

Orbital Period Change of V619 Peg Binary System.

ABSTRACT

The study of the period change of V619 Peg was conducted. V619 Peg is an A-subtype of W UMa contact binary. The data was monitored with the 0.7m telescope at NARIT's Spring Brook Observatory, Australia, in 2019-2020. The time of minima were used to compute the O-C diagram in order to find the system orbital period change and the third body. The results show that the system has an increasing in its orbital period. The O-C residual has a sinusoidal trend which might be caused by the third body component. The third body is a red dwarf with mass 0.16-0.20 Solar mass and period about 10-12 years.

Keywords: binaries: close —binaries: eclipsing —stars: individual (V619 Peg)

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