

Object	Con	Nav Star Number	Date	Local Time	Sideral Time	Quadrant Azimuth	Quadrant Altitude	Location	Latitude	Stellarium RA	Stellarium Dec	Actual RA	Actual Dec	Quadrant Transit	Astrolabe Altitude	Link to Position	Jacob's Staff Alt Staff	Jacob's Staff Alt Cross	Jacob's Staff tan x	Jacob's Staff arctan x	Jacob's Staff Angle
Alpheratz	And	1	7/3/2024	3:48	21:35	97.4	57.4	Broomfield	39.931	0:21:33	31:00:44	00 08 23	+29 05 26		57.4						
Ankaa	Phe	2	9/28/2024	0:25	23:04	164.9	7.8	OTSP	36.981	0:25:51	-43:2:15	00 26 17	-42 18 22								
Schedar	Cas	3	1/30/2024	20:08	4:47	315.1	47.8	Broomfield	39.931	0:40:51	58:14:56	00 40 30	+56 32 14		48.5						
Diphda	Cet	4	8/27/2024	2:16	23:40	161.5	30.8	Broomfield	39.931	0:43:13	-17:13:32	00 43 35	-17 59 12		31						
Hamal	Ari	6	1/30/2024	19:54	4:33	255	55.8	Broomfield	39.931	2:19:23	26:39:8	02 07 10	+23 27 45		56						
Acamar	Eri	7	9/28/2024	2:16	0:54	156.8	7.3	OTSP	36.981	2:58:31	-40:40:52	02 58 16	-40 18 17								
Menkar	Cet	8	3/3/2024	19:35	5:44	244.7	29.2	Broomfield	39.931	3:06:12	2:58:54	03 02 17	+04 05 23		41						
Mirfak	Per	9	3/3/2024	19:39	5:48	303.4	56.5	Broomfield	39.931	3:26:29	51:46:58	03 24 44	+49 51 40		58						
Aldebaran	Tau	10	1/30/2024	18:54	3:32	144.8	62	Broomfield	39.931	4:49:59	18:3:11	04 35 55	+16 30 33		64.9						
Rigel	Ori	11	2/4/2024	20:12	5:11	180	41.9	Broomfield	39.931	5:22:45	-5:50:15	05 14 32	-08 12 06	Y	42.2						
Capella	Aur	12	1/30/2024	18:36	3:16	66.5	68.5	Broomfield	39.931	5:24:24	47:12:48	05 16 41	+45 59 53		71.5						
Bellatrix	Ori	13	2/4/2024	20:22	5:21	180	55.9	Broomfield	39.931	5:32:46	8:9:46	05 25 08	+06 20 59	Y	56.9						
Elnath	Tau	14	1/30/2024	18:42	3:21	104	61.9	Broomfield	39.931	5:40:04	30:35:33	05 26 18	+28 36 27		63.8						
Alnilam	Ori	15	2/4/2024	20:29	5:36	180	47.5	Broomfield	39.931	5:38:47	-0:14:15	05 36 13	-01 12 07	Y	48.2						
Betelgeuse	Ori	16	2/4/2024	20:52	5:51	180	57.1	Broomfield	39.931	6:01:52	9:21:46	05 55 10	+07 24 25	Y	58.5						
Sirius	CMa	18	2/13/2024	21:10	6:44	180	32.2	Broomfield	39.931	6:05:24	-15:32:15	06 45 09	-16 42 58	Y	34						
Adhara	CMa	19	2/13/2024	21:24	6:59	180	20.9	Broomfield	39.931	7:09:26	-26:50:15	06 58 38	-28 58 20	Y	21.5						
Procyon	Cmi	20	2/13/2024	22:04	7:38	180	54.8	Broomfield	39.931	7:49:34	7:3:46	07 39 18	+05 13 30	Y	54.5						
Pollux	Gem	21	1/30/2024	18:46	3:25	82	35.5	Broomfield	39.931	8:01:05	28:19:11	07 45 19	+28 01 34		36	15.125	11	0.6875	0.843199	96.6	
Pollux	Gem	21	2/4/2024	19:25	4:44	94.5	49.8	Broomfield	39.931	7:42:47	28:26:14	07 45 19	+28 01 34		49.8						
Suhail	Vel	23	3/3/2024	21:52	8:02	180	6.9	CSAC	34.113	8:52:25	-40:50:15	09 08 00	-43 25 57	Y	7.2						
Alphard	Hya	25	3/3/2024	23:12	9:22	180	46.9	CSAC	34.113	8:52:25	-0:50:15	09 27 35	-08 39 31	Y	47.1						
Regulus	Leo	26	3/3/2024	23:53	10:03	180	67.8	CSAC	34.113	10:13:39	20:3:46	10 08 22	+11 58 02	Y	67.5						
