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Subject: Re: finding boundary in image having multiple region of interest

Posted by [Helder Marchetto](#) on Wed, 31 Aug 2016 09:37:10 GMT

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Hi,  
I can't tell if what you did is correct or not, but if you want to convert one-dimensional subscript to two dimensional, then `array_indices` is the way to go.  
For some examples, to learn how to use it, have a look at the help pages:  
[http://www.harrisgeospatial.com/docs/ARRAY\\_INDICES.html](http://www.harrisgeospatial.com/docs/ARRAY_INDICES.html)

I also think that the `label_region` page has an example on how to use the `reverse_indices` of the `histogram` function to retrieve one-dimensional subscripts:  
[http://www.harrisgeospatial.com/docs/LABEL\\_REGION.html](http://www.harrisgeospatial.com/docs/LABEL_REGION.html)  
I think the last line of the example is the most important one:  
`img[r[r[i]:r[i+1]-1]]`

The `histogram` function help page also has some more info on how to use the reverse indices:  
<http://www.harrisgeospatial.com/docs/histogram.html>

Good luck,  
Helder

On Wednesday, August 31, 2016 at 8:21:46 AM UTC+2, sin wrote:

> On Tuesday, August 30, 2016 at 2:22:18 PM UTC+5:30, Helder wrote:

>> On Tuesday, August 30, 2016 at 8:07:48 AM UTC+2, sin wrote:

>>> Hi all,

>>> I need to select roi having combined pixel area above 3493pixels and intensity above 1.25.

>>>

>>> I tried using `find_boundary` which gives the pixel area for pixels above the threshold for one roi that we give as input. But in one image I have multiple rois to be selected. so `find_boundary` will not work.

>>>

>>> I have several images like this.

>>>

>>> So do anyone have any idea to do this.

>>>

>>> The threshold should be the intensity should be more than 1.25 and the combined pixel area should be greater than 3493 pixels.

>>>

>>> thanks

>>

>> Hi,

>> I don't understand why you tried `find_boundary`. But I think what you're looking for is a combination of "greater then" and `label_region`.

>>

>> `subImage = myImage gt 1.25`

```
>> lr = label_region(subImage)
>>
>> then use histogram to identify the regions and look for the one's with more than 3493 pixels. In
case of doubt, follow the example given for label_region:
>> http://www.harrisgeospatial.com/docs/LABEL\_REGION.html
>>
>> Here is what is of interest for you:
>>
>> h = histogram(lr, REVERSE_INDICES=r)
>>
>> ; Print the mean and standard deviation of each region
>> FOR i=0, N_ELEMENTS(h)-1 DO if h[i] gt 3493 then $
>>   PRINT, 'This region ', i, ', has a population greater than 3493 and has = ', h[i], $
>>   ', elements. The indices of this region are between ', r[i], ' and ', r[i+1]-1
>>
>> I hope this helps.
>>
>> Cheers,
>> Helder
>
> Thanks a lot helder, it is very helpful.
> But I couldnt understand how to get array x,y coordinates from the indices r(i).
> can i use array_indices for this purpose.
> I tried but i am not sure whether it is correct or not.
>
> thanks
```

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