
Subject: Re: shifting a mask over an image

Posted by on Mon, 26 Nov 2012 12:18:40 GMT

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Den måndagen den 26:e november 2012 kl. 12:13:49 UTC+1 skrev haik...@gmail.com:

> Hi,

>
> I'm trying to move a mask over an image using the shift function. But I'm not sure if I really understood the description in the IDL help.

>
> Let's say I have a 10x10 mask and a 100x100 image. In this case I have to create an array with the same size as my image. It is filled with 0 and my mask. Then I start moving the mask inside that array (in x direction and y direction). But every time I do it with both directions, there is an error message telling me that I have an incorrect number of arguments. It works fine for one dimension, though.

>
> Has anyone an idea how I can shift in both directions?

>
> Btw, my code looks like this:

```
>  
> for i=0, n-1 do begin  
> for j=0, n-1 do begin  
> result=shift(template, shift_x[i], shift_y[j])  
> cor=where(max(correlate(result, image))  
> endfor  
> endfor
```

The shift operation should be fine - IF template is a 2D array. If the number of dimensions of template is not 2, you would get the error message you mention. Do a "help template" before you enter the loop.

But apart from that, your code looks funny:

* The "cor=..." line has three opening parentheses but only two closing ones so you should get an error from that when you try to run it.

* Correlate() returns a scalar so the where(max()) business makes no sense.

* And if you are trying to find the location of the pattern in the mask within the image by maximizing the correlation with respect to the shifts, you want to collect the correlation values in an array and then find the location of the maximum after the loop has finished.

/Mats

Subject: Re: shifting a mask over an image

Posted by [tom.grydeland](#) on Mon, 26 Nov 2012 12:21:42 GMT

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On Monday, November 26, 2012 12:13:49 PM UTC+1, haik...@gmail.com wrote:
> Hi,

[...]

> Has anyone an idea how I can shift in both directions?

The following works for me:

```
template = bytarr(8,8)
template[0:2,0:2] = 1
print, template
print, shift(template, 1, 2)
```

Does this work for you? If so, your problem lies elsewhere. You have not shown us how 'template' or 'shift_x' and 'shift_y' were generated.

--T

Subject: Re: shifting a mask over an image
Posted by [haikoley](#) on Mon, 26 Nov 2012 15:41:50 GMT
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On Monday, November 26, 2012 12:13:49 PM UTC+1, haik...@gmail.com wrote:
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>  
> cor=where(max(correlate(result, image))  
>  
> endfor  
>  
> endfor  
>  
>  
>  
>  
>  
> thanks,  
>  
> max
```

Yes, it does work now, thank you very much.
