
Subject: Re: Why plots shown on screen and postscript are different?

Posted by [David Fanning](#) on Wed, 11 Feb 2009 14:02:37 GMT

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T.H. writes:

> I've found that most of the time postscript plotting is more trouble
> than it's worth. If I have a plot on screen that I wish to keep I
> usually save it as PNG using a command something like.....
>
> WRITE_PNG, filename, TVRD()

Humm, well, we all have our own standards, I guess. :-)

This notion of how to write a program that looks good on the display and in a PostScript file comes up over and over. It really is quite simple to do, and the clues are all over my web page, although oddly they have never been collected in a single article. I should do that if I ever get a break from my stats homework. :-(

The basics are quite simple. Protect non-PostScript commands in your program. What are "non-PostScript commands"? There are only a handful:

Erase
WSet
Window
Device, Decomposed=1

You "protect" them like this (demonstrated with the Window command):

```
IF (!D.Flags AND 256) NE 0 THEN Window
```

Next, you take care that you use a minimum number of system variables to affect your plots, etc. Rather, use keywords on the Plot commands themselves whenever possible.

Then, you have to set the PostScript device up appropriately. I always use PSConfig for this. You can use PSConfig with a graphical user interface or not. It is up to you.

And, finally, you typically have to choose a hardcopy or true-type font. I typically use true-type fonts.

I accomplish setting up the PostScript device, getting my fonts correct, etc. with PS_START. This will also make

the PostScript output have the same aspect ratio as your current graphics window (a property of PSConfig), so what you get in PostScript looks very much like what you see on your display. I close everything up with PS_END.

PS_END has the added ability to make JPEG, PNG, and TIFF file output from the PostScript output, using ImageMagick, which creates image output with very nice looking fonts, suitable for viewing in presentations, on a web page, etc.

All of the programs I mentioned are part of the Coyote Library:

<http://www.dfanning.com/documents/programs.html>

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.")
