

New Light Elements and Types for 29 NSV Stars

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#	Name	Other	Coord (J2000)	Type	Max	Min	System	Period	Epoch (JD)	type	Sp	Comment	L.Curve	Find.Chart	Data
1	NSV 01760	GSC 0688-0237	04 54 18.70, +11 10 43.6	M	12.0	<14.4	V	317	2453777	max		Comm. 1	1760.jpg	1760ch.jpg	ASAS 045419+1110.7
2	NSV 02781	GSC 5357-1343	06 01 04.44, -12 12 21.2	M	12.2	<14.2	V	278	2453681	max		Comm. 2	2781.jpg	2781ch.jpg	ASAS 060104-1212.4
3	NSV 03802	GSC 6565-1580	07 53 57.64, -28 22 03.5	DCEP	12.8	13.8	V	5.8014	2451925.672	max		Comm. 3	3802.jpg	3802ch.jpg	ASAS 075358-2822.1
4	NSV 04249	AN 18.1932	08 44 39.80, -71 07 40.7	M	12.0	<14.4	V	270	2453157	max		Comm. 4	4249.jpg	4249ch.jpg	ASAS 084440-7107.7
5	NSV 05459	GSC 7763-0452	12 06 37.74, -42 43 19.4	EW	13.8	14.6	V	0.386639	2453820.724	min		Comm. 5	5459.jpg	5459ch.jpg	ASAS 120638-4243.3
6	NSV 05922	GSC 7775-0131	12 44 54.09, -40 17 17.7	RRAB	13.4	14.8	V	0.49843	2453127.6525	max		Comm. 6	5922.jpg	5922ch.jpg	ASAS 124454-4017.3
7	NSV 06010	GSC 7260-0341	12 53 16.39, -37 21 01.8	EW	13.6	14.7	V	0.43461	2453862.60	min		Comm. 7	6010.jpg	6010ch.jpg	ASAS 125316-3721.0
8	NSV 06080	GSC 4169-0448	13 04 02.98, +65 15 24.4	EW	12.34	12.98	R	0.382872	2451285.669	min		Comm. 8	6080.jpg	6080ch.jpg	NSVS 2689370
9	NSV 06084	HIP 063883	13 05 30.78, -52 06 56.4	SRS	6.33	6.58	V	21.8		other	M1III	Comm. 9	6084.jpg	6084ch.jpg	ASAS 130531-5206.9
10	NSV 06118	GSC 8247-1567	13 10 31.70, -45 19 46.7	SRB	12.6	14.2	V	178		other			6118.jpg	6118ch.jpg	ASAS 131032-4519.8
11	NSV 06127	GSC 5540-0691	13 11 17.41, -11 06 21.2	EA	9.16	9.45	V	2.9927:	2453900.5899	min	F5	Comm. 11	6127.jpg	6127ch.jpg	ASAS 131117-1106.4
12	NSV 06128	GSC 5540-0333	13 11 20.83, -10 30 51.8	SRB	7.1	7.7	V	58.5		other	M		6128.jpg	6128ch.jpg	ASAS 131121-1030.8
13	NSV 06132	GSC 8657-2057	13 12 23.99, -57 06 43.8	M	13.2	<15.1	V	303	2453827	max	M10		6132.jpg	6132ch.jpg	ASAS 131224-5706.7
14	NSV 06159	GSC 7275-0804	13 15 52.98, -36 03 48.1	RRAB	13.0	14.1	V	0.43143	2453607.498	max		Comm. 14	6159.jpg	6159ch.jpg	ASAS 131553-3603.8
15	NSV 06221	AN 212.1933	13 25 43.73, -75 17 03.8	M	12.4	<14.0	V	277	2453864	max		Comm. 15	6221.jpg	6221ch.jpg	ASAS 132544-7517.1
16	NSV 06222	GSC 9250-1449	13 25 32.27, -73 04 14.3	M	12.4	<14.7	V	284	2453356	max			6222.jpg	6222ch.jpg	ASAS 132532-7304.2
17	NSV 06227	GSC 3460-0514	13 24 22.80, +48 04 38.1	SRD	12.1	13.5	R	143	2451350	max			6227.jpg	6227ch.jpg	NSVS 5067950
18	NSV 06234	GSC 7791-2098	13 25 56.54, -40 18 18.8	RRC	13.6	14.4	V	0.274223	2453818.7046	max		Comm. 18	6234.jpg	6234ch.jpg	ASAS 132557-4018.3
19	NSV 06240	AN 147.1934	13 27 03.07, -70 12 15.3	M	13.3	<15.8	V	297	2453901	max			6240.jpg	6240ch.jpg	ASAS 132703-7012.3
20	NSV 06241	AN 148.1934	13 26 17.45, -67 09 13.2	M	12.4	<16.0	V	286	2453465	max			6241.jpg	6241ch.jpg	ASAS 132617-6709.2
21	NSV 06256	GSC 8252-1319	13 28 10.06, -48 02 29.4	EA	12.8	13.4:	V	0.94909	2452860.55	min		Comm. 21	6256.jpg	6256ch.jpg	ASAS 132810-4802.5
22	NSV 06294	GSC 7788-1619	13 32 04.24, -38 36 32.4	RRAB	13.9	14.8:	V	0.70943	2452736.6821	max		Comm. 22	6294.jpg	6294ch.jpg	ASAS 133204-3836.5
23	NSV 06318	GSC 7277-0998	13 34 59.41, -35 52 16.0	RRAB	13.5	14.8	V	0.58534	2452652.844	max		Comm. 23	6318.jpg	6318ch.jpg	ASAS 133459-3552.3

