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IMPROVED POSITIONS FOR SONNEBERG VARIABLES; PART 2

This paper is the second one devoted to the position improvements for Sonneberg variables, with more details given in Mánek (1997).

Table 1 gives precise positions for objects having published finding charts in MVS 250 – 254 (1957). North on these charts is on the top with exceptions marked directly on individual charts. However there are deviations from this rule and these are noted in remarks. Comments from original papers of Hoffmeister (1931, 1934) were used when possible. The source of the position is coded as follows : A = A1.0, C = CCD, D = DSS+Fitsview, E = estimate, P = plate scan. Positions should be precise to $\pm$ 1″ for A, C, P code and to $\pm$ 2″ for D code. The possible error for E code is noted in remarks. Identification with GSC is given where possible. No other identifications were searched for. As the final designation does not appear on the charts (it was not known at the time when charts were published), provisional designation is given in the table too. The differences resulting from a comparison with the positions given in GCVS in the sense $(new - GCVS)$ are also shown, where $\Delta\alpha$ is given in seconds of time and $\Delta\delta$ is given in minutes of arc.

Table 1

Prov. desig.	Name	RA (2000)	Dec	GSC	s	$\Delta\alpha$	$\Delta\delta$	Remark
267.1931	V511 Oph	18 08 19.24	+2 25 30.8	0435.4321	A	−0.8	0.0	
268.1931	V494 Oph	18 08 22.19	+3 12 05.0	0435.1299	A	+1.1	+0.6	
269.1931	V575 Oph	18 08 51.20	+3 31 52.7	0435.0847	A	−0.5	−0.2	
270.1931	V495 Oph	18 09 04.56	+3 29 29.7		A	−4.2	−1.1	
271.1931	V496 Oph	18 10 14.61	+3 08 42.7	0435.1931	A	−0.6	+0.1	
272.1931	V497 Oph	18 10 56.27	+3 13 02.2	0435.1599	A	+5.2	+0.3	
273.1931	AZ Ser	18 14 50.95	−0 13 17.5	5097.0855	A	−0.1	−0.3	
274.1931	BB Ser	18 15 39.45	−0 13 09.3		A	+1.3	+0.8	
275.1931	V498 Oph	18 15 44.11	+0 05 20.4	0432.0726	A	+0.4	−1.7	
276.1931	V499 Oph	18 16 48.53	+2 26 39.7		A	−1.4	−1.5	
277.1931	V500 Oph	18 17 59.49	+2 15 52.3		A	−2.7	+0.6	
278.1931	V348 Aql	19 11 20.00	+0 29 11.7	0463.2661	A	+1.7	+0.2	
279.1931	V352 Aql	19 13 33.74	+2 18 13.0		A	−4.6	0.0	2
280.1931	V353 Aql	19 15 18.12	+5 03 06.0	0472.2097	A	+3.9	−1.2	
281.1931	V355 Aql	19 17 13.39	+0 56 27.8		A	+1.5	+1.0	
282.1931	V848 Aql	19 20 34.36	+3 03 00.0	0468.2841	A	+0.8	−0.7	
283.1931	V531 Aql	19 22 50.30	+6 14 19.4	0477.4022	A	−3.7	−1.5	
284.1931	V372 Aql	19 29 17.20	+3 14 30.2	0469.2592	A	+7.8	+0.3	
285.1931	V376 Aql	19 30 51.06	+3 16 57.6	0482.0576	A	−0.3	+0.6	
286.1931	V416 Aql	19 33 39.51	+0 32 22.8	0478.0495	A	−2.8	−0.2	
287.1931	V391 Aql	19 37 52.55	+6 43 44.1	0491.0030	A	−0.1	−1.7	
288.1931	V392 Aql	19 38 33.79	−0 31 34.8	5145.0506	A	+1.3	+1.5	
289.1931	LT Aql	19 38 49.75	+6 34 59.3		A	+1.9	−1.5	
290.1931	V398 Aql	19 40 26.99	+5 06 44.2		A	−5.5	−1.3	
291.1931	UY Sge	20 20 23.39	+16 36 48.8	1631.1551	A	−0.1	−1.7	

Table 1 (continued)

