BOLETIN DE LOS OBSERVATORIOS DE TONANTZINTLA Y TACUBAYA, Nº 38, 6, 1972.

A FINDING LIST OF STARS OF SPECTRAL TYPE A7 AND EARLIER IN REGIONS AT HIGH GALACTIC LATITUDES. VI

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SUMARIO

Se ha efectuado una búsqueda con prisma objetivo en un área de 434 grados cuadrados que se extiende en ascensión recta desde las 22 horas a las 4 horas a una declinación de −28°. Esta franja se extiende desde $l = 22°$, $b = -54°$ a $l = 225°$, $b = -50°$ y pasa a través del Polo Galáctico Sur. Se presenta una lista conteniendo las posiciones, magnitudes y tipos espectrales de 539 estrellas.

ABSTRACT

An objective prism survey has been made in a 434 square degree region extending from right ascension 22 hours to 4 hours at a declination of −28°. This strip extends from $l = 22°$, $b = -54°$, to $l = 225°$, $b = -50°$ and goes through the South Galactic Pole. A finding list containing positions, magnitudes and spectral types for 539 stars is presented.

I. Introduction

This finding list is the sixth to be presented in a continuing study being made of galactic structure perpendicular to the galactic plane.

A number of surveys have been made of early type stars near the South Galactic Pole. These include Chavira (1958), Wayman (1961), Haro and Luyten (1962), Westerlund (1963), Bok and Basinski (1964), Luyten (1966), Philip and Sanduleak (1968), and Slettebak and Brundage (1971). The last two surveys were made by means of objective prism spectral plates; the earlier surveys were colorimetric in nature.

The present survey will be especially valuable since it extends approximately 80° in galactic latitude in a strip, centered on the South Galactic Pole. Much important information concerning the distribution of early type stars of Population I and Population II and interstellar reddening can be obtained from further study of the stars in the finding list.

II. Observations

The survey was made with the uv prism of the Warner and Swasey Observatory on the Michigan Curtis Schmidt telescope at Cerro Tololo Inter-American Observatory. Twenty minute exposures on IIaO emulsion reached an average limiting magnitude of $V = 13.4$. The dispersion of the spectra is 580 Å at H_γ. Each spectrum was classified independently by each author and the average spectral class was entered in the catalogue. The statistical conclusion of this survey will be compared later with respect to another survey made from $b = -50°$ to $b = 0°$ and to facilitate this comparison all subdivisions of the spectral classes were retained, even if in individual cases they turn out to be classes not normally used at this dispersion. The spectra were classified according to the criteria of Nassau and Stephenson (1960). Six stars in the list had very weak hydrogen lines and were classified as OB. Two of the stars in this group showed the uv depression remarked on by Slettebak and Stock (1957) which identified them as OBce stars. Seven stars were classified as AF because they could be classified as an A star by the K line criterion and as an F star by the g band. For the sake of completeness we have listed all the stars of spectral type A7 and earlier that fall in our area from the HD catalogue. If the HD spectral type is used (usually because the spectrum on our plates was overexposed) it is indicated by (HD) following the spectral type.

The positions were measured from the spectral plates by measuring the position of the H_ε line. From a comparison of star positions obtained in this way with positions listed for stars in the Smithsonian (1966) catalogue, and from a comparison of stellar positions in overlap regions, the po-

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TABLE 1

Catalog Number	HD Number	CD Number	Other Designations	Spectral Type	Ptg. Mag.	Right Ascension (1950)	50-year Precession	Declination (1950)	50-year Precession	Remarks
1				A6	13.2	22hr 5m 50s.5	+ 2m 51s.4	-29° 0' 51"	+14 40	
2				A2	13.8	22 6 39.7	+ 2 49.3	-26 17 16	+14 42	bSF
3				A0	13.5	22 6 59.0	+ 2 51.7	-29 42 35	+14 43	bP
4	210300	-28 17622		A3	5.9	22 7 9.4	+ 2 50.8	-28 32 20	+14 43	
5				A0	12.5	22 7 42.1	+ 2 49.7	-27 4 5	+14 44	
6				A4	10.8	22 9 16.4	+ 2 51.8	-30 15 9	+14 47	
7				B9	13.2	22 9 27.1	+ 2 51.7	-30 15 50	+14 48	
8				B9	13.8	22 9 29.0	+ 2 50.1	-27 55 33	+14 48	
9				A4	11.8	22 9 36.6	+ 2 49.6	-27 14 12	+14 48	
10	210739	-26 16033		A2	5.3	22 10 8.6	+ 2 49.1	-26 34 34	+14 49	
11				A0	13.5	22 10 15.4	+ 2 49.6	-27 22 5	+14 49	
12				A0	13.5	22 10 40.9	+ 2 51.5	-30 8 14	+14 50	
