

## OBSERVATIONAL RESULTS OF THREE-COLOR PHOTOMETRY FOR F TYPE STARS

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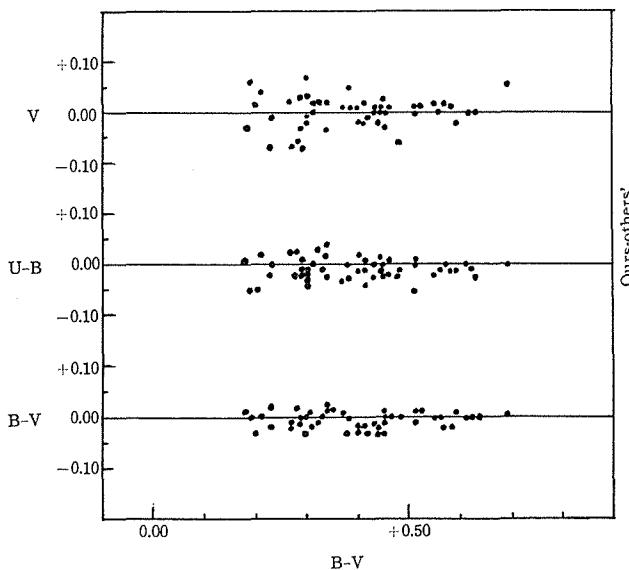
Fumihiko IMAGAWA

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It has been said that the near-by middle type main sequence stars seem to be classified into two categories. (1,2,3,4) Observations for the re-examination have been undertaken since two years ago. In this list, the results of three-color photometric observations on the UBV system for F type stars are summarized.

Observations had been done from 1962 autumn to 1963 summer, with the aid of the 16-inch reflector of our Institute and the 36-inch reflector of the Okayama Astrophysical Observatory. On our photometric apparatus using an RCA 1P21 a brief description was given elsewhere, (5) and that of the Okayama Observatory is also in principle of a type not so much different from ours except using an EMI 6256. Results due to both instruments were unified by reducing to Johnson's system by the same standard stars.

The stars observed were selected from the Yale Catalogue of Bright Stars by the



Comparison of ours with others',

following criteria: 1) FO-GO in spectral type; 2) larger than  $0''.010$  in parallax; 3) excluding double stars unseparable by our equipment and high velocity stars. In addition some stars with parallax smaller than  $0''.010$  were also collected from various sources. Most of all program stars are or may be the main sequence ones but some giants and supergiants are included for comparison. The reduction for extinction and to the standard system were carried out in the usual way. The accuracy for a single night observation is as follows:

$$\begin{aligned} \text{mean of m.e. in B-V: } & 0.016 \\ \text{U-B: } & 0.022 \\ \text{V: } & 0.026. \end{aligned}$$

Comparison of our observations with others' (6,7,8) by the common stars is shown in the diagram.

The final observational results are given in the table, where  $n$  in 6th column is the number of observations. The data show that many of stars thought to be main sequence ones seem to have ultra-excess or deficiency, though the discussions will be reserved later.

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## List of observational results.

