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New Semiregular and Irregular Pulsating Variable Stars 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		TYC 2287 00736 1	00 42 53.70, +36 30 01.3	LB	9.5	9.9	R			other		Comm. 1	1.PNG	chart1.PNG	NSVS 3783610 NSVS 6361054
2		GSC 2288-00914	00 45 05.86, +36 43 34.5	SR	10.05	10.5	R	60	2451548	max		Comm. 2	2.PNG	chart2.PNG	NSVS 3785576 NSVS 6362800
3		GSC 2284-00763	00 48 16.63, +34 39 49.5	SRB	10.0	10.55	R	100:		other		Comm. 3	3.PNG	chart3.PNG	NSVS 6365048
4		TYC 2277 00852 1	00 55 14.07, +31 30 22.4	LB	10.35	10.65	R			other		Comm. 4	4.PNG	chart4.PNG	NSVS 6370402
5		GSC 2277-00013	00 58 31.85, +30 21 47.3	LB	10.8	11.4	R			other		Comm. 5	5.PNG	chart5.PNG	NSVS 6372997 NSVS 6398920
6		TYC 2285 00379 1	00 59 05.61, +34 00 00.9	LB	10.7	11.0	R			other		Comm. 6	6.PNG	chart6.PNG	NSVS 6373582
7		GSC 2303-00148	01 17 43.19, +36 48 42.4	SR	12.35	12.75	R	58	2451499	max		Comm. 7	7.PNG	chart7.PNG	NSVS 6439098 NSVS 3817667
8		GSC 2298-00950	01 44 39.45, +33 13 44.0	SR	11.95	12.25	R	46	2451526	max		Comm. 8	8.PNG	chart8.PNG	NSVS 6460776 NSVS 6471508
9		GSC 2337-00432	02 42 25.29, +37 09 24.2	SR	12.45	12.9	R	45	2451469	max		Comm. 9	9.PNG	chart9.PNG	NSVS 4009366 NSVS 6568339 NSVS 6581162
10		TYC 2849 00469 1	02 47 14.42, +40 18 03.8	SR	10.3	10.55	R	48	2451481	max		Comm. 10	10.PNG	chart10.PNG	NSVS 4013816
11		GSC 2326-00369	02 56 29.20, +31 52 08.6	LB	12.3	12.65	R			other		Comm. 11	11.PNG	chart11.PNG	NSVS 6591587
12		TYC 2347 00516 1	03 04 04.88, +34 42 57.0	LB:	10.5	10.75	R			other		Comm. 12	12.PNG	chart12.PNG	NSVS 6598714
13		GSC 2343-01771	03 07 50.96, +33 07 46.0	LB	12.0	12.4	R			other		Comm. 13	13.PNG	chart13.PNG	NSVS 6601804
14		GSC 2344-01993	03 15 03.31, +32 30 18.8	SR:	9.6	10.2	R	180:	2451433	max		Comm. 14	14.PNG	chart14.PNG	NSVS 6607791
15		GSC 2852-01107	03 19 40.47, +40 22 06.1	SR	11.1	11.4	R	59	2451523	max		Comm. 15	15.PNG	chart15.PNG	NSVS 4153499
