Subject: Re: More Q's on TV and Postscript
Posted by steinhh on Wed, 31 Aug 1994 10:56:35 GMT
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In article <340vtmINN5tv@lanews.la.asu.edu>, rouse@sevens.la.asu.edu (Roger Rouse) writes:
|> Now that I can actually see the postscript output I've three more questions.
|>
|> 1. How do I get the picture to be black on white? If I try this trick
|>
|>   a(where(a eq 0B)) = 225B
|>
|>   then any plots that are with the picture disappear since plots are
|>   done in black. This also makes the picture look very different! I've
|>   also tried reloading the color arrays after set_plot,'ps' with and
|>   without giving /COLOR in the call to DEVICE. What's the catch?

It's usually best done by redefining color 0 to be white, and color 255
to be black, use "TVLCT" (I think), first to get the color table,
modify it, and then put it back. I.e.:

```
tvlct,r,g,b,/get_.... ; (NOT sure about the actual wording here, butt..)
r(0)=255 & g(0)=255 & b(255)=255 ; Color 0 has full intensity -- white
r(255)=0 & g(255)=.....          ; Color 255 has no intensity -- black
tvlct,r,g,b          ; Put color table back
```

You might not have 255 colors available, so ther might be some few changes..

|>
|> 2. I would also like to use PLOTS to draw circles and things on the picture.
|>   How can I position them correctly given that the position and size of the
|>   picture is specified in centimeters (or inches) not NORMAL, DATA, or even
|>   DEVICE coordinates?
Use:

```
DEV_COORD = convert_coord([x,y],/data,/to_device)   ; Put something at [x,y]
plots,x,y,/device
```

You could, of course, also use /to_normal and /normal..

|>
|> 3. Wouldn't it be nice if TV understood all of the !p variable especially
|>   !p.multi. Has anyone developed or know of a procedure, say PTV, that works
|>   like PLOT (or PLOTS) but draws an image instead of a graph? If you've only
|>   one picture then things go smoothly, but if you what a graph with a picture
|>   next to it or some other combination things get complicated.

I'll leave this to Bill :-) (Thompson)

|>
|> I think that I can do what I want in the window, but the conversion to
|> postsrcipt does not reproduce what's in the window. I've tried using
|> TVRD but then you have the black-on-white problem again.
|>
Generally, this is not a good idea. Make your plots/tv statements as device
independent as possible, and use them (possibly slightly rewritten) separately
for PS devices. A piece of paper has a lot more pixels than a computer screen!

Stein Vidar

Subject: Re: More Q's on TV and Postscript
Posted by thompson on Wed, 31 Aug 1994 12:28:23 GMT
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steinhh@amon.uio.no (Stein Vidar Hagfors Haugan) writes:

> In article <340vtmINN5tv@lanews.la.asu.edu>, rouse@sevens.la.asu.edu (Roger Rouse)
writes:

> |> 3. Wouldn't it be nice if TV understood all of the !p variable especially
> |> !p.multi. Has anyone developed or know of a procedure, say PTV, that
> |> works like PLOT (or PLOTS) but draws an image instead of a graph? If
> |> you've only one picture then things go smoothly, but if you what a
> |> graph with a picture next to it or some other combination things get
> |> complicated.

> I'll leave this to Bill :-) (Thompson)

I had responded privately to this, but now that my name has been taken in vain
(;^)) I will point out that I have a routine to do this called PLOT_IMAGE which
can be obtained via anonymous ftp from idlastro.gsfc.nasa.gov in the directory
contrib/thompson/image_display, or as a URL

 ftp://idlastro.gsfc.nasa.gov/contrib/thompson/image_display

Look at the README file and the LaTeX file image_display.tex (in
contrib/thompson) for more information. The software in this directory also
addresses some of the other points raised by the original post.

Bill Thompson
