```
          Thread Name & Version = MCNP5_RSICC, 1.30
                                    _
          ._ _   _  ._   ._    |_
          | | |  (_  | |  |_)   _)
                              |
 +-------------------------------------------------------------------+
 |   This program was prepared by the Regents of the University of    |
 |California at Los Alamos National Laboratory (the University) under |
 |  contract number W-7405-ENG-36 with the U.S. Department of Energy  |
 |(DoE).  The University has certain rights in the program pursuant to|
 |  the contract and the program should not be copied or distributed  |
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 | University makes any warranty, express or implied, or assumes any  |
 |     liability or responsibility for the use of this software.      |
 +-------------------------------------------------------------------+

1mcnp     version 5     ld=06212004                     04/19/16 06:24:14

***************************************************************************
probid =  04/19/16 06:24:14
 inp=inp x=xsdir130


 warning. universe map (print table 128) disabled.
    1-       Loose Plate with Box
    2-       c
    3-       c      Cask
    4-       c
    5-       10     2 -1.0    -400 424 -410 #20 #21 #22 #23
    6-                         #24 #25 #26 #27              imp:n=1 $
cavity
    7-       11     4 -7.94   (-424:410:400) 423 -411 -401 imp:n=1 $
inner steel
    8-       12     5 -11.35  (-423:411:401) 422 -412 -402 imp:n=1 $ lead
    9-       13     4 -7.94   (-422:412:402) 421 -413 -403 imp:n=1 $
outer steel
   10-       14     2 -1.0    (-421:413:403) -405          imp:n=1 $
between
   11-       c
   12-       20     0         660 -661 665 -666 504 -410   imp:n=1
fill=8(-13.7571 0 0) $ far
   13-       21     0         661 -662 665 -666 504 -410   imp:n=1
fill=8(-4.5857 0 0)  $ lef
   14-       22     0         662 -663 665 -666 504 -410   imp:n=1
fill=9(4.5857 0 0)   $ rig
   15-       23     0         663 -664 665 -666 504 -410   imp:n=1
fill=9(13.7571 0 0)  $ far
   16-       24     like 23 but trcl=20 fill=9(25)                $ top
right
   17-       25     like 23 but trcl=21 fill=9(26)                $ top
left
   18-       26     like 23 but trcl=22 fill=9(27)                $
bottom right
```

```
   19-       27     like 23 but trcl=23 fill=9(28)                $
bottom left
   20-       c
   21-       998    2 -1.0    405 -404 420 -414            imp:n=1 $
reflector
   22-       999    0              404:-420:414            imp:n=0
   23-       c
   24-       c      Universe 4: Loose Plate Box filled shifted right
   25-       c
   26-       400   2 -1.0      431 -432 435 -436 fill=7(0.657 0 0)  u=4
imp:n=1
   27-       403   4 -7.94   (-431:432:-435:436) 430 -433 434 -437  u=4
imp:n=1 $ loose plate
   28-       404   2 -1.0      -430:433:-434:437                   u=4
imp:n=1 $ water
   29-       c
   30-       c      Universe 10: Loose Plate Box filled shifted left
   31-       c
   32-       1000   2 -1.0      431 -432 435 -436 fill=7(-0.657 0 0)
u=10 imp:n=1
   33-       1003   4 -7.94   (-431:432:-435:436) 430 -433 434 -437
u=10 imp:n=1 $ loose pl
   34-       1004   2 -1.0      -430:433:-434:437
u=10 imp:n=1 $ water
   35-       c
   36-       c      Universe 5: Fuel Plate
   37-       c
   38-       c 500   2 -1.0  -500                u=5 imp:n=1 $ void
below plate
   39-       501   3 -2.7   505 -506 500 -501   u=5 imp:n=1 $ lower clad
   40-       502  10 -5.485 505 -506 501 -502   u=5 imp:n=1 $ fuel meat
   41-       503   3 -2.7   505 -506 502 -503   u=5 imp:n=1 $ upper clad
   42-       504   2 -1.0  -505:506:-500:503    u=5 imp:n=1 $ water
   43-       c
   44-       c     Universe 6: Fuel Plate Lattice wide (25 plates)
   45-       c
   46-       600   0        -510 lat=1 fill=0:0 0:24 0:0
   47-                       5 24r
   48-                       u=6 imp:n=1
   49-       c
   50-       c     Universe 20: Fuel Plate Lattice narrow (6 plates)
   51-       c
   52-       2000   0        -2000 lat=1 fill=0:0 0:5 0:0 5 5 5 5 5 5
   53-                       u=20 imp:n=1
   54-       c
   55-       c     Universe 7: x-y
   56-       c
   57-       700  0         507 -508 fill=6(0 -2.6797 0)  u=7 imp:n=1 $
wide lattice
   58-       701  0         509 -507 fill=20(0 -3.1369 0) u=7 imp:n=1 $
narrow lattice
   59-       702  2 -1.0   -509:508                      u=7 imp:n=1
   60-       c
   61-       c     Universe 8: Square fuel basket right shift
```

```
   62-       c
   63-       800   0         650 -651 652 -653  fill=4(0.215 0 0)  u=8
imp:n=1
   64-       801   4 -7.94   -650:651:-652:653                     u=8
imp:n=1 $ basket
   65-       c
   66-       c     Universe 9: Square fuel basket left shift
   67-       c
   68-       900   0         650 -651 652 -653  fill=10(-0.215 0 0) u=9
imp:n=1
   69-       901   4 -7.94   -650:651:-652:653                      u=9
imp:n=1 $ basket
   70-
   71-       c Fuel Plate
   72-       500 py -0.0381  $ cladding bottom, 0.005-in thick per SOW
   73-       501 py -0.0254  $ fuel meat bottom, 1/2  0.020-in per
drawing
   74-       502 py  0.0254  $ fuel meat top, 1/2  0.020-in per drawing
   75-       503 py  0.0381  $ cladding bottom, 0.005-in thick per SOW
   76-       504 pz 76.1822  $ fuel bottom
   77-       505 px -3.1369  $ 2.47"/2
   78-       506 px  3.1369  $ 2.47"/2
   79-       507 py -2.7178    $ y extent of expanded plates
   80-       508 py  3.2426    $ y extent of expanded plates
   81-       509 py -5         $ y extent of compressed plates (dummy)
   82-       c
   83-       510 rpp -1000 1000 -0.1212 0.1212 -1000 1000 $ lattice
   84-       c
   85-       c cask surfaces
   86-       c
   87-       400     cz 20.32    $ IR cask
   88-       401     cz 22.86    $ IR lead
   89-       402     cz 43.18    $ OR lead
   90-       403     cz 48.26    $ OR cask
   91-       404     cz 78.74    $ 1 foot water reflector
   92-       405    hex 0 0 -25.25 0 0 190.5355 0 48.27 0
   93-       c
   94-       410     pz 137.1422 $ bottom of lid
   95-       411     pz 139.6822 $ steel
   96-       412     pz 164.0154 $ lead
   97-       413     pz 165.2854 $ steel
   98-       414     pz 195.7654 $ 1 foot water reflector
   99-       c
  100-       420     pz -55.72   $ 1 foot water reflector
  101-       421     pz -25.24   $ bottom of cask
  102-       422     pz -22.7    $ steel
  103-       423     pz -3.0912  $ lead
  104-       424     pz 0        $ steel
  105-       c
  106-       c     loose plate basket surfaces
  107-       c
  108-       430   px -4.1021
  109-       431   px -3.7846
  110-       432   px  3.7846
```

```
  111-       433   px  4.1021
  112-       434   py -3.4925
  113-       435   py -3.1750
  114-       436   py  3.1750
  115-       437   py  3.4925
  116-       c
  117-       c     square fuel basket surfaces
  118-       c
  119-       650   px -4.318 $ inner
  120-       651   px  4.318
  121-       652   py -4.318
  122-       653   py  4.318
  123-       660   px -18.3428 $ outer
  124-       661   px -9.1714
  125-       662   px  0
  126-       663   px  9.1714
  127-       664   px  18.3428
  128-       665   py -4.5857
  129-       666   py  4.5857
  130-       c
  131-       2000  rpp -1000 1000 -0.0382 0.0382 -1000 1000 $ lattice
  132-
  133-       m2       1001.62c    2         $ water
  134-                8016.62c    1
  135-       mt2      lwtr.60t
  136-       m3      13027.62c    1         $ Al
  137-       m4       6000.66c   -0.08      $ SS-304
  138-               14000.60c   -1.0
  139-               15031.66c   -0.045
  140-               24000.50c  -19.0
  141-               25055.62c   -2.0
  142-               26000.55c  -68.375
  143-               28000.50c   -9.5
  144-       m5      82000.50c    1         $ Pb
  145-       m10     92235.69c   -0.661
  146-               92238.69c   -2.654
  147-               13027.62c   -1.908
  148-               14000.60c   -0.261     $ fuel.
  149-       m11     40000.66c    1
 warning. material  11 is not used in the problem.
  150-       c
  151-       *tr20     0 0 0              60  30  90 150 60  90 $ 60  deg
CCW
  152-       *tr21     0 0 0              120 30  90 210 120 90 $ 120 deg
CCW
  153-       *tr22     0 0 0              60  150 90 30  60  90 $ 60  deg
CW
  154-       *tr23     0 0 0              120 210 90 30  120 90 $ 120 deg
CW
  155-       c
  156-       *tr25     6.8786  11.9140 0  60  30  90 150 60  90 $ 60  deg
CCW
  157-       *tr26    -6.8786  11.9140 0  120 30  90 210 120 90 $ 120 deg
CCW
```

```
  158-       *tr27     6.8786 -11.9140 0  60  150 90 30  60  90 $ 60  deg
CW
  159-       *tr28    -6.8786 -11.9140 0  120 210 90 30  120 90 $ 120 deg
CW
  160-       c
  161-       tr30      0.647 0 0
  162-       tr31     -0.647 0 0
  163-       mode   n
  164-       kcode  5000 1.0 50 1050
  165-       sdef   cel=d1 x=d2 y=d3 z=d4
  166-       si1       L 20:800:400:700:600:502 21:800:400:700:600:502

 comment. using level-zero-first for cell path on si card.
  167-                  22:900:1000:700:600:502 23:900:1000:700:600:502
  168-                  24:900:1000:700:600:502 25:900:1000:700:600:502
  169-                  26:900:1000:700:600:502 27:900:1000:700:600:502
  170-       sp1       1 1 1 1   1 1 1 1
  171-       si2      -3.1269 3.1269
  172-       sp2       0 1
  173-       si3      -0.0254 0.0254
  174-       sp3       0 1
  175-       si4       78 137
  176-       sp4       0 1

 warning.
*********************************************************************

 warning. Using lattice speed tally modifications.

 warning.   User should review input deck and verify the following are
true:

 warning.   1) Nested lattices are not tallied over.

 warning.   2) A cell with the fill keyword does not reference its own
universe.

 warning.   3) Lattice index range on tally must match corresponding fill
range.

 warning.  Failure to meet these criteria may result in silent wrong
answers.

 warning.   See the Lattice Speed Tally Enhancement report: LA-UR-04-3400

 warning.
*********************************************************************

 surface    504   and surface  24504   are the same.  24504   will be
deleted.

 surface    504   and surface  25504   are the same.  25504   will be
deleted.
```

```
 surface    504   and surface  26504   are the same.  26504   will be
deleted.

 surface    504   and surface  27504   are the same.  27504   will be
deleted.

 surface    510.1 and surface   2000.1 are the same.   2000.1 will be
deleted.

 surface    510.2 and surface   2000.2 are the same.   2000.2 will be
deleted.

 surface    510.5 and surface   2000.5 are the same.   2000.5 will be
deleted.

 surface    510.6 and surface   2000.6 are the same.   2000.6 will be
deleted.

 surface    410   and surface  24410   are the same.  24410   will be
deleted.

 surface    410   and surface  25410   are the same.  25410   will be
deleted.

 surface    410   and surface  26410   are the same.  26410   will be
deleted.

 surface    410   and surface  27410   are the same.  27410   will be
deleted.

 surface  24665   and surface  27666   are the same.  27666   will be
deleted.

 surface  24666   and surface  27665   are the same.  27665   will be
deleted.

 surface  25665   and surface  26666   are the same.  26666   will be
deleted.

 surface  25666   and surface  26665   are the same.  26665   will be
deleted.

 comment.   16 surfaces were deleted for being the same as others.

 comment. total fission nubar data are being used.

 warning. tr 30 card unused.

 warning. tr 31 card unused.

 warning.   3 materials had unnormalized fractions. print table 40.
1cells
print table 60
```

cell	mat	atom density	gram density	volume	mass	pieces	neutron importance
1	10	2s	1.00309E-01	1.00000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
2	11	4	8.75840E-02	7.94000E+00	5.64988E+04	4.48600E+05	1	1.0000E+00
3	12	5	3.29849E-02	1.13500E+01	8.59297E+05	9.75302E+06	1	1.0000E+00
4	13	4	8.75840E-02	7.94000E+00	3.00354E+05	2.38481E+06	1	1.0000E+00
5	14	2s	1.00309E-01	1.00000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
6	20	0	0.00000E+00	0.00000E+00	5.12762E+03	0.00000E+00	0	1.0000E+00
7	21	0	0.00000E+00	0.00000E+00	5.12762E+03	0.00000E+00	0	1.0000E+00
8	22	0	0.00000E+00	0.00000E+00	5.12762E+03	0.00000E+00	0	1.0000E+00
9	23	0	0.00000E+00	0.00000E+00	5.12762E+03	0.00000E+00	0	1.0000E+00
10	24	0	0.00000E+00	0.00000E+00	5.12762E+03	0.00000E+00	0	1.0000E+00
11	25	0	0.00000E+00	0.00000E+00	5.12762E+03	0.00000E+00	0	1.0000E+00
12	26	0	0.00000E+00	0.00000E+00	5.12762E+03	0.00000E+00	0	1.0000E+00
13	27	0	0.00000E+00	0.00000E+00	5.12762E+03	0.00000E+00	0	1.0000E+00
14	998	2s	1.00309E-01	1.00000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
15	999	0	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0	0.0000E+00
16	400	2s	1.00309E-01	1.00000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
17	403	4	8.75840E-02	7.94000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
18	404	2s	1.00309E-01	1.00000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
19	1000	2s	1.00309E-01	1.00000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
20	1003	4	8.75840E-02	7.94000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
21	1004	2s	1.00309E-01	1.00000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
22	501	3	6.02616E-02	2.70000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
23	502	10	5.65990E-02	5.48500E+00	0.00000E+00	0.00000E+00	0	1.0000E+00
24	503	3	6.02616E-02	2.70000E+00	0.00000E+00	0.00000E+00	0	1.0000E+00

```
    25   504    2s 1.00309E-01 1.00000E+00 0.00000E+00 0.00000E+00     0
1.0000E+00
    26   600    0  0.00000E+00 0.00000E+00 9.69600E+05 0.00000E+00     0
1.0000E+00
    27  2000    0  0.00000E+00 0.00000E+00 3.05600E+05 0.00000E+00     0
1.0000E+00
    28   700    0  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00     0
1.0000E+00
    29   701    0  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00     0
1.0000E+00
    30   702    2s 1.00309E-01 1.00000E+00 0.00000E+00 0.00000E+00     0
1.0000E+00
    31   800    0  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00     0
1.0000E+00
    32   801    4  8.75840E-02 7.94000E+00 0.00000E+00 0.00000E+00     0
1.0000E+00
    33   900    0  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00     0
1.0000E+00
    34   901    4  8.75840E-02 7.94000E+00 0.00000E+00 0.00000E+00     0
1.0000E+00

 total                                     2.53237E+06 1.25864E+07

 ***************************************************
 * Random Number Generator  =                    1 *
 * Random Number Seed       =       19073486328125 *
 * Random Number Multiplier =       19073486328125 *
 * Random Number Adder      =                    0 *
 * Random Number Bits Used  =                   48 *
 * Random Number Stride     =               152917 *
 ***************************************************


        14 warning messages so far.
1cross-section tables
print table 100

     table    length

                        tables from file actia

   1001.62c    5202  1-h-1 at 293.6K from endf-vi.8 njoy99.50
mat 125      12/05/01
   8016.62c  170541  8-o-16 at 293.6K from endf-vi.8 njoy99.50
mat 825      12/05/01
  13027.62c   75363  13-al-27 at 293.6K from endf-vi.8 njoy99.50
mat1325      12/17/01
  25055.62c  134565  25-mn-55 at 293.6K from endf/b-vi.8 njoy99.50
mat2525      02/11/02

                        tables from file endf66a

   6000.66c   44688  6-c-0 at 293.6K from endf-vi.6 njoy99.50
mat 600      07/13/01
```

```
  15031.66c   24697  15-p-31 at 293.6K from endf-vi.6 njoy99.50
mat1525      07/24/01

                        tables from file endf60

  14000.60c   51392  14-si-nat from endf/b-vi
mat1400      11/25/93

                        tables from file rmccs

  24000.50c   89104  njoy
(  1324)      79/06/21.
  26000.55c   84136  njoy
( 260)       10/21/82
  28000.50c   82267  njoy
(  1328)      79/06/21.
  82000.50c   28695  njoy
( 1382)     03/10/82

                        tables from file t16_2003

  92235.69c  587997  92-u-235 at 293.6K from t16 u235la9d njoy99.50
total nu                 mat9228      07/02/03
                    probability tables used from 2.2500E-03 to 2.5000E-
02 mev.
  92238.69c  713320  92-u-238 at 293.6K from t16 u238la8h njoy99.50
total nu                 mat9237      07/02/03
                    probability tables used from 1.0000E-02 to 1.4903E-
01 mev.

                        tables from file sab2002

   lwtr.60t   63221  1-h-1 in h2o at 293.6k from endf-vi.5 njoy99.0
1001     0     0  09/13/99

  total     2155188


******************************************************************************
*********************************************
 dump no.    1 on file runtpe       nps =           0     coll =
0     ctm =        0.00   nrn =                 0


        14 warning messages so far.
1estimated keff results by cycle
print table 175

 cycle     1    k(collision)  0.615710    prompt removal lifetime(abs)
6.8559E+03    source points generated   3093

 cycle     2    k(collision)  0.628439    prompt removal lifetime(abs)
7.2132E+03    source points generated   5094
```

```
 cycle     3    k(collision)  0.620053    prompt removal lifetime(abs)
7.0111E+03    source points generated   4889

 cycle     4    k(collision)  0.645962    prompt removal lifetime(abs)
6.8085E+03    source points generated   5188

 cycle     5    k(collision)  0.642508    prompt removal lifetime(abs)
6.7897E+03    source points generated   4967

 cycle     6    k(collision)  0.630561    prompt removal lifetime(abs)
6.8402E+03    source points generated   4900

 cycle     7    k(collision)  0.626457    prompt removal lifetime(abs)
6.9880E+03    source points generated   4979

 cycle     8    k(collision)  0.632439    prompt removal lifetime(abs)
6.9514E+03    source points generated   5032

 cycle     9    k(collision)  0.636378    prompt removal lifetime(abs)
6.9361E+03    source points generated   5052

 cycle    10    k(collision)  0.638937    prompt removal lifetime(abs)
6.9086E+03    source points generated   5017

 cycle    11    k(collision)  0.643058    prompt removal lifetime(abs)
6.9936E+03    source points generated   5054

 cycle    12    k(collision)  0.636151    prompt removal lifetime(abs)
6.9345E+03    source points generated   4925

 cycle    13    k(collision)  0.642783    prompt removal lifetime(abs)
6.8977E+03    source points generated   5081

 cycle    14    k(collision)  0.639201    prompt removal lifetime(abs)
6.9800E+03    source points generated   4949

 cycle    15    k(collision)  0.640390    prompt removal lifetime(abs)
6.8701E+03    source points generated   5007

 cycle    16    k(collision)  0.642503    prompt removal lifetime(abs)
6.8271E+03    source points generated   4985

 cycle    17    k(collision)  0.635476    prompt removal lifetime(abs)
6.8450E+03    source points generated   4938

 cycle    18    k(collision)  0.643509    prompt removal lifetime(abs)
7.0071E+03    source points generated   5063

 cycle    19    k(collision)  0.663648    prompt removal lifetime(abs)
6.7620E+03    source points generated   5113

 cycle    20    k(collision)  0.639585    prompt removal lifetime(abs)
6.8037E+03    source points generated   4829
```

```
 cycle    21    k(collision)  0.631993    prompt removal lifetime(abs)
6.7216E+03    source points generated   4938

 cycle    22    k(collision)  0.650679    prompt removal lifetime(abs)
6.6940E+03    source points generated   5119

 cycle    23    k(collision)  0.655594    prompt removal lifetime(abs)
6.9172E+03    source points generated   5024

 cycle    24    k(collision)  0.652693    prompt removal lifetime(abs)
6.7193E+03    source points generated   4960

 cycle    25    k(collision)  0.649761    prompt removal lifetime(abs)
6.8580E+03    source points generated   4989

 cycle    26    k(collision)  0.655348    prompt removal lifetime(abs)
6.9744E+03    source points generated   5018

 cycle    27    k(collision)  0.632870    prompt removal lifetime(abs)
6.7928E+03    source points generated   4824

 cycle    28    k(collision)  0.638572    prompt removal lifetime(abs)
6.8593E+03    source points generated   5089

 cycle    29    k(collision)  0.650110    prompt removal lifetime(abs)
6.6272E+03    source points generated   5077

 cycle    30    k(collision)  0.644439    prompt removal lifetime(abs)
6.7093E+03    source points generated   4916

 cycle    31    k(collision)  0.643487    prompt removal lifetime(abs)
6.9848E+03    source points generated   5026

 cycle    32    k(collision)  0.637198    prompt removal lifetime(abs)
6.7496E+03    source points generated   4944

 cycle    33    k(collision)  0.636324    prompt removal lifetime(abs)
6.8557E+03    source points generated   5005

 cycle    34    k(collision)  0.657219    prompt removal lifetime(abs)
6.9021E+03    source points generated   5152

 cycle    35    k(collision)  0.618626    prompt removal lifetime(abs)
6.9194E+03    source points generated   4711

 cycle    36    k(collision)  0.640896    prompt removal lifetime(abs)
6.8043E+03    source points generated   5180

 cycle    37    k(collision)  0.648070    prompt removal lifetime(abs)
6.6238E+03    source points generated   5088

 cycle    38    k(collision)  0.639858    prompt removal lifetime(abs)
6.6778E+03    source points generated   4941
```

```
 cycle    39    k(collision)  0.637446    prompt removal lifetime(abs)
7.0031E+03    source points generated   4950

 cycle    40    k(collision)  0.644241    prompt removal lifetime(abs)
6.6683E+03    source points generated   5067

 cycle    41    k(collision)  0.647503    prompt removal lifetime(abs)
6.9390E+03    source points generated   4993

 cycle    42    k(collision)  0.621615    prompt removal lifetime(abs)
6.7618E+03    source points generated   4801

 cycle    43    k(collision)  0.637433    prompt removal lifetime(abs)
6.8916E+03    source points generated   5132

 cycle    44    k(collision)  0.638117    prompt removal lifetime(abs)
6.5300E+03    source points generated   5014

 cycle    45    k(collision)  0.650315    prompt removal lifetime(abs)
6.8323E+03    source points generated   5092

 cycle    46    k(collision)  0.650925    prompt removal lifetime(abs)
6.9347E+03    source points generated   5010

 cycle    47    k(collision)  0.619322    prompt removal lifetime(abs)
6.9316E+03    source points generated   4706

 cycle    48    k(collision)  0.639334    prompt removal lifetime(abs)
6.9368E+03    source points generated   5156

 cycle    49    k(collision)  0.624227    prompt removal lifetime(abs)
6.8868E+03    source points generated   4867

 cycle    50    k(collision)  0.654200    prompt removal lifetime(abs)
6.6985E+03    source points generated   5199

 cycle    51    k(collision)  0.648318    prompt removal lifetime(abs)
6.7001E+03    source points generated   4980

  estimator     cycle    52   ave of     2 cycles      combination
simple average    combined average     corr
 k(collision)      0.640122       0.644220 0.0064     k(col/abs)
0.000000 0.0000     0.000000 0.0000   0.0000
 k(absorption)     0.636698       0.643307 0.0103     k(abs/tk ln)
0.000000 0.0000     0.000000 0.0000   0.0000
 k(trk length)     0.622012       0.633340 0.0179     k(tk ln/col)
0.000000 0.0000     0.000000 0.0000   0.0000
 rem life(col)   6.8762E+03     6.7881E+03 0.0130
 rem life(abs)   6.8627E+03     6.7814E+03 0.0120     life(col/abs)
0.0000E+00 0.0000   0.0000E+00 0.0000   0.0000
 source points generated   4976

  estimator     cycle    53   ave of     3 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.644936       0.644459 0.0037     k(col/abs)
0.644017 0.0048     0.645903 0.0005   0.9995
 k(absorption)     0.644111       0.643575 0.0059     k(abs/tk ln)
0.640112 0.0086     0.648233 0.0091   0.9217
 k(trk length)     0.643267       0.636649 0.0115     k(tk ln/col)
0.640554 0.0075     0.647544 0.0039   0.9331
 rem life(col)   6.8438E+03     6.8067E+03 0.0080
 rem life(abs)   6.8860E+03     6.8163E+03 0.0086     life(col/abs)
6.8115E+03 0.0082   6.8031E+03 0.0121   0.9586
 source points generated   5011

  estimator     cycle    54   ave of     4 cycles      combination
simple average    combined average     corr
 k(collision)      0.644455       0.644458 0.0026     k(col/abs)
0.644056 0.0034     0.645762 0.0004   0.9991
 k(absorption)     0.643895       0.643655 0.0042     k(abs/tk ln)
0.641571 0.0065     0.645179 0.0051   0.8224
 k(trk length)     0.647997       0.639486 0.0092     k(tk ln/col)
0.641972 0.0057     0.645685 0.0027   0.8182
 rem life(col)   6.8498E+03     6.8174E+03 0.0058     k(col/abs/tk ln)
0.642533 0.0051     0.645749 0.0006
 rem life(abs)   6.8584E+03     6.8268E+03 0.0063     life(col/abs/tl)
6.8223E+03 0.0052   6.8115E+03 0.0066
 source points generated   5000

  estimator     cycle    55   ave of     5 cycles      combination
simple average    combined average     corr
 k(collision)      0.644784       0.644523 0.0020     k(col/abs)
0.645007 0.0030     0.644229 0.0021   0.7837
 k(absorption)     0.652831       0.645490 0.0043     k(abs/tk ln)
0.642689 0.0053     0.645907 0.0064   0.6740
 k(trk length)     0.641495       0.639888 0.0072     k(tk ln/col)
0.642205 0.0044     0.645665 0.0020   0.8184
 rem life(col)   6.6728E+03     6.7885E+03 0.0062     k(col/abs/tk ln)
0.643300 0.0041     0.645369 0.0026
 rem life(abs)   6.7084E+03     6.8031E+03 0.0060     life(col/abs/tl)
6.8019E+03 0.0050   6.8090E+03 0.0049
 source points generated   5042

  estimator     cycle    56   ave of     6 cycles      combination
simple average    combined average     corr
 k(collision)      0.644038       0.644442 0.0017     k(col/abs)
0.645066 0.0025     0.644085 0.0018   0.7718
 k(absorption)     0.646693       0.645691 0.0035     k(abs/tk ln)
0.640587 0.0054     0.645568 0.0052   0.3684
 k(trk length)     0.613455       0.635482 0.0091     k(tk ln/col)
0.639962 0.0051     0.645256 0.0021   0.5867
 rem life(col)   6.8959E+03     6.8064E+03 0.0057     k(col/abs/tk ln)
0.641872 0.0040     0.644875 0.0023
 rem life(abs)   6.9188E+03     6.8224E+03 0.0056     life(col/abs/tl)
6.8208E+03 0.0049   6.8224E+03 0.0060
 source points generated   4989
```

```
  estimator     cycle    57   ave of     7 cycles      combination
simple average    combined average     corr
 k(collision)      0.620764       0.641060 0.0055     k(col/abs)
0.641730 0.0056     0.640905 0.0064   0.9340
 k(absorption)     0.622664       0.642401 0.0059     k(abs/tk ln)
0.640523 0.0046     0.641107 0.0047  -0.3119
 k(trk length)     0.657622       0.638645 0.0091     k(tk ln/col)
0.639852 0.0043     0.640271 0.0041  -0.3977
 rem life(col)   6.8070E+03     6.8065E+03 0.0048     k(col/abs/tk ln)
0.640702 0.0039     0.639875 0.0049
 rem life(abs)   6.8199E+03     6.8220E+03 0.0048     life(col/abs/tl)
6.8238E+03 0.0042   6.8334E+03 0.0058
 source points generated   4833

  estimator     cycle    58   ave of     8 cycles      combination
simple average    combined average     corr
 k(collision)      0.653150       0.642571 0.0053     k(col/abs)
0.642607 0.0050     0.642613 0.0054   0.8663
 k(absorption)     0.644334       0.642643 0.0052     k(abs/tk ln)
0.641530 0.0043     0.641929 0.0041  -0.2693
 k(trk length)     0.652819       0.640417 0.0083     k(tk ln/col)
0.641494 0.0045     0.641887 0.0044  -0.1880
 rem life(col)   6.7702E+03     6.8020E+03 0.0042     k(col/abs/tk ln)
0.641877 0.0038     0.641936 0.0045
 rem life(abs)   6.7969E+03     6.8189E+03 0.0041     life(col/abs/tl)
6.8220E+03 0.0036   6.8338E+03 0.0052
 source points generated   5282

  estimator     cycle    59   ave of     9 cycles      combination
simple average    combined average     corr
 k(collision)      0.643057       0.642625 0.0046     k(col/abs)
0.642674 0.0044     0.642682 0.0047   0.8663
 k(absorption)     0.643363       0.642723 0.0045     k(abs/tk ln)
0.642683 0.0042     0.642701 0.0038  -0.2317
 k(trk length)     0.660462       0.642644 0.0081     k(tk ln/col)
0.642635 0.0043     0.642630 0.0040  -0.1622
 rem life(col)   6.8749E+03     6.8101E+03 0.0039     k(col/abs/tk ln)
0.642664 0.0036     0.642683 0.0040
 rem life(abs)   6.8722E+03     6.8248E+03 0.0038     life(col/abs/tl)
6.8267E+03 0.0033   6.8366E+03 0.0041
 source points generated   4888

  estimator     cycle    60   ave of    10 cycles      combination
simple average    combined average     corr
 k(collision)      0.635417       0.641904 0.0043     k(col/abs)
0.641871 0.0042     0.641870 0.0044   0.8757
 k(absorption)     0.633874       0.641838 0.0043     k(abs/tk ln)
0.641946 0.0039     0.641900 0.0036  -0.1775
 k(trk length)     0.636746       0.642054 0.0073     k(tk ln/col)
0.641979 0.0040     0.641946 0.0037  -0.1227
 rem life(col)   6.6569E+03     6.7947E+03 0.0042     k(col/abs/tk ln)
0.641932 0.0034     0.641914 0.0038
 rem life(abs)   6.6355E+03     6.8059E+03 0.0044     life(col/abs/tl)
6.8106E+03 0.0038   6.8213E+03 0.0038
```

```
 source points generated   4951

  estimator     cycle    61   ave of    11 cycles      combination
simple average    combined average     corr
 k(collision)      0.639564       0.641691 0.0039     k(col/abs)
0.641567 0.0038     0.641572 0.0040   0.8751
 k(absorption)     0.637480       0.641442 0.0039     k(abs/tk ln)
0.642216 0.0036     0.641890 0.0032  -0.2049
 k(trk length)     0.652355       0.642991 0.0068     k(tk ln/col)
0.642341 0.0037     0.642051 0.0034  -0.1376
 rem life(col)   6.6767E+03     6.7840E+03 0.0041     k(col/abs/tk ln)
0.642041 0.0031     0.641932 0.0034
 rem life(abs)   6.7031E+03     6.7965E+03 0.0042     life(col/abs/tl)
6.8030E+03 0.0036   6.8217E+03 0.0036
 source points generated   5033

  estimator     cycle    62   ave of    12 cycles      combination
simple average    combined average     corr
 k(collision)      0.650291       0.642408 0.0037     k(col/abs)
0.641867 0.0035     0.641749 0.0038   0.8193
 k(absorption)     0.640058       0.641326 0.0036     k(abs/tk ln)
0.641988 0.0033     0.641707 0.0030  -0.1996
 k(trk length)     0.638897       0.642650 0.0062     k(tk ln/col)
0.642529 0.0034     0.642479 0.0031  -0.1564
 rem life(col)   6.7016E+03     6.7771E+03 0.0039     k(col/abs/tk ln)
0.642128 0.0028     0.641948 0.0031
 rem life(abs)   6.7008E+03     6.7886E+03 0.0040     life(col/abs/tl)
6.7964E+03 0.0034   6.8205E+03 0.0034
 source points generated   5076

  estimator     cycle    63   ave of    13 cycles      combination
simple average    combined average     corr
 k(collision)      0.640172       0.642236 0.0035     k(col/abs)
0.641802 0.0032     0.641703 0.0034   0.8151
 k(absorption)     0.641879       0.641369 0.0033     k(abs/tk ln)
0.641761 0.0030     0.641592 0.0027  -0.2005
 k(trk length)     0.636194       0.642153 0.0058     k(tk ln/col)
0.642195 0.0031     0.642212 0.0029  -0.1441
 rem life(col)   6.9866E+03     6.7933E+03 0.0043     k(col/abs/tk ln)
0.641919 0.0026     0.641773 0.0029
 rem life(abs)   6.9472E+03     6.8008E+03 0.0041     life(col/abs/tl)
6.8085E+03 0.0036   6.8450E+03 0.0033
 source points generated   4934

  estimator     cycle    64   ave of    14 cycles      combination
simple average    combined average     corr
 k(collision)      0.623631       0.640907 0.0038     k(col/abs)
0.640741 0.0034     0.640603 0.0035   0.8379
 k(absorption)     0.630254       0.640575 0.0033     k(abs/tk ln)
0.640082 0.0038     0.640400 0.0032   0.0753
 k(trk length)     0.606248       0.639588 0.0067     k(tk ln/col)
0.640248 0.0042     0.640665 0.0038   0.2287
 rem life(col)   6.8980E+03     6.8007E+03 0.0041     k(col/abs/tk ln)
0.640357 0.0034     0.640354 0.0033
```

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 rem life(abs)   6.8944E+03     6.8075E+03 0.0039     life(col/abs/tl)
6.8153E+03 0.0035   6.8524E+03 0.0033
 source points generated   4872

  estimator     cycle    65   ave of    15 cycles      combination
simple average    combined average     corr
 k(collision)      0.640900       0.640907 0.0036     k(col/abs)
0.640806 0.0032     0.640725 0.0032   0.8361
 k(absorption)     0.642542       0.640706 0.0031     k(abs/tk ln)
0.639662 0.0036     0.640342 0.0030   0.0573
 k(trk length)     0.625024       0.638617 0.0064     k(tk ln/col)
0.639762 0.0040     0.640508 0.0035   0.2222
 rem life(col)   6.8510E+03     6.8041E+03 0.0039     k(col/abs/tk ln)
0.640077 0.0032     0.640299 0.0031
 rem life(abs)   6.8290E+03     6.8089E+03 0.0036     life(col/abs/tl)
6.8177E+03 0.0033   6.8559E+03 0.0032
 source points generated   5129

  estimator     cycle    66   ave of    16 cycles      combination
simple average    combined average     corr
 k(collision)      0.631801       0.640338 0.0034     k(col/abs)
0.640418 0.0030     0.640493 0.0030   0.8314
 k(absorption)     0.637400       0.640499 0.0029     k(abs/tk ln)
0.639057 0.0035     0.640041 0.0029   0.0832
 k(trk length)     0.622568       0.637614 0.0062     k(tk ln/col)
0.638976 0.0039     0.639912 0.0035   0.2730
 rem life(col)   6.9249E+03     6.8116E+03 0.0038     k(col/abs/tk ln)
0.639484 0.0032     0.640018 0.0029
 rem life(abs)   6.9098E+03     6.8152E+03 0.0035     life(col/abs/tl)
6.8244E+03 0.0032   6.8625E+03 0.0032
 source points generated   4906

  estimator     cycle    67   ave of    17 cycles      combination
simple average    combined average     corr
 k(collision)      0.646139       0.640679 0.0033     k(col/abs)
0.640510 0.0029     0.640369 0.0028   0.8024
 k(absorption)     0.637814       0.640342 0.0027     k(abs/tk ln)
0.639398 0.0034     0.640042 0.0027   0.0610
 k(trk length)     0.651904       0.638455 0.0060     k(tk ln/col)
0.639567 0.0038     0.640364 0.0033   0.2985
 rem life(col)   6.9122E+03     6.8176E+03 0.0036     k(col/abs/tk ln)
0.639825 0.0030     0.639951 0.0027
 rem life(abs)   6.9411E+03     6.8226E+03 0.0035     life(col/abs/tl)
6.8291E+03 0.0031   6.8583E+03 0.0028
 source points generated   5110

  estimator     cycle    68   ave of    18 cycles      combination
simple average    combined average     corr
 k(collision)      0.656011       0.641531 0.0034     k(col/abs)
0.641126 0.0029     0.640689 0.0028   0.8068
 k(absorption)     0.647186       0.640722 0.0027     k(abs/tk ln)
0.639378 0.0032     0.640260 0.0025   0.0331
 k(trk length)     0.630877       0.638034 0.0057     k(tk ln/col)
0.639782 0.0036     0.640826 0.0033   0.2264
```

```
 rem life(col)   6.7030E+03     6.8112E+03 0.0036     k(col/abs/tk ln)
0.640095 0.0029     0.640027 0.0026
 rem life(abs)   6.7719E+03     6.8198E+03 0.0033     life(col/abs/tl)
6.8268E+03 0.0029   6.8570E+03 0.0028
 source points generated   5063

  estimator     cycle    69   ave of    19 cycles      combination
simple average    combined average     corr
 k(collision)      0.639288       0.641413 0.0032     k(col/abs)
0.640993 0.0027     0.640542 0.0026   0.8073
 k(absorption)     0.637888       0.640573 0.0025     k(abs/tk ln)
0.639588 0.0030     0.640232 0.0024   0.0174
 k(trk length)     0.648866       0.638604 0.0054     k(tk ln/col)
0.640008 0.0034     0.640849 0.0031   0.2135
 rem life(col)   6.9884E+03     6.8205E+03 0.0036     k(col/abs/tk ln)
0.640196 0.0027     0.640008 0.0025
 rem life(abs)   6.9671E+03     6.8275E+03 0.0033     life(col/abs/tl)
6.8325E+03 0.0029   6.8525E+03 0.0024
 source points generated   4921

  estimator     cycle    70   ave of    20 cycles      combination
simple average    combined average     corr
 k(collision)      0.627496       0.640717 0.0032     k(col/abs)
0.640261 0.0028     0.639810 0.0028   0.8308
 k(absorption)     0.625234       0.639806 0.0027     k(abs/tk ln)
0.639066 0.0030     0.639512 0.0025   0.0531
 k(trk length)     0.633036       0.638326 0.0052     k(tk ln/col)
0.639521 0.0033     0.640187 0.0031   0.2287
 rem life(col)   7.0335E+03     6.8312E+03 0.0038     k(col/abs/tk ln)
0.639616 0.0027     0.639297 0.0026
 rem life(abs)   7.0338E+03     6.8378E+03 0.0035     life(col/abs/tl)
6.8417E+03 0.0031   6.8604E+03 0.0025
 source points generated   4933

  estimator     cycle    71   ave of    21 cycles      combination
simple average    combined average     corr
 k(collision)      0.661853       0.641723 0.0034     k(col/abs)
0.641104 0.0030     0.640279 0.0029   0.8579
 k(absorption)     0.654087       0.640486 0.0028     k(abs/tk ln)
0.639579 0.0029     0.640096 0.0026   0.0908
 k(trk length)     0.645593       0.638672 0.0050     k(tk ln/col)
0.640197 0.0033     0.640894 0.0033   0.2521
 rem life(col)   6.7698E+03     6.8282E+03 0.0036     k(col/abs/tk ln)
0.640294 0.0028     0.639589 0.0027
 rem life(abs)   6.7950E+03     6.8358E+03 0.0033     life(col/abs/tl)
6.8395E+03 0.0029   6.8586E+03 0.0024
 source points generated   5241

  estimator     cycle    72   ave of    22 cycles      combination
simple average    combined average     corr
 k(collision)      0.643743       0.641815 0.0033     k(col/abs)
0.641205 0.0028     0.640392 0.0028   0.8581
 k(absorption)     0.642877       0.640594 0.0026     k(abs/tk ln)
0.639698 0.0028     0.640209 0.0025   0.0933
```

```
 k(trk length)     0.641518       0.638801 0.0047     k(tk ln/col)
0.640308 0.0032     0.640997 0.0031   0.2535
 rem life(col)   6.7197E+03     6.8233E+03 0.0035     k(col/abs/tk ln)
0.640404 0.0027     0.639712 0.0025
 rem life(abs)   6.7106E+03     6.8301E+03 0.0033     life(col/abs/tl)
6.8351E+03 0.0029   6.8578E+03 0.0023
 source points generated   4878

  estimator     cycle    73   ave of    23 cycles      combination
simple average    combined average     corr
 k(collision)      0.617578       0.640761 0.0035     k(col/abs)
0.640081 0.0032     0.639387 0.0033   0.8873
 k(absorption)     0.613142       0.639401 0.0031     k(abs/tk ln)
0.639134 0.0028     0.639233 0.0027   0.0612
 k(trk length)     0.640340       0.638868 0.0045     k(tk ln/col)
0.639815 0.0032     0.640099 0.0032   0.2136
 rem life(col)   6.6345E+03     6.8151E+03 0.0036     k(col/abs/tk ln)
0.639677 0.0028     0.638761 0.0028
 rem life(abs)   6.6359E+03     6.8217E+03 0.0034     life(col/abs/tl)
6.8283E+03 0.0029   6.8568E+03 0.0022
 source points generated   4832

  estimator     cycle    74   ave of    24 cycles      combination
simple average    combined average     corr
 k(collision)      0.635358       0.640536 0.0034     k(col/abs)
0.640063 0.0031     0.639644 0.0031   0.8682
 k(absorption)     0.643927       0.639589 0.0030     k(abs/tk ln)
0.638966 0.0027     0.639200 0.0026   0.0416
 k(trk length)     0.626267       0.638343 0.0044     k(tk ln/col)
0.639440 0.0031     0.639791 0.0031   0.2280
 rem life(col)   6.6837E+03     6.8096E+03 0.0035     k(col/abs/tk ln)
0.639489 0.0027     0.638865 0.0027
 rem life(abs)   6.6495E+03     6.8145E+03 0.0034     life(col/abs/tl)
6.8216E+03 0.0030   6.8489E+03 0.0024
 source points generated   5183

  estimator     cycle    75   ave of    25 cycles      combination
simple average    combined average     corr
 k(collision)      0.631907       0.640191 0.0033     k(col/abs)
0.639892 0.0030     0.639624 0.0030   0.8564
 k(absorption)     0.639667       0.639593 0.0029     k(abs/tk ln)
0.638820 0.0026     0.639114 0.0025   0.0412
 k(trk length)     0.630945       0.638047 0.0043     k(tk ln/col)
0.639119 0.0030     0.639458 0.0030   0.2413
 rem life(col)   6.8661E+03     6.8119E+03 0.0034     k(col/abs/tk ln)
0.639277 0.0026     0.638873 0.0025
 rem life(abs)   6.8571E+03     6.8162E+03 0.0033     life(col/abs/tl)
6.8235E+03 0.0029   6.8511E+03 0.0023
 source points generated   4972

  estimator     cycle    76   ave of    26 cycles      combination
simple average    combined average     corr
 k(collision)      0.645347       0.640389 0.0032     k(col/abs)
0.639958 0.0029     0.639582 0.0029   0.8481
```

```
 k(absorption)     0.637860       0.639526 0.0028     k(abs/tk ln)
0.638903 0.0025     0.639141 0.0024   0.0377
 k(trk length)     0.644086       0.638279 0.0041     k(tk ln/col)
0.639334 0.0029     0.639670 0.0029   0.2478
 rem life(col)   7.0084E+03     6.8194E+03 0.0034     k(col/abs/tk ln)
0.639398 0.0025     0.638837 0.0025
 rem life(abs)   7.0388E+03     6.8248E+03 0.0034     life(col/abs/tl)
6.8305E+03 0.0029   6.8542E+03 0.0022
 source points generated   5111

  estimator     cycle    77   ave of    27 cycles      combination
simple average    combined average     corr
 k(collision)      0.644188       0.640530 0.0031     k(col/abs)
0.640181 0.0028     0.639907 0.0028   0.8453
 k(absorption)     0.647775       0.639831 0.0027     k(abs/tk ln)
0.639368 0.0025     0.639558 0.0024   0.0783
 k(trk length)     0.655166       0.638905 0.0041     k(tk ln/col)
0.639717 0.0028     0.640006 0.0028   0.2571
 rem life(col)   6.8451E+03     6.8204E+03 0.0033     k(col/abs/tk ln)
0.639755 0.0025     0.639395 0.0024
 rem life(abs)   6.8420E+03     6.8254E+03 0.0033     life(col/abs/tl)
6.8313E+03 0.0028   6.8557E+03 0.0021
 source points generated   4962

  estimator     cycle    78   ave of    28 cycles      combination
simple average    combined average     corr
 k(collision)      0.637710       0.640429 0.0030     k(col/abs)
0.640124 0.0027     0.639883 0.0027   0.8445
 k(absorption)     0.639453       0.639818 0.0026     k(abs/tk ln)
0.639226 0.0025     0.639472 0.0023   0.0787
 k(trk length)     0.631323       0.638634 0.0039     k(tk ln/col)
0.639532 0.0028     0.639857 0.0027   0.2609
 rem life(col)   6.6332E+03     6.8137E+03 0.0033     k(col/abs/tk ln)
0.639627 0.0024     0.639317 0.0024
 rem life(abs)   6.6260E+03     6.8183E+03 0.0033     life(col/abs/tl)
6.8263E+03 0.0028   6.8560E+03 0.0021
 source points generated   4956

  estimator     cycle    79   ave of    29 cycles      combination
simple average    combined average     corr
 k(collision)      0.643273       0.640527 0.0029     k(col/abs)
0.640315 0.0026     0.640169 0.0026   0.8398
 k(absorption)     0.648070       0.640103 0.0026     k(abs/tk ln)
0.639626 0.0024     0.639834 0.0023   0.1118
 k(trk length)     0.653584       0.639149 0.0039     k(tk ln/col)
0.639838 0.0027     0.640107 0.0026   0.2659
 rem life(col)   6.7974E+03     6.8131E+03 0.0032     k(col/abs/tk ln)
0.639926 0.0024     0.639774 0.0023
 rem life(abs)   6.7665E+03     6.8165E+03 0.0032     life(col/abs/tl)
6.8256E+03 0.0027   6.8577E+03 0.0021
 source points generated   5075

  estimator     cycle    80   ave of    30 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.635998       0.640376 0.0028     k(col/abs)
0.640040 0.0026     0.639868 0.0026   0.8321
 k(absorption)     0.628120       0.639703 0.0026     k(abs/tk ln)
0.639489 0.0024     0.639575 0.0022   0.0954
 k(trk length)     0.642940       0.639276 0.0038     k(tk ln/col)
0.639826 0.0026     0.640037 0.0025   0.2602
 rem life(col)   6.7742E+03     6.8118E+03 0.0031     k(col/abs/tk ln)
0.639785 0.0023     0.639534 0.0023
 rem life(abs)   6.7986E+03     6.8159E+03 0.0031     life(col/abs/tl)
6.8247E+03 0.0026   6.8564E+03 0.0020
 source points generated   4950

  estimator     cycle    81   ave of    31 cycles      combination
simple average    combined average     corr
 k(collision)      0.668908       0.641297 0.0031     k(col/abs)
0.640672 0.0027     0.640078 0.0026   0.8174
 k(absorption)     0.650356       0.640047 0.0025     k(abs/tk ln)
0.640116 0.0025     0.640083 0.0023   0.1641
 k(trk length)     0.667438       0.640184 0.0039     k(tk ln/col)
0.640740 0.0029     0.640952 0.0029   0.3851
 rem life(col)   6.7049E+03     6.8084E+03 0.0031     k(col/abs/tk ln)
0.640509 0.0025     0.639744 0.0024
 rem life(abs)   6.7377E+03     6.8134E+03 0.0030     life(col/abs/tl)
6.8217E+03 0.0026   6.8531E+03 0.0021
 source points generated   5241

  estimator     cycle    82   ave of    32 cycles      combination
simple average    combined average     corr
 k(collision)      0.637029       0.641163 0.0030     k(col/abs)
0.640433 0.0026     0.639823 0.0026   0.8114
 k(absorption)     0.629006       0.639702 0.0025     k(abs/tk ln)
0.639801 0.0025     0.639754 0.0023   0.1842
 k(trk length)     0.631129       0.639901 0.0038     k(tk ln/col)
0.640532 0.0028     0.640778 0.0028   0.3897
 rem life(col)   6.6568E+03     6.8037E+03 0.0031     k(col/abs/tk ln)
0.640255 0.0024     0.639466 0.0024
 rem life(abs)   6.6682E+03     6.8088E+03 0.0030     life(col/abs/tl)
6.8171E+03 0.0026   6.8481E+03 0.0022
 source points generated   4772

  estimator     cycle    83   ave of    33 cycles      combination
simple average    combined average     corr
 k(collision)      0.659700       0.641725 0.0030     k(col/abs)
0.640948 0.0026     0.640240 0.0027   0.8273
 k(absorption)     0.655166       0.640170 0.0025     k(abs/tk ln)
0.640362 0.0025     0.640266 0.0024   0.2468
 k(trk length)     0.661406       0.640553 0.0038     k(tk ln/col)
0.641139 0.0029     0.641378 0.0029   0.4370
 rem life(col)   6.7507E+03     6.8021E+03 0.0030     k(col/abs/tk ln)
0.640816 0.0025     0.639918 0.0025
 rem life(abs)   6.7696E+03     6.8076E+03 0.0029     life(col/abs/tl)
6.8148E+03 0.0025   6.8402E+03 0.0023
 source points generated   5157
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```
  estimator     cycle    84   ave of    34 cycles      combination
simple average    combined average     corr
 k(collision)      0.612867       0.640876 0.0032     k(col/abs)
0.640119 0.0029     0.639385 0.0029   0.8590
 k(absorption)     0.612683       0.639362 0.0028     k(abs/tk ln)
0.639887 0.0026     0.639691 0.0025   0.2463
 k(trk length)     0.635761       0.640412 0.0037     k(tk ln/col)
0.640644 0.0029     0.640702 0.0029   0.4217
 rem life(col)   6.8791E+03     6.8043E+03 0.0029     k(col/abs/tk ln)
0.640217 0.0026     0.639250 0.0026
 rem life(abs)   6.8930E+03     6.8102E+03 0.0029     life(col/abs/tl)
6.8174E+03 0.0025   6.8427E+03 0.0023
 source points generated   4684

  estimator     cycle    85   ave of    35 cycles      combination
simple average    combined average     corr
 k(collision)      0.642077       0.640911 0.0031     k(col/abs)
0.640115 0.0028     0.639348 0.0028   0.8582
 k(absorption)     0.637858       0.639319 0.0027     k(abs/tk ln)
0.639907 0.0025     0.639687 0.0024   0.2451
 k(trk length)     0.643345       0.640496 0.0036     k(tk ln/col)
0.640703 0.0028     0.640755 0.0028   0.4220
 rem life(col)   6.8920E+03     6.8068E+03 0.0028     k(col/abs/tk ln)
0.640242 0.0025     0.639231 0.0025
 rem life(abs)   6.8894E+03     6.8124E+03 0.0028     life(col/abs/tl)
6.8192E+03 0.0024   6.8435E+03 0.0022
 source points generated   5233

  estimator     cycle    86   ave of    36 cycles      combination
simple average    combined average     corr
 k(collision)      0.632833       0.640686 0.0030     k(col/abs)
0.639892 0.0027     0.639126 0.0028   0.8602
 k(absorption)     0.631330       0.639097 0.0026     k(abs/tk ln)
0.640046 0.0024     0.639690 0.0024   0.2086
 k(trk length)     0.658474       0.640995 0.0036     k(tk ln/col)
0.640841 0.0028     0.640800 0.0028   0.3841
 rem life(col)   6.7278E+03     6.8046E+03 0.0028     k(col/abs/tk ln)
0.640259 0.0025     0.639270 0.0024
 rem life(abs)   6.7270E+03     6.8100E+03 0.0027     life(col/abs/tl)
6.8175E+03 0.0024   6.8434E+03 0.0021
 source points generated   4919

  estimator     cycle    87   ave of    37 cycles      combination
simple average    combined average     corr
 k(collision)      0.649712       0.640930 0.0030     k(col/abs)
0.640042 0.0027     0.639165 0.0027   0.8571
 k(absorption)     0.641218       0.639154 0.0026     k(abs/tk ln)
0.640050 0.0024     0.639715 0.0023   0.2077
 k(trk length)     0.639173       0.640946 0.0035     k(tk ln/col)
0.640938 0.0027     0.640936 0.0027   0.3781
 rem life(col)   6.7171E+03     6.8023E+03 0.0027     k(col/abs/tk ln)
0.640343 0.0024     0.639243 0.0024
 rem life(abs)   6.7374E+03     6.8081E+03 0.0027     life(col/abs/tl)
6.8160E+03 0.0023   6.8435E+03 0.0021
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 source points generated   5135

  estimator     cycle    88   ave of    38 cycles      combination
simple average    combined average     corr
 k(collision)      0.657791       0.641374 0.0030     k(col/abs)
0.640495 0.0027     0.639645 0.0028   0.8653
 k(absorption)     0.656735       0.639617 0.0026     k(abs/tk ln)
0.640634 0.0025     0.640209 0.0024   0.2754
 k(trk length)     0.667715       0.641650 0.0036     k(tk ln/col)
0.641512 0.0028     0.641470 0.0027   0.4213
 rem life(col)   6.6894E+03     6.7993E+03 0.0027     k(col/abs/tk ln)
0.640880 0.0025     0.639804 0.0025
 rem life(abs)   6.6975E+03     6.8052E+03 0.0026     life(col/abs/tl)
6.8128E+03 0.0023   6.8387E+03 0.0021
 source points generated   5050

  estimator     cycle    89   ave of    39 cycles      combination
simple average    combined average     corr
 k(collision)      0.645700       0.641485 0.0029     k(col/abs)
0.640713 0.0026     0.640079 0.0027   0.8587
 k(absorption)     0.652232       0.639940 0.0026     k(abs/tk ln)
0.641215 0.0026     0.640576 0.0025   0.3217
 k(trk length)     0.674350       0.642489 0.0037     k(tk ln/col)
0.641987 0.0028     0.641786 0.0027   0.4146
 rem life(col)   6.7669E+03     6.7985E+03 0.0026     k(col/abs/tk ln)
0.641305 0.0025     0.640454 0.0026
 rem life(abs)   6.7223E+03     6.8030E+03 0.0026     life(col/abs/tl)
6.8106E+03 0.0023   6.8327E+03 0.0021
 source points generated   4974

  estimator     cycle    90   ave of    40 cycles      combination
simple average    combined average     corr
 k(collision)      0.629708       0.641190 0.0029     k(col/abs)
0.640460 0.0026     0.639831 0.0026   0.8613
 k(absorption)     0.631539       0.639730 0.0025     k(abs/tk ln)
0.641288 0.0025     0.640528 0.0024   0.2957
 k(trk length)     0.656726       0.642845 0.0037     k(tk ln/col)
0.642018 0.0027     0.641705 0.0027   0.3803
 rem life(col)   7.1796E+03     6.8080E+03 0.0029     k(col/abs/tk ln)
0.641255 0.0025     0.640405 0.0025
 rem life(abs)   7.1808E+03     6.8125E+03 0.0029     life(col/abs/tl)
6.8188E+03 0.0025   6.8416E+03 0.0021
 source points generated   4840

  estimator     cycle    91   ave of    41 cycles      combination
simple average    combined average     corr
 k(collision)      0.659364       0.641634 0.0029     k(col/abs)
0.640838 0.0026     0.640074 0.0026   0.8667
 k(absorption)     0.652534       0.640043 0.0025     k(abs/tk ln)
0.641614 0.0025     0.640842 0.0024   0.3154
 k(trk length)     0.656793       0.643185 0.0036     k(tk ln/col)
0.642409 0.0027     0.642129 0.0027   0.4004
 rem life(col)   6.8233E+03     6.8084E+03 0.0028     k(col/abs/tk ln)
0.641620 0.0025     0.640643 0.0025
```

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 rem life(abs)   6.8615E+03     6.8137E+03 0.0028     life(col/abs/tl)
6.8189E+03 0.0025   6.8383E+03 0.0021
 source points generated   5234

  estimator     cycle    92   ave of    42 cycles      combination
simple average    combined average     corr
 k(collision)      0.655047       0.641953 0.0029     k(col/abs)
0.641114 0.0026     0.640267 0.0026   0.8698
 k(absorption)     0.649827       0.640276 0.0025     k(abs/tk ln)
0.641893 0.0025     0.641084 0.0024   0.3297
 k(trk length)     0.656835       0.643510 0.0035     k(tk ln/col)
0.642732 0.0027     0.642449 0.0027   0.4151
 rem life(col)   6.6737E+03     6.8052E+03 0.0028     k(col/abs/tk ln)
0.641913 0.0024     0.640840 0.0025
 rem life(abs)   6.6859E+03     6.8106E+03 0.0028     life(col/abs/tl)
6.8167E+03 0.0024   6.8386E+03 0.0021
 source points generated   4958

  estimator     cycle    93   ave of    43 cycles      combination
simple average    combined average     corr
 k(collision)      0.640783       0.641926 0.0028     k(col/abs)
0.640990 0.0025     0.640144 0.0026   0.8631
 k(absorption)     0.630733       0.640054 0.0025     k(abs/tk ln)
0.641781 0.0024     0.640943 0.0024   0.3264
 k(trk length)     0.643475       0.643509 0.0035     k(tk ln/col)
0.642717 0.0026     0.642431 0.0026   0.4150
 rem life(col)   6.8764E+03     6.8068E+03 0.0028     k(col/abs/tk ln)
0.641830 0.0024     0.640739 0.0025
 rem life(abs)   6.8622E+03     6.8118E+03 0.0027     life(col/abs/tl)
6.8179E+03 0.0024   6.8394E+03 0.0020
 source points generated   4878

  estimator     cycle    94   ave of    44 cycles      combination
simple average    combined average     corr
 k(collision)      0.633709       0.641739 0.0027     k(col/abs)
0.640857 0.0025     0.640039 0.0025   0.8626
 k(absorption)     0.636559       0.639974 0.0024     k(abs/tk ln)
0.641714 0.0024     0.640871 0.0023   0.3272
 k(trk length)     0.641086       0.643454 0.0034     k(tk ln/col)
0.642597 0.0026     0.642293 0.0026   0.4153
 rem life(col)   6.5932E+03     6.8020E+03 0.0028     k(col/abs/tk ln)
0.641723 0.0023     0.640670 0.0024
 rem life(abs)   6.5612E+03     6.8061E+03 0.0028     life(col/abs/tl)
6.8135E+03 0.0024   6.8385E+03 0.0020
 source points generated   4939

  estimator     cycle    95   ave of    45 cycles      combination
simple average    combined average     corr
 k(collision)      0.653304       0.641996 0.0027     k(col/abs)
0.641055 0.0024     0.640142 0.0025   0.8631
 k(absorption)     0.646290       0.640115 0.0024     k(abs/tk ln)
0.642033 0.0024     0.641037 0.0023   0.3384
 k(trk length)     0.665855       0.643952 0.0034     k(tk ln/col)
0.642974 0.0026     0.642593 0.0026   0.4335
```

```
 rem life(col)   6.7249E+03     6.8002E+03 0.0027     k(col/abs/tk ln)
0.642021 0.0023     0.640793 0.0024
 rem life(abs)   6.7190E+03     6.8042E+03 0.0027     life(col/abs/tl)
6.8120E+03 0.0024   6.8384E+03 0.0020
 source points generated   5140

  estimator     cycle    96   ave of    46 cycles      combination
simple average    combined average     corr
 k(collision)      0.642941       0.642017 0.0027     k(col/abs)
0.641050 0.0024     0.640117 0.0025   0.8626
 k(absorption)     0.638720       0.640084 0.0023     k(abs/tk ln)
0.642181 0.0023     0.641075 0.0023   0.3314
 k(trk length)     0.658938       0.644278 0.0034     k(tk ln/col)
0.643147 0.0025     0.642689 0.0025   0.4304
 rem life(col)   6.7843E+03     6.7999E+03 0.0027     k(col/abs/tk ln)
0.642126 0.0023     0.640829 0.0024
 rem life(abs)   6.8002E+03     6.8041E+03 0.0027     life(col/abs/tl)
6.8119E+03 0.0023   6.8383E+03 0.0019
 source points generated   4918

  estimator     cycle    97   ave of    47 cycles      combination
simple average    combined average     corr
 k(collision)      0.637806       0.641927 0.0026     k(col/abs)
0.640937 0.0023     0.639998 0.0024   0.8626
 k(absorption)     0.633595       0.639946 0.0023     k(abs/tk ln)
0.642214 0.0023     0.641036 0.0022   0.3193
 k(trk length)     0.653820       0.644481 0.0033     k(tk ln/col)
0.643204 0.0025     0.642687 0.0025   0.4227
 rem life(col)   6.9198E+03     6.8025E+03 0.0026     k(col/abs/tk ln)
0.642118 0.0022     0.640791 0.0023
 rem life(abs)   6.9070E+03     6.8063E+03 0.0026     life(col/abs/tl)
6.8144E+03 0.0023   6.8414E+03 0.0020
 source points generated   4961

  estimator     cycle    98   ave of    48 cycles      combination
simple average    combined average     corr
 k(collision)      0.634109       0.641764 0.0026     k(col/abs)
0.640862 0.0023     0.640011 0.0023   0.8573
 k(absorption)     0.640607       0.639960 0.0022     k(abs/tk ln)
0.642119 0.0022     0.640990 0.0022   0.3168
 k(trk length)     0.634741       0.644278 0.0032     k(tk ln/col)
0.643021 0.0025     0.642508 0.0024   0.4282
 rem life(col)   6.9291E+03     6.8051E+03 0.0026     k(col/abs/tk ln)
0.642001 0.0022     0.640771 0.0022
 rem life(abs)   6.9189E+03     6.8087E+03 0.0026     life(col/abs/tl)
6.8163E+03 0.0023   6.8418E+03 0.0019
 source points generated   4972

  estimator     cycle    99   ave of    49 cycles      combination
simple average    combined average     corr
 k(collision)      0.633111       0.641588 0.0025     k(col/abs)
0.640699 0.0023     0.639850 0.0023   0.8590
 k(absorption)     0.632621       0.639810 0.0022     k(abs/tk ln)
0.642024 0.0022     0.640880 0.0022   0.3170
```

```
 k(trk length)     0.642297       0.644237 0.0032     k(tk ln/col)
0.642912 0.0024     0.642384 0.0024   0.4277
 rem life(col)   7.0036E+03     6.8091E+03 0.0026     k(col/abs/tk ln)
0.641878 0.0022     0.640658 0.0022
 rem life(abs)   6.9986E+03     6.8125E+03 0.0026     life(col/abs/tl)
6.8203E+03 0.0023   6.8460E+03 0.0020
 source points generated   4993

  estimator     cycle   100   ave of    50 cycles      combination
simple average    combined average     corr
 k(collision)      0.628009       0.641316 0.0025     k(col/abs)
0.640347 0.0023     0.639617 0.0024   0.8583
 k(absorption)     0.618217       0.639378 0.0022     k(abs/tk ln)
0.641667 0.0022     0.640550 0.0022   0.3412
 k(trk length)     0.630143       0.643956 0.0031     k(tk ln/col)
0.642636 0.0024     0.642107 0.0024   0.4410
 rem life(col)   6.7525E+03     6.8080E+03 0.0026     k(col/abs/tk ln)
0.641550 0.0022     0.640438 0.0023
 rem life(abs)   6.7521E+03     6.8113E+03 0.0026     life(col/abs/tl)
6.8195E+03 0.0022   6.8463E+03 0.0020
 source points generated   5017

  estimator     cycle   101   ave of    51 cycles      combination
simple average    combined average     corr
 k(collision)      0.659616       0.641675 0.0025     k(col/abs)
0.640733 0.0023     0.640085 0.0024   0.8656
 k(absorption)     0.660433       0.639791 0.0023     k(abs/tk ln)
0.641854 0.0022     0.640978 0.0022   0.3219
 k(trk length)     0.641986       0.643917 0.0031     k(tk ln/col)
0.642796 0.0024     0.642403 0.0024   0.4256
 rem life(col)   6.7631E+03     6.8071E+03 0.0025     k(col/abs/tk ln)
0.641794 0.0022     0.640864 0.0023
 rem life(abs)   6.7751E+03     6.8106E+03 0.0025     life(col/abs/tl)
6.8182E+03 0.0022   6.8418E+03 0.0020
 source points generated   5307

  estimator     cycle   102   ave of    52 cycles      combination
simple average    combined average     corr
 k(collision)      0.645247       0.641743 0.0025     k(col/abs)
0.640810 0.0023     0.640172 0.0024   0.8658
 k(absorption)     0.644205       0.639876 0.0023     k(abs/tk ln)
0.642161 0.0022     0.641089 0.0022   0.3256
 k(trk length)     0.671460       0.644447 0.0031     k(tk ln/col)
0.643095 0.0024     0.642551 0.0024   0.4217
 rem life(col)   6.8849E+03     6.8086E+03 0.0025     k(col/abs/tk ln)
0.642022 0.0022     0.641013 0.0023
 rem life(abs)   6.8753E+03     6.8119E+03 0.0025     life(col/abs/tl)
6.8190E+03 0.0022   6.8410E+03 0.0019
 source points generated   4882

  estimator     cycle   103   ave of    53 cycles      combination
simple average    combined average     corr
 k(collision)      0.635817       0.641632 0.0024     k(col/abs)
0.640704 0.0022     0.640066 0.0023   0.8665
```

```
 k(absorption)     0.634579       0.639776 0.0022     k(abs/tk ln)
0.642144 0.0022     0.641044 0.0022   0.3222
 k(trk length)     0.647943       0.644513 0.0031     k(tk ln/col)
0.643072 0.0023     0.642500 0.0023   0.4180
 rem life(col)   6.7734E+03     6.8080E+03 0.0024     k(col/abs/tk ln)
0.641973 0.0021     0.640965 0.0022
 rem life(abs)   6.7682E+03     6.8110E+03 0.0024     life(col/abs/tl)
6.8181E+03 0.0021   6.8395E+03 0.0019
 source points generated   4942

  estimator     cycle   104   ave of    54 cycles      combination
simple average    combined average     corr
 k(collision)      0.645760       0.641708 0.0024     k(col/abs)
0.640806 0.0022     0.640206 0.0023   0.8663
 k(absorption)     0.646719       0.639905 0.0022     k(abs/tk ln)
0.642187 0.0021     0.641143 0.0021   0.3187
 k(trk length)     0.642144       0.644469 0.0030     k(tk ln/col)
0.643088 0.0023     0.642544 0.0023   0.4162
 rem life(col)   6.9820E+03     6.8112E+03 0.0024     k(col/abs/tk ln)
0.642027 0.0021     0.641073 0.0022
 rem life(abs)   6.9659E+03     6.8139E+03 0.0024     life(col/abs/tl)
6.8207E+03 0.0021   6.8419E+03 0.0019
 source points generated   5077

  estimator     cycle   105   ave of    55 cycles      combination
simple average    combined average     corr
 k(collision)      0.654204       0.641935 0.0024     k(col/abs)
0.641070 0.0022     0.640558 0.0023   0.8687
 k(absorption)     0.656427       0.640205 0.0022     k(abs/tk ln)
0.642297 0.0021     0.641418 0.0021   0.3022
 k(trk length)     0.640091       0.644389 0.0030     k(tk ln/col)
0.643162 0.0022     0.642706 0.0022   0.4050
 rem life(col)   6.8533E+03     6.8119E+03 0.0024     k(col/abs/tk ln)
0.642177 0.0021     0.641363 0.0022
 rem life(abs)   6.8723E+03     6.8150E+03 0.0024     life(col/abs/tl)
6.8218E+03 0.0021   6.8431E+03 0.0019
 source points generated   5083

  estimator     cycle   106   ave of    56 cycles      combination
simple average    combined average     corr
 k(collision)      0.650209       0.642083 0.0023     k(col/abs)
0.641258 0.0022     0.640818 0.0023   0.8690
 k(absorption)     0.652924       0.640432 0.0022     k(abs/tk ln)
0.642307 0.0021     0.641560 0.0020   0.2785
 k(trk length)     0.632755       0.644181 0.0029     k(tk ln/col)
0.643132 0.0022     0.642750 0.0022   0.3897
 rem life(col)   6.7099E+03     6.8101E+03 0.0024     k(col/abs/tk ln)
0.642232 0.0020     0.641513 0.0021
 rem life(abs)   6.7144E+03     6.8132E+03 0.0024     life(col/abs/tl)
6.8202E+03 0.0021   6.8420E+03 0.0018
 source points generated   4948

  estimator     cycle   107   ave of    57 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.630425       0.641879 0.0023     k(col/abs)
0.641071 0.0022     0.640622 0.0023   0.8711
 k(absorption)     0.630804       0.640263 0.0022     k(abs/tk ln)
0.642256 0.0020     0.641485 0.0020   0.2718
 k(trk length)     0.648027       0.644249 0.0029     k(tk ln/col)
0.643064 0.0022     0.642653 0.0022   0.3808
 rem life(col)   7.0050E+03     6.8135E+03 0.0024     k(col/abs/tk ln)
0.642130 0.0020     0.641426 0.0021
 rem life(abs)   7.0111E+03     6.8166E+03 0.0024     life(col/abs/tl)
6.8233E+03 0.0021   6.8448E+03 0.0018
 source points generated   4834

  estimator     cycle   108   ave of    58 cycles      combination
simple average    combined average     corr
 k(collision)      0.617192       0.641453 0.0024     k(col/abs)
0.640667 0.0022     0.640179 0.0023   0.8808
 k(absorption)     0.618071       0.639881 0.0022     k(abs/tk ln)
0.641936 0.0021     0.641187 0.0021   0.2970
 k(trk length)     0.629281       0.643991 0.0029     k(tk ln/col)
0.642722 0.0022     0.642328 0.0022   0.4011
 rem life(col)   6.8477E+03     6.8141E+03 0.0023     k(col/abs/tk ln)
0.641775 0.0020     0.641085 0.0021
 rem life(abs)   6.8445E+03     6.8171E+03 0.0023     life(col/abs/tl)
6.8238E+03 0.0020   6.8453E+03 0.0018
 source points generated   4902

  estimator     cycle   109   ave of    59 cycles      combination
simple average    combined average     corr
 k(collision)      0.624879       0.641172 0.0024     k(col/abs)
0.640462 0.0022     0.639958 0.0023   0.8790
 k(absorption)     0.632302       0.639752 0.0022     k(abs/tk ln)
0.641662 0.0021     0.640901 0.0021   0.3089
 k(trk length)     0.619270       0.643572 0.0029     k(tk ln/col)
0.642372 0.0022     0.641967 0.0022   0.4257
 rem life(col)   6.9190E+03     6.8159E+03 0.0023     k(col/abs/tk ln)
0.641499 0.0020     0.640765 0.0021
 rem life(abs)   6.9232E+03     6.8189E+03 0.0023     life(col/abs/tl)
6.8257E+03 0.0020   6.8473E+03 0.0018
 source points generated   5078

  estimator     cycle   110   ave of    60 cycles      combination
simple average    combined average     corr
 k(collision)      0.658613       0.641463 0.0024     k(col/abs)
0.640770 0.0022     0.640307 0.0023   0.8836
 k(absorption)     0.659236       0.640077 0.0022     k(abs/tk ln)
0.641942 0.0021     0.641226 0.0021   0.3275
 k(trk length)     0.657653       0.643806 0.0029     k(tk ln/col)
0.642635 0.0022     0.642250 0.0022   0.4387
 rem life(col)   6.7631E+03     6.8150E+03 0.0023     k(col/abs/tk ln)
0.641782 0.0021     0.641107 0.0021
 rem life(abs)   6.7710E+03     6.8181E+03 0.0023     life(col/abs/tl)
6.8251E+03 0.0020   6.8473E+03 0.0018
 source points generated   5240
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  estimator     cycle   111   ave of    61 cycles      combination
simple average    combined average     corr
 k(collision)      0.640526       0.641447 0.0023     k(col/abs)
0.640719 0.0022     0.640247 0.0023   0.8825
 k(absorption)     0.634802       0.639991 0.0022     k(abs/tk ln)
0.641861 0.0020     0.641144 0.0020   0.3291
 k(trk length)     0.639205       0.643731 0.0028     k(tk ln/col)
0.642589 0.0022     0.642213 0.0022   0.4388
 rem life(col)   6.8862E+03     6.8162E+03 0.0023     k(col/abs/tk ln)
0.641723 0.0020     0.641031 0.0021
 rem life(abs)   6.9092E+03     6.8196E+03 0.0022     life(col/abs/tl)
6.8259E+03 0.0020   6.8463E+03 0.0017
 source points generated   4869

  estimator     cycle   112   ave of    62 cycles      combination
simple average    combined average     corr
 k(collision)      0.648531       0.641562 0.0023     k(col/abs)
0.640824 0.0022     0.640342 0.0022   0.8831
 k(absorption)     0.645976       0.640087 0.0021     k(abs/tk ln)
0.641915 0.0020     0.641221 0.0020   0.3288
 k(trk length)     0.644492       0.643743 0.0028     k(tk ln/col)
0.642652 0.0022     0.642299 0.0022   0.4380
 rem life(col)   6.8550E+03     6.8168E+03 0.0022     k(col/abs/tk ln)
0.641797 0.0020     0.641099 0.0021
 rem life(abs)   6.8690E+03     6.8204E+03 0.0022     life(col/abs/tl)
6.8266E+03 0.0019   6.8468E+03 0.0017
 source points generated   5052

  estimator     cycle   113   ave of    63 cycles      combination
simple average    combined average     corr
 k(collision)      0.636804       0.641486 0.0023     k(col/abs)
0.640703 0.0021     0.640236 0.0022   0.8816
 k(absorption)     0.629551       0.639920 0.0021     k(abs/tk ln)
0.642081 0.0020     0.641230 0.0020   0.2801
 k(trk length)     0.675197       0.644243 0.0028     k(tk ln/col)
0.642864 0.0021     0.642361 0.0021   0.4066
 rem life(col)   6.9794E+03     6.8194E+03 0.0022     k(col/abs/tk ln)
0.641883 0.0020     0.641108 0.0020
 rem life(abs)   7.0181E+03     6.8236E+03 0.0022     life(col/abs/tl)
6.8294E+03 0.0020   6.8488E+03 0.0017
 source points generated   4938

  estimator     cycle   114   ave of    64 cycles      combination
simple average    combined average     corr
 k(collision)      0.643879       0.641523 0.0022     k(col/abs)
0.640774 0.0021     0.640347 0.0022   0.8806
 k(absorption)     0.646656       0.640025 0.0021     k(abs/tk ln)
0.642138 0.0020     0.641315 0.0020   0.2796
 k(trk length)     0.644808       0.644251 0.0028     k(tk ln/col)
0.642887 0.0021     0.642390 0.0021   0.4065
 rem life(col)   6.6733E+03     6.8171E+03 0.0022     k(col/abs/tk ln)
0.641933 0.0019     0.641211 0.0020
 rem life(abs)   6.6674E+03     6.8211E+03 0.0022     life(col/abs/tl)
6.8273E+03 0.0019   6.8477E+03 0.0017
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 source points generated   5083

  estimator     cycle   115   ave of    65 cycles      combination
simple average    combined average     corr
 k(collision)      0.633134       0.641394 0.0022     k(col/abs)
0.640601 0.0021     0.640209 0.0022   0.8801
 k(absorption)     0.625942       0.639808 0.0021     k(abs/tk ln)
0.642026 0.0019     0.641202 0.0020   0.2766
 k(trk length)     0.643789       0.644244 0.0027     k(tk ln/col)
0.642819 0.0021     0.642309 0.0021   0.4052
 rem life(col)   6.8740E+03     6.8180E+03 0.0022     k(col/abs/tk ln)
0.641816 0.0019     0.641116 0.0020
 rem life(abs)   6.9055E+03     6.8224E+03 0.0022     life(col/abs/tl)
6.8282E+03 0.0019   6.8478E+03 0.0017
 source points generated   4867

  estimator     cycle   116   ave of    66 cycles      combination
simple average    combined average     corr
 k(collision)      0.650308       0.641529 0.0022     k(col/abs)
0.640665 0.0021     0.640222 0.0022   0.8755
 k(absorption)     0.639328       0.639801 0.0021     k(abs/tk ln)
0.642100 0.0019     0.641236 0.0019   0.2750
 k(trk length)     0.654432       0.644399 0.0027     k(tk ln/col)
0.642964 0.0021     0.642448 0.0021   0.4103
 rem life(col)   6.6587E+03     6.8156E+03 0.0022     k(col/abs/tk ln)
0.641910 0.0019     0.641131 0.0020
 rem life(abs)   6.7014E+03     6.8206E+03 0.0022     life(col/abs/tl)
6.8265E+03 0.0019   6.8475E+03 0.0017
 source points generated   5156

  estimator     cycle   117   ave of    67 cycles      combination
simple average    combined average     corr
 k(collision)      0.638033       0.641477 0.0022     k(col/abs)
0.640727 0.0020     0.640423 0.0021   0.8619
 k(absorption)     0.651544       0.639976 0.0020     k(abs/tk ln)
0.642148 0.0019     0.641362 0.0019   0.2661
 k(trk length)     0.639090       0.644319 0.0027     k(tk ln/col)
0.642898 0.0020     0.642386 0.0020   0.4113
 rem life(col)   6.9160E+03     6.8171E+03 0.0022     k(col/abs/tk ln)
0.641924 0.0019     0.641324 0.0019
 rem life(abs)   6.8752E+03     6.8214E+03 0.0021     life(col/abs/tl)
6.8272E+03 0.0019   6.8472E+03 0.0017
 source points generated   4860

  estimator     cycle   118   ave of    68 cycles      combination
simple average    combined average     corr
 k(collision)      0.634346       0.641372 0.0021     k(col/abs)
0.640627 0.0020     0.640322 0.0021   0.8627
 k(absorption)     0.633550       0.639882 0.0020     k(abs/tk ln)
0.641826 0.0019     0.641005 0.0019   0.2750
 k(trk length)     0.607003       0.643771 0.0028     k(tk ln/col)
0.642572 0.0021     0.642052 0.0020   0.4138
 rem life(col)   6.6635E+03     6.8148E+03 0.0021     k(col/abs/tk ln)
0.641675 0.0019     0.640993 0.0019
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 rem life(abs)   6.6140E+03     6.8183E+03 0.0022     life(col/abs/tl)
6.8247E+03 0.0019   6.8453E+03 0.0016
 source points generated   4953

  estimator     cycle   119   ave of    69 cycles      combination
simple average    combined average     corr
 k(collision)      0.636170       0.641297 0.0021     k(col/abs)
0.640521 0.0020     0.640227 0.0021   0.8624
 k(absorption)     0.630467       0.639745 0.0020     k(abs/tk ln)
0.641656 0.0019     0.640837 0.0019   0.2839
 k(trk length)     0.629666       0.643566 0.0028     k(tk ln/col)
0.642432 0.0021     0.641929 0.0020   0.4168
 rem life(col)   6.8692E+03     6.8156E+03 0.0021     k(col/abs/tk ln)
0.641536 0.0019     0.640852 0.0019
 rem life(abs)   6.8611E+03     6.8190E+03 0.0021     life(col/abs/tl)
6.8252E+03 0.0019   6.8457E+03 0.0016
 source points generated   5011

  estimator     cycle   120   ave of    70 cycles      combination
simple average    combined average     corr
 k(collision)      0.641406       0.641299 0.0021     k(col/abs)
0.640507 0.0020     0.640209 0.0020   0.8621
 k(absorption)     0.637639       0.639715 0.0020     k(abs/tk ln)
0.641731 0.0019     0.640860 0.0019   0.2799
 k(trk length)     0.656233       0.643747 0.0027     k(tk ln/col)
0.642523 0.0020     0.641973 0.0020   0.4147
 rem life(col)   6.8198E+03     6.8157E+03 0.0021     k(col/abs/tk ln)
0.641587 0.0018     0.640874 0.0019
 rem life(abs)   6.8400E+03     6.8193E+03 0.0021     life(col/abs/tl)
6.8255E+03 0.0018   6.8459E+03 0.0016
 source points generated   5047

  estimator     cycle   121   ave of    71 cycles      combination
simple average    combined average     corr
 k(collision)      0.649361       0.641412 0.0021     k(col/abs)
0.640655 0.0019     0.640407 0.0020   0.8623
 k(absorption)     0.652672       0.639898 0.0020     k(abs/tk ln)
0.641825 0.0019     0.641019 0.0018   0.2773
 k(trk length)     0.644038       0.643751 0.0027     k(tk ln/col)
0.642582 0.0020     0.642064 0.0020   0.4134
 rem life(col)   7.0217E+03     6.8186E+03 0.0021     k(col/abs/tk ln)
0.641687 0.0018     0.641046 0.0019
 rem life(abs)   7.0084E+03     6.8219E+03 0.0021     life(col/abs/tl)
6.8279E+03 0.0018   6.8483E+03 0.0016
 source points generated   5027

  estimator     cycle   122   ave of    72 cycles      combination
simple average    combined average     corr
 k(collision)      0.647137       0.641492 0.0020     k(col/abs)
0.640768 0.0019     0.640558 0.0020   0.8619
 k(absorption)     0.650495       0.640045 0.0020     k(abs/tk ln)
0.641836 0.0018     0.641107 0.0018   0.2661
 k(trk length)     0.634838       0.643627 0.0027     k(tk ln/col)
0.642560 0.0020     0.642090 0.0019   0.4071
```

```
 rem life(col)   6.7089E+03     6.8171E+03 0.0021     k(col/abs/tk ln)
0.641721 0.0018     0.641138 0.0019
 rem life(abs)   6.7015E+03     6.8203E+03 0.0021     life(col/abs/tl)
6.8268E+03 0.0018   6.8485E+03 0.0016
 source points generated   4966

  estimator     cycle   123   ave of    73 cycles      combination
simple average    combined average     corr
 k(collision)      0.642394       0.641504 0.0020     k(col/abs)
0.640779 0.0019     0.640569 0.0020   0.8619
 k(absorption)     0.640740       0.640055 0.0019     k(abs/tk ln)
0.641899 0.0018     0.641143 0.0018   0.2660
 k(trk length)     0.652155       0.643744 0.0026     k(tk ln/col)
0.642624 0.0019     0.642128 0.0019   0.4067
 rem life(col)   6.9522E+03     6.8189E+03 0.0021     k(col/abs/tk ln)
0.641768 0.0018     0.641175 0.0018
 rem life(abs)   6.9505E+03     6.8220E+03 0.0021     life(col/abs/tl)
6.8286E+03 0.0018   6.8503E+03 0.0016
 source points generated   4964

  estimator     cycle   124   ave of    74 cycles      combination
simple average    combined average     corr
 k(collision)      0.641494       0.641504 0.0020     k(col/abs)
0.640768 0.0019     0.640556 0.0019   0.8618
 k(absorption)     0.638460       0.640033 0.0019     k(abs/tk ln)
0.641867 0.0018     0.641115 0.0018   0.2663
 k(trk length)     0.640578       0.643701 0.0026     k(tk ln/col)
0.642603 0.0019     0.642116 0.0019   0.4066
 rem life(col)   6.9640E+03     6.8209E+03 0.0021     k(col/abs/tk ln)
0.641746 0.0017     0.641149 0.0018
 rem life(abs)   6.9555E+03     6.8238E+03 0.0021     life(col/abs/tl)
6.8302E+03 0.0018   6.8515E+03 0.0016
 source points generated   4981

  estimator     cycle   125   ave of    75 cycles      combination
simple average    combined average     corr
 k(collision)      0.630269       0.641354 0.0020     k(col/abs)
0.640615 0.0019     0.640405 0.0019   0.8639
 k(absorption)     0.628326       0.639877 0.0019     k(abs/tk ln)
0.641722 0.0018     0.640969 0.0018   0.2736
 k(trk length)     0.633678       0.643568 0.0026     k(tk ln/col)
0.642461 0.0019     0.641973 0.0019   0.4120
 rem life(col)   6.7906E+03     6.8205E+03 0.0020     k(col/abs/tk ln)
0.641600 0.0017     0.641005 0.0018
 rem life(abs)   6.7967E+03     6.8235E+03 0.0020     life(col/abs/tl)
6.8299E+03 0.0018   6.8514E+03 0.0015
 source points generated   4900

  estimator     cycle   126   ave of    76 cycles      combination
simple average    combined average     corr
 k(collision)      0.633220       0.641247 0.0019     k(col/abs)
0.640534 0.0018     0.640318 0.0019   0.8638
 k(absorption)     0.635613       0.639821 0.0019     k(abs/tk ln)
0.641675 0.0018     0.640919 0.0017   0.2744
```

```
 k(trk length)     0.640676       0.643530 0.0025     k(tk ln/col)
0.642388 0.0019     0.641890 0.0018   0.4124
 rem life(col)   7.0588E+03     6.8236E+03 0.0021     k(col/abs/tk ln)
0.641533 0.0017     0.640946 0.0018
 rem life(abs)   7.0543E+03     6.8265E+03 0.0021     life(col/abs/tl)
6.8324E+03 0.0018   6.8525E+03 0.0015
 source points generated   5002

  estimator     cycle   127   ave of    77 cycles      combination
simple average    combined average     corr
 k(collision)      0.626676       0.641058 0.0019     k(col/abs)
0.640367 0.0018     0.640133 0.0019   0.8659
 k(absorption)     0.628631       0.639675 0.0019     k(abs/tk ln)
0.641636 0.0017     0.640860 0.0017   0.2669
 k(trk length)     0.648723       0.643597 0.0025     k(tk ln/col)
0.642328 0.0019     0.641804 0.0018   0.4009
 rem life(col)   6.8489E+03     6.8239E+03 0.0020     k(col/abs/tk ln)
0.641444 0.0017     0.640870 0.0018
 rem life(abs)   6.8695E+03     6.8271E+03 0.0020     life(col/abs/tl)
6.8330E+03 0.0018   6.8533E+03 0.0015
 source points generated   4972

  estimator     cycle   128   ave of    78 cycles      combination
simple average    combined average     corr
 k(collision)      0.648226       0.641150 0.0019     k(col/abs)
0.640447 0.0018     0.640203 0.0019   0.8664
 k(absorption)     0.645034       0.639744 0.0018     k(abs/tk ln)
0.641684 0.0017     0.640919 0.0017   0.2674
 k(trk length)     0.645640       0.643623 0.0025     k(tk ln/col)
0.642387 0.0018     0.641881 0.0018   0.4009
 rem life(col)   6.8590E+03     6.8244E+03 0.0020     k(col/abs/tk ln)
0.641506 0.0017     0.640925 0.0017
 rem life(abs)   6.8903E+03     6.8279E+03 0.0020     life(col/abs/tl)
6.8332E+03 0.0018   6.8517E+03 0.0015
 source points generated   5131

  estimator     cycle   129   ave of    79 cycles      combination
simple average    combined average     corr
 k(collision)      0.624180       0.640935 0.0019     k(col/abs)
0.640273 0.0018     0.639998 0.0019   0.8675
 k(absorption)     0.629193       0.639611 0.0018     k(abs/tk ln)
0.641448 0.0017     0.640673 0.0017   0.2838
 k(trk length)     0.616947       0.643286 0.0025     k(tk ln/col)
0.642110 0.0019     0.641600 0.0018   0.4226
 rem life(col)   7.1511E+03     6.8285E+03 0.0021     k(col/abs/tk ln)
0.641277 0.0017     0.640654 0.0017
 rem life(abs)   7.1382E+03     6.8318E+03 0.0021     life(col/abs/tl)
6.8364E+03 0.0018   6.8530E+03 0.0015
 source points generated   4853

  estimator     cycle   130   ave of    80 cycles      combination
simple average    combined average     corr
 k(collision)      0.644647       0.640981 0.0019     k(col/abs)
0.640289 0.0018     0.640001 0.0018   0.8664
```

```
 k(absorption)     0.638553       0.639597 0.0018     k(abs/tk ln)
0.641508 0.0017     0.640696 0.0017   0.2818
 k(trk length)     0.653907       0.643419 0.0025     k(tk ln/col)
0.642200 0.0019     0.641664 0.0018   0.4240
 rem life(col)   6.7427E+03     6.8274E+03 0.0021     k(col/abs/tk ln)
0.641332 0.0017     0.640673 0.0017
 rem life(abs)   6.7394E+03     6.8307E+03 0.0020     life(col/abs/tl)
6.8353E+03 0.0018   6.8522E+03 0.0014
 source points generated   5181

  estimator     cycle   131   ave of    81 cycles      combination
simple average    combined average     corr
 k(collision)      0.639600       0.640964 0.0019     k(col/abs)
0.640334 0.0018     0.640099 0.0018   0.8613
 k(absorption)     0.648149       0.639703 0.0018     k(abs/tk ln)
0.641435 0.0017     0.640700 0.0017   0.2624
 k(trk length)     0.622990       0.643166 0.0025     k(tk ln/col)
0.642065 0.0018     0.641563 0.0018   0.4208
 rem life(col)   6.9123E+03     6.8285E+03 0.0020     k(col/abs/tk ln)
0.641278 0.0017     0.640681 0.0017
 rem life(abs)   6.8774E+03     6.8312E+03 0.0020     life(col/abs/tl)
6.8357E+03 0.0018   6.8514E+03 0.0014
 source points generated   4955

  estimator     cycle   132   ave of    82 cycles      combination
simple average    combined average     corr
 k(collision)      0.639558       0.640947 0.0019     k(col/abs)
0.640326 0.0017     0.640095 0.0018   0.8611
 k(absorption)     0.639872       0.639705 0.0018     k(abs/tk ln)
0.641313 0.0017     0.640611 0.0016   0.2590
 k(trk length)     0.623009       0.642921 0.0025     k(tk ln/col)
0.641934 0.0018     0.641469 0.0018   0.4180
 rem life(col)   6.9592E+03     6.8301E+03 0.0020     k(col/abs/tk ln)
0.641191 0.0016     0.640595 0.0017
 rem life(abs)   6.9310E+03     6.8325E+03 0.0020     life(col/abs/tl)
6.8370E+03 0.0017   6.8528E+03 0.0014
 source points generated   4998

  estimator     cycle   133   ave of    83 cycles      combination
simple average    combined average     corr
 k(collision)      0.627700       0.640787 0.0019     k(col/abs)
0.640242 0.0017     0.640016 0.0018   0.8543
 k(absorption)     0.639035       0.639697 0.0017     k(abs/tk ln)
0.641339 0.0017     0.640622 0.0016   0.2585
 k(trk length)     0.647963       0.642981 0.0024     k(tk ln/col)
0.641884 0.0018     0.641388 0.0018   0.4086
 rem life(col)   6.8716E+03     6.8306E+03 0.0020     k(col/abs/tk ln)
0.641155 0.0016     0.640613 0.0016
 rem life(abs)   6.8343E+03     6.8325E+03 0.0020     life(col/abs/tl)
6.8371E+03 0.0017   6.8527E+03 0.0014
 source points generated   4900

  estimator     cycle   134   ave of    84 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.657838       0.640990 0.0019     k(col/abs)
0.640460 0.0017     0.640257 0.0018   0.8588
 k(absorption)     0.659164       0.639929 0.0018     k(abs/tk ln)
0.641531 0.0017     0.640851 0.0016   0.2718
 k(trk length)     0.655773       0.643134 0.0024     k(tk ln/col)
0.642062 0.0018     0.641586 0.0018   0.4174
 rem life(col)   6.6945E+03     6.8290E+03 0.0020     k(col/abs/tk ln)
0.641351 0.0016     0.640848 0.0017
 rem life(abs)   6.7050E+03     6.8310E+03 0.0020     life(col/abs/tl)
6.8356E+03 0.0017   6.8516E+03 0.0014
 source points generated   5236

  estimator     cycle   135   ave of    85 cycles      combination
simple average    combined average     corr
 k(collision)      0.615456       0.640690 0.0019     k(col/abs)
0.640171 0.0018     0.639954 0.0018   0.8673
 k(absorption)     0.616367       0.639652 0.0018     k(abs/tk ln)
0.641331 0.0017     0.640662 0.0017   0.2822
 k(trk length)     0.632679       0.643011 0.0024     k(tk ln/col)
0.641850 0.0018     0.641381 0.0018   0.4228
 rem life(col)   7.0137E+03     6.8311E+03 0.0020     k(col/abs/tk ln)
0.641117 0.0017     0.640642 0.0017
 rem life(abs)   7.0345E+03     6.8334E+03 0.0020     life(col/abs/tl)
6.8376E+03 0.0017   6.8528E+03 0.0014
 source points generated   4637

  estimator     cycle   136   ave of    86 cycles      combination
simple average    combined average     corr
 k(collision)      0.651146       0.640812 0.0019     k(col/abs)
0.640262 0.0018     0.640018 0.0018   0.8670
 k(absorption)     0.644820       0.639712 0.0018     k(abs/tk ln)
0.641348 0.0017     0.640700 0.0016   0.2808
 k(trk length)     0.640761       0.642984 0.0024     k(tk ln/col)
0.641898 0.0018     0.641469 0.0018   0.4188
 rem life(col)   6.7567E+03     6.8303E+03 0.0020     k(col/abs/tk ln)
0.641169 0.0016     0.640672 0.0017
 rem life(abs)   6.7610E+03     6.8325E+03 0.0020     life(col/abs/tl)
6.8369E+03 0.0017   6.8523E+03 0.0014
 source points generated   5255

  estimator     cycle   137   ave of    87 cycles      combination
simple average    combined average     corr
 k(collision)      0.646411       0.640876 0.0019     k(col/abs)
0.640323 0.0017     0.640077 0.0018   0.8673
 k(absorption)     0.644824       0.639770 0.0018     k(abs/tk ln)
0.641372 0.0017     0.640741 0.0016   0.2800
 k(trk length)     0.642043       0.642974 0.0024     k(tk ln/col)
0.641925 0.0018     0.641514 0.0018   0.4178
 rem life(col)   6.8370E+03     6.8303E+03 0.0019     k(col/abs/tk ln)
0.641207 0.0016     0.640711 0.0016
 rem life(abs)   6.8439E+03     6.8326E+03 0.0019     life(col/abs/tl)
6.8374E+03 0.0017   6.8534E+03 0.0014
 source points generated   5012
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```
  estimator     cycle   138   ave of    88 cycles      combination
simple average    combined average     corr
 k(collision)      0.657119       0.641061 0.0019     k(col/abs)
0.640514 0.0018     0.640277 0.0018   0.8708
 k(absorption)     0.657056       0.639967 0.0018     k(abs/tk ln)
0.641534 0.0017     0.640932 0.0016   0.2896
 k(trk length)     0.654211       0.643101 0.0023     k(tk ln/col)
0.642081 0.0018     0.641690 0.0018   0.4245
 rem life(col)   6.8315E+03     6.8304E+03 0.0019     k(col/abs/tk ln)
0.641376 0.0016     0.640902 0.0017
 rem life(abs)   6.8190E+03     6.8325E+03 0.0019     life(col/abs/tl)
6.8372E+03 0.0017   6.8529E+03 0.0014
 source points generated   5034

  estimator     cycle   139   ave of    89 cycles      combination
simple average    combined average     corr
 k(collision)      0.632095       0.640960 0.0018     k(col/abs)
0.640417 0.0017     0.640180 0.0018   0.8717
 k(absorption)     0.631692       0.639874 0.0017     k(abs/tk ln)
0.641503 0.0016     0.640886 0.0016   0.2868
 k(trk length)     0.645864       0.643132 0.0023     k(tk ln/col)
0.642046 0.0018     0.641638 0.0017   0.4211
 rem life(col)   7.1054E+03     6.8334E+03 0.0020     k(col/abs/tk ln)
0.641322 0.0016     0.640854 0.0016
 rem life(abs)   7.1135E+03     6.8356E+03 0.0019     life(col/abs/tl)
6.8399E+03 0.0017   6.8546E+03 0.0013
 source points generated   4811

  estimator     cycle   140   ave of    90 cycles      combination
simple average    combined average     corr
 k(collision)      0.640573       0.640956 0.0018     k(col/abs)
0.640427 0.0017     0.640197 0.0018   0.8714
 k(absorption)     0.642003       0.639897 0.0017     k(abs/tk ln)
0.641417 0.0016     0.640829 0.0016   0.2814
 k(trk length)     0.625523       0.642937 0.0023     k(tk ln/col)
0.641946 0.0017     0.641563 0.0017   0.4179
 rem life(col)   6.8072E+03     6.8332E+03 0.0019     k(col/abs/tk ln)
0.641263 0.0016     0.640798 0.0016
 rem life(abs)   6.7972E+03     6.8352E+03 0.0019     life(col/abs/tl)
6.8395E+03 0.0017   6.8545E+03 0.0013
 source points generated   5076

  estimator     cycle   141   ave of    91 cycles      combination
simple average    combined average     corr
 k(collision)      0.627989       0.640813 0.0018     k(col/abs)
0.640284 0.0017     0.640055 0.0017   0.8734
 k(absorption)     0.626929       0.639755 0.0017     k(abs/tk ln)
0.641274 0.0016     0.640686 0.0016   0.2903
 k(trk length)     0.629894       0.642793 0.0023     k(tk ln/col)
0.641803 0.0017     0.641420 0.0017   0.4247
 rem life(col)   6.9721E+03     6.8347E+03 0.0019     k(col/abs/tk ln)
0.641120 0.0016     0.640655 0.0016
 rem life(abs)   6.9345E+03     6.8363E+03 0.0019     life(col/abs/tl)
6.8405E+03 0.0017   6.8546E+03 0.0013
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 source points generated   4877

  estimator     cycle   142   ave of    92 cycles      combination
simple average    combined average     corr
 k(collision)      0.641648       0.640822 0.0018     k(col/abs)
0.640287 0.0017     0.640054 0.0017   0.8733
 k(absorption)     0.639385       0.639751 0.0017     k(abs/tk ln)
0.641235 0.0016     0.640659 0.0016   0.2901
 k(trk length)     0.636033       0.642720 0.0023     k(tk ln/col)
0.641771 0.0017     0.641402 0.0017   0.4237
 rem life(col)   6.9408E+03     6.8358E+03 0.0019     k(col/abs/tk ln)
0.641098 0.0016     0.640628 0.0016
 rem life(abs)   6.9710E+03     6.8378E+03 0.0019     life(col/abs/tl)
6.8420E+03 0.0017   6.8561E+03 0.0013
 source points generated   5094

  estimator     cycle   143   ave of    93 cycles      combination
simple average    combined average     corr
 k(collision)      0.646562       0.640884 0.0018     k(col/abs)
0.640376 0.0017     0.640174 0.0017   0.8728
 k(absorption)     0.650681       0.639868 0.0017     k(abs/tk ln)
0.641399 0.0016     0.640787 0.0016   0.3010
 k(trk length)     0.662235       0.642930 0.0023     k(tk ln/col)
0.641907 0.0017     0.641493 0.0017   0.4264
 rem life(col)   6.7262E+03     6.8347E+03 0.0019     k(col/abs/tk ln)
0.641227 0.0016     0.640781 0.0016
 rem life(abs)   6.7099E+03     6.8364E+03 0.0019     life(col/abs/tl)
6.8408E+03 0.0016   6.8554E+03 0.0013
 source points generated   5003

  estimator     cycle   144   ave of    94 cycles      combination
simple average    combined average     corr
 k(collision)      0.627568       0.640742 0.0018     k(col/abs)
0.640251 0.0017     0.640044 0.0017   0.8741
 k(absorption)     0.629723       0.639761 0.0017     k(abs/tk ln)
0.641319 0.0016     0.640702 0.0016   0.3030
 k(trk length)     0.637937       0.642877 0.0022     k(tk ln/col)
0.641809 0.0017     0.641389 0.0017   0.4274
 rem life(col)   6.8641E+03     6.8350E+03 0.0019     k(col/abs/tk ln)
0.641126 0.0016     0.640689 0.0016
 rem life(abs)   6.8591E+03     6.8366E+03 0.0019     life(col/abs/tl)
6.8414E+03 0.0016   6.8565E+03 0.0013
 source points generated   4863

  estimator     cycle   145   ave of    95 cycles      combination
simple average    combined average     corr
 k(collision)      0.633229       0.640663 0.0018     k(col/abs)
0.640175 0.0017     0.639967 0.0017   0.8747
 k(absorption)     0.632681       0.639686 0.0017     k(abs/tk ln)
0.641315 0.0016     0.640677 0.0016   0.2986
 k(trk length)     0.649295       0.642944 0.0022     k(tk ln/col)
0.641804 0.0017     0.641360 0.0017   0.4226
 rem life(col)   6.9634E+03     6.8363E+03 0.0019     k(col/abs/tk ln)
0.641098 0.0015     0.640663 0.0016
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 rem life(abs)   6.9579E+03     6.8379E+03 0.0019     life(col/abs/tl)
6.8426E+03 0.0016   6.8575E+03 0.0013
 source points generated   5000

  estimator     cycle   146   ave of    96 cycles      combination
simple average    combined average     corr
 k(collision)      0.634989       0.640604 0.0017     k(col/abs)
0.640150 0.0016     0.639954 0.0017   0.8730
 k(absorption)     0.640568       0.639695 0.0017     k(abs/tk ln)
0.641283 0.0016     0.640660 0.0015   0.2977
 k(trk length)     0.635911       0.642871 0.0022     k(tk ln/col)
0.641737 0.0017     0.641296 0.0016   0.4242
 rem life(col)   6.9780E+03     6.8378E+03 0.0019     k(col/abs/tk ln)
0.641057 0.0015     0.640645 0.0016
 rem life(abs)   6.9687E+03     6.8393E+03 0.0019     life(col/abs/tl)
6.8438E+03 0.0016   6.8584E+03 0.0013
 source points generated   5015

  estimator     cycle   147   ave of    97 cycles      combination
simple average    combined average     corr
 k(collision)      0.645616       0.640656 0.0017     k(col/abs)
0.640169 0.0016     0.639959 0.0017   0.8715
 k(absorption)     0.638517       0.639683 0.0016     k(abs/tk ln)
0.641242 0.0015     0.640628 0.0015   0.2979
 k(trk length)     0.636154       0.642802 0.0022     k(tk ln/col)
0.641729 0.0017     0.641313 0.0016   0.4209
 rem life(col)   6.7464E+03     6.8369E+03 0.0018     k(col/abs/tk ln)
0.641047 0.0015     0.640616 0.0015
 rem life(abs)   6.7770E+03     6.8386E+03 0.0018     life(col/abs/tl)
6.8430E+03 0.0016   6.8576E+03 0.0013
 source points generated   5056

  estimator     cycle   148   ave of    98 cycles      combination
simple average    combined average     corr
 k(collision)      0.653175       0.640783 0.0017     k(col/abs)
0.640328 0.0016     0.640162 0.0017   0.8723
 k(absorption)     0.658171       0.639872 0.0016     k(abs/tk ln)
0.641318 0.0015     0.640783 0.0015   0.2881
 k(trk length)     0.639055       0.642763 0.0022     k(tk ln/col)
0.641773 0.0016     0.641403 0.0016   0.4147
 rem life(col)   6.7544E+03     6.8360E+03 0.0018     k(col/abs/tk ln)
0.641139 0.0015     0.640779 0.0015
 rem life(abs)   6.7780E+03     6.8380E+03 0.0018     life(col/abs/tl)
6.8423E+03 0.0016   6.8568E+03 0.0013
 source points generated   5066

  estimator     cycle   149   ave of    99 cycles      combination
simple average    combined average     corr
 k(collision)      0.643084       0.640807 0.0017     k(col/abs)
0.640332 0.0016     0.640159 0.0016   0.8717
 k(absorption)     0.638382       0.639857 0.0016     k(abs/tk ln)
0.641247 0.0015     0.640727 0.0015   0.2882
 k(trk length)     0.630361       0.642638 0.0021     k(tk ln/col)
0.641722 0.0016     0.641376 0.0016   0.4110
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```
 rem life(col)   6.7212E+03     6.8349E+03 0.0018     k(col/abs/tk ln)
0.641100 0.0015     0.640728 0.0015
 rem life(abs)   6.7165E+03     6.8368E+03 0.0018     life(col/abs/tl)
6.8412E+03 0.0016   6.8563E+03 0.0013
 source points generated   4954

  estimator     cycle   150   ave of   100 cycles      combination
simple average    combined average     corr
 k(collision)      0.635515       0.640754 0.0017     k(col/abs)
0.640289 0.0016     0.640117 0.0016   0.8718
 k(absorption)     0.636523       0.639823 0.0016     k(abs/tk ln)
0.641235 0.0015     0.640707 0.0015   0.2878
 k(trk length)     0.643476       0.642646 0.0021     k(tk ln/col)
0.641700 0.0016     0.641345 0.0016   0.4102
 rem life(col)   6.9265E+03     6.8358E+03 0.0018     k(col/abs/tk ln)
0.641075 0.0015     0.640707 0.0015
 rem life(abs)   6.9094E+03     6.8375E+03 0.0018     life(col/abs/tl)
6.8420E+03 0.0016   6.8571E+03 0.0013
 source points generated   4923

  estimator     cycle   151   ave of   101 cycles      combination
simple average    combined average     corr
 k(collision)      0.628289       0.640630 0.0017     k(col/abs)
0.640198 0.0016     0.640023 0.0016   0.8712
 k(absorption)     0.633922       0.639765 0.0016     k(abs/tk ln)
0.641146 0.0015     0.640624 0.0015   0.2912
 k(trk length)     0.630675       0.642528 0.0021     k(tk ln/col)
0.641579 0.0016     0.641223 0.0016   0.4159
 rem life(col)   6.8783E+03     6.8362E+03 0.0018     k(col/abs/tk ln)
0.640974 0.0015     0.640616 0.0015
 rem life(abs)   6.8840E+03     6.8380E+03 0.0018     life(col/abs/tl)
6.8423E+03 0.0016   6.8569E+03 0.0013
 source points generated   5005

  estimator     cycle   152   ave of   102 cycles      combination
simple average    combined average     corr
 k(collision)      0.647419       0.640697 0.0017     k(col/abs)
0.640252 0.0016     0.640068 0.0016   0.8713
 k(absorption)     0.644006       0.639806 0.0016     k(abs/tk ln)
0.641248 0.0015     0.640690 0.0015   0.2938
 k(trk length)     0.659074       0.642690 0.0021     k(tk ln/col)
0.641694 0.0016     0.641309 0.0016   0.4196
 rem life(col)   6.8862E+03     6.8367E+03 0.0018     k(col/abs/tk ln)
0.641065 0.0015     0.640680 0.0015
 rem life(abs)   6.9012E+03     6.8386E+03 0.0018     life(col/abs/tl)
6.8427E+03 0.0015   6.8566E+03 0.0012
 source points generated   5162

  estimator     cycle   153   ave of   103 cycles      combination
simple average    combined average     corr
 k(collision)      0.638691       0.640677 0.0017     k(col/abs)
0.640174 0.0016     0.640007 0.0016   0.8659
 k(absorption)     0.625876       0.639671 0.0016     k(abs/tk ln)
0.641149 0.0015     0.640588 0.0015   0.2971
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 k(trk length)     0.636192       0.642627 0.0021     k(tk ln/col)
0.641652 0.0016     0.641275 0.0016   0.4199
 rem life(col)   6.9654E+03     6.8379E+03 0.0018     k(col/abs/tk ln)
0.640992 0.0015     0.640605 0.0015
 rem life(abs)   6.9923E+03     6.8401E+03 0.0018     life(col/abs/tl)
6.8438E+03 0.0015   6.8569E+03 0.0012
 source points generated   4911

  estimator     cycle   154   ave of   104 cycles      combination
simple average    combined average     corr
 k(collision)      0.631166       0.640586 0.0016     k(col/abs)
0.640093 0.0016     0.639924 0.0016   0.8666
 k(absorption)     0.632201       0.639599 0.0016     k(abs/tk ln)
0.641097 0.0015     0.640533 0.0015   0.2980
 k(trk length)     0.639281       0.642595 0.0021     k(tk ln/col)
0.641590 0.0016     0.641207 0.0015   0.4203
 rem life(col)   6.7975E+03     6.8375E+03 0.0018     k(col/abs/tk ln)
0.640927 0.0014     0.640545 0.0015
 rem life(abs)   6.7822E+03     6.8395E+03 0.0017     life(col/abs/tl)
6.8436E+03 0.0015   6.8573E+03 0.0012
 source points generated   4969

  estimator     cycle   155   ave of   105 cycles      combination
simple average    combined average     corr
 k(collision)      0.633998       0.640523 0.0016     k(col/abs)
0.640043 0.0015     0.639874 0.0016   0.8667
 k(absorption)     0.635732       0.639563 0.0016     k(abs/tk ln)
0.641032 0.0015     0.640473 0.0014   0.2997
 k(trk length)     0.632696       0.642501 0.0021     k(tk ln/col)
0.641512 0.0016     0.641132 0.0015   0.4228
 rem life(col)   6.9945E+03     6.8390E+03 0.0017     k(col/abs/tk ln)
0.640862 0.0014     0.640483 0.0015
 rem life(abs)   6.9586E+03     6.8407E+03 0.0017     life(col/abs/tl)
6.8448E+03 0.0015   6.8587E+03 0.0012
 source points generated   5035

  estimator     cycle   156   ave of   106 cycles      combination
simple average    combined average     corr
 k(collision)      0.643390       0.640550 0.0016     k(col/abs)
0.640096 0.0015     0.639948 0.0016   0.8657
 k(absorption)     0.648021       0.639642 0.0016     k(abs/tk ln)
0.641000 0.0015     0.640487 0.0014   0.2882
 k(trk length)     0.627340       0.642358 0.0020     k(tk ln/col)
0.641454 0.0015     0.641102 0.0015   0.4173
 rem life(col)   6.8999E+03     6.8396E+03 0.0017     k(col/abs/tk ln)
0.640850 0.0014     0.640497 0.0014
 rem life(abs)   6.8869E+03     6.8411E+03 0.0017     life(col/abs/tl)
6.8449E+03 0.0015   6.8573E+03 0.0012
 source points generated   5049

  estimator     cycle   157   ave of   107 cycles      combination
simple average    combined average     corr
 k(collision)      0.640547       0.640550 0.0016     k(col/abs)
0.640079 0.0015     0.639927 0.0015   0.8651
```

```
 k(absorption)     0.635896       0.639607 0.0015     k(abs/tk ln)
0.640965 0.0014     0.640452 0.0014   0.2888
 k(trk length)     0.638633       0.642323 0.0020     k(tk ln/col)
0.641436 0.0015     0.641091 0.0015   0.4171
 rem life(col)   6.7306E+03     6.8386E+03 0.0017     k(col/abs/tk ln)
0.640827 0.0014     0.640465 0.0014
 rem life(abs)   6.7436E+03     6.8402E+03 0.0017     life(col/abs/tl)
6.8441E+03 0.0015   6.8569E+03 0.0012
 source points generated   4977

  estimator     cycle   158   ave of   108 cycles      combination
simple average    combined average     corr
 k(collision)      0.636556       0.640513 0.0016     k(col/abs)
0.640054 0.0015     0.639904 0.0015   0.8650
 k(absorption)     0.638180       0.639594 0.0015     k(abs/tk ln)
0.640882 0.0014     0.640385 0.0014   0.2884
 k(trk length)     0.625795       0.642170 0.0020     k(tk ln/col)
0.641341 0.0015     0.641010 0.0015   0.4182
 rem life(col)   6.8219E+03     6.8384E+03 0.0017     k(col/abs/tk ln)
0.640759 0.0014     0.640397 0.0014
 rem life(abs)   6.7681E+03     6.8395E+03 0.0017     life(col/abs/tl)
6.8435E+03 0.0015   6.8560E+03 0.0012
 source points generated   4907

  estimator     cycle   159   ave of   109 cycles      combination
simple average    combined average     corr
 k(collision)      0.643165       0.640538 0.0016     k(col/abs)
0.640060 0.0015     0.639904 0.0015   0.8643
 k(absorption)     0.638256       0.639582 0.0015     k(abs/tk ln)
0.640915 0.0014     0.640398 0.0014   0.2871
 k(trk length)     0.650689       0.642248 0.0020     k(tk ln/col)
0.641393 0.0015     0.641048 0.0015   0.4188
 rem life(col)   6.8890E+03     6.8389E+03 0.0017     k(col/abs/tk ln)
0.640789 0.0014     0.640411 0.0014
 rem life(abs)   6.8641E+03     6.8397E+03 0.0017     life(col/abs/tl)
6.8438E+03 0.0015   6.8562E+03 0.0012
 source points generated   5099

  estimator     cycle   160   ave of   110 cycles      combination
simple average    combined average     corr
 k(collision)      0.642781       0.640558 0.0016     k(col/abs)
0.640079 0.0015     0.639923 0.0015   0.8644
 k(absorption)     0.641572       0.639600 0.0015     k(abs/tk ln)
0.640975 0.0014     0.640437 0.0014   0.2876
 k(trk length)     0.653509       0.642350 0.0020     k(tk ln/col)
0.641454 0.0015     0.641088 0.0015   0.4190
 rem life(col)   6.9382E+03     6.8398E+03 0.0017     k(col/abs/tk ln)
0.640836 0.0014     0.640450 0.0014
 rem life(abs)   6.9281E+03     6.8406E+03 0.0017     life(col/abs/tl)
6.8444E+03 0.0015   6.8563E+03 0.0012
 source points generated   4974

  estimator     cycle   161   ave of   111 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.656403       0.640701 0.0016     k(col/abs)
0.640195 0.0015     0.640009 0.0015   0.8652
 k(absorption)     0.649602       0.639690 0.0015     k(abs/tk ln)
0.641176 0.0014     0.640539 0.0014   0.3006
 k(trk length)     0.677045       0.642663 0.0020     k(tk ln/col)
0.641682 0.0015     0.641241 0.0015   0.4367
 rem life(col)   6.8541E+03     6.8399E+03 0.0017     k(col/abs/tk ln)
0.641018 0.0014     0.640544 0.0014
 rem life(abs)   6.8392E+03     6.8405E+03 0.0017     life(col/abs/tl)
6.8445E+03 0.0014   6.8566E+03 0.0012
 source points generated   5111

  estimator     cycle   162   ave of   112 cycles      combination
simple average    combined average     corr
 k(collision)      0.652620       0.640807 0.0016     k(col/abs)
0.640294 0.0015     0.640099 0.0015   0.8666
 k(absorption)     0.649936       0.639782 0.0015     k(abs/tk ln)
0.641268 0.0014     0.640630 0.0014   0.3053
 k(trk length)     0.653021       0.642755 0.0020     k(tk ln/col)
0.641781 0.0015     0.641345 0.0015   0.4407
 rem life(col)   6.6677E+03     6.8384E+03 0.0017     k(col/abs/tk ln)
0.641115 0.0014     0.640632 0.0014
 rem life(abs)   6.6960E+03     6.8393E+03 0.0017     life(col/abs/tl)
6.8430E+03 0.0015   6.8544E+03 0.0012
 source points generated   4979

  estimator     cycle   163   ave of   113 cycles      combination
simple average    combined average     corr
 k(collision)      0.620370       0.640626 0.0016     k(col/abs)
0.640095 0.0015     0.639925 0.0015   0.8710
 k(absorption)     0.615089       0.639563 0.0015     k(abs/tk ln)
0.641100 0.0014     0.640473 0.0014   0.3167
 k(trk length)     0.629458       0.642638 0.0020     k(tk ln/col)
0.641632 0.0015     0.641195 0.0015   0.4481
 rem life(col)   6.8843E+03     6.8388E+03 0.0017     k(col/abs/tk ln)
0.640942 0.0014     0.640487 0.0014
 rem life(abs)   6.9105E+03     6.8399E+03 0.0016     life(col/abs/tl)
6.8435E+03 0.0014   6.8550E+03 0.0012
 source points generated   4713

  estimator     cycle   164   ave of   114 cycles      combination
simple average    combined average     corr
 k(collision)      0.649285       0.640702 0.0016     k(col/abs)
0.640152 0.0015     0.639968 0.0015   0.8708
 k(absorption)     0.643934       0.639601 0.0015     k(abs/tk ln)
0.641115 0.0014     0.640499 0.0014   0.3162
 k(trk length)     0.641592       0.642628 0.0020     k(tk ln/col)
0.641665 0.0015     0.641253 0.0015   0.4462
 rem life(col)   6.7503E+03     6.8380E+03 0.0016     k(col/abs/tk ln)
0.640977 0.0014     0.640511 0.0014
 rem life(abs)   6.7403E+03     6.8390E+03 0.0016     life(col/abs/tl)
6.8428E+03 0.0014   6.8544E+03 0.0012
 source points generated   5254
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```
  estimator     cycle   165   ave of   115 cycles      combination
simple average    combined average     corr
 k(collision)      0.628798       0.640599 0.0016     k(col/abs)
0.640068 0.0015     0.639877 0.0015   0.8712
 k(absorption)     0.632202       0.639537 0.0015     k(abs/tk ln)
0.641023 0.0014     0.640411 0.0014   0.3204
 k(trk length)     0.628810       0.642508 0.0020     k(tk ln/col)
0.641553 0.0015     0.641142 0.0015   0.4516
 rem life(col)   6.7658E+03     6.8374E+03 0.0016     k(col/abs/tk ln)
0.640881 0.0014     0.640414 0.0014
 rem life(abs)   6.7371E+03     6.8381E+03 0.0016     life(col/abs/tl)
6.8420E+03 0.0014   6.8539E+03 0.0012
 source points generated   4862

  estimator     cycle   166   ave of   116 cycles      combination
simple average    combined average     corr
 k(collision)      0.636410       0.640563 0.0015     k(col/abs)
0.640054 0.0015     0.639870 0.0015   0.8702
 k(absorption)     0.640488       0.639545 0.0015     k(abs/tk ln)
0.641019 0.0014     0.640412 0.0014   0.3203
 k(trk length)     0.640806       0.642494 0.0020     k(tk ln/col)
0.641528 0.0015     0.641113 0.0015   0.4517
 rem life(col)   6.7509E+03     6.8367E+03 0.0016     k(col/abs/tk ln)
0.640867 0.0014     0.640416 0.0014
 rem life(abs)   6.7488E+03     6.8374E+03 0.0016     life(col/abs/tl)
6.8413E+03 0.0014   6.8533E+03 0.0012
 source points generated   5043

  estimator     cycle   167   ave of   117 cycles      combination
simple average    combined average     corr
 k(collision)      0.611049       0.640310 0.0016     k(col/abs)
0.639837 0.0015     0.639610 0.0015   0.8749
 k(absorption)     0.618202       0.639363 0.0015     k(abs/tk ln)
0.640740 0.0015     0.640100 0.0014   0.3560
 k(trk length)     0.598548       0.642118 0.0020     k(tk ln/col)
0.641214 0.0016     0.640781 0.0015   0.4905
 rem life(col)   6.7877E+03     6.8362E+03 0.0016     k(col/abs/tk ln)
0.640597 0.0014     0.640079 0.0014
 rem life(abs)   6.7969E+03     6.8370E+03 0.0016     life(col/abs/tl)
6.8411E+03 0.0014   6.8535E+03 0.0012
 source points generated   4808

  estimator     cycle   168   ave of   118 cycles      combination
simple average    combined average     corr
 k(collision)      0.652656       0.640415 0.0016     k(col/abs)
0.639938 0.0015     0.639707 0.0015   0.8762
 k(absorption)     0.650925       0.639461 0.0015     k(abs/tk ln)
0.640824 0.0015     0.640194 0.0014   0.3590
 k(trk length)     0.650200       0.642187 0.0020     k(tk ln/col)
0.641301 0.0016     0.640881 0.0015   0.4926
 rem life(col)   6.7788E+03     6.8357E+03 0.0016     k(col/abs/tk ln)
0.640687 0.0014     0.640170 0.0014
 rem life(abs)   6.7673E+03     6.8364E+03 0.0016     life(col/abs/tl)
6.8405E+03 0.0014   6.8528E+03 0.0012
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 source points generated   5337

  estimator     cycle   169   ave of   119 cycles      combination
simple average    combined average     corr
 k(collision)      0.654867       0.640536 0.0016     k(col/abs)
0.640037 0.0015     0.639780 0.0015   0.8768
 k(absorption)     0.648701       0.639538 0.0015     k(abs/tk ln)
0.640867 0.0014     0.640260 0.0014   0.3584
 k(trk length)     0.643213       0.642195 0.0020     k(tk ln/col)
0.641366 0.0016     0.640985 0.0015   0.4898
 rem life(col)   6.7683E+03     6.8352E+03 0.0016     k(col/abs/tk ln)
0.640757 0.0014     0.640224 0.0014
 rem life(abs)   6.7820E+03     6.8360E+03 0.0016     life(col/abs/tl)
6.8400E+03 0.0014   6.8521E+03 0.0011
 source points generated   5029

  estimator     cycle   170   ave of   120 cycles      combination
simple average    combined average     corr
 k(collision)      0.621286       0.640376 0.0016     k(col/abs)
0.639923 0.0015     0.639659 0.0015   0.8749
 k(absorption)     0.631380       0.639470 0.0015     k(abs/tk ln)
0.640665 0.0015     0.640067 0.0014   0.3641
 k(trk length)     0.601933       0.641860 0.0021     k(tk ln/col)
0.641118 0.0016     0.640739 0.0015   0.5080
 rem life(col)   6.7491E+03     6.8345E+03 0.0016     k(col/abs/tk ln)
0.640569 0.0014     0.640017 0.0014
 rem life(abs)   6.7334E+03     6.8351E+03 0.0016     life(col/abs/tl)
6.8393E+03 0.0014   6.8518E+03 0.0011
 source points generated   4723

  estimator     cycle   171   ave of   121 cycles      combination
simple average    combined average     corr
 k(collision)      0.638210       0.640358 0.0016     k(col/abs)
0.639940 0.0015     0.639704 0.0015   0.8725
 k(absorption)     0.645594       0.639521 0.0015     k(abs/tk ln)
0.640675 0.0015     0.640100 0.0014   0.3622
 k(trk length)     0.638090       0.641828 0.0020     k(tk ln/col)
0.641093 0.0016     0.640717 0.0015   0.5082
 rem life(col)   6.6753E+03     6.8331E+03 0.0016     k(col/abs/tk ln)
0.640569 0.0014     0.640061 0.0014
 rem life(abs)   6.6590E+03     6.8336E+03 0.0016     life(col/abs/tl)
6.8381E+03 0.0014   6.8513E+03 0.0011
 source points generated   5127

  estimator     cycle   172   ave of   122 cycles      combination
simple average    combined average     corr
 k(collision)      0.638630       0.640344 0.0016     k(col/abs)
0.639939 0.0015     0.639712 0.0015   0.8721
 k(absorption)     0.641221       0.639535 0.0014     k(abs/tk ln)
0.640702 0.0014     0.640120 0.0014   0.3624
 k(trk length)     0.646843       0.641870 0.0020     k(tk ln/col)
0.641107 0.0016     0.640717 0.0015   0.5074
 rem life(col)   6.8220E+03     6.8331E+03 0.0016     k(col/abs/tk ln)
0.640583 0.0014     0.640086 0.0014
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 rem life(abs)   6.8335E+03     6.8336E+03 0.0016     life(col/abs/tl)
6.8379E+03 0.0014   6.8506E+03 0.0011
 source points generated   5060

  estimator     cycle   173   ave of   123 cycles      combination
simple average    combined average     corr
 k(collision)      0.643179       0.640367 0.0015     k(col/abs)
0.639957 0.0014     0.639726 0.0014   0.8721
 k(absorption)     0.640924       0.639546 0.0014     k(abs/tk ln)
0.640677 0.0014     0.640112 0.0014   0.3614
 k(trk length)     0.634151       0.641807 0.0020     k(tk ln/col)
0.641087 0.0015     0.640719 0.0015   0.5056
 rem life(col)   6.9900E+03     6.8343E+03 0.0016     k(col/abs/tk ln)
0.640573 0.0014     0.640076 0.0014
 rem life(abs)   6.9948E+03     6.8350E+03 0.0016     life(col/abs/tl)
6.8388E+03 0.0014   6.8504E+03 0.0011
 source points generated   5004

  estimator     cycle   174   ave of   124 cycles      combination
simple average    combined average     corr
 k(collision)      0.639353       0.640359 0.0015     k(col/abs)
0.639950 0.0014     0.639720 0.0014   0.8721
 k(absorption)     0.639021       0.639542 0.0014     k(abs/tk ln)
0.640759 0.0014     0.640142 0.0014   0.3577
 k(trk length)     0.662764       0.641976 0.0020     k(tk ln/col)
0.641167 0.0015     0.640747 0.0015   0.5001
 rem life(col)   6.7239E+03     6.8334E+03 0.0016     k(col/abs/tk ln)
0.640626 0.0014     0.640110 0.0014
 rem life(abs)   6.6988E+03     6.8339E+03 0.0016     life(col/abs/tl)
6.8378E+03 0.0014   6.8492E+03 0.0011
 source points generated   4962

  estimator     cycle   175   ave of   125 cycles      combination
simple average    combined average     corr
 k(collision)      0.629080       0.640269 0.0015     k(col/abs)
0.639847 0.0014     0.639620 0.0014   0.8730
 k(absorption)     0.624899       0.639425 0.0014     k(abs/tk ln)
0.640673 0.0014     0.640049 0.0014   0.3599
 k(trk length)     0.635067       0.641921 0.0020     k(tk ln/col)
0.641095 0.0015     0.640668 0.0015   0.5015
 rem life(col)   7.0229E+03     6.8350E+03 0.0016     k(col/abs/tk ln)
0.640538 0.0014     0.640021 0.0014
 rem life(abs)   7.0333E+03     6.8355E+03 0.0016     life(col/abs/tl)
6.8393E+03 0.0014   6.8507E+03 0.0011
 source points generated   4920

  estimator     cycle   176   ave of   126 cycles      combination
simple average    combined average     corr
 k(collision)      0.619571       0.640104 0.0015     k(col/abs)
0.639699 0.0014     0.639465 0.0014   0.8759
 k(absorption)     0.622827       0.639293 0.0014     k(abs/tk ln)
0.640595 0.0014     0.639962 0.0014   0.3588
 k(trk length)     0.638822       0.641896 0.0020     k(tk ln/col)
0.641000 0.0015     0.640562 0.0015   0.4976
```

```
 rem life(col)   6.9485E+03     6.8359E+03 0.0016     k(col/abs/tk ln)
0.640431 0.0014     0.639926 0.0014
 rem life(abs)   6.9682E+03     6.8365E+03 0.0016     life(col/abs/tl)
6.8403E+03 0.0014   6.8516E+03 0.0011
 source points generated   4920

  estimator     cycle   177   ave of   127 cycles      combination
simple average    combined average     corr
 k(collision)      0.622859       0.639969 0.0015     k(col/abs)
0.639576 0.0014     0.639339 0.0014   0.8778
 k(absorption)     0.625291       0.639183 0.0014     k(abs/tk ln)
0.640535 0.0014     0.639892 0.0014   0.3571
 k(trk length)     0.640677       0.641886 0.0020     k(tk ln/col)
0.640927 0.0015     0.640477 0.0015   0.4939
 rem life(col)   7.1014E+03     6.8379E+03 0.0016     k(col/abs/tk ln)
0.640346 0.0014     0.639852 0.0014
 rem life(abs)   7.0907E+03     6.8385E+03 0.0016     life(col/abs/tl)
6.8421E+03 0.0014   6.8531E+03 0.0011
 source points generated   4986

  estimator     cycle   178   ave of   128 cycles      combination
simple average    combined average     corr
 k(collision)      0.626537       0.639864 0.0015     k(col/abs)
0.639519 0.0014     0.639304 0.0014   0.8737
 k(absorption)     0.638149       0.639175 0.0014     k(abs/tk ln)
0.640471 0.0014     0.639848 0.0013   0.3563
 k(trk length)     0.626532       0.641766 0.0020     k(tk ln/col)
0.640815 0.0015     0.640366 0.0015   0.4990
 rem life(col)   6.8334E+03     6.8379E+03 0.0016     k(col/abs/tk ln)
0.640268 0.0014     0.639815 0.0014
 rem life(abs)   6.8377E+03     6.8385E+03 0.0016     life(col/abs/tl)
6.8423E+03 0.0014   6.8537E+03 0.0011
 source points generated   5009

  estimator     cycle   179   ave of   129 cycles      combination
simple average    combined average     corr
 k(collision)      0.645445       0.639907 0.0015     k(col/abs)
0.639552 0.0014     0.639328 0.0014   0.8737
 k(absorption)     0.642068       0.639197 0.0014     k(abs/tk ln)
0.640550 0.0014     0.639890 0.0013   0.3568
 k(trk length)     0.659356       0.641903 0.0020     k(tk ln/col)
0.640905 0.0015     0.640424 0.0015   0.5004
 rem life(col)   6.9064E+03     6.8384E+03 0.0015     k(col/abs/tk ln)
0.640336 0.0014     0.639856 0.0013
 rem life(abs)   6.9177E+03     6.8391E+03 0.0015     life(col/abs/tl)
6.8427E+03 0.0014   6.8537E+03 0.0011
 source points generated   5134

  estimator     cycle   180   ave of   130 cycles      combination
simple average    combined average     corr
 k(collision)      0.622017       0.639769 0.0015     k(col/abs)
0.639435 0.0014     0.639211 0.0014   0.8751
 k(absorption)     0.626566       0.639100 0.0014     k(abs/tk ln)
0.640477 0.0014     0.639812 0.0013   0.3587
```

```
 k(trk length)     0.635552       0.641854 0.0019     k(tk ln/col)
0.640812 0.0015     0.640326 0.0015   0.5005
 rem life(col)   6.9260E+03     6.8391E+03 0.0015     k(col/abs/tk ln)
0.640241 0.0014     0.639779 0.0013
 rem life(abs)   6.9375E+03     6.8399E+03 0.0015     life(col/abs/tl)
6.8436E+03 0.0014   6.8546E+03 0.0011
 source points generated   4844

  estimator     cycle   181   ave of   131 cycles      combination
simple average    combined average     corr
 k(collision)      0.626998       0.639672 0.0015     k(col/abs)
0.639351 0.0014     0.639130 0.0014   0.8759
 k(absorption)     0.629924       0.639030 0.0014     k(abs/tk ln)
0.640378 0.0014     0.639719 0.0013   0.3638
 k(trk length)     0.625062       0.641726 0.0019     k(tk ln/col)
0.640699 0.0015     0.640215 0.0015   0.5056
 rem life(col)   6.9414E+03     6.8399E+03 0.0015     k(col/abs/tk ln)
0.640143 0.0014     0.639687 0.0013
 rem life(abs)   6.9171E+03     6.8405E+03 0.0015     life(col/abs/tl)
6.8444E+03 0.0013   6.8558E+03 0.0011
 source points generated   5031

  estimator     cycle   182   ave of   132 cycles      combination
simple average    combined average     corr
 k(collision)      0.633026       0.639621 0.0015     k(col/abs)
0.639314 0.0014     0.639100 0.0014   0.8758
 k(absorption)     0.635838       0.639006 0.0014     k(abs/tk ln)
0.640329 0.0014     0.639679 0.0013   0.3646
 k(trk length)     0.631980       0.641652 0.0019     k(tk ln/col)
0.640637 0.0015     0.640156 0.0015   0.5072
 rem life(col)   6.8489E+03     6.8400E+03 0.0015     k(col/abs/tk ln)
0.640093 0.0014     0.639649 0.0013
 rem life(abs)   6.8748E+03     6.8407E+03 0.0015     life(col/abs/tl)
6.8447E+03 0.0013   6.8561E+03 0.0011
 source points generated   5105

  estimator     cycle   183   ave of   133 cycles      combination
simple average    combined average     corr
 k(collision)      0.635721       0.639592 0.0015     k(col/abs)
0.639282 0.0014     0.639067 0.0014   0.8759
 k(absorption)     0.634456       0.638972 0.0014     k(abs/tk ln)
0.640341 0.0014     0.639670 0.0013   0.3621
 k(trk length)     0.649332       0.641710 0.0019     k(tk ln/col)
0.640651 0.0015     0.640151 0.0015   0.5049
 rem life(col)   6.7934E+03     6.8396E+03 0.0015     k(col/abs/tk ln)
0.640091 0.0013     0.639641 0.0013
 rem life(abs)   6.8099E+03     6.8405E+03 0.0015     life(col/abs/tl)
6.8446E+03 0.0013   6.8564E+03 0.0011
 source points generated   5026

  estimator     cycle   184   ave of   134 cycles      combination
simple average    combined average     corr
 k(collision)      0.647074       0.639648 0.0015     k(col/abs)
0.639311 0.0014     0.639076 0.0014   0.8746
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 k(absorption)     0.639326       0.638974 0.0014     k(abs/tk ln)
0.640389 0.0014     0.639691 0.0013   0.3613
 k(trk length)     0.654243       0.641803 0.0019     k(tk ln/col)
0.640726 0.0015     0.640212 0.0015   0.5071
 rem life(col)   6.9220E+03     6.8402E+03 0.0015     k(col/abs/tk ln)
0.640142 0.0013     0.639657 0.0013
 rem life(abs)   6.9158E+03     6.8411E+03 0.0015     life(col/abs/tl)
6.8450E+03 0.0013   6.8562E+03 0.0011
 source points generated   5092

  estimator     cycle   185   ave of   135 cycles      combination
simple average    combined average     corr
 k(collision)      0.633747       0.639604 0.0015     k(col/abs)
0.639221 0.0014     0.638993 0.0014   0.8702
 k(absorption)     0.620497       0.638837 0.0014     k(abs/tk ln)
0.640376 0.0014     0.639654 0.0013   0.3411
 k(trk length)     0.656931       0.641915 0.0019     k(tk ln/col)
0.640760 0.0015     0.640210 0.0014   0.5002
 rem life(col)   6.6606E+03     6.8389E+03 0.0015     k(col/abs/tk ln)
0.640119 0.0013     0.639621 0.0013
 rem life(abs)   6.6987E+03     6.8400E+03 0.0015     life(col/abs/tl)
6.8440E+03 0.0013   6.8558E+03 0.0011
 source points generated   4842

  estimator     cycle   186   ave of   136 cycles      combination
simple average    combined average     corr
 k(collision)      0.636547       0.639582 0.0015     k(col/abs)
0.639208 0.0014     0.638985 0.0014   0.8700
 k(absorption)     0.638362       0.638834 0.0014     k(abs/tk ln)
0.640463 0.0013     0.639682 0.0013   0.3369
 k(trk length)     0.665945       0.642092 0.0019     k(tk ln/col)
0.640837 0.0015     0.640228 0.0014   0.4914
 rem life(col)   6.8430E+03     6.8389E+03 0.0015     k(col/abs/tk ln)
0.640169 0.0013     0.639656 0.0013
 rem life(abs)   6.8449E+03     6.8400E+03 0.0015     life(col/abs/tl)
6.8440E+03 0.0013   6.8559E+03 0.0011
 source points generated   5046

  estimator     cycle   187   ave of   137 cycles      combination
simple average    combined average     corr
 k(collision)      0.643473       0.639610 0.0015     k(col/abs)
0.639217 0.0014     0.638984 0.0014   0.8693
 k(absorption)     0.637560       0.638825 0.0014     k(abs/tk ln)
0.640414 0.0013     0.639646 0.0013   0.3368
 k(trk length)     0.629876       0.642003 0.0019     k(tk ln/col)
0.640806 0.0015     0.640226 0.0014   0.4876
 rem life(col)   7.0811E+03     6.8407E+03 0.0015     k(col/abs/tk ln)
0.640146 0.0013     0.639616 0.0013
 rem life(abs)   7.1283E+03     6.8421E+03 0.0015     life(col/abs/tl)
6.8456E+03 0.0013   6.8561E+03 0.0011
 source points generated   5032

  estimator     cycle   188   ave of   138 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.640987       0.639620 0.0015     k(col/abs)
0.639227 0.0014     0.638993 0.0014   0.8693
 k(absorption)     0.640069       0.638834 0.0013     k(abs/tk ln)
0.640442 0.0013     0.639664 0.0013   0.3369
 k(trk length)     0.648512       0.642050 0.0019     k(tk ln/col)
0.640835 0.0014     0.640244 0.0014   0.4876
 rem life(col)   7.0268E+03     6.8420E+03 0.0015     k(col/abs/tk ln)
0.640168 0.0013     0.639634 0.0013
 rem life(abs)   7.0118E+03     6.8434E+03 0.0015     life(col/abs/tl)
6.8467E+03 0.0013   6.8571E+03 0.0011
 source points generated   4939

  estimator     cycle   189   ave of   139 cycles      combination
simple average    combined average     corr
 k(collision)      0.640974       0.639630 0.0014     k(col/abs)
0.639223 0.0013     0.638982 0.0013   0.8688
 k(absorption)     0.636322       0.638816 0.0013     k(abs/tk ln)
0.640426 0.0013     0.639647 0.0013   0.3371
 k(trk length)     0.640161       0.642036 0.0019     k(tk ln/col)
0.640833 0.0014     0.640248 0.0014   0.4874
 rem life(col)   6.9130E+03     6.8426E+03 0.0015     k(col/abs/tk ln)
0.640161 0.0013     0.639616 0.0013
 rem life(abs)   6.8935E+03     6.8437E+03 0.0015     life(col/abs/tl)
6.8471E+03 0.0013   6.8573E+03 0.0011
 source points generated   5001

  estimator     cycle   190   ave of   140 cycles      combination
simple average    combined average     corr
 k(collision)      0.633661       0.639587 0.0014     k(col/abs)
0.639176 0.0013     0.638934 0.0013   0.8691
 k(absorption)     0.631768       0.638765 0.0013     k(abs/tk ln)
0.640358 0.0013     0.639583 0.0013   0.3399
 k(trk length)     0.630036       0.641951 0.0019     k(tk ln/col)
0.640769 0.0014     0.640190 0.0014   0.4890
 rem life(col)   6.9267E+03     6.8432E+03 0.0015     k(col/abs/tk ln)
0.640101 0.0013     0.639552 0.0013
 rem life(abs)   6.9217E+03     6.8443E+03 0.0015     life(col/abs/tl)
6.8477E+03 0.0013   6.8581E+03 0.0011
 source points generated   4945

  estimator     cycle   191   ave of   141 cycles      combination
simple average    combined average     corr
 k(collision)      0.653698       0.639687 0.0014     k(col/abs)
0.639284 0.0013     0.639053 0.0013   0.8707
 k(absorption)     0.655016       0.638881 0.0013     k(abs/tk ln)
0.640441 0.0013     0.639695 0.0013   0.3422
 k(trk length)     0.649168       0.642002 0.0019     k(tk ln/col)
0.640845 0.0014     0.640286 0.0014   0.4903
 rem life(col)   6.8792E+03     6.8434E+03 0.0015     k(col/abs/tk ln)
0.640190 0.0013     0.639665 0.0013
 rem life(abs)   6.8925E+03     6.8446E+03 0.0015     life(col/abs/tl)
6.8478E+03 0.0013   6.8577E+03 0.0011
 source points generated   5181
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  estimator     cycle   192   ave of   142 cycles      combination
simple average    combined average     corr
 k(collision)      0.646182       0.639733 0.0014     k(col/abs)
0.639318 0.0013     0.639079 0.0013   0.8707
 k(absorption)     0.642172       0.638904 0.0013     k(abs/tk ln)
0.640472 0.0013     0.639722 0.0013   0.3428
 k(trk length)     0.647440       0.642040 0.0018     k(tk ln/col)
0.640887 0.0014     0.640330 0.0014   0.4911
 rem life(col)   6.8208E+03     6.8433E+03 0.0015     k(col/abs/tk ln)
0.640226 0.0013     0.639689 0.0013
 rem life(abs)   6.8047E+03     6.8443E+03 0.0015     life(col/abs/tl)
6.8475E+03 0.0013   6.8573E+03 0.0011
 source points generated   4971

  estimator     cycle   193   ave of   143 cycles      combination
simple average    combined average     corr
 k(collision)      0.639255       0.639730 0.0014     k(col/abs)
0.639317 0.0013     0.639078 0.0013   0.8707
 k(absorption)     0.638969       0.638904 0.0013     k(abs/tk ln)
0.640488 0.0013     0.639730 0.0013   0.3427
 k(trk length)     0.646533       0.642072 0.0018     k(tk ln/col)
0.640901 0.0014     0.640335 0.0014   0.4908
 rem life(col)   6.6258E+03     6.8417E+03 0.0015     k(col/abs/tk ln)
0.640235 0.0013     0.639698 0.0013
 rem life(abs)   6.6300E+03     6.8428E+03 0.0015     life(col/abs/tl)
6.8462E+03 0.0013   6.8564E+03 0.0011
 source points generated   4928

  estimator     cycle   194   ave of   144 cycles      combination
simple average    combined average     corr
 k(collision)      0.639171       0.639726 0.0014     k(col/abs)
0.639313 0.0013     0.639074 0.0013   0.8707
 k(absorption)     0.638317       0.638900 0.0013     k(abs/tk ln)
0.640477 0.0013     0.639722 0.0012   0.3427
 k(trk length)     0.639506       0.642054 0.0018     k(tk ln/col)
0.640890 0.0014     0.640328 0.0014   0.4908
 rem life(col)   6.9211E+03     6.8423E+03 0.0015     k(col/abs/tk ln)
0.640227 0.0013     0.639690 0.0013
 rem life(abs)   6.8962E+03     6.8432E+03 0.0015     life(col/abs/tl)
6.8466E+03 0.0013   6.8568E+03 0.0011
 source points generated   4993

  estimator     cycle   195   ave of   145 cycles      combination
simple average    combined average     corr
 k(collision)      0.658033       0.639852 0.0014     k(col/abs)
0.639428 0.0013     0.639172 0.0013   0.8728
 k(absorption)     0.653900       0.639004 0.0013     k(abs/tk ln)
0.640600 0.0013     0.639825 0.0013   0.3527
 k(trk length)     0.662815       0.642197 0.0018     k(tk ln/col)
0.641024 0.0014     0.640454 0.0014   0.4995
 rem life(col)   6.9869E+03     6.8433E+03 0.0015     k(col/abs/tk ln)
0.640351 0.0013     0.639788 0.0013
 rem life(abs)   6.9908E+03     6.8442E+03 0.0015     life(col/abs/tl)
6.8472E+03 0.0013   6.8563E+03 0.0011
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 source points generated   5159

  estimator     cycle   196   ave of   146 cycles      combination
simple average    combined average     corr
 k(collision)      0.647308       0.639903 0.0014     k(col/abs)
0.639495 0.0013     0.639260 0.0013   0.8727
 k(absorption)     0.651212       0.639087 0.0013     k(abs/tk ln)
0.640642 0.0013     0.639899 0.0012   0.3509
 k(trk length)     0.642113       0.642196 0.0018     k(tk ln/col)
0.641050 0.0014     0.640496 0.0014   0.4986
 rem life(col)   7.0447E+03     6.8447E+03 0.0015     k(col/abs/tk ln)
0.640396 0.0013     0.639866 0.0012
 rem life(abs)   7.0002E+03     6.8453E+03 0.0015     life(col/abs/tl)
6.8480E+03 0.0013   6.8561E+03 0.0010
 source points generated   4894

  estimator     cycle   197   ave of   147 cycles      combination
simple average    combined average     corr
 k(collision)      0.653140       0.639993 0.0014     k(col/abs)
0.639605 0.0013     0.639401 0.0013   0.8733
 k(absorption)     0.658255       0.639218 0.0013     k(abs/tk ln)
0.640726 0.0013     0.640027 0.0012   0.3515
 k(trk length)     0.647686       0.642234 0.0018     k(tk ln/col)
0.641113 0.0014     0.640580 0.0014   0.4991
 rem life(col)   6.7886E+03     6.8443E+03 0.0015     k(col/abs/tk ln)
0.640481 0.0013     0.640003 0.0013
 rem life(abs)   6.7723E+03     6.8448E+03 0.0014     life(col/abs/tl)
6.8476E+03 0.0013   6.8556E+03 0.0010
 source points generated   5039

  estimator     cycle   198   ave of   148 cycles      combination
simple average    combined average     corr
 k(collision)      0.657711       0.640113 0.0014     k(col/abs)
0.639705 0.0013     0.639475 0.0013   0.8743
 k(absorption)     0.650999       0.639297 0.0013     k(abs/tk ln)
0.640794 0.0013     0.640104 0.0012   0.3543
 k(trk length)     0.650781       0.642291 0.0018     k(tk ln/col)
0.641202 0.0014     0.640697 0.0014   0.5007
 rem life(col)   6.8004E+03     6.8440E+03 0.0014     k(col/abs/tk ln)
0.640567 0.0013     0.640070 0.0012
 rem life(abs)   6.8036E+03     6.8445E+03 0.0014     life(col/abs/tl)
6.8471E+03 0.0013   6.8546E+03 0.0010
 source points generated   5055

  estimator     cycle   199   ave of   149 cycles      combination
simple average    combined average     corr
 k(collision)      0.645032       0.640146 0.0014     k(col/abs)
0.639731 0.0013     0.639496 0.0013   0.8743
 k(absorption)     0.642156       0.639316 0.0013     k(abs/tk ln)
0.640793 0.0013     0.640113 0.0012   0.3537
 k(trk length)     0.639051       0.642270 0.0018     k(tk ln/col)
0.641208 0.0014     0.640717 0.0013   0.4996
 rem life(col)   6.8267E+03     6.8439E+03 0.0014     k(col/abs/tk ln)
0.640577 0.0012     0.640076 0.0012
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 rem life(abs)   6.8348E+03     6.8445E+03 0.0014     life(col/abs/tl)
6.8469E+03 0.0013   6.8540E+03 0.0010
 source points generated   4897

  estimator     cycle   200   ave of   150 cycles      combination
simple average    combined average     corr
 k(collision)      0.651521       0.640222 0.0014     k(col/abs)
0.639791 0.0013     0.639539 0.0013   0.8744
 k(absorption)     0.645893       0.639360 0.0013     k(abs/tk ln)
0.640804 0.0013     0.640143 0.0012   0.3521
 k(trk length)     0.639050       0.642248 0.0018     k(tk ln/col)
0.641235 0.0014     0.640776 0.0013   0.4961
 rem life(col)   6.8726E+03     6.8441E+03 0.0014     k(col/abs/tk ln)
0.640610 0.0012     0.640098 0.0012
 rem life(abs)   6.9112E+03     6.8449E+03 0.0014     life(col/abs/tl)
6.8471E+03 0.0012   6.8536E+03 0.0010
 source points generated   5071

  estimator     cycle   201   ave of   151 cycles      combination
simple average    combined average     corr
 k(collision)      0.621544       0.640098 0.0014     k(col/abs)
0.639666 0.0013     0.639415 0.0013   0.8770
 k(absorption)     0.620186       0.639233 0.0013     k(abs/tk ln)
0.640671 0.0013     0.640009 0.0012   0.3642
 k(trk length)     0.621111       0.642108 0.0018     k(tk ln/col)
0.641103 0.0014     0.640644 0.0013   0.5047
 rem life(col)   7.0184E+03     6.8452E+03 0.0014     k(col/abs/tk ln)
0.640480 0.0012     0.639965 0.0012
 rem life(abs)   6.9939E+03     6.8459E+03 0.0014     life(col/abs/tl)
6.8480E+03 0.0012   6.8541E+03 0.0010
 source points generated   4812

  estimator     cycle   202   ave of   152 cycles      combination
simple average    combined average     corr
 k(collision)      0.659949       0.640229 0.0014     k(col/abs)
0.639759 0.0013     0.639460 0.0013   0.8755
 k(absorption)     0.647771       0.639289 0.0013     k(abs/tk ln)
0.640792 0.0013     0.640073 0.0012   0.3696
 k(trk length)     0.670437       0.642295 0.0018     k(tk ln/col)
0.641262 0.0014     0.640773 0.0014   0.5164
 rem life(col)   6.9027E+03     6.8456E+03 0.0014     k(col/abs/tk ln)
0.640604 0.0013     0.640012 0.0012
 rem life(abs)   6.9499E+03     6.8466E+03 0.0014     life(col/abs/tl)
6.8484E+03 0.0012   6.8542E+03 0.0010
 source points generated   5324

  estimator     cycle   203   ave of   153 cycles      combination
simple average    combined average     corr
 k(collision)      0.634768       0.640193 0.0014     k(col/abs)
0.639724 0.0013     0.639426 0.0013   0.8757
 k(absorption)     0.634152       0.639256 0.0013     k(abs/tk ln)
0.640731 0.0013     0.640019 0.0012   0.3713
 k(trk length)     0.628730       0.642206 0.0018     k(tk ln/col)
0.641199 0.0014     0.640719 0.0013   0.5175
```

