G

Stellar Data

Main-Sequence Stars (Luminosity Class V)									
Sp. Type	T_e (K)	$L/L_\odot$	$R/R_\odot$	$M/M_\odot$	M_{bol}	BC	M_V	$U-B$	$B-V$
O5	42000	499000	13.4	60	−9.51	−4.40	−5.1	−1.19	−0.33
O6	39500	324000	12.2	37	−9.04	−3.93	−5.1	−1.17	−0.33
O7	37500	216000	11.0	—	−8.60	−3.68	−4.9	−1.15	−0.32
O8	35800	147000	10.0	23	−8.18	−3.54	−4.6	−1.14	−0.32
B0	30000	32500	6.7	17.5	−6.54	−3.16	−3.4	−1.08	−0.30
B1	25400	9950	5.2	—	−5.26	−2.70	−2.6	−0.95	−0.26
B2	20900	2920	4.1	—	−3.92	−2.35	−1.6	−0.84	−0.24
B3	18800	1580	3.8	7.6	−3.26	−1.94	−1.3	−0.71	−0.20
B5	15200	480	3.2	5.9	−1.96	−1.46	−0.5	−0.58	−0.17
B6	13700	272	2.9	—	−1.35	−1.21	−0.1	−0.50	−0.15
B7	12500	160	2.7	—	−0.77	−1.02	+0.3	−0.43	−0.13
B8	11400	96.7	2.5	3.8	−0.22	−0.80	+0.6	−0.34	−0.11
B9	10500	60.7	2.3	—	+0.28	−0.51	+0.8	−0.20	−0.07
A0	9800	39.4	2.2	2.9	+0.75	−0.30	+1.1	−0.02	−0.02
A1	9400	30.3	2.1	—	+1.04	−0.23	+1.3	+0.02	+0.01
A2	9020	23.6	2.0	—	+1.31	−0.20	+1.5	+0.05	+0.05
A5	8190	12.3	1.8	2.0	+2.02	−0.15	+2.2	+0.10	+0.15
A8	7600	7.13	1.5	—	+2.61	−0.10	+2.7	+0.09	+0.25
F0	7300	5.21	1.4	1.6	+2.95	−0.09	+3.0	+0.03	+0.30
F2	7050	3.89	1.3	—	+3.27	−0.11	+3.4	+0.00	+0.35
F5	6650	2.56	1.2	1.4	+3.72	−0.14	+3.9	−0.02	+0.44
F8	6250	1.68	1.1	—	+4.18	−0.16	+4.3	+0.02	+0.52

Appendix G Stellar Data
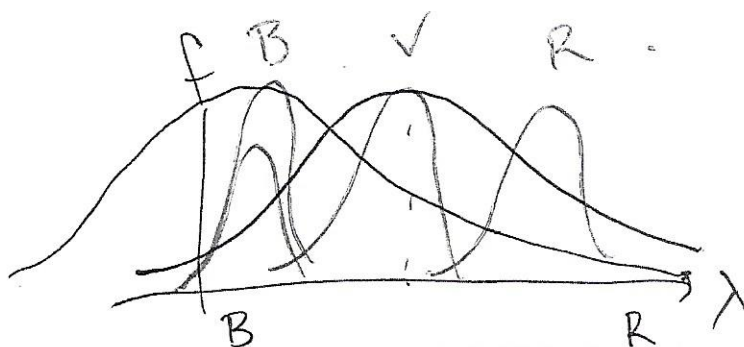
Main-Sequence Stars (Luminosity Class V)

