
```

```
75 23  1 205  0
75 24  2 136  0
76  1  2 176  0
76  2  2 216  0
76  3  1 216  0
76  4  2 196  0
76  5  3 197  0
76  6  3 217  0
76  7  4 227  0
76  8  3 225  0
76  9  3 254  0
76 10  4 262  0
76 11  4 332  0
76 12  5 341  0
76 13  3 301  0
76 14  3 361  0
76 15  3 312  0
76 16  3 343  0
76 17  3 255  0
76 18  3 165  0
76 19  2 246  0
76 20  2 217  0
76 21  3 177  0
76 22  3 227  0
76 23  3 206  0
76 24  3 236  0
77  1  3 216  0
77  2  3 216  0
77  3  4 216  0
77  4  4 226  0
77  5  4 196  0
77  6  4 236  0
77  7  4 206  0
77  8  4 274  0
77  9  4 382  0
77 10  4 361  0
77 11  5 461  0
77 12  5 451  0
77 13  4 491  0
77 14  5 491  0
77 15  5 491  0
77 16  5 402  0
77 17  5 414  0
77 18  5 255  0
77 19  5 126  0
77 20  4 136  0
77 21  5 146  0
77 22  5 116  0
77 23  5 137  0
77 24  5 117  0
78  1  6 147  0
78  2  7 166  0
78  3  8 176  0
78  4 10 186  0
78  5  9 306  0
78  6 10 426  0
78  7 11 325  0
78  8 11 294  0
78  9 12 421  0
78 10 12 431  0
```

```
78 11 12 251  0
78 12 12 282  0
78 13  7 194  0
78 14 12 281  0
78 15 13 123  0
78 16  8 144  0
78 17  2 134  0
78 18  4 125  0
78 19  5 126  0
78 20 13  87  0
78 21 11  57  0
78 22 13 167  0
78 23 14 156  0
78 24 13 207  0
79  1 14 137  0
79  2 14 127  0
79  3 13  66  0
79  4 12 177  0
79  5 13 107  0
79  6 10 207  0
79  7 11 135  0
79  8 12 264  0
79  9 13 204  0
79 10 14 244  0
79 11 13 281  0
79 12 15 341  0
79 13 15 301  0
79 14 15 372  0
79 15  1 343  0
79 16  1 324  0
79 17 16 244  0
79 18 15 305  0
79 19 14 285  0
79 20 15 355  0
79 21 15 354  0
79 22 14 344  0
79 23 14 314  0
79 24 15 324  0
80  1 15 244  0
80  2 15 265  0
80  3 16 215  0
80  4 16 215  0
80  5  1 175  0
80  6  1 205  0
80  7  1 225  0
80  8  2 354  0
80  9  2 204  1
80 10  1 214 13
80 11  2 194  1
80 12  2 545  0
80 13  4 604  0
80 14  5 502  0
80 15  5 374  0
80 16  4 404  0
80 17  4 314  0
80 18  4 304  0
80 19  4 275  0
80 20  5 215  0
80 21  4 235  0
80 22  4 235  0
```

```
80 23  4 195  0
80 24  4 226  0
81  1  5 176  0
81  2  4 176  0
81  3  5 166  0
81  4  4 116  0
81  5  5 126  0
81  6  5 136  0
81  7  6 126  0
81  8  7 264  0
81  9  8 352  0
81 10  9 281  0
81 11  6 183  0
81 12  6 203  0
81 13  4 201  0
81 14  6 172  0
81 15  4 281  0
81 16  5 213  0
81 17  6 214  0
81 18  4 125  0
81 19  5  95  0
81 20  2 137  0
81 21  2 127  0
81 22  9 217  0
81 23 16  97  0
81 24 16  77  0
82  1 16 187  0
82  2 16 137  0
82  3  2 127  0
82  4 10 127  0
82  5 13 107  0
82  6 14 177  0
82  7 14 177  0
82  8 16 227  0
82  9  1 204  0
82 10 16 323  0
82 11  1 342  0
82 12  1 272  0
82 13 16 401  0
82 14 16 391  0
82 15  1 351  0
82 16  2 422  0
82 17  2 364  0
82 18  2 185  0
82 19 16 166  0
82 20 16 325  0
82 21 15 305  0
82 22 15 255  0
82 23 16 215  0
82 24 16 175  0
83  1 16 195  0
83  2  1 145  0
83  3  1 146  0
83  4  1 126  0
83  5  2 146  0
83  6  1 106  0
83  7  2 206  0
83  8  2 215  0
83  9  3 253  0
83 10  4 301  0
```

```
83 11  4 302  0
83 12  4 313  0
83 13  4 314  0
83 14  4 324  0
83 15  5 334  0
83 16  5 334  0
83 17  4 304  0
83 18  3 215  0
83 19  2 256  0
83 20  3 176  0
83 21  6 245  0
83 22  5 135  0
83 23  5 105  0
83 24  5  85  0
84  1  7 125  0
84  2  3  85  0
84  3  2 165  0
84  4  3 146  0
84  5  2 106  0
84  6  3 176  0
84  7  5 106  0
84  8  6 214  0
84  9  9 204  0
84 10  7 164  0
84 11 12 222  0
84 12 12 132  0
84 13  2 233  0
84 14  7 484 10
84 15  8 494 23
84 16  8 384  0
84 17  8 264  0
84 18  6 204  7
84 19 10 184  3
84 20  9 185  3
84 21 10 164  2
84 22  9 164  2
84 23  9 145  0
84 24  9 234  0
85  1 10 264  1
85  2  9 214  2
85  3  9 174  5
85  4 11 214  5
85  5 11 255 12
85  6 11 215  3
85  7 11 264  0
85  8 12 314  0
85  9 13 364  4
85 10 12 364  1
85 11 12 524  0
85 12 11 404  0
85 13 12 434  0
85 14 11 354  0
85 15 11 354  0
85 16 12 324  0
85 17 11 314  0
85 18 11 364  0
85 19 11 344  0
85 20 12 244  0
85 21 11 294  0
85 22 10 305  0
```

```
85 23 11 265  0
85 24  9 165  0
86  1  9 185  0
86  2  8 235  0
86  3  8 275  0
86  4  8 235  0
86  5 11 195  0
86  6  3 116  0
86  7  3 135  0
86  8  8 175  0
86  9  8 264  0
86 10  8 242  0
86 11  9 232  0
86 12 10 232  0
86 13 10 271  0
86 14  8 323  0
86 15  8 363  0
86 16  8 353  0
86 17  8 244  0
86 18  8 215  0
86 19  8 176  0
86 20  7 136  0
86 21  3 157  0
86 22  2 157  0
86 23  2 137  0
86 24  3 207  0
87  1  3 137  0
87  2  3 197  0
87  3  8 267  0
87  4  7 137  0
87  5  4 127  0
87  6  5 177  0
87  7 10  77  0
87  8  1 106  0
87  9  6 181  0
87 10  9 221  0
87 11  7 331  0
87 12  7 341  0
87 13  6 291  0
87 14  7 311  0
87 15  4 311  0
87 16  5 361  0
87 17  5 221  0
87 18  4 152  0
87 19  4 166  0
87 20  3 137  0
87 21  4 167  0
87 22  3 177  0
87 23  3 207  0
87 24  4 197  0
88  1  4 167  0
88  2  3 157  0
88  3  4 127  0
88  4  5 127  0
88  5  5  97  0
88  6  3  66  0
88  7  8 246  0
88  8 11 197  0
88  9  5 201  0
88 10 10 211  0
```

```
88 11  9 221  0
88 12  8 232  0
88 13 11 252  0
88 14 13 253  0
88 15 16 254  0
88 16  2 254  0
88 17  4 254  0
88 18  5 145  0
88 19  3 136  0
88 20  5 137  0
88 21  7 216  0
88 22  9 206  0
88 23  9 196  0
88 24  9 256  0
89  1  9 217  0
89  2  9 156  0
89  3 11  77  0
89  4  1  97  0
89  5 10 226  0
89  6 11 296  0
89  7 11 295  0
89  8 11 434  0
89  9 12 642  0
89 10 12 681  0
89 11 12 551  0
89 12 12 481  0
89 13 13 401  0
89 14 13 351  0
89 15 13 273  0
89 16 14 303  0
89 17 13 255  0
89 18 11 285  0
89 19 16 275  0
89 20 15 245  0
89 21 15 215  0
89 22 13 275  0
89 23 13 325  0
89 24 13 205  0
90  1 13 195  0
90  2 13 185  0
90  3 12 185  0
90  4 12 225  0
90  5 13 305  0
90  6 13 245  0
90  7 12 235  2
90  8 12 315  0
90  9 13 325  1
90 10 13 285  2
90 11 14 325  0
90 12 14 454  0
90 13 13 334  0
90 14 14 314  0
90 15 16 494  0
90 16 15 634  0
90 17 15 464  0
90 18 15 465  0
90 19 16 464  0
90 20 15 465  0
90 21 15 395  0
90 22 15 345  0
```

```
90 23 14 255  0
90 24 14 285  0
91  1 15 275  0
91  2 15 255  0
91  3 15 285  0
91  4 16 215  0
91  5 16 195  1
91  6  1 195  1
91  7 16 205  3
91  8  1 255  2
91  9  1 265  2
91 10  2 305  0
91 11  2 315  3
91 12  2 244  1
91 13  2 384  0
91 14  4 262  0
91 15  2 204  0
91 16  2 174  0
91 17  3 134  0
91 18  1  95  0
91 19 16 146  0
91 20 15 206  0
91 21 16 225  0
91 22 16 225  0
91 23  1 165  0
91 24  1 175  0
92  1  2 215  0
92  2  3 175  0
92  3  5 105  0
92  4  3 135  0
92  5  7  75  0
92  6  7  65  0
92  7  5  66  0
92  8  4 125  0
92  9  7 125  0
92 10  9 154  0
92 11  8 283  0
92 12  8 304  0
92 13  8 182  0
92 14  8 224  0
92 15  3 232  0
92 16  2 252  0
92 17  3 184  0
92 18  3 145  0
92 19  3 146  0
92 20  4 167  0
92 21  4 117  0
92 22 14  87  0
92 23  4 136  0
92 24  4 106  0
93  1  3 167  0
93  2  3 167  0
93  3  3 177  0
93  4  5 147  0
93  5 16  87  0
93  6  2 167  0
93  7  3  87  0
93  8  1 115  0
93  9  1 114  0
93 10 16 162  0
```

```
93 11  1 344  0
93 12  1 333  0
93 13 16 341  0
93 14  1 373  0
93 15  1 361  0
93 16 16 343  0
93 17 15 464  0
93 18 16 444  0
93 19 16 325  0
93 20 15 405  0
93 21 15 285  0
93 22 15 325  0
93 23 15 275  0
93 24 15 175  0
94  1  1 165  0
94  2 16 185  0
94  3  1 225  0
94  4  1 205  0
94  5  2 175  0
94  6  1  85  0
94  7  2 145  0
94  8  2 294  0
94  9  3 384  0
94 10  3 283  0
94 11  3 283  0
94 12  3 333  0
94 13  3 311  0
94 14  3 561  0
94 15  4 422  0
94 16  3 443  0
94 17  3 394  0
94 18  4 295  0
94 19  3 165  0
94 20  4 136  0
94 21  3 186  0
94 22  3 166  0
94 23  4 196  0
94 24  4 176  0
95  1  5 146  0
95  2  4 176  0
95  3  6 116  0
95  4  6 216  0
95  5  7 186  0
95  6  7 256  0
95  7  8 325  0
95  8  8 344  0
95  9 10 344  0
95 10 11 321  0
95 11 14 251  0
95 12 14 303  0
95 13 12 212  0
95 14 11 351  0
95 15 13 281  0
95 16 12 263  0
95 17 13 264  0
95 18 15 704  0
95 19 15 455  0
95 20 15 604  0
95 21 15 415  0
95 22 15 345  0
```

```
95 23 14 345  0
95 24 14 295  0
96  1 13 295  0
96  2 14 264  0
96  3 13 324  0
96  4 12 254  0
96  5 12 264  0
96  6 12 184  0
96  7 12 384  0
96  8 12 254  0
96  9 11 214  0
96 10 13 224  0
96 11 13 273  0
96 12 13 164  0
96 13 14 212  0
96 14 15 214  0
96 15 15 184  0
96 16 10 114  0
96 17 11 174  0
96 18  9 125  0
96 19  9 135  0
96 20  8  85  0
96 21  6 146  0
96 22  1 117  0
96 23  2 116  0
96 24  2  85  0
97  1  9  56  0
97  2  4  56  0
97  3 16  46  0
97  4 11 106  0
97  5 14  46  0
97  6 15 176  0
97  7 13  65  0
97  8  2  84  0
97  9  2 114  0
97 10  2 232  0
97 11  4 121  0
97 12  4 174  0
97 13  1 173  0
97 14  2 133  0
97 15  3 281  0
97 16  4 292  0
97 17  5 224  0
97 18  3 175  0
97 19  3 115  0
97 20  1 295  0
97 21  1 304  0
97 22  1 275  0
97 23 16 244  0
97 24 16 225  0
98  1 16 215  0
98  2 16 155  0
98  3 16  95  0
98  4  2 116  0
98  5  3 157  0
98  6  3 126  0
98  7  3 156  0
98  8  4 224  0
98  9  5 303  0
98 10  6 272  0
```

```
 98 11  6 284  0
 98 12  6 304  0
 98 13  6 411  0
 98 14  5 402  0
 98 15  3 421  0
 98 16  4 413  0
 98 17  4 364  0
 98 18  4 424  0
 98 19 12 304  0
 98 20 14 145  0
 98 21 16 135  0
 98 22 16 125  0
 98 23 16 175  0
 98 24 16 176  0
 99  1  2 415  0
 99  2  2 515  0
 99  3  3 555  0
 99  4  3 385  0
 99  5  3 385  0
 99  6  2 375  0
 99  7  2 474  0
 99  8  3 444  0
 99  9  3 424  0
 99 10  3 552  0
 99 11  3 424  0
 99 12  3 424  0
 99 13  3 434  0
 99 14  3 464  0
 99 15  3 555  0
 99 16  3 544  0
 99 17  3 504  0
 99 18  3 385  0
 99 19  4 285  0
 99 20  3 235  0
 99 21  3 295  0
 99 22  3 315  0
 99 23  3 385  0
 99 24  3 425  0
100  1  4 445  0
100  2  3 365  0
100  3  4 365  0
100  4  4 295  0
100  5  4 245  0
100  6  4 235  0
100  7  4 265  0
100  8  6 234  0
100  9  7 294  0
100 10  6 273  0
100 11  7 214  0
100 12  7 264  0
100 13  4 251  0
100 14  6 333  0
100 15  4 293  0
100 16  3 214  0
100 17  3 224  0
100 18  2  75  0
100 19  1 145  0
100 20  2 206  0
100 21  2 295  0
100 22  1 136  0
```

```
100 23  1 167  0
100 24  1 167  0
101  1 15 186  0
101  2 15 276  0
101  3 16 205  0
101  4 16 215  0
101  5  1 136  0
101  6  1 216  0
101  7  2 274  0
101  8  3 414  0
101  9  3 483  0
101 10  3 523  0
101 11  3 481  0
101 12  3 481  0
101 13  4 581  0
101 14  4 532  0
101 15  4 572  0
101 16  5 573  0
101 17  5 504  0
101 18  5 385  0
101 19  4 345  0
101 20  5 295  0
101 21  6 305  0
101 22  5 245  0
101 23  5 256  0
101 24  5 276  0
102  1  6 305  0
102  2  6 325  0
102  3  5 226  0
102  4  6 235  0
102  5  6 176  0
102  6  4 166  0
102  7  4 185  0
102  8  5 344  0
102  9  6 452  0
102 10  6 411  0
102 11  6 391  0
102 12  6 491  0
102 13  6 531  0
102 14  7 551  0
102 15  7 551  0
102 16  6 543  0
102 17  5 454  0
102 18  7 425  0
102 19  6 325  0
102 20  6 305  0
102 21  7 305  0
102 22  8 385  0
102 23  9 405  0
102 24  9 345  0
103  1  8 405  0
103  2  8 255  0
103  3  8 136  0
103  4 15  36  0
103  5  7  45  0
103  6  8 325  0
103  7 10 184  0
103  8 11 264  0
103  9 12 251  0
103 10 10 254  0
```

```
103 11  8 262  0
103 12  8 262  0
103 13  6 332  0
103 14  5 281  0
103 15  6 302  0
103 16  8 294  0
103 17  5 254  0
103 18  8 175  0
103 19 12  96  0
103 20 16  87  0
103 21 16 127  0
103 22 15 127  0
103 23 15 167  0
103 24 15  47  0
104  1 14 137  0
104  2 13 107  0
104  3 13  87  0
104  4 12 187  0
104  5 12 137  0
104  6 15  97  0
104  7 12 156  0
104  8 12 384  0
104  9 13 392  0
104 10 13 471  0
104 11 12 451  0
104 12 12 351  0
104 13 11 302  0
104 14 11 282  0
104 15 13 271  0
104 16 12 252  0
104 17 13 244  0
104 18 13 195  0
104 19 13 256  0
104 20 15 365  0
104 21 14 325  0
104 22 14 285  0
104 23 14 225  0
104 24 14 225  0
105  1 14 245  0
105  2 14 255  0
105  3 14 275  0
105  4 15 375  0
105  5 15 365  0
105  6 16 265  0
105  7 16 255  0
105  8 16 334  0
105  9 16 404  0
105 10 16 594  0
105 11  2 495  0
105 12  2 275  1
105 13  1 305 10
105 14  4 195  7
105 15  1 384  0
105 16  1 385  0
105 17  6 444  0
105 18  7 224  0
105 19  3  85  0
105 20  4 206  5
105 21  5 316  0
105 22  5 235  0
```

```
105 23  6 375  0
105 24  6 385  0
106  1  5 475  0
106  2  5 325  0
106  3  5 415  0
106  4  5 425  0
106  5  5 265  0
106  6  4 255  0
106  7  5 394  0
106  8  5 423  0
106  9  5 472  0
106 10  5 501  0
106 11  5 491  0
106 12  5 551  0
106 13  5 561  0
106 14  4 401  0
106 15  4 442  0
106 16  4 472  0
106 17  4 394  0
106 18  3 355  0
106 19  3 275  0
106 20  3 255  0
106 21  3 265  0
106 22  4 275  0
106 23  5 325  0
106 24  5 215  0
107  1  4 235  0
107  2  5 185  0
107  3  5 215  0
107  4  5 245  0
107  5  5 235  0
107  6  4 195  0
107  7  4 185  0
107  8  4 234  0
107  9  5 244  0
107 10  5 324  0
107 11  3 333  0
107 12  3 441  0
107 13  4 531  0
107 14  4 501  0
107 15  4 552  0
107 16  4 541  0
107 17  4 464  0
107 18  5 424  0
107 19  5 245  0
107 20  5 176  0
107 21  6 186  0
107 22  6 216  0
107 23  5 137  0
107 24  5 127  0
108  1  4 127  0
108  2  5 117  0
108  3  6 216  0
108  4  4 166  0
108  5  3 216  0
108  6  3 196  0
108  7  4 214  0
108  8  4 272  0
108  9  6 362  0
108 10  5 361  0
```

```
108 11  4 321  0
108 12  4 441  0
108 13  6 361  0
108 14  5 341  0
108 15  4 401  0
108 16  5 352  0
108 17  5 354  0
108 18  4 254  0
108 19  5 146  0
108 20  4 136  0
108 21  5  97  0
108 22  5 107  0
108 23  6 186  0
108 24  6 126  0
109  1  3 176  0
109  2  4 157  0
109  3  4 177  0
109  4  4 126  0
109  5  4 146  0
109  6  4 146  0
109  7  5 165  0
109  8  6 294  0
109  9  7 512  0
109 10  7 441  0
109 11  7 431  0
109 12  7 421  0
109 13  7 381  0
109 14  7 401  0
109 15  5 333  0
109 16  7 324  0
109 17  5 244  0
109 18  4 205  0
109 19  2 186  0
109 20  2 177  0
109 21  2 207  0
109 22  2 217  0
109 23  2 207  0
109 24  2 347  0
110  1  2 226  0
110  2  1 216  0
110  3  1 276  0
110  4  2 236  0
110  5  2 226  0
110  6  3 265  0
110  7  4 174  0
110  8  2 314  0
110  9  3 453  0
110 10  4 381  0
110 11  5 481  0
110 12  5 321  0
110 13  4 361  0
110 14  4 421  0
110 15  5 431  0
110 16  5 362  0
110 17  5 354  0
110 18  5 185  0
110 19  5 116  0
110 20  5  86  0
110 21  2 127  0
110 22  4 167  0
```

```
110 23  5 147  0
110 24  5 137  0
111  1  5 147  0
111  2  2 117  0
111  3  4 147  0
111  4  3 167  0
111  5  3 267  0
111  6  5 147  0
111  7  6 135  0
111  8  4 163  0
111  9  4 134  0
111 10  7 164  0
111 11  3 252  0
111 12  3 323  0
111 13  6 252  0
111 14  4 232  0
111 15  5 252  0
111 16  2 332  0
111 17  2 284  0
111 18  4 175  0
111 19  3 116  0
111 20  1 217  0
111 21 16 276  0
111 22 16 206  0
111 23 16 155  0
111 24 16 146  0
112  1  1 216  0
112  2  2 196  0
112  3  2 166  0
112  4  2 186  0
112  5  2 196  0
112  6  2 146  0
112  7  1 155  0
112  8  2 284  0
112  9  2 253  0
112 10  2 372  0
112 11  3 382  0
112 12  3 301  0
112 13  3 371  0
112 14  1 442  0
112 15  1 402  0
112 16  1 384  0
112 17  1 384  0
112 18  1 305  0
112 19 16 286  0
112 20 16 285  0
112 21 16 255  0
112 22 16 255  0
112 23  1 255  0
112 24  1 215  0
113  1  1 245  0
113  2  1 235  0
113  3  2 205  0
113  4  2 235  0
113  5  3 155  0
113  6  2 176  0
113  7  3 225  0
113  8  3 284  0
113  9  4 244  0
113 10  5 352  0
```

```
113 11  5 381  0
113 12  5 361  0
113 13  4 421  0
113 14  4 381  0
113 15  4 451  0
113 16  4 391  0
113 17  4 384  0
113 18  3 345  0
113 19  3 195  0
113 20  3 255  0
113 21  4 245  0
113 22  4 215  0
113 23  4 205  0
113 24  4 275  0
114  1  4 235  0
114  2  4 255  0
114  3  4 235  0
114  4  5 195  0
114  5  5 205  0
114  6  6 165  0
114  7  6 214  0
114  8  6 284  0
114  9  7 303  0
114 10  8 352  0
114 11  9 312  0
114 12  9 213  0
114 13 10 313  0
114 14  9 432  0
114 15 10 292  0
114 16  9 253  0
114 17 14 614  0
114 18 14 415 12
114 19 13 235  1
114 20 13 415  0
114 21 13 255  0
114 22 13 285  0
114 23 13 215  0
114 24 13 225  0
115  1 13 225  0
115  2 13 264  0
115  3 12 315  0
115  4 12 304  0
115  5 12 314  0
115  6 12 314  0
115  7 13 254  0
115  8 12 304  0
115  9 13 434  0
115 10 13 353  0
115 11 13 384  0
115 12 13 293  0
115 13 13 331  0
115 14 14 233  0
115 15 12 194  0
115 16 12 194  0
115 17 13 144  0
115 18 14  85  0
115 19 15  45  0
115 20 14 105  0
115 21 13 105  0
115 22 15 115  0
```

```
115 23 14 105  0
115 24 14 145  0
116  1 13 165  0
116  2 15 125  0
116  3 14  85  0
116  4 13 105  0
116  5  8  85  0
116  6  8 114  0
116  7  8 114  0
116  8 15  84  0
116  9  5  84  0
116 10  2 182  0
116 11  3 222  0
116 12  3 392  0
116 13  2 381  0
116 14  2 293  0
116 15  2 222  0
116 16  2 234  0
116 17  2 224  0
116 18  2 135  0
116 19  2  95  0
116 20  1 166  0
116 21  4  96  0
116 22  1 137  0
116 23  2 167  0
116 24  2 145  0
117  1  5 135  0
117  2 12  66  0
117  3  7  76  0
117  4  7  86  0
117  5  7  97  0
117  6 14 117  0
117  7 13  95  0
117  8  2 124  0
117  9  3 134  0
117 10  2 323  0
117 11  3 342  0
117 12  3 352  0
117 13  4 321  0
117 14  3 353  0
117 15  3 401  0
117 16  3 344  0
117 17  3 314  0
117 18  3 185  0
117 19  6 365  0
117 20  6 365  0
117 21  6 115  0
117 22  7 115  0
117 23 16 185  0
117 24 16  55  0
118  1 16  46  0
118  2 14  96  0
118  3 15 157  0
118  4 13 136  0
118  5  7 135  1
118  6 14 125  1
118  7 13 105  0
118  8 15 194  0
118  9 16 124  0
118 10  6 164  0
```

```
118 11  9 214  0
118 12  9 503  0
118 13 10 484  0
118 14 10 514  0
118 15 10 484  0
118 16 11 524  0
118 17 11 364  0
118 18 11 474  0
118 19 11 334  0
118 20 11 424  0
118 21 11 384  0
118 22 11 334  0
118 23 11 424  0
118 24 11 264  0
119  1 11 364  0
119  2 11 264  0
119  3 11 464  0
119  4 11 414  0
119  5 11 304  0
119  6 11 394  0
119  7 11 344  0
119  8 11 265  1
119  9 10 314  0
119 10 11 364  0
119 11 11 374  0
119 12 11 254  0
119 13 10 304  0
119 14 10 334  1
119 15 10 394  1
119 16 10 264  0
119 17 11 315  0
119 18 11 425  1
119 19  9 415  0
119 20 11 355  0
119 21 10 294  0
119 22  9 414  0
119 23 10 334  0
119 24 10 454  0
120  1  9 404  0
120  2  9 434  1
120  3  9 454  0
120  4  9 494  0
120  5  9 464  1
120  6  9 474  0
120  7  9 414  1
120  8  9 454  3
120  9  9 514  8
120 10 10 504  3
120 11 10 514 20
120 12 10 564 35
120 13  9 594 20
120 14  9 564  8
120 15  9 554  9
120 16  9 604  3
120 17  9 635  8
120 18 10 625  1
120 19 10 635  0
120 20 10 515  0
120 21  9 515  1
120 22  9 455  2
```

```
120 23 10 535  0
120 24 10 635  0
121  1 10 545  0
121  2 10 535  0
121  3 10 595  0
121  4 10 434  0
121  5  9 434  0
121  6  9 484  0
121  7  9 534  0
121  8  9 424  0
121  9  9 334  0
121 10  9 384  0
121 11  9 484  0
121 12  9 454  0
121 13  9 524  0
121 14  8 364  0
121 15  9 424  0
121 16  9 245  2
121 17  8 345  2
121 18  8 235  0
121 19  8 175  0
121 20  7 175  0
121 21  8 235  0
121 22  8 195  0
121 23 10 145  0
121 24 10 385  0
122  1 11 106  1
122  2 10 225  0
122  3  8 305  0
122  4  8 325  0
122  5  8 325  0
122  6  8 365  0
122  7  8 384  0
122  8  9 474  0
122  9  9 452  0
122 10  9 442  0
122 11  9 452  0
122 12  9 432  0
122 13  9 411  0
122 14  9 373  0
122 15  9 352  0
122 16  9 393  0
122 17  8 414  0
122 18  8 264  0
122 19  8 176  0
122 20 11 145  0
122 21 10 186  0
122 22 12 147  0
122 23  8 147  0
122 24  8  87  0
123  1 11 247  0
123  2 12 156  0
123  3 12  47  0
123  4  8 147  0
123  5 11  97  0
123  6 10 136  0
123  7 10 244  0
123  8 10 244  0
123  9  9 194  0
123 10  8 243  0
```

```
123 11  7 253  0
123 12  7 323  0
123 13  6 282  0
123 14  8 333  0
123 15  7 332  0
123 16  7 302  0
123 17  8 254  0
123 18  9 145  0
123 19 13  46  0
123 20  3 107  0
123 21  2 107  0
123 22  3 197  0
123 23  2 177  0
123 24  2  27  0
124  1  2 117  0
124  2  3 167  0
124  3 14  57  0
124  4 16  87  0
124  5 14  57  0
124  6 15  97  0
124  7  1  76  0
124  8  3 134  0
124  9  3 273  0
124 10  2 332  0
124 11  3 302  0
124 12  3 273  0
124 13  3 251  0
124 14  3 231  0
124 15  1 301  0
124 16  1 262  0
124 17 16 274  0
124 18 16 185  0
124 19 15 176  0
124 20 16 305  0
124 21 16 295  0
124 22 16 335  0
124 23  1 255  0
124 24  1 265  0
125  1  1 275  0
125  2  1 215  0
125  3 16 175  0
125  4 16 255  0
125  5 15 315  0
125  6 15 305  0
125  7 16 204  0
125  8  2 134  0
125  9  1 174  0
125 10 16 154  0
125 11  1 322  0
125 12  1 263  0
125 13 16 244  0
125 14  1 165  1
125 15 10 305 10
125 16 11 175  1
125 17  1 215  3
125 18 15 245  7
125 19 15 355  2
125 20 15 205  0
125 21 16 215  0
125 22 15 255  0
```

```
125 23 16 175  0
125 24 16 205  0
126  1 16 225  0
126  2 16 235  0
126  3 16 195  0
126  4 15 185  0
126  5  7  75  0
126  6  9  25  0
126  7  9 135  0
126  8 10 154  0
126  9 16 204  0
126 10  1 173  0
126 11  1 213  0
126 12  1 213  0
126 13  1 432  0
126 14  7 335 11
126 15  4 134 12
126 16  1 115  2
126 17 16 216  2
126 18 16 376  0
126 19 16 346  0
126 20  1 195  0
126 21  1  96  0
126 22  1  97  0
126 23  5  96  0
126 24  5 217  0
127  1 14 187  0
127  2 13 156  0
127  3 10 136  0
127  4 16  67  0
127  5 14 107  0
127  6 14 216  0
127  7 14 215  0
127  8 16 264  0
127  9  1 254  0
127 10  1 244  0
127 11  2 323  0
127 12  2 204  0
127 13  2 244  0
127 14  3 364  0
127 15  2 574  0
127 16  2 284  0
127 17 16 214  0
127 18  2 365  0
127 19  1 275  0
127 20  1 245  0
127 21  1 265  0
127 22  2 295  0
127 23  2 265  0
127 24  2 255  0
128  1  3 135  0
128  2  1 195  0
128  3  1 255  0
128  4  1 245  0
128  5  3 125  0
128  6  3 195  0
128  7  3 224  0
128  8  5 224  0
128  9  5 193  0
128 10  5 273  0
```

