

**A new reduction of old observations in the Gaia era
June 20-22, 2012, Paris**

Catalogue of Wide-Field Plate Archives

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Catalogue of Wide-Field Plate Archives: General Information

The Catalogue of Wide-Field Plate Archives (CWFPAs) is a part of the Wide-Field Plate Database (WFPDB).

The WFPDB (www.wfpdb.org), based and developed at the Institute of Astronomy (Bulgarian Academy of Sciences) since 1991, collects data about the plate archives, plate metadata extracted from the logbooks or other sources, and digitized plate images.

Mirror sites:

- in the Astrophysical Institute Potsdam (since 2007),
- in the Institute of Mathematics and Informatics, BAS (since 2010).

CWFPAs can be downloaded:

- <http://www.wfpdb.org/catalogue.html> - last published version

January 2012)

- **CDS**, Strasbourg at <http://vizier.u-strasbg.fr/viz-bin/VizieR-3> (since 1997 and updated version since 2008).

Catalog Selection Page: VI/90 Wide-Field Plate Database (Tsvetkov+ 1997)

Catalogue of Wide-Field Plate Archives: General Information

An updated version of the catalogue – in the beginning of the year

Now I present an unpublished yet version from June 2012

**Workshop on a Plan for Preserving Astronomy's Archival Records
held April 18-19, 2012 in the American Institute of Physics in College
Park, MD, U.S.A.**

Catalogue of Wide-Field Plate Archives: General Information

Definition of Plate Archive

A collection of plates obtained with a certain telescope at a certain observational site and stored at a certain place.

One telescope may have more than one archive, if the telescope was moved or if its plates are stored at different observatories or institutions.

Catalogue of Wide-Field Plate Archives: General Information

First Lists of Observatories/Institutes Possessing Plate Archives

(no restriction on the telescope field)

B. Hauck B. (1982) *Automated Data Retrieval in Astronomy* 217.

B. Hauck B. (1982) *Automated Data Retrieval in Astronomy* 227.

C. Jaschek (1989) *Bull. Inform. CDS* **36** 123.

C. Jaschek (1989) *Bull. Inform. CDS* **36** 151.

Catalogue of Wide-Field Plate Archives: General Information

CWFPAs: only wide-field plates (≥ 1 degree)

(M. Tsvetkov, 1991, IAU WGWF I Newsletter 1, Ed. H. T. MacGillivray 17).

Catalogue of Wide-Field Plate Archives

CWFPA, v. 5.7 Jan 2012,
<http://www.wfpdb.org/data/Cat5.7.xls>

Sources:
The Strasbourg
Astronomical Institutes Directory;
The Nautical Astronomical Almanac;
Observatory Annual Reports;
Observatories Webpages;
Private Correspondence

Catalogue of Wide-Field Plate Archives: Contents

Observatory Abbreviation	Telescope Aperture (cm)	Telescope original name
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Observatory and Telescope Identifiers

Location of the Plate Archive: Site, Country
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Plate Archive Present Location

Observatory: Name, Site, Country

Observatory Where the Archive Was Produced

Marsden No.	Time Zone	Observatory Longitude	Observatory Latitude	Observatory Altitude
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Observatory Characteristics

Telescope Clear Aperture	Telescope Mirror Diameter	Telescope Focal Length
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Wide-Field Telescopes Parameters

Plate Scale	Instrument Type	Field Angular Dimension
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Plate Scale, Field and Type of the Instrument

Year of Beginning of Telescope Operation	Year of End of Telescope Operation
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Period of Operation

Film Identification	Number of Direct Plates	Number of Objective Prism Plates
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Symbol for Used Medium - Plate/Film
Quantity: of Direct/ of Objective Prism Plates

Plate Catalogue Form	Code for Plate Archive Quality	Astronomer in Charge
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Status of the Plate Archive and Astronomer in Charge

Catalogue of Wide-Field Plate Archives: Contents

Notes

Note on IDENTIFICATION (observatory, instrument, suffix):

Fields from byte 1 to byte 7, taken together, constitute the WFPDB instrument identifier.

Note on INSTRUMENT TYPE:

Ast - astrograph, Cam - camera, FEC - fish eye camera, Men - meniscus,
RCr - Ritchey-Chretien, Rfl - reflector, Rfr - refractor, Sch - Schmidt

Note on CATALOGUE FORM (direct/spectral plates):

C - computer-readable form, T - printed table form, TC - computer-readable
form in preparation

Note on QUALITY:

A - very good, B - good, D – distributed

ReadMe file at <http://cdsarc.u-strasbg.fr/viz-bin/Cat?VI/90>

Catalogue of Wide-Field Plate Archives: Given Details in WFPDB

ROZ050 Archive



Wide-Field Plate Database - Sofia

[WFPDB](#)WFPDB@VizieR[Aladin](#)[Other Plate Catalogues](#)[Access Log](#)[Help](#)

Details for archive: ROZ050

Location of the Archive:

Site: **Sofia**

Country: **Bulgaria**

Observatory:

Name: **Rozhen NAO**

Site: **Rozhen**

Country: **Bulgaria**

Time zone: +2 h

East longitude: 24° 45.0'

Latitude: 41° 43.0'

Altitude: 1760 m

Clear aperture: 0.50 m

Mirror diameter: 0.70 m

Focal length: 1.72 m

Scale: 120 "/mm

Type: Sch

Field size: 4.5°

Years of operation:

From: 1979

To:

P/F:

