
Subject: Re: Showing the least-squares line through a set of x,y points

Posted by [David Fanning](#) on Sun, 22 Feb 2009 04:34:40 GMT

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bobbylough writes:

> I was wondering if it could be possible to plot the least-squares line
> for a set of points on a 2D plot for a set of x,y points. This would
> involve reading the set of points via a textfile initially and then
> including additional syntax that would compute the "best-fit" line
> (this is correctly called the line of least-squares) through these
> points. I'm well capable of doing this in Excel but have had
> difficulty tracking the correct commands in IDL. Many thanks for any
> help you can give me on this problem.

I would do something like this:

```
IDL> x = indgen(20)
IDL> y = 3*x + 5 + RandomU(-3L, 20) * 10
IDL> plot, x, y, psym=2, symsize=2
IDL> result = linfit(x, y, YFIT=yfit)
IDL> oplot, x, yfit, thick=2
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Showing the least-squares line through a set of x,y points

Posted by [a.mozafari1211](#) on Sun, 22 Feb 2009 10:52:32 GMT

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On Feb 22, 5:34 am, David Fanning <n...@dfanning.com> wrote:

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> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:<http://www.dfanning.com/>
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
LINFIT: minimized the CHI-square error statistic.
Cheers

Subject: Re: Showing the least-squares line through a set of x,y points

Posted by [bobbylough](#) on Mon, 23 Feb 2009 17:55:17 GMT

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On Feb 22, 4:34 am, David Fanning <n...@dfanning.com> wrote:

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Thanks David, worked a treat!!

Robert.
