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OAK RIDGE NATIONAL LABORATORY

LOCKHEED MARTIN

DIMSUM, A Computer Program to Process SAS4 Surface-Dose Files

Jabo S. Tang

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Oak Ridge National Laboratory
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ABSTRACT

DIMSUM is a program to process SAS4 surface-detector files and output selected results in a format suitable for graphical representation. SAS4 is a module in the SCALE computer code system which performs Monte Carlo shielding analysis of nuclear fuel containers using an automated biasing procedure. With the new enhanced surface detector option in SAS4, spatial and angular differential responses can be calculated and saved on a surface-detector file. The quantity of the surface tallies can be quite large. The purpose of DIMSUM is to help the user process surface-detector files into a format useful for tabulation or plotting on graphs.

1. INTRODUCTION

SAS4[1] is a Monte Carlo radiation shielding module in the SCALE[2] computer code system which calculates dose rates exterior to a nuclear spent fuel cask using an automated biasing procedure. Biasing parameters required by the Monte Carlo program, MORSE/SGC, are generated from results of a one-dimensional adjoint discrete-ordinates calculation with XSDRNPM. With the new enhanced surface detector option in SAS4, the user can subdivide each surface into many equal-size spatial and angular segments. Depending on the number of spatial and angular segments, the amount of differential surface detector results can be very large. Also, because SAS4 calculates neutron and gamma doses separately and because radiation sources may originate from different parts of a nuclear spent fuel assembly, there is a need to be able to add the results of several SAS4 calculations to obtain the total differential dose rates. Furthermore, in performing Monte Carlo analyses, the user sometimes wants to combine results of two otherwise identical runs with different random seed numbers to obtain the average results and their corresponding fractional standard deviations. DIMSUM[a] has been developed to perform these tasks and write out a selected portion of the result in a format suitable for plotting by some commonly available PC software.

The next section provides the mathematics that is used in the code. Other sections in the report describe the input data, give sample input and resulting output and graphs, and provide a complete listing of the computer code.

---

[a]The word DIM in Cantonese can mean to choose or to point to; SUM in English, of course, means to add. Therefore, DIMSUM allows the user to select, add, or combine files. Incidently, DIMSUM is also a Cantonese tea pastry which the author misses most while living in East Tennessee.

2. STATISTICAL FORMULAE

From the statistical theory of error, it is known that the variance of a sum of independent random variables is the sum of their variances. That is, for n independent random variables z_1, z_2, ..,z_n, and their corresponding variances σ^2_1, σ^2_2, ..., σ^2_n, if one defines the sum:

$$z_t = z_1 + z_2 + ...+ z_n ,$$

then, the variance of z_t is

$$\sigma^2_t = \sigma^2_1 + \sigma^2_2 + ... + \sigma^2_n .$$

The two equations above are used for the summation of dose responses from several calculations. For SAS4 analyses of spent-fuel casks, neutron response and gamma responses are calculated separately. The total response and its variance are obtained using these two formulae.

In running SAS4 problems, the user sometimes desires to combine the results of two runs of the same problem to obtain the average response and its variance. The following derivation, taken from a report by Cain[3], provides the formulae to compute the average response and its variance.

Let's define two means $\bar{x}_1$ and $\bar{x}_2$, obtained by SAS4 calculations with n_1 and n_2 batches, and $\sigma^2_{\bar{x}_1}$ and $\sigma^2_{\bar{x}_2}$ are the corresponding variances. The mean of the two calculations is

$$\bar{x} = \frac{1}{n_1 + n_2}\left\{\sum_{i=1}^{n_1} x_i + \sum_{j=1}^{n_2} x_j\right\} = \frac{n_1\bar{x}_1 + n_2\bar{x}_2}{n_1 + n_2} .$$

The variance of $\bar{x}$ is

$$\sigma^2_{\bar{x}} = \frac{1}{(n_1 + n_2)(n_1 + n_2 - 1)} \sum_{i=1}^{n_1 + n_2} (x_i - \bar{x})^2$$

$$= \frac{1}{(n_1 + n_2)(n_1 + n_2 - 1)}\left\{\sum_{i=1}^{n_1} (x_i - \bar{x})^2 + \sum_{j=1}^{n_2} (x_j - \bar{x})^2\right\} .$$

Expanding the first term,

$$\sum_{i=1}^{n_1} (x_i - \bar{x})^2 = \sum_{i=1}^{n_1} \left\{(x_i - \bar{x}_1) + (\bar{x}_1 - \bar{x})\right\}^2$$

$$= \sum_{i=1}^{n_1} \left\{(x_i - \bar{x}_1)^2 + (\bar{x}_1 - \bar{x})^2 + 2(x_i - \bar{x}_1)(\bar{x}_1 - \bar{x})\right\}$$

$$= \sum_{i=1}^{n_1} (x_i - \bar{x}_1)^2 + \sum_{i=1}^{n_1} (\bar{x}_1 - \bar{x})^2$$

since $\sum_{i=1}^{n_1} (x_i - \bar{x}_1) = 0$.

The variance of $\bar{x}$ now becomes

$$\sigma^2_{\bar{x}} = \frac{1}{(n_1 + n_2)(n_1 + n_2 - 1)} \left\{ \sum_{i=1}^{n_1} (x_i - \bar{x}_1)^2 + \sum_{i=1}^{n_1} (\bar{x}_1 - \bar{x})^2 \right.$$

$$\left. + \sum_{j=1}^{n_2} (x_j - \bar{x}_2)^2 + \sum_{j=1}^{n_2} (\bar{x}_2 - \bar{x})^2 \right\}$$

$$= \frac{n_1(n_1 - 1)\ \sigma^2_{\bar{x}_1} + n_2(n_2 - 1)\ \sigma^2_{\bar{x}_2} + n_1(\bar{x}_1 + \bar{x})^2 + n_2(\bar{x}_2 - \bar{x})^2}{(n_1 + n_2)(n_1 + n_2 - 1)}$$

In the above derivation, it is assumed that the number of histories per batch in the two runs is identical, although the runs can have different number of batches.

3. INPUT DESCRIPTION

The input of this program consists of three or four items. Each item can span over more than one line, if necessary.

Item 1: Title
Must be enclosed in single quotations. Can have any alphanumerics and can be up to 120 characters long.

Item 2: Integer parameters: IRUN, ISD, INUM.
Can be in free form.

IRUN - the option of this run; there are 4 options.

- +n, the value of n must be between 2 and 10, indicating the summation of n cases to obtain the total respond.
- +1, write out spatial dose-rate profiles for INUM surfaces. For radial calculations, the profiles are dose rate versus the height from the cask midplane; for axial calculations, the profiles are dose rate versus the radius from the cask axis. All INUM surfaces must have the same limits and same number of spatial segments.
- -1, write out azimuthal dose rate profiles for INUM spatially segmented ring surfaces on the surface number ISNM.
- -2, combines the results of 2 runs to obtain the batch-weighted average dose rates.

ISD - The number of surface detectors in the SAS4 calculations. A maximum of 36 surface detectors are allowed.

INUM- must be input, but used only when IRUN=1 or -1. Must not exceed 10.
For IRUN=1, INUM is the number of surfaces for which spatial dose rate profiles are written out.
For IRUN=-1, INUM is the number of segmented ring surfaces for which azimuthal dose rate profiles are written.

Item 3: Names of the output file and input surface files, OUTF, (INPF(I), I=1,IRUN). IRUN+1 entries.
OUTF is the output file name; not more than 16 characters and enclosed in single quotations.
INPF(I) are the input surface file names; same conditions as OUTF.

Item 4: Integer array in free form. Enter only for IRUN=1, -1, or -2.
If IRUN=1, enter NS(I), I=1,INUM. A total of INUM entries.
NS(I) are the surface number for which spatial profiles are written out.
If IRUN=-1, enter ISNM, (NS(I),I=1,INUM). A total of INUM+1 entries.

ISNM is the surface number which contains the segmented ring surfaces, and NS(I) are the segmented ring surface numbers on surface ISNM for which azimuthal profiles are written.

If IRUN=-2, enter BN(I),I=1,2.

BN(I) is the number of batches for run I.

4. REFERENCES

1. "SAS4: A Monte Carlo Cask Shielding Analysis Module Using an Automated Biasing Procedure," J. S. Tang, ORNL/NUREG/CSD-2/V2/R5, Volume 1, Section S4 (September 1995).

2. *SCALE 4.3: A Modular Code System for Performing Standardized Computer Analyses for Licensing Evaluation*, NUREG/CR-0200, Rev. 5 (ORNL/NUREG/CSD-2/R5), Vols. I-III (September 1995). Available from Radiation Safety Information Computational Center, Oak Ridge National Laboratory, as CCC-545.

3. V. R. Cain, "Calculations of Thermal-Neutron Flux Distributions in Concrete-Walled Ducts Using an Albedo Model with Monte Carlo Techniques," ORNL-3507, 1963.

APPENDIX A

SAMPLE PROBLEMS

APPENDIX A

SAMPLE PROBLEMS

Sample Problem 1

This sample problem sums the results of 5 surface detector files for radial dose rates of the DPT cask and write out a total response file in the same format as the 5 surface detector files. The name of the output file is 'total-top-radial', while the names of the input files are: 'ft92prb1a', 'ft92prb2a', 'ft92prb4a', 'ft92prb5a', and 'ft92prb6a'.

A listing of the input of Sample Problem 1 is as followed:

```
 'total radial dose of DPT top geometry'
 5   6 1
'total-top-radial','ft92prb1a','ft92prb2a','ft92prb4a','ft92prb5a','ft92prb6a'
```

Note that only 3 items of the input are needed, since IRUN=5 does not require Item 4 of the input. For this problem, ISD=6, indicating there are 6 surfaces detectors in the SAS4 calculations. The last entry in the second line is not used (but must be present) for this option of IRUN.

The output of Sample Problem 1 is included in APPENDIX C

Sample Problem 2

This sample problem combines the results of two runs to obtain the average responses. The two runs are for the same problem, but the first run has 10 batches and the second run has 5 batches. A listing of the input is shown below.

```
 'this is the title card for combining cases test1.out & test2.out'
-2, 6,    0
'test12.out'   'test1.out', 'test2.out'
  10,5
```

Again the output file's name is 'test12.out', and the input files' names are 'test1.out' and 'test2.out'. In the second line the first entry is IRUN=-2 to indicate the combination of two files to obtain a batch-weighted average file. There are 6 surface detectors in the SAS4 calculations, and the third entry of this line in not used, but must be input. The fourth line indicates the first file was calculated with 10 batches, and second file with 5 batches.

Sample Problem 3

This problem illustrates the option of IRUN=1, which outputs the spatial dose-rate profiles for 3 surfaces. The input of this sample problem is:

‘this is a title card for plotting spatial dose file’
1 6 3
‘t-top-radial.pl3','total-top-radial’
3 4 5

In the second line, the first entry is IRUN, and the third entry is INUM=3 to signal 3 spatial dose-rate profiles will be output. The name for the output file is ‘t-top-radial.pl3', and the name for the input file is ‘total-top-radial’. The last line indicates that spatial profiles are output for surfaces 3, 4, and 5.

The following is the listing of the output of Sample Problem 3, and a plot of the data is given in Figure 1.

```
this is a title card for plotting spatial dose file

  z/r     surface  3  surface  4  surface  5
   5.00,  2.266E-02,  8.775E-03,  5.207E-03
  15.00,  2.273E-02,  8.814E-03,  5.156E-03
  25.00,  2.266E-02,  8.754E-03,  5.233E-03
  35.00,  2.220E-02,  8.847E-03,  5.088E-03
  45.00,  2.216E-02,  8.624E-03,  5.104E-03
  55.00,  2.219E-02,  8.791E-03,  5.138E-03
  65.00,  2.154E-02,  8.719E-03,  5.044E-03
  75.00,  2.193E-02,  8.424E-03,  5.001E-03
  85.00,  2.158E-02,  8.588E-03,  5.019E-03
  95.00,  2.186E-02,  8.644E-03,  5.023E-03
 105.00,  2.131E-02,  8.398E-03,  5.028E-03
 115.00,  2.182E-02,  8.515E-03,  4.762E-03
 125.00,  2.171E-02,  8.342E-03,  4.864E-03
 135.00,  2.227E-02,  8.064E-03,  4.698E-03
 145.00,  2.310E-02,  8.043E-03,  4.577E-03
 155.00,  2.395E-02,  7.925E-03,  4.493E-03
 165.00,  2.492E-02,  7.594E-03,  4.397E-03
 175.00,  2.617E-02,  7.412E-03,  4.378E-03
 185.00,  2.859E-02,  7.467E-03,  4.190E-03
 195.00,  3.131E-02,  7.262E-03,  4.104E-03
 205.00,  3.344E-02,  7.013E-03,  4.116E-03
 215.00,  3.510E-02,  6.735E-03,  3.943E-03
 225.00,  3.366E-02,  6.491E-03,  3.856E-03
 235.00,  2.960E-02,  6.386E-03,  3.636E-03
 245.00,  2.312E-02,  5.974E-03,  3.552E-03
 255.00,  1.831E-02,  6.022E-03,  3.537E-03
 265.00,  1.428E-02,  5.429E-03,  3.444E-03
 275.00,  1.157E-02,  5.407E-03,  3.399E-03
 285.00,  1.043E-02,  5.157E-03,  3.181E-03
 295.00,  9.465E-03,  4.647E-03,  3.215E-03
```

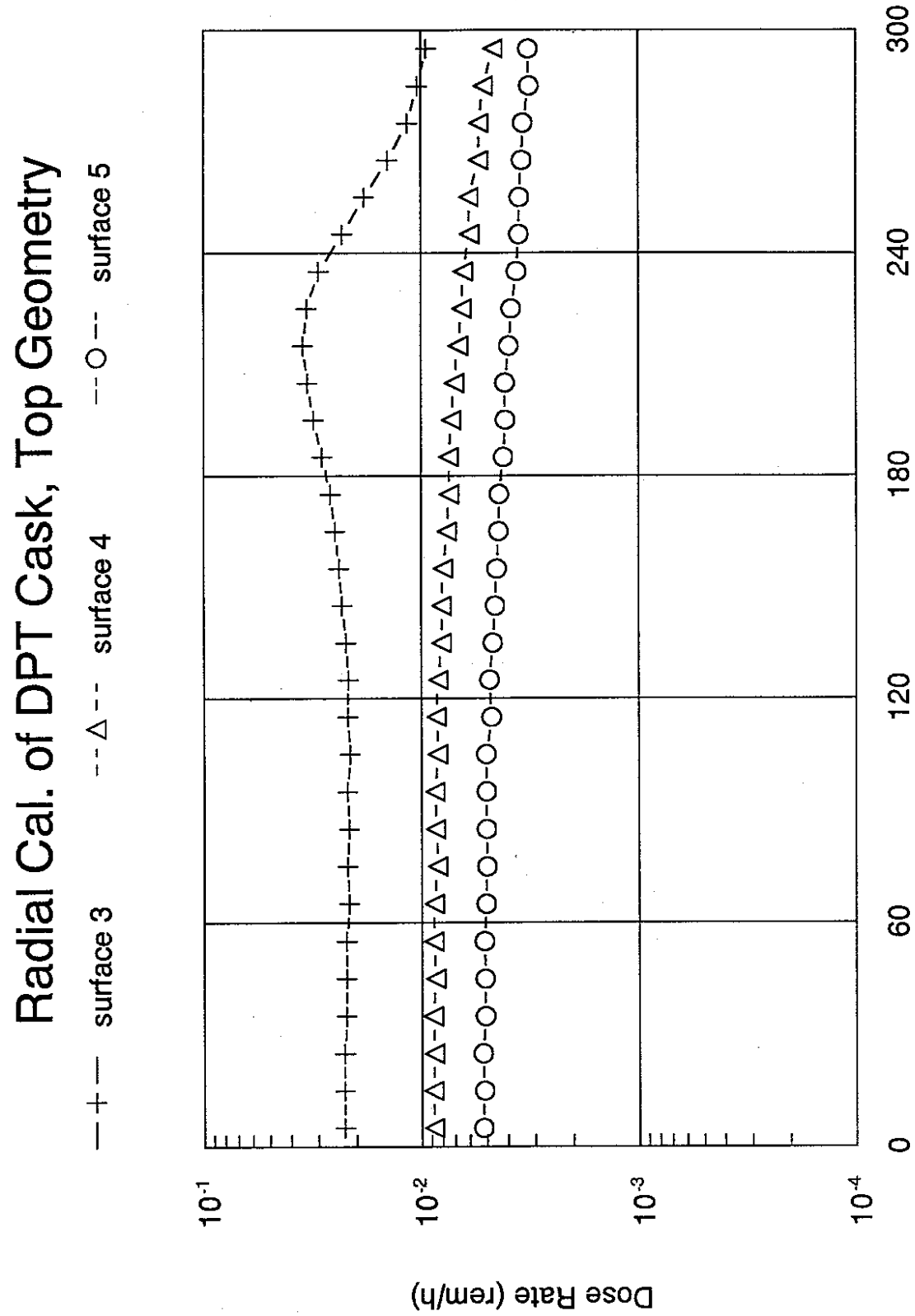

Figure 1. Axial dose profiles for radial surfaces

Sample Problem 4

The sample problem shows the last option with IRUN=-1 to output azimuthal dose profiles. The listing of input is given below.

```
 'this is a title card for plotting azimuthal dose file'
-1   6 5
 't-top-radial.pl2','total-top-radial'
 3 5 17 19 21 25
```

In the second line, the third entry INUM=5 indicates there are 5 azimuthal dose profiles to be output. In the last line there are INUM+1=6 entries. The first entry is ISNM=3 indicating the azimuthal dose profiles are from surface #3, the other 5 entries are the segmented ring surface numbers for which azimuthal profiles are output. The output listing is given below, followed by a plot of the data in Figure 2.

```
              this is a title card for plotting azimuthal dose file

   dose rates vs azimuthal angle for surface #  3
  angle    ring #   5  ring #  17  ring #  19  ring #  21  ring #  25
   5.00,  2.160E-02,  2.497E-02,  2.648E-02,  3.821E-02,  2.352E-02
  15.00,  2.252E-02,  2.633E-02,  2.854E-02,  2.676E-02,  2.413E-02
  25.00,  2.085E-02,  2.495E-02,  2.847E-02,  3.515E-02,  2.370E-02
  35.00,  2.063E-02,  2.516E-02,  2.616E-02,  3.523E-02,  1.864E-02
  45.00,  2.425E-02,  2.595E-02,  2.999E-02,  3.335E-02,  2.229E-02
  55.00,  2.075E-02,  2.568E-02,  2.834E-02,  3.310E-02,  2.149E-02
  65.00,  2.228E-02,  2.557E-02,  2.582E-02,  2.857E-02,  2.359E-02
  75.00,  2.248E-02,  2.523E-02,  2.662E-02,  3.798E-02,  2.387E-02
  85.00,  2.300E-02,  2.458E-02,  2.807E-02,  3.295E-02,  2.405E-02
  95.00,  2.157E-02,  2.309E-02,  2.713E-02,  3.672E-02,  1.966E-02
 105.00,  2.043E-02,  2.504E-02,  3.246E-02,  3.538E-02,  2.114E-02
 115.00,  2.214E-02,  2.272E-02,  2.896E-02,  3.239E-02,  2.240E-02
 125.00,  2.100E-02,  2.635E-02,  2.828E-02,  2.958E-02,  2.100E-02
 135.00,  2.170E-02,  2.697E-02,  2.882E-02,  3.335E-02,  2.246E-02
 145.00,  2.332E-02,  2.535E-02,  2.890E-02,  2.940E-02,  2.312E-02
 155.00,  2.423E-02,  2.566E-02,  2.733E-02,  3.178E-02,  2.516E-02
 165.00,  1.949E-02,  2.525E-02,  2.844E-02,  3.578E-02,  2.453E-02
 175.00,  2.210E-02,  2.306E-02,  2.820E-02,  3.709E-02,  2.477E-02
 185.00,  2.209E-02,  2.217E-02,  3.238E-02,  3.280E-02,  2.606E-02
 195.00,  2.100E-02,  2.764E-02,  2.891E-02,  3.350E-02,  2.507E-02
 205.00,  2.233E-02,  2.462E-02,  3.054E-02,  3.614E-02,  2.366E-02
 215.00,  2.239E-02,  2.414E-02,  2.840E-02,  3.358E-02,  2.545E-02
 225.00,  2.427E-02,  2.530E-02,  3.073E-02,  3.079E-02,  2.365E-02
 235.00,  2.293E-02,  2.572E-02,  3.004E-02,  3.208E-02,  2.053E-02
 245.00,  2.443E-02,  2.618E-02,  2.787E-02,  3.698E-02,  2.148E-02
 255.00,  2.225E-02,  2.314E-02,  2.917E-02,  3.143E-02,  2.162E-02
 265.00,  2.115E-02,  2.400E-02,  3.010E-02,  3.024E-02,  2.223E-02
 275.00,  2.130E-02,  2.441E-02,  2.840E-02,  3.288E-02,  2.406E-02
 285.00,  2.301E-02,  2.487E-02,  3.019E-02,  3.190E-02,  2.487E-02
 295.00,  2.156E-02,  2.599E-02,  2.914E-02,  3.106E-02,  2.214E-02
 305.00,  2.254E-02,  2.480E-02,  2.750E-02,  3.291E-02,  2.500E-02
 315.00,  2.211E-02,  2.265E-02,  2.843E-02,  3.500E-02,  2.273E-02
 325.00,  2.238E-02,  2.424E-02,  2.647E-02,  3.424E-02,  2.346E-02
 335.00,  2.175E-02,  2.461E-02,  2.871E-02,  3.454E-02,  2.353E-02
 345.00,  2.344E-02,  2.414E-02,  2.765E-02,  3.376E-02,  2.454E-02
```

