

ADAS Subroutine lh404ru

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      SUBROUTINE LH404RU (DATE , USER ,  
&           IZ0 , IZL , IZH , CHPRFIX ,  
&           MAXT , MAXD , TEK , DENSA ,  
&           DSNIN , DSNO , LDTYP , YEAR , OPEN17  
&           )
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C  
C ***** FORTRAN 77 PROGRAM: LH404RU *****  
C  
C   VERSION 1.0  
C  
C   PURPOSE:  TO FETCH DATA FROM MASTER CONDENSED PARENT/METASTABLE  
C             RESOLVED COLLISIONAL DIELECTRONIC FILES, BUNDLE THEM,  
C             AND PREPARE UNRESOLVED ISONUCLEAR (ADF11) MASTER FILES.  
C  
C             ALSO CHECK FOR AN EQUIVALENTLY NAMED ADF15 FILES  
C  
C             AND BUNDLE RESOLVED DATA BLOCKS INTO UNRESOLVED ONES.  
C  
C             LOOSELY BASED UPON WJD404R  
C  
C   PROGRAM:  
C  
C   PARAMETER : (I*4)  NUTMAX - OUTPUT ELEMENT MASTER FILE  
C                   MAXIMUM NUMBER OF TEMPERATURES  
C   PARAMETER : (I*4)  NUDMAX - OUTPUT ELEMENT MASTER FILE  
C                   MAXIMUM NUMBER OF DENSITIES  
C   PARAMETER : (I*4)  NUZMAX - OUTPUT ELEMENT MASTER FILE  
C                   MAXIMUM NUMBER OF CHARGE STATES  
C   PARAMETER : (I*4)  NUMMAX - METASTABLE FRACTIONS  
C                   MAXIMUM NUMBER OF METASTABLES  
C  
C   (R*8)  DENSA ()      - OUTPUT ELEMENT MASTER FILE  
C                   SET OF MAXD DENSITIES  
C   (R*8)  TEK ()       - OUTPUT ELEMENT MASTER FILE  
C                   SET OF MAXT TEMPERATURES  
C   (R*8)  DENSL ()     - OUTPUT ELEMENT MASTER FILE  
C                   SET OF MAXD DENSITIES IN LOGARITHM  
C   (R*8)  TEVL ()     - OUTPUT ELEMENT MASTER FILE  
C                   SET OF MAXT TEMPERATURES IN LOGARITHM  
C  
C  
C   ROUTINES:  
C   -----  
C   XUFLOW - VS FORTRAN UNDERFLOW EXCEPTION HANDLER  
C   CL3270 - JET-SPECIFIC CLEAR SCREEN ROUTINE  
C   XXDATE - ADAS - GATHER CURRENT DATE  
C   XXOPEN - ADAS - OPEN FILE  
C   XXSLEN - ADAS - GET FIRST AND LAST CHAR. POS. IN A STRING  
C   DMGUID - JET-SPECIFIC - GATHER USERS ID  
C   METRD  - READ MET FILES AND SPLINE ONTO TEMP/DENS ARRAY
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C FILEINF - VS FORTRAN FILE INFORMATION ROUTINE
 C BND404A - READ ACD,SCD,CCD,PRB,PRC RESOLVED ADF10 FILES
 C AND BUNDLE THEM INTO UNRESOLVED ADF11 FILES
 C BND404B - READ PLT,PLS RESOLVED ADF10 FILES
 C AND BUNDLE THEM INTO UNRESOLVED ADF11 FILES
 C BND404C - READ ADF10 FILES AND BUNDLE THE RESOLVED
 C BLOCKS INTO UNRESOLVED BLOCKS TO BE TACKED
 C ONTO THE BOTTOM OF THE FILE
 C
 C-----

C AUTHOR: LORNE D. HORTON
 C ROOM K1/1/58, JET JOINT UNDERTAKING
 C

C DATE: 21ST FEBRUARY 1996
 C
 C-----

C VERSION: 1.2
 C DATE: 20-10-97
 C MODIFIED: LORNE HORTON
 C - MODIFIED CALL TO BND404A and BND404B.
 C

C VERSION: 1.3
 C DATE: 4/11/99
 C MODIFIED: Martin O'Mullane
 C - Add real name of producer.
 C - Modify comments.
 C

C VERSION : 1.4
 C DATE : 04-01-2007
 C MODIFIED: Martin O'Mullane
 C - F-like and Ne-like stages have 2 (not 1) metastables.
 C Change NGRD vector.
 C - Use 11605.4 as K/eV conversion (same as xxtcon).
 C

C VERSION : 1.5
 C DATE : 17-05-2007
 C MODIFIED: Allan Whiteford
 C - Updated comments as part of subroutine documentation
 C procedure.
 C
 C-----

CHARACTER*2	CHPREFIX			
CHARACTER*8	DATE			
CHARACTER*80	DSNIN(50,10),		DSNO(10)	
CHARACTER*30	USER			
CHARACTER*2	YEAR			
INTEGER	IZ0,	IZH,	IZL,	MAXD
INTEGER	MAXT			
LOGICAL	LDTYP(9),	OPEN17		
REAL*8	DENSA (NUDMAX),		TEK (NUTMAX)	