

ADAS Subroutine ioadas2

```
SUBROUTINE IOADAS2( iunt      , DATE      ,  
&                    NTDIM     , NNEDIM  , NZDIM   ,  
&                    DATA0    , DATA   ,  
&                    ITMAX     , IDMAX   , IZMAX   ,  
&                    DENSE     , TEMPE  ,  
&                    IZ0      , NAME    , METHOD  ,  
&                    CSTRG1    , CSTRG2  , LINFO  ,  
&                    user     , type   , dsn03  , dsn35 , lfilter  
&                    )
```

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C-----  
C  
C PURPOSE : TO WRITE ADAS DATA WHICH IS DEPENDENT ON DENSITY  
C           AND HAS SEPARATE 'NEUTRAL' STAGE.  
C  
C           THE DATA IS IN THE FORM :-  
C                   DATA(IT, ID, IZ)  
C                   DATA0(IT, ID)  
C           WHERE,  
C           IT      : TEMPERATURE INDEX ( 1 - ITMAX )  
C           ID      : DENSITY INDEX ( 1 - IDMAX )  
C           IZ      : STAGE INDEX ( 1 - ITMAX )  
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           (R*4) DATA0 : 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*25) 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 IOADAS2 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
```

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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
C
C
C VERSION: 1.2 DATE: 21-07-2003
C MODIFIED: Martin O'Mullane
C           - Add a comment section at the end which requires user, date
C           and adf03/adf35 filenames.
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.

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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) ,		DATA0 (NTDIM, NNEDIM)	
REAL*8	DENSE (NNEDIM) ,		TEMPE (NTDIM)	