Number of direct plates: 7335

Archive type: C

Number of spectral plates: 214

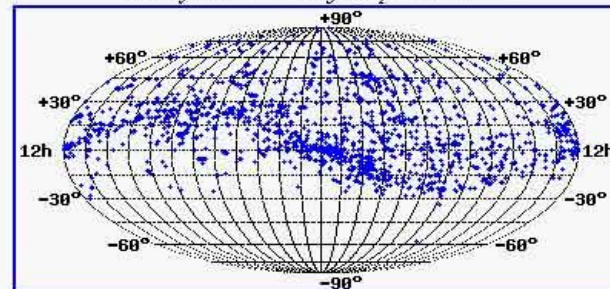
Archive type: C

Number of plates in WFPDB: 7359

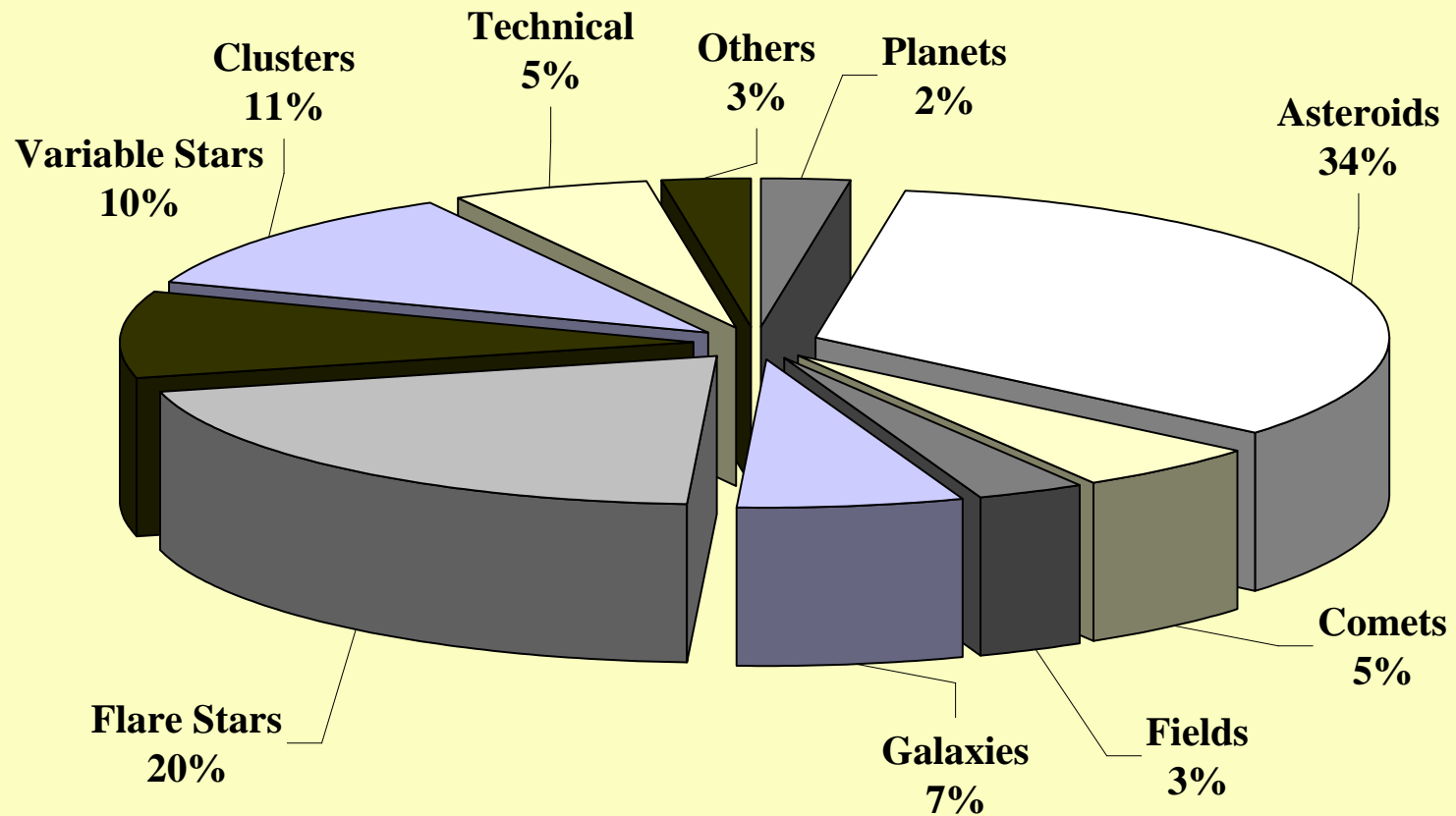
Quality: D

Astronomer in charge: [M. Tsvetkov](#)

All-sky distribution of the plate centres:



Catalogue of Wide-Field Plate Archives: Used Programmes for Plate Observations: ROZ050 Archive



Catalogue of Wide-Field Plate Archives: Analysis of Version June 2012

Observatories

Number of Observatories: 169 observatories;

Location: Northern hemisphere: 128

Southern hemisphere: 41

Altitudes: from 6m a.s.l. (Leiden Observatory, Netherland);
or 10 m (Cape of Good Hope Obs., Cape Town, South Africa)
up to 3610m (Llano del Hato Obs., Merida, Venezuela)

Storage of Plate Archives: in 114 observatories/institutions

Catalogue of Wide-Field Plate Archives: Analysis of Version June 2012

Plate Archive Contents

Number of Archives: 485;

Direct Plates: 2 413 736;

Spectral Plates: 79 681;

Total: 2 493417.

Catalogue of Wide-Field Plate Archives: Version June 2012

Analysis

Telescopes

Diameters of lenses:

0.01m (Meteor Patrol Camera, Harvard Obs., USA)

0.66m (Refractor, Yale-Columbia Station, Mt. Stromlo, Australia)

Diameters of mirrors:

0.30m (Reflector Astrophysical Obs. Potsdam, Germany)

4m (Kitt Peak Obs. USA or Inter-Amer. Obs., Cerro Tololo, Chile)

Focal Length:

0.03m (FEC Ondrejov Obs., Czech Republic)

19.5m (2.54m RCr telescope Las Campanas Obs., Chile)

Scale:

11"/mm (2.54m RCr Las Campanas Obs., Chile)

6876"/mm (FEC Ondrejov Obs., Czech Republic)

Catalogue of Wide-Field Plate Archives: Version June 2012

Analysis

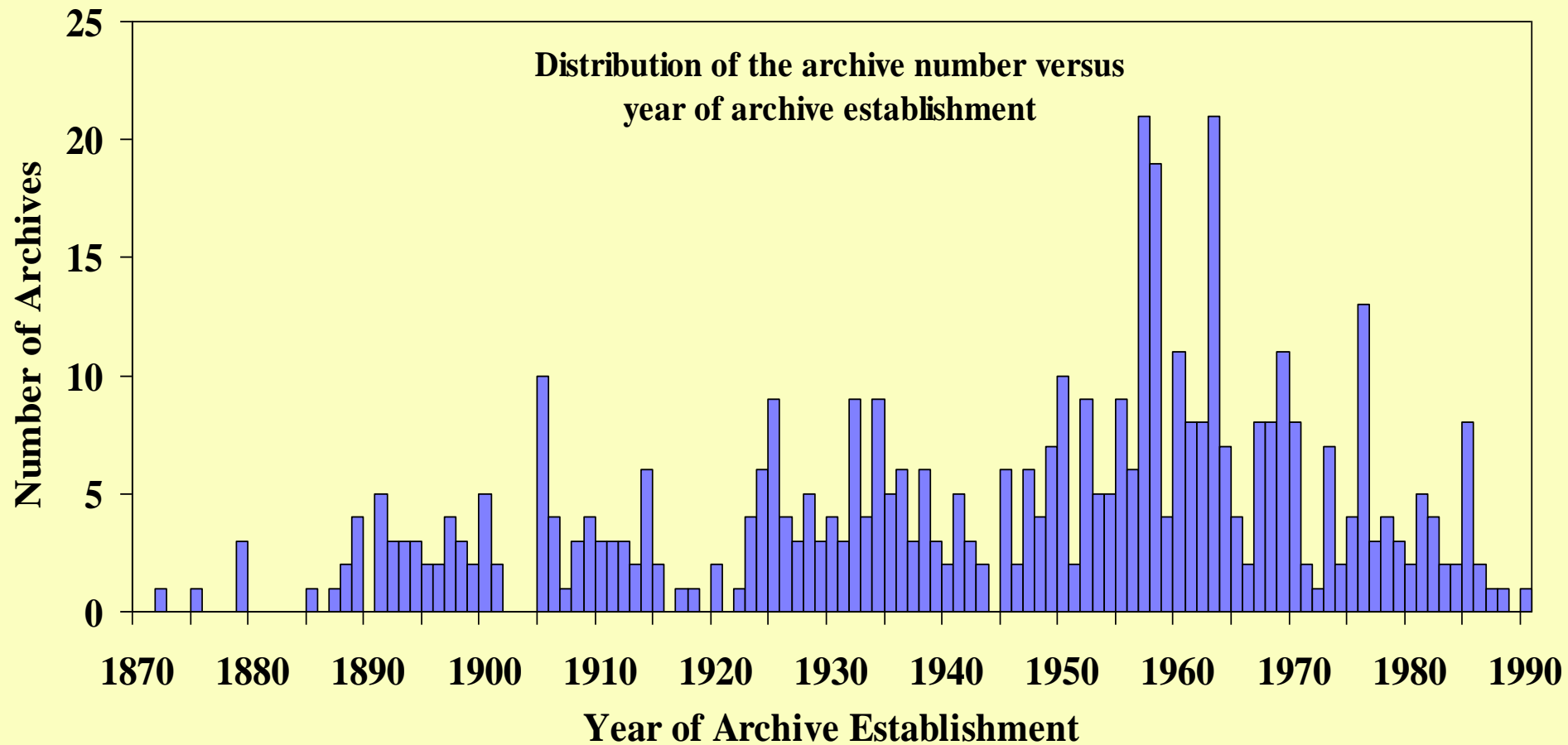
Telescopes

Years of Operation:

Beginning: 1872 (for COR029) up to 1988 for EAO020 Elgelhardt Obs. Kazan, Russia.