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 rem life(col)   6.8630E+03     6.8457E+03 0.0014     k(col/abs/tk ln)
0.640552 0.0013     0.639958 0.0012
 rem life(abs)   6.8291E+03     6.8465E+03 0.0014     life(col/abs/tl)
6.8485E+03 0.0012   6.8545E+03 0.0010
 source points generated   4834

  estimator     cycle   204   ave of   154 cycles      combination
simple average    combined average     corr
 k(collision)      0.656778       0.640301 0.0014     k(col/abs)
0.639869 0.0013     0.639651 0.0013   0.8748
 k(absorption)     0.667270       0.639438 0.0013     k(abs/tk ln)
0.640833 0.0013     0.640208 0.0012   0.3668
 k(trk length)     0.645715       0.642229 0.0018     k(tk ln/col)
0.641265 0.0014     0.640818 0.0013   0.5161
 rem life(col)   6.6615E+03     6.8445E+03 0.0014     k(col/abs/tk ln)
0.640656 0.0013     0.640173 0.0012
 rem life(abs)   6.6503E+03     6.8452E+03 0.0014     life(col/abs/tl)
6.8472E+03 0.0012   6.8532E+03 0.0010
 source points generated   5176

  estimator     cycle   205   ave of   155 cycles      combination
simple average    combined average     corr
 k(collision)      0.658002       0.640415 0.0014     k(col/abs)
0.639980 0.0013     0.639757 0.0013   0.8769
 k(absorption)     0.656172       0.639546 0.0013     k(abs/tk ln)
0.640949 0.0013     0.640317 0.0012   0.3756
 k(trk length)     0.661274       0.642352 0.0018     k(tk ln/col)
0.641383 0.0014     0.640932 0.0013   0.5227
 rem life(col)   7.0231E+03     6.8457E+03 0.0014     k(col/abs/tk ln)
0.640771 0.0013     0.640280 0.0013
 rem life(abs)   7.0332E+03     6.8464E+03 0.0014     life(col/abs/tl)
6.8480E+03 0.0012   6.8529E+03 0.0010
 source points generated   5023

  estimator     cycle   206   ave of   156 cycles      combination
simple average    combined average     corr
 k(collision)      0.639467       0.640409 0.0014     k(col/abs)
0.639998 0.0013     0.639793 0.0013   0.8755
 k(absorption)     0.645882       0.639586 0.0013     k(abs/tk ln)
0.640933 0.0013     0.640329 0.0012   0.3713
 k(trk length)     0.631233       0.642280 0.0017     k(tk ln/col)
0.641345 0.0014     0.640906 0.0013   0.5221
 rem life(col)   6.8266E+03     6.8455E+03 0.0014     k(col/abs/tk ln)
0.640758 0.0012     0.640297 0.0012
 rem life(abs)   6.8047E+03     6.8461E+03 0.0014     life(col/abs/tl)
6.8479E+03 0.0012   6.8532E+03 0.0010
 source points generated   4825

  estimator     cycle   207   ave of   157 cycles      combination
simple average    combined average     corr
 k(collision)      0.633535       0.640365 0.0014     k(col/abs)
0.639948 0.0013     0.639743 0.0013   0.8757
 k(absorption)     0.630889       0.639531 0.0013     k(abs/tk ln)
0.640881 0.0013     0.640276 0.0012   0.3730
```

```
 k(trk length)     0.634661       0.642232 0.0017     k(tk ln/col)
0.641298 0.0014     0.640860 0.0013   0.5231
 rem life(col)   6.7185E+03     6.8447E+03 0.0014     k(col/abs/tk ln)
0.640709 0.0012     0.640244 0.0012
 rem life(abs)   6.7171E+03     6.8453E+03 0.0014     life(col/abs/tl)
6.8474E+03 0.0012   6.8533E+03 0.0010
 source points generated   4924

  estimator     cycle   208   ave of   158 cycles      combination
simple average    combined average     corr
 k(collision)      0.632443       0.640315 0.0014     k(col/abs)
0.639892 0.0013     0.639688 0.0013   0.8761
 k(absorption)     0.629864       0.639470 0.0013     k(abs/tk ln)
0.640811 0.0013     0.640207 0.0012   0.3763
 k(trk length)     0.629757       0.642153 0.0017     k(tk ln/col)
0.641234 0.0014     0.640800 0.0013   0.5250
 rem life(col)   6.8252E+03     6.8446E+03 0.0014     k(col/abs/tk ln)
0.640646 0.0012     0.640177 0.0012
 rem life(abs)   6.8023E+03     6.8450E+03 0.0014     life(col/abs/tl)
6.8474E+03 0.0012   6.8539E+03 0.0010
 source points generated   5006

  estimator     cycle   209   ave of   159 cycles      combination
simple average    combined average     corr
 k(collision)      0.642869       0.640331 0.0014     k(col/abs)
0.639927 0.0013     0.639739 0.0013   0.8753
 k(absorption)     0.647960       0.639523 0.0013     k(abs/tk ln)
0.640814 0.0013     0.640238 0.0012   0.3723
 k(trk length)     0.634407       0.642104 0.0017     k(tk ln/col)
0.641218 0.0013     0.640798 0.0013   0.5236
 rem life(col)   6.7842E+03     6.8442E+03 0.0014     k(col/abs/tk ln)
0.640653 0.0012     0.640211 0.0012
 rem life(abs)   6.7919E+03     6.8447E+03 0.0014     life(col/abs/tl)
6.8471E+03 0.0012   6.8536E+03 0.0010
 source points generated   5123

  estimator     cycle   210   ave of   160 cycles      combination
simple average    combined average     corr
 k(collision)      0.630882       0.640272 0.0014     k(col/abs)
0.639846 0.0013     0.639666 0.0013   0.8750
 k(absorption)     0.623080       0.639420 0.0013     k(abs/tk ln)
0.640739 0.0013     0.640162 0.0012   0.3743
 k(trk length)     0.634674       0.642058 0.0017     k(tk ln/col)
0.641165 0.0013     0.640744 0.0013   0.5248
 rem life(col)   6.8008E+03     6.8440E+03 0.0014     k(col/abs/tk ln)
0.640583 0.0012     0.640140 0.0012
 rem life(abs)   6.8044E+03     6.8445E+03 0.0014     life(col/abs/tl)
6.8468E+03 0.0012   6.8533E+03 0.0010
 source points generated   4889

  estimator     cycle   211   ave of   161 cycles      combination
simple average    combined average     corr
 k(collision)      0.644457       0.640298 0.0014     k(col/abs)
0.639882 0.0013     0.639710 0.0013   0.8749
```

```
 k(absorption)     0.646874       0.639467 0.0013     k(abs/tk ln)
0.640735 0.0012     0.640184 0.0012   0.3705
 k(trk length)     0.633329       0.642003 0.0017     k(tk ln/col)
0.641151 0.0013     0.640749 0.0013   0.5224
 rem life(col)   6.7033E+03     6.8431E+03 0.0014     k(col/abs/tk ln)
0.640589 0.0012     0.640162 0.0012
 rem life(abs)   6.7238E+03     6.8437E+03 0.0014     life(col/abs/tl)
6.8461E+03 0.0012   6.8527E+03 0.0010
 source points generated   5079

  estimator     cycle   212   ave of   162 cycles      combination
simple average    combined average     corr
 k(collision)      0.661634       0.640430 0.0014     k(col/abs)
0.640003 0.0013     0.639813 0.0013   0.8772
 k(absorption)     0.657108       0.639576 0.0013     k(abs/tk ln)
0.640837 0.0012     0.640292 0.0012   0.3773
 k(trk length)     0.657403       0.642099 0.0017     k(tk ln/col)
0.641264 0.0013     0.640879 0.0013   0.5276
 rem life(col)   6.7066E+03     6.8422E+03 0.0014     k(col/abs/tk ln)
0.640701 0.0012     0.640261 0.0012
 rem life(abs)   6.7220E+03     6.8430E+03 0.0014     life(col/abs/tl)
6.8453E+03 0.0012   6.8521E+03 0.0010
 source points generated   5112

  estimator     cycle   213   ave of   163 cycles      combination
simple average    combined average     corr
 k(collision)      0.636930       0.640408 0.0013     k(col/abs)
0.640026 0.0013     0.639874 0.0013   0.8717
 k(absorption)     0.650883       0.639645 0.0013     k(abs/tk ln)
0.640942 0.0012     0.640367 0.0012   0.3838
 k(trk length)     0.665128       0.642240 0.0017     k(tk ln/col)
0.641324 0.0013     0.640895 0.0013   0.5198
 rem life(col)   6.8894E+03     6.8425E+03 0.0014     k(col/abs/tk ln)
0.640764 0.0012     0.640365 0.0012
 rem life(abs)   6.8900E+03     6.8432E+03 0.0014     life(col/abs/tl)
6.8456E+03 0.0012   6.8522E+03 0.0010
 source points generated   4876

  estimator     cycle   214   ave of   164 cycles      combination
simple average    combined average     corr
 k(collision)      0.632865       0.640362 0.0013     k(col/abs)
0.640001 0.0013     0.639854 0.0013   0.8707
 k(absorption)     0.638913       0.639640 0.0013     k(abs/tk ln)
0.640876 0.0012     0.640318 0.0012   0.3818
 k(trk length)     0.621300       0.642112 0.0017     k(tk ln/col)
0.641237 0.0013     0.640817 0.0013   0.5218
 rem life(col)   7.1341E+03     6.8443E+03 0.0014     k(col/abs/tk ln)
0.640705 0.0012     0.640315 0.0012
 rem life(abs)   7.1086E+03     6.8449E+03 0.0014     life(col/abs/tl)
6.8471E+03 0.0012   6.8537E+03 0.0010
 source points generated   4945

  estimator     cycle   215   ave of   165 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.633847       0.640323 0.0013     k(col/abs)
0.639960 0.0013     0.639812 0.0013   0.8710
 k(absorption)     0.632380       0.639596 0.0013     k(abs/tk ln)
0.640815 0.0012     0.640261 0.0012   0.3841
 k(trk length)     0.629137       0.642033 0.0017     k(tk ln/col)
0.641178 0.0013     0.640764 0.0013   0.5232
 rem life(col)   6.6032E+03     6.8428E+03 0.0014     k(col/abs/tk ln)
0.640651 0.0012     0.640259 0.0012
 rem life(abs)   6.6284E+03     6.8435E+03 0.0014     life(col/abs/tl)
6.8459E+03 0.0012   6.8528E+03 0.0010
 source points generated   5019

  estimator     cycle   216   ave of   166 cycles      combination
simple average    combined average     corr
 k(collision)      0.633151       0.640279 0.0013     k(col/abs)
0.639917 0.0013     0.639770 0.0013   0.8714
 k(absorption)     0.632705       0.639555 0.0013     k(abs/tk ln)
0.640765 0.0012     0.640213 0.0012   0.3858
 k(trk length)     0.632338       0.641975 0.0017     k(tk ln/col)
0.641127 0.0013     0.640715 0.0013   0.5245
 rem life(col)   7.1234E+03     6.8445E+03 0.0014     k(col/abs/tk ln)
0.640603 0.0012     0.640211 0.0012
 rem life(abs)   7.1063E+03     6.8451E+03 0.0014     life(col/abs/tl)
6.8473E+03 0.0012   6.8539E+03 0.0010
 source points generated   5028

  estimator     cycle   217   ave of   167 cycles      combination
simple average    combined average     corr
 k(collision)      0.638069       0.640266 0.0013     k(col/abs)
0.639890 0.0012     0.639741 0.0013   0.8709
 k(absorption)     0.632569       0.639513 0.0013     k(abs/tk ln)
0.640727 0.0012     0.640174 0.0012   0.3867
 k(trk length)     0.636339       0.641941 0.0017     k(tk ln/col)
0.641104 0.0013     0.640696 0.0013   0.5247
 rem life(col)   6.9158E+03     6.8450E+03 0.0014     k(col/abs/tk ln)
0.640574 0.0012     0.640174 0.0012
 rem life(abs)   6.9325E+03     6.8457E+03 0.0014     life(col/abs/tl)
6.8478E+03 0.0012   6.8542E+03 0.0010
 source points generated   5055

  estimator     cycle   218   ave of   168 cycles      combination
simple average    combined average     corr
 k(collision)      0.647784       0.640311 0.0013     k(col/abs)
0.639956 0.0012     0.639828 0.0013   0.8703
 k(absorption)     0.654217       0.639601 0.0013     k(abs/tk ln)
0.640773 0.0012     0.640250 0.0012   0.3848
 k(trk length)     0.642502       0.641945 0.0017     k(tk ln/col)
0.641128 0.0013     0.640733 0.0013   0.5241
 rem life(col)   6.6335E+03     6.8437E+03 0.0014     k(col/abs/tk ln)
0.640619 0.0012     0.640254 0.0012
 rem life(abs)   6.6257E+03     6.8443E+03 0.0014     life(col/abs/tl)
6.8466E+03 0.0012   6.8537E+03 0.0010
 source points generated   5112
```

```
  estimator     cycle   219   ave of   169 cycles      combination
simple average    combined average     corr
 k(collision)      0.635819       0.640284 0.0013     k(col/abs)
0.639927 0.0012     0.639800 0.0012   0.8704
 k(absorption)     0.634488       0.639570 0.0013     k(abs/tk ln)
0.640763 0.0012     0.640233 0.0012   0.3841
 k(trk length)     0.643935       0.641956 0.0017     k(tk ln/col)
0.641120 0.0013     0.640717 0.0013   0.5234
 rem life(col)   7.0766E+03     6.8451E+03 0.0014     k(col/abs/tk ln)
0.640604 0.0012     0.640237 0.0012
 rem life(abs)   7.1150E+03     6.8459E+03 0.0014     life(col/abs/tl)
6.8479E+03 0.0012   6.8542E+03 0.0010
 source points generated   4910

  estimator     cycle   220   ave of   170 cycles      combination
simple average    combined average     corr
 k(collision)      0.643736       0.640305 0.0013     k(col/abs)
0.639948 0.0012     0.639820 0.0012   0.8705
 k(absorption)     0.643108       0.639591 0.0012     k(abs/tk ln)
0.640803 0.0012     0.640262 0.0012   0.3848
 k(trk length)     0.651733       0.642014 0.0017     k(tk ln/col)
0.641159 0.0013     0.640745 0.0013   0.5238
 rem life(col)   6.8350E+03     6.8450E+03 0.0014     k(col/abs/tk ln)
0.640637 0.0012     0.640266 0.0012
 rem life(abs)   6.8625E+03     6.8460E+03 0.0014     life(col/abs/tl)
6.8477E+03 0.0012   6.8533E+03 0.0010
 source points generated   5029

  estimator     cycle   221   ave of   171 cycles      combination
simple average    combined average     corr
 k(collision)      0.634315       0.640270 0.0013     k(col/abs)
0.639906 0.0012     0.639778 0.0012   0.8707
 k(absorption)     0.631193       0.639542 0.0012     k(abs/tk ln)
0.640726 0.0012     0.640190 0.0012   0.3883
 k(trk length)     0.624151       0.641909 0.0017     k(tk ln/col)
0.641090 0.0013     0.640685 0.0013   0.5250
 rem life(col)   7.0801E+03     6.8464E+03 0.0014     k(col/abs/tk ln)
0.640574 0.0012     0.640197 0.0012
 rem life(abs)   7.0753E+03     6.8474E+03 0.0014     life(col/abs/tl)
6.8488E+03 0.0012   6.8539E+03 0.0010
 source points generated   4897

  estimator     cycle   222   ave of   172 cycles      combination
simple average    combined average     corr
 k(collision)      0.630465       0.640213 0.0013     k(col/abs)
0.639842 0.0012     0.639716 0.0012   0.8713
 k(absorption)     0.627260       0.639471 0.0012     k(abs/tk ln)
0.640670 0.0012     0.640132 0.0012   0.3898
 k(trk length)     0.635150       0.641870 0.0016     k(tk ln/col)
0.641041 0.0013     0.640635 0.0013   0.5259
 rem life(col)   6.8011E+03     6.8461E+03 0.0014     k(col/abs/tk ln)
0.640518 0.0012     0.640141 0.0012
 rem life(abs)   6.8129E+03     6.8472E+03 0.0014     life(col/abs/tl)
6.8488E+03 0.0012   6.8545E+03 0.0010
```

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 source points generated   5001

  estimator     cycle   223   ave of   173 cycles      combination
simple average    combined average     corr
 k(collision)      0.666858       0.640367 0.0013     k(col/abs)
0.639976 0.0012     0.639820 0.0012   0.8739
 k(absorption)     0.659191       0.639585 0.0012     k(abs/tk ln)
0.640735 0.0012     0.640236 0.0012   0.3878
 k(trk length)     0.644540       0.641886 0.0016     k(tk ln/col)
0.641126 0.0013     0.640782 0.0013   0.5196
 rem life(col)   6.7930E+03     6.8458E+03 0.0014     k(col/abs/tk ln)
0.640612 0.0012     0.640233 0.0012
 rem life(abs)   6.8153E+03     6.8470E+03 0.0014     life(col/abs/tl)
6.8485E+03 0.0012   6.8540E+03 0.0010
 source points generated   5324

  estimator     cycle   224   ave of   174 cycles      combination
simple average    combined average     corr
 k(collision)      0.647333       0.640407 0.0013     k(col/abs)
0.640009 0.0012     0.639848 0.0012   0.8740
 k(absorption)     0.644087       0.639611 0.0012     k(abs/tk ln)
0.640766 0.0012     0.640265 0.0012   0.3885
 k(trk length)     0.648290       0.641922 0.0016     k(tk ln/col)
0.641165 0.0013     0.640821 0.0012   0.5204
 rem life(col)   6.7697E+03     6.8454E+03 0.0014     k(col/abs/tk ln)
0.640647 0.0012     0.640260 0.0012
 rem life(abs)   6.7710E+03     6.8466E+03 0.0014     life(col/abs/tl)
6.8482E+03 0.0012   6.8540E+03 0.0010
 source points generated   4831

  estimator     cycle   225   ave of   175 cycles      combination
simple average    combined average     corr
 k(collision)      0.652510       0.640476 0.0013     k(col/abs)
0.640046 0.0012     0.639864 0.0012   0.8715
 k(absorption)     0.640540       0.639616 0.0012     k(abs/tk ln)
0.640805 0.0012     0.640285 0.0012   0.3880
 k(trk length)     0.654564       0.641995 0.0016     k(tk ln/col)
0.641235 0.0013     0.640891 0.0012   0.5231
 rem life(col)   6.7982E+03     6.8451E+03 0.0014     k(col/abs/tk ln)
0.640695 0.0012     0.640277 0.0012
 rem life(abs)   6.8198E+03     6.8464E+03 0.0014     life(col/abs/tl)
6.8480E+03 0.0012   6.8538E+03 0.0010
 source points generated   5000

  estimator     cycle   226   ave of   176 cycles      combination
simple average    combined average     corr
 k(collision)      0.650620       0.640533 0.0013     k(col/abs)
0.640084 0.0012     0.639888 0.0012   0.8709
 k(absorption)     0.642992       0.639635 0.0012     k(abs/tk ln)
0.640773 0.0012     0.640274 0.0012   0.3847
 k(trk length)     0.627421       0.641912 0.0016     k(tk ln/col)
0.641223 0.0013     0.640914 0.0012   0.5146
 rem life(col)   6.7835E+03     6.8448E+03 0.0014     k(col/abs/tk ln)
0.640693 0.0012     0.640266 0.0012
```

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 rem life(abs)   6.8201E+03     6.8463E+03 0.0014     life(col/abs/tl)
6.8479E+03 0.0012   6.8540E+03 0.0010
 source points generated   4953

  estimator     cycle   227   ave of   177 cycles      combination
simple average    combined average     corr
 k(collision)      0.648381       0.640578 0.0013     k(col/abs)
0.640113 0.0012     0.639906 0.0012   0.8704
 k(absorption)     0.641916       0.639648 0.0012     k(abs/tk ln)
0.640831 0.0012     0.640304 0.0011   0.3844
 k(trk length)     0.660118       0.642015 0.0016     k(tk ln/col)
0.641296 0.0013     0.640969 0.0012   0.5167
 rem life(col)   6.8374E+03     6.8447E+03 0.0014     k(col/abs/tk ln)
0.640747 0.0012     0.640294 0.0012
 rem life(abs)   6.8815E+03     6.8465E+03 0.0013     life(col/abs/tl)
6.8479E+03 0.0012   6.8538E+03 0.0010
 source points generated   4977

  estimator     cycle   228   ave of   178 cycles      combination
simple average    combined average     corr
 k(collision)      0.624343       0.640487 0.0013     k(col/abs)
0.640038 0.0012     0.639827 0.0012   0.8709
 k(absorption)     0.629307       0.639590 0.0012     k(abs/tk ln)
0.640721 0.0012     0.640198 0.0011   0.3903
 k(trk length)     0.613109       0.641852 0.0016     k(tk ln/col)
0.641169 0.0013     0.640846 0.0012   0.5244
 rem life(col)   6.7902E+03     6.8444E+03 0.0014     k(col/abs/tk ln)
0.640643 0.0012     0.640183 0.0012
 rem life(abs)   6.7609E+03     6.8460E+03 0.0013     life(col/abs/tl)
6.8476E+03 0.0012   6.8538E+03 0.0010
 source points generated   4800

  estimator     cycle   229   ave of   179 cycles      combination
simple average    combined average     corr
 k(collision)      0.654862       0.640567 0.0013     k(col/abs)
0.640113 0.0012     0.639895 0.0012   0.8720
 k(absorption)     0.651969       0.639659 0.0012     k(abs/tk ln)
0.640755 0.0012     0.640256 0.0011   0.3887
 k(trk length)     0.641780       0.641852 0.0016     k(tk ln/col)
0.641209 0.0013     0.640912 0.0012   0.5219
 rem life(col)   6.7355E+03     6.8438E+03 0.0013     k(col/abs/tk ln)
0.640693 0.0012     0.640235 0.0012
 rem life(abs)   6.7430E+03     6.8454E+03 0.0013     life(col/abs/tl)
6.8470E+03 0.0012   6.8529E+03 0.0010
 source points generated   5207

  estimator     cycle   230   ave of   180 cycles      combination
simple average    combined average     corr
 k(collision)      0.628622       0.640501 0.0013     k(col/abs)
0.640054 0.0012     0.639835 0.0012   0.8726
 k(absorption)     0.630410       0.639608 0.0012     k(abs/tk ln)
0.640666 0.0012     0.640173 0.0011   0.3931
 k(trk length)     0.618993       0.641725 0.0016     k(tk ln/col)
0.641113 0.0013     0.640822 0.0012   0.5262
```

```
 rem life(col)   6.9305E+03     6.8443E+03 0.0013     k(col/abs/tk ln)
0.640611 0.0012     0.640152 0.0012
 rem life(abs)   6.9330E+03     6.8459E+03 0.0013     life(col/abs/tl)
6.8474E+03 0.0012   6.8532E+03 0.0010
 source points generated   4784

  estimator     cycle   231   ave of   181 cycles      combination
simple average    combined average     corr
 k(collision)      0.653293       0.640571 0.0013     k(col/abs)
0.640143 0.0012     0.639951 0.0012   0.8729
 k(absorption)     0.658892       0.639714 0.0012     k(abs/tk ln)
0.640728 0.0012     0.640270 0.0011   0.3916
 k(trk length)     0.644818       0.641742 0.0016     k(tk ln/col)
0.641157 0.0013     0.640883 0.0012   0.5255
 rem life(col)   6.7881E+03     6.8440E+03 0.0013     k(col/abs/tk ln)
0.640676 0.0012     0.640256 0.0012
 rem life(abs)   6.7578E+03     6.8454E+03 0.0013     life(col/abs/tl)
6.8470E+03 0.0012   6.8528E+03 0.0010
 source points generated   5164

  estimator     cycle   232   ave of   182 cycles      combination
simple average    combined average     corr
 k(collision)      0.664507       0.640703 0.0013     k(col/abs)
0.640254 0.0012     0.640029 0.0012   0.8745
 k(absorption)     0.656142       0.639804 0.0012     k(abs/tk ln)
0.640826 0.0012     0.640361 0.0011   0.3988
 k(trk length)     0.661014       0.641848 0.0016     k(tk ln/col)
0.641275 0.0013     0.641012 0.0012   0.5324
 rem life(col)   6.9012E+03     6.8443E+03 0.0013     k(col/abs/tk ln)
0.640785 0.0012     0.640332 0.0012
 rem life(abs)   6.9066E+03     6.8457E+03 0.0013     life(col/abs/tl)
6.8472E+03 0.0012   6.8525E+03 0.0010
 source points generated   5058

  estimator     cycle   233   ave of   183 cycles      combination
simple average    combined average     corr
 k(collision)      0.647662       0.640741 0.0013     k(col/abs)
0.640337 0.0012     0.640182 0.0012   0.8691
 k(absorption)     0.663535       0.639934 0.0012     k(abs/tk ln)
0.640958 0.0012     0.640491 0.0012   0.4114
 k(trk length)     0.666456       0.641982 0.0016     k(tk ln/col)
0.641362 0.0013     0.641067 0.0012   0.5333
 rem life(col)   6.7100E+03     6.8436E+03 0.0013     k(col/abs/tk ln)
0.640886 0.0012     0.640508 0.0012
 rem life(abs)   6.6936E+03     6.8449E+03 0.0013     life(col/abs/tl)
6.8463E+03 0.0012   6.8513E+03 0.0010
 source points generated   4868

  estimator     cycle   234   ave of   184 cycles      combination
simple average    combined average     corr
 k(collision)      0.639699       0.640735 0.0013     k(col/abs)
0.640345 0.0012     0.640196 0.0012   0.8686
 k(absorption)     0.643724       0.639955 0.0012     k(abs/tk ln)
0.641027 0.0012     0.640528 0.0012   0.4117
```

```
 k(trk length)     0.663590       0.642100 0.0016     k(tk ln/col)
0.641417 0.0013     0.641088 0.0012   0.5291
 rem life(col)   6.8025E+03     6.8433E+03 0.0013     k(col/abs/tk ln)
0.640930 0.0012     0.640550 0.0012
 rem life(abs)   6.7927E+03     6.8446E+03 0.0013     life(col/abs/tl)
6.8461E+03 0.0012   6.8513E+03 0.0010
 source points generated   5005

  estimator     cycle   235   ave of   185 cycles      combination
simple average    combined average     corr
 k(collision)      0.617985       0.640612 0.0013     k(col/abs)
0.640221 0.0012     0.640073 0.0012   0.8717
 k(absorption)     0.616923       0.639830 0.0012     k(abs/tk ln)
0.640879 0.0012     0.640378 0.0012   0.4269
 k(trk length)     0.610465       0.641929 0.0016     k(tk ln/col)
0.641270 0.0013     0.640943 0.0012   0.5406
 rem life(col)   6.8514E+03     6.8434E+03 0.0013     k(col/abs/tk ln)
0.640790 0.0012     0.640404 0.0012
 rem life(abs)   6.8538E+03     6.8447E+03 0.0013     life(col/abs/tl)
6.8462E+03 0.0011   6.8516E+03 0.0010
 source points generated   4844

  estimator     cycle   236   ave of   186 cycles      combination
simple average    combined average     corr
 k(collision)      0.628002       0.640544 0.0013     k(col/abs)
0.640158 0.0012     0.640009 0.0012   0.8724
 k(absorption)     0.629010       0.639772 0.0012     k(abs/tk ln)
0.640838 0.0012     0.640332 0.0012   0.4274
 k(trk length)     0.637205       0.641903 0.0016     k(tk ln/col)
0.641224 0.0013     0.640890 0.0012   0.5406
 rem life(col)   7.0479E+03     6.8445E+03 0.0013     k(col/abs/tk ln)
0.640740 0.0012     0.640355 0.0012
 rem life(abs)   7.0282E+03     6.8457E+03 0.0013     life(col/abs/tl)
6.8471E+03 0.0011   6.8522E+03 0.0010
 source points generated   5086

  estimator     cycle   237   ave of   187 cycles      combination
simple average    combined average     corr
 k(collision)      0.641458       0.640549 0.0013     k(col/abs)
0.640197 0.0012     0.640077 0.0012   0.8691
 k(absorption)     0.653493       0.639845 0.0012     k(abs/tk ln)
0.640882 0.0012     0.640397 0.0012   0.4268
 k(trk length)     0.644699       0.641918 0.0016     k(tk ln/col)
0.641234 0.0013     0.640897 0.0012   0.5406
 rem life(col)   6.7390E+03     6.8439E+03 0.0013     k(col/abs/tk ln)
0.640771 0.0012     0.640424 0.0012
 rem life(abs)   6.7094E+03     6.8449E+03 0.0013     life(col/abs/tl)
6.8466E+03 0.0011   6.8522E+03 0.0009
 source points generated   5103

  estimator     cycle   238   ave of   188 cycles      combination
simple average    combined average     corr
 k(collision)      0.644044       0.640568 0.0013     k(col/abs)
0.640219 0.0012     0.640099 0.0012   0.8692
```

```
 k(absorption)     0.644332       0.639869 0.0012     k(abs/tk ln)
0.640886 0.0012     0.640411 0.0012   0.4261
 k(trk length)     0.638832       0.641902 0.0016     k(tk ln/col)
0.641235 0.0013     0.640907 0.0012   0.5400
 rem life(col)   6.8332E+03     6.8439E+03 0.0013     k(col/abs/tk ln)
0.640780 0.0012     0.640439 0.0012
 rem life(abs)   6.8361E+03     6.8449E+03 0.0013     life(col/abs/tl)
6.8465E+03 0.0011   6.8520E+03 0.0009
 source points generated   5030

  estimator     cycle   239   ave of   189 cycles      combination
simple average    combined average     corr
 k(collision)      0.658544       0.640663 0.0013     k(col/abs)
0.640321 0.0012     0.640212 0.0012   0.8711
 k(absorption)     0.660788       0.639980 0.0012     k(abs/tk ln)
0.640963 0.0012     0.640517 0.0012   0.4274
 k(trk length)     0.650058       0.641945 0.0016     k(tk ln/col)
0.641304 0.0013     0.640996 0.0012   0.5408
 rem life(col)   6.8343E+03     6.8438E+03 0.0013     k(col/abs/tk ln)
0.640863 0.0012     0.640544 0.0012
 rem life(abs)   6.8240E+03     6.8448E+03 0.0013     life(col/abs/tl)
6.8465E+03 0.0011   6.8522E+03 0.0009
 source points generated   5075

  estimator     cycle   240   ave of   190 cycles      combination
simple average    combined average     corr
 k(collision)      0.643855       0.640680 0.0013     k(col/abs)
0.640351 0.0012     0.640248 0.0012   0.8708
 k(absorption)     0.647884       0.640022 0.0012     k(abs/tk ln)
0.640947 0.0012     0.640529 0.0012   0.4218
 k(trk length)     0.628023       0.641872 0.0016     k(tk ln/col)
0.641276 0.0013     0.640988 0.0012   0.5378
 rem life(col)   6.5815E+03     6.8424E+03 0.0013     k(col/abs/tk ln)
0.640858 0.0012     0.640556 0.0012
 rem life(abs)   6.5452E+03     6.8432E+03 0.0013     life(col/abs/tl)
6.8452E+03 0.0011   6.8514E+03 0.0009
 source points generated   4911

  estimator     cycle   241   ave of   191 cycles      combination
simple average    combined average     corr
 k(collision)      0.646670       0.640711 0.0013     k(col/abs)
0.640380 0.0012     0.640277 0.0012   0.8709
 k(absorption)     0.645397       0.640050 0.0012     k(abs/tk ln)
0.641002 0.0012     0.640568 0.0011   0.4231
 k(trk length)     0.657815       0.641955 0.0016     k(tk ln/col)
0.641333 0.0013     0.641030 0.0012   0.5387
 rem life(col)   6.6198E+03     6.8413E+03 0.0013     k(col/abs/tk ln)
0.640905 0.0012     0.640595 0.0012
 rem life(abs)   6.6326E+03     6.8421E+03 0.0013     life(col/abs/tl)
6.8442E+03 0.0011   6.8508E+03 0.0009
 source points generated   5035

  estimator     cycle   242   ave of   192 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.628167       0.640646 0.0013     k(col/abs)
0.640343 0.0012     0.640243 0.0012   0.8689
 k(absorption)     0.638359       0.640041 0.0012     k(abs/tk ln)
0.640935 0.0012     0.640519 0.0011   0.4213
 k(trk length)     0.617823       0.641830 0.0016     k(tk ln/col)
0.641238 0.0013     0.640942 0.0012   0.5429
 rem life(col)   6.6716E+03     6.8404E+03 0.0013     k(col/abs/tk ln)
0.640839 0.0012     0.640539 0.0011
 rem life(abs)   6.6635E+03     6.8412E+03 0.0013     life(col/abs/tl)
6.8435E+03 0.0011   6.8508E+03 0.0009
 source points generated   4909

  estimator     cycle   243   ave of   193 cycles      combination
simple average    combined average     corr
 k(collision)      0.619350       0.640535 0.0013     k(col/abs)
0.640246 0.0012     0.640141 0.0012   0.8706
 k(absorption)     0.623607       0.639956 0.0012     k(abs/tk ln)
0.640767 0.0012     0.640354 0.0012   0.4330
 k(trk length)     0.593323       0.641578 0.0016     k(tk ln/col)
0.641057 0.0013     0.640770 0.0012   0.5548
 rem life(col)   6.9435E+03     6.8409E+03 0.0013     k(col/abs/tk ln)
0.640690 0.0012     0.640376 0.0012
 rem life(abs)   6.9312E+03     6.8416E+03 0.0013     life(col/abs/tl)
6.8441E+03 0.0011   6.8514E+03 0.0009
 source points generated   4937

  estimator     cycle   244   ave of   194 cycles      combination
simple average    combined average     corr
 k(collision)      0.657098       0.640621 0.0013     k(col/abs)
0.640325 0.0012     0.640215 0.0012   0.8719
 k(absorption)     0.654225       0.640029 0.0012     k(abs/tk ln)
0.640835 0.0012     0.640426 0.0012   0.4360
 k(trk length)     0.653800       0.641641 0.0016     k(tk ln/col)
0.641131 0.0013     0.640852 0.0012   0.5571
 rem life(col)   6.7388E+03     6.8404E+03 0.0013     k(col/abs/tk ln)
0.640764 0.0012     0.640447 0.0012
 rem life(abs)   6.7459E+03     6.8411E+03 0.0013     life(col/abs/tl)
6.8436E+03 0.0011   6.8511E+03 0.0009
 source points generated   5305

  estimator     cycle   245   ave of   195 cycles      combination
simple average    combined average     corr
 k(collision)      0.651529       0.640677 0.0013     k(col/abs)
0.640375 0.0012     0.640261 0.0012   0.8723
 k(absorption)     0.648678       0.640074 0.0012     k(abs/tk ln)
0.640882 0.0012     0.640471 0.0011   0.4375
 k(trk length)     0.651289       0.641691 0.0016     k(tk ln/col)
0.641184 0.0013     0.640907 0.0012   0.5584
 rem life(col)   6.9188E+03     6.8408E+03 0.0013     k(col/abs/tk ln)
0.640814 0.0012     0.640491 0.0012
 rem life(abs)   6.9432E+03     6.8417E+03 0.0013     life(col/abs/tl)
6.8440E+03 0.0011   6.8512E+03 0.0009
 source points generated   4942
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  estimator     cycle   246   ave of   196 cycles      combination
simple average    combined average     corr
 k(collision)      0.616748       0.640555 0.0013     k(col/abs)
0.640280 0.0012     0.640161 0.0012   0.8723
 k(absorption)     0.626845       0.640006 0.0012     k(abs/tk ln)
0.640854 0.0012     0.640430 0.0011   0.4349
 k(trk length)     0.643711       0.641701 0.0016     k(tk ln/col)
0.641128 0.0013     0.640833 0.0012   0.5505
 rem life(col)   6.9536E+03     6.8414E+03 0.0013     k(col/abs/tk ln)
0.640754 0.0012     0.640439 0.0012
 rem life(abs)   6.9437E+03     6.8422E+03 0.0013     life(col/abs/tl)
6.8445E+03 0.0011   6.8516E+03 0.0009
 source points generated   4703

  estimator     cycle   247   ave of   197 cycles      combination
simple average    combined average     corr
 k(collision)      0.655437       0.640630 0.0013     k(col/abs)
0.640340 0.0012     0.640207 0.0012   0.8724
 k(absorption)     0.648639       0.640050 0.0012     k(abs/tk ln)
0.640909 0.0012     0.640477 0.0011   0.4370
 k(trk length)     0.654998       0.641769 0.0016     k(tk ln/col)
0.641199 0.0013     0.640907 0.0012   0.5530
 rem life(col)   6.5941E+03     6.8401E+03 0.0013     k(col/abs/tk ln)
0.640816 0.0012     0.640484 0.0011
 rem life(abs)   6.6154E+03     6.8410E+03 0.0013     life(col/abs/tl)
6.8435E+03 0.0011   6.8515E+03 0.0009
 source points generated   5370

  estimator     cycle   248   ave of   198 cycles      combination
simple average    combined average     corr
 k(collision)      0.646346       0.640659 0.0013     k(col/abs)
0.640381 0.0012     0.640257 0.0012   0.8722
 k(absorption)     0.650490       0.640103 0.0012     k(abs/tk ln)
0.640929 0.0012     0.640517 0.0011   0.4350
 k(trk length)     0.638976       0.641754 0.0016     k(tk ln/col)
0.641207 0.0013     0.640927 0.0012   0.5522
 rem life(col)   6.6229E+03     6.8390E+03 0.0013     k(col/abs/tk ln)
0.640839 0.0012     0.640525 0.0011
 rem life(abs)   6.6016E+03     6.8398E+03 0.0013     life(col/abs/tl)
6.8425E+03 0.0011   6.8509E+03 0.0009
 source points generated   4896

  estimator     cycle   249   ave of   199 cycles      combination
simple average    combined average     corr
 k(collision)      0.614670       0.640528 0.0013     k(col/abs)
0.640300 0.0012     0.640183 0.0012   0.8667
 k(absorption)     0.634077       0.640072 0.0012     k(abs/tk ln)
0.640874 0.0012     0.640472 0.0011   0.4364
 k(trk length)     0.626257       0.641677 0.0016     k(tk ln/col)
0.641103 0.0013     0.640818 0.0012   0.5556
 rem life(col)   6.9001E+03     6.8393E+03 0.0013     k(col/abs/tk ln)
0.640759 0.0012     0.640472 0.0011
 rem life(abs)   6.8528E+03     6.8399E+03 0.0013     life(col/abs/tl)
6.8429E+03 0.0011   6.8516E+03 0.0009
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 source points generated   4730

  estimator     cycle   250   ave of   200 cycles      combination
simple average    combined average     corr
 k(collision)      0.646043       0.640556 0.0013     k(col/abs)
0.640331 0.0012     0.640217 0.0012   0.8668
 k(absorption)     0.646909       0.640107 0.0012     k(abs/tk ln)
0.640916 0.0012     0.640509 0.0011   0.4376
 k(trk length)     0.651332       0.641725 0.0016     k(tk ln/col)
0.641140 0.0013     0.640850 0.0012   0.5563
 rem life(col)   6.7949E+03     6.8391E+03 0.0013     k(col/abs/tk ln)
0.640796 0.0012     0.640509 0.0011
 rem life(abs)   6.7867E+03     6.8396E+03 0.0013     life(col/abs/tl)
6.8425E+03 0.0011   6.8509E+03 0.0009
 source points generated   5281

  estimator     cycle   251   ave of   201 cycles      combination
simple average    combined average     corr
 k(collision)      0.657853       0.640642 0.0013     k(col/abs)
0.640425 0.0012     0.640318 0.0012   0.8684
 k(absorption)     0.660487       0.640208 0.0012     k(abs/tk ln)
0.641001 0.0012     0.640607 0.0011   0.4417
 k(trk length)     0.655513       0.641793 0.0016     k(tk ln/col)
0.641218 0.0013     0.640933 0.0012   0.5590
 rem life(col)   7.0741E+03     6.8403E+03 0.0013     k(col/abs/tk ln)
0.640881 0.0012     0.640608 0.0011
 rem life(abs)   7.0770E+03     6.8408E+03 0.0013     life(col/abs/tl)
6.8435E+03 0.0011   6.8513E+03 0.0009
 source points generated   5080

  estimator     cycle   252   ave of   202 cycles      combination
simple average    combined average     corr
 k(collision)      0.637611       0.640627 0.0013     k(col/abs)
0.640422 0.0012     0.640322 0.0012   0.8679
 k(absorption)     0.642114       0.640217 0.0012     k(abs/tk ln)
0.640997 0.0012     0.640610 0.0011   0.4414
 k(trk length)     0.638578       0.641778 0.0016     k(tk ln/col)
0.641202 0.0013     0.640918 0.0012   0.5591
 rem life(col)   6.8582E+03     6.8404E+03 0.0013     k(col/abs/tk ln)
0.640874 0.0012     0.640611 0.0011
 rem life(abs)   6.8698E+03     6.8409E+03 0.0013     life(col/abs/tl)
6.8435E+03 0.0011   6.8513E+03 0.0009
 source points generated   4862

  estimator     cycle   253   ave of   203 cycles      combination
simple average    combined average     corr
 k(collision)      0.623022       0.640540 0.0013     k(col/abs)
0.640346 0.0012     0.640248 0.0012   0.8689
 k(absorption)     0.627071       0.640153 0.0012     k(abs/tk ln)
0.640941 0.0012     0.640551 0.0011   0.4433
 k(trk length)     0.632044       0.641730 0.0016     k(tk ln/col)
0.641135 0.0013     0.640846 0.0012   0.5604
 rem life(col)   7.0955E+03     6.8416E+03 0.0013     k(col/abs/tk ln)
0.640808 0.0012     0.640551 0.0011
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 rem life(abs)   7.0634E+03     6.8420E+03 0.0013     life(col/abs/tl)
6.8447E+03 0.0011   6.8524E+03 0.0009
 source points generated   4845

  estimator     cycle   254   ave of   204 cycles      combination
simple average    combined average     corr
 k(collision)      0.622796       0.640453 0.0013     k(col/abs)
0.640258 0.0012     0.640159 0.0012   0.8705
 k(absorption)     0.621714       0.640062 0.0012     k(abs/tk ln)
0.640832 0.0012     0.640446 0.0011   0.4517
 k(trk length)     0.615808       0.641603 0.0016     k(tk ln/col)
0.641028 0.0013     0.640743 0.0012   0.5662
 rem life(col)   6.8133E+03     6.8415E+03 0.0013     k(col/abs/tk ln)
0.640706 0.0012     0.640446 0.0011
 rem life(abs)   6.8090E+03     6.8419E+03 0.0013     life(col/abs/tl)
6.8445E+03 0.0011   6.8522E+03 0.0009
 source points generated   5021

  estimator     cycle   255   ave of   205 cycles      combination
simple average    combined average     corr
 k(collision)      0.620076       0.640354 0.0013     k(col/abs)
0.640157 0.0012     0.640058 0.0012   0.8726
 k(absorption)     0.619090       0.639960 0.0012     k(abs/tk ln)
0.640781 0.0012     0.640383 0.0011   0.4477
 k(trk length)     0.641359       0.641601 0.0016     k(tk ln/col)
0.640978 0.0013     0.640680 0.0012   0.5621
 rem life(col)   6.9988E+03     6.8422E+03 0.0013     k(col/abs/tk ln)
0.640638 0.0012     0.640382 0.0011
 rem life(abs)   7.0029E+03     6.8427E+03 0.0013     life(col/abs/tl)
6.8453E+03 0.0011   6.8531E+03 0.0009
 source points generated   5035

  estimator     cycle   256   ave of   206 cycles      combination
simple average    combined average     corr
 k(collision)      0.635544       0.640331 0.0013     k(col/abs)
0.640130 0.0012     0.640029 0.0012   0.8727
 k(absorption)     0.633588       0.639929 0.0012     k(abs/tk ln)
0.640780 0.0012     0.640369 0.0011   0.4459
 k(trk length)     0.647842       0.641632 0.0016     k(tk ln/col)
0.640981 0.0013     0.640672 0.0012   0.5607
 rem life(col)   6.9662E+03     6.8428E+03 0.0013     k(col/abs/tk ln)
0.640630 0.0011     0.640369 0.0011
 rem life(abs)   6.9905E+03     6.8434E+03 0.0013     life(col/abs/tl)
6.8459E+03 0.0011   6.8535E+03 0.0009
 source points generated   5106

  estimator     cycle   257   ave of   207 cycles      combination
simple average    combined average     corr
 k(collision)      0.631869       0.640290 0.0013     k(col/abs)
0.640108 0.0012     0.640016 0.0012   0.8718
 k(absorption)     0.639273       0.639926 0.0012     k(abs/tk ln)
0.640731 0.0012     0.640338 0.0011   0.4443
 k(trk length)     0.622032       0.641537 0.0016     k(tk ln/col)
0.640913 0.0012     0.640612 0.0012   0.5623
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```
 rem life(col)   6.8600E+03     6.8429E+03 0.0013     k(col/abs/tk ln)
0.640584 0.0011     0.640337 0.0011
 rem life(abs)   6.8358E+03     6.8433E+03 0.0013     life(col/abs/tl)
6.8460E+03 0.0011   6.8538E+03 0.0009
 source points generated   4981

  estimator     cycle   258   ave of   208 cycles      combination
simple average    combined average     corr
 k(collision)      0.651656       0.640344 0.0013     k(col/abs)
0.640133 0.0012     0.640025 0.0012   0.8695
 k(absorption)     0.639229       0.639922 0.0012     k(abs/tk ln)
0.640806 0.0012     0.640364 0.0011   0.4385
 k(trk length)     0.673346       0.641690 0.0016     k(tk ln/col)
0.641017 0.0013     0.640678 0.0012   0.5648
 rem life(col)   6.8327E+03     6.8429E+03 0.0013     k(col/abs/tk ln)
0.640652 0.0011     0.640362 0.0011
 rem life(abs)   6.8437E+03     6.8433E+03 0.0013     life(col/abs/tl)
6.8460E+03 0.0011   6.8540E+03 0.0009
 source points generated   5173

  estimator     cycle   259   ave of   209 cycles      combination
simple average    combined average     corr
 k(collision)      0.640542       0.640345 0.0012     k(col/abs)
0.640144 0.0012     0.640041 0.0012   0.8692
 k(absorption)     0.644198       0.639943 0.0012     k(abs/tk ln)
0.640793 0.0012     0.640368 0.0011   0.4366
 k(trk length)     0.632036       0.641644 0.0016     k(tk ln/col)
0.640995 0.0012     0.640666 0.0012   0.5642
 rem life(col)   6.5294E+03     6.8414E+03 0.0013     k(col/abs/tk ln)
0.640644 0.0011     0.640366 0.0011
 rem life(abs)   6.5344E+03     6.8419E+03 0.0013     life(col/abs/tl)
6.8448E+03 0.0011   6.8534E+03 0.0009
 source points generated   4932

  estimator     cycle   260   ave of   210 cycles      combination
simple average    combined average     corr
 k(collision)      0.632507       0.640308 0.0012     k(col/abs)
0.640107 0.0012     0.640004 0.0012   0.8695
 k(absorption)     0.632023       0.639905 0.0012     k(abs/tk ln)
0.640762 0.0012     0.640334 0.0011   0.4372
 k(trk length)     0.636388       0.641619 0.0016     k(tk ln/col)
0.640963 0.0012     0.640632 0.0012   0.5646
 rem life(col)   7.1309E+03     6.8428E+03 0.0013     k(col/abs/tk ln)
0.640611 0.0011     0.640332 0.0011
 rem life(abs)   7.1206E+03     6.8432E+03 0.0013     life(col/abs/tl)
6.8457E+03 0.0011   6.8534E+03 0.0009
 source points generated   4925

  estimator     cycle   261   ave of   211 cycles      combination
simple average    combined average     corr
 k(collision)      0.630724       0.640263 0.0012     k(col/abs)
0.640081 0.0012     0.639988 0.0012   0.8684
 k(absorption)     0.638832       0.639900 0.0012     k(abs/tk ln)
0.640753 0.0012     0.640327 0.0011   0.4372
```

```
 k(trk length)     0.639045       0.641606 0.0016     k(tk ln/col)
0.640935 0.0012     0.640598 0.0012   0.5643
 rem life(col)   6.7515E+03     6.8423E+03 0.0013     k(col/abs/tk ln)
0.640590 0.0011     0.640326 0.0011
 rem life(abs)   6.7403E+03     6.8427E+03 0.0013     life(col/abs/tl)
6.8453E+03 0.0011   6.8532E+03 0.0009
 source points generated   5003

  estimator     cycle   262   ave of   212 cycles      combination
simple average    combined average     corr
 k(collision)      0.645591       0.640288 0.0012     k(col/abs)
0.640121 0.0012     0.640037 0.0011   0.8680
 k(absorption)     0.651323       0.639954 0.0012     k(abs/tk ln)
0.640806 0.0012     0.640381 0.0011   0.4393
 k(trk length)     0.652555       0.641658 0.0015     k(tk ln/col)
0.640973 0.0012     0.640628 0.0012   0.5649
 rem life(col)   6.9524E+03     6.8428E+03 0.0013     k(col/abs/tk ln)
0.640633 0.0011     0.640380 0.0011
 rem life(abs)   6.9397E+03     6.8432E+03 0.0013     life(col/abs/tl)
6.8457E+03 0.0011   6.8532E+03 0.0009
 source points generated   5131

  estimator     cycle   263   ave of   213 cycles      combination
simple average    combined average     corr
 k(collision)      0.653754       0.640351 0.0012     k(col/abs)
0.640180 0.0012     0.640093 0.0011   0.8687
 k(absorption)     0.651648       0.640009 0.0012     k(abs/tk ln)
0.640853 0.0011     0.640433 0.0011   0.4407
 k(trk length)     0.650042       0.641697 0.0015     k(tk ln/col)
0.641024 0.0012     0.640688 0.0012   0.5658
 rem life(col)   6.8284E+03     6.8428E+03 0.0013     k(col/abs/tk ln)
0.640686 0.0011     0.640433 0.0011
 rem life(abs)   6.8535E+03     6.8432E+03 0.0013     life(col/abs/tl)
6.8458E+03 0.0011   6.8534E+03 0.0009
 source points generated   5094

  estimator     cycle   264   ave of   214 cycles      combination
simple average    combined average     corr
 k(collision)      0.643569       0.640366 0.0012     k(col/abs)
0.640181 0.0011     0.640087 0.0011   0.8681
 k(absorption)     0.637071       0.639995 0.0011     k(abs/tk ln)
0.640808 0.0011     0.640400 0.0011   0.4407
 k(trk length)     0.625117       0.641620 0.0015     k(tk ln/col)
0.640993 0.0012     0.640678 0.0012   0.5625
 rem life(col)   6.9758E+03     6.8434E+03 0.0013     k(col/abs/tk ln)
0.640660 0.0011     0.640400 0.0011
 rem life(abs)   6.9917E+03     6.8439E+03 0.0013     life(col/abs/tl)
6.8462E+03 0.0011   6.8531E+03 0.0009
 source points generated   4931

  estimator     cycle   265   ave of   215 cycles      combination
simple average    combined average     corr
 k(collision)      0.628103       0.640309 0.0012     k(col/abs)
0.640154 0.0011     0.640074 0.0011   0.8654
```

```
 k(absorption)      0.640784        0.639999 0.0011     k(abs/tk ln)
0.640767 0.0011      0.640379 0.0011   0.4387
 k(trk length)      0.623570        0.641536 0.0015     k(tk ln/col)
0.640922 0.0012      0.640611 0.0012   0.5651
 rem life(col)   6.8404E+03     6.8434E+03 0.0013     k(col/abs/tk ln)
0.640615 0.0011      0.640379 0.0011
 rem life(abs)   6.8176E+03     6.8438E+03 0.0013     life(col/abs/tl)
6.8461E+03 0.0011   6.8528E+03 0.0009
 source points generated   4884

  estimator     cycle   266   ave of   216 cycles      combination
simple average    combined average     corr
 k(collision)       0.641399        0.640314 0.0012     k(col/abs)
0.640171 0.0011      0.640099 0.0011   0.8649
 k(absorption)      0.646482        0.640029 0.0011     k(abs/tk ln)
0.640789 0.0011      0.640406 0.0011   0.4388
 k(trk length)      0.644350        0.641549 0.0015     k(tk ln/col)
0.640932 0.0012      0.640618 0.0012   0.5652
 rem life(col)   6.8354E+03     6.8434E+03 0.0013     k(col/abs/tk ln)
0.640631 0.0011      0.640406 0.0011
 rem life(abs)   6.8331E+03     6.8437E+03 0.0013     life(col/abs/tl)
6.8459E+03 0.0011   6.8524E+03 0.0009
 source points generated   5135

  estimator     cycle   267   ave of   217 cycles      combination
simple average    combined average     corr
 k(collision)       0.653091        0.640373 0.0012     k(col/abs)
0.640230 0.0011      0.640158 0.0011   0.8657
 k(absorption)      0.652826        0.640088 0.0011     k(abs/tk ln)
0.640847 0.0011      0.640464 0.0011   0.4414
 k(trk length)      0.654050        0.641607 0.0015     k(tk ln/col)
0.640990 0.0012      0.640677 0.0012   0.5670
 rem life(col)   6.7900E+03     6.8431E+03 0.0013     k(col/abs/tk ln)
0.640689 0.0011      0.640464 0.0011
 rem life(abs)   6.7753E+03     6.8434E+03 0.0013     life(col/abs/tl)
6.8457E+03 0.0011   6.8523E+03 0.0009
 source points generated   5088

  estimator     cycle   268   ave of   218 cycles      combination
simple average    combined average     corr
 k(collision)       0.629745        0.640324 0.0012     k(col/abs)
0.640194 0.0011      0.640127 0.0011   0.8656
 k(absorption)      0.634977        0.640064 0.0011     k(abs/tk ln)
0.640819 0.0011      0.640438 0.0011   0.4420
 k(trk length)      0.634433        0.641574 0.0015     k(tk ln/col)
0.640949 0.0012      0.640634 0.0012   0.5677
 rem life(col)   7.0828E+03     6.8442E+03 0.0013     k(col/abs/tk ln)
0.640654 0.0011      0.640438 0.0011
 rem life(abs)   7.0934E+03     6.8446E+03 0.0013     life(col/abs/tl)
6.8466E+03 0.0011   6.8525E+03 0.0009
 source points generated   4836

  estimator     cycle   269   ave of   219 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.651150       0.640374 0.0012     k(col/abs)
0.640245 0.0011     0.640179 0.0011   0.8662
 k(absorption)     0.651362       0.640116 0.0011     k(abs/tk ln)
0.640865 0.0011     0.640488 0.0011   0.4435
 k(trk length)     0.650512       0.641615 0.0015     k(tk ln/col)
0.640994 0.0012     0.640682 0.0012   0.5687
 rem life(col)   6.8690E+03     6.8443E+03 0.0013     k(col/abs/tk ln)
0.640701 0.0011     0.640488 0.0011
 rem life(abs)   6.8787E+03     6.8447E+03 0.0013     life(col/abs/tl)
6.8466E+03 0.0011   6.8524E+03 0.0009
 source points generated   5194

  estimator     cycle   270   ave of   220 cycles      combination
simple average    combined average     corr
 k(collision)      0.649847       0.640417 0.0012     k(col/abs)
0.640293 0.0011     0.640230 0.0011   0.8666
 k(absorption)     0.651771       0.640169 0.0011     k(abs/tk ln)
0.640898 0.0011     0.640534 0.0011   0.4431
 k(trk length)     0.644289       0.641627 0.0015     k(tk ln/col)
0.641022 0.0012     0.640719 0.0012   0.5685
 rem life(col)   6.6423E+03     6.8434E+03 0.0013     k(col/abs/tk ln)
0.640737 0.0011     0.640534 0.0011
 rem life(abs)   6.6353E+03     6.8438E+03 0.0013     life(col/abs/tl)
6.8459E+03 0.0011   6.8521E+03 0.0009
 source points generated   5000

  estimator     cycle   271   ave of   221 cycles      combination
simple average    combined average     corr
 k(collision)      0.623292       0.640339 0.0012     k(col/abs)
0.640224 0.0011     0.640164 0.0011   0.8676
 k(absorption)     0.626887       0.640109 0.0011     k(abs/tk ln)
0.640889 0.0011     0.640506 0.0011   0.4374
 k(trk length)     0.651194       0.641670 0.0015     k(tk ln/col)
0.641005 0.0012     0.640683 0.0012   0.5606
 rem life(col)   7.0160E+03     6.8442E+03 0.0013     k(col/abs/tk ln)
0.640706 0.0011     0.640507 0.0011
 rem life(abs)   7.0356E+03     6.8446E+03 0.0013     life(col/abs/tl)
6.8466E+03 0.0011   6.8528E+03 0.0009
 source points generated   4846

  estimator     cycle   272   ave of   222 cycles      combination
simple average    combined average     corr
 k(collision)      0.634921       0.640315 0.0012     k(col/abs)
0.640213 0.0011     0.640160 0.0011   0.8670
 k(absorption)     0.640767       0.640112 0.0011     k(abs/tk ln)
0.640870 0.0011     0.640497 0.0011   0.4368
 k(trk length)     0.632461       0.641629 0.0015     k(tk ln/col)
0.640972 0.0012     0.640653 0.0012   0.5611
 rem life(col)   6.6889E+03     6.8435E+03 0.0013     k(col/abs/tk ln)
0.640685 0.0011     0.640499 0.0011
 rem life(abs)   6.6714E+03     6.8439E+03 0.0013     life(col/abs/tl)
6.8460E+03 0.0011   6.8525E+03 0.0009
 source points generated   5061
```

```
  estimator     cycle   273   ave of   223 cycles      combination
simple average    combined average     corr
 k(collision)      0.637046       0.640300 0.0012     k(col/abs)
0.640192 0.0011     0.640136 0.0011   0.8669
 k(absorption)     0.633905       0.640084 0.0011     k(abs/tk ln)
0.640806 0.0011     0.640445 0.0011   0.4382
 k(trk length)     0.619144       0.641528 0.0015     k(tk ln/col)
0.640914 0.0012     0.640610 0.0012   0.5599
 rem life(col)   6.7557E+03     6.8431E+03 0.0013     k(col/abs/tk ln)
0.640637 0.0011     0.640445 0.0011
 rem life(abs)   6.7391E+03     6.8434E+03 0.0013     life(col/abs/tl)
6.8456E+03 0.0011   6.8523E+03 0.0009
 source points generated   5065

  estimator     cycle   274   ave of   224 cycles      combination
simple average    combined average     corr
 k(collision)      0.648039       0.640335 0.0012     k(col/abs)
0.640223 0.0011     0.640166 0.0011   0.8672
 k(absorption)     0.646439       0.640112 0.0011     k(abs/tk ln)
0.640875 0.0011     0.640487 0.0011   0.4395
 k(trk length)     0.666288       0.641638 0.0015     k(tk ln/col)
0.640986 0.0012     0.640656 0.0012   0.5609
 rem life(col)   6.8073E+03     6.8429E+03 0.0012     k(col/abs/tk ln)
0.640695 0.0011     0.640487 0.0011
 rem life(abs)   6.8079E+03     6.8432E+03 0.0012     life(col/abs/tl)
6.8456E+03 0.0011   6.8525E+03 0.0009
 source points generated   5105

  estimator     cycle   275   ave of   225 cycles      combination
simple average    combined average     corr
 k(collision)      0.633951       0.640306 0.0012     k(col/abs)
0.640186 0.0011     0.640125 0.0011   0.8672
 k(absorption)     0.629655       0.640066 0.0011     k(abs/tk ln)
0.640830 0.0011     0.640441 0.0011   0.4411
 k(trk length)     0.631631       0.641594 0.0015     k(tk ln/col)
0.640950 0.0012     0.640623 0.0012   0.5616
 rem life(col)   6.8484E+03     6.8430E+03 0.0012     k(col/abs/tk ln)
0.640655 0.0011     0.640441 0.0011
 rem life(abs)   6.8878E+03     6.8434E+03 0.0012     life(col/abs/tl)
6.8457E+03 0.0011   6.8527E+03 0.0009
 source points generated   4887

  estimator     cycle   276   ave of   226 cycles      combination
simple average    combined average     corr
 k(collision)      0.630993       0.640265 0.0012     k(col/abs)
0.640142 0.0011     0.640080 0.0011   0.8676
 k(absorption)     0.629496       0.640019 0.0011     k(abs/tk ln)
0.640772 0.0011     0.640386 0.0011   0.4438
 k(trk length)     0.625796       0.641524 0.0015     k(tk ln/col)
0.640894 0.0012     0.640572 0.0011   0.5632
 rem life(col)   7.0159E+03     6.8437E+03 0.0012     k(col/abs/tk ln)
0.640603 0.0011     0.640386 0.0011
 rem life(abs)   6.9965E+03     6.8441E+03 0.0012     life(col/abs/tl)
6.8464E+03 0.0011   6.8533E+03 0.0009
```

```
 source points generated   4945

  estimator     cycle   277   ave of   227 cycles      combination
simple average    combined average     corr
 k(collision)      0.648404       0.640301 0.0012     k(col/abs)
0.640182 0.0011     0.640122 0.0011   0.8679
 k(absorption)     0.650009       0.640063 0.0011     k(abs/tk ln)
0.640819 0.0011     0.640431 0.0011   0.4456
 k(trk length)     0.653105       0.641575 0.0015     k(tk ln/col)
0.640938 0.0012     0.640611 0.0011   0.5643
 rem life(col)   6.9505E+03     6.8442E+03 0.0012     k(col/abs/tk ln)
0.640646 0.0011     0.640431 0.0011
 rem life(abs)   6.9791E+03     6.8447E+03 0.0012     life(col/abs/tl)
6.8469E+03 0.0011   6.8538E+03 0.0009
 source points generated   5201

  estimator     cycle   278   ave of   228 cycles      combination
simple average    combined average     corr
 k(collision)      0.643766       0.640316 0.0012     k(col/abs)
0.640207 0.0011     0.640153 0.0011   0.8676
 k(absorption)     0.648086       0.640098 0.0011     k(abs/tk ln)
0.640797 0.0011     0.640440 0.0011   0.4394
 k(trk length)     0.623485       0.641496 0.0015     k(tk ln/col)
0.640906 0.0012     0.640601 0.0011   0.5606
 rem life(col)   6.8499E+03     6.8442E+03 0.0012     k(col/abs/tk ln)
0.640637 0.0011     0.640440 0.0011
 rem life(abs)   6.8262E+03     6.8446E+03 0.0012     life(col/abs/tl)
6.8468E+03 0.0011   6.8535E+03 0.0009
 source points generated   4971

  estimator     cycle   279   ave of   229 cycles      combination
simple average    combined average     corr
 k(collision)      0.642595       0.640326 0.0012     k(col/abs)
0.640237 0.0011     0.640195 0.0011   0.8663
 k(absorption)     0.651461       0.640148 0.0011     k(abs/tk ln)
0.640838 0.0011     0.640487 0.0010   0.4405
 k(trk length)     0.649016       0.641528 0.0015     k(tk ln/col)
0.640927 0.0012     0.640616 0.0011   0.5607
 rem life(col)   6.6866E+03     6.8435E+03 0.0012     k(col/abs/tk ln)
0.640667 0.0011     0.640485 0.0011
 rem life(abs)   6.6913E+03     6.8440E+03 0.0012     life(col/abs/tl)
6.8462E+03 0.0011   6.8531E+03 0.0009
 source points generated   4996

  estimator     cycle   280   ave of   230 cycles      combination
simple average    combined average     corr
 k(collision)      0.640564       0.640327 0.0012     k(col/abs)
0.640246 0.0011     0.640207 0.0011   0.8661
 k(absorption)     0.643875       0.640164 0.0011     k(abs/tk ln)
0.640818 0.0011     0.640485 0.0010   0.4382
 k(trk length)     0.628434       0.641471 0.0015     k(tk ln/col)
0.640899 0.0012     0.640602 0.0011   0.5596
 rem life(col)   6.6392E+03     6.8426E+03 0.0012     k(col/abs/tk ln)
0.640654 0.0011     0.640483 0.0010
```

```
 rem life(abs)   6.6432E+03     6.8431E+03 0.0012     life(col/abs/tl)
6.8455E+03 0.0011   6.8527E+03 0.0009
 source points generated   4933

  estimator     cycle   281   ave of   231 cycles      combination
simple average    combined average     corr
 k(collision)      0.627387       0.640271 0.0012     k(col/abs)
0.640183 0.0011     0.640142 0.0011   0.8668
 k(absorption)     0.623986       0.640094 0.0011     k(abs/tk ln)
0.640752 0.0011     0.640418 0.0010   0.4416
 k(trk length)     0.627228       0.641410 0.0015     k(tk ln/col)
0.640840 0.0012     0.640544 0.0011   0.5617
 rem life(col)   6.9772E+03     6.8432E+03 0.0012     k(col/abs/tk ln)
0.640592 0.0011     0.640416 0.0010
 rem life(abs)   6.9465E+03     6.8435E+03 0.0012     life(col/abs/tl)
6.8459E+03 0.0011   6.8532E+03 0.0009
 source points generated   4919

  estimator     cycle   282   ave of   232 cycles      combination
simple average    combined average     corr
 k(collision)      0.639564       0.640268 0.0012     k(col/abs)
0.640193 0.0011     0.640159 0.0011   0.8662
 k(absorption)     0.645497       0.640117 0.0011     k(abs/tk ln)
0.640766 0.0011     0.640437 0.0010   0.4415
 k(trk length)     0.642678       0.641415 0.0015     k(tk ln/col)
0.640842 0.0012     0.640543 0.0011   0.5617
 rem life(col)   7.0171E+03     6.8440E+03 0.0012     k(col/abs/tk ln)
0.640600 0.0011     0.640435 0.0010
 rem life(abs)   6.9946E+03     6.8442E+03 0.0012     life(col/abs/tl)
6.8464E+03 0.0011   6.8530E+03 0.0009
 source points generated   5088

  estimator     cycle   283   ave of   233 cycles      combination
simple average    combined average     corr
 k(collision)      0.647400       0.640299 0.0012     k(col/abs)
0.640235 0.0011     0.640207 0.0011   0.8661
 k(absorption)     0.652503       0.640171 0.0011     k(abs/tk ln)
0.640809 0.0011     0.640487 0.0010   0.4426
 k(trk length)     0.648935       0.641448 0.0015     k(tk ln/col)
0.640873 0.0012     0.640574 0.0011   0.5623
 rem life(col)   6.5566E+03     6.8427E+03 0.0012     k(col/abs/tk ln)
0.640639 0.0011     0.640483 0.0010
 rem life(abs)   6.5598E+03     6.8430E+03 0.0012     life(col/abs/tl)
6.8453E+03 0.0011   6.8523E+03 0.0009
 source points generated   5044

  estimator     cycle   284   ave of   234 cycles      combination
simple average    combined average     corr
 k(collision)      0.644967       0.640319 0.0011     k(col/abs)
0.640282 0.0011     0.640268 0.0011   0.8636
 k(absorption)     0.657857       0.640246 0.0011     k(abs/tk ln)
0.640879 0.0011     0.640561 0.0010   0.4464
 k(trk length)     0.656476       0.641512 0.0015     k(tk ln/col)
0.640915 0.0012     0.640602 0.0011   0.5626
```

```
 rem life(col)   6.8608E+03     6.8428E+03 0.0012     k(col/abs/tk ln)
0.640692 0.0011     0.640550 0.0010
 rem life(abs)   6.8782E+03     6.8431E+03 0.0012     life(col/abs/tl)
6.8453E+03 0.0011   6.8519E+03 0.0009
 source points generated   5027

  estimator     cycle   285   ave of   235 cycles      combination
simple average    combined average     corr
 k(collision)      0.658953       0.640398 0.0012     k(col/abs)
0.640336 0.0011     0.640311 0.0011   0.8623
 k(absorption)     0.646984       0.640275 0.0011     k(abs/tk ln)
0.640867 0.0011     0.640570 0.0010   0.4429
 k(trk length)     0.628972       0.641458 0.0015     k(tk ln/col)
0.640928 0.0012     0.640660 0.0011   0.5523
 rem life(col)   6.9821E+03     6.8434E+03 0.0012     k(col/abs/tk ln)
0.640710 0.0011     0.640565 0.0010
 rem life(abs)   7.0048E+03     6.8438E+03 0.0012     life(col/abs/tl)
6.8457E+03 0.0011   6.8517E+03 0.0009
 source points generated   5076

  estimator     cycle   286   ave of   236 cycles      combination
simple average    combined average     corr
 k(collision)      0.623553       0.640326 0.0012     k(col/abs)
0.640272 0.0011     0.640248 0.0011   0.8634
 k(absorption)     0.626548       0.640217 0.0011     k(abs/tk ln)
0.640766 0.0011     0.640481 0.0010   0.4489
 k(trk length)     0.607549       0.641315 0.0015     k(tk ln/col)
0.640821 0.0012     0.640561 0.0011   0.5580
 rem life(col)   6.8591E+03     6.8435E+03 0.0012     k(col/abs/tk ln)
0.640619 0.0011     0.640476 0.0010
 rem life(abs)   6.8591E+03     6.8439E+03 0.0012     life(col/abs/tl)
6.8458E+03 0.0011   6.8518E+03 0.0008
 source points generated   4750

  estimator     cycle   287   ave of   237 cycles      combination
simple average    combined average     corr
 k(collision)      0.653828       0.640383 0.0012     k(col/abs)
0.640329 0.0011     0.640306 0.0011   0.8642
 k(absorption)     0.654112       0.640275 0.0011     k(abs/tk ln)
0.640837 0.0011     0.640543 0.0010   0.4530
 k(trk length)     0.660994       0.641398 0.0015     k(tk ln/col)
0.640891 0.0012     0.640622 0.0011   0.5610
 rem life(col)   6.7844E+03     6.8432E+03 0.0012     k(col/abs/tk ln)
0.640685 0.0011     0.640537 0.0010
 rem life(abs)   6.7746E+03     6.8436E+03 0.0012     life(col/abs/tl)
6.8455E+03 0.0011   6.8515E+03 0.0008
 source points generated   5225

  estimator     cycle   288   ave of   238 cycles      combination
simple average    combined average     corr
 k(collision)      0.650291       0.640425 0.0011     k(col/abs)
0.640391 0.0011     0.640377 0.0011   0.8636
 k(absorption)     0.659485       0.640356 0.0011     k(abs/tk ln)
0.640889 0.0011     0.640616 0.0010   0.4528
```

```
 k(trk length)     0.647020       0.641421 0.0015     k(tk ln/col)
0.640923 0.0012     0.640660 0.0011   0.5614
 rem life(col)   6.9769E+03     6.8438E+03 0.0012     k(col/abs/tk ln)
0.640734 0.0011     0.640606 0.0010
 rem life(abs)   6.9857E+03     6.8442E+03 0.0012     life(col/abs/tl)
6.8459E+03 0.0011   6.8514E+03 0.0008
 source points generated   5002

  estimator     cycle   289   ave of   239 cycles      combination
simple average    combined average     corr
 k(collision)      0.635959       0.640406 0.0011     k(col/abs)
0.640368 0.0011     0.640353 0.0011   0.8637
 k(absorption)     0.634114       0.640330 0.0011     k(abs/tk ln)
0.640870 0.0011     0.640594 0.0010   0.4529
 k(trk length)     0.638555       0.641409 0.0015     k(tk ln/col)
0.640908 0.0012     0.640643 0.0011   0.5615
 rem life(col)   6.7230E+03     6.8433E+03 0.0012     k(col/abs/tk ln)
0.640715 0.0011     0.640584 0.0010
 rem life(abs)   6.7332E+03     6.8437E+03 0.0012     life(col/abs/tl)
6.8455E+03 0.0011   6.8511E+03 0.0008
 source points generated   4866

  estimator     cycle   290   ave of   240 cycles      combination
simple average    combined average     corr
 k(collision)      0.628300       0.640356 0.0011     k(col/abs)
0.640330 0.0011     0.640320 0.0011   0.8636
 k(absorption)     0.634285       0.640305 0.0011     k(abs/tk ln)
0.640858 0.0011     0.640575 0.0010   0.4525
 k(trk length)     0.641673       0.641410 0.0015     k(tk ln/col)
0.640883 0.0011     0.640608 0.0011   0.5600
 rem life(col)   6.8787E+03     6.8434E+03 0.0012     k(col/abs/tk ln)
0.640690 0.0011     0.640564 0.0010
 rem life(abs)   6.8867E+03     6.8439E+03 0.0012     life(col/abs/tl)
6.8457E+03 0.0011   6.8515E+03 0.0008
 source points generated   4929

  estimator     cycle   291   ave of   241 cycles      combination
simple average    combined average     corr
 k(collision)      0.648380       0.640389 0.0011     k(col/abs)
0.640346 0.0011     0.640329 0.0011   0.8625
 k(absorption)     0.639867       0.640303 0.0011     k(abs/tk ln)
0.640884 0.0011     0.640586 0.0010   0.4516
 k(trk length)     0.654499       0.641465 0.0014     k(tk ln/col)
0.640927 0.0011     0.640645 0.0011   0.5612
 rem life(col)   7.0919E+03     6.8445E+03 0.0012     k(col/abs/tk ln)
0.640719 0.0010     0.640577 0.0010
 rem life(abs)   7.1136E+03     6.8450E+03 0.0012     life(col/abs/tl)
6.8466E+03 0.0011   6.8516E+03 0.0008
 source points generated   5184

  estimator     cycle   292   ave of   242 cycles      combination
simple average    combined average     corr
 k(collision)      0.648181       0.640421 0.0011     k(col/abs)
0.640364 0.0011     0.640340 0.0011   0.8619
```

```
 k(absorption)     0.641150       0.640306 0.0011     k(abs/tk ln)
0.640899 0.0011     0.640595 0.0010   0.4516
 k(trk length)     0.647975       0.641492 0.0014     k(tk ln/col)
0.640957 0.0011     0.640676 0.0011   0.5617
 rem life(col)   7.0386E+03     6.8453E+03 0.0012     k(col/abs/tk ln)
0.640740 0.0010     0.640588 0.0010
 rem life(abs)   7.0649E+03     6.8459E+03 0.0012     life(col/abs/tl)
6.8473E+03 0.0011   6.8521E+03 0.0008
 source points generated   4984

  estimator     cycle   293   ave of   243 cycles      combination
simple average    combined average     corr
 k(collision)      0.644960       0.640440 0.0011     k(col/abs)
0.640369 0.0011     0.640340 0.0011   0.8612
 k(absorption)     0.638355       0.640298 0.0011     k(abs/tk ln)
0.640931 0.0011     0.640605 0.0010   0.4492
 k(trk length)     0.659003       0.641564 0.0014     k(tk ln/col)
0.641002 0.0011     0.640705 0.0011   0.5618
 rem life(col)   6.8213E+03     6.8452E+03 0.0012     k(col/abs/tk ln)
0.640767 0.0010     0.640599 0.0010
 rem life(abs)   6.8175E+03     6.8458E+03 0.0012     life(col/abs/tl)
6.8472E+03 0.0011   6.8518E+03 0.0008
 source points generated   4949

  estimator     cycle   294   ave of   244 cycles      combination
simple average    combined average     corr
 k(collision)      0.646490       0.640465 0.0011     k(col/abs)
0.640385 0.0011     0.640352 0.0011   0.8610
 k(absorption)     0.642057       0.640306 0.0011     k(abs/tk ln)
0.640927 0.0011     0.640607 0.0010   0.4490
 k(trk length)     0.638017       0.641549 0.0014     k(tk ln/col)
0.641007 0.0011     0.640721 0.0011   0.5608
 rem life(col)   6.9249E+03     6.8455E+03 0.0012     k(col/abs/tk ln)
0.640773 0.0010     0.640603 0.0010
 rem life(abs)   6.9310E+03     6.8461E+03 0.0012     life(col/abs/tl)
6.8474E+03 0.0010   6.8516E+03 0.0008
 source points generated   5015

  estimator     cycle   295   ave of   245 cycles      combination
simple average    combined average     corr
 k(collision)      0.638862       0.640458 0.0011     k(col/abs)
0.640409 0.0011     0.640391 0.0010   0.8575
 k(absorption)     0.653702       0.640360 0.0011     k(abs/tk ln)
0.640939 0.0011     0.640645 0.0010   0.4445
 k(trk length)     0.633833       0.641518 0.0014     k(tk ln/col)
0.640988 0.0011     0.640708 0.0011   0.5608
 rem life(col)   7.0026E+03     6.8461E+03 0.0012     k(col/abs/tk ln)
0.640779 0.0010     0.640636 0.0010
 rem life(abs)   6.9861E+03     6.8467E+03 0.0012     life(col/abs/tl)
6.8479E+03 0.0010   6.8521E+03 0.0008
 source points generated   4976

  estimator     cycle   296   ave of   246 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.657473       0.640528 0.0011     k(col/abs)
0.640460 0.0011     0.640433 0.0010   0.8571
 k(absorption)     0.648257       0.640392 0.0011     k(abs/tk ln)
0.640983 0.0011     0.640682 0.0010   0.4461
 k(trk length)     0.655465       0.641574 0.0014     k(tk ln/col)
0.641051 0.0011     0.640776 0.0011   0.5631
 rem life(col)   6.9179E+03     6.8464E+03 0.0012     k(col/abs/tk ln)
0.640831 0.0010     0.640676 0.0010
 rem life(abs)   6.8834E+03     6.8469E+03 0.0012     life(col/abs/tl)
6.8482E+03 0.0010   6.8524E+03 0.0008
 source points generated   5159

  estimator     cycle   297   ave of   247 cycles      combination
simple average    combined average     corr
 k(collision)      0.649065       0.640562 0.0011     k(col/abs)
0.640515 0.0010     0.640498 0.0010   0.8561
 k(absorption)     0.659096       0.640468 0.0011     k(abs/tk ln)
0.641038 0.0011     0.640752 0.0010   0.4470
 k(trk length)     0.649636       0.641607 0.0014     k(tk ln/col)
0.641085 0.0011     0.640810 0.0011   0.5638
 rem life(col)   6.7870E+03     6.8462E+03 0.0012     k(col/abs/tk ln)
0.640879 0.0010     0.640741 0.0010
 rem life(abs)   6.7754E+03     6.8466E+03 0.0012     life(col/abs/tl)
6.8479E+03 0.0010   6.8522E+03 0.0008
 source points generated   4970

  estimator     cycle   298   ave of   248 cycles      combination
simple average    combined average     corr
 k(collision)      0.637695       0.640551 0.0011     k(col/abs)
0.640493 0.0010     0.640473 0.0010   0.8558
 k(absorption)     0.632511       0.640436 0.0011     k(abs/tk ln)
0.641001 0.0011     0.640717 0.0010   0.4482
 k(trk length)     0.631311       0.641566 0.0014     k(tk ln/col)
0.641058 0.0011     0.640791 0.0011   0.5639
 rem life(col)   6.9429E+03     6.8466E+03 0.0012     k(col/abs/tk ln)
0.640851 0.0010     0.640707 0.0010
 rem life(abs)   6.9469E+03     6.8470E+03 0.0012     life(col/abs/tl)
6.8483E+03 0.0010   6.8525E+03 0.0008
 source points generated   4900

  estimator     cycle   299   ave of   249 cycles      combination
simple average    combined average     corr
 k(collision)      0.647563       0.640579 0.0011     k(col/abs)
0.640520 0.0010     0.640499 0.0010   0.8561
 k(absorption)     0.646653       0.640461 0.0011     k(abs/tk ln)
0.640995 0.0011     0.640727 0.0010   0.4460
 k(trk length)     0.632409       0.641529 0.0014     k(tk ln/col)
0.641054 0.0011     0.640805 0.0011   0.5614
 rem life(col)   6.8582E+03     6.8466E+03 0.0012     k(col/abs/tk ln)
0.640856 0.0010     0.640720 0.0010
 rem life(abs)   6.8507E+03     6.8470E+03 0.0012     life(col/abs/tl)
6.8483E+03 0.0010   6.8523E+03 0.0008
 source points generated   5057
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```
  estimator     cycle   300   ave of   250 cycles      combination
simple average    combined average     corr
 k(collision)      0.631658       0.640543 0.0011     k(col/abs)
0.640490 0.0010     0.640470 0.0010   0.8562
 k(absorption)     0.634359       0.640437 0.0011     k(abs/tk ln)
0.640960 0.0011     0.640696 0.0010   0.4470
 k(trk length)     0.629977       0.641483 0.0014     k(tk ln/col)
0.641013 0.0011     0.640766 0.0011   0.5625
 rem life(col)   7.0188E+03     6.8473E+03 0.0012     k(col/abs/tk ln)
0.640821 0.0010     0.640688 0.0010
 rem life(abs)   7.0285E+03     6.8477E+03 0.0012     life(col/abs/tl)
6.8489E+03 0.0010   6.8527E+03 0.0008
 source points generated   4865

  estimator     cycle   301   ave of   251 cycles      combination
simple average    combined average     corr
 k(collision)      0.639975       0.640541 0.0011     k(col/abs)
0.640506 0.0010     0.640493 0.0010   0.8549
 k(absorption)     0.649041       0.640471 0.0010     k(abs/tk ln)
0.640992 0.0010     0.640730 0.0010   0.4479
 k(trk length)     0.649229       0.641513 0.0014     k(tk ln/col)
0.641027 0.0011     0.640771 0.0011   0.5620
 rem life(col)   6.6983E+03     6.8467E+03 0.0012     k(col/abs/tk ln)
0.640842 0.0010     0.640717 0.0010
 rem life(abs)   6.6966E+03     6.8471E+03 0.0012     life(col/abs/tl)
6.8483E+03 0.0010   6.8523E+03 0.0008
 source points generated   5068

  estimator     cycle   302   ave of   252 cycles      combination
simple average    combined average     corr
 k(collision)      0.645329       0.640560 0.0011     k(col/abs)
0.640518 0.0010     0.640504 0.0010   0.8548
 k(absorption)     0.642060       0.640477 0.0010     k(abs/tk ln)
0.641010 0.0010     0.640742 0.0010   0.4480
 k(trk length)     0.649043       0.641543 0.0014     k(tk ln/col)
0.641052 0.0011     0.640792 0.0011   0.5624
 rem life(col)   6.8930E+03     6.8469E+03 0.0012     k(col/abs/tk ln)
0.640860 0.0010     0.640730 0.0010
 rem life(abs)   6.8656E+03     6.8472E+03 0.0012     life(col/abs/tl)
6.8485E+03 0.0010   6.8527E+03 0.0008
 source points generated   5056

  estimator     cycle   303   ave of   253 cycles      combination
simple average    combined average     corr
 k(collision)      0.645996       0.640581 0.0011     k(col/abs)
0.640530 0.0010     0.640511 0.0010   0.8545
 k(absorption)     0.640656       0.640478 0.0010     k(abs/tk ln)
0.640989 0.0010     0.640731 0.0010   0.4474
 k(trk length)     0.630770       0.641501 0.0014     k(tk ln/col)
0.641041 0.0011     0.640799 0.0011   0.5601
 rem life(col)   6.8647E+03     6.8470E+03 0.0012     k(col/abs/tk ln)
0.640853 0.0010     0.640722 0.0010
 rem life(abs)   6.8623E+03     6.8472E+03 0.0012     life(col/abs/tl)
6.8485E+03 0.0010   6.8525E+03 0.0008
```

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 source points generated   4985

  estimator     cycle   304   ave of   254 cycles      combination
simple average    combined average     corr
 k(collision)      0.633177       0.640552 0.0011     k(col/abs)
0.640476 0.0010     0.640452 0.0010   0.8528
 k(absorption)     0.620777       0.640400 0.0010     k(abs/tk ln)
0.640954 0.0010     0.640682 0.0010   0.4433
 k(trk length)     0.643465       0.641508 0.0014     k(tk ln/col)
0.641030 0.0011     0.640780 0.0011   0.5592
 rem life(col)   6.9969E+03     6.8476E+03 0.0012     k(col/abs/tk ln)
0.640820 0.0010     0.640676 0.0010
 rem life(abs)   7.0183E+03     6.8479E+03 0.0012     life(col/abs/tl)
6.8490E+03 0.0010   6.8526E+03 0.0008
 source points generated   4907

  estimator     cycle   305   ave of   255 cycles      combination
simple average    combined average     corr
 k(collision)      0.638687       0.640545 0.0011     k(col/abs)
0.640472 0.0010     0.640449 0.0010   0.8528
 k(absorption)     0.640039       0.640399 0.0010     k(abs/tk ln)
0.640950 0.0010     0.640679 0.0010   0.4433
 k(trk length)     0.639597       0.641501 0.0014     k(tk ln/col)
0.641023 0.0011     0.640773 0.0011   0.5592
 rem life(col)   6.8413E+03     6.8475E+03 0.0012     k(col/abs/tk ln)
0.640815 0.0010     0.640672 0.0010
 rem life(abs)   6.8316E+03     6.8479E+03 0.0012     life(col/abs/tl)
6.8489E+03 0.0010   6.8524E+03 0.0008
 source points generated   5038

  estimator     cycle   306   ave of   256 cycles      combination
simple average    combined average     corr
 k(collision)      0.636280       0.640528 0.0011     k(col/abs)
0.640458 0.0010     0.640436 0.0010   0.8528
 k(absorption)     0.637717       0.640388 0.0010     k(abs/tk ln)
0.640912 0.0010     0.640653 0.0010   0.4433
 k(trk length)     0.624856       0.641436 0.0014     k(tk ln/col)
0.640982 0.0011     0.640743 0.0011   0.5593
 rem life(col)   6.7842E+03     6.8473E+03 0.0012     k(col/abs/tk ln)
0.640784 0.0010     0.640646 0.0010
 rem life(abs)   6.8373E+03     6.8478E+03 0.0012     life(col/abs/tl)
6.8488E+03 0.0010   6.8524E+03 0.0008
 source points generated   4985

  estimator     cycle   307   ave of   257 cycles      combination
simple average    combined average     corr
 k(collision)      0.631550       0.640493 0.0011     k(col/abs)
0.640433 0.0010     0.640414 0.0010   0.8527
 k(absorption)     0.636430       0.640373 0.0010     k(abs/tk ln)
0.640878 0.0010     0.640627 0.0010   0.4437
 k(trk length)     0.627806       0.641383 0.0014     k(tk ln/col)
0.640938 0.0011     0.640702 0.0010   0.5606
 rem life(col)   6.7689E+03     6.8470E+03 0.0012     k(col/abs/tk ln)
0.640750 0.0010     0.640619 0.0010
```

```
 rem life(abs)   6.7450E+03     6.8474E+03 0.0012     life(col/abs/tl)
6.8486E+03 0.0010   6.8525E+03 0.0008
 source points generated   4944

  estimator     cycle   308   ave of   258 cycles      combination
simple average    combined average     corr
 k(collision)      0.637604       0.640482 0.0011     k(col/abs)
0.640427 0.0010     0.640410 0.0010   0.8526
 k(absorption)     0.640288       0.640373 0.0010     k(abs/tk ln)
0.640852 0.0010     0.640612 0.0010   0.4430
 k(trk length)     0.627998       0.641331 0.0014     k(tk ln/col)
0.640907 0.0011     0.640680 0.0010   0.5606
 rem life(col)   6.6530E+03     6.8462E+03 0.0012     k(col/abs/tk ln)
0.640729 0.0010     0.640604 0.0010
 rem life(abs)   6.6571E+03     6.8467E+03 0.0012     life(col/abs/tl)
6.8480E+03 0.0010   6.8524E+03 0.0008
 source points generated   5035

  estimator     cycle   309   ave of   259 cycles      combination
simple average    combined average     corr
 k(collision)      0.641763       0.640487 0.0011     k(col/abs)
0.640423 0.0010     0.640402 0.0010   0.8522
 k(absorption)     0.636791       0.640359 0.0010     k(abs/tk ln)
0.640852 0.0010     0.640606 0.0010   0.4425
 k(trk length)     0.645077       0.641345 0.0014     k(tk ln/col)
0.640916 0.0011     0.640687 0.0010   0.5606
 rem life(col)   6.9090E+03     6.8465E+03 0.0012     k(col/abs/tk ln)
0.640730 0.0010     0.640599 0.0010
 rem life(abs)   6.9269E+03     6.8470E+03 0.0012     life(col/abs/tl)
6.8483E+03 0.0010   6.8526E+03 0.0008
 source points generated   5046

  estimator     cycle   310   ave of   260 cycles      combination
simple average    combined average     corr
 k(collision)      0.651118       0.640528 0.0011     k(col/abs)
0.640461 0.0010     0.640440 0.0010   0.8527
 k(absorption)     0.649802       0.640395 0.0010     k(abs/tk ln)
0.640872 0.0010     0.640635 0.0010   0.4420
 k(trk length)     0.642230       0.641349 0.0014     k(tk ln/col)
0.640938 0.0011     0.640721 0.0010   0.5598
 rem life(col)   6.7313E+03     6.8460E+03 0.0012     k(col/abs/tk ln)
0.640757 0.0010     0.640630 0.0010
 rem life(abs)   6.7240E+03     6.8465E+03 0.0012     life(col/abs/tl)
6.8478E+03 0.0010   6.8522E+03 0.0008
 source points generated   5102

  estimator     cycle   311   ave of   261 cycles      combination
simple average    combined average     corr
 k(collision)      0.632970       0.640499 0.0011     k(col/abs)
0.640443 0.0010     0.640425 0.0010   0.8524
 k(absorption)     0.638285       0.640387 0.0010     k(abs/tk ln)
0.640837 0.0010     0.640612 0.0010   0.4417
 k(trk length)     0.624945       0.641286 0.0014     k(tk ln/col)
0.640892 0.0011     0.640682 0.0010   0.5609
```

```
 rem life(col)   6.8978E+03     6.8462E+03 0.0012     k(col/abs/tk ln)
0.640724 0.0010     0.640605 0.0010
 rem life(abs)   6.8606E+03     6.8466E+03 0.0012     life(col/abs/tl)
6.8480E+03 0.0010   6.8523E+03 0.0008
 source points generated   4845

  estimator     cycle   312   ave of   262 cycles      combination
simple average    combined average     corr
 k(collision)      0.631254       0.640464 0.0011     k(col/abs)
0.640418 0.0010     0.640403 0.0010   0.8521
 k(absorption)     0.636725       0.640373 0.0010     k(abs/tk ln)
0.640783 0.0010     0.640575 0.0010   0.4414
 k(trk length)     0.616882       0.641193 0.0014     k(tk ln/col)
0.640828 0.0011     0.640630 0.0010   0.5625
 rem life(col)   6.9852E+03     6.8468E+03 0.0012     k(col/abs/tk ln)
0.640677 0.0010     0.640568 0.0010
 rem life(abs)   6.9923E+03     6.8471E+03 0.0012     life(col/abs/tl)
6.8483E+03 0.0010   6.8521E+03 0.0008
 source points generated   5010

  estimator     cycle   313   ave of   263 cycles      combination
simple average    combined average     corr
 k(collision)      0.644147       0.640478 0.0011     k(col/abs)
0.640436 0.0010     0.640422 0.0010   0.8522
 k(absorption)     0.645878       0.640394 0.0010     k(abs/tk ln)
0.640797 0.0010     0.640593 0.0010   0.4415
 k(trk length)     0.643078       0.641200 0.0014     k(tk ln/col)
0.640839 0.0011     0.640643 0.0010   0.5625
 rem life(col)   6.7788E+03     6.8465E+03 0.0011     k(col/abs/tk ln)
0.640691 0.0010     0.640585 0.0010
 rem life(abs)   6.7482E+03     6.8467E+03 0.0012     life(col/abs/tl)
6.8480E+03 0.0010   6.8519E+03 0.0008
 source points generated   5099

  estimator     cycle   314   ave of   264 cycles      combination
simple average    combined average     corr
 k(collision)      0.641960       0.640483 0.0011     k(col/abs)
0.640466 0.0010     0.640460 0.0010   0.8498
 k(absorption)     0.654728       0.640448 0.0010     k(abs/tk ln)
0.640825 0.0010     0.640636 0.0010   0.4401
 k(trk length)     0.641779       0.641202 0.0014     k(tk ln/col)
0.640843 0.0011     0.640647 0.0010   0.5625
 rem life(col)   6.7246E+03     6.8460E+03 0.0011     k(col/abs/tk ln)
0.640711 0.0010     0.640623 0.0010
 rem life(abs)   6.7430E+03     6.8464E+03 0.0011     life(col/abs/tl)
6.8476E+03 0.0010   6.8515E+03 0.0008
 source points generated   5027

  estimator     cycle   315   ave of   265 cycles      combination
simple average    combined average     corr
 k(collision)      0.648131       0.640512 0.0011     k(col/abs)
0.640490 0.0010     0.640483 0.0010   0.8499
 k(absorption)     0.645461       0.640467 0.0010     k(abs/tk ln)
0.640877 0.0010     0.640669 0.0010   0.4407
```

```
 k(trk length)     0.663402       0.641286 0.0014     k(tk ln/col)
0.640899 0.0011     0.640686 0.0010   0.5635
 rem life(col)   6.8159E+03     6.8459E+03 0.0011     k(col/abs/tk ln)
0.640755 0.0010     0.640655 0.0010
 rem life(abs)   6.8354E+03     6.8463E+03 0.0011     life(col/abs/tl)
6.8475E+03 0.0010   6.8513E+03 0.0008
 source points generated   5047

  estimator     cycle   316   ave of   266 cycles      combination
simple average    combined average     corr
 k(collision)      0.645799       0.640532 0.0010     k(col/abs)
0.640517 0.0010     0.640512 0.0010   0.8499
 k(absorption)     0.649725       0.640502 0.0010     k(abs/tk ln)
0.640873 0.0010     0.640686 0.0010   0.4370
 k(trk length)     0.630287       0.641245 0.0014     k(tk ln/col)
0.640888 0.0011     0.640692 0.0010   0.5612
 rem life(col)   7.1049E+03     6.8469E+03 0.0011     k(col/abs/tk ln)
0.640760 0.0010     0.640672 0.0010
 rem life(abs)   7.0596E+03     6.8471E+03 0.0011     life(col/abs/tl)
6.8482E+03 0.0010   6.8514E+03 0.0008
 source points generated   5003

  estimator     cycle   317   ave of   267 cycles      combination
simple average    combined average     corr
 k(collision)      0.623450       0.640468 0.0011     k(col/abs)
0.640456 0.0010     0.640452 0.0010   0.8512
 k(absorption)     0.624924       0.640444 0.0010     k(abs/tk ln)
0.640835 0.0010     0.640640 0.0010   0.4370
 k(trk length)     0.636406       0.641227 0.0014     k(tk ln/col)
0.640847 0.0011     0.640642 0.0010   0.5605
 rem life(col)   7.1512E+03     6.8480E+03 0.0012     k(col/abs/tk ln)
0.640713 0.0010     0.640625 0.0010
 rem life(abs)   7.1126E+03     6.8481E+03 0.0012     life(col/abs/tl)
6.8491E+03 0.0010   6.8521E+03 0.0008
 source points generated   4861

  estimator     cycle   318   ave of   268 cycles      combination
simple average    combined average     corr
 k(collision)      0.644079       0.640481 0.0010     k(col/abs)
0.640473 0.0010     0.640471 0.0010   0.8512
 k(absorption)     0.646311       0.640466 0.0010     k(abs/tk ln)
0.640814 0.0010     0.640641 0.0009   0.4330
 k(trk length)     0.624133       0.641163 0.0013     k(tk ln/col)
0.640822 0.0011     0.640637 0.0010   0.5574
 rem life(col)   6.8621E+03     6.8481E+03 0.0011     k(col/abs/tk ln)
0.640703 0.0010     0.640627 0.0009
 rem life(abs)   6.8497E+03     6.8481E+03 0.0011     life(col/abs/tl)
6.8492E+03 0.0010   6.8524E+03 0.0008
 source points generated   5167

  estimator     cycle   319   ave of   269 cycles      combination
simple average    combined average     corr
 k(collision)      0.657972       0.640546 0.0010     k(col/abs)
0.640530 0.0010     0.640525 0.0010   0.8522
```

```
 k(absorption)     0.653613       0.640514 0.0010     k(abs/tk ln)
0.640838 0.0010     0.640679 0.0009   0.4317
 k(trk length)     0.641028       0.641162 0.0013     k(tk ln/col)
0.640854 0.0011     0.640691 0.0010   0.5547
 rem life(col)   6.7967E+03     6.8479E+03 0.0011     k(col/abs/tk ln)
0.640741 0.0010     0.640669 0.0009
 rem life(abs)   6.8520E+03     6.8481E+03 0.0011     life(col/abs/tl)
6.8491E+03 0.0010   6.8523E+03 0.0008
 source points generated   5108

  estimator     cycle   320   ave of   270 cycles      combination
simple average    combined average     corr
 k(collision)      0.632756       0.640518 0.0010     k(col/abs)
0.640524 0.0010     0.640526 0.0010   0.8500
 k(absorption)     0.644951       0.640531 0.0010     k(abs/tk ln)
0.640833 0.0010     0.640684 0.0009   0.4305
 k(trk length)     0.633881       0.641135 0.0013     k(tk ln/col)
0.640826 0.0011     0.640663 0.0010   0.5553
 rem life(col)   6.9789E+03     6.8484E+03 0.0011     k(col/abs/tk ln)
0.640728 0.0010     0.640670 0.0009
 rem life(abs)   6.9685E+03     6.8486E+03 0.0011     life(col/abs/tl)
6.8495E+03 0.0010   6.8522E+03 0.0008
 source points generated   4828

  estimator     cycle   321   ave of   271 cycles      combination
simple average    combined average     corr
 k(collision)      0.633059       0.640490 0.0010     k(col/abs)
0.640499 0.0010     0.640501 0.0010   0.8502
 k(absorption)     0.634090       0.640507 0.0010     k(abs/tk ln)
0.640767 0.0010     0.640636 0.0009   0.4315
 k(trk length)     0.611491       0.641026 0.0013     k(tk ln/col)
0.640758 0.0011     0.640612 0.0010   0.5556
 rem life(col)   6.9402E+03     6.8487E+03 0.0011     k(col/abs/tk ln)
0.640674 0.0010     0.640623 0.0009
 rem life(abs)   6.9657E+03     6.8490E+03 0.0011     life(col/abs/tl)
6.8499E+03 0.0010   6.8526E+03 0.0008
 source points generated   4992

  estimator     cycle   322   ave of   272 cycles      combination
simple average    combined average     corr
 k(collision)      0.631077       0.640455 0.0010     k(col/abs)
0.640480 0.0010     0.640489 0.0010   0.8492
 k(absorption)     0.640044       0.640505 0.0010     k(abs/tk ln)
0.640762 0.0010     0.640633 0.0009   0.4315
 k(trk length)     0.639238       0.641019 0.0013     k(tk ln/col)
0.640737 0.0011     0.640585 0.0010   0.5552
 rem life(col)   6.7434E+03     6.8483E+03 0.0011     k(col/abs/tk ln)
0.640660 0.0010     0.640616 0.0009
 rem life(abs)   6.7091E+03     6.8485E+03 0.0011     life(col/abs/tl)
6.8494E+03 0.0010   6.8524E+03 0.0008
 source points generated   5004

  estimator     cycle   323   ave of   273 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.647855       0.640483 0.0010     k(col/abs)
0.640515 0.0010     0.640526 0.0010   0.8493
 k(absorption)     0.652173       0.640548 0.0010     k(abs/tk ln)
0.640791 0.0010     0.640670 0.0009   0.4317
 k(trk length)     0.645124       0.641034 0.0013     k(tk ln/col)
0.640758 0.0010     0.640609 0.0010   0.5554
 rem life(col)   6.5125E+03     6.8471E+03 0.0011     k(col/abs/tk ln)
0.640688 0.0010     0.640651 0.0009
 rem life(abs)   6.5181E+03     6.8473E+03 0.0011     life(col/abs/tl)
6.8484E+03 0.0010   6.8518E+03 0.0008
 source points generated   5185

  estimator     cycle   324   ave of   274 cycles      combination
simple average    combined average     corr
 k(collision)      0.626893       0.640433 0.0010     k(col/abs)
0.640462 0.0010     0.640471 0.0010   0.8502
 k(absorption)     0.624947       0.640491 0.0010     k(abs/tk ln)
0.640683 0.0010     0.640582 0.0009   0.4391
 k(trk length)     0.597459       0.640875 0.0014     k(tk ln/col)
0.640654 0.0011     0.640528 0.0010   0.5582
 rem life(col)   7.1052E+03     6.8480E+03 0.0011     k(col/abs/tk ln)
0.640600 0.0010     0.640564 0.0009
 rem life(abs)   7.1001E+03     6.8482E+03 0.0011     life(col/abs/tl)
6.8492E+03 0.0010   6.8525E+03 0.0008
 source points generated   4794

  estimator     cycle   325   ave of   275 cycles      combination
simple average    combined average     corr
 k(collision)      0.652179       0.640476 0.0010     k(col/abs)
0.640493 0.0010     0.640499 0.0010   0.8500
 k(absorption)     0.645770       0.640510 0.0010     k(abs/tk ln)
0.640727 0.0010     0.640612 0.0009   0.4399
 k(trk length)     0.659627       0.640944 0.0014     k(tk ln/col)
0.640710 0.0011     0.640575 0.0010   0.5603
 rem life(col)   6.5425E+03     6.8469E+03 0.0012     k(col/abs/tk ln)
0.640643 0.0010     0.640597 0.0009
 rem life(abs)   6.5527E+03     6.8471E+03 0.0012     life(col/abs/tl)
6.8483E+03 0.0010   6.8519E+03 0.0008
 source points generated   5179

  estimator     cycle   326   ave of   276 cycles      combination
simple average    combined average     corr
 k(collision)      0.645525       0.640494 0.0010     k(col/abs)
0.640524 0.0010     0.640533 0.0010   0.8496
 k(absorption)     0.652476       0.640554 0.0010     k(abs/tk ln)
0.640778 0.0010     0.640659 0.0009   0.4426
 k(trk length)     0.657225       0.641003 0.0014     k(tk ln/col)
0.640748 0.0011     0.640601 0.0010   0.5607
 rem life(col)   6.8171E+03     6.8468E+03 0.0012     k(col/abs/tk ln)
0.640683 0.0010     0.640638 0.0009
 rem life(abs)   6.8088E+03     6.8470E+03 0.0012     life(col/abs/tl)
6.8482E+03 0.0010   6.8518E+03 0.0008
 source points generated   4962
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```
  estimator     cycle   327   ave of   277 cycles      combination
simple average    combined average     corr
 k(collision)      0.648934       0.640524 0.0010     k(col/abs)
0.640542 0.0010     0.640547 0.0010   0.8490
 k(absorption)     0.642060       0.640559 0.0010     k(abs/tk ln)
0.640759 0.0010     0.640653 0.0009   0.4416
 k(trk length)     0.629142       0.640960 0.0013     k(tk ln/col)
0.640742 0.0011     0.640617 0.0010   0.5571
 rem life(col)   6.8001E+03     6.8467E+03 0.0011     k(col/abs/tk ln)
0.640681 0.0010     0.640637 0.0009
 rem life(abs)   6.8011E+03     6.8468E+03 0.0011     life(col/abs/tl)
6.8480E+03 0.0010   6.8518E+03 0.0008
 source points generated   5023

  estimator     cycle   328   ave of   278 cycles      combination
simple average    combined average     corr
 k(collision)      0.647035       0.640548 0.0010     k(col/abs)
0.640551 0.0010     0.640552 0.0010   0.8482
 k(absorption)     0.639074       0.640554 0.0010     k(abs/tk ln)
0.640741 0.0010     0.640641 0.0009   0.4416
 k(trk length)     0.632290       0.640929 0.0013     k(tk ln/col)
0.640738 0.0010     0.640629 0.0010   0.5551
 rem life(col)   6.8138E+03     6.8465E+03 0.0011     k(col/abs/tk ln)
0.640677 0.0010     0.640630 0.0009
 rem life(abs)   6.8186E+03     6.8467E+03 0.0011     life(col/abs/tl)
6.8480E+03 0.0010   6.8519E+03 0.0008
 source points generated   4928

  estimator     cycle   329   ave of   279 cycles      combination
simple average    combined average     corr
 k(collision)      0.649010       0.640578 0.0010     k(col/abs)
0.640589 0.0010     0.640593 0.0010   0.8483
 k(absorption)     0.653527       0.640600 0.0010     k(abs/tk ln)
0.640786 0.0010     0.640687 0.0009   0.4435
 k(trk length)     0.652913       0.640971 0.0013     k(tk ln/col)
0.640775 0.0010     0.640662 0.0010   0.5562
 rem life(col)   6.7011E+03     6.8460E+03 0.0011     k(col/abs/tk ln)
0.640717 0.0010     0.640673 0.0009
 rem life(abs)   6.7289E+03     6.8463E+03 0.0011     life(col/abs/tl)
6.8475E+03 0.0010   6.8515E+03 0.0008
 source points generated   5019

  estimator     cycle   330   ave of   280 cycles      combination
simple average    combined average     corr
 k(collision)      0.649708       0.640611 0.0010     k(col/abs)
0.640605 0.0010     0.640603 0.0010   0.8472
 k(absorption)     0.640401       0.640600 0.0010     k(abs/tk ln)
0.640781 0.0010     0.640684 0.0009   0.4435
 k(trk length)     0.638149       0.640961 0.0013     k(tk ln/col)
0.640786 0.0010     0.640686 0.0010   0.5548
 rem life(col)   6.8512E+03     6.8460E+03 0.0011     k(col/abs/tk ln)
0.640724 0.0010     0.640676 0.0009
 rem life(abs)   6.8636E+03     6.8464E+03 0.0011     life(col/abs/tl)
6.8476E+03 0.0010   6.8517E+03 0.0008
```

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 source points generated   5042

  estimator     cycle   331   ave of   281 cycles      combination
simple average    combined average     corr
 k(collision)      0.643363       0.640621 0.0010     k(col/abs)
0.640620 0.0010     0.640620 0.0010   0.8472
 k(absorption)     0.646106       0.640619 0.0010     k(abs/tk ln)
0.640796 0.0010     0.640702 0.0009   0.4436
 k(trk length)     0.644152       0.640973 0.0013     k(tk ln/col)
0.640797 0.0010     0.640696 0.0010   0.5549
 rem life(col)   6.8304E+03     6.8460E+03 0.0011     k(col/abs/tk ln)
0.640738 0.0009     0.640692 0.0009
 rem life(abs)   6.8134E+03     6.8462E+03 0.0011     life(col/abs/tl)
6.8476E+03 0.0010   6.8519E+03 0.0008
 source points generated   4947

  estimator     cycle   332   ave of   282 cycles      combination
simple average    combined average     corr
 k(collision)      0.627162       0.640573 0.0010     k(col/abs)
0.640572 0.0010     0.640572 0.0010   0.8480
 k(absorption)     0.627078       0.640571 0.0010     k(abs/tk ln)
0.640774 0.0010     0.640667 0.0009   0.4420
 k(trk length)     0.641960       0.640976 0.0013     k(tk ln/col)
0.640775 0.0010     0.640661 0.0010   0.5531
 rem life(col)   6.9297E+03     6.8463E+03 0.0011     k(col/abs/tk ln)
0.640707 0.0009     0.640656 0.0009
 rem life(abs)   6.8939E+03     6.8464E+03 0.0011     life(col/abs/tl)
6.8478E+03 0.0010   6.8521E+03 0.0008
 source points generated   4888

  estimator     cycle   333   ave of   283 cycles      combination
simple average    combined average     corr
 k(collision)      0.646867       0.640595 0.0010     k(col/abs)
0.640580 0.0010     0.640575 0.0009   0.8471
 k(absorption)     0.638517       0.640564 0.0010     k(abs/tk ln)
0.640791 0.0010     0.640671 0.0009   0.4408
 k(trk length)     0.652881       0.641018 0.0013     k(tk ln/col)
0.640807 0.0010     0.640687 0.0010   0.5538
 rem life(col)   6.7369E+03     6.8459E+03 0.0011     k(col/abs/tk ln)
0.640726 0.0009     0.640663 0.0009
 rem life(abs)   6.7736E+03     6.8462E+03 0.0011     life(col/abs/tl)
6.8476E+03 0.0010   6.8523E+03 0.0008
 source points generated   5169

  estimator     cycle   334   ave of   284 cycles      combination
simple average    combined average     corr
 k(collision)      0.631631       0.640564 0.0010     k(col/abs)
0.640555 0.0009     0.640553 0.0009   0.8471
 k(absorption)     0.635792       0.640547 0.0010     k(abs/tk ln)
0.640780 0.0010     0.640657 0.0009   0.4408
 k(trk length)     0.639743       0.641014 0.0013     k(tk ln/col)
0.640789 0.0010     0.640662 0.0010   0.5534
 rem life(col)   6.7493E+03     6.8456E+03 0.0011     k(col/abs/tk ln)
0.640708 0.0009     0.640647 0.0009
```

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 rem life(abs)   6.7372E+03     6.8458E+03 0.0011     life(col/abs/tl)
6.8474E+03 0.0010   6.8523E+03 0.0008
 source points generated   4897

  estimator     cycle   335   ave of   285 cycles      combination
simple average    combined average     corr
 k(collision)      0.639578       0.640560 0.0010     k(col/abs)
0.640544 0.0009     0.640539 0.0009   0.8468
 k(absorption)     0.634938       0.640527 0.0010     k(abs/tk ln)
0.640762 0.0010     0.640638 0.0009   0.4411
 k(trk length)     0.636308       0.640997 0.0013     k(tk ln/col)
0.640779 0.0010     0.640656 0.0010   0.5534
 rem life(col)   6.9799E+03     6.8460E+03 0.0011     k(col/abs/tk ln)
0.640695 0.0009     0.640631 0.0009
 rem life(abs)   7.0068E+03     6.8463E+03 0.0011     life(col/abs/tl)
6.8478E+03 0.0010   6.8524E+03 0.0008
 source points generated   5039

  estimator     cycle   336   ave of   286 cycles      combination
simple average    combined average     corr
 k(collision)      0.639484       0.640556 0.0010     k(col/abs)
0.640527 0.0009     0.640518 0.0009   0.8461
 k(absorption)     0.631925       0.640497 0.0010     k(abs/tk ln)
0.640756 0.0010     0.640620 0.0009   0.4395
 k(trk length)     0.645978       0.641015 0.0013     k(tk ln/col)
0.640786 0.0010     0.640657 0.0010   0.5531
 rem life(col)   6.9053E+03     6.8462E+03 0.0011     k(col/abs/tk ln)
0.640689 0.0009     0.640615 0.0009
 rem life(abs)   6.9215E+03     6.8466E+03 0.0011     life(col/abs/tl)
6.8480E+03 0.0010   6.8525E+03 0.0008
 source points generated   4976

  estimator     cycle   337   ave of   287 cycles      combination
simple average    combined average     corr
 k(collision)      0.638260       0.640548 0.0010     k(col/abs)
0.640508 0.0009     0.640497 0.0009   0.8456
 k(absorption)     0.632134       0.640468 0.0010     k(abs/tk ln)
0.640724 0.0010     0.640590 0.0009   0.4406
 k(trk length)     0.630782       0.640979 0.0013     k(tk ln/col)
0.640764 0.0010     0.640642 0.0010   0.5531
 rem life(col)   6.7146E+03     6.8458E+03 0.0011     k(col/abs/tk ln)
0.640665 0.0009     0.640587 0.0009
 rem life(abs)   6.7421E+03     6.8462E+03 0.0011     life(col/abs/tl)
6.8476E+03 0.0010   6.8523E+03 0.0008
 source points generated   4996

  estimator     cycle   338   ave of   288 cycles      combination
simple average    combined average     corr
 k(collision)      0.632672       0.640521 0.0010     k(col/abs)
0.640481 0.0009     0.640469 0.0009   0.8459
 k(absorption)     0.632351       0.640440 0.0010     k(abs/tk ln)
0.640675 0.0010     0.640551 0.0009   0.4424
 k(trk length)     0.621355       0.640911 0.0013     k(tk ln/col)
0.640716 0.0010     0.640605 0.0010   0.5543
```

