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IDENTIFICATIONS FOR SONNEBERG VARIABLES ON MVS 246–254

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As part of initial work on obtaining accurate coordinates and identifications for variables appearing on the long series of Sonneberg *MVS* charts (Hoffmeister 1957, *et seq.*), we have re-examined the two lists presented by Manek (1997a,b) to find external identifications. His identifications were verified as well, and in two cases we present corrections to these. The stars are shown in the same order as in Manek's list, but not all have comments. We thus show in the first column the 'Kiel' preliminary designations, which increase nearly monotonically, to serve as an index between ours and Manek's work.

The working methods for star-identification were similar to those of Manek (1997a) and of Skiff (1999), which includes comparison of the source charts against computer-screen plots of the GSC and/or USNO-A catalogues, and with Digitized Sky Survey images. Identifications in other surveys were sought using SIMBAD and the Strasbourg 'VizieR' catalogue-query utility, and are mentioned here only if they are "new" in the sense of being not present or not linked in SIMBAD. The tedious work of identifying the stars on the sky and obtaining coordinates was done by Kinnunen, while Skiff examined difficult cases and did some sleuthing in the literature.

AN	GCVS	Remarks
121.1931	AT Tau	IRAS 05367+2749
122.1931	AW Tau	[TVH89] 14
123.1931	AY Tau	IRAS 05467+2524
124.1931	CG Tau	improved position: $5^h51^m58^s.9$ $+27°29'25''$ (2000); the northeastern component of a close pair, the variable is not present on POSS-I O print.
125.1931	BB Tau	IRAS 05492+2549
126.1931	BC Tau	IRAS 05499+2413
127.1931	BD Tau	IRAS 05506+2351
129.1931	CO Tau	IRAS 05557+2613
130.1931	BF Tau	IRAS 05566+2645
132.1931	BF Gem	IRAS 05588+2619
134.1931	BR Aur	IRAS 05595+2938
135.1931	BB Aur	IRAS 06001+3138
136.1931	BT Aur	IRAS 06012+2951
139.1931	BV Aur	IRAS 06076+3014

AN	GCVS	Remarks
140.1931	CQ Mon	IRAS 06245+0448 = IRC +00110
148.1931	DS Mon	IRAS 06423–0514
150.1931	DX Mon	[FT96] 214.5–1.8D; IRAS colors are appropriate for an AGB star.
151.1931	DZ Mon	IRAS 06474–0446
157.1931	BQ Mon	IRC –10148
165.1931	FR Mon	IRAS 07154–0932
170.1931	KP Mon	IRAS 07277–1046
173.1931	FX Pup	IRAS 07306–1141
175.1931	NSV 3651	IRAS 07328–1501; the western star of a pair.
176.1931	BF Pup	IRAS 07331–1459; Manek ID is correct (northeastern star of a small triangle).
178.1931	GH Pup	CGCS 1818; GCVS 4.1 position 13⁅5 in error.
180.1931	GN Pup	IRAS 07442–1453, southern component of a close pair.
181.1931	GO Pup	IRC –10177
182.1931	GQ Pup	IRAS 07462–1615
187.1931	LY Her	IRAS 17431+2521
192.1931	EL Her	the nebulous companion on the east noted by Manek is an E/SA0$^-$ galaxy. EL Her is not obviously variable nor especially red on POSS-I/II plates; is perhaps the apparent variability due to merger with the galaxy in variable seeing?
193.1931	EN Her	IRAS 17516+2639
194.1931	EO Her	IRAS 17519+2813
199.1931	EU Her	IRAS 17563+3155
203.1931	EW Her	IRAS F18020+3322
204.1931	EY Her	IRAS 18027+3241
205.1931	EZ Her	IRAS 18029+2832
206.1931	FF Her	IRAS 18032+3005
208.1931	FH Her	IRAS 18042+3221
209.1931	FI Her	IRAS 18080+3121
Ross 297	CG Her	SV* R 297
210.1931	V555 Oph	northeastern star of a pair.
217.1931	V560 Oph	IRAS 17462–0112
218.1931	V459 Oph	IRAS 17462+0200
220.1931	V460 Oph	FASTT 987
222.1931	V461 Oph	FASTT 897
225.1931	V464 Oph	southeastern component of a close pair.
226.1931	V465 Oph	FASTT 1097
237.1931	V472 Oph	fainter star 20″ southeast also very red.
247.1931	V478 Oph	FASTT 850
248.1931	V479 Oph	IRAS 17576+0607 = NSV 9963 = IRC +10344
249.1931	V480 Oph	FASTT 853
253.1931	V483 Oph	IRAS 17588+0258
254.1931	V570 Oph	western star of a pair.
259.1931	V486 Oph	IRAS 18000+0427
260.1931	V488 Oph	IRAS 18002+0418
266.1931	AY Ser	IRAS 18055–0015
29.1926	V426 Oph	present in outburst at epoch 1917.562 in the AC2000 star catalogue (Urban *et al.* 1998).
275.1931	V498 Oph	IRAS 18131+0004
277.1931	V500 Oph	IRAS 18154+0214
279.1931	V352 Aql	Manek ID correct.
280.1931	V353 Aql	IRAS 19128+0457
281.1931	V355 Aql	IRAS 19146+0050
282.1931	V848 Aql	IRAS 19180+0257
283.1931	V531 Aql	IRAS 19203+0608
284.1931	V372 Aql	IRAS 19267+0308
288.1931	V392 Aql	IRAS 19359–0038