Ser. No.	HD	Name	$\alpha$ (1950.0) $\delta$		n	B-V	U-B	V
1	400		0 <sup>h</sup> 06.1 <sup>m</sup>	+36° 21'	1	+0.49	-0.07	6.14
2	571	22And	0 07.7	+45 48	1	+0.38	+0.20	5.08
3	1671	$\rho$ And	0 18.5	+37 42	1	+0.39	+0.12	5.22
4	2454		0 25.7	+ 9 55	1	+0.43	-0.11	6.10
5	4614	$\eta$ Cas	0 46.1	+57 33	1	+0.59	-0.01	3.43
6	5357		0 53.7	+68 30	1	+0.37	-0.04	6.39
7	6314		1 01.8	+39 43	1	+0.30	+0.04	6.71
8	6680	78 Psc	1 05.2	+31 45	1	+0.38	0.00	6.31
9	6706	30 Cet	1 05.3	-10 03	1	+0.42	0.00	5.84
10	6763	80 Psc	1 05.8	+ 5 23	1	+0.32	+0.04	5.54
11	7238		1 12.0	+79 39	1	+0.42	-0.09	6.30
12	8634		1 22.9	+23 15	1	+0.44	-0.02	6.18
13	8673		1 23.3	+34 19	1	+0.45	-0.03	6.29
14	8723	$\rho$ Psc	1 23.6	+18 55	2	+0.41	-0.06	5.44
15	8829	47 Cet	1 24.4	-13 19	1	+0.34	0.00	5.68
16	9021	38 Cas	1 27.5	+70 00	1	+0.46	-0.13	5.82
17	9919	$\pi$ Psc	1 34.4	+11 53	1	+0.34	-0.01	5.66
18	10204		1 37.7	+43 03	1	+0.20	+0.16	5.61
19	10307		1 38.7	+42 22	4	+0.63	+0.10	4.94
20	10845		1 43.9	+17 10	1	+0.26	+0.17	6.58
21	11151		1 47.7	+51 41	1	+0.41	+0.01	5.90
22	11171		1 47.1	-10 56	1	+0.34	0.00	4.68
23	13174	14 Ari	2 06.6	+25 42	1	+0.33	+0.12	4.97
24	13555	$\eta$ Ari	2 10.0	+20 59	1	+0.43	-0.02	5.26
25	13594		2 10.8	+47 15	1	+0.42	-0.01	6.05
26	13871	20 Ari	2 12.9	+25 33	1	+0.42	+0.03	5.76
27	13872	21 Ari	2 12.9	+24 49	1	+0.48	0.00	5.56
28	13974	$\delta$ Tri	2 14.0	+34 00	1	+0.61	+0.02	4.87
29	14214		2 15.4	+ 1 31	1	+0.55	+0.12	5.64
30	14622		2 19.7	+41 10	1	+0.29	+0.13	5.86
31	14691		2 19.6	-11 00	1	+0.34	0.00	5.48
32	15524		2 27.7	+25 01	1	+0.42	+0.10	5.94
33	15550	26 Ari	2 27.8	+19 38	1	+0.24	+0.11	6.17
34	15814	29 Ari	2 30.2	+14 49	1	+0.55	+0.10	6.07
35	16220		2 34.1	+32 40	1	+0.50	+0.05	6.26
36	16234	31 Ari	2 33.9	+12 14	1	+0.51	0.00	5.68
37	16327		2 35.2	+37 31	1	+0.49	+0.12	6.21
38	16647		2 37.6	+ 5 54	1	+0.37	-0.01	6.28
39	16765	84 Cet	2 38.7	- 0 54	1	+0.51	-0.03	5.80
40	16895	$\theta$ Per	2 40.8	+49 01	1	+0.48	-0.03	-
41	17094	$\mu$ Cet	2 42.2	+ 9 54	1	+0.34	+0.09	4.22
42	17163		2 42.7	+ 4 30	1	+0.27	+0.11	6.07
43	17484		2 46.3	+37 07	1	+0.45	+0.17	6.48
44	17584	16 Per	2 47.4	+38 07	1	+0.36	+0.08	-
45	17904	20 Per	2 50.5	+38 08	1	+0.43	+0.03	5.34
46	17948		2 52.0	+61 19	1	+0.44	-0.12	5.61
47	18256	$\rho$ Ari	2 53.6	+17 49	1	+0.43	+0.03	5.69
48	18262		2 53.6	+ 8 11	1	+0.44	+0.10	6.01
49	18404	47 Ari	2 55.2	+20 28	1	+0.46	+0.02	5.86
50	19978		3 13.9	+77 33	1	+0.19	+0.06	5.51
51	19994	94 Cet	3 10.2	- 1 23	1	+0.54	+0.12	5.19
52	20193		3 12.7	+32 40	1	+0.38	+0.03	6.34
53	20395	14 Eri	3 14.2	- 9 20	1	+0.40	-0.03	6.28
54	23005		3 41.3	+67 03	1	+0.34	+0.05	5.82
55	24357		3 50.3	+17 11	1	+0.31	+0.06	5.98
56	24546	43 Per	3 52.9	+50 33	1	+0.38	-0.03	5.33
57	24740	32 Tau	3 53.9	+22 20	1	+0.29	-0.04	5.65
58	25102		3 56.9	+10 11	1	+0.38	+0.03	6.38
59	25570		4 01.2	+ 8 04	1	+0.33	+0.03	5.49
60	25621		4 01.5	+ 2 42	1	+0.47	+0.04	5.40

