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LOWELL PROPER MOTIONS XVII

Proper Motion Survey in the Southern Hemisphere with the 13-inch
Photographic Telescope of the Lowell Observatory

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I. INTRODUCTION

A program of direct measurement of proper motions between the magnitude limits of 8 and 17 and motion $> 0.^{\circ}26/\text{year}$ from 13-inch photographic telescope plates has been in progress at the Lowell Observatory since 1957. The northern hemisphere was completed, and a summary catalog published in 1971. For a detailed description of the plate examination, measurement procedures and accompanying finding charts, reference may be made to the 20 previous LOWELL BULLETINS containing the original measures, beginning with LOWELL BULLETINS Nos. 89 and 102.

The survey has been extended into the southern hemisphere (LOWELL BULLETIN No. 158, 1972 and No. 160, 1973) however, because of the greater epoch difference and improvement in measuring technique, the program limit has been lowered to include motions of $0.^{\circ}20/\text{year}$. In addition to the usual supplementary lists of very blue white dwarf suspects generated as a by-product from this program, with motions less than $0.^{\circ}20/\text{year}$, attention has been given to include the very red stars with small or no motion. For these reasons the work load of the program has increased many fold, and while the number of objects processed per unit time remains about the same, the number of plate fields covered is correspondingly smaller. In some instances we have sent preprints of the data before publication to observers currently using the data. To make the completed material available with the minimum of delay, we are publishing these two plate regions.

II. THE CATALOG

This list contains data on 915 stars; 360 in the regular catalog which have a proper motion $> 0.^{\circ}19/\text{year}$, 386 very blue stars with smaller or no motion and 169 very red stars with similar small motions. These two regions contain very few stars with large proper motion; only five with motion $> 1.^{\circ}0/\text{year}$, all of which were previously identified. There are six stars of -1 color in the regular catalog which, from the work of Eggen and Greenstein, have a very high probability of being white dwarfs. In the lists of objects with small motion there are over 100 stars with -1 color that may be added to the lists of new white dwarfs. In the catalog list of motions $> 0.^{\circ}20/\text{year}$ there are 48 very red, extreme dwarf stars, and a supplementary list with small or no motion containing 169 such objects. There are four newly recognized moving pairs in the catalog list, and seven interesting close pairs of contrasting color with very small motion added as an appendix.

The arrangement of the catalog columns follows the format of all previous Lowell Proper Motion lists, and the column headings are self-explanatory. Star colors (column 7) are estimated from the blink – comparison of a red plate with a blue one, and are given on our usual scale with +4 for the reddest stars and -1 , or occasionally -2 , for the bluest. Magnitude estimates are made from the blue plates in all cases. The lists of small motion blue and red stars are a continuation of previous lists published in LOWELL BULLETINS 125, 141, 153, 158, and 160. The numbering is a continuation of the designation "GD" and "GR" used in previous

lists. Although of less precision, measurements of motion are made to 0"07/year. Motion of 0"06 or less is designated as "SL", and the position angle of the motion is rounded to the nearest 5 degrees. Statistically, for about 5% of the "SL" group, the actual motion may be nearly zero and the observed agreement of the P.A. to within 18° may be due to the alignment of random effects on the two sets of plates. Also included are a few stars of extreme colors that have no appreciable motion. Statistically they do not represent any known percentage of the total number of such stars on the plate region, but are presented as a sample of these objects with no certain motion. In some cases a small shift observed on one set of plates could not be verified on the second set.

III. NOTES

An asterisk following the star number indicates that there is a note concerning the star following the catalog section. After notes to the catalog is an explanation of why some proper motion stars are missing from a region covered by our plates. In some cases, the motion we measured is too small to make our list, and, occasionally, we have been unable to find a motion star near the position given by another observer.

IV. IDENTIFICATION CHARTS

For each star listed in the catalog, including the supplementary lists, an identification field 18' on a side is given in our publications. In the event of a star being found on the overlap of an earlier plate, only one chart, and that bearing the number of the star on the plate on which it was first found will be given. The identity of a previously listed star will appear as the first reference. For example, the chart for the first catalog star, G272-1, does not appear in this BULLETIN because it was first found on G region 268 as G268-155, and therefore the chart appears with that plate region in LOWELL BULLETIN No. 158.

To locate the charts for stars listed in this publication but which appear also on earlier plates, the following reference table may be consulted:

G157, G158	LOWELL BULLETIN No. 122, 1964
G260	LOWELL BULLETIN No. 152, 1970
G266	LOWELL BULLETIN No. 158, 1972
G271	LOWELL BULLETIN No. 160, 1973

V. KEY TO REFERENCES

The references listed below represent the prior work consulted by us for all Lowell proper motion references.

A supplementary list of spectral and photometric work consulted follows our regular key to references. A few references were found from those applying mainly to the objects of small motion (GD and GR lists) and white dwarf suspects in the regular motion lists.

ACKNOWLEDGMENTS

This Proper Motion Survey is made possible through National Science Foundation grants which are gratefully acknowledged.

KEY TO REFERENCES

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 BD number with asterisk=*Bergedorfer Eigenbewegungs-Lexikon*, 1936, Hamburger Sternwarte in Bergedorf; Or the continuation published by Heidi, J., *A. N.*, 279, 273, 1950.
 BD number with (L)=Luyten, W. J., *Pub. Astr. Obs. Univ. of Minn.*, II, No. 12, 1942, III, No. 4, 1944.
 BPM=Bruce Proper Motion Survey: The General Catalogue Vols. I & II, Willem J. Luyten, University of Minnesota, 1963.
 CD=Cordoba Durchmusterung, Nat. Argentine Obs. XVII, 1894.
 Ci=*Pub. of the Cincinnati Obs.*, Nos. 18 and 20, 1918, 1930.
 CPD=Cape Photographic Durchmusterung, *Annals of the Cape Obs.*, III, IV, V, 1896, 7, & 1900.
 E=Ebbighausen, E. G., *A. J.*, 47, 112, 1938.
 FI, FII, FIII=Furuhjelm, R., *Acta Soc. Sci. Fennicae*, 48, No. 1, 1916, 50, No. 7, 1926, Ser. A, 3, No. 12, 1947.
 GL=Gliese, W., *Catalogue of Nearby Stars*, Veroff. Heidelberg, Nr. 22, 1969.
 Goyal=Indicates the star appears in the list published by A. N. Goyal in *A. N.*, 286, 196, 1962.
 GRN=Van Rhijn, P. J., Plaut, L., *Pub. of the Kapteyn Astr. Lab. at Groningen*, No. 56, 1955.
 H=Hertzsprung, E., *A. N.*, 207, 171-174, 1918.
 HL=Haro, G., Luyten, W. J., *Bulletin Tonantzintla y Tacubaya*, No. 19, 16, 1960.
 Hub=Hubble, E. P., *A. J.*, 29, 168, 1916.
 Hyd=Indicates the star appears in one of the lists published by the Hyderabad observers in the *A. N.*, *M. N.*, or *A. N. B. Z.*
 JO=Indicates the star is listed in one of the many lists of Proper Motion Stars in Astrographic Zones published in the *J. des Observateurs*, principally by the Nizamiah and Bordeaux Observatories.
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 K2=Karpov, B. G., *A. J.*, 46, 201, 1937.
 König=König, A., *A. N.*, 281, 107, 1953.
 Kopal No.=*Harvard Bulletin*, No. 911, 28, 1939.
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 LO=Klemola, A. R., Vasilevskis, S., Shane, C. D., Wirtanen, C. A., "Catalogue of Proper Motions of 8790 Stars with Reference to Galaxies", *Publ. of Lick Obs.* XXII, Part II, 1971.
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 LTT=Luyten, W. J., "A Catalogue of 9867 Stars in the Southern Hemisphere with Proper Motions Exceeding 0".2 Annually", Lund Press, Minneapolis, Minn., 1957.
 LTT 10,001 to 17,127=Luyten, W. J., "A Catalogue of 7127 Stars in the Northern Hemisphere with Proper Motions Exceeding 0".2 Annually", Lund Press, Minneapolis, Minn., 1961.
 LTT 17,128 to 18,635=Luyten, W. J., "First Supplement to the LTT Catalogues", The Obs. Univ. of Minn., Minneapolis, Minn., 1962.
 MC=Van de Kamp, P., Vyssotsky, A. N., *Pub. of the Leander McCormick Obs. of the Univ. of Virginia*, VII, 1937.
 ML=McLeod, N. W., *Pop. Astron.*, 47, 455, 1939.
 OST=Oosterhoff, P. Th., *Ap. J.*, 83, 340, 1936.
 Pul=Deutsch, A. N., *Pub. de L'Obs. Central a Pulkovo*, Serie II, LV, 1940.
 R=Ross, F. E., *A. J.*, 36 to 48, 1925 to 1939.
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 S=Strand, K. A., Lenham, A., and Owen, T. A. J., 63, 337, 1958.
 T=Toulouse, Ann. de L'Obs. Astr., XXIII, 1955.
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 VM1=Van Maanen, A., *Ap. J.*, 88, 27, Table 1, 1938.
 VM2=_____, *ibid.*, Table 2, 1938.
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 W=Wolf, Max, Veroff. Sternwarte zu Heidelberg, 7, No. 10, 1919, and *A. N.*, 209 to 236, 1919 to 1929.
 Y_____=Schlesinger, F., Barney, I., *Trans. of the Astr. Obs. of Yale Univ.*, 11, 12, 13, 14, 16, 17, 18-30, 1939 to 1970.

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 PHL=Haro, G., Luyten, W. J., "Faint Blue Stars in the Region Near the South Galactic Pole", *Bol. Obs. Tonantzintla y Tacubaya*, 3, No. 22, 1962.

PLATE NO. G272		CENTER: TAU CETI		1 ^h 41 ^m 7 ^s		-16°12'		REFERENCE						
STAR NO.		RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	REFERENCE						
		H M S	D ° ' "	'''	0									
G272-	1	1 18 04	-20 12.6	00.27	149	9.5	+2	G268-155	LTT	740	Y13-347	-20°249		
-	2	18 57	-19 45.7	.20	192	12.2	+2	-20°252						
-	3	19 13	-16 27.5	.27	80	13.9	+2	LTT	746					
-	4	19 26	-17 44.4	.44	174	17.0	+3	LP767-42						
-	5	19 39	-13 20.2	.20	98	11.5	+2	LTT	750	-13°244				
-	6	19 47	-12 31.9	.33	38	12.1	+2	LTT	753	R547	-13°245*			
-	7	19 56	-17 59.9	.20	170	16.2	+2							
-	8*	20 31	-13 13.1	.44	94	12.4	+3	LTT	759	GL-57.1B				
-	9*	20 33	-13 13.6	.44	94	10.1	+3	LTT	761	Y11-289	GL-57.1A	-13°249*		
-	10	20 50	-13 12.2	.31	2	14.9	+3	LTT	763					
-	11	20 55	-18 52.9	.37	109	12.1	+2	LTT	764	HYD37	-19°233			
-	12*	22 13	-15 55.2	.20	95	8.7	+3	Y12-351	-16°237*					
-	13*	22 15	-15 56.4	.20	95	13.5	+4							
-	14	24 49	-17 50.0	.22	183	15.0	+2	LP767-54						
-	15	24 55	-12 42.5	.51	93	16.3	+3	LP707-88						
-	16	25 05	-15 41.4	.20	160	12.9	+2							
-	17	25 12	-16 10.6	.37	119	16.8	+3	LP767-55						
-	18*	25 12	-19 40.2	.23	69	16.9	+3	LP767-56						
-	19*	25 46	-16 29.9	.24	189	16.3	+3							
-	20*	25 47	-16 29.9	.24	189	14.6	+3	BPM	70703					
-	21	26 53	-14 23.0	.20	87	15.2	+3							
-	22	27 26	-10 49.2	.20	142	9.5	+1	G271-78	Y11-321	C118-200	-11°279*			
-	23	27 36	-19 51.7	.20	175	9.8	+1	Y12-394	-20°277					
-	24	28 01	-11 36.5	.21	206	12.4	+3	G271-83	-12°275					
-	25	28 04	-16 39.7	.20	223	15.9	+4	LP768-5						
-	26	28 18	-19 44.7	.24	102	16.8	+4	LP768-25						
-	27	28 23	-11 09.0	.23	207	16.8	+3	G271-85	LP707-100					
-	28*	28 41	-15 53.8	.20	128	15.6	+2	LTT	823					
-	29	28 53	-17 56.6	.20	70	9.5	+2	Y12-400	-18°248					
-	30	28 59	-18 38.5	.34	138	15.3	+2	LTT	824					
-	31	29 07	-13 56.7	.21	167	10.3	+1	BPM	70720	Y12-380	C118-203	-14°294*		
-	32	29 11	-16 23.0	.31	66	14.1	+3	LP768-48						
-	33	29 26	-19 17.0	.20	15	15.4	+2	LTT	829					
-	34	29 49	-12 18.4	.37	100	17.0	+4	LP708-37						
-	35	29 53	-11 42.8	0.22	94	16.6	+4	G271-90						
-	36	30 04	-22 09.2	1.10	212	13.6	+2	LFT	138	-22°526				
-	37	30 23	-18 32.7	0.20	113	14.0	+3	LP768-84						
-	38	30 36	-16 26.1	.37	139	15.3	+3	LTT	842					
-	39*	30 41	-20 05.8	.27	71	13.4	+2	LTT	843	HYD147				
-	40	30 47	-12 58.0	.22	46	11.2	+1	LTT	845	Y11-337	C118-207	-13°283*		
-	41	31 02	-13 10.3	.35	92	16.5	+3	LP708-72						
-	42	31 30	-10 40.7	.22	185	12.2	+2	G271-95	-11°298					
-	43	31 32	-17 53.7	.23	163	15.2	+4	LP768-113						
-	44*	31 35	-12 57.3	.20	143	14.6	+1	BPM	70728					
-	45	31 38	-14 37.4	.37	197	15.7	+3	LP768-102						
-	46	32 07	-16 17.6	.30	94	12.9	+1	LP768-109						
-	47	32 55	-20 33.1	.20	100	15.7	+2	LP768-430						
-	48	32 59	-13 38.2	.24	111	8.2	+1	LTT	863	Y11-340	C118-215	-14°299*		
-	49	33 01	-13 39.1	.20	282	15.6	+3							
-	50	33 15	-20 19.0	.40	89	14.8	+3	LTT	866					
-	51	33 27	-17 47.2	.30	115	8.7	+1	LTT	868	Y12-426	C118-216	-18°266*		
-	52*	33 45	-11 35.8	.50	105	14.2	-1	G271-106	LTT	873	R548	C120-111		
-	53	34 11	-9 38.9	.20	84	14.1	+2	BPM	70737					
-	54	34 23	-11 57.4	.20	65	15.1	+3	G271-109						
-	55*	34 50	-17 42.5	.34	190	15.9	-1	LTT	880					
-	56	35 20	-18 38.8	.22	152	16.8	+4	LP768-209						
-	57	35 25	-14 58.6	.28	133	15.9	+3	LP768-199						
-	58	35 44	-21 24.5	.83	144	13.7	+2	LFT	143					
-	59	35 48	-16 51.5	.35	202	16.4	+3	LP768-218						
-	60*	36 08	-20 10.0	0.22	54	16.3	0	LP768-230						
-	61*	36 31	-18 12.5	3.33	80	14.3	+4	LFT	144.5	GL-65				
-	62	36 35	-22 40.7	0.24	111	12.5	+2	LTT	894	CD-23°605				
-	63	36 37	-12 13.8	.20	228	16.8	+3	G271-118						
-	64	36 48	-11 45.8	.26	136	16.3	+2	G271-120						
-	65	37 00	-13 14.7	.39	175	16.1	+3	LP708-233						
-	66	37 05	-9 13.2	.30	98	16.2	+3	G271-121						
-	67	37 11	-9 33.5	.21	119	14.9	+3	G271-123						
-	68	37 13	-16 25.1	.22	182	15.3	+2	LP768-265						
-	69	37 19	-15 12.6	.29	135	16.9	+3	LP768-261						
-	70	37 25	-10 13.5	.22	79	9.8	+1	G271-125	LTT	898	Y11-358	C118-233	-10°349*	
-	71	37 38	-14 09.8	.26	181	13.7	+3	LTT	900					
-	72	37 53	-10 41.8	.20	102	10.6	+2	G271-126	LTT	904	Y11-363	-11°318		
-	73	38 10	-10 04.9	.20	57	11.1	+1	LTT	908	Y11-366	-10°355*			
-	74*	38 10	-21 39.6	.21	101	16.3	+3	LP828-9						
-	75*	1 38 11	-21 40.0	0.21	101	16.5	+4	LP828-10						

