
Subject: Re: Using two different arrays in the same calculation

Posted by [steinhh](#) on Fri, 10 Jun 1994 07:44:17 GMT

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In article <thompson.771168039@serts.gsfc.nasa.gov>, thompson@serts.gsfc.nasa.gov (William Thompson) writes:

|> ragnar@kvarf.fi.uib.no (Ragnar Aas) writes:

|>

|> >I have the following problem :

|>

|> >I have two different arrays, (8) of float and (300,8) of float.

|> >I want to vectorize the equation and therefore I need to use both

|> >arrays in the same equation. For example :

|>

|> >newarray=cos(small_array)*sin(large_array)

|>

|> >where I want the data in small_array to be used over and over 300 times

|> >in this calculation.

|>

|> That's simple,

|>

|> newarray = cos(replicate(1,300)#small_array) * sin(large_array)

It certainly does the trick, Bill, but I wouldn't think that it's more efficient doing 8*300 cosine operations just to vectorize a multiplication of 8*300 elements :-)
I'd suggest instead:

```
newarray = replicate(1,300)#cos(small_array) * sin(large_array)
```

or (I don't know which is the more efficient - would be nice to get some feedback):

```
small_array = reform(small_array,1,8)
```

```
newarray = rebin(cos(small_array),300,8,/sample) * sin(large_array)
```

Stein Vidar
