## Subject: polar contour plots Posted by ahw199 on Fri, 03 Aug 2001 14:58:07 GMT

View Forum Message <> Reply to Message

I am a relatively new user of IDL and I am trying to make a ploar plot. I have written a programme which does exactly that but does not give me the expected pattern. I only have data for every 10 degrees around the circle, could this be my problem? i.e. do I need data for every degree around the plot for the contours to be accurate? thanks

Ann Webber

Subject: Re: polar contour plot Posted by David Fanning on Wed, 30 Dec 2009 14:12:26 GMT View Forum Message <> Reply to Message

## Hassan writes:

- > I have 3 arrays, a zenith angle array, a azimuth angle array and DN
- > values. each DN is related to specific zenith and azimuth. I need to
- > draw a contour of DNs on polar plot which is a circle as the distance
- > from the center of the circle is zenith and distance from North is
- > azimuth . I assume there should be a .pro file or sth that does this
- > work. I used polar\_contour but I think I need to add other commands to
- > get the desired results.
- > any help would be appreciated.

Your assumption that there should be a procedure for this is a good one, even if it turns out to be entirely wrong. I think thing this is one of those should-be-easy-turns-out-to-be-hard situations in IDL. (Normally, things are the other way around, thank goodness.)

I would approach this problem by setting up a Lambert Equal-Area map projection and drawing my contour plot on that, after scaling my data to the appropriate lat/lon values. This will mean you will have to do your own plot annotation (with PLOTS and XYOUTS, typically), but I don't think this will be particularly difficult.

difficult.		
Cheers,		
David		
 David Fanning, Ph.D.		

Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: polar contour plot Posted by Hassan on Mon, 04 Jan 2010 17:49:07 GMT View Forum Message <> Reply to Message On Dec 30 2009, 2:12 pm, David Fanning <n...@dfanning.com> wrote: > Hassan writes: >> I have 3 arrays, a zenith angle array, a azimuth angle array and DN >> values. each DN is related to specific zenith and azimuth. I need to >> draw a contour of DNs on polar plot which is a circle as the distance >> from the center of the circle is zenith and distance from North is >> azimuth . I assume there should be a .pro file or sth that does this >> work. I used polar\_contour but I think I need to add other commands to >> get the desired results. >> any help would be appreciated. > Your assumption that there should be a procedure for this > is a good one, even if it turns out to be entirely wrong. > I think thing this is one of those should-be-easy-turns-> out-to-be-hard situations in IDL. (Normally, things are > the other way around, thank goodness.) > > I would approach this problem by setting up a Lambert > Equal-Area map projection and drawing my contour plot > on that, after scaling my data to the appropriate > lat/lon values. This will mean you will have to do > your own plot annotation (with PLOTS and XYOUTS, > typically), but I don't think this will be particularly > difficult. > > Cheers, David > > David Fanning, Ph.D.

thanks David for the help. i think i need to work out how i can scale the zenith and azimuth angles based on lat/long.

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

> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

> Fanning Software Consulting, Inc.