Sp. Type	T_e (K)	$L/L_\odot$	$R/R_\odot$	$M/M_\odot$	M_{bol}	BC	M_V	$U-B$	$B-V$
G0	5940	1.25	1.06	1.05	+4.50	−0.18	+4.7	+0.06	+0.58
G2	5790	1.07	1.03	—	+4.66	−0.20	+4.9	+0.12	+0.63
Sun[a]	5777	1.00	1.00	1.00	+4.74	−0.08	+4.82	+0.195	+0.650
G8	5310	0.656	0.96	—	+5.20	−0.40	+5.6	+0.30	+0.74
K0	5150	0.552	0.93	0.79	+5.39	−0.31	+5.7	+0.45	+0.81
K1	4990	0.461	0.91	—	+5.58	−0.37	+6.0	+0.54	+0.86
K3	4690	0.318	0.86	—	+5.98	−0.50	+6.5	+0.80	+0.96
K4	4540	0.263	0.83	—	+6.19	−0.55	+6.7	—	+1.05
K5	4410	0.216	0.80	0.67	+6.40	−0.72	+7.1	+0.98	+1.15
K7	4150	0.145	0.74	—	+6.84	−1.01	+7.8	+1.21	+1.33
M0	3840	0.077	0.63	0.51	+7.52	−1.38	+8.9	+1.22	+1.40
M1	3660	0.050	0.56	—	+7.99	−1.62	+9.6	+1.21	+1.46
M2	3520	0.032	0.48	0.40	+8.47	−1.89	+10.4	+1.18	+1.49
M3	3400	0.020	0.41	—	+8.97	−2.15	+11.1	+1.16	+1.51
M4	3290	0.013	0.35	—	+9.49	−2.38	+11.9	+1.15	+1.54
M5	3170	0.0076	0.29	0.21	+10.1	−2.73	+12.8	+1.24	+1.64
M6	3030	0.0044	0.24	—	+10.6	−3.21	+13.8	+1.32	+1.73
M7	2860	0.0025	0.20	—	+11.3	−3.46	+14.7	+1.40	+1.80

[a] Values adopted in this text.

Giant Stars (Luminosity Class III)

Sp. Type	T_e (K)	$L/L_\odot$	$R/R_\odot$	$M/M_\odot$	M_{bol}	BC	M_V	$U - B$	$B - V$
O5	39400	741000	18.5	—	−9.94	−4.05	−5.9	−1.18	−0.32
O6	37800	519000	16.8	—	−9.55	−3.80	−5.7	−1.17	−0.32
O7	36500	375000	15.4	—	−9.20	−3.58	−5.6	−1.14	−0.32
O8	35000	277000	14.3	—	−8.87	−3.39	−5.5	−1.13	−0.31
B0	29200	84700	11.4	20	−7.58	−2.88	−4.7	−1.08	−0.29
B1	24500	32200	10.0	—	−6.53	−2.43	−4.1	−0.97	−0.26
B2	20200	11100	8.6	—	−5.38	−2.02	−3.4	−0.91	−0.24
B3	18300	6400	8.0	—	−4.78	−1.60	−3.2	−0.74	−0.20
B5	15100	2080	6.7	7	−3.56	−1.30	−2.3	−0.58	−0.17
B6	13800	1200	6.1	—	−2.96	−1.13	−1.8	−0.51	−0.15
B7	12700	710	5.5	—	−2.38	−0.97	−1.4	−0.44	−0.13
B8	11700	425	5.0	—	−1.83	−0.82	−1.0	−0.37	−0.11
B9	10900	263	4.5	—	−1.31	−0.71	−0.6	−0.20	−0.07
A0	10200	169	4.1	4	−0.83	−0.42	−0.4	−0.07	−0.03
A1	9820	129	3.9	—	−0.53	−0.29	−0.2	+0.07	+0.01
A2	9460	100	3.7	—	−0.26	−0.20	−0.1	+0.06	+0.05
A5	8550	52	3.3	—	+0.44	−0.14	+0.6	+0.11	+0.15
A8	7830	33	3.1	—	+0.95	−0.10	+1.0	+0.10	+0.25
F0	7400	27	3.2	—	+1.17	−0.11	+1.3	+0.08	+0.30
F2	7000	24	3.3	—	+1.31	−0.11	+1.4	+0.08	+0.35
F5	6410	22	3.8	—	+1.37	−0.14	+1.5	+0.09	+0.43
G0	5470	29	6.0	1.0	+1.10	−0.20	+1.3	+0.21	+0.65
G2	5300	31	6.7	—	+1.00	−0.27	+1.3	+0.39	+0.77
G8	4800	44	9.6	—	+0.63	−0.42	+1.0	+0.70	+0.94
K0	4660	50	10.9	1.1	+0.48	−0.50	+1.0	+0.84	+1.00
K1	4510	58	12.5	—	+0.32	−0.55	+0.9	+1.01	+1.07
K3	4260	79	16.4	—	−0.01	−0.76	+0.8	+1.39	+1.27
K4	4150	93	18.7	—	−0.18	−0.94	+0.8	—	+1.38
K5	4050	110	21.4	1.2	−0.36	−1.02	+0.7	+1.81	+1.50
K7	3870	154	27.6	—	−0.73	−1.17	+0.4	+1.83	+1.53
M0	3690	256	39.3	1.2	−1.28	−1.25	+0.0	+1.87	+1.56
M1	3600	355	48.6	—	−1.64	−1.44	−0.2	+1.88	+1.58
M2	3540	483	58.5	1.3	−1.97	−1.62	−0.4	+1.89	+1.60
M3	3480	643	69.7	—	−2.28	−1.87	−0.4	+1.88	+1.61
M4	3440	841	82.0	—	−2.57	−2.22	−0.4	+1.73	+1.62
M5	3380	1100	96.7	—	−2.86	−2.48	−0.4	+1.58	+1.63
M6	3330	1470	116	—	−3.18	−2.73	−0.4	+1.16	+1.52

