

## ADAS Subroutine e1chkb

```
      SUBROUTINE E1CHKB( IUNIT , NBSEL , IBSEL ,
&                      IZ0IN , IZIN   ,
&                      IZ0   , IZ     ,
&                      LOPEN , IRCODE
&                      )
```

```
C-----
C
C ***** FORTRAN77 SUBROUTINE: E1CHKB *****
C
C PURPOSE: TO CHECK THE SELECTED BLOCK (IBSEL) OF DATA EXISTS IN THE
C          INPUT DATA SET.
C
C          IF SO IT REPRESENTS THE ENTERED VALUES OF
C          'IZ0IN' (NUCLEAR CHARGE OF EMITTING ION)      &
C          'IZIN'  (CHARGE OF EMITTING ION)
C
C          IT ALSO CLOSES THE INPUT DATA SET ALLOCATION IF OPEN.
C
C CALLING PROGRAM: SSXB
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 EMITTING ION
C INPUT : (I*4)  IZIN   = REQUESTED: CHARGE OF EMITTING ION
C
C INPUT : (I*4)  IZ0    = INPUT FILE: NUCLEAR CHARGE OF EMITTING ION
C INPUT : (I*4)  IZ     = INPUT FILE: CHARGE OF EMITTING ION
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 CHARGES
C                               AND THOSE 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  = NAME OF DATA FILE INCLUDING PATH.
C
C ROUTINES:
C          ROUTINE      SOURCE      BRIEF DESCRIPTION
C-----
C          E1FILE       ADAS         OPEN DATA SET FOR SELECTED EMITTER
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. 2520  
 C  
 C DATE: 03/05/91  
 C  
 C UPDATE: 23/04/93 - PE BRIDEN - ADAS91: ADDED I4UNIT FUNCTION TO WRITE  
 C STATEMENTS FOR SCREEN MESSAGES  
 C  
 C UPDATE: 24/05/93 - PE BRIDEN - ADAS91: CHANGED I4UNIT(0)-> I4UNIT(-1)  
 C UPDATE: 31/10/94 - LALIT JALOTA - INCREASED SIZE DSNAME TO \*80 FOR  
 C UNIX.

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C  
 C VERSION: 1.1 DATE: 02-05-95  
 C MODIFIED: UNKNOWN (SOMEONE FROM TESSELLA SUPPORT SERVICES PLC)  
 C - PUT UNDER SCCS CONTROL

C  
 C VERSION: 1.2 DATE: 20-07-07  
 C MODIFIED: Allan Whiteford  
 C - Small modification to comments to allow for automatic  
 C documentation preparation.

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