THORP & MARTIN
COMPANY

STATIONERS

66 FRANKLIN STREET
BOSTON

IN RENEWING THE ORDER FOR THIS BOOK IT IS ONLY NECESSARY TO QUOTE THE NUMBER BELOW. YOU CAN TELEPHONE THE ORDER.

No.______ PR.______

Index

	Page
ε Lyrae Field — Kevin Burns	8 – 9
N.G.C. 5128 — Dr. Shapley	10
Bright line spectra — C. J. A. R.	11 – 15
Albany Stars — First list ($0^h - 3^h$)	16 – 19
" " Additional ($0^h - 3^h$)	19
San Luis " ($0^h - 3^h$)	20
Comp. stars for Dugan	22 – 23
" " " Thiele (UU Her)	24
Albany Stars — Second List (3^h – 9)	26 – 32
Suspected planetaries	33
Albany — Final list	34 –
Cape Proper Motions (15^h –	50 –
Leyden — 17° 3336-7	205
AR Lac	200

ε Lyrae Field

	α 1900	δ 1900	Sp.	DM No.
	h m			
1	18 39.0	+39° 7'	F2	
2	39.3	31	—	
3	39.3	31	—	
4	39.5	50	g5	+39° 3503
5	39.6	43	—	
6	39.7	37	—	
7	39.9	11	—	+39° 3504
8	40.0	29	—	
9	40.1	23	—	
10	40.2	29	K0	+39° 3506
11	40.5	10	g	
12	40.5	24	K	
13	40.6	34	—	
14	40.7	48	g	
15	40.8	20	—	
16	41.0	25	—	
17	41.4	21	F2	
18	41.5	8	—	
19	41.7	45	g0	+39° 3515
20	41.8	45	—	
21	41.8	7	—	
22	41.8	7	A2	+39° 3517
23	41.8	7	—	
24	41.9	25	F0	+39° 3518
25	41.9	17	—	
26	42.0	13	F5	+39° 3519
27	42.3	39	g	+39° 3521
28	42.3	34	—	
29	42.3	10	—	+39° 3522

	α 1900	δ 1900	Sp.	DM. No.	
30	18h 42.3m	+39° 36′	Mo	+39° 3523	
31	42.5	11	Ko	+39° 3524	
32	42.9	9	K2	+39° 3525	
33	42.9	39	Ko	+39° 3527	
34	42.9	31	—		
35	43.2	23	—		
36	18 43.5	+39° 41′	F8	+39° 3529	
		Sirius Field			
	6 40.2	−16° 38′	F?	−16°, 1586	A3 on B18975
	6 40.5	−16 42	K7?	−16° 1589	Probably O.K. Better H3394

From a letter of Dec. 30, 1932 from:

Keivin Burns
Allegheny Observatory, Univ. of Pittsburgh
Riverview Park
Pittsburgh, Pa.

Letter of Sept. 29. 1933 from Keivin Burns

o Ceti Field MF 8124

−3° 354	2 14.0	−3 43	—	Perhaps G5
−3 356	2 . 15.0	−3 15	F5	
−3 357	2 15.2	−3 19	A3	

o^2 Eridani Field

−7° 775	4 09.9	−7 28	A7	~~MF 8124~~ I 33784
−7 781	10.8	−7 47	A3	
−8 812			—	

Feb. 10, 1933

at Dr. Shapley's request

N.G.C 5128 13 21 -42.5

B 45391 72

Feb 27 1933
At Carol. Anger Rieke's request.
Bright line spectra
Nos. from her paper

1 H.D ~~257779~~ B8
MC 18388
Hβ br. with dark edges, well defined to red
very hazy to violet.
✓ B 38417 Hβ br.
Sp. almost cont. up to Hγ
Apparently earlier type than B8
but hard to classify as lines other than
hydrogen are very faint in MC 18388

2. H.D. 45828
MC 18388 Hβ narrow dark with possibly a bright edge to
violet.

MC 26320 . Hβ not clearly seen to be bright.

3. H.D. 45901
MF 8313 too poor.
M~~F~~C 26314 Indefinite.
MC 26219 mean edge but shows 2 lines.
The strongest is of shorter λ than Hβ
marked in pencil

H. D. 45910

I38168 Whole region of Hβ indef. Hβ neutral.

✓ β

MC 18388 best. Those marked in purple ink. Hβ definitely bright.

5. H. D. 46150

MC 18411 Rather vague

" 26219 Hγ seems br. Hβ dark

Several other spectra in the group seem to have br. lines even more distinct than 5.

6. ~~H. D. 46485~~

H. D. 259135

MC 26314 Hβ br. to violet?

H. D. 46202

7. I 20708 Hβ hardly seen

? MC 26313 Too dense

MC 26321 Too vague Lines indistinct

8. H. D. 46485

MC 18411 Hβ and several other lines br. Hγ br. ~~[illegible]~~ in[illegible]

✓ 26219 " " lines indistinct

26314 Indistinct, but appearance of br.

~~R.~~ 18388 Several br. lines seen

9 H. D. 46559

? MC 26321 Hβ appears to be bright. but on 26314 it is a narrow dark line.

10 H.D. 46573
MC 26321 Appearance of several br. lines
26314 " " "
I 38168 Thin but br. lines seem to be present
MF 18313 Too dense

11. H.D 259597
MC 18388
Looks like a br. line star but all
✓ lines very indefinite. Bright lines near Hγ

MC 26313 (Too dense,

Get better plates.

12 H.D. ~~46~~ 46847
B 20708 Rather weak pl. Almost cont.
? MF 18313 Too dense.
MC 26219 very poor focus, but looks like a br. line star, especially Hβ + Hδ

13 H.D. 46966
MC 18388.
Probably Hβ br. rather indefinite

? I 38168 Region not clearly seen.
Traces of br. lines but not very well defined. Line of greater λ than Hβ seems to be longer

14 H.D. ~~4753~~ 47359
MC18411
✓ a bunch of br. + dark lines

MC26219
not so good as 18411 or 18388

15 H.D 47360

MF18309 Too faint and dense

MC26219
✓ a trace of br. Hβ
MC26321 best showing br. Hβ
16 H.D 47382
~~I38168~~ I38168, B20708
✓ I38168 Hβ br.
B20708 " probably br.

17 H.D. 47398
MC26313 Too dense
✓ 18411 brightest lines in region of Hβ

18 H.D. 48434
I38168 near edge. Vague
○ MC18411 Too dense

19 H.D. 48914
MC 18411 Dark with h. to v –
✓ B 20708 Hp h.

20 B 20708

Albany Stars

Plate	0 hr. Albany	Sp.	B. D.	
I 35016	24	G5	+77°936 ✓	
I 33457	37	K0	+70°1345 ✓	better plate?
M7 8705	122	G5	+13°13 ✓	
"	187	G0	+15°28 ✓	
I 33457, MF240	267	K2	+65°37 ✓	
M7 8780	275	F8	+41°46 ✓	
"	355	G0	+40°93 ✓	
M7 8169	373=AG134	K5	+21°55 ✓	
M7 8705	410 9.8	G5 sup.	+14°61 ✓	
"	411 9.7			
M7 8705	425	F8	+15°78 ✓	
I 35016	437	K5	+78°17 ✓	
M7 8169	443=AG328	K0	+25°77 ✓	
M7 8705	446	F5	+18°76 ✓	
M7 8780	448	K0	+38°72 ✓	
M7 8780	495	K2 sup.	+40°131 ✓	
"	496	[illegible]		
M7 8159	501=AG372	G5	+30°89 ✓	
M7 ~~8792~~ 8705	521	F5	+15°102 ✓	
M7 240	557	G0	+69°39 ✓	
M7 ~~8792~~ 8705	568	G0	+15°108 ✓	
M7 ~~8159~~ + 8154	573	K0	+32°125 ✓	
M7 8826	587	G5	+9°84 ✓	
M7 ~~8792~~ 8128	657	F8	+15°124 ✓	
" 8128 ~~8826~~	659	G5 ~~K0~~	+11°102 ✓	
M7 8780	668	A2 sup.	+40°175 ✓	
"	669			
M7 ~~8826~~ ~~8128~~	687	F5	+9°99 ✓	
M7 ~~8792~~ 8128	720	G0	+12°109 ✓	
" 8826	742	F5	+9°106 ✓	

Plate	Albany	sp.	B.D.	
M7 8154	751	G5–	✓ +30° 140 ✓	
"	757	F2	✓ Not in DM	
B 23814	780 comb. w. 779	F5–	✓ –16° 162	
M7 8195, 23789 1hr.	908+09	Combined in H.D.	✓ –2° 160	
" 8143	948	G0	✓ +38° 204	
B 23789	957	K0	✓ –5° 200	
M7 8154	1015–	K0	✓ +26° 204 ✓	
" 8143, 8185	1054	G5–	✓ +37° 250	
" 240	1091+1094	– (1091)	✓ +63° 175 (=1091)	
I 12166	1149	G5–	✓ +75° 61	~~better plate?~~ Yes, MC 18158
M7 8200	1157	G0	✓ +4° 244	
I 33412	1181	F5–	✓ +63° 187	~~better plate?~~ –
B 23789	1200	F5–	✓ –1° 190	
M7 8185	1217	M0	✓ +34° 253	
I 12166	1273	K0	✓ +75° 65	better plate? – MC 18158
M7 8210, 8205	1298+1299 A3 A7	A3 ~~A1, A1 (8205)~~ ~~Superposed in 8211~~	✓ +11° 201	~~8205~~, Sup. in H.D
M7 8839	1324	F0	✓ +31° 281	
M7 8185	1349	F8	✓ +40° 340	
M7 8839	1351	G5–	✓ +31° 288	
"	1357	G0	✓ +32° 289	
M7 8803	1453	F0	✓ +19° 281	
M7 1334	1454	B3	✓ +60° 336	
"	1459	B3	✓ +60° 343	
"	1462	K7	+59° 3~~20~~19 ✓	
M7 8839	1463 = ag 963	K0	✓ +28° 293	
"	1474 = ag 970	F8	✓ +28° 297	
"	1483 = ag 977	G5	✓ +27° 282	
"	1491 = ag 984	K0	✓ +28° 300	
M7 8803	1495	K2	✓ +19° 287	
M7 8839	1512 = ag 997, 98	G5	✓ +26° 305	

Plate	albany	sp.	B.D.		
I 33458	1524	G5 —	✓ +63° 250		
M7 ~~8165~~ 8289	1538	K5	✓ +3° 250		
M7 8205	1602	G5 —	✓ +15° 280		
M7 8803, 8205	1606	K7	✓ +18° 250		
~~I~~ 8160	1609	G0	✓ +30° 307	✓ —	
M7 8803	~~1623+~~ 1624 = ag 587	Go	22 ~~+23~~ ~~254~~, ~~259~~		
I 36233, 12166	1634	K5	✓ +74° 92 " "		
M7 8803 !	1643 = ag 596	Go ✓	✓ +20° 320		
"	1672 = ag 608	Go ✓	✓ +~~23~~° 271		
I 33458	{1689	a	✓ +66° 181		J 37303
"	1691	a	✓ +66° 182		
M7 8289	1697	K0	✓ +10° 277		
M7 8798	2h. 1718	F0	✓ +36° 402		
M7 8160	1770 + 71	close. Superposed	✓ +32° 390		
"	1774 = ag 1158	Go ✓	✓ +29° 366		
B 41114	1810	[illegible] K0	✓ −18° 382		HD 13568
M7 ~~8124~~ 8121	1814 ~~+1815~~	G0	✓ −3° 335	O.K	no Dhe no. in [illegible]
" "	1839	G0	✓ −1° 306		
M7 8781, 8166	1855	K7	✓ +20° 361		—
M7 8160	1875 + 1876	superposed	✓ +28° 382		—
I 37099	1879	K0	+75° 90		
M7 ~~8793~~ 8781	1888	G0	✓ +18° 289		
I 37099, 292, 337,	1918	K0	✓ +70° 169		
M7 8160	1920 = aG 1245	K2 ✓	✓ +29° 394		
I 37099, 292, 337	1921	K5 ✓	✓ +73° 129		
M7 8798	1928	K0	✓ +42° 501		
M7 8781	1937 = aG $\left.\begin{matrix}712\\713\end{matrix}\right\}$	K0 ✓	✓ +22° 333		
I ~~35725~~ 1335	1956	B8	✓ +48° 662		
" "	2015 = AG	K2 ✓	✓ +53° 529		0.232657
~~I~~ 337 292	2037	G5	✓ +67° 209		

Plate	Albany	Sp.	B.D.	
M7 8129	2049=AG1341	K2	✓ +28°425	
~~I 31330~~ 292, 362, 401, 337	2164 2165 — 1" apart →	superposed G5−	✓ +65°284	
I 33574	2219=AG	G5	✓ +56°705	HD 236992
I 33574	2363=AG	K2	✓ +58°530	" " 237032
	2364 (two pl. & sup.)	—	✓ +58°531	
M7 8102	2401	F8	✓ +28°503	←
M7 8201	2462	F8 (H.D.)	✓ +10°402	HD 18701
M7 ~~410~~ 337, 292	2467	G0	✓ +70°221	See I 35105 better plate
B 23841	2509	G	✓ −5°570	
M7 8171	2515=AG905	G0	✓ +20°505	
M7 ~~410~~ 337, 292	2522	G0	✓ +68°220	
M7 8171	2535=AG911	F5	✓ +24°438	
I 13504	74	Gesell. K7		
"	85	" K0		
I 7702	474-5	" B5	MF 1329, I 33411	I 7702 shows thin K line also.
I 25926 +45°319	1098	—	Chart plate shows this much fainter than +45°320 & stars.	
I 5403	1346 +52°397	Lewis says of double both comp. = A	In Gesell. A for combined light.	
I 19811	1374 +14°253	251 253 } K0	Class K0 in H.D. should refer to the comb. light of +14°251 and 253. Ch. plate shows them nearly equally br.	
M7 1334 I 2291	1508	Gesell K0		
MF 8833 (49.3) (49.0) +39 45 I 7999	1577	G5	Adj. star 0.f. gives Hγ & Hδ sup. on this.	
M7 1334 I 2291	1630	Gesell. G5−		
M7 8121	2078	A	Chart plate shows no separation but B 12087 shows this double. H. comp. S. [illegible] sp. A	
M7 1335 I 2388	2288	W Pen. M9		

San Luis Stars

Plate	San Luis No.	Sp.	B.D	
B 42095	233	F8 (15152)	-56° 99 ✓	better plate?
B 20456	~~236~~ + 237	— (not sep.)	-26° 164 ✓	
B 12255	271	K7 (42098)	-42° 193 ✓	better plate 2.5 - 42
B 42095	~~313~~ + 314	—	-56° 13~~8~~ 2	" "
"	376	G5 (15152)	-56° 153 ✓	" "
B 39504	~~408~~ + 409	Too close	-25° 338 ✓	
B 41092	~~413~~ 414	G0 in H.D. not sep.	-61° 44 ✓	
"	~~483~~ 484	F5 in H.D. not sep.	-60° 7~~2~~ 3	DM no. wrong in San Luis cat.
B 19960 Find place for these	538	K5	-68° 43 ✓	Vol. 68 38365
"	568 ~~569~~	R Sup. F8 not sep.	-69° 45 ✓	
B 42150 F2 on this plate	749 + 750	F0 combined in H.D	-54° 358 ✓	
B 20149	~~873~~ + 874	comb. F0 in H.D not separated	-60° 16~~2~~ 3	DM no. wrong in San Luis cat.
B 44351	897 ~~898~~	Combined in H.D. F2 not separated	-23° 737 ✓ ~~-56° 389~~	
B 17378	991	— [illegible]	-56° ~~441~~ 389 ✓	2.1 - 56.5
B 23779	1155	B24024 K	-56° 441 ✓	2.5 - 56.5
B 12242	8.7 5.0 1163 + ~~1164~~	—	-28° 819 ✓	
B 20262	~~1217~~ + 1218	—	-53° 462 ✓	
"	1222	1222 intended ? F5 in H.D. 1221 — Probably error as list HD16744	-55° 445 ✓	1221 (-55°444) the s. prec. comp. is not in HD
B 12277	~~1311~~ + 1312	— also in B14189, 10586	-37° 1053 ✓	
B 12067	1352	F5 (best 15760)	-64° 204 ✓	
B 42686	1365	K0	-51° 684 ✓	
B 42799	1422	M0 (best 42089)	-41° 866 ✓	

Apr. 4 1933

Comparison stars for Dugan

U CrB	v	32° 2569	B8 (H.D.)	MF 8621
151432	a	32° 2570	G5	
	b	2566	K0	
	c	2572	G5	
	d	2567	F8	
	e	2568	K0	
	f	31° 2717	G0	

AG Vir				~~MF 8568~~
115613	V	+13° 2481	H.D.	A0
	a	14° 2462	MF 8568, 277	G0
	b	14° 2467	H.D.	G5
	c	13° 2483	H.D.	F8
	d	13° 2484	MF 8568, 353	G0
	e	13° 2485	H.D.	F0
	f	13° 2486	H.D.	K0

RW UMa			I 36030
113552	v	+52° 1579	—
Prager a5	a	52° 1580	A3

			MF 8798 (red ink) 10000, 10001
XZ And	v	+41° 376	A0
015041	a	+41° 380	G5
	b	+41° 372	F8?
	c	+41° 375	G0
	d		K5?
	e		—
	f		—

I 24978, 31594, 32962, MF 8467

TY Vir	v	−4° 3155′	K5 —
114605′	a	−5° 3372	F5 —
Prager K2	b	−4° 3153	—
	c	−4° 3151	G5 —
	d	−4° 3150	—

B 20679 – 24746

RU Mon			
064907	v	−7° 1623	B9
Prager A	a	1622	F8
	d	1621	A0
	f	1619	M0
	h	1627	K0
	i	1618	A2 —
	j	1629	F5 —

Dec. 6, 1933

Comparison stars for [illegible] Her. for Walter Thiele
See letter to Mr. Campbell, and Chart sent
by Thiele with stars marked.

