

RADIAL VELOCITIES OF 360 STARS

RALPH E. WILSON AND ALFRED H. JOY

MOUNT WILSON AND PALOMAR OBSERVATORIES

CARNEGIE INSTITUTION OF WASHINGTON

CALIFORNIA INSTITUTE OF TECHNOLOGY

Received October 22, 1951

ABSTRACT

Herein are presented radial velocities and spectral classifications of 360 stars, determined from observations with the 60-inch and 100-inch reflectors of the Mount Wilson Observatory.

Early in 1950 the authors published¹ radial velocities and spectral classifications of 2111 stars which had been observed at the Mount Wilson Observatory. In the introduction to that paper we stated that some work remained to be done in the early hours of right ascension, the region of the sky covered during our poorest observing season. This work was completed during the winter of 1950–1951, and a number of additional plates were secured of stars with spectra containing poor lines. Most of these stars were on the earlier programs, no results having been published because the characteristics of the spectra and the quality of the plates were such that the measures of velocity displacements were very uncertain. The probable errors of the velocities in this list are, therefore, unavoidably large. A number of stars are published now, only because there appears to be no immediate prospect that additional spectrograms will be secured, and we wish now to complete the publication of the Mount Wilson routine observations of radial velocities.

Most of the velocities are based upon plates taken with dispersions of 38 or 75 Å/mm at $H\gamma$. The 1950–1951 plates were taken by R. E. Wilson and W. C. Miller. They were measured by Mary F. Coffeen, Barbara P. Olsen, and R. E. Wilson. The classifications of spectra were made by A. H. Joy.

The tables present the results in the same form as before.

¹ *Ap. J.*, 111, 221–261, 1950.

TABLE I
RADIAL VELOCITIES OF 360 STARS

STAR	H.D.	1950		Vis. Mag.	P.M.	Spec.	Vel.	P.E.	No. Pl.	Others
		R.A.	Decl.							
		h m	° ' "				km	km		
A 30B	---	0 02.0	+41 49	9.2	---	dFo	- 36.	var	4*	
SW Sc1	151	03.7	-33 06	var	0.014	gM4e	+ 34.	3.9	2	
G 175	598	07.9	+28 23	8.1	.008	gM4	- 13.1	1.6	3	- 7.4 D
G 326	1255	14.2	+09 58	6.8	.018	gM2	+ 11.7	1.4	3	
75° 7	1359	15.5	+76 00	7.1	.029	B9n	0	3.2	4	- 5.0 D
G 453	1831	0 20.3	+38 29	7.0	.007	gM4	- 22.7	1.3	3	
B 66	1952	21.4	+43 59	6.6	.014	sgA7n	- 4.	var	4*	
A 439A	2814	29.2	+36 41	8.1	.043	dG2	- 20.2	1.5	3	
A 582A	3891	39.5	+71 06	8.0	.030	A1	- 15.	var	5*	
A 582B	----	39.5	+71 06	8.2	---	A1	- 11.	var	4*	
45° 187	4134	0 41.5	+46 08	7.5	.089	dF2	+ 9.	var	4*	
G 906	4266	42.9	+56 30	7.6	.050	gF1	- 25.6	2.5	4	
