

URL: <a href="http://cxc.harvard.edu/ciao3.4/prop-tools.html">http://cxc.harvard.edu/ciao3.4/prop-tools.html</a>
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Context: <u>proposaltools</u>

AHELP for CIAO 3.4

# prop-tools

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## **Synopsis**

Tools that aid in the preparation and submission of Chandra proposals

## **Description**

Below we list the tools available to help in feasibility studies, proposal preparation, and proposal submission. Use the ahelp system to find more detailed information on a particular tool or application. Also refer to the <u>Proposer section</u> of the Chandra X–ray Center web site for more information and links to tools.

#### **Tools that Access the Chandra Observation Catalog Database**

The following are ways to obtain information about observations that have already taken place or have been approved to take place with Chandra.

- Target Search Form for browsing the Chandra Observation Catalog at http://cxc.harvard.edu/targets/
- ChaSeR and Web ChaSeR search and retrieval from the Chandra Data Archive; see the Chandra Archive web pages for more information http://cxc.harvard.edu/cda/

## **Tools for Assessing Feasibility**

The following tools will aid in determining the feasibility of using one of the Chandra detectors to observe a specific target. When appropriately used, they can help provide a reasonable estimate of exposure time.

- PIMMS (Portable Interactive Multi-Mission Simulator) use when there is an estimate of source flux for a simple source spectra from either a count rate estimated from a previous mission or a flux in some energy band; estimates the amount of ACIS pile-up on the count rate
- Sherpa or XSPEC to provide a simulation of more complicated spectra estimates spectral shape and uncertainty; some pile—up modeling capability
- MARX (Model of AXAF's Response to X-rays) for a source with complicated spatial structure; perform Monte—Carlo simulation of the observation, including approximation to mirror and instrument characteristics; output is a simulated data set that can be analyzed with CIAO and other data analysis packages; simulates ACIS pile—up

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#### **Proposal Planning Tools**

These tools aid in the preparation of a Chandra proposal, in particular: evaluating target visibility and observing constraints, and converting between date/time systems and coordinate systems. These are available either over the web, or through a command–line interface; refer to ahelp files for the individual tools for more information.

- COLDEN calculate galactic neutral hydrogen column density
- ObsVis allows inspection of instrument fields—of-view, observatory roll angle and target visibility
- DATES perform interactive calendar and time conversions
- PRECESS perform astronomical coordinate conversions

#### **Chandra Proposal Submission**

Electronic submission of proposal information is required. The scientific justification must also be submitted electronically. Paper copies will be accepted only from individuals without access to the Internet.

- WWW version of the Remote Proposal Submission (RPS) system a form—based interface to proposal processor; links exist to help for each page of the form and for each parameter; generic RPS help is available at the top of the form. The form is available through the Proposer page URL at the top of this file.
- E-mail server of the RPS system instructions for use may be obtained by sending a blank e-mail message to rps@head-cfa.harvard.edu; note that if you are unable to send a message with no subject or text, enter a single character in either position; the response will be an ASCII file of instructions.

### See Also

proposaltools

colden, dates, obsvis, pimms, precess, prop-coords, prop-time

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