16		USNO-A2.0 1425-04801701	04 03 43.50, +53 19 11.9	LB	13.2	13.9	R			other		Comm. 16	16.PNG	chart16.PNG	NSVS 1990350 NSVS 2089742
17		GSC 3750-00821	05 47 35.13, +53 21 05.6	LB	11.3	11.55	R			other		Comm. 17	17.PNG	chart17.PNG	NSVS 2266841 NSVS 2169776
18		USNO-A2.0 1425-06312346	05 54 16.57, +53 37 24.7	SR	12.45	12.8	R	34	2451505	max		Comm. 18	18.PNG	chart18.PNG	NSVS 2272359
19		GSC 3750-00146	05 57 13.20, +53 35 49.8	SRB	11.35	11.7	R	50:		other		Comm. 19	19.PNG	chart19.PNG	NSVS 2274691
20		GSC 4618-01066	06 53 57.82, +83 16 02.9	SR	12.45	12.7	R	47.5	2451461	max		Comm. 20	20.PNG	chart20.PNG	NSVS 80137 NSVS 106712
21		GSC 4547-00846	09 34 22.83, +82 21 39.3	SRD	12.45	12.8	R	24.6	2451605	max		Comm. 21	21.PNG	chart21.PNG	NSVS 100132 NSVS 761579 NSVS 811254 NSVS 847844
22		TYC 2517 01034 1	10 29 25.72, +36 31 44.6	SRD	10.38	10.58	R	37.7	2451485	max		Comm. 22	22.PNG	chart22.PNG	NSVS 7528083 NSVS 4913217 NSVS 7521801
23		TYC 3033 00273 1	13 48 10.31, +43 15 46.7	SRD	10.4	10.55	R	68	2451311	max		Comm. 23	23.PNG	chart23.PNG	NSVS 5090006
24		GSC 3033-00421	13 48 17.90, +44 30 16.9	SR	11.7	12.05	R	54:	2451322	max		Comm. 24	24.PNG	chart24.PNG	NSVS 5090059 NSVS 5075498
25		TYC 3033 00039 1	13 49 08.78, +44 16 06.2	SR	10.45	10.75	R	41.5	2451303	max		Comm. 25	25.PNG	chart25.PNG	NSVS 5090311
26		TYC 3033 00849 1	13 58 26.99, +43 48 20.0	SR	10.35	10.6	R	44	2451339	max		Comm. 26	26.PNG	chart26.PNG	NSVS 5093401
27		TYC 2545 00355 1	14 08 30.55, +31 17 00.1	LB	9.45	9.85	R			other		Comm. 27	27.PNG	chart27.PNG	NSVS 7712575 NSVS 7727495
28		TYC 4176 01533 1	14 46 21.41, +62 33 14.2	SRD	11.92	12.18	R	78	2451354	max		Comm. 28	28.PNG	chart28.PNG	NSVS 2763736 NSVS 2778420
29		TYC 3878 01866 1	16 25 23.37, +52 41 43.6	SR	10.0	10.25	R	46	2451459	max		Comm. 29	29.PNG	chart29.PNG	NSVS 2828081 NSVS 5218997 NSVS 5268015
30		TYC 4190 01366 1	16 27 47.97, +60 10 55.9	SRB	11.5	11.85	R	79		other		Comm. 30	30.PNG	chart30.PNG	NSVS 2826849 NSVS 2851730 NSVS 2867046

