

AH_{ELP} for CIAO 3.4

staterrors

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Synopsis

Defines an expression or file to be used to specify the statistical errors for source data.

Syntax

```
sherpa> [B]STATERRORS [<dataset range> | ALLSETS] = <errorExpr>
```

STATERRORS is used for specifying statistical errors in source datasets, while BSTATERRORS is used for specifying statistical errors in background datasets.

<dataset range> = # (or more generally #:#, #:#, etc.) such that # specifies a dataset number and #:# represents an inclusive range of datasets; one may specify multiple inclusive ranges by separating them with commas. The default dataset is dataset 1.

Description

The error expression, <errorExpr>, may be composed of one or more (algebraically–combined) of the following elements:

Component:	Description:
DATA	An input dataset
numericals	Numerical values
operators	+ - * / ()

A few things to note:

- Statistical error expressions cannot be defined without first reading in a source dataset.
- Statistical errors are added in quadrature with systematic errors (if specified) to produce an overall error estimate in each data bin.
- Currently, statistical errors cannot be specified in an input file.

For additional information, see the related command `ERRORS`.

Example

Define an expression to be used for the statistical errors.

```
sherpa> DATA data.dat
sherpa> STATERRORS = 5
```

Bugs

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

See Also

sherpa

[berrors](#), [bsyserrors](#), [compute_errors](#), [compute_statistic](#), [covariance_errors](#), [fctest](#), [get_paramest](#), [get_paramestint](#), [get_paramestlim](#), [get_paramestreg](#), [goodness](#), [interval-projection](#), [interval-uncertainty](#), [list_paramest](#), [mlr](#), [projection](#), [region-projection](#), [region-uncertainty](#), [restore_paramest](#), [run_paramest](#), [run_paramestint](#), [run_paramestlim](#), [run_paramestreg](#), [set_errors](#), [set_syserrors](#), [syserrors](#), [uncertainty](#)

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