

utical Almanac Nautical Almanac Nautical Alm
nautical Almanac Nautical Alm
al Almanac Nautical Almanac Nauti
nautical Almanac Nautic
l Almanac Nautical Alm
Nautical Almanac Nautical Almanac Nautical
Nautical Almanac
utical Almanac Nautical Almanac Nautical
nautical Almanac Nautica
al Almanac Nautical Almanac Nautical Almanac
nautical Almanac Nautic
nautical Almanac Nautic
utical Almanac Nautical Almanac Nautical
Nautical Almanac Nautical Almanac
nautical Almanac Nautical Almanac
al ***Naut***
ut
2022
ut
utical Almanac Nautical Alm
nautical Almanac Nautic
utical Almanac Nautical Almanac Nautical Alm
utical Almanac Nautic
Nautical Almanac Nautical Almanac
nautical Almanac Nautic



Star Maps

The Nautical Almanac 2022 (Selected Stars)

Polaris Tables 2022

Revision V0.6 - Nov 2018

Warning and Terms of Usage:

The following pages have been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data in this Nautical Almanac is believed to be accurate but no warranty is given for its correctness.

Use this Nautical Almanac only for training and exercising!

Compiled by Erik De Man (mail2erik@siranah.de) on Thu Oct 28 11:53:37 2021

Introduction

This Nautical Almanac contains the Ephemerides of the "First Point of Aries" and sixty selected stars. It is designed for determination of Position (geographical Latitude and Longitude) from astronomical observations (Altitude of Celestial Objects).

The data compiled in this Nautical Almanac is based on calculations done with the software package "NOVAS" from the U.S. Naval Observatory (<http://aa.usno.navy.mil/AA/software>). The fundamental star data was originally obtained from the "Bright Star Catalogue" (5th revised edition of 1991). However, this data has recently been updated from other star catalogues. The complete star data as used in this Almanac is shown on the next page.

Values for "deltaT"

For the astrodynamical calculations, the following values for "delta T" (the difference between terrestrial time realized by atomic clocks and UT defined by the irregular rotation of the Earth) have been used:

Jan : 69.3 s	Apr : 69.3 s	Jul : 69.3 s	Oct : 69.2 s
Feb : 69.3 s	May : 69.3 s	Aug : 69.2 s	Nov : 69.2 s
Mar : 69.3 s	Jun : 69.3 s	Sep : 69.2 s	Dec : 69.2 s

Interpolation of the integral-hour GHA values

This Nautical Almanac uses a slightly different approach for the interpolation of the integral-hour values of Greenwich Hour Angle, compared to the techniques used in most commercially available Almanacs.

For more information please refer to the following web site: "<http://www.siranah.de/>"

The following table shows the fundamental star data as used in this Almanac. The data refers to Equinox J2000 / Epoch J2000.0.

Star Name	RA			Dec		mu_RA	mu_Dec	prllx	rad.vel.
	h	m	s	°	'	["/yr]	["/yr]	["]	[km/s]
Alpheratz	00	08	23.3	N 29	05.4	0.135680	-0.162950	0.034	-11
Ankaa	00	26	17.0	S 42	18.4	0.233050	-0.356300	0.039	75
Schedir	00	40	30.4	N 56	32.2	0.050360	-0.032170	0.014	-4
Diphda	00	43	35.4	S 17	59.2	0.232550	0.031990	0.034	13
Achernar	01	37	42.8	S 57	14.2	0.088020	-0.038240	0.023	16
Hamal	02	07	10.4	N 23	27.7	0.190730	-0.145770	0.049	-14
Polaris	02	31	49.1	N 89	15.8	0.044480	-0.011850	0.008	-17
Acamar	02	58	15.7	S 40	18.3	-0.044600	-0.019000	0.028	12
Menkar	03	02	16.8	N 04	05.4	-0.010410	-0.076850	0.013	-26
Mirfak	03	24	19.4	N 49	51.7	0.024110	-0.026010	0.005	-2
Aldebaran	04	35	55.2	N 16	30.6	0.063000	-0.190000	0.050	54
Capella	05	16	41.4	N 45	59.9	0.075520	-0.427110	0.077	29
Rigel	05	14	32.3	S 08	12.1	0.001870	-0.000560	0.004	21
Bellatrix	05	25	07.9	N 06	21.0	-0.008750	-0.013280	0.013	18
Elnath	05	26	17.5	N 28	36.5	0.023280	-0.174220	0.025	9
Alnilam	05	36	12.8	S 01	12.1	0.001490	-0.001060	0.002	26
Betelgeuze	05	55	10.3	N 07	24.4	0.024950	0.009560	0.005	22
Canopus	06	23	57.1	S 52	41.7	0.019990	0.023670	0.010	21
Sirius	06	45	08.9	S 16	43.0	-0.546050	-1.223140	0.379	-8
Adhara	06	58	37.6	S 28	58.3	0.002600	0.002290	0.008	27
Castor	07	34	36.0	N 31	53.3	-0.206330	-0.148180	0.066	5
Procyon	07	39	18.1	N 05	13.5	-0.716570	-1.034580	0.286	-3
Pollux	07	45	19.4	N 28	01.6	-0.625690	-0.045950	0.097	3
Avior	08	22	30.8	S 59	30.6	-0.025340	0.022720	0.005	2
Suhail	09	07	59.8	S 43	25.9	-0.023210	0.014280	0.006	18
Miaplacidus	09	13	12.0	S 69	43.0	-0.157660	0.108910	0.029	-5
Alphard	09	27	35.2	S 08	39.5	-0.014500	0.033250	0.018	-4
Regulus	10	08	22.3	N 11	58.0	0.249000	0.002000	0.042	6
Dubhe	11	03	43.7	N 61	45.0	-0.136460	-0.035250	0.026	-9
Denebola	11	49	03.6	N 14	34.3	-0.499020	-0.113780	0.090	0
Gienah	12	15	48.4	S 17	32.5	-0.161000	0.023000	0.020	-4
Acruz	12	26	35.9	S 63	05.9	-0.035370	-0.014730	0.010	-11
Gacrux	12	31	09.9	S 57	06.8	0.027940	-0.264330	0.037	21
Alioth	12	54	01.6	N 55	57.6	0.112000	-0.009000	0.040	-9
Spica	13	25	11.6	S 11	09.7	-0.042500	-0.031730	0.012	1
Alkaid	13	47	32.4	N 49	18.8	-0.122000	-0.015600	0.032	-11
Hadar	14	03	49.4	S 60	22.4	-0.033960	-0.025060	0.009	6
Menkent	14	06	41.3	S 36	22.1	-0.519290	-0.517870	0.053	1
Arcturus	14	15	39.7	N 19	10.9	-1.093450	-1.999400	0.089	5
Rigel Kentaurus	14	39	36.5	S 60	50.0	-3.678190	0.481840	0.747	-22
Zubenelgenubi	14	50	52.8	S 16	02.5	-0.106000	-0.067000	0.058	-10
Kocab	14	50	42.3	N 74	09.3	-0.032290	0.011910	0.026	17
Alphecca	15	34	41.3	N 26	42.9	0.120380	-0.089440	0.044	2
Antares	16	29	24.0	S 26	25.9	-0.010160	-0.023210	0.005	-3
Atria	16	48	39.9	S 69	01.7	0.017850	-0.032920	0.008	-3
Sabik	17	10	22.7	S 15	43.5	0.041160	0.097650	0.039	-2
Shaula	17	33	36.5	S 37	06.2	-0.008900	-0.029950	0.005	-3
Rasalhague	17	34	56.1	N 12	33.6	0.110080	-0.222610	0.070	13
Etamin	17	56	36.4	N 51	29.3	-0.008480	-0.022790	0.021	-28
Kaus Australis	18	24	10.3	S 34	23.1	-0.039420	-0.124200	0.023	-15
Vega	18	36	56.3	N 38	47.0	0.201030	0.287470	0.129	-14
Nunki	18	55	15.9	S 26	17.8	0.015140	-0.053430	0.014	-11
Albireo	19	30	43.3	N 27	57.6	0.005000	0.006000	0.009	-24
Altair	19	50	47.0	N 08	52.1	0.536870	0.385570	0.194	-26
Peacock	20	25	38.9	S 56	44.1	0.007710	-0.086150	0.018	2
Deneb	20	41	25.9	N 45	16.8	0.001990	0.001950	0.002	-5
Enif	21	44	11.2	N 09	52.5	0.030020	-0.001380	0.005	3
Alnair	22	08	14.0	S 46	57.7	0.128000	-0.148000	0.032	11
Formalhaut	22	57	39.0	S 29	37.3	0.329220	-0.164220	0.131	7
Markab	23	04	45.6	N 15	12.3	0.060400	-0.041300	0.024	-4

The following table lists the traditional star names as used in this Almanac with the corresponding scientific names (Bayer designation) as used in astronomical star constellation maps.

Star Name	Bayer designation	Apparent Magnitude
Alpheratz	Alpha Andromedae	2.06
Ankaa	Alpha Phoenicis	2.39
Schedir	Alpha Cassiopeiae	2.23
Diphda	Beta Ceti	2.04
Achernar	Alpha Eridani	0.46
Hamal	Alpha Arietis	2.00
Polaris	Alpha Ursae Minoris	2.02
Acamar	Theta Eridani	3.24
Menkar	Alpha Ceti	2.53
Mirfak	Alpha Persei	1.79
Aldebaran	Alpha Tauri	0.85
Capella	Alpha Aurigae	0.08
Rigel	Beta Orionis	0.12
Bellatrix	Gamma Orionis	1.64
Elnath	Beta Tauri	1.65
Alnilam	Epsilon Orionis	1.70
Betelgeuze	Alpha Orionis	0.50
Canopus	Alpha Carinae	-0.72
Sirius	Alpha Canis Majoris	-1.46
Adhara	Epsilon Canis Majoris	1.50
Castor	Alpha Geminorum	2.88
Procyon	Alpha Canis Minoris	0.38
Pollux	Beta Geminorum	1.14
Avior	Epsilon Carinae	1.86
Suhail	Lambda Velorum	2.21
Miaplacidus	Beta Carinae	1.68
Alphard	Alpha Hydrae	1.98
Regulus	Alpha Leonis	1.35
Dubhe	Alpha Ursae Majoris	1.79
Denebola	Beta Leonis	2.14
Gienah	Gamma Corvi	2.59
Acrux	Alpha Crucis	1.33
Gacrux	Gamma Crucis	1.63
Alioth	Epsilon Ursae Majoris	1.77
Spica	Alpha Virginis	0.98
Alkaid	Eta Ursae Majoris	1.86
Hadar	Beta Centauri	0.61
Menkent	Theta Centauri	2.06
Arcturus	Alpha Bootis	-0.04
Rigel Kentaurus	Alpha Centauri	-0.01
Zubenelgenubi	Alpha-2 Librae	2.75
Kocab	Beta Ursae Minoris	2.08
Alphecca	Alpha Coronae Borealis	2.23
Antares	Alpha Scorpii	0.96
Atria	Alpha Trianguli Australis	1.92
Sabik	Eta Ophiuchi	2.43
Shaula	Lambda Scorpii	1.63
Rasalhague	Alpha Ophiuchi	2.08
Etamin	Gamma Draconis	2.23
Kaus Australis	Epsilon Sagittarii	1.85
Vega	Alpha Lyrae	0.03
Nunki	Sigma Sagittarii	2.02
Albireo	Beta Cygni	3.08
Altair	Alpha Aquilae	0.77
Peacock	Alpha Pavonis	1.94
Deneb	Alpha Cygni	1.25
Enif	Epsilon Pegasi	2.39
Alnair	Alpha Gruis	1.74
Formalhaut	Alpha Piscis Austrini	1.16
Markab	Alpha Pegasi	2.49

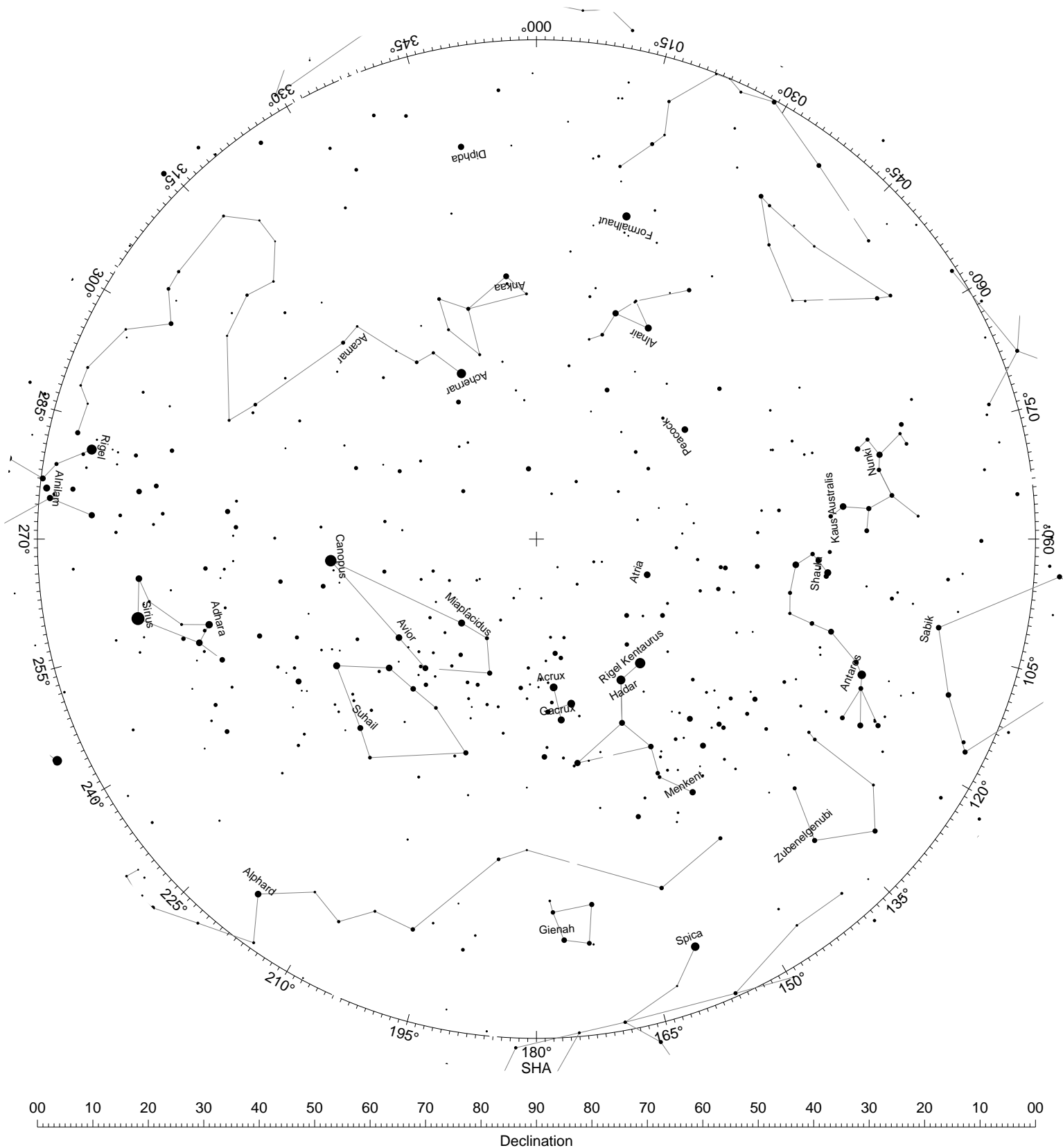
Position of the Stars on the local hemisphere

The following pages show different maps of the brightest stars on the night sky (down to magnitude 4.5) as well as some of the standard constellations. On each of the maps, the stars used in this Almanac are labeled with their traditional names.

The first two maps are stereographic maps of the stars of the northern- and southern hemisphere, respectively. These maps are centered on the celestial poles and may be used for observations at locations in high northern- or southern latitudes.

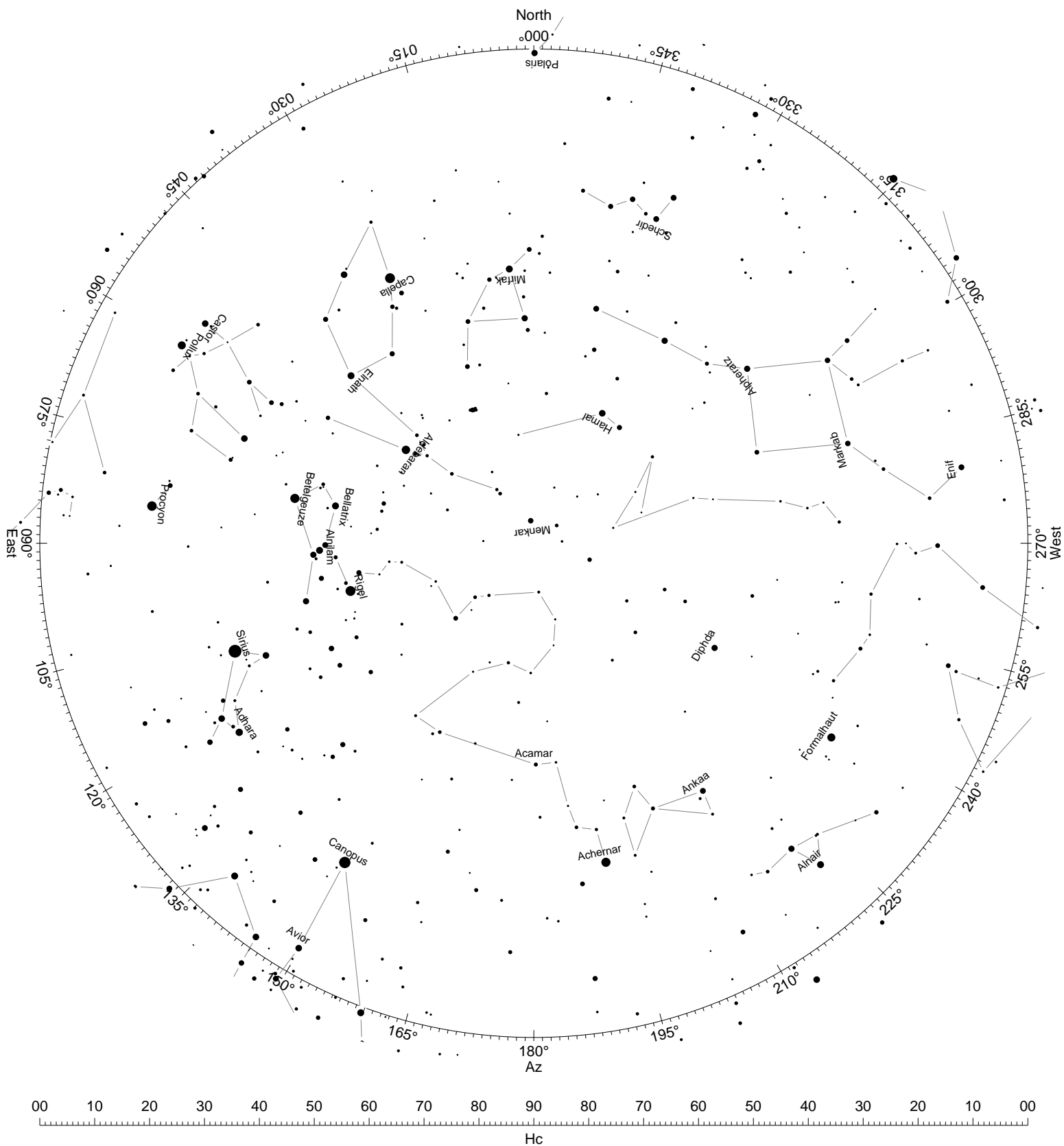
The following eight maps show the star constellations on the local hemisphere for locations on the Equator. These maps can be used for observations at locations in lower latitudes.

Map of bright Stars of the Southern Celestial Sphere



The map is centered on the celestial south pole and shows the brightest stars (up to magnitude 4.5) of the southern celestial hemisphere. The circle of constant declination is shown at 00° (Celestial Equator). The Sidereal Hour Angle of a specific star can be directly read from the SHA scale plotted on the Celestial Equator, while, the Declination can be determined by transferring the distance from the star to the center of the map onto the separate Declination scale. The Sidereal Hour Angle is zero for the "First-Point-of-Aries" and increases westward.

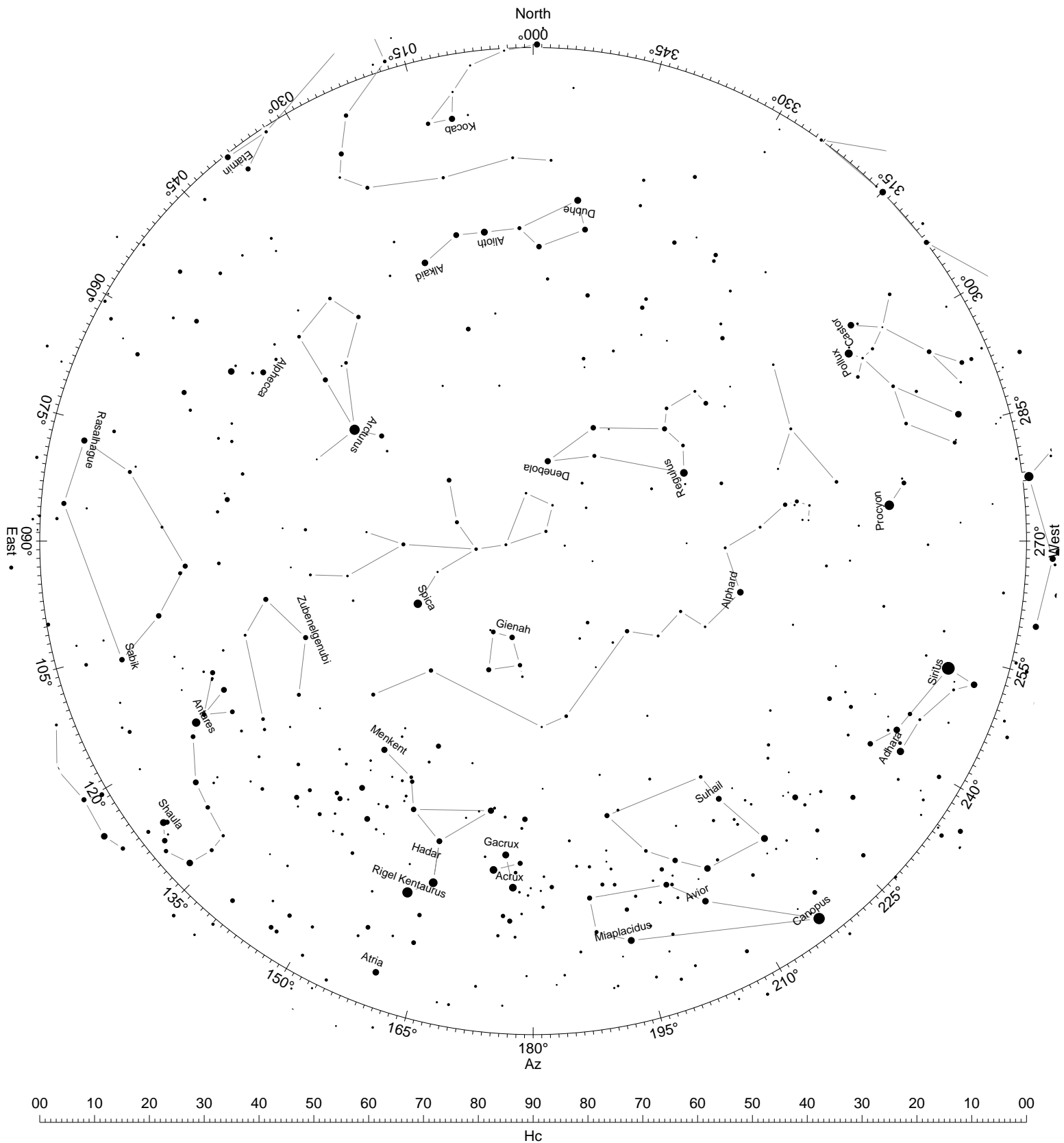
Horizontal-Coordinate-System Map of bright Stars - Part II



The Horizontal-Coordinate-System map shows the brightest stars (up to magnitude 4.5) of the local hemisphere for a location on the Equator. The stars are plotted with their Altitude (Hc) and Azimuth (Az) coordinates. The Azimuth scale is plotted on the circle of 0°-Altitude (local horizon). The Azimuth is the approximate compass direction in which the star is visible.

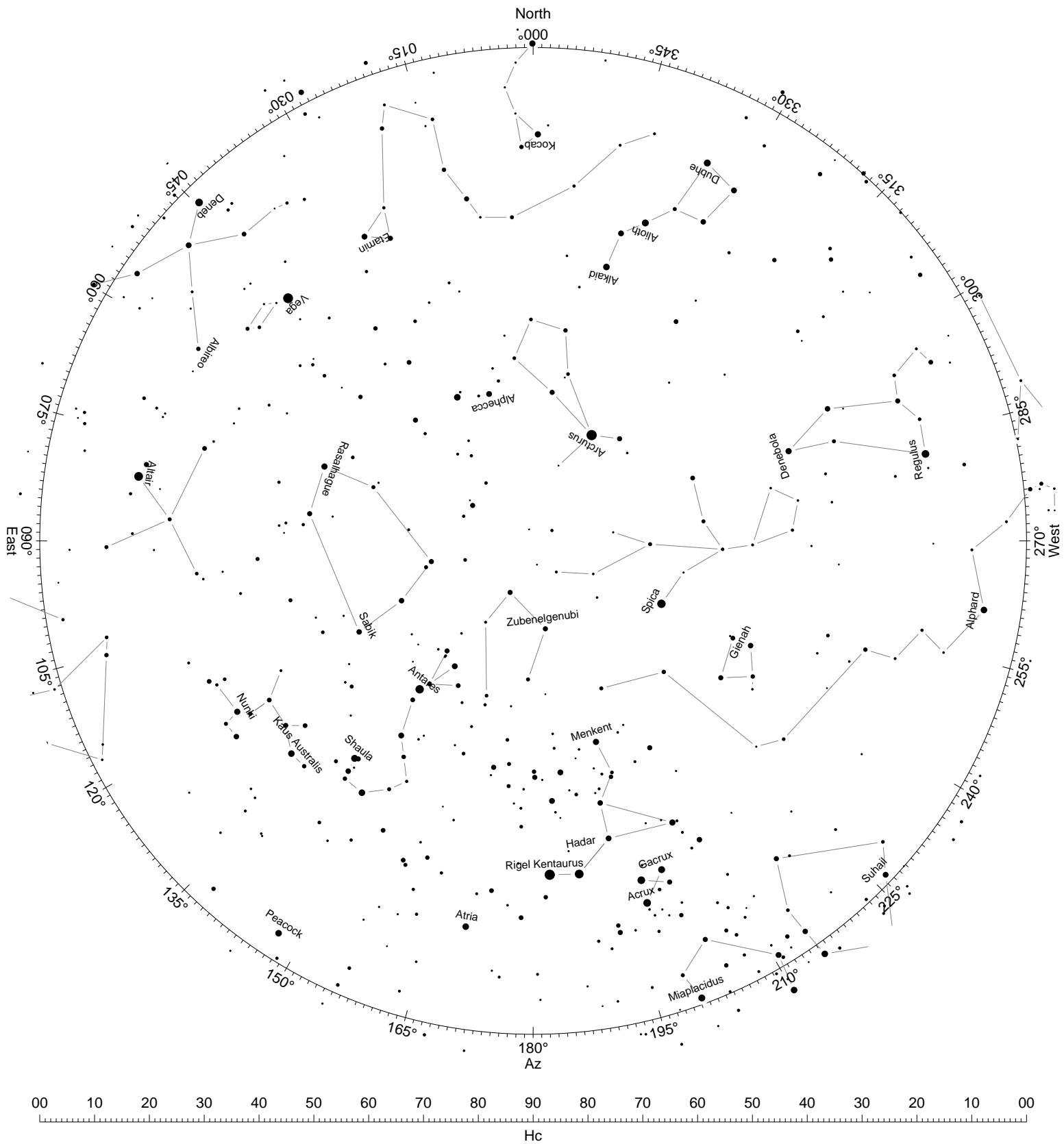
Each of these maps is valid for a location on the equator at a specific time of the day.

Horizontal-Coordinate-System Map of bright Stars - Part V



The Horizontal-Coordinate-System map shows the brightest stars (up to magnitude 4.5) of the local hemisphere for a location on the Equator. The stars are plotted with their Altitude (Hc) and Azimuth (Az) coordinates. The Azimuth scale is plotted on the circle of 0°-Altitude (local horizon). The Azimuth is the approximate compass direction in which the star is visible. Each of these maps is valid for a location on the equator at a specific time of the day.

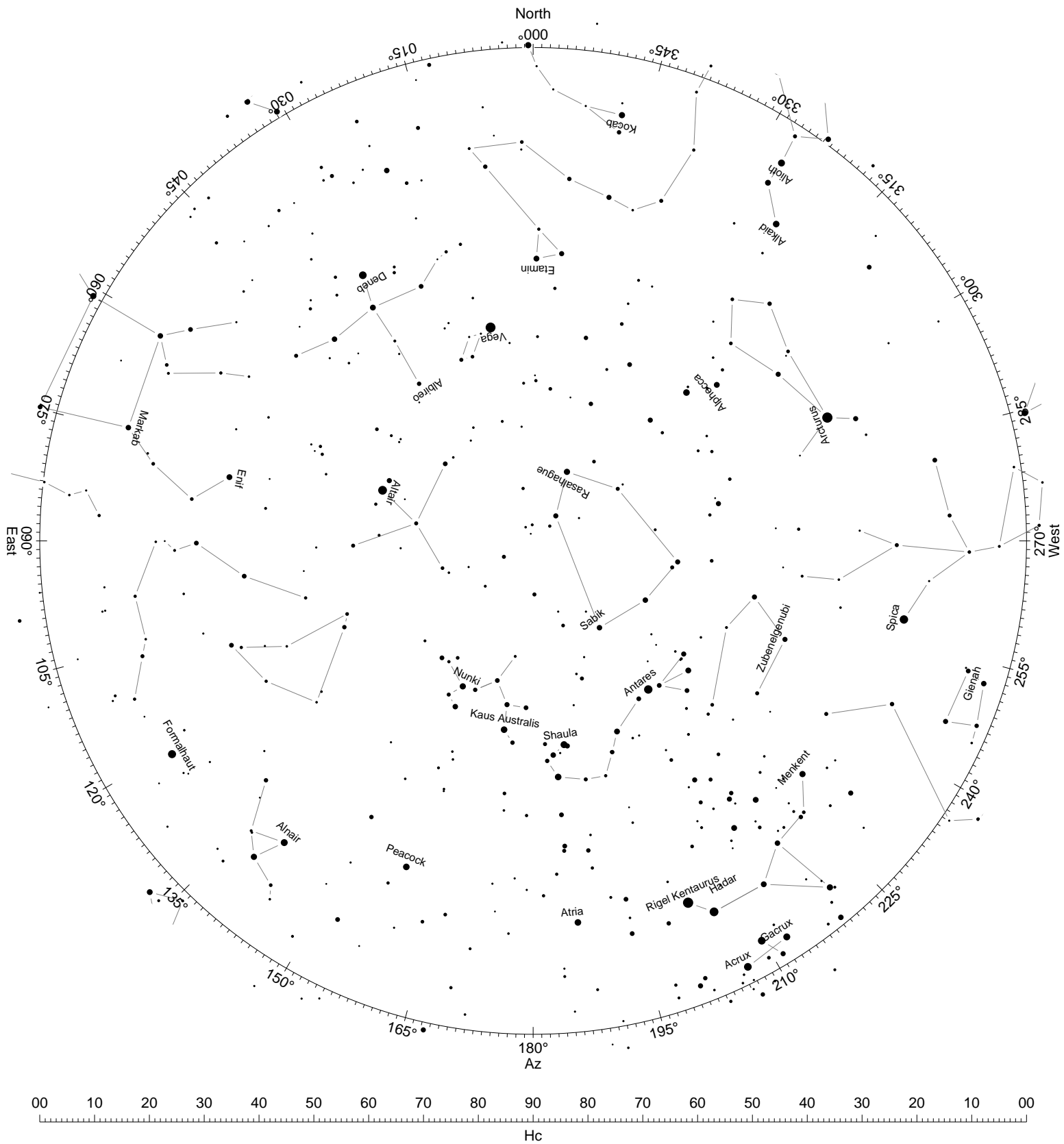
Horizontal-Coordinate-System Map of bright Stars - Part VI



The Horizontal-Coordinate-System map shows the brightest stars (up to magnitude 4.5) of the local hemisphere for a location on the Equator. The stars are plotted with their Altitude (Hc) and Azimuth (Az) coordinates. The Azimuth scale is plotted on the circle of 0°-Altitude (local horizon). The Azimuth is the approximate compass direction in which the star is visible.

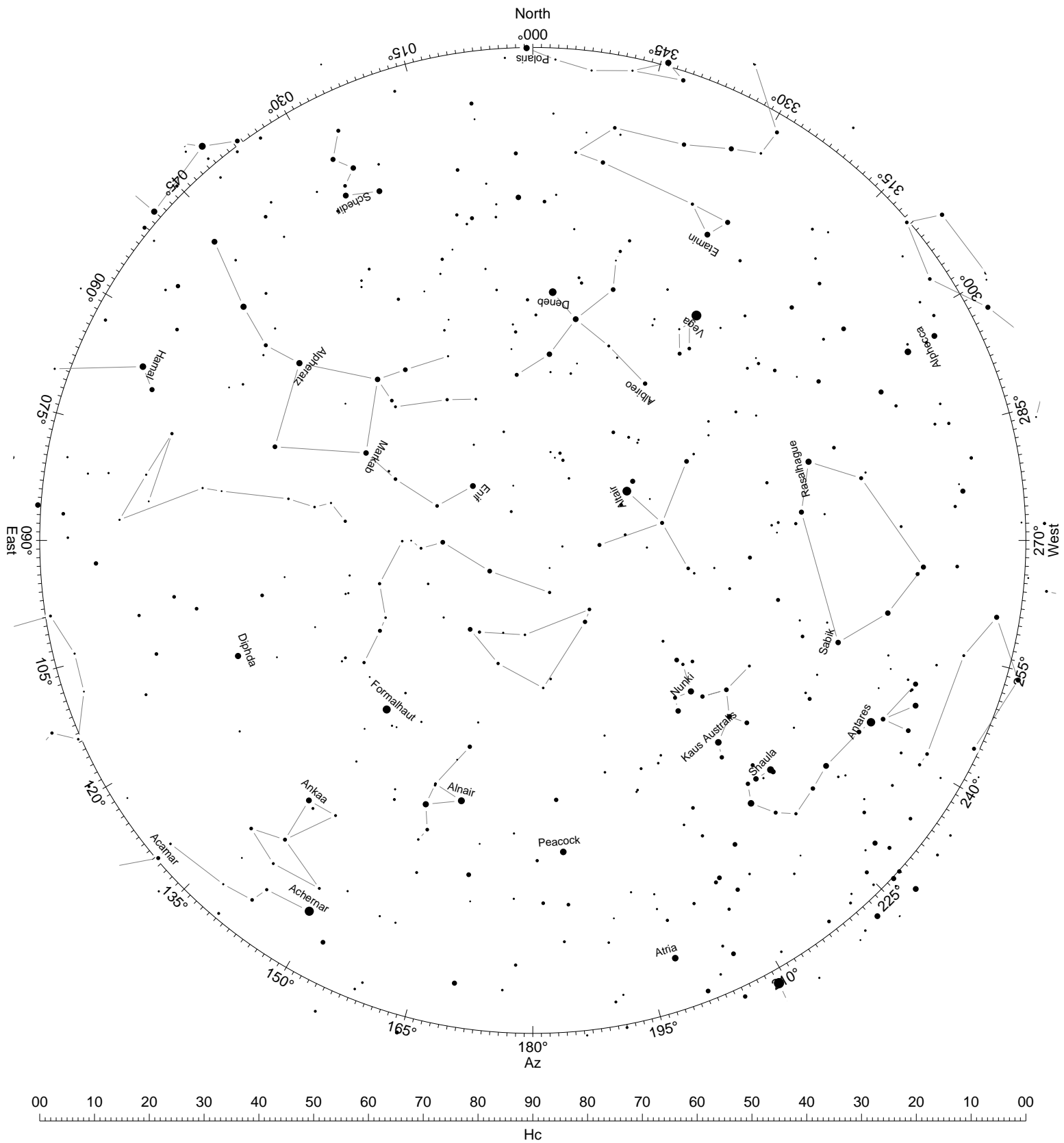
Each of these maps is valid for a location on the equator at a specific time of the day.

Horizontal-Coordinate-System Map of bright Stars - Part VII



The Horizontal-Coordinate-System map shows the brightest stars (up to magnitude 4.5) of the local hemisphere for a location on the Equator. The stars are plotted with their Altitude (Hc) and Azimuth (Az) coordinates. The Azimuth scale is plotted on the circle of 0°-Altitude (local horizon). The Azimuth is the approximate compass direction in which the star is visible. Each of these maps is valid for a location on the equator at a specific time of the day.

Horizontal-Coordinate-System Map of bright Stars - Part VIII



The Horizontal-Coordinate-System map shows the brightest stars (up to magnitude 4.5) of the local hemisphere for a location on the Equator. The stars are plotted with their Altitude (Hc) and Azimuth (Az) coordinates. The Azimuth scale is plotted on the circle of 0°-Altitude (local horizon). The Azimuth is the approximate compass direction in which the star is visible. Each of these maps is valid for a location on the equator at a specific time of the day.

Nautical Almanac for selected Stars

The following pages contain the celestial coordinates of the "First Point of Aries" and a set of selected stars. Each page compiles the almanac data for five successive days of the year. For this time span, the recorded star data consisting of Siderial Hour Angle (SHA) and Declination (Dec) is valid. The time used in this Almanac is Universal Time (UT).

The GHA of a specific star is obtained from the GHA of the "First Point of Aries" and the star's SHA by the following relationship: $GHA_{star} = GHA_{Aries} + SHA_{star}$

NOTICE:

This Nautical Almanac uses a slightly different approach for the interpolation of the integral-hour values of Greenwich Hour Angle and Declination, compared to the techniques used in most commercially available Almanacs.

For more information please refer to the following web site: "<http://www.siranah.de/>"

Abbreviations used in the Almanac tables:

UT	Universal Time	
GHA	Greenwich Hour Angle	° [degrees]
ddGHA	the increment of the GHA value for the next hour of time, additional to the "linear" increment of 15°/h	' [minutes of arc]
SHA	Siderial Hour Angle	° [degrees]
Dec	Declination	° [degrees]

2022 - First Point of Aries / Selected Stars

UT	day 1 of 365 <i>January 1</i>		day 2 of 365 <i>January 2</i>		day 3 of 365 <i>January 3</i>		day 4 of 365 <i>January 4</i>		day 5 of 365 <i>January 5</i>		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	100	37.6 +02.4	101	36.7 +02.5	102	35.9 +02.4	103	35.0 +02.5	104	34.2 +02.4	00
01	115	40.0 +02.5	116	39.2 +02.5	117	38.3 +02.5	118	37.5 +02.4	119	36.6 +02.5	01
02	130	42.5 +02.5	131	41.7 +02.4	132	40.8 +02.5	133	39.9 +02.5	134	39.1 +02.4	02
03	145	45.0 +02.4	146	44.1 +02.5	147	43.3 +02.4	148	42.4 +02.5	149	41.5 +02.5	03
04	160	47.4 +02.5	161	46.6 +02.4	162	45.7 +02.5	163	44.9 +02.4	164	44.0 +02.5	04
05	175	49.9 +02.5	176	49.0 +02.5	177	48.2 +02.5	178	47.3 +02.5	179	46.5 +02.4	05
06	190	52.4 +02.4	191	51.5 +02.5	192	50.7 +02.4	193	49.8 +02.5	194	48.9 +02.5	06
07	205	54.8 +02.5	206	54.0 +02.4	207	53.1 +02.5	208	52.3 +02.4	209	51.4 +02.5	07
08	220	57.3 +02.5	221	56.4 +02.5	222	55.6 +02.4	223	54.7 +02.5	224	53.9 +02.4	08
09	235	59.8 +02.4	236	58.9 +02.5	237	58.0 +02.5	238	57.2 +02.5	239	56.3 +02.5	09
10	251	02.2 +02.5	252	01.4 +02.4	253	00.5 +02.5	253	59.7 +02.4	254	58.8 +02.5	10
11	266	04.7 +02.5	267	03.8 +02.5	268	03.0 +02.4	269	02.1 +02.5	270	01.3 +02.4	11
12	281	07.2 +02.4	282	06.3 +02.5	283	05.4 +02.5	284	04.6 +02.4	285	03.7 +02.5	12
13	296	09.6 +02.5	297	08.8 +02.4	298	07.9 +02.5	299	07.0 +02.5	300	06.2 +02.4	13
14	311	12.1 +02.4	312	11.2 +02.5	313	10.4 +02.4	314	09.5 +02.5	315	08.6 +02.5	14
15	326	14.5 +02.5	327	13.7 +02.5	328	12.8 +02.5	329	12.0 +02.4	330	11.1 +02.5	15
16	341	17.0 +02.5	342	16.2 +02.4	343	15.3 +02.5	344	14.4 +02.5	345	13.6 +02.4	16
17	356	19.5 +02.4	357	18.6 +02.5	358	17.8 +02.4	359	16.9 +02.5	0	16.0 +02.5	17
18	11	21.9 +02.5	12	21.1 +02.4	13	20.2 +02.5	14	19.4 +02.4	15	18.5 +02.5	18
19	26	24.4 +02.5	27	23.5 +02.5	28	22.7 +02.5	29	21.8 +02.5	30	21.0 +02.4	19
20	41	26.9 +02.4	42	26.0 +02.5	43	25.2 +02.4	44	24.3 +02.5	45	23.4 +02.5	20
21	56	29.3 +02.5	57	28.5 +02.4	58	27.6 +02.5	59	26.8 +02.4	60	25.9 +02.5	21
22	71	31.8 +02.5	72	30.9 +02.5	73	30.1 +02.4	74	29.2 +02.5	75	28.4 +02.4	22
23	86	34.3 +02.4	87	33.4 +02.5	88	32.5 +02.5	89	31.7 +02.5	90	30.8 +02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.4	N 29 12.8	Gienah	175 46.0	S 17 39.7
Ankaa	353 09.8	S 42 11.4	Acrux	173 02.7	S 63 12.9
Schedir	349 33.8	N 56 39.7	Gacrux	171 54.4	S 57 13.7
Diphda	348 49.9	S 17 52.2	Alioth	166 15.4	N 55 50.2
Achernar	335 22.0	S 57 07.9	Spica	158 25.0	S 11 16.4
Hamal	327 53.9	N 23 34.0	Alkaid	152 54.1	N 49 12.0
Polaris	314 54.1	N 89 21.6	Hadar	148 39.7	S 60 28.4
Acamar	315 13.4	S 40 13.3	Menkent	148 00.4	S 36 28.2
Menkar	314 08.5	N 04 10.5	Arcturus	145 50.0	N 19 04.7
Mirfak	308 31.4	N 49 56.4	Rigel Kentaurus	139 41.4	S 60 55.4
Aldebaran	290 42.2	N 16 33.2	Zubenelgenubi	136 58.9	S 16 07.8
Capella	280 25.1	N 46 01.4	Kocab	137 20.5	N 74 03.7
Rigel	281 05.9	S 08 10.7	Alphecca	126 06.2	N 26 38.4
Bellatrix	278 25.2	N 06 22.1	Antares	112 19.3	S 26 28.7
Elnath	278 04.6	N 28 37.6	Atria	107 16.2	S 69 03.8
Alnilam	275 39.9	S 01 11.3	Sabik	102 06.0	S 15 45.1
Betelgeuze	270 54.4	N 07 24.6	Shaula	96 14.1	S 37 07.1
Canopus	263 52.9	S 52 42.5	Rasalhague	96 01.2	N 12 32.7
Sirius	258 27.9	S 16 44.4	Etamin	90 43.9	N 51 29.1
Adhara	255 07.4	S 29 00.1	Kaus Australis	83 36.2	S 34 22.4
Castor	245 59.8	N 31 50.4	Vega	80 35.4	N 38 48.1
Procyon	244 52.9	N 05 10.4	Nunki	75 51.2	S 26 16.2
Pollux	243 19.6	N 27 58.3	Albireo	67 06.4	N 28 00.3
Avior	234 15.1	S 59 34.6	Altair	62 02.9	N 08 55.4
Suhail	222 47.7	S 43 31.1	Peacock	53 10.2	S 56 40.0
Miaplacidus	221 37.7	S 69 48.2	Deneb	49 27.9	N 45 21.6
Alphard	217 49.9	S 08 45.2	Enif	33 41.5	N 09 58.5
Regulus	207 36.8	N 11 51.6	Alnair	27 36.4	S 46 51.5
Dubhe	193 43.7	N 61 37.7	Formalhaut	15 17.6	S 29 30.5
Denebola	182 27.3	N 14 27.0	Markab	13 32.5	N 15 19.4