355.00, 2.241E-02, 2.640E-02, 2.778E-02, 3.741E-02, 2.274E-02

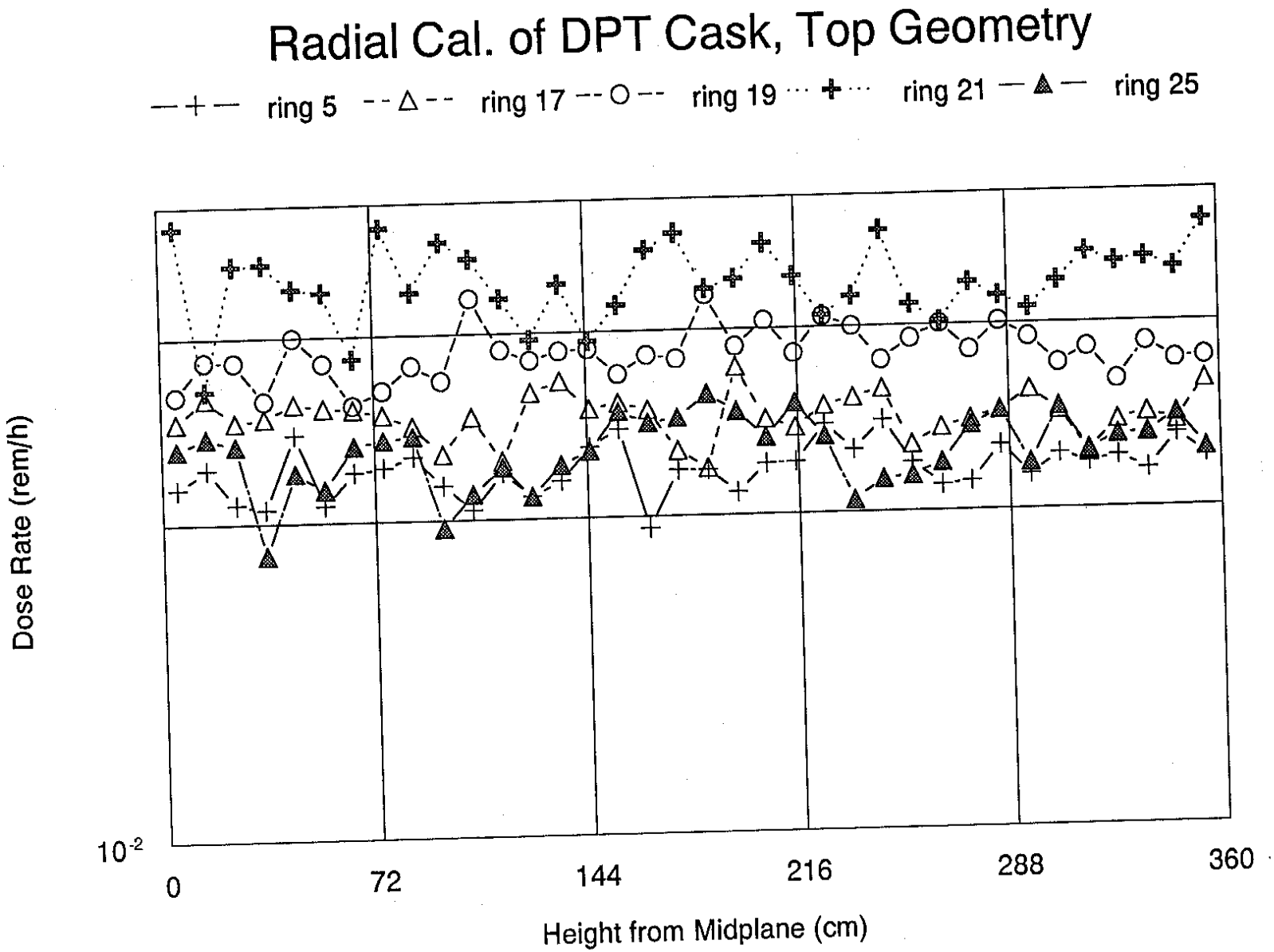

Figure 2. Azimuthal dose profiles for five ring surfaces on surface #3

APPENDIX B

LISTING OF THE PROGRAM

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LISTING OF THE PROGRAM

The DIMSUM program consists of 6 routines. The main routine is DIMSUM, and the other 5 routines are AZIMDO, POUTM1, POUTP1, RINGDO, and SURFDO.

```
      program dimsum
!
      implicit none
!
      integer :: i,j,irun,inum,isd,ninp,nout,nfile,isnm,ns,intvl,icnt
      integer,dimension(36) :: intzr=0,intam=0
      real,dimension(36) :: sloc=0.,zrmin=0.,zrmax=0.
      real    :: bn,dr,xmidp,fs
      character(len=120) :: title
      character(len=16) :: file40
      character(len=16),dimension(10) :: file3s
      common /units/ ninp,nout,irun,inum,intvl,icnt
      common /wates/ bn(3),ns(10),xmidp(720),dr(10,720),fs(10,720)
!
      ninp = 5
      nout = 6
      inum = 0
      icnt = 0
      ns   = 0
      bn    = 0.0
      xmidp = 0.0
      dr    = 0.0
      fs    = 0.0
!
!  open standard input and output units
      open(unit=ninp,status='old',file='dimsum.inp',form='formatted')
      open(unit=nout,status='unknown',file='dimsum.out',  &
           form='formatted')
!234567890123456789022345678903234567890423456789052345678906234567890 72
!
!  title (a120)
!
!  irun -- option of this run
!   +n  summation of n cases to obtain total dose rates, n .le. 10 and
!       .ge. 2
!   -2  batch-weighted average of 2 runs to obtain dose rate of one case,
!    0,1, or -1  write out data for plotting
!    0  not used
!    1  write out dose rate vs height(radial cal) or radius(axial cal)
!       for inum surfaces, inum must not be greater than 10
!       all surfaces must have the same height or radius and must have the
!       same number of sub-surfaces
!   -1  write out dose rate vs azimuthal for inum ring surfaces of surface
!       number isnm, inum must not be greater than 10
!       all ring surfaces must have the same number of azimuthal angles
!
!  isd  -- number of surface detectors
!
!  inum -- must be input, used only when irun=1 or -1
!          number of surfaces (irun=1) for which dose rate vs z/r are written
!       or number of ring surfaces (irun=-1) for which dose rate vs azimuthal
!          are written
!          inum must not be greater than 10
!
!  file40, file3s(i), i=1,abs(irun)
!     file40 is output file name (not more than 16 characters)
!     file3s(i) are input file names (each not more than 16 characters)
!
!  if (irun .eq. 1 ) read ns(i),i=1,inum
```

```
!     ns(i) is surface number in the file
!
!  if (irun .eq. -1) read isnm,ns(i),i=1,inum
!     isnm  is the surface number
!     ns(i) is the segment number of the each ring surface
!
!  if (irun .eq. -2) read bn(i),i=1,2
!     bn(i) is the number of batches of run i
!
!234567890123456789022345678903234567890423456789052345678906234567890 72
!
!  read input from unit ninp, associated to the file call 'dimsum.inp'
!
      read(ninp,*) title
      read(ninp,*) irun,isd,inum
!
      if (irun .gt. 10) then
         write(nout,3000) irun
 3000    format(' ****** error in input ******',/,' irun =', &
         i3,/,' the absolute value of irun must not exceed 10')
         stop
      endif
!
      if (irun .lt. -2) then
         write(nout,3100) irun
 3100    format(' ****** error in input ******',/,' irun =', &
         i3,/,' the value of irun must not be smaller than -2')
         stop
      endif
!
      if (irun .eq.  0) then
         write(nout,3200) irun
 3200    format(' ****** error in input ******',/,' irun =', &
         i3,/,' the value of irun must not be zero')
         stop
      endif
!
      if (inum .gt. 10) then
         write(nout,3300) irun
 3300    format(' ****** error in input ******',/,' inum =', &
         i3,/,' the value of inum must not exceed 10')
         stop
      endif
!
      nfile = abs(irun)
      read(ninp,*) file40, (file3s(i),i=1,nfile)
!
      if (irun .eq. 1) then
        read(ninp,*) (ns(i),i=1,inum)
!
      else if (irun .eq. -1) then
        read(ninp,*) isnm,(ns(i),i=1,inum)
!
      else if (irun .eq. -2) then
        read(ninp,*) (bn(i),i=1,2)
      endif
!
!  open input and output files
!
```

```
      do 100 i=1,nfile
         j = 29 + i
         open(j,status='old',    file=file3s(i),form='formatted')
 100  continue
      open(40,status='unknown',file=file40,form='formatted')
!
      do 110 i=1,8
         read(30,1000)
 110  continue
      do 120 i=1,isd
         read(30,1300) i,sloc(i),zrmin(i),zrmax(i),intzr(i),intam(i)
 120  continue
!
      rewind 30
!
      if (irun .ge. 2  .or.  irun .eq. -2) then
        call surfdo(nfile+1,isd,title)
        write(40,1400)
!
        do 200 i=1,isd
           call ringdo(nfile+1,intzr(i),i)
 200    continue
        write(40,1700)
!
        do 220 i=1,isd
           call azimdo(nfile+1,intzr(i),intam(i),i)
 220    continue
!
      else if (irun .eq. 1) then
        do 300 i=1,isd+8
          read(30,1000)
 300    continue
        do 310 i=1,isd
          call poutp1(intzr(i),i)
 310    continue
!
! write out ring dose profile for selected surfaces
        write(40,1000) title
        write(40,1825) (ns(i),i=1,inum)
        do 315 j=1,intvl
          write(40,1850) xmidp(j),(dr(i,j),i=1,icnt)
 315    continue
!
      else if (irun .eq. -1) then
        do 317 i=1,isd+8
          read(30,1000)
 317    continue
        do 319 i=1,isd
          call poutp1(intzr(i),i)
 319    continue
        do 320 i=1,isd
          call poutm1(intzr(i),intam(i),i,isnm)
 320    continue
      write(nout,*) irun,intvl,dr(1,1),dr(1,2)
!
! write out azimuthal dose profile for selected rings of surface isnm
        write(40,1000) title
        write(40,1875) isnm,(ns(i),i=1,inum)
        do 340 j=1,intvl
```

```
          write(40,1850) xmidp(j),(dr(i,j),i=1,inum)
 340    continue
      endif
!
!  close input and output files
!
      do 400 i=1,nfile
         j = 29 + i
         close(j)
 400  continue
      close(40)
 1000 format(a132)
 1300 format(i6,4x,3f10.3,2i8,1pe14.3,0p,f8.3,i12)
 1400 format(/,' - - - - tallies of spatial segments on each surface', &
       ' - - - -')
 1700 format(/,' - - - - tallies of azimuthal segments - - - -')
 1825 format(/,'  z/r   ',10('  surface',i3,:))
 1850 format(f7.2,1p,10(', ',e10.3,:))
 1875 format(/,'   dose rates vs azimuthal angle for surface #', i3,/, &
      '  angle ',10('  ring #',i4,:))
!
!
      end
```

```
      subroutine poutm1(intzr,intam,is,isnm)
!
      implicit none
!
      integer :: i,j,k,ndm,ind,id1,id2,isnm,idummy,icnt
      integer :: intvl,inct,intzr,intam,is,ninp,nout,irun,inum
      integer :: ns
      real    :: bn,xmidp,dr,fs,rdummy
      real,   dimension(intzr,intam) :: dose,fsds
      real,   dimension(intam) :: midp
!
      common /units/ ninp,nout,irun,inum,intvl,icnt
      common /wates/ bn(3),ns(10),xmidp(720),dr(10,720),fs(10,720)
!
!234567890123456789022345678903234567890423456789052345678906234567890 72
!
      if (is .eq. 1) then
         read(30,1000)
         read(30,1000)
      endif
      read(30,1000)
      read(30,1000)
!
      if (is .ne. isnm) then
        ndm = (intzr-1)/4 + 1
        do 120 ind=1,ndm
          read(30,1000)
          read(30,1000)
          read(30,1000)
          id1 = (ind -1)*4 +1
          if(ind.lt.ndm) then
            id2 = id1 + 3
          else
            id2 = intzr
          endif
          do 120 k=1,intam
             read(30,2100) k,rdummy ,(rdummy,rdummy,    &
                                      idummy,j=id1,id2)
 120    continue
!
      else
!
        intvl = intam
        ndm = (intzr-1)/4 + 1
        do 220 ind=1,ndm
          read(30,1000)
          read(30,1000)
          read(30,1000)
          id1 = (ind -1)*4 +1
          if(ind.lt.ndm) then
            id2 = id1 + 3
          else
            id2 = intzr
          endif
          do 220 k=1,intam
             read(30,2100) k,xmidp(k),(dose(j,k),fsds(j,k),    &
                                      idummy,j=id1,id2)
 220    continue
!
```

```
        do 240 j=1,intzr
        do 240 i=1,inum
            if (ns(i) .eq. j) then
              do 270 k=1,intam
                dr(i,k) = dose(j,k)
                fs(i,k) = fsds(j,k)
 270          continue
            endif
 240    continue
!
      endif
!
 1000 format(a132)
 2100 format(i7,0pf10.2,4(1pe13.3,0pf6.3,i7))
      return
      end
```

```
      subroutine poutp1(intzr,is)
!
      implicit none
!
      integer :: i,j,k,irun,idummy,iflag,ninp,nout
      integer :: intzr,is,inum,ns,intvl,icnt
      real    :: bn,xmidp,dr,fs,rdummy
!
      common /units/ ninp,nout,irun,inum,intvl,icnt
      common /wates/ bn(3),ns(10),xmidp(720),dr(10,720),fs(10,720)
!
!
      if (is .eq. 1) then
         read(30,1000)
         read(30,1000)
      endif
      do 110 k=1,3
         read(30,1000)
 110  continue
!
      iflag = 0
      if (irun .eq. 1) then
        do 120 i=1,inum
          if (is .eq. ns(i)) then
            icnt = icnt + 1
            iflag = 1
          endif
 120    continue
      endif
!
      if (iflag .eq. 1) then
        intvl = intzr
        do 130 j=1,intzr
          read(30,1600) j,xmidp(j),dr(icnt,j),fs(icnt,j),idummy
 130      continue
      else
        do 140 j=1,intzr
            read(30,1600) j,rdummy,rdummy,rdummy,idummy
 140    continue
      endif
!234567890123456789022345678903234567890423456789052345678906234567890 72
!
 1000 format(a132)
!234567890123456789022345678903234567890423456789052345678906234567890 72
 1600 format(i6,7x,0pf9.2,1pe14.3,0pf8.3,i10)
      return
      end
```

```
      subroutine ringdo(nfilep1,intzr,is)
!
      implicit none
!
      integer :: i,j,k
      integer :: nfilep1,intzr,is,ninp,nout,irun,inum,ns
      integer,dimension(nfilep1,intzr) :: hits
      real,   dimension(nfilep1,intzr) :: dose,fsds
      real,   dimension(intzr) :: midp
      real    :: bn
!
      common /units/ ninp,nout,irun,inum
      common /wates/ bn(3),ns(10)
!
      midp = 0.0
      dose = 0.0
      hits = 0
      fsds = 0.0
 10   continue
!
      do 100 i=1,nfilep1-1
         if (is .eq. 1) then
            read(29+i,1000)
            read(29+i,1000)
         endif
         do 110 k=1,3
            read(29+i,1000)
 110     continue
         do 100 j=1,intzr
            read(29+i,1600) j,midp(j),dose(i,j),fsds(i,j),hits(i,j)
 100  continue
!234567890123456789022345678903234567890423456789052345678906234567890 72
!
! *********** irun .ge. 2 ***********
!
      if (irun .ge. 2) then
        do 200 j=1,intzr
           do 200 i=1,nfilep1-1
              hits(nfilep1,j) = hits(nfilep1,j) + hits(i,j)
              dose(nfilep1,j) = dose(nfilep1,j) + dose(i,j)
              fsds(nfilep1,j) = fsds(nfilep1,j) +                &
                                (dose(i,j)*fsds(i,j))**2
 200    continue
!
! *********** irun .eq. -2 ***********
!
      else if (irun .eq. -2) then
        do 300 j=1,intzr
           hits(3,j) = hits(1,j) + hits(2,j)
           dose(3,j) = dose(1,j)*bn(1)/bn(3) + dose(2,j)*bn(2)/bn(3)
           fsds(3,j) = (bn(1)*(bn(1)-1.)*(dose(1,j)*fsds(1,j))**2  &
                      + bn(2)*(bn(2)-1.)*(dose(2,j)*fsds(2,j))**2  &
                      + bn(1)*(dose(1,j)-dose(3,j))**2             &
                      + bn(2)*(dose(2,j)-dose(3,j))**2)            &
                      /(bn(3)*(bn(3)-1))
 300    continue
!
      endif
!
```

```
      write(40,1500) is
      write(40,1550)
      do 400 j=1,intzr
       if (dose(nfilep1,j) .eq. 0.0) then
         fsds(nfilep1,j) = 0.0
       else
         fsds(nfilep1,j) = sqrt(fsds(nfilep1,j))/dose(nfilep1,j)
       endif
       write(40,1600) j,midp(j),                                    &
            dose(nfilep1,j),fsds(nfilep1,j),hits(nfilep1,j)
 400  continue
!
 1000 format(a132)
 1100 format(///,30x,'* * * * surface detectors results * * * *',  &
      //,' detector locations:',2a4)
 1200 format(/,' surface #    ',2a4,'   zrmin     zrmax   intzr',  &
      '   intam     dose rate     fsd   # of hits')
 1300 format(i6,4x,3f10.3,2i8,1pe14.3,0p,f8.3,i12)
 1400 format(/,' - - - - tallies of spatial segments on each surface', &
       ' - - - -')
!234567890123456789022345678903234567890423456789052345678906234567890 72
 1500 format(/,' tallies of spatial segments on surface #',i2)
 1550 format(' segment #',3x,'mid point',5x,'dose rate',5x,'fsd',  &
            3x,'# of hits')
 1600 format(i6,7x,0pf9.2,1pe14.3,0pf8.3,i10)
      return
      end
```

```
      subroutine surfdo(nfilep1,isd,title)
!
      implicit none
!
      integer :: i,j,k
      integer :: nfilep1,isd,ninp,nout,irun,inum,ns
      integer,dimension(isd) :: intzr,intam
      integer,dimension(nfilep1,isd) :: hits
      real,   dimension(nfilep1,isd) :: dose,fsds
      real,   dimension(isd) :: sloc,zrmin,zrmax
      real    :: bn
      character(len=120) :: title
!     character(len=16) :: file40,file3s
!     character(len=16), dimension(10) :: file3s
!
      common /units/ ninp,nout,irun,inum
      common /wates/ bn(3),ns(10)
!
      intzr=0; intam=0
      sloc=0.0; zrmin=0.0; zrmax=0.0
      dose = 0.0
      hits = 0
      fsds = 0.0
 10   continue
!
      do 100 i=1,nfilep1-1
         do 110 k=1,8
            read(29+i,1000)
 110     continue
         do 100 j=1,isd
            read(29+i,1300) j,sloc(j),zrmin(j),zrmax(j),intzr(j),  &
                      intam(j),dose(i,j),fsds(i,j),hits(i,j)
 100  continue
!234567890123456789022345678903234567890423456789052345678906234567890 72
!
      if (irun .ge. 2) then
! *********** irun .ge. 2 ***********
        do 200 j=1,isd
           do 200 i=1,nfilep1-1
              hits(nfilep1,j) = hits(nfilep1,j) + hits(i,j)
              dose(nfilep1,j) = dose(nfilep1,j) + dose(i,j)
              fsds(nfilep1,j) = fsds(nfilep1,j) +                    &
                                (dose(i,j)*fsds(i,j))**2
 200    continue
!
      else if (irun .eq. -2) then
! *********** irun .eq. -2 ***********
        bn(3) = bn(1) + bn(2)
        do 320 j=1,isd
           hits(3,j) = hits(1,j) + hits(2,j)
           dose(3,j) = dose(1,j)*bn(1)/bn(3) + dose(2,j)*bn(2)/bn(3)
           fsds(3,j) = (bn(1)*(bn(1)-1.)*(dose(1,j)*fsds(1,j))**2  &
                     + bn(2)*(bn(2)-1.)*(dose(2,j)*fsds(2,j))**2  &
                     + bn(1)*(dose(1,j)-dose(3,j))**2            &
                     + bn(2)*(dose(2,j)-dose(3,j))**2)           &
                     /(bn(3)*(bn(3)-1))
 320    continue
!     else
      endif
```

```
!
      write(40,1050) title
      write(40,1200)
      do 400 j=1,isd
         if (dose(nfilep1,j) .eq. 0.0) then
           fsds(nfilep1,j) = 0.0
         else
           fsds(nfilep1,j) = sqrt(fsds(nfilep1,j))/dose(nfilep1,j)
         endif
         write(40,1300) j,sloc(j),zrmin(j),zrmax(j),intzr(j),      &
           intam(j),dose(nfilep1,j),fsds(nfilep1,j),hits(nfilep1,j)
 400  continue
!
!234567890123456789022345678903234567890423456789052345678906234567890 72
 1000 format(a132)
 1050 format(///,10x,a120,//)
 1100 format(///,30x,'* * * * surface detectors results * * * *',  &
      //,' detector locations:',2a4)
 1200 format(/,' surface #',5x,'r/z       zrmin     zrmax   intzr',  &
      '   intam     dose rate     fsd   # of hits')
 1300 format(i6,4x,3f10.3,2i8,1pe14.3,0p,f8.3,i12)
 1400 format(/,' - - - - tallies of spatial segments on each surface', &
       ' - - - -')
      return
      end
```

```
      subroutine azimdo(nfilep1,intzr,intam,is)
!
      implicit none
!
      integer :: i,j,k,ndm,ind,id1,id2,ni
      integer :: nfilep1,intzr,intam,is,ninp,nout,irun,inum,ns
      integer,dimension(nfilep1,intzr,intam) :: hits
      real,   dimension(nfilep1,intzr,intam) :: dose,fsds
      real,   dimension(intam) :: midp
      real    :: bn
      character(len=1) :: ihb=' '
!
      common /units/ ninp,nout,irun,inum
      common /wates/ bn(3),ns(10)
!
      midp = 0.0
      dose = 0.0
      hits = 0
      fsds = 0.0
 10   continue
!
      do 100 i=1,nfilep1-1
         if (is .eq. 1) then
            read(29+i,1000)
            read(29+i,1000)
         endif
         read(29+i,1000)
         read(29+i,1000)
!234567890123456789022345678903234567890423456789052345678906234567890 72
!
        ndm = (intzr-1)/4 + 1
        do 120 ind=1,ndm
          read(29+i,1000)
          read(29+i,1000)
          read(29+i,1000)
          id1 = (ind -1)*4 +1
          if(ind.lt.ndm) then
            id2 = id1 + 3
          else
            id2 = intzr
          endif
          do 120 k=1,intam
             read(29+i,2100) k,midp(k),(dose(i,j,k),fsds(i,j,k),    &
                                        hits(i,j,k),j=id1,id2)
 120    continue
 100  continue
!
!
      if (irun .ge. 2) then
! *********** irun .ge. 2 ***********
        do 200 k=1,intam
        do 200 j=1,intzr
           do 200 i=1,nfilep1-1
              hits(nfilep1,j,k) = hits(nfilep1,j,k) + hits(i,j,k)
              dose(nfilep1,j,k) = dose(nfilep1,j,k) + dose(i,j,k)
              fsds(nfilep1,j,k) = fsds(nfilep1,j,k) +              &
                                  (dose(i,j,k)*fsds(i,j,k))**2
 200    continue
!
```

```
      else if (irun .eq. -2) then
! *********** irun .eq. -2  ***********
        do 320 k=1,intam
        do 320 j=1,intzr
           hits(3,j,k) = hits(1,j,k) + hits(2,j,k)
           dose(3,j,k)=dose(1,j,k)*bn(1)/bn(3)+dose(2,j,k)*bn(2)/bn(3)
           fsds(3,j,k)=(bn(1)*(bn(1)-1.)*(dose(1,j,k)*fsds(1,j,k))**2 &
                      +bn(2)*(bn(2)-1.)*(dose(2,j,k)*fsds(2,j,k))**2  &
                      + bn(1)*(dose(1,j,k)-dose(3,j,k))**2            &
                      + bn(2)*(dose(2,j,k)-dose(3,j,k))**2)           &
                      /(bn(3)*(bn(3)-1))
 320    continue
!
!     else
      endif
!
      do 420 k=1,intam
      do 420 j=1,intzr
         if (dose(nfilep1,j,k) .eq. 0.0) then
           fsds(nfilep1,j,k) = 0.0
         else
           fsds(nfilep1,j,k)= sqrt(fsds(nfilep1,j,k))/dose(nfilep1,j,k)
         endif
 420  continue
!
      write(40,1800) is
      ndm = (intzr-1)/4 + 1
        do 500 ind=1,ndm
          id1 = (ind -1)*4 +1
          if(ind.lt.ndm) then
            id2 = id1 + 3
          else
            id2 = intzr
          endif
          write(40,1900) (ni,ni=id1,id2)
          write(40,2000) (ihb,ni=id1,id2)
          do 500 k=1,intam
             write(40,2100) k,midp(k),(dose(i,j,k),fsds(i,j,k),    &
                                       hits(i,j,k),j=id1,id2)
 500  continue
 1000 format(a132)
 1700 format(/,' - - - - tallies of azimuthal segments - - - -')
 1800 format(/,' tallies of azimuthal segments on surface #',i2)
 1900 format(/,' azimuthal  mid  ',4(:,8x,'spatial segment',i3))
 2000 format(  ' segmt. #   point',4(a1,3x,'dose rate   fsd   hits'))
 2100 format(i7,0pf10.2,4(1pe13.3,0pf6.3,i7))
      return
      end
```

APPENDIX C

OUTPUT LISTING OF SAMPLE PROBLEM 1

APPENDIX C

OUTPUT LISTING OF SAMPLE PROBLEM 1

total radial dose of DPT top geometry

surface #	r/z	zrmin	zrmax	intzr	intam	dose rate	fsd	# of hits
1	108.850	200.000	250.000	5	36	9.387E-02	0.014	26954977
2	118.210	0.000	198.000	20	36	3.284E-02	0.004	58933532
3	157.480	0.000	300.000	30	36	2.286E-02	0.005	87152283
4	357.480	0.000	300.000	30	36	7.509E-03	0.005	72255135
5	518.210	0.000	300.000	30	36	4.413E-03	0.005	62251379
6	120.000	0.000	250.000	25	36	3.921E-02	0.005	87498703

- - - - tallies of spatial segments on each surface - - - -

tallies of spatial segments on surface # 1

segment #	mid point	dose rate	fsd	# of hits
1	205.00	1.635E-01	0.017	4640373
2	215.00	1.423E-01	0.019	10822374
3	225.00	1.027E-01	0.020	9753509
4	235.00	4.230E-02	0.036	1635294
5	245.00	1.848E-02	0.066	103427

tallies of spatial segments on surface # 2

segment #	mid point	dose rate	fsd	# of hits
1	4.95	3.538E-02	0.027	1942301
2	14.85	3.377E-02	0.014	1933636
3	24.75	3.374E-02	0.014	1873409
4	34.65	3.380E-02	0.018	1873240
5	44.55	3.233E-02	0.015	1834394
6	54.45	3.239E-02	0.015	1808220
7	64.35	3.209E-02	0.013	1804174
8	74.25	3.237E-02	0.012	1831417
9	84.15	3.353E-02	0.015	1875076
10	94.05	3.245E-02	0.014	1837192
11	103.95	3.221E-02	0.014	1846104
12	113.85	3.167E-02	0.014	1825650
13	123.75	3.152E-02	0.014	1819654
14	133.65	3.175E-02	0.015	1885962
15	143.55	3.220E-02	0.014	2167267
16	153.45	3.456E-02	0.013	3077247
17	163.35	3.594E-02	0.014	4854967
18	173.25	3.600E-02	0.009	7221991
19	183.15	3.253E-02	0.009	8400545
20	193.05	2.657E-02	0.011	7221084

tallies of spatial segments on surface # 3

segment #	mid point	dose rate	fsd	# of hits
1	5.00	2.266E-02	0.013	1909897
2	15.00	2.273E-02	0.017	1930440
3	25.00	2.266E-02	0.012	1921940
4	35.00	2.220E-02	0.011	1901481
5	45.00	2.216E-02	0.010	1883238
6	55.00	2.219E-02	0.010	1900705
7	65.00	2.154E-02	0.009	1876703
8	75.00	2.193E-02	0.009	1909312
9	85.00	2.158E-02	0.009	1931401
10	95.00	2.186E-02	0.009	1977682
11	105.00	2.131E-02	0.009	2057507
12	115.00	2.182E-02	0.010	2193814
13	125.00	2.171E-02	0.010	2415943
14	135.00	2.227E-02	0.011	2781550
15	145.00	2.310E-02	0.011	3366621
16	155.00	2.395E-02	0.011	4036077
17	165.00	2.492E-02	0.011	4854357
18	175.00	2.617E-02	0.011	5559682
19	185.00	2.859E-02	0.013	5913633
20	195.00	3.131E-02	0.014	6126987
21	205.00	3.344E-02	0.014	6015383
22	215.00	3.510E-02	0.015	5804868
23	225.00	3.366E-02	0.016	5205918
24	235.00	2.960E-02	0.016	4204483
25	245.00	2.312E-02	0.018	2955847
26	255.00	1.831E-02	0.020	1917815
27	265.00	1.428E-02	0.025	1195886
28	275.00	1.157E-02	0.026	708569
29	285.00	1.043E-02	0.033	429225
30	295.00	9.465E-03	0.035	265321

tallies of spatial segments on surface # 4

segment #	mid point	dose rate	fsd	# of hits
1	5.00	8.775E-03	0.011	2274701
2	15.00	8.814E-03	0.011	2278394
3	25.00	8.754E-03	0.011	2269094
4	35.00	8.847E-03	0.012	2297534
5	45.00	8.624E-03	0.011	2318009
6	55.00	8.791E-03	0.016	2372018
7	65.00	8.719E-03	0.012	2395895
8	75.00	8.424E-03	0.011	2432209
9	85.00	8.588E-03	0.011	2462706
10	95.00	8.644E-03	0.011	2504173
11	105.00	8.398E-03	0.012	2542031
12	115.00	8.515E-03	0.012	2613792
13	125.00	8.342E-03	0.012	2644774
14	135.00	8.064E-03	0.012	2689933
15	145.00	8.043E-03	0.012	2728929
16	155.00	7.925E-03	0.012	2726207
17	165.00	7.594E-03	0.012	2741606
18	175.00	7.412E-03	0.013	2724212
19	185.00	7.467E-03	0.014	2719279
20	195.00	7.262E-03	0.013	2679777
21	205.00	7.013E-03	0.014	2657235
22	215.00	6.735E-03	0.015	2577049
23	225.00	6.491E-03	0.014	2468950
24	235.00	6.386E-03	0.016	2410123
25	245.00	5.974E-03	0.017	2270454
26	255.00	6.022E-03	0.018	2148949
27	265.00	5.429E-03	0.017	2006003
28	275.00	5.407E-03	0.018	1898799
29	285.00	5.157E-03	0.020	1776306
30	295.00	4.647E-03	0.019	1625995

tallies of spatial segments on surface # 5

segment #	mid point	dose rate	fsd	# of hits
1	5.00	5.207E-03	0.013	2249286
2	15.00	5.156E-03	0.012	2241141
3	25.00	5.233E-03	0.013	2252966
4	35.00	5.088E-03	0.012	2216661
5	45.00	5.104E-03	0.013	2276486
6	55.00	5.138E-03	0.013	2237632
7	65.00	5.044E-03	0.011	2242099
8	75.00	5.001E-03	0.013	2233619
9	85.00	5.019E-03	0.014	2247699
10	95.00	5.023E-03	0.019	2256706
11	105.00	5.028E-03	0.014	2261428
12	115.00	4.762E-03	0.012	2207998
13	125.00	4.864E-03	0.013	2220891
14	135.00	4.698E-03	0.014	2212691
15	145.00	4.577E-03	0.013	2173962
16	155.00	4.493E-03	0.013	2200534
17	165.00	4.397E-03	0.014	2144397
18	175.00	4.378E-03	0.014	2142888
19	185.00	4.190E-03	0.014	2124369
20	195.00	4.104E-03	0.014	2079075
21	205.00	4.116E-03	0.016	2035484
22	215.00	3.943E-03	0.016	2024493
23	225.00	3.856E-03	0.014	1925898
24	235.00	3.636E-03	0.014	1881705
25	245.00	3.552E-03	0.015	1842272
26	255.00	3.537E-03	0.018	1772419
27	265.00	3.444E-03	0.020	1733492
28	275.00	3.399E-03	0.016	1686716
29	285.00	3.181E-03	0.018	1596606
30	295.00	3.215E-03	0.020	1529762

tallies of spatial segments on surface # 6

segment #	mid point	dose rate	fsd	# of hits
1	5.00	3.381E-02	0.025	1955750
2	15.00	3.259E-02	0.014	1951669
3	25.00	3.235E-02	0.014	1897142
4	35.00	3.236E-02	0.017	1892701
5	45.00	3.107E-02	0.014	1845141
6	55.00	3.118E-02	0.013	1832575
7	65.00	3.103E-02	0.013	1821190
8	75.00	3.107E-02	0.012	1851665
9	85.00	3.221E-02	0.014	1898687
10	95.00	3.098E-02	0.013	1853500
11	105.00	3.097E-02	0.014	1859745
12	115.00	3.036E-02	0.013	1842348
13	125.00	3.038E-02	0.013	1856163
14	135.00	3.044E-02	0.014	1940968
15	145.00	3.146E-02	0.013	2341620
16	155.00	3.345E-02	0.013	3401270
17	165.00	3.440E-02	0.012	5320988
18	175.00	3.401E-02	0.009	7528911
19	185.00	2.962E-02	0.009	8268485
20	195.00	3.881E-02	0.015	6825849

21	205.00	9.348E-02	0.014	6076650
22	215.00	9.745E-02	0.014	8781301
23	225.00	7.718E-02	0.015	8201574
24	235.00	4.658E-02	0.020	3556683
25	245.00	2.305E-02	0.031	896135

- - - - tallies of azimuthal segments - - - -

tallies of azimuthal segments on surface # 1

azimuthal	mid	spatial segment 1			spatial segment 2			spatial segment 3			spatial segment 4		
segmt. #	point	dose rate	fsd	hits	dose rate	fsd	hits	dose rate	fsd	hits	dose rate	fsd	hits
1	5.00	1.418E-01	0.079	154394	1.072E-01	0.087	239114	9.460E-02	0.084	279282	4.021E-02	0.115	42731
2	15.00	1.554E-01	0.091	114240	1.359E-01	0.080	306331	9.240E-02	0.086	264739	3.177E-02	0.123	45450
3	25.00	1.537E-01	0.071	120934	1.217E-01	0.088	276813	8.490E-02	0.090	253235	3.739E-02	0.219	44244
4	35.00	1.538E-01	0.082	114025	1.535E-01	0.079	300727	1.008E-01	0.093	287913	4.638E-02	0.153	48416
5	45.00	1.821E-01	0.077	132463	1.416E-01	0.088	326003	1.128E-01	0.105	295297	3.033E-02	0.126	43965
6	55.00	1.486E-01	0.076	186158	1.274E-01	0.102	361075	1.042E-01	0.106	278083	4.365E-02	0.181	47659
7	65.00	1.588E-01	0.087	114491	1.452E-01	0.074	286620	1.057E-01	0.121	238640	2.564E-02	0.118	41418
8	75.00	1.712E-01	0.090	127855	1.470E-01	0.089	331722	1.060E-01	0.099	279448	3.610E-02	0.151	43037
9	85.00	1.792E-01	0.077	136200	1.482E-01	0.097	296596	9.759E-02	0.091	258321	4.934E-02	0.185	46490
10	95.00	1.498E-01	0.095	123661	1.266E-01	0.086	277990	8.354E-02	0.117	244810	4.415E-02	0.182	45817
11	105.00	1.704E-01	0.076	131692	1.415E-01	0.092	302382	1.005E-01	0.110	303833	5.690E-02	0.149	59165
12	115.00	1.438E-01	0.074	135518	1.426E-01	0.106	303995	1.144E-01	0.115	234379	2.963E-02	0.129	38804
13	125.00	1.667E-01	0.078	124122	1.633E-01	0.117	293825	1.103E-01	0.090	287459	4.721E-02	0.161	45455
14	135.00	1.847E-01	0.078	117279	1.513E-01	0.078	284938	9.742E-02	0.085	250354	3.981E-02	0.117	45769
15	145.00	1.608E-01	0.082	120920	1.397E-01	0.082	299814	1.076E-01	0.086	263878	4.573E-02	0.146	44636
16	155.00	1.645E-01	0.078	133504	1.508E-01	0.097	277005	9.733E-02	0.076	244550	4.392E-02	0.192	53799
17	165.00	1.859E-01	0.086	131445	1.565E-01	0.091	299094	9.267E-02	0.084	287492	3.108E-02	0.111	43600
18	175.00	1.536E-01	0.072	119847	1.553E-01	0.094	284035	1.018E-01	0.108	267074	4.893E-02	0.233	47569
19	185.00	1.888E-01	0.113	126724	1.641E-01	0.092	340581	1.111E-01	0.098	314556	4.239E-02	0.116	43300
20	195.00	1.668E-01	0.087	116412	1.446E-01	0.082	308064	1.045E-01	0.090	278471	5.031E-02	0.165	45836
21	205.00	1.586E-01	0.072	128456	1.578E-01	0.081	303912	1.166E-01	0.117	273603	5.129E-02	0.163	47654
22	215.00	1.621E-01	0.079	116054	1.400E-01	0.078	282107	9.753E-02	0.079	260518	3.043E-02	0.136	44690
23	225.00	1.847E-01	0.079	124980	1.522E-01	0.102	279497	1.210E-01	0.193	273967	3.761E-02	0.153	41783
24	235.00	1.566E-01	0.078	132623	1.400E-01	0.098	313000	9.405E-02	0.084	289291	5.902E-02	0.290	48433
25	245.00	1.575E-01	0.072	122427	1.393E-01	0.099	290763	1.249E-01	0.169	288774	6.026E-02	0.196	48670
26	255.00	1.529E-01	0.090	128205	1.384E-01	0.078	303134	9.471E-02	0.081	242518	3.555E-02	0.132	38778
27	265.00	1.635E-01	0.083	136002	1.559E-01	0.081	322375	1.112E-01	0.099	300399	4.172E-02	0.148	49717
28	275.00	1.863E-01	0.079	154176	1.461E-01	0.104	306982	9.750E-02	0.132	264515	3.409E-02	0.139	46086
29	285.00	1.736E-01	0.100	140300	1.339E-01	0.073	299210	9.457E-02	0.086	260059	4.669E-02	0.159	42810
30	295.00	1.644E-01	0.083	123989	1.318E-01	0.090	352666	1.070E-01	0.085	293412	4.512E-02	0.211	40580
31	305.00	1.676E-01	0.088	120764	1.291E-01	0.073	283507	9.885E-02	0.077	264234	3.792E-02	0.163	44376
32	315.00	1.362E-01	0.073	125387	1.573E-01	0.080	324254	9.347E-02	0.076	276107	3.565E-02	0.233	47022
33	325.00	1.586E-01	0.076	122727	1.284E-01	0.076	323979	1.001E-01	0.090	283137	4.343E-02	0.154	43649
34	335.00	1.692E-01	0.096	123652	1.615E-01	0.152	294194	1.088E-01	0.091	254636	4.897E-02	0.280	44466
35	345.00	1.592E-01	0.081	129836	1.400E-01	0.086	307906	1.329E-01	0.153	260550	4.454E-02	0.117	43916
36	355.00	1.546E-01	0.100	128911	1.074E-01	0.099	238164	8.488E-02	0.087	255975	4.966E-02	0.154	45504

azimuthal	mid	spatial segment 5		
segmt. #	point	dose rate	fsd	hits
1	5.00	2.209E-02	0.297	2596
2	15.00	1.996E-02	0.227	3028
3	25.00	1.881E-02	0.215	3028
4	35.00	1.714E-02	0.253	3328
5	45.00	1.570E-02	0.246	2319
6	55.00	1.743E-02	0.250	2996
7	65.00	1.821E-02	0.421	2822
8	75.00	1.438E-02	0.234	3468
9	85.00	2.145E-02	0.278	2567
10	95.00	2.365E-02	0.328	2582
11	105.00	1.643E-02	0.323	2672
12	115.00	1.987E-02	0.489	2507
13	125.00	1.868E-02	0.240	2911
14	135.00	1.671E-02	0.284	2629
15	145.00	1.094E-02	0.253	2845
16	155.00	1.723E-02	0.327	2768
17	165.00	1.795E-02	0.245	3175
18	175.00	1.419E-02	0.441	3663
19	185.00	1.692E-02	0.257	3004
20	195.00	2.285E-02	0.285	2607
21	205.00	1.937E-02	0.291	2732
22	215.00	2.550E-02	0.397	3189
23	225.00	1.094E-02	0.289	2638
24	235.00	1.639E-02	0.230	2777
25	245.00	3.304E-02	0.273	2675
26	255.00	2.778E-02	0.315	2956
27	265.00	1.901E-02	0.272	2597
28	275.00	1.547E-02	0.353	2625
29	285.00	9.523E-03	0.215	2725
30	295.00	1.194E-02	0.228	2361
31	305.00	1.454E-02	0.283	2808
32	315.00	1.003E-02	0.215	4847
33	325.00	1.715E-02	0.205	2612
34	335.00	2.076E-02	0.231	2778
35	345.00	2.371E-02	0.297	2868
36	355.00	2.941E-02	0.604	2724

