

ADAS Subroutine b7datc

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      SUBROUTINE B7DATC( ndlev      ,
&                      titled_c   , iz_c      , iz0_c   , iz1_c   ,
&                      bwno_c    , il_c      ,
&                      ia_c      , cstrga_c  , isa_c   , ila_c   , xja_c   ,
&                      titled    , iz       , iz0     , iz1     ,
&                      bwno     , il       ,
&                      ia       , cstrga   , isa     , ila    , xja
&                      )
```

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C-----
C
C ***** FORTRAN77 SUBROUTINE: B7DATC *****
C
C PURPOSE:  Check consistency of adf04 file with contour passing file
C           data.
C
C CALLING PROGRAM: ADAS207
C
C SUBROUTINE:
C
C INPUT : (I*4)  ndlev      = maximum number of levels that can be read
C
C INPUT : (C*3)  titled_c   = contour file: element symbol.
C INPUT : (I*4)  iz_c      = contour file: recombined ion charge read
C INPUT : (I*4)  iz0_c     = contour file: nuclear charge read
C INPUT : (I*4)  iz1_c     = contour file: recombining ion charge read
C INPUT : (R*8)  bwno_c    = contour file: ionisation potential (cm-1)
C INPUT : (I*4)  il_c      = contour file: number of energy levels
C INPUT : (I*4)  ia_c()    = contour file: energy level index number
C INPUT : (C*18) cstrga_c()= contour file: configuration for level 'ia()'
C INPUT : (I*4)  isa_c()   = contour file: multiplicity for level 'ia()'
C INPUT : (I*4)  ila_c()   = contour file: quantum no. (L) for level 'ia()'
C INPUT : (R*8)  xja_c()   = contour file: quantum no.(J) for level 'ia()'
C
C INPUT : (C*3)  titled    = adf04 file: element symbol.
C INPUT : (I*4)  iz       = adf04 file: recombined ion charge read
C INPUT : (I*4)  iz0     = adf04 file: nuclear charge read
C INPUT : (I*4)  iz1     = adf04 file: recombining ion charge read
C INPUT : (R*8)  bwno    = adf04 file: ionisation potential (cm-1)
C INPUT : (I*4)  il      = adf04 file: number of energy levels
C INPUT : (I*4)  ia()    = adf04 file: energy level index number
C INPUT : (C*18) cstrga() = adf04 file: configuration for level 'ia()'
C INPUT : (I*4)  isa()   = adf04 file: multiplicity for level 'ia()'
C INPUT : (I*4)  ila()   = adf04 file: quantum no. (L) for level 'ia()'
C INPUT : (R*8)  xja()   = adf04 file: quantum no.(J) for level 'ia()'
C
C
C NOTE: Replaces original b7datc.for by Paul Briden. This version only
C       checks consistency and returns the transition energy.
C
C
```

C ROUTINES:

C	ROUTINE	SOURCE	BRIEF DESCRIPTION
C	-----		
C	I4UNIT	ADAS	FETCH UNIT NUMBER FOR OUTPUT OF MESSAGES

C VERSION: 1.7 DATE: 01-05-2003

C MODIFIED: Martin O'Mullane
C - Rewrite and functionality changed.

C	-----				
	CHARACTER*18	CSTRGA (NDLEV) ,	CSTRGA_C (NDLEV)		
	CHARACTER*3	TITLED ,	TITLED_C		
	INTEGER	IA (NDLEV) ,	IA_C (NDLEV) ,	IL	
	INTEGER	ILA (NDLEV) ,	ILA_C (NDLEV) ,	IL_C	
	INTEGER	ISA (NDLEV) ,	ISA_C (NDLEV) ,	IZ	
	INTEGER	IZ0 ,	IZ0_C ,	IZ1 ,	IZ1_C
	INTEGER	IZ_C ,	NDLEV		
	REAL*8	BWNO ,	BWNO_C ,	XJA (NDLEV)	
	REAL*8	XJA_C (NDLEV)			