Prov. desig.	Name	RA (2000)	Dec	GSC	s	$\Delta\alpha$	$\Delta\delta$	Remark
292.1931	CE Del	20 23 02.93	+10 19 14.8	1078.0911	A	−3.1	−0.4	
293.1931	CG Del	20 23 15.07	+17 29 26.1		A	−6.7	−2.3	
294.1931	WW Del	20 26 51.17	+15 36 58.5	1632.1262	A	+1.3	−0.9	
295.1931	XX Del	20 28 17.28	+18 33 17.2	1636.0287	A	+3.3	+0.3	
296.1931	AA Del	20 31 23.14	+18 00 40.2	1636.1159	A	+4.5	−0.5	
297.1931	AD Del	20 33 04.27	+13 28 23.8	1099.0086	A	+3.9	+3.1	
298.1931	AE Del	20 33 03.82	+17 33 11.1	1637.1761	A	+2.6	−1.1	
299.1931	SY Del	20 33 15.79	+14 58 53.8	1100.0264	A	0.0	+0.2	
300.1931	BL Del	20 34 03.03	+15 05 05.9		A	−0.7	−0.2	
301.1931	DG Del	20 35 44.13	+11 28 09.2		A	+0.8	+1.7	
302.1931	DF Del	20 35 49.21	+12 16 37.3	1096.1126	A	+4.7	+0.2	
303.1931	AL Del	20 36 15.84	+13 05 20.4	1096.0502	A	−1.0	−0.1	
304.1931	DK Del	20 37 35.67	+15 48 39.0	1633.0688	A	−2.6	+0.1	
305.1931	BO Del	20 39 23.64	+14 23 40.3		A	+5.9	+1.0	
306.1931	AP Del	20 40 13.33	+13 24 33.5	1100.1011	A	−0.4	+0.9	
307.1931	TU Del	20 40 50.66	+14 50 50.6	1100.0689	A	−1.7	+0.1	
308.1931	DS Del	20 43 28.73	+14 34 18.5	1101.1126	A	+5.0	+0.4	
309.1931	DT Del	20 43 57.05	+10 24 01.7	1093.2929	A	−4.6	+0.1	
310.1931	BQ Del	20 44 24.57	+14 28 25.4	1101.2152	A	+0.7	+0.5	
311.1931	DU Del	20 45 37.91	+11 36 45.6	1097.2088	A	+0.4	−0.2	
312.1931	AU Del	20 46 04.34	+13 16 43.8	1101.2275	A	+2.3	−0.3	
313.1931	AW Del	20 47 56.18	+17 04 20.7	1638.2621	A	+1.6	+0.2	
314.1931	EE Del	20 51 51.64	+12 37 30.9		A	−3.3	−0.8	
315.1931	AZ Del	20 52 16.28	+14 46 34.6		A	−7.7	+1.2	
316.1931	BS Del	20 52 58.26	+16 02 42.3	1647.1877	A	+0.4	+1.3	
189.1930	BV Del	20 53 09.95	+16 08 49.1	1647.1633	A	−0.8	−0.8	3
754.1933	V2067 Oph	16 59 28.09	−2 17 42.0	5055.0638	A	+3.7	−0.2	
755.1933	NSV 08128	17 01 54.50	−0 44 18.5	5064.0040	A	−2.1	−1.0	
756.1933	NSV 08133	17 02 26.07	+2 00 18.2	0402.2670	A	−0.4	−0.5	
757.1933	NSV 08188	17 06 03.80	+1 43 20.2	0398.1205	A	−6.0	+0.3	
758.1933	NSV 08223	17 07 54.23	−3 27 02.0	5069.1075	A	−2.5	+0.8	
759.1933	NSV 08236	17 09 11.08	−2 34 31.6	5069.0146	A	+7.4	+0.2	
760.1933	NSV 08235	17 09 03.80	+0 43 34.4	0399.1293	A	+3.8	+1.3	
761.1933	V2047 Oph	17 09 16.18	+0 42 41.8	0399.1432	A	−1.8	+1.5	
762.1933	V858 Oph	17 10 08.18	−2 35 55.0	5069.0083	A	−1.6	+0.8	1,4
763.1933	NSV 08256	17 10 22.00	−4 03 35.4	5073.1002	A	−0.4	+1.1	
764.1933	NSV 08351	17 13 53.98	−3 59 49.0	5073.1000	A	+1.6	−0.4	
765.1933	V2070 Oph	17 15 17.55	−0 16 03.4	5066.0028	A	+4.4	+0.3	
766.1933	NSV 08441	17 16 29.67	−0 29 16.3	5066.0736	A	+3.4	−2.0	
767.1933	V2072 Oph	17 16 59.81	−1 01 16.9	5066.1124	A	−11.1	−1.1	
768.1933	V1854 Oph	17 18 46.24	−2 03 43.0	5070.0468	A	+10.1	+0.4	
769.1933	V756 Oph	17 22 30.40	+1 46 48.1	0401.0572	A	+0.7	−0.1	
770.1933	NSV 08593	17 24 05.06	−1 03 28.6		A	+1.0	+0.2	
771.1933	V2054 Oph	17 24 46.77	−3 17 19.6	5071.0932	A	−2.8	+1.3	
772.1933	V767 Oph	17 30 44.88	+2 35 43.9	0418.0851	A	+0.1	+0.2	
773.1933	V2055 Oph	17 33 12.24	−2 14 36.4		A	+5.9	−1.6	
774.1933	NSV 09151	17 33 06.97	−4 09 20.2	5088.0340	A	−15.6	−1.3	2
775.1933	V671 Aql	19 45 57.28	+0 30 02.1		A	+8.9	+0.7	
776.1933	V539 Aql	19 47 52.61	−3 47 41.6	5154.1920	A	−2.2	+0.5	
777.1933	V686 Aql	19 48 44.43	−5 16 30.5	5154.1005	A	−4.0	+0.9	
778.1933	V541 Aql	19 48 27.62	+1 53 06.4	0484.2334	A	−0.3	+0.6	
779.1933	V542 Aql	19 48 46.79	−0 28 11.8		A	+2.4	+1.3	
780.1933	V423 Aql	19 48 40.77	+0 40 07.9	0480.3013	A	−1.4	−0.4	
781.1933	V689 Aql	19 49 20.09	−4 08 57.7	5154.1648	A	−8.1	+1.4	
782.1933	V545 Aql	19 49 36.83	−2 03 29.0	5150.1892	A	+0.8	−1.5	
783.1933	V548 Aql	19 49 59.50	−2 02 24.5		A	−3.5	0.0	
784.1933	V549 Aql	19 50 38.59	−3 57 25.0	5154.0268	A	−1.4	+0.9	
785.1933	V551 Aql	19 51 17.72	−2 42 11.0	5150.2641	A	−5.0	+0.1	
786.1933	V553 Aql	19 51 52.01	+2 48 18.5	0484.1036	A	0.0	+0.1	
787.1933	V706 Aql	19 52 57.81	−2 05 48.6	5151.0518	A	+3.8	−1.6	

