URL: http://cxc.harvard.edu/ciao3.4/compute_errors.html
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AHELP for CIAO 3.4

compute_errors

Context: sherpa

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Synopsis

Module function to estimate errors for an array of data

Syntax

```
Array_Type compute_errors(Array_Type)

Error Return Value: NULL

Argument:

(1) Array of values of type Float_Type or Double_Type
```

Description

This function estimates the errors for each element of the input array given Sherpa's current STATISTIC setting. (Note that these data need not have been input into Sherpa!) Thus there is an implicit assumption that the input array elements are counts. If the input array elements are not counts, then one could, e.g., create a new S−Lang function to compute the errors properly.

This function is only appropriate for use with data−based variances: chi gehrels, chi dvar, and chi parent.

Note that currently, the input array cannot be of type Integer_Type. This will be fixed in a future version of the module. To check the type of the array, use the S−Lang function _typeof:

```
sherpa> a = [5,3,9]
sherpa> _typeof(a)
Integer_Type
sherpa> compute_errors(a)
NULL
```

One can get around this error by explicitly typecasting the array:

```
sherpa> a = typecast(a,Double_Type)
sherpa> foo = compute_errors(a)
sherpa> print(foo)
3.39792
2.93649
4.1225
```

See the related function compute_statistic.

Bugs

See the Sherpa bug pages online for an up−to−date listing of known bugs.

See Also

sherpa

berrors, bsyserrors, compute_statistic, covariance, errors, ftest, 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, staterrors, syserrors, uncertainty

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