

MAIN FEATURES OF THE STELLAR BIBLIOGRAPHIC FILE

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Summary : Due to the increasing amount of the literature about stellar studies, the gathering of the published information about a given star becomes a tedious and time consuming task. For enabling an automatic retrieval of information, a bibliographic file has been built in machine readable form through collaboration between Paris and Strasbourg Observatories. The file begins with the year 1950, and is kept up to date. Knowing the name of a star, a program prints the titles of the papers quoting this star. However, only the main journals were covered at first, and some other limitations have been imposed. The first part of this file will be very soon published on microfiches. Meanwhile the information can be obtained from the Strasbourg Stellar Data Center, (Centre de Données Stellaires).

It is a tedious and time-consuming task to gather in the literature the information about a star or stellar object. Prof. R. Cayrel initiated in Paris-Meudon Observatory a bibliographic file, organised in a way suitable for a further automatic retrieval of information. The astronomical and astrophysical periodicals are read (not all of them, we will discuss this point further) and the papers quoting names of individual stars are looked for. For such a paper, the title and bibliographic reference is punched, on one hand, the list of quoted stars on the other hand. At a later stage, planetary nebulae have been added to the file.

Through collaboration with the Stellar Data Center in Strasbourg, these informations are put in the memory of a computer in the proper way, and a set of programmes has been built

to process these informations. Especially it is possible, knowing the name of a star, or stellar object, to get the titles of the papers quoting this star or object. The situation is not however as satisfactory as it may seem, because several limitations occur:

1) Up to now, most of the cross-references have been built for the names of the stars, and it may be that the complete solution of this problem will never be reached for faint stars ($m_V > 9$) due to the continuous appearance of new designations of stars and stellar objects. So that, for these fainter stars, you have to enumerate all the names of your star that you can think of.

2) The bibliographic file begins for the year 1950 and is kept up to date with about one year time lag.

3) The lists including more than 1000 objects are excluded from the file. They are considered as small catalogues by themselves, and can be easily searched. These small catalogues are listed and are not very numerous (about 30 for the years 1950 to 1975).

4) Of course not all astronomical periodicals are covered. For the years 1950-1972, only 12 periodicals were included. Starting with the literature of 1973, more than 30 periodicals are covered.

5) Starting with 1973, discrete X-ray sources and infra-red sources are included.

6) Stars numbered in clusters or special fields, without names in classical catalogues are not included. Faint stars without co-ordinates are not included.

7) The bibliographic file is not error-free. Any user should be ready to cope with errors and omissions. We ask to any user finding errors or omissions to mention them to us.

8) Finally, the use of the bibliographic file is not instantaneous. Taking into account free days and vacations, and mail delay, the process is a rather slow one for people who are not in France.

As a solution to this delay, Prof. Jaschek had the idea of publishing this file as a "Bibliographical Star Index". The part covering the years 1950 to 1972 will be published on microfiches next week. This Index is arranged by star names, and a preface describing the main features of the Index is joined to the microfiche edition (Cayrel, 1976). Let us recall here that in the bibliographical Star Index the code of the references (including the year) are listed in front of each star name ; the references are listed separately at the end, as it is done in Jaschek's well

known catalogue of stellar spectra (1976). This would enable to get at once the references of the papers quoting a star between 1950 and 1972 in the 12 periodicals included at this time.

The next edition, dealing with the years 1973 and 1974 will be available at the end of 1976.

It is planned to issue annually a microfiche edition of the stellar bibliography.

Finally, a few data about the bibliographic file may help to get an idea of the amount of data gathered :

Years 1950-1972 : 6 658 references and 56 000 different objects ; on the average, each star has 3.4 references.

Year 1973 : 648 references, 13 512 objects.

The list of planetary nebulae included about 1 200 objects and 7 references per object.

Many people have worked on this rather tedious and painstaking task : Prof. C. Jaschek, F. Ochsenbein, Drs. J. Jung, A. Valbousquet, Mrs. Bischoff and Mrs. Wagner who has done most of the punching work in Strasbourg; Prof. R. Cayrel, Mrs. Kirchner and Dr. F. Spite in Meudon. The work about planetary nebulae has been done by Dr. A. Acker and Mr. Marcout in Strasbourg.

The bibliographic file is frequently used by French astronomers, and it is hoped that this work will be useful to the astronomical community.

BIBLIOGRAPHY

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