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 AHELP for CIAO 3.4

## set\_lin

Context: [sherpa](#)

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### Synopsis

Switch plotting axis to linear scale in Sherpa plots

### Syntax

```
set_lin
set_xlin
set_ylin
```

### Description

These commands allow a user to switch x- and y-axis to linear scale in all Sherpa plots. A plotting command LPLOT 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 LPLOT 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_lin`, `set_xlin`, and `set_ylin` 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
<code>set_lin</code>	Set <code>x_log = 0</code> and <code>y_log = 0</code>
<code>set_xlin</code>	Set <code>x_log = 0</code>
<code>set_ylin</code>	Set <code>y_log = 0</code>

### Example 1

```
sherpa> set_lin
```

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

## Example 2

```
sherpa> set_xlin
```

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

## Example 3

```
sherpa> set_ylin
sherpa> print(sherpa.fitplot.y_log)
0
sherpa> lplot fit
```

The first command (`set_ylog`) sets y-axis to linear 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 0 (false) because of the `set_ylin` command. The third command displays fit in linear 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\\_lin.html](http://cxc.harvard.edu/ciao3.4/set_lin.html)  
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