

New Short Periodic Eclipsing Binaries II

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#	Name	Other	Coord (J2000)	Type	Max	Min	System	Period	Epoch (JD)	type	Sp	Comment	L.Curve	Find.Chart	Data
1		GSC 2315-00214	01 53 58.72, +34 15 03.0	EW	13.0	13.4	R	0.31781	2451482.830	min		Comm. 1	1.PNG	chart1.PNG	NSVS 6479156
2		GSC 2830-02240	02 19 13.83, +37 54 05.2	EW	13.65	14.2	R	0.35764	2451512.954	min		Comm. 2	2.PNG	chart2.PNG	NSVS 3983829 NSVS 6548837
3		TYC 2335 00165 1	02 28 44.32, +37 28 59.3	EW	12.0	12.4	R	0.6780	2451504.76	min		Comm. 3	3.PNG	chart3.PNG	NSVS 6556853 NSVS 3993106
4		TYC 2328 01143 1	02 38 24.78, +32 07 41.7	EW	11.15	11.4	R	0.6633	2451494.82	min		Comm. 4	4.PNG	chart4.PNG	NSVS 6566468
5		GSC 3705-00275	03 06 21.69, +54 47 02.2	EW	13.1	13.45	R	0.30386	2451504.954	min		Comm. 5	5.PNG	chart5.PNG	NSVS 1943969
6		GSC 4074-00946	03 30 19.19, +65 54 02.8	EW:	13.4	13.9	R	1.360	2451499.24	min		Comm. 6	6.PNG	chart6.PNG	NSVS 2004948 NSVS 496582 NSVS 2040879
7		GSC 3718-00687	04 08 13.91, +54 12 33.9	EW	13.5	14.0	R	0.9210	2451517.65	min		Comm. 7	7.PNG	chart7.PNG	NSVS 2094431
8		TYC 4337 00032 1	04 37 39.63, +71 58 46.2	EW	10.55	10.85	R	0.77337	2451525.04	min		Comm. 8	8.PNG	chart8.PNG	NSVS 530228
9		GSC 4351-01034	05 33 44.92, +71 37 28.8	EW	13.8	14.3	R	0.6640	2451508.525	min		Comm. 9	9.PNG	chart9.PNG	NSVS 552140 NSVS 644473
10		GSC 4348-00839	05 44 49.15, +71 08 09.6	EB:	13.05	13.3	R	1.0417	2451519.537	min		Comm. 10	10.PNG	chart10.PNG	NSVS 647244
11		TYC 4098 02020 1	05 47 51.53, +62 11 32.9	EW	12.25	12.6	R	0.65856	2451517.627	min		Comm. 11	11.PNG	chart11.PNG	NSVS 2206413 NSVS 2233011
12		GSC 4529-01407	06 20 00.80, +77 22 53.5	EW:	13.6	13.9	R	0.5008	2451514.11	min		Comm. 12	12.PNG	chart12.PNG	NSVS 593704 NSVS 629886
13		GSC 4366-01366	06 42 43.24, +72 00 03.2	EW	12.65	13.00	R	0.85110	2451520.863	min		Comm. 13	13.PNG	chart13.PNG	NSVS 666717
14		TYC 4362 00026 1	06 43 52.73, +70 21 50.2	EW	12.10	12.35	R	0.39745	2451525.978	min		Comm. 14	14.PNG	chart14.PNG	NSVS 666256
15		GSC 4366-00032	06 44 33.90, +71 37 02.0	ELL	12.85	13.1	R	0.32805	2451525.197	min		Comm. 15	15.PNG	chart15.PNG	NSVS 667115
16		GSC 3404-00088	07 09 01.20, +50 37 54.4	EB	13.8	14.6	R	0.6524	2451533.683	min		Comm. 16	16.PNG	chart16.PNG	NSVS 4640018 NSVS 4660050
17		TYC 4132 00362 1	08 19 23.16, +66 12 36.2	EW	12.22	12.53	R	0.316067	2451518.739	min		Comm. 17	17.PNG	chart17.PNG	NSVS 764155 NSVS 698208 NSVS 2460434
18		GSC 2514-00958	10 27 02.16, +33 16 58.7	EA	12.75	13.2	R	0.52834	2451484.538	min		Comm. 18	18.PNG	chart18.PNG	NSVS 7526751
19		GSC 2512-00059	10 37 45.89, +32 20 42.1	EW	14.0	14.6	R	0.40660	2451475.948	min		Comm. 19	19.PNG	chart19.PNG	NSVS 7530960
20		GSC 4399-00956	11 49 25.88, +72 34 01.4	EW	13.25	13.75	R	0.33967	2451414.113	min		Comm. 20	20.PNG	chart20.PNG	NSVS 881196
21		GSC 3469-00229	13 43 54.59, +50 28 36.6	EA	12.9	13.4	R	0.544755	2451413.624	min		Comm. 21	21.PNG	chart21.PNG	NSVS 5074370
22		TYC 3030 00284 1	13 52 09.71, +41 17 41.6	EW	11.15	11.55	R	0.96213	2451430.975	min		Comm. 22	22.PNG	chart22.PNG	NSVS 5091229
23		GSC 3467-00328	13 55 08.08, +48 26 01.0	EW	13.6	14.1	R	0.36023	2451422.539	min		Comm. 23	23.PNG	chart23.PNG	NSVS 5108924
24		GSC 3027-00925	13 56 42.53, +39 34 35.7	EW	13.3	13.7	R	0.38610	2451404.625	min		Comm. 24	24.PNG	chart24.PNG	NSVS 5092985
25		GSC 3027-00599	13 58 12.20, +39 44 33.5	EW	13.5	14.0	R	0.35834	2451404.856	min		Comm. 25	25.PNG	chart25.PNG	NSVS 5093463
26		GSC 3030-01103	13 59 20.36, +41 49 56.5	EW	13.1	13.4	R	0.38136	2451396.623	min		Comm. 26	26.PNG	chart26.PNG	NSVS 5093747

