

Telluric Reference Stars for Cerro Pachon

This set of files contain lists of hot stars (spectral type O-B-A and early F stars) kindly provided by Jeff Valenti (STScI). These stars are suggested as telluric spectrum references with Phoenix. The stars have been selected from the Bright Star Catalog with a limiting magnitude of 3.0. The files are labeled by LST. The contents of the file give the airmass for each star as observed at Cerro Pachon at that LST.

Our experience is that telluric constituents that are well mixed, e.g. CO, CO₂, N₂O, CH₄, etc. will ratio out of program star spectra if the reference star is observed at the same airmass on the same date. However, H₂O is not well mixed in terrestrial atmosphere and does not always scale as the airmass. In order to guarantee that the H₂O lines can be removed reference stars should be observed bracketing the airmass of the program star.

We have not investigated the infrared spectrum of each star in these lists to eliminate peculiar objects. Also note that spectra of hot stars do have spectral features in the infrared, most significantly hydrogen and helium lines. Additional information on the spectra of stars in the infrared throughout the K, H, and J bands can be found in:

- Wallace & Hinkle 1997 ApJS 111 445
- Meyer et al 1998 ApJ 508 397
- Wallace et al. 2000 ApJ 535 325

The telluric spectrum in the 1-5 micron infrared is show at high resolution in Hinkle, Wallace, & Livingston 1995 "Infrared Atlas of the Arcturus Spectrum, 0.9-5.3 microns," ASP.

Files by LST			
0	6	12	18
<u>0.5</u>	<u>6.5</u>	<u>12.5</u>	<u>18.5</u>
<u>1</u>	<u>7</u>	<u>13</u>	<u>19</u>
<u>1.5</u>	<u>7.5</u>	<u>13.5</u>	<u>19.5</u>
<u>2</u>	<u>8</u>	<u>14</u>	<u>20</u>
<u>2.5</u>	<u>8.5</u>	<u>14.5</u>	<u>20.5</u>
<u>3</u>	<u>9</u>	<u>15</u>	<u>21</u>
<u>3.5</u>	<u>9.5</u>	<u>15.5</u>	<u>21.5</u>
<u>4</u>	<u>10</u>	<u>16</u>	<u>22</u>
<u>4.5</u>	<u>10.5</u>	<u>16.5</u>	<u>22.5</u>
<u>5</u>	<u>11</u>	<u>17</u>	<u>23</u>
<u>5.5</u>	<u>11.5</u>	<u>17.5</u>	<u>23.5</u>