2022 - First Point of Aries / Selected Stars

UT	day 6 of 365 January 6		day 7 of 365 January 7		day 8 of 365 January 8		day 9 of 365 January 9		day 10 of 365 January 10		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	105 33.3	+02.5	106 32.4	+02.5	107 31.6	+02.4	108 30.7	+02.5	109 29.8	+02.5	00
01	120 35.8	+02.4	121 34.9	+02.5	122 34.0	+02.5	123 33.2	+02.4	124 32.3	+02.5	01
02	135 38.2	+02.5	136 37.4	+02.4	137 36.5	+02.5	138 35.6	+02.5	139 34.8	+02.4	02
03	150 40.7	+02.4	151 39.8	+02.5	152 39.0	+02.4	153 38.1	+02.5	154 37.2	+02.5	03
04	165 43.1	+02.5	166 42.3	+02.4	167 41.4	+02.5	168 40.6	+02.4	169 39.7	+02.5	04
05	180 45.6	+02.5	181 44.7	+02.5	182 43.9	+02.5	183 43.0	+02.5	184 42.2	+02.4	05
06	195 48.1	+02.4	196 47.2	+02.5	197 46.4	+02.4	198 45.5	+02.5	199 44.6	+02.5	06
07	210 50.5	+02.5	211 49.7	+02.4	212 48.8	+02.5	213 48.0	+02.4	214 47.1	+02.5	07
08	225 53.0	+02.5	226 52.1	+02.5	227 51.3	+02.4	228 50.4	+02.5	229 49.6	+02.4	08
09	240 55.5	+02.4	241 54.6	+02.5	242 53.7	+02.5	243 52.9	+02.4	244 52.0	+02.5	09
10	255 57.9	+02.5	256 57.1	+02.4	257 56.2	+02.5	258 55.3	+02.5	259 54.5	+02.4	10
11	271 00.4	+02.5	271 59.5	+02.5	272 58.7	+02.4	273 57.8	+02.5	274 56.9	+02.5	11
12	286 02.9	+02.4	287 02.0	+02.5	288 01.1	+02.5	289 00.3	+02.4	289 59.4	+02.5	12
13	301 05.3	+02.5	302 04.5	+02.4	303 03.6	+02.5	304 02.7	+02.5	305 01.9	+02.4	13
14	316 07.8	+02.5	317 06.9	+02.5	318 06.1	+02.4	319 05.2	+02.5	320 04.3	+02.5	14
15	331 10.3	+02.4	332 09.4	+02.5	333 08.5	+02.5	334 07.7	+02.4	335 06.8	+02.5	15
16	346 12.7	+02.5	347 11.9	+02.4	348 11.0	+02.5	349 10.1	+02.5	350 09.3	+02.4	16
17	1 15.2	+02.4	2 14.3	+02.5	3 13.5	+02.4	4 12.6	+02.5	5 11.7	+02.5	17
18	16 17.6	+02.5	17 16.8	+02.4	18 15.9	+02.5	19 15.1	+02.4	20 14.2	+02.5	18
19	31 20.1	+02.5	32 19.2	+02.5	33 18.4	+02.4	34 17.5	+02.5	35 16.7	+02.4	19
20	46 22.6	+02.4	47 21.7	+02.5	48 20.8	+02.5	49 20.0	+02.5	50 19.1	+02.5	20
21	61 25.0	+02.5	62 24.2	+02.4	63 23.3	+02.5	64 22.5	+02.4	65 21.6	+02.5	21
22	76 27.5	+02.5	77 26.6	+02.5	78 25.8	+02.4	79 24.9	+02.5	80 24.1	+02.4	22
23	91 30.0	+02.4	92 29.1	+02.5	93 28.2	+02.5	94 27.4	+02.4	95 26.5	+02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.4	N 29 12.8	Gienah	175 46.0	S 17 39.7
Ankaa	353 09.8	S 42 11.4	Acrux	173 02.7	S 63 12.9
Schedir	349 33.9	N 56 39.7	Gacrux	171 54.3	S 57 13.7
Diphda	348 49.9	S 17 52.2	Alioth	166 15.3	N 55 50.2
Achernar	335 22.0	S 57 07.9	Spica	158 24.9	S 11 16.4
Hamal	327 53.9	N 23 34.0	Alkaid	152 54.1	N 49 12.0
Polaris	314 55.9	N 89 21.7	Hadar	148 39.6	S 60 28.4
Acamar	315 13.4	S 40 13.3	Menkent	148 00.3	S 36 28.2
Menkar	314 08.5	N 04 10.5	Arcturus	145 49.9	N 19 04.7
Mirfak	308 31.4	N 49 56.5	Rigel Kentaurus	139 41.3	S 60 55.4
Aldebaran	290 42.2	N 16 33.2	Zubenelgenubi	136 58.9	S 16 07.8
Capella	280 25.1	N 46 01.4	Kocab	137 20.4	N 74 03.6
Rigel	281 05.9	S 08 10.7	Alphecca	126 06.1	N 26 38.4
Bellatrix	278 25.2	N 06 22.1	Antares	112 19.3	S 26 28.7
Elnath	278 04.6	N 28 37.6	Atria	107 16.1	S 69 03.8
Alnilam	275 39.9	S 01 11.3	Sabik	102 05.9	S 15 45.1
Betelgeuze	270 54.4	N 07 24.6	Shaula	96 14.1	S 37 07.1
Canopus	263 52.9	S 52 42.5	Rasalhague	96 01.2	N 12 32.7
Sirius	258 27.9	S 16 44.4	Etamin	90 43.9	N 51 29.1
Adhara	255 07.4	S 29 00.1	Kaus Australis	83 36.2	S 34 22.4
Castor	245 59.7	N 31 50.4	Vega	80 35.4	N 38 48.1
Procyon	244 52.9	N 05 10.4	Nunki	75 51.2	S 26 16.2
Pollux	243 19.6	N 27 58.3	Albireo	67 06.4	N 28 00.3
Avior	234 15.1	S 59 34.7	Altair	62 02.9	N 08 55.4
Suhail	222 47.7	S 43 31.1	Peacock	53 10.2	S 56 40.0
Miaplacidus	221 37.7	S 69 48.2	Deneb	49 27.9	N 45 21.6
Alphard	217 49.9	S 08 45.2	Enif	33 41.5	N 09 58.5
Regulus	207 36.7	N 11 51.5	Alnair	27 36.4	S 46 51.5
Dubhe	193 43.7	N 61 37.7	Formalhaut	15 17.6	S 29 30.5
Denebola	182 27.2	N 14 27.0	Markab	13 32.5	N 15 19.4

2022 - First Point of Aries / Selected Stars

UT	day 11 of 365		day 12 of 365		day 13 of 365		day 14 of 365		day 15 of 365		UT					
	<i>January 11</i>		<i>January 12</i>		<i>January 13</i>		<i>January 14</i>		<i>January 15</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	110	29.0	+02.4	111	28.1	+02.5	112	27.3	+02.4	113	26.4	+02.5	114	25.5	+02.5	00
01	125	31.4	+02.5	126	30.6	+02.4	127	29.7	+02.5	128	28.9	+02.4	129	28.0	+02.5	01
02	140	33.9	+02.5	141	33.0	+02.5	142	32.2	+02.5	143	31.3	+02.5	144	30.5	+02.4	02
03	155	36.4	+02.4	156	35.5	+02.5	157	34.7	+02.4	158	33.8	+02.5	159	32.9	+02.5	03
04	170	38.8	+02.5	171	38.0	+02.4	172	37.1	+02.5	173	36.3	+02.4	174	35.4	+02.5	04
05	185	41.3	+02.5	186	40.4	+02.5	187	39.6	+02.4	188	38.7	+02.5	189	37.9	+02.4	05
06	200	43.8	+02.4	201	42.9	+02.5	202	42.0	+02.5	203	41.2	+02.4	204	40.3	+02.5	06
07	215	46.2	+02.5	216	45.4	+02.4	217	44.5	+02.5	218	43.6	+02.5	219	42.8	+02.5	07
08	230	48.7	+02.5	231	47.8	+02.5	232	47.0	+02.4	233	46.1	+02.5	234	45.3	+02.4	08
09	245	51.2	+02.4	246	50.3	+02.5	247	49.4	+02.5	248	48.6	+02.4	249	47.7	+02.5	09
10	260	53.6	+02.5	261	52.8	+02.4	262	51.9	+02.5	263	51.0	+02.5	264	50.2	+02.4	10
11	275	56.1	+02.5	276	55.2	+02.5	277	54.4	+02.4	278	53.5	+02.5	279	52.6	+02.5	11
12	290	58.6	+02.4	291	57.7	+02.5	292	56.8	+02.5	293	56.0	+02.4	294	55.1	+02.5	12
13	306	01.0	+02.5	307	00.2	+02.4	307	59.3	+02.5	308	58.4	+02.5	309	57.6	+02.4	13
14	321	03.5	+02.4	322	02.6	+02.5	323	01.8	+02.4	324	00.9	+02.5	325	00.0	+02.5	14
15	336	05.9	+02.5	337	05.1	+02.4	338	04.2	+02.5	339	03.4	+02.4	340	02.5	+02.5	15
16	351	08.4	+02.5	352	07.5	+02.5	353	06.7	+02.4	354	05.8	+02.5	355	05.0	+02.4	16
17	6	10.9	+02.4	7	10.0	+02.5	8	09.1	+02.5	9	08.3	+02.5	10	07.4	+02.5	17
18	21	13.3	+02.5	22	12.5	+02.4	23	11.6	+02.5	24	10.8	+02.4	25	09.9	+02.5	18
19	36	15.8	+02.5	37	14.9	+02.5	38	14.1	+02.4	39	13.2	+02.5	40	12.4	+02.4	19
20	51	18.3	+02.4	52	17.4	+02.5	53	16.5	+02.5	54	15.7	+02.4	55	14.8	+02.5	20
21	66	20.7	+02.5	67	19.9	+02.4	68	19.0	+02.5	69	18.1	+02.5	70	17.3	+02.5	21
22	81	23.2	+02.5	82	22.3	+02.5	83	21.5	+02.4	84	20.6	+02.5	85	19.8	+02.4	22
23	96	25.7	+02.4	97	24.8	+02.5	98	23.9	+02.5	99	23.1	+02.4	100	22.2	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.5	N 29	12.8	Gienah	175	46.0	S 17	39.7
Ankaa	353	09.8	S 42	11.4	Acrux	173	02.6	S 63	12.9
Schedir	349	33.9	N 56	39.7	Gacrux	171	54.2	S 57	13.8
Diphda	348	49.9	S 17	52.2	Alioth	166	15.2	N 55	50.2
Achernar	335	22.1	S 57	07.9	Spica	158	24.9	S 11	16.5
Hamal	327	53.9	N 23	34.0	Alkaid	152	54.0	N 49	12.0
Polaris	314	58.1	N 89	21.7	Hadar	148	39.6	S 60	28.4
Acamar	315	13.4	S 40	13.3	Menkent	148	00.3	S 36	28.2
Menkar	314	08.6	N 04	10.5	Arcturus	145	49.9	N 19	04.7
Mirfak	308	31.5	N 49	56.5	Rigel Kentaurus	139	41.3	S 60	55.4
Aldebaran	290	42.2	N 16	33.2	Zubenelgenubi	136	58.8	S 16	07.8
Capella	280	25.1	N 46	01.4	Kocab	137	20.3	N 74	03.6
Rigel	281	05.9	S 08	10.7	Alphecca	126	06.1	N 26	38.4
Bellatrix	278	25.2	N 06	22.1	Antares	112	19.2	S 26	28.7
Elnath	278	04.6	N 28	37.6	Atria	107	16.0	S 69	03.8
Alnilam	275	39.9	S 01	11.4	Sabik	102	05.9	S 15	45.1
Betelgeuze	270	54.4	N 07	24.6	Shaula	96	14.1	S 37	07.1
Canopus	263	52.9	S 52	42.5	Rasalhague	96	01.2	N 12	32.7
Sirius	258	27.9	S 16	44.4	Etamin	90	43.8	N 51	29.0
Adhara	255	07.4	S 29	00.2	Kaus Australis	83	36.2	S 34	22.4
Castor	245	59.7	N 31	50.4	Vega	80	35.4	N 38	48.1
Procyon	244	52.8	N 05	10.4	Nunki	75	51.2	S 26	16.1
Pollux	243	19.6	N 27	58.3	Albireo	67	06.4	N 28	00.3
Avior	234	15.0	S 59	34.7	Altair	62	02.9	N 08	55.4
Suhail	222	47.7	S 43	31.1	Peacock	53	10.2	S 56	39.9
Miaplacidus	221	37.7	S 69	48.3	Deneb	49	27.9	N 45	21.5
Alphard	217	49.9	S 08	45.2	Enif	33	41.5	N 09	58.5
Regulus	207	36.7	N 11	51.5	Alnair	27	36.4	S 46	51.5
Dubhe	193	43.6	N 61	37.7	Formalhaut	15	17.6	S 29	30.5
Denebola	182	27.2	N 14	26.9	Markab	13	32.5	N 15	19.4

2022 - First Point of Aries / Selected Stars

UT	day 16 of 365			day 17 of 365			day 18 of 365			day 19 of 365			day 20 of 365			UT		
	January 16			January 17			January 18			January 19			January 20					
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA				
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"
00	115	24.7	+02.4	116	23.8	+02.5	117	23.0	+02.4	118	22.1	+02.5	119	21.2	+02.5	00		
01	130	27.1	+02.5	131	26.3	+02.4	132	25.4	+02.5	133	24.6	+02.4	134	23.7	+02.5	01		
02	145	29.6	+02.5	146	28.7	+02.5	147	27.9	+02.5	148	27.0	+02.5	149	26.2	+02.4	02		
03	160	32.1	+02.4	161	31.2	+02.5	162	30.4	+02.4	163	29.5	+02.5	164	28.6	+02.5	03		
04	175	34.5	+02.5	176	33.7	+02.4	177	32.8	+02.5	178	32.0	+02.4	179	31.1	+02.5	04		
05	190	37.0	+02.5	191	36.1	+02.5	192	35.3	+02.4	193	34.4	+02.5	194	33.6	+02.4	05		
06	205	39.5	+02.4	206	38.6	+02.5	207	37.7	+02.5	208	36.9	+02.5	209	36.0	+02.5	06		
07	220	41.9	+02.5	221	41.1	+02.4	222	40.2	+02.5	223	39.4	+02.4	224	38.5	+02.5	07		
08	235	44.4	+02.5	236	43.5	+02.5	237	42.7	+02.4	238	41.8	+02.5	239	41.0	+02.4	08		
09	250	46.9	+02.4	251	46.0	+02.5	252	45.1	+02.5	253	44.3	+02.4	254	43.4	+02.5	09		
10	265	49.3	+02.5	266	48.5	+02.4	267	47.6	+02.5	268	46.7	+02.5	269	45.9	+02.4	10		
11	280	51.8	+02.5	281	50.9	+02.5	282	50.1	+02.4	283	49.2	+02.5	284	48.3	+02.5	11		
12	295	54.3	+02.4	296	53.4	+02.5	297	52.5	+02.5	298	51.7	+02.4	299	50.8	+02.5	12		
13	310	56.7	+02.5	311	55.9	+02.4	312	55.0	+02.5	313	54.1	+02.5	314	53.3	+02.4	13		
14	325	59.2	+02.4	326	58.3	+02.5	327	57.5	+02.4	328	56.6	+02.5	329	55.7	+02.5	14		
15	341	01.6	+02.5	342	00.8	+02.4	342	59.9	+02.5	343	59.1	+02.4	344	58.2	+02.5	15		
16	356	04.1	+02.5	357	03.2	+02.5	358	02.4	+02.5	359	01.5	+02.5	0	00.7	+02.4	16		
17	11	06.6	+02.4	12	05.7	+02.5	13	04.9	+02.4	14	04.0	+02.5	15	03.1	+02.5	17		
18	26	09.0	+02.5	27	08.2	+02.4	28	07.3	+02.5	29	06.5	+02.4	30	05.6	+02.5	18		
19	41	11.5	+02.5	42	10.6	+02.5	43	09.8	+02.4	44	08.9	+02.5	45	08.1	+02.4	19		
20	56	14.0	+02.4	57	13.1	+02.5	58	12.2	+02.5	59	11.4	+02.4	60	10.5	+02.5	20		
21	71	16.4	+02.5	72	15.6	+02.4	73	14.7	+02.5	74	13.8	+02.5	75	13.0	+02.5	21		
22	86	18.9	+02.5	87	18.0	+02.5	88	17.2	+02.4	89	16.3	+02.5	90	15.5	+02.4	22		
23	101	21.4	+02.4	102	20.5	+02.5	103	19.6	+02.5	104	18.8	+02.4	105	17.9	+02.5	23		

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	37.5	N 29	12.8	Gienah	175	45.9	S 17	39.7
Ankaa	353	09.8	S 42	11.4	Acrux	173	02.5	S 63	12.9
Schedir	349	33.9	N 56	39.7	Gacrux	171	54.2	S 57	13.8
Diphda	348	49.9	S 17	52.2	Alioth	166	15.2	N 55	50.2
Achernar	335	22.1	S 57	07.9	Spica	158	24.8	S 11	16.5
Hamal	327	53.9	N 23	34.0	Alkaid	152	54.0	N 49	12.0
Polaris	314	60.0	N 89	21.7	Hadar	148	39.5	S 60	28.4
Acamar	315	13.5	S 40	13.3	Menkent	148	00.2	S 36	28.2
Menkar	314	08.6	N 04	10.5	Arcturus	145	49.9	N 19	04.7
Mirfak	308	31.5	N 49	56.5	Rigel Kentaurus	139	41.2	S 60	55.4
Aldebaran	290	42.2	N 16	33.2	Zubenelgenubi	136	58.8	S 16	07.8
Capella	280	25.1	N 46	01.4	Kocab	137	20.2	N 74	03.6
Rigel	281	05.9	S 08	10.7	Alphecca	126	06.1	N 26	38.3
Bellatrix	278	25.2	N 06	22.1	Antares	112	19.2	S 26	28.7
Elnath	278	04.6	N 28	37.6	Atria	107	16.0	S 69	03.7
Alnilam	275	39.9	S 01	11.4	Sabik	102	05.9	S 15	45.1
Betelgeuze	270	54.4	N 07	24.6	Shaula	96	14.0	S 37	07.1
Canopus	263	52.9	S 52	42.6	Rasalhague	96	01.1	N 12	32.7
Sirius	258	27.9	S 16	44.4	Etamin	90	43.8	N 51	29.0
Adhara	255	07.4	S 29	00.2	Kaus Australis	83	36.1	S 34	22.4
Castor	245	59.7	N 31	50.4	Vega	80	35.4	N 38	48.0
Procyon	244	52.8	N 05	10.4	Nunki	75	51.2	S 26	16.1
Pollux	243	19.6	N 27	58.3	Albireo	67	06.4	N 28	00.3
Avior	234	15.0	S 59	34.7	Altair	62	02.8	N 08	55.4
Suhail	222	47.6	S 43	31.2	Peacock	53	10.2	S 56	39.9
Miaplacidus	221	37.6	S 69	48.3	Deneb	49	27.9	N 45	21.5
Alphard	217	49.8	S 08	45.2	Enif	33	41.5	N 09	58.5
Regulus	207	36.7	N 11	51.5	Alnair	27	36.5	S 46	51.5
Dubhe	193	43.5	N 61	37.7	Formalhaut	15	17.6	S 29	30.5
Denebola	182	27.1	N 14	26.9	Markab	13	32.5	N 15	19.4

2022 - First Point of Aries / Selected Stars

UT	day 21 of 365 <i>January 21</i>			day 22 of 365 <i>January 22</i>			day 23 of 365 <i>January 23</i>			day 24 of 365 <i>January 24</i>			day 25 of 365 <i>January 25</i>			UT
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
00	120	20.4	+02.4	121	19.5	+02.5	122	18.7	+02.4	123	17.8	+02.5	124	16.9	+02.5	00
01	135	22.8	+02.5	136	22.0	+02.4	137	21.1	+02.5	138	20.3	+02.4	139	19.4	+02.5	01
02	150	25.3	+02.5	151	24.4	+02.5	152	23.6	+02.4	153	22.7	+02.5	154	21.9	+02.4	02
03	165	27.8	+02.4	166	26.9	+02.5	167	26.0	+02.5	168	25.2	+02.4	169	24.3	+02.5	03
04	180	30.2	+02.5	181	29.4	+02.4	182	28.5	+02.5	183	27.6	+02.5	184	26.8	+02.5	04
05	195	32.7	+02.5	196	31.8	+02.5	197	31.0	+02.4	198	30.1	+02.5	199	29.3	+02.4	05
06	210	35.2	+02.4	211	34.3	+02.5	212	33.4	+02.5	213	32.6	+02.4	214	31.7	+02.5	06
07	225	37.6	+02.5	226	36.8	+02.4	227	35.9	+02.5	228	35.0	+02.5	229	34.2	+02.4	07
08	240	40.1	+02.5	241	39.2	+02.5	242	38.4	+02.4	243	37.5	+02.5	244	36.6	+02.5	08
09	255	42.6	+02.4	256	41.7	+02.5	257	40.8	+02.5	258	40.0	+02.4	259	39.1	+02.5	09
10	270	45.0	+02.5	271	44.2	+02.4	272	43.3	+02.5	273	42.4	+02.5	274	41.6	+02.4	10
11	285	47.5	+02.4	286	46.6	+02.5	287	45.8	+02.4	288	44.9	+02.5	289	44.0	+02.5	11
12	300	49.9	+02.5	301	49.1	+02.5	302	48.2	+02.5	303	47.4	+02.4	304	46.5	+02.5	12
13	315	52.4	+02.5	316	51.6	+02.4	317	50.7	+02.5	318	49.8	+02.5	319	49.0	+02.4	13
14	330	54.9	+02.4	331	54.0	+02.5	332	53.2	+02.4	333	52.3	+02.5	334	51.4	+02.5	14
15	345	57.3	+02.5	346	56.5	+02.4	347	55.6	+02.5	348	54.8	+02.4	349	53.9	+02.5	15
16	0	59.8	+02.5	1	58.9	+02.5	2	58.1	+02.4	3	57.2	+02.5	4	56.4	+02.4	16
17	16	02.3	+02.4	17	01.4	+02.5	18	00.5	+02.5	18	59.7	+02.4	19	58.8	+02.5	17
18	31	04.7	+02.5	32	03.9	+02.4	33	03.0	+02.5	34	02.1	+02.5	35	01.3	+02.4	18
19	46	07.2	+02.5	47	06.3	+02.5	48	05.5	+02.4	49	04.6	+02.5	50	03.7	+02.5	19
20	61	09.7	+02.4	62	08.8	+02.5	63	07.9	+02.5	64	07.1	+02.4	65	06.2	+02.5	20
21	76	12.1	+02.5	77	11.3	+02.4	78	10.4	+02.5	79	09.5	+02.5	80	08.7	+02.4	21
22	91	14.6	+02.5	92	13.7	+02.5	93	12.9	+02.4	94	12.0	+02.5	95	11.1	+02.5	22
23	106	17.1	+02.4	107	16.2	+02.5	108	15.3	+02.5	109	14.5	+02.4	110	13.6	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.5	N 29	12.8	Gienah	175	45.9	S 17	39.8
Ankaa	353	09.8	S 42	11.4	Acrux	173	02.4	S 63	12.9
Schedir	349	34.0	N 56	39.6	Gacrux	171	54.1	S 57	13.8
Diphda	348	49.9	S 17	52.2	Alioth	166	15.1	N 55	50.2
Achernar	335	22.1	S 57	07.9	Spica	158	24.8	S 11	16.5
Hamal	327	54.0	N 23	34.0	Alkaid	152	53.9	N 49	12.0
Polaris	315	02.3	N 89	21.7	Hadar	148	39.4	S 60	28.4
Acamar	315	13.5	S 40	13.3	Menkent	148	00.2	S 36	28.2
Menkar	314	08.6	N 04	10.5	Arcturus	145	49.8	N 19	04.7
Mirfak	308	31.5	N 49	56.5	Rigel Kentaurus	139	41.1	S 60	55.4
Aldebaran	290	42.2	N 16	33.2	Zubenelgenubi	136	58.7	S 16	07.9
Capella	280	25.1	N 46	01.4	Kocab	137	20.1	N 74	03.6
Rigel	281	05.9	S 08	10.7	Alphecca	126	06.0	N 26	38.3
Bellatrix	278	25.2	N 06	22.1	Antares	112	19.2	S 26	28.7
Elnath	278	04.6	N 28	37.6	Atria	107	15.9	S 69	03.7
Alnilam	275	39.9	S 01	11.4	Sabik	102	05.8	S 15	45.1
Betelgeuze	270	54.4	N 07	24.6	Shaula	96	14.0	S 37	07.1
Canopus	263	53.0	S 52	42.6	Rasalhague	96	01.1	N 12	32.6
Sirius	258	27.9	S 16	44.4	Etamin	90	43.8	N 51	29.0
Adhara	255	07.4	S 29	00.2	Kaus Australis	83	36.1	S 34	22.4
Castor	245	59.7	N 31	50.4	Vega	80	35.3	N 38	48.0
Procyon	244	52.8	N 05	10.4	Nunki	75	51.1	S 26	16.1
Pollux	243	19.6	N 27	58.3	Albireo	67	06.4	N 28	00.2
Avior	234	15.0	S 59	34.8	Altair	62	02.8	N 08	55.4
Suhail	222	47.6	S 43	31.2	Peacock	53	10.2	S 56	39.9
Miaplacidus	221	37.6	S 69	48.3	Deneb	49	27.9	N 45	21.5
Alphard	217	49.8	S 08	45.3	Enif	33	41.5	N 09	58.5
Regulus	207	36.6	N 11	51.5	Alnair	27	36.5	S 46	51.4
Dubhe	193	43.5	N 61	37.7	Formalhaut	15	17.6	S 29	30.5
Denebola	182	27.1	N 14	26.9	Markab	13	32.6	N 15	19.4

2022 - First Point of Aries / Selected Stars

UT	day 26 of 365 January 26		day 27 of 365 January 27		day 28 of 365 January 28		day 29 of 365 January 29		day 30 of 365 January 30		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	125	16.1 +02.4	126	15.2 +02.5	127	14.3 +02.5	128	13.5 +02.5	129	12.6 +02.5	00
01	140	18.5 +02.5	141	17.7 +02.4	142	16.8 +02.5	143	16.0 +02.4	144	15.1 +02.5	01
02	155	21.0 +02.5	156	20.1 +02.5	157	19.3 +02.4	158	18.4 +02.5	159	17.6 +02.4	02
03	170	23.5 +02.4	171	22.6 +02.5	172	21.7 +02.5	173	20.9 +02.4	174	20.0 +02.5	03
04	185	25.9 +02.5	186	25.1 +02.4	187	24.2 +02.5	188	23.3 +02.5	189	22.5 +02.5	04
05	200	28.4 +02.5	201	27.5 +02.5	202	26.7 +02.4	203	25.8 +02.5	204	25.0 +02.4	05
06	215	30.9 +02.4	216	30.0 +02.5	217	29.1 +02.5	218	28.3 +02.4	219	27.4 +02.5	06
07	230	33.3 +02.5	231	32.5 +02.4	232	31.6 +02.5	233	30.7 +02.5	234	29.9 +02.4	07
08	245	35.8 +02.4	246	34.9 +02.5	247	34.1 +02.4	248	33.2 +02.5	249	32.3 +02.5	08
09	260	38.2 +02.5	261	37.4 +02.4	262	36.5 +02.5	263	35.7 +02.4	264	34.8 +02.5	09
10	275	40.7 +02.5	276	39.8 +02.5	277	39.0 +02.5	278	38.1 +02.5	279	37.3 +02.4	10
11	290	43.2 +02.4	291	42.3 +02.5	292	41.5 +02.4	293	40.6 +02.5	294	39.7 +02.5	11
12	305	45.6 +02.5	306	44.8 +02.4	307	43.9 +02.5	308	43.1 +02.4	309	42.2 +02.5	12
13	320	48.1 +02.5	321	47.2 +02.5	322	46.4 +02.4	323	45.5 +02.5	324	44.7 +02.4	13
14	335	50.6 +02.4	336	49.7 +02.5	337	48.8 +02.5	338	48.0 +02.5	339	47.1 +02.5	14
15	350	53.0 +02.5	351	52.2 +02.4	352	51.3 +02.5	353	50.5 +02.4	354	49.6 +02.5	15
16	5	55.5 +02.5	6	54.6 +02.5	7	53.8 +02.4	8	52.9 +02.5	9	52.1 +02.4	16
17	20	58.0 +02.4	21	57.1 +02.5	22	56.2 +02.5	23	55.4 +02.4	24	54.5 +02.5	17
18	36	00.4 +02.5	36	59.6 +02.4	37	58.7 +02.5	38	57.8 +02.5	39	57.0 +02.5	18
19	51	02.9 +02.5	52	02.0 +02.5	53	01.2 +02.4	54	00.3 +02.5	54	59.5 +02.4	19
20	66	05.4 +02.4	67	04.5 +02.5	68	03.6 +02.5	69	02.8 +02.4	70	01.9 +02.5	20
21	81	07.8 +02.5	82	07.0 +02.4	83	06.1 +02.5	84	05.2 +02.5	85	04.4 +02.4	21
22	96	10.3 +02.4	97	09.4 +02.5	98	08.6 +02.4	99	07.7 +02.5	100	06.8 +02.5	22
23	111	12.7 +02.5	112	11.9 +02.4	113	11.0 +02.5	114	10.2 +02.4	115	09.3 +02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.5	N 29 12.8	Gienah	175 45.8	S 17 39.8
Ankaa	353 09.9	S 42 11.4	Acrux	173 02.4	S 63 13.0
Schedir	349 34.0	N 56 39.6	Gacrux	171 54.1	S 57 13.8
Diphda	348 49.9	S 17 52.2	Alioth	166 15.1	N 55 50.2
Achernar	335 22.2	S 57 07.9	Spica	158 24.8	S 11 16.5
Hamal	327 54.0	N 23 34.0	Alkaid	152 53.8	N 49 12.0
Polaris	315 04.7	N 89 21.7	Hadar	148 39.3	S 60 28.4
Acamar	315 13.5	S 40 13.3	Menkent	148 00.1	S 36 28.2
Menkar	314 08.6	N 04 10.5	Arcturus	145 49.8	N 19 04.7
Mirfak	308 31.5	N 49 56.5	Rigel Kentaurus	139 41.1	S 60 55.4
Aldebaran	290 42.2	N 16 33.2	Zubenelgenubi	136 58.7	S 16 07.9
Capella	280 25.1	N 46 01.4	Kocab	137 20.0	N 74 03.6
Rigel	281 06.0	S 08 10.7	Alphecca	126 06.0	N 26 38.3
Bellatrix	278 25.2	N 06 22.1	Antares	112 19.1	S 26 28.7
Elnath	278 04.6	N 28 37.6	Atria	107 15.8	S 69 03.7
Alnilam	275 39.9	S 01 11.4	Sabik	102 05.8	S 15 45.1
Betelgeuze	270 54.4	N 07 24.6	Shaula	96 14.0	S 37 07.1
Canopus	263 53.0	S 52 42.6	Rasalhague	96 01.1	N 12 32.6
Sirius	258 27.9	S 16 44.5	Etamin	90 43.7	N 51 29.0
Adhara	255 07.4	S 29 00.2	Kaus Australis	83 36.1	S 34 22.3
Castor	245 59.7	N 31 50.4	Vega	80 35.3	N 38 48.0
Procyon	244 52.8	N 05 10.4	Nunki	75 51.1	S 26 16.1
Pollux	243 19.6	N 27 58.4	Albireo	67 06.4	N 28 00.2
Avior	234 15.0	S 59 34.8	Altair	62 02.8	N 08 55.3
Suhail	222 47.6	S 43 31.2	Peacock	53 10.2	S 56 39.9
Miaplacidus	221 37.6	S 69 48.4	Deneb	49 27.9	N 45 21.5
Alphard	217 49.8	S 08 45.3	Enif	33 41.5	N 09 58.5
Regulus	207 36.6	N 11 51.5	Alnair	27 36.5	S 46 51.4
Dubhe	193 43.4	N 61 37.8	Formalhaut	15 17.6	S 29 30.5
Denebola	182 27.1	N 14 26.9	Markab	13 32.6	N 15 19.4

2022 - First Point of Aries / Selected Stars

UT	day 31 of 365 January 31			day 32 of 365 February 1			day 33 of 365 February 2			day 34 of 365 February 3			day 35 of 365 February 4			UT
	GHA		ddGHA	GHA		ddGHA	GHA		ddGHA	GHA		ddGHA	GHA		ddGHA	
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	
00	130	11.8	+02.4	131	10.9	+02.5	132	10.1	+02.4	133	09.2	+02.5	134	08.3	+02.5	00
01	145	14.2	+02.5	146	13.4	+02.4	147	12.5	+02.5	148	11.7	+02.4	149	10.8	+02.5	01
02	160	16.7	+02.5	161	15.8	+02.5	162	15.0	+02.4	163	14.1	+02.5	164	13.3	+02.4	02
03	175	19.2	+02.4	176	18.3	+02.5	177	17.4	+02.5	178	16.6	+02.4	179	15.7	+02.5	03
04	190	21.6	+02.5	191	20.8	+02.4	192	19.9	+02.5	193	19.0	+02.5	194	18.2	+02.4	04
05	205	24.1	+02.5	206	23.2	+02.5	207	22.4	+02.4	208	21.5	+02.5	209	20.6	+02.5	05
06	220	26.6	+02.4	221	25.7	+02.5	222	24.8	+02.5	223	24.0	+02.4	224	23.1	+02.5	06
07	235	29.0	+02.5	236	28.2	+02.4	237	27.3	+02.5	238	26.4	+02.5	239	25.6	+02.4	07
08	250	31.5	+02.5	251	30.6	+02.5	252	29.8	+02.4	253	28.9	+02.5	254	28.0	+02.5	08
09	265	34.0	+02.4	266	33.1	+02.5	267	32.2	+02.5	268	31.4	+02.4	269	30.5	+02.5	09
10	280	36.4	+02.5	281	35.6	+02.4	282	34.7	+02.5	283	33.8	+02.5	284	33.0	+02.4	10
11	295	38.9	+02.4	296	38.0	+02.5	297	37.2	+02.4	298	36.3	+02.5	299	35.4	+02.5	11
12	310	41.3	+02.5	311	40.5	+02.4	312	39.6	+02.5	313	38.8	+02.4	314	37.9	+02.5	12
13	325	43.8	+02.5	326	42.9	+02.5	327	42.1	+02.5	328	41.2	+02.5	329	40.4	+02.4	13
14	340	46.3	+02.4	341	45.4	+02.5	342	44.6	+02.4	343	43.7	+02.5	344	42.8	+02.5	14
15	355	48.7	+02.5	356	47.9	+02.4	357	47.0	+02.5	358	46.2	+02.4	359	45.3	+02.5	15
16	10	51.2	+02.5	11	50.3	+02.5	12	49.5	+02.4	13	48.6	+02.5	14	47.8	+02.4	16
17	25	53.7	+02.4	26	52.8	+02.5	27	51.9	+02.5	28	51.1	+02.4	29	50.2	+02.5	17
18	40	56.1	+02.5	41	55.3	+02.4	42	54.4	+02.5	43	53.5	+02.5	44	52.7	+02.4	18
19	55	58.6	+02.5	56	57.7	+02.5	57	56.9	+02.4	58	56.0	+02.5	59	55.1	+02.5	19
20	71	01.1	+02.4	72	00.2	+02.5	72	59.3	+02.5	73	58.5	+02.4	74	57.6	+02.5	20
21	86	03.5	+02.5	87	02.7	+02.4	88	01.8	+02.5	89	00.9	+02.5	90	00.1	+02.4	21
22	101	06.0	+02.4	102	05.1	+02.5	103	04.3	+02.4	104	03.4	+02.5	105	02.5	+02.5	22
23	116	08.4	+02.5	117	07.6	+02.5	118	06.7	+02.5	119	05.9	+02.4	120	05.0	+02.5	23

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	37.5	N 29	12.8	Gienah	175	45.8	S 17	39.8
Ankaa	353	09.9	S 42	11.4	Acrux	173	02.3	S 63	13.0
Schedir	349	34.0	N 56	39.6	Gacrux	171	54.0	S 57	13.8
Diphda	348	50.0	S 17	52.2	Alioth	166	15.0	N 55	50.2
Achernar	335	22.2	S 57	07.9	Spica	158	24.7	S 11	16.5
Hamal	327	54.0	N 23	34.0	Alkaid	152	53.8	N 49	12.0
Polaris	315	06.8	N 89	21.7	Hadar	148	39.3	S 60	28.4
Acamar	315	13.5	S 40	13.3	Menkent	148	00.1	S 36	28.2
Menkar	314	08.6	N 04	10.5	Arcturus	145	49.7	N 19	04.6
Mirfak	308	31.6	N 49	56.5	Rigel Kentaurus	139	41.0	S 60	55.4
Aldebaran	290	42.2	N 16	33.2	Zubenelgenubi	136	58.6	S 16	07.9
Capella	280	25.1	N 46	01.4	Kocab	137	19.9	N 74	03.6
Rigel	281	06.0	S 08	10.7	Alphecca	126	05.9	N 26	38.3
Bellatrix	278	25.2	N 06	22.1	Antares	112	19.1	S 26	28.7
Elnath	278	04.6	N 28	37.6	Atria	107	15.7	S 69	03.7
Alnilam	275	39.9	S 01	11.4	Sabik	102	05.8	S 15	45.1
Betelgeuze	270	54.4	N 07	24.6	Shaula	96	13.9	S 37	07.1
Canopus	263	53.0	S 52	42.6	Rasalhague	96	01.0	N 12	32.6
Sirius	258	27.9	S 16	44.5	Etamin	90	43.7	N 51	28.9
Adhara	255	07.4	S 29	00.2	Kaus Australis	83	36.0	S 34	22.3
Castor	245	59.7	N 31	50.4	Vega	80	35.3	N 38	48.0
Procyon	244	52.8	N 05	10.4	Nunki	75	51.1	S 26	16.1
Pollux	243	19.5	N 27	58.4	Albireo	67	06.3	N 28	00.2
Avior	234	15.0	S 59	34.8	Altair	62	02.8	N 08	55.3
Suhail	222	47.6	S 43	31.3	Peacock	53	10.1	S 56	39.9
Miaplacidus	221	37.6	S 69	48.4	Deneb	49	27.9	N 45	21.4
Alphard	217	49.8	S 08	45.3	Enif	33	41.5	N 09	58.4
Regulus	207	36.6	N 11	51.5	Alnair	27	36.5	S 46	51.4
Dubhe	193	43.4	N 61	37.8	Formalhaut	15	17.6	S 29	30.5
Denebola	182	27.0	N 14	26.9	Markab	13	32.6	N 15	19.4

2022 - First Point of Aries / Selected Stars

UT	day 36 of 365 February 5			day 37 of 365 February 6			day 38 of 365 February 7			day 39 of 365 February 8			day 40 of 365 February 9			UT
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
00	135	07.5	+02.4	136	06.6	+02.5	137	05.7	+02.5	138	04.9	+02.4	139	04.0	+02.5	00
01	150	09.9	+02.5	151	09.1	+02.4	152	08.2	+02.5	153	07.3	+02.5	154	06.5	+02.4	01
02	165	12.4	+02.5	166	11.5	+02.5	167	10.7	+02.4	168	09.8	+02.5	169	08.9	+02.5	02
03	180	14.9	+02.4	181	14.0	+02.5	182	13.1	+02.5	183	12.3	+02.4	184	11.4	+02.5	03
04	195	17.3	+02.5	196	16.5	+02.4	197	15.6	+02.5	198	14.7	+02.5	199	13.9	+02.4	04
05	210	19.8	+02.5	211	18.9	+02.5	212	18.1	+02.4	213	17.2	+02.5	214	16.3	+02.5	05
06	225	22.3	+02.4	226	21.4	+02.5	227	20.5	+02.5	228	19.7	+02.4	229	18.8	+02.5	06
07	240	24.7	+02.5	241	23.9	+02.4	242	23.0	+02.5	243	22.1	+02.5	244	21.3	+02.4	07
08	255	27.2	+02.4	256	26.3	+02.5	257	25.5	+02.4	258	24.6	+02.5	259	23.7	+02.5	08
09	270	29.6	+02.5	271	28.8	+02.4	272	27.9	+02.5	273	27.1	+02.4	274	26.2	+02.5	09
10	285	32.1	+02.5	286	31.2	+02.5	287	30.4	+02.4	288	29.5	+02.5	289	28.7	+02.4	10
11	300	34.6	+02.4	301	33.7	+02.5	302	32.8	+02.5	303	32.0	+02.4	304	31.1	+02.5	11
12	315	37.0	+02.5	316	36.2	+02.4	317	35.3	+02.5	318	34.4	+02.5	319	33.6	+02.5	12
13	330	39.5	+02.5	331	38.6	+02.5	332	37.8	+02.4	333	36.9	+02.5	334	36.1	+02.4	13
14	345	42.0	+02.4	346	41.1	+02.5	347	40.2	+02.5	348	39.4	+02.4	349	38.5	+02.5	14
15	0	44.4	+02.5	1	43.6	+02.4	2	42.7	+02.5	3	41.8	+02.5	4	41.0	+02.4	15
16	15	46.9	+02.5	16	46.0	+02.5	17	45.2	+02.4	18	44.3	+02.5	19	43.4	+02.5	16
17	30	49.4	+02.4	31	48.5	+02.5	32	47.6	+02.5	33	46.8	+02.4	34	45.9	+02.5	17
18	45	51.8	+02.5	46	51.0	+02.4	47	50.1	+02.5	48	49.2	+02.5	49	48.4	+02.4	18
19	60	54.3	+02.4	61	53.4	+02.5	62	52.6	+02.4	63	51.7	+02.5	64	50.8	+02.5	19
20	75	56.7	+02.5	76	55.9	+02.4	77	55.0	+02.5	78	54.2	+02.4	79	53.3	+02.5	20
21	90	59.2	+02.5	91	58.3	+02.5	92	57.5	+02.5	93	56.6	+02.5	94	55.8	+02.4	21
22	106	01.7	+02.4	107	00.8	+02.5	107	60.0	+02.4	108	59.1	+02.5	109	58.2	+02.5	22
23	121	04.1	+02.5	122	03.3	+02.4	123	02.4	+02.5	124	01.6	+02.4	125	00.7	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.5	N 29	12.8	Gienah	175	45.8	S 17	39.8
Ankaa	353	09.9	S 42	11.4	Acrux	173	02.3	S 63	13.0
Schedir	349	34.1	N 56	39.6	Gacrux	171	53.9	S 57	13.9
Diphda	348	50.0	S 17	52.2	Alioth	166	14.9	N 55	50.2
Achernar	335	22.3	S 57	07.9	Spica	158	24.7	S 11	16.5
Hamal	327	54.0	N 23	34.0	Alkaid	152	53.7	N 49	12.0
Polaris	315	09.5	N 89	21.7	Hadar	148	39.2	S 60	28.4
Acamar	315	13.6	S 40	13.3	Menkent	148	00.0	S 36	28.3
Menkar	314	08.6	N 04	10.5	Arcturus	145	49.7	N 19	04.6
Mirfak	308	31.6	N 49	56.5	Rigel Kentaurus	139	40.9	S 60	55.4
Aldebaran	290	42.2	N 16	33.2	Zubenelgenubi	136	58.6	S 16	07.9
Capella	280	25.2	N 46	01.4	Kocab	137	19.8	N 74	03.6
Rigel	281	06.0	S 08	10.7	Alphecca	126	05.9	N 26	38.3
Bellatrix	278	25.2	N 06	22.1	Antares	112	19.0	S 26	28.7
Elnath	278	04.7	N 28	37.6	Atria	107	15.6	S 69	03.7
Alnilam	275	39.9	S 01	11.4	Sabik	102	05.7	S 15	45.1
Betelgeuze	270	54.4	N 07	24.6	Shaula	96	13.9	S 37	07.1
Canopus	263	53.0	S 52	42.6	Rasalhague	96	01.0	N 12	32.6
Sirius	258	27.9	S 16	44.5	Etamin	90	43.7	N 51	28.9
Adhara	255	07.4	S 29	00.3	Kaus Australis	83	36.0	S 34	22.3
Castor	245	59.7	N 31	50.4	Vega	80	35.3	N 38	47.9
Procyon	244	52.8	N 05	10.4	Nunki	75	51.0	S 26	16.1
Pollux	243	19.5	N 27	58.4	Albireo	67	06.3	N 28	00.2
Avior	234	15.0	S 59	34.9	Altair	62	02.8	N 08	55.3
Suhail	222	47.6	S 43	31.3	Peacock	53	10.1	S 56	39.8
Miaplacidus	221	37.6	S 69	48.4	Deneb	49	27.9	N 45	21.4
Alphard	217	49.8	S 08	45.3	Enif	33	41.5	N 09	58.4
Regulus	207	36.6	N 11	51.5	Alnair	27	36.4	S 46	51.4
Dubhe	193	43.3	N 61	37.8	Formalhaut	15	17.6	S 29	30.5
Denebola	182	27.0	N 14	26.9	Markab	13	32.6	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 41 of 365 February 10			day 42 of 365 February 11			day 43 of 365 February 12			day 44 of 365 February 13			day 45 of 365 February 14			UT
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
	° ' "	' "	' "	° ' "	' "	' "	° ' "	' "	' "	° ' "	' "	' "	° ' "	' "	' "	
00	140	03.2	+02.4	141	02.3	+02.5	142	01.4	+02.5	143	00.6	+02.4	143	59.7	+02.5	00
01	155	05.6	+02.5	156	04.8	+02.4	157	03.9	+02.5	158	03.0	+02.5	159	02.2	+02.4	01
02	170	08.1	+02.4	171	07.2	+02.5	172	06.4	+02.4	173	05.5	+02.5	174	04.6	+02.5	02
03	185	10.5	+02.5	186	09.7	+02.5	187	08.8	+02.5	188	08.0	+02.4	189	07.1	+02.5	03
04	200	13.0	+02.5	201	12.2	+02.4	202	11.3	+02.5	203	10.4	+02.5	204	09.6	+02.4	04
05	215	15.5	+02.4	216	14.6	+02.5	217	13.8	+02.4	218	12.9	+02.5	219	12.0	+02.5	05
06	230	17.9	+02.5	231	17.1	+02.4	232	16.2	+02.5	233	15.4	+02.4	234	14.5	+02.5	06
07	245	20.4	+02.5	246	19.5	+02.5	247	18.7	+02.4	248	17.8	+02.5	249	17.0	+02.4	07
08	260	22.9	+02.4	261	22.0	+02.5	262	21.1	+02.5	263	20.3	+02.5	264	19.4	+02.5	08
09	275	25.3	+02.5	276	24.5	+02.4	277	23.6	+02.5	278	22.8	+02.4	279	21.9	+02.5	09
10	290	27.8	+02.5	291	26.9	+02.5	292	26.1	+02.4	293	25.2	+02.5	294	24.4	+02.4	10
11	305	30.3	+02.4	306	29.4	+02.5	307	28.5	+02.5	308	27.7	+02.4	309	26.8	+02.5	11
12	320	32.7	+02.5	321	31.9	+02.4	322	31.0	+02.5	323	30.1	+02.5	324	29.3	+02.5	12
13	335	35.2	+02.5	336	34.3	+02.5	337	33.5	+02.4	338	32.6	+02.5	339	31.8	+02.4	13
14	350	37.7	+02.4	351	36.8	+02.5	352	35.9	+02.5	353	35.1	+02.4	354	34.2	+02.5	14
15	5	40.1	+02.5	6	39.3	+02.4	7	38.4	+02.5	8	37.5	+02.5	9	36.7	+02.4	15
16	20	42.6	+02.4	21	41.7	+02.5	22	40.9	+02.4	23	40.0	+02.5	24	39.1	+02.5	16
17	35	45.0	+02.5	36	44.2	+02.5	37	43.3	+02.5	38	42.5	+02.4	39	41.6	+02.5	17
18	50	47.5	+02.5	51	46.7	+02.4	52	45.8	+02.5	53	44.9	+02.5	54	44.1	+02.4	18
19	65	50.0	+02.4	66	49.1	+02.5	67	48.3	+02.4	68	47.4	+02.5	69	46.5	+02.5	19
20	80	52.4	+02.5	81	51.6	+02.4	82	50.7	+02.5	83	49.9	+02.4	84	49.0	+02.5	20
21	95	54.9	+02.5	96	54.0	+02.5	97	53.2	+02.4	98	52.3	+02.5	99	51.5	+02.4	21
22	110	57.4	+02.4	111	56.5	+02.5	112	55.6	+02.5	113	54.8	+02.5	114	53.9	+02.5	22
23	125	59.8	+02.5	126	59.0	+02.4	127	58.1	+02.5	128	57.3	+02.4	129	56.4	+02.5	23

