

## News about the Wide-field Plate Database

**ABSTRACT.** Since Symposium 161 of the IAU 'Astronomy from Wide-field Imaging', held in Potsdam, a lot of new information concerning the completeness and correctness of the Wide-field Plate Archive List and the Wide-field Plate Database (WFPDB) has been received. This note presents the latest progress in the presentation of the WFPDB. (For previous results see Tsvetkov & Tsvetkova 1993 and Tsvetkov et al. 1993).

### 1. New Information in the WFP Archive List

The very successful WFI meeting in Potsdam gave us the possibility for personal contacts and discussions resulting in the supplementing and making more precise the data in the WFP Archive List.

Due to the kind cooperation of M. Hazen from Harvard (U.S.A.), a supervisor of the world biggest wide-field plate collection, a complete list of the instruments used in Cambridge has been made, including corrections for the time of instrument operations and precise amount of plates. Part of the Harvard plate collection is already in computer-readable form, namely the plate catalogue for the 0.60 m Bruce telescope (27504 plates) and partly for the 0.40 m Metcalf telescope (40591 plates). In accordance with M. Hazen's information we are about to change slightly the list form, marking the telescopes, which have been replaced in different observatories (locations), as well as the archives for these telescopes, which are still located in other institutes.

E. Griffin pointed out that the RGO plate archives are located in Cambridge (UK) and that the whole plate collection contains more than 50,000 plates but many of them are still kept in boxes.

S. Tritton sent us the new updated computer-readable version of the UKSTU catalogue (see Table 1) which contains 1795 new plates received in Siding Spring during the last several years. 1320 from all UKSTU plates belong to the objective prism survey.

With the help of R. Hudec and J. Borovichka who supported the visit of A. Mutafov from the Bulgarian team in the Czech Republic a list of the observatories and instruments involved in the Wide-field Sky Imaging Programmes in this country was prepared. As a result 16 new instruments used in 11 observatories in the Czech Republic were included in the list. We would like to mention especially the 12 FE-cameras used in 10 different Czech stations which produced 22,000 plates covering the northern sky. The WFP collection (72,960 plates) of the Czech Sky Patrol is partly in computer-readable form.

With the help of L. Hric and J. Svoran the plate archives in Slovakia containing more than 11,000 wide-field plates taken with two telescopes, 0.30 m astrograph and 0.60 m reflector, since 1946 have been included in the List.

Both plate archives in Czechia and Slovakia are stored very well and are successfully used for searching for Gamma-ray bursters (GRBs) and small planets and comets.

The astrometric programme of the Yale University was discussed in Potsdam with W. van Altena and the wide-field plate information was included in the List: there are more than 62,000 plates existing in Bathany Observatory (New Haven), Johannesburg and Mr. Stromlo in the period 1926-1962 for the Yale Parallax Catalogues. All plates from New Haven are published in the Yale Transactions. The Yale programme in San Juan Observatory (Argentina) with the 0.51 m double astrograph started in 1965 resulting in 3000 *pg*- and *pv*-plates described already in a computer-readable catalogue.

A. Woszczyk kindly sent to us the computer-readable version of the Torun Schmidt plate catalogue and corrected the location of the plate collection: in Torun instead of Pivnice Observatory.

M.F. McCarthy corrected the number of the plates received with the 0.40 m astrograph in the Vatican Observatory to about 4000.

Additional information has been received from N. Bondar from the Crimean Observatory (Ukraine) about the Simeis and Nauchny plate catalogues already in computer-readable form. They contain the data for 1350 plates taken during the period 1947-1985 with 0.17 m and 0.40 m telescopes at both sites.

N. Bronnikova sent us detailed information about the Pulkovo Observatory archives. At present the plate collection in Pulkovo contains more than 55,600 plates and very soon N. Kanaeva will finish the computer version of the plate catalogue for the normal astrograph (17,000 plates). There are difficulties in the archiving work in Pulkovo because of the shortage of computational hardware.

