Subject: Two NewGraphics weirdnesses
Posted by Fabzi on Thu, 03 Jul 2014 12:11:44 GMT
View Forum Message <> Reply to Message

Folks,

do FONT_COLOR and SYM_COLOR accept arrays as input?

And, regardless to the answer, can someone explain this to me:

```
; This creates the correct filled points but the text colors are erratic
p1 = plot(INDGEN(10))
p1t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], ['BLUE', 'PURPLE',$
'RED', 'ORANGE'], FONT_COLOR=['BLUE', 'PURPLE', 'RED', 'ORANGE'])
p1s = symbol([0.27,0.27,0.27, 0.27],[0.8,0.77,0.72,0.69], 'circle',
/SYM_FILLED, SYM_COLOR=['BLUE', 'PURPLE', 'RED', 'ORANGE'])

; This is just chaos
cols = ['BLUE', 'PURPLE', 'RED', 'ORANGE']
p2 = plot(INDGEN(10))
p2t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], cols, FONT_COLOR=cols)
p2s = symbol([0.27,0.27,0.27, 0.27],[0.8,0.77,0.72,0.69], 'circle',
/SYM_FILLED, SYM_COLOR=cols)
```

Thanks for shedding light on this for me!

Fabien

```
IDL> print, !VERSION
{ x86_64 linux unix linux 8.3 Nov 15 2013      64      64}
```

Subject: Re: Two NewGraphics weirdnesses
Posted by lecacheux.alain on Thu, 03 Jul 2014 16:40:17 GMT
View Forum Message <> Reply to Message

On Thursday, July 3, 2014 2:11:44 PM UTC+2, Fabien wrote:
> Folks,
>
>
>
> do FONT_COLOR and SYM_COLOR accept arrays as input?
>
>

>
> And, regardless to the answer, can someone explain this to me:
>
>
>
>
>
> ; This creates the correct filled points but the text colors are erratic
>
> p1 = plot(INDGEN(10))
>
> p1t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], ['BLUE', 'PURPLE',$
>
> 'RED', 'ORANGE'], FONT_COLOR=['BLUE', 'PURPLE', 'RED', 'ORANGE'])
>
> p1s = symbol([0.27,0.27,0.27, 0.27],[0.8,0.77,0.72,0.69], 'circle',
>
> /SYM_FILLED, SYM_COLOR=['BLUE', 'PURPLE', 'RED', 'ORANGE'])
>
>
>
> ; This is just chaos
>
> cols = ['BLUE', 'PURPLE', 'RED', 'ORANGE']
>
> p2 = plot(INDGEN(10))
>
> p2t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], cols, FONT_COLOR=cols)
>
> p2s = symbol([0.27,0.27,0.27, 0.27],[0.8,0.77,0.72,0.69], 'circle',
>
> /SYM_FILLED, SYM_COLOR=cols)
>
>
>
>
>
> Thanks for shedding light on this for me!
>
>
>
>
>
> Fabien
>
>
>
>

>
> IDL> print, !VERSION
>
> { x86_64 linux unix linux 8.3 Nov 15 2013 64 64}

The trick (and the inconsistency) is that multiple positions create multiple TEXT objects and only one single SYMBOL object.
The correct way seems to be (note the 'foreach' line):

```
cols = ['BLUE', 'PURPLE', 'RED', 'ORANGE']
p2 = plot(INDGEN(10))
p2t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], cols)
foreach t,p2t,i do  t.FONT_COLOR=cols[i]
p2s = symbol([0.27,0.27,0.27, 0.27],[0.8,0.77,0.72,0.69], 'circle', SYM_COLOR=cols,
SYM_FILLED=1)
```

You get the same inconsistency if you jointly use LABEL_STRING and LABEL_COLOR keywords in SYMBOL (in order to avoid the TEXT calling).

alx.

Subject: Re: Two NewGraphics weirdnesses
Posted by Fabzi on Thu, 03 Jul 2014 20:53:41 GMT
View Forum Message <> Reply to Message

Hi Alx,

Thanks for your answer.

It is still really not ok that an IDL built-in routine messes around
with your variables:

```
IDL> print, cols
BLUE PURPLE RED ORANGE
IDL> p2t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], cols,$
FONT_COLOR=cols)
IDL> print, cols
   0   0   0
   0   0   0
   0   0   0
   0   0   0
```

Cheers,

Fabien

On 03.07.2014 14:11, Fabien wrote:
> Folks,
>
> do FONT_COLOR and SYM_COLOR accept arrays as input?
>
> And, regardless to the answer, can someone explain this to me:
>
>
> ; This creates the correct filled points but the text colors are erratic
> p1 = plot(INDGEN(10))
> p1t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], ['BLUE', 'PURPLE',$
> 'RED', 'ORANGE'], FONT_COLOR=['BLUE', 'PURPLE', 'RED', 'ORANGE'])
> p1s = symbol([0.27,0.27,0.27, 0.27],[0.8,0.77,0.72,0.69], 'circle',
> /SYM_FILLED, SYM_COLOR=['BLUE', 'PURPLE', 'RED', 'ORANGE'])
>
> ; This is just chaos
> cols = ['BLUE', 'PURPLE', 'RED', 'ORANGE']
> p2 = plot(INDGEN(10))
> p2t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], cols, FONT_COLOR=cols)
> p2s = symbol([0.27,0.27,0.27, 0.27],[0.8,0.77,0.72,0.69], 'circle',
> /SYM_FILLED, SYM_COLOR=cols)
>
>
> Thanks for shedding light on this for me!
>
>
> Fabien
>
>
> IDL> print, !VERSION
> { x86_64 linux unix linux 8.3 Nov 15 2013 64 64}

