



**New variables in ASAS-SN Database. Part 1.**

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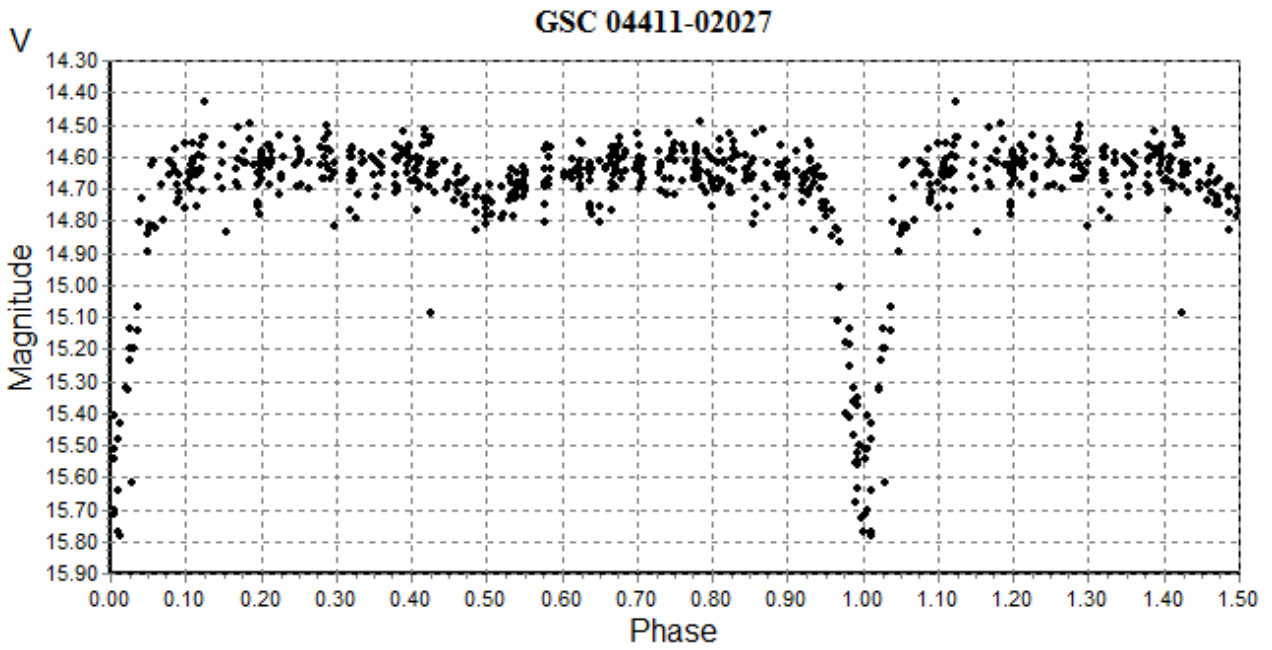
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**Abstracts:** 12 new variable stars are presented, which were found in the ASAS-SN database:

*GSC 04411-02027, GSC 03568-00294, USNO-B1.0 1414-0310345, USNO-B1.0 1414-0311251, GSC 03933-01423, USNO-B1.0 1410-0293235, GSC 04205-02116, USNO-B1.0 1517-0289620, GSC 04255-01111, GSC 04222-01778, GSC 04444-01262, USNO-B1.0 1587-0156583.*

