IMPROVED LIGHT CURVES OF LMC ECLIPSING BINARIES

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We present accurate BV light curves and continuum energy curves of the EROS eclipsing binaries in the Large Magellanic Cloud to find accurate binary parameters as well as their distances. The observations have been carried out using the 2.1 meter telescope in CASLEO, Argentina, during Feb. 1 – 10, 2003. We have concentrated CCD direct observations upon the EROS field 1 and 2 to improve the accuracy of light curve of eclipsing binaries in the fields. The spectroscopic observations have been also carried out using the simple dispersion method to get continuum energy curves between wavelengths of 4000–8000 angstrom for several EROS eclipsing binaries. At first we determined a combined temperature of both components of each binary system using the continuum. Then the combined temperature were resolved using the first estimation of the light curve solution. Finally we determined the photometric solutions of several binaries in the Large Magellanic Cloud.