Subject: Re: Color data points by 3rd variable Posted by morganisilverman on Thu, 25 Apr 2013 14:45:32 GMT View Forum Message <> Reply to Message

Colors=BytScl(temp5) seems to work. That's a lot simpler than I was trying to make it. How would I display a colorbar the corresponds to Colors? Thanks.

Sincerely, Morgan

```
On Thursday, April 25, 2013 10:15:49 AM UTC-4, David Fanning wrote:
  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, Ion5, lat5, Color=colors
>
>
  I may have the cutoff wrong. I'm really not clear what the "top 5% of my
  dataset" means. :-)
>
> Cheers,
>
> David
>
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")
```