

bright5

STAR	DISTANCE	LUM	CLASS	X	Y	Z
Sol	0	1	G2	0	0	0
Alp1Cen	4.341	1.53	G2	-1.623	-1.357	-3.791
Alp2Cen	4.341	0.445	K1	-1.623	-1.357	-3.791
18Eps Eri	10.759	0.3	K2	6.353	8.502	-1.766
61 Cyg	11.088	0.038	K7	6.298	-5.929	6.938
61 Cyg	11.164	0.083	K5	6.341	-5.97	6.985
Eps Ind	11.439	0.14	K4	5.472	-3.053	-9.57
52Tau Cet	11.855	0.45	G8	10.244	5	-3.254
40Omi2Eri	15.598	0.331	K1	6.821	13.873	-2.076
70 Oph	16.219	0.517	K0	0.386	-16.199	0.703
36 Oph	17.34	0.227	K0	-3.002	-15.211	-7.764
36 Oph	17.34	0.219	K1	-3.002	-15.211	-7.764
61Sig Dra	18.418	0.366	K0	2.512	-5.892	17.268
24Eta Cas	18.523	1.161	F9	9.645	2.099	15.674
37Xi Boo	20.897	0.532	G8	-14.478	-13.429	6.838
53Xi UMa	23.796	0.514	G0	-19.949	3.681	12.439
53Xi UMa	23.796	0.784	G0	-19.949	3.681	12.439
30Mu Cas	23.971	0.395	G5	13.171	4.044	19.616
Zet Tuc	24.328	0.968	F9	10.293	0.904	-22.025
13Gam Lep	25.469	1.895	F6	1.595	23.488	-9.719
1Pi 3Ori	26.08	2.899	F6	7.802	24.685	3.156
44Chi Dra	27.167	2.216	F7	0.741	-8.037	25.94
43Bet Com	27.167	1.174	F9	-22.845	-7.409	12.698
61 UMa	27.395	0.446	G8	-22.58	1.871	15.398
107 Psc	27.395	0.484	K1	23.171	11.114	9.489
8Bet CVn	27.863	1.235	G0	-20.69	-3.068	18.408
61 Vir	28.348	0.822	G6	-25.355	-9.029	-8.901
Alp Men	28.348	0.595	G6	-0.333	7.449	-27.35
Gam Pav	29.369	1.423	F6	9.601	-7.607	-26.693
11 LMi	29.908	0.493	G8	-19.603	14.287	17.495
96Kap1Cet	30.185	0.857	G5	19.433	23.029	1.773
5Bet Vir	31.346	2.844	F9	-31.306	1.272	0.957
54Chi1Ori	31.346	1.361	G0	0.721	29.397	10.858
29Gam Vir	32.929	3.025	F0	-32.376	-5.951	-0.824
29Gam Vir	32.929	2.943	F0	-32.376	-5.951	-0.824
54 Psc	32.929	0.391	K0	30.239	5.245	11.935
16Psi Cap	33.265	1.966	F4	19.943	-22.522	-14.199
Zet1Ret	33.608	0.553	G2	10.068	11.764	-29.829
Zet TrA	34.681	1.051	F9	-4.594	-10.884	-32.607
27Lam Ser	34.681	1.636	G0	-18.929	-28.719	4.437
8Del Tri	35.054	1.114	G0	23.956	16.319	19.712
12 Oph	35.054	0.495	K2	-12.501	-32.719	-1.417
Zet2Ret	35.824	0.828	G1	10.731	12.588	-31.776
44 Boo	37.907	1.442	F9	-17.756	-18.353	28.015
Zet Dor	38.353	1.532	F7	4.858	20.046	-32.335
lot Per	38.81	2.907	G0	17.069	18.476	29.555
85 Peg	39.277	0.622	G5	34.974	0.331	17.872
24lot Peg	39.756	3.984	F5	31.654	-17.006	17.011

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59 Vir	41.266	1.119	G0	-38.447	-13.384	6.752
58 Eri	41.266	0.857	G2	12.264	37.524	-12.019
13The Per	42.338	3.244	F8	20.856	18.162	32.058
36 UMa	42.338	1.671	F8	-21.917	9.008	35.086
Kap For	42.338	1.2	G0	31.483	22.57	-17.085
17Iot Psc	43.467	3.388	F7	43.093	-3.78	4.254
Alp For	43.467	4.304	F8	25.434	28.265	-21.062
