
Subject: PLOYY plot

Posted by [d.poreh](#) on Wed, 02 Jul 2008 09:03:50 GMT

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Folks

I want to plot, to set of data in a single figure in IDL (something like poly in MATLAB) one set x,y for example with normal axis and another on (say xx,yy) with logarithmic axis.

Any help?

Cheers

Dave

Subject: Re: PLOYY plot

Posted by [d.poreh](#) on Wed, 02 Jul 2008 15:08:10 GMT

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On Jul 2, 4:44 pm, Spon <christoph.b...@gmail.com> wrote:

> On Jul 2, 2:23 pm, d.po...@gmail.com wrote:

>

>

>

>> On Jul 2, 2:15 pm, Brian Larsen <balar...@gmail.com> wrote:

>

>>> Does this work?

>

>>> http://www.dfanning.com/tips/another_yaxis.html

>

>>> Try using that site for all you IDL needs, it is a great first (and

>>> last) stop.

>

>>> Cheers,

>

>>> Brian

>

>>> -----

>>> Brian Larsen

>>> Boston University

>>> Center for Space Physics <http://people.bu.edu/balarsen/Home/IDL>

>

>> Hi Brian

>> I saw that before no it is not what I need. In that image x is same

>> for both y. I want to inter another x (in the top of box) that $y=f(x)$

>> is for right and top.

>> Cheers

>

> You have to call AXIS twice, once for each new axis you require.

> To extend David's example:

```
>
> x = FINDGEN(100)
> theta = x/5
> curve = SIN(x/5) / EXP(x/50)
> PLOT, curve, YSTYLE=8
> AXIS, YAXIS=1, YLOG=1, YRANGE=[0.1, 100], /SAVE
> AXIS, XAXIS=1, X RANGE =[0, 200], /SAVE
> OPLOT, [theta, REVERSE(theta)]
>
> If you have the same problem as I do with overlaid axes disappearing
> you could get around it by setting YTHICK = 2 & XTHICK = 2 in your
> respective AXIS calls; but this might be a platform-dependent problem
> that doesn't affect you.
>
> Regards,
> Chris
```

no

what you had done is just put $y_1=f(x)$ & $y_2=f(x)$ in a same figure in need something like this:

<https://www.rsg.tu-freiberg.de/twiki/pub/Main/DavodPoreh/as.pdf>
that means plotting $y_1=f(x_1)$ & $y_2=f(x_2)$ in different axis format as you can see.
cheers

Subject: Re: PLOYY plot
Posted by [Brian Larsen](#) on Wed, 02 Jul 2008 15:14:30 GMT
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How is Chris' post not what you want? We all obviously need a little more explanation here. What I see in Chris' plot is a "wiggles" plotted on the bottom x-axis and a "parabola" plotted on the top x-axis.

Brian

Brian Larsen
Boston University
Center for Space Physics
<http://people.bu.edu/balarsen/Home/IDL>

Subject: Re: PLOYY plot

Posted by [d.poreh](#) on Wed, 02 Jul 2008 15:36:25 GMT

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On Jul 2, 5:14 pm, Brian Larsen <balar...@gmail.com> wrote:

> How is Chris' post not what you want? We all obviously need a little
> more explanation here. What I see in Chris' plot is a "wiggle"
> plotted on the bottom x-axis and a "parabola" plotted on the top x-
> axis.

>

> Brian

>

> -----

> Brian Larsen

> Boston University

> Center for Space Physics <http://people.bu.edu/balarsen/Home/IDL>

Brian

i want upper x also loarithmic. if i change and put *xlog=1* it is not
work. i want something like this:

<https://www.rsg.tu-freiberg.de/twiki/pub/Main/DavodPoreh/as.pdf>
as you can see $y_1=f(x)$ (left and down) is normal and $y_2=f(x^2)$ (righ
and up) is logarithmic.

Cheers

Subject: Re: PLOYY plot

Posted by [Paul Van Delst\[1\]](#) on Wed, 02 Jul 2008 15:51:26 GMT

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d.poreh@gmail.com wrote:

> On Jul 2, 5:14 pm, Brian Larsen <balar...@gmail.com> wrote:

>> How is Chris' post not what you want? We all obviously need a little
>> more explanation here. What I see in Chris' plot is a "wiggle"
>> plotted on the bottom x-axis and a "parabola" plotted on the top x-
>> axis.

>>

>> Brian

>>

>> -----

>> Brian Larsen

>> Boston University

>> Center for Space Physics <http://people.bu.edu/balarsen/Home/IDL>

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> work. i want something like this:

> <https://www.rsg.tu-freiberg.de/twiki/pub/Main/DavodPoreh/as.pdf>

> as you can see $y_1=f(x)$ (left and down) is normal and $y_2=f(x_2)$ (right
> and up) is logarithmic.

