Subject: Re: Correlate function (bug?)
Posted by John Smith on Tue, 17 Mar 1998 08:00:00 GMT
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William Connolley wrote:

> In article 9AA03CE1@fz-juelich.de, Theo Brauers <Th.Brauers@fz-juelich.de> writes:
>> I was facing a problem with the correlate function
>> which is demonstrated by the following IDL procedure:
>
>> pro testc
>> x=[1.D-5, 1.D-6, 0.0]
>> y=[1.D-5, 1.1D-6, 0.0]
>> print, correlate(x,y, /double)
>
>> giving the following result:
>>
>> NAN
>
> The problem is due to stupid programming in the correlate function.
> You can look at the source in $IDL_DIR/lib/correlate.pro.
> There is a tolerance (set to 1e-12 at /double, or 1e-6 otherwise) and if
> ||x'||^2*||y'||^2 is less than this, NAN is returned. Double precision should be
> good for a lot better than 1e-12, and anyway its more the ratio between x and y
> that would matter not the absolute value. Ho hum.
>
> Just take the code and insert tol=0 in the appropriate place...
>
> ps - the documentation doesn't mention this tolerance factor, presumably to avoid
> worrying our pretty little heads...
>
> - William

This bug was reported long time ago to RSI and they said they will fix it in one of
their
next releases. Meanwhile I use the old version.

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