Stars for which spectra are wanted, marked on MF 8896 by me

5	A2		
6	K0		
7	K0	= H.D. 150292	K0
8	K7	= H.D. 150119	K5 K7 better
9	K2		
9	A0		
10	G5		

b He did not ask for this, but it does not appear the dm
K0

Dec. 31, 1934

At Dr. Shapley's request.
Sp of an object for Luyten

chart plates
B 379
I 26826

Sp. plates
B 15243
I 21905
32496
33682
33772
MF 8302 poor, on edge

(started July 12, 1934)

albany stars

Plate		Sp.	alb. No.		alb. Mag.	B.D.
M7 ~~8171~~ 8161		G0	25~~55~~87 ✓	3^h1	9.4	+19° 479 ✓
M7 8297		G0	2590 ✓		8.5	+10 421 ✓
I 19656		G5	2595 ✓		8.6	+47 781 ✓
~~M7 8144~~ I 38082		F0	2600 ✓		8.9	+38 667 np ✓
"		F0	2601 ✓		8.9	+38 667 sf ✓
M7 ~~8006~~ 8161		A2	2612 ✓		8.9	+17 513 ✓
I 35560		K5	2628 ✓		9.4	+79 98 ✓
M7 8102, 10033		K0	2645 ✓		8.7	+32 594 ~~sf~~ ✓
I 36497		A3	2682 ✓		9.2	+67 259 ✓
M7 ~~8171~~ 8161		A2	2702 ✓		8.5	+19 509 sf ✓
" "		A2	2703 ✓		8.4	+19 509 nf ✓
I 35060		A	2672 ✓		9.4	+77 117 np ✓
"		A	2675 ✓		9.2	+77 117 sf ✓
M7 8211	Comb.	G5	2749 ✓		8.4	+17 545 np ✓
"			2750 ✓		9.2	+17 545 sf ✓
M7 8161		F8	2765 ✓		9.4	+19 527 ✓
"	probably combined	~~A3~~ A3	2790 ✓		7.0	+19 537 np ✓
"		~~A~~	2791 ✓		8.0	+19 " sf ✓
M7 8138, 16105	combined light	A0	2840 ✓		7.0	+27 515 sp ✓
"		~~A0~~	2842 ✓	3^h.5	6.5	+27 " nf ✓
I 35560		K5	2934 ✓		8.5	+77 131 ✓
I ~~36497~~ 38943	Comb.	A3	2942 ✓		7.1	+69 222 sp ✓
"			2943 ✓		7.1	+69 222 nf ✓
M7 8138		Gofl	2958 ✓		9.1	+26 585 ✓
I 33460		Mo	2975 ✓		9.4	+74 171 ✓
M7 3138		A5	3020 ✓		8.4	+31 643 ✓
I 33460		K0	3151 ✓		9.9	+69 230 ✓
I 24534		K7	3172 ✓		9.5	+51 805 ✓
~~I 39211~~ MF8293		F8	3218 ✓		9.2	+9 521 ✓
~~M7 8173~~ = 10004, 1456		G0	32~~73~~37 ✓		7.8	+36° 804 ✓

Plate	sp.	alb. No.	alb. Mag.	B.D.
M7 ~~8190~~ 9984	G0	3239 ✓	8.8	+19° 641 ✓
~~8173~~ = 10004, 969	G5 ✓	3266 ✓ h	8.6	+34 796 ✓
~~I 31098~~ 8828	G5	3355 ✓ 4	10.0	+5 591 ✓
" "	F5	3360 ✓	9.4	+8 638 ✓
M7 9985, No. 415	g5 ✓	3388 ✓	8.8	+14 661 ✓
" No. 299	K0 ✓	3391 ✓	8.5	+13 651 ✓
M7 8834	A2	3396 ✓	9.2	−2 826 ✓
~~M7 9985~~ = 8172, 14	K2 ✓	3409 ✓	8.4	+17 694 ✓
M7 9985, No. 415	g0 ✓	3419 ✓	10.6	+15 600 ✓
M7 412 chart I 23807	g5 }	{ 3447 ✓	8.8	+45° 898 s.p. ✓
"		3448 ✓	8.8	" " n.f.
~~I 19657~~ 294	a3p 4077 very strong	3547 ✓	8.8	+49° 1172 ✓
M7 412 + 294	B3	3612 ✓	8.5	+45 936 ✓
M7 241	—	{ 3620 ✓	9.7	+18 637 s.f. ✓
"	g0	3621 ✓	7.9	" n.f. ✓
M7 412 chart I 23807	B8 {	{ 3674 ✓	7.0	+39 1013 np ✓
"		3676 ✓ h 4.5	7.2	" sf
M7 8304	G0	3749 ✓	8.1	+9 606 ✓
B 12378 B 32734 chart	a0 lines double	{ 3791 ✓	7.3	−13 937 nf ✓
" very close. almost equally bright	a0	3792 ✓	7.8	" sf
~~M7 8176~~ = 8172, 239	K5 ✓	3837 ✓	10.1	+17 771 ✓
M7 8308	G5 in H.D. K0 {	{ 3866 ✓	8.9	+5 718 np. ✓
"		3867 ✓	8.9	" sf. ✓
B 12378 No. 69	F2 ✓	3891 ✓	7.7	−12 982 ✓
M7 8308	K0	{ 3991 ✓	8.2	+7 754 sf ✓
"	K0	3992 ✓ 3	7.9	" nf
~~M7 8384~~ 10024, 853	G0 ✓	4112 ✓	9.8	+27 720 ✓
M7 8312, +38183 (No. 67)	B8	{ 4114 ✓	6.2	+1 886 sf ✓
" chart I 19864 brand rep.	a	4115 ✓ ~~445~~ 5 h	7.4	" nf
B 17409	a0 ✓	4281 ✓	8.0	−8° 1057 ✓

Ident. incorrect for d. H.D. On B 14664 it was called −8° 1059, which is a bright B8 star.

Plate	Sp.	Alb. No.	Alb. Mag.	B.D.
M7 8384 MC14387 ~~I39523~~ C16277 see chart I 22470	—	4290 ✓	7.7	+32° 922 sf ✓
"	a2	4291 ✓	5.1	" nf
I 34521, 16486	F2	4342 ✓	9.9	+64 580 ✓
I 35815, I37366 no. 94	F5	4574 ✓	7.4	+49 1364 sf ✓
" chart I 7968		4575 ✓	7.4	" nf
I 33568, 36940	F5	4510 ✓	9.2	+78 192 ✓
M7 8215	K0	4564 ✓	9.0	−1 911 ✓
I 34521, 16486	K5	4627 ✓ n 5.5	8.7	+63 593 ✓
I ~~13850~~, 10005 chart I 29843 too sup. on neg. cluster	—	4666 ✓	9.2	+34 1106 ✓
" MC 25408	—	4669 ✓	8.7	+34 1107 ✓
I ~~33568~~ 32254, 8215	A0	4637 ✓	9.2	+73 294 ✓
M7 8379 chart 37224	B9	4749 ✓	9.4	−2 1323 sf ✓
"		4750 ✓	8.9	" nf
"	B9	4751 ✓	8.6	−2 1324 ✓
M7 8387, no. 1698	K0 ✓	4925 ✓	8.9	+32 1098 ✓
I 35161, 35815	A	4941 ✓	9.2	+48 1314 ✓
M7 ~~8848~~ 10015	G0	4965 ✓	9.2	+36 1276 ✓
M7 8847	G0	5032 ✓	8.6	+13 1037 ✓
M7 ~~8399~~, 10019	—	5058 ✓	10.5	+21 1060 ✓
I 36643, 16486, 35900	M0	5167 ✓	8.8	+63 631 ✓
"	G5	5188 ✓ 6 n	10.0	+66 4 ~~1~~27 (error in cl. Cat.) ✓
"	F5	5218 ✓	10.2	+67 414
"		5220 ✓	10.3	" ✓
M7 8316, no. 1021	K0 ✓	5240 ✓	9.1	+0 1289 ✓
", no. 1006	a ✓	5330 ✓	9.5	−1 1146 ✓
" chart MF1151		5331 ✓	9.0	"
M7 8847 chart I 5443		5360 ✓	7.9	+14 1213 sf ✓
"	B9	5362 ✓	7.4	" nf
M7 8848, 8939		5361 ✓	7.4	+36 1388 sf ✓
" chart MF1957	F0	5363 ✓	6.4	" nf

Plate	Sp.	Alb. No.	Alb. Mag.	B.D.
MF10019 n.f.1543, 10038	G5	6 10.2 +21 24 (1900) 5389 ✓	10.2	+21 ✓
M7 ~~8848~~, 10015	A2	5493 ✓	9.5	+36° 1408 ✓
"	F2	5494 ✓	8.8	+36° 1409 ✓
I 36643, 11482	G0	5557 ✓	9.7	+68° 441 ✓
B 12630 dual B26548	a3	5585 ✓	6.7	-16° 1467 ✓
"	A	5587 ✓	9.1	-16° 1468 ✓
M7 ~~8939~~ 10025	K2	5594 ✓	9.8	+35° 1406 ✓
" ~~composite~~	G5 a0 comp.	5604 ✓	8.8	+35° 1412 ✓
I 36643	F8	5612 ✓	10.0	+67° 431 ✓
M7 8903	G0 H.D.	5660 ✓	7.5	+17° 1260 ✓
M7 1337, 8382 ✓	a0	5717 ✓	8.6	+5° 1280 np ✓
" dual B53769	a0	5718 ✓	6.8	" sf
M7 8939 dual	F5	5748 ✓	7.6	+38° 1528 np ✓
" MF 1959		5749 ✓	8.2	" sf ✓
I 34886, 33672, 38239	M	5769 ✓ 6.5	8.8	+61° 894 (near +61° 894
~~I 31463~~ 8939 10021	a2	5780 ✓	7.8	+41° 1472 sp ✓
" dual MF 2137	a2	5781 ✓	8.3	" nf
B ~~41113~~, ~~12630~~ 39861 C17286 ✓	F5	5808 ✓	7.9	-18° 1478 ✓
" dual 18165	g5	5810 ✓	5.8	-18° 1480 ✓
M7 8939	K5 HDE	5828 ✓	9.1	+34° 1418 ✓
I 31449 not sep. in B31106 dual 8309, 8382		5859 ✓	7.7	+9° 1345 np ✓
" MF 8309, MC 25404 dual 18165	F5	5860 ✓	7.2	" sf
B ~~41113~~, 39861	a3	5923 ✓	8.5	-16° 1586 ✓
MF ~~10044~~, 8313 ~~B 2086~~ dual I28276	K7	6041 ✓	8.9	-4° 1713 (near -4° 1714 ✓
M7 ~~8939~~ 10022 MF340	K7	6065 ✓	8.4	+40° 1758 ✓
I 37070, 37559	g0	6096 ✓	6.8	+75° 281 sf ✓
" dual I13603		6097 ✓	7.6	" nf
M7 8385, 10030	G0 HDE.	6214 ✓	8.8	+28° 13~~4~~05 nf Error in alb. Cat. ✓
" I26220	—	6215 ✓ 7h ✓	9.3	" sf
M7 10072	a0	6298 ✓	8.6	+39° 1861 ✓

Plate	sp.	alb. no.	alb. mag.	B.D.
~~I 26232~~ 10022	G5	6377 ✓	9.2	+42° 1686 ✓
I 36691, 34886	G	6389 ✓	9.5	+63° 700 (near +63° 691) ✓
M7 ~~8291~~ 10065	G0	6395 ✓	8.8	+18° 1546 ✓
" "	K0	6425 ✓	8.3	+16° 1436 ✓
I 37075	A0	6483 ✓	8.6	+55° 1193 (near +55° 1192) ✓
M7 10065 chart I 25996	A3 {	{6560 ✓	8.9	+15° 1571 sf ✓
"		6561 ✓	8.9	" nf
"	K2	6562 ✓	8.8	+17° 1575 ✓
M7 8402	K0	6605 ✓	9.7	+19° 1739 ✓
M7 10065	G5	~~6612~~ 6627 ✓	~~8.6~~ 9.5	+18° 1635 ✓
" chart I 25996	G0 {	{~~6614~~ 57 ✓	~~5.9~~ 9.3	+16° 1497 sf ✓
"		6658 ✓	9.3	" nf.
M7 8291 (chart I 21923)	G0 {	{6680 ✓	8.6	+9° 1698 sf ✓
"		6686 ✓	9.0	" nf
I 14822	— two sup.	6690 " 7.5 ✓	9.1	+32° 1582 (near +32° 1581) ✓
I 28597 MF 407	G5	6735 ✓	8.6	+76° 290 ✓
M7 8291	M0	6760 ✓	8.5	+5° 1728 ✓
"	K7	6776 ✓	8.5	+5° 1735 ✓
~~B 10944~~		6795 ✓	9.7	−1° 1792
"		{6828 ✓	9.1	−3° 2019 sf
"	K5	6829 ✓	8.5	" nf
B 10944 MF 8951	B9	{6877 ✓	8.2	+0° 2079 sf ✓
"	+ A	6878 ✓	9.0	" nf
	F5	{6892 ✓	5.7	−11° 2106 sf
		6893 ✓	8.2	" nf
M7 8940	F2	6956 ✓ 7.8	8.8	+12° 1698 ✓
I 28597 MF 407 340	F2 {	{7021 ✓	10.8	+77° 309 sf ✓
		7022 ✓	10.0	" nf
I 28529 I 31624 I 36521 —	G5	7024 ✓	9.0	+69° 452 ✓
I 28529 MF 407 —	F2	7073 ✓	9.2	+71° 439 ✓

Plate	sp.	alb. No.	alb. Mag.	B. D.
M7 10069	F5	7115 ✓	8.9	+12°1760 sf ✓
"	F5	7116 ✓ 8ʰ	8.9	" nf
M7 8305	G5	7130 ✓	7.8	+8°1963 np ✓
"	—	7131 ✓	9.5	" f
M7 8398	G5	7198 ✓	9.9	+19°1944 sf ✓
"		7199 ✓	10.0	" nf
I (MF 16313)	~~K5~~ M0	7249 ✓	8.1	+27°1567
I 28529 I31624	K5	7234 ✓	9.5	+70°503 ✓
M7 8305	A2	7257 ✓	9.8	+7°1945 (near +7°1944) ✓
I ~~B~~ 17240 I36549	K7	7258 ✓	8.9	+60°1121 ✓
I 28597 MF407	K0	7259 ✓	8.6	+73°407 (near +73°406) ✓
~~M7 8314~~	K0	7280 8.2	8.8	+0°2241
I 32904 MF10070	G5	7290 ✓	8.6	+39°2083 ✓
I 30058 MF8386	K2	7294 ✓	8.5	+31°1781 ✓
I 32580 MF8383	F0	7304 ✓	9.6	+6°1922 ✓
I 32904 MF10070	G0	7313 ✓	8.8	+35°1801 (near +35°1802) ✓
I 23919 MF8314	G5	7325 ✓	8.6	+1°2063 ✓
I 22047 I37147	K0	7364 ✓	9.0	+45°1576 sf. ✓
"	g0	7365 ✓	7.5	" nf.
I 10767 MF8395	G5	7447 ✓	8.8	+17°1852 ✓
I 32904 MF8386	F2	7477 ✓	8.5	+32°1746 (near +32°1747) ✓
I 32904 MF10073	F5	7490 ✓	9.5	+37°1873 ✓
I 24398 I37147	F0	7531 ✓ 8.5ʰ	9.4	+47°1594 ✓
I 24240 I24963	F8	7554 ✓	9.9	+41°1860 Error in alb. Cat. ✓
		7563 ✓	8.9	+66°567
		~~7591~~ ✓	~~9.9~~	+62°1010 sf. ✓
I ~~B~~ 17240 I36549 36350	F8	7592 ✓	8.8	" nf
I 14851 MF8383 8296	G5	7605 ✓	7.8	+6°2007 ✓
	G5	7606 ✓	8.8	+6°2008 (near +6°2007)
		7629 ✓	8.4	−11°2425 nf
	A2	7630 ✓	8.0	" f
I 24398		7641 ✓	7.8	+49°1759 np ✓
	F0	7642 ✓	7.5	" f

Plate		Sp.	alb. No.	alb. Mag.	B.D.
~~I~~ 32904 MF10073 I24963	—	K0	7606 ✓	9.8	+38° 1947 ✓
I 210898 I34564	—	F8	7674 ✓	9.8	+55° 1292 ✓
I 14851 MF8296	|	F5	7675 ✓	8.4	+5° 2044 ✓
		K0	~~7692~~ 7670 ✓	8.2 ~~7.6~~	+42° 1922 ~~+2° 2676 sf.~~ ✓
I 14856 I24963		~~F6~~ G	~~7693~~ 7673 ✓	9.2 ~~6.5~~	1923 ~~" nf~~
I 10767		A0	7716 ✓	7.9	+11° 1913 nf ✓
"		A0	7717 ✓	7.8	" sf.
I 26315 I32759	—	G0	7724 ✓	8.0	+0° 2393 ✓
MF8392		F0	7740 ✓	7.2	+15° 1912 ✓
I 32973		—	7741 ✓	8.2	
I 25050 MF8296 8292	|	G0	7759 ✓ 8.8	9.1	+4° 2$\overset{05}{\cancel{50}}$6 ✓
I 17266		F8	7798 ✓	8.4	+44° 1798 ✓
			7799 ✓	9.0	"
MF8296		F8	7811 ✓	8.0	+8° 2138 ✓
I 25050		F8	7812 ✓	8.5	
I 32973 MF8392	|	G5	7819 ✓	8.4	+17° 1972 ✓
I 12269 MF16629 I37067	|	K2	7853 ✓ 9.0	9.2	+33° 1787 ✓
I 16782 I36350	—	F5	8022 ✓	8.7	+62° 1053 ✓
I 25050 MF8292	|	K5	8031 ✓	9.8	+9° 2130 ✓
I 16615 I32387	—	M0	8064 ✓	8.0	+78° ~~303~~ 307 ✓
MF16629		g5	8073 ✓	7.9	+23° 2063 ✓
I 12846		G0 (A.G.)	8074 ✓ 9.2	9.2	2065 ✓
MF16629		F5	8096 ✓	7.8	+24° 2068 ✓
I 12846			8097 ✓	8.1	
I 148$\overset{7}{5}$3 MF10068	|	a3	8152 ✓	8.8	+35° 1981 ✓
I 26371 MF8306		F0	8184 ✓	8.2	+4° 2178 ✓
"		F0	8185 ✓	6.9	
I 24243 I37142	—	—	8241 ✓	10.2	+43° 1922 ✓
I 30009 MF8306			8270 ✓	8.0	+11° 2052 ✓
"		g5	8271 ✓	7.7	

cont. in Bh. 198,4

Aug. 27 1935

For Dr. Shapley + Miss Mussells.

