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This bibliographical service is available at the Library of the "Institut d'Astrophysique de Paris". It is a hand-operated system, consisting of a card-catalogue concerning all astronomical objects (except those of the solar system). It was started in 1962 and has been updated regularly ever since. It has now more than 200.000 citations for about 19.000 entries arranged in wide sections and, inside each section, in alphabetic order. The main sections are : stars, novae and supernovae, radio-sources, X and \mathcal{T} sources, star clusters, clusters of galaxies, clouds, infrared objects. New sections are added when necessary. Any object is taken, even if it is not clear where to classify it (for example, supernova remnants can be found under supernovae or under X-ray sources).

50 journals are analyzed (including original russian literature) within 2 or 3 days after their arrival at the library. The main limitation is that papers studying more than 20 objects are excluded. These papers are considered as lits and are referenced on special cards : lists of variable stars, lists of double stars, lists of galaxies, lists of H II regions, etc...

Each card gives the complete bibliographical references and, when available, the characteristics of the object (see examples on figs. land2). To help with nomenclature problems, we use crossreference cards, as, for instance :

North	W 80	see	NGC 7000
	Sh 117	see	NGC 7000
	America Nebula	see	NGC 7000
	W 50	includes	SS 433
	SS433	in	W 50

but those cross-references are not given systematically.

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C. Jaschek and W. Heintz (eds.), Automated Data Retrieval in Astronomy, 155–158. Copyright © 1982 by D. Reidel Publishing Company. A first improvement to the system has just been completed with the use of a word-processing typewriter to print some references.

The next step will be the production on a magnetic disc of the bibliography of non-stellar objects, with the use of the HP 1000 computer of the Institute. A code is already given to each paper (in agreement with the CEDAG, Centre de Données des Amas de Galaxies). For the computerized version, we will not classify the objects in sections but produce only one list in alphabetic order. For example, under the letter "B" :

> B... (quasars) B2... BDA... BP... BRABCMS ... Baade... Barnard... Barnard's Loop Basel... Becklin-Neugebauer source Berkeley... Blanco... Bochum... Bootes Burbidge Chain Burnhamsche Nebel Byurakan...

Copies on magnetic tapes will be made and given to the C.D.S. It will then be possible for more users to have access to our catalogue.

At the present time, the bibliography is however already available to anyone interested in a given object : we send copies of our cards on request.

 $(1950) \alpha = 10h 42.3 m$ Markarian 35 8 = 56° 14' NGC 3353 Haro 3 m : 14 WEEDMAN (D.W.) KHACHIKIAN (E.Y.). - Spectral observations of Markarian galaxies with ultraviolet continuum. II. (Astrofizika, 5, 113-122) 1969 WEEDMAN (D.W.). - High velocity gas motions in galactic nuclei (Astrophys. J. 159, 405-413) 1970 WEEDMAN (D.W.). - Emission-line intensities and UBV magnitudes for twenty-three Markarian galaxies (Astrophys. J. 171, 5-12) 1972 & (A.J. Dyer Obs. reprint N° 62) NEUGEBAUER (G.) et al. - Optical and infrared spectrophotometry of 18 Markarian galaxies (Astrophys. J. 205, 29-43) 1976 ARAKELIAN (M.A.). - The dependence of emission line intensity of Markarian galaxies upon colour index (Astrofizika, <u>12</u>, 559-562) 1976 HUCHRA (J.P.). - Star formation in blue galaxies (Astrophys. J. 217, 928-939) 1977 ALLOIN (D.) BERGERON (J.) PELAT (D.). - Properties of a sample of irregular galaxies (Astron. Astrophys. 70, 141-149) 1978

Fig. 1. Markarian 35

 $(1950) \alpha = 19h 56m 28s$ Cygnus X-1 $\delta = 35^{\circ} \ 03^{\circ} \ 55^{\circ}$ HDE 226 868 BD + 34° 3815 V 1357 Cyg 20 1956+35 BRINI (D.) et al. - Cosmic X-ray sources in the 20-180 KeV energy range (Astrophys. J. 149, 429-433) 1967 . . . TREVES (A.) et al. - Ultraviolet X-ray and infrared observations of HDE 226 868 = Cygnus X-1 (Astrophys. J. 242, 1114-1123) 1980 /80APJ02421114/ DANIEL (J.Y.). - The inclination of the orbital plane of Cyg X-1 : a Monte-Carlo study (Astron. Astrophys. 94, 121-125) 1981 /81ANAP0940121/ BALOG (N.I.) et al. - Interpretation of light curves of X-ray binary systems. The system Cyg X-1 (Astron. Zu. <u>58</u>, 67-79) 1981 /81ASZU0580067/ GOLDMAN (I.). - Cyg X-1 : a massive neutron star ? (Astron. Astrophys. <u>97</u>, 219-222) 1981 /81ANAP0970219/ KEMP (J.C.) et al. - The 1980 June X-ray high state of Cygnus X-1: optical changes (Astrophys. J. 244, L73-77) 1981 /81APJ0244L073/ GILES (A.B.). - Observations of sub-millisecond bursts from Cygnus X-1 (Mon. Not. R. Astron. Soc. 195, 721-731) 1981 /81MONN1950721/

Fig. 2. Cygnus X-1 : top of the first card and last card (p.39)