

The Washington Double Star Catalog (WDS) maintained by the US Naval Observatory is the world's principal database for reporting or changing astrometric double and multiple star measurements. WDS measurements for this observing list most recently updated - 1/2024

Appendix A: Binocular Double Star Observing Program Object List

Constellation	Designation	R. A. (J2000)	Dec. (J2000)	Magnitudes: A, B, (C), (D)	Separation (") <i>Rho</i>	Position Angle (°) <i>Theta</i>
Andromeda	56	01 56 2	+ 37 15	5.8, 6.1	203	298
Andromeda	59	02 10 9	+ 39 02	6.1, 6.7	17	36
Aquila	15	19 05 0	- 04 02	5.5, 7.0	40	211
Aquila	ΟΣΣ 178	19 15 3	+ 15 05	5.7, 7.6	90	267
Aquila	28	19 19 7	+ 12 22	5.6, 9.0	61	175
Aquila	57	19 54 6	- 08 14	5.7, 6.4	36	171
Aries	14	02 09 4	+ 25 56	5.0, 8.0, 8.0	93, 106	35, 279
Aries	33	02 40 7	+ 27 04	5.3, 9.6	28	1
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	105	78
Boötes	μ 1 & 2	15 24 5	+ 37 23	4.3, 7.1	109	188
Camelopardalis	β	05 03 4	+ 60 27	4.1, 7.4	84	209
Camelopardalis	11 & 12	05 06 1	+ 58 58	5.2, 6.2	178	10
Camelopardalis	32	12 49 2	+ 83 25	5.3, 5.7	22	324
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	27	50
Canis Major	η	07 24 1	- 29 18	2.5, 6.8	177	287
Canis Major	Δ 47	07 24 7	- 31 49	5.4, 7.6	97	344
Canis Minor	14	07 58 3	+ 02 13	5.4, 9.4	100	84
Capricornus	α 1 & 2	20 18 1	- 12 33	3.7, 4.3	381	290
Capricornus	β 1 & 2	20 21 0	- 14 47	3.2, 6.1	205	266
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	283
Cassiopeia	φ	01 20 1	+ 58 14	5.1, 7.0	133	235
Cepheus	ΟΣΣ 1	00 14 1	+ 76 01	7.4, 7.8	73	103
Cepheus	δ	22 29 2	+ 58 25	4.2, 6.1	41	191
Cetus	37	01 14 4	- 07 55	5.2, 7.9	47	331
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	65	167
Coma Berenices	17	12 28 9	+ 25 55	5.2, 6.6	146	251
Corona Borealis	ν 1 & 2	16 22 4	+ 33 48	5.4, 5.6	355	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	40	133
Cygnus	Ο 1 (31)	20 13 6	+ 46 44	3.9, 7.0, 4.8	109, 337	173, 322
Cygnus	29	20 14 5	+ 36 48	5.0, 6.7	215	155
Cygnus	48	20 37 5	+ 31 34	6.3, 6.5	183	177

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Cygnus	61	21 06 9	+ 38 45	5.4, 6.1	32	154
Cygnus	79	21 43 4	+ 38 17	5.7, 7.0	150	60
Cygnus	μ	21 44 1	+ 28 45	4.8, 6.9	197	43
Delphinus	S 752	20 30 2	+ 19 25	6.8, 7.3	106	288
Draco	κ (5) & 6	12 33 3	+ 69 47	3.9, 5.0	926	25
Draco	17	16 36 2	+ 52 55	5.4, 5.5	90	193
Draco	ν 1 & 2	17 32 2	+ 55 11	4.9, 4.9	62	311
Draco	ψ (31) & (34)	17 41 9	+ 72 09	4.6, 5.6, 5.6	30, 3705	17, 96
Draco	Σ 2273	17 59 2	+ 64 09	7.3, 7.6	21	282
Draco	41, 40	18 00 2	+ 80 00	5.7, 6.0	19	232
Draco	39	18 23 9	+ 58 48	5.1, 8.0	89	19
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	335	152
Eridanus	62	04 56 4	- 05 10	5.5, 8.9	66	76
Gemini	ν	06 29 0	+ 20 13	4.1, 8.0	113	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	102	347
Gemini	65 & 64	07 29 5	+ 28 07	5.0, 5.1	818	333
Hercules	κ	16 08 1	+ 17 03	5.1, 6.2	27	14
Hercules	37 & 36	16 40 6	+ 04 13	5.8, 6.9	69	229
Hercules	Σ I 33	17 03 7	+ 13 36	5.9, 6.2, 8.5	305, 231	117, 11
Hydra	F	08 43 7	- 07 14	4.7, 8.2	79	310
Hydra	27	09 20 5	- 09 33	4.9, 7.0	229	211
Hydra	τ 1	09 29 1	- 02 46	4.6, 7.3	66	4
Hydra	Σ 1474	10 47 6	- 15 16	6.7, 7.0	66	27
Leo	ζ (36) & 35	10 16 7	+ 23 25	3.5, 6.0	331	337
Leo	δ	11 14 1	+ 20 31	2.5, 10.9	203	341
Leo	83	11 26 8	+ 03 01	6.6, 7.5	29	146
Leo	τ	11 27 9	+ 02 51	5.1, 7.5	89	181
Leo	93	11 48 0	+ 20 13	4.6, 9.0	76	356
Leo Minor	42	10 45 9	+ 30 41	5.3, 7.8	196	174
Lepus	γ	05 44 5	- 22 27	3.6, 6.3	96	349
Libra	α	14 50 9	- 16 03	2.7, 5.2	231	314
Lynx	5	06 26 8	+ 58 25	5.4, 7.9	96	272
Lynx	19	07 22 9	+ 55 17	5.8, 7.6	214	4
Lyra	ε 1 & 2	18 44 3	+ 39 40	4.7, 4.6	209	172
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	46	149
Lyra	δ 2 & 1	18 54 3	+ 36 58	4.3, 5.6	617	295
Ophiuchus	ρ	16 25 6	- 23 27	5.1, 7.3, 6.8	151, 156	0, 253
Ophiuchus	36	17 15 3	- 26 36	5.1, 6.5, 7.8	733, 296	74, 342
Ophiuchus	53	17 34 6	+ 09 35	5.8, 7.5	41	189
Ophiuchus	SHJ 251	17 39 1	+ 02 02	6.4, 7.8	111	328

