ADAS Subroutine b8corr

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C
        SUBROUTINE B8CORR(MAXT, MAXD, NMET, NPL3, TEVA, COEFF)



C----------------------------------------------------------------------
C
C  ***************** FORTRAN77 SUBROUTINE: B8CORR *********************
C
C  PURPOSE: Corrects unphysical low temperature recombination
C           contributions to a PEC.
C
C           There is a low temperature problem in the production
C           calculation which gives unphysical recombination
C           coefficients. Generally the first 3-4 temperatures in the
C           ADAS 96 standard are affected. This routine replaces the
C           first 4 temperatures from the  recombination contribution
C           with extrapolated values from the remaining data.
C
C
C
C  CALLING PROGRAM: ADAS208 (B8WRMC)
C
C  INPUT : (I*4)  MAXT    = NUMBER OF TEMPERATURES
C  INPUT : (I*4)  MAXD    = NUMBER OF DENSITIES
C  INPUT : (I*4)  NMET    = NUMBER OF METASTABLES
C  INPUT : (I*4)  NPL3    = NUMBER OF ACTIVE METAS. FOR RE+3B OF (Z+1) ION
C
C  I/O   : (R*8) COEFF() = (Z+1)-(Z) RECOM GEN. COLL. RAD. COEFFTS.
C                          (FVRRED IN ADAS208 CALL)
C                            1ST DIMENSION: (Z) METASTABLE INDEX
C                            2ND DIMENSION: (Z) METASTABLE INDEX
C                            3RD DIMENSION: TEMPERATURE INDEX
C                            4TH DIMENSION: DENSITY INDEX
C
C
C
C ROUTINES:
C          ROUTINE    SOURCE   BRIEF DESCRIPTION
C          ------------------------------------------------------------
C          XXSPLE     ADAS     SPLINE SUBROUTINE
C          R8FUN1     ADAS     REAL*8 FUNCTION: ( X -> X )
C
C AUTHOR:  Martin O'Mullane
C
C
C DATE:    14-09-99
C
C
C VERSION: 1.1                         DATE: 14-09-99
C MODIFIED: Martin O'Mullane
C          - First version
```

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C
C VERSION: 1.2                          DATE: 26-10-99
C MODIFIED: Martin O'Mullane
C             - Change the condition for extrapolating. If there are
C               coeff .GT. 1.0 then initiate extrapolation. Also
C               consider eachmetastable separately.
C
C VERSION: 1.3                          DATE: 20-07-07
C MODIFIED: Allan Whiteford
C             - Small modification to comments to allow for automatic
C               documentation preparation.
C
C-----------------------------------------------------------------------
C
C-----------------------------------------------------------------------
      INTEGER            MAXD,        MAXT,         NMET,         NPL3
      REAL*8             COEFF(NDMET,NDMET,NDTEM,NDDEN)
      REAL*8             TEVA(NDTEM)
```