



AHELP for CIAO 3.4

chips_eval

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Synopsis

Call ChIPS commands from S-Lang

Syntax

```
Integer_Type chips_eval(String_Type)
```

Description

The `chips_eval()` function allows S-Lang code to execute ChIPS commands which do not have a corresponding S-Lang version. To do this, you create a string which contains the command to execute and pass it to `chips_eval()`, which returns a 0 on success and a -1 on failure.

Example 1

```
() = chips_eval("xlabel 'TIME (s)');  
() = chips_eval("xlabel size 1.5");
```

These two lines – if included in a S-Lang script which has already loaded the ChIPS module with a

```
require("chips");
```

call – will change the x-axis label to "TIME (s)" and the size of the label to 1.5.

We use `() = "` to ignore the return value of the call (i.e. whether it succeeded or not).

Example 2

Defining S-Lang versions of ChIPS commands

The `"chips_eval()` function can be used to write your own S-Lang versions of ChIPS commands. The example file listed below (`"axis.sl"`) defines a S-Lang function called `"axis()` which takes one argument – the label for the X axis. It uses `"chips_eval()` to call the ChIPS `XLABEL` command twice; first to set the label `axis` and the second the size of the label. The use of `"string(label)"` means that the function can be called with a numeric argument (since the numeric value will be converted to a string by this function) as well as a string. Before calling `XLABEL` we turn off the redraw mode – using `chips_auto_redraw()` – to avoid the plot

flashing. The original value for this mode is reset after the chips_eval() calls are made.

```
unix% cat axis.sl
define xaxis(label) {
  variable oldval = chips_auto_redraw(0);
  () = chips_eval( "xlabel '" + string(label) + "'" );
  () = chips_eval( "xlabel size 1.5" );
  () = chips_auto_redraw(oldval);
}
```

This can then be used by:

```
chips> () = evalfile("axis.sl")
chips> xaxis("TIME (s)")
```

The evalfile call can also be included in your .chipsrc resource file to make sure the function is available each time you use ChIPS.

Bugs

See the [bugs page for ChIPS](#) on the CIAO website for an up-to-date listing of known bugs.

See Also

chips

[chips](#)

modules

[varmm](#)

sherpa

[sherpa_eval](#)

slang

[math, overview, slang, tips, variables](#)

tools

[ascii2fits](#)

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