Jared Espley writes:

> I have a few questions that I haven't been able to answer with some
> digging around on the web and in the IDL help files so maybe someone
> can help. The background on my question is that I'm trying to produce
> a "publication" quality plot using IDL and I intend to either make a
> .tif from a screen capture using tvread.pro
> (http://www.dfanning.com/programs/pswindow.pro) or a color .eps using
> postscript output.   I'm using IDL 6.2 on Windows XP.
>
> 1. Has anyone been able to get True Type fonts (i.e. !p.font=1) to look
> ok on the screen?

No. This is an item with a long history, but I think I can
say with some assurance that direct graphics fonts will NEVER
look good on the screen. To make them look good requires bitmaps,
apparently, and IDL direct graphics does not have the machinery
to manipulate bitmaps quickly. OpenGL *does* have the machinery,
which is why screen fonts can (and do) look good in object
graphics programs.

> 2. Has anyone been able to get device fonts (i..e !p.font=0) to work
> correctly with vertical axis labels on the screen?

No, screen fonts do not rotate on your display. They rotate
in PostScript, but only in the XY plane, not in 3D.

> 3. Assuming I could get the fonts to work correctly, how do I get
> special symbols? For example, using vector fonts, I would type,
> "title='!4d!B'" to get little delta B -- how can I do this with the
> other font styles?

Symbols in Postscript usually require UNICODE characters.
Here is an article that explains the situation in a lot
more detail:

  http://www.dfanning.com/graphics_tips/lesign.html

> 4. How come when I make sure that my plot size is the same on both the
> output window on my monitor and in the postscript output (by using
> David Fanning's pswindow.pro
> http://www.dfanning.com/programs/pswindow.pro) then I still have to
> adjust the positions of my plots, colorbars, etc. to make both outputs
> look the same?

Humm. Not sure about this. Probably because your
programs are written incorrectly. I've never found
this to be a problem. Are you trying to position things
in Device coordinates? That would wreak havoc.

> 5. It appears that the color output of the .eps file I make has very
> discrete color levels (about 10 or so) compared to the fairly smooth
> continuum I see when I output to a window on the screen. Is this a
> fundamental limit of postscript or am I doing something wrong?

This is something you are doing wrong. Probably you set the COLOR=1
keyword, but forgot the BITS_PER_PIXEL=8 keyword for the DEVICE
command.

Since you are already using PSWINDOW and other programs, why
not just use PSCONFIG to get your PostScript page set up.
Then most of these problems will be avoided.

```
  keywords = PSCONFIG(_Extra=PSWINDOW(), Cancel=cancelled)
  IF ~cancelled THEN BEGIN
 thisDevice = !D.Name
     Set_Plot, 'PS'
     Device, _Extra=keywords
     YourPlotHere
     Device, /Close
     Set_Plot, thisDevice
  ENDIF
```

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")