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Subject: Re: Why does color change to b/w when using PNG?  
Posted by [David Fanning](#) on Fri, 19 Mar 2004 22:12:16 GMT  
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Lawrence Bleau writes:

```
> Previously, we were using the ps device (SET_PLOT,'PS') and generating
> PostScript files for each plot. We now want to generate PNG files as well.
>
> I copied all the IDL code that generated the PostScript file, changed
> SET_PLOT,'PS' to SET_PLOT,'Z', removed most of the device commands (since
> few of them apply to the Z device), and ran the IDL code to test it out.
>
> It ran without errors, which is the good news. The bad news is that the
> output PNG file seems to be almost all black, with a few white dots where
> the data should be, and absolutely no color; the original had color all
> over the place. Sounds like a simple case of the color table being wrong,
> I thought.
>
> But wait: the PS device used a color table, too, and I didn't change that
> part of the code at all! Here's the code that sets up the color table:
>
> ; set up a simple color table
>
> bbc = 255b
> bfg = 0b
>
> red = [bbc, bfg, 255b, 0b, 0b, 0b, 255b, 255b, 255b, 127b, 0b, $
>        0b, 127b, 255b, 85b, 170b]
> gre = [bbc, bfg, 0b, 255b, 0b, 255b, 0b, 255b, 127b, 255b, 255b, $
>        127b, 0b, 0b, 85b, 170b]
> blu = [bbc, bfg, 0b, 0b, 255b, 255b, 255b, 0b, 0b, 0b, 127b, $
>        255b, 255b, 127b, 85b, 170b]
>
> tvlct, red, gre, blu
> tvlct, bfg, bfg, bfg, !d.n_colors-1
>
> I checked, and print,!d.n_colors-1 displays 255.
>
> So, what's different between these two plot types (PS vs. PNG) that would
> cause the same code to produce different results?
```

I think if you stay away from using color index 0 and color index 255 in your color tables you will be fine. In PostScript, of course, you can have any background color you like as long as it is white. (Another way to say this is that PostScript ignores the color loaded in to index 255.) PNG is not so particular. What happens when you run this program on your display? What does it look like then? That is what it

is going to look like in PNG, probably.

Anyway, this kind of thing is done all the time (even, I suppose, on OpenVMS systems). You really should be able to make identical plots without much difficulty. :-)

Cheers,

David

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

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