31		GSC 4190-00918	16 28 48.86, +61 37 22.7	LB	11.35	11.7	R			other		Comm. 31	31.PNG	chart31.PNG	NSVS 2851650 NSVS 2868020
32		TYC 3090 00299 1	17 21 18.02, +39 22 30.3	LB	9.13	9.40	R			other		Comm. 32	32.PNG	chart32.PNG	NSVS 5336444
33		GSC 2088-01653	17 41 41.16, +29 14 13.2	LB	11.02	11.38	R			other		Comm. 33	33.PNG	chart33.PNG	NSVS 8010369
34		GSC 2626-01614	18 15 24.50, +33 44 53.1	LB	10.5	10.8	R			other		Comm. 34	34.PNG	chart34.PNG	NSVS 8100216
35		TYC 2622 00606 1	18 16 46.39, +30 05 08.0	LB	9.6	9.95	R			other		Comm. 35	35.PNG	chart35.PNG	NSVS 8101106 NSVS 8146267
36		TYC 2627 01251 1	18 18 43.30, +33 15 57.8	LB	10.04	10.28	R			other		Comm. 36	36.PNG	chart36.PNG	NSVS 8104040
37		GSC 2627-01635	18 23 37.19, +33 32 10.0	SR	12.25	12.6	R	80	2451360	max		Comm. 37	37.PNG	chart37.PNG	NSVS 8109863
38		GSC 2624-02300	18 34 57.85, +30 20 22.3	SR	12.2	12.9	R	120	2451413	max		Comm. 38	38.PNG	chart38.PNG	NSVS 8170032 NSVS 8224273
39		GSC 2637-01995	18 36 33.54, +30 01 00.9	SR	11.65	12.0	R	43:	2451364	max		Comm. 39	39.PNG	chart39.PNG	NSVS 8172110 NSVS 8226054
40		GSC 2119-00670	18 37 17.66, +29 25 20.0	LB	10.77	11.12	R			other		Comm. 40	40.PNG	chart40.PNG	NSVS 8173111
41		GSC 2119-00539	18 39 39.25, +29 15 48.7	LB	11.4	11.85	R			other		Comm. 41	41.PNG	chart41.PNG	NSVS 8176279
42		GSC 2747-00467	22 38 02.53, +36 40 11.0	SR	11.8	12.1	R	56	2451371	max		Comm. 42	42.PNG	chart42.PNG	NSVS 8910498 NSVS 6112938
43		GSC 3218-00375	22 40 07.73, +39 52 06.4	LB	10.52	10.85	R			other		Comm. 43	43.PNG	chart43.PNG	NSVS 6115534
44		GSC 3218-01799	22 40 56.62, +40 33 52.7	LB	11.9	12.25	R			other		Comm. 44	44.PNG	chart44.PNG	NSVS 6116424
45		GSC 3218-00526	22 49 37.13, +39 58 11.9	LB	11.4	11.65	R			other		Comm. 45	45.PNG	chart45.PNG	NSVS 6127498
46		GSC 3219-00456	22 50 05.09, +40 05 44.2	SR	10.6	10.9	R	54	2451371	max		Comm. 46	46.PNG	chart46.PNG	NSVS 6127988
47		TYC 3216 01162 1	23 00 59.18, +37 47 34.6	SR	10.15	10.45	R	80	2451427	max		Comm. 47	47.PNG	chart47.PNG	NSVS 6141113 NSVS 9004191
48		GSC 2750-00995	23 03 23.95, +31 27 24.5	SR	12.4	12.7	R	56	2451472	max		Comm. 48	48.PNG	chart48.PNG	NSVS 9007037 NSVS 8972441
49		GSC 3220-01711	23 09 10.22, +40 44 09.6	LB	10.37	10.67	R			other		Comm. 49	49.PNG	chart49.PNG	NSVS 6149246
50		GSC 2759-01820	23 09 51.21, +34 59 09.6	SR	11.45	11.75	R	47	2451455	max		Comm. 50	50.PNG	chart50.PNG	NSVS 9013406
51		GSC 3217-00855	23 17 20.56, +39 21 00.5	LB	11.23	11.43	R			other		Comm. 51	51.PNG	chart51.PNG	NSVS 6158631 NSVS 3594575
52		GSC 3230-01486	23 21 31.38, +37 49 11.0	SR	12.2	12.5	R	66	2451499	max		Comm. 52	52.PNG	chart52.PNG	NSVS 3597123 NSVS 6163873 NSVS 6223275 NSVS 9024206
53		TYC 2249 01121 1	23 24 29.17, +29 28 39.4	LB	10.15	10.4	R			other		Comm. 53	53.PNG	chart53.PNG	NSVS 6257701 NSVS 8989942 NSVS 9029172 NSVS 6223025
54		GSC 2777-00084	23 24 34.21, +36 15 08.0	LB	9.5	9.75	R			other		Comm. 54	54.PNG	chart54.PNG	NSVS 6225248 NSVS 9027448 NSVS 6167973

