
Subject: Re: user-selected ROIs

Posted by [jeanh](#) on Wed, 04 Aug 2010 18:00:33 GMT

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On 04/08/2010 12:47 PM, geogal34 wrote:

```
> I have generated an output contour map of masses projected on a map
> and would like to be able to allow the user to select a specific
> region of interest and calculate the mass for that area. Basically I
> just need to add up the value of all the pixels contained within the
> boundary.
>
> I've tried using XROI, but haven't had any luck because the actual
> values (masses) of the pixels aren't what is shown in the histogram
> when the image is passed. I've tried several different ways of passing
> the data, but to no avail.
>
> So I have chosen to draw a polygon point by point using CURSOR, then
> plan to use a WHERE statement to figure out all the pixels within the
> ROI. I use a similar procedure to determine a larger subset of the
> satellite data, but that only has two points. The problem I'm
> encountering is that, while I can print the latitudes and longitudes
> as the mouse is clicked, I can't seem to save them to an array because
> the x, y positions are constantly being overwritten. What I'm trying
> to do is save the initial array and then add new ones as they are
> created. This code adds new lines to the array, but it just fills it
> with the same points (lat/lon).
>
> ;Drawing polygon point by point
> clicks=0
> CURSOR, x, y, /DOWN, /DATA
> PLOTS, x, y, PSYM=1, /DATA
> WHILE (!MOUSE.button NE 4) DO BEGIN
>   CURSOR, x1, y1, /DOWN, /DATA
>   PLOTS, [x, x1], [y, y1], /DATA
>   ; x=x1& y=y1
>   IF (!MOUSE.button EQ 1 OR 4) THEN BEGIN
>     clicks=clicks+1
>     print, 'Clicks=', clicks, ' ', 'X=', x, ' ', 'Y=', y
>     cloud_array=fltarr(2, clicks)
>     FOR i=0, clicks-1 DO BEGIN
>       cloud_array(0,i)=[x]
>       cloud_array(1,i)=[y]
>     ENDFOR
>     print, 'i=', i
>     print, cloud_array
>   ENDIF
>   x=x1& y=y1
> ENDWHILE
```

>
> There's probably a simple solution, but I've been going in circles for
> a while and now everything is a jumble in my head. Can anyone point in
> the right direction? Or has anyone been able to do what I'm trying to
> accomplish? I imagine there is probably a more elegant way and I'm not
> even sure if this way makes sense!
>
> Thanks!
> Emily

Hi,

when you do
`cloud_array=fltarr(2, clicks)`
you just erase all the content of `cloud_array`. Then, in a loop, you
assign the same value to each entry (for each "click" in your counter).
What you want to do, for this issue (see other posts about elegant ways
of achieving your objective), is to store `cloud_array` in the `Uvalue` of
your widget. Then, each time a click occurs, you read this array, add
one row, fill this row with x and y values, and save back `cloud_array` in
the `Uvalue`. When done, you can access the whole set of points.

Jean