PLATE NO. G272		CENTER: TAU CETI $1^{\text{h}}41^{\text{m}}7^{\text{s}}$ $-16^{\circ}12'$ (CONT'D)						
STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	REF E R E N C E S	
	H M S	D M S	'	"	0			
G272 - 76	1 38 14	-9 36.3	0.20	35	15.8	+3	G271-127	
- 77	39 28	-17 49.9	.20	103	11.5	+1	$-18^{\circ}285$	
- 78	39 28	-12 59.8	.21	225	14.9	+3	BPM 70766 R550	
- 79	39 44	-11 21.3	.23	164	10.0	+2	G271-133 LTT 922 Y11-378 CI18-239 -11°323*	
- 80	39 49	-17 27.7	.22	172	14.6	+2	LP768-327	
- 81	39 50	-18 08.4	.54	83	8.2	+1	LFT 154 Y12-459 CI20-122 CI18-240 -18°287*	
- 82*	40 05	-12 9.9	.23	166	14.0	+3	G271-134 LTT 924	
- 83	40 23	-15 52.4	.29	117	16.6	+2	LP768-336	
- 84	40 43	-10 22.7	.45	44	15.7	+4	G271-138 LTT 928 R551	
- 85	40 52	-12 53.0	.21	206	16.5	+3	LP708-328	
- 86	41 17	-12 37.8	.26	188	13.7	+3	LP708-341	
- 87	41 59	-20 50.6	.28	193	9.0	+1	LTT 937 Y13-469 CI18-241 -21°288*	
- 88	42 23	-13 58.7	.20	118	16.0	+3		
- 89	42 51	-16 08.6	.29	122	9.0	+1	LTT 942 Y12-435 CI18-242 -16°301*	
- 90	42 51	-13 44.9	.23	207	12.5	+2	LTT 945 R552 CI20-126	
- 91	43 23	-11 34.7	.32	160	12.1	+2	G271-148 LTT 949 Y11-394 -12°327*	
- 92	43 27	-12 48.4	.38	207	17.0	+3	LP708-393	
- 93	43 52	-16 55.6	.20	198	15.3	+2	LP768-453	
- 94	43 59	-13 08.6	.21	115	12.7	+2	LTT 953	
- 95*	45 16	-13 01.3	.30	52	11.2	+2	LTT 961 -13°321	
- 96*	45 18	-13 46.9	.23	123	16.3	+4	LP708-447	
- 97*	45 32	-14 29.0	.40	119	16.5	+3	LP768-714	
- 98	45 50	-17 29.0	.21	187	14.9	+3	BPM 70801	
- 99	45 58	-16 35.2	.26	180	14.6	+2	LTT 966	
-100	45 58	-13 25.6	.20	77	15.1	+4	LP708-462	
-101	46 48	-22 35.3	.20	207	10.7	+2	CD-22°606	
-102	47 02	-22 44.4	.20	110	12.2	+2	CD-23°672	
-103	48 03	-9 36.0	.24	79	11.9	+1	G271-162 -10°388	
-104	48 25	-12 27.1	.39	85	13.3	+3	LTT 986 R554 CI20-129	
-105	48 41	-14 06.7	.21	248	16.0	+4	LP708-532	
-106*	49 04	-11 27.0	.29	62	16.8	0	LP708-538	
-107	49 16	-16 33.6	.30	166	9.4	+1	LTT 995 Y12-471 CI18-250 -17°332*	
-108	49 16	-19 12.3	.20	93	16.3	+4	LP768-605	
-109	49 20	-11 02.8	.81	133	13.6	+4	G271-168 LFT 166 R555 CI20-130 GL-78	
-110	49 37	-15 09.0	.20	97	11.6	+1	LTT 998 -15°330	
-111	50 15	-9 42.4	.24	117	14.2	+2	G271-172	
-112*	50 23	-10 49.2	.37	69	15.7	+4	G271-173 LTT 1003	
-113*	50 23	-10 48.7	.37	69	15.7	+4	G271-174 LTT 1004	
-114	50 27	-22 40.8	.83	92	11.3	+3	LFT 168 CI20-132 CI18-251 GL-79 CD-23°693*	
-115	50 49	-21 20.6	.30	88	13.5	+3	LTT 1010	
-116	51 10	-21 29.8	.26	179	11.4	+2	LTT 1012 Y13-505 LO1180-83 -21°333	
-117	51 32	-19 14.5	.20	61	10.1	+1	$-19^{\circ}332$ (LP) Y12-506	
-118	51 43	-15 51.0	.35	155	16.4	+4	LP768-670	
-119*	51 55	-15 58.6	.32	122	16.0	+3	LTT 1016	
-120*	51 57	-15 58.1	.31	121	10.0	+1	LTT 1015 Y12-490 -16°328*	
-121*	51 59	-23 04.2	.22	201	12.6	+1	LP828-78 CD-23°702	
-122	52 09	-18 41.8	.21	133	12.9	+1	LP769-2	
-123	53 07	-15 46.0	.30	140	13.3	+3	LTT 1021	
-124	53 59	-19 57.6	.20	128	11.8	+1	LTT 1030 -20°370	
-125	54 12	-14 25.3	.29	44	11.0	+1	LTT 1033 Y12-502 -14°363	
-126*	54 42	-10 29.0	.47	224	8.0	+1	LTT 1036 Y11-438 CI20-135 CI18-259 GL-81.1	
-127*	54 44	-10 29.5	.47	224	11.8	+2	LTT 1039	
-128	55 38	-18 55.4	.41	165	16.9	+3	LP769-8	
-129	56 05	-15 39.9	.20	115	10.5	+1	LTT 1050 Y12-509 -16°341	
-130	56 21	-20 00.4	.43	108	11.4	+1	LTT 1052 -20°377	
-131*	56 26	-23 08.2	.20	132	13.0	-	LP828-49 CD-23°736	
-132*	56 34	-16 54.7	.24	92	16.6	+4		
-133*	56 34	-16 54.9	.24	92	16.9	+4		
-134	57 31	-16 38.6	.22	123	17.0	+3	LP769-16	
-135	57 42	-10 39.2	.27	163	16.2	+3	LP709-14	
-136	58 03	-13 09.5	.20	124	16.4	+2		
-137	58 20	-10 35.7	.62	222	16.3	+4	LP709-16	
-138	58 22	-13 07.1	.25	61	9.9	+1	LTT 1067 Y11-455 -13°364*	
-139	59 04	-11 23.2	.23	103	13.7	+2	LTT 1072	
-140	1 59 08	-14 27.8	.21	70	15.0	+2	LP709-17	
-141	2 00 20	-20 50.5	.29	159	14.5	+3	LP828-62	
-142	00 21	-11 22.1	.25	167	16.0	+1	LP709-25	
-143	00 33	-11 03.9	.22	120	15.9	+3	LP709-27	
-144	00 55	-17 16.3	.21	167	15.1	+1	BPM 70894	
-145	01 01	-21 28.0	.48	207	13.2	+2	LFT 174 -21°368	
-146	01 10	-15 42.9	.26	22	11.2	+1	LTT 1080 Y12-529 -16°358*	
-147	01 18	-13 49.1	0.43	112	15.9	+3	LP709-29	
-148	02 40	-17 51.2	1.31	97	12.2	+3	LFT 177 GL-84 -18°359	
-149*	02 46	-15 42.2	0.29	75	14.6	+2	LTT 1094	
-150	2 02 52	-20 43.9	.24	119	14.4	+1	LP829-11	

PLATE NO. G272 CENTER: TAU CETI $1^{\text{h}}41^{\text{m}}7^{\text{s}}$ $-16^{\circ}12'$ (CONT'D)

STAR NO	RA(1950) H M S	DEC(1950) ° ' "	MU	P.A. '	MAG.	COL	R E F E R E N C E S
-151	02 53	-21 03.5	.28	88	14.1	+1	LP829-12
G272-152*	02 03 01	-18 07.8	00.20	115	16.0	-1	(EPOCH 1972.92)

PLATE NO. G273 CENTER: ω^1 AQUARII $23^{\text{h}}37^{\text{m}}2^{\text{s}}$ $-14^{\circ}30'$

STAR NO	RA(1950) H M S	DEC(1950) ° ' "	MU	P.A. '	MAG.	COL	R E F E R E N C E S
G273-	1* 23 14 29	-14 06.9	1.27	205	9.6	+2	LFT 1777 Y ₁₂ -8612 C ₁₂₀ -1413 C ₁₁₈ -3048
- 2	14 51	-19 32.7	0.20	142	14.0	+2	BPM 82767
- 3	14 55	-17 34.5	.22	200	13.2	+2	BPM 82769
- 4	15 17	-11 32.2	.22	92	9.7	+2	LTT 9469 Y ₁₁ -8157 -12°6462*
- 5	15 31	-19 12.3	.28	168	13.4	+1	LTT 9470
- 6	15 33	-18 04.4	.20	238	15.9	+3	
- 7*	15 51	-9 32.7	.20	102	12.9	+2	LP762-13 -10°6092
- 8*	15 53	-9 33.0	.20	102	13.3	+2	LP762-14
- 9	16 00	-12 47.0	.27	71	11.9	+2	LTT 9477 -13°6381
- 10	16 01	-19 38.3	.21	218	15.9	+2	LP 822-48
- 11*	16 25	-17 37.7	.24	198	15.7	+2	LP 822-14
- 12	16 26	-19 43.2	.24	150	13.6	+2	LTT 9479
- 13*	16 57	-17 21.9	.24	90	13.5	-1	LTT 9491
- 14*	17 01	-9 9.9	.27	222	16.5	+4	G157-45
- 15	17 28	-12 59.3	.61	84	14.5	+2	LFT 1784
- 16	17 31	-18 38.9	.32	194	16.8	+4	LP822-55
- 17	17 35	-14 57.9	.22	142	14.1	+2	BPM 82816
- 18	17 49	-18 10.0	.28	212	13.0	+1	LTT 9501
- 19*	17 50	-12 15.0	.24	58	16.1	+3	LP762-51
- 20	17 58	-10 18.6	.20	140	15.4	+2	LP762-52
- 21	18 26	-8 46.5	.20	204	11.3	+2	Y ₁₆ -8290 -9°6172
- 22*	18 28	-17 08.2	.46	163	13.5	+2	LTT 9506
- 23	20 06	-19 57.8	.33	228	10.2	+3	LTT 9514 Y ₁₃ -9792 -20°6585
- 24	20 19	-16 16.1	.29	110	15.9	+3	
- 25	20 24	-9 35.7	.20	128	15.6	+3	BPM 82853
- 26*	20 24	-19 0.9	.21	221	13.4	+2	LP822-65
- 27	20 28	-11 02.4	.51	61	9.9	+3	G157-54 LFT 1787 Y ₁₁ -8176 C ₁₂₀ -1422 GL-894.5
- 28	20 40	-20 53.6	.33	186	15.2	+3	LP878-23
- 29	20 51	-9 09.5	.22	93	10.4	+2	LTT 9518 Y ₁₁ -8302 -9°6181*
- 30	21 01	-20 47.9	.20	162	14.9	+4	BPM 68366
- 31	21 31	-14 47.3	.20	132	12.8	+2	BPM 82867 -8°6103*
- 32	21 34	-18 02.3	.22	244	13.2	+3	BPM 82872
- 33	21 52	-18 47.7	.22	207	14.9	+3	LP822-74
- 34	22 02	-16 08.6	.23	97	16.1	+3	LP822-78
- 35	22 08	-19 28.4	.39	114	15.4	+3	LP822-5
- 36	22 12	-19 22.9	.22	181	13.2	+1	LP822-79
- 37	22 26	-16 12.3	.25	155	14.9	+1	LP822-80
- 38	22 40	-13 09.1	.20	104	13.2	+3	
- 39	22 41	-18 08.5	.22	91	15.1	-1	LP822-81
- 40*	23 02	-11 19.3	.20	163	17.1	+2	
- 41	23 07	-12 08.5	.44	213	15.3	+2	LP762-10
- 42	23 15	-20 53.4	.22	198	9.6	+2	Y ₁₃ -9813 -21°6419*
- 43	23 37	-10 27.7	.23	67	13.2	+3	LP762-70
- 44	23 43	-14 59.0	.28	104	10.3	+3	LTT 9534 Y ₁₂ -8660 -15°6419*
- 45	23 51	-11 14.6	.21	98	14.1	+1	LP762-71
- 46	24 03	-17 40.0	.28	73	12.7	+2	LTT 9540 HYD63
- 47	24 12	-13 55.6	.20	197	12.1	+3	-14°6472
- 48	24 14	-7 40.3	.28	159	12.6	+1	G157-62 LTT 9541
- 49	24 42	-21 34.7	.24	221	15.1	-	LTT 9545
- 50*	24 42	-21 34.7	.24	221	15.1	-	
- 51	25 28	-15 06.3	.20	213	15.9	+2	LP762-77
- 52	25 48	-10 58.4	.22	116	15.9	+2	
- 53	25 56	-14 27.3	.20	199	16.1	+3	
- 54	25 58	-9 54.0	.20	98	13.7	+2	
- 55	26 30	-15 30.9	.26	118	11.5	+2	LTT 9556 -16°6297
- 56	26 49	-15 38.8	.26	130	15.2	+2	LP822-93
- 57	27 08	-9 46.5	.20	129	14.5	+1	G157-66
- 58	27 24	-18 57.5	.26	233	16.8	+2	LP822-96
- 59	27 36	-20 39.9	.37	126	12.5	+3	LTT 9567
- 60	27 52	-20 49.1	.20	137	13.0	+1	BPM 68436
- 61	27 53	-9 49.7	.20	195	13.4	+2	LTT 9568
- 62	28 03	-9 25.2	.22	231	16.2	+3	
- 63	28 48	-16 32.5	.36	137	14.0	+3	LTT 9580
- 64	28 51	-15 45.8	.20	270	13.5	+2	BPM 82926
- 65	23 29 34	-10 02.9	0.20	165	14.0	+2	BPM 82929

