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Subject: Re: REGRESS Question

Posted by [wmconnolley](#) on Wed, 22 Oct 2003 13:03:57 GMT

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"Christopher Lee" <cl> wrote:

> "Kevin M. Lausten" <kevinlausten@hotmail.com> wrote:

>> I am having difficulty working with the REGRESS function. I continually  
>> get values <1 for my slope when doing a regression between two vectors.  
>> When I do a regression mapping y to x (slope = regress(x, y, const =  
>> const)) and when I do a regression mapping x to y (slope = regress(y, x,  
>> const = const) I get a slope<1 for both calculations. Shouldn't the  
>>  $y=mx+b$  of these two regressions be inverses of each other (leading to  
>> one slope>1, and one<1?) Maybe I am misunderstanding regressions?

You've certainly misunderstood some basic maths: the inverse (as in reciprocal) of -1 is -1, not 1. If the regression of y against x has a negative slope, then you would expect the regression of x against y to have too.

OTOH the relation is \*not\* reciprocal anyway, unless the fit is perfect. (probably because the fit is asymmetric: y values are assumed uncertain, x values exact).

-W.

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Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself  
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