ADAS Subroutine r8tcon

```
      FUNCTION R8TCON( INTYP , OUTTYP , IZ1 , TIN )
C-----------------------------------------------------------------------
C
C  **************** FORTRAN77 REAL*8 FUNCTION: R8TCON *****************
C
C  PURPOSE: TO CONVERT A TEMPERATURE INTO SPECIFIED UNITS
C           (DOUBLE PRESCISION FUNCTION VERSION OF 'XXTCON')
C
C  CALLING PROGRAM: GENERAL USE
C
C  FUNCTION:
C
C             (R*8)  R8TCON  = FUNCTION NAME -
C                              OUTPUT TEMPERATURE (STATED UNITS)
C             (I*4)  INTYP   = 1 => 'TIN' UNITS: KELVIN
C                            = 2 => 'TIN' UNITS: eV
C                            = 3 => 'TIN' UNITS: REDUCED TEMP.
C             (I*4)  OUTTYP  = 1 => 'R8TCON' UNITS: KELVIN
C                            = 2 => 'R8TCON' UNITS: eV
C                            = 3 => 'R8TCON' UNITS: REDUCED TEMP.
C             (I*4)  IZ1     = RECOMBINING ION CHARGE (= Z+1).
C             (R*8)  TIN     = INPUT TEMPERATURE (STATED UNITS)
C
C             (R*8)  EV2KEL  = ELECTRON VOLTS TO KELVIN CONVERSION
C             (R*8)  KEL2EV  = KELVIN TO ELECTRON VOLTS CONVERSION
C
C             (R*8)  Z1P2    = 'IZ1'**2
C             (R*8)  TCONV() = TEMPERATURE CONVERSION PARAMETERS
C
C ROUTINES:  NONE
C
C NOTE:
C            TEMPERATURE CONVERSION PARAMETERS:
C
C            INTYP = 1 ; TCONV(1) =>             KELVIN  -> OUTPUT UNITS
C            INTYP = 2 ; TCONV(2) =>                 eV  -> OUTPUT UNITS
C            INTYP = 3 ; TCONV(3) => REDUCED TEMPERATURE -> OUTPUT UNITS
C
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C          K1/0/81
C          JET EXT. 4569
C
C DATE:    04/01/91
C
C-----------------------------------------------------------------------
C
C-----------------------------------------------------------------------
      INTEGER             INTYP,       IZ1,         OUTTYP
      REAL*8              TIN
```