
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:

> Hello,
>
> I am using Craig Markwardt's MPFit with great enjoyment 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

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