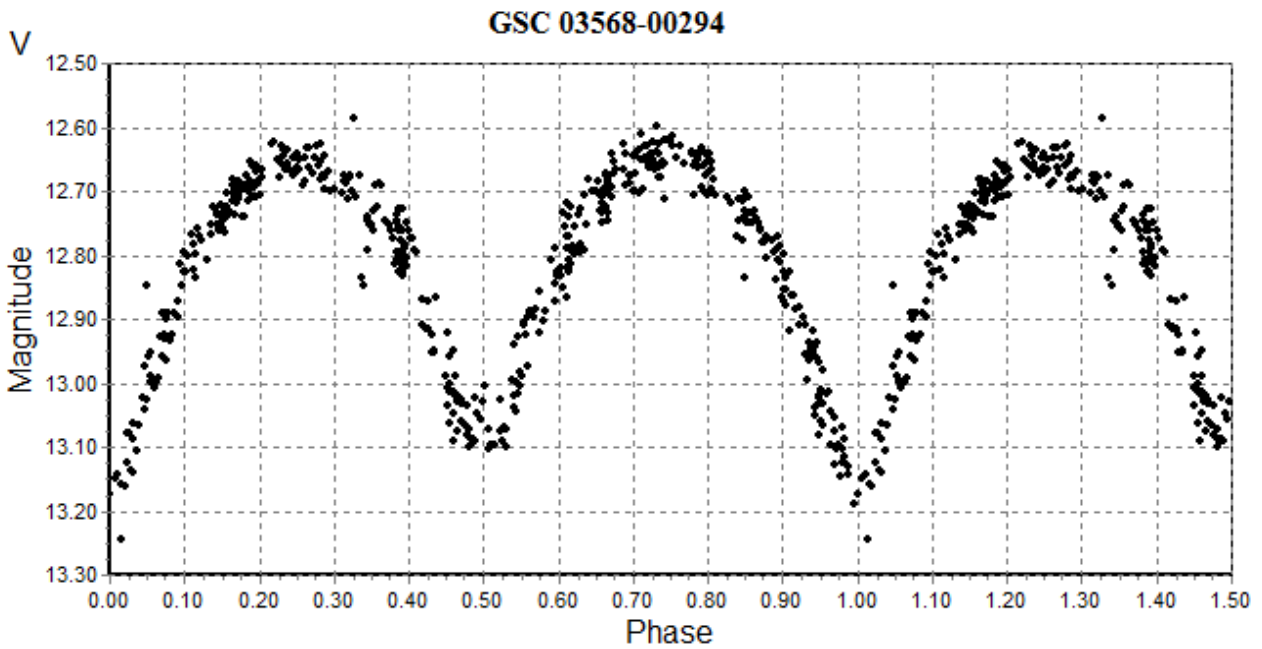
I used ADQL queries to the TAP VizieR system for search for new variable stars. An automatic selection of stars with  $B-V < 0.8$  was made in the APASS data and  $V \text{ err} > 0.3$ . The innovative method is based on identifying variable stars from APASS data release (Henden et al. 2015) using VizieR TAP service at <http://tapvizier.u-strasbg.fr/adql/>. The search was conducted in a field with the center  $RA = 277$  Dec = +65 (rectangle long in RA 40 degrees and in DEC 30 degrees). Coordinates are listed in the UCAC4 (UCAC5) catalog. To find the period, a program developed by Sergey Dubrovski was used. The period search was carried out by the method of Lafler-Kinman.

Name	RA2000	DEC2000	Mag.range V	Type	Epoch	Period	Light curve
SERIV 108 GSC 04411-02027	15 24 16.64	+69 01 55.41	14.6-15.75	EA	2457206.889	1.4146104	Fig.1
SERIV 109 GSC 03568-00294	19 36 32.71	+50 59 29.80	12.65-13.18	EW	2457136.037	0.3164373	Fig.2
SERIV 110 USNO-B1.0 1414- 0310345	19 28 16.78	+51 25 18.75	14.35-14.90	RRAB	2457526.950	0.304612	Fig.3
SERIV 111 USNO-B1.0 1414- 0311251	19 30 16.64	+51 29 45.78	14.2-14.7	EW	2457232.91	0.6136977	Fig.4
SERIV 113 GSC 03933-01423	19 23 43.85	+58 19 04.61	13.15-14.0	EA	2457323.750	2.3587907	Fig.5
SERIV 114 USNO-B1.0 1410- 0293235	18 30 31.85	+51 04 35.30	15.4-16.1	EW	2457304.756	0.2669843	Fig.6
SERIV 115 GSC 04205-02116	18 00 36.20	+63 30 40.66	12.7-15.3	EA	2457585.911	3.1895074	Fig.7
SERIV 116 USNO-B1.0 1517- 0289620	20 43 30.03	+61 45 22.52	14.3-14.75	DCEP:	2457885.006	2.0997669	Fig.8
SERIV 117 GSC 04255-01111	21 05 22.048	+64 44 38.80	14.6-15.05	EW	2457156.026	0.2888293	Fig.9
SERIV 118 GSC 04222-01778	18 30 04.13	+64 22 23.72	14.5-15.3	EW	2457174.912	0.28245	Fig.10
SERIV 119 GSC 04444-01262	19 15 12.35	+67 46 29.57	13.5-14.32	EA	2457889.020	1.9072471	Fig.11
SERIV 120 USNO-B1.0 1587- 0156583	18 41 06.47	+68 47 37.57	14.10-15.0	RRAB	2457908.906	0.6053578	Fig.12