tallies of azimuthal segments on surface # 2

azimuthal segmt. #	mid point	spatial segment 1 dose rate	fsd	hits	spatial segment 2 dose rate	fsd	hits	spatial segment 3 dose rate	fsd	hits	spatial segment 4 dose rate	fsd	hits
1	5.00	3.390E-02	0.066	49275	3.243E-02	0.065	50942	3.189E-02	0.063	48955	3.867E-02	0.081	52267
2	15.00	3.119E-02	0.067	49666	3.129E-02	0.064	51475	3.313E-02	0.111	52248	3.281E-02	0.072	51561
3	25.00	3.407E-02	0.064	58200	3.285E-02	0.052	49011	2.807E-02	0.060	44363	3.514E-02	0.155	49768
4	35.00	3.283E-02	0.071	49692	3.543E-02	0.068	53490	3.432E-02	0.069	54904	3.409E-02	0.067	51312
5	45.00	3.170E-02	0.066	49011	3.104E-02	0.082	53539	3.040E-02	0.057	49175	3.819E-02	0.171	58892
6	55.00	3.473E-02	0.090	54409	3.238E-02	0.059	63165	3.055E-02	0.060	51073	3.094E-02	0.061	48729
7	65.00	4.092E-02	0.127	57064	3.407E-02	0.070	55761	3.324E-02	0.063	56452	3.355E-02	0.054	53307
8	75.00	3.787E-02	0.104	56056	3.406E-02	0.058	54735	3.858E-02	0.092	50203	3.067E-02	0.058	48062
9	85.00	3.451E-02	0.097	52182	3.272E-02	0.073	52983	3.770E-02	0.120	52701	3.562E-02	0.130	54431
10	95.00	3.562E-02	0.079	55100	3.304E-02	0.069	51773	3.285E-02	0.067	52327	3.321E-02	0.089	47895
11	105.00	3.190E-02	0.065	52273	3.577E-02	0.068	55688	3.392E-02	0.088	50146	3.259E-02	0.071	51335
12	115.00	5.519E-02	0.476	65177	3.690E-02	0.108	49566	3.667E-02	0.065	51284	3.001E-02	0.061	51247
13	125.00	3.196E-02	0.074	49665	3.178E-02	0.054	50319	3.014E-02	0.058	46009	3.258E-02	0.064	47759
14	135.00	3.544E-02	0.064	50940	3.711E-02	0.069	57737	3.260E-02	0.069	45898	3.196E-02	0.062	51269
15	145.00	3.743E-02	0.080	52448	3.397E-02	0.061	50368	3.479E-02	0.084	48636	3.450E-02	0.070	50645
16	155.00	3.253E-02	0.077	57316	3.084E-02	0.063	53670	3.726E-02	0.061	61525	3.942E-02	0.075	57667
17	165.00	3.351E-02	0.061	55567	3.068E-02	0.051	50503	3.355E-02	0.065	50531	3.102E-02	0.062	51981
18	175.00	3.343E-02	0.064	57446	3.112E-02	0.057	51800	3.307E-02	0.072	53295	2.920E-02	0.056	48228
19	185.00	3.274E-02	0.064	52495	3.159E-02	0.067	52421	3.189E-02	0.060	51790	3.590E-02	0.086	53199
20	195.00	3.548E-02	0.076	51939	2.975E-02	0.053	49598	3.048E-02	0.054	52112	3.447E-02	0.079	60157
21	205.00	3.627E-02	0.112	53288	2.974E-02	0.055	49985	2.935E-02	0.057	48770	2.903E-02	0.053	47427
22	215.00	3.370E-02	0.101	49231	3.375E-02	0.075	52628	3.510E-02	0.072	52231	3.223E-02	0.078	52201
23	225.00	4.103E-02	0.134	61428	3.720E-02	0.085	55392	3.669E-02	0.079	56730	3.417E-02	0.069	54066
24	235.00	3.702E-02	0.074	54451	4.158E-02	0.079	60473	3.735E-02	0.069	57364	3.168E-02	0.054	52459
25	245.00	3.512E-02	0.063	59838	3.396E-02	0.066	56071	3.615E-02	0.108	52927	4.435E-02	0.203	65547
26	255.00	3.328E-02	0.067	50919	3.292E-02	0.079	61881	3.319E-02	0.079	55101	3.198E-02	0.086	52700
27	265.00	3.235E-02	0.065	51805	3.182E-02	0.056	50093	3.099E-02	0.052	51365	3.173E-02	0.052	47545
28	275.00	3.930E-02	0.108	58744	3.677E-02	0.104	60308	3.599E-02	0.101	57586	3.287E-02	0.065	49492
29	285.00	3.357E-02	0.072	56817	3.493E-02	0.063	56153	3.281E-02	0.080	47636	3.139E-02	0.073	43883
30	295.00	3.356E-02	0.067	51315	3.158E-02	0.064	48384	3.544E-02	0.074	47926	3.379E-02	0.075	49821
31	305.00	3.547E-02	0.089	50345	3.473E-02	0.087	50986	3.349E-02	0.069	54807	3.268E-02	0.057	51387
32	315.00	3.497E-02	0.078	53439	3.701E-02	0.081	58924	3.071E-02	0.055	52793	2.899E-02	0.050	46087
33	325.00	3.493E-02	0.059	50472	3.312E-02	0.062	51720	3.629E-02	0.068	51200	3.658E-02	0.076	55289
34	335.00	3.591E-02	0.067	54043	4.078E-02	0.095	55386	3.679E-02	0.091	54972	3.324E-02	0.057	53066
35	345.00	3.650E-02	0.072	56152	3.359E-02	0.064	51701	3.492E-02	0.083	51990	3.762E-02	0.090	55660
36	355.00	3.368E-02	0.065	54093	3.358E-02	0.057	55007	3.446E-02	0.054	56384	3.992E-02	0.097	56899

azimuthal segmt. #	mid point	spatial segment 5 dose rate	fsd	hits	spatial segment 6 dose rate	fsd	hits	spatial segment 7 dose rate	fsd	hits	spatial segment 8 dose rate	fsd	hits
1	5.00	3.367E-02	0.073	50338	3.292E-02	0.062	50964	3.052E-02	0.054	45852	3.170E-02	0.055	50374
2	15.00	2.809E-02	0.049	49932	3.698E-02	0.194	57667	3.247E-02	0.065	51175	3.033E-02	0.070	52292
3	25.00	3.301E-02	0.070	52819	3.327E-02	0.081	51312	2.927E-02	0.067	49021	2.901E-02	0.053	47035
4	35.00	3.253E-02	0.060	54153	3.021E-02	0.071	47056	2.957E-02	0.061	47046	2.948E-02	0.051	47935
5	45.00	3.270E-02	0.084	50535	2.999E-02	0.060	45514	3.226E-02	0.077	47286	2.963E-02	0.065	44762
6	55.00	3.236E-02	0.074	54773	3.654E-02	0.106	53292	3.646E-02	0.093	54991	3.382E-02	0.062	48645
7	65.00	3.018E-02	0.052	48884	3.344E-02	0.073	47996	3.378E-02	0.068	50049	3.226E-02	0.056	49524
8	75.00	3.488E-02	0.067	49643	2.964E-02	0.062	50245	3.092E-02	0.051	48081	2.996E-02	0.060	47579
9	85.00	3.331E-02	0.067	47688	3.282E-02	0.071	50049	3.135E-02	0.066	55991	3.277E-02	0.075	59810
10	95.00	3.435E-02	0.075	52786	3.389E-02	0.066	54231	3.212E-02	0.068	53660	3.309E-02	0.059	53600
11	105.00	3.315E-02	0.057	52890	3.028E-02	0.059	48017	3.660E-02	0.096	51560	3.125E-02	0.058	49691
12	115.00	3.187E-02	0.048	52717	3.681E-02	0.061	55316	3.327E-02	0.061	48724	2.993E-02	0.057	45485
13	125.00	2.970E-02	0.053	51442	2.994E-02	0.069	45121	3.281E-02	0.090	46015	3.096E-02	0.058	48797
14	135.00	3.036E-02	0.062	50414	3.188E-02	0.060	48621	3.110E-02	0.070	49465	3.018E-02	0.059	52722
15	145.00	3.305E-02	0.060	56336	3.386E-02	0.064	52202	2.972E-02	0.050	47734	3.135E-02	0.059	51168
16	155.00	3.204E-02	0.060	52134	3.072E-02	0.054	51768	2.891E-02	0.052	47279	3.215E-02	0.051	53025
17	165.00	3.017E-02	0.060	50668	3.028E-02	0.066	46835	2.941E-02	0.056	47914	3.417E-02	0.068	55201
18	175.00	3.198E-02	0.052	50224	3.188E-02	0.060	51528	3.073E-02	0.056	47463	3.485E-02	0.068	52408
19	185.00	3.139E-02	0.061	53232	3.174E-02	0.060	49534	2.950E-02	0.052	47813	3.298E-02	0.064	50838
20	195.00	3.210E-02	0.065	51100	3.345E-02	0.078	56458	3.193E-02	0.061	49523	3.363E-02	0.075	51841
21	205.00	3.466E-02	0.082	52458	3.693E-02	0.093	53510	3.521E-02	0.078	57641	3.044E-02	0.065	49598
22	215.00	3.560E-02	0.217	55186	3.376E-02	0.107	49630	2.853E-02	0.057	45957	3.393E-02	0.067	54537
23	225.00	3.311E-02	0.086	49966	2.978E-02	0.063	46812	3.268E-02	0.061	51613	3.159E-02	0.061	51589
24	235.00	3.146E-02	0.081	47862	3.187E-02	0.058	49873	3.223E-02	0.055	53279	3.461E-02	0.071	48577
25	245.00	3.503E-02	0.080	54374	3.041E-02	0.065	51067	3.433E-02	0.091	49128	3.320E-02	0.064	48817
26	255.00	3.209E-02	0.062	47908	3.153E-02	0.065	49078	3.123E-02	0.057	49335	3.281E-02	0.087	49466
27	265.00	3.307E-02	0.098	50794	3.108E-02	0.098	50048	3.285E-02	0.086	51946	3.290E-02	0.056	55356
28	275.00	3.553E-02	0.086	53129	3.087E-02	0.080	50339	3.479E-02	0.073	54863	3.291E-02	0.065	54062
29	285.00	3.054E-02	0.064	45565	2.885E-02	0.051	44768	3.110E-02	0.064	55009	3.139E-02	0.051	49426
30	295.00	3.261E-02	0.071	46274	2.988E-02	0.065	45618	3.577E-02	0.072	53774	3.836E-02	0.064	52683
31	305.00	3.081E-02	0.079	48040	3.713E-02	0.101	52623	3.420E-02	0.063	48393	3.723E-02	0.066	52444
32	315.00	3.091E-02	0.057	51763	3.698E-02	0.072	59059	3.809E-02	0.092	56775	3.519E-02	0.057	53566
33	325.00	3.179E-02	0.058	47447	3.503E-02	0.060	50899	3.265E-02	0.056	49793	3.251E-02	0.066	49533
34	335.00	3.203E-02	0.065	52270	2.950E-02	0.063	44140	2.737E-02	0.052	44841	3.430E-02	0.070	51580
35	345.00	3.281E-02	0.082	50440	2.916E-02	0.056	45610	2.979E-02	0.051	44908	2.699E-02	0.055	45169
36	355.00	3.087E-02	0.062	48210	3.284E-02	0.079	51420	3.184E-02	0.093	50277	3.335E-02	0.075	52282

azimuthal segmt. #	mid point	spatial segment 9 dose rate	fsd	hits	spatial segment 10 dose rate	fsd	hits	spatial segment 11 dose rate	fsd	hits	spatial segment 12 dose rate	fsd	hits
1	5.00	3.724E-02	0.073	55529	3.491E-02	0.059	55580	3.191E-02	0.080	52257	3.015E-02	0.060	50522
2	15.00	3.481E-02	0.080	56930	3.085E-02	0.056	51202	3.059E-02	0.053	50586	2.961E-02	0.067	47711
3	25.00	3.435E-02	0.059	48929	3.003E-02	0.070	47632	3.029E-02	0.070	47738	2.966E-02	0.054	50983
4	35.00	3.371E-02	0.077	50421	3.170E-02	0.076	50738	3.263E-02	0.069	49981	3.329E-02	0.067	51776
5	45.00	3.073E-02	0.058	49545	3.634E-02	0.080	51518	3.282E-02	0.064	53936	3.330E-02	0.086	52059
6	55.00	3.419E-02	0.058	51418	3.342E-02	0.074	50668	3.009E-02	0.066	49054	3.254E-02	0.078	51126
7	65.00	3.684E-02	0.065	56616	3.146E-02	0.060	52709	2.843E-02	0.051	48463	3.413E-02	0.070	54226
8	75.00	3.080E-02	0.067	49226	2.948E-02	0.066	48189	3.497E-02	0.085	53992	3.156E-02	0.078	53249
9	85.00	3.453E-02	0.083	54749	2.917E-02	0.064	49244	2.825E-02	0.059	47439	2.729E-02	0.069	46247
10	95.00	3.221E-02	0.070	51071	2.930E-02	0.063	47226	2.704E-02	0.058	46132	2.811E-02	0.054	50373
11	105.00	3.629E-02	0.103	55286	2.825E-02	0.057	50461	2.907E-02	0.058	58181	2.826E-02	0.057	50793
12	115.00	2.983E-02	0.053	46060	3.008E-02	0.062	47536	3.205E-02	0.075	47730	3.338E-02	0.066	49000
13	125.00	2.842E-02	0.054	49842	3.193E-02	0.074	50887	3.324E-02	0.057	53230	3.436E-02	0.073	55826
14	135.00	3.219E-02	0.067	50448	3.112E-02	0.058	49675	2.970E-02	0.057	47418	3.190E-02	0.065	54098
15	145.00	3.302E-02	0.059	52524	3.267E-02	0.081	51413	3.894E-02	0.184	57442	3.214E-02	0.060	50088
16	155.00	3.573E-02	0.081	52207	3.139E-02	0.058	52005	3.360E-02	0.053	52080	3.357E-02	0.063	56373
17	165.00	3.529E-02	0.103	53964	3.406E-02	0.061	52092	3.536E-02	0.059	53637	3.616E-02	0.066	57233
18	175.00	3.337E-02	0.059	53539	3.179E-02	0.056	48564	3.073E-02	0.056	53039	3.160E-02	0.073	48471
19	185.00	3.181E-02	0.060	49795	3.431E-02	0.098	51498	3.214E-02	0.089	49838	3.176E-02	0.076	50271
20	195.00	3.647E-02	0.114	55072	3.437E-02	0.086	51084	3.470E-02	0.061	53070	3.272E-02	0.057	51119
21	205.00	3.326E-02	0.060	57455	3.419E-02	0.080	50111	3.085E-02	0.058	44977	3.499E-02	0.104	52004
22	215.00	3.269E-02	0.057	52278	3.605E-02	0.061	52095	2.903E-02	0.052	45869	2.917E-02	0.063	50263
23	225.00	3.168E-02	0.055	51355	3.043E-02	0.068	51569	3.012E-02	0.063	47590	3.067E-02	0.079	42660
24	235.00	3.661E-02	0.066	56845	3.665E-02	0.074	57153	3.341E-02	0.074	50244	3.321E-02	0.061	55528
25	245.00	3.004E-02	0.061	48871	3.481E-02	0.076	52673	3.065E-02	0.062	55368	2.850E-02	0.065	46795
26	255.00	2.888E-02	0.068	48187	3.156E-02	0.068	47900	3.381E-02	0.066	58575	3.273E-02	0.065	45890
27	265.00	3.927E-02	0.095	63413	3.667E-02	0.087	59214	2.982E-02	0.065	48109	3.189E-02	0.069	50079
28	275.00	3.258E-02	0.062	50908	3.124E-02	0.064	47484	3.298E-02	0.076	52121	2.884E-02	0.065	45793
29	285.00	3.105E-02	0.059	47176	3.276E-02	0.072	48990	3.523E-02	0.068	48564	3.186E-02	0.060	46331
30	295.00	3.387E-02	0.059	52951	3.192E-02	0.054	49904	3.391E-02	0.065	55570	2.980E-02	0.062	51241
31	305.00	3.602E-02	0.073	55142	3.505E-02	0.083	53636	3.484E-02	0.124	59435	2.938E-02	0.061	47512
32	315.00	3.283E-02	0.090	48731	3.062E-02	0.069	50207	3.832E-02	0.080	52982	3.058E-02	0.063	49363
33	325.00	3.335E-02	0.075	50018	3.054E-02	0.059	53957	3.154E-02	0.055	50054	3.153E-02	0.055	51752
34	335.00	3.458E-02	0.087	49999	3.390E-02	0.064	52376	3.192E-02	0.062	48365	3.144E-02	0.059	55381
35	345.00	3.258E-02	0.078	45164	3.062E-02	0.083	46588	3.389E-02	0.070	53768	3.526E-02	0.073	53401
36	355.00	3.601E-02	0.082	53412	3.474E-02	0.063	53414	3.243E-02	0.071	49270	3.483E-02	0.116	50113

azimuthal segmt. #	mid point	spatial segment 13 dose rate	fsd	hits	spatial segment 14 dose rate	fsd	hits	spatial segment 15 dose rate	fsd	hits	spatial segment 16 dose rate	fsd	hits
1	5.00	3.214E-02	0.070	54254	3.737E-02	0.152	58100	3.181E-02	0.066	57533	3.481E-02	0.067	85453
2	15.00	2.891E-02	0.082	49620	2.957E-02	0.074	47124	2.740E-02	0.058	51982	3.560E-02	0.090	79351
3	25.00	2.963E-02	0.058	49626	3.364E-02	0.093	52627	2.986E-02	0.072	60969	3.494E-02	0.087	86448
4	35.00	3.512E-02	0.093	51736	3.566E-02	0.100	54346	3.514E-02	0.085	64473	3.822E-02	0.114	88097
5	45.00	3.447E-02	0.090	53559	3.175E-02	0.065	53720	2.922E-02	0.054	56991	3.859E-02	0.080	81166
6	55.00	3.301E-02	0.070	46936	3.333E-02	0.071	54111	3.493E-02	0.087	59777	3.645E-02	0.094	83111
7	65.00	3.203E-02	0.059	50566	3.376E-02	0.070	53893	3.056E-02	0.059	56402	3.360E-02	0.075	88980
8	75.00	3.268E-02	0.067	53006	3.033E-02	0.055	56374	2.864E-02	0.056	61349	3.367E-02	0.066	84795
9	85.00	3.258E-02	0.067	51509	3.102E-02	0.069	54096	3.045E-02	0.068	55853	3.263E-02	0.053	85468
10	95.00	3.181E-02	0.071	51052	3.042E-02	0.068	52176	3.050E-02	0.064	62056	3.667E-02	0.075	92145
11	105.00	3.036E-02	0.085	54104	3.312E-02	0.155	50353	3.110E-02	0.062	54089	3.267E-02	0.062	81409
12	115.00	3.102E-02	0.066	48911	3.025E-02	0.068	49520	3.119E-02	0.060	60264	3.255E-02	0.058	88184
13	125.00	3.381E-02	0.064	50804	3.254E-02	0.064	51164	3.180E-02	0.066	58853	2.986E-02	0.072	80301
14	135.00	3.086E-02	0.071	52507	3.052E-02	0.056	52963	3.350E-02	0.064	60632	3.441E-02	0.055	79846
15	145.00	3.409E-02	0.078	49026	2.868E-02	0.055	49786	3.220E-02	0.064	58396	3.571E-02	0.069	87203
16	155.00	3.345E-02	0.062	57713	3.307E-02	0.068	51313	3.476E-02	0.091	67892	3.487E-02	0.067	95895
17	165.00	3.397E-02	0.084	53279	3.299E-02	0.070	54187	3.833E-02	0.112	69409	3.557E-02	0.074	91183
18	175.00	3.146E-02	0.060	47515	3.155E-02	0.056	54309	3.032E-02	0.050	56146	3.448E-02	0.071	83298
19	185.00	2.867E-02	0.057	48909	3.163E-02	0.065	49954	3.329E-02	0.062	68501	3.722E-02	0.071	89255
20	195.00	2.957E-02	0.065	52359	3.708E-02	0.095	58196	3.072E-02	0.053	59964	3.187E-02	0.056	84716
21	205.00	2.952E-02	0.061	51744	3.335E-02	0.072	55789	3.351E-02	0.061	64761	3.589E-02	0.073	92433
22	215.00	3.051E-02	0.069	47412	3.010E-02	0.073	49840	2.975E-02	0.063	56873	3.373E-02	0.084	86139
23	225.00	2.969E-02	0.062	45918	2.737E-02	0.054	45985	3.020E-02	0.062	57151	3.649E-02	0.077	88587
24	235.00	3.117E-02	0.062	53516	3.146E-02	0.080	50881	3.152E-02	0.088	58538	3.319E-02	0.078	81957
25	245.00	3.016E-02	0.091	50128	2.647E-02	0.054	47814	3.290E-02	0.066	60876	3.322E-02	0.072	84500
26	255.00	2.888E-02	0.058	46038	2.775E-02	0.055	50990	3.320E-02	0.062	64659	3.755E-02	0.082	88645
27	265.00	2.951E-02	0.057	49082	3.235E-02	0.066	58422	3.112E-02	0.057	57313	3.432E-02	0.100	85607
28	275.00	3.101E-02	0.063	50212	3.073E-02	0.064	52438	3.525E-02	0.070	61254	3.660E-02	0.062	85814
29	285.00	3.252E-02	0.054	51087	3.090E-02	0.061	51561	3.285E-02	0.062	61370	3.282E-02	0.059	83531
30	295.00	3.439E-02	0.068	53674	3.298E-02	0.059	51769	2.996E-02	0.060	56914	3.195E-02	0.058	84340
31	305.00	3.594E-02	0.085	52154	3.315E-02	0.067	56852	3.107E-02	0.077	59871	3.587E-02	0.135	86697
32	315.00	2.765E-02	0.062	45793	2.914E-02	0.061	50660	3.307E-02	0.071	59514	3.104E-02	0.070	77008
33	325.00	3.560E-02	0.090	53416	3.138E-02	0.075	46986	3.316E-02	0.075	56741	3.475E-02	0.066	85122
34	335.00	2.707E-02	0.053	44216	2.951E-02	0.067	47478	3.312E-02	0.079	61571	3.192E-02	0.060	77857
35	345.00	3.248E-02	0.075	50357	3.528E-02	0.088	57229	3.765E-02	0.075	65570	3.586E-02	0.080	88642
36	355.00	2.911E-02	0.064	47916	3.277E-02	0.070	52956	3.524E-02	0.076	62760	3.444E-02	0.073	84064

azimuthal segmt. #	mid point	spatial segment 17 dose rate	fsd	hits	spatial segment 18 dose rate	fsd	hits	spatial segment 19 dose rate	fsd	hits	spatial segment 20 dose rate	fsd	hits
1	5.00	3.339E-02	0.056	131584	3.354E-02	0.043	195704	3.072E-02	0.035	224711	2.491E-02	0.040	203095
2	15.00	3.472E-02	0.088	133543	3.641E-02	0.058	202809	3.404E-02	0.036	241428	3.067E-02	0.085	197769
3	25.00	3.586E-02	0.074	136436	3.884E-02	0.048	212426	3.310E-02	0.034	241956	2.381E-02	0.041	197575
4	35.00	4.056E-02	0.075	137556	3.979E-02	0.059	203693	3.260E-02	0.039	236760	2.448E-02	0.047	190933
5	45.00	3.888E-02	0.120	131427	3.305E-02	0.041	187818	3.249E-02	0.047	222897	2.501E-02	0.070	186147
6	55.00	3.705E-02	0.052	134373	3.690E-02	0.047	201416	2.999E-02	0.030	230385	2.444E-02	0.051	197921
7	65.00	3.484E-02	0.069	132078	3.422E-02	0.040	197070	3.395E-02	0.035	241667	2.687E-02	0.051	199412
8	75.00	3.421E-02	0.049	132601	3.419E-02	0.044	199730	3.337E-02	0.048	232650	2.695E-02	0.052	196428
9	85.00	3.292E-02	0.053	131910	3.376E-02	0.038	201665	3.056E-02	0.030	223328	2.564E-02	0.042	203970
10	95.00	3.690E-02	0.064	140277	3.790E-02	0.056	203933	3.124E-02	0.033	226498	2.563E-02	0.045	200578
11	105.00	3.587E-02	0.053	136928	3.483E-02	0.038	200776	3.478E-02	0.054	226005	2.716E-02	0.056	193949
12	115.00	3.848E-02	0.083	133700	3.589E-02	0.042	203318	3.836E-02	0.151	243715	2.765E-02	0.058	207429
13	125.00	3.482E-02	0.057	130773	3.594E-02	0.042	209134	3.258E-02	0.038	238790	2.776E-02	0.052	211773
14	135.00	3.712E-02	0.056	133628	3.677E-02	0.046	203908	3.083E-02	0.030	232196	2.647E-02	0.047	205324
15	145.00	3.414E-02	0.062	129938	3.416E-02	0.050	189173	3.184E-02	0.035	232749	2.390E-02	0.053	194265
16	155.00	3.399E-02	0.069	131058	3.424E-02	0.041	188340	3.227E-02	0.036	239448	2.841E-02	0.070	199817
17	165.00	3.716E-02	0.061	149051	3.708E-02	0.044	204147	3.139E-02	0.033	234500	2.818E-02	0.065	196707
18	175.00	3.341E-02	0.054	129874	3.699E-02	0.064	208046	3.323E-02	0.033	241635	2.560E-02	0.051	191413
19	185.00	3.386E-02	0.058	128818	3.610E-02	0.054	186962	3.117E-02	0.038	222237	2.546E-02	0.054	199004
20	195.00	3.401E-02	0.073	128611	3.665E-02	0.054	194312	3.210E-02	0.034	236121	2.838E-02	0.071	202064
21	205.00	3.459E-02	0.067	130313	3.553E-02	0.047	212847	3.127E-02	0.054	226558	2.844E-02	0.072	196465
22	215.00	3.263E-02	0.053	130838	3.560E-02	0.053	199940	3.115E-02	0.034	238469	2.387E-02	0.038	198890
23	225.00	3.659E-02	0.068	136960	3.794E-02	0.043	207188	3.214E-02	0.033	226790	2.471E-02	0.054	202071
24	235.00	3.860E-02	0.087	133652	3.585E-02	0.047	195034	2.942E-02	0.029	218774	2.723E-02	0.069	206758
25	245.00	3.408E-02	0.054	133919	3.760E-02	0.051	210910	3.576E-02	0.050	241541	2.562E-02	0.100	203393
26	255.00	3.489E-02	0.053	129966	3.570E-02	0.046	196383	3.186E-02	0.032	227321	2.606E-02	0.052	192667
27	265.00	3.751E-02	0.072	131711	3.673E-02	0.050	211344	3.259E-02	0.036	236999	2.727E-02	0.078	202676
28	275.00	3.708E-02	0.066	131519	3.450E-02	0.064	190542	3.121E-02	0.034	214049	2.877E-02	0.078	199371
29	285.00	3.485E-02	0.067	129716	3.571E-02	0.045	189530	3.274E-02	0.036	224502	2.695E-02	0.052	201948
30	295.00	3.737E-02	0.085	137389	3.642E-02	0.047	200149	3.402E-02	0.052	247627	2.681E-02	0.079	195769
31	305.00	4.128E-02	0.101	166834	3.527E-02	0.044	206091	3.296E-02	0.033	236596	2.982E-02	0.074	205185
32	315.00	3.306E-02	0.049	133849	3.517E-02	0.038	205483	3.204E-02	0.028	239461	2.808E-02	0.078	202404
33	325.00	4.058E-02	0.089	143930	3.729E-02	0.047	202777	3.209E-02	0.035	232804	2.461E-02	0.047	210222
34	335.00	3.366E-02	0.048	132958	3.631E-02	0.035	208195	3.420E-02	0.033	243591	2.607E-02	0.044	206473
35	345.00	3.950E-02	0.110	141781	3.738E-02	0.046	195079	3.218E-02	0.032	233988	2.685E-02	0.049	206937
36	355.00	3.535E-02	0.055	135468	3.575E-02	0.050	196119	3.469E-02	0.071	241799	2.790E-02	0.059	214282

tallies of azimuthal segments on surface # 3

azimuthal segmt. #	mid point	spatial segment 1 dose rate	fsd	hits	spatial segment 2 dose rate	fsd	hits	spatial segment 3 dose rate	fsd	hits	spatial segment 4 dose rate	fsd	hits
1	5.00	2.384E-02	0.058	52632	2.174E-02	0.046	50316	2.298E-02	0.050	53741	2.309E-02	0.050	52933
2	15.00	2.245E-02	0.055	50923	2.259E-02	0.041	50995	2.263E-02	0.052	53400	2.215E-02	0.060	53342
3	25.00	2.100E-02	0.042	53287	2.050E-02	0.038	50281	2.411E-02	0.113	52105	1.947E-02	0.036	49084
4	35.00	2.166E-02	0.047	52275	2.200E-02	0.059	55429	2.235E-02	0.050	54825	2.240E-02	0.040	57383
5	45.00	2.221E-02	0.050	50672	2.137E-02	0.046	53885	2.272E-02	0.043	54582	2.070E-02	0.037	51453
6	55.00	2.239E-02	0.073	55886	2.310E-02	0.047	58888	2.275E-02	0.061	54303	2.125E-02	0.038	54754
7	65.00	2.333E-02	0.059	54513	2.184E-02	0.047	52978	2.155E-02	0.043	51361	2.158E-02	0.036	53172
8	75.00	2.305E-02	0.058	52041	2.387E-02	0.048	53360	2.450E-02	0.072	52173	2.246E-02	0.046	54435
9	85.00	2.109E-02	0.045	50892	2.345E-02	0.053	55852	2.253E-02	0.048	54700	2.320E-02	0.068	52429
10	95.00	2.439E-02	0.057	51562	2.239E-02	0.060	53745	2.118E-02	0.043	52457	2.421E-02	0.075	52986
11	105.00	2.285E-02	0.067	52900	2.102E-02	0.037	53299	2.144E-02	0.040	53072	2.274E-02	0.047	52443
12	115.00	2.170E-02	0.076	49990	3.063E-02	0.285	57112	2.394E-02	0.064	54159	2.309E-02	0.058	51683
13	125.00	2.307E-02	0.069	54709	2.246E-02	0.061	51991	2.139E-02	0.047	49637	2.213E-02	0.045	49355
14	135.00	2.177E-02	0.042	50355	2.238E-02	0.044	51180	2.188E-02	0.042	51273	2.197E-02	0.046	51735
15	145.00	2.589E-02	0.069	56500	2.352E-02	0.048	51782	2.264E-02	0.053	52095	2.293E-02	0.062	53927
16	155.00	2.007E-02	0.049	51971	2.241E-02	0.045	54139	2.267E-02	0.045	54601	2.307E-02	0.048	54144
17	165.00	2.086E-02	0.050	57093	2.266E-02	0.047	55461	2.177E-02	0.058	50655	2.109E-02	0.040	51556
18	175.00	2.184E-02	0.044	52796	2.086E-02	0.041	52627	2.120E-02	0.044	51879	2.059E-02	0.038	53027
19	185.00	2.182E-02	0.048	55089	2.142E-02	0.038	52202	2.167E-02	0.052	50749	2.531E-02	0.071	54284
20	195.00	2.133E-02	0.055	53454	2.069E-02	0.044	51890	2.293E-02	0.054	53561	2.146E-02	0.049	53799
21	205.00	2.505E-02	0.090	52980	2.160E-02	0.047	52835	2.233E-02	0.048	51011	2.249E-02	0.053	53480
22	215.00	2.384E-02	0.083	52354	2.273E-02	0.056	54320	2.446E-02	0.056	54350	2.170E-02	0.057	51921
23	225.00	2.321E-02	0.054	53870	2.411E-02	0.055	56935	2.291E-02	0.043	55317	2.215E-02	0.050	53648
24	235.00	2.429E-02	0.053	55557	2.477E-02	0.052	54578	2.323E-02	0.046	54468	2.230E-02	0.043	53361
25	245.00	2.363E-02	0.051	54959	2.366E-02	0.064	57876	2.458E-02	0.104	60950	2.263E-02	0.074	56167
26	255.00	2.186E-02	0.047	53380	2.200E-02	0.050	52985	2.189E-02	0.047	57640	2.309E-02	0.056	55017
27	265.00	2.210E-02	0.041	52998	2.237E-02	0.046	54313	2.196E-02	0.042	53050	2.141E-02	0.038	52039
28	275.00	2.467E-02	0.082	55832	2.379E-02	0.089	55819	2.303E-02	0.052	55833	2.273E-02	0.066	51375
29	285.00	2.267E-02	0.048	52706	2.123E-02	0.043	51449	1.958E-02	0.033	50752	2.285E-02	0.072	53927
30	295.00	2.270E-02	0.043	51484	2.225E-02	0.045	51899	2.195E-02	0.067	50037	2.043E-02	0.040	50126
31	305.00	2.065E-02	0.040	50282	2.573E-02	0.091	53078	2.482E-02	0.057	56124	2.035E-02	0.036	49165
32	315.00	2.265E-02	0.075	51448	2.208E-02	0.042	51375	2.224E-02	0.042	51505	2.175E-02	0.037	52067
33	325.00	2.269E-02	0.044	53072	2.314E-02	0.047	53554	2.259E-02	0.039	52936	2.198E-02	0.049	50038
34	335.00	2.320E-02	0.048	52060	2.403E-02	0.063	57666	2.319E-02	0.044	54036	2.386E-02	0.057	53659
35	345.00	2.384E-02	0.044	54801	2.168E-02	0.037	52073	2.343E-02	0.042	53785	2.110E-02	0.039	52791
36	355.00	2.188E-02	0.043	52574	2.249E-02	0.037	52273	2.471E-02	0.058	54818	2.348E-02	0.048	54776

