



AHELP for CIAO 3.4

load_dataset

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Synopsis

Module function to load data into Sherpa

Syntax

```
Integer_Type load_dataset([Integer_Type], {String_Type | Struct_Type |
Array_Type}, [,Array_Type, ...])
```

Success/Error Return Values: 1/0

Arguments:

- (1) Data set number (default 1)
- (2) File name, or
- (2) S-Lang variable of Struct_Type (e.g., type of variable returned by VARMM readfile()), or
- (2) S-Lang variable of Array_Type
- (3) More S-Lang variables of Array_Type

Description

This function acts as a wrapper around the filetype-specific load functions (e.g., load_ascii, load_pha, etc.). If a file name is provided, then the data are read in via the VARMM library readfile() function. If a S-Lang variable of Struct_Type is provided, then the data are loaded from the fields of that variable. If one or more S-Lang variables of Array_Type are provided, then the data are passed to the functions set_axes() and set_data(). A maximum of 8 arrays, for for data of up to 7 dimensions, can be passed as arguments of Array_Type.

See the related Sherpa command READ for more information.

Example 1

```
sherpa> () = load_dataset("example.dat")
sherpa> () = load_dataset(1,"example.pha")
```

These two commands are equivalent; both load data from file into data set 1. In the first case, data are loaded from an ASCII file, and in the second, data are loaded from a PHA file; `load_dataset()` calls the appropriate function to read from ASCII and FITS files respectively.

Example 2

```
sherpa> foo = readfile("example.pha")
sherpa> () = load_dataset(1,foo)
sherpa> () = load_dataset(1,foo.channels, foo.counts)
```

Here the data are loaded into a S-Lang variable of `Struct_Type`. In the first call to `load_dataset()`, this S-Lang variable is passed to the function. In the second call, two arrays are passed to `load_dataset()`. The data in `foo.channels` and `foo.counts` are used as the x and y arrays respectively; but the other fields of the variable `foo` are not used. This means the second call to `load_dataset()` is not quite the equivalent of the first.

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_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_subtract](#), [set_weights](#), [setback](#), [setdata](#), [subtract](#), [ungroup](#), [unsubtract](#), [use](#)

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