Subject: MAX function in IDL8.0
Posted by Anne Martel on Fri, 08 Oct 2010 13:25:24 GMT

I was happy to see that the new version of IDL includes a DIMENSION
keyword for the max function but I don't understand why the
max_subscript feature returns indices relative to the whole array,
rather than the index in the dimension specified. A simple example to
illustrate this:

If I create a 2D array q:

q=[[1,4,3,2,7,0],[2,4,1,3,4,1]]

and run

```
IDL> print,q
       1      4      3      2      7      0
       2      4      1      3      4      1
```

IDL> marr = max(q,ind,dim=2)

The returned max array is as expected:
```
IDL> print,marr
       2      4      3      3      7      1
```

The max_subscripts are
```
IDL> print,ind
   6   1   2   9   4   11
```

but what i would prefer is the subscripts in the 2nd dimension
```
IDL> print,ind/6
   1   0   0   1   0   1
```

In this example it is trivial to convert to what I want but if, for
example I want to generate a time to peak map from a dynamic sequence of
images , or return the most likely class from a stack of probability
maps, then I still have to write a procedure to do this.
Can anyone think of some example where the way max_subscript is
implemented is superior or should I just campaign for a modification in
some future release?

Anne