

U, *B*, *V*, AND $H\beta$ PHOTOMETRY FOR THE BRIGHT B8- AND B9-TYPE STARS*

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ABSTRACT

A table is given presenting *U*, *B*, *V*, and $H\beta$ photometry for 501 stars of spectral type B8 and B9 that are brighter than 6.5 mag. and north of -30° declination. The table also contains, for each star, the intrinsic color index $(U - B)_0$, the color excess, and the visual absorption.

I. INTRODUCTION

Determination of the color excesses of early B-type stars has been of great importance for investigation of the space distribution of interstellar dust. However, the space density of these stars is so low that the fine structure of the dust distribution cannot be determined in this way. In addition, the strong concentration of these stars in the galactic plane seriously limits the scope of any three-dimensional investigation.

For late spectral types, the space density is considerably higher and the distribution over the sky more uniform than for the early B-type stars. However, determination of accurate color excesses for these late-type stars requires a very accurate determination of spectral type. Differences in chemical composition among these stars also cloud the solution of the problem.

The stars of classes B8 and B9 offer a compromise. Their space density is high enough to be useful, and accurate color excesses may be determined by conventional *U*, *B*, *V* photometry. In addition, they are intrinsically brighter than the late-type stars, and hence one may penetrate farther out into space for a given apparent magnitude. In fact, for these stars, accurate determinations of the absolute magnitudes are possible by narrow-band photometry (Strömberg 1956; Crawford 1958).

With accurate absolute magnitudes and interstellar absorptions, good distances for individual stars may be obtained, and a picture of the space distribution of these stars will result. Also, for the brighter stars, proper motions and radial velocities yield accurate space velocities. These distances and space velocities may be investigated as a function of the age of the stars, as determined from theory or from a comparison with cluster members.

This paper presents the observations of the brighter stars of types B8 and B9. A discussion of the local interstellar dust distribution and the distribution of distances and space velocities of these stars will appear elsewhere. In addition, the current work is being extended to the fainter B8- and B9-type stars with the goal of penetrating farther into interstellar space.

II. THE OBSERVATIONS

U, *B*, *V*, and $H\beta$ photometry have been obtained for most of the stars of type B8 and B9 stars in the *Bright Star Catalogue* (Schlesinger and Jenkins 1940) that are north of -30° declination.

Table 1 contains the observations of 501 such stars. The first two columns give the

* *Contributions from the Kitt Peak National Observatory*, No. 21, and *Contributions from the McDonald Observatory*, No. 376.

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TABLE 1
PHOTOMETRY OF B8 and B9 STARS

	Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) _o	E(U-B)	A _v
3	10 Cas	7	118	+2	-0.02	-0.20	1	2.757	1	-0.23	+0.03	0.1
0		11	98	-63	-0.15	-0.46	1	2.707	1	-0.44	-0.02	0.0
0	34 Psc	26	107	-50	-0.07	-0.22	1	2.813	1	-0.21	-0.01	0.0
3		28	117	-5	-0.08	-0.42	1	2.753	1	-0.45	+0.03	0.1
4		55	121	+14	-0.07	-0.27	1	2.758	1	-0.28	+0.01	0.0
0	26 And	61	72	-80	-0.14	-0.50	1	2.776	1	-0.49	-0.01	0.0
3		62	117	-15	-0.09	-0.44	1	2.642	1	-0.47	+0.03	0.1
8		70	117	-19	-0.08	-0.36	1	2.797	1	-0.38	+0.02	0.0
0		78	115	-32	-0.12	-0.46	1	2.712	1	-0.46	0.00	0.0
1	12 Cas	93	120	-1	+0.01	-0.17	1	2.778	1	-0.22	+0.05	0.2
3	λ Cas	96	119	-10	-0.06	-0.32	1	2.745	1	-0.35	+0.03	0.1
4		113	120	-3	0.00	-0.35	1	2.725	1	-0.43	+0.08	0.3
0		123	120	-8	-0.10	-0.33	1	2.745	1	-0.32	-0.01	0.0
4	16 Cas	137	121	+4	-0.08	-0.33	1	2.732	1	-0.34	+0.01	0.0
4		149	119	-36	-0.11	-0.44	1	2.738	1	-0.45	+0.01	0.0
8	23 Cas	181	122	-4	-0.01	-0.12	1	2.746	2	-0.14	+0.02	0.0
8		205	122	-18	-0.06	-0.29	1	2.733	2	-0.31	+0.02	0.0
3	208	123	+12	-0.08	-0.40	1	2.676	5	-0.43	+0.03	0.1	
0	γ Cas	223	123	-12	-0.11	-0.43	1	2.769	1	-0.43	0.00	0.0
8		266	124	-3	-0.07	-0.33	1	2.783	1	-0.35	+0.02	0.0
4	σ Psc	273	124	+4	-0.02	-0.14	1	2.843	1	-0.15	+0.01	0.0
0		283	125	-18	-0.01	-0.05	1	2.843	3	-0.05	0.00	0.0
0		291	125	-22	-0.05	-0.18	1	2.843	1	-0.17	-0.01	0.0
5	φ And	326	117	-4	-0.01	-0.28	1	2.743	1	-0.34	+0.06	0.2
8		335	116	-15	-0.07	-0.34	1	2.705	1	-0.36	+0.02	0.0
0	32 Cas	342	119	+2	-0.06	-0.14	1	2.844	1	-0.12	-0.02	0.0
0		345	119	+3	-0.10	-0.29	1	2.789	1	-0.27	-0.02	0.0
4	45 And	348	127	-25	-0.10	-0.42	1	2.730	1	-0.43	+0.01	0.0
9	87 Psc	354	126	-1	0.00	-0.30	1	2.805	1	-0.37	+0.07	0.2
7		364	131	-46	-0.07	-0.42	1	2.758	1	-0.46	+0.04	0.1
1	101 Psc	369	127	-15	-0.04	-0.38	1	2.729	1	-0.43	+0.05	0.2
4		419	140	-58	-0.06	-0.25	1	2.853	1	-0.26	+0.01	0.0
0		422	130	-22	-0.04	-0.17	1	2.871	1	-0.17	0.00	0.0
4		438	132	-27	-0.11	-0.44	1	2.727	1	-0.45	+0.01	0.0
8		446	132	-25	-0.06	-0.30	1	2.807	1	-0.32	+0.02	0.0
9		449	126	+12	+0.03	-0.17	1	2.755	1	-0.24	+0.07	0.2
8	455	139	-47	-0.03	-0.22	1	2.704	1	-0.24	+0.02	0.0	
4	γ And	477	133	-21	-0.10	-0.41	1	2.697	1	-0.42	+0.01	0.0
4		481	129	-1	-0.02	-0.42	1	2.687	1	-0.50	+0.08	0.3
8		482	130	-4	-0.02	-0.46	1	2.709	1	-0.55	+0.09	0.3

