Subject: Re: Plotting data on orthographic globe projection
Posted by Sir Loin Steak on Tue, 28 Feb 2012 21:58:11 GMT
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On Feb 28, 9:43 pm, David Fanning <n...@idlcoyote.com> wrote:
> Sir Loin Steak writes:
>> I have some data in a (72,36) array, corresponding to 72 longitudes
>> and 36 latitudes. I am wanting to plot them onto a globe, and so have
>> used IDLs map_set and contour routines. However, depending upon which
>> angle I choose to view the image, there are problems with the filling
>> of the contours.
>
>> As an example, see the four images athttp://www.physics.open.ac.uk/~lsteele/globe.png.
>> I have plotted the exact same data in each image, the only difference
>> being I changed the value of 'loncentre' in the plotting routine
>> below:
>
>> ;---------------------------------------
>> lat = findgen(36)*180/35-90
>> lon = findgen(72)*360/71-180
>> latcentre=30
>> loncentre=-70
>> angle=0
>> map_set,latcentre,loncentre,angle,/orthographic,/isotropic
>> loadct, 13
>> contour,reverse(vapour(*,*,250),2),lon,lat,/overplot,
>> levels=findgen(30), /fill
>> map_grid, latdel=5, londel=5, glinestyle=0, glinethick=0.5
>> ;---------------------------------------
>
>> Has anyone used these routines and experienced the same problem? Or
>> can anyone suggest any other routines that produce something similar?
>> I'm stumped!
>
> I would try using the keyword CELL_FILL instead of FILL.
> Not only will these problems probably disappear, but your
> color will actually be correct! :-)
>
> http://www.idlcoyote.com/color_tips/fill_colors.html
>
> CELL_FILL should *always* be used to put filled contour
> plots on map projections.
>
> Cheers,
>
> David
>
> --

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

Brilliant! Thanks a lot David. It's funny how it always turns out to be something simple. I'll remember to use cell fill from now on!

Liam
