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Subject: Re: How to plot many lines simultaneously  
Posted by [David Fanning](#) on Tue, 05 Nov 2002 13:20:04 GMT  
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lily\_zhang (fengliza@sina.com) writes:

> Now I have two matrices, X and Y. Supposing X = FltArr(100), Y =  
> FltArr(8,100),  
> I just wonder how to plot all the columns of Y as the functions of X  
> in an image simultaneously.

I'd try something like this.

```
Plot, x, y[0,*], YRange=[Min(y),Max(y)]  
FOR j=1,7 DO OPlot, x, y[j,*]
```

You probably want each plot in a different color or  
line style so you can tell them apart, but just add  
the appropriate keywords.

Cheers,

David

--

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Subject: Re: How to plot many lines simultaneously  
Posted by [R.G. Stockwell](#) on Tue, 05 Nov 2002 14:34:09 GMT  
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lily\_zhang wrote:

> Now I have two matrices, X and Y. Supposing X = FltArr(100), Y =  
> FltArr(8,100),  
> I just wonder how to plot all the columns of Y as the functions of X  
> in an image simultaneously.

```
plot,x,y(0,*)  
for i= 1,7 do oplot,x,y(i,*)
```

Cheers,  
bob

PS

```
X = findgen(100)
Y = randomn(seed,8,100)
creates a far more interesting plot than your example
```

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Subject: Re: How to plot many lines simultaneously  
Posted by [Pavel A. Romashkin](#) on Tue, 05 Nov 2002 21:00:58 GMT  
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David Fanning wrote:

```
>
> lily_zhang (fengliza@sina.com) writes:
>
>> Now I have two matrices, X and Y. Supposing X = FltArr(100), Y =
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> I'd try something like this.
>
> Plot, x, y[0,*], YRange=[Min(y),Max(y)]
> FOR j=1,7 DO OPlot, x, y[j,*]
```

This is plotting \*subsequently\*. For simultaneous, he'd have to do a  
Countour, huh?

Am I being a little ... retentive? Sorry :-)

Cheers,

Pavel

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Subject: Re: How to plot many lines simultaneously  
Posted by [David Fanning](#) on Tue, 05 Nov 2002 21:45:17 GMT  
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Pavel A. Romashkin (pavel\_romashkin@hotmail.com) writes:

```
> This is plotting *subsequently*. For simultaneous, he'd have to do a
> Countour, huh?
> Am I being a little ... retentive? Sorry :-)
```

Talk about retentive. I got all hot and bothered this  
morning that my FSC\_COLOR program wouldn't allow me  
to specify a vector of drawing colors in a way that  
would allow me to loop in this little example I gave  
this morning. I spent half the day adding that little  
feature and more to some of my most stalwart programs. :-(

The example should have read:

```
d = FSC_Color(['charcoal', 'yellow'], Colors=c)
Plot, x, y[0,*], Color=c.charcoal, Background=c.yellow, /NoData
drawcolors = FSC_Color(['green', 'dodger blue', 'firebrick', $
    'pale green', 'dark goldenrod', 'moccasin', 'orchid'])
FOR j=0,7 DO OPlot, x, y[j,*], Color=drawcolors[j]
```

Now, how's that for a half day's work!!

Cheers,

David

P.S. Let's just say even tennis coaching is beginning to  
look lucrative to my wife. :-(

--

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Subject: Re: How to plot many lines simultaneously  
Posted by [Jeff Guerber](#) on Wed, 06 Nov 2002 05:47:01 GMT  
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On Tue, 5 Nov 2002, David Fanning wrote:

```
> lily_zhang (fengliza@sina.com) writes:
>
>> Now I have two matrices, X and Y. Supposing X = FltArr(100), Y =
>> FltArr(8,100),
>> I just wonder how to plot all the columns of Y as the functions of X
>> in an image simultaneously.
>
> I'd try something like this.
>
> Plot, x, y[0,*], YRange=[Min(y),Max(y)]
> FOR j=1,7 DO OPlot, x, y[j,*]
```

Lily, since no one else has mentioned this I'd just like to add that,  
although it doesn't make a noticeable difference in this small example, if  
you're doing this A LOT or the arrays are much bigger, it's much more

efficient if `Y = FltArr(100,8)` (and you make the corresponding changes to David's programlet). Remember that in IDL, as in Fortran, the left index varies the fastest.

Jeff Guerber

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