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 View Forum Message <> Reply to Message

Them I erain indeedage to hopey to indeed

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

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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