

ADAS Subroutine bxiord

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SUBROUTINE BXIORD( IL ,  
&                 NMET , IMETR ,  
&                 NORD , IORDR  
&                 )
```

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C-----  
C  
C ***** FORTRAN77 SUBROUTINE: BXIORD *****  
C  
C PURPOSE: TO SET UP THE INDEX OF ORDINARY EXCITED LEVELS IN COMPLETE  
C          LEVEL LIST 'IORDR()' .  
C  
C CALLING PROGRAM:  ADAS205/ADAS206  
C  
C SUBROUTINE:  
C  
C INPUT : (I*4)  IL      = NUMBER OF ENERGY LEVELS (MET. & ORD.)  
C  
C INPUT : (I*4)  NMET    = NUMBER OF METASTABLE STATES  
C INPUT : (I*4)  IMETR() = INDEX OF METASTABLES IN COMPLETE LEVEL LIST  
C  
C OUTPUT: (I*4)  NORD    = NUMBER OF ORDINARY EXCITED LEVELS.  
C OUTPUT: (I*4)  IORDR() = INDEX OF ORDINARY EXCITED LEVELS IN COMPLETE  
C          LEVEL LIST.  
C  
C          (I*4)  I4UNIT  = FUNCTION (SEE ROUTINE SECTION BELOW)  
C          (I*4)  IS      = ENERGY LEVEL ARRAY INDEX  
C          (I*4)  IM      = METASTABLE LEVEL NUMBER COUNTER  
C          (I*4)  IO      = ORDINARY EXCITED LEVEL NUMBER COUNTER  
C  
C  
C ROUTINES:  
C          ROUTINE      SOURCE      BRIEF DESCRIPTION  
C          -----  
C          XXTERM      ADAS        TERMINATES PROGRAM WITH MESSAGE  
C          I4UNIT      ADAS        FETCH UNIT NUMBER FOR OUTPUT OF MESSAGES  
C  
C  
C NOTE:      'NMET' + 'NORD' = 'IL'  
C  
C  
C AUTHOR:    PAUL E. BRIDEN (TESSELLA SUPPORT SERVICES PLC)  
C           K1/0/81  
C           JET EXT. 4569  
C  
C DATE:      09/10/90  
C  
C UPDATE:    23/04/93 - PE BRIDEN - ADAS91: ADDED I4UNIT FUNCTION TO WRITE  
C           STATEMENTS FOR SCREEN MESSAGES  
C  
C UPDATE:    24/05/93 - PE BRIDEN - ADAS91: CHANGED I4UNIT(0)-> I4UNIT(-1)  
C  
C VERSION:   1.5 DATE: 26-06-97
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C MODIFIED: H.P. SUMMERS, RICHARD MARTIN
C - CHANGED LINE IM=IM+1 TO IM=MIN(IM+1,NMET-1)
C THIS ENSURES UPPER ARRAY BOUND OF IMETR IS NOT
C EXCEEDED.

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INTEGER	IL,	IMETR(NMET),	IORDR(IL),	NMET
INTEGER	NORD			