Subject: Re: CORRELATE where is the problem?
Posted by Brian Larsen on Mon, 09 Mar 2009 12:24:16 GMT
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On Mar 8, 1:40 pm, xiao <littledd...@gmail.com> wrote:
> Hi~ everyone. I have a simple question here. I have two arrays and I
> calculated the correlation between them. The result is 0.49. But when
> I use the equation to calculate the correlation. The result is 0.99.
> And I can see from the plot that they are actually highly correlated.
> Why is that? THX
>
> openr,1,'data.txt'
> data=fltarr(2,1227)
> readf,1,data
>
> temp=data(1,*)
> oo=data(0,*)
> ;print,temp(0)
>
> temp=reform(temp)
> oo=reform(oo)
>
> corr=CORRELATE(oo,temp)
> print,corr
> rr=LINFIT(temp,oo)
> print,rr
> plot,psym=2,temp,oo

Are you talking about the difference between corr and rr?

Correlate:
Return Value

If vectors of unequal lengths are specified, the longer vector is
truncated to the length of the shorter vector and a single correlation
coefficient is returned. If an m x n array is specified, the result
will be an m x m array of linear Pearson correlation coefficients,
with the element i,j corresponding to correlation of the ith and jth
columns of the input array.

Linfit:
Return Value

The result is a two-element vector containing the linear model
parameters [A, B].

Those two are less related than apples and oranges, more like apples
and peanuts.

Brian

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