Subject: Re: How do I place an image when I am using !P.Multi? Posted by David Fanning on Mon, 23 Jun 2014 17:16:15 GMT

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Madhavan Bomidi writes:

```
cgPS_Open,FigFileName,FONT=-1, CHARSIZE=0.6
>
>
    ; Setting variables to plot
>
    thick = (!D.Name EQ 'PS') ? 2 : 1 ; Setup variable to the plot
>
>
    ; Display window
>
    cgDisplay,XSIZE=2000,YSIZE=1500 ; Create a map projection space
>
>
    !P.Multi=[0,2,2]; 2 columns X 2 rows
>
>
    pos1 = [0.05, 0.49, 0.5, 0.89]
>
    pos2 = [0.57, 0.55, 0.92, 0.9]
>
    pos3 = [0.07, 0.1, 0.5, 0.40]
>
    pos4 = [0.6, 0.1, 0.90, 0.40]
>
>
    ; Sub-Plot#1
>
>
>
>
    ; Sub-Plot#2
>
    READ_JPEG,SkyImgFile,img1,ORDER=1
>
    cgImage,img1,/NOERASE,Position=pos2,/KEEP ASPECT RATIO
>
>
    ;Sub-Plot#3
>
>
>
    ;Sub-Plot#4
>
>
     cgHistoplot,flux,/Frequency,/OProbability,ProbColorName='red',$
>
     ProbThick=2, PolyColor='dodger blue', /NAN, DataColorName='navy', $
>
     POSITION=pos4,XTITLE='Flux in W/m^2', Charsize=0.85,$
>
      /LINE FILL,LINE THICK=2,/OUTLINE,SMOOTH=1,THICK=2,XRange=[0. 0,1.2], $
>
     FONT=-1,YRange=[0.0,0.5]
>
>
    !P.Multi=0
>
>
>
    cgPS_Close
>
    ; Create a PNG file with a width of 1500 pixels
>
    cgPS2Raster,FigFileName,/PNG, Width=1500
>
```

>

> Please let me know where I am going wrong!!!

Well, you are doing quite a lot of things...I hestitate to use the word "wrong", but certainly "unnecessarily"...which in combination are giving you a lot of trouble.

There are still a few people who disagree with me, but I do think it is a grave error to use !P.MULTI and the POSITION keyword at the same time. If it is not "wrong", then it is certainly responsible for weeks, if not months, of head scratching. It wouldn't surprise me to learn that just removing the position keywords allowed you to muddle through with these plots in some form you could live with.

You set the plot up like this:

```
    cgPS_Open,FigFileName,FONT=-1, CHARSIZE=0.6
    ; Setting variables to plot
    thick = (!D.Name EQ 'PS') ? 2 : 1 ; Setup variable to the plot
    ; Display window
    cgDisplay,XSIZE=2000,YSIZE=1500 ; Create a map projection space
```

This may be exactly what you want, but there is usually no need for all this. cgPS_Open will do all the character sizing and changing of line thicknesses for you if you just get out of its way. I've always found it to go a great job with this, but there are people who like to tweak it. You may be one of them.

I'm not sure exactly what you are doing with cgDisplay, but I can assure you it is NOT creating a PostScript page that is 2000 by 1000 pixels in size, which seems your intention here. I'm on vacation and so can't test this readily this morning, but I suspect it is simply giving you a PostScript "page" that has this aspect ratio. That is it's normal job in a PostScript file.

I'm not sure why you are using a NOERASE keyword on the cgImage call, but that might really mess up your following histogram, if you are using !P.Multi to set the position. cgImage will do the right thing when using it with !P.Multi without having to manipulate it in any way.

If you want to fill up the !P.Multi position space with your image, don't set the KEEP_ASPECT keyword. If you do set the keyword, it will fill the space while keeping the aspect ratio. If you want the image to fill less of the space, use the MULTIMARGIN keyword. The image is really small right now because you are giving it so many contradictory messages it doesn't know if it is coming or going.

Good luck with this!

Cheers,

David

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

Sepore ma de ni thue. ("Perhaps thos speakest truth.")