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EIGHT NEW W UMa VARIABLES

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Observed star(s):				
Star name	GCVS type	Coordinates (J2000)		Comp./check star(s)
		RA	Dec	
GSC 661-503	EW	03 ^h 53 ^m 06 ^s 00	+10°26'45".0	*
GSC 4948-989	EW	12 ^h 39 ^m 48 ^s 54	−02°26'21".6	*
USNO-A2.0 1050-19244897	EW	21 ^h 08 ^m 53 ^s 74	+15°37'10".9	*
GSC 843-262	EW	10 ^h 18 ^m 53 ^s 46	+13°41'08".5	*
GSC 1402-121	EB	09 ^h 16 ^m 14 ^s 75	+16°15'25".7	*
GSC 1402-52	EW	09 ^h 17 ^m 16 ^s 09	+16°19'34".5	*
GSC 1400-455	EW	08 ^h 55 ^m 51 ^s 57	+20°03'38".3	*
GSC 2495-1124	EW	09 ^h 02 ^m 40 ^s 21	+34°19'46".6	*

* R magnitudes of about ten USNO-A2.0 stars in the fields.

Observatory and telescope:
Ottmarsheim Obs. (IAU astrometric code 224), 0.305m Schmidt–Cassegrain; DeKalb Obs. (hereafter DKO), 0.355m Schmidt–Cassegrain; Village-Neuf Obs. (138), 0.20m Schmidt–Cassegrain; Durtal Obs. (949), 0.305m Schmidt–Cassegrain; Les Engarouines Obs. (A14), 0.212m Newton.

Detector:	KAF-1602E at 224 and 138; KAF-3200ME at DKO; KAF-1600 at A14; KAF-400E at 949.
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Filter(s):	None, roughly <i>R</i> .
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Availability of the data:
Upon request

Method of data reduction:
Standard CCD-frame reduction using Prism, except AIP4win at DKO.

Date(s) of the observation(s):	
GSC 661-503	2001-12-19, 20, 21, 22; 2002-1-11, 12 (A14)
GSC 4948-989	2002-5-12, 13, 14; 2003-5-4, 11, 30 (A14)
USNO-A2.0 1050-19244897	2002-8-11, 14, 15; 2002-9-11, 12 (138)
GSC 843-262	2003-3-23, 30 (A14); 2003-3-25, 26, 27 (224)
GSC 1402-121	2003-3-23, 30 (A14); 2003-3-25, 26, 27 (224); 2003-3-30; 2003-4-2 (DKO)
GSC 1402-52	2003-3-23, 30 (A14); 2003-3-25, 26, 27 (224)
GSC 1400-455	2003-3-23, 30 (A14); 2003-3-25, 26, 27 (224)
GSC 2495-1124	2003-3-30; 2003-4-4, 5 (A14); 2003-4-8 (949)

Table 1. Light curve parameters from the data analysis by the **CourbRot** software (Behrend, 2001). Uncertainties correspond to one standard-deviation.

Star name	HJD of a pr. min.	Period	Tot. var.	Type
GSC 661-503	2452271 ^d 190 ±0 ^d 004	0 ^d 35240 ±0 ^d 00005	0 ^m 168 ±0 ^m 010	EW
GSC 4948-989	2452407 ^d 514 ±0 ^d 005	0 ^d 2562555 ±0 ^d 0000014	0 ^m 141 ±0 ^m 009	EW
USNO-A2.0 1050-19244897	2452506 ^d 488 ±0 ^d 008	0 ^d 29516 ±0 ^d 00003	0 ^m 61 ±0 ^m 07	EW
GSC 843-262	2452721 ^d 528 ±0 ^d 004	0 ^d 33614 ±0 ^d 00013	0 ^m 134 ±0 ^m 007	EW
GSC 1402-121	2452721 ^d 3126 ±0 ^d 0011	0 ^d 50146 ±0 ^d 00007	0 ^m 645 ±0 ^m 012	EB
GSC 1402-52	2452721 ^d 4882 ±0 ^d 0019	0 ^d 34781 ±0 ^d 00007	0 ^m 576 ±0 ^m 023	EW
GSC 1400-455	2452721 ^d 5705 ±0 ^d 0008	0 ^d 267650 ±0 ^d 000022	0 ^m 581 ±0 ^m 014	EW
GSC 2495-1124	2452728 ^d 300 ±0 ^d 004	0 ^d 32678 ±0 ^d 00009	0 ^m 283 ±0 ^m 019	EW

Remarks:

The Simbad database reports no known variable star in the vicinity of these eight objects. All objects were found to be variable by L. B., except USNO-A2.0 1050-19244897 by C. D., in the course of asteroidal light curve determination.