PLATE NO. G273 CENTER: ω^1 AQUARII $23^{\text{h}}37^{\text{m}}2$ $-14^{\circ}30'$ (CONT'D)

STAR NO.	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S	
							H	M
G273 - 66	23 29 48	-12 59.3	0.20	219	16.5	+2	LP763-26	
- 67*	30 10	-17 01.6	.40	123	12.2	+3	LTT 9587	GL-897 HYD64 $-17^{\circ}6768$
- 68*	30 12	-17 07.3	.39	125	10.2	+3	LTT 9590	$\underline{Y12}$ -8688 GL-898 $-17^{\circ}6769*$
- 69	30 32	-12 25.2	.70	102	14.4	+3	LTT 9591	
- 70*	30 46	-12 56.7	.20	91	16.2	+4	LP763-16	
- 71*	30 48	-12 56.4	.20	91	9.7	+2	LTT 9593	$\underline{Y11}$ -8219 C118-3084 $-13^{\circ}6429*$
- 72	32 00	-17 16.2	.22	45	9.0	+2	$\underline{Y12}$ -8698	C118-3089 $-17^{\circ}6776*$
- 73	32 01	-14 14.0	.22	108	13.9	+2	LP763-30	
- 74	32 08	-16 20.5	.42	123	14.9	+3	LTT 9604	
- 75	32 12	-17 53.3	.31	121	13.2	+2	LTT 9607	
- 76	32 19	-20 55.1	.38	159	12.6	+1	LTT 9609	
- 77*	32 35	-15 40.2	.27	104	15.8	+2		
- 78	32 45	-8 52.8	.37	115	16.0	+2	G157-78	
- 79	33 42	-11 42.4	.26	161	13.2	+1	LTT 9619	
- 80	33 48	-10 58.4	.25	109	16.6	+4	LP763-36	
- 81*	33 52	-21 33.4	.20	74	14.8	--	BPM 68538	
- 82	33 56	-8 42.5	.29	117	12.9	+2	G157-85	LTT 9622
- 83	34 00	-20 04.3	.53	219	16.6	+3		
- 84	34 06	-17 04.2	.22	123	12.6	+1	BPM 82976	
- 85	34 09	-17 30.8	.45	92	10.0	+2	LTT 9623	$\underline{Y12}$ -8708 C120-1440 $-18^{\circ}6342*$
- 86*	34 14	-20 27.0	.26	123	16.0	+3	LP823-23	
- 87	34 15	-15 07.5	.22	112	13.6	+3	LTT 9625	
- 88*	34 35	-20 27.9	.27	113	16.3	+2	LP823-24	
- 89	34 40	-19 01.3	.24	97	12.6	+3	LTT 9628	
- 90	34 53	-14 04.2	.24	136	12.3	+1	LTT 9629	
- 91	34 55	-11 03.9	.49	78	15.4	+3	LP763-2	
- 92	35 23	-8 02.1	.22	199	13.7	+1	G157-88	BPM 82987
- 93	35 33	-16 30.8	.30	254	12.5	+3	LTT 9634	HYD65 $-17^{\circ}6785$
- 94	35 43	-9 30.1	.21	244	14.2	+3		
- 95	36 03	-19 17.0	.49	94	16.7	+4	LP823-3	
- 96	36 14	-12 40.2	.20	147	16.4	+4	LP763-45	
- 97*	36 17	-18 42.8	.20	153	15.6	-1		
- 98	36 51	-11 20.4	.42	161	16.9	+3	LP763-5	
- 99	37 00	-19 15.0	.32	68	15.0	+3	LP823-31	
-100*	37 22	-9 53.6	.22	184	12.5	+1	BPM 83000	
-101	37 27	-19 44.0	.45	138	10.8	+1	LTT 9644	$-20^{\circ}6629$
-102	37 42	-19 19.0	.20	90	15.8	+2		
-103	38 01	-19 16.0	.27	109	9.1	+2	LTT 9651	$\underline{Y12}$ -9882 C118-3104 $-19^{\circ}6489*$
-104	38 08	-13 23.8	.26	166	16.4	+3	LP763-48	
-105	38 42	-20 04.2	.31	216	13.5	+1	LP823-36	
-106	38 43	-7 52.7	.28	128	15.7	+2	G157-91	
-107	38 46	-17 11.3	.20	105	16.0	+3	LP823-37	
-108	38 47	-20 21.7	.29	194	10.8	+2	LTT 9655	$\underline{Y13}$ -9885 $-20^{\circ}6633$
-109*	38 52	-20 00.5	.23	98	15.1	+1	LP823-38	
-110	38 54	-9 41.2	.39	208	16.2	+3	LP763-6	
-111	38 59	-10 53.5	.22	228	15.0	+3		
-112	39 02	-16 52.1	.23	139	11.5	+2	LTT 9658	$-17^{\circ}6798$
-113	39 09	-9 13.9	.20	132	12.7	+1	LP763-50	
-114*	39 45	-14 13.3	.28	56	16.2	+4	LP763-7	
-115*	39 46	-14 13.0	.28	56	15.9	+3	LP763-8	
-116	40 09	-20 09.6	.44	221	11.5	+3	LTT 9666	$-20^{\circ}6640$
-117	40 35	-12 29.7	.25	223	9.5	+2	LTT 9674	$\underline{Y11}$ -8251 C118-3113 $-13^{\circ}6454*$
-118	40 59	-8 11.9	.66	109	11.7	+1	G157-93	LFT 1820 W1041 C120-1446 $-8^{\circ}6177*$
-119	41 21	-11 00.0	.51	143	14.8	+3	LP763-9	
-120	41 41	-10 51.0	.31	92	15.2	+4	LP763-56	
-121	41 54	-17 03.0	.20	218	13.0	+1	BPM 83021	
-122	42 03	-21 14.7	.31	79	11.7	+2	LTT 9686	
-123	42 09	-20 11.9	.22	195	10.6	+1	LTT 9687	$\underline{Y13}$ -9899 $-20^{\circ}6643$
-124	42 31	-19 53.3	.31	126	13.2	+1	LTT 9689	
-125	42 34	-10 29.6	.23	70	16.4	+3	LP763-10	
-126	42 44	-15 19.8	.42	117	17.0	+3	LP823-48	
-127	42 45	-20 56.4	.20	106	15.3	+3	BPM 68702	
-128	42 48	-8 33.5	.27	153	13.6	+3	LP703-62	
-129	42 51	-19 09.4	.36	103	15.9	+3	LP823-49	
-130	42 57	-16 26.8	.67	212	15.7	+4	LP823-4	
-131	43 05	-12 08.7	.34	167	16.8	+2	LP763-59	
-132	43 17	-18 47.8	.20	48	15.4	+3		
-133	43 44	-12 13.4	.25	131	16.9	+4	LP763-61	
-134	43 48	-16 15.8	.74	150	16.1	+4	LP823-5	
-135	44 06	-8 40.4	.25	166	16.2	+4		
-136	44 25	-13 58.9	.22	201	11.5	+1	LTT 9703	$-14^{\circ}6541$
-137	44 29	-14 22.6	.60	134	14.3	+3	LFT 1825	
-138	44 31	-16 00.9	.23	89	16.8	+4	LP823-52	
-139	44 32	-11 08.4	.27	153	14.3	+3	LTT 9705	
-140	23 45 40	-19 20.9	0.21	90	10.9	+3	LTT 9713	$\underline{Y12}$ -9913 $-19^{\circ}6511$

PLATE NO. G273 CENTER: ω^1 AQUARII $23^h 37^m 2^s$ $-14^\circ 30'$ (CONT'D)

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S	
							H	M
G273-141	23 45 51	-13 16.0	0.22	89	10.6	+3	GL-907.1	-13° 6464
-142	46 02	-15 29.3	.22	117	9.4	+2	LTT 9717	Y12-8759 -16° 6370
-143	46 21	-21 07.6	.35	155	16.1	+2	LP879-2	
-144	46 28	-8 41.2	.38	127	14.6	+3		
-145	47 01	-17 27.1	.21	155	15.0	+3	LTT 9727	
-146	47 48	-18 40.9	.46	102	15.7	+4	LP823-6	
-147	47 56	-9 50.1	.76	127	14.6	+4	LP763-12	
-148	48 19	-8 29.2	.22	231	15.7	+3	LP703-85	
-149	49 09	-14 23.3	.23	230	14.3	+2	LTT 9742	
-150	49 36	-19 55.9	.20	282	13.0	+3	BPM 68779	
-151	49 48	-14 58.1	.49	125	16.5	+4	LP823-8	
-152	49 55	-9 41.1	.21	86	11.6	+1	-10° 6187	
-153	50 19	-17 11.4	.25	121	13.5	+3	LTT 9752	
-154*	50 33	-8 46.5	.27	222	16.7	+3	LP763-14	
-155	50 39	-11 17.6	.22	129	9.1	+2	Y11-8291 CI18-3128 -11° 6154*	
-156	50 48	-14 00.1	.30	182	17.0	+3	LP763-79	
-157	51 05	-19 32.4	.34	121	16.4	+3	LP823-66	
-158	51 08	-12 40.0	.50	189	15.3	+3	G158-2 LFT 1832	
-159	51 24	-19 15.3	.79	171	14.2	+1	G266-1 LFT 1833	
-160	51 26	-18 44.0	.38	191	16.3	+3	LP823-10	
-161	52 14	-18 29.5	.20	213	16.0	+2	LP764-26	
-162	52 14	-18 52.1	.24	230	11.5	+1	G266-5 -19° 6538	
-163	52 16	-10 13.7	.20	201	13.4	+2	BPM 83097	
-164	52 25	-13 14.4	.24	77	11.5	+2	G158-3 LTT 9781 -13° 6483	
-165	52 27	-14 11.1	.30	185	11.8	+1	G158-4 LTT 9782 -14° 6575	
-166	52 30	-12 19.6	.21	88	16.8	+3	LP763-83	
-167	52 43	-13 36.5	.20	198	15.9	+1	G158-5 BPM 83102	
-168	52 56	-14 01.9	.22	107	9.7	+1	Y12-8792 CI18-3135 -14° 6577*	
-169	53 10	-16 17.7	.21	40	16.3	+4	LP764-28	
-170	53 20	-13 38.3	.29	87	14.9	+3	G158-8	
-171	53 34	-14 15.0	.35	80	17.0	+4	LP704-7	
-172	53 35	-10 04.1	.20	124	16.4	+4	LP704-6	
-173	53 43	-18 35.9	.25	241	13.7	+3	G266-9 BPM 83119	
-174	53 44	-9 47.9	.26	118	15.7	+4	G158-9	
-175*	53 48	-9 46.7	.31	249	9.5	+2	G158-10 LTT 9798,9 CI18-3138 -10° 6203*	
-176	53 48	-19 42.5	.23	198	15.9	+3	G266-11 LP764-1	
-177	54 06	-15 09.3	.22	78	15.8	+3	LP764-32	
-178	54 16	-12 51.1	.20	207	16.4	+4	LP704-10	
-179	54 25	-13 41.1	.22	192	14.1	+3	LTT 9802	
-180*	54 40	-16 47.3	.50	55	12.2	+3	G158-12 G266-12 LTT 9805 HYD70	
-181*	54 41	-16 47.7	.50	55	16.0	+4	G158-13 LTT 9806	
-182	54 44	-18 40.4	.20	117	11.7	+1	G266-13 LTT 9809 Y12-9961 -19° 6544	
-183	54 44	-19 40.3	.60	120	16.3	+3	LP764-2	
-184	54 44	-14 53.3	.22	181	15.3	+3	LP764-35	
-185*	54 45	-13 15.5	.20	85	14.9	+4	LP704-14	
-186*	54 46	-13 15.7	.20	85	14.9	+4	LP704-15	
-187	54 59	-9 55.5	.47	111	9.5	+1	G158-14 LTT 9811 Y11-8309 CI20-1462 CI18-3139	
-188	55 22	-8 19.5	.32	101	15.9	+3	G158-17	
-189	55 23	-17 17.9	.20	133	11.1	+1	G266-14 BPM 83141 -17° 6850	
-190	55 31	-17 40.3	.32	103	13.3	+2	G266-15 LTT 9818	
-191	55 39	-17 41.2	0.21	85	13.5	+3	G266-16 BPM 83145	
-192	56 52	-17 13.3	1.13	97	10.7	+2	G266-20 LFT 1841 CI20-1467 -17° 6856*	
-193*	56 53	-20 18.8	0.64	126	9.4	+2	G266-21 LFT 1842 Y13-9973 CI20-1468 CI18-3146	
-194	56 54	-12 40.0	.23	103	12.6	+2	LTT 9822	
-195	57 00	-10 54.1	.20	130	16.4	+3		
-196	57 26	-15 51.7	.25	70	16.2	+4	LP764-4	
-197	57 27	-19 46.6	.21	105	10.7	+1	LTT 9831 Y12-9977 LO1175-32 -20° 6688	
-198	57 51	-9 22.3	.21	117	10.6	+2	LTT 9832 Y11-8318 -9° 6301	
-199	58 07	-17 09.7	.22	214	12.8	+1		
-200	58 19	-13 06.5	.24	121	10.5	+1	LTT 9846 Y11-8321 CI18-3151 -13° 6504*	
-201	58 24	-12 06.1	.44	102	9.6	+1	G158-20 LTT 9849 Y11-8322 CI20-1471 CI18-3152	
-202	58 51	-17 13.4	.40	135	12.2	+2	G266-26 LTT 9850 HYD73 -17° 6862	
-203	59 14	-20 08.2	.22	95	12.3	+1	G266-28 -20° 6694	
-204*	59 22	-10 08.4	.20	160	15.9	+2	LP704-31-32	
-205	59 29	-13 07.4	.20	60	15.4	+3	BPM 83181	
-206	23 59 58	-20 28.0	.24	96	12.5	+1	G266-30 LTT 9864	
-207	0 00 04	-11 40.2	.62	226	14.5	+3	G158-22	
G273-208*	0 00 58	-17 00.7	0.27	90	14.1	-1	G266-32 LTT 11 (EPOCH 1973.68)	

