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COORDINATES AND IDENTIFICATIONS FOR SONNEBERG VARIABLES – I

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This report contains identifications and accurate positions for 89 variables discovered by Hoffmeister (1959). Most are short-period variables in the constellation Hercules. The working methods were similar to previous lists (*e.g.* Skiff 1999), which involves comparing the source charts against computer-screen plots of the GSC or USNO–A2.0 star catalogues, with Digitized Sky Survey images, and making bibliographic comparisons using the Strasbourg 'VizieR' utility and SIMBAD.

The list is divided into four tables as given by Hoffmeister from differing plate material. The tables show Sonneberg serial numbers and GCVS designations in the first two columns. An asterisk by the GCVS name indicates a note following the tables. The star positions are from either the ACT (Urban *et al.* 1998) or USNO–A2.0 (Monet *et al.* 1998). The source of the position is given in column 's': A = USNO–A2.0, T = ACT. Several of the stars in Table 1 have precise coordinates previously published by de Martino *et al.* (1996) as part of the Yale southern proper-motion program. GSC names are given as available. A few new IDs with external catalogues are given in the remarks or the notes.

Table 1: Variables on southern sky-patrol plates

Sonne.	GCVS	RA (2000)	Dec	s	GSC	Remarks
S 5219	NSV 14530	23 22 46.5	−46 41 32	A		
S 5220	TU Phe	23 35 23.7	−55 03 06	T	8835-0869	
S 5221	NSV 14643	23 37 21.4	−33 36 22	T	7518-1036	HD 222024
S 5222	NSV 29*	0 06 20.8	−35 17 13	A	6995-0681	
S 5223	NSV 207	0 34 18.6	−43 00 04	A	7531-0512	
S 5224	NSV 336	0 53 33.0	−41 20 34	A	7536-0245	
S 5225	NSV 508	1 25 46.4	−39 56 11	T	7541-0649	

Table 2: Variables in the 73 Herculis astrograph field

Sonne.	GCVS	RA (2000)	Dec	s	GSC	Remarks
S 5226	V364 Her	17 04 03.7	+20 50 01	A		
S 5227	V366 Her	17 07 04.9	+27 37 47	A	2068-0675	
S 5228	V368 Her	17 10 31.1	+22 23 09	A		
S 5229	V369 Her	17 11 40.8	+24 57 32	A		
S 5230	V465 Her	17 12 28.2	+20 52 19	A	1548-2099	
S 5231	V370 Her	17 12 33.0	+20 32 24	A		
S 5232	V372 Her	17 13 16.9	+20 57 32	A		
S 5233	V374 Her	17 13 34.1	+24 04 29	A	2061-0146	
S 5234	V375 Her*	17 13 40.7	+27 59 20	A		
S 5235	V376 Her	17 14 15.7	+20 52 03	A		
S 5236	V379 Her	17 14 35.4	+22 23 42	A	1548-1804	
S 5237	V380 Her*	17 15 43.0	+25 15 45	A	2065-1222	
S 5238	V381 Her	17 16 11.1	+20 51 19	A	1548-0530	
S 5239	V382 Her	17 16 17.2	+22 01 05	A		
S 5240	V383 Her	17 16 28.2	+20 58 45	A		
S 5241	V385 Her	17 16 26.6	+28 05 57	A	2069-1646	
S 5242	V386 Her	17 17 24.4	+26 48 42	A		
S 5243	V473 Her	17 17 43.6	+20 24 20	A	1544-1368	
S 5244	V389 Her	17 19 16.2	+19 10 35	A		
S 5245	V394 Her	17 22 38.7	+17 53 05	A	1541-1279	
S 5246	V395 Her	17 22 34.0	+24 45 01	A	2078-1484	galaxy VII Zw 476
S 5247	V398 Her	17 23 00.4	+27 44 02	A		
S 5248	V399 Her	17 23 33.0	+26 08 58	A		
S 5249	V401 Her	17 26 44.9	+25 43 25	A		
S 5250	V402 Her	17 27 14.2	+24 02 44	A		
S 5251	V403 Her	17 27 26.6	+22 13 36	A	1549-2079	
S 5252	V404 Her	17 27 43.3	+26 57 04	A		
S 5253	V405 Her	17 27 53.9	+26 52 56	A	2083-1272	
S 5254	V407 Her	17 29 27.9	+23 25 28	A	2075-0105	
S 5255	V411 Her	17 30 49.3	+19 14 31	A	1546-1824	
S 5256	V410 Her	17 30 37.7	+19 37 07	A	1546-2098	
S 5257	V415 Her*	17 31 57.3	+21 46 56	A		
S 5258	V413 Her	17 31 35.6	+26 42 03	A	2083-1605	
S 5259	V418 Her	17 32 13.1	+18 14 00	A	1542-0747	
S 5260	V416 Her	17 31 57.5	+23 08 13	A		
S 5261	V419 Her	17 32 45.7	+18 56 29	A		
S 5262	V420 Her	17 32 32.2	+27 26 08	A	2083-2021	
S 5263	V422 Her	17 33 17.0	+22 59 39	A		
S 5264	V496 Her	17 33 35.7	+18 45 32	A	1546-1465	
S 5265	V423 Her	17 33 56.0	+26 48 46	A	2083-1814	
S 5266	V426 Her	17 35 29.1	+23 01 28	A	2076-0046	
S 5267	V425 Her	17 35 21.7	+26 52 21	A	2084-0596	
S 5268	V427 Her	17 37 15.0	+21 12 30	A	1563-0908	
S 5269	V428 Her	17 37 14.6	+24 49 10	A		
S 5270	V429 Her	17 37 33.4	+24 43 45	A		
S 5271	V430 Her	17 38 06.2	+24 39 05	A		
S 5272	V431 Her	17 38 32.8	+24 37 24	A	2080-1229	
S 5273	V434 Her	17 40 33.1	+22 49 03	A	2076-3262	
S 5274	V433 Her	17 40 24.8	+25 25 49	A	2080-2529	
S 5275	V435 Her	17 41 11.5	+25 18 58	A	2080-3105	
S 5276	V438 Her	17 42 04.8	+20 11 45	A		
S 5277	V440 Her	17 43 18.2	+23 30 25	A		

