

ADAS Subroutine e2file

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SUBROUTINE E2FILE( IUNIT , IZ0 , IRCODE , DSNAME )
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C
C ***** FORTRAN77 SUBROUTINE: E2FILE *****
C
C PURPOSE: TO OPEN AN IONIZATION RATE-COEFFT 'IONELEC' DATA SET
C          BY DEFAULT, OR AN ALTERNATIVE DATA SET IF REQUIRED, FOR
C          IONIZING ION WITH NUCLEAR CHARGE 'IZ0'
C          THIS WILL BE CONNECTED TO UNIT 'IUNIT'.
C
C DATA SET OPENED: $ADASUSER/<DEFADF>/<GROUP> (OPTIONAL) /<TYPE>/
C <GROUP_EXT>#<ELEMENT SYMBOL>'
C
C CALLING PROGRAM: SSZD
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
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                        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
CA         (C*1)   HASH    = '#'   IF NON-BLANK EXT, ELSE ' '.
C          (C*2)   XFESYM  = FUNCTION - (SEE ROUTINES SECTION BELOW)
C          (C*2)   ESYM    = ELEMENT SYMBOL FOR NUCLEAR CHARGE 'IZ0'
C          (C*3)   USREXT  = ADAS SOURCE DATA FILE EXTENSION
CA         (C*80)  USERID  = ADAS SOURCE DATA USER ID
C          (C*8)   USRGRP  = ADAS SOURCE DATA GROUPNAME
CA         (C*80)  USRTYP  = ADAS SOURCE DATA TYPENAME
C          (C*5)   DEFADF  = DEFAULT DATA DIRECTORY, I.E. ADF13
C
C          (L*4)   LEXIST  = .TRUE.  => REQUESTED DATA SET EXISTS.
C                        .FALSE. => REQUESTED DATA SET DOES NOT
C                        EXIST.
C
C ROUTINES:
C          ROUTINE      SOURCE      BRIEF DESCRIPTION
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C -----
C XXUID ADAS FETCHES/SETS ADAS SOURCE DATA USER ID
C XXSSZD ADAS FETCHES/SETS ADAS SOURCE DATA FILENAME
C AND FILE EXTENSION
C XFESYM ADAS CHARACTER*2 FUNCTION -
C GATHERS ELEMENT SYMBOL FOR NUC. CHARGE
C XXSLEN ADAS FINDS FIRST AND LAST NON-BLANK
C CHARACTERS IN STRING.
C
C AUTHOR: H.P. SUMMERS
C K1/1/57
C JET EXT. 4941
C DATE: 11/10/91
C
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 XXSSZD 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
C UPDATE: 10/11/94 - 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 ADDED DEFADF
C UPDATE: 22/11/94 - L. JALOTA: TIDIED UP CHARACTER LENGTH DEFINITIONS
C
C UPDATE: 24/03/95 - 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.
C
C -----
C -----
C
C -----
C CHARACTER*80 DSNAME
C INTEGER IRCODE, IUNIT, IZ0

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