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Subject: Re: setting default background color, etc  
Posted by [davidf](#) on Wed, 14 May 1997 07:00:00 GMT  
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Melissa Nischan writes:

> I am very new to IDL, and have what I believe should be a basic  
> question (but I couldn't find anything in the FAQ about it): when I start  
> IDL and plot something, I always get white on a black background. I  
> discovered that if I set !p.background I can change that, but I was  
> wondering how do I set the default background to be something other than  
> black? It's a pain to have to set it each time. (I use IDL on a  
> UNIX machine)

Hi Melissa,

By default, IDL sets the background color to color index 0. Thus, to change the background color, you need to load some other color into this index. For example, you could load (heaven forbid!) a yellow color in this index like this:

```
IDL> TVLCT, 255, 255, 0, 0
```

You could even do this in an IDL startup file.

The problem with this approach is that every time you load a new color table you are likely to write over this index. What I usually do is save about four or five colors at the top of my color table for "drawing colors". Then I make sure I use these colors for plotting, etc. And I make sure I don't write over them when I change color tables.

For example, here are three drawing colors (charcoal, yellow, and green, loaded into the last three elements of the color table. You might do this in an IDL startup file:

```
; Find out how many colors you have.
```

```
Window, /Pixmap, /Free, XSize=10, YSize=10  
WDelete, !D.Window  
ncolors = !D.N_Colors
```

```
; Data colors--leave top three colors alone.
```

```
dataColors = ncolors - 3
```

```
; Load "drawing" colors (charcoal, yellow, green).
```

```
TVLCT, [120, 255, 0], [120, 255, 255], [120, 0, 0], dataColors  
backgroundColor = dataColors  
plotColor = dataColors + 1  
oplotColor = dataColors + 2  
!P.Background = backgroundColor  
!P.Color = plotColor
```

Now, you can just draw a plot, like this:

```
data = Findgen(11)  
Plot, data
```

Or, you can specify the colors specifically, like this:

```
Plot, data, Color=plotColor, Background=backgroundColor  
OPlot, Reverse(data), Color=oplotColor
```

When you load a new color table, be sure you only load the data colors, and don't write over your drawing colors. Do something like this:

```
XLoadCT, NColors=datacolors
```

There are a lot of color tips like this on my Coyote's Guide to IDL Programming web page. You will also find programs (e.g. GETCOLOR, CHGCOLOR, XCOLORS, etc.) that will help you work with colors in IDL.

Good luck!

David

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