
Subject: Re: How to use hardware fonts in PS and X?

Posted by [davidf](#) on Thu, 12 Feb 1998 08:00:00 GMT

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Dan Mueth (d-mueth@uchicago.edu) writes:

- > I am looking for a clean way to use fonts in IDL. I would like to
- > produce PostScript plots for incorporation into LaTeX for publication.
- > They should include the PostScript(hardware) fonts, Greek letters, and
- > nice-looking equations if possible.
- >
- > I would like to use a single procedure to alternately save the plot to a
- > PostScript file or to plot it in an IDL plotting window (in X), using a
- > command-line keyword to specify the destination. I would like the two
- > plots to look identical, even though the device changes between X and PS.
- > Thus, the X device should use hardware fonts, placing the characters in
- > the same location and size that they appear in the PS file. (Y axis
- > title characters need to be rotated.)
- >
- > Is there any way of doing this nicely?

The bad news is that there is no way to do this currently in IDL. The good news is that I think it will be available shortly. Perhaps as soon as IDL 5.1.

I notice that there is an undocumented feature in IDL 5.0.3 in which if you set !P.Font=1 you access the same set of built-in PostScript fonts used by the object graphics system, but in normal graphics. Unfortunately, there are still problems with the positioning of axes annotations, etc., which I am sure is why this is an undocumented feature, but I am encouraged by what I see. Axis titles appear to rotate correctly, even if they aren't yet positioned where they are suppose to be.

```
!P.Font=1
Plot, Findgen(11), YTitle='Y Title', XTitle='X Title', $
    Position=[0.2, 0.2, 0.9, 0.9]
```

The characters are not rendered all that well on the display (how come display PostScript never caught on?), but they render great on the output and at least what you see on the display is quite a bit more like what you see on the hardcopy than it used to be, especially with respect to the size and weight of the annotations.

If you are interested in how you can get reasonably good WYSIWYG output of your current graphics displays, see the

series of articles on Perfect PostScript Output on my web page. An entire chapter of my book is devoted to the same subject.

Cheers,

David

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