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New Semiregular and Irregular Pulsating Variable Stars III

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#	Name	Other	Coord (J2000)	Type	Max	Min	System	Period	Epoch (JD)	type	Sp	Comment	L.Curve	Find.Chart	Data
1		USNO-A2.0 1500-00031032	00 01 29.24, +64 23 16.6	LB	11.6	12.0	R			other		Comm. 1	1.PNG	chart1.PNG	NSVS 1606454
2		USNO-A2.0 1575-00028616	00 02 55.58, +70 34 42.3	LB	12.8	13.2	R			other		Comm. 2	2.PNG	chart2.PNG	NSVS 197999 NSVS 200691
3		USNO-A2.0 1575-00117469	00 13 46.46, +68 17 30.2	LB	12.4	12.7	R			other	N	Comm. 3	3.PNG	chart3.PNG	NSVS 206131 NSVS 1612794
4		GSC 4295-00755	00 28 35.04, +68 15 18.7	LB	11.4	11.7	R			other		Comm. 4	4.PNG	chart4.PNG	NSVS 213848 NSVS 1620804 NSVS 1666102
5		GSC 4299-00538	00 30 24.40, +69 47 39.5	LB	11.45	11.8	R			other		Comm. 5	5.PNG	chart5.PNG	NSVS 213650
6		USNO-B1.0 1575-0014017	00 38 10.22, +67 32 38.5	LB	13.2	14.0	R			other		Comm. 6	6.PNG	chart6.PNG	NSVS 219465 NSVS 1626498
7		GSC 4295-00725	00 39 21.45, +68 16 26.1	SR	11.05	11.35	R	70	2451470	max		Comm. 7	7.PNG	chart7.PNG	NSVS 219444 NSVS 1626527 NSVS 1671812
8		USNO-A2.0 1500-00828639	00 47 52.32, +67 21 10.1	LB	13.0	13.5	R			other		Comm. 8	8.PNG	chart8.PNG	NSVS 225091 NSVS 1632181 NSVS 1675284
9		GSC 4304-01852	00 49 53.90, +71 23 05.4	SR	10.9	11.3	R	120	2451346	max		Comm. 9	9.PNG	chart9.PNG	NSVS 221241 NSVS 335698
10		GSC 4304-01400	00 50 56.40, +71 39 38.7	SR:	12.45	12.8	R	245:	2451435	max	N	Comm. 10	10.PNG	chart10.PNG	NSVS 221355 NSVS 336708
11		GSC 4300-01025	00 55 28.60, +70 00 54.0	SR	11.5	11.9	R	57.4	2451442	max		Comm. 11	11.PNG	chart11.PNG	NSVS 225697 NSVS 335213
12		GSC 4296-00534	00 58 26.76, +68 29 06.0	SR	10.0	10.35	R	85.2	2451403	max		Comm. 12	12.PNG	chart12.PNG	NSVS 229287 NSVS 333514
13		GSC 4296-01135	01 00 05.47, +67 37 23.1	LB	11.8	12.25	R			other		Comm. 13	13.PNG	chart13.PNG	NSVS 231352 NSVS 332686 NSVS 1638810 NSVS 1682342
14		USNO-A2.0 1500-01056156	01 01 04.96, +67 03 19.9	LB	11.95	12.6	R			other		Comm. 14	14.PNG	chart14.PNG	NSVS 232690 NSVS 332163 NSVS 1640216 NSVS 1682449
15		GSC 3721-00735	03 56 32.35, +55 14 52.7	SR	11.4	11.7	R	90	2451537	max		Comm. 15	15.PNG	chart15.PNG	NSVS 1982949 NSVS 2085873
16		TYC 3336 00036 1	04 15 40.11, +49 19 00.8	LB	9.35	10.0	R			other		Comm. 16	16.PNG	chart16.PNG	NSVS 4252579 NSVS 4276075
17		USNO-B1.0 1407-0115914	04 17 28.13, +50 43 05.0	M	12.1	<13.3	R		2451423	max		Comm. 17	17.PNG	chart17.PNG	NSVS 4253585 NSVS 4278913
18		GSC 3337-00125	04 22 06.95, +50 17 29.1	LB	11.05	11.35	R			other		Comm. 18	18.PNG	chart18.PNG	NSVS 4258133 NSVS 4282794
19		GSC 3341-00885	04 22 37.65, +51 05 47.1	SR	11.65	12.0	R	76.3	2451535	max		Comm. 19	19.PNG	chart19.PNG	NSVS 4258109 NSVS 4283863
20		GSC 3337-01644	04 24 33.50, +49 29 09.8	LB	10.77	11.0	R			other		Comm. 20	20.PNG	chart20.PNG	NSVS 4260870 NSVS 4284457
21		GSC 3337-01745	04 24 54.47, +49 26 14.2	SR	12.05	12.35	R	103	2451479	max		Comm. 21	21.PNG	chart21.PNG	NSVS 4261229 NSVS 4284743
22		USNO-A2.0 1350-04574415	04 26 03.08, +50 28 33.5	LB	12.4	12.8	R			other		Comm. 22	22.PNG	chart22.PNG	NSVS 4261590 NSVS 4286481
23		USNO-A2.0 1350-04598779	04 27 40.44, +47 30 43.8	LB	12.4	12.8	R			other		Comm. 23	23.PNG	chart23.PNG	NSVS 4264995 NSVS 4286041
24		USNO-B1.0 1370-0121154	04 31 06.72, +47 02 51.1	LB	13.75	14.1	R			other		Comm. 24	24.PNG	chart24.PNG	NSVS 4268404 NSVS 4289030
25		GSC 4090-00895	04 34 46.27, +66 59 45.7	SR	10.9	11.1	R	42	2451615	max		Comm. 25	25.PNG	chart25.PNG	NSVS 527764 NSVS 2073549
26		USNO-A2.0 1350-04744307	04 38 16.55, +46 52 00.7	LB	12.6	12.95	R			other		Comm. 26	26.PNG	chart26.PNG	NSVS 4295724
27		GSC 4090-01942	04 38 30.97, +67 06 42.1	SR	11.75	12.0	R	38	2451476	max		Comm. 27	27.PNG	chart27.PNG	NSVS 529581 NSVS 2075300
28		USNO A2.0 1275-03760387	04 48 02.60, +44 45 52.7	SR:	11.7	12.2	R	66:	2451608	max		Comm. 28	28.PNG	chart28.PNG	NSVS 4304484 NSVS 4350248
29		GSC 4519-01086	04 49 13.42, +79 00 25.5	SR	12.1	12.55	R	60	2451586	max		Comm. 29	29.PNG	chart29.PNG	NSVS 447843 NSVS 573210 NSVS 614636 NSVS 493712
30		GSC 2906-00081	04 51 37.66, +44 23 36.9	LB	11.1	11.35	R			other		Comm. 30	30.PNG	chart30.PNG	NSVS 4308147 NSVS 4353715