Table 1 (continued)

Prov. desig.	Name	RA (2000)	Dec	GSC	s	$\Delta\alpha$	$\Delta\delta$	Remark
788.1933	V501 Aql	19 53 09.81	−5 26 26.9	5155.1774	A	−8.7	−1.3	
789.1933	V554 Aql	19 53 21.12	−4 36 59.6		A	−2.5	−0.8	
790.1933	V344 Aql	19 53 24.66	+2 10 54.3		A	−3.0	−0.9	
791.1933	V345 Aql	19 53 47.29	+2 59 29.0		A	−2.5	+0.6	
792.1933	V556 Aql	19 54 43.49	-3 18 43.5	5151.1374	A	−0.8	+0.3	
793.1933	V558 Aql	19 54 54.80	-3 50 04.4		A	−3.0	0.0	
61.1924	EG Aql	19 55 12.94	−3 48 21.1		A	+0.1	0.0	
794.1933	V559 Aql	19 55 30.03	+2 26 40.9	0485.2192	A	−2.4	−0.3	
795.1933	V562 Aql	19 56 02.29	−0 35 58.3		A	−0.2	0.0	
796.1933	NSV 12577	19 56 18.82	+0 02 00.0	0481.2310	A	−1.0	0.0	
247.1930	QW Aql	19 56 46.33	+0 00 51.2	0481.2346	A	−0.6	0.0	
246.1930	GZ Aql	19 56 17.22	−0 02 57.8	5147.1014	A	+0.3	0.0	
797.1933	V502 Aql	19 56 35.47	−2 37 14.1	5151.1558	A	−5.1	−0.3	
798.1933	V724 Aql	19 56 42.70	+1 05 03.3	0481.2119	A	−5.1	−1.0	
Ross 263	QX Aql	19 58 28.59	−2 27 28.5	5151.0971	A	+14.2	+0.1	
799.1933	V503 Aql	19 59 14.04	−1 22 01.4	5147.2492	A	+3.7	+0.8	
800.1933	V565 Aql	19 59 17.31	+1 00 28.5	0481.3335	A	+5.4	+0.3	
801.1933	V745 Aql	19 59 23.57	−1 57 50.7	5151.0329	A	−0.3	−0.1	
802.1933	V566 Aql	19 59 23.21	+0 06 10.4		A	+3.4	−1.1	
803.1933	V567 Aql	19 59 42.72	+3 18 40.0	0485.3118	A	+3.2	−0.6	
804.1933	V568 Aql	20 00 20.73	−1 52 42.7	5164.0270	A	−0.1	−0.1	
805.1933	V754 Aql	20 00 39.76	−5 16 45.3	5168.0797	A	−2.5	+1.9	
806.1933	V752 Aql	20 00 28.21	+0 21 09.3	0494.2343	A	+3.7	−0.1	
807.1933	V569 Aql	20 00 19.16	+1 53 42.7	0498.1005	A	−2.8	+0.4	
808.1933	V570 Aql	20 00 28.39	+0 45 15.0		A	−1.8	+1.9	
809.1933	V762 Aql	20 01 06.87	+0 15 03.3	0494.0472	A	+5.2	−0.3	
810.1933	V504 Aql	20 01 47.76	+2 07 48.1		A	+8.0	+1.4	
811.1933	V765 Aql	20 02 04.81	−3 02 31.0	5164.1493	A	−0.2	+0.1	
812.1933	V766 Aql	20 02 02.19	+2 21 26.4	0498.1415	A	−0.3	+1.0	5
813.1933	V505 Aql	20 02 37.12	+0 16 25.1	0494.0745	A	+5.5	0.0	
