

*AHELP for CIAO 3.4*

## set\_dataspace

Context: [sherpa](#)

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### Synopsis

An alternative form of DATASPACE and set\_axes().

### Syntax

```
set_dataspace( dnum, elo, ehi, estep );
```

### Description

The routine is loaded into Sherpa with the call

```
require ( "sherpa_utils" );
```

This routine sets the X-axis grid of the given "dataset" (the dnum parameter; it should be an integer  $\geq 1$ ) to cover the range elo to ehi with a bin width of estep. The elo/ehi/estep parameters should generally be considered to be in units of keV but it depends on the model being used.

The grid is set up in "HISTOGRAM" mode (see "ahelp integrate") so the points go from elo to elo+estep, elo+estep to elo+2\*estep, etc. The behaviour at the ehi end is not well determined in the current version of this routine: it is not guaranteed to stop at ehi if  $(\text{ehi}-\text{elo})/\text{estep}$  does not evaluate to an integer value.

This routine is just a simple wrapper around the set\_axes() function – see "ahelp set\_axes" for more information.

### Example 1

```
sherpa> set_dataspace()
Usage:
set_dataspace( dnum, elo, ehi, estep )
```

If called with the incorrect number of arguments (here none) the routine will display a brief usage message.

## Example 2

```
sherpa> set_dataspace(1,0.1,10,0.01)
```

This is equivalent to calling:

```
sherpa> dataspace (0.1:10:0.01) histogram
```

## Example 3

```
sherpa> set_dataspace(2,0.1,10,0.01)
```

This is equivalent to calling:

```
sherpa> dataspace 2 (0.1:10:0.01) histogram
```

## NOTES

Please see "ahelp sherpa\_utils" for information on how to load these routines into Sherpa.

## See Also

*chandra*

guide

*sherpa*

bye, calc, kcorr, dataspace, dcounts, dollarsign, echo, eflux, eqwidth, erase, flux, get, get dcounts sum,  
get dir, get eflux, get eqwidth, get filename, get flux2d, get flux str, get lfactorial, get mcounts sum,  
get pflux, get source components, get verbose, groupbycounts, guess, is, journal, list, list par, mcounts,  
numbersign, paramest, plot eprof, plot rprof, prompt, reset, run, set, set analysis, set axes, set coord,  
set dir, set verbose, setplot, sherpa-module, sherpa plotfns, sherpa utils, show, simspec, use, version