31		GSC 4350-00058	05 09 53.21, +72 49 11.5	LB	11.05	11.55	R			other		Comm. 31	31.PNG	chart31.PNG	NSVS 543544
32		GSC 2415-01775	05 30 54.85, +35 56 32.3	LB	11.4	11.7	R			other		Comm. 32	32.PNG	chart32.PNG	NSVS 6972664
33		USNO-A2.0 1200-03421670	05 30 56.51, +36 52 20.0	SR	11.95	12.25	R	38	2451501	max		Comm. 33	33.PNG	chart33.PNG	NSVS 6972666
34		USNO-A2.0 1200-03429723	05 31 17.68, +32 11 03.4	LB	12.35	12.75	R			other		Comm. 34	34.PNG	chart34.PNG	NSVS 6973298
35		GSC 4347-00001	05 34 55.03, +71 01 08.5	SR	10.7	11.05	R	50	2451464	max	M	Comm. 35	35.PNG	chart35.PNG	NSVS 553076 NSVS 643775
36		GSC 2911-01035	05 43 50.58, +38 42 06.9	SR	10.35	10.55	R	37:	2451589	max		Comm. 36	36.PNG	chart36.PNG	NSVS 4407482 NSVS 4516608
37		GSC 2911-00829	05 45 01.90, +38 39 40.0	LB	11.35	11.6	R			other		Comm. 37	37.PNG	chart37.PNG	NSVS 4517957 NSVS 4408699
38		GSC 2911-01685	05 45 10.58, +38 22 23.1	LB	10.7	11.2	R			other		Comm. 38	38.PNG	chart38.PNG	NSVS 4517939 NSVS 4408977
39		USNO-B1.0 1281-0152667	05 48 09.51, +38 08 35.3	SR:	13.4	14.2	R		2451545	max	C:	Comm. 39	39.PNG	chart39.PNG	NSVS 4521385
40		TYC 2925 01526 1	06 03 37.89, +38 14 30.2	LB	10.1	10.35	R			other		Comm. 40	40.PNG	chart40.PNG	NSVS 4539378
41		GSC 4349-01396	06 07 55.27, +69 56 01.2	LB	12.55	12.9	R			other		Comm. 41	41.PNG	chart41.PNG	NSVS 564713 NSVS 653588
42		GSC 4345-00258	06 10 33.70, +68 56 17.1	SR	10.6	10.85	R	41.3	2451533	max		Comm. 42	42.PNG	chart42.PNG	NSVS 566688 NSVS 653412
43		GSC 4366-00379	06 28 23.69, +72 57 16.0	LB	10.8	11.1	R			other		Comm. 43	43.PNG	chart43.PNG	NSVS 566158 NSVS 602093 NSVS 663096
44		TYC 3467 01086 1	13 50 12.99, +47 40 41.8	SR	9.5	9.85	R	57	2451606	max		Comm. 44	44.PNG	chart44.PNG	NSVS 5076116
45		TYC 2015 00238 1	14 31 08.04, +24 39 22.6	SR	10.17	10.62	V	40.8:	2453111	max		Comm. 45	45.PNG	chart45.PNG	ASAS 143108+2439.4 NSVS 7737539
46		GSC 9261-01383	14 41 09.72, -70 32 06.8	SR	12.5	13.8	V	70.77	2454610	max		Comm. 46	46.PNG	chart46.PNG	ASAS 144110-7032.2
47		TYC 3059 02028 1	15 41 48.98, +44 46 41.4	SR	9.5	9.8	R	48	2451340	max	M4/M7	Comm. 47	47.PNG	chart47.PNG	NSVS 5171068 NSVS 5199496 NSVS 5220333
48		GSC 4421-02258	17 34 34.64, +68 29 25.6	LB	12.1	12.3	R			other	M7-M8	Comm. 48	48.PNG	chart48.PNG	NSVS 1096177 NSVS 2892329 NSVS 2954179
49		TYC 4436 01063 1	17 49 04.27, +72 30 10.2	LB	9.15	9.4	R			other	M3	Comm. 49	49.PNG	chart49.PNG	NSVS 1097188 NSVS 1183974
50		TYC 2622 00760 1	18 16 08.15, +30 10 35.3	LB	10.05	10.3	R			other		Comm. 50	50.PNG	chart50.PNG	NSVS 8100370 NSVS 8145482
51		TYC 2740 01813 1	22 42 39.51, +32 09 41.5	SRD	11.85	12.1	R	41.4	2451465	max		Comm. 51	51.PNG	chart51.PNG	NSVS 8914829
52		GSC 4483-01518	23 56 06.13, +70 59 59.8	LB	11.6	12.05	R			other		Comm. 52	52.PNG	chart52.PNG	NSVS 195332
53		USNO-B1.0 1590-0221321	23 57 42.24, +69 01 34.1	M:	13.0:	14.0	R			other		Comm. 53	53.PNG	chart53.PNG	NSVS 195924 NSVS 198741

