
Subject: Re: text positioning within multiple plots
Posted by [David Fanning](#) on Tue, 10 Jul 2007 14:50:26 GMT
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metachronist writes:

> May be this is already been discussed or trivial. In any case, I have
> multiple plots that go into same page, and I would like to position
> text within each of these sub windows, as they are plotted from within
> a loop, while using !p.multi.
> What is the best way to do it? For example, I have !
> p.multi=[0,2,7,0,1]. Say, I would like to put the station codes inside
> each of these 14 subwindows. I tried 'xyouts' with a bunch of
> combinations, but didn't work. I was thinking that when we use default
> data coordinates, then if we specify the location of each call to
> xyouts based on "data" specific to that window, then it should put the
> text at the correct location within that specific window. But it's
> not?!

Well, I expect this is pilot error. Exactly **when**
are you calling your XYOUTS command? If you do it
directly after you draw each plot, I think it can't
help but go in the right place. :-)

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: text positioning within multiple plots
Posted by [Conor](#) on Tue, 10 Jul 2007 14:50:36 GMT
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On Jul 10, 10:38 am, metachronist <rkombi...@gmail.com> wrote:
> May be this is already been discussed or trivial. In any case, I have
> multiple plots that go into same page, and I would like to position
> text within each of these sub windows, as they are plotted from within
> a loop, while using !p.multi.
> What is the best way to do it? For example, I have !
> p.multi=[0,2,7,0,1]. Say, I would like to put the station codes inside
> each of these 14 subwindows. I tried 'xyouts' with a bunch of
> combinations, but didn't work. I was thinking that when we use default

> data coordinates, then if we specify the location of each call to
> xyouts based on "data" specific to that window, then it should put the
> text at the correct location within that specific window. But it's
> not?! :-(Appreciate any help.
> TIA,
> /rk

xyouts works exactly the same with !P.MULTI set as it does without it. For instance:

```
!P.MULTI = [0,1,2]  
plot,[0,1],[0,1]  
xyouts,.05,.9,'a line'  
plot,[5,10],[5,10]  
xyouts,5.1,9,'another line'
```

That should make two plots with a line of text in each. You do have to make sure that the xyouts call comes after the plot you want it on, and before any others. Otherwise it will output to the wrong plot. I'm not sure why what you're trying isn't working. Maybe I've misunderstood your problem? Can you give some example code that isn't cooperating?

Subject: Re: text positioning within multiple plots
Posted by [astroboy2k](#) on Tue, 10 Jul 2007 16:22:35 GMT
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I think the problem here is in using the /normal keyword in multiple plots.

Doing this:
plot,findgen(10)
xyouts,.1,.1,char,/normal

places char in the lower left hand part of the screen, regardless of whether you're using multiple plots or not, which is no good.

I wrote the following code to overcome this problem:

Mark

```
;  
pro  
sub_xyouts,xx0,yy0,char,charsize=charsize,xdata=xdata,ydata= ydata,color=color,align=align
```

;xx0 and yy0 are usually normal coordinates, eg, fraction of the

current area of the plot
;setting the xdata or ydata keywords converts xx0 and yy0 from data to
normal coordinates

```
xx=xx0  
yy=yy0
```

```
delx=!x.window(1)-!x.window(0)  
dely=!y.window(1)-!y.window(0)
```

```
if keyword_set(ydata) then yy=(yy-!y.crange(0))/(!y.crange(1)-!  
y.crange(0))  
if keyword_set(xdata) then xx=(xx-!x.crange(0))/(!x.crange(1)-!  
x.crange(0))  
col=0  
if keyword_set(color) then col=color
```

```
xx=!x.window(0)+xx*delx+.02*delx  
yy=!y.window(0)+yy*dely+.02*dely
```

```
csize=.8  
if (keyword_set(charsize)) then csize=charsize
```

```
col=0  
if keyword_set(color) then col=color
```

```
aline=0.  
if keyword_set(alignment) then aline=align  
xyouts,xx,yy,char,charsize=csize,/normal,color=col,align=ali ne
```

```
return  
end
```

Subject: Re: text positioning within multiple plots
Posted by [David Fanning](#) on Tue, 10 Jul 2007 16:33:05 GMT
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astroboy2k@gmail.com writes:

```
> I think the problem here is in using the /normal keyword in multiple  
> plots.  
>  
> Doing this:  
> plot,findgen(10)  
> xyouts,.1,.1,char,/normal
```

>
> places char in the lower left hand part of the screen, regardless of
> whether you're using multiple plots or not, which is no good.

I'm not sure "no good" is how I would describe it. I think "exactly what you want and expect" is probably a better description. Normalized coordinates are referenced to the *display window* and *never* to a plot.

If you wanted to use normalized coordinates, then you should get your bearings from the ![XY].Window system variables after each plot.

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: text positioning within multiple plots
Posted by [rkombiyil](#) on Wed, 11 Jul 2007 02:52:16 GMT
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On Jul 10, 11:50 pm, David Fanning <n...@dfanning.com> wrote:

> Well, I expect this is pilot error. Exactly *when*
> are you calling your XYOUTS command? If you do it
> directly after you draw each plot, I think it can't
> help but go in the right place. :-)

Thank you gentlemen :-) for taking time off to reply.
It sure was pilot error, for two reasons:

1. I wanted to look at particular window in the time series and in my call to xyouts for specifying "Y" position, I used "max" of the whole range instead of the required window.

2. The range in Y varies from station to station, so I just had to figure out an optimum way for the Y position.

Problem solved after the morning cup of coffee :-)

~rk