LIST OF WHITE DWARF SUSPECTS VI

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S		
							H	M	S
GD - 953	1 18 32	-16 38.6	SL	205	15.7	0			
- 954	19 03	-17 18.2	SL	135	14.4	-1			
- 955	20 40	-16 35.3	SL	165	15.2	0			
- 956	20 49	-13 48.1	0.08	143	14.8	0			
- 957	22 50	-18 50.6	SL	115	15.2	-1			
- 958	23 39	-13 22.2	.07	187	15.3	0			
- 959	23 45	-14 09.2	.08	244	16.4	0			
- 960	24 10	-12 36.0	SL	110	15.7	-1			
- 961	24 11	-17 14.7	SL	160	14.7	0			
- 962	24 28	-14 41.5	SL	180	15.7	0			
- 963	24 50	-15 19.7	SL	160	15.7	0			
- 964	24 50	-16 01.0	SL	115	16.1	0			
- 965	25 02	-13 56.7	SL	160	16.2	0			
- 966	25 32	-18 41.5	SL	180	15.9	0			
- 967	25 47	-16 37.0	SL	155	14.9	0			
- 968	25 58	-18 57.6	SL	90	16.2	0			
- 969	26 00	-20 22.0	SL	180	14.6	0			
- 970	26 09	-14 29.6	SL	165	16.0	-1			
- 971	27 46	-15 34.9	SL	235	16.6	0			
- 972	28 07	-19 04.7	SL	190	15.9	0			
- 973	28 18	-18 01.1	.07	188	15.6	0			
- 974	28 41	-17 58.3	SL	195	16.0	0			
- 975	28 52	-16 21.4	.12	179	16.3	0	LP768-31		
- 976	29 15	-20 35.5	.19	89	15.7	-1	BPM 47191 PHL-1017		
- 977	29 29	-13 00.2	SL	205	15.9	0			
- 978*	30 29	-19 17.9	SL	70	16.0	0			
- 979	30 32	-11 52.7	SL	225	16.1	0			
- 980	31 17	-20 03.4	SL	115	15.7	0			
- 981*	31 24	-12 50.5	.07	178	16.7	0			
- 982	31 26	-12 33.2	SL	165	15.8	0			
- 983	31 40	-19 06.2	SL	150	16.2	0			
- 984	31 58	-16 22.5	SL	65	13.9	-1	PHL-1043		
- 985*	32 01	-15 50.5	.10	199	16.3	0			
- 986	32 10	-19 10.4	SL	125	16.2	0			
- 987	32 32	-15 51.7	.18	51	16.8	-1	LP768-127 PHL-1052		
- 988	32 43	-13 23.3	SL	200	16.5	0	PHL-7369		
- 989*	32 51	-17 41.1	SL	140	16.4	0			
- 990*	32 56	-16 13.7	SL	200	16.0	0			
- 991	32 58	-16 05.2	SL	105	16.2	0			
- 992	33 01	-14 07.9	.07	148	15.9	0			
- 993	33 14	-18 41.6	SL	150	16.3	0			
- 994	33 29	-16 55.4	.09	161	16.3	0			
- 995	33 34	-19 43.7	SL	110	16.1	-1	LP768-164 PHL-3465		
- 996	33 36	-10 55.0	.08	184	15.6	0			
- 997	33 38	-20 44.7	SL	170	15.6	-1			
- 998	33 44	-14 17.3	.07	110	15.9	0			
- 999	34 04	-11 58.7	SL	210	16.1	0			
-1000*	34 06	-21 08.8	SL	140	15.4	0			
-1001*	34 14	-20 44.6	.14	283	16.6	-1			
-1002	34 39	-10 14.0	SL	170	16.2	-1			
-1003	34 43	-12 40.3	.08	198	14.8	0			
-1004	35 10	-14 14.4	SL	175	16.6	0			
-1005	35 19	-19 05.9	SL	90	15.1	0			
-1006*	35 35	-15 21.8	.07	154	16.8	-1			
-1007	36 04	-17 20.6	SL	165	15.9	0			
-1008	36 34	-18 44.2	SL	130	16.3	0			
-1009	37 12	-19 54.8	.07	95	16.8	0			
-1010	37 12	-12 01.1	SL	220	16.2	0			
-1011	37 25	-10 33.7	SL	195	15.0	0			
-1012*	37 26	-16 27.7	SL	170	16.4	0			
-1013	37 36	-14 16.9	*SL	125	16.3	0			
-1014	37 44	-19 25.9	SL	190	16.0	0			
-1015	37 45	-11 22.2	SL	155	17.2	0			
-1016	37 47	-10 20.8	.07	217	16.4	0			
-1017*	37 54	-11 50.1	SL	165	16.1	0			
-1018	39 50	-13 53.9	SL	125	16.9	0			
-1019	39 57	-10 37.0	SL	150	16.0	0			
-1020	40 13	-14 00.6	.17	163	14.9	0			
-1021	40 23	-19 20.5	SL	120	16.3	-1	PHL-7677		
-1022	40 25	-13 53.7	SL	130	16.3	0			
-1023*	40 29	-11 36.3	SL	125	16.8	0			
-1024	41 14	-11 17.6	.10	190	15.6	0			
-1025*	41 58	-16 26.5	SL	125	16.1	0			
-1026	42 19	-18 16.1	.09	195	16.1	0			
-1027	1 43 39	-15 53.9	SL	115	16.8	0			

LIST OF WHITE DWARF SUSPECTS VI (CONT'D)

STAR NO	RA(1950)			DEC(1950)			MU	P.A.	MAG.	COL	R E F E R E N C E S
	H	M	S	°	'	"					
GD-1028	1 43 43	-11 35.2	0.12	144	16.1	0	PHL-7782				
-1029	43 52	-11 18.3	.10	109	15.5	0					
-1030	43 54	-10 28.9	SL	230	16.5	0					
-1031*	44 06	-11 47.3	.07	179	15.9	0					
-1032	44 11	-14 38.3	SL	140	16.2	0					
-1033	44 33	-20 40.1	SL	95	16.4	0					
-1034	44 48	-12 05.8	SL	140	16.5	0					
-1035	45 51	-15 09.8	.09	116	17.0	-1	LP768-493	PHL-3790			
-1036	46 30	-14 50.2	SL	135	16.5	0					
-1037	46 33	-15 24.5	.19	123	16.6	+1					
-1038	46 56	-9 57.0	.11	190	14.5	0					
-1039*	47 51	-17 54.3	.08	131	14.1	0	LP768-563				
-1040*	48 27	-10 55.5	SL	150	16.2	0					
-1041	48 34	-11 26.7	SL	170	15.1	0					
-1042	48 40	-11 55.0	SL	165	16.3	-1	PHL-3862				
-1043*	48 43	-20 12.1	SL	30	16.0	-1	LP768-588	PHL-1195			
-1044*	49 12	-18 24.8	SL	200	16.7	0					
-1045*	50 49	-22 08.1	SL	60	16.2	-1					
-1046	51 28	-21 37.4	SL	100	16.1	0					
-1047	51 29	-17 40.5	.08	167	16.1	0					
-1048	51 54	-13 54.4	SL	170	16.1	0					
-1049	52 43	-16 42.2	SL	30	12.7	0					
-1050	52 46	-18 41.9	SL	125	16.5	0					
-1051	53 50	-11 24.4	.09	152	16.1	0					
-1052	53 56	-9 58.4	.07	190	15.5	0					
-1053	54 06	-14 09.1	.13	182	12.2	0					
-1054	54 50	-12 13.1	SL	130	16.5	0					
-1055	55 20	-13 14.5	SL	140	16.2	0					
-1056	55 35	-12 58.3	.09	110	15.7	0					
-1057	56 04	-13 56.4	SL	195	16.4	-1					
-1058	56 16	-11 54.1	SL	125	16.5	-1					
-1059	56 18	-13 35.7	.07	152	15.7	0					
-1060	56 35	-12 25.4	SL	120	17.1	0					
-1061	56 38	-14 42.2	SL	105	16.6	0					
-1062	56 48	-10 53.4	.07	162	16.2	0					
-1063	57 09	-11 29.0	.13	124	16.9	0					
-1064	57 18	-11 18.7	SL	180	16.5	0					
-1065	57 35	-13 21.8	SL	110	15.7	0					
-1066*	57 42	-20 02.0	SL	140	16.8	-1					
-1067	57 50	-10 10.9	.14	83	17.1	0					
-1068*	57 50	-17 43.3	SL	215	12.2	0					
-1069	58 46	-13 28.2	.08	50	16.8	0					
-1070	59 09	-12 12.2	SL	160	15.1	0					
-1071	1 59 43	-11 15.2	.08	170	16.3	0					
-1072	2 00 38	-12 43.4	.16	191	14.6	0					
-1073	01 12	-16 40.5	SL	265	16.1	0					
-1074	01 16	-18 51.7	.17	136	9.7	0					
-1075	01 45	-15 07.9	SL	145	15.9	0					
-1076	01 56	-11 52.3	SL	220	16.2	0					
-1077	03 17	-17 34.1	.07	183	14.0	0					
-1078	03 29	-14 33.8	.11	135	15.6	0					
-1079	04 11	-13 28.6	SL	170	15.1	0					
-1080	04 19	-10 18.8	SL	165	14.4	0					
-1081	04 49	-14 54.4	.07	197	15.9	0					
-1082	04 53	-16 38.4	SL	270	15.5	0					
GD -1083	2 05 04	-18 45.0	.10	251	16.5	0					
GD -1084	2 05 12	-16 30.7	SL	170	13.8	0					

(EPOCH 1972.92)

LIST OF BLUE STARS WITH NO DEFINITE MOTION

STAR NO	RA(1950)			DEC(1950)			MU	P.A.	MAG.	COL	R E F E R E N C E S
	H	M	S	°	'	"					
GD-1085	1 20 18	-17 41.7	—	—	—	14.9	-1				
-1086	28 17	-10 41.2	—	—	—	14.1	-1				
-1087	29 41	-17 18.3	—	—	—	16.3	-1				
-1088	30 15	-19 37.2	—	—	—	15.5	-1	PHL-1025			
-1089	30 38	-14 21.4	—	—	—	15.3	0				
-1090	32 36	-19 11.6	—	—	—	16.3	0				
-1091	34 44	-21 38.2	—	—	—	15.0	-1				
-1092	38 43	-15 23.1	—	—	—	14.1	-1				
-1093	39 33	-10 16.0	—	—	—	15.1	-1				
-1094	1 39 56	-16 13.9	—	—	—	15.9	-1	PHL-7646			

LIST OF BLUE STARS WITH NO DEFINITE MOTION (CONT'D)

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S					
							H	M	S	0	'	''
GD -1095	1 41 14	-15 49.3	—	—	14.3	-1						
-1096	43 01	-14 46.1	—	—	16.3	-1	PHL-3709					
-1097	44 07	-16 37.7	—	—	12.2	-1						
-1098	48 52	-12 29.5	—	—	15.7	-1						
-1099	50 26	-16 50.3	—	—	13.6	-1	PHL-1212					
-1100	53 25	-19 45.3	—	—	15.1	-1	PHL-8087					
-1101	53 54	-11 13.8	—	—	16.6	0						
-1102	55 53	-12 12.8	—	—	14.2	-1						
-1103*	1 59 33	-14 51.6	—	—	16.5	0						
-1104*	2 03 24	-13 52.8	—	—	15.7	-2						
GD -1105	2 03 26	-14 56.3	—	—	16.6	0	(EPOCH 1972.92)					

