
Subject: Re: Question about storing arrays in pointer array.

Posted by [lan\[2\]](#) on Fri, 09 Mar 2012 16:01:06 GMT

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On Mar 8, 2:35 pm, David Fanning <n...@idlcoyote.com> wrote:

> 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
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
>
>
```

Great! Thank You!
