

*AHELP for CIAO 3.4***set**Context: [sherpa](#)

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## Synopsis

Summary of Sherpa/S–Lang module functions that change settings or data.

## Description

This document describes the set functions of the Sherpa/S–Lang module. Those expecting documentation on the SET command should be aware that this is no longer a Sherpa command as of CIAO 3.0. At the end of this document is a table showing how settings once made using the SET are now made with the Sherpa state object.

The set functions of the Sherpa/S–Lang module:

- Move numerical data into Sherpa after, e.g., they were manipulated. (These data may be retrieved from Sherpa using analogous get functions.)
- Change Sherpa settings. (These settings may be determined using analogous get functions.)

### Summary of Sherpa/S–Lang Module set Functions

Name	Description
set_erroff   set_xerroff   set_yerroff	Turn off the drawing of errorbars in Sherpa plots
set_erron   set_xerron   set_yerron	Turn on the drawing of errorbars in Sherpa plots
set_lin   set_xlin   set_ylin	Switch plotting axis to linear scale in Sherpa plots
set_log   set_xlog   set_ylog	Switch plotting axis to logarithmic scale in Sherpa plots
set_data   set_back	Assign source and background data
set_errors   set_berrors	Assign source and background error estimates
set_syserrors   set_bsyserrors	Assign source and background systematic errors
set_weights   set_bweights	Assign source and background statistical weights
set_filter   set_bfilter	Assign source and background filters from an array
set_groups   set_bgroups	Assign grouping to source and background from an array
set_quality   set_bquality	Assign quality to source and background from an array
set_axes   set_baxes	Create new source and background dataspaces

set_analysis	Set units for 1-D spectral analysis
set_coord	Set the coordinate system for 2-D image analysis
set_par	Set model parameter values, etc.
set_thawed   set_frozen	Thaw or freeze model parameter values
set_ignore   set_signore   set_bignore	Set source and background ignore ranges in 1-D datasets
set_ignore2d   set_signore2d   set_bignore2d	Set source and background exclude regions in 2-D datasets
set_ignore_all   set_signore_all   set_bignore_all	Ignore all source and background data
set_ignore_bad   set_signore_bad   set_bignore_bad	Ignore all bad quality source and background data
set_notice   set_snotice   set_bnotice	Set source and background notice ranges in 1-D datasets
set_notice2d   set_snotice2d   set_bnotice2d	Set source and background include regions in 2-D datasets
set_notice_all   set_snotice_all   set_bnotice_all	Notice all source and background data
set_subtract   set_unsubtract	Do or undo background subtraction
set_exptime   set_bexptime	Set source and background exposure times
set_backscale   set_bbackscale	Set source and background extraction region areas
set_source_expr   set_bg_expr	Set source and background model stack expression
set_inst_expr   set_sinst_expr   set_binst_expr	Set source and background instrument model stack expression
set_dir	Set into directory
set_verbose	Reset Sherpa's verbosity

## Configuring Plots in CIAO 3.x

As mentioned at the beginning of this document, one can no longer use the SET command to configure the appearance of Sherpa plots. The following table shows how settings once made using the SET are now made with the Sherpa state object:

### Configuring Plots in CIAO 3.x

Old Command:	New Functions/Settings:
SET PLOT NOERRORBARS	set_erroff, or change x_errorbars and y_errorbars to 0 in the plotting state objects
SET PLOT XERRORBARS	set_xerron and set_yerroff, or change x_errorbars to 1 and y_errorbars to 0 in the plotting state objects
SET PLOT YERRORBARS	set_xeroff and set_yerron, or change x_errorbars to 0 and y_errorbars to 1 in the plotting state objects
SET PLOT ERRORBARS	set_erron, or change x_errorbars and y_errorbars to 1 in the plotting state objects
SET PLOT LIN LIN	set_lin, or change x_log and y_log to 0 in the plotting state objects
SET PLOT LIN LOG	set_xlin and set_ylog, or change x_log to 0 and y_log to 1 in the plotting state objects
SET PLOT LOG LIN	set_xlog and set_ylin, or change x_log to 1 and y_log to 0 in the plotting state objects
SET PLOT LOG LOG	set_log, or change x_log and y_log to 1 in the plotting state objects
SET PLOT AUTORANGE	Leave sherpa.multiplot.xfilter_lo and xfilter_hi set to NULL
	Set sherpa.multiplot.xfilter_lo to MIN and sherpa.multiplot.xfilter_hi to MAX

SET PLOT RANGE MIN:MAX	
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See "ahelp sherpa" for more information on the Sherpa state objects.

## Bugs

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

## See Also

*chandra*

[guide](#)

*sherpa*

[bye](#), [calc](#) [kcorr](#), [dataspace](#), [dcounts](#), [dollarsign](#), [echo](#), [eflux](#), [eqwidth](#), [erase](#), [flux](#), [get](#), [get dcounts sum](#),  
[get dir](#), [get eflux](#), [get eqwidth](#), [get filename](#), [get flux2d](#), [get flux str](#), [get lfactorial](#), [get mcounts sum](#),  
[get pflux](#), [get source components](#), [get verbose](#), [groupbycounts](#), [guess](#), [is](#), [journal](#), [list](#), [list par](#), [mcounts](#),  
[numbersign](#), [paramest](#), [plot eprof](#), [plot rprof](#), [prompt](#), [reset](#), [run](#), [set analysis](#), [set axes](#), [set coord](#),  
[set dataspace](#), [set dir](#), [set verbose](#), [setplot](#), [sherpa-module](#), [sherpa plotfn](#)s, [sherpa utils](#), [show](#), [simspec](#),  
[use](#), [version](#)

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URL:

<http://cxc.harvard.edu/ciao3.4/set.html>

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