```
128 11  7 253  0
128 12  7 294  0
128 13  5 343  0
128 14  6 361  0
128 15  5 321  0
128 16  4 342  0
128 17  6 334  0
128 18  5 195  0
128 19  4  96  0
128 20  4 107  0
128 21  3 147  0
128 22  4 137  0
128 23  3 147  0
128 24  3  97  0
129  1  4 167  0
129  2  4 107  0
129  3  2  87  0
129  4  5  87  0
129  5  4  97  0
129  6  5  57  0
129  7  5 137  0
129  8  3  84  0
129  9  4 173  0
129 10  6 273  0
129 11  5 282  0
129 12  5 303  0
129 13  5 341  0
129 14  3 353  0
129 15  5 312  0
129 16  3 214  0
129 17  4 234  0
129 18  3 175  0
129 19  2 156  0
129 20  2 117  0
129 21  2 187  0
129 22  3 187  0
129 23  1 256  0
129 24  1 276  0
130  1  3 286  0
130  2  5 217  0
130  3  3 107  0
130  4  3  87  0
130  5  5  87  0
130  6  3  87  0
130  7  4  85  0
130  8 10 174  0
130  9 10 174  0
130 10 13 131  0
130 11 11 252  0
130 12 11 303  0
130 13 14 241  0
130 14 12 311  0
130 15 10 242  0
130 16 13 292  0
130 17 13 284  0
130 18 16 464  0
130 19  1 195  0
130 20 16 135  0
130 21  2 125  0
130 22 15 146  0
```

```
130 23  1 106  0
130 24  1 106  0
131  1 13 147  0
131  2  6  27  0
131  3  9  87  0
131  4  8 117  0
131  5  9 177  0
131  6 15  57  0
131  7 10 115  0
131  8 10 174  0
131  9 12 203  0
131 10 12 281  0
131 11 14 351  0
131 12 14 351  0
131 13 13 351  0
131 14 13 371  0
131 15 12 381  0
131 16 13 392  0
131 17 13 384  0
131 18 14 394  0
131 19 14 245  0
131 20 14 275  0
131 21 14 225  0
131 22 13 165  0
131 23 13 105  0
131 24 13  55  0
132  1 11 225  0
132  2 11 215  0
132  3 10 325  0
132  4  9 215  0
132  5 10 255  0
132  6  9 335  0
132  7  9 314  0
132  8 10 234  0
132  9 10 285  0
132 10 10 305  4
132 11 10 224  0
132 12 10 244  0
132 13  7 204  0
132 14  7 295  0
132 15  6 225  0
132 16  9 264  0
132 17  9 264  0
132 18  8 194  0
132 19 11 175  0
132 20 11  55  0
132 21  3 177  0
132 22  3  57  0
132 23  4  87  0
132 24  4 187  0
133  1  4  87  0
133  2  4 167  0
133  3  3 177  0
133  4  6  77  0
133  5 13  97  0
133  6 14  57  0
133  7 16  75  0
133  8  3 254  0
133  9  5 312  0
133 10  5 293  0
```

```
133 11  5 271  0
133 12  5 262  0
133 13  4 351  0
133 14  4 214  0
133 15  4 284  0
133 16  4 304  0
133 17  4 274  0
133 18  5 135  0
133 19  6 135  0
133 20  8 305 37
133 21 14 316  2
133 22  4 137  0
133 23  1 115  0
133 24  1 136  1
134  1  2 215  0
134  2  2 176  0
134  3  3 136  0
134  4  3 155  0
134  5  4 215  0
134  6  3 135  0
134  7  2 194  0
134  8  2 154  0
134  9  5 154  0
134 10  5 214  0
134 11  6 232  0
134 12  6 233  0
134 13  7 293  0
134 14  7 461  0
134 15  8 402  0
134 16  8 423  0
134 17  8 344  0
134 18 10 554  0
134 19 12 384  0
134 20 10 435  0
134 21 11 344  0
134 22 11 334  0
134 23 11 514  0
134 24 11 404  0
135  1 12 424  0
135  2 11 294  0
135  3 10 324  0
135  4  9 404  0
135  5 10 345  0
135  6 10 324  0
135  7 10 324  0
135  8 10 274  0
135  9  9 344  0
135 10  9 414  0
135 11 10 334  0
135 12 10 293  0
135 13  8 274  0
135 14 10 253  0
135 15  8 173  0
135 16  9 234  0
135 17  9 224  0
135 18 10  94  0
135 19 10  75  0
135 20  9 105  0
135 21 16 127  0
135 22  9  96  0
```

```
135 23  8 136  0
135 24  8 217  0
136  1  9 196  0
136  2  9 246  0
136  3  9 286  0
136  4 10 306  0
136  5 11 276  0
136  6  8 305  0
136  7  9 315  0
136  8 10 304  0
136  9 10 244  0
136 10  9 371  0
136 11  9 393  0
136 12  9 234  0
136 13  9 354  0
136 14  9 361  0
136 15  9 351  0
136 16 10 253  0
136 17 10 314  0
136 18  9 234  0
136 19 11 205  0
136 20 10 146  0
136 21 11 256  0
136 22 11 365  0
136 23 12 226  0
136 24 12 226  0
137  1 11 206  0
137  2 11 266  0
137  3 11 235  0
137  4 10 255  0
137  5  9 255  0
137  6  9 255  0
137  7 10 284  0
137  8 10 263  0
137  9  9 272  0
137 10 10 382  0
137 11 10 372  0
137 12 10 371  0
137 13  9 373  0
137 14 10 312  0
137 15 11 343  0
137 16 12 254  0
137 17 12 314  0
137 18 13 284  0
137 19 14 195  0
137 20 14 256  0
137 21 14 176  0
137 22 14 206  0
137 23 13  66  0
137 24 13  86  0
138  1 12 136  0
138  2 11  86  0
138  3  8  86  0
138  4  4  67  0
138  5  7  87  0
138  6 12 116  0
138  7 10 174  0
138  8 12 164  0
138  9  8 154  0
138 10  8 214  0
```

```
138 11  8 344  0
138 12  8 264  0
138 13  9 264  0
138 14  8 314  0
138 15 10 254  0
138 16  9 254  0
138 17 13 214  0
138 18 12 164  0
138 19 12  35  0
138 20 15  86  0
138 21  5  87  0
138 22 13  47  0
138 23  8 315  0
138 24  8 175  0
139  1  6 115  0
139  2  5  85  0
139  3  5 105  0
139  4 11 175  0
139  5  5  85  0
139  6  8 235  0
139  7  9 234  0
139  8  9 233  0
139  9  9 304  0
139 10 10 304  0
139 11 10 244  0
139 12 10 294  0
139 13  9 313  0
139 14  9 333  0
139 15  8 353  0
139 16  8 423  0
139 17  9 324  0
139 18  8 254  0
139 19  8 195  0
139 20  8 176  0
139 21 11 236  0
139 22 11 226  0
139 23 11 165  0
139 24 11 127  0
140  1  7  67  0
140  2 11 336  0
140  3 11 286  0
140  4 12 246  0
140  5 11 286  0
140  6 11 315  0
140  7 11 344  0
140  8 12 284  0
140  9 11 263  0
140 10 14 231  0
140 11  8 263  0
140 12  8 214  0
140 13  7 271  0
140 14  9 271  0
140 15  8 283  0
140 16  8 254  0
140 17  8 224  0
140 18  8 164  0
140 19 14 126  0
140 20 14 206  0
140 21 13 166  0
140 22 13 197  0
```

```
140 23 14 186  0
140 24 14 136  0
141  1  3 136  0
141  2 16 106  0
141  3  2  57  0
141  4 11  57  0
141  5  7 106  0
141  6  8 176  0
141  7  8 144  0
141  8  6 134  0
141  9  4 153  0
141 10 10 134  0
141 11  5 241  0
141 12  5 174  0
141 13 16 192  0
141 14 10 191  0
141 15 12 202  0
141 16 13 211  0
141 17 13 164  0
141 18 13 195  0
141 19 15 196  0
141 20 16 336  0
141 21 16 305  0
141 22 16 225  0
141 23  1 185  0
141 24  1 215  0
142  1  2 146  0
142  2  2 146  0
142  3 16  76  0
142  4 16  46  0
142  5 15  57  0
142  6 15 177  0
142  7  2 194  0
142  8  2 374  0
142  9  3 322  0
142 10  2 451  0
142 11  2 371  0
142 12  2 254  0
142 13  2 361  0
142 14  5 252  0
142 15  4 331  0
142 16  4 294  0
142 17  3 325  0
142 18 16 236  0
142 19 14 157  1
142 20  1 185  0
142 21 16 216  0
142 22  1 166  0
142 23 15 146  0
142 24 15 176  0
143  1  1 176  0
143  2  2 276  0
143  3  2 246  0
143  4  2 255  0
143  5  2 215  0
143  6  3 245  0
143  7  3 304  0
143  8  2 234  0
143  9  4 273  0
143 10  5 321  0
```

```
143 11  4 441  0
143 12  4 382  0
143 13  3 421  0
143 14  3 361  0
143 15  9 274  0
143 16 16 252  0
143 17  2 315  0
143 18  7 155  0
143 19 14 186  0
143 20  2 126  0
143 21  4 215  0
143 22  3 177  0
143 23  3 155  0
143 24  3 146  0
144  1  2 147  0
144  2  2 385  0
144  3  2 305  0
144  4  3 365  0
144  5  3 345  0
144  6  3 345  0
144  7  3 384  0
144  8  4 414  0
144  9  5 372  0
144 10  4 391  0
144 11  5 431  0
144 12  5 431  0
144 13  5 461  0
144 14  5 522  0
144 15  6 482  0
144 16  6 482  0
144 17  6 373  0
144 18  6 404  0
144 19  5 235  0
144 20  5 215  0
144 21  6 196  0
144 22  6 156  0
144 23  4 117  0
144 24  4 127  0
145  1  4 107  0
145  2  3 227  0
145  3  5 187  0
145  4  5 177  0
145  5  3 237  0
145  6  4 227  0
145  7  2 155  0
145  8  3 152  0
145  9  2 272  0
145 10  4 291  0
145 11  4 411  0
145 12  4 453  0
145 13  5 421  0
145 14  5 431  0
145 15  5 491  0
145 16  5 421  0
145 17  4 373  0
145 18  6 304  0
145 19  6 225  0
145 20  7 226  0
145 21  8 156  0
145 22  5  66  0
```

```
145 23  2  87  0
145 24  2 177  0
146  1  4 137  0
146  2  3 127  0
146  3  2  47  0
146  4  1 167  0
146  5  5 137  0
146  6  8 197  0
146  7  7  66  0
146  8  9 204  0
146  9 15 122  0
146 10  3 211  0
146 11  2 311  0
146 12  2 331  0
146 13  4 343  0
146 14  6 491  0
146 15  8 551  0
146 16  2 293  0
146 17  9 253  0
146 18  7 214  0
146 19  8 265  0
146 20  8 185  0
146 21  1 215  1
146 22  6 116 37
146 23  1  66  0
146 24  1 125  0
147  1  4  85  0
147  2  5 135  0
147  3  4 106  0
147  4  7 176  1
147  5  7 105  0
147  6 10  85  0
147  7 10 185  0
147  8  9 154  0
147  9 11 252  0
147 10 12 251  0
147 11 13 211  0
147 12 13 224  0
147 13 10 252  0
147 14  6 233  0
147 15  8 312  0
147 16  9 234  0
147 17 11 194  0
147 18  9 164  0
147 19  8 136  0
147 20  7 106  0
147 21  9 157  0
147 22 12 137  0
147 23 14  87  0
147 24 14  87  0
148  1 13 127  0
148  2 12 137  0
148  3 15 117  0
148  4 14  57  0
148  5 15  77  0
148  6 16  37  0
148  7  8  75  0
148  8  4  94  0
148  9  8 164  0
148 10 14 112  0
```

```
148 11 13 201  0
148 12 13 244  0
148 13  1 281  0
148 14 13 171  0
148 15 13 211  0
148 16 13 231  0
148 17 12 164  0
148 18 13 214  0
148 19 13 216  0
148 20 14 206  0
148 21 15 216  0
148 22  1 175  0
148 23 16 186  0
148 24 16 176  0
149  1 14 106  0
149  2 13  57  0
149  3 12 117  0
149  4 11  87  0
149  5  9  67  0
149  6 13  87  0
149  7 12  84  0
149  8 16 104  0
149  9  9 194  0
149 10 14 241  0
149 11 13 301  0
149 12 13 321  0
149 13 13 331  0
149 14 14 341  0
149 15 12 331  0
149 16 14 361  0
149 17 15 324  0
149 18 15 384  0
149 19 15 355  0
149 20 15 425  0
149 21 15 255  0
149 22 16 165  0
149 23 16 126  0
149 24 16 146  0
150  1 13  96  0
150  2 14 117  0
150  3 12 147  0
150  4 13 147  0
150  5 13 137  0
150  6 13 117  0
150  7 14 205  0
150  8 14 232  0
150  9 15 271  0
150 10 15 331  0
150 11 13 321  0
150 12 13 381  0
150 13 14 321  0
150 14 14 461  0
150 15 15 381  0
150 16 16 442  0
150 17 15 482  0
150 18 15 444  0
150 19 15 445  0
150 20 15 345  0
150 21 16 225  0
150 22 15 166  0
```

```
150 23 15 176  0
150 24 15 136  0
151  1 13 147  0
151  2 14 147  0
151  3 14 137  0
151  4 13 117  0
151  5 12 157  0
151  6 13 117  0
151  7 13 195  0
151  8 15 192  0
151  9 16 343  0
151 10 15 371  0
151 11 15 401  0
151 12 15 381  0
151 13 16 431  0
151 14 15 501  0
151 15 15 431  0
151 16 15 421  0
151 17 15 373  0
151 18 15 414  0
151 19 15 365  0
151 20 15 335  0
151 21 15 265  0
151 22 15 225  0
151 23 14 176  0
151 24 14 206  0
152  1 14 196  0
152  2 14  96  0
152  3 14 166  0
152  4 13 136  0
152  5 12 146  0
152  6 13 106  0
152  7 14 164  0
152  8 16 264  0
152  9 15 272  0
152 10  2 181  0
152 11 16 341  0
152 12 16 234  0
152 13  2 301  0
152 14  1 341  0
152 15 16 381  0
152 16 15 371  0
152 17 16 384  0
152 18 15 364  0
152 19 15 385  0
152 20 15 375  0
152 21 15 405  0
152 22 15 305  0
152 23 16 235  0
152 24 16 145  0
153  1 15 155  0
153  2 16  76  0
153  3  7 106  0
153  4 14  77  0
153  5 14 157  0
153  6 15 157  0
153  7  1 134  0
153  8  1 333  0
153  9  2 361  0
153 10  3 331  0
```

```
153 11  6 173  0
153 12  6 221  0
153 13  3 212  0
153 14 14 144  0
153 15  3 154  0
153 16  1 183  0
153 17  1 243  0
153 18 16 204  0
153 19  1 135  0
153 20 16 295  0
153 21 16 305  0
153 22 16 285  0
153 23  5 325  0
153 24  5 106  1
154  1 16 126  1
154  2  5  46  0
154  3  7  85  1
154  4 14  45  0
154  5 14  76  0
154  6  1 106  3
154  7  2 165  2
154  8  3 274  0
154  9  3 272  0
154 10  4 221  0
154 11  6 301  0
154 12  6 341  0
154 13  6 321  0
154 14  5 322  0
154 15  6 354  0
154 16  7 284  0
154 17  7 264  0
154 18  6 184  0
154 19  5 235  0
154 20  8 176  8
154 21 15 226  1
154 22  1 236  0
154 23  1 206  0
154 24  1 176  0
155  1  4 166  0
155  2  2  87  0
155  3  4 167  0
155  4  4 137  0
155  5  6 186  0
155  6  8 155  0
155  7  9 194  0
155  8  9 314  0
155  9  9 264  0
155 10  9 203  0
155 11  9 292  0
155 12  9 304  0
155 13  8 271  0
155 14  8 331  0
155 15 10 331  0
155 16  9 341  0
155 17  9 313  0
155 18 10 194  0
155 19 13 155  0
155 20 13 176  0
155 21 13 166  0
155 22 13  85  0
```

```
155 23 14 195  0
155 24 14 135  0
156  1 13 185  0
156  2 12 205  0
156  3 13 185  0
156  4 13 205  0
156  5 13 195  0
156  6 13 174  0
156  7 14 304  0
156  8 13 264  0
156  9 13 331  0
156 10 13 311  0
156 11 13 411  0
156 12 13 391  0
156 13 13 382  0
156 14 13 551  0
156 15 12 481  0
156 16 13 371  0
156 17 12 324  0
156 18 13 254  0
156 19 14 246  0
156 20 13 206  0
156 21 13 196  0
156 22 14 225  0
156 23 14 135  0
156 24 14 156  0
157  1 13  96  0
157  2 12 136  0
157  3 11 195  0
157  4 11 215  0
157  5 11 235  0
157  6 11 205  0
157  7 11 234  0
157  8 12 334  0
157  9 13 301  0
157 10 13 321  0
157 11 12 371  0
157 12 12 301  0
157 13 12 351  0
157 14 14 381  0
157 15 13 351  0
157 16 13 371  0
157 17 14 284  0
157 18 15 494  0
157 19 15 305  0
157 20 15 295  0
157 21 15 215  0
157 22 15 185  0
157 23 15 145  0
157 24 15  66  0
158  1 13  86  0
158  2 14 106  0
158  3 14 137  0
158  4  8  76  0
158  5  9  77  0
158  6 10  66  0
158  7 12 224  0
158  8 13 241  0
158  9 13 252  0
158 10 13 341  0
```

```
158 11 14 321  0
158 12 14 421  0
158 13 13 381  0
158 14 13 321  0
158 15 12 281  0
158 16 13 271  0
158 17 12 281  0
158 18 13 254  0
158 19 15 285  0
158 20 15 325  0
158 21 16 215  0
158 22  1 175  0
158 23  1 175  0
158 24  1 156  0
159  1  2 176  0
159  2  2 156  0
159  3 16  66  0
159  4 14  66  0
159  5  3  66  0
159  6  9  86  0
159  7  6 154  0
159  8  6 263  0
159  9  7 273  0
159 10  7 213  0
159 11  6 232  0
159 12  6 362  0
159 13 15 213  0
159 14  2 271  0
159 15  2 211  0
159 16 15 301  0
159 17 16 213  0
159 18 16 194  0
159 19 15 245  0
159 20 16 255  0
159 21  1 245  0
159 22  1 195  0
159 23  1 185  0
159 24  1 145  0
160  1  1 116  0
160  2  2 186  0
160  3  1  86  0
160  4 14 126  0
160  5 16  67  0
160  6 14  76  0
160  7  1 164  0
160  8  2 243  0
160  9  2 262  0
160 10  2 192  0
160 11 10 192  0
160 12 10 224  0
160 13 14 291  0
160 14 13 321  0
160 15 14 381  0
160 16 14 321  0
160 17 14 352  0
160 18 14 424  0
160 19 15 385  0
160 20 16 215  0
160 21 15 215  0
160 22 16 185  0
```

```
160 23 16 165  0
160 24 16 176  0
161  1 15 176  0
161  2 14  66  0
161  3 13 107  0
161  4 11  87  0
161  5 13  87  0
161  6 12  76  0
161  7 12 134  0
161  8 14 171  0
161  9  8 154  0
161 10 14 301  0
161 11 13 432  0
161 12 13 501  0
161 13 14 381  0
161 14 16 351  0
161 15 16 381  0
161 16 16 343  0
161 17 15 584  0
161 18 15 304  0
161 19 14 195  0
161 20 15 195  0
161 21 15 126  0
161 22 14 165  0
161 23 13 166  0
161 24 13 215  0
162  1 12 235  0
162  2 13 165  0
162  3 12 215  0
162  4 13 215  0
162  5 12 265  0
162  6 12 265  0
162  7 12 324  0
162  8 11 345 11
162  9 12 255 41
162 10 12 284  0
162 11 13 344  0
162 12 13 344  0
162 13 13 381  0
162 14 13 581  0
162 15 13 285  0
162 16 14 302  1
162 17 13 254  0
162 18 15 344  0
162 19 13 215  0
162 20 13 245  0
162 21 14 215  0
162 22 14 215  0
162 23 11 146  0
162 24 11 206  0
163  1 11 275  0
163  2 12 185  0
163  3 12 205  0
163  4 13 235  0
163  5 12 215  0
163  6 13 175  0
163  7 13 294  0
163  8 13 364  0
163  9 13 372  0
163 10 12 302  0
```

```
163 11 12 281  0
163 12 12 351  0
163 13 13 241  0
163 14 11 343  0
163 15 13 282  0
163 16 13 301  0
163 17 13 363  0
163 18 14 254  0
163 19 14 195  0
163 20 15 186  0
163 21 15 187  0
163 22 15 195  0
163 23 16 196  0
163 24 16 116  0
164  1  5  96  0
164  2 12 177  0
164  3 11  87  0
164  4 13 107  0
164  5 11  77  0
164  6 14  27  0
164  7 14  95  0
164  8 14 102  0
164  9 13 193  0
164 10 14 212  0
164 11 14 211  0
164 12 14 242  0
164 13 11 301  0
164 14 14 251  0
164 15 15 191  0
164 16 14 301  0
164 17 14 291  0
164 18 14 234  0
164 19 14 205  0
164 20  1 205  0
164 21 16 225  0
164 22 15 255  0
164 23 15 245  0
164 24 15 205  0
165  1 16 165  0
165  2  1 105  0
165  3  1  85  0
165  4 15  96  0
165  5 13  46  0
165  6 14  66  0
165  7  1 224  0
165  8  2 253  0
165  9  4 153  0
165 10  2 202  0
165 11  4 214  0
165 12  4 213  0
165 13  2 301  0
165 14  1 261  0
165 15  1 253  0
165 16  2 274  0
165 17  2 275  0
165 18 14 283  0
165 19 15 225  0
165 20 15 205  0
165 21 16 215  0
165 22 16 205  0
```

```
165 23 15 175  0
165 24 15 155  0
166  1  7 215  3
166  2 16  75 10
166  3  1  45  0
166  4 16 145  0
166  5  2 165  0
166  6  2 185  0
166  7  1 135  0
166  8  3 134  0
166  9  4 164  0
166 10  4 214  0
166 11  5 223  0
166 12  5 261  0
166 13  5 234  0
166 14  4 244  0
166 15  9 304  0
166 16  9 404  0
166 17 13 104  0
166 18  7  94  0
166 19 12 125  0
166 20  9 115  0
166 21 14 175  0
166 22 14 175  0
166 23 14 145  0
166 24 14 195  1
167  1 10  85  0
167  2 15 155  0
167  3 15 135  0
167  4  8 125  0
167  5 12  55  0
167  6 14  95  0
167  7 14 125  0
167  8 13 135  0
167  9  6  94  0
167 10  9 141  0
167 11  9 281  0
167 12  9 283  0
167 13  9 294  0
167 14  9 305 11
167 15  9 345  8
167 16  9 634  0
167 17  9 374  3
167 18  9 285 27
167 19  9 215 40
167 20  8 145 37
167 21  8 235 40
167 22  8 175 32
167 23  8  65 23
167 24  8  75  3
168  1  8 105  0
168  2  7 155  0
168  3  7 135  0
168  4  7 135  0
168  5  7 225  1
168  6  7 235  0
168  7  7 205  0
168  8  6 224  0
168  9  6 225  0
168 10  4 195  0
```

```
168 11  8 343  0
168 12  8 344  0
168 13  7 344  0
168 14  6 354  0
168 15  6 354  0
168 16  5 364  0
168 17  5 364  0
168 18  4 374  0
168 19  3 374  0
168 20  3 374  0
168 21  2 384  0
168 22  2 384  0
168 23  1 394  0
168 24 16 394  0
169  1 16 394  0
169  2 15 404  0
169  3 15 404  0
169  4 14 414  0
169  5 13 414  0
169  6 13 424  0
169  7 12 424  0
169  8 11 424  0
169  9 11 542  0
169 10 12 461  0
169 11 12 511  0
169 12 11 421  0
169 13 12 361  0
169 14 12 421  0
169 15 12 394  0
169 16 11 391  0
169 17 12 394  0
169 18 12 224  0
169 19 13 215  0
169 20 13 216  0
169 21 13 186  0
169 22 13 247  0
169 23 13 216  0
169 24 11 206  0
170  1 11 267  0
170  2 11 226  0
170  3 11 296  0
170  4 11 306  0
170  5 10 345  0
170  6 10 465  0
170  7 11 484  0
170  8 11 463  0
170  9 11 622  0
170 10 11 481  0
170 11 10 441  0
170 12 11 511  0
170 13 10 421  0
170 14 11 391  0
170 15 12 471  0
170 16 12 471  0
170 17 13 463  0
170 18 12 424  0
170 19 12 364  0
170 20 11 364  0
170 21 11 454  0
170 22 11 384  0
```

```
170 23 11 454  0
170 24 11 354  0
171  1 11 304  0
171  2 11 254  0
171  3 10 304  0
171  4 11 264  0
171  5 10 144  0
171  6  9 274  0
171  7 10 264  0
171  8 10 284  0
171  9  9 264  0
171 10 10 284  0
171 11 10 284  0
171 12 10 324  0
171 13  9 384  0
171 14  9 294  0
171 15 10 254  0
171 16 10 274  0
171 17 10 244  0
171 18 11 294  0
171 19 11 214  0
171 20 11 254  0
171 21 10 234  0
171 22 10 264  0
171 23 10 254  0
171 24 10 214  0
172  1 10 184  0
172  2 11 185  0
172  3 10 154  0
172  4 11 254  0
172  5 10 264  0
172  6  9 284  0
172  7  9 344  0
172  8 10 234  0
172  9 10 294  0
172 10  9 254  0
172 11  9 224  0
172 12  9 244  0
172 13  8 171  0
172 14  8 171  0
172 15 12 183  0
172 16 12 201  0
172 17 11 184  0
172 18 12 154  0
172 19 11 145  0
172 20 11 225  0
172 21 10 295  0
172 22  9 205  0
172 23  9 175  0
172 24  9 145  0
173  1 11 166  0
173  2 11 165  0
173  3 10 165  0
173  4 10 255  0
173  5 11 165  0
173  6  9 174  0
173  7 11 264  0
173  8 11 244  0
173  9 11 304  0
173 10 10 164  0
```

```
173 11  9 234  0
173 12  9 214  0
173 13  3 124  0
173 14 15 132  0
173 15 11  14  0
173 16  9 301  0
173 17 11 234  0
173 18 13  94  0
173 19 14 135  0
173 20 12 275  0
173 21 12 225  0
173 22 12 195  0
173 23 11 215  0
173 24 11 185  0
174  1 14 106  0
174  2 12 176  0
174  3 10 115  0
174  4 12 146  0
174  5  5 106  0
174  6  7  96  0
174  7  9 194  0
174  8  9 154  0
174  9  9 244  0
174 10  9 292  0
174 11 11 291  0
174 12 11 233  0
174 13 10 262  0
174 14 10 293  0
174 15  8 164  0
174 16 10 183  0
174 17 10 254  0
174 18 13 144  0
174 19 13 245  0
174 20 13 176  0
174 21 14 176  0
174 22 15 136  0
174 23  3  46  0
174 24  3  67  0
175  1 16 176  0
175  2 15 136  0
175  3 14  96  0
175  4 13  96  0
175  5  1  27  0
175  6 14  36  0
175  7 15  85  0
175  8  3 254  0
175  9  2 174  0
175 10  1 223  0
175 11 16 214  0
175 12 16 254  0
175 13  1 204  0
175 14 15 194  0
175 15  1 154  0
175 16 16 194  0
175 17 13 134  0
175 18 16  94  0
175 19 16  35  0
175 20  2  85  0
175 21 15  35  0
175 22  1 235  1
```

```
175 23  1 265  0
175 24  1 195  0
176  1  1 174  0
176  2  1 285  0
176  3  1 185  0
176  4  1 215  0
176  5  2 174  0
176  6  1 214  0
176  7  2 285  1
176  8  1 205  4
176  9  1 285  1
176 10  1 224  0
176 11  2 344  0
176 12  2 344  0
176 13  3 284  0
176 14  2 294  0
176 15  2 264  0
176 16 16 252  0
176 17  3 233  0
176 18  2 494  0
176 19  6 175  0
176 20  1 255  2
176 21  1 305  0
176 22  1 225  0
176 23  1 205  0
176 24  1 285  0
177  1  3 215  0
177  2  3 265  0
177  3  3 295  0
177  4  4 225  0
177  5  4 215  0
177  6  3 175  0
177  7  3 155  0
177  8  4 254  0
177  9  6 204  0
177 10  4 183  0
177 11  2 171  0
177 12  2 341  0
177 13  3 242  0
177 14  2 251  0
177 15  5 285  1
177 16  4 155  6
177 17  5 175  1
177 18 10 105  2
177 19  8  95  1
177 20 15 185  0
177 21  1 125  0
177 22 16 175  0
177 23  2 165  0
177 24  2 155  0
178  1  3 215  0
178  2  2 175  0
178  3 15 165  0
178  4  1 155  0
178  5 16 165  0
178  6  1 205  0
178  7  2 235  0
178  8  4 275  0
178  9  3 274  0
178 10  2 334  0
```

