

Low-Amplitude Eclipsing Binary Star GSC 04372-00066

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Star Name:	GSC 04372-00066, USNO-B1.0 1643-0055300
Coordinates (J2000):	07 22 47.96, +74 20 03.3
Variability type:	EW; Limits, System: 13.61-13.66(R);
Period:	0.4586 d; Epoch(min): JD 2454428.423

Remarks:

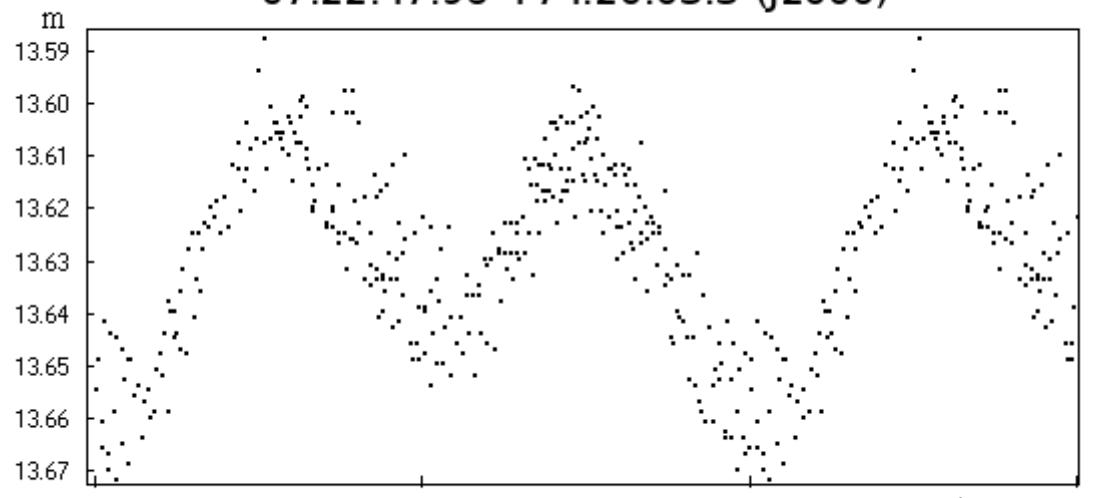
We report the discovery of a new W UMa eclipsing binary with a very small variability amplitude. The depth of the primary minimum is 0.05 mag only. Min II = 13.64. The primary minimum is 0.015 mag deeper than the secondary one.

The observations were performed with the Astrotel-Caucasus robotic telescope (D = 300 mm, F = 2310 mm) equipped with an unfiltered STL-11000M CCD camera. Our variability search used VaST software (<http://saistud.sai.msu.ru/vast/>). Unfiltered magnitudes were calibrated using a nearby star GSC 04372-00589 (= USNO-B1.0 1643-0055251, 07:22:11.21, +74:19:01.8 [J2000]; R1 = 13.86, R2 = 13.58), assuming R_comp = 13.72.

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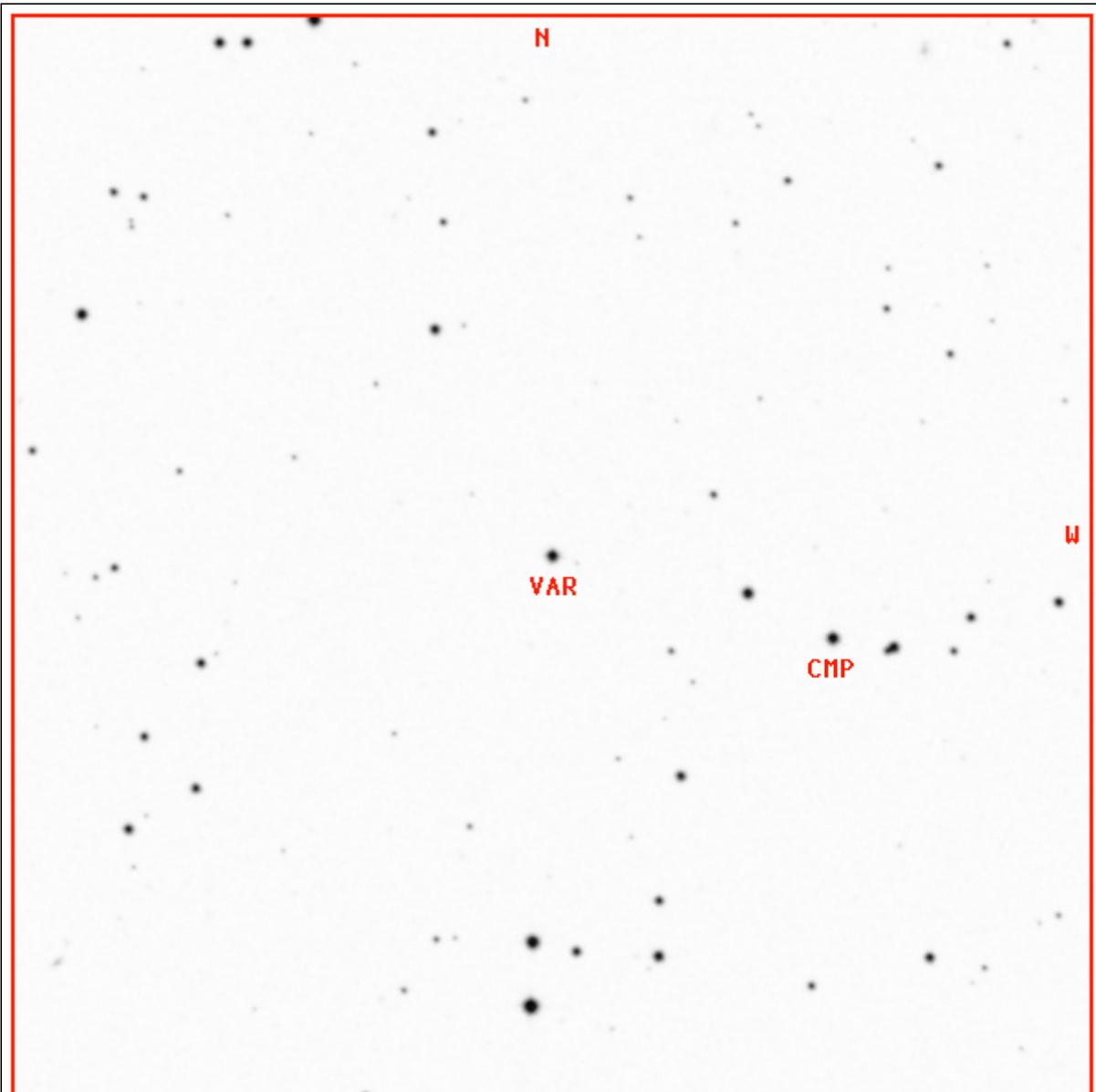
Light Curve

GSC 0437200066
07:22:47.96 +74:20:03.3 (J2000)



$$HJD_{min} = 2454428.423 + 0.4586 \times E$$

Finding Chart



10' x 10'
VAR = GSC 0437200066
CMP = GSC 0437200589

DSS2 red

J2000

07:22:47.96 +74:20:03.3
07:22:11.21 +74:19:01.8

Data Source

1. [gsc0437200066.txt](#)