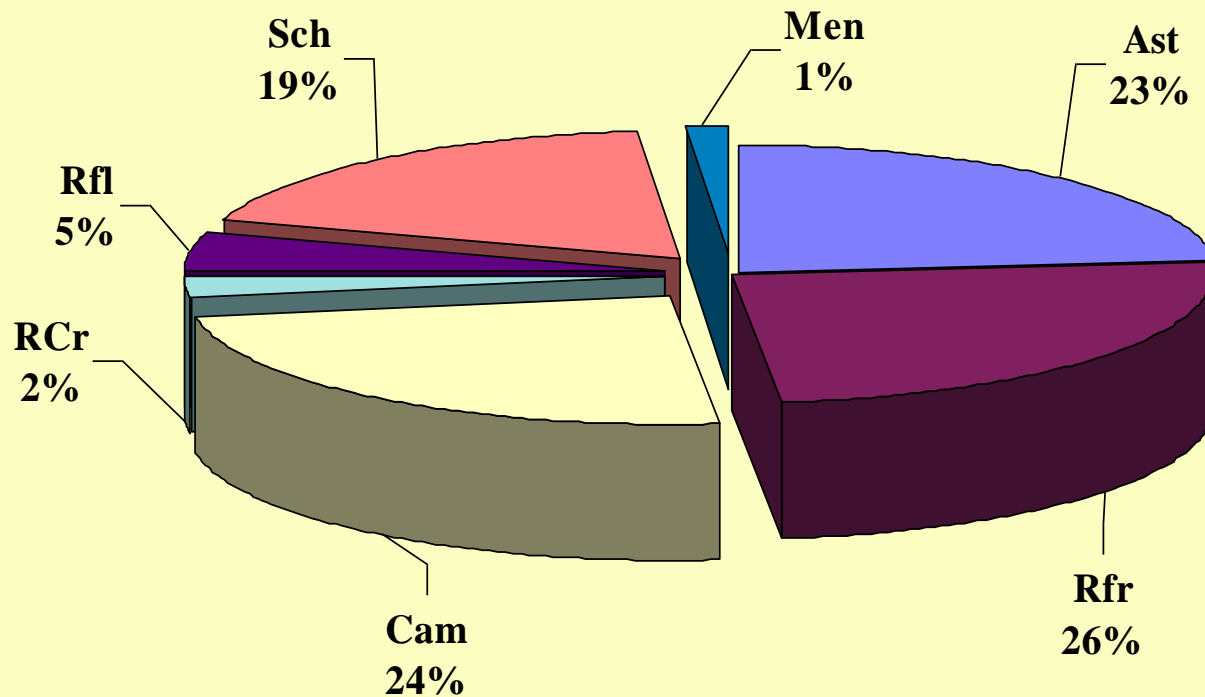
End: 1873 (for COR029) up to 2005 (for GUA040E – Main Astr. Obs. Kyiv, Ukraine, and BUC038, Ast. Institute, Bucharest, Romania).

Establishment of Plate Archives in Different Observatories



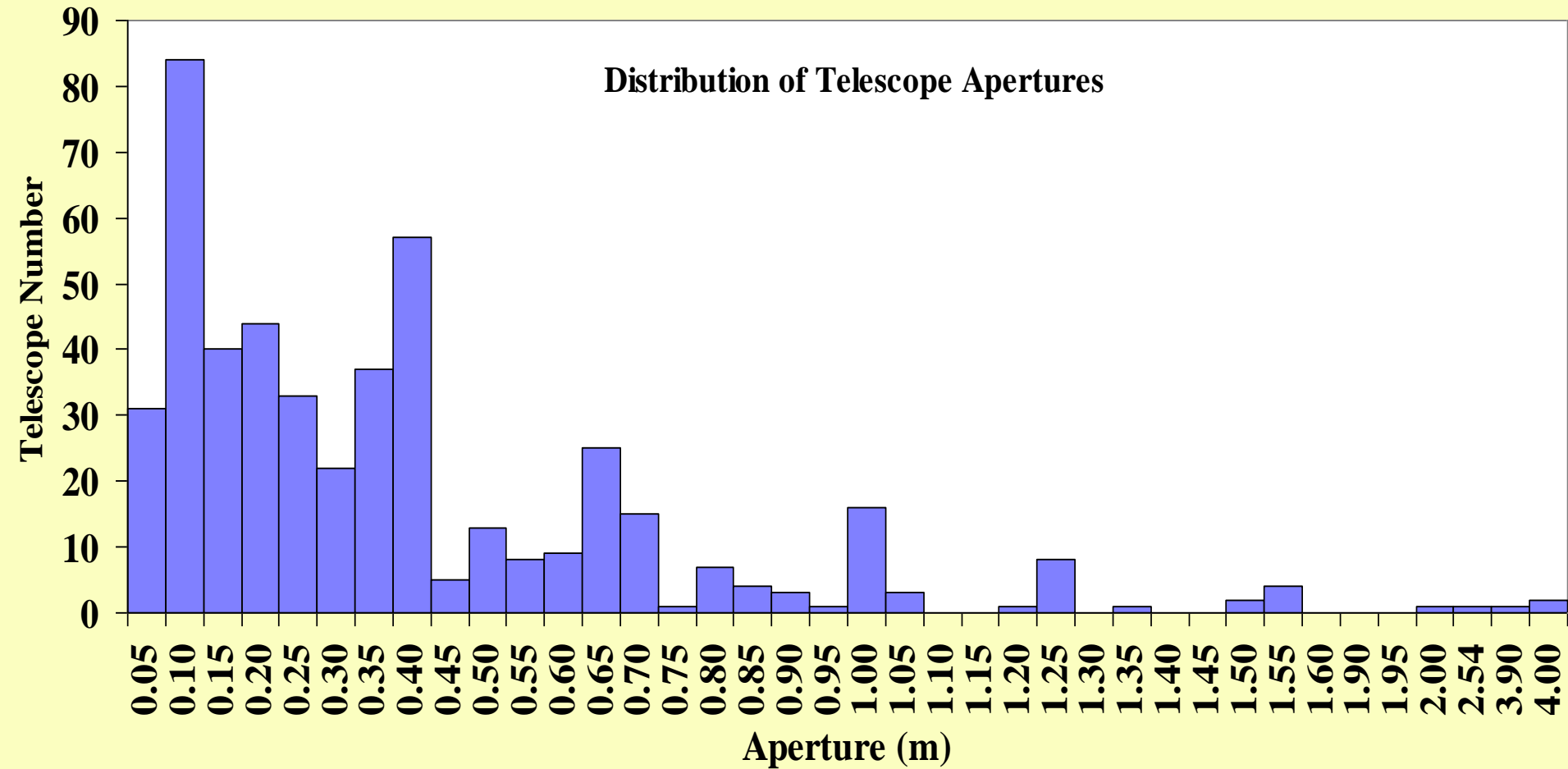
Telescopes Produced Wide-Field Plate Archives: Type