```
178 11  2 354  0
178 12  2 423  0
178 13  2 491  0
178 14  2 554  0
178 15  2 254  4
178 16  2 414  0
178 17  2 364  0
178 18  2 335  2
178 19  1 226  2
178 20  2 195  0
178 21  1 195  0
178 22  2 375  0
178 23  2 295  0
178 24  2 345  0
179  1  2 305  0
179  2  2 304  0
179  3  3 315  0
179  4  2 334  0
179  5  3 254  0
179  6  3 224  0
179  7  2 304  0
179  8  3 264  0
179  9  3 303  0
179 10  3 304  0
179 11  4 264  0
179 12  4 224  4
179 13  4 354  3
179 14  2 324  3
179 15  2 324  2
179 16  2 503  2
179 17  2 474  1
179 18  3 464  1
179 19  3 345  0
179 20  3 325  0
179 21  3 305  0
179 22  2 235  0
179 23  2 245  0
179 24  2 254  0
180  1  2 395  0
180  2  2 385  0
180  3  3 345  0
180  4  3 275  0
180  5  3 315  0
180  6  3 324  0
180  7  3 294  0
180  8  4 324  0
180  9  3 354  0
180 10  4 343  0
180 11  4 314  0
180 12  4 442  0
180 13  2 342  0
180 14  6 754  1
180 15  3 125  3
180 16 15 235  1
180 17  2 225  1
180 18 15 335  1
180 19  2 445  2
180 20  2 395  1
180 21  4 255  2
180 22  3 285  1
```

```
180 23  3 295  2
180 24  3 215  1
181  1  1 105  1
181  2  4  95  1
181  3 15 145  1
181  4  1 155  1
181  5  1 185  1
181  6  2 275  1
181  7  2 305  1
181  8  2 194  1
181  9  2 294  0
181 10  2 304  1
181 11  3 314  0
181 12  3 204  1
181 13  4 244  0
181 14 16 114  1
181 15  3 202  1
181 16  1 202  0
181 17 16 273  1
181 18 15 204  0
181 19 15 155  1
181 20  5 184  0
181 21  7  95  1
181 22  9  95  0
181 23  4 216  0
181 24  4 146  1
182  1  2 175  0
182  2  4 165  0
182  3  3 175  1
182  4 16 155  0
182  5  3 155  0
182  6  2 165  1
182  7  2 145  0
182  8  2 135  0
182  9  2 244  0
182 10  3 234  1
182 11  2 221  0
182 12  2 243  1
182 13  1 194  2
182 14  1 252  1
182 15 15 342  1
182 16 15 554  0
182 17  1 324  1
182 18  5 175  0
182 19 15 185  0
182 20 15 215  1
182 21  1  95  0
182 22  8 185  0
182 23 15 216  1
182 24 15 125  0
183  1 14 185  0
183  2  5  55  1
183  3 15 145  0
183  4 16 125  0
183  5 15 135  1
183  6  2  95  0
183  7  2  85  0
183  8 15 134 24
183  9 16 154  0
183 10 11 137  0
```

```
183 11  1 111  0
183 12  1 134  0
183 13  3 191  0
183 14  1 191  0
183 15 15 171  0
183 16 14 251  0
183 17 15 281  0
183 18 15 284  0
183 19 15 185  0
183 20 16 215  0
183 21 16 225  0
183 22 15 255  0
183 23 16 185  0
183 24 16 165  0
184  1 15 125  0
184  2 12  85  0
184  3 13 126  0
184  4 13 126  0
184  5 15 156  0
184  6 11  56  0
184  7 10  95  0
184  8  9  95  0
184  9  1 104  0
184 10  8 124  0
184 11  1 153  0
184 12  1 172  0
184 13 16 221  0
184 14 15 251  0
184 15 12 202  0
184 16 15 341  0
184 17 15 361  0
184 18 15 264  0
184 19 14 205  0
184 20 15 225  0
184 21 15 235  0
184 22 15 255  0
184 23 16 185  0
184 24 16  85  0
185  1 12 135  0
185  2 10 106  0
185  3 12  96  0
185  4 10 136  0
185  5 11 105  0
185  6 12  95  0
185  7 13 115  0
185  8 13 135  0
185  9 14 204  0
185 10 13 172  0
185 11 14 211  0
185 12 14 211  0
185 13 13 232  0
185 14 14 191  0
185 15 13 251  0
185 16 12 212  0
185 17 11 194  0
185 18 13 184  0
185 19 15 354  0
185 20 16 175  0
185 21  1 185  0
185 22  1 195  0
```

```
185 23  1 185  0
185 24  1 125  0
186  1  1  55  0
186  2  2 136  0
186  3  1  96  0
186  4  3  25  0
186  5  3 136  0
186  6  9  85  0
186  7  5 134  0
186  8  4 204  0
186  9  5 223  0
186 10  5 223  0
186 11  4 252  0
186 12  4 203  0
186 13  4 231  0
186 14  5 224  0
186 15  5 212  0
186 16  5 251  0
186 17  5 202  0
186 18  5 164  0
186 19  3 104  0
186 20  2 146  0
186 21  1 166  0
186 22  2 166  0
186 23  3 156  0
186 24  3 175  0
187  1  3 186  0
187  2 16 125  0
187  3  1  85  0
187  4  3 186  0
187  5  3 146  0
187  6 16  35  0
187  7  4 134  0
187  8  4 114  0
187  9  3 192  0
187 10  5 143  0
187 11  4 154  0
187 12  4 154  0
187 13  2 264  0
187 14 12 354 16
187 15 12 364  8
187 16 16 335  1
187 17  2 185  3
187 18 15 135  0
187 19  5 215  0
187 20  8 215  0
187 21  7 136  0
187 22  1 255 43
187 23 16 125 42
187 24 16 115 14
188  1  7 176  5
188  2  3 187  0
188  3 12 105  0
188  4 15 145  0
188  5  2 125  0
188  6  1 135  0
188  7  3 135  0
188  8  5 174  0
188  9  3 114  0
188 10  4 184  0
```

```
188 11  1 234  0
188 12  1 213  0
188 13  2 211  1
188 14  2 193  0
188 15  2 181  0
188 16  1 221  0
188 17  3 214  0
188 18 15 314  0
188 19 15 214  0
188 20 15 205  0
188 21 15 135  0
188 22 15 185  0
188 23 16 215  0
188 24 16 205  0
189  1  1 185  0
189  2  1 185  0
189  3  2 105  0
189  4 15  45  0
189  5  3 165  0
189  6 14  66  0
189  7  2 144  0
189  8  3 134  0
189  9  7 124  0
189 10  4 164  0
189 11  2 213  0
189 12  2 272  0
189 13  2 251  0
189 14  3 192  0
189 15  2 371  0
189 16  2 283  0
189 17  2 164  0
189 18  1 124  0
189 19  4 115  0
189 20  2 126  0
189 21  4 157  0
189 22  4 177  0
189 23  2 147  0
189 24  2 157  0
190  1  1 176  0
190  2  2 206  0
190  3  3 205  0
190  4  3 126  0
190  5  3 116  0
190  6  3  86  0
190  7  4 104  0
190  8  4 134  0
190  9  4 173  0
190 10  5 272  0
190 11  4 253  0
190 12  4 351  0
190 13  4 302  0
190 14  2 301  0
190 15  2 332  0
190 16  3 314  0
190 17  2 313  0
190 18  4 214  0
190 19  3 145  0
190 20  2 126  0
190 21  2 177  0
190 22  2 295  0
```

```
190 23  2 285  0
190 24  2 225  0
191  1  3 215  0
191  2  3 215  0
191  3  3 175  0
191  4  3 175  0
191  5  3 215  0
191  6  3 215  0
191  7  3 314  0
191  8  2 384  0
191  9  2 353  0
191 10  4 322  0
191 11  4 381  0
191 12  4 351  0
191 13  4 341  0
191 14  4 391  0
191 15  4 302  0
191 16  4 311  0
191 17  5 281  0
191 18  3 274  0
191 19  5 165  0
191 20  3  56  0
191 21  2 255  0
191 22  2 275  0
191 23  2 205  0
191 24  2 135  0
192  1  1 205  0
192  2  2 275  0
192  3  2 285  0
192  4  2 325  0
192  5  3 265  0
192  6  3 235  0
192  7  3 244  0
192  8  4 274  0
192  9  5 261  0
192 10  6 224  0
192 11  5 272  0
192 12  5 234  3
192 13  5 222  0
192 14  4 223  0
192 15 12 273  0
192 16 11 255 12
192 17 11 335 37
192 18 10 155 13
192 19 11 245 63
192 20 13 145 12
192 21 15 155 13
192 22 15 265  0
192 23  1 135  0
192 24  1  95  0
193  1 12  75  0
193  2 11 105  0
193  3 16  64  0
193  4 13 135  0
193  5 13 105  0
193  6 13  85  0
193  7 15 154  0
193  8 16  84  0
193  9 15  95  0
193 10 16 155  0
```

```
193 11 16 194  0
193 12 16 204  0
193 13  5 184  0
193 14  3 161  0
193 15  1 193  0
193 16 11 244  0
193 17 12 144  0
193 18 15 245 34
193 19 13  75  5
193 20 12  95 11
193 21 11 135 21
193 22 13 115  9
193 23 14 135  4
193 24 14  85  1
194  1  2  95  0
194  2  9 304  1
194  3 10 345  0
194  4  9 245  1
194  5  9 225  1
194  6 10 215  2
194  7 10 335  0
194  8 10 305  0
194  9  9 304  4
194 10  9 254 13
194 11  9 324 11
194 12  9 204  1
194 13 10 134  4
194 14  9 184  0
194 15  9 234  0
194 16  9 204  0
194 17  9 204  0
194 18  8 214  0
194 19 11 235  1
194 20 10 255  2
194 21 11 195  0
194 22 10 245  1
194 23 12  95  0
194 24 12 175  1
195  1  9 165  0
195  2  9 165  0
195  3 10 175  0
195  4  9 164  0
195  5  9 135  0
195  6 10 145  0
195  7  9 194  0
195  8 10 174  0
195  9 11 134  0
195 10 12 134  1
195 11 11 114  6
195 12 11 144  0
195 13 14  84  0
195 14 13 134  0
195 15 10 124  0
195 16 12 194  0
195 17 11 104  0
195 18 12 134  0
195 19 12 154  0
195 20 14  44  0
195 21 16  85  0
195 22 13  65  0
```

```
195 23 14 136  0
195 24 14  26  0
196  1 10 115  0
196  2  9  45  0
196  3 10 135  0
196  4  8 195  0
196  5  9 205  0
196  6 10 145  0
196  7 10 235  0
196  8  9 194  0
196  9 12 164  0
196 10 11 194  0
196 11 11 212  0
196 12 11 194  0
196 13  9 194  0
196 14 11 201  0
196 15 12 242  0
196 16 13 174  0
196 17 12 125  0
196 18 13 214  0
196 19 12 135  0
196 20 12 125  0
196 21  1 245  0
196 22 14 275  0
196 23 14 165  0
196 24 14  85  0
197  1  5  86  0
197  2 11 146  0
197  3 12  66  0
197  4 12  46  0
197  5  8 126  0
197  6  8 145  0
197  7 12  85  0
197  8  2  84  0
197  9 11  84  0
197 10 13 114  0
197 11 13 144  0
197 12 13 133  0
197 13 10 174  0
197 14 11 235 35
197 15 15 257 18
197 16  1 245  2
197 17  2 185  3
197 18  2 115  1
197 19  3 145  0
197 20 12 135  0
197 21  4 116  1
197 22  1  85  0
197 23 11 125  0
197 24 11  56  0
198  1 15  46  0
198  2  9 116  0
198  3  9 136  0
198  4  2  46  0
198  5  3  27  0
198  6  5  27  0
198  7  3  55  0
198  8  3  75  0
198  9  5  85  0
198 10  4  84  0
```

```
198 11  2 224  0
198 12  2  84  0
198 13  2 142  0
198 14  9 124  0
198 15  9 114  0
198 16  5 182  0
198 17  8 214  0
198 18  6 124  0
198 19  1  45  0
198 20  2 254  0
198 21  3 225  0
198 22 16  85  0
198 23  4 135  0
198 24  4  95  0
199  1  6  65  0
199  2  8 135  0
199  3 14  65  0
199  4  6  26  0
199  5 16 126  0
199  6  3 106  0
199  7 16  95  0
199  8  7 124  0
199  9  1  74  0
199 10  4 154  0
199 11  6 174  0
199 12  6 174  0
199 13  5 144  0
199 14  1 263  0
199 15  2 216  0
199 16  1 302  0
199 17 15 174  0
199 18 14 374  0
199 19 16 175  0
199 20  1 175  0
199 21  3 105  0
199 22 16  85  0
199 23 16 155  0
199 24 16  85  0
200  1  1 106  0
200  2  3  46  0
200  3  1  76  0
200  4 14  35  0
200  5  3  46  0
200  6  3 106  0
200  7  4 145  0
200  8  4 234  0
200  9  3 174  0
200 10  5 204  0
200 11  2 234  0
200 12  2 262  0
200 13  1 241  0
200 14  3 213  0
200 15  6 344  0
200 16  3 306  5
200 17  1 126  0
200 18 15  75  0
200 19 14  76  0
200 20 15 106  0
200 21  1 166  0
200 22  1 126  0
```

```
200 23  2 136  0
200 24  2 186  0
201  1  3 176  0
201  2  3 156  0
201  3  4 115  0
201  4  3 136  0
201  5  3 146  0
201  6  3 176  0
201  7  3 215  0
201  8  4 244  0
201  9  4 234  0
201 10  3 284  0
201 11  3 313  0
201 12  3 261  0
201 13  5 271  0
201 14  5 281  0
201 15  4 261  0
201 16  3 272  0
201 17  3 214  0
201 18  2 264  0
201 19  3 165  0
201 20  3 155  0
201 21  3 205  0
201 22  4 176  0
201 23  4 146  0
201 24  4 135  0
202  1  3 156  0
202  2  3  75  0
202  3  3 145  0
202  4  4 126  0
202  5  6 106  0
202  6  5 106  0
202  7  6 144  0
202  8  7 244  0
202  9  7 164  0
202 10  6 194  0
202 11  5 212  0
202 12  5 293  0
202 13  5 261  0
202 14  5 214  0
202 15  8 254  0
202 16  1 211  0
202 17  2 242  0
202 18  3 174  0
202 19  4 135  0
202 20  3 135  0
202 21  7 215  0
202 22  5  85  0
202 23  5 116  0
202 24  5  86  0
203  1  5 136  0
203  2  6  77  0
203  3  4 136  0
203  4  6 146  0
203  5  4  86  0
203  6  7 155  0
203  7  7 165  0
203  8  9 214  0
203  9  9 154  0
203 10  6  84  0
```

```
203 11  7 144  0
203 12  7 154  0
203 13  2 153  0
203 14  4 193  0
203 15 12 145  0
203 16 10 135  0
203 17 11  95  0
203 18 16  75  0
203 19  4 126  0
203 20  4 186  0
203 21  6 116  0
203 22  1  85  0
203 23  3 196  0
203 24  3  47  0
204  1  6  76  0
204  2  1  35  0
204  3  3  47  0
204  4  4  66  0
204  5 10  55  0
204  6 10  86  0
204  7  9 245  0
204  8  9 134  0
204  9 15 102  0
204 10  6 174  0
204 11  9 143  0
204 12  9 163  0
204 13 11 114  0
204 14  2 161  0
204 15 16 212  0
204 16  4 192  0
204 17  2 222  0
204 18  3 124  0
204 19  1 115  0
204 20  2 136  0
204 21  2 255  0
204 22  2 295  0
204 23  3 245  0
204 24  3 195  0
205  1  3 205  0
205  2  5  95  0
205  3  2 115  0
205  4 16  86  0
205  5  3 166  0
205  6  3 156  0
205  7  1 104  0
205  8  1 144  0
205  9  2 134  0
205 10 16 163  0
205 11  3 281  0
205 12  3 321  0
205 13  3 332  0
205 14  2 381  0
205 15  3 412  0
205 16  3 382  0
205 17  3 354  0
205 18  2 235  0
205 19  3 176  0
205 20  4 176  0
205 21 10 264  0
205 22 12 195  0
```

```
205 23 10 175  0
205 24 10 135  0
206  1 10  85  0
206  2 15  76  0
206  3  2 126  1
206  4  1  75  0
206  5  5 135  0
206  6  7  96  0
206  7  5 116  0
206  8  7 214  0
206  9  6 234  0
206 10  4 272  0
206 11  4 242  0
206 12  4 222  0
206 13  7 253  0
206 14  7 244  0
206 15  7 302  0
206 16  8 183  0
206 17  7 214  0
206 18  6 154  0
206 19  4 135  0
206 20 13  66  0
206 21 10  86  0
206 22  6 127  0
206 23  4 137  0
206 24  4 176  0
207  1  3 176  0
207  2  4 205  0
207  3  4 195  0
207  4  5 165  0
207  5  1  76  0
207  6  3 195  0
207  7  4 165  0
207  8  4 174  0
207  9  3 184  0
207 10  4 253  0
207 11  5 241  0
207 12  5 182  0
207 13  5 221  0
207 14  4 291  0
207 15  4 321  0
207 16  4 211  0
207 17  4 214  0
207 18  6 145  0
207 19  6 146  0
207 20  5 147  0
207 21  4 107  0
207 22  4 177  0
207 23  5 157  0
207 24  5 156  0
208  1  3 187  0
208  2  5 157  0
208  3  5 177  0
208  4  6 137  0
208  5  8  86  0
208  6  4 147  0
208  7  5 156  0
208  8  7 204  0
208  9  6 214  0
208 10  8 234  0
```

```
208 11  4 134  0
208 12  4 283  0
208 13  5 222  0
208 14  5 241  0
208 15  4 124  0
208 16  5 212  0
208 17  3 254  0
208 18  2 234  0
208 19  2 136  0
208 20  4 117  0
208 21  8 167  0
208 22  8 176  0
208 23  8  36  0
208 24  8 196  0
209  1  9 136  0
209  2  8 117  0
209  3  6  67  0
209  4  4  47  0
209  5  7 127  0
209  6  7  76  0
209  7  8 215  0
209  8  8 284  0
209  9  7 184  0
209 10 10 123  0
209 11 11 173  0
209 12 11 203  0
209 13  8 261  0
209 14  4 281  0
209 15  6 222  0
209 16  4 281  0
209 17  5 213  0
209 18  4 144  0
209 19  2 165  0
209 20  1 186  0
209 21  2 126  0
209 22  5 106  0
209 23  4 116  0
209 24  4 136  0
210  1  4 166  0
210  2  4 106  0
210  3  4  86  0
210  4  3 146  0
210  5  5 186  0
210  6  4 116  0
210  7  4 155  0
210  8  4 234  0
210  9  5 301  0
210 10  5 321  0
210 11  5 381  0
210 12  5 391  0
210 13  5 342  0
210 14  5 224  0
210 15  3 351  0
210 16  3 382  0
210 17  3 374  0
210 18  3 314  0
210 19  3 285  0
210 20  2 195  0
210 21  2 137  2
210 22  3 156  0
```

```
210 23  4 156  0
210 24  4 176  0
211  1  4 126  0
211  2  4 166  0
211  3  4 135  0
211  4  5 146  0
211  5  5 116  0
211  6  5 126  0
211  7  6 135  0
211  8  8 244  0
211  9  9 204  0
211 10 10 173  0
211 11 13 201  0
211 12 13 262  0
211 13 10 271  0
211 14  1 171  0
211 15  9 164  0
211 16  1 211  0
211 17  3 203  0
211 18  1 214  0
211 19  1 125  0
211 20  2 116  0
211 21  3 117  0
211 22  4 107  0
211 23  1 117  0
211 24  1 147  0
212  1 14  47  0
212  2  5  77  0
212  3  4 147  0
212  4  4 187  0
212  5  5 197  0
212  6  5 107  0
212  7  9 175  0
212  8  5 146  0
212  9  9 214  0
212 10 16 104  0
212 11 15 114  0
212 12 15 181  0
212 13  1 231  0
212 14  2 261  0
212 15  2 201  0
212 16  2 152  0
212 17 12 182  0
212 18 13 114  0
212 19 13 135  0
212 20 14 146  0
212 21  3 156  0
212 22  4 147  0
212 23  2  47  0
212 24  2  67  0
213  1  6  97  0
213  2  4  97  0
213  3  7 127  0
213  4  7 217  0
213  5  4 117  0
213  6  7 186  0
213  7  7 176  0
213  8  7 234  0
213  9  7 253  0
213 10  9 214  0
```

```
213 11 11 192  0
213 12 11 232  0
213 13  5 212  0
213 14  3 261  0
213 15  3 291  0
213 16  5 191  0
213 17  6 113  0
213 18  6  94  0
213 19  4 145  0
213 20  7  86  0
213 21  6 116  0
213 22  4  87  0
213 23  6 196  0
213 24  6 156  0
214  1  6 116  0
214  2  4 137  0
214  3  6 196  0
214  4  7 185  0
214  5  6 106  0
214  6  7  95  0
214  7  5  74  0
214  8 10 294  0
214  9  9 244  0
214 10 10 294  0
214 11  9 204  0
214 12  9 244  0
214 13  9 321  0
214 14  8 241  0
214 15  8 301  0
214 16  9 344  0
214 17 10 264  0
214 18 11 214  0
214 19  2  44  0
214 20 14 116  0
214 21  9  55  0
214 22 12  96  0
214 23 12 106  0
214 24 12  76  0
215  1 11 126  0
215  2 10 216  0
215  3 10 345  0
215  4 10 295  0
215  5 10 345  0
215  6 11 305  0
215  7 10 414  0
215  8 11 334  0
215  9 11 342  0
215 10 11 321  0
215 11 13 301  0
215 12 13 371  0
215 13 12 381  0
215 14 10 391  0
215 15  9 351  0
215 16  8 371  0
215 17  9 353  0
215 18  8 374  0
215 19 10 195  0
215 20 11 126  0
215 21 12 156  0
215 22 12 107  0
```

```
215 23  9 127  0
215 24  9 136  0
216  1  9 176  0
216  2  9 166  0
216  3 10 136  0
216  4 10 195  0
216  5 10 215  0
216  6 10 186  0
216  7  9 185  0
216  8 11 254  0
216  9 10 233  0
216 10 10 221  0
216 11  9 252  0
216 12  9 303  0
216 13  8 331  0
216 14  8 381  0
216 15 11 251  0
216 16  8 342  0
216 17  8 324  0
216 18  9 264  0
216 19 15 185  0
216 20 11  26  0
216 21 16 137  0
216 22 15  57  0
216 23  7  27  0
216 24  7  27  0
217  1 16  87  0
217  2 15  36  0
217  3 14  27  0
217  4 12  77  0
217  5 14  97  0
217  6  2  77  0
217  7  5  46  0
217  8  4 164  0
217  9  4 204  0
217 10  5 204  0
217 11  7 194  0
217 12  7 181  0
217 13  8 214  0
217 14 13 171  0
217 15  1 191  0
217 16 15 261  0
217 17 15 331  0
217 18 16 254  0
217 19 15 125  0
217 20 16 156  0
217 21  1 265  0
217 22 16 175  0
217 23 16 165  0
217 24 16 175  0
218  1  1 106  0
218  2 15  96  0
218  3 15  96  0
218  4  1  56  0
218  5  4  76  0
218  6  1  57  0
218  7 14  26  0
218  8  5 134  0
218  9  4 194  0
218 10  5 213  0
```

```
218 11  8 153  0
218 12  8 223  0
218 13  1 283  0
218 14  1 291  0
218 15 16 341  0
218 16 16 332  0
218 17 15 272  0
218 18 15 294  0
218 19 16 235  0
218 20 15 265  0
218 21 16 245  0
218 22 16 215  0
218 23 16 155  0
218 24 16 195  0
219  1 15 136  0
219  2 16 166  0
219  3 16  95  0
219  4 15  46  0
219  5 13  86  0
219  6 14 136  0
219  7 14 145  0
219  8 15 184  0
219  9 16 164  0
219 10  1 233  0
219 11 13 241  0
219 12 13 252  0
219 13 12 301  0
219 14 13 341  0
219 15 15 351  0
219 16 15 311  0
219 17 16 252  0
219 18 15 264  0
219 19 15 185  0
219 20 15 285  0
219 21 16 315  0
219 22 16 255  0
219 23 15 235  0
219 24 15 195  0
220  1 16 175  0
220  2 16 185  0
220  3  1 195  0
220  4  1 155  0
220  5  2 165  0
220  6  2 115  0
220  7  2 214  0
220  8  3 254  0
220  9  3 213  0
220 10  5 214  0
220 11  3 191  0
220 12  3 272  0
220 13  7 292  0
220 14  4 321  0
220 15  4 251  0
220 16  4 321  0
220 17  4 252  0
220 18  1 632  0
220 19  1 434  0
220 20  3 314  0
220 21  3 344  0
220 22  4 265  0
```

```
220 23  4 185  0
220 24  4 175  0
221  1  3 235  0
221  2  4 185  0
221  3  4  95  0
221  4  2 115  0
221  5  3 175  0
221  6  3 175  0
221  7  5 174  0
221  8  5 173  0
221  9  7 174  0
221 10  6 193  0
221 11  7 252  0
221 12  7 182  0
221 13  4 274  0
221 14  4 231  0
221 15  3 301  0
221 16  4 234  0
221 17  8 274  0
221 18  6 125  0
221 19 15  45  0
221 20  1 156  0
221 21  1 145  0
221 22  3 175  0
221 23  3 315  0
221 24  3 175  0
222  1  3 165  0
222  2  4  85  0
222  3  6  45  0
222  4  5  85  0
222  5  3 115  0
222  6  3 185  0
222  7  3 164  0
222  8  4 234  0
222  9  4 193  0
222 10  4 211  0
222 11  3 181  0
222 12  3 241  0
222 13  4 302  0
222 14 16 151  0
222 15  7 213  0
222 16  2 201  0
222 17 13 194  0
222 18  1 244  0
222 19  1 245  0
222 20  1 225  0
222 21  2 265  0
222 22  2 265  0
222 23  3 225  0
222 24  3 275  0
223  1  3 195  0
223  2  3 165  0
223  3  2 175  0
223  4  2 135  0
223  5  2 155  0
223  6  2 175  0
223  7  4 215  0
223  8  4 224  0
223  9  4 183  0
223 10  5 222  0
```

```
223 11  3 251  0
223 12  3 232  0
223 13  4 291  0
223 14  3 271  0
223 15  4 281  0
223 16  7 253  0
223 17  6 212  0
223 18  5 154  0
223 19  4  85  0
223 20  3 137  0
223 21  4 177  0
223 22  3  97  0
223 23  6 216  0
223 24  6 107  0
224  1  3 137  0
224  2  4  97  0
224  3  7 137  0
224  4  7 196  0
224  5  8  85  0
224  6  7 145  0
224  7  7 135  0
224  8  9 254  0
224  9  9 243  0
224 10 10 213  0
224 11  8 262  0
224 12  8 272  0
224 13  8 361  0
224 14  7 331  0
224 15  7 331  0
224 16  8 281  0
224 17  7 262  0
224 18  8 184  0
224 19  8 135  0
224 20  8 126  0
224 21 12  77  0
224 22 14 177  0
224 23 15 125  0
224 24 15 126  0
225  1 13  96  0
225  2 14 137  0
225  3 13 127  0
225  4 13  47  0
225  5  1  97  0
225  6 12 117  0
225  7 13 126  0
225  8 15 144  0
225  9  1 144  0
225 10 15 251  0
225 11 16 221  0
225 12 16 251  0
225 13 16 241  0
225 14 16 241  0
225 15 15 481  0
225 16 15 561  0
225 17 16 362  0
225 18 15 404  0
225 19 15 304  0
225 20 16 194  0
225 21 16 175  0
225 22 15 135  0
```

```
225 23 15 215  0
225 24 15 205  0
226  1 16 175  0
226  2  1 135  0
226  3  1 135  0
226  4 16 165  0
226  5  1 145  0
226  6  2 115  0
226  7 15 194  0
226  8  1 184  0
226  9  2 244  0
226 10 16 282  0
226 11  1 271  0
226 12  1 331  0
226 13 16 292  0
226 14 10 807 25
226 15  1 717 52
226 16 13 117  1
226 17 16 275  0
226 18 14 375  0
226 19 16 365  0
226 20 15 275  0
226 21 16 205  0
226 22  2 325  0
226 23  3 315  0
226 24  3 225  0
227  1  5  75  0
227  2 13 126  0
227  3 13  86  0
227  4 13 195  0
227  5 15 205  0
227  6 13 175  0
227  7  1 175  0
227  8 16 184  0
227  9  1 174  0
227 10  1 153  0
227 11  1 202  0
227 12  1 233  0
227 13  1 294  0
227 14 16 231  0
227 15 15 232  0
227 16 16 164  0
227 17 16 172  0
227 18 15 294  0
227 19 15 195  0
227 20 15 275  0
227 21 15 195  0
227 22 16 235  0
227 23 15 135  0
227 24 15 205  0
228  1 11 135  0
228  2  9 115  0
228  3 11 155  0
228  4 11 145  0
228  5 14 156  0
228  6 15 205  0
228  7  1 204  0
228  8  2 134  0
228  9 15 152  0
228 10  3 124  0
```

```
228 11  1 212  0
228 12  1 151  0
228 13 14 152  0
228 14  4 172  0
228 15 12 435  0
228 16 11 306  2
228 17 12 155  0
228 18 13 244  0
228 19 16 125  0
228 20 14 235  0
228 21 14 185  0
228 22 14 165  0
228 23 15 225  0
228 24 15 105  0
229  1 16  76  0
229  2  1  86  0
229  3  1 126  0
229  4  2 136  0
229  5  2 115  0
229  6  2 125  0
229  7  4 135  0
229  8  5 194  0
229  9  5 183  0
229 10  5 143  0
229 11 13 193  0
229 12 13 163  0
229 13  1 211  0
229 14  1 171  0
229 15  9 143  0
229 16  2 134  0
229 17  1 302  0
229 18  1 284  0
229 19  1 155  0
229 20 15 195  0
229 21 16 175  0
229 22  2 155  0
229 23  2 275  0
229 24  2 165  0
230  1  2 145  0
230  2  1 185  0
230  3  2 145  0
230  4  5  55  0
230  5 16 106  0
230  6  2 126  0
230  7  2 135  0
230  8  4 214  0
230  9  5 204  0
230 10  5 184  0
230 11  3 152  0
230 12  3 274  0
230 13  4 302  0
230 14  3 291  0
230 15  3 292  0
230 16  2 321  0
230 17  2 254  0
230 18  1 215  0
230 19  1 185  0
230 20 16 175  0
230 21  1 255  0
230 22  1 285  0
```