azimuthal segmt. #	mid point	spatial segment 5 dose rate	fsd	hits	spatial segment 6 dose rate	fsd	hits	spatial segment 7 dose rate	fsd	hits	spatial segment 8 dose rate	fsd	hits
1	5.00	2.160E-02	0.035	53290	2.224E-02	0.044	51685	2.130E-02	0.036	51169	2.141E-02	0.043	53865
2	15.00	2.252E-02	0.053	52786	2.093E-02	0.035	53812	1.990E-02	0.036	52066	2.139E-02	0.038	55335
3	25.00	2.085E-02	0.055	50343	2.249E-02	0.098	50750	2.044E-02	0.040	52044	2.134E-02	0.050	51395
4	35.00	2.063E-02	0.034	52564	2.281E-02	0.055	54208	2.144E-02	0.046	50443	2.095E-02	0.039	50704
5	45.00	2.425E-02	0.102	52034	2.279E-02	0.053	52755	2.107E-02	0.044	50959	2.261E-02	0.044	54280
6	55.00	2.075E-02	0.037	50918	2.504E-02	0.084	56169	2.375E-02	0.057	53102	2.151E-02	0.040	49684
7	65.00	2.228E-02	0.040	50226	2.233E-02	0.046	54727	2.236E-02	0.042	51181	2.216E-02	0.043	52512
8	75.00	2.248E-02	0.048	49760	2.152E-02	0.043	50890	2.004E-02	0.031	51923	2.129E-02	0.052	51052
9	85.00	2.300E-02	0.052	51372	2.261E-02	0.045	50619	2.191E-02	0.048	54261	2.199E-02	0.043	55497
10	95.00	2.157E-02	0.037	52008	2.123E-02	0.047	52831	2.301E-02	0.056	55217	2.200E-02	0.039	54579
11	105.00	2.043E-02	0.035	52279	2.272E-02	0.048	54345	2.102E-02	0.037	52897	2.150E-02	0.056	54290
12	115.00	2.214E-02	0.042	53238	2.096E-02	0.034	53026	2.265E-02	0.046	53868	2.056E-02	0.039	50255
13	125.00	2.100E-02	0.043	49453	2.015E-02	0.043	49078	2.026E-02	0.041	50905	2.233E-02	0.084	50869
14	135.00	2.170E-02	0.043	50884	2.203E-02	0.052	50060	2.168E-02	0.037	51946	2.262E-02	0.050	53354
15	145.00	2.332E-02	0.040	55676	2.199E-02	0.042	52223	2.119E-02	0.035	50911	1.975E-02	0.036	54147
16	155.00	2.423E-02	0.053	56155	2.105E-02	0.038	51540	2.109E-02	0.049	51285	2.128E-02	0.040	52837
17	165.00	1.949E-02	0.033	52323	2.170E-02	0.040	56792	2.120E-02	0.039	52041	2.199E-02	0.047	55240
18	175.00	2.210E-02	0.036	54207	2.223E-02	0.041	53609	2.224E-02	0.041	52871	2.180E-02	0.044	52849
19	185.00	2.209E-02	0.049	54045	2.381E-02	0.054	53596	2.136E-02	0.042	50807	2.083E-02	0.039	51409
20	195.00	2.100E-02	0.037	51655	2.035E-02	0.040	51277	2.177E-02	0.038	55602	2.234E-02	0.049	54330
21	205.00	2.233E-02	0.044	53805	2.181E-02	0.052	53056	2.144E-02	0.051	52736	2.250E-02	0.048	56030
22	215.00	2.239E-02	0.094	54428	2.204E-02	0.046	54794	2.123E-02	0.045	53982	2.269E-02	0.046	58659
23	225.00	2.427E-02	0.053	53623	2.299E-02	0.045	51118	2.114E-02	0.045	51645	2.078E-02	0.035	52809
24	235.00	2.293E-02	0.063	52253	2.417E-02	0.055	56909	2.105E-02	0.035	51485	2.146E-02	0.042	51979
25	245.00	2.443E-02	0.063	55259	2.225E-02	0.047	53362	2.239E-02	0.043	50221	2.168E-02	0.041	52535
26	255.00	2.225E-02	0.044	53689	2.234E-02	0.056	51395	1.988E-02	0.038	49528	2.400E-02	0.083	52243
27	265.00	2.115E-02	0.052	51269	2.138E-02	0.049	55216	2.338E-02	0.080	53730	2.093E-02	0.034	53816
28	275.00	2.130E-02	0.048	50819	2.231E-02	0.049	56271	2.086E-02	0.044	52611	2.248E-02	0.058	53015
29	285.00	2.301E-02	0.054	53260	2.269E-02	0.051	50397	2.097E-02	0.038	52143	2.135E-02	0.045	51464
30	295.00	2.156E-02	0.037	48458	2.155E-02	0.049	49596	2.142E-02	0.040	50342	2.324E-02	0.043	52094
31	305.00	2.254E-02	0.047	52399	2.392E-02	0.059	54596	2.280E-02	0.053	49670	2.288E-02	0.049	51504
32	315.00	2.211E-02	0.042	52398	2.435E-02	0.062	55996	2.192E-02	0.047	54697	2.298E-02	0.053	51675
33	325.00	2.238E-02	0.040	52708	2.285E-02	0.049	53274	2.376E-02	0.046	55876	2.192E-02	0.038	55217
34	335.00	2.175E-02	0.041	52299	2.129E-02	0.041	50166	2.078E-02	0.038	51923	2.217E-02	0.053	53395
35	345.00	2.344E-02	0.074	50764	2.082E-02	0.043	50404	2.085E-02	0.037	49579	2.291E-02	0.081	50406
36	355.00	2.241E-02	0.043	50591	2.102E-02	0.062	50163	2.177E-02	0.040	51037	2.375E-02	0.063	53988

azimuthal segmt. #	mid point	spatial segment 9 dose rate	fsd	hits	spatial segment 10 dose rate	fsd	hits	spatial segment 11 dose rate	fsd	hits	spatial segment 12 dose rate	fsd	hits
1	5.00	2.145E-02	0.040	54033	2.223E-02	0.044	57335	2.124E-02	0.051	56798	2.273E-02	0.057	63738
2	15.00	2.086E-02	0.049	54030	2.204E-02	0.045	54740	2.084E-02	0.041	55475	2.042E-02	0.048	60904
3	25.00	2.067E-02	0.041	52399	2.341E-02	0.065	55232	2.087E-02	0.044	58022	2.159E-02	0.047	59919
4	35.00	2.301E-02	0.069	50925	2.248E-02	0.064	52665	2.224E-02	0.041	57079	2.325E-02	0.068	60379
5	45.00	2.167E-02	0.043	54588	2.161E-02	0.055	54837	2.084E-02	0.042	56548	2.340E-02	0.055	63669
6	55.00	2.278E-02	0.045	54383	2.222E-02	0.040	56846	2.028E-02	0.040	54567	2.123E-02	0.038	64053
7	65.00	2.105E-02	0.032	52162	2.164E-02	0.040	55667	2.055E-02	0.044	58172	2.208E-02	0.040	63322
8	75.00	2.046E-02	0.046	53594	2.166E-02	0.055	56978	2.123E-02	0.044	55724	2.182E-02	0.050	61930
9	85.00	1.975E-02	0.037	53668	2.136E-02	0.055	57012	2.040E-02	0.045	55336	2.045E-02	0.043	61416
10	95.00	2.082E-02	0.049	51161	2.100E-02	0.044	54408	2.107E-02	0.046	55214	2.035E-02	0.057	60549
11	105.00	2.081E-02	0.042	50815	2.118E-02	0.047	54482	1.953E-02	0.041	55479	1.953E-02	0.038	60483
12	115.00	2.062E-02	0.038	53787	2.216E-02	0.055	53861	2.124E-02	0.039	59120	1.971E-02	0.039	58798
13	125.00	2.076E-02	0.040	51305	2.076E-02	0.040	54724	2.044E-02	0.038	60105	2.333E-02	0.053	66416
14	135.00	2.093E-02	0.039	52500	2.141E-02	0.053	54486	2.053E-02	0.038	56287	2.174E-02	0.045	60781
15	145.00	2.296E-02	0.052	53044	1.972E-02	0.034	55690	2.149E-02	0.038	57333	2.401E-02	0.119	63243
16	155.00	2.060E-02	0.038	52485	2.363E-02	0.043	57506	2.174E-02	0.036	57918	2.335E-02	0.047	63630
17	165.00	2.325E-02	0.068	51843	2.201E-02	0.039	56436	2.140E-02	0.040	56867	2.177E-02	0.045	61127
18	175.00	2.036E-02	0.044	55409	2.241E-02	0.045	55404	2.105E-02	0.040	57730	2.152E-02	0.045	59528
19	185.00	2.237E-02	0.041	55704	2.187E-02	0.055	55081	2.080E-02	0.042	56288	2.307E-02	0.046	59363
20	195.00	2.086E-02	0.039	53572	2.130E-02	0.040	53297	2.097E-02	0.039	56768	2.133E-02	0.052	60013
21	205.00	2.217E-02	0.058	53539	2.438E-02	0.058	57176	2.090E-02	0.037	58111	2.232E-02	0.064	61103
22	215.00	2.072E-02	0.037	52240	2.118E-02	0.041	52170	2.212E-02	0.063	57022	2.403E-02	0.063	62153
23	225.00	2.205E-02	0.055	52697	2.215E-02	0.052	54146	2.098E-02	0.045	57997	2.187E-02	0.059	60418
24	235.00	2.214E-02	0.039	54998	2.160E-02	0.039	56463	2.202E-02	0.065	54823	2.059E-02	0.039	58643
25	245.00	2.277E-02	0.060	59803	2.132E-02	0.051	53468	2.164E-02	0.045	58086	2.072E-02	0.048	59145
26	255.00	2.300E-02	0.065	56778	2.110E-02	0.039	54961	2.136E-02	0.058	64685	2.166E-02	0.056	58331
27	265.00	2.240E-02	0.056	55618	2.210E-02	0.045	54516	2.240E-02	0.046	57150	2.029E-02	0.034	57565
28	275.00	2.127E-02	0.036	55151	2.165E-02	0.040	55443	2.137E-02	0.041	56069	2.249E-02	0.063	61927
29	285.00	2.112E-02	0.036	49644	2.076E-02	0.037	53157	2.393E-02	0.052	56522	2.263E-02	0.056	62592
30	295.00	2.079E-02	0.033	54349	2.256E-02	0.070	53795	2.219E-02	0.046	57405	2.161E-02	0.041	57884
31	305.00	2.210E-02	0.041	54993	2.281E-02	0.051	54820	2.284E-02	0.064	62412	2.324E-02	0.058	60904
32	315.00	2.258E-02	0.052	57680	2.260E-02	0.045	53644	2.443E-02	0.060	54936	2.104E-02	0.039	60825
33	325.00	2.126E-02	0.037	54013	2.129E-02	0.042	54386	2.050E-02	0.039	59163	2.079E-02	0.040	60050
34	335.00	2.185E-02	0.050	51819	2.098E-02	0.053	52866	2.050E-02	0.038	55069	2.088E-02	0.031	56414
35	345.00	2.031E-02	0.039	53814	2.186E-02	0.048	53260	2.140E-02	0.045	54859	2.296E-02	0.045	62746
36	355.00	2.408E-02	0.064	52858	2.256E-02	0.050	56724	1.990E-02	0.039	56368	2.191E-02	0.038	59853

azimuthal segmt. #	mid point	spatial segment 13 dose rate	fsd	hits	spatial segment 14 dose rate	fsd	hits	spatial segment 15 dose rate	fsd	hits	spatial segment 16 dose rate	fsd	hits
1	5.00	2.235E-02	0.050	67306	2.279E-02	0.070	77777	2.083E-02	0.041	94051	2.275E-02	0.052	112089
2	15.00	2.105E-02	0.051	65673	2.288E-02	0.071	73928	2.080E-02	0.039	89148	2.246E-02	0.054	108929
3	25.00	2.127E-02	0.044	67389	2.217E-02	0.050	77162	2.482E-02	0.049	94729	2.408E-02	0.057	115308
4	35.00	2.240E-02	0.059	70965	2.249E-02	0.049	76497	2.254E-02	0.048	91690	2.469E-02	0.061	112050
5	45.00	2.151E-02	0.041	63887	2.278E-02	0.042	77081	2.208E-02	0.046	92555	2.581E-02	0.067	111930
6	55.00	2.446E-02	0.059	68185	2.177E-02	0.045	77085	2.444E-02	0.075	92768	2.506E-02	0.063	111960
7	65.00	2.179E-02	0.048	64501	2.190E-02	0.046	75597	2.362E-02	0.057	92608	2.317E-02	0.054	112499
8	75.00	2.202E-02	0.046	68318	2.031E-02	0.037	79323	2.094E-02	0.047	91244	2.361E-02	0.054	109145
9	85.00	1.952E-02	0.039	65344	2.210E-02	0.054	81034	2.139E-02	0.048	91818	2.400E-02	0.065	112938
10	95.00	2.000E-02	0.067	69791	2.376E-02	0.147	76210	2.213E-02	0.064	93450	2.450E-02	0.056	114142
11	105.00	2.174E-02	0.043	69756	2.270E-02	0.055	74936	2.216E-02	0.066	90214	2.295E-02	0.047	110434
12	115.00	2.170E-02	0.043	66346	2.222E-02	0.061	76071	2.268E-02	0.047	92028	2.435E-02	0.072	111043
13	125.00	2.201E-02	0.038	65228	2.288E-02	0.049	75897	2.351E-02	0.049	90914	2.269E-02	0.054	112354
14	135.00	2.095E-02	0.040	67075	2.133E-02	0.042	77490	2.122E-02	0.047	90271	2.337E-02	0.043	107947
15	145.00	2.257E-02	0.070	67293	2.386E-02	0.055	76563	2.263E-02	0.060	89172	2.418E-02	0.052	113024
16	155.00	2.192E-02	0.043	68324	2.225E-02	0.045	77520	2.676E-02	0.088	102868	2.498E-02	0.058	108625
17	165.00	2.314E-02	0.050	70958	2.308E-02	0.061	83708	2.594E-02	0.057	100518	2.300E-02	0.040	115202
18	175.00	2.099E-02	0.045	66970	2.217E-02	0.050	86215	2.225E-02	0.055	91893	2.464E-02	0.054	110552
19	185.00	2.303E-02	0.058	67994	2.294E-02	0.043	78385	2.244E-02	0.059	93565	2.519E-02	0.073	117535
20	195.00	2.285E-02	0.048	67330	2.231E-02	0.040	76601	2.237E-02	0.050	94575	2.277E-02	0.046	113872
21	205.00	2.102E-02	0.038	68425	2.192E-02	0.046	75226	2.417E-02	0.064	92759	2.580E-02	0.088	114999
22	215.00	2.079E-02	0.043	64103	2.064E-02	0.039	74049	2.327E-02	0.071	92514	2.497E-02	0.058	109580
23	225.00	1.993E-02	0.037	63636	2.157E-02	0.060	73308	2.183E-02	0.047	90556	2.500E-02	0.053	119634
24	235.00	2.079E-02	0.040	66962	2.127E-02	0.044	76249	2.204E-02	0.047	90636	2.120E-02	0.041	111089
25	245.00	2.283E-02	0.054	67287	2.177E-02	0.062	75964	2.223E-02	0.050	95088	2.288E-02	0.051	109159
26	255.00	2.072E-02	0.048	67127	2.138E-02	0.047	76111	2.253E-02	0.049	95636	2.402E-02	0.052	114251
27	265.00	2.111E-02	0.051	62700	2.166E-02	0.042	75568	2.410E-02	0.052	93823	2.458E-02	0.061	111077
28	275.00	2.132E-02	0.046	66441	2.331E-02	0.086	77845	2.434E-02	0.062	91928	2.417E-02	0.053	106126
29	285.00	2.223E-02	0.048	70401	2.286E-02	0.052	81749	2.340E-02	0.044	91909	2.472E-02	0.052	109183
30	295.00	2.077E-02	0.042	66617	2.108E-02	0.039	76254	2.270E-02	0.068	102579	2.254E-02	0.044	113083
31	305.00	2.235E-02	0.051	69384	2.334E-02	0.060	78906	2.385E-02	0.052	97563	2.251E-02	0.053	110688
32	315.00	2.120E-02	0.048	64267	2.241E-02	0.083	75372	2.562E-02	0.104	94242	2.471E-02	0.057	111735
33	325.00	2.449E-02	0.082	66907	2.004E-02	0.037	75081	2.321E-02	0.049	92749	2.330E-02	0.053	111986
34	335.00	2.099E-02	0.043	67942	2.217E-02	0.052	77129	2.421E-02	0.063	95363	2.555E-02	0.061	113750
35	345.00	2.219E-02	0.046	68772	2.457E-02	0.061	80388	2.552E-02	0.061	93126	2.407E-02	0.048	113917
36	355.00	2.176E-02	0.044	66339	2.311E-02	0.049	77271	2.328E-02	0.042	96071	2.367E-02	0.042	114242

azimuthal segmt. #	mid point	spatial segment 17 dose rate	fsd	hits	spatial segment 18 dose rate	fsd	hits	spatial segment 19 dose rate	fsd	hits	spatial segment 20 dose rate	fsd	hits
1	5.00	2.497E-02	0.073	138555	2.512E-02	0.048	155887	2.648E-02	0.052	180301	2.951E-02	0.054	166960
2	15.00	2.633E-02	0.070	134137	2.854E-02	0.075	155025	2.854E-02	0.066	162943	3.068E-02	0.068	172696
3	25.00	2.495E-02	0.057	137705	2.759E-02	0.063	151891	2.847E-02	0.071	168098	3.150E-02	0.096	160564
4	35.00	2.516E-02	0.053	133295	2.565E-02	0.048	152147	2.616E-02	0.049	163768	3.011E-02	0.063	159611
5	45.00	2.595E-02	0.056	131704	2.569E-02	0.066	154937	2.999E-02	0.074	158346	3.093E-02	0.078	158656
6	55.00	2.568E-02	0.055	128957	2.568E-02	0.057	147199	2.834E-02	0.056	162440	2.939E-02	0.058	171517
7	65.00	2.557E-02	0.055	142670	2.933E-02	0.082	191733	2.582E-02	0.059	166668	2.858E-02	0.057	166241
8	75.00	2.523E-02	0.056	130520	2.687E-02	0.068	157468	2.662E-02	0.068	165516	3.495E-02	0.094	164808
9	85.00	2.458E-02	0.060	135858	2.498E-02	0.058	154827	2.807E-02	0.058	162295	2.560E-02	0.047	169136
10	95.00	2.309E-02	0.052	135739	2.669E-02	0.058	152047	2.713E-02	0.058	163322	2.952E-02	0.062	168396
11	105.00	2.504E-02	0.057	131465	2.509E-02	0.053	149285	3.246E-02	0.086	156880	3.167E-02	0.070	172637
12	115.00	2.272E-02	0.043	135902	2.660E-02	0.101	156047	2.896E-02	0.055	166904	3.302E-02	0.069	176806
13	125.00	2.635E-02	0.059	137470	2.614E-02	0.050	157195	2.828E-02	0.068	166090	2.828E-02	0.067	172476
14	135.00	2.697E-02	0.056	133721	2.664E-02	0.055	153406	2.882E-02	0.062	164670	3.086E-02	0.060	169131
15	145.00	2.535E-02	0.056	131851	2.786E-02	0.066	148216	2.890E-02	0.064	161508	2.936E-02	0.064	163787
16	155.00	2.566E-02	0.072	133608	2.570E-02	0.053	152851	2.733E-02	0.059	158376	2.825E-02	0.053	168715
17	165.00	2.525E-02	0.074	134654	2.542E-02	0.052	154810	2.844E-02	0.068	156294	2.964E-02	0.059	166581
18	175.00	2.306E-02	0.043	134603	2.562E-02	0.046	158203	2.820E-02	0.058	168065	3.154E-02	0.073	162970
19	185.00	2.217E-02	0.042	129061	2.774E-02	0.063	148328	3.238E-02	0.073	162125	3.245E-02	0.073	173356
20	195.00	2.764E-02	0.066	133348	2.459E-02	0.052	151189	2.891E-02	0.063	161784	3.714E-02	0.083	170511
21	205.00	2.462E-02	0.059	133355	2.319E-02	0.052	154517	3.054E-02	0.068	167127	3.421E-02	0.069	166835
22	215.00	2.414E-02	0.057	132035	2.376E-02	0.046	147033	2.840E-02	0.066	163671	3.115E-02	0.067	165579
23	225.00	2.530E-02	0.053	139513	2.664E-02	0.053	152056	3.073E-02	0.075	161329	3.533E-02	0.071	171157
24	235.00	2.572E-02	0.062	128866	3.235E-02	0.085	154657	3.004E-02	0.064	164686	3.360E-02	0.084	173023
25	245.00	2.618E-02	0.084	139202	2.634E-02	0.061	152327	2.787E-02	0.074	162029	3.267E-02	0.074	172896
26	255.00	2.314E-02	0.044	132454	2.443E-02	0.058	147968	2.917E-02	0.065	162223	2.957E-02	0.071	166486
27	265.00	2.400E-02	0.052	133396	2.766E-02	0.067	157978	3.010E-02	0.080	168548	3.077E-02	0.064	173823
28	275.00	2.441E-02	0.052	135230	2.778E-02	0.072	154970	2.840E-02	0.063	164195	3.011E-02	0.056	165329
29	285.00	2.487E-02	0.051	132831	2.435E-02	0.040	149550	3.019E-02	0.061	162080	3.206E-02	0.071	186666
30	295.00	2.599E-02	0.067	136036	2.525E-02	0.055	152442	2.914E-02	0.078	161320	3.020E-02	0.064	169108
31	305.00	2.480E-02	0.053	137798	2.556E-02	0.049	153834	2.750E-02	0.054	167906	3.537E-02	0.089	173468
32	315.00	2.265E-02	0.040	132981	2.594E-02	0.045	161166	2.843E-02	0.057	163916	2.802E-02	0.059	170153
33	325.00	2.424E-02	0.064	143597	2.236E-02	0.039	149871	2.647E-02	0.056	165295	3.171E-02	0.071	176928
34	335.00	2.461E-02	0.069	139476	2.584E-02	0.054	153405	2.871E-02	0.061	168294	3.277E-02	0.074	173700
35	345.00	2.414E-02	0.062	139158	2.649E-02	0.053	158134	2.765E-02	0.078	162252	3.496E-02	0.076	175509
36	355.00	2.640E-02	0.058	133606	2.659E-02	0.066	157083	2.778E-02	0.057	172369	3.188E-02	0.065	190772

azimuthal segmt. #	mid point	spatial segment 21 dose rate	fsd	hits	spatial segment 22 dose rate	fsd	hits	spatial segment 23 dose rate	fsd	hits	spatial segment 24 dose rate	fsd	hits
1	5.00	3.821E-02	0.065	182663	3.614E-02	0.098	174394	4.486E-02	0.110	169274	3.414E-02	0.090	129648
2	15.00	2.676E-02	0.055	165407	3.463E-02	0.065	164265	3.243E-02	0.062	156358	2.743E-02	0.076	123543
3	25.00	3.515E-02	0.068	161755	3.242E-02	0.067	159957	3.625E-02	0.079	147893	2.935E-02	0.093	110525
4	35.00	3.523E-02	0.085	158897	3.410E-02	0.075	167845	3.267E-02	0.068	143063	2.612E-02	0.081	115168
5	45.00	3.335E-02	0.075	160648	3.371E-02	0.072	163055	2.979E-02	0.072	142124	2.482E-02	0.067	116287
6	55.00	3.310E-02	0.068	170429	3.506E-02	0.069	163889	3.039E-02	0.069	137858	3.315E-02	0.090	117491
7	65.00	2.857E-02	0.068	166013	3.973E-02	0.111	177684	3.628E-02	0.107	147283	2.937E-02	0.087	114098
8	75.00	3.798E-02	0.070	170187	3.576E-02	0.074	163695	3.205E-02	0.082	148441	2.876E-02	0.084	115792
9	85.00	3.295E-02	0.065	177382	3.446E-02	0.069	158989	3.330E-02	0.077	143547	3.064E-02	0.111	115333
10	95.00	3.672E-02	0.069	166488	3.601E-02	0.069	159007	2.898E-02	0.063	137721	2.855E-02	0.078	109116
11	105.00	3.538E-02	0.080	169259	3.277E-02	0.073	161878	3.158E-02	0.075	147011	2.868E-02	0.076	107922
12	115.00	3.239E-02	0.065	169183	3.434E-02	0.094	155554	2.905E-02	0.058	135107	2.895E-02	0.080	109960
13	125.00	2.958E-02	0.069	163318	3.416E-02	0.066	150661	3.605E-02	0.078	143184	2.895E-02	0.078	114747
14	135.00	3.335E-02	0.067	164785	3.875E-02	0.075	157384	3.478E-02	0.076	138479	2.695E-02	0.073	115449
15	145.00	2.940E-02	0.059	166737	3.579E-02	0.065	158730	3.329E-02	0.089	140789	2.850E-02	0.069	112165
16	155.00	3.178E-02	0.068	157343	4.000E-02	0.071	155344	3.374E-02	0.080	144404	2.950E-02	0.080	115968
17	165.00	3.578E-02	0.084	159753	3.738E-02	0.073	155303	3.266E-02	0.065	139990	2.704E-02	0.075	117791
18	175.00	3.709E-02	0.079	157964	3.236E-02	0.079	155295	3.280E-02	0.072	138139	2.904E-02	0.085	117854
19	185.00	3.280E-02	0.065	161032	3.558E-02	0.085	158405	3.221E-02	0.073	146874	3.320E-02	0.083	118555
20	195.00	3.350E-02	0.070	161464	3.922E-02	0.071	159860	3.656E-02	0.069	156173	3.200E-02	0.079	124042
21	205.00	3.614E-02	0.082	170024	3.279E-02	0.072	162158	3.594E-02	0.078	150294	3.360E-02	0.084	114242
22	215.00	3.358E-02	0.076	163260	3.482E-02	0.068	158067	3.747E-02	0.085	134361	3.154E-02	0.085	111658
23	225.00	3.079E-02	0.067	158780	3.636E-02	0.085	160288	3.812E-02	0.074	140718	3.128E-02	0.082	110607
24	235.00	3.208E-02	0.068	174142	3.685E-02	0.082	160870	3.313E-02	0.066	138718	2.847E-02	0.102	123462
25	245.00	3.698E-02	0.089	160540	3.360E-02	0.078	160813	3.265E-02	0.070	143689	2.633E-02	0.072	118406
26	255.00	3.143E-02	0.066	161756	2.956E-02	0.061	158277	3.076E-02	0.069	139195	3.136E-02	0.089	112609
27	265.00	3.024E-02	0.059	173573	3.653E-02	0.084	163711	3.542E-02	0.084	141268	3.319E-02	0.075	123391
28	275.00	3.288E-02	0.068	170725	3.486E-02	0.064	153470	3.280E-02	0.085	145505	2.993E-02	0.072	116383
29	285.00	3.190E-02	0.057	186973	3.453E-02	0.077	169748	3.563E-02	0.080	144355	2.579E-02	0.069	125409
30	295.00	3.106E-02	0.067	165839	3.257E-02	0.068	155066	3.239E-02	0.070	143818	2.570E-02	0.067	116543
31	305.00	3.291E-02	0.077	162712	3.465E-02	0.066	156084	3.607E-02	0.084	147447	2.995E-02	0.089	117274
32	315.00	3.500E-02	0.077	168757	3.376E-02	0.073	173831	3.409E-02	0.070	137550	3.163E-02	0.081	118050
33	325.00	3.424E-02	0.066	170795	3.354E-02	0.068	167400	3.257E-02	0.063	148981	2.925E-02	0.085	115638
34	335.00	3.454E-02	0.073	165574	3.053E-02	0.067	156167	2.954E-02	0.065	135757	3.083E-02	0.092	120195
35	345.00	3.376E-02	0.070	166153	3.849E-02	0.076	167049	3.112E-02	0.067	155828	2.956E-02	0.083	116267
36	355.00	3.741E-02	0.069	185073	3.792E-02	0.065	160675	3.444E-02	0.071	154722	3.217E-02	0.076	122895