Distribution of the telescopes by type

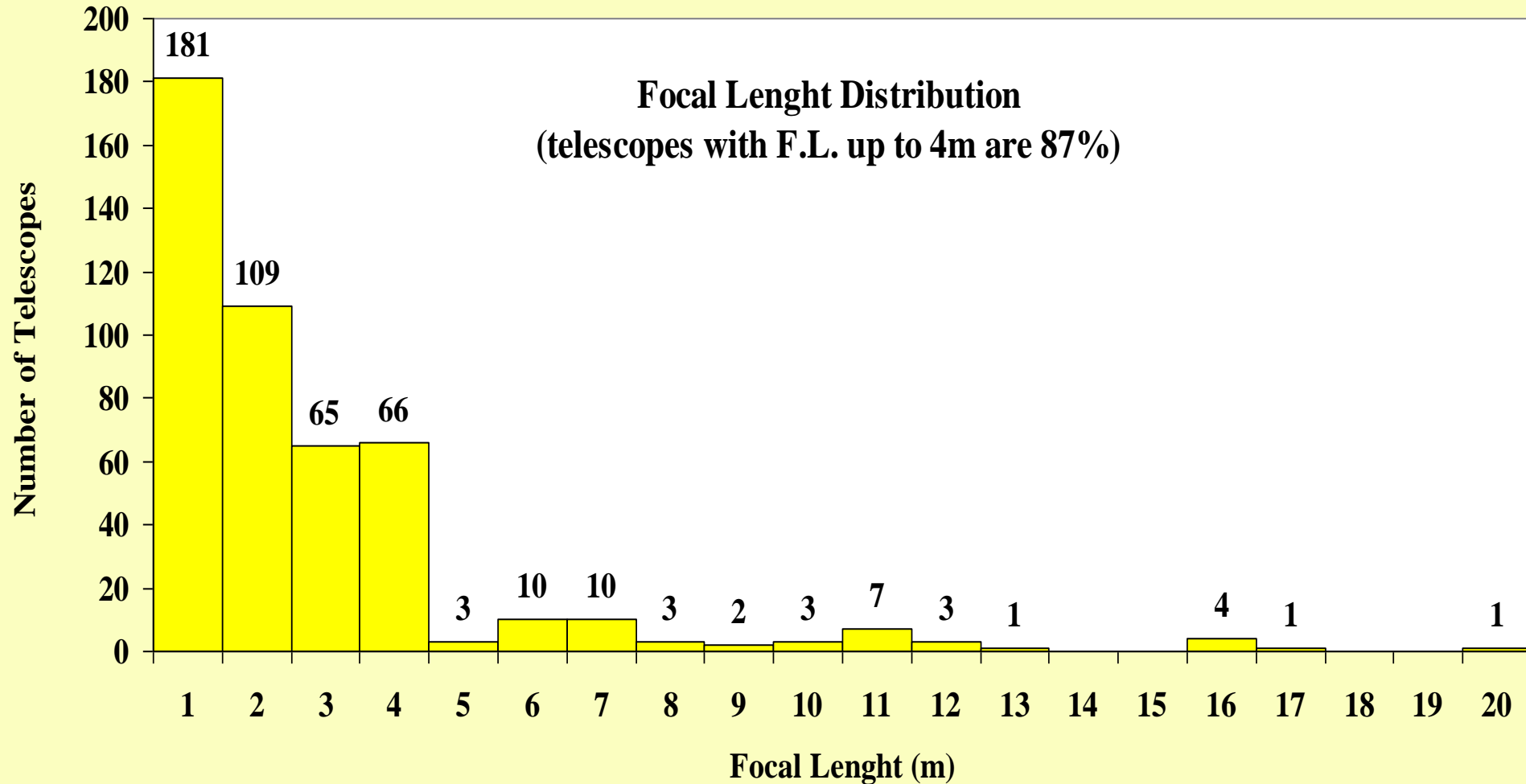


Telescopes Produced Wide-Field Plate Archives: Lens or Mirror Diameter

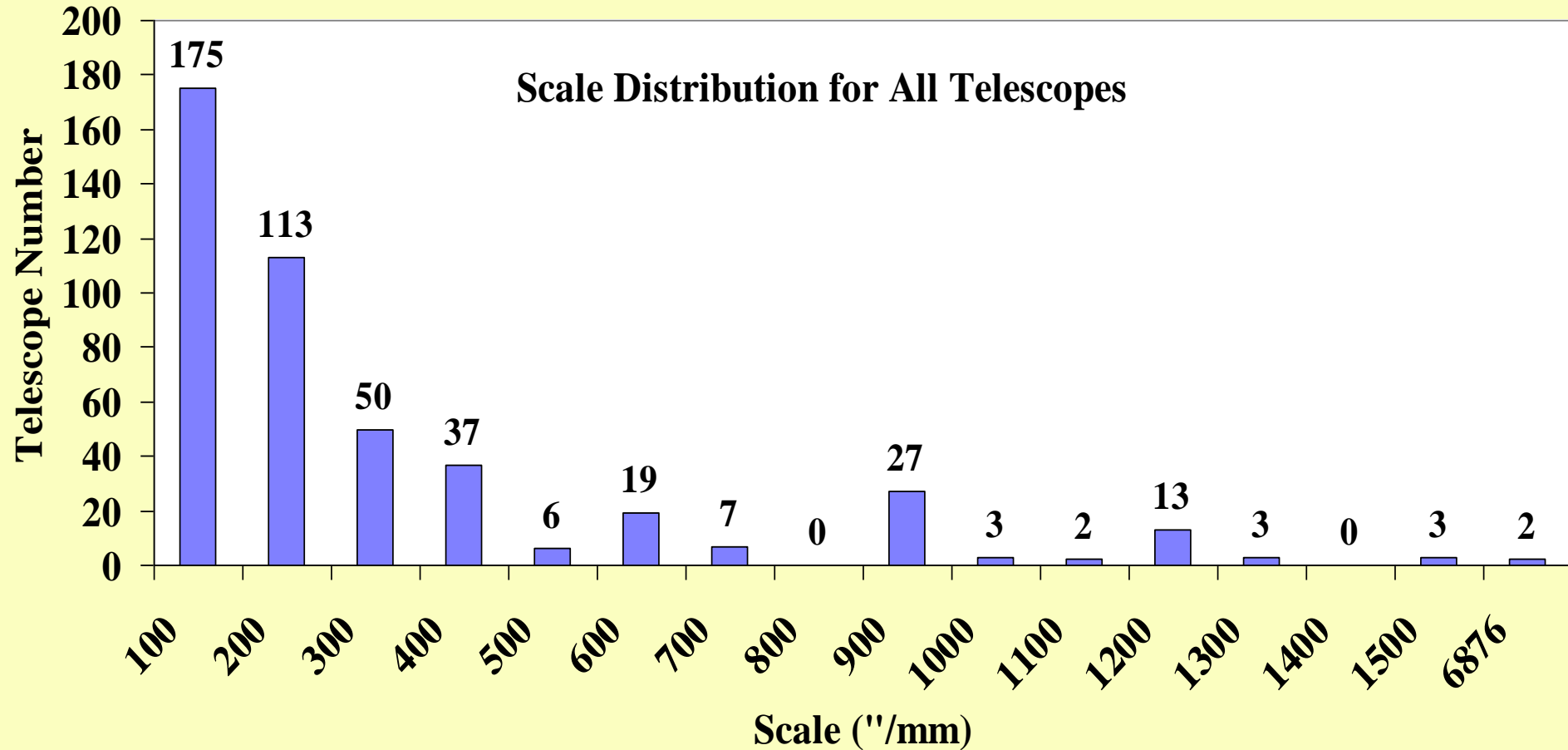
Distribution of Telescope Apertures



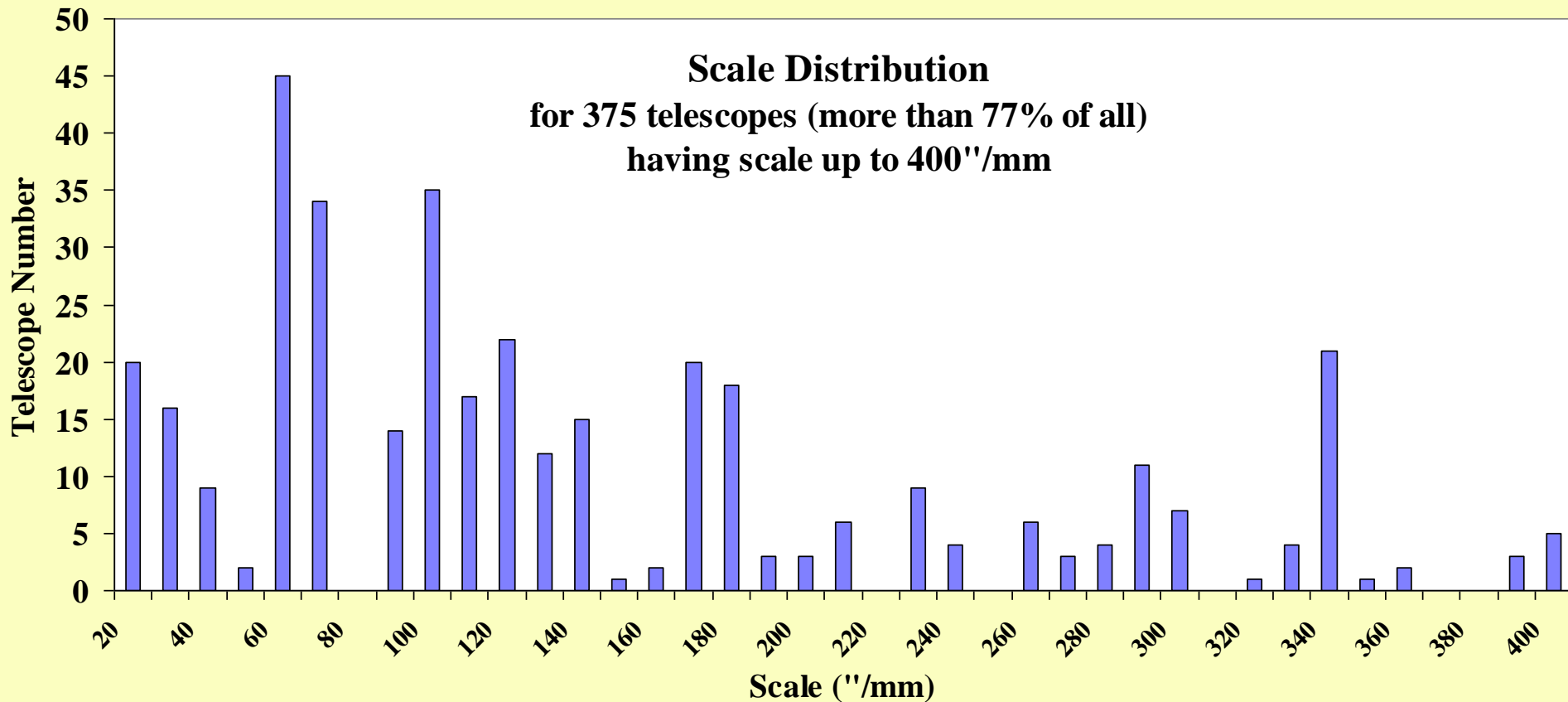
Telescopes Produced Wide-Field Plate Archives: Focal Length



