

## THE STELLAR DATA FILE AT DEARBORN OBSERVATORY

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The majority of entries for MK Spectral Classifications in the Kennedy & Buscombe (1974) catalogue referred to stars brighter than 9th magnitude with H. D. numbers. Accordingly, the file was arranged in sequence corresponding to right ascension for 1900, although the co-ordinates were actually listed for the epoch 2000, in accordance with an earlier precept established in the IAU.

When similar data were being assembled for the Third General Catalogue (Buscombe, 1977), many fainter objects were included, such as members of the Magellanic Clouds, certain types of variable stars, white dwarfs. More than half the entries have no H.D. number, and unfortunately some errors in sequencing (and even precession!) occurred. For this file, a particular effort was made to include classified stars with their UBV photometry, which have been confirmed as members of star clusters and physical binary systems.

The worldwide acceptance of these paper-bound books has led us to offer machine-readable versions on magnetic tape, transcribed to order for several institutions. Continual updating of the card files to include additional data and identifications is performed with the assistance of one part-time employee, currently Mark Shickel, an undergraduate student, who has taken increasing responsibility in handling the computer facilities. A merged file of the 1974 and 1977 material, with many amended entries, is available. Indications of peculiarities in chemical abundances are included where appropriate.

To facilitate future filing, the cards of the Fourth General Catalogue (Buscombe 1980) are arranged in order of R. A. (2000), so that the order of H.D. numbers is not maintained. Many identifications of stellar x-ray and infrared sources were included. The labour of maintaining files of references has been eliminated, because these are performed extensively at Meudon, France, and the bibliography is accessible in the semiannual Astronomy and Astrophysics Abstracts. Similarly, the lists of abbreviations for key initials of lists of faint stars are being organized at Meudon and Strasbourg, but the data

compilations which have been distributed on microfiche do not include as many faint objects as our catalogues. Some data files are more comprehensive, but we have limited each entry to an 80-column card. We try to maintain an accuracy within 0.3 min. of R.A. and 3' of Dec.

As the classification system has been adapted for use in many observatories with quite diverse equipment, secondary standards have been proposed to supplement the objects which originally defined the MK system. About 600 of these, selected from the recent atlases by Morgan, Keenan, Jaschek, and Yamashita, are listed on the opening pages of our forthcoming Fifth General Catalogue. The next section of about 60 pages assembles all available data for classified member stars of the Small and Large Magellanic Clouds. Earlier information from Cannon, Henize, Feast, Thackeray, Wesselink, Westerlund, Stock, Sanduleak, Humphreys, Osmer, Fehrenbach, Duflot, Martin, Brunet, Azzopardi, Breysacher, Ardeberg, Isserstedt, Bigay, Florsch, Gascoigne, Lloyd Evans, Hodge, Essser, and others, is consolidated (with slight corrections to positions, where necessary) in single sequence. The final group of 15,000 entries continues the compilation, mostly from literature of the last five years, especially based on Bartaya's classifications in the Northern Kapteyn Selected areas, certain stars of early type in the Southern Milky Way, and additional infrared sources. Wherever possible, UBV photometry from the Strasbourg microfiche is included, as well as notes on duplicity. The far left-hand columns indicate how many stellar images contribute to the quoted spectrum, and the right-hand columns, how many are included in the diaphragm for photometry (if known).