
Subject: Re: Catch the area outside a contour
Posted by [Adam\[1\]](#) on Fri, 20 May 2005 14:08:19 GMT
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Im not sure this is what you are asking for but if you want all elements that are below or above the contour then you can use the function where().

;array is the array containing your contour data.
;contourLevel = the value of the contour line you are interested in.

contourLevel = .5
outside = where(array LT contourLevel)

here "outside" will hold an index for every pixel that is below the contour level.

Subject: Re: Catch the area outside a contour
Posted by [James\[1\]](#) on Fri, 20 May 2005 14:16:30 GMT
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> contourLevel = .5
> outside = where(array LT contourLevel)
>
> here "outside" will hold an index for every pixel that is below the
> contour level.

Thanks for the answer, but this is not exactly what is needed. The point is to get a *fixed size* area outside the contour in pixels, but not in units of contour levels.

Imagine, there is a smooth image and I'm going to extract some region outside the contour. Since the gradient is negligible, operating with s contour level you can give a region of 1000.. pixels wide (depends on the gradient) ...

James

Subject: Re: Catch the area outside a contour
Posted by [Adam\[1\]](#) on Sat, 21 May 2005 07:36:14 GMT
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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.

Subject: Re: Catch the area outside a contour
Posted by [Chris Lee](#) on Sat, 21 May 2005 13:33:16 GMT
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James wrote:

> 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 outside that contour level withing the next N
> pixels ?
> Is there any IDL procedure/function for that ?
>
> Thanks in advance,
> James

You can get the X/Y coordinates of a contour levels with the PATH_INFO keyword (and a few others). If you then want a fixed area outside this you need to either

1. Use an IDL built in function (whose name I can't remember) which 'expands' an area by a fixed amount (then subtract the original)

or.

2. Draw the new path yourself. This would involve something like finding the local normal at each point along the path. Calculate the path length of the contour, expand along the the local normal to get the desired area.

Chris.

Subject: Re: Catch the area outside a contour
Posted by [James\[1\]](#) on Mon, 23 May 2005 11:20:49 GMT
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> 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 something in IDL's help, but still without a success
