Subject: Re: Maximum Intensity without FOR Loop
Posted by btt on Tue, 11 May 2004 19:46:12 GMT
View Forum Message <> Reply to Message

Stefan Tuchschmid wrote:
> Hi there
> a lot of posts talk about the necessity to avoid FOR loops ('if you
> use for loops, make sure a lot of stuff is happening in there...').
> However, I can't seem to find a better & working solution for the
> following code fragment:
>
> FOR i=0,x_resolution-1 DO BEGIN
> FOR j=0,y_resolution-1 DO BEGIN
> reformat_data[i,j,k]=MAX(data[i,j,lower_limit:upper_limit])
> ENDFOR
> ENDFOR
>
> Background: data is a image stack (MRI 3D Data), we would like to find
> the MIP (Maximum Intesity Projection) over a certain number of images.

Hi,

IDL> data = Bindgen(3,4,5)

You could use the DIMENSION keyword to MAX to find the maximum in that dimension (across the entire array.)

```
IDL> print, max(data, dim = 3)
  48  49  50
  51  52  53
  54  55  56
  57  58  59
```

Or, you could find the maximum using the 'max' operator on specified dismension (you can do more than two at a time.)

```
IDL> print,  data[*,*,0] > data[*,*,2]
  24  25  26
  27  28  29
  30  31  32
  33  34  35
```

Ben