

New Algol-Type Eclipsing Binaries III

[A. V. Khruslov](#)

Russia, Tula

Received: 12.09.2008; accepted: 19.11.2008

(E-mail for contact: khruslov@bk.ru)

#	Name	Other	Coord (J2000)	Type	Max	Min	System	Period	Epoch (JD)	type	Sp	Comment	L.Curve	Find.Chart	Data
1		GSC 2280-00506	00 49 23.12, +32 00 36.6	EA	13.9	14.5	R	1.587	2451479.957	min		Comm. 1	1.PNG	chart1.PNG	NSVS 6365610
2		TYC 2284 00373 1	00 52 17.31, +35 16 04.2	EA	11.8	12.5	R	0.74532	2451462.627	min		Comm. 2	2.PNG	chart2.PNG	NSVS 6368376
3		GSC 2802-00392	00 54 17.81, +39 45 10.3	EA	12.8	13.2	R	3.760	2451489.80	min		Comm. 3	3.PNG	chart3.PNG	NSVS 3795152
4		TYC 2290 00900 1	01 05 37.98, +36 49 05.9	EA	11.9	12.4	R	0.52854	2451478.765	min		Comm. 4	4.PNG	chart4.PNG	NSVS 3804916 NSVS 6378197 NSVS 6430145
5		TYC 2299 01028 1	01 16 48.08, +34 18 10.4	EA/RS	11.2	11.55	R	1.4290	2451480.560	min		Comm. 5	5.PNG	chart5.PNG	NSVS 6438680
6		TYC 2814 01959 1	01 35 19.25, +37 46 37.7	EA	11.4	11.75	R	0.90075	2451476.783	min		Comm. 6	6.PNG	chart6.PNG	NSVS 3835191 NSVS 6452832
7		TYC 2815 01348 1	01 42 25.32, +37 55 24.8	EA	11.0	11.8	R	0.9264	2451475.665	min		Comm. 7	7.PNG	chart7.PNG	NSVS 3842089 NSVS 6457961
8		GSC 1763-00073	01 53 39.21, +29 57 57.4	EA/RS	12.5	12.8	R	7.036	2451507.55	min		Comm. 8	8.PNG	chart8.PNG	NSVS 6478354 NSVS 6504872
9		TYC 1778 00901 1	02 22 26.74, +29 29 11.5	EA	11.8	12.3	R	2.94935	2451481.429	min		Comm. 9	9.PNG	chart9.PNG	vis.txt NSVS 6552621 NSVS 6524242
10		TYC 2587 00873 1	16 28 23.04, +36 56 01.8	EA	11.7	12.05	R	1.9129	2451393.535	min		Comm. 10	10.PNG	chart10.PNG	NSVS 7913010

Comments:

1. $\text{MinII} = 14.35$, $D = 0.07P$. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.
2. $\text{MinII} = 11.95$, $D = 0.10P$. X-ray source 1RXS J005217.8+351551 .
3. $\text{MinII} = 12.9$, $D = 0.10P$.
4. $\text{MinII} = 12.35$, $D = 0.13P$. X-ray source 1RXS J010537.3+364857. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.
5. $\text{MinII} = 11.5$, $D = 0.10P$. X-ray source 1RXS J011647.3+341816. The RS-type activity in maximum brightness.
6. $\text{MinII} = 11.65$, $D = 0.11P$. Identification with the X-ray source 1RXS J013521.5+374605 is possible.
7. $\text{MinII} = 11.15$, $D = 0.16P$.
8. Minimum (eclipsing) = 12.75, $D = 0.05P$. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.
9. $D = 0.06P$. The period value is based on the NSVS data and our additional visual observations. (29 estimates, JD2454303-2454365. Comparison stars: TYC 1778 00716 1 and TYC 1778 01480 1; magnitudes of the comparison stars were taken from the Tycho-2 catalog. Telescope: 15-cm reflector.) $\text{Mag}(\text{vis}) = 11.8 - 12.5$. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

10. $D = 0.11P$.

Remarks:

I present the discovery of 10 new Algol-type eclipsing binaries (EA). A search for variables was carried out in the publicly available data of the Northern Sky Variability Survey (NSVS, Wozniak et al., 2004, also see <http://skydot.lanl.gov/nsvs>). These observations were analyzed using the period-search software developed by Dr. V.P. Goranskij for Windows environment. The coordinates were drawn either from the Tycho-2 or from the 2MASS catalogs.

References:

Wozniak, P.R., Vestrand, W.T., Akerlof, C.W. et al., 2004, *Astron. J.*, 127, 2436