

37 Mira Type Stars from the NSV Catalog: Recovery and Light Elements

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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 09052	HV 9069	17 32 28.97, -50 24 37.0	M	12.9	<14.7	V	325	2454905	max		Comm. 1	9052lc.jpg	9052ch.jpg	ASAS 173229-5024.6
2	NSV 09127	HV 9072	17 34 01.36, -53 09 36.7	M	11.2	<13.6	V	126.7	2454719	max			9127lc.jpg	9127ch.jpg	ASAS 173401-5309.6
3	NSV 09153	HV 8739	17 33 36.51, -15 26 30.6	M:	11.7	<13.1	V	215	2453538	max		Comm. 3	9153lc.jpg	9153ch.jpg	ASAS 173337-1526.5
4	NSV 09154	HV 8740	17 33 49.68, -19 15 31.8	M	12.2	<14.5	V	257	2454603	max			9154lc.jpg	9154ch.jpg	ASAS 173350-1915.5
5	NSV 09177	HV 8743	17 34 49.01, -18 39 40.3	M	13.1	<14.6	V	284:	2454548	max		Comm. 5	9177lc.jpg	9177ch.jpg	ASAS 173449-1839.7
6	NSV 09182	SVS 461	17 35 03.57, -18 13 20.4	M	12.1	<14.6	V	219	2455067	max		Comm. 6	9182lc.jpg	9182ch.jpg	ASAS 173504-1813.3
7	NSV 09190	HV 9081	17 36 12.96, -47 03 11.7	M	12.6	<13.8	V	341	2454905	max		Comm. 7	9190lc.jpg	9190ch.jpg	ASAS 173613-4703.2
8	NSV 09194	Ross 25	17 35 39.10, -14 42 21.0	M	13.2	<15.1	V	276	2454555	max		Comm. 8	9194lc.jpg	9194ch.jpg	ASAS 173539-1442.4
9	NSV 09201	HV 8746	17 36 01.68, -19 09 13.9	M	12.9	<13.5	V	242:	2454706	max		Comm. 9	9201lc.jpg	9201ch.jpg	ASAS 173602-1909.2
10	NSV 09210	IRAS 17332-1507	17 36 07.27, -15 09 12.4	M	12.2	<14.4	V	296	2454193	max		Comm. 10	9210lc.jpg	9210ch.jpg	ASAS 173607-1509.2
11	NSV 09236	P 1267	17 36 41.26, -15 54 54.8	M	12.0	<15.1	V	221	2454941	max			9236lc.jpg	9236ch.jpg	ASAS 173641-1554.9
12	NSV 09313	HV 8754	17 38 10.96, -17 08 04.4	M	12.9	<13.8	V	316:	2453565	max		Comm. 12	9313lc.jpg	9313ch.jpg	ASAS 173811-1708.1
13	NSV 09359	HV 9091	17 38 37.15, -12 47 00.7	M	12.7	<14.7	V	222	2454641	max		Comm. 13	9359lc.jpg	9359ch.jpg	ASAS 173837-1247.0
14	NSV 09383	HV 6584	17 39 55.09, -47 27 40.4	M	13.2	<15.1	V	381	2453166	max		Comm. 14	9383lc.jpg	9383ch.jpg	ASAS 173955-4727.7
15	NSV 09456	HV 9093	17 41 29.66, -51 11 50.6	M	13.0	<14.4	V	318	2455020	max		Comm. 15	9456lc.jpg	9456ch.jpg	ASAS 174130-5111.8
16	NSV 09488	HV 8764	17 40 48.96, -18 32 59.1	M	12.9	<14.6	V	240	2454195	max		Comm. 16	9488lc.jpg	9488ch.jpg	ASAS 174049-1833.0
17	NSV 09499	HV 9097	17 41 52.64, -47 51 13.8	M	11.7	<14.4	V	287	2454993	max		Comm. 17	9499lc.jpg	9499ch.jpg	ASAS 174153-4751.2
18	NSV 09518	HV 8767	17 41 19.07, -18 00 33.3	M	12.9	<14.6	V	266	2454613	max		Comm. 18	9518lc.jpg	9518ch.jpg	ASAS 174119-1800.6
19	NSV 09564	S 8650	17 44 11.99, -47 44 00.7	M:	13.0	<14.5	V	239	2454917	max			9564lc.jpg	9564ch.jpg	ASAS 174412-4744.0
20	NSV 09641	HV 9105	17 47 16.87, -57 38 20.4	M	13.1	<14.4	V	229	2454766	max		Comm. 20	9641lc.jpg	9641ch.jpg	ASAS 174717-5738.3
21	NSV 09684	HV 9114	17 48 29.90, -42 49 14.1	M	10.7	<11.0	V	252	2454997	max		Comm. 21	9684lc.jpg	9684ch.jpg	ASAS 174830-4249.2
22	NSV 09732	HV 9119	17 51 03.23, -52 35 13.5	M	13.6	<14.8	V	246	2454673	max		Comm. 22	9732lc.jpg	9732ch.jpg	ASAS 175103-5235.2

