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New Short Periodic Eclipsing Binaries

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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 2320-01389	02 02 40.08, +36 42 40.9	EW	13.7	14.2	R	0.3058	2451478.76	min		Comm. 1	1.jpg	chart1.jpg	NSVS 6486189
2		GSC 2316-00946	02 03 12.71, +34 30 01.0	EW	14.1	14.6	R	0.35975	2451483.807	min		Comm. 2	2.jpg	chart2.jpg	NSVS 6486512
3		GSC 2317-00045	02 06 47.29, +33 49 41.8	EW	12.5	12.85	R	0.4958	2451482.715	min		Comm. 3	3.jpg	chart3.jpg	NSVS 6489201
4		TYC 2321 00257 1	02 07 20.03, +35 38 55.4	EW	10.85	11.30	R	0.38970	2451478.78	min		Comm. 4	4.jpg	chart4.jpg	NSVS 6489636
5		GSC 2313-00263	02 07 21.19, +32 02 02.5	EW:	12.95	13.40	R	0.6656:	2451473.975	min		Comm. 5	5.jpg	chart5.jpg	NSVS 6489625
6		GSC 2834-00434	02 13 05.43, +40 49 31.2	EW	13.9	14.5	R	0.39428	2451509.930	min		Comm. 6	6.jpg	chart6.jpg	NSVS 3978726
7		GSC 2331-01099	02 31 45.31, +34 20 52.6	EW	13.7	14.4	R	0.47273	2451490.731	min		Comm. 7	7.jpg	chart7.jpg	NSVS 6560105
8		TYC 2323 00199 1	02 32 15.17, +30 16 52.3	EW	12.0	12.3	R	0.36706	2451501.705	min		Comm. 8	8.jpg	chart8.jpg	NSVS 6561433 NSVS 6530861
9		GSC 2328-01114	02 37 05.67, +33 08 44.8	EW	14.1	14.8	R	0.29608	2451497.614	min		Comm. 9	9.jpg	chart9.jpg	NSVS 6565020
10		GSC 3706-00288	03 07 51.83, +55 04 37.8	EB	13.7	14.5	R	2.083	2451524.03	min		Comm. 10	10.jpg	chart10.jpg	NSVS 1945101
11		TYC 3715 00403 1	03 26 10.61, +59 34 42.5	EW:	10.5	10.95	R	0.6058	2451447.79	min		Comm. 11	11.jpg	chart11.jpg	NSVS 1959852
12		GSC 3465-00426	14 09 00.53, +45 18 37.2	EW	13.1	13.55	R	0.34741	2451438.735	min		Comm. 12	12.jpg	chart12.jpg	NSVS 5096763 NSVS 5113854
13		TYC 3041 00224 1	14 23 35.26, +43 39 40.6	EB	11.90	12.35	R	0.58987	2451399.545	min		Comm. 13	13.jpg	chart13.jpg	NSVS 5102018
14		TYC 3476 01223 1	14 43 51.23, +47 43 02.9	EW	9.18	9.48	R	0.38769	2451421.594	min		Comm. 14	14.jpg	chart14.jpg	NSVS 5133148
15		GSC 3049-00916	14 44 48.58, +44 39 00.3	EB	12.60	13.05	R	0.49340	2451352.765	min		Comm. 15	15.jpg	chart15.jpg	NSVS 5149545
16		TYC 3480 00487 1	14 45 33.35, +51 10 44.6	EB	11.06	11.47	R	0.86685	2451408.908	min		Comm. 16	16.jpg	chart16.jpg	NSVS 5134273
17		GSC 3046-00162	14 47 06.67, +41 03 39.0	EW	13.45	13.95	R	0.36534	2451411.847	min		Comm. 17	17.jpg	chart17.jpg	NSVS 5149885
18		GSC 3477-01108	14 48 48.77, +47 40 41.9	EW	14.0	14.4	R	0.36414	2451408.507	min		Comm. 18	18.jpg	chart18.jpg	NSVS 5134917
19		TYC 3484 01116 1	15 00 32.77, +49 55 02.5	EW	12.1	12.35	R	0.43489	2451408.707	min		Comm. 19	19.jpg	chart19.jpg	NSVS 5139156
20		GSC 3861-00565	15 00 34.64, +54 10 54.0	EW	13.4	13.8	R	0.33957	2451401.807	min		Comm. 20	20.jpg	chart20.jpg	NSVS 2749863
21		TYC 3484 01273 1	15 01 09.59, +48 48 16.0	EW	12.15	12.5	R	0.32679	2451406.635	min		Comm. 21	21.jpg	chart21.jpg	NSVS 5139318
22		GSC 3050-00993	15 04 37.63, +42 56 05.7	EW	13.8	14.1	R	0.27572	2451382.777	min		Comm. 22	22.jpg	chart22.jpg	NSVS 5156621
23		TYC 3871 00829 1	15 12 12.51, +56 45 10.4	EB	12.7	13.05	R	0.76433	2451401.003	min		Comm. 23	23.jpg	chart23.jpg	NSVS 2752648 NSVS 2802185