814.1933	NSV 12733	20 03 06.32	−2 11 34.5	5164.0426	A	−2.8	+1.0	
815.1933	V507 Aql	20 03 20.28	−1 29 32.0		A	+3.9	+1.0	
816.1933	NSV 12760	20 04 27.70	−0 45 26.0	5160.0947	A	0.0	+1.0	
817.1933	V773 Aql	20 04 36.57	−1 29 47.5		A	−3.9	+1.6	
818.1933	V574 Aql	20 05 39.86	+2 19 41.9	0498.2398	A	+0.3	−0.9	
819.1933	V575 Aql	20 05 40.00	+3 22 49.2	0498.0394	A	+0.5	+0.2	
820.1933	V576 Aql	20 05 52.77	−1 10 01.8	5160.0016	A	−5.3	−0.7	
821.1933	V509 Aql	20 06 16.89	+2 27 24.9	0498.2413	A	+2.5	−1.2	
822.1933	V782 Aql	20 07 14.40	+1 29 31.2	0494.1203	A	−2.0	−0.2	
823.1933	V510 Aql	20 07 37.43	−2 27 06.2		A	−1.9	+0.1	
824.1933	V787 Aql	20 08 20.78	+0 04 24.7	0495.1967	A	+1.0	−0.4	
825.1933	V788 Aql	20 08 48.43	−1 04 22.8	5161.2404	A	+2.5	−0.2	
826.1933	V511 Aql	20 09 27.90	+2 02 59.0	0499.2269	A	0.0	+1.1	
827.1933	V512 Aql	20 10 16.65	−3 33 07.9	5165.0728	A	+2.2	0.0	
828.1933	V513 Aql	20 10 06.39	+0 22 51.4	0495.1434	A	−0.1	+1.0	
829.1933	V514 Aql	20 11 02.87	−4 17 37.8	5169.0419	A	−1.3	−0.6	
830.1933	V790 Aql	20 11 27.37	−0 47 14.7		D	−0.3	−0.2	
831.1933	V515 Aql	20 12 14.64	−0 23 28.0	5161.0517	A	+0.4	+0.5	
832.1933	V516 Aql	20 12 36.55	+1 54 47.7	0499.0092	A	+2.5	−0.3	
833.1933	V517 Aql	20 13 46.17	+2 59 31.0	0499.2064	A	−3.8	+1.4	
834.1933	V519 Aql	20 14 39.91	−1 10 36.1		A	−0.1	0.0	
835.1933	V518 Aql	20 14 37.44	+0 08 52.8	0495.1720	A	−0.3	+0.7	
836.1933	V520 Aql	20 14 44.59	+0 24 27.4	0495.1429	A	−3.9	+0.3	
837.1933	V589 Aql	20 15 55.18	+1 00 30.0	0496.0788	A	+1.3	+0.2	
838.1933	V521 Aql	20 17 01.98	−3 15 38.1	5166.1783	A	+2.9	+2.0	
839.1933	V523 Aql	20 17 42.64	−1 06 16.4	5162.1018	A	+2.7	+0.4	
840.1933	V522 Aql	20 17 33.07	−0 25 00.6	5162.1956	A	−5.3	+1.6	
841.1933	V524 Aql	20 17 58.57	+1 03 16.9	0496.1540	A	+4.7	−0.1	
842.1933	V525 Aql	20 19 50.22	−4 17 41.2	5170.1355	A	−1.8	+1.8	
Ross 276	V335 Aql	20 21 17.77	+1 19 19.0	0496.1648	A	−0.9	0.0	

