

Types of Variability and Light Elements for 35 Suspected Variables from the NSV Catalog

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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 07529	BV 1112	16 14 45.14, -70 23 10.2	EA	12.46	13.2	V	4.69966	2454319.5655	min			7529lc.jpg	7529ch.jpg	ASAS 161445-7023.2
2	NSV 07561	AN 50.1914	16 14 59.70, -16 40 50.6	RRAB	14.0	14.7	V	0.614280	2454664.742	max		Comm. 2	7561lc.jpg	7561ch.jpg	ASAS 161500-1640.8
3	NSV 07617	HV 10552	16 18 40.42, -01 19 14.4	RRC	13.9	14.5	V	0.337154	2454526.8532	max		Comm. 3	7617lc.jpg	7617ch.jpg	ASAS 161840-0119.2
4	NSV 07620	IRAS 16162-5415	16 20 10.42, -54 22 15.9	SRA:	13.5	<14.7	V	322	2454581	max			7620lc.jpg	7620ch.jpg	ASAS 162010-5422.2
5	NSV 07631	S 7538	16 20 36.36, -32 24 35.3	RRAB	13.5	14.7	V	0.502334	2454129.8608	max		Comm. 5	7631lc.jpg	7631ch.jpg	ASAS 162036-3224.6
6	NSV 07685	S 7544	16 24 18.39, -29 47 42.3	SRB	13.0	13.9	V	54.4		max			7685lc.jpg	7685ch.jpg	ASAS 162418-2947.7
7	NSV 07741	HV 1072	16 28 17.78, -21 46 02.7	SRA	12.4	<14.6	V	193	2454905	max		Comm. 7	7741lc.jpg	7741ch.jpg	ASAS 162818-2146.0
8	NSV 07761	HV 3138	16 29 53.30, -12 01 42.5	SRB	8.25	8.65	V	320		other	K5		7761lc.jpg	7761ch.jpg	ASAS 162953-1201.7
9	NSV 07770	HV 10607	16 30 14.07, -02 34 00.6	SRB	12.3	13.0	V	48.1		other		Comm. 9	7770lc.jpg	7770ch.jpg	ASAS 163014-0234.0
10	NSV 07787	HV 10610	16 31 20.45, -05 15 59.9	SRB	11.9	13.1	V	275		max		Comm. 10	7787lc.jpg	7787ch.jpg	ASAS 163120-0516.0
11	NSV 07806	S 10279	16 31 34.21, +36 08 06.9	RRAB:	14.7	15.3	R	0.80528:	2451465.655	max		Comm. 11	7806lc.jpg	7806ch.jpg	NSVS 7915039
12	NSV 07823	S 7552	16 34 17.91, -30 44 52.2	EW	13.4	14.0	V	0.397347	2454948.7477	min		Comm. 12	7823lc.jpg	7823ch.jpg	ASAS 163418-3044.9
13	NSV 07858	S 7556	16 37 18.76, -30 18 50.1	M	13.0	<14.6	V	217	2454186	max		Comm. 13	7858lc.jpg	7858ch.jpg	ASAS 163719-3018.8
14	NSV 07866	S 7557	16 38 20.02, -30 15 43.5	SR	12.5	13.3	V	44.7		other			7866lc.jpg	7866ch.jpg	ASAS 163820-3015.7
15	NSV 07899	HV 8927	16 41 58.36, -57 43 56.4	M	13.0	<14.8	V	190.1	2455133	max		Comm. 15	7899lc.jpg	7899ch.jpg	ASAS 164158-5743.9
16	NSV 07903	HV 8931	16 42 14.32, -52 58 18.1	M	13.1	<14.5	V	226	2455015	max		Comm. 16	7903lc.jpg	7903ch.jpg	ASAS 164214-5258.3
17	NSV 07919	S 7565	16 42 40.55, -24 24 50.5	M	11.7	<15.0	V	242	2454927	max			7919lc.jpg	7919ch.jpg	ASAS 164241-2424.8
18	NSV 07908	HV 8926	16 43 36.79, -67 03 33.8	M	12.0	<14.6	V	333	2454927	max			7908lc.jpg	7908ch.jpg	ASAS 164337-6703.6
19	NSV 07925	HV 8942	16 44 36.25, -54 12 00.7	M	12.4	<14.0	V	206	2452783	max		Comm. 19	7925lc.jpg	7925ch.jpg	ASAS 164436-5412.0
20	NSV 07949	BV 1682	16 46 26.36, -31 45 42.0	SRA	12.9	14.6	V	140	2454952	max		Comm. 20	7949lc.jpg	7949ch.jpg	ASAS 164626-3145.7
21	NSV 07946	HV 8947	16 46 49.84, -56 03 38.4	M	12.6	<13.5	V	354	2454790	max		Comm. 21	7946lc.jpg	7946ch.jpg	ASAS 164650-5603.6
22	NSV 07958	S 7570	16 47 08.41, -31 20 16.4	SR	12.7	14.4	V	179		max			7958lc.jpg	7958ch.jpg	ASAS 164708-3120.3
23	NSV 07979	HV 6851	16 50 56.20, -58 42 27.1	SRB	11.6	12.2	V	307		max			7979lc.jpg	7979ch.jpg	ASAS 165056-5842.5

