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Subject: Re: How to plot linear regression relation of two array?

Posted by [Vince Hradil](#) on Mon, 09 Feb 2009 23:09:11 GMT

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On Feb 9, 3:21 pm, Hu <jha...@gmail.com> wrote:

> On Feb 9, 1:13 pm, Vince Hradil <vincehra...@gmail.com> wrote:

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>> On Feb 9, 2:51 pm, Hu <jha...@gmail.com> wrote:

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>>> On Feb 9, 12:12 pm, Vince Hradil <vincehra...@gmail.com> wrote:

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>>>> On Feb 9, 1:45 pm, Hu <jha...@gmail.com> wrote:

>

>>>> > Hi,

>

>>>> > I am trying to plot a linear regression relation of two array

>>>> > (supposing A and B) by using IDL. What I want is to got a chart like

>>>> > this link shows (the group is unable to post figure

directly):[http://serc.carleton.edu/images/introgeo/teachingw data/LeastSquaresGr...](http://serc.carleton.edu/images/introgeo/teachingw%20data/LeastSquaresGr...)

>

>>>> > especially, How can I got the black straight line and the coefficients

>>>> >  $R^2$  ?

>

>>>> > Thanks

>

>>>> Have you looked in the help for `linfit()`?

>

>>> BTW, I set `MEASURE_ERRORS` to `SQRT(ABS(Y))`, just follow the example,

>>> but what is `MEASURE_ERRORS`? and what is  $R^2$  mean in the above picture?

>

>>> Thank you very much

>

>> Sounds like you're using `REGRESS()` not `LINFIT()`?

>

>> I'd use `LINFIT()` to get the nice line

>> and use `CORRELATE()` to get the Pearson correlation coefficient. I

>> think `CORRELATE()` gives you the Pearson correlation coefficient,  $r$ ,

>> which, in this case can be squared to get  $R^2$ .

>

> I use `Linfit()`, this function need a `MEASURE_ERRORS` parameter to run.

> Anyway, I will try your suggestion, `CORRELATE()`

>

> Tnaks

Oh right, I've just never used it. Maybe these will help?

[http://en.wikipedia.org/wiki/Linear\\_regression](http://en.wikipedia.org/wiki/Linear_regression)