LIST OF WHITE DWARF SUSPECTS VI • CONTINUED

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S					
							H	M	S	0	'	''
GD -1106	23 14 25	-17 35.9	SL	180	16.0	0	PHL-5594					
-1107	15 00	-9 18.8	SL	240	13.7	-1	PHL-443					
-1108	15 09	-12 49.3	SL	295	13.1	0						
-1109	15 56	-12 52.8	SL	150	14.4	0						
-1110	16 49	-9 09.2	SL	255	13.4	-1	PHL-457					
-1111	17 13	-18 22.8	SL	155	14.5	0						
-1112	17 28	-17 28.1	SL	155	15.5	0						
-1113	17 35	-17 13.3	SL	125	14.5	0						
-1114*	17 40	-14 44.9	SL	110	14.9	0						
-1115*	17 48	-12 15.5	SL	-	14.2	0						
-1116	18 49	-16 02.7	SL	160	15.3	-1						
-1117	19 12	-18 01.9	SL	105	15.6	0						
-1118	19 31	-17 08.4	SL	160	14.8	0						
-1119*	19 32	-12 28.0	SL	190	16.8	+1						
-1120	19 40	-16 34.9	SL	190	15.0	0						
-1121	19 47	-10 09.4	SL	100	14.8	0						
-1122	19 54	-14 40.7	SL	195	15.3	0						
-1123	20 01	-15 55.6	SL	175	15.1	0						
-1124	20 17	-12 18.1	SL	285	16.4	0						
-1125	20 17	-18 14.4	SL	60	15.7	0	PHL-5733					
-1126	20 21	-14 15.1	0.09	167	15.3	0						
-1127	20 24	-12 35.8	0.07	189	15.5	+1						
-1128*	20 26	-12 51.7	SL	110	16.3	0						
-1129	20 30	-13 30.5	SL	130	16.1	0						
-1130	20 33	-17 22.5	SL	205	14.5	-1						
-1131	20 38	-12 08.7	•0.09	170	14.3	0						
-1132	20 40	-17 01.7	SL	110	15.5	0						
-1133	20 56	-12 15.1	•0.09	183	16.5	0						
-1134	21 02	-12 40.4	SL	90	16.4	-1						
-1135	21 07	-14 42.2	SL	95	15.9	0						
-1136*	21 10	-17 18.8	SL	155	15.6	+1						
-1137*	21 14	-11 41.7	SL	160	16.1	0						
-1138*	21 17	-11 34.0	SL	-	16.4	0						
-1139	21 38	-17 17.2	SL	125	15.7	0						
-1140*	21 40	-12 35.2	SL	160	15.4	+1						
-1141	21 48	-12 32.3	SL	95	15.9	0						
-1142	22 30	-15 07.6	SL	195	15.4	0						
-1143*	22 32	-16 30.8	SL	95	16.0	0						
-1144	22 52	-13 10.0	SL	205	16.2	0						
-1145	22 57	-14 43.0	SL	155	16.0	0	PHL-5803					
-1146	23 01	-15 10.5	SL	185	15.5	0						
-1147	23 15	-10 28.0	SL	120	15.6	0						
-1148*	23 19	-11 31.7	SL	105	16.5	-1						
-1149*	23 27	-10 13.9	SL	115	15.7	0						
-1150*	23 34	-14 31.2	SL	-	16.2	0	PHL-5813					
-1151	23 35	-16 37.8	SL	105	15.6	0						
-1152*	23 47	-13 53.4	SL	-	15.3	0						
-1153*	24 09	-18 03.7	SL	175	15.1	0						
-1154	24 21	-18 21.8	SL	100	15.2	0						
-1155	24 42	-20 14.7	•0.07	101	15.0	0						
-1156	24 49	-15 15.7	SL	150	15.9	0						
-1157	24 58	-15 37.5	SL	135	16.1	0						
-1158	25 00	-14 39.2	SL	205	15.7	0						
-1159	25 07	-11 22.3	•0.09	146	14.7	0						
-1160*	23 25 37	-10 54.7	SL	130	16.1	0						

LIST OF WHITE DWARF SUSPECTS VI (CONT'D)

STAR NO	RA(1950) H M S	DEC(1950) ° ' "	MU	P.A.	MAG.	COL	R E F E R E N C E S						
							H	M	S	°	'	"	O
GD-1161	23 25 38	-14 12.7	SL	175	16.0	0	PHL-5854						
-1162	25 45	-12 14.2	SL	100	16.1	0							
-1163	25 49	-19 14.4	SL	135	16.2	0							
-1164	26 11	-16 42.9	SL	90	16.1	0							
-1165	26 21	-12 29.9	SL	130	16.5	-1							
-1166	26 37	-10 53.4	0.08	113	16.7	0							
-1167	26 41	-17 00.8	SL	205	16.0	0							
-1168	27 02	-9 09.7	SL	95	15.4	0							
-1169	27 41	-9 18.7	SL	95	15.9	0							
-1170	27 47	-15 37.4	SL	170	15.2	0							
-1171*	28 19	-18 47.2	SL	170	16.8	0							
-1172	28 29	-11 47.5	SL	120	16.0	0							
-1173	28 41	-16 49.3	SL	85	15.8	0							
-1174	28 54	-17 31.9	SL	140	16.1	0							
-1175	29 21	-17 26.3	SL	195	14.6	0							
-1176	29 33	-9 53.4	SL	200	16.3	0							
-1177	29 47	-18 39.2	SL	105	16.0	0							
-1178	29 53	-17 57.8	.11	169	13.9	0							
-1179	30 02	-13 00.5	SL	140	16.1	0							
-1180	30 02	-19 10.2	SL	165	16.1	0							
-1181	30 23	-13 57.0	SL	340	15.2	-1							
-1182	30 38	-16 46.6	SL	105	16.0	-1							
-1183	30 45	-12 18.2	SL	65	15.9	0							
-1184	30 52	-13 23.1	SL	205	14.9	0							
-1185	31 21	-18 40.0	.08	196	15.7	0							
-1186	31 21	-19 48.4	SL	110	14.9	0							
-1187	31 29	-8 07.0	SL	105	15.2	0							
-1188	31 47	-17 06.2	SL	220	15.1	0							
-1189	32 16	-18 28.3	SL	135	14.5	0							
-1190*	32 18	-16 22.5	.11	145	15.5	+1							
-1191	32 55	-9 56.2	SL	360	15.3	0							
-1192	33 00	-16 34.3	.16	143	13.3	0	BPM 82958						
-1193	33 09	-12 32.3	SL	130	16.8	-1							
-1194*	33 09	-13 31.5	SL	95	16.9	+1							
-1195*	33 09	-14 59.0	SL	110	15.8	0							
-1196	33 13	-16 48.6	SL	135	16.1	0							
-1197	33 31	-16 04.2	SL	160	16.4	-1							
-1198	33 43	-9 12.6	SL	105	15.6	0							
-1199	33 43	-10 16.7	SL	270	10.2	0							
-1200	33 48	-15 37.2	SL	125	15.5	0							
-1201	34 04	-15 49.4	SL	195	16.0	0							
-1202	34 07	-15 55.8	SL	115	14.4	0							
-1203	34 10	-14 18.3	SL	215	16.1	0							
-1204	34 12	-17 46.1	SL	120	15.9	0							
-1205	34 18	-19 28.1	08	134	15.1	0							
-1206	34 37	-19 20.3	SL	175	14.2	0							
-1207	34 55	-13 55.2	SL	175	15.3	-1							
-1208	35 18	-18 54.9	.08	132	16.4	0							
-1209*	35 35	-12 19.9	.07	183	16.2	0							
-1210	35 51	-16 35.9	SL	85	12.5	0							
-1211	35 51	-10 28.6	SL	110	15.9	0							
-1212	36 16	-7 58.1	SL	140	13.4	-1							
-1213	36 18	-15 35.6	SL	150	15.6	0							
-1214	36 32	-12 41.3	SL	320	13.6	-1							
-1215	37 02	-19 45.1	SL	125	14.6	-1							
-1216*	37 07	-17 43.8	SL	205	12.0	+1							
-1217*	37 18	-15 10.4	SL	90	17.1	0							
-1218*	37 31	-15 08.0	SL	125	15.8	0							
-1219	37 31	-16 53.7	.15	110	16.3	+1							
-1220	37 39	-17 35.2	SL	65	16.5	0							
-1221	37 47	-17 47.2	SL	120	15.7	0							
-1222	38 08	-18 36.3	.12	157	16.9	0							
-1223	38 16	-16 48.3	SL	155	15.0	0							
-1224	39 22	-15 23.3	SL	175	15.5	0							
-1225*	39 31	-13 11.7	SL	165	14.4	0							
-1226	39 43	-16 11.6	SL	135	16.3	0							
-1227	39 52	-7 56.0	SL	165	14.8	-1							
-1228*	40 19	-17 05.6	SL	115	16.3	+1							
-1229	40 27	-11 38.9	.08	141	16.7	+1							
-1230	40 41	-15 53.4	.07	154	15.3	0							
-1231	41 10	-13 50.7	SL	160	13.1	0							
-1232	41 13	-9 04.9	SL	140	15.7	0							
-1233	42 04	-8 47.3	.07	130	15.8	0							
-1234*	42 04	-16 25.6	SL	105	16.3	0							
-1235*	23 42 10	-8 53.6	SL	-	15.7	-1							

LIST OF WHITE DWARF SUSPECTS VI (CONT'D)

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S
	H M S	D M S	"	'	0		
GD-1236	23 42 27	-9 11.6	SL	135	16.1	0	
-1237	42 52	-15 45.4	SL	45	15.8	-1	
-1238	42 59	-9 50.6	SL	215	16.2	0	
-1239*	43 37	-14 26.6	0.07	224	14.6	+1	
-1240	43 43	-8 32.4	SL	160	14.9	-1	
-1241	43 53	-8 42.6	SL	175	15.9	-1	
-1242	44 37	-16 40.4	SL	105	15.8	0	
-1243	44 43	-9 10.3	SL	105	16.3	0	
-1244	44 53	-15 56.8	SL	165	16.0	0	
-1245	45 18	-10 15.5	SL	270	16.3	0	
-1246*	45 49	-11 44.7	SL	105	16.3	-1	
-1247	47 12	-16 01.8	SL	170	16.0	0	
-1248	47 28	-19 16.0	SL	275	16.0	-1	
-1249	47 41	-11 03.4	SL	100	15.8	0	
-1250	48 00	-15 21.1	SL	130	16.3	0	
-1251	48 04	-9 26.6	SL	165	16.9	0	
-1252	48 06	-14 31.6	.10	99	16.0	+1	
-1253	48 08	-10 06.7	SL	145	16.0	0	
-1254	48 09	-17 36.3	.08	177	16.3	0	
-1255	48 16	-20 17.3	.09	213	15.9	0	
-1256	48 49	-8 32.5	SL	180	14.1	0	
-1257	49 56	-17 02.4	.07	211	16.3	0	
-1258	50 25	-18 10.1	SL	135	12.8	0	
-1259	50 34	-17 13.9	SL	210	15.9	0	
-1260*	51 15	-12 34.2	SL	200	16.7	0	
-1261	51 22	-11 17.0	SL	95	16.0	0	
-1262	51 36	-14 07.8	SL	120	16.3	0	
-1263	52 39	-10 29.2	.07	118	16.2	0	
-1264	52 58	-9 15.6	SL	140	15.9	0	
-1265	53 12	-10 04.7	SL	145	16.3	0	
-1266*	53 35	-8 26.3	SL	130	15.4	0	
-1267*	53 55	-12 26.7	SL	245	16.2	0	
-1268	53 58	-10 56.4	SL	135	16.3	0	
-1269	54 17	-11 12.3	SL	250	15.9	0	
-1270	54 21	-11 59.1	SL	100	16.0	0	
-1271	54 30	-15 40.5	SL	330	15.8	0	
-1272*	54 40	-11 06.9	SL	205	16.0	0	
-1273	54 59	-15 10.9	SL	155	15.0	-1	PHL-599
-1274*	55 07	-18 17.9	SL	230	15.2	+1	
-1275	55 19	-14 07.6	SL	215	16.0	0	
-1276*	55 38	-12 35.6	SL	155	15.9	0	
-1277*	55 46	-12 29.6	.07	185	15.5	+1	
-1278	56 00	-15 16.1	SL	105	14.9	0	
-1279	56 27	-11 27.4	SL	125	15.9	0	
-1280*	56 31	-8 52.7	SL	-	14.9	-1	PHL-6132
-1281	56 32	-11 19.0	SL	135	16.0	0	
-1282	56 53	-9 59.9	SL	120	14.1	0	
-1283*	57 17	-11 46.3	SL	145	16.5	0	
-1284	57 22	-16 25.9	SL	140	13.7	-1	PHL-611
-1285	57 50	-10 54.5	SL	150	16.2	0	
-1286*	58 11	-15 32.3	SL	130	15.3	+1	
-1287	59 14	-14 04.2	SL	160	14.0	0	
-1288*	23 59 16	-13 34.0	.08	249	16.1	+1	
GD -1289	00 00 51	-16 37.8	SL	150	12.3	0	

