Subject: Re: polynomial fitting(second degree) Posted by pgrigis on Mon, 10 May 2010 19:53:25 GMT

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

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
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> Ciao,
> Paolo
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>
>> 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
```