
Subject: Calculating Error Estimates

Posted by [davidf](#) on Tue, 14 Jul 1998 07:00:00 GMT

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Hi Folks,

It is so hot in Colorado today that I think my brain has vapor locked. In any case, I can use some help. :-)

Here is my problem. I have some experimental data. I have used CURVEFIT and my roll-your-own function to fit a curve through the data. What I want to do is display the experimental data on the plot, along with the curve. But I want to place error bars through the experimental data points. My question is this: how do I calculate the errors for the individual points so that I can place them on the plot with ERRPLOT?

CURVEFIT returns to me a parameter called SIGMA, which contains the standard deviations of the returned values of the four coefficients in my fitting function. What I cannot seem to work out is how to use these standard deviations to obtain an error estimate for each individual experimental point.

I realize this is basic error analysis, but even an hour spent refreshing myself with Bevington has not successfully stimulated this reptilian brain. :-(

Let's just say I had too much fun on vacation...

Thanks,

David

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