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LIST OF BLUE STARS WITH NO DEFINITE MOTION, CONTINUED

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S
	H M S	D M S	"	'	0		
GD -1290*	23 13 59	-17 10.2	--	-	14.1	-1	
-1291	14 39	-17 44.3	--	-	15.6	-1	
-1292	15 36	-14 57.6	--	-	14.0	-1	
-1293*	16 36	-19 00.4	--	-	14.3	0	
-1294	17 06	-11 13.0	--	-	13.8	-1	
-1295	17 46	-18 25.5	--	-	13.6	-1	PHL-466
-1296	17 50	-19 36.6	--	-	14.4	-1	
-1297	18 01	-11 17.2	--	-	16.2	-1	PHL-469
-1298	18 15	-13 51.9	--	-	13.7	-1	
-1299*	19 57	-16 54.8	--	-	15.2	0	
-1300*	20 44	-13 16.3	--	-	15.6	0	
-1301	20 45	-13 44.6	--	-	14.4	-1	
-1302*	21 30	-18 44.7	--	-	13.8	-1	PHL-2283
-1303	21 41	-14 18.1	--	-	13.6	-1	PHL-5767
-1304	23 22 36	-16 30.4	--	-	16.0	0	

LIST OF BLUE STARS WITH NO DEFINITE MOTION, CONTINUED

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S
	H M S	D M S	"	"	"		
GD -1305	23 22 58	-18 38.1	—	—	14.7	0	
-1306*	23 39	-17 41.9	—	—	13.6	-1	
-1307	24 44	-14 57.8	—	—	15.0	-1	
-1308*	26 28	-9 32.1	—	—	16.1	0	
-1309	26 35	-10 22.7	—	—	13.0	-1	PHL-540
-1310	27 25	-11 42.8	—	—	14.6	-1	PHL-5895
-1311	28 11	-19 49.6	—	—	16.0	-1	PHL-2376
-1312*	28 15	-9 27.9	—	—	14.9	0	
-1313*	29 02	-12 08.7	—	—	16.4	0	
-1314*	30 38	-21 08.9	—	—	13.9	-1	
-1315*	30 39	-17 43.6	—	—	15.9	-2	PHL-560
-1316	31 40	-15 52.7	—	—	14.2	-1	
-1317	32 00	-15 20.5	—	—	14.9	-1	
-1318	33 25	-15 26.5	—	—	14.7	-1	
-1319	35 36	-20 15.4	—	—	15.8	-1	
-1320	41 04	-18 01.4	—	—	16.1	-1	
-1321	41 47	-10 28.4	—	—	15.9	-1	
-1322*	42 09	-8 55.7	—	—	14.9	-1	
-1323*	43 31	-7 55.8	—	—	14.9	-1	
-1324	43 51	-17 40.8	—	—	16.1	-1	
-1325	50 07	-19 19.9	—	—	16.1	-1	
-1326*	52 19	-17 01.1	—	—	15.7	-1	
-1327*	52 38	-15 36.3	—	—	15.9	0	PHL-6057
-1328	52 42	-9 40.2	—	—	15.1	-1	
-1329*	53 36	-17 12.4	—	—	16.5	-1	
-1330	55 41	-10 36.1	—	—	14.7	-1	PHL-600
-1331	57 31	-14 54.6	—	—	15.4	-1	
-1332	57 51	-13 02.6	—	—	15.8	-1	PHL-2525
-1333	57 56	-10 14.1	—	—	15.0	-1	PHL-6161
-1334	58 35	-17 15.4	—	—	15.9	-1	
-1335*	58 52	-11 36.7	—	—	15.9	-1	PHL-6177
-1336	23 59 23	-11 57.6	—	—	15.8	-1	PHL-6192
-1337	0 00 35	-14 41.1	—	—	13.9	-1	
GD -1338	0 00 51	-18 19.0	—	—	14.5	-1	

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LIST OF VERY RED STARS III

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S						
							H	M	S	°	'	"	O
GR-120	1 20 06	-15 29.6	0.10	120	16.1	+4							
-121*	20 55	-21 19.7	.14	177	16.7	+3	LP827-161,2						
-122	21 17	-10 43.3	.18	92	15.8	+3	LP707-76						
-123*	25 04	-11 09.3	.18	87	16.9	+4							
-124*	25 17	-11 09.6	.18	87	7.6	+3	-11°272(LP)						
-125*	25 59	-13 09.1	.15	100	16.2	+4	LP707-92						
-126	26 22	-17 38.7	SL	245	12.3	+4							
-127	26 59	-9 49.9	.13	110	15.5	+4							
-128	27 54	-12 50.0	.11	75	16.6	+4	LP707-97						
-129	29 17	-12 23.9	.11	204	16.6	+4							
-130	30 38	-21 43.0	.18	65	16.1	+4	LTT 844						
-131*	30 42	-14 52.3	.15	238	16.6	+3							
-132	30 45	-21 31.7	SL	120	16.7	+4							
-133	31 08	-11 21.0	.09	183	16.6	+4							
-134	31 49	-20 02.1	.15	74	16.0	+4	LP768-121						
-135	32 30	-10 15.6	.09	107	16.5	+4							
-136	32 58	-14 56.2	.07	89	15.9	+4	LP768-141						
-137	33 21	-12 30.6	.13	205	16.5	+4							
-138	33 29	-13 41.1	.12	123	15.4	+4							
-139	33 42	-13 16.8	.10	124	15.9	+4							
-140	34 46	-19 48.7	.18	100	16.3	+4	LP768-198						
-141	35 14	-10 42.2	.07	136	16.3	+4							
-142	36 28	-18 58.9	.08	158	16.5	+4							
-143*	36 30	-14 58.9	.13	133	16.3	+3							
-144	36 38	-16 22.3	.13	209	16.8	+4	LP768-250						
-145	36 38	-14 36.7	.17	111	16.7	+4							
-146	37 08	-19 46.3	.12	95	16.8	+4	LP768-258						
-147	37 12	-15 17.1	SL	110	16.9	+4							
-148	38 17	-17 03.9	.08	81	16.5	+4							
-149	38 58	-18 19.6	SL	175	15.7	+4							
-150	40 11	-14 44.2	.10	195	16.7	+4							
-151	40 30	-11 16.5	.15	107	15.7	+4							
-152	41 09	-13 37.6	.08	234	16.3	+4							
-153	41 52	-14 30.9	.16	166	15.9	+4	LP768-376						
-154*	42 23	-17 47.4	SL	170	16.8	+4							
-155*	42 24	-17 47.4	SL	170	16.4	+4							
-156*	43 09	-18 08.7	.07	86	16.6	+4							
-157	43 13	-13 15.7	.09	167	16.3	+4							
-158*	43 25	-17 37.1	.12	134	16.0	+3							
-159*	43 34	-16 18.3	.15	120	16.8	+4	LP768-437						
-160	43 43	-13 45.5	.08	222	16.8	+4							
-161*	44 23	-12 20.2	.12	115	16.8	+3							
-162	44 37	-10 23.1	.09	95	16.4	+4							
-163*	45 03	-19 40.3	.17	193	15.8	+3	LP768-488						
-164	45 10	-13 19.4	SL	110	16.0	+4							
-165	45 42	-20 25.4	.10	113	16.5	+4							
-166	45 53	-18 50.3	.08	125	16.3	+4							
-167	46 07	-10 10.1	.19	173	15.8	+4	LP708-465						
-168	46 21	-16 29.0	.10	184	16.7	+4	LP768-503						
-169	46 29	-11 16.7	.13	189	16.7	+4							
-170	47 33	-16 10.9	.08	120	16.3	+4							
-171*	47 41	-15 37.7	.07	210	17.1	+4							
-172	47 46	-19 41.6	SL	200	16.3	+4							
-173	48 20	-10 53.2	.18	89	15.9	+4	LP708-525						
-174	48 46	-15 53.1	SL	145	17.1	+4							
-175*	49 13	-15 46.6	SL	135	16.6	+4							
-176*	49 16	-13 05.6	.09	117	16.3	+4							
-177*	49 17	-19 04.6	.08	76	16.1	+4	LP768-603,4						
-178*	49 17	-15 32.1	.11	137	17.2	+4							
-179*	49 36	-16 07.5	.15	206	16.3	+3	LP768-612						
-180*	50 10	-16 35.7	.17	135	16.0	+3	LP768-629						
-181	50 38	-17 44.9	.13	99	16.0	+4	LP768-653						
-182	51 06	-20 31.0	SL	75	16.1	+4							
-183	51 32	-20 48.0	.08	32	16.0	+4							
-184	51 35	-13 25.5	.15	169	16.2	+4							
-185	51 46	-21 07.3	.08	59	16.1	+4							
-186	52 22	-15 28.2	.13	197	16.1	+4							
-187	52 56	-21 06.9	.16	109	16.2	+4	LP828-79						
-188	53 19	-16 51.1	.08	117	16.6	+4							
-189	54 39	-16 18.5	.07	194	15.7	+4							
-190	54 44	-13 17.2	.12	229	15.7	+4							
-191	55 04	-16 17.8	.10	126	16.2	+4							
-192	55 45	-19 27.2	.16	36	16.8	+4							
-193	56 25	-18 49.6	.17	223	15.2	+4	BPM 70674						
-194	1 57 49	-13 59.0	0.07	149	16.8	+4							

LIST OF VERY RED STARS III (CONT'D)

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S
	H M S	D M S	"'	"'	"'	O	
GR-195	2 01 36	-12 48.1	0.11	194	13.2	+4	
-196	02 23	-9 51.2	.17	188	15.9	+4	
-197	03 04	-14 45.5	.15	227	16.3	+4	
-198*	04 08	-16 42.0	.08	27	16.4	+4	
GR-199	2 05 12	-21 29.9	0.16	245	15.9	+4	

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LIST OF VERY RED STARS III

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S
	H M S	D M S	"'	"'	"'	O	
GR-200	23 15 12	-12 37.2	0.11	86	16.1	+4	
-201	15 20	-12 16.2	.19	189	16.7	+4	
-202	15 41	-19 32.7	.08	147	16.5	+4	
-203	16 08	-17 52.2	.10	113	17.0	+4	
-204	17 01	-20 19.9	.07	107	16.3	+4	
-205	18 20	-13 49.5	.13	101	16.9	+4	
-206	20 05	-11 11.2	.10	92	16.1	+4	
-207	20 37	-12 30.6	.17	157	12.8	+4	
-208*	20 52	-10 17.2	.17	170	15.9	+4	LP 762-16
-209	21 19	-15 43.1	.18	219	13.3	+4	
-210	21 49	-18 01.6	.07	92	16.3	+4	
-211	22 43	-8 53.6	.14	97	15.7	+4	
-212	22 51	-12 29.7	.16	193	16.3	+4	
-213*	23 05	-12 55.5	.18	126	16.2	+3	
-214	23 37	-13 45.1	.07	133	14.0	+4	
-215	24 05	-15 21.1	.09	213	15.7	+4	
-216*	24 53	-10 48.6	.10	134	16.7	+4	
-217	24 59	-11 12.0	.08	115	16.9	+4	
-218	25 19	-10 27.4	SL	80	16.6	+4	
-219	25 48	-16 12.2	SL	5	15.6	+4	
-220	25 48	-17 46.9	.11	140	16.6	+4	
-221	25 55	-18 26.0	SL	100	16.9	+4	
-222	26 54	-11 51.8	.08	117	15.3	+4	
-223*	27 18	-12 39.3	.13	109	16.9	+4	
-224*	27 18	-12 39.2	.13	109	16.8	+4	
-225	27 40	-11 45.4	SL	155	16.2	+4	
-226	28 45	-18 29.4	.15	241	16.4	+4	
-227	29 53	-7 50.4	.15	65	16.4	+4	
-228	29 59	-15 10.7	SL	90	16.6	+4	
-229*	30 58	-17 19.1	.07	137	17.2	+4	
-230	31 16	-19 39.6	SL	260	16.0	+4	
-231*	31 30	-15 49.0	.19	121	16.7	+4	LP823-17
-232*	31 35	-15 47.6	.19	121	13.3	+3	BPM 82944
-233	31 53	-15 09.1	.10	66	16.4	+4	
-234	32 42	-11 05.8	.13	208	16.8	+4	
-235	33 11	-11 14.1	.09	251	16.8	+4	
-236	33 54	-9 07.2	.15	184	16.0	+4	
-237	34 37	-19 44.0	.18	70	17.0	+4	LP823-25
-238	34 54	-13 05.1	.19	122	15.9	+4	
-239	35 14	-13 08.3	.16	228	15.0	+4	
-240	35 20	-17 45.6	.10	205	15.9	+4	
-241	35 27	-10 25.0	.07	80	16.2	+4	
-242	36 33	-14 01.2	.15	217	16.7	+4	
-243	36 47	-14 32.1	.12	126	16.1	+4	
-244	37 10	-9 09.2	.07	106	16.1	+4	
-245	37 20	-16 57.9	.12	149	17.2	+4	
-246	38 48	-13 32.6	.15	118	17.0	+4	
-247	39 00	-10 04.6	.12	139	15.9	+4	
-248	39 51	-14 01.6	.11	198	16.2	+4	
-249	40 17	-12 16.7	.10	199	16.1	+4	
-250	41 13	-13 09.6	.08	112	14.9	+4	
-251	41 25	-10 11.3	.11	118	13.6	+4	
-252	42 24	-13 40.4	SL	165	17.1	+4	
-253	43 01	-10 14.9	.12	215	15.9	+4	
-254	43 01	-11 31.2	SL	155	16.1	+4	
-255	43 19	-12 49.9	SL	110	16.2	+4	
-256	43 37	-14 20.8	.10	156	16.8	+4	
-257	44 30	-12 57.7	.07	130	16.2	+4	
-258	44 47	-11 52.7	.07	356	15.3	+4	
-259	45 49	-10 34.5	SL	335	17.0	+4	
-260	47 07	-15 33.1	.10	111	16.1	+4	
-261	47 16	-11 38.0	.11	200	16.8	+4	
-262	47 18	-11 22.1	.16	131	15.3	+4	
-263	47 43	-16 52.2	.08	179	16.1	+4	
-264	23 47 49	-9 05.4	0.14	140	16.0	+4	

LIST OF VERY RED STARS III (CONT'D)