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 rem life(col)   6.8167E+03     6.8457E+03 0.0011     k(col/abs/tk ln)
0.640624 0.0009     0.640550 0.0009
 rem life(abs)   6.8319E+03     6.8462E+03 0.0011     life(col/abs/tl)
6.8475E+03 0.0010   6.8520E+03 0.0008
 source points generated   4913

  estimator     cycle   339   ave of   289 cycles      combination
simple average    combined average     corr
 k(collision)      0.655262       0.640572 0.0010     k(col/abs)
0.640539 0.0009     0.640530 0.0009   0.8469
 k(absorption)     0.659504       0.640506 0.0010     k(abs/tk ln)
0.640723 0.0010     0.640609 0.0009   0.4433
 k(trk length)     0.649168       0.640940 0.0013     k(tk ln/col)
0.640756 0.0010     0.640652 0.0010   0.5549
 rem life(col)   6.5982E+03     6.8448E+03 0.0011     k(col/abs/tk ln)
0.640673 0.0009     0.640607 0.0009
 rem life(abs)   6.5837E+03     6.8453E+03 0.0011     life(col/abs/tl)
6.8467E+03 0.0010   6.8514E+03 0.0008
 source points generated   5217

  estimator     cycle   340   ave of   290 cycles      combination
simple average    combined average     corr
 k(collision)      0.637569       0.640562 0.0010     k(col/abs)
0.640521 0.0009     0.640509 0.0009   0.8467
 k(absorption)     0.632850       0.640480 0.0010     k(abs/tk ln)
0.640695 0.0010     0.640582 0.0009   0.4441
 k(trk length)     0.632421       0.640910 0.0013     k(tk ln/col)
0.640736 0.0010     0.640637 0.0010   0.5551
 rem life(col)   6.8235E+03     6.8447E+03 0.0011     k(col/abs/tk ln)
0.640650 0.0009     0.640583 0.0009
 rem life(abs)   6.8428E+03     6.8453E+03 0.0011     life(col/abs/tl)
6.8467E+03 0.0010   6.8517E+03 0.0008
 source points generated   4860

  estimator     cycle   341   ave of   291 cycles      combination
simple average    combined average     corr
 k(collision)      0.662331       0.640636 0.0010     k(col/abs)
0.640584 0.0009     0.640568 0.0009   0.8478
 k(absorption)     0.655327       0.640531 0.0010     k(abs/tk ln)
0.640728 0.0010     0.640626 0.0009   0.4441
 k(trk length)     0.645617       0.640926 0.0013     k(tk ln/col)
0.640781 0.0010     0.640701 0.0010   0.5534
 rem life(col)   6.6678E+03     6.8441E+03 0.0011     k(col/abs/tk ln)
0.640698 0.0009     0.640631 0.0009
 rem life(abs)   6.6693E+03     6.8447E+03 0.0011     life(col/abs/tl)
6.8462E+03 0.0010   6.8514E+03 0.0008
 source points generated   5189

  estimator     cycle   342   ave of   292 cycles      combination
simple average    combined average     corr
 k(collision)      0.648977       0.640665 0.0010     k(col/abs)
0.640603 0.0009     0.640584 0.0009   0.8475
 k(absorption)     0.643432       0.640541 0.0009     k(abs/tk ln)
0.640702 0.0010     0.640618 0.0009   0.4415
```

```
 k(trk length)     0.622505       0.640863 0.0013     k(tk ln/col)
0.640764 0.0010     0.640710 0.0010   0.5479
 rem life(col)   6.8613E+03     6.8442E+03 0.0011     k(col/abs/tk ln)
0.640690 0.0009     0.640629 0.0009
 rem life(abs)   6.8933E+03     6.8448E+03 0.0011     life(col/abs/tl)
6.8464E+03 0.0010   6.8517E+03 0.0008
 source points generated   4894

  estimator     cycle   343   ave of   293 cycles      combination
simple average    combined average     corr
 k(collision)      0.640045       0.640663 0.0010     k(col/abs)
0.640609 0.0009     0.640593 0.0009   0.8472
 k(absorption)     0.644729       0.640555 0.0009     k(abs/tk ln)
0.640709 0.0010     0.640629 0.0009   0.4414
 k(trk length)     0.640736       0.640863 0.0013     k(tk ln/col)
0.640763 0.0010     0.640708 0.0010   0.5479
 rem life(col)   6.9365E+03     6.8445E+03 0.0011     k(col/abs/tk ln)
0.640694 0.0009     0.640637 0.0009
 rem life(abs)   6.9349E+03     6.8451E+03 0.0011     life(col/abs/tl)
6.8466E+03 0.0010   6.8519E+03 0.0007
 source points generated   4957

  estimator     cycle   344   ave of   294 cycles      combination
simple average    combined average     corr
 k(collision)      0.652264       0.640702 0.0010     k(col/abs)
0.640646 0.0009     0.640629 0.0009   0.8478
 k(absorption)     0.650931       0.640590 0.0009     k(abs/tk ln)
0.640764 0.0010     0.640673 0.0009   0.4441
 k(trk length)     0.662998       0.640938 0.0013     k(tk ln/col)
0.640820 0.0010     0.640755 0.0010   0.5502
 rem life(col)   6.8385E+03     6.8445E+03 0.0011     k(col/abs/tk ln)
0.640744 0.0009     0.640681 0.0009
 rem life(abs)   6.8222E+03     6.8451E+03 0.0011     life(col/abs/tl)
6.8466E+03 0.0010   6.8520E+03 0.0007
 source points generated   5070

  estimator     cycle   345   ave of   295 cycles      combination
simple average    combined average     corr
 k(collision)      0.629903       0.640666 0.0010     k(col/abs)
0.640616 0.0009     0.640600 0.0009   0.8480
 k(absorption)     0.633323       0.640566 0.0009     k(abs/tk ln)
0.640713 0.0010     0.640634 0.0009   0.4456
 k(trk length)     0.617898       0.640860 0.0013     k(tk ln/col)
0.640763 0.0010     0.640708 0.0010   0.5523
 rem life(col)   6.9954E+03     6.8450E+03 0.0011     k(col/abs/tk ln)
0.640697 0.0009     0.640642 0.0009
 rem life(abs)   6.9902E+03     6.8456E+03 0.0011     life(col/abs/tl)
6.8472E+03 0.0010   6.8526E+03 0.0007
 source points generated   4834

  estimator     cycle   346   ave of   296 cycles      combination
simple average    combined average     corr
 k(collision)      0.650832       0.640700 0.0010     k(col/abs)
0.640636 0.0009     0.640616 0.0009   0.8473
```

```
 k(absorption)     0.642467       0.640572 0.0009     k(abs/tk ln)
0.640689 0.0010     0.640627 0.0009   0.4440
 k(trk length)     0.624930       0.640806 0.0013     k(tk ln/col)
0.640753 0.0010     0.640723 0.0010   0.5468
 rem life(col)   6.7745E+03     6.8448E+03 0.0011     k(col/abs/tk ln)
0.640693 0.0009     0.640640 0.0009
 rem life(abs)   6.8012E+03     6.8454E+03 0.0011     life(col/abs/tl)
6.8470E+03 0.0010   6.8525E+03 0.0007
 source points generated   5202

  estimator     cycle   347   ave of   297 cycles      combination
simple average    combined average     corr
 k(collision)      0.634472       0.640679 0.0010     k(col/abs)
0.640618 0.0009     0.640598 0.0009   0.8474
 k(absorption)     0.635804       0.640556 0.0009     k(abs/tk ln)
0.640660 0.0010     0.640604 0.0009   0.4446
 k(trk length)     0.628151       0.640764 0.0013     k(tk ln/col)
0.640721 0.0010     0.640698 0.0010   0.5475
 rem life(col)   7.0086E+03     6.8453E+03 0.0011     k(col/abs/tk ln)
0.640666 0.0009     0.640618 0.0009
 rem life(abs)   6.9996E+03     6.8459E+03 0.0011     life(col/abs/tl)
6.8475E+03 0.0010   6.8528E+03 0.0007
 source points generated   4859

  estimator     cycle   348   ave of   298 cycles      combination
simple average    combined average     corr
 k(collision)      0.637245       0.640668 0.0010     k(col/abs)
0.640614 0.0009     0.640597 0.0009   0.8471
 k(absorption)     0.641875       0.640560 0.0009     k(abs/tk ln)
0.640682 0.0009     0.640616 0.0009   0.4444
 k(trk length)     0.652539       0.640803 0.0013     k(tk ln/col)
0.640735 0.0010     0.640697 0.0010   0.5459
 rem life(col)   6.7864E+03     6.8451E+03 0.0011     k(col/abs/tk ln)
0.640677 0.0009     0.640627 0.0009
 rem life(abs)   6.7733E+03     6.8457E+03 0.0011     life(col/abs/tl)
6.8473E+03 0.0010   6.8528E+03 0.0007
 source points generated   4995

  estimator     cycle   349   ave of   299 cycles      combination
simple average    combined average     corr
 k(collision)      0.636317       0.640653 0.0010     k(col/abs)
0.640620 0.0009     0.640609 0.0009   0.8451
 k(absorption)     0.648291       0.640586 0.0009     k(abs/tk ln)
0.640661 0.0009     0.640621 0.0009   0.4390
 k(trk length)     0.620641       0.640736 0.0013     k(tk ln/col)
0.640694 0.0010     0.640671 0.0009   0.5458
 rem life(col)   6.8311E+03     6.8451E+03 0.0011     k(col/abs/tk ln)
0.640658 0.0009     0.640627 0.0009
 rem life(abs)   6.8061E+03     6.8455E+03 0.0011     life(col/abs/tl)
6.8471E+03 0.0009   6.8525E+03 0.0007
 source points generated   4980

  estimator     cycle   350   ave of   300 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.635251       0.640635 0.0010     k(col/abs)
0.640609 0.0009     0.640601 0.0009   0.8448
 k(absorption)     0.639697       0.640583 0.0009     k(abs/tk ln)
0.640643 0.0009     0.640611 0.0009   0.4388
 k(trk length)     0.631095       0.640704 0.0013     k(tk ln/col)
0.640669 0.0010     0.640650 0.0009   0.5463
 rem life(col)   6.7408E+03     6.8447E+03 0.0011     k(col/abs/tk ln)
0.640641 0.0009     0.640616 0.0009
 rem life(abs)   6.7685E+03     6.8453E+03 0.0011     life(col/abs/tl)
6.8469E+03 0.0009   6.8525E+03 0.0007
 source points generated   4970

  estimator     cycle   351   ave of   301 cycles      combination
simple average    combined average     corr
 k(collision)      0.649446       0.640664 0.0010     k(col/abs)
0.640619 0.0009     0.640605 0.0009   0.8430
 k(absorption)     0.637555       0.640573 0.0009     k(abs/tk ln)
0.640666 0.0009     0.640616 0.0009   0.4367
 k(trk length)     0.657134       0.640758 0.0013     k(tk ln/col)
0.640711 0.0010     0.640684 0.0009   0.5476
 rem life(col)   6.9173E+03     6.8450E+03 0.0011     k(col/abs/tk ln)
0.640665 0.0009     0.640625 0.0009
 rem life(abs)   6.9329E+03     6.8456E+03 0.0011     life(col/abs/tl)
6.8472E+03 0.0009   6.8527E+03 0.0007
 source points generated   5098

  estimator     cycle   352   ave of   302 cycles      combination
simple average    combined average     corr
 k(collision)      0.629247       0.640627 0.0010     k(col/abs)
0.640575 0.0009     0.640560 0.0009   0.8436
 k(absorption)     0.625861       0.640524 0.0009     k(abs/tk ln)
0.640661 0.0009     0.640589 0.0009   0.4306
 k(trk length)     0.652889       0.640798 0.0013     k(tk ln/col)
0.640712 0.0010     0.640664 0.0009   0.5429
 rem life(col)   6.8460E+03     6.8450E+03 0.0011     k(col/abs/tk ln)
0.640650 0.0009     0.640597 0.0009
 rem life(abs)   6.8427E+03     6.8456E+03 0.0011     life(col/abs/tl)
6.8471E+03 0.0009   6.8525E+03 0.0007
 source points generated   4834

  estimator     cycle   353   ave of   303 cycles      combination
simple average    combined average     corr
 k(collision)      0.632485       0.640600 0.0010     k(col/abs)
0.640559 0.0009     0.640547 0.0009   0.8432
 k(absorption)     0.638728       0.640518 0.0009     k(abs/tk ln)
0.640618 0.0009     0.640565 0.0009   0.4296
 k(trk length)     0.616589       0.640718 0.0013     k(tk ln/col)
0.640659 0.0010     0.640625 0.0009   0.5441
 rem life(col)   6.6905E+03     6.8445E+03 0.0011     k(col/abs/tk ln)
0.640612 0.0009     0.640572 0.0009
 rem life(abs)   6.6558E+03     6.8449E+03 0.0011     life(col/abs/tl)
6.8466E+03 0.0009   6.8521E+03 0.0007
 source points generated   5009
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```
  estimator     cycle   354   ave of   304 cycles      combination
simple average    combined average     corr
 k(collision)      0.639122       0.640595 0.0010     k(col/abs)
0.640565 0.0009     0.640556 0.0009   0.8426
 k(absorption)     0.645701       0.640536 0.0009     k(abs/tk ln)
0.640619 0.0009     0.640574 0.0009   0.4287
 k(trk length)     0.635832       0.640702 0.0013     k(tk ln/col)
0.640649 0.0010     0.640618 0.0009   0.5441
 rem life(col)   6.8883E+03     6.8446E+03 0.0011     k(col/abs/tk ln)
0.640611 0.0009     0.640579 0.0009
 rem life(abs)   6.8398E+03     6.8449E+03 0.0011     life(col/abs/tl)
6.8466E+03 0.0009   6.8517E+03 0.0007
 source points generated   5074

  estimator     cycle   355   ave of   305 cycles      combination
simple average    combined average     corr
 k(collision)      0.631377       0.640565 0.0010     k(col/abs)
0.640540 0.0009     0.640532 0.0009   0.8427
 k(absorption)     0.634403       0.640515 0.0009     k(abs/tk ln)
0.640600 0.0009     0.640555 0.0009   0.4291
 k(trk length)     0.635109       0.640684 0.0013     k(tk ln/col)
0.640624 0.0010     0.640590 0.0009   0.5444
 rem life(col)   6.8779E+03     6.8447E+03 0.0011     k(col/abs/tk ln)
0.640588 0.0009     0.640558 0.0009
 rem life(abs)   6.8750E+03     6.8450E+03 0.0011     life(col/abs/tl)
6.8466E+03 0.0009   6.8517E+03 0.0007
 source points generated   4924

  estimator     cycle   356   ave of   306 cycles      combination
simple average    combined average     corr
 k(collision)      0.644728       0.640578 0.0010     k(col/abs)
0.640556 0.0009     0.640550 0.0009   0.8428
 k(absorption)     0.646347       0.640534 0.0009     k(abs/tk ln)
0.640573 0.0009     0.640553 0.0009   0.4244
 k(trk length)     0.618652       0.640612 0.0013     k(tk ln/col)
0.640595 0.0010     0.640585 0.0009   0.5402
 rem life(col)   6.6673E+03     6.8441E+03 0.0011     k(col/abs/tk ln)
0.640575 0.0009     0.640557 0.0009
 rem life(abs)   6.6873E+03     6.8445E+03 0.0011     life(col/abs/tl)
6.8461E+03 0.0009   6.8512E+03 0.0007
 source points generated   5038

  estimator     cycle   357   ave of   307 cycles      combination
simple average    combined average     corr
 k(collision)      0.655658       0.640627 0.0010     k(col/abs)
0.640591 0.0009     0.640580 0.0009   0.8425
 k(absorption)     0.647042       0.640556 0.0009     k(abs/tk ln)
0.640612 0.0009     0.640582 0.0009   0.4256
 k(trk length)     0.657984       0.640669 0.0013     k(tk ln/col)
0.640648 0.0010     0.640636 0.0009   0.5427
 rem life(col)   6.6302E+03     6.8434E+03 0.0011     k(col/abs/tk ln)
0.640617 0.0009     0.640589 0.0009
 rem life(abs)   6.6554E+03     6.8439E+03 0.0011     life(col/abs/tl)
6.8456E+03 0.0009   6.8510E+03 0.0007
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 source points generated   5057

  estimator     cycle   358   ave of   308 cycles      combination
simple average    combined average     corr
 k(collision)      0.635931       0.640612 0.0010     k(col/abs)
0.640580 0.0009     0.640570 0.0009   0.8424
 k(absorption)     0.638220       0.640548 0.0009     k(abs/tk ln)
0.640592 0.0009     0.640569 0.0009   0.4257
 k(trk length)     0.630855       0.640637 0.0013     k(tk ln/col)
0.640624 0.0010     0.640617 0.0009   0.5431
 rem life(col)   6.7812E+03     6.8432E+03 0.0011     k(col/abs/tk ln)
0.640599 0.0009     0.640575 0.0009
 rem life(abs)   6.7836E+03     6.8437E+03 0.0011     life(col/abs/tl)
6.8454E+03 0.0009   6.8510E+03 0.0007
 source points generated   4829

  estimator     cycle   359   ave of   309 cycles      combination
simple average    combined average     corr
 k(collision)      0.646572       0.640631 0.0010     k(col/abs)
0.640612 0.0009     0.640606 0.0009   0.8419
 k(absorption)     0.654484       0.640593 0.0009     k(abs/tk ln)
0.640667 0.0009     0.640626 0.0009   0.4308
 k(trk length)     0.672656       0.640740 0.0013     k(tk ln/col)
0.640686 0.0010     0.640654 0.0009   0.5425
 rem life(col)   6.5157E+03     6.8422E+03 0.0011     k(col/abs/tk ln)
0.640655 0.0009     0.640628 0.0009
 rem life(abs)   6.5091E+03     6.8426E+03 0.0011     life(col/abs/tl)
6.8444E+03 0.0009   6.8503E+03 0.0007
 source points generated   5128

  estimator     cycle   360   ave of   310 cycles      combination
simple average    combined average     corr
 k(collision)      0.635652       0.640615 0.0010     k(col/abs)
0.640605 0.0009     0.640601 0.0009   0.8416
 k(absorption)     0.640907       0.640594 0.0009     k(abs/tk ln)
0.640632 0.0009     0.640611 0.0009   0.4291
 k(trk length)     0.619108       0.640671 0.0013     k(tk ln/col)
0.640643 0.0010     0.640626 0.0009   0.5425
 rem life(col)   7.0139E+03     6.8427E+03 0.0011     k(col/abs/tk ln)
0.640627 0.0009     0.640612 0.0009
 rem life(abs)   7.0170E+03     6.8432E+03 0.0011     life(col/abs/tl)
6.8449E+03 0.0009   6.8505E+03 0.0007
 source points generated   4921

  estimator     cycle   361   ave of   311 cycles      combination
simple average    combined average     corr
 k(collision)      0.651194       0.640649 0.0010     k(col/abs)
0.640641 0.0009     0.640639 0.0009   0.8421
 k(absorption)     0.652640       0.640633 0.0009     k(abs/tk ln)
0.640658 0.0009     0.640644 0.0009   0.4291
 k(trk length)     0.644448       0.640683 0.0013     k(tk ln/col)
0.640666 0.0010     0.640656 0.0009   0.5425
 rem life(col)   6.8634E+03     6.8428E+03 0.0011     k(col/abs/tk ln)
0.640655 0.0009     0.640645 0.0009
```

```
 rem life(abs)   6.8711E+03     6.8433E+03 0.0011     life(col/abs/tl)
6.8449E+03 0.0009   6.8504E+03 0.0007
 source points generated   5127

  estimator     cycle   362   ave of   312 cycles      combination
simple average    combined average     corr
 k(collision)      0.626880       0.640605 0.0010     k(col/abs)
0.640590 0.0009     0.640585 0.0009   0.8430
 k(absorption)     0.622449       0.640575 0.0009     k(abs/tk ln)
0.640594 0.0009     0.640583 0.0009   0.4339
 k(trk length)     0.619001       0.640613 0.0013     k(tk ln/col)
0.640609 0.0010     0.640607 0.0009   0.5452
 rem life(col)   6.7844E+03     6.8426E+03 0.0011     k(col/abs/tk ln)
0.640598 0.0009     0.640587 0.0009
 rem life(abs)   6.7813E+03     6.8431E+03 0.0011     life(col/abs/tl)
6.8448E+03 0.0009   6.8506E+03 0.0007
 source points generated   4826

  estimator     cycle   363   ave of   313 cycles      combination
simple average    combined average     corr
 k(collision)      0.627303       0.640563 0.0009     k(col/abs)
0.640555 0.0009     0.640552 0.0009   0.8433
 k(absorption)     0.631819       0.640547 0.0009     k(abs/tk ln)
0.640594 0.0009     0.640568 0.0009   0.4315
 k(trk length)     0.649355       0.640641 0.0013     k(tk ln/col)
0.640602 0.0010     0.640579 0.0009   0.5412
 rem life(col)   6.7813E+03     6.8424E+03 0.0011     k(col/abs/tk ln)
0.640583 0.0009     0.640568 0.0009
 rem life(abs)   6.7713E+03     6.8428E+03 0.0011     life(col/abs/tl)
6.8446E+03 0.0009   6.8504E+03 0.0007
 source points generated   5015

  estimator     cycle   364   ave of   314 cycles      combination
simple average    combined average     corr
 k(collision)      0.659022       0.640621 0.0010     k(col/abs)
0.640613 0.0009     0.640610 0.0009   0.8448
 k(absorption)     0.658737       0.640605 0.0009     k(abs/tk ln)
0.640662 0.0009     0.640630 0.0009   0.4370
 k(trk length)     0.665485       0.640720 0.0013     k(tk ln/col)
0.640671 0.0010     0.640641 0.0009   0.5455
 rem life(col)   6.8820E+03     6.8425E+03 0.0011     k(col/abs/tk ln)
0.640649 0.0009     0.640630 0.0009
 rem life(abs)   6.8717E+03     6.8429E+03 0.0011     life(col/abs/tl)
6.8447E+03 0.0009   6.8505E+03 0.0007
 source points generated   5277

  estimator     cycle   365   ave of   315 cycles      combination
simple average    combined average     corr
 k(collision)      0.637785       0.640612 0.0009     k(col/abs)
0.640593 0.0009     0.640587 0.0009   0.8443
 k(absorption)     0.630757       0.640573 0.0009     k(abs/tk ln)
0.640621 0.0009     0.640594 0.0009   0.4389
 k(trk length)     0.624484       0.640669 0.0013     k(tk ln/col)
0.640641 0.0010     0.640624 0.0009   0.5453
```

```
 rem life(col)   6.6801E+03     6.8420E+03 0.0011     k(col/abs/tk ln)
0.640618 0.0009     0.640598 0.0009
 rem life(abs)   6.6938E+03     6.8425E+03 0.0011     life(col/abs/tl)
6.8444E+03 0.0009   6.8506E+03 0.0007
 source points generated   4857

  estimator     cycle   366   ave of   316 cycles      combination
simple average    combined average     corr
 k(collision)      0.662915       0.640683 0.0010     k(col/abs)
0.640668 0.0009     0.640663 0.0009   0.8466
 k(absorption)     0.665540       0.640652 0.0009     k(abs/tk ln)
0.640655 0.0009     0.640654 0.0009   0.4330
 k(trk length)     0.637196       0.640658 0.0013     k(tk ln/col)
0.640670 0.0010     0.640678 0.0009   0.5400
 rem life(col)   6.7812E+03     6.8418E+03 0.0011     k(col/abs/tk ln)
0.640664 0.0009     0.640659 0.0009
 rem life(abs)   6.7470E+03     6.8422E+03 0.0011     life(col/abs/tl)
6.8441E+03 0.0009   6.8502E+03 0.0007
 source points generated   5196

  estimator     cycle   367   ave of   317 cycles      combination
simple average    combined average     corr
 k(collision)      0.640273       0.640682 0.0009     k(col/abs)
0.640671 0.0009     0.640668 0.0009   0.8465
 k(absorption)     0.642913       0.640660 0.0009     k(abs/tk ln)
0.640633 0.0009     0.640647 0.0009   0.4314
 k(trk length)     0.624648       0.640607 0.0013     k(tk ln/col)
0.640644 0.0010     0.640666 0.0009   0.5391
 rem life(col)   6.9747E+03     6.8422E+03 0.0011     k(col/abs/tk ln)
0.640649 0.0009     0.640653 0.0009
 rem life(abs)   6.9556E+03     6.8425E+03 0.0011     life(col/abs/tl)
6.8443E+03 0.0009   6.8498E+03 0.0007
 source points generated   4791

  estimator     cycle   368   ave of   318 cycles      combination
simple average    combined average     corr
 k(collision)      0.643113       0.640689 0.0009     k(col/abs)
0.640673 0.0009     0.640669 0.0009   0.8463
 k(absorption)     0.639948       0.640657 0.0009     k(abs/tk ln)
0.640668 0.0009     0.640662 0.0009   0.4293
 k(trk length)     0.663387       0.640679 0.0013     k(tk ln/col)
0.640684 0.0010     0.640687 0.0009   0.5380
 rem life(col)   6.5732E+03     6.8414E+03 0.0011     k(col/abs/tk ln)
0.640675 0.0009     0.640667 0.0009
 rem life(abs)   6.5637E+03     6.8416E+03 0.0011     life(col/abs/tl)
6.8436E+03 0.0009   6.8496E+03 0.0007
 source points generated   5045

  estimator     cycle   369   ave of   319 cycles      combination
simple average    combined average     corr
 k(collision)      0.650707       0.640721 0.0009     k(col/abs)
0.640715 0.0009     0.640713 0.0009   0.8465
 k(absorption)     0.656975       0.640708 0.0009     k(abs/tk ln)
0.640698 0.0009     0.640703 0.0009   0.4285
```

```
 k(trk length)     0.643290       0.640687 0.0013     k(tk ln/col)
0.640704 0.0010     0.640714 0.0009   0.5378
 rem life(col)   6.8625E+03     6.8415E+03 0.0011     k(col/abs/tk ln)
0.640705 0.0009     0.640706 0.0009
 rem life(abs)   6.8361E+03     6.8416E+03 0.0011     life(col/abs/tl)
6.8437E+03 0.0009   6.8498E+03 0.0007
 source points generated   5064

  estimator     cycle   370   ave of   320 cycles      combination
simple average    combined average     corr
 k(collision)      0.657152       0.640772 0.0009     k(col/abs)
0.640761 0.0009     0.640758 0.0009   0.8473
 k(absorption)     0.653834       0.640749 0.0009     k(abs/tk ln)
0.640726 0.0009     0.640738 0.0009   0.4287
 k(trk length)     0.645564       0.640702 0.0013     k(tk ln/col)
0.640737 0.0010     0.640757 0.0009   0.5374
 rem life(col)   6.7537E+03     6.8412E+03 0.0011     k(col/abs/tk ln)
0.640741 0.0009     0.640744 0.0009
 rem life(abs)   6.7441E+03     6.8413E+03 0.0011     life(col/abs/tl)
6.8433E+03 0.0009   6.8494E+03 0.0007
 source points generated   5076

  estimator     cycle   371   ave of   321 cycles      combination
simple average    combined average     corr
 k(collision)      0.634180       0.640752 0.0009     k(col/abs)
0.640750 0.0009     0.640750 0.0009   0.8469
 k(absorption)     0.640419       0.640748 0.0009     k(abs/tk ln)
0.640710 0.0009     0.640731 0.0009   0.4285
 k(trk length)     0.630893       0.640672 0.0013     k(tk ln/col)
0.640712 0.0010     0.640735 0.0009   0.5380
 rem life(col)   6.7485E+03     6.8409E+03 0.0011     k(col/abs/tk ln)
0.640724 0.0009     0.640733 0.0009
 rem life(abs)   6.7447E+03     6.8410E+03 0.0011     life(col/abs/tl)
6.8431E+03 0.0009   6.8495E+03 0.0007
 source points generated   4796

  estimator     cycle   372   ave of   322 cycles      combination
simple average    combined average     corr
 k(collision)      0.640510       0.640751 0.0009     k(col/abs)
0.640753 0.0009     0.640754 0.0009   0.8468
 k(absorption)     0.643143       0.640756 0.0009     k(abs/tk ln)
0.640719 0.0009     0.640739 0.0009   0.4286
 k(trk length)     0.644073       0.640682 0.0013     k(tk ln/col)
0.640717 0.0010     0.640736 0.0009   0.5379
 rem life(col)   6.8201E+03     6.8408E+03 0.0011     k(col/abs/tk ln)
0.640730 0.0009     0.640740 0.0009
 rem life(abs)   6.8099E+03     6.8409E+03 0.0011     life(col/abs/tl)
6.8431E+03 0.0009   6.8495E+03 0.0007
 source points generated   5027

  estimator     cycle   373   ave of   323 cycles      combination
simple average    combined average     corr
 k(collision)      0.641812       0.640754 0.0009     k(col/abs)
0.640744 0.0009     0.640741 0.0009   0.8459
```

```
 k(absorption)     0.633477       0.640733 0.0009     k(abs/tk ln)
0.640706 0.0009     0.640720 0.0009   0.4285
 k(trk length)     0.639312       0.640678 0.0012     k(tk ln/col)
0.640716 0.0010     0.640738 0.0009   0.5379
 rem life(col)   6.9040E+03     6.8410E+03 0.0011     k(col/abs/tk ln)
0.640722 0.0009     0.640726 0.0009
 rem life(abs)   6.9087E+03     6.8411E+03 0.0011     life(col/abs/tl)
6.8433E+03 0.0009   6.8498E+03 0.0007
 source points generated   5035

  estimator     cycle   374   ave of   324 cycles      combination
simple average    combined average     corr
 k(collision)      0.650964       0.640786 0.0009     k(col/abs)
0.640775 0.0009     0.640772 0.0009   0.8464
 k(absorption)     0.650739       0.640764 0.0009     k(abs/tk ln)
0.640734 0.0009     0.640750 0.0009   0.4293
 k(trk length)     0.648946       0.640704 0.0012     k(tk ln/col)
0.640745 0.0010     0.640768 0.0009   0.5385
 rem life(col)   7.0937E+03     6.8418E+03 0.0011     k(col/abs/tk ln)
0.640751 0.0009     0.640756 0.0009
 rem life(abs)   7.0522E+03     6.8418E+03 0.0011     life(col/abs/tl)
6.8438E+03 0.0009   6.8498E+03 0.0007
 source points generated   5093

  estimator     cycle   375   ave of   325 cycles      combination
simple average    combined average     corr
 k(collision)      0.634208       0.640765 0.0009     k(col/abs)
0.640758 0.0009     0.640756 0.0009   0.8464
 k(absorption)     0.636340       0.640751 0.0009     k(abs/tk ln)
0.640724 0.0009     0.640738 0.0009   0.4294
 k(trk length)     0.638469       0.640697 0.0012     k(tk ln/col)
0.640731 0.0010     0.640751 0.0009   0.5385
 rem life(col)   6.8552E+03     6.8419E+03 0.0011     k(col/abs/tk ln)
0.640738 0.0009     0.640742 0.0008
 rem life(abs)   6.8711E+03     6.8419E+03 0.0010     life(col/abs/tl)
6.8439E+03 0.0009   6.8496E+03 0.0007
 source points generated   4920

  estimator     cycle   376   ave of   326 cycles      combination
simple average    combined average     corr
 k(collision)      0.636365       0.640752 0.0009     k(col/abs)
0.640737 0.0009     0.640733 0.0009   0.8463
 k(absorption)     0.631227       0.640721 0.0009     k(abs/tk ln)
0.640710 0.0009     0.640716 0.0008   0.4287
 k(trk length)     0.641431       0.640699 0.0012     k(tk ln/col)
0.640725 0.0010     0.640741 0.0009   0.5383
 rem life(col)   6.9852E+03     6.8423E+03 0.0011     k(col/abs/tk ln)
0.640724 0.0009     0.640722 0.0008
 rem life(abs)   6.9998E+03     6.8424E+03 0.0010     life(col/abs/tl)
6.8442E+03 0.0009   6.8497E+03 0.0007
 source points generated   4973

  estimator     cycle   377   ave of   327 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.629857       0.640719 0.0009     k(col/abs)
0.640710 0.0009     0.640708 0.0009   0.8464
 k(absorption)     0.634331       0.640702 0.0009     k(abs/tk ln)
0.640703 0.0009     0.640702 0.0008   0.4282
 k(trk length)     0.642156       0.640703 0.0012     k(tk ln/col)
0.640711 0.0009     0.640715 0.0009   0.5371
 rem life(col)   6.6795E+03     6.8418E+03 0.0011     k(col/abs/tk ln)
0.640708 0.0009     0.640705 0.0008
 rem life(abs)   6.6729E+03     6.8418E+03 0.0010     life(col/abs/tl)
6.8438E+03 0.0009   6.8496E+03 0.0007
 source points generated   4976

  estimator     cycle   378   ave of   328 cycles      combination
simple average    combined average     corr
 k(collision)      0.652098       0.640753 0.0009     k(col/abs)
0.640751 0.0009     0.640750 0.0009   0.8469
 k(absorption)     0.655786       0.640748 0.0009     k(abs/tk ln)
0.640746 0.0009     0.640747 0.0008   0.4304
 k(trk length)     0.653952       0.640744 0.0012     k(tk ln/col)
0.640749 0.0009     0.640751 0.0009   0.5385
 rem life(col)   6.9027E+03     6.8420E+03 0.0010     k(col/abs/tk ln)
0.640748 0.0009     0.640748 0.0008
 rem life(abs)   6.8720E+03     6.8419E+03 0.0010     life(col/abs/tl)
6.8439E+03 0.0009   6.8495E+03 0.0007
 source points generated   5167

  estimator     cycle   379   ave of   329 cycles      combination
simple average    combined average     corr
 k(collision)      0.622171       0.640697 0.0009     k(col/abs)
0.640698 0.0009     0.640698 0.0009   0.8481
 k(absorption)     0.624607       0.640699 0.0009     k(abs/tk ln)
0.640683 0.0009     0.640692 0.0008   0.4351
 k(trk length)     0.615795       0.640668 0.0012     k(tk ln/col)
0.640682 0.0010     0.640691 0.0009   0.5427
 rem life(col)   6.9710E+03     6.8424E+03 0.0010     k(col/abs/tk ln)
0.640688 0.0009     0.640692 0.0008
 rem life(abs)   7.0007E+03     6.8424E+03 0.0010     life(col/abs/tl)
6.8443E+03 0.0009   6.8497E+03 0.0007
 source points generated   4762

  estimator     cycle   380   ave of   330 cycles      combination
simple average    combined average     corr
 k(collision)      0.649355       0.640723 0.0009     k(col/abs)
0.640717 0.0009     0.640715 0.0009   0.8480
 k(absorption)     0.644805       0.640711 0.0009     k(abs/tk ln)
0.640708 0.0009     0.640710 0.0008   0.4355
 k(trk length)     0.652611       0.640704 0.0012     k(tk ln/col)
0.640714 0.0009     0.640719 0.0009   0.5436
 rem life(col)   6.8285E+03     6.8423E+03 0.0010     k(col/abs/tk ln)
0.640713 0.0009     0.640712 0.0008
 rem life(abs)   6.8066E+03     6.8423E+03 0.0010     life(col/abs/tl)
6.8442E+03 0.0009   6.8499E+03 0.0007
 source points generated   5208
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  estimator     cycle   381   ave of   331 cycles      combination
simple average    combined average     corr
 k(collision)      0.658174       0.640776 0.0009     k(col/abs)
0.640782 0.0009     0.640784 0.0009   0.8489
 k(absorption)     0.666345       0.640789 0.0009     k(abs/tk ln)
0.640762 0.0009     0.640776 0.0009   0.4366
 k(trk length)     0.651190       0.640736 0.0012     k(tk ln/col)
0.640756 0.0009     0.640767 0.0009   0.5446
 rem life(col)   6.8552E+03     6.8424E+03 0.0010     k(col/abs/tk ln)
0.640767 0.0009     0.640775 0.0008
 rem life(abs)   6.8597E+03     6.8424E+03 0.0010     life(col/abs/tl)
6.8443E+03 0.0009   6.8499E+03 0.0007
 source points generated   5054

  estimator     cycle   382   ave of   332 cycles      combination
simple average    combined average     corr
 k(collision)      0.643441       0.640784 0.0009     k(col/abs)
0.640783 0.0009     0.640783 0.0009   0.8486
 k(absorption)     0.638499       0.640782 0.0009     k(abs/tk ln)
0.640774 0.0009     0.640778 0.0008   0.4358
 k(trk length)     0.651053       0.640767 0.0012     k(tk ln/col)
0.640775 0.0009     0.640780 0.0009   0.5447
 rem life(col)   6.7437E+03     6.8421E+03 0.0010     k(col/abs/tk ln)
0.640777 0.0009     0.640779 0.0008
 rem life(abs)   6.7639E+03     6.8421E+03 0.0010     life(col/abs/tl)
6.8440E+03 0.0009   6.8496E+03 0.0007
 source points generated   4869

  estimator     cycle   383   ave of   333 cycles      combination
simple average    combined average     corr
 k(collision)      0.637636       0.640774 0.0009     k(col/abs)
0.640782 0.0009     0.640784 0.0009   0.8482
 k(absorption)     0.643508       0.640790 0.0009     k(abs/tk ln)
0.640769 0.0009     0.640780 0.0008   0.4353
 k(trk length)     0.634766       0.640749 0.0012     k(tk ln/col)
0.640762 0.0009     0.640769 0.0009   0.5448
 rem life(col)   6.8828E+03     6.8422E+03 0.0010     k(col/abs/tk ln)
0.640771 0.0009     0.640779 0.0008
 rem life(abs)   6.8458E+03     6.8421E+03 0.0010     life(col/abs/tl)
6.8441E+03 0.0009   6.8497E+03 0.0007
 source points generated   4955

  estimator     cycle   384   ave of   334 cycles      combination
simple average    combined average     corr
 k(collision)      0.617407       0.640704 0.0009     k(col/abs)
0.640712 0.0009     0.640714 0.0009   0.8504
 k(absorption)     0.617305       0.640720 0.0009     k(abs/tk ln)
0.640693 0.0009     0.640707 0.0009   0.4425
 k(trk length)     0.613230       0.640666 0.0012     k(tk ln/col)
0.640685 0.0009     0.640696 0.0009   0.5504
 rem life(col)   7.0763E+03     6.8429E+03 0.0010     k(col/abs/tk ln)
0.640697 0.0009     0.640706 0.0008
 rem life(abs)   7.0781E+03     6.8428E+03 0.0010     life(col/abs/tl)
6.8447E+03 0.0009   6.8503E+03 0.0007
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 source points generated   4816

  estimator     cycle   385   ave of   335 cycles      combination
simple average    combined average     corr
 k(collision)      0.649706       0.640731 0.0009     k(col/abs)
0.640730 0.0009     0.640729 0.0009   0.8501
 k(absorption)     0.643637       0.640728 0.0009     k(abs/tk ln)
0.640671 0.0009     0.640701 0.0008   0.4405
 k(trk length)     0.623095       0.640614 0.0012     k(tk ln/col)
0.640673 0.0009     0.640706 0.0009   0.5456
 rem life(col)   6.6541E+03     6.8423E+03 0.0010     k(col/abs/tk ln)
0.640691 0.0009     0.640706 0.0008
 rem life(abs)   6.6990E+03     6.8424E+03 0.0010     life(col/abs/tl)
6.8443E+03 0.0009   6.8501E+03 0.0007
 source points generated   5234

  estimator     cycle   386   ave of   336 cycles      combination
simple average    combined average     corr
 k(collision)      0.629733       0.640698 0.0009     k(col/abs)
0.640703 0.0009     0.640704 0.0009   0.8502
 k(absorption)     0.633882       0.640708 0.0009     k(abs/tk ln)
0.640638 0.0009     0.640675 0.0008   0.4415
 k(trk length)     0.624954       0.640567 0.0012     k(tk ln/col)
0.640633 0.0009     0.640671 0.0009   0.5471
 rem life(col)   6.9258E+03     6.8426E+03 0.0010     k(col/abs/tk ln)
0.640658 0.0009     0.640678 0.0008
 rem life(abs)   6.9008E+03     6.8426E+03 0.0010     life(col/abs/tl)
6.8445E+03 0.0009   6.8503E+03 0.0007
 source points generated   4821

  estimator     cycle   387   ave of   337 cycles      combination
simple average    combined average     corr
 k(collision)      0.631059       0.640670 0.0009     k(col/abs)
0.640668 0.0009     0.640668 0.0009   0.8505
 k(absorption)     0.626867       0.640667 0.0009     k(abs/tk ln)
0.640601 0.0009     0.640636 0.0008   0.4430
 k(trk length)     0.629576       0.640535 0.0012     k(tk ln/col)
0.640602 0.0009     0.640642 0.0009   0.5480
 rem life(col)   6.9253E+03     6.8428E+03 0.0010     k(col/abs/tk ln)
0.640624 0.0009     0.640641 0.0008
 rem life(abs)   6.8778E+03     6.8427E+03 0.0010     life(col/abs/tl)
6.8447E+03 0.0009   6.8504E+03 0.0007
 source points generated   5005

  estimator     cycle   388   ave of   338 cycles      combination
simple average    combined average     corr
 k(collision)      0.616527       0.640598 0.0009     k(col/abs)
0.640610 0.0009     0.640613 0.0009   0.8513
 k(absorption)     0.625210       0.640621 0.0009     k(abs/tk ln)
0.640547 0.0009     0.640587 0.0008   0.4465
 k(trk length)     0.619820       0.640473 0.0012     k(tk ln/col)
0.640536 0.0009     0.640572 0.0009   0.5518
 rem life(col)   6.9094E+03     6.8430E+03 0.0010     k(col/abs/tk ln)
0.640564 0.0009     0.640587 0.0008
```

```
 rem life(abs)   6.8832E+03     6.8428E+03 0.0010     life(col/abs/tl)
6.8449E+03 0.0009   6.8506E+03 0.0007
 source points generated   4892

  estimator     cycle   389   ave of   339 cycles      combination
simple average    combined average     corr
 k(collision)      0.638937       0.640594 0.0009     k(col/abs)
0.640602 0.0009     0.640604 0.0009   0.8513
 k(absorption)     0.637077       0.640611 0.0009     k(abs/tk ln)
0.640547 0.0009     0.640581 0.0008   0.4462
 k(trk length)     0.643519       0.640482 0.0012     k(tk ln/col)
0.640538 0.0009     0.640570 0.0009   0.5516
 rem life(col)   7.0107E+03     6.8435E+03 0.0010     k(col/abs/tk ln)
0.640562 0.0009     0.640582 0.0008
 rem life(abs)   7.0145E+03     6.8433E+03 0.0010     life(col/abs/tl)
6.8453E+03 0.0009   6.8510E+03 0.0007
 source points generated   5249

  estimator     cycle   390   ave of   340 cycles      combination
simple average    combined average     corr
 k(collision)      0.643212       0.640601 0.0009     k(col/abs)
0.640613 0.0009     0.640616 0.0009   0.8513
 k(absorption)     0.645329       0.640625 0.0009     k(abs/tk ln)
0.640553 0.0009     0.640591 0.0008   0.4460
 k(trk length)     0.640263       0.640482 0.0012     k(tk ln/col)
0.640542 0.0009     0.640576 0.0009   0.5515
 rem life(col)   7.1202E+03     6.8443E+03 0.0010     k(col/abs/tk ln)
0.640569 0.0009     0.640592 0.0008
 rem life(abs)   7.0929E+03     6.8440E+03 0.0010     life(col/abs/tl)
6.8459E+03 0.0009   6.8512E+03 0.0007
 source points generated   5033

  estimator     cycle   391   ave of   341 cycles      combination
simple average    combined average     corr
 k(collision)      0.648107       0.640623 0.0009     k(col/abs)
0.640636 0.0009     0.640640 0.0009   0.8515
 k(absorption)     0.648943       0.640649 0.0009     k(abs/tk ln)
0.640576 0.0009     0.640615 0.0008   0.4466
 k(trk length)     0.647751       0.640503 0.0012     k(tk ln/col)
0.640563 0.0009     0.640598 0.0009   0.5520
 rem life(col)   6.7768E+03     6.8441E+03 0.0010     k(col/abs/tk ln)
0.640592 0.0009     0.640615 0.0008
 rem life(abs)   6.7505E+03     6.8438E+03 0.0010     life(col/abs/tl)
6.8456E+03 0.0009   6.8507E+03 0.0007
 source points generated   5018

  estimator     cycle   392   ave of   342 cycles      combination
simple average    combined average     corr
 k(collision)      0.647548       0.640644 0.0009     k(col/abs)
0.640653 0.0009     0.640655 0.0009   0.8516
 k(absorption)     0.645135       0.640662 0.0009     k(abs/tk ln)
0.640596 0.0009     0.640631 0.0008   0.4471
 k(trk length)     0.649428       0.640529 0.0012     k(tk ln/col)
0.640586 0.0009     0.640619 0.0009   0.5525
```

```
 rem life(col)   6.7766E+03     6.8439E+03 0.0010     k(col/abs/tk ln)
0.640612 0.0009     0.640632 0.0008
 rem life(abs)   6.7775E+03     6.8436E+03 0.0010     life(col/abs/tl)
6.8456E+03 0.0009   6.8510E+03 0.0007
 source points generated   4942

  estimator     cycle   393   ave of   343 cycles      combination
simple average    combined average     corr
 k(collision)      0.648704       0.640667 0.0009     k(col/abs)
0.640676 0.0009     0.640678 0.0009   0.8518
 k(absorption)     0.648260       0.640684 0.0009     k(abs/tk ln)
0.640617 0.0009     0.640653 0.0008   0.4476
 k(trk length)     0.647499       0.640550 0.0012     k(tk ln/col)
0.640608 0.0009     0.640642 0.0009   0.5529
 rem life(col)   6.8530E+03     6.8440E+03 0.0010     k(col/abs/tk ln)
0.640634 0.0009     0.640654 0.0008
 rem life(abs)   6.8463E+03     6.8436E+03 0.0010     life(col/abs/tl)
6.8456E+03 0.0009   6.8512E+03 0.0007
 source points generated   5012

  estimator     cycle   394   ave of   344 cycles      combination
simple average    combined average     corr
 k(collision)      0.631930       0.640642 0.0009     k(col/abs)
0.640647 0.0009     0.640648 0.0009   0.8521
 k(absorption)     0.629597       0.640652 0.0009     k(abs/tk ln)
0.640619 0.0009     0.640636 0.0008   0.4437
 k(trk length)     0.652741       0.640585 0.0012     k(tk ln/col)
0.640613 0.0009     0.640630 0.0009   0.5498
 rem life(col)   6.8606E+03     6.8440E+03 0.0010     k(col/abs/tk ln)
0.640626 0.0009     0.640636 0.0008
 rem life(abs)   6.8737E+03     6.8437E+03 0.0010     life(col/abs/tl)
6.8457E+03 0.0009   6.8512E+03 0.0007
 source points generated   4907

  estimator     cycle   395   ave of   345 cycles      combination
simple average    combined average     corr
 k(collision)      0.608778       0.640549 0.0009     k(col/abs)
0.640562 0.0009     0.640566 0.0009   0.8550
 k(absorption)     0.614335       0.640576 0.0009     k(abs/tk ln)
0.640572 0.0009     0.640574 0.0008   0.4424
 k(trk length)     0.634973       0.640569 0.0012     k(tk ln/col)
0.640559 0.0009     0.640554 0.0009   0.5462
 rem life(col)   6.9608E+03     6.8443E+03 0.0010     k(col/abs/tk ln)
0.640565 0.0009     0.640570 0.0008
 rem life(abs)   6.9853E+03     6.8441E+03 0.0010     life(col/abs/tl)
6.8461E+03 0.0009   6.8517E+03 0.0007
 source points generated   4770

  estimator     cycle   396   ave of   346 cycles      combination
simple average    combined average     corr
 k(collision)      0.638557       0.640544 0.0009     k(col/abs)
0.640558 0.0009     0.640562 0.0009   0.8550
 k(absorption)     0.639557       0.640573 0.0009     k(abs/tk ln)
0.640597 0.0009     0.640584 0.0008   0.4411
```

```
 k(trk length)     0.658505       0.640621 0.0012     k(tk ln/col)
0.640582 0.0009     0.640561 0.0009   0.5443
 rem life(col)   6.6398E+03     6.8438E+03 0.0010     k(col/abs/tk ln)
0.640579 0.0009     0.640578 0.0008
 rem life(abs)   6.6542E+03     6.8435E+03 0.0010     life(col/abs/tl)
6.8457E+03 0.0009   6.8516E+03 0.0007
 source points generated   5261

  estimator     cycle   397   ave of   347 cycles      combination
simple average    combined average     corr
 k(collision)      0.643122       0.640551 0.0009     k(col/abs)
0.640565 0.0009     0.640569 0.0009   0.8550
 k(absorption)     0.642717       0.640579 0.0009     k(abs/tk ln)
0.640613 0.0009     0.640595 0.0008   0.4412
 k(trk length)     0.649543       0.640646 0.0012     k(tk ln/col)
0.640599 0.0009     0.640572 0.0009   0.5444
 rem life(col)   6.9333E+03     6.8440E+03 0.0010     k(col/abs/tk ln)
0.640592 0.0009     0.640589 0.0008
 rem life(abs)   6.9089E+03     6.8437E+03 0.0010     life(col/abs/tl)
6.8459E+03 0.0009   6.8517E+03 0.0007
 source points generated   5045

  estimator     cycle   398   ave of   348 cycles      combination
simple average    combined average     corr
 k(collision)      0.626453       0.640510 0.0009     k(col/abs)
0.640526 0.0009     0.640530 0.0009   0.8557
 k(absorption)     0.627443       0.640541 0.0009     k(abs/tk ln)
0.640611 0.0009     0.640575 0.0008   0.4366
 k(trk length)     0.652929       0.640682 0.0012     k(tk ln/col)
0.640596 0.0009     0.640550 0.0009   0.5393
 rem life(col)   6.8819E+03     6.8441E+03 0.0010     k(col/abs/tk ln)
0.640578 0.0008     0.640567 0.0008
 rem life(abs)   6.8832E+03     6.8438E+03 0.0010     life(col/abs/tl)
6.8460E+03 0.0009   6.8519E+03 0.0007
 source points generated   4866

  estimator     cycle   399   ave of   349 cycles      combination
simple average    combined average     corr
 k(collision)      0.662989       0.640575 0.0009     k(col/abs)
0.640586 0.0009     0.640589 0.0009   0.8572
 k(absorption)     0.659835       0.640596 0.0009     k(abs/tk ln)
0.640647 0.0009     0.640621 0.0008   0.4363
 k(trk length)     0.646030       0.640697 0.0012     k(tk ln/col)
0.640636 0.0009     0.640604 0.0009   0.5381
 rem life(col)   6.7617E+03     6.8439E+03 0.0010     k(col/abs/tk ln)
0.640623 0.0008     0.640616 0.0008
 rem life(abs)   6.7946E+03     6.8437E+03 0.0010     life(col/abs/tl)
6.8458E+03 0.0009   6.8517E+03 0.0007
 source points generated   5339

  estimator     cycle   400   ave of   350 cycles      combination
simple average    combined average     corr
 k(collision)      0.629836       0.640544 0.0009     k(col/abs)
0.640552 0.0009     0.640554 0.0009   0.8576
```

```
 k(absorption)     0.627772       0.640560 0.0009     k(abs/tk ln)
0.640609 0.0009     0.640584 0.0008   0.4381
 k(trk length)     0.627321       0.640659 0.0012     k(tk ln/col)
0.640601 0.0009     0.640571 0.0009   0.5393
 rem life(col)   7.0993E+03     6.8446E+03 0.0010     k(col/abs/tk ln)
0.640588 0.0008     0.640580 0.0008
 rem life(abs)   7.1269E+03     6.8445E+03 0.0010     life(col/abs/tl)
6.8466E+03 0.0009   6.8525E+03 0.0007
 source points generated   4748

  estimator     cycle   401   ave of   351 cycles      combination
simple average    combined average     corr
 k(collision)      0.666022       0.640617 0.0009     k(col/abs)
0.640611 0.0009     0.640609 0.0009   0.8582
 k(absorption)     0.656234       0.640605 0.0009     k(abs/tk ln)
0.640669 0.0009     0.640636 0.0008   0.4424
 k(trk length)     0.666719       0.640733 0.0012     k(tk ln/col)
0.640675 0.0009     0.640644 0.0009   0.5447
 rem life(col)   6.7176E+03     6.8443E+03 0.0010     k(col/abs/tk ln)
0.640651 0.0009     0.640635 0.0008
 rem life(abs)   6.7263E+03     6.8442E+03 0.0010     life(col/abs/tl)
6.8463E+03 0.0009   6.8523E+03 0.0007
 source points generated   5290

  estimator     cycle   402   ave of   352 cycles      combination
simple average    combined average     corr
 k(collision)      0.619127       0.640556 0.0009     k(col/abs)
0.640556 0.0009     0.640556 0.0009   0.8593
 k(absorption)     0.623504       0.640556 0.0009     k(abs/tk ln)
0.640607 0.0009     0.640581 0.0008   0.4471
 k(trk length)     0.614390       0.640658 0.0012     k(tk ln/col)
0.640607 0.0009     0.640579 0.0009   0.5493
 rem life(col)   6.8645E+03     6.8443E+03 0.0010     k(col/abs/tk ln)
0.640590 0.0009     0.640578 0.0008
 rem life(abs)   6.8272E+03     6.8441E+03 0.0010     life(col/abs/tl)
6.8463E+03 0.0009   6.8524E+03 0.0007
 source points generated   4644

  estimator     cycle   403   ave of   353 cycles      combination
simple average    combined average     corr
 k(collision)      0.636699       0.640545 0.0009     k(col/abs)
0.640539 0.0009     0.640537 0.0009   0.8592
 k(absorption)     0.632401       0.640533 0.0009     k(abs/tk ln)
0.640592 0.0009     0.640561 0.0008   0.4471
 k(trk length)     0.637979       0.640651 0.0012     k(tk ln/col)
0.640598 0.0009     0.640569 0.0009   0.5493
 rem life(col)   6.9262E+03     6.8445E+03 0.0010     k(col/abs/tk ln)
0.640576 0.0009     0.640560 0.0008
 rem life(abs)   6.9407E+03     6.8444E+03 0.0010     life(col/abs/tl)
6.8465E+03 0.0009   6.8524E+03 0.0007
 source points generated   5131

  estimator     cycle   404   ave of   354 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.656845       0.640591 0.0009     k(col/abs)
0.640583 0.0009     0.640580 0.0009   0.8600
 k(absorption)     0.655331       0.640575 0.0009     k(abs/tk ln)
0.640664 0.0009     0.640617 0.0008   0.4518
 k(trk length)     0.677254       0.640754 0.0012     k(tk ln/col)
0.640672 0.0009     0.640627 0.0009   0.5532
 rem life(col)   6.9275E+03     6.8448E+03 0.0010     k(col/abs/tk ln)
0.640640 0.0009     0.640615 0.0008
 rem life(abs)   6.9368E+03     6.8447E+03 0.0010     life(col/abs/tl)
6.8467E+03 0.0009   6.8524E+03 0.0007
 source points generated   5209

  estimator     cycle   405   ave of   355 cycles      combination
simple average    combined average     corr
 k(collision)      0.654988       0.640631 0.0009     k(col/abs)
0.640620 0.0009     0.640616 0.0009   0.8606
 k(absorption)     0.652400       0.640608 0.0009     k(abs/tk ln)
0.640695 0.0009     0.640649 0.0008   0.4530
 k(trk length)     0.650952       0.640783 0.0012     k(tk ln/col)
0.640707 0.0009     0.640665 0.0009   0.5541
 rem life(col)   6.8742E+03     6.8449E+03 0.0010     k(col/abs/tk ln)
0.640674 0.0009     0.640648 0.0008
 rem life(abs)   6.8807E+03     6.8448E+03 0.0010     life(col/abs/tl)
6.8467E+03 0.0009   6.8521E+03 0.0007
 source points generated   4991

  estimator     cycle   406   ave of   356 cycles      combination
simple average    combined average     corr
 k(collision)      0.642628       0.640637 0.0009     k(col/abs)
0.640631 0.0009     0.640629 0.0009   0.8604
 k(absorption)     0.646690       0.640625 0.0009     k(abs/tk ln)
0.640695 0.0009     0.640658 0.0008   0.4519
 k(trk length)     0.634188       0.640764 0.0012     k(tk ln/col)
0.640701 0.0009     0.640666 0.0009   0.5537
 rem life(col)   6.6472E+03     6.8443E+03 0.0010     k(col/abs/tk ln)
0.640675 0.0009     0.640656 0.0008
 rem life(abs)   6.6470E+03     6.8442E+03 0.0010     life(col/abs/tl)
6.8461E+03 0.0009   6.8515E+03 0.0007
 source points generated   4877

  estimator     cycle   407   ave of   357 cycles      combination
simple average    combined average     corr
 k(collision)      0.655428       0.640678 0.0009     k(col/abs)
0.640667 0.0009     0.640663 0.0009   0.8609
 k(absorption)     0.651799       0.640656 0.0009     k(abs/tk ln)
0.640686 0.0009     0.640671 0.0008   0.4468
 k(trk length)     0.623736       0.640716 0.0012     k(tk ln/col)
0.640697 0.0009     0.640687 0.0009   0.5468
 rem life(col)   6.8370E+03     6.8443E+03 0.0010     k(col/abs/tk ln)
0.640684 0.0009     0.640672 0.0008
 rem life(abs)   6.8429E+03     6.8442E+03 0.0010     life(col/abs/tl)
6.8461E+03 0.0009   6.8514E+03 0.0007
 source points generated   5046
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```
  estimator     cycle   408   ave of   358 cycles      combination
simple average    combined average     corr
 k(collision)      0.644594       0.640689 0.0009     k(col/abs)
0.640679 0.0009     0.640675 0.0009   0.8609
 k(absorption)     0.644869       0.640668 0.0009     k(abs/tk ln)
0.640709 0.0009     0.640687 0.0008   0.4472
 k(trk length)     0.652694       0.640750 0.0012     k(tk ln/col)
0.640720 0.0009     0.640703 0.0009   0.5470
 rem life(col)   6.7563E+03     6.8440E+03 0.0010     k(col/abs/tk ln)
0.640702 0.0008     0.640688 0.0008
 rem life(abs)   6.7502E+03     6.8439E+03 0.0010     life(col/abs/tl)
6.8457E+03 0.0009   6.8508E+03 0.0007
 source points generated   4891

  estimator     cycle   409   ave of   359 cycles      combination
simple average    combined average     corr
 k(collision)      0.646768       0.640706 0.0009     k(col/abs)
0.640687 0.0009     0.640680 0.0009   0.8605
 k(absorption)     0.640550       0.640668 0.0009     k(abs/tk ln)
0.640721 0.0009     0.640693 0.0008   0.4469
 k(trk length)     0.649174       0.640773 0.0012     k(tk ln/col)
0.640740 0.0009     0.640722 0.0009   0.5474
 rem life(col)   6.9200E+03     6.8443E+03 0.0010     k(col/abs/tk ln)
0.640716 0.0008     0.640695 0.0008
 rem life(abs)   6.9336E+03     6.8442E+03 0.0010     life(col/abs/tl)
6.8459E+03 0.0009   6.8508E+03 0.0007
 source points generated   5011

  estimator     cycle   410   ave of   360 cycles      combination
simple average    combined average     corr
 k(collision)      0.637385       0.640697 0.0009     k(col/abs)
0.640689 0.0009     0.640686 0.0009   0.8598
 k(absorption)     0.645183       0.640680 0.0009     k(abs/tk ln)
0.640713 0.0009     0.640696 0.0008   0.4457
 k(trk length)     0.631053       0.640746 0.0012     k(tk ln/col)
0.640722 0.0009     0.640708 0.0009   0.5475
 rem life(col)   6.9497E+03     6.8445E+03 0.0010     k(col/abs/tk ln)
0.640708 0.0008     0.640697 0.0008
 rem life(abs)   6.9414E+03     6.8445E+03 0.0010     life(col/abs/tl)
6.8461E+03 0.0009   6.8508E+03 0.0007
 source points generated   4906

  estimator     cycle   411   ave of   361 cycles      combination
simple average    combined average     corr
 k(collision)      0.632666       0.640675 0.0009     k(col/abs)
0.640670 0.0009     0.640668 0.0009   0.8600
 k(absorption)     0.635145       0.640665 0.0009     k(abs/tk ln)
0.640724 0.0009     0.640693 0.0008   0.4437
 k(trk length)     0.653935       0.640783 0.0012     k(tk ln/col)
0.640729 0.0009     0.640700 0.0009   0.5447
 rem life(col)   6.8741E+03     6.8446E+03 0.0010     k(col/abs/tk ln)
0.640708 0.0008     0.640692 0.0008
 rem life(abs)   6.8742E+03     6.8445E+03 0.0010     life(col/abs/tl)
6.8462E+03 0.0009   6.8509E+03 0.0007
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 source points generated   4937

  estimator     cycle   412   ave of   362 cycles      combination
simple average    combined average     corr
 k(collision)      0.648898       0.640698 0.0009     k(col/abs)
0.640685 0.0009     0.640681 0.0008   0.8598
 k(absorption)     0.643505       0.640673 0.0009     k(abs/tk ln)
0.640752 0.0009     0.640710 0.0008   0.4437
 k(trk length)     0.658147       0.640831 0.0012     k(tk ln/col)
0.640764 0.0009     0.640728 0.0009   0.5456
 rem life(col)   6.8157E+03     6.8445E+03 0.0010     k(col/abs/tk ln)
0.640734 0.0008     0.640710 0.0008
 rem life(abs)   6.8206E+03     6.8445E+03 0.0010     life(col/abs/tl)
6.8462E+03 0.0009   6.8510E+03 0.0007
 source points generated   5118

  estimator     cycle   413   ave of   363 cycles      combination
simple average    combined average     corr
 k(collision)      0.663554       0.640760 0.0009     k(col/abs)
0.640741 0.0009     0.640734 0.0009   0.8609
 k(absorption)     0.658460       0.640722 0.0009     k(abs/tk ln)
0.640793 0.0009     0.640756 0.0008   0.4454
 k(trk length)     0.653011       0.640864 0.0012     k(tk ln/col)
0.640812 0.0009     0.640785 0.0009   0.5467
 rem life(col)   6.7663E+03     6.8443E+03 0.0010     k(col/abs/tk ln)
0.640782 0.0008     0.640757 0.0008
 rem life(abs)   6.7665E+03     6.8443E+03 0.0010     life(col/abs/tl)
6.8460E+03 0.0009   6.8511E+03 0.0007
 source points generated   5099

  estimator     cycle   414   ave of   364 cycles      combination
simple average    combined average     corr
 k(collision)      0.650959       0.640788 0.0009     k(col/abs)
0.640765 0.0009     0.640756 0.0008   0.8611
 k(absorption)     0.647717       0.640741 0.0009     k(abs/tk ln)
0.640840 0.0009     0.640787 0.0008   0.4464
 k(trk length)     0.667798       0.640938 0.0012     k(tk ln/col)
0.640863 0.0009     0.640823 0.0009   0.5482
 rem life(col)   6.7396E+03     6.8440E+03 0.0010     k(col/abs/tk ln)
0.640823 0.0008     0.640789 0.0008
 rem life(abs)   6.7450E+03     6.8440E+03 0.0010     life(col/abs/tl)
6.8458E+03 0.0009   6.8510E+03 0.0007
 source points generated   4867

  estimator     cycle   415   ave of   365 cycles      combination
simple average    combined average     corr
 k(collision)      0.634530       0.640771 0.0009     k(col/abs)
0.640746 0.0009     0.640737 0.0008   0.8612
 k(absorption)     0.633629       0.640722 0.0009     k(abs/tk ln)
0.640819 0.0009     0.640767 0.0008   0.4470
 k(trk length)     0.632729       0.640916 0.0012     k(tk ln/col)
0.640844 0.0009     0.640804 0.0009   0.5486
 rem life(col)   6.7768E+03     6.8439E+03 0.0010     k(col/abs/tk ln)
0.640803 0.0008     0.640769 0.0008
```

```
 rem life(abs)   6.7958E+03     6.8439E+03 0.0010     life(col/abs/tl)
6.8458E+03 0.0009   6.8512E+03 0.0007
 source points generated   4868

  estimator     cycle   416   ave of   366 cycles      combination
simple average    combined average     corr
 k(collision)      0.645285       0.640784 0.0009     k(col/abs)
0.640758 0.0008     0.640748 0.0008   0.8613
 k(absorption)     0.644699       0.640732 0.0009     k(abs/tk ln)
0.640805 0.0009     0.640766 0.0008   0.4454
 k(trk length)     0.627113       0.640878 0.0012     k(tk ln/col)
0.640831 0.0009     0.640805 0.0009   0.5467
 rem life(col)   6.7329E+03     6.8436E+03 0.0010     k(col/abs/tk ln)
0.640798 0.0008     0.640770 0.0008
 rem life(abs)   6.7274E+03     6.8435E+03 0.0010     life(col/abs/tl)
6.8455E+03 0.0009   6.8511E+03 0.0007
 source points generated   5112

  estimator     cycle   417   ave of   367 cycles      combination
simple average    combined average     corr
 k(collision)      0.633333       0.640763 0.0009     k(col/abs)
0.640729 0.0008     0.640716 0.0008   0.8611
 k(absorption)     0.626901       0.640695 0.0009     k(abs/tk ln)
0.640774 0.0009     0.640732 0.0008   0.4464
 k(trk length)     0.631521       0.640853 0.0012     k(tk ln/col)
0.640808 0.0009     0.640784 0.0009   0.5472
 rem life(col)   6.9897E+03     6.8440E+03 0.0010     k(col/abs/tk ln)
0.640770 0.0008     0.640737 0.0008
 rem life(abs)   7.0059E+03     6.8440E+03 0.0010     life(col/abs/tl)
6.8459E+03 0.0009   6.8514E+03 0.0007
 source points generated   4881

  estimator     cycle   418   ave of   368 cycles      combination
simple average    combined average     corr
 k(collision)      0.638481       0.640757 0.0009     k(col/abs)
0.640748 0.0008     0.640744 0.0008   0.8575
 k(absorption)     0.656692       0.640738 0.0009     k(abs/tk ln)
0.640741 0.0009     0.640740 0.0008   0.4292
 k(trk length)     0.601142       0.640745 0.0012     k(tk ln/col)
0.640751 0.0009     0.640754 0.0009   0.5431
 rem life(col)   6.8066E+03     6.8439E+03 0.0010     k(col/abs/tk ln)
0.640747 0.0008     0.640742 0.0008
 rem life(abs)   6.7769E+03     6.8438E+03 0.0010     life(col/abs/tl)
6.8456E+03 0.0008   6.8508E+03 0.0007
 source points generated   5025

  estimator     cycle   419   ave of   369 cycles      combination
simple average    combined average     corr
 k(collision)      0.627286       0.640721 0.0009     k(col/abs)
0.640705 0.0008     0.640700 0.0008   0.8581
 k(absorption)     0.622817       0.640690 0.0009     k(abs/tk ln)
0.640710 0.0009     0.640699 0.0008   0.4290
 k(trk length)     0.635575       0.640731 0.0012     k(tk ln/col)
0.640726 0.0009     0.640723 0.0009   0.5431
```

```
 rem life(col)   6.8744E+03     6.8439E+03 0.0010     k(col/abs/tk ln)
0.640714 0.0008     0.640702 0.0008
 rem life(abs)   6.9013E+03     6.8440E+03 0.0010     life(col/abs/tl)
6.8458E+03 0.0008   6.8510E+03 0.0007
 source points generated   4898

  estimator     cycle   420   ave of   370 cycles      combination
simple average    combined average     corr
 k(collision)      0.629476       0.640690 0.0009     k(col/abs)
0.640668 0.0008     0.640661 0.0008   0.8583
 k(absorption)     0.624541       0.640646 0.0009     k(abs/tk ln)
0.640692 0.0009     0.640668 0.0008   0.4269
 k(trk length)     0.643545       0.640738 0.0012     k(tk ln/col)
0.640714 0.0009     0.640701 0.0009   0.5418
 rem life(col)   6.7374E+03     6.8436E+03 0.0010     k(col/abs/tk ln)
0.640692 0.0008     0.640672 0.0008
 rem life(abs)   6.7244E+03     6.8436E+03 0.0010     life(col/abs/tl)
6.8456E+03 0.0008   6.8510E+03 0.0007
 source points generated   5048

  estimator     cycle   421   ave of   371 cycles      combination
simple average    combined average     corr
 k(collision)      0.635912       0.640677 0.0009     k(col/abs)
0.640653 0.0008     0.640645 0.0008   0.8584
 k(absorption)     0.634131       0.640628 0.0009     k(abs/tk ln)
0.640692 0.0009     0.640659 0.0008   0.4258
 k(trk length)     0.647002       0.640755 0.0012     k(tk ln/col)
0.640716 0.0009     0.640695 0.0009   0.5410
 rem life(col)   6.9534E+03     6.8439E+03 0.0010     k(col/abs/tk ln)
0.640687 0.0008     0.640663 0.0008
 rem life(abs)   6.9618E+03     6.8439E+03 0.0010     life(col/abs/tl)
6.8459E+03 0.0008   6.8512E+03 0.0007
 source points generated   5032

  estimator     cycle   422   ave of   372 cycles      combination
simple average    combined average     corr
 k(collision)      0.654900       0.640716 0.0009     k(col/abs)
0.640685 0.0008     0.640675 0.0008   0.8587
 k(absorption)     0.650113       0.640654 0.0009     k(abs/tk ln)
0.640714 0.0009     0.640683 0.0008   0.4264
 k(trk length)     0.647983       0.640775 0.0012     k(tk ln/col)
0.640745 0.0009     0.640729 0.0009   0.5414
 rem life(col)   6.7017E+03     6.8436E+03 0.0010     k(col/abs/tk ln)
0.640715 0.0008     0.640688 0.0008
 rem life(abs)   6.6919E+03     6.8435E+03 0.0010     life(col/abs/tl)
6.8455E+03 0.0008   6.8510E+03 0.0007
 source points generated   5179

  estimator     cycle   423   ave of   373 cycles      combination
simple average    combined average     corr
 k(collision)      0.632692       0.640694 0.0009     k(col/abs)
0.640663 0.0008     0.640654 0.0008   0.8589
 k(absorption)     0.632763       0.640633 0.0009     k(abs/tk ln)
0.640721 0.0009     0.640676 0.0008   0.4239
```

```
 k(trk length)     0.653583       0.640809 0.0012     k(tk ln/col)
0.640752 0.0009     0.640720 0.0009   0.5387
 rem life(col)   6.9089E+03     6.8437E+03 0.0010     k(col/abs/tk ln)
0.640712 0.0008     0.640680 0.0008
 rem life(abs)   6.9097E+03     6.8437E+03 0.0010     life(col/abs/tl)
6.8457E+03 0.0008   6.8512E+03 0.0007
 source points generated   4819

  estimator     cycle   424   ave of   374 cycles      combination
simple average    combined average     corr
 k(collision)      0.638369       0.640688 0.0009     k(col/abs)
0.640654 0.0008     0.640643 0.0008   0.8589
 k(absorption)     0.635922       0.640620 0.0009     k(abs/tk ln)
0.640747 0.0009     0.640682 0.0008   0.4201
 k(trk length)     0.665384       0.640875 0.0012     k(tk ln/col)
0.640781 0.0009     0.640730 0.0009   0.5356
 rem life(col)   6.8233E+03     6.8437E+03 0.0010     k(col/abs/tk ln)
0.640728 0.0008     0.640685 0.0008
 rem life(abs)   6.8423E+03     6.8437E+03 0.0010     life(col/abs/tl)
6.8457E+03 0.0008   6.8512E+03 0.0007
 source points generated   5057

  estimator     cycle   425   ave of   375 cycles      combination
simple average    combined average     corr
 k(collision)      0.635990       0.640675 0.0009     k(col/abs)
0.640640 0.0008     0.640628 0.0008   0.8589
 k(absorption)     0.634527       0.640604 0.0008     k(abs/tk ln)
0.640715 0.0009     0.640658 0.0008   0.4210
 k(trk length)     0.622567       0.640826 0.0012     k(tk ln/col)
0.640751 0.0009     0.640709 0.0009   0.5358
 rem life(col)   6.8714E+03     6.8438E+03 0.0010     k(col/abs/tk ln)
0.640702 0.0008     0.640662 0.0008
 rem life(abs)   6.8872E+03     6.8438E+03 0.0010     life(col/abs/tl)
6.8458E+03 0.0008   6.8514E+03 0.0007
 source points generated   4960

  estimator     cycle   426   ave of   376 cycles      combination
simple average    combined average     corr
 k(collision)      0.651879       0.640705 0.0009     k(col/abs)
0.640663 0.0008     0.640649 0.0008   0.8589
 k(absorption)     0.646872       0.640621 0.0008     k(abs/tk ln)
0.640711 0.0009     0.640665 0.0008   0.4196
 k(trk length)     0.631958       0.640802 0.0012     k(tk ln/col)
0.640754 0.0009     0.640727 0.0009   0.5331
 rem life(col)   6.6392E+03     6.8432E+03 0.0010     k(col/abs/tk ln)
0.640709 0.0008     0.640671 0.0008
 rem life(abs)   6.6346E+03     6.8433E+03 0.0010     life(col/abs/tl)
6.8453E+03 0.0008   6.8511E+03 0.0007
 source points generated   5099

  estimator     cycle   427   ave of   377 cycles      combination
simple average    combined average     corr
 k(collision)      0.650693       0.640732 0.0009     k(col/abs)
0.640686 0.0008     0.640671 0.0008   0.8591
```

```
 k(absorption)     0.648056       0.640640 0.0008     k(abs/tk ln)
0.640717 0.0009     0.640678 0.0008   0.4188
 k(trk length)     0.637429       0.640793 0.0012     k(tk ln/col)
0.640763 0.0009     0.640746 0.0009   0.5319
 rem life(col)   6.6833E+03     6.8428E+03 0.0010     k(col/abs/tk ln)
0.640722 0.0008     0.640685 0.0008
 rem life(abs)   6.6803E+03     6.8428E+03 0.0010     life(col/abs/tl)
6.8449E+03 0.0008   6.8510E+03 0.0007
 source points generated   4967

  estimator     cycle   428   ave of   378 cycles      combination
simple average    combined average     corr
 k(collision)      0.640560       0.640731 0.0009     k(col/abs)
0.640676 0.0008     0.640658 0.0008   0.8586
 k(absorption)     0.633021       0.640620 0.0008     k(abs/tk ln)
0.640681 0.0008     0.640650 0.0008   0.4201
 k(trk length)     0.621275       0.640742 0.0012     k(tk ln/col)
0.640736 0.0009     0.640734 0.0009   0.5307
 rem life(col)   6.6891E+03     6.8424E+03 0.0010     k(col/abs/tk ln)
0.640698 0.0008     0.640661 0.0008
 rem life(abs)   6.6952E+03     6.8424E+03 0.0010     life(col/abs/tl)
6.8447E+03 0.0008   6.8512E+03 0.0007
 source points generated   4915

  estimator     cycle   429   ave of   379 cycles      combination
simple average    combined average     corr
 k(collision)      0.630642       0.640705 0.0009     k(col/abs)
0.640656 0.0008     0.640640 0.0008   0.8585
 k(absorption)     0.635777       0.640607 0.0008     k(abs/tk ln)
0.640655 0.0008     0.640631 0.0008   0.4207
 k(trk length)     0.626264       0.640704 0.0012     k(tk ln/col)
0.640704 0.0009     0.640704 0.0009   0.5319
 rem life(col)   6.8010E+03     6.8423E+03 0.0010     k(col/abs/tk ln)
0.640672 0.0008     0.640640 0.0008
 rem life(abs)   6.7836E+03     6.8423E+03 0.0010     life(col/abs/tl)
6.8447E+03 0.0008   6.8513E+03 0.0007
 source points generated   4900

  estimator     cycle   430   ave of   380 cycles      combination
simple average    combined average     corr
 k(collision)      0.627303       0.640669 0.0009     k(col/abs)
0.640640 0.0008     0.640629 0.0008   0.8565
 k(absorption)     0.641520       0.640610 0.0008     k(abs/tk ln)
0.640657 0.0008     0.640633 0.0008   0.4207
 k(trk length)     0.641248       0.640705 0.0012     k(tk ln/col)
0.640687 0.0009     0.640677 0.0009   0.5307
 rem life(col)   6.6921E+03     6.8419E+03 0.0010     k(col/abs/tk ln)
0.640661 0.0008     0.640638 0.0008
 rem life(abs)   6.6689E+03     6.8418E+03 0.0010     life(col/abs/tl)
6.8444E+03 0.0008   6.8514E+03 0.0007
 source points generated   4999

  estimator     cycle   431   ave of   381 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.637999       0.640662 0.0009     k(col/abs)
0.640629 0.0008     0.640618 0.0008   0.8565
 k(absorption)     0.635082       0.640595 0.0008     k(abs/tk ln)
0.640652 0.0008     0.640622 0.0008   0.4204
 k(trk length)     0.641796       0.640708 0.0012     k(tk ln/col)
0.640685 0.0009     0.640673 0.0008   0.5306
 rem life(col)   6.7266E+03     6.8416E+03 0.0010     k(col/abs/tk ln)
0.640655 0.0008     0.640628 0.0008
 rem life(abs)   6.7554E+03     6.8416E+03 0.0010     life(col/abs/tl)
6.8442E+03 0.0008   6.8513E+03 0.0007
 source points generated   5055

  estimator     cycle   432   ave of   382 cycles      combination
simple average    combined average     corr
 k(collision)      0.646062       0.640676 0.0009     k(col/abs)
0.640637 0.0008     0.640624 0.0008   0.8563
 k(absorption)     0.641731       0.640598 0.0008     k(abs/tk ln)
0.640642 0.0008     0.640619 0.0008   0.4201
 k(trk length)     0.632542       0.640686 0.0012     k(tk ln/col)
0.640681 0.0009     0.640679 0.0008   0.5295
 rem life(col)   6.7705E+03     6.8414E+03 0.0010     k(col/abs/tk ln)
0.640654 0.0008     0.640627 0.0008
 rem life(abs)   6.7744E+03     6.8414E+03 0.0010     life(col/abs/tl)
6.8440E+03 0.0008   6.8513E+03 0.0007
 source points generated   5065

  estimator     cycle   433   ave of   383 cycles      combination
simple average    combined average     corr
 k(collision)      0.642160       0.640680 0.0009     k(col/abs)
0.640631 0.0008     0.640614 0.0008   0.8556
 k(absorption)     0.633883       0.640581 0.0008     k(abs/tk ln)
0.640625 0.0008     0.640602 0.0008   0.4205
 k(trk length)     0.634119       0.640669 0.0012     k(tk ln/col)
0.640675 0.0009     0.640678 0.0008   0.5292
 rem life(col)   6.9387E+03     6.8416E+03 0.0010     k(col/abs/tk ln)
0.640643 0.0008     0.640613 0.0008
 rem life(abs)   6.9708E+03     6.8418E+03 0.0010     life(col/abs/tl)
6.8443E+03 0.0008   6.8515E+03 0.0007
 source points generated   4994

  estimator     cycle   434   ave of   384 cycles      combination
simple average    combined average     corr
 k(collision)      0.638906       0.640676 0.0009     k(col/abs)
0.640616 0.0008     0.640597 0.0008   0.8551
 k(absorption)     0.631397       0.640557 0.0008     k(abs/tk ln)
0.640621 0.0008     0.640588 0.0008   0.4190
 k(trk length)     0.646871       0.640685 0.0011     k(tk ln/col)
0.640681 0.0009     0.640678 0.0008   0.5288
 rem life(col)   6.6134E+03     6.8410E+03 0.0010     k(col/abs/tk ln)
0.640639 0.0008     0.640600 0.0008
 rem life(abs)   6.6707E+03     6.8413E+03 0.0010     life(col/abs/tl)
6.8439E+03 0.0008   6.8514E+03 0.0007
 source points generated   4999
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```
  estimator     cycle   435   ave of   385 cycles      combination
simple average    combined average     corr
 k(collision)      0.640126       0.640674 0.0009     k(col/abs)
0.640607 0.0008     0.640585 0.0008   0.8547
 k(absorption)     0.633826       0.640539 0.0008     k(abs/tk ln)
0.640630 0.0008     0.640583 0.0008   0.4167
 k(trk length)     0.654416       0.640721 0.0011     k(tk ln/col)
0.640698 0.0009     0.640685 0.0008   0.5281
 rem life(col)   6.5151E+03     6.8402E+03 0.0010     k(col/abs/tk ln)
0.640645 0.0008     0.640597 0.0008
 rem life(abs)   6.5213E+03     6.8405E+03 0.0010     life(col/abs/tl)
6.8432E+03 0.0008   6.8510E+03 0.0007
 source points generated   4996

  estimator     cycle   436   ave of   386 cycles      combination
simple average    combined average     corr
 k(collision)      0.622311       0.640627 0.0009     k(col/abs)
0.640569 0.0008     0.640549 0.0008   0.8550
 k(absorption)     0.629445       0.640511 0.0008     k(abs/tk ln)
0.640607 0.0008     0.640558 0.0008   0.4172
 k(trk length)     0.634116       0.640704 0.0011     k(tk ln/col)
0.640665 0.0009     0.640644 0.0008   0.5280
 rem life(col)   6.8326E+03     6.8402E+03 0.0010     k(col/abs/tk ln)
0.640614 0.0008     0.640568 0.0008
 rem life(abs)   6.8016E+03     6.8404E+03 0.0010     life(col/abs/tl)
6.8431E+03 0.0008   6.8511E+03 0.0007
 source points generated   4877

  estimator     cycle   437   ave of   387 cycles      combination
simple average    combined average     corr
 k(collision)      0.646536       0.640642 0.0009     k(col/abs)
0.640590 0.0008     0.640573 0.0008   0.8549
 k(absorption)     0.651198       0.640538 0.0008     k(abs/tk ln)
0.640618 0.0008     0.640577 0.0008   0.4162
 k(trk length)     0.638590       0.640699 0.0011     k(tk ln/col)
0.640670 0.0009     0.640655 0.0008   0.5276
 rem life(col)   6.7907E+03     6.8401E+03 0.0010     k(col/abs/tk ln)
0.640626 0.0008     0.640587 0.0008
 rem life(abs)   6.7868E+03     6.8403E+03 0.0010     life(col/abs/tl)
6.8430E+03 0.0008   6.8508E+03 0.0007
 source points generated   5200

  estimator     cycle   438   ave of   388 cycles      combination
simple average    combined average     corr
 k(collision)      0.637891       0.640635 0.0009     k(col/abs)
0.640589 0.0008     0.640574 0.0008   0.8547
 k(absorption)     0.642397       0.640543 0.0008     k(abs/tk ln)
0.640616 0.0008     0.640579 0.0008   0.4161
 k(trk length)     0.637127       0.640689 0.0011     k(tk ln/col)
0.640662 0.0009     0.640647 0.0008   0.5277
 rem life(col)   6.8401E+03     6.8401E+03 0.0010     k(col/abs/tk ln)
0.640622 0.0008     0.640587 0.0008
 rem life(abs)   6.8215E+03     6.8402E+03 0.0010     life(col/abs/tl)
6.8429E+03 0.0008   6.8506E+03 0.0007
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 source points generated   4955

  estimator     cycle   439   ave of   389 cycles      combination
simple average    combined average     corr
 k(collision)      0.644542       0.640645 0.0009     k(col/abs)
0.640585 0.0008     0.640566 0.0008   0.8535
 k(absorption)     0.633784       0.640526 0.0008     k(abs/tk ln)
0.640620 0.0008     0.640572 0.0008   0.4144
 k(trk length)     0.650740       0.640715 0.0011     k(tk ln/col)
0.640680 0.0009     0.640661 0.0008   0.5279
 rem life(col)   6.9315E+03     6.8403E+03 0.0010     k(col/abs/tk ln)
0.640629 0.0008     0.640583 0.0008
 rem life(abs)   6.9421E+03     6.8405E+03 0.0009     life(col/abs/tl)
6.8431E+03 0.0008   6.8506E+03 0.0007
 source points generated   5063

  estimator     cycle   440   ave of   390 cycles      combination
simple average    combined average     corr
 k(collision)      0.651839       0.640674 0.0009     k(col/abs)
0.640612 0.0008     0.640591 0.0008   0.8538
 k(absorption)     0.649938       0.640550 0.0008     k(abs/tk ln)
0.640646 0.0008     0.640597 0.0008   0.4154
 k(trk length)     0.651350       0.640742 0.0011     k(tk ln/col)
0.640708 0.0009     0.640689 0.0008   0.5288
 rem life(col)   6.7185E+03     6.8400E+03 0.0010     k(col/abs/tk ln)
0.640655 0.0008     0.640608 0.0008
 rem life(abs)   6.7185E+03     6.8402E+03 0.0009     life(col/abs/tl)
6.8428E+03 0.0008   6.8504E+03 0.0007
 source points generated   5091

  estimator     cycle   441   ave of   391 cycles      combination
simple average    combined average     corr
 k(collision)      0.646324       0.640688 0.0009     k(col/abs)
0.640624 0.0008     0.640603 0.0008   0.8539
 k(absorption)     0.644690       0.640560 0.0008     k(abs/tk ln)
0.640650 0.0008     0.640604 0.0008   0.4153
 k(trk length)     0.639743       0.640740 0.0011     k(tk ln/col)
0.640714 0.0009     0.640700 0.0008   0.5285
 rem life(col)   6.8573E+03     6.8400E+03 0.0009     k(col/abs/tk ln)
0.640663 0.0008     0.640616 0.0008
 rem life(abs)   6.8685E+03     6.8402E+03 0.0009     life(col/abs/tl)
6.8429E+03 0.0008   6.8505E+03 0.0007
 source points generated   4960

  estimator     cycle   442   ave of   392 cycles      combination
simple average    combined average     corr
 k(collision)      0.638702       0.640683 0.0009     k(col/abs)
0.640617 0.0008     0.640596 0.0008   0.8539
 k(absorption)     0.637073       0.640551 0.0008     k(abs/tk ln)
0.640661 0.0008     0.640605 0.0008   0.4141
 k(trk length)     0.652936       0.640771 0.0011     k(tk ln/col)
0.640727 0.0009     0.640703 0.0008   0.5276
 rem life(col)   6.7102E+03     6.8397E+03 0.0009     k(col/abs/tk ln)
0.640668 0.0008     0.640617 0.0008
```

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 rem life(abs)   6.7372E+03     6.8400E+03 0.0009     life(col/abs/tl)
6.8426E+03 0.0008   6.8504E+03 0.0007
 source points generated   4921

  estimator     cycle   443   ave of   393 cycles      combination
simple average    combined average     corr
 k(collision)      0.645290       0.640695 0.0009     k(col/abs)
0.640627 0.0008     0.640605 0.0008   0.8539
 k(absorption)     0.643727       0.640560 0.0008     k(abs/tk ln)
0.640690 0.0008     0.640623 0.0008   0.4141
 k(trk length)     0.660200       0.640820 0.0011     k(tk ln/col)
0.640758 0.0009     0.640723 0.0008   0.5277
 rem life(col)   6.8080E+03     6.8396E+03 0.0009     k(col/abs/tk ln)
0.640692 0.0008     0.640634 0.0008
 rem life(abs)   6.8344E+03     6.8400E+03 0.0009     life(col/abs/tl)
6.8426E+03 0.0008   6.8506E+03 0.0007
 source points generated   5046

  estimator     cycle   444   ave of   394 cycles      combination
simple average    combined average     corr
 k(collision)      0.635172       0.640681 0.0009     k(col/abs)
0.640612 0.0008     0.640589 0.0008   0.8540
 k(absorption)     0.633814       0.640542 0.0008     k(abs/tk ln)
0.640686 0.0008     0.640612 0.0008   0.4135
 k(trk length)     0.644300       0.640829 0.0011     k(tk ln/col)
0.640755 0.0009     0.640715 0.0008   0.5272
 rem life(col)   7.0178E+03     6.8401E+03 0.0009     k(col/abs/tk ln)
0.640684 0.0008     0.640623 0.0008
 rem life(abs)   7.0148E+03     6.8404E+03 0.0009     life(col/abs/tl)
6.8430E+03 0.0008   6.8508E+03 0.0007
 source points generated   4957

  estimator     cycle   445   ave of   395 cycles      combination
simple average    combined average     corr
 k(collision)      0.636333       0.640670 0.0009     k(col/abs)
0.640607 0.0008     0.640587 0.0008   0.8538
 k(absorption)     0.641520       0.640545 0.0008     k(abs/tk ln)
0.640669 0.0008     0.640605 0.0008   0.4127
 k(trk length)     0.626511       0.640793 0.0011     k(tk ln/col)
0.640731 0.0009     0.640698 0.0008   0.5274
 rem life(col)   6.7420E+03     6.8398E+03 0.0009     k(col/abs/tk ln)
0.640669 0.0008     0.640615 0.0008
 rem life(abs)   6.7552E+03     6.8402E+03 0.0009     life(col/abs/tl)
6.8428E+03 0.0008   6.8506E+03 0.0007
 source points generated   5048

  estimator     cycle   446   ave of   396 cycles      combination
simple average    combined average     corr
 k(collision)      0.659321       0.640717 0.0009     k(col/abs)
0.640670 0.0008     0.640657 0.0008   0.8539
 k(absorption)     0.671745       0.640624 0.0008     k(abs/tk ln)
0.640717 0.0008     0.640671 0.0008   0.4116
 k(trk length)     0.647819       0.640811 0.0011     k(tk ln/col)
0.640764 0.0009     0.640739 0.0008   0.5274
```

```
 rem life(col)   6.6686E+03     6.8394E+03 0.0009     k(col/abs/tk ln)
0.640717 0.0008     0.640679 0.0008
 rem life(abs)   6.6251E+03     6.8396E+03 0.0009     life(col/abs/tl)
6.8423E+03 0.0008   6.8502E+03 0.0007
 source points generated   5181

  estimator     cycle   447   ave of   397 cycles      combination
simple average    combined average     corr
 k(collision)      0.623558       0.640674 0.0009     k(col/abs)
0.640628 0.0008     0.640615 0.0008   0.8548
 k(absorption)     0.623909       0.640582 0.0008     k(abs/tk ln)
0.640686 0.0008     0.640634 0.0008   0.4125
 k(trk length)     0.632381       0.640790 0.0011     k(tk ln/col)
0.640732 0.0009     0.640701 0.0008   0.5279
 rem life(col)   6.8880E+03     6.8395E+03 0.0009     k(col/abs/tk ln)
0.640682 0.0008     0.640642 0.0008
 rem life(abs)   6.8818E+03     6.8397E+03 0.0009     life(col/abs/tl)
6.8424E+03 0.0008   6.8503E+03 0.0007
 source points generated   4709

  estimator     cycle   448   ave of   398 cycles      combination
simple average    combined average     corr
 k(collision)      0.633553       0.640656 0.0009     k(col/abs)
0.640615 0.0008     0.640604 0.0008   0.8547
 k(absorption)     0.638092       0.640575 0.0008     k(abs/tk ln)
0.640660 0.0008     0.640618 0.0008   0.4124
 k(trk length)     0.622577       0.640744 0.0011     k(tk ln/col)
0.640700 0.0009     0.640676 0.0008   0.5286
 rem life(col)   6.9431E+03     6.8398E+03 0.0009     k(col/abs/tk ln)
0.640658 0.0008     0.640625 0.0008
 rem life(abs)   6.8972E+03     6.8399E+03 0.0009     life(col/abs/tl)
6.8426E+03 0.0008   6.8504E+03 0.0007
 source points generated   5050

  estimator     cycle   449   ave of   399 cycles      combination
simple average    combined average     corr
 k(collision)      0.653541       0.640688 0.0009     k(col/abs)
0.640638 0.0008     0.640624 0.0008   0.8544
 k(absorption)     0.645929       0.640589 0.0008     k(abs/tk ln)
0.640691 0.0008     0.640640 0.0008   0.4130
 k(trk length)     0.660189       0.640793 0.0011     k(tk ln/col)
0.640740 0.0009     0.640712 0.0008   0.5305
 rem life(col)   6.7837E+03     6.8396E+03 0.0009     k(col/abs/tk ln)
0.640690 0.0008     0.640648 0.0008
 rem life(abs)   6.8086E+03     6.8398E+03 0.0009     life(col/abs/tl)
6.8424E+03 0.0008   6.8500E+03 0.0007
 source points generated   5180

  estimator     cycle   450   ave of   400 cycles      combination
simple average    combined average     corr
 k(collision)      0.661217       0.640739 0.0009     k(col/abs)
0.640693 0.0008     0.640679 0.0008   0.8558
 k(absorption)     0.663426       0.640646 0.0008     k(abs/tk ln)
0.640738 0.0008     0.640692 0.0008   0.4158
```

```
 k(trk length)     0.655958       0.640830 0.0011     k(tk ln/col)
0.640785 0.0009     0.640760 0.0008   0.5324
 rem life(col)   6.6621E+03     6.8392E+03 0.0009     k(col/abs/tk ln)
0.640739 0.0008     0.640701 0.0008
 rem life(abs)   6.6679E+03     6.8394E+03 0.0009     life(col/abs/tl)
6.8420E+03 0.0008   6.8497E+03 0.0007
 source points generated   5079

  estimator     cycle   451   ave of   401 cycles      combination
simple average    combined average     corr
 k(collision)      0.624334       0.640698 0.0009     k(col/abs)
0.640657 0.0008     0.640645 0.0008   0.8563
 k(absorption)     0.628335       0.640615 0.0008     k(abs/tk ln)
0.640694 0.0008     0.640655 0.0008   0.4184
 k(trk length)     0.617748       0.640773 0.0011     k(tk ln/col)
0.640736 0.0009     0.640715 0.0008   0.5352
 rem life(col)   6.8769E+03     6.8393E+03 0.0009     k(col/abs/tk ln)
0.640695 0.0008     0.640662 0.0008
 rem life(abs)   6.8718E+03     6.8395E+03 0.0009     life(col/abs/tl)
6.8421E+03 0.0008   6.8498E+03 0.0007
 source points generated   4729

  estimator     cycle   452   ave of   402 cycles      combination
simple average    combined average     corr
 k(collision)      0.646663       0.640713 0.0009     k(col/abs)
0.640666 0.0008     0.640652 0.0008   0.8561
 k(absorption)     0.641774       0.640618 0.0008     k(abs/tk ln)
0.640700 0.0008     0.640659 0.0008   0.4184
 k(trk length)     0.644463       0.640782 0.0011     k(tk ln/col)
0.640748 0.0009     0.640729 0.0008   0.5353
 rem life(col)   6.6526E+03     6.8388E+03 0.0009     k(col/abs/tk ln)
0.640704 0.0008     0.640668 0.0008
 rem life(abs)   6.6379E+03     6.8390E+03 0.0009     life(col/abs/tl)
6.8417E+03 0.0008   6.8494E+03 0.0007
 source points generated   5225

  estimator     cycle   453   ave of   403 cycles      combination
simple average    combined average     corr
 k(collision)      0.646172       0.640727 0.0009     k(col/abs)
0.640684 0.0008     0.640672 0.0008   0.8561
 k(absorption)     0.650195       0.640642 0.0008     k(abs/tk ln)
0.640729 0.0008     0.640685 0.0008   0.4197
 k(trk length)     0.654562       0.640816 0.0011     k(tk ln/col)
0.640772 0.0009     0.640747 0.0008   0.5357
 rem life(col)   6.8654E+03     6.8389E+03 0.0009     k(col/abs/tk ln)
0.640728 0.0008     0.640693 0.0008
 rem life(abs)   6.8435E+03     6.8390E+03 0.0009     life(col/abs/tl)
6.8417E+03 0.0008   6.8494E+03 0.0006
 source points generated   4933

  estimator     cycle   454   ave of   404 cycles      combination
simple average    combined average     corr
 k(collision)      0.643202       0.640733 0.0008     k(col/abs)
0.640695 0.0008     0.640685 0.0008   0.8560
```

```
 k(absorption)     0.647202       0.640658 0.0008     k(abs/tk ln)
0.640739 0.0008     0.640698 0.0008   0.4196
 k(trk length)     0.642162       0.640820 0.0011     k(tk ln/col)
0.640776 0.0009     0.640753 0.0008   0.5357
 rem life(col)   6.7536E+03     6.8387E+03 0.0009     k(col/abs/tk ln)
0.640737 0.0008     0.640705 0.0008
 rem life(abs)   6.7237E+03     6.8387E+03 0.0009     life(col/abs/tl)
6.8414E+03 0.0008   6.8491E+03 0.0006
 source points generated   4949

  estimator     cycle   455   ave of   405 cycles      combination
simple average    combined average     corr
 k(collision)      0.644143       0.640741 0.0008     k(col/abs)
0.640705 0.0008     0.640695 0.0008   0.8560
 k(absorption)     0.645018       0.640669 0.0008     k(abs/tk ln)
0.640752 0.0008     0.640711 0.0008   0.4199
 k(trk length)     0.647500       0.640836 0.0011     k(tk ln/col)
0.640789 0.0009     0.640763 0.0008   0.5358
 rem life(col)   6.9734E+03     6.8390E+03 0.0009     k(col/abs/tk ln)
0.640749 0.0008     0.640716 0.0008
 rem life(abs)   6.9443E+03     6.8389E+03 0.0009     life(col/abs/tl)
6.8416E+03 0.0008   6.8490E+03 0.0006
 source points generated   4992

  estimator     cycle   456   ave of   406 cycles      combination
simple average    combined average     corr
 k(collision)      0.645943       0.640754 0.0008     k(col/abs)
0.640701 0.0008     0.640687 0.0008   0.8542
 k(absorption)     0.632439       0.640648 0.0008     k(abs/tk ln)
0.640741 0.0008     0.640695 0.0008   0.4198
 k(trk length)     0.639404       0.640833 0.0011     k(tk ln/col)
0.640793 0.0009     0.640772 0.0008   0.5356
 rem life(col)   6.8017E+03     6.8389E+03 0.0009     k(col/abs/tk ln)
0.640745 0.0008     0.640705 0.0008
 rem life(abs)   6.8301E+03     6.8389E+03 0.0009     life(col/abs/tl)
6.8416E+03 0.0008   6.8490E+03 0.0006
 source points generated   5033

  estimator     cycle   457   ave of   407 cycles      combination
simple average    combined average     corr
 k(collision)      0.638615       0.640749 0.0008     k(col/abs)
0.640686 0.0008     0.640669 0.0008   0.8536
 k(absorption)     0.629975       0.640622 0.0008     k(abs/tk ln)
0.640695 0.0008     0.640658 0.0008   0.4221
 k(trk length)     0.614766       0.640768 0.0011     k(tk ln/col)
0.640759 0.0009     0.640753 0.0008   0.5342
 rem life(col)   7.0442E+03     6.8394E+03 0.0009     k(col/abs/tk ln)
0.640713 0.0008     0.640674 0.0008
 rem life(abs)   7.0659E+03     6.8395E+03 0.0009     life(col/abs/tl)
6.8421E+03 0.0008   6.8494E+03 0.0006
 source points generated   4929

  estimator     cycle   458   ave of   408 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.661070       0.640799 0.0008     k(col/abs)
0.640745 0.0008     0.640732 0.0008   0.8547
 k(absorption)     0.668448       0.640690 0.0008     k(abs/tk ln)
0.640742 0.0008     0.640716 0.0008   0.4228
 k(trk length)     0.650952       0.640793 0.0011     k(tk ln/col)
0.640796 0.0009     0.640797 0.0008   0.5349
 rem life(col)   6.8046E+03     6.8393E+03 0.0009     k(col/abs/tk ln)
0.640761 0.0008     0.640731 0.0008
 rem life(abs)   6.7647E+03     6.8393E+03 0.0009     life(col/abs/tl)
6.8419E+03 0.0008   6.8493E+03 0.0006
 source points generated   5164

  estimator     cycle   459   ave of   409 cycles      combination
simple average    combined average     corr
 k(collision)      0.652739       0.640828 0.0008     k(col/abs)
0.640772 0.0008     0.640758 0.0008   0.8551
 k(absorption)     0.650970       0.640716 0.0008     k(abs/tk ln)
0.640753 0.0008     0.640735 0.0008   0.4222
 k(trk length)     0.639844       0.640791 0.0011     k(tk ln/col)
0.640810 0.0009     0.640819 0.0008   0.5339
 rem life(col)   6.6973E+03     6.8390E+03 0.0009     k(col/abs/tk ln)
0.640778 0.0008     0.640751 0.0008
 rem life(abs)   6.6956E+03     6.8389E+03 0.0009     life(col/abs/tl)
6.8415E+03 0.0008   6.8488E+03 0.0006
 source points generated   4967

  estimator     cycle   460   ave of   410 cycles      combination
simple average    combined average     corr
 k(collision)      0.635562       0.640815 0.0008     k(col/abs)
0.640755 0.0008     0.640741 0.0008   0.8551
 k(absorption)     0.632300       0.640695 0.0008     k(abs/tk ln)
0.640742 0.0008     0.640719 0.0008   0.4220
 k(trk length)     0.639551       0.640788 0.0011     k(tk ln/col)
0.640802 0.0009     0.640809 0.0008   0.5339
 rem life(col)   6.7965E+03     6.8389E+03 0.0009     k(col/abs/tk ln)
0.640766 0.0008     0.640735 0.0008
 rem life(abs)   6.7843E+03     6.8388E+03 0.0009     life(col/abs/tl)
6.8414E+03 0.0008   6.8488E+03 0.0006
 source points generated   4844

  estimator     cycle   461   ave of   411 cycles      combination
simple average    combined average     corr
 k(collision)      0.639034       0.640811 0.0008     k(col/abs)
0.640743 0.0008     0.640727 0.0008   0.8547
 k(absorption)     0.632178       0.640674 0.0008     k(abs/tk ln)
0.640738 0.0008     0.640707 0.0008   0.4209
 k(trk length)     0.646034       0.640801 0.0011     k(tk ln/col)
0.640806 0.0009     0.640808 0.0008   0.5336
 rem life(col)   6.8226E+03     6.8388E+03 0.0009     k(col/abs/tk ln)
0.640762 0.0008     0.640725 0.0008
 rem life(abs)   6.8411E+03     6.8388E+03 0.0009     life(col/abs/tl)
6.8414E+03 0.0008   6.8486E+03 0.0006
 source points generated   5057
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```
  estimator     cycle   462   ave of   412 cycles      combination
simple average    combined average     corr
 k(collision)      0.642499       0.640815 0.0008     k(col/abs)
0.640739 0.0008     0.640722 0.0008   0.8544
 k(absorption)     0.636374       0.640664 0.0008     k(abs/tk ln)
0.640727 0.0008     0.640696 0.0008   0.4210
 k(trk length)     0.636634       0.640791 0.0011     k(tk ln/col)
0.640803 0.0008     0.640809 0.0008   0.5334
 rem life(col)   6.7754E+03     6.8387E+03 0.0009     k(col/abs/tk ln)
0.640756 0.0008     0.640717 0.0008
 rem life(abs)   6.7771E+03     6.8387E+03 0.0009     life(col/abs/tl)
6.8412E+03 0.0008   6.8484E+03 0.0006
 source points generated   4999

  estimator     cycle   463   ave of   413 cycles      combination
simple average    combined average     corr
 k(collision)      0.646401       0.640828 0.0008     k(col/abs)
0.640761 0.0008     0.640746 0.0008   0.8541
 k(absorption)     0.652933       0.640694 0.0008     k(abs/tk ln)
0.640747 0.0008     0.640721 0.0008   0.4211
 k(trk length)     0.644865       0.640801 0.0011     k(tk ln/col)
0.640814 0.0008     0.640822 0.0008   0.5336
 rem life(col)   7.0404E+03     6.8392E+03 0.0009     k(col/abs/tk ln)
0.640774 0.0008     0.640741 0.0008
 rem life(abs)   7.0435E+03     6.8392E+03 0.0009     life(col/abs/tl)
6.8416E+03 0.0008   6.8483E+03 0.0006
 source points generated   5099

  estimator     cycle   464   ave of   414 cycles      combination
simple average    combined average     corr
 k(collision)      0.633539       0.640811 0.0008     k(col/abs)
0.640746 0.0008     0.640732 0.0008   0.8542
 k(absorption)     0.635873       0.640682 0.0008     k(abs/tk ln)
0.640743 0.0008     0.640714 0.0008   0.4209
 k(trk length)     0.642608       0.640805 0.0011     k(tk ln/col)
0.640808 0.0008     0.640809 0.0008   0.5331
 rem life(col)   6.8129E+03     6.8391E+03 0.0009     k(col/abs/tk ln)
0.640766 0.0008     0.640732 0.0008
 rem life(abs)   6.8142E+03     6.8391E+03 0.0009     life(col/abs/tl)
6.8415E+03 0.0008   6.8484E+03 0.0006
 source points generated   4931

  estimator     cycle   465   ave of   415 cycles      combination
simple average    combined average     corr
 k(collision)      0.630534       0.640786 0.0008     k(col/abs)
0.640733 0.0008     0.640721 0.0008   0.8534
 k(absorption)     0.640087       0.640681 0.0008     k(abs/tk ln)
0.640747 0.0008     0.640714 0.0008   0.4208
 k(trk length)     0.643945       0.640813 0.0011     k(tk ln/col)
0.640799 0.0008     0.640792 0.0008   0.5319
 rem life(col)   6.7872E+03     6.8390E+03 0.0009     k(col/abs/tk ln)
0.640760 0.0008     0.640728 0.0008
 rem life(abs)   6.7828E+03     6.8390E+03 0.0009     life(col/abs/tl)
6.8415E+03 0.0008   6.8484E+03 0.0006
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 source points generated   4995

  estimator     cycle   466   ave of   416 cycles      combination
simple average    combined average     corr
 k(collision)      0.655273       0.640821 0.0008     k(col/abs)
0.640769 0.0008     0.640757 0.0008   0.8541
 k(absorption)     0.655823       0.640717 0.0008     k(abs/tk ln)
0.640788 0.0008     0.640753 0.0008   0.4235
 k(trk length)     0.659959       0.640859 0.0011     k(tk ln/col)
0.640840 0.0008     0.640830 0.0008   0.5340
 rem life(col)   6.6728E+03     6.8386E+03 0.0009     k(col/abs/tk ln)
0.640799 0.0008     0.640767 0.0008
 rem life(abs)   6.6931E+03     6.8386E+03 0.0009     life(col/abs/tl)
6.8411E+03 0.0008   6.8482E+03 0.0006
 source points generated   5188

  estimator     cycle   467   ave of   417 cycles      combination
simple average    combined average     corr
 k(collision)      0.632228       0.640800 0.0008     k(col/abs)
0.640745 0.0008     0.640732 0.0008   0.8543
 k(absorption)     0.629287       0.640690 0.0008     k(abs/tk ln)
0.640769 0.0008     0.640730 0.0008   0.4236
 k(trk length)     0.636677       0.640849 0.0011     k(tk ln/col)
0.640824 0.0008     0.640811 0.0008   0.5341
 rem life(col)   6.7647E+03     6.8384E+03 0.0009     k(col/abs/tk ln)
0.640779 0.0008     0.640744 0.0008
 rem life(abs)   6.7700E+03     6.8385E+03 0.0009     life(col/abs/tl)
6.8410E+03 0.0008   6.8483E+03 0.0006
 source points generated   4795

  estimator     cycle   468   ave of   418 cycles      combination
simple average    combined average     corr
 k(collision)      0.635200       0.640787 0.0008     k(col/abs)
0.640731 0.0008     0.640718 0.0008   0.8544
 k(absorption)     0.634540       0.640675 0.0008     k(abs/tk ln)
0.640771 0.0008     0.640724 0.0008   0.4225
 k(trk length)     0.648934       0.640868 0.0011     k(tk ln/col)
0.640827 0.0008     0.640806 0.0008   0.5330
 rem life(col)   7.0545E+03     6.8389E+03 0.0009     k(col/abs/tk ln)
0.640776 0.0008     0.640738 0.0008
 rem life(abs)   7.0700E+03     6.8390E+03 0.0009     life(col/abs/tl)
6.8415E+03 0.0008   6.8484E+03 0.0006
 source points generated   5034

  estimator     cycle   469   ave of   419 cycles      combination
simple average    combined average     corr
 k(collision)      0.645615       0.640798 0.0008     k(col/abs)
0.640750 0.0008     0.640740 0.0008   0.8541
 k(absorption)     0.652257       0.640702 0.0008     k(abs/tk ln)
0.640777 0.0008     0.640741 0.0008   0.4205
 k(trk length)     0.633977       0.640851 0.0011     k(tk ln/col)
0.640825 0.0008     0.640811 0.0008   0.5322
 rem life(col)   6.5929E+03     6.8383E+03 0.0009     k(col/abs/tk ln)
0.640784 0.0008     0.640753 0.0008
```

```
 rem life(abs)   6.5825E+03     6.8384E+03 0.0009     life(col/abs/tl)
6.8409E+03 0.0008   6.8482E+03 0.0006
 source points generated   5022

  estimator     cycle   470   ave of   420 cycles      combination
simple average    combined average     corr
 k(collision)      0.629715       0.640772 0.0008     k(col/abs)
0.640728 0.0008     0.640718 0.0008   0.8543
 k(absorption)     0.632902       0.640684 0.0008     k(abs/tk ln)
0.640750 0.0008     0.640718 0.0008   0.4215
 k(trk length)     0.626301       0.640817 0.0011     k(tk ln/col)
0.640794 0.0008     0.640782 0.0008   0.5334
 rem life(col)   6.8990E+03     6.8385E+03 0.0009     k(col/abs/tk ln)
0.640758 0.0008     0.640729 0.0008
 rem life(abs)   6.8961E+03     6.8385E+03 0.0009     life(col/abs/tl)
6.8411E+03 0.0008   6.8483E+03 0.0006
 source points generated   4856

  estimator     cycle   471   ave of   421 cycles      combination
simple average    combined average     corr
 k(collision)      0.649663       0.640793 0.0008     k(col/abs)
0.640732 0.0008     0.640718 0.0008   0.8522
 k(absorption)     0.634867       0.640670 0.0008     k(abs/tk ln)
0.640741 0.0008     0.640707 0.0008   0.4215
 k(trk length)     0.638720       0.640812 0.0011     k(tk ln/col)
0.640802 0.0008     0.640797 0.0008   0.5326
 rem life(col)   6.8713E+03     6.8386E+03 0.0009     k(col/abs/tk ln)
0.640758 0.0008     0.640724 0.0008
 rem life(abs)   6.9173E+03     6.8387E+03 0.0009     life(col/abs/tl)
6.8412E+03 0.0008   6.8482E+03 0.0006
 source points generated   5142

  estimator     cycle   472   ave of   422 cycles      combination
simple average    combined average     corr
 k(collision)      0.653954       0.640824 0.0008     k(col/abs)
0.640761 0.0008     0.640747 0.0008   0.8527
 k(absorption)     0.652277       0.640698 0.0008     k(abs/tk ln)
0.640747 0.0008     0.640723 0.0008   0.4196
 k(trk length)     0.634139       0.640796 0.0011     k(tk ln/col)
0.640810 0.0008     0.640818 0.0008   0.5302
 rem life(col)   6.7067E+03     6.8382E+03 0.0009     k(col/abs/tk ln)
0.640773 0.0008     0.640742 0.0008
 rem life(abs)   6.7243E+03     6.8384E+03 0.0009     life(col/abs/tl)
6.8409E+03 0.0008   6.8481E+03 0.0006
 source points generated   5005

  estimator     cycle   473   ave of   423 cycles      combination
simple average    combined average     corr
 k(collision)      0.630065       0.640799 0.0008     k(col/abs)
0.640729 0.0008     0.640714 0.0008   0.8529
 k(absorption)     0.624430       0.640659 0.0008     k(abs/tk ln)
0.640721 0.0008     0.640692 0.0008   0.4197
 k(trk length)     0.635463       0.640783 0.0011     k(tk ln/col)
0.640791 0.0008     0.640795 0.0008   0.5304
```

```
 rem life(col)   7.0717E+03     6.8388E+03 0.0009     k(col/abs/tk ln)
0.640747 0.0008     0.640712 0.0008
 rem life(abs)   7.0851E+03     6.8390E+03 0.0009     life(col/abs/tl)
6.8414E+03 0.0008   6.8484E+03 0.0006
 source points generated   4830

  estimator     cycle   474   ave of   424 cycles      combination
simple average    combined average     corr
 k(collision)      0.629838       0.640773 0.0008     k(col/abs)
0.640709 0.0008     0.640695 0.0008   0.8529
 k(absorption)     0.634553       0.640645 0.0008     k(abs/tk ln)
0.640683 0.0008     0.640664 0.0008   0.4203
 k(trk length)     0.614129       0.640721 0.0011     k(tk ln/col)
0.640747 0.0008     0.640761 0.0008   0.5320
 rem life(col)   6.8114E+03     6.8387E+03 0.0009     k(col/abs/tk ln)
0.640713 0.0008     0.640684 0.0008
 rem life(abs)   6.8140E+03     6.8390E+03 0.0009     life(col/abs/tl)
6.8414E+03 0.0008   6.8485E+03 0.0006
 source points generated   5031

  estimator     cycle   475   ave of   425 cycles      combination
simple average    combined average     corr
 k(collision)      0.639971       0.640771 0.0008     k(col/abs)
0.640715 0.0008     0.640703 0.0008   0.8524
 k(absorption)     0.647029       0.640660 0.0008     k(abs/tk ln)
0.640690 0.0008     0.640675 0.0008   0.4201
 k(trk length)     0.640323       0.640720 0.0011     k(tk ln/col)
0.640745 0.0008     0.640759 0.0008   0.5320
 rem life(col)   6.8562E+03     6.8388E+03 0.0009     k(col/abs/tk ln)
0.640717 0.0008     0.640693 0.0007
 rem life(abs)   6.8570E+03     6.8390E+03 0.0009     life(col/abs/tl)
6.8414E+03 0.0008   6.8486E+03 0.0006
 source points generated   5093

  estimator     cycle   476   ave of   426 cycles      combination
simple average    combined average     corr
 k(collision)      0.626441       0.640737 0.0008     k(col/abs)
0.640693 0.0008     0.640683 0.0008   0.8518
 k(absorption)     0.636103       0.640649 0.0008     k(abs/tk ln)
0.640673 0.0008     0.640661 0.0007   0.4205
 k(trk length)     0.630675       0.640696 0.0011     k(tk ln/col)
0.640717 0.0008     0.640728 0.0008   0.5328
 rem life(col)   7.0232E+03     6.8392E+03 0.0009     k(col/abs/tk ln)
0.640694 0.0008     0.640675 0.0007
 rem life(abs)   7.0063E+03     6.8394E+03 0.0009     life(col/abs/tl)
6.8418E+03 0.0008   6.8487E+03 0.0006
 source points generated   4874

  estimator     cycle   477   ave of   427 cycles      combination
simple average    combined average     corr
 k(collision)      0.643927       0.640745 0.0008     k(col/abs)
0.640698 0.0008     0.640688 0.0008   0.8518
 k(absorption)     0.641693       0.640651 0.0008     k(abs/tk ln)
0.640691 0.0008     0.640672 0.0007   0.4202
```

```
 k(trk length)     0.655750       0.640731 0.0011     k(tk ln/col)
0.640738 0.0008     0.640742 0.0008   0.5328
 rem life(col)   6.6925E+03     6.8389E+03 0.0009     k(col/abs/tk ln)
0.640709 0.0008     0.640685 0.0007
 rem life(abs)   6.6836E+03     6.8390E+03 0.0009     life(col/abs/tl)
6.8414E+03 0.0008   6.8484E+03 0.0006
 source points generated   5129

  estimator     cycle   478   ave of   428 cycles      combination
simple average    combined average     corr
 k(collision)      0.636741       0.640736 0.0008     k(col/abs)
0.640697 0.0008     0.640688 0.0008   0.8514
 k(absorption)     0.643558       0.640658 0.0008     k(abs/tk ln)
0.640691 0.0008     0.640675 0.0007   0.4200
 k(trk length)     0.637467       0.640724 0.0011     k(tk ln/col)
0.640730 0.0008     0.640733 0.0008   0.5329
 rem life(col)   6.7282E+03     6.8386E+03 0.0009     k(col/abs/tk ln)
0.640706 0.0008     0.640686 0.0007
 rem life(abs)   6.7057E+03     6.8387E+03 0.0009     life(col/abs/tl)
6.8412E+03 0.0008   6.8482E+03 0.0006
 source points generated   4916

  estimator     cycle   479   ave of   429 cycles      combination
simple average    combined average     corr
 k(collision)      0.631687       0.640714 0.0008     k(col/abs)
0.640678 0.0008     0.640670 0.0008   0.8515
 k(absorption)     0.633854       0.640642 0.0008     k(abs/tk ln)
0.640668 0.0008     0.640655 0.0007   0.4208
 k(trk length)     0.627518       0.640693 0.0011     k(tk ln/col)
0.640704 0.0008     0.640709 0.0008   0.5337
 rem life(col)   6.7477E+03     6.8384E+03 0.0009     k(col/abs/tk ln)
0.640683 0.0008     0.640666 0.0007
 rem life(abs)   6.7380E+03     6.8385E+03 0.0009     life(col/abs/tl)
6.8409E+03 0.0008   6.8479E+03 0.0006
 source points generated   4965

  estimator     cycle   480   ave of   430 cycles      combination
simple average    combined average     corr
 k(collision)      0.644871       0.640724 0.0008     k(col/abs)
0.640683 0.0008     0.640674 0.0008   0.8514
 k(absorption)     0.640659       0.640642 0.0008     k(abs/tk ln)
0.640646 0.0008     0.640645 0.0007   0.4199
 k(trk length)     0.622479       0.640651 0.0011     k(tk ln/col)
0.640687 0.0008     0.640707 0.0008   0.5314
 rem life(col)   6.7756E+03     6.8382E+03 0.0009     k(col/abs/tk ln)
0.640672 0.0008     0.640658 0.0007
 rem life(abs)   6.8135E+03     6.8384E+03 0.0009     life(col/abs/tl)
6.8408E+03 0.0008   6.8478E+03 0.0006
 source points generated   5071

  estimator     cycle   481   ave of   431 cycles      combination
simple average    combined average     corr
 k(collision)      0.634223       0.640709 0.0008     k(col/abs)
0.640667 0.0008     0.640657 0.0008   0.8515
```

```
 k(absorption)     0.632770       0.640624 0.0008     k(abs/tk ln)
0.640615 0.0008     0.640620 0.0007   0.4211
 k(trk length)     0.621755       0.640607 0.0011     k(tk ln/col)
0.640658 0.0008     0.640685 0.0008   0.5320
 rem life(col)   6.6576E+03     6.8378E+03 0.0009     k(col/abs/tk ln)
0.640647 0.0008     0.640635 0.0007
 rem life(abs)   6.6487E+03     6.8380E+03 0.0009     life(col/abs/tl)
6.8404E+03 0.0008   6.8475E+03 0.0006
 source points generated   4869

  estimator     cycle   482   ave of   432 cycles      combination
simple average    combined average     corr
 k(collision)      0.632427       0.640690 0.0008     k(col/abs)
0.640644 0.0008     0.640634 0.0008   0.8517
 k(absorption)     0.629446       0.640598 0.0008     k(abs/tk ln)
0.640587 0.0008     0.640593 0.0007   0.4225
 k(trk length)     0.627343       0.640576 0.0011     k(tk ln/col)
0.640633 0.0008     0.640664 0.0008   0.5327
 rem life(col)   6.8557E+03     6.8379E+03 0.0009     k(col/abs/tk ln)
0.640621 0.0008     0.640609 0.0007
 rem life(abs)   6.8665E+03     6.8381E+03 0.0009     life(col/abs/tl)
6.8405E+03 0.0008   6.8478E+03 0.0006
 source points generated   4942

  estimator     cycle   483   ave of   433 cycles      combination
simple average    combined average     corr
 k(collision)      0.636150       0.640679 0.0008     k(col/abs)
0.640635 0.0008     0.640625 0.0008   0.8517
 k(absorption)     0.637149       0.640590 0.0008     k(abs/tk ln)
0.640600 0.0008     0.640595 0.0007   0.4210
 k(trk length)     0.655572       0.640611 0.0011     k(tk ln/col)
0.640645 0.0008     0.640664 0.0008   0.5309
 rem life(col)   6.8519E+03     6.8379E+03 0.0009     k(col/abs/tk ln)
0.640627 0.0008     0.640610 0.0007
 rem life(abs)   6.8601E+03     6.8381E+03 0.0009     life(col/abs/tl)
6.8406E+03 0.0008   6.8477E+03 0.0006
 source points generated   5031

  estimator     cycle   484   ave of   434 cycles      combination
simple average    combined average     corr
 k(collision)      0.643561       0.640686 0.0008     k(col/abs)
0.640631 0.0008     0.640619 0.0008   0.8510
 k(absorption)     0.634697       0.640577 0.0008     k(abs/tk ln)
0.640579 0.0008     0.640578 0.0007   0.4217
 k(trk length)     0.628150       0.640582 0.0011     k(tk ln/col)
0.640634 0.0008     0.640662 0.0008   0.5299
 rem life(col)   6.6894E+03     6.8376E+03 0.0009     k(col/abs/tk ln)
0.640615 0.0008     0.640598 0.0007
 rem life(abs)   6.7074E+03     6.8378E+03 0.0009     life(col/abs/tl)
6.8403E+03 0.0008   6.8476E+03 0.0006
 source points generated   5042

  estimator     cycle   485   ave of   435 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.634956       0.640673 0.0008     k(col/abs)
0.640614 0.0008     0.640602 0.0008   0.8511
 k(absorption)     0.631489       0.640556 0.0008     k(abs/tk ln)
0.640571 0.0008     0.640564 0.0007   0.4210
 k(trk length)     0.642406       0.640586 0.0011     k(tk ln/col)
0.640629 0.0008     0.640653 0.0008   0.5295
 rem life(col)   7.1209E+03     6.8382E+03 0.0009     k(col/abs/tk ln)
0.640605 0.0007     0.640584 0.0007
 rem life(abs)   7.1511E+03     6.8385E+03 0.0009     life(col/abs/tl)
6.8409E+03 0.0008   6.8481E+03 0.0006
 source points generated   4939

  estimator     cycle   486   ave of   436 cycles      combination
simple average    combined average     corr
 k(collision)      0.643309       0.640679 0.0008     k(col/abs)
0.640615 0.0008     0.640601 0.0008   0.8509
 k(absorption)     0.638528       0.640551 0.0008     k(abs/tk ln)
0.640581 0.0008     0.640566 0.0007   0.4204
 k(trk length)     0.651492       0.640611 0.0011     k(tk ln/col)
0.640645 0.0008     0.640663 0.0008   0.5295
 rem life(col)   6.9541E+03     6.8385E+03 0.0009     k(col/abs/tk ln)
0.640614 0.0007     0.640588 0.0007
 rem life(abs)   6.9567E+03     6.8388E+03 0.0009     life(col/abs/tl)
6.8412E+03 0.0008   6.8483E+03 0.0006
 source points generated   5104

  estimator     cycle   487   ave of   437 cycles      combination
simple average    combined average     corr
 k(collision)      0.654961       0.640712 0.0008     k(col/abs)
0.640650 0.0008     0.640637 0.0008   0.8515
 k(absorption)     0.656824       0.640588 0.0008     k(abs/tk ln)
0.640624 0.0008     0.640607 0.0007   0.4235
 k(trk length)     0.661961       0.640660 0.0011     k(tk ln/col)
0.640686 0.0008     0.640700 0.0008   0.5317
 rem life(col)   6.7932E+03     6.8384E+03 0.0009     k(col/abs/tk ln)
0.640653 0.0007     0.640627 0.0007
 rem life(abs)   6.7925E+03     6.8387E+03 0.0009     life(col/abs/tl)
6.8411E+03 0.0008   6.8482E+03 0.0006
 source points generated   5097

  estimator     cycle   488   ave of   438 cycles      combination
simple average    combined average     corr
 k(collision)      0.646009       0.640724 0.0008     k(col/abs)
0.640662 0.0008     0.640649 0.0008   0.8516
 k(absorption)     0.646002       0.640601 0.0008     k(abs/tk ln)
0.640649 0.0008     0.640625 0.0007   0.4241
 k(trk length)     0.657122       0.640698 0.0011     k(tk ln/col)
0.640711 0.0008     0.640718 0.0008   0.5320
 rem life(col)   6.6753E+03     6.8380E+03 0.0009     k(col/abs/tk ln)
0.640674 0.0007     0.640645 0.0007
 rem life(abs)   6.6877E+03     6.8384E+03 0.0009     life(col/abs/tl)
6.8408E+03 0.0008   6.8481E+03 0.0006
 source points generated   4953
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  estimator     cycle   489   ave of   439 cycles      combination
simple average    combined average     corr
 k(collision)      0.629317       0.640698 0.0008     k(col/abs)
0.640637 0.0008     0.640624 0.0008   0.8519
 k(absorption)     0.630216       0.640577 0.0008     k(abs/tk ln)
0.640615 0.0008     0.640596 0.0007   0.4258
 k(trk length)     0.621133       0.640653 0.0011     k(tk ln/col)
0.640675 0.0008     0.640688 0.0008   0.5335
 rem life(col)   6.9658E+03     6.8383E+03 0.0009     k(col/abs/tk ln)
0.640643 0.0007     0.640616 0.0007
 rem life(abs)   6.9590E+03     6.8386E+03 0.0009     life(col/abs/tl)
6.8410E+03 0.0008   6.8479E+03 0.0006
 source points generated   4850

  estimator     cycle   490   ave of   440 cycles      combination
simple average    combined average     corr
 k(collision)      0.655186       0.640731 0.0008     k(col/abs)
0.640664 0.0008     0.640649 0.0008   0.8521
 k(absorption)     0.649592       0.640598 0.0008     k(abs/tk ln)
0.640638 0.0008     0.640618 0.0007   0.4267
 k(trk length)     0.651622       0.640678 0.0011     k(tk ln/col)
0.640704 0.0008     0.640719 0.0008   0.5344
 rem life(col)   6.7362E+03     6.8381E+03 0.0009     k(col/abs/tk ln)
0.640669 0.0007     0.640639 0.0007
 rem life(abs)   6.7526E+03     6.8384E+03 0.0009     life(col/abs/tl)
6.8407E+03 0.0008   6.8477E+03 0.0006
 source points generated   5174

  estimator     cycle   491   ave of   441 cycles      combination
simple average    combined average     corr
 k(collision)      0.619844       0.640683 0.0008     k(col/abs)
0.640629 0.0008     0.640616 0.0008   0.8518
 k(absorption)     0.630647       0.640575 0.0008     k(abs/tk ln)
0.640618 0.0008     0.640597 0.0007   0.4272
 k(trk length)     0.633474       0.640662 0.0011     k(tk ln/col)
0.640672 0.0008     0.640678 0.0008   0.5342
 rem life(col)   7.0133E+03     6.8385E+03 0.0009     k(col/abs/tk ln)
0.640640 0.0007     0.640613 0.0007
 rem life(abs)   6.9897E+03     6.8388E+03 0.0009     life(col/abs/tl)
6.8410E+03 0.0008   6.8475E+03 0.0006
 source points generated   4726

  estimator     cycle   492   ave of   442 cycles      combination
simple average    combined average     corr
 k(collision)      0.645651       0.640694 0.0008     k(col/abs)
0.640641 0.0008     0.640628 0.0008   0.8519
 k(absorption)     0.646258       0.640588 0.0008     k(abs/tk ln)
0.640665 0.0008     0.640626 0.0007   0.4271
 k(trk length)     0.676435       0.640743 0.0011     k(tk ln/col)
0.640718 0.0008     0.640705 0.0008   0.5329
 rem life(col)   6.8200E+03     6.8384E+03 0.0009     k(col/abs/tk ln)
0.640675 0.0007     0.640640 0.0007
 rem life(abs)   6.8534E+03     6.8388E+03 0.0009     life(col/abs/tl)
6.8410E+03 0.0008   6.8475E+03 0.0006
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 source points generated   5205

  estimator     cycle   493   ave of   443 cycles      combination
simple average    combined average     corr
 k(collision)      0.648066       0.640711 0.0008     k(col/abs)
0.640660 0.0008     0.640648 0.0008   0.8520
 k(absorption)     0.650062       0.640609 0.0008     k(abs/tk ln)
0.640696 0.0008     0.640652 0.0007   0.4285
 k(trk length)     0.658491       0.640783 0.0011     k(tk ln/col)
0.640747 0.0008     0.640727 0.0008   0.5336
 rem life(col)   6.9093E+03     6.8386E+03 0.0009     k(col/abs/tk ln)
0.640701 0.0007     0.640665 0.0007
 rem life(abs)   6.8848E+03     6.8389E+03 0.0009     life(col/abs/tl)
6.8411E+03 0.0008   6.8475E+03 0.0006
 source points generated   4993

  estimator     cycle   494   ave of   444 cycles      combination
simple average    combined average     corr
 k(collision)      0.632937       0.640694 0.0008     k(col/abs)
0.640627 0.0008     0.640613 0.0008   0.8507
 k(absorption)     0.618727       0.640560 0.0008     k(abs/tk ln)
0.640665 0.0008     0.640612 0.0007   0.4283
 k(trk length)     0.634806       0.640769 0.0011     k(tk ln/col)
0.640731 0.0008     0.640710 0.0008   0.5339
 rem life(col)   6.8205E+03     6.8385E+03 0.0009     k(col/abs/tk ln)
0.640674 0.0007     0.640631 0.0007
 rem life(abs)   6.8471E+03     6.8389E+03 0.0009     life(col/abs/tl)
6.8411E+03 0.0008   6.8477E+03 0.0006
 source points generated   4869

  estimator     cycle   495   ave of   445 cycles      combination
simple average    combined average     corr
 k(collision)      0.629130       0.640668 0.0008     k(col/abs)
0.640606 0.0008     0.640593 0.0008   0.8508
 k(absorption)     0.633793       0.640545 0.0008     k(abs/tk ln)
0.640615 0.0008     0.640579 0.0007   0.4286
 k(trk length)     0.603342       0.640685 0.0011     k(tk ln/col)
0.640676 0.0008     0.640671 0.0008   0.5353
 rem life(col)   6.6405E+03     6.8381E+03 0.0009     k(col/abs/tk ln)
0.640632 0.0007     0.640598 0.0007
 rem life(abs)   6.6310E+03     6.8385E+03 0.0009     life(col/abs/tl)
6.8407E+03 0.0008   6.8474E+03 0.0006
 source points generated   4984

  estimator     cycle   496   ave of   446 cycles      combination
simple average    combined average     corr
 k(collision)      0.664716       0.640722 0.0008     k(col/abs)
0.640662 0.0008     0.640650 0.0008   0.8526
 k(absorption)     0.666344       0.640603 0.0008     k(abs/tk ln)
0.640669 0.0008     0.640635 0.0007   0.4333
 k(trk length)     0.663525       0.640736 0.0011     k(tk ln/col)
0.640729 0.0008     0.640725 0.0008   0.5388
 rem life(col)   6.5504E+03     6.8374E+03 0.0009     k(col/abs/tk ln)
0.640687 0.0007     0.640654 0.0007
```