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	Spectype
3.135	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
2.892	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
2.781	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
2.450	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.963	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
1.888	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
1.476	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.249	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.177	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.125	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.028	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.251	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIE
3.242	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
2.886	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
2.871	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
2.282	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVE
1.974	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
1.742	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
1.552	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.214	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.178	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.148	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.064	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.466	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
3.453	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
3.245	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
3.132	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
3.066	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
2.622	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIE
2.227	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
2.215	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
2.037	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
1.894	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
1.672	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.651	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
1.250	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.189	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.130	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.117	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.270	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
3.058	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
2.922	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
2.880	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
2.569	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
2.543	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
2.370	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
2.337	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
2.247	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIE
2.162	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
1.853	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.836	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.824	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.630	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
1.603	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
1.345	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.190	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.175	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.122	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.483	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIpe
3.179	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
2.746	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
2.644	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
2.641	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
2.437	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
2.369	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IIVpMnHg
2.252	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
2.130	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
2.078	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
2.025	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
2.010	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIE
1.932	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.914	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.592	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
1.583	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.570	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.468	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.442	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVE
1.291	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.171	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.125	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.452	1220	Eps Per	03 57 51.2	+40 00 37	2000	2.89	153	B0.5V+A2V
3.294	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
2.713	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
2.701	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
2.637	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
2.571	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
2.401	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
2.390	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
2.173	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.959	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.861	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.859	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIfpe
1.773	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.699	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.654	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.645	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.631	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.616	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
1.429	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.411	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.397	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.305	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
1.176	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.138	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.339	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
3.247	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
3.158	1220	Eps Per	03 57 51.2	+40 00 37	2000	2.89	153	B0.5V+A2V
2.943	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
2.719	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
2.269	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
2.250	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
2.237	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
2.196	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.848	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.809	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.767	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIfpe
1.678	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
1.655	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.619	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.598	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.572	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.479	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
1.468	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.464	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.291	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.276	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.203	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
1.191	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.161	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.005	1220	Eps Per	03 57 51.2	+40 00 37	2000	2.89	153	B0.5V+A2V
2.748	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
2.372	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
2.360	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
2.159	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
2.145	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
2.022	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.991	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIpe
1.964	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.889	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.787	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
1.723	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIf
1.563	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.449	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.435	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.413	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.340	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.339	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.325	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
1.216	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.208	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.196	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.191	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.128	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	Spectype
3.431	2095	The Aur	05 59 43.3	+37 12 45	2000	2.62	49	A0pSi
2.962	1220	Eps Per	03 57 51.2	+40 00 37	2000	2.89	153	B0.5V+A2V
2.568	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
2.294	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
2.193	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
2.155	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
2.141	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
2.009	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.958	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
1.875	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.812	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
1.747	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.720	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIfpe
1.388	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.344	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.305	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.279	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.254	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.253	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.251	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.244	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.215	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.153	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.134	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.074	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.239	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
3.202	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
3.020	2095	The Aur	05 59 43.3	+37 12 45	2000	2.62	49	A0pSi
3.020	1220	Eps Per	03 57 51.2	+40 00 37	2000	2.89	153	B0.5V+A2V
2.946	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
2.223	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
2.182	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
2.023	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
1.854	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.782	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.757	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIf
1.751	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.698	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
1.581	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.307	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.302	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.285	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.261	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.201	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.198	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.193	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.182	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.137	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.119	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.098	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.036	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.277	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
3.261	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
3.190	1220	Eps Per	03 57 51.2	+40 00 37	2000	2.89	153	B0.5V+A2V
2.905	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
2.778	2095	The Aur	05 59 43.3	+37 12 45	2000	2.62	49	A0pSi
2.642	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
2.287	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
1.953	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
1.840	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIf
1.647	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.634	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.633	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.631	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
1.451	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.388	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.366	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.254	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.168	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.166	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.158	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.128	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.110	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.106	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.082	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.081	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.013	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.449	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
3.362	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
3.345	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
2.827	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
2.766	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.649	2095	The Aur	05 59 43.3	+37 12 45	2000	2.62	49	A0pSi
2.618	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
2.475	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
1.980	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIf
1.934	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
1.604	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
1.560	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.537	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.491	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.486	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.446	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.350	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.246	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.154	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.144	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.110	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.101	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.081	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.077	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.059	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.047	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.003	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.436	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
2.900	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
2.782	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
2.702	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
2.610	2095	The Aur	05 59 43.3	+37 12 45	2000	2.62	49	A0pSi
2.475	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
2.465	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.375	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
2.200	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIe
1.965	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
1.621	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.613	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
