Subject: Re: How to determine the WEIGHTS in MPFITFUN for distribution function fit?
Posted by duxiyu@gmail.com on Fri, 07 Sep 2007 05:26:48 GMT
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On 9 7 , 2 26 , Craig Markwardt
<craigm...@REMOVEcow.physics.wisc.edu> wrote:
>
> If Y is measured counts, then the YERR should be ~ SQRT(Y), right?
>
> But overall I agree, the original poster needs to specify how the
> numbers were measured in order to estimate the measurement error.
>
> Craig
>

The effect of Yerr=SQRT(Y) is the same as the effect of WEIGHTS=1/y
for the procedure MPFITFUN, isn't it?

The array named D in IDL means the original mesured data.
Y = histogram (D, locations = X)
I want use a specified function to fit this curve in the x-y plane.
The computed function is the distribution function for the measured
data D, isn't it?
If there are not the measurement errors for the data D, I should set
the Yerr = SQRT(Y) when I use the MPFITFUN to fit the curve.
If there ara the measurement errors Derr which have the same
dimensions as the data D, how do I caculate the Yerr?

The another question is how to determine the START_PARAMS in the
procedure MPFITFUN?
When I use the matlab to fit the curve, the procedure can select the
start_value automatically.
The START_PARAMS in <PFITFUN must be given by user.
The START_PARAMS is set to some values, and the procedure can return
the results without any error.
But when the START_PARAMS change a little, the procedurel gives the
warning "Program caused arithmetic error: Floating illegal operand"
and return the different results.
I do not know the criterion of its selection.

I am looking forward to your reply.

Best regards,
jdu