

10 NEW VARIABLE STARS DETECTED BY CRTS

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ABSTRACT. 10 new variable stars were found by CRTS.

Key words: Stars: new variable stars.

The authors carried out investigation using the time series photometry data from the Catalina Real-Time Transient Survey (CRTS) in 2013-2015. About 3,000 new variable stars were found. The data for 10 the most recently discovered stars are presented in the journal Odessa Astronomical Publications.

SSS_J041936.0-502614

The star was discovered by I.I.Baluk.

The UCAC4 position of the star: RA = $04^{\text{h}}19^{\text{m}}35.937^{\text{s}}$, Dec = $-50^{\circ}26'51''.03$.

The star's catalogue identifiers: the 2MASS identifier – J04193593-5026149; the USNO identifier – B1.0 0395-0035953; the UCAC4 identifier – 198-004300.

The star's variability type: EA, the peak brightness is 15.40^{m} ; the minimum brightness is 16.07^{m} (in the C and V band); the secondary minimum brightness is 15.70^{m} (in the C and V band). The star's light ephemerides are plotted in Figure 1. $D = 0.18$.

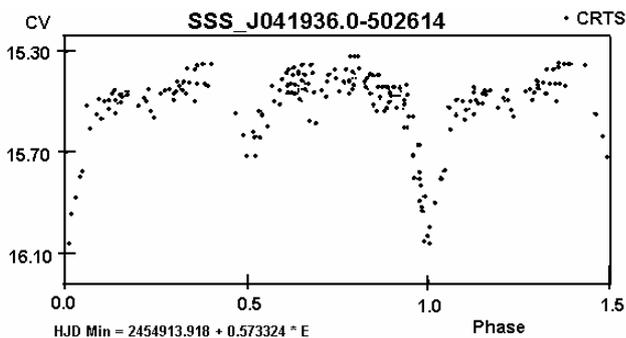


Figure 1

SSS_J065711.3-512110

The star was discovered by I.I.Baluk.

The UCAC4 position of the star: RA = $06^{\text{h}}57^{\text{m}}11.314^{\text{s}}$, Dec = $-51^{\circ}21'10''.47$.

The star's catalogue identifiers: the 2MASS identifier – J06571131-5121104; the USNO identifier – B1.0 0386-0064392; the UCAC4 identifier – 194-009935.

The star's variability type: SRA, the peak brightness is 11.80^{m} ; the minimum brightness is 12.70^{m} (in the C and V band). The star's light ephemerides are plotted in Figure 2. $J-K = 1.35$.

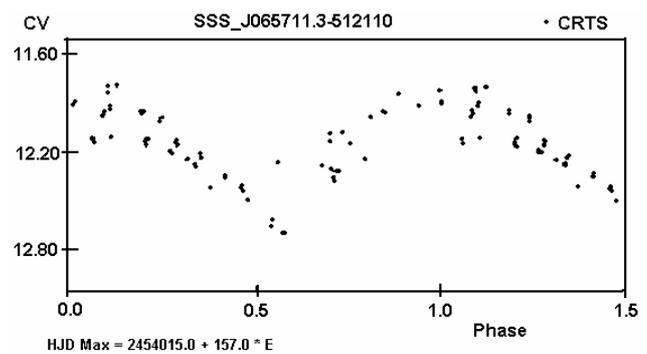


Figure 2

SSS_J195851.4-521601

The star was discovered by I.I.Baluk.

The PPMXL position of the star: RA = $19^{\text{h}}58^{\text{m}}51.384^{\text{s}}$, Dec = $-52^{\circ}16'01''.80$.

The star's catalogue identifiers: the 2MASS identifier – J19585138-5216017; the USNO identifier – B1.0 0377-1050512.

The star's variability type: EW, the peak brightness is 17.10^{m} ; the minimum brightness is 17.40^{m} (in the C and V band).

The star's light ephemerides are plotted in Figure 3.

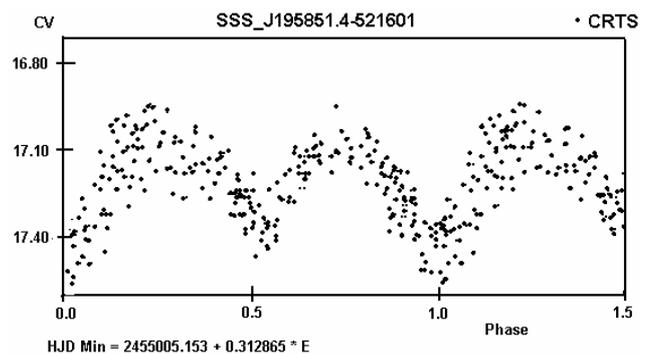


Figure 3

SSS_J020922.2-525228

The star was discovered by A.L.Galinskiy.

The UCAC4 position of the star: RA = $02^{\text{h}}09^{\text{m}}22.139^{\text{s}}$,
Dec = $-52^{\circ}52'28''.37$.