Possible planetary neb. 17 59 21 − 51 1.2 (19m)
Ident. on a 17079

a, MF, B spectrum plates looked up.

Miss Cannon's note: "The only plate where the sp. is distinctly seen is MF 12028, Feb. 16, 1928. The focus is very poor on this plate. The sp. is fairly bright. It shows no light of greater wave length than Hγ. At the Hγ region, there is a suspicion [illegible] of brightness but I am not sure that it is real, or due to bad definition. The remainder of the spectrum is nearly continuous. The nature of the object is not defined by the spectrum."

Possible planetary neb. 15 44 − 51
Ident. on 16878

" Sp. of star surrounded by neb.
MF 8018 – Strong dark line seen apparently Hγ or near Hγ.
a 12104 – Dark Hγ + Hδ seen.
No trace of bright lines on either plate."

Albany Stars - 3rd List (Final)

Plate		Sp.	Alb. No.	Mag.	BD	
37910,36)	20069 32251 ch.21729	K2	20 21	9.3 9.3	+45° 4408	0 0.9
38102,20)	MF336 8123 ch.26424	F2	26 27	8.6 8.6	+17° 5032	0 1.1
38102,21)	336 8123 chart 26424	K0	30 31	9.4 9.6	+17 5036	0 1.3
37007,55)	20069 32251 chart 21729	A2	82 83	8.1 9.1	+45 16	0 5.4
37937,50)	MF358 chart 21729	A2 A	144 n. 145 s.	8.6 5.6	+48 41 42	0 9.0
37378,12)	MF8188 ch.23902	F0	169 170	5.9 8.1	8 19	0 10.3
37974,28)	ch.31096 not separated on last plate	A0	539 540	8.1 8.0	70 39	0 37.0
38879,73)	MF10943 109w ch 21756	A0	973 974	8.9 9.1	50 236	1 7.0
	MF8154 ch.40727	A2 A0	984 986	7.6 6.6	31 197	1 7.9
MC4415,139) #	chart 21756 MF10943	— G0	1098 1099	9.3 8.9	45 319 320	1 15.4
38034,32)	MF8822 ch.25870 not sep.	F2	1445 1446	8.7 8.3	8 269	1 39.5
C7029)	ch.21860 given as comb. in H.D.	A0p	1566 1567	4.8 4.8	18 ~~18~~ 243	1 48.6
37403,106)	MF8793 ch.21860 not sep.	G5	1781 1782	8.9 8.4	13 343	2 6.0
37371,56)	~~ch.21860~~ not sep.	B8	1833 1835	8.0 8.0	29 ~~13~~ 376	2 9.5
C1616)	MF1333' bracketed ch.40953 comb. in H.D.	B5	2434 ~~1825~~ 2435 ~~1826~~	5.4 6.8	51 665	2 54.5
37417,115)	ch41721 not sep.	B9	3245 3246	6.9 7.8	22 617	3 ~~36~~ 55 6
37373,3)	ch.41721 not sep.	F8	2845 2846	8.6 8.6	19 549	3 26 0

Plate		Sp.	Alb. no.	Mag.	B.D.	
37406,195			3664	6.6		4 29.9
d. 41789		B1	3665	5.8	+53 779	
37566,52	MF 8308		p.0.7, s 2" —	8.2		
d. 40069		G5	3689	7.3	+6 696	4 26.2
38125,99	19794	G5	4067	7.9		4 54.4
d. ~~38125~~ 41789	24535		4068	8.8	+50 1103	
36997,45		A3	4211	6.1	+27 732	5 4.1
chart MF1124		—	—	8.1		
37366,249		—	4543	9.4		5 24.1
30861		G0	4544	7.6	+54 902	
37602,127			4598	6.0	+16 794	5 27.0
		B9	4599	6.5		
			5512	8.7	+26 1201	
		A0	5513	8.4		
			5719	7.8	+17 1286	
		F8	5720	7.2		
			6084	8.4	+2 1467	
		G5'	—	7.9	1468	
			6166	9.4	+56 1173	
		G	6168	8.6		
			7249	8.1	+27 1567	

Cont. Bk. 198, 4

Southern Stars Albany and San Luis

Plate	Sp. plate	Sp.	Alb. No.	Mag.	BD	
B26037	~~[illegible]~~ a B42084	K0	3 56 1483 ✓	8.9	-49°877 ✓	
B4636		K0	3 11 1528 ✓	9.6	-39°958 ✓	
B49425		K2	3 23 1624 ✓	9.6	-72°240 ✓	
B26037	B20263	G5	3 23 1629 ✓	9.4	-51°806 ✓	
B41024	a4177	F2	3 24 1637 ✓	9.5	-52°403 ✓	
B4636		K2	3 26 1647 ✓	9.2	-38°1158 ✓	
B41024	a4177	K5	3 27 1657 ✓	8.9	-55°533 ✓	
B49153	~~[illegible]~~ 46134 B~~20538 49153~~	K	" 1660 ✓	9.6	-79°101 ✓	
B5708		—	3 50 1872 ✓	9.0	-47°1189 ✓	
"		—	" 1873 ✓	9.6	-47°1190 ✓	
B28889		A3 = HD 24988	3 53 1896 ✓	8.0	-40°1148 ✓	
B39836	MF8378	A2	4 6 A 3396 ✓	9.2	-2°826 ✓	
B4336	B41072	G0	4 17 2113 ✓	8.6	-2~~5~~6°1643 ✓	
B30635		K0	4 26 2194 ✓	8.9	-46°1426 ✓	
B15662	42691 A5743	K5	4 33 2263	9.4	-6~~1~~0°351 ✓	
B57829	46134 46107	M0	4 37 2294 ✓	8.8	-74°297 ✓	
B32916	w 438 MF8215	G0	5 24 A 4553 ✓	10.2	-4°1144 ✓	
B31318		K7	5 36 2825 ✓	9.0	-36°2~~73~~1 37 ✓	
B57836	B15156	G	5 38 2847 ✓	10.0	-56°903 ✓	better plate?
B4625		— var. W Pic	5 40 2865 ✓	7.6	-46°1969 ✓	
"		M0	5 41 2870 ✓	8.9	-45°2133 ✓	
B35039		F2	5 44 2900 ✓	9.7	-60°467 ✓	better plate?
B57836	B15156 B18464, w. 86	G5 = HD 39978	5 51 2994 ✓	8.7	-57°903 ✓	~~better plate~~?
"	" " 87	A = HD 39977	" 2998 ✓	10.0	-57°904 ✓	
B4625		—	5 57 3065 ✓	9.9	-47°2135 ✓	

Cont. in 198 : 7

Proper Motion stars for Luyten

Plate	Design.	Pos. 1900	Mag.	Sp.	Sp. Plts
B 36253	✓ −46°29 ✓	0 16.4 −46 17	11.5	✓M (prob. early)	B39658 a6937 (no 86)
26775	✓Co. −46°2096	5 54.2 −46 57	11.5	F5	B42835, 15220
17684	✓ " −44°3045 ✓	6 54.9 −44 09	11.7	✓ — too ft.	B44377
12575	✓−45°1588	✓ 7 31.2 −45 04	11.5	— " "	B39929
26783	✓−40° 2734	~~9~~ 8 36.0 −40 37	10.0	a5 (prob. not nb. star very ft. for 10.0	MF7576, 7956
24642	✓−45° 3978 ✓	✓ 9 40.8 −45 18	11.7	✓ — Too ft.	MF 7842, 7949
19538	✓Co. −47°7000	✓ 11 32.9 −48 04	11.6	✓ — too ft.	n.s. B41498, 41217
38780	✓−48° 4791	✓ 12 20.7 −48 18	11.8	— dif. on plate	7835
"	✓−51° 5356	✓ 12 32.4 −51 28	11.2	— too sup. on start S.	7843
29241	✓Co. −42°8521	✓ 13 27.3 −42 11	11.7	— too ft.	B45391, 41596
14078	✓−40° 7021 ✓	15 25.6 −40 54	11.1	✓M1	12045, 12980
cf. B 37909, 89	✓ν Lupi ✓	15 15.0 − 47 57	6.3	✓ G0	
"	✓Comp		9.5	— too close	
B 17084, 232	✓ 46°8513 ✓	17 11.4 −46 32	6.5	✓ K0	MF 7867, 8027 14880
" ch. 33330	✓ "		10.0	— not sup. on chart	
33330	✓Co −44°11909 ✓	✓ 17 29.8 −44 14	11.5	✓G5	8027, ~~14880~~, 15482 15462
28736	✓−40° 8627	18 36.9 −40 8	11.2	K	MF ~~12008~~
10379	✓Co. −42° 15867 ✓	✓ 22 13.1 −41 54	11.7	✓ — too ft.	

Sp. fr S.G. Feb. 19. 1936

I 33544, I 33685

1	BD +68°	1065	F5
2	+68	1061	A3
3	+68	1064	K0
4	+68	1067	F5
5	+68	1069	F8

June. 1938

Var. for Miss Swope in Region 17 21 - 32.5
(marked on MF 9444)

	No.	Plate		
M (very poor) certainly [illegible] on 11997	4	MF11997, 12047,		A12102 M_2
Ko	10	MF8061, 11997, 12047	no. 1208 on MF8086 KO	
K?	20	MF11997		A12102 [illegible]
	26	MF12017, 11997, 12047, 7953		a6438 Mo
B3-5?	40	MF11986, 11997, 12047.		~~a6438 Mo~~
F5	42	In HD	MF7831 B40731 no. 12	HD158443 F5
M4	46	MF12047, 8061, 11997		
Ao	53	In HD	MF7831 B40431 no. 61	HD 155534 AO
Too poor. [illegible]	56	MF12047		
Too ff sp. [illegible]	59	MF12056, 12017		
Too ff.	61	MF12047		

comp. stars + var. marked on MF 18523

ao	var	MF23060
a3	A	"
ao	B	23856
ao	C	"
F2	D	23060
a2	E	"

Nov. 16, 1938

K5-M no. 6 MF12017, 8015, 8024.

Cape P.M. Cat.

Cont. from Bk 196, 203

No.	Mag.	C.P.D.	Plate Chart	Plate Sp.	Sp.
12701	11.7	49° 7661 ✓	B36699		— too fl
12704	10.7	49. 7665 ✓			a3
12713	11.1	51. 7511 ✓			A a2
12720	10.5	48. 7082 ✓			K Ko
12725	12.2	14 57 33.60 −46 17 9.0 A. 543			
12728	10.7	48. 7094 ✓			a0
? 12738	10.8	48. 7105 ✓			a5
12740	13.1	A. 26			
12741	11.3	48. 7106 ✓			a7
12742	11.6	14 58 29.4 − 44 48 37.1 A. 1267			— too fl.
12743	12.1	48. 7107 ✓			— too fl
12747	11.2	46. 7208 ✓			Ko
12748	10.1	45. 7206 ✓			a3
12749	10.4	50. 7584 ✓			a3
12754	10.8	50. 7591 ✓			a0
12756	12.6	A. 174			
12758	10.5	48. 7122 ✓			a2
12762	11.9	A. 447			
12768	11.8	50. 7611 ✓			— too fl
12769	10.7	45. 7218 ✓			F8
12770	10.6	49. 7744 ✓			F2
12772	10.6	46. 7223 ✓			a3
12775	10.7	46. 7224 ✓			Go
12780	10.7	50. 7637 ✓			a0
12785	10.6	51. 7611 ✓			sp. look up
12793	10.3	45. 7242 ✓			a5
12795	10.7	50. 7653 ✓			a0
12797	12.0	50. 7654 ✓			— too fl.
12798	10.9	48. 7185 ✓			F8
17800	12.0	A. 348			

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp.
✓12801	10.8	48°7186✓	B 36699		G0
✓12802	10.5	50. 7662✓			A0
✓12804	10.8	46. 7241✓			K2
✓12806	10.6	48. 7196✓			G0
✓12807	10.7	46. 7243✓			A2
✓12811	10.4	46. 7251✓			— sp.
✓12813	10.9	48. 7202			
✓12817	10.7	47. 6949✓			G0
✓12819	11.7	51. 7655✓			G
✓12822	13.0	✓ 50. 7699			— too fl.
✓12824	11.3	✓ 47. 6954			— superposed
✓12825	10.6	✓ 49. 7817			F8
✓12826	10.2	✓ 46. 7262			A7
✓12829	10.8	✓ 51. 7672			— sp. & fl.
✓12830	10.7	✓ 46. 7264			G0
12831	10.5	40. 6851			
✓12833	10.8	✓ 51. 7677			A2
✓12835	10.6	✓ 46. 7267			F0
✓12841	10.9	✓ 49. 7835			A2
✓12843	11.2	✓ 48. 7228			A3
✓12847	11.1	✓ 48. 7232			F5
✓12852	10.7	✓ 50. 7726			A5
✓12855	10.7	✓ 48. 7235			K2
12857	11.4	41. 7088			
✓12858	10.8	✓ 46. 7275			F5
✓12862	10.5	✓ 46. 7278			A0
✓12866	10.7	✓ 42. 6958			await plate look again on
✓12869	10.8	✓ 48. 7252			A2
✓12873	11.4	50. 7743			G0
✓12875	10.7	✓ 47. 6971			K0

No.	Mag.	C. P. D.	Chart	Plate Sp.	Sp
12877	10.8	✓ 49°. 7880	B 36699	12005 + 7873	G5
✓ 12879	10.3	✓ 43. 6937		~~G0~~	~~MF 12005~~ G0
✓ 12880	10.4	49. 7881	-		F0
✓ 12882	9.8	✓ 42. 6966			G
✓ 12886	10.7	✓ 50. 7759			B8
✓ 12887	11.8	✓ 48. 7267			— too pl.
✓ 12892	10.8	✓ 51. 7749			G0
✓ 12898	10.6	✓ 45. 7295			G0 -
✓ 12899	11.0	✓ 48. 7282			K0
12900	12.2	A. 163			
✓ 12901	10.7	✓ 51. 7758			G5
✓ 12906	10.8	✓ 51. 7764			a0
12907	10.8	40. 6891			
✓ 12910	12.9	48. 7291	B 40234		— too pl
✓ 12912	10.8	48. 7292			a0
12915	12.3	A. 801			
✓ 12917	10.5	49. 7908			F2
✓ 12918	10.4	50. 7789			F5
✓ 12919	10.4	45. 7307			~~F5~~ F2
✓ 12921	10.7	50. 7791			K0
✓ 12923	11.5	47. 7002			
12928	10.6	p.			
12930	10.9	f.			
✓ 12932	10.9	49. 7919			F2
✓ 12933	10.6	46. 7304			a2
✓ 12934	10.7	47. 7006			a0
✓ 12939	10.5	44. 7275			~~G5~~ K0
✓ 12940	10.9	49. 7925			F0
✓ 12941	10.9	50. 7799			a5
✓ 12946	10.5	49. 7929			G0
✓ 12947	10.7	50. 7807			a3

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp.
✓12948	10.6	49. 7933		12005 + 78	B9
✓12952	10.7	49. 7940			a2
✓12953	10.9	48. 7321			F0 ~~looking most flat~~
✓12955	11.8	47. 7014			— too fl.
12956	10.6	42. 6991			
✓12958	10.7	49. 7945			a2
12959	10.6	42. 6994			
✓12963	10.6	47. 7021			a0
✓12964	10.4	43. 6976			F0
✓12965	10.3	43. 6977			—
✓12966	10.4	43. 6978			F5
✓12968	11.2	48. 7333			G5
✓12971	11.7	47. 7029			G ~~* too fl.~~
✓12972	10.4	49. 7960			G5 :
✓12973	10.4	48. 7341			B8
12978	10.7	42. 7001			
✓12980	10.7	43. 6989			a2
✓12982	10.8	44. 7298			M0
✓12983	11.3	47. 7037			wrong star ~~B9~~ - F2
✓12985	10.0	45. 7345			F8
✓12986	10.7	47. 7040			F8 -
✓12988	10.5	49. 7978			a2 .
✓12991	10.5	48. 7367			F5 .
✓12992	10.6	45. 7348			a
✓12994	10.7	50. 7852			a0
✓12996	11.4	48. 7374			check Ident.
✓12997	10.5	43. 7001			a3
✓12998	10.9	47. 7051			K0 -
✓12999	10.4	✓ 51. 7860			
✓13002	10.2	45. 7355			a0