13	210934	-28 17653		B9 (HD)	5.6	22 11 29.0	+ 2 49.7	-28 00 56	+14 52	
14	210995	-29 18248		A5 (HD)	9.1	22 11 51.0	+ 2 50.7	-29 7 17	+14 53	
15				A3	10.5	22 11 53.0	+ 2 51.6	-30 35 56	+14 53	
16				A0	13.2	22 12 24.9	+ 2 50.5	-29 10 31	+14 54	bNF
17				A0	12.8	22 13 5.1	+ 2 50.0	-28 29 10	+14 55	
18				A0	12.5	22 13 26.9	+ 2 48.7	-26 40 16	+14 56	bP,NF
19	211272	-29 18270		A3 (HD)	10.5	22 13 42.0	+ 2 50.5	-29 35 26	+14 58	
20				A2	10.8	22 13 51.6	+ 2 49.6	-28 2 20	+14 57	
21	211293	-28 17674		A2 (HD)	11.5	22 13 52.3	+ 2 49.9	-28 46 48	+14 59	
22				A2 w	13.2	22 14 36.9	+ 2 49.1	-27 31 7	+14 58	
23	211441	-27 15846		A2	10.1	22 14 43.2	+ 2 49.0	-27 20 47	+14 58	
24				A0	12.1	22 15 53.4	+ 2 50.1	-29 18 44	+15 0	
25				A0	13.2	22 16 18.3	+ 2 50.4	-29 44 56	+15 1	
26				A7	13.2	22 17 29.4	+ 2 50.2	-29 46 22	+15 3	
27				A2	11.8	22 17 33.6	+ 2 49.5	-28 46 20	+15 4	
28				A2	13.2	22 18 15.1	+ 2 48.3	-26 59 20	+15 5	
29				A0	11.5	22 18 18.4	+ 2 50.2	-29 55 32	+15 5	
30	211993	-29 18313		A0	7.8	22 18 48.5	+ 2 49.5	-29 1 32	+15 6	
31	212056	-30 19117		A0	10.1	22hr 19m 15s.0	+ 2m 50s.0	-29° 51' 10"	+15 7	
32				A3	10.8	22 19 40.9	+ 2 48.7	-28 0 10	+15 8	
33	212162	-26 16106		A0	9.6	22 19 54.0	+ 2 47.4	-25 57 59	+15 6	
34	212295	-26 16113		A5 (HD)	10.6	22 20 57.6	+ 2 46.1	-26 45 12	+15 11	
35	212360	-28 17740		A2	10.5	22 21 16.4	+ 2 48.4	-27 55 53	+15 11	
36				A4	12.1	22 22 26.1	+ 2 49.9	-30 25 22	+15 13	
37				B9 w	13.5	22 23 3.2	+ 2 49.3	-29 35 27	+15 14	
38		-28 17756		A3	10.8	22 23 17.3	+ 2 48.4	-28 18 30	+15 14	bbNF
39				A0	12.1	22 24 38.4	+ 2 47.6	-27 21 11	+15 17	
40	212962	-26 16151		A2	10.1	22 25 42.4	+ 2 46.6	-25 44 56	+15 18	
41		-27 15924		A7	10.5	22 26 6.2	+ 2 47.6	-27 34 28	+15 19	
42				A2	13.4	22 26 50.0	+ 2 48.3	-29 2 28	+15 20	
43				A3 w	13.0	22 27 0.4	+ 2 49.2	-30 25 41	+15 21	NF
44				A2	11.6	22 27 43.2	+ 2 48.7	-29 56 40	+15 22	
45				A0	13.2	22 29 50.2	+ 2 46.4	-26 21 56	+15 26	
46				A2 w	13.2	22 29 57.6	+ 2 48.7	-30 31 48	+15 26	
47	213587	-26 16195		B9	9.1	22 30 11.4	+ 2 46.1	-26 3 42	+15 26	
48	213640	-30 19205		A2	9.6	22 30 39.7	+ 2 48.3	-29 59 18	+15 27	
49	213655	-29 19208		A7	7.8	22 30 45.4	+ 2 48.3	-29 55 24	+15 27	
50				A1	13.5	22 31 46.1	+ 2 46.6	-27 16 34	+15 29	NF
51				A5	13.5	22 32 17.5	+ 2 45.9	-26 12 13	+15 30	
52				A6	11.5	22 32 31.6	+ 2 47.8	-29 40 5	+15 30	
53	214012	-29 18401		A5 (HD)	9.9	22 33 07.7	+ 2 47.1	-28 48 27	+15 32	
54	214091	-27 15981		A4	8.4	22 33 31.0	+ 2 46.4	-27 24 48	+15 32	
55	214158	-26 16226		A6	11.1	22 34 6.7	+ 2 45.7	-26 7 59	+15 33	
56				B9	13.5	22 35 44.2	+ 2 46.8	-28 42 58	+15 35	P
57				B9 w	12.8	22 35 46.4	+ 2 47.8	-30 33 7	+15 35	
58				A0	12.8	22 36 14.9	+ 2 46.0	-27 16 59	+15 36	SP
59	214748	-27 16010		B8 (HD)	4.1	22 37 53.6	+ 2 45.6	-27 18 18	+15 36	
60				A0	13.2	22 38 18.3	+ 2 46.5	-28 46 19	+15 39	
61	214853	-27 16015		A2	7.8	22hr 38m 40s.6	+ 2m 45s.8	-27° 31' 8"	+15 40	
62	214926	-30 19265		A5	9.1	22 39 14.2	+ 2 46.9	-29 48 19	+15 40	
63				A0	13.2	22 40 24.7	+ 2 45.6	-27 42 43	+15 42	
64				A0	12.8	22 40 54.6	+ 2 46.7	-30 1 2	+15 43	
65				B9 w	13.5	22 41 20.4	+ 2 46.5	-29 41 22	+15 44	
66				A5 pec	12.5	22 41 50.3	+ 2 46.6	-30 3 10	+15 44	
67				A0	12.5	22 41 57.9	+ 2 45.8	-28 37 59	+15 45	
68				A2	12.8	22 41 59.5	+ 2 44.6	-26 13 19	+15 45	
69				A2	11.5	22 42 46.6	+ 2 45.0	-27 11 9	+15 46	
70	215481	-26 16309		A4	10.8	22 43 2.1	+ 2 44.6	-26 19 6	+15 46	
71				A4	11.8	22 44 3.3	+ 2 45.0	-27 36 16	+15 48	
72				A2	12.8	22 44 40.6	+ 2 46.1	-30 2 25	+15 48	
73				B8	13.5	22 46 15.0	+ 2 45.1	-28 23 43	+15 51	
74				DA	12.2	22 46 55.5	+ 2 44.5	-27 22 46	+15 52	o?
75				A0	13.8	22 47 45.2	+ 2 45.4	-29 38 10	+15 53	
76				A1	13.8	22 47 52.9	+ 2 44.6	-27 48 29	+15 53	
77	216147	-29 18481		A5 (HD)	9.9	22 48 2.5	+ 2 45.2	-29 34 12	+15 51	
78				A0	13.0	22 48 45.8	+ 2 45.6	-30 22 6	+15 54	
79	216335	-28 17972		A5 (HD)	9.8	22 49 44.1	+ 2 44.0	-27 39 09	+15 52	
80	216360	-26 16363		A3	10.1	22 49 53.3	+ 2 43.6	-26 24 48	+15 56	
81	216375	-30 19333		A5 (HD)	9.3	22 50 2.2	+ 2 45.2	-30 9 45	+15 54	
82	216496	-27 16095		A2 (HD)	9.5	22 50 53.7	+ 2 44.0	-27 14 52	+15 56	
83	216517	-30 19347		A4	8.4	22 51 9.9	+ 2 45.1	-29 59 53	+15 57	
84				A1	13.5	22 51 53.2	+ 2 44.5	-29 4 20	+15 58	
85				A2	13.8	22 53 0.4	+ 2 43.9	-28 0 44	+16 0	
86	216780	-28 17994		A3	7.7	22 53 18.3	+ 2 44.0	-28 17 27	+16 0	
87	216821	-28 18504		A7	7.7	22 53 43.6	+ 2 44.2	-28 52 24	+16 0	
88				A7	11.2	22 54 34.9	+ 2 43.2	-26 47 32	+16 2	
89	216956	-30 19370		A3 (HD)	1.3	22 54 53.5	+ 2 44.3	-29 53 16	+16 0	
90				A1 w	12.8	22 56 7.5	+ 2 43.3	-27 41 31	+16 4	

