

## ADAS Subroutine nfasym

SUBROUTINE NFASYM(X, XA, N, YA, Y, DY, C1, C2, C3, C4, FORM, IFORMS)  
IMPLICIT REAL\*8 (A-H, O-Z)

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C-----
C  PURPOSE: PROVIDE A SPLINE INTERPOLATE MAKING USE OF SPECIFIED
C  ASYMPTOTIC BEHAVIOUR
C
C  USES LABELLED COMMON /SPL3/
C
C  INPUT
C      X=REQUIRED X-VALUE
C      X(I)=KNOTS
C      N=NUMBER OF KNOTS
C      C1(I, J)=1ST SPINE COEFFICIENT PRECURSOR
C      C2(I, J)=2ND SPINE COEFFICIENT PRECURSOR
C      C3(I, J)=3RD SPINE COEFFICIENT PRECURSOR
C      C4(I, J)=4TH SPINE COEFFICIENT PRECURSOR
C      FORM=EXTERNAL FUNCTION SPECIFYING ASYMPTOTIC FORMS
C      IFORMS=INDEX OF REQUIRED FORM
C
C  OUTPUT
C      Y=RETURNED Y-VALUE
C      DY=RETURNED DERIVATIVE
C
C
C      *****
C-----
C IDL-UNIX CONVERSION:
C
C  VERSION: 1.1                                DATE: 01/11/96
C  MODIFIED: WILLIAM OSBORN
C           - FIRST WRITTEN. NO CHANGES.
C
C  VERSION: 1.2                                DATE: 15/05/07
C  MODIFIED: Allan Whiteford
C           - Updated comments as part of subroutine
C             documentation production.
C-----
C-----
C      INTEGER          IFORMS,          N
C      REAL*8          C1(10,9),          C2(10,9),          C3(10,9)
C      REAL*8          C4(10,9),          DY,          X,          XA(10)
C      REAL*8          Y,          YA(10)
```