
Subject: Re: Array comparison part 2

Posted by [Dick Jackson](#) on Thu, 03 Oct 2002 16:33:24 GMT

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"Sean Raffuse" <sean@me.wustl.edu> wrote in message

news:anhkqb\$ipf\$1@newsreader.wustl.edu...

> Thanks for all the help on my first question. I now have a related
> question.

>

> What is the best (read: fastest) way to do the following:

>

> I have an array of coordinates, A = intarr(2,25)

> and I have another array of a specific location, B = [125,1043]

>

> I would like to determine if location B is one of the coordinates in
A. I

> need to know if A[*,:] = 125, 1043

>

> Is it possible to do this without splitting A?

Oh, sure. Using the "replicate data rather than loop" principle, we
stretch B to be the same shape as A, then compare. Try this:

```
nCoords=25
```

```
a=indgen(2,nCoords)
```

```
b=[4,5]
```

```
print>Total(Total(a EQ (Rebin(b, 2, nCoords)), 1) EQ 2) GT 0
```

(result is 1, there is a match)

```
b=[4,6]
```

```
print>Total(Total(a EQ (Rebin(b, 2, nCoords)), 1) EQ 2) GT 0
```

(result is 0, there is no match)

To find *which* one(s) it matches, look at the inner part:

```
Total(a EQ (Rebin(b, 2, nCoords)), 1) EQ 2
```

This will be 1 where 'a' matches a pair of 'b' entries, use Where to
find which one (or more) it matches.

Cheers,

--

-Dick

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