Appendix J: An Example of NUTS's Debug Output File

```
NUTS_PA96 2.02 PROD PA96 05/23/96                                    05/24/96 11:45:54

N     NN  UU    UU  TTTTTT    SSSSSS            PPPPPP    AAAAA      9999     6666
NN    NN  UU    UU    TT     SS                 PP    PP  AA   AA   9    9   6
NNN   NN  UU    UU    TT     SS                 PP    PP  AA   AA   9    9   6
NN N  NN  UU    UU    TT      SSSSS             PPPPPP    AAAAAAA    99999   66666
NN   NNN  UU    UU    TT          SS            PP        AA   AA        9   6    6
NN    NN  UU    UU    TT          SS            PP        AA   AA        9   6    6
NN     N   UUUUU     TT     SSSSSS   _______    PP        AA   AA     9999     6666

                    NUTS - Nuclide Transport System Model

                          NUTS_PA96 Version 2.02
                         PROD PA96 Built 05/23/96
                          Written by Ali Shinta
                         Sponsored by Ali Shinta

                        Run on 05/24/96 at 11:45:54
                     Run on ALPHA AXP BEATLE OpenVMS V6.1

          ************************************************************

          Prepared for
          Sandia National Laboratories
          Albuquerque, New Mexico 87185-5800
          for the United States Department of Energy
          under Contract DE-AC04-76DP00789

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                                Disclaimer
                                ----------

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*******************************************************************************

FILE ASSIGNMENTS:
-----------------
POSTBRAG_T CDB file:
   WP$TESTROOT:[NUT.TEST.TEST4]NUT_TEST_CDPDC.IN;1
      Written on 01/24/96 12:00:08
Is this a TEST RUN? (Y/N):
   Y
I/O: (ASC, BIN, ASC-BIN):
   ASC
```

```
NUTS Input data file:
   WP$TESTROOT:[NUT.TEST.TEST4]NUT_CDPDC.IN;8
      Written on 05/24/96 11:39:43
NUTS Output CDB file:
   WP$TESTROOT:[NUT.TEST.TEST4]NUT_CDPDC.OUT
NUTS Diagnostic/Debug data file:
   WP$TESTROOT:[NUT.TEST.TEST4]NUT_CDPDC.DBG
Calculate for LIQUID or GAS? (L/G):
   L
BRAGFLO input file:

Read NUCLIDE related Material Properties from CDB or from NUTS input file (CDB/N:
   N
SOLUBILITY AND INVENTORY CDB:

UNDISTRUBED SCENARIO CDB:

                    !!!!!!!!!!!! DIGNOSTIC MESSAGES !!!!!!!!!!!!
                    !!!!!!!!!!!!!! TEST FILE INPUT !!!!!!!!!!!!!!!


*****************************************************************************
*****************************************************************************
                    NORMAL COMPLETION READING THE INPUT FILE
                    WP$TESTROOT:[NUT.TEST.TEST4]NUT_TEST_CDPDC.IN;1
*****************************************************************************
*****************************************************************************
               ******** START SUBROUTINE ONED3DINDEX ********

               ******** END SUBROUTINE ONED3DINDEX ********

               <><> START READING FROM READ_RAD SUB. <><>

                    !!!!!!!!!!!! DIGNOSTIC MESSAGES !!!!!!!!!!!!
                    !!!!!!!!!!!!!! NUTS INPUT !!!!!!!!!!!!!!
                    !!!!!!!!! GENERAL PROPERTIES !!!!!!!!!


*****************************************************************************
*****************************************************************************
                    NORMAL COMPLETION READING NUCLIDES PROPERTIES FROM
                    WP$TESTROOT:[NUT.TEST.TEST4]NUT_CDPDC.IN;8
*****************************************************************************
*****************************************************************************


*****************************************************************************
*****************************************************************************
                    NORMAL COMPLETION READING THE MATRIX PROPERTIES FROM
                    WP$TESTROOT:[NUT.TEST.TEST4]NUT_CDPDC.IN;8
*****************************************************************************
*****************************************************************************
               <><> FINISH READING FROM READ_RAD. <><>

               <><> START INITIALIZATION IN INITIALIZATION SUB. <><>

               <><> END INITIALIZATION IN INITIALIZATION SUB. <><>

               ******** START SUBROUTINE STOTALMAS ********

               ******** END SUBROUTINE STOTALMAS ********

               ******** START SUBROUTINE NTOTALMAS ********

               ******** END SUBROUTINE NTOTALMAS ********

               ******* START SUBROUTINE CURIES_VALUES *******
```

```
              ******* END SUBROUTINE CURIES_VALUES *******

              ******* START SUBROUTINE CNTOTALMAS *******

              ******* END SUBROUTINE CNTOTALMAS *******

              ++++++ START WRITING IN ASC_WRITE SUB. +++++++
               FIRST CALL, THE VARIABLES ARE INITIALIZED ABOVE

THE FOLLOWING INFORMATION IS BASICALLY AN ECHO
FOR THE INPUT DATA AND INITIALIZATION OF THE
CONCENTRATION AND PRECIPITATION

              +++++++++++++ START TIMELOOP +++++++++++++
              \/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\
TIME STEP #       =    1
TIME STEP LENGTH =    0.8640D+06
TIME              =    0.8640D+06

IF THERE IS INJECTION HISTORY THEN
INJECTION START IN MATRIX AT TIME    =    0.0000D+00
INJECTION SIEZE IN MATRIX AT TIME    =    0.0000D+00
INJECTION START IN FRACTURE AT TIME =    0.0000D+00
INJECTION SIEZE IN FRACTURE AT TIME =    0.0000D+00
****** MATRIX INJECTION PRODUCTION HISTORY ******


---- Injection at Each Block ----


  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00

---- Production from Each Block ----


  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00

****** FRACTURE INJECTION PRODUCTION HISTORY ******


---- Injection at Each Block ----


  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
```

