



AHELP for CIAO 3.4

sherpa.dataplot

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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 `LPLOT DATA` and `LPLOT 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

title_size	Size of title	1.5
tickvals_size	Size of tick values	1.5
prefunc	User S–Lang function executed before the data is plotted	NULL
postfunc	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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