Comments:

1. IRAS 00401+3613. J-H = 0.864 (2MASS), B-V = 1.465 (Tycho2). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

2. IRAS F00424+3627. J-H = 0.849 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

3. IRAS 00455+3423. J-H = 0.836 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

4. IRAS F00524+3113. J-H = 0.910 (2MASS), B-V = 2.118 (Tycho2). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

5. J-H = 0.832 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

6. IRAS Z00563+3343. J-H = 0.897 (2MASS), B-V=3.230 (Tycho2).

7. J-H = 0.943 (2MASS).

8. J-H = 0.860 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

9. J-H = 0.924 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

10. IRAS F02440+4005. J-H = 0.802 (2MASS), B-V = 2.304 (Tycho2). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

11. J-H = 1.107 (2MASS). Type SR is not excluded.

12. Probably can be identified with IRAS F03009+3430. J-H = 0.868 (2MASS), B-V = 1.680 (Tycho2). Type SR with the period 56 d is not excluded.

13. J-H = 0.977 (2MASS).

14. IRAS 03119+3219. J-H = 0.784 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

15. Probably can be identified with IRAS F03163+4010. J-H = 0.915 (2MASS).

16. IRAS 03598+5310. J-H = 1.632 (2MASS). CGCS 605 (Alksnis et al. 2001). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

17. IRAS F05435+5320. J-H = 0.956 (2MASS). CGCS 1039 (Alksnis et al. 2001).

18. J-H = 0.949 (2MASS).

19. J-H = 0.965 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

20. J-H = 0.857 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

21. J-H = 0.479 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

22. J-H = 0.573 (2MASS), B-V = 0.964 (Tycho2).

23. J-H = 0.564 (2MASS), B-V = 1.073 (Tycho2).

24. J-H = 0.897 (2MASS). Period 64 d is possible too. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

25. IRAS F13471+4430. J-H = 0.956 (2MASS), B-V = 2.467 (Tycho2). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

26. J-H = 0.881 (2MASS), B-V = 2.613 (Tycho2). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

27. IRAS 14062+3131. J-H = 0.920 (2MASS), B-V = 1.843 (Tycho2). Periods 48 d or 57 d and type SR are possible. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

28. J-H = 0.554 (2MASS), B-V = 1.108 (Tycho2).

29. IRAS 16241+5248. J-H = 0.882 (2MASS), B-V = 1.632 (Tycho2). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

30. J-H = 0.663 (2MASS), B-V = 1.824 (Tycho2). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

31. IRAS Z16281+6144. J-H = 0.906 (2MASS). Period 72 d and type SRB are possible.

32. IRAS 17196+3925. J-H = 0.847 (2MASS), B-V = 1.935 (Tycho2).

33. IRAS F17397+2915. J-H = 0.895 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

34. IRAS F18136+3343. J-H = 0.878 (2MASS).

35. IRAS 18148+3003. J-H = 0.889 (2MASS), B-V = 2.024 (Tycho2). Period 85 d and type SRB are possible. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

36. IRAS 18168+3314. J-H = 0.816 (2MASS), B-V = 2.622 (Tycho2).

37. J-H = 0.845 (2MASS).

38. J-H = 0.904 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

39. IRAS F18346+2958. J-H = 0.903 (2MASS).

40. IRAS F18353+2922. J-H = 0.960 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

41. IRAS F18377+2913. J-H = 0.977 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

42. Probably can be identified with IRAS Z22357+3624. J-H = 0.910 (2MASS).

43. IRAS F22378+3936. J-H = 0.958 (2MASS). Type SRB is not excluded.

44. IRAS F22387+4018. J-H = 0.971 (2MASS).

45. IRAS F22473+3942. J-H = 0.898 (2MASS).

46. Probably can be identified with IRAS F22477+3949. J-H = 0.946 (2MASS).

47. IRAS 22586+3731. J-H = 0.933 (2MASS), B-V = 2.008 (Tycho2). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

48. J-H = 0.880 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

49. IRAS F23068+4027. J-H = 0.915 (2MASS).

50. J-H = 0.921 (2MASS).

51. J-H = 0.892 (2MASS).

52. J-H = 0.941 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

53. IRAS 23220+2912. J-H = 0.919 (2MASS), B-V = 3.547 (Tycho2). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

54. IRAS 23221+3558. J-H = 0.966 (2MASS).

Remarks:

I present the discovery of 54 new semiregular (SR, SRB, SRD) and irregular (LB) pulsating variable stars. 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.

In several cases, 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.

References:

Alksnis, A., Balklavs, A., Dzervitis, U., et al., 2001, Baltic Astronomy, 10, 1
Wozniak, P.R., Vestrand, W.T., Akerlof, C.W. et al., 2004, Astron. J., 127, 2436