Subject: Horizontal error bars Posted by Inigo Garcia on Wed, 28 Jan 1998 08:00:00 GMT View Forum Message <> Reply to Message

Hi:

Does anyone out there have any routine to plot error bars in the X axis?

I need to plot both errors in X and Y, and I don't see the way of doing it.

Thanks.

Subject: Re: Horizontal error bars Posted by Martin Schultz on Wed, 28 Jan 1998 08:00:00 GMT View Forum Message <> Reply to Message

```
I~nigo Garcia wrote: >
```

> Hi:
> Does anyone out there have any routine to plot error bars in the X axis
?
> I need to plot both errors in X and Y, and I don't see the way of doing
> it.
>
> Thanks,
>
I~nigo.

Here's a simple one (not too fancy, but it does what you ask for, and you should be able to go along from this peace of code:

The program expects a vector with symmetric error values which must have the same number of elements as x and y do. The _EXTRA keyword

allows you to pass on every fancy thing that PLOTS can handle without having to worry about it in the routine. Before overlaying the error bars, you must plot your data with the PLOT command (or even better: 1st: plot the axis only with PLOT,...,/NODATA 2nd: overlay the error bars 3rd: overlay the symbols)

Hope this helps, Martin.

Dr. Martin Schultz

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IDL-homepage: http://www-as.harvard.edu/people/staff/mgs/idl/

pro oploterrxy,x,y,xerr,yerr,psym=psym,_EXTRA=e

```
xlo = x-xerr
xhi = x + xerr
ylo = y-yerr
yhi = y+yerr
; clipping (not done in plots!)
xlo = xlo > !x.crange(0)
xhi = xhi < !x.crange(1)
ylo = ylo > !y.crange(0)
```

yhi = yhi < !y.crange(1)

for i=0,n_elements(x)-1 do begin plots,[xlo(i),xhi(i)],[y(i),y(i)],_EXTRA=e plots,[x(i),x(i)],[ylo(i),yhi(i)],_EXTRA=e endfor

return end

Subject: Re: Horizontal error bars

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Hi again:

First, thank you Martin for your routine. Second, while trying it I typed oploterr by accident, and it works !!! Even if it is not documented (at least I haven't seen it), it draws x-axis error bars.

```
I~nigo.
          \\|//
          (0 0)
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```

Subject: Re: Horizontal error bars

Posted by Erard on Tue, 03 Feb 1998 08:00:00 GMT

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In article <34CF53FB.D019E9CA@astro.rug.nl>, I~nigo Garcia <iruiz@astro.rug.nl> wrote:

> Hi:

- > Does anyone out there have any routine to plot error bars in the X axis
- > I need to plot both errors in X and Y, and I don't see the way of doing

Yep: the most useful one is called Errbars and is part of the Meron library, that was distributed with IDL 3.6 (stil available on RSI site).

St�phane Erard Institut d'Astrophysique Spatiale Orsay, France

Subject: Re: Horizontal error bars

Posted by Martin Cartwright on Mon, 16 Feb 1998 08:00:00 GMT

St�phane Erard wrote:

>

> In article <34CF53FB.D019E9CA@astro.rug.nl>, I~nigo Garcia

> <iruiz@astro.rug.nl> wrote:

>

>> Hi:

>>

>> Does anyone out there have any routine to plot error bars in the X axis

>> ?

>> I need to plot both errors in X and Y, and I don't see the way of doing

>> it.

>

> Yep: the most useful one is called Errbars and is part of the Meron

> library, that was distributed with IDL 3.6 (stil available on RSI site).

>

There's also a very useful routine called PLOTERR that comes from the idl astonomy library that you can find at idlastro.gsfc.nasa.gov

--

M.Cartwright@qub.ac.uk --- http://star.pst.qub.ac.uk/~imc/vom.htm

"Sponges grow in the ocean ... I wonder how much deeper the ocean would be if that didn't happen."