Subject: Catch the area outside a contour
Posted by James[1] on Fri, 20 May 2005 13:23:09 GMT
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Hi Folks !

Can anyone help me with the following problem. For example, there is an area
of the image withing some contour level. How to determine and get parameters for a region otside that contour level withing the next N pixels ?
Is there any IDL procedure/function for that ?

Thanks in advance,
James

Subject: Re: Catch the area outside a contour
Posted by James Kuyper on Mon, 23 May 2005 14:29:12 GMT
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James wrote:
>> I'm sorry, I don't seem to understand the problem. Are you trying to
>> extract how many pixels are outside a given contour level? And by
>> "Fixed Size" do you mean that you want every pixel to represent the
>> same value of area? I may be able to help with some elaboration on the
>> topic.
>
> Chris Lee gave the right idea ! The question now, what is the name
> of that function, which allows one to expand the area ... Anybody
> can help with that ? I'm trying to find someting in IDL's help, but
> still without a success

I sent the following message on 5/20 using my employer's newsserver, but I haven't seen any evidence that it's propagated outside that newsserver. I'll try again using Google.

You want to identify a region consisting of all pixels below the countour level, that are within a horizontal distance r of the contour? You can do that with the DILATE command.

Here's an example using one of the test datasets that come with IDL:

@cntour02
contourLevel = 3250

```
r = 10
above = elev GT contourLevel
x = (INDGEN(2*r+1)-r)#REPLICATE(1.0,2*r+1)
y = TRANSPOSE(x)
disk = x^2+y^2 LE r^2
dilated = DILATE(above, disk)
boundary = dilated GT above
TVSCL,above+2*boundary
```

It looks like this didn't work properly in some areas near the edge; I think you have to pad the image with a border equal to half the size the the structure operator on all sides to avoid that problem.
