
Subject: Problem with multi plot
Posted by [Gaurav](#) on Wed, 13 Aug 2008 12:56:20 GMT
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Dear all,
I am trying to display the following data on a single plot.

```
xdata_area = [10, 20, 30, 40, 50]
xdata_vol = [112, 224, 336, 448, 560]
ydata = [20, 40, 60, 80, 100]
```

Note that the y-values for both are the same. I would like to have a graph with two x-axes, with different ranges and the plots in two different colors. Following is the code I wrote-it can be copy pasted and run. I shall point out my troubles after that:

```
##### CODE BEGIN #####
Pro multi_plot
;this code will try to display two plots on the same chart in
different colors with different x axes
xdata_area = [10, 20, 30, 40, 50]
xdata_vol = [112, 224, 336, 448, 560]
ydata = [20, 40, 60, 80, 100]
xMax_area = MAX(xData_area, MIN=xMin_area)
xMax_vol = MAX(xData_vol, MIN=xMin_vol)
ymax = min(ydata, min = ymin)

DEVICE, DECOMPOSED=0 & !P.FONT = 0 & loadct, 39

!p.background=255
!p.color=0

WINDOW, 2, XSIZE = 900, YSIZE = 500, TITLE = 'Elevation - Area -
Capacity Curve'
wset, 2

!P.MULTI = [0, 1,1,2]

plot, xdata_area , ydata , $
thick = 2, $
XRANGE = [xMin_area,xMax_area] , YRANGE = [yMin,yMax],$
XTITLE='Area in Million sq metres', YTITLE = 'Elevation in Metres',$
charsize=1.1, ystyle=1, $
subtitle='Elevation-Area Curve',$
XSTYLE = 8, color = 80

AXIS, XAXIS=1,XRANGE = [ceil(xMax_vol/100.)* 100,floor(xMin_vol/
```

```
100.)*100], $  
  XTITLE='Capacity in Million cubic metres', XCHARSIZE = 1.1, xstyle  
= 1
```

```
;The value of X RANGE has been defined that it rounds to the nearest  
hundred  
;above and below the extreme values.
```

```
plot , xdata_vol,ydata ,thick=2, color = 220,XSTYLE = 1, YSTYLE = 1,$  
  X RANGE = [ceil(xMax_vol/100.)* 100,floor(xMin_vol/100.)*100] , Y RANGE  
= [yMin,yMax]
```

```
end  
;##### END OF CODE #####
```

Please note that I have deliberately put the XSTYLE and YSTYLE variables(in the second plot command) equal to 1 to point out my problem. Now, I expected the axes from the two plots to sit together and the plots to be marked properly. Instead, the axes do not sit together. I have uploaded my output here:

<http://link.imgshare.us/8cjE4Y>

I would appreciate your kind consideration. My queries are:

- a] Where did I go wrong as a consequence of which the axes do not coincide?
- b] What do I do to plot just the curves (NOT the axes) in color?
- c] What do I do to have the caption at the top of the graph display properly?

Regards,
Gaurav