Comments:

1. IRAS 23589+6406. J–H = 1.201 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

2. J–H = 1.120 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

3. IRAS Z00110+6800. J–H = 1.431 (2MASS). CGCS 22 (Alksnis et al. 2001). Type SR with the period 130 d is not excluded. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

4. IRAS Z00256+6758. J–H = 1.135 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

5. IRAS 00274+6930. J–H = 1.251 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

6. IRAS Z00351+6716. J–H = 1.164 (2MASS). Faint close companion USNO-B1.0 1575-0014023. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

7. IRAS 00363+6759. J–H = 1.171 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

8. IRAS Z00447+6704. J–H = 1.252 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

9. IRAS 00466+7106. J–H = 1.045 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

10. IRAS Z00477+7123. J–H = 1.137 (2MASS). CGCS 122 (Alksnis et al. 2001). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

11. IRAS Z00522+6944. J–H = 1.111 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

12. IRAS 00551+6812. J–H = 1.016 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

13. IRAS 00568+6721. J–H = 1.350 (2MASS). CGCS 152 (Alksnis et al. 2001). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

14. IRAS 00578+6647. J–H = 1.154 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

15. IRAS Z03525+5506. J–H = 1.097 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

16. IRAS 04119+4911. B–V = 2.606 (Tycho2), J–H = 0.828 (2MASS).

17. IRAS 04136+5035. J–H = 1.316 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis. Three red images from the Digitized Sky Survey show that the variability amplitude is considerable:
1954-10-05: R = 18.6;
1988-11-05: R = 14.1;
1993-10-20: R = 19.0.
Delta mag = 4.7 mag, indicating that the variable is a Mira star (the comparison star magnitudes were taken from the USNO-B1.0 catalog).

