
Subject: Some questions about "axis"

Posted by [ICBM0926](#) on Thu, 11 Sep 2008 09:05:45 GMT

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Dear all

I am now currently using "TVSCL" to plot colored contour pictures. In my program, I've used "plot"+ "TVScl"+ "axis" to complete the entire colored contour. Especially I've used two "axis" procedure to make the axis labels and axis ticks stand outside the colored contour. The following address contains a completed plot.

<http://picasaweb.google.com/ICBM0926/oQPOXH?authkey=l5370hFdWig#5244685059173580738>

In the picture one can find that the ticks are too close to the labels, they almost stick together. I've tried to adjust the "ticklen". However, I can't shorten them any more or the ticks are almost invisible. I need some ways to move tick labels outward. Is there any way to solve this issue? Partial code are attached below. Please give me some suggestions.

code:

```
set_plot, 'ps'
```

```
device,/color
```

```
device, filename=psoutfilename, /color, bits_per_pixel=8 $
```

```
,xsize=x0_size, ysize=x1_size, xoffset=x0_offset, yoffset=x1_offset,/
portrait
```

```
!p.charsize=1.2
```

```
;plot data
```

```
plot , [x0_min,x0_max],[x1_min,x1_max], /nodata, /noerase $
```

```
, position=[px0,py0,px1,py1] $
```

```
, xstyle=5, ystyle=5,title=""
```

```
LoadCT, ict
```

```
stretch,ist_low,ist_high
```

```

xsize=(px1-px0)* !D.X_VSize
ysize=(py1-py0)* !D.Y_VSize
xstart=px0* !D.X_VSize
ystart=py0* !D.Y_VSize
TVScl, fielddata, xstart,ystart,XSize=xsize,YSize=ysize
LoadCT,0 ; reset color table
stretch, 0,255
;plot x0 axis
axis, x0_min, x1_min, xaxis=1 $
, xcharsize=0.001 , xtitle='!8'+x0_label $
, xticks=x0_ticks, xminor=x0_minor, ticklen=x0_ticklen,xticklayout = 0
axis, x0_min, x1_min, xaxis=0 $
, xtitle='!8'+x0_label $
, xticks=x0_ticks, xminor=x0_minor, ticklen=x0_ticklen,xticklayout = 1
;plot x1 axis
axis, x0_min, x1_min, yaxis=1 $
, ycharsize=0.001 $
, yticks=x1_ticks $
, yminor=x1_minor $
, yticklayout= 0 $
, ytickinterval=x1_interval
axis, x0_min, x1_min, yaxis=0 $
, ytitle='!8'+x1_label $
, yticks=x1_ticks $

```

```

, yticklayout= 1 $
, yminor=x1_minor $
, ytickinterval=x1_interval
if n_elements(time) ne 0 then begin
    string_temp = 'T='+string(time)+'(s)'
    string_temp = strcompress(string_temp,/remove_all)
    XYOUTS, 0.1,0.9, string_temp, CHARSIZE=1.5,CHARTHICK=3, /normal
endif

;-----plot remainings-----

oplot, [x0_min,x0_max],[x1_max,x1_max], thick=line_thick
oplot, [x0_max,x0_max],[x1_max,x1_min], thick=line_thick
;plot color bar
plot ,[0.,1.],[colorbar_min,colorbar_max], /nodata, /noerase $
,position=[cbx0,cby0,cbx1,cby1] $
, xstyle=5,ystyle=5,title='!8'+''

LoadCT, ict
stretch ,ist_low,ist_high

xsize=(cbx1-cbx0)* !D.X_VSize
ysize=(cby1-cby0)* !D.Y_VSize
xstart=cbx0* !D.X_VSize
ystart=cby0* !D.Y_VSize

```

TVSCL , cb_arr,xstart,ystart,XSize=xsize,YSize=ysize

LoadCT, 0

stretch ,0,255

;-----plot y axis-----

axis,1.,colorbar_min,yaxis=0 \$

,ycharsize=0.001 \$

,ticklen=colorbar_ticklen \$

,yticks=colorbar_ticks \$

,yticklayout= 0 \$

,yminor=colorbar_minor \$

,ytickinterval=colorbar_interval,ytitle=cbby_title

axis,1.,colorbar_min,yaxis=1 \$

,ticklen=colorbar_ticklen \$

,yticks=colorbar_ticks \$

,yticklayout= 1 \$

,yminor=colorbar_minor \$

,ytickinterval=colorbar_interval,ytitle=cbby_title

;-----

oplot, [0.,1.],[colorbar_min,colorbar_min], thick=line_thick

```
oplot, [0.,0.],[colorbar_min,colorbar_max], thick=line_thick  
oplot, [0.,1.],[colorbar_max,colorbar_max], thick=line_thick  
; here rendering to file is done. set back to screen defaults  
device, /close
```
