CIAO 2 Scripts

Unix command line scripts may be used to simplify repetitive basic tasks. Several of the CIAO **threads** have been semi-automated using scripts. Sometimes scripts are needed in "work-arounds" for CIAO bugs. The scripts presented here are designed and tested by users. Feel free to edit them, but be sure to use them with care.

To view the text of the script, simply click. To download the script, **shift-click**.

After downloading, make the file executable with the following command:

```
unix% chmod +x [filename]
```

To run the script, simply type the filename:

```
unix% [filename]
```

Subject	Topic	Script
• General		
	Determine Corrections Required for Data	**acis_check_data**
	Determine if Rescreening is Required	**acis_rescreen**
	Update ardlib.par files to find bad pixel lists	**acis_set_ardlib**
	Example of grating-event data inspection, using Chips and Slang (see also the Introduction to ChIPS thread)	**chips_tgscript.ch** **get_evt_data.sl** **README_ch_sl**
	Report information on installed CIAO software	**ciaover**
	Download and install **all** scripts in your CIAO installation directory. See the web page version of this page for instructions.	**CIAO_scripts.tar**
	Filter Streak Events from ACIS-S Observations (see also the HETG/ACIS-S Grating Spectra thread or the LETG/ACIS-S Grating Spectra thread)	**destreak (for Solaris)** **destreak (for Linux)** **destreak.ps (README)**
• Imaging		
	Generate ACIS Exposure Maps for	

	Generate ACIS Exposure Maps for *Celldetect* Recursive Blocking (HRC script not yet available)	**acis_expmap** **README_acis_expmap**
	Make a Color jpg Image (see also the Create "True Color" Images thread)	**color_image**
	Combine Two Different Obsids	**combine_obsid**
	Estimate Counts in a Source (see also the Estimate the Number of Counts thread)	**get_counts**
	Obtain a Radial Profile for a Source (see the Estimate the Number of Counts and Obtain Radial Profile and the Radial Profile with FUNTOOLS threads)	**get_rproj**
• Imaging Spectroscopy		
	Choose correct FEF file and extract ACIS spectrum, RMF and ARF for a point source (see also the Extract an ACIS Spectrum thread)	**imagspec.tar** **README_imagspec**
• Grating Spectroscopy		
	Extract Coadded, Grouped Spectra (see also the Extract Coadded and Grouped Nth-Order Source & Background Spectra and ARFs thread)	**add_grating_orders**
	Extract Spectra into a Grid for Use in Tools Like *mkgarf*	**mk_tggrid** **README_mk_tggrid**
	Make full garfs for an ACIS Observation (see also the Create HETG garf or the Create LETG garf thread)	**mkgarf_acis**
	Make full garfs for an LETG/HRC-I Observation (see also the Create LETG/HRCI garf thread)	**mkgarf_hrci**
	Make full garfs for an LETG/HRC-S Observation (see also the Create LETG/HRCS garf thread)	**mkgarf_hrcs**
	Echo Min Wavelength from a Chandra Grating RMF	**query_heg_grid** **README_query_heg_grid**

A Comment/Warning Regarding these Scripts:

These scripts are provided as-is, with the understanding that they will be useful as-is, or with modifications by the user. We hope to get feedback so that we can eventually turn the more useful scripts into fully supported CIAO utilities. Until that happens, however, we consider them to be relatively unsupported products. If you find a problem with a script, please report the specific tool and command-line generating the error or producing bad output.

(Note: the Bourne and C shells have the option "-x" which will print commands before they are executed. When problems occur, using this will allow us to determine whether there is a bug in a supported (i.e., configuration-controlled) tool, or if it is a scripting error. e.g, '/bin/sh -x some_script')