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) _o	E(U-B)	A _v
	488	129	-1	0.00	-0.46	1	2.666	3	-0.57	+0.11	0.46
	490	135	-27	-0.08	-0.24	1	2.850	1	-0.23	-0.01	0.00
44 Cas	491	129	-2	-0.01	-0.33	1	2.720	1	-0.40	+0.07	0.29
2 Per	536	133	-11	-0.06	-0.30	1	2.800	1	-0.32	+0.02	0.08
ω Cas	548	129	+7	-0.09	-0.41	1	2.755	1	-0.43	+0.02	0.08
	561	131	0	-0.03	-0.41	1	2.726	1	-0.48	+0.07	0.29
	562	136	-20	-0.06	-0.40	2	2.724	1	-0.45	+0.05	0.21
4 Per	590	133	-7	-0.09	-0.31	1	2.726	1	-0.31	0.00	0.00
11 Ari	615	144	-34	-0.04	-0.26	1	2.723	1	-0.28	+0.02	0.08
	677	141	-20	-0.10	-0.40	1	2.774	1	-0.41	+0.01	0.04
	746	144	-19	-0.10	-0.34	2	2.745	2	-0.33	-0.01	0.00
ω For	749	222	-67	-0.06	-0.13	1	2.916	1	-0.11	-0.02	0.00
	760	144	-19	-0.12	-0.49	1	2.753	1	-0.50	+0.01	0.04
11 Per	785	139	-4	-0.13	-0.49	1	2.749	1	-0.49	0.00	0.00
ϕ Ari	809	159	-40	-0.01	-0.21	1	2.796	1	-0.25	+0.04	0.17
41 Ari	838	153	-29	-0.11	-0.35	1	2.743	1	-0.33	-0.02	0.00
	846	141	-6	+0.07	-0.28	1	2.719	1	-0.41	+0.13	0.55
	894	149	-18	-0.07	-0.37	2	2.679	2	-0.40	+0.03	0.13
5 Eri	899	180	-51	-0.07	-0.16	2	2.804	2	-0.14	-0.02	0.00
	922	137	+5	-0.03	-0.14	2	2.813	1	-0.14	0.00	0.00
52 Ari	927	158	-29	-0.02	-0.38	1	2.747	1	-0.45	+0.07	0.29
55 Ari	944	156	-25	0.00	-0.17	1	2.764	1	-0.21	+0.04	0.17
	948	168	-38	-0.07	-0.27	1	2.756	1	-0.28	+0.01	0.04
	950	149	-13	-0.09	-0.57	3	2.694	2	-0.63	+0.06	0.25
	983	188	-50	-0.01	-0.08	1	2.774	1	-0.09	+0.01	0.04
65 Ari	1027	165	-29	-0.04	-0.10	2	2.881	1	-0.08	-0.02	0.00
	1033	141	+3	+0.02	-0.24	2	2.795	2	-0.32	+0.08	0.34
	1035	142	+3	+0.41	-0.23	3	Var.	6	-0.66	+0.43	1.81
ψ Tau	1038	174	-37	-0.08	-0.35	2	2.790	3	-0.36	+0.01	0.04
	1051	148	-7	-0.04	-0.32	2	2.752	1	-0.36	+0.04	0.17
	1059	148	-6	+0.09	-0.14	2	2.713	1	-0.25	+0.11	0.46
	1063	149	-7	-0.10	-0.57	3	2.695	1	-0.62	+0.05	0.21
17 Eri	1070	190	-46	-0.08	-0.30	1	2.784	1	-0.30	0.00	0.00
6 Tau	1079	176	-37	-0.07	-0.28	2	2.816	1	-0.29	+0.01	0.04
γ^s Eri	1088	214	-53	-0.11	-0.34	1	2.781	1	-0.32	-0.02	0.00
	1094	144	+1	-0.12	-0.36	2	2.724	1	-0.34	-0.02	0.00
	1097	153	-11	-0.06	-0.38	1	2.750	3	-0.42	+0.04	0.17
22 Eri	1121	192	-44	-0.16	-0.58	2	2.702	3	-0.58	0.00	0.00
13 Tau	1126	169	-28	-0.01	-0.27	3	2.701	2	-0.32	+0.05	0.21
	1137	169	-26	+0.02	+0.03	3	2.920	3	+0.02	+0.01	0.04

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) _o	E(U-B)	A _v
	1141	152	-7	-0.07	-0.46	2	2.702	1	-0.51	+0.05	0.21
18 Tau	1144	166	-23	-0.07	-0.36	1	2.752	S	-0.39	+0.03	0.13
24 Eri	1146	188	-41	-0.09	-0.38	2	2.713	1	-0.39	+0.01	0.04
	1147	146	+1	-0.04	-0.16	2	2.756	1	-0.16	0.00	0.00
21 Tau	1151	166	-23	-0.04	-0.23	1	2.800	1	-0.25	+0.02	0.08
	1152	166	-23	-0.02	-0.15	1	2.831	1	-0.17	+0.02	0.08
	1160	149	-3	+0.05	-0.33	2	2.699	1	-0.46	+0.13	0.55
	1161	145	+2	+0.06	+0.01	2	2.869	1	-0.04	+0.05	0.21
	1166	138	+11	-0.08	-0.24	2	2.786	1	-0.23	-0.01	0.00
	1172	167	-24	-0.07	-0.32	1	2.736	2	-0.34	+0.02	0.08
27 Tau	1178	167	-23	-0.08	-0.36	1	2.700	S	-0.38	+0.02	0.08
28 Tau	1180	167	-23	-0.08	-0.28	1	2.641	2	-0.28	0.00	0.00
	1183	167	-23	-0.05	-0.19	1	2.795	1	-0.19	0.00	0.00
	1185	169	-24	-0.02	-0.33	5	2.742	4	-0.39	+0.06	0.25
	1194	176	-31	-0.08	-0.48	4	2.712	3	-0.53	+0.05	0.21
31 Tau	1199	182	-35	+0.04	-0.45	2	2.681	3	-0.60	+0.15	0.63
30 Eri	1202	195	-42	-0.12	-0.44	1	2.721	1	-0.44	0.00	0.00
	1204	142	+7	-0.04	-0.17	1	2.815	1	-0.17	0.00	0.00
33 Tau	1221	169	-23	+0.04	-0.03	4	2.805	4	-0.08	+0.05	0.21
	1234	160	-12	-0.00	-0.10	3	2.845	2	-0.12	+0.02	0.08
	1237	174	-26	+0.06	-0.01	4	2.807	3	-0.06	+0.05	0.21
	1243	181	-31	0.00	-0.43	2	2.734	1	-0.53	+0.10	0.42
	1284	179	-27	+0.05	-0.09	2	2.846	1	-0.16	+0.07	0.29
	1297	172	-21	+0.19	-0.28	4	2.708	2	-0.52	+0.24	1.01
	1305	145	+8	-0.14	-0.52	2	2.715	1	-0.52	0.00	0.00
	1307	183	-28	+0.04	-0.30	2	2.776	1	-0.41	+0.11	0.46
	1315	183	-28	-0.08	-0.35	2	2.732	1	-0.36	+0.01	0.04
	1328	159	-6	-0.08	-0.30	2	2.811	1	-0.30	0.00	0.00
53 Tau	1339	175	-20	-0.10	-0.28	3	2.801	2	-0.26	-0.02	0.00
	1363	202	-37	-0.15	-0.53	1	2.713	1	-0.53	0.00	0.00
χ Tau	1369	172	-17	-0.04	-0.11	1	2.851	3	-0.10	-0.01	0.00
	1371	159	-5	-0.00	-0.16	2	2.840	1	-0.20	+0.04	0.17
	1375	175	-20	+0.03	-0.28	2	2.773	1	-0.38	+0.10	0.42
55 Per	1377	165	-11	-0.06	-0.36	2	2.761	1	-0.40	+0.04	0.17
62 Tau	1378	173	-17	+0.16	-0.38	2	2.734	1	-0.61	+0.23	0.97
	1402	184	-25	+0.06	-0.34	2	2.657	1	-0.47	+0.13	0.55
	1415	194	-31	-0.11	-0.54	2	2.707	1	-0.57	+0.03	0.13
	1419	168	-11	-0.04	-0.17	1	2.828	1	-0.17	0.00	0.00
	1420	185	-25	+0.09	-0.38	3	2.758	2	-0.55	+0.17	0.71
	1424	162	-6	+0.04	-0.37	1	2.764	1	-0.50	+0.13	0.55

