Subject: Re: Colors in PLOT with IDL
Posted by Andreas Ernst on Tue, 25 May 2004 09:44:02 GMT
View Forum Message <> Reply to Message

Ah, the color must also appear if I set

set_plot, "ps"
device, filename="myfile.ps"

How do I do that?

Thanks in advance. Andreas

Subject: Re: Colors in PLOT with IDL
Posted by Andreas Ernst on Tue, 25 May 2004 10:53:38 GMT
View Forum Message <> Reply to Message

Ok, I found it out finally! I now use a routine GetColor,
which I found on the internet and which works fine...

Cheers, Andreas

Subject: Re: Colors in PLOT with IDL
Posted by David Fanning on Tue, 25 May 2004 11:11:37 GMT
View Forum Message <> Reply to Message

Andreas Ernst writes:

> what is the argument for PLOT and OPLOT to plot
> a colored graph in IDL? The argument linestyle is
> not sufficient, my plot looks still very ugly with
> different line styles.

Color is a pretty complicated subject. You have
to worry about whether your device is 8-bit or
24-bit, whether color decomposition is turned on
or off, how many colors can physically be loaded
in the color table, etc., etc. It can drive you
crazy if you let it.

That's why I use a color program, FSC_COLOR, that
makes a lot of these decisions for me and lets me
create a plot in a device independent way. The
following short program will look identical on
your display screen, sent to a PostScript file,

run in the Z-graphics buffer, etc.

You can find FSC_COLOR here:

   http://www.dfanning.com/programs/fsc_color.pro

And, of course, you can find a LOT of information about
color, generally, on my web page. :-)

```
   PRO DrawingColorTest

   ; Create drawing colors.
   axisColor =    FSC_Color('navy', !D.Table_Size-2)
   background =   FSC_Color('ivory', !D.Table_Size-3)
   dataColor =    FSC_Color('indian red', !D.Table_Size-4)
   fillColor =    FSC_Color('dodger blue', !D.Table_Size-5)
   outlineColor = FSC_Color('dark green', !D.Table_Size-6)

   ; Create data for a plot. Fill the region from x=20 to x=45.
   x = Findgen(101)
   y = 4 * Sin(x * !DtoR) / Exp( (x-15) / 25.)
   lowVal = 20
   highVal = 45

   ; Draw the plot.
   lowY  = 4 * Sin(lowVal * !DtoR) / Exp( (lowVal-15) / 25.)
   highY = 4 * Sin(highVal * !DtoR) / Exp( (highVal-15) / 25.)
   indices = Value_Locate(x, [lowVal, highVal])
   low = indices[0]
   high = indices[1]

   IF x(low) LT lowVal THEN low = low + 1
   IF x(high) GT highVal THEN high = high - 1

   xpoly = [lowVal, lowVal, x[low:high], highVal, highVal]
   ypoly = [!Y.CRange[0], lowY, y[low:high], highY, !Y.CRange[0]]
   PolyFill, [0,0,1,1,0], [0,1,1,0,0], Color=background, /Normal
   PolyFill, xpoly, ypoly, Color=fillColor
   PlotS, xpoly, ypoly, Color=outlineColor, Thick=2
   Plot, x, y, Color=axisColor, /NoData, /NoErase
   OPlot, x, y, Color=dataColor, Thick=3

   END
```

To run this program at the IDL command line:

```
   IDL> Window
   IDL> DrawingColorTest
```

To run this program in the PostScript device:

```
IDL> thisDevice = !D.Name
IDL> Set_Plot, 'PS'
IDL> Device, Color=1, Bits=8
IDL> DrawingColorTest
IDL> Device, /Close
IDL> Set_Plot, thisDevice
```

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Colors in PLOT with IDL
Posted by David Fanning on Tue, 25 May 2004 11:15:20 GMT
View Forum Message <> Reply to Message

Andreas Ernst writes:

> Ok, I found it out finally! I now use a routine GetColor,
> which I found on the internet and which works fine...

Oh, that is an OLD one! Get FSC_COLOR instead and you
will be *much* happier. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
