



**ASTRONOMICAL LEAGUE
BINOCULAR DOUBLE STAR PROGRAM**

WDS data updated
September 1, 2012

Observing List

Constellation	Designation	RA	Dec	Magnitudes	Separation in (")	Position Angle in (°)
Andromeda	56	01 56 2	+ 37 15	5.8, 6.1	201	299
Andromeda	59	02 10 9	+ 39 02	6.1, 6.7	17	36
Aquila	15	19 05 0	- 04 02	5.5, 7.0	38	210
Aquila	ΟΣΣ 178	19 15 3	+ 15 05	5.7, 7.6	90	268
Aquila	28	19 19 7	+ 12 22	5.6, 9.0	61	174
Aquila	57	19 54 6	- 08 14	5.7, 6.4	36	170
Aries	14	02 09 4	+ 25 56	5.0, 8.0	105	279
Aries	33	02 40 7	+ 27 04	5.3, 9.6	24	356
Auriga	35 Cam	06 04 5	+ 51 34	6.4, 9.3	40	14
Boötes	ι	14 16 2	+ 51 22	4.8, 7.4	39	33
Boötes	Σ 1850	14 28 6	+ 28 17	7.1, 7.6	26	261
Boötes	δ	15 15 5	+ 33 19	3.6, 7.9	109	74
Boötes	μ 1 & 2	15 24 5	+ 37 23	4.3, 7.1	109	171
Camelopardalis	β	05 03 4	+ 60 27	4.1, 7.4	81	211
Camelopardalis	11 & 12	05 06 1	+ 58 58	5.2, 6.2	179	9
Camelopardalis	32	12 49 2	+ 83 25	5.3, 5.7	21	326
Cancer	ι	08 46 7	+ 28 46	4.1, 6.0	31	308
Canis Major	h 3945	07 16 6	- 23 19	5.0, 5.8	26	52
Canis Major	η	07 24 1	- 29 18	2.5, 6.8	179	286
Canis Major	Δ 47	07 24 7	- 31 49	5.4, 7.6	100	342
Canis Minor	14	07 58 3	+ 02 13	5.4, 9.4	100	85
Capricornus	α 1 & 2	20 18 1	- 12 33	3.7, 4.3	381	292
Capricornus	β 1 & 2	20 21 0	- 14 47	3.2, 6.1	206	267
Capricornus	ρ	20 28 9	- 17 49	5.0, 6.7	259	150
Capricornus	Ο	20 29 9	- 18 35	5.9, 6.7	22	238
Cassiopeia	α	00 40 5	+ 56 32	2.4, 9.0	71	281
Cassiopeia	φ	01 20 1	+ 58 14	5.1, 7.0	134	231
Cepheus	ΟΣΣ 1	00 14 1	+ 76 01	7.4, 7.8	73	104
Cepheus	δ	22 29 2	+ 58 25	4.2, 6.1	41	191
Cetus	37	01 14 4	- 07 55	5.2, 7.9	50	330
Cetus	χ	01 49 6	- 10 41	4.7, 6.8	184	250
Coma Berenices	12	12 22 5	+ 25 51	4.9, 8.9	64	168
Coma Berenices	17	12 28 9	+ 25 55	5.2, 6.6	144	250
Corona Borealis	v 1 & 2	16 22 4	+ 33 48	5.4, 5.6	357	164
Cygnus	β	19 30 7	+ 27 58	3.2, 4.7	35	54
Cygnus	16	19 41 8	+ 50 32	6.0, 6.2	51	130
Cygnus	Ο 1 (30 & 31)	20 13 6	+ 46 44	3.9, 7.0, 4.8	111, 334	174, 325
Cygnus	29	20 14 5	+ 36 48	5.0, 6.7	216	156

