
Subject: Oddities with the linfit function

Posted by [wdolan](#) on Thu, 06 Aug 2015 21:51:18 GMT

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I've got an array for X, and an array for y.

so I do this

```
plot, x,y, psym=1
result=linfit(x,y)
print, result
```

and instead of getting the usual 2 things that are the m and the b of the $y=mx+b$, I get three. The first two things I think are the m and b, and the third thing I though was the r^2 . But if I multiply the x value by -1 so everything flips, then do linfit, I get the identical third value, but negative...

Not sure why I get three things, and I'm not sure how to get the real r^2 value.

Thanks for your help!

Subject: Re: Oddities with the linfit function

Posted by [wdolan](#) on Thu, 06 Aug 2015 22:04:47 GMT

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I've also used the correlate function, and I get the same negative number as the 3rd value... But, then why would it be negative? It looks like it does follow the general data trend...

On Thursday, August 6, 2015 at 2:51:21 PM UTC-7, Wayana Dolan wrote:

> I've got an array for X, and an array for y.

>

> so I do this

>

> plot, x,y, psym=1

> result=linfit(x,y)

> print, result

>

> and instead of getting the usual 2 things that are the m and the b of the $y=mx+b$, I get three. The first two things I think are the m and b, and the third thing I though was the r^2 . But if I multiply the x value by -1 so everything flips, then do linfit, I get the identical third value, but negative...

>

> Not sure why I get three things, and I'm not sure how to get the real r^2 value.

>

> Thanks for your help!

Subject: Re: Oddities with the linfit function
Posted by [Helder Marchetto](#) on Thu, 06 Aug 2015 22:08:23 GMT
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On Thursday, August 6, 2015 at 11:51:21 PM UTC+2, Wayana Dolan wrote:

```
> I've got an array for X, and an array for y.  
>  
> so I do this  
>  
> plot, x,y, psym=1  
> result=linfit(x,y)  
> print, result  
>  
> and instead of getting the usual 2 things that are the m and the b of the  $y=mx+b$ , I get three.  
The first two things I think are the m and b, and the third thing I though was the  $r^2$ . But if I  
multiply the x value by -1 so everything flips, then do linfit, I get the identical third value, but  
negative...  
>  
> Not sure why I get three things, and I'm not sure how to get the real  $r^2$  value.  
>  
> Thanks for your help!
```

Kind of impossible. Are you using the "right" linfit from IDL that is found in /lib/linfit.pro?
If you can debug, try to step in the function and see where it brings you.
Or maybe even easier, try:
`print, routine_info('linfit', /source, /function)`

See also <http://www.exelisvis.de/docs/LINFIT.html>

Cheers,
Helder
