Subject: Re: Problem with gaussfit in IDL/v5.5
Posted by Craig Markwardt on Fri, 16 Nov 2001 20:41:25 GMT
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thompson@orpheus.nascom.nasa.gov (William Thompson) writes:

> We found a problem with the procedure gaussfit which is supplied with IDL/v5.5.
> It appears that somebody at RSI tried to improve the algorithm for generating
> the initial guess, but didn't quite complete the job. I've informed RSI, and
> decided to also inform the newsgroup. The simple fix is to change the line
...

Hi Bill--

That's an interesting report. If you are interested in a different approach to estimating the parameters of peaks, then you might be interested in MPFITPEAK, which is based on the MPFIT fitting routines.

I was having real problems with noisy data, that didn't work very well with GAUSSFIT. I found that a better approach is to compute the *area* above and below the mean, and that gives a much better handle on the position and width of the peak. It is very robust, even for very broad and noisy peaks.

However, if this is important to you:
> if nt gt 5 then a = [a, c[2]]

[indicating you need the quadratic approximation to the background before you begin fitting] then MPFITPEAK may not be for you. It doesn't pre-fit the background level, instead assuming it is constant.

Craig

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