	SHA	Dec		SHA	Dec
	° ' "	° ' "		° ' "	° ' "
Alpheratz	357 37.5	N 29 12.7	Gienah	175 45.7	S 17 39.8
Ankaa	353 09.9	S 42 11.3	Acrux	173 02.2	S 63 13.0
Schedir	349 34.1	N 56 39.6	Gacrux	171 53.9	S 57 13.9
Diphda	348 50.0	S 17 52.2	Alioth	166 14.9	N 55 50.2
Achernar	335 22.3	S 57 07.8	Spica	158 24.6	S 11 16.6
Hamal	327 54.0	N 23 34.0	Alkaid	152 53.7	N 49 12.0
Polaris	315 11.8	N 89 21.7	Hadar	148 39.1	S 60 28.5
Acamar	315 13.6	S 40 13.3	Menkent	148 00.0	S 36 28.3
Menkar	314 08.7	N 04 10.5	Arcturus	145 49.6	N 19 04.6
Mirfak	308 31.6	N 49 56.5	Rigel Kentaurus	139 40.8	S 60 55.4
Aldebaran	290 42.3	N 16 33.2	Zubenelgenubi	136 58.6	S 16 07.9
Capella	280 25.2	N 46 01.4	Kocab	137 19.7	N 74 03.6
Rigel	281 06.0	S 08 10.7	Alphecca	126 05.8	N 26 38.3
Bellatrix	278 25.2	N 06 22.1	Antares	112 19.0	S 26 28.7
Elnath	278 04.7	N 28 37.6	Atria	107 15.5	S 69 03.7
Alnilam	275 40.0	S 01 11.4	Sabik	102 05.7	S 15 45.2
Betelgeuze	270 54.5	N 07 24.6	Shaula	96 13.8	S 37 07.1
Canopus	263 53.1	S 52 42.7	Rasalhague	96 01.0	N 12 32.6
Sirius	258 27.9	S 16 44.5	Etamin	90 43.6	N 51 28.9
Adhara	255 07.4	S 29 00.3	Kaus Australis	83 36.0	S 34 22.3
Castor	245 59.7	N 31 50.4	Vega	80 35.2	N 38 47.9
Procyon	244 52.8	N 05 10.4	Nunki	75 51.0	S 26 16.1
Pollux	243 19.5	N 27 58.4	Albireo	67 06.3	N 28 00.2
Avior	234 15.0	S 59 34.9	Altair	62 02.8	N 08 55.3
Suhail	222 47.6	S 43 31.3	Peacock	53 10.1	S 56 39.8
Miaplacidus	221 37.6	S 69 48.5	Deneb	49 27.9	N 45 21.4
Alphard	217 49.8	S 08 45.3	Enif	33 41.5	N 09 58.4
Regulus	207 36.6	N 11 51.5	Alnair	27 36.4	S 46 51.4
Dubhe	193 43.3	N 61 37.8	Formalhaut	15 17.6	S 29 30.5
Denebola	182 27.0	N 14 26.9	Markab	13 32.6	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 46 of 365 February 15			day 47 of 365 February 16			day 48 of 365 February 17			day 49 of 365 February 18			day 50 of 365 February 19			UT
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
00	144	58.9	+02.4	145	58.0	+02.5	146	57.1	+02.5	147	56.3	+02.4	148	55.4	+02.5	00
01	160	01.3	+02.5	161	00.5	+02.4	161	59.6	+02.5	162	58.7	+02.5	163	57.9	+02.4	01
02	175	03.8	+02.4	176	02.9	+02.5	177	02.1	+02.4	178	01.2	+02.5	179	00.3	+02.5	02
03	190	06.2	+02.5	191	05.4	+02.5	192	04.5	+02.5	193	03.7	+02.4	194	02.8	+02.5	03
04	205	08.7	+02.5	206	07.9	+02.4	207	07.0	+02.5	208	06.1	+02.5	209	05.3	+02.4	04
05	220	11.2	+02.4	221	10.3	+02.5	222	09.5	+02.4	223	08.6	+02.5	224	07.7	+02.5	05
06	235	13.6	+02.5	236	12.8	+02.4	237	11.9	+02.5	238	11.1	+02.4	239	10.2	+02.5	06
07	250	16.1	+02.5	251	15.2	+02.5	252	14.4	+02.4	253	13.5	+02.5	254	12.7	+02.4	07
08	265	18.6	+02.4	266	17.7	+02.5	267	16.8	+02.5	268	16.0	+02.4	269	15.1	+02.5	08
09	280	21.0	+02.5	281	20.2	+02.4	282	19.3	+02.5	283	18.4	+02.5	284	17.6	+02.4	09
10	295	23.5	+02.5	296	22.6	+02.5	297	21.8	+02.4	298	20.9	+02.5	299	20.0	+02.5	10
11	310	26.0	+02.4	311	25.1	+02.5	312	24.2	+02.5	313	23.4	+02.4	314	22.5	+02.5	11
12	325	28.4	+02.5	326	27.6	+02.4	327	26.7	+02.5	328	25.8	+02.5	329	25.0	+02.4	12
13	340	30.9	+02.5	341	30.0	+02.5	342	29.2	+02.4	343	28.3	+02.5	344	27.4	+02.5	13
14	355	33.4	+02.4	356	32.5	+02.5	357	31.6	+02.5	358	30.8	+02.4	359	29.9	+02.5	14
15	10	35.8	+02.5	11	35.0	+02.4	12	34.1	+02.5	13	33.2	+02.5	14	32.4	+02.4	15
16	25	38.3	+02.4	26	37.4	+02.5	27	36.6	+02.4	28	35.7	+02.5	29	34.8	+02.5	16
17	40	40.7	+02.5	41	39.9	+02.4	42	39.0	+02.5	43	38.2	+02.4	44	37.3	+02.5	17
18	55	43.2	+02.5	56	42.3	+02.5	57	41.5	+02.5	58	40.6	+02.5	59	39.8	+02.4	18
19	70	45.7	+02.4	71	44.8	+02.5	72	44.0	+02.4	73	43.1	+02.5	74	42.2	+02.5	19
20	85	48.1	+02.5	86	47.3	+02.4	87	46.4	+02.5	88	45.6	+02.4	89	44.7	+02.5	20
21	100	50.6	+02.5	101	49.7	+02.5	102	48.9	+02.4	103	48.0	+02.5	104	47.2	+02.4	21
22	115	53.1	+02.4	116	52.2	+02.5	117	51.3	+02.5	118	50.5	+02.4	119	49.6	+02.5	22
23	130	55.5	+02.5	131	54.7	+02.4	132	53.8	+02.5	133	52.9	+02.5	134	52.1	+02.4	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.5	N 29 12.7	Gienah	175 45.7	S 17 39.9
Ankaa	353 09.9	S 42 11.3	Acrux	173 02.2	S 63 13.1
Schedir	349 34.1	N 56 39.6	Gacrux	171 53.8	S 57 13.9
Diphda	348 50.0	S 17 52.2	Alioth	166 14.8	N 55 50.2
Achernar	335 22.3	S 57 07.8	Spica	158 24.6	S 11 16.6
Hamal	327 54.1	N 23 34.0	Alkaid	152 53.6	N 49 12.0
Polaris	315 14.1	N 89 21.7	Hadar	148 39.1	S 60 28.5
Acamar	315 13.6	S 40 13.3	Menkent	147 60.0	S 36 28.3
Menkar	314 08.7	N 04 10.5	Arcturus	145 49.6	N 19 04.6
Mirfak	308 31.6	N 49 56.5	Rigel Kentaurus	139 40.8	S 60 55.5
Aldebaran	290 42.3	N 16 33.2	Zubenelgenubi	136 58.5	S 16 07.9
Capella	280 25.2	N 46 01.4	Kocab	137 19.6	N 74 03.6
Rigel	281 06.0	S 08 10.7	Alphecca	126 05.8	N 26 38.2
Bellatrix	278 25.3	N 06 22.1	Antares	112 18.9	S 26 28.8
Elnath	278 04.7	N 28 37.6	Atria	107 15.4	S 69 03.7
Alnilam	275 40.0	S 01 11.4	Sabik	102 05.6	S 15 45.2
Betelgeuze	270 54.5	N 07 24.6	Shaula	96 13.8	S 37 07.1
Canopus	263 53.1	S 52 42.7	Rasalhague	96 00.9	N 12 32.6
Sirius	258 27.9	S 16 44.5	Etamin	90 43.6	N 51 28.9
Adhara	255 07.4	S 29 00.3	Kaus Australis	83 35.9	S 34 22.3
Castor	245 59.7	N 31 50.4	Vega	80 35.2	N 38 47.9
Procyon	244 52.8	N 05 10.4	Nunki	75 51.0	S 26 16.1
Pollux	243 19.5	N 27 58.4	Albireo	67 06.3	N 28 00.1
Avior	234 15.1	S 59 34.9	Altair	62 02.7	N 08 55.3
Suhail	222 47.6	S 43 31.3	Peacock	53 10.0	S 56 39.8
Miaplacidus	221 37.6	S 69 48.5	Deneb	49 27.8	N 45 21.4
Alphard	217 49.7	S 08 45.3	Enif	33 41.5	N 09 58.4
Regulus	207 36.5	N 11 51.5	Alnair	27 36.4	S 46 51.4
Dubhe	193 43.2	N 61 37.8	Formalhaut	15 17.6	S 29 30.5
Denebola	182 26.9	N 14 26.9	Markab	13 32.6	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 51 of 365 February 20		day 52 of 365 February 21		day 53 of 365 February 22		day 54 of 365 February 23		day 55 of 365 February 24		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	
00	149	54.5 +02.5	150	53.7 +02.4	151	52.8 +02.5	152	52.0 +02.4	153	51.1 +02.5	00
01	164	57.0 +02.5	165	56.1 +02.5	166	55.3 +02.4	167	54.4 +02.5	168	53.6 +02.4	01
02	179	59.5 +02.4	180	58.6 +02.5	181	57.7 +02.5	182	56.9 +02.4	183	56.0 +02.5	02
03	195	01.9 +02.5	196	01.1 +02.4	197	00.2 +02.5	197	59.3 +02.5	198	58.5 +02.5	03
04	210	04.4 +02.5	211	03.5 +02.5	212	02.7 +02.4	213	01.8 +02.5	214	01.0 +02.4	04
05	225	06.9 +02.4	226	06.0 +02.5	227	05.1 +02.5	228	04.3 +02.4	229	03.4 +02.5	05
06	240	09.3 +02.5	241	08.5 +02.4	242	07.6 +02.5	243	06.7 +02.5	244	05.9 +02.4	06
07	255	11.8 +02.5	256	10.9 +02.5	257	10.1 +02.4	258	09.2 +02.5	259	08.3 +02.5	07
08	270	14.3 +02.4	271	13.4 +02.5	272	12.5 +02.5	273	11.7 +02.4	274	10.8 +02.5	08
09	285	16.7 +02.5	286	15.9 +02.4	287	15.0 +02.5	288	14.1 +02.5	289	13.3 +02.4	09
10	300	19.2 +02.4	301	18.3 +02.5	302	17.5 +02.4	303	16.6 +02.5	304	15.7 +02.5	10
11	315	21.6 +02.5	316	20.8 +02.5	317	19.9 +02.5	318	19.1 +02.4	319	18.2 +02.5	11
12	330	24.1 +02.5	331	23.3 +02.4	332	22.4 +02.5	333	21.5 +02.5	334	20.7 +02.4	12
13	345	26.6 +02.4	346	25.7 +02.5	347	24.9 +02.4	348	24.0 +02.5	349	23.1 +02.5	13
14	0	29.0 +02.5	1	28.2 +02.4	2	27.3 +02.5	3	26.5 +02.4	4	25.6 +02.5	14
15	15	31.5 +02.5	16	30.6 +02.5	17	29.8 +02.4	18	28.9 +02.5	19	28.1 +02.4	15
16	30	34.0 +02.4	31	33.1 +02.5	32	32.2 +02.5	33	31.4 +02.4	34	30.5 +02.5	16
17	45	36.4 +02.5	46	35.6 +02.4	47	34.7 +02.5	48	33.8 +02.5	49	33.0 +02.5	17
18	60	38.9 +02.5	61	38.0 +02.5	62	37.2 +02.4	63	36.3 +02.5	64	35.5 +02.4	18
19	75	41.4 +02.4	76	40.5 +02.5	77	39.6 +02.5	78	38.8 +02.4	79	37.9 +02.5	19
20	90	43.8 +02.5	91	43.0 +02.4	92	42.1 +02.5	93	41.2 +02.5	94	40.4 +02.4	20
21	105	46.3 +02.5	106	45.4 +02.5	107	44.6 +02.4	108	43.7 +02.5	109	42.8 +02.5	21
22	120	48.8 +02.4	121	47.9 +02.5	122	47.0 +02.5	123	46.2 +02.4	124	45.3 +02.5	22
23	135	51.2 +02.5	136	50.4 +02.4	137	49.5 +02.5	138	48.6 +02.5	139	47.8 +02.4	23

	SHA	Dec		SHA	Dec
	° ' "	° ' "		° ' "	° ' "
Alpheratz	357 37.6	N 29 12.7	Gienah	175 45.7	S 17 39.9
Ankaa	353 09.9	S 42 11.3	Acrux	173 02.1	S 63 13.1
Schedir	349 34.2	N 56 39.6	Gacrux	171 53.8	S 57 13.9
Diphda	348 50.0	S 17 52.2	Alioth	166 14.8	N 55 50.2
Achernar	335 22.4	S 57 07.8	Spica	158 24.6	S 11 16.6
Hamal	327 54.1	N 23 34.0	Alkaid	152 53.6	N 49 12.0
Polaris	315 16.8	N 89 21.7	Hadar	148 39.0	S 60 28.5
Acamar	315 13.7	S 40 13.3	Menkent	147 59.9	S 36 28.3
Menkar	314 08.7	N 04 10.5	Arcturus	145 49.6	N 19 04.6
Mirfak	308 31.7	N 49 56.5	Rigel Kentaurus	139 40.7	S 60 55.5
Aldebaran	290 42.3	N 16 33.2	Zubenelgenubi	136 58.5	S 16 07.9
Capella	280 25.2	N 46 01.4	Kocab	137 19.5	N 74 03.6
Rigel	281 06.0	S 08 10.7	Alphecca	126 05.8	N 26 38.2
Bellatrix	278 25.3	N 06 22.1	Antares	112 18.9	S 26 28.8
Elnath	278 04.7	N 28 37.6	Atria	107 15.3	S 69 03.7
Alnilam	275 40.0	S 01 11.4	Sabik	102 05.6	S 15 45.2
Betelgeuze	270 54.5	N 07 24.6	Shaula	96 13.7	S 37 07.1
Canopus	263 53.1	S 52 42.7	Rasalhague	96 00.9	N 12 32.5
Sirius	258 27.9	S 16 44.5	Etamin	90 43.5	N 51 28.8
Adhara	255 07.4	S 29 00.3	Kaus Australis	83 35.9	S 34 22.3
Castor	245 59.7	N 31 50.4	Vega	80 35.2	N 38 47.9
Procyon	244 52.8	N 05 10.4	Nunki	75 50.9	S 26 16.1
Pollux	243 19.6	N 27 58.4	Albireo	67 06.3	N 28 00.1
Avior	234 15.1	S 59 34.9	Altair	62 02.7	N 08 55.3
Suhail	222 47.6	S 43 31.4	Peacock	53 10.0	S 56 39.8
Miaplacidus	221 37.6	S 69 48.5	Deneb	49 27.8	N 45 21.3
Alphard	217 49.7	S 08 45.3	Enif	33 41.4	N 09 58.4
Regulus	207 36.5	N 11 51.5	Alnair	27 36.4	S 46 51.3
Dubhe	193 43.2	N 61 37.8	Formalhaut	15 17.6	S 29 30.5
Denebola	182 26.9	N 14 26.9	Markab	13 32.6	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 56 of 365 February 25			day 57 of 365 February 26			day 58 of 365 February 27			day 59 of 365 February 28			day 60 of 365 March 1			UT
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
00	154	50.2	+02.5	155	49.4	+02.4	156	48.5	+02.5	157	47.7	+02.4	158	46.8	+02.5	00
01	169	52.7	+02.5	170	51.8	+02.5	171	51.0	+02.4	172	50.1	+02.5	173	49.3	+02.4	01
02	184	55.2	+02.4	185	54.3	+02.5	186	53.4	+02.5	187	52.6	+02.5	188	51.7	+02.5	02
03	199	57.6	+02.5	200	56.8	+02.4	201	55.9	+02.5	202	55.1	+02.4	203	54.2	+02.5	03
04	215	00.1	+02.5	215	59.2	+02.5	216	58.4	+02.4	217	57.5	+02.5	218	56.7	+02.4	04
05	230	02.6	+02.4	231	01.7	+02.5	232	00.8	+02.5	232	60.0	+02.4	233	59.1	+02.5	05
06	245	05.0	+02.5	246	04.2	+02.4	247	03.3	+02.5	248	02.4	+02.5	249	01.6	+02.4	06
07	260	07.5	+02.5	261	06.6	+02.5	262	05.8	+02.4	263	04.9	+02.5	264	04.0	+02.5	07
08	275	10.0	+02.4	276	09.1	+02.5	277	08.2	+02.5	278	07.4	+02.4	279	06.5	+02.5	08
09	290	12.4	+02.5	291	11.6	+02.4	292	10.7	+02.5	293	09.8	+02.5	294	09.0	+02.4	09
10	305	14.9	+02.4	306	14.0	+02.5	307	13.2	+02.4	308	12.3	+02.5	309	11.4	+02.5	10
11	320	17.3	+02.5	321	16.5	+02.4	322	15.6	+02.5	323	14.8	+02.4	324	13.9	+02.5	11
12	335	19.8	+02.5	336	18.9	+02.5	337	18.1	+02.5	338	17.2	+02.5	339	16.4	+02.4	12
13	350	22.3	+02.4	351	21.4	+02.5	352	20.6	+02.4	353	19.7	+02.5	354	18.8	+02.5	13
14	5	24.7	+02.5	6	23.9	+02.4	7	23.0	+02.5	8	22.2	+02.4	9	21.3	+02.5	14
15	20	27.2	+02.5	21	26.3	+02.5	22	25.5	+02.4	23	24.6	+02.5	24	23.8	+02.4	15
16	35	29.7	+02.4	36	28.8	+02.5	37	27.9	+02.5	38	27.1	+02.4	39	26.2	+02.5	16
17	50	32.1	+02.5	51	31.3	+02.4	52	30.4	+02.5	53	29.5	+02.5	54	28.7	+02.5	17
18	65	34.6	+02.5	66	33.7	+02.5	67	32.9	+02.4	68	32.0	+02.5	69	31.2	+02.4	18
19	80	37.1	+02.4	81	36.2	+02.5	82	35.3	+02.5	83	34.5	+02.4	84	33.6	+02.5	19
20	95	39.5	+02.5	96	38.7	+02.4	97	37.8	+02.5	98	36.9	+02.5	99	36.1	+02.4	20
21	110	42.0	+02.4	111	41.1	+02.5	112	40.3	+02.4	113	39.4	+02.5	114	38.5	+02.5	21
22	125	44.4	+02.5	126	43.6	+02.5	127	42.7	+02.5	128	41.9	+02.4	129	41.0	+02.5	22
23	140	46.9	+02.5	141	46.1	+02.4	142	45.2	+02.5	143	44.3	+02.5	144	43.5	+02.4	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.6	N 29 12.7	Gienah	175 45.7	S 17 39.9
Ankaa	353 10.0	S 42 11.3	Acrux	173 02.1	S 63 13.1
Schedir	349 34.2	N 56 39.5	Gacrux	171 53.8	S 57 14.0
Diphda	348 50.0	S 17 52.2	Alioth	166 14.7	N 55 50.2
Achernar	335 22.4	S 57 07.8	Spica	158 24.5	S 11 16.6
Hamal	327 54.1	N 23 34.0	Alkaid	152 53.5	N 49 12.0
Polaris	315 18.9	N 89 21.7	Hadar	148 38.9	S 60 28.5
Acamar	315 13.7	S 40 13.3	Menkent	147 59.9	S 36 28.3
Menkar	314 08.7	N 04 10.5	Arcturus	145 49.5	N 19 04.6
Mirfak	308 31.7	N 49 56.5	Rigel Kentaurus	139 40.6	S 60 55.5
Aldebaran	290 42.3	N 16 33.2	Zubenelgenubi	136 58.4	S 16 08.0
Capella	280 25.3	N 46 01.5	Kocab	137 19.4	N 74 03.6
Rigel	281 06.0	S 08 10.8	Alphecca	126 05.7	N 26 38.2
Bellatrix	278 25.3	N 06 22.1	Antares	112 18.9	S 26 28.8
Elnath	278 04.7	N 28 37.6	Atria	107 15.2	S 69 03.7
Alnilam	275 40.0	S 01 11.4	Sabik	102 05.6	S 15 45.2
Betelgeuze	270 54.5	N 07 24.6	Shaula	96 13.7	S 37 07.1
Canopus	263 53.2	S 52 42.7	Rasalhague	96 00.9	N 12 32.5
Sirius	258 27.9	S 16 44.5	Etamin	90 43.5	N 51 28.8
Adhara	255 07.5	S 29 00.3	Kaus Australis	83 35.8	S 34 22.3
Castor	245 59.7	N 31 50.4	Vega	80 35.1	N 38 47.9
Procyon	244 52.8	N 05 10.4	Nunki	75 50.9	S 26 16.1
Pollux	243 19.6	N 27 58.4	Albireo	67 06.2	N 28 00.1
Avior	234 15.1	S 59 35.0	Altair	62 02.7	N 08 55.3
Suhail	222 47.6	S 43 31.4	Peacock	53 10.0	S 56 39.8
Miaplacidus	221 37.7	S 69 48.6	Deneb	49 27.8	N 45 21.3
Alphard	217 49.7	S 08 45.4	Enif	33 41.4	N 09 58.4
Regulus	207 36.5	N 11 51.5	Alnair	27 36.4	S 46 51.3
Dubhe	193 43.2	N 61 37.9	Formalhaut	15 17.6	S 29 30.4
Denebola	182 26.9	N 14 26.9	Markab	13 32.6	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 61 of 365		day 62 of 365		day 63 of 365		day 64 of 365		day 65 of 365		UT
	March 2		March 3		March 4		March 5		March 6		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	159	45.9 +02.5	160	45.1 +02.4	161	44.2 +02.5	162	43.3 +02.5	163	42.5 +02.4	00
01	174	48.4 +02.5	175	47.5 +02.5	176	46.7 +02.4	177	45.8 +02.5	178	44.9 +02.5	01
02	189	50.9 +02.4	190	50.0 +02.5	191	49.1 +02.5	192	48.3 +02.4	193	47.4 +02.5	02
03	204	53.3 +02.5	205	52.5 +02.4	206	51.6 +02.5	207	50.7 +02.5	208	49.9 +02.4	03
04	219	55.8 +02.5	220	54.9 +02.5	221	54.1 +02.4	222	53.2 +02.5	223	52.3 +02.5	04
05	234	58.3 +02.4	235	57.4 +02.5	236	56.5 +02.5	237	55.7 +02.4	238	54.8 +02.5	05
06	250	00.7 +02.5	250	59.9 +02.4	251	59.0 +02.5	252	58.1 +02.5	253	57.3 +02.4	06
07	265	03.2 +02.4	266	02.3 +02.5	267	01.5 +02.4	268	00.6 +02.5	268	59.7 +02.5	07
08	280	05.6 +02.5	281	04.8 +02.4	282	03.9 +02.5	283	03.1 +02.4	284	02.2 +02.5	08
09	295	08.1 +02.5	296	07.2 +02.5	297	06.4 +02.5	298	05.5 +02.5	299	04.7 +02.4	09
10	310	10.6 +02.4	311	09.7 +02.5	312	08.9 +02.4	313	08.0 +02.5	314	07.1 +02.5	10
11	325	13.0 +02.5	326	12.2 +02.4	327	11.3 +02.5	328	10.5 +02.4	329	09.6 +02.5	11
12	340	15.5 +02.5	341	14.6 +02.5	342	13.8 +02.4	343	12.9 +02.5	344	12.1 +02.4	12
13	355	18.0 +02.4	356	17.1 +02.5	357	16.2 +02.5	358	15.4 +02.4	359	14.5 +02.5	13
14	10	20.4 +02.5	11	19.6 +02.4	12	18.7 +02.5	13	17.8 +02.5	14	17.0 +02.4	14
15	25	22.9 +02.5	26	22.0 +02.5	27	21.2 +02.4	28	20.3 +02.5	29	19.4 +02.5	15
16	40	25.4 +02.4	41	24.5 +02.5	42	23.6 +02.5	43	22.8 +02.4	44	21.9 +02.5	16
17	55	27.8 +02.5	56	27.0 +02.4	57	26.1 +02.5	58	25.2 +02.5	59	24.4 +02.4	17
18	70	30.3 +02.5	71	29.4 +02.5	72	28.6 +02.4	73	27.7 +02.5	74	26.8 +02.5	18
19	85	32.8 +02.4	86	31.9 +02.5	87	31.0 +02.5	88	30.2 +02.4	89	29.3 +02.5	19
20	100	35.2 +02.5	101	34.4 +02.4	102	33.5 +02.5	103	32.6 +02.5	104	31.8 +02.4	20
21	115	37.7 +02.4	116	36.8 +02.5	117	36.0 +02.4	118	35.1 +02.5	119	34.2 +02.5	21
22	130	40.1 +02.5	131	39.3 +02.4	132	38.4 +02.5	133	37.6 +02.4	134	36.7 +02.5	22
23	145	42.6 +02.5	146	41.7 +02.5	147	40.9 +02.4	148	40.0 +02.5	149	39.2 +02.4	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.6	N 29 12.7	Gienah	175 45.6	S 17 39.9
Ankaa	353 10.0	S 42 11.3	Acrux	173 02.0	S 63 13.1
Schedir	349 34.2	N 56 39.5	Gacrux	171 53.7	S 57 14.0
Diphda	348 50.0	S 17 52.2	Alioth	166 14.7	N 55 50.2
Achernar	335 22.4	S 57 07.8	Spica	158 24.5	S 11 16.6
Hamal	327 54.1	N 23 34.0	Alkaid	152 53.5	N 49 12.0
Polaris	315 21.2	N 89 21.7	Hadar	148 38.9	S 60 28.5
Acamar	315 13.7	S 40 13.3	Menkent	147 59.8	S 36 28.3
Menkar	314 08.7	N 04 10.5	Arcturus	145 49.5	N 19 04.6
Mirfak	308 31.7	N 49 56.5	Rigel Kentaurus	139 40.6	S 60 55.5
Aldebaran	290 42.3	N 16 33.2	Zubenelgenubi	136 58.4	S 16 08.0
Capella	280 25.3	N 46 01.5	Kocab	137 19.3	N 74 03.6
Rigel	281 06.1	S 08 10.8	Alphecca	126 05.7	N 26 38.2
Bellatrix	278 25.3	N 06 22.1	Antares	112 18.8	S 26 28.8
Elnath	278 04.8	N 28 37.6	Atria	107 15.1	S 69 03.7
Alnilam	275 40.0	S 01 11.4	Sabik	102 05.5	S 15 45.2
Betelgeuze	270 54.5	N 07 24.6	Shaula	96 13.6	S 37 07.1
Canopus	263 53.2	S 52 42.7	Rasalhague	96 00.8	N 12 32.5
Sirius	258 27.9	S 16 44.5	Etamin	90 43.4	N 51 28.8
Adhara	255 07.5	S 29 00.3	Kaus Australis	83 35.8	S 34 22.3
Castor	245 59.7	N 31 50.4	Vega	80 35.1	N 38 47.8
Procyon	244 52.8	N 05 10.4	Nunki	75 50.9	S 26 16.1
Pollux	243 19.6	N 27 58.4	Albireo	67 06.2	N 28 00.1
Avior	234 15.1	S 59 35.0	Altair	62 02.6	N 08 55.3
Suhail	222 47.6	S 43 31.4	Peacock	53 09.9	S 56 39.7
Miaplacidus	221 37.7	S 69 48.6	Deneb	49 27.8	N 45 21.3
Alphard	217 49.7	S 08 45.4	Enif	33 41.4	N 09 58.4
Regulus	207 36.5	N 11 51.5	Alnair	27 36.4	S 46 51.3
Dubhe	193 43.1	N 61 37.9	Formalhaut	15 17.6	S 29 30.4
Denebola	182 26.9	N 14 26.9	Markab	13 32.6	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 66 of 365		day 67 of 365		day 68 of 365		day 69 of 365		day 70 of 365		UT
	March 7		March 8		March 9		March 10		March 11		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	164	41.6 +02.5	165	40.8 +02.4	166	39.9 +02.5	167	39.0 +02.5	168	38.2 +02.4	00
01	179	44.1 +02.4	180	43.2 +02.5	181	42.4 +02.4	182	41.5 +02.5	183	40.6 +02.5	01
02	194	46.5 +02.5	195	45.7 +02.5	196	44.8 +02.5	197	44.0 +02.4	198	43.1 +02.5	02
03	209	49.0 +02.5	210	48.2 +02.4	211	47.3 +02.5	212	46.4 +02.5	213	45.6 +02.4	03
04	224	51.5 +02.4	225	50.6 +02.5	226	49.8 +02.4	227	48.9 +02.5	228	48.0 +02.5	04
05	239	53.9 +02.5	240	53.1 +02.4	241	52.2 +02.5	242	51.4 +02.4	243	50.5 +02.5	05
06	254	56.4 +02.5	255	55.5 +02.5	256	54.7 +02.4	257	53.8 +02.5	258	53.0 +02.4	06
07	269	58.9 +02.4	270	58.0 +02.5	271	57.1 +02.5	272	56.3 +02.4	273	55.4 +02.5	07
08	285	01.3 +02.5	286	00.5 +02.4	286	59.6 +02.5	287	58.7 +02.5	288	57.9 +02.5	08
09	300	03.8 +02.5	301	02.9 +02.5	302	02.1 +02.4	303	01.2 +02.5	304	00.4 +02.4	09
10	315	06.3 +02.4	316	05.4 +02.5	317	04.5 +02.5	318	03.7 +02.4	319	02.8 +02.5	10
11	330	08.7 +02.5	331	07.9 +02.4	332	07.0 +02.5	333	06.1 +02.5	334	05.3 +02.4	11
12	345	11.2 +02.5	346	10.3 +02.5	347	09.5 +02.4	348	08.6 +02.5	349	07.7 +02.5	12
13	0	13.7 +02.4	1	12.8 +02.5	2	11.9 +02.5	3	11.1 +02.4	4	10.2 +02.5	13
14	15	16.1 +02.5	16	15.3 +02.4	17	14.4 +02.5	18	13.5 +02.5	19	12.7 +02.4	14
15	30	18.6 +02.4	31	17.7 +02.5	32	16.9 +02.4	33	16.0 +02.5	34	15.1 +02.5	15
16	45	21.0 +02.5	46	20.2 +02.4	47	19.3 +02.5	48	18.5 +02.4	49	17.6 +02.5	16
17	60	23.5 +02.5	61	22.6 +02.5	62	21.8 +02.5	63	20.9 +02.5	64	20.1 +02.4	17
18	75	26.0 +02.4	76	25.1 +02.5	77	24.3 +02.4	78	23.4 +02.5	79	22.5 +02.5	18
19	90	28.4 +02.5	91	27.6 +02.4	92	26.7 +02.5	93	25.9 +02.4	94	25.0 +02.5	19
20	105	30.9 +02.5	106	30.0 +02.5	107	29.2 +02.4	108	28.3 +02.5	109	27.5 +02.4	20
21	120	33.4 +02.4	121	32.5 +02.5	122	31.6 +02.5	123	30.8 +02.4	124	29.9 +02.5	21
22	135	35.8 +02.5	136	35.0 +02.4	137	34.1 +02.5	138	33.2 +02.5	139	32.4 +02.5	22
23	150	38.3 +02.5	151	37.4 +02.5	152	36.6 +02.4	153	35.7 +02.5	154	34.9 +02.4	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.6	N 29 12.7	Gienah	175 45.6	S 17 39.9
Ankaa	353 10.0	S 42 11.3	Acrux	173 02.0	S 63 13.2
Schedir	349 34.2	N 56 39.5	Gacrux	171 53.7	S 57 14.0
Diphda	348 50.0	S 17 52.2	Alioth	166 14.7	N 55 50.3
Achernar	335 22.5	S 57 07.8	Spica	158 24.5	S 11 16.6
Hamal	327 54.1	N 23 34.0	Alkaid	152 53.5	N 49 12.0
Polaris	315 23.5	N 89 21.7	Hadar	148 38.8	S 60 28.6
Acamar	315 13.7	S 40 13.3	Menkent	147 59.8	S 36 28.4
Menkar	314 08.7	N 04 10.5	Arcturus	145 49.5	N 19 04.6
Mirfak	308 31.8	N 49 56.5	Rigel Kentaurus	139 40.5	S 60 55.5
Aldebaran	290 42.4	N 16 33.2	Zubenelgenubi	136 58.4	S 16 08.0
Capella	280 25.3	N 46 01.5	Kocab	137 19.2	N 74 03.6
Rigel	281 06.1	S 08 10.8	Alphecca	126 05.6	N 26 38.2
Bellatrix	278 25.3	N 06 22.1	Antares	112 18.8	S 26 28.8
Elnath	278 04.8	N 28 37.6	Atria	107 15.0	S 69 03.7
Alnilam	275 40.1	S 01 11.4	Sabik	102 05.5	S 15 45.2
Betelgeuze	270 54.5	N 07 24.6	Shaula	96 13.6	S 37 07.1
Canopus	263 53.3	S 52 42.7	Rasalhague	96 00.8	N 12 32.5
Sirius	258 28.0	S 16 44.5	Etamin	90 43.4	N 51 28.8
Adhara	255 07.5	S 29 00.3	Kaus Australis	83 35.7	S 34 22.3
Castor	245 59.7	N 31 50.4	Vega	80 35.0	N 38 47.8
Procyon	244 52.9	N 05 10.4	Nunki	75 50.8	S 26 16.1
Pollux	243 19.6	N 27 58.4	Albireo	67 06.2	N 28 00.1
Avior	234 15.2	S 59 35.0	Altair	62 02.6	N 08 55.3
Suhail	222 47.6	S 43 31.4	Peacock	53 09.9	S 56 39.7
Miaplacidus	221 37.7	S 69 48.6	Deneb	49 27.8	N 45 21.3
Alphard	217 49.7	S 08 45.4	Enif	33 41.4	N 09 58.4
Regulus	207 36.5	N 11 51.5	Alnair	27 36.4	S 46 51.3
Dubhe	193 43.1	N 61 37.9	Formalhaut	15 17.6	S 29 30.4
Denebola	182 26.9	N 14 26.9	Markab	13 32.6	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 71 of 365		day 72 of 365		day 73 of 365		day 74 of 365		day 75 of 365		UT					
	March 12		March 13		March 14		March 15		March 16							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	169	37.3	+02.5	170	36.5	+02.4	171	35.6	+02.5	172	34.7	+02.5	173	33.9	+02.4	00
01	184	39.8	+02.4	185	38.9	+02.5	186	38.1	+02.4	187	37.2	+02.5	188	36.3	+02.5	01
02	199	42.2	+02.5	200	41.4	+02.4	201	40.5	+02.5	202	39.7	+02.4	203	38.8	+02.5	02
03	214	44.7	+02.5	215	43.8	+02.5	216	43.0	+02.5	217	42.1	+02.5	218	41.3	+02.4	03
04	229	47.2	+02.4	230	46.3	+02.5	231	45.5	+02.4	232	44.6	+02.5	233	43.7	+02.5	04
05	244	49.6	+02.5	245	48.8	+02.4	246	47.9	+02.5	247	47.1	+02.4	248	46.2	+02.5	05
06	259	52.1	+02.5	260	51.2	+02.5	261	50.4	+02.4	262	49.5	+02.5	263	48.7	+02.4	06
07	274	54.6	+02.4	275	53.7	+02.5	276	52.8	+02.5	277	52.0	+02.4	278	51.1	+02.5	07
08	289	57.0	+02.5	290	56.2	+02.4	291	55.3	+02.5	292	54.4	+02.5	293	53.6	+02.4	08
09	304	59.5	+02.5	305	58.6	+02.5	306	57.8	+02.4	307	56.9	+02.5	308	56.0	+02.5	09
10	320	02.0	+02.4	321	01.1	+02.5	322	00.2	+02.5	322	59.4	+02.4	323	58.5	+02.5	10
11	335	04.4	+02.5	336	03.6	+02.4	337	02.7	+02.5	338	01.8	+02.5	339	01.0	+02.4	11
12	350	06.9	+02.4	351	06.0	+02.5	352	05.2	+02.4	353	04.3	+02.5	354	03.4	+02.5	12
13	5	09.3	+02.5	6	08.5	+02.5	7	07.6	+02.5	8	06.8	+02.4	9	05.9	+02.5	13
14	20	11.8	+02.5	21	11.0	+02.4	22	10.1	+02.5	23	09.2	+02.5	24	08.4	+02.4	14
15	35	14.3	+02.4	36	13.4	+02.5	37	12.6	+02.4	38	11.7	+02.5	39	10.8	+02.5	15
16	50	16.7	+02.5	51	15.9	+02.4	52	15.0	+02.5	53	14.2	+02.4	54	13.3	+02.5	16
17	65	19.2	+02.5	66	18.3	+02.5	67	17.5	+02.4	68	16.6	+02.5	69	15.8	+02.4	17
18	80	21.7	+02.4	81	20.8	+02.5	82	19.9	+02.5	83	19.1	+02.5	84	18.2	+02.5	18
19	95	24.1	+02.5	96	23.3	+02.4	97	22.4	+02.5	98	21.6	+02.4	99	20.7	+02.5	19
20	110	26.6	+02.5	111	25.7	+02.5	112	24.9	+02.4	113	24.0	+02.5	114	23.2	+02.4	20
21	125	29.1	+02.4	126	28.2	+02.5	127	27.3	+02.5	128	26.5	+02.4	129	25.6	+02.5	21
22	140	31.5	+02.5	141	30.7	+02.4	142	29.8	+02.5	143	28.9	+02.5	144	28.1	+02.4	22
23	155	34.0	+02.5	156	33.1	+02.5	157	32.3	+02.4	158	31.4	+02.5	159	30.5	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.6	N 29	12.7	Gienah	175	45.6	S 17	39.9
Ankaa	353	10.0	S 42	11.2	Acrux	173	02.0	S 63	13.2
Schedir	349	34.2	N 56	39.5	Gacrux	171	53.7	S 57	14.1
Diphda	348	50.0	S 17	52.2	Alioth	166	14.6	N 55	50.3
Achernar	335	22.5	S 57	07.7	Spica	158	24.5	S 11	16.6
Hamal	327	54.1	N 23	34.0	Alkaid	152	53.4	N 49	12.0
Polaris	315	25.3	N 89	21.7	Hadar	148	38.8	S 60	28.6
Acamar	315	13.8	S 40	13.3	Menkent	147	59.8	S 36	28.4
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.4	N 19	04.6
Mirfak	308	31.8	N 49	56.4	Rigel Kentaurus	139	40.5	S 60	55.6
Aldebaran	290	42.4	N 16	33.2	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	25.4	N 46	01.5	Kocab	137	19.1	N 74	03.6
Rigel	281	06.1	S 08	10.8	Alphecca	126	05.6	N 26	38.2
Bellatrix	278	25.4	N 06	22.1	Antares	112	18.7	S 26	28.8
Elnath	278	04.8	N 28	37.6	Atria	107	14.9	S 69	03.7
Alnilam	275	40.1	S 01	11.4	Sabik	102	05.4	S 15	45.2
Betelgeuze	270	54.6	N 07	24.6	Shaula	96	13.5	S 37	07.1
Canopus	263	53.3	S 52	42.7	Rasalhague	96	00.8	N 12	32.5
Sirius	258	28.0	S 16	44.5	Etamin	90	43.3	N 51	28.8
Adhara	255	07.5	S 29	00.3	Kaus Australis	83	35.7	S 34	22.3
Castor	245	59.8	N 31	50.5	Vega	80	35.0	N 38	47.8
Procyon	244	52.9	N 05	10.4	Nunki	75	50.8	S 26	16.1
Pollux	243	19.6	N 27	58.4	Albireo	67	06.1	N 28	00.1
Avior	234	15.2	S 59	35.0	Altair	62	02.6	N 08	55.3
Suhail	222	47.6	S 43	31.5	Peacock	53	09.8	S 56	39.7
Miaplacidus	221	37.8	S 69	48.6	Deneb	49	27.7	N 45	21.3
Alphard	217	49.8	S 08	45.4	Enif	33	41.4	N 09	58.4
Regulus	207	36.5	N 11	51.5	Alnair	27	36.3	S 46	51.2
Dubhe	193	43.1	N 61	37.9	Formalhaut	15	17.6	S 29	30.4
Denebola	182	26.8	N 14	26.9	Markab	13	32.6	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 76 of 365			day 77 of 365			day 78 of 365			day 79 of 365			day 80 of 365			UT		
	March 17			March 18			March 19			March 20			March 21					
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA				
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"
00	174	33.0	+02.5	175	32.1	+02.5	176	31.3	+02.4	177	30.4	+02.5	178	29.6	+02.4	00		
01	189	35.5	+02.4	190	34.6	+02.5	191	33.7	+02.5	192	32.9	+02.4	193	32.0	+02.5	01		
02	204	37.9	+02.5	205	37.1	+02.4	206	36.2	+02.5	207	35.3	+02.5	208	34.5	+02.4	02		
03	219	40.4	+02.5	220	39.5	+02.5	221	38.7	+02.4	222	37.8	+02.5	223	36.9	+02.5	03		
04	234	42.9	+02.4	235	42.0	+02.5	236	41.1	+02.5	237	40.3	+02.4	238	39.4	+02.5	04		
05	249	45.3	+02.5	250	44.5	+02.4	251	43.6	+02.5	252	42.7	+02.5	253	41.9	+02.4	05		
06	264	47.8	+02.5	265	46.9	+02.5	266	46.1	+02.4	267	45.2	+02.5	268	44.3	+02.5	06		
07	279	50.3	+02.4	280	49.4	+02.5	281	48.5	+02.5	282	47.7	+02.4	283	46.8	+02.5	07		
08	294	52.7	+02.5	295	51.9	+02.4	296	51.0	+02.5	297	50.1	+02.5	298	49.3	+02.4	08		
09	309	55.2	+02.4	310	54.3	+02.5	311	53.5	+02.4	312	52.6	+02.5	313	51.7	+02.5	09		
10	324	57.6	+02.5	325	56.8	+02.4	326	55.9	+02.5	327	55.1	+02.4	328	54.2	+02.5	10		
11	340	00.1	+02.5	340	59.2	+02.5	341	58.4	+02.5	342	57.5	+02.5	343	56.7	+02.4	11		
12	355	02.6	+02.4	356	01.7	+02.5	357	00.9	+02.4	357	60.0	+02.5	358	59.1	+02.5	12		
13	10	05.0	+02.5	11	04.2	+02.4	12	03.3	+02.5	13	02.5	+02.4	14	01.6	+02.5	13		
14	25	07.5	+02.5	26	06.6	+02.5	27	05.8	+02.4	28	04.9	+02.5	29	04.1	+02.4	14		
15	40	10.0	+02.4	41	09.1	+02.5	42	08.2	+02.5	43	07.4	+02.4	44	06.5	+02.5	15		
16	55	12.4	+02.5	56	11.6	+02.4	57	10.7	+02.5	58	09.8	+02.5	59	09.0	+02.4	16		
17	70	14.9	+02.5	71	14.0	+02.5	72	13.2	+02.4	73	12.3	+02.5	74	11.4	+02.5	17		
18	85	17.4	+02.4	86	16.5	+02.5	87	15.6	+02.5	88	14.8	+02.4	89	13.9	+02.5	18		
19	100	19.8	+02.5	101	19.0	+02.4	102	18.1	+02.5	103	17.2	+02.5	104	16.4	+02.4	19		
20	115	22.3	+02.5	116	21.4	+02.5	117	20.6	+02.4	118	19.7	+02.5	119	18.8	+02.5	20		
21	130	24.8	+02.4	131	23.9	+02.5	132	23.0	+02.5	133	22.2	+02.4	134	21.3	+02.5	21		
22	145	27.2	+02.5	146	26.4	+02.4	147	25.5	+02.5	148	24.6	+02.5	149	23.8	+02.4	22		
23	160	29.7	+02.4	161	28.8	+02.5	162	28.0	+02.4	163	27.1	+02.5	164	26.2	+02.5	23		

