

ADAS Subroutine dnaq

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SUBROUTINE DNAQ(A0, A, B0, B, Q, NMAX, JSWICH)
IMPLICIT REAL*8 (A-H, O-Z)
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C-----
C   PURPOSE: GIVEN A0 AND ITS FIRST NMAX DERIVATIVES IN ARRAY A,
C   AND GIVEN Q AND NMAX, CALCULATES B0 AND ARRAY B, BEING THE
C   VALUE AND FIRST NMAX DERIVATIVES OF (A0)**Q
C
C   FOR PERHAPS GREATER SPEED, YOU MAY SET JSWICH TO 2 IF Q IS -2.0
C   JSWICH TO 3 IF Q IS -1.0
C   JSWICH TO 4 IF Q IS -0.5
C   JSWICH TO 5 IF Q IS -0.25
C   JSWICH TO 6 IF Q IS 0.25
C   JSWICH TO 7 IF Q IS 0.5
C   JSWICH TO 8 IF Q IS 2.0
C   OTHERWISE SET JSWICH TO 1
C-----
C UNIX-IDL PORT:
C
C AUTHOR: WILLIAM OSBORN (TESSELLA SUPPORT SERVICES PLC)
C
C DATE: 4TH JULY 1996
C
C VERSION: 1.1                                DATE: 04-07-96
C MODIFIED: WILLIAM OSBORN
C           - FIRST VERSION.
C
C VERSION: 1.2                                DATE: 19-12-01
C MODIFIED: Martin O'Mullane
C           - Removed junk from > column 72.
C
C VERSION: 1.3                                DATE: 16-05-07
C MODIFIED: Allan Whiteford
C           - Modified comments as part of subroutine documentation
C           procedure.
C
C VERSION: 1.4                                DATE: 20-07-07
C MODIFIED: Allan Whiteford
C           - Further modification to comments as part of
C           subroutine documentation procedure.
C-----
C
C   INTEGER          JSWICH,          NMAX
C   REAL*8           A(20),          A0,          B(20),          B0
C   REAL*8           Q
```