



AHELP for CIAO 3.4

## get\_arf\_axes

Context: [sherpa](#)

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## Synopsis

Module functions to retrieve the energy/wavelength grid of an ARF associated with source and background data

## Syntax

```
Struct_Type get_arf_axes([Integer_Type])
Struct_Type get_arf_baxes([Integer_Type])

Error Return Value: NULL

Arguments:

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

## Description

In Sherpa parlance, a ``dataspace" is an N-dimensional grid defined by the independent variables of the dataset (i.e.,  $x_i$  in the expression  $y = f(x_0, x_1, \dots, x_{(N-1)})$ ). Simple examples include the CHANNELS array in PHA datasets and the pixel numbers along each axis of FITS images.

The `get_arf_axes()` function returns a variable of `Struct_Type`, which is equivalent to that returned by `get_axes()`. The only difference is that the fields `lo` and `hi` contain data from the `ENERG_LO` and `ENERG_HI` columns from the input ARF file.

One may display the ARF on the same grid using the Sherpa plotting command `L PLOT ARF`.

## Bugs

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

## See Also

*chandra*

[guide](#)

*sherpa*

[get analysis](#), [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](#),

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get\_photon\_wave\_axes, get\_qvalue, get\_raw\_axes, get\_record, get\_source, 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\\_arf\\_axes.html](http://cxc.harvard.edu/ciao3.4/get_arf_axes.html)  
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