
Subject: Re: plots for printing

Posted by [Liam E. Gumley](#) on Thu, 26 Jul 2001 22:11:03 GMT

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"Dominik Paul" <dpaul@ukl.uni-freiburg.de> wrote in message
news:9jp1ne\$14p\$1@n.ruf.uni-freiburg.de...

> I need some plots for my report. And I made these plots with IDL (very
good
> programm for visualisation). Than I take screen shots of the pictures and
> used it for printing.
>
> The result was a wuite bad quality. Does somebody know, how I could do
this
> in a better way to get a good resolution for printing (maybe 300 dpi)?

Several people have recommended PostScript output to solve this problem.
However the PostScript device can be difficult to configure. My usual mode of
operation is to create the plot in a graphics window first, and when I'm
happy with it, I send the plot to the PostScript device with the same aspect
ratio and relative font sizes as the graphics window. The PSON and PSOFF
routines described in my book "Practical IDL Programming" are designed for
this purpose. These programs can be downloaded in the package of sample
programs available at

http://www.gumley.com/PIP/About_Book.html

For example, say you created the following plot in a graphics window:

```
window, /free  
device, decomposed=0  
z = dist(64)  
z = shift(z, 32, 32)  
z = exp(-(z * 0.1)^2)  
loadct, 3  
shade_surf, z, xstyle=1, ystyle=1, charsize=2, $  
  pixels=1000, xmargin=[4, 1], ymargin=[1, 0]
```

To reproduce the plot in a PostScript file:

```
pson  
loadct, 3  
shade_surf, z, xstyle=1, ystyle=1, charsize=2, $  
  pixels=1000, xmargin=[4, 1], ymargin=[1, 0]  
psoff
```

The first call to PSON selects the PostScript device, and opens an output
file named 'idl.ps' by default. It also configures the PostScript device to
have the same aspect ratio as the current graphics window, selects color

output by default, and sets the PostScript font size to the same relative size as the graphics window. After the plot is created, PSOFF closes the output file, and reselects the graphics device that was active before PSON was called.

I used PSON and PSOFF to generate most of the figures in my book, and I continue to find these routines useful for creating PostScript output. For more details, see the book.

Cheers,
Liam.
Practical IDL Programming
<http://www.gumley.com/>
