Subject: Re: Getting x and y positions from a mask
Posted by David Fanning on Thu, 28 Jul 2011 21:06:26 GMT
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S. Murray writes:

> 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!

I'd do something like this:

```
indices = Where(mask EQ 1)
xy = Array_Indices(mask, indices)
x = Reform(xy[0,*])
y = Reform(xy[1,*])
```

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")
