
Subject: Getting x and y positions from a mask
Posted by [S. Murray](#) on Thu, 28 Jul 2011 20:50:31 GMT
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I am trying to obtain pixels coordinates of all the pixels within a very specific mask that I have created (thresholded contour in an image, but just one of the thresholded contours of the image, not all of them). Firstly, I used the contour procedure (path_xy, path_info, getting data coordinates...) and then used objects to get my mask from this- something along the lines of here:

http://idlastro.gsfc.nasa.gov/idl_html_help/Programmatically_Defining_ROIs.html

I used 'mask_rule=2' so I that I have a mask of all pixels falling on or within a the regions boundary. I now have this mask array, which is just a 2d byte array:

```
IDL> help,mask  
MASK      BYTE      = Array[151, 151]
```

I want to find out what the x and y coordinates are of all pixels that are '1's' in 'mask'. I wish to run a procedure on all pixels within this contoured region but I cant figure out how to make an array of the x and y coordinates. I know I could get the contour path pixels by typing something like this from just the contour procedure:

```
line = [ LINDGEN( path_info[i].n ), 0 ]  
path_coords=path_xy[* , path_info[i].offset + line]
```

But this does not include ALL pixels within the contoured region. I've only ever come across the cursor procedure before which saves x and y positions after clicking on the x display, however this won't exactly be very useful for all 568 pixels in the mask!

Does anyone have any ideas? I don't know if its just because I'm not proficient enough in IDL yet or if its because I've been working on this for too long, but I have a feeling its a simple enough procedure if I figure out what to use!
