

## ADAS Subroutine b8corp

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C
      SUBROUTINE B8CORP (NLEV , MAXT , MAXD , NMET ,
&                      TEVA , COEFF )
C-----
C
C ***** FORTRAN77 SUBROUTINE: B8CORP *****
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          contributions to the PECs. Generally the first 3-4
C          temperatures in the ADAS 96 standard are affected. This
C          routine replaces the first 4 temperatures from the
C          recombination contribution with extrapolated values
C          from the remaining data.
C
C CALLING PROGRAM: ADAS208 (B8WR11)
C
C INPUT : (I*4)  NLEV   = NUMBER OF LEVELS
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
C I/O    : (R*4)  COEFF() = RECOMBINATION CONTRIBUTION TO THE PEC
C                               (STVR IN ADAS208 CALL)
C                               1ST DIMENSION : LEVELS
C                               2ND DIMENSION : TEMPERATURES
C                               3RD DIMENSION : DENSITIES
C                               4TH DIMENSION : METASTABLES
C
C ROUTINES:
C          ROUTINE      SOURCE      BRIEF DESCRIPTION
C          -----
C          XXSPLN      ADAS         SPLINE SUBROUTINE
C          R8FUN1      ADAS         REAL*8 FUNCTION: ( X -> X )
C
C AUTHOR:  Martin O'Mullane
C
C DATE:    14-09-99
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  
C DATE : 26-10-99  
C MODIFIED: Martin O'Mullane  
C - Consider each level separately for extrapolation.  
C - Increase NDLEV in line with adas208.  
C  
C VERSION : 1.3  
C DATE : 20-07-07  
C MODIFIED: Allan Whiteford  
C - Small modification to comments to allow for automatic  
C documentation preparation.  
C  
C VERSION : 1.4  
C DATE : 02-09-2007  
C MODIFIED: Martin O'Mullane  
C - ITAG was defined as real\*8 rather than integer.  
C

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C-----

INTEGER	MAXD,	MAXT,	NLEV,	NMET
REAL	COEFF (NDLEV, NDTEM, NDDEN, NDMET)			
REAL*8	TEVA (NDTEM)			