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NEW VARIABLE STARS DISCOVERED IN THE MISAO PROJECT

II: MisV0101–MisV0150

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This report describes 50 new variable stars (MisV0101–MisV0150) discovered in the course of the MISAO Project.

These objects are detected automatically by the PIXY system as candidates of variable stars from unfiltered CCD images taken by Kadota between 1999 March and August, then confirmed by Yoshida and Kadota. Further details are same as described in Yoshida and Kadota (1999).

The list of 50 new variable stars is given in Table 1. The position and magnitude are measured with USNO-A1.0 catalog. The magnitude is based on a preliminary V magnitude calculated from R and B magnitude in the catalog based on Kato's (1998) equation:

$$V = R + 0.375(B - R)$$

The finding charts are available electronically as 4770-f[*nnn*].eps where [*nnn*] refers to the serial number assigned to the star in the first column of Table 1.

MisV0120 is 54 arcsec from V1465 Cyg, a rapidly changing irregular variable, at R.A. 20^h01^m49^s.98, Decl. +33°14'24".3 (2000.0) in the GCVS. But MisV0120 is identified with IRAS 20000+3305, so it is probably Mira type or semi-regular type. Considering the large distance and the type difference, we concluded that MisV0120 is another new variable star. However, no star brighter than 14.6 mag was detected on our unfiltered CCD images taken on JD 2451299.20, 2451367.18, 2451392.11 and 2451394.16 at the position of V1465 Cyg. Therefore, it cannot be completely ruled out that the position of V1465 Cyg is inaccurate and MisV0120 is identical with V1465 Cyg.

MisV0130 is identified with HS 1332, one of the variable stars discovered by FASTT, Flagstaff Astrometric Scanning Transit Telescope (cf. Henden and Stone 1998).

NSV 11661 is 1.7 arcmin from MisV0134. No star brighter than 15.2 mag was detected at the position of NSV 11661 on our unfiltered CCD images taken on JD 2451298.21, 2451330.22 and 2451367.17. However, considering the large angular distance, MisV0134 is probably another variable object.

References:

Henden, A. A., Stone, R. C., 1998, *AJ*, **115**, 296

Kato, T., 1998,

<http://www.kusastro.kyoto-u.ac.jp/vsnet/Mail/vsnet-chat/msg00700.html>

Yoshida, S., Kadota, K., 1999, *IBVS*, No.4746

Yoshida, S., 1999, in preparation

Table 1: List of New Variable Stars

Code	R.A. (J2000.0)	Decl.	Unfiltered CCD Mag.		Type	Identified with
			Max	Min		
MisV0101	18 ^h 59 ^m 20 ^s .75	+11°38′53″.3	13.7	[15.1	?	
MisV0102	20 02 07.62	+35 23 24.2	13.8	[15.0	?	
MisV0103	20 57 03.25	+44 56 16.0	14.0	15.3	?	
MisV0104	19 58 09.93	+34 14 51.4	11.9	13.5	?	USNO-A1.0 1200.14207004
MisV0105	20 57 03.21	+39 16 51.9	11.9	13.0	?	
MisV0106	21 00 37.23	+37 28 54.8	12.6	14.0	?	USNO-A1.0 1200.17031953
MisV0107	21 03 40.38	+43 40 18.8	12.3	13.6	?	
MisV0108	19 02 22.55	+19 56 55.9	11.8	13.6	?	USNO-A1.0 1050.12897426 IRAS 19002+1952
MisV0109	18 59 40.03	+19 30 10.0	12.7	14.2	?	IRAS 18574+1925
MisV0110	18 59 38.64	+19 58 59.7	10.9	12.7	?	IRAS 18574+1954
MisV0111	18 57 29.84	+20 05 27.3	10.5	11.7	?	IRAS 18553+2001
MisV0112	18 59 12.58	+20 14 38.5	11.6	13.5	?	USNO-A1.0 1050.12690142 IRAS 18570+2010
MisV0113	19 01 09.49	+15 38 57.0	11.6	13.3	?	IRAS 18588+1534
MisV0114	18 59 06.54	-00 00 44.6	13.8	[14.8	?	IRAS 18565-0004
MisV0115	19 01 18.95	+20 33 31.3	12.3	13.3	?	GSC 1593.0681 USNO-A1.0 1050.12825355 IRAS 18591+2029
MisV0116	19 01 13.17	+10 42 55.1	10.4	11.9	?	USNO-A1.0 0975.14088010 IRAS 18588+1038
MisV0117	19 00 32.83	+11 36 11.6	10.6	11.4	?	USNO-A1.0 0975.14055676 IRAS 18581+1131
MisV0118	18 57 21.59	+18 53 51.8	11.6	12.4	?	USNO-A1.0 1050.12566015 IRAS 18551+1849
MisV0119	20 03 03.17	+31 12 43.8	10.2	11.3	?	USNO-A1.0 1200.14506260 IRAS 20010+3103
MisV0120	20 01 54.11	+33 14 07.6	12.0	13.1	?	USNO-A1.0 1200.14440980 IRAS 20000+3305
MisV0121	18 59 13.76	+16 54 47.2	12.6	13.8	?	USNO-A1.0 1050.12691375
MisV0122	20 56 38.73	+32 56 05.9	11.6	12.8	?	GSC 2692.1817 USNO-A1.0 1200.16805212 IRAS 20545+3244
MisV0123	20 02 56.93	+38 07 49.1	12.6	13.7	?	USNO-A1.0 1275.13401299
MisV0124	19 02 27.83	+18 12 36.4	12.3	13.1	?	USNO-A1.0 1050.12903675 IRAS 19002+1808
MisV0125	19 00 08.87	+18 24 48.1	12.7	13.7	?	USNO-A1.0 1050.12748967

