

ACTIVITIES OF THE POTSDAM DATA CENTER

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In 1968 the Data Centre was established in the Central Institute for Astrophysics of the Academy of Sciences (CIAP) of the German Democratic Republic. Its task was essentially the analysis of astronomical observations and the elaboration of theoretical models for astronomical problems.

In 1974, a cooperation was started between our institution and the Stellar Data Centre at Strasbourg.

As a consequence, in the Data Centre a working group of three scientists was formed, whose task was to collect, store and process astronomical catalogues on magnetic tapes and to forward these data to astronomers in socialist countries. The CIAP has a computer ES 1040 with the following characteristics :

Mean Operating speed	:	380 000 op/sec.
Main storage	:	512 Kilobytes
Mass storage	:	magnetic tapes, 9 traks, 800 bpi recording techniques : NRZI magnetic discs volume : 28 Mb
Operating system	:	OS - ES
Programming languages	:	Algol, Fortran, PL/ <u>1</u> , Assembler.

In cooperation with the CDS, the CIAP supplies data to Strasbourg for the "Bibliographical Catalogue of Variable Stars" (CDS Number 6017). At the moment about 257 000 bibliographical records have been prepared on magnetic tape and sent to the CDS. The catalogue should be ready by January 1982 and it will be supplemented each year.

This work is described in detail in CDS Bulletin 20, 105 (1981) in a paper by Dr. Wenzel.

The basic stock of catalogues in our Data Center comes from the CDS.

On the basis of a bilateral agreement we will receive all CDS catalogues in the future.

At the present we have 197 catalogues on magnetic tapes, but we have detailed descriptions for only 139.

After getting new magnetic tapes we make two copies. In order to avoid damage because of the aging of the tapes they are copied every two years.

To provide scientists with better and more specific information, we registered on cards the catalogues available at the moment. This registry is continually extended as new magnetic tapes arrive from the CDS. Every card contains a brief description, that is, not only the CDS-number, but the remarks, contents, number of records, etc... We send this registry to more than 80 different observatories and astronomical institutions in the GDR and in other socialist countries. So far, we have dispatched 139 cards to each address. They also received information about the kind of work which our Data Centre can carry out with the catalogues.

The working group created a system of programming support, that makes it possible to obtain the following information from the CDS catalogues :

1. A listing of a catalogue (only for small catalogues) and a complete copy on magnetic tape
2. A selection of all objects from a catalogue with definite parameters (for example, coordinates, spectral type, colour, radial velocity, etc...)
3. Statistical investigations (for example, frequency of appearance of objects with definite parameter)
4. The calculation of coordinates of celestial bodies for observation epoch with data from a definite catalogue, and so on.

Fortran was used to set up these programs.

During the three years that have passed since the first information on catalogues was dispatched, more than fifty orders have been received and answered.

Of these, twenty eight orders were for complete copies on magnetic tapes.

In the future, we intend to extend our service for customers, in particular by providing plots.

The work of data collection for the "Bibliographical catalogue of Variable Stars" will continue, and no considerable changes in the work of the group are planned. We hope that our cooperation with the CDS will be in the future as successful as it has been in the past.