Ser. No.	HD	Name	$\alpha$ (1950.0) $\delta$		n	B-V	U-B	V
61	25867	$\psi$ Tau	4 <sup>h</sup> 03.9m	+28° 52'	1	+0.35	-0.09	5.31
62	25998	50 Per	4 05.3	+37 55	1	+0.45	-0.05	5.53
63	26015		4 04.9	+15 02	6	+0.39	0.00	6.05
64	26322	44 Tau	4 07.8	+26 21	1	+0.38	+0.09	5.40
65	26462	45 Tau	4 08.7	+ 5 24	1	+0.40	-0.06	-
66	26911	48 Tau	4 12.9	+15 17	2	+0.40	-0.02	6.37
67	27397	57 Tau	4 17.1	+13 55	2	+0.30	+0.06	5.61
68	27429		4 17.5	+18 37	3	+0.36	-0.05	6.19
69	27459	58 Tau	4 17.8	+14 59	2	+0.25	+0.09	5.24
70	27483		4 18.1	+13 45	2	+0.45	-0.02	6.23
71	27786	56 Per	4 21.4	+33 51	1	+0.38	-0.13	5.78
72	27901		4 22.0	+18 56	4	+0.39	0.00	6.03
73	27946	67 Tau	4 22.4	+22 05	1	+0.28	+0.07	5.25
74	27991	70 Tau	4 22.8	+15 50	1	+0.49	-0.04	6.47
75	28294	76 Tau	4 25.6	+14 38	1	+0.34	+0.02	5.86
76	28319	$\theta^2$ Tau	4 25.8	+15 46	1	+0.18	+0.15	3.39
77	28485	80 Tau	4 27.3	+15 32	1	+0.33	+0.06	5.61
78	28556	83 Tau	4 27.8	+13 37	2	+0.28	+0.09	5.37
79	28677	85 Tau	4 29.0	+15 45	2	+0.36	+0.03	6.02
80	28704	57 Per	4 29.9	+42 58	1	+0.36	+0.03	6.08
81	28736		4 29.4	+ 5 18	1	+0.40	-0.09	6.34
82	29169		4 33.5	+23 14	1	+0.41	+0.03	6.15
83	29316	2 Cam	4 36.0	+53 23	1	+0.31	+0.10	5.35
84	29329		4 39.0	+76 31	1	+0.50	-0.13	6.51
85	29375	89 Tau	4 35.3	+15 56	1	+0.32	+0.02	5.77
86	29499		4 36.4	+ 7 46	1	+0.25	+0.09	5.42
87	29645		4 38.4	+38 11	1	+0.60	+0.04	5.97
88	29678		4 42.1	+75 51	1	+0.27	-0.04	6.08
89	30606	59 Eri	4 46.3	-16 25	1	+0.49	+0.07	5.91
90	30780	97 Tau	4 48.4	+18 45	1	+0.23	+0.10	5.06
91	31236		4 52.0	+19 24	1	+0.29	+0.04	6.36
92	31362		4 53.2	+24 31	1	+0.34	-0.07	6.35
93	31761	5 Aur	4 56.9	+39 19	1	+0.39	0.00	5.95
94	31925		4 56.8	-16 27	1	+0.38	-0.08	5.69
95	33167		5 07.0	+46 54	1	+0.43	+0.01	5.68
96	33276	15 Ori	5 06.8	+15 32	2	+0.29	+0.18	4.80
97	35317		5 21.3	- 0 55	2	+0.42	-0.04	6.12
98	35736		5 23.8	-19 44	1	+0.37	-0.03	5.89
99	35850		5 24.7	-11 56	1	+0.50	0.00	6.33
100	35984		5 26.5	+29 09	1	+0.45	0.00	6.22
101	36673	$\alpha$ Lep	5 30.5	-17 51	1	+0.21	+0.24	2.60
102	36719		5 32.5	+47 41	1	+0.26	+0.10	6.13
103	37077	45 Ori	5 33.2	- 4 53	1	+0.20	+0.12	5.29
104	38089		5 40.5	- 6 49	2	+0.38	-0.04	5.99
105	38558	130Tau	5 44.5	+17 43	2	+0.25	+0.22	5.53
106	39587	$\chi^1$ Ori	5 51.4	+20 16	2	+0.57	+0.06	4.43
107	40832		5 59.6	+32 38	2	+0.41	-0.02	6.25
108	41074	39 Aur	6 01.5	+42 59	1	+0.29	+0.04	5.89
109	41547		6 03.1	-10 14	2	+0.41	+0.02	5.88
110	43042	71 Ori	6 11.9	+19 11	2	+0.43	-0.02	5.20
111	43244	42 Aur	6 13.9	+46 27	2	+0.23	+0.07	6.54
112	43318		6 13.0	- 0 30	2	+0.55	+0.01	5.72
113	43386	74 Ori	6 13.6	+12 17	2	+0.40	-0.04	5.05
114	43905	45 Aur	6 17.7	+53 29	2	+0.40	+0.01	5.34
115	45947		6 31.6	+73 44	1	+0.37	-0.01	6.26
116	46588		6 37.7	+79 37	1	+0.47	-0.02	5.44
117	50420		6 51.6	+43 58	2	+0.28	+0.18	6.11
118	51530	39 Gem	6 55.7	+26 09	2	+0.45	0.00	6.12
119	52711		7 00.3	+29 25	2	+0.54	-0.01	5.93
120	55052	48 Gem	7 09.4	+24 13	2	+0.30	+0.07	5.78

