

Publications

There is an extensive literature describing the development and use of the Guide Star Catalog. See the [GSC Library](#) in the Astrophysics Data System for a full bibliography.

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Primary Publications

- **[The Guide Star Catalog I - Astronomical Foundations and Image Processing](#)**
Lasker et al 1990 *Astronomical Journal* Vol. 99, p.2019
- **[The Guide Star Catalog II - Photometric and Astrometric Models and Solutions](#)**
Russell et al 1990 *Astronomical Journal* Vol. 99, p.2059
- **[The Guide Star Catalog III - Production, Database Organization and Population Statistics](#)**
Jenker et al 1990 *Astronomical Journal*, Vol. 99, p. 2082
- **[The Second Generation Guide Star Catalog : Description and Properties](#)**
Lasker et al 2008 *The Astronomical Journal*, Vol. 136, p. 735

Secondary Publications

- **[The Guide Star Photometric Catalog I](#)**
Lasker et al 1988 *Astrophysical Journal Supplement* Vol. 68, p.1
- **[Some comments on the astrometric properties of the guide star catalog](#)**
Taff et al 1990 *Astrophysical Journal Letters* Vol. 353, p.L45
- **[GSC 1.2- An Astrometric Re-Reduction and other Refinements](#)**
Morrison et al 2001 *The Astronomical Journal*, Vol. 121, p. 1752
- **[An all-sky set of \(B\)-\(V-R\) photometric calibrators for Schmidt surveys. GSPC2.1: First release](#)**
Buccialetti et al 2001 *Astronomy and Astrophysics*, v.368, p.335-346

Related Publications

- **[An Estimation of the Positional Accuracy of the Space Telescope Guide Star Catalog](#)**
J.L.Russell and B.J.McLean 1984 B.A.A.S. 16,499
- **[The Guide Star Catalog - Structure and Publication](#)**
H.Jenker et al 1985 B.A.A.S. 17,549
- **[The TYCHO Input Catalogue : Cross-referencing the GSC with SIMBAD Database](#)**
D.Egret and B.J.McLean 1988 ESO Conference and Workshop Proceedings No.,28 - "Astronomy from Large Databases", p319
- **[The Guide Star Catalog : Structure, Publication and Future Plans](#)**
H.Jenker et al 1987 ESO Conference and Workshop Proceedings No.,28 - "Astronomy from Large Databases", p361
- **[The effect of Astrometric Modeling Error of Schmidt Plates on the Construction of the Guide Star Catalog for Space Telescope](#)**
J.L.Russell and B.J.McLean 1985 B.A.A.S. 16,986
- **[The TYCHO Input Catalogue - Cross-matching the Guide Star Catalog with the HIPPARCOS INCA Data Base](#)**
D.Egret et al 1991 BAAS 23,1319
- **[Design Considerations for Billion-Object Databases and their Application to a Second Generation Guide Star Catalog.](#)**
H.Jenker et al 1992 ESO Conference and Workshop Proceedings No.43, p349 - "Astronomy from Large Databases II"
- **[Galactic Structure with the GSC Plate Archive II - Colours and Proper Motions towards the Main Meridional Section](#)**
B.M.Lasker et al 1994 B.A.A.S. 26,955
- **[Galactic Structure with the GSC Plate Archive - Colours and Proper Motions in the Main Meridional Section of the Galaxy: First Results](#)**
M.G.Lattanzi et al 1993 Proceedings of the workshop "Galactic and Solar System Optical Astrometry", p.119
- **[GSC 1.2, A Subplate Reduction of the GSC](#)**
B.Buccialetti et al 1994 IAU Symposium 161, p277 - "Astronomy from Wide Field Imaging"
- **[Construction and Properties of GSC 1.2](#)**
S.Roser et al 1996
- **[Potential Applications of GSC-II for GAIA Operations](#)**
B.M.Lasker et al 1995 ESA SP-379,137 Proceedings of the workshop - "Future Possibilities for Astrometry in Space"
- **[The Guide Star Catalog and the Digitalized Sky Survey as Resources for Other Surveys](#)**
H.Jenker et al 1997 *Astrophys. Sp. Sci. Library*, 210, 37-44 Proc. 3rd Denis Euroconference "The Impact of Large-Scale near-IR Sky Surveys"
- **[New Surveys at STScI : Scanning, Distribution and Cataloging](#)**
V.Laidler et al 1996 B.A.A.S. 188, 5421L
- **[The Tycho Input Catalogue - Crossmatching the Guide Star Catalog with the HIPPARCOS INCA Database](#)**
D.Egret et al 1992 *Astron.Astrophys.* 258,217

