
Subject: 8-bit Postscript problem (Will IDL and color Postscript *ever* get along?)

Posted by [brac00_at_PsU_dot_EdU](#) on Thu, 06 Jul 2006 21:51:19 GMT

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Hello, I know this subject has (had) come up many times for over a decade, and from what I can tell on this newsgroup, seemed to be worked out to a great extent by say 2004.

My problem is a 'classic' (?) where color postscript output is only 16 colors. That is, I'm trying to make a Postscript color image, but I get 'blocky' colors - i.e., only 16 of them.

But the twist (or me missing something) is that

1) I am using David Fanning's flexible TVIMAGE program (thanks! great prog btw),
and

2) I explicitly set `DEVICE, BITS=8, COLOR=1, ENCAPSULATED=1` after doing `SET_PLOT,'ps'`.

A curious thing, though: using Fanning's COLORBAR program produces 256-color output on the Postscript plot, so the bar looks nice and the plot is crude/blocky/pixelly/ick. Also, doing a `LOADCT` after setting to PS output does not help.

Could anyone help or offer any suggestions for this seemingly ancient/solved problem?

Thanks,
-M. Kelly,
PSU Meteorology

Hofstadter's Law:

"It [a task] always takes longer than you expect, even when you take into account Hofstadter's Law."

Subject: Re: 8-bit Postscript problem (Will IDL and color Postscript *ever* get along?)

Posted by [David Fanning](#) on Tue, 11 Jul 2006 18:07:33 GMT

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M-K writes:

> Oddly, doing

```
> set_plot, 'ps' & !P.Font=0
> DEVICE, BITS_PER_PIXEL=8, COLOR=1, FILE=fnam, $
> /ENCAPS, XSIZE=7, YSIZE=4, /INCHES
> Help, /DEVICE
>
> confirms 8 bits per pixel; the output is:
>
> Current graphics device: PS
> Mode: Portrait, Encapsulated, EPSI Preview Disabled, Color Enabled
> Output Color Model: RGB
> ... { offset, size, preview stuff here, Scale Factor is 1 }
> ...
> Font: Helvetica TrueType Font: <default>
> # bits per image pixel: 8
> Font Mapping: ...
>
> So somehow the colorbar output is nice, but the TVImage output
> is pixelly or not enough colors, despite BITS_PER_PIXEL=8.
> Could there be a pixel scaling problem with Postscript?
```

If there is, it would be the first time I've ever heard of it.
I'll be honest, I am completely mystified. I guess the only
thing to try now is prayer, with maybe a histogram plot of
the data you are trying to display as an image to see if
there is something wrong there. But it looks to me like you are
doing all the right things. Strange... PostScript is always
ultra reliable. :-)

Cheers,

David

--

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