GSC 2684_1255: A NEW VARIABLE
IN THE FIELD OF V454 CYGNI

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Name of the object:
GSC 2684_1255

Equatorial coordinates:	Equinox:
R.A.= $20^h15^m55\overset{s}{.}995$ **DEC.**= $+37°27'15\overset{''}{.}62$	2000.0

Observatory and telescope:
N. Copernicus Observatory and Planetarium, 0.4-m Newton telescope

Detector:	CCD, SBIG ST7

Filter(s):	Without filter

Comparison star(s):	GSC 3151_2212

Check star(s):	GSC 2684_0631, GSC 3151_2170

Transformed to a standard system:	No

Type of variability:	EW

Remarks:
The variability of GSC 2684_1255 was found while being used as comparison star for variable V454 Cygni. CCD observations show that the star exhibits light variations with an amplitude of 0.26 magnitude in the instrumental band (primary minimum), the secondary minimum is $0\overset{m}{.}21$ deep. Range of variability GSC 2684_1255 is between 12.03 to 12.29 magnitude. A period was computed by neural network software LANCELOT (Gaspani 1999). The ephemeris is as follows: $$\text{Min JD}_{\text{hel}} = 2451375.4528 + 0\overset{d}{.}404194 \times E.$$ $$\pm0.0016 \quad \pm0.000068$$ The shape of the observed light curve corresponds to those of W UMa type stars. Figure 1 shows the light curve of GSC 2684_1255. Data were obtained from 18 Aug. 1999 to 31 Oct. 1999. The moments of light minima of the new variable star GSC 2684_1255 are presented in Table 1.

Table 1

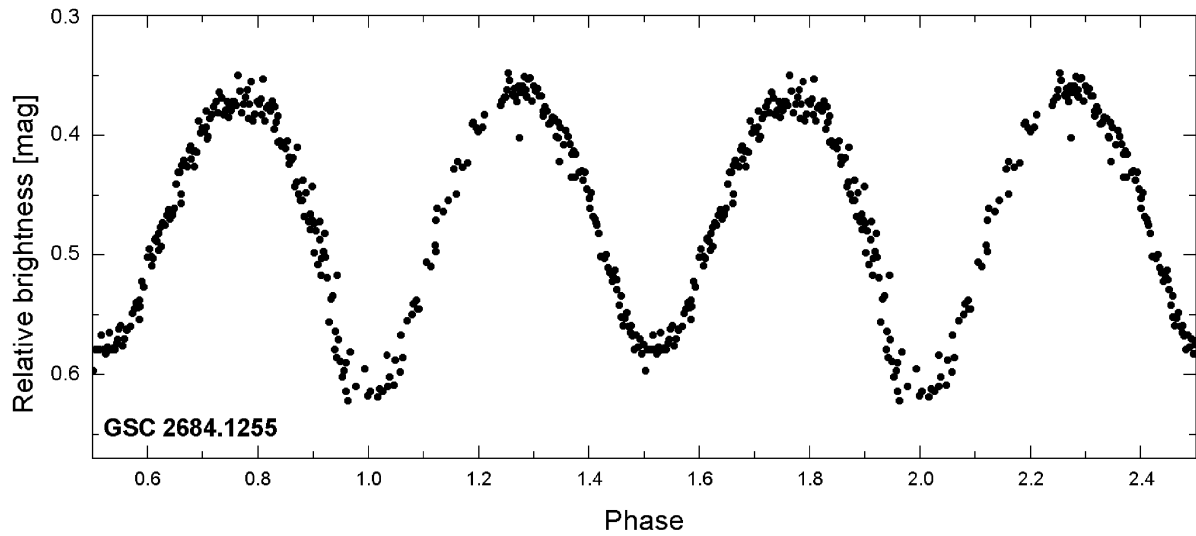| Min JD hel 2400000 +	Uncertainty	E	O − C	Observer
51375.4528	±0.0016	0.0	0.0000	J. Šafář
51392.4321	±0.0020	42.0	−0.0032	J. Šafář
51427.3936	±0.0016	128.5	−0.0019	J. Šafář
51433.4575	±0.0025	143.5	−0.0029	J. Šafář
51435.4751	±0.0018	148.5	0.0004	M. Zejda
51449.4213	±0.0029	183.0	−0.0011	J. Šafář

Figure 1.

Reference:

Gaspani, A., 1999, LANCELOT software, private communication