



## S–lang–related Bugs: general

### Bugs

#### 1. *load\_arf* with *set\_inst\_expr* vs. *instrument* with *far1d*

The following commands:

```
( ) = load_arf( "arf1", "arf.fits" );
( ) = set_inst_expr( 1, "arf1" );
```

do not produce the same results as:

```
instrument 1 = far1d[arf1](arf.fits)
```

1. The analysis setting is "Channel" and not "Energy" after performing the S–Lang calls.
2. The return value of `get_axes( )` *does not* obey the analysis setting, although it appears to do so.

This issue also holds if you create a fake arf using a struct.

#### 2. *When a fake arf has been create, using S–lang functions to define the same instrument model for different datasets confuses Sherpa.*

This works fine when the ARF is loaded from a file.

3. *There are no consistent error message system in the Sherpa Slang/Varmm environment.*
4. *Currently, the Sherpa/S–Lang module can report parameter links, but it cannot create them.*

This works:

```
sherpa> gauss[g1]
sherpa> gauss[g2]
sherpa> g2.fwhm => g1.fwhm
sherpa> get_par( "g2.fwhm" ).linkexpr
g1.fwhm
```

but this doesn't:

```
sherpa> ampl2 = get_par("g2.ampl")
sherpa> ampl2.linked = 1
sherpa> ampl2.linkexpr = "g1.ampl"
sherpa> set_par(ampl2)
1
sherpa> show g2
gauss1d[g2] (integrate: on)
  Param  Type      Value      Min      Max      Units
  -----
  1  fwhm  link         10  expression: g1.fwhm
  2   pos  thawed         0 -3.403e+38 3.4028e+38
  3  ampl  thawed         1 -3.403e+38 3.4028e+38
```

## S-lang-related Bugs: general – CIAO 3.4

```
sherpa> print(get_par("g2.ampl"))
name          = g2.ampl
model         = gauss1d
type          = src
value         = 1
min           = -3.40282e+38
max           = 3.40282e+38
delta         = -1
units         = NULL
frozen        = 0
linked        = 0
linkexpr      = NULL
```

---

The Chandra X-Ray Center (CXC) is operated for NASA by the Smithsonian Astrophysical Observatory.  
60 Garden Street, Cambridge, MA 02138 USA.  
Smithsonian Institution, Copyright © 1998–2006. All rights reserved.

URL:  
[http://cxc.harvard.edu/sherpa3.4/bugs/sl\\_general.html](http://cxc.harvard.edu/sherpa3.4/bugs/sl_general.html)  
Last modified: 21 September 2006