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Ophiuchus	67	18 00 6	+ 02 56	4.0, 8.1	55	143
Orion	δ	05 32 0	- 00 18	2.4, 6.8	56	4
Orion	θ 2 & 1	05 35 4	- 05 25	5.0, 6.6	75	315
Orion	42 & 45	05 36 1	- 04 50	4.6, 5.2	252	105
Pegasus	ε	21 44 2	+ 09 53	2.5, 8.7	144	318
Pegasus	π & π 1	22 09 6	+ 33 10	4.3, 5.6	573	268
Pegasus	33	22 23 7	+ 20 51	6.3, 8.5	93	306
Pegasus	35	22 27 9	+ 04 42	4.9, 10.0	81	227
Perseus	57	04 33 3	+ 43 04	6.1, 6.8	121	197
Pisces	ψ 1	01 05 7	+ 21 28	5.3, 5.5	30	159
Pisces	ρ (93) & 94	01 27 5	+ 19 10	5.4, 5.5	447	57
Puppis	Knt 4	07 47 8	- 16 01	6.6, 6.5	128	313
Sagitta	ε	19 37 3	+ 16 28	5.8, 8.4	87	82
Sagitta	15	20 04 1	+ 17 04	5.9, 6.9	217	335
Sagitta	θ	20 09 9	+ 20 55	6.6, 7.5	92	222
Sagittarius	54	19 40 7	- 16 18	5.4, 7.7	46	41
Scorpius	ω 1 & 2	16 06 5	- 20 40	4.0, 4.3	879	145
Scorpius	ν	16 12 0	- 19 28	4.4, 6.6	41	336
Scorpius	μ 1 & 2	16 51 5	- 38 03	3.0, 3.5	347	72
Scorpius	ζ 2 & 1	16 54 4	- 42 21	3.6, 4.7	388	270
Serpens	θ	18 56 2	+ 04 12	4.6, 4.9	22	106
Taurus	21 & 22	03 46 5	+ 24 35	5.8, 6.4	150	130
Taurus	η	03 47 5	+ 24 06	2.8, 6.3, 8.2, 8.7	118, 182, 192	291, 313, 297
Taurus	φ	04 20 4	+ 27 21	5.1, 7.5	49	259
Taurus	62 (STF534)	04 24 0	+ 24 18	6.4, 7.9	29	291
Taurus	κ 1 & 2 (65 & 67)	04 25 4	+ 22 18	4.2, 5.3	339	174
Taurus	θ 2 & 1	04 28 7	+ 15 52	3.4, 3.9	337	347
Taurus	88	04 35 7	+ 10 10	4.3, 7.8	69	300
Taurus	σ 2 & 1	04 40 1	+ 15 56	4.7, 5.1	439	194
Taurus	τ	04 42 2	+ 22 57	4.2, 7.0	63	214
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	385	206
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	274, 376, 363	62, 25, 268
Ursa Major	ζ (79) & 80	13 23 9	+ 54 56	2.2, 4.0	716	71
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	428	28