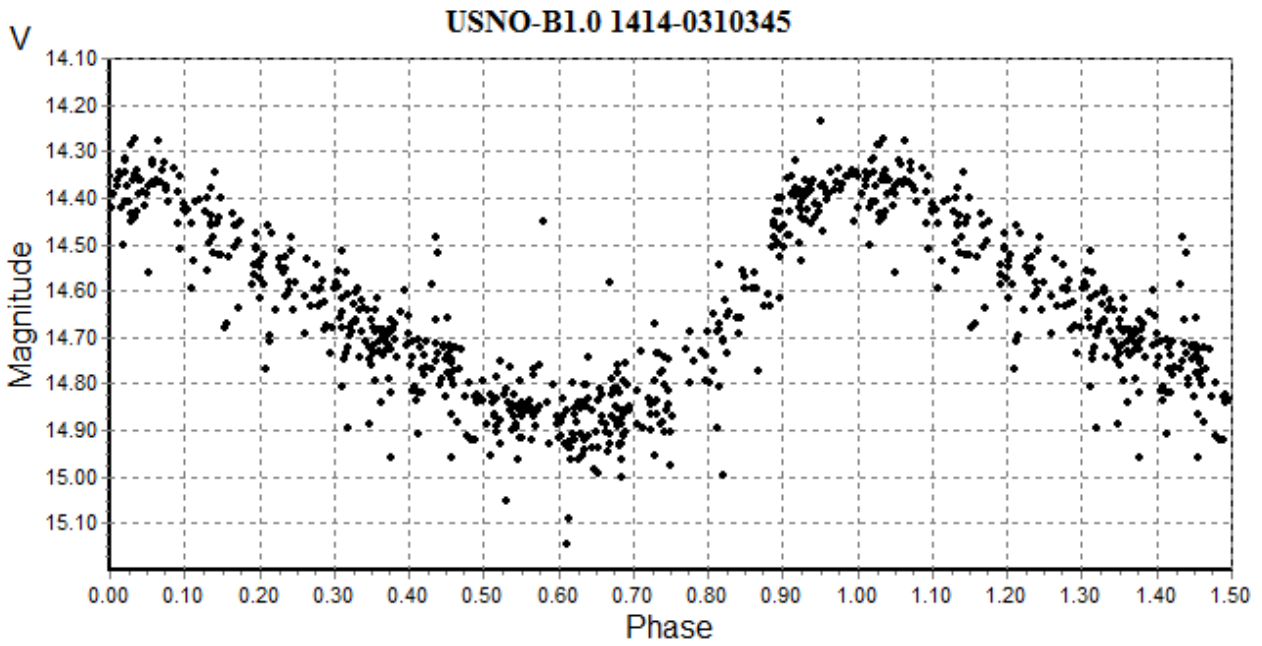
$$C = 2457206.889 + 1.4146104 * E$$

Fig.1 Phase Plot for GSC 04411-02027



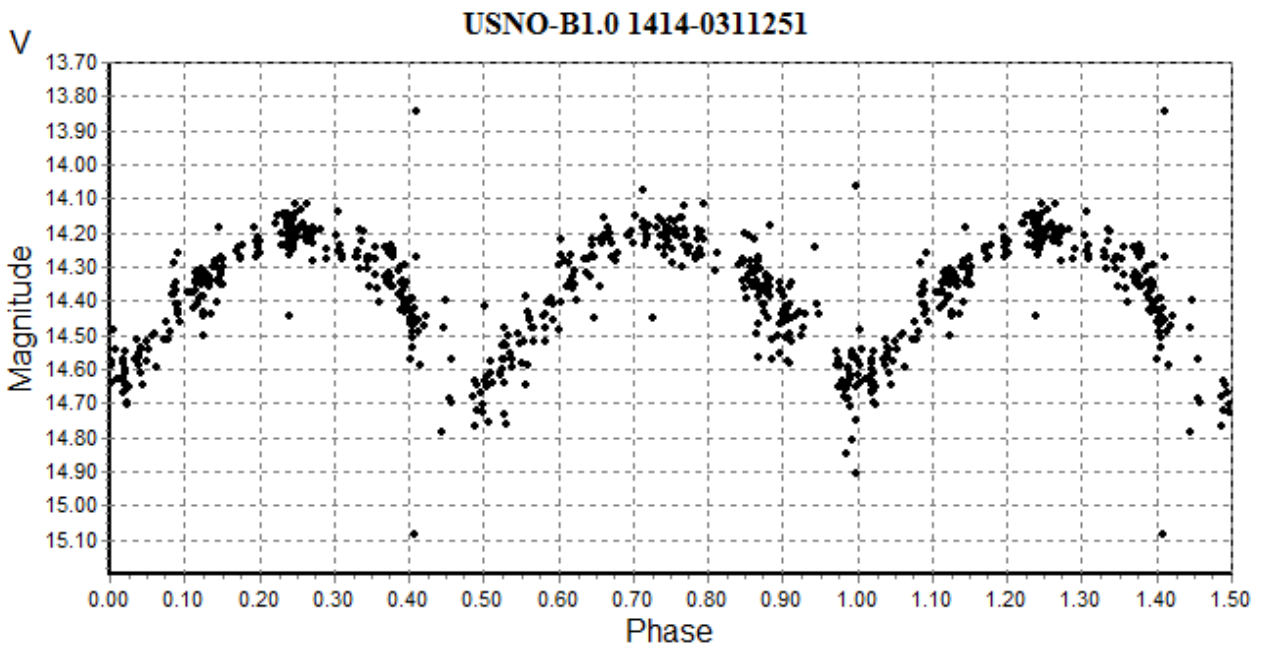
$$C = 2457136.037 + 0.3164373 * E$$

Fig.2 Phase Plot for GSC 03568-00294



