

Catalog Data Collections

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MAST Interfaces

MAST provides a variety of interfaces to access its hosted data collections. Tables in this document provide a few-letter code to indicate which interface(s) may be used to access data from a given collection. The following table lists the codes and their meaning.

Interface Code	Description
CJ	CasJobs (requires a separate account)
C.M	Catalogs.MAST
D	Direct download (usually from a link on a MAST webpage)
E.M	Exo.MAST
G	HTTP Get Request
P	Portal user interface
PX	Portal Cross-match
VOT	Virtual Observatory Tables interface
WF	Custom MAST web form

Data Catalogs

MAST hosts catalogs from a wide variety of digital surveys and source compendia to facilitate research. These catalogs are available in one or more MAST interfaces. See the table of Interface Codes above.

The catalogs may also be accessed via a Virtual Observatory table access protocol. The following table lists the catalogs by their acronyms.

Catalog	Version	Interface	Description	References
2MASS	Standard and 6X	CJ, PX	Two-micron All-Sky Survey: IR photometric catalog	Cutri, et al. 2003, VizieR On-line Data Catalog
CFHTLS	Deep, Wide; T0007 Release	PX	Canada-France-Hawaii Telescope Legacy Survey: optical/near-IR photometric catalogs	Hudelot, et al. 2012, VizieR On-line Data Catalog
CMC14		PX	Calsberg Meridian Catalog: astrometric positions	
CTL	8.0.1	CJ, PX	TESS Candidate Target List	Stassun, et al. 2018, AJ, 156, A102
DENIS	DR3	PX	Deep Near-Infrared Survey (DENIS) point-source photometric catalog	DENIS Consortium 2005, VizieR On-line Data Catalog
Exoplanets_TESS		CJ	TESS sources with threshold-crossing events	
FIRST		WF	Faint Images of the Radio Sky at Twenty-cm: radio source catalog.	Becker, et al. 1995, ApJ, 450, 559 White, et al. 1997, ApJ, 475, 479 Hefland, et al. 2015, ApJ, 801, A25
GAIA	DR1, DR2, EDR3	CJ, PX	GAIA Astrometric catalog of stellar positions and proper motions.	GAIA Collaboration 2018, A&A, 616, A1 GAIA Collaboration 2017, A&A, 605, A79 GAIA Collaboration 2021, A&A, 649, A1