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TABLE 1 (continued)

Catalog Number	HD Number	CD Number	Other Designations	Spectral Type	Ptg. Mag.	Right Ascension (1950)	50-year Precession	Declination (1950)	50-year Precession	Remarks
91		-26 16406		A2	10.8	22hr 56m 41.s9	+ 2m 42.s6	-26° 11' 15"	+16 4	
92	217236	-30 19383		A5 (HD)	6.3	22 56 51.9	+ 2 43.9	-29 43 51	+16 4	
93				A0	13.2	22 58 28.5	+ 2 43.8	-29 45 47	+16 6	
94	217610	-28 18052		A3 (HD)	9.8	22 59 26.7	+ 2 42.7	-27 37 12	+16 6	
95	217704	-27 16152		A7	10.5	23 0 7.4	+ 2 42.5	-27 11 29	+16 8	
96				A2 w	13.2	23 0 33.1	+ 2 43.3	-29 19 0	+16 9	
97				A0	13.5	23 0 41.5	+ 2 42.2	-26 31 7	+16 9	
98				A3 pec	12.8	23 0 55.3	+ 2 42.3	-26 53 31	+16 9	
99	218003	-27 16172		A5	6.4	23 2 8.0	+ 2 42.3	-27 24 24	+16 10	
100				OB-(Awf)	13.5	23 2 15.2	+ 2 42.7	-28 28 50	+16 10	
101				A0	13.2	23 2 26.6	+ 2 43.2	-29 50 1	+16 11	
102				A0	12.8	23 3 0.8	+ 2 41.8	-26 28 51	+16 11	
103				A1	11.5	23 3 46.0	+ 2 41.8	-26 41 12	+16 12	
104				A0	13.5	23 4 55.8	+ 2 42.9	-30 12 9	+16 13	
105				B9	11.5	23 5 31.5	+ 2 41.8	-27 22 58	+16 14	
106	218721	-27 16206		A2	10.5	23 7 52.5	+ 2 41.2	-26 38 3	+16 16	
107				A5	11.4	23 8 47.4	+ 2 42.2	-29 49 50	+16 17	
108				A0	13.6	23 9 4.2	+ 2 41.3	-27 30 25	+16 18	
109	218902	-26 16521		A0	10.2	23 9 14.8	+ 2 40.8	-25 47 34	+16 18	
110	219104	-30 19482		A0	8.4	23 10 54.0	+ 2 41.8	-29 54 44	+16 19	
111				A0	13.5	23 11 19.1	+ 2 41.8	-30 0 7	+16 20	
112				A4	11.8	23 11 52.4	+ 2 41.0	-27 50 22	+16 20	
113				A0	13.5	23 11 59.5	+ 2 40.5	-26 7 48	+16 20	
114	219379	-27 16243		A4	9.8	23 12 53.3	+ 2 40.6	-27 1 57	+16 21	
115	219391	-27 16244		A2	8.7	23 13 2.3	+ 2 40.7	-27 27 6	+16 21	
116				A0	12.8	23 13 47.6	+ 2 40.9	-28 22 56	+16 22	
117				A2	10.9	23 14 27.8	+ 2 40.2	-26 19 36	+16 22	
118				A2	12.5	23 14 31.5	+ 2 40.4	-27 10 36	+16 22	
119				A2	13.1	23 15 22.9	+ 2 40.6	-28 16 14	+16 23	
120				A0	13.5	23 16 6.1	+ 2 40.9	-29 30 9	+16 24	bNF
121	219794	-29 18652		A1	8.2	23hr 16m 13.s0	+ 2m 40.s7	-29° 0' 53"	+16 24	
122	219822	-26 16583		A7	8.7	23 16 24.5	+ 2 39.8	-25 45 6	+16 24	
123				A0	11.8	23 16 34.0	+ 2 40.4	-28 12 43	+16 24	
124				A4	11.2	23 17 11.0	+ 2 39.9	-26 43 4	+16 25	
125	219998	-26 16595		A2	10.5	23 17 58.1	+ 2 39.6	-26 7 27	+16 25	
126	220067	-25 16418		A4	8.7	23 18 25.9	+ 2 39.4	-25 31 38	+16 26	
127		-28 18171		A2	10.9	23 19 57.2	+ 2 39.9	-28 15 4	+16 27	fSP
128				A0	11.5	23 20 11.0	+ 2 39.3	-25 57 30	+16 27	
129	220413	-29 18680		A3	8.0	23 21 3.5	+ 2 39.9	-28 51 30	+16 28	
130				A4	10.9	23 21 17.8	+ 2 40.2	-30 11 33	+16 28	
131	220455	-27 16305		A1	7.5	23 21 22.1	+ 2 39.5	-27 33 21	+16 28	
132				A1	13.2	23 21 40.4	+ 2 40.0	-29 32 35	+16 28	
133		-30 19541		A0	10.9	23 22 38.5	+ 2 39.9	-29 55 40	+16 29	
134				A0	12.8	23 22 56.0	+ 2 40.0	-30 32 31	+16 29	
135				A1	13.2	23 22 59.9	+ 2 39.1	-26 56 57	+16 29	
136				A3	13.5	23 24 5.9	+ 2 38.9	-26 49 13	+16 30	
137	220881	-27 16320		A6	8.2	23 24 54.3	+ 2 39.0	-27 33 14	+16 30	
138				A0	11.8	23 25 24.4	+ 2 38.6	-25 57 17	+16 31	
139	220978	-26 16654		A3	7.3	23 25 47.0	+ 2 38.4	-25 41 45	+16 31	
140				A3	13.2	23 26 16.3	+ 2 38.8	-27 34 23	+16 31	
141				OB ce	11.2	23 26 21.4	+ 2 39.3	-30 3 16	+16 31	
142				A0	12.8	23 26 42.3	+ 2 38.6	-29 9 21	+16 32	
143	221166	-26 16667		A2	10.2	23 27 11.4	+ 2 38.4	-26 18 19	+16 32	
144				A2	11.5	23 27 24.3	+ 2 38.4	-26 23 51	+16 32	
145				A0	11.9	23 27 33.3	+ 2 38.5	-26 59 39	+16 32	
146				A3 w	13.2	23 28 43.5	+ 2 38.5	-28 7 9	+16 33	
147				A0	13.0	23 30 21.8	+ 2 38.3	-28 14 47	+16 34	
148	221907	-27 16377		A1	6.8	23 33 31.9	+ 2 37.6	-27 9 7	+16 36	
149				A6	12.7	23 33 55.0	+ 2 37.9	-29 16 54	+16 36	
150				A4	11.1	23 34 13.8	+ 2 38.1	-30 26 1	+16 36	
151				A0	11.4	23hr 34m 31.s4	+ 2m 37.s4	-26° 30' 36"	+16 36	
152	222012	-26 16713		A2	9.1	23 34 32.6	+ 2 37.3	-26 8 29	+16 36	
153				B9	13.6	23 34 59.0	+ 2 37.6	-28 16 5	+16 36	
154				A2	12.7	23 35 24.4	+ 2 37.1	-25 39 29	+16 36	
155				A2	13.6	23 36 5.1	+ 2 37.7	-30 15 43	+16 37	
156				B9	13.6	23 37 45.9	+ 2 37.0	-27 22 48	+16 37	
157				A0	13.9	23 38 55.1	+ 2 36.7	-26 31 22	+16 38	
158				A2	11.1	23 39 3.4	+ 2 37.1	-29 15 28	+16 38	
159				B	13.3	23 40 3.6	+ 2 36.6	-26 31 32	+16 38	
160				B9	13.0	23 40 35.6	+ 2 36.5	-26 55 27	+16 38	
161			SB 814	B8 w	13.3	23 41 17.9	+ 2 36.6	-28 35 14	+16 39	
162			SB 816	B9	13.0	23 41 52.8	+ 2 36.5	-28 36 3	+16 39	
163	222967	-29 18828		A5 (HD)	11.1	23 42 57.0	+ 2 36.3	-28 57 10	+16 39	
164		-28 18346	SB 841	A2	10.8	23 45 34.4	+ 2 35.9	-27 41 51	+16 40	
165	223352	-28 18353	SB 843	A0	5.1	23 46 19.6	+ 2 35.8	-28 24 29	+16 40	
166			SB 847	B8	13.0	23 46 47.2	+ 2 35.6	-26 52 24	+16 40	
167			SB 851	A0	13.6	23 47 4.7	+ 2 35.6	-26 48 16	+16 40	
168	223466	-26 16796	SB 855	A3	7.3	23 47 14.3	+ 2 35.4	-25 36 33	+16 41	
169			SB 862	A0	13.2	23 47 53.2	+ 2 35.7	-29 56 46	+16 41	NF
170			SB 866	A0	13.6	23 48 11.5	+ 2 35.4	-26 24 35	+16 41	
171				A6	12.2	23 48 30.6	+ 2 35.3	-25 49 31	+16 41	
172				A2	13.3	23 48 56.0	+ 2 35.4	-27 57 23	+16 41	NF
173			SB 874	A0	13.4	23 48 57.0	+ 2 35.2	-26 2 26	+16 41	
174			SB 876	A2	12.9	23 49 4.7	+ 2 35.5	-29 26 58	+16 41	
175		-30 19716	SB 884	B2	11.4	23 50 0.8	+ 2 35.4	-30 26 48	+16 41	
176	223886	-28 18379	SB 890	A3	10.4	23 50 48.2	+ 2 35.1	-27 35 56	+16 41	
177	223991	-27 16479	SB 897	A0	7.1	23 51 46.5	+ 2 34.9	-27 19 18	+16 42	P
178			SB 909	AF	12.9	23 52 47.6	+ 2 34.7	-26 34 47	+16 42	
179		-27 16484	SB 910	A8	10.3	23 52 49.9	+ 2 34.7	-27 16 45	+16 42	
180			SB 911	B8	13.3	23 52 55.6	+ 2 34.6	-25 32 52	+16 42	NF