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 rem life(abs)   6.5618E+03     6.8378E+03 0.0009     life(col/abs/tl)
6.8402E+03 0.0008   6.8471E+03 0.0006
 source points generated   5244

  estimator     cycle   497   ave of   447 cycles      combination
simple average    combined average     corr
 k(collision)      0.640243       0.640720 0.0008     k(col/abs)
0.640654 0.0008     0.640641 0.0008   0.8523
 k(absorption)     0.634235       0.640588 0.0008     k(abs/tk ln)
0.640653 0.0008     0.640620 0.0007   0.4337
 k(trk length)     0.632475       0.640718 0.0011     k(tk ln/col)
0.640719 0.0008     0.640720 0.0008   0.5386
 rem life(col)   6.9054E+03     6.8376E+03 0.0009     k(col/abs/tk ln)
0.640676 0.0007     0.640642 0.0007
 rem life(abs)   6.9085E+03     6.8380E+03 0.0009     life(col/abs/tl)
6.8403E+03 0.0008   6.8471E+03 0.0006
 source points generated   4769

  estimator     cycle   498   ave of   448 cycles      combination
simple average    combined average     corr
 k(collision)      0.652635       0.640747 0.0008     k(col/abs)
0.640678 0.0008     0.640664 0.0008   0.8525
 k(absorption)     0.649892       0.640609 0.0008     k(abs/tk ln)
0.640690 0.0008     0.640648 0.0007   0.4353
 k(trk length)     0.664263       0.640770 0.0011     k(tk ln/col)
0.640759 0.0008     0.640752 0.0008   0.5403
 rem life(col)   7.0405E+03     6.8380E+03 0.0009     k(col/abs/tk ln)
0.640709 0.0007     0.640670 0.0007
 rem life(abs)   7.0291E+03     6.8384E+03 0.0009     life(col/abs/tl)
6.8407E+03 0.0008   6.8473E+03 0.0006
 source points generated   5096

  estimator     cycle   499   ave of   449 cycles      combination
simple average    combined average     corr
 k(collision)      0.636119       0.640737 0.0008     k(col/abs)
0.640677 0.0008     0.640664 0.0008   0.8519
 k(absorption)     0.644206       0.640617 0.0008     k(abs/tk ln)
0.640707 0.0008     0.640660 0.0007   0.4355
 k(trk length)     0.652727       0.640797 0.0011     k(tk ln/col)
0.640767 0.0008     0.640750 0.0008   0.5390
 rem life(col)   6.9552E+03     6.8383E+03 0.0009     k(col/abs/tk ln)
0.640717 0.0007     0.640679 0.0007
 rem life(abs)   6.9587E+03     6.8387E+03 0.0009     life(col/abs/tl)
6.8409E+03 0.0008   6.8475E+03 0.0006
 source points generated   4846

  estimator     cycle   500   ave of   450 cycles      combination
simple average    combined average     corr
 k(collision)      0.653548       0.640765 0.0008     k(col/abs)
0.640700 0.0008     0.640686 0.0008   0.8520
 k(absorption)     0.648287       0.640634 0.0008     k(abs/tk ln)
0.640736 0.0008     0.640683 0.0007   0.4365
 k(trk length)     0.659221       0.640838 0.0011     k(tk ln/col)
0.640802 0.0008     0.640781 0.0008   0.5405
```

```
 rem life(col)   7.1592E+03     6.8390E+03 0.0009     k(col/abs/tk ln)
0.640746 0.0007     0.640702 0.0007
 rem life(abs)   7.1646E+03     6.8394E+03 0.0009     life(col/abs/tl)
6.8415E+03 0.0008   6.8477E+03 0.0006
 source points generated   5114

  estimator     cycle   501   ave of   451 cycles      combination
simple average    combined average     corr
 k(collision)      0.645890       0.640777 0.0008     k(col/abs)
0.640712 0.0008     0.640698 0.0008   0.8521
 k(absorption)     0.646369       0.640647 0.0008     k(abs/tk ln)
0.640769 0.0008     0.640705 0.0007   0.4371
 k(trk length)     0.664552       0.640890 0.0011     k(tk ln/col)
0.640834 0.0008     0.640801 0.0008   0.5405
 rem life(col)   6.8766E+03     6.8391E+03 0.0009     k(col/abs/tk ln)
0.640771 0.0007     0.640723 0.0007
 rem life(abs)   6.8703E+03     6.8395E+03 0.0009     life(col/abs/tl)
6.8415E+03 0.0008   6.8477E+03 0.0006
 source points generated   4950

  estimator     cycle   502   ave of   452 cycles      combination
simple average    combined average     corr
 k(collision)      0.641695       0.640779 0.0008     k(col/abs)
0.640709 0.0008     0.640694 0.0008   0.8519
 k(absorption)     0.636953       0.640639 0.0008     k(abs/tk ln)
0.640748 0.0008     0.640690 0.0007   0.4373
 k(trk length)     0.625976       0.640857 0.0011     k(tk ln/col)
0.640818 0.0008     0.640795 0.0008   0.5397
 rem life(col)   6.8609E+03     6.8392E+03 0.0009     k(col/abs/tk ln)
0.640758 0.0007     0.640712 0.0007
 rem life(abs)   6.8589E+03     6.8395E+03 0.0009     life(col/abs/tl)
6.8415E+03 0.0008   6.8477E+03 0.0006
 source points generated   4923

  estimator     cycle   503   ave of   453 cycles      combination
simple average    combined average     corr
 k(collision)      0.654309       0.640808 0.0008     k(col/abs)
0.640732 0.0008     0.640714 0.0008   0.8519
 k(absorption)     0.647788       0.640655 0.0008     k(abs/tk ln)
0.640760 0.0008     0.640704 0.0007   0.4374
 k(trk length)     0.644284       0.640865 0.0011     k(tk ln/col)
0.640837 0.0008     0.640820 0.0008   0.5394
 rem life(col)   6.6814E+03     6.8388E+03 0.0009     k(col/abs/tk ln)
0.640776 0.0007     0.640728 0.0007
 rem life(abs)   6.6761E+03     6.8392E+03 0.0009     life(col/abs/tl)
6.8412E+03 0.0008   6.8474E+03 0.0006
 source points generated   5116

  estimator     cycle   504   ave of   454 cycles      combination
simple average    combined average     corr
 k(collision)      0.659211       0.640849 0.0008     k(col/abs)
0.640763 0.0008     0.640743 0.0008   0.8519
 k(absorption)     0.650867       0.640677 0.0008     k(abs/tk ln)
0.640819 0.0008     0.640742 0.0007   0.4390
```

```
 k(trk length)     0.684365       0.640961 0.0011     k(tk ln/col)
0.640905 0.0008     0.640872 0.0008   0.5435
 rem life(col)   6.5786E+03     6.8382E+03 0.0009     k(col/abs/tk ln)
0.640829 0.0007     0.640767 0.0007
 rem life(abs)   6.6027E+03     6.8387E+03 0.0009     life(col/abs/tl)
6.8407E+03 0.0008   6.8470E+03 0.0006
 source points generated   5023

  estimator     cycle   505   ave of   455 cycles      combination
simple average    combined average     corr
 k(collision)      0.648752       0.640866 0.0008     k(col/abs)
0.640788 0.0008     0.640770 0.0007   0.8518
 k(absorption)     0.655470       0.640710 0.0008     k(abs/tk ln)
0.640839 0.0008     0.640770 0.0007   0.4388
 k(trk length)     0.644620       0.640969 0.0011     k(tk ln/col)
0.640918 0.0008     0.640887 0.0008   0.5436
 rem life(col)   6.7964E+03     6.8381E+03 0.0009     k(col/abs/tk ln)
0.640848 0.0007     0.640792 0.0007
 rem life(abs)   6.7954E+03     6.8386E+03 0.0009     life(col/abs/tl)
6.8406E+03 0.0008   6.8468E+03 0.0006
 source points generated   4901

  estimator     cycle   506   ave of   456 cycles      combination
simple average    combined average     corr
 k(collision)      0.640941       0.640867 0.0008     k(col/abs)
0.640798 0.0007     0.640783 0.0007   0.8511
 k(absorption)     0.649928       0.640730 0.0008     k(abs/tk ln)
0.640853 0.0008     0.640787 0.0007   0.4389
 k(trk length)     0.644492       0.640977 0.0011     k(tk ln/col)
0.640922 0.0008     0.640889 0.0008   0.5435
 rem life(col)   6.8417E+03     6.8381E+03 0.0009     k(col/abs/tk ln)
0.640858 0.0007     0.640806 0.0007
 rem life(abs)   6.8251E+03     6.8385E+03 0.0009     life(col/abs/tl)
6.8405E+03 0.0008   6.8467E+03 0.0006
 source points generated   4910

  estimator     cycle   507   ave of   457 cycles      combination
simple average    combined average     corr
 k(collision)      0.621152       0.640823 0.0008     k(col/abs)
0.640756 0.0007     0.640741 0.0007   0.8522
 k(absorption)     0.621469       0.640688 0.0008     k(abs/tk ln)
0.640819 0.0008     0.640749 0.0007   0.4404
 k(trk length)     0.628629       0.640950 0.0011     k(tk ln/col)
0.640886 0.0008     0.640849 0.0008   0.5445
 rem life(col)   7.1716E+03     6.8389E+03 0.0009     k(col/abs/tk ln)
0.640820 0.0007     0.640767 0.0007
 rem life(abs)   7.1935E+03     6.8393E+03 0.0009     life(col/abs/tl)
6.8413E+03 0.0008   6.8473E+03 0.0006
 source points generated   4848

  estimator     cycle   508   ave of   458 cycles      combination
simple average    combined average     corr
 k(collision)      0.648209       0.640840 0.0008     k(col/abs)
0.640768 0.0007     0.640753 0.0007   0.8522
```

```
 k(absorption)     0.645041       0.640697 0.0008     k(abs/tk ln)
0.640831 0.0008     0.640759 0.0007   0.4406
 k(trk length)     0.647696       0.640964 0.0011     k(tk ln/col)
0.640902 0.0008     0.640865 0.0008   0.5448
 rem life(col)   7.1044E+03     6.8395E+03 0.0009     k(col/abs/tk ln)
0.640834 0.0007     0.640779 0.0007
 rem life(abs)   7.0961E+03     6.8399E+03 0.0009     life(col/abs/tl)
6.8417E+03 0.0008   6.8476E+03 0.0006
 source points generated   5220

  estimator     cycle   509   ave of   459 cycles      combination
simple average    combined average     corr
 k(collision)      0.629974       0.640816 0.0008     k(col/abs)
0.640743 0.0007     0.640727 0.0007   0.8526
 k(absorption)     0.628606       0.640671 0.0008     k(abs/tk ln)
0.640822 0.0008     0.640742 0.0007   0.4393
 k(trk length)     0.644584       0.640972 0.0011     k(tk ln/col)
0.640894 0.0008     0.640848 0.0008   0.5436
 rem life(col)   6.8966E+03     6.8396E+03 0.0009     k(col/abs/tk ln)
0.640820 0.0007     0.640760 0.0007
 rem life(abs)   6.9262E+03     6.8401E+03 0.0009     life(col/abs/tl)
6.8419E+03 0.0008   6.8477E+03 0.0006
 source points generated   4850

  estimator     cycle   510   ave of   460 cycles      combination
simple average    combined average     corr
 k(collision)      0.641849       0.640818 0.0008     k(col/abs)
0.640745 0.0007     0.640729 0.0007   0.8526
 k(absorption)     0.641582       0.640673 0.0008     k(abs/tk ln)
0.640827 0.0008     0.640745 0.0007   0.4393
 k(trk length)     0.645503       0.640982 0.0010     k(tk ln/col)
0.640900 0.0008     0.640852 0.0008   0.5436
 rem life(col)   6.9623E+03     6.8398E+03 0.0009     k(col/abs/tk ln)
0.640824 0.0007     0.640764 0.0007
 rem life(abs)   6.9612E+03     6.8403E+03 0.0009     life(col/abs/tl)
6.8421E+03 0.0008   6.8477E+03 0.0006
 source points generated   5073

  estimator     cycle   511   ave of   461 cycles      combination
simple average    combined average     corr
 k(collision)      0.638622       0.640813 0.0008     k(col/abs)
0.640742 0.0007     0.640726 0.0007   0.8526
 k(absorption)     0.639444       0.640670 0.0008     k(abs/tk ln)
0.640815 0.0008     0.640738 0.0007   0.4392
 k(trk length)     0.630852       0.640960 0.0010     k(tk ln/col)
0.640887 0.0008     0.640844 0.0008   0.5436
 rem life(col)   7.0114E+03     6.8402E+03 0.0009     k(col/abs/tk ln)
0.640815 0.0007     0.640757 0.0007
 rem life(abs)   7.0036E+03     6.8407E+03 0.0009     life(col/abs/tl)
6.8424E+03 0.0008   6.8478E+03 0.0006
 source points generated   4952

  estimator     cycle   512   ave of   462 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.635120       0.640801 0.0008     k(col/abs)
0.640731 0.0007     0.640716 0.0007   0.8526
 k(absorption)     0.636734       0.640662 0.0008     k(abs/tk ln)
0.640818 0.0008     0.640735 0.0007   0.4387
 k(trk length)     0.647798       0.640975 0.0010     k(tk ln/col)
0.640888 0.0008     0.640837 0.0008   0.5428
 rem life(col)   7.0667E+03     6.8407E+03 0.0009     k(col/abs/tk ln)
0.640813 0.0007     0.640752 0.0007
 rem life(abs)   7.0656E+03     6.8412E+03 0.0009     life(col/abs/tl)
6.8428E+03 0.0008   6.8482E+03 0.0006
 source points generated   4993

  estimator     cycle   513   ave of   463 cycles      combination
simple average    combined average     corr
 k(collision)      0.634950       0.640788 0.0008     k(col/abs)
0.640716 0.0007     0.640700 0.0007   0.8527
 k(absorption)     0.632023       0.640643 0.0008     k(abs/tk ln)
0.640791 0.0008     0.640712 0.0007   0.4398
 k(trk length)     0.623932       0.640938 0.0010     k(tk ln/col)
0.640863 0.0008     0.640819 0.0008   0.5432
 rem life(col)   6.8109E+03     6.8406E+03 0.0009     k(col/abs/tk ln)
0.640790 0.0007     0.640731 0.0007
 rem life(abs)   6.8056E+03     6.8411E+03 0.0009     life(col/abs/tl)
6.8427E+03 0.0008   6.8480E+03 0.0006
 source points generated   5032

  estimator     cycle   514   ave of   464 cycles      combination
simple average    combined average     corr
 k(collision)      0.633711       0.640773 0.0008     k(col/abs)
0.640698 0.0007     0.640682 0.0007   0.8528
 k(absorption)     0.631630       0.640624 0.0008     k(abs/tk ln)
0.640766 0.0008     0.640690 0.0007   0.4408
 k(trk length)     0.627426       0.640909 0.0010     k(tk ln/col)
0.640841 0.0008     0.640801 0.0008   0.5437
 rem life(col)   7.1502E+03     6.8413E+03 0.0009     k(col/abs/tk ln)
0.640769 0.0007     0.640711 0.0007
 rem life(abs)   7.1587E+03     6.8418E+03 0.0009     life(col/abs/tl)
6.8434E+03 0.0008   6.8484E+03 0.0006
 source points generated   4965

  estimator     cycle   515   ave of   465 cycles      combination
simple average    combined average     corr
 k(collision)      0.645934       0.640784 0.0008     k(col/abs)
0.640709 0.0007     0.640693 0.0007   0.8529
 k(absorption)     0.645719       0.640635 0.0008     k(abs/tk ln)
0.640784 0.0008     0.640704 0.0007   0.4412
 k(trk length)     0.652249       0.640933 0.0010     k(tk ln/col)
0.640859 0.0008     0.640815 0.0008   0.5441
 rem life(col)   6.6527E+03     6.8409E+03 0.0009     k(col/abs/tk ln)
0.640784 0.0007     0.640724 0.0007
 rem life(abs)   6.6619E+03     6.8414E+03 0.0009     life(col/abs/tl)
6.8431E+03 0.0008   6.8485E+03 0.0006
 source points generated   5100
```

```
  estimator     cycle   516   ave of   466 cycles      combination
simple average    combined average     corr
 k(collision)      0.614243       0.640727 0.0008     k(col/abs)
0.640661 0.0007     0.640645 0.0007   0.8538
 k(absorption)     0.622313       0.640595 0.0008     k(abs/tk ln)
0.640745 0.0008     0.640665 0.0007   0.4437
 k(trk length)     0.622835       0.640894 0.0010     k(tk ln/col)
0.640811 0.0008     0.640762 0.0008   0.5462
 rem life(col)   6.9305E+03     6.8411E+03 0.0009     k(col/abs/tk ln)
0.640739 0.0007     0.640680 0.0007
 rem life(abs)   6.8891E+03     6.8415E+03 0.0009     life(col/abs/tl)
6.8433E+03 0.0008   6.8488E+03 0.0006
 source points generated   4783

  estimator     cycle   517   ave of   467 cycles      combination
simple average    combined average     corr
 k(collision)      0.633793       0.640712 0.0008     k(col/abs)
0.640653 0.0007     0.640639 0.0007   0.8535
 k(absorption)     0.640206       0.640594 0.0008     k(abs/tk ln)
0.640743 0.0008     0.640663 0.0007   0.4437
 k(trk length)     0.639387       0.640891 0.0010     k(tk ln/col)
0.640802 0.0008     0.640750 0.0008   0.5461
 rem life(col)   6.7232E+03     6.8408E+03 0.0009     k(col/abs/tk ln)
0.640733 0.0007     0.640676 0.0007
 rem life(abs)   6.7200E+03     6.8412E+03 0.0009     life(col/abs/tl)
6.8431E+03 0.0008   6.8488E+03 0.0006
 source points generated   5176

  estimator     cycle   518   ave of   468 cycles      combination
simple average    combined average     corr
 k(collision)      0.642264       0.640716 0.0008     k(col/abs)
0.640663 0.0007     0.640651 0.0007   0.8532
 k(absorption)     0.648392       0.640611 0.0008     k(abs/tk ln)
0.640752 0.0008     0.640677 0.0007   0.4436
 k(trk length)     0.641941       0.640894 0.0010     k(tk ln/col)
0.640805 0.0008     0.640753 0.0008   0.5461
 rem life(col)   6.7744E+03     6.8407E+03 0.0009     k(col/abs/tk ln)
0.640740 0.0007     0.640688 0.0007
 rem life(abs)   6.7593E+03     6.8410E+03 0.0009     life(col/abs/tl)
6.8429E+03 0.0008   6.8485E+03 0.0006
 source points generated   5070

  estimator     cycle   519   ave of   469 cycles      combination
simple average    combined average     corr
 k(collision)      0.628977       0.640691 0.0008     k(col/abs)
0.640639 0.0007     0.640627 0.0007   0.8535
 k(absorption)     0.629891       0.640588 0.0008     k(abs/tk ln)
0.640734 0.0008     0.640656 0.0007   0.4440
 k(trk length)     0.634059       0.640879 0.0010     k(tk ln/col)
0.640785 0.0008     0.640730 0.0008   0.5464
 rem life(col)   6.8295E+03     6.8407E+03 0.0009     k(col/abs/tk ln)
0.640719 0.0007     0.640666 0.0007
 rem life(abs)   6.8337E+03     6.8410E+03 0.0009     life(col/abs/tl)
6.8429E+03 0.0008   6.8485E+03 0.0006
```

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 source points generated   4930

  estimator     cycle   520   ave of   470 cycles      combination
simple average    combined average     corr
 k(collision)      0.658115       0.640728 0.0008     k(col/abs)
0.640668 0.0007     0.640652 0.0007   0.8535
 k(absorption)     0.649605       0.640607 0.0008     k(abs/tk ln)
0.640762 0.0008     0.640679 0.0007   0.4452
 k(trk length)     0.658557       0.640917 0.0010     k(tk ln/col)
0.640822 0.0008     0.640767 0.0008   0.5482
 rem life(col)   6.7400E+03     6.8405E+03 0.0009     k(col/abs/tk ln)
0.640751 0.0007     0.640692 0.0007
 rem life(abs)   6.7698E+03     6.8409E+03 0.0009     life(col/abs/tl)
6.8427E+03 0.0008   6.8485E+03 0.0006
 source points generated   5257

  estimator     cycle   521   ave of   471 cycles      combination
simple average    combined average     corr
 k(collision)      0.649571       0.640747 0.0008     k(col/abs)
0.640683 0.0007     0.640667 0.0007   0.8535
 k(absorption)     0.646351       0.640620 0.0008     k(abs/tk ln)
0.640763 0.0008     0.640686 0.0007   0.4446
 k(trk length)     0.636259       0.640907 0.0010     k(tk ln/col)
0.640827 0.0008     0.640780 0.0008   0.5472
 rem life(col)   6.6690E+03     6.8401E+03 0.0009     k(col/abs/tk ln)
0.640758 0.0007     0.640701 0.0007
 rem life(abs)   6.6446E+03     6.8405E+03 0.0009     life(col/abs/tl)
6.8424E+03 0.0008   6.8483E+03 0.0006
 source points generated   4962

  estimator     cycle   522   ave of   472 cycles      combination
simple average    combined average     corr
 k(collision)      0.634938       0.640734 0.0008     k(col/abs)
0.640661 0.0007     0.640644 0.0007   0.8531
 k(absorption)     0.625980       0.640589 0.0008     k(abs/tk ln)
0.640752 0.0008     0.640665 0.0007   0.4427
 k(trk length)     0.645287       0.640916 0.0010     k(tk ln/col)
0.640825 0.0008     0.640773 0.0008   0.5467
 rem life(col)   7.0011E+03     6.8404E+03 0.0009     k(col/abs/tk ln)
0.640746 0.0007     0.640682 0.0007
 rem life(abs)   7.0218E+03     6.8408E+03 0.0009     life(col/abs/tl)
6.8427E+03 0.0008   6.8484E+03 0.0006
 source points generated   4898

  estimator     cycle   523   ave of   473 cycles      combination
simple average    combined average     corr
 k(collision)      0.631374       0.640714 0.0008     k(col/abs)
0.640641 0.0007     0.640623 0.0007   0.8533
 k(absorption)     0.630218       0.640567 0.0008     k(abs/tk ln)
0.640757 0.0008     0.640656 0.0007   0.4396
 k(trk length)     0.655631       0.640947 0.0010     k(tk ln/col)
0.640831 0.0008     0.640764 0.0008   0.5437
 rem life(col)   6.7449E+03     6.8402E+03 0.0009     k(col/abs/tk ln)
0.640743 0.0007     0.640672 0.0007
```

```
 rem life(abs)   6.8054E+03     6.8408E+03 0.0009     life(col/abs/tl)
6.8426E+03 0.0008   6.8484E+03 0.0006
 source points generated   4971

  estimator     cycle   524   ave of   474 cycles      combination
simple average    combined average     corr
 k(collision)      0.649639       0.640733 0.0008     k(col/abs)
0.640661 0.0007     0.640643 0.0007   0.8536
 k(absorption)     0.650634       0.640588 0.0007     k(abs/tk ln)
0.640765 0.0008     0.640672 0.0007   0.4389
 k(trk length)     0.638787       0.640942 0.0010     k(tk ln/col)
0.640838 0.0008     0.640778 0.0008   0.5431
 rem life(col)   6.8239E+03     6.8402E+03 0.0009     k(col/abs/tk ln)
0.640755 0.0007     0.640688 0.0007
 rem life(abs)   6.8251E+03     6.8407E+03 0.0009     life(col/abs/tl)
6.8426E+03 0.0008   6.8484E+03 0.0006
 source points generated   5143

  estimator     cycle   525   ave of   475 cycles      combination
simple average    combined average     corr
 k(collision)      0.637492       0.640726 0.0008     k(col/abs)
0.640661 0.0007     0.640646 0.0007   0.8531
 k(absorption)     0.644406       0.640596 0.0007     k(abs/tk ln)
0.640758 0.0008     0.640673 0.0007   0.4380
 k(trk length)     0.630285       0.640920 0.0010     k(tk ln/col)
0.640823 0.0008     0.640768 0.0008   0.5432
 rem life(col)   6.9348E+03     6.8404E+03 0.0009     k(col/abs/tk ln)
0.640747 0.0007     0.640687 0.0007
 rem life(abs)   6.9300E+03     6.8409E+03 0.0009     life(col/abs/tl)
6.8428E+03 0.0008   6.8487E+03 0.0006
 source points generated   4911

  estimator     cycle   526   ave of   476 cycles      combination
simple average    combined average     corr
 k(collision)      0.638149       0.640721 0.0008     k(col/abs)
0.640656 0.0007     0.640640 0.0007   0.8532
 k(absorption)     0.637781       0.640590 0.0007     k(abs/tk ln)
0.640731 0.0008     0.640656 0.0007   0.4377
 k(trk length)     0.618313       0.640873 0.0010     k(tk ln/col)
0.640797 0.0008     0.640753 0.0008   0.5425
 rem life(col)   7.1215E+03     6.8410E+03 0.0009     k(col/abs/tk ln)
0.640728 0.0007     0.640672 0.0007
 rem life(abs)   7.1205E+03     6.8415E+03 0.0009     life(col/abs/tl)
6.8433E+03 0.0008   6.8489E+03 0.0006
 source points generated   5021

  estimator     cycle   527   ave of   477 cycles      combination
simple average    combined average     corr
 k(collision)      0.631203       0.640701 0.0008     k(col/abs)
0.640640 0.0007     0.640625 0.0007   0.8532
 k(absorption)     0.635401       0.640579 0.0007     k(abs/tk ln)
0.640717 0.0008     0.640644 0.0007   0.4381
 k(trk length)     0.632818       0.640856 0.0010     k(tk ln/col)
0.640778 0.0008     0.640734 0.0007   0.5429
```

```
 rem life(col)   6.8576E+03     6.8410E+03 0.0009     k(col/abs/tk ln)
0.640712 0.0007     0.640658 0.0007
 rem life(abs)   6.8421E+03     6.8415E+03 0.0009     life(col/abs/tl)
6.8434E+03 0.0008   6.8492E+03 0.0006
 source points generated   4953

  estimator     cycle   528   ave of   478 cycles      combination
simple average    combined average     corr
 k(collision)      0.625280       0.640669 0.0008     k(col/abs)
0.640611 0.0007     0.640596 0.0007   0.8537
 k(absorption)     0.627793       0.640552 0.0007     k(abs/tk ln)
0.640690 0.0008     0.640617 0.0007   0.4394
 k(trk length)     0.627482       0.640828 0.0010     k(tk ln/col)
0.640748 0.0008     0.640702 0.0007   0.5441
 rem life(col)   6.9629E+03     6.8413E+03 0.0009     k(col/abs/tk ln)
0.640683 0.0007     0.640630 0.0007
 rem life(abs)   6.9317E+03     6.8417E+03 0.0009     life(col/abs/tl)
6.8436E+03 0.0008   6.8495E+03 0.0006
 source points generated   4915

  estimator     cycle   529   ave of   479 cycles      combination
simple average    combined average     corr
 k(collision)      0.622781       0.640631 0.0008     k(col/abs)
0.640571 0.0007     0.640556 0.0007   0.8546
 k(absorption)     0.620234       0.640510 0.0007     k(abs/tk ln)
0.640676 0.0008     0.640589 0.0007   0.4356
 k(trk length)     0.647755       0.640842 0.0010     k(tk ln/col)
0.640737 0.0008     0.640677 0.0007   0.5407
 rem life(col)   7.1728E+03     6.8420E+03 0.0009     k(col/abs/tk ln)
0.640661 0.0007     0.640601 0.0007
 rem life(abs)   7.2243E+03     6.8425E+03 0.0009     life(col/abs/tl)
6.8442E+03 0.0008   6.8498E+03 0.0006
 source points generated   5003

  estimator     cycle   530   ave of   480 cycles      combination
simple average    combined average     corr
 k(collision)      0.641255       0.640633 0.0008     k(col/abs)
0.640567 0.0007     0.640551 0.0007   0.8544
 k(absorption)     0.636054       0.640501 0.0007     k(abs/tk ln)
0.640680 0.0008     0.640586 0.0007   0.4348
 k(trk length)     0.648788       0.640859 0.0010     k(tk ln/col)
0.640746 0.0008     0.640682 0.0007   0.5406
 rem life(col)   6.9032E+03     6.8421E+03 0.0009     k(col/abs/tk ln)
0.640664 0.0007     0.640599 0.0007
 rem life(abs)   6.8866E+03     6.8426E+03 0.0009     life(col/abs/tl)
6.8444E+03 0.0008   6.8500E+03 0.0006
 source points generated   5133

  estimator     cycle   531   ave of   481 cycles      combination
simple average    combined average     corr
 k(collision)      0.622784       0.640596 0.0008     k(col/abs)
0.640534 0.0007     0.640519 0.0007   0.8549
 k(absorption)     0.626746       0.640472 0.0007     k(abs/tk ln)
0.640661 0.0008     0.640563 0.0007   0.4347
```

```
 k(trk length)     0.637102       0.640851 0.0010     k(tk ln/col)
0.640723 0.0008     0.640651 0.0007   0.5400
 rem life(col)   7.0982E+03     6.8426E+03 0.0009     k(col/abs/tk ln)
0.640640 0.0007     0.640574 0.0007
 rem life(abs)   7.0779E+03     6.8431E+03 0.0009     life(col/abs/tl)
6.8447E+03 0.0008   6.8501E+03 0.0006
 source points generated   4859

  estimator     cycle   532   ave of   482 cycles      combination
simple average    combined average     corr
 k(collision)      0.634543       0.640583 0.0008     k(col/abs)
0.640522 0.0007     0.640507 0.0007   0.8550
 k(absorption)     0.635357       0.640461 0.0007     k(abs/tk ln)
0.640644 0.0007     0.640549 0.0007   0.4352
 k(trk length)     0.628844       0.640826 0.0010     k(tk ln/col)
0.640705 0.0008     0.640636 0.0007   0.5404
 rem life(col)   6.7736E+03     6.8425E+03 0.0009     k(col/abs/tk ln)
0.640624 0.0007     0.640560 0.0007
 rem life(abs)   6.7992E+03     6.8430E+03 0.0009     life(col/abs/tl)
6.8446E+03 0.0008   6.8499E+03 0.0006
 source points generated   5135

  estimator     cycle   533   ave of   483 cycles      combination
simple average    combined average     corr
 k(collision)      0.661569       0.640627 0.0008     k(col/abs)
0.640561 0.0007     0.640544 0.0007   0.8557
 k(absorption)     0.656558       0.640495 0.0007     k(abs/tk ln)
0.640650 0.0007     0.640570 0.0007   0.4317
 k(trk length)     0.631126       0.640806 0.0010     k(tk ln/col)
0.640716 0.0008     0.640667 0.0007   0.5353
 rem life(col)   6.7921E+03     6.8424E+03 0.0009     k(col/abs/tk ln)
0.640642 0.0007     0.640584 0.0007
 rem life(abs)   6.8073E+03     6.8429E+03 0.0009     life(col/abs/tl)
6.8445E+03 0.0008   6.8494E+03 0.0006
 source points generated   5180

  estimator     cycle   534   ave of   484 cycles      combination
simple average    combined average     corr
 k(collision)      0.643839       0.640633 0.0008     k(col/abs)
0.640566 0.0007     0.640549 0.0007   0.8558
 k(absorption)     0.642722       0.640499 0.0007     k(abs/tk ln)
0.640661 0.0007     0.640578 0.0007   0.4318
 k(trk length)     0.648749       0.640822 0.0010     k(tk ln/col)
0.640728 0.0008     0.640675 0.0007   0.5354
 rem life(col)   6.7698E+03     6.8422E+03 0.0009     k(col/abs/tk ln)
0.640652 0.0007     0.640591 0.0007
 rem life(abs)   6.7850E+03     6.8428E+03 0.0009     life(col/abs/tl)
6.8443E+03 0.0008   6.8493E+03 0.0006
 source points generated   4868

  estimator     cycle   535   ave of   485 cycles      combination
simple average    combined average     corr
 k(collision)      0.635011       0.640622 0.0008     k(col/abs)
0.640563 0.0007     0.640548 0.0007   0.8552
```

```
 k(absorption)     0.642808       0.640504 0.0007     k(abs/tk ln)
0.640662 0.0007     0.640581 0.0007   0.4317
 k(trk length)     0.639253       0.640819 0.0010     k(tk ln/col)
0.640720 0.0008     0.640666 0.0007   0.5354
 rem life(col)   6.9841E+03     6.8425E+03 0.0009     k(col/abs/tk ln)
0.640648 0.0007     0.640592 0.0007
 rem life(abs)   6.9397E+03     6.8430E+03 0.0009     life(col/abs/tl)
6.8445E+03 0.0008   6.8494E+03 0.0006
 source points generated   4952

  estimator     cycle   536   ave of   486 cycles      combination
simple average    combined average     corr
 k(collision)      0.646449       0.640634 0.0008     k(col/abs)
0.640565 0.0007     0.640548 0.0007   0.8545
 k(absorption)     0.637065       0.640497 0.0007     k(abs/tk ln)
0.640661 0.0007     0.640577 0.0007   0.4315
 k(trk length)     0.643719       0.640825 0.0010     k(tk ln/col)
0.640729 0.0008     0.640676 0.0007   0.5354
 rem life(col)   6.6414E+03     6.8421E+03 0.0009     k(col/abs/tk ln)
0.640652 0.0007     0.640591 0.0007
 rem life(abs)   6.6930E+03     6.8427E+03 0.0009     life(col/abs/tl)
6.8442E+03 0.0008   6.8493E+03 0.0006
 source points generated   5156

  estimator     cycle   537   ave of   487 cycles      combination
simple average    combined average     corr
 k(collision)      0.647211       0.640647 0.0008     k(col/abs)
0.640574 0.0007     0.640555 0.0007   0.8544
 k(absorption)     0.642443       0.640501 0.0007     k(abs/tk ln)
0.640673 0.0007     0.640585 0.0007   0.4316
 k(trk length)     0.650463       0.640845 0.0010     k(tk ln/col)
0.640746 0.0008     0.640691 0.0007   0.5358
 rem life(col)   6.6701E+03     6.8418E+03 0.0009     k(col/abs/tk ln)
0.640664 0.0007     0.640599 0.0007
 rem life(abs)   6.6911E+03     6.8424E+03 0.0009     life(col/abs/tl)
6.8439E+03 0.0008   6.8491E+03 0.0006
 source points generated   4982

  estimator     cycle   538   ave of   488 cycles      combination
simple average    combined average     corr
 k(collision)      0.631160       0.640628 0.0008     k(col/abs)
0.640553 0.0007     0.640534 0.0007   0.8547
 k(absorption)     0.629797       0.640479 0.0007     k(abs/tk ln)
0.640649 0.0007     0.640562 0.0007   0.4326
 k(trk length)     0.628408       0.640819 0.0010     k(tk ln/col)
0.640724 0.0008     0.640670 0.0007   0.5365
 rem life(col)   6.8984E+03     6.8419E+03 0.0009     k(col/abs/tk ln)
0.640642 0.0007     0.640577 0.0007
 rem life(abs)   6.8735E+03     6.8424E+03 0.0009     life(col/abs/tl)
6.8440E+03 0.0008   6.8492E+03 0.0006
 source points generated   4900

  estimator     cycle   539   ave of   489 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.640820       0.640628 0.0008     k(col/abs)
0.640550 0.0007     0.640530 0.0007   0.8546
 k(absorption)     0.637360       0.640473 0.0007     k(abs/tk ln)
0.640633 0.0007     0.640551 0.0007   0.4328
 k(trk length)     0.628457       0.640794 0.0010     k(tk ln/col)
0.640711 0.0008     0.640665 0.0007   0.5361
 rem life(col)   6.8082E+03     6.8418E+03 0.0009     k(col/abs/tk ln)
0.640632 0.0007     0.640568 0.0007
 rem life(abs)   6.8079E+03     6.8424E+03 0.0009     life(col/abs/tl)
6.8439E+03 0.0008   6.8490E+03 0.0006
 source points generated   5071

  estimator     cycle   540   ave of   490 cycles      combination
simple average    combined average     corr
 k(collision)      0.635082       0.640617 0.0008     k(col/abs)
0.640547 0.0007     0.640529 0.0007   0.8540
 k(absorption)     0.643153       0.640478 0.0007     k(abs/tk ln)
0.640626 0.0007     0.640550 0.0007   0.4322
 k(trk length)     0.631231       0.640775 0.0010     k(tk ln/col)
0.640696 0.0008     0.640652 0.0007   0.5364
 rem life(col)   6.8521E+03     6.8418E+03 0.0009     k(col/abs/tk ln)
0.640623 0.0007     0.640565 0.0007
 rem life(abs)   6.8231E+03     6.8423E+03 0.0009     life(col/abs/tl)
6.8439E+03 0.0008   6.8489E+03 0.0006
 source points generated   4954

  estimator     cycle   541   ave of   491 cycles      combination
simple average    combined average     corr
 k(collision)      0.632191       0.640600 0.0008     k(col/abs)
0.640531 0.0007     0.640513 0.0007   0.8542
 k(absorption)     0.632322       0.640462 0.0007     k(abs/tk ln)
0.640612 0.0007     0.640535 0.0007   0.4325
 k(trk length)     0.635302       0.640763 0.0010     k(tk ln/col)
0.640681 0.0008     0.640636 0.0007   0.5366
 rem life(col)   7.0193E+03     6.8422E+03 0.0009     k(col/abs/tk ln)
0.640608 0.0007     0.640550 0.0007
 rem life(abs)   7.0160E+03     6.8427E+03 0.0009     life(col/abs/tl)
6.8442E+03 0.0008   6.8492E+03 0.0006
 source points generated   4995

  estimator     cycle   542   ave of   492 cycles      combination
simple average    combined average     corr
 k(collision)      0.642892       0.640604 0.0008     k(col/abs)
0.640533 0.0007     0.640515 0.0007   0.8542
 k(absorption)     0.640679       0.640462 0.0007     k(abs/tk ln)
0.640622 0.0007     0.640540 0.0007   0.4323
 k(trk length)     0.650392       0.640783 0.0010     k(tk ln/col)
0.640694 0.0008     0.640644 0.0007   0.5366
 rem life(col)   6.8729E+03     6.8423E+03 0.0009     k(col/abs/tk ln)
0.640616 0.0007     0.640555 0.0007
 rem life(abs)   6.8809E+03     6.8428E+03 0.0009     life(col/abs/tl)
6.8442E+03 0.0008   6.8491E+03 0.0006
 source points generated   5063
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```
  estimator     cycle   543   ave of   493 cycles      combination
simple average    combined average     corr
 k(collision)      0.626253       0.640575 0.0008     k(col/abs)
0.640503 0.0007     0.640485 0.0007   0.8547
 k(absorption)     0.625544       0.640432 0.0007     k(abs/tk ln)
0.640591 0.0007     0.640509 0.0007   0.4341
 k(trk length)     0.625009       0.640751 0.0010     k(tk ln/col)
0.640663 0.0008     0.640614 0.0007   0.5380
 rem life(col)   6.9980E+03     6.8426E+03 0.0009     k(col/abs/tk ln)
0.640586 0.0007     0.640524 0.0007
 rem life(abs)   6.9879E+03     6.8431E+03 0.0009     life(col/abs/tl)
6.8446E+03 0.0008   6.8495E+03 0.0006
 source points generated   4859

  estimator     cycle   544   ave of   494 cycles      combination
simple average    combined average     corr
 k(collision)      0.638507       0.640571 0.0008     k(col/abs)
0.640510 0.0007     0.640495 0.0007   0.8538
 k(absorption)     0.648967       0.640449 0.0007     k(abs/tk ln)
0.640607 0.0007     0.640525 0.0007   0.4345
 k(trk length)     0.647288       0.640764 0.0010     k(tk ln/col)
0.640668 0.0008     0.640614 0.0007   0.5377
 rem life(col)   6.9425E+03     6.8428E+03 0.0009     k(col/abs/tk ln)
0.640595 0.0007     0.640537 0.0007
 rem life(abs)   6.9289E+03     6.8432E+03 0.0009     life(col/abs/tl)
6.8447E+03 0.0008   6.8495E+03 0.0006
 source points generated   5153

  estimator     cycle   545   ave of   495 cycles      combination
simple average    combined average     corr
 k(collision)      0.643367       0.640577 0.0008     k(col/abs)
0.640514 0.0007     0.640498 0.0007   0.8538
 k(absorption)     0.641372       0.640451 0.0007     k(abs/tk ln)
0.640603 0.0007     0.640524 0.0007   0.4344
 k(trk length)     0.636092       0.640755 0.0010     k(tk ln/col)
0.640666 0.0008     0.640616 0.0007   0.5374
 rem life(col)   6.6981E+03     6.8425E+03 0.0009     k(col/abs/tk ln)
0.640594 0.0007     0.640538 0.0007
 rem life(abs)   6.7439E+03     6.8430E+03 0.0009     life(col/abs/tl)
6.8445E+03 0.0008   6.8494E+03 0.0006
 source points generated   5017

  estimator     cycle   546   ave of   496 cycles      combination
simple average    combined average     corr
 k(collision)      0.666216       0.640628 0.0008     k(col/abs)
0.640551 0.0007     0.640529 0.0007   0.8532
 k(absorption)     0.651996       0.640474 0.0007     k(abs/tk ln)
0.640633 0.0007     0.640551 0.0007   0.4360
 k(trk length)     0.659458       0.640792 0.0010     k(tk ln/col)
0.640710 0.0008     0.640665 0.0007   0.5397
 rem life(col)   6.7500E+03     6.8423E+03 0.0009     k(col/abs/tk ln)
0.640632 0.0007     0.640567 0.0007
 rem life(abs)   6.7840E+03     6.8429E+03 0.0009     life(col/abs/tl)
6.8443E+03 0.0008   6.8491E+03 0.0006
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 source points generated   5166

  estimator     cycle   547   ave of   497 cycles      combination
simple average    combined average     corr
 k(collision)      0.634718       0.640616 0.0008     k(col/abs)
0.640537 0.0007     0.640515 0.0007   0.8532
 k(absorption)     0.632136       0.640457 0.0007     k(abs/tk ln)
0.640626 0.0007     0.640539 0.0007   0.4356
 k(trk length)     0.641861       0.640795 0.0010     k(tk ln/col)
0.640706 0.0008     0.640656 0.0007   0.5395
 rem life(col)   6.8824E+03     6.8424E+03 0.0009     k(col/abs/tk ln)
0.640623 0.0007     0.640555 0.0007
 rem life(abs)   6.9155E+03     6.8431E+03 0.0009     life(col/abs/tl)
6.8444E+03 0.0008   6.8491E+03 0.0006
 source points generated   4713

  estimator     cycle   548   ave of   498 cycles      combination
simple average    combined average     corr
 k(collision)      0.631329       0.640598 0.0008     k(col/abs)
0.640521 0.0007     0.640500 0.0007   0.8533
 k(absorption)     0.634285       0.640445 0.0007     k(abs/tk ln)
0.640618 0.0007     0.640528 0.0007   0.4356
 k(trk length)     0.638561       0.640790 0.0010     k(tk ln/col)
0.640694 0.0008     0.640641 0.0007   0.5393
 rem life(col)   6.7141E+03     6.8421E+03 0.0009     k(col/abs/tk ln)
0.640611 0.0007     0.640544 0.0007
 rem life(abs)   6.7043E+03     6.8428E+03 0.0009     life(col/abs/tl)
6.8442E+03 0.0008   6.8489E+03 0.0006
 source points generated   4969

  estimator     cycle   549   ave of   499 cycles      combination
simple average    combined average     corr
 k(collision)      0.655881       0.640628 0.0008     k(col/abs)
0.640559 0.0007     0.640541 0.0007   0.8538
 k(absorption)     0.662794       0.640490 0.0007     k(abs/tk ln)
0.640635 0.0007     0.640562 0.0007   0.4321
 k(trk length)     0.636037       0.640781 0.0010     k(tk ln/col)
0.640705 0.0008     0.640663 0.0007   0.5372
 rem life(col)   6.7145E+03     6.8419E+03 0.0009     k(col/abs/tk ln)
0.640633 0.0007     0.640576 0.0007
 rem life(abs)   6.6950E+03     6.8425E+03 0.0009     life(col/abs/tl)
6.8439E+03 0.0008   6.8485E+03 0.0006
 source points generated   5225

  estimator     cycle   550   ave of   500 cycles      combination
simple average    combined average     corr
 k(collision)      0.642772       0.640633 0.0008     k(col/abs)
0.640562 0.0007     0.640543 0.0007   0.8537
 k(absorption)     0.641177       0.640491 0.0007     k(abs/tk ln)
0.640653 0.0007     0.640571 0.0007   0.4316
 k(trk length)     0.658369       0.640816 0.0010     k(tk ln/col)
0.640724 0.0008     0.640674 0.0007   0.5369
 rem life(col)   6.7493E+03     6.8417E+03 0.0009     k(col/abs/tk ln)
0.640647 0.0007     0.640585 0.0007
```

```
 rem life(abs)   6.7293E+03     6.8423E+03 0.0009     life(col/abs/tl)
6.8437E+03 0.0008   6.8483E+03 0.0006
 source points generated   4882

  estimator     cycle   551   ave of   501 cycles      combination
simple average    combined average     corr
 k(collision)      0.638273       0.640628 0.0008     k(col/abs)
0.640558 0.0007     0.640539 0.0007   0.8538
 k(absorption)     0.638955       0.640488 0.0007     k(abs/tk ln)
0.640637 0.0007     0.640561 0.0007   0.4314
 k(trk length)     0.625725       0.640786 0.0010     k(tk ln/col)
0.640707 0.0008     0.640664 0.0007   0.5367
 rem life(col)   6.9796E+03     6.8420E+03 0.0009     k(col/abs/tk ln)
0.640634 0.0007     0.640576 0.0007
 rem life(abs)   6.9714E+03     6.8425E+03 0.0009     life(col/abs/tl)
6.8439E+03 0.0008   6.8485E+03 0.0006
 source points generated   4948

  estimator     cycle   552   ave of   502 cycles      combination
simple average    combined average     corr
 k(collision)      0.649061       0.640645 0.0008     k(col/abs)
0.640570 0.0007     0.640550 0.0007   0.8537
 k(absorption)     0.644159       0.640495 0.0007     k(abs/tk ln)
0.640652 0.0007     0.640572 0.0007   0.4317
 k(trk length)     0.652122       0.640808 0.0010     k(tk ln/col)
0.640727 0.0008     0.640682 0.0007   0.5373
 rem life(col)   6.9551E+03     6.8422E+03 0.0009     k(col/abs/tk ln)
0.640649 0.0007     0.640588 0.0007
 rem life(abs)   6.9434E+03     6.8427E+03 0.0009     life(col/abs/tl)
6.8441E+03 0.0008   6.8487E+03 0.0006
 source points generated   5069

  estimator     cycle   553   ave of   503 cycles      combination
simple average    combined average     corr
 k(collision)      0.656917       0.640677 0.0008     k(col/abs)
0.640603 0.0007     0.640583 0.0007   0.8544
 k(absorption)     0.657412       0.640529 0.0007     k(abs/tk ln)
0.640679 0.0007     0.640603 0.0007   0.4326
 k(trk length)     0.650888       0.640828 0.0010     k(tk ln/col)
0.640753 0.0008     0.640711 0.0007   0.5379
 rem life(col)   6.6264E+03     6.8418E+03 0.0009     k(col/abs/tk ln)
0.640678 0.0007     0.640618 0.0007
 rem life(abs)   6.6272E+03     6.8423E+03 0.0009     life(col/abs/tl)
6.8437E+03 0.0008   6.8484E+03 0.0006
 source points generated   5042

  estimator     cycle   554   ave of   504 cycles      combination
simple average    combined average     corr
 k(collision)      0.638049       0.640672 0.0008     k(col/abs)
0.640599 0.0007     0.640579 0.0007   0.8544
 k(absorption)     0.638639       0.640525 0.0007     k(abs/tk ln)
0.640686 0.0007     0.640604 0.0007   0.4322
 k(trk length)     0.649619       0.640846 0.0010     k(tk ln/col)
0.640759 0.0008     0.640711 0.0007   0.5374
```

```
 rem life(col)   6.6319E+03     6.8413E+03 0.0009     k(col/abs/tk ln)
0.640681 0.0007     0.640619 0.0007
 rem life(abs)   6.6113E+03     6.8418E+03 0.0009     life(col/abs/tl)
6.8433E+03 0.0008   6.8482E+03 0.0006
 source points generated   4886

  estimator     cycle   555   ave of   505 cycles      combination
simple average    combined average     corr
 k(collision)      0.630821       0.640652 0.0008     k(col/abs)
0.640577 0.0007     0.640557 0.0007   0.8546
 k(absorption)     0.628463       0.640501 0.0007     k(abs/tk ln)
0.640663 0.0007     0.640581 0.0007   0.4331
 k(trk length)     0.630100       0.640824 0.0010     k(tk ln/col)
0.640738 0.0008     0.640691 0.0007   0.5380
 rem life(col)   6.7943E+03     6.8412E+03 0.0009     k(col/abs/tk ln)
0.640659 0.0007     0.640597 0.0007
 rem life(abs)   6.7990E+03     6.8417E+03 0.0009     life(col/abs/tl)
6.8433E+03 0.0007   6.8484E+03 0.0006
 source points generated   4931

  estimator     cycle   556   ave of   506 cycles      combination
simple average    combined average     corr
 k(collision)      0.626206       0.640624 0.0008     k(col/abs)
0.640541 0.0007     0.640520 0.0007   0.8549
 k(absorption)     0.618236       0.640457 0.0007     k(abs/tk ln)
0.640630 0.0007     0.640543 0.0007   0.4341
 k(trk length)     0.630176       0.640803 0.0010     k(tk ln/col)
0.640714 0.0008     0.640665 0.0007   0.5388
 rem life(col)   6.9505E+03     6.8415E+03 0.0009     k(col/abs/tk ln)
0.640628 0.0007     0.640562 0.0007
 rem life(abs)   6.9603E+03     6.8420E+03 0.0009     life(col/abs/tl)
6.8436E+03 0.0007   6.8487E+03 0.0006
 source points generated   4954

  estimator     cycle   557   ave of   507 cycles      combination
simple average    combined average     corr
 k(collision)      0.639244       0.640621 0.0007     k(col/abs)
0.640540 0.0007     0.640520 0.0007   0.8549
 k(absorption)     0.640897       0.640458 0.0007     k(abs/tk ln)
0.640631 0.0007     0.640544 0.0007   0.4341
 k(trk length)     0.640993       0.640804 0.0010     k(tk ln/col)
0.640712 0.0008     0.640663 0.0007   0.5387
 rem life(col)   6.7534E+03     6.8413E+03 0.0009     k(col/abs/tk ln)
0.640628 0.0007     0.640562 0.0007
 rem life(abs)   6.7733E+03     6.8418E+03 0.0009     life(col/abs/tl)
6.8434E+03 0.0007   6.8485E+03 0.0006
 source points generated   5089

  estimator     cycle   558   ave of   508 cycles      combination
simple average    combined average     corr
 k(collision)      0.637986       0.640616 0.0007     k(col/abs)
0.640531 0.0007     0.640510 0.0007   0.8548
 k(absorption)     0.633853       0.640445 0.0007     k(abs/tk ln)
0.640618 0.0007     0.640531 0.0007   0.4344
```

```
 k(trk length)     0.634636       0.640792 0.0010     k(tk ln/col)
0.640704 0.0008     0.640656 0.0007   0.5388
 rem life(col)   6.8337E+03     6.8413E+03 0.0009     k(col/abs/tk ln)
0.640618 0.0007     0.640551 0.0007
 rem life(abs)   6.8463E+03     6.8419E+03 0.0009     life(col/abs/tl)
6.8434E+03 0.0007   6.8485E+03 0.0006
 source points generated   4972

  estimator     cycle   559   ave of   509 cycles      combination
simple average    combined average     corr
 k(collision)      0.630294       0.640596 0.0007     k(col/abs)
0.640512 0.0007     0.640492 0.0007   0.8550
 k(absorption)     0.632177       0.640429 0.0007     k(abs/tk ln)
0.640631 0.0007     0.640529 0.0007   0.4308
 k(trk length)     0.661917       0.640833 0.0010     k(tk ln/col)
0.640714 0.0008     0.640650 0.0007   0.5343
 rem life(col)   6.6658E+03     6.8409E+03 0.0009     k(col/abs/tk ln)
0.640619 0.0007     0.640546 0.0007
 rem life(abs)   6.6739E+03     6.8415E+03 0.0009     life(col/abs/tl)
6.8431E+03 0.0007   6.8482E+03 0.0006
 source points generated   4933

  estimator     cycle   560   ave of   510 cycles      combination
simple average    combined average     corr
 k(collision)      0.642755       0.640600 0.0007     k(col/abs)
0.640521 0.0007     0.640502 0.0007   0.8549
 k(absorption)     0.647298       0.640442 0.0007     k(abs/tk ln)
0.640644 0.0007     0.640543 0.0007   0.4311
 k(trk length)     0.646939       0.640845 0.0010     k(tk ln/col)
0.640723 0.0008     0.640656 0.0007   0.5344
 rem life(col)   6.8926E+03     6.8410E+03 0.0009     k(col/abs/tk ln)
0.640629 0.0007     0.640558 0.0007
 rem life(abs)   6.8624E+03     6.8416E+03 0.0009     life(col/abs/tl)
6.8431E+03 0.0007   6.8483E+03 0.0006
 source points generated   5100

  estimator     cycle   561   ave of   511 cycles      combination
simple average    combined average     corr
 k(collision)      0.611934       0.640544 0.0007     k(col/abs)
0.640463 0.0007     0.640444 0.0007   0.8570
 k(absorption)     0.609873       0.640383 0.0007     k(abs/tk ln)
0.640569 0.0007     0.640473 0.0007   0.4415
 k(trk length)     0.595320       0.640756 0.0010     k(tk ln/col)
0.640650 0.0008     0.640591 0.0007   0.5419
 rem life(col)   7.0214E+03     6.8414E+03 0.0009     k(col/abs/tk ln)
0.640561 0.0007     0.640492 0.0007
 rem life(abs)   7.0168E+03     6.8419E+03 0.0009     life(col/abs/tl)
6.8435E+03 0.0007   6.8487E+03 0.0006
 source points generated   4705

  estimator     cycle   562   ave of   512 cycles      combination
simple average    combined average     corr
 k(collision)      0.634503       0.640532 0.0007     k(col/abs)
0.640452 0.0007     0.640433 0.0007   0.8571
```

```
 k(absorption)     0.635016       0.640372 0.0007     k(abs/tk ln)
0.640554 0.0007     0.640461 0.0007   0.4418
 k(trk length)     0.630861       0.640737 0.0010     k(tk ln/col)
0.640634 0.0008     0.640577 0.0007   0.5423
 rem life(col)   6.7829E+03     6.8413E+03 0.0009     k(col/abs/tk ln)
0.640547 0.0007     0.640479 0.0007
 rem life(abs)   6.7966E+03     6.8418E+03 0.0008     life(col/abs/tl)
6.8434E+03 0.0007   6.8486E+03 0.0006
 source points generated   5183

  estimator     cycle   563   ave of   513 cycles      combination
simple average    combined average     corr
 k(collision)      0.646433       0.640543 0.0007     k(col/abs)
0.640465 0.0007     0.640447 0.0007   0.8571
 k(absorption)     0.647963       0.640387 0.0007     k(abs/tk ln)
0.640557 0.0007     0.640470 0.0007   0.4410
 k(trk length)     0.635457       0.640726 0.0010     k(tk ln/col)
0.640635 0.0008     0.640584 0.0007   0.5416
 rem life(col)   6.7164E+03     6.8410E+03 0.0009     k(col/abs/tk ln)
0.640552 0.0007     0.640488 0.0007
 rem life(abs)   6.7108E+03     6.8416E+03 0.0008     life(col/abs/tl)
6.8432E+03 0.0007   6.8486E+03 0.0006
 source points generated   5089

  estimator     cycle   564   ave of   514 cycles      combination
simple average    combined average     corr
 k(collision)      0.644681       0.640552 0.0007     k(col/abs)
0.640479 0.0007     0.640463 0.0007   0.8569
 k(absorption)     0.650680       0.640407 0.0007     k(abs/tk ln)
0.640588 0.0007     0.640495 0.0007   0.4426
 k(trk length)     0.662883       0.640770 0.0010     k(tk ln/col)
0.640661 0.0008     0.640599 0.0007   0.5414
 rem life(col)   6.9418E+03     6.8412E+03 0.0009     k(col/abs/tk ln)
0.640576 0.0007     0.640511 0.0007
 rem life(abs)   6.9157E+03     6.8417E+03 0.0008     life(col/abs/tl)
6.8434E+03 0.0007   6.8487E+03 0.0006
 source points generated   4937

  estimator     cycle   565   ave of   515 cycles      combination
simple average    combined average     corr
 k(collision)      0.644596       0.640559 0.0007     k(col/abs)
0.640487 0.0007     0.640470 0.0007   0.8570
 k(absorption)     0.644418       0.640415 0.0007     k(abs/tk ln)
0.640607 0.0007     0.640507 0.0007   0.4428
 k(trk length)     0.656069       0.640799 0.0010     k(tk ln/col)
0.640679 0.0008     0.640612 0.0007   0.5415
 rem life(col)   6.9266E+03     6.8414E+03 0.0008     k(col/abs/tk ln)
0.640591 0.0007     0.640523 0.0007
 rem life(abs)   6.9675E+03     6.8419E+03 0.0008     life(col/abs/tl)
6.8435E+03 0.0007   6.8487E+03 0.0006
 source points generated   4940

  estimator     cycle   566   ave of   516 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.652209       0.640582 0.0007     k(col/abs)
0.640507 0.0007     0.640489 0.0007   0.8572
 k(absorption)     0.649292       0.640432 0.0007     k(abs/tk ln)
0.640621 0.0007     0.640523 0.0007   0.4431
 k(trk length)     0.646266       0.640810 0.0010     k(tk ln/col)
0.640696 0.0008     0.640632 0.0007   0.5416
 rem life(col)   6.8224E+03     6.8413E+03 0.0008     k(col/abs/tk ln)
0.640608 0.0007     0.640540 0.0007
 rem life(abs)   6.8508E+03     6.8420E+03 0.0008     life(col/abs/tl)
6.8435E+03 0.0007   6.8484E+03 0.0006
 source points generated   5094

  estimator     cycle   567   ave of   517 cycles      combination
simple average    combined average     corr
 k(collision)      0.630118       0.640562 0.0007     k(col/abs)
0.640487 0.0007     0.640470 0.0007   0.8575
 k(absorption)     0.630487       0.640413 0.0007     k(abs/tk ln)
0.640619 0.0007     0.640513 0.0007   0.4415
 k(trk length)     0.648647       0.640825 0.0010     k(tk ln/col)
0.640693 0.0008     0.640620 0.0007   0.5400
 rem life(col)   6.7699E+03     6.8412E+03 0.0008     k(col/abs/tk ln)
0.640600 0.0007     0.640528 0.0007
 rem life(abs)   6.8317E+03     6.8419E+03 0.0008     life(col/abs/tl)
6.8434E+03 0.0007   6.8484E+03 0.0006
 source points generated   4840

  estimator     cycle   568   ave of   518 cycles      combination
simple average    combined average     corr
 k(collision)      0.639601       0.640560 0.0007     k(col/abs)
0.640482 0.0007     0.640464 0.0007   0.8574
 k(absorption)     0.636175       0.640405 0.0007     k(abs/tk ln)
0.640612 0.0007     0.640505 0.0007   0.4416
 k(trk length)     0.637831       0.640819 0.0010     k(tk ln/col)
0.640690 0.0008     0.640617 0.0007   0.5400
 rem life(col)   6.8182E+03     6.8412E+03 0.0008     k(col/abs/tk ln)
0.640595 0.0007     0.640521 0.0007
 rem life(abs)   6.8218E+03     6.8419E+03 0.0008     life(col/abs/tl)
6.8434E+03 0.0007   6.8483E+03 0.0006
 source points generated   5052

  estimator     cycle   569   ave of   519 cycles      combination
simple average    combined average     corr
 k(collision)      0.631567       0.640543 0.0007     k(col/abs)
0.640463 0.0007     0.640445 0.0007   0.8576
 k(absorption)     0.629931       0.640384 0.0007     k(abs/tk ln)
0.640601 0.0007     0.640490 0.0007   0.4412
 k(trk length)     0.640415       0.640818 0.0010     k(tk ln/col)
0.640680 0.0008     0.640604 0.0007   0.5397
 rem life(col)   6.8490E+03     6.8412E+03 0.0008     k(col/abs/tk ln)
0.640582 0.0007     0.640506 0.0007
 rem life(abs)   6.8313E+03     6.8419E+03 0.0008     life(col/abs/tl)
6.8434E+03 0.0007   6.8483E+03 0.0006
 source points generated   4929
```

```
  estimator     cycle   570   ave of   520 cycles      combination
simple average    combined average     corr
 k(collision)      0.637474       0.640537 0.0007     k(col/abs)
0.640464 0.0007     0.640447 0.0007   0.8572
 k(absorption)     0.643939       0.640391 0.0007     k(abs/tk ln)
0.640603 0.0007     0.640494 0.0007   0.4411
 k(trk length)     0.638969       0.640815 0.0010     k(tk ln/col)
0.640676 0.0008     0.640598 0.0007   0.5397
 rem life(col)   6.7364E+03     6.8410E+03 0.0008     k(col/abs/tk ln)
0.640581 0.0007     0.640509 0.0007
 rem life(abs)   6.7290E+03     6.8417E+03 0.0008     life(col/abs/tl)
6.8432E+03 0.0007   6.8484E+03 0.0006
 source points generated   5040

  estimator     cycle   571   ave of   521 cycles      combination
simple average    combined average     corr
 k(collision)      0.642479       0.640540 0.0007     k(col/abs)
0.640475 0.0007     0.640460 0.0007   0.8568
 k(absorption)     0.650003       0.640410 0.0007     k(abs/tk ln)
0.640606 0.0007     0.640505 0.0007   0.4398
 k(trk length)     0.634011       0.640802 0.0010     k(tk ln/col)
0.640671 0.0008     0.640598 0.0007   0.5394
 rem life(col)   6.8538E+03     6.8410E+03 0.0008     k(col/abs/tk ln)
0.640584 0.0007     0.640518 0.0007
 rem life(abs)   6.8559E+03     6.8417E+03 0.0008     life(col/abs/tl)
6.8432E+03 0.0007   6.8483E+03 0.0006
 source points generated   5048

  estimator     cycle   572   ave of   522 cycles      combination
simple average    combined average     corr
 k(collision)      0.648124       0.640555 0.0007     k(col/abs)
0.640488 0.0007     0.640473 0.0007   0.8569
 k(absorption)     0.646570       0.640421 0.0007     k(abs/tk ln)
0.640616 0.0007     0.640516 0.0007   0.4399
 k(trk length)     0.644955       0.640810 0.0010     k(tk ln/col)
0.640682 0.0007     0.640612 0.0007   0.5395
 rem life(col)   6.8946E+03     6.8411E+03 0.0008     k(col/abs/tk ln)
0.640595 0.0007     0.640529 0.0007
 rem life(abs)   6.8912E+03     6.8418E+03 0.0008     life(col/abs/tl)
6.8433E+03 0.0007   6.8483E+03 0.0006
 source points generated   5049

  estimator     cycle   573   ave of   523 cycles      combination
simple average    combined average     corr
 k(collision)      0.653744       0.640580 0.0007     k(col/abs)
0.640503 0.0007     0.640485 0.0007   0.8562
 k(absorption)     0.642646       0.640426 0.0007     k(abs/tk ln)
0.640624 0.0007     0.640523 0.0007   0.4400
 k(trk length)     0.647258       0.640822 0.0010     k(tk ln/col)
0.640701 0.0007     0.640634 0.0007   0.5397
 rem life(col)   6.7223E+03     6.8409E+03 0.0008     k(col/abs/tk ln)
0.640609 0.0007     0.640539 0.0007
 rem life(abs)   6.7488E+03     6.8416E+03 0.0008     life(col/abs/tl)
6.8431E+03 0.0007   6.8483E+03 0.0006
```

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 source points generated   5062

  estimator     cycle   574   ave of   524 cycles      combination
simple average    combined average     corr
 k(collision)      0.636669       0.640573 0.0007     k(col/abs)
0.640499 0.0007     0.640482 0.0007   0.8561
 k(absorption)     0.640383       0.640426 0.0007     k(abs/tk ln)
0.640606 0.0007     0.640513 0.0007   0.4393
 k(trk length)     0.621955       0.640786 0.0010     k(tk ln/col)
0.640679 0.0007     0.640620 0.0007   0.5396
 rem life(col)   6.8036E+03     6.8408E+03 0.0008     k(col/abs/tk ln)
0.640595 0.0007     0.640530 0.0007
 rem life(abs)   6.7667E+03     6.8415E+03 0.0008     life(col/abs/tl)
6.8430E+03 0.0007   6.8482E+03 0.0006
 source points generated   4862

  estimator     cycle   575   ave of   525 cycles      combination
simple average    combined average     corr
 k(collision)      0.631879       0.640556 0.0007     k(col/abs)
0.640485 0.0007     0.640469 0.0007   0.8561
 k(absorption)     0.634689       0.640415 0.0007     k(abs/tk ln)
0.640601 0.0007     0.640505 0.0007   0.4391
 k(trk length)     0.641166       0.640787 0.0010     k(tk ln/col)
0.640671 0.0007     0.640607 0.0007   0.5392
 rem life(col)   6.8109E+03     6.8407E+03 0.0008     k(col/abs/tk ln)
0.640586 0.0007     0.640520 0.0007
 rem life(abs)   6.8360E+03     6.8415E+03 0.0008     life(col/abs/tl)
6.8430E+03 0.0007   6.8483E+03 0.0006
 source points generated   4937

  estimator     cycle   576   ave of   526 cycles      combination
simple average    combined average     corr
 k(collision)      0.630814       0.640538 0.0007     k(col/abs)
0.640468 0.0007     0.640451 0.0007   0.8563
 k(absorption)     0.631865       0.640398 0.0007     k(abs/tk ln)
0.640599 0.0007     0.640496 0.0007   0.4380
 k(trk length)     0.647327       0.640799 0.0010     k(tk ln/col)
0.640668 0.0007     0.640596 0.0007   0.5379
 rem life(col)   7.0297E+03     6.8411E+03 0.0008     k(col/abs/tk ln)
0.640578 0.0007     0.640510 0.0007
 rem life(abs)   6.9959E+03     6.8418E+03 0.0008     life(col/abs/tl)
6.8433E+03 0.0007   6.8483E+03 0.0006
 source points generated   5015

  estimator     cycle   577   ave of   527 cycles      combination
simple average    combined average     corr
 k(collision)      0.647501       0.640551 0.0007     k(col/abs)
0.640486 0.0007     0.640471 0.0007   0.8563
 k(absorption)     0.652627       0.640422 0.0007     k(abs/tk ln)
0.640611 0.0007     0.640515 0.0007   0.4376
 k(trk length)     0.641839       0.640801 0.0010     k(tk ln/col)
0.640676 0.0007     0.640607 0.0007   0.5378
 rem life(col)   6.9271E+03     6.8413E+03 0.0008     k(col/abs/tk ln)
0.640591 0.0007     0.640527 0.0007
```

```
 rem life(abs)   6.9429E+03     6.8419E+03 0.0008     life(col/abs/tl)
6.8435E+03 0.0007   6.8486E+03 0.0006
 source points generated   5176

  estimator     cycle   578   ave of   528 cycles      combination
simple average    combined average     corr
 k(collision)      0.646884       0.640563 0.0007     k(col/abs)
0.640494 0.0007     0.640478 0.0007   0.8562
 k(absorption)     0.642733       0.640426 0.0007     k(abs/tk ln)
0.640599 0.0007     0.640511 0.0007   0.4366
 k(trk length)     0.625159       0.640772 0.0010     k(tk ln/col)
0.640667 0.0007     0.640610 0.0007   0.5357
 rem life(col)   6.9210E+03     6.8414E+03 0.0008     k(col/abs/tk ln)
0.640587 0.0007     0.640526 0.0007
 rem life(abs)   6.9382E+03     6.8421E+03 0.0008     life(col/abs/tl)
6.8436E+03 0.0007   6.8487E+03 0.0006
 source points generated   5016

  estimator     cycle   579   ave of   529 cycles      combination
simple average    combined average     corr
 k(collision)      0.638295       0.640559 0.0007     k(col/abs)
0.640490 0.0007     0.640474 0.0007   0.8562
 k(absorption)     0.637936       0.640421 0.0007     k(abs/tk ln)
0.640613 0.0007     0.640515 0.0007   0.4354
 k(trk length)     0.657919       0.640804 0.0010     k(tk ln/col)
0.640681 0.0007     0.640614 0.0007   0.5345
 rem life(col)   6.8880E+03     6.8415E+03 0.0008     k(col/abs/tk ln)
0.640595 0.0007     0.640529 0.0007
 rem life(abs)   6.8919E+03     6.8422E+03 0.0008     life(col/abs/tl)
6.8438E+03 0.0007   6.8489E+03 0.0006
 source points generated   4927

  estimator     cycle   580   ave of   530 cycles      combination
simple average    combined average     corr
 k(collision)      0.654670       0.640585 0.0007     k(col/abs)
0.640511 0.0007     0.640493 0.0007   0.8563
 k(absorption)     0.648404       0.640436 0.0007     k(abs/tk ln)
0.640633 0.0007     0.640533 0.0007   0.4362
 k(trk length)     0.654700       0.640830 0.0010     k(tk ln/col)
0.640708 0.0007     0.640640 0.0007   0.5356
 rem life(col)   6.7700E+03     6.8414E+03 0.0008     k(col/abs/tk ln)
0.640617 0.0007     0.640548 0.0007
 rem life(abs)   6.7992E+03     6.8421E+03 0.0008     life(col/abs/tl)
6.8436E+03 0.0007   6.8487E+03 0.0006
 source points generated   5104

  estimator     cycle   581   ave of   531 cycles      combination
simple average    combined average     corr
 k(collision)      0.637697       0.640580 0.0007     k(col/abs)
0.640509 0.0007     0.640491 0.0007   0.8562
 k(absorption)     0.641063       0.640438 0.0007     k(abs/tk ln)
0.640617 0.0007     0.640525 0.0007   0.4354
 k(trk length)     0.622338       0.640795 0.0010     k(tk ln/col)
0.640688 0.0007     0.640628 0.0007   0.5353
```

```
 rem life(col)   6.9042E+03     6.8415E+03 0.0008     k(col/abs/tk ln)
0.640604 0.0007     0.640540 0.0007
 rem life(abs)   6.9217E+03     6.8423E+03 0.0008     life(col/abs/tl)
6.8438E+03 0.0007   6.8488E+03 0.0006
 source points generated   4880

  estimator     cycle   582   ave of   532 cycles      combination
simple average    combined average     corr
 k(collision)      0.639145       0.640577 0.0007     k(col/abs)
0.640499 0.0007     0.640481 0.0007   0.8558
 k(absorption)     0.631845       0.640421 0.0007     k(abs/tk ln)
0.640598 0.0007     0.640507 0.0007   0.4361
 k(trk length)     0.629584       0.640774 0.0010     k(tk ln/col)
0.640676 0.0007     0.640621 0.0007   0.5352
 rem life(col)   6.8132E+03     6.8414E+03 0.0008     k(col/abs/tk ln)
0.640591 0.0007     0.640525 0.0007
 rem life(abs)   6.8487E+03     6.8423E+03 0.0008     life(col/abs/tl)
6.8438E+03 0.0007   6.8488E+03 0.0006
 source points generated   5058

  estimator     cycle   583   ave of   533 cycles      combination
simple average    combined average     corr
 k(collision)      0.632606       0.640562 0.0007     k(col/abs)
0.640500 0.0007     0.640486 0.0007   0.8536
 k(absorption)     0.649191       0.640438 0.0007     k(abs/tk ln)
0.640598 0.0007     0.640516 0.0007   0.4346
 k(trk length)     0.631755       0.640757 0.0010     k(tk ln/col)
0.640660 0.0007     0.640606 0.0007   0.5356
 rem life(col)   6.8431E+03     6.8414E+03 0.0008     k(col/abs/tk ln)
0.640586 0.0007     0.640529 0.0007
 rem life(abs)   6.8283E+03     6.8423E+03 0.0008     life(col/abs/tl)
6.8437E+03 0.0007   6.8488E+03 0.0006
 source points generated   4968

  estimator     cycle   584   ave of   534 cycles      combination
simple average    combined average     corr
 k(collision)      0.623114       0.640529 0.0007     k(col/abs)
0.640475 0.0007     0.640461 0.0007   0.8537
 k(absorption)     0.630855       0.640420 0.0007     k(abs/tk ln)
0.640569 0.0007     0.640492 0.0007   0.4359
 k(trk length)     0.619291       0.640717 0.0010     k(tk ln/col)
0.640623 0.0007     0.640571 0.0007   0.5378
 rem life(col)   7.0438E+03     6.8418E+03 0.0008     k(col/abs/tk ln)
0.640556 0.0007     0.640503 0.0007
 rem life(abs)   7.0449E+03     6.8427E+03 0.0008     life(col/abs/tl)
6.8441E+03 0.0007   6.8492E+03 0.0006
 source points generated   4898

  estimator     cycle   585   ave of   535 cycles      combination
simple average    combined average     corr
 k(collision)      0.633011       0.640515 0.0007     k(col/abs)
0.640465 0.0007     0.640453 0.0007   0.8535
 k(absorption)     0.638028       0.640415 0.0007     k(abs/tk ln)
0.640549 0.0007     0.640480 0.0007   0.4358
```

```
 k(trk length)     0.622296       0.640683 0.0010     k(tk ln/col)
0.640599 0.0007     0.640552 0.0007   0.5384
 rem life(col)   6.9435E+03     6.8420E+03 0.0008     k(col/abs/tk ln)
0.640538 0.0007     0.640490 0.0007
 rem life(abs)   6.8966E+03     6.8428E+03 0.0008     life(col/abs/tl)
6.8443E+03 0.0007   6.8495E+03 0.0006
 source points generated   5100

  estimator     cycle   586   ave of   536 cycles      combination
simple average    combined average     corr
 k(collision)      0.623388       0.640483 0.0007     k(col/abs)
0.640434 0.0007     0.640422 0.0007   0.8542
 k(absorption)     0.623825       0.640385 0.0007     k(abs/tk ln)
0.640534 0.0007     0.640457 0.0007   0.4346
 k(trk length)     0.641365       0.640684 0.0010     k(tk ln/col)
0.640584 0.0007     0.640528 0.0007   0.5369
 rem life(col)   7.0375E+03     6.8424E+03 0.0008     k(col/abs/tk ln)
0.640517 0.0007     0.640466 0.0007
 rem life(abs)   6.9936E+03     6.8430E+03 0.0008     life(col/abs/tl)
6.8446E+03 0.0007   6.8496E+03 0.0006
 source points generated   4905

  estimator     cycle   587   ave of   537 cycles      combination
simple average    combined average     corr
 k(collision)      0.659601       0.640519 0.0007     k(col/abs)
0.640459 0.0007     0.640443 0.0007   0.8538
 k(absorption)     0.648272       0.640399 0.0007     k(abs/tk ln)
0.640566 0.0007     0.640480 0.0007   0.4356
 k(trk length)     0.667348       0.640734 0.0010     k(tk ln/col)
0.640626 0.0007     0.640566 0.0007   0.5398
 rem life(col)   6.8911E+03     6.8425E+03 0.0008     k(col/abs/tk ln)
0.640551 0.0007     0.640491 0.0007
 rem life(abs)   6.9126E+03     6.8432E+03 0.0008     life(col/abs/tl)
6.8446E+03 0.0007   6.8495E+03 0.0006
 source points generated   5287

  estimator     cycle   588   ave of   538 cycles      combination
simple average    combined average     corr
 k(collision)      0.634792       0.640508 0.0007     k(col/abs)
0.640461 0.0007     0.640448 0.0007   0.8524
 k(absorption)     0.647829       0.640413 0.0007     k(abs/tk ln)
0.640574 0.0007     0.640491 0.0007   0.4355
 k(trk length)     0.641460       0.640735 0.0010     k(tk ln/col)
0.640622 0.0007     0.640559 0.0007   0.5396
 rem life(col)   6.8014E+03     6.8424E+03 0.0008     k(col/abs/tk ln)
0.640552 0.0007     0.640498 0.0007
 rem life(abs)   6.7910E+03     6.8431E+03 0.0008     life(col/abs/tl)
6.8445E+03 0.0007   6.8494E+03 0.0006
 source points generated   4845

  estimator     cycle   589   ave of   539 cycles      combination
simple average    combined average     corr
 k(collision)      0.649562       0.640525 0.0007     k(col/abs)
0.640459 0.0007     0.640442 0.0007   0.8493
```

```
 k(absorption)     0.629194       0.640392 0.0007     k(abs/tk ln)
0.640579 0.0007     0.640483 0.0007   0.4320
 k(trk length)     0.657831       0.640767 0.0010     k(tk ln/col)
0.640646 0.0007     0.640578 0.0007   0.5404
 rem life(col)   6.9736E+03     6.8426E+03 0.0008     k(col/abs/tk ln)
0.640561 0.0007     0.640495 0.0007
 rem life(abs)   7.0129E+03     6.8434E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8497E+03 0.0006
 source points generated   5126

  estimator     cycle   590   ave of   540 cycles      combination
simple average    combined average     corr
 k(collision)      0.652077       0.640547 0.0007     k(col/abs)
0.640480 0.0007     0.640464 0.0007   0.8496
 k(absorption)     0.652151       0.640414 0.0007     k(abs/tk ln)
0.640591 0.0007     0.640500 0.0007   0.4316
 k(trk length)     0.641474       0.640768 0.0010     k(tk ln/col)
0.640657 0.0007     0.640596 0.0007   0.5399
 rem life(col)   6.8134E+03     6.8426E+03 0.0008     k(col/abs/tk ln)
0.640576 0.0007     0.640513 0.0007
 rem life(abs)   6.8182E+03     6.8433E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8498E+03 0.0006
 source points generated   4982

  estimator     cycle   591   ave of   541 cycles      combination
simple average    combined average     corr
 k(collision)      0.628422       0.640524 0.0007     k(col/abs)
0.640464 0.0007     0.640449 0.0007   0.8494
 k(absorption)     0.635248       0.640404 0.0007     k(abs/tk ln)
0.640575 0.0007     0.640487 0.0007   0.4320
 k(trk length)     0.628284       0.640745 0.0010     k(tk ln/col)
0.640635 0.0007     0.640573 0.0007   0.5407
 rem life(col)   6.9439E+03     6.8428E+03 0.0008     k(col/abs/tk ln)
0.640558 0.0007     0.640498 0.0007
 rem life(abs)   6.9058E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8501E+03 0.0006
 source points generated   4852

  estimator     cycle   592   ave of   542 cycles      combination
simple average    combined average     corr
 k(collision)      0.643999       0.640530 0.0007     k(col/abs)
0.640459 0.0007     0.640441 0.0007   0.8482
 k(absorption)     0.631277       0.640388 0.0007     k(abs/tk ln)
0.640579 0.0007     0.640481 0.0007   0.4297
 k(trk length)     0.654704       0.640771 0.0009     k(tk ln/col)
0.640651 0.0007     0.640584 0.0007   0.5408
 rem life(col)   7.2032E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640563 0.0007     0.640494 0.0007
 rem life(abs)   7.2081E+03     6.8441E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8502E+03 0.0006
 source points generated   5128

  estimator     cycle   593   ave of   543 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.646632       0.640542 0.0007     k(col/abs)
0.640472 0.0007     0.640454 0.0007   0.8483
 k(absorption)     0.648223       0.640402 0.0007     k(abs/tk ln)
0.640581 0.0007     0.640490 0.0007   0.4289
 k(trk length)     0.635388       0.640761 0.0009     k(tk ln/col)
0.640651 0.0007     0.640590 0.0007   0.5402
 rem life(col)   6.9334E+03     6.8436E+03 0.0008     k(col/abs/tk ln)
0.640568 0.0007     0.640503 0.0007
 rem life(abs)   6.9040E+03     6.8442E+03 0.0008     life(col/abs/tl)
6.8456E+03 0.0007   6.8503E+03 0.0006
 source points generated   5084

  estimator     cycle   594   ave of   544 cycles      combination
simple average    combined average     corr
 k(collision)      0.646101       0.640552 0.0007     k(col/abs)
0.640479 0.0007     0.640461 0.0007   0.8483
 k(absorption)     0.642704       0.640406 0.0007     k(abs/tk ln)
0.640575 0.0007     0.640489 0.0007   0.4284
 k(trk length)     0.631670       0.640744 0.0009     k(tk ln/col)
0.640648 0.0007     0.640595 0.0007   0.5392
 rem life(col)   6.8011E+03     6.8435E+03 0.0008     k(col/abs/tk ln)
0.640567 0.0007     0.640504 0.0007
 rem life(abs)   6.8230E+03     6.8442E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8501E+03 0.0006
 source points generated   4970

  estimator     cycle   595   ave of   545 cycles      combination
simple average    combined average     corr
 k(collision)      0.629445       0.640532 0.0007     k(col/abs)
0.640464 0.0007     0.640446 0.0007   0.8483
 k(absorption)     0.634671       0.640396 0.0007     k(abs/tk ln)
0.640550 0.0007     0.640471 0.0007   0.4289
 k(trk length)     0.619234       0.640705 0.0009     k(tk ln/col)
0.640618 0.0007     0.640570 0.0007   0.5404
 rem life(col)   6.8473E+03     6.8435E+03 0.0008     k(col/abs/tk ln)
0.640544 0.0007     0.640485 0.0007
 rem life(abs)   6.7998E+03     6.8441E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8499E+03 0.0006
 source points generated   4905

  estimator     cycle   596   ave of   546 cycles      combination
simple average    combined average     corr
 k(collision)      0.628430       0.640509 0.0007     k(col/abs)
0.640447 0.0007     0.640431 0.0007   0.8482
 k(absorption)     0.634339       0.640385 0.0007     k(abs/tk ln)
0.640531 0.0007     0.640456 0.0007   0.4295
 k(trk length)     0.625950       0.640678 0.0009     k(tk ln/col)
0.640594 0.0007     0.640546 0.0007   0.5414
 rem life(col)   6.7826E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640524 0.0007     0.640468 0.0007
 rem life(abs)   6.7794E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8499E+03 0.0006
 source points generated   5021
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```
  estimator     cycle   597   ave of   547 cycles      combination
simple average    combined average     corr
 k(collision)      0.633883       0.640497 0.0007     k(col/abs)
0.640437 0.0007     0.640421 0.0007   0.8483
 k(absorption)     0.636279       0.640377 0.0007     k(abs/tk ln)
0.640515 0.0007     0.640444 0.0007   0.4298
 k(trk length)     0.627023       0.640653 0.0009     k(tk ln/col)
0.640575 0.0007     0.640531 0.0007   0.5418
 rem life(col)   6.7776E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640509 0.0007     0.640456 0.0007
 rem life(abs)   6.7800E+03     6.8439E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8500E+03 0.0006
 source points generated   5013

  estimator     cycle   598   ave of   548 cycles      combination
simple average    combined average     corr
 k(collision)      0.629059       0.640476 0.0007     k(col/abs)
0.640419 0.0007     0.640404 0.0007   0.8485
 k(absorption)     0.631624       0.640361 0.0007     k(abs/tk ln)
0.640498 0.0007     0.640427 0.0007   0.4303
 k(trk length)     0.631185       0.640635 0.0009     k(tk ln/col)
0.640556 0.0007     0.640511 0.0007   0.5424
 rem life(col)   6.8266E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640491 0.0007     0.640439 0.0007
 rem life(abs)   6.8186E+03     6.8438E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8500E+03 0.0006
 source points generated   4923

  estimator     cycle   599   ave of   549 cycles      combination
simple average    combined average     corr
 k(collision)      0.631043       0.640459 0.0007     k(col/abs)
0.640405 0.0007     0.640390 0.0007   0.8486
 k(absorption)     0.634166       0.640350 0.0007     k(abs/tk ln)
0.640485 0.0007     0.640415 0.0007   0.4307
 k(trk length)     0.632492       0.640621 0.0009     k(tk ln/col)
0.640540 0.0007     0.640495 0.0007   0.5427
 rem life(col)   6.7744E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640477 0.0007     0.640425 0.0007
 rem life(abs)   6.7637E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8500E+03 0.0006
 source points generated   4996

