
Subject: Re: x error bars in Curvefit / MPFIT

Posted by [Craig Markwardt](#) on Thu, 16 Jun 2005 01:56:04 GMT

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Sean Davis <seand@colorado.edu> writes:

> In my fit, x represents a "raw" value read from an instrument (it's actually
> calculated from several other "raw" values), and y represents the "true"
> value from the calibration using a different instrument. The goal is to
> come up with a fit that can be applied to my raw data that best fits the
> "truth".

Commonly, X is considered to be the *in*dependent variable. You don't mention any independent variables, although there must be one or more for your experiment to be a useful one.

> For fitting using MPFITFUN or similar programs, one typically provides error
> bars in the y value. But in my case, I have known errors in both x and y.

What you want is a package called ODRPACK. It's in FORTRAN, not IDL, but it does the kinds of things you want, and it's very well documented. I've thought about incorporating some of that logic into MPFIT, but it won't be happening soon.

Happy fitting,
Craig

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