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NEW VARIABLE IN CYGNUS

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Equatorial coordinates:	Equinox:
R.A. = 19 ^h 28 ^m 57 ^s .9 DEC. = 43°06′25″.5	2000

Observatory and telescope:
Crimean Astrophysical Observatory, 38-cm telescope

Detector:	CCD ST-7
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Filter(s):	Close to R (Johnson)
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Comparison star(s):	See Fig. 1
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Transformed to a standard system:	No
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Availability of the data:
Upon request

Type of variability:	Yet unknown
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Remarks:
A new variable was found while making photometric observations of the cataclysmic variable V1504 Cyg during August 3–5 and September 25–26 in 1998. The exposure time was 90 s in Aug. and 100 s in Sept. A typical error of 3% in a single observations was estimated every night. The total exposure was about 21 hours. The frequency analysis yields the most significant period of light variations $P = 0.17505 \pm 0.00003$ d (Fig. 3). Mean light curve is constructed using the ephemeris and zero phase epoch $HJD_0 = 2451029.5207 + 0^d.17505 \times E$ (Fig. 4). The new variable can be either a W UMa type star with an orbital period of 0.3501 d, or a δ Sct type star.

Acknowledgements:
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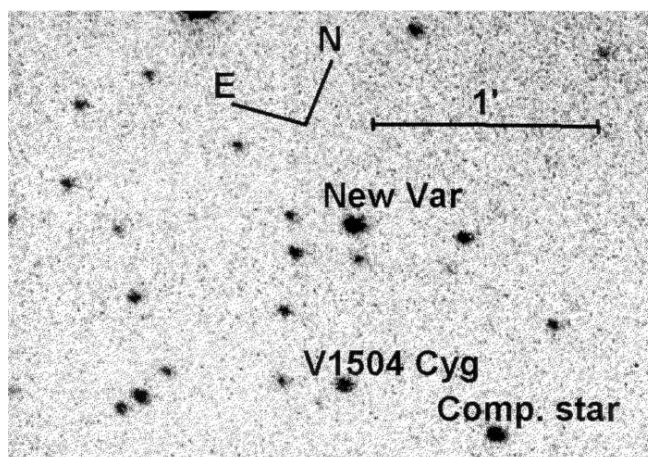


Figure 1. The finding chart for the new variable

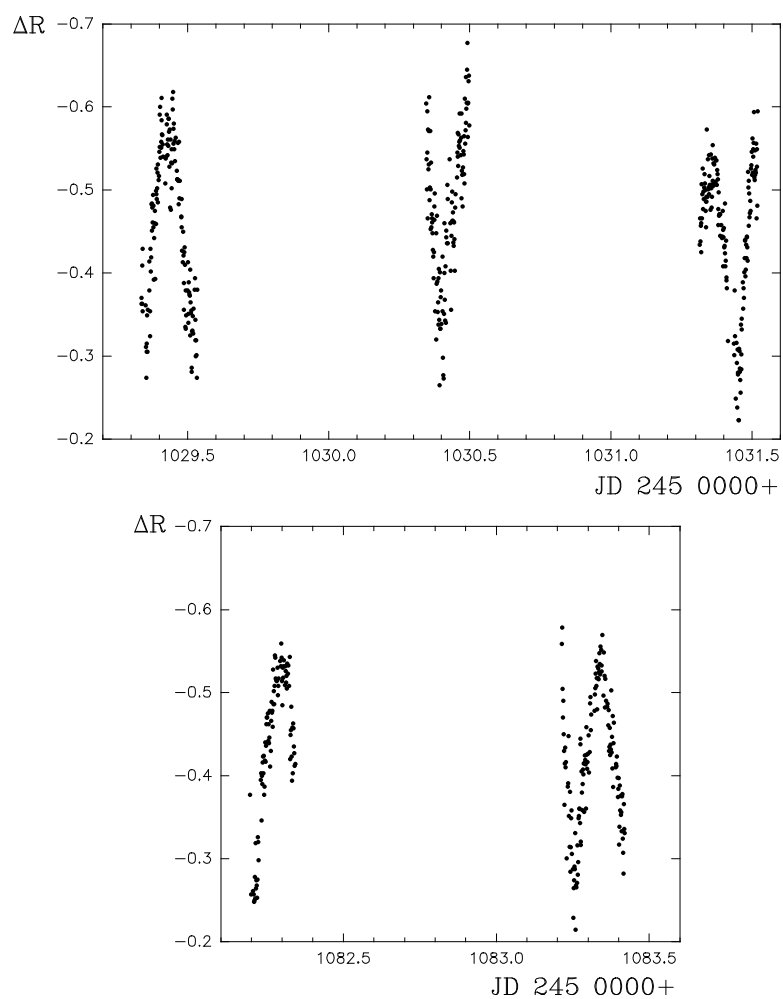


Figure 2. The original light curve for all data, obtained in August (upper panel) and September (lower panel) 1998

