
Subject: Re: How to shade area between two lines
Posted by [David Fanning](#) on Thu, 21 Mar 2002 20:02:10 GMT
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Charlie Zender (zender@uci.edu) writes:

- > I have two lines on an xy plot. The horizontal axis is time.
- > One line is always above the other.
- > I would like to greyshade the area in between the lines.
- > How can this be done?

Will PolyFill.

- > polyfill treats my vertices like a polygon,
- > and I do not want the last point connected to the first point.

I don't understand what this means. Here is an example
that seems to do what you want.

***** **

PRO Example

; Create some data

```
y1 = [ 1, 3, 2, 5, 6, 9]
y2 = [ 3, 6, 7, 6, 8, 10]
x1 = Indgen(6) + 1
x2 = Indgen(6) + 1
```

; Load some colors.

```
TVLCT, [125, 255, 0], [125,255, 255], [125, 0, 0], 100
Device, Decomposed=0
```

; Draw the plot, fill the area between lines with gray.

```
Plot, x1, y1, /NoData, XRange=[0,10], XStyle=1
Polyfill, [x1, Reverse(x2)], [y1, Reverse(y2)], Color=100
OPlot, x1, y1, Color=101
Oplot, x2, y2, Color=102
```

END

***** **

Cheers,

David

--

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: How to shade area between two lines
Posted by [Doug Rowland](#) on Thu, 21 Mar 2002 20:17:39 GMT
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On 03/21/02 02:02 PM, in article MPG.1703ea2fb4d4c3d0989841@news.frii.com,
"David Fanning" <david@dfanning.com> wrote:

```
> Charlie Zender (zender@uci.edu) writes:
>
>> I have two lines on an xy plot. The horizontal axis is time.
>> One line is always above the other.
>> I would like to greyscale the area in between the lines.
>> How can this be done?
>
> Will PolyFill.
>
>> polyfill treats my vertices like a polygon,
>> and I do not want the last point connected to the first point.
>
> I don't understand what this means. Here is an example
> that seems to do what you want.
>
> *****
> PRO Example
>
> ; Create some data
>
> y1 = [ 1, 3, 2, 5, 6, 9]
> y2 = [ 3, 6, 7, 6, 8, 10]
> x1 = Indgen(6) + 1
> x2 = Indgen(6) + 1
>
> ; Load some colors.
>
> TVLCT, [125, 255, 0], [125,255, 255], [125, 0, 0], 100
> Device, Decomposed=0
>
> ; Draw the plot, fill the area between lines with gray.
>
> Plot, x1, y1, /NoData, XRange=[0,10], XStyle=1
> Polyfill, [x1, Reverse(x2)], [y1, Reverse(y2)], Color=100
```

```
> OPlot, x1, y1, Color=101
> Oplot, x2, y2, Color=102
>
> END
> ***** **
>
> Cheers,
>
> David
```

To handle missing data (represented by !VALUES.F_NAN or otherwise) you'd first have to filter your data and interpolate.

Doug Rowland
rowland@fields.space.umn.edu

Subject: Re: How to shade area between two lines
Posted by [Charlie Zender](#) on Fri, 22 Mar 2002 15:17:48 GMT
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```
> I don't understand what this means. Here is an example
> that seems to do what you want.
```

Thanks for the example, I'll see if this works.
I think I forgot to reverse() the points in the second line
so the polygon connected points it shouldn't have in the middle...

--

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