18. Probably can be identified with IRAS 04182+5010. J–H = 1.264 (2MASS). Type SR is not excluded. Faint close companion 2MASS 04220533+5017418.

19. Probably can be identified with IRAS 04187+5058. J–H = 1.167 (2MASS).

20. IRAS 04208+4922. J–H = 1.231 (2MASS).

21. J–H = 1.171 (2MASS).

22. IRAS Z04222+5021. J–H = 1.309 (2MASS). Type SR with the period of 71 d is not excluded.

23. IRAS 04240+4724. J–H = 1.547 (2MASS). CGCS 688 (Alksnis et al. 2001). Type SR with the period of 160 d is not excluded.

24. IRAS Z04274+4656 . J–H = 1.475 (2MASS). Close companion USNO-B1.0 1370-0121185, the NSVS amplitude is slightly underestimated. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

25. Probably can be identified with IRAS F04298+6653. J–H = 0.955 (2MASS).

26. IRAS 04346+4646. J–H = 1.347 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

27. J–H = 0.901 (2MASS).

28. IRAS Z04444+4440. J–H = 1.072 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

29. J–H = 0.838 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

30. Probably can be identified with IRAS Z04481+4418. J–H = 1.026 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

31. IRAS F05038+7245. J–H = 0.909 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

32. J–H = 1.078 (2MASS). Period 70 d and type SR are possible.

33. IRAS 05275+3650. J–H = 1.211 (2MASS).

34. IRAS 05280+3208. J–H = 1.252 (2MASS). Type SR with the period of 100 d is not excluded.

35. IRAS F05291+7059. J–H = 0.944 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

36. IRAS Z05404+3840. J–H = 1.001 (2MASS).

37. IRAS 05415+3838. J–H = 1.069 (2MASS).

38. IRAS 05417+3821. J–H = 1.000 (2MASS).

39. IRAS Z05446+3807. J–H = 1.192 (2MASS). CGCS 1055 (Alksnis et al. 2001). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

40. IRAS 06001+3814. J–H = 0.980 (2MASS), B–V = 1.455 (Tycho2). Type SR is not excluded. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

41. J–H = 0.950 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

42. Probably can be identified with IRAS Z06052+6856. J–H = 0.924 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

43. IRAS F06222+7259. J–H = 0.880 (2MASS). Type SR is not excluded. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

44. IRAS 13482+4755. B–V = 1.650 (Tycho2), J–H = 0.839 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

45. BD+25 2788, IRAS 14288+2452. B–V = 1.812 (Tycho2), J–H = 0.843 (2MASS). According to ASAS-3 data, the most probable period is 40.8 d; other possible periods are 36.7 and 29.2 days. According to ROTSE-I/NSVS data, the most probable period is 45.6 d, a 39.3-day period is also possible. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

46. IRAS Z14365-7019. J–H = 1.030 (2MASS).

47. IRAS 15401+4456. B–V = 1.360 (Tycho2), J–H = 0.863 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

48. IRAS F17348+6831. J–H = 0.887 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

49. IRAS 17500+7230. B–V = 1.631 (Tycho2), J–H = 0.849 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

50. IRAS F18141+3009. B–V = 2.226 (Tycho2), J–H = 0.874(2MASS). Type SR is not excluded. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

51. B–V = 0.855 (Tycho2), J–H = 0.590 (2MASS). Faint close companion GSC 2740-01090, J–H = 0.245 (2MASS), the NSVS amplitude is slightly underestimated. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

52. IRAS 23536+7043. J–H = 1.003 (2MASS). Type SR is not excluded. Faint close companion GSC 4483-01506 the NSVS amplitude is slightly underestimated. The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

53. IRAS 23551+6844. J–H = 1.674 (2MASS). The ROTSE data with photometric correction flags (usually rejected) were kept for the analysis.

Remarks:

I present the discovery of 53 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) and The All Sky Automated Survey (ASAS-3; Pojmanski 2002). 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.

The sources of spectral types in the Table are: Abramyan and Gigoyan (1995), Alksnis et al. (2001), Lee et al. (1947), Mickaelian and Gigoyan (2000), Stephenson (1986).

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