STAR NO	RA(1950)	DEC(1950)	MU	P.A.	MAG.	COL	R E F E R E N C E S
	H M S	D M S		' "			
GR-265	23 47 54	-11 51.9		SL	125	16.4	+4
-266*	48 58	-14 00.8	.09	210	16.1	+4	
-267*	49 06	-17 53.6	.10	250	17.2	+4	
-268	49 32	-17 10.0	SL	110	16.8	+4	
-269*	50 58	-11 15.0	.15	67	16.3	+4	
-270	51 11	-17 41.9	.16	85	15.7	+4	LP823-67
-271	51 19	-8 49.9	.16	135	16.0	+4	
-272	51 41	-18 10.5	.10	120	16.6	+4	
-273*	52 56	-16 22.9	.09	203	17.3	+4	
-274*	52 56	-16 22.8	.09	203	16.9	+4	
-275	53 02	-14 36.4	SL	80	16.6	+4	
-276	53 06	-15 36.1	.11	117	16.2	+4	
-277	53 21	-15 25.3	.11	233	16.4	+4	
-278	54 13	-16 09.1	SL	60	16.2	+4	
-279	54 26	-18 23.8	.16	241	16.0	+4	
-280	55 11	-11 41.0	.19	84	15.9	+4	LP704-17
-281	55 32	-15 31.9	.11	266	15.8	+4	
-282	56 33	-14 30.6	.11	138	16.0	+4	
-283	56 46	-19 34.2	.07	78	17.0	+4	
-284	56 54	-17 34.1	.13	91	15.6	+4	BPM 83153
-285	57 19	-10 54.9	.09	115	16.5	+4	
-286	58 06	-12 32.6	.18	149	16.4	+4	
-287	23 58 36	-14 08.7	.16	236	15.8	+4	
GR-288	00 00 41	-20 00.0	0.07	58	17.2	+4	

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NOTES TO CATALOG

G272- Notes

- G272-8 & G272-9 These two stars form the common proper motion pair LDS 46. Separation about 39" in P.A. 313°.
- G272-12 & G272-13 A common proper motion pair; separation about 80" in P.A. 153°. The companion appears to be a new discovery.
- G272-18 The P.A. of this star is somewhat uncertain; noticeably different results are obtained by using different 1st epoch plates. The reported value of 69° was measured with the plates which appear to show the most clearly defined images.
- G272-19 & G272-20 These form a common proper motion pair with a separation of about 14" in P.A. 273°; the companion appears to be a new discovery.
- G272-28 This appears to be LTT 823, but Luyten reports a much larger motion of 0"32 annually. A check of our plates shows no other large motion in the area, and confirms our motion of about 0"20.
- G272-39 This is L654-5. Luyten finds a common motion companion of magnitude 20.4 at 117" in P.A. 18°; the two stars form his pair LDS 1103.
- G272-44 Both observers thought this faint star to be slightly bluish.
- G272-52 Refer to G271-106.
- G272-55 Suspected white dwarf. This is L726-7 and PHL 3499; Luyten's color class estimate is "a".
- G272-60 Suspected white dwarf. This is LP768-230 and PHL 3537. Luyten's color class estimate is "a-f".
- G272-61 This is the well known high proper motion pair L726-8, a red dwarf binary system of visual magnitudes 12.4 and 13.0; separation about 2".4. The components (not listed separately) have the smallest masses yet determined for any visible star. The fainter component is the flare star UV Ceti.
- G272-74 & G272-75 These two faint stars form a common proper motion pair; separation about 26" in P.A. 154°.
- G272-82 Refer to G271-134.
- G272-95 This is LTT 961, but the listed BD number of -13°311 is an error; the correct BD number is -13°321.
- G272-96 This appears to be LP708-447, but there is a discrepancy in the magnitude which Luyten gives as 13.8 photographic.

- G272-97 Luyten reports a companion of magnitude 18.8 in P.A. 86°, separation 29". These form his pair LDS 1117.
- G272-106 Suspected white dwarf. This is PHL 3878. Luyten's estimated color class is "a-f".
- G272-112 Refer to G271-173 and 174.
- G272-113
- G272-119 & G272-120 These form the common proper motion pair LDS 59, also listed in a later Luyten catalog under the designation LDS 1120. The separation is about 28" in P.A. 220°. Luyten's magnitude listing for the fainter component in the LTT and BPM catalogs is evidently an error, and seems to refer to the bright field star about 30" from the primary, but in the opposite direction, toward P.A. 20°. The proper motion companion is a 16th magnitude object. Refer to the finder chart for this pair.
- G272-121 Luyten reports a companion of magnitude 17.3, designated LP828-77. Separation 14" in P.A. 317°.
- G272-126 & G272-127 These form the common proper motion pair LDS 60; separation about 29" in P.A. 137°.
- G272-131 Luyten's estimated color class for this star is "g".
- G272-132 & G272-133 These form a common proper motion pair, newly discovered, with a separation of about 7" in P.A. 184°. Both stars seem to be extremely red.
- G272-149 This appears to be BPM 70905, though Luyten has a considerably lower P.A. of 54°.
- G272-152 Suspected white dwarf.
- G273- Notes**
- G273-1 This is the close visual binary ADS 16644 or β 182; the ADS Catalog gives the individual magnitudes as 8.7 and 8.9, with a separation of 0"6 (1959). The P.A. of this pair is increasing very slowly. A third faint star shares the proper motion of the system; this is VBS 12. It is 15" from the bright primary in P.A. 47°, magnitude about 17.
- G273-7 & G273-8 These form the common proper motion pair LDS 810; separation about 21" in P.A. 143°.
- G273-11 Luyten reports a companion which he designates LP822-15. Magnitude 17.8, separation 6" in P.A. 61°. The two stars form the pair LDS 2980.

G273-13	Suspected white dwarf. The star is PHL 459. Luyten's estimated color class is "a".	G273-175	This star is close pair, ADS 17107 or Σ3046. The Lick "Index Catalogue of Visual Double Stars" gives the individual magnitudes as 9.0 and 9.5; separation 3.6" in P.A. 260° (1959). Both the separation and the P.A. have been increasing slowly over the past century.
G273-14	There is some evidence for a slight variability of this star on the Lowell plates.	G273-180&	These form the common proper motion pair LDS 831. Separation about 31" in P.A. 142°.
G273-19	The very blue star GD 1115 lies in the field, about 52" distant from G273-19 in P.A. 226°.	G273-185&	These form the common motion pair LDS 830; separation about 20" in P.A. 114°.
G273-22	Luyten reports a companion of magnitude 21, which he designates LP822-59. Separation 6" in P.A. 360°.	G273-186	Luyten finds a close companion which he designates LP704-32. He reports a magnitude difference of about 0.7 magnitude, separation 2" in P.A. 72°.
G273-26	Luyten finds a companion of magnitude 17.6, which he designates LP822-66. Separation 5" in P.A. 4°.	G273-193	Additional references: BPM 68883, VM 528, and BD-20°6684°.
G273-40	Suspected white dwarf. This star is PHL 506. Luyten's estimated color class is "a".	G273-204	Refer to G266-32.
G273-50	This is LP878-32. Luyten finds a companion of magnitude 19.7 which he designates LP878-33. Separation 5" in 67°. Luyten's estimated color class for the primary is "m".	G273-208	
G273-67 & G273-68	These two stars form the wide pair LDS 816; separation about 339" in P.A. 353°. The BD number listed under LDS 816 appears to be incorrect. The fainter star, G273-67, is the very close pair Voute 28 with a separation of about 0''.2 (1962); Gliese (1969).		
G273-70 & G273-71	These form the common motion pair LDS 2989; separation about 31" in P.A. 232°.		
G273-77	The closest star on the finder chart (12 ^m 14" in P.A. 237°) shows some proper motion in very nearly the same P.A. The amount of motion, however, is much less, and was measured as about 0''.07 in P.A. 103°. Evidently the two stars do not form a physical pair.		
G273-81	No color estimate available, image off the edge of the red plate.	GD Stars-	Notes
G273-86 & G273-88	These two stars may possibly form a wide common motion pair, although the measured motions are not precisely identical. Separation about 5.1 in P.A. 101°.	GD 978	Possible variable star. The images on the Lowell plates differ by about 0.3 magnitude.
G273-97	Suspected white dwarf.	GD 981	The motion of this star is uncertain; there are considerable discrepancies in the measurements made on different sets of plates.
G273-100	This star was noted as slightly bluish by both observers.	GD 985	Motion uncertain, same circumstances as GD 981.
G273-109	This star was noted as slightly bluish.	GD 989	P.A. uncertain, same circumstances as GD 981.
G273-114&	These form the common proper motion pair LDS 2995; separation about 17" in P.A. 241°.	GD 990	P.A. uncertain, same circumstances as GD 981.
G273-115	Luyten reports a companion of magnitude 19.5; separation 35" in P.A. 34°. The companion is LP763-15; the two stars form the pair LDS 3003.	GD 1000	P.A. uncertain, same circumstances as GD 981.
G273-154		GD 1001	Mu uncertain, same circumstances as GD 981.
		GD 1006	This is probably PHL 1084, though there is a discrepancy in the R.A. which is given as 1 ^h 36 ^m .2 in the PHL list. Motion uncertain as above.
		GD 1012	P.A. uncertain.
		GD 1017	P.A. uncertain.
		GD 1023	P.A. uncertain. A very red star of the 17th magnitude lies 47" distant in P.A. 343°; it shows no certain motion on the Lowell plates.
		GD 1025	P.A. uncertain.
		GD 1031	P.A. uncertain.

NOTES TO LIST OF WHITE DWARF SUSPECTS

GD Stars- Notes

- GD 978 Possible variable star. The images on the Lowell plates differ by about 0.3 magnitude.
- GD 981 The motion of this star is uncertain; there are considerable discrepancies in the measurements made on different sets of plates.
- GD 985 Motion uncertain, same circumstances as GD 981.
- GD 989 P.A. uncertain, same circumstances as GD 981.
- GD 990 P.A. uncertain, same circumstances as GD 981.
- GD 1000 P.A. uncertain, same circumstances as GD 981.
- GD 1001 Mu uncertain, same circumstances as GD 981.
- GD 1006 This is probably PHL 1084, though there is a discrepancy in the R.A. which is given as 1^h 36^m.2 in the PHL list. Motion uncertain as above.
- GD 1012 P.A. uncertain.
- GD 1017 P.A. uncertain.
- GD 1023 P.A. uncertain. A very red star of the 17th magnitude lies 47" distant in P.A. 343°; it shows no certain motion on the Lowell plates.
- GD 1025 P.A. uncertain.
- GD 1031 P.A. uncertain.

GD 1039	This appears to be LP768-563, though Luyten reports a P.A. of 90°. His color class estimate for the star is "g".	GD 1152	Motion too slight and uncertain for accurate measurement; P.A. possibly about 300°.
GD 1040	This star may be identical with PHL 3849, though there are discrepancies in the position which the PHL list gives as 1 ^h 48.1 – 11°04'.	GD 1153	The position is near PHL 5827, but the two objects probably are not identical, as the magnitude of the PHL star is given as 19.0.
GD 1043	P.A. uncertain.	GD 1160	P.A. uncertain, differences of about 40° on different sets of plates. The color of the star is uncertain, as the image on the red plate appears to be defective.
GD 1044	P.A. very uncertain.	GD 1171	Color uncertain; images faint and indefinite.
GD 1045	P.A. uncertain.	GD 1190	Color uncertain, may possibly be bluer than +1.
GD 1066	Color estimate somewhat uncertain; the star does not appear equally blue on different sets of plates.	GD 1194	Color uncertain; may possibly be bluer than +1.
GD 1068	P.A. uncertain.	GD 1195	P.A. uncertain, differences of up to 30° on various sets of plates.
GD 1103	There is some indication of slight variability on the Lowell plates.	GD 1209	P.A. uncertain, differences of about 30° on various sets of plates.
GD 1104	Possible slight variability.	GD 1216	Both observers recorded the color as being slightly bluish.
GD 1114	P.A. uncertain; differences of about 35° on different sets of plates.	GD 1217	Color uncertain, images faint and diffuse.
GD 1115	Refer to note on G273-19. Motion of GD 1115 very slight; P.A. uncertain, possibly near 290°.	GD 1218	P.A. uncertain, differences of about 35° on various pairs of plates.
GD 1119	Image faint and difficult; color may possibly be bluer than +1.	GD 1225	Motion indefinite, P.A. measurements vary by about 35° on different pairs of plates.
GD 1128	P.A. uncertain; differences of about 40° on various sets of plates.	GD 1228	P.A. uncertain, differences of about 40° on various pairs of plates. Color uncertain, but seems somewhat bluer than +1.
GD 1136	Color uncertain, may possibly be bluer than +1.	GD 1234	P.A. uncertain, differences of about 40° on various pairs of plates.
GD 1137	This star is very close to the position for PHL 2282, but the identification is uncertain, since the PHL magnitude is 18.4.	GD 1235	Motion indefinite, P.A. may be about 100°. The blue star GD 1322 lies in the field, about 2/3 distant in P.A. 190°.
GD 1138	Motion very slight, P.A. uncertain, possibly about 195°.	GD 1239	Color uncertain, may possibly be bluer than +1.
GD 1140	The position is close to PHL 2286, with a difference of 4' in declination. The identification is uncertain, since the magnitude of the PHL star is given as 17.9.	GD 1246	P.A. uncertain, differences of about 50° on various pairs of plates.
GD 1143	The blue star GD 1304 lies in the field, about 1' distant in P.A. 67°. PHL 2296 and PHL 5797 are both close to the positions of these two GD stars, but the identifications are uncertain as the PHL magnitudes are 18.6 and 18.9.	GD 1260	P.A. uncertain, differences of about 35° on various pairs of plates.
GD 1148	P.A. uncertain; differences of about 60° on various sets of plates.	GD 1266	Color uncertain, but seems definitely bluer than +1.
GD 1149	Color uncertain, differences in images on various plates. May possibly be as blue as –1.	GD 1267	P.A. uncertain, differences of about 45° on various sets of plates.
GD 1150	Motion uncertain. A slight drift toward about 265° was measured on one pair of plates, but could not be confirmed on other plates. The star seems to be PHL 5813 though there is a discrepancy in the position which the PHL catalog gives as 23 ^h 23 ^m .4 – 14° 32'.	GD 1272	Color uncertain, but seems definitely bluer than +1.
		GD 1274	Color uncertain, possibly bluer than +1.
		GD 1276	P.A. uncertain; differences of up to 50° on different pairs of plates.

