

URL: <u>http://cxc.harvard.edu/ciao3.4/slang.html</u> Last modified: December 2006

AHELP for CIAO 3.4

slang

Context: slang

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Synopsis

The S-Lang programing language

Description

While ChIPS and Sherpa have their own languages which can be used to read in data, plot graphs, or fit data, they do not contain a general-purpose language which can be used to write macros or manipulate data. This capability is instead provided by the S-Lang language, a popular interpreted language created by John Davis of the Center for Space Research at MIT. For a list of topics related to S-Lang and its use in CIAO, type "about slang" (or "ahelp -k slang") and "ahelp -c slang".

- See "ahelp overview" for an overview of the S-Lang language
- See "ahelp slangrtl" for a list of functions in the S-Lang Run-Time librart
- See "ahelp chips" for specific information on using S-Lang in ChIPS.
- See "ahelp sherpa" for specific information on using S-Lang in Sherpa. The use of S-Lang to create models for Sherpa is described in "ahelp slang usermodel".
- See "ahelp variables" for the use of variables in S-Lang.
- See "ahelp math" for mathematical operations available in S-Lang.
- See "ahelp tips" for S–Lang tips and examples.
- See "ahelp varmm" for a discussion of the Variables, Math and Macros library.
- See "ahelp varmmrl" for the information on the Varmm readline module.
- See "ahelp caldb caldb" for a discussion of the S–Lang version of the CALDB library.
- See "ahelp paramio" for a discussion of the S-Lang version of the parmaeter library.
- See "ahelp group" for a discussion of the S–Lang version of the grouping library.
- See "ahelp stackio" for a discussion of the S-Lang version of the stack library.
- See "ahelp pixlib" for a discussion of the S–Lang version of the pixlib library.

Notes

• The Grating User Interactive Data Extension (GUIDE) derives most of its power from the S–Lang language; the scripts it uses are available in the

\$ASCDS_INSTALL/contrib/share/slsh/local-packages/ directory.

• Additional S-Lang scripts are provided on the CIAO download page.

CHANGES IN CIAO 3.0

The integration of S–Lang into CIAO has been greatly extended and improved with CIAO 3.0. Sherpa and ChIPS have an increased number of S–Lang functions and a number of libraries – caldb, paramio, group, region, stackio, and pixlib – are also now importable from S–Lang. See their respective ahelp documents for further information.

See Also

```
calibration
        <u>caldb</u>
chandra
        coords, guide, isis, level, pileup, times
chips
        chips, chips eval
concept
        autoname, parameter, stack, subspace
dm
        dm, dmbinning, dmcols, dmfiltering, dmimages, dmimfiltering, dmintro, dmopt, dmregions,
        dmsyntax
gui
        <u>gui</u>
modules
        paramio, pixlib, stackio, varmm
sherpa
        sherpa eval
slang
        math, overview, tips, variables
tools
        ascii2fits
```

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