

## ADAS Subroutine cxgfil

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      SUBROUTINE CXGFIL( MXA      , MXB      , IZ0      , AMSSNO ,
&                      N        , N1       , TIEV     , NDIV   ,
&                      ANGDIV   , NPTS    , CEMIS    , WAVLN  ,
&                      CWLN     , XA      , YA       , XB     ,
&                      YB
&                      )
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C \*\*\*\*\* FORTRAN77 SUBROUTINE: CXGFIL \*\*\*\*\*

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C PURPOSE: FILLS ADAS306 AND 308 GRAPH ARRAYS.

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C CALLING PROGRAM: C6OUTG ; C8OUTG.

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C INPUT : (I\*4) MXA = MAXIMUM NUMBER OF POINTS IN GRAPH A.

C INPUT : (I\*4) MXB = MAXIMUM NUMBER OF POINTS IN GRAPH B.

C INPUT : (I\*4) IZ0 = TARGET NUCLEAR CHARGE.

C INPUT : (R\*8) AMSSNO = ATOMIC MASS NUMBER OF TARGET.

C INPUT : (I\*4) N = UPPER PRINCIPAL QUANTUM NUMBER OF  
C TRANSITION.

C INPUT : (I\*4) N1 = LOWER PRINCIPAL QUANTUM NUMBER OF  
C TRANSITION.

C INPUT : (R\*8) TIEV = ION TEMPERATURE.  
C UNITS: A

C INPUT : (I\*4) NDIV = NUMBER OF DIVISIONS ON X AXIS OF PLOT.

C INPUT : (R\*8) ANGDIV = NO. OF ANGSTROMS PER DIVISION.

C INPUT : (I\*4) NPTS = NUMBER OF POINTS OF DATA.

C INPUT : (R\*8) CEMIS() = COLUMN EMISSIVITIES.

C UNITS: PHOT CM-2 SEC-1

C DIMENSION: MXA

C INPUT : (R\*8) WAVLN() = WAVELENGTHS.

C UNITS: A

C DIMENSION: MXA

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C OUTPUT (R\*8) CWLN = CENTRAL WAVELENGTH ON GRAPH.  
C UNITS: A

C OUTPUT: (R\*8) XA() = X DATA POINTS FOR GRAPH A.  
C DIMENSION: MXA

C OUTPUT: (R\*8) YA() = Y DATA POINTS FOR GRAPH A.  
C DIMENSION: MXA

C OUTPUT: (R\*8) XB() = X DATA POINTS FOR GRAPH B.  
C DIMENSION: MXB

C OUTPUT: (R\*8) YB() = Y DATA POINTS FOR GRAPH B.  
C DIMENSION: MXB

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C (I\*4) MIDDIV = CENTRAL DIVISION ON GRAPH.

C (I\*4) I = LOOP INDEX.

C (I\*4) J = LOOP INDEX.

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C (R\*8) Z0 = REAL VALUE = IZ0.

C (R\*8) XN = REAL VALUE = N.  
C (R\*8) XN1 = REAL VALUE = N1.  
C (R\*8) G =  
C  
C (R\*8) MINVAL = MINIMUM VALUE BELOW WHICH YB IS SET TO ZERO  
C

C ROUTINES: NONE

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C AUTHOR: JONATHAN NASH (TESSELLA SUPPORT SERVICES PLC)  
C K1/0/87  
C JET EXT. 5183  
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C DATE: 22/11/93  
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INTEGER	IZO,	MXA,	MXB,	N
INTEGER	N1,	NDIV,	NPTS	
REAL*8	AMSSNO,	ANGDIV,	CEMIS (MXA) ,	CWLN
REAL*8	TIEV,	WAVLN (MXA) ,	XA (MXA) ,	XB (MXB)
REAL*8	YA (MXA) ,	YB (MXB)		