

*AHELP for CIAO 3.4*

## sherpa.intunc

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## Synopsis

Configure INTERVAL–UNCERTAINTY in Sherpa.

## Syntax

```
sherpa.intunc.[field]
```

## Description

The Sherpa configuration variable (also called "state object") `sherpa.intunc` contains settings of INTERVAL–UNCERTAINTY for plotting the fit statistic as a function of parameter value, using the UNCERTAINTY algorithm in Sherpa. See `ahelp INTERVAL-UNCERTAINTY` for more details.

The `sherpa.intunc` fields are listed in the table:

Field	Description
<code>arange</code>	If 1, the grid limits are to be determined automatically. If 0, the grid limits are specified (see <code>min</code> and <code>max</code> ).
<code>min</code>	Specifies the grid minimum. This is always a linear quantity, regardless of the setting of <code>log</code> (see below). The setting is ignored if <code>arange = 1</code> .
<code>max</code>	Specifies the grid maximum. This is always a linear quantity, regardless of the setting of <code>log</code> (see below). The setting is ignored if <code>arange = 1</code> .
<code>log</code>	Specifies whether to use a linear (0) or logarithmic (1) spacing of grid points.
<code>nloop</code>	Specifies the number of grid points.
<code>sigma</code>	Specifies the number of sigma (i.e., the change in statistic) for the plot.

Field values may be set using directly, e.g.,

```
sherpa> sherpa.intunc.arange = 0
```

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

## Example 1

List the current and default values of the `intunc` structure, and restore the default values:

```
sherpa.intunc
```

```

sherpa> sherpa.intunc.arange = 0
sherpa> sherpa.intunc.log = 1
sherpa> sherpa.intunc.sigma = 5
sherpa> list_intunc
Parameter   Current      Default          Description
-----
arange       0            1               Auto-range: 0(n)/1(y)
min          0            0               Minimum value
max          0            0               Maximum value
log          1            0               Log-spacing: 0(n)/1(y)
nloop        100          100             Number of grid points
sigma        5            1               Number of sigma
sherpa> restore_intunc
sherpa> list_intunc
Parameter   Current      Default          Description
-----
arange       1            1               Auto-range: 0(n)/1(y)
min          0            0               Minimum value
max          0            0               Maximum value
log          0            0               Log-spacing: 0(n)/1(y)
nloop        100          100             Number of grid points
sigma        1            1               Number of sigma

```

## Example 2

Create alias for sherpa.intproj

```

sherpa> variable si = sherpa.intunc
sherpa> si.arange = 0

```

## Bugs

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

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URL:  
<http://cxc.harvard.edu/ciao3.4/sherpa.intunc.html>  
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