
Subject: Re: Mac display help
Posted by [davidf](#) on Wed, 25 Aug 1999 07:00:00 GMT
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Barbara A Cohen (bcohen@lpl.arizona.edu) writes:

> Hi, I have been using idl for about a year on a UNIX system, where I output
> everything to a postscript file, looked at the postscript, and made
> adjustments as necessary to xyouts, etc. I have just gotten idl for
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> to do is have a display window that at least positions everything the way
> it will come out when I write to postscript. As it is now, the positions
> and thicknesses are all weird. I'm sorry if this is an old question
> but does anyone know how to deal with the Mac display windows?

Uh, normalized coordinates. All the time. Every time. Every where. :-)

Cheers,

David

P.S. Lot's of good tips about PostScript output in the
Producing Perfect PostScript Output section of my IDL
Tips page:

<http://www.dfanning.com/documents/tips.html>

--

David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

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Subject: Mac display help

Posted by [bcohen](#) on Thu, 26 Aug 1999 07:00:00 GMT

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Barbara Cohen]

bcohen@lpl.arizona.edu

--

Subject: Re: Mac display help

Posted by [davidf](#) on Thu, 26 Aug 1999 07:00:00 GMT

Liam Gumley (Liam.Gumley@ssec.wisc.edu) writes:

> To create a graphics window with the same aspect as a portrait or landscape
> page:

Liam supplies some good advice here.

I tend to work the other way around. I want my
PostScript "window" to have the same aspect ratio
as the current graphics window. I do this:

```
keywords = PSWindow()  
Set_Plot, 'PS'  
Device, _Extra=keywords
```

And I am ready to go.

You can find the PSWINDOW program on my web page:

<http://www.dfanning.com/programs/pswindow.pro>

Cheers,

David

--

David Fanning, Ph.D.

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Subject: Re: Mac display help

Posted by [Liam Gumley](#) on Thu, 26 Aug 1999 07:00:00 GMT

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To create a graphics window with the same aspect as a portrait or landscape
page:

```
;- Create window with portrait aspect  
device, get_screen_size=screen_size  
ysize = screen[1] - 100  
xsize = long(ysize * (8.5 / 11.0))  
window, /free, xsize=xsize, ysize=ysize
```

```
;- Create window with landscape aspect
```

```
device, get_screen_size=screen_size
xsize = screen[1] - 100
ysize = long(xsize * (8.5 / 11.0))
window, /free, xsize=xsize, ysize=ysize
```

;- To set the vector fonts to an appropriate size
device, set_character_size=[10, 12]

To set up Postscript portrait and landscape mode pages:

;- Portrait mode on 8.5 x 11 in. page with 0.75 in. margin
device, /inches, xsize=7.0, ysize=9.5, xoffset=0.75, yoffset=0.75

;- Landscape mode on 11 x 8.5 in. page with 0.75 in. margin
device, /inches, xsize=9.5, ysize=7.0, xoffset=0.75, yoffset=10.25

If you then use normalized coordinates and/or !p.multi for positioning, your Postscript output should look just about the same as it does in a graphics window.

Cheers,
Liam.

--

Liam E. Gumley
Space Science and Engineering Center, UW-Madison
<http://cimss.ssec.wisc.edu/~gumley>

Subject: Re: Mac display help
Posted by [woodford](#) on Thu, 26 Aug 1999 07:00:00 GMT
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In article <7q23jj\$7h1\$1@news.ccit.arizona.edu>, bcohen@lpl.arizona.edu
(Barbara A Cohen) wrote:

> I tried installing
> GhostScript but it makes my computer crash every time.

What ghostscript are you using? I have done fine with MacGS 5.50,
although it's a bit slow.

--

Paul Woodford
woodford@essexcorp.com

-----== Posted via Newsfeeds.Com, Uncensored Usenet News ==-----

Subject: Re: Mac display help
Posted by [Liam Gumley](#) on Thu, 26 Aug 1999 07:00:00 GMT
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> and thicknesses are all weird. I'm sorry if this is an old question
> but does anyone know how to deal with the Mac display windows? Thanks
> in advance for anyone's suggestions...

Barbara,

David's previous comments about normalized coordinates are very important. What he means is that everything on your display should be positioned using normalized coordinates, not pixel coordinates. Another tip is to create a display window which has the same aspect as a printed page. The following example shows how to do this for Landscape output. Start a new IDL session, and try the following:

```
;- Create a graphics window with the same aspect as a landscape page
device, true=24, decomposed=0, retain=2
window, /free, xsize=924, ysize=714
device, set_character_size=[10, 12]
```

```
;- Display a surface plot and label
loadct, 0
shade_surf, dist(32), position=[0.2, 0.2, 0.5, 0.5], charsize=2
xyouts, 0.75, 0.75, 'IDL Surface Plot', /normal, align=0.5, charsize=2
```

```
;- Change to Postscript landscape mode
set_plot, 'PS'
device, /landscape, /color, bits=8
```

```
;- Display a surface plot and label
loadct, 0
shade_surf, dist(32), position=[0.2, 0.2, 0.5, 0.5], charsize=2
xyouts, 0.75, 0.75, 'IDL Surface Plot', /normal, align=0.5, charsize=2
```

```
;- Close the Postscript file  
device, /close
```

You should see that the Postscript output looks very similar to the display window. Note how the POSITION keyword was used to position the surface plot using normal coordinates, which start at 0.0,0.0 at the bottom left, and end at 1.0,1.0 at upper right. For more information, type

? normal coordinates

at the IDL command line.

Cheers,
Liam.

PS: *And* check out David's tips for perfect Postscript output.

--

Liam E. Gumley
Space Science and Engineering Center, UW-Madison
<http://cimss.ssec.wisc.edu/~gumley>

Subject: Re: Mac display help
Posted by [m218003](#) on Fri, 27 Aug 1999 07:00:00 GMT
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Hell! I am just trying to make IDL popular among my colleagues over here:

```
;- Create window with portrait aspect  
device, get_screen_size=screen_size  
ysize = screen[1] - 100  
xsize = long(ysize * (21./29.7)) ; <-----  
window, /free, xsize=xsize, ysize=ysize
```

```
;- Create window with landscape aspect  
device, get_screen_size=screen_size  
xsize = screen[1] - 100  
ysize = long(xsize * (21./29.7)) ; <-----  
window, /free, xsize=xsize, ysize=ysize
```

```
;- To set the vector fonts to an appropriate size  
device, set_character_size=[10, 12]
```

To set up Postscript portrait and landscape mode pages:

```
;- Portrait mode on A4 page with 2 cm margin <-----  
device, /inches, xsize=21./2.54, ysize=29.7/2.54, xoffset=2./2.54, $
```

yoffset=2./2.54

```
;- Landscape mode on A4 page with 2 cm margin <-----
device, /inches, xsize=29.7/2.54, ysize=21./2.54, xoffset=2./2.54, $
    yoffset=(29.7-2.)/2.54
```

If you then use normalized coordinates and/or !p.multi for positioning, your Postscript output should look just about the same as it does in a graphics window.

But otherwise: Thanks a lot for this, Liam!!

Martin

[illegible]