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) ₀	E(U-B)	A _v
	1441	199	-32	-0.12	-0.56	2	2.733	1	-0.59	+0.03	0.13
	1442	179	-20	+0.08	-0.13	4	2.826	1	-0.23	+0.10	0.46
	1445	171	-13	-0.07	-0.38	2	2.761	1	-0.41	+0.03	0.13
46 Eri	1449	203	-34	-0.14	-0.51	2	2.738	1	-0.50	-0.01	0.00
	1462	200	-32	-0.12	-0.41	2	2.750	1	-0.40	-0.01	0.00
	1471	178	-17	-0.06	-0.37	2	2.745	1	-0.41	+0.04	0.17
93 Tau	1484	185	-22	-0.13	-0.50	2	2.740	1	-0.50	0.00	0.00
	1493	156	+3	+0.02	-0.26	2	2.723	1	-0.34	+0.08	0.34
	1510	140	+17	-0.08	-0.25	2	2.802	1	-0.24	-0.01	0.00
	1512	177	-14	+0.06	-0.45	2	2.711	1	-0.61	+0.16	0.67
	1558	162	0	-0.03	-0.11	2	2.887	1	-0.11	0.00	0.00
	1576	185	-17	-0.09	-0.46	2	2.748	1	-0.49	+0.03	0.13
62 Eri	1582	204	-28	-0.13	-0.54	2	2.681	1	-0.55	+0.01	0.04
98 Tau	1590	177	-11	0.00	-0.04	1	2.907	2	-0.05	+0.01	0.04
	1600	186	-17	+0.06	-0.26	2	Var.	4	-0.37	+0.11	0.46
ψ Eri	1617	207	-28	-0.20	-0.72	2	2.681	1	-0.71	-0.01	0.00
	1619	198	-23	-0.08	-0.53	1	2.787	2	-0.59	+0.06	0.25
	1621	220	-33	-0.07	-0.13	1	2.853	2	-0.10	-0.03	0.00
11 Ori	1638	186	-15	-0.08	-0.10	3	Var.	5	-0.05	-0.05	0.00
	1650	136	+21	-0.02	-0.09	2	2.873	1	-0.09	0.00	0.00
66 Eri	1657	205	-26	-0.04	-0.20	2	2.814	1	-0.21	+0.01	0.04
	1671	209	-27	-0.10	-0.45	1	2.769	1	-0.47	+0.02	0.08
	1690	201	-22	-0.08	-0.34	2	2.767	1	-0.35	+0.01	0.04
ζ Lep	1696	213	-27	-0.10	-0.43	2	2.792	1	-0.44	+0.01	0.04
κ Lep	1705	214	-28	-0.10	-0.42	2	2.766	1	-0.43	+0.01	0.04
β Ori	1713	216	-25	-0.03	-0.69	2	2.493	2	-0.83	+0.14	0.59
	1724	199	-20	-0.02	-0.00	2	2.873	1	+0.02	-0.02	0.00
17 Aur	1728	173	-2	-0.06	-0.19	1	2.859	1	-0.19	0.00	0.00
	1750	178	-5	+0.04	-0.28	2	2.800	1	-0.39	+0.11	0.46
	1753	220	-28	-0.12	-0.44	2	2.732	1	-0.44	0.00	0.00
	1754	220	-28	-0.18	-0.60	2	2.694	1	-0.59	-0.01	0.00
	1759	207	-23	-0.02	-0.38	2	2.780	1	-0.45	+0.07	0.29
22 Aur	1768	177	-4	-0.06	-0.21	2	2.836	1	-0.21	0.00	0.00
	1769	216	-26	-0.08	-0.50	2	2.738	1	-0.55	+0.05	0.21
	1776	176	-3	+0.05	-0.16	2	2.793	1	-0.25	+0.09	0.38
β Tau	1791	178	-4	-0.13	-0.48	2	2.720	1	-0.48	0.00	0.00
	1800	203	-19	-0.02	-0.19	1	2.794	5	-0.22	+0.03	0.13
	1804	177	-3	+0.17	-0.18	4	2.632	2	-0.38	+0.20	0.84
	1806	208	-22	-0.08	-0.21	1	2.811	1	-0.19	-0.02	0.00
	1807	197	-15	+0.03	-0.09	2	2.885	1	-0.14	+0.05	0.21

TABLE 1 (Continued)

	Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) _o	E(U-B)	A _V
0		1826	206	-20	-0.04	-0.05	1	2.824	1	-0.02	-0.03	0.0
7		1846	168	+5	-0.03	-0.27	1	2.716	1	-0.31	+0.04	0.1
8		1847	189	-9	-0.04	-0.24	1	2.738	1	-0.26	+0.02	0.0
3	19 Cam	1857	149	+17	+0.01	-0.08	5	2.898	2	-0.11	+0.03	0.1
1		1860	186	-7	-0.06	-0.41	3	Var.	5	-0.46	+0.05	0.2
9		1883	195	-12	+0.13	-0.09	3	2.706	2	-0.23	+0.14	0.5
7		1902	181	-3	-0.07	-0.41	4	2.765	1	-0.45	+0.04	0.1
3		1920	198	-13	-0.08	-0.40	1	2.720	1	-0.43	+0.03	0.1
4		1938	178	0	+0.02	-0.23	3	2.741	1	-0.31	+0.08	0.3
0		1944	222	-24	-0.12	-0.41	2	2.757	1	-0.40	-0.01	0.0
4		1951	184	-4	-0.06	-0.55	2	2.706	1	-0.63	+0.08	0.3
0		1957	214	-20	-0.16	-0.53	2	2.730	1	-0.52	-0.01	0.0
4		1975	223	-23	-0.02	-0.12	2	2.928	1	-0.13	+0.01	0.0
1	129 Tau	1985	191	-7	-0.07	-0.46	1	2.731	2	-0.51	+0.05	0.2
7		1997	187	-4	-0.07	-0.41	1	2.778	2	-0.45	+0.04	0.1
0	30 Cam	2006	154	+16	-0.04	-0.14	2	2.883	1	-0.13	-0.01	0.0
0	134 Tau	2010	195	-8	-0.07	-0.17	7	2.848	7	-0.15	-0.02	0.0
0	137 Tau	2033	194	-6	-0.07	-0.09	1	2.829	1	-0.05	-0.04	0.0
8		2038	188	-3	-0.07	-0.34	2	2.782	1	-0.36	+0.02	0.0
8		2050	196	-7	+0.02	-0.02	2	2.921	2	-0.04	+0.02	0.0
0		2075	198	-8	-0.04	-0.14	2	2.791	1	-0.13	-0.01	0.0
7		2109	208	-12	-0.07	-0.41	2	2.721	1	-0.45	+0.04	0.1
8		2111	183	+2	+0.24	-0.27	3	2.628	2	-0.55	+0.28	1.1
8		2116	188	0	-0.07	-0.31	2	2.770	1	-0.33	+0.02	0.0
1	3 Mon	2128	217	-16	-0.11	-0.63	3	2.712	1	-0.68	+0.05	0.2
4	64 Ori	2130	190	-1	-0.11	-0.44	3	2.711	1	-0.45	+0.01	0.0
0		2139	178	+6	-0.08	-0.30	2	2.761	1	-0.30	0.00	0.0
4		2167	200	-5	-0.04	-0.20	2	2.807	1	-0.21	+0.01	0.0
0	68 Ori	2193	191	+1	-0.06	-0.15	1	2.817	1	-0.14	-0.01	0.0
7		2202	213	-11	-0.07	-0.40	2	2.756	1	-0.44	+0.04	0.1
7		2207	192	0	-0.08	-0.45	3	2.734	2	-0.49	+0.04	0.1
0	72 Ori	2223	195	0	-0.16	-0.47	1	2.786	1	-0.44	-0.03	0.0
3	73 Ori	2229	198	-2	-0.00	-0.14	1	2.736	1	-0.17	+0.03	0.1
0		2237	217	-12	-0.10	-0.34	2	2.793	1	-0.33	-0.01	0.0
0		2244	221	-14	-0.09	-0.26	1	2.766	1	-0.24	-0.02	0.0
9		2246	208	-7	-0.04	-0.45	2	2.694	1	-0.52	+0.07	0.2
9		2248	203	-4	-0.07	-0.52	2	2.747	1	-0.59	+0.07	0.2
4		2250	197	-1	-0.02	-0.14	2	2.833	1	-0.15	+0.01	0.0
3		2258	194	+1	-0.07	-0.36	1	2.778	1	-0.39	+0.03	0.1
0		2270	217	-11	-0.05	-0.17	1	2.835	2	-0.16	-0.01	0.0

TABLE 1 (Continued)

	Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) ₀	E(U-B)	A _V
5		2295	214	-8	+0.06	-0.04	2	2.916	1	-0.10	+0.06	0.21
1		2297	184	+8	-0.06	-0.40	2	2.804	1	-0.45	+0.05	0.21
3		2306	228	-15	-0.15	-0.65	1	2.716	2	-0.68	+0.03	0.11
4		2309	222	-12	-0.08	-0.64	2	2.658	1	-0.72	+0.08	0.31
0		2314	167	+16	-0.04	-0.13	3	2.871	2	-0.12	-0.01	0.01
0		2315	208	-5	-0.02	-0.10	3	2.860	2	-0.10	0.00	0.01
4		2347	209	-4	-0.04	-0.20	2	2.852	1	-0.21	+0.01	0.01
4		2374	200	+1	-0.11	-0.44	2	2.744	1	-0.45	+0.01	0.01
8		2413	207	-1	-0.05	-0.30	2	2.767	1	-0.32	+0.02	0.01
0		2418	216	-6	-0.12	-0.40	2	2.717	1	-0.39	-0.01	0.01
3	ψ^3 Aur	2420	175	+15	-0.07	-0.38	1	2.706	1	-0.41	+0.03	0.11
3		2433	232	-13	-0.11	-0.55	1	2.745	2	-0.58	+0.03	0.11
1	54 Aur	2438	186	+10	-0.08	-0.48	2	2.746	1	-0.53	+0.05	0.21
7		2441	207	-1	-0.06	-0.36	2	2.755	1	-0.40	+0.04	0.11
0		2454	206	0	-0.13	-0.50	2	2.730	1	-0.50	0.00	0.01
0		2461	211	-2	-0.09	-0.34	1	2.748	2	-0.34	0.00	0.01
3	11 CMa	2504	225	-8	-0.03	-0.26	2	2.739	1	-0.29	+0.03	0.11
5	12 CMa	2509	231	-10	-0.12	-0.69	1	2.690	2	-0.75	+0.06	0.21
0	33 Gem	2519	198	+7	-0.12	-0.52	2	2.706	1	-0.44	-0.08	0.01
5	ψ^3 Aur	2568	170	+20	-0.06	-0.46	2	2.685	1	-0.52	+0.06	0.21
8		2589	205	+6	-0.08	-0.36	2	2.751	1	-0.38	+0.02	0.01
7		2603	234	-9	-0.18	-0.81	1	2.628	2	-0.85	+0.04	0.11
1	40 Gem	2605	190	+13	-0.08	-0.51	1	2.730	2	-0.56	+0.05	0.21
3		2613	207	+5	-0.10	-0.48	2	2.700	1	-0.51	+0.03	0.11
5		2623	233	-8	-0.15	-0.79	1	2.621	2	-0.85	+0.06	0.21
8		2625	232	-7	-0.15	-0.63	1	2.712	2	-0.65	+0.02	0.01
8		2645	169	+22	-0.04	-0.24	1	2.702	1	-0.26	+0.02	0.01
3		2654	213	+4	+0.03	-0.02	1	2.834	2	-0.05	+0.03	0.11
4		2656	223	-2	-0.08	-0.31	2	2.727	1	-0.32	+0.01	0.01
0		2669	189	+16	-0.09	-0.26	2	2.757	1	-0.24	-0.02	0.01
0		2676	210	+6	-0.13	-0.49	2	2.714	1	-0.49	0.00	0.01
0		2709	133	+28	-0.04	-0.10	2	2.853	1	-0.08	-0.02	0.01
0		2722	193	+16	-0.03	-0.08	1	2.882	1	-0.07	-0.01	0.01
0		2757	187	+19	-0.04	-0.12	1	2.829	1	-0.11	-0.01	0.01
0		2760	210	+9	-0.12	-0.40	1	2.734	2	-0.39	-0.01	0.01
0		2801	216	+7	-0.10	-0.26	2	2.716	1	-0.23	-0.03	0.01
0		2809	150	+28	-0.09	-0.20	2	2.819	1	-0.17	-0.03	0.01
5		2812	233	-2	-0.04	-0.41	2	2.718	1	-0.47	+0.06	0.21
1		2826	237	-4	-0.06	-0.41	1	2.736	1	-0.46	+0.05	0.21
0		2838	221	+6	-0.03	-0.12	1	2.829	1	-0.12	0.00	0.01

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) ₀	E(U-B)	A _v	
β CMi	2840	207	+13	-0.13	-0.47	3	2.684	1	-0.46	-0.01	0.00	
	2841	239	-4	-0.10	-0.41	1	2.658	1	-0.42	+0.01	0.04	
	2844	170	+26	-0.10	-0.42	2	2.733	1	-0.43	+0.01	0.04	
	2845	210	+12	-0.11	-0.30	1	2.739	1	-0.27	-0.03	0.00	
	2860	237	-3	-0.12	-0.48	1	2.704	1	-0.49	+0.01	0.04	
	2863	243	-6	-0.08	-0.15	1	2.784	1	-0.12	-0.03	0.00	
	2922	243	-4	-0.11	-0.43	1	2.763	1	-0.43	0.00	0.00	
	2932	231	+3	-0.09	-0.33	1	2.639	1	-0.33	0.00	0.00	
	2944	241	-2	-0.10	-0.38	2	2.678	2	-0.38	0.00	0.00	
	2947	235	+2	-0.10	-0.51	1	2.711	1	-0.54	+0.03	0.13	
γ CMi	2948	242	-2	-0.19	-0.66	1	2.730	1	-0.65	-0.01	0.00	
	2956	242	-2	-0.16	-0.49	1	2.748	1	-0.47	-0.02	0.00	
	2972	243	-3	-0.18	-0.71	1	2.496	1	-0.72	+0.01	0.04	
	3019	231	+6	-0.03	-0.06	1	2.821	3	-0.04	-0.02	0.00	
	3042	232	+6	-0.09	-0.48	3	2.690	4	-0.52	+0.04	0.17	
	3059	218	+14	-0.16	-0.46	1	2.684	2	-0.43	-0.03	0.00	
	3103	214	+18	+0.02	-0.16	1	2.860	1	-0.22	+0.06	0.25	
	3164	194	+28	+0.06	-0.13	1	2.855	1	-0.21	+0.08	0.34	
	3189	232	+12	+0.06	-0.10	1	2.804	1	-0.17	+0.07	0.29	
	3201	213	+22	-0.07	-0.44	1	2.710	1	-0.49	+0.05	0.21	
δ CMi	3345	243	+10	-0.08	-0.43	2	2.676	2	-0.46	+0.03	0.13	
	3348	185	+35	+0.01	-0.18	1	2.822	1	-0.23	+0.05	0.21	
	3353	248	+7	-0.13	-0.55	1	2.792	1	-0.56	+0.01	0.04	
	3458	222	+27	-0.07	-0.12	2	2.817	1	-0.09	-0.03	0.00	
	3470	148	+36	-0.11	-0.41	1	2.756	1	-0.41	0.00	0.00	
	14 Hya	3500	231	+24	-0.08	-0.34	2	2.734	1	-0.35	+0.01	0.04
	κ Cnc	3623	219	+35	-0.12	-0.42	2	2.741	1	-0.41	-0.01	0.00
	19 Hya	3630	238	+25	-0.06	-0.18	1	2.788	1	-0.17	-0.01	0.00
	36 Lyn	3652	178	+44	-0.14	-0.46	1	2.707	1	-0.34	-0.12	0.00
	24 Hya	3683	240	+27	-0.05	-0.34	1	2.725	1	-0.37	+0.03	0.13
ε ² Hya	3745	258	+16	-0.11	-0.60	1	2.653	1	-0.65	+0.05	0.21	
	3774	138	+37	-0.10	-0.34	1	2.782	1	-0.33	-0.01	0.00	
	37 Hya	3846	245	+30	-0.02	-0.19	1	2.809	1	-0.22	+0.03	0.13
	ε ² Hya	3970	252	+33	-0.10	-0.28	2	2.716	1	-0.26	-0.02	0.00
	α Leo	3982	226	+49	-0.10	-0.37	1	2.708	1	-0.37	0.00	0.00
ζ Leo	4041	203	+56	-0.04	-0.11	1	2.873	1	-0.10	-0.01	0.00	
	42 Leo	4070	225	+54	+0.02	-0.07	1	2.861	1	-0.11	+0.04	0.17
	25 Sex	4082	248	+43	-0.09	-0.16	1	2.814	2	-0.12	-0.04	0.00
η Sex	4116	248	+45	-0.04	-0.12	1	2.828	1	-0.11	-0.01	0.00	
	4123	259	+37	-0.04	-0.16	1	2.745	1	-0.16	-0.00	0.00	

