
Subject: Re: polyfill

Posted by [David Fanning](#) on Mon, 01 Jun 2009 23:36:31 GMT

[View Forum Message](#) <> [Reply to Message](#)

mandrilhot@yahoo.co.uk writes:

> I'm doing an eps graph and I'm using polyfill to fill the area between
> two lines. However I would like the area to be gray transparent, so I
> can still see what's below the filled part. How can I do?
>
> I'm using this simple line, tried the keyword transparent but it seems
> not to be my case
>
> polyfill,[6000,6250,6250,6000],[1.215,1.215,1.406,1.406]

I was curious about this, so I modified some of the code to do this in a graphics window, which you can find here:

http://www.dfanning.com/code_tips/transpoly.html

By just grabbing the area inside the axes, and outputting that into the PostScript file as an image, and then putting the axes around that, I got some results that are not too bad.

You will need the current Coyote Library code to run this example, but I was quite surprised at how well it turned out.

Cheers,

David

PRO Transparent_PS

```
; Create some data.
signal = LoadData(1) - 15
time = Findgen(N_Elements(signal)) * 6.0 / N_Elements(signal)

; Create some windows.
Window, Title='Data Window', XSIZE=400, YSIZE=400, /FREE
dataWin = !D.Window
Window, Title='Polygon Window', XSIZE=400, YSIZE=400, /FREE
polyWin = !D.Window

; Draw plot in data window.
```

```

WSet, dataWin
pos = [0.2, 0.2, 0.9, 0.9]
Plot, time, signal, BACKGROUND=FSC_Color('ivory'), $
    COLOR=FSC_Color('navy'), $
    /NODATA, XTitle='Time', YTitle='Signal Strength', $
    POSITION=pos
OPLOT, time, signal, THICK=2, COLOR=FSC_Color('cornflower blue')
OPLOT, time, signal, PSYM=2, COLOR=FSC_Color('olive')

; Take a snapshot.
background = TVREAD(TRUE=3)

; Copy data window and draw a polygon in the polygon window.
WSet, polyWin
DEVICE, COPY=[0, 0, 400, 400, 0, 0, dataWin]
POLYFILL, [ 0, 6, 6, 0, 0], $
    [-5, -5, 5, 5, -5], /DATA, $
    COLOR=FSC_COLOR('deep pink')

; Take a snapshot of this window.
foreground = TVREAD(TRUE=3)

; Display the transparency.
alpha = 0.25
Window, Title='Transparent Polygon Window', $
    XSIZE=400, YSIZE=400, /FREE
TV, (foreground * alpha) + (1 - alpha) * background, TRUE=3

; Do it in PostScript now.
dpos = pos
dpos[[0,2]] = pos[[0,2]] * !D.X_Size
dpos[[1,3]] = pos[[1,3]] * !D.Y_Size
inPic = TVRead(dpos[0],dpos[1],dpos[2]-dpos[0]+1,dpos[3]-dpos[1]+1)

PS_Start, FILENAME='transparent_plot.ps', XSIZE=4, YSIZE=4, $
    /INCHES, /ENCAPSULATED
TVImage, inPic, POSITION=pos
Plot, time, signal, COLOR=FSC_Color('navy'), $
    /NODATA, XTitle='Time', YTitle='Signal Strength', $
    POSITION=pos, /NOERASE
PS_END;, /PNG
END

--
David Fanning, Ph.D.
Coyote's Guide to IDL Programming (www.dfanning.com)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

```