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp.
13007	12.0	✓51. 7878			—
✓13008	10.4				G0
✓13016	10.0	43. 7017			G0
13017	12.5	A. 358			
✓13018	10.1	✓51. 7895			
✓13021	10.6	✓51. 7897			
✓13022	10.5	47. 7074			A5 -
✓13024	10.6	✓51. 7899			
✓13026	10.3	49. 8012			A2 ·
✓13027	10.0	44. 7333			A5 -
✓13028	10.6	50. 7893			A2
✓13032	10.6	✓51. 7906			
✓13033	10.1	47. 7079			F8 -
✓13035	10.3	44. 7335			F5
✓13038	11.0	50. 7904			F8 ·
✓13040	10.3	47. 7080			F2 -
✓13043	11.8	43. 7032			G5 ·
13044	10.5	41. 7161			
✓13045	10.6	43. 7029			— - superposed
✓13048	10.5	49. 8026			K0 ·
✓13049	10.5	47. 7083			F8 -
13053	10.5	40. 6944			
✓13054	10.4	48. 7420			K0 ·
✓13056	11.0	45. 7382			G0 -
✓13058	10.5	43. 7039			A7
✓13061	10.7	46. 7380			A0
✓13063	10.4	49. 8037			F0 ·
✓13064	10.0	45. 7386			A0 ·
✓13067	11.5	45. 7387			G0
✓13069	10.1	50. 7950			

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp.
✓13070	10.8	49.8044			F5
✓13071	10.3	44.7359			Go
✓13072	10.4	46.7389			a3
✓13073	10.6	47.7095			a2
13074	10.6	40.6949			
✓13075	10.0	47.7099			Go
✓13077	10.9	48.7435			a3
✓13078	10.3	47.7102			a5
✓13079	10.9	50.7970			
✓13081	10.6	49.8062			F5
13082	10.5	40.6951			
✓13083	11.1	46 7397			F8
✓13084	10.6	46.7398			Go
13086	10.6	40.6954			
✓13087	11.0	48.7444			Ko
✓13088	10.9	50.7972			
✓13089	11.0	50.7973			
✓13090	11.0				
✓13093	10.4	46.7404			F5
✓13095	10.8	✓ 51.7978			
✓13097	10.8	48.7453			a2
✓13100	11.0	50.7982			
✓13101	10.9	48.7455			F5
✓13102	10.1	43.7064			Go
✓13103	10.2	46.7409			a5
✓13104	10.6	46.7411			F5
✓13105	10.8	48.7456			a2
✓13106	10.8	48.7457			ao
✓13107	10.9	50.7990			
✓13108	11.2	48.7460			Fo
✓13110	11.4	49.8072			

No.	Mag.	C. P. D.	Chart	Plate Sp.	Sp.
✓13111	11.0	51°.7998			a5
✓13112	11.4	46. 7412			G0
✓13114	11.4	51. 8003			G0
✓13115	10.5	47. 7120			F0
✓13116	10.4	48. 7466			B9
✓13117	11.2	50. 8002			
✓13119	11.2	50. 8004			
✓13120	10.5	45. 7404			a3
✓13121	10.8	47. 7122			F2
✓13122	10.7	49. 8085			— superposed
✓13123	10.6	50. 8011			
✓13124	10.4	51. 8009			a0
✓13125	11.0	51. 8011			K0
✓13126	10.5	51. 8012			a2
✓13130	11.0	50. 8013			G5
13132	10.6	40. 6976			
✓13133	10.8	51. 8023			K0
✓13134	11.1	50. 8018			G0
✓13135	11.1	50. 8020			K2
13136	10.6	41. 7198			
✓13137	10.8	48. 7481			F5
✓13138	11.1	48. 7482			K0
✓13140	10.7	48. 7487			G0
✓13141	11.1	48. 7486			G0
✓13142	10.7	48. 7488			F2
✓13144	10.9	48. 7489			a0
✓13146	10.5	50. 8029			
13147	10.2	39. 6714			
✓13148	10.6	44. 7394			F5
13149	10.3	40. 6987			

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp.
✓13150	10.6	50.8031			F2
✓13152	10.8	51.8047			K7
✓13153	11.1	48.7491			
✓13154	10.8	50.8034			a0
✓13155	10.9	51.8049			
13156	10.6	41.7209			
✓13157	11.0	48.7492			
✓13158	10.6	46.7440			a2
✓13160	11.1	50.8036			
✓13163	11.1	48.7494			
✓13164	11.1	48.7495			
✓13166	11.0	51.8062			
✓13167	10.3	47.7137			
✓13168	11.0	51.8064			a0
13169	10.6	49.8124			
✓13172	11.0	50.8048			
✓13173	11.0	50.8049			
13174	10.3	44.7402			
✓13177	10.9	50.8059			
✓13178	11.0	48.7513			
13179	10.9	49.7517			
13180	10.3	40.6999			
13181	10.6	45.7429			
✓13182	10.8	50.8062			
✓13183	10.5	51.8075			a0
✓13186	11.0	50.8066			
✓13188	11.1	48.7521			
✓13190	10.5	51.8079			a0
✓13191	11.0	50.8071			
✓13192	11.1	50.8072			

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp.
13193	10.8	49. 8131			
13194	11.8	A. 329			
✓13196	11.1	48. 7525			
✓13197	10.8	50. 8074			
✓13198	11.1	50. 8079			
✓13199	10.9	48. 7527			
✓13200	10.3	50. 8081			
✓13201	10.7	47. 7152			
✓13203	10.5	48. 7529			
13206	10.6	41. 7224			
13207	10.9	49. 8139			
✓13208	10.7	50. 8091			
✓13209	11.2	50. 8097			
✓13210	10.5	50. 8096			
✓13211	10.9	48. 7532			
✓13212	10.9	50. 8099			
13214	10.9	49. 8145			
✓13215	10.8	50. 8101			F0
✓13216	10.8	50. 8103			A0
13217	11.0	41. 7229			
✓13218	10.7	51. 8100			A3
✓13219	11.0	50. 8107			F5
13220	11.3	49. 8146			
✓13221	10.1	46. 7463			F2
✓13222	10.4	50. 8110			A0
13223	10.9	49. 8147			
✓13224	10.5	50. 8111			
✓13225	10.8	50. 8113			K5
13226	10.6	49. 8149			
13227	11.5	A. 466			

No.	Mag.	C. P. D.	Chart	Plate Sp.	Sp.
13228	10.7	49. 8151			
✓13230	10.9	51. 8105			a0
13231	10.9	45. 7438			
13232	11.0	42. 7072			
13233	11.0	50. 8116			
✓13234	12.0	48. 7545			
✓13235	10.8	48. 7546			
✓13236	10.8	51. 8109			K2
13237	12.1	A. 731			
13238	9.9	44. 7422			
13239	10.4	50. 8123			
13241	10.5	49. 8159			
13242	10.5	50. 8128			
13243	11.6	49. 8160			
✓13244	11.0	51. 8113			a2
✓13246	10.5	48. 7553			
13247	10.5	49. 8162			
✓13248	11.0	51. 8115			a0
✓13249	10.9	51. 8117			F5
13252	10.6	49. 8169			
13254	10.6	41. 7234			
13255	9.5	44. 7427			
✓13257	11.1	51. 8126			G5
✓13258	11.8	47. 7173			
13259	10.7	41. 7235			
✓13261	10.6	46. 7478			
✓13262	10.9	51. 8129		MF12025 blurry	— superposed ~~look up on other pl.~~
13263	10.2	49. 8175			
13264	10.4	49. 8177			
13265	10.9	50. 8140			

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp
13266	10.9	40. 7013			
13268	10.1	49. 8181			
✓13269	10.9	48. 7562			
✓13271	10.2	47. 7180			
13274	11.2	40. 7014			
13275	10.8	50. 8149			
13276	10.6	50. 8150			
✓13277	10.7	46. 7483			
13278	10.5	50. 8152			
✓13279	10.7	46 7484			
✓13280	10.0	46. 7485			
13281	11.1	40. 7016			
13282	11.1	50. 8154			
✓13283	10.7	47. 7186			
✓13285	10.3	47. 7188			
13286	12.4	A. 753			
✓13287	10.7	48. 7575			
13289	10.9	50. 8159			
13290	11.5	49. 8204			
13291	11.0	48. 7586			
13292	10.4	43. 7125			
13293	11.1	40. 7018			
13294	10.6	50. 8166			
13295	10.8	A. 384			
13297	10.6	49. 8215			
13298	11.1	51. 8159			
13299	11.0	50. 8173			
13300	9.9	44. 7445			
✓13301	11.0	48. 7588			
13302	11.5	42. 7082			A
13303	10.4				

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp.
✓13304	11.2	48. 7589			
13305	11.0	50. 8177			
13306	9.8	43. 7129			
13308	11.8	41. 7243			
13309	11.0				
✓13310	10.1	47. 7198			
13311	10.7	50. 8180			
13312	11.0	40. 7021			
✓13313	10.5	47. 7199			
13314	11.0	40. 7022			
13315	11.3	51. 8169			
13316	11.0	49. 8227			
13317	11.0	49. 8228			
13318	11.4	45. 7460			
13320	10.9	50. 8182			
13321	10.8	50. 8183			
✓13322	10.7	48. 7599			
13323	11.2	49. 8230			
13324	12.7				
13326	10.6	49. 8232			
13327	12.4	49. 8235			
13328	11.2				
13329	11.0	40. 7024			
13330	11.1	51. 8175			
13331	10.8	41. 7248			
13332	10.8	51. 8177			
13333	10.6	42. 7084			
13334	10.2	45. 7467			
13335	10.5	50. 8194			
13336	10.8	50. 8193			

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp.
13337	10.9	49. 8242			
13338*	14.	—			
13340	10.9	40. 7027			
✓ 13341	11.1	48. 7606			
13342	11.1	41. 7250			
13343	11.2	50. 8197			
13344	11.2				
13345	11.1	50. 8199			
13346	10.7	45. 7470			
✓ 13347	10.6	47. 7206			
13348	10.3	44. 7458			
13349	10.6	40. 7028			
13350	10.7	51. 8195			
13351	11.0	50. 8204			
13352	11.1	48. 7613			
13353	10.6	40. 7029			
13356	11.4	49. 8255			
13357	12.1				
13358	10.7	50. 8209			
13359	11.1	49. 8259			
13360	10.6	51. 8201			
✓ 13361	10.8	46. 7512			F8
13362	11.1	51. 8203			
13364	10.9	49. 8261			
13365	11.1	51. 8206			
✓ 13367	10.9	46. 7513			A3
13368	11.0	51. 8208			
13369	10.8	50. 8215			
13370	11.0	40. 7034			
✓ 13372	10.6	47. 7213			

No.	Mag.	C.P.D.	Chart	Plate Sp.	Sp.
13374	11.0	48.7621			
13375	11.1	49.8267			
13376	11.1	48.7622			
13377	10.6	49.8268			
13378	10.8	48.7624			
13379	10.9	42.7089			
13380	11.2	48.7625			
13381	10.8	51.8218			
✓13382	10.6	46.7518			a3
13383	11.0	50.8223			
13384	10.7	50.8224			
13385	11.1	48.7626			
13386	10.7	51.8220			
13387	11.1	50.8227			
13388	10.8	41.7254			
13389	11.2	49.8275			
13390	10.9	41.7255			
13391	11.0	40.7036			
13393	11.0	50.8232			
13394	10.9	51.8224			
✓13396	10.2	47.7223			
✓13397	10.7	46.7522			F8
13398	11.1	50.8238			
13399	10.7	50.8240			
13400	10.9	51.8230			
13402	11.0	48.7640			
13403	11.3	40.7037			
13404	10.9	50.8243			
13405	11.1	50.8246			
13406	10.6	49.8284			

No.	Mag.				
✓ 13408	10.7	47. 7227			
13409	10.7	51. 8237			
13410	11.1	50. 8248			
13411	10.4	45. 7486			
13412	11.2	40. 7038			
13413	11.1	50. 8254			
13414	10.6	51. 8240			
13415	10.6	42. 7093			
13416	11.0	48. 7644			
13417	11.2	49. 8286			
13418	11.1	51. 8242			
13419	11.0	49. 8288			
13420	11.1	51. 8244			
13421	10.2	45. 7487			
13423	11.0	50. 8259			
13425	11.1	48. 7646			
13426	11.0	41. 7261			
✓ 13428	10.3	46. 7534			KO
13429	10.8	48. 7649			
13430	11.1	48. 7648			
13431	10.6	43. 7158			
13432	10.9	51. 8249			
13433	10.5	50. 8271			
13434	10.5	43. 7159			
13435	10.7	50. 8276			
13436	10.8	42. 7095			
13437	10.4	50. 8281			
13438	10.4	50. 8282			
13439	11.5	49. 8303			
13440	11.1	50. 8284			

13441	11.1	51.8254
13442	11.0	40.7044
13443	11.3	49.8306
13444	11.9	44.7482
13445	10.7	
13448	11.0	40.7045
13450	11.0	50.8291
13451	10.9	48.7658
13452	10.7	51.8262
13453	11.1	50.8294
13454	11.1	49.8310
13455	10.5	44.7485
13456	10.4	50.8295
13458	10.9	49.8313
13459	11.0	50.8296
13460	11.0	51.8265
13461	11.1	50.8300
13462	10.8	50.8299
13463	10.7	50.8298
13464	11.0	50.8301
13465	10.9	49.8318
13466	11.1	49.8319
13467	12.9	w
13468	11.0	40.7048
13469	12.0	5
13471	10.9	49.8323
13472	10.7	40.7049
13473	10.8	49.8326
13474	11.3	48.7673
13475	11.1	40.7050

13476	11.0	48. 7675
13477	11.1	50. 8306
13479	11.0	48. 7676
13480	10.4	45. 7505
13481	11.1	50. 8312
13482	10.9	51. 8279
13484	10.4	49. 8334
13485	10.7	40. 7053
13486	10.8	48. 7680
13487	11.2	39. 6761
13490	10.8	48. 7684
13491	11.1	50. 8318
13492	10.8	51. 8287
13493	10.9	51. 8288
13494	10.6	49. 8338
13495	11.1	51. 8290
13496	10.5	49. 8340
13497	11.1	48. 7685
13498	11.0	42. 7106
13499	11.1	51. 8294
13500	11.2	49. 8342
13501	11.0	50. 8322
13502	11.1	51. 8295
13503	11.0	48. 7690
13504	11.0	50. 8324
13506	11.0	50. 8325
13507	10.4	46. 7562
13508	12.0	50. 8328
13509	10.9	
13511	10.9	48. 7694

13512	10.7	49.8349
13513	11.1	48.7699
13514	10.7	44.7497
13516	11.1	50.8331
13517	10.7	48.7704
13520	11.1	48.7705
13521	11.0	48.7706
13522	10.8	49.8350
13523	10.6	50.8335
13524	11.0	48.7710
13525	11.0	46.7564
13527	10.9	40.7060
13528	11.2	50.8339
13529	10.5	50.8341
13530	11.1	50.8343
13531	11.0	48.7717
13532	11.0	50.8345
13533	11.1	42.7110
13534	10.8	48.7722
13535	11.2	49.8360
13536	10.9	49.8362
13537	10.8	51.8321
13538	10.7	40.7062
13539	11.2	49.8365
13540	10.7	41.7276
13541	11.0	41.7278
13542	10.9	
13543	10.9	50.8356
13544	11.1	46.7570
13545	10.8	42.7114

13546	10.9	49. 8369
13547	11.1	51. 8326
13549	10.7	41. 7279
13550	10.6	51. 8327
13551	11.0	49. 8370
13553	10.9	49. 8372
13554	10.6	50. 8366
13555	11.0	50. 8368
13556	11.3	49. 8375
13557	10.4	41. 7280
13558	11.2	48. 7734
13559	10.8	48. 7736
13561	10.8	44. 7505
13562	11.2	42. 7119
13563	11.1	51. 8334
13564	10.7	50. 8377
13565	12.5	41. 7282
13566	11.2	
13567	11.1	49. 8378
✓13568	10.8	47. 7272
✓13569	10.6	47. 7274
13571	10.9	49. 8381
13573	10.7	42. 7120
13574	11.4	41. 7284
13575	11.1	50. 8384
13577	11.1	51. 8340
13578	11.0	50. 8385
13580	11.0	50. 8387
13581	10.4	45. 7536
✓ 13582	10.6	47. 7278

13583	11.0	49. 8392
13584	10.9	51. 8351
13585	10.8	40.7064
13586	11.1	51. 8353
13587	11.2	48. 7753
13588	10.9	48. 7754
13590	11.3	49.8398
13591	11.1	46. 7580
13592	10.8	41. 7288
13593	11.0	44. 7511
13594	10.9	50. 8398
13595	11.1	45. 7543
13596	10.5	51. 8362
13597	10.6	50. 8404
13598	11.2	50. 8403
13599	11.2	48. 7761
13600	10.8	44. 7514

