

ADAS Subroutine d5wr11

```
      SUBROUTINE D5WR11( IUNIT , DSNINC , DSNMTR , ELEMT ,
&                        UID      , DATE    , IZ0    ,
&                        NDLINE  , NLINE   ,
&                        TITL   , IZION   , CIMET   ,
&                        NTDIM   , ITMAX   ,
&                        TEV     , DENS    ,
&                        GCF
&                        )
```

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C
C ***** FORTRAN77 SUBROUTINE: D5WR11 *****
C
C PURPOSE:  TO OUTPUT DATA TO GCF PASSING FILE.
C
C CALLING PROGRAM: ADAS405
C
C SUBROUTINE:
C
C INPUT : (I*4)  IUNIT   = OUTPUT UNIT NUMBER FOR RESULTS
C INPUT : (C*80) DSNINC  = INPUT SCRIPT DATA SET NAME
C INPUT : (C*80) DSNMTR  = INPUT ACD MASTER FILE NAME
C INPUT : (C*2)  ELEMT   = ELEMENT SYMBOL.
C
C INPUT : (C*80) UID     = USER IDENTIFIER
C INPUT : (C*8)  DATE    = CURRENT DATE
C INPUT : (I*4)  IZ0     = NUCLEAR CHARGE
C
C INPUT : (I*4)  NDLINE  = MAXIMUM NUMBER OF SPECTRUM LINES
C INPUT : (I*4)  NLINE   = NUMBER OF SPECTRUM LINES
C INPUT : (C*12) TITL()  = TITLE FOR 1ST COMPONENT OF LINE
C INPUT : (I*4)  IZION() = ION CHARGE FOR 1ST COMPONENT OF LINE
C INPUT : (C*1)  CIMET() = +/- SHIFT OF ION CHARGE - 1ST COMPONENT
C
C INPUT : (I*4)  NTDIM   = AMXIMU, NUMBER OF INPUT TEMPERATURES
C INPUT : (I*4)  ITMAX   = NUMBER OF INPUT TEMPERATURES
C                        LIST.
C INPUT : (R*8)  TEV()   = ELECTRON TEMPERATURES (UNITS: EV)
C INPUT : (R*8)  DENS()  = ELECTRON DENSITIES (UNITS: CM-3)
C
C INPUT : (R*4)  GCF(, ) = G(TE) FUNCTION (CM3 S-1)
C                        1ST DIM: TEMPERATURE INDEX
C                        2ND DIM: LINE INDEX
C
C      (I*4) I          = GENERAL USE
C      (I*4) J          = GENERAL USE
C      (I*4) K          = GENERAL USE
C      (I*4) L          = GENERAL USE
C      (I*4) I1         = GENERAL USE
C      (I*4) I2         = GENERAL USE
C      (I*4) IT         = GENERAL USE
C      (C*80)CLINE     = GENERAL USE
```

C
 C
 C ROUTINES: NONE
 C
 C AUTHOR: H. P. SUMMERS, JET
 C K1/1/57
 C JET EXT. 4941
 C
 C DATE: 27/04/94
 C
 C UNIX-IDL PORT:
 C
 C VERSION: 1.1 DATE: 08-11-95
 C MODIFIED: TIM HAMMOND (TESSELLA SUPPORT SERVICES PLC)
 C - FIRST RELEASE
 C
 C VERSION: 1.2 DATE: 08-11-95
 C MODIFIED: TIM HAMMOND (TESSELLA SUPPORT SERVICES PLC)
 C - REMOVED SUPERFLUOUS VARIABLES
 C
 C VERSION: 1.3 DATE: 09-03-98
 C MODIFIED: RICHARD MARTIN
 C - INCREASED UID FROM CHAR*6 TO CHAR*80 IN ACCORDANCE WITH
 C XXUID.
 C
 C VERSION: 1.4 DATE: 20-11-98
 C MODIFIED: RICHARD MARTIN & MARTIN O'MULLANE
 C - REMOVED SEARCH FOR BRACKETS IN DSNINC AND INITIAL STRING
 C AS STRING = ' '
 C
 C-----

CHARACTER	CIMET (NLINE)
CHARACTER*8	DATE
CHARACTER*80	DSNINC, DSNMTR
CHARACTER*2	ELEMT
CHARACTER*12	TITL (NLINE)
CHARACTER*80	UID
INTEGER	ITMAX, IUNIT, IZ0
INTEGER	IZION (NLINE), NDLINE, NLINE
INTEGER	NTDIM
REAL*8	DENS (NTDIM), GCF (NTDIM, NDLINE)
REAL*8	TEV (NTDIM)