1.546	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.489	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.481	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.387	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.271	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.261	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.163	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.150	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.133	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.099	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.053	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.046	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.028	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.025	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.005	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.288	1203	Zet Per	03 54 7.9	+31 53 01	2000	2.85	59	B1Ib
2.845	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
2.651	2095	The Aur	05 59 43.3	+37 12 45	2000	2.62	49	A0pSi
2.597	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
2.547	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIe
2.492	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
2.281	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.265	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
2.197	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
2.168	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
2.049	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
1.786	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.671	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.658	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
1.458	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.430	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.323	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.301	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.210	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.192	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.176	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.176	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.135	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.030	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.024	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.021	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.020	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
1.006	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.443	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
3.229	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIpHgMn								
3.120	1165	Eta Tau	03 47 29.1	+24 06 18	2000	2.87	215	B7IIIe
3.119	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
2.781	2095	The Aur	05 59 43.3	+37 12 45	2000	2.62	49	A0pSi
2.349	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
2.200	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
2.182	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
2.179	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.124	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.999	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.994	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.976	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.952	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.827	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.747	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
1.465	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.383	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.369	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.288	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.245	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.244	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.224	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.193	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.164	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.048	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVE
1.035	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
1.030	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.004	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.000	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsini	Spectype
3.278	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
3.071	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
3.034	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
3.026	2095	The Aur	05 59 43.3	+37 12 45	2000	2.62	49	A0pSi
2.665	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
2.443	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
2.416	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIpHgMn								
2.276	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
2.141	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.022	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
2.004	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.942	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.890	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIPe
1.848	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.829	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.798	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.722	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.504	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.474	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.347	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.343	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.325	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.299	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.279	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.279	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.131	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.091	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVE
1.062	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.046	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.007	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.000	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.441	2095	The Aur	05 59 43.3	+37 12 45	2000	2.62	49	A0pSi
3.074	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
2.834	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
2.752	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
2.643	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
2.620	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
2.383	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
2.321	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
2.268	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
2.161	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.112	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
1.947	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIfpeHgMn								
1.754	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.753	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.725	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.655	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.636	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.628	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.578	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.548	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.485	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.444	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.409	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.401	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.321	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.293	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.152	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
1.110	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.106	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.077	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.028	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.009	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.494	1791	Bet Tau	05 26 17.5	+28 36 27	2000	1.65	71	B7III
3.145	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
2.994	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
2.583	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
2.482	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
2.459	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIfpe
2.420	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
2.242	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.183	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
2.055	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.970	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.858	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
1.698	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.691	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.647	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIfpeHgMn								
1.623	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.616	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.605	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.577	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.568	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.566	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.539	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.506	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.415	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.333	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.304	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.236	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
1.172	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.127	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.100	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.063	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.032	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.131	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
3.033	1910	Zet Tau	05 37 38.7	+21 08 33	2000	3.00	310	B4IIIPe
2.989	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
2.869	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
2.398	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.282	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
2.255	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
2.211	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
2.033	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.999	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
1.881	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
1.877	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.871	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
1.846	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.833	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
1.803	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
1.689	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.538	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.486	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.445	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.444	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIpHgMn								
1.424	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.422	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.403	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.349	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVE
1.312	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.296	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.264	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
1.200	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.116	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.100	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.070	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsini	SpecType
2.796	1790	Gam Ori	05 25 07.9	+06 20 59	2000	1.64	59	B2III
2.658	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.494	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
2.371	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
2.321	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
2.267	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
2.230	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
2.162	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
2.159	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
2.064	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.864	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.786	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.681	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.653	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.510	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.502	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
1.489	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.468	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.394	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
1.392	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.372	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.370	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.315	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.303	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.300	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIfHgMn								
1.297	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.232	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.189	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.125	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.110	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.382	1666	Bet Eri	05 07 51.0	-05 05 11	2000	2.79	179	A3III
3.081	2891	Alp Gem	07 34 36.0	+31 53 18	2000	1.98	14	A1V+A2V
2.940	1852	Del Ori	05 32 00.4	-00 17 57	2000	2.23	152	O9.5II
2.898	1713	Bet Ori	05 14 32.3	-08 12 06	2000	0.12	33	B8Ia
2.758	1903	Eps Ori	05 36 12.8	-01 12 07	2000	1.70	87	B0Ia
2.604	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
2.592	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.955	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.935	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.903	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.713	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
1.670	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.622	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.594	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.576	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
1.550	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.486	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.448	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.411	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.351	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.342	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.317	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.311	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.306	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.290	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.231	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.202	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.198	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIfHgMn								
1.172	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.132	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.379	2421	Gam Gem	06 37 42.7	+16 23 57	2000	1.93	32	A0IV
2.865	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
2.053	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
2.015	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVE
1.908	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
1.841	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
1.769	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.697	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.657	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.653	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.515	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.445	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.428	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.410	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.366	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.359	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.357	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.324	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.307	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.265	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.259	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.234	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.168	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.165	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.127	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.125	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	

