

ADAS Subroutine c3data

```
      SUBROUTINE C3DATA( IUNIT , DSNAME ,
&                      NSTORE ,
&                      NBSEL , ISELA ,
&                      CWAVEL , CDONOR , CRECVR ,
&                      CFILE , CPCODE , CINDM ,
&                      QEFREF ,
&                      ENREF , TEREf , DEREf , ZEREf , BMREF ,
&                      NENERA , NTEMPA , NDENSA , NZEFFA , NBMAGA ,
&                      ENERA , TEMPA , DENSA , ZEFFA , BMAGA ,
&                      QENERA , QTEMPA , QDENSA , QZEFFA , QBMAGA
&                      )
```

```
C-----
C
C ***** FORTRAN77 SUBROUTINE: C3DATA *****
C
C PURPOSE : TO FETCH DATA FROM INPUT QEF DATA SET.
C
C CALLING PROGRAM: ADAS303, SQEF
C
C SUBROUTINE:
C
C INPUT : (I*4) IUNIT      = UNIT NUMBER TO READ FROM
C INPUT : (C*80) DSNAME    = MVS DATA SET NAME OF DATA SET BEING READ
C INPUT : (I*4) NSTORE     = MAXIMUM NUMBER OF DATA BLOCKS ALLOWED
C
C OUTPUT: (I*4) NBSEL      = NUMBER OF BLOCKS PRESENT
C OUTPUT: (I*4) ISELA()    = INDEX NUMBER OF DATA BLOCK
C
C OUTPUT: (C*5) CWAVEL() = INPUT DATA FILE: TRANSITION
C                          DIMENSION: DATA-BLOCK INDEX
C OUTPUT: (C*8) CDONOR() = INPUT DATA FILE: DONOR NEUTRAL ATOM
C                          DIMENSION: DATA-BLOCK INDEX
C OUTPUT: (C*5) CRECVR() = INPUT DATA FILE: RECEIVER NUCLEUS
C                          DIMENSION: DATA-BLOCK INDEX
C OUTPUT: (C*8) CFILE()  = INPUT DATA FILE: SPECIFIC ION FILE SOURCE
C                          DIMENSION: DATA-BLOCK INDEX
C OUTPUT: (C*8) CPCODE() = INPUT DATA FILE: PROCESSING CODE
C                          DIMENSION: DATA-BLOCK INDEX
C OUTPUT: (C*6) CINDM()  = FILE DATA FILE: EMISSION TYPE
C                          DIMENSION: DATA-BLOCK INDEX
C
C OUTPUT: (R*8) QEFREF()  = REFERENCE VALUE OF RATE COEFFICIENT
C OUTPUT: (R*8) ENREF()   =      "      "      "      ENERGY
C OUTPUT: (R*8) TEREf()   =      "      "      "      TEMPERATURE
C OUTPUT: (R*8) DEREf()   =      "      "      "      DENSITY
C OUTPUT: (R*8) ZEREf()   =      "      "      "      EFFECTIVE Z
C OUTPUT: (R*8) BMREF()   =      "      "      "      MAGNETIC FIELD
C OUTPUT: (I*4) NENERA()  = NUMBER OF ENERGIES
C OUTPUT: (I*4) NTEMPA()  = NUMBER OF TEMPERATURES
C OUTPUT: (I*4) NDENSA()  = NUMBER OF DENSITIES
C OUTPUT: (I*4) NZEFFA()  = NUMBER OF EFFECTIVE Z'S
C OUTPUT: (I*4) NBMAGA()  = NUMBER OF MAGNETIC FIELD VALUES
```


INTEGER	NZEFFA (NSTORE)	
REAL*8	BMAGA (12, NSTORE) ,	BMREF (NSTORE)
REAL*8	DENSA (24, NSTORE) ,	DEREF (NSTORE)
REAL*8	ENERA (24, NSTORE) ,	ENREF (NSTORE)
REAL*8	QBMAGA (12, NSTORE) ,	QDENSA (24, NSTORE)
REAL*8	QEFREF (NSTORE) ,	QENERA (24, NSTORE)
REAL*8	QTEMPA (12, NSTORE) ,	QZEFFA (12, NSTORE)
REAL*8	TEMPA (12, NSTORE) ,	TEREF (NSTORE)
REAL*8	ZEFFA (12, NSTORE) ,	ZEREF (NSTORE)