



 AHELP for CIAO 3.4

set_stackexpr

Context: [sherpa](#)

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Synopsis

Module functions to set a model stack expression.

Syntax

```
Integer_Type set_source_expr([Integer_Type,]String_Type)
Integer_Type set_bg_expr([Integer_Type,]String_Type)
Integer_Type set_inst_expr([Integer_Type,]String_Type)
Integer_Type set_sinst_expr([Integer_Type,]String_Type)
Integer_Type set_binst_expr([Integer_Type,]String_Type)
```

Success/Error Return Values: 1/0

Arguments:

- (1) Dataset number (default 1)
- (2) A string expression

Note that if only one argument is provided, it is assumed to be a string expression, and the dataset is assumed to be dataset 1.

Description

These functions set model stack expressions; `set_sinst_expr` and `set_binst_expr` set instrument model stack expressions for the source dataset only, and the background dataset only, respectively.

See the related Sherpa commands `SOURCE`, `BACKGROUND`, and `INSTRUMENT` for more information.

NOTE: In CIAO 3.1 the instrument model stack expression for the background dataset is required for simultaneous filtering in energy/wave or fitting of PHA files.

Example 1

Specify the source model stack expression for dataset 3:

```
sherpa> PARAMPROMPT OFF
sherpa> GAUSS[g]
sherpa> POW[p]
sherpa> () = set_source_expr(3, "p+g")
```

Example 2

Specify a source model stack expression for dataset 1:

```
sherpa> () = set_source_expr("xswabs[xs1]*(pow[p]+gauss[g])")
sherpa> get_source_expr()
(xs1 * (p + g))
```

Bugs

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

See Also

sherpa

[autoest](#), [background](#), [create](#), [create_model](#), [createparamset](#), [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](#), [source](#), [thaw](#), [truncate](#),
[unlink](#)

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