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.6	N 29	12.7	Gienah	175	45.6	S 17	39.9
Ankaa	353	10.0	S 42	11.2	Acrux	173	02.0	S 63	13.2
Schedir	349	34.2	N 56	39.5	Gacrux	171	53.7	S 57	14.1
Diphda	348	50.0	S 17	52.1	Alioth	166	14.6	N 55	50.3
Achernar	335	22.5	S 57	07.7	Spica	158	24.4	S 11	16.6
Hamal	327	54.1	N 23	34.0	Alkaid	152	53.4	N 49	12.0
Polaris	315	27.3	N 89	21.7	Hadar	148	38.7	S 60	28.6
Acamar	315	13.8	S 40	13.3	Menkent	147	59.7	S 36	28.4
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.4	N 19	04.6
Mirfak	308	31.8	N 49	56.4	Rigel Kentaurus	139	40.4	S 60	55.6
Aldebaran	290	42.4	N 16	33.2	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	25.4	N 46	01.5	Kocab	137	19.0	N 74	03.6
Rigel	281	06.1	S 08	10.8	Alphecca	126	05.6	N 26	38.2
Bellatrix	278	25.4	N 06	22.1	Antares	112	18.7	S 26	28.8
Elnath	278	04.8	N 28	37.6	Atria	107	14.8	S 69	03.7
Alnilam	275	40.1	S 01	11.4	Sabik	102	05.4	S 15	45.2
Betelgeuze	270	54.6	N 07	24.6	Shaula	96	13.5	S 37	07.1
Canopus	263	53.3	S 52	42.7	Rasalhague	96	00.7	N 12	32.5
Sirius	258	28.0	S 16	44.5	Etamin	90	43.3	N 51	28.8
Adhara	255	07.6	S 29	00.4	Kaus Australis	83	35.6	S 34	22.3
Castor	245	59.8	N 31	50.5	Vega	80	35.0	N 38	47.8
Procyon	244	52.9	N 05	10.4	Nunki	75	50.7	S 26	16.1
Pollux	243	19.6	N 27	58.4	Albireo	67	06.1	N 28	00.1
Avior	234	15.3	S 59	35.1	Altair	62	02.5	N 08	55.3
Suhail	222	47.6	S 43	31.5	Peacock	53	09.8	S 56	39.7
Miaplacidus	221	37.8	S 69	48.7	Deneb	49	27.7	N 45	21.2
Alphard	217	49.8	S 08	45.4	Enif	33	41.4	N 09	58.4
Regulus	207	36.5	N 11	51.5	Alnair	27	36.3	S 46	51.2
Dubhe	193	43.1	N 61	37.9	Formalhaut	15	17.6	S 29	30.4
Denebola	182	26.8	N 14	26.9	Markab	13	32.5	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 81 of 365		day 82 of 365		day 83 of 365		day 84 of 365		day 85 of 365		UT					
	March 22		March 23		March 24		March 25		March 26							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	179	28.7	+02.5	180	27.8	+02.5	181	27.0	+02.4	182	26.1	+02.5	183	25.3	+02.4	00
01	194	31.2	+02.4	195	30.3	+02.5	196	29.4	+02.5	197	28.6	+02.4	198	27.7	+02.5	01
02	209	33.6	+02.5	210	32.8	+02.4	211	31.9	+02.5	212	31.0	+02.5	213	30.2	+02.4	02
03	224	36.1	+02.5	225	35.2	+02.5	226	34.4	+02.4	227	33.5	+02.5	228	32.6	+02.5	03
04	239	38.6	+02.4	240	37.7	+02.5	241	36.8	+02.5	242	36.0	+02.4	243	35.1	+02.5	04
05	254	41.0	+02.5	255	40.2	+02.4	256	39.3	+02.5	257	38.4	+02.5	258	37.6	+02.4	05
06	269	43.5	+02.4	270	42.6	+02.5	271	41.8	+02.4	272	40.9	+02.5	273	40.0	+02.5	06
07	284	45.9	+02.5	285	45.1	+02.4	286	44.2	+02.5	287	43.4	+02.4	288	42.5	+02.5	07
08	299	48.4	+02.5	300	47.5	+02.5	301	46.7	+02.5	302	45.8	+02.5	303	45.0	+02.4	08
09	314	50.9	+02.4	315	50.0	+02.5	316	49.2	+02.4	317	48.3	+02.5	318	47.4	+02.5	09
10	329	53.3	+02.5	330	52.5	+02.4	331	51.6	+02.5	332	50.8	+02.4	333	49.9	+02.5	10
11	344	55.8	+02.5	345	54.9	+02.5	346	54.1	+02.4	347	53.2	+02.5	348	52.4	+02.4	11
12	359	58.3	+02.4	0	57.4	+02.5	1	56.5	+02.5	2	55.7	+02.4	3	54.8	+02.5	12
13	15	00.7	+02.5	15	59.9	+02.4	16	59.0	+02.5	17	58.1	+02.5	18	57.3	+02.5	13
14	30	03.2	+02.5	31	02.3	+02.5	32	01.5	+02.4	33	00.6	+02.5	33	59.8	+02.4	14
15	45	05.7	+02.4	46	04.8	+02.5	47	03.9	+02.5	48	03.1	+02.4	49	02.2	+02.5	15
16	60	08.1	+02.5	61	07.3	+02.4	62	06.4	+02.5	63	05.5	+02.5	64	04.7	+02.4	16
17	75	10.6	+02.4	76	09.7	+02.5	77	08.9	+02.4	78	08.0	+02.5	79	07.1	+02.5	17
18	90	13.0	+02.5	91	12.2	+02.5	92	11.3	+02.5	93	10.5	+02.4	94	09.6	+02.5	18
19	105	15.5	+02.5	106	14.7	+02.4	107	13.8	+02.5	108	12.9	+02.5	109	12.1	+02.4	19
20	120	18.0	+02.4	121	17.1	+02.5	122	16.3	+02.4	123	15.4	+02.5	124	14.5	+02.5	20
21	135	20.4	+02.5	136	19.6	+02.4	137	18.7	+02.5	138	17.9	+02.4	139	17.0	+02.5	21
22	150	22.9	+02.5	151	22.0	+02.5	152	21.2	+02.4	153	20.3	+02.5	154	19.5	+02.4	22
23	165	25.4	+02.4	166	24.5	+02.5	167	23.6	+02.5	168	22.8	+02.5	169	21.9	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.6	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	10.0	S 42	11.2	Acrux	173	01.9	S 63	13.3
Schedir	349	34.2	N 56	39.4	Gacrux	171	53.7	S 57	14.1
Diphda	348	50.0	S 17	52.1	Alioth	166	14.6	N 55	50.3
Achernar	335	22.5	S 57	07.7	Spica	158	24.4	S 11	16.6
Hamal	327	54.2	N 23	34.0	Alkaid	152	53.4	N 49	12.0
Polaris	315	29.1	N 89	21.6	Hadar	148	38.7	S 60	28.6
Acamar	315	13.8	S 40	13.2	Menkent	147	59.7	S 36	28.4
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.4	N 19	04.6
Mirfak	308	31.9	N 49	56.4	Rigel Kentaurus	139	40.4	S 60	55.6
Aldebaran	290	42.4	N 16	33.2	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	25.4	N 46	01.5	Kocab	137	18.9	N 74	03.6
Rigel	281	06.2	S 08	10.8	Alphecca	126	05.5	N 26	38.2
Bellatrix	278	25.4	N 06	22.1	Antares	112	18.6	S 26	28.8
Elnath	278	04.9	N 28	37.6	Atria	107	14.7	S 69	03.7
Alnilam	275	40.1	S 01	11.4	Sabik	102	05.4	S 15	45.2
Betelgeuze	270	54.6	N 07	24.6	Shaula	96	13.5	S 37	07.1
Canopus	263	53.4	S 52	42.7	Rasalhague	96	00.7	N 12	32.5
Sirius	258	28.0	S 16	44.5	Etamin	90	43.2	N 51	28.8
Adhara	255	07.6	S 29	00.4	Kaus Australis	83	35.6	S 34	22.3
Castor	245	59.8	N 31	50.5	Vega	80	34.9	N 38	47.8
Procyon	244	52.9	N 05	10.4	Nunki	75	50.7	S 26	16.1
Pollux	243	19.7	N 27	58.4	Albireo	67	06.1	N 28	00.1
Avior	234	15.3	S 59	35.1	Altair	62	02.5	N 08	55.3
Suhail	222	47.7	S 43	31.5	Peacock	53	09.7	S 56	39.7
Miaplacidus	221	37.9	S 69	48.7	Deneb	49	27.7	N 45	21.2
Alphard	217	49.8	S 08	45.4	Enif	33	41.3	N 09	58.4
Regulus	207	36.5	N 11	51.5	Alnair	27	36.3	S 46	51.2
Dubhe	193	43.1	N 61	38.0	Formalhaut	15	17.5	S 29	30.4
Denebola	182	26.8	N 14	26.9	Markab	13	32.5	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 86 of 365		day 87 of 365		day 88 of 365		day 89 of 365		day 90 of 365		UT					
	March 27		March 28		March 29		March 30		March 31							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "						
00	184	24.4	+02.5	185	23.5	+02.5	186	22.7	+02.4	187	21.8	+02.5	188	20.9	+02.5	00
01	199	26.9	+02.4	200	26.0	+02.5	201	25.1	+02.5	202	24.3	+02.4	203	23.4	+02.5	01
02	214	29.3	+02.5	215	28.5	+02.4	216	27.6	+02.5	217	26.7	+02.5	218	25.9	+02.4	02
03	229	31.8	+02.5	230	30.9	+02.5	231	30.1	+02.4	232	29.2	+02.5	233	28.3	+02.5	03
04	244	34.3	+02.4	245	33.4	+02.5	246	32.5	+02.5	247	31.7	+02.4	248	30.8	+02.5	04
05	259	36.7	+02.5	260	35.9	+02.4	261	35.0	+02.5	262	34.1	+02.5	263	33.3	+02.4	05
06	274	39.2	+02.4	275	38.3	+02.5	276	37.5	+02.4	277	36.6	+02.5	278	35.7	+02.5	06
07	289	41.6	+02.5	290	40.8	+02.4	291	39.9	+02.5	292	39.1	+02.4	293	38.2	+02.5	07
08	304	44.1	+02.5	305	43.2	+02.5	306	42.4	+02.4	307	41.5	+02.5	308	40.7	+02.4	08
09	319	46.6	+02.4	320	45.7	+02.5	321	44.8	+02.5	322	44.0	+02.4	323	43.1	+02.5	09
10	334	49.0	+02.5	335	48.2	+02.4	336	47.3	+02.5	337	46.4	+02.5	338	45.6	+02.4	10
11	349	51.5	+02.5	350	50.6	+02.5	351	49.8	+02.4	352	48.9	+02.5	353	48.0	+02.5	11
12	4	54.0	+02.4	5	53.1	+02.5	6	52.2	+02.5	7	51.4	+02.4	8	50.5	+02.5	12
13	19	56.4	+02.5	20	55.6	+02.4	21	54.7	+02.5	22	53.8	+02.5	23	53.0	+02.4	13
14	34	58.9	+02.5	35	58.0	+02.5	36	57.2	+02.4	37	56.3	+02.5	38	55.4	+02.5	14
15	50	01.4	+02.4	51	00.5	+02.5	51	59.6	+02.5	52	58.8	+02.4	53	57.9	+02.5	15
16	65	03.8	+02.5	66	03.0	+02.4	67	02.1	+02.5	68	01.2	+02.5	69	00.4	+02.4	16
17	80	06.3	+02.4	81	05.4	+02.5	82	04.6	+02.4	83	03.7	+02.5	84	02.8	+02.5	17
18	95	08.7	+02.5	96	07.9	+02.5	97	07.0	+02.5	98	06.2	+02.4	99	05.3	+02.5	18
19	110	11.2	+02.5	111	10.4	+02.4	112	09.5	+02.5	113	08.6	+02.5	114	07.8	+02.4	19
20	125	13.7	+02.4	126	12.8	+02.5	127	12.0	+02.4	128	11.1	+02.5	129	10.2	+02.5	20
21	140	16.1	+02.5	141	15.3	+02.4	142	14.4	+02.5	143	13.6	+02.4	144	12.7	+02.5	21
22	155	18.6	+02.5	156	17.7	+02.5	157	16.9	+02.4	158	16.0	+02.5	159	15.2	+02.4	22
23	170	21.1	+02.4	171	20.2	+02.5	172	19.3	+02.5	173	18.5	+02.4	174	17.6	+02.5	23

	SHA	Dec		SHA	Dec
	° ' "	° ' "		° ' "	° ' "
Alpheratz	357 37.6	N 29 12.6	Gienah	175 45.6	S 17 40.0
Ankaa	353 10.0	S 42 11.2	Acrux	173 01.9	S 63 13.3
Schedir	349 34.2	N 56 39.4	Gacrux	171 53.6	S 57 14.1
Diphda	348 50.0	S 17 52.1	Alioth	166 14.6	N 55 50.3
Achernar	335 22.5	S 57 07.7	Spica	158 24.4	S 11 16.7
Hamal	327 54.2	N 23 34.0	Alkaid	152 53.3	N 49 12.0
Polaris	315 30.3	N 89 21.6	Hadar	148 38.7	S 60 28.7
Acamar	315 13.8	S 40 13.2	Menkent	147 59.7	S 36 28.4
Menkar	314 08.8	N 04 10.5	Arcturus	145 49.4	N 19 04.6
Mirfak	308 31.9	N 49 56.4	Rigel Kentaurus	139 40.3	S 60 55.6
Aldebaran	290 42.4	N 16 33.2	Zubenelgenubi	136 58.2	S 16 08.0
Capella	280 25.5	N 46 01.4	Kocab	137 18.8	N 74 03.7
Rigel	281 06.2	S 08 10.8	Alphecca	126 05.5	N 26 38.2
Bellatrix	278 25.4	N 06 22.1	Antares	112 18.6	S 26 28.8
Elnath	278 04.9	N 28 37.6	Atria	107 14.6	S 69 03.7
Alnilam	275 40.1	S 01 11.4	Sabik	102 05.3	S 15 45.2
Betelgeuze	270 54.6	N 07 24.6	Shaula	96 13.4	S 37 07.1
Canopus	263 53.4	S 52 42.7	Rasalhague	96 00.6	N 12 32.5
Sirius	258 28.1	S 16 44.5	Etamin	90 43.2	N 51 28.8
Adhara	255 07.6	S 29 00.4	Kaus Australis	83 35.5	S 34 22.3
Castor	245 59.8	N 31 50.5	Vega	80 34.9	N 38 47.8
Procyon	244 52.9	N 05 10.4	Nunki	75 50.7	S 26 16.1
Pollux	243 19.7	N 27 58.4	Albireo	67 06.0	N 28 00.1
Avior	234 15.3	S 59 35.1	Altair	62 02.5	N 08 55.3
Suhail	222 47.7	S 43 31.5	Peacock	53 09.6	S 56 39.7
Miaplacidus	221 37.9	S 69 48.7	Deneb	49 27.6	N 45 21.2
Alphard	217 49.8	S 08 45.4	Enif	33 41.3	N 09 58.4
Regulus	207 36.5	N 11 51.5	Alnair	27 36.3	S 46 51.2
Dubhe	193 43.1	N 61 38.0	Formalhaut	15 17.5	S 29 30.4
Denebola	182 26.8	N 14 26.9	Markab	13 32.5	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 91 of 365		day 92 of 365		day 93 of 365		day 94 of 365		day 95 of 365		UT					
	<i>April 1</i>		<i>April 2</i>		<i>April 3</i>		<i>April 4</i>		<i>April 5</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	189	20.1	+02.4	190	19.2	+02.5	191	18.4	+02.4	192	17.5	+02.5	193	16.6	+02.5	00
01	204	22.5	+02.5	205	21.7	+02.4	206	20.8	+02.5	207	20.0	+02.4	208	19.1	+02.5	01
02	219	25.0	+02.5	220	24.1	+02.5	221	23.3	+02.4	222	22.4	+02.5	223	21.6	+02.4	02
03	234	27.5	+02.4	235	26.6	+02.5	236	25.7	+02.5	237	24.9	+02.4	238	24.0	+02.5	03
04	249	29.9	+02.5	250	29.1	+02.4	251	28.2	+02.5	252	27.3	+02.5	253	26.5	+02.5	04
05	264	32.4	+02.5	265	31.5	+02.5	266	30.7	+02.4	267	29.8	+02.5	268	29.0	+02.4	05
06	279	34.9	+02.4	280	34.0	+02.5	281	33.1	+02.5	282	32.3	+02.4	283	31.4	+02.5	06
07	294	37.3	+02.5	295	36.5	+02.4	296	35.6	+02.5	297	34.7	+02.5	298	33.9	+02.4	07
08	309	39.8	+02.5	310	38.9	+02.5	311	38.1	+02.4	312	37.2	+02.5	313	36.3	+02.5	08
09	324	42.3	+02.4	325	41.4	+02.5	326	40.5	+02.5	327	39.7	+02.4	328	38.8	+02.5	09
10	339	44.7	+02.5	340	43.9	+02.4	341	43.0	+02.5	342	42.1	+02.5	343	41.3	+02.4	10
11	354	47.2	+02.5	355	46.3	+02.5	356	45.5	+02.4	357	44.6	+02.5	358	43.7	+02.5	11
12	9	49.7	+02.4	10	48.8	+02.5	11	47.9	+02.5	12	47.1	+02.4	13	46.2	+02.5	12
13	24	52.1	+02.5	25	51.3	+02.4	26	50.4	+02.5	27	49.5	+02.5	28	48.7	+02.4	13
14	39	54.6	+02.4	40	53.7	+02.5	41	52.9	+02.4	42	52.0	+02.5	43	51.1	+02.5	14
15	54	57.0	+02.5	55	56.2	+02.4	56	55.3	+02.5	57	54.5	+02.4	58	53.6	+02.5	15
16	69	59.5	+02.5	70	58.6	+02.5	71	57.8	+02.4	72	56.9	+02.5	73	56.1	+02.4	16
17	85	02.0	+02.4	86	01.1	+02.5	87	00.2	+02.5	87	59.4	+02.4	88	58.5	+02.5	17
18	100	04.4	+02.5	101	03.6	+02.4	102	02.7	+02.5	103	01.8	+02.5	104	01.0	+02.5	18
19	115	06.9	+02.5	116	06.0	+02.5	117	05.2	+02.4	118	04.3	+02.5	119	03.5	+02.4	19
20	130	09.4	+02.4	131	08.5	+02.5	132	07.6	+02.5	133	06.8	+02.4	134	05.9	+02.5	20
21	145	11.8	+02.5	146	11.0	+02.4	147	10.1	+02.5	148	09.2	+02.5	149	08.4	+02.4	21
22	160	14.3	+02.5	161	13.4	+02.5	162	12.6	+02.4	163	11.7	+02.5	164	10.8	+02.5	22
23	175	16.8	+02.4	176	15.9	+02.5	177	15.0	+02.5	178	14.2	+02.4	179	13.3	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.5	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	10.0	S 42	11.1	Acrux	173	01.9	S 63	13.3
Schedir	349	34.2	N 56	39.4	Gacrux	171	53.6	S 57	14.2
Diphda	348	50.0	S 17	52.1	Alioth	166	14.6	N 55	50.3
Achernar	335	22.5	S 57	07.6	Spica	158	24.4	S 11	16.7
Hamal	327	54.2	N 23	33.9	Alkaid	152	53.3	N 49	12.1
Polaris	315	32.0	N 89	21.6	Hadar	148	38.6	S 60	28.7
Acamar	315	13.8	S 40	13.2	Menkent	147	59.7	S 36	28.5
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.3	N 19	04.6
Mirfak	308	31.9	N 49	56.4	Rigel Kentaurus	139	40.3	S 60	55.7
Aldebaran	290	42.5	N 16	33.2	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	25.5	N 46	01.4	Kocab	137	18.8	N 74	03.7
Rigel	281	06.2	S 08	10.7	Alphecca	126	05.5	N 26	38.3
Bellatrix	278	25.4	N 06	22.1	Antares	112	18.6	S 26	28.8
Elnath	278	04.9	N 28	37.6	Atria	107	14.5	S 69	03.8
Alnilam	275	40.2	S 01	11.4	Sabik	102	05.3	S 15	45.2
Betelgeuze	270	54.6	N 07	24.6	Shaula	96	13.4	S 37	07.1
Canopus	263	53.5	S 52	42.7	Rasalhague	96	00.6	N 12	32.5
Sirius	258	28.1	S 16	44.5	Etamin	90	43.1	N 51	28.8
Adhara	255	07.6	S 29	00.4	Kaus Australis	83	35.5	S 34	22.3
Castor	245	59.8	N 31	50.5	Vega	80	34.8	N 38	47.8
Procyon	244	52.9	N 05	10.4	Nunki	75	50.6	S 26	16.1
Pollux	243	19.7	N 27	58.4	Albireo	67	06.0	N 28	00.1
Avior	234	15.4	S 59	35.1	Altair	62	02.4	N 08	55.3
Suhail	222	47.7	S 43	31.5	Peacock	53	09.6	S 56	39.6
Miaplacidus	221	38.0	S 69	48.7	Deneb	49	27.6	N 45	21.2
Alphard	217	49.8	S 08	45.4	Enif	33	41.3	N 09	58.4
Regulus	207	36.5	N 11	51.5	Alnair	27	36.2	S 46	51.2
Dubhe	193	43.1	N 61	38.0	Formalhaut	15	17.5	S 29	30.3
Denebola	182	26.8	N 14	26.9	Markab	13	32.5	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 96 of 365		day 97 of 365		day 98 of 365		day 99 of 365		day 100 of 365		UT					
	<i>April 6</i>		<i>April 7</i>		<i>April 8</i>		<i>April 9</i>		<i>April 10</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	194	15.8	+02.4	195	14.9	+02.5	196	14.1	+02.4	197	13.2	+02.5	198	12.3	+02.5	00
01	209	18.2	+02.5	210	17.4	+02.4	211	16.5	+02.5	212	15.7	+02.4	213	14.8	+02.5	01
02	224	20.7	+02.5	225	19.8	+02.5	226	19.0	+02.4	227	18.1	+02.5	228	17.3	+02.4	02
03	239	23.2	+02.4	240	22.3	+02.5	241	21.4	+02.5	242	20.6	+02.4	243	19.7	+02.5	03
04	254	25.6	+02.5	255	24.8	+02.4	256	23.9	+02.5	257	23.0	+02.5	258	22.2	+02.4	04
05	269	28.1	+02.5	270	27.2	+02.5	271	26.4	+02.4	272	25.5	+02.5	273	24.6	+02.5	05
06	284	30.6	+02.4	285	29.7	+02.5	286	28.8	+02.5	287	28.0	+02.4	288	27.1	+02.5	06
07	299	33.0	+02.5	300	32.2	+02.4	301	31.3	+02.5	302	30.4	+02.5	303	29.6	+02.4	07
08	314	35.5	+02.4	315	34.6	+02.5	316	33.8	+02.4	317	32.9	+02.5	318	32.0	+02.5	08
09	329	37.9	+02.5	330	37.1	+02.5	331	36.2	+02.5	332	35.4	+02.4	333	34.5	+02.5	09
10	344	40.4	+02.5	345	39.6	+02.4	346	38.7	+02.5	347	37.8	+02.5	348	37.0	+02.4	10
11	359	42.9	+02.4	0	42.0	+02.5	1	41.2	+02.4	2	40.3	+02.5	3	39.4	+02.5	11
12	14	45.3	+02.5	15	44.5	+02.4	16	43.6	+02.5	17	42.8	+02.4	18	41.9	+02.5	12
13	29	47.8	+02.5	30	46.9	+02.5	31	46.1	+02.4	32	45.2	+02.5	33	44.4	+02.4	13
14	44	50.3	+02.4	45	49.4	+02.5	46	48.5	+02.5	47	47.7	+02.5	48	46.8	+02.5	14
15	59	52.7	+02.5	60	51.9	+02.4	61	51.0	+02.5	62	50.2	+02.4	63	49.3	+02.5	15
16	74	55.2	+02.5	75	54.3	+02.5	76	53.5	+02.4	77	52.6	+02.5	78	51.8	+02.4	16
17	89	57.7	+02.4	90	56.8	+02.5	91	55.9	+02.5	92	55.1	+02.4	93	54.2	+02.5	17
18	105	00.1	+02.5	105	59.3	+02.4	106	58.4	+02.5	107	57.5	+02.5	108	56.7	+02.4	18
19	120	02.6	+02.5	121	01.7	+02.5	122	00.9	+02.4	123	00.0	+02.5	123	59.1	+02.5	19
20	135	05.1	+02.4	136	04.2	+02.5	137	03.3	+02.5	138	02.5	+02.4	139	01.6	+02.5	20
21	150	07.5	+02.5	151	06.7	+02.4	152	05.8	+02.5	153	04.9	+02.5	154	04.1	+02.4	21
22	165	10.0	+02.4	166	09.1	+02.5	167	08.3	+02.4	168	07.4	+02.5	169	06.5	+02.5	22
23	180	12.4	+02.5	181	11.6	+02.5	182	10.7	+02.5	183	09.9	+02.4	184	09.0	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.5	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	09.9	S 42	11.1	Acrux	173	01.9	S 63	13.4
Schedir	349	34.2	N 56	39.4	Gacrux	171	53.6	S 57	14.2
Diphda	348	50.0	S 17	52.1	Alioth	166	14.6	N 55	50.4
Achernar	335	22.6	S 57	07.6	Spica	158	24.4	S 11	16.7
Hamal	327	54.2	N 23	33.9	Alkaid	152	53.3	N 49	12.1
Polaris	315	33.0	N 89	21.6	Hadar	148	38.6	S 60	28.7
Acamar	315	13.9	S 40	13.2	Menkent	147	59.6	S 36	28.5
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.3	N 19	04.6
Mirfak	308	31.9	N 49	56.4	Rigel Kentaurus	139	40.2	S 60	55.7
Aldebaran	290	42.5	N 16	33.2	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	25.5	N 46	01.4	Kocab	137	18.7	N 74	03.7
Rigel	281	06.2	S 08	10.7	Alphecca	126	05.5	N 26	38.3
Bellatrix	278	25.5	N 06	22.1	Antares	112	18.5	S 26	28.8
Elnath	278	04.9	N 28	37.6	Atria	107	14.4	S 69	03.8
Alnilam	275	40.2	S 01	11.4	Sabik	102	05.3	S 15	45.2
Betelgeuze	270	54.7	N 07	24.6	Shaula	96	13.3	S 37	07.1
Canopus	263	53.5	S 52	42.7	Rasalhague	96	00.6	N 12	32.5
Sirius	258	28.1	S 16	44.5	Etamin	90	43.1	N 51	28.8
Adhara	255	07.7	S 29	00.4	Kaus Australis	83	35.5	S 34	22.3
Castor	245	59.9	N 31	50.5	Vega	80	34.8	N 38	47.8
Procyon	244	53.0	N 05	10.4	Nunki	75	50.6	S 26	16.1
Pollux	243	19.7	N 27	58.4	Albireo	67	05.9	N 28	00.1
Avior	234	15.4	S 59	35.1	Altair	62	02.4	N 08	55.3
Suhail	222	47.7	S 43	31.5	Peacock	53	09.5	S 56	39.6
Miaplacidus	221	38.1	S 69	48.7	Deneb	49	27.5	N 45	21.2
Alphard	217	49.8	S 08	45.4	Enif	33	41.3	N 09	58.4
Regulus	207	36.6	N 11	51.5	Alnair	27	36.2	S 46	51.1
Dubhe	193	43.2	N 61	38.0	Formalhaut	15	17.5	S 29	30.3
Denebola	182	26.8	N 14	26.9	Markab	13	32.5	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 101 of 365 <i>April 11</i>		day 102 of 365 <i>April 12</i>		day 103 of 365 <i>April 13</i>		day 104 of 365 <i>April 14</i>		day 105 of 365 <i>April 15</i>		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	199	11.5 +02.4	200	10.6 +02.5	201	09.7 +02.5	202	08.9 +02.4	203	08.0 +02.5	00
01	214	13.9 +02.5	215	13.1 +02.4	216	12.2 +02.5	217	11.3 +02.5	218	10.5 +02.4	01
02	229	16.4 +02.5	230	15.5 +02.5	231	14.7 +02.4	232	13.8 +02.5	233	12.9 +02.5	02
03	244	18.9 +02.4	245	18.0 +02.5	246	17.1 +02.5	247	16.3 +02.4	248	15.4 +02.5	03
04	259	21.3 +02.5	260	20.5 +02.4	261	19.6 +02.5	262	18.7 +02.5	263	17.9 +02.4	04
05	274	23.8 +02.5	275	22.9 +02.5	276	22.1 +02.4	277	21.2 +02.5	278	20.3 +02.5	05
06	289	26.3 +02.4	290	25.4 +02.5	291	24.5 +02.5	292	23.7 +02.4	293	22.8 +02.5	06
07	304	28.7 +02.5	305	27.9 +02.4	306	27.0 +02.5	307	26.1 +02.5	308	25.3 +02.4	07
08	319	31.2 +02.4	320	30.3 +02.5	321	29.5 +02.4	322	28.6 +02.5	323	27.7 +02.5	08
09	334	33.6 +02.5	335	32.8 +02.4	336	31.9 +02.5	337	31.1 +02.4	338	30.2 +02.5	09
10	349	36.1 +02.5	350	35.2 +02.5	351	34.4 +02.4	352	33.5 +02.5	353	32.7 +02.4	10
11	4	38.6 +02.4	5	37.7 +02.5	6	36.8 +02.5	7	36.0 +02.5	8	35.1 +02.5	11
12	19	41.0 +02.5	20	40.2 +02.4	21	39.3 +02.5	22	38.5 +02.4	23	37.6 +02.5	12
13	34	43.5 +02.5	35	42.6 +02.5	36	41.8 +02.4	37	40.9 +02.5	38	40.1 +02.4	13
14	49	46.0 +02.4	50	45.1 +02.5	51	44.2 +02.5	52	43.4 +02.4	53	42.5 +02.5	14
15	64	48.4 +02.5	65	47.6 +02.4	66	46.7 +02.5	67	45.8 +02.5	68	45.0 +02.4	15
16	79	50.9 +02.5	80	50.0 +02.5	81	49.2 +02.4	82	48.3 +02.5	83	47.4 +02.5	16
17	94	53.4 +02.4	95	52.5 +02.5	96	51.6 +02.5	97	50.8 +02.4	98	49.9 +02.5	17
18	109	55.8 +02.5	110	55.0 +02.4	111	54.1 +02.5	112	53.2 +02.5	113	52.4 +02.4	18
19	124	58.3 +02.5	125	57.4 +02.5	126	56.6 +02.4	127	55.7 +02.5	128	54.8 +02.5	19
20	140	00.8 +02.4	140	59.9 +02.5	141	59.0 +02.5	142	58.2 +02.4	143	57.3 +02.5	20
21	155	03.2 +02.5	156	02.4 +02.4	157	01.5 +02.5	158	00.6 +02.5	158	59.8 +02.4	21
22	170	05.7 +02.4	171	04.8 +02.5	172	04.0 +02.4	173	03.1 +02.5	174	02.2 +02.5	22
23	185	08.1 +02.5	186	07.3 +02.4	187	06.4 +02.5	188	05.6 +02.4	189	04.7 +02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.5	N 29 12.6	Gienah	175 45.6	S 17 40.0
Ankaa	353 09.9	S 42 11.1	Acrux	173 01.9	S 63 13.4
Schedir	349 34.2	N 56 39.4	Gacrux	171 53.6	S 57 14.2
Diphda	348 50.0	S 17 52.1	Alioth	166 14.5	N 55 50.4
Achernar	335 22.6	S 57 07.6	Spica	158 24.4	S 11 16.7
Hamal	327 54.2	N 23 33.9	Alkaid	152 53.3	N 49 12.1
Polaris	315 33.8	N 89 21.6	Hadar	148 38.6	S 60 28.7
Acamar	315 13.9	S 40 13.2	Menkent	147 59.6	S 36 28.5
Menkar	314 08.8	N 04 10.5	Arcturus	145 49.3	N 19 04.6
Mirfak	308 31.9	N 49 56.4	Rigel Kentaurus	139 40.2	S 60 55.7
Aldebaran	290 42.5	N 16 33.2	Zubenelgenubi	136 58.2	S 16 08.0
Capella	280 25.5	N 46 01.4	Kocab	137 18.7	N 74 03.7
Rigel	281 06.2	S 08 10.7	Alphecca	126 05.4	N 26 38.3
Bellatrix	278 25.5	N 06 22.1	Antares	112 18.5	S 26 28.8
Elnath	278 04.9	N 28 37.6	Atria	107 14.3	S 69 03.8
Alnilam	275 40.2	S 01 11.4	Sabik	102 05.2	S 15 45.2
Betelgeuze	270 54.7	N 07 24.6	Shaula	96 13.3	S 37 07.1
Canopus	263 53.6	S 52 42.7	Rasalhague	96 00.5	N 12 32.5
Sirius	258 28.1	S 16 44.5	Etamin	90 43.0	N 51 28.8
Adhara	255 07.7	S 29 00.4	Kaus Australis	83 35.4	S 34 22.3
Castor	245 59.9	N 31 50.5	Vega	80 34.7	N 38 47.8
Procyon	244 53.0	N 05 10.4	Nunki	75 50.5	S 26 16.1
Pollux	243 19.7	N 27 58.4	Albireo	67 05.9	N 28 00.1
Avior	234 15.5	S 59 35.1	Altair	62 02.4	N 08 55.3
Suhail	222 47.8	S 43 31.6	Peacock	53 09.5	S 56 39.6
Miaplacidus	221 38.1	S 69 48.8	Deneb	49 27.5	N 45 21.2
Alphard	217 49.8	S 08 45.4	Enif	33 41.2	N 09 58.4
Regulus	207 36.6	N 11 51.5	Alnair	27 36.1	S 46 51.1
Dubhe	193 43.2	N 61 38.0	Formalhaut	15 17.4	S 29 30.3
Denebola	182 26.8	N 14 26.9	Markab	13 32.4	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 106 of 365		day 107 of 365		day 108 of 365		day 109 of 365		day 110 of 365		UT					
	<i>April 16</i>		<i>April 17</i>		<i>April 18</i>		<i>April 19</i>		<i>April 20</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	204	07.2	+02.4	205	06.3	+02.5	206	05.4	+02.5	207	04.6	+02.4	208	03.7	+02.5	00
01	219	09.6	+02.5	220	08.8	+02.4	221	07.9	+02.5	222	07.0	+02.5	223	06.2	+02.4	01
02	234	12.1	+02.4	235	11.2	+02.5	236	10.4	+02.4	237	09.5	+02.5	238	08.6	+02.5	02
03	249	14.5	+02.5	250	13.7	+02.4	251	12.8	+02.5	252	12.0	+02.4	253	11.1	+02.5	03
04	264	17.0	+02.5	265	16.1	+02.5	266	15.3	+02.5	267	14.4	+02.5	268	13.6	+02.4	04
05	279	19.5	+02.4	280	18.6	+02.5	281	17.8	+02.4	282	16.9	+02.5	283	16.0	+02.5	05
06	294	21.9	+02.5	295	21.1	+02.4	296	20.2	+02.5	297	19.4	+02.4	298	18.5	+02.5	06
07	309	24.4	+02.5	310	23.5	+02.5	311	22.7	+02.4	312	21.8	+02.5	313	21.0	+02.4	07
08	324	26.9	+02.4	325	26.0	+02.5	326	25.1	+02.5	327	24.3	+02.4	328	23.4	+02.5	08
09	339	29.3	+02.5	340	28.5	+02.4	341	27.6	+02.5	342	26.7	+02.5	343	25.9	+02.5	09
10	354	31.8	+02.5	355	30.9	+02.5	356	30.1	+02.4	357	29.2	+02.5	358	28.4	+02.4	10
11	9	34.3	+02.4	10	33.4	+02.5	11	32.5	+02.5	12	31.7	+02.4	13	30.8	+02.5	11
12	24	36.7	+02.5	25	35.9	+02.4	26	35.0	+02.5	27	34.1	+02.5	28	33.3	+02.4	12
13	39	39.2	+02.5	40	38.3	+02.5	41	37.5	+02.4	42	36.6	+02.5	43	35.7	+02.5	13
14	54	41.7	+02.4	55	40.8	+02.5	56	39.9	+02.5	57	39.1	+02.4	58	38.2	+02.5	14
15	69	44.1	+02.5	70	43.3	+02.4	71	42.4	+02.5	72	41.5	+02.5	73	40.7	+02.4	15
16	84	46.6	+02.4	85	45.7	+02.5	86	44.9	+02.4	87	44.0	+02.5	88	43.1	+02.5	16
17	99	49.0	+02.5	100	48.2	+02.4	101	47.3	+02.5	102	46.5	+02.4	103	45.6	+02.5	17
18	114	51.5	+02.5	115	50.6	+02.5	116	49.8	+02.4	117	48.9	+02.5	118	48.1	+02.4	18
19	129	54.0	+02.4	130	53.1	+02.5	131	52.2	+02.5	132	51.4	+02.5	133	50.5	+02.5	19
20	144	56.4	+02.5	145	55.6	+02.4	146	54.7	+02.5	147	53.9	+02.4	148	53.0	+02.5	20
21	159	58.9	+02.5	160	58.0	+02.5	161	57.2	+02.4	162	56.3	+02.5	163	55.5	+02.4	21
22	175	01.4	+02.4	176	00.5	+02.5	176	59.6	+02.5	177	58.8	+02.4	178	57.9	+02.5	22
23	190	03.8	+02.5	191	03.0	+02.4	192	02.1	+02.5	193	01.2	+02.5	194	00.4	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.5	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	09.9	S 42	11.1	Acrux	173	01.9	S 63	13.4
Schedir	349	34.2	N 56	39.3	Gacrux	171	53.6	S 57	14.2
Diphda	348	50.0	S 17	52.1	Alioth	166	14.6	N 55	50.4
Achernar	335	22.6	S 57	07.5	Spica	158	24.4	S 11	16.7
Hamal	327	54.2	N 23	33.9	Alkaid	152	53.3	N 49	12.1
Polaris	315	34.8	N 89	21.5	Hadar	148	38.6	S 60	28.8
Acamar	315	13.9	S 40	13.1	Menkent	147	59.6	S 36	28.5
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.3	N 19	04.7
Mirfak	308	32.0	N 49	56.4	Rigel Kentaurus	139	40.2	S 60	55.7
Aldebaran	290	42.5	N 16	33.2	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	25.6	N 46	01.4	Kocab	137	18.6	N 74	03.7
Rigel	281	06.3	S 08	10.7	Alphecca	126	05.4	N 26	38.3
Bellatrix	278	25.5	N 06	22.1	Antares	112	18.5	S 26	28.8
Elnath	278	05.0	N 28	37.6	Atria	107	14.3	S 69	03.8
Alnilam	275	40.2	S 01	11.4	Sabik	102	05.2	S 15	45.2
Betelgeuze	270	54.7	N 07	24.6	Shaula	96	13.2	S 37	07.1
Canopus	263	53.6	S 52	42.7	Rasalhague	96	00.5	N 12	32.5
Sirius	258	28.2	S 16	44.5	Etamin	90	43.0	N 51	28.8
Adhara	255	07.7	S 29	00.4	Kaus Australis	83	35.4	S 34	22.3
Castor	245	59.9	N 31	50.5	Vega	80	34.7	N 38	47.8
Procyon	244	53.0	N 05	10.4	Nunki	75	50.5	S 26	16.1
Pollux	243	19.8	N 27	58.4	Albireo	67	05.9	N 28	00.1
Avior	234	15.5	S 59	35.1	Altair	62	02.3	N 08	55.3
Suhail	222	47.8	S 43	31.6	Peacock	53	09.4	S 56	39.6
Miaplacidus	221	38.2	S 69	48.8	Deneb	49	27.4	N 45	21.2
Alphard	217	49.8	S 08	45.4	Enif	33	41.2	N 09	58.4
Regulus	207	36.6	N 11	51.5	Alnair	27	36.1	S 46	51.1
Dubhe	193	43.2	N 61	38.1	Formalhaut	15	17.4	S 29	30.3
Denebola	182	26.8	N 14	26.9	Markab	13	32.4	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 111 of 365 April 21			day 112 of 365 April 22			day 113 of 365 April 23			day 114 of 365 April 24			day 115 of 365 April 25			UT
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
00	209	02.9	+02.4	210	02.0	+02.5	211	01.1	+02.5	212	00.3	+02.4	212	59.4	+02.5	00
01	224	05.3	+02.5	225	04.5	+02.4	226	03.6	+02.5	227	02.7	+02.5	228	01.9	+02.4	01
02	239	07.8	+02.4	240	06.9	+02.5	241	06.1	+02.4	242	05.2	+02.5	243	04.3	+02.5	02
03	254	10.2	+02.5	255	09.4	+02.4	256	08.5	+02.5	257	07.7	+02.4	258	06.8	+02.5	03
04	269	12.7	+02.5	270	11.8	+02.5	271	11.0	+02.5	272	10.1	+02.5	273	09.3	+02.4	04
05	284	15.2	+02.4	285	14.3	+02.5	286	13.5	+02.4	287	12.6	+02.5	288	11.7	+02.5	05
06	299	17.6	+02.5	300	16.8	+02.4	301	15.9	+02.5	302	15.1	+02.4	303	14.2	+02.5	06
07	314	20.1	+02.5	315	19.2	+02.5	316	18.4	+02.4	317	17.5	+02.5	318	16.7	+02.4	07
08	329	22.6	+02.4	330	21.7	+02.5	331	20.8	+02.5	332	20.0	+02.4	333	19.1	+02.5	08
09	344	25.0	+02.5	345	24.2	+02.4	346	23.3	+02.5	347	22.4	+02.5	348	21.6	+02.5	09
10	359	27.5	+02.5	0	26.6	+02.5	1	25.8	+02.4	2	24.9	+02.5	3	24.1	+02.4	10
11	14	30.0	+02.4	15	29.1	+02.5	16	28.2	+02.5	17	27.4	+02.4	18	26.5	+02.5	11
12	29	32.4	+02.5	30	31.6	+02.4	31	30.7	+02.5	32	29.8	+02.5	33	29.0	+02.4	12
13	44	34.9	+02.4	45	34.0	+02.5	46	33.2	+02.4	47	32.3	+02.5	48	31.4	+02.5	13
14	59	37.3	+02.5	60	36.5	+02.5	61	35.6	+02.5	62	34.8	+02.4	63	33.9	+02.5	14
15	74	39.8	+02.5	75	39.0	+02.4	76	38.1	+02.5	77	37.2	+02.5	78	36.4	+02.4	15
16	89	42.3	+02.4	90	41.4	+02.5	91	40.6	+02.4	92	39.7	+02.5	93	38.8	+02.5	16
17	104	44.7	+02.5	105	43.9	+02.4	106	43.0	+02.5	107	42.2	+02.4	108	41.3	+02.5	17
18	119	47.2	+02.5	120	46.3	+02.5	121	45.5	+02.5	122	44.6	+02.5	123	43.8	+02.4	18
19	134	49.7	+02.4	135	48.8	+02.5	136	48.0	+02.4	137	47.1	+02.5	138	46.2	+02.5	19
20	149	52.1	+02.5	150	51.3	+02.4	151	50.4	+02.5	152	49.6	+02.4	153	48.7	+02.5	20
21	164	54.6	+02.5	165	53.7	+02.5	166	52.9	+02.4	167	52.0	+02.5	168	51.2	+02.4	21
22	179	57.1	+02.4	180	56.2	+02.5	181	55.3	+02.5	182	54.5	+02.4	183	53.6	+02.5	22
23	194	59.5	+02.5	195	58.7	+02.4	196	57.8	+02.5	197	56.9	+02.5	198	56.1	+02.4	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.5	N 29 12.6	Gienah	175 45.6	S 17 40.0
Ankaa	353 09.9	S 42 11.0	Acrux	173 01.9	S 63 13.4
Schedir	349 34.2	N 56 39.3	Gacrux	171 53.6	S 57 14.3
Diphda	348 50.0	S 17 52.0	Alioth	166 14.6	N 55 50.4
Achernar	335 22.5	S 57 07.5	Spica	158 24.4	S 11 16.7
Hamal	327 54.2	N 23 33.9	Alkaid	152 53.3	N 49 12.2
Polaris	315 35.0	N 89 21.5	Hadar	148 38.5	S 60 28.8
Acamar	315 13.9	S 40 13.1	Menkent	147 59.6	S 36 28.5
Menkar	314 08.8	N 04 10.5	Arcturus	145 49.3	N 19 04.7
Mirfak	308 32.0	N 49 56.3	Rigel Kentaurus	139 40.1	S 60 55.7
Aldebaran	290 42.5	N 16 33.2	Zubenelgenubi	136 58.1	S 16 08.0
Capella	280 25.6	N 46 01.4	Kocab	137 18.6	N 74 03.8
Rigel	281 06.3	S 08 10.7	Alphecca	126 05.4	N 26 38.3
Bellatrix	278 25.5	N 06 22.1	Antares	112 18.4	S 26 28.8
Elnath	278 05.0	N 28 37.6	Atria	107 14.2	S 69 03.8
Alnilam	275 40.2	S 01 11.4	Sabik	102 05.2	S 15 45.2
Betelgeuze	270 54.7	N 07 24.6	Shaula	96 13.2	S 37 07.1
Canopus	263 53.6	S 52 42.7	Rasalhague	96 00.5	N 12 32.6
Sirius	258 28.2	S 16 44.5	Etamin	90 42.9	N 51 28.9
Adhara	255 07.7	S 29 00.3	Kaus Australis	83 35.3	S 34 22.3
Castor	245 59.9	N 31 50.5	Vega	80 34.7	N 38 47.8
Procyon	244 53.0	N 05 10.4	Nunki	75 50.5	S 26 16.1
Pollux	243 19.8	N 27 58.4	Albireo	67 05.8	N 28 00.1
Avior	234 15.6	S 59 35.1	Altair	62 02.3	N 08 55.3
Suhail	222 47.8	S 43 31.6	Peacock	53 09.3	S 56 39.6
Miaplacidus	221 38.3	S 69 48.8	Deneb	49 27.4	N 45 21.2
Alphard	217 49.9	S 08 45.4	Enif	33 41.2	N 09 58.4
Regulus	207 36.6	N 11 51.5	Alnair	27 36.1	S 46 51.1
Dubhe	193 43.2	N 61 38.1	Formalhaut	15 17.4	S 29 30.3
Denebola	182 26.8	N 14 26.9	Markab	13 32.4	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 116 of 365 April 26			day 117 of 365 April 27			day 118 of 365 April 28			day 119 of 365 April 29			day 120 of 365 April 30			UT
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
00	213	58.5	+02.5	214	57.7	+02.5	215	56.8	+02.5	216	56.0	+02.4	217	55.1	+02.5	00
01	229	01.0	+02.5	230	00.2	+02.4	230	59.3	+02.5	231	58.4	+02.5	232	57.6	+02.4	01
02	244	03.5	+02.4	245	02.6	+02.5	246	01.8	+02.4	247	00.9	+02.5	248	00.0	+02.5	02
03	259	05.9	+02.5	260	05.1	+02.4	261	04.2	+02.5	262	03.4	+02.4	263	02.5	+02.5	03
04	274	08.4	+02.5	275	07.5	+02.5	276	06.7	+02.4	277	05.8	+02.5	278	05.0	+02.4	04
05	289	10.9	+02.4	290	10.0	+02.5	291	09.1	+02.5	292	08.3	+02.4	293	07.4	+02.5	05
06	304	13.3	+02.5	305	12.5	+02.4	306	11.6	+02.5	307	10.7	+02.5	308	09.9	+02.4	06
07	319	15.8	+02.5	320	14.9	+02.5	321	14.1	+02.4	322	13.2	+02.5	323	12.3	+02.5	07
08	334	18.3	+02.4	335	17.4	+02.5	336	16.5	+02.5	337	15.7	+02.4	338	14.8	+02.5	08
09	349	20.7	+02.5	350	19.9	+02.4	351	19.0	+02.5	352	18.1	+02.5	353	17.3	+02.4	09
10	4	23.2	+02.5	5	22.3	+02.5	6	21.5	+02.4	7	20.6	+02.5	8	19.7	+02.5	10
11	19	25.7	+02.4	20	24.8	+02.5	21	23.9	+02.5	22	23.1	+02.4	23	22.2	+02.5	11
12	34	28.1	+02.5	35	27.3	+02.4	36	26.4	+02.5	37	25.5	+02.5	38	24.7	+02.4	12
13	49	30.6	+02.4	50	29.7	+02.5	51	28.9	+02.4	52	28.0	+02.5	53	27.1	+02.5	13
14	64	33.0	+02.5	65	32.2	+02.4	66	31.3	+02.5	67	30.5	+02.4	68	29.6	+02.5	14
15	79	35.5	+02.5	80	34.6	+02.5	81	33.8	+02.4	82	32.9	+02.5	83	32.1	+02.4	15
16	94	38.0	+02.4	95	37.1	+02.5	96	36.2	+02.5	97	35.4	+02.4	98	34.5	+02.5	16
17	109	40.4	+02.5	110	39.6	+02.4	111	38.7	+02.5	112	37.8	+02.5	113	37.0	+02.5	17
18	124	42.9	+02.5	125	42.0	+02.5	126	41.2	+02.4	127	40.3	+02.5	128	39.5	+02.4	18
19	139	45.4	+02.4	140	44.5	+02.5	141	43.6	+02.5	142	42.8	+02.4	143	41.9	+02.5	19
20	154	47.8	+02.5	155	47.0	+02.4	156	46.1	+02.5	157	45.2	+02.5	158	44.4	+02.4	20
21	169	50.3	+02.5	170	49.4	+02.5	171	48.6	+02.4	172	47.7	+02.5	173	46.8	+02.5	21
22	184	52.8	+02.4	185	51.9	+02.5	186	51.0	+02.5	187	50.2	+02.4	188	49.3	+02.5	22
23	199	55.2	+02.5	200	54.4	+02.4	201	53.5	+02.5	202	52.6	+02.5	203	51.8	+02.4	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.4	N 29 12.6	Gienah	175 45.6	S 17 40.0
Ankaa	353 09.9	S 42 11.0	Acrux	173 01.9	S 63 13.5
Schedir	349 34.1	N 56 39.3	Gacrux	171 53.6	S 57 14.3
Diphda	348 49.9	S 17 52.0	Alioth	166 14.6	N 55 50.5
Achernar	335 22.5	S 57 07.5	Spica	158 24.3	S 11 16.7
Hamal	327 54.1	N 23 33.9	Alkaid	152 53.3	N 49 12.2
Polaris	315 35.3	N 89 21.5	Hadar	148 38.5	S 60 28.8
Acamar	315 13.9	S 40 13.1	Menkent	147 59.6	S 36 28.5
Menkar	314 08.8	N 04 10.5	Arcturus	145 49.3	N 19 04.7
Mirfak	308 32.0	N 49 56.3	Rigel Kentaurus	139 40.1	S 60 55.8
Aldebaran	290 42.5	N 16 33.2	Zubenelgenubi	136 58.1	S 16 08.1
Capella	280 25.6	N 46 01.4	Kocab	137 18.6	N 74 03.8
Rigel	281 06.3	S 08 10.7	Alphecca	126 05.4	N 26 38.3
Bellatrix	278 25.5	N 06 22.1	Antares	112 18.4	S 26 28.8
Elnath	278 05.0	N 28 37.6	Atria	107 14.1	S 69 03.8
Alnilam	275 40.2	S 01 11.4	Sabik	102 05.1	S 15 45.2
Betelgeuze	270 54.7	N 07 24.6	Shaula	96 13.1	S 37 07.1
Canopus	263 53.7	S 52 42.7	Rasalhague	96 00.4	N 12 32.6
Sirius	258 28.2	S 16 44.5	Etamin	90 42.9	N 51 28.9
Adhara	255 07.8	S 29 00.3	Kaus Australis	83 35.3	S 34 22.3
Castor	245 60.0	N 31 50.5	Vega	80 34.6	N 38 47.9
Procyon	244 53.0	N 05 10.4	Nunki	75 50.4	S 26 16.1
Pollux	243 19.8	N 27 58.4	Albireo	67 05.8	N 28 00.1
Avior	234 15.6	S 59 35.1	Altair	62 02.3	N 08 55.3
Suhail	222 47.9	S 43 31.6	Peacock	53 09.3	S 56 39.6
Miaplacidus	221 38.4	S 69 48.8	Deneb	49 27.3	N 45 21.2
Alphard	217 49.9	S 08 45.4	Enif	33 41.1	N 09 58.4
Regulus	207 36.6	N 11 51.5	Alnair	27 36.0	S 46 51.1
Dubhe	193 43.3	N 61 38.1	Formalhaut	15 17.3	S 29 30.2
Denebola	182 26.8	N 14 26.9	Markab	13 32.4	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 121 of 365		day 122 of 365		day 123 of 365		day 124 of 365		day 125 of 365		UT					
	May 1		May 2		May 3		May 4		May 5							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	218	54.2	+02.5	219	53.4	+02.4	220	52.5	+02.5	221	51.7	+02.4	222	50.8	+02.5	00
01	233	56.7	+02.5	234	55.8	+02.5	235	55.0	+02.4	236	54.1	+02.5	237	53.3	+02.4	01
02	248	59.2	+02.4	249	58.3	+02.5	250	57.4	+02.5	251	56.6	+02.4	252	55.7	+02.5	02
03	264	01.6	+02.5	265	00.8	+02.4	265	59.9	+02.5	266	59.0	+02.5	267	58.2	+02.5	03
04	279	04.1	+02.5	280	03.2	+02.5	281	02.4	+02.4	282	01.5	+02.5	283	00.7	+02.4	04
05	294	06.6	+02.4	295	05.7	+02.5	296	04.8	+02.5	297	04.0	+02.4	298	03.1	+02.5	05
06	309	09.0	+02.5	310	08.2	+02.4	311	07.3	+02.5	312	06.4	+02.5	313	05.6	+02.4	06
07	324	11.5	+02.4	325	10.6	+02.5	326	09.8	+02.4	327	08.9	+02.5	328	08.0	+02.5	07
08	339	13.9	+02.5	340	13.1	+02.5	341	12.2	+02.5	342	11.4	+02.4	343	10.5	+02.5	08
09	354	16.4	+02.5	355	15.6	+02.4	356	14.7	+02.5	357	13.8	+02.5	358	13.0	+02.4	09
10	9	18.9	+02.4	10	18.0	+02.5	11	17.2	+02.4	12	16.3	+02.5	13	15.4	+02.5	10
11	24	21.3	+02.5	25	20.5	+02.4	26	19.6	+02.5	27	18.8	+02.4	28	17.9	+02.5	11
12	39	23.8	+02.5	40	22.9	+02.5	41	22.1	+02.4	42	21.2	+02.5	43	20.4	+02.4	12
13	54	26.3	+02.4	55	25.4	+02.5	56	24.5	+02.5	57	23.7	+02.5	58	22.8	+02.5	13
14	69	28.7	+02.5	70	27.9	+02.4	71	27.0	+02.5	72	26.2	+02.4	73	25.3	+02.5	14
15	84	31.2	+02.5	85	30.3	+02.5	86	29.5	+02.4	87	28.6	+02.5	88	27.8	+02.4	15
16	99	33.7	+02.4	100	32.8	+02.5	101	31.9	+02.5	102	31.1	+02.4	103	30.2	+02.5	16
17	114	36.1	+02.5	115	35.3	+02.4	116	34.4	+02.5	117	33.5	+02.5	118	32.7	+02.4	17
18	129	38.6	+02.5	130	37.7	+02.5	131	36.9	+02.4	132	36.0	+02.5	133	35.1	+02.5	18
19	144	41.1	+02.4	145	40.2	+02.5	146	39.3	+02.5	147	38.5	+02.4	148	37.6	+02.5	19
20	159	43.5	+02.5	160	42.7	+02.4	161	41.8	+02.5	162	40.9	+02.5	163	40.1	+02.4	20
21	174	46.0	+02.4	175	45.1	+02.5	176	44.3	+02.4	177	43.4	+02.5	178	42.5	+02.5	21
22	189	48.4	+02.5	190	47.6	+02.4	191	46.7	+02.5	192	45.9	+02.4	193	45.0	+02.5	22
23	204	50.9	+02.5	205	50.0	+02.5	206	49.2	+02.5	207	48.3	+02.5	208	47.5	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.4	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	09.8	S 42	11.0	Acrux	173	02.0	S 63	13.5
Schedir	349	34.1	N 56	39.3	Gacrux	171	53.7	S 57	14.3
Diphda	348	49.9	S 17	52.0	Alioth	166	14.6	N 55	50.5
Achernar	335	22.5	S 57	07.4	Spica	158	24.3	S 11	16.7
Hamal	327	54.1	N 23	33.9	Alkaid	152	53.3	N 49	12.2
Polaris	315	35.5	N 89	21.4	Hadar	148	38.5	S 60	28.8
Acamar	315	13.9	S 40	13.1	Menkent	147	59.6	S 36	28.5
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.3	N 19	04.7
Mirfak	308	32.0	N 49	56.3	Rigel Kentaurus	139	40.1	S 60	55.8
Aldebaran	290	42.5	N 16	33.2	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.6	N 46	01.4	Kocab	137	18.6	N 74	03.8
Rigel	281	06.3	S 08	10.7	Alphecca	126	05.3	N 26	38.3
Bellatrix	278	25.5	N 06	22.1	Antares	112	18.4	S 26	28.8
Elnath	278	05.0	N 28	37.6	Atria	107	14.1	S 69	03.9
Alnilam	275	40.3	S 01	11.4	Sabik	102	05.1	S 15	45.2
Betelgeuze	270	54.8	N 07	24.6	Shaula	96	13.1	S 37	07.1
Canopus	263	53.7	S 52	42.7	Rasalhague	96	00.4	N 12	32.6
Sirius	258	28.2	S 16	44.5	Etamin	90	42.9	N 51	28.9
Adhara	255	07.8	S 29	00.3	Kaus Australis	83	35.2	S 34	22.3
Castor	245	60.0	N 31	50.5	Vega	80	34.6	N 38	47.9
Procyon	244	53.1	N 05	10.4	Nunki	75	50.4	S 26	16.1
Pollux	243	19.8	N 27	58.4	Albireo	67	05.7	N 28	00.1
Avior	234	15.7	S 59	35.1	Altair	62	02.2	N 08	55.3
Suhail	222	47.9	S 43	31.6	Peacock	53	09.2	S 56	39.6
Miaplacidus	221	38.4	S 69	48.8	Deneb	49	27.3	N 45	21.2
Alphard	217	49.9	S 08	45.4	Enif	33	41.1	N 09	58.4
Regulus	207	36.6	N 11	51.5	Alnair	27	36.0	S 46	51.0
Dubhe	193	43.3	N 61	38.1	Formalhaut	15	17.3	S 29	30.2
Denebola	182	26.8	N 14	26.9	Markab	13	32.3	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 126 of 365		day 127 of 365		day 128 of 365		day 129 of 365		day 130 of 365		UT					
	<i>May 6</i>		<i>May 7</i>		<i>May 8</i>		<i>May 9</i>		<i>May 10</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	223	49.9	+02.5	224	49.1	+02.4	225	48.2	+02.5	226	47.4	+02.4	227	46.5	+02.5	00
01	238	52.4	+02.5	239	51.5	+02.5	240	50.7	+02.4	241	49.8	+02.5	242	49.0	+02.4	01
02	253	54.9	+02.4	254	54.0	+02.5	255	53.1	+02.5	256	52.3	+02.4	257	51.4	+02.5	02
03	268	57.3	+02.5	269	56.5	+02.4	270	55.6	+02.5	271	54.7	+02.5	272	53.9	+02.4	03
04	283	59.8	+02.5	284	58.9	+02.5	285	58.1	+02.4	286	57.2	+02.5	287	56.3	+02.5	04
05	299	02.3	+02.4	300	01.4	+02.5	301	00.5	+02.5	301	59.7	+02.4	302	58.8	+02.5	05
06	314	04.7	+02.5	315	03.9	+02.4	316	03.0	+02.5	317	02.1	+02.5	318	01.3	+02.4	06
07	329	07.2	+02.4	330	06.3	+02.5	331	05.5	+02.4	332	04.6	+02.5	333	03.7	+02.5	07
08	344	09.6	+02.5	345	08.8	+02.5	346	07.9	+02.5	347	07.1	+02.4	348	06.2	+02.5	08
09	359	12.1	+02.5	0	11.3	+02.4	1	10.4	+02.5	2	09.5	+02.5	3	08.7	+02.4	09
10	14	14.6	+02.4	15	13.7	+02.5	16	12.9	+02.4	17	12.0	+02.5	18	11.1	+02.5	10
11	29	17.0	+02.5	30	16.2	+02.4	31	15.3	+02.5	32	14.5	+02.4	33	13.6	+02.5	11
12	44	19.5	+02.5	45	18.6	+02.5	46	17.8	+02.4	47	16.9	+02.5	48	16.1	+02.4	12
13	59	22.0	+02.4	60	21.1	+02.5	61	20.2	+02.5	62	19.4	+02.5	63	18.5	+02.5	13
14	74	24.4	+02.5	75	23.6	+02.4	76	22.7	+02.5	77	21.9	+02.4	78	21.0	+02.5	14
15	89	26.9	+02.5	90	26.0	+02.5	91	25.2	+02.4	92	24.3	+02.5	93	23.5	+02.4	15
16	104	29.4	+02.4	105	28.5	+02.5	106	27.6	+02.5	107	26.8	+02.4	108	25.9	+02.5	16
17	119	31.8	+02.5	120	31.0	+02.4	121	30.1	+02.5	122	29.2	+02.5	123	28.4	+02.4	17
18	134	34.3	+02.5	135	33.4	+02.5	136	32.6	+02.4	137	31.7	+02.5	138	30.8	+02.5	18
19	149	36.8	+02.4	150	35.9	+02.5	151	35.0	+02.5	152	34.2	+02.4	153	33.3	+02.5	19
20	164	39.2	+02.5	165	38.4	+02.4	166	37.5	+02.5	167	36.6	+02.5	168	35.8	+02.4	20
21	179	41.7	+02.4	180	40.8	+02.5	181	40.0	+02.4	182	39.1	+02.5	183	38.2	+02.5	21
22	194	44.1	+02.5	195	43.3	+02.4	196	42.4	+02.5	197	41.6	+02.4	198	40.7	+02.5	22
23	209	46.6	+02.5	210	45.7	+02.5	211	44.9	+02.5	212	44.0	+02.5	213	43.2	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.4	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	09.8	S 42	11.0	Acrux	173	02.0	S 63	13.5
Schedir	349	34.1	N 56	39.3	Gacrux	171	53.7	S 57	14.3
Diphda	348	49.9	S 17	52.0	Alioth	166	14.6	N 55	50.5
Achernar	335	22.5	S 57	07.4	Spica	158	24.3	S 11	16.7
Hamal	327	54.1	N 23	33.9	Alkaid	152	53.3	N 49	12.2
Polaris	315	35.0	N 89	21.4	Hadar	148	38.5	S 60	28.9
Acamar	315	13.9	S 40	13.0	Menkent	147	59.6	S 36	28.6
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.3	N 19	04.7
Mirfak	308	31.9	N 49	56.3	Rigel Kentaurus	139	40.1	S 60	55.8
Aldebaran	290	42.5	N 16	33.2	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.6	N 46	01.4	Kocab	137	18.6	N 74	03.9
Rigel	281	06.3	S 08	10.7	Alphecca	126	05.3	N 26	38.4
Bellatrix	278	25.5	N 06	22.1	Antares	112	18.3	S 26	28.9
Elnath	278	05.0	N 28	37.6	Atria	107	14.0	S 69	03.9
Alnilam	275	40.3	S 01	11.4	Sabik	102	05.1	S 15	45.2
Betelgeuze	270	54.8	N 07	24.6	Shaula	96	13.1	S 37	07.1
Canopus	263	53.7	S 52	42.7	Rasalhague	96	00.4	N 12	32.6
Sirius	258	28.2	S 16	44.5	Etamin	90	42.8	N 51	28.9
Adhara	255	07.8	S 29	00.3	Kaus Australis	83	35.2	S 34	22.3
Castor	245	60.0	N 31	50.5	Vega	80	34.5	N 38	47.9
Procyon	244	53.1	N 05	10.4	Nunki	75	50.3	S 26	16.1
Pollux	243	19.8	N 27	58.4	Albireo	67	05.7	N 28	00.1
Avior	234	15.7	S 59	35.1	Altair	62	02.2	N 08	55.3
Suhail	222	47.9	S 43	31.6	Peacock	53	09.1	S 56	39.6
Miaplacidus	221	38.5	S 69	48.8	Deneb	49	27.2	N 45	21.2
Alphard	217	49.9	S 08	45.4	Enif	33	41.0	N 09	58.4
Regulus	207	36.6	N 11	51.5	Alnair	27	35.9	S 46	51.0
Dubhe	193	43.3	N 61	38.1	Formalhaut	15	17.3	S 29	30.2
Denebola	182	26.9	N 14	26.9	Markab	13	32.3	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 131 of 365		day 132 of 365		day 133 of 365		day 134 of 365		day 135 of 365		UT					
	May 11		May 12		May 13		May 14		May 15							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "						
00	228	45.6	+02.5	229	44.8	+02.4	230	43.9	+02.5	231	43.0	+02.5	232	42.2	+02.4	00
01	243	48.1	+02.5	244	47.2	+02.5	245	46.4	+02.4	246	45.5	+02.5	247	44.6	+02.5	01
02	258	50.6	+02.4	259	49.7	+02.5	260	48.8	+02.5	261	48.0	+02.4	262	47.1	+02.5	02
03	273	53.0	+02.5	274	52.2	+02.4	275	51.3	+02.5	276	50.4	+02.5	277	49.6	+02.4	03
04	288	55.5	+02.5	289	54.6	+02.5	290	53.8	+02.4	291	52.9	+02.5	292	52.0	+02.5	04
05	303	58.0	+02.4	304	57.1	+02.5	305	56.2	+02.5	306	55.4	+02.4	307	54.5	+02.5	05
06	319	00.4	+02.5	319	59.6	+02.4	320	58.7	+02.5	321	57.8	+02.5	322	57.0	+02.4	06
07	334	02.9	+02.4	335	02.0	+02.5	336	01.2	+02.4	337	00.3	+02.5	337	59.4	+02.5	07
08	349	05.3	+02.5	350	04.5	+02.4	351	03.6	+02.5	352	02.8	+02.4	353	01.9	+02.5	08
09	4	07.8	+02.5	5	06.9	+02.5	6	06.1	+02.4	7	05.2	+02.5	8	04.4	+02.4	09
10	19	10.3	+02.4	20	09.4	+02.5	21	08.5	+02.5	22	07.7	+02.4	23	06.8	+02.5	10
11	34	12.7	+02.5	35	11.9	+02.4	36	11.0	+02.5	37	10.1	+02.5	38	09.3	+02.4	11
12	49	15.2	+02.5	50	14.3	+02.5	51	13.5	+02.4	52	12.6	+02.5	53	11.7	+02.5	12
13	64	17.7	+02.4	65	16.8	+02.5	66	15.9	+02.5	67	15.1	+02.4	68	14.2	+02.5	13
14	79	20.1	+02.5	80	19.3	+02.4	81	18.4	+02.5	82	17.5	+02.5	83	16.7	+02.4	14
15	94	22.6	+02.5	95	21.7	+02.5	96	20.9	+02.4	97	20.0	+02.5	98	19.1	+02.5	15
16	109	25.1	+02.4	110	24.2	+02.5	111	23.3	+02.5	112	22.5	+02.4	113	21.6	+02.5	16
17	124	27.5	+02.5	125	26.7	+02.4	126	25.8	+02.5	127	24.9	+02.5	128	24.1	+02.4	17
18	139	30.0	+02.4	140	29.1	+02.5	141	28.3	+02.4	142	27.4	+02.5	143	26.5	+02.5	18
19	154	32.4	+02.5	155	31.6	+02.4	156	30.7	+02.5	157	29.9	+02.4	158	29.0	+02.5	19
20	169	34.9	+02.5	170	34.0	+02.5	171	33.2	+02.4	172	32.3	+02.5	173	31.5	+02.4	20
21	184	37.4	+02.4	185	36.5	+02.5	186	35.6	+02.5	187	34.8	+02.5	188	33.9	+02.5	21
22	199	39.8	+02.5	200	39.0	+02.4	201	38.1	+02.5	202	37.3	+02.4	203	36.4	+02.5	22
23	214	42.3	+02.5	215	41.4	+02.5	216	40.6	+02.4	217	39.7	+02.5	218	38.9	+02.4	23

