Chandra X-ray Center

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

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Synopsis

Module functions for setting source and background extraction region areas.

Syntax

```
Integer_Type set_backscale([Integer_Type],Float_Type)
Integer_Type set_bbackscale([Integer_Type],Float_Type)

Success/Error Return Values: 1/0

Arguments:

(1) Dataset number (default 1)

(2) Extraction region area
```

Description

These functions take their names from the PHA header keyword BACKSCAL. BACKSCAL can be defined as the ratio of the area of the source (or background) extraction region in image pixels to the total number of image pixels. The fact that there is no ironclad definition for this quantity does not matter so long as the BACKSCAL for a source dataset and its associated background dataset are defined in the similar manner, because only the ratio of source and background BACKSCAL is used in analyses.

The specified backscale replaces the current value of the backscale within Sherpa, which as mentioned above may have been set when the dataset was loaded from the value of the BACKSCAL header keyword of a PHA file.

See the related Sherpa commands SETDATA and SETBACK for more information.

Example

Change the backscale value of dataset 1 from 0.0441895 to 0.07:

```
sherpa> get_backscale()
0.0441895
sherpa> set_backscale(1,0.07)
1
sherpa> get_backscale()
0.07
```

Bugs

See the Sherpa bug pages online for an up–to–date listing of known bugs.

See Also

chandra

> guide

sherpa

> autoest, back, berrors, bsyserrors, coord, data, dataspace, fakeit, feffile, group, guess, is_subtracted, load, load_arf, load_ascii, load_back_from, load_backset, load_dataset, load_fitsbin, load_image, load_inst, load_inst_from, load_pha, load_pha2, load_rmf, read, set_analysis, set_axes, set_coord, set_data, set_exptime, set_subtract, set_weights, setback, setdata, subtract, ungroup, unsubtract, use