
Subject: Bug report: plot title

Posted by [markb77](#) on Wed, 29 Oct 2014 16:24:56 GMT

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hi,

I am making a foray into function graphics programming and I have uncovered what I think is a bug in the way that the properties of the plot title are set.

Essentially, when you create the plot, if you request a certain font, or font color, these properties are applied to the axis fonts but not the font title. This is contrary to what is specified in the IDL documentation for the PLOT function:

TITLE
Set this property to a string specifying a title. The title properties may be modified using FONT_COLOR, FONT_NAME, FONT_SIZE, and FONT_STYLE. After creation the TITLE property may be used to retrieve a reference to the title text object, and the TEXT properties may be used to modify the title object.

The bug is demonstrated in the following test case:

```
;----  
pro test_plot_title_font  
  
    mydata_x = indgen(100)  
    mydata_y = sin(mydata_x * !pi/25.0)  
  
    plotfont = 'Courier'  
    mycolor = [255,0,0]  
  
    myplot = plot(mydata_x, $  
                  mydata_y, $  
                  font_name=plotfont, $  
                  font_color=mycolor)  
  
    myplot.title = 'Plot Title'  
  
    ax = myplot.axes  
    ax[0].title = 'X axis'  
    ax[1].title = 'Y axis'  
  
    mytitle = myplot.title  
  
    print, 'Test results:'  
    print, "
```

```
print, 'Requested font: ', plotfont
print, 'X axis font: ', ax[0].tickfont_name
print, 'Y axis font: ', ax[1].tickfont_name
print, 'Plot title font: ', mytitle.font_name
print, "
print, 'Requested font color: ', mycolor
print, 'X axis font color: ', ax[0].text_color
print, 'Y axis font color: ', ax[1].text_color
print, 'Plot title font color: ', mytitle.font_color
```

```
print, !version
```

```
end
```

```
;---
```

program output:

Test results:

Requested font: Courier

X axis font: Courier

Y axis font: Courier

Plot title font: Helvetica

Requested font color: 255 0 0

X axis font color: 255 0 0

Y axis font color: 255 0 0

Plot title font color: 0 0 0

{ x86_64 Win32 Windows Microsoft Windows 8.3 Nov 15 2013 64 64 }

As you can see, the plot title doesn't get assigned the correct font name or font color - possibly other properties would also not be properly assigned. I am using IDL 8.3 x64 on Windows. Perhaps the bug has been fixed in version 8.4?

Mark

Subject: Re: Bug report: plot title

Posted by [Dick Jackson](#) on Thu, 30 Oct 2014 21:43:21 GMT

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Hi Mark,

If you specify the string when you create the Plot() it will take the font name and colour as specified there:

```
myplot = plot(mydata_x, $
              mydata_y, $
```

```
font_name=plotfont, $
font_color=mycolor, $
title = 'Plot Title')
```

It seems that if you specify it as you did, the font_name and font_color are not saved as "defaults", they just apply to things created in that command. However, if the title needs to wait until the Plot() is created, two options:

```
myplot.title = Text(0.5, 0.9, 'Plot Title', alignment=0.5, font_name = 'Courier', color = [255,0,0])
... and you'd have to fuss with the text size, get the position right, etc.
```

```
myplot.title = 'Plot Title' ; A just-right TEXT object is created from this
myplot.title.font_name = 'Courier'
myplot.title.color = [255,0,0]
```

If you see unwanted flickering through those changes, you can do this:

```
myplot.refresh, /disable
myplot.title = 'Plot Title'
myplot.title.font_name = 'Courier'
myplot.title.color = [255,0,0]
myplot.refresh
```

Hope this helps!

--

Cheers,
-Dick

Dick Jackson Software Consulting Inc.
Victoria, BC, Canada
www.d-jackson.com

superchromix wrote, On 2014-10-29, 9:24am:

```
>
> hi,
>
> I am making a foray into function graphics programming and I have uncovered what I think is a
bug in the way that the properties of the plot title are set.
>
> Essentially, when you create the plot, if you request a certain font, or font color, these
properties are applied to the axis fonts but not the font title. This is contrary to what is specified in
the IDL documentation for the PLOT function:
>
> -----
> TITLE
```

> Set this property to a string specifying a title. The title properties may be modified using FONT_COLOR, FONT_NAME, FONT_SIZE, and FONT_STYLE. After creation the TITLE property may be used to retrieve a reference to the title text object, and the TEXT properties may be used to modify the title object.

> -----

>

>

> The bug is demonstrated in the following test case:

>

> ;----

> pro test_plot_title_font

>

> mydata_x = indgen(100)

> mydata_y = sin(mydata_x * !pi/25.0)

>

> plotfont = 'Courier'

> mycolor = [255,0,0]

>

> myplot = plot(mydata_x, \$

> mydata_y, \$

> font_name=plotfont, \$

> font_color=mycolor)

>

> myplot.title = 'Plot Title'

>

> ax = myplot.axes

> ax[0].title = 'X axis'

> ax[1].title = 'Y axis'

>

> mytitle = myplot.title

>

> print, 'Test results:'

> print, "

> print, 'Requested font: ', plotfont

> print, 'X axis font: ', ax[0].tickfont_name

> print, 'Y axis font: ', ax[1].tickfont_name

> print, 'Plot title font: ', mytitle.font_name

> print, "

> print, 'Requested font color: ', mycolor

> print, 'X axis font color: ', ax[0].text_color

> print, 'Y axis font color: ', ax[1].text_color

> print, 'Plot title font color: ', mytitle.font_color

>

> print, !version

>

> end

> ;---

>

```
> program output:
>
> Test results:
>
> Requested font: Courier
> X axis font: Courier
> Y axis font: Courier
> Plot title font: Helvetica
>
> Requested font color: 255 0 0
> X axis font color: 255 0 0
> Y axis font color: 255 0 0
> Plot title font color: 0 0 0
> { x86_64 Win32 Windows Microsoft Windows 8.3 Nov 15 2013 64 64}
>
> As you can see, the plot title doesn't get assigned the correct font name or font color - possibly
other properties would also not be properly assigned. I am using IDL 8.3 x64 on Windows.
Perhaps the bug has been fixed in version 8.4?
>
> Mark
>
```

Subject: Re: Bug report: plot title
Posted by [markb77](#) on Sat, 01 Nov 2014 17:11:32 GMT
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hi Dick, thanks for looking into this.

I maintain, however, that this is a BUG.

consider the following:

pro plot_title_bug

```
mydata_x = indgen(100)
mydata_y = sin(mydata_x * !pi/25.0)
```

```
plotfont = 'Courier'
mycolor = [255,0,0]
```

```
myplot = plot(mydata_x, $
              mydata_y, $
              font_name=plotfont, $
              font_color=mycolor)
```

```
print, 'Plot properties before setting title:'
print, 'Font name: ', myplot.font_name
print, 'Font color: ', myplot.font_color

myplot.title = 'Plot Title'

print, 'Plot properties after setting title:'
print, 'Font name: ', myplot.font_name
print, 'Font color: ', myplot.font_color

print, !version

end
```

output:

```
Plot properties before setting title:
Font name: Courier
Font color: 255 0 0
Plot properties after setting title:
Font name: Helvetica
Font color: 0 0 0
{x86_64 Win32 Windows Microsoft Windows 8.3 Nov 15 2013 64 64}
```

Surely setting the Title property of the plot shouldn't change other properties of the plot in this way?

Looks like a bug to me.

Mark