```
230 23  1 205  0
230 24  1 205  0
231  1  2 235  0
231  2  2 215  0
231  3  4 155  0
231  4  5 105  0
231  5  2 145  0
231  6  1 126  0
231  7  1 215  0
231  8  2 264  0
231  9  3 203  0
231 10  4 183  0
231 11  2 252  0
231 12  2 302  0
231 13 16 231  0
231 14 16 224  0
231 15  8 334  0
231 16  8 207  0
231 17  2 235  0
231 18 16 205  0
231 19  2 155  0
231 20 16 195  0
231 21 15 175  0
231 22 14 195  0
231 23 13 494  0
231 24 13 515  0
232  1 16 225 64
232  2 15 216 17
232  3 15 426 22
232  4  6 326  0
232  5  5 177  1
232  6  4 296  0
232  7  3 405  0
232  8  2 286  0
232  9  4 346  8
232 10  2 447 95
232 11 16 316 12
232 12 16 185  0
232 13  2 313  0
232 14  3 303  0
232 15 16 233  0
232 16  2  75  0
232 17 12 195  0
232 18  7 205  0
232 19 11 135  0
232 20  6 275  0
232 21  9 325  0
232 22  1 136  0
232 23  3 196  0
232 24  3 176  0
233  1  3 195  0
233  2  3 175  0
233  3  3 185  0
233  4 15  65  0
233  5  3  46  0
233  6 10  46  0
233  7 15 105  0
233  8  1 104  0
233  9  5 164  0
233 10  3 214  0
```

```
233 11  5 213  0
233 12  5 302  0
233 13  4 272  0
233 14  3 221  0
233 15  6 133  0
233 16 10 223  0
233 17 13 163  0
233 18 14 145  0
233 19 14  55  0
233 20  3 176  0
233 21 11 176  0
233 22 10 146  0
233 23 13 137  0
233 24 13  97  0
234  1  9 126  0
234  2  3  86  0
234  3  7  76  0
234  4  9 176  0
234  5 13  95  0
234  6 11 136  0
234  7 12 175  0
234  8 12 204  0
234  9 12 254  0
234 10 12 354  0
234 11 13 291  0
234 12 13 243  0
234 13 14 271  0
234 14 12 261  0
234 15 11 242  0
234 16 12 124  0
234 17 12 215  0
234 18 14 255  0
234 19 16 364  0
234 20 12  95  0
234 21  1 265  0
234 22 10 185  0
234 23 12  86  0
234 24 12  66  0
235  1 16  56  0
235  2  6  76  0
235  3 11  96  0
235  4  1  67  0
235  5 13 117  0
235  6 13  47  0
235  7 10  66  0
235  8 12 174  0
235  9 10 144  0
235 10 11 224  0
235 11 12 184  0
235 12 12  94  0
235 13 13  74  0
235 14 13 134  0
235 15 14 134  0
235 16 13 164  0
235 17 15 134  0
235 18 12 304  0
235 19 13 205  0
235 20 14 195  0
235 21 14 225  0
235 22 15 225  0
```

```
235 23 13 196  0
235 24 13 225  0
236  1 13 235  0
236  2 15 105  0
236  3 14 125  0
236  4 13 145  0
236  5 12 125  0
236  6 12 136  0
236  7 12 185  0
236  8 14 203  0
236  9 14 163  0
236 10 16 212  0
236 11 15 261  0
236 12 16 281  0
236 13  1 221  0
236 14 14 302  0
236 15 13 383  0
236 16 15 454  0
236 17 14 234  0
236 18 10 264  2
236 19 15 165 27
236 20 14 195 27
236 21  2  85  1
236 22 11 105  0
236 23 15  75  0
236 24 16 145  0
237  1  7 125  0
237  2 13  65  0
237  3 15  25  0
237  4  2 105  1
237  5  3  96  0
237  6  3  95  0
237  7  5 115  0
237  8  3 175  0
237  9  3 224  0
237 10  1 214  0
237 11  2 242  0
237 12  2 274  0
237 13  3 211  0
237 14  6 152  0
237 15  5 252  0
237 16  3 152  0
237 17  2 212  0
237 18 16 154  0
237 19 15 156  0
237 20 16 116  0
237 21 15 186  0
237 22 15 226  0
237 23  1 265  0
237 24  1 225  0
238  1  2 225  0
238  2  2 215  0
238  3  2 245  0
238  4  3 115  0
238  5  2 165  0
238  6  3 185  0
238  7  3 154  0
238  8  3 183  0
238  9  5 212  0
238 10  3 252  0
```

```
238 11  3 232  0
238 12  3 354  0
238 13  2 361  0
238 14  2 371  0
238 15  3 301  0
238 16  3 304  0
238 17  3 174  0
238 18  3 135  0
238 19 16 225  0
238 20 16 245  0
238 21  1 155  0
238 22  6 215  0
238 23 16 126  0
238 24 15 285  0
239  1 15 225  0
239  2 16 165  0
239  3  2 195  0
239  4  4 125  0
239  5  2  65  0
239  6 16 135  0
239  7  4 115  0
239  8  3 184  0
239  9  2 142  0
239 10  1 131  0
239 11  3 141  0
239 12  3 181  0
239 13  7 244  0
239 14  5 281  0
239 15  6 271  0
239 16  4 161  0
239 17  6 154  0
239 18  5 105  0
239 19  2  86  0
239 20 14 177  0
239 21 15 304  0
239 22  1 155  0
239 23 16 125  0
239 24 16  96  0
240  1 11  86  0
240  2 13 116  0
240  3 13  66  0
240  4 12 116  0
240  5 14  86  0
240  6 11 125  0
240  7  9  65  0
240  8 11  94  0
240  9 10 174  0
240 10 10 214  0
240 11 10 252  0
240 12 10 174  0
240 13 11 174  0
240 14 14 221  0
240 15  9 293  0
240 16  9 253  0
240 17 13 175  0
240 18 12 205  0
240 19 11 236  0
240 20 11 185  0
240 21 13 185  0
240 22 12 176  0
```

```
240 23 11 186  0
240 24 11 256  0
241  1 10 215  0
241  2 11 235  0
241  3 10 235  0
241  4  9 295  0
241  5 10 285  0
241  6  9 315  0
241  7  9 184  0
241  8 11 382  0
241  9 11 363  0
241 10 10 433  0
241 11 10 483  0
241 12 10 444  0
241 13 10 504  0
241 14  9 403  0
241 15  9 484  0
241 16  9 394  0
241 17  8 394  0
241 18  8 375  0
241 19  8 285  0
241 20  8 285  0
241 21  8 275  0
241 22  8 305  0
241 23  7 325  0
241 24  7 355  0
242  1  8 345  0
242  2  8 355  0
242  3  7 295  0
242  4  7 335  0
242  5  8 355  0
242  6  7 345  0
242  7  8 335  0
242  8  8 314  0
242  9  9 383  0
242 10  9 433  0
242 11  9 442  0
242 12 10 412  0
242 13  9 312  0
242 14  9 271  0
242 15  9 263  0
242 16  9 142  0
242 17 12 134  0
242 18 12 105  0
242 19 12 196  0
242 20 12 206  0
242 21 12 286  0
242 22 12 295  0
242 23 12 325  0
242 24 11 285  0
243  1 12 165  0
243  2 11 336  0
243  3 10 425  0
243  4 10 385  0
243  5  9 365  0
243  6  9 325  0
243  7  9 294  0
243  8  9 294  0
243  9 10 302  0
243 10  9 283  0
```

```
243 11  8 392  0
243 12  8 332  0
243 13  8 322  0
243 14  9 302  0
243 15 10 231  0
243 16  8 253  0
243 17 10 324  0
243 18  9 214  0
243 19 10 176  0
243 20 11 236  0
243 21 10 146  0
243 22  9  67  0
243 23  9 207  0
243 24  9 166  0
244  1 10  87  0
244  2  8 137  0
244  3  8 217  0
244  4  9 176  0
244  5  9 186  0
244  6  8 216  0
244  7  8 135  0
244  8  9 134  0
244  9 10 154  0
244 10 13 181  0
244 11 10 283  0
244 12 10 343  0
244 13 10 221  0
244 14  4 201  0
244 15  5 311  0
244 16  6 303  0
244 17  4 253  0
244 18  4 155  0
244 19  6  87  0
244 20  5  87  0
244 21  4 157  0
244 22  5 167  0
244 23  3  97  0
244 24  3  36  0
245  1  8 177  0
245  2  9 177  0
245  3  8 147  0
245  4  9 177  0
245  5  9 107  0
245  6  5  97  0
245  7  6 107  0
245  8  8 145  0
245  9 10 174  0
245 10 11 134  0
245 11  9 231  0
245 12  9 353  0
245 13  7 281  0
245 14  6 371  0
245 15  6 341  0
245 16  6 252  0
245 17  9 174  0
245 18 10 215  0
245 19 10 226  0
245 20  9 236  0
245 21  8 227  0
245 22 10 355  0
```

```
245 23 11 247  0
245 24 11 136  0
246  1  7 126  0
246  2 10 176  0
246  3 10 265  0
246  4  9 186  0
246  5  8 376  0
246  6  9 145  0
246  7 10 115  0
246  8  9 194  0
246  9  8 224  0
246 10  8 302  0
246 11  8 282  0
246 12  8 372  0
246 13  8 431  0
246 14  8 343  0
246 15  9 342  0
246 16  9 304  0
246 17  7 105  0
246 18  7 195  0
246 19  7 207  0
246 20  7 206  0
246 21  9 246  0
246 22  9 196  0
246 23  9 176  0
246 24  9 176  0
247  1  3  47  0
247  2  9 186  0
247  3  9 196  0
247  4 10 185  0
247  5  9  85  0
247  6  7 205  0
247  7  7 224  0
247  8  8 333  0
247  9  8 332  0
247 10  8 293  0
247 11  9 461  0
247 12  9 412  0
247 13  8 351  0
247 14  7 411  0
247 15  8 371  0
247 16  8 372  0
247 17  8 404  0
247 18  8 254  0
247 19  8 186  0
247 20  7 147  0
247 21  6 197  0
247 22  7 197  0
247 23  5 167  0
247 24  5 187  0
248  1  5 177  0
248  2  5 177  0
248  3 13  87  0
248  4  3 127  0
248  5  3 257  0
248  6  3 237  0
248  7  3 176  0
248  8  4 244  0
248  9  4 302  0
248 10  4 331  0
```

```
248 11  4 401  0
248 12  4 461  0
248 13  5 451  0
248 14  5 344  0
248 15  4 302  0
248 16  4 274  0
248 17  5 175  0
248 18  4 126  0
248 19  4 167  0
248 20  3 157  0
248 21  3 176  0
248 22 13 165  0
248 23 12 265  0
248 24 12 275  0
249  1 15 335  0
249  2  1 205  0
249  3  1 226  0
249  4  3 205  0
249  5  3 216  0
249  6  3 176  0
249  7  3 205  0
249  8  5 214  0
249  9  4 213  0
249 10  4 222  0
249 11  2 282  0
249 12  2 292  0
249 13  6 291  0
249 14  5 381  0
249 15  4 321  0
249 16  6 272  0
249 17  5 134  0
249 18  1 125  0
249 19  1 216  0
249 20  2 196  0
249 21  1 196  0
249 22 16 145  0
249 23  2 305  0
249 24  2 275  0
250  1  3 225  0
250  2  4 135  0
250  3  4 135  0
250  4  4 136  0
250  5  7  36  0
250  6  7  95  0
250  7  9  86  0
250  8 11 123  0
250  9 11 214  0
250 10 14 231  0
250 11 13 291  0
250 12 13 341  0
250 13 12 251  0
250 14 12 182  0
250 15  9 541  0
250 16 12 191  0
250 17 14 214  0
250 18 14  54  0
250 19 15 405  0
250 20  2 384  0
250 21  3 235  0
250 22  4 155  0
```

```
250 23  7  55  0
250 24  7 115  0
251  1 15  85  0
251  2 14 106  0
251  3 15 126  0
251  4  2 135  0
251  5  1  65  0
251  6  2 135  0
251  7  4  85  0
251  8  3 114  0
251  9  1 161  0
251 10 14 191  0
251 11 16 192  0
251 12 16 254  0
251 13 13 211  0
251 14  9 192  0
251 15 14 241  0
251 16 15 233  0
251 17 14 273  0
251 18 16 224  0
251 19 15 215  0
251 20 15 175  0
251 21 14 145  0
251 22 14 195  0
251 23 15 205  0
251 24 15 215  0
252  1  1  85  0
252  2 14 115  0
252  3 13  76  0
252  4 12 116  0
252  5  9  85  0
252  6 13 125  0
252  7 12 134  0
252  8 12  95  0
252  9  9 124  0
252 10  9 154  0
252 11  8 143  0
252 12  8 271  0
252 13 10 261  0
252 14 12 211  0
252 15 13 211  0
252 16 15 133  0
252 17  7 723  0
252 18  6 275 39
252 19  9 465 24
252 20  8 385  3
252 21 10  95  0
252 22 11 215  0
252 23 10 175  0
252 24 10 135  0
253  1  5 135  0
253  2  7 145  0
253  3  8 215  0
253  4  7 195  1
253  5  6 135  0
253  6  6 105  0
253  7  7 134  0
253  8  7 194  0
253  9  8 164  0
253 10  9 254  0
```

```
253 11  8 272  0
253 12  8 283  0
253 13  9 242  0
253 14  9 212  0
253 15  8 362  0
253 16  8 283  0
253 17  8 254  0
253 18  6  65  0
253 19 10 205  0
253 20 10 216  0
253 21 10 196  0
253 22 12 167  0
253 23 11 156  0
253 24 11 187  0
254  1 12 176  0
254  2 11 176  0
254  3 13 167  0
254  4 13 167  0
254  5 12 127  0
254  6 11 147  0
254  7 10 105  0
254  8 11 144  0
254  9 14 114  0
254 10 12 212  0
254 11 13 212  0
254 12 13 262  0
254 13 11 281  0
254 14 11 201  0
254 15 12 241  0
254 16 10 254  0
254 17  9 234  0
254 18 12 175  0
254 19 13 186  0
254 20 12 217  0
254 21 13 216  0
254 22 12 146  0
254 23 13 136  0
254 24 13 117  0
255  1 11 107  0
255  2 12  97  0
255  3 12  97  0
255  4  8  87  0
255  5  8 117  0
255  6  8 107  0
255  7 11 166  0
255  8  9 204  0
255  9 12 223  0
255 10 14 251  0
255 11 11 461  0
255 12 11 301  0
255 13 11 391  0
255 14 13 341  0
255 15 12 301  0
255 16 13 261  0
255 17 13 255  0
255 18 14 225  0
255 19 14 156  0
255 20 14 116  0
255 21 13 197  0
255 22 13 216  0
```

```
255 23 14 196  0
255 24 14 147  0
256  1 12 166  0
256  2 11 207  0
256  3 10 196  0
256  4  9 145  0
256  5 10 136  0
256  6  9 176  0
256  7  9 205  0
256  8 10 214  0
256  9 10 224  0
256 10 11 351  0
256 11 12 371  0
256 12 12 361  0
256 13 12 351  0
256 14  9 351  0
256 15  9 321  0
256 16 10 343  0
256 17 10 234  0
256 18 10 145  0
256 19 13 226  0
256 20 12 186  0
256 21 10 226  0
256 22 10 196  0
256 23 11 237  0
256 24 11 276  0
257  1 11 286  0
257  2  9 216  0
257  3  9 216  0
257  4  8 256  0
257  5  8 346  0
257  6  8 306  0
257  7  9 345  0
257  8  9 284  0
257  9  9 422  0
257 10 10 491  0
257 11 10 531  0
257 12 11 471  0
257 13 12 411  0
257 14 12 431  0
257 15 12 381  0
257 16 11 324  0
257 17 11 414  0
257 18 11 414  0
257 19 11 245  0
257 20 11 315  0
257 21 11 385  0
257 22 11 455  0
257 23 11 505  0
257 24 10 384  0
258  1 11 515  0
258  2 11 424  0
258  3 11 424  0
258  4 10 405  0
258  5 10 524  0
258  6 10 494  0
258  7 10 514  0
258  8 10 524  0
258  9 10 614  0
258 10  9 634  0
```

```
258 11 10 624  0
258 12 10 555  0
258 13  9 595  1
258 14  9 635  4
258 15  9 635  8
258 16  9 654  6
258 17  8 665  8
258 18  8 775  4
258 19  8 705  4
258 20  9 835  4
258 21  8 495  3
258 22  8 525  0
258 23  8 535  0
258 24  7 515  0
259  1  7 515  0
259  2  7 425  0
259  3  5 295  0
259  4  5 305  0
259  5  5 265  0
259  6  5 205  0
259  7  5 255  0
259  8  6 284  0
259  9  7 283  0
259 10  7 372  0
259 11  7 381  0
259 12  8 322  0
259 13  7 272  0
259 14  6 291  0
259 15  6 281  0
259 16  8 382  0
259 17  9 224  0
259 18  8 215  0
259 19  8 237  0
259 20  8 217  0
259 21 10 236  0
259 22  9 237  0
259 23  9 246  0
259 24 11 286  0
260  1 11 306  0
260  2 12 286  0
260  3 11 336  0
260  4  9 146  0
260  5 10 276  0
260  6 10 206  0
260  7 10 205  0
260  8 11 374  0
260  9 11 482  0
260 10 12 421  0
260 11 11 351  0
260 12 13 301  0
260 13 12 271  0
260 14  9 201  0
260 15 10 172  0
260 16 12 252  0
260 17 14 252  0
260 18 14 205  0
260 19 15 176  0
260 20 14 177  0
260 21 14 177  0
260 22 13 216  0
```

```
260 23 14 146  0
260 24 14 177  0
261  1 12 177  0
261  2 12 196  0
261  3 13  97  0
261  4 11 166  0
261  5 11 196  0
261  6 11 166  0
261  7 11 206  0
261  8 11 205  0
261  9 12 273  0
261 10 13 274  0
261 11 13 351  0
261 12 11 321  0
261 13 13 321  0
261 14 14 331  0
261 15 15 292  0
261 16 14 243  0
261 17 15 303  0
261 18 14 165  0
261 19 14 175  0
261 20 13 196  0
261 21 13 196  0
261 22 13 216  0
261 23 13 215  0
261 24 13 195  0
262  1 14 155  0
262  2 12 135  0
262  3 12 196  0
262  4 12 196  0
262  5 11 166  0
262  6 12 175  0
262  7 12 285  0
262  8 12 314  0
262  9 12 294  0
262 10 13 323  0
262 11 13 292  0
262 12 14 301  0
262 13 14 214  0
262 14 15 205  2
262 15 13 214  2
262 16 12 254  0
262 17 14 215  0
262 18 12 125  0
262 19 14 115  0
262 20 12 125  1
262 21 14 105  1
262 22 13 105  0
262 23 13  86  0
262 24 11 135  1
263  1 11 215  0
263  2 10 305  0
263  3 10 244  0
263  4 11 255  0
263  5 11 284  0
263  6 11 384  0
263  7 11 314  0
263  8 11 294  1
263  9 12 284  0
263 10 11 274  0
```

```
263 11 12 293  0
263 12 11 382  0
263 13 11 323  0
263 14 11 284  0
263 15 11 304  0
263 16 11 274  0
263 17 10 145  1
263 18  9 235  0
263 19 10 314  2
263 20 10 265  3
263 21 11 255  2
263 22 14 165  3
263 23  9  75  0
263 24  9 135  4
264  1  8 224  3
264  2 12 195  2
264  3  9 285  1
264  4  8 265  0
264  5  9 125  0
264  6 10 125  0
264  7 11 164  0
264  8 10 174  0
264  9  6 104  0
264 10  8 154  0
264 11  8 174  0
264 12  9 164  0
264 13  9 214  0
264 14  8 384  0
264 15  7 264  0
264 16  7 254  3
264 17  8 224  0
264 18  8 294  0
264 19  8 245  0
264 20  8 315  0
264 21  8 255  0
264 22  9 304  0
264 23  8 354  0
264 24  9 454  0
265  1  9 534  0
265  2  9 424  0
265  3  9 524  0
265  4 10 385  0
265  5 10 214  0
265  6 10 304  0
265  7  9 264  0
265  8  9 384  0
265  9 10 362  0
265 10  9 421  0
265 11  9 401  0
265 12  8 371  0
265 13  8 401  0
265 14  8 361  0
265 15  9 372  0
265 16  8 383  0
265 17  8 254  0
265 18 11  75  0
265 19 11 156  0
265 20 12 156  0
265 21 13  96  0
265 22 16  46  0
```

```
265 23 10  26  0
265 24  9 107  0
266  1 11  87  0
266  2 10  47  0
266  3  7  37  0
266  4  9  47  0
266  5  7  27  0
266  6  8 117  0
266  7  7  87  0
266  8 10 105  0
266  9 12 154  0
266 10 12 241  0
266 11 13 271  0
266 12 14 211  0
266 13 13 251  0
266 14 10 251  0
266 15 10 213  0
266 16 10 213  0
266 17 14 142  0
266 18 14 185  0
266 19 14 166  0
266 20 14 177  0
266 21 14 117  0
266 22 14 207  0
266 23 13 147  0
266 24 15  67  0
267  1 14  37  0
267  2  8  67  0
267  3  9  97  0
267  4  6  87  0
267  5  9 117  0
267  6  8 107  0
267  7  8 127  0
267  8  9 135  0
267  9 12 164  0
267 10  9 224  0
267 11 11 292  0
267 12 12 291  0
267 13 12 281  0
267 14 12 203  0
267 15 13 232  0
267 16 13 223  0
267 17 14 252  0
267 18 14 175  0
267 19 14 145  0
267 20 14 165  0
267 21 14 206  0
267 22 13  86  0
267 23 14  77  0
267 24  6  97  0
268  1  7 117  0
268  2  7 137  0
268  3  9  87  0
268  4  9  97  0
268  5  8  77  0
268  6  6 137  0
268  7  8 186  0
268  8  6 204  0
268  9  8 134  0
268 10  7 173  0
```

```
268 11 10 212  0
268 12  4 174  0
268 13  9 134  0
268 14  3 152  0
268 15 14 113  0
268 16 14 134  0
268 17 12  75  0
268 18 14 145  0
268 19  6  36  0
268 20  1  37  0
268 21 13  26  0
268 22  5  47  0
268 23 14  77  0
268 24 13  57  0
269  1 12  87  0
269  2  9  57  0
269  3 10  67  0
269  4  9 117  0
269  5 15  27  0
269  6 10 155  0
269  7  9  85  0
269  8 11 155  0
269  9 11 205  0
269 10 11 282  0
269 11 12 341  0
269 12 12 251  0
269 13 13 321  0
269 14 13 361  0
269 15 13 343  0
269 16 14 175  0
269 17 15 215  1
269 18 14 295  0
269 19 16 225  3
269 20 12 155  1
269 21 14 195  0
269 22 14 205  1
269 23 14 155  2
269 24 13 165  5
270  1 13 255  3
270  2 15 355  3
270  3 13 165  2
270  4 12 175  2
270  5 12 215  2
270  6 13 215  0
270  7 13 145  0
270  8 13 185  1
270  9 14 165  2
270 10 13 194 13
270 11 14 245 13
270 12 15 364 32
270 13 15 415  0
270 14 14 135 14
270 15 13 254  0
270 16 14 295  0
270 17 13 235  0
270 18 13 255  0
270 19 13 185  0
270 20 13 175  0
270 21 13 255  0
270 22 13 245  0
```

```
270 23 16 275  0
270 24 15 185  2
271  1 14 165  4
271  2 14 155  1
271  3 13 116  0
271  4 13  96  0
271  5  2  75  2
271  6 11  65  0
271  7  8  25  3
271  8  8  95 26
271  9 12 164 13
271 10  7  64  0
271 11 16  74  0
271 12  2 204  0
271 13  7 134  0
271 14  1 154  0
271 15 10 113  0
271 16 12 214  0
271 17 10 215  0
271 18 13 235  0
271 19 13 175  0
271 20 11 155  0
271 21 13 195  0
271 22 14 185  0
271 23 16 234  0
271 24 16 175  0
272  1 15 235  0
272  2 16 105  0
272  3  2 165  0
272  4  3  85  3
272  5  3  35  1
272  6 16 135  0
272  7  1 145  0
272  8  2 224  0
272  9  3 174  0
272 10  2 194  0
272 11  2 264  0
272 12  2 323  0
272 13  3 194  0
272 14  1 174  0
272 15  6 254  0
272 16  3 205 15
272 17  1 194  0
272 18  1 185  0
272 19  2 135  0
272 20  2 225  2
272 21  3 145  0
272 22  3 215  0
272 23  4 215  0
272 24  3 135  0
273  1  3 185  0
273  2  6 265  0
273  3  6 335  0
273  4  6 255  0
273  5  7 325  0
273  6  7 195  0
273  7  8 255  0
273  8  8 344  0
273  9  8 374  0
273 10  9 401  0
```

```
273 11  9 412  0
273 12  9 421  0
273 13 10 322  0
273 14  9 251  0
273 15  9 273  0
273 16 10 193  0
273 17  8 194  0
273 18 10  45  0
273 19 11 165  0
273 20 10 246  0
273 21 11 206  0
273 22 12 167  0
273 23 13  57  0
273 24 13  27  0
274  1 11  87  0
274  2  9  67  0
274  3  9  77  0
274  4  8 137  0
274  5  9 137  0
274  6  9 197  0
274  7  9 227  0
274  8 10 155  0
274  9 12 274  0
274 10 11 251  0
274 11 10 252  0
274 12 10 243  0
274 13 12 243  0
274 14  9 234  0
274 15 11 224  0
274 16 13 224  0
274 17 12 214  0
274 18 13 206  0
274 19 13 127  0
274 20 14  67  0
274 21 14  87  0
274 22 14 107  0
274 23 14 147  0
274 24 13 147  0
275  1 14 157  0
275  2 11 107  0
275  3 10  97  0
275  4  9 127  0
275  5 14  87  0
275  6  9  97  0
275  7  8  37  0
275  8 10 144  0
275  9 12 234  0
275 10 12 223  0
275 11 14 241  0
275 12 14 192  0
275 13  1 342  0
275 14 15 283  0
275 15 15 331  0
275 16 15 223  0
275 17 15 224  0
275 18 13 205  0
275 19 15 215  0
275 20 15 225  0
275 21 13 146  0
275 22 13 146  0
```

```
275 23 13 136  0
275 24 12 126  0
276  1 12 136  0
276  2 13 147  0
276  3 13  97  0
276  4 12 127  0
276  5 12 107  0
276  6  9  36  0
276  7 11 117  0
276  8 13 165  0
276  9 12 224  0
276 10 14 241  0
276 11 12 192  0
276 12 11 214  0
276 13 14 273  0
276 14 11 242  0
276 15 13 304  0
276 16 13 214  0
276 17 14 224  0
276 18 14 185  0
276 19 14 176  0
276 20 14 285  0
276 21 15 315  0
276 22 14 185  0
276 23 14 155  0
276 24 13 135  0
277  1 14 105  0
277  2 13  95  0
277  3 14 175  0
277  4 14  95  0
277  5 14 105  0
277  6 12  85  0
277  7 13  55  0
277  8 13 125  0
277  9  1  95  0
277 10  4 115  4
277 11  5 145 20
277 12  7 174 11
277 13  8 534 26
277 14  8 355 13
277 15  9 284 25
277 16 12 244 10
277 17 15 395  3
277 18 13  85  0
277 19  6 215  0
277 20  7 134  0
277 21  7 125  0
277 22 10  25  0
277 23  4  85  0
277 24  1  55  0
278  1  7 135  0
278  2  7 145  0
278  3  8 265  0
278  4  8 205  0
278  5  6  75  0
278  6  3  85  0
278  7 16 105  0
278  8  3  94  0
278  9  5  84  0
278 10  8 214  0
```

```
278 11  9 314  0
278 12  9 214  0
278 13  9 252  0
278 14 10 212  0
278 15 11 241  0
278 16 12 223  0
278 17 12 214  0
278 18 12 145  0
278 19 12 195  0
278 20 15  26  0
278 21 16 176  0
278 22  9  36  0
278 23 10 135  0
278 24 13 175  0
279  1 13 155  0
279  2 11 206  0
279  3 11 205  0
279  4 11 215  0
279  5 11 195  0
279  6 11 185  0
279  7 10 185  0
279  8 12 204  0
279  9 11 264  0
279 10 11 382  0
279 11 11 311  0
279 12 12 281  0
279 13 10 252  0
279 14 10 261  0
279 15 12 232  0
279 16 12 212  0
279 17 12 114  0
279 18 11  36  0
279 19 12  47  0
279 20 15  37  0
279 21 15  96  0
279 22 11  26  0
279 23 11 116  0
279 24 11 116  0
280  1 13  57  0
280  2 11 137  0
280  3 11  87  0
280  4 11 117  0
280  5  9 137  0
280  6  9 117  0
280  7  9 117  0
280  8 11 155  0
280  9 12 264  0
280 10 12 342  0
280 11 13 451  0
280 12 13 411  0
280 13 12 371  0
280 14 12 431  0
280 15 13 341  0
280 16 12 404  0
280 17 12 265  0
280 18 12 246  0
280 19 12 246  0
280 20 12 246  0
280 21 13 235  0
280 22 12 246  0
```

```
280 23 12 226  0
280 24 12 246  0
281  1 12 275  0
281  2 11 315  0
281  3 12 305  0
281  4 12 335  0
281  5 12 265  0
281  6 12 345  0
281  7 12 304  0
281  8 12 364  0
281  9 13 473  0
281 10 13 371  0
281 11 13 361  0
281 12 13 361  0
281 13 13 341  0
281 14 13 411  0
281 15 14 344  0
281 16 14 304  0
281 17 13 335  0
281 18 13 305  0
281 19 13 235  0
281 20 12 325  0
281 21 12 285  0
281 22 12 215  0
281 23 12 275  0
281 24 12 215  0
282  1 12 235  0
282  2 12 255  0
282  3 13 225  0
282  4 12 205  0
282  5 12 165  0
282  6 12 175  0
282  7 14  75  0
282  8 13 194  0
282  9 13 242  0
282 10 15 441  0
282 11 15 452  0
282 12 15 452  0
282 13 16 352  0
282 14 15 373  0
282 15 15 354  0
282 16 15 304  0
282 17 15 254  0
282 18 15 255  0
282 19 14 205  0
282 20 14 195  0
282 21 14 235  0
282 22 15 255  0
282 23 15 195  0
282 24 15 155  0
283  1 14 185  0
283  2 14 145  0
283  3 14 135  0
283  4 15 115  0
283  5 16 175  0
283  6 15 215  0
283  7 15 115  0
283  8 16 184  0
283  9 16 313  0
283 10  1 274  0
```