- **Galactic Structure along the Main Meridional Section of the Galaxy I - The North Galactic Pole (N321) Field**
A.Spagna et al 1996 Astron.Astrophys 311,758
- **GSC-II : An Overview of the Database System**
G.Greene et al 1998 B.A.A.S. 30, 898
- **GSC-II : An Overview of Current Catalogue Construction**
B.McLean et al 1998 B.A.A.S. 30, 900
- **Celestial Mapping with Persistent Objects using the COMPASS Database**
G.Greene, B.McLean 1998 WorldView Conference
- **The GSC-I and GSC-II Databases : An Object-Oriented Approach**
G.Greene et al 1998 IAU Symposium 179,474
- **Contents, Test Results and Data Availability for GSC 1.2**
S.Roeser et al 1998 IAU Symposium 179, 420
- **Galactic Structure with GSC-II Material : The North Galactic Pole and the Stock-2 Cluster Regions**
A.Spagna et al 1998 IAU Symposium 179, 228
- **The Second Guide Star Catalogue**
B.McLean et al 1998 IAU Symposium 179, 43
- **DSS-II and GSC-II: STScI All-Sky Image and Catalog Databases**
B.M.Lasker et al 1998 Proceedings "Astrophysics and Algorithms: a DIMACS Workshop on Massive Astronomical Data Sets"
- **Faint Photometric BVR CCD Sequences : The North Galactic Pole and the Anticenter**
A.Spagna et al 1998 Astron. Astrophys Suppl. 130,359
- **Development of the Astronomical Image Archive and Catalog Database for Production of GSC-II**
G.Greene et al 1999 Journal of Future Generation Computing Systems 16, 29
- **Status of the Second Guide Star Catalog**
J.Morrison and B.McLean 1999 American Astronomical Society, DDA meeting #31, #05.10
- **Predicted Deep NIR Starcounts for the NGST Guide Star System**
A.Spagna and B.McLean 1999 NGST Detector Workshop, STScI
- **The Second Guide Star Catalog**
B. McLean et al 2000 UCLean conference "The New Era of Wide-Field Astronomy" August 21-24
- **An Overview of the Multi-Terabyte GSC-II Database and some Preliminary Scientific Results**
B. McLean et al 2000 MPA/ESO/MPE Joint Astronomy conference "Mining the Sky" July 31 - August 4
- **The Status of the Second Generation Digitized Sky Survey and Guide Star Catalog (Invited)**
B.McLean et al 2000 ADASS IX conference proceedings
- **The Second Guide Star Catalog and Cool Stars**
R.L.Smart et al 2001 Ultracool Dwarfs: New Spectral Types L and T
- **An Overview of Existing Ground-Based Wide-Area Surveys (Invited)**
B.McLean 2001 Virtual Observatories of the Future, ASP Conference Proceedings, Vol. 225, p103
- **The Second Generation Guide Star Catalog**
J.E.Morrison et al 2001 AAS DDA meeting #32
- **GSC2.2 vs SDSS EDR: Astrometry, Photometry and Classification**
V.Laidler et al 2001 AAS 199#130.11
- **Testing the Automated Classification of the Second Guide Star Catalogue**
R.Smart et al 2002 Automated Data Analysis in Astronomy. p133
- **Exotic Objects in GAIA: Results from GSC-II**
M.G.Lattanzi et al 2002 Proc. Monte Rosa Conf. "GAIA Spectroscopy, Science and Technology"
- **Faint and peculiar objects in GAIA: results from GSC-II**
D. Carollo et al 2002 Proc. Monte Rosa Conf. "GAIA spectroscopy, science and technology"
- **The AXAF (Chandra) Guide and Acquisition Star Catalog V1.5 (AGASC 1.5)**
Schmidt & Green 2003 Astronomical Data Analysis Software and Systems XII ASP Conference Series, Vol. 295
- **Search for Ancient Cool White Dwarfs Using GSC-II Material**
D.Carlo et al 2004 Proc. IAU Symp. 220 "Dark Matter in Galaxies", p207
- **Guide Star Catalog v2.3 : Parameters and Comparisons**
C.Loomis et al 2004 AAS #205.91.10
- **Estimated Source Counts from the GSC-II Catalog**
R.Drimmel et al 2004 Proc "Milky Way Surveys: The Structure and Evolution of our Galaxy", ASP Conference #317
- **Data Mining with the Multicolor GSC-II Database**
A.Spagna et al 2004 Mem.S.A.It.Suppl 5,97
- **Search for Cool White Dwarfs Using GSC2**
D.Carlo et al 2004 Proc. IAU Symp. 220 "Dark Matter in Galaxies", p207
- **The International DSS/GSC Consortium**
B.McLean et al 2004 SpaceOps Conference
- **Cool halo white dwarfs from GSC-II**
D.Carlo et al 2005 Proc "White Dwarfs: cosmological and galactic probes", Astrophysics & Space Science Library, 332, p31
- **The GSC2 Survey of Cool White Dwarfs**
D.Carlo et al 2005 Proc "14th European Workshop on White Dwarfs", ASP Conference series, 334, p135
- **The GSC2-based Survey of Ancient Cool White Dwarfs I : The Sample of Spectroscopically Identified WDs**
D.Carlo et al 2006 Astron.Astrophys., 448,579
- **The Guide Star Catalog II. Properties of the GSC 2.3 release**
A.Spagna et al 2006 MsSAI 77,1166
- **The Guide Star Catalog II: Properties of the GSC 2.3 Release**
A.Spagna et al 2006 IAU JD 13, #49
- **The New GSC-II and its Use for HST**
B.McLean 2006 Proc "2005 HST Calibration Workshop", NASA/CP2006-214134. National Aeronautics and Space Administration, Goddard Space Flight Center, 2006, p.413
- **Improving the Absolute Astrometry of HST Data with GSC-II**
A.Koekemoer et al 2006 Proc "2005 HST Calibration Workshop", NASA/CP2006-214134. National Aeronautics and Space Administration, Goddard Space Flight Center, 2006, p.417
- **The GSC-II catalog release GSC 2.3: description and properties**
B.Bucciarelli et al 2008 IAU Symposium 248,316 "A Giant Step: from Milli- to Micro-arcsecond Astrometry"

- **Absolute Proper Motions Outside the Plane (APOP) - A Step Toward the GSC2.4**
Zhaoxiang, Q et al 2015 AJ 150, 137