
Subject: Re: cw_defroi vertices.
Posted by [Ted Cary](#) on Thu, 18 Apr 2002 16:17:19 GMT
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"David Higgins" <dmh@medphysics.leeds.ac.uk> wrote in message
news:<a03a1bd.0204180834.4fbdc03d@posting.google.com>...

- > I want to be able to use cw_defroi instead because I am updating a
- > draw widget.
- > Obviously xVerts and yVerts are no longer defined, and it seems that
- > the "area" array is the wrong dimensions to be used with the "data"
- > keyword in the initialization of "ROI" (above).
- >
- > Does anyone know how I should input the vertices of the region of
- > interest when initializing "ROI"?
- >
- > TIA
- > Dave Higgins

Hello,

You could use my lab's modified version of CW_DEFROI, which will optionally return the vertices. There's also an option to draw rubber band lines in polygon mode, and a few more modifications. I can send it to you as soon as I get to work, if you want.

I believe the reason the "area array" returned by your CW_DEFROI is of the wrong dimensions to put into an IDLanROI is that it is a 1D vector of array subscripts. You can convert these into x and y vectors if you know your image dimensions--see Fanning's website (just MOD the "area" vector by x-width to get the x vector and divide by x-width to get y.)

If you do put this area/interior data into your ROI, you'll probably want to change the TYPE. I know there's a TYPE which treats the data as points, but I don't know the number to use offhand. However, if you want to continue to use ROIs of TYPE 2 (closed polygon), you'll need the vertices. Either use the modified CW_DEFROI or write your own code to draw the region (not a bad idea, since CW_DEFROI uses its own crash-prone event loop)--I don't think

contouring the area is the best approach.

(I don't have IDL at this computer, so I'm not sure of all of the above advice...)

Hope this helps,

Subject: Re: cw_defroi vertices.

Posted by [David Fanning](#) on Thu, 18 Apr 2002 17:07:44 GMT

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David Higgins (dmh@medphysics.leeds.ac.uk) writes:

```
> I have been using DEFROI to define a region of interest, and then
> using xVerts and yVerts in the line that follows:
>
> area=DEFROI(m,n,xVerts,yVerts)
> ROI=OBJ_NEW('IDLanROI', xVerts, yVerts, type=2); type two
>                               ;is a closed polygon
>
> I want to be able to use cw_defroi instead because I am updating a
> draw widget.
> Something like
> area = cw_defroi(info.drawID)
>
> Obviously xVerts and yVerts are no longer defined, and it seems that
> the "area" array is the wrong dimensions to be used with the "data"
> keyword in the initialization of "ROI" (above).
>
> Does anyone know how I should input the vertices of the region of
> interest when initializing "ROI"?
```

You can turn your "area" into xVerts and yVerts like this.
(I assume your image is an m-by-n array.)

```
xVerts = area MOD m
yVerts = area / m
```

These will be in device (pixel) coordinate space.

Cheers,

David

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