



AHELP for CIAO 3.4

# show

Context: [sherpa](#)

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## Synopsis

Reports current status.

## Syntax

```
sherpa> SHOW [<arg>]
```

## Description

<arg> may be:

### SHOW Command Arguments:

Argument	Performs the following:
[ALL]	Reports all current settings and parameter values. The commands SHOW and SHOW ALL are equivalent.
VERBOSE	Reports all current settings and parameter values, in verbose mode.
MODELS	Displays information about all current model stacks and model component parameter values.
<sherpa_model_stack> [# [ID]]	Displays the parameter values of all components of the specified model stack (SOURCE, BACKGROUND, PILEUP, [B]NOISE, or KERNEL). # is a dataset number (default 1); see BACKGROUND for an explanation of ID.
<model_stack>	Displays the parameter values of all model components of the specified user-defined model stack.
<sherpa_modelname>	Displays the parameter values of the specified model component.
<modelname>	Displays the parameter values of the specified model component.
<sherpa_plot_quantity>	Lists the specified quantity; this includes everything that can be plotted/imaged with Sherpa except fits, unconvolved data/fits, unconvolved model amplitudes, and model stacks. See, e.g., documentation on the command LPLOT. (This option of SHOW may be deprecated in future versions of Sherpa since it largely duplicates the WRITE command.
METHOD	Displays the name of the current optimization method, and lists parameter values.
<sherpa_methodname>	Displays the name of the specified optimization method, and lists parameter values.
STATISTIC	Displays the name of the current statistic.
FAKEIT	Displays the exposure time and backscale to be used for FAKEIT.

PILEUP	Reports on the pileup fractions from the most recent fit. See PILEUP for more details.
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Note: The behavior of the SHOW command is controlled by the environment variable \$PAGER. The default setting for this variable should be:

```
unix% echo $PAGER
/bin/more
```

This setting causes the results of the SHOW command to scroll down the screen. However, the user may prefer to use:

```
unix% setenv PAGER "/bin/less -s"
unix% echo $PAGER
/bin/less -s
```

Note: The SHOW command can generate more than one screen of information, particularly after data have been read, filters and models defined, models fit to the data, and statistics generated. A : symbol indicates additional information is on the next screen; tapping the space bar moves the pointer to the next screen. The end of SHOW output is indicated by END; tapping q quits the SHOW interface. (However, there are many more options at this point, including saving the screen output to a file. Tapping h (for help) will cause information on these options to be displayed.

Note: The commands SHOW MODELS, SHOW <modelname>, and SHOW SOURCE currently do not return information about model parameter delta settings. Information about model parameter delta settings is included when using SAVE.

## Example 1

Report all current settings:

```
sherpa> SHOW

Optimization Method: Levenberg-Marquardt
Statistic:           Chi-Squared Gehrels
```

This example illustrates all of the initial Sherpa settings; since no models have been defined, none are shown.

## Example 2

Report on the model components of different source models:

```
sherpa> READ DATA 1 example1.dat
sherpa> PARAMPROMPT OFF
Model parameter prompting is off
sherpa> POLY[modela]
sherpa> GAUSS[modelb]
sherpa> SOURCE 1 = modela
sherpa> SOURCE 2 = modelb
sherpa> SHOW SOURCE 1
Source 1: modela
polynom1d[modela] (integrate: on)
  Param  Type      Value      Min      Max      Units
  -----
  1      c0 thawed      33         -1       65
  2      c1 frozen      0    -914.2857    914.2857
  3      c2 frozen      0   -130.6122    130.6122
  4      c3 frozen      0         -1       65
  5      c4 frozen      0         -1       65
```

6	c5	frozen	0	-1	65	
7	c6	frozen	0	-1	65	
8	c7	frozen	0	-1	65	
9	c8	frozen	0	-1	65	
10	offset	frozen	0	-1	8	

```

sherpa> SHOW SOURCE 2
Source 2: modelb
gauss1d[modelb] (integrate: on)
  Param  Type      Value      Min      Max      Units
  -----
  1  fwhm  thawed    5.1306  5.1306e-02  513.0582
  2   pos  thawed      8         1         8
  3  ampl  thawed     65        0.65     6500
    
```

## 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](#), [set\\_analysis](#), [set\\_axes](#), [set\\_coord](#), [set\\_dataspace](#), [set\\_dir](#), [set\\_verbose](#), [setplot](#), [sherpa-module](#), [sherpa\\_plotfns](#), [sherpa\\_utils](#), [simspec](#), [use](#), [version](#)

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