Acknowledgements:

These researches used the Simbad database, operated by the CDS at Strasbourg, France.

Reference:

Behrend, R., 2001, *Orion*, **304**, 12

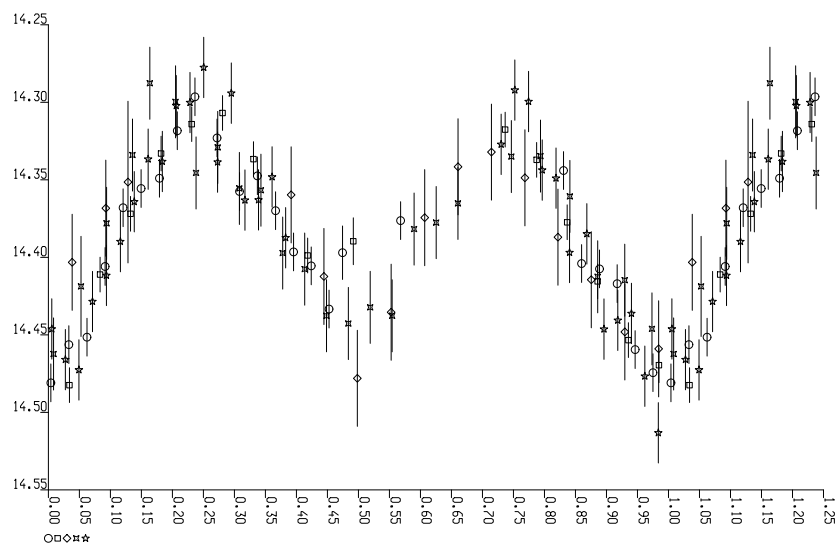


Figure 1. Unfiltered light curve of GSC 661-503, $P = 0^d35240$. The small labels denote the chronologic order of the series of observations in Figs.1-8.

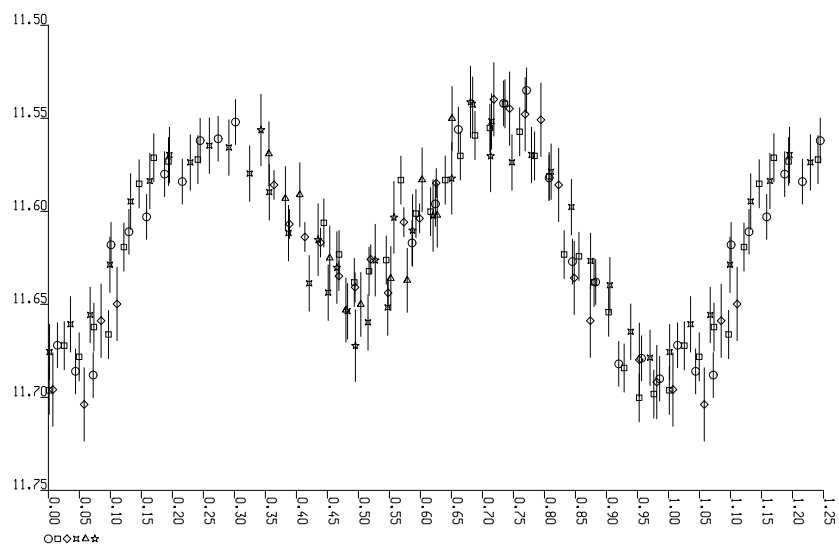


Figure 2. Unfiltered light curve of GSC 4948-989, $P = 0^d2562555$.

