



AHELP for CIAO 3.4

get_record

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Synopsis

Module function to return a record of model parameter values at the end of each iteration of the fitting process.

Syntax

```
Struct_Type get_record()  
Error Return Value: NULL
```

Description

The RECORD command saves the best-fit model values at the end of each iteration during fits. For instance, if a particular fit with the POWELL optimization method took 14 iterations, then 14 values are recorded for each free parameter. Also saved is the statistic value at the end of each iteration. The output of `get_record` is a S-Lang variable of `Struct_Type`, containing this information.

There are three fields in the output structure:

- `name`: a `String_Type` array of length `M`, where `M` is the number of free model parameters. This array contains the parameter names.
- `val`: a `Double_Type` array of length `M x N`, where `N` is the number of iterations through parameter space during the fitting process. This array records the value of each free model parameter at the end of each step through parameter space.
- `stat`: a `Double_Type` array of statistic values of length `N`. This array records the value of the fit statistic at the end of each step through parameter space.

See the related Sherpa command RECORD for more information.

Example

```
sherpa> record
sherpa> fit
...
sherpa> foo = get_record()
sherpa> print(foo)
name           = String_Type[4]
val            = Double_Type[4,14]
stat          = Double_Type[14]
sherpa> variable a = foo.val[0,*]
sherpa> () = curve(a,foo.stat)
```

Bugs

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

See Also

chandra

[guide](#)

sherpa

[get analysis](#), [get arf axes](#), [get axes](#), [get coord](#), [get data](#), [get energy axes](#), [get errors](#), [get filter](#),
[get filter expr](#), [get fit](#), [get fluxed spectrum](#), [get ftest](#), [get metadata](#), [get photon axes](#),
[get photon energy axes](#), [get photon wave axes](#), [get qvalue](#), [get raw axes](#), [get source](#), [get statistic](#),
[get stats](#), [get syserrors](#), [get wave axes](#), [get weights](#), [record](#), [save](#), [write](#)

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URL:
http://cxc.harvard.edu/ciao3.4/get_record.html
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