



AHELP for CIAO 3.4

# sherpa.dataplot

Context: [sherpa](#)

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## Synopsis

Configure appearance of Sherpa plots.

## Syntax

```
sherpa.dataplot.[field]
```

## Description

The Sherpa configuration variable (also called "state object") `sherpa.dataplot` controls appearance of plots created by `L PLOT DATA` and `L PLOT BACK`. The settings of `sherpa.dataplot` do not affect plots created with any other command.

The following table lists each field of `sherpa.dataplot`, with a description and the default value:

Field Name	Description	Default
<code>x_errorbars</code>	Add x error bars to data points (0 = false, 1 = true)	0
<code>y_errorbars</code>	Add y error bars to data points (0 = false, 1 = true)	1
<code>errs_style</code>	Style of error bars	bar
<code>errs_type</code>	Error bars above or below data points (or both)	both
<code>x_log</code>	Log scale for x-axis (0 = false, 1 = true)	0
<code>y_log</code>	Log scale for y-axis (0 = false, 1 = true)	0
<code>curvestyle</code>	Style of curve (e.g., histogram)	noline
<code>curvecolor</code>	Curve color	default
<code>symbolstyle</code>	Style of symbols (e.g., triangle, square)	square
<code>symbolcolor</code>	Symbol color	default
<code>symbolsize</code>	Symbol size	2
<code>xlabel_size</code>	Size of x label	1.5
<code>ylabel_size</code>	Size of y label	1.5
<code>zlabel_size</code>	Size of z label	1.5
<code>title_size</code>	Size of title	1.5
<code>tickvals_size</code>	Size of tick values	1.5
<code>prefunc</code>	User S-Lang function executed before the data is plotted	NULL
<code>postfunc</code>	User S-Lang function executed after the data is plotted	NULL

Possible error bar styles: standard, bar.

Possible error bar types: both, none, up, down, dn.

Possible colors: black, blue, cyan, default, green, magenta, red, white, yellow.

Possible curve styles: histo, noline, simpleline, step.

Possible symbol styles: bigpoint, block, circle, cross, diamond, downtri, none, point, soliddiamond, soliddowntri, soliduptri, square, uptri.

The fields `sherpa.dataplot.prefunc` and `sherpa.dataplot.postfunc` refer to optional user functions that can be applied to plots before and after the plot is created. Please see the ahelp file `sherpa-plot-hooks` for more information.

## Example 1

The `sherpa.dataplot` settings can be changed at the command line. When assigning a string to a field, the string should be quoted as in the second command below:

```
sherpa> sherpa.dataplot.x_log = 1
sherpa> sherpa.dataplot.curvecolor = "green"
```

## Example 2

Create an alias `sdp` to `sherpa.dataplot` and use it.

```
sherpa> variable sdp = sherpa.dataplot
sherpa> sdp.x_log = 1
sherpa> sdp.curvecolor = "green"
```

## Example 3

Use `print` to obtain the information about the current settings of `sherpa.dataplot`:

```
sherpa> print (sherpa.dataplot)
x_errorbars      = 0
y_errorbars      = 1
errs_style       = bar
errs_type        = both
x_log            = 0
y_log            = 0
curvestyle       = noline
curvecolor       = default
symbolstyle      = square
symbolcolor      = default
symbolsize       = 2
xlabel_size      = 1.5
ylabel_size      = 1.5
zlabel_size      = 1.5
title_size       = 1.5
tickvals_size    = 1.5
prefunc          = NULL
postfunc         = NULL
```

## Bugs

See the [Sherpa bug pages](#) online for an up-to-date listing of known bugs.

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URL:  
<http://cxc.harvard.edu/ciao3.4/sherpa.dataplot.html>  
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