Subject: Re: Further adventures in POLAR CONTOUR Posted by David Fanning on Wed, 29 Feb 2012 14:13:29 GMT

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John Coxon writes:

- > However, since then, it has become apparent that it would be useful to
- > put the contours above some lines that denote the co-ordinate system,
- > and so I began to experiment with putting two separate contour plots on
- > top of those lines. (I now know, thanks to David, that /cell fill
- > doesn't ruin my fills in the way I thought it did, so this has become
- > easier and more elegant within the last few minutes!)

Well, a couple of things about this plot. First of all, my remarks yesterday had to do with contour plots on MAP PROJECTIONS. I really don't know what happens when you use CELL FILL with Contour without putting it on a map projection. Nothing good, probably. :-)

In any case, there are no map projections here, so if I were creating this plot, I would be using the FILL keyword.

I have almost no experience with POLOR_CONTOUR, although I see it is simply a wrapper for the Contour command. It takes your polar coordinates, translates them to Cartesian coordinates, then grids them with Triangulate and TriGrid, before passing the result to the Contour command. If things go wrong, it is almost certainly in the gridding part of the code.

I have never had any luck "layering" filled contour plots. I think you have to create them all at once with the data you have. If your data truly goes from -1 to 1, I would have just created the levels and contour colors like this:

```
levels = Findgen(10) * 0.2 - 1.0
c\_colors = Indgen(10)+1
```

And called Polar_Contour once, with the FILL keyword set. That certainly works with the test data set I created and the colors you loaded.

After you get your filled contours, you can overlay contour lines in various colors, etc. That should be pretty straightforward.

I guess my general feeling, without the data to work with, is that this whole business has been make overly complex. If I were having problems with it, I would probably try gridding the data

myself, so I had more control over that part of it,	and	then
using cgContour to explore the rest of it.		

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")