
Subject: Re: Curve Fitting

Posted by [Craig Markwardt](#) on Wed, 13 May 2009 15:19:47 GMT

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Hi David--

On May 11, 9:47 am, David Fanning <n...@dfanning.com> wrote:

> Folks,

>

> Here is an excellent article on the perils of curve fitting
> that I think an awful lot of IDL programmers would do well
> to read, especially in light of some recent questions on
> the newsgroup:

>

> <http://tamino.wordpress.com/2009/05/11/dangerous-curves/>

Yep, nice article. The key point is that when doing curve fitting, the choice of model is crucial to the analysis.

Ultimately, least squares fitting can only answer the question, is this curve *consistent* with my data or not? The parameter values are almost secondary. There may be many other curves that are also consistent with the data. By not considering them, our interpretation of the results will have a hidden bias.

If possible, it's best to choose a model based on previously known qualities of the system being studied. [...which the article author did not.]

Craig