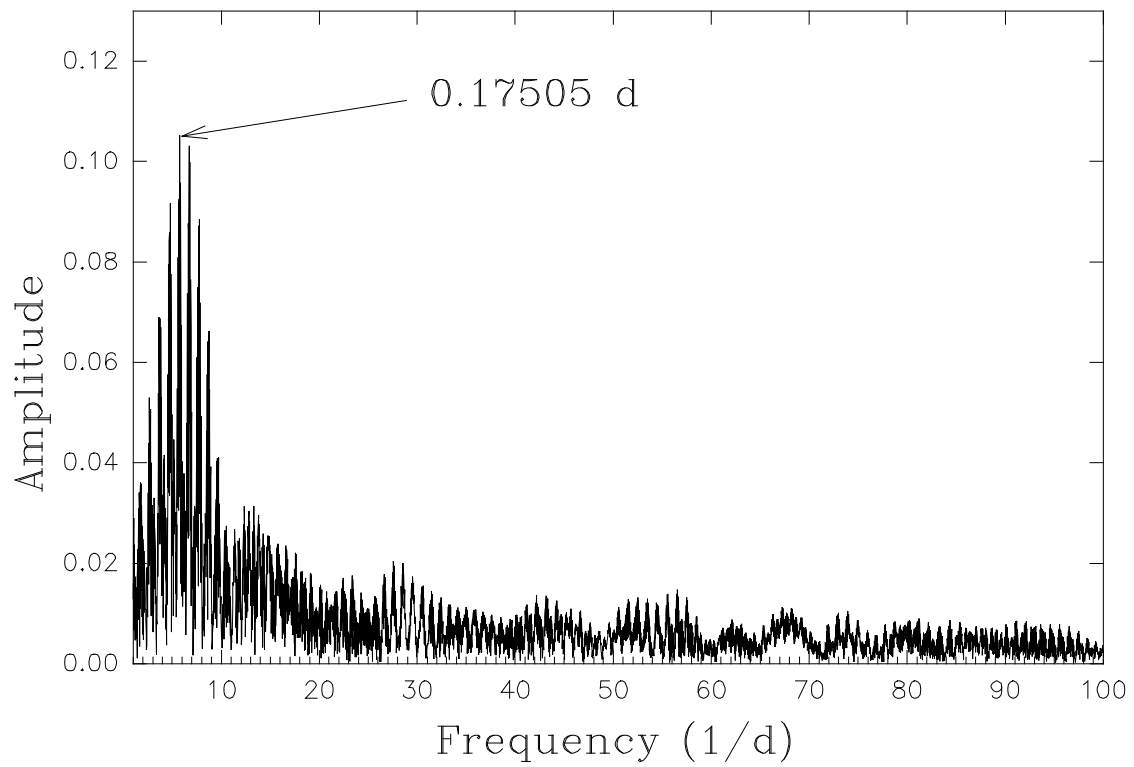


Figure 3. The periodogram of all data

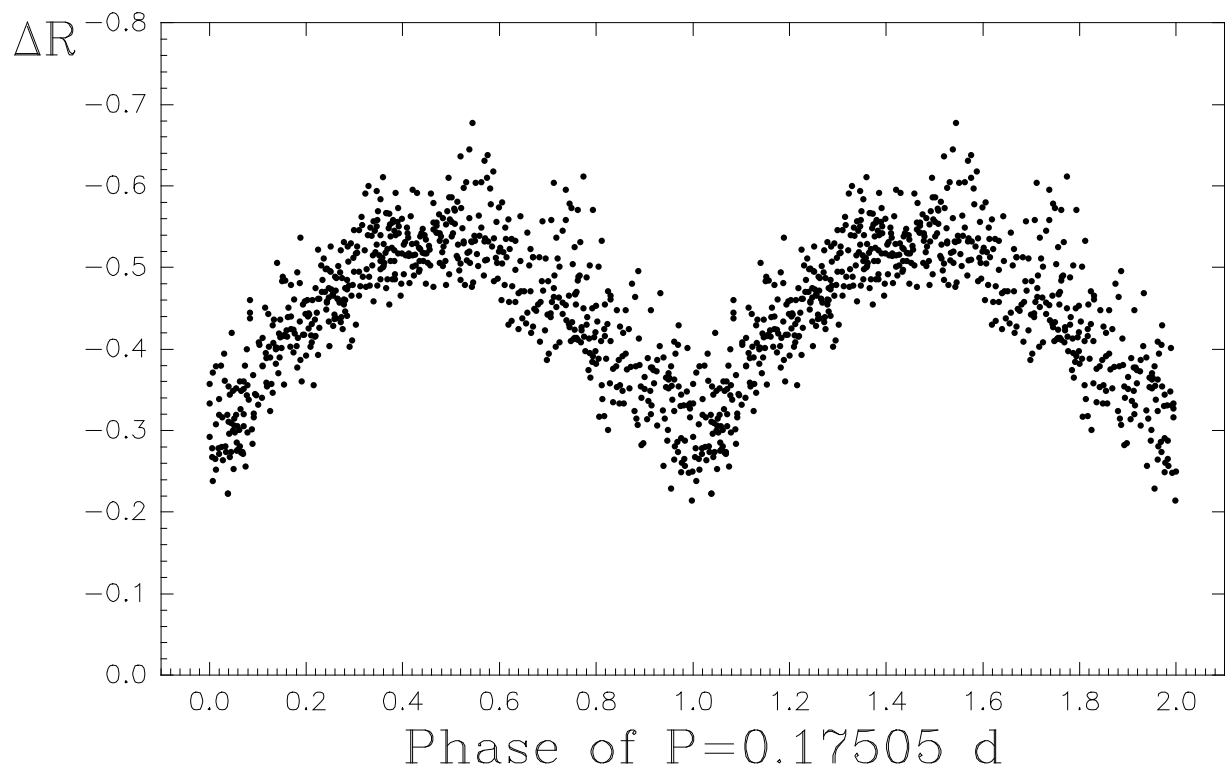


Figure 4. The mean light curve of the new variable