
Subject: Re: Postscript device coordinates

Posted by [mchinand](#) on Thu, 31 Aug 2006 17:51:06 GMT

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In article <1157045037.993836.3160@e3g2000cwe.googlegroups.com>, greg michael <greg.michael@gmail.com> wrote:

```
>
> I'm trying to make a plot with an exact print-size - 2 cm per tick mark
> - using the PS device.
>
> Setting up the plot window works ok:
>
> set_plot,'PS'
>
> xrange=[-3,1]
> yrange=[-4,2]
> xticks=xrange[1]-xrange[0]
> yticks=yrange[1]-yrange[0]
>
>
> device,/encapsulated,filename="test.eps",/helvetica,xsize=xticks*2.+3.,ysize=yticks*2.+3.
>
> Then I hoped to be able to specify the plot region in centimetres using
> 'position':
>
>
> plot,[0],[0],/nodata,xrange=10.^xrange,/xlog,yrange=10.^yrange,/ylog,/isotropic,$
>   position=[2.,2.,2.+xticks*2.,2.+yticks*2.],/device,$
>   xticks=xticks,yticks=yticks
>
> device,/close_file
>
> Seems the device coordinates are not cm, since all I get is a spot in
> the bottom left corner. By trial and error, I find that if I multiply
> the position array by 1000, I get more or less something which fills
> the window. But I don't know where this 1000 figure comes from: does
> anyone know what it means? And how I can calculate the exact value?
>
> many thanks,
> Greg
```

```
IDL> set_plot,'PS'
IDL> print, !D.X_PX_CM
      1000.00
IDL> print, !D.Y_PX_CM
      1000.00
```

IDL help says these variables are the approximate number of pixels per centimeter in the X and Y

directions.

--Mike