0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00

---- Production from Each Block ----

0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00

!!!! MATRIX UPSTREAM WEIGHTING FACTORS !!!!
!!!

---- Upstream Weighting in X-direction ----

0.000000E+00	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01

---- Upstream Weighting in Y-direction ----

0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00

---- Upstream Weighting in Z-direction ----

0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00

```
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00  0.000000E+00
            +*! CALCULATION STARTED AT DSPRSN1 SUB +*!
            {{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{{
*** MATRIX DISPERSION CALCULATION IS REQUIRED***

            +*! CALCULATION ENDED IN DSPRSN1 +*!
---- Dispersion in X-Direction ----


Dispersion of COMP1

  0.00000E+00  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09  0.40000E-09
  0.00000E+00  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03
  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03  0.20000E-03

---- Dispersion in Y-Direction ----


Dispersion of COMP1

  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
```

```
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00

---- Dispersion in Z-Direction ----


Dispersion of COMP1

   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
               $$$ CALCULATION STARTED AT ADSORP SUB $$$
               [][][][][][][][][][][][]][[]][][][][[][][]
%%% NO MATRIX SORPTION CALCULATION IS REQUIRED %%%

               $$$ CALCULATION ENDED IN ADSORP $$$!
---- sorption in all Blocks ----


Sorption of COMP1

   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
               ::::::::: START IN MATRIX PRDECAY SUB. :::::::::

               :::::: CALCULATION ENDED IN PRDECAY ::::::
---- Precipitate Decay in all Blocks ----


Precipitate Decay of COMP1

   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
   0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
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    0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
    0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
    0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
               {{{{{{{{{ START IN MATRIX DECAYSOURCE SUB. }}}}}}}}}

               {{{{{{ CALCULATION ENDED IN DECAYSOURCE }}}}}}
 ---- Decay Coefficient in all Blocks ----


 Decay Coefficient of COMP1

    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
    0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09  0.14400E-09
               @@@@@@@@ START IN MATRIX FLUX SUB. @@@@@@@@

               @@@@@@ CALCULATION ENDED IN FLUX @@@@@@
 ---- The Flux Matrix Is ----


 2D FLUX MATRIX
     0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
     0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
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  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0.0000E+00   0.4000E-03   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
      ///// START IN MATRIX DECAY_SUM COMPONENT COMP1                  /////

            ///// END DECAY_SUM FOR COMPONENT COMP1                  /////
---- The Parent Contribution Is ----

 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
            ->->->-> START IN CONC_MATRIX SUB.->->->->

            ->->->-> CALCULATION ENDED IN CONC_MATRIX ->->->->
---- The Concentration Matrix Is ----

REFERENCE HALF BAND WIDTH =     1

  0.0000E+00   0.0000E+00   0.1000E+39   0.2000E-03   0.0000E+00   0.1000E+39
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
  0.0000E+00   0.6000E-03  -0.2652E-02   0.2000E-03   0.0000E+00   0.0000E+00
```