Telescopes Produced Wide-Field Plate Archives: Scale



Telescopes Produced Wide-Field Plate Archives: Scale



Telescopes Produced Wide-Field Plate Archives: Scale

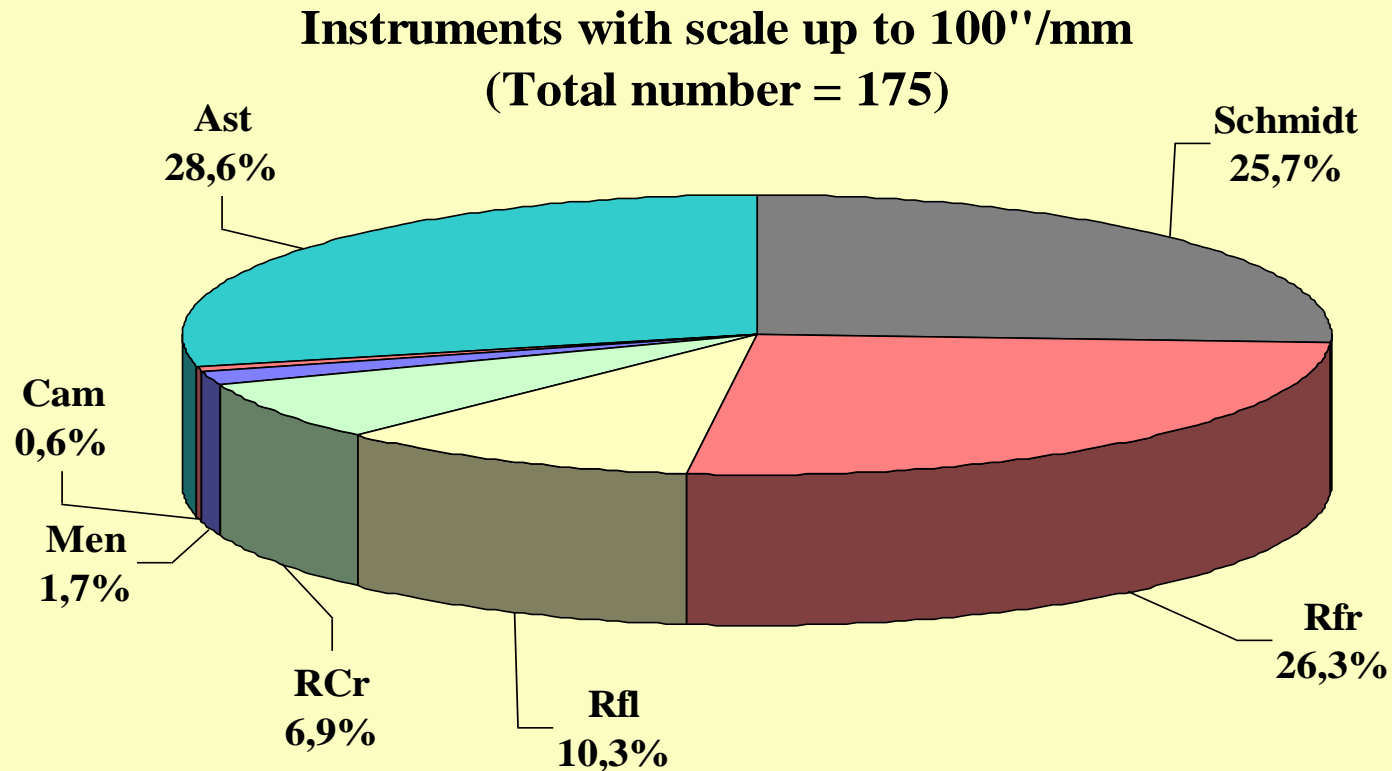


