Subject: Re: color plot over greyscale image - postscript Posted by David Fanning on Mon, 24 May 2010 20:50:07 GMT

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Gray writes:

> there.

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> Okay, still not working, but in a different way. I tried to do this
> systematically, doing a .RESET to clear everything. Here's my code
> (using random x and y values for the overplot):
>
> set_plot, 'ps'
> img = readfits('myimage.fits')
> img_sz = size(img,/dim)
> keywords = psconfig(/nogui,/encapsul,/color,/inches,xsize=6,$
 ysize=6.*img_sz[0]/img_sz[1],filename='myimage.eps')
> device, _extra=keywords
> tvimage, img, /axes, axkey={xstyle:9, vstyle:9}, $
  xra=[0,img_sz[0]-1], yra=[0,img_sz[1]-1]
> x = randomu(seed, 100)*(img sz[0]-1)
> y = randomu(seed, 100)*(img_sz[1]-1)
> loadct, 13, /silent
> oplot, x, y, psym=4, color=fsc color('green')
> oplot, x+1,y+1,psym=1, color=fsc_color('red')
> oplot, x-1,y-1,psym=6, color=fsc_color('yellow')
> device, /close
> set_plot, 'x'
>
> When I do this, I have two problems: 1) my points (if they overplot
> at all, I'm not 100% convinced) are in greyscale, even though I loaded
> a new color table, and 2) I've now realized that even passing those
> black against the border of a complicated greyscale image, but it's
```

OK, no grey-scale color table is loaded before you display the image. So whatever colors happen to be loaded, will be what the image uses.

Then, if you are going to use FSC COLOR for the overlay colors, there is no need to load a color table before you draw your overlays. FSC COLOR will load its own color in the color table before it does the drawing. (And it will dirty the one and only color table, which is why you have to refresh it BEFORE you display your image!)

If your points are overlaying (only you can tell this for sure), I can assure you they are NOT overlaying with gray-scale colors. FSC COLOR has worked for a *long* time. It is *extremely* unlikely that it would be broken, expecially with the colors "red", "green" and "yellow". It's more likely that you aren't drawing in a data space you think you are drawing into.

What happened to your plot command? I thought that was how you were setting up the data space? TVImage may look to you like it is "doing the right thing", but it is actually designed to "do the same wrong thing the TV command does". That is to say, it will not establish a data coordinate system on its own. It seems to me the data "space" where you are drawing your overplots is probably in some random data space in which you accidentally drew a plot in your IDL session.

I'd go back to the PLOT command, put your image on it, then try to draw into it.

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thue. ("Perhaps thos speakest truth.")