44° 162	4364	43.7	+45 09	7.8	.031	dA5n	+ 9.5	2.1	4	
62° 175	5551	55.2	+63 27	7.7	.007	B1	- 51.	3.3	3*	-51.5 D
G 1176	5735	56.3	-19 54	7.3	.047	gM2	+ 30.	var	4*	
G 1184	5256	0 56.8	+87 03	8.9	.324	dG4	+ 15.1	0.8	3	
A 902A	----	1 03.2	+13 03	9.1	---	sgF9	+ 21.8	2.7	4	
G 1321	6414	03.4	+70 40	6.6	.087	A4n	- 6.	3.4	4*	
G 1399	6833	06.8	+54 28	7.1	.053	dG5	-238.2	1.9	2	-250. V
β And	6860	06.9	+35 21	2.4	.211	gMo	+ 3.2	1.6	4	+ 0.1 M
G 1480	7351	1 11.3	+28 16	6.6	.090	gM2	- 1.8	0.7	2	+ 5.8 D
55° 290	7861	16.3	+56 03	8.9	.025	gM6	+ 5.0	2.3	4	
B 301	8003	17.7	+64 24	6.3	.060	Aon	- 11.	5.3	4	- 19. V
76° 42	8364	22.1	+77 25	8.0	---	dF8	- 11.0	2.0	3	
A 1148A	8803	24.3	+03 17	6.4	.029	B8n	+ 15.5	2.3	4	
A 1148B	----	1 24.3	+03 17	9.0	---	dFo	+ 14.	3.4	4	
G 1811	9030	27.4	+65 50	6.2	.085	A2	+ 7.	var	4*	+ 10. V
G 1886	9500	31.0	+35 21	7.3	.044	gM3	+ 2.0	1.7	2	+ 1. L
63° 224	10304	39.2	+63 39	7.7	.056	gG8	- 8.8	1.5	4	
G 2090	10465	40.1	+48 16	7.0	.018	cM2	- 69.1	0.7	3	
22° 297	11038	1 45.7	-22 28	9.0	.182	dF7	+ 9.	4.1	5	
22° 299	11074	46.1	-22 28	8.3	.118	dG5	- 1.6	1.6	3	
G 2368	11961	55.2	+30 54	7.2	.048	gM5	- 44.3	2.4	3	- 46. L
G 2382	12051	56.2	+32 58	7.1	.433	dG7	- 36.4	1.1	3	
G 2403	12204	57.1	-14 07	7.1	.027	gM3	+ 29.4	2.1	3	
G 2456	12479	1 59.9	+13 14	6.3	.017	gM2	- 9.1	0.6	2	- 4.7 D
γ And	12533	2 00.8	+42 05	2.3	.068	gK3	- 9.1	0.5	3	- 11.7 M
CC 144	12873	03.3	-24 37	9.5	.44	dK1	+ 46.	3.4	2	
CC 145	12889	03.3	-24 37	9.2	.47	dKo	+ 24.2	1.9	2	
G 2524	12872	03.6	+08 01	6.7	.033	gM2	- 27.6	1.3	2	- 24.0 D
56° 444	----	2 08.6	+56 41	9.2	.003	B3	- 18.4	2.0	3	
56° 445	13370	09.0	+57 04	9.4	.014	B8	- 32.	var	4*	
G 2723	14001	13.4	-18 28	8.3	.192	dK4	+ 5.8	0.4	3	
G 2762	14146	15.0	+28 47	6.8	.015	gM1	+ 27.6	1.0	3	
56° 567	14434	18.3	+56 41	8.5	.009	B2n	- 20.	3.5	3	
70° 182	15472	2 28.9	+70 43	8.0	---	B4ne	- 25.	var	5*	- 62. D
G 3040	14955	29.3	+84 51	8.6	.094	dG3	- 48.	var	4*	
G 3048	15755	29.8	+34 19	5.9	.068	gK1	- 1.	3.1	4	- 2.7 S
B 562	15342	30.0	+81 26	8.5	.027	gK5	- 23.	var	4*	
29° 444	16245	34.2	+30 12	7.4	.031	Aon	+ 10.	4.5	4	+ 4.9 D
41° 508	----	2 37.6	+42 03	9.2	.320	dKo	+ 25.3	0.4	3	
G 3359	17382	45.2	+26 52	8.2	.296	dKo	+ 6.2	1.3	4	
G 3509	18142	52.7	+30 50	7.2	.019	gM3	- 21.6	0.5	2	- 25. L
A 2218B	----	52.7	+26 40	9.7	---	dMo	+ 26.8	2.1	3	
29° 502	18328	54.6	+29 31	8.9	.049	dGo	- 6.	var	3*	
29° 503	----	2 54.8	+29 28	9.2	.206	dG9	+ 23.2	0.9	5	
G 3621	18760	58.3	-03 05	6.3	.021	gM1	+ 81.6	2.1	4	
α Cet	18884	59.7	+03 54	2.8	.075	gM2	- 26.2	0.2	2	- 25.7 M
G 3722	19382	3 04.3	-13 31	8.0	.067	dF2	- 3.5	2.9	4	
G 3734	19467	04.9	-13 57	7.2	.261	dG5	+ 12.8	1.5	4	

