

## ADAS Subroutine h9gett

```
      subroutine h9gett( iunit  , ndlev  ,
&                      nv      , tva   ,
&                      )
-----
c
c
c ***** fortran77 subroutine: h9gett *****
c
c purpose:  to fetch temperature set from input adf04 type 3 data set.
c
c calling program: adas809
c
c data:
c      the 'real' data in the file is represented in an abbreviated
c      form which omits the "d" or "e" exponent specifier.
c      e.g. 1.23d-06 or 1.23e-06 is represented as 1.23-06
c           6.75d+07 or 6.75e+07 is represented as 6.75+07
c
c      therefore the form of each 'real' number in the data set is:
c           n.nn+nn or n.nn-nn
c
c      the units used in the data file are taken as follows:
c
c      ionisation potential: wave number (cm-1)
c      index level energies: wave number (cm-1)
c      temperatures          : kelvin
c      a-values              : sec-1
c      gamma-values         :
c      rate coefft.         : cm3 sec-1
c
c
c subroutine:
c
c input : (i*4)  iunit   = unit to which input file is allocated
c input : (i*4)  ndlev   = maximum number of levels that can be read
c
c output: (i*4)  nv      = input data file: number of gamma/temperature
c                       pairs for a given transition.
c output: (r*8)  scef()  = input data file: electron temperatures (k)
c
c      (i*4)  nvmax     = parameter = max. number of temperatures
c                       that can be read in.
c
c      (i*4)  i4unit    = function (see routine section below)
c      (i*4)  iqs       = x-sect data format selector
c                       note: iqs=3 or 4 only allowed in this program
c      (i*4)  i         = general use.
c      (i*4)  j         = general use.
c      (i*4)  iline     = energy level index for current line
c      (i*4)  itpow()   = temperatures - exponent
c                       note: mantissa initially kept in 'scef()'
c
c      (r*4)  zf        = should be equivalent to 'iz1'
```

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c
c      (c*80) cline   = current energy level index parameter line
c      (c*500)buffer = general string buffer storage
c      (c*3)  citpow()= used to parse values to itpow()
c      (c*5)  cscef() = used to parse values to scef()
c
c      (l*4)  ldata   = identifies whether the end of an input
c                  section in the data set has been located.
c                  (.true. => end of section reached)
c      (l*4)  ltied() = .true.  => specified level tied
c                  = .false. => specified level is untied
c                  dimension => level index
c
c routines:
c      routine      source      brief description
c      -----
c      i4unit       adas        fetch unit number for output of messages
c
c routines: none
c
c author:  Hugh Summers, University of strathclyde
c         ja7.08
c         ext. 4196
c
c date:    13/08/01
c
c update:
c
c unix-idl port:
c
c version: 1.1                                date: 14-06-013
c modified: Hugh Summers
c         - first version
c
c-----
c-----
c      INTEGER          IUNIT,          NDLEV,          NV
c      REAL*8           TVA (NVMAX)

```