

ADAS Subroutine voigt

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subroutine voigt ( iprofile, y0, yl, yt, x, y, iz, w2f, wid,  
& fact, xmin, xmax)
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C *****FORTRAN77 SUBROUTINE: VOIGT *****

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C ORIGINAL NAME: VOIGT.BAS

C (DEVELOPED BY KURT BEHRINGER)

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C VERSION: 1.0

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C PURPOSE: COMPUTES LINE PROFILES

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C CALLING PROGRAM: ESCAPE.FOR

C

C INPUT:

C

C

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C ROUTINES:

C ROUTINE SOURCE BRIEF DESCRIPTION

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C AUTHOR: K.H.BEHRINGER (IPF, UNIVERSITY OF STUTTGART)

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C DATE: 31/4/98

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C UPDATE:

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C VERSION: 1.1 DATE: 18-06-98

C MODIFIED: STUART LOCH

C - CONVERTED TO FORTRAN FOR ADAS.

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C VERSION: 1.2 DATE: 26-11-98

C MODIFIED: STUART LOCH

C - CONVOLVED PROFILES ARE NORMALISED TO

C ACCOUNT FOR NUMERICAL INACCURACIES WHICH

C GAVE ESCAPE FACTORS GREATER THAN ONE

C VERSION: 1.3

DATE: 19-02-99

C MODIFIED: STUART LOCH

C -DIMENSIONS OF X,Y, YT, YL AND MODPROF INCREASED FROM 1000

C TO 3000, TO ACCOMODATE POSSIBLE INCREASES IN INTEGRATION

C LIMIT OF LINE PROFILE

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INTEGER

IPROFILE,

IZ

REAL*8

FACT,

W2F,

WID,

X(3000)

REAL*8

XMAX,

XMIN,

Y(3000),

Y0

REAL*8

YL(3000),

YT(3000)