TABLE I (Cont'd)

STAR	H.D.	1950		Vis. Mag.	P.M.	Spec.	Vel.	P.E.	No. Pl.	Others
		R.A.	Decl.							
		h m	° ' "		"		km	km		
A 2373AB	19620	3 07.0	+05 01	8.6	0.078	dGo	+ 35.4	1.2	3	
G 3806	19836	08.8	-04 00	6.3	.035	gM1	+ 24.3	0.5	3	
G 3808	19534	08.8	+74 03	7.2	.023	gM2	+ 13.8	1.2	2	+ 12. L
36° 651	19784	09.1	+36 47	8.8	.005	Ao	+ 7.4	1.3	3	
G 3983	20729	17.4	-24 18	6.0	.021	gM2	+ 15.4	2.1	4	
A 2499A	20873	3 19.9	+29 38	8.5	.038	A4	+ 11.	var	4*	
A 2499B	-----	19.9	+29 38	8.5	.041	A6	+ 19.	var	4*	
α Per	20902	20.7	+49 41	1.9	.035	cF4	- 3.0	1.0	3	- 2.4 M
41° 714	22193	32.8	+42 11	8.4	---	dG5	+ 54.2	0.9	3	
G 4465	-----	41.4	+32 00	8.4	.009	B8n	+ 25.	var	4*	
23° 520	23479	3 43.3	+24 02	8.2	.050	dA6n	+ 5.	4.1	3	- 6. Md
B 867	23629	44.4	+23 58	8.1	.052	Aon	+ 4.	4.8	4	+ 6. Md
23° 529	23643	44.5	+23 32	8.1	.033	A3n	+ 8.9	2.1	3	+ 8. Md
B 864	23475	44.9	+65 22	4.7	.008	gM1	- 3.1	1.5	7	- 3.2 L
A 2926B	-----	58.0	+23 04	7.8	.023	B9n	+ 10.	6.5	4	
G 4856	24894	4 00.2	+79 29	8.4	.206	dF8	+ 44.8	2.5	4*	
11° 571	25978	04.4	+12 08	7.4	.055	Aon	+ 22.	var	5*	
29° 700	27514	18.6	+30 05	8.8	.032	gG6	- 25.0	1.7	3	
χ Tau	27638	19.5	+25 31	5.4	.030	Aon	+ 26.3	2.6	4	+ 11. L
29° 706	27787	21.3	+30 01	9.0	.037	Aln	- 24.	3.7	4	
G 5449	28479	4 26.4	-19 34	6.1	.090	gK1	+ 26.7	2.5	4*	
Anon.	-----	29.6	+36 05	10.8	---	gG8	+ 34.1	2.3	3*	
G 5617	29248	33.8	-03 27	4.1	.001	B2	+ 15.	var	5*	+ 15.4vM
19° 762	-----	39.8	+20 08	9.6	.092	Ao	- 5.	4.7	4r	
44° 1013	29882	41.0	+44 41	7.8	.044	dA6n	+ 23.4	2.4	3	
A 3417A	30101	4 42.1	+05 12	8.9	.159	dG7	- 18.4	0.5	2	
A 3417B	-----	42.1	+05 12	8.9	---	dK1	- 19.2	0.1	2	
G 5827	30165	44.6	+61 25	7.7	.019	gM5	+ 53.8	1.2	3	
41° 1002	31085	51.3	+41 41	8.0	.029	dF5	- 4.5	1.0	3	
A 3514A	31208	51.6	+07 18	7.9	.323	dK2	+ 46.4	1.6	3	
A 3514B	-----	4 51.6	+07 17	8.2	.300	dK1	+ 40.6	1.9	3	
42° 1180	-----	5 05.2	+42 30	9.2	.051	gM6	+ 5.	var	4*	
38° 1040	33061	06.0	+38 57	8.6	.048	B8	- 12.	var	5*	
G 6316	33340	07.2	+08 07	7.1	.128	dF5	- 64.	var	4*	
A 3835A	-----	12.6	+29 25	9.0	.052	dG3	- 65.9	1.6	4	
G 6425	34180	5 12.8	-01 28	6.1	.058	dF2	+ 13.2	3.0	4	
14° 1080	34309	13.7	-14 34	7.7	.047	B9	+ 46.	var	4*	
A 3866B	-----	14.6	+20 05	9.5	---	dK2	- 35.5	1.2	2	
G 6483	34454	15.2	+13 22	7.9	.022	gM5	+ 10.3	1.8	3	
G 6511	34721	16.6	-18 11	5.9	.387	dGo	+34.9	1.7	4*	+ 48.v Md
15° 790	34811	5 17.9	+15 35	7.7	.021	dA5n	+ 29.	var	4*	
14° 1105	35042	19.1	-14 36	7.2	.038	B6	+ 21.	4.1	4	
G 6622	35171	20.7	+17 17	8.2	.270	dK5	+ 37.9	1.6	3	
B 1294	35296	21.5	+17 20	5.1	.249	dF8	+ 33.9	2.3	3	+ 37.0 M
G 6747	35991	25.5	-21 25	6.1	.040	gG7	+ 34.4	0.5	3	
G 6779	36134	5 26.9	-03 29	6.1	.046	gG8	+ 23.6	2.0	4	
G 6869	36065	30.4	+74 17	7.0	.120	dF2	- 18.	3.3	4	
A 4193B	-----	33.0	-05 56	7.3	---	B8	+ 23.2	2.9	2	
5° 1325	-----	33.1	-05 18	9.1	.015	B8n	+ 48.	var	3	+ 36.8 V
1° 1001	37674	37.7	-01 29	8.4	.010	B5n	+ 15.	var	4*	
2° 1345	37903	5 39.2	-02 17	8.6	.017	B3n	+ 10.	5.	3	+ 5.9 L
43° 1332	-----	39.8	+43 27	8.8	.024	gM1	+ 15.	var	4*	
2° 1350	38087	40.5	-02 20	8.6	.005	B3n	+ 33.	4.1	4	
B 1447	39070	47.3	-14 30	5.6	.052	gG6	- 1.8	2.0	4	
24° 1036	249499	54.2	+25 00	9.3	.063	dK4	+ 3.	var	4*	
G 7515	40301	5 55.2	-06 06	7.6	.011	gM2	+ 40.9	1.7	3	
G 7589	40635	57.6	-00 30	7.7	.022	B9n	+ 31.	var	4*	
G 7617	38847	58.9	+85 00	8.8	.177	dG2	- 70.2	2.5	4	
A 4629B	-----	6 00.3	+27 39	9.3	---	dA7n	+ 27.	var	4	
G 7824	42049	06.5	+22 12	6.0	.020	gK4	+ 6.9	2.3	3	+ 10.3 D