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TABLE 1 (continued)

Catalog Number	HD Number	CD Number	Other Designations	Spectral Type	Ptg. Mag.	Right Ascension (1950)	50-year Precession	Declination (1950)	50-year Precession	Remarks
181			SB 915	A2w	13.3	$23^h\ 53^m\ 27^s.7$	$+\ 2^m\ 34^s.6$	-27° 30' 13"	+16 42	
182			SB 931	B1	12.9	23 56 33.0	+ 2 34.2	-26 55 48	+16 42	
183	224820	-30 19776	SB 943	A0	8.4	23 58 21.4	+ 2 33.9	-30 20 34	+16 42	
184	224927	-26 16876	SB 949	A3	8.9	23 59 15.9	+ 2 33.8	-26 4 26	+16 42	
185	224948	-30 19785		A7	10.3	23 59 24.1	+ 2 33.8	-30 26 12	+16 42	
186		-29 18932	SB 952	A3	11.6	23 59 33.9	+ 2 33.7	-29 7 14	+16 42	
187			SB 954	A5	12.0	23 59 38.0	+ 2 33.7	-29 35 25	+16 42	
188	224990	-30 19790	SB 956	B5 (HD)	4.9	23 59 45.5	+ 2 33.6	-30 00 00	+16 42	
189	225047	-30 19795	SB 3	A0	8.3	0 0 21.7	+ 2 33.6	-30 25 32	+16 42	
190	225119	-29 18945	SB 11	B9	7.7	0 1 3.7	+ 2 33.5	-28 41 46	+16 42	
191	225187	-30 19809	SB 13	A0	7.1	0 1 38.6	+ 2 33.4	-30 24 46	+16 42	
192	225200	-29 18950	SB 19	A0	6.6	0 1 47.0	+ 2 33.4	-29 32 51	+16 42	
193	225206	-30 19813	SB 20	A0	7.7	0 1 49.6	+ 2 33.4	-29 39 36	+16 42	
194	225264	-30 19818	SB 22	A0	8.4	0 2 17.6	+ 2 33.3	-29 54 43	+16 42	
195	225282	-30 19820	SB 23	A0	7.7	0 2 20.2	+ 2 33.3	-30 32 6	+16 42	
196	50	-30 19827	SB 25	A5	10.0	0 2 53.6	+ 2 33.2	-30 34 6	+16 42	
197			SB 27	A2	13.3	0 3 1.5	+ 2 33.2	-26 27 24	+16 42	
198	91	-30 19834		A7	10.0	0 3 9.9	+ 2 33.1	-30 14 20	+16 42	
199	141	-29 18964	SB 34	A0	7.7	0 3 36.1	+ 2 33.1	-29 25 47	+16 42	
200			SB 38	B3	12.9	0 4 13.3	+ 2 33.0	-27 37 57	+16 42	
201				A0	13.3	0 5 17.9	+ 2 32.9	-26 47 41	+16 42	
202	343	-30 10	SB 47	A7	10.0	0 5 29.3	+ 2 32.7	-30 18 36	+16 42	
203			SB 52	A1	13.0	0 6 21.4	+ 2 32.6	-30 6 34	+16 42	
204			SB 51	A3w	12.9	0 6 22.0	+ 2 32.6	-28 54 54	+16 42	
205	562	-26 35	SB 57	A0	7.1	0 7 26.4	+ 2 32.6	-26 9 10	+16 42	
206			SB 58	OB	12.3	0 7 34.5	+ 2 32.6	-26 29 52	+16 42	
207			SB 63	A0	12.9	0 8 47.0	+ 2 32.4	-26 43 18	+16 41	
208	719	-26 42	SB 65	A7	10.0	0 8 56.2	+ 2 32.4	-26 31 49	+16 41	
209			SB 67	B9	12.2	0 9 25.4	+ 2 32.1	-29 59 46	+16 41	
210				A8	12.3	0 10 51.5	+ 2 32.1	-26 29 44	+16 41	
211		-27 39	SB 76	A0	10.6	$0^h\ 10^m\ 51^s.6$	$+\ 2^m\ 32^s.0$	-27° 15' 40"	+16 41	
212	923	-30 48	SB 77	A3	8.4	0 11 2.3	+ 2 31.8	-29 51 12	+16 41	
213			SB 78	A3	13.2	0 11 10.6	+ 2 32.0	-27 30 13	+16 41	
214	1097	-29 50	SB 94	A3	8.2	0 12 36.4	+ 2 31.6	-29 17 5	+16 41	
215				A7	12.2	0 12 55.4	+ 2 31.6	-28 30 10	+16 40	
216		-26 71	SB 103	A2	11.6	0 13 25.1	+ 2 31.8	-25 41 39	+16 40	
217			SB 104	A2	13.2	0 13 27.6	+ 2 31.5	-29 16 14	+16 40	
218			SB 107	A0	13.2	0 13 30.7	+ 2 31.5	-28 50 41	+16 40	
219			SB 106	DA	13.5	0 13 38.2	+ 2 31.7	-26 5 36	+16 40	o?
220				A7	12.5	0 15 52.0	+ 2 31.0	-30 9 28	+16 40	
221			SB 126	B8	13.8	0 16 45.4	+ 2 30.8	-30 18 27	+16 40	
222				A0	13.5	0 17 2.4	+ 2 31.0	-27 42 4	+16 39	
223			PS 1 II,SB 133	B8	13.5	0 17 46.9	+ 2 30.8	-29 4 14	+16 39	
224				DA	13.8	0 18 59.9	+ 2 30.9	-26 42 53	+16 39	
225	2026	-29 106	PS 8 I,SB 161	A1	8.2	0 21 48.6	+ 2 30.1	-29 15 29	+16 38	
226	2037	-27 110	PS 9 I,SB 162	A5	8.9	0 21 59.4	+ 2 30.4	-27 11 39	+16 38	
227			SB 173	A2	13.5	0 23 52.8	+ 2 30.0	-27 25 13	+16 37	
228	2415	-30 127	PS 14 I,SB 182	A0	10.6	0 25 14.9	+ 2 29.4	-29 48 10	+16 36	
229				OB-	13.2	0 26 37.5	+ 2 29.6	-27 35 50	+16 35	
230	2641	-30 138	PS 18 I,SB 199	B9	9.8	0 27 28.9	+ 2 29.0	-30 30 26	+16 35	
231				A pec w:	11.3	0 27 32.4	+ 2 29.4	-28 3 49	+16 35	
232			PS 9 II	A2 W:	12.4	0 27 47.2	+ 2 29.1	-29 31 10	+16 35	
233			PS 10 II,SB 202	A2	13.7	0 27 54.8	+ 2 29.3	-28 25 32	+16 35	
234			PS 13 II,SB 210	B9	12.0	0 28 53.9	+ 2 29.2	-28 14 2	+16 34	
235				A5 w	12.9	0 29 50.2	+ 2 28.7	-29 39 35	+16 34	
236			PS 16 II,SB 225	A1	13.6	0 30 54.2	+ 2 28.7	-28 50 58	+16 33	NF
237				OB-	13.2	0 31 25.0	+ 2 28.9	-27 24 56	+16 33	
238			PS 17 II,SB 231	B9	12.5	0 31 36.2	+ 2 28.6	-28 47 11	+16 33	
239	3244	-26 173	PS 23 I,SB 236	A5	7.7	0 33 3.9	+ 2 29.0	-25 40 28	+16 32	
240		-27 171	PS 24 I,SB 238	A7	10.8	0 33 21.7	+ 2 28.8	-26 46 17	+16 32	
241		-28 170	PS 27 I,	A8	11.8	$0^h\ 34^m\ 36^s.7$	$+\ 2^m\ 28^s.3$	-27° 54' 30"	+16 31	
242		-27 179	PS 28 I, SB 250	A6	12.5	0 34 55.8	+ 2 28.5	-27 6 13	+16 30	
243			PS 20 II, SB 257	B9	13.2	0 36 9.6	+ 2 27.8	-29 14 58	+16 30	
244	3622	-26 196	PS 31 I, SB 263	A5	7.3	0 36 24.6	+ 2 28.5	-25 52 12	+16 30	
245			PS 22 II, SB 272	AF	12.8	0 38 14.9	+ 2 28.2	-26 3 17	+16 28	
246			PS 23 II, SB 276	A0	13.2	0 38 40.3	+ 2 28.1	-26 12 56	+16 28	
247			PS 26 II, SB 285	A0	13.2	0 39 57.8	+ 2 27.3	-28 50 48	+16 27	fSP
248		-29 201	PS 36 I, SB 287	A0	10.5	0 40 3.5	+ 2 27.3	-28 51 1	+16 27	
249		-27 224		A3	10.1	0 42 10.8	+ 2 27.5	-26 35 24	+16 25	
250			PS 27 II, SB 298	A0	12.5	0 42 14.2	+ 2 27.3	-27 27 23	+16 25	
251			PS 28 II, SB 302	A0	13.6	0 42 26.6	+ 2 26.7	-29 30 42	+16 25	
252	4329	-29 213	PS 45 I, SB 306	A2	9.6	0 43 5.3	+ 2 26.8	-28 57 31	+16 24	
253	4399	-29 215	PS 47 I, SB 312	A6	8.9	0 43 38.0	+ 2 26.6	-29 5 59	+16 24	
254	4414	-26 247	PS 49 I, SB 314	A5	8.4	0 43 48.2	+ 2 27.5	-25 48 37	+16 24	
255			SB 315	A1	13.2	0 43 49.8	+ 2 26.5	-29 23 27	+16 24	
256			PS 29 II, SB 317	A4	13.2	0 44 14.5	+ 2 26.8	-28 12 38	+16 24	
257		-30 230	SB 323	A7	10.1	0 44 32.2	+ 2 26.1	-30 27 14	+16 23	fSF
258		-28 251	PS 56 I, SB 337	A4	10.8	0 46 47.9	+ 2 26.5	-27 48 5	+16 21	
259		-30 253	PS 59 I, SB 344	A0	11.0	0 48 8.7	+ 2 25.5	-30 14 24	+16 20	
260	4876	-28 260	SB 343	A7	8.6	0 48 10.2	+ 2 26.3	-27 42 24	+16 20	
261				A6	12.8	0 48 22.6	+ 2 25.5	-30 19 24	+16 20	
262			SB 355	A0	13.4	0 50 32.0	+ 2 25.2	-30 10 52	+16 18	
263		-29 259	PS 63 I, SB 361	A2	10.5	0 51 41.4	+ 2 25.4	-29 1 21	+16 17	
264			PS 55 II, SB 362	B8	12.2	0 51 54.0	+ 2 26.0	-27 11 54	+16 16	
265			PS 36 II, SB 363	A2	12.8	0 52 16.0	+ 2 25.5	-28 30 10	+16 16	
266			PS 38 II, SB 371	A2 w	12.5	0 53 32.7	+ 2 25.9	-26 39 12	+16 15	
267	5524	-26 303	PS 66 I, SB 377	A2	6.9	0 54 22.8	+ 2 26.1	-25 37 58	+16 14	
268	5546	-30 283	PS 67 I, SB 379	A3	10.2	0 54 30.0	+ 2 24.6	-30 1 53	+16 14	
269				B8	13.5	0 54 56.2	+ 2 24.4	-30 8 16	+16 14	
270	5737	-30 297	PS 71 I, SB 390	B5 (HD)	4.1	0 56 11.9	+ 2 24.1	-29 37 38	+16 12	

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TABLE 1 (continued)