azimuthal segmt. #	mid point	spatial segment 25 dose rate	fsd	hits	spatial segment 26 dose rate	fsd	hits	spatial segment 27 dose rate	fsd	hits	spatial segment 28 dose rate	fsd	hits
1	5.00	2.352E-02	0.083	88685	2.036E-02	0.130	55881	1.542E-02	0.113	35863	1.312E-02	0.152	20577
2	15.00	2.413E-02	0.086	84359	1.659E-02	0.100	53571	1.694E-02	0.110	34811	9.830E-03	0.136	19888
3	25.00	2.370E-02	0.081	83002	2.119E-02	0.126	55910	1.271E-02	0.123	31727	1.248E-02	0.154	21242
4	35.00	1.864E-02	0.077	79809	1.733E-02	0.089	58314	1.447E-02	0.131	32716	1.318E-02	0.145	19373
5	45.00	2.229E-02	0.092	91474	2.092E-02	0.115	52703	1.344E-02	0.132	33728	1.530E-02	0.155	19460
6	55.00	2.149E-02	0.086	83304	1.818E-02	0.098	53191	1.344E-02	0.111	33570	8.596E-03	0.116	19189
7	65.00	2.359E-02	0.086	78491	1.605E-02	0.106	51260	1.588E-02	0.149	31230	1.027E-02	0.145	18995
8	75.00	2.387E-02	0.097	85320	1.714E-02	0.107	51502	1.482E-02	0.124	35074	1.073E-02	0.141	19380
9	85.00	2.405E-02	0.149	75773	1.718E-02	0.155	49812	1.630E-02	0.199	35991	1.177E-02	0.121	19825
10	95.00	1.966E-02	0.076	78321	1.805E-02	0.111	52567	1.360E-02	0.155	31459	9.375E-03	0.127	21642
11	105.00	2.114E-02	0.070	83442	1.641E-02	0.092	51765	1.555E-02	0.154	32414	1.042E-02	0.124	22318
12	115.00	2.240E-02	0.080	78942	1.676E-02	0.116	49735	1.550E-02	0.130	30866	1.259E-02	0.152	18867
13	125.00	2.100E-02	0.081	82336	1.818E-02	0.103	52757	1.440E-02	0.120	34888	1.156E-02	0.132	18502
14	135.00	2.246E-02	0.086	74410	1.818E-02	0.081	54255	1.400E-02	0.156	32230	1.493E-02	0.134	19500
15	145.00	2.312E-02	0.081	77016	1.781E-02	0.105	50679	1.672E-02	0.258	29659	1.265E-02	0.159	18316
16	155.00	2.516E-02	0.078	84438	1.657E-02	0.100	52576	1.192E-02	0.119	29916	1.580E-02	0.162	19013
17	165.00	2.453E-02	0.089	78829	1.945E-02	0.124	53169	1.303E-02	0.105	30953	1.218E-02	0.126	20232
18	175.00	2.477E-02	0.086	81949	2.068E-02	0.088	57667	1.151E-02	0.109	32833	9.935E-03	0.136	19177
19	185.00	2.606E-02	0.093	87858	1.802E-02	0.090	53532	1.508E-02	0.096	31458	1.241E-02	0.123	19291
20	195.00	2.507E-02	0.076	83829	2.036E-02	0.120	52601	1.386E-02	0.111	36580	1.193E-02	0.128	21351
21	205.00	2.366E-02	0.090	81768	1.676E-02	0.110	51561	1.596E-02	0.127	32991	1.392E-02	0.166	18725
22	215.00	2.545E-02	0.098	86121	2.067E-02	0.092	50166	1.566E-02	0.108	35040	1.188E-02	0.150	18755
23	225.00	2.365E-02	0.094	84662	1.837E-02	0.104	56107	1.413E-02	0.116	31690	9.951E-03	0.142	19197
24	235.00	2.053E-02	0.082	79213	1.895E-02	0.092	52396	1.258E-02	0.100	32517	1.005E-02	0.127	20763
25	245.00	2.148E-02	0.104	78778	1.408E-02	0.087	57595	1.243E-02	0.105	34115	8.159E-03	0.116	18132
26	255.00	2.162E-02	0.082	79119	1.958E-02	0.123	52777	1.278E-02	0.112	31518	9.985E-03	0.120	19007
27	265.00	2.223E-02	0.098	82638	1.927E-02	0.107	51854	1.372E-02	0.107	36439	1.074E-02	0.146	19384
28	275.00	2.406E-02	0.080	81457	2.063E-02	0.096	51505	1.242E-02	0.091	34291	1.059E-02	0.178	20546
29	285.00	2.487E-02	0.101	78893	1.838E-02	0.096	51178	1.399E-02	0.120	32426	1.328E-02	0.175	18378
30	295.00	2.214E-02	0.093	81395	1.489E-02	0.092	60523	1.445E-02	0.120	35868	1.018E-02	0.181	18689
31	305.00	2.500E-02	0.097	85601	2.203E-02	0.121	52129	1.416E-02	0.152	32373	1.152E-02	0.134	19741
32	315.00	2.273E-02	0.092	79070	1.634E-02	0.092	52643	1.455E-02	0.148	30961	9.968E-03	0.142	20510
33	325.00	2.346E-02	0.091	80177	1.694E-02	0.092	53101	1.242E-02	0.125	30548	1.271E-02	0.147	20277
34	335.00	2.353E-02	0.079	79326	1.967E-02	0.116	51733	1.694E-02	0.125	34797	1.154E-02	0.117	19212
35	345.00	2.454E-02	0.106	84478	1.965E-02	0.115	53943	1.440E-02	0.123	38012	1.262E-02	0.143	20356
36	355.00	2.274E-02	0.080	91564	1.751E-02	0.107	55157	1.475E-02	0.193	34334	1.048E-02	0.145	20759

azimuthal segmt. #	mid point	spatial segment 29 dose rate	fsd	hits	spatial segment 30 dose rate	fsd	hits
1	5.00	9.185E-03	0.156	12209	7.903E-03	0.197	7240
2	15.00	1.167E-02	0.164	12654	1.007E-02	0.182	7233
3	25.00	1.190E-02	0.276	11436	7.497E-03	0.177	7873
4	35.00	8.491E-03	0.167	11448	8.914E-03	0.175	9152
5	45.00	7.896E-03	0.171	11411	8.764E-03	0.225	7599
6	55.00	1.139E-02	0.204	12326	6.324E-03	0.211	7235
7	65.00	1.008E-02	0.174	11373	8.754E-03	0.198	7102
8	75.00	1.357E-02	0.222	12355	1.186E-02	0.190	7167
9	85.00	7.069E-03	0.180	11971	1.166E-02	0.182	7100
10	95.00	1.146E-02	0.201	12335	7.694E-03	0.186	6912
11	105.00	9.077E-03	0.143	11256	9.287E-03	0.195	7066
12	115.00	8.423E-03	0.173	10767	1.071E-02	0.191	6893
13	125.00	9.625E-03	0.152	12595	9.938E-03	0.196	7175
14	135.00	1.517E-02	0.149	11234	1.067E-02	0.193	7369
15	145.00	1.009E-02	0.200	11302	8.998E-03	0.178	7097
16	155.00	1.151E-02	0.161	11368	1.057E-02	0.221	7058
17	165.00	8.932E-03	0.154	12124	9.721E-03	0.222	6990
18	175.00	1.213E-02	0.175	11654	8.384E-03	0.194	7445
19	185.00	1.377E-02	0.162	15701	9.778E-03	0.193	7345
20	195.00	8.770E-03	0.180	11495	7.496E-03	0.212	7788
21	205.00	1.272E-02	0.158	11343	7.260E-03	0.210	7731
22	215.00	9.980E-03	0.169	11226	1.030E-02	0.183	7048
23	225.00	6.637E-03	0.164	11788	8.975E-03	0.168	7717
24	235.00	1.704E-02	0.171	11177	7.385E-03	0.172	6937
25	245.00	1.150E-02	0.175	11887	7.617E-03	0.182	7273
26	255.00	1.124E-02	0.178	12102	1.281E-02	0.205	7377
27	265.00	8.916E-03	0.158	12479	9.871E-03	0.216	7496
28	275.00	1.109E-02	0.174	12202	1.002E-02	0.189	7912
29	285.00	9.098E-03	0.184	12137	1.102E-02	0.204	6939
30	295.00	9.760E-03	0.180	11141	7.432E-03	0.214	7299
31	305.00	8.482E-03	0.200	10969	1.247E-02	0.206	7952
32	315.00	8.789E-03	0.164	11604	8.865E-03	0.209	7284
33	325.00	9.884E-03	0.216	14999	9.854E-03	0.204	6904
34	335.00	8.146E-03	0.204	11161	8.039E-03	0.192	7722
35	345.00	1.256E-02	0.195	12131	9.710E-03	0.190	7197
36	355.00	9.330E-03	0.173	11865	1.413E-02	0.195	7694

tallies of azimuthal segments on surface # 4

azimuthal segmt. #	mid point	spatial segment 1 dose rate	fsd	hits	spatial segment 2 dose rate	fsd	hits	spatial segment 3 dose rate	fsd	hits	spatial segment 4 dose rate	fsd	hits
1	5.00	8.212E-03	0.040	65404	7.977E-03	0.040	62963	8.571E-03	0.061	61219	8.919E-03	0.051	66837
2	15.00	9.153E-03	0.058	63831	9.593E-03	0.063	63157	8.425E-03	0.060	60941	8.629E-03	0.071	62188
3	25.00	8.761E-03	0.053	64862	9.056E-03	0.062	64387	8.095E-03	0.042	63029	7.758E-03	0.066	59402
4	35.00	8.945E-03	0.072	62045	8.724E-03	0.055	66502	8.379E-03	0.046	62843	9.197E-03	0.073	65322
5	45.00	8.025E-03	0.043	61760	8.837E-03	0.060	68310	8.573E-03	0.054	64321	8.957E-03	0.079	65409
6	55.00	9.405E-03	0.059	63469	9.482E-03	0.082	67271	8.856E-03	0.056	63068	9.443E-03	0.066	66080
7	65.00	8.136E-03	0.040	60646	8.504E-03	0.051	62168	9.126E-03	0.079	61397	8.757E-03	0.054	62876
8	75.00	9.286E-03	0.078	61595	8.726E-03	0.051	63125	8.490E-03	0.063	62648	9.685E-03	0.082	62571
9	85.00	9.000E-03	0.054	64989	8.144E-03	0.049	61390	7.809E-03	0.040	61246	9.333E-03	0.077	65257
10	95.00	8.660E-03	0.058	60320	8.710E-03	0.051	61263	8.732E-03	0.048	62303	9.555E-03	0.085	64150
11	105.00	8.618E-03	0.047	62968	8.707E-03	0.058	61167	8.527E-03	0.050	63532	8.615E-03	0.068	62739
12	115.00	8.764E-03	0.063	65615	8.804E-03	0.057	62790	8.281E-03	0.053	63922	8.260E-03	0.051	61405
13	125.00	8.772E-03	0.054	62170	8.583E-03	0.048	61727	8.568E-03	0.065	58839	8.215E-03	0.047	60267
14	135.00	8.818E-03	0.054	62055	8.272E-03	0.052	60271	9.688E-03	0.072	60945	9.037E-03	0.061	62128
15	145.00	1.005E-02	0.085	60869	8.359E-03	0.051	61468	9.186E-03	0.064	61390	9.432E-03	0.074	65928
16	155.00	8.657E-03	0.059	62164	9.320E-03	0.056	62885	9.099E-03	0.064	64580	8.850E-03	0.054	65282
17	165.00	8.383E-03	0.046	63379	7.929E-03	0.043	62701	9.234E-03	0.081	65483	8.590E-03	0.046	62409
18	175.00	8.919E-03	0.063	63021	7.834E-03	0.038	65137	8.657E-03	0.055	65992	8.949E-03	0.067	62503
19	185.00	8.538E-03	0.050	63144	8.965E-03	0.046	62602	8.706E-03	0.056	65884	8.633E-03	0.049	63277
20	195.00	8.090E-03	0.050	60031	9.786E-03	0.075	62891	9.433E-03	0.082	62499	8.872E-03	0.077	63417
21	205.00	9.488E-03	0.092	63957	8.328E-03	0.050	62031	9.079E-03	0.059	64678	8.895E-03	0.053	63756
22	215.00	9.302E-03	0.066	66485	8.763E-03	0.058	65974	8.874E-03	0.077	62327	8.559E-03	0.043	63815
23	225.00	9.718E-03	0.062	62314	9.193E-03	0.052	63321	8.699E-03	0.068	59621	8.023E-03	0.041	64417
24	235.00	9.040E-03	0.062	71835	8.228E-03	0.046	61073	8.378E-03	0.049	63614	9.549E-03	0.054	71049
25	245.00	8.596E-03	0.060	63763	9.668E-03	0.097	65794	9.051E-03	0.057	64134	1.019E-02	0.084	63289
26	255.00	8.715E-03	0.057	62798	9.798E-03	0.059	63320	9.474E-03	0.064	68219	8.726E-03	0.049	65365
27	265.00	8.350E-03	0.047	68545	8.892E-03	0.058	62048	8.034E-03	0.040	62482	8.544E-03	0.055	63660
28	275.00	8.567E-03	0.086	60034	9.847E-03	0.097	65891	8.432E-03	0.063	64578	8.626E-03	0.048	62738
29	285.00	7.979E-03	0.048	66073	9.017E-03	0.054	63593	8.639E-03	0.046	63916	8.557E-03	0.047	62393
30	295.00	8.697E-03	0.050	59420	8.326E-03	0.053	61660	8.533E-03	0.049	61810	7.911E-03	0.040	63534
31	305.00	8.501E-03	0.067	59015	9.395E-03	0.080	64207	9.160E-03	0.090	62200	8.640E-03	0.060	63162
32	315.00	8.557E-03	0.053	61224	8.701E-03	0.055	61306	9.874E-03	0.069	66260	9.394E-03	0.082	67659
33	325.00	9.289E-03	0.057	65155	8.833E-03	0.065	62378	7.863E-03	0.040	61710	8.679E-03	0.060	62129
34	335.00	8.702E-03	0.051	65475	8.765E-03	0.055	67615	9.100E-03	0.086	61970	8.610E-03	0.048	63680
35	345.00	8.958E-03	0.064	63042	8.255E-03	0.048	60689	7.989E-03	0.044	61942	8.985E-03	0.053	65417
36	355.00	8.266E-03	0.060	61229	9.016E-03	0.067	63319	9.562E-03	0.066	63552	8.911E-03	0.065	62024

azimuthal segmt. #	mid point	spatial segment 5 dose rate	fsd	hits	spatial segment 6 dose rate	fsd	hits	spatial segment 7 dose rate	fsd	hits	spatial segment 8 dose rate	fsd	hits
1	5.00	8.080E-03	0.042	67383	9.145E-03	0.068	66605	9.332E-03	0.065	69281	8.257E-03	0.054	68104
2	15.00	7.783E-03	0.044	63306	8.342E-03	0.055	64161	9.764E-03	0.119	69540	8.158E-03	0.046	69725
3	25.00	9.046E-03	0.053	63734	7.847E-03	0.037	66168	7.836E-03	0.051	65194	9.877E-03	0.076	66334
4	35.00	8.244E-03	0.047	65835	8.325E-03	0.055	67073	8.373E-03	0.048	66901	8.178E-03	0.049	69297
5	45.00	7.920E-03	0.043	60633	9.398E-03	0.060	66696	8.946E-03	0.068	64933	8.757E-03	0.100	65718
6	55.00	8.372E-03	0.067	61464	8.160E-03	0.045	64225	9.315E-03	0.069	68304	8.515E-03	0.074	67015
7	65.00	8.689E-03	0.058	62864	9.871E-03	0.093	103983	8.586E-03	0.050	66803	7.597E-03	0.046	67927
8	75.00	8.431E-03	0.051	64189	8.561E-03	0.045	63963	8.851E-03	0.060	66538	8.729E-03	0.064	70885
9	85.00	9.156E-03	0.062	62714	7.963E-03	0.044	64340	7.926E-03	0.056	64735	7.569E-03	0.047	66138
10	95.00	8.058E-03	0.044	62144	8.783E-03	0.063	63547	8.860E-03	0.060	65215	7.926E-03	0.047	68656
11	105.00	7.853E-03	0.041	63462	8.964E-03	0.069	64734	8.428E-03	0.074	65032	8.243E-03	0.074	64697
12	115.00	8.888E-03	0.050	63112	1.190E-02	0.290	71869	9.181E-03	0.068	64522	8.163E-03	0.074	65159
13	125.00	9.039E-03	0.058	66861	8.405E-03	0.058	62767	7.720E-03	0.051	62668	9.195E-03	0.059	68076
14	135.00	8.241E-03	0.049	67101	8.771E-03	0.049	63445	9.061E-03	0.054	64578	8.489E-03	0.057	66450
15	145.00	8.427E-03	0.045	62778	8.694E-03	0.058	63391	8.511E-03	0.056	64079	8.932E-03	0.066	68910
16	155.00	9.014E-03	0.068	63543	7.985E-03	0.045	63968	8.660E-03	0.044	69214	8.525E-03	0.058	71197
17	165.00	8.235E-03	0.055	63063	8.837E-03	0.072	66541	1.002E-02	0.063	67286	8.923E-03	0.078	66756
18	175.00	9.002E-03	0.065	64810	8.596E-03	0.061	62292	8.247E-03	0.049	67605	9.350E-03	0.056	76206
19	185.00	9.054E-03	0.044	65434	8.906E-03	0.074	67877	8.877E-03	0.080	65405	8.003E-03	0.062	62917
20	195.00	8.466E-03	0.049	64205	7.781E-03	0.042	64120	8.455E-03	0.062	75244	8.612E-03	0.057	64971
21	205.00	8.900E-03	0.070	63967	9.619E-03	0.063	65834	8.834E-03	0.060	66706	8.538E-03	0.071	69218
22	215.00	7.932E-03	0.054	62726	9.045E-03	0.068	63418	9.021E-03	0.055	67493	8.676E-03	0.062	67212
23	225.00	8.957E-03	0.060	67796	8.435E-03	0.065	62506	8.080E-03	0.048	65970	7.740E-03	0.045	65928
24	235.00	9.437E-03	0.070	66260	9.636E-03	0.083	67865	8.717E-03	0.057	63721	8.176E-03	0.049	68564
25	245.00	8.244E-03	0.045	66388	9.035E-03	0.057	67711	8.697E-03	0.057	66132	8.058E-03	0.058	65292
26	255.00	8.851E-03	0.069	64496	9.836E-03	0.100	63550	9.363E-03	0.062	65377	7.298E-03	0.038	64947
27	265.00	8.916E-03	0.087	65370	8.536E-03	0.059	63622	8.859E-03	0.074	68390	8.578E-03	0.054	67327
28	275.00	8.996E-03	0.062	67285	7.899E-03	0.049	62400	9.104E-03	0.078	66999	8.314E-03	0.050	66123
29	285.00	9.449E-03	0.076	68974	8.262E-03	0.047	63093	7.636E-03	0.048	65640	9.131E-03	0.062	65673
30	295.00	8.153E-03	0.040	62783	9.383E-03	0.071	65858	8.193E-03	0.043	66127	8.855E-03	0.073	77919
31	305.00	9.682E-03	0.077	65317	8.354E-03	0.047	63834	8.641E-03	0.055	66256	8.740E-03	0.066	66545
32	315.00	8.724E-03	0.056	63559	8.994E-03	0.056	63621	9.380E-03	0.056	65657	7.994E-03	0.047	66933
33	325.00	9.289E-03	0.058	66210	7.946E-03	0.044	63876	8.495E-03	0.053	68443	8.490E-03	0.065	68375
34	335.00	8.138E-03	0.053	62109	8.973E-03	0.059	63687	8.394E-03	0.051	67482	8.054E-03	0.039	68258
35	345.00	8.412E-03	0.058	62136	8.655E-03	0.047	64472	9.279E-03	0.080	66073	8.440E-03	0.045	65049
36	355.00	8.372E-03	0.040	63998	8.629E-03	0.059	64906	8.229E-03	0.062	66352	8.190E-03	0.060	63708

azimuthal segmt. #	mid point	spatial segment 9 dose rate	fsd	hits	spatial segment 10 dose rate	fsd	hits	spatial segment 11 dose rate	fsd	hits	spatial segment 12 dose rate	fsd	hits
1	5.00	8.352E-03	0.052	71189	9.308E-03	0.060	74886	8.663E-03	0.060	72743	8.868E-03	0.086	72348
2	15.00	7.765E-03	0.058	64622	8.350E-03	0.065	68937	8.673E-03	0.074	73878	8.136E-03	0.059	73901
3	25.00	9.500E-03	0.074	68999	8.174E-03	0.053	70292	7.480E-03	0.041	71091	7.958E-03	0.055	70407
4	35.00	8.731E-03	0.061	66440	8.744E-03	0.060	71375	7.430E-03	0.044	71149	9.386E-03	0.115	71792
5	45.00	7.209E-03	0.034	67297	9.442E-03	0.058	69819	8.988E-03	0.078	71119	9.320E-03	0.073	71279
6	55.00	9.390E-03	0.063	70242	8.151E-03	0.045	68968	8.280E-03	0.065	67828	7.613E-03	0.043	71279
7	65.00	9.270E-03	0.087	68628	8.706E-03	0.059	70454	7.628E-03	0.054	68594	8.717E-03	0.060	73295
8	75.00	8.001E-03	0.041	71775	8.519E-03	0.054	70231	7.784E-03	0.051	70185	7.580E-03	0.056	73802
9	85.00	9.439E-03	0.055	69360	8.580E-03	0.076	68456	7.756E-03	0.059	69133	8.392E-03	0.072	73923
10	95.00	8.643E-03	0.068	66252	8.182E-03	0.063	67346	8.617E-03	0.068	72108	8.521E-03	0.059	71050
11	105.00	7.929E-03	0.047	66049	9.356E-03	0.056	70910	7.688E-03	0.049	68954	8.483E-03	0.072	71424
12	115.00	8.419E-03	0.048	67368	8.512E-03	0.062	68074	9.131E-03	0.069	71961	8.732E-03	0.073	71738
13	125.00	9.026E-03	0.060	66733	8.248E-03	0.047	69077	9.771E-03	0.093	69108	8.743E-03	0.063	71123
14	135.00	8.336E-03	0.049	67084	8.082E-03	0.050	69503	8.337E-03	0.046	70906	7.926E-03	0.061	72777
15	145.00	7.602E-03	0.039	68987	7.932E-03	0.049	70227	9.120E-03	0.084	70648	8.588E-03	0.063	70924
16	155.00	8.733E-03	0.054	69979	8.339E-03	0.066	67019	7.623E-03	0.051	67329	8.579E-03	0.056	73156
17	165.00	8.079E-03	0.041	67126	8.049E-03	0.060	69109	8.338E-03	0.049	69962	7.800E-03	0.051	71398
18	175.00	8.664E-03	0.063	71937	8.056E-03	0.051	68929	9.072E-03	0.081	73461	8.657E-03	0.068	73411
19	185.00	9.508E-03	0.071	67206	8.467E-03	0.057	74330	8.086E-03	0.059	70007	8.973E-03	0.082	72167
20	195.00	9.880E-03	0.070	68865	8.084E-03	0.053	67669	8.294E-03	0.061	70677	8.815E-03	0.070	72530
21	205.00	8.307E-03	0.058	68034	8.440E-03	0.056	66947	8.407E-03	0.057	67843	8.369E-03	0.059	82031
22	215.00	8.301E-03	0.054	67574	9.232E-03	0.083	67393	8.785E-03	0.087	74781	8.679E-03	0.067	71222
23	225.00	8.495E-03	0.063	70514	9.947E-03	0.078	71430	8.416E-03	0.058	68212	9.795E-03	0.075	74563
24	235.00	8.746E-03	0.056	67900	8.926E-03	0.056	67022	8.710E-03	0.071	70211	8.394E-03	0.065	75698
25	245.00	8.210E-03	0.069	69648	9.013E-03	0.066	68364	9.063E-03	0.068	72300	8.240E-03	0.052	77343
26	255.00	8.849E-03	0.082	68141	9.166E-03	0.059	70057	7.676E-03	0.047	74889	7.715E-03	0.049	68889
27	265.00	9.300E-03	0.065	65637	9.234E-03	0.064	70133	8.139E-03	0.057	67722	9.136E-03	0.065	71903
28	275.00	8.278E-03	0.050	68527	9.443E-03	0.080	68870	8.668E-03	0.069	72768	8.445E-03	0.072	74536
29	285.00	8.878E-03	0.081	66651	9.249E-03	0.063	68457	8.617E-03	0.056	71114	7.561E-03	0.055	72419
30	295.00	7.975E-03	0.049	67917	8.335E-03	0.062	67709	7.337E-03	0.044	67972	8.035E-03	0.076	68673
31	305.00	8.415E-03	0.051	69661	7.900E-03	0.052	68690	8.412E-03	0.066	70495	7.765E-03	0.055	68470
32	315.00	8.691E-03	0.057	72135	8.778E-03	0.058	75556	8.410E-03	0.050	72198	1.060E-02	0.108	79492
33	325.00	8.609E-03	0.059	68821	8.446E-03	0.056	69733	8.629E-03	0.098	69391	8.259E-03	0.065	69962
34	335.00	8.442E-03	0.048	66823	8.366E-03	0.049	67795	9.026E-03	0.064	68784	8.294E-03	0.059	70229
35	345.00	8.573E-03	0.075	68510	8.783E-03	0.065	69592	8.518E-03	0.052	72499	8.717E-03	0.064	73366
36	355.00	8.629E-03	0.050	70075	8.618E-03	0.056	70812	8.745E-03	0.092	70011	8.744E-03	0.057	71272

azimuthal segmt. #	mid point	spatial segment 13 dose rate	fsd	hits	spatial segment 14 dose rate	fsd	hits	spatial segment 15 dose rate	fsd	hits	spatial segment 16 dose rate	fsd	hits
1	5.00	7.938E-03	0.062	72998	7.816E-03	0.059	72209	8.609E-03	0.069	75954	8.515E-03	0.083	72715
2	15.00	9.369E-03	0.067	72656	7.578E-03	0.048	71028	8.181E-03	0.061	76120	7.242E-03	0.062	73071
3	25.00	8.536E-03	0.074	75942	8.894E-03	0.078	74265	8.025E-03	0.063	80089	7.396E-03	0.069	75126
4	35.00	7.841E-03	0.049	71556	8.187E-03	0.075	71477	9.712E-03	0.098	74069	8.140E-03	0.072	72645
5	45.00	8.341E-03	0.073	70461	8.076E-03	0.055	73188	7.020E-03	0.048	75067	7.517E-03	0.066	72007
6	55.00	9.710E-03	0.088	75122	8.266E-03	0.061	74885	7.767E-03	0.064	74241	7.520E-03	0.061	74381
7	65.00	8.053E-03	0.058	72099	8.877E-03	0.068	74274	7.586E-03	0.052	73901	7.613E-03	0.061	74381
8	75.00	8.257E-03	0.059	77425	7.199E-03	0.066	74182	6.696E-03	0.040	74572	8.933E-03	0.072	78898
9	85.00	7.873E-03	0.057	74643	8.148E-03	0.069	76763	7.327E-03	0.062	74985	7.647E-03	0.070	72590
10	95.00	8.725E-03	0.081	71974	8.147E-03	0.069	73469	7.512E-03	0.057	73111	8.021E-03	0.063	76027
11	105.00	8.291E-03	0.077	75271	9.329E-03	0.124	74596	6.992E-03	0.051	73147	8.511E-03	0.071	77947
12	115.00	8.571E-03	0.079	73851	7.235E-03	0.048	74351	8.888E-03	0.087	84382	7.610E-03	0.068	73821
13	125.00	8.317E-03	0.084	70016	7.899E-03	0.061	74429	8.437E-03	0.079	74771	7.791E-03	0.061	75572
14	135.00	7.467E-03	0.045	71689	8.007E-03	0.053	75193	7.442E-03	0.047	75070	7.729E-03	0.063	71938
15	145.00	8.627E-03	0.074	73375	7.724E-03	0.055	71170	8.179E-03	0.062	75133	6.741E-03	0.038	71585
16	155.00	8.626E-03	0.065	75942	8.200E-03	0.070	71575	8.857E-03	0.071	77295	7.823E-03	0.055	70323
17	165.00	8.006E-03	0.050	70115	8.132E-03	0.051	80852	7.832E-03	0.058	71909	9.223E-03	0.106	85362
18	175.00	7.388E-03	0.045	73999	8.666E-03	0.080	76536	7.728E-03	0.057	73930	7.696E-03	0.055	73117
19	185.00	8.876E-03	0.076	76434	8.180E-03	0.056	73174	8.782E-03	0.092	74660	7.323E-03	0.058	76614
20	195.00	8.189E-03	0.077	71907	9.446E-03	0.083	76018	8.781E-03	0.083	76045	8.348E-03	0.065	75138
21	205.00	9.646E-03	0.085	72449	8.393E-03	0.075	75272	8.293E-03	0.071	73225	7.578E-03	0.061	80355
22	215.00	8.776E-03	0.067	76803	7.606E-03	0.050	72221	7.357E-03	0.058	78383	7.810E-03	0.062	73047
23	225.00	8.626E-03	0.076	75170	8.186E-03	0.058	77424	9.002E-03	0.080	73430	8.062E-03	0.073	78369
24	235.00	7.740E-03	0.055	73141	7.482E-03	0.049	75148	9.775E-03	0.094	80266	7.789E-03	0.079	73406
25	245.00	8.459E-03	0.057	71835	7.597E-03	0.060	74743	7.245E-03	0.048	73891	8.119E-03	0.064	87498
26	255.00	7.807E-03	0.056	71980	7.436E-03	0.059	70066	7.336E-03	0.052	76389	7.050E-03	0.062	77270
27	265.00	7.799E-03	0.059	71953	8.066E-03	0.058	76247	7.998E-03	0.062	76532	7.810E-03	0.063	80873
28	275.00	8.354E-03	0.075	71344	7.135E-03	0.039	72099	8.077E-03	0.057	80545	7.486E-03	0.055	71853
29	285.00	7.741E-03	0.055	71275	8.848E-03	0.067	77712	7.771E-03	0.063	71609	8.084E-03	0.078	77047
30	295.00	7.821E-03	0.053	71914	7.861E-03	0.060	76847	8.368E-03	0.074	71949	7.636E-03	0.072	74081
31	305.00	7.789E-03	0.067	70158	8.159E-03	0.063	75809	7.534E-03	0.051	72712	8.478E-03	0.064	74070
32	315.00	9.295E-03	0.062	73199	8.602E-03	0.074	77431	7.505E-03	0.060	75245	8.714E-03	0.071	74020
33	325.00	7.742E-03	0.054	71457	8.276E-03	0.058	78603	8.015E-03	0.065	76037	8.672E-03	0.097	78069
34	335.00	8.298E-03	0.059	74630	7.405E-03	0.053	73247	7.861E-03	0.049	74358	8.157E-03	0.063	78776
35	345.00	8.725E-03	0.059	79696	7.162E-03	0.042	77895	8.642E-03	0.060	76055	8.658E-03	0.073	76788
36	355.00	8.681E-03	0.065	80295	8.091E-03	0.075	75535	8.425E-03	0.064	89852	7.854E-03	0.066	77427

