
Subject: Re: PostScript and IDL, why object graphics ?
Posted by [Martin Schultz](#) on Thu, 28 May 1998 07:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

others wrote [...]

Thanks for this discussion!! Just two days ago I sneaked into one of these "technical seminars" that RSI gives these days, and I must say I was really amazed by the live_tool and object graphics capabilities. *BUT* in my work I completely depend on being able to produce publishable figures (and even with direct graphics this is often a major step after having a the data on the screen, especially when maps are involved). One aspect that is too often forgotten in all this object oriented stuff is the "reproducibility" of a plot. E.g. I make a plot of some preliminary data, and of course it is nice to optimize this plot with the help of a few mouse clicks, i.e. in object graphics. But then I want to reproduce the exact same plot with the final data that comes in a few weeks/months later. With conventional direct graphics, I only have to rerun my program and that's it. With object graphics, after rerunning my program I would have to go through all this clicking again, and it is very likely that I forget a few important clicks. And this situation becomes even worse when I have to process not only one data set but order 100. Then I don't want one single click in order to prevent RSI ("repetative stress syndrome", a big issue here at Harvard ;-). Now, I must admit, I haven't really used IDL object graphics too much, but my experience from EXCEL and others which presumably have a similar underlying concept warns me. I guess one solution would be to have some kind of program generator from object graphics. If I understand the live tools correctly, one can use them in the same manner as e.g. the plot command. If there were a way to generate a program from the final plot (this would generate a call to live_plot with all the view parameters that are necessary to reproduce exactly the same graph: scaling, line thicknesses, types, symbols, etc.) it would help a lot -- but of course only if there was also a true ps output capability.

As far as WYSIWYG is concerned, I think the direct graphics routines could also be improved. One solution would be to have a "screenps" device which would produce the plot exactly as on the postscript page but with reduced resolution (yes, this is what ghostview does). You might not be able to read all your labels any longer, but at least you could position them correctly without having to

```
set_plot,'ps',file='bla.ps'  
myprogram  
set_plot,'X'  
[unix prompt]gs bla.ps  
n times.
```

Martin

PS: (don't read if you love your mouse) what's upsetting me about object graphics (or better its interface with the user) is also what upsets me about windows and why I like unix so much. Instead of

```
foreach name ( thisplot[abc]*.ps thatplot*3*.ps )  
  ps2epsi $name  
end
```

(with csh under unix) you need zillions of mouseclicks and ctrl key strokes to do the same in windows. This example may serve to illustrate more clearly what I meant above.

Dr. Martin Schultz
Department for Earth&Planetary Sciences, Harvard University
109 Pierce Hall, 29 Oxford St., Cambridge, MA-02138, USA

phone: (617)-496-8318
fax : (617)-495-4551

e-mail: mgs@io.harvard.edu
Internet-homepage: <http://www-as.harvard.edu/people/staff/mgs/>