Catalog Number	HD Number	CD Number	Other Designations	Spectral Type	Ptg. Mag.	Right Ascension (1950)	50-year Precession	Declination (1950)	50-year Precession	Remarks
271	5769	-30 299	PS 73 I, SB 393	A2	9.1	$0^h\ 56^m\ 36^s.8$	$+\ 2^m\ 24^s.4$	-29° 40' 18"	+16 12	
272		-27 317	PS 74 I, SB 399	A2	10.5	0 57 16.0	+ 2 25.2	-27 1 50	+16 11	
273			PS 42 II, SB 408	A3	13.2	0 58 27.7	+ 2 24.6	-28 21 37	+16 10	
274		-30 314	PS 75 I, SB 411	A3	12.5	0 59 37.4	+ 2 23.8	-29 47 22	+16 8	
275		-30 324	PS 78 I, SB 416	B8	10.5	1 0 50.7	+ 2 23.5	-29 59 59	+16 7	
276				A3	13.5	1 1 19.3	+ 2 25.2	-25 35 4	+16 6	
277	6365	-30 330	PS 82 I, SB 431	A2	9.1	1 1 53.6	+ 2 23.2	-30 17 24	+16 6	
278	6364	-27 345	PS 81 I, SB 430	A4	9.6	1 1 53.8	+ 2 24.4	-27 25 22	+16 6	
279	6532	-27 355	PS 83 I, SB 441	A2	7.3	1 3 31.5	+ 2 24.4	-26 59 44	+16 4	
280				A2w:	12.5	1 4 26.9	+ 2 22.7	-30 34 16	+16 3	
281			PS 48 II, SB 449	A0	12.5	1 4 34.6	+ 2 23.6	-28 23 45	+16 3	
282	6670	-30 348	PS 85 I, SB 451	A6	9.1	1 4 38.1	+ 2 23.0	-29 52 56	+16 2	
283	6723	-29 335	PS 87 I, SB 455	A6	8.6	1 5 12.6	+ 2 23.3	-28 58 18	+16 2	
284		-27 372	PS 90 I, SB 460	A0 w	11.9	1 6 13.4	+ 2 23.9	-27 9 6	+16 1	
285			SB 467	A3 w	12.8	1 7 4.8	+ 2 23.9	-26 55 43	+16 0	
286			SB 469	A3 w	13.0	1 7 35.5	+ 2 23.2	-28 14 29	+15 59	
287			PS 52 II, SB 474	B9 w	12.8	1 8 7.0	+ 2 24.0	-26 20 42	+15 58	
288			PS 53 II, SB 473	A0	13.6	1 8 7.4	+ 2 24.1	-25 56 40	+15 58	
289	7184	-27 389	PS 95 I, SB 481	A2	10.0	1 9 26.8	+ 2 23.7	-26 37 16	+15 56	
290			PS 54 II, SB 485	B5	12.4	1 9 48.0	+ 2 23.7	-26 29 20	+15 56	
291		-30 389	PS 98 I, SB 502	A0	11.7	1 11 33.1	+ 2 21.8	-30 2 15	+15 54	
292		-26 414	PS 101 I, SB 512	A6	11.7	1 13 37.2	+ 2 23.4	-25 58 22	+15 51	
293			PS 58 II, SB 519	B9	13.0	1 14 36.0	+ 2 22.7	-27 14 48	+15 50	
294			SB 520	A0	13.7	1 14 36.0	+ 2 22.3	-28 1 46	+15 50	
295				A w	14.0	1 15 28.4	+ 2 21.2	-30 2 57	+15 48	
296			PS 62 II, SB 537	A4	12.6	1 17 7.2	+ 2 22.4	-26 57 33	+15 46	
297		-26 442	PS 114 I, SB 551	A2	10.3	1 19 5.4	+ 2 22.5	-26 16 14	+15 43	
298				A w	13.7	1 20 24.5	+ 2 21.1	-28 40 10	+15 41	
299		-26 452	SB 562	AF	11.0	1 20 28.0	+ 2 22.5	-25 54 59	+15 41	
300			SB 563	A0	13.7	1 20 29.2	+ 2 20.3	-30 10 15	+15 41	bSP
301			SB 570	A0	11.6	$1^h\ 22^m\ 8^s.2$	$+\ 2^m\ 21^s.0$	-28° 19' 42"	+15 38	
302	8603	-25 563	SB 571	A3	9.5	1 22 9.6	+ 2 22.4	-25 34 47	+15 38	
303	8717	-29 454	SB 574	A3	8.2	1 23 7.1	+ 2 20.5	-29 2 32	+15 37	
304	8716	-27 478	SB 576	A5	8.7	1 23 9.1	+ 2 21.7	-26 43 3	+15 37	
305			SB 593	A3	12.4	1 25 31.3	+ 2 21.6	-26 21 38	+15 33	
306			SB 591	A2	13.7	1 25 32.0	+ 2 21.8	-25 59 23	+15 33	2bNP
307			SB 601	A2	13.4	1 25 45.9	+ 2 21.3	-26 55 38	+15 33	
308			SB 603	A0	12.7	1 26 3.6	+ 2 21.3	-26 41 11	+15 32	S
309				A pec w	12.7	1 26 24.2	+ 2 20.2	-28 43 46	+15 32	
310			SB 613	A0	11.7	1 26 36.4	+ 2 19.1	-30 37 11	+15 31	
311			SB 617	A0	13.4	1 27 33.1	+ 2 20.0	-28 47 2	+15 30	
312		-30 500	SB 618	A5	11.0	1 27 46.4	+ 2 18.9	-30 35 59	+15 30	
313		-28 473	SB 627	A5	10.4	1 29 23.4	+ 2 19.9	-28 22 43	+15 27	ffNP
314	9451	-26 522	SB 635	A4	7.6	1 29 58.4	+ 2 20.7	-26 48 30	+15 26	fF
315	9475	-30 509		A8	8.2	1 30 10.6	+ 2 18.9	-29 58 57	+15 26	
316		-29 495	SB 638	A0	10.7	1 30 16.5	+ 2 19.5	-28 54 42	+15 25	
317			SB 645	A3	13.5	1 30 42.6	+ 2 20.6	-26 47 54	+15 25	
318			SB 648	A1	13.1	1 31 10.6	+ 2 20.2	-27 26 16	+15 24	
319	9673	-28 489	SB 652	A3	7.1	1 31 58.2	+ 2 20.0	-27 37 9	+15 22	
320	9857	-30 538	SB 657	A6	10.1	1 33 21.3	+ 2 18.1	-30 29 50	+15 20	
321			SB 669	A2	12.7	1 35 16.1	+ 2 20.6	-25 45 6	+15 17	
322			SB 673	A0	13.5	1 36 36.2	+ 2 18.8	-28 34 45	+15 14	
323			SB 684	A2	12.7	1 38 2.8	+ 2 18.6	-28 31 24	+15 12	
324				A7	13.5	1 38 33.4	+ 2 19.5	-26 58 28	+15 11	
325		-30 571	SB 691	A2	10.4	1 38 51.6	+ 2 17.3	-30 23 50	+15 10	
326				A2	13.7	1 39 7.0	+ 2 18.0	-29 8 33	+15 10	
327				B9	13.1	1 40 19.3	+ 2 17.1	-30 16 43	+15 8	
328				A0	13.1	1 40 22.0	+ 2 18.4	-28 14 5	+15 8	
329	10646	-30 585	SB 704	A8	10.1	1 41 2.8	+ 2 17.4	-29 39 54	+15 6	
330		-30 599	SB 714	A1 w:	11.4	1 42 42.9	+ 2 16.7	-30 18 33	+15 3	
331		-29 573	SB 721	A2	11.4	$1^h\ 44^m\ 6^s.1$	$+\ 2^h\ 17^s.4$	-29° 2' 54"	+15 0	
332		-28 560	SB 727	AF	11.7	1 44 47.3	+ 2 17.7	-28 25 15	+14 59	
333	11021	-30 615	SB 735	A0	8.2	1 45 23.8	+ 2 16.6	-29 58 16	+14 58	
334	11100	-26 642	SB 742	A3 (HD)	7.2	1 46 17.2	+ 2 18.7	-26 30 7	+14 55	
335	11101	-27 615	SB 743	A6	8.9	1 46 17.4	+ 2 18.6	-26 48 12	+14 56	
336			SB 744	B4	12.1	1 46 25.3	+ 2 18.5	-26 51 5	+14 56	
337		-28 572	SB 748	A2	10.4	1 47 1.5	+ 2 17.7	-27 56 24	+14 55	
338	11208	-29 599	SB 749	AF	10.0	1 47 19.1	+ 2 16.6	-29 31 46	+14 54	
339				A4 w	12.8	1 47 22.4	+ 2 16.4	-29 49 26	+14 54	
340			SB 756	A0	13.4	1 48 53.6	+ 2 16.8	-28 50 26	+14 51	
341	11370	-28 613	SB 755	A3	9.4	1 48 57.5	+ 2 16.8	-28 49 38	+14 51	
342		-29 621	SB 761	A3	11.6	1 49 53.8	+ 2 16.4	-29 18 30	+14 49	bNP
343		-28 586	SB 766	A2	11.6	1 50 12.0	+ 2 17.4	-27 45 7	+14 48	fSF
344			SB 772	A6	12.2	1 50 58.1	+ 2 17.3	-27 43 34	+14 47	
345		-27 656	SB 778	A6	12.5	1 52 2.9	+ 2 17.8	-26 52 20	+14 45	
346			SB 780	A8	12.5	1 52 37.3	+ 2 17.8	-26 41 35	+14 44	
347	11808	-25 758		A2	7.8	1 52 56.6	+ 2 18.5	-25 36 41	+14 43	
348				A0	12.8	1 53 3.3	+ 2 17.3	-27 24 12	+14 43	
349				A4	12.5	1 54 7.1	+ 2 17.8	-26 22 35	+14 40	
350		-29 652	SB 781	A2	10.9	1 54 19.9	+ 2 15.5	-29 35 23	+14 40	
351				A7	12.1	1 54 40.9	+ 2 16.7	-27 53 10	+14 39	
352				A2	12.5	1 56 37.6	+ 2 15.8	-28 46 16	+14 35	
353	12206	-27 688		A2	5.5	1 57 2.0	+ 2 17.3	-26 40 30	+14 34	
354	12318	-30 693		A3	8.4	1 57 57.5	+ 2 14.6	-30 6 29	+14 32	
355	12384	-27 700		A0	9.1	1 58 39.3	+ 2 17.1	-26 38 24	+14 31	
356				A7	12.5	1 58 56.8	+ 2 15.2	-29 8 40	+14 30	fNP, NF
357				A7	12.2	1 59 32.1	+ 2 16.1	-27 46 41	+14 29	
358				A1	13.2	1 59 45.2	+ 2 16.1	-27 49 25	+14 28	
359				A6	11.9	2 00 4.0	+ 2 16.8	-26 46 54	+14 28	
360	12563	-30 714		A3 (HD)	6.6	2 00 13.8	+ 2 14.3	-29 54 21	+14 26	

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TABLE 1 (continued)