```
283 11  1 264  0
283 12  2 304  0
283 13  3 214  0
283 14  1 253  0
283 15  1 184  0
283 16 15 234  0
283 17  1  65  0
283 18 15 135  0
283 19 15 226  0
283 20 15 295  0
283 21 15 345  0
283 22  1 135  0
283 23  4  45  0
283 24 15 266  0
284  1  5 105  0
284  2 16  95  0
284  3 16 175  0
284  4 16 145  0
284  5  2 145  0
284  6  2  45  0
284  7 16  65  0
284  8  2 144  0
284  9  3 213  0
284 10  7 154  0
284 11  5 164  0
284 12  3 182  0
284 13  6 214  0
284 14  6 233  0
284 15  7 244  0
284 16  7 204  0
284 17  8 154  0
284 18 16  45  0
284 19  8 135  0
284 20  9 125  0
284 21 10 285  0
284 22 10 215  0
284 23 11 195  0
284 24 10 255  0
285  1 11 205  0
285  2 10 215  0
285  3 10 264  0
285  4 11 244  0
285  5 10 244  0
285  6 10 254  0
285  7 11 225  0
285  8 11 244  0
285  9 11 274  0
285 10 12 245  1
285 11 11 334  1
285 12 12 294  1
285 13 11 354  2
285 14 11 245  0
285 15 11 365  1
285 16 10 395  4
285 17 11 335 38
285 18 10 395 43
285 19 11 285 47
285 20 12 395 25
285 21 12 455 15
285 22 12 285  1
```

```
285 23 11 225  0
285 24 10 235  0
286  1 10 325  0
286  2 11 205  0
286  3 10 215  0
286  4 10 264  0
286  5  9 174  0
286  6  9 214  0
286  7  9 214  0
286  8 10 254  0
286  9 11 164  0
286 10  9 174  0
286 11  8 184  0
286 12  8 134  0
286 13  8 274  0
286 14  6 174  0
286 15  7 214  0
286 16  6 194  0
286 17  7 194  0
286 18  1  25  0
286 19  2  95  0
286 20  2 105  0
286 21  4 115  0
286 22  4  85  0
286 23  6 155  0
286 24  6 274  0
287  1  4 155  0
287  2  3 175  0
287  3  5 135  0
287  4  3 175  0
287  5  4 104  0
287  6  4 154  0
287  7  6 144  0
287  8  7 244  0
287  9  6 224  0
287 10  7 234  0
287 11  9 184  0
287 12  9 123  0
287 13 10 182  0
287 14 12 252  0
287 15 15 162  0
287 16 13 194  0
287 17 13 225  0
287 18 12 305  0
287 19 12 245  0
287 20 12 215  0
287 21 13 235  0
287 22 13 225  0
287 23 13 165  0
287 24 12 156  0
288  1 11 215  0
288  2 11 225  0
288  3 12 255  0
288  4 11 245  0
288  5 10 385  0
288  6 10 275  0
288  7 10 255  0
288  8 10 384  0
288  9 11 333  0
288 10 11 431  0
```

```
288 11 11 401  0
288 12 12 441  0
288 13 11 411  0
288 14 11 401  0
288 15 11 421  0
288 16 11 304  0
288 17 11 315  0
288 18 11 315  0
288 19 10 395  0
288 20 10 405  0
288 21 10 395  0
288 22 10 345  0
288 23 10 385  0
288 24 11 375  0
289  1 10 415  0
289  2 10 365  0
289  3 10 455  0
289  4 10 355  0
289  5 10 325  0
289  6 10 365  0
289  7 10 255  0
289  8  9 414  0
289  9 10 414  0
289 10 11 394  0
289 11 11 383  0
289 12 11 471  0
289 13 11 471  0
289 14 11 474  0
289 15 10 374  0
289 16 10 354  0
289 17  9 335  0
289 18  9 355  0
289 19  9 335  0
289 20 10 395  0
289 21 10 415  0
289 22 10 425  0
289 23 10 514  0
289 24 10 514  0
290  1  9 414  0
290  2  9 464  0
290  3  9 425  0
290  4  9 455  1
290  5  9 515  0
290  6  9 514  0
290  7  9 574  0
290  8  8 535  0
290  9  9 584  0
290 10  9 624  0
290 11  8 614  0
290 12  8 604  0
290 13  8 614  1
290 14  8 564  0
290 15  8 514  0
290 16  8 524  0
290 17  8 404  0
290 18  6 235  0
290 19  6 166  0
290 20  5 136  0
290 21  4  86  0
290 22  5  96  0
```

```
290 23  5 126  0
290 24  5  96  0
291  1  4 177  0
291  2  5 147  0
291  3  5 106  0
291  4  3  97  0
291  5  5 126  0
291  6  5 117  0
291  7  4 106  0
291  8  5 135  0
291  9  8 324  0
291 10  9 263  0
291 11  9 203  0
291 12  9 154  0
291 13 16 152  0
291 14 14 152  0
291 15 13 165  0
291 16 12 164  0
291 17 11 175  0
291 18 11 136  0
291 19 15 116  0
291 20 12 216  0
291 21 12 255  0
291 22 12 305  0
291 23 12 285  0
291 24 12 275  0
292  1 12 235  0
292  2 12 275  0
292  3 12 265  0
292  4 12 275  0
292  5 12 225  0
292  6 12 245  0
292  7 10 255  0
292  8 12 304  0
292  9 12 264  0
292 10 13 323  0
292 11 12 204  0
292 12 13 243  0
292 13 12 224  0
292 14 12 205  1
292 15 11 194  0
292 16 12 254  0
292 17 11 264  0
292 18 11 264  0
292 19 11 224  0
292 20 11 224  0
292 21 11 234  0
292 22 11 204  0
292 23 11 174  0
292 24 13 124  0
293  1  7 194  0
293  2 11  84  0
293  3  8  75  0
293  4  8 215  0
293  5  8 205  0
293  6  9 125  0
293  7  8 175  0
293  8  9 185  0
293  9 10  74  0
293 10  7 194  0
```

```
293 11 11 164  0
293 12  7 214  0
293 13  7 384  0
293 14  9 244  0
293 15  8 384  0
293 16  7 324  0
293 17  8 354  0
293 18  8 234  0
293 19 10 184  0
293 20 11 254  0
293 21  9 234  0
293 22 10 194  0
293 23  9 304  0
293 24  9 334  0
294  1  9 394  0
294  2  9 364  0
294  3  9 314  0
294  4  9 374  0
294  5  9 324  0
294  6 10 324  0
294  7  9 334  0
294  8 10 294  0
294  9 11 354  0
294 10 10 303  0
294 11 10 311  0
294 12  9 303  0
294 13  8 303  0
294 14  9 293  0
294 15  9 214  0
294 16 11 212  0
294 17  9 224  0
294 18  9 205  0
294 19  8 245  0
294 20  8 246  0
294 21  9  46  0
294 22  9  66  0
294 23  9 127  0
294 24  8 196  0
295  1  7 127  0
295  2  8 217  0
295  3  8 177  0
295  4  6  67  0
295  5  7 187  0
295  6  4  37  0
295  7  5  87  0
295  8  5 107  0
295  9  5 174  0
295 10  5 283  0
295 11  3 242  0
295 12  4 332  0
295 13  4 351  0
295 14  4 371  0
295 15  4 342  0
295 16  3 354  0
295 17  3 295  0
295 18  3 206  0
295 19  3 186  0
295 20  2 386  0
295 21  3 275  0
295 22  3 295  0
```

```
295 23  3 285  0
295 24  3 275  0
296  1  4 226  0
296  2  4 216  0
296  3  5 226  0
296  4  6 235  0
296  5  6 226  0
296  6  5 137  0
296  7  4 146  0
296  8  6 304  0
296  9  6 394  0
296 10  6 462  0
296 11  7 503  0
296 12  7 501  0
296 13  6 461  0
296 14  6 431  0
296 15  7 473  0
296 16  7 404  0
296 17  7 285  0
296 18  6 136  0
296 19  6 167  0
296 20  6 187  0
296 21  6 236  0
296 22  8 256  0
296 23  8 275  0
296 24  8 246  0
297  1  8 246  0
297  2  8 206  0
297  3  8 177  0
297  4  6 147  0
297  5  6 177  0
297  6  4  76  0
297  7  3  87  0
297  8  7 115  0
297  9  8 343  0
297 10  8 332  0
297 11  9 293  0
297 12  7 322  0
297 13  8 301  0
297 14  7 311  0
297 15  8 343  0
297 16  7 304  0
297 17  7 225  0
297 18  5 146  0
297 19  6 157  0
297 20  6 127  0
297 21 16  67  0
297 22  7  27  0
297 23  4  57  0
297 24  3  87  0
298  1  8  47  0
298  2  6  67  0
298  3  7  57  0
298  4  7 107  0
298  5  9 107  0
298  6  8  37  0
298  7 13  57  0
298  8 13 115  0
298  9 13 223  0
298 10 14 172  0
```

```
298 11 16 144  0
298 12 14 153  0
298 13  6 183  0
298 14  8 182  0
298 15  1 182  0
298 16  7 144  0
298 17  5  85  0
298 18 12  55  0
298 19  3  77  0
298 20  2  47  0
298 21 15  27  0
298 22 12  87  0
298 23 16  77  0
298 24 11  27  0
299  1  6  27  0
299  2 11  27  0
299  3 11  47  0
299  4 11  27  0
299  5  3  37  0
299  6  5  47  0
299  7  2  27  0
299  8 14  37  0
299  9  4 104  0
299 10  2 163  0
299 11  4 213  0
299 12  3 201  0
299 13  5 222  0
299 14  3 222  0
299 15  4 174  0
299 16  4 174  0
299 17  3 135  0
299 18  3 126  0
299 19  4 137  0
299 20  3 117  0
299 21  4 197  0
299 22  5 167  0
299 23  4 127  0
299 24 16  67  0
300  1  3 117  0
300  2  4 107  0
300  3 16  27  0
300  4  3 187  0
300  5  5 147  0
300  6  6 157  0
300  7  6 117  0
300  8  8 205  0
300  9  9 194  0
300 10  9 204  0
300 11 11 203  0
300 12 12 292  0
300 13 12 201  0
300 14 12 222  0
300 15 12 193  0
300 16 11  94  0
300 17 14  75  0
300 18 14  25  0
300 19  4  27  0
300 20  3  27  0
300 21  6  37  0
300 22  8  87  0
```

```
300 23  9  67  0
300 24 11  47  0
301  1 11 177  0
301  2  6  67  0
301  3  8 137  0
301  4  8  87  0
301  5 10 137  0
301  6 11 177  0
301  7  9  97  0
301  8 11  86  0
301  9 12 194  0
301 10 12 193  0
301 11 14 252  0
301 12 13 301  0
301 13 11 262  0
301 14 14 212  0
301 15 12 253  0
301 16 12 194  0
301 17 11 215  0
301 18 12 236  0
301 19 13 217  0
301 20 13 197  0
301 21 13 197  0
301 22 13 157  0
301 23 12 127  0
301 24 10  37  0
302  1  7  47  0
302  2  9 107  0
302  3  9  67  0
302  4  8 137  0
302  5  9 187  0
302  6  9  97  0
302  7  9 177  0
302  8 10 215  0
302  9 11 224  0
302 10 12 184  0
302 11 12 332  0
302 12 12 291  0
302 13 11 273  0
302 14 12 222  0
302 15 12 173  0
302 16 12 194  0
302 17 11 145  0
302 18 12 186  0
302 19 12 176  0
302 20 12 157  0
302 21 12 187  0
302 22 12 177  0
302 23 12 177  0
302 24 11 177  0
303  1 12 117  0
303  2 12 177  0
303  3  7 166  0
303  4  8 207  0
303  5  9 227  0
303  6  9 266  0
303  7 10 215  0
303  8 12 215  0
303  9 11 264  0
303 10 11 303  0
```

```
303 11 11 401  0
303 12 12 224  0
303 13 15 184  0
303 14  3 175  7
303 15  7 156  1
303 16 10 135  0
303 17 11 125  0
303 18  9 176  0
303 19 10 196  0
303 20 11 236  0
303 21 11 246  0
303 22 12 217  0
303 23 12 256  0
303 24 12 216  0
304  1 11 186  0
304  2 11 166  0
304  3 10 265  0
304  4 10 175  0
304  5 10 256  0
304  6 10 205  0
304  7  9 166  0
304  8 10 234  0
304  9 11 244  0
304 10 11 254  0
304 11 11 282  0
304 12 12 293  0
304 13 13 391  0
304 14 13 314  0
304 15 12 304  0
304 16 13 294  0
304 17 14 215  0
304 18 14 264  0
304 19 14 265  0
304 20 12 146  0
304 21 13 165  0
304 22 12 165  0
304 23 13 205  0
304 24 13 144  0
305  1 13 175  0
305  2 13 155  0
305  3 12 135  0
305  4 13 234  0
305  5 12 135  0
305  6 12 155  0
305  7 13 175  0
305  8 12 184  0
305  9 13 271  0
305 10 13 361  0
305 11 13 314  0
305 12 13 371  0
305 13 13 394  0
305 14 13 394  0
305 15 13 424  0
305 16 13 424  0
305 17 13 324  0
305 18 13 315  0
305 19 13 255  0
305 20 14 245  0
305 21 14 335  3
305 22 13 365  0
```

```
305 23 14 295  1
305 24 14 305  1
306  1 14 315  1
306  2 14 385  1
306  3 15 455  3
306  4 16 405 12
306  5  5 405  7
306  6  4 245  0
306  7  3 245  0
306  8  3 324  0
306  9  2 404  0
306 10  2 374  0
306 11  3 472  0
306 12  4 534  1
306 13  4 464  0
306 14  4 454  0
306 15  4 404  0
306 16  5 434  0
306 17  5 584  0
306 18  6 644  0
306 19  6 424  0
306 20  5 475  0
306 21  6 435  0
306 22  6 385  0
306 23  6 375  0
306 24  6 345  0
307  1  5 235  0
307  2  5 305  0
307  3  5 225  0
307  4  6 275  0
307  5  6 275  0
307  6  4 186  0
307  7  4 206  0
307  8  5 334  0
307  9  6 403  0
307 10  6 432  0
307 11  5 301  0
307 12  5 303  0
307 13  5 371  0
307 14  5 442  0
307 15  6 432  0
307 16  5 454  0
307 17  5 225  0
307 18  5 186  0
307 19  5 126  0
307 20  4 127  0
307 21  4 147  0
307 22  4 137  0
307 23  4  97  0
307 24  6  47  0
308  1  4 127  0
308  2  5 187  0
308  3  4  87  0
308  4  7  47  0
308  5  9  27  0
308  6 11 117  0
308  7  9  47  0
308  8  6 156  0
308  9  9 124  0
308 10 13 243  0
```

```
308 11 14 223  0
308 12 12 263  0
308 13 11 223  0
308 14 12 133  0
308 15  7 114  0
308 16 14 103  0
308 17 13  75  0
308 18 13  76  0
308 19  6  77  0
308 20  2  87  0
308 21  2 117  0
308 22 15 137  0
308 23  1  87  0
308 24 11  37  0
309  1  8  87  0
309  2  9  97  0
309  3  3  27  0
309  4 12  87  0
309  5  9 177  0
309  6 14  87  0
309  7  4  87  0
309  8  8 117  0
309  9  9 114  0
309 10  9 134  0
309 11  9 164  0
309 12  9 154  0
309 13 14 232  0
309 14 10 122  0
309 15 13 124  0
309 16 16 124  0
309 17  6  35  0
309 18  2  86  0
309 19  5  47  0
309 20  9  27  0
309 21  1 107  0
309 22  2 127  0
309 23  2 117  0
309 24  3 137  0
310  1  3  87  0
310  2  5 107  0
310  3  7  67  0
310  4  2  67  0
310  5  6  97  0
310  6  7  67  0
310  7  3 107  0
310  8  2  37  0
310  9  6 115  0
310 10  5 204  0
310 11  7 174  0
310 12  3 232  0
310 13  5 244  0
310 14  2 304  0
310 15  4 244  0
310 16  4 234  0
310 17  5  95  0
310 18  3 177  0
310 19  5 157  0
310 20  5 147  0
310 21 12  27  0
310 22  1  27  0
```

```
310 23  3 167  0
310 24  4  77  0
311  1  5 117  0
311  2  6  37  0
311  3  4  57  0
311  4  5  77  0
311  5  8 197  0
311  6  9 207  0
311  7  9 167  0
311  8  8 167  0
311  9  8 174  0
311 10  9 174  0
311 11 10 145  0
311 12 13 222  0
311 13 12 251  0
311 14 13 301  0
311 15 12 173  0
311 16 13 134  0
311 17  1  25  0
311 18  3  76  0
311 19  5 107  0
311 20 12 137  0
311 21  4  67  0
311 22  4  77  0
311 23  4  67  0
311 24  2 167  0
312  1  3  47  0
312  2  5 107  0
312  3  6 187  0
312  4  6  97  0
312  5  6 137  0
312  6 14  97  0
312  7  3  97  0
312  8  1  37  0
312  9  7 134  0
312 10  7 154  0
312 11  4 164  0
312 12  5 203  0
312 13  4 292  0
312 14  5 213  0
312 15  1 172  0
312 16  3 164  0
312 17  2 115  0
312 18  2 136  0
312 19  2 147  0
312 20  3 167  0
312 21  3 167  0
312 22  3 137  0
312 23 14 127  0
312 24 14 167  0
313  1 16 107  0
313  2 13 117  0
313  3  2  67  0
313  4 12  47  0
313  5  4  47  0
313  6 13  67  0
313  7 15  97  0
313  8 14  37  0
313  9  2 135  0
313 10  3 184  0
```

```
313 11  4 174  0
313 12  5 204  0
313 13  6 174  0
313 14  6 194  0
313 15  4 204  0
313 16  3 214  0
313 17  2 125  0
313 18  3 126  0
313 19  3 137  0
313 20  2 177  0
313 21 16 167  0
313 22  2 187  0
313 23  3 147  0
313 24  2 176  0
314  1  3 157  0
314  2  3 157  0
314  3  4 147  0
314  4  5  96  0
314  5  2 117  0
314  6  3 127  0
314  7  4  47  0
314  8 16  47  0
314  9  4 227  0
314 10  3 257  0
314 11  3 417  0
314 12  3 387  0
314 13  4 306  0
314 14  4 254  0
314 15  4 347  0
314 16  2 246  0
314 17  3 145  0
314 18  1 156  0
314 19  2 207  0
314 20  3 147  0
314 21  2 167  0
314 22  5 147  0
314 23  4 177  0
314 24  2 167  0
315  1  4 177  0
315  2  3 147  0
315  3  4 157  0
315  4  3 177  0
315  5  4 177  0
315  6  3 137  0
315  7  3 177  0
315  8  3 157  0
315  9  4 184  0
315 10  5 303  0
315 11  5 343  0
315 12  5 311  0
315 13  6 353  0
315 14  7 314  0
315 15  4 273  0
315 16  3 234  0
315 17  9  96  0
315 18  9 635  0
315 19  9 484  0
315 20 11 195  0
315 21 10 315  0
315 22  9 145  0
```

```
315 23  8 115  0
315 24  9 245  0
316  1  9 365  0
316  2  9 275  0
316  3 10 345  0
316  4 11 385  0
316  5 11 374  0
316  6 11 434  0
316  7 11 424  0
316  8 11 454  0
316  9 11 434  0
316 10 11 424  0
316 11 12 344  0
316 12 11 304  0
316 13 10 234  0
316 14  9 244  0
316 15  9 344  0
316 16 11 254  0
316 17  9  55  0
316 18  7 165  0
316 19 12  65  0
316 20  8 175  0
316 21 10 155  0
316 22  8 306  0
316 23  9 256  0
316 24  6 166  0
317  1  6  86  0
317  2  8 207  0
317  3  8 197  0
317  4  8 177  0
317  5  8 146  0
317  6  7 137  0
317  7  8 197  0
317  8  3  85  0
317  9  7 145  0
317 10  6 134  0
317 11  9 185  0
317 12  7 214  0
317 13  7 224  0
317 14  6 224  0
317 15  6 224  0
317 16  6 234  0
317 17  5 234  0
317 18  5 234  0
317 19  5 244  0
317 20  5 244  0
317 21  4 244  0
317 22  4 254  0
317 23  4 254  0
317 24  4 264  0
318  1  3 264  0
318  2  3 264  0
318  3  3 274  0
318  4  2 274  0
318  5  2 274  0
318  6  2 284  0
318  7  2 284  0
318  8  1 284  0
318  9  1 294  0
318 10  1 294  0
```

```
318 11 16 294  0
318 12 16 304  0
318 13 16 304  0
318 14 16 304  0
318 15 15 314  0
318 16 15 314  0
318 17 15 314  0
318 18 15 324  0
318 19 14 324  0
318 20 14 324  0
318 21 14 334  0
318 22 13 334  0
318 23 13 334  0
318 24 13 344  0
319  1 13 344  0
319  2 12 344  0
319  3 12 354  0
319  4 12 354  0
319  5 12 354  0
319  6 11 364  0
319  7 11 364  0
319  8 11 364  0
319  9 10 374  0
319 10 10 443  0
319 11 10 463  0
319 12  9 512  0
319 13  9 391  0
319 14  9 333  0
319 15  9 253  0
319 16  9 244  0
319 17  7 215  0
319 18  7 186  0
319 19  7 156  0
319 20  5 107  0
319 21  2 167  0
319 22  2  27  0
319 23  5  27  0
319 24  7 137  0
320  1  5 157  0
320  2  7  47  0
320  3  9 216  0
320  4 10 136  0
320  5  9 117  0
320  6 10 176  0
320  7 10 256  0
320  8  9 295  0
320  9 10 214  0
320 10 10 274  0
320 11 10 273  0
320 12  9 263  0
320 13  8 342  0
320 14  8 313  0
320 15  8 313  0
320 16  7 294  0
320 17  7 165  0
320 18  6 156  0
320 19  7 176  0
320 20  6 107  0
320 21 10  77  0
320 22  8 207  0
```

```
320 23 10 176  0
320 24  8 146  0
321  1  9 226  0
321  2  9 156  0
321  3  9 206  0
321  4  9 195  0
321  5 10 216  0
321  6 10 347  0
321  7 11 216  0
321  8 12 166  0
321  9 13 274  0
321 10 12 372  0
321 11 13 303  0
321 12 13 293  0
321 13 14 134  0
321 14  8 223  0
321 15 10 204  0
321 16  7  74  0
321 17  8 135  0
321 18  6 156  0
321 19  6 156  0
321 20 11  37  0
321 21  6  57  0
321 22 12  67  0
321 23 12  47  0
321 24 15 107  0
322  1  5  57  0
322  2 10  27  0
322  3 12  97  0
322  4  9  77  0
322  5 11  47  0
322  6 10  57  0
322  7 16  67  0
322  8  9  87  0
322  9 14 105  0
322 10 12 204  0
322 11 12 243  0
322 12 13 183  0
322 13 11 144  0
322 14  5 174  0
322 15  6 104  0
322 16 16 114  0
322 17 11  64  0
322 18 11 205  0
322 19 10  56  0
322 20 12 127  0
322 21 13  77  0
322 22 11  87  0
322 23 12  37  0
322 24 12  47  0
323  1 10 137  0
323  2 10 137  0
323  3  7  67  0
323  4 10 137  0
323  5 11 137  0
323  6 12 167  0
323  7  8 127  0
323  8  7 127  0
323  9 12 144  0
323 10 13 204  0
```

```
323 11 14 174  0
323 12 12 153  0
323 13 15 243  0
323 14 15 304  0
323 15  1 204  0
323 16 15 254  0
323 17 14 115  0
323 18 15 116  0
323 19 14 186  0
323 20 14 176  0
323 21 14 176  0
323 22 14 166  0
323 23 14 156  0
323 24 14 136  0
324  1 14 166  0
324  2 13 126  0
324  3 13 166  0
324  4 13 136  0
324  5 12  76  0
324  6 13 106  0
324  7 14  67  0
324  8 14  37  0
324  9 15 106  0
324 10 15 165  0
324 11 15 194  0
324 12 13 292  0
324 13 13 174  0
324 14 13 241  0
324 15 12 241  0
324 16 13 204  0
324 17 11 135  0
324 18 13 146  0
324 19 13 246  0
324 20 13 216  0
324 21 13 146  0
324 22 14 146  0
324 23 13  86  0
324 24 12 177  0
325  1 13  57  0
325  2 10 147  0
325  3 11  77  0
325  4  9 116  0
325  5  8 156  0
325  6  7 135  0
325  7  8 125  0
325  8 11 215  0
325  9  9 215  0
325 10  8 154  0
325 11  9 173  0
325 12 12 312  0
325 13 12 321  0
325 14 12 214  0
325 15 12 204  0
325 16 11 134  0
325 17 10 174  0
325 18  9 135  0
325 19 10 135  0
325 20 11 216  0
325 21 11 145  0
325 22 11 165  0
```

```
325 23 13 206  0
325 24 12 216  0
326  1  9  35  0
326  2  7 145  0
326  3  9 225  0
326  4  8 235  0
326  5  8 365  0
326  6  9 245  0
326  7 10 175  0
326  8  9 225  0
326  9 10 224  0
326 10  9 254  0
326 11  9 234  0
326 12 12 331  0
326 13 12 321  0
326 14 12 261  0
326 15 12 281  0
326 16 13 394  0
326 17 11 264  0
326 18 10 255  0
326 19 10 185  0
326 20  9 255  0
326 21  9 315  0
326 22  9 285  0
326 23  9 275  0
326 24 10 345  0
327  1 10 285  0
327  2 10 325  0
327  3  9 245  0
327  4 10 325  0
327  5 11 285  0
327  6 11 245  0
327  7 10 225  0
327  8 11 215  0
327  9 11 314  0
327 10 11 362  0
327 11 11 392  0
327 12 12 371  0
327 13 12 382  0
327 14 13 401  0
327 15 11 194  0
327 16 11 314  0
327 17 14 244  0
327 18 14  26  0
327 19 12 136  0
327 20 12 196  0
327 21 12 175  0
327 22 11 196  0
327 23 12 196  0
327 24 12 216  0
328  1 12 206  0
328  2 12 225  0
328  3 11 215  0
328  4 10 255  0
328  5 11 225  0
328  6 10 215  0
328  7 10 235  0
328  8 10 235  0
328  9  9 256  0
328 10 12 274  0
```

```
328 11 11 303  0
328 12 11 253  0
328 13 10 273  0
328 14 11 293  0
328 15 12 232  0
328 16 11 254  0
328 17 11 264  0
328 18 11 155  0
328 19 12 205  0
328 20 10 215  0
328 21 11 315  0
328 22 10 285  0
328 23 11 275  0
328 24 11 255  0
329  1 11 265  1
329  2 12 285  0
329  3 12 245  0
329  4 12 255  0
329  5 12 235  0
329  6 13 204  0
329  7 13 195  0
329  8 12 255  5
329  9 13 214  0
329 10 13 264  0
329 11 14 194  1
329 12 13 124  0
329 13 10  84  0
329 14  9 144  0
329 15 12 134  0
329 16 15 295  0
329 17 15 335  0
329 18 15 435  0
329 19 15 425  0
329 20 14 375  0
329 21 14 385  0
329 22 15 335  0
329 23 15 325  0
329 24 15 285  1
330  1 15 315  0
330  2 16 315  0
330  3 16 275  5
330  4 16 215  2
330  5  1 195  0
330  6  1 245  0
330  7 16 145  2
330  8 16 145  0
330  9  1 254  0
330 10  2 334  0
330 11  2 384  0
330 12  2 504  0
330 13  4 413  0
330 14  6 384  0
330 15  6 274  0
330 16  4 224  0
330 17  5 135  0
330 18  5 235  0
330 19  5 174  0
330 20  5 274  0
330 21  6 325  0
330 22  5 265  0
```

```
330 23  5 135  0
330 24  5 205  0
331  1  5 125  0
331  2  6 145  0
331  3  6 115  0
331  4  6 195  0
331  5  6 175  0
331  6  6 185  0
331  7  7 156  0
331  8  7 125  0
331  9  9 134  0
331 10 10 184  0
331 11  8 214  0
331 12  8 343  0
331 13  7 283  0
331 14  8 303  0
331 15  7 264  0
331 16  7 264  0
331 17  7 175  0
331 18  9 186  0
331 19  4 137  0
331 20  5 147  0
331 21  2  87  0
331 22  3 127  0
331 23  3 137  0
331 24  4 167  0
332  1  4 147  0
332  2  6 137  0
332  3  6 127  0
332  4  5 157  0
332  5  4 127  0
332  6  4 187  0
332  7  4  87  0
332  8  6 157  0
332  9  9 155  0
332 10  9 214  0
332 11 12 253  0
332 12 14 183  0
332 13 14 222  0
332 14 15 212  0
332 15 16 233  0
332 16 15 174  0
332 17 16  95  0
332 18 15 136  0
332 19 15  77  0
332 20 12  97  0
332 21 13 197  0
332 22 14 137  0
332 23 15 177  0
332 24 15 157  0
333  1 14 167  0
333  2 13  97  0
333  3 13 177  0
333  4 13 137  0
333  5 11  37  0
333  6 13 137  0
333  7 11 137  0
333  8 10 126  0
333  9 11 264  0
333 10 11 332  0
```

```
333 11 12 421  0
333 12 11 361  0
333 13 11 292  0
333 14 11 303  0
333 15 10 264  0
333 16 10 214  0
333 17 11 185  0
333 18 10 155  0
333 19 10 205  0
333 20  9 196  0
333 21  9 226  0
333 22 10 116  0
333 23  9 366  0
333 24  8 246  0
334  1  9 365  0
334  2  9 405  0
334  3  9 425  0
334  4  9 285  0
334  5 10 215  0
334  6 10 295  0
334  7 11 185  0
334  8 11 185  0
334  9 10 334  0
334 10  9 422  0
334 11 10 452  0
334 12  8 411  0
334 13  8 452  0
334 14  8 442  0
334 15  8 443  0
334 16  8 354  0
334 17  9 235  0
334 18  9 215  0
334 19  9 216  0
334 20 10 105  0
334 21 10 136  0
334 22 11 286  0
334 23 11 216  0
334 24 10 305  0
335  1 11 226  0
335  2 11 305  0
335  3  9 175  0
335  4 10 245  0
335  5  9 195  0
335  6  9 205  0
335  7  9 205  0
335  8  9 265  0
335  9 10 244  0
335 10 11 273  0
335 11 10 231  0
335 12  9 223  0
335 13  8 282  0
335 14  6 313  0
335 15  8 344  0
335 16  7 204  0
335 17  7 145  0
335 18  7 156  0
335 19  7 166  0
335 20  5 217  0
335 21  6 127  0
335 22  3  87  0
```

