

URL: http://cxc.harvard.edu/ciao3.4/load dataset.html

Last modified: December 2006

AHELP for CIAO 3.4

load_dataset

Context: sherpa

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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")
```

load dataset 1

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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