
Subject: Re: polynomial fitting(second degree)
Posted by [sid](#) on Wed, 12 May 2010 08:52:39 GMT
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On May 11, 12:53 am, Paolo <pgri...@gmail.com> wrote:

> One of the possible problem here is that your x-values are large
> and close to each other. Therefore, it's not a good idea to have
> a model that computes the square of a close set of large numbers,
> as you could end up losing precision.

>
> So doing the fitting in the variable $x=(c-3933)$ instead is a much
> better alternative. Does that work properly?

>
> Ciao,
> Paolo

>
> On May 10, 2:36 pm, sid <gunvicsi...@gmail.com> wrote:

>
>> Hi,
>> I am having wavelength in x axis from say $c=(3933.2002, \dots$
>> $3933.4724)$ and intensity in y axis from say d
>> $=(0.085022407, \dots, 0.081581624, \dots, 0.085993795)$.
>> Now I did $\text{res}=\text{poly_fit}(c,d,2)$
>> then, $x=(-\text{res}(1)/(2*\text{res}(2))$ which should give the site of minimum
>> value, but instead im getting some very weird answer as 4410.8199. I
>> calculated $y = \text{res}(0) + \text{res}(1)*x + \text{res}(2)*x^2$ which should give the
>> minimum value but it is also obviously weird.
>> But the same procedure if I proceed with $c=\text{dindgen}(78)$ (that is the
>> number of wavelength values initially in c).
>> Then if I do $\text{res}=\text{poly_fit}(c,d,2)$
>> then i did $x=(-\text{res}(1)/(2*\text{res}(2))$ and $y = \text{res}(0) + \text{res}(1)*x +$
>> $\text{res}(2)*x^2$, in this way im getting resonable x and y value.

>
>> Why it happens and please help me to get the correct solution, even if
>> i do the same with the wavelength values.
>> regards
>> sid

>
>

Thank you very much, its working properly
regards
sid