24	NSV 07982	HV 6852	16 51 05.48, -58 50 44.0	SRA	13.1	14.2	V	99.5	2454964	max			7982lc.jpg	7982ch.jpg	ASAS 165105-5850.7
25	NSV 08000	HV 8960	16 52 52.69, -51 23 28.8	M	11.9	<14.6	V	221	2454939	max			8000lc.jpg	8000ch.jpg	ASAS 165253-5123.5
26	NSV 08041	S 7575	16 54 55.87, -26 02 43.4	M	11.4	<14.8	V	324	2454747	max			8041lc.jpg	8041ch.jpg	ASAS 165456-2602.7
27	NSV 08046	HV 10808	16 55 42.03, -38 34 38.8	RRC	13.3	13.8	V	0.203202	2454531.8553	max		Comm. 27	8046lc.jpg	8046ch.jpg	ASAS 165542-3834.6
28	NSV 08073	HV 3912	16 58 21.12, -24 04 37.6	SRB	12.9	<14.7	V	154		max			8073lc.jpg	8073ch.jpg	ASAS 165821-2404.6
29	NSV 08076	HV 10825	16 58 53.19, -40 27 59.8	EW	13.2	13.6	V	0.285282	2454365.5383	min		Comm. 29	8076lc.jpg	8076ch.jpg	ASAS 165853-4028.0
30	NSV 08070	HV 8979	16 59 11.98, -55 00 16.0	SRA	11.0	14.5	V	268	2455013	max			8070lc.jpg	8070ch.jpg	ASAS 165912-5500.3
31	NSV 08074	BV 1510	16 59 18.09, -53 39 57.4	M	10.0	<13.0	V	389	2454993	max	S	Comm. 31	8074lc.jpg	8074ch.jpg	ASAS 165918-5340.0
32	NSV 08084	HV 8985	17 00 20.55, -52 02 45.1	M	12.6	<14.8	V	335	2455050	max			8084lc.jpg	8084ch.jpg	ASAS 170021-5202.8
33	NSV 08121	HV 8998	17 02 21.29, -33 00 05.0	M	12.7	<14.6	V	283	2455075	max		Comm. 33	8121lc.jpg	8121ch.jpg	ASAS 170221-3300.1
34	NSV 08116	HV 8994	17 02 41.20, -48 17 12.7	M	12.8	<14.8	V	430	2453551	max			8116lc.jpg	8116ch.jpg	ASAS 170241-4817.2
35	NSV 08137	HV 9000	17 04 51.68, -60 57 06.1	M:	12.3	<13.8	V	305	2454878	max		Comm. 35	8137lc.jpg	8137ch.jpg	ASAS 170452-6057.1

Comments:

2. M-m = 0.2P.

3. M-m = 0.34P.

5. M-m = 0.13P.

7. This star was discovered in the ASAS-3 survey and enters their variable-star catalog as a MISC/SR star but with a wrong period (207.0d).

9. This star was found, upon our request, by the late Dr. M. Hazen in Harvard Observatory's logbooks. No finding chart was available for this variable before.

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11. M-m = 0.21:P.

12. MinII = 14.0.

13. R = 16.2 in the USNO Archive image of 1981.4962.

15. R = 15.2 in the USNO Archive image of 1984.2615.

16. R = 15.3 in the USNO Archive image of 1991.5852. The ASAS-3 range is for the combined brightness of the Mira and its neighbor.

19. R = 15.0 in the USNO Archive image of 1982.2587.

20. Not IRAS 16432-3139.

21. The ASAS-3 range is for the combined brightness of the Mira and its neighbor. This star was discovered in the ASAS-3 survey and enters their variable-star catalog as a MISC-type star but with a wrong period (41.8d). R = 10.7 in the USNO Archive image of 1991.5852 and R = 13.6 in the USNO Archive image of 1982.3313.

27. M-m = 0.38P.

29. $\text{MinII} = 13.6$. A twice shorter period and the DSCT type are possible.
31. This star was discovered by Sosna (1972) as a possible Mira-type variable.
33. $R = 16.0$ in the USNO Archive image of 1991.5934.
35. The ASAS-3 range is for the combined brightness of the Mira and its neighbor.

Remarks:

In our work aimed at improvement of the coordinates of variable stars in the NSV catalog (Samus et al. 2009), we checked a number of poorly studied variables and found new light elements and types for 35 of them. We recovered the variables NSV 07908, NSV 08121, NSV 08137 suspected by Luyten (1933); NSV 07899, NSV 07903, NSV 07925, NSV 07946, NSV 08000, NSV 08070, NSV 08084, NSV 08116 suspected by Luyten (1935); NSV 07561 suspected by Lampland (1914); NSV 07741 suspected by Leavitt (1904). Finding charts, light elements, and variability types for these suspected variables have never been published before. We could study the variables thanks to the publicly available electronic archives of CCD observations of the ASAS-3 project (Pojmanski 2002), ROTSE1/NSVS project (Wozniak et al. 2004), and to images of the US Naval Observatory Image and Catalog Archive.

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