

ADAS Subroutine ee2

FUNCTION EE2 (X)

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C ***** FORTRAN77 FUNCTION: EE2 *****

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C PURPOSE: EVALUATES EXP (X) E2 (X) WHERE E2 IS THE 2ND EXPONENTIAL
C INTEGRAL

C

C CALLING PROGRAMS: GENERAL

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C INPUT: (R*8) X = INDEPENDENT VARIABLE

C

C OUTPUT: (R*8) EE2 = EXP (X) E2 (X)

C

C ROUTINES:

| ROUTINE | SOURCE | BRIEF DESCRIPTION |
|---------|--------|-------------------|
|---------|--------|-------------------|

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| | | |
|-----|------|------------------------------------|
| EEI | ADAS | EVALUATES 1ST EXPONENTIAL INTEGRAL |
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C

C UNIX-IDL PORT:

C

C VERSION: 1.1 DATE: 11-07-95

C MODIFIED: TIM HAMMOND (TESSELLA SUPPORT SERVICES PLC)

C

- PUT UNDER S.C.C.S. CONTROL

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C VERSION: 1.2 DATE: 06-03-96

C MODIFIED: TIM HAMMOND

C

- ADDED HEADERS

C

C VERSION: 1.3 DATE: 17-4-07

C MODIFIED: HUGH SUMMERS

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- COMPLETED COMMENT BLOCK DESCRIPTION

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C

IMPLICIT REAL*8 (A-H, O-Z)

IF (X-30.0D0) 1, 1, 2

1 EE2=1.0D0-X*EEI (X)

GO TO 3

2 X1=1.0D0/X

EE2=X1*(1.0D0-X1*(2.0D0-X1*(6.0D0-X1*(24.0D0-X1*(120.0D0-X1*
1(720.0D0-X1*5040.0D0))))))

3 RETURN

END

REAL*8

X