

ADAS Subroutine e3file

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SUBROUTINE E3FILE( IUNIT , IZ0 , IZ , IRCODE , DSNAME )
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C
C ***** FORTRAN77 SUBROUTINE: E3FILE *****
C
C PURPOSE: TO OPEN A PHOTON EMISSIVITY 'IONELEC' DATA SET
C          BY DEFAULT, OR AN ALTERNATIVE DATA SET IF REQUIRED, FOR
C          EMITTING ION WITH NUCLEAR CHARGE 'IZ0' AND CHARGE 'IZ'.
C          THIS WILL BE CONNECTED TO UNIT 'IUNIT'.
C
C DATA SET OPENED: $ADASUSER/<DEFADF>/<GROUP>(OPTIONAL)/<TYPE>/
C <GROUP_EXT>#<ELEMENT SYMBOL><CHARGE>
C
C CALLING PROGRAM: SPEC
C
C SUBROUTINE:
C
C INPUT : (I*4)   IUNIT   = UNIT TO WHICH DATA SET WILL BE CONNECTED
C INPUT : (I*4)   IZ0     = NUCLEAR CHARGE OF EMITTING ION REQUESTED
C INPUT : (I*4)   IZ      = ION CHARGE OF EMITTING ION REQUESTED
C
C OUTPUT: (I*4)   IRCODE  = RETURN CODE FROM SUBROUTINE:
C                          0 => DATA SET SUCCESSFULLY CONNECTED
C                          1 => REQUESTED DATA SET MEMBER DOES NOT
C                              EXISTS - DATA SET NOT CONNECTED.
C                          6 => INVALID VALUE FOR 'IZ' ENTERED.
C                              ( 0 <= 'IZ' <= 99 )
C                          9 => REQUESTED DATA SET EXISTS BUT CANNOT
C                              BE OPENED.
C OUTPUT: (C*80)  DSNAME  = NAME OF OPENED DATA SET UNDER UNIX
C
C          (I*4)   IDLEN   = LENGTH, IN BYTES, OF FIXED 'DSNAME' PREFIX
C          (I*4)   LENF1   = FIRST NON-BLANK CHR OF 'DSNAME' GROUP PART
C          (I*4)   LENF2   = LAST  NON-BLANK CHR OF 'DSNAME' GROUP PART
C          (I*4)   LENF3   = FIRST NON-BLANK CHR OF 'DSNAME' TYPE PART
C          (I*4)   LENF4   = LAST  NON-BLANK CHR OF 'DSNAME' TYPE PART
C          (I*4)   LENF5   = LAST  NON-BLANK CHR OF 'DSNAME' USERID PART
C          (I*4)   LENF6   = LAST  NON-BLANK CHR OF 'DSNAME' USERID PART
C          (I*4)   LENF7   = LAST  NON-BLANK CHR OF 'DSNAME' EXTENSION PART
C          (I*4)   LENF8   = LAST  NON-BLANK CHR OF 'DSNAME' EXTENSION PART
C          (I*4)   IZEND   = LAST BYTE WRITTEN TO IN 'CZ'. (= 1 OR 2)
C          (C*1)   HASH    = '#' IF NON-BLANK EXT, ELSE ' '.
C          (C*2)   CZ      = 'IZ' (NO LEADING BLANKS)
C          (C*2)   XFESYM  = FUNCTION - (SEE ROUTINES SECTION BELOW)
C          (C*2)   ESYM    = ELEMENT SYMBOL FOR NUCLEAR CHARGE 'IZ0'
CA          (C*3)   USREXT  = ADAS SOURCE DATA FILE EXTENSION
CA          (C*80)  USERID  = ADAS SOURCE DATA USER ID
CA          (C*8)   USRGRP  = ADAS SOURCE DATA GROUPNAME
CA          (C*80)  USRTYP  = ADAS SOURCE DATA TYPENAME
C          (C*6)   DEFADF  = DEFAULT DATA DIRECTORY, I.E. ADF13
C
C          (L*4)   LEXIST  = .TRUE. => REQUESTED DATA SET EXISTS.
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C .FALSE. => REQUESTED DATA SET DOES NOT
C EXIST.
C

C ROUTINES:

ROUTINE	SOURCE	BRIEF DESCRIPTION
XXUID	ADAS	FETCHES/SETS ADAS SOURCE DATA USER ID
XXSPEC	ADAS	FETCHES/SETS ADAS SOURCE DATA FILENAME AND FILE EXTENSION
XFESYM	ADAS	CHARACTER*2 FUNCTION - GATHERS ELEMENT SYMBOL FOR NUC. CHARGE
XXSLEN	ADAS	FINDS FIRST AND LAST NON-BLANK CHARACTERS IN STRING.

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C K1/1/67

C JET EXT. 4941

C DATE: 11/10/91

C UPDATE: 10/03/93 - PE BRIDEN: ADDED CALL TO XXUID AND USERID VARIABLE
C - NOW ALLOWS ANY INPUT DATASET USER ID.

C UPDATE: 2/09/93 - HPS : ADDED CALL TO XXSPEC AND USRGRP, USRTYP
C AND USREXT NAMES
C - NOW ALLOWS ANY INPUT DATASET FILENAME
C AND EXTENSION

C UPDATE: 23/11/93 - PEB : CORRECT ERROR - A '.' HAD MISTAKENLY
C BEEN PLACED BEFORE THE MEMBER NAME IN
C VARIABLE DSNAME.

C UPDATE: 1/11/94 - L. JALOTA: MODIFIED CODE FOR RUNNING UNDER UNIX
C USING NEW FILE NAMING CONVENTION.

C "ACTION" KEYWORD IN OPEN COMMAND IS IBM
C SO REMOVED HERE.

C UPDATE: 8/11/94 - L. JALOTA: ADDED DEFADF

C UPDATE: 22/11/94 - L. JALOTA: TIDIED UP CHARACTER STRING LENGTHS

C UPDATE: 22/03/95 _ HPS : INTRODUCED HASH TO ELIMINATE # IN FILE IF
C THERE IS NO EXTENSION PART OF THE FILE NAME
C ALTER LOGIC TO ALLOW USRTYP, USREXT TO BE A
C SINGLE CHARACTER.

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CHARACTER*80 DSNAME
INTEGER IRCODE, IUNIT, IZ, IZ0