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Subject: Re: Correlate and NAN

Posted by [Andy Loughe](#) on Mon, 08 Jan 2001 17:08:59 GMT

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Why not simply perform the correlation on a subset of the larger arrays, that portion with the NaNs removed? Something like:

```
indices = [ where( finite(dataset1) eq 1 ), where( finite(dataset2) eq 2
) ]
```

```
common_indices = indices( UNIQ(indices, sort(indices)) )
```

```
Result = CORRELATE( dataset1(common_indices), dataset2(common_indices)
)
```

Ben Tupper wrote:

```
>
> Hello,
>
> I have two datasets that I would like to correlate using the CORRELATE
> function. Each dataset has some members flagged as NaNs; the NaNs are
> not necessarily coincident. The online documentation makes no mention
> of NAN-handling, but the procedure in the lib directory indicates (see
> modifications history) that it handles NaNs (although there is no
> keyword for it). It doesn't really handle NaNs the way I expect it
> to. For example, repeated calls to the TOTAL function don't set the
> keyword NAN, so TOTAL doesn't check for NaNs.
>
> I'm not sure if it is reasonable to involve NaNs in a correlation... but
> it seems reasonable to request that the routine ignore NaNs in the input
> arguments.
>
> Is there a simple solution to this NAN-jam?
>
> Thanks,
>
> Ben
>
> --
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```

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Andrew Loughe =====

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