



AHELP for CIAO 3.4

set_subtract

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Synopsis

Module functions to subtract background from a source dataset, or to undo subtraction.

Syntax

```
Integer_Type set_subtract([Integer_Type])
Integer_Type set_unsubtract([Integer_Type])

Success/Error Return Values: 1/0

Arguments:

(1) Dataset number (default 1)
```

Description

These functions return 1 if successful, and 0 if the (un)subtraction cannot be done (because, e.g., background already have been subtracted before a call to set_subtract).

See the related Sherpa commands SUBTRACT and UNSUBTRACT for more information.

Example

Subtract the background from dataset 1; then add it back in:

```
sherpa> DATA example.pha
The inferred file type is PHA.  If this is not what you want, please
specify the type explicitly in the data command.
WARNING: using systematic errors specified in the PHA file.
RMF is being input from:
  <directory_path>/example2.rmf
ARF is being input from:
  <directory_path>/example2.arf
Background data are being input from:
  <directory_path>/example2_bkg.pha
```

```

sherpa> is_subtracted
0
sherpa> set_subtract
1
sherpa> is_subtracted(1)
1
sherpa> set_unsubtract()
1
sherpa> is_subtracted(1)
0

```

The 0 returned from the first call indicates that no, dataset 1 is not yet background subtracted. (Unlike XSPEC, Sherpa does not automatically subtract background data upon input.) The 1 returned from the third call, issued after the call to the `set_subtract` function, indicates that yes, dataset 1 is now background-subtracted. Similarly, the 0 returned from the last call to `is_subtracted` indicates that the call to `set_unsubtract` was successful.

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_backscale](#), [set_coord](#), [set_data](#), [set_exptime](#), [set_weights](#), [setback](#), [setdata](#), [subtract](#), [ungroup](#), [unsubtract](#), [use](#)

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URL:
http://cxc.harvard.edu/ciao3.4/set_subtract.html
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