
Subject: legend() with a mix of plot() and contour()
Posted by [Brian Daniel](#) on Wed, 12 Oct 2011 19:27:44 GMT
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Dear IDL-er's,

I've recently started playing with the NG system. Oddly enough, its been working well for me, but I've run into an odd behavior of legend(). I use plot() for some data, then to draw a geometrical function on top of it, I create coordinate arrays and use contour() with the c_value keyword set.

The problem is when I attempt to show a legend only the calls to plot() are listed. Nowhere in the documentation does ITT discuss this limitation. Has anyone used legend for other graphing routines? Here's a simple example:

```
dataX = randomn(1,300)
dataY = randomn(2,300)
p = plot(dataX,dataY, linestyle=6, symbol='.', Name='Data')
xrange = p.xrange
yrange = p.yrange

; create coordinates
N_samp = 200 ; number of samples in "cartoon" space
xx = findgen(N_samp)/(N_samp-1) * (xrange[1]-xrange[0]) + xrange[0]
yy = findgen(N_samp)/(N_samp-1) * (yrange[1]-yrange[0]) + yrange[0]
x = xx # replicate(1.0,N_samp)
y = replicate(1.0,N_samp) # yy

; function to draw
r = sqrt((x-0.5)^2.0 + (y-0.5)^2.0)

; draw the function
c = contour(r,xx,yy,c_linestyle='__',color='red', C_Value=1.0,
Name='Circle', /Overplot)

; add a legend
l = legend(target=[p,c],position=[0.15,0.85],/Norm)
```
