
Subject: Re: getting an IDLgrPlot drawn
Posted by [David Fanning](#) on Fri, 24 Nov 2006 15:04:55 GMT
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Laurens writes:

> Now, when I execute this code, I don't get what I want. I get some
> strange lines, of which you can view the result at
> http://sophorus.mine.nu/idlgrplot_weird.jpg.

Humm. Well, I think the problem is that you have a misunderstanding of what you are doing with the Viewplane rectangle. It seems to be you think this might be the size of the window used to view the plot. In fact, it is establishing the coordinate system you plan to use for viewing the plot. Two different things.

When I first started with object graphics (and even now, come to think of it) I preferred to set up my coordinate system to go from 0 to 1 (what we refer to in direct graphics as a normalized coordinate system). I was familiar with that system, I knew how to lay things out in a window using that system, etc. But what that means is that all your data, then, has to be scaled so that it fits into that system. Since I did this over and over again, I simply wrote a small routine to do this for me, which I named NORMALIZE.

You can see how I would construct a simple plot like you want in the program XPLOT, which you can find on my web page:

<http://www.dfanning.com/programs/xplot.pro>

Notice that I don't bother with a scene object. It is really not necessary unless you plan to have multiple plots in the same window.

Cheers,

David

P.S. The weird lines in your output indicate a mismatch between the data in the plot and the coordinate system you have chosen. Most people don't see anything in this situation, so you are MUCH luckier than most! :-)

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.

Subject: Re: getting an IDLgrPlot drawn
Posted by [Laurens](#) on Fri, 24 Nov 2006 15:12:53 GMT
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I noticed :) Got a line from another ng-posting,

```
info.View->SetProperty, VIEWPLANE_RECT = [-0.1, -0.1, 1.2, 1.2]
```

which fixed a lot :)

I actually see a line being drawn and if that's not enough, I also see an axis (though its ugly huge big, and just goes from 0 to 1 which doesn't correspond to my data).

Without having looked at your xplot example the "normalizing" is done through;

```
info.Plot->getProperty, XRange = xrange, YRange = yrange
```

```
info.Plot->setProperty, XCOORD_CONV = norm_coord(xrange)  
info.Plot->setProperty, YCOORD_CONV = norm_coord(yrange)
```

I assume that's good enough? Will check your xplot example in a minute...

So Viewplane is not the actual pixels but just from 0.0 to 1.0....hmz...could make sense i guess...

GrtZ, Laurens

I'm so glad I was lucky...feels good to be lucky, though doesn't feel good to be lucky and don't get nothing back for it hehe :)

David Fanning wrote:

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Subject: Re: getting an IDLgrPlot drawn
Posted by [Laurens](#) on Fri, 24 Nov 2006 15:14:13 GMT
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David Fanning wrote:

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By the way; i'm getting redirected to <http://www.w3.org/Protocols/> when trying that url?

Subject: Re: getting an IDLgrPlot drawn
Posted by [David Fanning](#) on Fri, 24 Nov 2006 15:15:55 GMT
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Laurens writes:

> At first I was kinda embarrassed to ask this but after spending my
> complete day at finding a solution which appearantly I didn't find, I
> don't know if the embarrassement would be fair :)

By the way, if your time is worth anything at all, buy
Ronn Kling's excellent introduction to object graphics,
Power Graphics with IDL. It will save you MANY hours

of frustration! :-)

<http://www.kilvarock.com/books/powergraphics.htm>

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: getting an IDLgrPlot drawn

Posted by [Laurens](#) on Fri, 24 Nov 2006 15:16:28 GMT

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Laurens wrote:

> David Fanning wrote:

>> Laurens writes:

>>

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>> situation, so you are MUCH luckier than most! :-)
>
> By the way; i'm getting redirected to <http://www.w3.org/Protocols/> when
> trying that url?
OMG :| So stupid haha, forgot the colon ;)

Subject: Re: getting an IDLgrPlot drawn
Posted by [David Fanning](#) on Fri, 24 Nov 2006 15:20:29 GMT
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Laurens writes:

> By the way; i'm getting redirected to <http://www.w3.org/Protocols/> when
> trying that url?

My damn :::::::::: key is giving me problems!
My keyboard seems to be wearing out faster than I am. :-(

<http://www.dfanning.com/programs/xplot.pro>

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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Subject: Re: getting an IDLgrPlot drawn
Posted by [David Fanning](#) on Fri, 24 Nov 2006 15:22:10 GMT
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Laurens writes:

```
> Without having looked at your xplot example the "normalizing" is done
> through;
>
>   info.Plot->getProperty, XRANGE = xrange, YRANGE = yrange
>
>   info.Plot->setProperty, XCOORD_CONV = norm_coord(xrange)
>   info.Plot->setProperty, YCOORD_CONV = norm_coord(yrange)
>
> I assume that's good enough? Will check your xplot example in a minute...
```

I found NORM_COORD to be sufficient if your axis always starts at 0. If it starts somewhere else, NORM_COORD lets you down. That's why I wrote NORMALIZE.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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Subject: Re: getting an IDLgrPlot drawn

Posted by [Laurens](#) on Fri, 24 Nov 2006 15:27:53 GMT

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David Fanning wrote:

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> of frustration! :-)
>
>   http://www.kilvarock.com/books/powergraphics.htm
>
> Cheers,
>
> David
>
```

thnx for the tip! Will ask the boss if that's doable ;)

Now need to correct that axis to the correct scale, need to change range-property for that then?

Hmz, maybe a solid introduction to obj_graph would be bad hehe :)

GrtZ, Laurens

p.s. if your ::::: key is giving problems, why not use the old-style alt-058 haha :D

Subject: Re: getting an IDLgrPlot drawn

Posted by [Laurens](#) on Fri, 24 Nov 2006 15:30:25 GMT

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Laurens wrote:

> David Fanning wrote:

>> Laurens writes:

>>

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>> David

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>

> GrtZ, Laurens

>

> p.s. if your ::::: key is giving problems, why not use the old-style

> alt-058 haha :D

would / wouldn't, what's the difference anyway :D

Subject: Re: getting an IDLgrPlot drawn
Posted by [David Fanning](#) on Fri, 24 Nov 2006 15:38:01 GMT
[View Forum Message](#) <> [Reply to Message](#)

Laurens writes:

> Now need to correct that axis to the correct scale, need to change
> range-property for that then?

Better have a look at that XPLOT program. It's pretty well documented. :-)

<http://www.dfanning.com/programs/xplot.pro>

Cheers,

David

--

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Subject: Re: getting an IDLgrPlot drawn
Posted by [David Fanning](#) on Fri, 24 Nov 2006 15:49:42 GMT
[View Forum Message](#) <> [Reply to Message](#)

Laurens writes:

> Now need to correct that axis to the correct scale, need to change
> range-property for that then?

Also, for the people listening in, be sure you use the *calculated* range in the scaling, not the range you *asked* for when you made the axis. Because IDL *always* autoscales axis unless you expressly forbid it, the calculated range is very often different from the requested range.

If you fail to do this, your data points will be off every so slightly, which you won't realize until the big presentation when your arch nemesis points it out to you in front of hundreds of people. :-)

This is explained explicitly in the XPLOT code.

Cheers,

David

--

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