

ADAS Subroutine ioadas1

```
SUBROUTINE IOADAS1( iunt      , DATE      ,  
&                    NTDIM     , NNEDIM  , NZDIM   , DATA   ,  
&                    ITMAX    , IDMAX   , IZMAX   ,  
&                    DENSE    , TEMPE   ,  
&                    IZ0     , NAME    , METHOD   ,  
&                    CSTRG1   , CSTRG2  , LINFO   ,  
&                    user    , type    , dsn03   , dsn35  , lfilter  
&                    )
```

```
C-----  
C  
C PURPOSE : TO WRITE ADAS DATA WHICH IS DEPENDENT ON DENSITY  
C           AND HAS NO SEPARATE 'NEUTRAL' STAGE.  
C  
C           THE DATA IS IN THE FORM :-  
C                   DATA(IT, ID, IZ)  
C           WHERE,  
C                   IT      : TEMPERATURE INDEX ( 1 - ITMAX ) NTDIM  
C                   ID      : DENSITY          INDEX ( 1 - IDMAX ) NNEDIM  
C                   IZ      : STAGE            INDEX ( 1 - ITMAX ) NZDIM  
C  
C           WITH ELECTRON TEMPERATUES ---- TEMPE(1 - ITMAX)  
C                   ELECTRON DENSITIES ---- DENSE(1 - IDMAX)  
C  
C           (I*4) iunt      = STREAM NUMBER (PREVIOUSLY ALLOCATED)  
C  
C           INPUT  
C           ~~~~~  
C           (R*4) DATA      : PROFILE ARRAY (SEE ABOVE)  
C           (I*4) ITMAX     : NUMBER OF TEMPERATURE INDICIES  
C           (I*4) IDMAX     : NUMBER OF DENSITY      INDICIES  
C           (I*4) IZMAX     : NUMBER OF STAGE        INDICIES  
C           (R*4) DENSE     : ELECTRON DENSITIES  
C           (R*4) TEMPE     : ELECTRON TEMPERATURES  
C           (I*4) IZ0      : NUCLEAR CHARGE OF SEPCIES  
C           (C*13) NAME     : NAME OF ELEMENT  
C           (C*24) METHOD    : METHOD USED IN THE CALCULATIONS  
C           (C*10) CSTRG1   : FIRST PARENT/GROUND INFORMATION STRING  
C           (C*10) CSTRG2   : SECOND PARENT/GROUND INFORMATION STRING  
C           (C*8)  LINFO    : WAVELENGTH IDENTIFIER FOR SPECIFIC LINE  
C  
C  
C BASED ON IOADAS1 BY  
C           JAMES SPENCE  
C           JET/TESELLA SUPPORT SERVICES PLC  23/3/90  
C  
C MODIFIED TO WRITE ONLY  
C           M. O'MULLANE    11/8/92  
C  
C UNIX-IDL PORT:
```

C
 C VERSION: 1.1 DATE: 15-04-96
 C MODIFIED: WILLIAM OSBORN (TESSELLA SUPPORT SERVICES PLC)
 C - FIRST CONVERTED, CALL TO XXDATE REMOVED
 C
 C VERSION: 1.2 DATE: 21-07-2003
 C MODIFIED: Martin O'Mullane
 C - Add a comment section at the end.
 C - Remove redundant variables.
 C
 C VERSION: 1.3 DATE: 17-05-2007
 C MODIFIED: Allan Whiteford
 C - Updated comments as part of subroutine documentation
 C procedure.
 C

C-----
 CHARACTER*10 CSTRG1, CSTRG2
 CHARACTER*8 DATE
 CHARACTER*80 DSN03, DSN35
 CHARACTER*8 LINFO (NZDIM)
 CHARACTER*24 METHOD
 CHARACTER*13 NAME
 CHARACTER*40 TYPE
 CHARACTER*30 USER
 INTEGER IDMAX, ITMAX, IUNT, IZ0
 INTEGER IZMAX, NNEDIM, NTDIM, NZDIM
 LOGICAL LFILTER
 REAL*8 DATA (NTDIM, NNEDIM, NZDIM) , DENSE (NNEDIM)
 REAL*8 TEMPE (NTDIM)