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Subject: Re: OBJ\_AXIS tick labels

Posted by [davidf](#) on Wed, 14 Apr 1999 07:00:00 GMT

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Pavel Romashkin (pavel@terra.colorado.edu) writes:

> Could anyone tell me: do I really have to individually call SETPROPERTY,  
> RECOMPUTE=2 for axis tick labels (which, by the way, are not so easily  
> accessible from an axis object) each time I change viewplane rectangle  
> (when placing data in PLOT object after initializing it with no data),  
> or there is a smart way to do that? Once I change the data in a plot  
> object, re-limit axes and recalculate viewplane rectangle, tick labels  
> get squeezed. So do axes titles, despite having their RECOMPUTE set to  
> 2. If I set RECOMPUTE to 2 after the transformation, everything looks  
> ok, but shouldn't CHAR\_SIZE be recomputed automatically if RECOMPUTE is  
> set to 2?

Well, no question you have to recompute the polygons after you re-scale the axes. I don't know why you have to do it by hand every time. I've never seen this. Perhaps because you are recalculating the viewplane rectangle. I tend to leave the viewplane rectangle alone and scale everything into it.

Here is the code I use to define one of my axes. You see how I get the axes labels and set them to recompute themselves. The "xtitle" variable is a text object that also has Recompute\_Dimensions set to 2.

```
xAxis1 = Obj_New("IDLgrAxis", 0, Color=[255,255,0], Ticklen=0.025, $  
  Minor=4, Range=xrange, Title=xtitle, XCoord_Conv=xs, $  
  Location=[1000, 0 ,0], /Exact)  
xAxis1->GetProperty, Ticktext=xAxisText  
helvetica10pt = Obj_New('IDLgrFont', 'Helvetica', Size=10)  
xAxisText->SetProperty, Font=helvetica10pt, Recompute_Dimensions=2
```

After I load new data, I have code that looks something like this. Normalize is a utility routine that creates scaling factors to scale the data into 0 to 1, which is appropriate for the viewplane rectangle I'm using.

```
info.thisPlot->SetProperty, DataX = x, DataY = y  
info.thisPlot->GetProperty, XRange=xrange, YRange=yrange  
xs = Normalize(xrange)  
ys = Normalize(yrange)  
info.thisPlot->SetProperty, XCoord_Conv=xs, YCoord_Conv=ys  
  
info.xaxis1->SetProperty, XCoord_Conv=xs, Range=xrange
```

info.yaxis1->SetProperty, YCoord\_Conv=ys, Range=yrange

The axis labels and titles now appear fine. That is, they get recomputed correctly and automatically.

Cheers,

David

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[Note: This follow-up was e-mailed to the cited author.]

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