
Subject: filling area for an XY plot

Posted by [mkmvarma](#) on Mon, 19 Jan 2015 19:52:27 GMT

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I would like to fill an area for an XY plot. I have altitude on Y axis and percentage difference on X axis. I have three lines plotted, the center line being the mean value and the other two lines are ± 1 standard deviation. I would like to plot the standard deviation from mean as a shaded area. I tried to use polyfill but was no luck. Any help will be appreciated.

Thanks,
Mahesh

Subject: Re: filling area for an XY plot

Posted by [David Fanning](#) on Tue, 20 Jan 2015 01:01:43 GMT

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mkmvarma@gmail.com writes:

> I would like to fill an area for an XY plot. I have altitude on Y axis and percentage difference on X axis. I have three lines plotted, the center line being the mean value and the other two lines are ± 1 standard deviation. I would like to plot the standard deviation from mean as a shaded area. I tried to use polyfill but was no luck. Any help will be appreciated.

See the code for the Error Estimate Plot in the Coyote Gallery:

<http://www.idlcoyote.com/gallery/index.html>

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Seppure ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: filling area for an XY plot

Posted by [chris_torrence@NOSPAM](#) on Tue, 20 Jan 2015 02:51:40 GMT

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On Monday, January 19, 2015 at 12:52:28 PM UTC-7, mkmv...@gmail.com wrote:

> I would like to fill an area for an XY plot. I have altitude on Y axis and percentage difference on X axis. I have three lines plotted, the center line being the mean value and the other two lines are ± 1 standard deviation. I would like to plot the standard deviation from mean as a shaded area. I tried to use polyfill but was no luck. Any help will be appreciated.

> Thanks,

> Mahesh

Example from the POLYGON function:

```
data = RANDOMU(s,81)*15-5
upper = data + RANDOMU(s,81)*2 + 6
bottom = data - RANDOMU(s,81)*3 - 7
year = INDGEN(81) + 1930
key = 1942

p = PLOT(year, data, X RANGE=[1930,2010], Y RANGE=[-15,20], $
  YTITLE='Soil Heat Accumulation [MJ m$^{-2}$]', THICK=2)
poly = POLYGON([year,reverse(year)], [upper,reverse(bottom)], $
  [REPLICATE(-0.01,162)], /DATA, /FILL_BACKGROUND, $
  FILL_COLOR="light steel blue")
```

Cheers,
Chris
