Subject: Re: Help with vert_colors and rgb_table
Posted by David Fanning on Mon, 28 Jan 2013 17:40:26 GMT
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justinclouds writes:

> I am trying to plot x, y and z where x and y are plotted in XY plot and z is a color vector. This is the command I use and it works well:
>
> p=plot(x, y, symbol='o', LINESTYLE = ' ', vert_colors=z, rgb_table=39)
>
> What I need is to be able to show the color scale in the plot area to give an indication of the scale on the z values. Also, can the color range in z values be controlled?
>
> More info:
> x, y and z are FLOAT = Array[507]
> z has range from 0 to 100.
>
> Any help with proper syntax is appreciated.

I don't know how this is done in function graphics. There is an example of how it is done in Coyote Graphics in the Colored Line Plots example in the Gallery. To restrict Z to 100 colors, for example, simply replace the value 255 with 100 in the elevColors variable, and restrict your color table to 100 colors with the NColors keyword.

http://www.idlcoyote.com/gallery/

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.")

Subject: Re: Help with vert_colors and rgb_table
Posted by Mark Piper on Tue, 29 Jan 2013 17:19:27 GMT
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On Monday, January 28, 2013 10:33:20 AM UTC-7, justinclouds wrote:
>
> What I need is to be able to show the color scale in the plot area to give an indication of the

scale on the z values. Also, can the color range in z values be controlled?
>

There are a few ways to handle this. If you have IDL 8.2, here's one:

```
x = 2*!pi*findgen(50)/49
y = sin(x)*cos(2*x)
z = round(randomu(1, 50)*100)
p = plot(x, y, 'o', $
  /sym_filled, $
  vert_colors=bytscl(z), $
  rgb_table=39)
cb = colorbar(rgb_table=39, $
  range=[0,100], $
  position=[0.50, 0.20, 0.90, 0.23])
```

Note that I bytescaled the Z values.

mp

Subject: Re: Help with vert_colors and rgb_table
Posted by justinclouds on Tue, 29 Jan 2013 17:56:19 GMT
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On Tuesday, January 29, 2013 10:19:27 AM UTC-7, Mark Piper wrote:
> On Monday, January 28, 2013 10:33:20 AM UTC-7, justinclouds wrote:
>
>>
>
>> What I need is to be able to show the color scale in the plot area to give an indication of the scale on the z values. Also, can the color range in z values be controlled?
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>
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>
> z = round(randomu(1, 50)*100)
>
> p = plot(x, y, 'o', $

```
>
>    /sym_filled, $
>
>    vert_colors=bytscl(z), $
>
>    rgb_table=39)
>
> cb = colorbar(rgb_table=39, $
>
>    range=[0,100], $
>
>    position=[0.50, 0.20, 0.90, 0.23])
>
>
>
> Note that I bytescaled the Z values.
>
>
>
> mp
```

That's what I needed. Thanks!
