
Subject: Re: Voigt function fit using MPFIT

Posted by [Sreelakshmi S](#) on Tue, 08 Oct 2013 01:39:47 GMT

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On Wednesday, October 2, 2013 4:42:55 PM UTC+5:30, Sreelakshmi S wrote:

> Hi,

>

>

>

> I have a set of observed data of flux vs wavelength. I am trying MPFIT to fit a voigt function. I defined the function as

>

>

>

> FUNCTION fit,p,X=x2,Y=nflux2

>

>

>

> model=double((voigt(p[0],p[1])*1e-13)/(p[3]*sqrt(!pi)))

>

> return,(Y-model)/err

>

>

>

> END

>

>

>

> But when I run this, the following errors are coming

>

>

>

> FUNCTION fit,x2=X,nflux2=Y,p

>

> ^

>

> % Programs can't be compiled from single statement mode.

>

>

>

>

>

> return,(Y-model)/1

>

> ^

>

> % Syntax error.

>

>
>
> Why is this happening?

Hi,
Thank you for your inputs.
I have modified the function as

```
FUNCTION voigtfit,p,x,y,er

lambda1=1025.7230
gamma1=1.897e08
f1=2.638e-2

av1=double((gamma1*lambda1*1e-13)/(4*pi*p[0]))
u1=(y/p[0])-(p[1]/p[0])
dop1=double(p[0]/lambda1)

phi1=double((voigt(av1,u1)*1e-13)/(dop1*sqrt(pi)))
tau1=double(2.654e-02*p[2]*f1*phi1)
model1=double(exp(-tau1))
return,(y-model1)/er
END
```

and I am calling this function from IDL as below

```
fac={X:vel,Y:nflux2,ERR:dy}
result=double(mpfitt('voigtfit',p,functargs=fac))
```

Now when I run this an error comes
% MPFIT: Error detected while calling voigtfit:
% MPFIT:Keyword parameter not allowed in call.
% MPFIT: Error condition detected. Returning to main level.

Which is the keyword here? What is this error?
