
Subject: WIN device color and backgnd reset after set_plot command

Posted by [guillaume.drolet.1](#) on Sun, 22 Jan 2006 04:52:55 GMT

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Dear group of IDL users--

I've been trying to find an answer to this question but unsuccessfully:

In my IDL start up script, I switch the default WIN device background and color (!d.background & !d.color) to white and black, respectively. However, when I write a Post Script file (set_plot, 'PS') and then get back to the WIN device, the device background and color are reset to the default values.

Does anyone have any solution or trick for avoiding such a behavior?

Thank you.

Gui

Subject: Re: WIN device color and backgnd reset after set_plot command

Posted by [David Fanning](#) on Thu, 26 Jan 2006 09:56:46 GMT

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guillaume.drolet.1@ulaval.ca writes:

> I edited my startup script like this (as David's suggest):

>

> !p.background = fsc_color('white')

> !p.color = fsc_color('Navy')

Uh, I don't remember any discussion about a startup script. I was suggesting you do this before you draw graphics in whatever device you find yourself in. And **especially** you need to do it if you switch from a 24-bit device to an 8-bit device, and back, since colors are represented differently in those environments.

I personally don't use these system variables for ANY colors I care about, mostly for this non-equivalence between devices. I try to load my color tables **before** I draw graphics, and I explicitly stay away from color indices 0 and 255, mostly because these are used by !P.Color and !P.Background in this perverse way you are discovering. :-)

> But the same thing keep happening when I switch from WIN to PS and then
> to WIN again: the plot background and color previously set in my
> startup script are reset to IDL defaults (i.e. black background and
> white color, which I don't like).
>
> Since I usually plot long expressions, I don't to have to specify plot
> color and background every time I plot data after coming back PS device
> to WIN device.
>
> Again, any useful advice is welcome.

Well, this unhappiness is caused by the odd behavior of the PostScript device. It switches foreground and background colors, then completely ignores the background color. ("You can have any background color you like in PostScript as long as it is white.") Then, when it switches back, it mindlessly sets !P.Color to what had previously been !P.Background and sets !P.Background to 0.

Why? I don't know why. The gods decreed it at some time in the past and that's the way it is. Get used to it, is my advice. I think it falls under the category of "direct graphics", which I understand to read "hopeless". :-)

Knowing this, of course, allows you to work around it. Most of us build "wrappers" that allow us to switch from our graphics device back to our display device, and visa versa. We change the thickness of plots, the fonts, and all of the myriad other things we have to tweak to work around this creaky system. Here is another thing to go in there.

Cheers,

David

--

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

Subject: Re: WIN device color and backgnd reset after set_plot command
Posted by [David Fanning](#) on Thu, 26 Jan 2006 10:21:37 GMT

David Fanning writes:

- > I think it falls under the
- > category of "direct graphics", which I understand to
- > read "hopeless". :-)

"Hopeless" is too strong a word, and emotionally laden, to boot. Perhaps "unchanging" is a better choice and more accurately reflects my understanding of the situation.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Subject: Re: WIN device color and backgnd reset after set_plot command
Posted by [Paolo Grigis](#) on Thu, 26 Jan 2006 10:33:00 GMT

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- > [...]
- >
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- > mindlessly sets !P.Color to what had previously been
- > !P.Background and sets !P.Background to 0.
- >
- > Why? I don't know why.

Maybe to lower the toner consumption rate? It may have been implemented after the discovery of scientists printing tons of pages featuring white plots on black background, giving nightmares to the people in the budget department ;-)

Ciao,
Paolo

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> category of "direct graphics", which I understand to
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> fonts, and all of the myriad other things we have to
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>
> Cheers,
>
> David
>
>

Subject: Re: WIN device color and backgnd reset after set_plot command
Posted by [David Fanning](#) on Thu, 26 Jan 2006 14:21:16 GMT
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Paolo Grigis writes:

>> Why? I don't know why.
>
> Maybe to lower the toner consumption rate? It may have been
> implemented after the discovery of scientists printing
> tons of pages featuring white plots on black background,
> giving nightmares to the people in the budget department ;-)

Oh, I understand why they switched *that*. Have you ever
made the mistake of printing a page with a black background?
You can hardly pick the soggy mess up!

No, I was complaining about *always* setting the background
color index to 0 when they switch back, instead of keeping
track of what it was before and switching back to that.
This seems to me to be a simple programming error that has
persisted in IDL almost from the beginning of time.

Cheers,

David

--

David Fanning, Ph.D.

Subject: Re: WIN device color and backgnd reset after set_plot command
Posted by [guillaume.drolet.1](#) on Thu, 26 Jan 2006 15:12:31 GMT
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Thanks David for elucidating some of the mysteries of Direct Graphics.
I guess I'll write wrappers too...

Cheers,

Gui

Subject: Re: WIN device color and backgnd reset after set_plot command
Posted by [K. Bowman](#) on Thu, 26 Jan 2006 17:30:23 GMT
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In article <1138288351.728855.205420@g14g2000cwa.googlegroups.com>,
[guillaume.drolet.1@ulaval.ca](#) wrote:

> Thanks David for elucidating some of the mysteries of Direct Graphics.
> I guess I'll write wrappers too...
>
> Cheers,
>
> Gui

Liam Gumley has some nice wrapper programs for PS here

<http://gumley.com/>

Or you can try mine, which are based on Liam's but work slightly differently,
from here

<http://idl.tamu.edu/>

Either one could be customized.

Ken Bowman
