Chandra X-ray Center

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_xerroff 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 PLOT RANGE MIN:MAX	Set sherpa.multiplot.xfilter_lo to MIN and sherpa.multiplot.xfilter_hi to MAX

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_plotfns, sherpa_utils, show, simspec, use, version