```
335 23  4 107  0
335 24  4  47  0
336  1  3  87  0
336  2 16  57  0
336  3  6  37  0
336  4  6  27  0
336  5  1  27  0
336  6  7  47  0
336  7 16  47  0
336  8  3  27  0
336  9 16  76  0
336 10  9  94  0
336 11 15 154  0
336 12  4 154  0
336 13  5 162  0
336 14  1 183  0
336 15  3 124  0
336 16  4 184  0
336 17  4 135  0
336 18  3  96  0
336 19  3 127  0
336 20  2 147  0
336 21  2 187  0
336 22  1 147  0
336 23  1  97  0
336 24 12 137  0
337  1 12  77  0
337  2 12  57  0
337  3 14  27  0
337  4 11  27  0
337  5 12  57  0
337  6  7  47  0
337  7 16  37  0
337  8  1  27  0
337  9 15  46  0
337 10  6 144  0
337 11  5 242  0
337 12  1 224  0
337 13  1 212  0
337 14  3 242  0
337 15  2 313  0
337 16 16 204  0
337 17 16 145  0
337 18 16 136  0
337 19 16 177  0
337 20 16 217  0
337 21 16 157  0
337 22 16 197  0
337 23 16 167  0
337 24  1 217  0
338  1 15  47  0
338  2 12  47  0
338  3 14 107  0
338  4 14  57  0
338  5 11  47  0
338  6  5 127  0
338  7  7  97  0
338  8  4  37  0
338  9 11  67  0
338 10 10 135  0
```

```
338 11  9 124  0
338 12  4 232  0
338 13  2 302  0
338 14  3 333  0
338 15  3 324  0
338 16  2 334  0
338 17  2 155  0
338 18  1  36  0
338 19  2  77  0
338 20 15 137  0
338 21  1  57  0
338 22  1 107  0
338 23 16 216  0
338 24 16 136  0
339  1 16 135  0
339  2 14 126  0
339  3 15  97  0
339  4 13  66  0
339  5 12 116  0
339  6 13 136  0
339  7 14 197  0
339  8 15 127  0
339  9 15 225  0
339 10 16 284  0
339 11 16 444  0
339 12 15 414  0
339 13 16 323  0
339 14 15 423  0
339 15 16 424  0
339 16 16 345  0
339 17  1 245  0
339 18  1 195  0
339 19 16 205  0
339 20 16 245  0
339 21 16 245  0
339 22 16 295  0
339 23  1 305  0
339 24  1 345  0
340  1  1 365  0
340  2  2 405  0
340  3  1 345  0
340  4  1 384  0
340  5  2 295  0
340  6  3 175  8
340  7  6 274 12
340  8  5 255  1
340  9  5 224  0
340 10  5 334  0
340 11  5 404  0
340 12  4 353  0
340 13  4 402  0
340 14  5 423  0
340 15  4 453  0
340 16  5 394  0
340 17  5 385  0
340 18  5 335  0
340 19  6 295  0
340 20  5 135  0
340 21  3 156  0
340 22  6 215  0
```

```
340 23  6 225  0
340 24  5 125  0
341  1  6 175  0
341  2  7 195  0
341  3  7 216  0
341  4  8 156  0
341  5 11 135  0
341  6 10 225  0
341  7 10 305  0
341  8 11 195  0
341  9 12 204  0
341 10 11 254  0
341 11 12 203  0
341 12 10 224  0
341 13  9 184  0
341 14  9 194  0
341 15 10 204  0
341 16 11 114  0
341 17 11 155  0
341 18 13 136  0
341 19  5  37  0
341 20 11  57  0
341 21 11 107  0
341 22 11 127  0
341 23 13 147  0
341 24 13 117  0
342  1  4  56  0
342  2  8  46  0
342  3  8 147  0
342  4  8 147  0
342  5  8 147  0
342  6  7 117  0
342  7  9 177  0
342  8  9  87  0
342  9 14  96  0
342 10 13 164  0
342 11 11 184  0
342 12  5 144  0
342 13  3 144  0
342 14 16 192  0
342 15  8 124  0
342 16 14 164  0
342 17  9 135  0
342 18 11 176  0
342 19 12 186  0
342 20 11 176  0
342 21 11 206  0
342 22 12 216  0
342 23 12 136  0
342 24 12 157  0
343  1 11 147  0
343  2 12 227  0
343  3 12 127  0
343  4 10 136  0
343  5  9 137  0
343  6  8 137  0
343  7 10 107  0
343  8 10 106  0
343  9 10 174  0
343 10 13 174  0
```

```
343 11 13 223  0
343 12 13 183  0
343 13 16 232  0
343 14 16 214  0
343 15 16 254  0
343 16 15 134  0
343 17 14 184  0
343 18 14 176  0
343 19 14 196  0
343 20 14 226  0
343 21 14 216  0
343 22 15 265  0
343 23 15 185  0
343 24 15 275  0
344  1  1 155  0
344  2  1  65  0
344  3 13 116  0
344  4 15 206  0
344  5 16 206  0
344  6  1 126  0
344  7 16 196  0
344  8 16 235  0
344  9  1 395  0
344 10  1 514  0
344 11  2 614  0
344 12  3 345  0
344 13  3 384  0
344 14  5 574  0
344 15  4 514  0
344 16  5 354  0
344 17  6 285  0
344 18  6 295  0
344 19  7 345  0
344 20  6 265  0
344 21  6 175  0
344 22  4 176  0
344 23  5 106  0
344 24  5 137  0
345  1  7 156  0
345  2  4 127  0
345  3  5 217  0
345  4  6 137  0
345  5  6  87  0
345  6 10 206  0
345  7  9 156  0
345  8 10  57  0
345  9 12 235  0
345 10 13 333  0
345 11 12 371  0
345 12 12 343  0
345 13 12 301  0
345 14 13 252  0
345 15 11 213  0
345 16 11 274  0
345 17 11 255  0
345 18 12 246  0
345 19 12 246  0
345 20 12 226  0
345 21 12 176  0
345 22 12 216  0
```

```
345 23 12 225  0
345 24 12 175  0
346  1 12 196  0
346  2 11 175  0
346  3 12 125  0
346  4 11 135  0
346  5 10 106  0
346  6 10 106  0
346  7 11 106  0
346  8 12 185  0
346  9 11 214  0
346 10 10 174  0
346 11 11 134  0
346 12 13 134  0
346 13 14 143  0
346 14 12 174  0
346 15 14 173  0
346 16 13 124  0
346 17 12 174  0
346 18 12 135  0
346 19 12 195  0
346 20 12 175  0
346 21 13 186  0
346 22 13 206  0
346 23 13 166  0
346 24 14 216  0
347  1 15 296  0
347  2 16 215  0
347  3  2 135  0
347  4 14 155  0
347  5 14 186  0
347  6 14 165  0
347  7 14 175  0
347  8 15 255  0
347  9 15 225  0
347 10 16 205  0
347 11  1 174  0
347 12 15  74  0
347 13 13 174  1
347 14 15 294  1
347 15 15 315  0
347 16 15 315  0
347 17 15 185  0
347 18 14 255  0
347 19 15 315  0
347 20 15 265  2
347 21 15 275  6
347 22 16 275  1
347 23 16 295  0
347 24  1 285  1
348  1  1 295  6
348  2  2 315  3
348  3  3 455  3
348  4  3 475  0
348  5  3 485  0
348  6  3 345  0
348  7  3 165  0
348  8  3 245  0
348  9  4 314  0
348 10  5 454  0
```

```
348 11  5 394  0
348 12  5 502  0
348 13  4 422  0
348 14  4 403  0
348 15  4 313  0
348 16  4 324  0
348 17  3 215  0
348 18  3 146  0
348 19  2 107  0
348 20  3 147  0
348 21  2 147  0
348 22  3 147  0
348 23  4 147  0
348 24  3 147  0
349  1  3 137  0
349  2  3 167  0
349  3  4 147  0
349  4  4 127  0
349  5  2 137  0
349  6  2 187  0
349  7  2 187  0
349  8  2 177  0
349  9  2 226  0
349 10  2 234  0
349 11  2 304  0
349 12  2 334  0
349 13  3 334  0
349 14  2 343  0
349 15  2 343  0
349 16  2 414  0
349 17  2 275  0
349 18  2 245  0
349 19  2 205  0
349 20  1 226  0
349 21  2 316  0
349 22  4 215  0
349 23  5 285  0
349 24  5 285  0
350  1  5 305  0
350  2  6 405  0
350  3  6 375  0
350  4  5 235  0
350  5  5 225  0
350  6  5 205  0
350  7  5 185  0
350  8  5 155  0
350  9  5 234  0
350 10  6 314  0
350 11  6 263  0
350 12  7 324  0
350 13  7 412  0
350 14  7 303  0
350 15  6 344  0
350 16  5 234  0
350 17  4 145  0
350 18  5  86  0
350 19  4 107  0
350 20  4 137  0
350 21  4 147  0
350 22  4 157  0
```

```
350 23  3  97  0
350 24  4 107  0
351  1  5 107  0
351  2  3 137  0
351  3  5 167  0
351  4  6 127  0
351  5  6  97  0
351  6  3  77  0
351  7  5  87  0
351  8  6  67  0
351  9 11  37  0
351 10 15 134  0
351 11 15 184  0
351 12 15 174  0
351 13 15 154  0
351 14  8 114  0
351 15 14 144  0
351 16 14 115  0
351 17 16  95  0
351 18  1 116  0
351 19 12  46  0
351 20 12  36  0
351 21  3  47  0
351 22 12 107  0
351 23 13  77  0
351 24  9  97  0
352  1  8  87  0
352  2  9 167  0
352  3  9 187  0
352  4  8 127  0
352  5  9 177  0
352  6  9 247  0
352  7 10 217  0
352  8  9 216  0
352  9  9 215  0
352 10  9 175  0
352 11 11 244  0
352 12 11 324  0
352 13 12 314  0
352 14 12 234  0
352 15 12 334  0
352 16 12 214  0
352 17 12 145  0
352 18 11 185  0
352 19 11 185  0
352 20 12 195  0
352 21 12 275  0
352 22 11 304  0
352 23 12 385  0
352 24 10 284  0
353  1 10 325  0
353  2 10 335  1
353  3  9 315 16
353  4 11 555 11
353  5 11 385  3
353  6 11 465  7
353  7 11 595  3
353  8 12 405  7
353  9 11 545  0
353 10 11 505  0
```

```
353 11 11 475  0
353 12 12 445  0
353 13 11 455  0
353 14 11 425  0
353 15 11 294  0
353 16 11 375  0
353 17 10 335  0
353 18 10 275  0
353 19 10 255  0
353 20 10 225  0
353 21 11 405  0
353 22 11 355  0
353 23 10 275  0
353 24 11 325  0
354  1 11 265  0
354  2 10 184  0
354  3 10 214  0
354  4  9 154  0
354  5  8 154  0
354  6  7 114  0
354  7  7 145  0
354  8  7 114  0
354  9  9 194  1
354 10  6  54  0
354 11  7  94  0
354 12  3 194  0
354 13  5 204  0
354 14  4 234  0
354 15  4 204  0
354 16  4 224  0
354 17  3 184  0
354 18  3  85  0
354 19  3 105  0
354 20  5  46  0
354 21 15  46  0
354 22  2  47  0
354 23  9  26  0
354 24  2 117  0
355  1  3  57  0
355  2  5  27  0
355  3 14 107  0
355  4  4  57  0
355  5  5  65  0
355  6  7 116  0
355  7  9 145  0
355  8 12  75  0
355  9 10 115  0
355 10  2 125  0
355 11  5 214 10
355 12 13 135  2
355 13 14 325  4
355 14 14 484  2
355 15 14 464  0
355 16 14 505  1
355 17  5 185  0
355 18  7 145  0
355 19  9 145  0
355 20  9 145  0
355 21 10  85  0
355 22 13  95  0
```

```
355 23 14 135  0
355 24 14 125  0
356  1  6  95  0
356  2  5  95  0
356  3  6  85  0
356  4  7  85  0
356  5  7 205  0
356  6  6 185  0
356  7  7 225  0
356  8  7 194  0
356  9  8 214  0
356 10  9 224  0
356 11 10 194  0
356 12  9 194  0
356 13  9 244  0
356 14  9 224  0
356 15  9 244  0
356 16  9 244  0
356 17  9 174  0
356 18 10 105  0
356 19  9 135  0
356 20 11  56  0
356 21  7 106  0
356 22  5  47  0
356 23  8 157  0
356 24  6  27  0
357  1  4  67  0
357  2  6 117  0
357  3  4  46  0
357  4  6 115  0
357  5  5 135  0
357  6  5 155  0
357  7  9  85  0
357  8  5  95  0
357  9  6 105  0
357 10 10 114  0
357 11 16 154  0
357 12  7 124  0
357 13  6 244  0
357 14  7 264  0
357 15  7 374  0
357 16  7 214  0
357 17  6 145  0
357 18  4 105  0
357 19  4 107  0
357 20  4 137  0
357 21  6 266  0
357 22  6 285  0
357 23  4 166  0
357 24  4 176  0
358  1  5 215  0
358  2  5 205  0
358  3  4 136  0
358  4  4 157  0
358  5  4 147  0
358  6  3 196  0
358  7  4 176  0
358  8  4 196  0
358  9  4 214  0
358 10  4 323  0
```

```
358 11  4 423  0
358 12  6 523  0
358 13  5 362  0
358 14  5 432  0
358 15  5 394  0
358 16  6 334  0
358 17  7 315  0
358 18  7 485  0
358 19  7 405  0
358 20  7 305  0
358 21  7 305  0
358 22  7 305  0
358 23  7 255  0
358 24  8 315  0
359  1 11 125  0
359  2 11 135  0
359  3 11 255  0
359  4 10 275  0
359  5 10 295  0
359  6 10 215  0
359  7 10 235  0
359  8 10 304  0
359  9 11 463  0
359 10 10 372  0
359 11  9 362  0
359 12  9 293  0
359 13  9 361  0
359 14  8 382  0
359 15  8 393  0
359 16  8 294  0
359 17  9 214  0
359 18  8 135  0
359 19  6 116  0
359 20  5 107  0
359 21  5  97  0
359 22  2  97  0
359 23  1  67  0
359 24  3 107  0
360  1  2 147  0
360  2  2 167  0
360  3  2 167  0
360  4  3 167  0
360  5  3 147  0
360  6  3 216  0
360  7  3 305  0
360  8  3 255  0
360  9  3 344  0
360 10  4 454  0
360 11  4 393  0
360 12  4 433  0
360 13  3 534  0
360 14  4 353  0
360 15  3 573  0
360 16  4 434  0
360 17  3 345  0
360 18  3 305  0
360 19  3 355  0
360 20  3 435  0
360 21  4 385  0
360 22  4 265  0
```

```
360 23  3 245  0
360 24  3 215  0
361  1  4 206  0
361  2  3 176  0
361  3  4 147  0
361  4  4 137  0
361  5  4 147  0
361  6  4 136  0
361  7  4 127  0
361  8  4 116  0
361  9  6 204  0
361 10  6 284  0
361 11  5 214  0
361 12  5 244  0
361 13  5 273  0
361 14  4 273  0
361 15  3 293  0
361 16  4 314  0
361 17  3 225  0
361 18  3 186  0
361 19  3 186  0
361 20  4 186  0
361 21  4 107  0
361 22  4 147  0
361 23  3 167  0
361 24  5  97  0
362  1  4 137  0
362  2  5 126  0
362  3  4 157  0
362  4  5 177  0
362  5  4 127  0
362  6  4 177  0
362  7  3 167  0
362  8  5 187  0
362  9  4 135  0
362 10  4 184  0
362 11  5 234  0
362 12  4 333  0
362 13  5 352  0
362 14  4 452  0
362 15  4 523  0
362 16  4 464  0
362 17  3 385  0
362 18  4 255  0
362 19  4 205  0
362 20  3 225  0
362 21  4 305  0
362 22  5 305  0
362 23  4 335  0
362 24  5 275  0
363  1  4 325  0
363  2  4 245  0
363  3  5 205  0
363  4  5 156  0
363  5  4 126  0
363  6  5 126  0
363  7  3 176  0
363  8  5 136  0
363  9  6 174  0
363 10  8 184  0
```

```
363 11  8 244  0
363 12  9 204  0
363 13  4 193  0
363 14  5 182  0
363 15  5 164  0
363 16  3 224  0
363 17  2 155  0
363 18  2 176  0
363 19  2 127  0
363 20  1 147  0
363 21  1 157  0
363 22 16 147  0
363 23 15 297  0
363 24  1 146  0
364  1  1 227  0
364  2  1 127  0
364  3  2 187  0
364  4  2 167  0
364  5  3 127  0
364  6  5  97  0
364  7  3 177  0
364  8  3 187  0
364  9  3 166  0
364 10  2 244  0
364 11  2 263  0
364 12  3 312  0
364 13  4 353  0
364 14  3 382  0
364 15  3 313  0
364 16  2 374  0
364 17  2 195  0
364 18  2 186  0
364 19  2 217  0
364 20  2 177  0
364 21  2 177  0
364 22  2 177  0
364 23  1 166  0
364 24  2 127  0
365  1  2 136  0
365  2  2  97  0
365  3  3 136  0
365  4  3 146  0
365  5  3 166  0
365  6  3 196  0
365  7  3 215  0
365  8  3 245  0
365  9  3 225  0
365 10  3 204  0
365 11  4 164  0
365 12  4 264  0
365 13  4  94  0
365 14  3 144  0
365 15  3 244  0
365 16  3 214  0
365 17  2 145  0
365 18 16 105  0
365 19  2 176  0
365 20  2 136  0
365 21 12  67  0
365 22 11  47  0
```

```
 365 23 13  87  0
 365 24 13  87  0
        4.        4.        4.        4.       15.       15.       15.       15.
```

```
SECPOP2000 V3.12  MACCS2 Site Data File for Vogtle + transients projected to year 2040.  INCLUD
Lat: 33d 8'31'' Long:  81d45'45'' Population multiplier: 1.0000   10/06/2006
 10 SPATIAL INTERVALS
 16 WIND DIRECTIONS
  7 CROP CATEGORIES
  4 WATER PATHWAY ISOTOPES
  1 WATERSHEDS
 97 ECONOMIC REGIONS
SPATIAL DISTANCES     KILOMETERS
   1.6093    3.2187    4.8280    6.4374    8.0467   16.0935   32.1869   48.2804
  64.3739   80.4674
POPULATION
       0.       69.        0.        0.        0.        0.     8727.    92192.
   28873.    22032.
       0.        0.        0.        0.        0.        0.     4594.    14508.
    7731.    13488.
       0.        0.        0.        0.        0.        0.        0.     9309.
    5508.    10769.
       0.        0.        0.        0.        0.        0.      774.    13423.
   12596.    11961.
       0.        0.        0.        0.        0.       13.      735.     3547.
    1805.     3263.
       0.        0.        0.       22.        1.      346.      249.     6077.
    7848.    12492.
       0.        0.        0.       19.       17.      281.      336.      344.
     869.    11149.
       0.        0.       34.        0.        0.      991.      881.     7749.
    3263.     7071.
       0.        0.        0.        0.       25.      315.     2322.     1938.
    4168.    69610.
       0.        0.        0.        0.        3.       58.      609.     5337.
    2694.     9893.
       0.        7.        0.        7.        1.      193.      859.      737.
    2006.     7607.
       0.        0.       19.       79.       22.      763.     9211.      797.
    5609.     5525.
       0.        0.       70.        9.        4.      392.     4333.     1613.
    4660.     3290.
       0.        0.       90.        0.       86.      226.     4262.    10681.
   12014.    22397.
       0.       50.        0.      156.      122.      156.    12373.   142545.
  353009.    27595.
       0.        0.        0.        0.        0.       91.     4875.   140058.
   60057.    10509.
LAND FRACTION
0.00 0.00 0.99 0.00 0.00 0.98 0.98 0.98 0.98 0.98
0.00 0.00 0.00 0.00 0.00 0.00 0.98 0.98 0.98 0.98
0.91 0.00 0.00 0.00 0.00 0.00 0.00 0.99 0.98 0.99
0.91 0.00 0.00 0.00 0.99 0.00 0.99 0.99 0.99 0.99
0.91 0.00 0.00 0.00 0.00 0.99 1.00 0.99 0.99 0.98
0.91 0.91 0.91 0.91 0.91 0.92 0.99 1.00 0.91 0.85
0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.96 0.89 0.82
0.91 0.00 0.91 0.00 0.00 0.91 0.91 0.91 0.91 0.93
0.91 0.91 0.00 0.00 0.91 0.91 0.93 0.92 0.94 0.99
0.91 0.91 0.00 0.00 0.91 0.91 0.96 1.00 0.99 0.99
0.91 0.91 0.00 0.91 0.91 0.91 0.92 0.97 0.96 0.98
0.91 0.00 0.91 0.91 0.91 0.91 0.91 0.91 0.97 0.98
0.91 0.00 0.91 0.91 0.91 0.91 0.91 0.92 0.99 0.99
0.00 0.00 0.91 0.91 0.91 0.91 0.85 0.80 0.92 0.96
0.00 0.91 0.00 0.91 0.91 0.90 0.76 0.74 0.97 0.98
```

```
0.00 0.00 0.00 0.00 0.00 0.97 0.95 0.89 0.98 0.99
REGION INDEX
1 2 2 2 2 3 4 5 6 7
1 8 8 8 8 910111213
1141414141516171819
1202020202122232425
1262626262728293031
1323232323334353637
1383838383940414243
1444444444546474849
1505050505152535455
1565656565758596061
1626262626364656667
1686868686970717273
1747474747576777879
1808080808182838485
1868686868788899091
1929292929394959697
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
CROP SEASON AND SHARE
  1 PASTURE               90. 270.  0.4100
  2 STORED FORAGE        150. 240.  0.1300
  3 GRAINS               150. 240.  0.2100
  4 GRN LEAFY VEGETABLES 150. 240.  0.0020
  5 OTHER FOOD CROPS     150. 240.  0.0040
  6 LEGUMES AND SEEDS    150. 240.  0.1500
  7 ROOTS AND TUBERS     150. 240.  0.0030
WATERSHED DEFINITION  -- INITIAL AND ANNUAL WASHOFF AND INGESTION FACTORS
  1 Sr-89                          5.00E-06       0.0
  2 Sr-90                          5.00E-06       0.0
  3 Cs-134                         5.00E-06       0.0
  4 Cs-137                         5.00E-06       0.0
REGIONAL ECONOMIC DATA
  1 EXCLUSION      .214 0.001    4971.0   14888.0  143897.0
  2 REGION_02      .331 0.252    1065.0    3848.0   80147.0
  3 REGION_03      .327 0.002    1067.0    3003.0   86571.0
  4 REGION_04      .327 0.002    1067.0    3003.0   86571.0
  5 REGION_05      .327 0.002    1067.0    3003.0   86571.2
  6 REGION_06      .364 0.017    1027.3    3086.3   85815.6
  7 REGION_07      .468 0.097     763.3    4024.3   86190.3
  8 REGION_08      .000 0.000       0.0       0.0       0.0
  9 REGION_09      .000 0.000       0.0       0.0       0.0
 10 REGION_10      .327 0.002    1067.0    3003.0   86571.0
 11 REGION_11      .327 0.002    1067.0    3003.0   86571.0
```

12	REGION_12	.327	0.002	1067.0	3003.0	86571.0
13	REGION_13	.315	0.005	858.5	3170.5	85006.6
14	REGION_14	.000	0.000	0.0	0.0	0.0
15	REGION_15	.000	0.000	0.0	0.0	0.0
16	REGION_16	.000	0.000	0.0	0.0	0.0
17	REGION_17	.329	0.159	1065.7	3534.0	82534.3
18	REGION_18	.243	0.074	1119.9	6538.0	104101.4
19	REGION_19	.164	0.003	1046.3	9118.2	121204.5
20	REGION_20	.331	0.252	1065.0	3848.0	80147.0
21	REGION_21	.000	0.000	0.0	0.0	0.0
22	REGION_22	.331	0.252	1065.0	3848.0	80147.0
23	REGION_23	.331	0.252	1065.0	3848.0	80147.0
24	REGION_24	.277	0.131	981.5	5407.5	100054.8
25	REGION_25	.109	0.015	1139.1	11472.1	138770.2
26	REGION_26	.000	0.000	0.0	0.0	0.0
27	REGION_27	.331	0.252	1065.0	3848.0	80147.0
28	REGION_28	.231	0.149	485.0	2877.2	83330.2
29	REGION_29	.283	0.203	787.0	3382.7	81672.6
30	REGION_30	.247	0.078	716.8	4608.5	100922.2
31	REGION_31	.302	0.048	853.0	5113.6	104661.1
32	REGION_32	.214	0.001	4971.0	14888.0	143897.0
33	REGION_33	.222	0.019	4689.9	14094.3	139324.5
34	REGION_34	.163	0.075	275.8	2704.7	87813.1
35	REGION_35	.162	0.078	84.0	2206.0	85531.0
36	REGION_36	.107	0.041	84.5	2789.9	83824.1
37	REGION_37	.145	0.007	243.6	3442.7	83083.6
38	REGION_38	.214	0.001	4971.0	14888.0	143897.0
39	REGION_39	.214	0.001	4971.0	14888.0	143897.0
40	REGION_40	.077	0.028	4095.0	12799.2	131784.3
41	REGION_41	.105	0.057	1871.6	6954.9	105898.1
42	REGION_42	.097	0.034	86.6	2912.1	83506.2
43	REGION_43	.059	0.000	252.6	3687.0	82558.9
44	REGION_44	.214	0.001	4971.0	14888.0	143897.0
45	REGION_45	.214	0.001	4971.0	14888.0	143897.0
46	REGION_46	.075	0.027	4130.2	12894.8	132165.3
47	REGION_47	.040	0.034	3921.0	12399.0	129247.0
48	REGION_48	.040	0.034	3919.1	12394.5	129223.2
49	REGION_49	.140	0.013	1659.3	6804.9	104062.8
50	REGION_50	.214	0.001	4971.0	14888.0	143897.0
51	REGION_51	.214	0.001	4971.0	14888.0	143897.0
52	REGION_52	.193	0.011	3746.7	11842.2	127607.4
53	REGION_53	.080	0.030	3545.0	11426.9	124445.9
54	REGION_54	.108	0.031	2984.3	10214.6	121352.5
55	REGION_55	.243	0.027	1071.2	5772.9	105572.3
56	REGION_56	.214	0.001	4971.0	14888.0	143897.0
57	REGION_57	.214	0.001	4971.0	14888.0	143897.0
58	REGION_58	.308	0.000	2579.7	8833.1	112664.4
59	REGION_59	.381	0.000	727.0	4142.0	88467.0
60	REGION_60	.347	0.034	784.4	4286.9	91108.1
61	REGION_61	.240	0.107	692.0	3950.5	95403.3
62	REGION_62	.214	0.001	4971.0	14888.0	143897.0
63	REGION_63	.214	0.001	4971.0	14888.0	143897.0
64	REGION_64	.222	0.001	4778.3	14400.1	141380.3
65	REGION_65	.327	0.000	2092.0	7598.3	106295.1
66	REGION_66	.257	0.141	2006.6	6914.3	105976.2
67	REGION_67	.250	0.233	969.1	3969.4	92895.2
68	REGION_68	.214	0.001	4971.0	14888.0	143897.0
69	REGION_69	.214	0.001	4971.0	14888.0	143897.0
70	REGION_70	.214	0.001	4971.0	14888.0	143897.0
71	REGION_71	.214	0.001	4971.0	14888.0	143897.0

72	REGION_72	.166	0.333	1593.4	10683.1	122616.1
73	REGION_73	.219	0.359	342.5	7373.4	104993.8
74	REGION_74	.214	0.001	4971.0	14888.0	143897.0
75	REGION_75	.214	0.001	4971.0	14888.0	143897.0
76	REGION_76	.214	0.001	4971.0	14888.0	143897.0
77	REGION_77	.205	0.064	4336.7	14130.8	140041.0
78	REGION_78	.145	0.462	343.4	9363.9	115765.8
79	REGION_79	.247	0.343	272.7	7345.8	103055.8
80	REGION_80	.214	0.001	4971.0	14888.0	143897.0
81	REGION_81	.214	0.001	4971.0	14888.0	143897.0
82	REGION_82	.141	0.001	3521.8	11365.6	129080.4
83	REGION_83	.088	0.001	2452.0	8770.0	118158.2
84	REGION_84	.329	0.140	630.7	5364.1	97969.9
85	REGION_85	.595	0.027	645.2	3859.5	92133.0
86	REGION_86	.214	0.001	4971.0	14888.0	143897.0
87	REGION_87	.203	0.001	4667.1	14115.3	140542.7
88	REGION_88	.039	0.000	1469.0	6372.9	108068.8
89	REGION_89	.014	0.000	981.0	5190.0	103103.1
90	REGION_90	.523	0.013	890.5	3564.9	88208.1
91	REGION_91	.556	0.030	879.3	3475.5	86076.3
92	REGION_92	.000	0.000	0.0	0.0	0.0
93	REGION_93	.325	0.002	1066.2	3022.3	86717.2
94	REGION_94	.288	0.002	1056.3	3275.5	88631.1
95	REGION_95	.218	0.002	1036.9	3767.8	92352.3
96	REGION_96	.526	0.084	936.4	3909.6	83919.0
97	REGION_97	.522	0.098	1324.4	5422.0	86588.9

