
Subject: IDLgrAxis question.

Posted by [savoie](#) on Thu, 19 Feb 2004 20:26:10 GMT

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Gurus,

O.k. I've been pulling hair and beating my head over this for a while, and I think if I ask, someone here will probably be able to tell me right away. I want to be able to change the range of an axis from within a widget program. I am doing this with the setProperty procedures of the axis and plot. After I do this, the yfonts get all screwy. (that's the technical term.)

I'm running into this problem on IDL Version 6.0 (linux x86 m32).

I have just taken Ronn Kling's example program and hacked it to show you what I mean.

Please tell me what I'm doing wrong before I get any balder?

Thanks so much

Matt

```
;; Here it is ....
```

```
pro plot_axis_weirdness
```

```
;; example program for plot objects from Kling's book originally, modified
```

```
;; to ask a question
```

```
array = findgen(180)
```

```
x = array
```

```
y = Sin(array/5.) / Exp(array/50.)
```

```
theFont = Obj_New('IDLgrFont', size = 8)
```

```
oWindow = obj_new('IDLgrWindow', dimension = [400, 400], renderer = 1, $  
retain = 2, title = 'Plot Object example')
```

```
oView = obj_new('IDLgrView', $  
VIEWPLANE_RECT = [-.3, -.3, 1.4, 1.6], $  
color = [255, 255, 255])
```

```
oModel = obj_new('IDLgrModel')
```

```
oPlot = obj_new('IDLgrPlot', x, y)
```

```
oPlot->getProperty, xrange = xrange, yrange = yrange  
print, yrange, xrange
```

```

xs = normalize(xrange)
ys = normalize(yrange)
oPlot -> SetProperty, xcoord_conv = xs, ycoord_conv = ys
oModel -> add, oPlot
oView -> add, oModel

oTextX = obj_new('IDLgrText', 'X Axis', FONT=theFont)
oAxisX = obj_new('IDLgrAxis', 0, range = xrange, xcoord_conv = xs, /EXACT, $
               title = oTextX)

;;add it to the model
oModel -> add, oAxisX

;;create a text object
oTextY = obj_new('IDLgrText', 'Y Axis', FONT = theFont)

;;create an axis object
oAxisY = obj_new('IDLgrAxis', 1, range = yrange, $
               ycoord_conv = ys, exact = 1, $
               title = oTextY)

;;add it to the model
oModel -> add, oAxisY

oWindow -> draw, oView ;;have to redraw the view to see the changes
oWindow -> show, 1 ;;now push it to the top

print, 'press return to change the yrange'
r = get_kbrd(1)

oAxisY -> GetProperty, crange = range
print, range
new_range = [range[0]-4, range[0]+4]

oAxisY -> SetProperty, range = new_range, /EXACT

;; just to verify
oAxisY -> GetProperty, crange = range
print, range

new_Yscale = normalize(range)
oAxisY -> SetProperty, YCOORD_CONV = new_Yscale
oPlot -> SetProperty, YCOORD_CONV = new_Yscale

oWindow -> draw, oView
oWindow -> show, 1

```

```
print, 'press return to end the program'
r = get_kbrd(1)

;clean up the objects
obj_destroy, oWindow
obj_destroy, oView
obj_destroy, oModel
obj_destroy, oPlot
obj_destroy, oAxisX
obj_destroy, oAxisY
obj_destroy, oTextX
obj_destroy, oTextY

return
end
```

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