Plate Archives Volume: Direct Plates

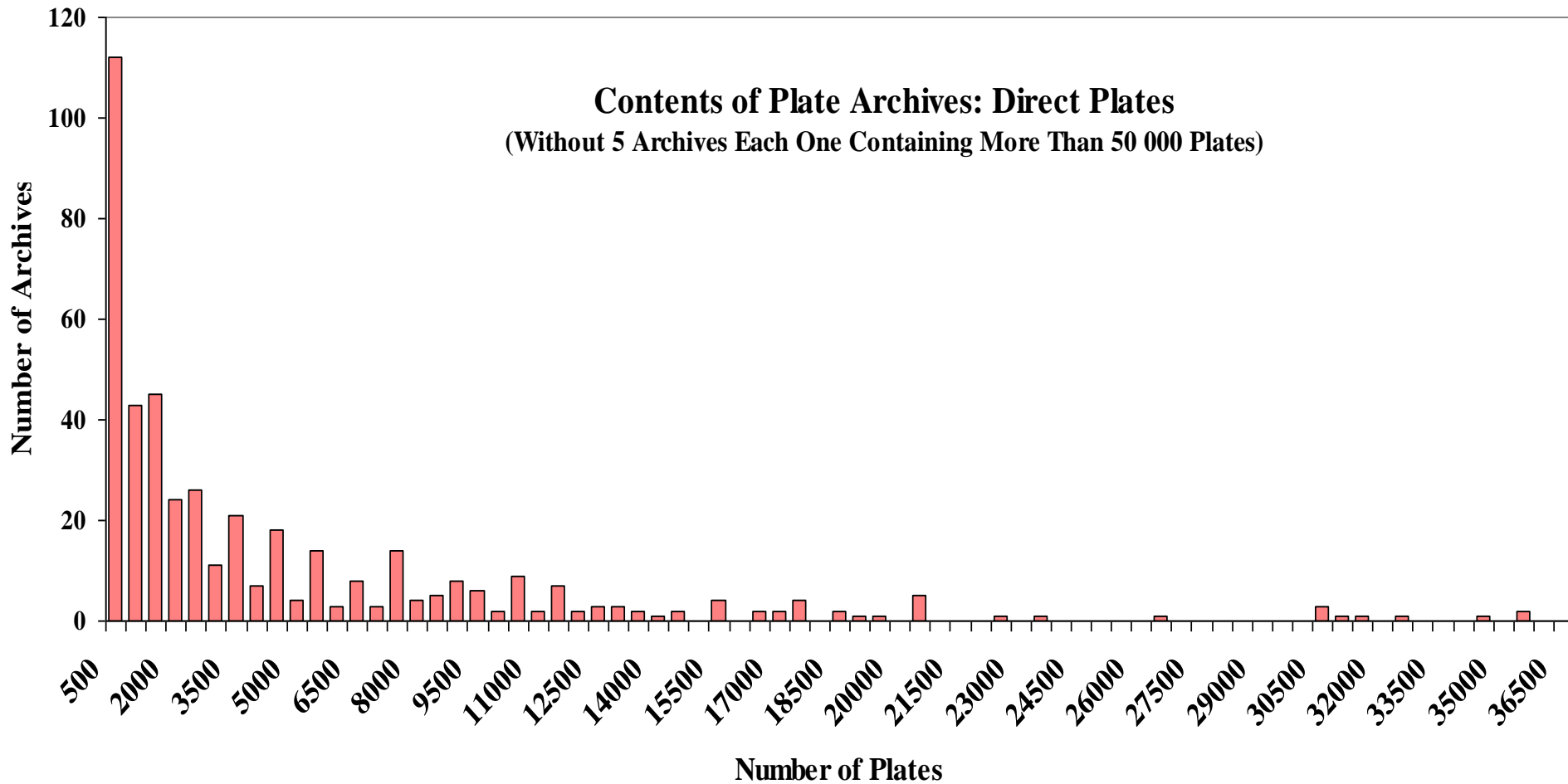


Plate Archives Volume: Objective Prism Plates

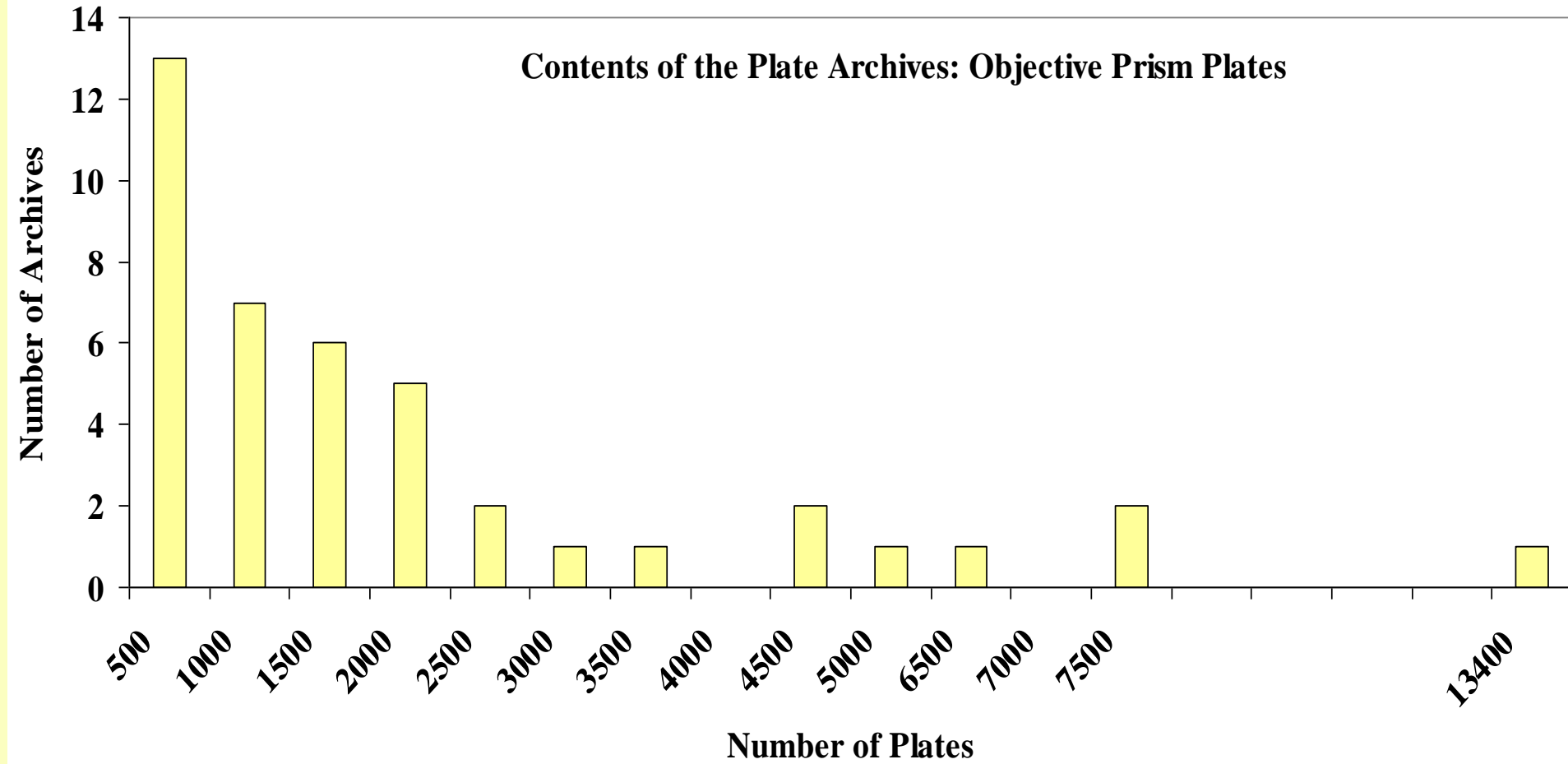
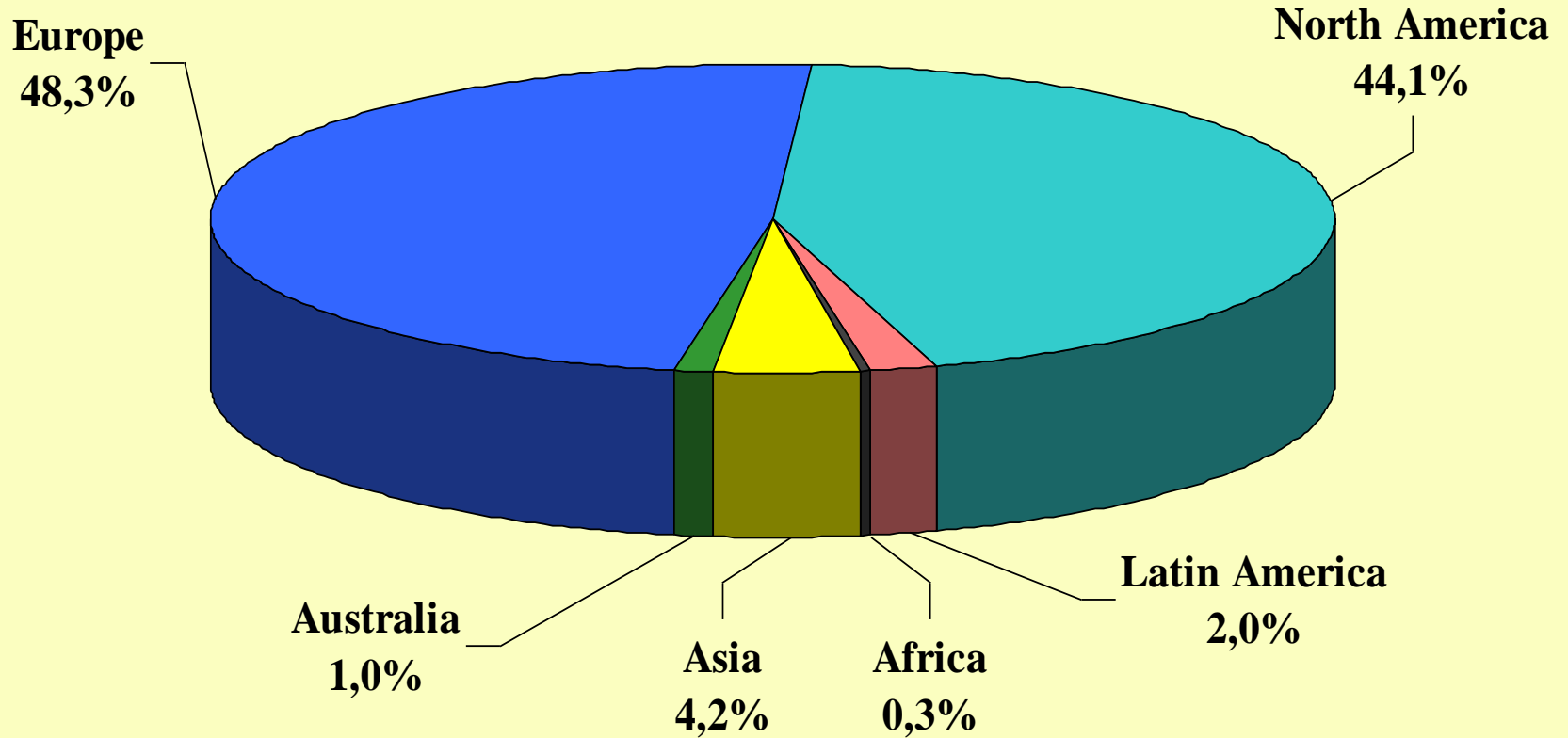


