
Subject: Re: IDL calculating elements in arrays plus there offsets

Posted by [jeanh](#) on Mon, 08 Mar 2010 12:26:57 GMT

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Let's see last point in your message first.

For images, you don't need more than 3 or 4 dimensions.

- 1) X
- 2) Y
- 3) Z - number of images
- 4) (RGB)

Now, and this may not be the most efficient way but it will allow you to understand what is going on, you can do something like:

```
image1Array
image2Array
nblImagesFirstGroup = 10
nblImagesSecondGroup = 5

for img1 = 0, nblImagesFirstGroup -1 do begin
  for img2 = 0, nblImagesSecondGroup -1 do begin
    result = image1Array[*,* ,img1] - image2Array[*,* ,img2]
  endfor
endfor
```

here, image1Array has 3 dimensions (x, y, z). By using the subscript `[*,* ,img1]`, you are accessing "each elements of the 1 and 2nd dimensions, corresponding to img1", img1 being a simple counter. Of course, in this example, the result will be overwritten in each iteration so you may want to save it.

This being said, you should first write a more precise question. "offset the elements by 1 to the right" can mean lots of things... are yo comparing 2 images, shifting in the X direction? Y? or are you considering multiple images?

Jean

On 08/03/2010 6:43 AM, Will wrote:

```
> Hi
>
> sorry I don't think the heading was very clear there.
>
> I have loaded a group of arrays (jpeg files) into a seperate float
> array, and again with another group of files I have done the same
> thing. I am now trying to have the two arrays perform a subtraction
> calculation with one another and what I want to do is have the arrays
```

> do this with each other until they have did the calculation with every
> element. i.e
>
> it does the first calculation, then offsets the elements by one to the
> right and does the next calculation then repeats this until it has
> done every element in the array.
>
> I was curious as to how to do this successflly I am currently trying
> to use a FOR loop after my Repeat loop failed. I have the maths I need
> here but I don't know how to access the subscripts of my array. I have
> inputted all the files into an array using the FLOAT command. the
> likes of FLTARR just keeps saying that I have more than 8 dimensions
> and hence it won't work.
>
> Any ideas guys?
>
> Thanks
>
> Will
