Subject: Re: Missing fill colours in contour plot Posted by DavidF[1] on Tue, 15 Jan 2013 22:14:04 GMT

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>

On Tuesday, January 15, 2013 1:56:23 PM UTC-7, Ij...@fsmail.net wrote:

> I am trying to do a contour plot of a latitude-longitude array, but I keep getting gaps in my plot, as shown in the following image: http://www.physics.open.ac.uk/~lsteele/contour.png. I'm stumped as to the reason, as it's not as if it's missing contours at the very end ranges of the contour values - it's somewhere in between. Anyhow, I'm sure the knowledgable folks on here will know!

> I have defined a blue-white-red colour scheme and loaded it in with tvlct, but the problem occurs with other colour schemes too. I am calculating my contour levels and colours as follows (with ncont the number of contours I'm plotting):

```
>
>
         = floor(min(array))
> minv
>
  maxv = ceil(max(array))
>
  maxval = max([abs(array),abs(array)])
>
  clevels = -maxval + findgen(ncont)/(ncont-1)*2*maxval
>
>
       = floor(findgen(ncont)/(ncont-1)*250)
  ccol
>
>
>
>
  I am then plotting my contour plot as:
>
>
>
  device, decomposed=0
>
>
  bwr_colour, red_vec, grn_vec, blu_vec
>
>
  tvlct, red_vec, grn_vec, blu_vec
>
  contour, array, Ion, lat, $
>
        levels=clevels, c_colors=ccol, /fill, $
>
>
        background=cgColor('white'), color=cgColor('black'), $
>
>
        xrange=[-180,180], yrange=[-90,90], xstyle=1, ystyle=1, $
>
```

```
> yticks=6, ytickv=[-90,-60,-30,0,30,60,90], $
> 
xticks=6, xtickv=[-180,-120,-60,0,60,120,180], $
> 
xtitle='Longitude', ytitle='Latitude', charsize=1.5, $
> 
title=plotsym+' (all motions) / g m!u-1!n s!u-1!n'
>
```

> If anyone can offer any suggestions then I'll be very grateful, as it's bugging me now!

Just seeing "lon", "lat", and "contour" causes me to think that one of your problems is that you should be using the CELL_FILL keyword, rather than the FILL keyword.

http://www.idlcoyote.com/color_tips/fill_colors.html

If that doesn't work, I'd try cgCONTOUR. That routine will fill up the "normal" hole Contour creates.

http://www.idlcoyote.com/tips/contour_hole.php

Cheers,

David

>