



AHELP for CIAO 3.4

createparamset

Context: [sherpa](#)

Jump to: [Description](#) [Examples](#) [Bugs](#) [See Also](#)

Synopsis

To be especially efficient, one may establish and assign a name to a model component, as well as set model parameters and their ranges, all at one time using a single command:

Syntax

```
sherpa> [CREATE] <sherpa_modelname>[<modelname>](<param>
[,<param>,<param>, ...])
```

where <sherpa_modelname> is the Sherpa default model name and <modelname> is the name being given to the model component by the user. Note that <modelname> must be enclosed in brackets, []. The sequential order of the comma-separated <param> arguments indicates to which model parameter the values will be applied. That is, the first <param> argument will apply to the model's first parameter, the second <param> to the model's second parameter, etc.

Description

The command argument <param> contains the parameter assignments <value>:<min>:<max>:<delta>, where:

Argument:	Description:
<value>	The value for the model parameter.
<min>	The minimum for that parameter range.
<max>	The maximum for that parameter range.
<delta>	Specifies initial parameter step size.

The colon separated list for <param> need not include all of the elements, but it does need to maintain the proper sequential parameter order.

Example 1

Establish a model component, assign it a name, and set parameter values and ranges:

```
sherpa> ERASE ALL
```

```
sherpa> POLY[modela](3.0:1.0:4.0)
```

Assigns the name `modela` to the Sherpa model component `POLY`. Also gives the value of 3.0 to the model's first parameter (in this case parameter `c0`), sets the minimum to 1.0 for this parameter, and sets the maximum to 4.0 for this parameter.

Example 2

Establish a model component, assign it a name, and set parameter values:

```
sherpa> POW[modelc](1, 5, 10)
```

Assigns the name `modelc` to the Sherpa model component `POW`. Also gives the value of 1.0 to the model's first parameter (in this case parameter `gamma`), gives the value of 5.0 to the model's second parameter (`ref`), and gives the value of 10.0 to the model's third parameter (`ampl`).

Example 3

Establish a model component, assign it a name, and set parameter values:

```
sherpa> POW[modelc2](, , 10.0:1.0:100.0:0.05)
```

Assigns the name `modelc2` to the Sherpa model component `POWLAW1D`. Also gives the value of 10.0 to the model's third parameter (in this case parameter `ampl`), sets the minimum to 1.0 for this parameter, sets the maximum to 100.0 for this parameter, and set the initial step size to 0.05 for this parameter.

Bugs

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

See Also

sherpa

[autoest](#), [background](#), [create](#), [create_model](#), [fit](#), [freeze](#), [get_defined_models](#), [get_model_params](#), [get_models](#), [get_num_par](#), [get_par](#), [get_stackexpr](#), [getx](#), [gety](#), [guess](#), [instrument](#), [integrate](#), [is_paramset](#), [jointmode](#), [kernel](#), [lineid](#), [linkparam](#), [mdl](#), [modelexpr](#), [modelstack](#), [nestedmodel](#), [noise](#), [paramprompt](#), [paramset](#), [pileup](#), [rename](#), [run_fit](#), [set_par](#), [set_paramset](#), [set_stackexpr](#), [source](#), [thaw](#), [truncate](#), [unlink](#)