Subject: Re: Fill intersection of two contours Posted by Brian Larsen on Wed, 22 Aug 2007 15:22:56 GMT View Forum Message <> Reply to Message

While I am sure there is a much more elegant solution this one works pretty well. I have hacking this kinda thing together before. I would love to see the more elegant solution...

dat = dist(100)
loadct, 0
contour, dist(100), /fill, nlevels=20
mask = dat gt 30 and dat lt 40
loadct, 12
contour, mask*100, /over, /fill, nlevels=1
end

To be more specific on the filled region you might need to specify the contours in the original plot so that the colored region falls on top of it nicely.

Cheers,

Brian

Brian Larsen
Boston University
Center for Space Physics

Subject: Re: Fill intersection of two contours
Posted by David Fanning on Wed, 22 Aug 2007 15:50:38 GMT
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Brian Larsen writes:

- > While I am sure there is a much more elegant solution this one works
- > pretty well. I have hacking this kinda thing together before. I
- > would love to see the more elegant solution.

I'm pretty sure a more elegant solution would involve the ISOCONTOUR command, but actually writing the darn thing is more in the nature of a research project than a friendly

conversation in a newsgroup. :-(
Cheers,

David

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Fill intersection of two contours Posted by burkina on Thu, 23 Aug 2007 09:23:58 GMT View Forum Message <> Reply to Message

On Aug 22, 5:22 pm, Brian Larsen <balar...@gmail.com> wrote:

- > While I am sure there is a much more elegant solution this one works
- > pretty well. I have hacking this kinda thing together before. I
- > would love to see the more elegant solution...

>

- > dat = dist(100)
- > loadct, 0
- > contour, dist(100), /fill, nlevels=20
- > mask = dat gt 30 and dat lt 40
- > loadct, 12
- > contour, mask*100, /over, /fill, nlevels=1
- > end

>

- > To be more specific on the filled region you might need to specify the
- > contours in the original plot so that the colored region falls on top
- > of it nicely.

>

> Cheers,

>

> Brian

>

- > ------
- > Brian Larsen
- > Boston University
- > Center for Space Physics

Hi Brian,

thanks for the reply.

The method you are suggesting me is the one I was thinking about. Unfortunately, it does not work as I wish, because the 'mask' is not coincident with the contours' region. It must be the way the contour

procedure works. The two regions are similar, of course, but the difference is not acceptable for my plot.

I guess the solution should be a graphical one, in the sense that the contours produced by the contour procedure should be treated as polygons, with their coordinates, and then, in some way, their intersection should be found in this way, not in an analytical way.

I hoped this problem had been solved by someone else, since it sould be quite useful in this kind of plots...

Stefano