  estimator     cycle   600   ave of   550 cycles      combination
simple average    combined average     corr
 k(collision)      0.636381       0.640452 0.0007     k(col/abs)
0.640393 0.0007     0.640377 0.0007   0.8485
 k(absorption)     0.631589       0.640334 0.0007     k(abs/tk ln)
0.640468 0.0007     0.640399 0.0007   0.4313
 k(trk length)     0.630409       0.640602 0.0009     k(tk ln/col)
0.640527 0.0007     0.640485 0.0007   0.5429
 rem life(col)   7.0010E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640463 0.0007     0.640410 0.0007
 rem life(abs)   7.0161E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8500E+03 0.0006
```

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 source points generated   5034

  estimator     cycle   601   ave of   551 cycles      combination
simple average    combined average     corr
 k(collision)      0.640259       0.640451 0.0007     k(col/abs)
0.640391 0.0007     0.640375 0.0007   0.8485
 k(absorption)     0.638742       0.640331 0.0007     k(abs/tk ln)
0.640469 0.0007     0.640398 0.0007   0.4313
 k(trk length)     0.643236       0.640607 0.0009     k(tk ln/col)
0.640529 0.0007     0.640486 0.0007   0.5429
 rem life(col)   6.8205E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640463 0.0007     0.640410 0.0006
 rem life(abs)   6.8288E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8503E+03 0.0006
 source points generated   5037

  estimator     cycle   602   ave of   552 cycles      combination
simple average    combined average     corr
 k(collision)      0.629530       0.640432 0.0007     k(col/abs)
0.640368 0.0007     0.640352 0.0007   0.8487
 k(absorption)     0.626013       0.640305 0.0007     k(abs/tk ln)
0.640439 0.0007     0.640370 0.0007   0.4332
 k(trk length)     0.621728       0.640573 0.0009     k(tk ln/col)
0.640502 0.0007     0.640462 0.0007   0.5440
 rem life(col)   6.7155E+03     6.8432E+03 0.0008     k(col/abs/tk ln)
0.640436 0.0007     0.640383 0.0006
 rem life(abs)   6.7359E+03     6.8438E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8503E+03 0.0006
 source points generated   4930

  estimator     cycle   603   ave of   553 cycles      combination
simple average    combined average     corr
 k(collision)      0.629815       0.640412 0.0007     k(col/abs)
0.640356 0.0007     0.640341 0.0007   0.8485
 k(absorption)     0.636714       0.640299 0.0007     k(abs/tk ln)
0.640415 0.0007     0.640354 0.0007   0.4331
 k(trk length)     0.617465       0.640531 0.0009     k(tk ln/col)
0.640472 0.0007     0.640438 0.0007   0.5451
 rem life(col)   6.7044E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640414 0.0007     0.640366 0.0006
 rem life(abs)   6.7071E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8451E+03 0.0007   6.8503E+03 0.0006
 source points generated   5024

  estimator     cycle   604   ave of   554 cycles      combination
simple average    combined average     corr
 k(collision)      0.638459       0.640409 0.0007     k(col/abs)
0.640359 0.0007     0.640346 0.0007   0.8480
 k(absorption)     0.646515       0.640310 0.0007     k(abs/tk ln)
0.640419 0.0007     0.640362 0.0007   0.4328
 k(trk length)     0.638944       0.640528 0.0009     k(tk ln/col)
0.640468 0.0007     0.640435 0.0007   0.5451
 rem life(col)   6.9614E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640416 0.0007     0.640372 0.0006
```

```
 rem life(abs)   6.9210E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8504E+03 0.0006
 source points generated   5096

  estimator     cycle   605   ave of   555 cycles      combination
simple average    combined average     corr
 k(collision)      0.642596       0.640413 0.0007     k(col/abs)
0.640362 0.0007     0.640349 0.0007   0.8480
 k(absorption)     0.641326       0.640312 0.0007     k(abs/tk ln)
0.640434 0.0007     0.640370 0.0006   0.4325
 k(trk length)     0.656690       0.640557 0.0009     k(tk ln/col)
0.640485 0.0007     0.640444 0.0007   0.5449
 rem life(col)   6.9522E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640427 0.0007     0.640380 0.0006
 rem life(abs)   6.9252E+03     6.8438E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8505E+03 0.0006
 source points generated   5000

  estimator     cycle   606   ave of   556 cycles      combination
simple average    combined average     corr
 k(collision)      0.648179       0.640427 0.0007     k(col/abs)
0.640376 0.0007     0.640362 0.0007   0.8482
 k(absorption)     0.647523       0.640325 0.0007     k(abs/tk ln)
0.640439 0.0007     0.640379 0.0006   0.4321
 k(trk length)     0.638171       0.640553 0.0009     k(tk ln/col)
0.640490 0.0007     0.640454 0.0007   0.5444
 rem life(col)   6.9035E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640435 0.0007     0.640390 0.0006
 rem life(abs)   6.8944E+03     6.8439E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8506E+03 0.0006
 source points generated   5007

  estimator     cycle   607   ave of   557 cycles      combination
simple average    combined average     corr
 k(collision)      0.647414       0.640439 0.0007     k(col/abs)
0.640384 0.0007     0.640370 0.0007   0.8481
 k(absorption)     0.642962       0.640329 0.0007     k(abs/tk ln)
0.640462 0.0007     0.640393 0.0006   0.4318
 k(trk length)     0.664280       0.640595 0.0009     k(tk ln/col)
0.640517 0.0007     0.640473 0.0007   0.5448
 rem life(col)   6.6402E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640455 0.0007     0.640403 0.0006
 rem life(abs)   6.6698E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8504E+03 0.0006
 source points generated   5006

  estimator     cycle   608   ave of   558 cycles      combination
simple average    combined average     corr
 k(collision)      0.658272       0.640471 0.0007     k(col/abs)
0.640405 0.0007     0.640386 0.0007   0.8472
 k(absorption)     0.645284       0.640338 0.0007     k(abs/tk ln)
0.640462 0.0007     0.640397 0.0006   0.4313
 k(trk length)     0.634898       0.640585 0.0009     k(tk ln/col)
0.640528 0.0007     0.640496 0.0007   0.5421
```

```
 rem life(col)   6.7065E+03     6.8428E+03 0.0008     k(col/abs/tk ln)
0.640465 0.0007     0.640412 0.0006
 rem life(abs)   6.7399E+03     6.8434E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8503E+03 0.0006
 source points generated   5040

  estimator     cycle   609   ave of   559 cycles      combination
simple average    combined average     corr
 k(collision)      0.630255       0.640453 0.0007     k(col/abs)
0.640396 0.0007     0.640380 0.0007   0.8465
 k(absorption)     0.640640       0.640339 0.0007     k(abs/tk ln)
0.640449 0.0007     0.640391 0.0006   0.4308
 k(trk length)     0.625697       0.640559 0.0009     k(tk ln/col)
0.640506 0.0007     0.640476 0.0007   0.5429
 rem life(col)   6.7656E+03     6.8427E+03 0.0008     k(col/abs/tk ln)
0.640450 0.0007     0.640403 0.0006
 rem life(abs)   6.7615E+03     6.8433E+03 0.0008     life(col/abs/tl)
6.8449E+03 0.0007   6.8502E+03 0.0006
 source points generated   4793

  estimator     cycle   610   ave of   560 cycles      combination
simple average    combined average     corr
 k(collision)      0.618070       0.640413 0.0007     k(col/abs)
0.640363 0.0007     0.640348 0.0007   0.8470
 k(absorption)     0.625636       0.640313 0.0007     k(abs/tk ln)
0.640400 0.0007     0.640353 0.0006   0.4341
 k(trk length)     0.601205       0.640488 0.0009     k(tk ln/col)
0.640451 0.0007     0.640429 0.0007   0.5474
 rem life(col)   7.1318E+03     6.8432E+03 0.0008     k(col/abs/tk ln)
0.640405 0.0007     0.640364 0.0006
 rem life(abs)   7.0806E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8504E+03 0.0006
 source points generated   4945

  estimator     cycle   611   ave of   561 cycles      combination
simple average    combined average     corr
 k(collision)      0.623160       0.640382 0.0007     k(col/abs)
0.640330 0.0007     0.640314 0.0007   0.8478
 k(absorption)     0.620392       0.640277 0.0007     k(abs/tk ln)
0.640366 0.0007     0.640318 0.0006   0.4365
 k(trk length)     0.621985       0.640455 0.0009     k(tk ln/col)
0.640419 0.0007     0.640398 0.0007   0.5490
 rem life(col)   7.0701E+03     6.8436E+03 0.0008     k(col/abs/tk ln)
0.640372 0.0007     0.640330 0.0006
 rem life(abs)   7.0731E+03     6.8441E+03 0.0008     life(col/abs/tl)
6.8457E+03 0.0007   6.8508E+03 0.0006
 source points generated   5033

  estimator     cycle   612   ave of   562 cycles      combination
simple average    combined average     corr
 k(collision)      0.647069       0.640394 0.0007     k(col/abs)
0.640341 0.0007     0.640326 0.0007   0.8479
 k(absorption)     0.646661       0.640288 0.0007     k(abs/tk ln)
0.640354 0.0007     0.640319 0.0006   0.4340
```

```
 k(trk length)     0.620591       0.640420 0.0009     k(tk ln/col)
0.640407 0.0007     0.640400 0.0007   0.5464
 rem life(col)   6.8156E+03     6.8435E+03 0.0008     k(col/abs/tk ln)
0.640368 0.0007     0.640332 0.0006
 rem life(abs)   6.8153E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8457E+03 0.0007   6.8507E+03 0.0006
 source points generated   5215

  estimator     cycle   613   ave of   563 cycles      combination
simple average    combined average     corr
 k(collision)      0.631139       0.640378 0.0007     k(col/abs)
0.640326 0.0007     0.640311 0.0007   0.8480
 k(absorption)     0.632721       0.640275 0.0007     k(abs/tk ln)
0.640340 0.0007     0.640305 0.0006   0.4345
 k(trk length)     0.631498       0.640404 0.0009     k(tk ln/col)
0.640391 0.0007     0.640383 0.0007   0.5468
 rem life(col)   6.6851E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640352 0.0007     0.640318 0.0006
 rem life(abs)   6.6864E+03     6.8438E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8506E+03 0.0006
 source points generated   4904

  estimator     cycle   614   ave of   564 cycles      combination
simple average    combined average     corr
 k(collision)      0.623923       0.640349 0.0007     k(col/abs)
0.640298 0.0007     0.640284 0.0007   0.8486
 k(absorption)     0.625225       0.640248 0.0007     k(abs/tk ln)
0.640296 0.0007     0.640270 0.0006   0.4376
 k(trk length)     0.606631       0.640344 0.0009     k(tk ln/col)
0.640346 0.0007     0.640348 0.0007   0.5493
 rem life(col)   6.8010E+03     6.8432E+03 0.0008     k(col/abs/tk ln)
0.640314 0.0007     0.640284 0.0006
 rem life(abs)   6.8035E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8505E+03 0.0006
 source points generated   4956

  estimator     cycle   615   ave of   565 cycles      combination
simple average    combined average     corr
 k(collision)      0.639903       0.640348 0.0007     k(col/abs)
0.640298 0.0007     0.640284 0.0007   0.8486
 k(absorption)     0.640292       0.640248 0.0007     k(abs/tk ln)
0.640305 0.0007     0.640275 0.0006   0.4374
 k(trk length)     0.650769       0.640363 0.0009     k(tk ln/col)
0.640355 0.0007     0.640351 0.0007   0.5490
 rem life(col)   6.9536E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640320 0.0007     0.640287 0.0006
 rem life(abs)   6.9496E+03     6.8439E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8506E+03 0.0006
 source points generated   5142

  estimator     cycle   616   ave of   566 cycles      combination
simple average    combined average     corr
 k(collision)      0.635862       0.640340 0.0007     k(col/abs)
0.640292 0.0007     0.640278 0.0007   0.8486
```

```
 k(absorption)     0.638105       0.640245 0.0007     k(abs/tk ln)
0.640296 0.0007     0.640268 0.0006   0.4375
 k(trk length)     0.632216       0.640348 0.0009     k(tk ln/col)
0.640344 0.0007     0.640342 0.0007   0.5492
 rem life(col)   6.7380E+03     6.8432E+03 0.0008     k(col/abs/tk ln)
0.640311 0.0007     0.640281 0.0006
 rem life(abs)   6.7412E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8507E+03 0.0006
 source points generated   4975

  estimator     cycle   617   ave of   567 cycles      combination
simple average    combined average     corr
 k(collision)      0.639792       0.640339 0.0007     k(col/abs)
0.640284 0.0007     0.640269 0.0007   0.8482
 k(absorption)     0.631990       0.640230 0.0007     k(abs/tk ln)
0.640296 0.0007     0.640260 0.0006   0.4364
 k(trk length)     0.648067       0.640362 0.0009     k(tk ln/col)
0.640350 0.0007     0.640344 0.0007   0.5490
 rem life(col)   6.7597E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640310 0.0007     0.640274 0.0006
 rem life(abs)   6.7863E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8506E+03 0.0006
 source points generated   5000

  estimator     cycle   618   ave of   568 cycles      combination
simple average    combined average     corr
 k(collision)      0.629560       0.640320 0.0007     k(col/abs)
0.640271 0.0007     0.640257 0.0007   0.8481
 k(absorption)     0.635880       0.640222 0.0007     k(abs/tk ln)
0.640286 0.0007     0.640252 0.0006   0.4366
 k(trk length)     0.633792       0.640350 0.0009     k(tk ln/col)
0.640335 0.0007     0.640326 0.0007   0.5492
 rem life(col)   6.7005E+03     6.8428E+03 0.0008     k(col/abs/tk ln)
0.640298 0.0007     0.640264 0.0006
 rem life(abs)   6.6963E+03     6.8433E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8505E+03 0.0006
 source points generated   4918

  estimator     cycle   619   ave of   569 cycles      combination
simple average    combined average     corr
 k(collision)      0.636784       0.640314 0.0007     k(col/abs)
0.640255 0.0007     0.640238 0.0007   0.8472
 k(absorption)     0.624793       0.640195 0.0007     k(abs/tk ln)
0.640272 0.0007     0.640231 0.0006   0.4358
 k(trk length)     0.639845       0.640349 0.0009     k(tk ln/col)
0.640332 0.0007     0.640321 0.0007   0.5492
 rem life(col)   6.9754E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640286 0.0007     0.640246 0.0006
 rem life(abs)   6.9975E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8505E+03 0.0006
 source points generated   5071

  estimator     cycle   620   ave of   570 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.644870       0.640322 0.0007     k(col/abs)
0.640259 0.0007     0.640241 0.0007   0.8471
 k(absorption)     0.640628       0.640196 0.0007     k(abs/tk ln)
0.640285 0.0007     0.640237 0.0006   0.4355
 k(trk length)     0.654274       0.640374 0.0009     k(tk ln/col)
0.640348 0.0007     0.640333 0.0007   0.5494
 rem life(col)   6.8729E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640297 0.0007     0.640253 0.0006
 rem life(abs)   6.8621E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8506E+03 0.0006
 source points generated   5047

  estimator     cycle   621   ave of   571 cycles      combination
simple average    combined average     corr
 k(collision)      0.644209       0.640329 0.0007     k(col/abs)
0.640261 0.0007     0.640242 0.0007   0.8469
 k(absorption)     0.639119       0.640194 0.0007     k(abs/tk ln)
0.640300 0.0007     0.640243 0.0006   0.4347
 k(trk length)     0.658135       0.640405 0.0009     k(tk ln/col)
0.640367 0.0007     0.640344 0.0007   0.5494
 rem life(col)   6.7163E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640309 0.0007     0.640259 0.0006
 rem life(abs)   6.7368E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8451E+03 0.0007   6.8505E+03 0.0006
 source points generated   4957

  estimator     cycle   622   ave of   572 cycles      combination
simple average    combined average     corr
 k(collision)      0.641961       0.640331 0.0007     k(col/abs)
0.640253 0.0007     0.640232 0.0007   0.8457
 k(absorption)     0.629003       0.640175 0.0007     k(abs/tk ln)
0.640303 0.0007     0.640234 0.0006   0.4317
 k(trk length)     0.655929       0.640432 0.0009     k(tk ln/col)
0.640382 0.0007     0.640352 0.0007   0.5491
 rem life(col)   6.8755E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640313 0.0007     0.640253 0.0006
 rem life(abs)   6.9081E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8504E+03 0.0006
 source points generated   4956

  estimator     cycle   623   ave of   573 cycles      combination
simple average    combined average     corr
 k(collision)      0.637631       0.640327 0.0007     k(col/abs)
0.640249 0.0007     0.640228 0.0007   0.8457
 k(absorption)     0.638186       0.640171 0.0007     k(abs/tk ln)
0.640290 0.0007     0.640226 0.0006   0.4317
 k(trk length)     0.627319       0.640409 0.0009     k(tk ln/col)
0.640368 0.0007     0.640344 0.0007   0.5490
 rem life(col)   6.7911E+03     6.8428E+03 0.0008     k(col/abs/tk ln)
0.640302 0.0007     0.640245 0.0006
 rem life(abs)   6.7764E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8503E+03 0.0006
 source points generated   4929
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```
  estimator     cycle   624   ave of   574 cycles      combination
simple average    combined average     corr
 k(collision)      0.658115       0.640358 0.0007     k(col/abs)
0.640268 0.0007     0.640243 0.0007   0.8448
 k(absorption)     0.644507       0.640179 0.0007     k(abs/tk ln)
0.640289 0.0007     0.640229 0.0006   0.4313
 k(trk length)     0.634453       0.640399 0.0009     k(tk ln/col)
0.640378 0.0007     0.640366 0.0007   0.5464
 rem life(col)   6.9422E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640312 0.0007     0.640253 0.0006
 rem life(abs)   6.9474E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8503E+03 0.0006
 source points generated   5130

  estimator     cycle   625   ave of   575 cycles      combination
simple average    combined average     corr
 k(collision)      0.627432       0.640335 0.0007     k(col/abs)
0.640250 0.0007     0.640225 0.0007   0.8449
 k(absorption)     0.631773       0.640164 0.0007     k(abs/tk ln)
0.640271 0.0007     0.640213 0.0006   0.4319
 k(trk length)     0.628371       0.640378 0.0009     k(tk ln/col)
0.640357 0.0007     0.640344 0.0007   0.5472
 rem life(col)   6.9170E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640292 0.0007     0.640235 0.0006
 rem life(abs)   6.9263E+03     6.8438E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8505E+03 0.0006
 source points generated   4760

  estimator     cycle   626   ave of   576 cycles      combination
simple average    combined average     corr
 k(collision)      0.628988       0.640316 0.0007     k(col/abs)
0.640229 0.0007     0.640204 0.0007   0.8453
 k(absorption)     0.627814       0.640143 0.0007     k(abs/tk ln)
0.640268 0.0007     0.640201 0.0006   0.4298
 k(trk length)     0.649770       0.640394 0.0009     k(tk ln/col)
0.640355 0.0007     0.640332 0.0007   0.5452
 rem life(col)   6.9575E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640284 0.0007     0.640222 0.0006
 rem life(abs)   6.9827E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8506E+03 0.0006
 source points generated   5009

  estimator     cycle   627   ave of   577 cycles      combination
simple average    combined average     corr
 k(collision)      0.652487       0.640337 0.0007     k(col/abs)
0.640249 0.0007     0.640223 0.0007   0.8455
 k(absorption)     0.650446       0.640160 0.0007     k(abs/tk ln)
0.640259 0.0007     0.640206 0.0006   0.4260
 k(trk length)     0.618831       0.640357 0.0009     k(tk ln/col)
0.640347 0.0007     0.640341 0.0007   0.5406
 rem life(col)   6.8356E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640285 0.0006     0.640229 0.0006
 rem life(abs)   6.8378E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8504E+03 0.0006
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 source points generated   5186

  estimator     cycle   628   ave of   578 cycles      combination
simple average    combined average     corr
 k(collision)      0.614821       0.640292 0.0007     k(col/abs)
0.640211 0.0007     0.640186 0.0007   0.8464
 k(absorption)     0.622257       0.640129 0.0007     k(abs/tk ln)
0.640216 0.0007     0.640169 0.0006   0.4297
 k(trk length)     0.608976       0.640303 0.0009     k(tk ln/col)
0.640298 0.0007     0.640295 0.0007   0.5447
 rem life(col)   6.9247E+03     6.8435E+03 0.0008     k(col/abs/tk ln)
0.640241 0.0007     0.640190 0.0006
 rem life(abs)   6.9120E+03     6.8441E+03 0.0008     life(col/abs/tl)
6.8456E+03 0.0007   6.8506E+03 0.0006
 source points generated   4717

  estimator     cycle   629   ave of   579 cycles      combination
simple average    combined average     corr
 k(collision)      0.628834       0.640273 0.0007     k(col/abs)
0.640189 0.0007     0.640163 0.0007   0.8467
 k(absorption)     0.625661       0.640104 0.0007     k(abs/tk ln)
0.640189 0.0007     0.640143 0.0006   0.4313
 k(trk length)     0.623423       0.640273 0.0009     k(tk ln/col)
0.640273 0.0007     0.640273 0.0007   0.5457
 rem life(col)   6.8626E+03     6.8435E+03 0.0008     k(col/abs/tk ln)
0.640217 0.0007     0.640165 0.0006
 rem life(abs)   6.8665E+03     6.8442E+03 0.0008     life(col/abs/tl)
6.8457E+03 0.0007   6.8507E+03 0.0006
 source points generated   5129

  estimator     cycle   630   ave of   580 cycles      combination
simple average    combined average     corr
 k(collision)      0.631760       0.640258 0.0007     k(col/abs)
0.640175 0.0007     0.640150 0.0007   0.8468
 k(absorption)     0.632741       0.640092 0.0007     k(abs/tk ln)
0.640166 0.0007     0.640126 0.0006   0.4321
 k(trk length)     0.621053       0.640240 0.0009     k(tk ln/col)
0.640249 0.0007     0.640254 0.0007   0.5463
 rem life(col)   6.7403E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640197 0.0007     0.640148 0.0006
 rem life(abs)   6.7290E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8505E+03 0.0006
 source points generated   5007

  estimator     cycle   631   ave of   581 cycles      combination
simple average    combined average     corr
 k(collision)      0.627004       0.640235 0.0007     k(col/abs)
0.640154 0.0007     0.640129 0.0007   0.8472
 k(absorption)     0.628513       0.640072 0.0007     k(abs/tk ln)
0.640127 0.0007     0.640097 0.0006   0.4341
 k(trk length)     0.606947       0.640183 0.0009     k(tk ln/col)
0.640209 0.0007     0.640225 0.0007   0.5480
 rem life(col)   6.7363E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640163 0.0007     0.640120 0.0006
```

```
 rem life(abs)   6.7352E+03     6.8438E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8504E+03 0.0005
 source points generated   4928

  estimator     cycle   632   ave of   582 cycles      combination
simple average    combined average     corr
 k(collision)      0.654719       0.640260 0.0007     k(col/abs)
0.640167 0.0007     0.640138 0.0007   0.8462
 k(absorption)     0.641550       0.640074 0.0007     k(abs/tk ln)
0.640140 0.0007     0.640104 0.0006   0.4340
 k(trk length)     0.653804       0.640206 0.0009     k(tk ln/col)
0.640233 0.0007     0.640249 0.0007   0.5489
 rem life(col)   6.7164E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640180 0.0007     0.640129 0.0006
 rem life(abs)   6.7549E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8451E+03 0.0007   6.8502E+03 0.0005
 source points generated   5269

  estimator     cycle   633   ave of   583 cycles      combination
simple average    combined average     corr
 k(collision)      0.629029       0.640241 0.0007     k(col/abs)
0.640151 0.0007     0.640123 0.0007   0.8463
 k(absorption)     0.632519       0.640061 0.0007     k(abs/tk ln)
0.640131 0.0007     0.640093 0.0006   0.4341
 k(trk length)     0.636506       0.640200 0.0009     k(tk ln/col)
0.640220 0.0007     0.640232 0.0007   0.5488
 rem life(col)   7.0825E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640167 0.0007     0.640116 0.0006
 rem life(abs)   7.0137E+03     6.8439E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8504E+03 0.0005
 source points generated   4849

  estimator     cycle   634   ave of   584 cycles      combination
simple average    combined average     corr
 k(collision)      0.640007       0.640240 0.0007     k(col/abs)
0.640153 0.0007     0.640125 0.0007   0.8463
 k(absorption)     0.642275       0.640065 0.0007     k(abs/tk ln)
0.640124 0.0007     0.640092 0.0006   0.4336
 k(trk length)     0.629711       0.640182 0.0009     k(tk ln/col)
0.640211 0.0007     0.640228 0.0007   0.5486
 rem life(col)   6.7973E+03     6.8432E+03 0.0008     k(col/abs/tk ln)
0.640163 0.0007     0.640115 0.0006
 rem life(abs)   6.8154E+03     6.8439E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8503E+03 0.0005
 source points generated   5055

  estimator     cycle   635   ave of   585 cycles      combination
simple average    combined average     corr
 k(collision)      0.654086       0.640264 0.0007     k(col/abs)
0.640165 0.0007     0.640133 0.0007   0.8451
 k(absorption)     0.640291       0.640066 0.0007     k(abs/tk ln)
0.640128 0.0007     0.640094 0.0006   0.4336
 k(trk length)     0.644923       0.640190 0.0009     k(tk ln/col)
0.640227 0.0007     0.640249 0.0007   0.5485
```

```
 rem life(col)   6.8816E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640173 0.0006     0.640120 0.0006
 rem life(abs)   6.9447E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8503E+03 0.0005
 source points generated   5088

  estimator     cycle   636   ave of   586 cycles      combination
simple average    combined average     corr
 k(collision)      0.628393       0.640244 0.0007     k(col/abs)
0.640154 0.0007     0.640124 0.0006   0.8445
 k(absorption)     0.638823       0.640063 0.0007     k(abs/tk ln)
0.640117 0.0007     0.640087 0.0006   0.4335
 k(trk length)     0.628509       0.640170 0.0009     k(tk ln/col)
0.640207 0.0007     0.640229 0.0007   0.5492
 rem life(col)   6.8159E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640159 0.0006     0.640111 0.0006
 rem life(abs)   6.7961E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8502E+03 0.0005
 source points generated   4809

  estimator     cycle   637   ave of   587 cycles      combination
simple average    combined average     corr
 k(collision)      0.639037       0.640242 0.0007     k(col/abs)
0.640157 0.0007     0.640129 0.0006   0.8442
 k(absorption)     0.644711       0.640071 0.0007     k(abs/tk ln)
0.640108 0.0007     0.640088 0.0006   0.4322
 k(trk length)     0.625060       0.640144 0.0009     k(tk ln/col)
0.640193 0.0007     0.640222 0.0007   0.5488
 rem life(col)   6.6028E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640153 0.0006     0.640111 0.0006
 rem life(abs)   6.5947E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8501E+03 0.0005
 source points generated   5113

  estimator     cycle   638   ave of   588 cycles      combination
simple average    combined average     corr
 k(collision)      0.623978       0.640214 0.0007     k(col/abs)
0.640139 0.0006     0.640113 0.0006   0.8437
 k(absorption)     0.635164       0.640063 0.0007     k(abs/tk ln)
0.640097 0.0007     0.640078 0.0006   0.4325
 k(trk length)     0.632695       0.640132 0.0009     k(tk ln/col)
0.640173 0.0007     0.640197 0.0007   0.5490
 rem life(col)   6.9475E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640136 0.0006     0.640098 0.0006
 rem life(abs)   6.9510E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8502E+03 0.0005
 source points generated   4876

  estimator     cycle   639   ave of   589 cycles      combination
simple average    combined average     corr
 k(collision)      0.632791       0.640202 0.0007     k(col/abs)
0.640126 0.0006     0.640101 0.0006   0.8438
 k(absorption)     0.632708       0.640051 0.0007     k(abs/tk ln)
0.640078 0.0007     0.640063 0.0006   0.4332
```

```
 k(trk length)     0.624559       0.640105 0.0009     k(tk ln/col)
0.640153 0.0007     0.640182 0.0007   0.5495
 rem life(col)   6.7058E+03     6.8428E+03 0.0008     k(col/abs/tk ln)
0.640119 0.0006     0.640083 0.0006
 rem life(abs)   6.6937E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8502E+03 0.0005
 source points generated   5091

  estimator     cycle   640   ave of   590 cycles      combination
simple average    combined average     corr
 k(collision)      0.634793       0.640192 0.0007     k(col/abs)
0.640115 0.0006     0.640089 0.0006   0.8438
 k(absorption)     0.632594       0.640038 0.0007     k(abs/tk ln)
0.640060 0.0007     0.640048 0.0006   0.4338
 k(trk length)     0.626814       0.640083 0.0009     k(tk ln/col)
0.640138 0.0007     0.640170 0.0007   0.5498
 rem life(col)   6.7930E+03     6.8427E+03 0.0008     k(col/abs/tk ln)
0.640104 0.0006     0.640069 0.0006
 rem life(abs)   6.7950E+03     6.8434E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8502E+03 0.0005
 source points generated   5043

  estimator     cycle   641   ave of   591 cycles      combination
simple average    combined average     corr
 k(collision)      0.647173       0.640204 0.0007     k(col/abs)
0.640135 0.0006     0.640112 0.0006   0.8435
 k(absorption)     0.656030       0.640065 0.0007     k(abs/tk ln)
0.640075 0.0007     0.640070 0.0006   0.4332
 k(trk length)     0.641681       0.640086 0.0009     k(tk ln/col)
0.640145 0.0007     0.640180 0.0007   0.5497
 rem life(col)   6.7017E+03     6.8425E+03 0.0008     k(col/abs/tk ln)
0.640118 0.0006     0.640090 0.0006
 rem life(abs)   6.6709E+03     6.8431E+03 0.0008     life(col/abs/tl)
6.8447E+03 0.0007   6.8500E+03 0.0005
 source points generated   5097

  estimator     cycle   642   ave of   592 cycles      combination
simple average    combined average     corr
 k(collision)      0.640512       0.640205 0.0007     k(col/abs)
0.640131 0.0006     0.640107 0.0006   0.8433
 k(absorption)     0.635323       0.640057 0.0007     k(abs/tk ln)
0.640090 0.0007     0.640072 0.0006   0.4310
 k(trk length)     0.662766       0.640124 0.0009     k(tk ln/col)
0.640164 0.0007     0.640188 0.0007   0.5486
 rem life(col)   6.7122E+03     6.8423E+03 0.0008     k(col/abs/tk ln)
0.640129 0.0006     0.640092 0.0006
 rem life(abs)   6.7320E+03     6.8429E+03 0.0008     life(col/abs/tl)
6.8445E+03 0.0007   6.8499E+03 0.0005
 source points generated   4988

  estimator     cycle   643   ave of   593 cycles      combination
simple average    combined average     corr
 k(collision)      0.633628       0.640194 0.0007     k(col/abs)
0.640111 0.0006     0.640086 0.0006   0.8428
```

```
 k(absorption)     0.623147       0.640028 0.0007     k(abs/tk ln)
0.640072 0.0007     0.640048 0.0006   0.4308
 k(trk length)     0.635533       0.640116 0.0009     k(tk ln/col)
0.640155 0.0007     0.640178 0.0007   0.5487
 rem life(col)   7.0130E+03     6.8425E+03 0.0008     k(col/abs/tk ln)
0.640113 0.0006     0.640072 0.0006
 rem life(abs)   7.0494E+03     6.8432E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8502E+03 0.0005
 source points generated   4890

  estimator     cycle   644   ave of   594 cycles      combination
simple average    combined average     corr
 k(collision)      0.624723       0.640168 0.0007     k(col/abs)
0.640094 0.0006     0.640070 0.0006   0.8424
 k(absorption)     0.634753       0.640020 0.0007     k(abs/tk ln)
0.640057 0.0007     0.640037 0.0006   0.4312
 k(trk length)     0.627327       0.640095 0.0009     k(tk ln/col)
0.640131 0.0007     0.640153 0.0007   0.5495
 rem life(col)   6.7803E+03     6.8424E+03 0.0008     k(col/abs/tk ln)
0.640094 0.0006     0.640057 0.0006
 rem life(abs)   6.7471E+03     6.8431E+03 0.0008     life(col/abs/tl)
6.8447E+03 0.0007   6.8500E+03 0.0005
 source points generated   4907

  estimator     cycle   645   ave of   595 cycles      combination
simple average    combined average     corr
 k(collision)      0.626465       0.640145 0.0007     k(col/abs)
0.640078 0.0006     0.640057 0.0006   0.8420
 k(absorption)     0.635740       0.640012 0.0007     k(abs/tk ln)
0.640048 0.0007     0.640028 0.0006   0.4314
 k(trk length)     0.633119       0.640083 0.0009     k(tk ln/col)
0.640114 0.0007     0.640132 0.0007   0.5497
 rem life(col)   6.8196E+03     6.8424E+03 0.0008     k(col/abs/tk ln)
0.640080 0.0006     0.640046 0.0006
 rem life(abs)   6.7964E+03     6.8430E+03 0.0008     life(col/abs/tl)
6.8447E+03 0.0007   6.8500E+03 0.0005
 source points generated   4997

  estimator     cycle   646   ave of   596 cycles      combination
simple average    combined average     corr
 k(collision)      0.635271       0.640136 0.0007     k(col/abs)
0.640075 0.0006     0.640055 0.0006   0.8418
 k(absorption)     0.640985       0.640014 0.0007     k(abs/tk ln)
0.640054 0.0007     0.640032 0.0006   0.4314
 k(trk length)     0.646445       0.640094 0.0009     k(tk ln/col)
0.640115 0.0007     0.640128 0.0007   0.5492
 rem life(col)   6.7826E+03     6.8423E+03 0.0008     k(col/abs/tk ln)
0.640081 0.0006     0.640048 0.0006
 rem life(abs)   6.7892E+03     6.8429E+03 0.0008     life(col/abs/tl)
6.8446E+03 0.0007   6.8500E+03 0.0005
 source points generated   5077

  estimator     cycle   647   ave of   597 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.629808       0.640119 0.0007     k(col/abs)
0.640055 0.0006     0.640034 0.0006   0.8421
 k(absorption)     0.626069       0.639991 0.0007     k(abs/tk ln)
0.640030 0.0007     0.640008 0.0006   0.4327
 k(trk length)     0.625328       0.640069 0.0009     k(tk ln/col)
0.640094 0.0007     0.640109 0.0007   0.5500
 rem life(col)   6.7660E+03     6.8422E+03 0.0008     k(col/abs/tk ln)
0.640059 0.0006     0.640026 0.0006
 rem life(abs)   6.8054E+03     6.8429E+03 0.0008     life(col/abs/tl)
6.8445E+03 0.0007   6.8499E+03 0.0005
 source points generated   4905

  estimator     cycle   648   ave of   598 cycles      combination
simple average    combined average     corr
 k(collision)      0.626429       0.640096 0.0007     k(col/abs)
0.640046 0.0006     0.640029 0.0006   0.8403
 k(absorption)     0.642839       0.639995 0.0007     k(abs/tk ln)
0.639999 0.0007     0.639997 0.0006   0.4287
 k(trk length)     0.600947       0.640003 0.0009     k(tk ln/col)
0.640050 0.0007     0.640078 0.0007   0.5516
 rem life(col)   6.8160E+03     6.8421E+03 0.0008     k(col/abs/tk ln)
0.640032 0.0006     0.640012 0.0006
 rem life(abs)   6.7806E+03     6.8428E+03 0.0008     life(col/abs/tl)
6.8444E+03 0.0007   6.8499E+03 0.0005
 source points generated   4980

  estimator     cycle   649   ave of   599 cycles      combination
simple average    combined average     corr
 k(collision)      0.630631       0.640080 0.0007     k(col/abs)
0.640031 0.0006     0.640015 0.0006   0.8404
 k(absorption)     0.631958       0.639982 0.0007     k(abs/tk ln)
0.639983 0.0007     0.639983 0.0006   0.4293
 k(trk length)     0.628773       0.639985 0.0009     k(tk ln/col)
0.640032 0.0007     0.640061 0.0007   0.5521
 rem life(col)   7.0879E+03     6.8425E+03 0.0008     k(col/abs/tk ln)
0.640016 0.0006     0.639997 0.0006
 rem life(abs)   7.0635E+03     6.8431E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8501E+03 0.0005
 source points generated   5035

  estimator     cycle   650   ave of   600 cycles      combination
simple average    combined average     corr
 k(collision)      0.663842       0.640120 0.0007     k(col/abs)
0.640068 0.0006     0.640051 0.0006   0.8416
 k(absorption)     0.660978       0.640017 0.0007     k(abs/tk ln)
0.640016 0.0007     0.640016 0.0006   0.4315
 k(trk length)     0.657798       0.640014 0.0009     k(tk ln/col)
0.640067 0.0007     0.640099 0.0007   0.5537
 rem life(col)   6.8770E+03     6.8426E+03 0.0008     k(col/abs/tk ln)
0.640050 0.0006     0.640031 0.0006
 rem life(abs)   6.8652E+03     6.8432E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8501E+03 0.0005
 source points generated   5311
```

```
  estimator     cycle   651   ave of   601 cycles      combination
simple average    combined average     corr
 k(collision)      0.639699       0.640119 0.0007     k(col/abs)
0.640062 0.0006     0.640044 0.0006   0.8414
 k(absorption)     0.633087       0.640005 0.0007     k(abs/tk ln)
0.640004 0.0007     0.640005 0.0006   0.4318
 k(trk length)     0.632744       0.640002 0.0009     k(tk ln/col)
0.640061 0.0007     0.640096 0.0007   0.5536
 rem life(col)   6.8262E+03     6.8426E+03 0.0008     k(col/abs/tk ln)
0.640042 0.0006     0.640021 0.0006
 rem life(abs)   6.8426E+03     6.8432E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8501E+03 0.0005
 source points generated   4840

  estimator     cycle   652   ave of   602 cycles      combination
simple average    combined average     corr
 k(collision)      0.640921       0.640121 0.0007     k(col/abs)
0.640063 0.0006     0.640044 0.0006   0.8413
 k(absorption)     0.640105       0.640006 0.0007     k(abs/tk ln)
0.640011 0.0007     0.640008 0.0006   0.4317
 k(trk length)     0.647989       0.640015 0.0009     k(tk ln/col)
0.640068 0.0007     0.640099 0.0007   0.5535
 rem life(col)   6.9420E+03     6.8427E+03 0.0008     k(col/abs/tk ln)
0.640047 0.0006     0.640024 0.0006
 rem life(abs)   6.9345E+03     6.8433E+03 0.0008     life(col/abs/tl)
6.8449E+03 0.0007   6.8501E+03 0.0005
 source points generated   5012

  estimator     cycle   653   ave of   603 cycles      combination
simple average    combined average     corr
 k(collision)      0.652190       0.640141 0.0007     k(col/abs)
0.640088 0.0006     0.640071 0.0006   0.8416
 k(absorption)     0.657799       0.640035 0.0007     k(abs/tk ln)
0.640029 0.0007     0.640033 0.0006   0.4316
 k(trk length)     0.644989       0.640024 0.0009     k(tk ln/col)
0.640082 0.0007     0.640117 0.0007   0.5536
 rem life(col)   6.8869E+03     6.8428E+03 0.0008     k(col/abs/tk ln)
0.640066 0.0006     0.640049 0.0006
 rem life(abs)   6.8769E+03     6.8434E+03 0.0008     life(col/abs/tl)
6.8449E+03 0.0007   6.8501E+03 0.0005
 source points generated   5060

  estimator     cycle   654   ave of   604 cycles      combination
simple average    combined average     corr
 k(collision)      0.647138       0.640152 0.0007     k(col/abs)
0.640092 0.0006     0.640072 0.0006   0.8410
 k(absorption)     0.637813       0.640031 0.0007     k(abs/tk ln)
0.640035 0.0007     0.640033 0.0006   0.4312
 k(trk length)     0.648665       0.640038 0.0009     k(tk ln/col)
0.640095 0.0007     0.640129 0.0007   0.5538
 rem life(col)   6.7106E+03     6.8426E+03 0.0008     k(col/abs/tk ln)
0.640074 0.0006     0.640051 0.0006
 rem life(abs)   6.7511E+03     6.8432E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8500E+03 0.0005
```

```
 source points generated   4922

  estimator     cycle   655   ave of   605 cycles      combination
simple average    combined average     corr
 k(collision)      0.638702       0.640150 0.0007     k(col/abs)
0.640087 0.0006     0.640067 0.0006   0.8410
 k(absorption)     0.635441       0.640024 0.0006     k(abs/tk ln)
0.640029 0.0007     0.640026 0.0006   0.4313
 k(trk length)     0.637164       0.640033 0.0009     k(tk ln/col)
0.640092 0.0007     0.640126 0.0007   0.5539
 rem life(col)   6.9615E+03     6.8428E+03 0.0008     k(col/abs/tk ln)
0.640069 0.0006     0.640044 0.0006
 rem life(abs)   6.9840E+03     6.8434E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8503E+03 0.0005
 source points generated   4950

  estimator     cycle   656   ave of   606 cycles      combination
simple average    combined average     corr
 k(collision)      0.639333       0.640148 0.0007     k(col/abs)
0.640089 0.0006     0.640070 0.0006   0.8409
 k(absorption)     0.643404       0.640029 0.0006     k(abs/tk ln)
0.640040 0.0007     0.640034 0.0006   0.4315
 k(trk length)     0.650895       0.640051 0.0009     k(tk ln/col)
0.640100 0.0007     0.640129 0.0007   0.5535
 rem life(col)   6.6645E+03     6.8425E+03 0.0008     k(col/abs/tk ln)
0.640076 0.0006     0.640052 0.0006
 rem life(abs)   6.6254E+03     6.8431E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8502E+03 0.0005
 source points generated   4988

  estimator     cycle   657   ave of   607 cycles      combination
simple average    combined average     corr
 k(collision)      0.657386       0.640177 0.0007     k(col/abs)
0.640117 0.0006     0.640098 0.0006   0.8416
 k(absorption)     0.657341       0.640058 0.0006     k(abs/tk ln)
0.640049 0.0007     0.640054 0.0006   0.4289
 k(trk length)     0.632720       0.640039 0.0009     k(tk ln/col)
0.640108 0.0007     0.640149 0.0007   0.5509
 rem life(col)   6.5995E+03     6.8421E+03 0.0008     k(col/abs/tk ln)
0.640091 0.0006     0.640072 0.0006
 rem life(abs)   6.6095E+03     6.8427E+03 0.0008     life(col/abs/tl)
6.8444E+03 0.0007   6.8501E+03 0.0005
 source points generated   5165

  estimator     cycle   658   ave of   608 cycles      combination
simple average    combined average     corr
 k(collision)      0.632028       0.640163 0.0007     k(col/abs)
0.640100 0.0006     0.640080 0.0006   0.8416
 k(absorption)     0.626949       0.640036 0.0006     k(abs/tk ln)
0.640042 0.0007     0.640039 0.0006   0.4276
 k(trk length)     0.645084       0.640047 0.0009     k(tk ln/col)
0.640105 0.0007     0.640140 0.0007   0.5501
 rem life(col)   6.7778E+03     6.8420E+03 0.0008     k(col/abs/tk ln)
0.640082 0.0006     0.640057 0.0006
```

```
 rem life(abs)   6.8130E+03     6.8427E+03 0.0008     life(col/abs/tl)
6.8444E+03 0.0007   6.8501E+03 0.0005
 source points generated   4794

  estimator     cycle   659   ave of   609 cycles      combination
simple average    combined average     corr
 k(collision)      0.651923       0.640183 0.0007     k(col/abs)
0.640120 0.0006     0.640100 0.0006   0.8420
 k(absorption)     0.652365       0.640057 0.0006     k(abs/tk ln)
0.640050 0.0007     0.640054 0.0006   0.4267
 k(trk length)     0.637431       0.640043 0.0009     k(tk ln/col)
0.640113 0.0007     0.640154 0.0007   0.5492
 rem life(col)   6.7660E+03     6.8419E+03 0.0008     k(col/abs/tk ln)
0.640094 0.0006     0.640072 0.0006
 rem life(abs)   6.7822E+03     6.8426E+03 0.0008     life(col/abs/tl)
6.8443E+03 0.0007   6.8500E+03 0.0005
 source points generated   5141

  estimator     cycle   660   ave of   610 cycles      combination
simple average    combined average     corr
 k(collision)      0.636116       0.640176 0.0007     k(col/abs)
0.640114 0.0006     0.640095 0.0006   0.8420
 k(absorption)     0.637615       0.640053 0.0006     k(abs/tk ln)
0.640048 0.0007     0.640050 0.0006   0.4267
 k(trk length)     0.639638       0.640042 0.0009     k(tk ln/col)
0.640109 0.0007     0.640148 0.0007   0.5492
 rem life(col)   6.9302E+03     6.8420E+03 0.0008     k(col/abs/tk ln)
0.640090 0.0006     0.640069 0.0006
 rem life(abs)   6.9304E+03     6.8427E+03 0.0008     life(col/abs/tl)
6.8445E+03 0.0007   6.8503E+03 0.0005
 source points generated   4845

  estimator     cycle   661   ave of   611 cycles      combination
simple average    combined average     corr
 k(collision)      0.642396       0.640180 0.0007     k(col/abs)
0.640125 0.0006     0.640108 0.0006   0.8415
 k(absorption)     0.651071       0.640071 0.0006     k(abs/tk ln)
0.640072 0.0007     0.640071 0.0006   0.4280
 k(trk length)     0.659047       0.640074 0.0009     k(tk ln/col)
0.640127 0.0007     0.640158 0.0007   0.5488
 rem life(col)   7.0926E+03     6.8424E+03 0.0008     k(col/abs/tk ln)
0.640108 0.0006     0.640088 0.0006
 rem life(abs)   7.0749E+03     6.8431E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8504E+03 0.0005
 source points generated   5106

  estimator     cycle   662   ave of   612 cycles      combination
simple average    combined average     corr
 k(collision)      0.643408       0.640185 0.0007     k(col/abs)
0.640122 0.0006     0.640102 0.0006   0.8407
 k(absorption)     0.632430       0.640058 0.0006     k(abs/tk ln)
0.640062 0.0007     0.640060 0.0006   0.4282
 k(trk length)     0.634916       0.640065 0.0009     k(tk ln/col)
0.640125 0.0007     0.640160 0.0007   0.5485
```

```
 rem life(col)   6.6314E+03     6.8421E+03 0.0008     k(col/abs/tk ln)
0.640103 0.0006     0.640079 0.0006
 rem life(abs)   6.6601E+03     6.8428E+03 0.0008     life(col/abs/tl)
6.8445E+03 0.0007   6.8503E+03 0.0005
 source points generated   4996

  estimator     cycle   663   ave of   613 cycles      combination
simple average    combined average     corr
 k(collision)      0.625736       0.640161 0.0007     k(col/abs)
0.640105 0.0006     0.640088 0.0006   0.8404
 k(absorption)     0.634692       0.640049 0.0006     k(abs/tk ln)
0.640047 0.0007     0.640048 0.0006   0.4286
 k(trk length)     0.627651       0.640045 0.0009     k(tk ln/col)
0.640103 0.0007     0.640137 0.0007   0.5493
 rem life(col)   6.7393E+03     6.8419E+03 0.0008     k(col/abs/tk ln)
0.640085 0.0006     0.640066 0.0006
 rem life(abs)   6.7370E+03     6.8426E+03 0.0008     life(col/abs/tl)
6.8444E+03 0.0007   6.8503E+03 0.0005
 source points generated   4872

  estimator     cycle   664   ave of   614 cycles      combination
simple average    combined average     corr
 k(collision)      0.633721       0.640151 0.0007     k(col/abs)
0.640099 0.0006     0.640083 0.0006   0.8403
 k(absorption)     0.638789       0.640047 0.0006     k(abs/tk ln)
0.640037 0.0007     0.640043 0.0006   0.4285
 k(trk length)     0.628891       0.640027 0.0009     k(tk ln/col)
0.640089 0.0007     0.640125 0.0007   0.5496
 rem life(col)   7.0839E+03     6.8423E+03 0.0008     k(col/abs/tk ln)
0.640075 0.0006     0.640059 0.0006
 rem life(abs)   7.0697E+03     6.8430E+03 0.0008     life(col/abs/tl)
6.8447E+03 0.0007   6.8505E+03 0.0005
 source points generated   5066

  estimator     cycle   665   ave of   615 cycles      combination
simple average    combined average     corr
 k(collision)      0.631704       0.640137 0.0007     k(col/abs)
0.640100 0.0006     0.640088 0.0006   0.8382
 k(absorption)     0.648975       0.640062 0.0006     k(abs/tk ln)
0.640043 0.0007     0.640053 0.0006   0.4281
 k(trk length)     0.638226       0.640024 0.0009     k(tk ln/col)
0.640080 0.0007     0.640114 0.0007   0.5495
 rem life(col)   6.8214E+03     6.8423E+03 0.0008     k(col/abs/tk ln)
0.640074 0.0006     0.640066 0.0006
 rem life(abs)   6.7854E+03     6.8429E+03 0.0008     life(col/abs/tl)
6.8447E+03 0.0007   6.8506E+03 0.0005
 source points generated   4972

  estimator     cycle   666   ave of   616 cycles      combination
simple average    combined average     corr
 k(collision)      0.648343       0.640151 0.0007     k(col/abs)
0.640117 0.0006     0.640107 0.0006   0.8383
 k(absorption)     0.653039       0.640083 0.0006     k(abs/tk ln)
0.640046 0.0007     0.640066 0.0006   0.4260
```

```
 k(trk length)     0.630900       0.640009 0.0009     k(tk ln/col)
0.640080 0.0007     0.640121 0.0007   0.5483
 rem life(col)   7.0161E+03     6.8425E+03 0.0008     k(col/abs/tk ln)
0.640081 0.0006     0.640079 0.0006
 rem life(abs)   7.0091E+03     6.8431E+03 0.0008     life(col/abs/tl)
6.8449E+03 0.0007   6.8506E+03 0.0005
 source points generated   5137

  estimator     cycle   667   ave of   617 cycles      combination
simple average    combined average     corr
 k(collision)      0.622669       0.640122 0.0007     k(col/abs)
0.640088 0.0006     0.640078 0.0006   0.8390
 k(absorption)     0.622554       0.640055 0.0006     k(abs/tk ln)
0.640007 0.0007     0.640033 0.0006   0.4294
 k(trk length)     0.609043       0.639959 0.0009     k(tk ln/col)
0.640040 0.0007     0.640089 0.0007   0.5507
 rem life(col)   7.2713E+03     6.8432E+03 0.0008     k(col/abs/tk ln)
0.640045 0.0006     0.640046 0.0006
 rem life(abs)   7.2456E+03     6.8438E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8509E+03 0.0005
 source points generated   4798

  estimator     cycle   668   ave of   618 cycles      combination
simple average    combined average     corr
 k(collision)      0.645825       0.640131 0.0007     k(col/abs)
0.640095 0.0006     0.640084 0.0006   0.8390
 k(absorption)     0.642224       0.640058 0.0006     k(abs/tk ln)
0.640012 0.0007     0.640037 0.0006   0.4295
 k(trk length)     0.644885       0.639967 0.0009     k(tk ln/col)
0.640049 0.0007     0.640098 0.0007   0.5508
 rem life(col)   6.7658E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640052 0.0006     0.640052 0.0006
 rem life(abs)   6.7635E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8507E+03 0.0005
 source points generated   5174

  estimator     cycle   669   ave of   619 cycles      combination
simple average    combined average     corr
 k(collision)      0.636613       0.640126 0.0007     k(col/abs)
0.640093 0.0006     0.640082 0.0006   0.8389
 k(absorption)     0.640821       0.640059 0.0006     k(abs/tk ln)
0.640016 0.0007     0.640040 0.0006   0.4295
 k(trk length)     0.644128       0.639973 0.0009     k(tk ln/col)
0.640050 0.0007     0.640095 0.0007   0.5506
 rem life(col)   6.7717E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640053 0.0006     0.640053 0.0006
 rem life(abs)   6.7494E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8506E+03 0.0005
 source points generated   4943

  estimator     cycle   670   ave of   620 cycles      combination
simple average    combined average     corr
 k(collision)      0.657609       0.640154 0.0007     k(col/abs)
0.640117 0.0006     0.640105 0.0006   0.8393
```

```
 k(absorption)     0.652658       0.640080 0.0006     k(abs/tk ln)
0.640029 0.0007     0.640056 0.0006   0.4293
 k(trk length)     0.642419       0.639977 0.0009     k(tk ln/col)
0.640066 0.0007     0.640117 0.0007   0.5499
 rem life(col)   6.9090E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640070 0.0006     0.640071 0.0006
 rem life(abs)   6.9434E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8453E+03 0.0007   6.8506E+03 0.0005
 source points generated   5211

  estimator     cycle   671   ave of   621 cycles      combination
simple average    combined average     corr
 k(collision)      0.646539       0.640164 0.0007     k(col/abs)
0.640123 0.0006     0.640110 0.0006   0.8392
 k(absorption)     0.641387       0.640082 0.0006     k(abs/tk ln)
0.640045 0.0007     0.640065 0.0006   0.4289
 k(trk length)     0.658712       0.640008 0.0009     k(tk ln/col)
0.640086 0.0007     0.640132 0.0007   0.5502
 rem life(col)   6.8115E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640085 0.0006     0.640080 0.0006
 rem life(abs)   6.7992E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8505E+03 0.0005
 source points generated   4937

  estimator     cycle   672   ave of   622 cycles      combination
simple average    combined average     corr
 k(collision)      0.642849       0.640169 0.0007     k(col/abs)
0.640133 0.0006     0.640122 0.0006   0.8389
 k(absorption)     0.649941       0.640098 0.0006     k(abs/tk ln)
0.640054 0.0007     0.640077 0.0006   0.4288
 k(trk length)     0.641169       0.640009 0.0009     k(tk ln/col)
0.640089 0.0007     0.640136 0.0007   0.5502
 rem life(col)   6.6134E+03     6.8427E+03 0.0008     k(col/abs/tk ln)
0.640092 0.0006     0.640091 0.0006
 rem life(abs)   6.5934E+03     6.8432E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8502E+03 0.0005
 source points generated   4960

  estimator     cycle   673   ave of   623 cycles      combination
simple average    combined average     corr
 k(collision)      0.632940       0.640157 0.0007     k(col/abs)
0.640129 0.0006     0.640120 0.0006   0.8383
 k(absorption)     0.642242       0.640101 0.0006     k(abs/tk ln)
0.640068 0.0007     0.640086 0.0006   0.4287
 k(trk length)     0.655341       0.640034 0.0009     k(tk ln/col)
0.640096 0.0007     0.640132 0.0007   0.5483
 rem life(col)   6.8546E+03     6.8427E+03 0.0008     k(col/abs/tk ln)
0.640097 0.0006     0.640097 0.0006
 rem life(abs)   6.8370E+03     6.8432E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8501E+03 0.0005
 source points generated   4958

  estimator     cycle   674   ave of   624 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.636401       0.640151 0.0007     k(col/abs)
0.640118 0.0006     0.640108 0.0006   0.8381
 k(absorption)     0.630046       0.640085 0.0006     k(abs/tk ln)
0.640071 0.0007     0.640079 0.0006   0.4264
 k(trk length)     0.654725       0.640058 0.0009     k(tk ln/col)
0.640104 0.0007     0.640132 0.0007   0.5472
 rem life(col)   6.9753E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640098 0.0006     0.640090 0.0006
 rem life(abs)   7.0021E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8503E+03 0.0005
 source points generated   5035

  estimator     cycle   675   ave of   625 cycles      combination
simple average    combined average     corr
 k(collision)      0.642626       0.640155 0.0007     k(col/abs)
0.640124 0.0006     0.640114 0.0006   0.8381
 k(absorption)     0.644906       0.640093 0.0006     k(abs/tk ln)
0.640066 0.0006     0.640080 0.0006   0.4255
 k(trk length)     0.628531       0.640039 0.0009     k(tk ln/col)
0.640097 0.0007     0.640131 0.0007   0.5466
 rem life(col)   6.6642E+03     6.8426E+03 0.0008     k(col/abs/tk ln)
0.640096 0.0006     0.640092 0.0006
 rem life(abs)   6.6495E+03     6.8431E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8502E+03 0.0005
 source points generated   5106

  estimator     cycle   676   ave of   626 cycles      combination
simple average    combined average     corr
 k(collision)      0.615338       0.640115 0.0007     k(col/abs)
0.640092 0.0006     0.640085 0.0006   0.8385
 k(absorption)     0.625101       0.640069 0.0006     k(abs/tk ln)
0.640027 0.0007     0.640050 0.0006   0.4284
 k(trk length)     0.605728       0.639984 0.0009     k(tk ln/col)
0.640050 0.0007     0.640089 0.0007   0.5506
 rem life(col)   6.8221E+03     6.8426E+03 0.0008     k(col/abs/tk ln)
0.640056 0.0006     0.640059 0.0006
 rem life(abs)   6.7980E+03     6.8431E+03 0.0008     life(col/abs/tl)
6.8448E+03 0.0007   6.8503E+03 0.0005
 source points generated   4793

  estimator     cycle   677   ave of   627 cycles      combination
simple average    combined average     corr
 k(collision)      0.633540       0.640105 0.0007     k(col/abs)
0.640082 0.0006     0.640075 0.0006   0.8386
 k(absorption)     0.634004       0.640059 0.0006     k(abs/tk ln)
0.640018 0.0007     0.640041 0.0006   0.4285
 k(trk length)     0.635980       0.639978 0.0009     k(tk ln/col)
0.640041 0.0007     0.640079 0.0007   0.5507
 rem life(col)   7.0313E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640047 0.0006     0.640050 0.0006
 rem life(abs)   7.0105E+03     6.8433E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8503E+03 0.0005
 source points generated   5186
```

```
  estimator     cycle   678   ave of   628 cycles      combination
simple average    combined average     corr
 k(collision)      0.640991       0.640106 0.0007     k(col/abs)
0.640082 0.0006     0.640074 0.0006   0.8386
 k(absorption)     0.639073       0.640057 0.0006     k(abs/tk ln)
0.640027 0.0006     0.640044 0.0006   0.4282
 k(trk length)     0.651557       0.639996 0.0009     k(tk ln/col)
0.640051 0.0007     0.640084 0.0007   0.5505
 rem life(col)   6.8681E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640053 0.0006     0.640053 0.0006
 rem life(abs)   6.8650E+03     6.8434E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8503E+03 0.0005
 source points generated   5061

  estimator     cycle   679   ave of   629 cycles      combination
simple average    combined average     corr
 k(collision)      0.652408       0.640126 0.0007     k(col/abs)
0.640098 0.0006     0.640089 0.0006   0.8387
 k(absorption)     0.647755       0.640070 0.0006     k(abs/tk ln)
0.640050 0.0006     0.640061 0.0006   0.4290
 k(trk length)     0.661016       0.640030 0.0009     k(tk ln/col)
0.640078 0.0007     0.640106 0.0007   0.5517
 rem life(col)   6.9802E+03     6.8432E+03 0.0008     k(col/abs/tk ln)
0.640075 0.0006     0.640070 0.0006
 rem life(abs)   7.0079E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8502E+03 0.0005
 source points generated   5111

  estimator     cycle   680   ave of   630 cycles      combination
simple average    combined average     corr
 k(collision)      0.654810       0.640149 0.0007     k(col/abs)
0.640120 0.0006     0.640111 0.0006   0.8392
 k(absorption)     0.653717       0.640091 0.0006     k(abs/tk ln)
0.640068 0.0006     0.640081 0.0006   0.4296
 k(trk length)     0.648773       0.640044 0.0009     k(tk ln/col)
0.640096 0.0007     0.640128 0.0007   0.5520
 rem life(col)   6.8360E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640095 0.0006     0.640090 0.0006
 rem life(abs)   6.8749E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8501E+03 0.0005
 source points generated   5056

  estimator     cycle   681   ave of   631 cycles      combination
simple average    combined average     corr
 k(collision)      0.638201       0.640146 0.0007     k(col/abs)
0.640116 0.0006     0.640106 0.0006   0.8392
 k(absorption)     0.636759       0.640086 0.0006     k(abs/tk ln)
0.640052 0.0006     0.640071 0.0006   0.4297
 k(trk length)     0.623802       0.640018 0.0009     k(tk ln/col)
0.640082 0.0007     0.640120 0.0007   0.5518
 rem life(col)   6.7726E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640083 0.0006     0.640082 0.0006
 rem life(abs)   6.7520E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8499E+03 0.0005
```

```
 source points generated   4867

  estimator     cycle   682   ave of   632 cycles      combination
simple average    combined average     corr
 k(collision)      0.647657       0.640158 0.0007     k(col/abs)
0.640132 0.0006     0.640123 0.0006   0.8392
 k(absorption)     0.652266       0.640105 0.0006     k(abs/tk ln)
0.640064 0.0006     0.640087 0.0006   0.4296
 k(trk length)     0.642845       0.640022 0.0009     k(tk ln/col)
0.640090 0.0007     0.640130 0.0006   0.5517
 rem life(col)   6.8037E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640095 0.0006     0.640097 0.0006
 rem life(abs)   6.8082E+03     6.8435E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8499E+03 0.0005
 source points generated   5083

  estimator     cycle   683   ave of   633 cycles      combination
simple average    combined average     corr
 k(collision)      0.648187       0.640170 0.0007     k(col/abs)
0.640151 0.0006     0.640145 0.0006   0.8390
 k(absorption)     0.656964       0.640132 0.0006     k(abs/tk ln)
0.640062 0.0006     0.640100 0.0006   0.4245
 k(trk length)     0.620630       0.639992 0.0009     k(tk ln/col)
0.640081 0.0007     0.640134 0.0006   0.5491
 rem life(col)   6.8357E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640098 0.0006     0.640110 0.0006
 rem life(abs)   6.8239E+03     6.8434E+03 0.0008     life(col/abs/tl)
6.8449E+03 0.0007   6.8497E+03 0.0005
 source points generated   5064

  estimator     cycle   684   ave of   634 cycles      combination
simple average    combined average     corr
 k(collision)      0.642142       0.640174 0.0007     k(col/abs)
0.640150 0.0006     0.640143 0.0006   0.8388
 k(absorption)     0.636615       0.640126 0.0006     k(abs/tk ln)
0.640073 0.0006     0.640102 0.0006   0.4232
 k(trk length)     0.657809       0.640020 0.0009     k(tk ln/col)
0.640097 0.0007     0.640142 0.0006   0.5488
 rem life(col)   6.8962E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640107 0.0006     0.640112 0.0006
 rem life(abs)   6.9390E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8498E+03 0.0005
 source points generated   4922

  estimator     cycle   685   ave of   635 cycles      combination
simple average    combined average     corr
 k(collision)      0.633731       0.640163 0.0007     k(col/abs)
0.640140 0.0006     0.640132 0.0006   0.8389
 k(absorption)     0.633252       0.640116 0.0006     k(abs/tk ln)
0.640056 0.0006     0.640088 0.0006   0.4238
 k(trk length)     0.624907       0.639996 0.0009     k(tk ln/col)
0.640080 0.0007     0.640130 0.0006   0.5491
 rem life(col)   7.1177E+03     6.8435E+03 0.0008     k(col/abs/tk ln)
0.640092 0.0006     0.640099 0.0006
```

```
 rem life(abs)   7.1024E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8500E+03 0.0005
 source points generated   4894

  estimator     cycle   686   ave of   636 cycles      combination
simple average    combined average     corr
 k(collision)      0.641479       0.640166 0.0007     k(col/abs)
0.640139 0.0006     0.640131 0.0006   0.8388
 k(absorption)     0.638329       0.640113 0.0006     k(abs/tk ln)
0.640046 0.0006     0.640083 0.0006   0.4239
 k(trk length)     0.629699       0.639980 0.0009     k(tk ln/col)
0.640073 0.0007     0.640128 0.0006   0.5488
 rem life(col)   6.7927E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640086 0.0006     0.640095 0.0006
 rem life(abs)   6.8127E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8501E+03 0.0005
 source points generated   5074

  estimator     cycle   687   ave of   637 cycles      combination
simple average    combined average     corr
 k(collision)      0.633357       0.640155 0.0007     k(col/abs)
0.640120 0.0006     0.640110 0.0006   0.8384
 k(absorption)     0.623054       0.640086 0.0006     k(abs/tk ln)
0.640030 0.0006     0.640060 0.0006   0.4237
 k(trk length)     0.635701       0.639973 0.0009     k(tk ln/col)
0.640064 0.0007     0.640118 0.0006   0.5489
 rem life(col)   6.8695E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640071 0.0006     0.640075 0.0006
 rem life(abs)   6.8970E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8502E+03 0.0005
 source points generated   4975

  estimator     cycle   688   ave of   638 cycles      combination
simple average    combined average     corr
 k(collision)      0.635758       0.640148 0.0007     k(col/abs)
0.640111 0.0006     0.640100 0.0006   0.8384
 k(absorption)     0.632730       0.640074 0.0006     k(abs/tk ln)
0.640018 0.0006     0.640049 0.0006   0.4240
 k(trk length)     0.632683       0.639962 0.0009     k(tk ln/col)
0.640055 0.0007     0.640110 0.0006   0.5490
 rem life(col)   6.9842E+03     6.8437E+03 0.0008     k(col/abs/tk ln)
0.640061 0.0006     0.640064 0.0006
 rem life(abs)   6.9859E+03     6.8443E+03 0.0008     life(col/abs/tl)
6.8456E+03 0.0007   6.8503E+03 0.0005
 source points generated   4980

  estimator     cycle   689   ave of   639 cycles      combination
simple average    combined average     corr
 k(collision)      0.655547       0.640172 0.0007     k(col/abs)
0.640130 0.0006     0.640117 0.0006   0.8385
 k(absorption)     0.648666       0.640088 0.0006     k(abs/tk ln)
0.640031 0.0006     0.640062 0.0006   0.4244
 k(trk length)     0.648037       0.639974 0.0009     k(tk ln/col)
0.640073 0.0007     0.640132 0.0006   0.5492
```

```
 rem life(col)   6.6522E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640078 0.0006     0.640078 0.0006
 rem life(abs)   6.6846E+03     6.8440E+03 0.0008     life(col/abs/tl)
6.8454E+03 0.0007   6.8502E+03 0.0005
 source points generated   5110

  estimator     cycle   690   ave of   640 cycles      combination
simple average    combined average     corr
 k(collision)      0.639420       0.640171 0.0007     k(col/abs)
0.640131 0.0006     0.640119 0.0006   0.8384
 k(absorption)     0.642511       0.640092 0.0006     k(abs/tk ln)
0.640022 0.0006     0.640060 0.0006   0.4237
 k(trk length)     0.625381       0.639952 0.0009     k(tk ln/col)
0.640061 0.0007     0.640126 0.0006   0.5489
 rem life(col)   6.5443E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640071 0.0006     0.640076 0.0006
 rem life(abs)   6.5564E+03     6.8436E+03 0.0008     life(col/abs/tl)
6.8450E+03 0.0007   6.8499E+03 0.0005
 source points generated   4848

  estimator     cycle   691   ave of   641 cycles      combination
simple average    combined average     corr
 k(collision)      0.641884       0.640174 0.0007     k(col/abs)
0.640136 0.0006     0.640125 0.0006   0.8384
 k(absorption)     0.645041       0.640099 0.0006     k(abs/tk ln)
0.640019 0.0006     0.640063 0.0006   0.4230
 k(trk length)     0.631919       0.639939 0.0009     k(tk ln/col)
0.640056 0.0007     0.640126 0.0006   0.5486
 rem life(col)   7.0020E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640071 0.0006     0.640079 0.0006
 rem life(abs)   6.9924E+03     6.8438E+03 0.0008     life(col/abs/tl)
6.8452E+03 0.0007   6.8499E+03 0.0005
 source points generated   4960

  estimator     cycle   692   ave of   642 cycles      combination
simple average    combined average     corr
 k(collision)      0.630990       0.640159 0.0007     k(col/abs)
0.640134 0.0006     0.640127 0.0006   0.8368
 k(absorption)     0.646515       0.640109 0.0006     k(abs/tk ln)
0.640026 0.0006     0.640071 0.0006   0.4231
 k(trk length)     0.642578       0.639943 0.0009     k(tk ln/col)
0.640051 0.0007     0.640115 0.0006   0.5480
 rem life(col)   6.8254E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640071 0.0006     0.640084 0.0006
 rem life(abs)   6.8013E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8451E+03 0.0007   6.8499E+03 0.0005
 source points generated   4900

  estimator     cycle   693   ave of   643 cycles      combination
simple average    combined average     corr
 k(collision)      0.652342       0.640178 0.0007     k(col/abs)
0.640159 0.0006     0.640154 0.0006   0.8369
 k(absorption)     0.660209       0.640141 0.0006     k(abs/tk ln)
0.640053 0.0006     0.640100 0.0006   0.4245
```

```
 k(trk length)     0.654165       0.639965 0.0009     k(tk ln/col)
0.640072 0.0007     0.640135 0.0006   0.5488
 rem life(col)   6.8332E+03     6.8431E+03 0.0008     k(col/abs/tk ln)
0.640095 0.0006     0.640112 0.0006
 rem life(abs)   6.8259E+03     6.8437E+03 0.0008     life(col/abs/tl)
6.8451E+03 0.0007   6.8499E+03 0.0005
 source points generated   5194

  estimator     cycle   694   ave of   644 cycles      combination
simple average    combined average     corr
 k(collision)      0.636401       0.640172 0.0007     k(col/abs)
0.640150 0.0006     0.640144 0.0006   0.8368
 k(absorption)     0.631855       0.640128 0.0006     k(abs/tk ln)
0.640056 0.0006     0.640095 0.0006   0.4229
 k(trk length)     0.652575       0.639985 0.0009     k(tk ln/col)
0.640079 0.0007     0.640134 0.0006   0.5480
 rem life(col)   6.9318E+03     6.8432E+03 0.0008     k(col/abs/tk ln)
0.640095 0.0006     0.640107 0.0006
 rem life(abs)   6.9565E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8453E+03 0.0007   6.8501E+03 0.0005
 source points generated   4900

  estimator     cycle   695   ave of   645 cycles      combination
simple average    combined average     corr
 k(collision)      0.656757       0.640198 0.0007     k(col/abs)
0.640182 0.0006     0.640177 0.0006   0.8373
 k(absorption)     0.664423       0.640165 0.0006     k(abs/tk ln)
0.640075 0.0006     0.640123 0.0006   0.4210
 k(trk length)     0.639508       0.639984 0.0009     k(tk ln/col)
0.640091 0.0007     0.640154 0.0006   0.5469
 rem life(col)   6.8845E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640116 0.0006     0.640134 0.0006
 rem life(abs)   6.8769E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8453E+03 0.0007   6.8501E+03 0.0005
 source points generated   5169

  estimator     cycle   696   ave of   646 cycles      combination
simple average    combined average     corr
 k(collision)      0.653733       0.640219 0.0007     k(col/abs)
0.640201 0.0006     0.640197 0.0006   0.8377
 k(absorption)     0.651855       0.640184 0.0006     k(abs/tk ln)
0.640101 0.0006     0.640145 0.0006   0.4225
 k(trk length)     0.662038       0.640018 0.0009     k(tk ln/col)
0.640119 0.0007     0.640178 0.0006   0.5482
 rem life(col)   6.6443E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640140 0.0006     0.640156 0.0006
 rem life(abs)   6.6330E+03     6.8436E+03 0.0007     life(col/abs/tl)
6.8450E+03 0.0007   6.8499E+03 0.0005
 source points generated   4972

  estimator     cycle   697   ave of   647 cycles      combination
simple average    combined average     corr
 k(collision)      0.650667       0.640235 0.0007     k(col/abs)
0.640208 0.0006     0.640201 0.0006   0.8369
```

```
 k(absorption)     0.639050       0.640182 0.0006     k(abs/tk ln)
0.640102 0.0006     0.640145 0.0006   0.4224
 k(trk length)     0.643071       0.640023 0.0009     k(tk ln/col)
0.640129 0.0007     0.640192 0.0006   0.5481
 rem life(col)   6.7624E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640147 0.0006     0.640159 0.0006
 rem life(abs)   6.7883E+03     6.8435E+03 0.0007     life(col/abs/tl)
6.8450E+03 0.0007   6.8499E+03 0.0005
 source points generated   4992

  estimator     cycle   698   ave of   648 cycles      combination
simple average    combined average     corr
 k(collision)      0.631551       0.640222 0.0007     k(col/abs)
0.640193 0.0006     0.640186 0.0006   0.8371
 k(absorption)     0.629256       0.640165 0.0006     k(abs/tk ln)
0.640088 0.0006     0.640129 0.0006   0.4229
 k(trk length)     0.631746       0.640010 0.0009     k(tk ln/col)
0.640116 0.0007     0.640178 0.0006   0.5484
 rem life(col)   6.7191E+03     6.8427E+03 0.0008     k(col/abs/tk ln)
0.640132 0.0006     0.640143 0.0006
 rem life(abs)   6.7075E+03     6.8433E+03 0.0007     life(col/abs/tl)
6.8448E+03 0.0007   6.8499E+03 0.0005
 source points generated   4840

  estimator     cycle   699   ave of   649 cycles      combination
simple average    combined average     corr
 k(collision)      0.636445       0.640216 0.0007     k(col/abs)
0.640191 0.0006     0.640185 0.0006   0.8369
 k(absorption)     0.641346       0.640167 0.0006     k(abs/tk ln)
0.640078 0.0006     0.640126 0.0006   0.4225
 k(trk length)     0.626837       0.639990 0.0009     k(tk ln/col)
0.640103 0.0007     0.640170 0.0006   0.5485
 rem life(col)   6.9280E+03     6.8428E+03 0.0008     k(col/abs/tk ln)
0.640124 0.0006     0.640140 0.0006
 rem life(abs)   6.9502E+03     6.8435E+03 0.0007     life(col/abs/tl)
6.8449E+03 0.0007   6.8500E+03 0.0005
 source points generated   5009

  estimator     cycle   700   ave of   650 cycles      combination
simple average    combined average     corr
 k(collision)      0.615265       0.640178 0.0007     k(col/abs)
0.640156 0.0006     0.640149 0.0006   0.8381
 k(absorption)     0.618548       0.640134 0.0006     k(abs/tk ln)
0.640068 0.0006     0.640103 0.0006   0.4189
 k(trk length)     0.648778       0.640003 0.0009     k(tk ln/col)
0.640090 0.0007     0.640141 0.0006   0.5438
 rem life(col)   7.2293E+03     6.8434E+03 0.0008     k(col/abs/tk ln)
0.640105 0.0006     0.640114 0.0006
 rem life(abs)   7.2288E+03     6.8441E+03 0.0008     life(col/abs/tl)
6.8455E+03 0.0007   6.8503E+03 0.0005
 source points generated   4837

  estimator     cycle   701   ave of   651 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.626642       0.640157 0.0007     k(col/abs)
0.640137 0.0006     0.640132 0.0006   0.8384
 k(absorption)     0.629657       0.640117 0.0006     k(abs/tk ln)
0.640054 0.0006     0.640088 0.0006   0.4193
 k(trk length)     0.632007       0.639991 0.0009     k(tk ln/col)
0.640074 0.0007     0.640122 0.0006   0.5441
 rem life(col)   6.7587E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640088 0.0006     0.640098 0.0006
 rem life(abs)   6.7634E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8454E+03 0.0007   6.8504E+03 0.0005
 source points generated   5119

  estimator     cycle   702   ave of   652 cycles      combination
simple average    combined average     corr
 k(collision)      0.656134       0.640181 0.0007     k(col/abs)
0.640167 0.0006     0.640163 0.0006   0.8388
 k(absorption)     0.663414       0.640153 0.0006     k(abs/tk ln)
0.640086 0.0006     0.640121 0.0006   0.4215
 k(trk length)     0.657422       0.640018 0.0009     k(tk ln/col)
0.640100 0.0007     0.640147 0.0006   0.5454
 rem life(col)   6.6930E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640117 0.0006     0.640130 0.0006
 rem life(abs)   6.6563E+03     6.8437E+03 0.0007     life(col/abs/tl)
6.8451E+03 0.0007   6.8502E+03 0.0005
 source points generated   5233

  estimator     cycle   703   ave of   653 cycles      combination
simple average    combined average     corr
 k(collision)      0.653334       0.640201 0.0007     k(col/abs)
0.640185 0.0006     0.640180 0.0006   0.8391
 k(absorption)     0.649748       0.640168 0.0006     k(abs/tk ln)
0.640118 0.0006     0.640144 0.0006   0.4228
 k(trk length)     0.672383       0.640067 0.0009     k(tk ln/col)
0.640134 0.0007     0.640174 0.0006   0.5468
 rem life(col)   6.7930E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640146 0.0006     0.640153 0.0006
 rem life(abs)   6.8020E+03     6.8436E+03 0.0007     life(col/abs/tl)
6.8450E+03 0.0007   6.8500E+03 0.0005
 source points generated   5000

  estimator     cycle   704   ave of   654 cycles      combination
simple average    combined average     corr
 k(collision)      0.653168       0.640221 0.0007     k(col/abs)
0.640206 0.0006     0.640201 0.0006   0.8395
 k(absorption)     0.654558       0.640190 0.0006     k(abs/tk ln)
0.640140 0.0006     0.640166 0.0006   0.4239
 k(trk length)     0.654390       0.640089 0.0009     k(tk ln/col)
0.640155 0.0007     0.640194 0.0006   0.5477
 rem life(col)   6.6644E+03     6.8427E+03 0.0008     k(col/abs/tk ln)
0.640167 0.0006     0.640175 0.0006
 rem life(abs)   6.6698E+03     6.8433E+03 0.0007     life(col/abs/tl)
6.8448E+03 0.0007   6.8500E+03 0.0005
 source points generated   4960
```

```
  estimator     cycle   705   ave of   655 cycles      combination
simple average    combined average     corr
 k(collision)      0.649522       0.640235 0.0007     k(col/abs)
0.640218 0.0006     0.640213 0.0006   0.8396
 k(absorption)     0.647026       0.640200 0.0006     k(abs/tk ln)
0.640147 0.0006     0.640175 0.0006   0.4240
 k(trk length)     0.643062       0.640094 0.0009     k(tk ln/col)
0.640165 0.0007     0.640206 0.0006   0.5476
 rem life(col)   6.9722E+03     6.8429E+03 0.0008     k(col/abs/tk ln)
0.640177 0.0006     0.640184 0.0006
 rem life(abs)   6.9691E+03     6.8435E+03 0.0007     life(col/abs/tl)
6.8450E+03 0.0007   6.8500E+03 0.0005
 source points generated   4969

  estimator     cycle   706   ave of   656 cycles      combination
simple average    combined average     corr
 k(collision)      0.619407       0.640204 0.0007     k(col/abs)
0.640193 0.0006     0.640190 0.0006   0.8397
 k(absorption)     0.628629       0.640183 0.0006     k(abs/tk ln)
0.640136 0.0006     0.640161 0.0006   0.4240
 k(trk length)     0.636791       0.640089 0.0009     k(tk ln/col)
0.640146 0.0007     0.640179 0.0006   0.5467
 rem life(col)   6.9227E+03     6.8430E+03 0.0008     k(col/abs/tk ln)
0.640158 0.0006     0.640167 0.0006
 rem life(abs)   6.9116E+03     6.8436E+03 0.0007     life(col/abs/tl)
6.8451E+03 0.0007   6.8502E+03 0.0005
 source points generated   4729

  estimator     cycle   707   ave of   657 cycles      combination
simple average    combined average     corr
 k(collision)      0.632291       0.640192 0.0007     k(col/abs)
0.640185 0.0006     0.640183 0.0006   0.8396
 k(absorption)     0.637672       0.640179 0.0006     k(abs/tk ln)
0.640145 0.0006     0.640163 0.0006   0.4233
 k(trk length)     0.654371       0.640111 0.0009     k(tk ln/col)
0.640151 0.0007     0.640174 0.0006   0.5449
 rem life(col)   7.0023E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640160 0.0006     0.640167 0.0006
 rem life(abs)   7.0125E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8453E+03 0.0007   6.8504E+03 0.0005
 source points generated   5158

  estimator     cycle   708   ave of   658 cycles      combination
simple average    combined average     corr
 k(collision)      0.645299       0.640199 0.0007     k(col/abs)
0.640191 0.0006     0.640189 0.0006   0.8396
 k(absorption)     0.642877       0.640183 0.0006     k(abs/tk ln)
0.640131 0.0006     0.640159 0.0006   0.4220
 k(trk length)     0.619808       0.640080 0.0009     k(tk ln/col)
0.640140 0.0007     0.640174 0.0006   0.5430
 rem life(col)   6.8680E+03     6.8433E+03 0.0008     k(col/abs/tk ln)
0.640154 0.0006     0.640164 0.0006
 rem life(abs)   6.8706E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8453E+03 0.0007   6.8503E+03 0.0005
```

```
 source points generated   5147

  estimator     cycle   709   ave of   659 cycles      combination
simple average    combined average     corr
 k(collision)      0.633490       0.640189 0.0007     k(col/abs)
0.640182 0.0006     0.640180 0.0006   0.8397
 k(absorption)     0.634415       0.640174 0.0006     k(abs/tk ln)
0.640124 0.0006     0.640151 0.0006   0.4221
 k(trk length)     0.636510       0.640074 0.0009     k(tk ln/col)
0.640132 0.0007     0.640165 0.0006   0.5430
 rem life(col)   6.7876E+03     6.8432E+03 0.0007     k(col/abs/tk ln)
0.640146 0.0006     0.640156 0.0006
 rem life(abs)   6.7982E+03     6.8438E+03 0.0007     life(col/abs/tl)
6.8453E+03 0.0007   6.8504E+03 0.0005
 source points generated   4919

  estimator     cycle   710   ave of   660 cycles      combination
simple average    combined average     corr
 k(collision)      0.619502       0.640158 0.0007     k(col/abs)
0.640148 0.0006     0.640145 0.0006   0.8406
 k(absorption)     0.615860       0.640137 0.0006     k(abs/tk ln)
0.640098 0.0006     0.640118 0.0006   0.4229
 k(trk length)     0.629127       0.640058 0.0009     k(tk ln/col)
0.640108 0.0007     0.640136 0.0006   0.5435
 rem life(col)   7.0202E+03     6.8435E+03 0.0007     k(col/abs/tk ln)
0.640118 0.0006     0.640124 0.0006
 rem life(abs)   7.0337E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0007   6.8505E+03 0.0005
 source points generated   4887

  estimator     cycle   711   ave of   661 cycles      combination
simple average    combined average     corr
 k(collision)      0.650751       0.640174 0.0007     k(col/abs)
0.640164 0.0006     0.640162 0.0006   0.8409
 k(absorption)     0.651592       0.640155 0.0006     k(abs/tk ln)
0.640124 0.0006     0.640140 0.0006   0.4244
 k(trk length)     0.663392       0.640093 0.0009     k(tk ln/col)
0.640133 0.0007     0.640157 0.0006   0.5444
 rem life(col)   6.6861E+03     6.8432E+03 0.0007     k(col/abs/tk ln)
0.640141 0.0006     0.640145 0.0006
 rem life(abs)   6.6854E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8454E+03 0.0007   6.8504E+03 0.0005
 source points generated   5237

  estimator     cycle   712   ave of   662 cycles      combination
simple average    combined average     corr
 k(collision)      0.639585       0.640173 0.0007     k(col/abs)
0.640162 0.0006     0.640160 0.0006   0.8409
 k(absorption)     0.638361       0.640152 0.0006     k(abs/tk ln)
0.640115 0.0006     0.640135 0.0006   0.4244
 k(trk length)     0.630671       0.640079 0.0009     k(tk ln/col)
0.640126 0.0007     0.640153 0.0006   0.5443
 rem life(col)   6.7500E+03     6.8431E+03 0.0007     k(col/abs/tk ln)
0.640135 0.0006     0.640140 0.0006
```

```
 rem life(abs)   6.7405E+03     6.8437E+03 0.0007     life(col/abs/tl)
6.8452E+03 0.0007   6.8504E+03 0.0005
 source points generated   4933

  estimator     cycle   713   ave of   663 cycles      combination
simple average    combined average     corr
 k(collision)      0.643403       0.640178 0.0007     k(col/abs)
0.640171 0.0006     0.640169 0.0006   0.8408
 k(absorption)     0.647674       0.640163 0.0006     k(abs/tk ln)
0.640141 0.0006     0.640153 0.0006   0.4252
 k(trk length)     0.666899       0.640119 0.0009     k(tk ln/col)
0.640149 0.0007     0.640166 0.0006   0.5437
 rem life(col)   6.9092E+03     6.8432E+03 0.0007     k(col/abs/tk ln)
0.640153 0.0006     0.640157 0.0006
 rem life(abs)   6.8954E+03     6.8438E+03 0.0007     life(col/abs/tl)
6.8453E+03 0.0006   6.8506E+03 0.0005
 source points generated   5005

  estimator     cycle   714   ave of   664 cycles      combination
simple average    combined average     corr
 k(collision)      0.620292       0.640148 0.0007     k(col/abs)
0.640142 0.0006     0.640141 0.0006   0.8416
 k(absorption)     0.622604       0.640137 0.0006     k(abs/tk ln)
0.640126 0.0006     0.640132 0.0006   0.4247
 k(trk length)     0.637612       0.640116 0.0009     k(tk ln/col)
0.640132 0.0007     0.640141 0.0006   0.5428
 rem life(col)   7.0330E+03     6.8435E+03 0.0007     k(col/abs/tk ln)
0.640133 0.0006     0.640134 0.0006
 rem life(abs)   6.9930E+03     6.8440E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8509E+03 0.0005
 source points generated   4825

  estimator     cycle   715   ave of   665 cycles      combination
simple average    combined average     corr
 k(collision)      0.649080       0.640161 0.0007     k(col/abs)
0.640154 0.0006     0.640152 0.0006   0.8417
 k(absorption)     0.646722       0.640147 0.0006     k(abs/tk ln)
0.640135 0.0006     0.640141 0.0006   0.4249
 k(trk length)     0.645399       0.640123 0.0009     k(tk ln/col)
0.640142 0.0007     0.640153 0.0006   0.5429
 rem life(col)   6.8406E+03     6.8435E+03 0.0007     k(col/abs/tk ln)
0.640144 0.0006     0.640144 0.0006
 rem life(abs)   6.8569E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8509E+03 0.0005
 source points generated   5243

  estimator     cycle   716   ave of   666 cycles      combination
simple average    combined average     corr
 k(collision)      0.630955       0.640148 0.0007     k(col/abs)
0.640145 0.0006     0.640144 0.0006   0.8415
 k(absorption)     0.637118       0.640142 0.0006     k(abs/tk ln)
0.640134 0.0006     0.640138 0.0006   0.4248
 k(trk length)     0.642095       0.640126 0.0009     k(tk ln/col)
0.640137 0.0007     0.640143 0.0006   0.5424
```

```
 rem life(col)   6.8207E+03     6.8434E+03 0.0007     k(col/abs/tk ln)
0.640139 0.0006     0.640140 0.0006
 rem life(abs)   6.8155E+03     6.8440E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8508E+03 0.0005
 source points generated   4854

  estimator     cycle   717   ave of   667 cycles      combination
simple average    combined average     corr
 k(collision)      0.635421       0.640140 0.0007     k(col/abs)
0.640139 0.0006     0.640138 0.0006   0.8416
 k(absorption)     0.636394       0.640137 0.0006     k(abs/tk ln)
0.640119 0.0006     0.640128 0.0006   0.4249
 k(trk length)     0.623400       0.640101 0.0009     k(tk ln/col)
0.640121 0.0007     0.640132 0.0006   0.5425
 rem life(col)   6.9833E+03     6.8437E+03 0.0007     k(col/abs/tk ln)
0.640126 0.0006     0.640130 0.0006
 rem life(abs)   6.9904E+03     6.8442E+03 0.0007     life(col/abs/tl)
6.8457E+03 0.0006   6.8509E+03 0.0005
 source points generated   5072

  estimator     cycle   718   ave of   668 cycles      combination
simple average    combined average     corr
 k(collision)      0.658113       0.640167 0.0007     k(col/abs)
0.640170 0.0006     0.640171 0.0006   0.8422
 k(absorption)     0.664243       0.640173 0.0006     k(abs/tk ln)
0.640147 0.0006     0.640160 0.0006   0.4262
 k(trk length)     0.653318       0.640121 0.0009     k(tk ln/col)
0.640144 0.0007     0.640157 0.0006   0.5434
 rem life(col)   6.9171E+03     6.8438E+03 0.0007     k(col/abs/tk ln)
0.640154 0.0006     0.640161 0.0006
 rem life(abs)   6.9057E+03     6.8443E+03 0.0007     life(col/abs/tl)
6.8458E+03 0.0006   6.8508E+03 0.0005
 source points generated   5152

  estimator     cycle   719   ave of   669 cycles      combination
simple average    combined average     corr
 k(collision)      0.616987       0.640133 0.0007     k(col/abs)
0.640147 0.0006     0.640151 0.0006   0.8413
 k(absorption)     0.632606       0.640161 0.0006     k(abs/tk ln)
0.640129 0.0006     0.640146 0.0006   0.4268
 k(trk length)     0.624164       0.640097 0.0009     k(tk ln/col)
0.640115 0.0007     0.640125 0.0006   0.5446
 rem life(col)   6.8724E+03     6.8438E+03 0.0007     k(col/abs/tk ln)
0.640130 0.0006     0.640144 0.0006
 rem life(abs)   6.8589E+03     6.8444E+03 0.0007     life(col/abs/tl)
6.8458E+03 0.0006   6.8508E+03 0.0005
 source points generated   4671

  estimator     cycle   720   ave of   670 cycles      combination
simple average    combined average     corr
 k(collision)      0.639033       0.640131 0.0007     k(col/abs)
0.640151 0.0006     0.640156 0.0006   0.8410
 k(absorption)     0.646145       0.640170 0.0006     k(abs/tk ln)
0.640149 0.0006     0.640160 0.0006   0.4273
```

```
 k(trk length)     0.660031       0.640127 0.0009     k(tk ln/col)
0.640129 0.0007     0.640130 0.0006   0.5436
 rem life(col)   6.7016E+03     6.8436E+03 0.0007     k(col/abs/tk ln)
0.640143 0.0006     0.640155 0.0006
 rem life(abs)   6.7005E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8507E+03 0.0005
 source points generated   5137

  estimator     cycle   721   ave of   671 cycles      combination
simple average    combined average     corr
 k(collision)      0.646080       0.640140 0.0007     k(col/abs)
0.640159 0.0006     0.640164 0.0006   0.8411
 k(absorption)     0.644870       0.640177 0.0006     k(abs/tk ln)
0.640162 0.0006     0.640170 0.0006   0.4276
 k(trk length)     0.653221       0.640147 0.0009     k(tk ln/col)
0.640143 0.0007     0.640141 0.0006   0.5439
 rem life(col)   6.8749E+03     6.8436E+03 0.0007     k(col/abs/tk ln)
0.640155 0.0006     0.640165 0.0006
 rem life(abs)   6.8636E+03     6.8442E+03 0.0007     life(col/abs/tl)
6.8457E+03 0.0006   6.8509E+03 0.0005
 source points generated   5103

  estimator     cycle   722   ave of   672 cycles      combination
simple average    combined average     corr
 k(collision)      0.635160       0.640132 0.0007     k(col/abs)
0.640153 0.0006     0.640159 0.0006   0.8411
 k(absorption)     0.637360       0.640173 0.0006     k(abs/tk ln)
0.640151 0.0006     0.640163 0.0006   0.4277
 k(trk length)     0.628129       0.640129 0.0009     k(tk ln/col)
0.640131 0.0007     0.640132 0.0006   0.5441
 rem life(col)   6.9195E+03     6.8438E+03 0.0007     k(col/abs/tk ln)
0.640145 0.0006     0.640157 0.0006
 rem life(abs)   6.9058E+03     6.8443E+03 0.0007     life(col/abs/tl)
6.8458E+03 0.0006   6.8510E+03 0.0005
 source points generated   4888

  estimator     cycle   723   ave of   673 cycles      combination
simple average    combined average     corr
 k(collision)      0.643521       0.640138 0.0006     k(col/abs)
0.640157 0.0006     0.640162 0.0006   0.8411
 k(absorption)     0.642212       0.640176 0.0006     k(abs/tk ln)
0.640149 0.0006     0.640164 0.0006   0.4275
 k(trk length)     0.635910       0.640122 0.0009     k(tk ln/col)
0.640130 0.0007     0.640134 0.0006   0.5439
 rem life(col)   6.6218E+03     6.8434E+03 0.0007     k(col/abs/tk ln)
0.640145 0.0006     0.640159 0.0006
 rem life(abs)   6.6119E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8455E+03 0.0006   6.8507E+03 0.0005
 source points generated   5035

  estimator     cycle   724   ave of   674 cycles      combination
simple average    combined average     corr
 k(collision)      0.644912       0.640145 0.0006     k(col/abs)
0.640162 0.0006     0.640167 0.0006   0.8410
```

```
 k(absorption)     0.642160       0.640179 0.0006     k(abs/tk ln)
0.640158 0.0006     0.640169 0.0006   0.4276
 k(trk length)     0.649436       0.640136 0.0009     k(tk ln/col)
0.640140 0.0007     0.640143 0.0006   0.5440
 rem life(col)   6.6730E+03     6.8432E+03 0.0007     k(col/abs/tk ln)
0.640153 0.0006     0.640165 0.0006
 rem life(abs)   6.6922E+03     6.8437E+03 0.0007     life(col/abs/tl)
6.8453E+03 0.0006   6.8506E+03 0.0005
 source points generated   4994

  estimator     cycle   725   ave of   675 cycles      combination
simple average    combined average     corr
 k(collision)      0.635470       0.640138 0.0006     k(col/abs)
0.640155 0.0006     0.640160 0.0006   0.8411
 k(absorption)     0.635891       0.640173 0.0006     k(abs/tk ln)
0.640158 0.0006     0.640166 0.0006   0.4273
 k(trk length)     0.644571       0.640143 0.0009     k(tk ln/col)
0.640140 0.0007     0.640139 0.0006   0.5437
 rem life(col)   6.8404E+03     6.8432E+03 0.0007     k(col/abs/tk ln)
0.640151 0.0006     0.640161 0.0006
 rem life(abs)   6.8446E+03     6.8437E+03 0.0007     life(col/abs/tl)
6.8453E+03 0.0006   6.8507E+03 0.0005
 source points generated   4958

  estimator     cycle   726   ave of   676 cycles      combination
simple average    combined average     corr
 k(collision)      0.645948       0.640146 0.0006     k(col/abs)
0.640163 0.0006     0.640168 0.0006   0.8412
 k(absorption)     0.645367       0.640180 0.0006     k(abs/tk ln)
0.640173 0.0006     0.640177 0.0006   0.4277
 k(trk length)     0.654979       0.640165 0.0009     k(tk ln/col)
0.640156 0.0007     0.640150 0.0006   0.5440
 rem life(col)   6.8386E+03     6.8432E+03 0.0007     k(col/abs/tk ln)
0.640164 0.0006     0.640172 0.0006
 rem life(abs)   6.8496E+03     6.8437E+03 0.0007     life(col/abs/tl)
6.8453E+03 0.0006   6.8508E+03 0.0005
 source points generated   5110

  estimator     cycle   727   ave of   677 cycles      combination
simple average    combined average     corr
 k(collision)      0.636924       0.640142 0.0006     k(col/abs)
0.640163 0.0006     0.640169 0.0006   0.8409
 k(absorption)     0.642902       0.640184 0.0006     k(abs/tk ln)
0.640174 0.0006     0.640179 0.0006   0.4276
 k(trk length)     0.638778       0.640163 0.0009     k(tk ln/col)
0.640152 0.0007     0.640146 0.0006   0.5440
 rem life(col)   7.0207E+03     6.8434E+03 0.0007     k(col/abs/tk ln)
0.640163 0.0006     0.640173 0.0006
 rem life(abs)   6.9840E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8455E+03 0.0006   6.8507E+03 0.0005
 source points generated   4862

  estimator     cycle   728   ave of   678 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.621667       0.640114 0.0006     k(col/abs)
0.640142 0.0006     0.640150 0.0006   0.8410
 k(absorption)     0.630049       0.640169 0.0006     k(abs/tk ln)
0.640152 0.0006     0.640161 0.0006   0.4287
 k(trk length)     0.620999       0.640134 0.0009     k(tk ln/col)
0.640124 0.0007     0.640119 0.0006   0.5455
 rem life(col)   6.9894E+03     6.8436E+03 0.0007     k(col/abs/tk ln)
0.640139 0.0006     0.640154 0.0006
 rem life(abs)   6.9808E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8507E+03 0.0005
 source points generated   4880

  estimator     cycle   729   ave of   679 cycles      combination
simple average    combined average     corr
 k(collision)      0.640529       0.640115 0.0006     k(col/abs)
0.640146 0.0006     0.640155 0.0006   0.8409
 k(absorption)     0.645341       0.640177 0.0006     k(abs/tk ln)
0.640156 0.0006     0.640167 0.0006   0.4286
 k(trk length)     0.640617       0.640135 0.0009     k(tk ln/col)
0.640125 0.0007     0.640119 0.0006   0.5455
 rem life(col)   6.8006E+03     6.8436E+03 0.0007     k(col/abs/tk ln)
0.640142 0.0006     0.640159 0.0006
 rem life(abs)   6.7846E+03     6.8440E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8509E+03 0.0005
 source points generated   5082

  estimator     cycle   730   ave of   680 cycles      combination
simple average    combined average     corr
 k(collision)      0.639788       0.640114 0.0006     k(col/abs)
0.640145 0.0006     0.640153 0.0006   0.8409
 k(absorption)     0.638524       0.640175 0.0006     k(abs/tk ln)
0.640147 0.0006     0.640162 0.0006   0.4286
 k(trk length)     0.628882       0.640119 0.0009     k(tk ln/col)
0.640116 0.0007     0.640115 0.0006   0.5453
 rem life(col)   6.9761E+03     6.8438E+03 0.0007     k(col/abs/tk ln)
0.640136 0.0006     0.640154 0.0006
 rem life(abs)   6.9664E+03     6.8442E+03 0.0007     life(col/abs/tl)
6.8458E+03 0.0006   6.8510E+03 0.0005
 source points generated   4983

  estimator     cycle   731   ave of   681 cycles      combination
simple average    combined average     corr
 k(collision)      0.622940       0.640089 0.0006     k(col/abs)
0.640121 0.0006     0.640131 0.0006   0.8414
 k(absorption)     0.625431       0.640153 0.0006     k(abs/tk ln)
0.640111 0.0006     0.640134 0.0006   0.4312
 k(trk length)     0.606642       0.640069 0.0009     k(tk ln/col)
0.640079 0.0007     0.640085 0.0006   0.5475
 rem life(col)   6.6328E+03     6.8435E+03 0.0007     k(col/abs/tk ln)
0.640104 0.0006     0.640126 0.0006
 rem life(abs)   6.6205E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8455E+03 0.0006   6.8508E+03 0.0005
 source points generated   4856
```

```
  estimator     cycle   732   ave of   682 cycles      combination
simple average    combined average     corr
 k(collision)      0.630089       0.640075 0.0006     k(col/abs)
0.640105 0.0006     0.640114 0.0006   0.8416
 k(absorption)     0.627589       0.640135 0.0006     k(abs/tk ln)
0.640099 0.0006     0.640118 0.0006   0.4313
 k(trk length)     0.635292       0.640062 0.0009     k(tk ln/col)
0.640068 0.0007     0.640072 0.0006   0.5476
 rem life(col)   7.1413E+03     6.8439E+03 0.0007     k(col/abs/tk ln)
0.640091 0.0006     0.640110 0.0006
 rem life(abs)   7.1456E+03     6.8443E+03 0.0007     life(col/abs/tl)
6.8459E+03 0.0006   6.8511E+03 0.0005
 source points generated   5075

  estimator     cycle   733   ave of   683 cycles      combination
simple average    combined average     corr
 k(collision)      0.632905       0.640064 0.0006     k(col/abs)
0.640098 0.0006     0.640108 0.0006   0.8415
 k(absorption)     0.638517       0.640132 0.0006     k(abs/tk ln)
0.640093 0.0006     0.640114 0.0006   0.4313
 k(trk length)     0.633642       0.640053 0.0009     k(tk ln/col)
0.640059 0.0007     0.640062 0.0006   0.5478
 rem life(col)   6.7312E+03     6.8437E+03 0.0007     k(col/abs/tk ln)
0.640083 0.0006     0.640105 0.0006
 rem life(abs)   6.7134E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8457E+03 0.0006   6.8510E+03 0.0005
 source points generated   5069

  estimator     cycle   734   ave of   684 cycles      combination
simple average    combined average     corr
 k(collision)      0.629085       0.640048 0.0006     k(col/abs)
0.640086 0.0006     0.640098 0.0006   0.8414
 k(absorption)     0.635056       0.640125 0.0006     k(abs/tk ln)
0.640085 0.0006     0.640106 0.0006   0.4315
 k(trk length)     0.634153       0.640044 0.0009     k(tk ln/col)
0.640046 0.0007     0.640047 0.0006   0.5479
 rem life(col)   6.8394E+03     6.8437E+03 0.0007     k(col/abs/tk ln)
0.640072 0.0006     0.640096 0.0006
 rem life(abs)   6.7960E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8457E+03 0.0006   6.8511E+03 0.0005
 source points generated   4992

  estimator     cycle   735   ave of   685 cycles      combination
simple average    combined average     corr
 k(collision)      0.628202       0.640031 0.0006     k(col/abs)
0.640074 0.0006     0.640088 0.0006   0.8413
 k(absorption)     0.635641       0.640118 0.0006     k(abs/tk ln)
0.640084 0.0006     0.640103 0.0006   0.4312
 k(trk length)     0.644093       0.640050 0.0009     k(tk ln/col)
0.640040 0.0007     0.640035 0.0006   0.5469
 rem life(col)   7.0440E+03     6.8440E+03 0.0007     k(col/abs/tk ln)
0.640066 0.0006     0.640091 0.0006
 rem life(abs)   7.0058E+03     6.8443E+03 0.0007     life(col/abs/tl)
6.8460E+03 0.0006   6.8514E+03 0.0005
```

```
 source points generated   5002

  estimator     cycle   736   ave of   686 cycles      combination
simple average    combined average     corr
 k(collision)      0.649371       0.640044 0.0006     k(col/abs)
0.640088 0.0006     0.640102 0.0006   0.8414
 k(absorption)     0.649771       0.640132 0.0006     k(abs/tk ln)
0.640087 0.0006     0.640112 0.0006   0.4303
 k(trk length)     0.634716       0.640043 0.0009     k(tk ln/col)
0.640043 0.0007     0.640044 0.0006   0.5461
 rem life(col)   6.9876E+03     6.8442E+03 0.0007     k(col/abs/tk ln)
0.640073 0.0006     0.640100 0.0006
 rem life(abs)   7.0094E+03     6.8445E+03 0.0007     life(col/abs/tl)
6.8462E+03 0.0006   6.8514E+03 0.0005
 source points generated   5123

  estimator     cycle   737   ave of   687 cycles      combination
simple average    combined average     corr
 k(collision)      0.642084       0.640047 0.0006     k(col/abs)
0.640093 0.0006     0.640107 0.0006   0.8414
 k(absorption)     0.644635       0.640139 0.0006     k(abs/tk ln)
0.640086 0.0006     0.640114 0.0006   0.4299
 k(trk length)     0.633233       0.640033 0.0008     k(tk ln/col)
0.640040 0.0007     0.640044 0.0006   0.5459
 rem life(col)   6.8511E+03     6.8442E+03 0.0007     k(col/abs/tk ln)
0.640073 0.0006     0.640103 0.0006
 rem life(abs)   6.8493E+03     6.8445E+03 0.0007     life(col/abs/tl)
6.8462E+03 0.0006   6.8514E+03 0.0005
 source points generated   4971

  estimator     cycle   738   ave of   688 cycles      combination
simple average    combined average     corr
 k(collision)      0.631172       0.640034 0.0006     k(col/abs)
0.640087 0.0006     0.640103 0.0006   0.8410
 k(absorption)     0.640345       0.640139 0.0006     k(abs/tk ln)
0.640069 0.0006     0.640107 0.0006   0.4291
 k(trk length)     0.617365       0.640000 0.0008     k(tk ln/col)
0.640017 0.0007     0.640027 0.0006   0.5465
 rem life(col)   6.8651E+03     6.8443E+03 0.0007     k(col/abs/tk ln)
0.640058 0.0006     0.640095 0.0006
 rem life(abs)   6.8308E+03     6.8445E+03 0.0007     life(col/abs/tl)
6.8462E+03 0.0006   6.8514E+03 0.0005
 source points generated   4934

  estimator     cycle   739   ave of   689 cycles      combination
simple average    combined average     corr
 k(collision)      0.632633       0.640024 0.0006     k(col/abs)
0.640082 0.0006     0.640100 0.0006   0.8406
 k(absorption)     0.640905       0.640140 0.0006     k(abs/tk ln)
0.640075 0.0006     0.640110 0.0006   0.4291
 k(trk length)     0.646597       0.640009 0.0008     k(tk ln/col)
0.640016 0.0007     0.640021 0.0006   0.5458
 rem life(col)   6.9759E+03     6.8445E+03 0.0007     k(col/abs/tk ln)
0.640058 0.0006     0.640096 0.0006
```

```
 rem life(abs)   6.9284E+03     6.8446E+03 0.0007     life(col/abs/tl)
6.8463E+03 0.0006   6.8515E+03 0.0005
 source points generated   4999

  estimator     cycle   740   ave of   690 cycles      combination
simple average    combined average     corr
 k(collision)      0.636091       0.640018 0.0006     k(col/abs)
0.640077 0.0006     0.640096 0.0006   0.8406
 k(absorption)     0.637852       0.640137 0.0006     k(abs/tk ln)
0.640070 0.0006     0.640106 0.0006   0.4291
 k(trk length)     0.635995       0.640003 0.0008     k(tk ln/col)
0.640011 0.0007     0.640015 0.0006   0.5458
 rem life(col)   6.7964E+03     6.8444E+03 0.0007     k(col/abs/tk ln)
0.640053 0.0006     0.640092 0.0006
 rem life(abs)   6.8222E+03     6.8446E+03 0.0007     life(col/abs/tl)
6.8463E+03 0.0006   6.8515E+03 0.0005
 source points generated   5031

  estimator     cycle   741   ave of   691 cycles      combination
simple average    combined average     corr
 k(collision)      0.621908       0.639992 0.0006     k(col/abs)
0.640056 0.0006     0.640077 0.0006   0.8408
 k(absorption)     0.629240       0.640121 0.0006     k(abs/tk ln)
0.640050 0.0006     0.640088 0.0006   0.4302
 k(trk length)     0.622500       0.639978 0.0008     k(tk ln/col)
0.639985 0.0007     0.639989 0.0006   0.5471
 rem life(col)   7.2226E+03     6.8449E+03 0.0007     k(col/abs/tk ln)
0.640030 0.0006     0.640073 0.0006
 rem life(abs)   7.1788E+03     6.8451E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8518E+03 0.0005
 source points generated   4877

  estimator     cycle   742   ave of   692 cycles      combination
simple average    combined average     corr
 k(collision)      0.656680       0.640016 0.0006     k(col/abs)
0.640071 0.0006     0.640089 0.0006   0.8400
 k(absorption)     0.643327       0.640126 0.0006     k(abs/tk ln)
0.640070 0.0006     0.640100 0.0006   0.4300
 k(trk length)     0.665428       0.640015 0.0008     k(tk ln/col)
0.640015 0.0007     0.640016 0.0006   0.5489
 rem life(col)   6.8503E+03     6.8449E+03 0.0007     k(col/abs/tk ln)
0.640052 0.0006     0.640087 0.0006
 rem life(abs)   6.8652E+03     6.8451E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8518E+03 0.0005
 source points generated   5271

  estimator     cycle   743   ave of   693 cycles      combination
simple average    combined average     corr
 k(collision)      0.637316       0.640012 0.0006     k(col/abs)
0.640075 0.0006     0.640096 0.0006   0.8392
 k(absorption)     0.648891       0.640138 0.0006     k(abs/tk ln)
0.640089 0.0006     0.640116 0.0006   0.4308
 k(trk length)     0.657037       0.640039 0.0008     k(tk ln/col)
0.640026 0.0007     0.640018 0.0006   0.5479
```

```
 rem life(col)   6.6475E+03     6.8447E+03 0.0007     k(col/abs/tk ln)
0.640063 0.0006     0.640100 0.0006
 rem life(abs)   6.6372E+03     6.8448E+03 0.0007     life(col/abs/tl)
6.8465E+03 0.0006   6.8517E+03 0.0005
 source points generated   4866

  estimator     cycle   744   ave of   694 cycles      combination
simple average    combined average     corr
 k(collision)      0.616343       0.639978 0.0006     k(col/abs)
0.640045 0.0006     0.640067 0.0006   0.8400
 k(absorption)     0.621670       0.640112 0.0006     k(abs/tk ln)
0.640074 0.0006     0.640094 0.0006   0.4302
 k(trk length)     0.637474       0.640036 0.0008     k(tk ln/col)
0.640007 0.0007     0.639990 0.0006   0.5465
 rem life(col)   6.9752E+03     6.8448E+03 0.0007     k(col/abs/tk ln)
0.640042 0.0006     0.640077 0.0006
 rem life(abs)   6.9500E+03     6.8450E+03 0.0007     life(col/abs/tl)
6.8466E+03 0.0006   6.8518E+03 0.0005
 source points generated   4809

  estimator     cycle   745   ave of   695 cycles      combination
simple average    combined average     corr
 k(collision)      0.634710       0.639970 0.0006     k(col/abs)
0.640035 0.0006     0.640056 0.0006   0.8400
 k(absorption)     0.631007       0.640099 0.0006     k(abs/tk ln)
0.640072 0.0006     0.640086 0.0006   0.4294
 k(trk length)     0.646214       0.640045 0.0008     k(tk ln/col)
0.640007 0.0007     0.639986 0.0006   0.5461
 rem life(col)   6.7352E+03     6.8447E+03 0.0007     k(col/abs/tk ln)
0.640038 0.0006     0.640069 0.0006
 rem life(abs)   6.7478E+03     6.8448E+03 0.0007     life(col/abs/tl)
6.8465E+03 0.0006   6.8518E+03 0.0005
 source points generated   5137

  estimator     cycle   746   ave of   696 cycles      combination
simple average    combined average     corr
 k(collision)      0.627751       0.639953 0.0006     k(col/abs)
0.640013 0.0006     0.640032 0.0006   0.8402
 k(absorption)     0.622212       0.640073 0.0006     k(abs/tk ln)
0.640063 0.0006     0.640068 0.0006   0.4274
 k(trk length)     0.645506       0.640052 0.0008     k(tk ln/col)
0.640003 0.0007     0.639974 0.0006   0.5449
 rem life(col)   6.9111E+03     6.8448E+03 0.0007     k(col/abs/tk ln)
0.640026 0.0006     0.640051 0.0006
 rem life(abs)   6.9319E+03     6.8450E+03 0.0007     life(col/abs/tl)
6.8466E+03 0.0006   6.8519E+03 0.0005
 source points generated   4979

  estimator     cycle   747   ave of   697 cycles      combination
simple average    combined average     corr
 k(collision)      0.636829       0.639948 0.0006     k(col/abs)
0.640007 0.0006     0.640025 0.0006   0.8402
 k(absorption)     0.634346       0.640065 0.0006     k(abs/tk ln)
0.640033 0.0006     0.640050 0.0006   0.4274
```

```
 k(trk length)     0.603720       0.640000 0.0008     k(tk ln/col)
0.639974 0.0007     0.639959 0.0006   0.5434
 rem life(col)   7.0289E+03     6.8450E+03 0.0007     k(col/abs/tk ln)
0.640004 0.0006     0.640034 0.0006
 rem life(abs)   7.0231E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8518E+03 0.0005
 source points generated   5045

  estimator     cycle   748   ave of   698 cycles      combination
simple average    combined average     corr
 k(collision)      0.645910       0.639957 0.0006     k(col/abs)
0.640015 0.0006     0.640034 0.0006   0.8403
 k(absorption)     0.646465       0.640074 0.0006     k(abs/tk ln)
0.640038 0.0006     0.640057 0.0006   0.4273
 k(trk length)     0.640510       0.640001 0.0008     k(tk ln/col)
0.639979 0.0007     0.639966 0.0006   0.5433
 rem life(col)   6.9241E+03     6.8452E+03 0.0007     k(col/abs/tk ln)
0.640011 0.0006     0.640042 0.0006
 rem life(abs)   6.9173E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8519E+03 0.0005
 source points generated   5084

  estimator     cycle   749   ave of   699 cycles      combination
simple average    combined average     corr
 k(collision)      0.662078       0.639988 0.0006     k(col/abs)
0.640043 0.0006     0.640061 0.0006   0.8409
 k(absorption)     0.656406       0.640097 0.0006     k(abs/tk ln)
0.640060 0.0006     0.640080 0.0006   0.4286
 k(trk length)     0.654986       0.640023 0.0008     k(tk ln/col)
0.640005 0.0007     0.639996 0.0006   0.5443
 rem life(col)   6.6103E+03     6.8448E+03 0.0007     k(col/abs/tk ln)
0.640036 0.0006     0.640066 0.0006
 rem life(abs)   6.6337E+03     6.8450E+03 0.0007     life(col/abs/tl)
6.8466E+03 0.0006   6.8518E+03 0.0005
 source points generated   5089

  estimator     cycle   750   ave of   700 cycles      combination
simple average    combined average     corr
 k(collision)      0.652449       0.640006 0.0006     k(col/abs)
0.640069 0.0006     0.640089 0.0006   0.8407
 k(absorption)     0.664293       0.640132 0.0006     k(abs/tk ln)
0.640074 0.0006     0.640105 0.0006   0.4259
 k(trk length)     0.635854       0.640017 0.0008     k(tk ln/col)
0.640011 0.0007     0.640008 0.0006   0.5433
 rem life(col)   6.5810E+03     6.8444E+03 0.0007     k(col/abs/tk ln)
0.640052 0.0006     0.640089 0.0006
 rem life(abs)   6.5453E+03     6.8446E+03 0.0007     life(col/abs/tl)
6.8463E+03 0.0006   6.8515E+03 0.0005
 source points generated   4927

  estimator     cycle   751   ave of   701 cycles      combination
simple average    combined average     corr
 k(collision)      0.646395       0.640015 0.0006     k(col/abs)
0.640074 0.0006     0.640092 0.0006   0.8405
```

```
 k(absorption)     0.640051       0.640132 0.0006     k(abs/tk ln)
0.640080 0.0006     0.640107 0.0006   0.4258
 k(trk length)     0.647747       0.640028 0.0008     k(tk ln/col)
0.640021 0.0007     0.640018 0.0006   0.5435
 rem life(col)   6.7449E+03     6.8443E+03 0.0007     k(col/abs/tk ln)
0.640058 0.0006     0.640093 0.0006
 rem life(abs)   6.7365E+03     6.8444E+03 0.0007     life(col/abs/tl)
6.8461E+03 0.0006   6.8514E+03 0.0005
 source points generated   4952

  estimator     cycle   752   ave of   702 cycles      combination
simple average    combined average     corr
 k(collision)      0.632263       0.640004 0.0006     k(col/abs)
0.640068 0.0006     0.640089 0.0006   0.8401
 k(absorption)     0.640744       0.640133 0.0006     k(abs/tk ln)
0.640081 0.0006     0.640109 0.0006   0.4258
 k(trk length)     0.641390       0.640030 0.0008     k(tk ln/col)
0.640017 0.0007     0.640010 0.0006   0.5432
 rem life(col)   6.7364E+03     6.8441E+03 0.0007     k(col/abs/tk ln)
0.640056 0.0006     0.640092 0.0006
 rem life(abs)   6.7050E+03     6.8442E+03 0.0007     life(col/abs/tl)
6.8460E+03 0.0006   6.8513E+03 0.0005
 source points generated   4888

  estimator     cycle   753   ave of   703 cycles      combination
simple average    combined average     corr
 k(collision)      0.641835       0.640007 0.0006     k(col/abs)
0.640079 0.0006     0.640100 0.0006   0.8395
 k(absorption)     0.652549       0.640150 0.0006     k(abs/tk ln)
0.640066 0.0006     0.640111 0.0006   0.4197
 k(trk length)     0.606882       0.639982 0.0008     k(tk ln/col)
0.639995 0.0007     0.640002 0.0006   0.5405
 rem life(col)   6.5415E+03     6.8437E+03 0.0007     k(col/abs/tk ln)
0.640047 0.0006     0.640094 0.0006
 rem life(abs)   6.5177E+03     6.8438E+03 0.0007     life(col/abs/tl)
6.8455E+03 0.0006   6.8510E+03 0.0005
 source points generated   5019

  estimator     cycle   754   ave of   704 cycles      combination
simple average    combined average     corr
 k(collision)      0.659083       0.640034 0.0006     k(col/abs)
0.640103 0.0006     0.640124 0.0006   0.8401
 k(absorption)     0.655525       0.640172 0.0006     k(abs/tk ln)
0.640090 0.0006     0.640134 0.0006   0.4213
 k(trk length)     0.658096       0.640008 0.0008     k(tk ln/col)
0.640021 0.0007     0.640028 0.0006   0.5419
 rem life(col)   6.8451E+03     6.8437E+03 0.0007     k(col/abs/tk ln)
0.640071 0.0006     0.640118 0.0006
 rem life(abs)   6.8475E+03     6.8438E+03 0.0007     life(col/abs/tl)
6.8455E+03 0.0006   6.8509E+03 0.0005
 source points generated   5121

  estimator     cycle   755   ave of   705 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.646037       0.640042 0.0006     k(col/abs)
0.640111 0.0006     0.640132 0.0006   0.8401
 k(absorption)     0.645576       0.640180 0.0006     k(abs/tk ln)
0.640099 0.0006     0.640142 0.0006   0.4215
 k(trk length)     0.646609       0.640017 0.0008     k(tk ln/col)
0.640030 0.0007     0.640037 0.0006   0.5421
 rem life(col)   6.8983E+03     6.8438E+03 0.0007     k(col/abs/tk ln)
0.640080 0.0006     0.640126 0.0006
 rem life(abs)   6.9065E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8511E+03 0.0005
 source points generated   4892

  estimator     cycle   756   ave of   706 cycles      combination
simple average    combined average     corr
 k(collision)      0.651967       0.640059 0.0006     k(col/abs)
0.640127 0.0006     0.640148 0.0006   0.8404
 k(absorption)     0.650211       0.640194 0.0006     k(abs/tk ln)
0.640114 0.0006     0.640157 0.0006   0.4221
 k(trk length)     0.651477       0.640034 0.0008     k(tk ln/col)
0.640047 0.0007     0.640054 0.0006   0.5426
 rem life(col)   6.9527E+03     6.8440E+03 0.0007     k(col/abs/tk ln)
0.640096 0.0006     0.640141 0.0006
 rem life(abs)   6.9607E+03     6.8440E+03 0.0007     life(col/abs/tl)
6.8457E+03 0.0006   6.8510E+03 0.0005
 source points generated   5019

  estimator     cycle   757   ave of   707 cycles      combination
simple average    combined average     corr
 k(collision)      0.625735       0.640039 0.0006     k(col/abs)
0.640112 0.0006     0.640136 0.0006   0.8402
 k(absorption)     0.634271       0.640186 0.0006     k(abs/tk ln)
0.640115 0.0006     0.640153 0.0006   0.4214
 k(trk length)     0.648203       0.640045 0.0008     k(tk ln/col)
0.640042 0.0006     0.640040 0.0006   0.5407
 rem life(col)   6.7364E+03     6.8438E+03 0.0007     k(col/abs/tk ln)
0.640090 0.0006     0.640135 0.0006
 rem life(abs)   6.6920E+03     6.8438E+03 0.0007     life(col/abs/tl)
6.8455E+03 0.0006   6.8508E+03 0.0005
 source points generated   4804

  estimator     cycle   758   ave of   708 cycles      combination
simple average    combined average     corr
 k(collision)      0.629470       0.640024 0.0006     k(col/abs)
0.640099 0.0006     0.640123 0.0006   0.8404
 k(absorption)     0.631708       0.640174 0.0006     k(abs/tk ln)
0.640099 0.0006     0.640139 0.0006   0.4221
 k(trk length)     0.625801       0.640025 0.0008     k(tk ln/col)
0.640025 0.0006     0.640024 0.0006   0.5414
 rem life(col)   6.9069E+03     6.8439E+03 0.0007     k(col/abs/tk ln)
0.640074 0.0006     0.640121 0.0006
 rem life(abs)   6.8940E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8509E+03 0.0005
 source points generated   5042
```

```
  estimator     cycle   759   ave of   709 cycles      combination
simple average    combined average     corr
 k(collision)      0.636962       0.640020 0.0006     k(col/abs)
0.640097 0.0006     0.640121 0.0006   0.8403
 k(absorption)     0.639742       0.640173 0.0006     k(abs/tk ln)
0.640106 0.0006     0.640142 0.0006   0.4219
 k(trk length)     0.649877       0.640039 0.0008     k(tk ln/col)
0.640029 0.0006     0.640024 0.0006   0.5409
 rem life(col)   6.7969E+03     6.8438E+03 0.0007     k(col/abs/tk ln)
0.640077 0.0006     0.640123 0.0006
 rem life(abs)   6.7769E+03     6.8438E+03 0.0007     life(col/abs/tl)
6.8455E+03 0.0006   6.8508E+03 0.0005
 source points generated   5085

  estimator     cycle   760   ave of   710 cycles      combination
simple average    combined average     corr
 k(collision)      0.650045       0.640034 0.0006     k(col/abs)
0.640112 0.0006     0.640137 0.0006   0.8405
 k(absorption)     0.652498       0.640190 0.0006     k(abs/tk ln)
0.640118 0.0006     0.640157 0.0006   0.4220
 k(trk length)     0.644764       0.640046 0.0008     k(tk ln/col)
0.640040 0.0006     0.640037 0.0006   0.5409
 rem life(col)   7.0185E+03     6.8441E+03 0.0007     k(col/abs/tk ln)
0.640090 0.0006     0.640138 0.0006
 rem life(abs)   6.9986E+03     6.8440E+03 0.0007     life(col/abs/tl)
6.8457E+03 0.0006   6.8507E+03 0.0005
 source points generated   5160

  estimator     cycle   761   ave of   711 cycles      combination
simple average    combined average     corr
 k(collision)      0.619109       0.640005 0.0006     k(col/abs)
0.640085 0.0006     0.640111 0.0006   0.8412
 k(absorption)     0.622543       0.640166 0.0006     k(abs/tk ln)
0.640092 0.0006     0.640131 0.0006   0.4238
 k(trk length)     0.621111       0.640019 0.0008     k(tk ln/col)
0.640012 0.0006     0.640008 0.0006   0.5424
 rem life(col)   6.6112E+03     6.8437E+03 0.0007     k(col/abs/tk ln)
0.640063 0.0006     0.640112 0.0006
 rem life(abs)   6.6069E+03     6.8437E+03 0.0007     life(col/abs/tl)
6.8454E+03 0.0006   6.8506E+03 0.0005
 source points generated   4792

  estimator     cycle   762   ave of   712 cycles      combination
simple average    combined average     corr
 k(collision)      0.618404       0.639974 0.0006     k(col/abs)
0.640052 0.0006     0.640076 0.0006   0.8422
 k(absorption)     0.614262       0.640129 0.0006     k(abs/tk ln)
0.640058 0.0006     0.640096 0.0006   0.4268
 k(trk length)     0.617160       0.639987 0.0008     k(tk ln/col)
0.639981 0.0006     0.639977 0.0006   0.5444
 rem life(col)   6.9745E+03     6.8439E+03 0.0007     k(col/abs/tk ln)
0.640030 0.0006     0.640077 0.0006
 rem life(abs)   7.0111E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8506E+03 0.0005
```

```
 source points generated   5011

  estimator     cycle   763   ave of   713 cycles      combination
simple average    combined average     corr
 k(collision)      0.632329       0.639964 0.0006     k(col/abs)
0.640037 0.0006     0.640059 0.0006   0.8422
 k(absorption)     0.626269       0.640110 0.0006     k(abs/tk ln)
0.640052 0.0006     0.640083 0.0006   0.4256
 k(trk length)     0.645010       0.639994 0.0008     k(tk ln/col)
0.639979 0.0006     0.639970 0.0006   0.5438
 rem life(col)   6.8423E+03     6.8439E+03 0.0007     k(col/abs/tk ln)
0.640022 0.0006     0.640064 0.0006
 rem life(abs)   6.8418E+03     6.8439E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8508E+03 0.0005
 source points generated   5138

  estimator     cycle   764   ave of   714 cycles      combination
simple average    combined average     corr
 k(collision)      0.639663       0.639963 0.0006     k(col/abs)
0.640040 0.0006     0.640063 0.0006   0.8420
 k(absorption)     0.644708       0.640116 0.0006     k(abs/tk ln)
0.640061 0.0006     0.640090 0.0006   0.4258
 k(trk length)     0.648698       0.640006 0.0008     k(tk ln/col)
0.639985 0.0006     0.639972 0.0006   0.5437
 rem life(col)   7.0045E+03     6.8441E+03 0.0007     k(col/abs/tk ln)
0.640029 0.0006     0.640071 0.0006
 rem life(abs)   6.9865E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8458E+03 0.0006   6.8507E+03 0.0005
 source points generated   5062

  estimator     cycle   765   ave of   715 cycles      combination
simple average    combined average     corr
 k(collision)      0.637613       0.639960 0.0006     k(col/abs)
0.640041 0.0006     0.640065 0.0006   0.8418
 k(absorption)     0.643926       0.640122 0.0006     k(abs/tk ln)
0.640060 0.0006     0.640093 0.0006   0.4255
 k(trk length)     0.634329       0.639998 0.0008     k(tk ln/col)
0.639979 0.0006     0.639968 0.0006   0.5437
 rem life(col)   6.9096E+03     6.8442E+03 0.0007     k(col/abs/tk ln)
0.640027 0.0006     0.640072 0.0006
 rem life(abs)   6.8814E+03     6.8442E+03 0.0007     life(col/abs/tl)
6.8458E+03 0.0006   6.8507E+03 0.0005
 source points generated   4936

  estimator     cycle   766   ave of   716 cycles      combination
simple average    combined average     corr
 k(collision)      0.636463       0.639955 0.0006     k(col/abs)
0.640033 0.0006     0.640057 0.0006   0.8418
 k(absorption)     0.633147       0.640112 0.0006     k(abs/tk ln)
0.640057 0.0006     0.640086 0.0006   0.4252
 k(trk length)     0.642403       0.640002 0.0008     k(tk ln/col)
0.639978 0.0006     0.639965 0.0006   0.5436
 rem life(col)   6.8227E+03     6.8442E+03 0.0007     k(col/abs/tk ln)
0.640023 0.0006     0.640065 0.0006
```

```
 rem life(abs)   6.8361E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8458E+03 0.0006   6.8506E+03 0.0005
 source points generated   5021

  estimator     cycle   767   ave of   717 cycles      combination
simple average    combined average     corr
 k(collision)      0.643739       0.639960 0.0006     k(col/abs)
0.640040 0.0006     0.640065 0.0006   0.8418
 k(absorption)     0.646268       0.640120 0.0006     k(abs/tk ln)
0.640057 0.0006     0.640090 0.0006   0.4247
 k(trk length)     0.634286       0.639994 0.0008     k(tk ln/col)
0.639977 0.0006     0.639967 0.0006   0.5433
 rem life(col)   6.7330E+03     6.8441E+03 0.0007     k(col/abs/tk ln)
0.640025 0.0006     0.640070 0.0006
 rem life(abs)   6.7063E+03     6.8440E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8506E+03 0.0005
 source points generated   5068

  estimator     cycle   768   ave of   718 cycles      combination
simple average    combined average     corr
 k(collision)      0.637120       0.639956 0.0006     k(col/abs)
0.640032 0.0006     0.640055 0.0006   0.8416
 k(absorption)     0.631133       0.640108 0.0006     k(abs/tk ln)
0.640046 0.0006     0.640078 0.0006   0.4250
 k(trk length)     0.632450       0.639983 0.0008     k(tk ln/col)
0.639970 0.0006     0.639962 0.0006   0.5434
 rem life(col)   6.9721E+03     6.8442E+03 0.0007     k(col/abs/tk ln)
0.640016 0.0006     0.640059 0.0006
 rem life(abs)   6.9450E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8458E+03 0.0006   6.8507E+03 0.0005
 source points generated   4911

  estimator     cycle   769   ave of   719 cycles      combination
simple average    combined average     corr
 k(collision)      0.644709       0.639963 0.0006     k(col/abs)
0.640041 0.0006     0.640064 0.0006   0.8417
 k(absorption)     0.647586       0.640118 0.0006     k(abs/tk ln)
0.640050 0.0006     0.640086 0.0006   0.4248
 k(trk length)     0.639263       0.639982 0.0008     k(tk ln/col)
0.639972 0.0006     0.639967 0.0006   0.5433
 rem life(col)   6.7721E+03     6.8441E+03 0.0007     k(col/abs/tk ln)
0.640021 0.0006     0.640066 0.0006
 rem life(abs)   6.7666E+03     6.8440E+03 0.0007     life(col/abs/tl)
6.8457E+03 0.0006   6.8506E+03 0.0005
 source points generated   5032

  estimator     cycle   770   ave of   720 cycles      combination
simple average    combined average     corr
 k(collision)      0.624452       0.639941 0.0006     k(col/abs)
0.640024 0.0006     0.640049 0.0006   0.8417
 k(absorption)     0.631909       0.640107 0.0006     k(abs/tk ln)
0.640046 0.0006     0.640078 0.0006   0.4245
 k(trk length)     0.641441       0.639984 0.0008     k(tk ln/col)
0.639963 0.0006     0.639951 0.0006   0.5423
```

```
 rem life(col)   6.9867E+03     6.8443E+03 0.0007     k(col/abs/tk ln)
0.640011 0.0006     0.640056 0.0006
 rem life(abs)   6.9527E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8458E+03 0.0006   6.8508E+03 0.0005
 source points generated   4834

  estimator     cycle   771   ave of   721 cycles      combination
simple average    combined average     corr
 k(collision)      0.631636       0.639930 0.0006     k(col/abs)
0.640022 0.0006     0.640050 0.0006   0.8406
 k(absorption)     0.645279       0.640114 0.0006     k(abs/tk ln)
0.640041 0.0006     0.640079 0.0006   0.4237
 k(trk length)     0.628044       0.639968 0.0008     k(tk ln/col)
0.639949 0.0006     0.639938 0.0006   0.5427
 rem life(col)   6.9225E+03     6.8444E+03 0.0007     k(col/abs/tk ln)
0.640004 0.0006     0.640056 0.0006
 rem life(abs)   6.8548E+03     6.8441E+03 0.0007     life(col/abs/tl)
6.8459E+03 0.0006   6.8507E+03 0.0005
 source points generated   5038

  estimator     cycle   772   ave of   722 cycles      combination
simple average    combined average     corr
 k(collision)      0.625090       0.639909 0.0006     k(col/abs)
0.639998 0.0006     0.640024 0.0006   0.8410
 k(absorption)     0.620286       0.640087 0.0006     k(abs/tk ln)
0.640027 0.0006     0.640058 0.0006   0.4226
 k(trk length)     0.639869       0.639967 0.0008     k(tk ln/col)
0.639938 0.0006     0.639922 0.0006   0.5420
 rem life(col)   7.0728E+03     6.8448E+03 0.0007     k(col/abs/tk ln)
0.639988 0.0006     0.640035 0.0006
 rem life(abs)   7.0785E+03     6.8445E+03 0.0007     life(col/abs/tl)
6.8462E+03 0.0006   6.8509E+03 0.0005
 source points generated   4938

  estimator     cycle   773   ave of   723 cycles      combination
simple average    combined average     corr
 k(collision)      0.628076       0.639893 0.0006     k(col/abs)
0.639985 0.0006     0.640013 0.0006   0.8411
 k(absorption)     0.633113       0.640077 0.0006     k(abs/tk ln)
0.640026 0.0006     0.640053 0.0006   0.4220
 k(trk length)     0.645891       0.639976 0.0008     k(tk ln/col)
0.639934 0.0006     0.639911 0.0006   0.5408
 rem life(col)   6.8266E+03     6.8447E+03 0.0007     k(col/abs/tk ln)
0.639982 0.0006     0.640028 0.0006
 rem life(abs)   6.8200E+03     6.8444E+03 0.0007     life(col/abs/tl)
6.8461E+03 0.0006   6.8510E+03 0.0005
 source points generated   5070

  estimator     cycle   774   ave of   724 cycles      combination
simple average    combined average     corr
 k(collision)      0.633421       0.639884 0.0006     k(col/abs)
0.639973 0.0006     0.640000 0.0006   0.8411
 k(absorption)     0.629615       0.640063 0.0006     k(abs/tk ln)
0.640013 0.0006     0.640039 0.0006   0.4225
```

```
 k(trk length)     0.630566       0.639963 0.0008     k(tk ln/col)
0.639923 0.0006     0.639901 0.0006   0.5411
 rem life(col)   6.8771E+03     6.8448E+03 0.0007     k(col/abs/tk ln)
0.639970 0.0006     0.640015 0.0006
 rem life(abs)   6.8822E+03     6.8445E+03 0.0007     life(col/abs/tl)
6.8462E+03 0.0006   6.8510E+03 0.0005
 source points generated   5017

  estimator     cycle   775   ave of   725 cycles      combination
simple average    combined average     corr
 k(collision)      0.644332       0.639890 0.0006     k(col/abs)
0.639966 0.0006     0.639988 0.0006   0.8391
 k(absorption)     0.625536       0.640043 0.0006     k(abs/tk ln)
0.640009 0.0006     0.640026 0.0006   0.4206
 k(trk length)     0.648794       0.639975 0.0008     k(tk ln/col)
0.639932 0.0006     0.639909 0.0006   0.5412
 rem life(col)   7.1729E+03     6.8452E+03 0.0007     k(col/abs/tk ln)
0.639969 0.0006     0.640005 0.0006
 rem life(abs)   7.2111E+03     6.8450E+03 0.0007     life(col/abs/tl)
6.8466E+03 0.0006   6.8513E+03 0.0005
 source points generated   5109

  estimator     cycle   776   ave of   726 cycles      combination
simple average    combined average     corr
 k(collision)      0.645544       0.639898 0.0006     k(col/abs)
0.639977 0.0006     0.639999 0.0006   0.8391
 k(absorption)     0.649733       0.640056 0.0006     k(abs/tk ln)
0.640015 0.0006     0.640036 0.0006   0.4203
 k(trk length)     0.639896       0.639975 0.0008     k(tk ln/col)
0.639936 0.0006     0.639915 0.0006   0.5411
 rem life(col)   6.7960E+03     6.8452E+03 0.0007     k(col/abs/tk ln)
0.639976 0.0006     0.640014 0.0006
 rem life(abs)   6.8018E+03     6.8449E+03 0.0007     life(col/abs/tl)
6.8466E+03 0.0006   6.8512E+03 0.0005
 source points generated   5016

  estimator     cycle   777   ave of   727 cycles      combination
simple average    combined average     corr
 k(collision)      0.644957       0.639905 0.0006     k(col/abs)
0.639985 0.0006     0.640008 0.0006   0.8391
 k(absorption)     0.646981       0.640065 0.0006     k(abs/tk ln)
0.640020 0.0006     0.640044 0.0006   0.4202
 k(trk length)     0.640501       0.639975 0.0008     k(tk ln/col)
0.639940 0.0006     0.639920 0.0006   0.5411
 rem life(col)   6.8305E+03     6.8451E+03 0.0007     k(col/abs/tk ln)
0.639982 0.0006     0.640021 0.0006
 rem life(abs)   6.8524E+03     6.8449E+03 0.0007     life(col/abs/tl)
6.8465E+03 0.0006   6.8512E+03 0.0005
 source points generated   5005

  estimator     cycle   778   ave of   728 cycles      combination
simple average    combined average     corr
 k(collision)      0.644951       0.639912 0.0006     k(col/abs)
0.639992 0.0006     0.640015 0.0006   0.8392
```

```
 k(absorption)     0.645192       0.640072 0.0006     k(abs/tk ln)
0.640034 0.0006     0.640054 0.0006   0.4206
 k(trk length)     0.654933       0.639996 0.0008     k(tk ln/col)
0.639954 0.0006     0.639930 0.0006   0.5412
 rem life(col)   6.6940E+03     6.8449E+03 0.0007     k(col/abs/tk ln)
0.639993 0.0006     0.640031 0.0006
 rem life(abs)   6.7420E+03     6.8448E+03 0.0007     life(col/abs/tl)
6.8464E+03 0.0006   6.8511E+03 0.0005
 source points generated   5031

  estimator     cycle   779   ave of   729 cycles      combination
simple average    combined average     corr
 k(collision)      0.638654       0.639910 0.0006     k(col/abs)
0.639989 0.0006     0.640011 0.0006   0.8392
 k(absorption)     0.636757       0.640068 0.0006     k(abs/tk ln)
0.640029 0.0006     0.640049 0.0006   0.4207
 k(trk length)     0.635086       0.639989 0.0008     k(tk ln/col)
0.639950 0.0006     0.639927 0.0006   0.5413
 rem life(col)   7.0112E+03     6.8452E+03 0.0007     k(col/abs/tk ln)
0.639989 0.0006     0.640026 0.0006
 rem life(abs)   6.9952E+03     6.8450E+03 0.0007     life(col/abs/tl)
6.8466E+03 0.0006   6.8513E+03 0.0005
 source points generated   4926

  estimator     cycle   780   ave of   730 cycles      combination
simple average    combined average     corr
 k(collision)      0.638179       0.639908 0.0006     k(col/abs)
0.639989 0.0006     0.640012 0.0006   0.8391
 k(absorption)     0.641610       0.640070 0.0006     k(abs/tk ln)
0.640026 0.0006     0.640049 0.0006   0.4205
 k(trk length)     0.634328       0.639981 0.0008     k(tk ln/col)
0.639945 0.0006     0.639924 0.0006   0.5413
 rem life(col)   7.1314E+03     6.8456E+03 0.0007     k(col/abs/tk ln)
0.639986 0.0006     0.640026 0.0006
 rem life(abs)   7.1137E+03     6.8454E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8515E+03 0.0005
 source points generated   4978

  estimator     cycle   781   ave of   731 cycles      combination
simple average    combined average     corr
 k(collision)      0.644245       0.639914 0.0006     k(col/abs)
0.639989 0.0006     0.640010 0.0006   0.8387
 k(absorption)     0.636213       0.640065 0.0006     k(abs/tk ln)
0.640032 0.0006     0.640049 0.0006   0.4197
 k(trk length)     0.653600       0.640000 0.0008     k(tk ln/col)
0.639957 0.0006     0.639933 0.0006   0.5414
 rem life(col)   6.6734E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.639993 0.0006     0.640027 0.0006
 rem life(abs)   6.7100E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8514E+03 0.0005
 source points generated   5019

  estimator     cycle   782   ave of   732 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.633750       0.639905 0.0006     k(col/abs)
0.639983 0.0006     0.640005 0.0006   0.8387
 k(absorption)     0.637251       0.640061 0.0006     k(abs/tk ln)
0.640022 0.0006     0.640042 0.0006   0.4198
 k(trk length)     0.627944       0.639984 0.0008     k(tk ln/col)
0.639944 0.0006     0.639922 0.0006   0.5417
 rem life(col)   6.8793E+03     6.8454E+03 0.0007     k(col/abs/tk ln)
0.639983 0.0006     0.640020 0.0006
 rem life(abs)   6.8894E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8514E+03 0.0005
 source points generated   4934

  estimator     cycle   783   ave of   733 cycles      combination
simple average    combined average     corr
 k(collision)      0.637087       0.639901 0.0006     k(col/abs)
0.639974 0.0006     0.639994 0.0006   0.8384
 k(absorption)     0.629095       0.640046 0.0006     k(abs/tk ln)
0.640017 0.0006     0.640032 0.0006   0.4192
 k(trk length)     0.642859       0.639988 0.0008     k(tk ln/col)
0.639944 0.0006     0.639920 0.0006   0.5416
 rem life(col)   6.8144E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.639978 0.0006     0.640011 0.0006
 rem life(abs)   6.7998E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8515E+03 0.0005
 source points generated   5027

  estimator     cycle   784   ave of   734 cycles      combination
simple average    combined average     corr
 k(collision)      0.660996       0.639930 0.0006     k(col/abs)
0.640008 0.0006     0.640028 0.0006   0.8392
 k(absorption)     0.668982       0.640085 0.0006     k(abs/tk ln)
0.640052 0.0006     0.640069 0.0006   0.4223
 k(trk length)     0.662741       0.640019 0.0008     k(tk ln/col)
0.639974 0.0006     0.639949 0.0006   0.5435
 rem life(col)   6.9409E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640011 0.0006     0.640045 0.0006
 rem life(abs)   6.9504E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8515E+03 0.0005
 source points generated   5185

  estimator     cycle   785   ave of   735 cycles      combination
simple average    combined average     corr
 k(collision)      0.644455       0.639936 0.0006     k(col/abs)
0.640007 0.0006     0.640025 0.0006   0.8386
 k(absorption)     0.634299       0.640077 0.0006     k(abs/tk ln)
0.640054 0.0006     0.640066 0.0006   0.4217
 k(trk length)     0.648402       0.640030 0.0008     k(tk ln/col)
0.639983 0.0006     0.639957 0.0006   0.5436
 rem life(col)   6.9729E+03     6.8456E+03 0.0007     k(col/abs/tk ln)
0.640015 0.0006     0.640044 0.0006
 rem life(abs)   6.9748E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8516E+03 0.0005
 source points generated   4834
```

```
  estimator     cycle   786   ave of   736 cycles      combination
simple average    combined average     corr
 k(collision)      0.626320       0.639918 0.0006     k(col/abs)
0.639987 0.0006     0.640005 0.0006   0.8390
 k(absorption)     0.624532       0.640056 0.0006     k(abs/tk ln)
0.640053 0.0006     0.640055 0.0006   0.4187
 k(trk length)     0.654192       0.640049 0.0008     k(tk ln/col)
0.639983 0.0006     0.639947 0.0006   0.5409
 rem life(col)   6.9671E+03     6.8458E+03 0.0007     k(col/abs/tk ln)
0.640008 0.0006     0.640032 0.0006
 rem life(abs)   6.9931E+03     6.8457E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8516E+03 0.0005
 source points generated   4874

  estimator     cycle   787   ave of   737 cycles      combination
simple average    combined average     corr
 k(collision)      0.629497       0.639904 0.0006     k(col/abs)
0.639974 0.0006     0.639992 0.0006   0.8392
 k(absorption)     0.630552       0.640043 0.0006     k(abs/tk ln)
0.640050 0.0006     0.640047 0.0006   0.4179
 k(trk length)     0.645693       0.640057 0.0008     k(tk ln/col)
0.639980 0.0006     0.639938 0.0006   0.5400
 rem life(col)   6.7524E+03     6.8457E+03 0.0007     k(col/abs/tk ln)
0.640001 0.0006     0.640024 0.0006
 rem life(abs)   6.7308E+03     6.8456E+03 0.0007     life(col/abs/tl)
6.8471E+03 0.0006   6.8516E+03 0.0005
 source points generated   5003

  estimator     cycle   788   ave of   738 cycles      combination
simple average    combined average     corr
 k(collision)      0.631335       0.639892 0.0006     k(col/abs)
0.639969 0.0006     0.639989 0.0006   0.8386
 k(absorption)     0.641764       0.640046 0.0006     k(abs/tk ln)
0.640030 0.0006     0.640038 0.0006   0.4160
 k(trk length)     0.608515       0.640014 0.0008     k(tk ln/col)
0.639953 0.0006     0.639919 0.0006   0.5404
 rem life(col)   6.7111E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.639984 0.0006     0.640014 0.0006
 rem life(abs)   6.7132E+03     6.8454E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8515E+03 0.0005
 source points generated   5008

  estimator     cycle   789   ave of   739 cycles      combination
simple average    combined average     corr
 k(collision)      0.647933       0.639903 0.0006     k(col/abs)
0.639982 0.0006     0.640003 0.0006   0.8387
 k(absorption)     0.651976       0.640062 0.0006     k(abs/tk ln)
0.640038 0.0006     0.640050 0.0006   0.4156
 k(trk length)     0.639342       0.640013 0.0008     k(tk ln/col)
0.639958 0.0006     0.639927 0.0006   0.5401
 rem life(col)   6.7858E+03     6.8454E+03 0.0007     k(col/abs/tk ln)
0.639993 0.0006     0.640026 0.0006
 rem life(abs)   6.7457E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8513E+03 0.0005
```

```
 source points generated   5134

  estimator     cycle   790   ave of   740 cycles      combination
simple average    combined average     corr
 k(collision)      0.630902       0.639891 0.0006     k(col/abs)
0.639972 0.0006     0.639993 0.0006   0.8388
 k(absorption)     0.634054       0.640054 0.0006     k(abs/tk ln)
0.640032 0.0006     0.640043 0.0006   0.4156
 k(trk length)     0.638308       0.640011 0.0008     k(tk ln/col)
0.639951 0.0006     0.639917 0.0006   0.5400
 rem life(col)   6.8469E+03     6.8454E+03 0.0007     k(col/abs/tk ln)
0.639985 0.0006     0.640018 0.0006
 rem life(abs)   6.8222E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8511E+03 0.0005
 source points generated   4857

  estimator     cycle   791   ave of   741 cycles      combination
simple average    combined average     corr
 k(collision)      0.638301       0.639889 0.0006     k(col/abs)
0.639969 0.0006     0.639990 0.0006   0.8388
 k(absorption)     0.637582       0.640050 0.0006     k(abs/tk ln)
0.640043 0.0006     0.640047 0.0006   0.4146
 k(trk length)     0.658791       0.640036 0.0008     k(tk ln/col)
0.639962 0.0006     0.639921 0.0006   0.5391
 rem life(col)   6.8394E+03     6.8454E+03 0.0007     k(col/abs/tk ln)
0.639992 0.0006     0.640021 0.0006
 rem life(abs)   6.8384E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8510E+03 0.0005
 source points generated   5109

  estimator     cycle   792   ave of   742 cycles      combination
simple average    combined average     corr
 k(collision)      0.631643       0.639877 0.0006     k(col/abs)
0.639970 0.0006     0.639994 0.0006   0.8371
 k(absorption)     0.649289       0.640063 0.0006     k(abs/tk ln)
0.640047 0.0006     0.640055 0.0006   0.4140
 k(trk length)     0.635522       0.640030 0.0008     k(tk ln/col)
0.639954 0.0006     0.639911 0.0006   0.5392
 rem life(col)   7.1073E+03     6.8457E+03 0.0007     k(col/abs/tk ln)
0.639990 0.0006     0.640025 0.0006
 rem life(abs)   7.0701E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8511E+03 0.0005
 source points generated   4875

  estimator     cycle   793   ave of   743 cycles      combination
simple average    combined average     corr
 k(collision)      0.629369       0.639863 0.0006     k(col/abs)
0.639959 0.0006     0.639983 0.0006   0.8372
 k(absorption)     0.633367       0.640054 0.0006     k(abs/tk ln)
0.640052 0.0006     0.640053 0.0006   0.4126
 k(trk length)     0.655265       0.640051 0.0008     k(tk ln/col)
0.639957 0.0006     0.639905 0.0006   0.5370
 rem life(col)   6.8431E+03     6.8457E+03 0.0007     k(col/abs/tk ln)
0.639989 0.0006     0.640022 0.0006
```

```
 rem life(abs)   6.8381E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8512E+03 0.0005
 source points generated   4937

  estimator     cycle   794   ave of   744 cycles      combination
simple average    combined average     corr
 k(collision)      0.635816       0.639858 0.0006     k(col/abs)
0.639951 0.0006     0.639974 0.0006   0.8371
 k(absorption)     0.632309       0.640044 0.0006     k(abs/tk ln)
0.640053 0.0006     0.640048 0.0006   0.4117
 k(trk length)     0.648669       0.640062 0.0008     k(tk ln/col)
0.639960 0.0006     0.639903 0.0006   0.5365
 rem life(col)   6.7194E+03     6.8456E+03 0.0007     k(col/abs/tk ln)
0.639988 0.0006     0.640017 0.0006
 rem life(abs)   6.7480E+03     6.8454E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8511E+03 0.0005
 source points generated   5033

  estimator     cycle   795   ave of   745 cycles      combination
simple average    combined average     corr
 k(collision)      0.653692       0.639876 0.0006     k(col/abs)
0.639970 0.0006     0.639994 0.0006   0.8375
 k(absorption)     0.655582       0.640064 0.0006     k(abs/tk ln)
0.640057 0.0006     0.640061 0.0006   0.4098
 k(trk length)     0.631299       0.640051 0.0008     k(tk ln/col)
0.639963 0.0006     0.639915 0.0006   0.5347
 rem life(col)   6.6607E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.639997 0.0006     0.640031 0.0006
 rem life(abs)   6.6786E+03     6.8451E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8510E+03 0.0005
 source points generated   5155

  estimator     cycle   796   ave of   746 cycles      combination
simple average    combined average     corr
 k(collision)      0.638204       0.639874 0.0006     k(col/abs)
0.639967 0.0006     0.639991 0.0006   0.8375
 k(absorption)     0.636873       0.640060 0.0006     k(abs/tk ln)
0.640045 0.0006     0.640053 0.0006   0.4099
 k(trk length)     0.624918       0.640030 0.0008     k(tk ln/col)
0.639952 0.0006     0.639909 0.0006   0.5345
 rem life(col)   6.6678E+03     6.8451E+03 0.0007     k(col/abs/tk ln)
0.639988 0.0006     0.640023 0.0006
 rem life(abs)   6.6990E+03     6.8449E+03 0.0007     life(col/abs/tl)
6.8465E+03 0.0006   6.8510E+03 0.0005
 source points generated   4914

  estimator     cycle   797   ave of   747 cycles      combination
simple average    combined average     corr
 k(collision)      0.642699       0.639878 0.0006     k(col/abs)
0.639975 0.0006     0.639999 0.0006   0.8374
 k(absorption)     0.648282       0.640071 0.0006     k(abs/tk ln)
0.640064 0.0006     0.640068 0.0006   0.4106
 k(trk length)     0.660015       0.640057 0.0008     k(tk ln/col)
0.639967 0.0006     0.639917 0.0006   0.5343
```

```
 rem life(col)   6.7075E+03     6.8449E+03 0.0007     k(col/abs/tk ln)
0.640002 0.0006     0.640036 0.0006
 rem life(abs)   6.6751E+03     6.8447E+03 0.0007     life(col/abs/tl)
6.8463E+03 0.0006   6.8510E+03 0.0005
 source points generated   5054

  estimator     cycle   798   ave of   748 cycles      combination
simple average    combined average     corr
 k(collision)      0.652160       0.639894 0.0006     k(col/abs)
0.639990 0.0006     0.640015 0.0006   0.8377
 k(absorption)     0.651450       0.640086 0.0006     k(abs/tk ln)
0.640080 0.0006     0.640083 0.0006   0.4113
 k(trk length)     0.651833       0.640073 0.0008     k(tk ln/col)
0.639984 0.0006     0.639934 0.0006   0.5348
 rem life(col)   6.8750E+03     6.8449E+03 0.0007     k(col/abs/tk ln)
0.640018 0.0006     0.640052 0.0006
 rem life(abs)   6.8556E+03     6.8447E+03 0.0007     life(col/abs/tl)
6.8464E+03 0.0006   6.8511E+03 0.0005
 source points generated   5064

  estimator     cycle   799   ave of   749 cycles      combination
simple average    combined average     corr
 k(collision)      0.631426       0.639883 0.0006     k(col/abs)
0.639981 0.0006     0.640006 0.0006   0.8378
 k(absorption)     0.634321       0.640079 0.0006     k(abs/tk ln)
0.640080 0.0006     0.640079 0.0006   0.4109
 k(trk length)     0.646377       0.640081 0.0008     k(tk ln/col)
0.639982 0.0006     0.639927 0.0006   0.5341
 rem life(col)   6.9291E+03     6.8451E+03 0.0007     k(col/abs/tk ln)
0.640014 0.0006     0.640047 0.0006
 rem life(abs)   6.9202E+03     6.8448E+03 0.0007     life(col/abs/tl)
6.8465E+03 0.0006   6.8513E+03 0.0005
 source points generated   4861

  estimator     cycle   800   ave of   750 cycles      combination
simple average    combined average     corr
 k(collision)      0.639806       0.639883 0.0006     k(col/abs)
0.639979 0.0006     0.640003 0.0006   0.8377
 k(absorption)     0.637133       0.640075 0.0006     k(abs/tk ln)
0.640076 0.0006     0.640075 0.0006   0.4109
 k(trk length)     0.636987       0.640077 0.0008     k(tk ln/col)
0.639980 0.0006     0.639926 0.0006   0.5340
 rem life(col)   7.0096E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.640012 0.0006     0.640043 0.0006
 rem life(abs)   7.0363E+03     6.8451E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8515E+03 0.0005
 source points generated   5060

  estimator     cycle   801   ave of   751 cycles      combination
simple average    combined average     corr
 k(collision)      0.640783       0.639884 0.0006     k(col/abs)
0.639974 0.0006     0.639996 0.0006   0.8372
 k(absorption)     0.631260       0.640063 0.0006     k(abs/tk ln)
0.640082 0.0006     0.640072 0.0006   0.4089
```

```
 k(trk length)     0.657543       0.640100 0.0008     k(tk ln/col)
0.639992 0.0006     0.639932 0.0006   0.5336
 rem life(col)   6.8657E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.640016 0.0006     0.640041 0.0006
 rem life(abs)   6.8825E+03     6.8451E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8516E+03 0.0005
 source points generated   5009

  estimator     cycle   802   ave of   752 cycles      combination
simple average    combined average     corr
 k(collision)      0.630353       0.639871 0.0006     k(col/abs)
0.639961 0.0006     0.639983 0.0006   0.8374
 k(absorption)     0.630505       0.640050 0.0006     k(abs/tk ln)
0.640069 0.0006     0.640060 0.0006   0.4094
 k(trk length)     0.630905       0.640088 0.0008     k(tk ln/col)
0.639980 0.0006     0.639919 0.0006   0.5340
 rem life(col)   6.8962E+03     6.8454E+03 0.0007     k(col/abs/tk ln)
0.640003 0.0006     0.640029 0.0006
 rem life(abs)   6.8962E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8516E+03 0.0005
 source points generated   4911

  estimator     cycle   803   ave of   753 cycles      combination
simple average    combined average     corr
 k(collision)      0.630382       0.639859 0.0006     k(col/abs)
0.639947 0.0006     0.639969 0.0006   0.8376
 k(absorption)     0.628966       0.640036 0.0006     k(abs/tk ln)
0.640041 0.0006     0.640038 0.0006   0.4109
 k(trk length)     0.608725       0.640046 0.0008     k(tk ln/col)
0.639953 0.0006     0.639900 0.0006   0.5346
 rem life(col)   6.7816E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.639980 0.0006     0.640008 0.0006
 rem life(abs)   6.7749E+03     6.8451E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8515E+03 0.0005
 source points generated   5003

  estimator     cycle   804   ave of   754 cycles      combination
simple average    combined average     corr
 k(collision)      0.651073       0.639874 0.0006     k(col/abs)
0.639961 0.0006     0.639983 0.0006   0.8378
 k(absorption)     0.649423       0.640048 0.0006     k(abs/tk ln)
0.640046 0.0006     0.640047 0.0006   0.4104
 k(trk length)     0.637645       0.640043 0.0008     k(tk ln/col)
0.639958 0.0006     0.639911 0.0006   0.5339
 rem life(col)   6.6897E+03     6.8451E+03 0.0007     k(col/abs/tk ln)
0.639988 0.0006     0.640018 0.0006
 rem life(abs)   6.6962E+03     6.8449E+03 0.0007     life(col/abs/tl)
6.8465E+03 0.0006   6.8513E+03 0.0005
 source points generated   5131

  estimator     cycle   805   ave of   755 cycles      combination
simple average    combined average     corr
 k(collision)      0.643371       0.639878 0.0006     k(col/abs)
0.639966 0.0006     0.639988 0.0006   0.8378
```

```
 k(absorption)     0.643936       0.640053 0.0006     k(abs/tk ln)
0.640047 0.0006     0.640050 0.0006   0.4103
 k(trk length)     0.638223       0.640041 0.0008     k(tk ln/col)
0.639960 0.0006     0.639914 0.0006   0.5338
 rem life(col)   6.7372E+03     6.8449E+03 0.0007     k(col/abs/tk ln)
0.639991 0.0006     0.640021 0.0006
 rem life(abs)   6.7857E+03     6.8448E+03 0.0007     life(col/abs/tl)
6.8465E+03 0.0006   6.8513E+03 0.0005
 source points generated   4926

  estimator     cycle   806   ave of   756 cycles      combination
simple average    combined average     corr
 k(collision)      0.618586       0.639850 0.0006     k(col/abs)
0.639938 0.0006     0.639959 0.0006   0.8387
 k(absorption)     0.618751       0.640025 0.0006     k(abs/tk ln)
0.640017 0.0006     0.640021 0.0006   0.4129
 k(trk length)     0.616759       0.640010 0.0008     k(tk ln/col)
0.639930 0.0006     0.639885 0.0006   0.5358
 rem life(col)   6.9412E+03     6.8451E+03 0.0007     k(col/abs/tk ln)
0.639962 0.0006     0.639992 0.0006
 rem life(abs)   6.9527E+03     6.8450E+03 0.0007     life(col/abs/tl)
6.8466E+03 0.0006   6.8514E+03 0.0005
 source points generated   4770

  estimator     cycle   807   ave of   757 cycles      combination
simple average    combined average     corr
 k(collision)      0.647152       0.639860 0.0006     k(col/abs)
0.639945 0.0006     0.639967 0.0006   0.8387
 k(absorption)     0.644168       0.640030 0.0006     k(abs/tk ln)
0.640011 0.0006     0.640021 0.0006   0.4120
 k(trk length)     0.625460       0.639991 0.0008     k(tk ln/col)
0.639925 0.0006     0.639889 0.0006   0.5343
 rem life(col)   6.5617E+03     6.8447E+03 0.0007     k(col/abs/tk ln)
0.639960 0.0006     0.639993 0.0006
 rem life(abs)   6.5634E+03     6.8446E+03 0.0007     life(col/abs/tl)
6.8463E+03 0.0006   6.8512E+03 0.0005
 source points generated   5200

  estimator     cycle   808   ave of   758 cycles      combination
simple average    combined average     corr
 k(collision)      0.665067       0.639893 0.0006     k(col/abs)
0.639979 0.0006     0.640000 0.0006   0.8399
 k(absorption)     0.665928       0.640065 0.0006     k(abs/tk ln)
0.640036 0.0006     0.640050 0.0006   0.4129
 k(trk length)     0.652038       0.640007 0.0008     k(tk ln/col)
0.639950 0.0006     0.639918 0.0006   0.5348
 rem life(col)   6.6245E+03     6.8444E+03 0.0007     k(col/abs/tk ln)
0.639988 0.0006     0.640024 0.0006
 rem life(abs)   6.6380E+03     6.8443E+03 0.0007     life(col/abs/tl)
6.8460E+03 0.0006   6.8512E+03 0.0005
 source points generated   5137

  estimator     cycle   809   ave of   759 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.625665       0.639874 0.0006     k(col/abs)
0.639968 0.0006     0.639992 0.0006   0.8394
 k(absorption)     0.637398       0.640061 0.0006     k(abs/tk ln)
0.640016 0.0006     0.640039 0.0006   0.4126
 k(trk length)     0.613234       0.639971 0.0008     k(tk ln/col)
0.639923 0.0006     0.639896 0.0006   0.5362
 rem life(col)   6.7061E+03     6.8442E+03 0.0007     k(col/abs/tk ln)
0.639969 0.0006     0.640011 0.0006
 rem life(abs)   6.7367E+03     6.8442E+03 0.0007     life(col/abs/tl)
6.8459E+03 0.0006   6.8512E+03 0.0005
 source points generated   4732

  estimator     cycle   810   ave of   760 cycles      combination
simple average    combined average     corr
 k(collision)      0.649821       0.639887 0.0006     k(col/abs)
0.639988 0.0006     0.640012 0.0006   0.8392
 k(absorption)     0.660228       0.640088 0.0006     k(abs/tk ln)
0.640046 0.0006     0.640067 0.0006   0.4153
 k(trk length)     0.665117       0.640004 0.0008     k(tk ln/col)
0.639946 0.0006     0.639913 0.0006   0.5369
 rem life(col)   6.6302E+03     6.8439E+03 0.0007     k(col/abs/tk ln)
0.639993 0.0006     0.640035 0.0006
 rem life(abs)   6.5719E+03     6.8438E+03 0.0007     life(col/abs/tl)
6.8456E+03 0.0006   6.8508E+03 0.0005
 source points generated   5191

  estimator     cycle   811   ave of   761 cycles      combination
simple average    combined average     corr
 k(collision)      0.643442       0.639892 0.0006     k(col/abs)
0.639989 0.0006     0.640013 0.0006   0.8390
 k(absorption)     0.638807       0.640086 0.0006     k(abs/tk ln)
0.640038 0.0006     0.640063 0.0006   0.4152
 k(trk length)     0.629279       0.639990 0.0008     k(tk ln/col)
0.639941 0.0006     0.639914 0.0006   0.5364
 rem life(col)   6.7574E+03     6.8438E+03 0.0007     k(col/abs/tk ln)
0.639989 0.0006     0.640032 0.0006
 rem life(abs)   6.7705E+03     6.8437E+03 0.0007     life(col/abs/tl)
6.8455E+03 0.0006   6.8507E+03 0.0005
 source points generated   4954

  estimator     cycle   812   ave of   762 cycles      combination
simple average    combined average     corr
 k(collision)      0.642821       0.639896 0.0006     k(col/abs)
0.639996 0.0006     0.640021 0.0006   0.8389
 k(absorption)     0.648415       0.640097 0.0006     k(abs/tk ln)
0.640050 0.0006     0.640074 0.0006   0.4156
 k(trk length)     0.649184       0.640002 0.0008     k(tk ln/col)
0.639949 0.0006     0.639919 0.0006   0.5364
 rem life(col)   6.8719E+03     6.8439E+03 0.0007     k(col/abs/tk ln)
0.639998 0.0006     0.640042 0.0006
 rem life(abs)   6.8553E+03     6.8438E+03 0.0007     life(col/abs/tl)
6.8455E+03 0.0006   6.8507E+03 0.0005
 source points generated   5021
```

```
  estimator     cycle   813   ave of   763 cycles      combination
simple average    combined average     corr
 k(collision)      0.630454       0.639884 0.0006     k(col/abs)
0.639985 0.0006     0.640009 0.0006   0.8391
 k(absorption)     0.631733       0.640086 0.0006     k(abs/tk ln)
0.640034 0.0006     0.640060 0.0006   0.4163
 k(trk length)     0.624225       0.639982 0.0008     k(tk ln/col)
0.639933 0.0006     0.639905 0.0006   0.5370
 rem life(col)   7.1870E+03     6.8443E+03 0.0007     k(col/abs/tk ln)
0.639984 0.0006     0.640028 0.0006
 rem life(abs)   7.1864E+03     6.8442E+03 0.0007     life(col/abs/tl)
6.8459E+03 0.0006   6.8509E+03 0.0005
 source points generated   4890

  estimator     cycle   814   ave of   764 cycles      combination
simple average    combined average     corr
 k(collision)      0.629205       0.639870 0.0006     k(col/abs)
0.639968 0.0006     0.639992 0.0006   0.8393
 k(absorption)     0.625781       0.640067 0.0006     k(abs/tk ln)
0.640018 0.0006     0.640043 0.0006   0.4169
 k(trk length)     0.630196       0.639969 0.0008     k(tk ln/col)
0.639919 0.0006     0.639891 0.0006   0.5374
 rem life(col)   7.0810E+03     6.8446E+03 0.0007     k(col/abs/tk ln)
0.639969 0.0006     0.640011 0.0006
 rem life(abs)   7.1017E+03     6.8445E+03 0.0007     life(col/abs/tl)
6.8462E+03 0.0006   6.8510E+03 0.0005
 source points generated   4970

  estimator     cycle   815   ave of   765 cycles      combination
simple average    combined average     corr
 k(collision)      0.641480       0.639872 0.0006     k(col/abs)
0.639973 0.0006     0.639997 0.0006   0.8392
 k(absorption)     0.645937       0.640075 0.0006     k(abs/tk ln)
0.640020 0.0006     0.640048 0.0006   0.4167
 k(trk length)     0.637790       0.639966 0.0008     k(tk ln/col)
0.639919 0.0006     0.639892 0.0006   0.5373
 rem life(col)   6.9609E+03     6.8448E+03 0.0007     k(col/abs/tk ln)
0.639971 0.0006     0.640016 0.0006
 rem life(abs)   6.9649E+03     6.8447E+03 0.0007     life(col/abs/tl)
6.8463E+03 0.0006   6.8510E+03 0.0005
 source points generated   5114

  estimator     cycle   816   ave of   766 cycles      combination
simple average    combined average     corr
 k(collision)      0.650928       0.639886 0.0006     k(col/abs)
0.639987 0.0006     0.640011 0.0006   0.8394
 k(absorption)     0.650261       0.640088 0.0006     k(abs/tk ln)
0.640043 0.0006     0.640066 0.0006   0.4178
 k(trk length)     0.664041       0.639998 0.0008     k(tk ln/col)
0.639942 0.0006     0.639910 0.0006   0.5382
 rem life(col)   6.7751E+03     6.8447E+03 0.0007     k(col/abs/tk ln)
0.639991 0.0006     0.640033 0.0006
 rem life(abs)   6.7743E+03     6.8446E+03 0.0007     life(col/abs/tl)
6.8462E+03 0.0006   6.8509E+03 0.0005
```

```
 source points generated   5084

  estimator     cycle   817   ave of   767 cycles      combination
simple average    combined average     corr
 k(collision)      0.630320       0.639874 0.0006     k(col/abs)
0.639971 0.0006     0.639993 0.0006   0.8395
 k(absorption)     0.624551       0.640068 0.0006     k(abs/tk ln)
0.640023 0.0006     0.640046 0.0006   0.4190
 k(trk length)     0.624785       0.639978 0.0008     k(tk ln/col)
0.639926 0.0006     0.639896 0.0006   0.5388
 rem life(col)   6.9760E+03     6.8448E+03 0.0007     k(col/abs/tk ln)
0.639973 0.0006     0.640014 0.0006
 rem life(abs)   7.0139E+03     6.8448E+03 0.0007     life(col/abs/tl)
6.8464E+03 0.0006   6.8511E+03 0.0005
 source points generated   4810

  estimator     cycle   818   ave of   768 cycles      combination
simple average    combined average     corr
 k(collision)      0.643146       0.639878 0.0006     k(col/abs)
0.639972 0.0006     0.639994 0.0006   0.8394
 k(absorption)     0.638814       0.640066 0.0006     k(abs/tk ln)
0.640018 0.0006     0.640043 0.0006   0.4190
 k(trk length)     0.633411       0.639969 0.0008     k(tk ln/col)
0.639924 0.0006     0.639898 0.0006   0.5385
 rem life(col)   6.8852E+03     6.8449E+03 0.0007     k(col/abs/tk ln)
0.639971 0.0006     0.640011 0.0006
 rem life(abs)   6.8969E+03     6.8449E+03 0.0007     life(col/abs/tl)
6.8464E+03 0.0006   6.8511E+03 0.0005
 source points generated   5123

  estimator     cycle   819   ave of   769 cycles      combination
simple average    combined average     corr
 k(collision)      0.644496       0.639884 0.0006     k(col/abs)
0.639975 0.0006     0.639997 0.0006   0.8393
 k(absorption)     0.640558       0.640067 0.0006     k(abs/tk ln)
0.640025 0.0006     0.640047 0.0006   0.4189
 k(trk length)     0.650973       0.639983 0.0008     k(tk ln/col)
0.639934 0.0006     0.639905 0.0006   0.5387
 rem life(col)   6.8471E+03     6.8449E+03 0.0007     k(col/abs/tk ln)
0.639978 0.0006     0.640016 0.0005
 rem life(abs)   6.8858E+03     6.8449E+03 0.0007     life(col/abs/tl)
6.8464E+03 0.0006   6.8511E+03 0.0005
 source points generated   4987

  estimator     cycle   820   ave of   770 cycles      combination
simple average    combined average     corr
 k(collision)      0.647328       0.639894 0.0006     k(col/abs)
0.639988 0.0006     0.640010 0.0006   0.8394
 k(absorption)     0.652399       0.640083 0.0006     k(abs/tk ln)
0.640039 0.0006     0.640062 0.0006   0.4194
 k(trk length)     0.649334       0.639996 0.0008     k(tk ln/col)
0.639945 0.0006     0.639916 0.0006   0.5389
 rem life(col)   6.6600E+03     6.8447E+03 0.0007     k(col/abs/tk ln)
0.639991 0.0006     0.640030 0.0005
```

```
 rem life(abs)   6.6720E+03     6.8447E+03 0.0007     life(col/abs/tl)
6.8463E+03 0.0006   6.8510E+03 0.0005
 source points generated   4988

  estimator     cycle   821   ave of   771 cycles      combination
simple average    combined average     corr
 k(collision)      0.621925       0.639870 0.0006     k(col/abs)
0.639968 0.0006     0.639991 0.0006   0.8397
 k(absorption)     0.627184       0.640066 0.0006     k(abs/tk ln)
0.640022 0.0006     0.640045 0.0006   0.4202
 k(trk length)     0.626767       0.639978 0.0008     k(tk ln/col)
0.639924 0.0006     0.639894 0.0006   0.5397
 rem life(col)   6.9416E+03     6.8448E+03 0.0007     k(col/abs/tk ln)
0.639972 0.0006     0.640012 0.0005
 rem life(abs)   6.9528E+03     6.8449E+03 0.0007     life(col/abs/tl)
6.8464E+03 0.0006   6.8512E+03 0.0005
 source points generated   4839

  estimator     cycle   822   ave of   772 cycles      combination
simple average    combined average     corr
 k(collision)      0.651702       0.639886 0.0006     k(col/abs)
0.639981 0.0006     0.640003 0.0006   0.8398
 k(absorption)     0.647590       0.640076 0.0006     k(abs/tk ln)
0.640040 0.0006     0.640058 0.0006   0.4208
 k(trk length)     0.659234       0.640003 0.0008     k(tk ln/col)
0.639945 0.0006     0.639911 0.0006   0.5405
 rem life(col)   6.7925E+03     6.8447E+03 0.0007     k(col/abs/tk ln)
0.639988 0.0006     0.640026 0.0005
 rem life(abs)   6.7845E+03     6.8448E+03 0.0007     life(col/abs/tl)
6.8463E+03 0.0006   6.8512E+03 0.0005
 source points generated   5270

  estimator     cycle   823   ave of   773 cycles      combination
simple average    combined average     corr
 k(collision)      0.631217       0.639874 0.0006     k(col/abs)
0.639973 0.0006     0.639996 0.0006   0.8397
 k(absorption)     0.636526       0.640071 0.0006     k(abs/tk ln)
0.640039 0.0006     0.640055 0.0006   0.4207
 k(trk length)     0.642017       0.640006 0.0008     k(tk ln/col)
0.639940 0.0006     0.639903 0.0006   0.5401
 rem life(col)   7.0169E+03     6.8449E+03 0.0007     k(col/abs/tk ln)
0.639984 0.0006     0.640022 0.0005
 rem life(abs)   7.0044E+03     6.8450E+03 0.0007     life(col/abs/tl)
6.8465E+03 0.0006   6.8514E+03 0.0005
 source points generated   4862

  estimator     cycle   824   ave of   774 cycles      combination
simple average    combined average     corr
 k(collision)      0.643445       0.639879 0.0006     k(col/abs)
0.639978 0.0006     0.640002 0.0006   0.8397
 k(absorption)     0.644711       0.640077 0.0006     k(abs/tk ln)
0.640040 0.0006     0.640059 0.0005   0.4206
 k(trk length)     0.637930       0.640003 0.0008     k(tk ln/col)
0.639941 0.0006     0.639906 0.0006   0.5400
```

```
 rem life(col)   6.9727E+03     6.8451E+03 0.0007     k(col/abs/tk ln)
0.639987 0.0006     0.640026 0.0005
 rem life(abs)   6.9575E+03     6.8451E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8515E+03 0.0005
 source points generated   5102

  estimator     cycle   825   ave of   775 cycles      combination
simple average    combined average     corr
 k(collision)      0.634048       0.639872 0.0006     k(col/abs)
0.639973 0.0006     0.639998 0.0006   0.8397
 k(absorption)     0.638210       0.640075 0.0006     k(abs/tk ln)
0.640043 0.0006     0.640059 0.0005   0.4205
 k(trk length)     0.645699       0.640011 0.0008     k(tk ln/col)
0.639941 0.0006     0.639902 0.0006   0.5396
 rem life(col)   6.9329E+03     6.8452E+03 0.0007     k(col/abs/tk ln)
0.639986 0.0006     0.640025 0.0005
 rem life(abs)   6.8971E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8513E+03 0.0005
 source points generated   4884

  estimator     cycle   826   ave of   776 cycles      combination
simple average    combined average     corr
 k(collision)      0.645781       0.639879 0.0006     k(col/abs)
0.639983 0.0006     0.640008 0.0006   0.8397
 k(absorption)     0.649582       0.640087 0.0006     k(abs/tk ln)
0.640056 0.0006     0.640072 0.0005   0.4210
 k(trk length)     0.651504       0.640025 0.0008     k(tk ln/col)
0.639952 0.0006     0.639911 0.0006   0.5398
 rem life(col)   7.0483E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.639997 0.0006     0.640037 0.0005
 rem life(abs)   7.0447E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8513E+03 0.0005
 source points generated   5133

  estimator     cycle   827   ave of   777 cycles      combination
simple average    combined average     corr
 k(collision)      0.649782       0.639892 0.0006     k(col/abs)
0.639997 0.0006     0.640022 0.0006   0.8399
 k(absorption)     0.651415       0.640102 0.0006     k(abs/tk ln)
0.640083 0.0006     0.640093 0.0005   0.4225
 k(trk length)     0.670592       0.640065 0.0008     k(tk ln/col)
0.639978 0.0006     0.639929 0.0006   0.5405
 rem life(col)   6.8058E+03     6.8454E+03 0.0007     k(col/abs/tk ln)
0.640019 0.0006     0.640055 0.0005
 rem life(abs)   6.7835E+03     6.8454E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8511E+03 0.0005
 source points generated   5052

  estimator     cycle   828   ave of   778 cycles      combination
simple average    combined average     corr
 k(collision)      0.636287       0.639887 0.0006     k(col/abs)
0.639987 0.0006     0.640010 0.0006   0.8397
 k(absorption)     0.628414       0.640087 0.0006     k(abs/tk ln)
0.640073 0.0006     0.640080 0.0005   0.4225
```

```
 k(trk length)     0.635674       0.640059 0.0008     k(tk ln/col)
0.639973 0.0006     0.639924 0.0006   0.5406
 rem life(col)   6.7939E+03     6.8454E+03 0.0007     k(col/abs/tk ln)
0.640011 0.0006     0.640044 0.0005
 rem life(abs)   6.8140E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8510E+03 0.0005
 source points generated   4906

  estimator     cycle   829   ave of   779 cycles      combination
simple average    combined average     corr
 k(collision)      0.658448       0.639911 0.0006     k(col/abs)
0.640012 0.0006     0.640035 0.0006   0.8403
 k(absorption)     0.660505       0.640113 0.0006     k(abs/tk ln)
0.640092 0.0006     0.640103 0.0005   0.4230
 k(trk length)     0.648984       0.640071 0.0008     k(tk ln/col)
0.639991 0.0006     0.639945 0.0006   0.5408
 rem life(col)   6.9712E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640032 0.0006     0.640066 0.0005
 rem life(abs)   6.9345E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8510E+03 0.0005
 source points generated   5195

  estimator     cycle   830   ave of   780 cycles      combination
simple average    combined average     corr
 k(collision)      0.633649       0.639903 0.0006     k(col/abs)
0.639997 0.0006     0.640017 0.0006   0.8399
 k(absorption)     0.622738       0.640091 0.0006     k(abs/tk ln)
0.640080 0.0006     0.640085 0.0005   0.4225
 k(trk length)     0.638373       0.640068 0.0008     k(tk ln/col)
0.639986 0.0006     0.639939 0.0006   0.5407
 rem life(col)   6.9095E+03     6.8456E+03 0.0007     k(col/abs/tk ln)
0.640021 0.0006     0.640050 0.0005
 rem life(abs)   6.9210E+03     6.8456E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8510E+03 0.0005
 source points generated   4776

  estimator     cycle   831   ave of   781 cycles      combination
simple average    combined average     corr
 k(collision)      0.620938       0.639879 0.0006     k(col/abs)
0.639974 0.0006     0.639995 0.0006   0.8404
 k(absorption)     0.623587       0.640070 0.0006     k(abs/tk ln)
0.640066 0.0006     0.640068 0.0005   0.4223
 k(trk length)     0.635999       0.640063 0.0008     k(tk ln/col)
0.639971 0.0006     0.639919 0.0006   0.5403
 rem life(col)   6.7099E+03     6.8454E+03 0.0007     k(col/abs/tk ln)
0.640004 0.0006     0.640032 0.0005
 rem life(abs)   6.7214E+03     6.8454E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8511E+03 0.0005
 source points generated   4949

  estimator     cycle   832   ave of   782 cycles      combination
simple average    combined average     corr
 k(collision)      0.650172       0.639892 0.0006     k(col/abs)
0.639988 0.0006     0.640009 0.0006   0.8406
```

```
 k(absorption)     0.651768       0.640084 0.0006     k(abs/tk ln)
0.640075 0.0006     0.640080 0.0005   0.4222
 k(trk length)     0.642323       0.640066 0.0008     k(tk ln/col)
0.639979 0.0006     0.639930 0.0006   0.5401
 rem life(col)   6.8720E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640014 0.0006     0.640044 0.0005
 rem life(abs)   6.8776E+03     6.8454E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8512E+03 0.0005
 source points generated   5228

  estimator     cycle   833   ave of   783 cycles      combination
simple average    combined average     corr
 k(collision)      0.642680       0.639895 0.0006     k(col/abs)
0.639996 0.0006     0.640017 0.0006   0.8405
 k(absorption)     0.648872       0.640096 0.0006     k(abs/tk ln)
0.640084 0.0006     0.640090 0.0005   0.4224
 k(trk length)     0.644867       0.640072 0.0008     k(tk ln/col)
0.639984 0.0006     0.639934 0.0006   0.5402
 rem life(col)   6.9737E+03     6.8456E+03 0.0007     k(col/abs/tk ln)
0.640021 0.0006     0.640053 0.0005
 rem life(abs)   6.9666E+03     6.8456E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8512E+03 0.0005
 source points generated   4937

  estimator     cycle   834   ave of   784 cycles      combination
simple average    combined average     corr
 k(collision)      0.655383       0.639915 0.0006     k(col/abs)
0.640009 0.0006     0.640030 0.0006   0.8401
 k(absorption)     0.645001       0.640102 0.0006     k(abs/tk ln)
0.640100 0.0006     0.640101 0.0005   0.4226
 k(trk length)     0.660528       0.640098 0.0008     k(tk ln/col)
0.640007 0.0006     0.639955 0.0006   0.5414
 rem life(col)   6.9031E+03     6.8457E+03 0.0007     k(col/abs/tk ln)
0.640039 0.0006     0.640067 0.0005
 rem life(abs)   6.9606E+03     6.8457E+03 0.0007     life(col/abs/tl)
6.8471E+03 0.0006   6.8512E+03 0.0005
 source points generated   5151

  estimator     cycle   835   ave of   785 cycles      combination
simple average    combined average     corr
 k(collision)      0.634971       0.639909 0.0006     k(col/abs)
0.640002 0.0006     0.640022 0.0006   0.8402
 k(absorption)     0.634209       0.640094 0.0006     k(abs/tk ln)
0.640096 0.0006     0.640095 0.0005   0.4225
 k(trk length)     0.639806       0.640098 0.0008     k(tk ln/col)
0.640003 0.0006     0.639950 0.0006   0.5414
 rem life(col)   6.6569E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640034 0.0006     0.640061 0.0005
 rem life(abs)   6.6349E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8511E+03 0.0005
 source points generated   4889

  estimator     cycle   836   ave of   786 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.631624       0.639898 0.0006     k(col/abs)
0.639996 0.0006     0.640018 0.0006   0.8400
 k(absorption)     0.638701       0.640093 0.0006     k(abs/tk ln)
0.640099 0.0006     0.640096 0.0005   0.4224
 k(trk length)     0.645575       0.640105 0.0008     k(tk ln/col)
0.640002 0.0006     0.639943 0.0006   0.5407
 rem life(col)   6.9487E+03     6.8456E+03 0.0007     k(col/abs/tk ln)
0.640032 0.0006     0.640059 0.0005
 rem life(abs)   6.9197E+03     6.8456E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8513E+03 0.0005
 source points generated   5015

  estimator     cycle   837   ave of   787 cycles      combination
simple average    combined average     corr
 k(collision)      0.636146       0.639894 0.0006     k(col/abs)
0.639993 0.0006     0.640016 0.0006   0.8399
 k(absorption)     0.640563       0.640093 0.0006     k(abs/tk ln)
0.640094 0.0006     0.640093 0.0005   0.4223
 k(trk length)     0.631332       0.640094 0.0008     k(tk ln/col)
0.639994 0.0006     0.639937 0.0006   0.5408
 rem life(col)   6.5867E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.640027 0.0006     0.640056 0.0005
 rem life(abs)   6.5690E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8512E+03 0.0005
 source points generated   5061

  estimator     cycle   838   ave of   788 cycles      combination
simple average    combined average     corr
 k(collision)      0.648077       0.639904 0.0006     k(col/abs)
0.640005 0.0006     0.640027 0.0006   0.8400
 k(absorption)     0.649715       0.640105 0.0006     k(abs/tk ln)
0.640116 0.0006     0.640111 0.0005   0.4233
 k(trk length)     0.665834       0.640126 0.0008     k(tk ln/col)
0.640015 0.0006     0.639952 0.0006   0.5412
 rem life(col)   6.8452E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.640045 0.0006     0.640072 0.0005
 rem life(abs)   6.8344E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8511E+03 0.0005
 source points generated   5104

  estimator     cycle   839   ave of   789 cycles      combination
simple average    combined average     corr
 k(collision)      0.646191       0.639912 0.0006     k(col/abs)
0.640012 0.0006     0.640035 0.0006   0.8401
 k(absorption)     0.645928       0.640113 0.0006     k(abs/tk ln)
0.640124 0.0006     0.640118 0.0005   0.4235
 k(trk length)     0.647144       0.640135 0.0008     k(tk ln/col)
0.640024 0.0006     0.639960 0.0006   0.5414
 rem life(col)   6.8345E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.640053 0.0006     0.640080 0.0005
 rem life(abs)   6.8099E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8466E+03 0.0006   6.8510E+03 0.0005
 source points generated   4962
```

```
  estimator     cycle   840   ave of   790 cycles      combination
simple average    combined average     corr
 k(collision)      0.645104       0.639919 0.0006     k(col/abs)
0.640019 0.0006     0.640042 0.0006   0.8401
 k(absorption)     0.645550       0.640120 0.0006     k(abs/tk ln)
0.640140 0.0006     0.640129 0.0005   0.4238
 k(trk length)     0.659438       0.640160 0.0008     k(tk ln/col)
0.640039 0.0006     0.639970 0.0006   0.5415
 rem life(col)   6.7281E+03     6.8451E+03 0.0007     k(col/abs/tk ln)
0.640066 0.0006     0.640090 0.0005
 rem life(abs)   6.7054E+03     6.8450E+03 0.0007     life(col/abs/tl)
6.8465E+03 0.0006   6.8511E+03 0.0005
 source points generated   5020

  estimator     cycle   841   ave of   791 cycles      combination
simple average    combined average     corr
 k(collision)      0.643523       0.639923 0.0006     k(col/abs)
0.640027 0.0006     0.640050 0.0006   0.8401
 k(absorption)     0.648631       0.640130 0.0006     k(abs/tk ln)
0.640135 0.0006     0.640133 0.0005   0.4221
 k(trk length)     0.623612       0.640139 0.0008     k(tk ln/col)
0.640031 0.0006     0.639969 0.0006   0.5405
 rem life(col)   7.0047E+03     6.8453E+03 0.0007     k(col/abs/tk ln)
0.640064 0.0006     0.640093 0.0005
 rem life(abs)   7.0222E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8467E+03 0.0006   6.8512E+03 0.0005
 source points generated   4948

  estimator     cycle   842   ave of   792 cycles      combination
simple average    combined average     corr
 k(collision)      0.640694       0.639924 0.0006     k(col/abs)
0.640030 0.0006     0.640053 0.0006   0.8400
 k(absorption)     0.643849       0.640135 0.0006     k(abs/tk ln)
0.640137 0.0006     0.640136 0.0005   0.4220
 k(trk length)     0.639879       0.640139 0.0008     k(tk ln/col)
0.640031 0.0006     0.639970 0.0006   0.5405
 rem life(col)   6.9599E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640066 0.0006     0.640096 0.0005
 rem life(abs)   6.9104E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8513E+03 0.0005
 source points generated   4960

  estimator     cycle   843   ave of   793 cycles      combination
simple average    combined average     corr
 k(collision)      0.629385       0.639911 0.0006     k(col/abs)
0.640019 0.0006     0.640044 0.0006   0.8401
 k(absorption)     0.633977       0.640127 0.0006     k(abs/tk ln)
0.640122 0.0006     0.640125 0.0005   0.4225
 k(trk length)     0.622151       0.640116 0.0008     k(tk ln/col)
0.640013 0.0006     0.639955 0.0006   0.5412
 rem life(col)   6.8595E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640051 0.0006     0.640084 0.0005
 rem life(abs)   6.8627E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8514E+03 0.0005
```

```
 source points generated   4926

  estimator     cycle   844   ave of   794 cycles      combination
simple average    combined average     corr
 k(collision)      0.645404       0.639918 0.0006     k(col/abs)
0.640027 0.0006     0.640051 0.0006   0.8401
 k(absorption)     0.646706       0.640136 0.0006     k(abs/tk ln)
0.640122 0.0006     0.640129 0.0005   0.4220
 k(trk length)     0.634764       0.640109 0.0008     k(tk ln/col)
0.640013 0.0006     0.639959 0.0006   0.5408
 rem life(col)   6.8769E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640054 0.0006     0.640089 0.0005
 rem life(abs)   6.8499E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8514E+03 0.0005
 source points generated   5127

  estimator     cycle   845   ave of   795 cycles      combination
simple average    combined average     corr
 k(collision)      0.636120       0.639913 0.0006     k(col/abs)
0.640023 0.0006     0.640048 0.0006   0.8401
 k(absorption)     0.638166       0.640133 0.0006     k(abs/tk ln)
0.640121 0.0006     0.640127 0.0005   0.4220
 k(trk length)     0.639567       0.640108 0.0008     k(tk ln/col)
0.640011 0.0006     0.639955 0.0006   0.5408
 rem life(col)   6.8023E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640052 0.0006     0.640087 0.0005
 rem life(abs)   6.7776E+03     6.8452E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8514E+03 0.0005
 source points generated   4972

  estimator     cycle   846   ave of   796 cycles      combination
simple average    combined average     corr
 k(collision)      0.643866       0.639918 0.0006     k(col/abs)
0.640022 0.0006     0.640045 0.0006   0.8396
 k(absorption)     0.634005       0.640126 0.0006     k(abs/tk ln)
0.640131 0.0006     0.640128 0.0005   0.4201
 k(trk length)     0.662077       0.640136 0.0008     k(tk ln/col)
0.640027 0.0006     0.639964 0.0006   0.5407
 rem life(col)   6.9074E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640060 0.0006     0.640089 0.0005
 rem life(abs)   6.9034E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8469E+03 0.0006   6.8515E+03 0.0005
 source points generated   5089

  estimator     cycle   847   ave of   797 cycles      combination
simple average    combined average     corr
 k(collision)      0.638386       0.639916 0.0006     k(col/abs)
0.640009 0.0006     0.640029 0.0006   0.8383
 k(absorption)     0.621904       0.640103 0.0006     k(abs/tk ln)
0.640122 0.0006     0.640112 0.0005   0.4186
 k(trk length)     0.644372       0.640141 0.0008     k(tk ln/col)
0.640029 0.0006     0.639964 0.0006   0.5406
 rem life(col)   7.1205E+03     6.8459E+03 0.0007     k(col/abs/tk ln)
0.640053 0.0006     0.640075 0.0005
```

```
 rem life(abs)   7.1251E+03     6.8456E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8515E+03 0.0005
 source points generated   4943

  estimator     cycle   848   ave of   798 cycles      combination
simple average    combined average     corr
 k(collision)      0.646413       0.639924 0.0006     k(col/abs)
0.640020 0.0006     0.640040 0.0006   0.8383
 k(absorption)     0.651290       0.640117 0.0006     k(abs/tk ln)
0.640138 0.0006     0.640127 0.0005   0.4194
 k(trk length)     0.653712       0.640158 0.0008     k(tk ln/col)
0.640041 0.0006     0.639974 0.0006   0.5409
 rem life(col)   6.7397E+03     6.8457E+03 0.0007     k(col/abs/tk ln)
0.640066 0.0006     0.640088 0.0005
 rem life(abs)   6.7466E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8514E+03 0.0005
 source points generated   5050

  estimator     cycle   849   ave of   799 cycles      combination
simple average    combined average     corr
 k(collision)      0.654662       0.639943 0.0006     k(col/abs)
0.640036 0.0006     0.640056 0.0006   0.8385
 k(absorption)     0.651027       0.640130 0.0006     k(abs/tk ln)
0.640141 0.0006     0.640135 0.0005   0.4185
 k(trk length)     0.634359       0.640151 0.0008     k(tk ln/col)
0.640047 0.0006     0.639987 0.0006   0.5395
 rem life(col)   6.6562E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640075 0.0006     0.640099 0.0005
 rem life(abs)   6.6556E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8513E+03 0.0005
 source points generated   5085

  estimator     cycle   850   ave of   800 cycles      combination
simple average    combined average     corr
 k(collision)      0.641936       0.639945 0.0006     k(col/abs)
0.640037 0.0006     0.640057 0.0006   0.8385
 k(absorption)     0.639462       0.640130 0.0006     k(abs/tk ln)
0.640138 0.0006     0.640134 0.0005   0.4185
 k(trk length)     0.636125       0.640146 0.0008     k(tk ln/col)
0.640046 0.0006     0.639988 0.0006   0.5394
 rem life(col)   6.8196E+03     6.8455E+03 0.0007     k(col/abs/tk ln)
0.640074 0.0005     0.640097 0.0005
 rem life(abs)   6.8265E+03     6.8453E+03 0.0007     life(col/abs/tl)
6.8468E+03 0.0006   6.8513E+03 0.0005
 source points generated   4896

  estimator     cycle   851   ave of   801 cycles      combination
simple average    combined average     corr
 k(collision)      0.645411       0.639952 0.0006     k(col/abs)
0.640045 0.0006     0.640065 0.0006   0.8385
 k(absorption)     0.647410       0.640139 0.0006     k(abs/tk ln)
0.640158 0.0006     0.640148 0.0005   0.4191
 k(trk length)     0.664618       0.640177 0.0008     k(tk ln/col)
0.640064 0.0006     0.640000 0.0006   0.5394
```

```
 rem life(col)   6.9999E+03     6.8457E+03 0.0007     k(col/abs/tk ln)
0.640089 0.0005     0.640110 0.0005
 rem life(abs)   6.9767E+03     6.8454E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8514E+03 0.0005
 source points generated   5055

  estimator     cycle   852   ave of   802 cycles      combination
simple average    combined average     corr
 k(collision)      0.623477       0.639931 0.0006     k(col/abs)
0.640024 0.0006     0.640044 0.0006   0.8390
 k(absorption)     0.622985       0.640117 0.0006     k(abs/tk ln)
0.640146 0.0006     0.640132 0.0005   0.4185
 k(trk length)     0.639363       0.640176 0.0008     k(tk ln/col)
0.640053 0.0006     0.639984 0.0006   0.5387
 rem life(col)   7.0167E+03     6.8459E+03 0.0007     k(col/abs/tk ln)
0.640075 0.0005     0.640093 0.0005
 rem life(abs)   7.0183E+03     6.8456E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8515E+03 0.0005
 source points generated   4808

  estimator     cycle   853   ave of   803 cycles      combination
simple average    combined average     corr
 k(collision)      0.647118       0.639940 0.0006     k(col/abs)
0.640032 0.0006     0.640052 0.0006   0.8391
 k(absorption)     0.645771       0.640124 0.0006     k(abs/tk ln)
0.640159 0.0006     0.640141 0.0005   0.4189
 k(trk length)     0.654844       0.640194 0.0008     k(tk ln/col)
0.640067 0.0006     0.639994 0.0006   0.5390
 rem life(col)   6.7554E+03     6.8458E+03 0.0007     k(col/abs/tk ln)
0.640086 0.0005     0.640103 0.0005
 rem life(abs)   6.7561E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8514E+03 0.0005
 source points generated   5156

  estimator     cycle   854   ave of   804 cycles      combination
simple average    combined average     corr
 k(collision)      0.642979       0.639944 0.0006     k(col/abs)
0.640026 0.0006     0.640043 0.0006   0.8378
 k(absorption)     0.627431       0.640108 0.0006     k(abs/tk ln)
0.640154 0.0006     0.640131 0.0005   0.4179
 k(trk length)     0.644781       0.640200 0.0008     k(tk ln/col)
0.640072 0.0006     0.639999 0.0006   0.5391
 rem life(col)   6.9670E+03     6.8459E+03 0.0007     k(col/abs/tk ln)
0.640084 0.0005     0.640095 0.0005
 rem life(abs)   6.9832E+03     6.8457E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8514E+03 0.0005
 source points generated   4921

  estimator     cycle   855   ave of   805 cycles      combination
simple average    combined average     corr
 k(collision)      0.649055       0.639955 0.0006     k(col/abs)
0.640038 0.0006     0.640055 0.0006   0.8380
 k(absorption)     0.650332       0.640121 0.0006     k(abs/tk ln)
0.640170 0.0006     0.640145 0.0005   0.4187
```

```
 k(trk length)     0.655806       0.640219 0.0008     k(tk ln/col)
0.640087 0.0006     0.640012 0.0006   0.5396
 rem life(col)   6.8984E+03     6.8460E+03 0.0007     k(col/abs/tk ln)
0.640099 0.0005     0.640109 0.0005
 rem life(abs)   6.8721E+03     6.8457E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8514E+03 0.0005
 source points generated   5064

  estimator     cycle   856   ave of   806 cycles      combination
simple average    combined average     corr
 k(collision)      0.625732       0.639938 0.0006     k(col/abs)
0.640024 0.0006     0.640042 0.0006   0.8381
 k(absorption)     0.631318       0.640110 0.0006     k(abs/tk ln)
0.640137 0.0006     0.640123 0.0005   0.4193
 k(trk length)     0.595754       0.640164 0.0008     k(tk ln/col)
0.640051 0.0006     0.639985 0.0006   0.5409
 rem life(col)   6.8850E+03     6.8460E+03 0.0007     k(col/abs/tk ln)
0.640071 0.0005     0.640087 0.0005
 rem life(abs)   6.8479E+03     6.8457E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8515E+03 0.0005
 source points generated   4840

  estimator     cycle   857   ave of   807 cycles      combination
simple average    combined average     corr
 k(collision)      0.633876       0.639930 0.0006     k(col/abs)
0.640018 0.0006     0.640036 0.0006   0.8381
 k(absorption)     0.636967       0.640106 0.0006     k(abs/tk ln)
0.640136 0.0006     0.640120 0.0005   0.4193
 k(trk length)     0.640896       0.640165 0.0008     k(tk ln/col)
0.640047 0.0006     0.639979 0.0006   0.5408
 rem life(col)   6.8739E+03     6.8461E+03 0.0007     k(col/abs/tk ln)
0.640067 0.0005     0.640083 0.0005
 rem life(abs)   6.8801E+03     6.8458E+03 0.0007     life(col/abs/tl)
6.8473E+03 0.0006   6.8515E+03 0.0005
 source points generated   5076

  estimator     cycle   858   ave of   808 cycles      combination
simple average    combined average     corr
 k(collision)      0.629480       0.639917 0.0006     k(col/abs)
0.640006 0.0006     0.640025 0.0006   0.8383
 k(absorption)     0.631004       0.640095 0.0006     k(abs/tk ln)
0.640123 0.0006     0.640109 0.0005   0.4197
 k(trk length)     0.629346       0.640151 0.0008     k(tk ln/col)
0.640034 0.0006     0.639966 0.0006   0.5412
 rem life(col)   6.6675E+03     6.8458E+03 0.0007     k(col/abs/tk ln)
0.640055 0.0005     0.640071 0.0005
 rem life(abs)   6.7007E+03     6.8456E+03 0.0007     life(col/abs/tl)
6.8471E+03 0.0006   6.8515E+03 0.0005
 source points generated   4965

  estimator     cycle   859   ave of   809 cycles      combination
simple average    combined average     corr
 k(collision)      0.642894       0.639921 0.0006     k(col/abs)
0.640006 0.0006     0.640024 0.0006   0.8381
```

```
 k(absorption)     0.636788       0.640091 0.0006     k(abs/tk ln)
0.640118 0.0006     0.640104 0.0005   0.4198
 k(trk length)     0.634447       0.640144 0.0008     k(tk ln/col)
0.640033 0.0006     0.639967 0.0006   0.5410
 rem life(col)   6.7365E+03     6.8457E+03 0.0007     k(col/abs/tk ln)
0.640052 0.0005     0.640068 0.0005
 rem life(abs)   6.7478E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8515E+03 0.0005
 source points generated   5142

  estimator     cycle   860   ave of   810 cycles      combination
simple average    combined average     corr
 k(collision)      0.634202       0.639914 0.0006     k(col/abs)
0.639999 0.0006     0.640017 0.0006   0.8381
 k(absorption)     0.635136       0.640085 0.0006     k(abs/tk ln)
0.640112 0.0006     0.640098 0.0005   0.4199
 k(trk length)     0.635648       0.640139 0.0008     k(tk ln/col)
0.640026 0.0006     0.639961 0.0006   0.5410
 rem life(col)   6.9479E+03     6.8458E+03 0.0007     k(col/abs/tk ln)
0.640046 0.0005     0.640062 0.0005
 rem life(abs)   6.9401E+03     6.8456E+03 0.0007     life(col/abs/tl)
6.8471E+03 0.0006   6.8516E+03 0.0005
 source points generated   4926

  estimator     cycle   861   ave of   811 cycles      combination
simple average    combined average     corr
 k(collision)      0.652658       0.639930 0.0006     k(col/abs)
0.640014 0.0006     0.640031 0.0006   0.8383
 k(absorption)     0.650397       0.640098 0.0006     k(abs/tk ln)
0.640123 0.0006     0.640110 0.0005   0.4202
 k(trk length)     0.647558       0.640148 0.0008     k(tk ln/col)
0.640039 0.0006     0.639975 0.0006   0.5412
 rem life(col)   6.9170E+03     6.8459E+03 0.0007     k(col/abs/tk ln)
0.640058 0.0005     0.640075 0.0005
 rem life(abs)   6.9274E+03     6.8457E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8514E+03 0.0005
 source points generated   5184

  estimator     cycle   862   ave of   812 cycles      combination
simple average    combined average     corr
 k(collision)      0.647473       0.639939 0.0006     k(col/abs)
0.640018 0.0006     0.640035 0.0006   0.8381
 k(absorption)     0.639867       0.640097 0.0006     k(abs/tk ln)
0.640130 0.0006     0.640113 0.0005   0.4200
 k(trk length)     0.651920       0.640162 0.0008     k(tk ln/col)
0.640051 0.0006     0.639986 0.0006   0.5416
 rem life(col)   6.7610E+03     6.8458E+03 0.0007     k(col/abs/tk ln)
0.640066 0.0005     0.640080 0.0005
 rem life(abs)   6.7490E+03     6.8456E+03 0.0007     life(col/abs/tl)
6.8471E+03 0.0006   6.8514E+03 0.0005
 source points generated   4949

  estimator     cycle   863   ave of   813 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.637404       0.639936 0.0006     k(col/abs)
0.640011 0.0006     0.640027 0.0005   0.8379
 k(absorption)     0.631488       0.640087 0.0006     k(abs/tk ln)
0.640113 0.0006     0.640099 0.0005   0.4208
 k(trk length)     0.621294       0.640139 0.0008     k(tk ln/col)
0.640037 0.0006     0.639978 0.0006   0.5413
 rem life(col)   6.9462E+03     6.8459E+03 0.0007     k(col/abs/tk ln)
0.640054 0.0005     0.640067 0.0005
 rem life(abs)   6.9415E+03     6.8457E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8514E+03 0.0005
 source points generated   4944

  estimator     cycle   864   ave of   814 cycles      combination
simple average    combined average     corr
 k(collision)      0.647048       0.639945 0.0006     k(col/abs)
0.640025 0.0005     0.640041 0.0005   0.8378
 k(absorption)     0.655464       0.640106 0.0006     k(abs/tk ln)
0.640123 0.0006     0.640114 0.0005   0.4203
 k(trk length)     0.640915       0.640140 0.0008     k(tk ln/col)
0.640042 0.0006     0.639985 0.0006   0.5412
 rem life(col)   6.8709E+03     6.8460E+03 0.0007     k(col/abs/tk ln)
0.640063 0.0005     0.640080 0.0005
 rem life(abs)   6.8356E+03     6.8457E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8515E+03 0.0005
 source points generated   5108

  estimator     cycle   865   ave of   815 cycles      combination
simple average    combined average     corr
 k(collision)      0.650784       0.639958 0.0006     k(col/abs)
0.640035 0.0005     0.640051 0.0005   0.8378
 k(absorption)     0.645661       0.640112 0.0006     k(abs/tk ln)
0.640131 0.0006     0.640122 0.0005   0.4205
 k(trk length)     0.648503       0.640150 0.0008     k(tk ln/col)
0.640054 0.0006     0.639998 0.0006   0.5415
 rem life(col)   6.6382E+03     6.8457E+03 0.0007     k(col/abs/tk ln)
0.640074 0.0005     0.640089 0.0005
 rem life(abs)   6.6836E+03     6.8455E+03 0.0007     life(col/abs/tl)
6.8470E+03 0.0006   6.8513E+03 0.0005
 source points generated   4996

  estimator     cycle   866   ave of   816 cycles      combination
simple average    combined average     corr
 k(collision)      0.624329       0.639939 0.0006     k(col/abs)
0.640016 0.0005     0.640031 0.0005   0.8382
 k(absorption)     0.624083       0.640093 0.0006     k(abs/tk ln)
0.640116 0.0006     0.640104 0.0005   0.4210
 k(trk length)     0.630840       0.640139 0.0008     k(tk ln/col)
0.640039 0.0006     0.639981 0.0006   0.5418
 rem life(col)   7.0575E+03     6.8460E+03 0.0007     k(col/abs/tk ln)
0.640057 0.0005     0.640071 0.0005
 rem life(abs)   7.0523E+03     6.8457E+03 0.0007     life(col/abs/tl)
6.8472E+03 0.0006   6.8516E+03 0.0005
 source points generated   4818
```

```
  estimator     cycle   867   ave of   817 cycles      combination
simple average    combined average     corr
 k(collision)      0.643979       0.639944 0.0006     k(col/abs)
0.640017 0.0005     0.640032 0.0005   0.8380
 k(absorption)     0.637933       0.640090 0.0006     k(abs/tk ln)
0.640116 0.0006     0.640103 0.0005   0.4210
 k(trk length)     0.642241       0.640142 0.0008     k(tk ln/col)
0.640043 0.0006     0.639985 0.0006   0.5419
 rem life(col)   7.0415E+03     6.8462E+03 0.0007     k(col/abs/tk ln)
0.640058 0.0005     0.640071 0.0005
 rem life(abs)   7.0599E+03     6.8460E+03 0.0007     life(col/abs/tl)
6.8475E+03 0.0006   6.8517E+03 0.0005
 source points generated   5168

  estimator     cycle   868   ave of   818 cycles      combination
simple average    combined average     corr
 k(collision)      0.629119       0.639930 0.0006     k(col/abs)
0.640004 0.0005     0.640019 0.0005   0.8382
 k(absorption)     0.629354       0.640077 0.0006     k(abs/tk ln)
0.640095 0.0006     0.640086 0.0005   0.4221
 k(trk length)     0.616414       0.640113 0.0008     k(tk ln/col)
0.640021 0.0006     0.639968 0.0006   0.5427
 rem life(col)   7.0359E+03     6.8465E+03 0.0007     k(col/abs/tk ln)
0.640040 0.0005     0.640055 0.0005
 rem life(abs)   7.0153E+03     6.8462E+03 0.0007     life(col/abs/tl)
6.8477E+03 0.0006   6.8519E+03 0.0005
 source points generated   4877

  estimator     cycle   869   ave of   819 cycles      combination
simple average    combined average     corr
 k(collision)      0.624183       0.639911 0.0006     k(col/abs)
0.639985 0.0005     0.640000 0.0005   0.8386
 k(absorption)     0.625262       0.640059 0.0006     k(abs/tk ln)
0.640085 0.0006     0.640072 0.0005   0.4217
 k(trk length)     0.639294       0.640112 0.0008     k(tk ln/col)
0.640011 0.0006     0.639953 0.0006   0.5420
 rem life(col)   6.9483E+03     6.8466E+03 0.0007     k(col/abs/tk ln)
0.640027 0.0005     0.640040 0.0005
 rem life(abs)   6.9622E+03     6.8464E+03 0.0007     life(col/abs/tl)
6.8478E+03 0.0006   6.8521E+03 0.0005
 source points generated   4926

  estimator     cycle   870   ave of   820 cycles      combination
simple average    combined average     corr
 k(collision)      0.638807       0.639910 0.0006     k(col/abs)
0.639985 0.0005     0.640000 0.0005   0.8386
 k(absorption)     0.641170       0.640060 0.0006     k(abs/tk ln)
0.640071 0.0006     0.640066 0.0005   0.4207
 k(trk length)     0.616480       0.640083 0.0008     k(tk ln/col)
0.639996 0.0006     0.639946 0.0006   0.5413
 rem life(col)   6.9165E+03     6.8467E+03 0.0007     k(col/abs/tk ln)
0.640018 0.0005     0.640035 0.0005
 rem life(abs)   6.9049E+03     6.8464E+03 0.0007     life(col/abs/tl)
6.8479E+03 0.0006   6.8521E+03 0.0005
```

```
 source points generated   5138

  estimator     cycle   871   ave of   821 cycles      combination
simple average    combined average     corr
 k(collision)      0.632127       0.639900 0.0006     k(col/abs)
0.639975 0.0005     0.639991 0.0005   0.8387
 k(absorption)     0.631992       0.640050 0.0006     k(abs/tk ln)
0.640049 0.0006     0.640050 0.0005   0.4215
 k(trk length)     0.611705       0.640048 0.0008     k(tk ln/col)
0.639974 0.0006     0.639931 0.0006   0.5416
 rem life(col)   6.7651E+03     6.8466E+03 0.0007     k(col/abs/tk ln)
0.640000 0.0005     0.640020 0.0005
 rem life(abs)   6.7659E+03     6.8463E+03 0.0007     life(col/abs/tl)
6.8478E+03 0.0006   6.8521E+03 0.0005
 source points generated   4975

  estimator     cycle   872   ave of   822 cycles      combination
simple average    combined average     corr
 k(collision)      0.627269       0.639885 0.0006     k(col/abs)
0.639959 0.0005     0.639974 0.0005   0.8390
 k(absorption)     0.626281       0.640034 0.0006     k(abs/tk ln)
0.640044 0.0006     0.640039 0.0005   0.4203
 k(trk length)     0.645786       0.640055 0.0008     k(tk ln/col)
0.639970 0.0006     0.639920 0.0006   0.5405
 rem life(col)   7.1591E+03     6.8469E+03 0.0007     k(col/abs/tk ln)
0.639991 0.0005     0.640008 0.0005
 rem life(abs)   7.1460E+03     6.8467E+03 0.0007     life(col/abs/tl)
6.8481E+03 0.0006   6.8522E+03 0.0005
 source points generated   4927

  estimator     cycle   873   ave of   823 cycles      combination
simple average    combined average     corr
 k(collision)      0.623454       0.639865 0.0006     k(col/abs)
0.639939 0.0005     0.639954 0.0005   0.8395
 k(absorption)     0.622680       0.640013 0.0006     k(abs/tk ln)
0.640031 0.0006     0.640022 0.0005   0.4202
 k(trk length)     0.635989       0.640050 0.0008     k(tk ln/col)
0.639958 0.0006     0.639904 0.0006   0.5402
 rem life(col)   6.7332E+03     6.8468E+03 0.0007     k(col/abs/tk ln)
0.639976 0.0005     0.639991 0.0005
 rem life(abs)   6.7200E+03     6.8465E+03 0.0007     life(col/abs/tl)
6.8480E+03 0.0006   6.8523E+03 0.0005
 source points generated   4974

  estimator     cycle   874   ave of   824 cycles      combination
simple average    combined average     corr
 k(collision)      0.641861       0.639867 0.0006     k(col/abs)
0.639945 0.0005     0.639960 0.0005   0.8394
 k(absorption)     0.647412       0.640022 0.0006     k(abs/tk ln)
0.640029 0.0006     0.640025 0.0005   0.4191
 k(trk length)     0.627953       0.640036 0.0008     k(tk ln/col)
0.639951 0.0006     0.639903 0.0006   0.5398
 rem life(col)   6.7669E+03     6.8467E+03 0.0007     k(col/abs/tk ln)
0.639975 0.0005     0.639994 0.0005
```

```
 rem life(abs)   6.7538E+03     6.8464E+03 0.0007     life(col/abs/tl)
6.8479E+03 0.0006   6.8522E+03 0.0005
 source points generated   5174

  estimator     cycle   875   ave of   825 cycles      combination
simple average    combined average     corr
 k(collision)      0.635493       0.639862 0.0006     k(col/abs)
0.639942 0.0005     0.639958 0.0005   0.8393
 k(absorption)     0.639859       0.640021 0.0006     k(abs/tk ln)
0.640025 0.0006     0.640023 0.0005   0.4191
 k(trk length)     0.634341       0.640029 0.0008     k(tk ln/col)
0.639945 0.0006     0.639897 0.0006   0.5399
 rem life(col)   6.7568E+03     6.8466E+03 0.0007     k(col/abs/tk ln)
0.639971 0.0005     0.639991 0.0005
 rem life(abs)   6.7436E+03     6.8463E+03 0.0007     life(col/abs/tl)
6.8479E+03 0.0006   6.8523E+03 0.0005
 source points generated   4957

  estimator     cycle   876   ave of   826 cycles      combination
simple average    combined average     corr
 k(collision)      0.654602       0.639880 0.0006     k(col/abs)
0.639952 0.0005     0.639967 0.0005   0.8388
 k(absorption)     0.642904       0.640025 0.0006     k(abs/tk ln)
0.640036 0.0006     0.640030 0.0005   0.4191
 k(trk length)     0.655353       0.640047 0.0008     k(tk ln/col)
0.639964 0.0006     0.639915 0.0006   0.5407
 rem life(col)   6.6721E+03     6.8464E+03 0.0007     k(col/abs/tk ln)
0.639984 0.0005     0.640001 0.0005
 rem life(abs)   6.6891E+03     6.8461E+03 0.0007     life(col/abs/tl)
6.8477E+03 0.0006   6.8524E+03 0.0005
 source points generated   5189

  estimator     cycle   877   ave of   827 cycles      combination
simple average    combined average     corr
 k(collision)      0.637504       0.639877 0.0006     k(col/abs)
0.639954 0.0005     0.639969 0.0005   0.8386
 k(absorption)     0.644277       0.640030 0.0006     k(abs/tk ln)
0.640044 0.0006     0.640037 0.0005   0.4193
 k(trk length)     0.649303       0.640058 0.0008     k(tk ln/col)
0.639968 0.0006     0.639915 0.0006   0.5404
 rem life(col)   6.9254E+03     6.8465E+03 0.0007     k(col/abs/tk ln)
0.639988 0.0005     0.640006 0.0005
 rem life(abs)   6.9069E+03     6.8462E+03 0.0007     life(col/abs/tl)
6.8478E+03 0.0006   6.8524E+03 0.0005
 source points generated   4846

  estimator     cycle   878   ave of   828 cycles      combination
simple average    combined average     corr
 k(collision)      0.631968       0.639868 0.0006     k(col/abs)
0.639945 0.0005     0.639961 0.0005   0.8386
 k(absorption)     0.633730       0.640022 0.0006     k(abs/tk ln)
0.640032 0.0006     0.640027 0.0005   0.4197
 k(trk length)     0.625670       0.640041 0.0008     k(tk ln/col)
0.639954 0.0006     0.639904 0.0006   0.5408
```

```
 rem life(col)   6.8822E+03     6.8465E+03 0.0007     k(col/abs/tk ln)
0.639977 0.0005     0.639996 0.0005
 rem life(abs)   6.9136E+03     6.8463E+03 0.0007     life(col/abs/tl)
6.8478E+03 0.0006   6.8523E+03 0.0005
 source points generated   4926

  estimator     cycle   879   ave of   829 cycles      combination
simple average    combined average     corr
 k(collision)      0.639848       0.639868 0.0006     k(col/abs)
0.639950 0.0005     0.639967 0.0005   0.8382
 k(absorption)     0.649185       0.640033 0.0006     k(abs/tk ln)
0.640047 0.0006     0.640040 0.0005   0.4204
 k(trk length)     0.655515       0.640060 0.0008     k(tk ln/col)
0.639964 0.0006     0.639907 0.0006   0.5404
 rem life(col)   6.6954E+03     6.8463E+03 0.0007     k(col/abs/tk ln)
0.639987 0.0005     0.640005 0.0005
 rem life(abs)   6.6623E+03     6.8460E+03 0.0007     life(col/abs/tl)
6.8477E+03 0.0006   6.8523E+03 0.0005
 source points generated   5106

  estimator     cycle   880   ave of   830 cycles      combination
simple average    combined average     corr
 k(collision)      0.623533       0.639848 0.0006     k(col/abs)
0.639932 0.0005     0.639949 0.0005   0.8387
 k(absorption)     0.625131       0.640016 0.0006     k(abs/tk ln)
0.640052 0.0006     0.640033 0.0005   0.4163
 k(trk length)     0.663264       0.640088 0.0008     k(tk ln/col)
0.639968 0.0006     0.639898 0.0006   0.5357
 rem life(col)   7.1025E+03     6.8467E+03 0.0007     k(col/abs/tk ln)
0.639984 0.0005     0.639997 0.0005
 rem life(abs)   7.1017E+03     6.8463E+03 0.0007     life(col/abs/tl)
6.8479E+03 0.0006   6.8525E+03 0.0005
 source points generated   4880

  estimator     cycle   881   ave of   831 cycles      combination
simple average    combined average     corr
 k(collision)      0.646023       0.639855 0.0006     k(col/abs)
0.639934 0.0005     0.639950 0.0005   0.8383
 k(absorption)     0.637723       0.640013 0.0006     k(abs/tk ln)
0.640036 0.0006     0.640024 0.0005   0.4161
 k(trk length)     0.616839       0.640060 0.0008     k(tk ln/col)
0.639957 0.0006     0.639898 0.0006   0.5336
 rem life(col)   6.8264E+03     6.8466E+03 0.0007     k(col/abs/tk ln)
0.639976 0.0005     0.639991 0.0005
 rem life(abs)   6.8605E+03     6.8464E+03 0.0007     life(col/abs/tl)
6.8479E+03 0.0006   6.8525E+03 0.0005
 source points generated   5185

  estimator     cycle   882   ave of   832 cycles      combination
simple average    combined average     corr
 k(collision)      0.662167       0.639882 0.0006     k(col/abs)
0.639959 0.0005     0.639975 0.0005   0.8391
 k(absorption)     0.659371       0.640036 0.0006     k(abs/tk ln)
0.640062 0.0006     0.640048 0.0005   0.4182
```

```
 k(trk length)     0.662877       0.640087 0.0008     k(tk ln/col)
0.639985 0.0006     0.639925 0.0006   0.5354
 rem life(col)   6.8467E+03     6.8466E+03 0.0007     k(col/abs/tk ln)
0.640002 0.0005     0.640016 0.0005
 rem life(abs)   6.8507E+03     6.8464E+03 0.0007     life(col/abs/tl)
6.8479E+03 0.0006   6.8524E+03 0.0005
 source points generated   5149

  estimator     cycle   883   ave of   833 cycles      combination
simple average    combined average     corr
 k(collision)      0.635417       0.639877 0.0006     k(col/abs)
0.639958 0.0005     0.639975 0.0005   0.8388
 k(absorption)     0.642524       0.640039 0.0006     k(abs/tk ln)
0.640047 0.0006     0.640043 0.0005   0.4167
 k(trk length)     0.613274       0.640055 0.0008     k(tk ln/col)
0.639966 0.0006     0.639914 0.0006   0.5352
 rem life(col)   7.1540E+03     6.8470E+03 0.0007     k(col/abs/tk ln)
0.639990 0.0005     0.640010 0.0005
 rem life(abs)   7.1363E+03     6.8467E+03 0.0007     life(col/abs/tl)
6.8482E+03 0.0006   6.8524E+03 0.0005
 source points generated   4811

  estimator     cycle   884   ave of   834 cycles      combination
simple average    combined average     corr
 k(collision)      0.635930       0.639872 0.0006     k(col/abs)
0.639955 0.0005     0.639972 0.0005   0.8388
 k(absorption)     0.639195       0.640038 0.0006     k(abs/tk ln)
0.640040 0.0006     0.640039 0.0005   0.4166
 k(trk length)     0.629947       0.640043 0.0008     k(tk ln/col)
0.639957 0.0006     0.639908 0.0006   0.5353
 rem life(col)   6.9493E+03     6.8471E+03 0.0007     k(col/abs/tk ln)
0.639984 0.0005     0.640006 0.0005
 rem life(abs)   6.9235E+03     6.8468E+03 0.0007     life(col/abs/tl)
6.8483E+03 0.0006   6.8525E+03 0.0005
 source points generated   5023

  estimator     cycle   885   ave of   835 cycles      combination
simple average    combined average     corr
 k(collision)      0.637241       0.639869 0.0006     k(col/abs)
0.639950 0.0005     0.639968 0.0005   0.8388
 k(absorption)     0.635007       0.640032 0.0006     k(abs/tk ln)
0.640039 0.0006     0.640035 0.0005   0.4165
 k(trk length)     0.642781       0.640046 0.0008     k(tk ln/col)
0.639957 0.0006     0.639906 0.0006   0.5352
 rem life(col)   6.8158E+03     6.8471E+03 0.0007     k(col/abs/tk ln)
0.639982 0.0005     0.640002 0.0005
 rem life(abs)   6.8181E+03     6.8468E+03 0.0007     life(col/abs/tl)
6.8483E+03 0.0006   6.8525E+03 0.0005
 source points generated   5030

  estimator     cycle   886   ave of   836 cycles      combination
simple average    combined average     corr
 k(collision)      0.631313       0.639859 0.0006     k(col/abs)
0.639935 0.0005     0.639951 0.0005   0.8387
```

```
 k(absorption)     0.622972       0.640012 0.0006     k(abs/tk ln)
0.640021 0.0006     0.640016 0.0005   0.4174
 k(trk length)     0.626780       0.640030 0.0008     k(tk ln/col)
0.639944 0.0006     0.639894 0.0006   0.5356
 rem life(col)   7.1533E+03     6.8474E+03 0.0007     k(col/abs/tk ln)
0.639967 0.0005     0.639984 0.0005
 rem life(abs)   7.1608E+03     6.8472E+03 0.0007     life(col/abs/tl)
6.8486E+03 0.0006   6.8527E+03 0.0005
 source points generated   4993

  estimator     cycle   887   ave of   837 cycles      combination
simple average    combined average     corr
 k(collision)      0.649968       0.639871 0.0006     k(col/abs)
0.639949 0.0005     0.639965 0.0005   0.8388
 k(absorption)     0.653702       0.640028 0.0006     k(abs/tk ln)
0.640029 0.0006     0.640029 0.0005   0.4170
 k(trk length)     0.640535       0.640031 0.0008     k(tk ln/col)
0.639951 0.0006     0.639904 0.0006   0.5353
 rem life(col)   6.7234E+03     6.8473E+03 0.0007     k(col/abs/tk ln)
0.639976 0.0005     0.639996 0.0005
 rem life(abs)   6.7091E+03     6.8470E+03 0.0007     life(col/abs/tl)
6.8484E+03 0.0006   6.8526E+03 0.0005
 source points generated   5168

  estimator     cycle   888   ave of   838 cycles      combination
simple average    combined average     corr
 k(collision)      0.637171       0.639867 0.0006     k(col/abs)
0.639944 0.0005     0.639960 0.0005   0.8388
 k(absorption)     0.634433       0.640021 0.0006     k(abs/tk ln)
0.640024 0.0006     0.640022 0.0005   0.4171
 k(trk length)     0.635933       0.640026 0.0008     k(tk ln/col)
0.639947 0.0006     0.639901 0.0006   0.5354
 rem life(col)   7.0803E+03     6.8476E+03 0.0007     k(col/abs/tk ln)
0.639972 0.0005     0.639991 0.0005
 rem life(abs)   7.0855E+03     6.8473E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8526E+03 0.0005
 source points generated   4903

  estimator     cycle   889   ave of   839 cycles      combination
simple average    combined average     corr
 k(collision)      0.620171       0.639844 0.0006     k(col/abs)
0.639924 0.0005     0.639941 0.0005   0.8392
 k(absorption)     0.626130       0.640005 0.0006     k(abs/tk ln)
0.640004 0.0006     0.640004 0.0005   0.4184
 k(trk length)     0.620622       0.640003 0.0008     k(tk ln/col)
0.639923 0.0006     0.639877 0.0006   0.5367
 rem life(col)   6.7351E+03     6.8474E+03 0.0007     k(col/abs/tk ln)
0.639950 0.0005     0.639972 0.0005
 rem life(abs)   6.7147E+03     6.8471E+03 0.0007     life(col/abs/tl)
6.8485E+03 0.0006   6.8524E+03 0.0005
 source points generated   4836

  estimator     cycle   890   ave of   840 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.632552       0.639835 0.0006     k(col/abs)
0.639921 0.0005     0.639939 0.0005   0.8388
 k(absorption)     0.641661       0.640007 0.0006     k(abs/tk ln)
0.639994 0.0006     0.640001 0.0005   0.4178
 k(trk length)     0.622660       0.639982 0.0008     k(tk ln/col)
0.639909 0.0006     0.639866 0.0006   0.5371
 rem life(col)   7.0322E+03     6.8477E+03 0.0007     k(col/abs/tk ln)
0.639941 0.0005     0.639967 0.0005
 rem life(abs)   7.0353E+03     6.8473E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8525E+03 0.0005
 source points generated   5064

  estimator     cycle   891   ave of   841 cycles      combination
simple average    combined average     corr
 k(collision)      0.641860       0.639838 0.0006     k(col/abs)
0.639921 0.0005     0.639938 0.0005   0.8387
 k(absorption)     0.638400       0.640005 0.0006     k(abs/tk ln)
0.639993 0.0006     0.639999 0.0005   0.4178
 k(trk length)     0.640042       0.639982 0.0008     k(tk ln/col)
0.639910 0.0006     0.639868 0.0006   0.5371
 rem life(col)   6.7829E+03     6.8476E+03 0.0007     k(col/abs/tk ln)
0.639942 0.0005     0.639967 0.0005
 rem life(abs)   6.7840E+03     6.8473E+03 0.0007     life(col/abs/tl)
6.8486E+03 0.0006   6.8525E+03 0.0005
 source points generated   5058

  estimator     cycle   892   ave of   842 cycles      combination
simple average    combined average     corr
 k(collision)      0.648227       0.639848 0.0006     k(col/abs)
0.639928 0.0005     0.639944 0.0005   0.8386
 k(absorption)     0.642398       0.640008 0.0006     k(abs/tk ln)
0.639989 0.0006     0.639999 0.0005   0.4174
 k(trk length)     0.629608       0.639970 0.0008     k(tk ln/col)
0.639909 0.0006     0.639873 0.0006   0.5360
 rem life(col)   7.0778E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639942 0.0005     0.639968 0.0005
 rem life(abs)   7.0799E+03     6.8475E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8526E+03 0.0005
 source points generated   5052

  estimator     cycle   893   ave of   843 cycles      combination
simple average    combined average     corr
 k(collision)      0.629407       0.639835 0.0006     k(col/abs)
0.639917 0.0005     0.639934 0.0005   0.8387
 k(absorption)     0.632875       0.639999 0.0006     k(abs/tk ln)
0.639979 0.0006     0.639990 0.0005   0.4177
 k(trk length)     0.631350       0.639960 0.0008     k(tk ln/col)
0.639897 0.0006     0.639861 0.0006   0.5363
 rem life(col)   6.8753E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639931 0.0005     0.639958 0.0005
 rem life(abs)   6.8612E+03     6.8476E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8525E+03 0.0005
 source points generated   4835
```

```
  estimator     cycle   894   ave of   844 cycles      combination
simple average    combined average     corr
 k(collision)      0.638807       0.639834 0.0006     k(col/abs)
0.639909 0.0005     0.639924 0.0005   0.8381
 k(absorption)     0.627402       0.639984 0.0006     k(abs/tk ln)
0.639976 0.0006     0.639980 0.0005   0.4166
 k(trk length)     0.646860       0.639968 0.0008     k(tk ln/col)
0.639901 0.0006     0.639862 0.0006   0.5362
 rem life(col)   6.8901E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639929 0.0005     0.639951 0.0005
 rem life(abs)   6.8964E+03     6.8476E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8525E+03 0.0005
 source points generated   5095

  estimator     cycle   895   ave of   845 cycles      combination
simple average    combined average     corr
 k(collision)      0.644262       0.639839 0.0006     k(col/abs)
0.639917 0.0005     0.639933 0.0005   0.8380
 k(absorption)     0.649566       0.639996 0.0006     k(abs/tk ln)
0.639975 0.0006     0.639986 0.0005   0.4154
 k(trk length)     0.628905       0.639955 0.0008     k(tk ln/col)
0.639897 0.0006     0.639863 0.0006   0.5355
 rem life(col)   6.6981E+03     6.8478E+03 0.0007     k(col/abs/tk ln)
0.639930 0.0005     0.639956 0.0005
 rem life(abs)   6.6632E+03     6.8474E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8524E+03 0.0005
 source points generated   5046

  estimator     cycle   896   ave of   846 cycles      combination
simple average    combined average     corr
 k(collision)      0.639230       0.639839 0.0006     k(col/abs)
0.639919 0.0005     0.639935 0.0005   0.8380
 k(absorption)     0.643424       0.640000 0.0006     k(abs/tk ln)
0.639965 0.0006     0.639983 0.0005   0.4143
 k(trk length)     0.619796       0.639931 0.0008     k(tk ln/col)
0.639885 0.0006     0.639858 0.0006   0.5350
 rem life(col)   6.6098E+03     6.8475E+03 0.0007     k(col/abs/tk ln)
0.639923 0.0005     0.639953 0.0005
 rem life(abs)   6.6074E+03     6.8471E+03 0.0007     life(col/abs/tl)
6.8485E+03 0.0006   6.8523E+03 0.0005
 source points generated   4997

  estimator     cycle   897   ave of   847 cycles      combination
simple average    combined average     corr
 k(collision)      0.623042       0.639819 0.0006     k(col/abs)
0.639898 0.0005     0.639914 0.0005   0.8385
 k(absorption)     0.621185       0.639977 0.0006     k(abs/tk ln)
0.639950 0.0006     0.639964 0.0005   0.4145
 k(trk length)     0.632813       0.639922 0.0008     k(tk ln/col)
0.639871 0.0006     0.639840 0.0006   0.5351
 rem life(col)   7.0306E+03     6.8477E+03 0.0007     k(col/abs/tk ln)
0.639906 0.0005     0.639934 0.0005
 rem life(abs)   7.0416E+03     6.8473E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8525E+03 0.0005
```