B8IIIpHgMn

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
2.466	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVe
2.277	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
2.245	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1II-III
2.211	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.956	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.716	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.657	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.618	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.508	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.471	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.450	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.449	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.390	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.361	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.351	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.331	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.281	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.262	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.231	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.214	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.211	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.153	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.121	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.096	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.074	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	

B8IIIfHgMn

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.412	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
3.201	1956	Alp Col	05 39 38.9	-34 04 27	2000	2.64	176	B7IVE
3.143	4915	Alp2CVn	12 56 01.7	+38 19 06	2000	2.90	29	A0pSiEuHg
3.092	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
2.919	2294	Bet CMa	06 22 42.0	-17 57 21	2000	1.98	36	B1III-III
2.894	2845	Bet CMi	07 27 09.0	+08 17 22	2000	2.90	276	B8Ve
2.431	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
1.890	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.820	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.649	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.564	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.492	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.455	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.416	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.388	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.367	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.344	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.307	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.295	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.272	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.207	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.190	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.188	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.182	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.093	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.087	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.076	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.043	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	

B8IIIpHgMn

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.259	2491	Alp CMa	06 45 08.9	-16 42 58	2000	-1.46	13	A1Vm
3.173	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
2.897	4915	Alp2CVn	12 56 01.7	+38 19 06	2000	2.90	29	A0pSiEuHg
2.610	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
2.463	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
2.297	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
1.935	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
1.566	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.557	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.487	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.436	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.412	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.352	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.335	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.291	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.261	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.256	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.244	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.194	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.161	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.132	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.127	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.068	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.066	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.051	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.027	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.304	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
3.249	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
2.957	2618	Eps CMa	06 58 37.5	-28 58 20	2000	1.50	44	B2II
2.771	4915	Alp2CVn	12 56 01.7	+38 19 06	2000	2.90	29	A0pSiEuHg
2.383	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
2.365	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
2.120	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
2.051	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1III
1.712	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.496	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.454	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.437	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.425	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.393	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.285	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.223	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.205	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.198	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.190	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.181	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.150	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.092	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.086	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.070	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.057	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.027	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIfHgMn								
1.024	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.210	5435	Gam Boo	14 32 04.7	+38 18 30	2000	3.03	139	A7III
3.071	2827	Eta CMa	07 24 05.7	-29 18 11	2000	2.45	45	B5Ia
2.738	4915	Alp2CVn	12 56 01.7	+38 19 06	2000	2.90	29	A0pSiEuHg
2.660	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
2.528	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.944	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
1.926	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.794	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.765	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1III
1.584	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.570	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.494	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.375	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.287	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.271	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.196	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.178	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.164	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.149	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.144	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.121	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.083	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.065	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.064	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III- IV+B2V
1.058	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.041	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIfHgMn								
1.009	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	Spectype
3.376	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
2.940	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
2.935	5435	Gam Boo	14 32 04.7	+38 18 30	2000	3.03	139	A7III
2.794	4915	Alp2CVn	12 56 01.7	+38 19 06	2000	2.90	29	A0pSiEuHg
2.306	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
2.304	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
2.056	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.751	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.659	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.633	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.589	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.565	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.558	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.336	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.298	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.212	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.186	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.162	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.158	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.151	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.108	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.089	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.077	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.072	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIPhgMn								
1.070	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.058	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.050	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.007	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
2.949	4915	Alp2CVn	12 56 01.7	+38 19 06	2000	2.90	29	A0pSiEuHg
2.903	3982	Alp Leo	10 08 22.3	+11 58 02	2000	1.35	329	B7V
2.787	5435	Gam Boo	14 32 04.7	+38 18 30	2000	3.03	139	A7III
2.570	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
2.278	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
2.083	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
1.969	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
1.765	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.742	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.735	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.434	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.404	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.399	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.318	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.307	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.237	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.177	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.158	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.156	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.145	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.128	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.121	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIfpHgMn								
1.094	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.069	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.054	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.048	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.046	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.017	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.235	4915	Alp2CVn	12 56 01.7	+38 19 06	2000	2.90	29	A0pSiEuHg
2.736	5435	Gam Boo	14 32 04.7	+38 18 30	2000	3.03	139	A7III
2.256	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
2.111	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.955	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
1.943	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
1.891	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.872	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.523	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.348	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.294	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.289	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.288	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.277	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.274	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.207	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.197	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.193	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIpHgMn								
1.185	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.160	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.130	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.097	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.091	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.053	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.039	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.035	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.031	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
2.774	5435	Gam Boo	14 32 04.7	+38 18 30	2000	3.03	139	A7III
2.646	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
2.296	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
2.041	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.865	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
1.824	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.602	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.388	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.365	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.323	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.294	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIpHgMn								
1.278	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.265	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.250	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.235	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.202	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.195	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.185	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.181	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.173	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.145	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.076	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.073	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.072	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.032	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.026	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.192	3485	Del Vel	08 44 42.2	-54 42 30	2000	1.96	40	A1V
2.907	5435	Gam Boo	14 32 04.7	+38 18 30	2000	3.03	139	A7III
2.858	4534	Bet Leo	11 49 03.6	+14 34 19	2000	2.14	121	A3V
2.219	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.835	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
1.636	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.439	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.435	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIpHgMn								
1.414	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.386	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.354	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.312	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.305	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.277	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.249	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.248	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.216	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.197	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.136	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.128	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.124	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.117	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.102	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.072	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.045	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.032	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.163	5435	Gam Boo	14 32 04.7	+38 18 30	2000	3.03	139	A7III
2.881	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
2.643	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
2.428	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
1.851	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
1.634	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIfpHgMn								
1.510	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.502	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.469	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.465	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.426	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.377	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.338	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.318	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.285	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.279	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.233	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.201	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.162	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.147	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.088	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1III
