
Subject: Re: Displaced errorbars on log-log scale with cgPlot
Posted by [David Fanning](#) on Wed, 28 Jan 2015 15:58:32 GMT
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Madhavan Bomidi writes:

```
>
> Hello David,
>
> Please check the below code and the resulting output:
>
> -----
> PRO testerr
>
> xdt = [5, 10, 20, 40, 80, 160, 320, 640, 1280, 2560, 5120, 10240]
>
>
> ymean = [ 5.7071102e-07, 1.9411492e-07, 2.4366391e-07, 3.9646722e-07, $
> 8.8304703e-07, 3.6161633e-06, 1.5931371e-05, 6.4912913e-05, $
> 0.00019788680, 0.00042545785, 0.00033186864, 0.00031074151 ]
>
> ystd = [ 4.1662774e-07, 2.7208043e-07, 4.5170846e-07, 7.2870838e-07, $
> 1.2310552e-06, 3.6163696e-06, 1.4698943e-05, 6.3878156e-05, $
> 0.00023048977, 0.00053752256, 0.00033514162, 0.00018645177 ]
>
> low_yerr = (ymean - ystd)
> high_yerr = (ymean + ystd)
>
> FigFile = 'testerrplot.ps'
>
> cgPS_Open, FigFile
> cgDisplay
>
> cgPlot, xdt, ymean, Font=-1, /XLOG, XStyle=1, YStyle=1, $
> XRange=[100000,1], YRange=[0.000000001,0.1], /YLOG, $
> CharSize=1.2, ERR_YLow=low_yerr, $
> ERR_YHigh=high_yerr, Psym=-16, $
> ERR_Color='red7', SymColor='red7', Color='red7'
>
> cgPS_Close
>
> ; Create a PNG file
> cgPS2Raster, FigFile, /PNG
>
> END
> -----
```

It appears to me you are giving me numbers that it is impossible to take

the log of:

```
IDL> print, alog10(low_yerr)
-6.81224      -NaN      -NaN      -NaN      -NaN
-NaN  -5.90924  -5.98516      -NaN
      -NaN      -NaN      -3.90556
```

The "problem" values are those that can't be calculated.

I guess the real problem might be understanding why errors are not being thrown by cgPlot. I'll look into it.

Cheers,

David

--

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

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