Plate Number Distribution

Total Number of Plates 2 493 417



43 countries possessing wide-field plate archives ordered according to the number of obtained plates

USA

Germany

Russia

Ukraine

Tajikistan

Georgia

Italy

Czech Republic

UK

Armenia

Chile

Netherlands

France

Sweden

Australia

Latvia

Belgium

Hungary

Romania

Poland

Serbia

Japan

Finland

Mexico

Slovakia

Bulgaria

Vatican

Argentina

China

Algeria

Uzbekistan

Indonesia

Spain

Estonia

Canada

Egypt

South Africa

Denmark

India

Venezuela

Austria

Switzerland

New Zealand

Plate Archives in Harvard Observatory

Telescopes Characteristics: Rfr and Schmidt types; Meteor Patrol cameras with $D=0.01$ m
32"/36" Baker Schmidt (ADH) with D of lens/mirror 0,81/0,91 m

F.L.: 0,15m up to 3,43m; **Scale:** 1200 "/mm up to 60 "/mm

Archives: 69

Period of Observations: 1872 - 1988.

Number of Direct Plates: 482822.

Observatory	Site	Country
Harvard	Cambridge	USA MA
Harvard	Cerro Tololo	Chile
Harvard	Chuquicamata	Chile
Harvard	Dona Ana	USA NM
Harvard	Mt. Harvard	Peru
Harvard	Mt. John	New Zealand
Harvard	Organ Pass	USA NM
Harvard	Sacramento Pk	USA NM
Harvard	San Jose	Peru
Harvard	Soledad Canyon	USA NM
Harvard	Taunton	USA MA
Harvard	Willows	USA CA
Harvard–Boyden St.	Arequipa	Peru
Harvard–Boyden St.	Bloemfontein	South Africa
Harvard–Oak Ridge St.	Harvard	USA MA
Cordoba Obs.	Cordoba	Argentina

Plate Archives in Sonneberg Observatory

Telescopes Characteristics: Ast, Cam, Rfl, Sch; Zeiss Tessar with $D=0.04$ m up to 50/70/172 cm Schmidt; F.L.: 0.16 m - 5.50 m; Scale: 38"/mm up to 1250 "/mm

Archives: 50

Period of Observations: 1917 - 1976.

Number of Direct Plates: 249626.

Observatory	Site	Country
Sonneberg	Sonneberg	Germany
Windhoek St.	Windhoek	Namibia
Windhoek St.	Windhoek	Namibia
Harvard–Boyden St.	Bloemfontein	South Africa
Harvard–Boyden St.	Bloemfontein	South Africa
Harvard–Boyden St.	Bloemfontein	South Africa
Koenigstuhl	Heidelberg	Germany
La Paz St.	La Paz	Bolivia
Potsdam–Babelsberg	Potsdam	Germany

Plate Archives in French Observatories

WFPDB Ident.	Telescope Orig.Name	Location of Archive
CER090		Caussols CERGA
NIC040		Caussols Nice–Cote d'Azur
MEU040		Caussols Meudon
BOR038	Grand Equatorial	Floirac Bordeaux
BOR033	CdC Astrograph	Floirac Bordeaux
PAR033	CdC Astrograph	Paris Paris Obs.
OHP040	GPO	Saint Michel Obs. de Haute–Provence
OHP062	Schmidt	Saint Michel Obs. de Haute–Provence
OHP030		Saint Michel Obs. de Haute–Provence
TOU033	CdC Astrograph	Toulouse University Obs.Toulouse
OHP040	GPO	Saint Michel Zeekoegat South Africa

Plate Archives in French Observatories

WFPDB Ident.	Lens (m)	Mirror (m)	F.L. (m)	Scale "/mm	Type	Field degree	Period	Number of plates
CER090	0,90	1,52	3,16	65	Sch	5,2	1976	3000
NIC040	2x0,40		2,00	103	Ast	8,0	1933	
MEU040	0,40	0,60	1,00	206	Sch	10,0	1961-1975	3293
BOR038	0,38		6,82	30	Rfr	1,2		200
BOR033	0,33		3,43	60	Ast	2,0	1893	4151
PAR033	0,33		3,43	60	Ast	2,0	1891-1927	1261
OHP040	0,40		4,00	51	Ast	2,2	1957	
OHP062	0,62	0,90	2,08	99	Sch	4,1	1970-1997	7054
OHP030	0,30	0,41	0,60	347	Sch	7,7		5442
TOU033	0,33		3,43	60	Ast	2,0		10000
OHP040	0,40		4,00	51	Ast	2,2	1961	

Carte du Ciel Plate Archives in the CWFPA

Astrographs: D=33cm (exceptions: POT032 and NIZ020-Nizamiah Obs.Hyderabad)

