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PHOTOMETRIC ANALYSIS OF THE VARIABILITY OF LBV STARS AND CANDIDATES IN IC 342

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Luminous blue variables are a class of massive, unstable stars that exhibit significant photometric variability. Their variability can be linked to their significant mass-loss rates, envelope instabilities and sometimes binarity. These factors can affect the star's brightness and spectrum. LBVs are relatively rare, so studying their variability is challenging. To understand their different types of photometric variability, continuous long-term observations are needed.

In this study, we present the analysis of the optical light curves of LBV stars and LBV candidates in the galaxy IC 342. Our observations cover time interval of nearly 4 year and were taken in B and R bands with the 2m telescope at NAO Rozhen, Bulgaria. We supplement our photometry with data from the Pan-STARRS catalog DR1 to expand the light curve coverage and to study both microvariability and long-term variability.