LARGE ASTRONOMICAL CATALOGS

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Abstract. Large astronomical catalogues, containing astrometric and photometric information for millions of objects (GSC, USNO-A, etc.) are widely used by the astronomical community for all sorts of applications, particularly, for preparing and carrying out observations with ground- and space based telescopes, for quick identification of objects and first interpretation of results.

However, getting at the actual catalogue data is not quite straightforward, due to the huge size of the catalogues and a somewhat complicated internal format. To facilitate data retrieval, user-friendly programs are created that lets one look directly at the data in the large catalogues, either as a graphical sky map, a plot, or a simple text table. The programs can read a sampling of the catalogue data for a given sky region, store this sampling in a text file, and display a graphical map of the sampled region.

Besides their obvious use as lists of positions, photometry and other data for celestial objects, the great feature of astronomical catalogues is their effectiveness as powerful tools to carry out modern theoretical and observational studies.