Table 1 (continued)

Prov. desig.	Name	RA (2000)	Dec	GSC	s	$\Delta\alpha$	$\Delta\delta$	Remark
843.1933	V595 Aql	20 21 35.58	+0 43 09.9	0496.1261	A	−0.6	+0.6	
844.1933	V596 Aql	20 21 50.83	−1 52 47.5	5166.1391	A	+3.1	+1.6	
845.1933	UX Sge	20 18 07.11	+18 08 17.4		A	+0.3	−0.1	6
846.1933	BZ Del	20 22 18.78	+12 36 04.3	1082.0316	A	+5.1	+0.4	
847.1933	CF Del	20 23 31.33	+12 59 29.8		A	+7.0	−1.2	
848.1933	BE Del	20 23 50.56	+13 14 58.5	1086.1212	A	+2.4	+1.2	
849.1933	VY Del	20 23 51.96	+18 15 50.7	1635.1345	A	+8.0	−0.9	
850.1933	CN Del	20 25 20.19	+13 26 10.2		A	+2.2	−0.7	
851.1933	CP Del	20 25 54.39	+14 47 09.0		A	−3.3	−0.7	
852.1933	WY Del	20 27 20.52	+13 54 33.7		A	+3.9	−0.4	
853.1933	CR Del	20 28 50.14	+15 37 01.0	1632.1154	A	+0.2	0.0	
854.1933	CV Del	20 30 54.18	+16 32 34.3	1632.2095	A	−6.0	−0.6	
855.1933	AH Del	20 34 31.76	+14 02 37.2	1100.0326	A	+1.9	+3.3	
856.1933	AM Del	20 36 27.53	+13 30 34.8		A	+3.1	+1.1	
857.1933	AO Del	20 39 48.66	+17 20 57.4	1637.1138	A	+0.8	−1.7	
858.1933	DN Del	20 40 04.08	+13 48 25.4		A	−2.2	+1.7	
859.1933	DO Del	20 40 19.38	+13 52 45.4	1100.0374	A	−4.8	+0.1	
860.1933	AQ Del	20 41 02.68	+17 20 03.6	1638.0757	A	+2.8	−0.7	
861.1933	AS Del	20 42 13.63	+15 26 45.5	1634.0186	A	−2.2	−3.0	1
862.1933	DV Del	20 46 17.06	+13 05 41.4	1097.0641	A	+2.8	+0.7	
863.1933	DW Del	20 46 20.78	+15 48 24.7		A	−0.9	+0.4	
864.1933	EF Del	20 52 04.47	+12 51 23.7	1098.1375	A	+0.8	+0.1	
865.1933	BT Del	20 53 44.16	+15 44 07.1	1647.0208	A	+4.0	+0.7	
866.1933	EH Del	20 55 02.04	+13 48 04.4		A	0.0	+1.6	
867.1933	BR Cep	22 27 17.17	+66 10 00.5	4276.0502	A	−4.1	−0.2	
868.1933	BT Cep	22 31 30.35	+67 23 46.7	4276.0073	A	+0.1	0.0	
869.1933	CH Cep	23 10 43.59	+64 28 52.9	4287.0974	A	−2.0	−0.1	
870.1933	CK Cep	23 12 43.79	+63 57 17.0	4287.0722	A	+3.4	+0.3	
871.1933	NSV 14486	23 17 51.66	+62 08 06.1	4283.0021	A	+1.4	0.0	1

Remarks:

1. Two entries for the same star in A1.0. The position given in the table is an average.
2. Slightly uncertain identification.
3. BV Del – unlabeled circle on chart for BS Del.
4. V858 Oph – Two GSC numbers (5069.0083 and 5069.1384) for one star. Northern component of a double star, the southern one having position $17^{\rm h}10^{\rm m}8\overset{\rm s}{.}05$, $-02°36'03\overset{''}{.}0$.
5. V766 Aql – north on the bottom.
6. UX Sge – mean position of a close double, not known which component varies.

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