
Subject: Re: cgGallery with function graphics
Posted by [Matthew Argall](#) on Thu, 27 Feb 2014 16:13:54 GMT
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Basic Contour Plot

http://www.idlcoyote.com/gallery/basic_contour_plot.png

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; Example Gaussian data.

data = cgDemoData(26)

; Set up variables for the contour plot. Normally, these values

; would be passed into the program as positional and keyword parameters.

minValue = Floor(Min(data))

nLevels = 10

xtitle = 'X Axis'

ytitle = 'Y Axis'

position = [0.125, 0.125, 0.9, 0.9]

title = 'Basic Contour Plot'

;Contour levels

contourLevels = cgConLevels(data, NLevels=10, MinValue=minValue)

; Open a window and return its reference to the user.

aWindow = Window(WINDOW_TITLE="Basic Contour Plot")

;Create a contour

fgContour = Contour(data, /Current, C_Value=contourLevels, C_Color='Purple', \$
 XTitle=xtitle, YTitle=ytitle, Title=title)

;Add the right and top axes

; In IDL 8.2.3+ set Location='Right' or 'Top' and skip finding [xy]range.

xrange = (fgContour.Axes)[0].Range

yrange = (fgContour.Axes)[1].Range

xAxis = Axis('X', Target=fgContour, Location=[xrange[1], yrange[1], 0], \$
 TickFormat='(A1)', TickDir=1)

yAxis = Axis('Y', Target=fgContour, Location=[xrange[1], yrange[0], 0], \$
 TickFormat='(A1)', TickDir=1)

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Coyote Version

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PRO Basic_Contour_Plot_FG, WINDOW=window
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END ;*****

; This main program shows how to call the program and produce
; various types of output.

; Display the plot in a resizeable graphics window.
Basic_Contour_Plot_FG, Window=window

; Create a PostScript file. Linestyles are not preserved in IDL 8.2.3 due
; to a bug. Only encapsulated PostScript files can be created.
window.save, 'basic_contour_plot_fg.eps'

; Create a PNG file with a width of 600 pixels. Resolution of this
; PNG file is not very good.
window.save, 'basic_contour_plot_fg.png', WIDTH=600

```

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; For better resolution PNG files, make the PNG full-size, then resize it
; with ImageMagick. Requires ImageMagick to be installed.
window.save, 'line_plot_with_legend_fullsize.png'
  Spawn, 'convert basic_contour_plot_fg_fullsize.png -resize 600
basic_contour_plot_fg_resized.png'
```

END
