## Subject: Re: Problems with system variables Posted by davidf on Tue, 27 Jul 1999 07:00:00 GMT

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Brad L. Fisher (fisher@trmm.gsfc.nasa.gov) writes:

- > This problem requires a little bit explanation. I am e xtracting data
- > from an image window with the cursor command, which I am using to
- > generate two different windows (the cursor coordinates are used to
- > select the central pixel in one of two windows). One window is
- > displayed with TV; the other with PLOT (draws a simple graph). The idea
- > is for user to be able to select different points in the main data
- > window and carry out analysis on the data selected within the other two
- > windows. Consequently, the program was designed to interact with the
- > main data image multiple times using the cursor command.

>

- > Before adding the PLOT window everything was fine, but after generating
- > a PLOT, which was drawn in a unique window opened by the program, it
- > seems that the window system info from the main image is getting lost or
- > replaced. For instance, when I select a point with the cursor the first
- > time through everything is fine, for at first, there is only one window
- > drawn, but the second time through the cursor return bogus data
- > coordinates. It turns out that the data selected from the main window
- > was actually data in my PLOT window. I did notice that the system
- > values in !p were getting changed. I then tried just saving the
- > original!p and reassigning it after generating the PLOT, but that
- > solution did not rectify the problem I described above. Can anyone help
- > with this? If so, please send responses to fisher@trmm.gsfc.nasa.gov.

In doing this kind of thing with data coordinates (and I'm NOT sure that is such a good idea with images, by the way, since images don't work in a data coordinate system, but in a DEVICE coordinate system), then you have to save the proper plot system variables for each graph you want to draw on. I've never bothered to figure out exactly \*which\* system variables these are, because I always save !P, !X, and !Y as a matter of course. Then, I always restore these before I draw something on the graph.

Plot, data

p = !P

x = !X

y = !Y

Then, sometime later...

WSet, plotWindow

!P = p !X = x !Y = yOPlot, moredata

Cheers,

David

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