
Subject: Re: Question about storing arrays in pointer array.
Posted by [David Fanning](#) on Thu, 08 Mar 2012 22:35:53 GMT
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Ian writes:

```
>
> Hello All,
> I have a question regarding the storage of arrays within arrays. I am
> attempting to read in 14 data files with 5 vectors of 512 elements. I
> have attempted two methods:
>
>
> ;test attempting to read in variety of data and overplot it in a stack
> ;without y-axis and single x-axis
>
> boo=DBLARR(14, 512)
> ;boo=PTRARR(14)
> for x = 0,13,1 do begin
>   rdcol, 'iz_diff_rot'+STRCOMPRESS(x,/REMOVE_ALL)
>   +'.dat',p1,p2,p3,p4,p5
>   print, i, " The dat file is: ", 'iz_diff_rot'+STRCOMPRESS(x,/
>   REMOVE_ALL)+'.dat'
>
> ;attempt 1
> ;Fills the pointer array with 14 dbl arrays. Use boo=PTR....
> ;   for i=0,13,1 do begin
> ;     boo[i]=PTR_NEW(DBLARR(512))
> ;     p5=boo[i]
> ;   endfor
> ;endfor
>
> ;attempt 2
> ;Creates two dimensional array of 14 columns with 512 elements. Use
> boo=DBL....
>   for i = 0,13,1 do begin
>     for j = 0,511,1 do begin
>       boo[i,j]=p5[j]
>     endfor
>     print, boo[i,300]
>   endfor
> endfor
>
>
> END
>
> Attempt one using the pointer array provides 14 arrays but the values
> are all zero, can anybody give a suggestion on how to store the new p5
```

> in boo[i]?

Don't you want something like this:

```
numFiles = 14
boo = PtrArr(numFiles)
FOR j=0,numFiles-1 DO BEGIN
    data = Read_Data(files[j])
    boo[j] = Ptr_New(Reform(data), /No_Copy)
ENDFOR
```

Now, each pointer points to an array of 512 columns and 5 rows
(to make accessing each row faster!).

If you want the 5th vector of the 7th pointer:

```
thisRow = (*boo[6])[*,4]
```

Cheers,

David

--

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

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