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# CHANDRA DATA ARCHIVE

<http://cxc.harvard.edu/cda>

*Your Source for Chandra Data*

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## Obtaining Publicly Available Data

- ★ *ChaSeR* – allows users to browse the observation catalog with a variety of search criteria, to display preview images, and to stage for download any combination of public data products.
- ★ *WebChaSeR* – a Web version of *ChaSeR* with restricted functionality. This version is aimed at the majority of users who just want to retrieve the primary and secondary data products for specific observations.
- ★ *Provisional Web Interface* – provides access to higher-level data products for calibration observations and GTO/GO/TOO/DDT observations that have been released to the public domain.



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## – *ChaSeR* –

- ★ **Observation Search** – The first screen allows the user to specify constraints in order to find observations that match what (s)he wants
- ★ **Search Results** – The results of the search are presented in tabular form. All observations with status *Archived* have been publicly released.
- ★ **Retrieval List** – The user may edit the contents of the shopping cart by selecting items and deleting them.



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## ChaSeR Observation Search

- ★ Most of the fields are self-explanatory and their use becomes clear when clicked on
- ★ Source names may be converted to celestial coordinates through the SIMBAD name resolver
- ★ Names or coordinates may be read from an ASCII file, instead of being entered on the form, allowing multiple searches to be executed in one query.



## ChaSer Search Results

- ★ Observations may be selected by clicking on them. Control-clicking selects multiple entries.
- ★ The user may select certain data products for selected observations and add these to the *Retrieve List*. Selected products are added to the shopping cart when the [Add to Retrieval List](#) button is pressed.
- ★ The standard CDA data distribution consists of the groups *Primary* and *Secondary* data products. However, the user may customize these packages by clicking on them and deselecting certain products, and/or by adding items from the *Supporting* data products group.
- ★ Retrievals that include supporting products are inherently slower since the data products need to be retrieved from a different archive server.



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## ChaSeR Retrieval List

- ★ *Browse selected products* will bring up a new window with a list of the actual data products that are included in the shopping cart, with the filenames and uncompressed file sizes.
- ★ *Retrieve selected products* will start the retrieval process, either directly to a user-specified directory (*Download via application*) or to the CDA ftp site (*Stage in anonymous ftp area*). The second method is significantly faster.
- ★ In both cases the data products are collected in a single tar file containing one directory per ObsId.



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## *– Provisional Web Interface –*

- ★ Currently the only source for many calibration observations
- ★ No provision for retrieving proprietary data
- ★ Provides a list of observations that are not in the archive but for which manually processed products are available
- ★ Mirror site at LEDAS



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## – *WebChSeR* –

- ★ The current release is aimed at the majority of users who just want to retrieve primary and secondary data products for specific observations
- ★ Restrictions from ChaSeR functionality
  - No selection by proposal number, exposure, time ranges or category
  - No file input or output
  - Retrieval only of complete primary and/or secondary data products packages
  - No preview images or observation details
- ★ This interface works best with Netscape 6.1 and higher.





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# Obtaining Proprietary Data

- ★ Policies related to proprietary data
  - Distributions are made only after V&V approval
  - Proprietary period starts when 80% of a SeqNum has been distributed
  - Proprietary periods may be 0,1,2,3,4,6,9,12 months
  - Proprietary accounts are by PI and proposal
- ★ Standard distribution
  - ftp: the PI is sent the URL to the data in an email
  - the data is shipped to the PI on physical medium
- ★ *ChaSer/WebChaSeR*
  - the user will be requested to log in to a proprietary account to retrieve proprietary data
  - the *Specify new login and password* button may be used to change the archive account that is in use



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# Tracking Data and Publications

- ★ Processing Status Tool
  - [http://cxc.harvard.edu/soft/op/ops\\_pst.html](http://cxc.harvard.edu/soft/op/ops_pst.html)
  - enables users to create customized reports on the processing status of Chandra observations
  - reports may be regular HTML, tab-delimited ASCII, or RDB
  - where appropriate, links are made to V&V reports, if they exist
- ★ CDA Links to ADS Abstracts
  - <http://cxc.harvard.edu/cda/bib.html>
  - allows users to search for articles in the ADS abstract service that are based on specific Chandra observations



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## Data Packages

- ★ Primary – L2 science data and products needed to analyze them
- ★ Secondary – products needed for recreating L2 products
- ★ Supporting – available through ChaSeR; some are available through the Provisional Interface
- ★ L0 event files – not available due to proprietary issues
- ★ Older versions of data – available upon request