azimuthal segmt. #	mid point	spatial segment 17 dose rate	fsd	hits	spatial segment 18 dose rate	fsd	hits	spatial segment 19 dose rate	fsd	hits	spatial segment 20 dose rate	fsd	hits
1	5.00	8.443E-03	0.066	79486	7.829E-03	0.069	78388	7.597E-03	0.065	74366	7.255E-03	0.067	80792
2	15.00	7.701E-03	0.066	75356	7.513E-03	0.080	74637	7.163E-03	0.063	79840	1.031E-02	0.131	72437
3	25.00	7.605E-03	0.060	75691	7.369E-03	0.075	79961	8.015E-03	0.099	77335	7.079E-03	0.068	75071
4	35.00	7.156E-03	0.058	75712	6.857E-03	0.062	72872	6.733E-03	0.054	80217	6.832E-03	0.056	72872
5	45.00	9.230E-03	0.074	73924	7.513E-03	0.063	74498	6.758E-03	0.069	69514	7.051E-03	0.071	74998
6	55.00	7.018E-03	0.067	75311	7.332E-03	0.058	73192	8.044E-03	0.089	74247	6.616E-03	0.059	69169
7	65.00	8.257E-03	0.073	76863	6.954E-03	0.065	73249	7.509E-03	0.062	74197	8.342E-03	0.095	75007
8	75.00	6.960E-03	0.060	75281	7.237E-03	0.079	78661	1.021E-02	0.157	77475	6.779E-03	0.056	79442
9	85.00	7.346E-03	0.052	85194	7.707E-03	0.081	83604	7.509E-03	0.079	74608	7.282E-03	0.065	75148
10	95.00	7.144E-03	0.049	75864	7.716E-03	0.067	76152	7.099E-03	0.061	76714	6.867E-03	0.057	72561
11	105.00	6.966E-03	0.052	74415	6.582E-03	0.055	72314	6.550E-03	0.047	79163	7.198E-03	0.081	70916
12	115.00	7.120E-03	0.065	82962	7.286E-03	0.070	73711	6.651E-03	0.061	74267	7.636E-03	0.127	70604
13	125.00	7.521E-03	0.066	76937	7.945E-03	0.094	72225	7.601E-03	0.068	74895	7.515E-03	0.073	74989
14	135.00	7.682E-03	0.068	78445	6.677E-03	0.046	75542	7.519E-03	0.060	72576	6.685E-03	0.062	72953
15	145.00	8.415E-03	0.137	75336	8.126E-03	0.069	77214	7.113E-03	0.058	79068	7.850E-03	0.073	72869
16	155.00	7.032E-03	0.051	73667	7.511E-03	0.054	75143	7.471E-03	0.064	71960	7.242E-03	0.081	73483
17	165.00	7.009E-03	0.056	72744	7.341E-03	0.062	75432	7.550E-03	0.074	70743	6.848E-03	0.072	74603
18	175.00	6.813E-03	0.051	73520	6.933E-03	0.058	74668	7.282E-03	0.061	72259	7.638E-03	0.107	74516
19	185.00	7.308E-03	0.056	74797	7.157E-03	0.072	73833	7.249E-03	0.060	77165	7.102E-03	0.066	74968
20	195.00	7.246E-03	0.050	76062	8.026E-03	0.070	75640	8.360E-03	0.103	73180	7.115E-03	0.064	79024
21	205.00	7.988E-03	0.065	77373	7.281E-03	0.065	74301	8.391E-03	0.076	78895	7.392E-03	0.060	74757
22	215.00	8.781E-03	0.094	77218	8.263E-03	0.078	76411	7.879E-03	0.067	73437	8.347E-03	0.089	74539
23	225.00	8.224E-03	0.073	70515	7.747E-03	0.078	73510	7.518E-03	0.072	73002	6.394E-03	0.056	80753
24	235.00	7.722E-03	0.071	76119	6.922E-03	0.056	75053	6.061E-03	0.045	76456	7.061E-03	0.066	71772
25	245.00	7.533E-03	0.080	72299	7.653E-03	0.106	71520	7.496E-03	0.083	73278	6.621E-03	0.061	73427
26	255.00	7.151E-03	0.049	75672	6.937E-03	0.046	73273	7.514E-03	0.063	77517	7.311E-03	0.074	75404
27	265.00	6.906E-03	0.060	74361	7.922E-03	0.067	79731	6.896E-03	0.067	89799	7.296E-03	0.064	71756
28	275.00	7.364E-03	0.052	77046	7.533E-03	0.069	73739	6.953E-03	0.070	74410	7.266E-03	0.055	74635
29	285.00	7.646E-03	0.059	76665	7.608E-03	0.063	76789	7.293E-03	0.058	78246	6.871E-03	0.054	74052
30	295.00	7.448E-03	0.060	77444	7.505E-03	0.081	75062	7.477E-03	0.070	73984	7.478E-03	0.109	75258
31	305.00	8.221E-03	0.082	78255	6.736E-03	0.046	80795	9.026E-03	0.093	74358	6.469E-03	0.059	73807
32	315.00	7.787E-03	0.067	76181	6.567E-03	0.043	74972	7.108E-03	0.072	74767	6.693E-03	0.072	73838
33	325.00	7.674E-03	0.052	73421	7.429E-03	0.068	77847	6.684E-03	0.059	73555	6.976E-03	0.057	73667
34	335.00	8.131E-03	0.097	77908	8.573E-03	0.077	78893	7.512E-03	0.101	75723	7.097E-03	0.062	78577
35	345.00	7.094E-03	0.052	76056	7.352E-03	0.066	75833	7.276E-03	0.084	72395	8.172E-03	0.071	75028
36	355.00	7.732E-03	0.076	77506	7.166E-03	0.062	75547	7.765E-03	0.076	75668	6.740E-03	0.060	72085

azimuthal segmt. #	mid point	spatial segment 21 dose rate	fsd	hits	spatial segment 22 dose rate	fsd	hits	spatial segment 23 dose rate	fsd	hits	spatial segment 24 dose rate	fsd	hits
1	5.00	6.929E-03	0.071	73211	7.234E-03	0.084	75573	6.289E-03	0.073	75027	7.065E-03	0.107	66233
2	15.00	6.911E-03	0.115	72071	6.466E-03	0.062	72553	6.553E-03	0.064	69294	6.490E-03	0.074	75756
3	25.00	6.546E-03	0.076	69529	7.510E-03	0.082	75034	6.460E-03	0.089	64938	6.512E-03	0.061	70692
4	35.00	6.016E-03	0.045	71567	5.944E-03	0.056	70216	6.380E-03	0.097	68184	7.011E-03	0.095	62720
5	45.00	6.177E-03	0.049	73547	6.074E-03	0.068	75218	5.920E-03	0.054	74543	6.290E-03	0.078	69222
6	55.00	6.656E-03	0.076	74073	6.244E-03	0.062	69548	6.237E-03	0.068	65027	5.886E-03	0.074	65223
7	65.00	7.480E-03	0.083	74015	7.097E-03	0.081	72009	7.127E-03	0.084	66279	7.826E-03	0.110	64074
8	75.00	8.240E-03	0.160	95866	7.587E-03	0.074	72823	6.964E-03	0.076	72773	6.443E-03	0.079	61434
9	85.00	6.878E-03	0.080	70765	6.103E-03	0.068	68938	5.804E-03	0.063	71118	5.330E-03	0.065	66595
10	95.00	7.524E-03	0.083	76751	7.238E-03	0.082	70502	6.532E-03	0.068	70079	5.261E-03	0.068	69793
11	105.00	7.622E-03	0.106	76604	7.265E-03	0.079	73646	6.038E-03	0.066	69314	6.117E-03	0.082	67451
12	115.00	7.064E-03	0.068	67834	6.263E-03	0.092	69807	6.979E-03	0.085	70259	7.408E-03	0.086	70277
13	125.00	6.558E-03	0.055	74007	6.429E-03	0.065	71048	6.347E-03	0.077	69443	6.657E-03	0.099	61889
14	135.00	6.387E-03	0.058	72716	6.567E-03	0.069	70127	5.636E-03	0.056	65523	6.550E-03	0.081	62564
15	145.00	6.772E-03	0.069	71952	7.048E-03	0.078	74228	6.916E-03	0.092	67569	6.332E-03	0.079	69590
16	155.00	6.917E-03	0.075	67764	6.228E-03	0.060	70516	5.683E-03	0.062	70608	5.160E-03	0.054	68410
17	165.00	7.550E-03	0.086	72023	7.148E-03	0.112	69769	6.719E-03	0.080	64453	6.206E-03	0.082	61816
18	175.00	6.921E-03	0.073	72039	6.501E-03	0.078	67691	6.419E-03	0.072	68039	6.052E-03	0.092	61655
19	185.00	8.119E-03	0.095	71306	6.551E-03	0.095	69099	6.324E-03	0.067	66844	7.274E-03	0.138	63521
20	195.00	6.479E-03	0.067	71114	7.786E-03	0.085	71737	6.354E-03	0.068	67718	5.807E-03	0.062	69048
21	205.00	5.690E-03	0.052	70826	6.535E-03	0.085	71640	6.776E-03	0.089	65225	6.237E-03	0.086	64143
22	215.00	6.770E-03	0.065	72977	6.515E-03	0.077	68706	6.110E-03	0.073	67904	7.211E-03	0.099	72001
23	225.00	7.346E-03	0.088	74508	6.153E-03	0.072	76246	5.672E-03	0.057	70540	6.564E-03	0.112	61843
24	235.00	8.439E-03	0.124	78050	6.945E-03	0.096	68747	6.267E-03	0.083	67557	6.326E-03	0.079	66723
25	245.00	7.669E-03	0.080	76231	6.848E-03	0.106	70023	6.679E-03	0.088	70857	6.104E-03	0.068	69594
26	255.00	7.145E-03	0.104	71924	7.020E-03	0.126	76883	7.222E-03	0.134	63850	6.472E-03	0.104	66591
27	265.00	6.822E-03	0.060	74984	6.658E-03	0.069	70520	7.025E-03	0.079	65874	5.994E-03	0.095	73910
28	275.00	6.752E-03	0.064	73695	6.591E-03	0.075	71066	6.664E-03	0.081	69970	6.145E-03	0.077	63230
29	285.00	6.927E-03	0.063	75544	6.642E-03	0.079	70069	6.087E-03	0.070	70346	6.789E-03	0.070	66265
30	295.00	6.413E-03	0.080	69054	6.507E-03	0.075	66584	7.323E-03	0.120	69274	6.301E-03	0.085	67674
31	305.00	7.052E-03	0.065	84485	7.616E-03	0.104	70045	7.853E-03	0.112	69484	6.100E-03	0.065	64453
32	315.00	6.827E-03	0.083	70088	6.746E-03	0.067	76689	6.704E-03	0.080	68213	6.288E-03	0.075	66918
33	325.00	7.437E-03	0.096	72285	6.254E-03	0.057	72522	6.676E-03	0.114	67936	6.021E-03	0.082	68429
34	335.00	6.800E-03	0.072	75671	6.130E-03	0.056	76600	5.873E-03	0.060	70658	6.498E-03	0.087	68993
35	345.00	7.311E-03	0.079	77875	7.204E-03	0.084	70146	6.723E-03	0.080	63265	6.568E-03	0.086	69018
36	355.00	7.324E-03	0.071	70284	6.816E-03	0.085	70481	6.338E-03	0.064	70965	6.606E-03	0.089	72375

azimuthal segmt. #	mid point	spatial segment 25 dose rate	fsd	hits	spatial segment 26 dose rate	fsd	hits	spatial segment 27 dose rate	fsd	hits	spatial segment 28 dose rate	fsd	hits
1	5.00	6.656E-03	0.117	68753	5.270E-03	0.070	61972	5.857E-03	0.089	55473	5.664E-03	0.112	49900
2	15.00	8.620E-03	0.185	68938	5.669E-03	0.099	58144	5.377E-03	0.104	54430	6.637E-03	0.135	52247
3	25.00	6.147E-03	0.092	63099	5.403E-03	0.090	58107	5.697E-03	0.081	59036	5.059E-03	0.091	57261
4	35.00	6.677E-03	0.085	60779	6.224E-03	0.159	56846	6.001E-03	0.118	55859	5.293E-03	0.106	53586
5	45.00	4.832E-03	0.050	62300	6.048E-03	0.091	55774	5.923E-03	0.091	53691	5.102E-03	0.093	52376
6	55.00	5.925E-03	0.089	59309	6.558E-03	0.132	56702	5.499E-03	0.080	57615	4.944E-03	0.076	54068
7	65.00	7.294E-03	0.186	64806	5.844E-03	0.080	61397	4.651E-03	0.061	54726	6.384E-03	0.114	50383
8	75.00	5.223E-03	0.084	62472	5.032E-03	0.072	61081	4.458E-03	0.066	58091	5.738E-03	0.096	49111
9	85.00	6.358E-03	0.077	65017	7.022E-03	0.203	60357	6.709E-03	0.178	56938	5.687E-03	0.106	50844
10	95.00	5.598E-03	0.078	63470	6.342E-03	0.088	63715	5.398E-03	0.095	56229	5.237E-03	0.082	49664
11	105.00	5.753E-03	0.071	61667	5.858E-03	0.105	56689	4.963E-03	0.106	54950	5.688E-03	0.113	56926
12	115.00	6.086E-03	0.094	60653	5.087E-03	0.081	57521	5.054E-03	0.078	52552	5.669E-03	0.096	50866
13	125.00	5.896E-03	0.091	60162	4.954E-03	0.064	59960	5.003E-03	0.076	53076	5.208E-03	0.107	55825
14	135.00	5.960E-03	0.103	64002	5.224E-03	0.066	57939	5.643E-03	0.100	53917	4.919E-03	0.108	56017
15	145.00	6.180E-03	0.087	60425	5.798E-03	0.088	57088	4.967E-03	0.070	53909	4.845E-03	0.082	51403
16	155.00	5.962E-03	0.082	60947	5.230E-03	0.091	56927	5.992E-03	0.110	63408	5.032E-03	0.086	53164
17	165.00	5.937E-03	0.101	61696	5.188E-03	0.074	57085	5.260E-03	0.069	54256	5.257E-03	0.094	49443
18	175.00	6.905E-03	0.115	63741	6.524E-03	0.119	57552	5.584E-03	0.112	52944	5.886E-03	0.089	51796
19	185.00	5.565E-03	0.077	62769	7.035E-03	0.111	61818	5.462E-03	0.060	55611	5.392E-03	0.074	53659
20	195.00	5.230E-03	0.060	64473	6.181E-03	0.097	60127	6.037E-03	0.106	55132	5.925E-03	0.095	52897
21	205.00	5.561E-03	0.074	63908	6.806E-03	0.104	58977	4.980E-03	0.090	57299	6.111E-03	0.104	51219
22	215.00	5.827E-03	0.078	63275	6.260E-03	0.109	58304	6.750E-03	0.107	56104	5.869E-03	0.096	52239
23	225.00	6.036E-03	0.073	65826	5.930E-03	0.090	57711	5.123E-03	0.077	55567	5.948E-03	0.124	52055
24	235.00	5.728E-03	0.064	62788	5.250E-03	0.062	59089	4.836E-03	0.089	56193	4.624E-03	0.078	59645
25	245.00	5.346E-03	0.079	62810	6.128E-03	0.116	60519	4.912E-03	0.059	56000	4.498E-03	0.080	51672
26	255.00	5.718E-03	0.089	60518	6.246E-03	0.094	57830	5.559E-03	0.108	55221	4.824E-03	0.070	52225
27	265.00	5.973E-03	0.110	61403	6.303E-03	0.108	65668	5.205E-03	0.084	55349	5.285E-03	0.134	51566
28	275.00	5.797E-03	0.092	59536	5.706E-03	0.081	56686	5.200E-03	0.079	54432	6.092E-03	0.120	50087
29	285.00	6.165E-03	0.075	64207	7.828E-03	0.119	73434	4.525E-03	0.059	55334	4.465E-03	0.064	51600
30	295.00	5.618E-03	0.071	60265	6.223E-03	0.088	64508	6.029E-03	0.086	59392	4.956E-03	0.091	51627
31	305.00	5.674E-03	0.064	62740	6.058E-03	0.105	58856	5.607E-03	0.092	52185	5.250E-03	0.076	55058
32	315.00	5.658E-03	0.068	62500	6.177E-03	0.091	59656	5.936E-03	0.092	58158	5.462E-03	0.100	49693
33	325.00	5.427E-03	0.056	65618	5.456E-03	0.068	58561	5.114E-03	0.135	53864	5.011E-03	0.068	55042
34	335.00	5.758E-03	0.079	66177	7.800E-03	0.124	62234	5.709E-03	0.089	56432	5.208E-03	0.077	53287
35	345.00	6.408E-03	0.080	64751	6.216E-03	0.092	60313	4.952E-03	0.066	54825	5.894E-03	0.102	58488
36	355.00	5.587E-03	0.066	64654	5.932E-03	0.097	59802	5.480E-03	0.085	57805	5.562E-03	0.092	51860

azimuthal segmt. #	mid point	spatial segment 29 dose rate	fsd	hits	spatial segment 30 dose rate	fsd	hits
1	5.00	5.085E-03	0.079	51101	5.467E-03	0.117	47266
2	15.00	5.304E-03	0.098	50178	4.613E-03	0.102	50892
3	25.00	4.848E-03	0.082	47868	5.547E-03	0.130	46788
4	35.00	4.579E-03	0.086	50186	4.175E-03	0.094	44197
5	45.00	4.882E-03	0.088	49013	4.441E-03	0.113	44430
6	55.00	4.728E-03	0.065	52003	4.393E-03	0.113	46542
7	65.00	5.136E-03	0.111	49251	4.657E-03	0.159	44830
8	75.00	4.937E-03	0.094	49402	3.978E-03	0.063	44944
9	85.00	5.222E-03	0.112	46112	4.618E-03	0.084	45660
10	95.00	5.317E-03	0.119	52439	4.066E-03	0.077	44496
11	105.00	5.321E-03	0.139	45761	4.665E-03	0.140	44744
12	115.00	4.460E-03	0.087	47360	4.201E-03	0.096	44991
13	125.00	4.566E-03	0.080	45928	4.053E-03	0.092	43100
14	135.00	7.032E-03	0.289	51104	4.277E-03	0.103	44740
15	145.00	5.321E-03	0.104	46085	3.990E-03	0.066	48565
16	155.00	5.688E-03	0.099	48813	4.185E-03	0.094	43097
17	165.00	5.886E-03	0.128	48546	4.909E-03	0.108	41571
18	175.00	5.575E-03	0.103	48255	4.545E-03	0.093	49372
19	185.00	5.384E-03	0.129	49546	4.145E-03	0.084	43891
20	195.00	6.202E-03	0.112	54181	4.573E-03	0.118	45203
21	205.00	4.777E-03	0.072	51104	3.897E-03	0.088	44039
22	215.00	4.903E-03	0.104	46679	4.232E-03	0.078	43968
23	225.00	5.178E-03	0.094	54575	4.900E-03	0.120	41912
24	235.00	5.692E-03	0.121	48543	4.526E-03	0.101	43467
25	245.00	5.057E-03	0.112	45770	4.956E-03	0.088	45346
26	255.00	5.016E-03	0.102	48195	3.940E-03	0.084	43959
27	265.00	4.385E-03	0.072	51234	5.326E-03	0.120	43103
28	275.00	4.854E-03	0.092	46355	5.197E-03	0.121	45186
29	285.00	4.773E-03	0.107	48346	4.147E-03	0.083	46646
30	295.00	4.889E-03	0.075	48606	5.560E-03	0.113	44995
31	305.00	4.459E-03	0.089	47538	4.743E-03	0.127	45254
32	315.00	5.891E-03	0.138	52320	4.567E-03	0.094	46526
33	325.00	5.855E-03	0.096	54358	6.057E-03	0.122	44467
34	335.00	4.451E-03	0.066	50958	6.562E-03	0.142	44770
35	345.00	5.182E-03	0.091	49355	5.117E-03	0.112	46601
36	355.00	4.833E-03	0.111	49238	4.069E-03	0.080	46437

tallies of azimuthal segments on surface # 5

azimuthal segmt. #	mid point	spatial segment 1 dose rate	fsd	hits	spatial segment 2 dose rate	fsd	hits	spatial segment 3 dose rate	fsd	hits	spatial segment 4 dose rate	fsd	hits
1	5.00	5.251E-03	0.059	65182	4.787E-03	0.055	62929	4.817E-03	0.063	63540	5.306E-03	0.062	61514
2	15.00	5.435E-03	0.070	59016	4.833E-03	0.050	65307	5.727E-03	0.085	61282	4.892E-03	0.070	61760
3	25.00	5.221E-03	0.082	64855	4.951E-03	0.069	61595	5.062E-03	0.069	61714	4.416E-03	0.057	62775
4	35.00	5.699E-03	0.073	62125	5.210E-03	0.068	61013	4.534E-03	0.048	63201	4.880E-03	0.064	62857
5	45.00	5.090E-03	0.055	61453	4.919E-03	0.054	64009	5.477E-03	0.091	61373	5.044E-03	0.049	59910
6	55.00	5.281E-03	0.057	64574	5.067E-03	0.072	63401	5.221E-03	0.072	61259	5.457E-03	0.070	62146
7	65.00	4.989E-03	0.064	60989	4.752E-03	0.066	60757	5.111E-03	0.053	60343	5.499E-03	0.102	60128
8	75.00	4.944E-03	0.065	64657	4.923E-03	0.063	62810	5.080E-03	0.062	62917	5.050E-03	0.056	61729
9	85.00	5.207E-03	0.072	62003	4.635E-03	0.054	62021	5.243E-03	0.070	62529	5.250E-03	0.071	60878
10	95.00	5.135E-03	0.064	59489	5.159E-03	0.070	60779	5.460E-03	0.078	62016	5.006E-03	0.056	57853
11	105.00	4.614E-03	0.053	60998	5.027E-03	0.074	62438	4.883E-03	0.051	61341	4.794E-03	0.058	61214
12	115.00	5.387E-03	0.065	61796	6.353E-03	0.087	68266	5.047E-03	0.062	59809	4.908E-03	0.056	60602
13	125.00	4.779E-03	0.054	59073	5.056E-03	0.065	60872	5.329E-03	0.077	60235	5.304E-03	0.060	59803
14	135.00	5.455E-03	0.072	58148	5.241E-03	0.063	61282	5.368E-03	0.072	64448	5.444E-03	0.057	62700
15	145.00	4.950E-03	0.055	59904	5.236E-03	0.057	62928	5.195E-03	0.056	60943	4.790E-03	0.058	59583
16	155.00	4.690E-03	0.042	61099	5.505E-03	0.067	62722	5.092E-03	0.067	62952	4.959E-03	0.066	60755
17	165.00	4.637E-03	0.049	62116	4.833E-03	0.051	60198	4.677E-03	0.067	62328	5.222E-03	0.067	61081
18	175.00	5.571E-03	0.067	63384	5.066E-03	0.053	60849	5.199E-03	0.056	66450	5.510E-03	0.061	62535
19	185.00	5.960E-03	0.075	65764	5.630E-03	0.066	60312	5.657E-03	0.082	64255	5.104E-03	0.055	62313
20	195.00	5.319E-03	0.071	62793	4.889E-03	0.059	61483	5.180E-03	0.079	60623	5.437E-03	0.072	61558
21	205.00	5.546E-03	0.109	72631	5.048E-03	0.080	59596	5.897E-03	0.068	61816	5.190E-03	0.080	61320
22	215.00	5.357E-03	0.090	62461	5.574E-03	0.069	66969	5.067E-03	0.084	58564	4.997E-03	0.056	63616
23	225.00	5.148E-03	0.058	63956	5.078E-03	0.056	60969	5.472E-03	0.079	62247	4.666E-03	0.055	58179
24	235.00	4.596E-03	0.060	60989	5.045E-03	0.055	61707	6.044E-03	0.089	63162	4.834E-03	0.057	60656
25	245.00	6.255E-03	0.107	66698	4.973E-03	0.071	63482	5.922E-03	0.079	63606	5.555E-03	0.069	61132
26	255.00	5.111E-03	0.108	60282	5.376E-03	0.066	59607	5.565E-03	0.060	66297	4.984E-03	0.054	61614
27	265.00	4.697E-03	0.052	61882	5.246E-03	0.066	60112	4.611E-03	0.060	63350	5.389E-03	0.102	62504
28	275.00	5.182E-03	0.061	58264	5.924E-03	0.114	64767	5.349E-03	0.070	60741	5.041E-03	0.070	62753
29	285.00	5.370E-03	0.120	61396	5.912E-03	0.085	62385	5.404E-03	0.066	64234	4.731E-03	0.055	66894
30	295.00	5.083E-03	0.058	63546	5.111E-03	0.073	61586	4.999E-03	0.084	70388	5.004E-03	0.061	61042
31	305.00	5.234E-03	0.062	62885	4.987E-03	0.072	61095	5.752E-03	0.106	64401	5.205E-03	0.066	62453
32	315.00	5.421E-03	0.064	68066	4.868E-03	0.060	60112	4.846E-03	0.058	65874	4.607E-03	0.057	61381
33	325.00	5.450E-03	0.068	63457	5.116E-03	0.057	67462	4.595E-03	0.058	61244	4.831E-03	0.057	62404
34	335.00	4.642E-03	0.046	62295	5.403E-03	0.062	60732	5.175E-03	0.056	61067	4.969E-03	0.065	63184
35	345.00	5.471E-03	0.098	60169	4.808E-03	0.055	64744	5.183E-03	0.072	59731	5.656E-03	0.073	63295
36	355.00	5.287E-03	0.061	60891	5.060E-03	0.063	59845	5.174E-03	0.056	62686	5.236E-03	0.074	60540

azimuthal segmt. #	mid point	spatial segment 5 dose rate	fsd	hits	spatial segment 6 dose rate	fsd	hits	spatial segment 7 dose rate	fsd	hits	spatial segment 8 dose rate	fsd	hits
1	5.00	5.507E-03	0.109	60148	5.645E-03	0.068	63516	5.228E-03	0.075	63449	4.465E-03	0.049	68387
2	15.00	4.923E-03	0.060	64137	4.541E-03	0.050	62257	5.212E-03	0.075	62270	4.664E-03	0.052	60445
3	25.00	4.683E-03	0.062	60497	4.575E-03	0.052	60131	4.880E-03	0.047	61767	5.457E-03	0.075	61313
4	35.00	4.897E-03	0.066	61064	4.593E-03	0.052	64732	4.835E-03	0.071	61944	4.640E-03	0.059	63955
5	45.00	4.909E-03	0.066	62330	5.144E-03	0.061	62205	5.467E-03	0.078	61627	4.484E-03	0.053	59348
6	55.00	4.965E-03	0.058	64356	5.212E-03	0.076	64482	5.023E-03	0.070	63811	5.526E-03	0.101	62051
7	65.00	5.057E-03	0.086	104780	5.211E-03	0.063	61546	5.379E-03	0.070	61162	5.078E-03	0.062	60965
8	75.00	4.785E-03	0.045	61649	4.792E-03	0.054	60820	5.035E-03	0.071	62780	5.073E-03	0.071	61726
9	85.00	5.021E-03	0.073	60577	4.667E-03	0.058	61541	5.059E-03	0.067	60406	5.165E-03	0.080	62009
10	95.00	5.420E-03	0.101	60487	4.408E-03	0.046	57361	4.931E-03	0.057	61466	5.765E-03	0.098	61444
11	105.00	4.516E-03	0.043	62953	4.743E-03	0.065	62017	5.215E-03	0.075	63945	4.801E-03	0.067	58657
12	115.00	5.425E-03	0.084	60481	5.103E-03	0.056	61273	5.270E-03	0.059	62925	4.786E-03	0.055	60686
13	125.00	5.345E-03	0.092	59938	4.919E-03	0.061	57614	5.080E-03	0.064	63329	4.822E-03	0.072	61739
14	135.00	5.156E-03	0.072	63713	5.297E-03	0.063	61571	4.432E-03	0.044	58538	4.349E-03	0.049	59815
15	145.00	5.463E-03	0.070	60634	5.479E-03	0.065	64324	4.793E-03	0.050	63158	4.876E-03	0.069	62115
16	155.00	4.538E-03	0.048	60224	4.890E-03	0.049	61924	4.873E-03	0.071	61009	5.284E-03	0.079	63303
17	165.00	5.537E-03	0.084	61124	4.782E-03	0.051	62577	4.565E-03	0.056	64879	5.675E-03	0.101	61832
18	175.00	5.298E-03	0.064	64990	5.637E-03	0.089	61767	5.109E-03	0.076	63927	4.781E-03	0.061	63143
19	185.00	5.187E-03	0.092	63628	4.989E-03	0.084	62584	4.765E-03	0.061	61815	4.556E-03	0.051	64836
20	195.00	4.979E-03	0.053	61926	5.037E-03	0.064	61821	4.944E-03	0.063	61769	5.449E-03	0.094	61859
21	205.00	5.372E-03	0.058	68440	5.100E-03	0.058	62220	4.725E-03	0.056	59942	5.846E-03	0.083	63449
22	215.00	5.138E-03	0.066	61950	5.016E-03	0.070	60161	5.212E-03	0.090	65015	5.814E-03	0.094	63102
23	225.00	5.162E-03	0.080	63411	5.343E-03	0.060	67498	4.969E-03	0.070	60565	5.193E-03	0.074	62188
24	235.00	5.040E-03	0.071	58424	5.916E-03	0.092	61961	5.314E-03	0.059	63184	4.820E-03	0.053	60672
25	245.00	4.793E-03	0.070	62730	4.994E-03	0.062	64203	4.954E-03	0.054	59914	5.092E-03	0.057	64008
26	255.00	5.668E-03	0.109	67410	5.805E-03	0.089	60705	5.373E-03	0.058	66123	4.601E-03	0.055	62031
27	265.00	5.126E-03	0.067	61878	5.335E-03	0.068	60605	5.132E-03	0.079	65314	4.545E-03	0.056	58459
28	275.00	5.072E-03	0.057	62616	5.066E-03	0.069	61540	4.834E-03	0.055	60502	4.811E-03	0.050	61715
29	285.00	5.045E-03	0.058	63864	5.462E-03	0.093	64736	4.588E-03	0.062	60431	4.851E-03	0.053	60723
30	295.00	4.596E-03	0.046	59165	4.953E-03	0.054	60625	5.084E-03	0.088	62223	4.561E-03	0.053	61979
31	305.00	4.704E-03	0.058	60165	4.817E-03	0.061	61676	5.639E-03	0.090	60231	4.868E-03	0.069	59955
32	315.00	5.275E-03	0.064	63903	5.822E-03	0.095	67291	5.711E-03	0.067	63379	5.229E-03	0.065	64402
33	325.00	4.720E-03	0.059	60258	5.860E-03	0.071	62093	5.020E-03	0.056	64240	4.742E-03	0.076	59173
34	335.00	5.189E-03	0.061	60369	5.436E-03	0.079	60545	5.510E-03	0.070	59900	5.065E-03	0.070	60592
35	345.00	5.033E-03	0.055	59918	5.258E-03	0.071	61370	4.620E-03	0.056	60035	4.982E-03	0.055	66038
36	355.00	6.201E-03	0.102	62349	5.113E-03	0.063	64340	4.782E-03	0.054	65125	5.297E-03	0.072	65505

azimuthal segmt. #	mid point	spatial segment 9 dose rate	fsd	hits	spatial segment 10 dose rate	fsd	hits	spatial segment 11 dose rate	fsd	hits	spatial segment 12 dose rate	fsd	hits
1	5.00	4.422E-03	0.060	60688	5.043E-03	0.085	60522	4.772E-03	0.054	59801	5.080E-03	0.071	61269
2	15.00	4.781E-03	0.053	59567	5.024E-03	0.065	62364	5.010E-03	0.075	61729	4.513E-03	0.053	59792
3	25.00	4.770E-03	0.060	62535	5.041E-03	0.065	63387	5.471E-03	0.070	64686	4.556E-03	0.064	60340
4	35.00	4.713E-03	0.055	60924	4.857E-03	0.050	61009	6.067E-03	0.119	65638	5.253E-03	0.079	63578
5	45.00	5.295E-03	0.129	62185	4.871E-03	0.067	61686	4.367E-03	0.050	62401	4.571E-03	0.067	59160
6	55.00	5.859E-03	0.093	61614	4.749E-03	0.059	62140	5.659E-03	0.098	65607	4.674E-03	0.069	62874
7	65.00	5.361E-03	0.093	60668	4.886E-03	0.064	62229	5.107E-03	0.099	65963	4.795E-03	0.074	59289
8	75.00	4.152E-03	0.039	64114	5.540E-03	0.069	64469	5.673E-03	0.085	65076	4.430E-03	0.054	61300
9	85.00	4.888E-03	0.071	60766	4.673E-03	0.068	62335	4.964E-03	0.080	62953	4.913E-03	0.064	62005
10	95.00	5.260E-03	0.056	61847	4.814E-03	0.072	61526	5.062E-03	0.069	62055	5.095E-03	0.059	64093
11	105.00	5.145E-03	0.086	61452	5.280E-03	0.131	62126	4.794E-03	0.071	59319	4.506E-03	0.076	62046
12	115.00	4.096E-03	0.048	61290	7.004E-03	0.339	65855	5.350E-03	0.076	64668	4.870E-03	0.067	61619
13	125.00	5.087E-03	0.079	60102	5.010E-03	0.060	62258	5.071E-03	0.085	59930	4.255E-03	0.053	62577
14	135.00	4.544E-03	0.044	63796	4.474E-03	0.066	59959	5.374E-03	0.067	63340	4.825E-03	0.076	62005
15	145.00	5.491E-03	0.091	61484	5.318E-03	0.095	61710	5.085E-03	0.075	61855	4.328E-03	0.053	58368
16	155.00	4.884E-03	0.054	62454	5.505E-03	0.073	64304	5.251E-03	0.072	61633	4.688E-03	0.063	59497
17	165.00	4.609E-03	0.056	58300	4.857E-03	0.051	65691	5.097E-03	0.070	64342	5.250E-03	0.062	61187
18	175.00	4.508E-03	0.049	63952	5.478E-03	0.082	62900	4.620E-03	0.059	63068	4.729E-03	0.062	61012
19	185.00	4.880E-03	0.062	61911	5.155E-03	0.083	60196	5.386E-03	0.099	64190	4.802E-03	0.067	64718
20	195.00	5.198E-03	0.095	61096	5.056E-03	0.080	64363	4.594E-03	0.062	60707	5.894E-03	0.096	63135
21	205.00	5.304E-03	0.084	62297	5.013E-03	0.063	63435	5.749E-03	0.094	62851	4.665E-03	0.079	61058
22	215.00	5.295E-03	0.077	64080	4.761E-03	0.077	67554	4.546E-03	0.062	59781	5.412E-03	0.081	61392
23	225.00	4.499E-03	0.046	62535	4.928E-03	0.064	63076	5.281E-03	0.088	65471	5.018E-03	0.071	59527
24	235.00	5.660E-03	0.066	67588	4.667E-03	0.058	61985	5.040E-03	0.086	62634	4.279E-03	0.048	58702
25	245.00	5.665E-03	0.090	64976	4.112E-03	0.050	59513	5.017E-03	0.073	58422	4.148E-03	0.047	62648
26	255.00	5.102E-03	0.065	64999	5.070E-03	0.071	60135	4.621E-03	0.068	61600	4.885E-03	0.062	61765
27	265.00	4.987E-03	0.075	61739	4.586E-03	0.063	67225	5.143E-03	0.069	68299	4.849E-03	0.079	62620
28	275.00	4.861E-03	0.066	60748	4.741E-03	0.061	62754	5.337E-03	0.090	65899	4.206E-03	0.050	59282
29	285.00	5.388E-03	0.069	62648	5.363E-03	0.074	61304	4.069E-03	0.044	59111	4.850E-03	0.080	59169
30	295.00	4.626E-03	0.055	64839	4.460E-03	0.054	60413	5.209E-03	0.073	62128	4.484E-03	0.055	59760
31	305.00	4.798E-03	0.060	61379	4.509E-03	0.048	62089	4.745E-03	0.067	57565	4.476E-03	0.064	61213
32	315.00	5.552E-03	0.134	66311	5.403E-03	0.073	61032	4.800E-03	0.060	60423	5.066E-03	0.077	63959
33	325.00	5.545E-03	0.110	62986	5.766E-03	0.076	66315	4.993E-03	0.104	61765	4.607E-03	0.060	58254
34	335.00	5.069E-03	0.076	66337	4.743E-03	0.060	61105	4.757E-03	0.052	58279	5.189E-03	0.069	62789
35	345.00	5.719E-03	0.091	62872	4.788E-03	0.061	61920	4.269E-03	0.048	66105	4.718E-03	0.062	64057
36	355.00	4.694E-03	0.047	60620	5.297E-03	0.066	65822	4.670E-03	0.067	72134	4.584E-03	0.059	61939

