

ADAS Subroutine e2chkb

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      SUBROUTINE E2CHKB( IUNIT , NBSEL , IBSEL ,  
&                      IZ0IN , IZ0      ,  
&                      LOPEN  , IRCODE  
&                      )
```

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C-----  
C  
C ***** FORTRAN77 SUBROUTINE: E2CHKB *****  
C  
C PURPOSE: TO CHECK THE SELECTED BLOCK (IBSEL) OF DATA EXISTS IN THE  
C           INPUT DATA SET AND IF SO IT REPRESENTS THE ENTERED VALUES OF  
C           'IZ0IN' (NUCLEAR CHARGE OF SELECTED IONISING ION ELEMENT).  
C  
C           IT ALSO CLOSES THE INPUT DATA SET ALLOCATION IF OPEN.  
C  
C CALLING PROGRAM: SSZD  
C  
C SUBROUTINE:  
C  
C INPUT : (I*4)   IUNIT   = UNIT TO WHICH INPUT DATA SET IS ALLOCATED  
C INPUT : (I*4)   NBSEL   = TOTAL NUMBER OF DATA-BLOCKS READ FROM INPUT  
C                               DATA SET.  
C INPUT : (I*4)   IBSEL   = INDEX OF DATA-BLOCK SELECTED FOR ANALYSIS  
C  
C INPUT : (I*4)   IZ0IN   = REQUESTED: NUCLEAR CHARGE OF ELEMENT  
C INPUT : (I*4)   IZ0     = INPUT FILE: NUCLEAR CHARGE OF ELEMENT  
C  
C I/O   : (L*4)   LOPEN   = INPUT : .TRUE.  => INPUT DATA SET OPEN.  
C                               .FALSE. => INPUT DATA SET CLOSED.  
C                               OUTPUT: ALWAYS RETURNED AS .FALSE.  
C OUTPUT: (I*4)   IRCODE  = RETURN CODE FROM SUBROUTINE:  
C                               0 => NO ERROR DETECTED.  
C                               2 => DISCREPANCY BETWEEN REQUESTED ELEMENT  
C                               AND THAT IN INPUT DATA FILE.  
C                               3 => SELECTED DATA-BLOCK OUT OF RANGE OR  
C                               DOES NOT EXIST.  
C  
C           (I*4)   I4UNIT  = FUNCTION (SEE ROUTINE SECTION BELOW)  
C  
CA      (c*80)   DSNAME   = DATA FILE NAME UNDER UNIX, INCLUDING PATH.  
C  
C ROUTINES:  
C           ROUTINE      SOURCE      BRIEF DESCRIPTION  
C           -----  
C           E2FILE       ADAS        OPEN DATA SET FOR SELECTED ELEMENT  
C           I4UNIT       ADAS        FETCH UNIT NUMBER FOR OUTPUT OF MESSAGES  
C  
C AUTHOR:  PAUL E. BRIDEN (TESSELLA SUPPORT SERVICES PLC)  
C           K1/0/37  
C           JET EXT. 2620  
C  
C DATE:    06/06/91  
C
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C UPDATE: 23/04/93 - PE BRIDEN - ADAS91: ADDED I4UNIT FUNCTION TO WRITE
C STATEMENTS FOR SCREEN MESSAGES
C

C UPDATE: 24/06/93 - PE BRIDEN - ADAS91: CHANGED I4UNIT(0)-> I4UNIT(-1)
C

C UPDATE: 10/11/94 - L. JALOTA - UPDATED TO RUN UNDER UNIX.

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C-----
C
C-----

INTEGER	IBSEL,	IRCODE,	IUNIT,	IZ0
INTEGER	IZ0IN,	NBSEL		
LOGICAL	LOPEN			