Catalog Number	HD Number	CD Number	Other Designations	Spectral Type	Ptg. Mag.	Right Ascension (1950)	50-year Precession	Declination (1950)	50-year Precession	Remarks
361	12597	-28 647		A2	9.8	$2^h\ 0^m\ 38^s.7$	$+\ 2^m\ 16^s.1$	-27° 39' 29"	+14 26	
362	12767	-29 706		A0 p(HD)	4.8	2 02 15.0	+ 2 14.3	-29 32 10	+14 22	
363				B7	13.5	2 2 21.8	+ 2 15.6	-27 58 24	+14 23	
364		-29 715		A6	11.2	2 3 21.0	+ 2 14.4	-29 22 35	+14 20	
365				A3	12.8	2 3 28.8	+ 2 15.7	-27 37 48	+14 20	
366	12959	-29 718		A4	9.1	2 3 56.5	+ 2 14.2	-29 27 50	+14 19	
367	13106	-29 730		A8	8.4	2 5 20.7	+ 2 14.0	-29 34 17	+14 16	
368		-27 737		A6	10.5	2 5 36.0	+ 2 15.8	-27 6 10	+14 15	
369	13168	-28 675		A7	6.6	2 5 53.2	+ 2 15.3	-27 48 30	+14 15	
370	13232	-26 767		A2	8.3	2 6 23.1	+ 2 16.6	-25 58 38	+14 14	
371				A2 w	12.9	2 7 41.0	+ 2 16.2	-26 20 45	+14 11	
372				A2(w)	13.2	2 7 45.3	+ 2 15.6	-27 4 2	+14 10	
373		-26 778		A0	11.5	2 7 55.6	+ 2 16.5	-25 53 47	+14 10	
374	13385	-27 746		A0	9.8	2 7 58.1	+ 2 15.7	-26 56 28	+14 10	
375		-29 756		A2 w	12.1	2 7 58.5	+ 2 13.9	-29 10 48	+14 10	
376		-27 747		A0	11.6	2 8 7.9	+ 2 15.4	-27 16 29	+14 10	
377	13408	-28 691		A2	8.6	2 8 12.6	+ 2 14.8	-28 3 5	+14 9	
378		-27 756		A4	10.4	2 9 31.5	+ 2 15.6	-26 44 42	+14 6	
379				A2	13.2	2 9 59.8	+ 2 16.5	-25 34 45	+14 5	
380	13752	-29 784		A1	8.9	2 11 11.3	+ 2 13.4	-29 12 9	+14 2	
381	13807	-30 787		A0	10.0	2 11 29.1	+ 2 12.6	-30 7 3	+14 2	
382				A0	12.6	2 11 35.6	+ 2 12.7	-30 3 11	+13 1	
383				A2 w	12.4	2 17 54.7	+ 2 13.3	-28 19 25	+13 46	F
384	14574	-27 812		A2	10.4	2 18 28.6	+ 2 14.3	-27 1 35	+13 45	
385	14600	-28 747		A8	10.0	2 18 35.7	+ 2 13.2	-28 17 21	+13 44	
386		-29 841		A2	11.7	2 19 0.6	+ 2 12.3	-29 20 6	+13 43	
387	14850	-30 850		B9	7.8	2 20 48.9	+ 2 11.6	-29 50 45	+13 39	
388		-26 851		A5	10.7	2 21 9.4	+ 2 14.5	-26 23 11	+13 38	
389	14965	-29 859		A1	8.9	2 21 45.7	+ 2 11.6	-29 39 36	+13 36	
390		-28 766		A2	10.7	2 22 17.0	+ 2 13.1	-27 53 30	+13 35	
391				A2	13.6	$2^h\ 22^m\ 45^s.4$	$+\ 2^m\ 12^s.4$	-28° 34' 17"	+13 34	
392		-28 861		A0	11.0	2 23 0.9	+ 2 14.9	-25 40 42	+13 33	
393				A3 w	12.6	2 23 4.3	+ 2 12.7	-28 14 16	+13 33	
394				A2	12.6	2 23 28.0	+ 2 13.5	-27 14 17	+13 32	
395	15287	-29 884		A2	10.0	2 24 43.2	+ 2 11.2	-29 38 47	+13 29	
396				A4	12.9	2 25 9.1	+ 2 11.4	-29 21 19	+13 28	
397				B9	12.6	2 25 32.7	+ 2 12.9	-27 39 4	+13 27	
398				A0	12.6	2 25 43.7	+ 2 12.8	-27 43 52	+13 26	
399				A2 w	13.2	2 28 41.7	+ 2 9.9	-30 26 43	+13 18	
400				B9	13.9	2 28 44.6	+ 2 13.0	-27 3 44	+13 18	
401		-30 917		A3	10.6	2 28 45.4	+ 2 10.2	-30 12 11	+13 13	
402				A0	13.0	2 29 14.9	+ 2 10.6	-29 37 28	+13 17	
403	15783	-28 800		A4	7.4	2 29 21.0	+ 2 12.4	-27 43 31	+13 17	
404	15887	-27 882		A4	7.4	2 30 17.2	+ 2 12.7	-27 13 22	+13 14	
405				A1	11.3	2 30 38.0	+ 2 12.1	-27 50 7	+13 13	fNP
406				A0 w	12.6	2 30 42.2	+ 2 11.0	-28 58 8	+13 13	
407				A4	12.6	2 31 27.0	+ 2 13.8	-25 52 52	+13 11	
408	16046	-28 819		B9 (HD)	4.8	2 31 39.3	+ 2 11.6	-28 27 4	+13 9	
409	16195	-29 935		A1	7.5	2 33 0.1	+ 2 10.8	-28 54 55	+13 7	
410				A0	13.6	2 33 17.5	+ 2 10.8	-28 50 58	+13 6	fP
411				A0	13.0	2 34 25.4	+ 2 11.0	-28 29 14	+13 3	
412				A4	13.0	2 34 58.5	+ 2 13.3	-25 57 38	+13 2	
413		-30 966		A0	10.3	2 35 3.0	+ 2 9.6	-29 51 56	+13 1	
414				A2	12.6	2 37 3.7	+ 2 13.1	-25 57 50	+12 56	
415				A1	13.3	2 38 38.4	+ 2 12.8	-26 5 2	+12 52	
416				A0	13.3	2 38 57.6	+ 2 9.0	-30 2 54	+12 51	
417	16914	-28 869		A5	8.9	2 39 46.9	+ 2 10.7	-28 9 46	+12 48	fF
418	17041	-27 957		A4	8.9	2 41 11.0	+ 2 11.9	-26 43 26	+12 44	
419				A2	13.6	2 41 28.8	+ 2 11.1	-27 31 6	+12 44	
420				A w	13.3	2 41 53.1	+ 2 11.6	-26 58 19	+12 42	
421	17187	-26 1000		A4	9.5	$2^h\ 42^m\ 31^s.7$	$+\ 2^m\ 12^s.0$	-26° 24' 59"	+12 40	
422				A1 w	13.3	2 42 58.4	+ 2 9.9	-28 33 41	+12 39	
423				A2	13.0	2 44 9.5	+ 2 9.0	-29 19 11	+12 36	
424				B8	13.3	2 45 35.8	+ 2 8.6	-29 35 6	+12 32	
425				A1	13.0	2 46 4.6	+ 2 7.8	-30 15 11	+12 30	
426				A0	11.6	2 46 48.1	+ 2 9.8	-28 10 56	+12 28	
427	17681	-29 1035		A4	9.5	2 47 10.6	+ 2 8.7	-29 15 53	+12 27	
428				A2	12.0	2 47 10.9	+ 2 9.9	-28 4 52	+12 27	
429				A0	12.6	2 47 21.3	+ 2 11.2	-26 45 7	+12 27	
430	17729	-28 903		A1	6.6	2 47 44.3	+ 2 9.8	-28 8 54	+12 26	
431				A2 w	12.6	2 47 58.4	+ 2 11.4	-26 28 13	+12 25	3NP
432				A2	13.4	2 48 3.3	+ 2 9.0	-28 49 24	+12 25	
433	17846	-25 1134		A8	10.0	2 49 6.0	+ 2 12.1	-25 37 50	+12 22	
434	17978	-26 1051		A3	9.8	2 50 22.1	+ 2 11.1	-26 30 28	+12 18	
435	18064	-30 1086		A7	8.0	2 51 6.8	+ 2 7.4	-30 2 9	+12 16	
436				A4	10.9	2 51 9.2	+ 2 9.1	-28 24 29	+12 15	
437	18100	-26 1057		B6	7.3	2 51 29.7	+ 2 11.1	-26 21 30	+12 14	
438	18108	-27 1012		A3 (HD)	10.2	2 51 36.2	+ 2 10.0	-27 27 48	+12 16	
439	18116	-25 1148		A3 (HD)	10.0	2 51 41.0	+ 2 11.8	-25 40 37	+12 16	
440				A3 w	12.5	2 52 21.5	+ 2 8.8	-28 36 9	+12 12	
441				A1	13.2	2 53 53.1	+ 2 8.6	-28 36 42	+12 7	
442	18350	-26 1074		A4	6.8	2 53 56.6	+ 2 10.8	-26 24 3	+12 7	
443				BA w	12.8	2 54 16.2	+ 2 6.7	-30 18 59	+12 6	
444				A2	12.5	2 54 30.3	+ 2 8.3	-28 48 50	+12 5	
445				A6	12.1	2 54 42.3	+ 2 9.8	-27 20 11	+12 5	
446				A0	12.2	2 54 56.2	+ 2 8.4	-28 38 55	+12 4	
447				A0	12.5	2 55 48.1	+ 2 7.7	-29 14 7	+12 2	
448				A2	12.8	2 58 50.4	+ 2 7.0	-29 32 51	+11 52	bF
449				A8	12.5	2 58 59.8	+ 2 6.2	-30 18 44	+11 52	
450	18874	-27 1056		A3	8.4	2 59 8.7	+ 2 9.0	-27 41 25	+11 51	

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TABLE 1 (continued)