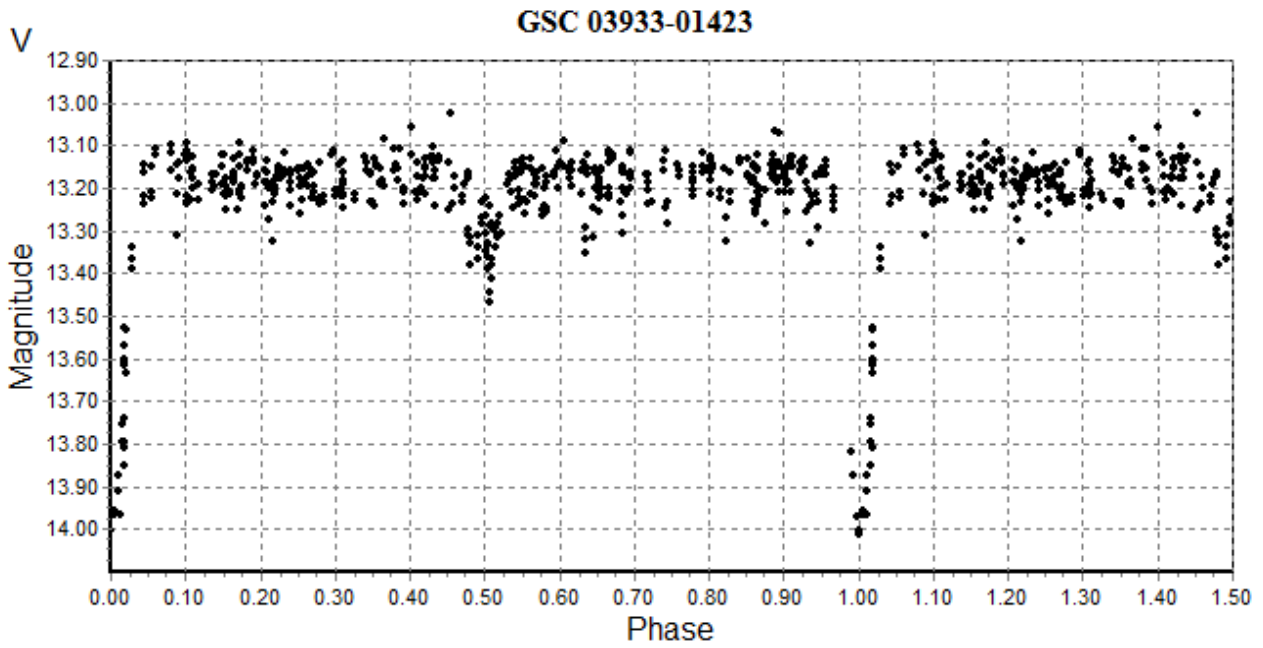
$$C = 2457526.950 + 0.304612 * E$$

Fig.3 Phase Plot for USNO-B1.0 1414-0310345



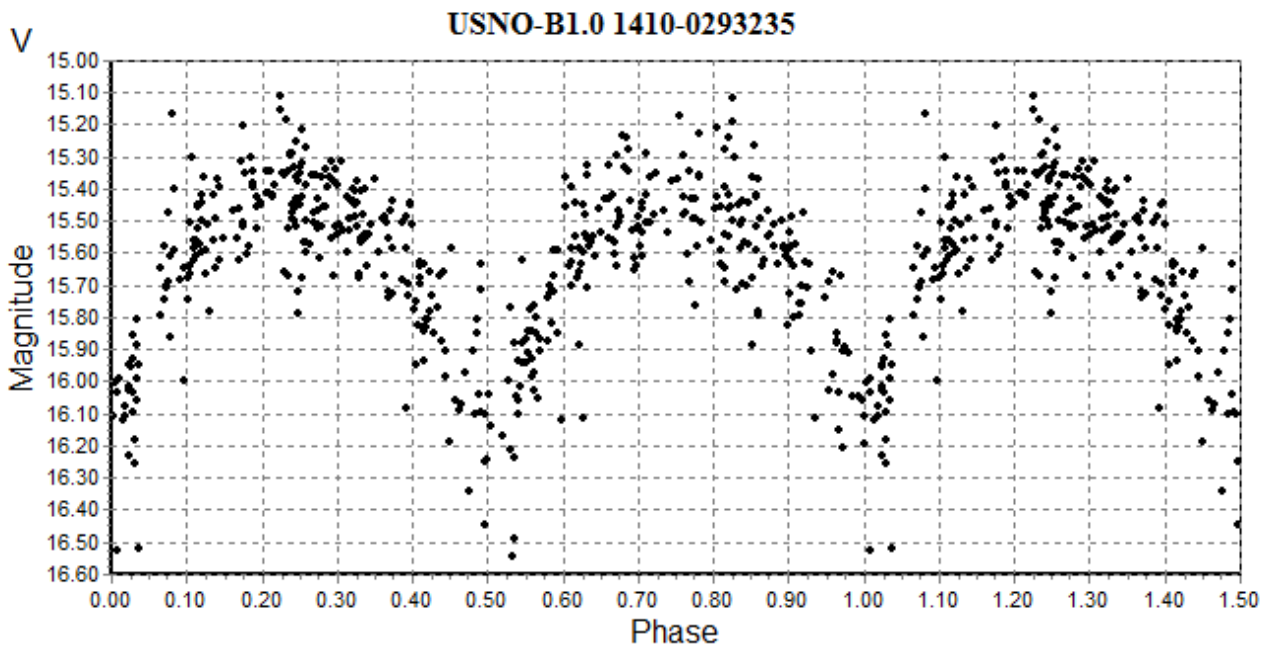
$$C = 2457232.910 + 0.6136977 * E$$

Fig.4 Phase Plot for USNO-B1.0 1414-0311251



