Subject: HELP! Color problem
Posted by rew032 on Fri, 14 Feb 1997 08:00:00 GMT
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Hello!

I have a great problem with the colors....!!
We are working in developing a user-surface for IDL,
in which you can draw xy-plots, countour-plots, surface-plots
and so on.

Normally, I want the colour of background white and the color
of text, axes and so on black.
The colormap for my data I want to use a spectrum from blue for
the minimum data value (eg. z value at surface) and red
for the highest value.
But how can I use then white for my background and black for my text???

Next problem: if I work something with shades=bytscl(...
what I have to specify, that he dont use my white and black in the
colormap??

Next problem: I have e.g. a contour plot in and a surface in the same
picture. But how can I get, that e.g. value 10 = yellow in my surface
plot is the same in my countour plot??

Any help is welcome...!!

Regards, Astrid Kuhr

Subject: Re: HELP! Color problem
Posted by davidf on Fri, 14 Feb 1997 08:00:00 GMT
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Astrid Kuhr <a.kuhr@kfa-juelich.de> writes:

> I have a great problem with the colors....!!

You know, some days you wake up and it's like,
"Wow, my prayers are answered. An IDL question I
know how to answer!"

> Normally, I want the colour of background white and the color
> of text, axes and so on black.
> The colormap for my data I want to use a spectrum from blue for
> the minimum data value (eg. z value at surface) and red
> for the highest value.

> But how can I use then white for my background and black for my text???

Well, do this. Suppose you want to have 200 "data" colors, and
then a couple of "drawing" colors for your background, plots, etc.
First, let's build a color table that goes from blue to red. This
is pretty easy. Here are 200 data colors going from pure blue
at one end to pure red at the other end.

```
blue = Congrid(Findgen(256), 200)
blue = Reverse(blue)
red =  Congrid(Findgen(256), 200)
green = FltArr(200)
TVLCT, red, green, blue
```

Now, let's have some "drawing colors". I want black (0,0,0),
white(255,255,255), charcoal(70,70,70), and yellow(255,255,0).
I want to load these colors "above" my drawing colors, starting
at index 200. I do this:

```
TVLCT, [0, 255, 70, 255], [0, 255, 70, 255], [0, 255, 70, 0], 200
```

Let's draw a surface in which the surface is shaded with the
data colors, but I use a charcoal background and yellow axes.

```
SURFACE, DIST(30), Background=202, Color=203, $
   Shades=BYTSCL(DIST(30), TOP=199)
```

> Next problem: I have e.g. a contour plot in and a surface in the same
> picture. But how can I get, that e.g. value 10 = yellow in my surface
> plot is the same in my contour plot??

```
!P.MULTI=[0, 2, 1]
SURFACE, DIST(30), Background=202, Color=203, $
   Shades=BYTSCL(DIST(30), TOP=199)
CONTOUR, DIST(30), NLEVELS=12, Color=201, C_Color=203
```

This is good fodder for the "tips" section on my web page.
I'll put it in with the other color stuff.

Cheers!

David

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