

ADAS Subroutine d4znel

```
      SUBROUTINE D4ZNEL ( IZ1 , IZ2 ,  
&                      NEL1 , NEL2 ,  
&                      IZ0 , IZE1 , IZE2  
&                      )
```

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C-----  
C  
C ***** FORTRAN77 SUBROUTINE: D4ZNEL *****  
C  
C PURPOSE: TO RETURN THE MAXIMUM AND MINIMUM CHOSEN FOR THE IONIC  
C          CHARGE (+1) AND THE NUMBER OF ELECTRONS IN EACH CASE.  
C  
C CALLING PROGRAM: ADAS404  
C  
C SUBROUTINE:  
C  
C OUTPUT: (I*4)  IZ1      = MINIMUM ALLOWED IONIC CHARGE + 1  
C OUTPUT: (I*4)  IZ2      = MAXIMUM ALLOWED IONIC CHARGE + 1  
C  
C OUTPUT: (I*4)  NEL1     = NUMBER OF ELECTRONS IN STATE 'IZ1'  
C OUTPUT: (I*4)  NEL2     = NUMBER OF ELECTRONS IN STATE 'IZ2'  
C  
C INPUT  : (I*4)  IZ0      = ELEMENT NUCLEAR CHARGE  
C INPUT  : (I*4)  IZE1     = LOWEST ION CHARGE  
C INPUT  : (I*4)  IZE2     = HIGHEST ION CHARGE (NB. EXCLUDING THE BARE  
C                               NUCLEUS - ONE MORE STAGE IS BROUGHT IN AUTO-  
C                               MATICALLY IN THE IONISATION BALANCE)  
C  
C ROUTINES: NONE  
C  
C AUTHOR:  PAUL E. BRIDEN (TESSELLA SUPPORT SERVICES PLC)  
C          K1/0/81  
C          JET EXT. 4569  
C  
C DATE:    08/10/90  
C  
C UNIX-IDL PORT:  
C  
C VERSION: 1.1 DATE: 11-20-96  
C MODIFIED: WILLIAM OSBORN (TESSELLA SUPPORT SERVICES PLC)  
C - FIRST CONVERTED  
C  
C VERSION: 1.2 DATE: 20-10-97  
C MODIFIED: LORNE HORTON (JET)  
C          - REMOVED NONSENSE WITH NIND, NSET AND YEAR  
C-----  
C-----  
      INTEGER          IZ0,          IZ1,          IZ2,          IZE1  
      INTEGER          IZE2,         NEL1,         NEL2
```