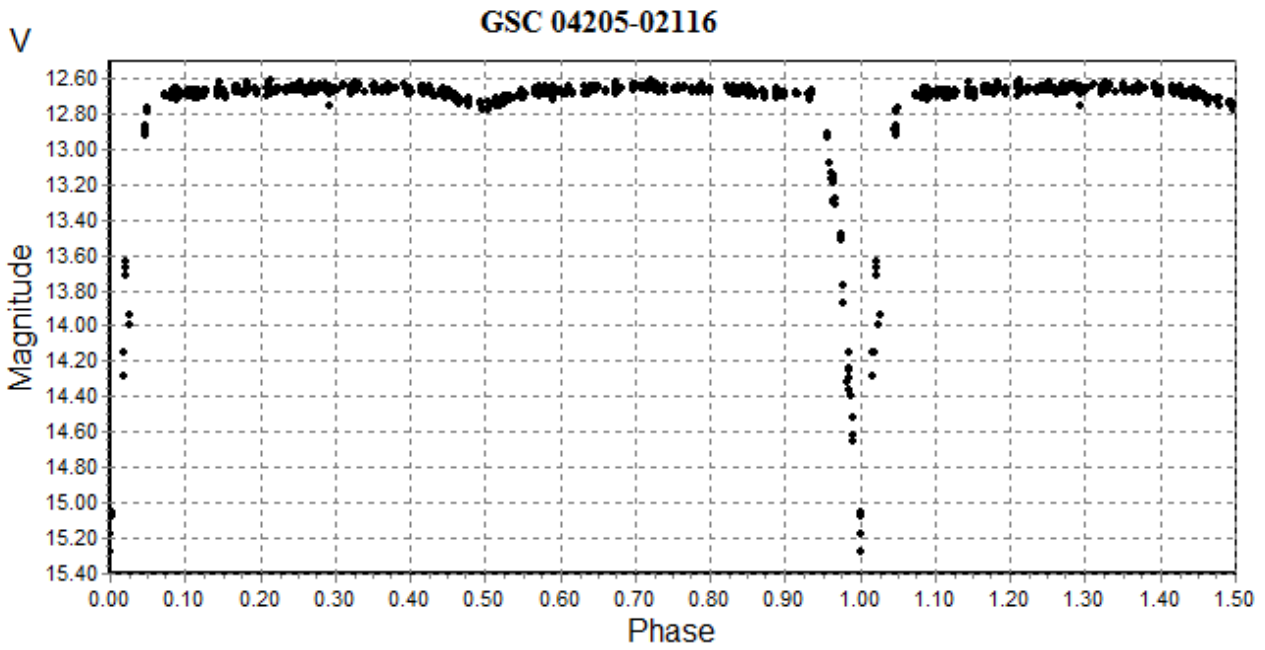
$$C = 2457323.750 + 2.3587907 * E$$

Fig.5 Phase Plot for GSC 03933-01423



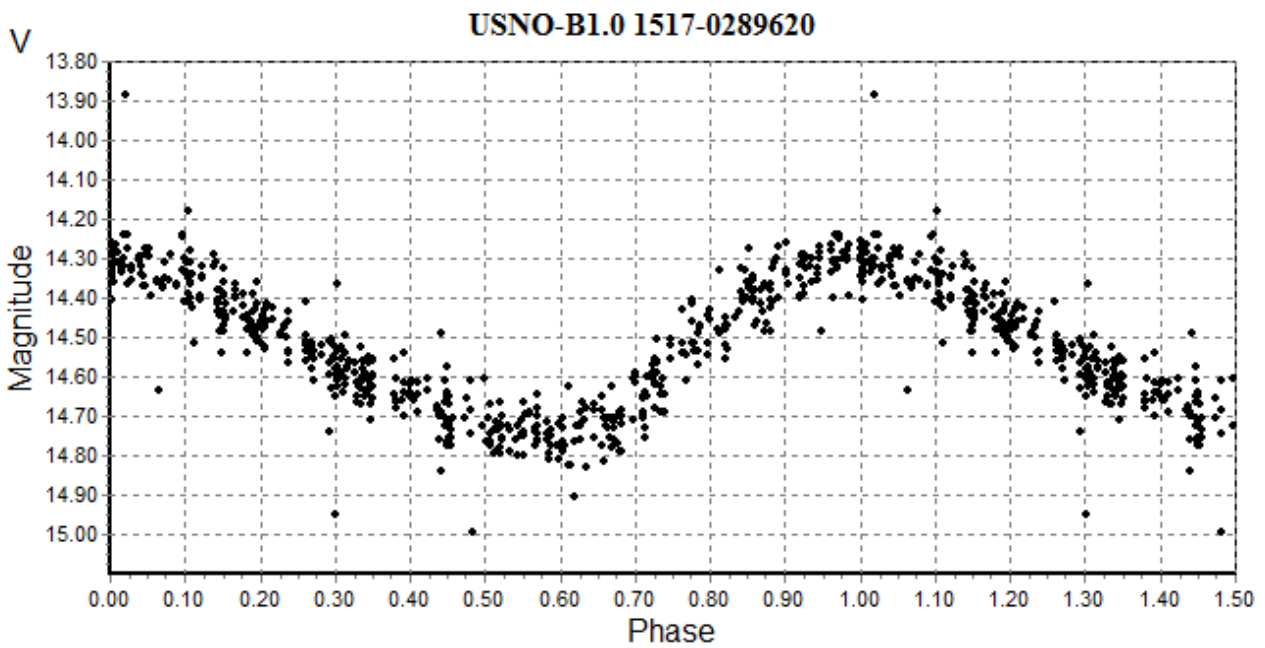
$$C = 2457304.756 + 0.2669843 * E$$

Fig.6 Phase Plot for USNO-B1.0 1410-0293235