```
*******************************************************************************
*******************************************************************************
* FILE NAME Vchronc.inp
*
* DESCRIPTIVE TITLE DESCRIBING THIS "CHRONC" INPUT FILE
*
CHCHNAME001  'SNC AP1000 CHRONC FILE'
*******************************************************************************
* EMERGENCY RESPONSE COST DATA BLOCK
*
* DAILY COST FOR A PERSON WHO IS EVACUATED (DOLLARS/PERSON-DAY)
* ESCALATED FROM $27/DAY IN 1986 TO
*   ESCALATED FROM $27/DAY IN 1986 TO 49.64 in 2006 {FACTOR OF 1.8385036} FROM
*   WWW.BLS.GOV/CPI/HOME.HTM, INFLATION CALCULATOR
CHEVACST001  49.64   (INCLUDES FOOD AND HOUSING COSTS BUT NOT LOST INCOME)
*
* DAILY COST FOR A PERSON WHO IS RELOCATED (DOLLARS/PERSON-DAY)
*   ESCALATED '86 TO '06, FACTOR = 1.8385036
CHRELCST001  49.64   (INCLUDES FOOD AND HOUSING COSTS BUT NOT LOST INCOME)
*******************************************************************************
* LONG TERM PROTECTIVE ACTION DATA BLOCK
*
* Duration of the intermediate phase period--at version 1.11c TMIPND is no
* longer processed.  The new input variable DUR_INTPHAS is the period's
* duration, not the time after plume arrival at which the period ends.
*
DUR_INTPHAS   0.0    (in seconds)   (no intermediate phase)
*
* LONG-TERM PHASE DOSE PROJECTION PERIOD, THE DURATION OF THE EXPOSURE
* PERIOD OVER WHICH THE LONG-TERM DOSE CRITERION IS EVALUATED (SECONDS)
*
CHTMPACT001   1.58E8             (5 YEARS)
*
* DOSE CRITERION FOR INTERMEDIATE PHASE RELOCATION (Sv)
*
CHDSCRTI001   1.0E5              (NO INTERMEDIATE PHASE RELOCATION)
*
* DOSE CRITERION FOR LONG-TERM PHASE RELOCATION (Sv)
*
CHDSCRLT001    0.04
*
* CRITICAL ORGAN NAME FOR LONG-TERM ACTIONS
*
CHCRTOCR001 'L-EDEWBODY'
*
* Long Term Exposure Period    Previously permanently set to:
*    one million years = 3.15 E13 seconds
*    MACCS2 allowable range is 3.15E7 to 1.E10
*
CHEXPTIM001    1.E10
*******************************************************************************
* DECONTAMINATION PLAN DATA BLOCK
*
* NUMBER OF LEVELS OF DECONTAMINATION
*
CHLVLDEC001  2
*
* DECONTAMINATION TIMES CORRESPONDING TO THE LVLDEC LEVELS OF DECONTAMINATION
*  (SECONDS)
*
```

```
CHTIMDEC001   5.184E6  1.0368E7    (60, 120 DAYS)
*
* DOSE REDUCTION FACTORS CORRESPONDING TO THE LVLDEC LEVELS OF DECONTAMINATION
*
CHDSRFCT001   3.      15.
*
* COST OF FARM DECONTAMINATION PER FARMLAND UNIT AREA (DOLLARS/HECTARE)
*  FOR THE VARIOUS LEVELS OF DECONTAMINATION
*
*CHCDFRM0001   562.5   1250. ESCALATED '86 TO '06
*        FACTOR = 1.8385036
CHCDFRM0001    1034.16  2298.13
*
* COST OF NONFARM DECONTAMINATION PER RESIDENT PERSON (DOLLARS/PERSON)
*  FOR THE VARIOUS LEVELS OF DECONTAMINATION
*
*CHCDNFRM001   3000.   8000.  ESCALATED '86 TO '06
*        FACTOR = 1.8385036
CHCDNFRM001  5515.51  14708.03
*
* FRACTION OF FARMLAND DECONTAMINATION COST DUE TO LABOR
*  FOR THE VARIOUS DECONTAMINATION LEVELS
*
CHFRFDL0001  .3      .35
*
* FRACTION OF NON-FARM DECONTAMINATION COST DUE TO LABOR
*  FOR THE VARIOUS DECONTAMINATION LEVELS
*
CHFRNFDL001  .7      .5
*
* FRACTION OF TIME WORKERS IN FARM AREAS SPEND IN CONTAMINATED AREAS
*  FOR THE VARIOUS DECONTAMINATION LEVELS
*
CHTFWKF0001  .10     .33
*
* FRACTION OF TIME WORKERS IN NON-FARM AREAS SPEND IN CONTAMINATED AREAS
*  FOR THE VARIOUS DECONTAMINATION LEVELS
*
CHTFWKNF001  .33     .33
*
* AVERAGE COST OF DECONTAMINATION LABOR (DOLLARS/MAN-YEAR)
*
*CHDLBCST001   35000.  ESCALATED '86 TO '06
*        FACTOR = 1.8385036
CHDLBCST001    64347.63
*******************************************************************************
* INTERDICTION COST DATA BLOCK
*
* DEPRECIATION (DETERIORATION) RATE DURING INTERDICTION PERIOD (PER YEAR)
*
CHDPRATE001    .20   (VALUE OBTAINED FROM WASH-1400, APPENDIX 6)
*
* INVESTMENT INCOME RETURN (DISCOUNT RATE) DURING INTERDICTION PERIOD (PER YEAR)
* THIS VALUE SHOULD BE DERIVED AS A REAL RETURN RATE ADJUSTED FOR INFLATION
*
CHDSRATE001    .12   (VALUE OBTAINED FROM WASH-1400, APPENDIX 6)
*
* POPULATION RELOCATION COST (DOLLARS/PERSON):
*  ALTERNATIVE HOUSING, MOVING COSTS, AND LOST INCOME FOR PEOPLE IN
*  AREAS WHICH REQUIRE DECONTAMINATION, INTERDICTION, OR CONDEMNATION
```

```
*
*CHPOPCST001   5000.  ESCALATED '86 TO '06
*        FACTOR = 1.8385036
CHPOPCST001    9192.52
*******************************************************************************
* GROUNDSHINE WEATHERING DEFINITION DATA BLOCK
*
* NUMBER OF TERMS IN THE GROUNDSHINE WEATHERING RELATIONSHIP (EITHER 1 OR 2)
*
CHNGWTRM001   2
*
* GROUNDSHINE WEATHERING COEFFICIENTS
*
CHGWCOEF001   0.5    0.5            (JON HELTON)
*
* HALF LIVES CORRESPONDING TO THE GROUNDSHINE WEATHERING COEFFICIENTS (S)
*
CHTGWHLF001   1.6E7  2.8E9          (JON HELTON)
*******************************************************************************
* RESUSPENSION WEATHERING DEFINITION DATA BLOCK
*
* NUMBER OF TERMS IN THE RESUSPENSION WEATHERING RELATIONSHIP
*
CHNRWTRM001    3
*
* RESUSPENSION CONCENTRATION COEFFICIENTS   (/ METER)
*  RELATIONSHIP BETWEEN GROUND CONCENTRATION AND INSTANTANEOUS AIR CONC.
*
CHRWCOEF001  1.0E-5   1.0E-7   1.0E-9  (VALUES HERE SELECTED BY JON HELTON)
*
* HALF-LIVES CORRESPONDING TO THE RESUSPENSION CONCENTRATION COEFFICIENTS (S)
*
CHTRWHLF001  1.6E7    1.6E8    1.6E9   (6 MONTHS, 5 YEARS, 50 YEARS)
*******************************************************************************
* SITE REGION DESCRIPTION DATA BLOCK
*
* FRACTION OF AREA THAT IS LAND IN THE REGION
*
CHFRACLD001   0.95   (ROUGH GUESS VALUE, SITE FILE OVERRIDES THIS VALUE)
*
* FRACTION OF LAND DEVOTED TO FARMING IN THE REGION
*
CHFRCFRM001   0.382  (VIRGINIA STATE VALUE, SITE FILE OVERRIDES THIS VALUE)
*
* AVERAGE VALUE OF ANNUAL FARM PRODUCTION IN THE REGION (DOLLARS/HECTARE)
*  (CASH RECEIPTS FROM FARMING PLUS VALUE OF HOME CONSUMPTION)/(LAND IN FARMS)
*
CHFRMPRD001   371.0  (VIRGINIA STATE VALUE, SITE FILE OVERRIDES THIS VALUE)
*
* FRACTION OF FARM PRODUCTION RESULTING FROM DAIRY PRODUCTION IN THE REGION
*  (VALUE OF MILK PRODUCED)/(CASH RECEIPTS FROM FARMING PLUS HOME CONSUMPTION)
*
CHDPFRCT001   0.198  (VIRGINIA STATE VALUE, SITE FILE OVERRIDES THIS VALUE)
*
* VALUE OF FARM WEALTH (DOLLARS/HECTARE)
*  (AVERAGE VALUE PER HECTARE OF FARM LAND AND BUILDINGS TO 50 MILES)
*
*CHVALWF0001   2541.  ESCALATED '03 TO '06
*       FACTOR = 1.0951087
CHVALWF0001   2782.67  * FARM SIZE/AREA WEIGHTED AVERAGE FOR GA/SC
```

```
*                       COUNTIES WITHIN 50 MILE RADIUS TAKING SRS INTO ACCOUNT
*
* FRACTION OF FARM WEALTH IN IMPROVEMENTS FOR THE REGION
*
CHFRFIM0001   0.25  * SURRY
*
* NON-FARM WEALTH, PROPERTY AND IMPROVEMENTS FOR THE REGION (DOLLARS/PERSON)
*  THE VALUE OF ALL RESIDENTIAL, BUSINESS, AND PUBLIC ASSETS WHICH WOULD BE
*  LOST IN THE EVENT OF PERMANENT INTERDICTION (CONDEMNATION) OF THE AREA
*
*CHVALWNF001  107602.  ESCALATED 2003 TO 2006
*        FACTOR = 1.0951087
CHVALWNF001  117836.  * POPULATION/AREA WEIGHTED AVERAGE FOR GA/SC
*                       COUNTIES WITHIN 50 MILE RADIUS
*
* FRACTION OF NON-FARM WEALTH IN IMPROVEMENTS FOR THE REGION
*
CHFRNFIM001   0.8
******************************************************************************
CHFDPATH001 'NEW'
*
* name of the COMIDA2 binary output file
*
BIN_FILE001 'C:\MACCS2\SAMP_A.BIN'   (binary data file of 1/04)
*
* Dose limits triggering first year crop disposal of the separate
* milk and non-milk components of the diet, corresponding in purpose,
* more or less, to the MACCS 1.5 input variables PSCMLK and PSCOTH
*
* For NUREG-1150 calculations, the maximum allowable ground concentrations for
* production of milk and non-milk crops contaminated by an accident occurring
* in the growing season were derived based on an assumed maximum allowable
* dose of 5 rem effective or 15 rem thyroid, per the 1982 FDA guidance that's
* reprinted in the 1992 EPA PAG Manual.  For purposes of comparison against
* the prior results, it is being assumed, for simplicity, that milk and
* non-milk crops contribute equally to the first year dose.  Thus, the 5 rem
* effective dose limit used in NUREG-1150 is equally split between milk and
* non-milk crops, with 2.5 rem allowed for each.  Similarly, the 15 rem
* thyroid limit is split into 7.5 and 7.5 rem for the milk and non-milk
* portions of the diet.
*
* SUPPORTING DOCUMENT FOR GUIDANCE LEVELS FOR RADIONUCLIDES IN DOMESTIC AND
* DOMESTIC FOODS, July, 2004, FDA (www.cfsan.fda.gov/~dms/nucleve2.html, see
* especially Section II) revises limits from 5/15 rem (effective/thyroid) to
* 0.5/5 rem.  The latter is incorporated below.
*
*             effective     thyroid  (doses in sieverts)
DOSEMILK001    0.0025         0.025
DOSEOTHR001    0.0025         0.025
*
* Annual dose limits for the subsequent year's (i.e., after the first year)
* interdiction of BOTH the milk and non-milk (combined) components of the diet
*
* Note: the long-term food critera, GCMAXR, used for NUREG-1150 wre based on
* an ingestion dose integrated from zero to infinity.  It is not possible to
* translate those parameter values into corresponding annual dose limits, as is
* required by the COMIDA2-based food model.  The "total" dose limits used in
* NUREG-1150 for "root uptake", 0.5 rem effective and 1.5 rem thyroid, are used
* here as annual dose limits for interdiction of food production in years the
* years subsequent to the accident.
```

```
*
*             effective     thyroid  (doses in sieverts)
DOSELONG001    0.005          0.015
*
*******************************************************************************
*
* NUMBER OF NUCLIDES IN THE WATER INGESTION PATHWAY MODEL
*
CHNUMWPI001    4
*
* TABLE OF NUCLIDE DEFINITIONS IN THE WATER INGESTION PATHWAY MODEL
*
* IF A SITE DATA FILE IS DEFINED, THE DATA DEFINING THE WATERSHED INGESTION
*  FACTOR IS SUPERSEDED BY THE CORRESPONDING DATA IN THE SITE DATA FILE
*
*                        INITIAL     ANNUAL    INGESTION FACTOR
*             WATER      WASHOFF     WASHOFF    ((Bq INGESTED)/
*            NUCLIDE     FRACTION     RATE       (Bq IN WATER))
*
*             NAMWPI      WSHFRI      WSHRTA         WINGF
CHWTRISO001   Sr-89        0.01       0.004          5.0E-6
CHWTRISO002   Sr-90        0.01       0.004          5.0E-6
CHWTRISO003   Cs-134       0.005      0.001          5.0E-6
CHWTRISO004   Cs-137       0.005      0.001          5.0E-6
*******************************************************************************
* SPECIAL OPTIONS DATA BLOCK
*
* DETAILED PRINT OPTION CONTROL SWITCHES, LOOK AT THE CODE BEFORE TURNING ON!!
*          KSWDSC
*
CHKSWTCH001   0
*******************************************************************************
* DEFINE THE TYPE 9 RESULTS
*
* LONG-TERM POPULATION DOSE IN A GIVEN REGION BROKEN DOWN BY THE 12 PATHWAYS
*
* NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED
* FOR EACH RESULT YOU REQUEST, THE CODE WILL PRODUCE A SET OF 12
*
TYPE9NUMBER   2      (UP TO 10 ALLOWED)
*
*              ORGNAM        INNER      OUTER
*
TYPE9OUT001   'L-EDEWBODY'       1          6     (0-10 MILES)
TYPE9OUT002   'L-EDEWBODY'       1         10     (0-50 MILES)
*******************************************************************************
* ECONOMIC COST RESULTS IN A REGION BROKEN DOWN BY 12 TYPES OF COSTS
*
* NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED
* FOR EACH RESULT YOU REQUEST, THE CODE WILL PRODUCE A SET OF 12
*
TYP10NUMBER   1      (UP TO 10 ALLOWED)
*
*              INNER      OUTER
*
TYP10OUT001      1          10   (0-50 MILES)
*******************************************************************************
* DEFINE A FLAG THAT CONTROLS THE PRODUCTION OF THE ACTION DISTANCE RESULTS
*
* SPECIFYING A VALUE OF .TRUE. TURNS ON ALL 8 OF THE ACTION DISTANCE RESULTS,
```

```
* A VALUE OF .FALSE. WILL ELIMINATE THE ACTION DISTANCE RESULTS FROM THE OUTPUT.
*
TYP11FLAG11  .FALSE.
*******************************************************************************
* IMPACTED AREA/POPULATION RESULTS IN A REGION BROKEN DOWN BY 6 TYPES OF IMPACTS
*
* NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED
* FOR EACH RESULT YOU REQUEST, THE CODE WILL PRODUCE A SET OF 8
*
TYP12NUMBER   1      (UP TO 10 ALLOWED)
*
*              INNER      OUTER
*
TYP12OUT001      1          10   (0-50 MILES)
*******************************************************************************
* Maximal annual food ingestion dose to an individual, requested by IXOT13
*
* This result is calculated after accounting for temporary or
* permanent interdiction.  It is only available for the "new" food model.
*
* NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED
*
TYP13NUMBER   0  (UP TO 10 ALLOWED)
*
* IRAD13 is the radial spatial interval at which results are requested
*
* ORGN13 is the name of the organ for which results are requested
*  (allowable values for ORGN13 are 'EFFECTIVE' or 'THYROID')
*
*          IRAD13   ORGN13
*
*TYP13OUT001   2    EFFECTIVE
*TYP13OUT002   4    EFFECTIVE
*TYP13OUT003   6    EFFECTIVE
*TYP13OUT004   9    EFFECTIVE
.
```

```
*****************************************************************************
* FILE NAME:  VEARLY.INP
*
* DESCRIPTIVE TITLE DESCRIBING THIS "EARLY" INPUT FILE
*
MIEANAM1001  'SNC AP1000 EARLY FILE - 95% Evacuation'
DCF_FILE001 'C:\MACCS2\DOSDATA.INP' (DCF file of MACCS 1.5.11.1)
*
*             ORGNAM         ORGFLG
*
MIORGDEF001  'A-SKIN'        .TRUE.
MIORGDEF002  'A-RED MARR'    .TRUE.
MIORGDEF003  'A-LUNGS'       .TRUE.
MIORGDEF004  'A-THYROIDH'    .TRUE.
MIORGDEF005  'A-STOMACH'     .TRUE.
MIORGDEF006  'A-LOWER LI'    .FALSE.  (does not contribute to early fatalities)
MIORGDEF007  'L-EDEWBODY'    .TRUE.
MIORGDEF008  'L-RED MARR'    .TRUE.
MIORGDEF009  'L-BONE SUR'    .TRUE.
MIORGDEF010  'L-BREAST'      .TRUE.
MIORGDEF011  'L-LUNGS'       .TRUE.
MIORGDEF012  'L-THYROID'     .TRUE.
MIORGDEF013  'L-LOWER LI'    .TRUE.
MIORGDEF014  'L-BLAD WAL'    .TRUE.
MIORGDEF015  'L-LIVER'       .FALSE.
MIORGDEF016  'L-THYROIDH'    .TRUE.
*
* FLAG TO INDICATE THAT THIS IS THE LAST PROGRAM IN THE SERIES TO BE RUN
*
MIENDAT2001  .FALSE.    (SET THIS VALUE TO .TRUE. TO SKIP CHRONC)
*
* DISPERSION MODEL OPTION CODE:  1  *  STRAIGHT LINE
*                                2  *  WIND-SHIFT WITH ROTATION
*                                3  *  WIND-SHIFT WITHOUT ROTATION
*
MIIPLUME001  1 * URD used 1
*
* NUMBER OF FINE GRID SUBDIVISIONS USED BY THE MODEL
*
MINUMFIN001  7    (3, 5 OR 7 ALLOWED)
*
* LEVEL OF DEBUG OUTPUT REQUIRED, NORMAL RUNS SHOULD SPECIFY ZERO
*
MIIPRINT001  0
*
* LOGICAL FLAG SIGNIFYING THAT THE BREAKDOWN OF RISK BY WEATHER CATEGORY
* BIN ARE TO BE PRESENTED TO SHOW THEIR RELATIVE CONTRIBUTION TO THE MEAN
*
*             RISBIN
*
MIRISCAT001   .FALSE.
*
* FLAG INDICATING IF WIND-ROSES FROM ATMOS ARE TO BE OVERRIDDEN
*
MIOVRRID001  .FALSE.  (USE THE WIND ROSE CALCULATED FOR EACH WEATHER BIN)
*****************************************************************************
* POPULATION DISTRIBUTION DATA BLOCK, LOADED BY INPOPU, STORED IN /POPDAT/
*
PDPOPFLG001  FILE
*
```

```
*****************************************************************************
* SHIELDING AND EXPOSURE FACTORS, LOADED BY INDFAC, STORED IN /EADFAC/
*
* THREE VALUES OF EACH PROTECTION FACTOR ARE SUPPLIED,
* ONE FOR EACH TYPE OF ACTIVTY:
*
* ACTIVITY TYPE:
*     1 - EVACUEES WHILE MOVING
*     2 - NORMAL ACTIVITY IN SHELTERING AND EVACUATION ZONE
*     3 - SHELTERED ACTIVITY
*
* CLOUD SHIELDING FACTOR
*
*    SITE        GG   PB   SEQ  SUR  ZION
*    SHELTERING  0.7  0.5  0.65 0.6  0.5
*
*            EVACUEES  NORMAL  SHELTER
*
SECSFACT001      0.75     0.75     0.75   *  use URD values
*
* PROTECTION FACTOR FOR INHALATION
*
SEPROTIN001      0.4     0.4      0.4  * URD Values*
*
* BREATHING RATE (CUBIC METERS PER SECOND)
*
SEBRRATE001  3.3E-4  3.3E-4  3.3E-4 *URD values
*
* SKIN PROTECTION FACTOR
*
SESKPFAC001  1.0      0.41     0.33    * VALUES FOR NORMAL ACTIVITY AND
*                                         SHELTERING SELECTED BY NRC STAFF
*
* GROUND SHIELDING FACTOR
*
*    SITE        GG   PB   SEQ  SUR  ZION
*    SHELTERING  0.25 0.1  0.2  0.2  0.1
*
SEGSHFAC001      0.33    0.33    0.33   * URD values
*
*
* RESUSPENSION INHALATION MODEL CONCENTRATION COEFFICIENT (/METER)
*
*   RESCON = 1.E-4 IS APPROPRIATE FOR MECHANICAL RESUSPENSION BY VEHICLES.
*   RESHAF = 2.11 DAYS CAUSES 1.E-4 TO DECAY IN ONE WEEK TO 1.E-5, THE VALUE
*   OF RESCON USED IN THE FIRST TERM OF THE LONG-TERM RESUSPENSION EQUATION
*   USED IN CHRONC.
*
SERESCON001   1.E-4     (RESUSPENSION IS TURNED ON)
*
* RESUSPENSION CONCENTRATION COEFFICIENT HALF-LIFE (SEC)
*
SERESHAF001   1.82E5    (2.11 DAYS)
*****************************************************************************
* EVACUATION ZONE DATA BLOCK, LOADED BY EVNETW, STORED IN /NETWOR/, /EOPTIO/
*
* SPECIFIC DESCRIPTION OF THE EMERGENCY RESPONSE SCENARIO BEING USED
*
EZEANAM2001  '95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION'
*
```

```
* THE TYPE OF WEIGHTING TO BE APPLIED TO THE EMERGENCY RESPONSE SCENARIOS
* YOU MUST SUPPLY A VALUE OF 'TIME' OR 'PEOPLE'
*
EZWTNAME001  'PEOPLE'
*
* WEIGHTING FRACTION APPLICABLE TO THIS SCENARIO
*
EZWTFRAC001  0.95 *95% of people evacuated
*
* LAST RING IN THE MOVEMENT ZONE
*
EZLASMOV001     6    (10 miles)
*
*  Flag defining the time at which evacuees "enter" the destination element
*
TRAVELPOINT   'CENTERPOINT' (new option implemented at MACCS2 v. 1.11f)
*TRAVELPOINT   'BOUNDARY'    (Westinghouse used BOUNDARY)
*
* RADIAL EVACUATION SPEED (M/S) = speed to exit EPZ, 30 min after alarm
*
EZESPEED001   2.20 2.20 2.20 *(based on 125-42 min for all zones to clear EPZ,
*                              in 2010, extrapolated for 2040 population)
EZEVATYP001     'RADIAL'
EZDURBEG001    86400.0
EZDURMID001    0.0
EZREFPNT001     'ALARM'
EZNUMEVA001       6
EZDLTSHL001  2520. 2520. 2520. 2520. 2520. 2520. (42 MINUTES DELAY, 95% MOBILIZATION)
EZDLTEVA001     0.    0.    0.    0.    0.    0.

*********************************************************************
* SHELTER AND RELOCATION ZONE DATA BLOCK, LOADED BY INPEMR,
*                                         STORED IN /INPSRZ/, /RELOCA/
*
* DURATION OF THE EMERGENCY PHASE (SECONDS FROM PLUME ARRIVAL)
*
SRENDEMP001  604800.   (ONE WEEK)
*
* CRITICAL ORGAN FOR RELOCATION DECISIONS
*
SRCRIORG001 'L-EDEWBODY'
*
* HOT SPOT RELOCATION TIME (SECONDS FROM PLUME ARRIVAL)
*
SRTIMHOT001  43200.    (ONE HALF DAY)
*
* NORMAL RELOCATION TIME (SECONDS FROM PLUME ARRIVAL)
*
SRTIMNRM001  86400.    (ONE DAY)
*
* HOT SPOT RELOCATION DOSE CRITERION THRESHOLD (SIEVERTS)
*
SRDOSHOT001  0.5    (50 REM DOSE TO WHOLE BODY IN 1 WEEK TRIGGERS RELOCATION)
*
* NORMAL RELOCATION DOSE CRITERION THRESHOLD (SIEVERTS)
*
SRDOSNRM001  0.25   (25 REM DOSE TO WHOLE BODY IN 1 WEEK TRIGGERS RELOCATION)
*****************************************************************************
* EARLY FATALITY MODEL PARAMETERS, LOADED BY INEFAT, STORED IN /EFATAL/
*
```

```
* NUMBER OF EARLY FATALITY EFFECTS
*
EFNUMEFA001   2
*
*            ORGNAM       EFFACA   EFFACB   EFFTHR
*
EFATAGRP001 'A-RED MARR'      3.8      5.0    1.5
EFATAGRP002 'A-LUNGS'        10.0      7.0    5.0
*******************************************************************************
* EARLY INJURY MODEL PARAMETERS, LOADED BY INEINJ, STORED IN /EINJUR/
*
* NUMBER OF EARLY INJURY EFFECTS
*
EINUMEIN001  0
*
*            EINAME           ORGNAM   EISUSC EITHRE EIFACA EIFACB
*
*EINJUGRP001 'PRODROMAL VOMIT' 'A-STOMACH'  1.     .5     2.     3.
*EINJUGRP002 'DIARRHEA'        'A-STOMACH'  1.     1.     3.     2.5
*EINJUGRP003 'PNEUMONITIS'     'A-LUNGS'    1.     5.    10.     7.
*EINJUGRP004 'SKIN ERYTHEMA'   'A-SKIN'     1.     3.     6.     5.
*EINJUGRP005 'TRANSEPIDERMAL'  'A-SKIN'     1.    10.    20.     5.
*EINJUGRP006 'THYROIDITIS'     'A-THYROIDH' 1.    40.   240.     2.
*EINJUGRP007 'HYPOTHYROIDISM'  'A-THYROIDH' 1.     2.    60.     1.3
*******************************************************************************
* ACUTE EXPOSURE CANCER PARAMETERS, LOADED BY INACAN STORED IN /ACANCR/.
*
* NUMBER OF ACUTE EXPOSURE CANCER EFFECTS
*
LCNUMACA001   1
*
* THRESHOLD DOSE FOR APPLYING THE DOSE DEPENDENT REDUCTION FACTOR
*
LCDDTHRE001   0.2  (LOWEST DOSE FOR WHICH DDREFA WILL BE APPLIED)
*
* DOSE THRESHOLD FOR LINEAR DOSE RESPONSE (Sv)
*
LCACTHRE001   0.0  (LINEAR-QUADRATIC MODEL IS NOT BEING USED)
*
*            ACNAME     ORGNAM  ACSUSC DOSEFA DOSEFB CFRISK   CIRISK  DDREFA
*
LCANCERS001 'OTHER'    'L-EDEWBODY'  1.0   1.0   0.0   0.12    0.16      2.0
*******************************************************************************
* RESULT 1 OPTIONS BLOCK, LOADED BY INOUT1, STORED IN /INOUT1/
* TOTAL NUMBER OF A GIVEN EFFECT (LATENT CANCER, EARLY DEATH, EARLY INJURY)
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
TYPE1NUMBER    5
*
TYPE1OUT001    'CAN FAT/TOTAL'                1  10       (0 to 50 miles)
TYPE1OUT002    'CAN FAT/TOTAL'                1   6       (0 to 10 miles)
TYPE1OUT003    'ERL FAT/TOTAL'                1  10       (0 to 50 miles)
TYPE1OUT004    'ERL FAT/TOTAL'                1   2       (0 to  2 miles)
TYPE1OUT005    'ERL FAT/TOTAL'                1   1       (0 to  1 miles)
*****************************************************************************
* RESULT 2 OPTIONS BLOCK, LOADED BY INOUT2, STORED IN /INOUT2/
* FURTHEST DISTANCE AT WHICH A GIVEN RISK OF EARLY DEATH IS EXCEEDED.
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
```

```
*
TYPE2NUMBER  0
*
*            FATALITY RISK THRESHOLD
*
*TYPE2OUT001  0.
*****************************************************************************
* RESULT 3 OPTIONS BLOCK, LOADED BY INOUT3, STORED IN /INOUT3/
* NUMBER OF PEOPLE WHOSE DOSE TO A GIVEN ORGAN EXCEEDS A GIVEN THRESHOLD.
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
TYPE3NUMBER  0
*
*               ORGAN NAME   DOSE THRESHOLD (Sv)
*
*TYPE3OUT001    'A-RED MARR'        1.5
*TYPE3OUT002    'A-LUNGS'           5.0
*TYPE3OUT003    'L-EDEWBODY'        0.05
*****************************************************************************
* RESULT 4 OPTIONS BLOCK, LOADED BY INOUT4, STORED IN /INOUT4/
* 360 DEGREE AVERAGE RISK OF A GIVEN EFFECT AT A GIVEN DISTANCE.
*
* POSSIBLE TYPES OF EFFECTS ARE:
*
*   'ERL FAT/TOTAL'
*   'ERL INJ/INJURY NAME'
*   'CAN FAT/CANCER NAME'
*   'CAN FAT/TOTAL'
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
TYPE4NUMBER  0
*
*            RADIAL INDEX   TYPE OF EFFECT
*
*TYPE4OUT001       1         'ERL FAT/TOTAL'
*TYPE4OUT002       2         'ERL FAT/TOTAL'
*TYPE4OUT003       3         'ERL FAT/TOTAL'
*TYPE4OUT004       5         'ERL FAT/TOTAL'
*TYPE4OUT005       6         'ERL FAT/TOTAL'
*****************************************************************************
* RESULT 5 OPTIONS BLOCK, LOADED BY INOUT5, STORED IN /INOUT5/
*
* TOTAL POPULATION DOSE TO A GIVEN ORGAN BETWEEN TWO DISTANCES.
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
TYPE5NUMBER     2
*
*             ORGAN      I1DIS5     I2DIS5
*
TYPE5OUT001 'L-EDEWBODY'      1          6          (0-10 MILES)
TYPE5OUT002 'L-EDEWBODY'      1         10          (0-50 MILES)
*****************************************************************************
* RESULT 6 OPTIONS BLOCK, LOADED BY INOUT6, STORED IN /INOUT6/
*
* CENTERLINE DOSE TO AN ORGAN VS DIST BY PATHWAY, PATHWAY NAMES ARE AS FOLLOWS:
*
*  PATHWAY NAME:
```

