Subject: Re: Color data points by 3rd variable
Posted by David Fanning on Thu, 25 Apr 2013 14:15:49 GMT
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Morgan Silverman writes:

> I'm plotting the latitude and longitude locations of the top 5% of my dataset. I want to color the locations of these data points by corresponding no2 values. I'm having a hard time figuring out how to set up the colorscale and colorbar correctly. I tried something along the lines of
>
> no2temp = no2sorted(0:83) ; only want top 5% of data points (83 values out of 1661)
> NO2colors = no2temp
> NO2colors(*) = 0
> NO2colors = fix(no2temp*255/(max(no2temp)-min(no2temp)))
> cgcolors = cgColor(Bindgen(256))
> NO2colors = cgcolors[NO2colors]
>
> but it doesn't seem to work quite right. I'd like the range to be [1e16, 4e16]. Looking for any insight. Thanks.

It isn't clear to me if you are plotting *all* the data, but only the top five percent is colored, of if you just want to plot the top five percent and you want the data colored. If you want the latter, and assuming your variables are lon, lat, and temps, I would do it like this:

```
cutoff95 = Max(temps) * 0.95
indices = Where(temps GE cutoff95)
lon5 = lon[indices]
lat5 = lat[indices]
temp5 = temps[indices]
colors = BytScl(temp5)
cgPlotS, lon5, lat5, Color=colors
```

I may have the cutoff wrong. I'm really not clear what the "top 5% of my dataset" means. :-)

Cheers,

David

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