27	GSC 3467-00403	13 59 43.26, +49 49 42.1	EW	14.2	14.7	R	0.3428	2451419.762	min	Comm. 27	27.PNG	chart27.PNG	NSVS 5110338
28	GSC 3464-00242	13 59 51.04, +47 06 35.6	EW	14.1	14.9	R	0.30316	2451433.612	min	Comm. 28	28.PNG	chart28.PNG	NSVS 5110496
29	GSC 2548-00889	14 00 48.19, +33 47 22.1	EB:	14.4	15.5	R	0.40129	2451428.913	min	Comm. 29	29.PNG	chart29.PNG	NSVS 7709769
30	GSC 3040-00813	14 06 45.54, +43 06 44.3	EB	13.5	13.9	R	0.53756	2451389.637	min	Comm. 30	30.PNG	chart30.PNG	NSVS 5096198
31	GSC 3475-01036	14 16 00.17, +49 14 16.3	EW	14.0	14.6	R	0.25145	2451421.597	min	Comm. 31	31.PNG	chart31.PNG	NSVS 5115773
32	GSC 3041-00854	14 16 46.31, +43 08 45.0	EW	13.4	13.7	R	0.26475	2451399.955	min	Comm. 32	32.PNG	chart32.PNG	NSVS 5099705
33	GSC 3864-00107	14 59 09.34, +55 08 48.1	EW	14.3	14.9	R	0.27077	2451400.953	min	Comm. 33	33.PNG	chart33.PNG	NSVS 2749094
34	GSC 3861-00642	15 03 12.09, +53 33 54.2	EW	12.8	13.1	R	0.311445	2451372.668	min	Comm. 34	34.PNG	chart34.PNG	NSVS 2750971 NSVS 5140185
35	GSC 3058-00735	15 20 15.13, +43 23 48.6	EW	12.6	12.85	R	0.44664	2451373.940	min	Comm. 35	35.PNG	chart35.PNG	NSVS 5162544
36	GSC 3058-01140	15 30 07.95, +43 15 00.5	EW	12.9	13.4	R	0.62265	2451400.538	min	Comm. 36	36.PNG	chart36.PNG	NSVS 5166557
37	GSC 3059-00748	15 39 17.41, +43 45 45.3	EW	12.7	12.9	R	0.34189	2451404.765	min	Comm. 37	37.PNG	chart37.PNG	NSVS 5170269
38	TYC 3060 00405 1	15 48 35.03, +43 28 45.0	EW	10.7	10.9	R	0.36281	2451393.654	min	Comm. 38	38.PNG	chart38.PNG	NSVS 5174191 NSVS 5222764
39	GSC 3490-00705	15 53 09.83, +46 52 05.7	EW	13.7	14.1	R	0.3730	2451390.675	min	Comm. 39	39.PNG	chart39.PNG	NSVS 5196233 NSVS 5204643
40	GSC 3876-01271	15 57 09.14, +58 10 00.7	EW	13.7	14.2	R	0.3329	2451375.700	min	Comm. 40	40.PNG	chart40.PNG	NSVS 2816696
41	TYC 3497 01342 1	16 10 33.68, +51 44 00.8	EW	11.1	11.3	R	0.43551	2451404.831	min	Comm. 41	41.PNG	chart41.PNG	NSVS 5212956
42	TYC 3068 00970 1	16 22 40.76, +43 01 08.1	EW	12.2	12.5	R	0.41409	2451373.610	min	Comm. 42	42.PNG	chart42.PNG	NSVS 5238959
43	TYC 3069 01654 1	16 34 20.90, +42 44 33.4	EW	10.77	11.05	R	0.36362	2451386.817	min	Comm. 43	43.PNG	chart43.PNG	NSVS 5245285
44	GSC 3499-01631	16 35 47.39, +45 24 58.2	EW	13.7	14.3	R	0.3388	2451339.853	min	Comm. 44	44.PNG	chart44.PNG	NSVS 5245754
45	TYC 3066 00543 1	16 38 50.60, +40 57 58.4	EW	12.25	12.45	R	0.36332	2451390.958	min	Comm. 45	45.PNG	chart45.PNG	NSVS 5247969
46	TYC 3500 01461 1	16 50 34.13, +45 46 36.5	EW	10.42	10.67	R	0.67945	2451412.848	min	Comm. 46	46.PNG	chart46.PNG	NSVS 5253582 NSVS 5281330
47	GSC 3520-01008	17 21 13.63, +51 09 50.4	EW	13.4	13.8	R	0.40095	2451398.743	min	Comm. 47	47.PNG	chart47.PNG	NSVS 5310393
48	GSC 3513-01084	17 36 01.68, +47 02 17.7	EW	14.1	14.7	R	0.29111	2451389.140	min	Comm. 48	48.PNG	chart48.PNG	NSVS 5318453
49	TYC 2626 02082 1	18 15 49.52, +32 18 38.3	EB	12.35	12.8	R	0.62945	2451389.765	min	Comm. 49	49.PNG	chart49.PNG	NSVS 8100445
50	GSC 2632-00292	18 30 31.54, +33 55 28.7	EW	13.2	13.6	R	0.40981	2451413.553	min	Comm. 50	50.PNG	chart50.PNG	NSVS 8117989
51	GSC 3567-01035	20 07 07.31, +50 34 01.3	EW:	12.5	12.9	R	1.0786	2451427.93	min	Comm. 51	51.PNG	chart51.PNG	NSVS 5662031

