Subject: Re: Errorbar plot with max-min boundaries and bar plot with !P.Multi
Posted by atmospheric physics on Sat, 30 Nov 2013 23:03:05 GMT
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Thank you. Now the code works fine!

How can I include legend into my top panel plot (error estimate plot)?

Thanks in advance.

On Saturday, November 30, 2013 1:02:55 AM UTC+1, David Fanning wrote:
> Madhavan Bomidi writes:
>
>
>
>> In my opinion, !P.Multi can just indicate how many subplots are required in the display window while you don't have any control for adjusting the width / height of each the subplots. In this case, 'position' option will be very handy. I tried to run my code by disabling the !P.Multi commands while retaining the 'position' option. This resulted in only a single plot and the other plot disappeared or not static on the display window. By keeping both the options, I could
>
> control the width / height of each subplot and also both the subplots are static on the display window. This is what I observed. May be I am wrong but keeping both has no problem on plotting.

>
>
>
> You are certainly welcome to do what you like and have any opinion you
>
> want. I'm just telling you that using !P.Multi and the POSITION keyword
>
> together will lead to head scratching and chaos sooner rather than
>
> later. I have a bit of experience in this area. ;-)
>
>
>
>> My plots were as per my desired one except one issue. From your graphics routines, I just wanted to show the standard deviation as a background color similar to your example plot of Error-estimate plot. I tried to check all lines in all possible ways. While my syntax looks fine and no error results while running the program, I still can't figure out why I see a complete frame of my subplot covered by the color specified for showing the error in the plot.
>
>
>
> Yes, you need to remove the POSITION keyword from the cgColorFill

>
> command. Then, things should work as you expect.
>
>
>
>> Please help me solve this issue ...
>
>
>
> Here is a sample program that doesn't use !P.Multi at all (always my
>
> preference, given the numerous bad things that can happen when you do
>
> use it). I believe it does what you want. I've just faked some data, but
>
> I believe I am using most of your code.
>
>
>
> ;---------- ---------
>
> xtime=Indgen(101) ; X-axis
>
> var_data=cgDemoData(1) ; Variable mean values
>
> var_std=Randomu(seed, 101)*3 ; Variable standard deviation values
>
> high_error=var_data + var_std ; Upper error
>
> low_error=var_data - var_std ; Lower error
>
> var_min=low_error-5 ; Variable minimum values
>
> var_max=high_error + 6 ; Variable maximum values
>
> npoints=RandomU(seed, 101) *10 ; No. of points used
>
>
>
> ; Setup variables for the plot
>
> xtitle = 'Julian Time'
>
> ytitle1 = 'Variable'
>
> ytitle2 = 'Counts'
>
> title = 'Test Plot'

```
>
>  position1 = [0.15, 0.40, 0.95, 0.90]
>
>  position2 = [0.15, 0.10, 0.95, 0.30]
>
>
>
>  thick = (!D.Name EQ 'PS') ? 4 : 2
>
>
>
>  ; Setup colors for plot
>
>  colors=['goldenrod','sky blue','blue','black']
>
>
>
>  ; Setup Graphics Display
>
>  cgDisplay
>
>
>
>  ; Draw the first plot
>
>  cgPlot, xtime, var_data, Title=title, XTitle=xtitle, YTitle=ytitle1, $
>
>     XStyle=8, Position=position1,/NoData, YStyle=1
>
>
>
>  ; Fill in the error estimates
>
>  cgColorFill, [xtime, Reverse(xtime), xtime[0]], $
>
>     [high_error, Reverse(low_error), high_error[0]], $
>
>     Color=colors[1]
>
>
>
>  ; Draw the line plot with no data
>
>  cgPlot, xtime, var_data, linestyle=0, thick=2,Color=colors[3],/OVERPLOT
>
>  cgPlot, xtime, var_min, linestyle=2, thick=2, Color=colors[2],/OVERPLOT
>
>  cgPlot, xtime, var_max, linestyle=2, thick=2, Color=colors[2],/OVERPLOT
```

>
>
>
> ; Draw the bottom plot without a top axis
>
> cgPlot, xtime, npoints, PSYM=16, Color=colors[0], $
>
>   SYMSIZE=0.5,Position=position2, /NoErase, $
>
>   YTitle=ytitle2, XTitle=xtitle
>
>
>
> END
>
> ;-- ---------
>
>
>
> Cheers,
>
>
>
> David
>
> --
>
> David Fanning, Ph.D.
>
> Fanning Software Consulting, Inc.
>
> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
>
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")
