595-61 NBS: ONLY 175085 N94-227533

GUIDE STAR CATALOGUE DATA RETRIEVAL SOFTWARE II

O.M.Smirnov, O.Yu.Malkov (Inst. of Astr. of the Russian Ac. Sci.)

The Guide Star Catalogue (GSC), being the largest astronomical catalogue is date, is widely used by the astronomical community for all sorts of applications, such as statistical studies of certain sky regions, searches for counterparts to observational phenomena, and generation of finder charts. It's format (2 CD-ROMs) requires minimum hardware and is ideally suited for all sorts of conditions, especially observations.

Unfortunately, the actual GSC data is not easily accessible. It takes the form of FITS tables, and the coordinates of the objects are given in one coordinate system (equinox 2000). The included reading software is rudimentary at best. Thus, even generation of a simple finder chart is not a trivial undertaking. To solve this problem, at least for PC users, we have created GUIDARES. GUIDARES is a user-friendly program that lets you look directly at the data in the GSC, either as a graphical sky map or as a text table.

GUIDARES can read a sampling of GSC data from a given sky region, store this sampling in a text file, and display a graphical map of the sampled region in projected celestial coordinates (perfect for finder charts). GUIDARES supports rectangular and circular regions defined by coordinates in the equatorial, ecliptic (any equinox) or galactic systems.