Ser. No.	HD	Name	$\alpha$ (1950.0) $\delta$		n	B-V	U-B	V
121	55057	21 Mon	7 <sup>h</sup> 08.8 <sup>m</sup>	- 0° 13'	3	+0.30	+0.12	5.45
122	55130		7 09.7	+27 19	2	+0.46	-0.06	6.44
123	56963		7 17.7	+45 19	2	+0.31	-0.02	5.76
124	57927	59 Gem	7 21.4	+27 44	2	+0.30	+0.06	5.72
125	58579	61 Gem	7 24.0	+20 22	2	+0.27	+0.06	5.92
126	58728	63 Gem	7 24.8	+21 33	2	+0.38	-0.06	5.24
127	58855	22 Lyn	7 26.1	+49 47	2	+0.42	-0.10	5.35
128	61064	25 Mon	7 34.8	- 4 00	3	+0.45	+0.10	5.15
129	61110	$\sigma$ Gem	7 35.9	+34 42	2	+0.41	+0.08	4.88
130	65123		7 54.7	+ 1 16	3	+0.50	0.00	6.42
131	65301		7 57.2	+59 11	1	+0.41	-0.08	5.77
132	65448		7 58.0	+63 14	1	+0.58	+0.33	6.42
133	67483	12 Can	8 05.9	+13 47	2	+0.40	-0.03	6.24
134	69548	30 Lyn	8 16.4	+57 54	1	+0.40	-0.11	5.89
135	69897	$\chi$ Can	8 17.0	+27 23	2	+0.44	-0.05	5.15
136	70937		8 22.1	- 4 33	3	+0.45	-0.01	6.02
137	70958	1 Hya	8 22.1	- 3 35	3	+0.45	-0.08	5.59
138	71030	25 Can	8 23.0	+17 13	2	+0.40	-0.05	6.13
139	72041	$\nu^1$ Can	8 28.6	+24 15	2	+0.26	+0.06	5.76
140	72291	32 Lyn	8 30.2	+36 36	2	+0.34	-0.06	6.24
141	72617		8 31.5	+ 8 37	3	+0.35	+0.10	6.07
142	74874	$\epsilon$ Hya	8 44.1	+ 6 36	1	+0.69	+0.34	3.42
143	75332		8 47.4	+33 28	2	+0.47	0.00	6.25
144	76572	61 Can	8 54.9	+30 26	2	+0.41	-0.02	6.30
145	77093		8 58.5	+39 55	2	+0.30	+0.02	6.32
146	77601		9 02.0	+48 44	1	+0.46	+0.13	5.97
147	79028	16 UMa	9 10.4	+61 38	1	+0.54	+0.08	5.07
148	80719		9 18.6	-15 24	1	+0.50	-0.03	6.39
149	81937	23 UMa	9 27.6	+63 17	1	+0.31	+0.10	3.66
