
Subject: Re: MPFIT2DFUN

Posted by [Paolo Grigis](#) on Tue, 31 Oct 2006 13:30:55 GMT

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You may want to read the discussion in the "numerical recipes in C" book, chapter 15.3 (freely available on the web), for the two-dimensional case (that is, a straight line fitting with errors in x and y).

Ciao,
Paolo

Steve wrote:

> Hi all,
>
> I'm using the excellent mpfit2dfun to fit a plane $Z=f(X,Y)$ in the
> following way :
>
> `myfit = MPFIT2DFUN('MYFORM', X, Y,Z,err_Z,start)`
>
> It works very nicely, but I can only account for errors in Z. In the
> particular case I'm working with, I also have errors in X and Y. Is
> there any way to account for these errors? Or any other routine to use?
>
> Thanks a lot!
> S.
>

Subject: Re: MPFIT2DFUN

Posted by [Craig Markwardt](#) on Tue, 31 Oct 2006 17:22:34 GMT

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"Steve" <Steve.Morris@libero.it> writes:

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>
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> It works very nicely, but I can only account for errors in Z. In the
> particular case I'm working with, I also have errors in X and Y. Is
> there any way to account for these errors? Or any other routine to use?

I don't have any great suggestions, but MPFIT2DFUN is definitely not going to solve that problem. As Paolo mentioned, you might be able to

use the technique of Numerical Recipes extended to 2D, but I have a feeling that won't work so well. The best suggestion I have is to use the non-IDL code called ODRPACK.

Craig

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Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