Catalog Number	HD Number	CD Number	Other Designations	Spectral Type	Ptg. Mag.	Right Ascension (1950)	50-year Precession	Declination (1950)	50-year Precession	Remarks
451				A3 w	13.2	$2^h\ 59^m\ 15^s.6$	$+2^m\ 7^s.6$	-28° 58' 47"	+11 51	
452				B9	12.5	3 0 3.6	+ 2 6.9	-29 32 23	+11 48	bSF
453				B5	12.2	3 0 14.6	+ 2 10.4	-26 13 27	+11 48	
454	19005	-28 992		A2	9.8	3 0 24.6	+ 2 8.4	-28 3 45	+11 47	NF
455		-27 1067		A4	11.2	3 1 30.7	+ 2 9.5	-26 56 15	+11 44	
456				A0	12.8	3 1 58.9	+ 2 9.7	-26 42 0	+11 42	
457				A3	12.8	3 2 24.6	+ 2 7.5	-28 45 36	+11 41	
458				AF comp?	12.8	3 3 33.0	+ 2 7.6	-28 28 0	+11 38	
459				B8	12.5	3 3 57.4	+ 2 8.5	-27 39 38	+11 36	
460	19452	-26 1144		A8	8.6	3 4 38.2	+ 2 10.0	-26 8 40	+11 34	
461	19497	-26 1147		A0	9.1	3 5 3.6	+ 2 9.4	-26 40 15	+11 33	
462	19545	-28 1028		A3	5.0	3 5 42.7	+ 2 7.9	-28 1 20	+11 31	
463		-27 1094		A0	11.8	3 5 43.6	+ 2 8.8	-27 9 42	+11 31	
464	19563	-30 1195		A8	6.8	3 5 52.0	+ 2 5.1	-30 30 14	+11 30	
465		-29 1155		A8	11.2	3 6 11.3	+ 2 6.6	-29 11 21	+11 29	
466	19678	-27 1103		A4	6.8	3 7 4.5	+ 2 9.0	-26 54 21	+11 26	
467	19839	-26 1172		A2	10.2	3 8 25.7	+ 2 10.0	-25 45 22	+11 22	
468		-27 1115		A0	10.2	3 8 29.7	+ 2 8.4	-27 17 29	+11 22	
469				A1 w	10.8	3 9 4.2	+ 2 9.0	-26 40 16	+11 20	
470	20002	-30 1223		A7	7.8	3 9 47.2	+ 2 4.7	-30 27 48	+11 18	
471		-28 1056		A8	10.8	3 9 48.8	+ 2 6.8	-28 34 48	+11 18	
472		-30 1233		A2	11.9	3 11 10.5	+ 2 4.7	-30 19 20	+11 13	
473	20142	-28 1067		A2	6.7	3 11 14.2	+ 2 7.6	-27 45 39	+11 13	
474	20187	-30 1239		A7	8.7	3 11 35.1	+ 2 4.6	-30 24 30	+11 12	
475				A2 w	12.8	3 12 35.4	+ 2 8.0	-27 13 47	+11 9	fP,o
476	20293	-26 1210		A0	6.4	3 12 51.1	+ 2 9.1	-26 17 7	+11 8	
477		-28 1081		A2	10.0	3 14 11.4	+ 2 6.6	-28 22 22	+11 3	
478	20606	-29 1216		A5 (HD)	6.2	3 15 56.3	+ 2 5.7	-28 58 43	+11 3	
479				A5 w:	12.8	3 16 33.9	+ 2 8.1	-26 50 26	+10 56	
480		-28 1105		A0	11.2	3 17 23.6	+ 2 6.9	-27 50 9	+10 53	
481				A2	12.8	$3^h\ 17^m\ 41^s.3$	$+2^h\ 8^s.4$	-26° 27' 12"	+10 52	
482				B9	12.8	3 18 5.0	+ 2 3.6	-30 35 46	+10 51	
483				A1	13.1	3 18 27.7	+ 2 5.9	-28 35 39	+10 49	
484	20980	-26 1257		A1	6.4	3 20 7.2	+ 2 9.0	-25 45 58	+10 44	
485				A3 w:	13.1	3 20 17.2	+ 2 7.3	-27 11 30	+10 43	
486		-26 1260		AF	10.2	3 20 38.8	+ 2 8.7	-25 55 41	+10 42	
487				A7	12.8	3 22 21.5	+ 2 7.3	-27 1 44	+10 36	
488	21219	-30 1314		A2	10.0	3 22 27.2	+ 2 4.0	-29 53 22	+10 36	
489		-30 1320		A4	10.0	3 23 26.5	+ 2 3.5	-30 10 31	+10 33	
490		-27 1225		A3	10.9	3 24 6.3	+ 2 7.4	-26 50 52	+10 30	
491		-26 1291		A1	10.2	3 24 35.6	+ 2 8.0	-26 15 23	+10 29	
492		-27 1240		A0	10.5	3 25 49.4	+ 2 7.1	-26 55 12	+10 24	
493				A0	12.8	3 26 4.0	+ 2 8.4	-25 47 13	+10 24	
494				B9 w	12.5	3 26 23.3	+ 2 4.8	-28 50 50	+10 22	
495				DA	12.8	3 26 40.7	+ 2 6.4	-27 29 31	+10 22	
496		-30 1346		A2	10.6	3 27 23.6	+ 2 3.6	-29 48 5	+10 19	fSP
497		-29 1298		A5	11.4	3 28 53.8	+ 2 3.7	-29 32 36	+10 14	
498	21997	-26 1333		A2	6.4	3 29 45.4	+ 2 8.1	-25 46 57	+10 11	
499	22025	-29 1306		A3	8.9	3 30 0.5	+ 2 4.1	-29 11 5	+10 10	
500				B9 w	12.9	3 31 1.5	+ 2 5.0	-28 16 34	+10 6	bNP
501		-26 1340		OBee	11.0	3 31 6.8	+ 2 7.7	-26 2 20	+10 6	
502				B9	11.7	3 31 43.1	+ 2 3.1	-29 51 26	+10 4	
503	22413	-28 1205		A6	8.6	3 33 29.8	+ 2 4.6	-28 30 3	+ 9 58	
504	22424	-26 1352		A6	8.6	3 33 23.9	+ 2 6.8	-26 35 43	+ 9 58	
505		-29 1340		A0	11.4	3 33 58.6	+ 2 3.8	-29 3 34	+ 9 56	
506				A0	13.3	3 34 6.4	+ 2 3.0	-29 43 15	+ 9 56	
507				B8	11.7	3 35 3.4	+ 2 5.1	-27 55 26	+ 9 52	
508	22593	-30 1406		A1	8.0	3 35 6.5	+ 2 2.6	-29 59 37	+ 9 52	
509				B9 w	13.6	3 35 11.1	+ 2 4.1	-28 42 27	+ 9 52	
510				A2	13.6	3 36 19.6	+ 2 7.3	-25 59 55	+ 9 48	
511		-26 1313		A2	11.1	$3^h\ 36^m\ 23^s.2$	$+2^h\ 6^s.2$	-26° 52' 14"	+ 9 48	
512	22789	-28 1225		A2	6.4	3 36 42.7	+ 2 4.7	-28 6 20	+ 9 46	
513				A5	12.4	3 37 11.6	+ 2 4.7	-28 5 19	+ 9 45	SP
514				A3 w	13.3	3 38 2.6	+ 2 4.1	-28 33 4	+ 9 42	SP
515				A3	12.7	3 38 5.1	+ 2 7.0	-26 5 42	+ 9 42	
516				A5	13.3	3 40 25.4	+ 2 4.3	-28 9 0	+ 9 33	
517	23329	-26 1402		A5	10.1	3 41 17.5	+ 2 6.2	-26 30 44	+ 9 30	
518	23342	-28 1260		B9	10.1	3 41 23.4	+ 2 3.7	-28 37 38	+ 9 30	
519	23405	-29 1401		A5	7.5	3 41 54.4	+ 2 3.4	-28 47 8	+ 9 28	
520	23530	-25 1535		A3	9.6	3 42 53.2	+ 2 7.0	-25 44 43	+ 9 24	
521				A6	13.3	3 43 11.2	+ 2 5.7	-26 49 19	+ 9 23	
522	23616	-26 1423		A6	6.9	3 43 26.5	+ 2 6.6	-26 4 15	+ 9 22	
523		-30 1482		A2	11.1	3 44 0.3	+ 2 0.9	-30 34 15	+ 9 20	
524	23738	-29 1413		A2	6.9	3 44 25.1	+ 2 2.3	-29 29 34	+ 9 19	
525		-28 1282		A8	10.1	3 44 38.9	+ 2 3.6	-28 27 33	+ 9 18	
526		-29 1424		A3	11.4	3 45 18.2	+ 2 2.3	-29 23 40	+ 9 16	
527	23920	-26 1434		A3	6.9	3 45 53.0	+ 2 5.9	-26 28 53	+ 9 14	
528	23939	-30 1496		A8	7.5	3 45 55.0	+ 2 1.2	-30 14 58	+ 9 13	
529	24007	-30 1500		A6	9.1	3 46 27.6	+ 2 1.2	-30 13 47	+ 9 11	
530	24019	-30 1502		A1	9.1	3 46 33.8	+ 2 0.7	-30 33 15	+ 9 11	
531		-27 1404		A4	11.7	3 46 55.5	+ 2 5.2	-26 57 31	+ 9 10	
532	24083	-27 1407		A2	10.1	3 47 4.3	+ 2 4.5	-27 34 43	+ 9 9	o
533				A0	13.0	3 47 48.5	+ 2 6.1	-26 12 47	+ 9 6	bF
534				B9	13.4	3 48 16.4	+ 2 5.4	-26 46 34	+ 9 5	
535		-30 1523		A6	10.1	3 49 1.2	+ 2 1.1	-30 6 39	+ 9 2	
536	24405	-25 1617		A2	8.8	3 49 51.8	+ 2 6.5	-25 44 6	+ 8 59	
537				B9 w	12.0	3 50 25.7	+ 2 3.7	-27 58 4	+ 8 57	
538		-25 1623		A5	11.4	3 51 0.6	+ 2 6.4	-25 45 23	+ 8 55	
539				A0 w	12.6	3 51 13.0	+ 2 5.0	-26 51 52	+ 8 54	

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sitions were found to be good to 0.07 seconds of time and one second of arc in right ascension and declination respectively.