TABLE I (Cont'd)

STAR	H.D.	1950		Vis. Mag.	P.M.	Spec.	Vel.	P.E.	No. Pl.	Others
		R.A.	Decl.							
G 7844	42216	6 ^h 07.5	+23 01	6.7	0.007	B9n	- 5.	km	4*	
B 1542	42443	07.7	-22 46	5.7	.106	dF6	+ 21.7	km	4	
B 1541	42398	08.5	+24 26	5.9	.057	gKo	+ 22.	var	4*	
G 7888	42471	09.1	+32 42	6.0	.008	gM1	- 48.0	2.3	2	- 51.4 D
CC 380	-----	13.0	+47 05	9.2	.53	dG6	+ 27.3	0.1	2	
G 8065	43745	6 15.0	-22 42	6.0	.280	dGo	- 3.4	1.9	4	
B 1586	43760	15.2	-10 42	6.7	.008	gF2	+ 26.2	1.9	3	
G 8238	43680	21.1	+79 41	8.4	.157	gKo	+ 3.2	1.8	4	
B 1612	44780	21.6	+25 05	6.6	.012	gG9	+ 6.	var	4*	+ 9. v D
G 8438	45783	27.7	+32 50	8.1	.031	gM2	+ 48.5	1.3	3	
G 8456	46114	6 28.5	-17 53	7.7	.274	dG4	+ 0.8	0.9	3	
30° 1256	46158	29.9	+30 21	8.0	.038	A2n	- 9.	var	4*	
B 1557	42855	30.2	+86 44	6.6	.107	gG8	+ 26.8	1.1	3	+ 24.8 V
B 1658	46318	31.8	+56 26	6.5	.066	dFon	+ 1.7	2.3	3	
B 1679	46781	33.1	+16 50	6.7	.037	dF8	+ 27.8	0.7	2	+ 30.5 V
B 1691	-----	6 34.2	-18 37	7.9	.044	dA8	+ 33.8	2.8	4	
44° 1501	46981	34.8	+44 21	7.8	.046	gF1	- 19.3	2.8	4	
G 9042	50420	51.6	+43 58	6.0	.018	gFo	- 7.1	2.5	3	- 8.5 V
B 1778	50635	51.8	+13 15	4.7	.117	dA8n	+ 27.	3.5	4	+ 21.0 L
+0° 1717	51220	54.0	+00 10	7.7	.042	dG5	+ 47.7	1.8	4	
1° 1473	51473	6 54.9	-01 18	8.7	.022	Ao	+ 9.	var	6*	
A 5752AB	53299	7 01.8	-02 58	8.6	.055	dG6	+ 7.	var	4*	
10° 1848	53367	02.1	-10 23	7.0	.040	Blne	+ 24.	4.7	7*	+ 11.1 V
8° 1734	53667	03.2	-08 39	7.8	.018	Boe	+ 40.	6.	4	+ 36. L
G 9366	53532	03.3	+22 46	8.1	.119	dG6	+ 39.4	1.6	3	
G 9385	53766	7 04.2	+24 15	6.9	.040	gM1	- 11.7	0.7	3	
A 5854A	54649	08.6	+55 53	7.7	.046	gK1	+ 11.	var	3*	
B 1848	55057	08.8	-00 13	5.4	.034	dA8n	+ 23.	3.3	4	+ 36. L
4° 1862	55684	11.3	-05 04	7.5	.012	*	+ 3.	var	4*	
14° 1628	56714	15.8	+14 27	7.7	.015	B9	+ 31.	var	4*	
G 9720	56196	7 15.9	+65 32	9.4	.321	dGo	+ 35.9	0.5	3	
14° 1843	57435	18.3	-14 47	9.1	.022	gK3	+129.1	2.2	3	
B 1923	57749	20.0	-05 53	5.8	.013	gF2	+ 10.9	1.5	3	
B 1936	58367	22.9	+09 23	5.1	.015	gG5	- 12.4	1.2	2	- 7.6 M
G 9923	58526	23.4	-05 40	6.1	.030	cG2	+ 13.6	1.7	3	
27° 1387	58578	7 24.2	+27 24	8.2	.028	A2	- 0.7	2.3	4	
B 1951	58954	24.9	-17 46	5.7	.014	dA5n	- 29.7	0.9	3	
G 9963	58640	25.0	+48 01	6.9	.102	gM4	+ 26.0	0.9	3	
G 10022	59381	27.0	-10 13	6.0	.031	gK5	- 6.8	0.4	3	
G 10091	59201	29.8	+73 23	8.4	.354	dK2	- 24.	var	4*	
B 1985	60414	7 31.5	-14 25	5.1	.015	gM3ep	+ 40.0	1.4	5	+ 20. v M
G 10136	60336	32.0	+24 23	7.9	.025	gM2	+ 25.4	0.9	3	
B 2002	-----	35.8	+05 11	8.5	.006	gM2	+ 1.	var	4*	
G 10280	61295	36.7	+32 08	6.1	.052	gF3	+ 25.9	0.8	3	+ 25. v DS
G 10298	61856	37.3	-01 24	9.7	.282	dG2	+ 44.8	1.0	3	
G 10566	63696	7 47.4	-13 58	6.6	.049	dM1	+ 33.8	2.7	4*	
B 2066	63697	47.4	-17 06	5.5	.130	gK3	+ 44.5	1.6	4	
G 10619	63889	49.0	+19 27	6.1	.064	gK1	+ 37.9	0.7	2	+ 40.7 D
B 2073	64077	49.3	-12 41	6.5	.013	dF2	+ 20.9	2.7	4	
B 2082	64238	50.0	-14 43	5.7	.014	cF3	+ 16.7	1.5	3	
B 2083	64235	7 50.3	-05 18	5.8	.036	gF5	- 2.3	0.4	3	
G 10671	64351	51.3	+21 14	7.0	.015	gM1	+ 9.6	1.1	3	
B 2092	64685	52.8	+09 00	5.8	.091	dF4	+ 24.8	0.4	2	+ 19.8 V
B 2104	65345	55.8	+02 22	5.4	.187	gG6	+ 44.0	1.0	2	+ 46.8 M
G 10788	65275	56.2	+34 49	7.7	.015	gM2	- 24.3	1.7	3	
G 10911	66175	8 00.4	+36 29	6.8	.037	gM5	- 0.5	1.0	3	
G 10924	65871	00.8	+68 32	7.6	.306	dF7	- 5.1	2.1	3	
G 11079	67743	07.2	+17 10	7.4	.019	gM2	+ 22.6	1.5	4	
G 11137	68168	09.0	+16 41	7.2	.293	dG2	+ 8.0	0.7	3	
G 11165	68461	10.2	+16 40	6.1	.026	gG3	- 18.4	0.6	2	- 20. v DS

TABLE I (Cont'd)