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) ₀	E(U-B)	A _v
33 LMi	4124	195	+59	+0.13	+0.03	3	2.880	2	-0.08	+0.11	0.46
39 UMa	4187	151	+52	-0.02	-0.10	1	2.823	1	-0.10	0.00	0.00
42 LMi	4203	198	+62	-0.06	-0.16	2	2.804	1	-0.15	-0.01	0.00
	4215	141	+47	-0.02	-0.05	1	2.881	1	-0.04	-0.01	0.00
2 Hya	4317	276	+30	-0.06	-0.27	2	2.774	2	-0.29	+0.02	0.08
θ Cra	4468	274	+49	-0.06	-0.20	1	2.795	1	-0.20	0.00	0.00
γ Crv	4662	291	+45	-0.11	-0.36	6	2.743	2	-0.35	-0.01	0.00
δ Crv	4696	294	+40	-0.11	-0.39	1	2.737	2	-0.38	-0.01	0.00
	4854	300	+69	-0.05	-0.14	1	2.819	1	-0.12	-0.02	0.00
	4857	302	+38	-0.04	-0.46	1	2.780	1	-0.53	+0.07	0.29
14 CVn	4943	105	+81	-0.08	-0.20	2	2.823	2	-0.18	-0.02	0.00
15 CVn	4967	106	+78	-0.10	-0.50	1	2.716	3	-0.53	+0.03	0.13
	5018	120	+49	-0.06	-0.17	1	2.846	1	-0.16	-0.01	0.00
	5197	318	+32	-0.03	-0.13	1	2.864	1	-0.13	0.00	0.00
47 Hya	5250	322	+36	-0.10	-0.40	1	2.711	1	-0.41	+0.01	0.04
	5332	329	+40	-0.01	-0.09	1	2.868	1	-0.10	+0.01	0.04
52 Hya	5407	327	+29	-0.07	-0.45	1	2.738	1	-0.50	+0.05	0.21
	5422	51	+68	-0.03	-0.10	2	2.763	1	-0.09	-0.01	0.00
4 Lib	5484	333	+31	-0.01	-0.09	1	2.829	1	-0.10	+0.01	0.04
108 Vir	5501	354	+52	-0.03	-0.11	2	2.858	1	-0.11	0.00	0.00
57 Hya	5517	333	+29	-0.02	-0.10	1	2.854	1	-0.10	0.00	0.00
	5565	333	+26	-0.04	-0.22	1	2.813	1	-0.23	+0.01	0.04
	5614	337	+28	-0.01	-0.39	1	2.720	1	-0.47	+0.08	0.34
	5655	340	+29	-0.03	-0.42	1	2.760	1	-0.49	+0.07	0.29
26 Lib	5662	345	+33	-0.02	-0.25	1	2.743	1	-0.29	+0.04	0.17
β Lib	5685	352	+39	-0.11	-0.37	S	2.695	S	-0.36	-0.01	0.00
50 Boo	5718	52	+57	-0.08	-0.22	1	2.853	1	-0.20	-0.02	0.00
	5731	98	+47	-0.07	-0.15	1	2.835	1	-0.13	-0.02	0.00
τ^2 Ser	5770	25	+51	-0.04	-0.26	1	2.816	1	-0.28	+0.02	0.08
	5801	343	+23	+0.01	-0.42	1	2.750	2	-0.53	+0.11	0.46
ξ CrB	5833	59	+53	-0.12	-0.48	1	2.764	1	-0.49	+0.01	0.04
25 Ser	5863	6	+39	-0.04	-0.45	1	2.764	1	-0.52	+0.07	0.29
3 Sco	5912	347	+22	-0.06	-0.60	2	2.685	2	-0.70	+0.10	0.42
	5931	32	+47	-0.09	-0.46	1	2.703	1	-0.49	+0.03	0.13
4 Her	5938	68	+50	-0.12	-0.42	1	2.744	1	-0.41	-0.01	0.00
	5942	348	+21	-0.08	-0.65	1	2.679	1	-0.74	+0.09	0.38
	5949	91	+45	-0.02	-0.19	1	2.855	1	-0.22	+0.03	0.13
ν Her	5982	73	+48	-0.09	-0.34	1	2.782	2	-0.34	0.00	0.00
	5988	350	+21	-0.08	-0.56	1	2.734	2	-0.63	+0.07	0.29
	5998	350	+20	-0.07	-0.55	2	2.712	2	-0.62	+0.07	0.29

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) _o	E(U-B)	A _v
ϕ Her 12 Sco	6003	351	+20	+0.02	-0.32	2	2.801	2	-0.42	+0.10	0.42
	6023	71	+47	-0.05	-0.29	1	2.782	1	-0.31	+0.02	0.08
	6029	348	+17	-0.00	-0.20	1	2.840	2	-0.25	+0.05	0.21
	6042	351	+19	+0.04	-0.46	2	2.728	1	-0.61	+0.15	0.63
	6054	350	+18	+0.04	-0.37	2	2.745	2	-0.50	+0.13	0.55
19 UMi	6066	354	+21	+0.02	-0.16	2	2.846	2	-0.22	+0.06	0.25
	6079	110	+36	-0.15	-0.46	1	2.691	2	-0.44	-0.02	0.00
	6096	12	+31	+0.10	-0.08	1	2.851	1	-0.19	+0.11	0.46
28 Her	6158	21	+33	-0.05	-0.22	1	2.811	1	-0.22	0.00	0.00
15 Dra	6161	101	+38	-0.05	-0.16	1	2.826	1	-0.15	-0.01	0.00
16 Oph	6224	18	+28	-0.01	-0.15	1	2.802	2	-0.18	+0.03	0.13
♁ Oph	6281	29	+31	-0.10	-0.31	1	2.763	2	-0.30	-0.01	0.00
	6383	78	+37	-0.00	-0.14	1	2.833	1	-0.17	+0.03	0.13
	6395	80	+36	-0.00	-0.19	1	2.748	1	-0.24	+0.05	0.21
	6414	23	+22	+0.08	-0.47	1	2.707	1	-0.65	+0.18	0.76
♃ Oph	6482	38	+26	0.00	-0.21	1	2.801	1	-0.26	+0.05	0.21
	6506	59	+32	-0.02	-0.08	1	2.895	1	-0.08	0.00	0.00
	6532	35	+23	0.00	-0.22	1	2.811	1	-0.27	+0.05	0.21
	6544	14	+11	+0.01	-0.19	1	2.790	1	-0.25	+0.06	0.25
	6567	17	+12	+0.10	-0.21	1	2.739	1	-0.35	+0.14	0.59
38 Her	6619	56	+27	+0.01	-0.27	1	2.648	1	-0.43	+0.16	0.67
	6620	12	+7	+0.05	-0.33	1	2.752	1	-0.46	+0.13	0.55
	6664	75	+30	-0.15	-0.39	1	2.725	1	-0.35	-0.04	0.00
	6718	72	+28	-0.07	-0.26	1	2.817	1	-0.26	0.00	0.00
	6720	45	+20	-0.06	-0.41	1	2.689	1	-0.46	+0.05	0.21
37 Her	6741	49	+21	-0.11	-0.66	1	2.701	1	-0.72	+0.06	0.25
	6755	20	+6	+0.20	-0.68	2	2.721	1	-1.02	+0.34	1.43
	6881	19	+1	+0.01	-0.26	1	2.749	1	-0.33	+0.06	0.25
	6900	35	+8	+0.04	-0.24	1	2.768	1	-0.34	+0.10	0.42
	6906	44	+12	+0.09	-0.37	1	2.799	2	-0.54	+0.17	0.71
	6919	15	-3	+0.01	-0.31	1	2.772	1	-0.40	+0.09	0.38
	6928	36	+8	-0.04	-0.36	1	2.754	1	-0.41	+0.05	0.21
	6958	34	+6	-0.06	-0.24	1	2.748	1	-0.25	+0.01	0.04
	6967	38	+8	-0.05	-0.32	1	2.710	1	-0.35	+0.03	0.13
	6968	59	+17	-0.10	-0.36	1	2.785	1	-0.36	0.00	0.00
7028	6974	81	+24	-0.05	-0.25	1	2.785	1	-0.26	+0.01	0.04
	6989	19	-3	+0.21	-0.20	1	2.724	1	-0.44	+0.22	0.92
	6990	11	-8	+0.02	-0.42	1	2.733	1	-0.54	+0.12	0.50
	6997	62	+17	-0.12	-0.51	1	2.739	1	-0.52	+0.01	0.04
	7028	81	+23	-0.07	-0.22	1	2.794	2	-0.21	-0.01	0.00

