## Subject: Re: Adding arrays of different dimensions Posted by David Fanning on Fri, 19 Oct 2007 17:07:19 GMT

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ianpaul.freeley@gmail.com writes:

> I keep running into this and not being sure what the best solution is.

>

- > I have a 2d array, and I'd like to add a 1d array to each row (or
- > column).
- > The easy stupid slow way:
- > a=findgen(3,5)
- > b=[1,2,3]
- > for i=0,4 do a[\*,i]=a[\*,i]+b

>

- > Perhaps a better way with no loops:
- > a=findgen(3,5)
- > b=[1,2,3]
- > x=b#(fltarr(n\_elements(a[0,\*])) +1)
- > a=a+x

>

- > Is there a better way? Anyone care to generalize so I can optimally
- > add 2d arrays into 3d?

I think a careful look at the array concatenation tutorial would be helpful:

http://www.dfanning.com/tips/array concatenation.html

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Covote's Guide to IDL Programming: http://www.dfanning.com/

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

Subject: Re: Adding arrays of different dimensions Posted by Jean H. on Fri, 19 Oct 2007 17:17:46 GMT

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- > column).

```
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> a=findgen(3,5)
> b=[1,2,3]
> x=b#(fltarr(n_elements(a[0,*])) +1)
>
> Is there a better way? Anyone care to generalize so I can optimally
> add 2d arrays into 3d?
>
> Thanks.
> IP Freeley
Xsize = 2
Ysize = 3
Zsize = 4
a = indgen(Xsize, Ysize)
b = indgen(Xsize) + 1
print, a + rebin(b,Xsize, Ysize)
or in 3D:
a = indgen(Xsize, Ysize, Zsize)
b = indgen(Xsize, Ysize) + 1
print, a + rebin(b, Xsize, Ysize, Zsize)
```

Subject: Re: Adding arrays of different dimensions Posted by ianpaul freeley on Fri, 19 Oct 2007 17:43:48 GMT View Forum Message <> Reply to Message

Thanks, rebin magic is clearly what I was looking for.