Cont. from 198:16

Plate	Spectrum	~~S~~ San Luis No.	Mag.		D.M.
-B 50558 ✓	B8	S 7732 } 12.0	7.7	-61	2933 ✓
		33 }	8.1	-44°	2935 ✓
-B 35435 ✓		S 7773	10.2	㊸	7793 ✓
-B 37555 ✓	G0	A 10092 }	6.8	11	3246 ✓
		93 }	8.9		3248 ✓
-B 37555 ✓		A 10167	8.3	6	3532 ✓
	G5	68	8.0		
-B 50558 ✓		S 7888	8.3	65	1844 ✓
-B 15293 ✓		S 7934 12.3	9.6	56	5221 ✓
-B 33240 ✓		A 10349	9.2	15	3481 ✓
-B 33240 ✓		A 10435	9.6	18	3424 ✓
-B 21766 ✓	K5	A 10467 }	6.9	3	3329 ~~2929~~ ?
		68 }	10.1	-52°	3330 ~~2930~~
-B 15293 ✓		S 8124 13.6	8.1	(51)	5847
-B 15293 ✓	B3	S 8136 }	4.9	55	5215 ✓
		37 }	9.2		5216 ✓
B 43670 ~~B 5281~~ can't mark, in cluster, 5** in field		S 8201	8.0 a 12 46 14.9	-59° 40.2 59	4547
-B 11193 ✓		A 10645 }	9.3	17	3725 ✓
	A0	46 }	6.8		3726 ✓
-B 46546 ✓		S 8283 }	8.2	32	9088 ✓
	G5	84 }	7.2		
-B 29361 ✓		S 8287	9.9	46	8337 ✓
-B 46546 ✓		S 8307 13.0	9.6	30	10299 ✓
-B 25482 ✓	A0	A 10877	6.8 }	18	3562 ✓
		10878	7.3 }	-33°	
-B 46546 ✓		S 8357	9.6	㉜	8842 ✓
-B 40174 ✓		S 8410 }	8.2	67	2223 ✓
	B8	11 }	5.0		2224 ✓
-B 29361 ✓		S 8431	9.7	46	8532 ✓
-B 25482 ✓		S 8441	9.0	23	10996 ✓

Plate	Sp.	San L. No.	Mag	D.M.	
B 40124 ✓		S 8491 13.3	8.3	−59	4940 ✓
B 40124 ✓		S 8580	9.0	62	3326 ✓
	B₀	81	7.6		
B 2936 ✓		S 8608	9.9	46	8718 ✓
B 43375 ✓		S 8614	9.9	37	8719 ✓
B 13165 ✓		S 8645	7.0	25	9900 ✓
	A₂	46	5.5		
B 43375 ✓		S 8654	9.9	37	8769
B 43375 ✓		S 8661	9.7	40	8031 ✓
B 53860 ✓	B9	S 8696	5.7	53	5725 ✓
		97	7.1		
B 9151 ✓		S 8705 13.6	6.9	61	3926 ✓
B 43375 ✓	F₅	S 8715	7.4	33	9259 ✓
		16	7.7		
B 43375 ✓		S 8742	9.4	38	8772 ✓
B 9151 ✓	B9	S 8829	8.0	66	2370 ✓
		31	9.8		2371 ✓
B 13165 ✓		S 8834	9.2	31	10729 ✓
	B₅	35	4.8		
B 41310 ✓		S 8903	10.0	40	8299 ✓
B 40417 ✓	F8	A 11401	8.9	3	3552 ✓
		02	8.8		
B 9151 ✓	B9	S 8913 13.9	7.6	62	3807 ✓
		14	9.8		3809 ✓
B 30476 ✓		S 8934	9.9	78	839 ✓
B 3769 ✓		S 8982	7.6	53	5879 ✓
	F₂	83	8.6		5880 ✓
B 41310 ✓		S 8990	9.4	41	8483 ✓
B 3769 ✓		S 9071	9.8	46	9191 ✓
B 3769 ✓		S 9078	10.0	46	9208

Plate	Sp.	S. L. No.	Mag	D.M.
-B 50132 ✓ ✓	G₀	S 9123 } 24 }	5.1 7.0	-57 6619
-B 30476 ✓	F₈	S 9152 } 14.3 53 }	9.1 } 9.4 }	79 760 ✓
-B 40917 ✓	G₀	A 11717 } 18 }	7.6 } 7.6 }	7 3834 ✓
-B 41310 ✓		S 9178	8.5	44 9321 ✓
-B 25724 ✓	K₀-Ⓐ ↙?	S 9308 } 09 }	5.9 9.2	45 9302
-B 50132 ✓	F₀	S 9350 } 51 }	8.8 5.9	64 2977 ✓
-B 44522 ✓	F₅	S 9419 9420	5.0 7.5	24 11661 ✓
-B 25724 ✓	B₉	S 9526 } 14.7 27 }	7.3 6.1	47 9543 ✓
-B 44522 ✓	G₀	S 9606 } 07 }	8.9 8.6	27 10194 ✓
-B 44758 ✓	K₀	S 9700 } 15.1 01 }	9.7 9.2	31 11773 ✓ 11774 ✓
-B 25724 ✓		S 9714	10.5	47 9790 ✓
-B 25724 ✓		S 9721	10.0	47 9805 ✓
-B 41578 ✓	F₅	A 12319 } 12321 }	6.7 8.9	17 4283 ✓ 4284 ✓
B 44011 (op.) -B 44758 ✓	Aop	S 9811 } 12 }	6.6 8.8	-37 10171 ✓
-B 49623 ✓	G₀	S 9861 } 62 }	8.2 9.8	42 10390 ✓ 10392 ✓
-B 25724 ✓		S 9867	9.6	48 9950 ✓
-B 49623 ✓	A₀	S 9912 } 15.7 13 }	8.0 6.8	41 9965 ✓

Plate	Sp.	~~#~~ S.L. No.	Mag	D.M.	
B 49623 ✓		S 9919	9.5	−44	10172
B 49623 ✓		S 9927	9.8	44	10191
B 34286 ✓	F_5	S 9932 33	9.9 9.4	73	1607
B 41578 ✓	A_5	A 12528 29	8.9 6.7	19	4128
B 28401 ✓		S 9941	10.	48	10062
B 41578 ✓	A_3	S 9950 51	7.6 7.4	24° 23	12155
B 28401 ✓		S 9952	9.6	48	10073
B 41242 ✓	F_5	A 12621 22	6.6 6.5	8	4031 4032
B 49623 ✓	K_0	S 9994	7.3 (H.D. gives 10.8)	40	9794
B 49623 ✓	A_0	S 10071 72	8.0 6.6	41	10245
B 41643 ✓		S 10106 15.7	8.1	77	1168
B 49623 ✓		S 10134 R. Lib	9.6 var	44	10427 154716
B 41643 ✓		S 10156	10.5	78	1063
B 28401 ✓	A_2	S 10185 86	7.4 7.7	49	10122 10123
B 28401 ✓		S 10264	9.8	50	10059
B 3624 ✓	B_3	S 10272 73	3.8 7.8	38° 37	10797
B 28401 ✓		S 10286	9.7	50	10075
B 38886 ✓	A_2	S 10298 99	8.5 4.9	57	7500
B 41242 ✓	F_8	A 12928 29	4.2 7.2	10	4237
B 44924 ✓	B_1	A 12948 49	2.9 5.1	19	4307 4308

Plate	Sp.	S.L. No.	Mag	D.M.	
-B 38886 ✓		S 10358 16.0	10.3	-50	10154
-B 3624 ✓	G_0	S 10392	6.7	32	11456
		93	7.5		
-B 3624 ✓	F_8	S 10485	8.8	34	10911
		86	8.6		
-B 38886 ✓		S 10533	10.	51	10071
-B 3624 ✓	A_0	S 10562 16.3	7.1	32	11687
		63	7.6		
-B 44924 ✓	B_5	S 10597	5.2	23	12861
		98	5.9		
-B 3624 ✓		S 10613	10.1	34	11005
-B 54075 ✓		S 10622	10.2	44	10891
-B 54075 ✓		S 10626	9.7	44	10894
-B 3624 ✓		S 10633	9.7	38	11008
-B 54075 ✓		S 10651	9.7	44	10924
-B 16093		A 13317	var	16	4307
-B 54075 ✓	Oe5	S 10770 16.6	7.1	48	11070
		73	5.6		
-B 13982 ✓	F_0	A 13389	8.0	7	4337
-B 54075 ✓		S 10843	8.7	46	11019
	O_e	46	7.5		
-B 54075 ✓		S 10861	9.4	44	11124
-B 54075 ✓		S 10881	9.1	43	11137
-B 59710 ✓	A_5	S 10889	7.3	49	10998
		90	7.3		
-B 54075 ✓		S 10907	9.8	44	11193
-B 59710 ✓		S 10935	9.6	50	10887
-B 48117 ✓		S 10991	8.9	44	11285
-B 48117 ✓		S 10992	9.4	44	11287
-B 48117 ✓		S 10996	9.7	44	11290

Plate	Sp.	S. L. No.	Mag.	D.M.	
-B 40482 ✓		A 13606 }	8.3	-19	4471
	B8	07 }	6.3	-	
-B 59710 ✓		S 11029	10.	52	10369
-B 48117 ✓		S 11042	9.5	43	11300
-B 48117 ✓		S 11134 17.0	10.	44	11438
-B 5336 ✓		S 11152	10.1	28	12821
-B 5336 ✓		S 11162	10.	27	11467
-B 59710 ✓	B2	S 11180 }	7.0	46	11258
		11181 }	7.9		
-B 31998 ✓		S 11193	8.5	41	11336
-B 31998 ✓	F5	S 11228 }	6.9	38	11663
		29 }	9.4		
-B 46518 ✓		S 11230	9.4	44	11534
-B 5336 ✓	K0	S 11257 }	5.3 }	26	12026
		58 }	5.3 }		
-B 5336 ✓		S 11304 }	6.9	24	13255
	K0	05 }	5.4		
-B 41362 ✓	G0	A 13919 }	9.7 }	6	4580
		20 }	9.7 }		
-B 50582 ✓		S 11364	9.0	56	8215
-B 46518 ✓		S 11370	8.5	44	11668
-B 31998 ✓		S 11376 17.3	8.9	41	11570
-B 31998 ✓		S 11389	9.6	37	11549
-B 46518 ✓		S 11400	9.5	43	11684
-B 46518 ✓	B9	S 11413 }	5.8	45	11531
		14 }	7.1	~~45~~	#
-B 46518 ✓	B9	S 11448 }	6.5	43	11741
		49 }	9.8		
-B 19112 ✓		S 11505	9.1	44	11854
-B 19112 ✓		S 11616 17.6	9.8	43	11933

Plate	Sp.	S. L. No.	Mag.	D.M.	
B 47997 ✓		S 11663	9.3	−62	5691
−B 31470 ✓	G5	S 11703 } — }	7.0 9.0	33	12476
−B 31470 ✓	A0	S 11756 } 57 }	8.7 6.5	30	14802
−B 50582 ✓		S 11788	9.2	49	11779
−B 11351 ✓		A 14428	8.2	2	4480
−B 47997 ✓		S 11838	9.6	64	3739
−B 31470 ✓	K5	S 11852 } 53 }	5.3 7.0	30	15035
−B 43797 ✓	Oe5	S 11894 } 11.9 95 }	9.4 6.9	23	13804
−B 41650 ✓	A0	S 11913 } 14 }	7.6 9.2	75	1409

cont. 198 31

March 31, 1936

Boss plates cont. from 196, 219

San Luis

✓ 7537	Mo	MF 7807
✓ 7696	Go	MF 7841
✓ 7071	Ao	in H. D.
✓ 7526	Go	B 42420
✓ 7588	Ko	"
✓ 7378	Ko	B 19003
✓ 7473	K	B 19003

Finite pl. All other plates can again show nothing.

~~6080~~ ✓ 6802	K5	B 15319
✓ 4360	K5	B 15516

Corrected plate

Apr. 1, 1936

✓ 6559 — Too close to 6557, 8

✓ 6807 Oe5 MF7907
also checked by several X plates on which
~~[illegible]~~ 4542 is seen.

✓ 6916 A
Seen best on B13056

✓ 7773 n.s. on B15605. 41427

✓ 10167, 8 Combined light.

✓ 7733 F5 B38757

✓ 7420 Mo MF7907

✓ 6632 MF 8004
MF 7957 Bright lines suspected

A ✓ 9180 F0
vHEa I32514 I25187
N

April 6, 1936

a 10645, 6
√10645 F0
10646 A2 B40456

√a10349 Too close B21252
— B21639
— B18987
— B40448

10435 K-M B21252
— B21635
— B18987
√ K5 B40448

√8124 In H.D. F2

√7934 K7 MF7843

√8137 — Too flt. and close

√8253,4 Combined spect. B40429

√8307 F5 B40429

√8357 — " and [illegible] [illegible]
— Try B13058 n.s.

April 8, 1936

√S 8287 ~~K8~~ ~~B39199~~
M0 on 39283 better than 39199

√8431 K7 39199 and 39283

8608 Too faint 39199, 40084, 39283
√ Best on B37609, perhaps M.
M1 on A5467 A plate? Yes, a good one found by MLM

√8441 G5 B40315

√A10877,8 Combined light.

√8491 M0 B39228 MF 17826, 7508

√8580, x B lines seen to N. of 8581
B39228, 19892, 35759 (long) and others

√8410 A0 B38829

√8715, 6 Combined light.

√8614 K2 B45391

√8654 G0 "

April 28, 1936

✓S 8742 G5 B+5391

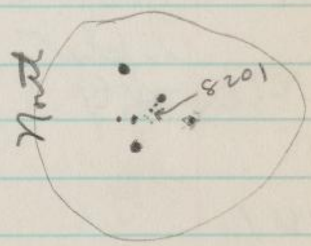
✓8661 G5 "

✓7888 K0 MF7851

✓10467, 8 = K0 I 31541

also x 15728 M0 (A8 sft)

✓8201 K0 MF7823 chart MF17781



✓8696, 7 Combined light.

✓8705 B5 B13097

Brighter star somewhat mottled in H.D.

✓8914 A7 B21696 MF8025

✓8829, 31 = A0 MF7951

~~chart MF17781~~

April 9, 1936

San Lin
✓ 8903 A2 B37601

✓ 8990 F8 "

✓ 9178 M0 " and 39367

✓ A11401,2 Combined B40417

✓ A11717,8 Combined "

8645,6
✓ 8645 A See remark in H.D.
also B13165

✓ 8834 — Too ft. & close to 8835

✓ 9152,3 Combined light

✓ 8934 G5 B19160

✓ 9606,7 Combined

✓ 9419,20 Combined B13160
B13166 I33927

✓ 9700,01 K0 K0 on F12015
B39299 No. 38. See trails on following edge of image where there are two narrow trails, and one on other spectra

April 9, 1936

9811,12

✓ 9812 — ? Too much suf. on 9811
Chart image does not show 9812

✓ 9932,3 Combined light B 37636
15586

a ~~152~~
✓ 12528,9 — F0 B39299
Seen as fl. image on pre. side 12529

✓ 9950,57 — B 39332 two dim
B 39229 " "
Combined light B21584

12319,21 Chart B17530
✓ 12321 F5 B40622

April 10, 1938

Sam Lum

8982,3

✓ 8982 — MF 8031, 7872, 7844 7917
Directly s. f 8983 and a mag. or more
fainter than 8983 photographically
although Boss gives it brighter

Sp. vis only as a blur at red end of 8983
No. 50 in B 40108

9071 — B 38800, MF 7885 14.2-47
✓ B 39200 A 4354 Mo
Mo Try MF 7845 (out of stock)

9078 — B 38800 MF 7885
✓ B 39200 seen but very indistinct A short image,
evidently red
M3 Look up A plates, and MF 7845
A 4354 M3

chart 35747
✓ 9350,1 9350 — MF 7862 7973
Too close to 9351

chart 35747
✓ 9723,4 Combined MF 7878

Apr. 20, 36

San Luis

✓ 9919 — F2 — B37602

✓ 9927 — F5 — "

9861,2 — 9862 seen on B49623 chart, but very faint

✓ 9862 — No 391 on B37602
where 9862 is barely glimpsed too faint to classify.

Seen on A 4373 but not good enough

19654 too broad
19404 too broad.
B53244 too poor

✓ 9526,7 — Combined object

✓ 9308,9 — ch. B45724 shows wings of 2 lines
Can not better Class A of H.D.

April 13, 1936

San Luis

✓9714 B39069 n.S. 15.1 - 47
37909
A5 53283 two meas of p
B14310

✓9721 B39069 n.S.
37909
38480
M3 c 21246
B14310 11689
53233 n.S.

✓9867 15.3 - 48
K2 B14310

✓9912,3 15.4 - 41
Jt. n.S. on B19654
Combined light B53264

✓10134 A0 B21781

✓10071,2 Combined light B21781

Apr. 13, 36

a 12928, 9 No sep. on chart B14033

12929 – Probably two pl. to affect brightest star

a12621, 2 Combined light

Chart B ~~14033~~ 22850 shows two images very close together.

10106 In H.D. B9

10156 n.s. on B42633

40252

39516

12881

13469

R Leporis

B18968

21163

3.8 21335

20277

40300

10271, 3 – for 10273. [illegible] of Lupi

10392, 3 Combined light

B21253 40723 39300

Apr. 13, 36

✓

10485, 6 Crude, light
same plate as 10392, 3

R Lib
"Not seen on about a dozen I plates" and
about as many B's
MF 12992 shows a trace of violet end, but
no bright lines

April 14, 1936

San Luis

✓9941 n.s. B39069

— Mn F 8023 Seen but indefinite K?

also looked upon A4428, but not so good as 8023

✓9952 Mn F 8023 too much sup. on star to ?.

— F5?

Also see A4428, but poorer than 8023

✓10185,6 Combined light Mn F 8023

✓10264 — At broken portion of Mn F 8023

Apparently too faint anyway

95 Mn Fe 8029; Mn Fe 12999

✓10286 Mo Mn F 8023 B21832

T Mn Fe 8029

✓10298,9 — for 10298

✓10597,8 Combined light

a ✓12948,9 β Ser

— 12949 probably too faint to affect B1 sp.

April 14

✓10770,3 Combined object

✓10843 Oe B20080 (MWF 7837)

✓10907 B5 (Klein strip)

April 15, 1936

Van Lein

✓ 10889, 90 Combined light B39271

a ✓
13317 — B 40615, 40402, 40330
S6pl MF12311 ~~B40330~~ trace seen, very banded
No br. lines, but very ft.