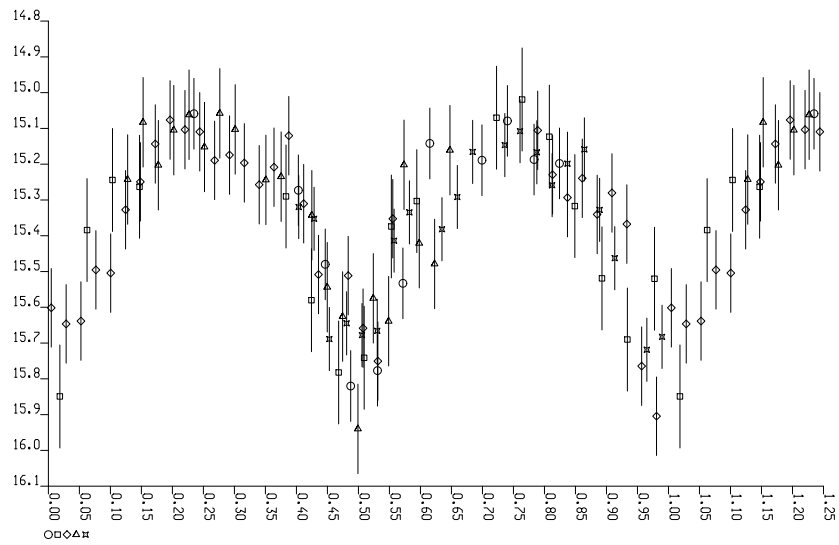


Figure 3. Unfiltered light curve of USNO-A2.0 1050-19244897, $P = 0^{\text{d}}29516$.

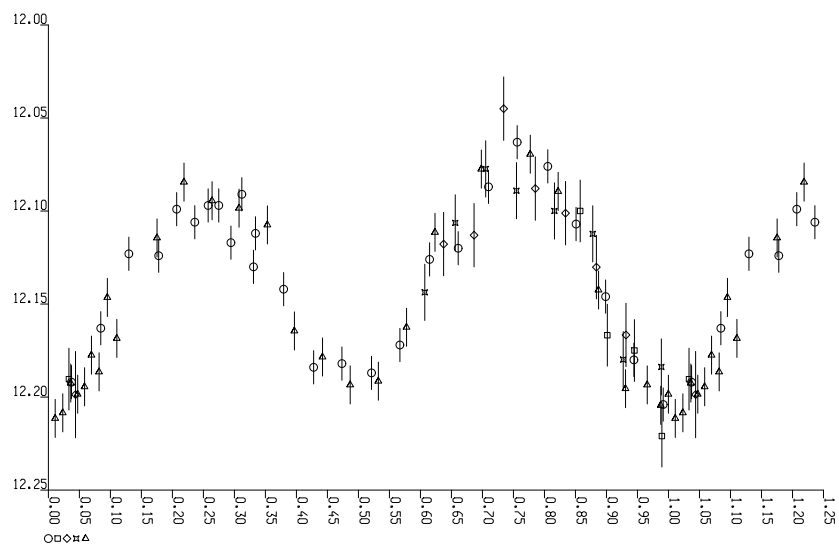


Figure 4. Unfiltered light curve of GSC 843-262, $P = 0^{\text{d}}33614$.

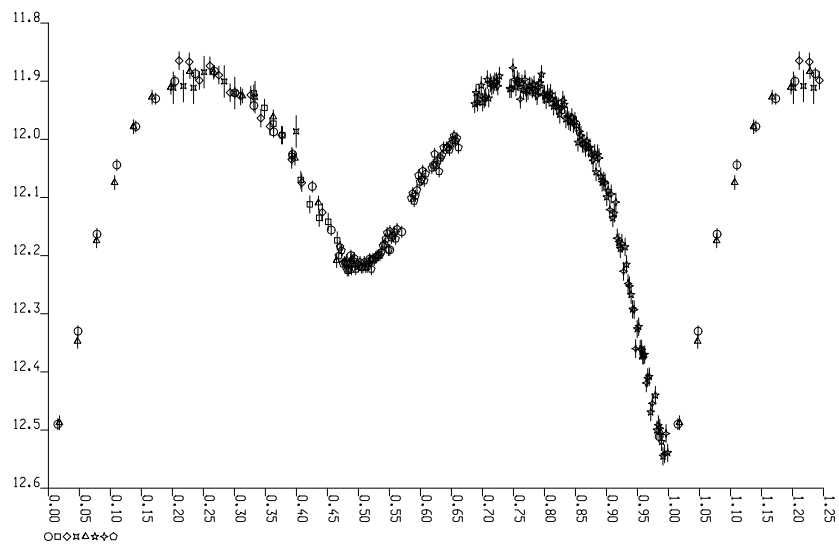


Figure 5. Unfiltered light curve of GSC 1402-121, $P = 0^d50146$.

