



AHELP for CIAO 3.4

# sherpa.proj

Context: [sherpa](#)

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## Synopsis

Configure PROJECTION in Sherpa.

## Syntax

```
sherpa.proj.[field]
```

## Description

The Sherpa configuration variable (also called "state object") `sherpa.proj` contains settings of PROJECTION for calculating confidence intervals in Sherpa. See `ahelp PROJECTION` for more details.

The following table lists each field of `sherpa.proj`, with a description and the default value:

| Field Name | Description  | Default |
|------------|--|---------|
| fast       | Use levenberg-marquardt (or simplex if using Cash) in place of current optimization method (0 = false, 1 = true) | 1       |
| sigma      | Specifies the number of sigma (i.e. the change in fit statistic).  | 1       |

To restore the default settings use the Sherpa/S-Lang module function `restore_proj`.

## Example 1

The `sherpa.proj` settings can be changed at the command line.

```
sherpa> sherpa.proj.fast = 0
```

## Example 2

List the current settings of `sherpa.proj` and set confidence level to 1.6 sigma in the second command.

```
sherpa> list_proj
Parameter  Current      Default      Description
-----
```

```
fast      1      1      Switch to LM/simplex: 0(n)/1(y)
sigma     1      1      Number of sigma

sherpa> sherpa.proj.sigma=1.6
```

## Example 3

List the current and default values of sherpa.proj and restore the default values:

```
sherpa> sherpa.proj.sigma = 5

sherpa> list_proj
Parameter  Current      Default      Description
-----
fast       1           1      Switch to LM/simplex: 0(n)/1(y)
sigma     5           1      Number of sigma

sherpa> restore_proj

sherpa> list_proj

Parameter  Current      Default      Description
-----
fast       1           1      Switch to LM/simplex: 0(n)/1(y)
sigma     1           1      Number of sigma
```

## Example 4

Create an alias sp to sherpa.proj and use it.

```
sherpa> variable sp = sherpa.proj
sherpa> sp.fast = 0
```

## Bugs

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