```
*    'CLD'     - CLOUDSHINE
*    'GRD'     - GROUNDSHINE
*    'INH ACU' - "ACUTE DOSE EQUIVALENT" FROM DIRECT INHALATION OF THE CLOUD
*    'INH LIF' - "LIFETIME DOSE COMMITMENT" FROM DIRECT INHALATION OF THE CLOUD
*    'RES ACU' - "ACUTE DOSE EQUIVALENT" FROM RESUSPENSION INHALATION
*    'RES LIF' - "LIFETIME DOSE COMMITMENT" FROM RESUSPENSION INHALATION
*    'TOT ACU' - "ACUTE DOSE EQUIVALENT" FROM ALL PATHWAYS
*    'TOT LIF' - "LIFETIME DOSE COMMITMENT" FROM ALL PATHWAYS
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
TYPE6NUMBER     0
*
*             ORGNAM        PATHNM      I1DIS6   I2DIS6
*
*TYPE6OUT001  'A-RED MARR'    'TOT ACU'      1       19     (0-50 MILES)
*TYPE6OUT002  'A-LUNGS'       'TOT ACU'      1       19     (0-50 MILES)
*TYPE6OUT003  'L-EDEWBODY'    'TOT LIF'      1       26     (0-1000 MILES)
*******************************************************************************
* RESULT 7 OPTIONS BLOCK, LOADED BY INOUT7, STORED IN /INOUT7/
*
* CENTERLINE RISK OF A GIVEN EFFECT VS DISTANCE
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
TYPE7NUMBER   0
*
*                    NAME           I1DIS7       I2DIS7
*
*TYPE7OUT001     'ERL FAT/TOTAL'        1          10       (0-50 MILES)
*TYPE7OUT002     'CAN FAT/TOTAL'        1          10       (0-50 MILES)
*******************************************************************************
* RESULT 8 OPTIONS BLOCK, LOADED BY INOUT8, STORED IN /INOUT8/
*
* POPULATION WEIGHTED FATALITY RISK BETWEEN 2 DISTANCES
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
TYPE8NUMBER   6
*
*                NAME       I1DIS8  I2DIS8
*
TYPE8OUT001 'ERL FAT/TOTAL'   1      10     NOCCDF  (0-50 MILES)
TYPE8OUT002 'ERL FAT/TOTAL'   1       2     NOCCDF  (0- 2 MILES)
TYPE8OUT003 'ERL FAT/TOTAL'   1       1     NOCCDF  (0- 1 MILES)
TYPE8OUT004 'ERL FAT/TOTAL'   3       3     NOCCDF  (2- 3 MILES)
TYPE8OUT005 'CAN FAT/TOTAL'   1      10     NOCCDF  (0-50 MILES)
TYPE8OUT006 'CAN FAT/TOTAL'   1       6     NOCCDF  (0-10 MILES)
*******************************************************************************
* RESULT A OPTIONS BLOCK, LOADED BY INOUTA, STORED IN /INOUTA/
*
* peak dose to a given organ
*
*            NUMA
TYPEANUMBER   1
*
*              ORGNAM    I1DISA  I2DISA
TYPEAOUT001 'L-EDEWBODY'  1       1    CCDF
*
             NUMB
```

```
TYPEBNUMBER   0
.
*****************************************************************************
* EMERGENCY RESPONSE SCENARIO NUMBER 2
*****************************************************************************
* EVACUATION ZONE DATA BLOCK, LOADED BY EVNETW, STORED IN /NETWOR/, /EOPTIO/
*
* SPECIFIC DESCRIPTION OF THE EMERGENCY RESPONSE SCENARIO BEING USED
*
EZEANAM2001  'NO EVACUATION'
*
* WEIGHTING FRACTION APPLICABLE TO THIS SCENARIO
*
EZWTFRAC001  0.05 *5% of people relocated but not evacuated
*
* LAST RING IN THE MOVEMENT ZONE
*
EZLASMOV001     0   (A ZERO TURNS OFF THE EVACUATION MODEL)
.
```

```
*******************************************************************************
* FILE NAME:   VATMOS.INP
*
* GENERAL DESCRIPTIVE TITLE DESCRIBING THIS "ATMOS" INPUT
*
RIATNAM1001 'ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000'
*
*******************************************************************************
* GEOMETRY DATA BLOCK, LOADED BY INPGEO, STORED IN /GEOM/
*
* NUMBER OF RADIAL SPATIAL ELEMENTS
*
GENUMRAD001 10
*
* SPATIAL ENDPOINT DISTANCES IN MILES    [SEE SIT FILE]
*
*         END001   1      2      3      4      5
*         END002  10     20     30     40     50
*
* SPATIAL ENDPOINT DISTANCES IN KILOMETERS
*
GESPAEND001   1.6093    3.2187    4.8280    6.4374    8.0467
GESPAEND002  16.0935   32.1869   48.2804   64.3739   80.4674
*******************************************************************************
* NUCLIDE DATA BLOCK, LOADED BY INPISO, STORED IN /ISOGRP/, /ISONAM/
*
* Number of pseudo-stable nuclides (used to truncate the decay chains)
*                                                        [1:page 5-7]
ISNUMSTB001      27
*
* List of pseudo-stable nuclides
*                                                        [1:page 5-7]
ISNAMSTB001     I-129    (daughter of Te-129 and Te-129m)
ISNAMSTB002     Xe-131m  (daughter of I-131)
ISNAMSTB003     Xe-133m  (daughter of I-133)
ISNAMSTB004     Xe-135m  (daughter of I-135)
ISNAMSTB005     Cs-135   (daughter of Xe-135 and Xe-135m)
ISNAMSTB006     Sm-147   (daughter of Pm-147)
ISNAMSTB007     U-234    (daughter of Pu-238)
ISNAMSTB008     U-235    (daughter of Pu-239)
ISNAMSTB009     U-236    (daughter of Pu-240)
ISNAMSTB010     U-237    (daughter of Pu-241)
ISNAMSTB011     Np-237   (daughter of Am-241)
ISNAMSTB012     Rb-87    (daughter of Kr-87)
ISNAMSTB013     Ba-137m  (daughter of Cs-137)
ISNAMSTB014     Rb-88    (daughter of Kr-88)
ISNAMSTB015     Y-91m    (daughter of Sr-91)
ISNAMSTB016     Zr-93    (daughter of Y-93)
ISNAMSTB017     Nb-93m   (daughter of Zr-93)
ISNAMSTB018     Nb-95m   (daughter of Zr-95)
ISNAMSTB019     Nb-97    (daughter of Zr-97 and Nb-97m)
ISNAMSTB020     Nb-97m   (daughter of Zr-97)
ISNAMSTB021     Tc-99    (daughter of Mo-99)
ISNAMSTB022     Rh-103m  (daughter of Ru-103)
ISNAMSTB023     Rh-106   (daughter of Ru-106)
ISNAMSTB024     Te-131   (daughter of Te-131m)
ISNAMSTB025     Pr-144   (daughter of Ce-144 and Pr-144m)
ISNAMSTB026     Pr-144m  (daughter of Ce-144)
ISNAMSTB027     Pm-147   (daughter of Nd-147)
*
```

```
* Number of radioactive nuclides to be considered
*
ISNUMISO001 60
*
* NUMBER OF NUCLIDE GROUPS
*
ISMAXGRP001  9
*
* WET AND DRY DEPOSITION FLAGS FOR EACH NUCLIDE GROUP
*
*              WETDEP     DRYDEP
*
ISDEPFLA001    .FALSE.   .FALSE.
ISDEPFLA002    .TRUE.    .TRUE.
ISDEPFLA003    .TRUE.    .TRUE.
ISDEPFLA004    .TRUE.    .TRUE.
ISDEPFLA005    .TRUE.    .TRUE.
ISDEPFLA006    .TRUE.    .TRUE.
ISDEPFLA007    .TRUE.    .TRUE.
ISDEPFLA008    .TRUE.    .TRUE.
ISDEPFLA009    .TRUE.    .TRUE.
*
* NUCLIDE GROUP DATA FOR 9 NUCLIDE GROUPS
*  (SAME AS 1150 EXCEPT LOWER CASE NUCNAM, NO PARENT OR HALFLIFE [1:page 5-7]
*               NUCNAM    IGROUP
*
ISOTPGRP001     Co-58        6
ISOTPGRP002     Co-60        6
ISOTPGRP003     Kr-85        1
ISOTPGRP004     Kr-85m       1
ISOTPGRP005     Kr-87        1
ISOTPGRP006     Kr-88        1
ISOTPGRP007     Rb-86        3
ISOTPGRP008     Sr-89        5
ISOTPGRP009     Sr-90        5
ISOTPGRP010     Sr-91        5
ISOTPGRP011     Sr-92        5
ISOTPGRP012     Y-90         7
ISOTPGRP013     Y-91         7
ISOTPGRP014     Y-92         7
ISOTPGRP015     Y-93         7
ISOTPGRP016     Zr-95        7
ISOTPGRP017     Zr-97        7
ISOTPGRP018     Nb-95        7
ISOTPGRP019     Mo-99        6
ISOTPGRP020     Tc-99m       6
ISOTPGRP021     Ru-103       6
ISOTPGRP022     Ru-105       6
ISOTPGRP023     Ru-106       6
ISOTPGRP024     Rh-105       6
ISOTPGRP025     Sb-127       4
ISOTPGRP026     Sb-129       4
ISOTPGRP027     Te-127       4
ISOTPGRP028     Te-127m      4
ISOTPGRP029     Te-129       4
ISOTPGRP030     Te-129m      4
ISOTPGRP031     Te-131m      4
ISOTPGRP032     Te-132       4
ISOTPGRP033     I-131        2
ISOTPGRP034     I-132        2
```

```
ISOTPGRP035     I-133        2
ISOTPGRP036     I-134        2
ISOTPGRP037     I-135        2
ISOTPGRP038     Xe-133       1
ISOTPGRP039     Xe-135       1
ISOTPGRP040     Cs-134       3
ISOTPGRP041     Cs-136       3
ISOTPGRP042     Cs-137       3
ISOTPGRP043     Ba-139       9
ISOTPGRP044     Ba-140       9
ISOTPGRP045     La-140       7
ISOTPGRP046     La-141       7
ISOTPGRP047     La-142       7
ISOTPGRP048     Ce-141       8
ISOTPGRP049     Ce-143       8
ISOTPGRP050     Ce-144       8
ISOTPGRP051     Pr-143       7
ISOTPGRP052     Nd-147       7
ISOTPGRP053     Np-239       8
ISOTPGRP054     Pu-238       8
ISOTPGRP055     Pu-239       8
ISOTPGRP056     Pu-240       8
ISOTPGRP057     Pu-241       8
ISOTPGRP058     Am-241       7
ISOTPGRP059     Cm-242       7
ISOTPGRP060     Cm-244       7
*****************************************************************************
* WET DEPOSITION DATA BLOCK, LOADED BY INPWET, STORED IN /WETCON/
*
* WASHOUT COEFFICIENT NUMBER ONE, LINEAR FACTOR
*
WDCWASH1001  9.5E-5   (JON HELTON AFTER JONES, 1986)
*
* WASHOUT COEFFICIENT NUMBER TWO, EXPONENTIAL FACTOR
*
WDCWASH2001  0.8      (JON HELTON AFTER JONES, 1986)
******************************************************************************
* DRY DEPOSITION DATA BLOCK, LOADED BY INPDRY, STORED IN /DRYCON/
*
* NUMBER OF PARTICLE SIZE GROUPS
*
DDNPSGRP001   3
*
* DEPOSITION VELOCITY OF EACH PARTICLE SIZE GROUP (M/S)
*
DDVDEPOS001   0.0     0.01     0.001    (values from URD)
*  First value is for volatile iodine (5% of total; see PSDIST002)
*  Second value is for particulate iodine (95% ; see PSDIST002)
*  Third value is for all other particulates except iodine (see PSDIST 3-9)
*****************************************************************************
* DISPERSION PARAMETER DATA BLOCK, LOADED BY INPDIS, STORED IN /DISPY/, /DISPZ/
*
* # of distances in plume-size tables--which can be used as an alternative to the power-law mode
* (to utilize the power-law model, set NUM_DIST to zero or delete the following data card)
*
NUM_DIST001   0
*
* SIGMA = A * X ** B
*
* Taken from URD
```

```
* P-G CLASS:          A            B            C            D            E            F
DPCYSIGA001         0.3658       0.2751       0.2089       0.1474       0.1046       0.0722
DPCYSIGB001         0.9031       0.9031       0.9031       0.9031       0.9031       0.9031
DPCZSIGA001         2.47E-4      0.078        0.144        0.368        0.2517       0.184
DPCZSIGB001         2.118        1.085        0.911        0.6764       0.6720       0.6546
*
*  LINEAR SCALING FACTOR FOR SIGMA-Y FUNCTION, NORMALLY 1
*
DPYSCALE001    1.
*
*  LINEAR SCALING FACTOR FOR SIGMA-Z FUNCTION,
*  NORMALLY USED FOR SURFACE ROUGHNESS LENGTH CORRECTION.
*  (Z1 / Z0) ** 0.2,   FROM CRAC2 WE HAVE  (10 CM / 3 CM) ** 0.2 = 1.27
*
DPZSCALE001    1.27
***************************************************************************** *
* EXPANSION FACTOR DATA BLOCK, LOADED BY INPEXP, STORED IN /EXPAND/
*
* TIME BASE FOR EXPANSION FACTOR (SECONDS)
*
PMTIMBAS001    180.   (from Westinghouse ATMOS file)
*
* BREAK POINT FOR FORMULA CHANGE (SECONDS)
*
PMBRKPNT001   3600.   (1 HOUR)
*
* EXPONENTIAL EXPANSION FACTOR NUMBER 1
*
PMXPFAC1001      0.2
*
* EXPONENTIAL EXPANSION FACTOR NUMBER 2
*
PMXPFAC2001      0.25
*****************************************************************************
* PLUME RISE DATA BLOCK, LOADED BY INPLRS, STORED IN /PLUMRS/
*
* SCALING FACTOR FOR THE CRITICAL WIND SPEED FOR ENTRAINMENT OF A BOUYANT PLUME
* (USED BY FUNCTION CAUGHT)
*
PRSCLCRW001   1.
*
* SCALING FACTOR FOR THE A-D STABILITY PLUME RISE FORMULA
* (USED BY FUNCTION PLMRIS)
*
PRSCLADP001   1.
*
* SCALING FACTOR FOR THE E-F STABILITY PLUME RISE FORMULA
* (USED BY FUNCTION PLMRIS)
*
PRSCLEFP001   1.
*****************************************************************************
* RELEASE DATA BLOCK, LOADED BY INPREL, STORED IN /ATNAM2/, /MULREL/
********************** RELEASE DATA BLOCK *************
*
*    Vogtle ESP CONTAINMENT VESSEL (DCD REV16 P.3.8-1)
*       height 215'4" (65.63 meters)  X  width 130' (39.62 meters)
*
* Initial value of sigma-y for each plume
*
SIGYINIT001   9.21   9.21   9.21   9.21  *(initial sigma-y = W/4.3)
```

```
*
* Initial value of sigma-z for each plume
*
SIGZINIT001  30.53  30.53  30.53  30.53  *(initial sigma-z = H/2.15)
*
* Building height (meters)
*
WEBUILDH001  65.63  65.63  65.63  65.63  *(Height of Vogtle ESP containment)
*
* PARTICLE SIZE DISTRIBUTION OF EACH NUCLIDE GROUP
* YOU MUST SPECIFY A COLUMN OF DATA FOR EACH OF THE PARTICLE SIZE GROUPS
*
RDPSDIST001      0.0    0.0    1.0
RDPSDIST002      0.05   0.95   0.0
RDPSDIST003      0.0    0.0    1.0
RDPSDIST004      0.0    0.0    1.0
RDPSDIST005      0.0    0.0    1.0
RDPSDIST006      0.0    0.0    1.0
RDPSDIST007      0.0    0.0    1.0
RDPSDIST008      0.0    0.0    1.0
RDPSDIST009      0.0    0.0    1.0
*
* AP1000 CORE INVENTORY, END-OF-CYCLE from AP1000 DCD, Rev 12 (in Rev 14)
*
*
*               NUCNAM        CORINV (Bq)
*
RDCORINV001     Co-58         0.0
RDCORINV002     Co-60         0.0
RDCORINV003     Kr-85         3.92E+16
RDCORINV004     Kr-85m        9.73E+17
RDCORINV005     Kr-87         1.88E+18
RDCORINV006     Kr-88         2.64E+18
RDCORINV007     Rb-86         8.47E+15
RDCORINV008     Sr-89         3.57E+18
RDCORINV009     Sr-90         3.07E+17
RDCORINV010     Sr-91         4.44E+18
RDCORINV011     Sr-92         4.77E+18
RDCORINV012     Y-90          3.20E+17
RDCORINV013     Y-91          4.59E+18
RDCORINV014     Y-92          4.81E+18
RDCORINV015     Y-93          5.51E+18
RDCORINV016     Zr-95         6.14E+18
RDCORINV017     Zr-97         6.07E+18
RDCORINV018     Nb-95         6.18E+18
RDCORINV019     Mo-99         6.81E+18
RDCORINV020     Tc-99m        5.96E+18
RDCORINV021     Ru-103        5.37E+18
RDCORINV022     Ru-105        3.64E+18
RDCORINV023     Ru-106        1.76E+18
RDCORINV024     Rh-105        3.33E+18
RDCORINV025     Sb-127        3.81E+17
RDCORINV026     Sb-129        1.15E+18
RDCORINV027     Te-127        3.77E+17
RDCORINV028     Te-127m       4.88E+16
RDCORINV029     Te-129        1.12E+18
RDCORINV030     Te-129m       1.67E+17
RDCORINV031     Te-131m       5.18E+17
RDCORINV032     Te-132        5.11E+18
RDCORINV033     I-131         3.56E+18
```

```
RDCORINV034     I-132         5.18E+18
RDCORINV035     I-133         7.36E+18
RDCORINV036     I-134         8.07E+18
RDCORINV037     I-135         6.88E+18
RDCORINV038     Xe-133        7.03E+18
RDCORINV039     Xe-135        1.79E+18
RDCORINV040     Cs-134        7.18E+17
RDCORINV041     Cs-136        2.05E+17
RDCORINV042     Cs-137        4.18E+17
RDCORINV043     Ba-139        6.59E+18
RDCORINV044     Ba-140        6.33E+18
RDCORINV045     La-140        6.73E+18
RDCORINV046     La-141        5.99E+18
RDCORINV047     La-142        5.81E+18
RDCORINV048     Ce-141        6.03E+18
RDCORINV049     Ce-143        5.62E+18
RDCORINV050     Ce-144        4.55E+18
RDCORINV051     Pr-143        5.40E+18
RDCORINV052     Nd-147        2.40E+18
RDCORINV053     Np-239        7.14E+19
RDCORINV054     Pu-238        1.42E+16
RDCORINV055     Pu-239        1.25E+15
RDCORINV056     Pu-240        1.83E+15
RDCORINV057     Pu-241        4.11E+17
RDCORINV058     Am-241        4.63E+14
RDCORINV059     Cm-242        1.09E+17
RDCORINV060     Cm-244        1.346E+16
*

*
RDCORSCA001   1.000
*
RDAPLFRC001   PARENT      (apply rel fracs the same as prior versions)
*
*******************************************************************************
* OUTPUT CONTROL DATA BLOCK, LOADED BY INPOPT, STORED IN /STOPME/, /ATMOPT/
*
* FLAG TO INDICATE THAT THIS IS THE LAST PROGRAM IN THE SERIES TO BE RUN
*
OCENDAT1001  .FALSE. (SET THIS VALUE TO .TRUE. TO SKIP EARLY AND CHRONC)
*
OCIDEBUG001  0
*
* NAME OF THE NUCLIDE TO BE LISTED ON THE DISPERSION LISTINGS
*
*OCNUCOUT001  Cs-137
*
*              NUM0               NO TABLES OUTPUT=0
TYPE0NUMBER      0
*
*              INDREL   INDRAD
*TYPE0OUT001      1        4
*TYPE0OUT002      1       10         XCCDF
*******************************************************************************
* METEOROLOGICAL SAMPLING DATA BLOCK
*
* METEOROLOGICAL SAMPLING OPTION CODE:
*
* METCOD = 1, USER SPECIFIED DAY AND HOUR IN THE YEAR (FROM MET FILE),
*          2, WEATHER CATEGORY BIN SAMPLING,
```

```
*          3, 120 HOURS OF WEATHER SPECIFIED ON THE ATMOS USER INPUT FILE,
*          4, CONSTANT MET (BOUNDARY WEATHER USED FROM THE START),
*          5, STRATIFIED RANDOM SAMPLES FOR EACH DAY OF THE YEAR.
*
M1METCOD001  2
*
* LAST SPATIAL INTERVAL FOR MEASURED WEATHER
*
M2LIMSPA001  10                        (ADJUSTED FOR RADIAL INTVL)
*
* BOUNDARY WEATHER MIXING LAYER HEIGHT
*
M2BNDMXH001  1500.  (METERS; used by Westinghouse)
*
* BOUNDARY WEATHER STABILITY CLASS INDEX
*
M2IBDSTB001  4      (D-STABILITY; Westinghouse used 6 for F class)
*
* BOUNDARY WEATHER RAIN RATE
*
M2BNDRAN001  0.     (MM/HR)
*
* BOUNDARY WEATHER WIND SPEED
*
M2BNDWND001  2.0     (M/S; used by Westinghouse)
*
* NUMBER OF RAIN DISTANCE INTERVALS FOR BINNING
*
M4NRNINT001    5
*                                          nureg 4551 [4:page a-9]
* ENDPOINTS OF THE RAIN DISTANCE INTERVALS (KILOMETERS)
*
* NOTE:   THESE MUST BE CHOSEN TO MATCH THE SPATIAL ENDPOINT DISTANCES
* SPECIFIED FOR ARRAY SPAEND (10 % ERROR IS ALLOWED).
*
M4RNDSTS001  3.22  8.05  16.09  48.28  80.47  KM
*
* NUMBER OF RAIN INTENSITIY BREAKPOINTS
*
M4NRINTN001   3
*
* RAIN INTENSITY BREAKPOINTS FOR WEATHER BINNING (MILLIMETERS PER HOUR)
*
M4RNRATE001   2.  4.  6.
*
* NUMBER OF SAMPLES PER BIN
*
M4NSMPLS001  4  (THIS NUMBER SHOULD BE SET TO AT LEAST 4 WHEN METCOD=2)
*
* INITIAL SEED FOR RANDOM NUMBER GENERATOR
*
M4IRSEED001   79
********************** RELEASE DATA BLOCK *************
* SOURCE TERM NUMBER 1 OF 6
*
RDATNAM2001 'CFI'
RDOALARM001 2924. * value provided by Westinghouse for all source terms
RDNUMREL001 4 *four plume segments
RDMAXRIS001 1 *first plume segment carries greatest risk
RDREFTIM001 0.5 0.5 0.5 0.5
```

```
RDPLHEAT001 0.0 0.0 0.0 0.0 *neglects buoyant plume rise
RDPLHITE001  0.  0.  0.  0.  *Release height of each plume (meters above grade)
RDPLUDUR001 29666. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
RDPDELAY001 2924. 32590. 86420. 172800. *start at Table 49-2 values
* XE/KR I CS TE(SB) SR RU(MO) LA CE BA
RDRELFRC001 5.40E-1 3.19E-3 3.18E-3 4.18E-4 2.11E-2 9.11E-3 3.53E-3 2.64E-5 1.62E-2
RDRELFRC002 2.58E-1 1.35E-4 1.35E-4 1.67E-5 6.50E-4 1.68E-4 4.53E-3 1.68E-5 3.40E-4
RDRELFRC003 8.40E-2 0.00E0 0.00E0 4.47E-6 0.00E0 0.00E0 6.00E-3 2.17E-5 0.00E0
RDRELFRC004 3.83E-2 0.00E0 0.00E0 1.57E-6 0.00E0 0.00E0 5.22E-3 1.89E-5 0.00E0
.
********************** RELEASE DATA BLOCK *************
* SOURCE TERM NUMBER 2 OF 6
*
RDATNAM2001 'CFE'
RDOALARM001 3004.
RDNUMREL001 4 *four plume segments
RDMAXRIS001 1 *first plume segment carries greatest risk
*RDREFTIM001 *defined in source term 1
*RDPLHEAT001 *defined in source term 1
*RDPLHITE001 *defined in source term 1
RDPLUDUR001 16806. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
RDPDELAY001 3004. 19810. 89970. 176300. *start at Table 49-2 seconds after scram
* XE/KR I CS TE(SB) SR RU(MO) LA CE BA
RDRELFRC001 4.16E-1 5.53E-2 5.37E-2 1.23E-3 3.14E-3 1.16E-2 5.57E-5 9.54E-7 4.63E-3
RDRELFRC002 4.05E-1 1.26E-3 1.21E-3 1.61E-4 3.43E-4 2.58E-3 9.66E-6 4.56E-8 6.45E-4
RDRELFRC003 1.08E-1 0.00E0 0.00E0 0.00E0    0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
RDRELFRC004 3.43E-2 0.00E0 0.00E0 6.04E-7   0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
.
********************** RELEASE DATA BLOCK *************
* SOURCE TERM NUMBER 3 OF 6
*
RDATNAM2001 'IC'
RDOALARM001 4378.
RDNUMREL001 4 *four plume segments
RDMAXRIS001 1 *first plume segment carries greatest risk
*RDREFTIM001 *defined in source term 1
*RDPLHEAT001 *defined in source term 1
*RDPLHITE001 *defined in source term 1
RDPLUDUR001 36000. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
RDPDELAY001 4378. 84810. 134400. 177600. *start at Table 49-2 seconds after scram
* XE/KR I CS TE(SB) SR RU(MO) LA CE BA
RDRELFRC001 9.83E-4 1.20E-5 1.15E-5 8.04E-7 1.07E-5 1.31E-5 1.35E-6 5.85E-9 1.20E-5
RDRELFRC002 4.93E-4 0.00E0 0.00E0 4.83E-9 0.00E0 0.00E0 6.00E-9 3.20E-11 0.00E0
RDRELFRC003 3.94E-4 0.00E0 0.00E0 1.21E-9 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
RDRELFRC004 7.72E-4 0.00E0 0.00E0 6.04E-10 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
.
********************** RELEASE DATA BLOCK *************
* SOURCE TERM NUMBER 4 OF 6
*
RDATNAM2001 'BP'
RDOALARM001 31890.
RDNUMREL001 4 *four plume segments
RDMAXRIS001 1 *first plume segment carries greatest risk
*RDREFTIM001 *defined in source term 1
*RDPLHEAT001 *defined in source term 1
*RDPLHITE001 *defined in source term 1
RDPLUDUR001 14550. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
RDPDELAY001 31890. 46440. 86490. 172800. *start at Table 49-2 seconds after scram
* XE/KR I CS TE(SB) SR RU(MO) LA CE BA
RDRELFRC001 1.00E0 1.69E-1 1.62E-1 6.27E-3 3.57E-3 4.48E-2 1.30E-4 3.19E-6 8.93E-3
```

```
RDRELFRC002 0.00E0 4.64E-2 3.38E-2 3.12E-3 0.00E0 0.00E0 0.00E0 0.00E0 2.00E-6
RDRELFRC003 0.00E0 2.31E-1 6.60E-2 5.32E-3 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
RDRELFRC004 0.00E0 2.80E-3 9.96E-3 1.57E-3 0.00E0 0.00E0 0.00E0 1.00E-6 0.00E0
.
********************** RELEASE DATA BLOCK *************
* SOURCE TERM NUMBER 5 OF 6
*
RDATNAM2001 'CI'
RDOALARM001 101.
RDNUMREL001 4 *four plume segments
RDMAXRIS001 1 *first plume segment carries greatest risk
*RDREFTIM001 *defined in source term 1
*RDPLHEAT001 *defined in source term 1
*RDPLHITE001 *defined in source term 1
RDPLUDUR001 36000. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
RDPDELAY001 101. 50020. 136400. 211700. *start at Table 49-2 seconds after scram
* XE/KR I CS TE(SB) SR RU(MO) LA CE BA
RDRELFRC001 5.73E-1 4.56E-2 2.10E-2 1.64E-3 2.03E-2 4.04E-2 2.39E-4 2.97E-6 3.16E-2
RDRELFRC002 1.13E-1 0.00E0 0.00E0 1.15E-5 0.00E0 0.00E0 1.00E-7 0.00E0 0.00E0
RDRELFRC003 5.66E-2 0.0E0 0.00E0 8.10E-5 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
RDRELFRC004 2.74E-2 0.0E0 0.00E0 1.27E-5 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0
.
********************** RELEASE DATA BLOCK *************
* SOURCE TERM NUMBER 6 OF 6
*
RDATNAM2001 'CFL'
RDOALARM001 2922.
RDNUMREL001 4 *four plume segments
RDMAXRIS001 3 *third segment is largest noble gas/i/cs release
*RDREFTIM001 *defined in source term 1
*RDPLHEAT001 *defined in source term 1
*RDPLHITE001 *defined in source term 1
RDPLUDUR001 23438. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to 10 hrs
RDPDELAY001 2922. 26360. 108000. 194400. *start at Table 49-2 seconds after scram
* XE/KR I CS TE(SB) SR RU(MO) LA CE BA
RDRELFRC001 3.36E-4 1.20E-5 1.15E-5 1.00E-6 1.57E-5 1.68E-5 9.96E-7 7.41E-9 1.61E-5
RDRELFRC002 1.19E-3 5.00E-8 3.23E-8 1.75E-8 1.04E-6 2.90E-7 1.07E-5 4.05E-8 6.60E-7
RDRELFRC003 9.79E-1 2.13E-5 1.16E-5 2.47E-5 2.39E-3 1.26E-3 9.75E-2 3.68E-4 2.25E-3
RDRELFRC004 0.00E0 0.00E0 2.56E-7 1.20E-5 4.42E-4 1.55E-4 4.39E-2 1.66E-4 3.46E-4
.
```