

ADAS Subroutine bxsetp

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      SUBROUTINE BXSETP( IZ0      , IZ      ,  
&                      NDLEV    , IL      , ICNTE  ,  
&                      CSTRGA   , ISA     , ILA     , XJA     ,  
&                      STRGA  
&                      )
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C  
C ***** FORTRAN77 SUBROUTINE: BXSETP *****  
C  
C PURPOSE: TO SET UP PARAMETERS IN THE SHARED POOLED FOR PANEL DISPLAY  
C  
C CALLING PROGRAM: ADAS205/ADAS206  
C  
C DATA:  
C          DATA IS OBTAINED VIA SUBROUTINE 'BXDATA'  
C  
C SUBROUTINE:  
C  
C INPUT : (I*4)  IZ0      =          NUCLEAR CHARGE READ  
C INPUT : (I*4)  IZ       =    RECOMBINED ION CHARGE READ  
C  
C INPUT : (I*4)  NDLEV    = MAXIMUM NUMBER OF ENERGY LEVELS ALLOWED  
C INPUT : (I*4)  IL       = INPUT DATA FILE: NUMBER OF ENERGY LEVELS  
C INPUT : (I*4)  ICNTE    = NUMBER OF ELECTRON IMPACT TRANSITIONS  
C  
C INPUT : (C*18) CSTRGA() = NOMENCLATURE/CONFIGURATION FOR LEVEL 'IA()'  
C INPUT : (I*4)  ISA()    = MULTIPLICITY FOR LEVEL 'IA()'  
C          NOTE: (ISA-1)/2 = QUANTUM NUMBER (S)  
C INPUT : (I*4)  ILA()    = QUANTUM NUMBER (L) FOR LEVEL 'IA()'  
C INPUT : (R*8)  XJA()    = QUANTUM NUMBER (J-VALUE) FOR LEVEL 'IA()'  
C          NOTE: (2*XJA)+1 = STATISTICAL WEIGHT  
C  
C OUTPUT: (C*22) STRGA() = LEVEL DESIGNATIONS  
C  
C          (C*8)  F6       = PARAMETER = 'VREPLACE'  
C  
C          (I*4)  ILEN     = LENGTH, IN BYTES, OF ISPF DIALOG VARIABLES  
C          (I*4)  ILEV     = ARRAY COUNTER FOR LEVEL INDEX  
C          (I*4)  J        = VALUE OF QUANTUM NUMBER L + 1  
C          (I*4)  LFPOOL   = NO. OF LEVEL STRINGS SENT TO FUNCTION POOL  
C  
C          (C*2)  SZ0      =          NUCLEAR CHARGE READ  
C          (C*2)  SZ       =    RECOMBINED ION CHARGE READ  
C          (C*4)  SCNTE    = NUMBER OF ELECTRON IMPACT TRANSITIONS  
C          (C*4)  SIL      = NUMBER OF ENERGY LEVELS  
C          (C*1)  CONFIG() = QUANTUM NUMBER (L) LETTERS  
C          DIMENSION: QUANTUM NUMBER L + 1  
C          (C*8)  CHA()    = FUNCTION POOL NAMES: CHARGE VALUES  
C          (C*8)  CHB()    = FUNCTION POOL NAMES: LEVEL DESIGNATIONS <=99  
C          (I*4)  PIPEOU   = PARAMETER = UNIT NUMBER FOR OUTPUT TO PIPE  
C  
C
```

C ROUTINES:

C ROUTINE SOURCE BRIEF DESCRIPTION

C -----

C AUTHOR: PAUL E. BRIDEN (TESSELLA SUPPORT SERVICES PLC)
C K1/0/81
C JET EXT. 4569

C DATE: 09/10/90

C UPDATE: 26/06/92 - ADAS91 PEB: PLACED A LIMIT OF 99 ON THE NUMBER OF
C LEVEL STRINGS SENT TO FUNCTION POOL.

C 15/04/93 - AB: CONVERTED TO WRITE TO IDL VIA PIPE INSTEAD
C OF ISPF FUNCTION POOL.

C 14/03/95 - L. JALOTA : INCREASED CSTRG TO 18 BYTES IN LINE WITH
C NEW ADF04 FILE FORMATS AND READ ROUTINES.

C 05/04/95 - TIM HAMMOND : ADDED SEVERAL CALLS TO XXFLSH ROUTINE
C TO CLEAR THE PIPE AFTER IT HAS BEEN
C WRITTEN TO.

C V 1.5: 23/11/95 - TIM HAMMOND : ALTERED FORMAT 1001 TO I4 FROM I3
C AND INCREASED SCNTE AND SIL FROM A3
C TO A4 TO ALLOW FOR LARGER NUMBERS.

C VERSION: 1.6

DATE: 29-04-2003

C MODIFIED: Martin O'Mullane

C - Remove the restriction of only sending LFPOOL (99)
C values of level string identifier to IDL. Send the
C complete level list and improve the data handling
C at the IDL level.

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|--------------|--------------|------|----------|---------|
| CHARACTER*18 | CSTRGA(IL) | | | |
| CHARACTER*22 | STRGA(NDLEV) | | | |
| INTEGER | ICNTE, | IL, | ILA(IL), | ISA(IL) |
| INTEGER | IZ, | IZO, | NDLEV | |
| REAL*8 | XJA(IL) | | | |