R34c Comprehensive Catalogue of Kiso Ultraviolet-Excess Galaxies

宮内良子、前原英夫(国立天文台) 中嶋浩一(一橋大学)

We have continued the surveys of ultraviolet-excess galaxies (abbreviated as KUGs) with the 105cm Kiso Schmidt telescope for two decades. The first survey was summarized in Takase and Miyauchi-Isobe (1993b), which lists 8,104 KUGs in 5,100 square degrees area. The second survey has been followed the first survey with a similar method, and lists 1,985 objects in 1,860 square degrees area in 6 papers (Miyauchi-Isobe and Maehara 1998-2006), supplementing the first survey.

There are some differences in photographic plates used and the observation condition in the surveys, such as emulsions, exposures or seeing sizes. Thus the homogeneity of the KUG survey is rather low, but its catalogue forms a somewhat large collection of UV-excess/blue galaxies. In these circumstances, we intend to merge both catalogues, upon requests from investigators working in follow-up observations of these galaxies.

In the process of catalogue merging, we met a systematic difference between the first and the second surveys in overall properties of objects, such as brightness, degree of UV-excess and morphological type. This mainly originates from differences in the observation condition and personal errors in the survey. We scrutinize and discuss those differences and errors, and finally merge into a comprehensive catalogue of KUGs in the machine-readable form including more than ten thousand UV-excess galaxies.