CCD LIGHT CURVES OF ROTSE1 VARIABLES, VII:
GSC 3564.3059 CYGNI, GSC 3121.1799 LYRAE

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Var 1

Name of the object:
GSC 3564.3059 = ROTSE1 J194028.86+502554.7

Equatorial coordinates:	Equinox:
R.A.= $19^h 40^m 28.86^s$ **DEC.**= $+50°25'54.7''$	2000.0

Comparison star(s):	GSC 3564.2983

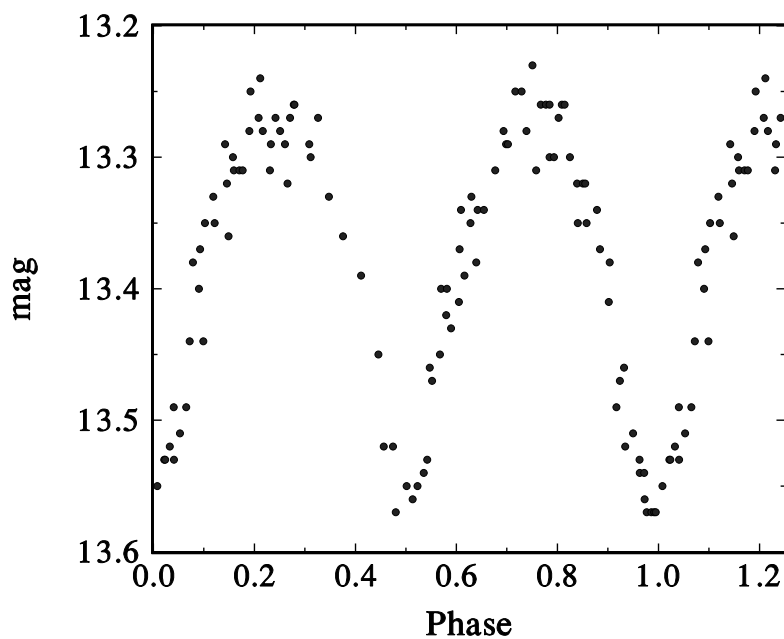| Check star(s):	GSC 3564.2997

Figure 1. CCD light curve (without filter) of GSC 3564.3059

Var 2

Name of the object:
GSC 3121.1799 = ROTSE1 J191352.55+380653.3

Equatorial coordinates:	Equinox:
R.A.= $19^\text{h}13^\text{m}52.55^\text{s}$ **DEC.**= $+38°06'53.3''$	2000.0

Comparison star(s):	GSC 3121.1335

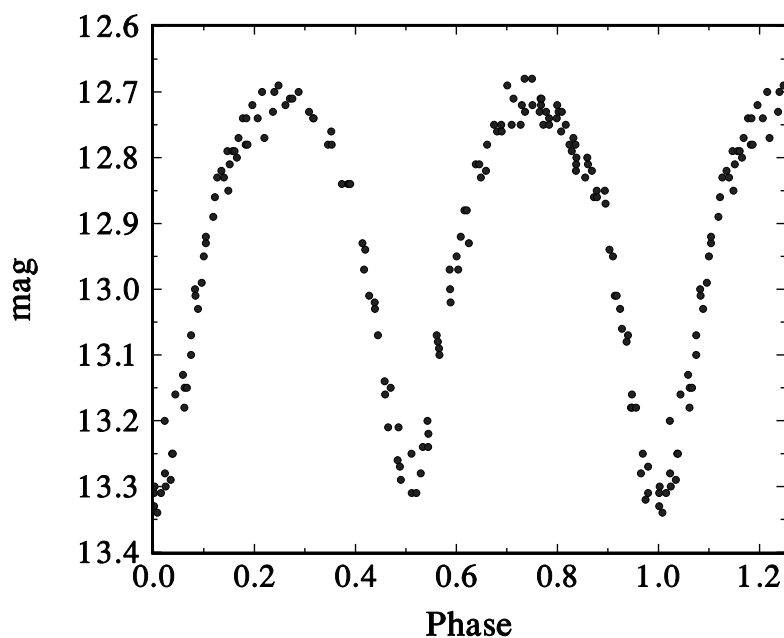| Check star(s):	GSC 3121.1294

Figure 2. CCD light curve (without filter) of GSC 3121.1799

Observatory and telescope:
Private observatory, Schlüsselacher, Wald, 0.15-m refractor

Detector:	SBIG ST-7 CCD camera

Filter(s):	None

Availability of the data:
Upon request from diethelm@astro.unibas.ch

Type of variability:	EW

Remarks:

As a byproduct of the ROTSE1 CCD survey, a large number of new variables have been discovered (Akerlof et al., 2000). In a series of papers, we report unfiltered CCD observations for some of the close binary systems (type EW and E) in the list of Akerlof et al. (2000). GSC 3564.3059 (VAR1 in this paper) was observed with our CCD equipment as mentioned above during 4 nights between JD 2451766 and JD 2451781, while the data on GSC 3121.1799 (here VAR2) was collected during 6 nights between JD 2451801 and JD 2451850. A total of 108 CCD frames were measured for VAR1 and 163 frames for VAR2. A long observing run on GSC 3564.3059 during one night showed that the period given in Akerlof et al. (2000) was spurious and a corrected value had to be determined from the available CCD data. This new period is in need of confirmation, since the exact number of cycles between the two sets of observations could not be established unambiguously. Figures 1 and 2 show our observations folded with the elements

$$\text{GSC } 3564.3059: \quad \text{JD(min, hel)} = 2451781.4048(12) + 0.35436(4) \times E;$$
$$\text{GSC } 3121.1799: \quad \text{JD(min, hel)} = 2451801.3651(3) + 0.2534306(8) \times E.$$

These elements of variation are deduced from a linear fit to the newly determined normal minima from the ROTSE1 data (VAR1: JDH 2451311.8785(4), primary (?); VAR2: JDH 2451274.8682(2), secondary; JDH 2451321.8727(6), primary) as well as the minima derived from our data and given in Blättler (2000, 2001).

VAR2 = GSC 3121.1799 turned out to be identical with V400 Lyr, which is certainly misclassified in the Fourth Edition of the GCVS. (The Editors)

References:

Akerlof, C., Amrose, S., Balsano, R., Bloch, J., Casperson, D., Fletcher, S., Gisler, G., Hills, J., Kehoe, R., Lee, B., Marshall, S., McKay, T., Pawl, A., Schaefer, J., Szymanski, J., Wren, J., 2000, *AJ*, **119**, 1901

Blättler, E., 2000, *BBSAG Bulletin*, **123**, 6

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