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CCD LIGHT CURVES OF ROTSE1 VARIABLES, II: GSC 3100.1616 HERCULIS

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Name of the object: GSC 3100.1616 = ROTSE1 174311.02+432709.0

B. $A_{\cdot} = 17^{h} 43^{m} 11.02^{s}$ DEC $= +43^{\circ} 27' 09.0''$ 2000.0	Equatorial coordinates:	Equinox:		
	R.A. = $17^{h}43^{m}11.02^{s}$ DEC. = $+43^{\circ}27'09.0''$	2000.0		

Observatory and telescope:

Private observatory Schlüsselacher, Wald, 0.15-m refractor

Detector: SBIG ST-7 CCD camera

Filter(s):None

Comparison star(s): GSC 3100.1679

Check star(s): GSC 3100.1797

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 3100.1616 was observed with our CCD equipment as specified above during 5 nights between JD 2451746 and JD 2451781. A total of 158 CCD frames were measured and Figure 1 shows these observations folded with the elements

 $JD(\min, hel) = 2451746.4139(6) + 0.2581094(25) \times E.$

These elements of variation are deduced from a linear fit to the newly determined normal minima from the ROTSE1 data (JDH 2451286.8514(2), secondary(?); JDH 2451310.7238(6), primary(?)) as well as the 8 minima (3 primary, 5 secondary) published in BBSAG Bulletin 123. Because of the uncertainty in the cycle count since the ROTSE1 data, the elements given above are in need of affirmation.



Figure 1. CCD light curve (without filter) of GSC 3100.1616

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France.											

Reference:

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