GALEX: AIS+MIS	GR5	CJ	All-sky imaging survey and Medium-depth imaging survey: photometric UV catalog	Bianchi, et al. 2011, VizieR On-line Data Catalog
GALEX: All	GR 6+7	CJ, PX	Source catalog all surveys: photometric UV catalog	Bianchi, et al. 2014, VizieR On-line Data Catalog
GLIMPSE		PX	Source Catalog	IPAC 2008, VizieR On-line Data Catalog
GSC	2.2, 2.3, ASC	WF, PX	Guide-Star Catalog of stellar positions and magnitudes	Lasker, et al. 2008, AJ, 136, 735
HLSP_47TUC		CJ	Photometric source catalog of 47 Tuc	Kalirai et al. 2012, AJ, 143, 11
HLSP_ATLAS_REFCAT2		CJ	ATLAS All-Sky Reference Catalog of stars	Tonry et al. 2018, ApJ, 867, 105
HLSP_ATLAS_VAR		CJ	Source catalog of variable stars from the Asteroid Terrestrial-impact Last Alert System	Heinze, et al. 2018, AJ, 156, A241
HLSP_GSWLC		CJ	GALEX-SDSS-WISE Legacy Catalog of galaxy properties	Salim et al. 2016, ApJS, 227, 2
HLSP_KG_RA DII		CJ	Revised Kepler Stellar and Exoplanet Properties from GAIA-DR2	Berger, et al. 2018, ApJ, 866, 99
HSLP_PS1_PSC		CJ	Probabilistic classifications of unresolved point-sources in Pan-STARRS1	Tachibana & Miller 2018, PASP, 130, 994
HLSP_TESS_HERMES		CJ	Catalog of stellar parameters	Sharma, et al. 2018, MNRAS, 473, 2004
HLSP_UVOTSC		CJ	Swift UVOT serendipitous source catalog	Page, et al. 2015, Proceedings of Science, 223, 37
HSC	3: MagAper2 3: MagAuto	CJ, C.M, P, PX, VOT	Hubble Source Catalog, includes Hubble Catalog of Variables; source positions and multi-band magnitudes	Whitmore et al. 2016, AJ, 151, A134 Bonanos et al., 2019, A&A, 630, A92
IRSF MCPS		PX	IRSF Magellanic Clouds Point-Source Catalog	Daisuke, et al. 2007, PASJ, 59, 615
KIC		WF, PX	Kepler Input Catalog	Brown, et al. 2011, AJ, 142, A112
KOI	DR25	CJ	Kepler Object of Interest catalog of stars with exo-planets	Thompson, et al. 2018, ApJS, 235, A38
LMCPS		PX	Magellanic Clouds Photometric Survey: the LMC: multi-band optical catalog of stars	Zaritsky, et al. 2004, AJ, 128, 1606
NOMAD		PX	Naval Observatory Merged Astrometric Dataset astrometric catalog	Zacharias, et al. 2005, VizieR On-line Data Catalog
OGLE II BULGE		PX	OGLE Photometric Catalog of the Galactic Bulge	Udalski, et al. 2002, AcA, 52, 217
Pan-STARRS	DR1, DR2	CJ, C.M	Panoramic Survey Telescope and Rapid Response System photometric catalog	Chambers, K, et al. 2019, https://arxiv.org/abs/1612.05560
PHAT	v2	CJ	Panchromatic Hubble Andromeda Treasury photometric survey	Johnson, et al. AJ, 752, A95
PPMX		PX	Catalog of Positions and Proper Motions of stars	Röser, et al. 2008, A&A, 488, 401
PPMXL		PX	PPMX on the ICRS	Roeser, et al. 2010, AJ, 139, 2440
SAGE		PX	Surveying the Agents of a Galaxy's Evolution	Meixner, et al. 2006, AJ, 132, 2268
SDSS	DR7, 8, 9, 14	CJ, PX	Photometric Source Catalog: multi-band optical and near-IR photometry	Abazajian, et al. 2009, ApJS, 182, 543
SPM	4.0	PX	Yale/San Juan Southern Proper Motion Catalog	Girard, et al. 2011, AJ, 142, 15
TGAS	DR1	PX	Tycho-GAIA	
TIC	8.1	CJ, PX	TESS Input Catalog	Stassun, et al. 2018, AJ, 156, A102
Tycho-2		PX	Tycho-2 Astrometric Catalog	Hog, et al. 2000, A&A, 355, L27
UCAC	2, 3, 4	PX	US Naval Observatory CCD Astrograph Catalog	Zacharias, et al. 2013, AJ, 145, 44
UKIDSS:DXS	DR8, DR9	PX	UKIRT Infrared Deep Sky Survey: Deep Extragalactic Survey	Lawrence, et al. 2007, MNRAS, 379, 1599 Lawrence, et al. 2012, VizieR Online Data Catalog
UKIDSS:GCS	DR8, DR9	PX	UKIRT Infrared Deep Sky Survey: Galactic Clusters Survey	Lawrence, et al. 2007, MNRAS, 379, 1599 Lawrence, et al. 2012, VizieR Online Data Catalog

UKIDSS: GPS	DR6	PX	UKIRT Infrared Deep Sky Survey: Galactic Plane Survey	Lawrence, et al. 2007, MNRAS, 379, 1599 Lawrence, et al. 2012, VizieR Online Data Catalog
UKIDSS: LAS	DR7, DR8, DR9	PX	UKIRT Infrared Deep Sky Survey: Large Area Survey	Lawrence, et al. 2007, MNRAS, 379, 1599 Lawrence, et al. 2012, VizieR Online Data Catalog
USNO	A2.0, B1.0	PX	USNO Astrometric Catalog	Monet, et al. 2003, AJ, 125, 984
WISE		PX	WISE All-Sky Photometric Survey	Cutri, et al. 2012, VizieR On-line Catalog

For Further Reading...

- [Mission Data Collections](#)