✓ 10935 — B39271
K0 MF8047

✓ 11029 — B39271
B9 MF8047

✓ 11180, 1 Double lines
B2 B2 B13089 ft. to S.
Both apparently B2

✓ 10562, 3 Combined light
107 on B39300

1936phae.proj.22[illegible]C

April 15, 1936

San Luis

✓10613 Mo MF 12016

✓10633 A5 " "

✓10992 Classified A2 on MF 9059 No. 1275
This classification rests on the (strong K line)
Other plates where the image is less dense
show 4026 and other helium lines
See B 13784
B 13809
Therefore I think the K line may be interstellar and
that the class should be
B5

April 16, 1936

✓ San Luis

a13919,20 Combined light. B39394

✓11257,8 Combined light

✓11304,5 Combined light
Chart plate B5336 shows a double trail

✓11152 F2 MF 15481

✓11162 G5 " "

✓a13606,7 Combined light. B40110 & others

✓11389 B5 MF 8077 No. 1130

✓11228,9
11229 — MF 8077

✓11370 F8 B37613 Chart 32623
close to a h. star

April 16, 36

San Luis
√ 11413, 14 Combined light MF 7867

√ 11448, 9 11449 — Fogt.

√ 11400 G0 B37613

√ 11364 Mo B37596

√ 11788 K7 B37596

√ 11585 K7 B39375

√ 11616 F2 B~~2783~~ 21873

√ a14428 K0 MF 8567

11703 G5 in H.D ?

√ 11756, 7 11756 — No trace of lines to. of [illegible]
seen on MF 8357, MF 8040

√ 11952, 3 Combined light.

April 16, '36

✓ San Luis
11894,5   11894 —

✓ 11913.4 11914   a   Hyd. lines seen to S. of
B19008   line of 11913

✓ 11663   n.s. on B20144, 12079
Poor def. on MF12342
Mo   a3570

✓ 11838   n.s. on B20144
Mo   a3570

Get ✓ MF12342

✓ 10358   K2   MF8029, 12999, 12026

a3570 does not show as faint spectra as MF8029.

✓ 10533   G5   MF8029, 12999, 12026

✓ 11703 and Comparison which are assume the CDM −33°, 12[illegible]
G5

✓ 12087   K0   a 5587, 4589   Cont. 198, 40

April 18, 1936

Sp. H.D. 30443, 34467 looked up for Wildt. (Princeton) See letter to Dr. Shapley.

Classified Nb in H.D.
Very ft. on plates then available. See I 35702

H.D. 30443 looked up on
MF 10027
~~10005~~
8175
10024
10011

H.D. 34467
MF 10024
10005
MC 18387

Both spectra appear to be of Class R8 as compared with typical stars on
I 33486 I 33951

Both spectra have sp. of ft. star to N, partly superposed.

April 20, 1936

Albany

√10396,7	Combined object	M F12977	
√10454	K0	I36048	
√10684	F8	"	
√1078~~4~~8	F5	"	
√10885	G5	"	
√10485	F5	I20078	I34575
√10509	G0	"	"

Apr. 21, 1936

Albany

✓10883 +38° 2412 I 25305
M0

✓10663 F5 MF 8565

✓10665 G5 "

✓~~10757 F5 "~~
10750, — Too close to 10757 of pl. MF 8565,

✓10767, 68 Combined light: Chart I 24772 shows single image
G5 MF 8570

✓10368 9
10368 F5 MF 8571

✓10549, 50
10549 A I 22644 and others

✓10807, 8 Combined light MF 8573

✓11354 G5 I 35781

✓11668 G0 "

Apr. 22, 1936

√ 11671 atbary X_0 / I33083

11720 Sup. on another star. Look up other plates.

May 4, 1936

Boss stars –
Circumpolars. Albany

√1221	F2	MF1221
√1048	G5	"
√725	A0	"
√1·20	F5	"
√20452	G5	"
√20434	M0	"
√20166	A0	"
√4070	A7	√36940
√3832	F8	"
√2628	K0	√35018

May 4, 1936

Albany		
✓10444	G5	I34011
✓15761	A5	I36857
✓16454	M0	"
✓11240	G5	~~I36335~~ I37232
✓8882	F0	"
✓7316	K5	I37232
✓7452	K0	"
✓4900	K0	MC 21619
✓5344	G0	I37070

May 4, 1936

Albany

8018	Toft.	I 32387
8142	K5	"
8723	A7	"
8064	M0	"
9162	G0	"
9362	K0	I 33397
9799	A0	"
10019	K5	"
11282	G0	"
9704	—	"

May ~~4~~ 5, 1936

Boss Star	Circumpolars	
√12685	Albany	I.4473
√12687 also Class A		"
√13277	F5	"
√13591	G5	"
√14512	G0	" & I36236
√19393	G5	I33363
√19507	A0	"

May 5, 1936

Boss plates

Southern Circumpolar

✓ 14772	Mo	B22578, 15773
✓ CPD -88°206	M	B22578, 15773
✓ 4$\overset{3}{5}$9	Mo	B42795
✓ 14683	K7	"
✓ 14684	~~Rather flat~~ F5	"
✓ 14685	K5	"
✓ 14883	K2	"
✓ 14660	K5	"
✓ 14698	K5	"

May 5, 1936

Boss
San Luis

✓1014 K2 B38136

✓1136 K0 "

✓6645 F2 B22238, B44635
Seen on preceding side of image.
Perhaps best on 44635, long disp.
See chart pl. B35299

✓5801 K0 B20869, B44635

✓5791 – B20869, 22238 and others

May 5, 1936

Boss plates

Albany 13^{h}

✓ 11136	G0	I33034
✓ 11671	G0	I14860d
✓ 11720	K0	"
✓ 11338	K0	I24984
✓ 11415	G0	"
✓ 11466	F5	"
✓ 11224	—	I20729 and others
	a blend in MF18388	
✓ 11045	G0	MF18381
✓ 11512	K5	I31531
✓ 11457	G0	MF18609

May 5, 1936

Boss albany		
√ 11963	F8	Im Fe 8695
√ $115\overset{5}{\cancel{6}}6$	F5	I 25263
√ 11561	K0	I 33014
~~115 87~~		

May 6, 1936

Boss star
Albany

11587	K5–	I 33014	
11711	F8	"	+ I 28880
11742,3	Comb. light	I 34510	MF 8680
11906	F5	MF 8681	
11949	G5	"	
11996	Mo	"	
12127	G0	"	
12376,7	Comb. light	B 11333	MF 8689 etc.
12311,2	Comb. light		

Stars well separated on chart pl.
Many sp. plates looked up and separate
sp. not detected. I 22834, Class O. shows some
narrow lines

May 6, 1936

Boss stars — Albany.

✓12207,8	Combined light.	I37729, B19011
✓12251	F8	MF18589
✓12130,1	Combined light.	
✓12284	G0	I25031
✓12362	F8	I25031
✓ (adopt)	G0	MF18664
✓12385	K0	MF18614
✓12389	F8	"
✓12405	F5 Comb. light	I25031
✓12249	K0	I35065

May 6, 1936

Albany

✓12739, 40 A_3, A_3 I 31564

✓14655, 6 Comb light — I 38015, I 32964 & others.

12736, 7

✓12736 G_0 MF 8631

✓12570 F_5 I 33082

✓12571 K_0 "

✓126~~40~~ 39, 41 F_5, F_5 " and I 25478

✓12542 — I 22860, MF 8589 and others

✓12596 ~~K I 22860~~

Dumbbell form I 41114. elongated image & partly sep. on slides at S!

G_0 MF 8589 (well separated from sp. at S.)

May 6, 1936

Albany

✓12848 — pM F8878

✓12858 G5 "
~~Ident.?~~ checked

✓13149 G5 I 22874

✓12890 F8 I 20286

~~12866 — m I 36783~~

✓12979 G0 M F8762

May 7, 1936

Boss
Albany

✓ 12886 = – I36283, I36089 37631 I25306, MF16829 Edge
~~I36722 Hγ, Kδ double. 'Probably due to [illegible]'~~
MF17989 H & K seen? very poorly drawn
✓ I36362 Sp. of 12886 seen

12881 K2 I22967

✓ 13656 Mo I34988

✓ 13359 K5 I36214

✓ 13430 K2 "

✓ 12986 Seen only on I36214. Edge poor def.

✓ 13016 " " " " " " "

✓ 12784 G0 I36089

May 7, 1936

Albany

J 12580 ‖ G F8 I36740 —

J 12691 F5 "

J 12938 — Ill defined

J 13098 — Too faint I35006 I806$\overset{8}{9}$ —

J 13257 F8 I25620, 33601

J 13320 F2 " "

J 13543 K0 I8068, 8604, 25620

J 13740 A5 "

May 7, 1936

albany

✓14214 – D25620, 36236

✓13297 F8 MF8682 —

✓13226 K0 ″

✓13337 B5 – D33207, D34871 and others —

✓11721 M0 MF8711

✓13386 A fainter star is n.p. quite close D30172 —

F8 D20287

✓ ~~13344~~ 13436, 7 K0 Combined light –

~~13386~~

✓13327 B5 – D36746

✓13344 K2 ″

May 7, 1936

Albany ✓ 13363	G0	I 25255
✓ 13542	K0	M F 8584, 8566
✓ 13370	K5	M F 8584
✓ 13263	G5	M F 8622
✓ $1\overset{3}{8}322$	F5	M F 8696

a fainter star s.p. is not included

✓ 13329	F8	"
✓ 13396	K0	"
✓ 13634	G5	I 34866 M F 8628

May 8, 1936

Boss
Albany cont.

13971	G0	MF8628
13568	M0	I36046
13576	K0	"
13838	K5	I40393
13845	K7	"
13848	K0	MF1
14002	A0	MF8628
14022	K7	"
14025	M0	"
13751,2	K0, K0	MF8636

May 8, 1936

Boss slug
Albany

✓ 13946	I 35579 too poor.	
	F8	Mn F16690
✓ 14108	F8	Mn F8706
✓ 14276	G0	"
✓ 14398	K0	"
✓ 13664	G0	I 35911
✓ 13665	K0	I 36214
✓ 13694	G0	"
✓ 13696	F8	"
✓ 13706	K0	"
✓ 13875	F5	39511

May 8, 1936

Boss
Albany

✓115351 MF 17988 ſ
Go

✓14242 M3 ~~D 36214~~ 35911

✓14287 Go – ''

✓14298 K5 '' dwarf. Fd Hγ strong

✓14405 – Too near 14404 MF 18611

✓14415 F5 MF 18611

✓14457 K7 ''

✓14492 Go '' Hδ very strong

✓14515 F2 ''

May 8, 1936

Boss	Albany	
√13801	K0	I25366
√14006	G5	I36677
√14177	F0	MF8688
√14491-3	Combined light	MF8073
√14687	G0	"
√14403	G0	MF8385
√14443	G0	MF8094
√14621	F0	B39410
√14623	G5	"

May 9, 1936

Boss stars
Albany

√14210 Ko MF8706

√14000 K7 I 40393

√14010-12 | 14010 not sep. on I 25381
14010 — unless I 34846 can be found and shows it.

√14072 K5 " + I 25381

√14107 Ko I 25381

√14158 Sep. on b. stars at N. I 25381

√14634 F5 I 34804

√14842 A2 "

√14750,1 G0 Combined light MF862

May 9, 1936

Boss Albany
✓ 14703 A3 I37193

✓ 14651 Seen on I36189 but too poor
✓
18.0 +45
F8 on I36757 ~~may come but I do not guarantee it~~

✓
✓ 14666 — 11.5 on I36189, I36757

✓ 14868 ~~#~~ " seen " " ~~[illegible] F8 618~~ not seen
but very poor. also on I25569
G5 I20593

cont. on p. 192

-10° - 14°

May 11, 1936

Schlesinger -10° to -14°

✓4524	F8	B40416, B21819
✓4526	K0	"
✓4542	A	B22972 sup. on 4543
✓4544	K2	B21819
✓4563	– Completely sup. on 4364 which is brighter photographically	B21819
✓4582	K2	B21819
✓4583	G0	B40412
✓4597	K5	"
✓4634	K0	B41548
✓4640	K0	"
✓4661	K0	"
✓4665	K5	"
✓4668	K0	"
✓4670	K2	"

−10° to −14°

May 11, 1936

Schlesinger class −10 to 14

4677	G0	B40592
4678	K5	B41578
4680	K2	"
4684	K0	"
4685	F8	B40592
4687	K2	B41578
4688	G0	"
4692	K2	"
4695	F8	"
4696	K5	"
×		
4698	K0	"
4699	G5	"
4700	K7	"
4702	K5	"

-10° to -14°

May 11, 1936

Schlesinger

✓4710	K2	B41548
✓4712	K5	"
✓4715	G0	B40592
✓4722	ft	
✓4723	K7	B41548
✓4727	K5	B40592
✓4731	G0	"
✓4735	K	"
✓4741	F0	B19142
✓4757	K0	B40592
✓4758	K5	B40583
✓4761	G5	"
✓4765	F5	"
✓4766	K	"

~~10 to~~-14° May 11, 1936

4773, 74 Combined	K2	I20517
4817	F8	B19020
4827	K0	B40583
4833	K2	"
4862	K0	"
4870	K5	"
4928	F5	B40579 & MF18593
4997	Z Vir B40092	
—		
4998	G5	"
5073	G	" B39941
5084	F5	B40606

-10° to -15°

May 12, 1936

Schlesinger

✓ 5097 9.6 Seen on B40606 but poor, aft. star s.f. suspected
(14.4-10)
G5 I 32897

✓ 5136 very ft. on 40606
14.1-11 9.3
K0 I 32897

✓ 5145 K0 B40606

✓ 5150 M0 I 32897 "

✓ 5184 K7 I 32897
(14.7-13) 9.1

✓ 5192 G0 MF18594

5210 very ft. on B19021 G5 on B40453
14.8-13

✓ 5244 G5 MF18594

✓ 5251 F8 "

✓ 5266 F8 "

✓ 5261 M0 "

10°5 - 14°

May 12, 1936

✓ 5269	F5	MF8164
✓ 5278	F5	"
✓ 5283	G0 F8	"
✓ 5285	K0	"
✓ 5287	G$\overset{5}{8}$	"
✓ 5291	G0	"
✓ 5305	K0	"
✓ 5311	K2	"
✓ 5314	G0	"
✓ 5324	G5	"
✓ 5327	G5	" & a8336
✓ 5329	K0	a8338
✓ 5330	F4	"

-10° to -14°

May 12, 1936

5333 G0 m F8364

5339 G5 "

5286 15.0 -14 16 (9.0)
B41198 [illegible]
Kp2 a 8338

5277 K7 B19021 I 25513 a8338

5280 K5 a8338
~~5286 K2 a8338~~

5322 I 25513 F0 a 8338

5334 K5 "

~~5365~~ 15.3 -13 " [illegible]

~~5384~~

~~5390~~

~~5407~~

-10° to -14°

May 13, 1936

√ 5384 K J25573

√ 5390 — Perhaps G ,,

√ 5407 K7 ,,

√ 5403 K2 B23433

~~5718(9.) 15.4 13 57~~ see p. 134

10° 5 – 14

May 14, 1936

✓ 5515	K0	B22928
✓ 5526	G0	"
✓ 5535	K2	"
✓ 5543	F8	"
✓ 5549	F5	"
✓ 5642	K0	B39393
✓ 5678	F5	
~~5681~~		
~~5709~~		

May 18, 1936

-10 [illegible] -1x0

✓ 5418 G0 B40584

✓ 5421 G5 B40584

✓ 5423 G5 "

✓ 5425 K0 "

✓ 5426 – Supl: B40584 B23433

✓ 5427 K2 B40584

✓ 5455 G0 " B21334

✓ 5458 F2 "

✓ 5464 15.6 - 13 (B23433, 21334) F5 on B40584

✓ 5465 – Too much sup. in 5464

✓ 5473 G5 B22928

✓ 5471 F0 B40584

-10° to -14° May 1$\overset{9}{8}$, 1936

~~[illegible]~~

✓	5365	K2	B40584
✓	5681	G0	B40593
✓	5709	F8	〃
✓	5728	F5	MF13000
✓	5731	F8	〃
✓	5737	G5	〃
✓	5748	K2	〃
✓	5749	K5	〃
✓	5750	M0	〃
✓	5757	K0	〃

-10° to -14°

May 19, 1936

✓ 5756	K0	MF 1300
✓ 5759	A3	"
✓ 5754	K0	"
✓ 5762	K7	"
✓ 5763	G5	"
✓ 5764	F5	"
✓ 5765	A0	"
✓ 576~~8~~7	G5	"
✓ 5769	M0	"
✓ 5779	G5	"

-10° to -16°   May 19, 1936

✓5783	K0	MF 13000
✓5790	F0	"
✓5791	A2	"
✓5803	K5	MF 13008
✓5806	F5	"
✓5808	F8	"
✓5818	M0	"
✓5821	G0	"
✓5822	G5	"
✓5824	M0	"
✓5827	G0	"

-10° to -14° May 19, 1936

✓ 5828	A2	MF13008
✓ 5830	F2	"
✓ 5834	F8	"
✓ 5841	K7	"
✓ 5845	A2	"
✓ 5838	F2	"
✓ 5869	K0	"
✓ 5884	F8	MF15460
✓ 5892	K0	MF13008
✓ 5896	F2	"

May 19, 1936

-10° to -14°

✓5910	G0	M F15460
✓5923 –	Faint edge foll. 5922 is probably a trail.	
✓5934	F2	M F15460
✓5938	G0	″
✓5940	K0	″
✓5941	G5	″
✓594~~8~~3	F8	″
✓5948	F~~8~~5	″ & B21435
✓5950	F5	B22981
✓5957	F0	″
✓6000	F2	B21435
✓6006	K5	M F12336
✓6048	F5	B22981
✓6056	G0	B21435