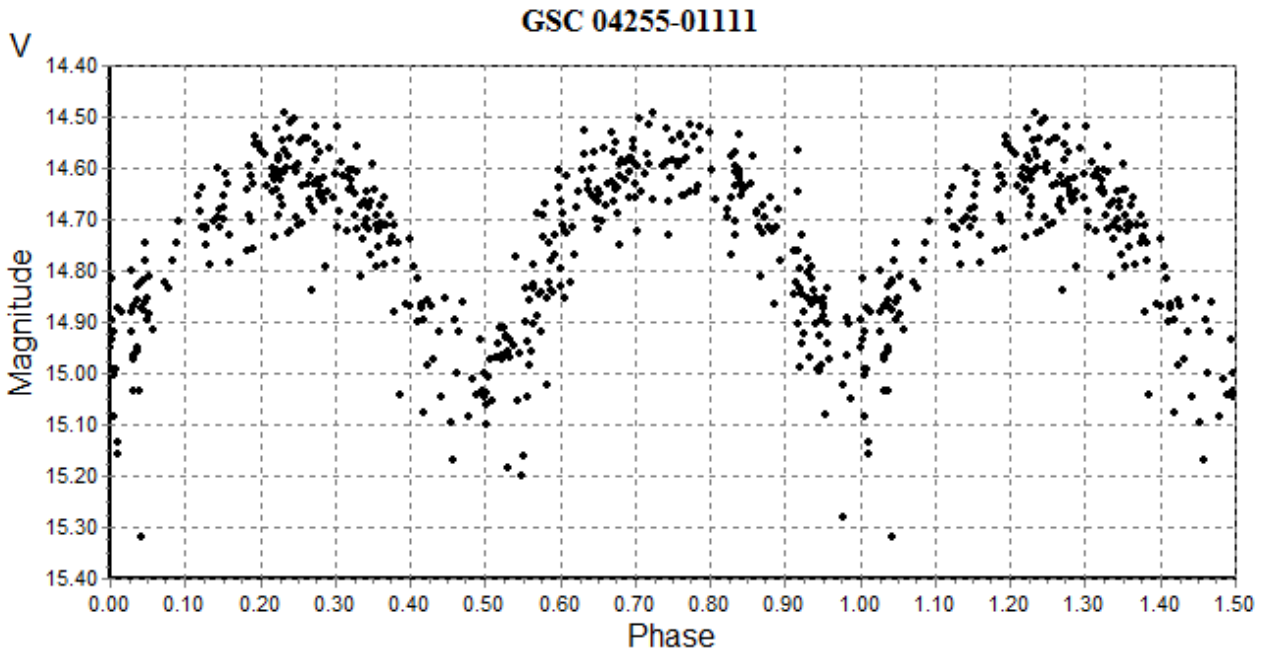
$$C = 2457585.911 + 3.1895074 * E$$

Fig.7 Phase Plot for GSC 04205-02116



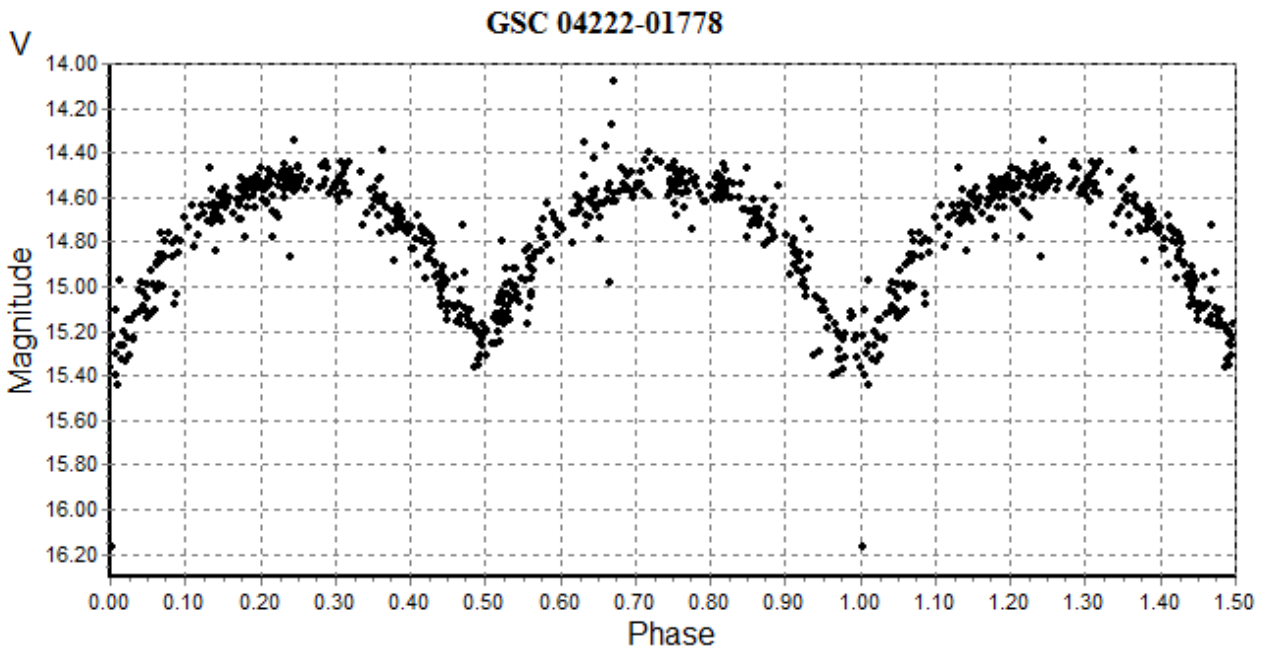
$$C = 2457885.006 + 2.0997669 * E$$

Fig.8 Phase Plot for USNO-B1.0 1517-0289620



