# COMMISSIONS 27 AND 42 OF THE IAU INFORMATION BULLETIN ON VARIABLE STARS

Number 4982

Konkoly Observatory Budapest 7 November 2000 HU ISSN 0374 - 0676

## CCD LIGHT CURVES OF ROTSE1 VARIABLES, V: GSC 3131.476 LYRAE, GSC 2646.1938 LYRAE

BLÄTTLER, E.<sup>1</sup>; DIETHELM, R.<sup>2</sup>

## VAR1

Name of the object:
GSC 3131.476 = ROTSE1 J185052.26 + 434007.1

Equatorial coordinates:		Equinox:
$\mathbf{R.A.} = 18^{\mathrm{h}}50^{\mathrm{m}}52.26$	<b>DEC.</b> = $+43^{\circ}40'07''.1$	2000.0

Comparison $star(s)$ :	GSC 3131.439
------------------------	--------------

Check star(s):	GSC 3131.522

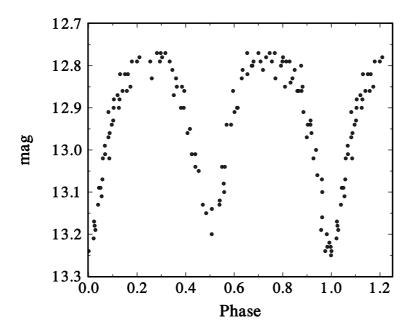


Figure 1. CCD light curve (without filter) of GSC 3131.476

<sup>&</sup>lt;sup>1</sup> BBSAG, Schlüsselacher 1, CH-8636 Wald, Switzerland; e-mail: blaettler-wald@bluewin.ch

 $<sup>^2</sup>$ BBSAG, Rennweg 1, CH-4118 Rodersdorf, Switzerland; e-mail: diethelm@astro.unibas.ch

2 IBVS 4982

# VAR2

Name of the object:	
GSC 2646.1938 = ROTSE1 J185110.44 + 353556.1	

Equatorial coordinates:	Equinox:
$\mathbf{R.A.} = 18^{\mathrm{h}}51^{\mathrm{m}}10^{\mathrm{s}}.44  \mathbf{DEC.} = +35^{\circ}35'56''.1$	2000.0

Comparison star(s):	GSC 2646.1777
---------------------	---------------

Check star(s):	GSC 2646.1920
----------------	---------------

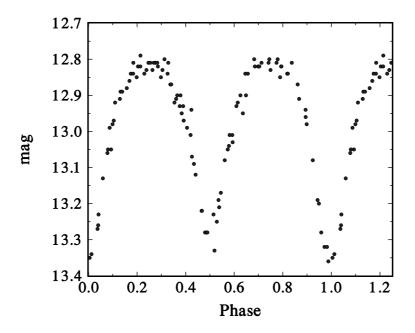


Figure 2. CCD light curve (without filter) of GSC 2646.1938

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

IBVS 4982

#### 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 3131.476 (VAR1 in this paper) was observed with our CCD equipment as mentioned above during 4 nights between JD 2451757 and JD 2451781, while the data on GSC 2646.1938 (here VAR2) was collected during 4 nights between JD 2451766 and JD 2451781. A total of 107 CCD frames were measured for VAR1 and 119 frames for VAR2. Figures 1 and 2 show these observations folded with the elements

```
GSC 3131.476: JD(min, hel) = 2451757.4883(5) + 0.2429100(25) \times E,
GSC 2646.1938: JD(min, hel) = 2451766.6097(3) + 0.2860550(12) \times E.
```

These elements of variation are deduced from a linear fit to the newly determined normal minima from the ROTSE1 data (VAR1: JDH 2451257.8242(2), primary, JDH 2451308.7108(4), secondary; VAR2: JDH 2451295.8834(3), secondary, JDH 2451306.7233(5), primary) as well as the minima derived from our data and given in Blättler (2000).

### Acknowledgements:

This research made use of the Simbad data base, operated at CDS, Strasbourg, France

#### 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

#### ERRATUM FOR IBVS 4982

In IBVS No. 4982 the period of GSC 2646.1938 should read 0.2890550 instead of 0.2860550.