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) ₀	E(U-B)	A _v
	7035	10	-10	+0.06	-0.39	1	2.731	1	-0.33	-0.06	0.00
	7073	71	+19	-0.12	-0.41	1	2.730	1	-0.40	-0.01	0.00
	7098	62	+14	-0.00	-0.12	1	2.820	1	-0.15	+0.03	0.13
	7109	46	+6	+0.05	-0.34	1	2.763	1	-0.47	+0.13	0.55
112 Her	7113	52	+9	-0.08	-0.42	1	2.748	1	-0.45	+0.03	0.13
	7118	71	+17	-0.09	-0.32	1	2.721	1	-0.32	0.00	0.00
	7128	13	-11	-0.02	-0.42	1	2.702	1	-0.50	+0.08	0.34
	7147	50	+7	-0.05	-0.47	1	2.682	1	-0.53	+0.06	0.25
54 Ser	7158	36	0	0.00	-0.26	1	2.751	1	-0.32	+0.06	0.25
	7171	52	+7	-0.05	-0.44	1	2.813	1	-0.50	+0.06	0.25
	7224	100	+25	-0.15	-0.54	2	2.697	3	-0.54	0.00	0.00
λ Aql	7236	30	-6	-0.10	-0.29	2	2.819	1	-0.27	-0.02	0.00
	7239	20	-11	-0.04	-0.36	1	2.735	1	-0.41	+0.05	0.21
	7241	18	-12	-0.04	-0.42	1	2.740	1	-0.48	+0.06	0.25
	7245	35	-3	+0.06	-0.28	1	2.728	1	-0.40	+0.12	0.50
	7246	12	-14	+0.04	-0.25	1	2.820	1	-0.35	+0.10	0.42
18 Aql	7248	45	+2	-0.08	-0.39	1	2.771	1	-0.41	+0.02	0.08
	7269	35	-4	-0.04	-0.48	1	2.672	1	-0.56	+0.08	0.34
	7285	50	+3	-0.02	-0.29	1	2.843	2	-0.34	+0.05	0.21
21 Aql	7287	38	-4	-0.09	-0.42	1	2.716	1	-0.44	+0.02	0.08
	7305	60	+7	-0.05	-0.60	1	2.698	1	-0.70	+0.10	0.42
27 Aql	7336	36	-7	-0.06	-0.23	1	2.774	1	-0.24	+0.01	0.04
	7339	19	-15	-0.10	-0.52	1	2.713	1	-0.56	+0.04	0.17
	7346	68	+10	-0.13	-0.54	2	2.752	1	-0.55	+0.01	0.04
	7361	96	+21	-0.04	-0.48	3	2.708	1	-0.56	+0.08	0.34
	7374	62	+6	-0.08	-0.54	1	2.728	1	-0.60	+0.06	0.25
	7378	23	-14	+0.03	-0.34	1	2.767	1	-0.45	+0.11	0.46
	7380	9	-20	0.00	-0.11	1	2.888	1	-0.14	+0.03	0.13
	7381	82	+16	-0.08	-0.37	2	2.781	1	-0.39	+0.02	0.08
	7397	40	-7	0.00	-0.42	1	2.681	1	-0.52	+0.10	0.42
	7401	89	+19	-0.15	-0.54	1	2.752	1	-0.54	+0.00	0.00
β Cyg B	7418	62	+5	-0.08	-0.36	1	2.748	2	-0.38	+0.02	0.08
9 Vul	7437	55	0	-0.12	-0.42	1	2.675	1	-0.41	-0.01	0.00
52 Sgr	7440	15	-21	-0.07	-0.19	1	2.861	1	-0.18	-0.01	0.00
	7452	58	+1	-0.04	-0.30	1	2.731	1	-0.33	+0.03	0.13
11 Cyg	7457	71	+8	-0.10	-0.42	1	2.720	1	-0.43	+0.01	0.04
	7467	72	+8	-0.14	-0.62	1	2.687	1	-0.64	+0.02	0.08
14 Cyg	7483	76	+10	-0.08	-0.23	1	2.785	1	-0.22	-0.01	0.00
46 Aql	7493	50	-5	-0.08	-0.42	1	2.693	1	-0.45	+0.03	0.13
	7505	66	+4	0.00	-0.06	1	2.872	2	-0.07	+0.01	0.04

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) ₀	E(U-B)	A _V
78 Aql	7511	51	-5	-0.04	-0.22	1	2.789	1	-0.23	+0.01	0.04
	7543	73	+7	-0.08	-0.37	1	2.753	1	-0.39	+0.02	0.08
	7556	65	+1	-0.12	-0.51	1	2.681	1	-0.52	+0.01	0.04
	7607	67	+1	-0.05	-0.48	1	2.674	1	-0.55	+0.07	0.29
11 Sge	7622	56	-6	-0.14	-0.61	1	2.675	1	-0.63	+0.02	0.08
	7640	68	+1	-0.08	-0.19	1	2.785	1	-0.17	-0.02	0.00
	7656	63	-3	-0.13	-0.54	1	2.689	2	-0.55	+0.01	0.04
20 Vul	7699	72	+1	+0.16	-0.43	1	2.581	2	-0.67	+0.24	1.01
	7719	66	-4	-0.12	-0.45	1	2.715	1	-0.45	0.00	0.00
	7721	83	+8	-0.12	-0.46	1	2.727	1	-0.46	0.00	0.00
31 Cyg B	7735	83	+7	-0.14	-0.61	1	2.686	1	-0.63	+0.02	0.08
	7737	79	+4	-0.04	-0.28	1	2.728	1	-0.31	+0.03	0.13
3 Cap	7738	31	-24	+0.01	-0.18	2	2.820	1	-0.23	+0.05	0.21
κ Cep	7750	110	+23	-0.04	-0.16	1	2.819	1	-0.16	0.00	0.00
	7775	29	-26	-0.02	-0.12	1	2.844	2	-0.13	+0.01	0.04
25 Vul	7786	83	+6	-0.06	-0.38	1	2.709	1	-0.42	+0.04	0.17
	7789	65	-7	-0.11	-0.41	1	2.694	1	-0.41	0.00	0.00
71 Dra	7792	97	+14	-0.05	-0.22	1	2.798	1	-0.22	0.00	0.00
π Cap	7814	26	-29	-0.07	-0.42	1	2.720	1	-0.46	+0.04	0.17
	7815	89	+9	+0.01	-0.14	1	2.752	1	-0.18	+0.04	0.17
68 Aql	7821	41	-23	-0.07	-0.22	1	2.841	1	-0.21	-0.01	0.00
	7843	92	+10	-0.04	-0.25	1	2.782	1	-0.27	+0.02	0.08
	7870	85	+4	-0.15	-0.54	1	2.740	1	-0.54	0.00	0.00
	7878	46	-23	-0.09	-0.41	1	2.730	1	-0.43	+0.02	0.08
27 Vul	7880	69	-9	-0.06	-0.23	1	2.828	1	-0.24	+0.01	0.04
α Del	7890	44	-25	-0.10	-0.47	1	2.672	1	-0.49	+0.02	0.08
	7906	60	-15	-0.06	-0.22	1	2.805	1	-0.22	0.00	0.00
	7911	80	-1	-0.19	-0.55	1	2.682	1	-0.51	-0.04	0.00
	7922	79	-2	-0.09	-0.51	1	2.713	1	-0.55	+0.04	0.17
	7926	82	0	-0.11	-0.46	1	2.724	1	-0.47	+0.01	0.04
5 Aqr	7961	20	-36	-0.07	-0.47	1	2.682	1	-0.52	+0.05	0.21
	7978	90	+5	-0.07	-0.57	1	2.827	2	-0.65	+0.08	0.34
	7985	42	-29	-0.09	-0.27	1	2.809	1	-0.26	-0.01	0.00
	8009	82	-3	-0.08	-0.40	2	2.608	3	-0.43	+0.03	0.13
	8014	45	-29	-0.08	-0.33	1	2.787	1	-0.34	+0.01	0.04
	8020	88	+1	+0.48	-0.33	2	2.602	2	-0.84	+0.51	2.14
8022	90	+4	-0.10	-0.51	1	2.698	1	-0.54	+0.03	0.13	
8036	84	-3	-0.06	-0.47	1	2.772	1	-0.53	+0.06	0.25	
8040	90	+3	-0.13	-0.52	1	2.697	1	-0.53	+0.01	0.04	
8054	48	-29	-0.10	-0.47	1	2.700	1	-0.49	+0.02	0.08	

