Subject: Re: Does object graphics have true-color? Posted by Rick Towler on Thu, 28 Sep 2006 17:49:06 GMT

View Forum Message <> Reply to Message

Object graphics on a

yy wrote:

- > In direct graphics, I can use the following to define my own colors:
- > cc=0.99*tanh((findgen(ncolors)/30-4.)/2.)/2+0.5
- > plots,[0,u],[0,v],[0,w], /t3d, \$
- $> color=256.^2B(cc(c)^255.)+256.^G(cc(c)^255.)+R(cc(c)^255.)$

ummm. o.k.

- > Can I do the same thing in object graphics?
- > Does SetRGB in IDLgrPalette work in the
- > same way? Thank you!

Unless you specify otherwise, object graphics uses an RGB color model so you can define your colors however you wish. You'll probably find it easier to simply define your colors as an RGB triplet instead of as an index into a palette.

myPlot = OBJ_NEW('IDLgrPlot', FINDGEN(360), \$
 SIN(FINDGEN(360)*!DTOR)*!RADEG, COLOR=[255,100,50]
myModel = OBJ_NEW('IDLgrModel')
myModel -> Add, myPlot
XOBJVIEW, myModel, /BLOCK
OBJ_DESTROY, myModel

-Rick

Subject: Re: Does object graphics have true-color? Posted by yy on Fri, 29 Sep 2006 20:44:23 GMT

View Forum Message <> Reply to Message

Rick Towler wrote:

> Object graphics on a

>

- > yy wrote:
- >> In direct graphics, I can use the following to define my own colors:
- >> cc=0.99*tanh((findgen(ncolors)/30-4.)/2.)/2+0.5
- >> plots,[0,u],[0,v],[0,w], /t3d, \$
- >> color=256.^2*B(cc(c)*255.)+256.*G(cc(c)*255.)+R(cc(c)*255.)

>

> ummm. o.k.

```
>
>> Can I do the same thing in object graphics?
>> Does SetRGB in IDLgrPalette work in the
>> same way? Thank you!
>
> Unless you specify otherwise, object graphics uses an RGB color model so
> you can define your colors however you wish. You'll probably find it
> easier to simply define your colors as an RGB triplet instead of as an
> index into a palette.
>
> myPlot = OBJ_NEW('IDLgrPlot', FINDGEN(360), $
     SIN(FINDGEN(360)*!DTOR)*!RADEG, COLOR=[255,100,50]
> myModel = OBJ_NEW('IDLgrModel')
> myModel -> Add, myPlot
> XOBJVIEW, myModel, /BLOCK
> OBJ_DESTROY, myModel
>
>
> -Rick
I tried to use color to visualize the phase and intensity of a field by
the following definition:
```

the following definition:
; Define RGB value of the palette
red = phase*Intensity
green = (255-phase)*Intensity
blue = fltarr(128,128)
oPalette = OBJ_NEW('IDLgrPalette', red, green, blue)
; Use the palette to draw the picture
olmage = OBJ_NEW('IDLgrImage', BYTSCL(phase*intensity), \$
PALETTE = oPalette)

The purpose of such a definition is: the intensity affects the brightness of the image, and the phase affects the hue of the image.

However, I think there is something wrong when I use this palette to draw my picture. My problem is I don't know how to address the color map I defined meaningfully. In this case, the data becomes the multiplication of the phase and intensity, which I don't think will use the palette correctly. But I don't know how to make this correct.

Jingyi