Subject: Re: rough lines in IDL graphic window
Posted by David Fanning on Tue, 15 Nov 2005 16:35:30 GMT
View Forum Message <> Reply to Message

Franco writes:

> yes the problem is resolution, and I've partially resolved it using
> your suggestion http://www.dfanning.com/graphics_tips/zfonts.html
> with the z-buffer.
>
> My code looks like this:
>
>   thisDevice = !D.Name
>   Set_Plot, 'Z'
>   Device, Set_Resolution=[1200,1200]
>   contour,u,x,y,levels=vals,/fill,c_colors=col,charsize=4.0,fo nt=1
>   contour,v,x,y,nlevels=15,/noerase,c_thick=4,charsize=4.0,fon t=1
>
>   snapshot = TVRD()
>   Set_Plot, thisDevice
>   window,1,xsize=300,ysize=300
>   new= Rebin(snapshot, 300, 300)
>   TV, new
>   write_tiff, 'pl.tiff', reverse(new, 3), /append
>
> In grayscale it works simply great!!
> My problem now is with colors. If I load a color table, I make the
> following modification:
>   snapshot = TVRD(true=1)
>   Set_Plot, thisDevice
>   window,1,xsize=300,ysize=300
>   new= Rebin(snapshot, 3, 300, 300)
>   TV, new, /true
>   write_tiff, 'pl.tiff', reverse(new, 3), /append
>
> but now it doesn't work. It shows 3 small rough pictures.
> Unfurtunately I have not a lot of experience with the z-buffer
> and colors. Is there a simple solution?
> I'm using IDL 6.1 on a Mac Powerbook G4.

I don't answer questions about Macs. Who knows what is happening!?

No, just kidding.

The reason you are using the Z-buffer is to get away from
having to resize a 24-bit image, which will implement all sorts
of complications in your life. So that whole TVRD(TRUE=1) thing
concerns me.

I don't have time to try this (I'm teaching a class today),
but I would do the output and resizing in the Z-buffer as normal,
then I would load a color table (one that presumably resembles
the gray-scale table in its smoothness). Get those color vectors,
and run my re-sized snapshot through those vectors to produce
my 24-bit image for the TIFF file:

```
thisDevice = !D.Name
Set_Plot, 'Z'
Device, Set_Resolution=[1200,1200]
 contour,u,x,y,levels=vals,/fill,c_colors=col,charsize=4.0,fo nt=1
 contour,v,x,y,nlevels=15,/noerase,c_thick=4,charsize=4.0,fon t=1
new= Rebin(snapshot, 300, 300)
Set_Plot, thisDevice

LoadCT, 22
TVLCT, r, g, b, /Get
image24 = [  [[r[new]]], [[g[new]]], [[b[new]]] ]
write_tiff, 'pl.tiff', reverse( image24, 2 ), /append
```

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/