

Pisgah Astronomical Research Institute (PARI)



The 200 acre PARI campus, looking west from the 26-m East radio telescope

Astronomical Photographic Data Archive (APDA)

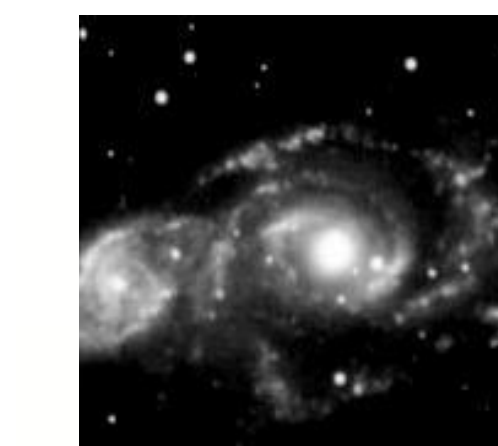
- APDA is dedicated to the collection, restoration, preservation and storage of astronomical photographic data.
- APDA is tasked with digitizing and establishing a digital image database accessible by the astronomical community via the Internet.
- APDA is essential both for the health of astronomical science and for credibility of the current generation of astronomers as guardians of its unique heritage.
- Photographic collections in APDA are used by professional astronomers, college students, PARI interns, primary and secondary school students, STEM educational and home-school student programs, and citizen science projects.
- Located in the PARI Research Building.



20,000 sq. ft. two story PARI Research Building recently renovated with support from the NSF – Award AST-0963300. Houses the Radio Frequency Laboratory, APDA, the Aeronomy Program Center, and lab space for short-term projects conducted by PARI Research Faculty Affiliates.

Surveys, Fields, and Collections in the Astronomical Photographic Data Archive at PARI

J.D. Cline, T.H. Barker
Pisgah Astronomical Research Institute
North Carolina Astronomers Meeting. September 25, 2021



Not-for-profit public foundation

WWW.PARI.EDU

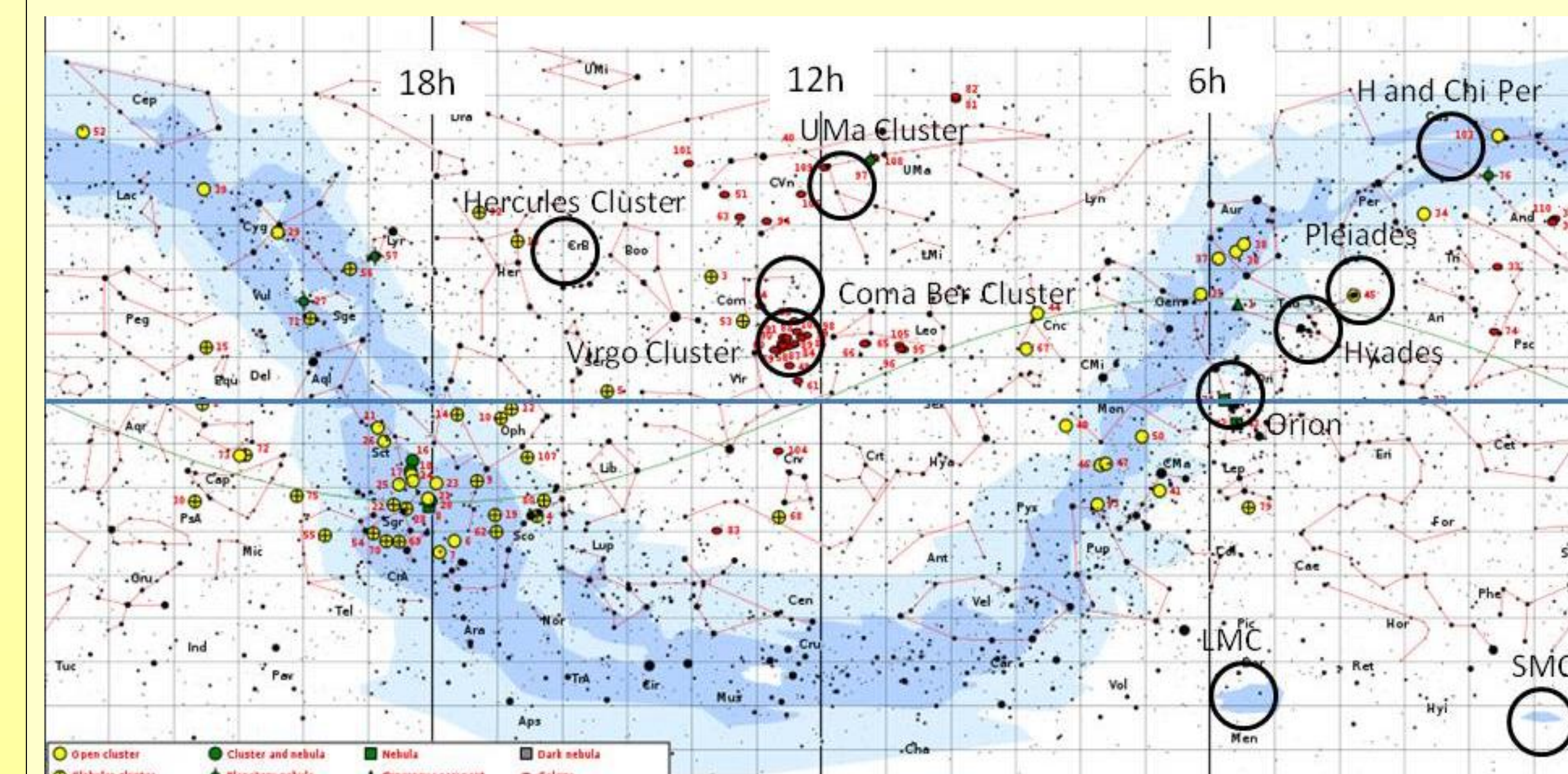
APDA Plate/Film Collections January 1, 2021