	SHA	Dec		SHA	Dec
	° ' "	° ' "		° ' "	° ' "
Alpheratz	357 37.3	N 29 12.6	Gienah	175 45.6	S 17 40.0
Ankaa	353 09.8	S 42 10.9	Acrux	173 02.0	S 63 13.5
Schedir	349 34.0	N 56 39.3	Gacrux	171 53.7	S 57 14.4
Diphda	348 49.9	S 17 52.0	Alioth	166 14.6	N 55 50.5
Achernar	335 22.5	S 57 07.4	Spica	158 24.3	S 11 16.7
Hamal	327 54.1	N 23 33.9	Alkaid	152 53.3	N 49 12.2
Polaris	315 34.8	N 89 21.4	Hadar	148 38.5	S 60 28.9
Acamar	315 13.9	S 40 13.0	Menkent	147 59.5	S 36 28.6
Menkar	314 08.8	N 04 10.5	Arcturus	145 49.2	N 19 04.7
Mirfak	308 31.9	N 49 56.3	Rigel Kentaurus	139 40.1	S 60 55.8
Aldebaran	290 42.5	N 16 33.2	Zubenelgenubi	136 58.1	S 16 08.1
Capella	280 25.6	N 46 01.4	Kocab	137 18.6	N 74 03.9
Rigel	281 06.3	S 08 10.7	Alphecca	126 05.3	N 26 38.4
Bellatrix	278 25.5	N 06 22.1	Antares	112 18.3	S 26 28.9
Elnath	278 05.0	N 28 37.6	Atria	107 13.9	S 69 03.9
Alnilam	275 40.3	S 01 11.4	Sabik	102 05.0	S 15 45.2
Betelgeuze	270 54.8	N 07 24.6	Shaula	96 13.0	S 37 07.1
Canopus	263 53.8	S 52 42.7	Rasalhague	96 00.3	N 12 32.6
Sirius	258 28.2	S 16 44.5	Etamin	90 42.8	N 51 28.9
Adhara	255 07.8	S 29 00.3	Kaus Australis	83 35.2	S 34 22.3
Castor	246 00.0	N 31 50.5	Vega	80 34.5	N 38 47.9
Procyon	244 53.1	N 05 10.4	Nunki	75 50.3	S 26 16.1
Pollux	243 19.9	N 27 58.4	Albireo	67 05.7	N 28 00.1
Avior	234 15.8	S 59 35.1	Altair	62 02.1	N 08 55.3
Suhail	222 47.9	S 43 31.6	Peacock	53 09.1	S 56 39.6
Miaplacidus	221 38.6	S 69 48.8	Deneb	49 27.2	N 45 21.2
Alphard	217 49.9	S 08 45.4	Enif	33 41.0	N 09 58.4
Regulus	207 36.6	N 11 51.5	Alnair	27 35.9	S 46 51.0
Dubhe	193 43.4	N 61 38.1	Formalhaut	15 17.2	S 29 30.2
Denebola	182 26.9	N 14 26.9	Markab	13 32.3	N 15 19.3

2022 - First Point of Aries / Selected Stars

UT	day 136 of 365		day 137 of 365		day 138 of 365		day 139 of 365		day 140 of 365		UT					
	May 16		May 17		May 18		May 19		May 20							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	233	41.3	+02.5	234	40.5	+02.4	235	39.6	+02.5	236	38.7	+02.5	237	37.9	+02.4	00
01	248	43.8	+02.4	249	42.9	+02.5	250	42.1	+02.4	251	41.2	+02.5	252	40.3	+02.5	01
02	263	46.2	+02.5	264	45.4	+02.5	265	44.5	+02.5	266	43.7	+02.4	267	42.8	+02.5	02
03	278	48.7	+02.5	279	47.9	+02.4	280	47.0	+02.5	281	46.1	+02.5	282	45.3	+02.4	03
04	293	51.2	+02.4	294	50.3	+02.5	295	49.5	+02.4	296	48.6	+02.5	297	47.7	+02.5	04
05	308	53.6	+02.5	309	52.8	+02.4	310	51.9	+02.5	311	51.1	+02.4	312	50.2	+02.5	05
06	323	56.1	+02.5	324	55.2	+02.5	325	54.4	+02.5	326	53.5	+02.5	327	52.7	+02.4	06
07	338	58.6	+02.4	339	57.7	+02.5	340	56.9	+02.4	341	56.0	+02.5	342	55.1	+02.5	07
08	354	01.0	+02.5	355	00.2	+02.4	355	59.3	+02.5	356	58.5	+02.4	357	57.6	+02.5	08
09	9	03.5	+02.5	10	02.6	+02.5	11	01.8	+02.4	12	00.9	+02.5	13	00.1	+02.4	09
10	24	06.0	+02.4	25	05.1	+02.5	26	04.2	+02.5	27	03.4	+02.4	28	02.5	+02.5	10
11	39	08.4	+02.5	40	07.6	+02.4	41	06.7	+02.5	42	05.8	+02.5	43	05.0	+02.5	11
12	54	10.9	+02.5	55	10.0	+02.5	56	09.2	+02.4	57	08.3	+02.5	58	07.5	+02.4	12
13	69	13.4	+02.4	70	12.5	+02.5	71	11.6	+02.5	72	10.8	+02.4	73	09.9	+02.5	13
14	84	15.8	+02.5	85	15.0	+02.4	86	14.1	+02.5	87	13.2	+02.5	88	12.4	+02.4	14
15	99	18.3	+02.4	100	17.4	+02.5	101	16.6	+02.4	102	15.7	+02.5	103	14.8	+02.5	15
16	114	20.7	+02.5	115	19.9	+02.5	116	19.0	+02.5	117	18.2	+02.4	118	17.3	+02.5	16
17	129	23.2	+02.5	130	22.4	+02.4	131	21.5	+02.5	132	20.6	+02.5	133	19.8	+02.4	17
18	144	25.7	+02.4	145	24.8	+02.5	146	24.0	+02.4	147	23.1	+02.5	148	22.2	+02.5	18
19	159	28.1	+02.5	160	27.3	+02.4	161	26.4	+02.5	162	25.6	+02.4	163	24.7	+02.5	19
20	174	30.6	+02.5	175	29.7	+02.5	176	28.9	+02.5	177	28.0	+02.5	178	27.2	+02.4	20
21	189	33.1	+02.4	190	32.2	+02.5	191	31.4	+02.4	192	30.5	+02.5	193	29.6	+02.5	21
22	204	35.5	+02.5	205	34.7	+02.4	206	33.8	+02.5	207	33.0	+02.4	208	32.1	+02.5	22
23	219	38.0	+02.5	220	37.1	+02.5	221	36.3	+02.4	222	35.4	+02.5	223	34.6	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.3	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	09.7	S 42	10.9	Acrux	173	02.0	S 63	13.5
Schedir	349	34.0	N 56	39.3	Gacrux	171	53.7	S 57	14.4
Diphda	348	49.8	S 17	51.9	Alioth	166	14.6	N 55	50.5
Achernar	335	22.4	S 57	07.4	Spica	158	24.3	S 11	16.7
Hamal	327	54.1	N 23	33.9	Alkaid	152	53.3	N 49	12.3
Polaris	315	34.2	N 89	21.4	Hadar	148	38.5	S 60	28.9
Acamar	315	13.9	S 40	13.0	Menkent	147	59.5	S 36	28.6
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.3	N 19	04.7
Mirfak	308	31.9	N 49	56.3	Rigel Kentaurus	139	40.1	S 60	55.9
Aldebaran	290	42.5	N 16	33.2	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.6	N 46	01.4	Kocab	137	18.6	N 74	03.9
Rigel	281	06.3	S 08	10.7	Alphecca	126	05.3	N 26	38.4
Bellatrix	278	25.5	N 06	22.1	Antares	112	18.3	S 26	28.9
Elnath	278	05.0	N 28	37.6	Atria	107	13.9	S 69	03.9
Alnilam	275	40.3	S 01	11.4	Sabik	102	05.0	S 15	45.2
Betelgeuze	270	54.8	N 07	24.6	Shaula	96	13.0	S 37	07.1
Canopus	263	53.8	S 52	42.6	Rasalhague	96	00.3	N 12	32.6
Sirius	258	28.3	S 16	44.5	Etamin	90	42.8	N 51	29.0
Adhara	255	07.8	S 29	00.3	Kaus Australis	83	35.1	S 34	22.3
Castor	246	00.0	N 31	50.5	Vega	80	34.5	N 38	47.9
Procyon	244	53.1	N 05	10.4	Nunki	75	50.3	S 26	16.1
Pollux	243	19.9	N 27	58.4	Albireo	67	05.6	N 28	00.2
Avior	234	15.8	S 59	35.1	Altair	62	02.1	N 08	55.3
Suhail	222	48.0	S 43	31.6	Peacock	53	09.0	S 56	39.6
Miaplacidus	221	38.7	S 69	48.8	Deneb	49	27.2	N 45	21.3
Alphard	217	50.0	S 08	45.4	Enif	33	41.0	N 09	58.4
Regulus	207	36.7	N 11	51.5	Alnair	27	35.8	S 46	51.0
Dubhe	193	43.4	N 61	38.1	Formalhaut	15	17.2	S 29	30.2
Denebola	182	26.9	N 14	27.0	Markab	13	32.2	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 141 of 365		day 142 of 365		day 143 of 365		day 144 of 365		day 145 of 365		UT					
	May 21		May 22		May 23		May 24		May 25							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	238	37.0	+02.5	239	36.2	+02.4	240	35.3	+02.5	241	34.4	+02.5	242	33.6	+02.4	00
01	253	39.5	+02.5	254	38.6	+02.5	255	37.8	+02.4	256	36.9	+02.5	257	36.0	+02.5	01
02	268	42.0	+02.4	269	41.1	+02.5	270	40.2	+02.5	271	39.4	+02.4	272	38.5	+02.5	02
03	283	44.4	+02.5	284	43.6	+02.4	285	42.7	+02.5	286	41.8	+02.5	287	41.0	+02.4	03
04	298	46.9	+02.4	299	46.0	+02.5	300	45.2	+02.4	301	44.3	+02.5	302	43.4	+02.5	04
05	313	49.3	+02.5	314	48.5	+02.4	315	47.6	+02.5	316	46.8	+02.4	317	45.9	+02.5	05
06	328	51.8	+02.5	329	50.9	+02.5	330	50.1	+02.5	331	49.2	+02.5	332	48.4	+02.4	06
07	343	54.3	+02.4	344	53.4	+02.5	345	52.6	+02.4	346	51.7	+02.5	347	50.8	+02.5	07
08	358	56.7	+02.5	359	55.9	+02.4	0	55.0	+02.5	1	54.2	+02.4	2	53.3	+02.5	08
09	13	59.2	+02.5	14	58.3	+02.5	15	57.5	+02.4	16	56.6	+02.5	17	55.8	+02.4	09
10	29	01.7	+02.4	30	00.8	+02.5	30	59.9	+02.5	31	59.1	+02.4	32	58.2	+02.5	10
11	44	04.1	+02.5	45	03.3	+02.4	46	02.4	+02.5	47	01.5	+02.5	48	00.7	+02.4	11
12	59	06.6	+02.5	60	05.7	+02.5	61	04.9	+02.4	62	04.0	+02.5	63	03.1	+02.5	12
13	74	09.1	+02.4	75	08.2	+02.5	76	07.3	+02.5	77	06.5	+02.4	78	05.6	+02.5	13
14	89	11.5	+02.5	90	10.7	+02.4	91	09.8	+02.5	92	08.9	+02.5	93	08.1	+02.4	14
15	104	14.0	+02.5	105	13.1	+02.5	106	12.3	+02.4	107	11.4	+02.5	108	10.5	+02.5	15
16	119	16.5	+02.4	120	15.6	+02.5	121	14.7	+02.5	122	13.9	+02.4	123	13.0	+02.5	16
17	134	18.9	+02.5	135	18.1	+02.4	136	17.2	+02.5	137	16.3	+02.5	138	15.5	+02.4	17
18	149	21.4	+02.4	150	20.5	+02.5	151	19.7	+02.4	152	18.8	+02.5	153	17.9	+02.5	18
19	164	23.8	+02.5	165	23.0	+02.4	166	22.1	+02.5	167	21.3	+02.4	168	20.4	+02.5	19
20	179	26.3	+02.5	180	25.4	+02.5	181	24.6	+02.4	182	23.7	+02.5	183	22.9	+02.4	20
21	194	28.8	+02.4	195	27.9	+02.5	196	27.0	+02.5	197	26.2	+02.5	198	25.3	+02.5	21
22	209	31.2	+02.5	210	30.4	+02.4	211	29.5	+02.5	212	28.7	+02.4	213	27.8	+02.5	22
23	224	33.7	+02.5	225	32.8	+02.5	226	32.0	+02.4	227	31.1	+02.5	228	30.3	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.3	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	09.7	S 42	10.9	Acrux	173	02.1	S 63	13.6
Schedir	349	33.9	N 56	39.3	Gacrux	171	53.7	S 57	14.4
Diphda	348	49.8	S 17	51.9	Alioth	166	14.6	N 55	50.6
Achernar	335	22.4	S 57	07.3	Spica	158	24.3	S 11	16.7
Hamal	327	54.0	N 23	33.9	Alkaid	152	53.3	N 49	12.3
Polaris	315	33.0	N 89	21.4	Hadar	148	38.5	S 60	28.9
Acamar	315	13.8	S 40	13.0	Menkent	147	59.5	S 36	28.6
Menkar	314	08.8	N 04	10.5	Arcturus	145	49.2	N 19	04.7
Mirfak	308	31.9	N 49	56.3	Rigel Kentaurus	139	40.0	S 60	55.9
Aldebaran	290	42.5	N 16	33.2	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.6	N 46	01.4	Kocab	137	18.6	N 74	03.9
Rigel	281	06.3	S 08	10.7	Alphecca	126	05.3	N 26	38.4
Bellatrix	278	25.5	N 06	22.1	Antares	112	18.3	S 26	28.9
Elnath	278	05.0	N 28	37.6	Atria	107	13.8	S 69	03.9
Alnilam	275	40.3	S 01	11.4	Sabik	102	05.0	S 15	45.2
Betelgeuze	270	54.8	N 07	24.6	Shaula	96	13.0	S 37	07.1
Canopus	263	53.8	S 52	42.6	Rasalhague	96	00.3	N 12	32.6
Sirius	258	28.3	S 16	44.5	Etamin	90	42.7	N 51	29.0
Adhara	255	07.8	S 29	00.3	Kaus Australis	83	35.1	S 34	22.3
Castor	246	00.0	N 31	50.5	Vega	80	34.4	N 38	48.0
Procyon	244	53.1	N 05	10.4	Nunki	75	50.2	S 26	16.1
Pollux	243	19.9	N 27	58.4	Albireo	67	05.6	N 28	00.2
Avior	234	15.9	S 59	35.1	Altair	62	02.1	N 08	55.4
Suhail	222	48.0	S 43	31.6	Peacock	53	08.9	S 56	39.6
Miaplacidus	221	38.7	S 69	48.8	Deneb	49	27.1	N 45	21.3
Alphard	217	50.0	S 08	45.4	Enif	33	40.9	N 09	58.5
Regulus	207	36.7	N 11	51.5	Alnair	27	35.7	S 46	51.0
Dubhe	193	43.5	N 61	38.2	Formalhaut	15	17.1	S 29	30.1
Denebola	182	26.9	N 14	27.0	Markab	13	32.2	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 146 of 365			day 147 of 365			day 148 of 365			day 149 of 365			day 150 of 365			UT
	May 26			May 27			May 28			May 29			May 30			
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	
00	243	32.7	+02.5	244	31.9	+02.4	245	31.0	+02.5	246	30.1	+02.5	247	29.3	+02.4	00
01	258	35.2	+02.4	259	34.3	+02.5	260	33.5	+02.4	261	32.6	+02.5	262	31.7	+02.5	01
02	273	37.6	+02.5	274	36.8	+02.4	275	35.9	+02.5	276	35.1	+02.4	277	34.2	+02.5	02
03	288	40.1	+02.5	289	39.2	+02.5	290	38.4	+02.5	291	37.5	+02.5	292	36.7	+02.4	03
04	303	42.6	+02.4	304	41.7	+02.5	305	40.9	+02.4	306	40.0	+02.5	307	39.1	+02.5	04
05	318	45.0	+02.5	319	44.2	+02.4	320	43.3	+02.5	321	42.5	+02.4	322	41.6	+02.5	05
06	333	47.5	+02.5	334	46.6	+02.5	335	45.8	+02.4	336	44.9	+02.5	337	44.1	+02.4	06
07	348	50.0	+02.4	349	49.1	+02.5	350	48.2	+02.5	351	47.4	+02.4	352	46.5	+02.5	07
08	3	52.4	+02.5	4	51.6	+02.4	5	50.7	+02.5	6	49.8	+02.5	7	49.0	+02.4	08
09	18	54.9	+02.5	19	54.0	+02.5	20	53.2	+02.4	21	52.3	+02.5	22	51.4	+02.5	09
10	33	57.4	+02.4	34	56.5	+02.5	35	55.6	+02.5	36	54.8	+02.4	37	53.9	+02.5	10
11	48	59.8	+02.5	49	59.0	+02.4	50	58.1	+02.5	51	57.2	+02.5	52	56.4	+02.4	11
12	64	02.3	+02.5	65	01.4	+02.5	66	00.6	+02.4	66	59.7	+02.5	67	58.8	+02.5	12
13	79	04.8	+02.4	80	03.9	+02.5	81	03.0	+02.5	82	02.2	+02.4	83	01.3	+02.5	13
14	94	07.2	+02.5	95	06.4	+02.4	96	05.5	+02.5	97	04.6	+02.5	98	03.8	+02.4	14
15	109	09.7	+02.4	110	08.8	+02.5	111	08.0	+02.4	112	07.1	+02.5	113	06.2	+02.5	15
16	124	12.1	+02.5	125	11.3	+02.4	126	10.4	+02.5	127	09.6	+02.4	128	08.7	+02.5	16
17	139	14.6	+02.5	140	13.7	+02.5	141	12.9	+02.4	142	12.0	+02.5	143	11.2	+02.4	17
18	154	17.1	+02.4	155	16.2	+02.5	156	15.3	+02.5	157	14.5	+02.5	158	13.6	+02.5	18
19	169	19.5	+02.5	170	18.7	+02.4	171	17.8	+02.5	172	17.0	+02.4	173	16.1	+02.5	19
20	184	22.0	+02.5	185	21.1	+02.5	186	20.3	+02.4	187	19.4	+02.5	188	18.6	+02.4	20
21	199	24.5	+02.4	200	23.6	+02.5	201	22.7	+02.5	202	21.9	+02.4	203	21.0	+02.5	21
22	214	26.9	+02.5	215	26.1	+02.4	216	25.2	+02.5	217	24.3	+02.5	218	23.5	+02.4	22
23	229	29.4	+02.5	230	28.5	+02.5	231	27.7	+02.4	232	26.8	+02.5	233	25.9	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.2	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	09.7	S 42	10.9	Acrux	173	02.1	S 63	13.6
Schedir	349	33.9	N 56	39.3	Gacrux	171	53.8	S 57	14.4
Diphda	348	49.8	S 17	51.9	Alioth	166	14.7	N 55	50.6
Achernar	335	22.4	S 57	07.3	Spica	158	24.3	S 11	16.7
Hamal	327	54.0	N 23	33.9	Alkaid	152	53.3	N 49	12.3
Polaris	315	32.3	N 89	21.3	Hadar	148	38.5	S 60	28.9
Acamar	315	13.8	S 40	12.9	Menkent	147	59.5	S 36	28.6
Menkar	314	08.7	N 04	10.5	Arcturus	145	49.2	N 19	04.8
Mirfak	308	31.9	N 49	56.3	Rigel Kentaurus	139	40.1	S 60	55.9
Aldebaran	290	42.5	N 16	33.2	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.6	N 46	01.3	Kocab	137	18.7	N 74	04.0
Rigel	281	06.3	S 08	10.6	Alphecca	126	05.3	N 26	38.4
Bellatrix	278	25.5	N 06	22.1	Antares	112	18.2	S 26	28.9
Elnath	278	05.0	N 28	37.6	Atria	107	13.8	S 69	04.0
Alnilam	275	40.3	S 01	11.3	Sabik	102	05.0	S 15	45.2
Betelgeuze	270	54.8	N 07	24.6	Shaula	96	12.9	S 37	07.1
Canopus	263	53.9	S 52	42.6	Rasalhague	96	00.3	N 12	32.6
Sirius	258	28.3	S 16	44.5	Etamin	90	42.7	N 51	29.0
Adhara	255	07.9	S 29	00.3	Kaus Australis	83	35.0	S 34	22.3
Castor	246	00.0	N 31	50.5	Vega	80	34.4	N 38	48.0
Procyon	244	53.1	N 05	10.4	Nunki	75	50.2	S 26	16.1
Pollux	243	19.9	N 27	58.4	Albireo	67	05.6	N 28	00.2
Avior	234	15.9	S 59	35.1	Altair	62	02.0	N 08	55.4
Suhail	222	48.0	S 43	31.6	Peacock	53	08.9	S 56	39.6
Miaplacidus	221	38.8	S 69	48.8	Deneb	49	27.1	N 45	21.3
Alphard	217	50.0	S 08	45.4	Enif	33	40.9	N 09	58.5
Regulus	207	36.7	N 11	51.5	Alnair	27	35.7	S 46	51.0
Dubhe	193	43.5	N 61	38.2	Formalhaut	15	17.1	S 29	30.1
Denebola	182	26.9	N 14	27.0	Markab	13	32.1	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 151 of 365		day 152 of 365		day 153 of 365		day 154 of 365		day 155 of 365		UT					
	May 31		June 1		June 2		June 3		June 4							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "						
00	248	28.4	+02.5	249	27.6	+02.4	250	26.7	+02.5	251	25.8	+02.5	252	25.0	+02.4	00
01	263	30.9	+02.4	264	30.0	+02.5	265	29.2	+02.4	266	28.3	+02.5	267	27.4	+02.5	01
02	278	33.3	+02.5	279	32.5	+02.4	280	31.6	+02.5	281	30.8	+02.4	282	29.9	+02.5	02
03	293	35.8	+02.5	294	34.9	+02.5	295	34.1	+02.5	296	33.2	+02.5	297	32.4	+02.4	03
04	308	38.3	+02.4	309	37.4	+02.5	310	36.6	+02.4	311	35.7	+02.5	312	34.8	+02.5	04
05	323	40.7	+02.5	324	39.9	+02.4	325	39.0	+02.5	326	38.2	+02.4	327	37.3	+02.5	05
06	338	43.2	+02.5	339	42.3	+02.5	340	41.5	+02.4	341	40.6	+02.5	342	39.8	+02.4	06
07	353	45.7	+02.4	354	44.8	+02.5	355	43.9	+02.5	356	43.1	+02.4	357	42.2	+02.5	07
08	8	48.1	+02.5	9	47.3	+02.4	10	46.4	+02.5	11	45.5	+02.5	12	44.7	+02.5	08
09	23	50.6	+02.5	24	49.7	+02.5	25	48.9	+02.4	26	48.0	+02.5	27	47.2	+02.4	09
10	38	53.1	+02.4	39	52.2	+02.5	40	51.3	+02.5	41	50.5	+02.4	42	49.6	+02.5	10
11	53	55.5	+02.5	54	54.7	+02.4	55	53.8	+02.5	56	52.9	+02.5	57	52.1	+02.4	11
12	68	58.0	+02.4	69	57.1	+02.5	70	56.3	+02.4	71	55.4	+02.5	72	54.5	+02.5	12
13	84	00.4	+02.5	84	59.6	+02.5	85	58.7	+02.5	86	57.9	+02.4	87	57.0	+02.5	13
14	99	02.9	+02.5	100	02.1	+02.4	101	01.2	+02.5	102	00.3	+02.5	102	59.5	+02.4	14
15	114	05.4	+02.4	115	04.5	+02.5	116	03.7	+02.4	117	02.8	+02.5	118	01.9	+02.5	15
16	129	07.8	+02.5	130	07.0	+02.4	131	06.1	+02.5	132	05.3	+02.4	133	04.4	+02.5	16
17	144	10.3	+02.5	145	09.4	+02.5	146	08.6	+02.4	147	07.7	+02.5	148	06.9	+02.4	17
18	159	12.8	+02.4	160	11.9	+02.5	161	11.0	+02.5	162	10.2	+02.5	163	09.3	+02.5	18
19	174	15.2	+02.5	175	14.4	+02.4	176	13.5	+02.5	177	12.7	+02.4	178	11.8	+02.5	19
20	189	17.7	+02.5	190	16.8	+02.5	191	16.0	+02.4	192	15.1	+02.5	193	14.3	+02.4	20
21	204	20.2	+02.4	205	19.3	+02.5	206	18.4	+02.5	207	17.6	+02.4	208	16.7	+02.5	21
22	219	22.6	+02.5	220	21.8	+02.4	221	20.9	+02.5	222	20.0	+02.5	223	19.2	+02.5	22
23	234	25.1	+02.5	235	24.2	+02.5	236	23.4	+02.4	237	22.5	+02.5	238	21.7	+02.4	23

	SHA	Dec		SHA	Dec				
	° ' "	' "		° ' "	' "				
Alpheratz	357	37.2	N 29	12.6	Gienah	175	45.6	S 17	40.0
Ankaa	353	09.6	S 42	10.8	Acrux	173	02.1	S 63	13.6
Schedir	349	33.8	N 56	39.3	Gacrux	171	53.8	S 57	14.4
Diphda	348	49.7	S 17	51.9	Alioth	166	14.7	N 55	50.6
Achernar	335	22.3	S 57	07.3	Spica	158	24.4	S 11	16.7
Hamal	327	54.0	N 23	33.9	Alkaid	152	53.3	N 49	12.3
Polaris	315	30.9	N 89	21.3	Hadar	148	38.5	S 60	29.0
Acamar	315	13.8	S 40	12.9	Menkent	147	59.5	S 36	28.6
Menkar	314	08.7	N 04	10.6	Arcturus	145	49.3	N 19	04.8
Mirfak	308	31.8	N 49	56.2	Rigel Kentaurus	139	40.1	S 60	55.9
Aldebaran	290	42.5	N 16	33.2	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.6	N 46	01.3	Kocab	137	18.7	N 74	04.0
Rigel	281	06.3	S 08	10.6	Alphecca	126	05.3	N 26	38.4
Bellatrix	278	25.5	N 06	22.1	Antares	112	18.2	S 26	28.9
Elnath	278	05.0	N 28	37.6	Atria	107	13.7	S 69	04.0
Alnilam	275	40.3	S 01	11.3	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.8	N 07	24.6	Shaula	96	12.9	S 37	07.1
Canopus	263	53.9	S 52	42.6	Rasalhague	96	00.3	N 12	32.7
Sirius	258	28.3	S 16	44.4	Etamin	90	42.7	N 51	29.0
Adhara	255	07.9	S 29	00.2	Kaus Australis	83	35.0	S 34	22.3
Castor	246	00.1	N 31	50.5	Vega	80	34.4	N 38	48.0
Procyon	244	53.1	N 05	10.4	Nunki	75	50.1	S 26	16.1
Pollux	243	19.9	N 27	58.4	Albireo	67	05.5	N 28	00.2
Avior	234	16.0	S 59	35.1	Altair	62	02.0	N 08	55.4
Suhail	222	48.1	S 43	31.6	Peacock	53	08.8	S 56	39.6
Miaplacidus	221	38.9	S 69	48.8	Deneb	49	27.0	N 45	21.3
Alphard	217	50.0	S 08	45.4	Enif	33	40.8	N 09	58.5
Regulus	207	36.7	N 11	51.6	Alnair	27	35.6	S 46	51.0
Dubhe	193	43.5	N 61	38.2	Formalhaut	15	17.1	S 29	30.1
Denebola	182	26.9	N 14	27.0	Markab	13	32.1	N 15	19.3