Appendix G   Stellar Data

Supergiant Stars (Luminosity Class Approximately Iab)

Sp. Type	T_e (K)	$L/L_\odot$	$R/R_\odot$	$M/M_\odot$	M_{bol}	BC	M_V	$U-B$	$B-V$
O5	40900	1140000	21.2	70	−10.40	−3.87	−6.5	−1.17	−0.31
O6	38500	998000	22.4	40	−10.26	−3.74	−6.5	−1.16	−0.31
O7	36200	877000	23.8	—	−10.12	−3.48	−6.6	−1.14	−0.31
O8	34000	769000	25.3	28	−9.98	−3.35	−6.6	−1.13	−0.29
B0	26200	429000	31.7	25	−9.34	−2.49	−6.9	−1.06	−0.23
B1	21400	261000	37.3	—	−8.80	−1.87	−6.9	−1.00	−0.19
B2	17600	157000	42.8	—	−8.25	−1.58	−6.7	−0.94	−0.17
B3	16000	123000	45.8	—	−7.99	−1.26	−6.7	−0.83	−0.13
B5	13600	79100	51.1	20	−7.51	−0.95	−6.6	−0.72	−0.10
B6	12600	65200	53.8	—	−7.30	−0.88	−6.4	−0.69	−0.08
B7	11800	54800	56.4	—	−7.11	−0.78	−6.3	−0.64	−0.05
B8	11100	47200	58.9	—	−6.95	−0.66	−6.3	−0.56	−0.03
B9	10500	41600	61.8	—	−6.81	−0.52	−6.3	−0.50	−0.02
A0	9980	37500	64.9	16	−6.70	−0.41	−6.3	−0.38	−0.01
A1	9660	35400	67.3	—	−6.63	−0.32	−6.3	−0.29	+0.02
A2	9380	33700	69.7	—	−6.58	−0.28	−6.3	−0.25	+0.03
A5	8610	30500	78.6	13	−6.47	−0.13	−6.3	−0.07	+0.09
A8	7910	29100	91.1	—	−6.42	−0.03	−6.4	+0.11	+0.14
F0	7460	28800	102	12	−6.41	−0.01	−6.4	+0.15	+0.17
F2	7030	28700	114	—	−6.41	0.00	−6.4	+0.18	+0.23
F5	6370	29100	140	10	−6.42	−0.03	−6.4	+0.27	+0.32
F8	5750	29700	174	—	−6.44	−0.09	−6.4	+0.41	+0.56
G0	5370	30300	202	10	−6.47	−0.15	−6.3	+0.52	+0.76
G2	5190	30800	218	—	−6.48	−0.21	−6.3	+0.63	+0.87
G8	4700	32400	272	—	−6.54	−0.42	−6.1	+1.07	+1.15
K0	4550	33100	293	13	−6.56	−0.50	−6.1	+1.17	+1.24
K1	4430	34000	314	—	−6.59	−0.56	−6.0	+1.28	+1.30
K3	4190	36100	362	—	−6.66	−0.75	−5.9	+1.60	+1.46
K4	4090	37500	386	—	−6.70	−0.90	−5.8	—	+1.53
K5	3990	39200	415	13	−6.74	−1.01	−5.7	+1.80	+1.60
K7	3830	43200	473	—	−6.85	−1.20	−5.6	+1.84	+1.63
M0	3620	51900	579	13	−7.05	−1.29	−5.8	+1.90	+1.67
M1	3490	60300	672	—	−7.21	−1.38	−5.8	+1.90	+1.69
M2	3370	72100	791	19	−7.41	−1.62	−5.8	+1.95	+1.71
M3	3210	89500	967	—	−7.64	−2.13	−5.5	+1.95	+1.69
M4	3060	117000	1220	—	−7.93	−2.75	−5.2	+2.00	+1.76
M5	2880	165000	1640	24	−8.31	−3.47	−4.8	+1.60	+1.80
M6	2710	264000	2340	—	−8.82	−3.90	−4.9	—	—

$$\frac{M}{L} = 1$$