Subject: Re: Help, somebody! Error Bars in both X and Y directions.
Posted by thompson on Fri, 03 Dec 1993 15:32:02 GMT
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shah@spot.Colorado.EDU (SSS) writes:

> Hello there,

> I have been fruitlessly trying to implement an IDL code to
> create errorbars in both x and y directions. However, my data
> on the ordinate (y axis) is at a very different range than the abcissae
> (x axis). For example, xrange=[0.75,1.25]; yrange=[0.01,0.05]. The
> following procedure, obviously wrong, is able to produce the
> correct x,y mapping but, alas, the errorbars do not correspond to
> their respective x and y scales.

> Can a kind soul help me in this adventure? Oh, I would
> appreciate a non-widget solution. Both, pwidget of RSI and
> pubplot of Joel Offenberg were unable to run on my Solaris
> machine because of some problem. And, no time to spare...

(rest deleted)

I think your mistake is in trying to use USERSYM to accomplish what you want to do. You'd be better off just using OPLOT with PSYM=0, e.g.

```
for i=0,9 do begin
 xx= x(i) + [1,-1]*xerrbar(i) ;x-coordinates
 yy= y(i) + [1,-1]*yerrbar(i) ;y-coordinates
 oplot, xx, y(i), psym=0, linestyle=0
 oplot, x(i), yy, psym=0, linestyle=0
 xyouts, x(i), y(i), xytitle(i)
endfor
```

It should also work with PLOTS instead of OPLOT, if you prefer.

Bill Thompson

P.S. You might prefer to adjust the minimum and maximum values to include the error bars, e.g.

```
xmin=min(x-xerrbar) & xmax=max(x+xerrbar)
ymin=min(y-yerrbar) & ymax=max(y+yerrbar)
plot, x, y,/nodata, xrange=[xmin,xmax],yrange=[ymin,ymax]
```