Subject: Re: CURVEFIT
Posted by Craig Markwardt on Wed, 02 Jun 2004 18:40:37 GMT
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Andreas Ernst <aernst@ari.nis> writes:

> Hi,
>
> (1) I am using CURVEFIT to fit a straight line
> through my data points. My user-supplied
> function looks like this:
>
> PRO gerade, X, A, F, PDER
> F=A[0]+A[1]*X
> IF N_PARAMS() GE 4 THEN $
> PDER = [[REPLICATE(1.0, N_ELEMENTS(X))], [X]]
> RETURN
> END
>
> Anyway, even though it defines a straight line,
> the routine CURVEFIT seems to fit some other
> curve through the data points, which is something

A linear fit is trivial, and CURVEFIT shouldn't produce problems like
you found. My guess is that it is more likely that you have a data
handling problem. For example, if you perform a data selection on the
X values but forget to do the same for the Y values.

As the other poster said, you can use LINFIT/POLYFIT* to do the simple
fits you desire.

For more complicated fits, or as a cross check, you can use my own
fitting program, MPFIT + MPCURVEFIT, which have a wide acknowledgement
in the IDL community. As a combination, they are a drop-in
replacement for CURVEFIT (although if you don't have the requirement
to keep CURVEFIT compatibility, then I recommend using MPFITFUN).

Happy fitting!

Craig

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