AN	GCVS	Remarks
291.1931	UY Sge	IRAS 20181+1627
294.1931	WW Del	IRAS 20245+1527
296.1931	AA Del	IRAS 20290+1750
299.1931	SY Del	IRAS 20309+1448
301.1931	DG Del	eastern star of a pair.
309.1931	DT Del	IRAS 20415+1013
311.1931	DU Del	close double.
315.1931	AZ Del	IRAS 20499+1435
754.1933	V2067 Oph	IRAS 16568–0213
755.1933	NSV 8128	IRAS 16593–0040
756.1933	NSV 8133	IRAS 16599+0204
757.1933	NSV 8188	IRAS 17035+0147
758.1933	NSV 8223	IRAS 17052–0323
759.1933	NSV 8236	IRAS 17065–0230
762.1933	V858 Oph	IRAS 17075–0232
765.1933	V2070 Oph	IRAS 17127–0012
767.1933	V2072 Oph	IRAS 17144–0058
768.1933	V1854 Oph	IRAS F17161–0200
773.1933	V2055 Oph	IRAS 17306–0212
774.1933	NSV 9151	IRAS 17304–0407; Manek ID correct.
776.1933	V539 Aql	IRAS 19452–0355
777.1933	V686 Aql	IRAS 19460–0524
778.1933	V541 Aql	IRAS 19459+0145 = IRC +00452
779.1933	V542 Aql	IRAS 19462–0035
781.1933	V689 Aql	Manek ID correct; SIMBAD ID misattributed: $\neq$ BD–04°4935, etc.
785.1933	V551 Aql	IRAS 19486–0249
789.1933	V554 Aql	IRAS 19507–0444
790.1933	V344 Aql	IRAS 19508+0203
791.1933	V345 Aql	IRAS 19512+0251
792.1933	V556 Aql	IRAS 19521–0326, eastern star of a pair.
793.1933	V558 Aql	IRAS 19522–0358
61.1924	EG Aql	IRAS 19525–0356
796.1933	NSV 12577	southeastern star of a pair.
814.1936	V502 Aql	IRAS 19539–0245, southeastern star of a pair.
798.1933	V724 Aql	HD 357600, verified on HDE chart, but type (A2) probably wrong.
Ross 263	QX Aql	IRAS 19558–0235 = SV* R 263
801.1933	V745 Aql	IRAS 19567–0206
803.1933	V567 Aql	IRAS 19571+0310
804.1933	V568 Aql	IRAS 19577–0201 = IRC +00461
805.1933	V754 Aql	IRAS 19580–0525
806.1933	V752 Aql	IRAS 19578+0012
810.1933	V504 Aql	IRAS 19592+0158; *MVS* chart somewhat distorted, Manek ID in error, should be: $20^{\rm h}01^{\rm m}47\overset{\rm s}{.}10$ $+02°07'22\overset{''}{.}6$ (2000, USNO-A2.0), *cf.* POSS-I/II images, which show the variation.
815.1933	V507 Aql	IRAS 20007–0137
822.1933	V782 Aql	southeastern star of a pair.
819.1933	V575 Aql	IRAS 20031+0314
826.1933	V511 Aql	IRAS 20069+0154
828.1933	V513 Aql	IRAS 20075+0013
833.1933	V517 Aql	IRAS 20112+0250
834.1933	V519 Aql	IRAS 20120–0119
836.1933	V520 Aql	IRAS 20121+0015
838.1933	V521 Aql	IRAS 20144–0324
Ross 276	V335 Aql	SV* R 276
843.1933	V595 Aql	IRAS 20190+0033
845.1933	UX Sge	southeastern component of a close double, *cf.* POSS-I/II images.

AN	GCVS	Remarks
852.1933	WY Del	IRAS 20250+1344
854.1933	CV Del	eastern star of a pair.
860.1933	AQ Del	IRAS 20387+1709
861.1933	AS Del	IRAS 20399+1520, Manek ID in error, should be: $20^{\rm h}42^{\rm m}17\overset{\rm s}{.}25$ $+15°30'51\overset{''}{.}5$ (2000, USNO-A2.0). Manek's star is in a field with a similar-looking star pattern, but the present star is a much better match to the *MVS* chart and GCVS 4.1 position, and is consistent with the IRAS ID.
862.1933	DV Del	IRAS 20439+1254
868.1933	BT Cep	IRAS 22299+6708

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