55Rho1Cnc	44.054	0.651	G8	-26.523	28.295	20.897
3Pi 1UMa	44.658	0.89	G1	-12.073	14.491	40.479
83Eps Cet	45.278	1.911	F5	33.998	28.417	-9.311
1Tau1Eri	45.278	2.687	F6	32.257	28.315	-14.417
31Tau1Hya	45.278	2.384	F6	-35.777	27.665	-2.186
23The Boo	45.278	3.957	F7	-22.541	-16.558	35.606
47 UMa	45.278	1.575	G1	-33.277	9	29.356
41Gam Ser	47.246	5.18	F6	-23.354	-39.043	12.745
Nu Phe	47.246	1.863	F8	31.34	10.667	-33.708
26 Dra	47.246	1.453	G0	-2.426	-22.145	41.664
72 Her	47.246	1.254	G0	-6.809	-39.276	25.362
Iot Hor	47.246	1.231	G0	22.659	19.448	-36.613
28Sig Boo	47.941	3.041	F2	-32.502	-26.011	23.777
56Psi5Aur	47.941	1.469	G0	-7.035	34.017	33.041
6 Cet	48.657	2.108	F7	46.838	2.304	-12.976
111 Tau	48.657	1.922	F8	7.18	45.881	14.523
Nu 2Lup	49.394	1.079	G3	-20.915	-25.328	-36.889
45 Boo	50.938	2.227	F5	-31.622	-33.704	21.42
81Pi 1Cnc	50.938	0.52	G9	-36.609	32.879	13.169
10 CVn	51.746	0.898	G0	-39.293	-7.814	32.752
39 Tau	51.746	0.94	G5	23.015	42.098	19.384
62Rho Gem	52.581	4.734	F0	-16.944	41.36	27.695
19 Dra	52.581	2.462	F6	-6.092	-21.255	47.706
39 Leo	52.581	1.045	F8	-43.585	20.966	20.629
50Ups And	52.581	5.143	F8	35.976	16.168	34.772
9 Pup	52.581	1.902	G0	-23.919	45.094	-12.617
18 Sco	52.581	1.404	G2	-22.882	-46.719	-7.651
58Ome Sgr	52.581	2.932	G5	22.828	-41.25	-23.283
18Chi Cnc	53.443	2.02	F6	-27.271	38.923	24.443
2Eta CrB	53.443	1.347	G0	-29.168	-35.765	26.95
2Eta CrB	53.443	0.85	G3	-29.168	-35.765	26.95
104 Tau	53.443	2.298	G4	11.51	49.316	17.076
58 Oph	54.333	2.677	F6	-3.648	-50.362	-20.06
99 Her	54.333	2.289	F7	1.434	-46.769	27.617
13 Cet	54.333	1.976	F8	53.587	8.307	-3.396
15 Sge	54.333	1.137	G1	26.771	-44.51	15.946
Bet Cae	56.207	2.427	F1	14.947	42.244	-33.931
69Tau Oph	56.207	2.038	F2	0.748	-55.632	-7.984
69Tau Oph	56.207	1.069	F5	0.748	-55.632	-7.984
7Del Equ	56.207	4.066	F5	41.534	-36.591	9.76
1 Hya	57.193	1.501	F3	-33.663	46.086	-3.741
94 Cet	57.193	2.49	F8	38.118	42.622	-1.181

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53 Aqr	57.193	0.759	G1	50.283	-21.714	-16.467
53 Aqr	57.193	0.62	G2	50.283	-21.715	-16.467
13The Cyg	58.214	4.402	F4	15.217	-34.001	44.736
37 Cet	58.214	2.419	F5	54.648	18.391	-8.018
1Chi Her	58.214	3.869	F8	-22.655	-36.494	39.291
Eta1Pic	59.273	1.992	F2	9.574	37.569	-44.836
37 Gem	59.273	1.443	G0	-12.8	52.006	25.393
42Alp Com	60.37	2.394	F5	-54.907	-17.309	18.17
Gam CrA	60.37	3.128	F8	13.769	-46.173	-36.374
Gam CrA	60.37	2.959	F8	13.769	-46.173	-36.374
31Psi1Dra	60.37	1.416	G0	-1.455	-18.448	57.464
15Tau PsA	61.509	3.277	F6	46.013	-23.915	-33.079
