
Subject: Re: Robust curve fitting (BUG)

Posted by [Craig Markwardt](#) on Tue, 04 Aug 1998 07:00:00 GMT

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I found a small bug in MPFIT.PRO. It only bites in certain circumstances. Specifically, if you fix some parameters, and place bounding constraints on other parameters, then the fit procedure can finish too soon, before the parameters have converged.

A new corrected version is on my web page, listed below.

Craig

>>>

>>> I recently had an opportunity to translate the MINPACK-1 curve-fitting
>>> package into IDL. MINPACK is a minimization package available from
>>> netlib, and has an excellent reputation. I have found that it is much
>>> more robust, able to cope with singular matrices, etc. Since people
>>> have been requesting, I polished it up a little bit, and am making it
>>> available via my IDL web page:

>>>

>>> <http://astrog.physics.wisc.edu/~craigm/idl/idl.html>

>

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Subject: Re: Robust curve fitting (BUG)

Posted by [Craig Markwardt](#) on Wed, 05 Aug 1998 07:00:00 GMT

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By request, the fitting routines are now available in single packaged archives. Both GZIPed tar files and ZIP archives are available. The web page address is the same.

Another note: when I fixed the bug mentioned in a previous post, I also added the PERROR keyword, which returns parameter errors explicitly. (Previously you had to compute errors yourself using the covariance matrix).

On the whole, the MINPACK-1 routines themselves are well-tested. However, the original MINPACK-1 routines did not permit parameter freezing or simple bounding constraints, nor did it automatically calculate the parameter errors. These are my own additions; therefore

there may be a small amount of bug-ironing to get it just right.
Suggestions are welcome.

Craig

Craig Markwardt <craigmnet@astrog.physics.wisc.edu> writes:

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