24	NSV 06334	AN 220.1933	13 37 53.39, -75 50 22.0	M	12.4	<14.1	V	277	2453851	max			6334.jpg	6334ch.jpg	ASAS 133753-7550.4
25	NSV 06338	GSC 7273.1198	13 36 19.21, -34 25 12.2	RRAB	13.4	14.8	V	0.50063	2453423.7902	max		Comm. 25	6338.jpg	6338ch.jpg	ASAS 133619-3425.2
26	NSV 06344	HV 12296	13 37 36.75, -38 11 44.5	M	12.0	<14.3	V	305	2453093	max			6344.jpg	6344ch.jpg	ASAS 133737-3811.7
27	NSV 06360	AN 342.1935	13 40 02.07, -44 04 54.8	M	12.7	<14.3	V	318	2453063	max			6360.jpg	6360ch.jpg	ASAS 134002-4404.9
28	NSV 08042	GSC 9530-0048	17 10 29.01, -86 23 00.1	SRA	9.9	12.3	V	267	2453849	max		Comm. 28	8042.jpg	8042ch.jpg	ASAS 171029-8623.0
29	NSV 24897	GSC 0480-2811	19 49 01.50, +00 29 11.6	M	11.2	<14.6	V	361	2453175	max	S	Comm. 29	24897.jpg	24897ch.jpg	ASAS 194902+0029.2

Comments:

1. Reported as a confirmed variable in Greaves (2006a).
2. Reported as a confirmed variable in Greaves (2006a).
3. $M-m = 0.25$. Classified as a DCEP/EC star in the ASAS-3 catalogue, with a spurious period, $P = 0.85095d$.
4. The ASAS-3 range is for the combined brightness of the variable and its neighbor, which has $B = 14.7$. Reported as a confirmed variable in Greaves (2006a).
5. $MinII = 14.5$.
6. $M-m = 0.25$.
7. $MinII = 14.4$. The star was found by M. Hazen on Harvard plates.
8. $MinII = 12.92$.
9. The star was studied by Koen and Eyer (2002) on the base of Hipparcos photometry, they found a period close to 5 days. The light curve for Hipparcos photometry is not good for any of the suggested periods, the ASAS-3 data gives a much better light curve with the period given in the table.
11. $D = 0.10$:. Due to the period being close to an integer number of days, the phase coverage is poor. A twice longer or a twice shorter period is possible; a secondary minimum of any depth might be present.
14. $M-m = 0.2$.
15. The ASAS-3 range is for the combined brightness of the Mira and its neighbor, which has $B = 14.0$.
18. $M-m = 0.38$.
21. $D = 0.20$:. A blend of several stars influences ASAS-3 photometry, the identification of the particular variable component is based on sky survey images. The period can also be twice longer.
22. $M-m = 0.30$:. A one-day alias, $P = 0.41454d$, is also possible.
23. $M-m = 0.17$.
25. $M-m = 0.09$.
28. Type MISC in the ASAS-3 catalogue, with a period of 222d (apparently wrong). Also reported as a confirmed variable in Greaves (2006a).
29. Reported as a confirmed variable in Greaves (2006b).

Remarks:

In our work on the improvement of the coordinates for all stars in the NSV catalogue, we succeeded in studying 29 variable stars. We could study the variables thanks to the publicly available electronic archives of CCD observations of the ASAS-3 (Pojmanski, 2002) and ROTSE1/NSVS (Wozniak et al., 2004) surveys. We recovered the variables NSV5922, NSV6118, NSV6256, NSV6360 suspected by Luyten (1935), NSV6132, NSV6240, NSV6241 suspected by Luyten (1934), NSV6159, NSV6221, NSV6222, NSV6334 suspected by Luyten (1933), NSV6227 suspected by Balanovsky (1918), NSV6234, NSV6294, NSV6318, NSV6338 and NSV6344 suspected by Shapley (1954). The candidates were found using the US Naval Observatory Image Archive (<http://www.nofs.navy.mil/data/fchpix/>). Our studies are supported by grants from the Russian Foundation for Basic Research (grant No. 05-02-16289), from the Program "Origin and Evolution of Stars and Galaxies" of the Presidium of Russian Academy of Science, and from the Program of Support for Leading Scientific Schools of Russia (grant No. NSh 5290.2006.2).

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