azimuthal segmt. #	mid point	spatial segment 13 dose rate	fsd	hits	spatial segment 14 dose rate	fsd	hits	spatial segment 15 dose rate	fsd	hits	spatial segment 16 dose rate	fsd	hits
1	5.00	4.932E-03	0.059	64399	5.234E-03	0.077	61685	4.885E-03	0.069	61028	4.440E-03	0.066	61338
2	15.00	5.331E-03	0.080	63495	5.476E-03	0.152	63289	4.138E-03	0.053	57771	4.167E-03	0.071	58513
3	25.00	5.201E-03	0.075	66913	4.840E-03	0.069	61703	4.555E-03	0.088	57822	4.895E-03	0.081	60144
4	35.00	5.154E-03	0.095	60019	5.257E-03	0.077	64354	4.533E-03	0.067	59527	4.472E-03	0.060	64312
5	45.00	4.332E-03	0.055	59800	4.740E-03	0.073	60379	4.032E-03	0.049	58267	4.438E-03	0.065	59476
6	55.00	4.602E-03	0.062	58660	4.356E-03	0.066	60830	4.739E-03	0.073	60404	4.488E-03	0.060	58661
7	65.00	4.841E-03	0.088	61874	4.464E-03	0.062	59687	3.742E-03	0.039	55746	4.279E-03	0.065	59869
8	75.00	4.940E-03	0.083	61316	4.722E-03	0.067	63691	4.672E-03	0.098	60372	4.603E-03	0.086	62328
9	85.00	4.573E-03	0.063	61325	4.318E-03	0.056	67035	4.233E-03	0.073	66032	4.662E-03	0.090	61380
10	95.00	4.328E-03	0.064	59680	4.246E-03	0.061	58145	4.241E-03	0.052	60993	4.364E-03	0.079	60318
11	105.00	5.456E-03	0.090	67148	4.567E-03	0.069	61053	4.145E-03	0.053	58127	4.418E-03	0.065	59282
12	115.00	4.835E-03	0.092	59245	4.517E-03	0.063	68303	4.252E-03	0.074	62785	4.615E-03	0.069	63491
13	125.00	5.371E-03	0.113	59692	5.002E-03	0.088	63941	4.834E-03	0.078	60427	4.672E-03	0.087	58015
14	135.00	4.835E-03	0.063	60306	4.406E-03	0.107	59476	4.588E-03	0.058	60207	4.397E-03	0.063	58669
15	145.00	4.939E-03	0.068	62734	4.713E-03	0.071	57994	5.208E-03	0.076	62762	4.525E-03	0.067	60595
16	155.00	4.441E-03	0.051	60775	4.231E-03	0.055	58446	5.095E-03	0.074	59118	4.515E-03	0.062	60438
17	165.00	4.854E-03	0.072	62529	4.483E-03	0.076	58525	4.330E-03	0.060	59421	5.042E-03	0.118	68405
18	175.00	4.352E-03	0.057	60320	4.064E-03	0.052	59441	4.277E-03	0.063	56033	4.340E-03	0.062	57377
19	185.00	4.819E-03	0.067	58396	4.204E-03	0.053	61468	4.462E-03	0.083	58219	4.396E-03	0.058	60182
20	195.00	5.116E-03	0.069	63226	5.264E-03	0.104	61181	4.747E-03	0.072	59796	4.338E-03	0.066	61969
21	205.00	4.829E-03	0.068	63836	4.506E-03	0.065	60975	5.199E-03	0.073	63777	4.419E-03	0.060	58462
22	215.00	5.276E-03	0.073	62536	5.051E-03	0.096	60515	4.663E-03	0.090	61157	4.444E-03	0.064	62982
23	225.00	5.167E-03	0.084	61805	5.216E-03	0.088	57849	5.336E-03	0.096	61835	4.611E-03	0.073	59331
24	235.00	5.612E-03	0.102	68209	5.142E-03	0.079	65733	4.373E-03	0.051	59740	4.414E-03	0.089	60304
25	245.00	4.589E-03	0.065	64434	4.679E-03	0.072	58989	4.562E-03	0.071	61985	4.424E-03	0.060	61908
26	255.00	4.049E-03	0.050	57800	4.618E-03	0.068	61264	4.692E-03	0.088	60987	4.232E-03	0.063	61324
27	265.00	4.769E-03	0.062	61886	4.279E-03	0.073	58807	4.285E-03	0.065	64521	4.615E-03	0.072	62268
28	275.00	4.548E-03	0.055	63120	4.307E-03	0.050	59315	4.261E-03	0.056	56188	4.864E-03	0.075	62976
29	285.00	4.739E-03	0.066	64190	4.969E-03	0.059	62061	4.589E-03	0.061	62209	4.595E-03	0.072	64308
30	295.00	4.551E-03	0.076	59049	4.934E-03	0.089	62103	4.558E-03	0.086	58702	4.500E-03	0.069	58721
31	305.00	5.170E-03	0.072	58637	4.280E-03	0.078	59859	5.032E-03	0.094	61734	4.393E-03	0.063	67589
32	315.00	5.054E-03	0.073	60832	5.299E-03	0.084	61063	4.745E-03	0.071	60363	4.572E-03	0.057	62427
33	325.00	5.673E-03	0.101	60548	4.934E-03	0.078	61559	4.396E-03	0.052	60133	4.454E-03	0.083	60827
34	335.00	4.679E-03	0.070	59794	4.460E-03	0.058	65494	4.891E-03	0.108	61244	4.338E-03	0.066	60099
35	345.00	4.318E-03	0.059	60343	4.352E-03	0.066	60065	5.125E-03	0.079	61450	4.403E-03	0.071	61775
36	355.00	4.839E-03	0.071	62020	4.993E-03	0.099	66414	4.336E-03	0.055	63080	4.435E-03	0.083	60471

azimuthal segmt. #	mid point	spatial segment 17 dose rate	fsd	hits	spatial segment 18 dose rate	fsd	hits	spatial segment 19 dose rate	fsd	hits	spatial segment 20 dose rate	fsd	hits
1	5.00	4.678E-03	0.074	57923	4.135E-03	0.066	59085	4.936E-03	0.119	61083	3.770E-03	0.070	58329
2	15.00	4.939E-03	0.113	62589	4.503E-03	0.103	64812	3.994E-03	0.077	57566	4.223E-03	0.061	56019
3	25.00	4.667E-03	0.091	62555	4.441E-03	0.078	57388	4.148E-03	0.155	57276	4.200E-03	0.098	55551
4	35.00	4.690E-03	0.145	58785	3.911E-03	0.056	62760	4.068E-03	0.078	56704	4.058E-03	0.103	57104
5	45.00	3.925E-03	0.057	55805	4.610E-03	0.072	61372	4.261E-03	0.075	54691	3.821E-03	0.074	58240
6	55.00	4.704E-03	0.085	58490	4.278E-03	0.061	58260	4.629E-03	0.086	56423	3.946E-03	0.055	55664
7	65.00	4.305E-03	0.080	57356	4.528E-03	0.071	59651	4.337E-03	0.103	60851	4.597E-03	0.103	57247
8	75.00	3.868E-03	0.055	59611	4.416E-03	0.088	58703	4.366E-03	0.065	64954	3.782E-03	0.057	54907
9	85.00	5.005E-03	0.083	63429	4.167E-03	0.071	55414	4.546E-03	0.066	61053	4.057E-03	0.083	57481
10	95.00	4.223E-03	0.051	60558	4.643E-03	0.071	63589	4.350E-03	0.064	56716	3.832E-03	0.063	56312
11	105.00	4.522E-03	0.074	57291	4.744E-03	0.087	56430	3.803E-03	0.056	61071	4.309E-03	0.085	56717
12	115.00	3.702E-03	0.053	60617	4.400E-03	0.061	59570	4.657E-03	0.144	57783	3.713E-03	0.073	56660
13	125.00	4.251E-03	0.076	59928	4.556E-03	0.075	56412	4.034E-03	0.057	54782	4.363E-03	0.071	61146
14	135.00	4.654E-03	0.062	57064	3.897E-03	0.054	56702	3.882E-03	0.059	61211	3.864E-03	0.061	57254
15	145.00	3.737E-03	0.059	60839	4.433E-03	0.079	62785	4.546E-03	0.069	60686	3.810E-03	0.073	55867
16	155.00	3.844E-03	0.054	56598	4.023E-03	0.080	58263	4.348E-03	0.086	60267	4.022E-03	0.068	54101
17	165.00	4.196E-03	0.081	59087	4.289E-03	0.104	56180	3.887E-03	0.055	56503	4.593E-03	0.091	54685
18	175.00	4.219E-03	0.064	59317	4.266E-03	0.123	56625	3.701E-03	0.052	58094	4.130E-03	0.087	58287
19	185.00	4.643E-03	0.077	60073	4.437E-03	0.063	60132	4.190E-03	0.062	57028	3.718E-03	0.076	55283
20	195.00	4.185E-03	0.091	59319	5.032E-03	0.093	56383	4.109E-03	0.066	61281	4.048E-03	0.082	55868
21	205.00	4.756E-03	0.103	59161	4.689E-03	0.078	59864	4.479E-03	0.071	59432	4.021E-03	0.086	59060
22	215.00	4.856E-03	0.093	61942	4.004E-03	0.079	57319	4.033E-03	0.075	57265	3.914E-03	0.077	57247
23	225.00	4.981E-03	0.075	58910	4.037E-03	0.063	61110	4.089E-03	0.070	58806	3.766E-03	0.064	61828
24	235.00	4.072E-03	0.072	58300	4.441E-03	0.062	59379	4.412E-03	0.084	62093	4.401E-03	0.137	61604
25	245.00	4.389E-03	0.064	60560	4.422E-03	0.074	59438	4.468E-03	0.120	69955	3.878E-03	0.076	56403
26	255.00	3.989E-03	0.060	58475	4.070E-03	0.069	57336	4.090E-03	0.074	55537	4.504E-03	0.113	60972
27	265.00	3.986E-03	0.060	58329	4.618E-03	0.075	69796	4.318E-03	0.064	60424	4.312E-03	0.063	56956
28	275.00	3.985E-03	0.054	59540	4.444E-03	0.083	64575	3.878E-03	0.074	56818	4.010E-03	0.072	55501
29	285.00	4.303E-03	0.083	61529	4.435E-03	0.062	58501	4.178E-03	0.071	57876	3.852E-03	0.071	62681
30	295.00	4.007E-03	0.049	57403	4.600E-03	0.085	60150	4.157E-03	0.078	56406	4.158E-03	0.076	57982
31	305.00	4.753E-03	0.092	59558	4.743E-03	0.084	57030	3.956E-03	0.067	56074	4.550E-03	0.098	66135
32	315.00	4.294E-03	0.072	60225	4.557E-03	0.071	61523	3.756E-03	0.048	57045	3.696E-03	0.076	55341
33	325.00	4.504E-03	0.062	63014	4.307E-03	0.058	60391	3.649E-03	0.054	56595	4.673E-03	0.106	55159
34	335.00	5.071E-03	0.111	62649	4.256E-03	0.065	58244	4.332E-03	0.063	63022	4.390E-03	0.085	64031
35	345.00	4.457E-03	0.075	61304	3.836E-03	0.071	59039	4.278E-03	0.059	59650	4.468E-03	0.084	55937
36	355.00	4.926E-03	0.073	56264	4.428E-03	0.067	58677	3.986E-03	0.070	61346	4.312E-03	0.059	59516

azimuthal segmt. #	mid point	spatial segment 21 dose rate	fsd	hits	spatial segment 22 dose rate	fsd	hits	spatial segment 23 dose rate	fsd	hits	spatial segment 24 dose rate	fsd	hits
1	5.00	4.068E-03	0.061	57068	3.941E-03	0.065	58131	4.092E-03	0.098	53034	3.457E-03	0.066	51773
2	15.00	4.271E-03	0.098	60306	3.831E-03	0.069	55369	3.721E-03	0.068	52502	4.210E-03	0.122	58752
3	25.00	4.109E-03	0.066	57628	4.120E-03	0.075	60733	4.305E-03	0.103	55181	3.325E-03	0.067	49352
4	35.00	4.142E-03	0.093	57500	3.665E-03	0.076	57152	3.465E-03	0.057	49866	3.491E-03	0.092	50851
5	45.00	4.126E-03	0.081	59861	3.215E-03	0.048	54228	3.447E-03	0.054	53481	3.519E-03	0.066	52908
6	55.00	4.461E-03	0.106	56338	3.417E-03	0.068	52508	3.986E-03	0.068	54952	3.596E-03	0.075	47226
7	65.00	3.984E-03	0.069	55079	3.805E-03	0.074	54955	3.913E-03	0.087	50788	3.759E-03	0.087	52112
8	75.00	5.470E-03	0.172	78245	4.903E-03	0.199	60031	4.149E-03	0.077	55441	3.548E-03	0.071	47910
9	85.00	3.834E-03	0.090	54865	3.702E-03	0.072	55155	3.936E-03	0.094	52851	3.314E-03	0.050	51376
10	95.00	3.890E-03	0.068	59135	4.069E-03	0.097	54965	4.154E-03	0.093	54757	3.325E-03	0.061	56266
11	105.00	4.686E-03	0.116	56816	3.453E-03	0.064	56956	3.965E-03	0.074	53890	3.585E-03	0.073	52534
12	115.00	3.657E-03	0.061	52246	4.088E-03	0.102	55712	4.142E-03	0.102	50607	3.659E-03	0.072	54243
13	125.00	3.910E-03	0.067	53621	3.420E-03	0.052	56914	4.308E-03	0.089	52278	3.501E-03	0.067	54288
14	135.00	3.432E-03	0.051	51789	3.894E-03	0.077	52611	3.564E-03	0.062	52560	3.276E-03	0.065	49539
15	145.00	4.735E-03	0.167	56267	3.735E-03	0.077	59252	4.258E-03	0.100	51815	4.081E-03	0.094	53854
16	155.00	4.150E-03	0.073	56578	4.403E-03	0.083	54300	3.758E-03	0.069	54133	3.272E-03	0.055	58362
17	165.00	4.051E-03	0.081	53362	4.932E-03	0.134	58033	3.617E-03	0.071	52016	3.219E-03	0.067	52898
18	175.00	3.695E-03	0.080	55389	3.857E-03	0.067	53377	3.901E-03	0.075	52458	3.970E-03	0.091	49737
19	185.00	4.535E-03	0.089	57534	3.850E-03	0.067	55330	3.732E-03	0.075	51828	4.102E-03	0.129	55785
20	195.00	3.945E-03	0.075	54107	4.300E-03	0.112	53860	3.949E-03	0.071	53157	4.046E-03	0.081	51595
21	205.00	4.112E-03	0.075	57100	3.876E-03	0.080	53387	3.355E-03	0.052	55684	3.577E-03	0.082	50336
22	215.00	3.948E-03	0.072	54941	3.668E-03	0.064	58165	3.970E-03	0.075	57690	3.518E-03	0.082	51503
23	225.00	3.842E-03	0.058	54165	3.458E-03	0.061	60012	4.222E-03	0.090	55910	3.680E-03	0.105	52494
24	235.00	4.842E-03	0.097	59319	4.802E-03	0.097	57222	3.715E-03	0.072	54097	3.661E-03	0.081	51420
25	245.00	4.380E-03	0.108	52844	3.866E-03	0.107	54834	3.716E-03	0.110	54899	4.244E-03	0.138	52479
26	255.00	4.573E-03	0.136	57640	4.098E-03	0.077	61845	3.213E-03	0.051	50433	4.280E-03	0.108	51291
27	265.00	3.814E-03	0.066	54001	4.246E-03	0.071	53727	4.003E-03	0.083	52315	3.462E-03	0.069	52369
28	275.00	3.957E-03	0.063	56719	3.748E-03	0.079	58514	3.887E-03	0.086	56100	3.566E-03	0.080	50208
29	285.00	3.675E-03	0.061	53852	4.093E-03	0.073	52606	3.604E-03	0.067	52056	3.546E-03	0.083	50893
30	295.00	3.763E-03	0.070	53459	4.042E-03	0.068	53415	4.432E-03	0.138	50427	3.508E-03	0.074	49565
31	305.00	3.988E-03	0.064	57624	4.121E-03	0.091	61217	4.338E-03	0.108	55193	4.262E-03	0.129	55679
32	315.00	4.240E-03	0.090	52553	3.872E-03	0.066	57217	3.362E-03	0.073	54150	3.580E-03	0.057	51632
33	325.00	3.610E-03	0.072	55112	3.800E-03	0.067	56374	3.279E-03	0.054	53220	3.331E-03	0.062	53393
34	335.00	3.760E-03	0.070	57064	3.627E-03	0.057	57742	3.731E-03	0.069	56496	3.274E-03	0.050	51575
35	345.00	4.487E-03	0.090	59756	3.801E-03	0.068	53274	4.079E-03	0.084	53087	3.451E-03	0.073	51328
36	355.00	4.064E-03	0.084	55601	4.245E-03	0.091	55370	3.542E-03	0.065	56546	3.729E-03	0.062	54179

azimuthal segmt. #	mid point	spatial segment 25 dose rate	fsd	hits	spatial segment 26 dose rate	fsd	hits	spatial segment 27 dose rate	fsd	hits	spatial segment 28 dose rate	fsd	hits
1	5.00	3.604E-03	0.074	52384	3.664E-03	0.141	50536	4.062E-03	0.125	53159	3.351E-03	0.088	46532
2	15.00	3.160E-03	0.058	56780	4.652E-03	0.199	53392	4.600E-03	0.148	52258	3.017E-03	0.083	46465
3	25.00	3.532E-03	0.081	52026	3.570E-03	0.068	52952	3.611E-03	0.108	46760	3.171E-03	0.070	45788
4	35.00	3.792E-03	0.087	49398	4.215E-03	0.115	47295	3.969E-03	0.119	49446	4.233E-03	0.145	47168
5	45.00	3.360E-03	0.064	56045	3.041E-03	0.067	47165	3.332E-03	0.082	51585	3.298E-03	0.080	42715
6	55.00	3.659E-03	0.086	48992	3.697E-03	0.085	49688	2.889E-03	0.076	44167	3.095E-03	0.131	43949
7	65.00	4.113E-03	0.120	49847	4.123E-03	0.139	48373	3.951E-03	0.209	47662	3.639E-03	0.097	48484
8	75.00	3.976E-03	0.101	49692	3.378E-03	0.078	50805	3.146E-03	0.082	48905	2.944E-03	0.061	47867
9	85.00	3.023E-03	0.045	51088	3.596E-03	0.084	58059	4.733E-03	0.211	46355	3.153E-03	0.076	47305
10	95.00	3.691E-03	0.089	50774	3.227E-03	0.084	50806	3.144E-03	0.067	48175	3.479E-03	0.100	46494
11	105.00	3.158E-03	0.064	48768	3.345E-03	0.088	47724	3.022E-03	0.069	49279	2.930E-03	0.082	43904
12	115.00	3.832E-03	0.099	52606	3.476E-03	0.108	49933	3.009E-03	0.069	48282	3.719E-03	0.109	47834
13	125.00	4.129E-03	0.101	50777	3.586E-03	0.086	48493	3.454E-03	0.093	44589	3.383E-03	0.082	44680
14	135.00	3.324E-03	0.060	47609	3.320E-03	0.083	47486	3.174E-03	0.089	46349	3.396E-03	0.108	48365
15	145.00	3.406E-03	0.076	48564	3.543E-03	0.088	50564	3.554E-03	0.093	51752	3.871E-03	0.089	43945
16	155.00	3.068E-03	0.048	51668	3.113E-03	0.062	46332	3.141E-03	0.089	46783	2.943E-03	0.058	45304
17	165.00	4.216E-03	0.102	50906	3.248E-03	0.076	46179	3.797E-03	0.121	46463	3.468E-03	0.075	45165
18	175.00	3.459E-03	0.077	50157	3.454E-03	0.077	50593	4.120E-03	0.136	48193	3.392E-03	0.109	44243
19	185.00	4.054E-03	0.115	48960	3.268E-03	0.075	47092	2.959E-03	0.068	48215	3.560E-03	0.079	47616
20	195.00	3.528E-03	0.082	51140	3.542E-03	0.082	53249	3.723E-03	0.110	48853	2.939E-03	0.069	49015
21	205.00	3.901E-03	0.098	54056	3.257E-03	0.084	46209	2.694E-03	0.050	47421	3.666E-03	0.112	44583
22	215.00	3.985E-03	0.085	53564	3.913E-03	0.090	51708	2.987E-03	0.074	46399	3.834E-03	0.117	46878
23	225.00	3.171E-03	0.063	50157	3.342E-03	0.079	47555	3.732E-03	0.110	46186	3.365E-03	0.074	45574
24	235.00	3.596E-03	0.085	49009	3.287E-03	0.055	50173	2.890E-03	0.059	48549	2.962E-03	0.074	48117
25	245.00	3.305E-03	0.074	52283	3.201E-03	0.057	53224	3.857E-03	0.103	49249	3.406E-03	0.118	46640
26	255.00	3.174E-03	0.061	49790	3.600E-03	0.102	45853	3.571E-03	0.117	44450	3.890E-03	0.122	47619
27	265.00	3.620E-03	0.094	52483	2.857E-03	0.062	44136	3.653E-03	0.127	46129	3.339E-03	0.096	57921
28	275.00	3.856E-03	0.087	52493	3.524E-03	0.073	46522	3.158E-03	0.080	45648	3.315E-03	0.082	43603
29	285.00	3.486E-03	0.073	50435	3.784E-03	0.087	48790	3.710E-03	0.090	50322	3.950E-03	0.119	55685
30	295.00	3.302E-03	0.081	51247	4.180E-03	0.099	47430	3.008E-03	0.079	47935	3.203E-03	0.073	48700
31	305.00	3.014E-03	0.053	50163	3.519E-03	0.067	47811	2.898E-03	0.062	45405	3.159E-03	0.091	45461
32	315.00	3.298E-03	0.066	50108	3.219E-03	0.064	49034	3.741E-03	0.071	48856	3.038E-03	0.063	46157
33	325.00	3.487E-03	0.076	50822	3.297E-03	0.069	49163	2.789E-03	0.060	48198	3.331E-03	0.093	46934
34	335.00	3.356E-03	0.070	52146	4.030E-03	0.116	49154	3.257E-03	0.064	53409	4.320E-03	0.133	46961
35	345.00	4.037E-03	0.105	51183	3.613E-03	0.115	49318	3.318E-03	0.070	48624	3.165E-03	0.067	45952
36	355.00	3.195E-03	0.068	54152	3.642E-03	0.092	49623	3.326E-03	0.075	49482	3.447E-03	0.112	47093

azimuthal segmt. #	mid point	spatial segment 29 dose rate	fsd	hits	spatial segment 30 dose rate	fsd	hits
1	5.00	2.804E-03	0.066	43678	3.419E-03	0.098	43638
2	15.00	3.370E-03	0.144	42543	3.168E-03	0.096	43301
3	25.00	2.737E-03	0.072	40971	3.815E-03	0.113	46056
4	35.00	3.369E-03	0.099	42685	2.982E-03	0.085	42968
5	45.00	3.376E-03	0.117	41372	3.046E-03	0.112	39782
6	55.00	3.297E-03	0.160	42232	3.380E-03	0.097	44453
7	65.00	3.156E-03	0.065	48014	2.795E-03	0.060	40741
8	75.00	3.690E-03	0.207	47821	2.516E-03	0.071	41698
9	85.00	3.338E-03	0.086	48184	3.172E-03	0.101	41670
10	95.00	2.881E-03	0.088	42577	3.107E-03	0.139	42611
11	105.00	3.779E-03	0.121	47861	2.822E-03	0.084	42100
12	115.00	3.167E-03	0.091	42309	2.920E-03	0.081	41690
13	125.00	2.568E-03	0.054	47061	2.575E-03	0.062	39847
14	135.00	3.190E-03	0.081	43403	4.443E-03	0.295	41181
15	145.00	3.138E-03	0.089	43095	3.500E-03	0.108	41979
16	155.00	2.612E-03	0.054	42138	3.439E-03	0.132	49620
17	165.00	3.330E-03	0.120	44897	2.931E-03	0.069	41866
18	175.00	2.808E-03	0.069	45256	3.331E-03	0.142	39742
19	185.00	3.039E-03	0.074	44741	3.528E-03	0.105	44427
20	195.00	3.759E-03	0.114	43056	3.246E-03	0.103	41380
21	205.00	3.114E-03	0.096	44415	3.581E-03	0.111	41941
22	215.00	3.180E-03	0.109	43963	3.887E-03	0.113	41023
23	225.00	3.262E-03	0.093	44066	2.795E-03	0.074	41187
24	235.00	3.112E-03	0.088	42983	2.421E-03	0.059	41978
25	245.00	2.908E-03	0.065	43546	3.346E-03	0.087	43128
26	255.00	3.010E-03	0.070	45109	3.070E-03	0.095	42571
27	265.00	3.320E-03	0.082	46501	3.189E-03	0.125	42393
28	275.00	2.767E-03	0.058	42074	3.302E-03	0.092	40145
29	285.00	3.002E-03	0.089	44608	2.992E-03	0.091	44751
30	295.00	3.134E-03	0.092	42865	4.018E-03	0.129	46706
31	305.00	3.246E-03	0.086	44960	3.939E-03	0.133	43054
32	315.00	3.158E-03	0.084	44916	3.596E-03	0.120	40844
33	325.00	3.660E-03	0.138	43418	2.649E-03	0.069	41946
34	335.00	3.353E-03	0.076	47386	3.180E-03	0.095	41757
35	345.00	3.479E-03	0.103	45893	2.934E-03	0.072	43337
36	355.00	3.427E-03	0.108	46007	2.731E-03	0.084	42251

tallies of azimuthal segments on surface # 6

azimuthal segmt. #	mid point	spatial segment 1 dose rate	fsd	hits	spatial segment 2 dose rate	fsd	hits	spatial segment 3 dose rate	fsd	hits	spatial segment 4 dose rate	fsd	hits
1	5.00	3.225E-02	0.063	50231	3.134E-02	0.065	50980	3.112E-02	0.057	50932	3.619E-02	0.076	53043
2	15.00	2.980E-02	0.065	50656	2.981E-02	0.058	51177	3.322E-02	0.102	52821	3.070E-02	0.069	51361
3	25.00	3.271E-02	0.059	58268	3.094E-02	0.051	49551	2.752E-02	0.054	44927	3.296E-02	0.145	50738
4	35.00	3.167E-02	0.067	50371	3.381E-02	0.066	53595	3.236E-02	0.067	55146	3.276E-02	0.064	52393
5	45.00	3.047E-02	0.063	49729	3.026E-02	0.076	54392	2.804E-02	0.053	49695	3.756E-02	0.154	59545
6	55.00	3.397E-02	0.087	54948	3.106E-02	0.056	63689	2.996E-02	0.058	50472	2.907E-02	0.058	51858
7	65.00	3.837E-02	0.124	57469	3.277E-02	0.065	56572	3.167E-02	0.058	56463	3.269E-02	0.052	53546
8	75.00	3.657E-02	0.097	55119	3.392E-02	0.055	57335	3.523E-02	0.084	49767	3.018E-02	0.056	48482
9	85.00	3.248E-02	0.089	53324	3.270E-02	0.070	54702	3.618E-02	0.114	53080	3.339E-02	0.116	52355
10	95.00	3.471E-02	0.075	54673	3.246E-02	0.063	52388	3.148E-02	0.065	52625	3.176E-02	0.087	48831
11	105.00	3.045E-02	0.062	52763	3.468E-02	0.080	57141	3.130E-02	0.062	49184	3.124E-02	0.063	51888
12	115.00	5.117E-02	0.463	65455	3.303E-02	0.073	47299	3.537E-02	0.063	52206	2.890E-02	0.055	51516
13	125.00	3.131E-02	0.076	50417	3.344E-02	0.083	54131	2.911E-02	0.056	45878	3.149E-02	0.060	48560
14	135.00	3.500E-02	0.064	51592	3.558E-02	0.067	57351	3.158E-02	0.065	47487	3.029E-02	0.059	51094
15	145.00	3.639E-02	0.078	52985	3.237E-02	0.058	51625	3.260E-02	0.071	49180	3.276E-02	0.068	52535
16	155.00	3.101E-02	0.074	58126	3.057E-02	0.058	53961	3.446E-02	0.057	60647	3.726E-02	0.076	57256
17	165.00	3.209E-02	0.058	55790	3.020E-02	0.047	51837	3.194E-02	0.065	50851	3.002E-02	0.056	52635
18	175.00	3.202E-02	0.060	56999	2.971E-02	0.054	52088	3.172E-02	0.067	53627	2.881E-02	0.053	49109
19	185.00	3.075E-02	0.060	53036	2.976E-02	0.061	53187	3.090E-02	0.055	52095	3.460E-02	0.079	56102
20	195.00	3.432E-02	0.073	52251	2.844E-02	0.050	49832	2.964E-02	0.051	53414	3.184E-02	0.072	59091
21	205.00	3.468E-02	0.109	53814	2.910E-02	0.054	50277	2.774E-02	0.052	48965	2.840E-02	0.050	48740
22	215.00	3.356E-02	0.117	50414	3.367E-02	0.077	54269	3.381E-02	0.071	52941	3.159E-02	0.078	52649
23	225.00	3.830E-02	0.109	60995	3.623E-02	0.076	56482	3.504E-02	0.076	57646	3.319E-02	0.071	54197
24	235.00	3.423E-02	0.063	55030	3.975E-02	0.076	60422	3.501E-02	0.065	58420	2.988E-02	0.045	51677
25	245.00	3.385E-02	0.060	59743	3.236E-02	0.063	55903	3.469E-02	0.115	55778	4.211E-02	0.184	65924
26	255.00	3.198E-02	0.064	51969	3.216E-02	0.074	60233	3.252E-02	0.076	57296	3.098E-02	0.077	53987
27	265.00	3.084E-02	0.067	52114	3.106E-02	0.055	51311	2.931E-02	0.050	52577	3.124E-02	0.051	48866
28	275.00	3.721E-02	0.094	59127	3.545E-02	0.102	59590	3.491E-02	0.098	58721	3.182E-02	0.068	50210
29	285.00	3.269E-02	0.069	56771	3.276E-02	0.058	56026	3.211E-02	0.076	49046	2.973E-02	0.075	44547
30	295.00	3.158E-02	0.062	52154	3.176E-02	0.064	49619	3.363E-02	0.072	48535	3.212E-02	0.070	49169
31	305.00	3.182E-02	0.086	50275	3.401E-02	0.085	51442	3.310E-02	0.067	55734	3.067E-02	0.055	51122
32	315.00	3.514E-02	0.080	55020	3.396E-02	0.074	57657	3.050E-02	0.053	54309	2.864E-02	0.047	47696
33	325.00	3.210E-02	0.053	49201	3.295E-02	0.064	52841	3.420E-02	0.066	51216	3.507E-02	0.071	55637
34	335.00	3.465E-02	0.068	54611	3.621E-02	0.072	54958	3.592E-02	0.085	55777	3.247E-02	0.055	54203
35	345.00	3.472E-02	0.063	56626	3.234E-02	0.057	52737	3.327E-02	0.069	52491	3.470E-02	0.087	55876
36	355.00	3.237E-02	0.063	53684	3.259E-02	0.052	55069	3.315E-02	0.051	57193	3.775E-02	0.090	56263

