Subject: Re: Using Postscript & Colours in IDL
Posted by liamgumley on Mon, 28 Jan 2008 16:11:54 GMT
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On Jan 28, 9:10 am, chloesharro...@gmail.com wrote:
> Sorry, I know I'm being really slow/annoying, but I'm still completely
> lost! I have tried using Liam Gumley's book (I have it in front of me
> as I type), but am still completely lost with using colours in
> postscript output (I can't follow his examples because I don't
> understand the basics - I don't know the difference between an 8-bit
> mode or 24-bit display etc.

Chloé,

I agree that graphics in IDL can be a bit confusing. Here's a simple example, based on the LOADCOLORS (p. 249), PSON (p. 362), and PSOFF (p. 366) sample programs from my book. First, download and unzip the sample program zip file (PIP_programs.zip) from

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

Start a new IDL session, and then change to the directory where you unzipped the sample programs, e.g.,

```
IDL> cd, '/home/chloe/PIP_programs'
```

Then try this example program which first renders a multi-color plot onscreen, and then sends the same plot to a PostScript output file named test.ps.

```
;===
PRO TEST_PLOT

x = [0, 1, 2, 3, 4]
y = [0, 2, 4, 6, 8]

;- Create the plot onscreen
loadcolors
plot, x, y, title='My Test Plot', background=7, color=0, /nodata
oplot, x, y * 1.00, psym=4, symsize=2, color=4
oplot, x, y * 0.50, psym=5, symsize=2, color=5
oplot, x, y * 0.25, psym=6, symsize=2, color=6

;- Repeat the plot to PostScript output
loadcolors
pson, filename='test.ps'
plot, x, y, title='My Test Plot', background=7, color=0, /nodata
oplot, x, y * 1.00, psym=4, symsize=2, color=4
```

```
oplot, x, y * 0.50, psym=5, symsize=2, color=5
oplot, x, y * 0.25, psym=6, symsize=2, color=6
psoff

END
;===
```

Note that the PSON and PSOFF routines make it easy to switch on and switch off the PostScript device. If you want to add the sample program directory to your IDL path so that PSON and PSOFF are always available, regardless of which directory you are in when you start IDL, then create an IDL startup file as explained on p. 204. My IDL startup file looks like this:

```
if !version.os_family eq 'unix' then device, true_color=24
window, /free, /pixmap, colors=-10
wdelete, !d.window
device, decomposed=0, retain=2, set_character_size=[10, 12]
device, get_visual_depth=depth
compile_opt idl2
!path = !path + ':/home/gumley/idl/PIP_programs'
print, 'Display depth: ', strcompress(depth)
print, 'Color table size: ', strcompress(!d.table_size)
print, 'Default integer type: ', size(0, /tname)
journal
```

Cheers,
Liam.

Practical IDL Programming
http://www.gumley.com/