2022 - First Point of Aries / Selected Stars

UT	day 156 of 365		day 157 of 365		day 158 of 365		day 159 of 365		day 160 of 365		UT
	<i>June 5</i>		<i>June 6</i>		<i>June 7</i>		<i>June 8</i>		<i>June 9</i>		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	253	24.1 +02.5	254	23.3 +02.4	255	22.4 +02.5	256	21.5 +02.5	257	20.7 +02.4	00
01	268	26.6 +02.4	269	25.7 +02.5	270	24.9 +02.4	271	24.0 +02.5	272	23.1 +02.5	01
02	283	29.0 +02.5	284	28.2 +02.4	285	27.3 +02.5	286	26.5 +02.4	287	25.6 +02.5	02
03	298	31.5 +02.5	299	30.6 +02.5	300	29.8 +02.4	301	28.9 +02.5	302	28.1 +02.4	03
04	313	34.0 +02.4	314	33.1 +02.5	315	32.2 +02.5	316	31.4 +02.5	317	30.5 +02.5	04
05	328	36.4 +02.5	329	35.6 +02.4	330	34.7 +02.5	331	33.9 +02.4	332	33.0 +02.5	05
06	343	38.9 +02.5	344	38.0 +02.5	345	37.2 +02.4	346	36.3 +02.5	347	35.5 +02.4	06
07	358	41.4 +02.4	359	40.5 +02.5	0	39.6 +02.5	1	38.8 +02.4	2	37.9 +02.5	07
08	13	43.8 +02.5	14	43.0 +02.4	15	42.1 +02.5	16	41.2 +02.5	17	40.4 +02.4	08
09	28	46.3 +02.5	29	45.4 +02.5	30	44.6 +02.4	31	43.7 +02.5	32	42.8 +02.5	09
10	43	48.8 +02.4	44	47.9 +02.5	45	47.0 +02.5	46	46.2 +02.4	47	45.3 +02.5	10
11	58	51.2 +02.5	59	50.4 +02.4	60	49.5 +02.5	61	48.6 +02.5	62	47.8 +02.4	11
12	73	53.7 +02.4	74	52.8 +02.5	75	52.0 +02.4	76	51.1 +02.5	77	50.2 +02.5	12
13	88	56.1 +02.5	89	55.3 +02.5	90	54.4 +02.5	91	53.6 +02.4	92	52.7 +02.5	13
14	103	58.6 +02.5	104	57.8 +02.4	105	56.9 +02.5	106	56.0 +02.5	107	55.2 +02.4	14
15	119	01.1 +02.4	120	00.2 +02.5	120	59.4 +02.4	121	58.5 +02.5	122	57.6 +02.5	15
16	134	03.5 +02.5	135	02.7 +02.4	136	01.8 +02.5	137	01.0 +02.4	138	00.1 +02.5	16
17	149	06.0 +02.5	150	05.1 +02.5	151	04.3 +02.4	152	03.4 +02.5	153	02.6 +02.4	17
18	164	08.5 +02.4	165	07.6 +02.5	166	06.7 +02.5	167	05.9 +02.4	168	05.0 +02.5	18
19	179	10.9 +02.5	180	10.1 +02.4	181	09.2 +02.5	182	08.3 +02.5	183	07.5 +02.4	19
20	194	13.4 +02.5	195	12.5 +02.5	196	11.7 +02.4	197	10.8 +02.5	198	09.9 +02.5	20
21	209	15.9 +02.4	210	15.0 +02.5	211	14.1 +02.5	212	13.3 +02.4	213	12.4 +02.5	21
22	224	18.3 +02.5	225	17.5 +02.4	226	16.6 +02.5	227	15.7 +02.5	228	14.9 +02.4	22
23	239	20.8 +02.5	240	19.9 +02.5	241	19.1 +02.4	242	18.2 +02.5	243	17.3 +02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.1	N 29 12.6	Gienah	175 45.6	S 17 40.0
Ankaa	353 09.6	S 42 10.8	Acrux	173 02.2	S 63 13.6
Schedir	349 33.7	N 56 39.3	Gacrux	171 53.8	S 57 14.4
Diphda	348 49.7	S 17 51.9	Alioth	166 14.7	N 55 50.6
Achernar	335 22.3	S 57 07.2	Spica	158 24.4	S 11 16.7
Hamal	327 54.0	N 23 33.9	Alkaid	152 53.3	N 49 12.3
Polaris	315 29.4	N 89 21.3	Hadar	148 38.5	S 60 29.0
Acamar	315 13.8	S 40 12.9	Menkent	147 59.5	S 36 28.6
Menkar	314 08.7	N 04 10.6	Arcturus	145 49.3	N 19 04.8
Mirfak	308 31.8	N 49 56.2	Rigel Kentaurus	139 40.1	S 60 55.9
Aldebaran	290 42.5	N 16 33.2	Zubenelgenubi	136 58.1	S 16 08.1
Capella	280 25.6	N 46 01.3	Kocab	137 18.8	N 74 04.0
Rigel	281 06.3	S 08 10.6	Alphecca	126 05.3	N 26 38.5
Bellatrix	278 25.5	N 06 22.1	Antares	112 18.2	S 26 28.9
Elnath	278 05.0	N 28 37.6	Atria	107 13.7	S 69 04.0
Alnilam	275 40.3	S 01 11.3	Sabik	102 04.9	S 15 45.2
Betelgeuze	270 54.8	N 07 24.6	Shaula	96 12.9	S 37 07.1
Canopus	263 53.9	S 52 42.5	Rasalhague	96 00.2	N 12 32.7
Sirius	258 28.3	S 16 44.4	Etamin	90 42.7	N 51 29.1
Adhara	255 07.9	S 29 00.2	Kaus Australis	83 35.0	S 34 22.3
Castor	246 00.1	N 31 50.5	Vega	80 34.4	N 38 48.0
Procyon	244 53.1	N 05 10.4	Nunki	75 50.1	S 26 16.1
Pollux	243 19.9	N 27 58.4	Albireo	67 05.5	N 28 00.2
Avior	234 16.0	S 59 35.1	Altair	62 02.0	N 08 55.4
Suhail	222 48.1	S 43 31.5	Peacock	53 08.8	S 56 39.6
Miaplacidus	221 38.9	S 69 48.8	Deneb	49 27.0	N 45 21.3
Alphard	217 50.0	S 08 45.4	Enif	33 40.8	N 09 58.5
Regulus	207 36.7	N 11 51.6	Alnair	27 35.6	S 46 50.9
Dubhe	193 43.6	N 61 38.2	Formalhaut	15 17.0	S 29 30.1
Denebola	182 26.9	N 14 27.0	Markab	13 32.1	N 15 19.4

2022 - First Point of Aries / Selected Stars

UT	day 161 of 365		day 162 of 365		day 163 of 365		day 164 of 365		day 165 of 365		UT
	<i>June 10</i>		<i>June 11</i>		<i>June 12</i>		<i>June 13</i>		<i>June 14</i>		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	258	19.8 +02.5	259	18.9 +02.5	260	18.1 +02.4	261	17.2 +02.5	262	16.4 +02.4	00
01	273	22.3 +02.4	274	21.4 +02.5	275	20.5 +02.5	276	19.7 +02.5	277	18.8 +02.5	01
02	288	24.7 +02.5	289	23.9 +02.4	290	23.0 +02.5	291	22.2 +02.4	292	21.3 +02.5	02
03	303	27.2 +02.5	304	26.3 +02.5	305	25.5 +02.4	306	24.6 +02.5	307	23.8 +02.4	03
04	318	29.7 +02.4	319	28.8 +02.5	320	27.9 +02.5	321	27.1 +02.4	322	26.2 +02.5	04
05	333	32.1 +02.5	334	31.3 +02.4	335	30.4 +02.5	336	29.5 +02.5	337	28.7 +02.5	05
06	348	34.6 +02.5	349	33.7 +02.5	350	32.9 +02.4	351	32.0 +02.5	352	31.2 +02.4	06
07	3	37.1 +02.4	4	36.2 +02.5	5	35.3 +02.5	6	34.5 +02.4	7	33.6 +02.5	07
08	18	39.5 +02.5	19	38.7 +02.4	20	37.8 +02.5	21	36.9 +02.5	22	36.1 +02.4	08
09	33	42.0 +02.4	34	41.1 +02.5	35	40.3 +02.4	36	39.4 +02.5	37	38.5 +02.5	09
10	48	44.4 +02.5	49	43.6 +02.4	50	42.7 +02.5	51	41.9 +02.4	52	41.0 +02.5	10
11	63	46.9 +02.5	64	46.0 +02.5	65	45.2 +02.5	66	44.3 +02.5	67	43.5 +02.4	11
12	78	49.4 +02.4	79	48.5 +02.5	80	47.7 +02.4	81	46.8 +02.5	82	45.9 +02.5	12
13	93	51.8 +02.5	94	51.0 +02.4	95	50.1 +02.5	96	49.3 +02.4	97	48.4 +02.5	13
14	108	54.3 +02.5	109	53.4 +02.5	110	52.6 +02.4	111	51.7 +02.5	112	50.9 +02.4	14
15	123	56.8 +02.4	124	55.9 +02.5	125	55.0 +02.5	126	54.2 +02.5	127	53.3 +02.5	15
16	138	59.2 +02.5	139	58.4 +02.4	140	57.5 +02.5	141	56.7 +02.4	142	55.8 +02.5	16
17	154	01.7 +02.5	155	00.8 +02.5	155	60.0 +02.4	156	59.1 +02.5	157	58.3 +02.4	17
18	169	04.2 +02.4	170	03.3 +02.5	171	02.4 +02.5	172	01.6 +02.4	173	00.7 +02.5	18
19	184	06.6 +02.5	185	05.8 +02.4	186	04.9 +02.5	187	04.0 +02.5	188	03.2 +02.5	19
20	199	09.1 +02.5	200	08.2 +02.5	201	07.4 +02.4	202	06.5 +02.5	203	05.7 +02.4	20
21	214	11.6 +02.4	215	10.7 +02.5	216	09.8 +02.5	217	09.0 +02.4	218	08.1 +02.5	21
22	229	14.0 +02.5	230	13.2 +02.4	231	12.3 +02.5	232	11.4 +02.5	233	10.6 +02.4	22
23	244	16.5 +02.4	245	15.6 +02.5	246	14.8 +02.4	247	13.9 +02.5	248	13.0 +02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.1	N 29 12.6	Gienah	175 45.7	S 17 40.0
Ankaa	353 09.5	S 42 10.8	Acrux	173 02.2	S 63 13.6
Schedir	349 33.7	N 56 39.3	Gacrux	171 53.8	S 57 14.4
Diphda	348 49.7	S 17 51.8	Alioth	166 14.8	N 55 50.6
Achernar	335 22.2	S 57 07.2	Spica	158 24.4	S 11 16.7
Hamal	327 53.9	N 23 34.0	Alkaid	152 53.4	N 49 12.3
Polaris	315 28.0	N 89 21.3	Hadar	148 38.5	S 60 29.0
Acamar	315 13.8	S 40 12.9	Menkent	147 59.6	S 36 28.6
Menkar	314 08.7	N 04 10.6	Arcturus	145 49.3	N 19 04.8
Mirfak	308 31.8	N 49 56.2	Rigel Kentaurus	139 40.1	S 60 56.0
Aldebaran	290 42.4	N 16 33.2	Zubenelgenubi	136 58.1	S 16 08.1
Capella	280 25.6	N 46 01.3	Kocab	137 18.8	N 74 04.0
Rigel	281 06.3	S 08 10.6	Alphecca	126 05.3	N 26 38.5
Bellatrix	278 25.5	N 06 22.1	Antares	112 18.2	S 26 28.9
Elnath	278 05.0	N 28 37.6	Atria	107 13.7	S 69 04.0
Alnilam	275 40.2	S 01 11.3	Sabik	102 04.9	S 15 45.2
Betelgeuze	270 54.8	N 07 24.6	Shaula	96 12.9	S 37 07.2
Canopus	263 53.9	S 52 42.5	Rasalhague	96 00.2	N 12 32.7
Sirius	258 28.3	S 16 44.4	Etamin	90 42.6	N 51 29.1
Adhara	255 07.9	S 29 00.2	Kaus Australis	83 35.0	S 34 22.3
Castor	246 00.1	N 31 50.5	Vega	80 34.3	N 38 48.0
Procyon	244 53.1	N 05 10.4	Nunki	75 50.1	S 26 16.1
Pollux	243 19.9	N 27 58.4	Albireo	67 05.5	N 28 00.3
Avior	234 16.0	S 59 35.1	Altair	62 01.9	N 08 55.4
Suhail	222 48.1	S 43 31.5	Peacock	53 08.7	S 56 39.6
Miaplacidus	221 39.0	S 69 48.8	Deneb	49 26.9	N 45 21.3
Alphard	217 50.0	S 08 45.4	Enif	33 40.8	N 09 58.5
Regulus	207 36.7	N 11 51.6	Alnair	27 35.5	S 46 50.9
Dubhe	193 43.6	N 61 38.2	Formalhaut	15 17.0	S 29 30.1
Denebola	182 26.9	N 14 27.0	Markab	13 32.0	N 15 19.4

2022 - First Point of Aries / Selected Stars

UT	day 166 of 365		day 167 of 365		day 168 of 365		day 169 of 365		day 170 of 365		UT
	June 15		June 16		June 17		June 18		June 19		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	263	15.5 +02.5	264	14.6 +02.5	265	13.8 +02.5	266	12.9 +02.5	267	12.1 +02.4	00
01	278	18.0 +02.4	279	17.1 +02.5	280	16.3 +02.4	281	15.4 +02.5	282	14.5 +02.5	01
02	293	20.4 +02.5	294	19.6 +02.4	295	18.7 +02.5	296	17.9 +02.4	297	17.0 +02.5	02
03	308	22.9 +02.5	309	22.0 +02.5	310	21.2 +02.4	311	20.3 +02.5	312	19.5 +02.4	03
04	323	25.4 +02.4	324	24.5 +02.5	325	23.6 +02.5	326	22.8 +02.5	327	21.9 +02.5	04
05	338	27.8 +02.5	339	27.0 +02.4	340	26.1 +02.5	341	25.3 +02.4	342	24.4 +02.5	05
06	353	30.3 +02.5	354	29.4 +02.5	355	28.6 +02.4	356	27.7 +02.5	357	26.9 +02.4	06
07	8	32.8 +02.4	9	31.9 +02.5	10	31.0 +02.5	11	30.2 +02.4	12	29.3 +02.5	07
08	23	35.2 +02.5	24	34.4 +02.4	25	33.5 +02.5	26	32.6 +02.5	27	31.8 +02.4	08
09	38	37.7 +02.5	39	36.8 +02.5	40	36.0 +02.4	41	35.1 +02.5	42	34.2 +02.5	09
10	53	40.2 +02.4	54	39.3 +02.5	55	38.4 +02.5	56	37.6 +02.4	57	36.7 +02.5	10
11	68	42.6 +02.5	69	41.8 +02.4	70	40.9 +02.5	71	40.0 +02.5	72	39.2 +02.4	11
12	83	45.1 +02.4	84	44.2 +02.5	85	43.4 +02.4	86	42.5 +02.5	87	41.6 +02.5	12
13	98	47.5 +02.5	99	46.7 +02.4	100	45.8 +02.5	101	45.0 +02.4	102	44.1 +02.5	13
14	113	50.0 +02.5	114	49.1 +02.5	115	48.3 +02.5	116	47.4 +02.5	117	46.6 +02.4	14
15	128	52.5 +02.4	129	51.6 +02.5	130	50.8 +02.4	131	49.9 +02.5	132	49.0 +02.5	15
16	143	54.9 +02.5	144	54.1 +02.4	145	53.2 +02.5	146	52.4 +02.4	147	51.5 +02.5	16
17	158	57.4 +02.5	159	56.5 +02.5	160	55.7 +02.4	161	54.8 +02.5	162	54.0 +02.4	17
18	173	59.9 +02.4	174	59.0 +02.5	175	58.1 +02.5	176	57.3 +02.5	177	56.4 +02.5	18
19	189	02.3 +02.5	190	01.5 +02.4	191	00.6 +02.5	191	59.8 +02.4	192	58.9 +02.5	19
20	204	04.8 +02.5	205	03.9 +02.5	206	03.1 +02.4	207	02.2 +02.5	208	01.4 +02.4	20
21	219	07.3 +02.4	220	06.4 +02.5	221	05.5 +02.5	222	04.7 +02.4	223	03.8 +02.5	21
22	234	09.7 +02.5	235	08.9 +02.4	236	08.0 +02.5	237	07.1 +02.5	238	06.3 +02.4	22
23	249	12.2 +02.4	250	11.3 +02.5	251	10.5 +02.4	252	09.6 +02.5	253	08.7 +02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 37.1	N 29 12.7	Gienah	175 45.7	S 17 40.0
Ankaa	353 09.5	S 42 10.8	Acrux	173 02.2	S 63 13.6
Schedir	349 33.6	N 56 39.3	Gacrux	171 53.9	S 57 14.4
Diphda	348 49.6	S 17 51.8	Alioth	166 14.8	N 55 50.6
Achernar	335 22.2	S 57 07.2	Spica	158 24.4	S 11 16.7
Hamal	327 53.9	N 23 34.0	Alkaid	152 53.4	N 49 12.4
Polaris	315 25.9	N 89 21.3	Hadar	148 38.6	S 60 29.0
Acamar	315 13.7	S 40 12.8	Menkent	147 59.6	S 36 28.6
Menkar	314 08.6	N 04 10.6	Arcturus	145 49.3	N 19 04.8
Mirfak	308 31.7	N 49 56.2	Rigel Kentaurus	139 40.1	S 60 56.0
Aldebaran	290 42.4	N 16 33.2	Zubenelgenubi	136 58.1	S 16 08.1
Capella	280 25.6	N 46 01.3	Kocab	137 18.9	N 74 04.0
Rigel	281 06.3	S 08 10.6	Alphecca	126 05.3	N 26 38.5
Bellatrix	278 25.5	N 06 22.2	Antares	112 18.2	S 26 28.9
Elnath	278 05.0	N 28 37.6	Atria	107 13.7	S 69 04.0
Alnilam	275 40.2	S 01 11.3	Sabik	102 04.9	S 15 45.2
Betelgeuze	270 54.7	N 07 24.6	Shaula	96 12.8	S 37 07.2
Canopus	263 53.9	S 52 42.5	Rasalhague	96 00.2	N 12 32.7
Sirius	258 28.3	S 16 44.4	Etamin	90 42.6	N 51 29.1
Adhara	255 07.9	S 29 00.2	Kaus Australis	83 34.9	S 34 22.3
Castor	246 00.1	N 31 50.5	Vega	80 34.3	N 38 48.1
Procyon	244 53.1	N 05 10.4	Nunki	75 50.0	S 26 16.1
Pollux	243 19.9	N 27 58.4	Albireo	67 05.4	N 28 00.3
Avior	234 16.1	S 59 35.0	Altair	62 01.9	N 08 55.4
Suhail	222 48.1	S 43 31.5	Peacock	53 08.6	S 56 39.6
Miaplacidus	221 39.1	S 69 48.8	Deneb	49 26.9	N 45 21.4
Alphard	217 50.0	S 08 45.4	Enif	33 40.7	N 09 58.5
Regulus	207 36.7	N 11 51.6	Alnair	27 35.5	S 46 50.9
Dubhe	193 43.7	N 61 38.2	Formalhaut	15 16.9	S 29 30.1
Denebola	182 26.9	N 14 27.0	Markab	13 32.0	N 15 19.4

2022 - First Point of Aries / Selected Stars

UT	day 171 of 365		day 172 of 365		day 173 of 365		day 174 of 365		day 175 of 365		UT					
	June 20		June 21		June 22		June 23		June 24							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "						
00	268	11.2	+02.5	269	10.3	+02.5	270	09.5	+02.4	271	08.6	+02.5	272	07.8	+02.4	00
01	283	13.7	+02.4	284	12.8	+02.5	285	11.9	+02.5	286	11.1	+02.5	287	10.2	+02.5	01
02	298	16.1	+02.5	299	15.3	+02.4	300	14.4	+02.5	301	13.6	+02.4	302	12.7	+02.5	02
03	313	18.6	+02.5	314	17.7	+02.5	315	16.9	+02.4	316	16.0	+02.5	317	15.2	+02.4	03
04	328	21.1	+02.4	329	20.2	+02.5	330	19.3	+02.5	331	18.5	+02.4	332	17.6	+02.5	04
05	343	23.5	+02.5	344	22.7	+02.4	345	21.8	+02.5	346	20.9	+02.5	347	20.1	+02.4	05
06	358	26.0	+02.5	359	25.1	+02.5	0	24.3	+02.4	1	23.4	+02.5	2	22.5	+02.5	06
07	13	28.5	+02.4	14	27.6	+02.5	15	26.7	+02.5	16	25.9	+02.4	17	25.0	+02.5	07
08	28	30.9	+02.5	29	30.1	+02.4	30	29.2	+02.5	31	28.3	+02.5	32	27.5	+02.4	08
09	43	33.4	+02.5	44	32.5	+02.5	45	31.7	+02.4	46	30.8	+02.5	47	29.9	+02.5	09
10	58	35.9	+02.4	59	35.0	+02.5	60	34.1	+02.5	61	33.3	+02.4	62	32.4	+02.5	10
11	73	38.3	+02.5	74	37.5	+02.4	75	36.6	+02.5	76	35.7	+02.5	77	34.9	+02.4	11
12	88	40.8	+02.4	89	39.9	+02.5	90	39.1	+02.4	91	38.2	+02.5	92	37.3	+02.5	12
13	103	43.2	+02.5	104	42.4	+02.4	105	41.5	+02.5	106	40.7	+02.4	107	39.8	+02.5	13
14	118	45.7	+02.5	119	44.8	+02.5	120	44.0	+02.4	121	43.1	+02.5	122	42.3	+02.4	14
15	133	48.2	+02.4	134	47.3	+02.5	135	46.4	+02.5	136	45.6	+02.4	137	44.7	+02.5	15
16	148	50.6	+02.5	149	49.8	+02.4	150	48.9	+02.5	151	48.0	+02.5	152	47.2	+02.5	16
17	163	53.1	+02.5	164	52.2	+02.5	165	51.4	+02.4	166	50.5	+02.5	167	49.7	+02.4	17
18	178	55.6	+02.4	179	54.7	+02.5	180	53.8	+02.5	181	53.0	+02.4	182	52.1	+02.5	18
19	193	58.0	+02.5	194	57.2	+02.4	195	56.3	+02.5	196	55.4	+02.5	197	54.6	+02.4	19
20	209	00.5	+02.5	209	59.6	+02.5	210	58.8	+02.4	211	57.9	+02.5	212	57.0	+02.5	20
21	224	03.0	+02.4	225	02.1	+02.5	226	01.2	+02.5	227	00.4	+02.4	227	59.5	+02.5	21
22	239	05.4	+02.5	240	04.6	+02.4	241	03.7	+02.5	242	02.8	+02.5	243	02.0	+02.4	22
23	254	07.9	+02.4	255	07.0	+02.5	256	06.2	+02.4	257	05.3	+02.5	258	04.4	+02.5	23

	SHA	Dec		SHA	Dec				
	° ' "	' "		° ' "	' "				
Alpheratz	357	37.0	N 29	12.7	Gienah	175	45.7	S 17	40.0
Ankaa	353	09.4	S 42	10.8	Acrux	173	02.3	S 63	13.6
Schedir	349	33.6	N 56	39.3	Gacrux	171	53.9	S 57	14.4
Diphda	348	49.6	S 17	51.8	Alioth	166	14.8	N 55	50.6
Achernar	335	22.1	S 57	07.2	Spica	158	24.4	S 11	16.7
Hamal	327	53.8	N 23	34.0	Alkaid	152	53.4	N 49	12.4
Polaris	315	24.2	N 89	21.2	Hadar	148	38.6	S 60	29.0
Acamar	315	13.7	S 40	12.8	Menkent	147	59.6	S 36	28.6
Menkar	314	08.6	N 04	10.6	Arcturus	145	49.3	N 19	04.8
Mirfak	308	31.7	N 49	56.2	Rigel Kentaurus	139	40.1	S 60	56.0
Aldebaran	290	42.4	N 16	33.2	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.5	N 46	01.3	Kocab	137	18.9	N 74	04.0
Rigel	281	06.2	S 08	10.6	Alphecca	126	05.3	N 26	38.5
Bellatrix	278	25.5	N 06	22.2	Antares	112	18.2	S 26	28.9
Elnath	278	04.9	N 28	37.6	Atria	107	13.6	S 69	04.1
Alnilam	275	40.2	S 01	11.3	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.7	N 07	24.6	Shaula	96	12.8	S 37	07.2
Canopus	263	53.9	S 52	42.5	Rasalhague	96	00.2	N 12	32.7
Sirius	258	28.3	S 16	44.4	Etamin	90	42.6	N 51	29.1
Adhara	255	07.9	S 29	00.2	Kaus Australis	83	34.9	S 34	22.3
Castor	246	00.1	N 31	50.5	Vega	80	34.3	N 38	48.1
Procyon	244	53.1	N 05	10.4	Nunki	75	50.0	S 26	16.1
Pollux	243	19.9	N 27	58.4	Albireo	67	05.4	N 28	00.3
Avior	234	16.1	S 59	35.0	Altair	62	01.9	N 08	55.5
Suhail	222	48.1	S 43	31.5	Peacock	53	08.6	S 56	39.6
Miaplacidus	221	39.1	S 69	48.8	Deneb	49	26.9	N 45	21.4
Alphard	217	50.0	S 08	45.4	Enif	33	40.7	N 09	58.6
Regulus	207	36.7	N 11	51.6	Alnair	27	35.4	S 46	50.9
Dubhe	193	43.7	N 61	38.2	Formalhaut	15	16.9	S 29	30.0
Denebola	182	27.0	N 14	27.0	Markab	13	31.9	N 15	19.4

2022 - First Point of Aries / Selected Stars

UT	day 176 of 365			day 177 of 365			day 178 of 365			day 179 of 365			day 180 of 365			UT
	June 25			June 26			June 27			June 28			June 29			
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
00	273	06.9	+02.5	274	06.0	+02.5	275	05.2	+02.4	276	04.3	+02.5	277	03.5	+02.4	00
01	288	09.4	+02.4	289	08.5	+02.5	290	07.6	+02.5	291	06.8	+02.5	292	05.9	+02.5	01
02	303	11.8	+02.5	304	11.0	+02.4	305	10.1	+02.5	306	09.3	+02.4	307	08.4	+02.5	02
03	318	14.3	+02.5	319	13.4	+02.5	320	12.6	+02.4	321	11.7	+02.5	322	10.9	+02.4	03
04	333	16.8	+02.4	334	15.9	+02.5	335	15.0	+02.5	336	14.2	+02.4	337	13.3	+02.5	04
05	348	19.2	+02.5	349	18.4	+02.4	350	17.5	+02.5	351	16.6	+02.5	352	15.8	+02.4	05
06	3	21.7	+02.5	4	20.8	+02.5	5	20.0	+02.4	6	19.1	+02.5	7	18.2	+02.5	06
07	18	24.2	+02.4	19	23.3	+02.5	20	22.4	+02.5	21	21.6	+02.4	22	20.7	+02.5	07
08	33	26.6	+02.5	34	25.8	+02.4	35	24.9	+02.5	36	24.0	+02.5	37	23.2	+02.4	08
09	48	29.1	+02.4	49	28.2	+02.5	50	27.4	+02.4	51	26.5	+02.5	52	25.6	+02.5	09
10	63	31.5	+02.5	64	30.7	+02.4	65	29.8	+02.5	66	29.0	+02.4	67	28.1	+02.5	10
11	78	34.0	+02.5	79	33.1	+02.5	80	32.3	+02.5	81	31.4	+02.5	82	30.6	+02.4	11
12	93	36.5	+02.4	94	35.6	+02.5	95	34.8	+02.4	96	33.9	+02.5	97	33.0	+02.5	12
13	108	38.9	+02.5	109	38.1	+02.4	110	37.2	+02.5	111	36.4	+02.4	112	35.5	+02.5	13
14	123	41.4	+02.5	124	40.5	+02.5	125	39.7	+02.4	126	38.8	+02.5	127	38.0	+02.4	14
15	138	43.9	+02.4	139	43.0	+02.5	140	42.1	+02.5	141	41.3	+02.4	142	40.4	+02.5	15
16	153	46.3	+02.5	154	45.5	+02.4	155	44.6	+02.5	156	43.7	+02.5	157	42.9	+02.5	16
17	168	48.8	+02.5	169	47.9	+02.5	170	47.1	+02.4	171	46.2	+02.5	172	45.4	+02.4	17
18	183	51.3	+02.4	184	50.4	+02.5	185	49.5	+02.5	186	48.7	+02.4	187	47.8	+02.5	18
19	198	53.7	+02.5	199	52.9	+02.4	200	52.0	+02.5	201	51.1	+02.5	202	50.3	+02.4	19
20	213	56.2	+02.4	214	55.3	+02.5	215	54.5	+02.4	216	53.6	+02.5	217	52.7	+02.5	20
21	228	58.6	+02.5	229	57.8	+02.5	230	56.9	+02.5	231	56.1	+02.4	232	55.2	+02.5	21
22	244	01.1	+02.5	245	00.3	+02.4	245	59.4	+02.5	246	58.5	+02.5	247	57.7	+02.4	22
23	259	03.6	+02.4	260	02.7	+02.5	261	01.9	+02.4	262	01.0	+02.5	263	00.1	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	37.0	N 29	12.7	Gienah	175	45.7	S 17	40.0
Ankaa	353	09.4	S 42	10.7	Acrux	173	02.3	S 63	13.6
Schedir	349	33.5	N 56	39.3	Gacrux	171	53.9	S 57	14.4
Diphda	348	49.5	S 17	51.8	Alioth	166	14.9	N 55	50.6
Achernar	335	22.1	S 57	07.1	Spica	158	24.4	S 11	16.7
Hamal	327	53.8	N 23	34.0	Alkaid	152	53.4	N 49	12.4
Polaris	315	22.2	N 89	21.2	Hadar	148	38.6	S 60	29.0
Acamar	315	13.7	S 40	12.8	Menkent	147	59.6	S 36	28.6
Menkar	314	08.6	N 04	10.6	Arcturus	145	49.3	N 19	04.8
Mirfak	308	31.6	N 49	56.2	Rigel Kentaurus	139	40.1	S 60	56.0
Aldebaran	290	42.4	N 16	33.3	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.5	N 46	01.3	Kocab	137	19.0	N 74	04.1
Rigel	281	06.2	S 08	10.5	Alphecca	126	05.3	N 26	38.5
Bellatrix	278	25.5	N 06	22.2	Antares	112	18.2	S 26	28.9
Elnath	278	04.9	N 28	37.6	Atria	107	13.6	S 69	04.1
Alnilam	275	40.2	S 01	11.3	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.7	N 07	24.7	Shaula	96	12.8	S 37	07.2
Canopus	263	53.9	S 52	42.4	Rasalhague	96	00.2	N 12	32.7
Sirius	258	28.3	S 16	44.4	Etamin	90	42.6	N 51	29.2
Adhara	255	07.9	S 29	00.1	Kaus Australis	83	34.9	S 34	22.3
Castor	246	00.1	N 31	50.5	Vega	80	34.3	N 38	48.1
Procyon	244	53.1	N 05	10.4	Nunki	75	50.0	S 26	16.1
Pollux	243	19.9	N 27	58.4	Albireo	67	05.4	N 28	00.3
Avior	234	16.1	S 59	35.0	Altair	62	01.9	N 08	55.5
Suhail	222	48.2	S 43	31.5	Peacock	53	08.5	S 56	39.6
Miaplacidus	221	39.2	S 69	48.7	Deneb	49	26.8	N 45	21.4
Alphard	217	50.0	S 08	45.3	Enif	33	40.7	N 09	58.6
Regulus	207	36.8	N 11	51.6	Alnair	27	35.4	S 46	50.9
Dubhe	193	43.7	N 61	38.2	Formalhaut	15	16.8	S 29	30.0
Denebola	182	27.0	N 14	27.0	Markab	13	31.9	N 15	19.4

2022 - First Point of Aries / Selected Stars

UT	day 181 of 365			day 182 of 365			day 183 of 365			day 184 of 365			day 185 of 365			UT
	June 30			July 1			July 2			July 3			July 4			
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
00	278	02.6	+02.5	279	01.7	+02.5	280	00.9	+02.4	281	00.0	+02.5	281	59.2	+02.4	00
01	293	05.1	+02.4	294	04.2	+02.5	295	03.3	+02.5	296	02.5	+02.5	297	01.6	+02.5	01
02	308	07.5	+02.5	309	06.7	+02.4	310	05.8	+02.5	311	05.0	+02.4	312	04.1	+02.5	02
03	323	10.0	+02.5	324	09.1	+02.5	325	08.3	+02.4	326	07.4	+02.5	327	06.6	+02.4	03
04	338	12.5	+02.4	339	11.6	+02.5	340	10.7	+02.5	341	09.9	+02.4	342	09.0	+02.5	04
05	353	14.9	+02.5	354	14.1	+02.4	355	13.2	+02.5	356	12.3	+02.5	357	11.5	+02.4	05
06	8	17.4	+02.5	9	16.5	+02.5	10	15.7	+02.4	11	14.8	+02.5	12	13.9	+02.5	06
07	23	19.9	+02.4	24	19.0	+02.5	25	18.1	+02.5	26	17.3	+02.4	27	16.4	+02.5	07
08	38	22.3	+02.5	39	21.5	+02.4	40	20.6	+02.5	41	19.7	+02.5	42	18.9	+02.4	08
09	53	24.8	+02.4	54	23.9	+02.5	55	23.1	+02.4	56	22.2	+02.5	57	21.3	+02.5	09
10	68	27.2	+02.5	69	26.4	+02.4	70	25.5	+02.5	71	24.7	+02.4	72	23.8	+02.5	10
11	83	29.7	+02.5	84	28.8	+02.5	85	28.0	+02.5	86	27.1	+02.5	87	26.3	+02.4	11
12	98	32.2	+02.4	99	31.3	+02.5	100	30.5	+02.4	101	29.6	+02.5	102	28.7	+02.5	12
13	113	34.6	+02.5	114	33.8	+02.4	115	32.9	+02.5	116	32.1	+02.4	117	31.2	+02.5	13
14	128	37.1	+02.5	129	36.2	+02.5	130	35.4	+02.4	131	34.5	+02.5	132	33.7	+02.4	14
15	143	39.6	+02.4	144	38.7	+02.5	145	37.8	+02.5	146	37.0	+02.4	147	36.1	+02.5	15
16	158	42.0	+02.5	159	41.2	+02.4	160	40.3	+02.5	161	39.4	+02.5	162	38.6	+02.5	16
17	173	44.5	+02.5	174	43.6	+02.5	175	42.8	+02.4	176	41.9	+02.5	177	41.1	+02.4	17
18	188	47.0	+02.4	189	46.1	+02.5	190	45.2	+02.5	191	44.4	+02.4	192	43.5	+02.5	18
19	203	49.4	+02.5	204	48.6	+02.4	205	47.7	+02.5	206	46.8	+02.5	207	46.0	+02.4	19
20	218	51.9	+02.5	219	51.0	+02.5	220	50.2	+02.4	221	49.3	+02.5	222	48.4	+02.5	20
21	233	54.4	+02.4	234	53.5	+02.5	235	52.6	+02.5	236	51.8	+02.4	237	50.9	+02.5	21
22	248	56.8	+02.5	249	56.0	+02.4	250	55.1	+02.5	251	54.2	+02.5	252	53.4	+02.4	22
23	263	59.3	+02.4	264	58.4	+02.5	265	57.6	+02.4	266	56.7	+02.5	267	55.8	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.9	N 29	12.7	Gienah	175	45.7	S 17	40.0
Ankaa	353	09.3	S 42	10.7	Acrux	173	02.4	S 63	13.6
Schedir	349	33.4	N 56	39.3	Gacrux	171	54.0	S 57	14.4
Diphda	348	49.5	S 17	51.8	Alioth	166	14.9	N 55	50.6
Achernar	335	22.0	S 57	07.1	Spica	158	24.4	S 11	16.7
Hamal	327	53.8	N 23	34.0	Alkaid	152	53.5	N 49	12.4
Polaris	315	19.8	N 89	21.2	Hadar	148	38.6	S 60	29.0
Acamar	315	13.6	S 40	12.7	Menkent	147	59.6	S 36	28.6
Menkar	314	08.5	N 04	10.6	Arcturus	145	49.3	N 19	04.8
Mirfak	308	31.6	N 49	56.2	Rigel Kentaurus	139	40.2	S 60	56.0
Aldebaran	290	42.3	N 16	33.3	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.5	N 46	01.3	Kocab	137	19.1	N 74	04.1
Rigel	281	06.2	S 08	10.5	Alphecca	126	05.3	N 26	38.5
Bellatrix	278	25.4	N 06	22.2	Antares	112	18.2	S 26	28.9
Elnath	278	04.9	N 28	37.6	Atria	107	13.6	S 69	04.1
Alnilam	275	40.2	S 01	11.3	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.7	N 07	24.7	Shaula	96	12.8	S 37	07.2
Canopus	263	53.9	S 52	42.4	Rasalhague	96	00.2	N 12	32.8
Sirius	258	28.2	S 16	44.3	Etamin	90	42.6	N 51	29.2
Adhara	255	07.9	S 29	00.1	Kaus Australis	83	34.9	S 34	22.3
Castor	246	00.0	N 31	50.4	Vega	80	34.3	N 38	48.1
Procyon	244	53.1	N 05	10.5	Nunki	75	50.0	S 26	16.1
Pollux	243	19.9	N 27	58.4	Albireo	67	05.4	N 28	00.3
Avior	234	16.1	S 59	35.0	Altair	62	01.8	N 08	55.5
Suhail	222	48.2	S 43	31.5	Peacock	53	08.5	S 56	39.6
Miaplacidus	221	39.2	S 69	48.7	Deneb	49	26.8	N 45	21.5
Alphard	217	50.0	S 08	45.3	Enif	33	40.6	N 09	58.6
Regulus	207	36.8	N 11	51.6	Alnair	27	35.3	S 46	50.9
Dubhe	193	43.8	N 61	38.1	Formalhaut	15	16.8	S 29	30.0
Denebola	182	27.0	N 14	27.0	Markab	13	31.9	N 15	19.5

2022 - First Point of Aries / Selected Stars

UT	day 186 of 365		day 187 of 365		day 188 of 365		day 189 of 365		day 190 of 365		UT		
	July 5		July 6		July 7		July 8		July 9				
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
	°	'	°	'	°	'	°	'	°	'			
00	282	58.3	+02.5	283	57.4	+02.5	284	56.6	+02.4	285	55.7	+02.5	00
01	298	00.8	+02.4	298	59.9	+02.5	299	59.0	+02.5	300	58.2	+02.4	01
02	313	03.2	+02.5	314	02.4	+02.4	315	01.5	+02.5	316	00.6	+02.5	02
03	328	05.7	+02.5	329	04.8	+02.5	330	04.0	+02.4	331	03.1	+02.5	03
04	343	08.2	+02.4	344	07.3	+02.5	345	06.4	+02.5	346	05.6	+02.4	04
05	358	10.6	+02.5	359	09.8	+02.4	0	08.9	+02.5	1	08.0	+02.5	05
06	13	13.1	+02.4	14	12.2	+02.5	15	11.4	+02.4	16	10.5	+02.5	06
07	28	15.5	+02.5	29	14.7	+02.5	30	13.8	+02.5	31	13.0	+02.4	07
08	43	18.0	+02.5	44	17.2	+02.4	45	16.3	+02.5	46	15.4	+02.5	08
09	58	20.5	+02.4	59	19.6	+02.5	60	18.8	+02.4	61	17.9	+02.5	09
10	73	22.9	+02.5	74	22.1	+02.4	75	21.2	+02.5	76	20.4	+02.4	10
11	88	25.4	+02.5	89	24.5	+02.5	90	23.7	+02.4	91	22.8	+02.5	11
12	103	27.9	+02.4	104	27.0	+02.5	105	26.1	+02.5	106	25.3	+02.4	12
13	118	30.3	+02.5	119	29.5	+02.4	120	28.6	+02.5	121	27.7	+02.5	13
14	133	32.8	+02.5	134	31.9	+02.5	135	31.1	+02.4	136	30.2	+02.5	14
15	148	35.3	+02.4	149	34.4	+02.5	150	33.5	+02.5	151	32.7	+02.4	15
16	163	37.7	+02.5	164	36.9	+02.4	165	36.0	+02.5	166	35.1	+02.5	16
17	178	40.2	+02.5	179	39.3	+02.5	180	38.5	+02.4	181	37.6	+02.5	17
18	193	42.7	+02.4	194	41.8	+02.5	195	40.9	+02.5	196	40.1	+02.4	18
19	208	45.1	+02.5	209	44.3	+02.4	210	43.4	+02.5	211	42.5	+02.5	19
20	223	47.6	+02.4	224	46.7	+02.5	225	45.9	+02.4	226	45.0	+02.5	20
21	238	50.0	+02.5	239	49.2	+02.4	240	48.3	+02.5	241	47.5	+02.4	21
22	253	52.5	+02.5	254	51.6	+02.5	255	50.8	+02.4	256	49.9	+02.5	22
23	268	55.0	+02.4	269	54.1	+02.5	270	53.2	+02.5	271	52.4	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.9	N 29	12.7	Gienah	175	45.7	S 17	40.0
Ankaa	353	09.3	S 42	10.7	Acrux	173	02.4	S 63	13.6
Schedir	349	33.4	N 56	39.3	Gacrux	171	54.0	S 57	14.4
Diphda	348	49.5	S 17	51.7	Alioth	166	14.9	N 55	50.6
Achernar	335	22.0	S 57	07.1	Spica	158	24.4	S 11	16.7
Hamal	327	53.7	N 23	34.0	Alkaid	152	53.5	N 49	12.4
Polaris	315	17.8	N 89	21.2	Hadar	148	38.7	S 60	29.1
Acamar	315	13.6	S 40	12.7	Menkent	147	59.6	S 36	28.7
Menkar	314	08.5	N 04	10.7	Arcturus	145	49.3	N 19	04.8
Mirfak	308	31.5	N 49	56.2	Rigel Kentaurus	139	40.2	S 60	56.0
Aldebaran	290	42.3	N 16	33.3	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.4	N 46	01.3	Kocab	137	19.2	N 74	04.1
Rigel	281	06.2	S 08	10.5	Alphecca	126	05.3	N 26	38.6
Bellatrix	278	25.4	N 06	22.2	Antares	112	18.2	S 26	28.9
Elnath	278	04.9	N 28	37.6	Atria	107	13.6	S 69	04.1
Alnilam	275	40.2	S 01	11.2	Sabik	102	04.8	S 15	45.2
Betelgeuze	270	54.7	N 07	24.7	Shaula	96	12.8	S 37	07.2
Canopus	263	53.9	S 52	42.4	Rasalhague	96	00.2	N 12	32.8
Sirius	258	28.2	S 16	44.3	Etamin	90	42.6	N 51	29.2
Adhara	255	07.9	S 29	00.1	Kaus Australis	83	34.8	S 34	22.4
Castor	246	00.0	N 31	50.4	Vega	80	34.3	N 38	48.2
Procyon	244	53.1	N 05	10.5	Nunki	75	50.0	S 26	16.1
Pollux	243	19.9	N 27	58.4	Albireo	67	05.3	N 28	00.4
Avior	234	16.2	S 59	34.9	Altair	62	01.8	N 08	55.5
Suhail	222	48.2	S 43	31.4	Peacock	53	08.4	S 56	39.6
Miaplacidus	221	39.3	S 69	48.7	Deneb	49	26.8	N 45	21.5
Alphard	217	50.0	S 08	45.3	Enif	33	40.6	N 09	58.6
Regulus	207	36.8	N 11	51.6	Alnair	27	35.3	S 46	50.9
Dubhe	193	43.8	N 61	38.1	Formalhaut	15	16.8	S 29	30.0
Denebola	182	27.0	N 14	27.0	Markab	13	31.8	N 15	19.5

2022 - First Point of Aries / Selected Stars

UT	day 191 of 365		day 192 of 365		day 193 of 365		day 194 of 365		day 195 of 365		UT					
	<i>July 10</i>		<i>July 11</i>		<i>July 12</i>		<i>July 13</i>		<i>July 14</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	287	54.0	+02.5	288	53.1	+02.5	289	52.3	+02.4	290	51.4	+02.5	291	50.6	+02.4	00
01	302	56.5	+02.4	303	55.6	+02.5	304	54.7	+02.5	305	53.9	+02.4	306	53.0	+02.5	01
02	317	58.9	+02.5	318	58.1	+02.4	319	57.2	+02.5	320	56.3	+02.5	321	55.5	+02.5	02
03	333	01.4	+02.4	334	00.5	+02.5	334	59.7	+02.4	335	58.8	+02.5	336	58.0	+02.4	03
04	348	03.8	+02.5	349	03.0	+02.5	350	02.1	+02.5	351	01.3	+02.4	352	00.4	+02.5	04
05	3	06.3	+02.5	4	05.5	+02.4	5	04.6	+02.5	6	03.7	+02.5	7	02.9	+02.4	05
06	18	08.8	+02.4	19	07.9	+02.5	20	07.1	+02.4	21	06.2	+02.5	22	05.3	+02.5	06
07	33	11.2	+02.5	34	10.4	+02.4	35	09.5	+02.5	36	08.7	+02.4	37	07.8	+02.5	07
08	48	13.7	+02.5	49	12.8	+02.5	50	12.0	+02.5	51	11.1	+02.5	52	10.3	+02.4	08
09	63	16.2	+02.4	64	15.3	+02.5	65	14.5	+02.4	66	13.6	+02.5	67	12.7	+02.5	09
10	78	18.6	+02.5	79	17.8	+02.4	80	16.9	+02.5	81	16.1	+02.4	82	15.2	+02.5	10
11	93	21.1	+02.5	94	20.2	+02.5	95	19.4	+02.4	96	18.5	+02.5	97	17.7	+02.4	11
12	108	23.6	+02.4	109	22.7	+02.5	110	21.8	+02.5	111	21.0	+02.5	112	20.1	+02.5	12
13	123	26.0	+02.5	124	25.2	+02.4	125	24.3	+02.5	126	23.5	+02.4	127	22.6	+02.5	13
14	138	28.5	+02.5	139	27.6	+02.5	140	26.8	+02.4	141	25.9	+02.5	142	25.1	+02.4	14
15	153	31.0	+02.4	154	30.1	+02.5	155	29.2	+02.5	156	28.4	+02.4	157	27.5	+02.5	15
16	168	33.4	+02.5	169	32.6	+02.4	170	31.7	+02.5	171	30.8	+02.5	172	30.0	+02.5	16
17	183	35.9	+02.4	184	35.0	+02.5	185	34.2	+02.4	186	33.3	+02.5	187	32.5	+02.4	17
18	198	38.3	+02.5	199	37.5	+02.5	200	36.6	+02.5	201	35.8	+02.4	202	34.9	+02.5	18
19	213	40.8	+02.5	214	40.0	+02.4	215	39.1	+02.5	216	38.2	+02.5	217	37.4	+02.4	19
20	228	43.3	+02.4	229	42.4	+02.5	230	41.6	+02.4	231	40.7	+02.5	232	39.8	+02.5	20
21	243	45.7	+02.5	244	44.9	+02.4	245	44.0	+02.5	246	43.2	+02.4	247	42.3	+02.5	21
22	258	48.2	+02.5	259	47.3	+02.5	260	46.5	+02.5	261	45.6	+02.5	262	44.8	+02.4	22
23	273	50.7	+02.4	274	49.8	+02.5	275	49.0	+02.4	276	48.1	+02.5	277	47.2	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.9	N 29	12.7	Gienah	175	45.7	S 17	40.0
Ankaa	353	09.2	S 42	10.7	Acrux	173	02.5	S 63	13.6
Schedir	349	33.3	N 56	39.3	Gacrux	171	54.0	S 57	14.4
Diphda	348	49.4	S 17	51.7	Alioth	166	15.0	N 55	50.6
Achernar	335	21.9	S 57	07.1	Spica	158	24.4	S 11	16.7
Hamal	327	53.7	N 23	34.0	Alkaid	152	53.5	N 49	12.4
Polaris	315	15.4	N 89	21.2	Hadar	148	38.7	S 60	29.1
Acamar	315	13.5	S 40	12.7	Menkent	147	59.6	S 36	28.7
Menkar	314	08.5	N 04	10.7	Arcturus	145	49.3	N 19	04.9
Mirfak	308	31.5	N 49	56.2	Rigel Kentaurus	139	40.2	S 60	56.0
Aldebaran	290	42.3	N 16	33.3	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.4	N 46	01.3	Kocab	137	19.2	N 74	04.1
Rigel	281	06.2	S 08	10.5	Alphecca	126	05.3	N 26	38.6
Bellatrix	278	25.4	N 06	22.2	Antares	112	18.2	S 26	28.9
Elnath	278	04.8	N 28	37.6	Atria	107	13.7	S 69	04.2
Alnilam	275	40.1	S 01	11.2	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.7	N 07	24.7	Shaula	96	12.8	S 37	07.2
Canopus	263	53.9	S 52	42.4	Rasalhague	96	00.2	N 12	32.8
Sirius	258	28.2	S 16	44.3	Etamin	90	42.6	N 51	29.2
Adhara	255	07.9	S 29	00.1	Kaus Australis	83	34.8	S 34	22.4
Castor	246	00.0	N 31	50.4	Vega	80	34.3	N 38	48.2
Procyon	244	53.1	N 05	10.5	Nunki	75	49.9	S 26	16.1
Pollux	243	19.9	N 27	58.4	Albireo	67	05.3	N 28	00.4
Avior	234	16.2	S 59	34.9	Altair	62	01.8	N 08	55.5
Suhail	222	48.2	S 43	31.4	Peacock	53	08.4	S 56	39.6
Miaplacidus	221	39.3	S 69	48.7	Deneb	49	26.8	N 45	21.5
Alphard	217	50.1	S 08	45.3	Enif	33	40.6	N 09	58.6
Regulus	207	36.8	N 11	51.6	Alnair	27	35.2	S 46	50.9
Dubhe	193	43.8	N 61	38.1	Formalhaut	15	16.7	S 29	30.0
Denebola	182	27.0	N 14	27.0	Markab	13	31.8	N 15	19.5