STAR	H.D.	1950		Vis. Mag.	P.M.	Spec.	Vel.	P.E.	No. Pl.	Others
		R.A.	Decl.							
		h m	° '		"		km	km		
G 11200	-----	8 11.7	+27 19	8.1	0.004	gMo	+ 27.5	0.7	3	
14° 2460	69772	15.7	-14 49	8.0	.052	B9n	+ 27.	4.1	4	
74° 360	69659	19.1	+74 36	8.6	.016	gK3	+ 1.2	2.1	4	
G 11480	70937	22.1	-04 33	6.0	.056	dF4	- 35.	var	4*	
A 6800B	-----	23.0	-23 53	9.0	.032	gK3	+ 19.		1	
G 11906	73844	8 37.6	-17 07	7.0	.160	gM5	+ 31.6	1.1	3	
B 2261	71986	38.6	+85 14	7.4	.140	dF5	+ 0.3	2.2	4	
G 11958	74011	39.4	+34 22	7.4	.267	dF7	+ 44.4	1.7	4	
B 2339	74521	42.0	+10 16	5.6	.027	A4p	+ 24.1	2.2	4	+ 24.6 YV
B 2353	74873	44.2	+12 17	5.7	.090	Ao	+ 25.1	2.1	3	+ 21.0 D
CC 490	-----	8 46.2	+36 41	10.0	.56	dM1	+ 1.2	0.0	2	
-0° 2087	76082	51.4	-00 25	8.4	.017	gK1	+ 58.7	1.9	4	
A 7114B	-----	55.8	+48 14	10.8	---	dM1	+ 15.		1	
B 2423	77309	9 00.4	+54 29	5.7	.005	A2n	+ 6.	3.7	4*	- 8.9 D
G 12566	77985	03.5	+17 19	7.6	.070	gG7	- 4.2	1.9	4	
G 12569	78011	9 03.6	+15 29	8.0	.023	gM4	+ 20.2	2.0	4	
B 2415	76990	05.3	+84 23	6.3	.030	dF2	- 20.9	1.7	3*	+ 1. V
G 12691	79097	09.4	-06 46	8.0	.007	gM2	+ 7.2	1.8	3	
G 12882	80567	18.0	+00 24	6.8	.026	gM4	+ 3.1	1.7	4	
81° 295	80113	19.9	+80 45	8.8	---	gG8	- 27.0	2.2	2	
G 12950	81109	9 21.0	-20 49	7.1	.014	gM3	+ 17.	var	3*	+ 17. L
A 7352A	81212	21.8	+06 34	7.5	.182	dF5	+ 44.6	0.9	2	
A 7352B	-----	21.8	+06 34	7.6	---	dF7	+ 40.6	2.0	2	
20° 2334	82372	29.2	+20 16	8.3	.015	dA9	+ 7.8	1.2	3	
G 13148	82428	29.2	-10 20	6.1	.027	gA8	- 18.	var	4*	
48° 1780	82287	9 29.3	+48 23	7.9	.033	dA8n	- 14.	3.1	5	
G 13305	83205	35.4	+58 46	7.5	.031	gM2	+ 20.0	1.8	3	
B 2595	83618	37.3	-00 55	4.1	.083	gK3	+ 25.5	2.2	3	+ 23.0 M
33° 1895	83630	37.8	+33 13	7.8	.040	dA8	+ 24.0	1.7	4	
G 13430	84165	42.1	+65 51	7.2	.031	gM1	- 37.0	1.8	2	- 32. L
G 13572	85461	9 49.2	-11 06	6.8	.040	gM2	+ 13.0	1.4	3	
B 2657	85859	51.9	-25 42	5.0	.195	gK3	+ 54.0	1.1	3	+ 50.5 M
G 13659	85876	53.1	+54 29	6.8	.046	gM2	- 31.1	1.1	3	
B 2688	87427	10 02.0	-24 03	5.8	.099	dA8n	+ 3.6	2.8	4	
G 13908	87806	05.0	+01 10	7.0	.021	gM2	- 29.2	0.9	3	
G 13910	87870	10 05.2	-22 15	7.3	.018	gM4	+ 31.0	2.8	2	
G 13912	87855	05.3	-07 23	6.9	.047	gM2	+ 32.5	1.8	3	
51° 1577	87852	05.9	+51 05	7.6	.016	A2	- 11.3	3.5	4	
G 13936	87955	06.3	+38 41	8.0	.041	gM2	- 31.5	1.3	3	
B 2712	88372	08.8	-07 04	6.1	.012	Aon	+ 22.	var	5*	- 6. V
G 13998	88419	10 08.9	-18 43	7.0	.095	gM3	+ 37.3	2.2	3	
G 14060	88806	11.8	-23 34	6.7	.022	gM2	- 5.7	1.5	3	
G 14118	89053	14.3	+41 43	6.9	.091	gM2	- 32.1	2.0	4	
G 14284	90068	21.5	+34 26	7.3	.035	gM4	+ 3.3	2.3	2	+ 1.4 L
G 14286	-----	21.5	+41 15	8.8	.013	gK4	+ 28.5	2.2	4	
A 7894B	-----	10 39.8	+51 04	9.4	---	dG6	- 2.6	0.2	3	
G 14977	94190	51.3	+77 21	7.0	.027	gM2	- 89.5	1.1	3	
G 15322	96572	11 06.3	+78 03	7.4	.046	gM1	- 25.4	0.8	3	
G 15690	99363	23.4	-13 29	7.0	.055	gM2	+ 6.1	1.6	4	
G 15826	100214	29.6	+56 22	8.0	.265	dF7	+ 12.8	1.3	3	
A 8202A	100287	11 29.8	-28 59	5.8	.141	dF6	+ 3.8	1.8	2	
A 8202B	100286	29.8	-28 59	5.9	.132	dF7	+ 9.3	1.1	3	
G 15933	100933	34.6	+62 28	7.5	.023	gM3	- 27.0	2.0	3	
A 8250C	-----	36.1	+45 23	9.0	.014	gG5	- 39.9	1.7	4	
B 3120	103483	52.5	+46 45	6.5	.001	A2	- 5.	var	5*	-10. DV
A 8495A	106784	12 14.2	+39 52	7.2	.021	A2	+ 4.2	3.0	4	
A 8495B	-----	14.2	+39 52	10.0	---	dG5	+ 7.2	1.7	3	
B 3202	107070	16.1	-00 31	5.9	.034	A3n	- 19.	7.	4	-13. V
15° 3450	107149	16.7	-16 00	7.8	.021	gM1	+ 14.2	2.1	4	
A 8531B	-----	20.0	+05 35	9.0	---	dK5	+ 6.4	2.5	4	

TABLE I (Cont'd)

