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Subject: Re: subscribing 3D arrays

Posted by [Dick Jackson](#) on Thu, 16 Sep 1999 07:00:00 GMT

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Tom Wassenaar wrote:

```
>
> I can't figure out how to directly subscribe a group of individual cells
> in one layer of a 3D array.
>
> [...]
>
> b = indgen(3,3,3)
> b[[1,2],[2,1],0] = 0
> print, b[*,*,0]
>
> 0 1 2
> 3 0 0
> 6 0 0
>
> so a square envelope of cells set to zero
> Any suggestion ?
```

When the arrays of index values are of different lengths, IDL takes the subset of each dimension separately. When you say `b[[1,2],[2,1],0]`, this means all points with X=1 or 2, Y=2 or 1, and Z=0:  $2*2*1 = 4$  array elements

What you want to do is give three equal-length arrays, one for each dimension. Then IDL will take one array element for each corresponding set of three index values:

```
b = indgen(3,3,3)
b[[1,2],[2,1],[0,0]] = 0
print, b[*,*,0]
```

```
0   1   2
3   4   0
6   0   8
```

The Replicate command can be useful for making an array of '0' values as long as you need it.

Cheers,

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-Dick

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

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