2022 - First Point of Aries / Selected Stars

UT	day 196 of 365		day 197 of 365		day 198 of 365		day 199 of 365		day 200 of 365		UT					
	July 15		July 16		July 17		July 18		July 19							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	292	49.7	+02.5	293	48.8	+02.5	294	48.0	+02.4	295	47.1	+02.5	296	46.3	+02.4	00
01	307	52.2	+02.4	308	51.3	+02.5	309	50.4	+02.5	310	49.6	+02.4	311	48.7	+02.5	01
02	322	54.6	+02.5	323	53.8	+02.4	324	52.9	+02.5	325	52.0	+02.5	326	51.2	+02.4	02
03	337	57.1	+02.5	338	56.2	+02.5	339	55.4	+02.4	340	54.5	+02.5	341	53.6	+02.5	03
04	352	59.6	+02.4	353	58.7	+02.5	354	57.8	+02.5	355	57.0	+02.4	356	56.1	+02.5	04
05	8	02.0	+02.5	9	01.2	+02.4	10	00.3	+02.5	10	59.4	+02.5	11	58.6	+02.4	05
06	23	04.5	+02.4	24	03.6	+02.5	25	02.8	+02.4	26	01.9	+02.5	27	01.0	+02.5	06
07	38	06.9	+02.5	39	06.1	+02.5	40	05.2	+02.5	41	04.4	+02.4	42	03.5	+02.5	07
08	53	09.4	+02.5	54	08.6	+02.4	55	07.7	+02.5	56	06.8	+02.5	57	06.0	+02.4	08
09	68	11.9	+02.4	69	11.0	+02.5	70	10.2	+02.4	71	09.3	+02.5	72	08.4	+02.5	09
10	83	14.3	+02.5	84	13.5	+02.4	85	12.6	+02.5	86	11.8	+02.4	87	10.9	+02.5	10
11	98	16.8	+02.5	99	15.9	+02.5	100	15.1	+02.4	101	14.2	+02.5	102	13.4	+02.4	11
12	113	19.3	+02.4	114	18.4	+02.5	115	17.5	+02.5	116	16.7	+02.4	117	15.8	+02.5	12
13	128	21.7	+02.5	129	20.9	+02.4	130	20.0	+02.5	131	19.1	+02.5	132	18.3	+02.5	13
14	143	24.2	+02.5	144	23.3	+02.5	145	22.5	+02.4	146	21.6	+02.5	147	20.8	+02.4	14
15	158	26.7	+02.4	159	25.8	+02.5	160	24.9	+02.5	161	24.1	+02.4	162	23.2	+02.5	15
16	173	29.1	+02.5	174	28.3	+02.4	175	27.4	+02.5	176	26.5	+02.5	177	25.7	+02.4	16
17	188	31.6	+02.5	189	30.7	+02.5	190	29.9	+02.4	191	29.0	+02.5	192	28.1	+02.5	17
18	203	34.1	+02.4	204	33.2	+02.5	205	32.3	+02.5	206	31.5	+02.4	207	30.6	+02.5	18
19	218	36.5	+02.5	219	35.7	+02.4	220	34.8	+02.5	221	33.9	+02.5	222	33.1	+02.4	19
20	233	39.0	+02.4	234	38.1	+02.5	235	37.3	+02.4	236	36.4	+02.5	237	35.5	+02.5	20
21	248	41.4	+02.5	249	40.6	+02.4	250	39.7	+02.5	251	38.9	+02.4	252	38.0	+02.5	21
22	263	43.9	+02.5	264	43.0	+02.5	265	42.2	+02.5	266	41.3	+02.5	267	40.5	+02.4	22
23	278	46.4	+02.4	279	45.5	+02.5	280	44.7	+02.4	281	43.8	+02.5	282	42.9	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.8	N 29	12.8	Gienah	175	45.7	S 17	40.0
Ankaa	353	09.2	S 42	10.7	Acrux	173	02.5	S 63	13.6
Schedir	349	33.3	N 56	39.3	Gacrux	171	54.1	S 57	14.4
Diphda	348	49.4	S 17	51.7	Alioth	166	15.0	N 55	50.6
Achernar	335	21.8	S 57	07.1	Spica	158	24.4	S 11	16.7
Hamal	327	53.6	N 23	34.0	Alkaid	152	53.5	N 49	12.4
Polaris	315	12.7	N 89	21.2	Hadar	148	38.7	S 60	29.1
Acamar	315	13.5	S 40	12.7	Menkent	147	59.6	S 36	28.7
Menkar	314	08.4	N 04	10.7	Arcturus	145	49.3	N 19	04.9
Mirfak	308	31.4	N 49	56.2	Rigel Kentaurus	139	40.2	S 60	56.0
Aldebaran	290	42.2	N 16	33.3	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	25.3	N 46	01.3	Kocab	137	19.3	N 74	04.1
Rigel	281	06.1	S 08	10.5	Alphecca	126	05.3	N 26	38.6
Bellatrix	278	25.4	N 06	22.2	Antares	112	18.2	S 26	28.9
Elnath	278	04.8	N 28	37.6	Atria	107	13.7	S 69	04.2
Alnilam	275	40.1	S 01	11.2	Sabik	102	04.8	S 15	45.2
Betelgeuze	270	54.6	N 07	24.7	Shaula	96	12.8	S 37	07.2
Canopus	263	53.8	S 52	42.3	Rasalhague	96	00.2	N 12	32.8
Sirius	258	28.2	S 16	44.3	Etamin	90	42.6	N 51	29.3
Adhara	255	07.8	S 29	00.1	Kaus Australis	83	34.8	S 34	22.4
Castor	245	60.0	N 31	50.4	Vega	80	34.3	N 38	48.2
Procyon	244	53.1	N 05	10.5	Nunki	75	49.9	S 26	16.1
Pollux	243	19.8	N 27	58.4	Albireo	67	05.3	N 28	00.4
Avior	234	16.2	S 59	34.9	Altair	62	01.8	N 08	55.5
Suhail	222	48.2	S 43	31.4	Peacock	53	08.4	S 56	39.6
Miaplacidus	221	39.3	S 69	48.7	Deneb	49	26.7	N 45	21.5
Alphard	217	50.0	S 08	45.3	Enif	33	40.5	N 09	58.7
Regulus	207	36.8	N 11	51.6	Alnair	27	35.2	S 46	50.9
Dubhe	193	43.8	N 61	38.1	Formalhaut	15	16.7	S 29	30.0
Denebola	182	27.0	N 14	27.0	Markab	13	31.7	N 15	19.5

2022 - First Point of Aries / Selected Stars

UT	day 201 of 365		day 202 of 365		day 203 of 365		day 204 of 365		day 205 of 365		UT
	<i>July 20</i>		<i>July 21</i>		<i>July 22</i>		<i>July 23</i>		<i>July 24</i>		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	297	45.4 +02.5	298	44.5 +02.5	299	43.7 +02.4	300	42.8 +02.5	301	41.9 +02.5	00
01	312	47.9 +02.4	313	47.0 +02.5	314	46.1 +02.5	315	45.3 +02.4	316	44.4 +02.5	01
02	327	50.3 +02.5	328	49.5 +02.4	329	48.6 +02.5	330	47.7 +02.5	331	46.9 +02.4	02
03	342	52.8 +02.4	343	51.9 +02.5	344	51.1 +02.4	345	50.2 +02.5	346	49.3 +02.5	03
04	357	55.2 +02.5	358	54.4 +02.4	359	53.5 +02.5	0	52.7 +02.4	1	51.8 +02.5	04
05	12	57.7 +02.5	13	56.8 +02.5	14	56.0 +02.5	15	55.1 +02.5	16	54.3 +02.4	05
06	28	00.2 +02.4	28	59.3 +02.5	29	58.5 +02.4	30	57.6 +02.5	31	56.7 +02.5	06
07	43	02.6 +02.5	44	01.8 +02.4	45	00.9 +02.5	46	00.1 +02.4	46	59.2 +02.5	07
08	58	05.1 +02.5	59	04.2 +02.5	60	03.4 +02.4	61	02.5 +02.5	62	01.7 +02.4	08
09	73	07.6 +02.4	74	06.7 +02.5	75	05.8 +02.5	76	05.0 +02.4	77	04.1 +02.5	09
10	88	10.0 +02.5	89	09.2 +02.4	90	08.3 +02.5	91	07.4 +02.5	92	06.6 +02.5	10
11	103	12.5 +02.5	104	11.6 +02.5	105	10.8 +02.4	106	09.9 +02.5	107	09.1 +02.4	11
12	118	15.0 +02.4	119	14.1 +02.5	120	13.2 +02.5	121	12.4 +02.4	122	11.5 +02.5	12
13	133	17.4 +02.5	134	16.6 +02.4	135	15.7 +02.5	136	14.8 +02.5	137	14.0 +02.4	13
14	148	19.9 +02.5	149	19.0 +02.5	150	18.2 +02.4	151	17.3 +02.5	152	16.4 +02.5	14
15	163	22.4 +02.4	164	21.5 +02.5	165	20.6 +02.5	166	19.8 +02.4	167	18.9 +02.5	15
16	178	24.8 +02.5	179	24.0 +02.4	180	23.1 +02.5	181	22.2 +02.5	182	21.4 +02.4	16
17	193	27.3 +02.4	194	26.4 +02.5	195	25.6 +02.4	196	24.7 +02.5	197	23.8 +02.5	17
18	208	29.7 +02.5	209	28.9 +02.4	210	28.0 +02.5	211	27.2 +02.4	212	26.3 +02.5	18
19	223	32.2 +02.5	224	31.3 +02.5	225	30.5 +02.5	226	29.6 +02.5	227	28.8 +02.4	19
20	238	34.7 +02.4	239	33.8 +02.5	240	33.0 +02.4	241	32.1 +02.5	242	31.2 +02.5	20
21	253	37.1 +02.5	254	36.3 +02.4	255	35.4 +02.5	256	34.6 +02.4	257	33.7 +02.5	21
22	268	39.6 +02.5	269	38.7 +02.5	270	37.9 +02.4	271	37.0 +02.5	272	36.2 +02.4	22
23	283	42.1 +02.4	284	41.2 +02.5	285	40.3 +02.5	286	39.5 +02.4	287	38.6 +02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 36.8	N 29 12.8	Gienah	175 45.8	S 17 40.0
Ankaa	353 09.1	S 42 10.7	Acrux	173 02.6	S 63 13.6
Schedir	349 33.2	N 56 39.4	Gacrux	171 54.1	S 57 14.4
Diphda	348 49.3	S 17 51.7	Alioth	166 15.0	N 55 50.6
Achernar	335 21.8	S 57 07.1	Spica	158 24.5	S 11 16.7
Hamal	327 53.6	N 23 34.0	Alkaid	152 53.6	N 49 12.4
Polaris	315 10.5	N 89 21.2	Hadar	148 38.8	S 60 29.1
Acamar	315 13.4	S 40 12.7	Menkent	147 59.7	S 36 28.7
Menkar	314 08.4	N 04 10.7	Arcturus	145 49.4	N 19 04.9
Mirfak	308 31.4	N 49 56.2	Rigel Kentaurus	139 40.3	S 60 56.0
Aldebaran	290 42.2	N 16 33.3	Zubenelgenubi	136 58.1	S 16 08.1
Capella	280 25.3	N 46 01.3	Kocab	137 19.4	N 74 04.1
Rigel	281 06.1	S 08 10.5	Alphecca	126 05.3	N 26 38.6
Bellatrix	278 25.3	N 06 22.2	Antares	112 18.2	S 26 28.9
Elnath	278 04.8	N 28 37.6	Atria	107 13.7	S 69 04.2
Alnilam	275 40.1	S 01 11.2	Sabik	102 04.9	S 15 45.2
Betelgeuze	270 54.6	N 07 24.7	Shaula	96 12.8	S 37 07.2
Canopus	263 53.8	S 52 42.3	Rasalhague	96 00.2	N 12 32.8
Sirius	258 28.2	S 16 44.3	Etamin	90 42.6	N 51 29.3
Adhara	255 07.8	S 29 00.0	Kaus Australis	83 34.8	S 34 22.4
Castor	245 60.0	N 31 50.4	Vega	80 34.3	N 38 48.2
Procyon	244 53.1	N 05 10.5	Nunki	75 49.9	S 26 16.1
Pollux	243 19.8	N 27 58.4	Albireo	67 05.3	N 28 00.4
Avior	234 16.2	S 59 34.9	Altair	62 01.8	N 08 55.6
Suhail	222 48.2	S 43 31.4	Peacock	53 08.3	S 56 39.6
Miaplacidus	221 39.4	S 69 48.6	Deneb	49 26.7	N 45 21.6
Alphard	217 50.0	S 08 45.3	Enif	33 40.5	N 09 58.7
Regulus	207 36.8	N 11 51.6	Alnair	27 35.1	S 46 50.9
Dubhe	193 43.9	N 61 38.1	Formalhaut	15 16.6	S 29 30.0
Denebola	182 27.0	N 14 27.0	Markab	13 31.7	N 15 19.5

2022 - First Point of Aries / Selected Stars

UT	day 206 of 365			day 207 of 365			day 208 of 365			day 209 of 365			day 210 of 365			UT
	July 25			July 26			July 27			July 28			July 29			
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	
00	302	41.1	+02.5	303	40.2	+02.5	304	39.4	+02.4	305	38.5	+02.5	306	37.6	+02.5	00
01	317	43.6	+02.4	318	42.7	+02.5	319	41.8	+02.5	320	41.0	+02.4	321	40.1	+02.5	01
02	332	46.0	+02.5	333	45.2	+02.4	334	44.3	+02.5	335	43.4	+02.5	336	42.6	+02.4	02
03	347	48.5	+02.4	348	47.6	+02.5	349	46.8	+02.4	350	45.9	+02.5	351	45.0	+02.5	03
04	2	50.9	+02.5	3	50.1	+02.4	4	49.2	+02.5	5	48.4	+02.4	6	47.5	+02.5	04
05	17	53.4	+02.5	18	52.5	+02.5	19	51.7	+02.5	20	50.8	+02.5	21	50.0	+02.4	05
06	32	55.9	+02.4	33	55.0	+02.5	34	54.2	+02.4	35	53.3	+02.5	36	52.4	+02.5	06
07	47	58.3	+02.5	48	57.5	+02.4	49	56.6	+02.5	50	55.8	+02.4	51	54.9	+02.5	07
08	63	00.8	+02.5	63	59.9	+02.5	64	59.1	+02.4	65	58.2	+02.5	66	57.4	+02.4	08
09	78	03.3	+02.4	79	02.4	+02.5	80	01.5	+02.5	81	00.7	+02.5	81	59.8	+02.5	09
10	93	05.7	+02.5	94	04.9	+02.4	95	04.0	+02.5	96	03.2	+02.4	97	02.3	+02.5	10
11	108	08.2	+02.5	109	07.3	+02.5	110	06.5	+02.4	111	05.6	+02.5	112	04.8	+02.4	11
12	123	10.7	+02.4	124	09.8	+02.5	125	08.9	+02.5	126	08.1	+02.4	127	07.2	+02.5	12
13	138	13.1	+02.5	139	12.3	+02.4	140	11.4	+02.5	141	10.5	+02.5	142	09.7	+02.4	13
14	153	15.6	+02.5	154	14.7	+02.5	155	13.9	+02.4	156	13.0	+02.5	157	12.1	+02.5	14
15	168	18.1	+02.4	169	17.2	+02.5	170	16.3	+02.5	171	15.5	+02.4	172	14.6	+02.5	15
16	183	20.5	+02.5	184	19.7	+02.4	185	18.8	+02.5	186	17.9	+02.5	187	17.1	+02.4	16
17	198	23.0	+02.4	199	22.1	+02.5	200	21.3	+02.4	201	20.4	+02.5	202	19.5	+02.5	17
18	213	25.4	+02.5	214	24.6	+02.4	215	23.7	+02.5	216	22.9	+02.4	217	22.0	+02.5	18
19	228	27.9	+02.5	229	27.0	+02.5	230	26.2	+02.5	231	25.3	+02.5	232	24.5	+02.4	19
20	243	30.4	+02.4	244	29.5	+02.5	245	28.7	+02.4	246	27.8	+02.5	247	26.9	+02.5	20
21	258	32.8	+02.5	259	32.0	+02.4	260	31.1	+02.5	261	30.3	+02.4	262	29.4	+02.5	21
22	273	35.3	+02.5	274	34.4	+02.5	275	33.6	+02.4	276	32.7	+02.5	277	31.9	+02.4	22
23	288	37.8	+02.4	289	36.9	+02.5	290	36.0	+02.5	291	35.2	+02.4	292	34.3	+02.5	23

	SHA	Dec		SHA	Dec
	°	'	"	°	'
Alpheratz	357	36.7	N 29 12.8	Gienah	175 45.8 S 17 40.0
Ankaa	353	09.1	S 42 10.7	Acrux	173 02.6 S 63 13.6
Schedir	349	33.1	N 56 39.4	Gacrux	171 54.1 S 57 14.4
Diphda	348	49.3	S 17 51.7	Alioth	166 15.1 N 55 50.6
Achernar	335	21.7	S 57 07.1	Spica	158 24.5 S 11 16.7
Hamal	327	53.5	N 23 34.1	Alkaid	152 53.6 N 49 12.4
Polaris	315	07.8	N 89 21.2	Hadar	148 38.8 S 60 29.1
Acamar	315	13.4	S 40 12.7	Menkent	147 59.7 S 36 28.6
Menkar	314	08.3	N 04 10.7	Arcturus	145 49.4 N 19 04.9
Mirfak	308	31.3	N 49 56.2	Rigel Kentaurus	139 40.3 S 60 56.1
Aldebaran	290	42.2	N 16 33.3	Zubenelgenubi	136 58.1 S 16 08.0
Capella	280	25.3	N 46 01.2	Kocab	137 19.5 N 74 04.1
Rigel	281	06.1	S 08 10.4	Alphecca	126 05.4 N 26 38.6
Bellatrix	278	25.3	N 06 22.2	Antares	112 18.2 S 26 28.9
Elnath	278	04.7	N 28 37.6	Atria	107 13.7 S 69 04.2
Alnilam	275	40.1	S 01 11.2	Sabik	102 04.9 S 15 45.2
Betelgeuze	270	54.6	N 07 24.7	Shaula	96 12.8 S 37 07.2
Canopus	263	53.8	S 52 42.3	Rasalhague	96 00.2 N 12 32.8
Sirius	258	28.2	S 16 44.3	Etamin	90 42.7 N 51 29.3
Adhara	255	07.8	S 29 00.0	Kaus Australis	83 34.8 S 34 22.4
Castor	245	60.0	N 31 50.4	Vega	80 34.3 N 38 48.3
Procyon	244	53.1	N 05 10.5	Nunki	75 49.9 S 26 16.1
Pollux	243	19.8	N 27 58.4	Albireo	67 05.3 N 28 00.5
Avior	234	16.2	S 59 34.8	Altair	62 01.8 N 08 55.6
Suhail	222	48.2	S 43 31.4	Peacock	53 08.3 S 56 39.7
Miaplacidus	221	39.4	S 69 48.6	Deneb	49 26.7 N 45 21.6
Alphard	217	50.0	S 08 45.3	Enif	33 40.5 N 09 58.7
Regulus	207	36.8	N 11 51.6	Alnair	27 35.1 S 46 50.9
Dubhe	193	43.9	N 61 38.1	Formalhaut	15 16.6 S 29 30.0
Denebola	182	27.0	N 14 27.0	Markab	13 31.7 N 15 19.5

2022 - First Point of Aries / Selected Stars

UT	day 211 of 365			day 212 of 365			day 213 of 365			day 214 of 365			day 215 of 365			UT		
	July 30			July 31			August 1			August 2			August 3					
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA				
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"
00	307	36.8	+02.5	308	35.9	+02.5	309	35.1	+02.4	310	34.2	+02.5	311	33.3	+02.5	00		
01	322	39.3	+02.4	323	38.4	+02.5	324	37.5	+02.5	325	36.7	+02.4	326	35.8	+02.5	01		
02	337	41.7	+02.5	338	40.9	+02.4	339	40.0	+02.5	340	39.1	+02.5	341	38.3	+02.4	02		
03	352	44.2	+02.4	353	43.3	+02.5	354	42.5	+02.4	355	41.6	+02.5	356	40.7	+02.5	03		
04	7	46.6	+02.5	8	45.8	+02.4	9	44.9	+02.5	10	44.1	+02.4	11	43.2	+02.5	04		
05	22	49.1	+02.5	23	48.2	+02.5	24	47.4	+02.4	25	46.5	+02.5	26	45.7	+02.4	05		
06	37	51.6	+02.4	38	50.7	+02.5	39	49.8	+02.5	40	49.0	+02.4	41	48.1	+02.5	06		
07	52	54.0	+02.5	53	53.2	+02.4	54	52.3	+02.5	55	51.4	+02.5	56	50.6	+02.5	07		
08	67	56.5	+02.5	68	55.6	+02.5	69	54.8	+02.4	70	53.9	+02.5	71	53.1	+02.4	08		
09	82	59.0	+02.4	83	58.1	+02.5	84	57.2	+02.5	85	56.4	+02.4	86	55.5	+02.5	09		
10	98	01.4	+02.5	99	00.6	+02.4	99	59.7	+02.5	100	58.8	+02.5	101	58.0	+02.4	10		
11	113	03.9	+02.5	114	03.0	+02.5	115	02.2	+02.4	116	01.3	+02.5	117	00.4	+02.5	11		
12	128	06.4	+02.4	129	05.5	+02.5	130	04.6	+02.5	131	03.8	+02.4	132	02.9	+02.5	12		
13	143	08.8	+02.5	144	08.0	+02.4	145	07.1	+02.5	146	06.2	+02.5	147	05.4	+02.4	13		
14	158	11.3	+02.4	159	10.4	+02.5	160	09.6	+02.4	161	08.7	+02.5	162	07.8	+02.5	14		
15	173	13.7	+02.5	174	12.9	+02.5	175	12.0	+02.5	176	11.2	+02.4	177	10.3	+02.5	15		
16	188	16.2	+02.5	189	15.4	+02.4	190	14.5	+02.5	191	13.6	+02.5	192	12.8	+02.4	16		
17	203	18.7	+02.4	204	17.8	+02.5	205	17.0	+02.4	206	16.1	+02.5	207	15.2	+02.5	17		
18	218	21.1	+02.5	219	20.3	+02.4	220	19.4	+02.5	221	18.6	+02.4	222	17.7	+02.5	18		
19	233	23.6	+02.5	234	22.7	+02.5	235	21.9	+02.4	236	21.0	+02.5	237	20.2	+02.4	19		
20	248	26.1	+02.4	249	25.2	+02.5	250	24.3	+02.5	251	23.5	+02.4	252	22.6	+02.5	20		
21	263	28.5	+02.5	264	27.7	+02.4	265	26.8	+02.5	266	25.9	+02.5	267	25.1	+02.4	21		
22	278	31.0	+02.5	279	30.1	+02.5	280	29.3	+02.4	281	28.4	+02.5	282	27.5	+02.5	22		
23	293	33.5	+02.4	294	32.6	+02.5	295	31.7	+02.5	296	30.9	+02.4	297	30.0	+02.5	23		

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	36.7	N 29	12.8	Gienah	175	45.8	S 17	40.0
Ankaa	353	09.0	S 42	10.7	Acrux	173	02.6	S 63	13.6
Schedir	349	33.1	N 56	39.4	Gacrux	171	54.2	S 57	14.4
Diphda	348	49.3	S 17	51.7	Alioth	166	15.1	N 55	50.6
Achernar	335	21.7	S 57	07.1	Spica	158	24.5	S 11	16.6
Hamal	327	53.5	N 23	34.1	Alkaid	152	53.6	N 49	12.4
Polaris	315	05.2	N 89	21.2	Hadar	148	38.9	S 60	29.1
Acamar	315	13.4	S 40	12.6	Menkent	147	59.7	S 36	28.6
Menkar	314	08.3	N 04	10.7	Arcturus	145	49.4	N 19	04.9
Mirfak	308	31.3	N 49	56.2	Rigel Kentaurus	139	40.4	S 60	56.1
Aldebaran	290	42.1	N 16	33.3	Zubenelgenubi	136	58.1	S 16	08.0
Capella	280	25.2	N 46	01.2	Kocab	137	19.6	N 74	04.1
Rigel	281	06.0	S 08	10.4	Alphecca	126	05.4	N 26	38.6
Bellatrix	278	25.3	N 06	22.2	Antares	112	18.2	S 26	28.9
Elnath	278	04.7	N 28	37.6	Atria	107	13.8	S 69	04.2
Alnilam	275	40.0	S 01	11.2	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.5	N 07	24.7	Shaula	96	12.8	S 37	07.2
Canopus	263	53.8	S 52	42.3	Rasalhague	96	00.2	N 12	32.8
Sirius	258	28.1	S 16	44.2	Etamin	90	42.7	N 51	29.3
Adhara	255	07.8	S 28	60.0	Kaus Australis	83	34.8	S 34	22.4
Castor	245	59.9	N 31	50.4	Vega	80	34.3	N 38	48.3
Procyon	244	53.0	N 05	10.5	Nunki	75	49.9	S 26	16.1
Pollux	243	19.8	N 27	58.4	Albireo	67	05.3	N 28	00.5
Avior	234	16.2	S 59	34.8	Altair	62	01.8	N 08	55.6
Suhail	222	48.2	S 43	31.3	Peacock	53	08.3	S 56	39.7
Miaplacidus	221	39.4	S 69	48.6	Deneb	49	26.7	N 45	21.6
Alphard	217	50.0	S 08	45.3	Enif	33	40.5	N 09	58.7
Regulus	207	36.8	N 11	51.6	Alnair	27	35.1	S 46	50.9
Dubhe	193	43.9	N 61	38.1	Formalhaut	15	16.6	S 29	30.0
Denebola	182	27.0	N 14	27.0	Markab	13	31.7	N 15	19.6

2022 - First Point of Aries / Selected Stars

UT	day 216 of 365			day 217 of 365			day 218 of 365			day 219 of 365			day 220 of 365			UT		
	August 4			August 5			August 6			August 7			August 8					
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA				
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"
00	312	32.5	+02.4	313	31.6	+02.5	314	30.8	+02.4	315	29.9	+02.5	316	29.0	+02.5	00		
01	327	34.9	+02.5	328	34.1	+02.4	329	33.2	+02.5	330	32.4	+02.4	331	31.5	+02.5	01		
02	342	37.4	+02.5	343	36.5	+02.5	344	35.7	+02.4	345	34.8	+02.5	346	34.0	+02.4	02		
03	357	39.9	+02.4	358	39.0	+02.5	359	38.1	+02.5	0	37.3	+02.4	1	36.4	+02.5	03		
04	12	42.3	+02.5	13	41.5	+02.4	14	40.6	+02.5	15	39.7	+02.5	16	38.9	+02.5	04		
05	27	44.8	+02.5	28	43.9	+02.5	29	43.1	+02.4	30	42.2	+02.5	31	41.4	+02.4	05		
06	42	47.3	+02.4	43	46.4	+02.5	44	45.5	+02.5	45	44.7	+02.4	46	43.8	+02.5	06		
07	57	49.7	+02.5	58	48.9	+02.4	59	48.0	+02.5	60	47.1	+02.5	61	46.3	+02.4	07		
08	72	52.2	+02.5	73	51.3	+02.5	74	50.5	+02.4	75	49.6	+02.5	76	48.7	+02.5	08		
09	87	54.7	+02.4	88	53.8	+02.5	89	52.9	+02.5	90	52.1	+02.4	91	51.2	+02.5	09		
10	102	57.1	+02.5	103	56.3	+02.4	104	55.4	+02.5	105	54.5	+02.5	106	53.7	+02.4	10		
11	117	59.6	+02.4	118	58.7	+02.5	119	57.9	+02.4	120	57.0	+02.5	121	56.1	+02.5	11		
12	133	02.0	+02.5	134	01.2	+02.4	135	00.3	+02.5	135	59.5	+02.4	136	58.6	+02.5	12		
13	148	04.5	+02.5	149	03.6	+02.5	150	02.8	+02.5	151	01.9	+02.5	152	01.1	+02.4	13		
14	163	07.0	+02.4	164	06.1	+02.5	165	05.3	+02.4	166	04.4	+02.5	167	03.5	+02.5	14		
15	178	09.4	+02.5	179	08.6	+02.4	180	07.7	+02.5	181	06.9	+02.4	182	06.0	+02.5	15		
16	193	11.9	+02.5	194	11.0	+02.5	195	10.2	+02.4	196	09.3	+02.5	197	08.5	+02.4	16		
17	208	14.4	+02.4	209	13.5	+02.5	210	12.6	+02.5	211	11.8	+02.4	212	10.9	+02.5	17		
18	223	16.8	+02.5	224	16.0	+02.4	225	15.1	+02.5	226	14.2	+02.5	227	13.4	+02.5	18		
19	238	19.3	+02.5	239	18.4	+02.5	240	17.6	+02.4	241	16.7	+02.5	242	15.9	+02.4	19		
20	253	21.8	+02.4	254	20.9	+02.5	255	20.0	+02.5	256	19.2	+02.4	257	18.3	+02.5	20		
21	268	24.2	+02.5	269	23.4	+02.4	270	22.5	+02.5	271	21.6	+02.5	272	20.8	+02.4	21		
22	283	26.7	+02.4	284	25.8	+02.5	285	25.0	+02.4	286	24.1	+02.5	287	23.2	+02.5	22		
23	298	29.1	+02.5	299	28.3	+02.5	300	27.4	+02.5	301	26.6	+02.4	302	25.7	+02.5	23		

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.7	N 29	12.8	Gienah	175	45.8	S 17	40.0
Ankaa	353	09.0	S 42	10.7	Acrux	173	02.7	S 63	13.6
Schedir	349	33.0	N 56	39.4	Gacrux	171	54.2	S 57	14.4
Diphda	348	49.2	S 17	51.7	Alioth	166	15.1	N 55	50.6
Achernar	335	21.6	S 57	07.1	Spica	158	24.5	S 11	16.6
Hamal	327	53.5	N 23	34.1	Alkaid	152	53.7	N 49	12.4
Polaris	315	02.8	N 89	21.2	Hadar	148	38.9	S 60	29.1
Acamar	315	13.3	S 40	12.6	Menkent	147	59.7	S 36	28.6
Menkar	314	08.3	N 04	10.7	Arcturus	145	49.4	N 19	04.9
Mirfak	308	31.2	N 49	56.2	Rigel Kentaurus	139	40.4	S 60	56.1
Aldebaran	290	42.1	N 16	33.3	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	25.2	N 46	01.2	Kocab	137	19.7	N 74	04.1
Rigel	281	06.0	S 08	10.4	Alphecca	126	05.4	N 26	38.6
Bellatrix	278	25.2	N 06	22.3	Antares	112	18.2	S 26	28.9
Elnath	278	04.7	N 28	37.6	Atria	107	13.8	S 69	04.2
Alnilam	275	40.0	S 01	11.2	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.5	N 07	24.7	Shaula	96	12.8	S 37	07.2
Canopus	263	53.7	S 52	42.2	Rasalhague	96	00.2	N 12	32.8
Sirius	258	28.1	S 16	44.2	Etamin	90	42.7	N 51	29.3
Adhara	255	07.8	S 28	60.0	Kaus Australis	83	34.8	S 34	22.4
Castor	245	59.9	N 31	50.4	Vega	80	34.3	N 38	48.3
Procyon	244	53.0	N 05	10.5	Nunki	75	49.9	S 26	16.1
Pollux	243	19.8	N 27	58.4	Albireo	67	05.3	N 28	00.5
Avior	234	16.2	S 59	34.8	Altair	62	01.8	N 08	55.6
Suhail	222	48.2	S 43	31.3	Peacock	53	08.3	S 56	39.7
Miaplacidus	221	39.4	S 69	48.6	Deneb	49	26.7	N 45	21.6
Alphard	217	50.0	S 08	45.3	Enif	33	40.4	N 09	58.7
Regulus	207	36.8	N 11	51.6	Alnair	27	35.1	S 46	50.9
Dubhe	193	43.9	N 61	38.0	Formalhaut	15	16.5	S 29	30.0
Denebola	182	27.1	N 14	27.0	Markab	13	31.6	N 15	19.6

2022 - First Point of Aries / Selected Stars

UT	day 221 of 365 August 9		day 222 of 365 August 10		day 223 of 365 August 11		day 224 of 365 August 12		day 225 of 365 August 13		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	317 28.2	+02.4	318 27.3	+02.5	319 26.5	+02.4	320 25.6	+02.5	321 24.7	+02.5	00
01	332 30.6	+02.5	333 29.8	+02.4	334 28.9	+02.5	335 28.1	+02.4	336 27.2	+02.5	01
02	347 33.1	+02.5	348 32.2	+02.5	349 31.4	+02.4	350 30.5	+02.5	351 29.7	+02.4	02
03	2 35.6	+02.4	3 34.7	+02.5	4 33.8	+02.5	5 33.0	+02.5	6 32.1	+02.5	03
04	17 38.0	+02.5	18 37.2	+02.4	19 36.3	+02.5	20 35.5	+02.4	21 34.6	+02.5	04
05	32 40.5	+02.5	33 39.6	+02.5	34 38.8	+02.4	35 37.9	+02.5	36 37.1	+02.4	05
06	47 43.0	+02.4	48 42.1	+02.5	49 41.2	+02.5	50 40.4	+02.4	51 39.5	+02.5	06
07	62 45.4	+02.5	63 44.6	+02.4	64 43.7	+02.5	65 42.8	+02.5	66 42.0	+02.4	07
08	77 47.9	+02.5	78 47.0	+02.5	79 46.2	+02.4	80 45.3	+02.5	81 44.4	+02.5	08
09	92 50.4	+02.4	93 49.5	+02.5	94 48.6	+02.5	95 47.8	+02.4	96 46.9	+02.5	09
10	107 52.8	+02.5	108 52.0	+02.4	109 51.1	+02.5	110 50.2	+02.5	111 49.4	+02.4	10
11	122 55.3	+02.4	123 54.4	+02.5	124 53.6	+02.4	125 52.7	+02.5	126 51.8	+02.5	11
12	137 57.7	+02.5	138 56.9	+02.5	139 56.0	+02.5	140 55.2	+02.4	141 54.3	+02.5	12
13	153 00.2	+02.5	153 59.4	+02.4	154 58.5	+02.5	155 57.6	+02.5	156 56.8	+02.4	13
14	168 02.7	+02.4	169 01.8	+02.5	170 01.0	+02.4	171 00.1	+02.5	171 59.2	+02.5	14
15	183 05.1	+02.5	184 04.3	+02.4	185 03.4	+02.5	186 02.6	+02.4	187 01.7	+02.5	15
16	198 07.6	+02.5	199 06.7	+02.5	200 05.9	+02.4	201 05.0	+02.5	202 04.2	+02.4	16
17	213 10.1	+02.4	214 09.2	+02.5	215 08.3	+02.5	216 07.5	+02.5	217 06.6	+02.5	17
18	228 12.5	+02.5	229 11.7	+02.4	230 10.8	+02.5	231 10.0	+02.4	232 09.1	+02.5	18
19	243 15.0	+02.5	244 14.1	+02.5	245 13.3	+02.4	246 12.4	+02.5	247 11.6	+02.4	19
20	258 17.5	+02.4	259 16.6	+02.5	260 15.7	+02.5	261 14.9	+02.4	262 14.0	+02.5	20
21	273 19.9	+02.5	274 19.1	+02.4	275 18.2	+02.5	276 17.3	+02.5	277 16.5	+02.4	21
22	288 22.4	+02.5	289 21.5	+02.5	290 20.7	+02.4	291 19.8	+02.5	292 18.9	+02.5	22
23	303 24.9	+02.4	304 24.0	+02.5	305 23.1	+02.5	306 22.3	+02.4	307 21.4	+02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 36.6	N 29 12.9	Gienah	175 45.8	S 17 40.0
Ankaa	353 09.0	S 42 10.7	Acrux	173 02.7	S 63 13.6
Schedir	349 33.0	N 56 39.4	Gacrux	171 54.2	S 57 14.4
Diphda	348 49.2	S 17 51.7	Alioth	166 15.1	N 55 50.6
Achernar	335 21.5	S 57 07.1	Spica	158 24.5	S 11 16.6
Hamal	327 53.4	N 23 34.1	Alkaid	152 53.7	N 49 12.4
Polaris	314 59.9	N 89 21.2	Hadar	148 38.9	S 60 29.1
Acamar	315 13.3	S 40 12.6	Menkent	147 59.7	S 36 28.6
Menkar	314 08.2	N 04 10.8	Arcturus	145 49.4	N 19 04.9
Mirfak	308 31.2	N 49 56.2	Rigel Kentaurus	139 40.4	S 60 56.0
Aldebaran	290 42.1	N 16 33.3	Zubenelgenubi	136 58.2	S 16 08.0
Capella	280 25.1	N 46 01.2	Kocab	137 19.8	N 74 04.1
Rigel	281 06.0	S 08 10.4	Alphecca	126 05.4	N 26 38.6
Bellatrix	278 25.2	N 06 22.3	Antares	112 18.2	S 26 28.9
Elnath	278 04.6	N 28 37.6	Atria	107 13.9	S 69 04.2
Alnilam	275 40.0	S 01 11.2	Sabik	102 04.9	S 15 45.2
Betelgeuze	270 54.5	N 07 24.7	Shaula	96 12.8	S 37 07.2
Canopus	263 53.7	S 52 42.2	Rasalhague	96 00.2	N 12 32.8
Sirius	258 28.1	S 16 44.2	Etamin	90 42.7	N 51 29.4
Adhara	255 07.7	S 28 60.0	Kaus Australis	83 34.8	S 34 22.4
Castor	245 59.9	N 31 50.4	Vega	80 34.3	N 38 48.3
Procyon	244 53.0	N 05 10.5	Nunki	75 49.9	S 26 16.1
Pollux	243 19.7	N 27 58.4	Albireo	67 05.3	N 28 00.5
Avior	234 16.2	S 59 34.8	Altair	62 01.7	N 08 55.6
Suhail	222 48.2	S 43 31.3	Peacock	53 08.3	S 56 39.7
Miaplacidus	221 39.4	S 69 48.5	Deneb	49 26.7	N 45 21.7
Alphard	217 50.0	S 08 45.3	Enif	33 40.4	N 09 58.7
Regulus	207 36.8	N 11 51.6	Alnair	27 35.0	S 46 51.0
Dubhe	193 43.9	N 61 38.0	Formalhaut	15 16.5	S 29 30.0
Denebola	182 27.1	N 14 27.0	Markab	13 31.6	N 15 19.6

2022 - First Point of Aries / Selected Stars

UT	day 226 of 365			day 227 of 365			day 228 of 365			day 229 of 365			day 230 of 365			UT		
	August 14			August 15			August 16			August 17			August 18					
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA				
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"
00	322	23.9	+02.4	323	23.0	+02.5	324	22.1	+02.5	325	21.3	+02.4	326	20.4	+02.5	00		
01	337	26.3	+02.5	338	25.5	+02.4	339	24.6	+02.5	340	23.7	+02.5	341	22.9	+02.5	01		
02	352	28.8	+02.5	353	27.9	+02.5	354	27.1	+02.4	355	26.2	+02.5	356	25.4	+02.4	02		
03	7	31.3	+02.4	8	30.4	+02.5	9	29.5	+02.5	10	28.7	+02.4	11	27.8	+02.5	03		
04	22	33.7	+02.5	23	32.9	+02.4	24	32.0	+02.5	25	31.1	+02.5	26	30.3	+02.4	04		
05	37	36.2	+02.5	38	35.3	+02.5	39	34.5	+02.4	40	33.6	+02.5	41	32.7	+02.5	05		
06	52	38.7	+02.4	53	37.8	+02.5	54	36.9	+02.5	55	36.1	+02.4	56	35.2	+02.5	06		
07	67	41.1	+02.5	68	40.3	+02.4	69	39.4	+02.5	70	38.5	+02.5	71	37.7	+02.4	07		
08	82	43.6	+02.4	83	42.7	+02.5	84	41.9	+02.4	85	41.0	+02.5	86	40.1	+02.5	08		
09	97	46.0	+02.5	98	45.2	+02.5	99	44.3	+02.5	100	43.5	+02.4	101	42.6	+02.5	09		
10	112	48.5	+02.5	113	47.7	+02.4	114	46.8	+02.5	115	45.9	+02.5	116	45.1	+02.4	10		
11	127	51.0	+02.4	128	50.1	+02.5	129	49.3	+02.4	130	48.4	+02.5	131	47.5	+02.5	11		
12	142	53.4	+02.5	143	52.6	+02.4	144	51.7	+02.5	145	50.9	+02.4	146	50.0	+02.5	12		
13	157	55.9	+02.5	158	55.0	+02.5	159	54.2	+02.4	160	53.3	+02.5	161	52.5	+02.4	13		
14	172	58.4	+02.4	173	57.5	+02.5	174	56.6	+02.5	175	55.8	+02.4	176	54.9	+02.5	14		
15	188	00.8	+02.5	188	60.0	+02.4	189	59.1	+02.5	190	58.2	+02.5	191	57.4	+02.4	15		
16	203	03.3	+02.5	204	02.4	+02.5	205	01.6	+02.4	206	00.7	+02.5	206	59.8	+02.5	16		
17	218	05.8	+02.4	219	04.9	+02.5	220	04.0	+02.5	221	03.2	+02.4	222	02.3	+02.5	17		
18	233	08.2	+02.5	234	07.4	+02.4	235	06.5	+02.5	236	05.6	+02.5	237	04.8	+02.4	18		
19	248	10.7	+02.5	249	09.8	+02.5	250	09.0	+02.4	251	08.1	+02.5	252	07.2	+02.5	19		
20	263	13.2	+02.4	264	12.3	+02.5	265	11.4	+02.5	266	10.6	+02.4	267	09.7	+02.5	20		
21	278	15.6	+02.5	279	14.8	+02.4	280	13.9	+02.5	281	13.0	+02.5	282	12.2	+02.4	21		
22	293	18.1	+02.4	294	17.2	+02.5	295	16.4	+02.4	296	15.5	+02.5	297	14.6	+02.5	22		
23	308	20.5	+02.5	309	19.7	+02.4	310	18.8	+02.5	311	18.0	+02.4	312	17.1	+02.5	23		

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.6	N 29	12.9	Gienah	175	45.8	S 17	40.0
Ankaa	353	08.9	S 42	10.7	Acrux	173	02.7	S 63	13.6
Schedir	349	32.9	N 56	39.5	Gacrux	171	54.3	S 57	14.4
Diphda	348	49.1	S 17	51.7	Alioth	166	15.2	N 55	50.6
Achernar	335	21.5	S 57	07.1	Spica	158	24.5	S 11	16.6
Hamal	327	53.4	N 23	34.1	Alkaid	152	53.7	N 49	12.4
Polaris	314	57.5	N 89	21.2	Hadar	148	39.0	S 60	29.1
Acamar	315	13.2	S 40	12.6	Menkent	147	59.8	S 36	28.6
Menkar	314	08.2	N 04	10.8	Arcturus	145	49.4	N 19	04.9
Mirfak	308	31.1	N 49	56.3	Rigel Kentaurus	139	40.5	S 60	56.0
Aldebaran	290	42.0	N 16	33.3	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	25.1	N 46	01.2	Kocab	137	19.9	N 74	04.1
Rigel	281	05.9	S 08	10.4	Alphecca	126	05.4	N 26	38.6
Bellatrix	278	25.2	N 06	22.3	Antares	112	18.3	S 26	28.9
Elnath	278	04.6	N 28	37.6	Atria	107	13.9	S 69	04.3
Alnilam	275	39.9	S 01	11.1	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.4	N 07	24.7	Shaula	96	12.8	S 37	07.2
Canopus	263	53.7	S 52	42.2	Rasalhague	96	00.2	N 12	32.9
Sirius	258	28.1	S 16	44.2	Etamin	90	42.8	N 51	29.4
Adhara	255	07.7	S 28	59.9	Kaus Australis	83	34.8	S 34	22.4
Castor	245	59.9	N 31	50.4	Vega	80	34.3	N 38	48.3
Procyon	244	53.0	N 05	10.5	Nunki	75	49.9	S 26	16.1
Pollux	243	19.7	N 27	58.4	Albireo	67	05.3	N 28	00.5
Avior	234	16.1	S 59	34.7	Altair	62	01.7	N 08	55.6
Suhail	222	48.2	S 43	31.3	Peacock	53	08.3	S 56	39.7
Miaplacidus	221	39.4	S 69	48.5	Deneb	49	26.7	N 45	21.7
Alphard	217	50.0	S 08	45.2	Enif	33	40.4	N 09	58.8
Regulus	207	36.8	N 11	51.6	Alnair	27	35.0	S 46	51.0
Dubhe	193	43.9	N 61	38.0	Formalhaut	15	16.5	S 29	30.0
Denebola	182	27.1	N 14	27.0	Markab	13	31.6	N 15	19.6

