Subject: Re: Doubt in polynomial fitting - emergency
Posted by Bringfried Stecklum on Tue, 02 Nov 2010 09:22:18 GMT
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sid wrote:
> Hi,
> I am fitting my spectral data with 2 degree polynomial with the
> routine svdfit. I need to find the minmum value after fitting the data
> points.
> For example my code is like this,
> ;c is x axis with wavelength(it is an absorption line)
> ;d is y axis with normalised intensity
> ypoly=svdfit(c,d,3,yfit=y1,chisq=chi,sigma=sig)
> x=min(y1)
> x1=-(ypoly(1))/(2*ypoly(2))
> if suppose u,v is the position of x, x1 respectively then
> c(u) should be equal to c(v)
> and
> d(u) should be equal to d(v)
> but im getting
> c(u)=3933.3090 in angstroms
> c(v)=3933.3072 in angstroms
> d(u)=0.071168385
> d(v)=0.072779992
> Please suggest me why it is not the same, which value should I believe
> and how?
> thanking you
> sid
>
>
Well, I'd say x represents the minimum for the fitted data while x1 is the minimum for the fitted polynomial. Since the spectrum is sampled at discrete points c, you cannot expect that the abscissa value for the minimum of the polynomial coincides with a sampling point.

Regards, Bringfried

Subject: Re: Doubt in polynomial fitting - emergency
Posted by sid on Tue, 02 Nov 2010 10:38:03 GMT
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On Nov 2, 2:22 pm, Bringfried Stecklum <steck...@tls-tautenburg.de>
wrote:
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> polynomial coincides with a sampling point.
>
> Regards, Bringfried

Which value will be the best and how to find that, by looking into the
plot I feel x is good.
thanking you
sid
