
Subject: How multiply two arrays in IDL?

Posted by [atmospheric physics](#) on Thu, 30 Apr 2015 13:47:24 GMT

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Hello,

I have two arrays as below:

```
a = [1, 2, 3, 4, 5, 6]
```

```
b = [[3, 4, 5, 6, 7, 8], [9, 10, 11, 12, 13, 14], [15, 16, 17, 18, 19, 20]]
```

When I multiply a and b, I get the following

```
a * b = [3, 8, 15, 24, 35, 48]
```

instead of the following result

```
[[3, 8, 15, 24, 35, 48], [9, 20, 33, 48, 65, 84], [15, 32, 51, 72, 95, 120]]
```

Can anyone suggest me how I can obtain the result as desired?

Thanks in advance,
Madhavan

Subject: Re: How multiply two arrays in IDL?

Posted by [natha](#) on Thu, 30 Apr 2015 14:54:39 GMT

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See matrix operators

http://www.exelisvis.com/docs/matrix_operators.html

Subject: Re: How multiply two arrays in IDL?

Posted by [Dick Jackson](#) on Thu, 30 Apr 2015 15:39:16 GMT

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On Thursday, 30 April 2015 06:47:26 UTC-7, Madhavan Bomidi wrote:

> Hello,

>

> I have two arrays as below:

>

> a = [1, 2, 3, 4, 5, 6]

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> When I multiply a and b, I get the following

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> a * b = [3, 8, 15, 24, 35, 48]
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> instead of the following result
>
> [[3, 8, 15, 24, 35, 48], [9, 20, 33, 48, 65, 84], [15, 32, 51, 72, 95, 120]]
>
> Can anyone suggest me how I can obtain the result as desired?
>
> Thanks in advance,
> Madhavan

It looks like you want to extend a to match the rows of b, then multiply corresponding elements, like this:

```
IDL> Rebin(a, [6, 3]) * b
      3      8      15      24      35      48
      9     20     33     48     65     84
     15     32     51     72     95    120
```

... or generally:

```
IDL> Rebin(a, Size(b, /DIMENSIONS)) * b
      3      8      15      24      35      48
      9     20     33     48     65     84
     15     32     51     72     95    120
```

Hope this helps!

-Dick

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