Subject: MPFit: changing the cost function Posted by thomas.launey on Thu, 07 Feb 2008 05:22:31 GMT View Forum Message <> Reply to Message

Hello,

I am using Craig Markwardt's MPFit with great enjoyement but I would like to change the way the model error is calculated. MPfit minimizes the Chi^2 but for what I want to do, I would prefer minimizing "the largest relative error" rather than the "mean relative error". I haven't found any hint in the documentation about "user-defined cost function". Shall I modify MPfit itself to add this option or did I miss something?

Thanks,

**Thomas** 

T. Launey RIKEN Brain Science Institute

Subject: Re: MPFit: changing the cost function
Posted by Craig Markwardt on Mon, 11 Feb 2008 13:42:57 GMT
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thomas.launey@ncm.brain.riken.jp writes:

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>

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- > function". Shall I modify MPfit itself to add this option or did I
- > miss something?
- > Thanks,
- > Thomas

>

- > T. Launey
- > RIKEN Brain Science Institute

Hello, I'm afraid it's going to be harder than you suspect. The cost function is built into the technique, namely it is \*assumed\* that the cost function is the sum of the squared residuals, and this feeds directly into the basic factorization approach taken by the code.

I suggest that you will probably want a generic optimizer. One option is my TNMIN() code, which will max/minimize any arbitrary cost function.

## Good luck! Craig

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