The star's catalogue identifiers: the 2MASS identifier – J02092213-5252284; the USNO identifier – B1.0 0371-0017475; the GSC identifier – 08483-00062; the UCAC4 identifier – 186-001925.

The star's variability type: SR, the peak brightness is 14.90^{m} ; the minimum brightness is 15.29^{m} (in the C and V band). The star's light ephemerides are plotted in Figure 4. J-K = 1.18.

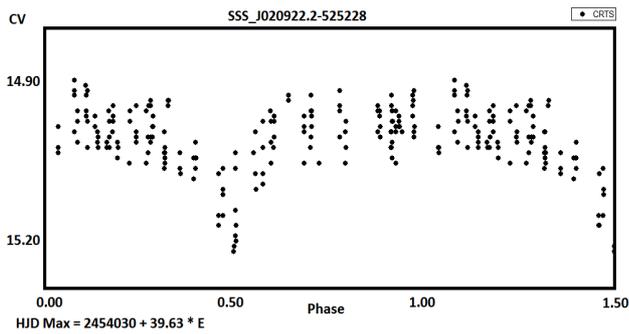


Figure 4

SSS_J035759.1-515819

The star was discovered by A.L.Galinskiy.

The PPMXL position of the star: RA = $03^{\text{h}}57^{\text{m}}59.139^{\text{s}}$,
Dec = $-51^{\circ}58'19''.39$.

The star's catalogue identifiers: the 2MASS identifier – J03575913-5158193; the USNO identifier – B1.0 0380-0047211; the GSC identifier – 08073-00336.

The star's variability type: SR, the peak brightness is 15.50^{m} ; the minimum brightness is 15.98^{m} (in the C and V band). The star's light ephemerides are plotted in Figure 5. J-K = 1.21.

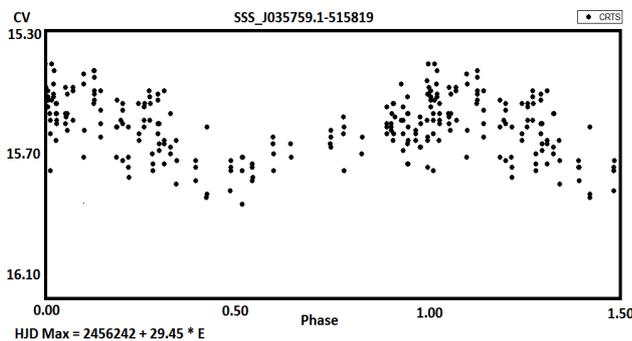


Figure 5

SSS_J073103.3-525443

The star was discovered by A.L.Galinskiy.

The UCAC4 position of the star: RA = $07^{\text{h}}31^{\text{m}}03.297^{\text{s}}$,
Dec = $-52^{\circ}54'43''.63$.

The star's catalogue identifiers: the 2MASS identifier – J07310329-5254436; the USNO identifier – B1.0 0370-0086299; the UCAC4 identifier – 186-012398.

The star's variability type: SR, the peak brightness is 12.10^{m} ; the minimum brightness is 12.90^{m} (in the C and V band). The star's light ephemerides are plotted in Figure 6. J-K = 1.27.

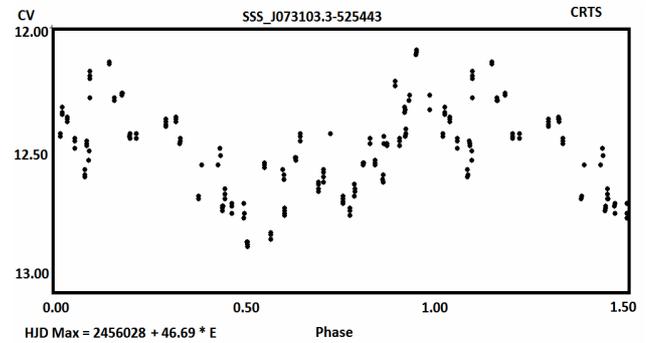


Figure 6

SSS_J100550.3-282525

The star was discovered by A.L.Galinskiy.

The UCAC4 position of the star: RA = $10^{\text{h}}05^{\text{m}}50.317^{\text{s}}$,
Dec = $-28^{\circ}25'25''.14$.

The star's catalogue identifiers: the 2MASS identifier – J10055031-2825251; the USNO identifier – B1.0 0615-0234047; the GSC identifier – 06629-01092; the UCAC4 identifier – 308-062711.

The star's variability type: EA, the peak brightness is 14.59^{m} ; the minimum brightness is 14.90^{m} (in the C and V band); the secondary minimum brightness is 14.69^{m} (in the C and V band). The star's light ephemerides are plotted in Figure 7. D = 0.16.

