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CCD LIGHT CURVES OF ROTSE1 VARIABLES, IX:
GSC 2530.488 CV_n, GSC 1991.1390 Com, GSC 1991.1633 Com

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VAR1

Name of the object:	
GSC 2530.488 = ROTSE1 J122607.59+355548.9	
Equatorial coordinates:	Equinox:
R.A. = 12 ^h 26 ^m 07 ^s .6 DEC. = +35°55'49"	2000.0
Comparison star(s):	GSC 2530.525
Check star(s):	GSC 2530.547

VAR2

Name of the object:	
GSC 1991.1390 = ROTSE1 J123204.87+262248.1	
Equatorial coordinates:	Equinox:
R.A. = 12 ^h 32 ^m 04 ^s .94 DEC. = +26°22'48".6	2000.0
Comparison star(s):	GSC 1991.1415
Check star(s):	GSC 1991.1422

VAR3

Name of the object:	
GSC 1991.1633 = ROTSE1 J123305.53+270803.4	
Equatorial coordinates:	Equinox:
R.A. = 12 ^h 33 ^m 05 ^s .5 DEC. = +27°08'03"	2000.0
Comparison star(s):	GSC 1991.1669
Check star(s):	GSC 1991.1840

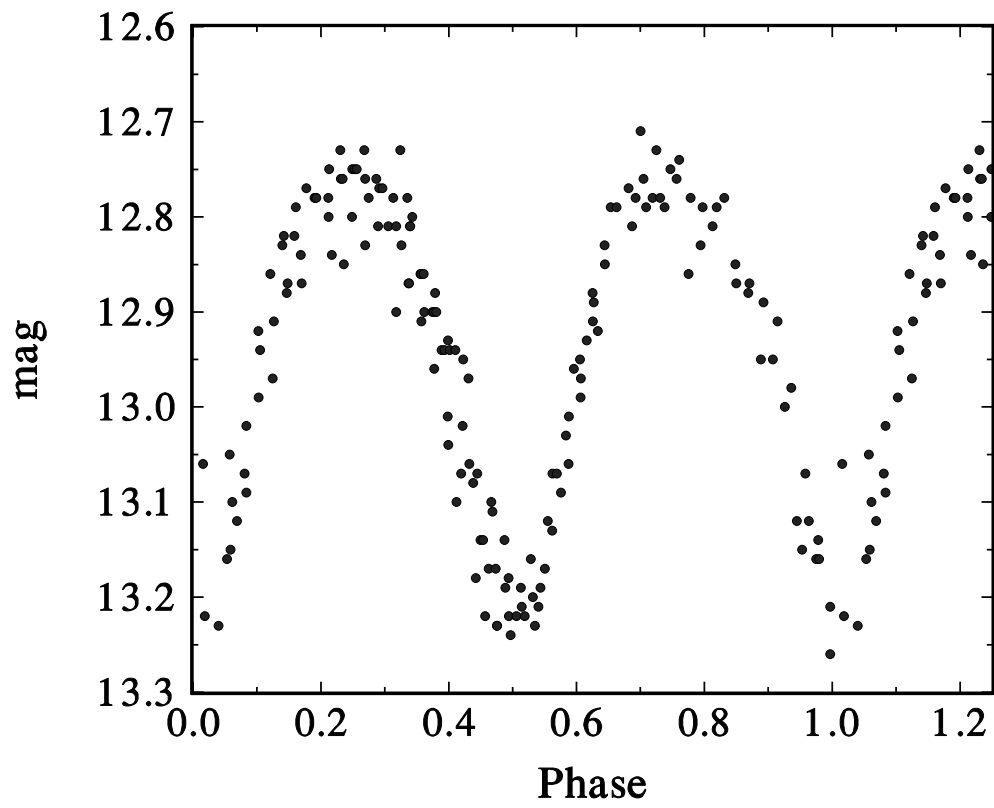


Figure 1. CCD light curve (without filter) of GSC 2530.488

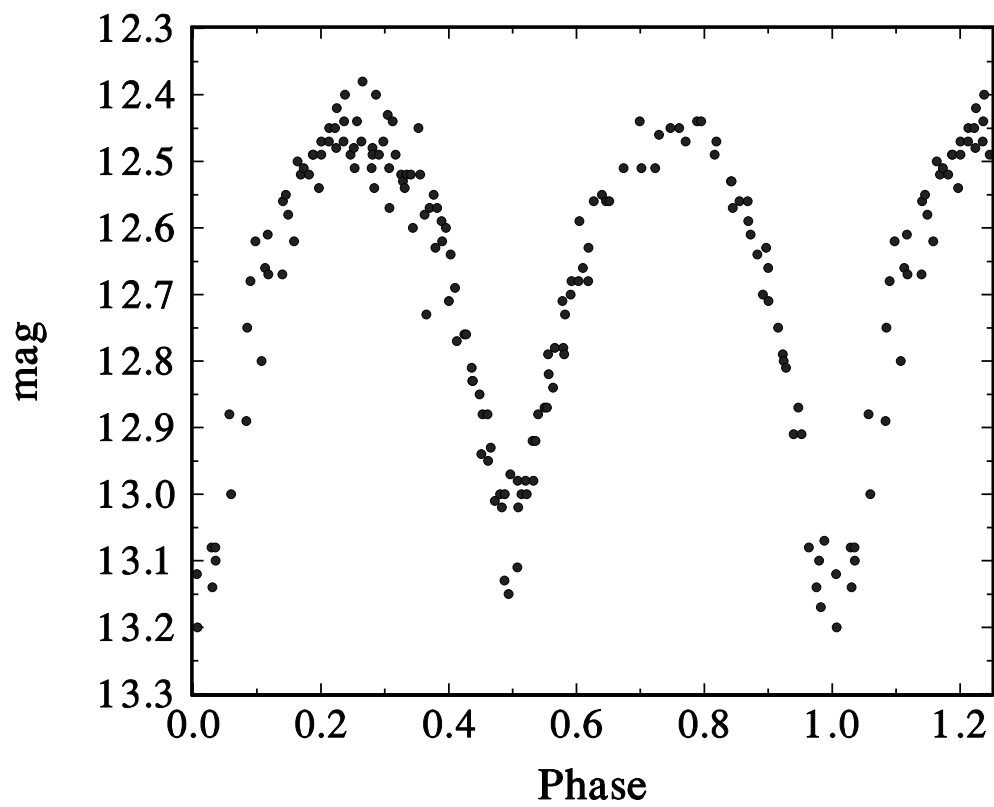


Figure 2. CCD light curve (without filter) of GSC 1991.1390

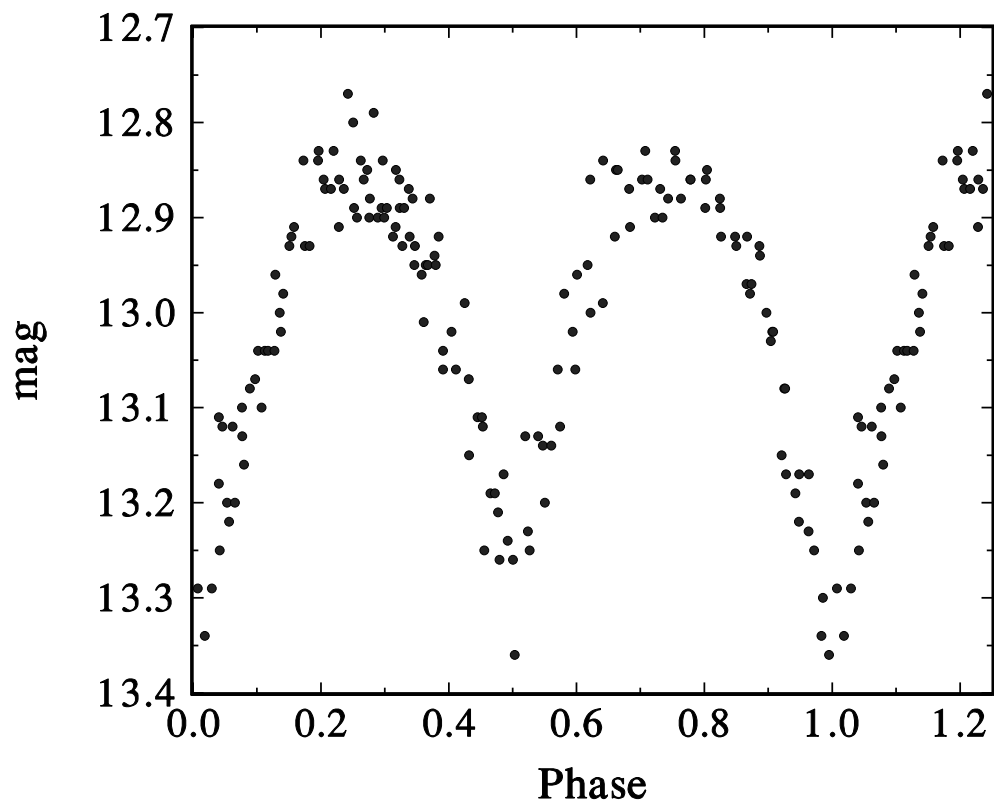


Figure 3. CCD light curve (without filter) of GSC 1911.1633

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) in the list of Akerlof et al. (2000). GSC 2530.488 (VAR1 in this paper) was observed with our CCD equipment as mentioned above during 5 nights between JD 2451951 and JD 2451984, while the data on GSC 