lot Pav	61.509	1.938	G0	1.314	-28.847	-54.309
20 LMi	61.509	2.185	G3	-45.33	25.905	32.519
9 Aur	62.692	3.162	F0	8.982	37.906	49.12
Pi PsA	62.692	2.858	F0	49.963	-12.574	-35.719
110 Her	62.692	6.668	F6	11.62	-57.548	21.989
7 And	63.922	5.115	F0	40.71	-8.551	48.534
68 Eri	65.2	3.062	F2	14.422	63.383	-5.059
78Mu 1Cyg	66.531	4.567	F6	48.385	-32.592	31.984
17 Cyg	66.531	3.594	F7	24.785	-49.48	36.93
50 Per	66.531	2.226	F7	24.479	46.335	40.991
78Mu 2Cyg	66.531	1.317	G2	48.385	-32.593	31.984
9 Cet	66.531	0.99	G2	64.705	6.476	-14.06
54Omi Aql	67.917	3.354	F8	31.111	-59.115	12.26
Phi2Pav	67.917	3.323	F8	21.48	-25.589	-59.131
16 Lib	69.362	6.192	F0	-49.504	-48.301	-5.241
Nu 2Col	69.362	2.909	F4	5.9	60.564	-33.292
36 Dra	69.362	3.765	F5	1.817	-29.933	62.544
18 Pup	69.362	2.354	F6	-36.359	56.71	-16.526
64 Psc	69.362	3.629	F8	64.845	14.073	20.202
16 UMa	69.362	3.434	F9	-24.887	21.952	60.908
21Mu Dra	70.87	1.934	F7	-9.732	-40.022	57.672
21Mu Dra	70.87	1.881	F7	-9.732	-40.022	57.672
23Psi Ser	70.87	1.797	G2	-39.585	-58.703	3.091
Alp Cae	72.444	7.008	F2	18.332	50.754	-48.333
28Ome Dra	72.444	5.077	F5	-2.636	-26.124	67.518
89 Leo	72.444	2.078	F5	-71.889	8.074	3.855
66 Cet	72.444	2.568	F8	60.568	39.631	-3.013
17Sig CrB	72.444	2.342	G0	-26.685	-53.923	40.353
17Sig CrB	72.444	0.915	G1	-26.685	-53.923	40.353
Pi Men	74.091	2.427	G1	1.221	12.21	-73.068
38 Gem	75.814	6.384	F0	-17.435	71.733	17.269
50Sig Ser	75.814	5.458	F0	-31.413	-68.987	1.345
21Eta UMi	75.814	4.842	F5	-8.07	-16.827	73.481
12 Per	75.814	5.024	F9	44.002	37.664	48.918
70 Vir	75.814	4.71	G4	-68.222	-27.713	18.041
38 Vir	77.619	1.744	F5	-75.393	-17.818	-4.806
22 Lyn	77.619	3.479	F6	-19.212	46.419	59.168

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Tau1Gru	77.619	1.86	G0	49.209	-14.663	-58.208
63 Gem	79.512	4.154	F5	-27.648	68.655	29.055
71 Ori	79.512	4.231	F6	-4.863	74.954	26.083
34 Peg	79.512	2.549	F7	72.79	-31.415	6.077
39 Ser	79.512	1.847	G0	-40.68	-65.867	18.134
19 LMi	81.5	4.698	F6	-52.915	31.267	53.522
15Rho CrB	81.5	3.663	G0	-33.79	-59.147	44.745
38 Cas	83.59	2.666	F6	26.038	10.949	78.673
Eps2Ara	83.59	4.304	F6	-12.285	-48.502	-66.962
11 Aql	83.59	4.549	F8	20.716	-78.555	19.679
16Zet1Cnc	83.59	3.147	F8	-43.449	66.77	25.321
16Zet1Cnc	83.59	2.197	F9	-43.449	66.77	25.321
16 Cyg	83.59	2.322	G1	22.843	-47.992	64.516
51Mu 2Boo	83.59	1.412	G1	-41.711	-51.746	50.693
16Zet2Cnc	83.59	1.862	G5	-43.452	66.769	25.321
93Rho Psc	85.789	4.173	F2	75.362	29.783	28.166
46Rho3Ari	85.789	3.315	F6	58.578	56.783	26.534
Rho Tuc	85.789	4.135	F6	35.012	6.564	-78.044