0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2652E-02	0.2000E-03	0.0000E+00	0.0000E+00
0.0000E+00	0.6000E-03	-0.2052E-02	0.0000E+00	0.0000E+00	0.0000E+00

THE FOLLOWING IS A-MATRIX

0.0000E+00	0.1000E+39	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03
0.6000E-03	-0.2652E-02	0.2000E-03

```
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2652E-02  0.2000E-03
 0.6000E-03 -0.2052E-02  0.0000E+00

        XXXXX FRACTURE CONCENTRATION OF COMP1              XXXXX
        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
 0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00

        XXXXX MATRIX CONCENTRATION OF COMP1              XXXXX
        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

 0.10000E+01  0.23026E+00  0.53018E-01  0.12208E-01  0.28109E-02
 0.64722E-03  0.14903E-03  0.34314E-04  0.79010E-05  0.18192E-05
 0.41889E-06  0.96452E-07  0.22209E-07  0.51137E-08  0.11775E-08
 0.27111E-09  0.62426E-10  0.14374E-10  0.33097E-11  0.76207E-12
 0.17547E-12  0.40403E-13  0.93030E-14  0.21421E-14  0.49322E-15
 0.11357E-15  0.26150E-16  0.60211E-17  0.13864E-17  0.31922E-18
 0.73503E-19  0.16925E-19  0.38970E-20  0.89730E-21  0.20661E-21
 0.47573E-22  0.10954E-22  0.25222E-23  0.58075E-24  0.13372E-24
 0.30790E-25  0.70895E-26  0.16324E-26  0.37587E-27  0.86546E-28
 0.19928E-28  0.45885E-29  0.10565E-29  0.24327E-30  0.56014E-31
 0.12898E-31  0.29697E-32  0.68380E-33  0.15745E-33  0.36254E-34
 0.83476E-35  0.19221E-35  0.44261E-36  0.10240E-36  0.29944E-37
           &&&&&&&& START IN MATRIX PRECIPITATE SUB. &&&&&&&&

           &&&&& CALCULATION ENDED IN PRECIPITATE SUB. &&&&&
-------------- Precipitate ----------------


Precipitate of COMP1
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```
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00  0.00000E+00
                END END END END END END END END END END
                BYE BYE BYE BYE BYE BYE BYE BYE BYE BYE
                ||||||||||||||||||||||||||||||||||||||||
                ****************************************

******** START SUBROUTINE STOTALMAS ********

******** END SUBROUTINE STOTALMAS ********

******** START SUBROUTINE NTOTALMAS ********

******** END SUBROUTINE NTOTALMAS ********

******* START SUBROUTINE CURIES_VALUES *******

******* END SUBROUTINE CURIES_VALUES *******

******* START SUBROUTINE CNTOTALMAS *******

******* END SUBROUTINE CNTOTALMAS *******
```