1991.1390 (here VAR2) and GSC 1991.1633 (VAR3) were collected during the same 5 nights. A total of 171 CCD frames were measured for VAR1, 162 frames for VAR2 and 160 frames for VAR3. Figures 1, 2 and 3 show our observations folded with the elements

$$\begin{aligned} \text{GSC 2530.488} \quad \text{JD}(\text{min, hel}) &= 2451967.325(2) + 0.365714(30) \times E; \\ \text{GSC 1991.1390} \quad \text{JD}(\text{min, hel}) &= 2451967.3479(9) + 0.2863601(9) \times E; \\ \text{GSC 1991.1633} \quad \text{JD}(\text{min, hel}) &= 2451967.4962(9) + 0.3379351(17) \times E. \end{aligned}$$

These elements of variation are deduced from a linear fit to the newly determined normal minima from the ROTSE1 data (VAR1: HJD 2451244.6766(15), primary, HJD 2451246.6826(16), secondary; VAR2: HJD 2451312.7287(3), primary; VAR3: HJD 2451246.6822(14), primary, HJD 2451260.7032(8), secondary) as well as the minima derived from our data and given in Blättler (2001).

The elements of variation for GSC 2530.488 given above should be checked since the number of revolutions between the ROTSE1 data and ours is somewhat ambiguous. GSC 1991.1390 and GSC 1991.1633 are situated within the Coma Cluster (Melotte 111, AV 2059 and AV 2139 respectively).

Acknowledgements:

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References:

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 Blättler, E., 2001, *BBSAG Bulletin*, **125**, in preparation