

*AHELP for CIAO 3.4*

## get\_source

Context: [sherpa](#)*Jump to:* [Description](#) [Example](#) [Bugs](#) [See Also](#)

## Synopsis

Module functions to retrieve predicted source and background model photon amplitudes.

## Syntax

```
Array_Type get_source([Integer])
Array_Type get_bg([Integer])
Array_Type get_full_source([Integer])
Array_Type get_full_bg([Integer])

Error Return Value: NULL

Arguments:

(1) data set number (default 1)
```

## Description

These functions evaluate the source or bg model in photon space, and are thus analogous to `get_mcounts()`, etc., which work in counts space. What is returned is an array of amplitudes for those photon-space bins which map to the filtered data set. (Adding full causes unfiltered amplitudes to be returned.) One retrieves the dataspace for these amplitudes using the functions `get_photon_axes()` et al.

Filtered source and background model amplitudes in photon–space may be displayed, e.g., via the Sherpa plotting commands `LPLOT SOURCE` and `LPLOT BG`.

## Example

```
sherpa> data example.pha
sherpa> instrument = rsp[rr]("example.rmf", "example.arf")
sherpa> source = xspowlaw[pp]
sherpa> foo = get_source()
```

## Bugs

See the [Sherpa bug pages](#) online for an up-to-date listing of known bugs.

## See Also

*chandra*

[guide](#)

*sherpa*

[get analysis](#), [get arf axes](#), [get axes](#), [get coord](#), [get data](#), [get energy axes](#), [get errors](#), [get filter](#),  
[get filter expr](#), [get fit](#), [get fluxed spectrum](#), [get ftest](#), [get metadata](#), [get photon axes](#),  
[get photon energy axes](#), [get photon wave axes](#), [get qvalue](#), [get raw axes](#), [get record](#), [get statistic](#),  
[get stats](#), [get syserrors](#), [get wave axes](#), [get weights](#), [record](#), [save](#), [write](#)

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URL:

[http://cxc.harvard.edu/ciao3.4/get\\_source.html](http://cxc.harvard.edu/ciao3.4/get_source.html)

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