70 Tau	85.789	1.543	F7	33.019	75.597	23.551
38 LMi	85.789	2.707	F9	-63.524	23.395	52.699
Eps Scl	88.108	4.695	F1	71.489	35.506	-37.306
2Xi 2Cap	88.108	2.855	F7	46.964	-72.021	-19.245
33 Peg	88.108	2.397	F7	75.178	-33.605	31.336
37 UMa	90.556	5.694	F1	-45.897	17.811	76.004
25 Cnc	93.143	2.443	F6	-52.921	71.628	27.284
7 CVn	93.143	2.29	F6	-57.443	-7.575	72.928
31 Ari	93.143	3.731	F7	70.53	57.437	20.054
49 Lib	93.143	4.528	F8	-44.539	-77.399	-26.48
88 Leo	93.143	2.311	G0	-89.552	11.095	23.085
51 Eri	95.882	5.985	F0	33.703	89.668	-4.127
78 UMa	95.882	7.889	F2	-51.276	-13.914	79.816
The Scl	95.882	5.875	F4	78.327	4.014	-55.155
2Ome Leo	95.882	5.07	F9	-74.732	58.147	15.082
42 Cap	95.882	6.267	G1	76.557	-52.838	-23.25
23 Lib	95.882	1.946	G4	-57.587	-64.792	-40.976
16 Cep	98.788	7.638	F5	24.728	-14.385	94.555
11 Aqr	98.788	2.576	G1	69.788	-69.446	-8.123
8 Dra	101.875	6.694	F0	-41.12	-10.152	92.653
37 Peg	101.875	5.367	F2	93.835	-38.884	7.845
Eps CrA	101.875	9.412	F2	20.592	-78.601	-61.452
45 Tau	101.875	4.302	F4	46.297	90.218	9.794
32 Lyn	101.875	2.665	F5	-50.845	64.287	60.502
Nu 1Lup	101.875	8.35	F8	-43.398	-52.711	-75.609
4 Pup	105.161	8.576	F0	-45.397	91.104	-26.419
80 Tau	105.161	5.215	F0	38.696	93.586	28.339
68 Dra	105.161	4.459	F5	26.755	-41.364	92.909
46 Tau	108.667	7.274	F2	48.238	96.279	14.56
73 Oph	108.667	4.85	F2	4.522	-108.31	7.549
39 Com	108.667	3.817	F4	-97.129	-28.934	39.208

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15 Del	108.667	3.853	F5	71.539	-78.324	23.582
122 Tau	112.414	6.183	F0	10.739	106.945	32.929
20 Dra	112.414	2.775	F1	-12.995	-45.635	101.909
Zet For	112.414	5.287	F2	72.009	71.759	-47.982
48 Hya	112.414	5.003	F7	-88.232	-50.941	-47.508
14Psi Cnc	112.414	5.19	G7	-54.685	85.465	48.395
47 Cas	116.429	7.686	F0	21.932	13.325	113.566
38 Cet	116.429	5.724	F5	110.26	37.333	-1.964
4 Aqr	116.429	4.382	F5	78.812	-84.939	-11.395
21 Eri	116.429	4.505	K1	66.866	94.63	-11.395
12Alp1CVn	120.741	6.75	F0	-91.939	-22.926	74.833
17 Vir	120.741	3.231	F8	-119.64	-11.801	11.153
109 Psc	120.741	3.641	G3	101.73	50.129	41.428
62 UMa	125.385	6.457	F4	-106.3	8.566	65.948
86Zet Psc	125.385	3.82	F7	117.91	39.313	16.511
Tau Scl	130.4	7.246	F2	103.24	46.042	-65.003
39 Gem	130.4	4.967	F7	-29.719	113.303	57.3
9 Com	130.4	4.019	F8	-114.56	-9.767	61.52
26 Cet	135.833	5.696	F1	130.56	37.326	3.24
61 Psc	148.182	4.277	F8	135.4	28.727	52.902
4Eps1Lyr	155.238	7.578	F1	22.974	-117.27	99.092
5 Aur	155.238	8.083	F5	30.901	115.939	98.499
24 Cnc	155.238	1.457	F7	-84.333	113.278	64.458