Table 3: Variables in the 73 Herculis Schmidt field

Sonne.	GCVS	RA (2000)	Dec	s	GSC	Remarks
S 5278	V367 Her	17 08 20.8	+25 20 48	A		
S 5279	V371 Her	17 12 51.2	+23 54 02	A		
S 5280	V373 Her	17 13 08.3	+24 36 59	A		
S 5281	V377 Her	17 14 07.6	+25 45 57	A		
S 5282	V378 Her	17 14 42.3	+25 23 28	A		
S 5283	V384 Her	17 16 30.9	+23 34 21	A	2061-1959	
S 5284	V388 Her	17 18 45.2	+23 37 48	A		
S 5285	V390 Her	17 20 28.4	+25 48 15	A		
S 5286	V391 Her	17 21 07.5	+19 02 49	A		
S 5287	V477 Her	17 20 57.9	+26 18 20	A	2082-2362	
S 5288	V392 Her	17 20 51.4	+26 32 20	A	2082-2371	
S 5289	V396 Her	17 22 41.3	+24 36 19	A		quasar, $z = 0.175$
S 5290	V482 Her	17 25 09.6	+18 43 43	A		
S 5291	V400 Her	17 25 42.4	+19 33 27	A	1545-1008	IRAS 17235+1935
S 5292	V406 Her	17 28 18.0	+21 16 30	A	1550-2250	
S 5293	V408 Her	17 29 29.7	+25 35 35	A		
S 5294	V409 Her	17 30 27.9	+18 06 38	A		
S 5295	V412 Her	17 30 30.5	+25 54 15	A	2079-0509	
S 5296	V414 Her	17 31 43.0	+22 38 41	A		
S 5297	V417 Her	17 31 55.6	+23 50 58	A		
S 5298	V424 Her	17 34 44.0	+17 57 17	A	1542-1209	
S 5299	V432 Her	17 39 39.3	+25 13 15	A		
S 5300	V513 Her	17 40 22.0	+24 15 47	A	2076-1720	
S 5301	V436 Her	17 41 26.2	+19 09 49	A		
S 5302	V516 Her	17 41 22.9	+24 51 50	A	2080-3094	
S 5303	V437 Her	17 41 26.7	+24 44 36	A		
S 5304	V439 Her	17 42 04.8	+23 48 37	A	2076-2131	CCDM J17421+2349A

Table 4: Variables in high-latitude fields

Sonne.	GCVS	RA (2000)	Dec	s	GSC	Remarks
S 5305	DI UMa	9 12 16.1	+50 53 55	A		
S 5306	TZ Com	12 30 09.9	+13 53 55	A		
S 5307	CV Vir	12 30 58.1	+12 18 31	A	0877-0233	

Notes:

NSV 29 BPS CS 22876-0034 = SB 36.

V375 Her star marked is not red.

V380 Her assumed to be the southeastern star of a pair.

V415 Her assumed to be the eastern star of a pair.

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