150	82189	22 UMa	9 30.2	+72 26	1	+0.41	-0.03	5.63
151	84179	28 UMa	9 42.1	+63 53	1	+0.30	-0.04	6.36
152	84607		9 43.8	+ 2 01	2	+0.31	+0.12	5.69
153	84722	19 Leo	9 44.7	+11 48	2	+0.26	+0.08	6.49
154	84999	$\nu$ UMa	9 47.5	+59 17	1	+0.29	+0.10	3.71
155	85217	4 Sex	9 47.9	+ 4 35	2	+0.47	0.00	6.28
156	87141		10 01.3	+54 08	1	+0.49	0.00	5.77
157	87301		10 01.6	+ 3 27	2	+0.38	-0.02	6.47
158	88215		10 07.7	-12 34	2	+0.37	-0.03	5.32
159	88815		10 13.9	+73 19	1	+0.22	-0.04	6.42
160	89025	$\zeta$ Leo	10 13.9	+23 40	2	+0.29	+0.19	3.47
161	89254	$\epsilon$ Sex	10 15.1	- 7 49	2	+0.30	+0.11	5.27
162	89744		10 19.2	+41 29	2	+0.53	+0.06	5.78
163	90277	30 LMi	10 23.1	+34 03	2	+0.23	+0.17	4.73
164	91480	37 UMa	10 32.0	+57 20	1	+0.33	-0.03	5.17
165	91752	35 LMi	10 33.5	+36 35	2	+0.39	-0.05	6.31
166	93765	44 LMi	10 47.2	+28 14	2	+0.36	-0.03	6.06
167	94480	48 LMi	10 52.0	+25 45	2	+0.29	+0.10	6.25
168	95241		10 57.5	+43 11	2	+0.58	0.00	6.05
169	97937		11 13.4	+13 07	2	+0.26	+0.05	6.69
170	99285	81 Leo	11 23.0	+16 44	2	+0.34	0.00	5.61
171	99564	$\kappa$ Cra	11 24.6	-12 05	1	+0.51	+0.01	6.00
172	99747		11 26.2	+62 03	1	+0.35	-0.07	5.85
173	99984	58 UMa	11 27.8	+43 27	2	+0.50	-0.03	5.98
174	100563	89 Leo	11 31.8	+ 3 20	2	+0.43	+0.01	5.80
175	101107	59 UMa	11 35.7	+43 54	2	+0.34	-0.01	5.64
176	101606	62 UMa	11 39.0	+32 01	2	+0.42	-0.09	5.76
177	104179		11 57.4	+34 19	2	+0.20	+0.16	6.50
178	106516		12 12.6	-10 01	2	+0.46	-0.18	6.13
179	108722	18 Com	12 27.0	+24 23	2	+0.41	+0.10	5.50
180	108845	7 CVn	12 17.7	+51 49	2	+0.52	0.00	6.24