Cygnus	48	20 37 5	+ 31 34	6.3, 6.5	187	185
Cygnus	61	21 06 9	+ 38 45	5.4, 6.1	34	175
Cygnus	79	21 43 4	+ 38 17	5.7, 7.0	149	59
Cygnus	μ	21 44 1	+ 28 45	4.8, 6.9	198	44
Delphinus	S 752	20 30 2	+ 19 25	6.8, 7.3	107	288
Draco	κ (5) & 6	12 33 3	+ 69 47	3.9, 4.9	925	25
Draco	16 & 17	16 36 2	+ 52 55	5.4, 5.5	89	193
Draco	ν 1 & 2	17 32 2	+ 55 11	4.9, 4.9	62	311
Draco	ψ 1 (31) & 2 (34)	17 41 9	+ 72 09	4.6, 5.6, 5.5	30, 3705	16, 96
Draco	Σ 2273	17 59 1	+ 64 09	7.3, 7.6	21	283
Draco	41, 40	18 00 1	+ 80 00	5.7, 6.0	19	231
Draco	39	18 23 9	+ 58 48	5.1, 8.0	89	20
Draco	75	20 28 2	+ 81 25	5.5, 6.7	197	282
Equuleus	γ (5) & 6	21 10 3	+ 10 08	4.7, 6.1	336	152
Eridanus	62	04 56 4	- 05 10	5.5, 8.9	64	77
Gemini	ν	06 29 0	+ 20 13	4.1, 8.0	112	330
Gemini	20	06 32 3	+ 17 47	6.3, 6.9	20	211
Gemini	ζ	07 04 1	+ 20 34	4.1, 7.7	101	347
Gemini	65 & 64	07 29 5	+ 28 07	5.0, 5.1	817	333
Hercules	κ	16 08 1	+ 17 03	5.1, 6.2	27	13
Hercules	36 & 37	16 40 6	+ 04 13	5.8, 6.9	69	230
Hercules	Σ I 33	17 03 7	+ 13 36	5.9, 6.2, 8.5	304, 245	117, 13
Hydra	F	08 43 7	- 07 14	4.7, 8.2	77	309
Hydra	27	09 20 5	- 09 33	4.9, 7.0	229	212
Hydra	τ 1	09 29 1	- 02 46	4.6, 7.3	66	5
Hydra	Σ 1474	10 47 6	- 15 16	6.7, 7.0, 7.6	66, 73	28, 27
Leo	ζ (36) & 35	10 16 7	+ 23 25	3.5, 6.0	334	338
Leo	δ	11 14 1	+ 20 31	2.6, 8.6	205	342
Leo	83	11 26 8	+ 03 01	6.6, 7.5	28	150
Leo	τ	11 27 9	+ 02 51	5.1, 7.5	91	182
Leo	93	11 48 0	+ 20 13	4.6, 9.0	77	356
Leo Minor	42	10 45 9	+ 30 41	5.3, 7.8	194	172
Lepus	γ	05 44 5	- 22 27	3.6, 6.3	96	348
Libra	α	14 50 9	- 16 03	2.7, 5.2	231	315
Lynx	5	06 26 8	+ 58 25	5.4, 7.9	92	273
Lynx	19	07 22 9	+ 55 17	5.8, 7.6	215	6
Lyra	ϵ 1 & 2	18 44 3	+ 39 40	4.7, 4.6	211	182
Lyra	ζ 1 & 2	18 44 8	+ 37 36	4.3, 5.6	44	150
Lyra	β	18 50 1	+ 33 22	3.6, 6.7	44	152
Lyra	δ 2 & 1	18 54 3	+ 36 53	4.3, 5.6	617	295
Ophiuchus	ρ	16 25 6	- 23 27	5.1, 7.3, 6.8	150, 156	360, 252
Ophiuchus	36	17 15 3	- 26 36	5.1, 6.5, 7.8	732, 277	74, 338
Ophiuchus	53	17 34 6	+ 09 35	5.8, 7.5	41	190
Ophiuchus	Sh 251	17 39 1	+ 02 02	6.4, 7.8	112	328
Ophiuchus	67	18 00 6	+ 02 56	4.0, 8.1	56	139
Orion	δ	05 32 0	- 00 18	2.4, 6.8	53	359
Orion	42 & 45	05 35 2	- 04 50	4.6, 5.3	251	105
Orion	θ 2	05 35 4	- 05 25	5.0, 6.2	52	95

Pegasus	ϵ	21 44 2	+ 09 53	2.5, 8.7	144	317
Pegasus	π 2 & 1	22 09 6	+ 33 10	4.3, 5.6	573	268
Pegasus	33	22 23 7	+ 20 51	6.3, 8.5	90	308
Pegasus	35	22 27 9	+ 04 42	4.9, 10.0	81	225
Perseus	57	04 33 4	+ 43 04	6.1, 6.8	121	198
Pisces	ψ 1	01 05 7	+ 21 28	5.3, 5.5	31	159
Pisces	ρ (93) & 94	01 26 2	+ 19 10	5.4, 5.5	447	57
Puppis	Knt 4	07 47 8	- 16 01	6.5, 6.6	130	131
Sagitta	ϵ	19 37 3	+ 16 28	5.8, 8.4	87	82
Sagitta	15	20 04 1	+ 17 04	5.9, 6.9	215	335
Sagitta	θ	20 09 9	+ 20 55	6.6, 7.5	90	222
Sagittarius	54	19 40 7	- 16 18	5.4, 7.7	45	42
Scorpius	ω 1 & 2	16 06 5	- 20 40	4.0, 4.3	877	145
Scorpius	ν	16 12 0	+ 19 28	4.4, 6.6	42	337
Scorpius	μ 1 & 2	16 51 5	- 38 03	3.1, 3.6	347	72
Scorpius	ζ 2 & 1	16 54 4	- 42 21	3.6, 4.7	391	270
Serpens	θ	18 56 2	+ 04 12	4.6, 4.9	25	99
Taurus	21 & 22	03 45 5	+ 24 33	5.8, 6.4	150	130
Taurus	η	03 47 5	+ 24 06	2.8, 6.3, 8.2, 8.7	118, 182, 192	290, 313, 296
Taurus	ϕ	04 20 4	+ 27 21	5.1, 7.5	48	258
Taurus	62	04 24 0	+ 24 18	6.4, 7.9	29	291
Taurus	κ 1 & 2	04 25 4	+ 22 18	4.2, 5.3	340	174
Taurus	θ 2 & 1	04 28 7	+ 15 52	3.4, 3.9	337	348
Taurus	88	04 35 7	+ 10 10	4.3, 7.8	71	300
Taurus	σ 2 & 1	04 39 3	+ 15 55	4.7, 5.1	436	194
Taurus	τ	04 42 2	+ 22 57	4.2, 7.0	62	215
Triangulum	15	02 35 8	+ 34 41	5.6, 6.8	142	16
Ursa Major	α	11 03 7	+ 61 45	2.0, 7.2	381	204
Ursa Major	65	11 55 1	+ 46 29	6.7, 7.0	63	114
Ursa Major	67	12 02 1	+ 43 03	5.2, 6.7, 8.5, 8.9	275, 373, 367	62, 26, 269
Ursa Major	ζ (79) & 80	13 23 9	+ 54 56	2.2, 4.0	706	70
Virgo	Σ 1740	13 23 7	+ 02 43	7.1, 7.4	26	75
Virgo	70	13 28 4	+ 13 47	5.0, 8.7	269	127
Vulpecula	α (6) & 8	19 28 7	+ 24 40	4.6, 5.9	427	28