STAR	H.D.	1950		Vis. Mag.	P.M.	Spec.	Vel.	P.E.	No. Pl.	Others
		R.A.	Decl.							
		h m	° '		"		km	km		
A 8576B	-----	12 28.0	+03 47	9.6	----	dF5	0	3.2	3	
A 8585A	109005	29.0	-10 48	7.5	0.051	A4	- 14.	var	4*	
A 8585B	-----	29.0	-10 48	8.3	----	dF1	- 1.	3.1	4	
G 17115	109282	31.0	+24 43	7.4	.021	gM3	- 10.4	1.1-	4	
G 17345	110932	42.9	+14 39	6.8	.045	B9	+ 4.	var	3*	+ 4. V
α CVn	112413	12 53.7	+38 35	2.9	.238	A1	- 1.0	0.8	2	- 3.5 M
B 3405	114149	13 06.7	-22 51	5.1	.051	gK1	- 22.3	2.0	4	- 18.4 M
G 17903	-----	10.8	-18 34	7.3	.033	A2	- 27.	var	4*	
G 17906	-----	10.8	+37 38	9.6	.034	gK4	- 41.	var	4*	
G 17912	114975	11.3	+37 09	6.7	.028	gM2	+ 1.8	2.3	4	
A 8871A	116206	13 19.4	+18 02	8.1	.043	dF2	- 24.0	1.4	3	
A 8871B	-----	19.4	+18 02	10.3	----	dG2	- 21.8	1.9	3	
G 18102	116275	20.1	-12 56	7.7	.038	A2	- 22.	var	4*	
B 3480	116842	23.2	+55 15	4.0	.121	Aln	- 5.2	0.5	3	- 2.0 M
A 9053B	-----	52.4	-07 49	7.7	----	dG1	- 19.9	1.8	4	
γ° 2842	122769	14 01.2	+08 44	7.8	.037	dF5	- 4.0	2.2	3	
G 19058	123710	04.5	+74 49	8.3	.165	dG2	+ 6.3	1.5	3	
G 19059	123408	04.5	+35 01	7.1	.015	gKo	- 2.9	1.3	3	
G 19175	124304	10.5	-13 38	7.2	.054	gM4	- 44.4	0.8	2	- 46. L
A 9188B	-----	13.8	+06 19	10.0	----	dGo	- 25.	var	4*	
G 19505	126944	14 25.6	+33 10	8.4	.027	dFo	- 6.	var	4*	
A 9273B	-----	25.6	-02 00	9.7	----	dKo	- 8.	var	4*	
A 9405B	-----	47.9	+51 35	9.9	----	dG7	- 29.	3.4	3	
G 20396	134807	15 07.6	+65 59	6.8	.034	gM4	- 26.2	1.7	4	
A 9527B	-----	08.0	+39 10	10.1	----	dK4	- 5.	var	4*	
B 3868	134967	15 10.5	-19 28	6.0	.067	Aon	+ 1.	var	4*	
B 3909	136562	17.9	+50 24	7.4	.012	A2	- 11.	var	3*	- 11. v V
G 21065	140227	37.5	+69 27	5.9	.069	gMo	- 32.2	2.7	4	- 25.2 D
A 9778B	-----	43.9	+15 35	9.2	----	dK3	+ 2.8	2.5	4	
A 9799B	-----	47.4	+25 37	10.1	----	dG8	- 32.6	1.3	4	
B 4033	142096	15 50.4	-20 01	5.1	.034	B3n	- 12.	5.	4	0 M
29° 2739	142796	53.4	+29 41	7.7	.021	A1	- 14.4	1.1	4	
G 21411	142804	54.3	-15 53	6.8	.039	gM1	- 10.0	1.9	4	
B 4115	145482	16 09.2	-27 48	4.7	.036	B3	+ 10.	9.	3	+ 9. L
A 10005A	147103	17.6	-20 00	7.7	.020	Ao	+ 18.	5.3	4	
A 10005B	147104	16 17.6	-20 00	8.0	.061	Ao	+ 2.	5.3	5	
24° 12684	147889	22.4	-24 21	8.0	.025	B3	- 3.	6.	5	
A 10049A	147933	22.6	-23 20	5.2	.026	B5n	- 6.	6.	5*	- 13. M
A 10049C	147932	22.6	-23 18	7.1	.038	B9n	- 19.	3.2	4	
A 10072A	148515	26.1	-08 01	6.6	.100	dF3	- 0.5	0.7	3	
A 10072B	-----	16 26.1	-08 01	9.0	----	dK1	- 2.	3.7	3	
G 22342	149881	34.7	+14 35	6.6	.009	B2	- 8.	3.0	2*	+ 18. v M
Anon.	-----	34.8	+31 13	10.	----	dA7	- 24.9	2.5	4*	
β 7740B	-----	42.6	+06 11	9.0	----	dK5	- 4.	var	4*	
B 4338	154204	17 01.8	-20 26	6.2	.031	B9n	- 11.2	2.9	4	
G 23358	156890	17 15.5	+60 46	6.7	.031	gA9n	- 22.0	1.3	6	
G 23364	156652	15.6	+28 58	7.1	.001	gM2	- 37.4	1.8	4	
G 23606	157857	23.5	-10 57	7.4	.024	07	----	----	7*	+ 58.6 VL
B 4432	158460	25.0	+60 05	5.7	.025	A2	- 5.	5.2	5*	+ 12.7 V
G 24016	160869	39.9	-04 50	6.8	.021	gM2	+ 39.7	1.3	3	
G 24380	163296	17 53.3	-21 27	6.6	.035	A2e	- 3.	3.2	6	
B 4543	164212	56.4	+43 25	6.9	.015	Aon	- 5.	var	5*	- 41.3 V
B 4560	164794	18 00.8	-24 22	5.9	.003	05	+ 4.4	1.9	7*	+ 15.3 V
B 4636	168720	18.2	+21 56	5.0	.060	gMo	- 37.9	2.4	3*	- 32.0 L
B 4640	168812	18.5	+28 58	6.5	.010	Ao	- 7.	4.1	4	
17° 5155	168673	18 18.8	-17 18	9.4	.006	Ao	- 38.	6.	4	
G 25064	168814	19.4	-14 25	7.3	.045	cA2	- 15.	4.5	4*	
A 11292B	-----	19.9	+11 24	10.4	----	gM2	- 48.	var	3*	
G 25133	169454	22.4	-14 00	6.8	.009	cBoe	----	----	4*	- 25. L
A 11326A	169457	22.4	-16 32	9.8	----	dF3	- 28.0	2.3	3	

TABLE I (Cont'd)