23	NSV 09783	HV 11701	17 52 52.69, -38 36 01.4	M:	13.1	<15.6	V	182	2454874	max	Comm. 23	9783lc.jpg	9783ch.jpg	ASAS 175253-3836.0
24	NSV 09789	HV 9135	17 53 04.75, -42 09 25.0	M	12.0	<14.3	V	403	2455085	max	Comm. 24	9789lc.jpg	9789ch.jpg	ASAS 175305-4209.4
25	NSV 09791	HV 7014	17 53 03.27, -37 34 04.5	M:	13.7	<17.4	V		2452110	max	Comm. 25	9791lc.jpg	9791ch.jpg	ASAS 175303-3734.1
26	NSV 09825	HV 9141	17 54 54.48, -43 01 07.0	M	12.6	<14.0	V	278	2454566	max	Comm. 26	9825lc.jpg	9825ch.jpg	ASAS 175454-4301.1
27	NSV 09868	HV 9157	17 56 54.66, -33 20 42.2	M	13.4	<14.5	V	206	2454975	max	Comm. 27	9868lc.jpg	9868ch.jpg	ASAS 175655-3320.7
28	NSV 09875	HV 9156	17 57 22.31, -44 52 32.4	M	12.7	<14.2	V	159.5	2454231	max	Comm. 28	9875lc.jpg	9875ch.jpg	ASAS 175722-4452.5
29	NSV 09882	HV 9159	17 57 38.57, -42 13 56.0	M	12.7	<14.0	V	219	2455075	max	Comm. 29	9882lc.jpg	9882ch.jpg	ASAS 175739-4213.9
30	NSV 09883	HV 9163	17 56 59.15, -17 28 35.8	M	12.8	<14.6	V	243	2454985	max	Comm. 30	9883lc.jpg	9883ch.jpg	ASAS 175659-1728.6
31	NSV 09892	HV 9166	17 58 07.16, -33 45 09.5	M	12.2	<13.0	V	274	2455106	max	Comm. 31	9892lc.jpg	9892ch.jpg	ASAS 175807-3345.2
32	NSV 09895	HV 7053	17 58 18.92, -36 19 16.5	M	14.0	<15.4	V	248	2452944	max	Comm. 32	9895lc.jpg	9895ch.jpg	ASAS 175819-3619.3
33	NSV 09955	HV 9178	18 00 06.56, -16 01 25.5	M	13.7	<14.7	V	295	2454408	max	Comm. 33	9955lc.jpg	9955ch.jpg	ASAS 180007-1601.4
34	NSV 09982	HV 9181	18 02 28.75, -47 55 18.3	M	12.7	<14.5	V	310	2453792	max	Comm. 34	9982lc.jpg	9982ch.jpg	ASAS 180229-4755.3
35	NSV 09992	HV 9185	18 02 36.76, -48 31 01.4	M	11.2	<13.5	V	277	2454976	max	Comm. 35	9992lc.jpg	9992ch.jpg	ASAS 180237-4831.0
36	NSV 10035	HV 9194	18 02 46.47, -32 02 40.0	M	13.2	<14.6	V	220	2453788	max	Comm. 36	10035lc.jpg	10035ch.jpg	ASAS 180246-3202.7
37	NSV 10036	S 8763	18 03 27.46, -47 13 02.9	M	13.4	<14.9	V	263	2454356	max	Comm. 37	10036lc.jpg	10036ch.jpg	ASAS 180327-4713.0