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) ₀	E(U-B)	A _v
	8064	87	-1	-0.14	-0.56	1	2.695	1	-0.57	+0.01	0.04
	8065	95	+7	-0.07	-0.35	1	2.695	1	-0.37	+0.02	0.08
	8106	94	+4	-0.12	-0.46	1	2.686	1	-0.46	0.00	0.00
	8109	101	+10	-0.11	-0.47	1	2.752	1	-0.48	+0.01	0.04
	8112	112	+20	-0.06	-0.28	1	2.799	1	-0.30	+0.02	0.08
	8118	40	-37	-0.08	-0.32	1	2.762	1	-0.33	+0.01	0.04
30 Cap	8137	33	-42	-0.12	-0.50	1	2.717	1	-0.51	+0.01	0.04
15 Aqr	8141	47	-35	-0.13	-0.53	1	2.705	1	-0.54	+0.01	0.04
	8144	87	-5	-0.11	-0.44	1	2.675	1	-0.45	+0.01	0.04
	8158	72	-19	-0.07	-0.50	1	2.721	1	-0.56	+0.06	0.25
	8218	95	+2	-0.12	-0.47	1	2.704	1	-0.47	0.00	0.00
	8226	97	+3	+0.14	-0.29	1	2.678	1	-0.49	+0.20	0.84
	8240	75	-20	-0.08	-0.26	1	2.772	2	-0.25	-0.01	0.00
	8259	95	0	+0.02	-0.30	1	2.735	1	-0.39	+0.09	0.38
	8292	66	-31	-0.12	-0.50	1	2.721	1	-0.51	+0.01	0.04
	8338	88	-12	-0.06	-0.36	1	2.746	1	-0.40	+0.04	0.17
	8348	75	-26	-0.10	-0.42	1	2.756	1	-0.43	+0.01	0.04
	8349	89	-11	-0.05	-0.46	1	2.675	1	-0.52	+0.06	0.25
γ Gru	8353	6	-52	-0.14	-0.54	1	2.734	1	-0.54	0.00	0.00
13 Cep	8371	100	+2	+0.75	-0.06	1	2.659	1	-0.74	+0.68	2.86
ε PsA	8386	21	-52	-0.09	-0.42	1	2.672	1	-0.44	+0.02	0.08
	8397	70	-34	-0.08	-0.61	1	2.672	1	-0.69	+0.08	0.34
ι Aqr	8418	44	-49	-0.06	-0.33	1	2.812	1	-0.36	+0.03	0.13
	8434	102	+1	-0.08	-0.46	1	2.743	1	-0.50	+0.04	0.17
25 Peg	8438	80	-27	-0.10	-0.42	2	2.726	2	-0.43	+0.01	0.04
	8473	111	+13	-0.04	-0.23	1	2.825	1	-0.25	+0.02	0.08
λ PsA	8478	23	-55	-0.16	-0.56	1	2.722	1	-0.56	0.00	0.00
	8490	106	+6	-0.09	-0.44	2	2.698	2	-0.47	+0.03	0.13
ρ Aqr	8512	54	-49	-0.06	-0.37	2	2.730	3	-0.41	+0.04	0.17
32 Peg	8522	87	-24	+0.02	-0.22	2	2.741	3	-0.29	+0.07	0.29
	8535	104	0	-0.12	-0.56	2	2.696	2	-0.59	+0.03	0.13
4 Lac	8541	100	-7	+0.08	-0.34	2	2.630	4	-0.49	+0.15	0.63
	8550	116	+18	-0.06	-0.17	1	2.774	2	-0.16	-0.01	0.00
	8554	104	-1	-0.10	-0.48	2	2.752	2	-0.51	+0.03	0.13
η Aqr	8597	67	-48	-0.10	-0.26	2	2.800	2	-0.23	-0.03	0.00
ε PsA	8628	25	-61	-0.16	-0.52	1	2.695	1	-0.51	-0.01	0.00
ζ Peg	8634	79	-41	-0.08	-0.24	1	2.778	8	-0.23	-0.01	0.00
67 Aqr	8647	61	-54	-0.05	-0.14	2	2.880	2	-0.12	-0.02	0.00
	8652	101	-10	+0.47	-0.07	3	2.692	4	-0.51	+0.44	1.85
69 Aqr	8673	51	-58	-0.05	-0.26	1	2.838	1	-0.27	+0.01	0.04

TABLE 1 (Continued)

Name	HR	l	b	(B-V)	(U-B)	n	β	n	(U-B) _o	E(U-B)	A _v
74 Aqr	8682	106	-4	-0.07	-0.50	2	2.675	2	-0.56	+0.06	0.25
	8704	56	-58	-0.08	-0.36	1	2.789	1	-0.38	+0.02	0.08
	8705	104	-8	-0.04	-0.35	2	2.758	2	-0.39	+0.04	0.17
	8706	100	-17	-0.08	-0.43	2	2.732	2	-0.46	+0.03	0.13
	8723	98	-21	-0.06	-0.36	2	2.719	2	-0.40	+0.04	0.17
58 Peg	8745	109	0	+0.02	-0.25	2	2.698	3	-0.33	+0.08	0.34
	8770	108	-4	-0.08	-0.56	2	2.682	2	-0.63	+0.07	0.29
	8821	86	-46	-0.08	-0.27	1	2.750	1	-0.27	+0.00	0.00
	8861	106	-14	-0.03	-0.26	2	2.759	2	-0.29	+0.03	0.13
	8873	102	-24	-0.06	-0.38	1	2.724	1	-0.42	+0.04	0.17
64 Peg	8887	102	-27	-0.12	-0.45	1	2.709	1	-0.45	0.00	0.00
13 And	8913	107	-17	0.00	-0.10	1	2.758	1	-0.12	+0.02	0.08
	8962	109	-17	-0.06	-0.32	1	2.784	1	-0.35	+0.03	0.13
4 And	8965	109	-18	-0.10	-0.30	1	2.728	1	-0.28	-0.02	0.00
18 And	8967	111	-11	-0.06	-0.15	2	2.822	1	-0.14	-0.01	0.00
106 Aqr	8998	59	-72	-0.08	-0.28	1	2.782	1	-0.28	0.00	0.00
26 Psc	9048	99	-53	-0.05	-0.18	1	2.870	1	-0.17	-0.01	0.00
	9063	116	-2	0.00	-0.11	1	2.768	1	-0.14	+0.03	0.13
	9086	113	-20	-0.03	-0.26	2	2.680	2	-0.29	+0.03	0.13
29 Psc	9087	95	-63	-0.13	-0.50	1	2.708	2	-0.50	0.00	0.00
	9110	117	-1	-0.10	-0.33	1	2.725	1	-0.32	-0.01	0.00

star's name and its number in the *Bright Star Catalogue*. The next two columns give the galactic longitude and latitude on the new system (Blaauw, Gum, Pawsey, and Westerhout 1959). The values were computed with the Kitt Peak National Observatory's digital computer from the 1900 right ascensions and declinations. The next three columns give the observed $(B - V)$ and $(U - B)$ values and the number of observations. The photometry was obtained with the 36-inch reflector of the McDonald Observatory and with the 16-inch reflector on Kitt Peak. As the original goal was to obtain only one observation per star and as some nights of poor quality were included in the work, the tabular values are not to be taken as being of high weight. A number of the stars that