STAR	M.D.	1950		Vis.	P.M.	Spec.	Vel.	P.E.	No.	Others
		R.A.	Decl.	Mag.					Pl.	
A 11326B	-----	h m	° ' "		"		km	km	2	
65° 1277	-----	18 22.4	-16 32	10.8	---	dF8	- 16.2	0.8	2	
B 4712	171802	31.8	+65 20	8.7	0.02	dFo	- 19.	6.	5	
8° 4675	172488	34.1	+09 05	5.4	.128	dF2	- 23.4	0.6	2	- 21.6 L
G 25649	173740	38.1	-08 46	7.9	.032	Bp	+ 50.	6.	3	
		42.2	+59 33	9.7	2.268	dM4	+ 3.	4.1	5r	- 4. Md
A11711BC	-----	18 46.7	+16 12	10.0	---	A4	+ 22.	4.3	3	
A 11910B	-----	57.1	+40 37	9.5	---	A4	- 3.	var	3*	
G 26095	176582	57.5	+39 09	6.2	0.009	B7n	- 12.	3.7	6	- 18.2 V
G 26099	176269	57.7	-37 08	6.8	.023	B9n	+ 10.	var	4*	
G 26100	176270	57.7	-37 08	6.6	.042	B9	- 27.	var	4*	
G 26107	176541	18 57.9	+22 45	6.4	.029	gM3	- 49.5	0.5	2	- 52.5 D
G 26153	176825	59.3	+08 40	8.9	.022	gG5	- 19.4	1.7	4	
G 26171	176915	59.8	+08 41	9.1	.010	gG2	- 13.3	1.4	2	
G 26173	176916	59.8	+08 41	8.3	.004	gG8	- 20.9	2.2	4	
A 12040B	-----	19 04.2	+30 22	9.7	---	dG7	- 48.	---	1	
B 4881	179323	19 10.1	-26 00	5.9	.012	cKo	+ 1.4	0.3	2	
A 12197B	-----	12.1	+39 04	8.5	---	Ao	- 25.0	1.1	3	
B 4954	182645	23.3	-15 09	5.7	.021	B8	- 7.	3.8	4	
G 26960	183986	29.0	+36 07	6.0	.014	Ao	+ 8.0	2.5	4	
B 4992	184171	29.9	+34 21	4.8	.003	B5	- 26.	6.	2	- 21.8 M
A 12864C	-----	19 42.6	+10 39	9.5	---	B4n	- 14.	var	4*	
32° 3634	188876	54.1	+32 56	7.2	.015	B8	- 17.	4.0	4	- 19. D
B 5117	189253	55.4	+50 46	6.3	.007	A1	- 18.1	2.2	3	- 21. V
A 13196B	-----	56.6	+33 08	8.2	---	dF3	- 19.	---	1	
G 27730	189690	58.0	+29 47	7.3	.010	Aon	- 36.	7.	5	
A 13312A	190429	20 01.6	+35 53	7.2	.016	O5n	- 12.	---	1*	- 13. V
A 13312B	-----	01.6	+35 53	7.8	---	O9n	- 22.	---	1*	- 22. V
A 13429A	191566	07.3	+35 20	7.7	.005	B2	- 10.	---	2*	- 45. V
A 13429B	-----	07.3	+35 20	8.7	---	B2	- 1.	---	1*	- 29. V
39° 4082	192281	10.8	+40 07	7.5	.004	O5n	- 59.	---	1*	- 60. V
A 13545A	-----	20 11.6	+49 02	7.8	.022	Ao	- 22.7	3.0	4	
A 13545B	-----	11.6	+49 02	10.2	---	sgG8	- 27.4	1.9	4	
16° 4200	-----	12.1	+16 36	9.8	.035	gG8	- 28.4	2.7	4*	
B 5249	195050	25.7	+38 17	5.4	.076	Aln	+ 2.	4.9	4	0 v M
B 5269	195710	29.3	+49 03	6.5	.006	Aon	+ 5.	var	4*	+ 5. V
A 14054A	196310	20 34.2	-12 55	8.0	.034	dF1	- 32.0	2.4	4	
A 14054B	-----	34.2	-12 55	9.0	.051	dF5	- 20.0	0.7	2	
14° 4389	197040	38.3	+14 21	7.7	.027	A2n	- 36.	var	4*	
α Cyg	197345	39.7	+45 06	1.3	.003	cA2e	- 3.8	0.9	10	- 4.6vM
B 5345	198134	45.2	+34 11	5.2	.043	gK3	- 23.7	0.5	2	- 22.5 L
B 5499	203836	21 09.3	+86 50	7.4	.085	A4n	+ 1.	3.8	4	- 3.6 D
G 29673	202128	11.1	+15 47	6.2	.044	A3n	- 34.	9.	4	- 28.1 VS
A 14847B	-----	16.9	-26 34	9.0	---	dG6	+ 3.	4.9	2	
B 5626	208008	50.9	-10 33	6.5	.006	B9	- 11.2	1.7	4	
G 30749	208971	56.1	+65 54	7.0	.019	gM2	+ 11.	var	3*	
G 30855	209691	22 01.5	+65 49	6.8	.024	B8	- 40.	3.3	4	
B 5751	211554	14.6	+56 58	6.0	.042	gG4	- 9.1	1.1	5	- 8.3 V
B 5818	213798	29.5	+78 34	5.5	.016	Aln	+ 14.	4.1	3	- 6. M
B 5876	215664	43.9	+44 17	5.8	.140	dA8n	- 8.6	0.6	4	- 12.8 D
B 5954	218356	23 04.7	+25 12	5.0	.031	cKo	- 25.9	1.6	4	- 26.7 L
A 16661A	219813	23 16.0	+46 59	7.7	---	B9	- 16.2	1.2	3	
A 16661B	-----	16.0	+46 59	10.1	---	Ao	- 24.	6.	3	
60° 2552	-----	18.5	+60 55	8.0	.024	B1n	- 35.7	2.6	3*	+ 2. V
G 32631	220876	24.8	-13 12	7.5	.033	gM3	- 18.3	2.0	4	
32° 4649	220951	25.3	+32 43	7.4	.040	dA6n	- 9.8	2.9	4	
G 32697	221327	23 28.6	+18 30	7.4	.019	A3	- 3.0	0.9	4	
G 33135	223835	50.5	+41 04	7.2	.017	gM2	- 5.0	1.4	4	- 12. L
G 33217	224364	54.8	+60 45	7.0	.009	gM2	- 76.3	1.4	3	
75° 904	224917	59.2	+76 07	9.0	.024	gK3	- 6.0	3.0	4	
G 33336	224980	59.7	+60 25	7.0	.017	gM2	- 24.0	0.4	3	