Dubhe	UMa	27	3/3/2024	23:17	9:27	22.9	58	CSAC	34.113	12:36:55	68:41:12	11 03 44	+61 45 04		58.1						
Denebola	Leo	28	4/3/2024	23:43	11:44	180	63.5	Broomfield	39.931	11:45:47	15:45:46	11 49 04	+14 34 19	Y	65						
Gamma	Crv	29	4/10/2024	23:39	12:11	180	30.6	Broomfield	39.931	12:09:23	-17:8:15	12 15 48	-17 32 31	Y	33.2						
Alioth	UMa	32	3/3/2024	23:22	9:32	42.9	49.1	CSAC	34.113	14:31:44	59:41:17	12 54 02	+55 57 35		49.2						
Spica	Vir	33	5/16/2024	22:32		180	38.8	DSS	39.644	13:24:07	-8:56:15	13 25 12	-11 09 41	Y	40.1						
Alkaid	UMa	34	3/3/2024	23:24	9:34	40.6	42.5	CSAC	34.113	15:27:56	60:18:4	13 47 32	+49 18 48		42.5						
Menkent	Cen	36	5/16/2024	23:11		180	13	DSS	39.644	14:03:14	-34:44:15	14 06 41	-36 22 12	Y	15						
Arcturus	Boo	37	5/16/2024	23:24		180	69.5	DSS	39.644	14:16:16	21:45:46	14 15 40	+19 10 57	Y	71						
Zubenelgenubi	Lib	39	6/5/2024	22:46	14:46	180	34.2	Broomfield	39.931	14:57:01	-13:32:15	14 50 53	-16 02 30	Y	34						
Kochab	Umi	40	3/3/2024	23:32	9:43	24	33	CSAC	34.113	17:46:31	68:57:19	14 50 42	+74 09 20		33						
Alphecca	CrB	41	6/5/2024	21:45	13:45	113.5	59	Broomfield	39.931	16:01:37	25:7:4	15 34 41	+26 42 53		59.1						
Antares	Sco	42	7/4/2024	22:29	16:23	180	22.4	Broomfield	39.931	16:30:22	-24:20:15	16 29 24	-26 25 55	Y	23.1						
Sabik	Oph	44	7/4/2024	23:08	17:03	180	33.5	Broomfield	39.931	17:09:28	-14:14:15	17 10 23	-15 43 30	Y	33.1						
Shaula	Sco	45	7/4/2024	23:31	17:26	180	12	Broomfield	39.931	17:32:32	-35:44:15	17 33 37	-37 06 14	Y	12.1						
Rasalhague	Oph	46	7/4/2024	22:47	16:42	154.9	59.9	Broomfield	39.931	18:23:15	14:13:31	17 34 56	+12 33 36		59.5						
Eltanin	Dra	47	7/4/2024	22:34	16:28	47.1	69.8	Broomfield	39.931	18:29:23	53:37:18	17 56 36	+51 29 20		69.9						
Kaus Australis	Sgr	48	7/27/2024	22:57	18:20	180	17.1	Broomfield	39.931	18:22:05	-32:58:46	18 24 10	-34 23 05	Y	17						
Vega	Lyr	49	7/4/2024	22:38	16:32	83.9	65	Broomfield	39.931	18:52:28	39:59:51	18 36 56	+38 47 01		65.1						
Nunki	Sgr	50	7/27/2024	23:29	18:54	180	24	Broomfield	39.931	18:54:10	-26:4:46	18 55 16	-26 17 48	Y	24.5						
Altair	Aql	51	7/4/2024	22:43	16:38	114.2	35.3	Broomfield	39.931	19:59:26	8:6:28	19 50 47	+08 52 06		36.2						
Deneb	Cyg	53	7/4/2024	22:40	16:35	62.4	44.8	Broomfield	39.931	20:59:16	45:49:19	20 41 26	+45 16 49		45						
Enif	Peg	54	7/6/2024	3:39	21:38	175.8	54.9	Broomfield	39.931	21:58:50	7:13:43	21 44 11	+09 52 30		59.1						
Alnair	Gru	55	9/27/2024	22:47	21:25	172.8	5.2	OTSP	36.981	22:07:17	-47:17:11	22 08 14	-46 57 40								
Fomalhaut	PsA	56	7/28/2024	3:33	22:59	180	22.6	Broomfield	39.931	22:58:50	-27:28:46	22 57 39	-29 37 20	Y	21.5						
Markab	Peg	57	7/3/2024	3:43	21:30	132.1	57.6	Broomfield	39.931	23:25:54	17:34:35	23 04 46	+15 12 19								58.2
Polaris	UMi		1/28/2024	18:46		0	40	Broomfield	39.931						39.9	12	17.5625	0.341637	0.355945		40.8