



AHELP for CIAO 3.4

## data

Context: [sherpa](#)

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## Synopsis

Inputs the contents of one or more source data files.

## Syntax

```
sherpa> DATA [#] <filespec> [, [#] <filespec>, ...]
```

where # specifies the number of the dataset to be associated with this source data file (default dataset number is 1).

## Description

Alternative means of reading in source datasets involve using the load functions of the Sherpa/S–Lang module (e.g., `load_pha`).

The help file for the READ command explains the <filespec> definition and has a listing of allowed file types; see also the related commands SOURCE, ERRORS, and SETDATA.

## Using Data Model Filters

This command is able to take any Data Model virtual file specification (see "ahelp dmsyntax"). If you can do

```
unix% dmcoppy "infile.fits[spec 1][spec 2]" outfile.fits
```

you can also do

```
sherpa> data "infile.fits[spec 1][spec 2]"
```

This is especially useful when working with very large files. For example:

```
sherpa> data "evt.fits[bin sky=4][opt mem=100]"
```

bins the event file by a factor of four and allocates additional memory. A similar command (omitting the binning factor) can be used to read in an image.

## Example 1

Input an ASCII data file having a .dat extension name:

```
sherpa> DATA example.dat
```

This command reads the first two columns of the ASCII data file example.dat, as dataset number 1.

## Example 2

Input an ASCII data file not having a .dat extension name:

```
sherpa> DATA example.qdp ASCII 1 2
```

This command reads columns 1 and 2 of the ASCII data file example.qdp, as dataset number 1.

## Example 3

Input a FITS image data file:

```
sherpa> DATA 3 data/example_img.fits FITS
```

This command reads the FITS image data/example\_img.fits, as dataset number 3.

## 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](#), [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\\_subtract](#), [set\\_weights](#), [setback](#), [setdata](#), [subtract](#), [ungroup](#), [unsubtract](#), [use](#)

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URL:  
<http://cxc.harvard.edu/ciao3.4/data.html>  
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