24		GSC 3051-00600	15 18 32.02, +44 57 11.6	EW	13.7	14.1:	R	0.3713	2451349.790	min		Comm. 24	24.jpg	chart24.jpg	NSVS 5161724
25		TYC 3488 00926 1	15 19 44.17, +50 20 57.3	EW	12.3	12.6	R	0.281615	2451403.825	min		Comm. 25	25.jpg	chart25.jpg	NSVS 5181566
26		TYC 3482 01058 1	15 23 02.18, +45 39 20.4	EW	10.6	10.9	R	0.48224	2451395.826	min		Comm. 26	26.jpg	chart26.jpg	NSVS 5163410 NSVS 5183344
27		GSC 3872-01019	15 25 23.43, +56 45 49.2	EW	14.1	14.8	R	0.276917	2451408.415	min		Comm. 27	27.jpg	chart27.jpg	NSVS 2806329
28		TYC 3488 00585 1	15 28 22.16, +51 32 21.5	EW	12.1	12.65	R	0.278047	2451403.125	min		Comm. 28	28.jpg	chart28.jpg	NSVS 5184756
29		GSC 3483-01409	15 32 04.83, +45 34 07.4	EW	12.45	12.85	R	0.27648	2451415.776	min		Comm. 29	29.jpg	chart29.jpg	NSVS 5166948 NSVS 5187334
30		GSC 3053-00007	15 36 29.48, +39 56 10.9	EW	14.2	15.0	R	0.32480	2451396.81	min		Comm. 30	30.jpg	chart30.jpg	NSVS 5169846
31		GSC 3483-01073	15 36 34.58, +46 38 09.3	EW	12.1	12.45	R	0.29087	2451391.922	min		Comm. 31	31.jpg	chart31.jpg	NSVS 5189188
32		GSC 3486-01453	15 36 49.26, +47 37 19.1	EW	12.5	13.2	R	0.360465	2451395.970	min		Comm. 32	32.jpg	chart32.jpg	NSVS 5189082 NSVS 5198499
33		GSC 4182-01259	15 49 11.14, +60 38 02.9	EW	13.3	13.9	R	0.23515	2451328.988	min		Comm. 33	33.jpg	chart33.jpg	NSVS 2795099 NSVS 2814492
34		GSC 3493-00620	15 49 34.75, +49 50 12.3	EW	14.3	14.7	R	0.37083	2451397.70	min		Comm. 34	34.jpg	chart34.jpg	NSVS 5193784 NSVS 5203901
35		GSC 3873-01282	15 49 57.07, +55 21 42.0	EW	13.4	14.0	R	0.4574	2451385.88	min		Comm. 35	35.jpg	chart35.jpg	NSVS 2814222
36		GSC 3493-00701	15 50 09.25, +49 36 39.0	EW	13.8	14.1	R	0.4609	2451394.822	min		Comm. 36	36.jpg	chart36.jpg	NSVS 5194073 NSVS 5204086
37		GSC 3873-01665	15 53 02.37, +55 04 31.6	EW	12.65	13.05	R	0.39221	2451391.780	min		Comm. 37	37.jpg	chart37.jpg	NSVS 2815238
38		GSC 3057-01450	15 56 57.51, +42 13 36.9	EW	14.6	15.4	R	0.25497	2451373.105	min		Comm. 38	38.jpg	chart38.jpg	NSVS 5226350
39		GSC 3067-00807	16 00 44.19, +43 08 41.8	EW	13.8	14.3	R	0.254468	2451375.875	min		Comm. 39	39.jpg	chart39.jpg	NSVS 5228339
40		GSC 3497-01775	16 00 47.96, +51 16 48.5	EW	13.2	13.45	R	0.29190	2451389.933	min		Comm. 40	40.jpg	chart40.jpg	NSVS 5208905
41		GSC 3494-01097	16 01 21.97, +48 29 37.8	EW	12.5	13.1	R	0.282255	2451399.849	min		Comm. 41	41.jpg	chart41.jpg	NSVS 5208622
42		GSC 3494-00838	16 03 55.26, +48 57 12.8	EW	12.8	13.05	R	0.27818	2451397.757	min		Comm. 42	42.jpg	chart42.jpg	NSVS 5209789
43		GSC 3497-00900	16 04 34.86, +50 45 13.4	EW	12.4	12.65	R	0.37422	2451396.909	min		Comm. 43	43.jpg	chart43.jpg	NSVS 5210347
44		GSC 3064-01470	16 08 59.58, +42 01 40.6	EW	14.4	14.8	R	0.36945	2451380.52	min		Comm. 44	44.jpg	chart44.jpg	NSVS 5232217
45		GSC 3061-01393	16 10 59.64, +39 52 53.8	EW	14.1	14.7	R	0.31589	2451384.654	min		Comm. 45	45.jpg	chart45.jpg	NSVS 5232976
46		TYC 3067 00618 1	16 11 23.21, +44 06 20.9	EW	9.78	9.95	R	0.6600	2451408.74	min		Comm. 46	46.jpg	chart46.jpg	NSVS 5233597
47		GSC 3491-00010	16 11 34.37, +47 16 12.2	EW	13.3	14.0	R	0.28735	2451396.632	min		Comm. 47	47.jpg	chart47.jpg	NSVS 5212910
48		GSC 3067-00850	16 12 16.24, +43 16 31.3	EW	12.2	12.65	R	0.376075	2451381.548	min		Comm. 48	48.jpg	chart48.jpg	NSVS 5233933
49		TYC 3497 00479 1	16 13 22.03, +51 55 22.7	EW	11.3	11.7	R	0.38987	2451400.740	min		Comm. 49	49.jpg	chart49.jpg	NSVS 5214167
50		TYC 3492 00638 1	16 28 36.15, +47 17 58.1	EW	10.9	11.25	R	0.35979	2451390.561	min		Comm. 50	50.jpg	chart50.jpg	NSVS 5269547
51		GSC 3503-00450	16 47 18.05, +49 37 19.0	EW	14.3	15.0	R	0.31275	2451389.56	min		Comm. 51	51.jpg	chart51.jpg	NSVS 5278546
52		GSC 3082-00896	16 48 15.54, +44 44 28.7	EW	12.15	12.60	R	0.30203	2451373.713	min		Comm. 52	52.jpg	chart52.jpg	NSVS 5252572

