Subject: Re: Strange TITLE output using NG PLOT.
Posted by lecacheux.alain on Wed, 01 Dec 2010 20:44:02 GMT
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On 1 déc, 21:10, Paul van Delst <paul.vande...@noaa.gov> wrote:
> Hello,
>
> I have the following NG plot code in a loop:
>
> ; Begin detector loop
> FOR i = 0, n_detectors-1 DO BEGIN
>
> ....do some stuff here....
>
> ; Plot the data detector by detector for inspection
> IF (Plot_Data) THEN BEGIN
> osrf->Get_Property, Frequency=f, Response=r
> p = PLOT(f, r, $
> TITLE=Sensor_Id+' ch.'+STRTRIM(Sensor_Channel[l],2), $
> XTITLE='Frequency (cm!U-1!N)', $
> YTITLE='Relative Response', $
> COLOR=color[i MOD N_ELEMENTS(color)], $
> OVERPLOT=i, $
> /CURRENT)
> ENDIF
> ENDFOR ; Detector loop
>
> This produces a plot (slowly, but surely) that contains all the necessary data. However, it would appear that the main
> title is output again and again for each overplot. The x- and y-axis titles appear "normal", it's just the main plot
> title that looks like a very thick magic marker was used to write it.
>
> Here's a standalone example:
>
> x = findgen(100)
> y = (x/10.0)^3
>
> for i = 0, 31 do p = PLOT(x,y, $
> TITLE='My x-y plot', $
> XTITLE='x-axis', $
> YTITLE='y-axis', $
> OVERPLOT=i, $
> /CURRENT)
>
> Watch the "My x-y plot" title get bolder/thicker with each overplot. If you zoom in, the title gets redrawn to the
> correct weight. But, if you hit the "undo" button, you get the original heavy weight result.

>
> Has anyone else experienced this strange phenomena? Is it something I'm doing wrong, or the PLOT() function?
>
> cheers,
>
> paulv
>
> p.s. BTW, any interaction with my resulting plot is agonisingly slow. I.e. it took about 20seconds to render the
> rubberband box and then redraw for a zoom in. My equivalent DG plot/overplot was almost instantaneous (to plot
> initially, and to redraw when zooming in). The speed of NG redraws for "many" plots (in my case 32 with each plot
> consisting of 10000's of points each) is embarrassing to behold. ITTVIS *has* to improve the performance of NG for it to
> be taken seriously (and to any ITTVIS folks reading this, I *really* want to take it seriously). Otherwise it's just a
> toy feature because its slowness makes it unusable for actual work. Sigh.
>
> E.g. try the above standalone example, but with
> x = findgen(50000)
> y = (x/5000.0)^3
> Maybe it's my machine or setup, but I can go get a coffee and it'll still be drawing when I get back.

OVERPLOT in NG is not like OPLOT in DG: axes and labels are (re)drawn;
only scale and range from first plot are kept. To ensure speed, you
should use REFRESH=1 option :

```
  x = findgen(100)
  y = (x/10.0)^3

  p = PLOT( x,y, TITLE='My x-y plot', XTITLE='x-axis', YTITLE='y-
axis'))
for i = 0, 31 do
```

Subject: Re: Strange TITLE output using NG PLOT.
Posted by lecacheux.alain on Wed, 01 Dec 2010 20:46:16 GMT
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On 1 déc, 21:44, alx <lecacheux.al...@wanadoo.fr> wrote:
> On 1 déc, 21:10, Paul van Delst <paul.vande...@noaa.gov> wrote:
>
>
>
>

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>> OVERPLOT=i, $
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>> YTITLE='y-axis', $
>> OVERPLOT=i, $
>> /CURRENT)
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>
> x = findgen(100)
> y = (x/10.0)^3
>
> p = PLOT(x,y, TITLE='My x-y plot', XTITLE='x-axis', YTITLE='y-
> axis'))
> for i = 0, 31 do- Masquer le texte des messages précédents -
>
> - Afficher le texte des messages précédents -

```
x = findgen(100)
y = (x/10.0)^3
p = PLOT( x,y, TITLE='My x-y plot', XTITLE='x-axis', YTITLE='y-axis')
p.Refresh, /DISABLE
for i = 0, 31 do !Null = plot(x, y, OVERPLOT=p)
p.Refresh
```

Subject: Re: Strange TITLE output using NG PLOT.
Posted by David Fanning on Wed, 01 Dec 2010 21:01:59 GMT
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Paul van Delst writes:

> BTW, any interaction with my resulting plot is agonisingly slow. I.e. it took about 20seconds to render the
> rubberband box and then redraw for a zoom in

How do you get a rubberband box in this plot? Whenever
I click inside the plot to draw a rubberband box,
the whole damn plot moves on me. :-(

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Strange TITLE output using NG PLOT.
Posted by Paul Van Delst[1] on Wed, 01 Dec 2010 21:05:21 GMT
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David Fanning wrote:
> Paul van Delst writes:
>
>> BTW, any interaction with my resulting plot is agonisingly slow. I.e. it took about 20seconds to render the
>> rubberband box and then redraw for a zoom in
>
> How do you get a rubberband box in this plot? Whenever
> I click inside the plot to draw a rubberband box,
> the whole damn plot moves on me. :-(

Yeah, it's an annoying default.

Hold down the shift key and the cursor should change from and hand to a magnifying glass. Now you can zoom.

cheers,

paulv

Subject: Re: Strange TITLE output using NG PLOT.
Posted by Paul Van Delst[1] on Wed, 01 Dec 2010 21:58:32 GMT
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alx wrote:
> OVERPLOT in NG is not like OPLOT in DG: axes and labels are (re)drawn;
> only scale and range from first plot are kept. To ensure speed, you
> should use REFRESH=1 option :
>
> x = findgen(100)
> y = (x/10.0)^3
> p = PLOT(x,y, TITLE='My x-y plot', XTITLE='x-axis', YTITLE='y-axis')
> p.Refresh, /DISABLE
> for i = 0, 31 do !Null = plot(x, y, OVERPLOT=p)
> p.Refresh

Brilliant! Thanks very much. That sped up the process greatly (and solved the title redraw issue too!). DG is still
faster but the 20second wait for NG that I whinged about in my original post is now a *much* less noticeable
large-fraction of a second.

All of the plot examples in the docs I looked at simply used OVERPLOT -- I didn't see any examples using the refresh
method (until I clicked on the method documentation itself after reading your post. D'oh!)

Merci beaucoup!

cheers,

paulv

Subject: Re: Strange TITLE output using NG PLOT.
Posted by penteado on Wed, 01 Dec 2010 23:44:02 GMT
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On Dec 1, 6:44 pm, alx <lecacheux.al...@wanadoo.fr> wrote:
> OVERPLOT in NG is not like OPLOT in DG: axes and labels are (re)drawn;
> only scale and range from first plot are kept. To ensure speed, you
> should use REFRESH=1 option :

Range is only preserved if the first plot had the x and y ranges
explicitly set. Otherwise it is recalculated (and possibly changed,
redrawing everything) on every overplot.
