
Subject: linfit and regress questions

Posted by [rlyberry](#) on Sun, 11 Nov 2007 16:27:41 GMT

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Hi

I am interested in fitting a line of the form $y=mx+c$ using regress or linfit. I want the option of fixing the value of c at zero. Can I do this in either of these 2 functions or would I need to use something else?

Thanks

Russ

Subject: Re: linfit and regress questions

Posted by [rlyberry](#) on Tue, 13 Nov 2007 10:24:33 GMT

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On 13 Nov, 03:16, Craig Markwardt

<craigm...@REMOVEcow.physics.wisc.edu> wrote:

> hradilv <hrad...@yahoo.com> writes:

>

>> Transform the data?

>

>> $mhat = total(x*(y-c1))/total(x*x)$

>

> Of course this all assumes the data are meant to be equally weighted

> (no error bars, or all error bars are equal).

>

and does anyone know how the chi-sq or any other goodness of fit parameter would be calculated?

russ

Subject: Re: linfit and regress questions

Posted by [Craig Markwardt](#) on Tue, 13 Nov 2007 16:14:57 GMT

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rlyberry@hotmail.com writes:

> On 13 Nov, 03:16, Craig Markwardt

> <craigm...@REMOVEcow.physics.wisc.edu> wrote:

>> hradilv <hrad...@yahoo.com> writes:

>>

```
>>> Transform the data?
>>
>>> mhat = total(x*(y-c1))/total(x*x)
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>> Of course this all assumes the data are meant to be equally weighted
>> (no error bars, or all error bars are equal).
>>
>>
>
> and does anyone know how the chi-sq or any other goodness of fit
> paramater would be calculated?
```

Do you mean, how to compute the chi-square value? Probably something like,

$$\text{TOTAL}((Y-\text{MHAT}*X)/\text{ERROR})^2$$

But you've never really specified what you are trying to do. Why not just use a fitting program like MPFITFUN or CURVEFIT and specify whatever model and/or error bars that you want?

Craig
