

## ADAS Subroutine e3chkb

```
      SUBROUTINE E3CHKB( IUNIT , NBSEL , IBSEL ,  
&                      IZ0IN  , IZIN   ,  
&                      IZ0     , IZ     ,  
&                      LOPEN  , IRCODE  
&                      )
```

```
C-----  
C  
C ***** FORTRAN77 SUBROUTINE: E3CHKB *****  
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: SPEC  
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  
C          (C*80) DSNAME = UNIX NAME OF DATA SET OPENED  
C  
C ROUTINES:  
C          ROUTINE      SOURCE      BRIEF DESCRIPTION  
C          -----  
C          E3FILE       ADAS        OPEN DATA SET FOR SELECTED EMITTER  
C          I4UNIT       ADAS        FETCH UNIT NUMBER FOR OUTPUT OF MESSAGES
```

C  
 C AUTHOR: H. P. SUMMERS  
 C K1/1/57  
 C JET EXT. 4941  
 C  
 C DATE: 11/10/91  
 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  
 C UPDATE: 1/11/94 - L. JALOTA - UPDATED TO RUN UNDER UNIX ON DEC-ALPHA  
 C  
 C-----  
 C  
 C VERSION: 1.1 DATE: 25-05-95  
 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.  
 C  
 C-----  
 C  
 C-----  

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