-10° to -14°   May 19, 1936

√ 6163	G0	B39380	
√ 6184	K5	MF8030	
√ 6189	K5	"	
√ 6197	a7	"	MF7947

May 20, 1936

-10°½ - 14°

✓6205	G0	M Fe8078
✓6208	F5	"
✓6219	M0	"
✓6222	B0	"
✓6223	K0	"
✓6228	B	"
✓6230	B0	"
✓6244	B	"
✓6245	F8	"
✓6247	K2	"
✓6257	F8	" very long violet end.
✓6264	K0	"

-10° to -14°	May 20, 1936		
✓6268	A5	B53279	
✓6270	A3	"	
✓6271	K0	"	& MF 8078
✓6276	G0	"	"
✓6278	B2	"	"
✓6283	K0	"	"
✓6285	B2	"	"
✓6293	M0	"	"
✓6297	K0	on MF 8078	
✓6298	G0	"	
✓6303	A0	"	
✓6309	~~K0~~ G5	"	
✓6310	K2	"	
✓6317	F2	"	

-10° to -14° May 22, 1936

✓6332	M0	B5 3279
✓6342	B5	[illegible] MF18078
✓6345	A5	"
✓6350	A3	B5 3125 and MF18078
✓6351	K0	"
✓6353	Two stars n.f. = K2 s.f. = B n.f. a little brighter photographically ~~Dm~~ BD no. may include both.	"
✓6357	A0	"
✓6363	A0	"
✓6375	M0	"
✓6380	G0	"

10°5-14°

May 21, 1936

✓6391	K5	MF8078	
✓6393	B9	"	
✓6398	B	"	
✓6399	F5	"	
✓6409	G0	"	r B53261
✓6419	F5	"	
✓6434	K7	"	
✓6446	F2	"	
✓6455	G0	"	
✓6464	K0	"	
✓6466 (o.p.)	G0	"	
✓6475 – s. of alm. star			
✓6482	K7	B13419	

-10° - 11h May 2$\overset{2}{8}$, 1936

✓6484	B38080,	B23023	A3	
✓6500	K0	"		
✓6507	M1	"		
✓6517	F8	"		
✓6518	K7	"	n.p. & fainter of 2	
✓6524	K5	"		
✓6537	K5	"		
✓6538	F5	"		
✓6540	A3	B38080	B23042	
✓6541	K7	B23023		
✓6552	M0	B "	23042	

−10° to −14° May 22, 1936

✓6535	K0	B23023	
✓6577	K0	"	
✓6562	F0	"	long violet end
✓6565	A0	"	
✓6567	F5	B23042	
✓6568	—	Sup. on sp. of star S. No. 6570 in H.D. Looked up on numerous plates, including A	
✓6569	A5	B23023, 23042	
✓6571	K0	B23042	
✓6580	K2	"	
✓6581	G5	"	
✓6585	G8	"	
✓6586	F2	"	
✓6587	G5	"	

-10° to -14° May 22, 1936

✓6595	K7	B23042	
✓6597	Mo	"	
✓6623	F2	"	
✓6640	Mo	"	T B23023
✓6655	Go		"
✓6660	K5	"	
✓6668	K7	"	
✓6691	K7	"	
✓6699	Go	"	T "
✓6700	Go	"	
✓6734	F5	"	
✓6740	A2	"	
✓6741	Mo	.	

-10° to -14° May 22, 1936

✓6743 R Partly superim. other stars

✓6753 F5 B23042

✓6759 — sup. on b. star to S.

✓6776 — Sup. on br. star to N

✓6783 F5 B23042 long violet

✓6785 K7 "

✓6801 Mo "

✓6806 G5 " + B39482 (partly sup. on another)

✓6816 G5 "

✓6821 K2 "

✓6824 — Completely lost bet. two brighter spectra

✓6870 K7 B40847

✓6890 — Too close to 6891

-10° to -141 May 22, 1936

√6902	G5	B40847
√6908	M0	"
√6909	F2	~~B39482~~
√6914	G0	"
√6916	F8	" ~~B40847~~
√6917	K2	"
√6920	M0	"
√6922	G0	"
√6935	F8	~~39482~~
√6943	G5	B40847 Sp. of DY apl. precedes DY = M0
√6957	K2	~~B39482~~
√6958	K7	B40586

−10° to −14° May 22, 1936

✓6962	A3	B40586	
✓6969	K2	"	9240847
✓6973	F8	"	"
✓6977	K0	"	

cont. on p. 180

-14° to 18°
Washington zone

May 25, 1936

~~4728~~	~~G5~~	~~B40091~~
✓4728	K5	B40416
✓4733	K2	"
✓4759	G5	"
✓4760	K0	B40091
✓4764	G0	"
✓4766	~~K0~~ G5	40416
✓4767	K0	"
✓4769	K2	"
✓4772	F8	40091
✓4777	K5	"
✓4781	K7	"
✓4784	G0	"

-14° to -18°

May 25, 1936

✓ 4795	K0	B40091	
✓ 4803	K2	B40452	
✓ 4811	K2	"	
✓ 4814	K2	I25271	
✓ 4820	F8	"	8 40452
✓ 4826	K5	"	
✓ 4827	G5		"
✓ 4833	" K0	"	
✓ 4834	K0		"
✓ 4835	G0		40456
✓ 4840	F5 B40456 ~~Troph.~~	"	x
✓ 4843	K2	"	8B40456
✓ 4847	K5	"	"

-1405-180 May 25, 1936

✓4851	G0	B40452
✓4856	G5	B40456
✓4858	K7	J25271 −4
✓4861	G0	B40416
✓4863	K2	"
✓4866	G0	"
✓4871	G5	"
✓4873	F5	"
✓4875	G5	"
✓4879	F8	"
✓4884	F8	"
✓4886	K0	"
✓4890	F6	"
✓4893	G0	"

-14°5-180	May 25, 1936		
✓ 4895	G5	B41548	
✓ 4896	K5	"	
✓ 4897	K7	"	
✓ 4903	K5	"	
✓ 4905	G5	40456	
✓ 4906	G0	"	
✓ 4910	G0	"	
✓ 4915	K0	"	
✓ 4916	K2	"	r J25789
✓ 4917	G0	"	
✓ 4919	M0	"	"
✓ 4926	A2	"	
✓ 4929	F5	"	
✓ 4930	A5	"	a 9278

-14°t-18° May 25, 1936

✓14933	F8	B40456	r a9278
✓4934	G8	"	
✓4935	F8	"	
✓4937	—	Two sp. sup.	
✓4939	—	Very poor small plate	
✓4940	—	" " " "	
✓4942	M0	B40456	
✓4944	K7	I25189	
✓4946	G0	40456	
✓4951	K5	B41548	
✓4952	K7	"	
✓4953	K5	"	
✓4954	K7	B40456	
✓4956	F0	"	r 41548

-14° to -18° May 26, 1936

✓ 4959 Mo B25789 B40456
strong abs. to violet of Hγ. Dwarf?

✓ 4961 Mo B41578

✓ 4963 Ko I25789 rocking

✓ 4964 F2 " "

✓ 4965 Ko " "

✓ 4967 F8 " "

✓ 4969 Md " & 40294 (best)

✓ 4971 Mo " "

✓ 4975 G5 " & "

✓ 4977 F2 " & "

✓ 4978 F2 " " (best)

✓ 4979 Go B40592

✓ 4981 F8 B21559

✓ 4984 Ko " 40592

-14° to -180 May 26, 1936

✓ 4992	G0	B40294	41528
✓ 4995	F8	"	"
✓ 4999	K5	"	
✓ 5000	K5		"
✓ 5016	K5	I31613	B40294
✓ 5030	G0		"
✓ 5031	K2		"
✓ 5043	G5		"
✓ 5045	G0		"
✓ 5059	F5		"
✓ 5060	K0		"
✓ 5066	M1	" and	B39948
✓ 5075	K7		"
✓ 5081	K0		"

-14° to -18°	May 26, 1936	
✓ 5092	A5	B39948
✓ 5097	G5	"
✓ 5102	K0	"
✓ 5104	K0	"
✓ 5111	M2	"
✓ 5113	K5	"
✓ 5120	F8	"
✓ 5121	G0	"
✓ 5129	G5	"
✓ 5132	K0	"
✓ 5138	K0	"
✓ 5143	F5	"
✓ 5144	K0	"
✓ 5146	K5	"

14° to 18° May 26, 1936

5169	K2	B39948	
5175	K5	"	
5183	K0	"	
5196	K0	"	
5200	G0	B40538	
5207	F5	"	
5232	G5	B39948	
5236	K0	"	
5244	F0	"	r 40538
5252	K7	"	
5255	K0	"	
5261	M0	"	r I31624
5263	G0	"	
5267	G0	"	

-140 to -180 May 26, 1936

5269	G0	an edge on foll. side of 5268	B39948
5270	G0		"
5283	G5	B39948	
5285	G5	"	
5314	G5	"	+ 40445
5338	– two stars.	A blend. Perhaps best on B11312	
5385	K0	B40445	
5415	K0	"	
5417	G5	"	
5425	v Lib. n.s.	"	
5489	– Sup. on sp. 5490, which is much brighter		
5502	K0	B39981	
5506	G5	"	& I 25273
5534	G5	"	"

+40 to -80 May 27, 1936

✓ 5540	G	B39881	+40622
✓ 5547	F2	"	
✓ 5577	G0	"	+ I25273
✓ 5534	K5	"	"
✓ 5561	A5	"	"
✓ 5607	G0	B40622	
✓ 5613 15.2-14.41	—	"	of 35888 Loft K5-M Traces of I25713 Part M
✓ 5622	G5	"	
✓ 5626	G0	"	"
✓ 5640	K5-	"	"
✓ 5665	M0		"
✓ 5668	G0	"	
✓ 5687	—	n.s. I25573	I33086
	Barely seen on 35888		Too faint
✓ 5769	G5-	M F12992	

-14° to -18°
Washington A.G.

May 28, 1936

✓ 5781	K5	M F1		
✓ 5864	G0	B37760		
✓ 5884	F8	"		
✓ 5901	K0	B39393		
✓ 5925	K0	B40615		
✓ 5934	G5	"		
✓ 5935	K7	B39393		
✓ 5957	F0	B40615		
✓ 5982	G0	B40446	M F1	13000
✓ 5987	F0			"
✓ 5993	F5	"		"
✓ 5996	M1	"		"
✓ 5999	F8	"		"
✓ 6007	B	"		

Different .3819 seen on this plate
numerous other plates examined.

May 29, 1936

-14° to -18°

✓6011	F8	B40446	
✓6016	A2	"	B39379
✓6021	M0	"	"
✓6023	M0	"	"
✓6028	K2	"	"
✓6033	G0	"	"
✓6035	A0	"	"
✓6042	M0	"	"
✓6045	F0	"	"
✓6047	M0	"	"
✓6050	G5	"	"
✓6076	K0	"	"
✓6085	G0	"	"
✓6086	K5	"	"

-140 ϖ -180

May 29, 1936

✓6089	F5	B40446	
✓6112	K2	"	B39379
✓6115	K5	"	"
✓6116	K7	"	"
✓6117	G0	"	"
✓6123	K2	"	"
✓6133	F5	B40619	
✓6134	A5	"	
✓6163	A3	"	4 39378

✓6186 (Two stars touching) The n.p. is slightly fainter than the s.f.
n.p = F0 B39378, MF 13008
s.f = F5

✓6198 Too near br. star at S.

✓6207	A5	B39378	
✓6215	M0	MF13008	B37578
✓6217	K2	"	
✓6220	K2	"	

-14° to -18° May 29, 1936

✓6225 K5 B37578 only plate seen separation from star to North
✓6236 K0 " I40619
✓6237 F8 "
✓6240 K7 " "
✓6266 Combined with 6265 = H.D. 158376 K2
Chart image single, only slightly elongated
✓6275 F2 B39404
✓6295 — Superposed on [illegible] On B39404 have seen only K-M [illegible] too poor. A9252 [illegible] n.s. or not com
✓6312 G0 B39404 B38078
✓6398 B2 On F8075 08067
✓6403 F5 " "
✓6417 M0 " "
✓6428 F8 " "
✓6434 K0 " "
✓6436 G0 " "

-14° to -18°

June 1, 1936

~~6436~~

✓6439	G5	M F8075	
✓6440	F2	"	
✓6441	F8	M F8067	
✓6448	–	Completely sup. m6447	
✓6457	K0	M F8075	
✓6465	K0	"	+8067
✓6469	G5	"	"
✓6476	F8	"	"
✓6501	A2	M F7947	"
✓6507	B5	"	
✓6516	A3	"	"
✓6519	F2	"	"
✓6520	B		"

-14° to -18° June 1, 1936

✓6522 A3 MF 8067

✓6544 Can not make it out on 8067 & other MF plates ?

✓6554 G0 "

✓6571 — Seen on 8067 + B53119 and others, but class not defined

✓6581 B9 " The following and brightest star of a group of 3.

✓6603 K2 "

✓6604 Too close to 6605. Try for A plate
M on B53119 (best) & A

✓6612 G0 MF 7839, 7947 Faintly sup. on star at N
(A plate)

✓6624 K5 8067

✓6646 A0 X 15774 Faintly sup. on star at N on all except X plates & def. not very good on X

✓6681 A2 X 15777 B39306 In a cluster

✓6683 B8 (MF 7839 (best)

✓6687 B Very little seen on any plate MF 7947
✓6689 K5 X 15777 MF
✓6692 — Too much involved in nebulosity — " MF 7947
Br. lines apparently seen on X 15777

14° to 18°

June 2, 1936

6695 — Fog fl. & in dusk   a good X plates D̄ē neglect all these 6692–6698

6698 — Sup. on others

6718 a × ~~167~~ 15777

6731 ~~completely sup on~~ B8 B39346 narrow lines

6732 — Completely sup on 6733 in H.D.

6740 B~~8~~ MF7839

6746 B8 B39346 narrow lines

6767 Mo MF8078 foll. Schalen 253

6770 Mo B39346

6779 K2 "

6791 K0 "

{6794 / 6795 Comb. light. B38079 shows darker lines

6825 MF+12312 super.

Two stars nearly equal both of which may be included in +17°5238. S.f. is G5 N.f. slightly brighter is seen only near Hβ and looks like M.

a 2103

-14° to -18°   June 4, 1936

✓6833	K5	B39346
✓6834	K7	"
✓6843	K0	"
✓6850	F0	"
✓6853	K2	"
✓6854	K0	"
✓6864	G5	MF8078
✓6867	K0	39346
✓6889	K5	MF8078
✓6926	A0	39346
✓6927	A0	"
✓6931	G0	"
✓6959	K7	"
✓6966	M0	"

-14° to -18°

June 4, 1936

✓6972	Mo	B37622
✓6984	K2	"
✓6991	A	"
✓6997	Mo	" & 39281
✓7001	Mo	B39391
✓7008	G5	" MF5307
✓7016	K0	"
✓7017	Mo	" "
✓7057	G0	"
✓7067	K0	MF12203 & 39281
✓7100	K0	" "
✓7119	F2	a double star. B39391 Comb. light. There might be a note of duplicate
✓7242	Mo	B23042
✓7267	A5	39391

-14° to -18° June 20, 1936

7286 Ko 39391

7341 K7 B39347

7343 — Too much sup.

7364 Mc 39347

7382 M "

7401 K2 B40586

7405 K5— B16854 On other B plates, sp. combined with 7406.

7406 — Too much sup. on others

7410 — Completing sup. on B39482, 16854, 40578, 40588 & 39347 Both may be [illegible] F

7411 —

7420 Go B40588

7424 G5— "

-14° to -18° June 5, 1936

7428	K2	B40588		✓
7429	~~K0~~ G5-	"		✓
7440	G0	"		✓
7442	G5-	"		✓
7443	A2	"		✓
7466	K0	"	r 39347	✓
7467	F5-	"	"	✓
7468	K2	"	"	✓
7475	F5-	"	r 16854	✓
7481	K2	"		✓
7488	—	"		✓

-140 to -180 June 5, 1936

7492	F5	B40580	
7494	K5	"	+16854
7508	Me	"	
7518	— Too close to br. star		
7519	K7	B39412	
		5 – + B36241	
7537	— Seen on I25973 but can not classify. N.S. on A9660 · 8664 n.s.		
7540	K7	B39412	
7554	F2	B21929,	
87		chart (B17561)	
7579	K2	B39412	MF12313
7586	K5	"	"
7626	G5	"	
7645	K0	"	

-14° to -18°   June 5, 1936

·7693	Mo	B39412	
·7701	G5	B39502	
·7714	K0	39412	MF 12313
·7726	G0	39502	
·7742	G0	"	
·7766	K5		"
·7775	G0		"
·7783	G0		"
·7802	G0	"	
·7841	G0	"	
·7842	Mo	B45127	
·7904	K0	"	
	74 m	B45074	
·7905	F~~8~~2	"	
	284 m	B45074	

-14° to -18° June 8, 1934

√7959 K5 B45127 45084
No. 440 in B45074

√7976 Var. Z Cap. Sp. M5e in H.B. 787.
M4e in HA79. B

√8048 Go No. 28 on B45084

√8053 Go " 25 " "

√8222 Ko MF12334, 12213. B39413

√8328 M1 B39413

√8431 – Completely sup. on larger plate MF12325

√8452 F5 "

√8534 Ko "

√8642 F5 B 17041, 40866

√8644 Ko " "

√8647 Go B40866

$14^{h}5 - 18^{h}$ June 8, 1936

✓8658	K7	B40866	
✓8659	K5	"	
✓8661	G0	B17041	B39706 (leak)
✓8664	K0	"	
✓8667	G0	"	
✓8689	G0	"	
✓8726	G0	"	"
✓8732	F5	"	"
✓8736	K5	"	"
✓8741	K0	"	"

-14° to -18°   June 8, 1936

✓ 8744	G0	B17041	35706
✓ 8757	K5	"	"
✓ 8777	G0	B42082	
✓ 8782	K5	"	
✓ 8787	Gp5	×× B17053	
✓ 8788	~~G0~~ K5	"	"
✓ 8789	G0	"	
✓ 8790	–	M? in 42082 very poor. N.S. Type 39464, 14157, 17053 A $\overset{m.s.}{9651}$, $\overset{a.s.}{9656}$	
✓ 8791	K0	42082	
✓ 8798	K0	B17053	
✓ 8799	K0	"	
✓ 8801	G0	"	

140ts-180 June 8, 1936

✓8802	F2	17053
✓8804	G5	17053
✓8806	K7	"
✓8807	F5	17053
✓8810	K0	"
✓8814	F2	17053
✓8816	K5	"
✓8819	G0	"
✓8826	F5	17053

—10° ~~6~~-140   June 9, 1936

Cont. Jump .150

ʲ 6991   G5   B~~40886~~ 40586

ʲ 7009   K5   "

19.9-13
ʲ 7024   K7   a6471

ʲ 7025   K7   "

19.9-9
ʲ 7033 — Barely seen on B40909   Perhaps F or G.
~~Lu~~ a9787 m.s.

