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VARIABILITY OF GSC 3151.0633

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Name of the object:	
GSC 3151.0633	
Equatorial coordinates:	Equinox:
R.A.= 20 ^h 16 ^m 58 ^s .8 DEC.= +39°05'23"	2000.0
Comparison star(s):	GSC 3151.0480
Check star(s):	GSC 3151.0600 and GSC 3151.0197
Observatory and telescope:	
Vyškov observatory, Czech Republic, RL 300/1200 mm telescope	
Detector:	CCD camera SBIG ST-7, 382 × 255 pixels, 19' × 13' FOV
Filter(s):	unfiltered CCD band and V filter
Transformed to a standard system:	No
Date(s) of the observation(s):	
from August 2000 to November 2001	
Method of data reduction:	
Images were processed by MUNIDOS photometry software package. (Hroch, 1997)	
Method of minimum determination:	
The times of minima (see table 1) were derived by means of Tintagel programme, based on an artificial neural network (Gaspani, 1995).	
Type of variability:	EB
Availability of the data:	
Upon request	

Ephemeris:			
Star name	E 2400000+	P [day]	Source
GSC 3151.0633	52122.459 ± 0.001	0.50619 ± 0.00001	this paper

Times of minima:						
Star name	Time of min. HJD 2400000+	Error	Type	Filter	$O - C$ [day]	Rem.
GSC 3151.0633	52027.5476	0.0010	sec.	C	0.001	H, K
	52030.5819	0.0006	sec.	C	-0.004	H, K
	52042.4863	0.0011	prim.	C	0.005	K
	52121.4521	0.0016	prim.	V	0.006	K
	52122.4612	0.0011	prim.	C	0.002	K
	52127.5131	0.0018	prim.	V	-0.008	K
	52195.3495	0.0038	prim.	V	0.001	H, M

Explanation of the remarks in the table:

Observer: H=Hajek, K=Koss, M=Motl

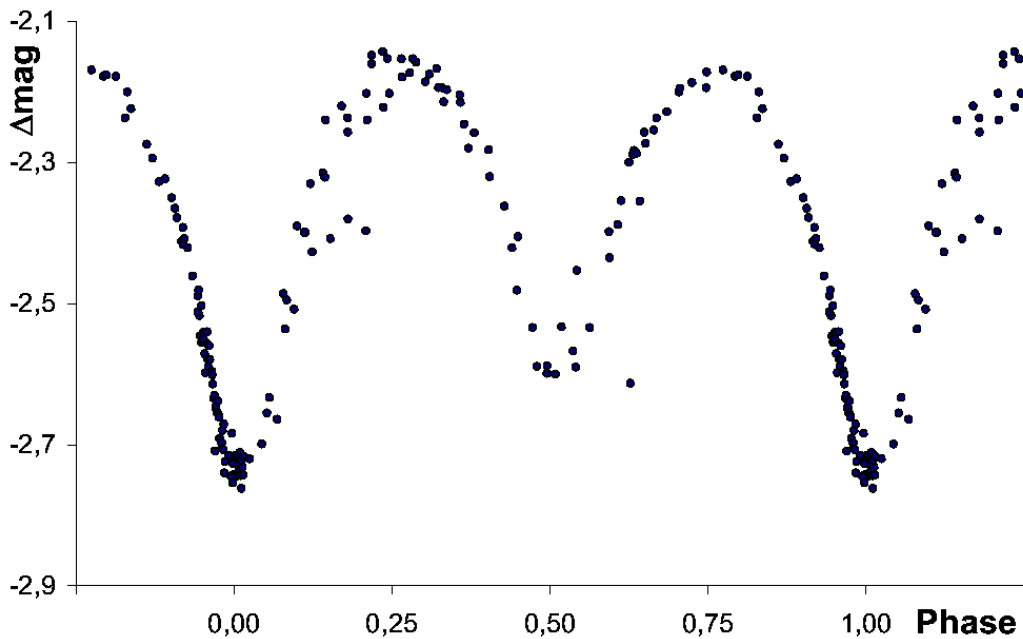


Figure 1. Folded light curve of GSC 3151.0633.

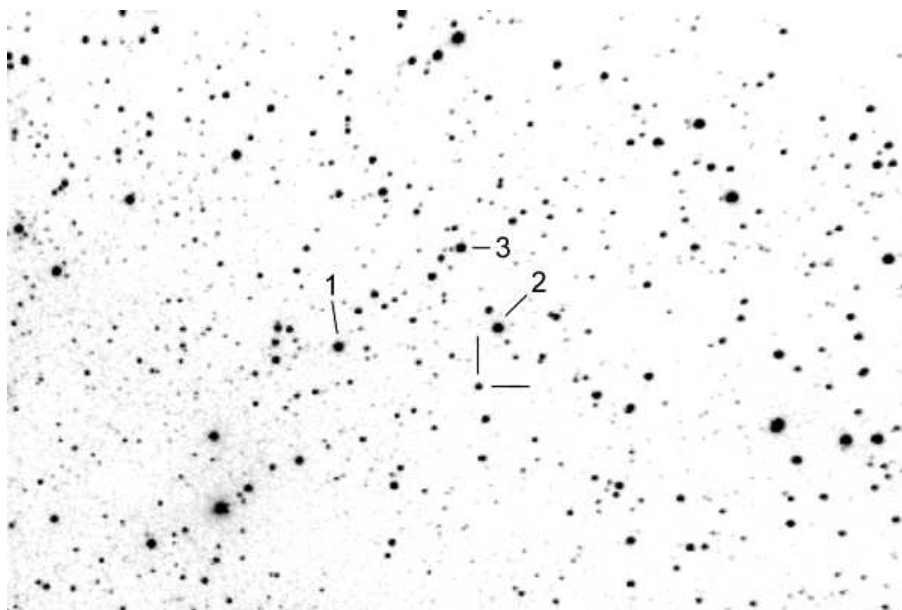


Figure 2. Identification map of GSC 3151.0633 (bars), comparison star (No. 1) and two check stars (No. 2 and 3). The size of the field is 19×13 arc minutes, unfiltered CCD band, 20-second exposure.

Remarks:

The authors discovered light changes of GSC 3151.0633 on CCD frames which were taken on August 7/8, 2000 at the observatory in Vyškov (a station of N. Copernicus Observatory and Planetarium Brno) when monitoring V699 Cyg (Whitney, 1952). The light curve elements were determined with the help of our Varplot application. Figure 1 displays the folded light curve. Magnitudes are instrumental and they are relative to the comparison star used. The depth of the primary and secondary minima are 0^m5 and 0^m6 , respectively. Figure 2 shows one CCD frame (20-second exposure, unfiltered CCD band) with the identification of a variable (bars), the comparison star used (No. 1, GSC 3151.0480) and two check stars (No. 2 and 3 and GSC 3151.0197).

Reference:

- Gaspani, A., 1995, *3rd GEOS workshop on variable star data acquisition and processing techniques*, May 13–14, 1995, S. Pellegrino Terme, Italy
 Hroch, F., Novak, R., 1997, *MUNIDOS*, <http://www.ian.cz/munipack/>
 Whitney, B.S., 1952, *Astronomical Journal*, **No. 56**, 206, Variable Star Notes: A Small Nebula