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 source points generated   4865

  estimator     cycle   898   ave of   848 cycles      combination
simple average    combined average     corr
 k(collision)      0.627581       0.639804 0.0006     k(col/abs)
0.639886 0.0005     0.639903 0.0005   0.8386
 k(absorption)     0.632409       0.639968 0.0006     k(abs/tk ln)
0.639943 0.0006     0.639956 0.0005   0.4146
 k(trk length)     0.635060       0.639917 0.0008     k(tk ln/col)
0.639861 0.0006     0.639828 0.0006   0.5351
 rem life(col)   6.8091E+03     6.8477E+03 0.0007     k(col/abs/tk ln)
0.639897 0.0005     0.639925 0.0005
 rem life(abs)   6.7918E+03     6.8473E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8525E+03 0.0005
 source points generated   4993

  estimator     cycle   899   ave of   849 cycles      combination
simple average    combined average     corr
 k(collision)      0.636126       0.639800 0.0006     k(col/abs)
0.639885 0.0005     0.639902 0.0005   0.8385
 k(absorption)     0.640678       0.639969 0.0006     k(abs/tk ln)
0.639949 0.0006     0.639959 0.0005   0.4146
 k(trk length)     0.649353       0.639928 0.0008     k(tk ln/col)
0.639864 0.0006     0.639827 0.0006   0.5346
 rem life(col)   6.8698E+03     6.8477E+03 0.0007     k(col/abs/tk ln)
0.639899 0.0005     0.639927 0.0005
 rem life(abs)   6.8465E+03     6.8473E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8525E+03 0.0005
 source points generated   5052

  estimator     cycle   900   ave of   850 cycles      combination
simple average    combined average     corr
 k(collision)      0.636263       0.639796 0.0006     k(col/abs)
0.639875 0.0005     0.639890 0.0005   0.8381
 k(absorption)     0.626892       0.639954 0.0006     k(abs/tk ln)
0.639944 0.0006     0.639949 0.0005   0.4136
 k(trk length)     0.645034       0.639934 0.0008     k(tk ln/col)
0.639865 0.0006     0.639825 0.0006   0.5344
 rem life(col)   6.8427E+03     6.8477E+03 0.0007     k(col/abs/tk ln)
0.639895 0.0005     0.639918 0.0005
 rem life(abs)   6.8318E+03     6.8473E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8526E+03 0.0005
 source points generated   4986

  estimator     cycle   901   ave of   851 cycles      combination
simple average    combined average     corr
 k(collision)      0.628522       0.639783 0.0006     k(col/abs)
0.639861 0.0005     0.639877 0.0005   0.8383
 k(absorption)     0.628087       0.639940 0.0006     k(abs/tk ln)
0.639930 0.0006     0.639935 0.0005   0.4143
 k(trk length)     0.627765       0.639920 0.0008     k(tk ln/col)
0.639851 0.0006     0.639811 0.0006   0.5349
 rem life(col)   6.8015E+03     6.8476E+03 0.0007     k(col/abs/tk ln)
0.639881 0.0005     0.639904 0.0005
```

```
 rem life(abs)   6.7980E+03     6.8472E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8527E+03 0.0005
 source points generated   4960

  estimator     cycle   902   ave of   852 cycles      combination
simple average    combined average     corr
 k(collision)      0.639289       0.639782 0.0006     k(col/abs)
0.639858 0.0005     0.639873 0.0005   0.8383
 k(absorption)     0.634924       0.639934 0.0006     k(abs/tk ln)
0.639929 0.0006     0.639932 0.0005   0.4141
 k(trk length)     0.643522       0.639924 0.0008     k(tk ln/col)
0.639853 0.0006     0.639812 0.0006   0.5349
 rem life(col)   7.0095E+03     6.8478E+03 0.0007     k(col/abs/tk ln)
0.639880 0.0005     0.639901 0.0005
 rem life(abs)   7.0536E+03     6.8474E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8528E+03 0.0005
 source points generated   5114

  estimator     cycle   903   ave of   853 cycles      combination
simple average    combined average     corr
 k(collision)      0.645228       0.639788 0.0006     k(col/abs)
0.639864 0.0005     0.639879 0.0005   0.8383
 k(absorption)     0.645267       0.639940 0.0006     k(abs/tk ln)
0.639938 0.0006     0.639939 0.0005   0.4143
 k(trk length)     0.650386       0.639936 0.0008     k(tk ln/col)
0.639862 0.0006     0.639819 0.0006   0.5350
 rem life(col)   6.8921E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639888 0.0005     0.639909 0.0005
 rem life(abs)   6.8678E+03     6.8475E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8528E+03 0.0005
 source points generated   5046

  estimator     cycle   904   ave of   854 cycles      combination
simple average    combined average     corr
 k(collision)      0.655686       0.639807 0.0006     k(col/abs)
0.639873 0.0005     0.639887 0.0005   0.8371
 k(absorption)     0.639266       0.639940 0.0005     k(abs/tk ln)
0.639952 0.0006     0.639945 0.0005   0.4135
 k(trk length)     0.663515       0.639964 0.0008     k(tk ln/col)
0.639885 0.0006     0.639840 0.0006   0.5364
 rem life(col)   6.8636E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639903 0.0005     0.639918 0.0005
 rem life(abs)   6.8950E+03     6.8475E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8528E+03 0.0004
 source points generated   5106

  estimator     cycle   905   ave of   855 cycles      combination
simple average    combined average     corr
 k(collision)      0.649492       0.639818 0.0006     k(col/abs)
0.639884 0.0005     0.639898 0.0005   0.8372
 k(absorption)     0.649389       0.639951 0.0005     k(abs/tk ln)
0.639958 0.0006     0.639954 0.0005   0.4134
 k(trk length)     0.641125       0.639965 0.0008     k(tk ln/col)
0.639892 0.0006     0.639849 0.0006   0.5362
```

```
 rem life(col)   6.9147E+03     6.8480E+03 0.0007     k(col/abs/tk ln)
0.639911 0.0005     0.639927 0.0005
 rem life(abs)   6.9161E+03     6.8476E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8527E+03 0.0004
 source points generated   5018

  estimator     cycle   906   ave of   856 cycles      combination
simple average    combined average     corr
 k(collision)      0.648849       0.639829 0.0006     k(col/abs)
0.639888 0.0005     0.639900 0.0005   0.8365
 k(absorption)     0.636753       0.639947 0.0005     k(abs/tk ln)
0.639958 0.0006     0.639952 0.0005   0.4133
 k(trk length)     0.642696       0.639968 0.0008     k(tk ln/col)
0.639899 0.0006     0.639858 0.0006   0.5362
 rem life(col)   6.7596E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639915 0.0005     0.639928 0.0005
 rem life(abs)   6.7884E+03     6.8475E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8527E+03 0.0004
 source points generated   5019

  estimator     cycle   907   ave of   857 cycles      combination
simple average    combined average     corr
 k(collision)      0.638909       0.639828 0.0006     k(col/abs)
0.639886 0.0005     0.639898 0.0005   0.8365
 k(absorption)     0.638021       0.639945 0.0005     k(abs/tk ln)
0.639964 0.0006     0.639954 0.0005   0.4129
 k(trk length)     0.653307       0.639984 0.0008     k(tk ln/col)
0.639906 0.0006     0.639860 0.0005   0.5358
 rem life(col)   6.9376E+03     6.8480E+03 0.0007     k(col/abs/tk ln)
0.639919 0.0005     0.639929 0.0005
 rem life(abs)   6.9611E+03     6.8477E+03 0.0007     life(col/abs/tl)
6.8490E+03 0.0006   6.8528E+03 0.0004
 source points generated   4926

  estimator     cycle   908   ave of   858 cycles      combination
simple average    combined average     corr
 k(collision)      0.641174       0.639829 0.0006     k(col/abs)
0.639888 0.0005     0.639900 0.0005   0.8365
 k(absorption)     0.642253       0.639947 0.0005     k(abs/tk ln)
0.639971 0.0006     0.639959 0.0005   0.4129
 k(trk length)     0.648978       0.639994 0.0008     k(tk ln/col)
0.639912 0.0006     0.639864 0.0005   0.5358
 rem life(col)   6.9338E+03     6.8481E+03 0.0007     k(col/abs/tk ln)
0.639924 0.0005     0.639933 0.0005
 rem life(abs)   6.9060E+03     6.8477E+03 0.0007     life(col/abs/tl)
6.8491E+03 0.0006   6.8528E+03 0.0004
 source points generated   5011

  estimator     cycle   909   ave of   859 cycles      combination
simple average    combined average     corr
 k(collision)      0.637087       0.639826 0.0006     k(col/abs)
0.639884 0.0005     0.639896 0.0005   0.8365
 k(absorption)     0.635492       0.639942 0.0005     k(abs/tk ln)
0.639982 0.0006     0.639961 0.0005   0.4114
```

```
 k(trk length)     0.663488       0.640022 0.0008     k(tk ln/col)
0.639924 0.0006     0.639867 0.0005   0.5344
 rem life(col)   7.0380E+03     6.8483E+03 0.0007     k(col/abs/tk ln)
0.639930 0.0005     0.639935 0.0005
 rem life(abs)   7.0508E+03     6.8480E+03 0.0007     life(col/abs/tl)
6.8493E+03 0.0006   6.8529E+03 0.0004
 source points generated   4960

  estimator     cycle   910   ave of   860 cycles      combination
simple average    combined average     corr
 k(collision)      0.643515       0.639830 0.0006     k(col/abs)
0.639887 0.0005     0.639898 0.0005   0.8365
 k(absorption)     0.641178       0.639944 0.0005     k(abs/tk ln)
0.639989 0.0005     0.639966 0.0005   0.4113
 k(trk length)     0.651308       0.640035 0.0008     k(tk ln/col)
0.639933 0.0006     0.639873 0.0005   0.5345
 rem life(col)   6.7407E+03     6.8482E+03 0.0007     k(col/abs/tk ln)
0.639936 0.0005     0.639940 0.0005
 rem life(abs)   6.7201E+03     6.8478E+03 0.0007     life(col/abs/tl)
6.8491E+03 0.0006   6.8528E+03 0.0004
 source points generated   5057

  estimator     cycle   911   ave of   861 cycles      combination
simple average    combined average     corr
 k(collision)      0.625139       0.639813 0.0006     k(col/abs)
0.639869 0.0005     0.639880 0.0005   0.8369
 k(absorption)     0.623087       0.639924 0.0005     k(abs/tk ln)
0.639975 0.0005     0.639949 0.0005   0.4117
 k(trk length)     0.632184       0.640026 0.0008     k(tk ln/col)
0.639920 0.0006     0.639858 0.0005   0.5347
 rem life(col)   6.8906E+03     6.8482E+03 0.0007     k(col/abs/tk ln)
0.639921 0.0005     0.639923 0.0005
 rem life(abs)   6.8736E+03     6.8478E+03 0.0007     life(col/abs/tl)
6.8491E+03 0.0006   6.8528E+03 0.0004
 source points generated   4817

  estimator     cycle   912   ave of   862 cycles      combination
simple average    combined average     corr
 k(collision)      0.621115       0.639792 0.0006     k(col/abs)
0.639849 0.0005     0.639861 0.0005   0.8373
 k(absorption)     0.625504       0.639907 0.0005     k(abs/tk ln)
0.639971 0.0005     0.639938 0.0005   0.4102
 k(trk length)     0.648287       0.640035 0.0008     k(tk ln/col)
0.639913 0.0006     0.639843 0.0005   0.5324
 rem life(col)   7.0418E+03     6.8484E+03 0.0007     k(col/abs/tk ln)
0.639911 0.0005     0.639911 0.0005
 rem life(abs)   7.0215E+03     6.8480E+03 0.0007     life(col/abs/tl)
6.8494E+03 0.0006   6.8530E+03 0.0004
 source points generated   5001

  estimator     cycle   913   ave of   863 cycles      combination
simple average    combined average     corr
 k(collision)      0.634216       0.639785 0.0006     k(col/abs)
0.639837 0.0005     0.639847 0.0005   0.8369
```

```
 k(absorption)     0.623388       0.639888 0.0005     k(abs/tk ln)
0.639957 0.0005     0.639922 0.0005   0.4106
 k(trk length)     0.631309       0.640025 0.0008     k(tk ln/col)
0.639905 0.0006     0.639836 0.0005   0.5326
 rem life(col)   7.1179E+03     6.8487E+03 0.0007     k(col/abs/tk ln)
0.639899 0.0005     0.639896 0.0005
 rem life(abs)   7.1153E+03     6.8484E+03 0.0007     life(col/abs/tl)
6.8497E+03 0.0006   6.8533E+03 0.0004
 source points generated   5105

  estimator     cycle   914   ave of   864 cycles      combination
simple average    combined average     corr
 k(collision)      0.631982       0.639776 0.0006     k(col/abs)
0.639829 0.0005     0.639839 0.0005   0.8370
 k(absorption)     0.633702       0.639881 0.0005     k(abs/tk ln)
0.639950 0.0005     0.639915 0.0005   0.4108
 k(trk length)     0.634628       0.640019 0.0008     k(tk ln/col)
0.639898 0.0006     0.639828 0.0005   0.5327
 rem life(col)   6.8732E+03     6.8488E+03 0.0007     k(col/abs/tk ln)
0.639892 0.0005     0.639889 0.0005
 rem life(abs)   6.8665E+03     6.8484E+03 0.0007     life(col/abs/tl)
6.8497E+03 0.0006   6.8533E+03 0.0004
 source points generated   4983

  estimator     cycle   915   ave of   865 cycles      combination
simple average    combined average     corr
 k(collision)      0.646744       0.639784 0.0006     k(col/abs)
0.639829 0.0005     0.639838 0.0005   0.8362
 k(absorption)     0.634061       0.639874 0.0005     k(abs/tk ln)
0.639939 0.0005     0.639906 0.0005   0.4111
 k(trk length)     0.626484       0.640003 0.0008     k(tk ln/col)
0.639894 0.0006     0.639831 0.0005   0.5316
 rem life(col)   6.6068E+03     6.8485E+03 0.0007     k(col/abs/tk ln)
0.639887 0.0005     0.639883 0.0005
 rem life(abs)   6.6103E+03     6.8481E+03 0.0007     life(col/abs/tl)
6.8494E+03 0.0006   6.8531E+03 0.0005
 source points generated   5192

  estimator     cycle   916   ave of   866 cycles      combination
simple average    combined average     corr
 k(collision)      0.630937       0.639774 0.0006     k(col/abs)
0.639820 0.0005     0.639829 0.0005   0.8363
 k(absorption)     0.633055       0.639866 0.0005     k(abs/tk ln)
0.639930 0.0005     0.639897 0.0005   0.4114
 k(trk length)     0.630922       0.639993 0.0008     k(tk ln/col)
0.639883 0.0006     0.639820 0.0005   0.5318
 rem life(col)   6.8590E+03     6.8485E+03 0.0007     k(col/abs/tk ln)
0.639878 0.0005     0.639874 0.0005
 rem life(abs)   6.8517E+03     6.8481E+03 0.0007     life(col/abs/tl)
6.8494E+03 0.0006   6.8531E+03 0.0004
 source points generated   4833

  estimator     cycle   917   ave of   867 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.639875       0.639774 0.0006     k(col/abs)
0.639822 0.0005     0.639832 0.0005   0.8362
 k(absorption)     0.643523       0.639871 0.0005     k(abs/tk ln)
0.639942 0.0005     0.639905 0.0005   0.4115
 k(trk length)     0.658033       0.640014 0.0008     k(tk ln/col)
0.639894 0.0006     0.639825 0.0005   0.5313
 rem life(col)   6.9792E+03     6.8487E+03 0.0007     k(col/abs/tk ln)
0.639886 0.0005     0.639880 0.0005
 rem life(abs)   6.9724E+03     6.8483E+03 0.0007     life(col/abs/tl)
6.8495E+03 0.0006   6.8531E+03 0.0004
 source points generated   5068

  estimator     cycle   918   ave of   868 cycles      combination
simple average    combined average     corr
 k(collision)      0.634037       0.639768 0.0006     k(col/abs)
0.639820 0.0005     0.639831 0.0005   0.8359
 k(absorption)     0.641939       0.639873 0.0005     k(abs/tk ln)
0.639940 0.0005     0.639906 0.0005   0.4113
 k(trk length)     0.634477       0.640007 0.0008     k(tk ln/col)
0.639887 0.0006     0.639818 0.0005   0.5315
 rem life(col)   6.8176E+03     6.8486E+03 0.0007     k(col/abs/tk ln)
0.639883 0.0005     0.639879 0.0005
 rem life(abs)   6.8297E+03     6.8482E+03 0.0007     life(col/abs/tl)
6.8495E+03 0.0006   6.8530E+03 0.0004
 source points generated   4928

  estimator     cycle   919   ave of   869 cycles      combination
simple average    combined average     corr
 k(collision)      0.648144       0.639777 0.0006     k(col/abs)
0.639836 0.0005     0.639847 0.0005   0.8357
 k(absorption)     0.658968       0.639895 0.0005     k(abs/tk ln)
0.639952 0.0005     0.639923 0.0005   0.4107
 k(trk length)     0.641345       0.640009 0.0008     k(tk ln/col)
0.639893 0.0006     0.639826 0.0005   0.5313
 rem life(col)   6.5930E+03     6.8483E+03 0.0007     k(col/abs/tk ln)
0.639894 0.0005     0.639894 0.0005
 rem life(abs)   6.5524E+03     6.8479E+03 0.0007     life(col/abs/tl)
6.8492E+03 0.0006   6.8527E+03 0.0005
 source points generated   5107

  estimator     cycle   920   ave of   870 cycles      combination
simple average    combined average     corr
 k(collision)      0.634645       0.639771 0.0006     k(col/abs)
0.639829 0.0005     0.639840 0.0005   0.8357
 k(absorption)     0.632717       0.639887 0.0005     k(abs/tk ln)
0.639946 0.0005     0.639916 0.0005   0.4108
 k(trk length)     0.637343       0.640006 0.0007     k(tk ln/col)
0.639888 0.0006     0.639821 0.0005   0.5314
 rem life(col)   6.9227E+03     6.8484E+03 0.0007     k(col/abs/tk ln)
0.639888 0.0005     0.639887 0.0005
 rem life(abs)   6.9438E+03     6.8480E+03 0.0007     life(col/abs/tl)
6.8493E+03 0.0006   6.8527E+03 0.0004
 source points generated   4892
```

```
  estimator     cycle   921   ave of   871 cycles      combination
simple average    combined average     corr
 k(collision)      0.636594       0.639768 0.0006     k(col/abs)
0.639827 0.0005     0.639838 0.0005   0.8357
 k(absorption)     0.639529       0.639886 0.0005     k(abs/tk ln)
0.639941 0.0005     0.639913 0.0005   0.4107
 k(trk length)     0.631598       0.639996 0.0007     k(tk ln/col)
0.639882 0.0006     0.639816 0.0005   0.5314
 rem life(col)   6.8430E+03     6.8484E+03 0.0007     k(col/abs/tk ln)
0.639883 0.0005     0.639884 0.0005
 rem life(abs)   6.8545E+03     6.8480E+03 0.0007     life(col/abs/tl)
6.8493E+03 0.0006   6.8527E+03 0.0004
 source points generated   4987

  estimator     cycle   922   ave of   872 cycles      combination
simple average    combined average     corr
 k(collision)      0.635042       0.639762 0.0006     k(col/abs)
0.639818 0.0005     0.639828 0.0005   0.8356
 k(absorption)     0.629243       0.639874 0.0005     k(abs/tk ln)
0.639945 0.0005     0.639909 0.0005   0.4087
 k(trk length)     0.656722       0.640015 0.0007     k(tk ln/col)
0.639889 0.0006     0.639816 0.0005   0.5303
 rem life(col)   6.7513E+03     6.8483E+03 0.0007     k(col/abs/tk ln)
0.639884 0.0005     0.639880 0.0005
 rem life(abs)   6.7367E+03     6.8479E+03 0.0007     life(col/abs/tl)
6.8491E+03 0.0006   6.8526E+03 0.0004
 source points generated   4983

  estimator     cycle   923   ave of   873 cycles      combination
simple average    combined average     corr
 k(collision)      0.639547       0.639762 0.0006     k(col/abs)
0.639815 0.0005     0.639825 0.0005   0.8355
 k(absorption)     0.634769       0.639868 0.0005     k(abs/tk ln)
0.639946 0.0005     0.639907 0.0005   0.4083
 k(trk length)     0.647723       0.640024 0.0007     k(tk ln/col)
0.639893 0.0006     0.639817 0.0005   0.5302
 rem life(col)   6.6650E+03     6.8481E+03 0.0007     k(col/abs/tk ln)
0.639885 0.0005     0.639878 0.0005
 rem life(abs)   6.6791E+03     6.8477E+03 0.0007     life(col/abs/tl)
6.8490E+03 0.0006   6.8525E+03 0.0004
 source points generated   5072

  estimator     cycle   924   ave of   874 cycles      combination
simple average    combined average     corr
 k(collision)      0.625966       0.639746 0.0006     k(col/abs)
0.639801 0.0005     0.639811 0.0005   0.8357
 k(absorption)     0.628661       0.639855 0.0005     k(abs/tk ln)
0.639936 0.0005     0.639895 0.0005   0.4085
 k(trk length)     0.634304       0.640017 0.0007     k(tk ln/col)
0.639882 0.0006     0.639804 0.0005   0.5303
 rem life(col)   6.6713E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639873 0.0005     0.639867 0.0005
 rem life(abs)   6.6565E+03     6.8475E+03 0.0007     life(col/abs/tl)
6.8488E+03 0.0006   6.8525E+03 0.0004
```

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 source points generated   4869

  estimator     cycle   925   ave of   875 cycles      combination
simple average    combined average     corr
 k(collision)      0.636768       0.639743 0.0006     k(col/abs)
0.639801 0.0005     0.639811 0.0005   0.8356
 k(absorption)     0.642645       0.639859 0.0005     k(abs/tk ln)
0.639939 0.0005     0.639898 0.0005   0.4085
 k(trk length)     0.642378       0.640020 0.0007     k(tk ln/col)
0.639881 0.0006     0.639802 0.0005   0.5302
 rem life(col)   6.7470E+03     6.8478E+03 0.0007     k(col/abs/tk ln)
0.639874 0.0005     0.639868 0.0005
 rem life(abs)   6.7355E+03     6.8473E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8525E+03 0.0004
 source points generated   5112

  estimator     cycle   926   ave of   876 cycles      combination
simple average    combined average     corr
 k(collision)      0.640312       0.639743 0.0006     k(col/abs)
0.639803 0.0005     0.639814 0.0005   0.8355
 k(absorption)     0.644000       0.639863 0.0005     k(abs/tk ln)
0.639936 0.0005     0.639899 0.0005   0.4080
 k(trk length)     0.629148       0.640008 0.0007     k(tk ln/col)
0.639876 0.0006     0.639800 0.0005   0.5300
 rem life(col)   6.9047E+03     6.8478E+03 0.0007     k(col/abs/tk ln)
0.639871 0.0005     0.639869 0.0005
 rem life(abs)   6.9267E+03     6.8474E+03 0.0007     life(col/abs/tl)
6.8488E+03 0.0006   6.8525E+03 0.0004
 source points generated   5020

  estimator     cycle   927   ave of   877 cycles      combination
simple average    combined average     corr
 k(collision)      0.651373       0.639757 0.0006     k(col/abs)
0.639814 0.0005     0.639825 0.0005   0.8356
 k(absorption)     0.647393       0.639872 0.0005     k(abs/tk ln)
0.639939 0.0005     0.639905 0.0005   0.4077
 k(trk length)     0.638019       0.640005 0.0007     k(tk ln/col)
0.639881 0.0006     0.639810 0.0005   0.5294
 rem life(col)   6.7801E+03     6.8478E+03 0.0007     k(col/abs/tk ln)
0.639878 0.0005     0.639876 0.0005
 rem life(abs)   6.7938E+03     6.8474E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8524E+03 0.0004
 source points generated   5092

  estimator     cycle   928   ave of   878 cycles      combination
simple average    combined average     corr
 k(collision)      0.645466       0.639763 0.0006     k(col/abs)
0.639820 0.0005     0.639831 0.0005   0.8356
 k(absorption)     0.644138       0.639877 0.0005     k(abs/tk ln)
0.639936 0.0005     0.639906 0.0005   0.4072
 k(trk length)     0.630447       0.639995 0.0007     k(tk ln/col)
0.639879 0.0006     0.639813 0.0005   0.5288
 rem life(col)   6.8473E+03     6.8478E+03 0.0007     k(col/abs/tk ln)
0.639878 0.0005     0.639878 0.0005
```

```
 rem life(abs)   6.8313E+03     6.8474E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8524E+03 0.0004
 source points generated   4956

  estimator     cycle   929   ave of   879 cycles      combination
simple average    combined average     corr
 k(collision)      0.637840       0.639761 0.0006     k(col/abs)
0.639809 0.0005     0.639817 0.0005   0.8346
 k(absorption)     0.622641       0.639857 0.0005     k(abs/tk ln)
0.639933 0.0005     0.639895 0.0005   0.4046
 k(trk length)     0.653164       0.640010 0.0007     k(tk ln/col)
0.639885 0.0006     0.639814 0.0005   0.5283
 rem life(col)   6.8475E+03     6.8478E+03 0.0007     k(col/abs/tk ln)
0.639876 0.0005     0.639869 0.0005
 rem life(abs)   6.8786E+03     6.8474E+03 0.0007     life(col/abs/tl)
6.8487E+03 0.0006   6.8525E+03 0.0004
 source points generated   4917

  estimator     cycle   930   ave of   880 cycles      combination
simple average    combined average     corr
 k(collision)      0.656914       0.639781 0.0006     k(col/abs)
0.639823 0.0005     0.639831 0.0005   0.8345
 k(absorption)     0.647384       0.639866 0.0005     k(abs/tk ln)
0.639947 0.0005     0.639906 0.0005   0.4051
 k(trk length)     0.656279       0.640028 0.0007     k(tk ln/col)
0.639904 0.0006     0.639833 0.0005   0.5292
 rem life(col)   6.9711E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639891 0.0005     0.639882 0.0005
 rem life(abs)   7.0304E+03     6.8476E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8526E+03 0.0004
 source points generated   5123

  estimator     cycle   931   ave of   881 cycles      combination
simple average    combined average     corr
 k(collision)      0.626792       0.639766 0.0006     k(col/abs)
0.639807 0.0005     0.639814 0.0005   0.8348
 k(absorption)     0.623918       0.639848 0.0005     k(abs/tk ln)
0.639929 0.0005     0.639888 0.0005   0.4062
 k(trk length)     0.625210       0.640011 0.0007     k(tk ln/col)
0.639888 0.0006     0.639818 0.0005   0.5299
 rem life(col)   7.0539E+03     6.8481E+03 0.0007     k(col/abs/tk ln)
0.639875 0.0005     0.639865 0.0005
 rem life(abs)   7.0596E+03     6.8478E+03 0.0007     life(col/abs/tl)
6.8491E+03 0.0006   6.8527E+03 0.0004
 source points generated   4779

  estimator     cycle   932   ave of   882 cycles      combination
simple average    combined average     corr
 k(collision)      0.654157       0.639782 0.0006     k(col/abs)
0.639819 0.0005     0.639826 0.0005   0.8348
 k(absorption)     0.647210       0.639856 0.0005     k(abs/tk ln)
0.639936 0.0005     0.639896 0.0005   0.4063
 k(trk length)     0.645143       0.640017 0.0007     k(tk ln/col)
0.639900 0.0006     0.639832 0.0005   0.5299
```

```
 rem life(col)   6.9994E+03     6.8483E+03 0.0007     k(col/abs/tk ln)
0.639885 0.0005     0.639875 0.0005
 rem life(abs)   7.0358E+03     6.8480E+03 0.0007     life(col/abs/tl)
6.8493E+03 0.0006   6.8528E+03 0.0004
 source points generated   5259

  estimator     cycle   933   ave of   883 cycles      combination
simple average    combined average     corr
 k(collision)      0.653794       0.639798 0.0006     k(col/abs)
0.639834 0.0005     0.639840 0.0005   0.8350
 k(absorption)     0.651432       0.639869 0.0005     k(abs/tk ln)
0.639953 0.0005     0.639911 0.0005   0.4073
 k(trk length)     0.657541       0.640037 0.0007     k(tk ln/col)
0.639917 0.0006     0.639849 0.0005   0.5308
 rem life(col)   6.9405E+03     6.8484E+03 0.0007     k(col/abs/tk ln)
0.639901 0.0005     0.639890 0.0005
 rem life(abs)   6.9546E+03     6.8482E+03 0.0007     life(col/abs/tl)
6.8493E+03 0.0006   6.8527E+03 0.0004
 source points generated   4985

  estimator     cycle   934   ave of   884 cycles      combination
simple average    combined average     corr
 k(collision)      0.638777       0.639797 0.0006     k(col/abs)
0.639829 0.0005     0.639834 0.0005   0.8348
 k(absorption)     0.632076       0.639860 0.0005     k(abs/tk ln)
0.639950 0.0005     0.639905 0.0005   0.4069
 k(trk length)     0.643107       0.640040 0.0007     k(tk ln/col)
0.639919 0.0006     0.639849 0.0005   0.5307
 rem life(col)   6.8543E+03     6.8484E+03 0.0007     k(col/abs/tk ln)
0.639899 0.0005     0.639885 0.0005
 rem life(abs)   6.8665E+03     6.8482E+03 0.0007     life(col/abs/tl)
6.8494E+03 0.0006   6.8528E+03 0.0004
 source points generated   4880

  estimator     cycle   935   ave of   885 cycles      combination
simple average    combined average     corr
 k(collision)      0.636159       0.639793 0.0006     k(col/abs)
0.639822 0.0005     0.639827 0.0005   0.8348
 k(absorption)     0.632080       0.639851 0.0005     k(abs/tk ln)
0.639930 0.0005     0.639890 0.0005   0.4076
 k(trk length)     0.612565       0.640009 0.0007     k(tk ln/col)
0.639901 0.0006     0.639839 0.0005   0.5303
 rem life(col)   7.0274E+03     6.8486E+03 0.0007     k(col/abs/tk ln)
0.639884 0.0005     0.639872 0.0005
 rem life(abs)   7.0051E+03     6.8484E+03 0.0007     life(col/abs/tl)
6.8495E+03 0.0006   6.8529E+03 0.0004
 source points generated   5007

  estimator     cycle   936   ave of   886 cycles      combination
simple average    combined average     corr
 k(collision)      0.641622       0.639795 0.0006     k(col/abs)
0.639829 0.0005     0.639836 0.0005   0.8345
 k(absorption)     0.651051       0.639864 0.0005     k(abs/tk ln)
0.639935 0.0005     0.639899 0.0005   0.4070
```

```
 k(trk length)     0.636179       0.640005 0.0007     k(tk ln/col)
0.639900 0.0006     0.639839 0.0005   0.5302
 rem life(col)   6.8693E+03     6.8486E+03 0.0007     k(col/abs/tk ln)
0.639888 0.0005     0.639879 0.0005
 rem life(abs)   6.8397E+03     6.8484E+03 0.0007     life(col/abs/tl)
6.8495E+03 0.0006   6.8529E+03 0.0004
 source points generated   5037

  estimator     cycle   937   ave of   887 cycles      combination
simple average    combined average     corr
 k(collision)      0.649549       0.639806 0.0006     k(col/abs)
0.639839 0.0005     0.639845 0.0005   0.8345
 k(absorption)     0.646538       0.639872 0.0005     k(abs/tk ln)
0.639943 0.0005     0.639907 0.0005   0.4072
 k(trk length)     0.647911       0.640014 0.0007     k(tk ln/col)
0.639910 0.0006     0.639850 0.0005   0.5305
 rem life(col)   6.7167E+03     6.8485E+03 0.0007     k(col/abs/tk ln)
0.639897 0.0005     0.639888 0.0005
 rem life(abs)   6.7245E+03     6.8482E+03 0.0007     life(col/abs/tl)
6.8494E+03 0.0006   6.8527E+03 0.0004
 source points generated   5082

  estimator     cycle   938   ave of   888 cycles      combination
simple average    combined average     corr
 k(collision)      0.642916       0.639809 0.0006     k(col/abs)
0.639836 0.0005     0.639841 0.0005   0.8339
 k(absorption)     0.631841       0.639863 0.0005     k(abs/tk ln)
0.639930 0.0005     0.639896 0.0005   0.4077
 k(trk length)     0.624959       0.639997 0.0007     k(tk ln/col)
0.639903 0.0006     0.639849 0.0005   0.5297
 rem life(col)   6.7000E+03     6.8483E+03 0.0007     k(col/abs/tk ln)
0.639890 0.0005     0.639879 0.0005
 rem life(abs)   6.7132E+03     6.8481E+03 0.0007     life(col/abs/tl)
6.8493E+03 0.0006   6.8527E+03 0.0004
 source points generated   4972

  estimator     cycle   939   ave of   889 cycles      combination
simple average    combined average     corr
 k(collision)      0.618020       0.639785 0.0006     k(col/abs)
0.639818 0.0005     0.639824 0.0005   0.8338
 k(absorption)     0.629832       0.639851 0.0005     k(abs/tk ln)
0.639918 0.0005     0.639884 0.0005   0.4082
 k(trk length)     0.629627       0.639985 0.0007     k(tk ln/col)
0.639885 0.0006     0.639828 0.0005   0.5300
 rem life(col)   6.9833E+03     6.8485E+03 0.0007     k(col/abs/tk ln)
0.639874 0.0005     0.639866 0.0005
 rem life(abs)   6.9598E+03     6.8482E+03 0.0007     life(col/abs/tl)
6.8494E+03 0.0006   6.8528E+03 0.0004
 source points generated   4795

  estimator     cycle   940   ave of   890 cycles      combination
simple average    combined average     corr
 k(collision)      0.655974       0.639803 0.0006     k(col/abs)
0.639835 0.0005     0.639841 0.0005   0.8341
```

```
 k(absorption)     0.653655       0.639867 0.0005     k(abs/tk ln)
0.639932 0.0005     0.639899 0.0005   0.4088
 k(trk length)     0.650361       0.639997 0.0007     k(tk ln/col)
0.639900 0.0006     0.639845 0.0005   0.5304
 rem life(col)   6.7170E+03     6.8483E+03 0.0007     k(col/abs/tk ln)
0.639889 0.0005     0.639881 0.0005
 rem life(abs)   6.6943E+03     6.8480E+03 0.0007     life(col/abs/tl)
6.8493E+03 0.0006   6.8528E+03 0.0004
 source points generated   5316

  estimator     cycle   941   ave of   891 cycles      combination
simple average    combined average     corr
 k(collision)      0.648637       0.639813 0.0006     k(col/abs)
0.639843 0.0005     0.639849 0.0005   0.8342
 k(absorption)     0.645845       0.639873 0.0005     k(abs/tk ln)
0.639941 0.0005     0.639907 0.0005   0.4090
 k(trk length)     0.649640       0.640008 0.0007     k(tk ln/col)
0.639910 0.0006     0.639855 0.0005   0.5307
 rem life(col)   6.8055E+03     6.8483E+03 0.0007     k(col/abs/tk ln)
0.639898 0.0005     0.639889 0.0005
 rem life(abs)   6.8179E+03     6.8480E+03 0.0007     life(col/abs/tl)
6.8492E+03 0.0006   6.8527E+03 0.0004
 source points generated   4916

  estimator     cycle   942   ave of   892 cycles      combination
simple average    combined average     corr
 k(collision)      0.646227       0.639820 0.0006     k(col/abs)
0.639846 0.0005     0.639851 0.0005   0.8339
 k(absorption)     0.638551       0.639872 0.0005     k(abs/tk ln)
0.639952 0.0005     0.639912 0.0005   0.4083
 k(trk length)     0.662119       0.640033 0.0007     k(tk ln/col)
0.639926 0.0006     0.639865 0.0005   0.5309
 rem life(col)   6.7453E+03     6.8482E+03 0.0007     k(col/abs/tk ln)
0.639908 0.0005     0.639895 0.0005
 rem life(abs)   6.7758E+03     6.8479E+03 0.0007     life(col/abs/tl)
6.8491E+03 0.0006   6.8527E+03 0.0004
 source points generated   4967

  estimator     cycle   943   ave of   893 cycles      combination
simple average    combined average     corr
 k(collision)      0.648224       0.639829 0.0006     k(col/abs)
0.639853 0.0005     0.639858 0.0005   0.8340
 k(absorption)     0.644707       0.639877 0.0005     k(abs/tk ln)
0.639960 0.0005     0.639918 0.0005   0.4085
 k(trk length)     0.649496       0.640043 0.0007     k(tk ln/col)
0.639936 0.0006     0.639875 0.0005   0.5312
 rem life(col)   6.6425E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639917 0.0005     0.639902 0.0005
 rem life(abs)   6.6787E+03     6.8477E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8525E+03 0.0004
 source points generated   4997

  estimator     cycle   944   ave of   894 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.651424       0.639842 0.0006     k(col/abs)
0.639869 0.0005     0.639874 0.0005   0.8342
 k(absorption)     0.655552       0.639895 0.0005     k(abs/tk ln)
0.639982 0.0005     0.639938 0.0005   0.4102
 k(trk length)     0.663834       0.640070 0.0007     k(tk ln/col)
0.639956 0.0006     0.639891 0.0005   0.5321
 rem life(col)   6.8804E+03     6.8480E+03 0.0007     k(col/abs/tk ln)
0.639936 0.0005     0.639920 0.0005
 rem life(abs)   6.8769E+03     6.8477E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8524E+03 0.0004
 source points generated   5074

  estimator     cycle   945   ave of   895 cycles      combination
simple average    combined average     corr
 k(collision)      0.624837       0.639826 0.0006     k(col/abs)
0.639858 0.0005     0.639864 0.0005   0.8338
 k(absorption)     0.635335       0.639890 0.0005     k(abs/tk ln)
0.639974 0.0005     0.639931 0.0005   0.4103
 k(trk length)     0.629790       0.640058 0.0007     k(tk ln/col)
0.639942 0.0006     0.639875 0.0005   0.5325
 rem life(col)   6.7845E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639925 0.0005     0.639912 0.0005
 rem life(abs)   6.7814E+03     6.8477E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8523E+03 0.0004
 source points generated   4841

  estimator     cycle   946   ave of   896 cycles      combination
simple average    combined average     corr
 k(collision)      0.638814       0.639825 0.0006     k(col/abs)
0.639853 0.0005     0.639858 0.0005   0.8336
 k(absorption)     0.631947       0.639881 0.0005     k(abs/tk ln)
0.639976 0.0005     0.639928 0.0005   0.4093
 k(trk length)     0.652065       0.640072 0.0007     k(tk ln/col)
0.639948 0.0006     0.639877 0.0005   0.5322
 rem life(col)   6.9155E+03     6.8480E+03 0.0007     k(col/abs/tk ln)
0.639926 0.0005     0.639909 0.0005
 rem life(abs)   6.9326E+03     6.8478E+03 0.0007     life(col/abs/tl)
6.8489E+03 0.0006   6.8523E+03 0.0004
 source points generated   5137

  estimator     cycle   947   ave of   897 cycles      combination
simple average    combined average     corr
 k(collision)      0.659763       0.639847 0.0006     k(col/abs)
0.639873 0.0005     0.639878 0.0005   0.8341
 k(absorption)     0.655802       0.639899 0.0005     k(abs/tk ln)
0.639997 0.0005     0.639947 0.0005   0.4108
 k(trk length)     0.660715       0.640095 0.0007     k(tk ln/col)
0.639971 0.0006     0.639899 0.0005   0.5336
 rem life(col)   6.9166E+03     6.8480E+03 0.0007     k(col/abs/tk ln)
0.639947 0.0005     0.639929 0.0005
 rem life(abs)   6.8788E+03     6.8478E+03 0.0006     life(col/abs/tl)
6.8489E+03 0.0006   6.8522E+03 0.0004
 source points generated   5144
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```
  estimator     cycle   948   ave of   898 cycles      combination
simple average    combined average     corr
 k(collision)      0.637871       0.639845 0.0006     k(col/abs)
0.639875 0.0005     0.639880 0.0005   0.8339
 k(absorption)     0.645118       0.639905 0.0005     k(abs/tk ln)
0.639993 0.0005     0.639948 0.0005   0.4102
 k(trk length)     0.629107       0.640082 0.0007     k(tk ln/col)
0.639964 0.0006     0.639895 0.0005   0.5335
 rem life(col)   6.6638E+03     6.8478E+03 0.0007     k(col/abs/tk ln)
0.639944 0.0005     0.639929 0.0005
 rem life(abs)   6.6697E+03     6.8476E+03 0.0006     life(col/abs/tl)
6.8488E+03 0.0006   6.8522E+03 0.0004
 source points generated   4803

  estimator     cycle   949   ave of   899 cycles      combination
simple average    combined average     corr
 k(collision)      0.627179       0.639830 0.0006     k(col/abs)
0.639859 0.0005     0.639864 0.0005   0.8342
 k(absorption)     0.623996       0.639887 0.0005     k(abs/tk ln)
0.639975 0.0005     0.639930 0.0005   0.4114
 k(trk length)     0.622578       0.640063 0.0007     k(tk ln/col)
0.639947 0.0006     0.639880 0.0005   0.5343
 rem life(col)   6.8576E+03     6.8479E+03 0.0007     k(col/abs/tk ln)
0.639927 0.0005     0.639912 0.0005
 rem life(abs)   6.8808E+03     6.8476E+03 0.0006     life(col/abs/tl)
6.8488E+03 0.0006   6.8523E+03 0.0004
 source points generated   4909

  estimator     cycle   950   ave of   900 cycles      combination
simple average    combined average     corr
 k(collision)      0.646755       0.639838 0.0006     k(col/abs)
0.639870 0.0005     0.639876 0.0005   0.8342
 k(absorption)     0.652923       0.639901 0.0005     k(abs/tk ln)
0.639995 0.0005     0.639947 0.0005   0.4128
 k(trk length)     0.663617       0.640089 0.0007     k(tk ln/col)
0.639964 0.0006     0.639891 0.0005   0.5346
 rem life(col)   6.6158E+03     6.8476E+03 0.0007     k(col/abs/tk ln)
0.639943 0.0005     0.639927 0.0005
 rem life(abs)   6.5894E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0006   6.8522E+03 0.0004
 source points generated   5155

  estimator     cycle   951   ave of   901 cycles      combination
simple average    combined average     corr
 k(collision)      0.639247       0.639838 0.0006     k(col/abs)
0.639864 0.0005     0.639870 0.0005   0.8339
 k(absorption)     0.631001       0.639891 0.0005     k(abs/tk ln)
0.640002 0.0005     0.639946 0.0005   0.4105
 k(trk length)     0.662050       0.640114 0.0007     k(tk ln/col)
0.639976 0.0006     0.639895 0.0005   0.5337
 rem life(col)   6.6506E+03     6.8474E+03 0.0007     k(col/abs/tk ln)
0.639948 0.0005     0.639926 0.0005
 rem life(abs)   6.6734E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0006   6.8521E+03 0.0004
```

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 source points generated   4917

  estimator     cycle   952   ave of   902 cycles      combination
simple average    combined average     corr
 k(collision)      0.634482       0.639832 0.0005     k(col/abs)
0.639861 0.0005     0.639867 0.0005   0.8338
 k(absorption)     0.639576       0.639891 0.0005     k(abs/tk ln)
0.639990 0.0005     0.639939 0.0005   0.4100
 k(trk length)     0.617230       0.640088 0.0007     k(tk ln/col)
0.639960 0.0006     0.639885 0.0005   0.5338
 rem life(col)   6.6743E+03     6.8472E+03 0.0007     k(col/abs/tk ln)
0.639937 0.0005     0.639919 0.0005
 rem life(abs)   6.6735E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8521E+03 0.0004
 source points generated   4932

  estimator     cycle   953   ave of   903 cycles      combination
simple average    combined average     corr
 k(collision)      0.660356       0.639854 0.0006     k(col/abs)
0.639888 0.0005     0.639893 0.0005   0.8345
 k(absorption)     0.666723       0.639921 0.0005     k(abs/tk ln)
0.640007 0.0005     0.639963 0.0005   0.4095
 k(trk length)     0.645262       0.640094 0.0007     k(tk ln/col)
0.639974 0.0006     0.639905 0.0005   0.5334
 rem life(col)   6.8245E+03     6.8472E+03 0.0007     k(col/abs/tk ln)
0.639956 0.0005     0.639943 0.0005
 rem life(abs)   6.8126E+03     6.8469E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0006   6.8519E+03 0.0004
 source points generated   5254

  estimator     cycle   954   ave of   904 cycles      combination
simple average    combined average     corr
 k(collision)      0.645072       0.639860 0.0005     k(col/abs)
0.639894 0.0005     0.639900 0.0005   0.8345
 k(absorption)     0.645924       0.639927 0.0005     k(abs/tk ln)
0.640010 0.0005     0.639968 0.0005   0.4093
 k(trk length)     0.639030       0.640093 0.0007     k(tk ln/col)
0.639976 0.0006     0.639909 0.0005   0.5333
 rem life(col)   6.8038E+03     6.8471E+03 0.0007     k(col/abs/tk ln)
0.639960 0.0005     0.639948 0.0005
 rem life(abs)   6.7846E+03     6.8469E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0006   6.8519E+03 0.0004
 source points generated   4815

  estimator     cycle   955   ave of   905 cycles      combination
simple average    combined average     corr
 k(collision)      0.631221       0.639851 0.0005     k(col/abs)
0.639879 0.0005     0.639884 0.0005   0.8344
 k(absorption)     0.622636       0.639908 0.0005     k(abs/tk ln)
0.640009 0.0005     0.639958 0.0005   0.4065
 k(trk length)     0.655235       0.640109 0.0007     k(tk ln/col)
0.639980 0.0006     0.639905 0.0005   0.5318
 rem life(col)   7.0110E+03     6.8473E+03 0.0007     k(col/abs/tk ln)
0.639956 0.0005     0.639938 0.0005
```

```
 rem life(abs)   7.0494E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0006   6.8521E+03 0.0004
 source points generated   4881

  estimator     cycle   956   ave of   906 cycles      combination
simple average    combined average     corr
 k(collision)      0.625775       0.639835 0.0005     k(col/abs)
0.639863 0.0005     0.639868 0.0005   0.8348
 k(absorption)     0.624426       0.639891 0.0005     k(abs/tk ln)
0.639998 0.0005     0.639945 0.0005   0.4064
 k(trk length)     0.636156       0.640105 0.0007     k(tk ln/col)
0.639970 0.0006     0.639892 0.0005   0.5317
 rem life(col)   6.9752E+03     6.8474E+03 0.0006     k(col/abs/tk ln)
0.639944 0.0005     0.639924 0.0005
 rem life(abs)   6.9813E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0006   6.8522E+03 0.0004
 source points generated   4998

  estimator     cycle   957   ave of   907 cycles      combination
simple average    combined average     corr
 k(collision)      0.614840       0.639807 0.0006     k(col/abs)
0.639840 0.0005     0.639846 0.0005   0.8353
 k(absorption)     0.622637       0.639872 0.0005     k(abs/tk ln)
0.639981 0.0005     0.639926 0.0005   0.4074
 k(trk length)     0.625513       0.640089 0.0007     k(tk ln/col)
0.639948 0.0006     0.639868 0.0005   0.5324
 rem life(col)   7.0787E+03     6.8477E+03 0.0007     k(col/abs/tk ln)
0.639923 0.0005     0.639905 0.0005
 rem life(abs)   7.0813E+03     6.8475E+03 0.0006     life(col/abs/tl)
6.8487E+03 0.0006   6.8524E+03 0.0004
 source points generated   4875

  estimator     cycle   958   ave of   908 cycles      combination
simple average    combined average     corr
 k(collision)      0.642955       0.639811 0.0005     k(col/abs)
0.639847 0.0005     0.639853 0.0005   0.8352
 k(absorption)     0.649384       0.639883 0.0005     k(abs/tk ln)
0.639991 0.0005     0.639937 0.0005   0.4078
 k(trk length)     0.649900       0.640100 0.0007     k(tk ln/col)
0.639955 0.0006     0.639873 0.0005   0.5325
 rem life(col)   6.8044E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.639931 0.0005     0.639914 0.0005
 rem life(abs)   6.8235E+03     6.8475E+03 0.0006     life(col/abs/tl)
6.8487E+03 0.0006   6.8523E+03 0.0004
 source points generated   5207

  estimator     cycle   959   ave of   909 cycles      combination
simple average    combined average     corr
 k(collision)      0.631379       0.639802 0.0005     k(col/abs)
0.639840 0.0005     0.639847 0.0005   0.8352
 k(absorption)     0.635501       0.639878 0.0005     k(abs/tk ln)
0.639995 0.0005     0.639936 0.0005   0.4073
 k(trk length)     0.651197       0.640112 0.0007     k(tk ln/col)
0.639957 0.0006     0.639868 0.0005   0.5314
```

```
 rem life(col)   6.7176E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.639931 0.0005     0.639912 0.0005
 rem life(abs)   6.6998E+03     6.8473E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0006   6.8524E+03 0.0004
 source points generated   4945

  estimator     cycle   960   ave of   910 cycles      combination
simple average    combined average     corr
 k(collision)      0.633950       0.639795 0.0005     k(col/abs)
0.639834 0.0005     0.639841 0.0005   0.8352
 k(absorption)     0.634936       0.639872 0.0005     k(abs/tk ln)
0.640006 0.0005     0.639939 0.0005   0.4056
 k(trk length)     0.664696       0.640139 0.0007     k(tk ln/col)
0.639967 0.0006     0.639869 0.0005   0.5294
 rem life(col)   6.8133E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.639936 0.0005     0.639913 0.0005
 rem life(abs)   6.8048E+03     6.8473E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0006   6.8524E+03 0.0004
 source points generated   4994

  estimator     cycle   961   ave of   911 cycles      combination
simple average    combined average     corr
 k(collision)      0.642963       0.639799 0.0005     k(col/abs)
0.639837 0.0005     0.639843 0.0005   0.8352
 k(absorption)     0.641561       0.639874 0.0005     k(abs/tk ln)
0.640008 0.0005     0.639941 0.0005   0.4057
 k(trk length)     0.642278       0.640141 0.0007     k(tk ln/col)
0.639970 0.0006     0.639872 0.0005   0.5294
 rem life(col)   6.9161E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.639938 0.0005     0.639915 0.0005
 rem life(abs)   6.8994E+03     6.8473E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0006   6.8525E+03 0.0004
 source points generated   5128

  estimator     cycle   962   ave of   912 cycles      combination
simple average    combined average     corr
 k(collision)      0.637643       0.639796 0.0005     k(col/abs)
0.639841 0.0005     0.639848 0.0005   0.8346
 k(absorption)     0.649679       0.639885 0.0005     k(abs/tk ln)
0.640018 0.0005     0.639951 0.0005   0.4060
 k(trk length)     0.649280       0.640151 0.0007     k(tk ln/col)
0.639974 0.0006     0.639872 0.0005   0.5291
 rem life(col)   6.7982E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.639944 0.0005     0.639922 0.0005
 rem life(abs)   6.7792E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0006   6.8524E+03 0.0004
 source points generated   4986

  estimator     cycle   963   ave of   913 cycles      combination
simple average    combined average     corr
 k(collision)      0.636737       0.639793 0.0005     k(col/abs)
0.639833 0.0005     0.639840 0.0005   0.8343
 k(absorption)     0.628693       0.639873 0.0005     k(abs/tk ln)
0.640011 0.0005     0.639942 0.0005   0.4060
```

```
 k(trk length)     0.637405       0.640148 0.0007     k(tk ln/col)
0.639971 0.0006     0.639869 0.0005   0.5292
 rem life(col)   6.7244E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.639938 0.0005     0.639914 0.0005
 rem life(abs)   6.7505E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0006   6.8523E+03 0.0004
 source points generated   4986

  estimator     cycle   964   ave of   914 cycles      combination
simple average    combined average     corr
 k(collision)      0.651146       0.639805 0.0005     k(col/abs)
0.639848 0.0005     0.639855 0.0005   0.8345
 k(absorption)     0.655591       0.639890 0.0005     k(abs/tk ln)
0.640014 0.0005     0.639952 0.0005   0.4042
 k(trk length)     0.630274       0.640138 0.0007     k(tk ln/col)
0.639971 0.0006     0.639877 0.0005   0.5279
 rem life(col)   6.7232E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.639944 0.0005     0.639925 0.0005
 rem life(abs)   6.7082E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8522E+03 0.0004
 source points generated   5107

  estimator     cycle   965   ave of   915 cycles      combination
simple average    combined average     corr
 k(collision)      0.636357       0.639802 0.0005     k(col/abs)
0.639852 0.0005     0.639860 0.0005   0.8335
 k(absorption)     0.651349       0.639903 0.0005     k(abs/tk ln)
0.640026 0.0005     0.639965 0.0005   0.4048
 k(trk length)     0.651866       0.640150 0.0007     k(tk ln/col)
0.639976 0.0006     0.639877 0.0005   0.5274
 rem life(col)   6.9068E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.639952 0.0005     0.639933 0.0005
 rem life(abs)   6.8946E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0006   6.8522E+03 0.0004
 source points generated   4904

  estimator     cycle   966   ave of   916 cycles      combination
simple average    combined average     corr
 k(collision)      0.653191       0.639816 0.0005     k(col/abs)
0.639857 0.0005     0.639863 0.0005   0.8320
 k(absorption)     0.634988       0.639897 0.0005     k(abs/tk ln)
0.640021 0.0005     0.639959 0.0005   0.4049
 k(trk length)     0.635483       0.640145 0.0007     k(tk ln/col)
0.639981 0.0006     0.639887 0.0005   0.5264
 rem life(col)   6.7824E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.639953 0.0005     0.639932 0.0005
 rem life(abs)   6.8087E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8521E+03 0.0004
 source points generated   5146

  estimator     cycle   967   ave of   917 cycles      combination
simple average    combined average     corr
 k(collision)      0.653820       0.639832 0.0005     k(col/abs)
0.639874 0.0005     0.639881 0.0005   0.8324
```

```
 k(absorption)     0.657268       0.639916 0.0005     k(abs/tk ln)
0.640028 0.0005     0.639973 0.0005   0.4037
 k(trk length)     0.636015       0.640141 0.0007     k(tk ln/col)
0.639986 0.0006     0.639899 0.0005   0.5255
 rem life(col)   6.7448E+03     6.8471E+03 0.0006     k(col/abs/tk ln)
0.639963 0.0005     0.639946 0.0005
 rem life(abs)   6.7344E+03     6.8469E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0006   6.8520E+03 0.0004
 source points generated   5028

  estimator     cycle   968   ave of   918 cycles      combination
simple average    combined average     corr
 k(collision)      0.639600       0.639831 0.0005     k(col/abs)
0.639878 0.0005     0.639885 0.0005   0.8321
 k(absorption)     0.647744       0.639925 0.0005     k(abs/tk ln)
0.640036 0.0005     0.639981 0.0005   0.4039
 k(trk length)     0.646375       0.640148 0.0007     k(tk ln/col)
0.639989 0.0006     0.639900 0.0005   0.5254
 rem life(col)   6.7260E+03     6.8470E+03 0.0006     k(col/abs/tk ln)
0.639968 0.0005     0.639952 0.0005
 rem life(abs)   6.7189E+03     6.8467E+03 0.0006     life(col/abs/tl)
6.8480E+03 0.0006   6.8518E+03 0.0004
 source points generated   4893

  estimator     cycle   969   ave of   919 cycles      combination
simple average    combined average     corr
 k(collision)      0.643847       0.639836 0.0005     k(col/abs)
0.639876 0.0005     0.639882 0.0005   0.8315
 k(absorption)     0.632393       0.639916 0.0005     k(abs/tk ln)
0.640044 0.0005     0.639981 0.0005   0.4021
 k(trk length)     0.661378       0.640171 0.0007     k(tk ln/col)
0.640003 0.0006     0.639908 0.0005   0.5253
 rem life(col)   6.9778E+03     6.8471E+03 0.0006     k(col/abs/tk ln)
0.639974 0.0005     0.639953 0.0005
 rem life(abs)   6.9966E+03     6.8469E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0006   6.8519E+03 0.0004
 source points generated   5029

  estimator     cycle   970   ave of   920 cycles      combination
simple average    combined average     corr
 k(collision)      0.646925       0.639843 0.0005     k(col/abs)
0.639888 0.0005     0.639895 0.0005   0.8314
 k(absorption)     0.655424       0.639933 0.0005     k(abs/tk ln)
0.640057 0.0005     0.639996 0.0005   0.4025
 k(trk length)     0.648902       0.640180 0.0007     k(tk ln/col)
0.640012 0.0006     0.639916 0.0005   0.5255
 rem life(col)   6.9554E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.639986 0.0005     0.639966 0.0005
 rem life(abs)   6.9328E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8520E+03 0.0004
 source points generated   5009

  estimator     cycle   971   ave of   921 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.651556       0.639856 0.0005     k(col/abs)
0.639901 0.0005     0.639908 0.0005   0.8316
 k(absorption)     0.652249       0.639947 0.0005     k(abs/tk ln)
0.640061 0.0005     0.640005 0.0005   0.4017
 k(trk length)     0.635044       0.640175 0.0007     k(tk ln/col)
0.640015 0.0006     0.639925 0.0005   0.5247
 rem life(col)   6.8395E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.639992 0.0005     0.639975 0.0005
 rem life(abs)   6.8623E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8520E+03 0.0004
 source points generated   5006

  estimator     cycle   972   ave of   922 cycles      combination
simple average    combined average     corr
 k(collision)      0.646649       0.639863 0.0005     k(col/abs)
0.639910 0.0005     0.639917 0.0005   0.8317
 k(absorption)     0.648284       0.639956 0.0005     k(abs/tk ln)
0.640072 0.0005     0.640015 0.0005   0.4022
 k(trk length)     0.653209       0.640189 0.0007     k(tk ln/col)
0.640026 0.0006     0.639934 0.0005   0.5250
 rem life(col)   6.8740E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.640003 0.0005     0.639985 0.0005
 rem life(abs)   6.8409E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8519E+03 0.0004
 source points generated   5034

  estimator     cycle   973   ave of   923 cycles      combination
simple average    combined average     corr
 k(collision)      0.662051       0.639887 0.0005     k(col/abs)
0.639931 0.0005     0.639938 0.0005   0.8322
 k(absorption)     0.657224       0.639974 0.0005     k(abs/tk ln)
0.640092 0.0005     0.640034 0.0005   0.4036
 k(trk length)     0.659435       0.640210 0.0007     k(tk ln/col)
0.640049 0.0006     0.639958 0.0005   0.5263
 rem life(col)   6.7898E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.640024 0.0005     0.640006 0.0005
 rem life(abs)   6.7963E+03     6.8469E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0006   6.8519E+03 0.0004
 source points generated   5104

  estimator     cycle   974   ave of   924 cycles      combination
simple average    combined average     corr
 k(collision)      0.646103       0.639894 0.0005     k(col/abs)
0.639941 0.0005     0.639949 0.0005   0.8322
 k(absorption)     0.653223       0.639989 0.0005     k(abs/tk ln)
0.640100 0.0005     0.640045 0.0005   0.4035
 k(trk length)     0.641974       0.640211 0.0007     k(tk ln/col)
0.640053 0.0006     0.639963 0.0005   0.5263
 rem life(col)   6.7226E+03     6.8470E+03 0.0006     k(col/abs/tk ln)
0.640031 0.0005     0.640016 0.0005
 rem life(abs)   6.7176E+03     6.8468E+03 0.0006     life(col/abs/tl)
6.8481E+03 0.0006   6.8517E+03 0.0004
 source points generated   4862
```

```
  estimator     cycle   975   ave of   925 cycles      combination
simple average    combined average     corr
 k(collision)      0.634772       0.639889 0.0005     k(col/abs)
0.639936 0.0005     0.639944 0.0005   0.8322
 k(absorption)     0.635483       0.639984 0.0005     k(abs/tk ln)
0.640103 0.0005     0.640045 0.0005   0.4029
 k(trk length)     0.650791       0.640223 0.0007     k(tk ln/col)
0.640056 0.0006     0.639961 0.0005   0.5257
 rem life(col)   6.8241E+03     6.8470E+03 0.0006     k(col/abs/tk ln)
0.640032 0.0005     0.640014 0.0005
 rem life(abs)   6.8660E+03     6.8468E+03 0.0006     life(col/abs/tl)
6.8480E+03 0.0006   6.8516E+03 0.0004
 source points generated   4931

  estimator     cycle   976   ave of   926 cycles      combination
simple average    combined average     corr
 k(collision)      0.650612       0.639900 0.0005     k(col/abs)
0.639948 0.0005     0.639955 0.0005   0.8324
 k(absorption)     0.650837       0.639996 0.0005     k(abs/tk ln)
0.640110 0.0005     0.640054 0.0005   0.4028
 k(trk length)     0.641528       0.640224 0.0007     k(tk ln/col)
0.640062 0.0006     0.639971 0.0005   0.5255
 rem life(col)   6.7222E+03     6.8469E+03 0.0006     k(col/abs/tk ln)
0.640040 0.0005     0.640024 0.0005
 rem life(abs)   6.7407E+03     6.8467E+03 0.0006     life(col/abs/tl)
6.8479E+03 0.0006   6.8515E+03 0.0004
 source points generated   5142

  estimator     cycle   977   ave of   927 cycles      combination
simple average    combined average     corr
 k(collision)      0.646300       0.639907 0.0005     k(col/abs)
0.639951 0.0005     0.639958 0.0005   0.8322
 k(absorption)     0.639735       0.639995 0.0005     k(abs/tk ln)
0.640109 0.0005     0.640053 0.0005   0.4028
 k(trk length)     0.639147       0.640223 0.0007     k(tk ln/col)
0.640065 0.0006     0.639976 0.0005   0.5253
 rem life(col)   6.9004E+03     6.8469E+03 0.0006     k(col/abs/tk ln)
0.640042 0.0005     0.640025 0.0005
 rem life(abs)   6.9321E+03     6.8468E+03 0.0006     life(col/abs/tl)
6.8480E+03 0.0006   6.8515E+03 0.0004
 source points generated   4957

  estimator     cycle   978   ave of   928 cycles      combination
simple average    combined average     corr
 k(collision)      0.634406       0.639901 0.0005     k(col/abs)
0.639947 0.0005     0.639954 0.0005   0.8322
 k(absorption)     0.637646       0.639993 0.0005     k(abs/tk ln)
0.640099 0.0005     0.640047 0.0005   0.4028
 k(trk length)     0.623486       0.640205 0.0007     k(tk ln/col)
0.640053 0.0006     0.639967 0.0005   0.5255
 rem life(col)   6.8622E+03     6.8470E+03 0.0006     k(col/abs/tk ln)
0.640033 0.0005     0.640018 0.0005
 rem life(abs)   6.8330E+03     6.8468E+03 0.0006     life(col/abs/tl)
6.8480E+03 0.0006   6.8516E+03 0.0004
```

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 source points generated   4950

  estimator     cycle   979   ave of   929 cycles      combination
simple average    combined average     corr
 k(collision)      0.630007       0.639891 0.0005     k(col/abs)
0.639940 0.0005     0.639948 0.0005   0.8321
 k(absorption)     0.636833       0.639989 0.0005     k(abs/tk ln)
0.640098 0.0005     0.640044 0.0005   0.4027
 k(trk length)     0.640966       0.640206 0.0007     k(tk ln/col)
0.640048 0.0006     0.639960 0.0005   0.5252
 rem life(col)   6.8638E+03     6.8470E+03 0.0006     k(col/abs/tk ln)
0.640029 0.0005     0.640014 0.0005
 rem life(abs)   6.8642E+03     6.8468E+03 0.0006     life(col/abs/tl)
6.8480E+03 0.0006   6.8516E+03 0.0004
 source points generated   4931

  estimator     cycle   980   ave of   930 cycles      combination
simple average    combined average     corr
 k(collision)      0.639608       0.639890 0.0005     k(col/abs)
0.639940 0.0005     0.639948 0.0005   0.8320
 k(absorption)     0.641158       0.639991 0.0005     k(abs/tk ln)
0.640103 0.0005     0.640048 0.0005   0.4027
 k(trk length)     0.649805       0.640216 0.0007     k(tk ln/col)
0.640053 0.0006     0.639962 0.0005   0.5251
 rem life(col)   6.8259E+03     6.8470E+03 0.0006     k(col/abs/tk ln)
0.640032 0.0005     0.640017 0.0005
 rem life(abs)   6.8228E+03     6.8468E+03 0.0006     life(col/abs/tl)
6.8480E+03 0.0006   6.8516E+03 0.0004
 source points generated   5062

  estimator     cycle   981   ave of   931 cycles      combination
simple average    combined average     corr
 k(collision)      0.635952       0.639886 0.0005     k(col/abs)
0.639933 0.0005     0.639941 0.0005   0.8320
 k(absorption)     0.630498       0.639980 0.0005     k(abs/tk ln)
0.640094 0.0005     0.640038 0.0005   0.4031
 k(trk length)     0.631623       0.640207 0.0007     k(tk ln/col)
0.640047 0.0006     0.639956 0.0005   0.5252
 rem life(col)   6.9147E+03     6.8470E+03 0.0006     k(col/abs/tk ln)
0.640025 0.0005     0.640008 0.0005
 rem life(abs)   6.9266E+03     6.8469E+03 0.0006     life(col/abs/tl)
6.8481E+03 0.0006   6.8517E+03 0.0004
 source points generated   4944

  estimator     cycle   982   ave of   932 cycles      combination
simple average    combined average     corr
 k(collision)      0.658646       0.639906 0.0005     k(col/abs)
0.639951 0.0005     0.639958 0.0005   0.8323
 k(absorption)     0.653660       0.639995 0.0005     k(abs/tk ln)
0.640097 0.0005     0.640047 0.0005   0.4019
 k(trk length)     0.633066       0.640199 0.0007     k(tk ln/col)
0.640053 0.0006     0.639971 0.0005   0.5232
 rem life(col)   6.6412E+03     6.8468E+03 0.0006     k(col/abs/tk ln)
0.640034 0.0005     0.640020 0.0005
```

```
 rem life(abs)   6.6291E+03     6.8466E+03 0.0006     life(col/abs/tl)
6.8479E+03 0.0006   6.8516E+03 0.0004
 source points generated   5182

  estimator     cycle   983   ave of   933 cycles      combination
simple average    combined average     corr
 k(collision)      0.626967       0.639892 0.0005     k(col/abs)
0.639937 0.0005     0.639944 0.0005   0.8326
 k(absorption)     0.627356       0.639982 0.0005     k(abs/tk ln)
0.640080 0.0005     0.640031 0.0005   0.4030
 k(trk length)     0.619844       0.640178 0.0007     k(tk ln/col)
0.640035 0.0006     0.639955 0.0005   0.5241
 rem life(col)   6.9230E+03     6.8469E+03 0.0006     k(col/abs/tk ln)
0.640017 0.0005     0.640004 0.0005
 rem life(abs)   6.9330E+03     6.8467E+03 0.0006     life(col/abs/tl)
6.8480E+03 0.0006   6.8517E+03 0.0004
 source points generated   4820

  estimator     cycle   984   ave of   934 cycles      combination
simple average    combined average     corr
 k(collision)      0.645502       0.639898 0.0005     k(col/abs)
0.639942 0.0005     0.639949 0.0005   0.8326
 k(absorption)     0.644527       0.639986 0.0005     k(abs/tk ln)
0.640077 0.0005     0.640033 0.0005   0.4026
 k(trk length)     0.631420       0.640168 0.0007     k(tk ln/col)
0.640033 0.0006     0.639958 0.0005   0.5236
 rem life(col)   6.7196E+03     6.8468E+03 0.0006     k(col/abs/tk ln)
0.640018 0.0005     0.640006 0.0005
 rem life(abs)   6.7264E+03     6.8466E+03 0.0006     life(col/abs/tl)
6.8479E+03 0.0006   6.8517E+03 0.0004
 source points generated   5144

  estimator     cycle   985   ave of   935 cycles      combination
simple average    combined average     corr
 k(collision)      0.646049       0.639905 0.0005     k(col/abs)
0.639950 0.0005     0.639957 0.0005   0.8327
 k(absorption)     0.647363       0.639994 0.0005     k(abs/tk ln)
0.640087 0.0005     0.640041 0.0005   0.4029
 k(trk length)     0.650000       0.640179 0.0007     k(tk ln/col)
0.640042 0.0006     0.639965 0.0005   0.5238
 rem life(col)   7.1031E+03     6.8470E+03 0.0006     k(col/abs/tk ln)
0.640026 0.0005     0.640015 0.0005
 rem life(abs)   7.0880E+03     6.8469E+03 0.0006     life(col/abs/tl)
6.8481E+03 0.0006   6.8517E+03 0.0004
 source points generated   5008

  estimator     cycle   986   ave of   936 cycles      combination
simple average    combined average     corr
 k(collision)      0.611872       0.639875 0.0005     k(col/abs)
0.639921 0.0005     0.639928 0.0005   0.8339
 k(absorption)     0.614117       0.639967 0.0005     k(abs/tk ln)
0.640065 0.0005     0.640017 0.0005   0.4040
 k(trk length)     0.626291       0.640164 0.0007     k(tk ln/col)
0.640019 0.0006     0.639939 0.0005   0.5243
```

```
 rem life(col)   7.0454E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.640002 0.0005     0.639990 0.0005
 rem life(abs)   7.0094E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8518E+03 0.0004
 source points generated   4735

  estimator     cycle   987   ave of   937 cycles      combination
simple average    combined average     corr
 k(collision)      0.635155       0.639870 0.0005     k(col/abs)
0.639917 0.0005     0.639925 0.0005   0.8338
 k(absorption)     0.638024       0.639965 0.0005     k(abs/tk ln)
0.640062 0.0005     0.640015 0.0005   0.4040
 k(trk length)     0.636149       0.640160 0.0007     k(tk ln/col)
0.640015 0.0006     0.639934 0.0005   0.5244
 rem life(col)   6.7846E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.639998 0.0005     0.639987 0.0005
 rem life(abs)   6.7942E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0006   6.8518E+03 0.0004
 source points generated   5182

  estimator     cycle   988   ave of   938 cycles      combination
simple average    combined average     corr
 k(collision)      0.635220       0.639865 0.0005     k(col/abs)
0.639915 0.0005     0.639923 0.0005   0.8338
 k(absorption)     0.640066       0.639965 0.0005     k(abs/tk ln)
0.640054 0.0005     0.640010 0.0005   0.4037
 k(trk length)     0.624171       0.640143 0.0007     k(tk ln/col)
0.640004 0.0006     0.639927 0.0005   0.5245
 rem life(col)   6.9355E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.639991 0.0005     0.639982 0.0005
 rem life(abs)   6.9022E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8518E+03 0.0004
 source points generated   5004

  estimator     cycle   989   ave of   939 cycles      combination
simple average    combined average     corr
 k(collision)      0.626537       0.639851 0.0005     k(col/abs)
0.639902 0.0005     0.639910 0.0005   0.8340
 k(absorption)     0.628360       0.639952 0.0005     k(abs/tk ln)
0.640043 0.0005     0.639999 0.0005   0.4042
 k(trk length)     0.631055       0.640133 0.0007     k(tk ln/col)
0.639992 0.0006     0.639913 0.0005   0.5248
 rem life(col)   6.9045E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.639979 0.0005     0.639970 0.0005
 rem life(abs)   6.9206E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8518E+03 0.0004
 source points generated   4881

  estimator     cycle   990   ave of   940 cycles      combination
simple average    combined average     corr
 k(collision)      0.639334       0.639850 0.0005     k(col/abs)
0.639902 0.0005     0.639910 0.0005   0.8340
 k(absorption)     0.640991       0.639953 0.0005     k(abs/tk ln)
0.640039 0.0005     0.639997 0.0005   0.4040
```

```
 k(trk length)     0.631918       0.640124 0.0007     k(tk ln/col)
0.639987 0.0005     0.639911 0.0005   0.5248
 rem life(col)   6.8354E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.639976 0.0005     0.639969 0.0005
 rem life(abs)   6.8163E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8519E+03 0.0004
 source points generated   5128

  estimator     cycle   991   ave of   941 cycles      combination
simple average    combined average     corr
 k(collision)      0.632068       0.639842 0.0005     k(col/abs)
0.639894 0.0005     0.639902 0.0005   0.8341
 k(absorption)     0.632162       0.639945 0.0005     k(abs/tk ln)
0.640031 0.0005     0.639989 0.0005   0.4042
 k(trk length)     0.633711       0.640117 0.0007     k(tk ln/col)
0.639980 0.0005     0.639903 0.0005   0.5249
 rem life(col)   6.7693E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.639968 0.0005     0.639961 0.0005
 rem life(abs)   6.7840E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8519E+03 0.0004
 source points generated   4922

  estimator     cycle   992   ave of   942 cycles      combination
simple average    combined average     corr
 k(collision)      0.636438       0.639838 0.0005     k(col/abs)
0.639888 0.0005     0.639896 0.0005   0.8341
 k(absorption)     0.632374       0.639937 0.0005     k(abs/tk ln)
0.640027 0.0005     0.639983 0.0005   0.4041
 k(trk length)     0.640542       0.640118 0.0007     k(tk ln/col)
0.639978 0.0005     0.639900 0.0005   0.5249
 rem life(col)   6.8883E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.639964 0.0005     0.639955 0.0005
 rem life(abs)   6.9160E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0006   6.8519E+03 0.0004
 source points generated   5034

  estimator     cycle   993   ave of   943 cycles      combination
simple average    combined average     corr
 k(collision)      0.652074       0.639851 0.0005     k(col/abs)
0.639897 0.0005     0.639905 0.0005   0.8340
 k(absorption)     0.646024       0.639944 0.0005     k(abs/tk ln)
0.640030 0.0005     0.639988 0.0005   0.4039
 k(trk length)     0.638534       0.640116 0.0007     k(tk ln/col)
0.639984 0.0005     0.639910 0.0005   0.5243
 rem life(col)   6.9167E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.639970 0.0005     0.639962 0.0005
 rem life(abs)   6.9189E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0006   6.8520E+03 0.0004
 source points generated   5097

  estimator     cycle   994   ave of   944 cycles      combination
simple average    combined average     corr
 k(collision)      0.636039       0.639847 0.0005     k(col/abs)
0.639893 0.0005     0.639900 0.0005   0.8341
```

```
 k(absorption)     0.634435       0.639938 0.0005     k(abs/tk ln)
0.640029 0.0005     0.639984 0.0005   0.4037
 k(trk length)     0.643139       0.640119 0.0007     k(tk ln/col)
0.639983 0.0005     0.639908 0.0005   0.5242
 rem life(col)   7.0272E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.639968 0.0005     0.639958 0.0005
 rem life(abs)   7.0233E+03     6.8473E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0006   6.8521E+03 0.0004
 source points generated   4878

  estimator     cycle   995   ave of   945 cycles      combination
simple average    combined average     corr
 k(collision)      0.641581       0.639849 0.0005     k(col/abs)
0.639894 0.0005     0.639902 0.0005   0.8341
 k(absorption)     0.641255       0.639939 0.0005     k(abs/tk ln)
0.640029 0.0005     0.639985 0.0005   0.4037
 k(trk length)     0.639157       0.640118 0.0007     k(tk ln/col)
0.639984 0.0005     0.639909 0.0005   0.5242
 rem life(col)   6.8029E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.639969 0.0005     0.639959 0.0005
 rem life(abs)   6.8175E+03     6.8473E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0006   6.8520E+03 0.0004
 source points generated   5093

  estimator     cycle   996   ave of   946 cycles      combination
simple average    combined average     corr
 k(collision)      0.629370       0.639838 0.0005     k(col/abs)
0.639884 0.0005     0.639892 0.0005   0.8342
 k(absorption)     0.631812       0.639931 0.0005     k(abs/tk ln)
0.640027 0.0005     0.639980 0.0005   0.4033
 k(trk length)     0.644828       0.640123 0.0007     k(tk ln/col)
0.639981 0.0005     0.639902 0.0005   0.5235
 rem life(col)   6.8619E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.639964 0.0005     0.639953 0.0005
 rem life(abs)   6.8859E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8521E+03 0.0004
 source points generated   4914

  estimator     cycle   997   ave of   947 cycles      combination
simple average    combined average     corr
 k(collision)      0.633025       0.639831 0.0005     k(col/abs)
0.639875 0.0005     0.639883 0.0005   0.8342
 k(absorption)     0.629695       0.639920 0.0005     k(abs/tk ln)
0.640022 0.0005     0.639972 0.0005   0.4030
 k(trk length)     0.641547       0.640125 0.0007     k(tk ln/col)
0.639978 0.0005     0.639897 0.0005   0.5234
 rem life(col)   6.9436E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.639958 0.0005     0.639946 0.0005
 rem life(abs)   6.9597E+03     6.8475E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8521E+03 0.0004
 source points generated   5055

  estimator     cycle   998   ave of   948 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.629971       0.639820 0.0005     k(col/abs)
0.639864 0.0005     0.639871 0.0005   0.8344
 k(absorption)     0.627765       0.639907 0.0005     k(abs/tk ln)
0.640018 0.0005     0.639964 0.0005   0.4024
 k(trk length)     0.643439       0.640128 0.0007     k(tk ln/col)
0.639974 0.0005     0.639890 0.0005   0.5229
 rem life(col)   7.0216E+03     6.8478E+03 0.0006     k(col/abs/tk ln)
0.639952 0.0005     0.639937 0.0005
 rem life(abs)   7.0009E+03     6.8476E+03 0.0006     life(col/abs/tl)
6.8488E+03 0.0005   6.8522E+03 0.0004
 source points generated   4986

  estimator     cycle   999   ave of   949 cycles      combination
simple average    combined average     corr
 k(collision)      0.653218       0.639835 0.0005     k(col/abs)
0.639878 0.0005     0.639886 0.0005   0.8347
 k(absorption)     0.654468       0.639922 0.0005     k(abs/tk ln)
0.640030 0.0005     0.639978 0.0005   0.4027
 k(trk length)     0.648317       0.640137 0.0007     k(tk ln/col)
0.639986 0.0005     0.639903 0.0005   0.5231
 rem life(col)   6.6872E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.639965 0.0005     0.639951 0.0005
 rem life(abs)   6.6921E+03     6.8475E+03 0.0006     life(col/abs/tl)
6.8487E+03 0.0005   6.8521E+03 0.0004
 source points generated   5175

  estimator     cycle  1000   ave of   950 cycles      combination
simple average    combined average     corr
 k(collision)      0.659208       0.639855 0.0005     k(col/abs)
0.639903 0.0005     0.639910 0.0005   0.8353
 k(absorption)     0.666637       0.639950 0.0005     k(abs/tk ln)
0.640044 0.0005     0.639999 0.0005   0.4015
 k(trk length)     0.640866       0.640138 0.0007     k(tk ln/col)
0.639996 0.0005     0.639919 0.0005   0.5223
 rem life(col)   6.7713E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.639981 0.0005     0.639972 0.0005
 rem life(abs)   6.7144E+03     6.8473E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0005   6.8520E+03 0.0004
 source points generated   5034

  estimator     cycle  1001   ave of   951 cycles      combination
simple average    combined average     corr
 k(collision)      0.659291       0.639875 0.0005     k(col/abs)
0.639919 0.0005     0.639926 0.0005   0.8354
 k(absorption)     0.651863       0.639963 0.0005     k(abs/tk ln)
0.640060 0.0005     0.640014 0.0005   0.4024
 k(trk length)     0.658957       0.640157 0.0007     k(tk ln/col)
0.640016 0.0005     0.639940 0.0005   0.5235
 rem life(col)   6.6195E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.639999 0.0005     0.639988 0.0005
 rem life(abs)   6.6070E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0005   6.8519E+03 0.0004
 source points generated   4996
```

```
  estimator     cycle  1002   ave of   952 cycles      combination
simple average    combined average     corr
 k(collision)      0.643784       0.639879 0.0005     k(col/abs)
0.639922 0.0005     0.639929 0.0005   0.8354
 k(absorption)     0.642145       0.639965 0.0005     k(abs/tk ln)
0.640064 0.0005     0.640017 0.0005   0.4025
 k(trk length)     0.644533       0.640162 0.0007     k(tk ln/col)
0.640021 0.0005     0.639944 0.0005   0.5235
 rem life(col)   7.1295E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640002 0.0005     0.639991 0.0005
 rem life(abs)   7.1275E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0006   6.8520E+03 0.0004
 source points generated   4913

  estimator     cycle  1003   ave of   953 cycles      combination
simple average    combined average     corr
 k(collision)      0.641799       0.639881 0.0005     k(col/abs)
0.639924 0.0005     0.639931 0.0005   0.8354
 k(absorption)     0.641880       0.639967 0.0005     k(abs/tk ln)
0.640079 0.0005     0.640025 0.0005   0.4020
 k(trk length)     0.667244       0.640190 0.0007     k(tk ln/col)
0.640036 0.0005     0.639951 0.0005   0.5228
 rem life(col)   6.8802E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640013 0.0005     0.639999 0.0005
 rem life(abs)   6.8386E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8521E+03 0.0004
 source points generated   4974

  estimator     cycle  1004   ave of   954 cycles      combination
simple average    combined average     corr
 k(collision)      0.641916       0.639884 0.0005     k(col/abs)
0.639930 0.0005     0.639938 0.0005   0.8353
 k(absorption)     0.649254       0.639977 0.0005     k(abs/tk ln)
0.640088 0.0005     0.640035 0.0005   0.4024
 k(trk length)     0.648575       0.640199 0.0007     k(tk ln/col)
0.640041 0.0005     0.639955 0.0005   0.5229
 rem life(col)   6.7607E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.640020 0.0005     0.640006 0.0005
 rem life(abs)   6.7343E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0005   6.8519E+03 0.0004
 source points generated   5049

  estimator     cycle  1005   ave of   955 cycles      combination
simple average    combined average     corr
 k(collision)      0.638796       0.639882 0.0005     k(col/abs)
0.639929 0.0005     0.639936 0.0005   0.8353
 k(absorption)     0.637649       0.639975 0.0005     k(abs/tk ln)
0.640089 0.0005     0.640034 0.0005   0.4023
 k(trk length)     0.644523       0.640204 0.0007     k(tk ln/col)
0.640043 0.0005     0.639955 0.0005   0.5228
 rem life(col)   6.8059E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.640020 0.0005     0.640006 0.0005
 rem life(abs)   6.8212E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8519E+03 0.0004
```