Ser. No.	HD	Name	$\alpha$ (1950.0) $\delta$		n	B-V	U-B	V	
181	108954		12 <sup>k</sup>	28.5 <sup>m</sup>	+53° 21'	2	+0.55	+0.05	6.23
182	109141		12	30.0	-13 35	2	+0.39	-0.04	5.76
183	110897	10 CVn	12	42.6	+39 33	2	+0.55	-0.06	5.96
184	111199		12	45.0	- 6 02	2	+0.54	+0.04	6.32
185	111456		12	46.5	+60 36	1	+0.45	-0.05	5.85
186	111998	38 Vir	12	50.6	- 3 17	2	+0.48	0.00	6.16
187	112429	8 Dra	12	53.5	+65 43	1	+0.27	+0.05	5.17
188	113022		12	58.2	+18 38	2	+0.42	0.00	6.23
189	113337		12	59.8	+63 52	1	+0.40	0.00	6.02
190	113848	39 Com	13	03.9	+21 25	2	+0.37	-0.02	6.04
191	114642	53 Vir	13	09.4	-15 56	2	+0.44	+0.01	5.02
192	115604	20 CVn	13	15.3	+40 50	1	+0.27	+0.24	4.74
193	116568	66 Vir	13	21.9	- 4 54	2	+0.39	-0.05	5.61
194	117242		13	26.0	+53 00	2	+0.23	+0.12	6.35
195	117361		13	26.7	+50 59	2	+0.37	+0.03	6.44
196	118660		13	35.7	+14 33	2	+0.24	+0.09	6.54
197	119288		13	39.7	+ 8 38	2	+0.39	-0.06	6.21
198	119992		13	43.4	+56 08	2	+0.46	-0.08	6.52
199	120136	$\tau$ Boo	13	44.9	+17 42	1	+0.48	+0.03	4.49
200	121682		13	54.0	+32 17	2	+0.35	+0.04	6.36
201	122106		13	57.2	- 3 18	2	+0.46	+0.06	6.21
202	123255		14	04.1	- 9 05	1	+0.35	+0.08	5.58
203	124115		14	09.0	+ 1 36	2	+0.47	+0.02	6.45
204	124570	14 Boo	14	11.7	+13 12	2	+0.50	+0.07	5.60
205	124850	$\iota$ Vir	14	13.4	- 5 46	1	+0.51	0.00	4.09
206	125111		14	14.4	+39 59	2	+0.36	-0.09	6.40
207	126141		14	20.9	+25 34	2	+0.35	-0.03	6.26
208	126660	$\theta$ Boo	14	23.5	+52 05	4	+0.49	+0.02	4.04
209	126943		14	25.5	+41 15	2	+0.36	-0.07	6.65
210	127739	26 Boo	14	30.3	+22 29	2	+0.32	+0.05	5.96
211	127762	$\tau$ Boo	14	30.1	+38 32	1	+0.16	+0.18	3.05
212	127821		14	29.6	+63 24	1	+0.40	-0.06	6.11
213	128093		14	32.1	+32 45	2	+0.39	-0.02	6.34
214	128429		14	34.3	-12 06	1	+0.46	-0.03	6.32
215	130817		14	47.1	+38 01	2	+0.36	-0.09	6.18
216	130945	38 Boo	14	47.5	+46 19	2	+0.46	0.00	5.80
217	132052	16 Lib	14	54.6	- 4 09	1	+0.30	+0.01	4.56
218	132254		14	54.7	+49 50	2	+0.49	-0.02	5.65
219	132772	40 Boo	14	57.7	+39 28	2	+0.31	+0.01	5.67
220	133484		15	01.3	+44 50	1	+0.41	+0.03	6.59
221	134044		15	04.6	+36 39	1	+0.21	+0.01	6.37
222	136407	$\sigma$ Lib	15	18.2	-15 22	1	+0.40	+0.03	6.32
223	136751		15	19.0	+44 37	1	+0.34	+0.03	6.15
224	137006	8 Ser	15	21.1	- 0 51	1	+0.28	+0.10	6.27
225	139225	$\tau^5$ Ser	15	34.2	+16 17	2	+0.28	+0.02	5.95
226	139478		15	34.7	+52 14	1	+0.27	+0.02	6.68
227	139798		15	36.7	+46 58	1	+0.32	-0.02	5.75
228	142373	$\chi$ Her	15	50.9	+42 35	1	+0.56	0.00	4.60
229	142640		15	53.4	-14 15	1	+0.50	+0.03	6.50
230	142908	$\lambda$ CrB	15	54.0	+38 05	2	+0.30	+0.02	5.43
231	143333	49 Lib	15	57.5	-16 23	1	+0.52	+0.03	5.64
232	143584		15	57.7	+50 01	1	+0.26	+0.03	6.02
233	143761	$\rho$ CrB	15	59.1	+33 27	2	+0.58	+0.08	5.41
234	144362		16	03.1	- 6 09	1	+0.47	+0.05	6.55
235	144585		16	04.3	-13 56	1	+0.65	+0.17	6.40
236	145976		16	10.7	+26 48	1	+0.38	-0.05	6.52
237	146233	18 Sco	16	12.9	- 8 14	1	+0.66	+0.11	5.59
238	146361	$\sigma$ CrB	16	12.8	+33 59	1	+0.50	-0.02	5.66
239	146514		16	14.3	- 3 50	1	+0.34	+0.13	6.29
240	148048	$\eta$ UMa	16	18.9	+75 52	1	+0.34	+0.06	5.04