ʲ 7039   F2   40586   16854

ʲ 7047   K0   "   "

ʲ 7050   M0   a6471

ʲ 7071   F2   "   "

ʲ 7085   K7   "   r ~~40909~~ 21929

ʲ 7104 — Too near on bright plate o.f. a6471

ʲ 7112 Try: B40909, 21929 a 6471

7123	K5	40909
7129	K2	"
7134	G5	"
7150	—	Lost in sp. of 7157 magn 4.6
7155	Mo	40909
7174	K7	"
7193	K0	B40843
7199	F2	40591, 40843, 40909
7202	F5	" "
7233	K7	"
7235	G0	" "
7262	G0	" "
7276	K0	B21932, 13873

-10° to -140 June 9, 1936

7306 M2 40843

7311 K0 "

7326 G0 "

7332 K7 "

7378 K2 "

21.8–12
7389 K0 B39479 (good)

(B45084 (narrower), but does not show. 21932 shows it, very K–)

7414 – Lost in Sp. of star to S usually in all plates
20.9–10

7417 K5 B45084

7418 M B40851 39479

7449 K5 B45084

7457 K5 "

7460 K7 "

7469 F5 "

7472 G0 a 6941

-10° to -180 June 10, 1936

7533	K0	A6941	
7534	K0	"	
7536	K5	"	
7553	K7	" &	B40559
7556	G0		"
7566	G5	"	"
7570	* (Lost in sp. of star to N on B plates) * G0	A6941 (well separated)	
7579	K7	A6941	& 40603
7598	K2	B40603	
7602	F5	A~~6974~~ 6941 and several B plates	
	Third B39407		
7722	G0	MF 12334,	B39483
7735	K2	40605	"
7736	K5	MF 12334	"
7758	G0	"	'

-10°W -140 June 10, 1936

7759	— Completely sup. in sp. of a star north of it.			
7761	K0	MF 12330	B 39483	
7769	K2	〃		
7793	F8			〃
7804	G0			〃
7812	F5		40910	〃
7840	K5		〃	
7883	K5		39462	
7888	K0		〃	
7894	M0		B 24437	
7902	K5		〃	
7922	M0		〃	
7936	— Lost in sp. of 7935 — ~~1/2 a plate~~ AQ 9650 m/s.			
7943	K0		〃	

-10° to -14°   June 16, 1936

7947	K0	24437	
7993	K0	"	20539
7994	G0	"	"
7998	G0	"	"
8003	G5	"	"
8011	G0	"	"
8013	G0	"	"
8020	F8	"	"
8052	K0	39701	
8081 8082	{ Combined light		
8186	K5	B24575	
8205	K	"	
8209	K0	"	B24554

10° to -14'

June 10, 1936

✓8219	K0	24575		
✓8220	K5	"		
✓8241	K7	"		
✓8245	G5	"		
✓8246	K0	"		
✓8248	~~K~~ G5	"		
✓8253	~~K0~~ G5	"	B40849	17396
✓8256	~~K0~~ F2	"	17041	"
✓8258	K0	"		
✓8264	G0	"		
✓8267	G0	"	B40849	
✓8273	K0	"	"	

-10° to -14° June 11, 1936

8276	—	B 2 4575 medium edge trapd	
+17041	trapd	n.s.n 17396	
8284	G0	40849	
8286	F8	"	
8316	K7	B 41081	
8317	F5	"	40849
8323	G5	"	J 34268
8325	K0	"	"
8327	F8	"	"
8330	K2	"	"
8331	K0	"	"
8333	K5	"	

June 19, 1936

Boss plates
Albany

cont. from p. 124

√ 14782 M0 I 34822

√ 14810 } Combined light.
11 }

√ 14813 G0 MF 8709
14 A7

14813 = H.D. 167783 K0, but this is a blur of combined light.
MF 8709 is the only plate I see which clearly separates the two spectra and shows the classes.
Near Nr. 372. MF 8697 (classified for the Cygnus-Aql. region) is not so good, burned out.

√ 15106 K0 I 35785 35423

√ 15233 K2 "

√ 15461 F5 I 33544

Albany

14977
78 { Combined light. I 40397 I 25405
No neg on I 37806

14984 G5 — MF 16706

15088 K2 "

15219
20 { Combined light

15169 Non sep. from star to N. I 34979

F8 I 36185 on edge & separated
also MF 8629 (1 mk)

15054 F2 MF 8629

15050 'T' Lyr., marked on I 35322 very ft.,
y. s. on MF 8616
Prager gives it N_3

Boss
Albany

June 19, 1936

√15227	B8	MF 8616
	and several I plates	
√15295	A0	MF 8616
√15296	— very flt. on I25322 (chart)	
	If magnitude is correct, star must be red	
√15268	A3	MF 8616
√15300	A2	"
√15381	K7	"
√14991, 2	Combined light	
√15740	K2	MF 8103
√15767	K0	" "
√15735	A2	" 8689

Boss Albany

June 23, 1936

√ 15842 var? Doubt about identification
I 18334 shows two stars either of which may be the B.D.
The s.p. is brighter. Its spectrum is seen on
all the good plates
See I 33542
I 34924
Mo

The n.f. star is very faint but traces of its
sp. are seen on I 33542 35460,
It also appears to be of Class M but it is
too faint to get subdivision

√ 15250 - Too close to 15249
I 32263 best.

√ 15337.8 Combined light.
No sep. for chart plate.

√ 16601 ~~H6~~ A3 B 39418
16603 Combined light.

Albany Stars Aug. 27, 1936

cont. from p. 124

✓ 16530 Nova 11 Vulpec

Ident. uncertain and no classifiable sp. seen near pos.

On B53126, an ill-defined image seen extending ~~into~~ to H. Looks like G-smeared, but extremely improbable whether it is the Nova.

✓ 165~~7~~44
S Vulp. M2

Given in Prague 1936 c K7v.

✓ 16434 G0
B37598 MF7971

✓ 16350 F0 F5 in AG O.K. lines wide
B35358 38407

✓ 16264 = 127 in 7972 K5

October 1, 1936

W Crucis. 120658 Spectrum examined at request of Dr. S. and Dr. C. Gaposchkin

It is too faint on nearly all of the B plates. Class I.

B 43171 Class I. however, shows sp. quite clearly, and
June 6, 1912 from distribution of light, I should class it K0

B 43152 Same as above, only fainter.
June 3, 1912

May 18, " B 43097 " " "

June 14, 1912 Too ft. on B 43211
July 11, " " " " 43273

B 43611 Same as B 43171, except that 4227 is seen
Mch 30, 1913 more clearly, probably due to quality of plate

May 1, 1911 B 42271 Too ft.

May 12, 1893 B 9429 " "
This plate is fading

Apr. 26, '14 B 44442
Too ft.

Oct. 1, 1936
W Crucis

B plates Class O

B 15612
Apr. 16, 1896 Covered by trail of a bright star

B16724
July 8, '96 Wide images. Too faint.

B11263
Wide images. Too faint.

June 6, 1907 B37591 June 6, 1907
Very narrow lines. Little absorption at G band.
Is this something like R C Bor?
I do not see any bright lines, although as in all cases of sharp lined stars, some of the spaces seem bright.

June 30, '22 B53188 June 30, 1922
Focus not so good as in B37591
Class G5

Oct. 7, 1936
W Crucis (cont.)

MF plates

MF 7818
Apr. 19, 1922 K0 edge

7822 ~~Apr. 20, 1922~~
Apr. 20, 1922 G0 edge
Hyd. lines strong.

May 16, 1922 7907
G5

June 1, 1923 8003 Focus poor June 1, 1923
G5 ? Perhaps same like B 375-91 in general distribution of light.

Apr. 8, 1902 A 5788
Focus poor G5 – K0
No bright lines seen in position of hydrogen
Somewhat H β and H γ seem to be bright lines or spaces.

November 2, 1936

Spectra for Dr. Shapley and C. Boyd

Region 17.5 -43

Nos in red on MF 20681
Sp. marked on MF 12007, 15482

Nos 9 Probably K (only seen on MF 12007)
certainly near K

No. 10 Too ft.

" 24 K2 MF 12007 14880 15482

" 27 G5 8027 " "

" 29 A0 "

30 A5 " ~~(if enough blue)~~

31 F0 12007, 8027

32 K0 " "

33 A0 " "

34 K5 "

Nov. 3, 1936
Spectra for C. Boyd (cont. of preceding)

35 A0 12007 8027

36 A7 " "

37 F8 " "

38 K7 "

39 B5 B 38099 best.

40 Too faint.

41 A: Hyd. lines seen as in A.

45 G0 MF 15482 B 38099

46 Too faint

47 Too faint

Nov. 3, 1936
(cont. of preceding)

48	A0	12007	8027
50	F2	"	
52	Test.	n.s.	
53	K5	12007	8027
54	G0	"	8027
55	G0	B 38099	
56	K0	"	
57 = M0 α 12007	B9	12007	8027
58	↓		

A R Lacertae

I have examined the spectrum on 16 plates. On Class I short dispersion it is too dense.

On 8 plates, Class D long dispersion the ~~only~~ greatest change is seen on Plates I 33838 & 38810,

On the latter plate, the star is fainter and ~~th~~ although the sp. is near edge where the definition is poor, the type seems to be at least K0 from the light distribution.

AR Lac. for H.S.

I 38838 Good. Bright Good G5
I 38810 Edge. Star fainter than in 38838
Def. not very good but certainly seems to be K0

I 20536 short K but near edge + def. poor

I 13579 " Bright. G5

I 23969 " Very bright. Too dense
I 20600 " At least K0. 4227 well marked but much neg, Ca
I 22838 long. G5
I 35844 "
I 37978 "" near E. Classed K0 but I am not aware whether any diff
m F 1331 rather dense on E. Certainly G-G5, and near G.
I 35816 long rather poor def. No change G5
I 11319 long K0 near E
I 9675 long G5 Extreme edge
I 2162 short very dense not beyond G5
I 32244 " Def. too poor to show detail
I 19172 " " " " to show detail

Trumpler's list.

No 38		8700,574	K7
128		24998,92	F8
158		8700,520	F2
α 1	11.54	8619,25	ge.
2		8700,566	G0
3		8619,16	K0
4		-	—
5		8619,15	K2
6		8619,65	F5
7		8619,6	G0 mfh. G5 ~~F5~~
8		8619,4	F5
9	11.44	~~8619,11~~	—
10		8619,11	K0
11		8700,557	K5
12		8700,550	G5
13		8700,553	K0
14		24998,211	G5
15		24998,209	K
16		8700,625	—
17		8700,535	F5
18		8700,534	G5
		+	+
19		—	—
20		8700,531	K5
21	11.07	—	—

Cat #

82 = Plate = 8838 ✓ G_0 ✓

107 = Plate 8792 (Albany 659) Sp G5 ✓

111 = Plate = 8838 ✓ F0 ✓

114 (Albany 687) Sp F5 ✓

123 Plate 8792 ✓ K_2

140 Plate 8826 ✓ G_0

218 Plate 8210 ✓ + 8205 K_0

246 Plate 8205 ✓ K_2

256 Plate 8205 ✓ K_0

260 Plate 8205 ✓ K_5 –

292 Plate 8289 ✓ K_5 –

479 Plate 8211 ✓ K_5 –

530 Plate 8211 ✓ K_5 –

744 Taurus Cloud – MF 8207, Chart I, Star # 217, F5 ✓ –

759 MF 8202, Chart V, Star 312, F2 ✓ –

785 Plate 8922 ✓ HD 242055, F8 ✓

1039 (H.D. # 48953, 54 {F5 / A5 Comp.) ✓ 37441, 28

1156 Plates 10065, 10067 ✓ Mo

1249 Plate 8398 (digit "7" from another numbering covers spectrum.) ✓ K_7

1309 (H.D # 74228, 29 {A3 / G Comp.) ✓

1316 Plate 518 ✓ A3

1391 Plate 8306 ✓ G_0

1463 Plate I 36406 ✓ K_0

1473 Plate I 36406 ✓ F_2

1483 Plate I 36406 ✓ K7

1588 Plate 569 ✓ K

1602 Plate 8575 ✓ F5 –

1610 Plate I 37112 ✓ K0

1619 Plate 8575 ✓ 2 close stars either might be it DM G_0

1784 Plates I 34673, I 35912 ✓ K_2

1879 Plates I 32881, I 24979 ✓ K_0

1916 Plates MF 8576, 8573 ✓ K7.

2366 HD Stars 148478, 79 {Ma / A3 (a Scorpii) Comp. ✓

2592 MF 8040 ✓ K0

2827 H.D Stars 181615, 16 {B8p / F2p (v Sagitarii (Comp. + Var. ✓

2969 H.D Stars 193495, 96 {G0 / A0 β Capricorni Comp. ✓

3407 Plate 8158 ✓ Ko

Spectra looked
up to complete
zodiacal Cat. of
Naval Observatory,
in answer to
request of Walter
Hamilton.
Dec. 1939

April 10, 1936

Looked up for Luyten

−17° 3336-7

B 41220, 41225, very wide sp. ~~Class Mo~~,
B 39947 the brighter (n.f.) star Class Mo; the fainter
barely seen but appears to be similar

I 36535, the best, shows both spectra to be of Class Mo.

May 18, 1936

Looked up for Luyten

CPD − 21° 5912

No MF plate

n.s. on A's or B's — too ft.

CPD − 38° 7124

MF 22359 Apparently not Class A. Too faint to classify
21083 but I should guess F5 or G. A.J.C.

several others examined, but not so good

November 11, 1936

Spectrum for Seyfert

-18° 359 chart pl. B42049

B41114 (best?)

Mo

B40765 very flt.

Mo

A9782 very flt.

I36319 too flt.

I31304 very poor, but looks like M

I24128

Mo (best) shows bands distinctly

Jan. ~~16~~ 17, 1935

For Dr. Shapley
Large Parallax star "Schlesinger" on Announcement Card 441

18 44 - 23 57 (1900)
18 42 7 - 23 58 (1875)
marked on A 9577

Sp. plates MF 12078
12211
B 40442
40745

M5 or M0 probably the latter with dwarf characteristics.

October 12, 1938

Spectra of RR Lyrae (at request of Mr. Norman)
H plates

H 2939 A3 hazy br. bet. Hβ and Hδ
2940 assumed to be 2940 as another plate is marked
distinctly 2939

H 2948
Sept. 24, 1937 A0 very bright.

2959 very wide. too poor to classify.

2920 Plate fogged. Lines too indistinct
to classify.

2946 Focus very poor
A7?

2917 A3? Hγ, Hδ faint for weakness
of the lines

Oct. 12, 1938

RR Lyr. cont.

H 2941 too poor

2921

F

294

295

295

29

29

29

29

Many thanks -
I don't think that
there can be any more
question but that
the range is at least
B9 to F2.

DN.

Oct. 12, 1938

RR Lyr. cont.

H 2941 too poor

2921 fogged.
F?

2944
A5

2954 too poor

2955 " "

2947 B9

2952 A0

2968 A2

2945 A5

Oct 12, 1938

RR Lyr (cont)

H 2925 A2

2951 A0

2960 A0

2964 Too poor.

2950 Too poor. Lines double from atmospheric or instrumental causes

2924 A0

2953 A3 very poor

2939 F poor

Oct. 12, 1938

RR Lyr (cont.)

H 2948

A0

2958? No number on plate

Too poor

I 34230 Sept. 7, 1906

B9

I 38531 July 26, 1913

F2

I 37348 Mr. 13, 1911

F0

I 37347 Mr. 11, 1911

A3

H 2965

A7

2949

A0

H 2963

Too indistinct

2966

A5

~~2969~~

2961

F? Too indistinct

2969?

A5? Too indistinct, or blurry

2962 F?

Blurry

2918

Very small contrast of lines to cont.
Some strong lines seen, not hydrogen or cal.
Faint. Can not classify.

May 15, 1940
Looked up for Luyten
Susp. white dwarf.

8 37.7 −32 37 12.0
marked No. 67 on pair } A plates at 8:30 −32.5 A16004
No. 81 " " } " " " 8:50 −32.5

sp. plates MF 7882 marked
7889
B 40081
40292
too ft. on all

July 8, 1940
for Luyten Susp. white dwarf
CoD −37° 10765 16 13.5 −37 19 ptg mag 12.0

marked by C.D.B on MF 15480

MF 12016 K dwarf
15480 not blue
15500 not blue
B 23017 } very poor – only small patch }
53272 } red light seen.
a 6427 }

MM