Subject: Re: Non linear fit with more than 2 dimensions!, does mpfit work?
Posted by Craig Markwardt on Thu, 12 Apr 2012 12:45:34 GMT
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On Thursday, April 12, 2012 12:57:04 AM UTC-4, Steve Daal wrote:
> IDL-ers,
>
> I have a complex fitting problem that I am tackling. my model function
> has the form:
>
> Y(n+1) = A(1 - exp(C*Yn)) * [X(n+1)/exp(D-Xn - Yn)]
>
> where Yn and Xn refer to some values at time= n, and Y(n+1), X(n+1)
> refer to updated values at time =n+1. A,B,C, and D are the parameters
> of the fit.
>
> I am aware of mpfit and I think this is doable if I have Yn and Xn
> only, but I am really puzzled with the existence of the n+1 terms.

The answer is that MPFIT doesn't care about the dimensionality of the problem. It just wants a list of residuals to minimize. That goes for the dimensionality of both your *de*pendent and *in*dependent variables.

It's not clear if you want to do a new fit, every time a new N+1 data set arrives. Or, if you want to do a global fit of all data points at once.

It sounds like you may need to do a FOR loop to evaluate your function. So be it. First focus on getting a correct answer, then worry about speed later.

Craig

Subject: Re: Non linear fit with more than 2 dimensions!, does mpfit work?
Posted by maldayeh on Thu, 12 Apr 2012 15:40:13 GMT
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On Apr 12, 7:45 am, Craig Markwardt <craig.markwa...@gmail.com> wrote:
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>
> Craig

Great, Thanks Craig!
