Chandra X-ray Center

AHELP for CIAO 3.4   **reset**   Context: sherpa

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Synopsis

Restores settings and/or parameter values.

Syntax

```
sherpa> RESET [<arg>]
```

Description

<arg> may be:

RESET Command Arguments

Argument	Description
none	Equivalent to RESET MODELS
ALL	Equivalent to issuing RESET MODELS and RESET METHOD
MODELS	Restores the parameter values of all current model components to their latest user–defined (or GUESS command–defined) values.
<sherpa_model_stack> [# [ID]]	Restores the parameter values of all components of the specified model stack (SOURCE, BACKGROUND, PILEUP, [B]NOISE, or KERNEL) to their latest user–defined (or GUESS command–defined) values. # is a dataset number (default 1); see BACKGROUND for an explanation of ID.
<sherpa_modelname>	Restores the parameter values of the specified model component to their latest user–defined (or GUESS command–defined) values.
<modelname>	Restores the parameter values of the specified model component to their latest user–defined (or GUESS command–defined) values.
METHOD	Restores the parameter values of the current optimization method to their initial default values.
<sherpa_methodname>	Restores the parameter values of the specified optimization method to their initial default values.
[B]ERRORS [# [ID]]	Removes user–defined source or background data error values. Note that if the errors

	are not redefined, then they are subsequently computed using the current choice of statistic. # is a dataset number (default 1); see BERRORS for an explanation of ID.
[B]SYSERRORS [# [ID]]	Resets the systematic error for every source or background data point to 0. # is a dataset number (default 1); see BSYSERRORS for an explanation of ID.
FILTER [#]	Clears user–defined filters. # is a dataset number (default 1). NOTE: the implementation of this command in CIAO 3.0 contains a bug, such that sometimes the source and background filters are reset, and sometime only one or the other; also, there is no RESET BFILTER.
[B]WEIGHTS [# [ID]]	Resets the statistical weight assignment for every source or background data point to 1. Removes user–defined source or background statistic weight settings. # is a dataset number (default 1); see READ BWEIGHTS for an explanation of ID.

ERASE is a related command that may be used to remove all user inputs and user–defined settings, or to remove a model component from the current Sherpa session.

Example 1

Restore the parameter values of the current method to the initial values:

```
sherpa> METHOD GRID
sherpa> SHOW METHOD
Optimization Method: Grid

     Name         Value         Min        Max                        Description
     ----         -----         ---        ---                        -----------
 1  totdim           4           1          24        Number of free parameters
 2 nloop01          10           1       1e+07           Number of grid points
 3 nloop02          10           1       1e+07           Number of grid points
 4 nloop03          10           1       1e+07           Number of grid points
 5 nloop04          10           1       1e+07           Number of grid points

sherpa> GRID.nloop01 = 2000
sherpa> SHOW METHOD
Optimization Method: Grid

     Name         Value         Min        Max                        Description
     ----         -----         ---        ---                        -----------
 1  totdim           4           1          24        Number of free parameters
 2 nloop01        2000           1       1e+07           Number of grid points
 3 nloop02          10           1       1e+07           Number of grid points
 4 nloop03          10           1       1e+07           Number of grid points
 5 nloop04          10           1       1e+07           Number of grid points

sherpa> RESET METHOD
sherpa> SHOW METHOD
Optimization Method: Grid

     Name         Value         Min        Max                        Description
     ----         -----         ---        ---                        -----------
 1  totdim           4           1          24        Number of free parameters
 2 nloop01          10           1       1e+07           Number of grid points
 3 nloop02          10           1       1e+07           Number of grid points
 4 nloop03          10           1       1e+07           Number of grid points
 5 nloop04          10           1       1e+07           Number of grid points
```

Example 2

Restore the parameter values, of the current model components, to the latest user−defined values:

```
sherpa> DATA example.dat
sherpa> PARAMPROMPT OFF
Model parameter prompting is off
sherpa> GAUSS[modelb]
sherpa> SOURCE 1 = modelb
sherpa> modelb.pos = 1.0
sherpa> SHOW modelb
gauss1d[modelb]  (integration: on)
    Param    Type        Value        Min        Max              Units
    -----    ----        -----        ---        ---              -----
 1   fwhm  thawed       2.0185     0.0202   201.8513
 2    pos  thawed            1          1          4
 3   ampl  thawed           17     0.1700       1700
sherpa> FIT
sherpa> SHOW modelb
gauss1d[modelb]  (integration: on)
    Param    Type        Value        Min        Max              Units
    -----    ----        -----        ---        ---              -----
 1   fwhm  thawed       3.3671     0.0202   201.8513
 2    pos  thawed            4          1          4
 3   ampl  thawed      10.1912     0.1700       1700
sherpa> RESET modelb
sherpa> SHOW modelb
gauss1d[modelb]  (integration: on)
    Param    Type        Value        Min        Max              Units
    -----    ----        -----        ---        ---              -----
 1   fwhm  thawed       2.0185     0.0202   201.8513
 2    pos  thawed            1          1          4
 3   ampl  thawed           17     0.1700       1700
```

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, run, set, set_analysis, set_axes, set_coord,
>   set_dataspace, set_dir, set_verbose, setplot, sherpa−module, sherpa_plotfns, sherpa_utils, show, simspec,
>   use, version

Example 2

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Example 2