
Subject: Dereferencing a Pointer Array

Posted by [Art Burden](#) on Tue, 01 May 2001 17:59:53 GMT

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Hi,

I have a structure that contains a pointer array that points to twelve 512-by-512 images. I would like to find the mean image from the twelve images in a simple and fast way. I understand that I can dereference the pointer to an image or an individual element in an image by using, for example

```
img = (*info.images[0])  
and  
img_element = (*info.images[0])[240,240]
```

but I can't figure out a way to dereference the pointers to all 12 pixel values from a given coordinate in one step. At this stage, I pass the structure into my averaging subroutine and I create a new array to store the 12 images. I then fill the array by dereferencing the pointer to each image in a loop. Finally, I loop through the rows and columns to get each mean pixel value, as shown below. Can anyone think of a better (mainly faster) way to do this?

```
;retrieve array of images  
ffim = lonarr(12,512,512)  
for num=0,11 do ffim[num,*,*] = *info.images[num]
```

```
;calculate mean of images  
mean_ff = fltarr(512,512)  
for ir = 0,511 do for ic = 0,511 do mean_im[ic,ir] = mean(ffim[* ,ic,ir])
```

I greatly appreciate your help with this,

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