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 source points generated   4948

  estimator     cycle  1006   ave of   956 cycles      combination
simple average    combined average     corr
 k(collision)      0.649510       0.639893 0.0005     k(col/abs)
0.639941 0.0005     0.639949 0.0005   0.8354
 k(absorption)     0.654661       0.639990 0.0005     k(abs/tk ln)
0.640103 0.0005     0.640048 0.0005   0.4029
 k(trk length)     0.651114       0.640215 0.0007     k(tk ln/col)
0.640054 0.0005     0.639965 0.0005   0.5231
 rem life(col)   6.7321E+03     6.8474E+03 0.0006     k(col/abs/tk ln)
0.640033 0.0005     0.640019 0.0005
 rem life(abs)   6.7111E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0005   6.8518E+03 0.0004
 source points generated   5104

  estimator     cycle  1007   ave of   957 cycles      combination
simple average    combined average     corr
 k(collision)      0.654652       0.639908 0.0005     k(col/abs)
0.639957 0.0005     0.639964 0.0005   0.8357
 k(absorption)     0.654631       0.640005 0.0005     k(abs/tk ln)
0.640113 0.0005     0.640061 0.0005   0.4030
 k(trk length)     0.645249       0.640220 0.0007     k(tk ln/col)
0.640064 0.0005     0.639979 0.0005   0.5231
 rem life(col)   6.6403E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.640045 0.0005     0.640032 0.0005
 rem life(abs)   6.6341E+03     6.8468E+03 0.0006     life(col/abs/tl)
6.8481E+03 0.0005   6.8517E+03 0.0004
 source points generated   5027

  estimator     cycle  1008   ave of   958 cycles      combination
simple average    combined average     corr
 k(collision)      0.634020       0.639902 0.0005     k(col/abs)
0.639951 0.0005     0.639958 0.0005   0.8357
 k(absorption)     0.634833       0.640000 0.0005     k(abs/tk ln)
0.640110 0.0005     0.640057 0.0005   0.4029
 k(trk length)     0.639620       0.640220 0.0007     k(tk ln/col)
0.640061 0.0005     0.639974 0.0005   0.5230
 rem life(col)   6.9692E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.640040 0.0005     0.640028 0.0005
 rem life(abs)   6.9631E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0005   6.8518E+03 0.0004
 source points generated   4830

  estimator     cycle  1009   ave of   959 cycles      combination
simple average    combined average     corr
 k(collision)      0.638792       0.639901 0.0005     k(col/abs)
0.639948 0.0005     0.639955 0.0005   0.8357
 k(absorption)     0.635741       0.639995 0.0005     k(abs/tk ln)
0.640111 0.0005     0.640056 0.0005   0.4027
 k(trk length)     0.646226       0.640226 0.0007     k(tk ln/col)
0.640063 0.0005     0.639974 0.0005   0.5229
 rem life(col)   7.0615E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.640041 0.0005     0.640026 0.0005
```

```
 rem life(abs)   7.0577E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8519E+03 0.0004
 source points generated   5063

  estimator     cycle  1010   ave of   960 cycles      combination
simple average    combined average     corr
 k(collision)      0.637935       0.639899 0.0005     k(col/abs)
0.639947 0.0005     0.639954 0.0005   0.8357
 k(absorption)     0.640078       0.639995 0.0005     k(abs/tk ln)
0.640107 0.0005     0.640053 0.0005   0.4026
 k(trk length)     0.632332       0.640218 0.0007     k(tk ln/col)
0.640058 0.0005     0.639971 0.0005   0.5230
 rem life(col)   6.8334E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.640037 0.0005     0.640024 0.0005
 rem life(abs)   6.8344E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8520E+03 0.0004
 source points generated   4970

  estimator     cycle  1011   ave of   961 cycles      combination
simple average    combined average     corr
 k(collision)      0.630858       0.639889 0.0005     k(col/abs)
0.639941 0.0005     0.639949 0.0005   0.8356
 k(absorption)     0.636609       0.639992 0.0005     k(abs/tk ln)
0.640111 0.0005     0.640054 0.0005   0.4022
 k(trk length)     0.651130       0.640229 0.0007     k(tk ln/col)
0.640059 0.0005     0.639966 0.0005   0.5219
 rem life(col)   6.9828E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640037 0.0005     0.640023 0.0005
 rem life(abs)   6.9766E+03     6.8473E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0005   6.8519E+03 0.0004
 source points generated   4939

  estimator     cycle  1012   ave of   962 cycles      combination
simple average    combined average     corr
 k(collision)      0.625486       0.639874 0.0005     k(col/abs)
0.639930 0.0005     0.639939 0.0005   0.8355
 k(absorption)     0.634265       0.639986 0.0005     k(abs/tk ln)
0.640101 0.0005     0.640046 0.0005   0.4025
 k(trk length)     0.627011       0.640215 0.0007     k(tk ln/col)
0.640045 0.0005     0.639952 0.0005   0.5225
 rem life(col)   6.9757E+03     6.8478E+03 0.0006     k(col/abs/tk ln)
0.640025 0.0005     0.640014 0.0005
 rem life(abs)   6.9516E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8519E+03 0.0004
 source points generated   4993

  estimator     cycle  1013   ave of   963 cycles      combination
simple average    combined average     corr
 k(collision)      0.631785       0.639866 0.0005     k(col/abs)
0.639923 0.0005     0.639932 0.0005   0.8355
 k(absorption)     0.634518       0.639980 0.0005     k(abs/tk ln)
0.640102 0.0005     0.640044 0.0005   0.4020
 k(trk length)     0.648437       0.640224 0.0007     k(tk ln/col)
0.640045 0.0005     0.639947 0.0005   0.5218
```

```
 rem life(col)   6.6936E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640023 0.0005     0.640011 0.0005
 rem life(abs)   6.6695E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0005   6.8518E+03 0.0004
 source points generated   5042

  estimator     cycle  1014   ave of   964 cycles      combination
simple average    combined average     corr
 k(collision)      0.650250       0.639877 0.0005     k(col/abs)
0.639939 0.0005     0.639948 0.0005   0.8355
 k(absorption)     0.659398       0.640000 0.0005     k(abs/tk ln)
0.640111 0.0005     0.640058 0.0005   0.4008
 k(trk length)     0.637302       0.640221 0.0007     k(tk ln/col)
0.640049 0.0005     0.639955 0.0005   0.5213
 rem life(col)   6.8399E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640033 0.0005     0.640024 0.0005
 rem life(abs)   6.8264E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8518E+03 0.0004
 source points generated   5140

  estimator     cycle  1015   ave of   965 cycles      combination
simple average    combined average     corr
 k(collision)      0.635685       0.639872 0.0005     k(col/abs)
0.639930 0.0005     0.639938 0.0005   0.8353
 k(absorption)     0.627413       0.639987 0.0005     k(abs/tk ln)
0.640096 0.0005     0.640044 0.0005   0.4017
 k(trk length)     0.625175       0.640205 0.0007     k(tk ln/col)
0.640039 0.0005     0.639948 0.0005   0.5214
 rem life(col)   6.7570E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.640022 0.0005     0.640011 0.0005
 rem life(abs)   6.7771E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8519E+03 0.0004
 source points generated   4874

  estimator     cycle  1016   ave of   966 cycles      combination
simple average    combined average     corr
 k(collision)      0.655417       0.639888 0.0005     k(col/abs)
0.639939 0.0005     0.639947 0.0005   0.8347
 k(absorption)     0.642567       0.639990 0.0005     k(abs/tk ln)
0.640106 0.0005     0.640051 0.0005   0.4017
 k(trk length)     0.655526       0.640221 0.0007     k(tk ln/col)
0.640055 0.0005     0.639964 0.0005   0.5221
 rem life(col)   6.8495E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.640033 0.0005     0.640020 0.0005
 rem life(abs)   6.8719E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8519E+03 0.0004
 source points generated   5133

  estimator     cycle  1017   ave of   967 cycles      combination
simple average    combined average     corr
 k(collision)      0.640486       0.639889 0.0005     k(col/abs)
0.639947 0.0005     0.639955 0.0005   0.8340
 k(absorption)     0.654053       0.640005 0.0005     k(abs/tk ln)
0.640111 0.0005     0.640061 0.0005   0.4010
```

```
 k(trk length)     0.637278       0.640218 0.0007     k(tk ln/col)
0.640054 0.0005     0.639964 0.0005   0.5221
 rem life(col)   6.6325E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.640037 0.0005     0.640028 0.0005
 rem life(abs)   6.6222E+03     6.8469E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0005   6.8517E+03 0.0004
 source points generated   4909

  estimator     cycle  1018   ave of   968 cycles      combination
simple average    combined average     corr
 k(collision)      0.638826       0.639888 0.0005     k(col/abs)
0.639950 0.0005     0.639959 0.0005   0.8337
 k(absorption)     0.646694       0.640012 0.0005     k(abs/tk ln)
0.640120 0.0005     0.640068 0.0005   0.4013
 k(trk length)     0.649421       0.640228 0.0007     k(tk ln/col)
0.640058 0.0005     0.639965 0.0005   0.5219
 rem life(col)   6.9465E+03     6.8474E+03 0.0006     k(col/abs/tk ln)
0.640042 0.0005     0.640033 0.0005
 rem life(abs)   6.9402E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0005   6.8517E+03 0.0004
 source points generated   4995

  estimator     cycle  1019   ave of   969 cycles      combination
simple average    combined average     corr
 k(collision)      0.640814       0.639889 0.0005     k(col/abs)
0.639948 0.0005     0.639957 0.0005   0.8336
 k(absorption)     0.636633       0.640008 0.0005     k(abs/tk ln)
0.640123 0.0005     0.640068 0.0005   0.4009
 k(trk length)     0.649917       0.640238 0.0007     k(tk ln/col)
0.640063 0.0005     0.639968 0.0005   0.5218
 rem life(col)   7.0803E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640045 0.0005     0.640033 0.0005
 rem life(abs)   7.0853E+03     6.8473E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0005   6.8518E+03 0.0004
 source points generated   4995

  estimator     cycle  1020   ave of   970 cycles      combination
simple average    combined average     corr
 k(collision)      0.649296       0.639899 0.0005     k(col/abs)
0.639962 0.0005     0.639971 0.0005   0.8337
 k(absorption)     0.656650       0.640025 0.0005     k(abs/tk ln)
0.640122 0.0005     0.640076 0.0005   0.3977
 k(trk length)     0.621032       0.640218 0.0007     k(tk ln/col)
0.640058 0.0005     0.639971 0.0005   0.5199
 rem life(col)   6.8223E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640047 0.0005     0.640041 0.0005
 rem life(abs)   6.7747E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8517E+03 0.0004
 source points generated   5079

  estimator     cycle  1021   ave of   971 cycles      combination
simple average    combined average     corr
 k(collision)      0.634653       0.639893 0.0005     k(col/abs)
0.639949 0.0005     0.639957 0.0005   0.8330
```

```
 k(absorption)     0.621088       0.640006 0.0005     k(abs/tk ln)
0.640110 0.0005     0.640061 0.0005   0.3975
 k(trk length)     0.636243       0.640214 0.0007     k(tk ln/col)
0.640053 0.0005     0.639966 0.0005   0.5199
 rem life(col)   6.9421E+03     6.8477E+03 0.0006     k(col/abs/tk ln)
0.640038 0.0005     0.640028 0.0005
 rem life(abs)   6.9718E+03     6.8473E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0005   6.8519E+03 0.0004
 source points generated   4883

  estimator     cycle  1022   ave of   972 cycles      combination
simple average    combined average     corr
 k(collision)      0.634160       0.639887 0.0005     k(col/abs)
0.639944 0.0005     0.639951 0.0005   0.8331
 k(absorption)     0.634473       0.640000 0.0005     k(abs/tk ln)
0.640112 0.0005     0.640059 0.0005   0.3970
 k(trk length)     0.650014       0.640224 0.0007     k(tk ln/col)
0.640056 0.0005     0.639964 0.0005   0.5193
 rem life(col)   6.8727E+03     6.8477E+03 0.0006     k(col/abs/tk ln)
0.640037 0.0005     0.640025 0.0005
 rem life(abs)   6.9015E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8519E+03 0.0004
 source points generated   4956

  estimator     cycle  1023   ave of   973 cycles      combination
simple average    combined average     corr
 k(collision)      0.623292       0.639870 0.0005     k(col/abs)
0.639926 0.0005     0.639934 0.0005   0.8335
 k(absorption)     0.623277       0.639983 0.0005     k(abs/tk ln)
0.640098 0.0005     0.640044 0.0005   0.3975
 k(trk length)     0.630647       0.640214 0.0007     k(tk ln/col)
0.640042 0.0005     0.639949 0.0005   0.5196
 rem life(col)   6.9067E+03     6.8478E+03 0.0006     k(col/abs/tk ln)
0.640022 0.0005     0.640010 0.0005
 rem life(abs)   6.9280E+03     6.8475E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8519E+03 0.0004
 source points generated   4911

  estimator     cycle  1024   ave of   974 cycles      combination
simple average    combined average     corr
 k(collision)      0.643007       0.639873 0.0005     k(col/abs)
0.639927 0.0005     0.639934 0.0005   0.8334
 k(absorption)     0.637481       0.639980 0.0005     k(abs/tk ln)
0.640107 0.0005     0.640047 0.0005   0.3968
 k(trk length)     0.658652       0.640233 0.0007     k(tk ln/col)
0.640053 0.0005     0.639956 0.0005   0.5196
 rem life(col)   6.6054E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.640029 0.0005     0.640014 0.0005
 rem life(abs)   6.6071E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8519E+03 0.0004
 source points generated   5170

  estimator     cycle  1025   ave of   975 cycles      combination
simple average    combined average     corr
```

```
 k(collision)      0.648605       0.639882 0.0005     k(col/abs)
0.639937 0.0005     0.639944 0.0005   0.8335
 k(absorption)     0.651677       0.639992 0.0005     k(abs/tk ln)
0.640113 0.0005     0.640057 0.0005   0.3966
 k(trk length)     0.641325       0.640234 0.0007     k(tk ln/col)
0.640058 0.0005     0.639963 0.0005   0.5194
 rem life(col)   6.8164E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.640036 0.0005     0.640023 0.0005
 rem life(abs)   6.8175E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8517E+03 0.0004
 source points generated   5044

  estimator     cycle  1026   ave of   976 cycles      combination
simple average    combined average     corr
 k(collision)      0.641052       0.639884 0.0005     k(col/abs)
0.639939 0.0005     0.639946 0.0005   0.8335
 k(absorption)     0.642157       0.639994 0.0005     k(abs/tk ln)
0.640111 0.0005     0.640056 0.0005   0.3964
 k(trk length)     0.633231       0.640227 0.0007     k(tk ln/col)
0.640055 0.0005     0.639962 0.0005   0.5193
 rem life(col)   6.8424E+03     6.8475E+03 0.0006     k(col/abs/tk ln)
0.640035 0.0005     0.640022 0.0005
 rem life(abs)   6.8414E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8516E+03 0.0004
 source points generated   4939

  estimator     cycle  1027   ave of   977 cycles      combination
simple average    combined average     corr
 k(collision)      0.654645       0.639899 0.0005     k(col/abs)
0.639952 0.0005     0.639959 0.0005   0.8337
 k(absorption)     0.650463       0.640005 0.0005     k(abs/tk ln)
0.640114 0.0005     0.640063 0.0005   0.3958
 k(trk length)     0.635307       0.640222 0.0007     k(tk ln/col)
0.640060 0.0005     0.639973 0.0005   0.5182
 rem life(col)   6.7407E+03     6.8474E+03 0.0006     k(col/abs/tk ln)
0.640042 0.0005     0.640031 0.0005
 rem life(abs)   6.7736E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0005   6.8515E+03 0.0004
 source points generated   5058

  estimator     cycle  1028   ave of   978 cycles      combination
simple average    combined average     corr
 k(collision)      0.647946       0.639907 0.0005     k(col/abs)
0.639965 0.0005     0.639973 0.0005   0.8335
 k(absorption)     0.658221       0.640024 0.0005     k(abs/tk ln)
0.640131 0.0005     0.640081 0.0005   0.3969
 k(trk length)     0.655450       0.640237 0.0007     k(tk ln/col)
0.640072 0.0005     0.639983 0.0005   0.5186
 rem life(col)   6.7469E+03     6.8473E+03 0.0006     k(col/abs/tk ln)
0.640056 0.0005     0.640046 0.0005
 rem life(abs)   6.7360E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0005   6.8514E+03 0.0004
 source points generated   4930
```

```
  estimator     cycle  1029   ave of   979 cycles      combination
simple average    combined average     corr
 k(collision)      0.640421       0.639907 0.0005     k(col/abs)
0.639965 0.0005     0.639972 0.0005   0.8335
 k(absorption)     0.638874       0.640023 0.0005     k(abs/tk ln)
0.640138 0.0005     0.640084 0.0005   0.3966
 k(trk length)     0.655656       0.640253 0.0007     k(tk ln/col)
0.640080 0.0005     0.639987 0.0005   0.5184
 rem life(col)   6.7827E+03     6.8472E+03 0.0006     k(col/abs/tk ln)
0.640061 0.0005     0.640049 0.0005
 rem life(abs)   6.8186E+03     6.8470E+03 0.0006     life(col/abs/tl)
6.8481E+03 0.0005   6.8513E+03 0.0004
 source points generated   4953

  estimator     cycle  1030   ave of   980 cycles      combination
simple average    combined average     corr
 k(collision)      0.642558       0.639910 0.0005     k(col/abs)
0.639969 0.0005     0.639977 0.0005   0.8335
 k(absorption)     0.645811       0.640029 0.0005     k(abs/tk ln)
0.640139 0.0005     0.640088 0.0005   0.3964
 k(trk length)     0.637391       0.640250 0.0007     k(tk ln/col)
0.640080 0.0005     0.639988 0.0005   0.5183
 rem life(col)   6.9858E+03     6.8474E+03 0.0006     k(col/abs/tk ln)
0.640063 0.0005     0.640052 0.0005
 rem life(abs)   6.9864E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8482E+03 0.0005   6.8514E+03 0.0004
 source points generated   5010

  estimator     cycle  1031   ave of   981 cycles      combination
simple average    combined average     corr
 k(collision)      0.649188       0.639920 0.0005     k(col/abs)
0.639977 0.0005     0.639985 0.0005   0.8335
 k(absorption)     0.646765       0.640035 0.0005     k(abs/tk ln)
0.640145 0.0005     0.640094 0.0005   0.3964
 k(trk length)     0.643723       0.640254 0.0007     k(tk ln/col)
0.640087 0.0005     0.639996 0.0005   0.5183
 rem life(col)   6.8713E+03     6.8474E+03 0.0006     k(col/abs/tk ln)
0.640070 0.0005     0.640059 0.0005
 rem life(abs)   6.8794E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0005   6.8515E+03 0.0004
 source points generated   5058

  estimator     cycle  1032   ave of   982 cycles      combination
simple average    combined average     corr
 k(collision)      0.635088       0.639915 0.0005     k(col/abs)
0.639976 0.0005     0.639983 0.0005   0.8334
 k(absorption)     0.641636       0.640037 0.0005     k(abs/tk ln)
0.640139 0.0005     0.640091 0.0005   0.3961
 k(trk length)     0.626967       0.640240 0.0007     k(tk ln/col)
0.640077 0.0005     0.639989 0.0005   0.5184
 rem life(col)   6.8304E+03     6.8474E+03 0.0006     k(col/abs/tk ln)
0.640064 0.0005     0.640056 0.0005
 rem life(abs)   6.8294E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0005   6.8515E+03 0.0004
```

```
 source points generated   4898

  estimator     cycle  1033   ave of   983 cycles      combination
simple average    combined average     corr
 k(collision)      0.606770       0.639881 0.0005     k(col/abs)
0.639944 0.0005     0.639952 0.0005   0.8348
 k(absorption)     0.610458       0.640007 0.0005     k(abs/tk ln)
0.640116 0.0005     0.640065 0.0005   0.3974
 k(trk length)     0.625006       0.640225 0.0007     k(tk ln/col)
0.640053 0.0005     0.639961 0.0005   0.5190
 rem life(col)   6.8442E+03     6.8474E+03 0.0006     k(col/abs/tk ln)
0.640038 0.0005     0.640030 0.0005
 rem life(abs)   6.8638E+03     6.8471E+03 0.0006     life(col/abs/tl)
6.8483E+03 0.0005   6.8516E+03 0.0004
 source points generated   4786

  estimator     cycle  1034   ave of   984 cycles      combination
simple average    combined average     corr
 k(collision)      0.629686       0.639871 0.0005     k(col/abs)
0.639933 0.0005     0.639941 0.0005   0.8350
 k(absorption)     0.629174       0.639996 0.0005     k(abs/tk ln)
0.640103 0.0005     0.640053 0.0005   0.3981
 k(trk length)     0.624781       0.640209 0.0007     k(tk ln/col)
0.640040 0.0005     0.639949 0.0005   0.5195
 rem life(col)   6.8975E+03     6.8474E+03 0.0006     k(col/abs/tk ln)
0.640025 0.0005     0.640017 0.0005
 rem life(abs)   6.9061E+03     6.8472E+03 0.0006     life(col/abs/tl)
6.8484E+03 0.0005   6.8517E+03 0.0004
 source points generated   5191

  estimator     cycle  1035   ave of   985 cycles      combination
simple average    combined average     corr
 k(collision)      0.644902       0.639876 0.0005     k(col/abs)
0.639937 0.0005     0.639945 0.0005   0.8350
 k(absorption)     0.642871       0.639999 0.0005     k(abs/tk ln)
0.640110 0.0005     0.640059 0.0005   0.3982
 k(trk length)     0.652695       0.640222 0.0007     k(tk ln/col)
0.640049 0.0005     0.639956 0.0005   0.5197
 rem life(col)   7.0159E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640032 0.0005     0.640023 0.0005
 rem life(abs)   7.0440E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0005   6.8518E+03 0.0004
 source points generated   5101

  estimator     cycle  1036   ave of   986 cycles      combination
simple average    combined average     corr
 k(collision)      0.649726       0.639886 0.0005     k(col/abs)
0.639946 0.0005     0.639953 0.0005   0.8351
 k(absorption)     0.646453       0.640005 0.0005     k(abs/tk ln)
0.640120 0.0005     0.640067 0.0005   0.3985
 k(trk length)     0.652582       0.640234 0.0007     k(tk ln/col)
0.640060 0.0005     0.639967 0.0005   0.5201
 rem life(col)   6.8513E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640042 0.0005     0.640032 0.0005
```

```
 rem life(abs)   6.8368E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8485E+03 0.0005   6.8518E+03 0.0004
 source points generated   5026

  estimator     cycle  1037   ave of   987 cycles      combination
simple average    combined average     corr
 k(collision)      0.626020       0.639872 0.0005     k(col/abs)
0.639934 0.0005     0.639942 0.0005   0.8352
 k(absorption)     0.630973       0.639996 0.0005     k(abs/tk ln)
0.640104 0.0005     0.640053 0.0005   0.3993
 k(trk length)     0.617169       0.640211 0.0007     k(tk ln/col)
0.640041 0.0005     0.639950 0.0005   0.5211
 rem life(col)   6.9045E+03     6.8477E+03 0.0006     k(col/abs/tk ln)
0.640026 0.0005     0.640018 0.0005
 rem life(abs)   6.8948E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8518E+03 0.0004
 source points generated   4807

  estimator     cycle  1038   ave of   988 cycles      combination
simple average    combined average     corr
 k(collision)      0.635972       0.639868 0.0005     k(col/abs)
0.639929 0.0005     0.639937 0.0005   0.8352
 k(absorption)     0.633927       0.639990 0.0005     k(abs/tk ln)
0.640090 0.0005     0.640043 0.0005   0.3996
 k(trk length)     0.619673       0.640190 0.0007     k(tk ln/col)
0.640029 0.0005     0.639942 0.0005   0.5211
 rem life(col)   6.8528E+03     6.8477E+03 0.0006     k(col/abs/tk ln)
0.640016 0.0005     0.640009 0.0005
 rem life(abs)   6.8363E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8519E+03 0.0004
 source points generated   5127

  estimator     cycle  1039   ave of   989 cycles      combination
simple average    combined average     corr
 k(collision)      0.640336       0.639868 0.0005     k(col/abs)
0.639933 0.0005     0.639942 0.0005   0.8350
 k(absorption)     0.647861       0.639998 0.0005     k(abs/tk ln)
0.640099 0.0005     0.640052 0.0005   0.4000
 k(trk length)     0.650778       0.640201 0.0007     k(tk ln/col)
0.640034 0.0005     0.639945 0.0005   0.5209
 rem life(col)   6.9467E+03     6.8478E+03 0.0006     k(col/abs/tk ln)
0.640022 0.0005     0.640015 0.0005
 rem life(abs)   6.9022E+03     6.8475E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8519E+03 0.0004
 source points generated   5048

  estimator     cycle  1040   ave of   990 cycles      combination
simple average    combined average     corr
 k(collision)      0.657296       0.639886 0.0005     k(col/abs)
0.639948 0.0005     0.639957 0.0005   0.8352
 k(absorption)     0.652377       0.640011 0.0005     k(abs/tk ln)
0.640116 0.0005     0.640066 0.0005   0.4010
 k(trk length)     0.660007       0.640221 0.0007     k(tk ln/col)
0.640053 0.0005     0.639963 0.0005   0.5221
```

```
 rem life(col)   6.7380E+03     6.8476E+03 0.0006     k(col/abs/tk ln)
0.640039 0.0005     0.640031 0.0005
 rem life(abs)   6.8045E+03     6.8474E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8518E+03 0.0004
 source points generated   5104

  estimator     cycle  1041   ave of   991 cycles      combination
simple average    combined average     corr
 k(collision)      0.625478       0.639871 0.0005     k(col/abs)
0.639933 0.0005     0.639942 0.0005   0.8356
 k(absorption)     0.624765       0.639995 0.0005     k(abs/tk ln)
0.640113 0.0005     0.640058 0.0005   0.3994
 k(trk length)     0.650235       0.640231 0.0007     k(tk ln/col)
0.640051 0.0005     0.639954 0.0005   0.5204
 rem life(col)   6.9130E+03     6.8477E+03 0.0006     k(col/abs/tk ln)
0.640032 0.0005     0.640022 0.0005
 rem life(abs)   6.8906E+03     6.8475E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8518E+03 0.0004
 source points generated   4751

  estimator     cycle  1042   ave of   992 cycles      combination
simple average    combined average     corr
 k(collision)      0.647125       0.639879 0.0005     k(col/abs)
0.639942 0.0005     0.639950 0.0005   0.8356
 k(absorption)     0.649828       0.640005 0.0005     k(abs/tk ln)
0.640114 0.0005     0.640063 0.0005   0.3985
 k(trk length)     0.631368       0.640222 0.0007     k(tk ln/col)
0.640050 0.0005     0.639958 0.0005   0.5198
 rem life(col)   6.8391E+03     6.8477E+03 0.0006     k(col/abs/tk ln)
0.640035 0.0005     0.640027 0.0005
 rem life(abs)   6.8733E+03     6.8475E+03 0.0006     life(col/abs/tl)
6.8486E+03 0.0005   6.8518E+03 0.0004
 source points generated   5174

  estimator     cycle  1043   ave of   993 cycles      combination
simple average    combined average     corr
 k(collision)      0.618105       0.639857 0.0005     k(col/abs)
0.639928 0.0005     0.639938 0.0005   0.8349
 k(absorption)     0.634335       0.639999 0.0005     k(abs/tk ln)
0.640096 0.0005     0.640051 0.0005   0.3987
 k(trk length)     0.611598       0.640193 0.0007     k(tk ln/col)
0.640025 0.0005     0.639934 0.0005   0.5218
 rem life(col)   6.9982E+03     6.8479E+03 0.0006     k(col/abs/tk ln)
0.640016 0.0005     0.640013 0.0005
 rem life(abs)   6.9343E+03     6.8476E+03 0.0006     life(col/abs/tl)
6.8487E+03 0.0005   6.8519E+03 0.0004
 source points generated   4782

  estimator     cycle  1044   ave of   994 cycles      combination
simple average    combined average     corr
 k(collision)      0.649561       0.639866 0.0005     k(col/abs)
0.639935 0.0005     0.639945 0.0005   0.8348
 k(absorption)     0.643729       0.640003 0.0005     k(abs/tk ln)
0.640098 0.0005     0.640054 0.0005   0.3987
```

```
 k(trk length)     0.640095       0.640193 0.0007     k(tk ln/col)
0.640030 0.0005     0.639942 0.0005   0.5216
 rem life(col)   6.8531E+03     6.8479E+03 0.0006     k(col/abs/tk ln)
0.640021 0.0005     0.640018 0.0005
 rem life(abs)   6.8440E+03     6.8476E+03 0.0006     life(col/abs/tl)
6.8487E+03 0.0005   6.8519E+03 0.0004
 source points generated   5287

  estimator     cycle  1045   ave of   995 cycles      combination
simple average    combined average     corr
 k(collision)      0.631279       0.639858 0.0005     k(col/abs)
0.639927 0.0005     0.639937 0.0005   0.8349
 k(absorption)     0.633199       0.639996 0.0005     k(abs/tk ln)
0.640101 0.0005     0.640052 0.0005   0.3979
 k(trk length)     0.652887       0.640206 0.0007     k(tk ln/col)
0.640032 0.0005     0.639938 0.0005   0.5205
 rem life(col)   7.0219E+03     6.8480E+03 0.0006     k(col/abs/tk ln)
0.640020 0.0005     0.640015 0.0005
 rem life(abs)   6.9978E+03     6.8477E+03 0.0006     life(col/abs/tl)
6.8488E+03 0.0005   6.8518E+03 0.0004
 source points generated   4888

  estimator     cycle  1046   ave of   996 cycles      combination
simple average    combined average     corr
 k(collision)      0.634714       0.639853 0.0005     k(col/abs)
0.639923 0.0005     0.639933 0.0005   0.8349
 k(absorption)     0.637005       0.639993 0.0005     k(abs/tk ln)
0.640111 0.0005     0.640056 0.0005   0.3968
 k(trk length)     0.663746       0.640229 0.0007     k(tk ln/col)
0.640041 0.0005     0.639940 0.0005   0.5188
 rem life(col)   6.7521E+03     6.8479E+03 0.0006     k(col/abs/tk ln)
0.640025 0.0005     0.640018 0.0005
 rem life(abs)   6.7378E+03     6.8476E+03 0.0006     life(col/abs/tl)
6.8487E+03 0.0005   6.8518E+03 0.0004
 source points generated   4983

  estimator     cycle  1047   ave of   997 cycles      combination
simple average    combined average     corr
 k(collision)      0.634171       0.639847 0.0005     k(col/abs)
0.639916 0.0005     0.639926 0.0005   0.8349
 k(absorption)     0.631869       0.639985 0.0005     k(abs/tk ln)
0.640118 0.0005     0.640055 0.0005   0.3951
 k(trk length)     0.660597       0.640250 0.0007     k(tk ln/col)
0.640048 0.0005     0.639940 0.0005   0.5174
 rem life(col)   6.8397E+03     6.8479E+03 0.0006     k(col/abs/tk ln)
0.640027 0.0005     0.640016 0.0005
 rem life(abs)   6.8281E+03     6.8476E+03 0.0006     life(col/abs/tl)
6.8487E+03 0.0005   6.8519E+03 0.0004
 source points generated   5033

  estimator     cycle  1048   ave of   998 cycles      combination
simple average    combined average     corr
 k(collision)      0.625109       0.639832 0.0005     k(col/abs)
0.639907 0.0005     0.639918 0.0005   0.8346
```

```
 k(absorption)     0.636239       0.639981 0.0005     k(abs/tk ln)
0.640114 0.0005     0.640052 0.0005   0.3951
 k(trk length)     0.636806       0.640246 0.0007     k(tk ln/col)
0.640039 0.0005     0.639928 0.0005   0.5172
 rem life(col)   6.9796E+03     6.8481E+03 0.0006     k(col/abs/tk ln)
0.640020 0.0005     0.640011 0.0005
 rem life(abs)   6.9658E+03     6.8477E+03 0.0006     life(col/abs/tl)
6.8489E+03 0.0005   6.8519E+03 0.0004
 source points generated   4889

  estimator     cycle  1049   ave of   999 cycles      combination
simple average    combined average     corr
 k(collision)      0.645977       0.639838 0.0005     k(col/abs)
0.639907 0.0005     0.639918 0.0005   0.8341
 k(absorption)     0.635102       0.639977 0.0005     k(abs/tk ln)
0.640112 0.0005     0.640048 0.0005   0.3951
 k(trk length)     0.640543       0.640247 0.0007     k(tk ln/col)
0.640043 0.0005     0.639933 0.0005   0.5172
 rem life(col)   6.9193E+03     6.8481E+03 0.0006     k(col/abs/tk ln)
0.640021 0.0005     0.640009 0.0005
 rem life(abs)   6.9123E+03     6.8478E+03 0.0006     life(col/abs/tl)
6.8489E+03 0.0005   6.8520E+03 0.0004
 source points generated   5193

  estimator     cycle  1050   ave of  1000 cycles      combination
simple average    combined average     corr
 k(collision)      0.639456       0.639838 0.0005     k(col/abs)
0.639908 0.0005     0.639919 0.0005   0.8340
 k(absorption)     0.641993       0.639979 0.0005     k(abs/tk ln)
0.640112 0.0005     0.640049 0.0005   0.3950
 k(trk length)     0.639010       0.640246 0.0007     k(tk ln/col)
0.640042 0.0005     0.639933 0.0005   0.5172
 rem life(col)   6.7468E+03     6.8480E+03 0.0006     k(col/abs/tk ln)
0.640021 0.0005     0.640010 0.0005
 rem life(abs)   6.7155E+03     6.8477E+03 0.0006     life(col/abs/tl)
6.8488E+03 0.0005   6.8520E+03 0.0004
 source points generated   4912

 source distribution written to file srctp           cycle =  1050
1problem summary (active cycles only)              source particle weight
for summary table normalization =      5000000.00

      run terminated when  1050   kcode cycles were done.
+
04/19/16 07:07:52
      Loose Plate with Box
probid =  04/19/16 06:24:14
0
 neutron creation    tracks      weight        energy            neutron
loss        tracks      weight        energy
                                 (per source particle)
(per source particle)
```

```
 source              5001757    1.0000E+00    2.0345E+00          escape
635    7.6104E-05    9.2528E-05
                                                                  energy
cutoff            0    0.            0.
                                                                  time
cutoff              0    0.            0.
 weight window            0    0.            0.                   weight
window            0    0.            0.
 cell importance          0    0.            0.                   cell
importance          0    0.            0.
 weight cutoff            0    1.2678E-01    2.9735E-07          weight
cutoff      5003222    1.2674E-01    3.0148E-07
 e or t importance        0    0.            0.                   e or t
importance        0    0.            0.
 dxtran                   0    0.            0.                   dxtran
0    0.            0.
 forced collisions        0    0.            0.                   forced
collisions        0    0.            0.
 exp. transform           0    0.            0.                   exp.
transform           0    0.            0.
 upscattering             0    0.            3.2407E-07
downscattering           0    0.            1.9920E+00
 photonuclear             0    0.            0.                   capture
0    7.3821E-01    2.7638E-02
 (n,xn)                4195    7.3238E-04    6.1250E-04          loss to
(n,xn)        2095    3.6579E-04    3.4879E-03
 prompt fission           0    0.            0.                   loss to
fission          0    2.6212E-01    1.1952E-02
 delayed fission          0    0.            0.
     total          5005952    1.1275E+00    2.0352E+00
total          5005952    1.1275E+00    2.0352E+00

   number of neutrons banked                    2196        average time
of (shakes)              cutoffs
   neutron tracks per source particle     1.0012E+00          escape
1.6150E+04          tco   1.0000E+33
   neutron collisions per source particle 1.1689E+02          capture
7.8302E+03          eco   0.0000E+00
   total neutron collisions               584443097          capture or
escape 7.8311E+03          wc1  -5.0000E-01
   net multiplication              1.0004E+00 0.0000          any
termination   8.0669E+03          wc2  -2.5000E-01

 computer time so far in this run    43.62 minutes            maximum
number ever in bank         2
 computer time in mcrun              43.58 minutes            bank
overflows to backup file       0
 source particles per minute            1.2045E+05
 random numbers generated               6125717410            most random
numbers used was       15247 in history      988648

 range of sampled source weights = 9.3110E-01 to 1.6166E+00

 source efficiency = 1.0000  in cell    20
```

```
 source efficiency = 1.0000  in cell    21

 source efficiency = 1.0000  in cell    22

 source efficiency = 1.0000  in cell    23

 source efficiency = 1.0000  in cell    24

 source efficiency = 1.0000  in cell    25

 source efficiency = 1.0000  in cell    26

 source efficiency = 1.0000  in cell    27

 source efficiency = 1.0000  in cell   400

 source efficiency = 1.0000  in cell  1000

 source efficiency = 1.0000  in cell   502

 source efficiency = 1.0000  in cell   600

 source efficiency = 1.0000  in cell   700

 source efficiency = 1.0000  in cell   800

 source efficiency = 1.0000  in cell   900
1neutron  activity in each cell
print table 126

                 tracks     population   collisions   collisions
number        flux        average      average
        cell    entering                                * weight
weighted     weighted   track weight   track mfp
                                                     (per history)
energy       energy     (relative)      (cm)

     1    10    12904272      4355221    295900321    3.7043E+01
9.1076E-05   3.3563E-01   7.1703E-01   1.0147E+00
     2    11     4686265      1715065     14539773    2.1029E+00
5.8800E-04   5.0136E-01   8.0520E-01   2.4744E+00
     3    12     2840911      1077310     38404506    6.0862E+00
1.0834E-03   3.8860E-01   8.2359E-01   3.8250E+00
     4    13     1820944       556094      9211232    1.3286E+00
9.2382E-04   2.7592E-01   7.9792E-01   2.6297E+00
     5    14     1487837       434554     17372841    1.9675E+00
3.6834E-05   9.1161E-02   6.3619E-01   6.5306E-01
     6    20           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     7    21           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     8    22           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
```

```
     9    23           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    10    24           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    11    25           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    12    26           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    13    27           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    14   998      901385       371932     75822146    7.5969E+00
1.4546E-05   5.2651E-02   5.4134E-01   5.0200E-01
    16   400           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    17   403     5691114      1898010      2514638    3.9563E-01
5.8343E-04   7.1327E-01   8.5767E-01   2.4301E+00
    18   404     6395146      1971773     12253543    1.6838E+00
2.8519E-04   5.6782E-01   8.1483E-01   1.4588E+00
    19  1000           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    20  1003    14521718      4157709      6644142    1.0130E+00
4.8106E-04   6.9577E-01   8.3769E-01   2.3658E+00
    21  1004    16385548      4171270     31739760    4.2539E+00
2.5355E-04   5.5135E-01   7.9848E-01   1.4229E+00
    22   501   136691145      4918926       561847    1.0626E-01
9.7016E-04   8.8656E-01   9.1393E-01   8.3057E+00
    23   502   141259523      5002840      5604858    9.1060E-01
1.0007E-03   8.9730E-01   9.1508E-01   4.1637E+00
    24   503   136672856      4929312       560807    1.0609E-01
9.7172E-04   8.8672E-01   9.1429E-01   8.3051E+00
    25   504   283119261      4953006     62590409    9.9666E+00
6.8240E-04   8.0548E-01   9.0153E-01   1.8480E+00
    26   600           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    27  2000           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    28   700           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    29   701           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    30   702           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    31   800           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    32   801     7154934      1990799      2895461    4.2513E-01
3.2971E-04   5.8436E-01   8.0822E-01   2.2119E+00
    33   900           0            0            0    0.0000E+00
0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
    34   901    18484376      4123144      7826813    1.1130E+00
2.5768E-04   5.4232E-01   7.8394E-01   2.1011E+00

     total     791017235     46626965    584443097    7.6100E+01
1keff results for: Loose Plate with Box
probid =  04/19/16 06:24:14
```

```
 the initial fission neutron source distribution was generated from a
general sdef source description.
 the criticality problem was scheduled to skip  50 cycles and run a total
of 1050 cycles with nominally     5000 neutrons per cycle.
 this problem has run  50 inactive cycles with   247944 neutron histories
and 1000 active cycles with     5001757 neutron histories.


 this calculation has completed the requested number of keff cycles using
a total of     5249701 fission neutron source histories.
 all cells with fissionable material were sampled and had fission neutron
source points.


 print table 128 off:  cannot determine if all repeated structures /
lattice elements were sampled.


 the results of the w test for normality applied to the individual
collision, absorption, and track-length keff cycle values are:

           the k( collision) cycle values appear normally distributed at
the 95 percent confidence level
           the k(absorption) cycle values appear normally distributed at
the 95 percent confidence level
           the k(trk length) cycle values appear normally distributed at
the 95 percent confidence level


 ---------------------------------------------------------------------------
-------------------------------------------------------------
 |
|
 | the final estimated combined collision/absorption/track-length keff =
0.64001 with an estimated standard deviation of 0.00030   |
 |
|
 | the estimated 68, 95, & 99 percent keff confidence intervals are
0.63971 to 0.64031, 0.63941 to 0.64062, and 0.63921 to 0.64081 |
 |
|
 | the final combined (col/abs/tl) prompt removal lifetime = 6.8520E-05
seconds with an estimated standard deviation of 2.8566E-08 |
 |
|
 | the average neutron energy causing fission = 4.5597E-02 mev
|
 | the energy corresponding to the average neutron lethargy causing
fission = 1.0717E-07 mev                                          |
 |
|
```

```
 | the percentages of fissions caused by neutrons in the thermal,
intermediate, and fast neutron ranges are:                        |
 |         (<0.625 ev):  88.75%         (0.625 ev - 100 kev):   9.25%
(>100 kev):   2.00%                                  |
 |
|
 | the average fission neutrons produced per neutron absorbed (capture +
fission) in all cells with fission = 1.8438E+00           |
 | the average fission neutrons produced per neutron absorbed (capture +
fission) in all the geometry cells = 6.3962E-01           |
 |
|
 | the average number of neutrons produced per fission = 2.441
|
 |
|
 ---------------------------------------------------------------------------
-------------------------------------------------------------
```

the estimated average keffs, one standard deviations, and 68, 95, and 99 percent confidence intervals are:

```
        keff estimator       keff     standard deviation      68%
confidence        95% confidence        99% confidence       corr

            collision     0.63984         0.00033          0.63950 to
0.64017    0.63917 to 0.64050    0.63895 to 0.64072
            absorption     0.63998         0.00033          0.63965 to
0.64030    0.63933 to 0.64063    0.63912 to 0.64084
          track length     0.64025         0.00044          0.63980 to
0.64069    0.63937 to 0.64112    0.63908 to 0.64141
            col/absorp     0.63992         0.00032          0.63960 to
0.64024    0.63929 to 0.64055    0.63908 to 0.64075    0.8340
           abs/trk len     0.64005         0.00031          0.63974 to
0.64036    0.63944 to 0.64066    0.63924 to 0.64086    0.3950
           col/trk len     0.63993         0.00032          0.63961 to
0.64026    0.63929 to 0.64057    0.63908 to 0.64078    0.5172
       col/abs/trk len     0.64001         0.00030          0.63971 to
0.64031    0.63941 to 0.64062    0.63921 to 0.64081
```

if the largest of each keff occurred on the next cycle, the keff results and 68, 95, and 99 percent confidence intervals would be:

```
        keff estimator       keff     standard deviation      68%
confidence        95% confidence        99% confidence

            collision     0.63987         0.00034          0.63953 to
0.64020    0.63920 to 0.64054    0.63898 to 0.64075
            absorption     0.64001         0.00033          0.63968 to
0.64034    0.63936 to 0.64066    0.63915 to 0.64088
          track length     0.64029         0.00044          0.63985 to
0.64073    0.63941 to 0.64117    0.63912 to 0.64146
```

```
       col/abs/trk len     0.64004         0.00031          0.63974 to
0.64035    0.63943 to 0.64065    0.63924 to 0.64085


 the estimated average prompt removal lifetimes, one standard deviations,
and 68, 95, and 99 percent confidence intervals are (sec):

       estimator      lifetime     std. dev.         68% confidence
95% confidence           99% confidence           corr

       collision   6.84803E-05   4.18116E-08    6.8438E-05 to 6.8522E-05
6.8397E-05 to 6.8564E-05 6.8370E-05 to 6.8591E-05
      absorption   6.84766E-05   4.16929E-08    6.8435E-05 to 6.8518E-05
6.8394E-05 to 6.8560E-05 6.8366E-05 to 6.8587E-05
    track length   6.85077E-05   2.96544E-08    6.8478E-05 to 6.8537E-05
6.8449E-05 to 6.8567E-05 6.8429E-05 to 6.8586E-05
      col/absorp   6.84781E-05   4.16288E-08    6.8436E-05 to 6.8520E-05
6.8395E-05 to 6.8561E-05 6.8368E-05 to 6.8588E-05    0.9862
     abs/trk len   6.85185E-05   2.86472E-08    6.8490E-05 to 6.8547E-05
6.8461E-05 to 6.8576E-05 6.8443E-05 to 6.8594E-05    0.8536
     col/trk len   6.85156E-05   2.89069E-08    6.8487E-05 to 6.8544E-05
6.8458E-05 to 6.8573E-05 6.8439E-05 to 6.8592E-05    0.8373
 col/abs/trk len   6.85197E-05   2.85655E-08    6.8491E-05 to 6.8548E-05
6.8463E-05 to 6.8577E-05 6.8444E-05 to 6.8595E-05

 absorption estimates of prompt lifetimes (sec):

                             escape        capture        fission
removal

            fraction    7.60722E-05    7.37910E-01    2.62014E-01
1.00000E+00
       lifetime(abs)    9.00154E-01    9.27982E-05    2.61347E-04
6.84766E-05
     lifetime(c/a/t)    9.00720E-01    9.28565E-05    2.61511E-04
6.85197E-05

1average individual and combined collision/absorption/track-length keff
results for 14 different batch sizes

 cycles per  number of    average keff estimators and deviations
normality  average k(c/a/t)    k(c/a/t) confidence intervals
 keff batch  k batches  k(col) st dev  k(abs) st dev  k(trk) st dev
co/ab/trk  k(c/a/t) st dev    95% confidence    99% confidence

       1       1000  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95|  0.64001 0.00030   0.63941-0.64062   0.63921-0.64081
       2        500  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95|  0.64001 0.00030   0.63941-0.64062   0.63922-0.64081
       4        250  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0005
|95/95/95|  0.64001 0.00031   0.63940-0.64062   0.63920-0.64082
       5        200  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95|  0.64002 0.00030   0.63943-0.64062   0.63923-0.64082
```

```
       8        125  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0005
|95/95/95|  0.64003 0.00031   0.63941-0.64065   0.63921-0.64085
      10        100  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95|  0.63996 0.00029   0.63939-0.64054   0.63920-0.64072
      20         50  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0005
|95/95/95|  0.63995 0.00031   0.63932-0.64058   0.63911-0.64079
      25         40  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0005
|95/95/95|  0.63994 0.00031   0.63932-0.64057   0.63910-0.64078
      40         25  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0005
|95/95/95|  0.63993 0.00032   0.63925-0.64060   0.63901-0.64084
      50         20  |  0.6398 0.0003  0.6400 0.0003  0.6402 0.0005
|95/95/99|  0.63993 0.00035   0.63920-0.64066   0.63892-0.64094
 ---------------------------------------------------------------------------
-------------------------------------------------------------
     100         10  |  0.6398 0.0003  0.6400 0.0004  0.6402 0.0006
|95/95/95|  0.63980 0.00040   0.63886-0.64074   0.63841-0.64119
     125          8  |  0.6398 0.0004  0.6400 0.0004  0.6402 0.0006
|95/95/95|  0.63992 0.00047   0.63872-0.64111   0.63804-0.64179
     200          5  |  0.6398 0.0004  0.6400 0.0004  0.6402 0.0005
|95/95/95|  0.63994 0.00059   0.63741-0.64246   0.63411-0.64576
     250          4  |  0.6398 0.0005  0.6400 0.0003  0.6402 0.0006
|95/95/95|  0.64024 0.00027   0.63681-0.64366   0.62309-0.65739
1individual and average keff estimator results by cycle

  keff     neutron    keff estimators by cycle           average keff
estimators and deviations                average k(c/a/t)
 cycle   histories   k(coll)  k(abs)  k(track)     k(coll)  st dev
k(abs)  st dev   k(track) st dev    k(c/a/t)  st dev    fom

     1        5000 | 0.61571  0.60969  0.61400  |
     2        3093 | 0.62844  0.61808  0.65256  |
     3        5094 | 0.62005  0.62933  0.62621  |
     4        4889 | 0.64596  0.65213  0.65329  |
     5        5188 | 0.64251  0.63559  0.65272  |
     6        4967 | 0.63056  0.63891  0.64322  |
     7        4900 | 0.62646  0.63522  0.62579  |
     8        4979 | 0.63244  0.63530  0.61020  |
     9        5032 | 0.63638  0.63145  0.63649  |
    10        5052 | 0.63894  0.64309  0.64434  |
 ---------------------------------------------------------------------------
-------------------------------------------------------------
    11        5017 | 0.64306  0.62942  0.64718  |
    12        5054 | 0.63615  0.64002  0.62368  |
    13        4925 | 0.64278  0.64555  0.64872  |
    14        5081 | 0.63920  0.63986  0.61080  |
    15        4949 | 0.64039  0.64311  0.63268  |
    16        5007 | 0.64250  0.63361  0.63105  |
    17        4985 | 0.63548  0.63598  0.65351  |
    18        4938 | 0.64351  0.64998  0.64146  |
    19        5063 | 0.66365  0.65965  0.64810  |
    20        5113 | 0.63959  0.63727  0.63829  |
 ---------------------------------------------------------------------------
-------------------------------------------------------------
    21        4829 | 0.63199  0.63472  0.61852  |
```

