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:

- > sid wrote:
- >> Hi,
- >> I am fitting my spectral data with 2 degree polynomial with the
- >> routine sydfit. 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

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

thanking you

sid