
Subject: p_correlate

Posted by [Tim Osborn](#) on Mon, 10 Feb 2003 16:29:29 GMT

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Dear IDL users,

I'm using IDL5.4 and have used P_CORRELATE to compute partial correlation coefficients between vectors x and y while adjusting for the influence of a third vector z (=="while holding z constant"). This seems to have worked fine:

```
rxldotz = p_correlate( x , y , reform(z,1,n) )    ; n=vector length
```

and the results check out against an independent calculation.

However, I've also been using it when I want to "adjust for the influence" of more than one vector, where z is now a 2D array with the first dimension equal to the number of vectors whose influence I wish to remove, e.g.:

```
rxldotzz = p_correlate( x , y , reform(z,2,n) )
```

In all cases I've tried (about 8000 different sets of data) this has always returned a positive value. I've looked at p_correlate.pro in IDL5.4, and for cases where the first dimension is > 1 it returns a value that is a square root of some other stuff - and hence always positive.

This doesn't seem right to me! Is this a known bug? Is it fixed in later versions of IDL? Any other comments?

Cheers

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