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GSC 5582.0545 IS AN ECLIPSING BINARY OF W UMa TYPE

(BAV MITTEILUNGEN NO. 137)

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Name of the object:
GSC 5582.0545

Equatorial coordinates:	Equinox:
R.A.= 14 ^h 51 ^m 17 ^s .1 DEC.= -11°09'43"	2000

Observatory and telescope:
P. Frank: Private observatory, 30-cm flat-field camera;
K. Bernhard: Private observatory, 20-cm Schmidt–Cassegrain telescope

Detector:	P. Frank: OES-LcCCD11 camera; K. Bernhard: Starlight Xpress SX camera
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Filter(s):	None
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Comparison star(s):	GSC 5582.0574, $V \approx 11^m6$
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Check star(s):	GSC 5586.0018
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Transformed to a standard system:	No
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Availability of the data:
Upon request

Type of variability:	W UMa
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Remarks:

In 1998 the variability of GSC 5582.0545 has been found as part of a program to discover and classify new variables using CCD observations of selected fields on the edge of the northern Milky Way (eg. Bernhard & Lloyd 2000). Additional observations were performed on 7 nights between April and May 2000 (P. Frank). This star has previously been referred to as Brh V3 (Bernhard 1998, Moschner 2001).

The following times of minima were observed:

Type	JD Hel.
Min II	2451678.383
Min I	2451679.424
Min II	2451680.467

The ephemeris was calculated using the “Phase Dispersion Minimization” method:

$$\text{MinI} = \text{HJD } 2451679.424 + 0^d69552 \times E. \quad (1)$$

$\pm 2 \qquad \pm 3$

Acknowledgements:

This research made use of the SIMBAD data base, operated by the CDS at Strasbourg, France. The authors thank Dr. P. Kroll for helpful comments.

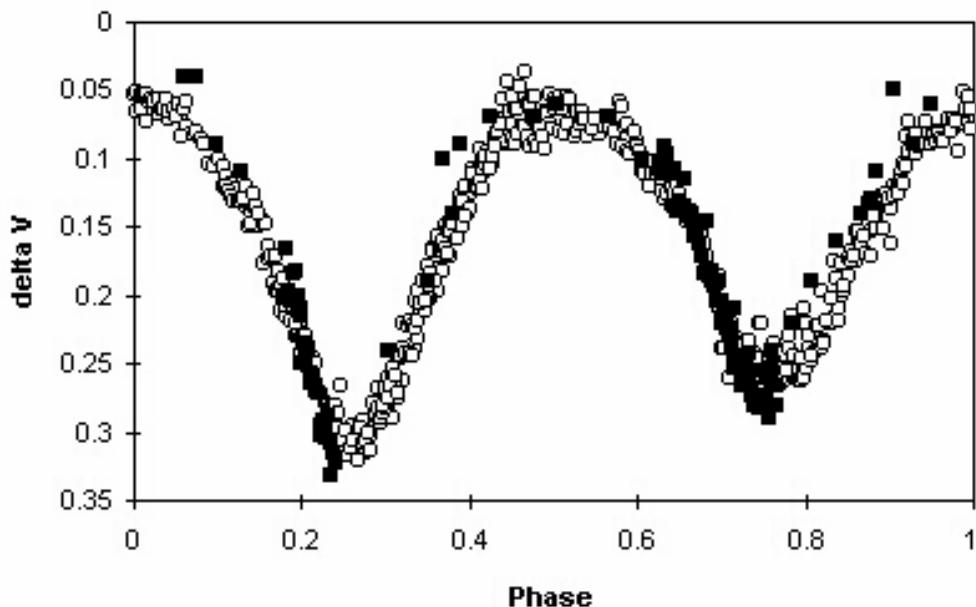


Figure 1. Differential light curve of GSC 5582.0545; filled squares: K. Bernhard, open circles: P. Frank

References:

- Bernhard, K., 1998, *vsnet-obs*, No. 15317,
<http://www.kusastro.kyoto-u.ac.jp/vsnet/Mail/obs15000/msg00317.html>
 Bernhard, K., Lloyd. C., 2000, *IBVS*, No. 4920
 Moschner, W., 2001, <http://www.var-mo.de/bev.sterne.htm>