PHOTOMETRIC STUDY OF MR SERPENTIS: EXTREME LIGHT CURVE VARIATIONS OF THE MAGNETIC CATACLYSMIC BINARY

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ABSTRACT. The observations obtained in 1982-1991 show the extreme variations of the shape of the light curve. The best fit photometric elements for 1991 (6 minima in R) are the following: Min HJD = 2448446 $^{\circ}$.7284(±0.0015) + 0 $^{\circ}$.078795(±0.000012)E: Our period value differs from the previously published ones by 7 σ , and it is not possible to fit all the times in 1981-1991 by the same period. The phase changes have the large amplitude up to 0.4 $^{\circ}$. However, this phenomenon may arise due to the drastic changes in the accretion geometry, despite the cycle number miscount may not be ruled out. New photometric observations are needed to study the phase light curve variations.