

## ADAS Subroutine c2chkb

```
C
      SUBROUTINE C2CHKB( IUNIT , NBSEL , IBSEL ,
&                      IZ0IN , IZ0 ,
&                      LOPEN , IRCODE
&                      )
C-----
C
C ***** FORTRAN77 SUBROUTINE: C2CHKB *****
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: SSIA
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*44) DSNAME = FULL MVS NAME OF DATA SET OPENED
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. 2520
C
C DATE:    06/06/91
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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 UNIX-IDL PORT: H.P.SUMMERS

C  
C VERSION: 1.1 DATE: 19-11-96

C MODIFIED: WILLIAM OSBORN (TESSELLA SUPPORT SERVICES PLC)  
C - PUT UNDER S.C.C.S. CONTROL

C  
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C-----

C  
C-----

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