
Subject: Re: least square error for a regression

Posted by [Craig Markwardt](#) on Thu, 16 Sep 2004 03:50:51 GMT

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"yaj" <tgupta2000@hotmail.com> writes:

- > Hello,
- > I am fitting a function of the form
- > $A \sin(\omega t + \theta) + \text{constant}$ to a set of points. Instead of a readymade
- > fitting routine from IDL (to avoid any potential problems with small numbers
- > later), I use the three linear equations to minimize the least square error,
- > then use an IDL function to solve the matrix equation. Could someone suggest
- > a simple way to calculate the least squares error and goodness of fit using
- > some higher level IDL functions ?

Pardon me for asking, but which "small numbers" problems are you hoping to avoid? If you are able to linearize your problem yourself, as you seem to have done, then I believe that a routine like CURVEFIT or MPFIT should do just fine at estimating the parameters and returning the uncertainties. And these routines have the added benefit of tested by years of use.

Happy fitting,
Craig

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

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Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