Ser. No.	HD	Name	$\alpha$ (1950.0) $\delta$		n	B-V	U-B	V	
241	147449	$\sigma$ Ser	16 <sup>h</sup>	19.5 <sup>m</sup>	+ 1° 09'	1	+0.27	+0.05	4.99
242	147547	$\tau$ Her	16	19.7	+19 16	1	+0.27	+0.22	3.81
243	148515		16	26.1	- 8 01	1	+0.41	-0.01	6.58
244	150177		16	36.9	- 9 27	1	+0.51	-0.12	6.49
245	150557	14 Oph	16	39.2	+ 1 17	2	+0.35	+0.09	5.86
246	150680	$\zeta$ Her	16	39.4	+31 42	1	+0.63	+0.14	2.78
247	150682	39 Her	16	39.6	+27 01	1	+0.39	-0.09	5.94
248	151087		16	42.0	+34 08	2	+0.28	+0.04	6.01
249	151769	20 Oph	16	47.1	-10 42	1	+0.49	+0.07	4.85
250	152598	53 Her	16	51.1	+31 47	2	+0.28	-0.04	5.34
251	153229		16	55.8	-14 48	1	+0.39	-0.01	6.61
252	153897		16	59.2	+27 16	1	+0.39	-0.10	6.56
253	155078		17	07.0	-10 28	2	+0.51	0.00	5.58
254	156971		17	18.1	-10 39	1	+0.34	-0.01	6.58
255	157214	72 Her	17	18.8	+32 32	1	+0.62	+0.06	5.39
256	157373		17	19.2	+48 14	2	+0.38	-0.09	6.37
257	157950		17	24.0	- 5 03	1	+0.36	-0.04	4.61
258	158170		17	25.3	- 8 10	1	+0.56	+0.15	6.41
259	159332		17	31.2	+19 17	1	+0.43	-0.07	5.60
260	159870		17	32.7	+57 35	1	+0.49	+0.11	6.22
261	160933		17	37.1	+69 36	1	+0.57	+0.07	6.44
262	161023		17	41.0	-13 29	1	+0.38	-0.09	6.56
263	161149		17	41.1	+14 19	1	+0.38	+0.13	6.21
264	163929		17	54.5	+55 59	2	+0.29	+0.07	6.10
265	163989	35 Dra	17	51.7	+76 58	1	+0.47	+0.06	5.12
266	164259	$\zeta$ Sep	17	57.8	- 3 41	1	+0.38	0.00	4.63
267	165373		18	02.6	+23 56	2	+0.29	+0.03	6.37
268	165908	99 Her	18	05.1	+30 33	3	+0.51	-0.09	5.05
269	168092		18	13.8	+56 34	1	+0.34	-0.01	6.15
270	168151	36 Dra	18	13.6	+64 23	1	+0.40	-0.06	5.09
271	171635	45 Dra	18	31.7	+57 00	1	+0.58	+0.43	4.73
272	171834		18	34.2	+ 6 38	1	+0.34	-0.07	5.45
273	173417		18	42.0	+31 53	1	+0.33	+0.03	5.72
274	173494		18	42.6	+23 32	2	+0.39	-0.02	6.35
275	173667	110 Her	18	43.5	+20 30	2	+0.45	0.00	4.20
276	174309	30 Sgt	18	47.8	-22 13	1	+0.37	+0.27	6.63
277	175317		18	52.6	-16 26	1	+0.35	+0.04	5.81
278	178449	17 Lyr	19	05.5	+32 25	1	+0.38	+0.05	5.33
279	178476		19	05.9	+21 37	1	+0.39	-0.01	6.25
280	178619		19	06.4	+16 46	1	+0.67	+0.23	6.10
281	179422		19	09.5	+26 39	1	+0.40	-0.04	6.37
282	181096		19	15.4	+46 54	1	+0.42	-0.03	6.01
283	181333	28 Aql	19	17.3	+12 17	1	+0.23	+0.15	5.53
284	182807		19	23.4	+24 49	1	+0.39	-0.05	6.24
285	182900		19	24.1	+12 55	1	+0.43	+0.02	5.79
286	184960		19	33.0	+51 08	1	+0.44	-0.02	5.71
287	185124	42 Aql	19	35.1	- 4 46	1	+0.39	+0.08	5.68
288	186155		19	39.3	+45 24	1	+0.36	+0.15	5.06
289	187013	17 Cyg	19	44.5	+33 37	2	+0.46	+0.01	5.00
290	187458		19	46.9	+35 11	1	+0.48	-0.06	6.42
291	188074		19	49.8	+47 15	1	+0.34	+0.02	6.21
292	191195		20	04.9	+53 01	1	+0.44	-0.03	5.88
293	192985		20	14.4	+45 26	1	+0.44	-0.06	5.95
294	194012		20	20.5	+14 23	1	+0.48	-0.12	6.17
295	197373		20	39.2	+60 19	1	+0.45	-0.08	6.03
296	198390	15 Del	20	47.2	+12 21	1	+0.41	-0.10	5.80
297	200790	4 Eq	21	03.0	+ 5 46	1	+0.51	-0.03	5.88
298	201636		21	06.1	+71 14	1	+0.39	-0.02	5.89
299	203803		21	21.7	+24 04	1	+0.33	+0.07	5.78
300	203925		21	22.3	+25 58	1	+0.32	+0.07	5.75