- GD 1277 Both observers recorded the color as being slightly bluer than +1.
- GD 1280 The motion of this star is slight and uncertain; the P.A. may be near 145°.
- GD 1283 The color is uncertain, owing to image differences in the various plates. The star may be slightly variable.
- GD 1286 Color uncertain, may be bluer than +1.
- GD 1288 Color uncertain, may be bluer than +1.
- GD 1290 This star is close to the position given for PHL 5586, but the two objects are probably not identical, as the PHL object has a magnitude of 17.5.
- GD 1293 Color uncertain, possibly bluer than 0.
- GD 1299 Color possibly bluer than 0.
- GD 1300 Color possibly bluer than 0.
- GD 1302 This star seems to be PHL 2283, though there is a discrepancy in the magnitude which is given in the PHL catalog as 15.4.
- GD 1306 Another faint bluish star, of about magnitude 15, lies in the field, 110" from GD 1306 in P.A. 187°. The color seems to be 0 or better, but the star shows no certain motion on the Lowell plates.
- GD 1308 Color uncertain, may possibly be somewhat bluer than 0.
- GD 1312 Color uncertain, may possibly be somewhat bluer than 0.
- GD 1313 Color somewhat uncertain; discrepancies in the measurements on different sets of plates, but appears to be bluer than +1.
- GD 1314 Color uncertain; images near edge of plate and somewhat distorted.
- GD 1315 Another faint bluish star of about 16th magnitude lies in the field, 170" distant from GD 1315 in P.A. 25°. The color does not appear to be as definite as 0, and the motion is too slight and uncertain for measurement.
- GD 1322 Refer to note on GD 1235.
- GD 1323 The color of this star seems noticeably bluer than our usual grade of -1.
- GD 1326 Another faint bluish star, of about magnitude 16, lies in the field, 142" distant in P.A. 15°. The color may be about 0, but the motion is too slight for measurement.
- The closest star to GD 1326 on the finder chart, about 20" distant toward the east, appears extremely red on the Lowell plates. Since none of these stars show any definite motion, the possibility of a physical system remains uncertain.
- GD 1327 The color of this star appears somewhat bluer than our usual grade of 0.
- GD 1329 The position of this star closely matches PHL 6075, but the catalog magnitude for the PHL object is 18.2.
- GD 1335 The color of the star is somewhat uncertain owing to the poor position near the edge of the plate, but appears bluer than -1.

NOTES TO LIST OF VERY RED STARS

GR Stars- Notes

- GR 121 Luyten finds this star to be a close pair, separation 4" in P.A. 310°, magnitudes 15.3 and 16.8
- GR 123& These form a common proper motion pair
- GR 124 with a separation of about 3.3 in P.A. 277°. The bright primary is the close pair ADS 1162 or β 399, with a separation of about 1".6.
- GR 125 The amount of motion is uncertain, the measurements on different sets of plates show noticeable discrepancies.
- GR 131 Motion uncertain, same circumstances as GR 125.
- GR 143 Both observers thought this faint star to be definitely redder than the usual rating of +3, but not equal to +4.
- GR 154& A common proper motion pair with a separation of about 15" in P.A. 280°.
- GR 155
- GR 156 Possible slight variability on the Lowell plates. The position of the star appears to match LP768-414, but Luyten's magnitude is 18.2 and his color class estimate is "F".
- GR 158 Color not equal to our rating of +4. Same circumstances at GR 143.
- GR 159 Luyten reference uncertain. An object which is evidently the same star appears in his South Galactic Pole catalog, but with the number LP768-427.
- GR 161 Same circumstances as GR 143.
- GR 163 Same circumstances as GR 143.
- GR 171 This appears to be LP768-556, but there is a discrepancy in the P.A. which Luyten gives as 100°.
- GR 175 P.A. uncertain, discrepancies in the measurements on different sets of plates.
- GR 176 Same circumstances as CR 125.
- GR 177 This is the double star LDS 1119; separation 14" in P.A. 192°, magnitudes 16.0 and 19.8 according to Luyten.
- GR 178 P.A. uncertain, same circumstances as GR 175.

GR 179	Same circumstances as GR 143.	LP707-99	Luyten motion 0".39; Possible faint image located, motion uncertain.
GR 180	Same circumstances as GR 143.	LP709-4	Luyten motion 0".51; Identification uncertain; a possible faint image was found, but about 10' north of the Luyten position. Owing to the faintness of the first epoch image, no accurate measurement was possible.
GR 198	P.A. uncertain, same circumstances as GR 175.	LP709-5	Luyten motion 0".28; Identification uncertain. A possible faint image was located at Luyten's position, but with much lower P.A.; the motion appears to be less than 0".18.
GR 208	This is the primary of Luyten's pair LDS 2983. According to Luyten the companion is magnitude 20.0, estimated color class "k". Separation 4".5 in P.A. 339°.	LP709-7	Luyten motion 0".23; Cannot verify, perhaps too faint.
GR 213	The color of this star seems to be somewhat redder than our usual grade of +3.	LP709-18	Luyten motion 0".39; Cannot verify, perhaps too faint.
GR 216	A very red star of about 17th magnitude lies in the field, about 48" from GR 216 in P.A. 230°. The color estimate is about +4, but the star shows no certain motion on the Lowell plates.	LP709-19	Luyten motion 0".28; Cannot verify, perhaps too faint.
GR 223&	A common motion pair, separation about 5" in P.A. 213°.	LP709-23	Luyten motion 0".29; Cannot verify, perhaps too faint.
GR 224		LP767-37	Luyten motion 0".79; Cannot verify, perhaps too faint.
GR 229	Color somewhat uncertain owing to the faintness of the star, but seems redder than our usual grade of +3.	LP767-66	Luyten motion 0".22; Cannot verify, perhaps too faint.
GR 231&	These two stars appear to form a wide common motion pair; separation about 109" in P.A. 223°.	LP768-105	Luyten motion 0".23; Cannot verify, perhaps too faint.
GR 232		LP768-147	Luyten motion 0".23; Lowell 0".13.
GR 266	The color of this star seems redder than our usual grade of +3. The closest star to GR 266 on the finder chart, about 30" distant toward P.A. 290°, shows a strong red color on the Lowell plates. No definite motion could be detected, however,	LP768-203	Luyten motion 0".21; Cannot verify, perhaps too faint.
GR 267	The color of this star seems redder than our usual grade of +3, but not equal to +4.	LP768-342	Luyten motion 0".24; Cannot verify, perhaps too faint.
GR 269	The color of this star is perhaps not quite as red as our usual grade of +4.	LP768-450	Luyten motion 0".26; Lowell 0".18.
GR 273&	A common proper motion pair with a separation of 6" in P.A. 190°.	LP768-535	Luyten motion 0".47; Possible faint image located, too uncertain for measurement.
GR 274		LP768-683	Luyten motion 0".33; Cannot verify, perhaps too faint.

NOTES ON MOTION STARS NOT LISTED

A number of proper motion stars appearing in the lists of Wolf, Ross, Luyten and others have not been included in our catalog lists. These are given below with explanations.

G272-LTT 741	Luyten motion 0".21; Lowell 0".18.
LTT 757	Luyten motion 0".25; Lowell 0".18.
LTT 760	Luyten motion 0".21; Lowell 0".18.
LTT 936	Luyten motion 0".20; Lowell 0".15.
LTT 1051	Luyten motion 0".20; Lowell 0".13.
LTT 1073	Luyten motion 0".32; Lowell 0".14.
LTT 1082	Luyten motion 0".23; Lowell 0".13.
LTT 1085	Luyten motion 0".29; Lowell 0".19.
LTT 1087	Luyten motion 0".20; Lowell 0".13.
LP707-73	Luyten motion 0".38; Cannot verify, perhaps too faint.

LP707-99	Luyten motion 0".39; Possible faint image located, motion uncertain.
LP709-4	Luyten motion 0".51; Identification uncertain; a possible faint image was found, but about 10' north of the Luyten position. Owing to the faintness of the first epoch image, no accurate measurement was possible.
LP709-5	Luyten motion 0".28; Identification uncertain. A possible faint image was located at Luyten's position, but with much lower P.A.; the motion appears to be less than 0".18.
LP709-7	Luyten motion 0".23; Cannot verify, perhaps too faint.
LP709-18	Luyten motion 0".39; Cannot verify, perhaps too faint.
LP709-19	Luyten motion 0".28; Cannot verify, perhaps too faint.
LP709-23	Luyten motion 0".29; Cannot verify, perhaps too faint.
LP767-37	Luyten motion 0".79; Cannot verify, perhaps too faint.
LP767-66	Luyten motion 0".22; Cannot verify, perhaps too faint.
LP768-105	Luyten motion 0".23; Cannot verify, perhaps too faint.
LP768-147	Luyten motion 0".23; Lowell 0".13.
LP768-203	Luyten motion 0".21; Cannot verify, perhaps too faint.
LP768-342	Luyten motion 0".24; Cannot verify, perhaps too faint.
LP768-450	Luyten motion 0".26; Lowell 0".18.
LP768-535	Luyten motion 0".47; Possible faint image located, too uncertain for measurement.
LP768-683	Luyten motion 0".33; Cannot verify, perhaps too faint.
LP768-712	Luyten motion 0".21; Lowell 0".18.
LP769-6	Luyten motion 0".22; Lowell 0".08.
LP769-15	Luyten motion 0".23; Probable faint image located, motion uncertain, but appears less than 0".20.
LP769-18	Luyten motion 0".25; Cannot verify, perhaps too faint.
LP769-20	Luyten motion 0".20; Cannot verify, perhaps too faint.
LP769-27	Luyten motion 0".22; Cannot verify, perhaps too faint.
LP769-28	Luyten motion 0".26; Cannot verify, perhaps too faint.

LP769-32	Luyten motion 0".22; Cannot verify, perhaps too faint.		LTT 9520	Luyten motion 0".21; Lowell 0".12.
LP828-5	Luyten motion 0".50; Cannot verify, perhaps too faint.		LTT 9695	Luyten motion 0".21; Lowell 0".19.
LP828-47	Luyten motion 0".23; Cannot verify, perhaps too faint.		LTT 9704	Luyten motion 0".20; Lowell 0".13.
LP828-55	Luyten motion 0".21; Cannot verify, perhaps too faint.		LTT 9711	Luyten motion 0".20; Lowell 0".17.
LO 1180-13	Lick motion 0".216; Lowell 0".17.		LTT 9771	Luyten motion 0".20; Lowell 0".15.
LO 1180-39	Lick motion 0".212; Lowell 0".15.		LTT 9800	Luyten motion 0".30; Lowell 0".17.
LO 1180-82	Lick motion 0".196; Lowell 0".18.		LTT 9833	Luyten motion 0".20; Lowell 0".18.
G273-LTT 9458	Luyten motion 0".23; This is Wolf 1565, identified by Wolf as BD-16°6253. This BD star shows only a slight motion of about 0".03 on the Lowell plates.		LP763-13	Luyten motion 0".52; Cannot verify, perhaps too faint.
LTT 9490	Luyten motion 0".24; Identification uncertain. No star was found at this position with a motion greater than about 0".06.		LP764-3	Luyten motion 0".34; Cannot verify, perhaps too faint.
LTT 9498	Luyten motion 0".21; Identified by Luyten as BD -20°6576. This BD star shows only a slight uncertain motion on the Lowell plates, possibly about 0".03, P.A. near 200°.		LP822-4	Luyten motion 0".31; Cannot verify, perhaps too faint.
			LP822-6	Luyten motion 0".87; Cannot verify, perhaps too faint.
			LP822-45	Luyten motion 0".26; Cannot verify, perhaps too faint.
			LP822-58	Luyten motion 0".22; Cannot verify, perhaps too faint.
			LP822-87	Luyten motion 0".35; Possible image located, too un- certain for measurement.
			LP822-99	Luyten motion 0".20; Lowell 0".16.

APPENDIX I

The following objects are interesting pairs, of contrasting colors, with motions below our usual program limit. These are additions to previous lists published in LOWELL BULLETINS 120, 122, 124, 132, 136, 140, 152, 158, and 160. The identification charts for these objects appear on the last page of charts in this bulletin.

Identification	R.A. and Dec. (1950)	Mu	P.A.	Mag.	Color	Separation and Angle
G272-B4	1 ^h 41 ^m 50 ^s	-17°28'1	0".06	161°	16.2 0	23" 188°
				17.2	+3	
G272-B3	1 ^h 50 ^m 22 ^s	-16°47'4	0".11	174°	13.5 +2	96" 194°
				168°	0	
G272-B2	1 ^h 58 ^m 32 ^s	-16°00'6	0".13	81°	14.8 -1	7" 164°
				17.4	+3	
G272-B5	2 ^h 00 ^m 31 ^s	-17°07'5	0".05	181°	12.5 +2	72" 79°
				15.8	-1	
G273-B15	23 ^h 41 ^m 45 ^s	-16°27'5	0".14	210°	15.8 +2	5" 5°
				16.3	0	
G273-B25	23 ^h 47 ^m 58 ^s	-11°12'3	0".10	154°	16.0 +4	132" 87°
				16.6	+1	
G273-B1	23 ^h 50 ^m 54 ^s	-8°21'1	0".12	75°	12.0 +2	26" 210°
				16.4	-1	

ADDITIONAL NOTES AND CORRECTIONS TO EARLIER REGIONS

- GI75-29 Declination should be corrected to +57° 38'.6.
 G266-15 Add reference LTT 9818.
 G266-16 Delete reference LTT 9818. Add reference BPM 83145.



































