Subject: PLOT() function THICK keyword in v8.2 just a guideline?

Posted by Paul Van Delst[1] on Thu, 06 Sep 2012 22:14:48 GMT

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

Subject: Re: PLOT() function THICK keyword in v8.2 just a guideline?
Posted by chris_torrence@NOSPAM on Thu, 13 Sep 2012 15:18:50 GMT
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Hi Paul,
Do you have a simpler reproduce case that doesn't require any external data? I think this bug has been fixed in IDL 8.2.1 but I wanted to verify with your code.
Thanks!

-Chris
ExelisVIS