Subject: Re: PLOT() function THICK keyword in v8.2 just a guideline?
Posted by Paul Van Delst[1] on Thu, 06 Sep 2012 22:39:30 GMT

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Oh boy. Further investigations reveal that, for plot with the incorrect
line thickness problem, when I give focus to a plot that has a
non-existant (or very thin) line and zoom in, the line thickness in
all the plots in the window suddenly appear as they should be.

When I click the "undo" button, the line thicknesses return to their
previous pear shaped wrongness. Unbelievable.

Did somebody at Excelis bury a whack-a-mole game inside the function
graphics byte code? (ha ha)

But, seriously: sigh.

cheers,

paulv

On 09/06/12 18:14, Paul van Delst wrote:
> Hello,
>
> I just got IDL v8.2 installed,
> IDL> print, !version
> { x86 linux unix linux 8.2 Apr 10 2012 32 64}
>
> I have a piece of code like that shown below (it's within a loop over
> index "i"). It simply reads some "new" data and some "old" data, then it
> plots the two of them together (the "pn" and "po" plots), and then it
> plots the difference (the "pd" plot):
>
> ; Create window to hold plots
> w = WINDOW($
> WINDOW_TITLE = rts_file_list[i], $
> DIMENSIONS = [800,900], $
> BUFFER = buffer)
> ; ...Initialise layout index
> index = 0
>
>
> ; Loop over data items
> FOR j = 0, n_items-1 DO BEGIN
>
> ; Extract the current data item from the RTS objects
> new_data = new_rts.Get_Data(item_name[j], Profile=1)

```
> old_data = old_rts.Get_Data(item_name[j], Profile=1)
>
> ; Plot the two data sets
> index++
> yrange = [MIN(new_data)<MIN(old_data), $
> MAX(new_data)>MAX(old_data)]
> pn = PLOT( $
> new_data, $
> TITLE = item_name[j], $
> YRANGE = yrange, $
> LAYOUT = [ n_col, n_row, index ], $
> COLOR = 'red', $
> THICK = 2, $
> CURRENT = w )
> po = PLOT( $
> old_data, $
> COLOR = 'green', $
> OVERPLOT = w )
>
> ; Plot the difference
> index++
> pd = PLOT( $
> new_data-old_data, $
> TITLE = item_name[j]+" difference", $
> LAYOUT = [ n_col, n_row, index ], $
> CURRENT = w )
>
> ENDFOR
>
>
> Now, *most* of the time this code works fine. However, every now and
> again the line that is plotted by the "pn" plot, that is the one that
> has the keyword
> THICK=2
> plots the line with what looks like the equivalent of a thickness of
> about 10, and then some subsequent lines with a thickness of zero (i.e.
> not there, or hardly visible).
>
> It's as though the first super-thick line uses up all the thick,
> starving subsequent lines.
>
> Here's an example of the wrong result, with incorrect line thicknesses:
> http://tinyurl.com/bnchou4
>
> And here's an example of the expected result, with correct line
> thicknesses throughout:
> http://tinyurl.com/d394vsy
>
```

> I have the red line be twice as thick so I can see it behind the green
> one when the data are the same (too many points to use symbols).
>
> Is this a bug in IDL v8.2? Has anyone seen this behaviour before and
> (fingers crossed) discovered a solution?
>
> cheers,
>
> paulv