



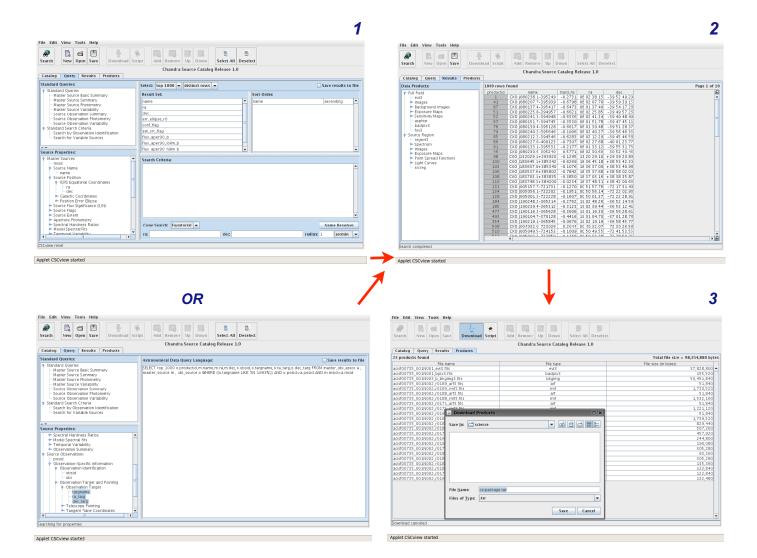


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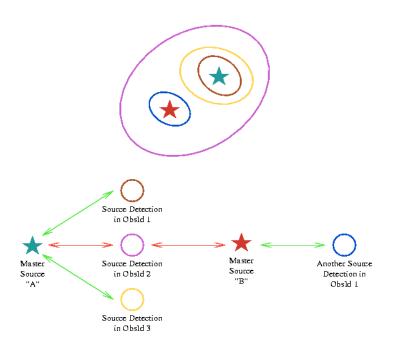
The Chandra Source Catalog (CSC) is ultimately intended to be the definitive catalog of all X-ray sources detected by the Chandra X-Ray Observatory. CSC Release 1 became available in March 2009; it includes information about sources detected in public ACIS imaging observations from roughly the first eight years of the Chandra mission. Only point sources, and compact sources with extents <~30 arcseconds, are included. Highly extended sources, and sources located in selected fields containing bright, highly extended sources, are excluded.

The CSC contains positions and multi-band count rates for the sources, as well as derived spatial, spectral, and temporal calibrated source properties that may be compared with data obtained by other telescopes. The CSC also includes associated data products for each source, including images, photon event lists, light curves, and spectra.

Search the catalog, save text files of source data, and download data files associated with each source with CSCview.



The catalog is presented in two tables: the **Master Sources Table** and the **Source Observations Table**. Each distinct X-ray source on the sky identified in the CSC is represented by a single *master source* table entry and one or more *source observation* table entries for each observation in which the source is detected. In each table, a row represents a source, and each column a quantity or parameter that is officially part of the catalog.



The red arrows in the figure illustrate that confused sources are linked to multiple master sources in the catalog, but their properties do not contribute to the reported master source properties.

If a source is detected in multiple observations that overlap the same region of sky, then the master source table entry is produced by merging the corresponding individual source observations.

The properties of a master source represent the best estimates of the source properties derived from the set of individual source observations contributing to the master source.

The Source Observations Table contains source properties based on observational data extracted independently from each Chandra pointing in which the source is detected; it contains multiple entries for the corresponding single, merged source entry in the Master Sources Table.

Bidirectional links within the catalog database connect a master source table entry with multiple source observation entries associated with it, so that you can view all observations of a single source and how they contribute to the master source entry. These links are referred to as Master Sources/Source Observations Associations. This feature allows you to request any combination of master source properties and source observation properties in a single query to the database, so you are not restricted to searching a single table at a given time.

Send questions about the CSC to the CXC Helpdesk: <u>http://cxc.harvard.edu/helpdesk</u>