Images	Collection
68,000	Yale University Parallax Plates
39,800	USNO Double Star and Miscellaneous
36,341	USNO Parallax Plates
35,000	Harvard Meteor Survey, Baker Super-Schmidt
28,862	National Solar Observatory – White Light - 1899-1995
23,979	USNO Parallax Plates (ammo cans)
22,000	U of Michigan 1911-1975, Spectra
20,814	USNO Moon Camera 10" Telescope
20,020	Case Western Reserve University) 1941-1994
15,500	U of Minnesota Cordoba Observatory, Argentina
12,420	Yale University Miscellaneous Plates
12,000	Yale University Yale 26" AG Plates
9,000	Harvard SAO Meteorite Recovery, 1963-1974
7,125	Maria Mitchel Observatory 1915-1995
6,417	USNO (AGK2, ZA, LA, BY projects)
5,720	Yale University Allegheny Observatory Plates
3,026	STScI - POSS and CTIO
2,978	USNO UCAC2 plates
2,780	CTIO Dr. Houk Southern Survey
2,484	Fort Yukon - Chemical Trails
2,339	HAO - NCAR MLSO July 1991 MK3
2,125	Yale University, Southern Observatory AG
1,872	U of Minnesota, POSS-I Blue & Red plates
1,872	CWRU POSS-I E & O Prints
1,800	Union College, Dr. Phillip, Spectra
1,566	USNO Zone Astrograph
1,550	Miscellaneous direct images
1,400	USNO TAC
1,328	U of Texas Minor Planet Survey
1,245	Radcliffe Observatory, S.A. 74" reflector
1,123	Halley Comet 1985-86 IHW prints
936	U of Minnesota Luyten Red sky survey
894	USNO NOFS IIIa-J -POSS fields
894	U of Minnesota POSS-II Blue plates
719	CTIO CS CWRU Projects, Spectra
650	Vanderbilt University - Dyer Observatory
644	Stony Brook University Dr. Peterson
550	Miscellaneous spectral images
545	CTIO Curtis Schmidt plates, Dr. MacConnell (STScI) Spectra
513	Northwestern University - Henize 3"x 4"plates
500	Orphan plates, slides, and negatives
480	USNO NOFS Minor planets, Direct
385	U of Michigan - Bloemfontein, S.A., Henize H-alpha
350	MCT (MONTREAL-CAMBRIDGE-TOLOLO) Survey
350	CTIO Curtis Schmidt Telescope InfraRed Survey
321	CTIO 4-meter plates, Direct
310	U of Texas 8"x10"format .Prints
300	U of Texas Mars print Prints
300	Central Michigan University, Direct
218	KPNO - Burrell-Schmidt HK surveys, Spectra
210	Observatorio Astrofisico Nacional, Mexico, Spectra
200	Lick Observatory, Direct
180	USNO Minor Planets, Astrometric
166	Leo Connolly collection, Direct
160	Las Campanas Observatory (Chile), Direct
153	U of Texas Skylab Experiment S-019 UV spectra
150	David Dunlap Observatory (University of Toronto), Direct
145	U of Michigan Curtis - Std Stars, Spectra
120	McDonald Observatory Coudé spectra, Spectra
109	Grober Schmidtspiegel, Spectra
104	U of Nebraska, Direct
96	Mt. Palomar and Mt. Wilson, Direct
55	Harvard All-Sky Survey 1898-1903
21	CFHT - Hawaii, 3.6-meter Telescope
20	USNO NOFS 61" telescope plates, Direct
11	Bosscha Observatory, Lembang, Indonesia
10	Mount Stromlo (Australia), Direct
404,255	Total as of January, 2021

SURVEYS IN APDA

- HK Survey 4-deg prism
- A-Stars Survey 1.8-deg prism
- He Survey UV filters
- High Luminosity Survey
- IR Survey 4-deg prism
- Red Survey 4-deg prism
- OB Survey 4-deg prism
- QSO Survey 1.8-deg prism
- SGP Survey 1.8-deg prism
- NGP Survey 1.8-deg prism
- All-Sky Survey 4-deg prism
- Blue Survey 10-deg prism
- AntiCenter Survey 4-deg prism
- Weak Metallicity Survey 4-deg prism
- 6-Degree Survey 6-deg prism
- Low-Z Survey 4-deg prism
- LS1-VI Luminous Stars Survey 1.8-degree prism
- Parallax Survey (non-USNO) Direct images
- SGH (Southern Galactic Hemisphere) Survey 2 or 6 degree prisms
- Henize H-alpha Southern Survey 4-degree prism
- Taurus 6-degree Survey 6-degree prism
- UV-Survey 1.8-degree prism

EXAMPLE FIELDS IN APDA



Represented here are several fields with plates taken over long periods of time of open clusters, Messier objects, nebula, and galactic clusters. The surveys include direct and spectral plates.