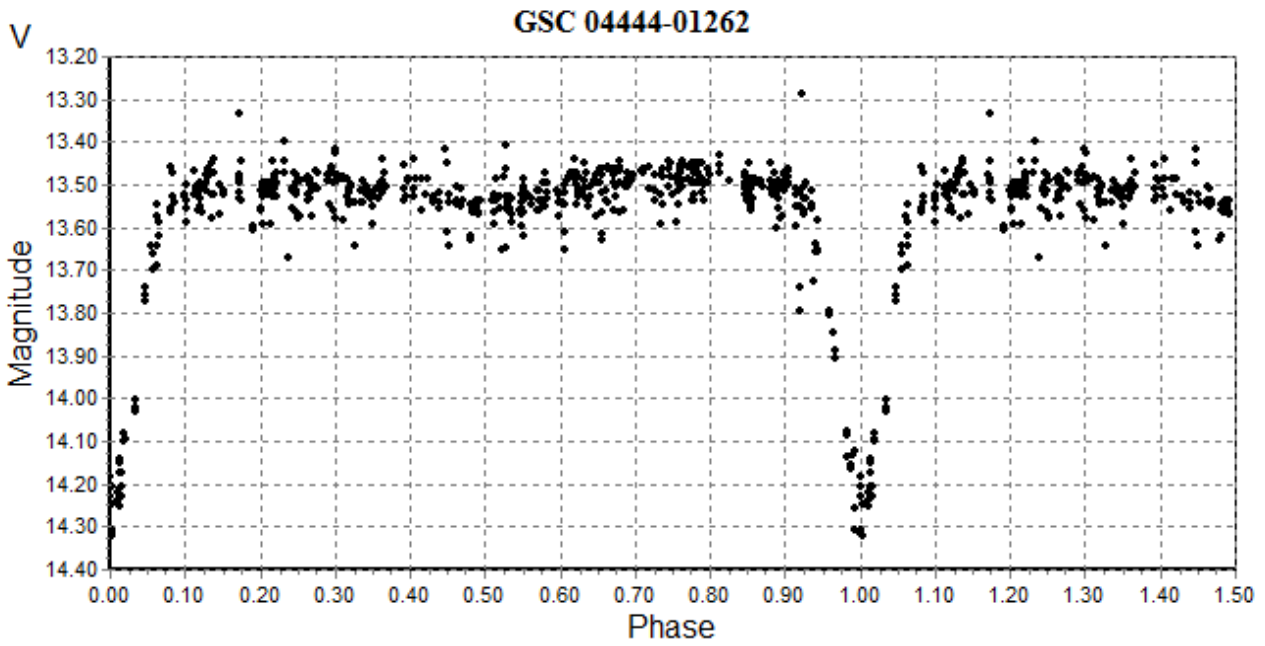
$$C = 2457156.026 + 0.2888293 * E$$

Fig. 9 Phase Plot for GSC 04255-01111



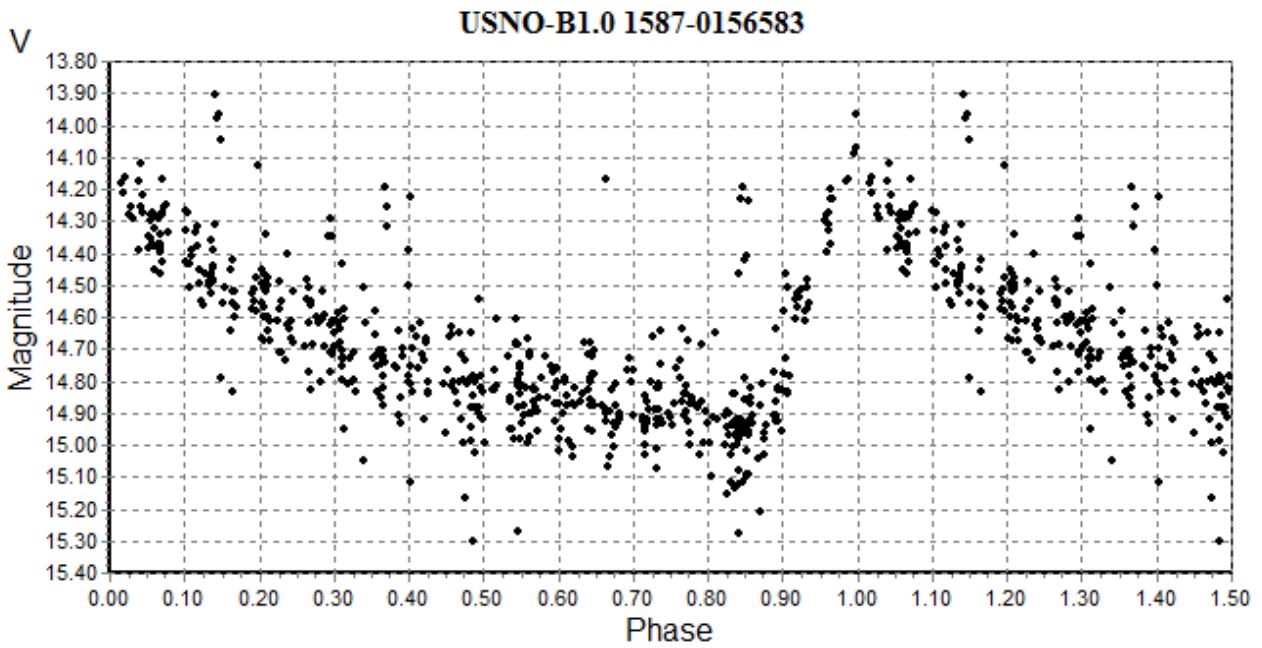
$$C = 2457174.912 + 0.28245 * E$$

Fig.10 Phase Plot for GSC 04222-01778



$$C = 2457889.020 + 1.9072471 * E$$

Fig.11 Phase Plot for GSC 04444-01262



$$C = 2457908.906 + 0.6053578 * E$$

Fig.12 Phase Plot for USNO-B1.0 1587-0156583



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