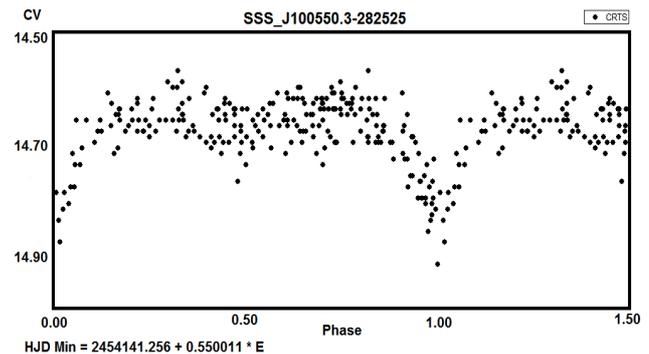


Figure 7

SSS_J101916.8-281924

The star was discovered by A.L.Galinskiy.

The UCAC4 position of the star: RA = $10^{\text{h}}19^{\text{m}}16.838^{\text{s}}$,
Dec = $-28^{\circ}19'25''.02$.

The star's catalogue identifiers: the 2MASS identifier – J10191683-2819250; the USNO identifier – B1.0 0616-0240796; the GSC identifier – 06630-00805; the UCAC4 identifier – 309-061750.

The star's variability type: EB, the peak brightness is 14.30^m; the minimum brightness is 14.60^m (in the C and V band); the secondary minimum brightness is 14.45^m (in the C and V band).

The star's light ephemerides are plotted in Figure 8.

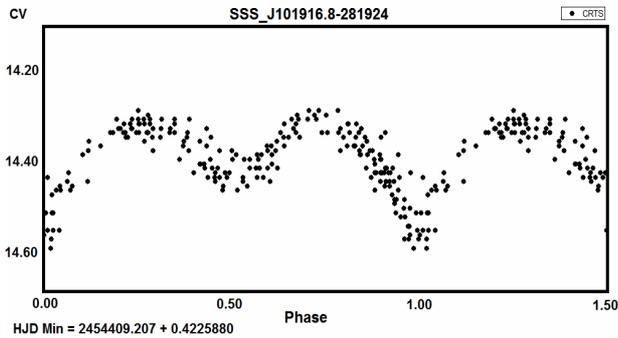


Figure 8

SSS_J073149.9-505012

The star was discovered by A.L.Galinskiy.

The UCAC4 position of the star: RA = 07^h31^m49.879^s, Dec = -50°50'12".48.

The star's catalogue identifiers: the 2MASS identifier – J07314986-5050124; the USNO identifier – B1.0 0391-0077713; the GSC identifier – 08145-00452; the UCAC4 identifier – 196-013096.

The star's variability type: SRA, the peak brightness is 11.00^m; the minimum brightness is 12.10^m (in the C and V band). The star's light ephemerides are plotted in Figure 9. J-K = 1.36.

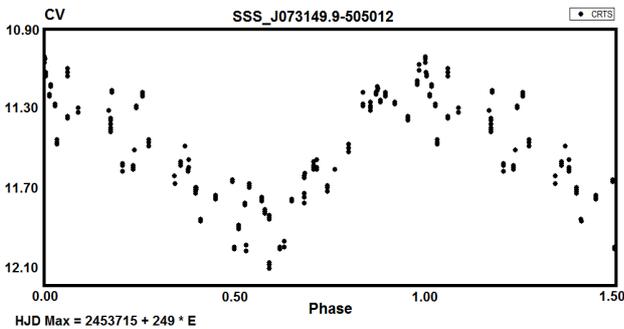


Figure 9

SSS_J200359.4-432015

The star was discovered by A.L.Galinskiy.

The UCAC4 position of the star: RA = 20^h03^m59.430^s, Dec = -43°20'15".83.

The star's catalogue identifiers: the 2MASS identifier – J20035942-4320158; the USNO identifier – B1.0 0466-0733718; the GSC identifier – 07959-00363; the UCAC4 identifier – 234-176574.

The star's variability type: EB, the peak brightness is 13.85^m; the minimum brightness is 14.05^m; the secondary minimum brightness is 13.95^m (in the C and V band).

The star's light ephemerides are plotted in Figure 10.

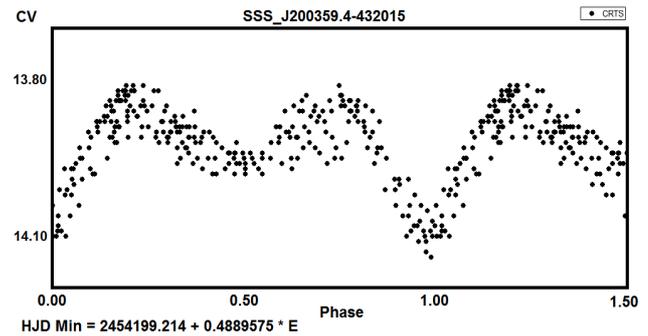


Figure 10

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References

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