azimuthal segmt. #	mid point	spatial segment 5 dose rate	fsd	hits	spatial segment 6 dose rate	fsd	hits	spatial segment 7 dose rate	fsd	hits	spatial segment 8 dose rate	fsd	hits
1	5.00	3.297E-02	0.066	50703	3.141E-02	0.060	51894	2.932E-02	0.048	46547	3.107E-02	0.053	51250
2	15.00	2.757E-02	0.048	51110	3.571E-02	0.176	58706	3.118E-02	0.062	50856	2.961E-02	0.077	53651
3	25.00	3.235E-02	0.066	52871	3.203E-02	0.074	51094	2.758E-02	0.064	49638	2.799E-02	0.051	48337
4	35.00	3.118E-02	0.056	54310	2.942E-02	0.065	47746	2.825E-02	0.056	46503	2.884E-02	0.048	48195
5	45.00	3.069E-02	0.077	50767	2.906E-02	0.055	46113	3.287E-02	0.075	49460	2.755E-02	0.046	45461
6	55.00	3.137E-02	0.068	53572	3.513E-02	0.100	54129	3.499E-02	0.092	54789	3.225E-02	0.057	49179
7	65.00	2.891E-02	0.050	48776	3.198E-02	0.069	49273	3.183E-02	0.062	50131	3.203E-02	0.052	50236
8	75.00	3.251E-02	0.066	49948	2.901E-02	0.055	51304	2.974E-02	0.052	48376	2.812E-02	0.055	47798
9	85.00	3.275E-02	0.063	50067	3.069E-02	0.062	50242	3.120E-02	0.068	56413	3.151E-02	0.070	60087
10	95.00	3.328E-02	0.070	53908	3.232E-02	0.060	54107	3.122E-02	0.067	55110	3.107E-02	0.054	53703
11	105.00	3.195E-02	0.054	53794	3.003E-02	0.054	48402	3.498E-02	0.087	51612	2.946E-02	0.055	49979
12	115.00	3.033E-02	0.046	53592	3.307E-02	0.054	54260	3.258E-02	0.060	49251	2.864E-02	0.053	46007
13	125.00	2.851E-02	0.049	49962	3.017E-02	0.067	46581	3.147E-02	0.088	46813	3.013E-02	0.057	49239
14	135.00	2.964E-02	0.057	52280	2.993E-02	0.053	50659	2.981E-02	0.066	48185	2.915E-02	0.057	52724
15	145.00	3.213E-02	0.057	55945	3.206E-02	0.062	52961	2.851E-02	0.044	47423	3.023E-02	0.056	53049
16	155.00	3.090E-02	0.055	53123	2.946E-02	0.052	52734	2.752E-02	0.049	48405	3.077E-02	0.046	51845
17	165.00	2.877E-02	0.053	50796	2.988E-02	0.062	47781	2.884E-02	0.053	49049	3.245E-02	0.064	55706
18	175.00	2.983E-02	0.051	50910	3.027E-02	0.056	51307	2.962E-02	0.052	48352	3.364E-02	0.064	53731
19	185.00	3.173E-02	0.062	52973	3.107E-02	0.055	50111	2.850E-02	0.048	48749	3.177E-02	0.062	50742
20	195.00	3.112E-02	0.059	50624	3.103E-02	0.068	55764	3.118E-02	0.057	50672	3.316E-02	0.073	53031
21	205.00	3.318E-02	0.078	53438	3.475E-02	0.086	54226	3.368E-02	0.074	57409	2.936E-02	0.060	50041
22	215.00	3.399E-02	0.203	55556	3.219E-02	0.100	49551	2.880E-02	0.055	48812	3.214E-02	0.062	55749
23	225.00	3.171E-02	0.082	49693	2.909E-02	0.061	47997	3.037E-02	0.057	50909	3.160E-02	0.058	52219
24	235.00	3.137E-02	0.078	48749	3.115E-02	0.055	51251	3.075E-02	0.048	53540	3.276E-02	0.068	51042
25	245.00	3.310E-02	0.077	53013	2.996E-02	0.060	51659	3.322E-02	0.083	49521	3.107E-02	0.057	49604
26	255.00	3.121E-02	0.062	48142	3.035E-02	0.062	49925	3.018E-02	0.055	49641	3.273E-02	0.091	50948
27	265.00	3.110E-02	0.093	50173	3.009E-02	0.088	50489	3.158E-02	0.085	52822	3.060E-02	0.053	54978
28	275.00	3.225E-02	0.073	52237	3.146E-02	0.074	53419	3.338E-02	0.070	54533	3.150E-02	0.061	54850
29	285.00	2.889E-02	0.060	45659	2.826E-02	0.055	45504	3.041E-02	0.060	55779	2.961E-02	0.047	49636
30	295.00	2.989E-02	0.057	46121	2.943E-02	0.061	46449	3.405E-02	0.058	51804	3.595E-02	0.060	53129
31	305.00	3.041E-02	0.075	48890	3.523E-02	0.091	53098	3.542E-02	0.070	51943	3.604E-02	0.064	52775
32	315.00	2.960E-02	0.051	51737	3.524E-02	0.067	59622	3.630E-02	0.085	55713	3.250E-02	0.052	53209
33	325.00	3.117E-02	0.055	49145	3.366E-02	0.056	51847	3.194E-02	0.055	50213	2.983E-02	0.060	49377
34	335.00	3.085E-02	0.061	52522	2.833E-02	0.058	44095	2.685E-02	0.046	46802	3.307E-02	0.069	51666
35	345.00	3.157E-02	0.079	51383	2.817E-02	0.051	46395	2.868E-02	0.048	45176	2.749E-02	0.061	45270
36	355.00	2.958E-02	0.057	48652	3.155E-02	0.071	51880	3.027E-02	0.086	50239	3.297E-02	0.075	53222

azimuthal segmt. #	mid point	spatial segment 9 dose rate	fsd	hits	spatial segment 10 dose rate	fsd	hits	spatial segment 11 dose rate	fsd	hits	spatial segment 12 dose rate	fsd	hits
1	5.00	3.566E-02	0.068	56848	3.282E-02	0.056	55653	3.173E-02	0.077	54598	2.820E-02	0.053	51496
2	15.00	3.246E-02	0.066	56055	3.069E-02	0.055	51595	2.942E-02	0.050	51104	2.860E-02	0.067	48838
3	25.00	3.264E-02	0.057	49534	3.025E-02	0.076	48095	2.916E-02	0.055	52327	2.869E-02	0.057	48574
4	35.00	3.275E-02	0.076	51038	3.107E-02	0.070	49789	3.072E-02	0.064	51192	3.142E-02	0.061	52494
5	45.00	3.051E-02	0.057	51314	3.363E-02	0.074	51330	3.091E-02	0.061	53559	3.308E-02	0.088	54243
6	55.00	3.461E-02	0.059	52950	3.119E-02	0.065	51200	2.940E-02	0.060	51523	3.051E-02	0.072	50444
7	65.00	3.402E-02	0.056	56219	2.911E-02	0.053	52007	2.952E-02	0.052	50697	3.209E-02	0.070	53312
8	75.00	2.958E-02	0.065	50000	2.947E-02	0.065	50056	3.278E-02	0.076	53096	3.015E-02	0.071	53429
9	85.00	3.232E-02	0.078	55308	2.772E-02	0.059	49614	2.704E-02	0.055	47100	2.661E-02	0.064	47720
10	95.00	3.243E-02	0.065	53268	2.741E-02	0.062	45981	2.593E-02	0.051	46495	2.729E-02	0.050	51210
11	105.00	3.443E-02	0.094	55509	2.682E-02	0.051	51136	2.784E-02	0.057	57411	2.781E-02	0.053	52364
12	115.00	2.948E-02	0.054	47956	2.966E-02	0.059	48317	3.003E-02	0.067	48038	3.160E-02	0.063	48896
13	125.00	2.829E-02	0.061	50216	2.971E-02	0.063	51587	3.171E-02	0.055	52474	3.392E-02	0.070	57933
14	135.00	3.094E-02	0.066	51918	2.952E-02	0.054	49293	2.917E-02	0.057	48315	3.047E-02	0.061	54565
15	145.00	3.258E-02	0.061	52747	3.185E-02	0.077	54844	3.586E-02	0.167	55660	3.085E-02	0.055	51377
16	155.00	3.470E-02	0.077	52927	3.031E-02	0.050	52098	3.327E-02	0.052	53847	3.149E-02	0.056	56113
17	165.00	3.327E-02	0.090	53748	3.328E-02	0.060	53429	3.322E-02	0.056	52852	3.401E-02	0.065	58203
18	175.00	3.163E-02	0.052	52738	3.161E-02	0.053	51466	2.962E-02	0.055	52067	3.029E-02	0.066	48075
19	185.00	3.150E-02	0.060	52186	3.187E-02	0.090	50550	3.121E-02	0.085	51215	2.899E-02	0.058	49709
20	195.00	3.394E-02	0.110	55227	3.339E-02	0.077	52715	3.293E-02	0.057	52811	3.215E-02	0.063	51239
21	205.00	3.288E-02	0.058	57014	3.117E-02	0.072	49904	3.089E-02	0.060	46773	3.213E-02	0.095	51508
22	215.00	3.184E-02	0.052	51913	3.350E-02	0.060	52148	2.819E-02	0.053	46319	2.755E-02	0.055	50397
23	225.00	3.019E-02	0.051	51982	2.944E-02	0.065	51843	2.875E-02	0.058	46905	2.980E-02	0.073	44569
24	235.00	3.517E-02	0.061	55864	3.307E-02	0.071	55471	3.217E-02	0.073	51276	3.222E-02	0.057	55660
25	245.00	2.944E-02	0.058	49537	3.391E-02	0.074	54343	3.062E-02	0.060	55904	2.811E-02	0.061	47813
26	255.00	2.737E-02	0.050	48027	2.980E-02	0.049	48181	3.179E-02	0.064	58215	3.122E-02	0.060	47112
27	265.00	3.795E-02	0.085	63886	3.420E-02	0.084	58698	3.023E-02	0.059	49103	2.989E-02	0.064	50536
28	275.00	3.015E-02	0.053	50259	2.993E-02	0.060	49509	3.083E-02	0.073	50934	2.821E-02	0.058	46489
29	285.00	3.097E-02	0.053	48561	3.153E-02	0.069	50628	3.380E-02	0.066	49224	3.159E-02	0.058	47366
30	295.00	3.176E-02	0.050	52614	2.976E-02	0.051	49659	3.273E-02	0.063	55707	2.887E-02	0.060	52006
31	305.00	3.431E-02	0.068	56241	3.356E-02	0.083	58848	3.126E-02	0.107	52924	3.022E-02	0.067	49248
32	315.00	3.211E-02	0.084	50661	2.938E-02	0.062	49712	3.683E-02	0.076	54582	2.921E-02	0.059	49402
33	325.00	3.176E-02	0.074	53315	3.031E-02	0.055	52095	2.978E-02	0.052	50413	3.021E-02	0.054	52610
34	335.00	3.225E-02	0.078	51111	3.192E-02	0.059	52256	3.013E-02	0.056	48655	3.019E-02	0.056	54877
35	345.00	3.029E-02	0.076	46521	2.982E-02	0.081	48014	3.378E-02	0.069	55921	3.412E-02	0.067	53618
36	355.00	3.357E-02	0.074	53475	3.270E-02	0.060	51436	3.156E-02	0.067	50509	3.128E-02	0.110	48903

azimuthal segmt. #	mid point	spatial segment 13 dose rate	fsd	hits	spatial segment 14 dose rate	fsd	hits	spatial segment 15 dose rate	fsd	hits	spatial segment 16 dose rate	fsd	hits
1	5.00	3.157E-02	0.066	55887	3.475E-02	0.140	56446	3.184E-02	0.061	64920	3.181E-02	0.065	90531
2	15.00	2.772E-02	0.072	49118	2.852E-02	0.072	49020	2.662E-02	0.051	58257	3.501E-02	0.086	89447
3	25.00	2.910E-02	0.057	50471	3.184E-02	0.088	54002	2.900E-02	0.075	65954	3.384E-02	0.080	95412
4	35.00	3.348E-02	0.078	51428	3.457E-02	0.089	57238	3.339E-02	0.080	67916	3.768E-02	0.104	97897
5	45.00	3.165E-02	0.075	53488	3.073E-02	0.064	55173	3.009E-02	0.055	62193	3.659E-02	0.075	88178
6	55.00	3.344E-02	0.068	49879	3.117E-02	0.066	55429	3.500E-02	0.083	63287	3.522E-02	0.085	91924
7	65.00	3.125E-02	0.052	51579	3.022E-02	0.062	54553	2.938E-02	0.055	61719	3.357E-02	0.073	98652
8	75.00	3.162E-02	0.058	55615	2.815E-02	0.051	57116	2.886E-02	0.054	65804	3.256E-02	0.063	92546
9	85.00	3.148E-02	0.064	51466	3.029E-02	0.064	55995	2.898E-02	0.061	60412	3.199E-02	0.054	94641
10	95.00	3.013E-02	0.069	53048	2.860E-02	0.064	53056	3.037E-02	0.060	67493	3.534E-02	0.070	100188
11	105.00	2.855E-02	0.082	54120	3.228E-02	0.153	52364	3.027E-02	0.065	58980	3.194E-02	0.053	91097
12	115.00	2.974E-02	0.054	50305	2.881E-02	0.068	51080	3.175E-02	0.054	65161	3.180E-02	0.055	97056
13	125.00	3.137E-02	0.056	50486	3.193E-02	0.062	53404	2.962E-02	0.063	62862	3.059E-02	0.067	90601
14	135.00	3.000E-02	0.065	54334	2.916E-02	0.052	53724	3.271E-02	0.061	63954	3.375E-02	0.054	89020
15	145.00	3.254E-02	0.076	50431	2.797E-02	0.055	50811	3.252E-02	0.074	63503	3.407E-02	0.058	96642
16	155.00	3.192E-02	0.062	57156	3.295E-02	0.064	54898	3.444E-02	0.090	72469	3.161E-02	0.056	97573
17	165.00	3.266E-02	0.074	54259	3.155E-02	0.063	56272	3.632E-02	0.107	75393	3.551E-02	0.070	108593
18	175.00	3.028E-02	0.057	49494	3.103E-02	0.051	56128	2.995E-02	0.060	61631	3.270E-02	0.059	89385
19	185.00	2.783E-02	0.057	49263	3.021E-02	0.060	53213	3.263E-02	0.061	73896	3.465E-02	0.066	95365
20	195.00	3.084E-02	0.068	56069	3.227E-02	0.078	57666	3.018E-02	0.048	64868	3.224E-02	0.061	94864
21	205.00	2.798E-02	0.052	53224	3.229E-02	0.068	57821	3.277E-02	0.061	69201	3.297E-02	0.068	98675
22	215.00	3.022E-02	0.065	49552	2.866E-02	0.069	50784	2.956E-02	0.058	63032	3.224E-02	0.080	92814
23	225.00	2.759E-02	0.054	47089	2.835E-02	0.060	49963	2.962E-02	0.057	62127	3.546E-02	0.074	100854
24	235.00	3.070E-02	0.056	52641	2.934E-02	0.080	51685	3.070E-02	0.082	63480	3.255E-02	0.069	93122
25	245.00	2.836E-02	0.085	51835	2.658E-02	0.051	49675	3.151E-02	0.066	65224	3.249E-02	0.061	94946
26	255.00	2.762E-02	0.055	46413	2.752E-02	0.053	54198	3.371E-02	0.063	70840	3.284E-02	0.065	93664
27	265.00	2.844E-02	0.055	49255	3.087E-02	0.062	59463	3.004E-02	0.056	62420	3.573E-02	0.092	96551
28	275.00	3.007E-02	0.060	51840	2.970E-02	0.061	53627	3.328E-02	0.066	63935	3.605E-02	0.058	92402
29	285.00	3.083E-02	0.048	53065	3.062E-02	0.059	52254	3.161E-02	0.059	65413	3.203E-02	0.058	94886
30	295.00	3.307E-02	0.056	54671	3.054E-02	0.058	54186	2.908E-02	0.056	59739	3.151E-02	0.056	93183
31	305.00	3.451E-02	0.085	53040	2.993E-02	0.063	55924	3.003E-02	0.070	63971	3.593E-02	0.126	100625
32	315.00	2.680E-02	0.058	46582	2.907E-02	0.056	52728	3.190E-02	0.068	63463	3.042E-02	0.064	88085
33	325.00	3.355E-02	0.092	52809	3.093E-02	0.067	48656	3.219E-02	0.074	65266	3.308E-02	0.067	91703
34	335.00	2.724E-02	0.053	46237	2.798E-02	0.063	48437	3.247E-02	0.072	64414	3.060E-02	0.051	88112
35	345.00	3.028E-02	0.066	50054	3.517E-02	0.085	60756	3.665E-02	0.071	71220	3.585E-02	0.085	97327
36	355.00	2.919E-02	0.060	49960	3.142E-02	0.062	53223	3.374E-02	0.066	67203	3.222E-02	0.060	94709

azimuthal segmt. #	mid point	spatial segment 17 dose rate	fsd	hits	spatial segment 18 dose rate	fsd	hits	spatial segment 19 dose rate	fsd	hits	spatial segment 20 dose rate	fsd	hits
1	5.00	3.184E-02	0.055	146386	3.222E-02	0.040	202597	2.739E-02	0.030	222323	3.502E-02	0.061	195738
2	15.00	3.465E-02	0.076	145755	3.420E-02	0.057	210969	3.060E-02	0.033	234405	4.241E-02	0.088	187214
3	25.00	3.484E-02	0.056	153418	3.599E-02	0.044	219837	3.058E-02	0.033	239042	3.093E-02	0.055	187085
4	35.00	3.808E-02	0.063	150702	3.826E-02	0.052	214029	2.808E-02	0.031	226686	3.765E-02	0.075	180387
5	45.00	3.597E-02	0.112	144562	3.167E-02	0.038	195392	2.856E-02	0.040	218328	3.880E-02	0.083	177493
6	55.00	3.520E-02	0.048	148174	3.402E-02	0.042	209679	2.791E-02	0.030	225628	3.675E-02	0.065	188719
7	65.00	3.327E-02	0.059	143993	3.279E-02	0.037	208415	3.011E-02	0.034	237702	3.983E-02	0.066	189828
8	75.00	3.286E-02	0.041	145805	3.266E-02	0.041	207497	3.028E-02	0.047	228603	4.031E-02	0.074	186251
9	85.00	3.086E-02	0.046	144629	3.176E-02	0.033	207487	2.863E-02	0.029	223845	3.847E-02	0.060	193633
10	95.00	3.633E-02	0.067	155416	3.537E-02	0.048	208166	2.802E-02	0.028	225684	3.805E-02	0.088	187035
11	105.00	3.421E-02	0.049	147835	3.305E-02	0.036	207030	3.146E-02	0.051	222142	3.754E-02	0.069	186067
12	115.00	3.698E-02	0.078	146789	3.468E-02	0.041	214771	3.496E-02	0.148	239508	3.682E-02	0.070	195259
13	125.00	3.306E-02	0.048	149644	3.445E-02	0.039	214262	2.954E-02	0.039	239443	4.002E-02	0.068	196941
14	135.00	3.493E-02	0.051	147455	3.467E-02	0.042	212758	2.795E-02	0.029	227347	3.862E-02	0.073	192322
15	145.00	3.137E-02	0.048	140506	3.337E-02	0.049	201598	2.854E-02	0.033	226584	3.006E-02	0.057	184212
16	155.00	3.291E-02	0.062	139959	3.309E-02	0.038	200367	3.014E-02	0.049	233796	3.995E-02	0.085	189682
17	165.00	3.567E-02	0.056	157396	3.410E-02	0.040	214427	2.895E-02	0.031	226794	4.329E-02	0.074	190844
18	175.00	3.292E-02	0.044	147148	3.446E-02	0.054	216380	3.031E-02	0.031	237155	4.018E-02	0.089	178262
19	185.00	3.399E-02	0.054	140338	3.241E-02	0.048	191608	2.903E-02	0.038	224384	4.116E-02	0.072	187668
20	195.00	3.290E-02	0.066	139157	3.455E-02	0.050	209762	2.896E-02	0.047	222412	4.123E-02	0.081	188410
21	205.00	3.346E-02	0.064	144767	3.310E-02	0.044	223087	3.005E-02	0.057	225283	3.862E-02	0.077	184096
22	215.00	3.234E-02	0.044	146202	3.318E-02	0.049	206538	2.809E-02	0.032	232510	3.720E-02	0.072	187236
23	225.00	3.352E-02	0.047	145128	3.584E-02	0.038	216595	2.963E-02	0.037	224690	4.062E-02	0.089	189234
24	235.00	3.684E-02	0.082	145472	3.368E-02	0.044	200875	2.672E-02	0.028	215580	4.190E-02	0.083	198581
25	245.00	3.245E-02	0.049	147516	3.557E-02	0.045	218967	3.200E-02	0.047	238783	3.894E-02	0.098	190707
26	255.00	3.438E-02	0.049	146041	3.309E-02	0.045	201140	2.939E-02	0.032	224038	3.598E-02	0.076	183330
27	265.00	3.522E-02	0.066	149954	3.457E-02	0.044	217324	2.917E-02	0.033	231237	4.062E-02	0.085	193476
28	275.00	3.546E-02	0.064	144039	3.297E-02	0.055	199130	2.792E-02	0.031	213295	4.713E-02	0.098	190655
29	285.00	3.388E-02	0.059	142325	3.401E-02	0.042	196524	2.985E-02	0.034	222535	3.883E-02	0.069	193666
30	295.00	3.621E-02	0.080	150852	3.455E-02	0.042	211942	3.102E-02	0.060	239251	3.657E-02	0.075	185412
31	305.00	3.823E-02	0.092	172742	3.311E-02	0.035	217926	3.074E-02	0.035	230121	4.539E-02	0.077	194755
32	315.00	3.199E-02	0.046	144508	3.376E-02	0.036	216859	2.987E-02	0.029	235660	3.979E-02	0.090	191863
33	325.00	3.672E-02	0.077	156062	3.554E-02	0.043	209776	2.964E-02	0.035	231816	3.598E-02	0.069	197723
34	335.00	3.365E-02	0.049	148836	3.445E-02	0.033	216285	3.119E-02	0.032	240579	3.438E-02	0.083	191601
35	345.00	3.745E-02	0.090	154879	3.468E-02	0.039	204140	2.952E-02	0.032	233874	3.717E-02	0.065	195156
36	355.00	3.413E-02	0.047	146598	3.454E-02	0.067	204772	3.141E-02	0.047	247420	4.117E-02	0.071	195308

azimuthal segmt. #	mid point	spatial segment 21 dose rate	fsd	hits	spatial segment 22 dose rate	fsd	hits	spatial segment 23 dose rate	fsd	hits	spatial segment 24 dose rate	fsd	hits
1	5.00	9.367E-02	0.068	210160	1.169E-01	0.084	314987	8.504E-02	0.075	288448	4.888E-02	0.089	110148
2	15.00	8.177E-02	0.067	156919	9.187E-02	0.062	244495	7.361E-02	0.068	225604	4.532E-02	0.079	92593
3	25.00	8.644E-02	0.065	157032	9.119E-02	0.060	218317	7.830E-02	0.073	214864	3.727E-02	0.099	96528
4	35.00	9.771E-02	0.074	155591	8.769E-02	0.061	236963	7.911E-02	0.066	237135	4.412E-02	0.087	100997
5	45.00	9.951E-02	0.062	165366	9.693E-02	0.062	250279	7.799E-02	0.068	240750	4.798E-02	0.096	104259
6	55.00	8.899E-02	0.074	218136	9.366E-02	0.085	280820	7.340E-02	0.071	233004	5.069E-02	0.099	98089
7	65.00	9.675E-02	0.071	159607	9.586E-02	0.073	222839	7.629E-02	0.081	216817	4.296E-02	0.095	89688
8	75.00	9.228E-02	0.063	170071	9.121E-02	0.058	256694	8.059E-02	0.082	234481	4.609E-02	0.091	103246
9	85.00	9.687E-02	0.066	167260	1.019E-01	0.073	240853	7.878E-02	0.070	207313	3.979E-02	0.083	102116
10	95.00	8.596E-02	0.070	162340	8.381E-02	0.057	231774	7.223E-02	0.084	207114	4.304E-02	0.084	95277
11	105.00	8.879E-02	0.066	161554	9.614E-02	0.067	248664	6.869E-02	0.065	226173	4.450E-02	0.101	107193
12	115.00	9.006E-02	0.062	179559	1.041E-01	0.062	229269	8.402E-02	0.075	200634	5.080E-02	0.112	89611
13	125.00	9.395E-02	0.063	165526	8.844E-02	0.057	231524	7.870E-02	0.073	234705	4.813E-02	0.092	95992
14	135.00	9.364E-02	0.063	157027	9.859E-02	0.067	235243	7.735E-02	0.064	219052	5.255E-02	0.100	93819
15	145.00	9.310E-02	0.065	155772	1.022E-01	0.067	231234	7.523E-02	0.073	211279	4.832E-02	0.092	92328
16	155.00	9.688E-02	0.072	169717	9.799E-02	0.070	227345	7.738E-02	0.071	208634	4.674E-02	0.091	98790
17	165.00	1.022E-01	0.072	171362	9.553E-02	0.061	232410	7.953E-02	0.060	233908	4.764E-02	0.099	96147
18	175.00	8.893E-02	0.071	159328	1.050E-01	0.064	232740	7.869E-02	0.064	218734	4.421E-02	0.094	103077
19	185.00	9.496E-02	0.065	166207	1.149E-01	0.072	262975	7.985E-02	0.070	248869	5.302E-02	0.089	100168
20	195.00	9.298E-02	0.064	161094	9.849E-02	0.063	239848	7.900E-02	0.070	237874	5.208E-02	0.101	103135
21	205.00	9.533E-02	0.064	159601	1.070E-01	0.063	239898	8.004E-02	0.064	234104	4.958E-02	0.111	102098
22	215.00	9.397E-02	0.066	160976	1.042E-01	0.065	225137	7.138E-02	0.094	207988	5.045E-02	0.096	96890
23	225.00	1.031E-01	0.062	162602	1.037E-01	0.068	229057	8.232E-02	0.079	231144	4.798E-02	0.086	93693
24	235.00	9.618E-02	0.071	174919	9.112E-02	0.063	242260	7.365E-02	0.073	239741	4.286E-02	0.090	102551
25	245.00	9.756E-02	0.070	162984	9.548E-02	0.066	231553	8.491E-02	0.071	225326	4.038E-02	0.080	99897
26	255.00	8.920E-02	0.062	163213	9.685E-02	0.062	239077	7.001E-02	0.066	218663	4.996E-02	0.098	90743
27	265.00	9.765E-02	0.063	176181	9.325E-02	0.061	253767	7.613E-02	0.067	234884	4.621E-02	0.086	103334
28	275.00	9.884E-02	0.068	183438	1.005E-01	0.070	232889	7.444E-02	0.062	231182	5.049E-02	0.092	98723
29	285.00	9.172E-02	0.064	180446	9.272E-02	0.069	244690	7.090E-02	0.067	212409	4.506E-02	0.086	95248
30	295.00	9.249E-02	0.074	168759	9.801E-02	0.061	274544	7.549E-02	0.071	235215	4.099E-02	0.099	99377
31	305.00	9.721E-02	0.063	158525	9.459E-02	0.067	226290	8.035E-02	0.067	232398	4.342E-02	0.104	99351
32	315.00	8.659E-02	0.063	163299	9.263E-02	0.066	257355	7.583E-02	0.059	229337	4.048E-02	0.089	100248
33	325.00	9.060E-02	0.065	166155	9.196E-02	0.063	255365	7.189E-02	0.067	227187	4.696E-02	0.095	103457
34	335.00	9.330E-02	0.067	158805	9.569E-02	0.067	226357	8.019E-02	0.069	217042	4.753E-02	0.097	92335
35	345.00	9.469E-02	0.071	175006	9.839E-02	0.067	236403	7.284E-02	0.063	226735	4.771E-02	0.089	94907
36	355.00	9.125E-02	0.066	192113	9.967E-02	0.063	297386	8.431E-02	0.070	252827	5.272E-02	0.100	110630

azimuthal segmt. #	mid point	spatial segment 25 dose rate	fsd	hits
1	5.00	2.624E-02	0.199	25366
2	15.00	1.796E-02	0.105	24215
3	25.00	2.630E-02	0.128	26742
4	35.00	2.430E-02	0.122	28401
5	45.00	2.382E-02	0.126	25410
6	55.00	2.574E-02	0.196	27263
7	65.00	2.235E-02	0.148	22899
8	75.00	2.214E-02	0.153	24660
9	85.00	3.000E-02	0.202	26704
10	95.00	2.096E-02	0.120	24015
11	105.00	2.627E-02	0.152	28056
12	115.00	2.017E-02	0.154	22371
13	125.00	2.563E-02	0.140	24342
14	135.00	2.347E-02	0.127	24640
15	145.00	2.293E-02	0.120	25257
16	155.00	2.106E-02	0.122	25264
17	165.00	2.029E-02	0.142	24658
18	175.00	1.919E-02	0.135	25171
19	185.00	2.147E-02	0.110	25901
20	195.00	2.514E-02	0.148	23966
21	205.00	2.459E-02	0.134	26345
22	215.00	2.571E-02	0.172	23365
23	225.00	2.577E-02	0.171	23582
24	235.00	2.351E-02	0.116	24621
25	245.00	2.598E-02	0.142	25365
26	255.00	2.141E-02	0.104	24393
27	265.00	2.390E-02	0.110	26792
28	275.00	2.126E-02	0.133	24944
29	285.00	2.111E-02	0.158	24307
30	295.00	1.984E-02	0.138	22738
31	305.00	1.637E-02	0.111	23939
32	315.00	1.559E-02	0.138	25636
33	325.00	1.968E-02	0.116	23399
34	335.00	2.740E-02	0.132	23238
35	345.00	3.026E-02	0.155	23134
36	355.00	2.199E-02	0.112	25036

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