

## ADAS Subroutine axwups

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      SUBROUTINE AXWUPS( ELO      , EHI      , DELTAE, KTYPE  , GF      ,
&                      CPAR      , YKN      , I1      , I2      , NELEC  ,
&                      NCHAR     , NTEMP   , T        , UPS     , DSFULL,
&                      ISTDIM, NET      , ENTE     , OMUP   , IWRITE,
&                      INDIM  , WI       , WJ
&                      )
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C
C ***** FORTRAN77 SUBROUTINE:AXWUPS *****
C
C PURPOSE: TO WRITE DATA TO AN OLD/NEW ARCHIVE IN BURGESS FORMAT
C
C INPUT:
C      (R*8) ELO      - LOWER LEVEL ENERGY
C      (R*8) EHI      - UPPER LEVEL ENERGY
C      (R*8) DELTAE   - TRANSITION ENERGY
C      (I)   KTYPE    - TRANSITION TYPE
C      (R*8) GF       - WEIGHTED OSCILLATOR STRENGTH
C      (R*8) CPAR     - SCALABLE PARAMETER
C      (R*8) YKN      - KNOT POINTS
C      (I)   I1       - LOWER LEVEL INDEX
C      (I)   I2       - UPPER LEVEL INDEX
C      (R*8) NELEC    - NUMBER OF ELECTRONS
C      (R*8) NCHAR    - NUCLEAR CHARGE
C      (I)   NTEMP    - NUMBER OF TEMPERATURE POINTS
C      (R*8) T        - TEMPERATURES
C      (R*8) UPS      - UPSILONS
C      (C*80)DSFULL  - ARCHIVE FILE NAME
C      (I)   ISTDIM   - MAXIMUM INPUT ARRAY DIMENSIONS
C      (I)   NET      - NUMBER OF ENERGY POINTS
C      (R*8) ENTE     - ENRGIES
C      (R*8) OMUP     - OMEGAS
C      (I)   IWRITE   - OUTPUT UNIT NUMBER
C      (I)   INDIM    - MAXIMUM OUTPUT ARRAY DIMENSION
C      (R*8) WI       - LOWER LEVEL STATISTICAL WEIGHT
C      (R*8) WJ       - UPPER LEVEL STATISTICAL WEIGHT
C
C OUTPUT:
C
C DATA:
C      CIARR(500)*80- 500 IS THE CURRENT LIMIT ON INDEXES
C
C ROUTINES:
C      NONE
C
C WRITTEN:  CONVERSION OF WUPSILON BY A.LANZAFAME & D.H.BROOKS BY
C           HUGH P. SUMMERS, UNIVERSITY OF STRATHCLYDE
C           TEL. 0141-553-4196
C
C DATE:    24/11/96 VERSION 1.1
C MODIFIED: HUGH SUMMERS 24/11/96
C - FIRST RELEASE.
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C  
C DATE: 13/05/99 VERSION 1.2  
C MODIFIED: HUGH SUMMERS  
C - CORRECTED CONFUSION ABOUT NCHAR AND NELEC IN COMMENTS  
C INSERTED LEADING DECIMAL IN OUTPUT FLOATING FORMATS  
C

C-----  
CHARACTER\*80 DSFULL  
INTEGER I1, I2, INDIM, ISTDIM  
INTEGER IWRITE, KTYPE, NET, NTEMP  
REAL\*8 CPAR, DELTAE, EHI, ELO  
REAL\*8 ENTE (ISTDIM) , GF, NCHAR  
REAL\*8 NELEC, OMUP (ISTDIM)  
REAL\*8 T (ISTDIM) , UPS (INDIM) , WI, WJ  
REAL\*8 YKN (5)