Subject: Re: IDL and X and PS
Posted by zawodny on Wed, 16 Sep 1992 15:59:27 GMT
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The real difficulty in trying to implement a WYSIWYG program in IDL/WAVE between an X-window view and a Postscript output has to do with several factors. Using the /NORMAL keyword may help a little but it is not the solution. Recall that the plot box (defined by !p.clip) is determined by the font size and x(y).margin variables (Yes, you can also get at it with !p.region or !p.position as well). So when you shift between devices, you naturally shift between fonts, font sizes, and hardware vs software fonts. A change in any of these will, typically, alter where a xyouts will place a string relative to the plot box and or the relative size of the string. Additionally there is the difficulty of getting the aspect ratios (x dimension / y dimension) of the paper and window to be the same. I have not browsed through Bill Thompson's (sp?) recent posting so perhaps some of this has been delt with there. If I were to invest the time in a WYSIWYG implementation the first thing I would do would be to establish some standards. Such as, aspect ratio, default font size (that is how big !p.charsize=1 makes the font) relative to the vertical extent of the plot (sort of a !p.charsize in normalized coordinates), use a standard set of font metrics for both hardware and vector drawn fonts, implement a way to rotate hardware fonts in some Xwindow systems (this one could be tough, maybe you could use a free window pixmap, TVRD, and a rotation routine), and be able to specify the symsize in normalized coordinates as well. With this basic set of standards, I think you would get a WYSIWYG by default. With some effort and a little reading (to find out things like the default fontsize for postscript is 12pt and such), one could write a routine to call the device routine with the proper parameter values and set values of fields in the !p system variable to closely match with postscript what would be plotted to a window. Later on you would have to worry about things like p[xy].thick and how line thickness varies from device to device. I hope this motivates someone into implementing it, I might give it a go if I can find the time.

Have Fun,

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