```
    22        4938 | 0.65068  0.65208  0.64987  |
    23        5119 | 0.65559  0.65580  0.66481  |
    24        5024 | 0.65269  0.64829  0.66841  |
    25        4960 | 0.64976  0.64700  0.65165  |
    26        4989 | 0.65535  0.65442  0.63928  |
    27        5018 | 0.63287  0.63784  0.64003  |
    28        4824 | 0.63857  0.63641  0.64782  |
    29        5089 | 0.65011  0.65049  0.65501  |
    30        5077 | 0.64444  0.64113  0.64195  |
 ---------------------------------------------------------------------
-------------------------------------------------------------
    31        4916 | 0.64349  0.63728  0.64791  |
    32        5026 | 0.63720  0.64108  0.65113  |
    33        4944 | 0.63632  0.64063  0.63036  |
    34        5005 | 0.65722  0.65680  0.63987  |
    35        5152 | 0.61863  0.61744  0.62458  |
    36        4711 | 0.64090  0.64435  0.65091  |
    37        5180 | 0.64807  0.64218  0.64059  |
    38        5088 | 0.63986  0.64494  0.64402  |
    39        4941 | 0.63745  0.63499  0.63592  |
    40        4950 | 0.64424  0.63822  0.63919  |
 ---------------------------------------------------------------------
-------------------------------------------------------------
    41        5067 | 0.64750  0.64474  0.65054  |
    42        4993 | 0.62161  0.62788  0.61951  |
    43        4801 | 0.63743  0.62985  0.64155  |
    44        5132 | 0.63812  0.63850  0.62908  |
    45        5014 | 0.65031  0.65545  0.65238  |
    46        5092 | 0.65093  0.64972  0.63003  |
    47        5010 | 0.61932  0.61939  0.64096  |
    48        4706 | 0.63933  0.63717  0.64772  |
    49        5156 | 0.62423  0.62230  0.60043  |
    50        4867 | 0.65420  0.65328  0.64386  |
 -------------------  begin active keff cycles  -------------------------
-------------------------------------------------------------
    51        5199 | 0.64832  0.64992  0.64467  |
    52        4980 | 0.64012  0.63670  0.62201  |  0.64422 0.00410
0.64331 0.00661   0.63334 0.01133  |
    53        4976 | 0.64494  0.64411  0.64327  |  0.64446 0.00238
0.64358 0.00383   0.63665 0.00733  |
    54        5011 | 0.64446  0.64389  0.64800  |  0.64446 0.00168
0.64366 0.00271   0.63949 0.00591  |  0.64575 0.00038   6386620
    55        5000 | 0.64478  0.65283  0.64149  |  0.64452 0.00130
0.64549 0.00279   0.63989 0.00459  |  0.64537 0.00167    270845
    56        5042 | 0.64404  0.64669  0.61346  |  0.64444 0.00107
0.64569 0.00228   0.63548 0.00579  |  0.64487 0.00145    300588
    57        4989 | 0.62076  0.62266  0.65762  |  0.64106 0.00350
0.64240 0.00381   0.63865 0.00582  |  0.63987 0.00312     53633
    58        4833 | 0.65315  0.64433  0.65282  |  0.64257 0.00339
0.64264 0.00331   0.64042 0.00535  |  0.64194 0.00289     54990
    59        5282 | 0.64306  0.64336  0.66046  |  0.64262 0.00299
0.64272 0.00292   0.64264 0.00521  |  0.64268 0.00260     60194
    60        4888 | 0.63542  0.63387  0.63675  |  0.64190 0.00277
0.64184 0.00276   0.64205 0.00470  |  0.64191 0.00244     61060
```

61	4951	0.63956	0.63748	0.65235	0.64169	0.00251	0.64144	0.00253	0.64299	0.00435	0.64193	0.00219	68927
62	5033	0.65029	0.64006	0.63890	0.64241	0.00240	0.64133	0.00231	0.64265	0.00399	0.64195	0.00202	74586
63	5076	0.64017	0.64188	0.63619	0.64224	0.00222	0.64137	0.00212	0.64215	0.00370	0.64177	0.00183	83032
64	4934	0.62363	0.63025	0.60625	0.64091	0.00245	0.64057	0.00212	0.63959	0.00428	0.64035	0.00213	56848
65	4872	0.64090	0.64254	0.62502	0.64091	0.00228	0.64071	0.00198	0.63862	0.00410	0.64030	0.00198	61044
66	5129	0.63180	0.63740	0.62257	0.64034	0.00220	0.64050	0.00186	0.63761	0.00397	0.64002	0.00188	63000
67	4906	0.64614	0.63781	0.65190	0.64068	0.00210	0.64034	0.00176	0.63845	0.00382	0.63995	0.00176	67939
68	5110	0.65601	0.64719	0.63088	0.64153	0.00215	0.64072	0.00170	0.63803	0.00363	0.64003	0.00169	69138
69	5063	0.63929	0.63789	0.64887	0.64141	0.00204	0.64057	0.00161	0.63860	0.00348	0.64001	0.00159	74197
70	4921	0.62750	0.62523	0.63304	0.64072	0.00206	0.63981	0.00171	0.63833	0.00331	0.63930	0.00167	63460
71	4933	0.66185	0.65409	0.64559	0.64172	0.00220	0.64049	0.00177	0.63867	0.00317	0.63959	0.00171	58306
72	5241	0.64374	0.64288	0.64152	0.64182	0.00210	0.64059	0.00169	0.63880	0.00302	0.63971	0.00163	61168
73	4878	0.61758	0.61314	0.64034	0.64076	0.00227	0.63940	0.00201	0.63887	0.00289	0.63876	0.00182	46713
74	4832	0.63536	0.64393	0.62627	0.64054	0.00218	0.63959	0.00193	0.63834	0.00282	0.63886	0.00171	50622
75	5183	0.63191	0.63967	0.63095	0.64019	0.00212	0.63959	0.00185	0.63805	0.00272	0.63887	0.00162	54129
76	4972	0.64535	0.63786	0.64409	0.64039	0.00205	0.63953	0.00178	0.63828	0.00262	0.63884	0.00157	55846
77	5111	0.64419	0.64777	0.65517	0.64053	0.00198	0.63983	0.00174	0.63890	0.00260	0.63940	0.00157	53922
78	4962	0.63771	0.63945	0.63132	0.64043	0.00191	0.63982	0.00168	0.63863	0.00252	0.63932	0.00151	56028
79	4956	0.64327	0.64807	0.65358	0.64053	0.00184	0.64010	0.00164	0.63915	0.00248	0.63977	0.00150	55102
80	5075	0.63600	0.62812	0.64294	0.64038	0.00179	0.63970	0.00164	0.63928	0.00240	0.63953	0.00148	54823
81	4950	0.66891	0.65036	0.66744	0.64130	0.00196	0.64005	0.00162	0.64018	0.00250	0.63974	0.00151	50728
82	5241	0.63703	0.62901	0.63113	0.64116	0.00190	0.63970	0.00161	0.63990	0.00243	0.63947	0.00153	47892
83	4772	0.65970	0.65517	0.66141	0.64173	0.00192	0.64017	0.00162	0.64055	0.00245	0.63992	0.00158	43600
84	5157	0.61287	0.61268	0.63576	0.64088	0.00205	0.63936	0.00177	0.64041	0.00238	0.63925	0.00164	38747

85	4684	0.64208	0.63786	0.64334	0.64091	0.00199	0.63932	0.00172	0.64050	0.00231	0.63923	0.00160	39876
86	5233	0.63283	0.63133	0.65847	0.64069	0.00195	0.63910	0.00169	0.64100	0.00230	0.63927	0.00155	40878
87	4919	0.64971	0.64122	0.63917	0.64093	0.00191	0.63915	0.00164	0.64095	0.00224	0.63924	0.00152	41429
88	5135	0.65779	0.65673	0.66772	0.64137	0.00191	0.63962	0.00166	0.64165	0.00229	0.63980	0.00160	36866
89	5050	0.64570	0.65223	0.67435	0.64148	0.00187	0.63994	0.00165	0.64249	0.00238	0.64045	0.00164	34332
90	4974	0.62971	0.63154	0.65673	0.64119	0.00184	0.63973	0.00162	0.64284	0.00235	0.64040	0.00160	34989
91	4840	0.65936	0.65253	0.65679	0.64163	0.00185	0.64004	0.00161	0.64319	0.00232	0.64064	0.00160	34065
92	5234	0.65505	0.64983	0.65684	0.64195	0.00183	0.64028	0.00159	0.64351	0.00228	0.64084	0.00159	33667
93	4958	0.64078	0.63073	0.64348	0.64193	0.00179	0.64005	0.00157	0.64351	0.00223	0.64074	0.00158	33389
94	4878	0.63371	0.63656	0.64109	0.64174	0.00176	0.63997	0.00154	0.64345	0.00218	0.64067	0.00154	34366
95	4939	0.65330	0.64629	0.66586	0.64200	0.00174	0.64011	0.00151	0.64395	0.00219	0.64079	0.00153	33733
96	5140	0.64294	0.63872	0.65894	0.64202	0.00170	0.64008	0.00148	0.64428	0.00216	0.64083	0.00151	33925
97	4918	0.63781	0.63359	0.65382	0.64193	0.00167	0.63995	0.00145	0.64448	0.00213	0.64079	0.00149	34106
98	4961	0.63411	0.64061	0.63474	0.64176	0.00164	0.63996	0.00142	0.64428	0.00209	0.64077	0.00144	35687
99	4972	0.63311	0.63262	0.64230	0.64159	0.00162	0.63981	0.00140	0.64424	0.00205	0.64066	0.00142	36128
100	4993	0.62801	0.61822	0.63014	0.64132	0.00161	0.63938	0.00144	0.64396	0.00203	0.64044	0.00147	32928
101	5017	0.65962	0.66043	0.64199	0.64167	0.00162	0.63979	0.00147	0.64392	0.00199	0.64086	0.00146	32750
102	5307	0.64525	0.64421	0.67146	0.64174	0.00159	0.63988	0.00144	0.64445	0.00202	0.64101	0.00146	32316
103	4882	0.63582	0.63458	0.64794	0.64163	0.00156	0.63978	0.00142	0.64451	0.00198	0.64097	0.00144	32762
104	4942	0.64576	0.64672	0.64214	0.64171	0.00153	0.63990	0.00140	0.64447	0.00195	0.64107	0.00141	33544
105	5077	0.65420	0.65643	0.64009	0.64194	0.00152	0.64021	0.00140	0.64439	0.00191	0.64136	0.00139	34049
106	5083	0.65021	0.65292	0.63275	0.64208	0.00150	0.64043	0.00140	0.64418	0.00189	0.64151	0.00135	35123
107	4948	0.63043	0.63080	0.64803	0.64188	0.00149	0.64026	0.00138	0.64425	0.00186	0.64143	0.00134	35458
108	4834	0.61719	0.61807	0.62928	0.64145	0.00152	0.63988	0.00141	0.64399	0.00184	0.64108	0.00136	33411
109	4902	0.62488	0.63230	0.61927	0.64117	0.00152	0.63975	0.00139	0.64357	0.00186	0.64077	0.00134	33732

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   110        5078 | 0.65861  0.65924  0.65765  |  0.64146 0.00153
0.64008 0.00141   0.64381 0.00184  |  0.64111 0.00136     32650
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-------------------------------------------------------------
   111        5240 | 0.64053  0.63480  0.63920  |  0.64145 0.00150
0.63999 0.00139   0.64373 0.00181  |  0.64103 0.00134     32874
   112        4869 | 0.64853  0.64598  0.64449  |  0.64156 0.00148
0.64009 0.00137   0.64374 0.00178  |  0.64110 0.00132     33345
   113        5052 | 0.63680  0.62955  0.67520  |  0.64149 0.00146
0.63992 0.00136   0.64424 0.00183  |  0.64111 0.00131     33332
   114        4938 | 0.64388  0.64666  0.64481  |  0.64152 0.00144
0.64003 0.00134   0.64425 0.00180  |  0.64121 0.00129     33898
   115        5083 | 0.63313  0.62594  0.64379  |  0.64139 0.00142
0.63981 0.00134   0.64424 0.00177  |  0.64112 0.00129     33529
   116        4867 | 0.65031  0.63933  0.65443  |  0.64153 0.00140
0.63980 0.00132   0.64440 0.00175  |  0.64113 0.00128     33692
   117        5156 | 0.63803  0.65154  0.63909  |  0.64148 0.00138
0.63998 0.00131   0.64432 0.00172  |  0.64132 0.00124     34876
   118        4860 | 0.63435  0.63355  0.60700  |  0.64137 0.00137
0.63988 0.00129   0.64377 0.00179  |  0.64099 0.00124     34394
   119        4953 | 0.63617  0.63047  0.62967  |  0.64130 0.00135
0.63975 0.00128   0.64357 0.00177  |  0.64085 0.00124     34086
   120        5011 | 0.64141  0.63764  0.65623  |  0.64130 0.00133
0.63972 0.00126   0.64375 0.00175  |  0.64087 0.00122     34284
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   121        5047 | 0.64936  0.65267  0.64404  |  0.64141 0.00132
0.63990 0.00126   0.64375 0.00173  |  0.64105 0.00121     34653
   122        5027 | 0.64714  0.65050  0.63484  |  0.64149 0.00130
0.64005 0.00125   0.64363 0.00171  |  0.64114 0.00119     35432
   123        4966 | 0.64239  0.64074  0.65216  |  0.64150 0.00128
0.64005 0.00123   0.64374 0.00169  |  0.64117 0.00118     35720
   124        4964 | 0.64149  0.63846  0.64058  |  0.64150 0.00127
0.64003 0.00122   0.64370 0.00167  |  0.64115 0.00116     36076
   125        4981 | 0.63027  0.62833  0.63368  |  0.64135 0.00126
0.63988 0.00121   0.64357 0.00165  |  0.64100 0.00116     35858
   126        4900 | 0.63322  0.63561  0.64068  |  0.64125 0.00125
0.63982 0.00119   0.64353 0.00163  |  0.64095 0.00114     36335
   127        5002 | 0.62668  0.62863  0.64872  |  0.64106 0.00124
0.63968 0.00119   0.64360 0.00161  |  0.64087 0.00113     36478
   128        4972 | 0.64823  0.64503  0.64564  |  0.64115 0.00123
0.63974 0.00117   0.64362 0.00159  |  0.64092 0.00112     36835
   129        5131 | 0.62418  0.62919  0.61695  |  0.64093 0.00123
0.63961 0.00117   0.64329 0.00160  |  0.64065 0.00112     36380
   130        4853 | 0.64465  0.63855  0.65391  |  0.64098 0.00122
0.63960 0.00115   0.64342 0.00159  |  0.64067 0.00111     36605
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   131        5181 | 0.63960  0.64815  0.62299  |  0.64096 0.00120
0.63970 0.00114   0.64317 0.00159  |  0.64068 0.00108     37752
   132        4955 | 0.63956  0.63987  0.62301  |  0.64095 0.00119
0.63971 0.00113   0.64292 0.00159  |  0.64059 0.00107     38292
   133        4998 | 0.62770  0.63903  0.64796  |  0.64079 0.00119
0.63970 0.00112   0.64298 0.00157  |  0.64061 0.00105     39080
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   134        4900 | 0.65784  0.65916  0.65577  |  0.64099 0.00119
0.63993 0.00113   0.64313 0.00156  |  0.64085 0.00106     38136
   135        5236 | 0.61546  0.61637  0.63268  |  0.64069 0.00121
0.63965 0.00115   0.64301 0.00155  |  0.64064 0.00108     36576
   136        4637 | 0.65115  0.64482  0.64076  |  0.64081 0.00121
0.63971 0.00114   0.64298 0.00153  |  0.64067 0.00107     37012
   137        5255 | 0.64641  0.64482  0.64204  |  0.64088 0.00119
0.63977 0.00112   0.64297 0.00151  |  0.64071 0.00105     37416
   138        5012 | 0.65712  0.65706  0.65421  |  0.64106 0.00119
0.63997 0.00113   0.64310 0.00150  |  0.64090 0.00106     36829
   139        5034 | 0.63209  0.63169  0.64586  |  0.64096 0.00118
0.63987 0.00112   0.64313 0.00148  |  0.64085 0.00105     37046
   140        4811 | 0.64057  0.64200  0.62552  |  0.64096 0.00117
0.63990 0.00111   0.64294 0.00148  |  0.64080 0.00103     37664
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   141        5076 | 0.62799  0.62693  0.62989  |  0.64081 0.00117
0.63975 0.00110   0.64279 0.00147  |  0.64066 0.00103     37311
   142        4877 | 0.64165  0.63938  0.63603  |  0.64082 0.00115
0.63975 0.00109   0.64272 0.00146  |  0.64063 0.00102     37767
   143        5094 | 0.64656  0.65068  0.66224  |  0.64088 0.00114
0.63987 0.00109   0.64293 0.00146  |  0.64078 0.00102     37434
   144        5003 | 0.62757  0.62972  0.63794  |  0.64074 0.00114
0.63976 0.00108   0.64288 0.00144  |  0.64069 0.00102     37548
   145        4863 | 0.63323  0.63268  0.64929  |  0.64066 0.00113
0.63969 0.00107   0.64294 0.00143  |  0.64066 0.00101     37850
   146        5000 | 0.63499  0.64057  0.63591  |  0.64060 0.00112
0.63970 0.00106   0.64287 0.00141  |  0.64065 0.00100     38469
   147        5015 | 0.64562  0.63852  0.63615  |  0.64066 0.00111
0.63968 0.00105   0.64280 0.00140  |  0.64062 0.00099     38826
   148        5056 | 0.65318  0.65817  0.63906  |  0.64078 0.00111
0.63987 0.00106   0.64276 0.00139  |  0.64078 0.00098     39032
   149        5066 | 0.64308  0.63838  0.63036  |  0.64081 0.00110
0.63986 0.00104   0.64264 0.00138  |  0.64073 0.00097     39375
   150        4954 | 0.63552  0.63652  0.64348  |  0.64075 0.00109
0.63982 0.00103   0.64265 0.00137  |  0.64071 0.00096     39794
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   151        4923 | 0.62829  0.63392  0.63067  |  0.64063 0.00108
0.63976 0.00103   0.64253 0.00136  |  0.64062 0.00095     40098
   152        5005 | 0.64742  0.64401  0.65907  |  0.64070 0.00107
0.63981 0.00102   0.64269 0.00135  |  0.64068 0.00095     40071
   153        5162 | 0.63869  0.62588  0.63619  |  0.64068 0.00106
0.63967 0.00102   0.64263 0.00134  |  0.64061 0.00095     39612
   154        4911 | 0.63117  0.63220  0.63928  |  0.64059 0.00106
0.63960 0.00101   0.64259 0.00133  |  0.64054 0.00094     39817
   155        4969 | 0.63400  0.63573  0.63270  |  0.64052 0.00105
0.63956 0.00100   0.64250 0.00132  |  0.64048 0.00093     40169
   156        5035 | 0.64339  0.64802  0.62734  |  0.64055 0.00104
0.63964 0.00099   0.64236 0.00131  |  0.64050 0.00092     40924
   157        5049 | 0.64055  0.63590  0.63863  |  0.64055 0.00103
0.63961 0.00098   0.64232 0.00130  |  0.64047 0.00091     41225
   158        4977 | 0.63656  0.63818  0.62579  |  0.64051 0.00102
0.63959 0.00098   0.64217 0.00130  |  0.64040 0.00091     41639
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159 4907 | 0.64317 0.63826 0.65069 | 0.64054 0.00101
0.63958 0.00097 0.64225 0.00129 | 0.64041 0.00090 41943
160 5099 | 0.64278 0.64157 0.65351 | 0.64056 0.00100
0.63960 0.00096 0.64235 0.00128 | 0.64045 0.00089 42205
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161 4974 | 0.65640 0.64960 0.67704 | 0.64070 0.00100
0.63969 0.00095 0.64266 0.00131 | 0.64054 0.00090 41051
162 5111 | 0.65262 0.64994 0.65302 | 0.64081 0.00100
0.63978 0.00095 0.64276 0.00130 | 0.64063 0.00090 40986
163 4979 | 0.62037 0.61509 0.62946 | 0.64063 0.00101
0.63956 0.00097 0.64264 0.00129 | 0.64049 0.00091 39308
164 4713 | 0.64928 0.64393 0.64159 | 0.64070 0.00100
0.63960 0.00096 0.64263 0.00128 | 0.64051 0.00091 39644
165 5254 | 0.62880 0.63220 0.62881 | 0.64060 0.00100
0.63954 0.00095 0.64251 0.00128 | 0.64041 0.00090 39767
166 4862 | 0.63641 0.64049 0.64081 | 0.64056 0.00099
0.63955 0.00094 0.64249 0.00127 | 0.64042 0.00089 40268
167 5043 | 0.61105 0.61820 0.59855 | 0.64031 0.00101
0.63936 0.00095 0.64212 0.00131 | 0.64008 0.00092 38004
168 4808 | 0.65266 0.65092 0.65020 | 0.64041 0.00101
0.63946 0.00095 0.64219 0.00130 | 0.64017 0.00091 38007
169 5337 | 0.65487 0.64870 0.64321 | 0.64054 0.00101
0.63954 0.00095 0.64220 0.00129 | 0.64022 0.00091 38177
170 5029 | 0.62129 0.63138 0.60193 | 0.64038 0.00101
0.63947 0.00094 0.64186 0.00132 | 0.64002 0.00090 38007
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171 4723 | 0.63821 0.64559 0.63809 | 0.64036 0.00100
0.63952 0.00093 0.64183 0.00131 | 0.64006 0.00090 38499
172 5127 | 0.63863 0.64122 0.64684 | 0.64034 0.00100
0.63953 0.00093 0.64187 0.00130 | 0.64009 0.00089 38847
173 5060 | 0.64318 0.64092 0.63415 | 0.64037 0.00099
0.63955 0.00092 0.64181 0.00129 | 0.64008 0.00088 39222
174 5004 | 0.63935 0.63902 0.66276 | 0.64036 0.00098
0.63954 0.00091 0.64198 0.00129 | 0.64011 0.00088 39392
175 4962 | 0.62908 0.62490 0.63507 | 0.64027 0.00098
0.63942 0.00091 0.64192 0.00128 | 0.64002 0.00088 39062
176 4920 | 0.61957 0.62283 0.63882 | 0.64010 0.00098
0.63929 0.00091 0.64190 0.00127 | 0.63993 0.00088 38799
177 4920 | 0.62286 0.62529 0.64068 | 0.63997 0.00098
0.63918 0.00091 0.64189 0.00126 | 0.63985 0.00087 38727
178 4986 | 0.62654 0.63815 0.62653 | 0.63986 0.00098
0.63917 0.00091 0.64177 0.00126 | 0.63981 0.00087 39208
179 5009 | 0.64544 0.64207 0.65936 | 0.63991 0.00098
0.63920 0.00090 0.64190 0.00126 | 0.63986 0.00086 39274
180 5134 | 0.62202 0.62657 0.63555 | 0.63977 0.00098
0.63910 0.00090 0.64185 0.00125 | 0.63978 0.00086 39227
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181 4844 | 0.62700 0.62992 0.62506 | 0.63967 0.00098
0.63903 0.00089 0.64173 0.00125 | 0.63969 0.00086 39228
182 5031 | 0.63303 0.63584 0.63198 | 0.63962 0.00097
0.63901 0.00089 0.64165 0.00124 | 0.63965 0.00085 39549

183 5105 | 0.63572 0.63446 0.64933 | 0.63959 0.00096
0.63897 0.00088 0.64171 0.00123 | 0.63964 0.00084 39781
184 5026 | 0.64707 0.63933 0.65424 | 0.63965 0.00096
0.63897 0.00087 0.64180 0.00122 | 0.63966 0.00084 39975
185 5092 | 0.63375 0.62050 0.65693 | 0.63960 0.00095
0.63884 0.00088 0.64192 0.00122 | 0.63962 0.00084 39675
186 4842 | 0.63655 0.63836 0.66594 | 0.63958 0.00094
0.63883 0.00087 0.64209 0.00122 | 0.63966 0.00084 39709
187 5046 | 0.64347 0.63756 0.62988 | 0.63961 0.00094
0.63882 0.00087 0.64200 0.00122 | 0.63962 0.00083 39990
188 5032 | 0.64099 0.64007 0.64851 | 0.63962 0.00093
0.63883 0.00086 0.64205 0.00121 | 0.63963 0.00082 40241
189 4939 | 0.64097 0.63632 0.64016 | 0.63963 0.00092
0.63882 0.00085 0.64204 0.00120 | 0.63962 0.00082 40495
190 5001 | 0.63366 0.63177 0.63004 | 0.63959 0.00092
0.63877 0.00085 0.64195 0.00120 | 0.63955 0.00082 40577
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191 4945 | 0.65370 0.65502 0.64917 | 0.63969 0.00092
0.63888 0.00085 0.64200 0.00119 | 0.63967 0.00082 40349
192 5181 | 0.64618 0.64217 0.64744 | 0.63973 0.00091
0.63890 0.00085 0.64204 0.00118 | 0.63969 0.00081 40531
193 4971 | 0.63926 0.63897 0.64653 | 0.63973 0.00091
0.63890 0.00084 0.64207 0.00117 | 0.63970 0.00081 40768
194 4928 | 0.63917 0.63832 0.63951 | 0.63973 0.00090
0.63890 0.00083 0.64205 0.00117 | 0.63969 0.00080 41070
195 4993 | 0.65803 0.65390 0.66281 | 0.63985 0.00090
0.63900 0.00083 0.64220 0.00117 | 0.63979 0.00080 40431
196 5159 | 0.64731 0.65121 0.64211 | 0.63990 0.00090
0.63909 0.00083 0.64220 0.00116 | 0.63987 0.00080 40559
197 4894 | 0.65314 0.65826 0.64769 | 0.63999 0.00090
0.63922 0.00084 0.64223 0.00115 | 0.64000 0.00080 40213
198 5039 | 0.65771 0.65100 0.65078 | 0.64011 0.00090
0.63930 0.00084 0.64229 0.00114 | 0.64007 0.00080 40150
199 5055 | 0.64503 0.64216 0.63905 | 0.64015 0.00089
0.63932 0.00083 0.64227 0.00114 | 0.64008 0.00079 40424
200 4897 | 0.65152 0.64589 0.63905 | 0.64022 0.00089
0.63936 0.00083 0.64225 0.00113 | 0.64010 0.00079 40681
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201 5071 | 0.62154 0.62019 0.62111 | 0.64010 0.00089
0.63923 0.00083 0.64211 0.00113 | 0.63997 0.00079 39713
202 4812 | 0.65995 0.64777 0.67044 | 0.64023 0.00090
0.63929 0.00083 0.64229 0.00114 | 0.64001 0.00080 39327
203 5324 | 0.63477 0.63415 0.62873 | 0.64019 0.00089
0.63926 0.00082 0.64221 0.00114 | 0.63996 0.00079 39430
204 4834 | 0.65678 0.66727 0.64572 | 0.64030 0.00089
0.63944 0.00084 0.64223 0.00113 | 0.64017 0.00080 38639
205 5176 | 0.65800 0.65617 0.66127 | 0.64041 0.00089
0.63955 0.00084 0.64235 0.00113 | 0.64028 0.00080 38064
206 5023 | 0.63947 0.64588 0.63123 | 0.64041 0.00089
0.63959 0.00083 0.64228 0.00112 | 0.64030 0.00079 38466
207 4825 | 0.63354 0.63089 0.63466 | 0.64036 0.00088
0.63953 0.00083 0.64223 0.00112 | 0.64024 0.00079 38516

208	4924	0.63244	0.62986	0.62976	0.64031	0.00088	0.63947	0.00083	0.64215	0.00111	0.64018	0.00079	38473
209	5006	0.64287	0.64796	0.63441	0.64033	0.00087	0.63952	0.00082	0.64210	0.00111	0.64021	0.00078	38846
210	5123	0.63088	0.62308	0.63467	0.64027	0.00087	0.63942	0.00082	0.64206	0.00110	0.64014	0.00079	38469
211	4889	0.64446	0.64687	0.63333	0.64030	0.00086	0.63947	0.00082	0.64200	0.00109	0.64016	0.00078	38840
212	5079	0.66163	0.65711	0.65740	0.64043	0.00087	0.63958	0.00082	0.64210	0.00109	0.64026	0.00078	38391
213	5112	0.63693	0.65088	0.66513	0.64041	0.00086	0.63964	0.00082	0.64224	0.00109	0.64036	0.00078	38134
214	4876	0.63286	0.63891	0.62130	0.64036	0.00086	0.63964	0.00082	0.64211	0.00110	0.64031	0.00078	38445
215	4945	0.63385	0.63238	0.62914	0.64032	0.00086	0.63960	0.00081	0.64203	0.00109	0.64026	0.00077	38513
216	5019	0.63315	0.63271	0.63234	0.64028	0.00085	0.63955	0.00081	0.64198	0.00109	0.64021	0.00077	38585
217	5028	0.63807	0.63257	0.63634	0.64027	0.00085	0.63951	0.00080	0.64194	0.00108	0.64017	0.00077	38649
218	5055	0.64778	0.65422	0.64250	0.64031	0.00084	0.63960	0.00080	0.64194	0.00107	0.64025	0.00076	38723
219	5112	0.63582	0.63449	0.64393	0.64028	0.00084	0.63957	0.00080	0.64196	0.00107	0.64024	0.00076	38865
220	4910	0.64374	0.64311	0.65173	0.64030	0.00083	0.63959	0.00080	0.64201	0.00106	0.64027	0.00076	39028
221	5029	0.63432	0.63119	0.62415	0.64027	0.00083	0.63954	0.00079	0.64191	0.00106	0.64020	0.00076	38993
222	4897	0.63046	0.62726	0.63515	0.64021	0.00083	0.63947	0.00079	0.64187	0.00106	0.64014	0.00075	38877
223	5001	0.66686	0.65919	0.64454	0.64037	0.00084	0.63958	0.00079	0.64189	0.00105	0.64023	0.00076	38593
224	5324	0.64733	0.64409	0.64829	0.64041	0.00083	0.63961	0.00079	0.64192	0.00104	0.64026	0.00075	38708
225	4831	0.65251	0.64054	0.65456	0.64048	0.00083	0.63962	0.00079	0.64199	0.00104	0.64028	0.00075	38776
226	5000	0.65062	0.64299	0.62742	0.64053	0.00083	0.63964	0.00078	0.64191	0.00104	0.64027	0.00074	38985
227	4953	0.64838	0.64192	0.66012	0.64058	0.00082	0.63965	0.00078	0.64201	0.00104	0.64029	0.00074	38995
228	4977	0.62434	0.62931	0.61311	0.64049	0.00082	0.63959	0.00078	0.64185	0.00104	0.64018	0.00074	38762
229	4800	0.65486	0.65197	0.64178	0.64057	0.00082	0.63966	0.00077	0.64185	0.00104	0.64024	0.00074	38830
230	5207	0.62862	0.63041	0.61899	0.64050	0.00082	0.63961	0.00077	0.64172	0.00104	0.64015	0.00074	38695
231	4784	0.65329	0.65889	0.64482	0.64057	0.00082	0.63971	0.00077	0.64174	0.00104	0.64026	0.00074	38536

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   232        5164 | 0.66451  0.65614  0.66101  |  0.64070 0.00083
0.63980 0.00078   0.64185 0.00104  |  0.64033 0.00074     38042
   233        5058 | 0.64766  0.66353  0.66646  |  0.64074 0.00082
0.63993 0.00078   0.64198 0.00104  |  0.64051 0.00075     37218
   234        4868 | 0.63970  0.64372  0.66359  |  0.64074 0.00082
0.63995 0.00078   0.64210 0.00104  |  0.64055 0.00075     37261
   235        5005 | 0.61799  0.61692  0.61047  |  0.64061 0.00082
0.63983 0.00078   0.64193 0.00105  |  0.64040 0.00075     36193
   236        4844 | 0.62800  0.62901  0.63721  |  0.64054 0.00082
0.63977 0.00078   0.64190 0.00104  |  0.64035 0.00075     36220
   237        5086 | 0.64146  0.65349  0.64470  |  0.64055 0.00082
0.63985 0.00078   0.64192 0.00104  |  0.64042 0.00075     36377
   238        5103 | 0.64404  0.64433  0.63883  |  0.64057 0.00081
0.63987 0.00078   0.64190 0.00103  |  0.64044 0.00074     36613
   239        5030 | 0.65854  0.66079  0.65006  |  0.64066 0.00081
0.63998 0.00078   0.64195 0.00103  |  0.64054 0.00075     36328
   240        5075 | 0.64386  0.64788  0.62802  |  0.64068 0.00081
0.64002 0.00078   0.64187 0.00102  |  0.64056 0.00074     36628
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   241        4911 | 0.64667  0.64540  0.65782  |  0.64071 0.00081
0.64005 0.00077   0.64196 0.00102  |  0.64060 0.00074     36663
   242        5035 | 0.62817  0.63836  0.61782  |  0.64065 0.00081
0.64004 0.00077   0.64183 0.00102  |  0.64054 0.00073     36847
   243        4909 | 0.61935  0.62361  0.59332  |  0.64054 0.00081
0.63996 0.00077   0.64158 0.00105  |  0.64038 0.00074     36017
   244        4937 | 0.65710  0.65422  0.65380  |  0.64062 0.00081
0.64003 0.00077   0.64164 0.00105  |  0.64045 0.00074     35880
   245        5305 | 0.65153  0.64868  0.65129  |  0.64068 0.00081
0.64007 0.00077   0.64169 0.00104  |  0.64049 0.00074     35920
   246        4942 | 0.61675  0.62684  0.64371  |  0.64055 0.00081
0.64001 0.00077   0.64170 0.00104  |  0.64044 0.00074     35936
   247        4703 | 0.65544  0.64864  0.65500  |  0.64063 0.00081
0.64005 0.00076   0.64177 0.00103  |  0.64048 0.00074     35944
   248        5370 | 0.64635  0.65049  0.63898  |  0.64066 0.00081
0.64010 0.00076   0.64175 0.00103  |  0.64053 0.00073     36110
   249        4896 | 0.61467  0.63408  0.62626  |  0.64053 0.00081
0.64007 0.00076   0.64168 0.00103  |  0.64047 0.00073     36262
   250        4730 | 0.64604  0.64691  0.65133  |  0.64056 0.00081
0.64011 0.00076   0.64172 0.00102  |  0.64051 0.00073     36369
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   251        5281 | 0.65785  0.66049  0.65551  |  0.64064 0.00081
0.64021 0.00076   0.64179 0.00102  |  0.64061 0.00073     35992
   252        5080 | 0.63761  0.64211  0.63858  |  0.64063 0.00081
0.64022 0.00076   0.64178 0.00101  |  0.64061 0.00072     36210
   253        4862 | 0.62302  0.62707  0.63204  |  0.64054 0.00081
0.64015 0.00075   0.64173 0.00101  |  0.64055 0.00072     36131
   254        4845 | 0.62280  0.62171  0.61581  |  0.64045 0.00081
0.64006 0.00076   0.64160 0.00101  |  0.64045 0.00073     35633
   255        5021 | 0.62008  0.61909  0.64136  |  0.64035 0.00081
0.63996 0.00076   0.64160 0.00101  |  0.64038 0.00073     35325
   256        5035 | 0.63554  0.63359  0.64784  |  0.64033 0.00081
0.63993 0.00076   0.64163 0.00100  |  0.64037 0.00072     35445
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   257        5106 | 0.63187  0.63927  0.62203  |  0.64029 0.00080
0.63993 0.00075   0.64154 0.00100  |  0.64034 0.00072     35642
   258        4981 | 0.65166  0.63923  0.67335  |  0.64034 0.00080
0.63992 0.00075   0.64169 0.00101  |  0.64036 0.00072     35653
   259        5173 | 0.64054  0.64420  0.63204  |  0.64035 0.00080
0.63994 0.00075   0.64164 0.00101  |  0.64037 0.00072     35887
   260        4932 | 0.63251  0.63202  0.63639  |  0.64031 0.00080
0.63991 0.00074   0.64162 0.00100  |  0.64033 0.00071     35970
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   261        4925 | 0.63072  0.63883  0.63904  |  0.64026 0.00079
0.63990 0.00074   0.64161 0.00100  |  0.64033 0.00071     36166
   262        5003 | 0.64559  0.65132  0.65255  |  0.64029 0.00079
0.63995 0.00074   0.64166 0.00099  |  0.64038 0.00071     36134
   263        5131 | 0.65375  0.65165  0.65004  |  0.64035 0.00079
0.64001 0.00074   0.64170 0.00099  |  0.64043 0.00071     36142
   264        5094 | 0.64357  0.63707  0.62512  |  0.64037 0.00078
0.64000 0.00073   0.64162 0.00099  |  0.64040 0.00070     36284
   265        4931 | 0.62810  0.64078  0.62357  |  0.64031 0.00078
0.64000 0.00073   0.64154 0.00099  |  0.64038 0.00070     36505
   266        4884 | 0.64140  0.64648  0.64435  |  0.64031 0.00078
0.64003 0.00073   0.64155 0.00098  |  0.64041 0.00070     36661
   267        5135 | 0.65309  0.65283  0.65405  |  0.64037 0.00078
0.64009 0.00073   0.64161 0.00098  |  0.64046 0.00070     36582
   268        5088 | 0.62975  0.63498  0.63443  |  0.64032 0.00078
0.64006 0.00072   0.64157 0.00098  |  0.64044 0.00069     36715
   269        4836 | 0.65115  0.65136  0.65051  |  0.64037 0.00077
0.64012 0.00072   0.64161 0.00097  |  0.64049 0.00069     36733
   270        5194 | 0.64985  0.65177  0.64429  |  0.64042 0.00077
0.64017 0.00072   0.64163 0.00097  |  0.64053 0.00069     36804
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   271        5000 | 0.62329  0.62689  0.65119  |  0.64034 0.00077
0.64011 0.00072   0.64167 0.00097  |  0.64051 0.00069     36833
   272        4846 | 0.63492  0.64077  0.63246  |  0.64031 0.00077
0.64011 0.00072   0.64163 0.00096  |  0.64050 0.00069     37039
   273        5061 | 0.63705  0.63390  0.61914  |  0.64030 0.00077
0.64008 0.00071   0.64153 0.00096  |  0.64045 0.00068     37081
   274        5065 | 0.64804  0.64644  0.66629  |  0.64033 0.00076
0.64011 0.00071   0.64164 0.00096  |  0.64049 0.00068     37028
   275        5105 | 0.63395  0.62966  0.63163  |  0.64031 0.00076
0.64007 0.00071   0.64159 0.00096  |  0.64044 0.00068     37019
   276        4887 | 0.63099  0.62950  0.62580  |  0.64027 0.00076
0.64002 0.00071   0.64152 0.00096  |  0.64039 0.00068     36981
   277        4945 | 0.64840  0.65001  0.65310  |  0.64030 0.00076
0.64006 0.00071   0.64157 0.00096  |  0.64043 0.00068     36995
   278        5201 | 0.64377  0.64809  0.62348  |  0.64032 0.00075
0.64010 0.00070   0.64150 0.00096  |  0.64044 0.00067     37244
   279        4971 | 0.64259  0.65146  0.64902  |  0.64033 0.00075
0.64015 0.00070   0.64153 0.00095  |  0.64049 0.00067     37268
   280        4996 | 0.64056  0.64387  0.62843  |  0.64033 0.00075
0.64016 0.00070   0.64147 0.00095  |  0.64048 0.00067     37493
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281 4933 | 0.62739 0.62399 0.62723 | 0.64027 0.00074
0.64009 0.00070 0.64141 0.00095 | 0.64042 0.00067 37266
282 4919 | 0.63956 0.64550 0.64268 | 0.64027 0.00074
0.64012 0.00070 0.64142 0.00094 | 0.64043 0.00067 37425
283 5088 | 0.64740 0.65250 0.64894 | 0.64030 0.00074
0.64017 0.00070 0.64145 0.00094 | 0.64048 0.00067 37425
284 5044 | 0.64497 0.65786 0.65648 | 0.64032 0.00074
0.64025 0.00070 0.64151 0.00094 | 0.64055 0.00067 37185
285 5027 | 0.65895 0.64698 0.62897 | 0.64040 0.00074
0.64027 0.00070 0.64146 0.00094 | 0.64056 0.00066 37414
286 5076 | 0.62355 0.62655 0.60755 | 0.64033 0.00074
0.64022 0.00069 0.64131 0.00094 | 0.64048 0.00067 37073
287 4750 | 0.65383 0.65411 0.66099 | 0.64038 0.00074
0.64028 0.00069 0.64140 0.00094 | 0.64054 0.00067 36906
288 5225 | 0.65029 0.65948 0.64702 | 0.64043 0.00073
0.64036 0.00070 0.64142 0.00094 | 0.64061 0.00067 36752
289 5002 | 0.63596 0.63411 0.63855 | 0.64041 0.00073
0.64033 0.00069 0.64141 0.00093 | 0.64058 0.00066 36868
290 4866 | 0.62830 0.63428 0.64167 | 0.64036 0.00073
0.64030 0.00069 0.64141 0.00093 | 0.64056 0.00066 36975
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291 4929 | 0.64838 0.63987 0.65450 | 0.64039 0.00073
0.64030 0.00069 0.64146 0.00093 | 0.64058 0.00066 37116
292 5184 | 0.64818 0.64115 0.64798 | 0.64042 0.00073
0.64031 0.00069 0.64149 0.00093 | 0.64059 0.00066 37259
293 4984 | 0.64496 0.63836 0.65900 | 0.64044 0.00072
0.64030 0.00068 0.64156 0.00092 | 0.64060 0.00065 37360
294 4949 | 0.64649 0.64206 0.63802 | 0.64046 0.00072
0.64031 0.00068 0.64155 0.00092 | 0.64060 0.00065 37520
295 5015 | 0.63886 0.65370 0.63383 | 0.64046 0.00072
0.64036 0.00068 0.64152 0.00092 | 0.64064 0.00065 37625
296 4976 | 0.65747 0.64826 0.65547 | 0.64053 0.00072
0.64039 0.00068 0.64157 0.00092 | 0.64068 0.00065 37625
297 5159 | 0.64907 0.65910 0.64964 | 0.64056 0.00072
0.64047 0.00068 0.64161 0.00091 | 0.64074 0.00065 37437
298 4970 | 0.63770 0.63251 0.63131 | 0.64055 0.00071
0.64044 0.00068 0.64157 0.00091 | 0.64071 0.00065 37488
299 4900 | 0.64756 0.64665 0.63241 | 0.64058 0.00071
0.64046 0.00067 0.64153 0.00091 | 0.64072 0.00064 37672
300 5057 | 0.63166 0.63436 0.62998 | 0.64054 0.00071
0.64044 0.00067 0.64148 0.00090 | 0.64069 0.00064 37750
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301 4865 | 0.63997 0.64904 0.64923 | 0.64054 0.00071
0.64047 0.00067 0.64151 0.00090 | 0.64072 0.00064 37836
302 5068 | 0.64533 0.64206 0.64904 | 0.64056 0.00070
0.64048 0.00067 0.64154 0.00090 | 0.64073 0.00064 37978
303 5056 | 0.64600 0.64066 0.63077 | 0.64058 0.00070
0.64048 0.00067 0.64150 0.00090 | 0.64072 0.00064 38163
304 4985 | 0.63318 0.62078 0.64347 | 0.64055 0.00070
0.64040 0.00067 0.64151 0.00089 | 0.64068 0.00064 38020
305 4907 | 0.63869 0.64004 0.63960 | 0.64054 0.00070
0.64040 0.00066 0.64150 0.00089 | 0.64067 0.00063 38185

306	5038	0.63628	0.63772	0.62486	0.64053	0.00069	0.64039	0.00066	0.64144	0.00089	0.64065	0.00063	38314
307	4985	0.63155	0.63643	0.62781	0.64049	0.00069	0.64037	0.00066	0.64138	0.00089	0.64062	0.00063	38415
308	4944	0.63760	0.64029	0.62800	0.64048	0.00069	0.64037	0.00066	0.64133	0.00088	0.64060	0.00063	38579
309	5035	0.64176	0.63679	0.64508	0.64049	0.00069	0.64036	0.00065	0.64135	0.00088	0.64060	0.00062	38730
310	5046	0.65112	0.64980	0.64223	0.64053	0.00069	0.64040	0.00065	0.64135	0.00088	0.64063	0.00062	38829
311	5102	0.63297	0.63829	0.62495	0.64050	0.00068	0.64039	0.00065	0.64129	0.00088	0.64061	0.00062	38950
312	4845	0.63125	0.63672	0.61688	0.64046	0.00068	0.64037	0.00065	0.64119	0.00088	0.64057	0.00062	39016
313	5010	0.64415	0.64588	0.64308	0.64048	0.00068	0.64039	0.00065	0.64120	0.00087	0.64058	0.00062	39133
314	5099	0.64196	0.65473	0.64178	0.64048	0.00068	0.64045	0.00065	0.64120	0.00087	0.64062	0.00061	39149
315	5027	0.64813	0.64546	0.66340	0.64051	0.00067	0.64047	0.00064	0.64129	0.00087	0.64065	0.00061	39146
316	5047	0.64580	0.64972	0.63029	0.64053	0.00067	0.64050	0.00064	0.64124	0.00087	0.64067	0.00061	39293
317	5003	0.62345	0.62492	0.63641	0.64047	0.00067	0.64044	0.00064	0.64123	0.00087	0.64063	0.00061	39158
318	4861	0.64408	0.64631	0.62413	0.64048	0.00067	0.64047	0.00064	0.64116	0.00087	0.64063	0.00061	39351
319	5167	0.65797	0.65361	0.64103	0.64055	0.00067	0.64051	0.00064	0.64116	0.00086	0.64067	0.00061	39373
320	5108	0.63276	0.64495	0.63388	0.64052	0.00067	0.64053	0.00064	0.64114	0.00086	0.64067	0.00061	39531
321	4828	0.63306	0.63409	0.61149	0.64049	0.00067	0.64051	0.00064	0.64103	0.00086	0.64062	0.00060	39496
322	4992	0.63108	0.64004	0.63924	0.64046	0.00067	0.64051	0.00063	0.64102	0.00086	0.64062	0.00060	39642
323	5004	0.64786	0.65217	0.64512	0.64048	0.00066	0.64055	0.00063	0.64103	0.00086	0.64065	0.00060	39681
324	5185	0.62689	0.62495	0.59746	0.64043	0.00066	0.64049	0.00063	0.64088	0.00087	0.64056	0.00060	39168
325	4794	0.65218	0.64577	0.65963	0.64048	0.00066	0.64051	0.00063	0.64094	0.00087	0.64060	0.00060	39220
326	5179	0.64552	0.65248	0.65723	0.64049	0.00066	0.64055	0.00063	0.64100	0.00087	0.64064	0.00060	39168
327	4962	0.64893	0.64206	0.62914	0.64052	0.00066	0.64056	0.00063	0.64096	0.00086	0.64064	0.00060	39346
328	5023	0.64703	0.63907	0.63229	0.64055	0.00066	0.64055	0.00063	0.64093	0.00086	0.64063	0.00060	39509
329	4928	0.64901	0.65353	0.65291	0.64058	0.00065	0.64060	0.00063	0.64097	0.00086	0.64067	0.00060	39467
330	5019	0.64971	0.64040	0.63815	0.64061	0.00065	0.64060	0.00062	0.64096	0.00086	0.64068	0.00059	39631

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331 5042 | 0.64336 0.64611 0.64415 | 0.64062 0.00065
0.64062 0.00062 0.64097 0.00085 | 0.64069 0.00059 39760
332 4947 | 0.62716 0.62708 0.64196 | 0.64057 0.00065
0.64057 0.00062 0.64098 0.00085 | 0.64066 0.00059 39734
333 4888 | 0.64687 0.63852 0.65288 | 0.64060 0.00065
0.64056 0.00062 0.64102 0.00085 | 0.64066 0.00059 39878
334 5169 | 0.63163 0.63579 0.63974 | 0.64056 0.00065
0.64055 0.00062 0.64101 0.00085 | 0.64065 0.00059 39985
335 4897 | 0.63958 0.63494 0.63631 | 0.64056 0.00064
0.64053 0.00061 0.64100 0.00084 | 0.64063 0.00059 40098
336 5039 | 0.63948 0.63192 0.64598 | 0.64056 0.00064
0.64050 0.00061 0.64101 0.00084 | 0.64061 0.00058 40203
337 4976 | 0.63826 0.63213 0.63078 | 0.64055 0.00064
0.64047 0.00061 0.64098 0.00084 | 0.64059 0.00058 40265
338 4996 | 0.63267 0.63235 0.62136 | 0.64052 0.00064
0.64044 0.00061 0.64091 0.00084 | 0.64055 0.00058 40257
339 4913 | 0.65526 0.65950 0.64917 | 0.64057 0.00064
0.64051 0.00061 0.64094 0.00084 | 0.64061 0.00058 40059
340 5217 | 0.63757 0.63285 0.63242 | 0.64056 0.00064
0.64048 0.00061 0.64091 0.00083 | 0.64058 0.00058 40124

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341 4860 | 0.66233 0.65533 0.64562 | 0.64064 0.00064
0.64053 0.00061 0.64093 0.00083 | 0.64063 0.00058 40021
342 5189 | 0.64898 0.64343 0.62251 | 0.64067 0.00064
0.64054 0.00061 0.64086 0.00083 | 0.64063 0.00058 40172
343 4894 | 0.64004 0.64473 0.64074 | 0.64066 0.00064
0.64055 0.00061 0.64086 0.00083 | 0.64064 0.00058 40319
344 4957 | 0.65226 0.65093 0.66300 | 0.64070 0.00063
0.64059 0.00061 0.64094 0.00083 | 0.64068 0.00058 40229
345 5070 | 0.62990 0.63332 0.61790 | 0.64067 0.00063
0.64057 0.00060 0.64086 0.00083 | 0.64064 0.00058 40198
346 4834 | 0.65083 0.64247 0.62493 | 0.64070 0.00063
0.64057 0.00060 0.64081 0.00083 | 0.64064 0.00057 40348
347 5202 | 0.63447 0.63580 0.62815 | 0.64068 0.00063
0.64056 0.00060 0.64076 0.00083 | 0.64062 0.00057 40426
348 4859 | 0.63725 0.64187 0.65254 | 0.64067 0.00063
0.64056 0.00060 0.64080 0.00082 | 0.64063 0.00057 40568
349 4995 | 0.63632 0.64829 0.62064 | 0.64065 0.00063
0.64059 0.00060 0.64074 0.00082 | 0.64063 0.00057 40728
350 4980 | 0.63525 0.63970 0.63109 | 0.64064 0.00062
0.64058 0.00059 0.64070 0.00082 | 0.64062 0.00057 40859

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351 4970 | 0.64945 0.63755 0.65713 | 0.64066 0.00062
0.64057 0.00059 0.64076 0.00082 | 0.64062 0.00056 40987
352 5098 | 0.62925 0.62586 0.65289 | 0.64063 0.00062
0.64052 0.00059 0.64080 0.00082 | 0.64060 0.00056 41008
353 4834 | 0.63248 0.63873 0.61659 | 0.64060 0.00062
0.64052 0.00059 0.64072 0.00082 | 0.64057 0.00056 41083
354 5009 | 0.63912 0.64570 0.63583 | 0.64059 0.00062
0.64054 0.00059 0.64070 0.00082 | 0.64058 0.00056 41228

355 5074 | 0.63138 0.63440 0.63511 | 0.64056 0.00062
0.64052 0.00059 0.64068 0.00082 | 0.64056 0.00056 41306
356 4924 | 0.64473 0.64635 0.61865 | 0.64058 0.00062
0.64053 0.00059 0.64061 0.00082 | 0.64056 0.00056 41460
357 5038 | 0.65566 0.64704 0.65798 | 0.64063 0.00062
0.64056 0.00058 0.64067 0.00082 | 0.64059 0.00056 41465
358 5057 | 0.63593 0.63822 0.63086 | 0.64061 0.00061
0.64055 0.00058 0.64064 0.00081 | 0.64058 0.00055 41581
359 4829 | 0.64657 0.65448 0.67266 | 0.64063 0.00061
0.64059 0.00058 0.64074 0.00082 | 0.64063 0.00056 41366
360 5128 | 0.63565 0.64091 0.61911 | 0.64062 0.00061
0.64059 0.00058 0.64067 0.00082 | 0.64061 0.00055 41473
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361 4921 | 0.65119 0.65264 0.64445 | 0.64065 0.00061
0.64063 0.00058 0.64068 0.00082 | 0.64065 0.00055 41481
362 5127 | 0.62688 0.62245 0.61900 | 0.64061 0.00061
0.64057 0.00058 0.64061 0.00082 | 0.64059 0.00055 41147
363 4826 | 0.62730 0.63182 0.64936 | 0.64056 0.00061
0.64055 0.00058 0.64064 0.00081 | 0.64057 0.00055 41232
364 5015 | 0.65902 0.65874 0.66549 | 0.64062 0.00061
0.64060 0.00058 0.64072 0.00081 | 0.64063 0.00055 40863
365 5277 | 0.63778 0.63076 0.62448 | 0.64061 0.00061
0.64057 0.00058 0.64067 0.00081 | 0.64060 0.00055 40858
366 4857 | 0.66291 0.66554 0.63720 | 0.64068 0.00061
0.64065 0.00058 0.64066 0.00081 | 0.64066 0.00056 40537
367 5196 | 0.64027 0.64291 0.62465 | 0.64068 0.00061
0.64066 0.00058 0.64061 0.00081 | 0.64065 0.00055 40666
368 4791 | 0.64311 0.63995 0.66339 | 0.64069 0.00061
0.64066 0.00058 0.64068 0.00081 | 0.64067 0.00055 40784
369 5045 | 0.65071 0.65697 0.64329 | 0.64072 0.00060
0.64071 0.00058 0.64069 0.00081 | 0.64071 0.00055 40722
370 5064 | 0.65715 0.65383 0.64556 | 0.64077 0.00060
0.64075 0.00058 0.64070 0.00081 | 0.64074 0.00055 40674
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371 5076 | 0.63418 0.64042 0.63089 | 0.64075 0.00060
0.64075 0.00058 0.64067 0.00080 | 0.64073 0.00055 40792
372 4796 | 0.64051 0.64314 0.64407 | 0.64075 0.00060
0.64076 0.00058 0.64068 0.00080 | 0.64074 0.00055 40923
373 5027 | 0.64181 0.63348 0.63931 | 0.64075 0.00060
0.64073 0.00058 0.64068 0.00080 | 0.64073 0.00055 41023
374 5035 | 0.65096 0.65074 0.64895 | 0.64079 0.00060
0.64076 0.00057 0.64070 0.00080 | 0.64076 0.00055 41040
375 5093 | 0.63421 0.63634 0.63847 | 0.64077 0.00060
0.64075 0.00057 0.64070 0.00079 | 0.64074 0.00054 41140
376 4920 | 0.63637 0.63123 0.64143 | 0.64075 0.00060
0.64072 0.00057 0.64070 0.00079 | 0.64072 0.00054 41213
377 4973 | 0.62986 0.63433 0.64216 | 0.64072 0.00059
0.64070 0.00057 0.64070 0.00079 | 0.64071 0.00054 41304
378 4976 | 0.65210 0.65579 0.65395 | 0.64075 0.00059
0.64075 0.00057 0.64074 0.00079 | 0.64075 0.00054 41190
379 5167 | 0.62217 0.62461 0.61579 | 0.64070 0.00059
0.64070 0.00057 0.64067 0.00079 | 0.64069 0.00054 40865

380 4762 | 0.64936 0.64481 0.65261 | 0.64072 0.00059
0.64071 0.00057 0.64070 0.00079 | 0.64071 0.00054 40951
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381 5208 | 0.65817 0.66635 0.65119 | 0.64078 0.00059
0.64079 0.00057 0.64074 0.00079 | 0.64078 0.00054 40528
382 5054 | 0.64344 0.63850 0.65105 | 0.64078 0.00059
0.64078 0.00057 0.64077 0.00078 | 0.64078 0.00054 40656
383 4869 | 0.63764 0.64351 0.63477 | 0.64077 0.00059
0.64079 0.00057 0.64075 0.00078 | 0.64078 0.00054 40790
384 4955 | 0.61741 0.61730 0.61323 | 0.64070 0.00059
0.64072 0.00057 0.64067 0.00078 | 0.64071 0.00054 40166
385 4816 | 0.64971 0.64364 0.62310 | 0.64073 0.00059
0.64073 0.00057 0.64061 0.00078 | 0.64071 0.00054 40295
386 5234 | 0.62973 0.63388 0.62495 | 0.64070 0.00059
0.64071 0.00057 0.64057 0.00078 | 0.64068 0.00054 40300
387 4821 | 0.63106 0.62687 0.62958 | 0.64067 0.00059
0.64067 0.00057 0.64053 0.00078 | 0.64064 0.00054 40231
388 5005 | 0.61653 0.62521 0.61982 | 0.64060 0.00059
0.64062 0.00057 0.64047 0.00078 | 0.64059 0.00054 39944
389 4892 | 0.63894 0.63708 0.64352 | 0.64059 0.00059
0.64061 0.00057 0.64048 0.00078 | 0.64058 0.00054 40067
390 5249 | 0.64321 0.64533 0.64026 | 0.64060 0.00059
0.64062 0.00057 0.64048 0.00078 | 0.64059 0.00054 40175
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391 5033 | 0.64811 0.64894 0.64775 | 0.64062 0.00059
0.64065 0.00056 0.64050 0.00077 | 0.64061 0.00054 40232
392 5018 | 0.64755 0.64514 0.64943 | 0.64064 0.00059
0.64066 0.00056 0.64053 0.00077 | 0.64063 0.00054 40320
393 4942 | 0.64870 0.64826 0.64750 | 0.64067 0.00058
0.64068 0.00056 0.64055 0.00077 | 0.64065 0.00054 40380
394 5012 | 0.63193 0.62960 0.65274 | 0.64064 0.00058
0.64065 0.00056 0.64059 0.00077 | 0.64064 0.00053 40457
395 4907 | 0.60878 0.61434 0.63497 | 0.64055 0.00059
0.64058 0.00056 0.64057 0.00077 | 0.64057 0.00054 39940
396 4770 | 0.63856 0.63956 0.65850 | 0.64054 0.00059
0.64057 0.00056 0.64062 0.00077 | 0.64058 0.00054 40058
397 5261 | 0.64312 0.64272 0.64954 | 0.64055 0.00059
0.64058 0.00056 0.64065 0.00077 | 0.64059 0.00053 40164
398 5045 | 0.62645 0.62744 0.65293 | 0.64051 0.00059
0.64054 0.00056 0.64068 0.00076 | 0.64057 0.00053 40202
399 4866 | 0.66299 0.65984 0.64603 | 0.64057 0.00059
0.64060 0.00056 0.64070 0.00076 | 0.64062 0.00053 40018
400 5339 | 0.62984 0.62777 0.62732 | 0.64054 0.00059
0.64056 0.00056 0.64066 0.00076 | 0.64058 0.00053 39937
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401 4748 | 0.66602 0.65623 0.66672 | 0.64062 0.00059
0.64060 0.00056 0.64073 0.00076 | 0.64063 0.00053 39650
402 5290 | 0.61913 0.62350 0.61439 | 0.64056 0.00059
0.64056 0.00056 0.64066 0.00076 | 0.64058 0.00054 39314
403 4644 | 0.63670 0.63240 0.63798 | 0.64054 0.00059
0.64053 0.00056 0.64065 0.00076 | 0.64056 0.00053 39389

404 5131 | 0.65685 0.65533 0.67725 | 0.64059 0.00059
0.64057 0.00056 0.64075 0.00077 | 0.64061 0.00054 39085
405 5209 | 0.65499 0.65240 0.65095 | 0.64063 0.00059
0.64061 0.00056 0.64078 0.00076 | 0.64065 0.00054 39055
406 4991 | 0.64263 0.64669 0.63419 | 0.64064 0.00059
0.64063 0.00056 0.64076 0.00076 | 0.64066 0.00053 39170
407 4877 | 0.65543 0.65180 0.62374 | 0.64068 0.00059
0.64066 0.00056 0.64072 0.00076 | 0.64067 0.00053 39262
408 5046 | 0.64459 0.64487 0.65269 | 0.64069 0.00059
0.64067 0.00056 0.64075 0.00076 | 0.64069 0.00053 39347
409 4891 | 0.64677 0.64055 0.64917 | 0.64071 0.00058
0.64067 0.00056 0.64077 0.00076 | 0.64070 0.00053 39457
410 5011 | 0.63738 0.64518 0.63105 | 0.64070 0.00058
0.64068 0.00055 0.64075 0.00076 | 0.64070 0.00053 39575
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411 4906 | 0.63267 0.63514 0.65393 | 0.64067 0.00058
0.64066 0.00055 0.64078 0.00076 | 0.64069 0.00053 39684
412 4937 | 0.64890 0.64350 0.65815 | 0.64070 0.00058
0.64067 0.00055 0.64083 0.00076 | 0.64071 0.00053 39752
413 5118 | 0.66355 0.65846 0.65301 | 0.64076 0.00058
0.64072 0.00055 0.64086 0.00075 | 0.64076 0.00053 39556
414 5099 | 0.65096 0.64772 0.66780 | 0.64079 0.00058
0.64074 0.00055 0.64094 0.00076 | 0.64079 0.00053 39527
415 4867 | 0.63453 0.63363 0.63273 | 0.64077 0.00058
0.64072 0.00055 0.64092 0.00075 | 0.64077 0.00053 39581
416 4868 | 0.64529 0.64470 0.62711 | 0.64078 0.00058
0.64073 0.00055 0.64088 0.00075 | 0.64077 0.00052 39702
417 5112 | 0.63333 0.62690 0.63152 | 0.64076 0.00058
0.64069 0.00055 0.64085 0.00075 | 0.64074 0.00052 39643
418 4881 | 0.63848 0.65669 0.60114 | 0.64076 0.00058
0.64074 0.00055 0.64074 0.00076 | 0.64074 0.00052 39767
419 5025 | 0.62729 0.62282 0.63557 | 0.64072 0.00058
0.64069 0.00055 0.64073 0.00076 | 0.64070 0.00052 39639
420 4898 | 0.62948 0.62454 0.64355 | 0.64069 0.00057
0.64065 0.00055 0.64074 0.00075 | 0.64067 0.00052 39607
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421 5048 | 0.63591 0.63413 0.64700 | 0.64068 0.00057
0.64063 0.00055 0.64076 0.00075 | 0.64066 0.00052 39702
422 5032 | 0.65490 0.65011 0.64798 | 0.64072 0.00057
0.64065 0.00055 0.64077 0.00075 | 0.64069 0.00052 39722
423 5179 | 0.63269 0.63276 0.65358 | 0.64069 0.00057
0.64063 0.00055 0.64081 0.00075 | 0.64068 0.00052 39815
424 4819 | 0.63837 0.63592 0.66538 | 0.64069 0.00057
0.64062 0.00054 0.64087 0.00075 | 0.64069 0.00052 39919
425 5057 | 0.63599 0.63453 0.62257 | 0.64068 0.00057
0.64060 0.00054 0.64083 0.00075 | 0.64066 0.00052 39945
426 4960 | 0.65188 0.64687 0.63196 | 0.64071 0.00057
0.64062 0.00054 0.64080 0.00075 | 0.64067 0.00051 40048
427 5099 | 0.65069 0.64806 0.63743 | 0.64073 0.00057
0.64064 0.00054 0.64079 0.00075 | 0.64069 0.00051 40132
428 4967 | 0.64056 0.63302 0.62128 | 0.64073 0.00057
0.64062 0.00054 0.64074 0.00075 | 0.64066 0.00051 40141

429 4915 | 0.63064 0.63578 0.62626 | 0.64070 0.00057
0.64061 0.00054 0.64070 0.00074 | 0.64064 0.00051 40190
430 4900 | 0.62730 0.64152 0.64125 | 0.64067 0.00056
0.64061 0.00054 0.64070 0.00074 | 0.64064 0.00051 40310
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431 4999 | 0.63800 0.63508 0.64180 | 0.64066 0.00056
0.64060 0.00054 0.64071 0.00074 | 0.64063 0.00051 40404
432 5055 | 0.64606 0.64173 0.63254 | 0.64068 0.00056
0.64060 0.00054 0.64069 0.00074 | 0.64063 0.00051 40514
433 5065 | 0.64216 0.63388 0.63412 | 0.64068 0.00056
0.64058 0.00053 0.64067 0.00074 | 0.64061 0.00051 40583
434 4994 | 0.63891 0.63140 0.64687 | 0.64068 0.00056
0.64056 0.00053 0.64069 0.00074 | 0.64060 0.00051 40662
435 4999 | 0.64013 0.63383 0.65442 | 0.64067 0.00056
0.64054 0.00053 0.64072 0.00073 | 0.64060 0.00050 40767
436 4996 | 0.62231 0.62944 0.63412 | 0.64063 0.00056
0.64051 0.00053 0.64070 0.00073 | 0.64057 0.00050 40746
437 4877 | 0.64654 0.65120 0.63859 | 0.64064 0.00056
0.64054 0.00053 0.64070 0.00073 | 0.64059 0.00050 40813
438 5200 | 0.63789 0.64240 0.63713 | 0.64063 0.00056
0.64054 0.00053 0.64069 0.00073 | 0.64059 0.00050 40924
439 4955 | 0.64454 0.63378 0.65074 | 0.64064 0.00055
0.64053 0.00053 0.64072 0.00073 | 0.64058 0.00050 41024
440 5063 | 0.65184 0.64994 0.65135 | 0.64067 0.00055
0.64055 0.00053 0.64074 0.00073 | 0.64061 0.00050 41032
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441 5091 | 0.64632 0.64469 0.63974 | 0.64069 0.00055
0.64056 0.00053 0.64074 0.00072 | 0.64062 0.00050 41132
442 4960 | 0.63870 0.63707 0.65294 | 0.64068 0.00055
0.64055 0.00053 0.64077 0.00072 | 0.64062 0.00050 41242
443 4921 | 0.64529 0.64373 0.66020 | 0.64069 0.00055
0.64056 0.00052 0.64082 0.00072 | 0.64063 0.00050 41303
444 5046 | 0.63517 0.63381 0.64430 | 0.64068 0.00055
0.64054 0.00052 0.64083 0.00072 | 0.64062 0.00049 41388
445 4957 | 0.63633 0.64152 0.62651 | 0.64067 0.00055
0.64054 0.00052 0.64079 0.00072 | 0.64062 0.00049 41493
446 5048 | 0.65932 0.67175 0.64782 | 0.64072 0.00055
0.64062 0.00053 0.64081 0.00072 | 0.64068 0.00050 41003
447 5181 | 0.62356 0.62391 0.63238 | 0.64067 0.00055
0.64058 0.00053 0.64079 0.00072 | 0.64064 0.00050 40864
448 4709 | 0.63355 0.63809 0.62258 | 0.64066 0.00055
0.64058 0.00053 0.64074 0.00072 | 0.64062 0.00050 40929
449 5050 | 0.65354 0.64593 0.66019 | 0.64069 0.00055
0.64059 0.00052 0.64079 0.00072 | 0.64065 0.00049 40941
450 5180 | 0.66122 0.66343 0.65596 | 0.64074 0.00055
0.64065 0.00053 0.64083 0.00072 | 0.64070 0.00050 40610
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451 5079 | 0.62433 0.62833 0.61775 | 0.64070 0.00055
0.64062 0.00053 0.64077 0.00072 | 0.64066 0.00050 40467
452 4729 | 0.64666 0.64177 0.64446 | 0.64071 0.00055
0.64062 0.00052 0.64078 0.00071 | 0.64067 0.00050 40571

453 5225 | 0.64617 0.65020 0.65456 | 0.64073 0.00055
0.64064 0.00052 0.64082 0.00071 | 0.64069 0.00049 40580
454 4933 | 0.64320 0.64720 0.64216 | 0.64073 0.00054
0.64066 0.00052 0.64082 0.00071 | 0.64070 0.00049 40668
455 4949 | 0.64414 0.64502 0.64750 | 0.64074 0.00054
0.64067 0.00052 0.64084 0.00071 | 0.64072 0.00049 40757
456 4992 | 0.64594 0.63244 0.63940 | 0.64075 0.00054
0.64065 0.00052 0.64083 0.00071 | 0.64070 0.00049 40829
457 5033 | 0.63861 0.62997 0.61477 | 0.64075 0.00054
0.64062 0.00052 0.64077 0.00071 | 0.64067 0.00049 40752
458 4929 | 0.66107 0.66845 0.65095 | 0.64080 0.00054
0.64069 0.00052 0.64079 0.00071 | 0.64073 0.00049 40355
459 5164 | 0.65274 0.65097 0.63984 | 0.64083 0.00054
0.64072 0.00052 0.64079 0.00071 | 0.64075 0.00049 40398
460 4967 | 0.63556 0.63230 0.63955 | 0.64082 0.00054
0.64070 0.00052 0.64079 0.00070 | 0.64074 0.00049 40458

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461 4844 | 0.63903 0.63218 0.64603 | 0.64081 0.00054
0.64067 0.00052 0.64080 0.00070 | 0.64073 0.00049 40539
462 5057 | 0.64250 0.63637 0.63663 | 0.64081 0.00054
0.64066 0.00052 0.64079 0.00070 | 0.64072 0.00049 40625
463 4999 | 0.64640 0.65293 0.64487 | 0.64083 0.00054
0.64069 0.00052 0.64080 0.00070 | 0.64074 0.00049 40654
464 5099 | 0.63354 0.63587 0.64261 | 0.64081 0.00053
0.64068 0.00052 0.64080 0.00070 | 0.64073 0.00049 40741
465 4931 | 0.63053 0.64009 0.64395 | 0.64079 0.00053
0.64068 0.00052 0.64081 0.00070 | 0.64073 0.00049 40849
466 4995 | 0.65527 0.65582 0.65996 | 0.64082 0.00053
0.64072 0.00052 0.64086 0.00070 | 0.64077 0.00049 40708
467 5188 | 0.63223 0.62929 0.63668 | 0.64080 0.00053
0.64069 0.00052 0.64085 0.00069 | 0.64074 0.00049 40715
468 4795 | 0.63520 0.63454 0.64893 | 0.64079 0.00053
0.64067 0.00051 0.64087 0.00069 | 0.64074 0.00048 40809
469 5034 | 0.64561 0.65226 0.63398 | 0.64080 0.00053
0.64070 0.00051 0.64085 0.00069 | 0.64075 0.00048 40884
470 5022 | 0.62972 0.63290 0.62630 | 0.64077 0.00053
0.64068 0.00051 0.64082 0.00069 | 0.64073 0.00048 40885

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471 4856 | 0.64966 0.63487 0.63872 | 0.64079 0.00053
0.64067 0.00051 0.64081 0.00069 | 0.64072 0.00048 40973
472 5142 | 0.65395 0.65228 0.63414 | 0.64082 0.00053
0.64070 0.00051 0.64080 0.00069 | 0.64074 0.00048 41017
473 5005 | 0.63007 0.62443 0.63546 | 0.64080 0.00053
0.64066 0.00051 0.64078 0.00069 | 0.64071 0.00048 40942
474 4830 | 0.62984 0.63455 0.61413 | 0.64077 0.00053
0.64064 0.00051 0.64072 0.00069 | 0.64068 0.00048 40907
475 5031 | 0.63997 0.64703 0.64032 | 0.64077 0.00053
0.64066 0.00051 0.64072 0.00069 | 0.64069 0.00048 41002
476 5093 | 0.62644 0.63610 0.63067 | 0.64074 0.00053
0.64065 0.00051 0.64070 0.00069 | 0.64067 0.00048 41047
477 4874 | 0.64393 0.64169 0.65575 | 0.64074 0.00053
0.64065 0.00051 0.64073 0.00068 | 0.64069 0.00048 41133

478	5129	0.63674	0.64356	0.63747	0.64074	0.00052	0.64066	0.00051	0.64072	0.00068	0.64069	0.00048	41237
479	4916	0.63169	0.63385	0.62752	0.64071	0.00052	0.64064	0.00051	0.64069	0.00068	0.64067	0.00048	41263
480	4965	0.64487	0.64066	0.62248	0.64072	0.00052	0.64064	0.00050	0.64065	0.00068	0.64066	0.00048	41349
481	5071	0.63422	0.63277	0.62176	0.64071	0.00052	0.64062	0.00050	0.64061	0.00068	0.64063	0.00047	41341
482	4869	0.63243	0.62945	0.62734	0.64069	0.00052	0.64060	0.00050	0.64058	0.00068	0.64061	0.00047	41311
483	4942	0.63615	0.63715	0.65557	0.64068	0.00052	0.64059	0.00050	0.64061	0.00068	0.64061	0.00047	41416
484	5031	0.64356	0.63470	0.62815	0.64069	0.00052	0.64058	0.00050	0.64058	0.00068	0.64060	0.00047	41471
485	5042	0.63496	0.63149	0.64241	0.64067	0.00052	0.64056	0.00050	0.64059	0.00068	0.64058	0.00047	41526
486	4939	0.64331	0.63853	0.65149	0.64068	0.00052	0.64055	0.00050	0.64061	0.00068	0.64059	0.00047	41622
487	5104	0.65496	0.65682	0.66196	0.64071	0.00052	0.64059	0.00050	0.64066	0.00068	0.64063	0.00047	41446
488	5097	0.64601	0.64600	0.65712	0.64072	0.00051	0.64060	0.00050	0.64070	0.00068	0.64064	0.00047	41489
489	4953	0.62932	0.63022	0.62113	0.64070	0.00051	0.64058	0.00050	0.64065	0.00068	0.64062	0.00047	41427
490	4850	0.65519	0.64959	0.65162	0.64073	0.00051	0.64060	0.00050	0.64068	0.00067	0.64064	0.00047	41425
491	5174	0.61984	0.63065	0.63347	0.64068	0.00052	0.64058	0.00050	0.64066	0.00067	0.64061	0.00047	41399
492	4726	0.64565	0.64626	0.67644	0.64069	0.00051	0.64059	0.00050	0.64074	0.00068	0.64064	0.00047	41366
493	5205	0.64807	0.65006	0.65849	0.64071	0.00051	0.64061	0.00050	0.64078	0.00068	0.64066	0.00047	41352
494	4993	0.63294	0.61873	0.63481	0.64069	0.00051	0.64056	0.00050	0.64077	0.00068	0.64063	0.00047	41190
495	4869	0.62913	0.63379	0.60334	0.64067	0.00051	0.64054	0.00050	0.64069	0.00068	0.64060	0.00047	41094
496	4984	0.66472	0.66634	0.66352	0.64072	0.00051	0.64060	0.00050	0.64074	0.00068	0.64065	0.00047	40630
497	5244	0.64024	0.63424	0.63247	0.64072	0.00051	0.64059	0.00050	0.64072	0.00068	0.64064	0.00047	40686
498	4769	0.65263	0.64989	0.66426	0.64075	0.00051	0.64061	0.00050	0.64077	0.00068	0.64067	0.00047	40637
499	5096	0.63612	0.64421	0.65273	0.64074	0.00051	0.64062	0.00050	0.64080	0.00068	0.64068	0.00047	40723
500	4846	0.65355	0.64829	0.65922	0.64077	0.00051	0.64063	0.00049	0.64084	0.00068	0.64070	0.00047	40710
501	5114	0.64589	0.64637	0.66455	0.64078	0.00051	0.64065	0.00049	0.64089	0.00068	0.64072	0.00047	40728

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   502        4950 | 0.64169  0.63695  0.62598  |  0.64078 0.00051
0.64064 0.00049   0.64086 0.00068  |  0.64071 0.00047     40798
   503        4923 | 0.65431  0.64779  0.64428  |  0.64081 0.00051
0.64065 0.00049   0.64087 0.00068  |  0.64073 0.00047     40841
   504        5116 | 0.65921  0.65087  0.68436  |  0.64085 0.00051
0.64068 0.00049   0.64096 0.00068  |  0.64077 0.00047     40623
   505        5023 | 0.64875  0.65547  0.64462  |  0.64087 0.00051
0.64071 0.00049   0.64097 0.00068  |  0.64079 0.00047     40617
   506        4901 | 0.64094  0.64993  0.64449  |  0.64087 0.00051
0.64073 0.00049   0.64098 0.00068  |  0.64081 0.00047     40686
   507        4910 | 0.62115  0.62147  0.62863  |  0.64082 0.00051
0.64069 0.00049   0.64095 0.00068  |  0.64077 0.00047     40477
   508        4848 | 0.64821  0.64504  0.64770  |  0.64084 0.00051
0.64070 0.00049   0.64096 0.00068  |  0.64078 0.00047     40545
   509        5220 | 0.62997  0.62861  0.64458  |  0.64082 0.00051
0.64067 0.00049   0.64097 0.00067  |  0.64076 0.00047     40557
   510        4850 | 0.64185  0.64158  0.64550  |  0.64082 0.00050
0.64067 0.00049   0.64098 0.00067  |  0.64076 0.00046     40648
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-------------------------------------------------------------
   511        5073 | 0.63862  0.63944  0.63085  |  0.64081 0.00050
0.64067 0.00049   0.64096 0.00067  |  0.64076 0.00046     40732
   512        4952 | 0.63512  0.63673  0.64780  |  0.64080 0.00050
0.64066 0.00049   0.64097 0.00067  |  0.64075 0.00046     40817
   513        4993 | 0.63495  0.63202  0.62393  |  0.64079 0.00050
0.64064 0.00049   0.64094 0.00067  |  0.64073 0.00046     40820
   514        5032 | 0.63371  0.63163  0.62743  |  0.64077 0.00050
0.64062 0.00049   0.64091 0.00067  |  0.64071 0.00046     40824
   515        4965 | 0.64593  0.64572  0.65225  |  0.64078 0.00050
0.64063 0.00048   0.64093 0.00067  |  0.64072 0.00046     40882
   516        5100 | 0.61424  0.62231  0.62283  |  0.64073 0.00050
0.64060 0.00049   0.64089 0.00067  |  0.64068 0.00046     40613
   517        4783 | 0.63379  0.64021  0.63939  |  0.64071 0.00050
0.64059 0.00048   0.64089 0.00067  |  0.64068 0.00046     40705
   518        5176 | 0.64226  0.64839  0.64194  |  0.64072 0.00050
0.64061 0.00048   0.64089 0.00067  |  0.64069 0.00046     40775
   519        5070 | 0.62898  0.62989  0.63406  |  0.64069 0.00050
0.64059 0.00048   0.64088 0.00066  |  0.64067 0.00046     40769
   520        4930 | 0.65812  0.64960  0.65856  |  0.64073 0.00050
0.64061 0.00048   0.64092 0.00066  |  0.64069 0.00046     40728
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   521        5257 | 0.64957  0.64635  0.63626  |  0.64075 0.00050
0.64062 0.00048   0.64091 0.00066  |  0.64070 0.00046     40802
   522        4962 | 0.63494  0.62598  0.64529  |  0.64073 0.00050
0.64059 0.00048   0.64092 0.00066  |  0.64068 0.00046     40805
   523        4898 | 0.63137  0.63022  0.65563  |  0.64071 0.00050
0.64057 0.00048   0.64095 0.00066  |  0.64067 0.00046     40864
   524        4971 | 0.64964  0.65063  0.63879  |  0.64073 0.00050
0.64059 0.00048   0.64094 0.00066  |  0.64069 0.00046     40914
   525        5143 | 0.63749  0.64441  0.63029  |  0.64073 0.00050
0.64060 0.00048   0.64092 0.00066  |  0.64069 0.00045     41009
   526        4911 | 0.63815  0.63778  0.61831  |  0.64072 0.00050
0.64059 0.00048   0.64087 0.00066  |  0.64067 0.00045     41059
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527 5021 | 0.63120 0.63540 0.63282 | 0.64070 0.00049
0.64058 0.00048 0.64086 0.00066 | 0.64066 0.00045 41109
528 4953 | 0.62528 0.62779 0.62748 | 0.64067 0.00049
0.64055 0.00048 0.64083 0.00066 | 0.64063 0.00045 41034
529 4915 | 0.62278 0.62023 0.64776 | 0.64063 0.00050
0.64051 0.00048 0.64084 0.00065 | 0.64060 0.00045 40931
530 5003 | 0.64126 0.63605 0.64879 | 0.64063 0.00049
0.64050 0.00048 0.64086 0.00065 | 0.64060 0.00045 41013
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531 5133 | 0.62278 0.62675 0.63710 | 0.64060 0.00049
0.64047 0.00048 0.64085 0.00065 | 0.64057 0.00045 40959
532 4859 | 0.63454 0.63536 0.62884 | 0.64058 0.00049
0.64046 0.00048 0.64083 0.00065 | 0.64056 0.00045 41009
533 5135 | 0.66157 0.65656 0.63113 | 0.64063 0.00049
0.64049 0.00048 0.64081 0.00065 | 0.64058 0.00045 40995
534 5180 | 0.64384 0.64272 0.64875 | 0.64063 0.00049
0.64050 0.00048 0.64082 0.00065 | 0.64059 0.00045 41071
535 4868 | 0.63501 0.64281 0.63925 | 0.64062 0.00049
0.64050 0.00047 0.64082 0.00065 | 0.64059 0.00045 41165
536 4952 | 0.64645 0.63707 0.64372 | 0.64063 0.00049
0.64050 0.00047 0.64083 0.00065 | 0.64059 0.00045 41250
537 5156 | 0.64721 0.64244 0.65046 | 0.64065 0.00049
0.64050 0.00047 0.64084 0.00065 | 0.64060 0.00045 41319
538 4982 | 0.63116 0.62980 0.62841 | 0.64063 0.00049
0.64048 0.00047 0.64082 0.00064 | 0.64058 0.00045 41298
539 4900 | 0.64082 0.63736 0.62846 | 0.64063 0.00049
0.64047 0.00047 0.64079 0.00064 | 0.64057 0.00045 41367
540 5071 | 0.63508 0.64315 0.63123 | 0.64062 0.00049
0.64048 0.00047 0.64077 0.00064 | 0.64057 0.00045 41460
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541 4954 | 0.63219 0.63232 0.63530 | 0.64060 0.00049
0.64046 0.00047 0.64076 0.00064 | 0.64055 0.00044 41492
542 4995 | 0.64289 0.64068 0.65039 | 0.64060 0.00049
0.64046 0.00047 0.64078 0.00064 | 0.64055 0.00044 41573
543 5063 | 0.62625 0.62554 0.62501 | 0.64058 0.00049
0.64043 0.00047 0.64075 0.00064 | 0.64052 0.00044 41455
544 4859 | 0.63851 0.64897 0.64729 | 0.64057 0.00049
0.64045 0.00047 0.64076 0.00064 | 0.64054 0.00044 41519
545 5153 | 0.64337 0.64137 0.63609 | 0.64058 0.00048
0.64045 0.00047 0.64075 0.00064 | 0.64054 0.00044 41606
546 5017 | 0.66622 0.65200 0.65946 | 0.64063 0.00049
0.64047 0.00047 0.64079 0.00064 | 0.64057 0.00044 41486
547 5166 | 0.63472 0.63214 0.64186 | 0.64062 0.00049
0.64046 0.00047 0.64079 0.00064 | 0.64056 0.00044 41535
548 4713 | 0.63133 0.63428 0.63856 | 0.64060 0.00049
0.64045 0.00047 0.64079 0.00064 | 0.64054 0.00044 41596
549 4969 | 0.65588 0.66279 0.63604 | 0.64063 0.00049
0.64049 0.00047 0.64078 0.00063 | 0.64058 0.00044 41500
550 5225 | 0.64277 0.64118 0.65837 | 0.64063 0.00048
0.64049 0.00047 0.64082 0.00063 | 0.64059 0.00044 41563
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551 4882 | 0.63827 0.63896 0.62573 | 0.64063 0.00048
0.64049 0.00046 0.64079 0.00063 | 0.64058 0.00044 41632
552 4948 | 0.64906 0.64416 0.65212 | 0.64064 0.00048
0.64050 0.00046 0.64081 0.00063 | 0.64059 0.00044 41685
553 5069 | 0.65692 0.65741 0.65089 | 0.64068 0.00048
0.64053 0.00046 0.64083 0.00063 | 0.64062 0.00044 41580
554 5042 | 0.63805 0.63864 0.64962 | 0.64067 0.00048
0.64053 0.00046 0.64085 0.00063 | 0.64062 0.00044 41665
555 4886 | 0.63082 0.62846 0.63010 | 0.64065 0.00048
0.64050 0.00046 0.64082 0.00063 | 0.64060 0.00044 41635
556 4931 | 0.62621 0.61824 0.63018 | 0.64062 0.00048
0.64046 0.00046 0.64080 0.00063 | 0.64056 0.00044 41417
557 4954 | 0.63924 0.64090 0.64099 | 0.64062 0.00048
0.64046 0.00046 0.64080 0.00063 | 0.64056 0.00044 41505
558 5089 | 0.63799 0.63385 0.63464 | 0.64062 0.00048
0.64045 0.00046 0.64079 0.00063 | 0.64055 0.00044 41555
559 4972 | 0.63029 0.63218 0.66192 | 0.64060 0.00048
0.64043 0.00046 0.64083 0.00063 | 0.64055 0.00044 41631
560 4933 | 0.64276 0.64730 0.64694 | 0.64060 0.00048
0.64044 0.00046 0.64085 0.00063 | 0.64056 0.00044 41692
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561 5100 | 0.61193 0.60987 0.59532 | 0.64054 0.00048
0.64038 0.00046 0.64076 0.00063 | 0.64049 0.00044 40830
562 4705 | 0.63450 0.63502 0.63086 | 0.64053 0.00048
0.64037 0.00046 0.64074 0.00063 | 0.64048 0.00044 40882
563 5183 | 0.64643 0.64796 0.63546 | 0.64054 0.00048
0.64039 0.00046 0.64073 0.00063 | 0.64049 0.00044 40952
564 5089 | 0.64468 0.65068 0.66288 | 0.64055 0.00048
0.64041 0.00046 0.64077 0.00063 | 0.64051 0.00044 40930
565 4937 | 0.64460 0.64442 0.65607 | 0.64056 0.00048
0.64041 0.00046 0.64080 0.00063 | 0.64052 0.00044 40980
566 4940 | 0.65221 0.64929 0.64627 | 0.64058 0.00048
0.64043 0.00046 0.64081 0.00063 | 0.64054 0.00044 41005
567 5094 | 0.63012 0.63049 0.64865 | 0.64056 0.00048
0.64041 0.00046 0.64082 0.00063 | 0.64053 0.00044 41047
568 4840 | 0.63960 0.63617 0.63783 | 0.64056 0.00047
0.64040 0.00046 0.64082 0.00062 | 0.64052 0.00044 41119
569 5052 | 0.63157 0.62993 0.64042 | 0.64054 0.00047
0.64038 0.00046 0.64082 0.00062 | 0.64051 0.00043 41140
570 4929 | 0.63747 0.64394 0.63897 | 0.64054 0.00047
0.64039 0.00046 0.64081 0.00062 | 0.64051 0.00043 41228
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571 5040 | 0.64248 0.65000 0.63401 | 0.64054 0.00047
0.64041 0.00046 0.64080 0.00062 | 0.64052 0.00043 41303
572 5048 | 0.64812 0.64657 0.64496 | 0.64055 0.00047
0.64042 0.00046 0.64081 0.00062 | 0.64053 0.00043 41359
573 5049 | 0.65374 0.64265 0.64726 | 0.64058 0.00047
0.64043 0.00046 0.64082 0.00062 | 0.64054 0.00043 41415
574 5062 | 0.63667 0.64038 0.62195 | 0.64057 0.00047
0.64043 0.00046 0.64079 0.00062 | 0.64053 0.00043 41483
575 4862 | 0.63188 0.63469 0.64117 | 0.64056 0.00047
0.64041 0.00045 0.64079 0.00062 | 0.64052 0.00043 41545

576 4937 | 0.63081 0.63186 0.64733 | 0.64054 0.00047
0.64040 0.00045 0.64080 0.00062 | 0.64051 0.00043 41596
577 5015 | 0.64750 0.65263 0.64184 | 0.64055 0.00047
0.64042 0.00045 0.64080 0.00062 | 0.64053 0.00043 41622
578 5176 | 0.64688 0.64273 0.62516 | 0.64056 0.00047
0.64043 0.00045 0.64077 0.00062 | 0.64053 0.00043 41704
579 5016 | 0.63830 0.63794 0.65792 | 0.64056 0.00047
0.64042 0.00045 0.64080 0.00061 | 0.64053 0.00043 41778
580 4927 | 0.65467 0.64840 0.65470 | 0.64059 0.00047
0.64044 0.00045 0.64083 0.00061 | 0.64055 0.00043 41774
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581 5104 | 0.63770 0.64106 0.62234 | 0.64058 0.00047
0.64044 0.00045 0.64080 0.00061 | 0.64054 0.00043 41844
582 4880 | 0.63915 0.63185 0.62958 | 0.64058 0.00047
0.64042 0.00045 0.64077 0.00061 | 0.64053 0.00043 41870
583 5058 | 0.63261 0.64919 0.63175 | 0.64056 0.00046
0.64044 0.00045 0.64076 0.00061 | 0.64053 0.00043 41962
584 4968 | 0.62311 0.63085 0.61929 | 0.64053 0.00047
0.64042 0.00045 0.64072 0.00061 | 0.64050 0.00043 41891
585 4898 | 0.63301 0.63803 0.62230 | 0.64052 0.00046
0.64042 0.00045 0.64068 0.00061 | 0.64049 0.00042 41937
586 5100 | 0.62339 0.62383 0.64137 | 0.64048 0.00046
0.64038 0.00045 0.64068 0.00061 | 0.64047 0.00042 41869
587 4905 | 0.65960 0.64827 0.66735 | 0.64052 0.00047
0.64040 0.00045 0.64073 0.00061 | 0.64049 0.00042 41794
588 5287 | 0.63479 0.64783 0.64146 | 0.64051 0.00046
0.64041 0.00045 0.64074 0.00061 | 0.64050 0.00042 41868
589 4845 | 0.64956 0.62919 0.65783 | 0.64053 0.00046
0.64039 0.00045 0.64077 0.00061 | 0.64049 0.00042 41934
590 5126 | 0.65208 0.65215 0.64147 | 0.64055 0.00046
0.64041 0.00045 0.64077 0.00061 | 0.64051 0.00042 41949
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591 4982 | 0.62842 0.63525 0.62828 | 0.64052 0.00046
0.64040 0.00045 0.64075 0.00061 | 0.64050 0.00042 41979
592 4852 | 0.64400 0.63128 0.65470 | 0.64053 0.00046
0.64039 0.00045 0.64077 0.00061 | 0.64049 0.00042 42047
593 5128 | 0.64663 0.64822 0.63539 | 0.64054 0.00046
0.64040 0.00044 0.64076 0.00061 | 0.64050 0.00042 42114
594 5084 | 0.64610 0.64270 0.63167 | 0.64055 0.00046
0.64041 0.00044 0.64074 0.00061 | 0.64050 0.00042 42195
595 4970 | 0.62944 0.63467 0.61923 | 0.64053 0.00046
0.64040 0.00044 0.64070 0.00061 | 0.64048 0.00042 42194
596 4905 | 0.62843 0.63434 0.62595 | 0.64051 0.00046
0.64038 0.00044 0.64068 0.00061 | 0.64047 0.00042 42211
597 5021 | 0.63388 0.63628 0.62702 | 0.64050 0.00046
0.64038 0.00044 0.64065 0.00061 | 0.64046 0.00042 42255
598 5013 | 0.62906 0.63162 0.63119 | 0.64048 0.00046
0.64036 0.00044 0.64064 0.00060 | 0.64044 0.00042 42259
599 4923 | 0.63104 0.63417 0.63249 | 0.64046 0.00046
0.64035 0.00044 0.64062 0.00060 | 0.64043 0.00042 42288
600 4996 | 0.63638 0.63159 0.63041 | 0.64045 0.00046
0.64033 0.00044 0.64060 0.00060 | 0.64041 0.00042 42299

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601 5034 | 0.64026 0.63874 0.64324 | 0.64045 0.00046
0.64033 0.00044 0.64061 0.00060 | 0.64041 0.00042 42370
602 5037 | 0.62953 0.62601 0.62173 | 0.64043 0.00046
0.64031 0.00044 0.64057 0.00060 | 0.64038 0.00042 42262
603 4930 | 0.62982 0.63671 0.61747 | 0.64041 0.00046
0.64030 0.00044 0.64053 0.00060 | 0.64037 0.00042 42278
604 5024 | 0.63846 0.64651 0.63894 | 0.64041 0.00046
0.64031 0.00044 0.64053 0.00060 | 0.64037 0.00041 42348
605 5096 | 0.64260 0.64133 0.65669 | 0.64041 0.00045
0.64031 0.00044 0.64056 0.00060 | 0.64038 0.00041 42403
606 5000 | 0.64818 0.64752 0.63817 | 0.64043 0.00045
0.64032 0.00044 0.64055 0.00060 | 0.64039 0.00041 42461
607 5007 | 0.64741 0.64296 0.66428 | 0.64044 0.00045
0.64033 0.00044 0.64060 0.00060 | 0.64040 0.00041 42488
608 5006 | 0.65827 0.64528 0.63490 | 0.64047 0.00045
0.64034 0.00043 0.64059 0.00060 | 0.64041 0.00041 42542
609 5040 | 0.63026 0.64064 0.62570 | 0.64045 0.00045
0.64034 0.00043 0.64056 0.00060 | 0.64040 0.00041 42602
610 4793 | 0.61807 0.62564 0.60121 | 0.64041 0.00045
0.64031 0.00043 0.64049 0.00060 | 0.64036 0.00041 42322

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611 4945 | 0.62316 0.62039 0.62198 | 0.64038 0.00045
0.64028 0.00043 0.64046 0.00060 | 0.64033 0.00041 42099
612 5033 | 0.64707 0.64666 0.62059 | 0.64039 0.00045
0.64029 0.00043 0.64042 0.00060 | 0.64033 0.00041 42177
613 5215 | 0.63114 0.63272 0.63150 | 0.64038 0.00045
0.64027 0.00043 0.64040 0.00060 | 0.64032 0.00041 42197
614 4904 | 0.62392 0.62523 0.60663 | 0.64035 0.00045
0.64025 0.00043 0.64034 0.00060 | 0.64028 0.00041 41984
615 4956 | 0.63990 0.64029 0.65077 | 0.64035 0.00045
0.64025 0.00043 0.64036 0.00060 | 0.64029 0.00041 42059
616 5142 | 0.63586 0.63810 0.63222 | 0.64034 0.00045
0.64024 0.00043 0.64035 0.00060 | 0.64028 0.00041 42124
617 4975 | 0.63979 0.63199 0.64807 | 0.64034 0.00045
0.64023 0.00043 0.64036 0.00060 | 0.64027 0.00041 42185
618 5000 | 0.62956 0.63588 0.63379 | 0.64032 0.00045
0.64022 0.00043 0.64035 0.00060 | 0.64026 0.00041 42237
619 4918 | 0.63678 0.62479 0.63984 | 0.64031 0.00045
0.64020 0.00043 0.64035 0.00060 | 0.64025 0.00041 42219
620 5071 | 0.64487 0.64063 0.65427 | 0.64032 0.00045
0.64020 0.00043 0.64037 0.00060 | 0.64025 0.00041 42284

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621 5047 | 0.64421 0.63912 0.65813 | 0.64033 0.00045
0.64019 0.00043 0.64040 0.00060 | 0.64026 0.00041 42348
622 4957 | 0.64196 0.62900 0.65593 | 0.64033 0.00045
0.64017 0.00043 0.64043 0.00060 | 0.64025 0.00041 42405
623 4956 | 0.63763 0.63819 0.62732 | 0.64033 0.00045
0.64017 0.00043 0.64041 0.00060 | 0.64025 0.00041 42468
624 4929 | 0.65812 0.64451 0.63445 | 0.64036 0.00045
0.64018 0.00043 0.64040 0.00059 | 0.64025 0.00041 42525

625 5130 | 0.62743 0.63177 0.62837 | 0.64034 0.00045
0.64016 0.00043 0.64038 0.00059 | 0.64023 0.00041 42523
626 4760 | 0.62899 0.62781 0.64977 | 0.64032 0.00045
0.64014 0.00043 0.64039 0.00059 | 0.64022 0.00041 42549
627 5009 | 0.65249 0.65045 0.61883 | 0.64034 0.00045
0.64016 0.00043 0.64036 0.00059 | 0.64023 0.00041 42615
628 5186 | 0.61482 0.62226 0.60898 | 0.64029 0.00045
0.64013 0.00043 0.64030 0.00060 | 0.64019 0.00041 42314
629 4717 | 0.62883 0.62566 0.62342 | 0.64027 0.00045
0.64010 0.00043 0.64027 0.00059 | 0.64016 0.00041 42222
630 5129 | 0.63176 0.63274 0.62105 | 0.64026 0.00045
0.64009 0.00043 0.64024 0.00059 | 0.64015 0.00041 42216
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631 5007 | 0.62700 0.62851 0.60695 | 0.64024 0.00045
0.64007 0.00043 0.64018 0.00060 | 0.64012 0.00041 42086
632 4928 | 0.65472 0.64155 0.65380 | 0.64026 0.00045
0.64007 0.00043 0.64021 0.00060 | 0.64013 0.00041 42129
633 5269 | 0.62903 0.63252 0.63651 | 0.64024 0.00045
0.64006 0.00043 0.64020 0.00059 | 0.64012 0.00041 42159
634 4849 | 0.64001 0.64228 0.62971 | 0.64024 0.00045
0.64007 0.00042 0.64018 0.00059 | 0.64012 0.00040 42237
635 5055 | 0.65409 0.64029 0.64492 | 0.64026 0.00045
0.64007 0.00042 0.64019 0.00059 | 0.64012 0.00040 42294
636 5088 | 0.62839 0.63882 0.62851 | 0.64024 0.00045
0.64006 0.00042 0.64017 0.00059 | 0.64011 0.00040 42356
637 4809 | 0.63904 0.64471 0.62506 | 0.64024 0.00044
0.64007 0.00042 0.64014 0.00059 | 0.64011 0.00040 42437
638 5113 | 0.62398 0.63516 0.63269 | 0.64021 0.00044
0.64006 0.00042 0.64013 0.00059 | 0.64010 0.00040 42474
639 4876 | 0.63279 0.63271 0.62456 | 0.64020 0.00044
0.64005 0.00042 0.64011 0.00059 | 0.64008 0.00040 42485
640 5091 | 0.63479 0.63259 0.62681 | 0.64019 0.00044
0.64004 0.00042 0.64008 0.00059 | 0.64007 0.00040 42500
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641 5043 | 0.64717 0.65603 0.64168 | 0.64020 0.00044
0.64006 0.00042 0.64009 0.00059 | 0.64009 0.00040 42480
642 5097 | 0.64051 0.63532 0.66277 | 0.64020 0.00044
0.64006 0.00042 0.64012 0.00059 | 0.64009 0.00040 42552
643 4988 | 0.63363 0.62315 0.63553 | 0.64019 0.00044
0.64003 0.00042 0.64012 0.00059 | 0.64007 0.00040 42488
644 4890 | 0.62472 0.63475 0.62733 | 0.64017 0.00044
0.64002 0.00042 0.64009 0.00059 | 0.64006 0.00040 42515
645 4907 | 0.62647 0.63574 0.63312 | 0.64014 0.00044
0.64001 0.00042 0.64008 0.00059 | 0.64005 0.00040 42564
646 4997 | 0.63527 0.64098 0.64644 | 0.64014 0.00044
0.64001 0.00042 0.64009 0.00059 | 0.64005 0.00040 42641
647 5077 | 0.62981 0.62607 0.62533 | 0.64012 0.00044
0.63999 0.00042 0.64007 0.00059 | 0.64003 0.00040 42567
648 4905 | 0.62643 0.64284 0.60095 | 0.64010 0.00044
0.64000 0.00042 0.64000 0.00059 | 0.64001 0.00040 42597
649 4980 | 0.63063 0.63196 0.62877 | 0.64008 0.00044
0.63998 0.00042 0.63998 0.00059 | 0.64000 0.00040 42608

650 5035 | 0.66384 0.66098 0.65780 | 0.64012 0.00044
0.64002 0.00042 0.64001 0.00059 | 0.64003 0.00040 42365
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651 5311 | 0.63970 0.63309 0.63274 | 0.64012 0.00044
0.64001 0.00042 0.64000 0.00059 | 0.64002 0.00040 42402
652 4840 | 0.64092 0.64010 0.64799 | 0.64012 0.00044
0.64001 0.00042 0.64002 0.00059 | 0.64002 0.00040 42476
653 5012 | 0.65219 0.65780 0.64499 | 0.64014 0.00044
0.64004 0.00042 0.64002 0.00058 | 0.64005 0.00040 42401
654 5060 | 0.64714 0.63781 0.64866 | 0.64015 0.00044
0.64003 0.00042 0.64004 0.00058 | 0.64005 0.00040 42469
655 4922 | 0.63870 0.63544 0.63716 | 0.64015 0.00044
0.64002 0.00042 0.64003 0.00058 | 0.64004 0.00040 42527
656 4950 | 0.63933 0.64340 0.65089 | 0.64015 0.00044
0.64003 0.00042 0.64005 0.00058 | 0.64005 0.00040 42592
657 4988 | 0.65739 0.65734 0.63272 | 0.64018 0.00044
0.64006 0.00042 0.64004 0.00058 | 0.64007 0.00040 42553
658 5165 | 0.63203 0.62695 0.64508 | 0.64016 0.00044
0.64004 0.00042 0.64005 0.00058 | 0.64006 0.00040 42561
659 4794 | 0.65192 0.65236 0.63743 | 0.64018 0.00044
0.64006 0.00042 0.64004 0.00058 | 0.64007 0.00039 42575
660 5141 | 0.63612 0.63762 0.63964 | 0.64018 0.00044
0.64005 0.00041 0.64004 0.00058 | 0.64007 0.00039 42641
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661 4845 | 0.64240 0.65107 0.65905 | 0.64018 0.00043
0.64007 0.00041 0.64007 0.00058 | 0.64009 0.00039 42629
662 5106 | 0.64341 0.63243 0.63492 | 0.64018 0.00043
0.64006 0.00041 0.64007 0.00058 | 0.64008 0.00039 42669
663 4996 | 0.62574 0.63469 0.62765 | 0.64016 0.00043
0.64005 0.00041 0.64004 0.00058 | 0.64007 0.00039 42693
664 4872 | 0.63372 0.63879 0.62889 | 0.64015 0.00043
0.64005 0.00041 0.64003 0.00058 | 0.64006 0.00039 42754
665 5066 | 0.63170 0.64898 0.63823 | 0.64014 0.00043
0.64006 0.00041 0.64002 0.00058 | 0.64007 0.00039 42822
666 4972 | 0.64834 0.65304 0.63090 | 0.64015 0.00043
0.64008 0.00041 0.64001 0.00057 | 0.64008 0.00039 42851
667 5137 | 0.62267 0.62255 0.60904 | 0.64012 0.00043
0.64005 0.00041 0.63996 0.00058 | 0.64005 0.00039 42610
668 4798 | 0.64583 0.64222 0.64488 | 0.64013 0.00043
0.64006 0.00041 0.63997 0.00058 | 0.64005 0.00039 42676
669 5174 | 0.63661 0.64082 0.64413 | 0.64013 0.00043
0.64006 0.00041 0.63997 0.00057 | 0.64005 0.00039 42747
670 4943 | 0.65761 0.65266 0.64242 | 0.64015 0.00043
0.64008 0.00041 0.63998 0.00057 | 0.64007 0.00039 42726
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671 5211 | 0.64654 0.64139 0.65871 | 0.64016 0.00043
0.64008 0.00041 0.64001 0.00057 | 0.64008 0.00039 42775
672 4937 | 0.64285 0.64994 0.64117 | 0.64017 0.00043
0.64010 0.00041 0.64001 0.00057 | 0.64009 0.00039 42817
673 4960 | 0.63294 0.64224 0.65534 | 0.64016 0.00043
0.64010 0.00041 0.64003 0.00057 | 0.64010 0.00039 42888

674 4958 | 0.63640 0.63005 0.65472 | 0.64015 0.00043
0.64008 0.00041 0.64006 0.00057 | 0.64009 0.00039 42944
675 5035 | 0.64263 0.64491 0.62853 | 0.64015 0.00043
0.64009 0.00041 0.64004 0.00057 | 0.64009 0.00039 43012
676 5106 | 0.61534 0.62510 0.60573 | 0.64012 0.00043
0.64007 0.00041 0.63998 0.00057 | 0.64006 0.00039 42772
677 4793 | 0.63354 0.63400 0.63598 | 0.64010 0.00043
0.64006 0.00041 0.63998 0.00057 | 0.64005 0.00039 42817
678 5186 | 0.64099 0.63907 0.65156 | 0.64011 0.00043
0.64006 0.00041 0.64000 0.00057 | 0.64005 0.00039 42884
679 5061 | 0.65241 0.64776 0.66102 | 0.64013 0.00043
0.64007 0.00041 0.64003 0.00057 | 0.64007 0.00039 42870
680 5111 | 0.65481 0.65372 0.64877 | 0.64015 0.00043
0.64009 0.00041 0.64004 0.00057 | 0.64009 0.00039 42826
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681 5056 | 0.63820 0.63676 0.62380 | 0.64015 0.00043
0.64009 0.00041 0.64002 0.00057 | 0.64008 0.00039 42868
682 4867 | 0.64766 0.65227 0.64285 | 0.64016 0.00043
0.64011 0.00041 0.64002 0.00057 | 0.64010 0.00039 42879
683 5083 | 0.64819 0.65696 0.62063 | 0.64017 0.00043
0.64013 0.00041 0.63999 0.00057 | 0.64011 0.00039 42899
684 5064 | 0.64214 0.63662 0.65781 | 0.64017 0.00043
0.64013 0.00041 0.64002 0.00057 | 0.64011 0.00039 42968
685 4922 | 0.63373 0.63325 0.62491 | 0.64016 0.00043
0.64012 0.00040 0.64000 0.00057 | 0.64010 0.00039 42983
686 4894 | 0.64148 0.63833 0.62970 | 0.64017 0.00042
0.64011 0.00040 0.63998 0.00057 | 0.64009 0.00038 43044
687 5074 | 0.63336 0.62305 0.63570 | 0.64015 0.00042
0.64009 0.00040 0.63997 0.00057 | 0.64007 0.00038 42985
688 4975 | 0.63576 0.63273 0.63268 | 0.64015 0.00042
0.64007 0.00040 0.63996 0.00057 | 0.64006 0.00038 43015
689 4980 | 0.65555 0.64867 0.64804 | 0.64017 0.00042
0.64009 0.00040 0.63997 0.00057 | 0.64008 0.00038 43020
690 5110 | 0.63942 0.64251 0.62538 | 0.64017 0.00042
0.64009 0.00040 0.63995 0.00057 | 0.64008 0.00038 43085
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691 4848 | 0.64188 0.64504 0.63192 | 0.64017 0.00042
0.64010 0.00040 0.63994 0.00056 | 0.64008 0.00038 43153
692 4960 | 0.63099 0.64651 0.64258 | 0.64016 0.00042
0.64011 0.00040 0.63994 0.00056 | 0.64008 0.00038 43223
693 4900 | 0.65234 0.66021 0.65417 | 0.64018 0.00042
0.64014 0.00040 0.63997 0.00056 | 0.64011 0.00038 43079
694 5194 | 0.63640 0.63186 0.65257 | 0.64017 0.00042
0.64013 0.00040 0.63998 0.00056 | 0.64011 0.00038 43139
695 4900 | 0.65676 0.66442 0.63951 | 0.64020 0.00042
0.64017 0.00040 0.63998 0.00056 | 0.64013 0.00038 42983
696 5169 | 0.65373 0.65186 0.66204 | 0.64022 0.00042
0.64018 0.00040 0.64002 0.00056 | 0.64016 0.00038 42916
697 4972 | 0.65067 0.63905 0.64307 | 0.64024 0.00042
0.64018 0.00040 0.64002 0.00056 | 0.64016 0.00038 42980
698 4992 | 0.63155 0.62926 0.63175 | 0.64022 0.00042
0.64016 0.00040 0.64001 0.00056 | 0.64014 0.00038 42974

699 4840 | 0.63644 0.64135 0.62684 | 0.64022 0.00042
0.64017 0.00040 0.63999 0.00056 | 0.64014 0.00038 43037
700 5009 | 0.61526 0.61855 0.64878 | 0.64018 0.00042
0.64013 0.00040 0.64000 0.00056 | 0.64011 0.00038 42923
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701 4837 | 0.62664 0.62966 0.63201 | 0.64016 0.00042
0.64012 0.00040 0.63999 0.00056 | 0.64010 0.00038 42913
702 5119 | 0.65613 0.66341 0.65742 | 0.64018 0.00042
0.64015 0.00040 0.64002 0.00056 | 0.64013 0.00038 42685
703 5233 | 0.65333 0.64975 0.67238 | 0.64020 0.00042
0.64017 0.00040 0.64007 0.00056 | 0.64015 0.00038 42606
704 5000 | 0.65317 0.65456 0.65439 | 0.64022 0.00042
0.64019 0.00040 0.64009 0.00056 | 0.64017 0.00038 42544
705 4960 | 0.64952 0.64703 0.64306 | 0.64024 0.00042
0.64020 0.00040 0.64009 0.00056 | 0.64018 0.00038 42584
706 4969 | 0.61941 0.62863 0.63679 | 0.64020 0.00042
0.64018 0.00040 0.64009 0.00056 | 0.64017 0.00038 42562
707 4729 | 0.63229 0.63767 0.65437 | 0.64019 0.00042
0.64018 0.00040 0.64011 0.00056 | 0.64017 0.00038 42634
708 5158 | 0.64530 0.64288 0.61981 | 0.64020 0.00042
0.64018 0.00040 0.64008 0.00056 | 0.64016 0.00038 42695
709 5147 | 0.63349 0.63442 0.63651 | 0.64019 0.00042
0.64017 0.00040 0.64007 0.00056 | 0.64016 0.00038 42738
710 4919 | 0.61950 0.61586 0.62913 | 0.64016 0.00042
0.64014 0.00040 0.64006 0.00056 | 0.64012 0.00038 42498
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711 4887 | 0.65075 0.65159 0.66339 | 0.64017 0.00042
0.64015 0.00040 0.64009 0.00056 | 0.64015 0.00038 42444
712 5237 | 0.63958 0.63836 0.63067 | 0.64017 0.00042
0.64015 0.00040 0.64008 0.00056 | 0.64014 0.00038 42500
713 4933 | 0.64340 0.64767 0.66690 | 0.64018 0.00042
0.64016 0.00040 0.64012 0.00056 | 0.64016 0.00038 42494
714 5005 | 0.62029 0.62260 0.63761 | 0.64015 0.00042
0.64014 0.00040 0.64012 0.00055 | 0.64013 0.00038 42406
715 4825 | 0.64908 0.64672 0.64540 | 0.64016 0.00042
0.64015 0.00040 0.64012 0.00055 | 0.64014 0.00038 42446
716 5243 | 0.63096 0.63712 0.64210 | 0.64015 0.00042
0.64014 0.00040 0.64013 0.00055 | 0.64014 0.00038 42502
717 4854 | 0.63542 0.63639 0.62340 | 0.64014 0.00042
0.64014 0.00040 0.64010 0.00055 | 0.64013 0.00038 42537
718 5072 | 0.65811 0.66424 0.65332 | 0.64017 0.00042
0.64017 0.00040 0.64012 0.00055 | 0.64016 0.00038 42319
719 5152 | 0.61699 0.63261 0.62416 | 0.64013 0.00042
0.64016 0.00040 0.64010 0.00055 | 0.64014 0.00038 42285
720 4671 | 0.63903 0.64614 0.66003 | 0.64013 0.00042
0.64017 0.00040 0.64013 0.00055 | 0.64016 0.00038 42317
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721 5137 | 0.64608 0.64487 0.65322 | 0.64014 0.00042
0.64018 0.00040 0.64015 0.00055 | 0.64016 0.00038 42353
722 5103 | 0.63516 0.63736 0.62813 | 0.64013 0.00042
0.64017 0.00040 0.64013 0.00055 | 0.64016 0.00038 42398

723 4888 | 0.64352 0.64221 0.63591 | 0.64014 0.00042
0.64018 0.00040 0.64012 0.00055 | 0.64016 0.00038 42465
724 5035 | 0.64491 0.64216 0.64944 | 0.64014 0.00042
0.64018 0.00040 0.64014 0.00055 | 0.64016 0.00038 42520
725 4994 | 0.63547 0.63589 0.64457 | 0.64014 0.00041
0.64017 0.00040 0.64014 0.00055 | 0.64016 0.00038 42579
726 4958 | 0.64595 0.64537 0.65498 | 0.64015 0.00041
0.64018 0.00040 0.64016 0.00055 | 0.64017 0.00038 42611
727 5110 | 0.63692 0.64290 0.63878 | 0.64014 0.00041
0.64018 0.00039 0.64016 0.00055 | 0.64017 0.00037 42674
728 4862 | 0.62167 0.63005 0.62100 | 0.64011 0.00041
0.64017 0.00039 0.64013 0.00055 | 0.64015 0.00037 42616
729 4880 | 0.64053 0.64534 0.64062 | 0.64011 0.00041
0.64018 0.00039 0.64014 0.00055 | 0.64016 0.00037 42673
730 5082 | 0.63979 0.63852 0.62888 | 0.64011 0.00041
0.64017 0.00039 0.64012 0.00055 | 0.64015 0.00037 42728
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731 4983 | 0.62294 0.62543 0.60664 | 0.64009 0.00041
0.64015 0.00039 0.64007 0.00055 | 0.64013 0.00037 42550
732 4856 | 0.63009 0.62759 0.63529 | 0.64007 0.00041
0.64013 0.00039 0.64006 0.00055 | 0.64011 0.00037 42538
733 5075 | 0.63290 0.63852 0.63364 | 0.64006 0.00041
0.64013 0.00039 0.64005 0.00055 | 0.64011 0.00037 42592
734 5069 | 0.62909 0.63506 0.63415 | 0.64005 0.00041
0.64012 0.00039 0.64004 0.00055 | 0.64010 0.00037 42627
735 4992 | 0.62820 0.63564 0.64409 | 0.64003 0.00041
0.64012 0.00039 0.64005 0.00054 | 0.64009 0.00037 42676
736 5002 | 0.64937 0.64977 0.63472 | 0.64004 0.00041
0.64013 0.00039 0.64004 0.00054 | 0.64010 0.00037 42714
737 5123 | 0.64208 0.64464 0.63323 | 0.64005 0.00041
0.64014 0.00039 0.64003 0.00054 | 0.64010 0.00037 42774
738 4971 | 0.63117 0.64034 0.61737 | 0.64003 0.00041
0.64014 0.00039 0.64000 0.00054 | 0.64009 0.00037 42811
739 4934 | 0.63263 0.64090 0.64660 | 0.64002 0.00041
0.64014 0.00039 0.64001 0.00054 | 0.64010 0.00037 42873
740 4999 | 0.63609 0.63785 0.63599 | 0.64002 0.00041
0.64014 0.00039 0.64000 0.00054 | 0.64009 0.00037 42929
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741 5031 | 0.62191 0.62924 0.62250 | 0.63999 0.00041
0.64012 0.00039 0.63998 0.00054 | 0.64007 0.00037 42867
742 4877 | 0.65668 0.64333 0.66543 | 0.64002 0.00041
0.64013 0.00039 0.64001 0.00054 | 0.64009 0.00037 42881
743 5271 | 0.63732 0.64889 0.65704 | 0.64001 0.00041
0.64014 0.00039 0.64004 0.00054 | 0.64010 0.00037 42891
744 4866 | 0.61634 0.62167 0.63747 | 0.63998 0.00041
0.64011 0.00039 0.64004 0.00054 | 0.64008 0.00037 42779
745 4809 | 0.63471 0.63101 0.64621 | 0.63997 0.00041
0.64010 0.00039 0.64004 0.00054 | 0.64007 0.00037 42824
746 5137 | 0.62775 0.62221 0.64551 | 0.63995 0.00041
0.64007 0.00039 0.64005 0.00054 | 0.64005 0.00037 42783
747 4979 | 0.63683 0.63435 0.60372 | 0.63995 0.00041
0.64006 0.00039 0.64000 0.00054 | 0.64003 0.00037 42757

748	5045	0.64591	0.64646	0.64051	0.63996	0.00041	0.64007	0.00039	0.64000	0.00054	0.64004	0.00037	42804
749	5084	0.66208	0.65641	0.65499	0.63999	0.00041	0.64010	0.00039	0.64002	0.00054	0.64007	0.00037	42691
750	5089	0.65245	0.66429	0.63585	0.64001	0.00041	0.64013	0.00039	0.64002	0.00054	0.64009	0.00037	42578
751	4927	0.64639	0.64005	0.64775	0.64002	0.00041	0.64013	0.00039	0.64003	0.00054	0.64009	0.00037	42640
752	4952	0.63226	0.64074	0.64139	0.64000	0.00041	0.64013	0.00039	0.64003	0.00054	0.64009	0.00037	42699
753	4888	0.64183	0.65255	0.60688	0.64001	0.00041	0.64015	0.00039	0.63998	0.00054	0.64009	0.00037	42758
754	5019	0.65908	0.65553	0.65810	0.64003	0.00041	0.64017	0.00039	0.64001	0.00054	0.64012	0.00037	42655
755	5121	0.64604	0.64558	0.64661	0.64004	0.00041	0.64018	0.00039	0.64002	0.00054	0.64013	0.00037	42698
756	4892	0.65197	0.65021	0.65148	0.64006	0.00041	0.64019	0.00039	0.64003	0.00054	0.64014	0.00037	42695
757	5019	0.62574	0.63427	0.64820	0.64004	0.00041	0.64019	0.00039	0.64005	0.00054	0.64014	0.00037	42740
758	4804	0.62947	0.63171	0.62580	0.64002	0.00041	0.64017	0.00039	0.64003	0.00054	0.64012	0.00037	42735
759	5042	0.63696	0.63974	0.64988	0.64002	0.00041	0.64017	0.00039	0.64004	0.00054	0.64012	0.00037	42792
760	5085	0.65005	0.65250	0.64476	0.64003	0.00041	0.64019	0.00039	0.64005	0.00054	0.64014	0.00037	42786
761	5160	0.61911	0.62254	0.62111	0.64000	0.00041	0.64017	0.00039	0.64002	0.00054	0.64011	0.00037	42625
762	4792	0.61840	0.61426	0.61716	0.63997	0.00041	0.64013	0.00039	0.63999	0.00054	0.64008	0.00037	42301
763	5011	0.63233	0.62627	0.64501	0.63996	0.00041	0.64011	0.00039	0.63999	0.00054	0.64006	0.00037	42311
764	5138	0.63966	0.64471	0.64870	0.63996	0.00041	0.64012	0.00039	0.64001	0.00053	0.64007	0.00037	42357
765	5062	0.63761	0.64393	0.63433	0.63996	0.00040	0.64012	0.00039	0.64000	0.00053	0.64007	0.00037	42414
766	4936	0.63646	0.63315	0.64240	0.63995	0.00040	0.64011	0.00039	0.64000	0.00053	0.64007	0.00037	42464
767	5021	0.64374	0.64627	0.63429	0.63996	0.00040	0.64012	0.00038	0.63999	0.00053	0.64007	0.00036	42519
768	5068	0.63712	0.63113	0.63245	0.63996	0.00040	0.64011	0.00038	0.63998	0.00053	0.64006	0.00036	42542
769	4911	0.64471	0.64759	0.63926	0.63996	0.00040	0.64012	0.00038	0.63998	0.00053	0.64007	0.00036	42587
770	5032	0.62445	0.63191	0.64144	0.63994	0.00040	0.64011	0.00038	0.63998	0.00053	0.64006	0.00036	42607
771	4834	0.63164	0.64528	0.62804	0.63993	0.00040	0.64011	0.00038	0.63997	0.00053	0.64006	0.00036	42662

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   772        5038 | 0.62509  0.62029  0.63987  |  0.63991 0.00040
0.64009 0.00038   0.63997 0.00053  |  0.64003 0.00036     42580
   773        4938 | 0.62808  0.63311  0.64589  |  0.63989 0.00040
0.64008 0.00038   0.63998 0.00053  |  0.64003 0.00036     42618
   774        5070 | 0.63342  0.62961  0.63057  |  0.63988 0.00040
0.64006 0.00038   0.63996 0.00053  |  0.64001 0.00036     42620
   775        5017 | 0.64433  0.62554  0.64879  |  0.63989 0.00040
0.64004 0.00038   0.63997 0.00053  |  0.64000 0.00036     42660
   776        5109 | 0.64554  0.64973  0.63990  |  0.63990 0.00040
0.64006 0.00038   0.63997 0.00053  |  0.64001 0.00036     42689
   777        5016 | 0.64496  0.64698  0.64050  |  0.63990 0.00040
0.64007 0.00038   0.63998 0.00053  |  0.64002 0.00036     42733
   778        5005 | 0.64495  0.64519  0.65493  |  0.63991 0.00040
0.64007 0.00038   0.64000 0.00053  |  0.64003 0.00036     42763
   779        5031 | 0.63865  0.63676  0.63509  |  0.63991 0.00040
0.64007 0.00038   0.63999 0.00053  |  0.64003 0.00036     42816
   780        4926 | 0.63818  0.64161  0.63433  |  0.63991 0.00040
0.64007 0.00038   0.63998 0.00052  |  0.64003 0.00036     42875
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   781        4978 | 0.64424  0.63621  0.65360  |  0.63991 0.00040
0.64006 0.00038   0.64000 0.00052  |  0.64003 0.00036     42938
   782        5019 | 0.63375  0.63725  0.62794  |  0.63991 0.00040
0.64006 0.00038   0.63998 0.00052  |  0.64002 0.00036     42978
   783        4934 | 0.63709  0.62909  0.64286  |  0.63990 0.00040
0.64005 0.00038   0.63999 0.00052  |  0.64001 0.00036     43012
   784        5027 | 0.66100  0.66898  0.66274  |  0.63993 0.00040
0.64009 0.00038   0.64002 0.00052  |  0.64005 0.00036     42647
   785        5185 | 0.64445  0.63430  0.64840  |  0.63994 0.00040
0.64008 0.00038   0.64003 0.00052  |  0.64004 0.00036     42708
   786        4834 | 0.62632  0.62453  0.65419  |  0.63992 0.00040
0.64006 0.00038   0.64005 0.00052  |  0.64003 0.00036     42716
   787        4874 | 0.62950  0.63055  0.64569  |  0.63990 0.00040
0.64004 0.00038   0.64006 0.00052  |  0.64002 0.00036     42749
   788        5003 | 0.63133  0.64176  0.60851  |  0.63989 0.00040
0.64005 0.00038   0.64001 0.00052  |  0.64001 0.00036     42773
   789        5008 | 0.64793  0.65198  0.63934  |  0.63990 0.00040
0.64006 0.00038   0.64001 0.00052  |  0.64003 0.00036     42790
   790        5134 | 0.63090  0.63405  0.63831  |  0.63989 0.00040
0.64005 0.00038   0.64001 0.00052  |  0.64002 0.00036     42825
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   791        4857 | 0.63830  0.63758  0.65879  |  0.63989 0.00040
0.64005 0.00038   0.64004 0.00052  |  0.64002 0.00036     42883
   792        5109 | 0.63164  0.64929  0.63552  |  0.63988 0.00039
0.64006 0.00038   0.64003 0.00052  |  0.64003 0.00036     42926
   793        4875 | 0.62937  0.63337  0.65526  |  0.63986 0.00039
0.64005 0.00038   0.64005 0.00052  |  0.64002 0.00036     42977
   794        4937 | 0.63582  0.63231  0.64867  |  0.63986 0.00039
0.64004 0.00038   0.64006 0.00052  |  0.64002 0.00036     43029
   795        5033 | 0.65369  0.65558  0.63130  |  0.63988 0.00039
0.64006 0.00038   0.64005 0.00052  |  0.64003 0.00036     43032
   796        5155 | 0.63820  0.63687  0.62492  |  0.63987 0.00039
0.64006 0.00038   0.64003 0.00052  |  0.64002 0.00036     43072
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797 4914 | 0.64270 0.64828 0.66001 | 0.63988 0.00039
0.64007 0.00038 0.64006 0.00052 | 0.64004 0.00036 43070
798 5054 | 0.65216 0.65145 0.65183 | 0.63989 0.00039
0.64009 0.00038 0.64007 0.00052 | 0.64005 0.00036 43051
799 5064 | 0.63143 0.63432 0.64638 | 0.63988 0.00039
0.64008 0.00038 0.64008 0.00052 | 0.64005 0.00035 43096
800 4861 | 0.63981 0.63713 0.63699 | 0.63988 0.00039
0.64007 0.00038 0.64008 0.00052 | 0.64004 0.00035 43154
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801 5060 | 0.64078 0.63126 0.65754 | 0.63988 0.00039
0.64006 0.00038 0.64010 0.00052 | 0.64004 0.00035 43213
802 5009 | 0.63035 0.63051 0.63090 | 0.63987 0.00039
0.64005 0.00038 0.64009 0.00052 | 0.64003 0.00035 43214
803 4911 | 0.63038 0.62897 0.60872 | 0.63986 0.00039
0.64004 0.00038 0.64005 0.00052 | 0.64001 0.00035 43132
804 5003 | 0.65107 0.64942 0.63765 | 0.63987 0.00039
0.64005 0.00037 0.64004 0.00052 | 0.64002 0.00035 43165
805 5131 | 0.64337 0.64394 0.63822 | 0.63988 0.00039
0.64005 0.00037 0.64004 0.00052 | 0.64002 0.00035 43221
806 4926 | 0.61859 0.61875 0.61676 | 0.63985 0.00039
0.64002 0.00037 0.64001 0.00052 | 0.63999 0.00035 42986
807 4770 | 0.64715 0.64417 0.62546 | 0.63986 0.00039
0.64003 0.00037 0.63999 0.00052 | 0.63999 0.00035 43053
808 5200 | 0.66507 0.66593 0.65204 | 0.63989 0.00039
0.64006 0.00038 0.64001 0.00052 | 0.64002 0.00035 42804
809 5137 | 0.62567 0.63740 0.61323 | 0.63987 0.00039
0.64006 0.00037 0.63997 0.00052 | 0.64001 0.00035 42794
810 4732 | 0.64982 0.66023 0.66512 | 0.63989 0.00039
0.64009 0.00038 0.64000 0.00052 | 0.64004 0.00035 42628
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811 5191 | 0.64344 0.63881 0.62928 | 0.63989 0.00039
0.64009 0.00037 0.63999 0.00052 | 0.64003 0.00035 42684
812 4954 | 0.64282 0.64842 0.64918 | 0.63990 0.00039
0.64010 0.00037 0.64000 0.00052 | 0.64004 0.00035 42707
813 5021 | 0.63045 0.63173 0.62422 | 0.63988 0.00039
0.64009 0.00037 0.63998 0.00052 | 0.64003 0.00035 42698
814 4890 | 0.62920 0.62578 0.63020 | 0.63987 0.00039
0.64007 0.00037 0.63997 0.00051 | 0.64001 0.00035 42659
815 4970 | 0.64148 0.64594 0.63779 | 0.63987 0.00039
0.64007 0.00037 0.63997 0.00051 | 0.64002 0.00035 42707
816 5114 | 0.65093 0.65026 0.66404 | 0.63989 0.00039
0.64009 0.00037 0.64000 0.00051 | 0.64003 0.00035 42660
817 5084 | 0.63032 0.62455 0.62478 | 0.63987 0.00039
0.64007 0.00037 0.63998 0.00051 | 0.64001 0.00035 42592
818 4810 | 0.64315 0.63881 0.63341 | 0.63988 0.00039
0.64007 0.00037 0.63997 0.00051 | 0.64001 0.00035 42649
819 5123 | 0.64450 0.64056 0.65097 | 0.63988 0.00039
0.64007 0.00037 0.63998 0.00051 | 0.64002 0.00035 42701
820 4987 | 0.64733 0.65240 0.64933 | 0.63989 0.00039
0.64008 0.00037 0.64000 0.00051 | 0.64003 0.00035 42690
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821 4988 | 0.62192 0.62718 0.62677 | 0.63987 0.00039
0.64007 0.00037 0.63998 0.00051 | 0.64001 0.00035 42626
822 4839 | 0.65170 0.64759 0.65923 | 0.63989 0.00039
0.64008 0.00037 0.64000 0.00051 | 0.64003 0.00035 42622
823 5270 | 0.63122 0.63653 0.64202 | 0.63987 0.00039
0.64007 0.00037 0.64001 0.00051 | 0.64002 0.00035 42665
824 4862 | 0.64344 0.64471 0.63793 | 0.63988 0.00039
0.64008 0.00037 0.64000 0.00051 | 0.64003 0.00035 42718
825 5102 | 0.63405 0.63821 0.64570 | 0.63987 0.00039
0.64007 0.00037 0.64001 0.00051 | 0.64002 0.00035 42770
826 4884 | 0.64578 0.64958 0.65150 | 0.63988 0.00038
0.64009 0.00037 0.64003 0.00051 | 0.64004 0.00035 42776
827 5133 | 0.64978 0.65141 0.67059 | 0.63989 0.00038
0.64010 0.00037 0.64006 0.00051 | 0.64006 0.00035 42700
828 5052 | 0.63629 0.62841 0.63567 | 0.63989 0.00038
0.64009 0.00037 0.64006 0.00051 | 0.64004 0.00035 42714
829 4906 | 0.65845 0.66051 0.64898 | 0.63991 0.00038
0.64011 0.00037 0.64007 0.00051 | 0.64007 0.00035 42597
830 5195 | 0.63365 0.62274 0.63837 | 0.63990 0.00038
0.64009 0.00037 0.64007 0.00051 | 0.64005 0.00035 42570
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831 4776 | 0.62094 0.62359 0.63600 | 0.63988 0.00038
0.64007 0.00037 0.64006 0.00051 | 0.64003 0.00035 42502
832 4949 | 0.65017 0.65177 0.64232 | 0.63989 0.00038
0.64008 0.00037 0.64007 0.00051 | 0.64004 0.00035 42511
833 5228 | 0.64268 0.64887 0.64487 | 0.63990 0.00038
0.64010 0.00037 0.64007 0.00051 | 0.64005 0.00035 42537
834 4937 | 0.65538 0.64500 0.66053 | 0.63992 0.00038
0.64010 0.00037 0.64010 0.00051 | 0.64007 0.00035 42540
835 5151 | 0.63497 0.63421 0.63981 | 0.63991 0.00038
0.64009 0.00037 0.64010 0.00051 | 0.64006 0.00035 42581
836 4889 | 0.63162 0.63870 0.64557 | 0.63990 0.00038
0.64009 0.00037 0.64010 0.00051 | 0.64006 0.00035 42629
837 5015 | 0.63615 0.64056 0.63133 | 0.63989 0.00038
0.64009 0.00037 0.64009 0.00050 | 0.64006 0.00035 42679
838 5061 | 0.64808 0.64971 0.66583 | 0.63990 0.00038
0.64011 0.00037 0.64013 0.00051 | 0.64007 0.00035 42642
839 5104 | 0.64619 0.64593 0.64714 | 0.63991 0.00038
0.64011 0.00037 0.64014 0.00050 | 0.64008 0.00035 42677
840 4962 | 0.64510 0.64555 0.65944 | 0.63992 0.00038
0.64012 0.00037 0.64016 0.00050 | 0.64009 0.00035 42693
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841 5020 | 0.64352 0.64863 0.62361 | 0.63992 0.00038
0.64013 0.00037 0.64014 0.00050 | 0.64009 0.00035 42743
842 4948 | 0.64069 0.64385 0.63988 | 0.63992 0.00038
0.64014 0.00037 0.64014 0.00050 | 0.64010 0.00035 42794
843 4960 | 0.62938 0.63398 0.62215 | 0.63991 0.00038
0.64013 0.00037 0.64012 0.00050 | 0.64008 0.00035 42793
844 4926 | 0.64540 0.64671 0.63476 | 0.63992 0.00038
0.64014 0.00037 0.64011 0.00050 | 0.64009 0.00035 42842
845 5127 | 0.63612 0.63817 0.63957 | 0.63991 0.00038
0.64013 0.00037 0.64011 0.00050 | 0.64009 0.00035 42892

846 4972 | 0.64387 0.63400 0.66208 | 0.63992 0.00038
0.64013 0.00037 0.64014 0.00050 | 0.64009 0.00034 42949
847 5089 | 0.63839 0.62190 0.64437 | 0.63992 0.00038
0.64010 0.00037 0.64014 0.00050 | 0.64007 0.00034 42947
848 4943 | 0.64641 0.65129 0.65371 | 0.63992 0.00038
0.64012 0.00037 0.64016 0.00050 | 0.64009 0.00034 42936
849 5050 | 0.65466 0.65103 0.63436 | 0.63994 0.00038
0.64013 0.00037 0.64015 0.00050 | 0.64010 0.00034 42960
850 5085 | 0.64194 0.63946 0.63612 | 0.63995 0.00038
0.64013 0.00036 0.64015 0.00050 | 0.64010 0.00034 43014
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851 4896 | 0.64541 0.64741 0.66462 | 0.63995 0.00038
0.64014 0.00036 0.64018 0.00050 | 0.64011 0.00034 43006
852 5055 | 0.62348 0.62298 0.63936 | 0.63993 0.00038
0.64012 0.00036 0.64018 0.00050 | 0.64009 0.00034 42948
853 4808 | 0.64712 0.64577 0.65484 | 0.63994 0.00038
0.64012 0.00036 0.64019 0.00050 | 0.64010 0.00034 42972
854 5156 | 0.64298 0.62743 0.64478 | 0.63994 0.00038
0.64011 0.00036 0.64020 0.00050 | 0.64010 0.00034 43012
855 4921 | 0.64905 0.65033 0.65581 | 0.63996 0.00038
0.64012 0.00036 0.64022 0.00050 | 0.64011 0.00034 42999
856 5064 | 0.62573 0.63132 0.59575 | 0.63994 0.00038
0.64011 0.00036 0.64016 0.00050 | 0.64009 0.00034 42882
857 4840 | 0.63388 0.63697 0.64090 | 0.63993 0.00038
0.64011 0.00036 0.64016 0.00050 | 0.64008 0.00034 42929
858 5076 | 0.62948 0.63100 0.62935 | 0.63992 0.00038
0.64010 0.00036 0.64015 0.00050 | 0.64007 0.00034 42927
859 4965 | 0.64289 0.63679 0.63445 | 0.63992 0.00037
0.64009 0.00036 0.64014 0.00050 | 0.64007 0.00034 42981
860 5142 | 0.63420 0.63514 0.63565 | 0.63991 0.00037
0.64008 0.00036 0.64014 0.00050 | 0.64006 0.00034 43018
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861 4926 | 0.65266 0.65040 0.64756 | 0.63993 0.00037
0.64010 0.00036 0.64015 0.00050 | 0.64007 0.00034 43020
862 5184 | 0.64747 0.63987 0.65192 | 0.63994 0.00037
0.64010 0.00036 0.64016 0.00050 | 0.64008 0.00034 43069
863 4949 | 0.63740 0.63149 0.62129 | 0.63994 0.00037
0.64009 0.00036 0.64014 0.00050 | 0.64007 0.00034 43074
864 4944 | 0.64705 0.65546 0.64091 | 0.63994 0.00037
0.64011 0.00036 0.64014 0.00050 | 0.64008 0.00034 43065
865 5108 | 0.65078 0.64566 0.64850 | 0.63996 0.00037
0.64011 0.00036 0.64015 0.00050 | 0.64009 0.00034 43095
866 4996 | 0.62433 0.62408 0.63084 | 0.63994 0.00037
0.64009 0.00036 0.64014 0.00050 | 0.64007 0.00034 43024
867 4818 | 0.64398 0.63793 0.64224 | 0.63994 0.00037
0.64009 0.00036 0.64014 0.00050 | 0.64007 0.00034 43082
868 5168 | 0.62912 0.62935 0.61641 | 0.63993 0.00037
0.64008 0.00036 0.64011 0.00050 | 0.64005 0.00034 43031
869 4877 | 0.62418 0.62526 0.63929 | 0.63991 0.00037
0.64006 0.00036 0.64011 0.00050 | 0.64004 0.00034 42995
870 4926 | 0.63881 0.64117 0.61648 | 0.63991 0.00037
0.64006 0.00036 0.64008 0.00050 | 0.64003 0.00034 43038

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871 5138 | 0.63213 0.63199 0.61170 | 0.63990 0.00037
0.64005 0.00036 0.64005 0.00050 | 0.64002 0.00034 43007
872 4975 | 0.62727 0.62628 0.64579 | 0.63988 0.00037
0.64003 0.00036 0.64006 0.00050 | 0.64001 0.00034 43005
873 4927 | 0.62345 0.62268 0.63599 | 0.63987 0.00037
0.64001 0.00036 0.64005 0.00050 | 0.63999 0.00034 42937
874 4974 | 0.64186 0.64741 0.62795 | 0.63987 0.00037
0.64002 0.00036 0.64004 0.00050 | 0.63999 0.00034 42988
875 5174 | 0.63549 0.63986 0.63434 | 0.63986 0.00037
0.64002 0.00036 0.64003 0.00049 | 0.63999 0.00034 43035
876 4957 | 0.65460 0.64290 0.65535 | 0.63988 0.00037
0.64002 0.00036 0.64005 0.00049 | 0.64000 0.00034 43063
877 5189 | 0.63750 0.64428 0.64930 | 0.63988 0.00037
0.64003 0.00036 0.64006 0.00049 | 0.64001 0.00034 43102
878 4846 | 0.63197 0.63373 0.62567 | 0.63987 0.00037
0.64002 0.00036 0.64004 0.00049 | 0.64000 0.00034 43115
879 4926 | 0.63985 0.64918 0.65551 | 0.63987 0.00037
0.64003 0.00036 0.64006 0.00049 | 0.64001 0.00034 43125
880 5106 | 0.62353 0.62513 0.66326 | 0.63985 0.00037
0.64002 0.00036 0.64009 0.00049 | 0.64000 0.00034 43137

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881 4880 | 0.64602 0.63772 0.61684 | 0.63986 0.00037
0.64001 0.00036 0.64006 0.00049 | 0.63999 0.00034 43184
882 5185 | 0.66217 0.65937 0.66288 | 0.63988 0.00037
0.64004 0.00036 0.64009 0.00049 | 0.64002 0.00034 43008
883 5149 | 0.63542 0.64252 0.61327 | 0.63988 0.00037
0.64004 0.00036 0.64005 0.00049 | 0.64001 0.00034 43044
884 4811 | 0.63593 0.63920 0.62995 | 0.63987 0.00037
0.64004 0.00036 0.64004 0.00049 | 0.64001 0.00034 43090
885 5023 | 0.63724 0.63501 0.64278 | 0.63987 0.00037
0.64003 0.00036 0.64005 0.00049 | 0.64000 0.00034 43137
886 5030 | 0.63131 0.62297 0.62678 | 0.63986 0.00037
0.64001 0.00036 0.64003 0.00049 | 0.63998 0.00034 43072
887 4993 | 0.64997 0.65370 0.64054 | 0.63987 0.00037
0.64003 0.00036 0.64003 0.00049 | 0.64000 0.00034 43069
888 5168 | 0.63717 0.63443 0.63593 | 0.63987 0.00037
0.64002 0.00036 0.64003 0.00049 | 0.63999 0.00034 43108
889 4903 | 0.62017 0.62613 0.62062 | 0.63984 0.00037
0.64000 0.00036 0.64000 0.00049 | 0.63997 0.00034 43010
890 4836 | 0.63255 0.64166 0.62266 | 0.63984 0.00037
0.64001 0.00036 0.63998 0.00049 | 0.63997 0.00034 43051

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891 5064 | 0.64186 0.63840 0.64004 | 0.63984 0.00037
0.64000 0.00035 0.63998 0.00049 | 0.63997 0.00033 43106
892 5058 | 0.64823 0.64240 0.62961 | 0.63985 0.00037
0.64001 0.00035 0.63997 0.00049 | 0.63997 0.00033 43162
893 5052 | 0.62941 0.63288 0.63135 | 0.63984 0.00037
0.64000 0.00035 0.63996 0.00049 | 0.63996 0.00033 43174
894 4835 | 0.63881 0.62740 0.64686 | 0.63983 0.00037
0.63998 0.00035 0.63997 0.00049 | 0.63995 0.00033 43207

895 5095 | 0.64426 0.64957 0.62891 | 0.63984 0.00037
0.64000 0.00035 0.63995 0.00049 | 0.63996 0.00033 43249
896 5046 | 0.63923 0.64342 0.61980 | 0.63984 0.00037
0.64000 0.00035 0.63993 0.00049 | 0.63995 0.00033 43298
897 4997 | 0.62304 0.62118 0.63281 | 0.63982 0.00037
0.63998 0.00035 0.63992 0.00049 | 0.63993 0.00033 43206
898 4865 | 0.62758 0.63241 0.63506 | 0.63980 0.00037
0.63997 0.00035 0.63992 0.00049 | 0.63992 0.00033 43219
899 4993 | 0.63613 0.64068 0.64935 | 0.63980 0.00036
0.63997 0.00035 0.63993 0.00049 | 0.63993 0.00033 43267
900 5052 | 0.63626 0.62689 0.64503 | 0.63980 0.00036
0.63995 0.00035 0.63993 0.00049 | 0.63992 0.00033 43291
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901 4986 | 0.62852 0.62809 0.62777 | 0.63978 0.00036
0.63994 0.00035 0.63992 0.00049 | 0.63990 0.00033 43263
902 4960 | 0.63929 0.63492 0.64352 | 0.63978 0.00036
0.63993 0.00035 0.63992 0.00049 | 0.63990 0.00033 43312
903 5114 | 0.64523 0.64527 0.65039 | 0.63979 0.00036
0.63994 0.00035 0.63994 0.00049 | 0.63991 0.00033 43342
904 5046 | 0.65569 0.63927 0.66352 | 0.63981 0.00036
0.63994 0.00035 0.63996 0.00049 | 0.63992 0.00033 43370
905 5106 | 0.64949 0.64939 0.64112 | 0.63982 0.00036
0.63995 0.00035 0.63997 0.00049 | 0.63993 0.00033 43391
906 5018 | 0.64885 0.63675 0.64270 | 0.63983 0.00036
0.63995 0.00035 0.63997 0.00048 | 0.63993 0.00033 43448
907 5019 | 0.63891 0.63802 0.65331 | 0.63983 0.00036
0.63994 0.00035 0.63998 0.00048 | 0.63993 0.00033 43498
908 4926 | 0.64117 0.64225 0.64898 | 0.63983 0.00036
0.63995 0.00035 0.63999 0.00048 | 0.63993 0.00033 43544
909 5011 | 0.63709 0.63549 0.66349 | 0.63983 0.00036
0.63994 0.00035 0.64002 0.00048 | 0.63994 0.00033 43592
910 4960 | 0.64352 0.64118 0.65131 | 0.63983 0.00036
0.63994 0.00035 0.64003 0.00048 | 0.63994 0.00033 43638
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911 5057 | 0.62514 0.62309 0.63218 | 0.63981 0.00036
0.63992 0.00035 0.64003 0.00048 | 0.63992 0.00033 43568
912 4817 | 0.62112 0.62550 0.64829 | 0.63979 0.00036
0.63991 0.00035 0.64004 0.00048 | 0.63991 0.00033 43552
913 5001 | 0.63422 0.62339 0.63131 | 0.63979 0.00036
0.63989 0.00035 0.64003 0.00048 | 0.63990 0.00033 43515
914 5105 | 0.63198 0.63370 0.63463 | 0.63978 0.00036
0.63988 0.00035 0.64002 0.00048 | 0.63989 0.00033 43542
915 4983 | 0.64674 0.63406 0.62648 | 0.63978 0.00036
0.63987 0.00035 0.64000 0.00048 | 0.63988 0.00033 43587
916 5192 | 0.63094 0.63306 0.63092 | 0.63977 0.00036
0.63987 0.00035 0.63999 0.00048 | 0.63987 0.00033 43603
917 4833 | 0.63987 0.64352 0.65803 | 0.63977 0.00036
0.63987 0.00035 0.64001 0.00048 | 0.63988 0.00033 43634
918 5068 | 0.63404 0.64194 0.63448 | 0.63977 0.00036
0.63987 0.00035 0.64001 0.00048 | 0.63988 0.00033 43683
919 4928 | 0.64814 0.65897 0.64135 | 0.63978 0.00036
0.63989 0.00035 0.64001 0.00048 | 0.63989 0.00033 43643

920 5107 | 0.63465 0.63272 0.63734 | 0.63977 0.00036
0.63989 0.00035 0.64001 0.00048 | 0.63989 0.00033 43672
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921 4892 | 0.63659 0.63953 0.63160 | 0.63977 0.00036
0.63989 0.00035 0.64000 0.00048 | 0.63988 0.00033 43720
922 4987 | 0.63504 0.62924 0.65672 | 0.63976 0.00036
0.63987 0.00035 0.64002 0.00048 | 0.63988 0.00033 43761
923 4983 | 0.63955 0.63477 0.64772 | 0.63976 0.00036
0.63987 0.00035 0.64002 0.00048 | 0.63988 0.00033 43810
924 5072 | 0.62597 0.62866 0.63430 | 0.63975 0.00036
0.63986 0.00035 0.64002 0.00048 | 0.63987 0.00033 43794
925 4869 | 0.63677 0.64265 0.64238 | 0.63974 0.00036
0.63986 0.00035 0.64002 0.00048 | 0.63987 0.00033 43843
926 5112 | 0.64031 0.64400 0.62915 | 0.63974 0.00036
0.63986 0.00035 0.64001 0.00048 | 0.63987 0.00033 43894
927 5020 | 0.65137 0.64739 0.63802 | 0.63976 0.00036
0.63987 0.00035 0.64001 0.00048 | 0.63988 0.00032 43928
928 5092 | 0.64547 0.64414 0.63045 | 0.63976 0.00036
0.63988 0.00035 0.63999 0.00048 | 0.63988 0.00032 43980
929 4956 | 0.63784 0.62264 0.65316 | 0.63976 0.00036
0.63986 0.00035 0.64001 0.00048 | 0.63987 0.00032 43998
930 4917 | 0.65691 0.64738 0.65628 | 0.63978 0.00036
0.63987 0.00035 0.64003 0.00048 | 0.63988 0.00032 43984
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931 5123 | 0.62679 0.62392 0.62521 | 0.63977 0.00036
0.63985 0.00035 0.64001 0.00048 | 0.63987 0.00032 43907
932 4779 | 0.65416 0.64721 0.64514 | 0.63978 0.00036
0.63986 0.00035 0.64002 0.00047 | 0.63987 0.00032 43927
933 5259 | 0.65379 0.65143 0.65754 | 0.63980 0.00036
0.63987 0.00035 0.64004 0.00047 | 0.63989 0.00032 43885
934 4985 | 0.63878 0.63208 0.64311 | 0.63980 0.00036
0.63986 0.00034 0.64004 0.00047 | 0.63989 0.00032 43926
935 4880 | 0.63616 0.63208 0.61257 | 0.63979 0.00035
0.63985 0.00034 0.64001 0.00047 | 0.63987 0.00032 43912
936 5007 | 0.64162 0.65105 0.63618 | 0.63979 0.00035
0.63986 0.00034 0.64000 0.00047 | 0.63988 0.00032 43944
937 5037 | 0.64955 0.64654 0.64791 | 0.63981 0.00035
0.63987 0.00034 0.64001 0.00047 | 0.63989 0.00032 43966
938 5082 | 0.64292 0.63184 0.62496 | 0.63981 0.00035
0.63986 0.00034 0.64000 0.00047 | 0.63988 0.00032 43990
939 4972 | 0.61802 0.62983 0.62963 | 0.63978 0.00035
0.63985 0.00034 0.63999 0.00047 | 0.63987 0.00032 43949
940 4795 | 0.65597 0.65366 0.65036 | 0.63980 0.00035
0.63987 0.00034 0.64000 0.00047 | 0.63988 0.00032 43908
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941 5316 | 0.64864 0.64584 0.64964 | 0.63981 0.00035
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942 4916 | 0.64623 0.63855 0.66212 | 0.63982 0.00035
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943 4967 | 0.64822 0.64471 0.64950 | 0.63983 0.00035
0.63988 0.00034 0.64004 0.00047 | 0.63990 0.00032 43997

944 4997 | 0.65142 0.65555 0.66383 | 0.63984 0.00035
0.63989 0.00034 0.64007 0.00047 | 0.63992 0.00032 43903
945 5074 | 0.62484 0.63533 0.62979 | 0.63983 0.00035
0.63989 0.00034 0.64006 0.00047 | 0.63991 0.00032 43915
946 4841 | 0.63881 0.63195 0.65206 | 0.63982 0.00035
0.63988 0.00034 0.64007 0.00047 | 0.63991 0.00032 43959
947 5137 | 0.65976 0.65580 0.66071 | 0.63985 0.00035
0.63990 0.00034 0.64009 0.00047 | 0.63993 0.00032 43847
948 5144 | 0.63787 0.64512 0.62911 | 0.63984 0.00035
0.63990 0.00034 0.64008 0.00047 | 0.63993 0.00032 43895
949 4803 | 0.62718 0.62400 0.62258 | 0.63983 0.00035
0.63989 0.00034 0.64006 0.00047 | 0.63991 0.00032 43811
950 4909 | 0.64675 0.65292 0.66362 | 0.63984 0.00035
0.63990 0.00034 0.64009 0.00047 | 0.63993 0.00032 43760
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951 5155 | 0.63925 0.63100 0.66205 | 0.63984 0.00035
0.63989 0.00034 0.64011 0.00047 | 0.63993 0.00032 43805
952 4917 | 0.63448 0.63958 0.61723 | 0.63983 0.00035
0.63989 0.00034 0.64009 0.00047 | 0.63992 0.00032 43833
953 4932 | 0.66036 0.66672 0.64526 | 0.63985 0.00035
0.63992 0.00034 0.64009 0.00047 | 0.63994 0.00032 43654
954 5254 | 0.64507 0.64592 0.63903 | 0.63986 0.00035
0.63993 0.00034 0.64009 0.00047 | 0.63995 0.00032 43688
955 4815 | 0.63122 0.62264 0.65523 | 0.63985 0.00035
0.63991 0.00034 0.64011 0.00047 | 0.63994 0.00032 43690
956 4881 | 0.62577 0.62443 0.63616 | 0.63984 0.00035
0.63989 0.00034 0.64011 0.00047 | 0.63992 0.00032 43648
957 4998 | 0.61484 0.62264 0.62551 | 0.63981 0.00035
0.63987 0.00034 0.64009 0.00047 | 0.63990 0.00032 43512
958 4875 | 0.64296 0.64938 0.64990 | 0.63981 0.00035
0.63988 0.00034 0.64010 0.00047 | 0.63991 0.00032 43525
959 5207 | 0.63138 0.63550 0.65120 | 0.63980 0.00035
0.63988 0.00034 0.64011 0.00047 | 0.63991 0.00032 43561
960 4945 | 0.63395 0.63494 0.66470 | 0.63980 0.00035
0.63987 0.00034 0.64014 0.00047 | 0.63991 0.00032 43597
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961 4994 | 0.64296 0.64156 0.64228 | 0.63980 0.00035
0.63987 0.00034 0.64014 0.00047 | 0.63992 0.00032 43641
962 5128 | 0.63764 0.64968 0.64928 | 0.63980 0.00035
0.63989 0.00034 0.64015 0.00047 | 0.63992 0.00032 43655
963 4986 | 0.63674 0.62869 0.63740 | 0.63979 0.00035
0.63987 0.00034 0.64015 0.00047 | 0.63991 0.00032 43670
964 4986 | 0.65115 0.65559 0.63027 | 0.63981 0.00035
0.63989 0.00034 0.64014 0.00047 | 0.63992 0.00032 43676
965 5107 | 0.63636 0.65135 0.65187 | 0.63980 0.00035
0.63990 0.00034 0.64015 0.00047 | 0.63993 0.00032 43679
966 4904 | 0.65319 0.63499 0.63548 | 0.63982 0.00035
0.63990 0.00034 0.64015 0.00047 | 0.63993 0.00032 43729
967 5146 | 0.65382 0.65727 0.63602 | 0.63983 0.00035
0.63992 0.00034 0.64014 0.00047 | 0.63995 0.00032 43702
968 5028 | 0.63960 0.64774 0.64637 | 0.63983 0.00035
0.63992 0.00034 0.64015 0.00047 | 0.63995 0.00032 43727

969 4893 | 0.64385 0.63239 0.66138 | 0.63984 0.00035
0.63992 0.00034 0.64017 0.00047 | 0.63995 0.00032 43772
970 5029 | 0.64692 0.65542 0.64890 | 0.63984 0.00035
0.63993 0.00034 0.64018 0.00047 | 0.63997 0.00032 43742
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971 5009 | 0.65156 0.65225 0.63504 | 0.63986 0.00035
0.63995 0.00034 0.64017 0.00046 | 0.63998 0.00032 43757
972 5006 | 0.64665 0.64828 0.65321 | 0.63986 0.00035
0.63996 0.00034 0.64019 0.00046 | 0.63998 0.00032 43759
973 5034 | 0.66205 0.65722 0.65943 | 0.63989 0.00035
0.63997 0.00034 0.64021 0.00046 | 0.64001 0.00032 43630
974 5104 | 0.64610 0.65322 0.64197 | 0.63989 0.00035
0.63999 0.00034 0.64021 0.00046 | 0.64002 0.00032 43632
975 4862 | 0.63477 0.63548 0.65079 | 0.63989 0.00035
0.63998 0.00034 0.64022 0.00046 | 0.64001 0.00032 43675
976 4931 | 0.65061 0.65084 0.64153 | 0.63990 0.00035
0.64000 0.00034 0.64022 0.00046 | 0.64002 0.00032 43685
977 5142 | 0.64630 0.63973 0.63915 | 0.63991 0.00035
0.64000 0.00034 0.64022 0.00046 | 0.64002 0.00032 43730
978 4957 | 0.63441 0.63765 0.62349 | 0.63990 0.00035
0.63999 0.00034 0.64021 0.00046 | 0.64002 0.00032 43758
979 4950 | 0.63001 0.63683 0.64097 | 0.63989 0.00035
0.63999 0.00034 0.64021 0.00046 | 0.64001 0.00032 43794
980 4931 | 0.63961 0.64116 0.64981 | 0.63989 0.00035
0.63999 0.00034 0.64022 0.00046 | 0.64002 0.00032 43838
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981 5062 | 0.63595 0.63050 0.63162 | 0.63989 0.00035
0.63998 0.00034 0.64021 0.00046 | 0.64001 0.00032 43852
982 4944 | 0.65865 0.65366 0.63307 | 0.63991 0.00035
0.64000 0.00034 0.64020 0.00046 | 0.64002 0.00032 43856
983 5182 | 0.62697 0.62736 0.61984 | 0.63989 0.00035
0.63998 0.00034 0.64018 0.00046 | 0.64000 0.00032 43794
984 4820 | 0.64550 0.64453 0.63142 | 0.63990 0.00035
0.63999 0.00034 0.64017 0.00046 | 0.64001 0.00032 43845
985 5144 | 0.64605 0.64736 0.65000 | 0.63990 0.00035
0.63999 0.00034 0.64018 0.00046 | 0.64001 0.00031 43864
986 5008 | 0.61187 0.61412 0.62629 | 0.63987 0.00035
0.63997 0.00034 0.64016 0.00046 | 0.63999 0.00032 43617
987 4735 | 0.63515 0.63802 0.63615 | 0.63987 0.00035
0.63996 0.00034 0.64016 0.00046 | 0.63999 0.00032 43661
988 5182 | 0.63522 0.64007 0.62417 | 0.63986 0.00035
0.63996 0.00034 0.64014 0.00046 | 0.63998 0.00031 43697
989 5004 | 0.62654 0.62836 0.63105 | 0.63985 0.00035
0.63995 0.00034 0.64013 0.00046 | 0.63997 0.00031 43675
990 4881 | 0.63933 0.64099 0.63192 | 0.63985 0.00035
0.63995 0.00034 0.64012 0.00046 | 0.63997 0.00031 43723
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991 5128 | 0.63207 0.63216 0.63371 | 0.63984 0.00035
0.63995 0.00034 0.64012 0.00046 | 0.63996 0.00031 43735
992 4922 | 0.63644 0.63237 0.64054 | 0.63984 0.00034
0.63994 0.00034 0.64012 0.00046 | 0.63996 0.00031 43770

993 5034 | 0.65207 0.64602 0.63853 | 0.63985 0.00034
0.63994 0.00034 0.64012 0.00046 | 0.63996 0.00031 43806
994 5097 | 0.63604 0.63444 0.64314 | 0.63985 0.00034
0.63994 0.00033 0.64012 0.00046 | 0.63996 0.00031 43844
995 4878 | 0.64158 0.64126 0.63916 | 0.63985 0.00034
0.63994 0.00033 0.64012 0.00046 | 0.63996 0.00031 43892
996 5093 | 0.62937 0.63181 0.64483 | 0.63984 0.00034
0.63993 0.00033 0.64012 0.00046 | 0.63995 0.00031 43916
997 4914 | 0.63302 0.62970 0.64155 | 0.63983 0.00034
0.63992 0.00033 0.64012 0.00045 | 0.63995 0.00031 43936
998 5055 | 0.62997 0.62777 0.64344 | 0.63982 0.00034
0.63991 0.00033 0.64013 0.00045 | 0.63994 0.00031 43944
999 4986 | 0.65322 0.65447 0.64832 | 0.63983 0.00034
0.63992 0.00033 0.64014 0.00045 | 0.63995 0.00031 43913
1000 5175 | 0.65921 0.66664 0.64087 | 0.63985 0.00034
0.63995 0.00033 0.64014 0.00045 | 0.63997 0.00031 43777

1001 5034 | 0.65929 0.65186 0.65896 | 0.63988 0.00034
0.63996 0.00033 0.64016 0.00045 | 0.63999 0.00031 43719
1002 4996 | 0.64378 0.64215 0.64453 | 0.63988 0.00034
0.63997 0.00033 0.64016 0.00045 | 0.63999 0.00031 43762
1003 4913 | 0.64180 0.64188 0.66724 | 0.63988 0.00034
0.63997 0.00033 0.64019 0.00045 | 0.64000 0.00031 43778
1004 4974 | 0.64192 0.64925 0.64857 | 0.63988 0.00034
0.63998 0.00033 0.64020 0.00045 | 0.64001 0.00031 43795
1005 5049 | 0.63880 0.63765 0.64452 | 0.63988 0.00034
0.63997 0.00033 0.64020 0.00045 | 0.64001 0.00031 43841
1006 4948 | 0.64951 0.65466 0.65111 | 0.63989 0.00034
0.63999 0.00033 0.64022 0.00045 | 0.64002 0.00031 43809
1007 5104 | 0.65465 0.65463 0.64525 | 0.63991 0.00034
0.64001 0.00033 0.64022 0.00045 | 0.64003 0.00031 43784
1008 5027 | 0.63402 0.63483 0.63962 | 0.63990 0.00034
0.64000 0.00033 0.64022 0.00045 | 0.64003 0.00031 43818
1009 4830 | 0.63879 0.63574 0.64623 | 0.63990 0.00034
0.64000 0.00033 0.64023 0.00045 | 0.64003 0.00031 43863
1010 5063 | 0.63793 0.64008 0.63233 | 0.63990 0.00034
0.64000 0.00033 0.64022 0.00045 | 0.64002 0.00031 43907

1011 4970 | 0.63086 0.63661 0.65113 | 0.63989 0.00034
0.63999 0.00033 0.64023 0.00045 | 0.64002 0.00031 43948
1012 4939 | 0.62549 0.63427 0.62701 | 0.63987 0.00034
0.63999 0.00033 0.64022 0.00045 | 0.64001 0.00031 43947
1013 4993 | 0.63179 0.63452 0.64844 | 0.63987 0.00034
0.63998 0.00033 0.64022 0.00045 | 0.64001 0.00031 43985
1014 5042 | 0.65025 0.65940 0.63730 | 0.63988 0.00034
0.64000 0.00033 0.64022 0.00045 | 0.64002 0.00031 43956
1015 5140 | 0.63568 0.62741 0.62518 | 0.63987 0.00034
0.63999 0.00033 0.64021 0.00045 | 0.64001 0.00031 43939
1016 4874 | 0.65542 0.64257 0.65553 | 0.63989 0.00034
0.63999 0.00033 0.64022 0.00045 | 0.64002 0.00031 43958
1017 5133 | 0.64049 0.65405 0.63728 | 0.63989 0.00034
0.64000 0.00033 0.64022 0.00045 | 0.64003 0.00031 43976

1018 4909 | 0.63883 0.64669 0.64942 | 0.63989 0.00034
0.64001 0.00033 0.64023 0.00045 | 0.64003 0.00031 44005
1019 4995 | 0.64081 0.63663 0.64992 | 0.63989 0.00034
0.64001 0.00033 0.64024 0.00045 | 0.64003 0.00031 44049
1020 4995 | 0.64930 0.65665 0.62103 | 0.63990 0.00034
0.64003 0.00033 0.64022 0.00045 | 0.64004 0.00031 44077

1021 5079 | 0.63465 0.62109 0.63624 | 0.63989 0.00034
0.64001 0.00033 0.64021 0.00045 | 0.64003 0.00031 44043
1022 4883 | 0.63416 0.63447 0.65001 | 0.63989 0.00034
0.64000 0.00033 0.64022 0.00045 | 0.64003 0.00031 44084
1023 4956 | 0.62329 0.62328 0.63065 | 0.63987 0.00034
0.63998 0.00033 0.64021 0.00045 | 0.64001 0.00031 44012
1024 4911 | 0.64301 0.63748 0.65865 | 0.63987 0.00034
0.63998 0.00033 0.64023 0.00045 | 0.64001 0.00031 44052
1025 5170 | 0.64860 0.65168 0.64133 | 0.63988 0.00034
0.63999 0.00033 0.64023 0.00045 | 0.64002 0.00031 44064
1026 5044 | 0.64105 0.64216 0.63323 | 0.63988 0.00034
0.63999 0.00033 0.64023 0.00045 | 0.64002 0.00031 44111
1027 4939 | 0.65464 0.65046 0.63531 | 0.63990 0.00034
0.64001 0.00033 0.64022 0.00045 | 0.64003 0.00031 44135
1028 5058 | 0.64795 0.65822 0.65545 | 0.63991 0.00034
0.64002 0.00033 0.64024 0.00044 | 0.64005 0.00031 44066
1029 4930 | 0.64042 0.63887 0.65566 | 0.63991 0.00034
0.64002 0.00033 0.64025 0.00044 | 0.64005 0.00031 44107
1030 4953 | 0.64256 0.64581 0.63739 | 0.63991 0.00034
0.64003 0.00033 0.64025 0.00044 | 0.64005 0.00031 44149

1031 5010 | 0.64919 0.64677 0.64372 | 0.63992 0.00034
0.64004 0.00033 0.64025 0.00044 | 0.64006 0.00031 44178
1032 5058 | 0.63509 0.64164 0.62697 | 0.63991 0.00034
0.64004 0.00033 0.64024 0.00044 | 0.64006 0.00031 44217
1033 4898 | 0.60677 0.61046 0.62501 | 0.63988 0.00034
0.64001 0.00033 0.64022 0.00044 | 0.64003 0.00031 43893
1034 4786 | 0.62969 0.62917 0.62478 | 0.63987 0.00034
0.64000 0.00033 0.64021 0.00044 | 0.64002 0.00031 43871
1035 5191 | 0.64490 0.64287 0.65270 | 0.63988 0.00034
0.64000 0.00033 0.64022 0.00044 | 0.64002 0.00031 43900
1036 5101 | 0.64973 0.64645 0.65258 | 0.63989 0.00034
0.64001 0.00033 0.64023 0.00044 | 0.64003 0.00031 43912
1037 5026 | 0.62602 0.63097 0.61717 | 0.63987 0.00034
0.64000 0.00033 0.64021 0.00044 | 0.64002 0.00031 43868
1038 4807 | 0.63597 0.63393 0.61967 | 0.63987 0.00034
0.63999 0.00033 0.64019 0.00044 | 0.64001 0.00031 43878
1039 5127 | 0.64034 0.64786 0.65078 | 0.63987 0.00034
0.64000 0.00033 0.64020 0.00044 | 0.64002 0.00031 43898
1040 5048 | 0.65730 0.65238 0.66001 | 0.63989 0.00034
0.64001 0.00033 0.64022 0.00044 | 0.64003 0.00031 43838

1041 5104 | 0.62548 0.62476 0.65023 | 0.63987 0.00034
0.64000 0.00033 0.64023 0.00044 | 0.64002 0.00031 43834

```
  1042        4751 | 0.64712  0.64983  0.63137  |  0.63988 0.00034
0.64001 0.00033   0.64022 0.00044  |  0.64003 0.00031     43873
  1043        5174 | 0.61811  0.63433  0.61160  |  0.63986 0.00034
0.64000 0.00033   0.64019 0.00044  |  0.64001 0.00031     43810
  1044        4782 | 0.64956  0.64373  0.64010  |  0.63987 0.00034
0.64000 0.00033   0.64019 0.00044  |  0.64002 0.00031     43854
  1045        5287 | 0.63128  0.63320  0.65289  |  0.63986 0.00034
0.64000 0.00033   0.64021 0.00044  |  0.64002 0.00031     43888
  1046        4888 | 0.63471  0.63700  0.66375  |  0.63985 0.00034
0.63999 0.00033   0.64023 0.00044  |  0.64002 0.00030     43925
  1047        4983 | 0.63417  0.63187  0.66060  |  0.63985 0.00034
0.63999 0.00033   0.64025 0.00044  |  0.64002 0.00030     43965
  1048        5033 | 0.62511  0.63624  0.63681  |  0.63983 0.00034
0.63998 0.00033   0.64025 0.00044  |  0.64001 0.00030     43985
  1049        4889 | 0.64598  0.63510  0.64054  |  0.63984 0.00033
0.63998 0.00033   0.64025 0.00044  |  0.64001 0.00030     44035
  1050        5193 | 0.63946  0.64199  0.63901  |  0.63984 0.00033
0.63998 0.00033   0.64025 0.00044  |  0.64001 0.00030     44079
 ---------------------------------------------------------------------------
-------------------------------------------------------------


  the largest active cycle keffs by estimator are:
the smallest active cycle keffs by estimator are:

                   collision 0.66891 on cycle  81
collision 0.60677 on cycle1033
                  absorption 0.67175 on cycle 446
absorption 0.60987 on cycle 561
                track length 0.68436 on cycle 504
track length 0.59332 on cycle 243
1plot of the estimated col/abs/track-length keff one standard deviation
interval versus cycle number (| = final keff =  0.64001)

    cycle   active 0.636        0.637         0.638         0.639
0.640         0.641         0.642          0.643
   number   cycles  |------------|-------------|-------------|-----------
---|-------------|-------------|--------------|
       64       14  |                              (----------------------
---|----k-----------------------------)       |
       73       23  |            (-------------------------k--------------
---|-------)                                 |
       82       32  |                          (---------------------k----
---|-------------)                            |
       91       41  |                                          (----------
---|--------k----------------------)          |
      100       50  |                                        (-----------
---|-----k--------------------)               |
      109       59  |                                                (-----
---|----------k------------------)            |
      118       68  |
(---|-------------k-----------------)          |
      127       77  |
(---|-----------k---------------)              |
```

```
      136       86  |                                                        (--
---|--------k--------------)                  |
      145       95  +                                                         (-
---|--------k--------------)                  +
      154      104  |                                                        (--
---|------k-------------)                     |
      163      113  |                                                        (--
---|------k------------)                      |
      172      122  |                                                 (--------
---|k------------)                            |
      181      131  |                                            (-----------k-
---|------)                                   |
      190      140  |                                          (----------k---
---|----)                                     |
      199      149  |                                                 (-------
---|k----------)                              |
      208      158  |                                                   (-----
---|-k----------)                             |
      217      167  |                                                   (-----
---|-k----------)                             |
      226      176  |                                                     (---
---|--k----------)                            |
      235      185  +                                                       (-
---|----k----------)                          +
      244      194  |                                                       (-
---|-----k----------)                         |
      253      203  |
(--|-------k---------)                        |
      262      212  |                                                       (-
---|----k---------)                           |
      271      221  |
(--|------k---------)                         |
      280      230  |
(--|------k--------)                          |
      289      239  |
(-|-------k--------)                         |
      298      248  |
|(--------k--------)                       |
      307      257  |
|-------k--------)                         |
      316      266  |
|(-------k--------)                        |
      325      275  +
|-------k--------)                         +
      334      284  |
|--------k-------)                         |
      343      293  |
|(-------k-------)                         |
      352      302  |
|-------k-------)                          |
      361      311  |
|(-------k-------)                         |
      370      320  |
| (-------k-------)                        |
```

```
      379      329  |
| (-------k------)                        |
      388      338  |
|-------k-------)                         |
      397      347  |
|-------k-------)                         |
      406      356  |
|(-------k-------)                        |
      415      365  +
|  (-------k------)                       +
      424      374  |
| (------k-------)                        |
      433      383  |
|(------k-------)                         |
      442      392  |
|(------k-------)                         |
      451      401  |
| (------k------)                         |
      460      410  |
|  (------k------)                        |
      469      419  |
|  (------k------)                        |
      478      428  |
|  (-----k------)                         |
      487      437  |
| (------k-----)                          |
      496      446  |
| (------k------)                         |
      505      455  +
|   (------k------)                       +
      514      464  |
|  (------k-----)                         |
      523      473  |
|  (-----k------)                         |
      532      482  |
|(------k-----)                           |
      541      491  |
|(-----k------)                           |
      550      500  |
| (-----k-----)                           |
      559      509  |
|(-----k------)                           |
      568      518  |
|(-----k-----)                            |
      577      527  |
|(-----k-----)                            |
      586      536  |
|-----k-----)                             |
      595      545  +
|(-----k-----)                            +
      604      554  |
(|----k-----)                              |
      613      563  |
(-|---k-----)                                |
```

```
      622      572  |
(--|--k-----)                                |
      631      581  |
(---|k-----)                                  |
      640      590  |                                                          (-
---|k----)                                   |
      649      599  |                                                         (--
---k----)                                    |
      658      608  |                                                          (-
---k-----)                                   |
      667      617  |                                                          (-
---k-----)                                   |
      676      626  |                                                          (-
---k-----)                                   |
      685      635  +
(---|k-----)                                  +
      694      644  |
(---|k-----)                                  |
      703      653  |
(---|-k----)                                  |
      712      662  |
(---|-k----)                                  |
      721      671  |
(--|-k----)                                   |
      730      680  |
(--|-k----)                                   |
      739      689  |
(---|k----)                                   |
      748      698  |                                                          (-
---k-----)                                   |
      757      707  |
(---|-k----)                                  |
      766      716  |                                                          (-
---|k----)                                   |
      775      725  +                                                          (-
---k----)                                    +
      784      734  |                                                          (-
---k----)                                    |
      793      743  |                                                          (-
---k----)                                    |
      802      752  |                                                          (-
---k----)                                    |
      811      761  |                                                          (-
---k----)                                    |
      820      770  |                                                          (-
---k----)                                    |
      829      779  |
(---|k----)                                  |
      838      788  |
(---|k----)                                  |
      847      797  |
(---|k----)                                  |
      856      806  |
(---|k----)                                  |
```

```
      865      815  +
(---|k----)                                  +
      874      824  |                                                (-
---k---)                                    |
      883      833  |                                                (-
---k----)                                   |
      892      842  |                                               (--
--k|---)                                    |
      901      851  |                                               (--
-k-|--)                                     |
      910      860  |                                               (--
--k|--)                                     |
      919      869  |                                              (---
-k-|--)                                     |
      928      878  |                                              (---
-k-|--)                                     |
      937      887  |                                              (---
-k-|--)                                     |
      946      896  |                                               (--
-k-|--)                                     |
      955      905  +                                               (--
--k|--)                                    +
      964      914  |                                               (--
--k|--)                                     |
      973      923  |                                                (-
---k---)                                    |
      982      932  |                                                (-
---k---)                                    |
      991      941  |                                                (-
--k|---)                                    |
     1000      950  |                                                (-
--k|---)                                    |
     1009      959  |
(---k---)                                     |
     1018      968  |
(---k----)                                    |
     1027      977  |
(---k---)                                     |
     1036      986  |
(---k---)                                     |
     1045      995  +                                                (-
---k---)                                    +
     1050     1000  |                                                (-
---k---)                                    |
                    |------------|-------------|-------------|-----------
---|-------------|-------------|-------------|
                  0.636        0.637         0.638         0.639
0.640         0.641         0.642          0.643
```

1individual and collision/absorption/track-length keffs for different numbers of inactive cycles skipped for fission source settling

skip active active average keff estimators and deviations
normality average k(c/a/t) k(c/a/t) confidence intervals

```
  cycles cycles   neutrons  k(col) st dev  k(abs) st dev  k(trk) st dev
co/ab/tl  k(c/a/t) st dev   95% confidence   99% confidence

     0   1050      5249701| 0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.63999 0.00030  0.63940-0.64058  0.63920-0.64077
     1   1049      5244701| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64002 0.00030  0.63943-0.64061  0.63923-0.64080
     2   1048      5241608| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64003 0.00030  0.63944-0.64062  0.63924-0.64081
     3   1047      5236514| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64004 0.00030  0.63945-0.64063  0.63926-0.64082
     4   1046      5231625| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64003 0.00030  0.63944-0.64062  0.63925-0.64081
     5   1045      5226437| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64003 0.00030  0.63944-0.64062  0.63924-0.64081
     6   1044      5221470| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64003 0.00030  0.63944-0.64062  0.63925-0.64082
     7   1043      5216570| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64004 0.00030  0.63945-0.64063  0.63925-0.64082
     8   1042      5211591| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64005 0.00030  0.63946-0.64064  0.63926-0.64084
     9   1041      5206559| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64006 0.00030  0.63946-0.64065  0.63927-0.64084
    10   1040      5201507| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64005 0.00030  0.63946-0.64065  0.63927-0.64084
 ----------------------------------------------------------------------
-------------------------------------------------------------
    11   1039      5196490| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64006 0.00030  0.63946-0.64065  0.63927-0.64084
    12   1038      5191436| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64006 0.00030  0.63947-0.64066  0.63927-0.64085
    13   1037      5186511| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64006 0.00030  0.63946-0.64065  0.63927-0.64085
    14   1036      5181430| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64006 0.00030  0.63947-0.64066  0.63927-0.64085
    15   1035      5176481| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64006 0.00030  0.63947-0.64066  0.63927-0.64085
    16   1034      5171474| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64007 0.00030  0.63947-0.64067  0.63928-0.64086
    17   1033      5166489| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64007 0.00030  0.63947-0.64067  0.63928-0.64086
    18   1032      5161551| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64006 0.00030  0.63947-0.64066  0.63927-0.64085
    19   1031      5156488| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64004 0.00030  0.63945-0.64064  0.63925-0.64084
    20   1030      5151375| 0.6399 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64005 0.00030  0.63945-0.64064  0.63925-0.64084
 ----------------------------------------------------------------------
-------------------------------------------------------------
    24   1026      5131465| 0.6399 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64002 0.00030  0.63942-0.64061  0.63922-0.64081
    33   1017      5086622| 0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.63998 0.00030  0.63938-0.64059  0.63919-0.64078
```

```
    42   1008      5041535| 0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.63999 0.00030  0.63939-0.64060  0.63919-0.64079
    50   1000*     5001757| 0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64001 0.00030  0.63941-0.64062  0.63921-0.64081
    51    999      4996558| 0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64000 0.00030  0.63940-0.64061  0.63920-0.64080
    60    990      4951557| 0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.63999 0.00031  0.63938-0.64060  0.63918-0.64080
    69    981      4906483| 0.6398 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64000 0.00031  0.63939-0.64062  0.63919-0.64082
    78    972      4861450| 0.6398 0.0003  0.6400 0.0003  0.6403 0.0004
|95/95/95| 0.64002 0.00031  0.63940-0.64063  0.63920-0.64084
    87    963      4816463| 0.6398 0.0003  0.6400 0.0003  0.6402 0.0004
|95/95/95| 0.64001 0.00031  0.63939-0.64063  0.63919-0.64083
    96    954      4771315| 0.6397 0.0003  0.6400 0.0003  0.6401 0.0004
|95/95/95| 0.63994 0.00031  0.63932-0.64056  0.63911-0.64076
 ---------------------------------------------------------------------------
-------------------------------------------------------------
   105    945      4726246| 0.6397 0.0003  0.6400 0.0003  0.6400 0.0005
|95/95/95| 0.63992 0.00031  0.63930-0.64054  0.63909-0.64074
   114    936      4681302| 0.6397 0.0003  0.6400 0.0003  0.6400 0.0005
|95/95/95| 0.63992 0.00031  0.63929-0.64054  0.63909-0.64075
   123    927      4636332| 0.6397 0.0003  0.6400 0.0003  0.6400 0.0005
|95/95/95| 0.63991 0.00032  0.63928-0.64054  0.63908-0.64075
   132    918      4591393| 0.6397 0.0003  0.6400 0.0003  0.6400 0.0005
|95/95/95| 0.63994 0.00032  0.63931-0.64058  0.63910-0.64078
   141    909      4546434| 0.6397 0.0003  0.6400 0.0003  0.6400 0.0005
|95/95/95| 0.63994 0.00032  0.63930-0.64057  0.63910-0.64078
   150    900      4501506| 0.6397 0.0004  0.6400 0.0003  0.6400 0.0005
|95/95/95| 0.63993 0.00032  0.63929-0.64057  0.63908-0.64078
   159    891      4456568| 0.6398 0.0004  0.6400 0.0003  0.6400 0.0005
|95/95/95| 0.63996 0.00032  0.63931-0.64060  0.63910-0.64081
   168    882      4411725| 0.6398 0.0004  0.6400 0.0003  0.6400 0.0005
|95/95/95| 0.63997 0.00032  0.63932-0.64061  0.63911-0.64082
   177    873      4366643| 0.6398 0.0004  0.6401 0.0003  0.6400 0.0005
|95/95/95| 0.64001 0.00032  0.63936-0.64066  0.63915-0.64087
   186    864      4321574| 0.6399 0.0004  0.6402 0.0004  0.6400 0.0005
|95/95/95| 0.64005 0.00033  0.63939-0.64070  0.63918-0.64091
 ---------------------------------------------------------------------------
-------------------------------------------------------------
   195    855      4276538| 0.6398 0.0004  0.6401 0.0004  0.6399 0.0005
|95/95/95| 0.64002 0.00033  0.63936-0.64067  0.63915-0.64089
   204    846      4231453| 0.6398 0.0004  0.6401 0.0004  0.6399 0.0005
|95/95/95| 0.63996 0.00033  0.63930-0.64061  0.63908-0.64083
   213    837      4186296| 0.6397 0.0004  0.6400 0.0004  0.6399 0.0005
|95/95/95| 0.63993 0.00033  0.63927-0.64059  0.63905-0.64080
   222    828      4141425| 0.6398 0.0004  0.6401 0.0004  0.6399 0.0005
|95/95/95| 0.63997 0.00033  0.63931-0.64063  0.63909-0.64085
   231    819      4096548| 0.6397 0.0004  0.6400 0.0004  0.6399 0.0005
|95/95/95| 0.63992 0.00033  0.63925-0.64059  0.63904-0.64081
   240    810      4051315| 0.6396 0.0004  0.6400 0.0004  0.6399 0.0005
|95/95/95| 0.63987 0.00033  0.63920-0.64053  0.63899-0.64075
   249    801      4006307| 0.6397 0.0004  0.6400 0.0004  0.6399 0.0005
|95/95/95| 0.63987 0.00033  0.63920-0.64053  0.63899-0.64075
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   258    792      3961366| 0.6397 0.0004  0.6400 0.0004  0.6399 0.0005
|95/95/95| 0.63989 0.00033  0.63922-0.64056  0.63901-0.64077
   267    783      3916158| 0.6397 0.0004  0.6399 0.0004  0.6399 0.0005
|95/95/95| 0.63986 0.00034  0.63919-0.64053  0.63897-0.64075
   276    774      3871076| 0.6397 0.0004  0.6400 0.0004  0.6399 0.0005
|95/95/95| 0.63988 0.00034  0.63920-0.64056  0.63898-0.64078
 ---------------------------------------------------------------------
-------------------------------------------------------------
   285    765      3825952| 0.6397 0.0004  0.6399 0.0004  0.6399 0.0005
|95/95/95| 0.63983 0.00034  0.63915-0.64051  0.63893-0.64073
   294    756      3780987| 0.6396 0.0004  0.6399 0.0004  0.6398 0.0005
|95/95/95| 0.63980 0.00034  0.63912-0.64049  0.63890-0.64071
   303    747      3735921| 0.6396 0.0004  0.6398 0.0004  0.6398 0.0005
|95/95/95| 0.63976 0.00035  0.63907-0.64045  0.63885-0.64067
   312    738      3691034| 0.6396 0.0004  0.6398 0.0004  0.6399 0.0005
|95/95/95| 0.63980 0.00035  0.63911-0.64050  0.63888-0.64072
   321    729      3645884| 0.6396 0.0004  0.6398 0.0004  0.6400 0.0005
|95/95/95| 0.63978 0.00035  0.63908-0.64048  0.63885-0.64070
   330    720      3600798| 0.6395 0.0004  0.6397 0.0004  0.6400 0.0005
|95/95/95| 0.63975 0.00035  0.63904-0.64045  0.63881-0.64068
   339    711      3555931| 0.6395 0.0004  0.6398 0.0004  0.6400 0.0005
|95/95/95| 0.63976 0.00036  0.63905-0.64047  0.63882-0.64070
   348    702      3510849| 0.6395 0.0004  0.6397 0.0004  0.6400 0.0005
|95/95/95| 0.63974 0.00036  0.63903-0.64046  0.63879-0.64069
   357    693      3465927| 0.6395 0.0004  0.6397 0.0004  0.6401 0.0005
|95/95/95| 0.63975 0.00036  0.63902-0.64047  0.63879-0.64071
   366    684      3420890| 0.6394 0.0004  0.6397 0.0004  0.6401 0.0005
|95/95/95| 0.63971 0.00036  0.63899-0.64043  0.63875-0.64067
 ---------------------------------------------------------------------
-------------------------------------------------------------
   375    675      3375767| 0.6394 0.0004  0.6396 0.0004  0.6400 0.0005
|95/95/95| 0.63966 0.00037  0.63893-0.64039  0.63869-0.64063
   384    666      3330883| 0.6394 0.0004  0.6396 0.0004  0.6400 0.0005
|95/95/95| 0.63966 0.00037  0.63894-0.64039  0.63870-0.64063
   393    657      3285873| 0.6394 0.0004  0.6396 0.0004  0.6401 0.0005
|95/95/95| 0.63968 0.00037  0.63894-0.64041  0.63870-0.64065
   402    648      3240635| 0.6394 0.0004  0.6397 0.0004  0.6400 0.0005
|95/95/95| 0.63969 0.00037  0.63896-0.64043  0.63872-0.64066
   411    639      3195929| 0.6394 0.0004  0.6396 0.0004  0.6399 0.0005
|95/95/95| 0.63962 0.00037  0.63888-0.64035  0.63864-0.64059
   420    630      3151124| 0.6393 0.0004  0.6396 0.0004  0.6400 0.0005
|95/95/95| 0.63961 0.00037  0.63887-0.64035  0.63862-0.64059
   429    621      3106048| 0.6393 0.0004  0.6396 0.0004  0.6400 0.0005
|95/95/95| 0.63961 0.00038  0.63886-0.64036  0.63861-0.64060
   438    612      3060963| 0.6393 0.0004  0.6396 0.0004  0.6400 0.0006
|95/95/95| 0.63962 0.00038  0.63887-0.64038  0.63862-0.64063
   447    603      3015741| 0.6393 0.0004  0.6396 0.0004  0.6399 0.0006
|95/95/95| 0.63958 0.00038  0.63881-0.64034  0.63856-0.64059
   456    594      2970895| 0.6392 0.0004  0.6395 0.0004  0.6398 0.0006
|95/95/95| 0.63952 0.00039  0.63875-0.64028  0.63850-0.64053
 ---------------------------------------------------------------------
-------------------------------------------------------------
   465    585      2925872| 0.6392 0.0004  0.6395 0.0004  0.6398 0.0006
|95/95/95| 0.63949 0.00039  0.63871-0.64026  0.63846-0.64051
```

```
   474    576      2881005| 0.6391 0.0004  0.6395 0.0004  0.6399 0.0006
|95/95/95| 0.63950 0.00039  0.63872-0.64028  0.63846-0.64053
   483    567      2836115| 0.6392 0.0004  0.6395 0.0004  0.6400 0.0006
|95/95/95| 0.63954 0.00040  0.63875-0.64033  0.63849-0.64059
   492    558      2791199| 0.6392 0.0004  0.6395 0.0004  0.6399 0.0006
|95/95/95| 0.63950 0.00040  0.63871-0.64029  0.63845-0.64055
   501    549      2746079| 0.6391 0.0004  0.6394 0.0004  0.6397 0.0006
|95/95/95| 0.63942 0.00040  0.63863-0.64021  0.63837-0.64047
   510    540      2701338| 0.6390 0.0004  0.6394 0.0004  0.6396 0.0006
|95/95/95| 0.63936 0.00040  0.63857-0.64016  0.63831-0.64042
   519    531      2656194| 0.6391 0.0004  0.6394 0.0004  0.6397 0.0006
|95/95/95| 0.63942 0.00040  0.63862-0.64023  0.63836-0.64049
   528    522      2611148| 0.6391 0.0005  0.6395 0.0004  0.6397 0.0006
|95/95/95| 0.63943 0.00041  0.63862-0.64024  0.63835-0.64051
   537    513      2565947| 0.6391 0.0005  0.6395 0.0004  0.6397 0.0006
|95/95/95| 0.63943 0.00041  0.63861-0.64025  0.63834-0.64052
   546    504      2520953| 0.6391 0.0005  0.6395 0.0005  0.6397 0.0006
|95/95/95| 0.63943 0.00042  0.63860-0.64026  0.63833-0.64053
 ---------------------------------------------------------------------------
-------------------------------------------------------------
   550    500      2500880| 0.6390 0.0005  0.6395 0.0005  0.6397 0.0006
|95/95/95| 0.63941 0.00042  0.63858-0.64024  0.63830-0.64051
   555    495      2476053| 0.6390 0.0005  0.6394 0.0005  0.6397 0.0006
|95/95/95| 0.63938 0.00042  0.63855-0.64022  0.63827-0.64050
   564    486      2431097| 0.6391 0.0005  0.6395 0.0005  0.6397 0.0006
|95/95/95| 0.63947 0.00042  0.63863-0.64030  0.63836-0.64058
   573    477      2386168| 0.6390 0.0005  0.6395 0.0005  0.6396 0.0006
|95/95/95| 0.63941 0.00043  0.63856-0.64026  0.63829-0.64054
   582    468      2341189| 0.6390 0.0005  0.6395 0.0005  0.6396 0.0006
|95/95/95| 0.63941 0.00043  0.63854-0.64027  0.63826-0.64055
   591    459      2296020| 0.6390 0.0005  0.6395 0.0005  0.6397 0.0006
|95/95/95| 0.63941 0.00044  0.63854-0.64028  0.63825-0.64056
   600    450      2251128| 0.6391 0.0005  0.6395 0.0005  0.6398 0.0006
|95/95/95| 0.63949 0.00044  0.63861-0.64038  0.63832-0.64067
   609    441      2205954| 0.6391 0.0005  0.6395 0.0005  0.6398 0.0007
|95/95/95| 0.63948 0.00045  0.63859-0.64038  0.63829-0.64067
   618    432      2160991| 0.6392 0.0005  0.6397 0.0005  0.6401 0.0006
|95/95/95| 0.63966 0.00045  0.63876-0.64056  0.63846-0.64085
   627    423      2116214| 0.6392 0.0005  0.6397 0.0005  0.6401 0.0007
|95/95/95| 0.63967 0.00046  0.63875-0.64059  0.63846-0.64089
 ---------------------------------------------------------------------------
-------------------------------------------------------------
   636    414      2070986| 0.6393 0.0005  0.6399 0.0005  0.6404 0.0007
|95/95/95| 0.63982 0.00046  0.63890-0.64074  0.63860-0.64104
   645    405      2026172| 0.6394 0.0005  0.6399 0.0005  0.6405 0.0007
|95/95/95| 0.63992 0.00047  0.63899-0.64086  0.63869-0.64116
   654    396      1980955| 0.6394 0.0005  0.6399 0.0005  0.6406 0.0007
|95/95/95| 0.63992 0.00047  0.63898-0.64086  0.63867-0.64117
   663    387      1936048| 0.6393 0.0005  0.6399 0.0005  0.6406 0.0007
|95/95/95| 0.63990 0.00048  0.63894-0.64085  0.63863-0.64116
   672    378      1890938| 0.6393 0.0005  0.6398 0.0005  0.6406 0.0007
|95/95/95| 0.63987 0.00049  0.63890-0.64084  0.63859-0.64115
   681    369      1845672| 0.6393 0.0005  0.6398 0.0005  0.6406 0.0007
|95/95/95| 0.63988 0.00049  0.63890-0.64086  0.63859-0.64118
```

```
   690    360      1800703| 0.6392 0.0005  0.6398 0.0006  0.6408 0.0007
|95/95/95| 0.63989 0.00050  0.63890-0.64089  0.63857-0.64122
   699    351      1755928| 0.6391 0.0006  0.6396 0.0006  0.6407 0.0007
|95/95/95| 0.63979 0.00051  0.63878-0.64080  0.63845-0.64112
   708    342      1710914| 0.6391 0.0006  0.6396 0.0006  0.6406 0.0007
|95/95/95| 0.63971 0.00051  0.63871-0.64072  0.63838-0.64105
   717    333      1665864| 0.6392 0.0006  0.6397 0.0006  0.6405 0.0007
|95/95/95| 0.63977 0.00051  0.63875-0.64079  0.63842-0.64112
 ---------------------------------------------------------------------------
-------------------------------------------------------------
   726    324      1620854| 0.6392 0.0006  0.6396 0.0006  0.6404 0.0007
|95/95/95| 0.63968 0.00052  0.63865-0.64071  0.63832-0.64104
   735    315      1575945| 0.6394 0.0006  0.6397 0.0006  0.6407 0.0007
|95/95/95| 0.63987 0.00052  0.63883-0.64091  0.63849-0.64125
   744    306      1530871| 0.6395 0.0006  0.6397 0.0006  0.6407 0.0008
|95/95/95| 0.63991 0.00053  0.63886-0.64096  0.63851-0.64131
   753    297      1485961| 0.6394 0.0006  0.6396 0.0006  0.6409 0.0008
|95/95/95| 0.63988 0.00054  0.63881-0.64095  0.63846-0.64130
   762    288      1441027| 0.6395 0.0006  0.6396 0.0006  0.6409 0.0008
|95/95/95| 0.63992 0.00054  0.63885-0.64098  0.63850-0.64133
   771    279      1396014| 0.6396 0.0006  0.6396 0.0006  0.6410 0.0008
|95/95/95| 0.63998 0.00055  0.63888-0.64107  0.63852-0.64143
   780    270      1350864| 0.6396 0.0006  0.6397 0.0006  0.6410 0.0008
|95/95/95| 0.64003 0.00056  0.63890-0.64115  0.63854-0.64151
   789    261      1306002| 0.6397 0.0006  0.6397 0.0006  0.6409 0.0008
|95/95/95| 0.64002 0.00057  0.63888-0.64115  0.63851-0.64152
   798    252      1260934| 0.6397 0.0006  0.6397 0.0007  0.6408 0.0008
|95/95/95| 0.63995 0.00058  0.63878-0.64111  0.63840-0.64149
   807    243      1216199| 0.6398 0.0006  0.6398 0.0007  0.6410 0.0008
|95/95/95| 0.64013 0.00059  0.63894-0.64131  0.63856-0.64170
 ---------------------------------------------------------------------------
-------------------------------------------------------------
   816    234      1170990| 0.6397 0.0007  0.6396 0.0007  0.6411 0.0008
|95/95/95| 0.64004 0.00060  0.63885-0.64122  0.63847-0.64161
   825    225      1125925| 0.6397 0.0007  0.6396 0.0007  0.6411 0.0009
|95/95/95| 0.64007 0.00061  0.63886-0.64128  0.63846-0.64167
   834    216      1080865| 0.6396 0.0007  0.6395 0.0007  0.6408 0.0009
|95/95/95| 0.63989 0.00061  0.63867-0.64111  0.63828-0.64150
   843    207      1035755| 0.6396 0.0007  0.6394 0.0007  0.6407 0.0009
|95/95/95| 0.63984 0.00063  0.63859-0.64109  0.63818-0.64150
   852    198       990612| 0.6395 0.0007  0.6394 0.0007  0.6405 0.0009
|95/95/95| 0.63975 0.00065  0.63847-0.64104  0.63805-0.64146
   861    189       945714| 0.6394 0.0007  0.6395 0.0008  0.6407 0.0009
|95/95/99| 0.63984 0.00066  0.63853-0.64115  0.63810-0.64158
   870    180       900744| 0.6395 0.0008  0.6396 0.0008  0.6410 0.0009
|95/95/99| 0.64003 0.00067  0.63869-0.64137  0.63825-0.64181
   879    171       855638| 0.6397 0.0008  0.6397 0.0008  0.6411 0.0010
|95/95/99| 0.64019 0.00069  0.63881-0.64157  0.63837-0.64201
   888    162       810293| 0.6397 0.0008  0.6398 0.0008  0.6414 0.0010
|95/95/99| 0.64031 0.00071  0.63891-0.64172  0.63845-0.64218
   897    153       765407| 0.6399 0.0008  0.6400 0.0008  0.6420 0.0010
|95/95/95| 0.64071 0.00073  0.63925-0.64216  0.63878-0.64264
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-------------------------------------------------------------
```

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   906    144       720267| 0.6399 0.0009  0.6402 0.0009  0.6419 0.0010
|95/95/99| 0.64072 0.00076  0.63920-0.64223  0.63871-0.64273
   915    135       675388| 0.6402 0.0009  0.6406 0.0009  0.6418 0.0011
|95/95/95| 0.64097 0.00079  0.63940-0.64254  0.63889-0.64306
   924    126       630326| 0.6405 0.0009  0.6408 0.0010  0.6418 0.0011
|95/95/95| 0.64113 0.00083  0.63948-0.64277  0.63894-0.64331
   933    117       585199| 0.6401 0.0010  0.6408 0.0010  0.6418 0.0012
|95/95/95| 0.64103 0.00087  0.63930-0.64276  0.63874-0.64333
   942    108       540209| 0.6400 0.0010  0.6409 0.0011  0.6420 0.0012
|95/95/95| 0.64112 0.00091  0.63931-0.64293  0.63872-0.64352
   951     99       495182| 0.6398 0.0011  0.6408 0.0011  0.6414 0.0012
|95/95/95| 0.64088 0.00092  0.63906-0.64271  0.63846-0.64330
   960     90       450358| 0.6403 0.0011  0.6411 0.0011  0.6413 0.0012
|95/95/95| 0.64101 0.00094  0.63915-0.64288  0.63854-0.64348
   969     81       405186| 0.6399 0.0012  0.6407 0.0012  0.6411 0.0013
|95/95/95| 0.64080 0.00102  0.63876-0.64283  0.63809-0.64350
   978     72       360112| 0.6390 0.0013  0.6398 0.0012  0.6408 0.0014
|95/95/95| 0.64014 0.00109  0.63797-0.64231  0.63726-0.64302
   987     63       315336| 0.6394 0.0013  0.6402 0.0013  0.6415 0.0015
|95/95/95| 0.64063 0.00115  0.63834-0.64293  0.63758-0.64368
 ---------------------------------------------------------------------------
-------------------------------------------------------------
   996     54       270117| 0.6398 0.0015  0.6408 0.0015  0.6424 0.0017
|95/95/95| 0.64133 0.00130  0.63871-0.64394  0.63784-0.64482
  1005     45       225021| 0.6389 0.0016  0.6401 0.0016  0.6411 0.0019
|95/95/95| 0.64031 0.00141  0.63746-0.64316  0.63650-0.64412
  1014     36       180105| 0.6388 0.0018  0.6394 0.0018  0.6409 0.0023
|95/95/95| 0.63979 0.00162  0.63649-0.64308  0.63536-0.64422
  1023     27       135141| 0.6387 0.0022  0.6398 0.0019  0.6414 0.0028
|95/95/95| 0.64058 0.00190  0.63666-0.64449  0.63527-0.64589
  1032     18        90068| 0.6356 0.0030  0.6368 0.0024  0.6405 0.0038
|95/95/95| 0.63814 0.00252  0.63278-0.64350  0.63073-0.64555
  1041      9        44980| 0.6362 0.0035  0.6381 0.0020  0.6419 0.0053
|95/95/95| 0.63957 0.00183  0.63510-0.64403  0.63280-0.64634
  1047      3        15115| 0.6368 0.0062  0.6378 0.0021  0.6388 0.0011 |
  1048      2        10082| 0.6427 0.0033  0.6385 0.0034  0.6398 0.0008 |


 the minimum estimated standard deviation for the col/abs/tl keff
estimator occurs with   1 inactive cycles and 1049 active cycles.


 the first active half of the problem skips 50 cycles and uses 500 active
cycles; the second half skips 550 and uses 500 cycles.
 the col/abs/trk-len keff, one standard deviation, and 68, 95, and 99
percent intervals for each active half of the problem are:

              problem        keff     standard deviation       68%
confidence         95% confidence         99% confidence

            first half     0.64059         0.00044           0.64014 to
0.64103     0.63971 to 0.64146     0.63942 to 0.64175
           second half     0.63941         0.00042           0.63899 to
0.63983     0.63858 to 0.64024     0.63830 to 0.64051
```

```
          final result     0.64001         0.00030           0.63971 to
0.64031     0.63941 to 0.64062     0.63921 to 0.64081

 the first and second half values of k(collision/absorption/track length)
appear to be the same at the 95 percent confidence level.
1plot of the estimated col/abs/track-length keff one standard deviation
interval by active cycle number (| = final keff =  0.64001)

 inactive   active 0.637          0.638            0.639            0.640
0.641            0.642            0.643
   cycles   cycles  |--------------|----------------|----------------|---
------------|----------------|----------------|
        0     1050  |                                          (----k|---
)                                          |
        9     1041  |                                           (----k---
-)                                         |
       18     1032  |                                            (---|k--
--)                                        |
       27     1023  |                                          (----k|---
)                                          |
       36     1014  |                                          (----k|---
)                                          |
       45     1005  |                                          (----k|---
)                                          |
       54      996  |                                          (----k|---
-)                                         |
       63      987  |                                          (----k|---
)                                          |
       72      978  |                                          (----k|---
-)                                         |
       81      969  +                                          (----k|---
-)                                         +
       90      960  |                                          (----k|---
)                                          |
       99      951  |                                         (-----k|---
)                                          |
      108      942  |                                         (----k-|---
)                                          |
      117      933  |                                         (----k-|--)
|
      126      924  |                                         (----k-|---
)                                          |
      135      915  |                                         (-----k|---
)                                          |
      144      906  |                                         (----k-|---
)                                          |
      153      897  |                                         (-----k|---
)                                          |
      162      888  |                                         (----k-|---
)                                          |
      171      879  +                                          (----k|---
)                                          +
      180      870  |                                          (-----k---
-)                                         |
```

```
      189      861  |                                                  (----k---
--)                                                                  |
      198      852  |                                                 (----k|---
-)                                                                  |
      207      843  |                                                (-----k|---
)                                                                   |
      216      834  |                                                (-----k|---
)                                                                   |
      225      825  |                                                (----k-|---
)                                                                   |
      234      816  |                                               (----k--|--)
|
      243      807  |                                               (-----k-|--)
|
      252      798  |                                              (-----k--|-)
|
      261      789  +                                               (-----k-|--)
+
      270      780  |                                              (-----k--|--)
|
      279      771  |                                              (-----k--|--)
|
      288      762  |                                              (----k---|-)
|
      297      753  |                                             (-----k---|)
|
      306      744  |                                             (-----k---|-)
|
      315      735  |                                             (-----k---|)
|
      324      726  |                                             (-----k---|-)
|
      333      717  |                                            (-----k----|)
|
      342      708  |                                            (-----k----|)
|
      351      699  +                                            (-----k----|)
+
      360      690  |                                            (-----k----|)
|
      369      681  |                                           (-----k-----|
|
      378      672  |                                           (-----k-----|
|
      387      663  |                                           (-----k-----|)
|
      396      654  |                                           (------k----|)
|
      405      645  |                                           (-----k-----|
|
      414      636  |                                         (-----k-----) |
|
      423      627  |                                          (-----k-----)|
|
```

```
      432      618  |                                  (-----k-----)|
|
      441      609  +                                 (------k-----)|
+
      450      600  |                                (------k-----) |
|
      459      591  |                              (------k-----)  |
|
      468      582  |                              (------k-----)  |
|
      477      573  |                              (------k------) |
|
      486      564  |                               (------k------)|
|
      495      555  |                               (------k-----) |
|
      504      546  |                           (------k------)   |
|
      513      537  |                            (-----k------)   |
|
      522      528  |                            (-----k------)   |
|
      531      519  +                              (------k-----)  |
+
      540      510  |                              (-----k------)  |
|
      549      501  |                            (------k------)  |
|
      558      492  |                            (------k------)  |
|
      567      483  |                            (------k------)  |
|
      576      474  |                            (------k------)  |
|
      585      465  |                            (------k------)  |
|
      594      456  |                           (------k-------)  |
|
      603      447  |                             (-------k------)|
|
      612      438  |                               (------k-------|
|
      621      429  +                                (-------k-----|)
+
      630      420  |                                  (-------k---|---
)                                          |
      639      411  |                                     (------k--|---
-)                                         |
      648      402  |                                      (-------k|---
---)                                       |
      657      393  |                                     (-------k-|---
--)                                        |
      666      384  |                                     (-------k-|---
--)                                        |
```

```
      675      375  |                                   (-------k--|---
-)                                                  |
      684      366  |                                  (--------k--|---
-)                                                  |
      693      357  |                                   (-------k--|---
-)                                                  |
      702      348  |                                  (-------k---|---
)                                                   |
      711      339  +                                 (-------k----|---
)                                                   +
      720      330  |                                (--------k----|--)
|
      729      321  |                                (--------k----|--)
|
      738      312  |                                   (-------k--|---
--)                                                  |
      747      303  |                                     (--------k---
----)                                                |
      756      294  |                                 (-------k----|---
)                                                   |
      765      285  |                                   (--------k-|---
---)                                                |
      774      276  |                                     (--------|k--
------)                                              |
      783      267  |                                     (--------k---
------)                                              |
      792      258  |                                    (---------k---
------)                                              |
      801      249  +                                   (---------k|---
-----)                                              +
      810      240  |                                    (---------k---
------)                                              |
      819      231  |                                     (--------|k--
-------)                                             |
      828      222  |                                   (---------k|---
------)                                              |
      837      213  |                                  (---------k-|---
-----)                                              |
      846      204  |                                (---------k---|---
---)                                                |
      855      195  |                           (----------k-----|---
-)                                                  |
      864      186  |                             (-----------k--|---
----)                                               |
      873      177  |                                     (-------|--
k-----------)                                        |
      882      168  |                                    (---------|-k-
---------)                                          |
      891      159  +                                          (---|---
---k-----------)                                    +
      900      150  |                                              |---
--------k------------)                              |
      909      141  |                                           (--|---
------k------------)                                |
```

```
      918      132  |                                                  |
(-------------k------------)                    |
      927      123  |                                                  |
(-------------k-------------)                  |
      936      114  |                                                  |
(--------------k--------------)              |
      945      105  |                                                  |(--
------------k--------------)                  |
      954       96  |                                                 (-|---
---------k---------------)                    |
      963       87  |                                                  |(--
-------------k---------------)                |
      972       78  |                                        (--------|---
----k----------------)                        |
      981       69  +                                 (--------------|---
k------------------)                           +
      990       60  |                                              (--|---
------------k-------------------)              |
      999       51  |                                                  |---
------------------k----------------------)    |
     1008       42  |                     (-----------------------k---|---
-----------------)                            |
     1017       33  |                (----------------------------k---|---
--------------------)                          |
     1026       24  |                (--------------------------------|-k-
----------------------------------)             |
     1035       15  |    (-----------------------------------k-------|---
-------------------------)                     |
                    |--------------|----------------|----------------|---
------------|----------------|----------------|
                  0.637          0.638            0.639            0.640
0.641            0.642            0.643


*****************************************************************************
**********************************************
 dump no.    2 on file runtpe       nps =     5249701     coll =
584443097     ctm =       43.58   nrn =        6125717410


        14 warning messages so far.


 run terminated when  1050   kcode cycles were done.

 computer time =   43.62 minutes

 mcnp     version 5     06212004                     04/19/16 07:07:52
probid =  04/19/16 06:24:14
```