1.088	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.076	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.073	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.068	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.050	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
2.673	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
2.358	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
2.134	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.928	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIpHgMn								
1.913	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
1.619	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.591	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.580	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.563	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.467	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.462	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.454	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.429	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.301	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.298	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.280	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.208	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.180	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.122	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.120	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.098	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.081	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.055	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.047	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.035	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.351	7001	Alp Lyr	18 36 56.3	+38 47 01	2000	0.03	15	A0Va
2.958	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
2.385	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIpHgMn								
2.032	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
1.999	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.835	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
1.820	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.816	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IIVne
1.685	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.674	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.669	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.605	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.581	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.429	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.382	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.342	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.327	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.288	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.189	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.177	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.126	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.109	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.053	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.034	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.034	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.015	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	Spectype
3.286	3685	Bet Car	09 13 12.0	-69 43 02	2000	1.68	133	A2IV
3.171	4662	Gam Crv	12 15 48.4	-17 32 31	2000	2.59	41	
B8IIIIpHgMn								
3.037	7001	Alp Lyr	18 36 56.3	+38 47 01	2000	0.03	15	A0Va
2.819	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
2.225	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
2.211	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
2.078	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
1.977	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
1.835	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.805	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
1.787	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.742	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.724	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.614	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.606	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.421	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.393	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.364	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.363	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.287	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.258	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.187	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.059	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.036	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.026	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.023	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.007	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
2.865	7001	Alp Lyr	18 36 56.3	+38 47 01	2000	0.03	15	A0Va
2.840	5107	Zet Vir	13 34 41.6	-00 35 45	2000	3.37	173	A3V
2.531	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
2.467	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
2.439	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
2.218	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
2.074	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
2.022	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
1.921	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.904	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
1.853	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
1.552	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.531	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.521	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.475	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.424	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.410	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.374	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.373	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.270	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.054	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.029	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.025	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.012	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.007	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
3.477	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
3.475	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
3.337	5056	Alp Vir	13 25 11.6	-11 09 41	2000	0.98	159	B1III-
IV+B2V								
3.029	5793	Alp CrB	15 34 41.3	+26 42 53	2000	2.23	133	A0V+G5V
2.955	4621	Del Cen	12 08 21.5	-50 43 21	2000	2.60	181	B2IVne
2.798	7001	Alp Lyr	18 36 56.3	+38 47 01	2000	0.03	15	A0Va
2.448	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
2.255	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
2.208	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
2.134	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
2.081	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.840	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.713	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.645	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.618	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.539	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.470	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.410	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.408	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.383	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.379	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.089	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.043	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.029	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.007	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.003	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
2.991	4819	Gam Cen	12 41 31.0	-48 57 35	2000	2.17	81	A1IV
2.952	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
2.881	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
2.822	7001	Alp Lyr	18 36 56.3	+38 47 01	2000	0.03	15	A0Va
2.752	5028	Iot Cen	13 20 35.8	-36 42 44	2000	2.75	85	A2V
2.547	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
2.429	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
2.272	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
1.958	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
1.903	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
1.801	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.780	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.584	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.543	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.524	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.479	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.325	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.299	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.143	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.070	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.059	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.011	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.003	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
2.943	7001	Alp Lyr	18 36 56.3	+38 47 01	2000	0.03	15	A0Va
2.919	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
2.817	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
2.767	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
2.554	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
2.497	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
2.451	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
2.347	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
2.297	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
2.147	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
1.997	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
1.718	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.631	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.589	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.404	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.295	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.222	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.215	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.110	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.104	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.033	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.011	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.396	4730	Alp Cru	12 26 35.9	-63 05 57	2000	1.33	117	B0.5IV
3.336	4853	Bet Cru	12 47 43.2	-59 41 19	2000	1.25	38	B0.5III
3.185	7001	Alp Lyr	18 36 56.3	+38 47 01	2000	0.03	15	A0Va
3.105	5531	Alp2Lib	14 50 52.7	-16 02 30	2000	2.75	84	A3IV
2.787	5231	Zet Cen	13 55 32.4	-47 17 18	2000	2.55	219	B2.5IV
2.762	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
2.754	5685	Bet Lib	15 17 00.4	-09 22 59	2000	2.61	230	B8V
2.248	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
2.247	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
2.246	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
2.132	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.985	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
1.754	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.738	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.332	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.290	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.273	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.167	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.167	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.152	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.068	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.034	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.073	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
2.569	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
2.365	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
2.004	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
2.003	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
1.929	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.889	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.866	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.488	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.310	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.252	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.243	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.177	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.120	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.106	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.073	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	Spectype
3.433	4798	Alp Mus	12 37 11.0	-69 08 08	2000	2.69	147	B2IV-V
2.991	5267	Bet Cen	14 03 49.4	-60 22 23	2000	0.61	139	B1III
2.937	5571	Bet Lup	14 58 31.9	-43 08 02	2000	2.68	127	B2III/IV
2.392	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
2.019	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.813	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.721	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.711	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.701	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.366	6527	Iam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.357	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.344	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.192	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.129	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.107	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.073	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.052	6556	Alp Oph	17 34 56.1	+12 33 36	2000	2.08	219	A5III
2.970	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
2.202	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
2.044	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
1.660	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.584	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.554	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.520	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.478	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.435	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.289	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.208	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.057	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V
1.053	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpectType
2.578	6378	Eta Oph	17 10 22.7	-15 43 29	2000	2.43	26	A2V
2.535	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
2.419	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
1.731	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.656	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
1.554	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.537	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.496	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.438	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.420	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.317	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.044	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.024	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	Spectype
3.054	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
2.677	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
2.266	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
2.030	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
1.899	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1III
1.730	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.600	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.467	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.445	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.438	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.346	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.047	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.006	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
2.983	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
2.471	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
2.468	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
2.242	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
2.099	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
1.996	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
1.850	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
1.677	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.426	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.360	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.274	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.061	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.000	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V

