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Subject: Re: correlation and NaN

Posted by [Maarten\[1\]](#) on Wed, 19 Sep 2007 08:53:05 GMT

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On Sep 19, 7:08 am, WRC2...@gmail.com wrote:

> Dear,  
>  
> I would like to calculate correlation factors from arrays which also  
> contains NaN values. Now, i checked some newsgroups and got answers  
> like this:  
>  
> indices = [where( finite(Var1) eq 1), where( finite(Var2) eq 1)]  
> common\_indices = indices(UNIQ(indices, sort(indices)))  
> Result = CORRELATE( Var1(common\_indices), Var2(common\_indices))  
>  
> or with the another command (get\_intersection?? - sorry, forgot the  
> right name, and can find it back anymore...)  
>  
> The first doesn't seems to work in my case ( $r^2 = \text{NaN}$ ), and the second  
> is not recognized in my IDL 5.6 version.  
> For the first method, maybe it is because one array doesn't contain a  
> NaN value???

No, finite() eq 1 filters for values that are non NaN, i.e. it captures all normal numbers.

Does this work:

```
common_indices = where(finite(Var1) and finite(Var2), cnt)
```

```
if cnt gt 0 then $
```

```
    Rsqr = CORRELATE( Var1[common_indices], Var2[common_indices])
```

Maarten

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