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> conp = 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,conp)
sherpa> () = curve(mid,cong)
```

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