



AHELP for CIAO 3.4

## set\_log

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## Synopsis

Switch axis to log in Sherpa plots

## Syntax

```
set_log
set_xlog
set_ylog
```

## Description

These commands allow a user to switch x- and y-axis to log in all Sherpa plots. A plotting command L PLOT needs to be issued in order for these commands to take effect.

A user can control log and linear scale of the x and y-axis created with the L PLOT command by setting the x\_log and y\_log in the corresponding Sherpa configuration variable (also called "state object") sherpa.plot, sherpa.dataplot, sherpa.fitplot, or sherpa.resplot.

The functions set\_log, set\_xlog, and set\_ylog allow you to change these fields in all the configuration variables (sherpa.plot, sherpa.dataplot, sherpa.fitplot, sherpa.resplot) at once as shown in the following table:

| Function Name | Description                 |
|---------------|-----------------------------|
| set_log       | Set x_log = 1 and y_log = 1 |
| set_xlog      | Set x_log = 1               |
| set_ylog      | Set y_log = 1               |

## Example 1

```
sherpa> set_log
```

This sets plot axis (both in x and y ) to log scale in all Sherpa plots.

## Example 2

```
sherpa> set_xlog
```

This sets plot axis to log scale for only the x-axes in all Sherpa plots.

## Example 3

```
sherpa> set_ylog
sherpa> print(sherpa.fitplot.y_log)
1
sherpa> lplot fit
```

The first command (`set_ylog`) sets y-axis to log scale in all Sherpa plots. The second command prints out the value of the `y_log` field of the `sherpa.fitplot` variable; it is set to 1 because of the `set_ylog` command. The third command displays fit in log scale

## 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/set\\_log.html](http://cxc.harvard.edu/ciao3.4/set_log.html)  
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