

LMC/SMC Outer Halo Carbon Star Survey: Radial Velocities of 500 Newly Identified Stars

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Making use of the available UKST sky survey plates scanned by the APM, we have produced color-magnitude diagrams and identified carbon star candidates among the very red stars ($B-V > 2.0$) within the magnitude range of AGB stars at ~ 55 kpc in 19 fields representing 600 deg^2 around the Magellanic Clouds. Follow-up slit spectroscopy at a resolution of 2.3 \AA has resulted in the identification of more than 500 previously unknown outer halo carbon stars extending up to 10° from the LMC and 8° from the SMC. Radial velocities of these stars are valuable for the kinematic study of the periphery of the Clouds.

We are investigating the use of spectral features in the $7000\text{--}9000 \text{ \AA}$ interval to establish criteria to discriminate between the two Cloud populations. Examples of observed spectra are shown.

The data discussed here have been published by Kunkel, Irwin & Demers (1997, *A & A Supp.*, 122, 463). The radial-velocity data are available, via Internet, at the CDS.