
Subject: Re: Comparing 2 arrays

Posted by [David Fanning](#) on Sun, 26 Aug 2007 04:45:31 GMT

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teich@atmsci.msrc.sunysb.edu writes:

> I would like to know if the data in two different 1 dimensional arrays
> are the same or not. This should be for every index. For example, if
> A=[0,1,2,3] and B=[0,1,3,2], then I would want the answer to be that A
> and B are not equal even though they happen to have the same values in
> different order. A problem with comparing each element is that the
> numbers are floating point so I would prefer not to compare with
> 'EQ'. Has anyone any suggestions?
>
> Alternatively, my arrays are actually from different structures. Is
> there a way to compare structures? For example, data1.A vs data2.B in
> the above example.

If your arrays are the same size, there is no problem using structures.
You could subtract the two values and call the result "equal" if
the difference was "sufficiently" close to zero.

```
IF Total( (data1.A - data2.B) LT 1e-6) EQ N_Elements(data1.A) THEN $  
  Print, 'The arrays are equal' ELSE Print, 'The arrays are unequal'
```

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