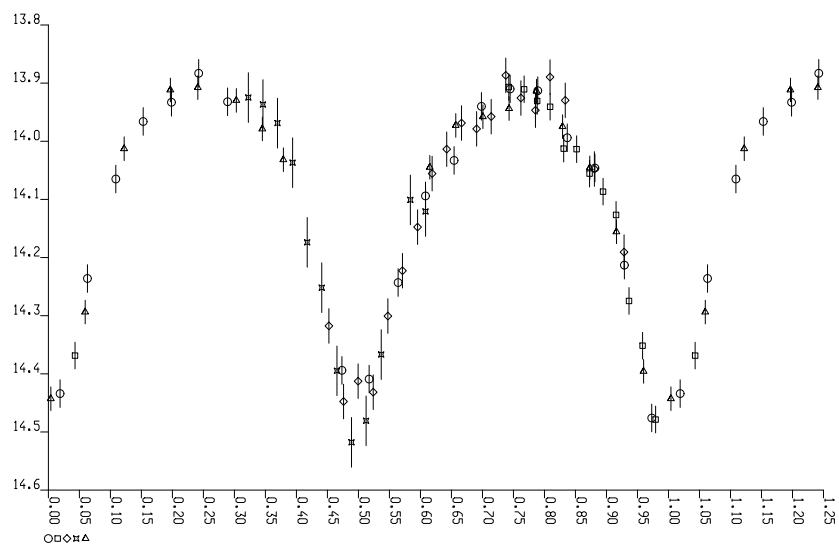


Figure 6. Unfiltered light curve of GSC 1402-52, $P = 0^d34781$.

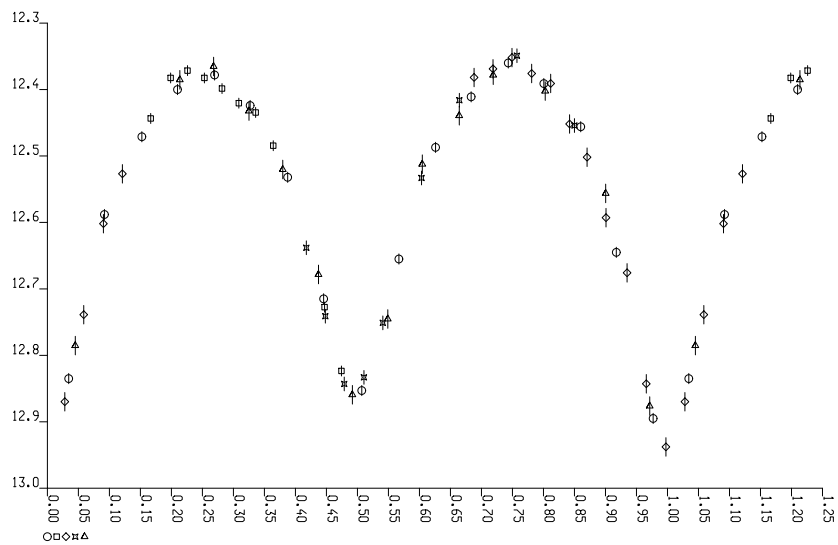


Figure 7. Unfiltered light curve of GSC 1400-455, $P = 0^{\text{d}}267650$.

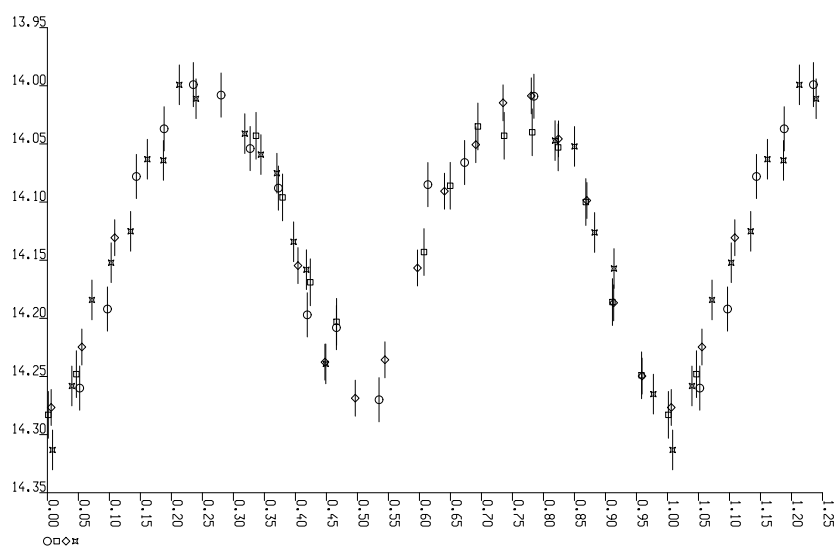


Figure 8. Unfiltered light curve of GSC 2495-1124, $P = 0^{\text{d}}32678$.