

ADAS Subroutine e4file

SUBROUTINE E4FILE(IUNIT , IZ0 , IRCODE , DSNAME)

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C
C ***** FORTRAN77 SUBROUTINE: E4FILE *****
C
C PURPOSE: TO OPEN AN RADIATED POWER COEFFT 'IONELEC' DATA SET
C          BY DEFAULT, OR AN ALTERNATIVE DATA SET IF REQUIRED, FOR
C          RADIATING ELEMENT GIVEN BY IT NUCLEAR CHARGE 'IZ0'.
C          THIS WILL BE CONNECTED TO UNIT 'IUNIT'.
C
C DATA SET OPENED: '$ADASUSER/DEFADF/<GROUP>/<TYPE>/
C <GROUP>_<EXT>#<ELEMENT SYMBOL>'
C
C CALLING PROGRAM: SPZD
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 ELEMENT 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   = FIRST NON-BLANK CHR OF 'DSNAME' USERID PART
C          (I*4)   LENF6   = LAST  NON-BLANK CHR OF 'DSNAME' USERID PART
C          (I*4)   LENF7   = FIRST NON-BLANK CHR OF 'DSNAME' USREXT PART
C          (I*4)   LENF8   = LAST  NON-BLANK CHR OF 'DSNAME' USREXT 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
C          (C*80)  USERID  = ADAS SOURCE DATA USER ID
C          (C*8)   USRGRP  = ADAS SOURCE DATA GROUPNAME
CA         (C*80)  USRTYP  = SUB-DIRECTORY NAME (OPTIONAL)
CA         (C*5)   DEFADF  = DEFAULT ADF DIRECTORY FOR THIS ROUTINE, I.E.
CA                          ADF19
C
C          (L*4)   LEXIST  = .TRUE.  => REQUESTED DATA SET EXISTS.
C                          .FALSE. => REQUESTED DATA SET DOES NOT
C                                  EXIST.
C
C ROUTINES:
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C          ROUTINE      SOURCE      BRIEF DESCRIPTION
C          -----
C          XXUID        ADAS         FETCHES/SETS ADAS SOURCE DATA USER ID
C          XXSPZD       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
C AUTHOR:   PAUL E. BRIDEN (TESSELLA SUPPORT SERVICES PLC)
C          K1/0/37
C          JET EXT. 5023
C
C DATE:    06/06/91
C UPDATE:  31/07/91 - PE BRIDEN: ADDED "ACTION='READ'" TO OPEN STATEMENT
C UPDATE:  08/08/91 - PE BRIDEN: ADDED "IRCODE=9" => OPEN ERROR
C UPDATE:  10/03/93 - PE BRIDEN: ADDED CALL TO XXUID AND USERID VARIABLE
C UPDATE:   2/09/93 - HPS          : ADDED CALL TO XXSPZD AND USRGRP, USRTYP
C                                     AND USREXT NAMES
C                                     - NOW ALLOWS ANY INPUT DATASET FILENAME
C                                     AND EXTENSION
C                                     - NOW ALLOWS ANY INPUT DATASET USER ID.
C UPDATE:  23/11/93 - PEB          : CORRECT ERROR - A '.' HAD MISTAKENLY
C                                     BEEN PLACED BEFORE THE MEMBER NAME IN
C                                     VARIABLE DSNAME.
C UPDATE:   4/11/94 - L.JALOTA    : MODIFIED FOR UNIX, INCREASED NAME LENGTHS
C UPDATE:   7/11/94 - L.JALOTA    : ADDED DEFADF.
C UPDATE:  21/11/94 - L.JALOTA    : CORRECTED SIZE OF USRTYP.
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
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          CHARACTER*80      DSNAME
          INTEGER          IRCODE,      IUNIT,      IZ0

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