Comments:

1. MinII = 14.0.

2. MinII = 14.6. Primary eclipse might be the secondary.

3. MinII = 12.8.

4. MinII = 11.25.

5. MinII = 13.3.

6. MinII = 14.4.

7. MinII = 14.3.

8. MinII = 12.25.

9. MinII = 14.7.

10. MinII = 14.1.

11. MinII = 10.8.

12. MinII = 13.45.

13. MinII = 12.1.

14. MinII = 9.46. BD+48 2231. There is a faint close companion. Identification with the X-ray source RX J1443.8+4743 is possible.

15. MinII = 12.85.

16. MinII = 11.34. Identification with the X-ray source 1RXS J144533.3+511038 is possible.

17. MinII = 13.9.

18. MinII = 14.4. Primary eclipse might be the secondary.

19. MinII = 12.35.

20. MinII = 13.75:.

21. MinII = 12.5. Identification with the X-ray source 1RXS J150109.4+484805 is possible. Primary eclipse might be the secondary.

22. MinII = 14.0.

23. MinII = 12.8.

24. MinII = 14.05.

25. MinII = 12.5.

26. MinII = 10.85.

27. MinII = 14.6.

28. MinII = 12.55.

29. MinII = 12.75.

30. MinII = 15.0. Primary eclipse might be the secondary.

31. MinII = 12.4.

32. MinII = 13.1. Identification with the X-ray source 1RXS J153648.4+473727 is possible.

33. MinII = 13.8.

34. MinII = 14.7. Primary eclipse might be the secondary.

35. MinII = 13.9.

36. MinII = 14.0.

37. MinII = 13.00.

38. MinII = 15.4:. Primary eclipse might be the secondary.

39. MinII = 14.1.

40. MinII = 13.4.

41. MinII = 13.0.

42. MinII = 13.05. Primary eclipse might be the secondary.

43. MinII = 12.6.

44. MinII = 14.8:. Primary eclipse might be the secondary.

45. MinII = 14.7. Primary eclipse might be the secondary.

46. MinII = 9.94. HD 145848. Primary eclipse might be the secondary. A twice shorter period and a type RRC are possible.

47. MinII = 13.9.

48. MinII = 12.6.

49. MinII = 11.7. Primary eclipse might be the secondary.

50. MinII = 11.22.

51. MinII = 14.9.

52. MinII = 12.5. Identification with the X-ray source 1RXS J164817.3+444430 is possible.

Remarks:

I present the discovery of 52 new short-period eclipsing binaries (mostly EW and EB). 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