Table 1 (cont.)

Code	R.A. (J2000.0) Decl.		Unfiltered		Type	Identified with
			CCD Mag.	Max Min		
MisV0126	19 ^h 56 ^m 49 ^s .94	+31°43'10"0	12.3	13.4	?	USNO-A1.0 1200.14114676 IRAS 19548+3135
MisV0127	19 00 59.36	+13 57 36.6	12.4	13.6	?	USNO-A1.0 0975.14076767 IRAS 18586+1353
MisV0128	19 58 14.84	+35 43 22.1	12.4	13.6	?	GSC 2682.1684 USNO-A1.0 1200.14212791
MisV0129	21 55 46.94	+56 12 36.9	14.0	15.7	?	USNO-A1.0 1425.12660249
MisV0130	19 02 25.63	-00 30 14.5	10.8	12.0	?	USNO-A1.0 0825.14192122 IRAS 18598-0034 HS 1332
MisV0131	18 01 45.22	-31 20 04.3	12.0	12.8	?	IRAS 17585-3120
MisV0132	17 59 07.42	-29 30 27.3	11.8	13.0	SR?	IRAS 17559-2930
MisV0133	18 57 49.93	+20 31 37.1	13.0	14.2	?	USNO-A1.0 1050.12598950 IRAS 18556+2027
MisV0134	19 01 38.64	+15 43 08.0	13.5	14.4	?	IRAS 18593+1538
MisV0135	18 58 52.63	-09 41 06.6	11.5	12.7	SR?	IRAS 18561-0945
MisV0136	18 59 29.49	-00 41 55.1	12.9	14.5	?	IRAS 18569-0046
MisV0137	18 57 26.66	-03 34 34.3	11.8	13.5	SR?	USNO-A1.0 0825.13779108 IRAS 18548-0338
MisV0138	19 01 20.23	-01 24 12.1	12.2	13.3	?	
MisV0139	18 59 28.17	-04 25 34.2	13.8	16.5	?	
MisV0140	19 01 08.68	-06 07 52.6	12.6	13.7	?	USNO-A1.0 0825.14092766
MisV0141	19 02 15.91	-02 24 16.3	13.1	15.3	?	
MisV0142	19 00 49.48	-01 53 40.8	12.1	13.3	?	USNO-A1.0 0825.14069645
MisV0143	19 00 17.64	-02 02 36.6	12.3	13.4	?	USNO-A1.0 0825.14031033
MisV0144	19 00 29.32	-01 54 50.8	12.2	13.8	?	USNO-A1.0 0825.14046017
MisV0145	19 59 37.89	+22 18 45.1	12.8	15.2	?	USNO-A1.0 1050.16326536
MisV0146	19 59 40.42	+23 44 17.7	13.4	15.3	?	
MisV0147	19 00 43.07	-07 42 37.2	11.9	13.6	?	USNO-A1.0 0750.16160471 IRAS 18580-0747
MisV0148	19 56 56.06	+44 35 24.2	12.6	14.0	?	
MisV0149	19 58 08.52	+30 06 29.3	11.1	11.9	SR?	IRAS 19561+2958
MisV0150	19 00 27.09	-08 47 52.6	11.4	12.6	?	USNO-A1.0 0750.16135617 IRAS 18577-0852