

ADAS Subroutine bxmcm

```
      SUBROUTINE BXMCMA( NDLEV ,  
&                      NORD  , IORDR ,  
&                      CC    ,  
&                      CMAT  
&                      )
```

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C-----  
C  
C ***** FORTRAN77 SUBROUTINE: BXMCMA *****  
C  
C PURPOSE: TO STACK UP NON-METASTABLE/ORDINARY EXCITED LEVEL RATE  
C           MATRIX 'CMAT' FROM WHOLE RATE MATRIX 'CC' FOR ALL TRANSIT'NS  
C           BETWEEN ALL ENERGY LEVELS AT A FIXED TEMPERATURE AND DENSITY  
C  
C CALLING PROGRAM:  ADAS205/ADAS206  
C  
C SUBROUTINE:  
C  
C INPUT :  (I*4)  NDLEV  = MAXIMUM NUMBER OF ENERGY LEVELS ALLOWED  
C  
C INPUT :  (I*4)  NORD   = NUMBER OF NON-METASTABLE/ORDINARY EXCITED  
C           ENERGY LEVELS.  
C  
C INPUT :  (I*4)  IORDR() = INDEX OF NON-METASTABLE/ORDINARY EXCITED  
C           LEVELS IN COMPLETE LEVEL LIST.  
C  
C INPUT :  (R*8)  CC(, ) = RATE MATRIX COVERING ALL TRANSITIONS  
C           (UNITS: SEC-1)  
C           VALUES FOR GIVEN TEMPERATURE AND DENSITY.  
C           1st DIMENSION: ENERGY LEVEL INDEX  
C           2nd DIMENSION: ENERGY LEVEL INDEX  
C  
C OUTPUT:  (R*8)  CMAT(, ) = RATE MATRIX COVERING ALL NON-METASTABLE/  
C           ORDINARY EXCITED LEVELS.  
C           (UNITS: SEC-1)  
C           VALUES FOR GIVEN TEMPERATURE AND DENSITY.  
C           1st DIMENSION: ORDINARY EXCITED LEVEL INDEX  
C           2nd DIMENSION: ORDINARY EXCITED LEVEL INDEX  
C  
C           (I*4)  IS1    = ORDINARY EXCITED LEVEL ARRAY INDEX  
C           (I*4)  IS2    = ORDINARY EXCITED LEVEL ARRAY INDEX  
C  
C  
C ROUTINES: NONE  
C  
C  
C AUTHOR:  PAUL E. BRIDEN (TESSELLA SUPPORT SERVICES PLC)  
C           K1/0/81  
C           JET EXT. 4569  
C  
C DATE:    09/10/90  
C-----  
C
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C-----

INTEGER
REAL*8

IORDR (NDLEV) ,
CC (NDLEV, NDLEV) ,

NDLEV, NORD
CMAT (NDLEV, NDLEV)