Subject: Re: Two NewGraphics weirdnesses
Posted by lecacheux.alain on Thu, 03 Jul 2014 22:01:07 GMT
View Forum Message <> Reply to Message

Le jeudi 3 juillet 2014 22:53:41 UTC+2, Fabien a écrit :
> Hi Alx,
>
>
>
> Thanks for your answer.
>
>
>
> It is still really not ok that an IDL built-in routine messes around
>

> with your variables:
>
>
>
> IDL> print, cols
>
> BLUE PURPLE RED ORANGE
>
> IDL> p2t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], cols,$
>
> FONT_COLOR=cols)
>
> IDL> print, cols
>
> 0 0 0
>
> 0 0 0
>
> 0 0 0
>
> 0 0 0
>
>
>
> Cheers,
>
>
>
> Fabien
>
>
>
> On 03.07.2014 14:11, Fabien wrote:
>
>> Folks,
>
>>
>
>> do FONT_COLOR and SYM_COLOR accept arrays as input?
>
>>
>
>> And, regardless to the answer, can someone explain this to me:
>
>>
>
>>
>

>> ; This creates the correct filled points but the text colors are erratic
>
>> p1 = plot(INDGEN(10))
>
>> p1t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], ['BLUE', 'PURPLE',$
>
>> 'RED', 'ORANGE'], FONT_COLOR=['BLUE', 'PURPLE', 'RED', 'ORANGE'])
>
>> p1s = symbol([0.27,0.27,0.27, 0.27],[0.8,0.77,0.72,0.69], 'circle',
>
>> /SYM_FILLED, SYM_COLOR=['BLUE', 'PURPLE', 'RED', 'ORANGE'])
>
>>
>
>> ; This is just chaos
>
>> cols = ['BLUE', 'PURPLE', 'RED', 'ORANGE']
>
>> p2 = plot(INDGEN(10))
>
>> p2t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], cols, FONT_COLOR=cols)
>
>> p2s = symbol([0.27,0.27,0.27, 0.27],[0.8,0.77,0.72,0.69], 'circle',
>
>> /SYM_FILLED, SYM_COLOR=cols)
>
>>
>
>>
>
>> Thanks for shedding light on this for me!
>
>>
>
>>
>
>> Fabien
>
>>
>
>>
>
>> IDL> print, !VERSION
>
>> { x86_64 linux unix linux 8.3 Nov 15 2013 64 64}

I agree. In spite of the fact that the documentation does not say that you can specify a multiple color, this looks like a (dangerous) bug.

```
IDL> pl=plot(/TEST)
IDL> toto = 'blue' & p2t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], cols, FONT_COLOR=toto)
IDL> foreach t,p2t do print,t.font_color
   0   0 255
   0   0 255
   0   0 255
   0   0 255
IDL> p2t = text([0.3,0.3,0.3, 0.3],[0.8,0.77,0.72,0.69], cols, FONT_COLOR=cols)
IDL> foreach t,p2t do print,t.font_color
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
   0   0   0
IDL> cols
   0   0   0
   0   0   0
   0   0   0
   0   0   0
```

Subject: Re: Two NewGraphics weirdnesses
Posted by chris_torrence@NOSPAM on Fri, 04 Jul 2014 06:01:14 GMT
View Forum Message <> Reply to Message

Just FYI, that bug where it changes your variable has been fixed for IDL 8.4, due out in a few months.

Cheers,
Chris

Subject: Re: Two NewGraphics weirdnesses
Posted by Fabzi on Fri, 04 Jul 2014 08:16:05 GMT
View Forum Message <> Reply to Message

Hi Chris,

that's great, thanks!

The documentation for both SYM_COLOR and FONT_COLOR states:
"Set this property to a string or RGB vector that specifies the text
color. The default value is "black"."

So is it OK or not to give an array as input? Is the "inconsistency"
between text() and symbol() going to remain as it is now?

Thanks a lot!

Fabien

Subject: Re: Two NewGraphics weirdnesses
Posted by lecacheux.alain on Fri, 04 Jul 2014 09:07:10 GMT
View Forum Message <> Reply to Message

On Friday, July 4, 2014 10:16:05 AM UTC+2, Fabien wrote:
> Hi Chris,
>
>
>
> that's great, thanks!
>
>
>
> The documentation for both SYM_COLOR and FONT_COLOR states:
>
> "Set this property to a string or RGB vector that specifies the text
>
> color. The default value is "black"."
>
>
>
> So is it OK or not to give an array as input? Is the "inconsistency"
>
> between text() and symbol() going to remain as it is now?
>
>
>
> Thanks a lot!
>
>
>
> Fabien

"Set this property to a string or RGB vector that specifies the text color"
seems to me be meaning that you *cannot* give an array as input.
alx.

Subject: Re: Two NewGraphics weirdnesses
Posted by Fabzi on Sat, 05 Jul 2014 10:23:38 GMT
View Forum Message <> Reply to Message

Hi Alx,

On 04.07.2014 11:07, alx wrote:
> seems to me be meaning that you*cannot* give an array as input.

Agreed. But since it works well for symbols it is tempting to use this
"bug" in your code, while it might not work forever if they decide to
throw an error in 8.4 when you try to pass a 4-element array as argument.

Anyway, it's not that important. Thanks Alx and Chris for your help!