Ser. No.	HD	Name	$\alpha$ (1950.5) $\delta$			n	B-V	U-B	V
301	204121		21 <sup>h</sup>	23.9 <sup>m</sup>	+ 0° 53'	1	+0.43	-0.09	6.12
302	204153		21	23.5	+46 30	1	+0.33	-0.01	5.64
303	204485		21	26.0	+32 00	1	+0.32	+0.03	5.82
304	205924	4 Peg	21	36.0	+ 5 33	1	+0.26	+0.01	5.60
305	206043		21	36.7	+20 02	1	+0.32	+0.04	5.87
306	207652	13 Peg	21	47.8	+17 03	1	+0.35	-0.07	5.27
307	207978	15 Peg	21	50.3	+28 34	1	+0.42	-0.12	5.51
308	209166	20 Peg	21	58.7	+12 53	1	+0.32	+0.04	5.54
309	210027	$\iota$ Peg	22	04.7	+25 06	4	+0.44	-0.03	3.76
310	210459	$\pi$ Peg	22	07.8	+32 56	2	+0.47	+0.21	4.20
311	210705	39 Aqr	22	09.7	-14 26	1	+0.38	-0.02	-
312	210763		22	10.1	- 4 58	1	+0.48	-0.05	6.40
313	210855		22	10.0	+56 35	1	+0.51	-0.02	5.24
314	211976		22	18.4	+ 7 56	1	+0.46	-0.13	6.22
315	212487		22	21.7	+38 19	1	+0.48	-0.03	6.24
316	213198		22	27.4	-13 10	1	+0.31	-0.04	6.42
317	213845	$v$ Aqr	22	32.0	-20 58	1	+0.44	-0.02	5.13
318	215648	$\xi$ Peg	22	44.2	+11 55	3	+0.51	-0.03	4.19
319	216048		22	47.0	+10 13	2	+0.26	+0.04	6.55
320	216385	$\sigma$ Peg	22	49.9	+ 9 34	2	+0.45	-0.03	5.24
321	216756		22	52.7	+36 49	1	+0.41	-0.10	5.93
322	217166		22	56.0	+ 9 05	1	+0.62	+0.07	6.46
323	217754		23	00.2	+31 31	1	+0.34	+0.06	6.59
324	217926		23	01.5	+ 6 21	1	+0.37	+0.04	6.45
325	218235		23	03.8	+18 15	1	+0.43	+0.08	6.15
326	218470	5 And	23	05.5	+49 01	1	+0.42	-0.01	5.68
327	218804	6 And	23	08.1	+43 17	1	+0.44	-0.05	5.93
328	220117	12 And	23	18.5	+37 55	1	+0.45	0.00	5.79
329	220460		23	21.3	+32 15	1	+0.46	-0.12	6.73
330	221356		23	28.9	- 4 22	1	+0.52	-0.12	6.51
331	221357	100 Aqr	23	29.1	-21 39	1	+0.32	+0.14	6.31
332	221950	16 Psc	23	33.8	+ 1 49	2	+0.41	-0.08	5.74
333	221970		23	34.0	+32 38	1	+0.47	-0.03	6.38
334	223346		23	46.3	+ 1 56	1	+0.44	0.00	6.49
335	223421		23	46.7	+58 51	1	+0.38	+0.03	6.35
336	223552		23	47.9	+51 21	1	+0.35	-0.03	6.44
337	223731		23	49.5	+77 19	1	+0.43	-0.13	6.57
338	224758		23	57.8	+26 39	1	+0.52	0.00	6.49
339	225003	32 Psc	23	59.9	+ 8 12	2	+0.42	0.00	5.78