
Subject: Re: colorbar positioning in postscript
Posted by [David Fanning](#) on Mon, 13 Nov 2006 14:38:39 GMT
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Jess writes:

> I am using David Fannings colorbar routine to place a colorbar on the
> RHS of my image which I want to write to postscript. Positioning both
> image and colorbar in normalised coords (using tvimage for the image).
> Thanks David for the great routines tvimage and colorbar. When writing
> to PS device, I am scaling the positions from normalised coords to the
> size of the PS image, but this is causing a call to axis in colorbar
> to crash with:
>
> % AXIS: Data coordinate system not established.
> % Error occurred at: COLORBAR 353
> /usr/local/rsi/add-ons/fanning/colorbar.pro
>
> Can someone point out where I went wrong?

I think you went wrong when you thought you needed to do something different for PostScript. Both of those routines were written expressly so that you do NOT have to do anything different to get them to work in PostScript.

I simply make my PostScript "window" the right size, and just call the same routine that places the graphics in the display window. If graphics are placed with normalized or data coordinates, they should show up in the same locations in both windows.

Have you tried this simpler approach?

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.")

Subject: Re: colorbar positioning in postscript
Posted by [jesscobrien](#) on Mon, 13 Nov 2006 15:51:37 GMT

Hi David,

- > Both of
- > those routines were written expressly so that you
- > do NOT have to do anything different to get them
- > to work in PostScript.
- >
- > I simply make my PostScript "window" the right size,
- > and just call the same routine that places the graphics
- > in the display window. If graphics are placed with
- > normalized or data coordinates, they should show up
- > in the same locations in both windows.

Originally I tried writing to postscript using these normalised positions, but didnt realise I needed to get the size of the postscript window right. So have removed my rescaling of the positions. And set my postscript window size such that it has the same aspect ratio as the image + colorbar combined. However this aspect ratio doesnt cater for the axis annotations of the image and colorbar, which change the aspect ratio, so my PS version shows the colorbar oversized relative to the image. How can I get the full region of my image and colorbar, including the space taken up by annotations, so that I can set the PS size with the correct aspect ratio?

Thanks,
Jess

Subject: Re: colorbar positioning in postscript
Posted by [David Fanning](#) on Mon, 13 Nov 2006 16:17:25 GMT
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jesscobrien@gmail.com writes:

- > Originally I tried writing to postscript using these normalised
- > positions, but didnt realise I needed to get the size of the postscript
- > window right. So have removed my rescaling of the positions. And set my
- > postscript window size such that it has the same aspect ratio as the
- > image + colorbar combined. However this aspect ratio doesnt cater for
- > the axis annotations of the image and colorbar, which change the aspect
- > ratio, so my PS version shows the colorbar oversized relative to the
- > image. How can I get the full region of my image and colorbar,
- > including the space taken up by annotations, so that I can set the PS
- > size with the correct aspect ratio?

Say what!? :-(

Here is how I do this, assuming I have just displayed my graphics in a window on my display to see how it all looks, with my graphics display command DoMyThingHere:

```
; Set up PS with same aspect as display window
keywords = PSConfig(_Extra=PSWindow(), CANCEL=cancelled)
IF ~cancelled THEN BEGIN
  thisDevice = !D.Name
  thisFont = !P.Font
  !P.Font = 1
  Set_Plot, 'PS'
  Device, _Extra=keywords
  DoMyThingHere
  Device, /Close
  !P.Font = thisFont
  Set_Plot, thisDevice
ENDIF
```

Perhaps this is a problem with how DoMyThingHere is written. I don't know. I've just never run into the problems you seem to be having.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: colorbar positioning in postscript

Posted by [jesscobrien](#) on Mon, 13 Nov 2006 17:16:13 GMT

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It just had a very silly error.

Was using

```
pos_image = [0.15,0.15,0.75,0.95]
pos_bar = [0.75,0.2,0.85,0.8]
```

when x and y span of pos_image should have been the same as the image is square and I call tvimage with /keep_aspect_ratio. ie. I should have used:

```
pos_image = [0.15,0.2,0.75,0.8]
pos_bar = [0.75,0.2,0.85,0.8]
```

Sorry for all the hassle. Thanks for writing the psconfig package. I'm sure I will use it many a time in future.

- Jess