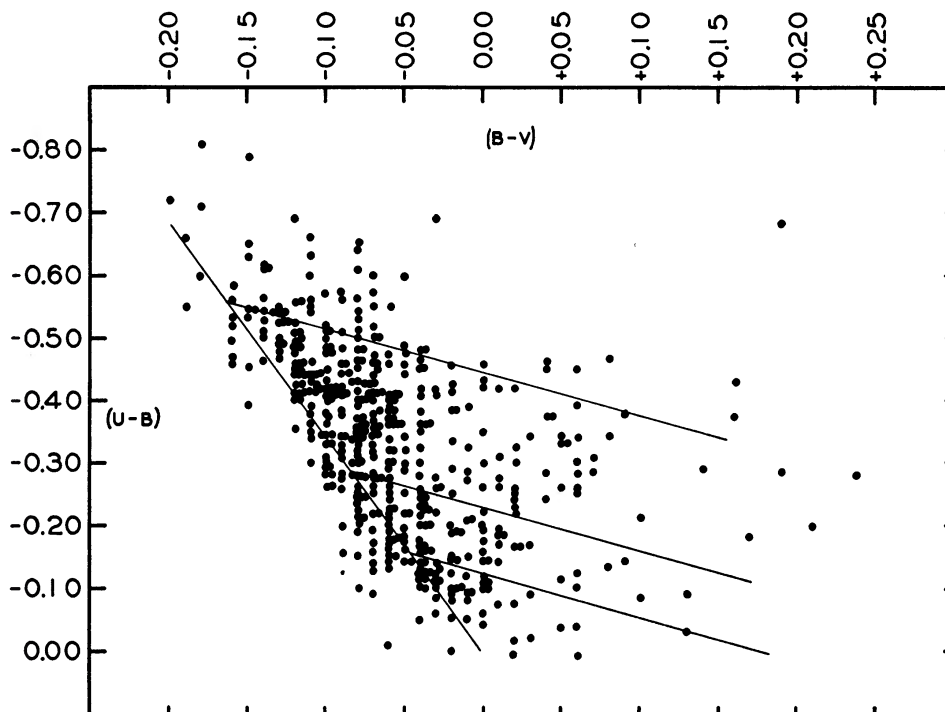


FIG. 1.—The $(U - B)$ versus $(B - V)$ relation for the stars of Table 1. The lines show the intrinsic color relation of Johnson and Morgan and the reddening lines for stars of spectral type B5, B8, and B9.

appeared interesting (reddened, supergiants, etc.) were repeated, as well as standard stars. These multiple observations indicate an average deviation of about 0.02 mag. No attempt was made to derive V magnitudes from the observations.

The next two columns give values of the $H\beta$ line-intensity index, β , as defined by Crawford (1960), and the number of observations. The majority of these observations was obtained with a simultaneous two-channel photometer, similar to those previously described (Crawford 1958). Again the goal was only one observation per star, but standards and tie-ins from night to night have yielded multiple observations on many of the stars. The average deviation as computed from these multiple observations is 0.020 mag. Four stars have been noted as being variable (HR 1035, 1600, 1638, and 1860). It should be explicitly noted that the $H\beta$ photometry for a given star was obtained on a different night than the U , B , V photometry.

Every effort was made to avoid mistakes, but, as in any table giving only single observations, any individual entry may be subject to error. The table is intended mainly for statistical use and as a guide for further work.

The table also gives the computed values of (1) $(U - B)_0$, the intrinsic ultraviolet color index; (2) $E(U - B)$, the ultraviolet color excess; and (3) A_V , the visual absorption. These were computed by assuming a linear reddening slope, $E(U - B)/E(B - V) = 0.72$, and a ratio of total to selective absorption, $A_V/E(U - B) = 4.2$. In the cases where the computed color excess was negative, the absorption was assumed to be zero.

Figure 1 shows the two-color relation, $(U - B)$ versus $(B - V)$. Five stars lie outside the range of the diagram: HR 1035, 8020, 8371, and 8652, which are too red, and HR 2603, which is too blue.

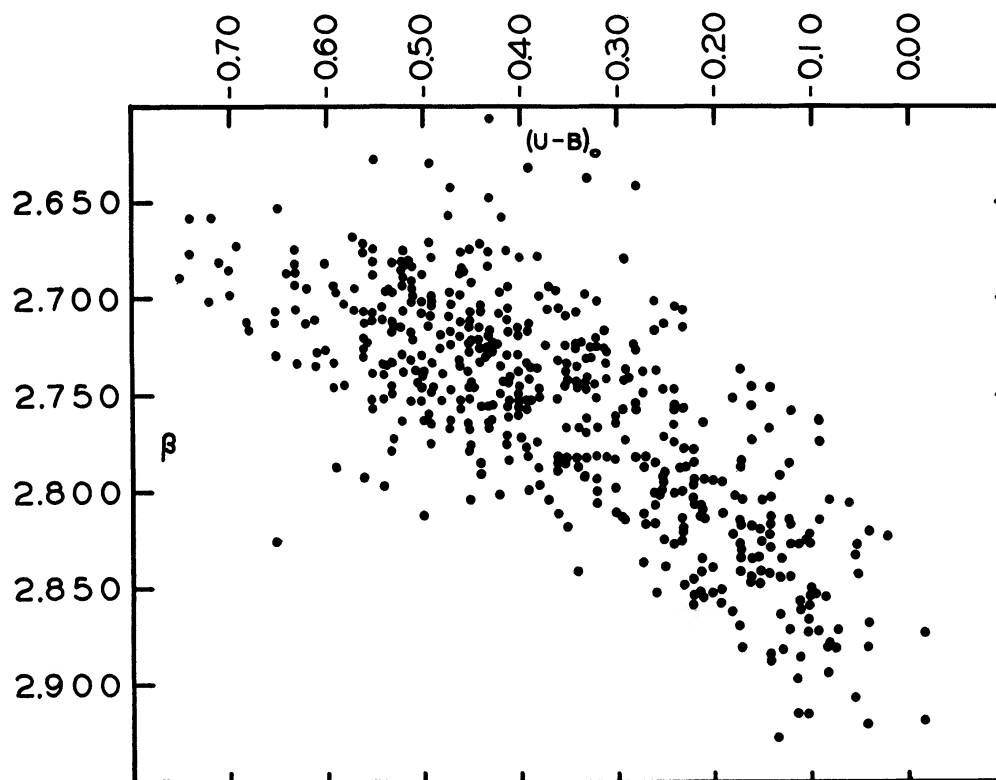


FIG. 2.—The β versus $(U - B)_0$ relation for the stars of Table 1

The line near the left-hand edge of the plotted points is the intrinsic color line of Johnson and Morgan (1953). The lines running to the right from it indicate the reddening paths from the mean points for spectral types B5, B8, and B9. They were drawn by assuming a linear slope of 0.72.

Figure 2 shows the β versus $(U - B)_0$ relation. Here four stars (HR 2603, 2623, 6755, and 8020) lie off the diagram; all are too blue. As expected, the plotted points indicate a wide range in luminosity and age for these stars because stars with a weak H β for a given $(U - B)_0$ are either more luminous or have hydrogen-line emission (for example, see Crawford 1958; Sinnerstad 1961).

A detailed discussion of Figures 1 and 2 will appear elsewhere when distances and space motions for these stars are considered.

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