Subject: Re: Gauss2DFit question
Posted by Craig Markwardt on Tue, 09 May 2000 07:00:00 GMT
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"Kenneth P. Bowman" <kbowman@null.net> writes:

> [[This message was both posted and mailed: see
> the "To," "Cc," and "Newsgroups" headers for details.]]
>
> In article <on3dnrl7o9.fsf@cow.physics.wisc.edu>, Craig Markwardt
> <craigmnet@cow.physics.wisc.edu> wrote:
>
>> http://cow.physics.wisc.edu/~craigm/idl/idl.html
>
> Thanks, Craig. I greatly appreciate the help.
>
> I was thinking of writing a GAUSS2DFIT replacement using the built-in
> Levenberg-Marquardt algorithm, LMFIT. Have you compared the built-in
> function with your LM algorithm? (For speed, accuracy, etc.?)

I haven't done any direct comparisons, but I would expect any better.
In the speed category it will definitely be a loser, since it does a
function call for *each* data point. For images that's a lot of
points!

MPFIT is based on MINPACK-1 which which was designed to handle more
difficult problems. I believe that LMFIT is descends from Numerical
Recipes which doesn't have that reputation.

Craig

P.S. MPFIT is not the end-all, be-all. It fails this problem
miserably, <http://www.maxthis.com/curviex.htm>, but I believe this is
because the initial trial function spans about 8 orders of magnitude.

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