
Subject: Re: Line plots with filled regions? (was: Star chart and better poly_area?
Posted by [William H Dorin IV](#) on Thu, 16 Jul 1998 07:00:00 GMT

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<HTML>

dEdmundson@Bigfoot.com wrote:

<BLOCKQUOTE TYPE=CITE>In article <35A72423.5B448CC9@lanl.gov>, bill4@lanl.gov wrote:

> Does anyone know if anyone has developed a good poly_area function for

> IDL? The current version does not handle non-simple polygons at all.

<P>On a related note, I saw a seminar last week in which the speaker

had beautiful XY plots with different regions done in different colours.

When a plot line indicates a dividing line between different regions of

interest, the use of colour is a great aid to understanding.

<P>The question is: how can one achieve this in IDL? I am interested in

writing a very general object that takes sets of XY plot data and can

fill interior regions with different colours. This amounts to:

given

sets of lines and a bounding box (the axes), locate all the closed

polygons.

<P>Comments?

<P>Darran.

<P>-----== Posted via Deja News, The Leader in Internet Discussion ==-----

http://www.dejanews.com/rg_mkgrp.xp p;

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 You know, I'm working with a very similar problem right now as well.

As it happened, I gave up on quadrilaterals and turned to triangles (which

I should have thought of to start with). Fortunately, my points are

associated to start with, so polygons are rather an easy task. For

a general set of (x,y,value) data points, maybe approaching it along the lines of:

<P>pick a point

find two nearest neighbors

poly_fill ([point(0), neighbor1(0), neighbor2(0)],[point(1), neighbor1(1), neighbor2(1)], color=avg. value of the three)

repeat until done

<P>which is essentially what I'm doing. it doesn't work so well on Map_set, because of the north/south polar problem. I've found that if you have regular xy data, it makes your job a lot easier.

$\langle P \rangle W_m$.

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