Amass	HR	Name	RA	Dec	Epoch	Vmag	Vsin <i>i</i>	SpecType
3.340	5671	Gam TrA	15 18 54.6	-68 40 46	2000	2.89	214	A1V
3.177	6527	Lam Sco	17 33 36.5	-37 06 14	2000	1.63	163	B2IV+B
2.749	6553	The Sco	17 37 19.2	-42 59 52	2000	1.87	105	F1II
2.414	7557	Alp Aql	19 50 47.0	+08 52 06	2000	0.77	242	A7V
2.215	6879	Eps Sgr	18 24 10.3	-34 23 05	2000	1.85	140	B9.5III
2.114	553	Bet Ari	01 54 38.4	+20 48 29	2000	2.64	79	A5V
2.003	15	Alp And	00 08 23.3	+29 05 26	2000	2.06	56	B8IVpMnHg
1.981	7121	Sig Sgr	18 55 15.9	-26 17 48	2000	2.02	201	B2.5V
1.436	8781	Alp Peg	23 04 45.7	+15 12 19	2000	2.49	148	B9V
1.298	591	Alp Hyi	01 58 46.2	-61 34 11	2000	2.86	153	F0V
1.219	472	Alp Eri	01 37 42.9	-57 14 12	2000	0.46	251	B3Vpe
1.086	8425	Alp Gru	22 08 14.0	-46 57 40	2000	1.74	236	B7IV
1.008	8728	Alp PsA	22 57 39.1	-29 37 20	2000	1.16	100	A3V