Comments:

1. MinII = 13.3.
2. MinII = 14.1.
3. MinII = 12.35.
4. MinII = 11.4.
5. MinII = 13.45.
6. MinII = 13.85.
7. MinII = 13.85.

8. MinII = 10.85.
9. MinII = 14.2. Primary eclipse might be the secondary.
10. MinII = 13.15.
11. MinII = 12.55.
12. MinII = 13.9.
13. MinII = 12.95.
14. MinII = 12.35. Primary eclipse might be the secondary.
15. MinII = 13.1.
16. MinII = 14.1.
17. MinII = 12.48.
18. MinII = 13.1.
19. MinII = 14.5.
20. MinII = 13.65.
21. MinII = 13.0.
22. MinII = 11.5. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis. The use of these data considerably increases the number of available observations without deteriorating quality and allows us to determine the period more accurately.
23. MinII = 14.0. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis. The use of these data considerably increases the number of available observations without deteriorating quality and allows us to determine the period more accurately.
24. MinII = 13.7. Primary eclipse might be the secondary.
25. MinII = 13.8.
26. MinII = 13.35.
27. MinII = 14.6.
28. MinII = 14.6.
29. MinII = 14.7. EA type is possible.
30. MinII = 13.7.
31. MinII = 14.5.
32. MinII = 13.6. Identification with the X-ray source 1RXS J141645.9+430807 is possible.
33. MinII = 14.9.
34. MinII = 13.05. 1RXS J150312.2+533351.

35. MinII = 12.82. Primary eclipse might be the secondary.
36. MinII = 13.25. O'Connell effect, MaxII = 13.05.
37. MinII = 12.85.
38. MinII = 10.9. Primary eclipse might be the secondary. 1RXS J154834.7+432853.
39. MinII = 14.1.
40. MinII = 14.0.
41. MinII = 11.3.
42. MinII = 12.45.
43. MinII = 11.05. 1RXS J163420.0+424425.
44. MinII = 14.3. Primary eclipse might be the secondary.
45. MinII = 12.45. Primary eclipse might be the secondary.
46. MinII = 10.62:.
47. MinII = 13.75.
48. MinII = 14.6:.
49. MinII = 12.45.
50. MinII = 13.5.
51. MinII = 12.9. Primary eclipse might be the secondary. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis. The use of these data considerably increases the number of available observations without deteriorating quality and allows us to determine the period more accurately.

Remarks:

I present the discovery of 51 new short-period eclipsing binaries (mostly EW). 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 2MASS catalogs.

References:

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