Subject: Re: subscripting arrays with dim > 1
Posted by thompson on Fri, 28 Aug 1998 07:00:00 GMT
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Gwyn:

I would take the following approach:

```
IDL> index1 = 0
IDL> index2 = 4
IDL> print,array[index1,index2]
```

That doesn't seem very elegant, until you start making arrays. For example,

```
IDL> print,array[0,4],array[3,3]
      20      18
IDL> index1=[0,3]
IDL> index2=[4,3]
IDL> print,array[index1,index2]
      20      18
```

You can even make index1 and index2 multidimensional arrays, so long as they have the same dimensions. Your result should have the same dimensionality as your index arrays.

Bill Thompson

fireman@aerialist.gsfc.nasa.gov (Gwyn Fireman) writes:

> I'd like to reference an array with a variable containing a subscript for
> each dimension, passing the subscripts as an array. For instance:

```
> IDL> array = indgen(5,5)
> IDL> print,array
>       0       1       2       3       4
>       5       6       7       8       9
>      10      11      12      13      14
>      15      16      17      18      19
>      20      21      22      23      24
> IDL> print,array[0,4]
>      20
```

> But I can't seem to reference each dimension. Instead, the subscript array
> is passed as two instances of a single subscript:

```
> IDL> index=[0,4]
> IDL> print,array[index]
```

>   0   4

> I can of course calculate a single index, but it seems a bit clunky:

> IDL> s=size(array)
> IDL> print,s
>   2   5   5   2   25
> IDL> print,array[index(0)*s(1)+index(1)*s(2)]
>   20
> - or -
> IDL> print,array[long(total(s(1:s(0))*index))]
>   20

> Is there a better way?
> Gwyn

> --
>   __.
> / | , , , , , ,_   Gwyn F. Fireman
> (__/|/(_(_)(_/|/| |_/   General Sciences Corporation
>   /| /| Gwyn.Fireman@gsfc.nasa.gov   MODIS Characterization Supp. Team
>   (_/   (_/   301-352-2118