Comments:

1. R = 15.7 on the SERC-DSS2 image of 1998-06-17.
3. R = 14.5 on the SERC-DSS2 image of 1989-09-03.
5. R = 16.5 on the SERC-DSS2 image of 1997-03-31.
6. The ASAS-3 range is for the combined brightness of the Mira and its neighbor. R = 15.5 on the ESO-MAMA image of 1985-04-25.
7. R = 16.3 on the ESO-MAMA image of 1985-06-26.
8. The ASAS-3 range is for the combined brightness of the Mira and its neighbor. R = 16.0 on the SERC-DSS2 image of 1996-09-06.
9. R = 16.1 on the AAO-DSS2 image of 1992-07-22.
10. Woźniak et al. (2004) give a wrong period (280 d) for this Mira star.
12. R = 17.0 on the SERC-DSS2 image of 1989-09-03.
13. R = 16.9 on the SERS-DSS2 image of 1996-09-06.
14. R = 16.5 on the AAO-DSS2 image of 1992-08-01.
15. R = 17.0 on the AAO-DSS2 image of 1992-08-01.

16. R = 15.6 on the AAO-DSS2 image of 1992-07-22.
17. HV 9499 was discovered by Luyten (1935). We assume that there was a misprint in the published declination: $-46^{\circ}49'$ instead of the correct value of $-47^{\circ}49'$.
18. R = 16.5 on the SERC-DSS2 image of 1997-03-31.
20. R = 16.8 on the AAO-DSS2 image of 1990-06-22.
21. The ASAS-3 range is for the combined brightness of the Mira and its neighbor. R = 16.6 on the SERC-DSS2 image of 1996-09-06.
22. R = 16.9 on the AAO-DSS2 image of 1993-04-18.
23. The ASAS-3 range is for the combined brightness of the Mira and its neighbor. SRA type is possible.
24. R = 14.9 on the AAO-DSS2 image of 1991-09-06.
25. We have got only one maximum in ASAS-3 for this star and 5 our measurements in R band (USNO Archive):

JD	R
2438560	14.7
2444476	17.0
2447774	17.0
2448506	15.0
2450334	17.4

26. The ASAS-3 range is for the combined brightness of the Mira and its neighbor. R = 16.0 on the SERC-DSS2 image of 1996-09-06.
27. R = 16.2 on the SERC-DSS2 image of 1996-09-07.
28. R = 16.0 on the SERS-DSS2 image of 1996-09-06.
29. R = 16.4 on the ESO-MAMA image of 1980-08-23.
30. R = 16.5 on the SERC-DSS2 image of 1986-08-16.
31. The ASAS-3 range is for the combined brightness of the Mira and its neighbor. R = 17.0 on the SERC-DSS2 image of 1987-09-16.
32. R = 16.2 on the SERS-DSS2 image of 1996-09-07.
33. R = 15.5 on the SERS-DSS2 image of 1996-09-13.
34. R = 16.0 on the ESO-MAMA image of 1984-04-23.
35. R = 15.5 on the SERC-DSS2 image of 1998-07-16.
36. R = 16.7 on the ESO-MAMA image of 1978-01-07.

37. $R = 15.0$ on the ESO-MAMA image of 1985-07-15.

Remarks:

In our work aimed at improvement of the coordinates of variable stars in the NSV catalog (Samus et al. 2007–2013), we determined new light elements for 37 Mira type stars. The variables were studied using data from the publicly available electronic archives of CCD observations of the ASAS-3 project (Pojmanski 2002), and images from the US Naval Observatory Image and Catalog Archive. HV 8740, HV 8743, HV 8754, HV 9091, HV 8764, HV 8767, and HV 9119 were found, upon our request, by D. Williams on Harvard plates and HV 6584 was found, upon our request, by the late Dr. M. Hazen in Harvard Observatory's logbooks. The other 29 stars were rediscovered by the authors.

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