Subject: Re: mpfit: what's different
Posted by David Fanning on Wed, 06 Feb 2008 17:01:29 GMT
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Wox writes:

> Is there any documentation on the theory behind Craig Markwardt's
> mpfit? What's different from the Levenberg-Marquardt algorithm as
> given in "Numerical Recipes in C" (used in IDL's curvefit)?
>
> Is it a difference in choosing the damping factor in the modified
> curvature matrix or is there more to it?

I'll let Craig answer for himself (assuming he is back from
Egypt), but in general when someone writes something like
this the "theory" behind it is that whatever IDL is offering
is too clunky, too inadequate, too (in the case of iTools)
complicated, or in some other way inadequate for the task
at hand. So, you implement something better.

In the case of MPFIT, it is not only more robust than
CURVEFIT, but it offers features CURVEFIT doesn't offer.
That's why it is the software of choice for most people
doing curve fitting in IDL.

Cheers,

David
--
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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")