Subject: Re: the problem of PERROR in MPFITFUN
Posted by Vince Hradil on Thu, 15 Mar 2007 15:31:31 GMT
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On Mar 15, 4:17 am, "dux...@gmail.com" <dux...@gmail.com> wrote:
> In my work, independent variable X is time and measured dependent
> variable Y is magnetic field. The instrument do not give the measured
> error.
> Do I use 1 in MPFITFUN for errors of Y?
> Is the PERROR useless at this time?
>
> I do not understand the following paragraph in the instructions of
> MPFITFUN.
> Who can give me some explanations for it?
>
> ; *If* you can assume that the true reduced chi-squared
> ; value is unity -- meaning that the fit is implicitly
> ; assumed to be of good quality -- then the estimated
> ; parameter uncertainties can be computed by scaling PERROR
> ; by the measured chi-squared value.
> ;
> ; DOF = N_ELEMENTS(X) - N_ELEMENTS(PARMS) ; deg of
> freedom
> ; PCERROR = PERROR * SQRT(BESTNORM / DOF) ; scaled
> uncertainties
>
> Best regards,
> Du Jian

Can you estimate the instrument error, say from a "just noise" signal,
or part of the signal?