The magnitudes listed for the stars are intended primarily for identification purposes. They were made from density estimates of the stellar spectra between H_γ and H_δ and are accurate to approximately $+0.5$ mag.

III. The Finding List

The stars in the finding list are presented in Table 1. The catalogue, HD and CD numbers are shown in columns 1-3. If the star appears in the Philip, Sanduleak (1968) or Slettebak, Brundage (1971) lists, its number is shown in column 4. The spectral type is listed in column 5. Some special symbols are used to further describe the spectra. A "w" indicates weak hydrogen lines, an "!" indicates that the preceding feature is pronounced, a "pec." indicates a peculiar star, and "ce" indicates a ce star (Slettebak and Stock, 1957). The positions and 50 year precession are given in columns 7-10. Symbols describing the position and brightness of stars in the field of the catalogue star appear in the remarks section. The second star in the field is referred to as brighter "b", fainter "f", preceding "P", or following "F", north "N", or south "S". If the second star is much brighter this is indicated by "bb". The symbol "2b" indicates that there are two companion stars in approximately the same position and approximately the same magnitude. An "O" indicates that the catalogue star is overlapped with another spectrum.

For stars which are also in the Slettebak, Brundage (1971) lists, finding charts exist in that publication. For the other stars, the positions plus the positional information under remarks is sufficient to decide which star is the one to be observed. Finding charts are in preparation for those stars with right ascension greater than 2^{hrs}. Finding charts for stars with right ascension less than $23^h\ 33^m$ will be prepared during the next observing season.

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Figure 1

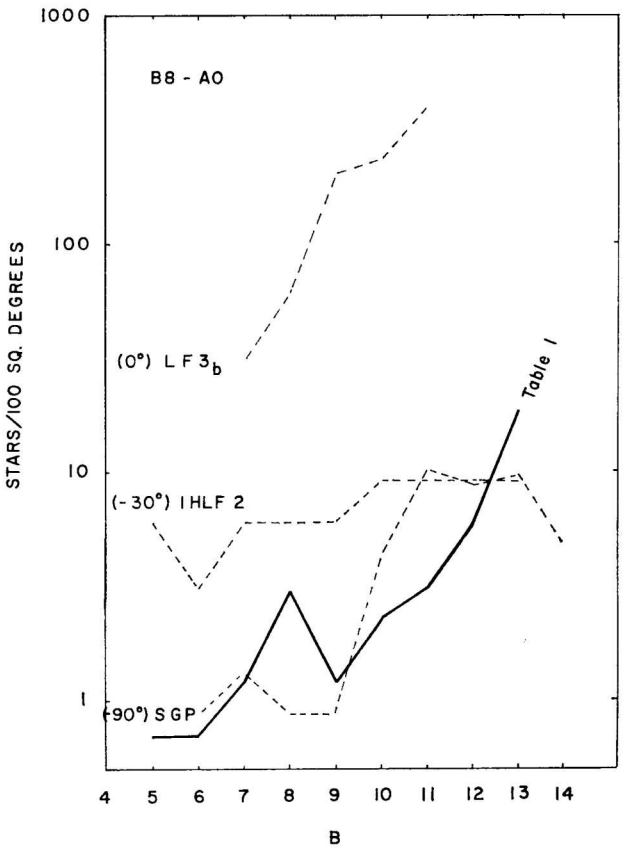

Figure 2

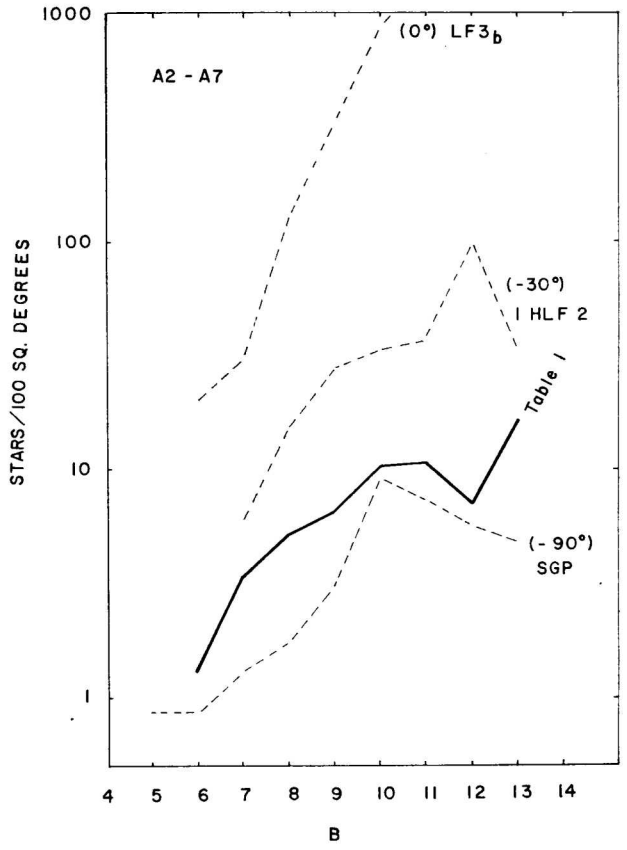

Fig. 1. *The distribution of the number of stars/100 square degrees with apparent magnitude for B8-A0 stars. The distributions in other areas are marked by dashed lines, the distribution in the area of this study by a heavy line.*

Fig. 2. *The distribution of the number of stars/100 square degrees with apparent magnitude for A2-A7 stars. The distributions in other areas are marked by dashed lines, the distribution in the area of this study by a heavy line.*

IV. Remarks

The distributions of stars/100 square degrees for the spectral groups B8 – A0 and A2 – A7 are shown for stars in the area under study in Figures 1 and 2. The distribution for latitudes –80, –70, –60, and –50 showed no differences greater than the statistical error; therefore the distribution for all latitudes –50° to –90° are shown together. We expect differences in stellar distribution to show up when the distribution of stars in the $b = -50°$ to $b = 0°$ latitudes are analyzed.

Figure 3

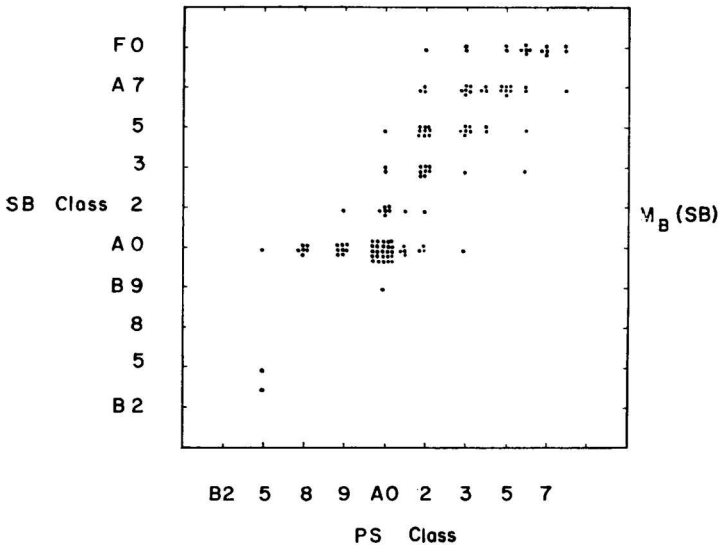

Figure 4

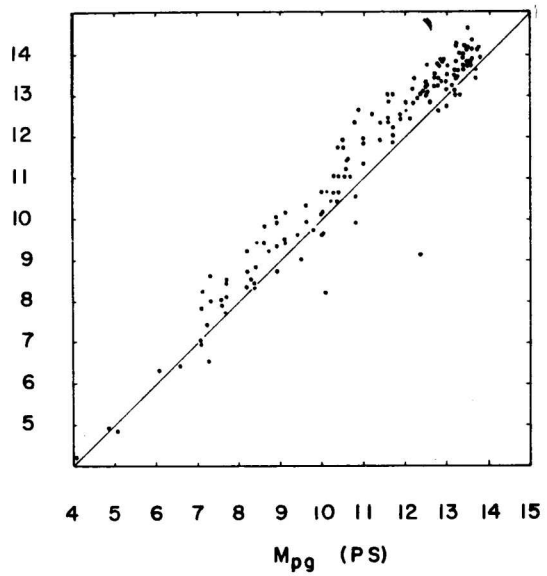

Fig. 3. *Spectral types in the Philip, Stock catalogue compared with those in the Slettebak, Brundage (1971) catalogue.*

Fig. 4. *Magnitudes measured in the Philip, Stock catalogue compared with those in the Slettebak, Brundage (1971) catalogue.*

The spectral types in this catalogue are compared with those in the Slettebak, Brundage (1971) catalogue in Figure 3. The late A stars are classified about one Schmidt type early relative to this classification. The photographic magnitudes in the two catalogues are compared in Figure 4. The Philip, Stock magnitudes are about 0.5 magnitudes brighter than the magnitudes in the Slettebak, Brundage catalogue. This same effect was noted by Slettebak and Brundage when they compared their magnitudes with the Philip, Sanduleak Catalogue.

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