

ADAS Subroutine e4chkb

```
      SUBROUTINE E4CHKB( IUNIT , NBSEL , IBSEL ,  
&                      IZ0IN  , IZ0    ,  
&                      LOPEN  , IRCODE  
&                      )
```

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C-----  
C  
C ***** FORTRAN77 SUBROUTINE: E4CHKB *****  
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: SPZD  
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  
C           (C*80) DSNAME = NAME OF DATA SET OPENED  
C  
C ROUTINES:  
C           ROUTINE      SOURCE      BRIEF DESCRIPTION  
C           -----  
C           E4FILE       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
```

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: 1/11/94 - L. JALOTA - INCREASED SIZE OF DSNAME FOR UNIX.
C

C UNIX-IDL PORT:
C

C VERSION: 1.1 DATE: 25-5-95

C MODIFIED: TIM HAMMOND (TESSELLA SUPPORT SERVICES PLC)

C - PUT UNDER SCCS CONTROL
C

C VERSION: 1.2 DATE: 17-1-96

C MODIFIED: TIM HAMMOND (TESSELLA SUPPORT SERVICES PLC)

C - REPLACED SSZD WITH SPZD AND MINOR CHANGE TO FORMATS
C

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C-----
C

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C

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C-----
C

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