ADAS Subroutine i4indfi4

```
C
      FUNCTION I4INDFI4( ndim , array , ind )



C-----------------------------------------------------------------------
C
C  ************* FORTRAN77 INTEGER*4 FUNCTION: I4INDFI4 ***************
C
C  PURPOSE : Finds the index in the integer array corresponding to the
C            exact match to value. If the entry is outside the range of
C            array then -1 is returned.
C
C  CALLING PROGRAM: GENERAL USE
C
C  FUNCTION:
C
C  FUNC:   (I*4)   I4INDFI4  = INDEX
C
C  INPUT:  (I*4)   NDIM      = SIZE OF ARRAY
C  INPUT:  (R*8)   ARRAY     = obvious
C  INPUT:  (R*8)   IND       = SOUGHT VALUE
C
C
C  AUTHOR   : Martin O'Mullane,
C
C  VERSION  : 1.1
C  DATE     : 15-04-2005
C
C  MODIFIED : Martin O'Mullane
C              - First version.
C
C VERSION  : 1.2
C DATE     : 10-04-2007
C MODIFIED : Allan Whiteford
C              - Modified documentation as part of automated
C   subroutine documentation preparation.
C
C VERSION  : 1.3
C DATE     : 21-07-2008
C MODIFIED : Martin O'Mullane
C              - Do not assume a monotonic array when checking limits,
C                determine min/max index values instead.
C
C-----------------------------------------------------------------------
C-----------------------------------------------------------------------
      INTEGER            ARRAY(NDIM), IND,          NDIM
```