Subject: the problem of PERROR in MPFITFUN Posted by duxiyu@gmail.com on Thu, 15 Mar 2007 09:17:23 GMT View Forum Message <> Reply to Message

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