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Subject: Re: cgBoxPlot not responding to xCharsize  
Posted by [David Fanning](#) on Tue, 02 Jul 2013 13:21:43 GMT  
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JP writes:

> It seems that cgBoxPlot is not responding to the xCharsize keyword. I  
tried the code below:

```
>  
> PS_Start, 'cgHistoplot.png'  
> !P.Multi=[0,3,1]  
> labels=['var1','var2','var3','var4']  
> cgdisplay, 1000, 300  
> cgBoxPlot, randomn(seed, 4, 1000), labels=labels  
> cgBoxPlot, randomn(seed, 4, 1000), labels=labels, xCharsize=0.5  
> cgBoxPlot, randomn(seed, 4, 1000), labels=labels, xCharsize=0.25  
> PS_End, resize=100, /png
```

Yes, I was using the XCharsize value incorrectly in this program. You  
can find an updated version here:

<http://www.idlcoyote.com/programs/cgboxplot.pro>

Unfortunately, this is not going to solve all your problems. :-)

The larger problem here is doing multiple plots with !P.Multi. This  
method of doing multiple plots is great as long as you are willing to  
surrender all control over plot position and character size and rely  
completely on the !P.Multi algorithm to set these for you. But, if you  
wish to control this aspect of your plots (as I do in cgBoxPlot), then  
chaos is certain to ensue.

In this particular case, since I am putting plot labels on with XYOutS,  
there will be a terrible mismatch between the size of the plot  
annotation, which is under the influence of !P.Multi, and the plot  
labels, which are not. Basically, you will never be able to get the two  
sizes to match! (Or, if you do, immediately call me with the algorithm  
you used!)

Download the updated program, then consider this code. Here is how you  
are doing things now.

```
!P.Multi=[0,3,1]  
labels=['var1','var2','var3','var4']  
cgdisplay, 1000, 300, wid=1  
cgBoxPlot, randomn(seed, 4, 1000), labels=labels  
cgBoxPlot, randomn(seed, 4, 1000), labels=labels, xCharsize=0.75  
cgBoxPlot, randomn(seed, 4, 1000), labels=labels, xCharsize=1.25
```

!P.multi=0

You can see the plot annotations are all over the map!

In this case, it will make a LOT more sense to use `cgLayout` to set up your plot positions, which will allow you to control your plot annotations exactly. There will be no interference from `!P.Multi`.

See how much more sense this way of drawing the plots makes.

```
positions = cgLayout([3,1], xGap=5, oxMargin=[5,5], $
    oyMargin=[5,3])
labels=['var1','var2','var3','var4']
cgdisplay, 1000, 300
cgBoxPlot, randomn(seed, 4, 1000), labels=labels, $
    Position=positions[*],0]
cgBoxPlot, randomn(seed, 4, 1000), labels=labels, $
    Position=positions[*],1], /NoErase, XCharsize=0.75, $
    Charsize=0.75
cgBoxPlot, randomn(seed, 4, 1000), labels=labels, $
    Position=positions[*],2], /NoErase, XCharsize=1.25, $
    Charsize=1.25
```

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")

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