NOTES

STAR		R.A.		
		h	m	
A	30B	0	02.0	-8, -54, -27, -57
75°	7		15.5	Broad lines
B	66		21.4	+4, +10, -16, -12
A	582A		39.5	-23, -4, -28, -23, +3
A	582B		39.5	-29, -19, +7, -2
45°	187		41.5	Two spectra
62°	175		55.2	IS -17.6
G	1176		56.3	+29, +44, +23, +21
A	902A	1	03.4	Velocity is probably variable: -18, +7, -7, -7
G	1811		27.4	+22, +12, -18, +13
56°	445	2	09.0	-66, -10, -46, -7
70°	182		28.9	-21, -47, -40, -1, -19
G	3040		29.3	-35, -48, -46, -62
B	562		30.0	-33, -21, -27, -11
29°	502		54.6	-6, +5, -17
A	2499A	3	19.9	-9, 0, +2, +50
A	2499B		19.9	+5, +64, -6, +13
G	4465		41.4	+42, +20, +80, -43
G	4856	4	00.2	Velocity is probably variable: +45, +42, +55, +37
11°	571		04.4	+7, +53, -2, +29
G	5449		26.4	Velocity is probably variable: +27, +21, +37, +21
Anon.			29.6	Plates taken for Luyten's pm. star, which was probably misidentified
G	5617		33.8	+13, +16, +26, +21, -1; IS +10. $\pm$ 3.0
42°	1180	5	05.2	+8, 0, +17, -5
38°	1040		06.0	-6, +5, +6, -36, -29
G	6316		07.2	-58, -67, -55, -77
14°	1080		13.7	Two spectra
G	6511		16.6	+28, +35, +39, +38
15°	790		17.9	+27, -2, +28, +63: poor lines
5°	1325		33.1	+40, +67, +39
1°	1001		37.7	+20, +18, +38, -13
43°	1332		39.8	+11, +20, +29, 0
24°	1036		54.2	+20, +4, -6, -4
G	7589		57.6	+41, +14, +44, +18
A	4629B	6	00.3	+51, +8, +60, -11
G	7844		07.5	+6, -28, +13, -13
B	1541		08.5	+32, +6, +11, +43
B	1612		21.6	+22, -2, -18, +20
30°	1256		29.9	Two spectra
1°	1473		54.9	Two spectra
A	5752AB	7	01.8	-2, -4, +17, +18
10°	1848		02.1	IS +26.0 $\pm$ 0.1 3
A	5854A		08.6	+21, +12, 0
4°	1862		11.3	Sp Ao + gKo: +22, -27, +8, -13
14°	1628		15.8	+23, +59, +34, +10
G	10091		29.8	-12, -32, -31, -23
B	2002		35.8	-18, +10, -5, +18
G	10566		47.4	Velocity is probably variable: +24, +30, +39, +42
G	11480	8	22.1	-44, -23, -24, -48

STAR	R.A.	
	h m	
B 2423	9 00.4	Velocity is probably variable: +9, +9, -10, +15
B 2415	05.3	Large difference, V-W; velocity probably variable
G 12950	21.0	+11, +11, +30
G 13148	29.2	-27, -17, -27, -1
B 2712	10 08.8	+57, 0, +23, +26
B 3120	11 52.5	Two spectra
A 8585A	12 29.0	-19, -40, +6, -4
G 17345	42.9	-11, +2, +22
G 17903	13 10.8	-34, -20, -43, -8
G 17906	10.8	-41, -27, -45, -51
G 18102	20.1	+1, -29, -24, -34
A 9188B	14 13.8	-26, -37, -20, -17
G 19505	25.6	Two spectra
A 9273B	25.6	-8, +6, -18, -12
A 9527B	15 08.0	+9, -2, -5, -22
B 3868	10.5	+3, -6, +26, -18
B 3909	17.9	-24, -21, +12
A 10049A	16 22.6	IS -7.9 +0.3 2
G 22342	34.7	IS -17.5 +1.7 5
Anon.	34.8	In field of G2217
β 7740B	42.6	-2, -8, +12, -26; comp. to B 4257
G 23606	17 23.5	IS -8.9 +0.9
B 4432	25.0	Velocity is probably variable; +15, -7, -2, -25, -21
B 4543	56.4	0, -4, -39, +21, -4
B 4560	18 00.8	IS -13.7 + 1.5 4
B 4636	18.2	Velocity is probably variable
G 25064	19.4	Velocity is probably variable; -12, -36, -6, -8
A 11292B	19.9	-36, -50, -59
G 25133	22.4	IS -5.4 + 0.9
A 11910B	57.1	+35, -7, -37; two spectra
G 26099	57.7	-14, +8, +20, +28
G 26100	57.7	-47, +22, -52, -33
A 12864C	19 42.6	Two spectra
A 13312A	20 01.6	IS -8.2 + 0.9 13
A 13312B	01.6	IS -7.8 + 1.2 7
A 13429A	07.3	IS -7.6 + 0.2 2
A 13429B	07.3	IS -12.2 + 2.2 3
39° 4082	10.8	IS -12.2 + 1.6 2
16° 4200	12.1	In field of R Sge
B 5269	29.3	-22, +8, +16, +19
14° 4389	38.2	-4, -44, -40, -56
G 30749	21 56.1	+10, +1, +21
60° 2552	23 18.5	In NGC 7635; large difference, V-W; velocity is probably variable