Subject: Satellite projection contour plots
Posted by Matt[3] on Wed, 30 Mar 2011 16:10:46 GMT

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Hi All,

I'm trying to create a few contour plots on a satellite map
projection. Mostly they look great, but from some viewing angles (the
lon/lat that the 'satellite' is over), there seems to be some strange
artifacts in my eps and png output. For example, I've put a plot up
here (http://dl.dropbox.com/u/13779929/h00200.png) which looks good in
the tropics, but goes a little crazy at the high-latitudes.

I've checked the output with antialiasing turned off (or on, whichever
it is), but same result. There are hints of similar behavior for
other projections, but not as severe as with the satellite. Other
color tables and number of contour levels etc. seem to lead to the
same result.

The map has been created using Dave Fanning's routines and the old
fashioned map_set (see below). If there's something I'm missing, or
if there's a better way to do this with the new graphics, I'd love to
hear it!

Cheers,

Matt


```
ps_start, filename=outeps, /nomatch, ysize=ysize, xsize=xsize,
xoffset=0., yoffset=0.

   !p.multi=[0, 2, 1]
   pos=[0.05, 0.1, 0.8, 0.9]
   cgloadct, 0

   MAP_SET, angle_lat, angle_lon, 0., position=pos, /noborder, /
satellite, SAT_P=[3., 0., 0.]

   cgLoadCT, 25, /brewer, nColors=CtN, /reverse

   cgcontour, IM_append, lon_append, lat, levels=indgen(ctN)+ctB, /
fill, /overplot
   ;IM_append is the image, scaled to be a floating point number
between 0. and 255. (CtN=256, CtB=0).

   cgloadct, 0
   map_continents, thick=2
```

;Color bar plotted here

ps_end, /png