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Subject: Zooming in function graphics

Posted by [wlandsman](#) on Fri, 25 Sep 2015 19:21:19 GMT

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One thing that has kept me from committing to function graphics is the difficulty with interactive zooming. Say I am plotting a time series

```
f = randomn(seed,1000)
p = plot(f)
```

Now I want to change the X axis to be [0,100] instead of [0,1000]. I know I can set `p.xrange=[0,100]`, but it is quicker to click on the zoom region. So I follow the documentation.

"hold down the <SHIFT> button on your keyboard while pressing your left mouse button. Your mouse pointer will change into an icon of a magnifying glass. Drag your mouse to define a zoom area, then release the <SHIFT> key and mouse button for the zoom operation to complete."

Ok, I first try to shift click on  $x = 0$  which is the Y axis. But this selects the Y axis, and now moving the cursor moves the entire plot area instead of selecting a zoom region. Other plotting systems would let one click to the left of the Y axis when zooming and the zoom region then truncates to  $x = 0$ . But in IDL function graphics this outside region is insensitive to shift click.

So my only choice to click somewhere at X greater than 0, while being very careful not to touch the X or Y axes. I end up with a plot region of [5,100]

Today, I had an epiphany that the way to make this easier is to select the higher value first. By first selecting an interior region near  $x=100$  and moving left, I can select a [0,100] region with less worry about accidentally touching an axis. Unfortunately, the selected region is then typically [-5,100] because IDL does not reset the zoom region to where there is actually data.

But the main problem is that shift+cursor is used both to select axes and to select a plotting region. Are there any preferences I can set to help me with this? Thanks, --Wayne

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Subject: Re: Zooming in function graphics

Posted by [Paul Van Delst\[1\]](#) on Mon, 28 Sep 2015 16:33:29 GMT

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Hello,

On 09/25/15 15:21, wlandsman wrote:

[description of problem about plot data/axes selection elided]

> But the main problem is that shift+cursor is used both to select axes  
> and to select a plotting region. Are there any preferences I can  
> set to help me with this? Thanks, --Wayne

I don't know of any preferences, but if I have to select close to the axes, I move the plot within the window (using the middle mouse button) so I can then select my region of interest -- which is now far enough away from the axes to not interfere.

cheers,

paulv

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Subject: Re: Zooming in function graphics

Posted by [chris\\_torrence@NOSPAM](#) on Mon, 28 Sep 2015 18:03:56 GMT

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On Monday, September 28, 2015 at 10:33:31 AM UTC-6, Paul van Delst wrote:

> Hello,

>

> On 09/25/15 15:21, wlandsman wrote:

>

> [description of problem about plot data/axes selection elided]

>

>> But the main problem is that shift+cursor is used both to select axes

>> and to select a plotting region. Are there any preferences I can

>> set to help me with this? Thanks, --Wayne

>

> I don't know of any preferences, but if I have to select close to the

> axes, I move the plot within the window (using the middle mouse button)

> so I can then select my region of interest -- which is now far enough

> away from the axes to not interfere.

>

> cheers,

>

> paulv

Hi Paul & Wayne,

Would it be helpful if the red zoom box snapped to the closest data point (in the X direction) while you were drawing it?

-Chris

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Subject: Re: Zooming in function graphics

Posted by [Paul Van Delst\[1\]](#) on Mon, 28 Sep 2015 18:50:12 GMT

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Hi Chris,

On 09/28/15 14:03, Chris Torrence wrote:

> On Monday, September 28, 2015 at 10:33:31 AM UTC-6, Paul van Delst wrote:

>> Hello,

>>

>> On 09/25/15 15:21, wlandsman wrote:

>>

>> [description of problem about plot data/axes selection elided]

>>

>>> But the main problem is that shift+cursor is used both to select axes

>>> and to select a plotting region. Are there any preferences I can

>>> set to help me with this? Thanks, --Wayne

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>> I don't know of any preferences, but if I have to select close to the

>> axes, I move the plot within the window (using the middle mouse button)

>> so I can then select my region of interest -- which is now far enough

>> away from the axes to not interfere.

>>

>> cheers,

>>

>> paulv

>

> Hi Paul & Wayne,

> Would it be helpful if the red zoom box snapped to the closest data

> point (in the X direction) while you were drawing it?

I dunno about Wayne, but I would definitely *\*not\** want that to be the default.

I would like me, not my data, to be in control of where the zoom box goes.

I do a lot of overshooting in my zoomboxing when I am drilling down to very low levels so the snapping to the closest data point would not be appreciated.

cheers,

paulv

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