We have been informed by Song-zhu Lan that from the beginning of 1993 the Beijing Observatory terminated direct-photography observations with the Schmidt telescope and continued only with CCD-observations.

The new, fourth in order, updated WFP Archive List will be distributed during the joint discussion on the status of archiving astronomical data at the IAU General Assembly in the Hague, this year.

**Table 1.** List of new plate catalogues included in the WFPDB after August 1993

No.	Observatory	Instrument Aperture (m)	type	Number of plates	Years of Operation	Astronomer in charge	Notes
1.	Bordeaux	0.33	Ast	4307	1893-1993	J. Colin	1
2.	Crimea-Nauchny	0.17	Ast	49	1951-1953	N. Bondar	
3.	Crimea-Nauchny	2 x 0.40	Ast	507	1951-1984	N. Bondar	
4.	Crimea-Simeis	0.17	Ast	570	1948-1965	N. Bondar	
5.	Crimea-Simeis	0.40	Ast	222	1947-1965	N. Bondar	
6.	Krakow/Palomar	1.24	Sch	122		J. Machalski	2
7.	Ondrejov	10 x 0.04	Cam	10600	1955-1977	J. Borovicka	3
8.	Ondrejov	10 x 0.04	Cam	16060	1958-1975	J. Borovicka	4
9.	Torun	0.60	Sch	2826	1962-1985	A. Woszczyk	
10.	Turku-Tuorla	0.50	Ast	≈8000	1938-1949	L. Takalo	5

Notes:

- 1) The catalogue was obtained from Ch. Ducourant.
- 2) The list of the plates was obtained from P. Flin. It contains two sets of data for plates i) Nos. 9787-9991 and ii) Nos. 20002-21113.
- 3) Plate archive of the 10 x 0.04 m stationary cameras.
- 4) Plate archive of the 10 x 0.04 m guided cameras.
- 5) The catalogue published in the *Annales Universitatis Turkuensis* (Oterma 1951) is in preparation in computer-readable form in Sofia. It contains the data of two plate archives for two telescopes: 0.50 m and 0.34 m reflectors. The data will be separated in different archives after the preparation of the computer-readable version.

## 2. Development of the Wide-field Plate Database

At present with the newly received 10 catalogues in computer-readable form, containing 43256 plates, the WFPDB enlarges up to 350837 entries, i.e. 12.3% increase in the total number of plates. The total number of the plate catalogues included now in the database is 61. The new catalogues received after August 1993 are listed in Table 1 containing the location of the plate archive (observatory/institute), aperture of the instrument (m), type of the telescope, years of operation, name of the astronomer responsible for the plate archive, and notes. The WFPDB in the form of WFP Index Catalogue is now installed on an IBM 4381 computer at the Computer Centre of Physics, Bulgarian Academy of Sciences, and soon it will be also installed on the IBM 4381 computer at the Main Computer Centre of the Academy. Next the procedure for information search in the database will be organised.

Requests for information for the plates from the WFPDB can be sent to:

WFPA@BGEARN.BITNET

### 3. General Comments

Since November 1993 the Wide-field Plate Archive Project has been recognized by the National Science Foundation in Bulgaria and supported under a grant F-311 for a three year period. With funds from this grant a personal computer 486DX2-66MHz/340 MB HDD has been bought which will facilitate the current work on the database.

Last year the work on the WFPDB was supported mainly by the Alexander von Humboldt Foundation (Germany) and the Astronomical Institute of the Muenster University (Germany). The Alexander von Humboldt Foundation approved our proposal for advanced computer technique (complex of SUN/SPARC Station 10 and two PC486 computers) dedicated to the work on the WFPDB and to the image processing and flare star search in stellar aggregates. We expect that this hardware will be provided in Sofia from Germany in 1994 and its installation will help us in the development of the database.

In September 1993 we were visited for a week by Elizabeth Griffin (Cambridge, U.K.), with whom the problems of the WFP database preparation and the future cooperation with the IAU working group on photographic spectral archives were discussed.

### Acknowledgements

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### References

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