F.L.=3.43 m; Scale: 60"/mm; Field: 2 deg

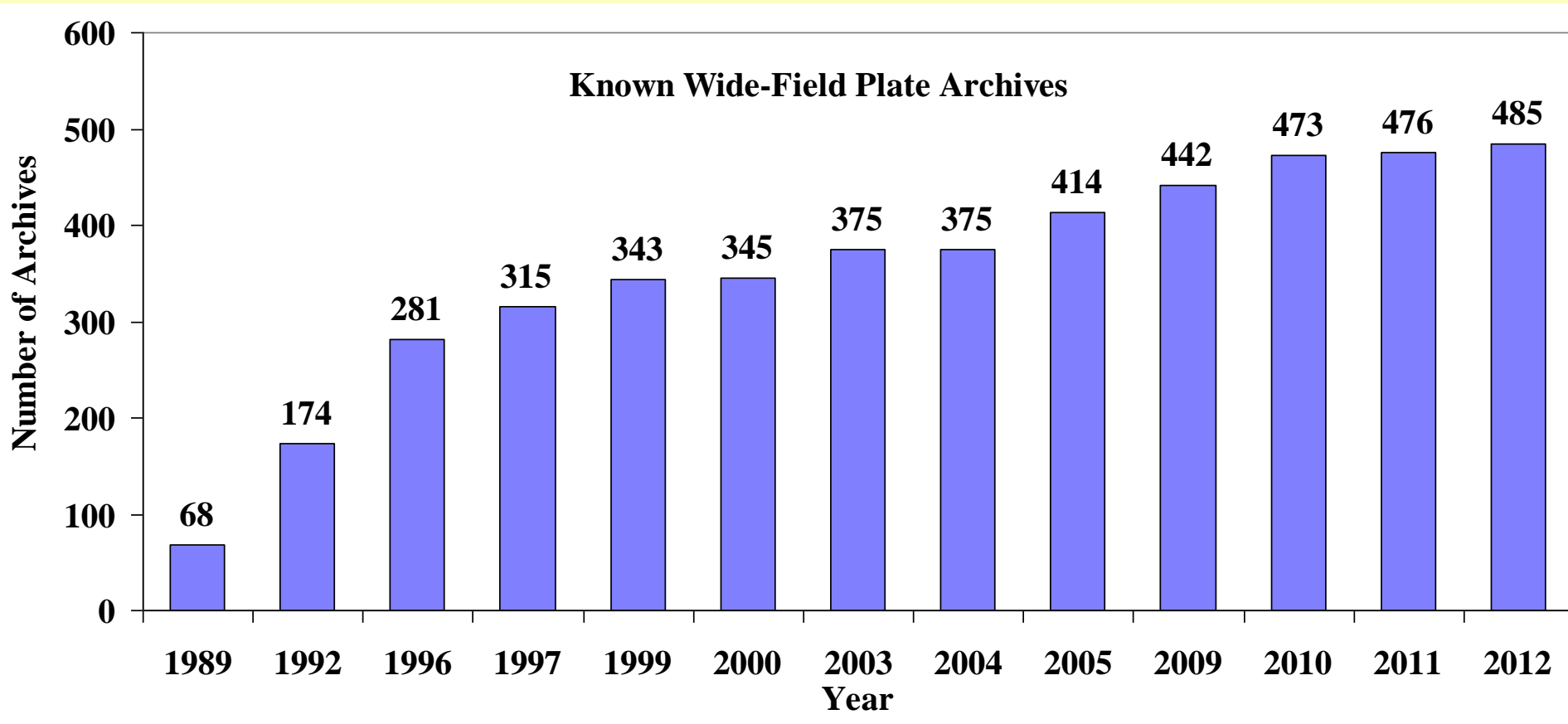
Period: 1889 - 1939

Number of Plates: 24000-38000.

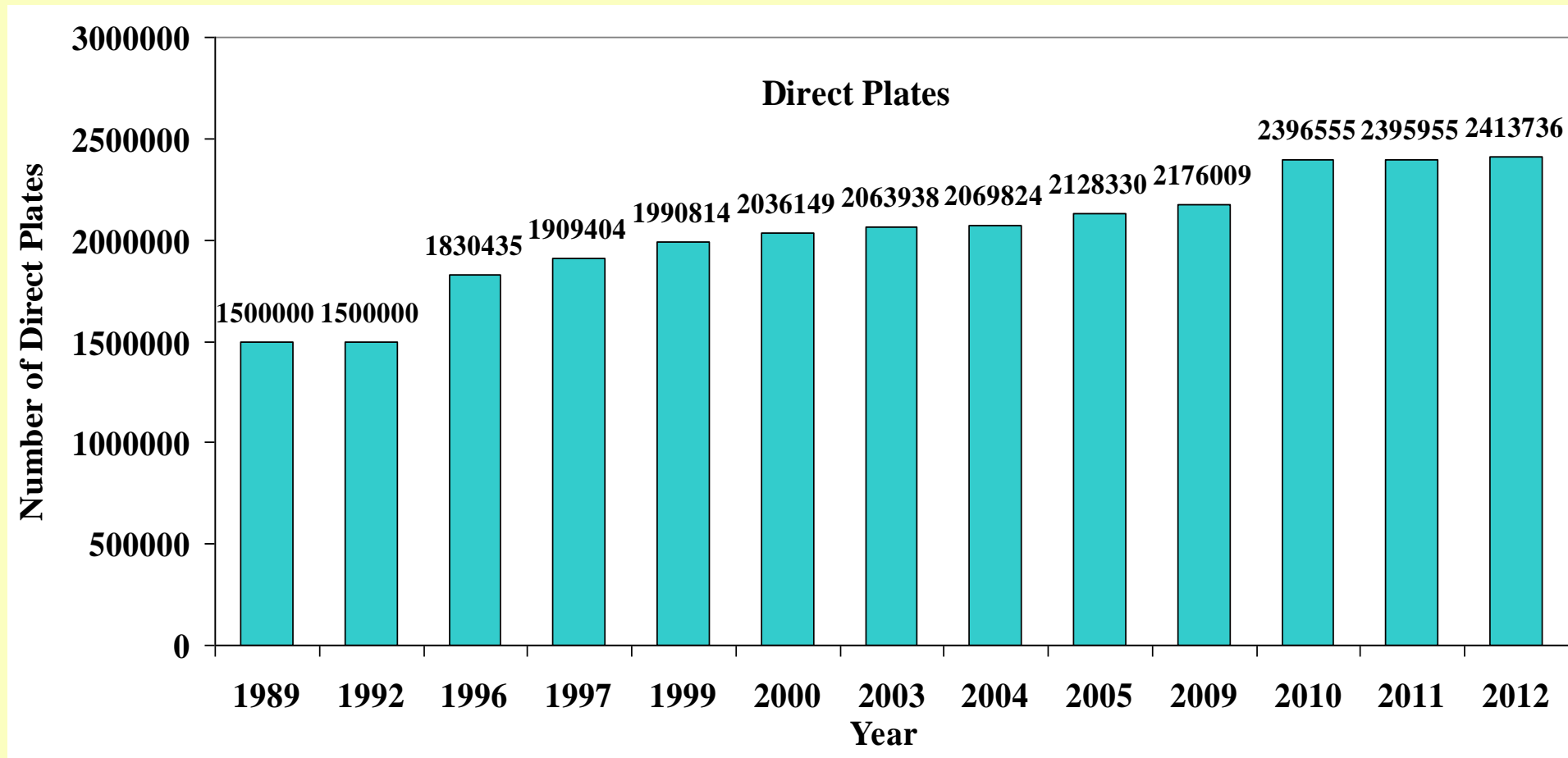
*ALG033	Bouzareah	Algeria
*BOR033	Floirac	France
CAP033	Cape Town	South Africa
*CAT033	Serra la Nave	Italy
COR033	Cordoba	Argentina
HEL033	Helsingfors	Finland
MEL033	Melbourne	Australia
NIZ020	Hyderabad	India
OXF033	Oxford	UK England
PAR033	Paris	France
PER033	Perth	Australia
*POT032	Potsdam	Germany
RGO033	Cambridge	UK England
*ROB033	Brussels	Belgium
*SFO033	San Fernando	Spain
SYD033	Sydney	Australia
TAC033	Mexico City	Mexico
*TOU033	Toulouse	France
*VAT033	Castel Gandolfo	Vatican

*in computer-readable form

CWFPA Development: Number of Included Archives



CWFPAs Development: Number of Included Direct Plates



CWFPAs Development: Number of Included Objective Prism Plates