Why? The x-axes aren't related -- at least they shouldn't be since the lower one starts at 0.

Why plot two disparate datasets on the same figure? Even if it is valid numbers-wise, it will still be confusing. I don't know anything about the data, but it smacks of advanced plotology to me, i.e. displaying data to make it look a certain way. The plot equivalent of the drunk man under the street light statistics story.

cheers,

paulv

Subject: Re: PLOYY plot
Posted by [d.poreh](#) on Wed, 02 Jul 2008 15:58:50 GMT
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On Jul 2, 5:51 pm, Paul van Delst <Paul.vanDe...@noaa.gov> wrote:

> d.po...@gmail.com wrote:

>> On Jul 2, 5:14 pm, Brian Larsen <balars...@gmail.com> wrote:

>>> How is Chris' post not what you want? We all obviously need a little
>>> more explanation here. What I see in Chris' plot is a "wiggle"
>>> plotted on the bottom x-axis and a "parabola" plotted on the top x-
>>> axis.

>

>>> Brian

>

>>> -----

>>> Brian Larsen

>>> Boston University

>>> Center for Space Physics<http://people.bu.edu/balarsen/Home/IDL>

>

>> Brian

>> i want upper x also logarithmic. if i change and put $*xlog=1*$ it is not

>> work. i want something like this:

>> <https://www.rsg.tu-freiberg.de/twiki/pub/Main/DavodPoreh/as.pdf>

>> as you can see $y_1=f(x)$ (left and down) is normal and $y_2=f(x_2)$ (right
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>

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> plotology to me, i.e. displaying data to make it look a certain way. The plot equivalent
> of the drunk man under the street light statistics story.

>

> cheers,
>
> paulv

Paul

if you search in net Plotyy you can see alot about this for example:

<http://www.sgr.nada.kth.se/unix/software/matlab/senaste/tech doc/ref/plotyy.html>

it is very useful in scince.

Cheers

Subject: Re: PLOYY plot

Posted by [d.poreh](#) on Wed, 02 Jul 2008 16:12:14 GMT

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On Jul 2, 5:58 pm, d.po...@gmail.com wrote:

> On Jul 2, 5:51 pm, Paul van Delst <Paul.vanDe...@noaa.gov> wrote:

>

>

>

>> d.po...@gmail.com wrote:

>>> On Jul 2, 5:14 pm, Brian Larsen <balars...@gmail.com> wrote:

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>

>>>> Brian

>

>>>> -----

>>>> Brian Larsen

>>>> Boston University

>>>> Center for Space Physics<http://people.bu.edu/balarsen/Home/IDL>

>

>>> Brian

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>> cheers,
>
>> paulv
>
> Paul
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example:[http://www.sgr.nada.kth.se/unix/software/matlab/sena ste/techdoc/ref/p...](http://www.sgr.nada.kth.se/unix/software/matlab/sena%20ste/techdoc/ref/p...)
> it is very useful in scince.
> Cheers

Brian it works now. thanks for all
for helping. now i want to do that in ITools.
Cheers

Subject: Re: PLOYY plot
Posted by [Paul Van Delst\[1\]](#) on Wed, 02 Jul 2008 16:47:43 GMT
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d.poreh@gmail.com wrote:
> On Jul 2, 5:51 pm, Paul van Delst <Paul.vanDe...@noaa.gov> wrote:
>> d.po...@gmail.com wrote:
>>> On Jul 2, 5:14 pm, Brian Larsen <balars...@gmail.com> wrote:
>>>> How is Chris' post not what you want? We all obviously need a little
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>>>> Brian
>>>> -----
>>>> Brian Larsen
>>>> Boston University
>>>> Center for Space Physics<http://people.bu.edu/balarsen/Home/IDL>
>>> Brian
>>> i want upper x also loarithmic. if i change and put *xlog=1* it is not
>>> work. i want something like this:
>>> [https://www.rsg.tu-freiberg.de/twiki/pub/Main/DavodPoreh/as. pdf](https://www.rsg.tu-freiberg.de/twiki/pub/Main/DavodPoreh/as.pdf)
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>> cheers,
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> Paul
> if you search in net Plotyy you can see alot about this for example:
> <http://www.sgr.nada.kth.se/unix/software/matlab/senaste/tech doc/ref/plotyy.html>
> it is very useful in scince.

Oh, I have no argument about the technique in general. I've done similar to that shown in the matlab example above. My issue (such as it is) was with the example plot you showed.

cheers,

paulv
