



## Plotting Bugs: general

### Bugs

1. *When plotting scatter data (i.e., multiple y-values per x-value), x-errorbars are not plotted, even when the user requests x-errorbars.*
2. *One cannot plot convolved model components, only the overall convolved model stack.*

```
sherpa> source = gauss[g]+pow[p]
sherpa> lp source          # fine (unconvolved stack, g+p)
sherpa> lp model          # fine (convolved stack, g+p)
sherpa> lp g              # fine (_unconvolved_ component p)
```

#### Workaround:

```
sherpa> source = g
sherpa> lp model
sherpa> source = p
sherpa> lp model
```

If one wishes to overplot convolved components with the convolved stack (XSPEC-style counts plotting), it can be done via a Sherpa/S-Lang module workaround:

```
sherpa> source = g
sherpa> cong = get_mcounts() # array of g amplitudes, convolved
sherpa> source = p
sherpa> comp = get_mcounts() # array of p amplitudes, convolved
sherpa> source = p+g
sherpa> cons = get_mcounts() # array of p+g amplitudes, convolved
sherpa> conx = get_axes()
sherpa> print(conx)
axistype      = Energy
axisunits     = keV
lo            = Float_Type[95]
hi           = Float_Type[95]
mid          = NULL
sherpa> mid = (conx.lo+conx.hi)/2.0 # make array of bin midpoints
sherpa> () = curve(mid,cons) # plot in ChIPS
sherpa> () = curve(mid,comp)
sherpa> () = curve(mid,cong)
```

3. *Displayed x-errorbars are only correct if data are evenly binned.*

## Plotting Bugs: general – CIAO 3.4

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