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Subject: Re: FSC\_PLOT defaults

Posted by [David Fanning](#) on Mon, 20 Dec 2010 22:57:59 GMT

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Wayne Landsman writes:

> I am updating the plotting routines in the IDL Astronomy library ( e.g.  
> AL\_LEGEND, TVCIRCLE, PLOTERROR in <http://idlastro.gsfc.nasa.gov/> ) to  
> use the new Coyote routines FSC\_PLOT, and FSC\_COLOR(), and for example  
> to allow colors to be specified by name. It is mostly going well  
> but I do find it jarring going from the white on black of  
>  
> IDL> plot,indgen(10)  
>  
> to the black on white of  
>  
> IDL> fsc\_plot,indgen(10)  
>  
> I'm old-fashioned enough to think that black on white does not show  
> up as clearly on the screen, but I did not have a similar problem  
> with the black on white of function graphics.  
>  
> The reason is that  
>  
> IDL> o = plot(indgen(10))  
>  
> is more comparable to something like  
>  
> IDL> fsc\_plot,indgen(10),thick=2,xthick=2,ythick=2,charsize = 2, xticklen = !P.ticklen\*2,  
> yticklen=!p.ticklen\*2  
>  
> to give the lines extra thickness (and clarity).  
>  
> Maybe it would be worth having a similar default display for  
> FSC\_PLOT (at the expense of having different defaults than PLOT).  
> Another default I like in the function PLOT() is having exact X,Y  
> ranges (X|Y|Style= 1). --Wayne

The central theme of my upcoming book is that there is no real need for fancy new graphics. That almost everything you need is already available to you via traditional graphics commands IF you do a few simple things. One of those things is write programs that work both on your display and in a PostScript file. Of course, it is \*possible\* to do this if one has a black background and one has a white background, but if you use color at all (another theme of the book), then this is all much harder to do.

Better, I thought, to make everything work the same. Even old timers with schizophrenic brains catch onto it fairly quickly and realize how easy it is to make things work identically in the two different environments. :-)

That said, I've gone to some trouble to make sure these routines work "naturally". If you set the background color to "black", the drawing routines should draw in white. I've just really changed the default background color.

I've no objection to changing the default line thickness values, although I have tried to make these commands work as normally as possible, even when "normally" sometimes means sub-optimally. I really only tried to fix the things I thought were obvious defects. (I do set exact axis ranges on the FSC\_Contour command, but personally, I don't mind autoscaling axes on the Plot command most of the time.)

I do note that I *\*always\** change line thicknesses when I make a PostScript file, so maybe changing it everywhere is not such a bad idea. Let me play with this a little and see what I can do. Anything that makes these more useful is what I am looking for.

We still have a month or so to experiment before they are cast in stone. :-)

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

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