2022 - First Point of Aries / Selected Stars

UT	day 231 of 365 August 19		day 232 of 365 August 20		day 233 of 365 August 21		day 234 of 365 August 22		day 235 of 365 August 23		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	327 19.6	+02.4	328 18.7	+02.5	329 17.8	+02.5	330 17.0	+02.4	331 16.1	+02.5	00
01	342 22.0	+02.5	343 21.2	+02.4	344 20.3	+02.5	345 19.4	+02.5	346 18.6	+02.4	01
02	357 24.5	+02.5	358 23.6	+02.5	359 22.8	+02.4	0 21.9	+02.5	1 21.0	+02.5	02
03	12 27.0	+02.4	13 26.1	+02.5	14 25.2	+02.5	15 24.4	+02.4	16 23.5	+02.5	03
04	27 29.4	+02.5	28 28.6	+02.4	29 27.7	+02.5	30 26.8	+02.5	31 26.0	+02.4	04
05	42 31.9	+02.4	43 31.0	+02.5	44 30.2	+02.4	45 29.3	+02.5	46 28.4	+02.5	05
06	57 34.3	+02.5	58 33.5	+02.4	59 32.6	+02.5	60 31.8	+02.4	61 30.9	+02.5	06
07	72 36.8	+02.5	73 35.9	+02.5	74 35.1	+02.5	75 34.2	+02.5	76 33.4	+02.4	07
08	87 39.3	+02.4	88 38.4	+02.5	89 37.6	+02.4	90 36.7	+02.5	91 35.8	+02.5	08
09	102 41.7	+02.5	103 40.9	+02.4	104 40.0	+02.5	105 39.2	+02.4	106 38.3	+02.5	09
10	117 44.2	+02.5	118 43.3	+02.5	119 42.5	+02.4	120 41.6	+02.5	121 40.8	+02.4	10
11	132 46.7	+02.4	133 45.8	+02.5	134 44.9	+02.5	135 44.1	+02.4	136 43.2	+02.5	11
12	147 49.1	+02.5	148 48.3	+02.4	149 47.4	+02.5	150 46.5	+02.5	151 45.7	+02.5	12
13	162 51.6	+02.5	163 50.7	+02.5	164 49.9	+02.4	165 49.0	+02.5	166 48.2	+02.4	13
14	177 54.1	+02.4	178 53.2	+02.5	179 52.3	+02.5	180 51.5	+02.4	181 50.6	+02.5	14
15	192 56.5	+02.5	193 55.7	+02.4	194 54.8	+02.5	195 53.9	+02.5	196 53.1	+02.4	15
16	207 59.0	+02.5	208 58.1	+02.5	209 57.3	+02.4	210 56.4	+02.5	211 55.5	+02.5	16
17	223 01.5	+02.4	224 00.6	+02.5	224 59.7	+02.5	225 58.9	+02.4	226 58.0	+02.5	17
18	238 03.9	+02.5	239 03.1	+02.4	240 02.2	+02.5	241 01.3	+02.5	242 00.5	+02.4	18
19	253 06.4	+02.4	254 05.5	+02.5	255 04.7	+02.4	256 03.8	+02.5	257 02.9	+02.5	19
20	268 08.8	+02.5	269 08.0	+02.4	270 07.1	+02.5	271 06.3	+02.4	272 05.4	+02.5	20
21	283 11.3	+02.5	284 10.4	+02.5	285 09.6	+02.5	286 08.7	+02.5	287 07.9	+02.4	21
22	298 13.8	+02.4	299 12.9	+02.5	300 12.1	+02.4	301 11.2	+02.5	302 10.3	+02.5	22
23	313 16.2	+02.5	314 15.4	+02.4	315 14.5	+02.5	316 13.7	+02.4	317 12.8	+02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 36.6	N 29 12.9	Gienah	175 45.8	S 17 39.9
Ankaa	353 08.9	S 42 10.7	Acrux	173 02.8	S 63 13.5
Schedir	349 32.9	N 56 39.5	Gacrux	171 54.3	S 57 14.4
Diphda	348 49.1	S 17 51.7	Alioth	166 15.2	N 55 50.6
Achernar	335 21.4	S 57 07.1	Spica	158 24.5	S 11 16.6
Hamal	327 53.4	N 23 34.1	Alkaid	152 53.7	N 49 12.4
Polaris	314 54.9	N 89 21.2	Hadar	148 39.0	S 60 29.0
Acamar	315 13.2	S 40 12.6	Menkent	147 59.8	S 36 28.6
Menkar	314 08.2	N 04 10.8	Arcturus	145 49.5	N 19 04.9
Mirfak	308 31.0	N 49 56.3	Rigel Kentaurus	139 40.5	S 60 56.0
Aldebaran	290 42.0	N 16 33.3	Zubenelgenubi	136 58.2	S 16 08.0
Capella	280 25.0	N 46 01.2	Kocab	137 20.0	N 74 04.1
Rigel	281 05.9	S 08 10.4	Alphecca	126 05.5	N 26 38.6
Bellatrix	278 25.1	N 06 22.3	Antares	112 18.3	S 26 28.9
Elnath	278 04.5	N 28 37.6	Atria	107 14.0	S 69 04.3
Alnilam	275 39.9	S 01 11.1	Sabik	102 04.9	S 15 45.2
Betelgeuze	270 54.4	N 07 24.7	Shaula	96 12.8	S 37 07.2
Canopus	263 53.6	S 52 42.2	Rasalhague	96 00.2	N 12 32.9
Sirius	258 28.0	S 16 44.2	Etamin	90 42.8	N 51 29.4
Adhara	255 07.7	S 28 59.9	Kaus Australis	83 34.8	S 34 22.4
Castor	245 59.8	N 31 50.4	Vega	80 34.3	N 38 48.4
Procyon	244 52.9	N 05 10.5	Nunki	75 49.9	S 26 16.1
Pollux	243 19.7	N 27 58.4	Albireo	67 05.3	N 28 00.6
Avior	234 16.1	S 59 34.7	Altair	62 01.8	N 08 55.6
Suhail	222 48.2	S 43 31.3	Peacock	53 08.3	S 56 39.7
Miaplacidus	221 39.4	S 69 48.5	Deneb	49 26.7	N 45 21.7
Alphard	217 50.0	S 08 45.2	Enif	33 40.4	N 09 58.8
Regulus	207 36.8	N 11 51.6	Alnair	27 35.0	S 46 51.0
Dubhe	193 44.0	N 61 38.0	Formalhaut	15 16.5	S 29 30.0
Denebola	182 27.1	N 14 27.0	Markab	13 31.6	N 15 19.6

2022 - First Point of Aries / Selected Stars

UT	day 236 of 365		day 237 of 365		day 238 of 365		day 239 of 365		day 240 of 365		UT					
	August 24		August 25		August 26		August 27		August 28							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "						
00	332	15.3	+02.4	333	14.4	+02.5	334	13.5	+02.5	335	12.7	+02.4	336	11.8	+02.5	00
01	347	17.7	+02.5	348	16.9	+02.4	349	16.0	+02.5	350	15.1	+02.5	351	14.3	+02.4	01
02	2	20.2	+02.5	3	19.3	+02.5	4	18.5	+02.4	5	17.6	+02.5	6	16.7	+02.5	02
03	17	22.7	+02.4	18	21.8	+02.5	19	20.9	+02.5	20	20.1	+02.4	21	19.2	+02.5	03
04	32	25.1	+02.5	33	24.3	+02.4	34	23.4	+02.5	35	22.5	+02.5	36	21.7	+02.4	04
05	47	27.6	+02.4	48	26.7	+02.5	49	25.9	+02.4	50	25.0	+02.5	51	24.1	+02.5	05
06	62	30.0	+02.5	63	29.2	+02.4	64	28.3	+02.5	65	27.5	+02.4	66	26.6	+02.5	06
07	77	32.5	+02.5	78	31.6	+02.5	79	30.8	+02.4	80	29.9	+02.5	81	29.1	+02.4	07
08	92	35.0	+02.4	93	34.1	+02.5	94	33.2	+02.5	95	32.4	+02.5	96	31.5	+02.5	08
09	107	37.4	+02.5	108	36.6	+02.4	109	35.7	+02.5	110	34.9	+02.4	111	34.0	+02.5	09
10	122	39.9	+02.5	123	39.0	+02.5	124	38.2	+02.4	125	37.3	+02.5	126	36.5	+02.4	10
11	137	42.4	+02.4	138	41.5	+02.5	139	40.6	+02.5	140	39.8	+02.4	141	38.9	+02.5	11
12	152	44.8	+02.5	153	44.0	+02.4	154	43.1	+02.5	155	42.2	+02.5	156	41.4	+02.4	12
13	167	47.3	+02.5	168	46.4	+02.5	169	45.6	+02.4	170	44.7	+02.5	171	43.8	+02.5	13
14	182	49.8	+02.4	183	48.9	+02.5	184	48.0	+02.5	185	47.2	+02.4	186	46.3	+02.5	14
15	197	52.2	+02.5	198	51.4	+02.4	199	50.5	+02.5	200	49.6	+02.5	201	48.8	+02.4	15
16	212	54.7	+02.4	213	53.8	+02.5	214	53.0	+02.4	215	52.1	+02.5	216	51.2	+02.5	16
17	227	57.1	+02.5	228	56.3	+02.5	229	55.4	+02.5	230	54.6	+02.4	231	53.7	+02.5	17
18	242	59.6	+02.5	243	58.8	+02.4	244	57.9	+02.5	245	57.0	+02.5	246	56.2	+02.4	18
19	258	02.1	+02.4	259	01.2	+02.5	260	00.4	+02.4	260	59.5	+02.5	261	58.6	+02.5	19
20	273	04.5	+02.5	274	03.7	+02.4	275	02.8	+02.5	276	02.0	+02.4	277	01.1	+02.5	20
21	288	07.0	+02.5	289	06.1	+02.5	290	05.3	+02.4	291	04.4	+02.5	292	03.6	+02.4	21
22	303	09.5	+02.4	304	08.6	+02.5	305	07.7	+02.5	306	06.9	+02.4	307	06.0	+02.5	22
23	318	11.9	+02.5	319	11.1	+02.4	320	10.2	+02.5	321	09.3	+02.5	322	08.5	+02.4	23

	SHA	Dec		SHA	Dec				
	° ' "	' "		° ' "	' "				
Alpheratz	357	36.5	N 29	12.9	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.8	S 42	10.7	Acrux	173	02.8	S 63	13.5
Schedir	349	32.9	N 56	39.5	Gacrux	171	54.3	S 57	14.3
Diphda	348	49.1	S 17	51.6	Alioth	166	15.2	N 55	50.5
Achernar	335	21.4	S 57	07.1	Spica	158	24.5	S 11	16.6
Hamal	327	53.3	N 23	34.2	Alkaid	152	53.8	N 49	12.4
Polaris	314	52.2	N 89	21.2	Hadar	148	39.1	S 60	29.0
Acamar	315	13.1	S 40	12.6	Menkent	147	59.8	S 36	28.6
Menkar	314	08.1	N 04	10.8	Arcturus	145	49.5	N 19	04.9
Mirfak	308	31.0	N 49	56.3	Rigel Kentaurus	139	40.6	S 60	56.0
Aldebaran	290	41.9	N 16	33.3	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	25.0	N 46	01.2	Kocab	137	20.1	N 74	04.1
Rigel	281	05.9	S 08	10.4	Alphecca	126	05.5	N 26	38.6
Bellatrix	278	25.1	N 06	22.3	Antares	112	18.3	S 26	28.9
Elnath	278	04.5	N 28	37.6	Atria	107	14.0	S 69	04.3
Alnilam	275	39.9	S 01	11.1	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.4	N 07	24.8	Shaula	96	12.8	S 37	07.3
Canopus	263	53.6	S 52	42.1	Rasalhague	96	00.3	N 12	32.9
Sirius	258	28.0	S 16	44.2	Etamin	90	42.8	N 51	29.4
Adhara	255	07.6	S 28	59.9	Kaus Australis	83	34.9	S 34	22.4
Castor	245	59.8	N 31	50.4	Vega	80	34.4	N 38	48.4
Procyon	244	52.9	N 05	10.5	Nunki	75	49.9	S 26	16.1
Pollux	243	19.7	N 27	58.4	Albireo	67	05.3	N 28	00.6
Avior	234	16.1	S 59	34.7	Altair	62	01.8	N 08	55.6
Suhail	222	48.2	S 43	31.2	Peacock	53	08.3	S 56	39.8
Miaplacidus	221	39.4	S 69	48.5	Deneb	49	26.7	N 45	21.7
Alphard	217	50.0	S 08	45.2	Enif	33	40.4	N 09	58.8
Regulus	207	36.7	N 11	51.6	Alnair	27	35.0	S 46	51.0
Dubhe	193	44.0	N 61	37.9	Formalhaut	15	16.4	S 29	30.0
Denebola	182	27.1	N 14	27.0	Markab	13	31.5	N 15	19.7

2022 - First Point of Aries / Selected Stars

UT	day 241 of 365		day 242 of 365		day 243 of 365		day 244 of 365		day 245 of 365		UT					
	August 29		August 30		August 31		September 1		September 2							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "						
00	337	10.9	+02.5	338	10.1	+02.5	339	09.2	+02.5	340	08.4	+02.4	341	07.5	+02.5	00
01	352	13.4	+02.5	353	12.6	+02.4	354	11.7	+02.5	355	10.8	+02.5	356	10.0	+02.4	01
02	7	15.9	+02.4	8	15.0	+02.5	9	14.2	+02.4	10	13.3	+02.5	11	12.4	+02.5	02
03	22	18.3	+02.5	23	17.5	+02.4	24	16.6	+02.5	25	15.8	+02.4	26	14.9	+02.5	03
04	37	20.8	+02.5	38	19.9	+02.5	39	19.1	+02.4	40	18.2	+02.5	41	17.4	+02.4	04
05	52	23.3	+02.4	53	22.4	+02.5	54	21.5	+02.5	55	20.7	+02.4	56	19.8	+02.5	05
06	67	25.7	+02.5	68	24.9	+02.4	69	24.0	+02.5	70	23.1	+02.5	71	22.3	+02.4	06
07	82	28.2	+02.5	83	27.3	+02.5	84	26.5	+02.4	85	25.6	+02.5	86	24.7	+02.5	07
08	97	30.7	+02.4	98	29.8	+02.5	99	28.9	+02.5	100	28.1	+02.4	101	27.2	+02.5	08
09	112	33.1	+02.5	113	32.3	+02.4	114	31.4	+02.5	115	30.5	+02.5	116	29.7	+02.4	09
10	127	35.6	+02.5	128	34.7	+02.5	129	33.9	+02.4	130	33.0	+02.5	131	32.1	+02.5	10
11	142	38.1	+02.4	143	37.2	+02.5	144	36.3	+02.5	145	35.5	+02.4	146	34.6	+02.5	11
12	157	40.5	+02.5	158	39.7	+02.4	159	38.8	+02.5	160	37.9	+02.5	161	37.1	+02.4	12
13	172	43.0	+02.4	173	42.1	+02.5	174	41.3	+02.4	175	40.4	+02.5	176	39.5	+02.5	13
14	187	45.4	+02.5	188	44.6	+02.4	189	43.7	+02.5	190	42.9	+02.4	191	42.0	+02.5	14
15	202	47.9	+02.5	203	47.0	+02.5	204	46.2	+02.4	205	45.3	+02.5	206	44.5	+02.4	15
16	217	50.4	+02.4	218	49.5	+02.5	219	48.6	+02.5	220	47.8	+02.4	221	46.9	+02.5	16
17	232	52.8	+02.5	233	52.0	+02.4	234	51.1	+02.5	235	50.2	+02.5	236	49.4	+02.5	17
18	247	55.3	+02.5	248	54.4	+02.5	249	53.6	+02.4	250	52.7	+02.5	251	51.9	+02.4	18
19	262	57.8	+02.4	263	56.9	+02.5	264	56.0	+02.5	265	55.2	+02.4	266	54.3	+02.5	19
20	278	00.2	+02.5	278	59.4	+02.4	279	58.5	+02.5	280	57.6	+02.5	281	56.8	+02.4	20
21	293	02.7	+02.5	294	01.8	+02.5	295	01.0	+02.4	296	00.1	+02.5	296	59.2	+02.5	21
22	308	05.2	+02.4	309	04.3	+02.5	310	03.4	+02.5	311	02.6	+02.4	312	01.7	+02.5	22
23	323	07.6	+02.5	324	06.8	+02.4	325	05.9	+02.5	326	05.0	+02.5	327	04.2	+02.4	23

	SHA	Dec		SHA	Dec				
	° ' "	' "		° ' "	' "				
Alpheratz	357	36.5	N 29	13.0	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.8	S 42	10.7	Acrux	173	02.8	S 63	13.5
Schedir	349	32.8	N 56	39.5	Gacrux	171	54.3	S 57	14.3
Diphda	348	49.1	S 17	51.6	Alioth	166	15.2	N 55	50.5
Achernar	335	21.3	S 57	07.1	Spica	158	24.6	S 11	16.6
Hamal	327	53.3	N 23	34.2	Alkaid	152	53.8	N 49	12.3
Polaris	314	49.9	N 89	21.2	Hadar	148	39.1	S 60	29.0
Acamar	315	13.1	S 40	12.6	Menkent	147	59.8	S 36	28.6
Menkar	314	08.1	N 04	10.8	Arcturus	145	49.5	N 19	04.9
Mirfak	308	30.9	N 49	56.3	Rigel Kentaurus	139	40.6	S 60	56.0
Aldebaran	290	41.9	N 16	33.4	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	24.9	N 46	01.2	Kocab	137	20.2	N 74	04.1
Rigel	281	05.8	S 08	10.4	Alphecca	126	05.5	N 26	38.6
Bellatrix	278	25.1	N 06	22.3	Antares	112	18.3	S 26	28.9
Elnath	278	04.4	N 28	37.6	Atria	107	14.1	S 69	04.3
Alnilam	275	39.8	S 01	11.1	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	54.3	N 07	24.8	Shaula	96	12.9	S 37	07.3
Canopus	263	53.5	S 52	42.1	Rasalhague	96	00.3	N 12	32.9
Sirius	258	28.0	S 16	44.2	Etamin	90	42.9	N 51	29.4
Adhara	255	07.6	S 28	59.9	Kaus Australis	83	34.9	S 34	22.4
Castor	245	59.8	N 31	50.4	Vega	80	34.4	N 38	48.4
Procyon	244	52.9	N 05	10.5	Nunki	75	49.9	S 26	16.1
Pollux	243	19.6	N 27	58.4	Albireo	67	05.4	N 28	00.6
Avior	234	16.1	S 59	34.7	Altair	62	01.8	N 08	55.7
Suhail	222	48.1	S 43	31.2	Peacock	53	08.3	S 56	39.8
Miaplacidus	221	39.4	S 69	48.4	Deneb	49	26.7	N 45	21.8
Alphard	217	50.0	S 08	45.2	Enif	33	40.4	N 09	58.8
Regulus	207	36.7	N 11	51.6	Alnair	27	35.0	S 46	51.0
Dubhe	193	43.9	N 61	37.9	Formalhaut	15	16.4	S 29	30.0
Denebola	182	27.1	N 14	27.0	Markab	13	31.5	N 15	19.7

2022 - First Point of Aries / Selected Stars

UT	day 246 of 365 September 3			day 247 of 365 September 4			day 248 of 365 September 5			day 249 of 365 September 6			day 250 of 365 September 7			UT
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
00	342	06.6	+02.5	343	05.8	+02.4	344	04.9	+02.5	345	04.1	+02.4	346	03.2	+02.5	00
01	357	09.1	+02.5	358	08.2	+02.5	359	07.4	+02.4	0	06.5	+02.5	1	05.7	+02.4	01
02	12	11.6	+02.4	13	10.7	+02.5	14	09.8	+02.5	15	09.0	+02.5	16	08.1	+02.5	02
03	27	14.0	+02.5	28	13.2	+02.4	29	12.3	+02.5	30	11.5	+02.4	31	10.6	+02.5	03
04	42	16.5	+02.5	43	15.6	+02.5	44	14.8	+02.4	45	13.9	+02.5	46	13.1	+02.4	04
05	57	19.0	+02.4	58	18.1	+02.5	59	17.2	+02.5	60	16.4	+02.4	61	15.5	+02.5	05
06	72	21.4	+02.5	73	20.6	+02.4	74	19.7	+02.5	75	18.8	+02.5	76	18.0	+02.4	06
07	87	23.9	+02.5	88	23.0	+02.5	89	22.2	+02.4	90	21.3	+02.5	91	20.4	+02.5	07
08	102	26.4	+02.4	103	25.5	+02.5	104	24.6	+02.5	105	23.8	+02.4	106	22.9	+02.5	08
09	117	28.8	+02.5	118	28.0	+02.4	119	27.1	+02.5	120	26.2	+02.5	121	25.4	+02.4	09
10	132	31.3	+02.4	133	30.4	+02.5	134	29.6	+02.4	135	28.7	+02.5	136	27.8	+02.5	10
11	147	33.7	+02.5	148	32.9	+02.4	149	32.0	+02.5	150	31.2	+02.4	151	30.3	+02.5	11
12	162	36.2	+02.5	163	35.3	+02.5	164	34.5	+02.5	165	33.6	+02.5	166	32.8	+02.4	12
13	177	38.7	+02.4	178	37.8	+02.5	179	37.0	+02.4	180	36.1	+02.5	181	35.2	+02.5	13
14	192	41.1	+02.5	193	40.3	+02.4	194	39.4	+02.5	195	38.6	+02.4	196	37.7	+02.5	14
15	207	43.6	+02.5	208	42.7	+02.5	209	41.9	+02.4	210	41.0	+02.5	211	40.2	+02.4	15
16	222	46.1	+02.4	223	45.2	+02.5	224	44.3	+02.5	225	43.5	+02.4	226	42.6	+02.5	16
17	237	48.5	+02.5	238	47.7	+02.4	239	46.8	+02.5	240	45.9	+02.5	241	45.1	+02.5	17
18	252	51.0	+02.5	253	50.1	+02.5	254	49.3	+02.4	255	48.4	+02.5	256	47.6	+02.4	18
19	267	53.5	+02.4	268	52.6	+02.5	269	51.7	+02.5	270	50.9	+02.4	271	50.0	+02.5	19
20	282	55.9	+02.5	283	55.1	+02.4	284	54.2	+02.5	285	53.3	+02.5	286	52.5	+02.4	20
21	297	58.4	+02.4	298	57.5	+02.5	299	56.7	+02.4	300	55.8	+02.5	301	54.9	+02.5	21
22	313	00.8	+02.5	313	60.0	+02.5	314	59.1	+02.5	315	58.3	+02.4	316	57.4	+02.5	22
23	328	03.3	+02.5	329	02.5	+02.4	330	01.6	+02.5	331	00.7	+02.5	331	59.9	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.5	N 29	13.0	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.8	S 42	10.7	Acrux	173	02.9	S 63	13.5
Schedir	349	32.8	N 56	39.6	Gacrux	171	54.4	S 57	14.3
Diphda	348	49.0	S 17	51.6	Alioth	166	15.3	N 55	50.5
Achernar	335	21.3	S 57	07.1	Spica	158	24.6	S 11	16.6
Hamal	327	53.2	N 23	34.2	Alkaid	152	53.8	N 49	12.3
Polaris	314	47.4	N 89	21.3	Hadar	148	39.1	S 60	29.0
Acamar	315	13.1	S 40	12.6	Menkent	147	59.9	S 36	28.6
Menkar	314	08.1	N 04	10.8	Arcturus	145	49.5	N 19	04.9
Mirfak	308	30.9	N 49	56.3	Rigel Kentaurus	139	40.7	S 60	56.0
Aldebaran	290	41.9	N 16	33.4	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	24.9	N 46	01.2	Kocab	137	20.3	N 74	04.1
Rigel	281	05.8	S 08	10.4	Alphecca	126	05.5	N 26	38.6
Bellatrix	278	25.0	N 06	22.3	Antares	112	18.3	S 26	28.9
Elnath	278	04.4	N 28	37.6	Atria	107	14.2	S 69	04.3
Alnilam	275	39.8	S 01	11.1	Sabik	102	05.0	S 15	45.2
Betelgeuze	270	54.3	N 07	24.8	Shaula	96	12.9	S 37	07.3
Canopus	263	53.5	S 52	42.1	Rasalhague	96	00.3	N 12	32.9
Sirius	258	27.9	S 16	44.1	Etamin	90	42.9	N 51	29.4
Adhara	255	07.6	S 28	59.9	Kaus Australis	83	34.9	S 34	22.4
Castor	245	59.7	N 31	50.4	Vega	80	34.4	N 38	48.4
Procyon	244	52.9	N 05	10.5	Nunki	75	50.0	S 26	16.1
Pollux	243	19.6	N 27	58.4	Albireo	67	05.4	N 28	00.6
Avior	234	16.0	S 59	34.6	Altair	62	01.8	N 08	55.7
Suhail	222	48.1	S 43	31.2	Peacock	53	08.3	S 56	39.8
Miaplacidus	221	39.3	S 69	48.4	Deneb	49	26.7	N 45	21.8
Alphard	217	50.0	S 08	45.2	Enif	33	40.4	N 09	58.8
Regulus	207	36.7	N 11	51.6	Alnair	27	35.0	S 46	51.0
Dubhe	193	43.9	N 61	37.9	Formalhaut	15	16.4	S 29	30.0
Denebola	182	27.1	N 14	27.0	Markab	13	31.5	N 15	19.7

2022 - First Point of Aries / Selected Stars

UT	day 251 of 365 September 8		day 252 of 365 September 9		day 253 of 365 September 10		day 254 of 365 September 11		day 255 of 365 September 12		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	347	02.3 +02.5	348	01.5 +02.4	349	00.6 +02.5	349	59.8 +02.4	350	58.9 +02.5	00
01	2	04.8 +02.5	3	03.9 +02.5	4	03.1 +02.4	5	02.2 +02.5	6	01.4 +02.4	01
02	17	07.3 +02.4	18	06.4 +02.5	19	05.5 +02.5	20	04.7 +02.4	21	03.8 +02.5	02
03	32	09.7 +02.5	33	08.9 +02.4	34	08.0 +02.5	35	07.1 +02.5	36	06.3 +02.4	03
04	47	12.2 +02.5	48	11.3 +02.5	49	10.5 +02.4	50	09.6 +02.5	51	08.7 +02.5	04
05	62	14.7 +02.4	63	13.8 +02.5	64	12.9 +02.5	65	12.1 +02.4	66	11.2 +02.5	05
06	77	17.1 +02.5	78	16.3 +02.4	79	15.4 +02.5	80	14.5 +02.5	81	13.7 +02.4	06
07	92	19.6 +02.5	93	18.7 +02.5	94	17.9 +02.4	95	17.0 +02.5	96	16.1 +02.5	07
08	107	22.1 +02.4	108	21.2 +02.5	109	20.3 +02.5	110	19.5 +02.4	111	18.6 +02.5	08
09	122	24.5 +02.5	123	23.7 +02.4	124	22.8 +02.5	125	21.9 +02.5	126	21.1 +02.4	09
10	137	27.0 +02.4	138	26.1 +02.5	139	25.3 +02.4	140	24.4 +02.5	141	23.5 +02.5	10
11	152	29.4 +02.5	153	28.6 +02.4	154	27.7 +02.5	155	26.9 +02.4	156	26.0 +02.5	11
12	167	31.9 +02.5	168	31.0 +02.5	169	30.2 +02.4	170	29.3 +02.5	171	28.5 +02.4	12
13	182	34.4 +02.4	183	33.5 +02.5	184	32.6 +02.5	185	31.8 +02.4	186	30.9 +02.5	13
14	197	36.8 +02.5	198	36.0 +02.4	199	35.1 +02.5	200	34.2 +02.5	201	33.4 +02.4	14
15	212	39.3 +02.5	213	38.4 +02.5	214	37.6 +02.4	215	36.7 +02.5	216	35.8 +02.5	15
16	227	41.8 +02.4	228	40.9 +02.5	229	40.0 +02.5	230	39.2 +02.4	231	38.3 +02.5	16
17	242	44.2 +02.5	243	43.4 +02.4	244	42.5 +02.5	245	41.6 +02.5	246	40.8 +02.4	17
18	257	46.7 +02.5	258	45.8 +02.5	259	45.0 +02.4	260	44.1 +02.5	261	43.2 +02.5	18
19	272	49.2 +02.4	273	48.3 +02.5	274	47.4 +02.5	275	46.6 +02.4	276	45.7 +02.5	19
20	287	51.6 +02.5	288	50.8 +02.4	289	49.9 +02.5	290	49.0 +02.5	291	48.2 +02.4	20
21	302	54.1 +02.4	303	53.2 +02.5	304	52.4 +02.4	305	51.5 +02.5	306	50.6 +02.5	21
22	317	56.5 +02.5	318	55.7 +02.5	319	54.8 +02.5	320	54.0 +02.4	321	53.1 +02.5	22
23	332	59.0 +02.5	333	58.2 +02.4	334	57.3 +02.5	335	56.4 +02.5	336	55.6 +02.4	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 36.5	N 29 13.0	Gienah	175 45.8	S 17 39.9
Ankaa	353 08.8	S 42 10.7	Acrux	173 02.9	S 63 13.5
Schedir	349 32.7	N 56 39.6	Gacrux	171 54.4	S 57 14.3
Diphda	348 49.0	S 17 51.6	Alioth	166 15.3	N 55 50.5
Achernar	335 21.2	S 57 07.1	Spica	158 24.6	S 11 16.6
Hamal	327 53.2	N 23 34.2	Alkaid	152 53.8	N 49 12.3
Polaris	314 44.8	N 89 21.3	Hadar	148 39.2	S 60 29.0
Acamar	315 13.0	S 40 12.6	Menkent	147 59.9	S 36 28.6
Menkar	314 08.0	N 04 10.8	Arcturus	145 49.5	N 19 04.8
Mirfak	308 30.8	N 49 56.3	Rigel Kentaurus	139 40.7	S 60 56.0
Aldebaran	290 41.8	N 16 33.4	Zubenelgenubi	136 58.3	S 16 08.0
Capella	280 24.8	N 46 01.2	Kocab	137 20.3	N 74 04.0
Rigel	281 05.7	S 08 10.4	Alphecca	126 05.5	N 26 38.6
Bellatrix	278 25.0	N 06 22.3	Antares	112 18.4	S 26 28.9
Elnath	278 04.4	N 28 37.6	Atria	107 14.2	S 69 04.3
Alnilam	275 39.7	S 01 11.1	Sabik	102 05.0	S 15 45.2
Betelgeuze	270 54.3	N 07 24.8	Shaula	96 12.9	S 37 07.3
Canopus	263 53.5	S 52 42.1	Rasalhague	96 00.3	N 12 32.9
Sirius	258 27.9	S 16 44.1	Etamin	90 42.9	N 51 29.4
Adhara	255 07.5	S 28 59.9	Kaus Australis	83 34.9	S 34 22.4
Castor	245 59.7	N 31 50.4	Vega	80 34.4	N 38 48.4
Procyon	244 52.8	N 05 10.5	Nunki	75 50.0	S 26 16.1
Pollux	243 19.6	N 27 58.3	Albireo	67 05.4	N 28 00.6
Avior	234 16.0	S 59 34.6	Altair	62 01.8	N 08 55.7
Suhail	222 48.1	S 43 31.2	Peacock	53 08.3	S 56 39.8
Miaplacidus	221 39.3	S 69 48.4	Deneb	49 26.7	N 45 21.8
Alphard	217 49.9	S 08 45.2	Enif	33 40.4	N 09 58.8
Regulus	207 36.7	N 11 51.6	Alnair	27 34.9	S 46 51.0
Dubhe	193 43.9	N 61 37.9	Formalhaut	15 16.4	S 29 30.0
Denebola	182 27.1	N 14 27.0	Markab	13 31.5	N 15 19.7

2022 - First Point of Aries / Selected Stars

UT	day 256 of 365			day 257 of 365			day 258 of 365			day 259 of 365			day 260 of 365			UT		
	September 13			September 14			September 15			September 16			September 17					
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA				
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"
00	351	58.0	+02.5	352	57.2	+02.4	353	56.3	+02.5	354	55.4	+02.5	355	54.6	+02.4	00		
01	7	00.5	+02.5	7	59.6	+02.5	8	58.8	+02.4	9	57.9	+02.5	10	57.0	+02.5	01		
02	22	03.0	+02.4	23	02.1	+02.5	24	01.2	+02.5	25	00.4	+02.4	25	59.5	+02.5	02		
03	37	05.4	+02.5	38	04.6	+02.4	39	03.7	+02.5	40	02.8	+02.5	41	02.0	+02.4	03		
04	52	07.9	+02.4	53	07.0	+02.5	54	06.2	+02.4	55	05.3	+02.5	56	04.4	+02.5	04		
05	67	10.3	+02.5	68	09.5	+02.4	69	08.6	+02.5	70	07.8	+02.4	71	06.9	+02.5	05		
06	82	12.8	+02.5	83	11.9	+02.5	84	11.1	+02.4	85	10.2	+02.5	86	09.4	+02.4	06		
07	97	15.3	+02.4	98	14.4	+02.5	99	13.5	+02.5	100	12.7	+02.5	101	11.8	+02.5	07		
08	112	17.7	+02.5	113	16.9	+02.4	114	16.0	+02.5	115	15.2	+02.4	116	14.3	+02.5	08		
09	127	20.2	+02.5	128	19.3	+02.5	129	18.5	+02.4	130	17.6	+02.5	131	16.8	+02.4	09		
10	142	22.7	+02.4	143	21.8	+02.5	144	20.9	+02.5	145	20.1	+02.4	146	19.2	+02.5	10		
11	157	25.1	+02.5	158	24.3	+02.4	159	23.4	+02.5	160	22.5	+02.5	161	21.7	+02.4	11		
12	172	27.6	+02.5	173	26.7	+02.5	174	25.9	+02.4	175	25.0	+02.5	176	24.1	+02.5	12		
13	187	30.1	+02.4	188	29.2	+02.5	189	28.3	+02.5	190	27.5	+02.4	191	26.6	+02.5	13		
14	202	32.5	+02.5	203	31.7	+02.4	204	30.8	+02.5	205	29.9	+02.5	206	29.1	+02.4	14		
15	217	35.0	+02.4	218	34.1	+02.5	219	33.3	+02.4	220	32.4	+02.5	221	31.5	+02.5	15		
16	232	37.4	+02.5	233	36.6	+02.5	234	35.7	+02.5	235	34.9	+02.4	236	34.0	+02.5	16		
17	247	39.9	+02.5	248	39.1	+02.4	249	38.2	+02.5	250	37.3	+02.5	251	36.5	+02.4	17		
18	262	42.4	+02.4	263	41.5	+02.5	264	40.7	+02.4	265	39.8	+02.5	266	38.9	+02.5	18		
19	277	44.8	+02.5	278	44.0	+02.4	279	43.1	+02.5	280	42.3	+02.4	281	41.4	+02.5	19		
20	292	47.3	+02.5	293	46.4	+02.5	294	45.6	+02.4	295	44.7	+02.5	296	43.9	+02.4	20		
21	307	49.8	+02.4	308	48.9	+02.5	309	48.0	+02.5	310	47.2	+02.4	311	46.3	+02.5	21		
22	322	52.2	+02.5	323	51.4	+02.4	324	50.5	+02.5	325	49.6	+02.5	326	48.8	+02.5	22		
23	337	54.7	+02.5	338	53.8	+02.5	339	53.0	+02.4	340	52.1	+02.5	341	51.3	+02.4	23		

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.5	N 29	13.0	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.7	S 42	10.7	Acrux	173	02.9	S 63	13.4
Schedir	349	32.7	N 56	39.6	Gacrux	171	54.4	S 57	14.3
Diphda	348	49.0	S 17	51.6	Alioth	166	15.3	N 55	50.4
Achernar	335	21.2	S 57	07.1	Spica	158	24.6	S 11	16.6
Hamal	327	53.2	N 23	34.2	Alkaid	152	53.9	N 49	12.3
Polaris	314	42.8	N 89	21.3	Hadar	148	39.2	S 60	29.0
Acamar	315	13.0	S 40	12.6	Menkent	147	59.9	S 36	28.6
Menkar	314	08.0	N 04	10.8	Arcturus	145	49.5	N 19	04.8
Mirfak	308	30.8	N 49	56.3	Rigel Kentaurus	139	40.7	S 60	56.0
Aldebaran	290	41.8	N 16	33.4	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	24.8	N 46	01.2	Kocab	137	20.4	N 74	04.0
Rigel	281	05.7	S 08	10.3	Alphecca	126	05.6	N 26	38.6
Bellatrix	278	24.9	N 06	22.3	Antares	112	18.4	S 26	28.9
Elnath	278	04.3	N 28	37.6	Atria	107	14.3	S 69	04.3
Alnilam	275	39.7	S 01	11.1	Sabik	102	05.0	S 15	45.2
Betelgeuze	270	54.2	N 07	24.8	Shaula	96	12.9	S 37	07.3
Canopus	263	53.4	S 52	42.1	Rasalhague	96	00.3	N 12	32.9
Sirius	258	27.9	S 16	44.1	Etamin	90	43.0	N 51	29.4
Adhara	255	07.5	S 28	59.9	Kaus Australis	83	34.9	S 34	22.4
Castor	245	59.7	N 31	50.4	Vega	80	34.5	N 38	48.4
Procyon	244	52.8	N 05	10.5	Nunki	75	50.0	S 26	16.1
Pollux	243	19.5	N 27	58.3	Albireo	67	05.4	N 28	00.6
Avior	234	16.0	S 59	34.6	Altair	62	01.8	N 08	55.7
Suhail	222	48.1	S 43	31.2	Peacock	53	08.3	S 56	39.8
Miaplacidus	221	39.3	S 69	48.4	Deneb	49	26.8	N 45	21.8
Alphard	217	49.9	S 08	45.2	Enif	33	40.4	N 09	58.8
Regulus	207	36.7	N 11	51.6	Alnair	27	34.9	S 46	51.1
Dubhe	193	43.9	N 61	37.8	Formalhaut	15	16.4	S 29	30.0
Denebola	182	27.1	N 14	27.0	Markab	13	31.5	N 15	19.7

2022 - First Point of Aries / Selected Stars

UT	day 261 of 365 September 18			day 262 of 365 September 19			day 263 of 365 September 20			day 264 of 365 September 21			day 265 of 365 September 22			UT
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	
00	356	53.7	+02.5	357	52.9	+02.4	358	52.0	+02.5	359	51.1	+02.5	0	50.3	+02.4	00
01	11	56.2	+02.4	12	55.3	+02.5	13	54.5	+02.4	14	53.6	+02.5	15	52.7	+02.5	01
02	26	58.6	+02.5	27	57.8	+02.4	28	56.9	+02.5	29	56.1	+02.4	30	55.2	+02.5	02
03	42	01.1	+02.5	43	00.2	+02.5	43	59.4	+02.5	44	58.5	+02.5	45	57.7	+02.4	03
04	57	03.6	+02.4	58	02.7	+02.5	59	01.9	+02.4	60	01.0	+02.5	61	00.1	+02.5	04
05	72	06.0	+02.5	73	05.2	+02.4	74	04.3	+02.5	75	03.5	+02.4	76	02.6	+02.5	05
06	87	08.5	+02.5	88	07.6	+02.5	89	06.8	+02.4	90	05.9	+02.5	91	05.1	+02.4	06
07	102	11.0	+02.4	103	10.1	+02.5	104	09.2	+02.5	105	08.4	+02.4	106	07.5	+02.5	07
08	117	13.4	+02.5	118	12.6	+02.4	119	11.7	+02.5	120	10.8	+02.5	121	10.0	+02.5	08
09	132	15.9	+02.5	133	15.0	+02.5	134	14.2	+02.4	135	13.3	+02.5	136	12.5	+02.4	09
10	147	18.4	+02.4	148	17.5	+02.5	149	16.6	+02.5	150	15.8	+02.4	151	14.9	+02.5	10
11	162	20.8	+02.5	163	20.0	+02.4	164	19.1	+02.5	165	18.2	+02.5	166	17.4	+02.4	11
12	177	23.3	+02.5	178	22.4	+02.5	179	21.6	+02.4	180	20.7	+02.5	181	19.8	+02.5	12
13	192	25.8	+02.4	193	24.9	+02.5	194	24.0	+02.5	195	23.2	+02.4	196	22.3	+02.5	13
14	207	28.2	+02.5	208	27.4	+02.4	209	26.5	+02.5	210	25.6	+02.5	211	24.8	+02.4	14
15	222	30.7	+02.4	223	29.8	+02.5	224	29.0	+02.4	225	28.1	+02.5	226	27.2	+02.5	15
16	237	33.1	+02.5	238	32.3	+02.4	239	31.4	+02.5	240	30.6	+02.4	241	29.7	+02.5	16
17	252	35.6	+02.5	253	34.7	+02.5	254	33.9	+02.5	255	33.0	+02.5	256	32.2	+02.4	17
18	267	38.1	+02.4	268	37.2	+02.5	269	36.4	+02.4	270	35.5	+02.5	271	34.6	+02.5	18
19	282	40.5	+02.5	283	39.7	+02.4	284	38.8	+02.5	285	38.0	+02.4	286	37.1	+02.5	19
20	297	43.0	+02.5	298	42.1	+02.5	299	41.3	+02.4	300	40.4	+02.5	301	39.6	+02.4	20
21	312	45.5	+02.4	313	44.6	+02.5	314	43.7	+02.5	315	42.9	+02.4	316	42.0	+02.5	21
22	327	47.9	+02.5	328	47.1	+02.4	329	46.2	+02.5	330	45.3	+02.5	331	44.5	+02.4	22
23	342	50.4	+02.5	343	49.5	+02.5	344	48.7	+02.4	345	47.8	+02.5	346	46.9	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.4	N 29	13.0	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.7	S 42	10.8	Acrux	173	02.9	S 63	13.4
Schedir	349	32.7	N 56	39.7	Gacrux	171	54.4	S 57	14.2
Diphda	348	49.0	S 17	51.7	Alioth	166	15.3	N 55	50.4
Achernar	335	21.2	S 57	07.1	Spica	158	24.6	S 11	16.6
Hamal	327	53.2	N 23	34.2	Alkaid	152	53.9	N 49	12.3
Polaris	314	40.4	N 89	21.3	Hadar	148	39.2	S 60	29.0
Acamar	315	12.9	S 40	12.6	Menkent	147	59.9	S 36	28.6
Menkar	314	07.9	N 04	10.8	Arcturus	145	49.5	N 19	04.8
Mirfak	308	30.7	N 49	56.3	Rigel Kentaurus	139	40.8	S 60	56.0
Aldebaran	290	41.7	N 16	33.4	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	24.7	N 46	01.2	Kocab	137	20.5	N 74	04.0
Rigel	281	05.7	S 08	10.3	Alphecca	126	05.6	N 26	38.6
Bellatrix	278	24.9	N 06	22.3	Antares	112	18.4	S 26	28.9
Elnath	278	04.3	N 28	37.6	Atria	107	14.3	S 69	04.3
Alnilam	275	39.7	S 01	11.1	Sabik	102	05.0	S 15	45.2
Betelgeuze	270	54.2	N 07	24.8	Shaula	96	13.0	S 37	07.3
Canopus	263	53.4	S 52	42.1	Rasalhague	96	00.4	N 12	32.9
Sirius	258	27.8	S 16	44.1	Etamin	90	43.0	N 51	29.4
Adhara	255	07.5	S 28	59.9	Kaus Australis	83	35.0	S 34	22.4
Castor	245	59.6	N 31	50.3	Vega	80	34.5	N 38	48.4
Procyon	244	52.8	N 05	10.5	Nunki	75	50.0	S 26	16.1
Pollux	243	19.5	N 27	58.3	Albireo	67	05.4	N 28	00.6
Avior	234	15.9	S 59	34.6	Altair	62	01.8	N 08	55.7
Suhail	222	48.0	S 43	31.1	Peacock	53	08.4	S 56	39.8
Miaplacidus	221	39.2	S 69	48.3	Deneb	49	26.8	N 45	21.9
Alphard	217	49.9	S 08	45.2	Enif	33	40.4	N 09	58.8
Regulus	207	36.7	N 11	51.6	Alnair	27	35.0	S 46	51.1
Dubhe	193	43.9	N 61	37.8	Formalhaut	15	16.4	S 29	30.0
Denebola	182	27.1	N 14	27.0	Markab	13	31.5	N 15	19.7

2022 - First Point of Aries / Selected Stars

UT	day 266 of 365		day 267 of 365		day 268 of 365		day 269 of 365		day 270 of 365		UT					
	September 23		September 24		September 25		September 26		September 27							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "						
00	1	49.4	+02.5	2	48.5	+02.5	3	47.7	+02.5	4	46.8	+02.5	5	46.0	+02.4	00
01	16	51.9	+02.4	17	51.0	+02.5	18	50.2	+02.4	19	49.3	+02.5	20	48.4	+02.5	01
02	31	54.3	+02.5	32	53.5	+02.4	33	52.6	+02.5	34	51.8	+02.4	35	50.9	+02.5	02
03	46	56.8	+02.5	47	55.9	+02.5	48	55.1	+02.4	49	54.2	+02.5	50	53.4	+02.4	03
04	61	59.3	+02.4	62	58.4	+02.5	63	57.5	+02.5	64	56.7	+02.4	65	55.8	+02.5	04
05	77	01.7	+02.5	78	00.9	+02.4	79	00.0	+02.5	79	59.1	+02.5	80	58.3	+02.4	05
06	92	04.2	+02.5	93	03.3	+02.5	94	02.5	+02.4	95	01.6	+02.5	96	00.7	+02.5	06
07	107	06.7	+02.4	108	05.8	+02.5	109	04.9	+02.5	110	04.1	+02.4	111	03.2	+02.5	07
08	122	09.1	+02.5	123	08.3	+02.4	124	07.4	+02.5	125	06.5	+02.5	126	05.7	+02.4	08
09	137	11.6	+02.5	138	10.7	+02.5	139	09.9	+02.4	140	09.0	+02.5	141	08.1	+02.5	09
10	152	14.1	+02.4	153	13.2	+02.5	154	12.3	+02.5	155	11.5	+02.4	156	10.6	+02.5	10
11	167	16.5	+02.5	168	15.7	+02.4	169	14.8	+02.5	170	13.9	+02.5	171	13.1	+02.4	11
12	182	19.0	+02.4	183	18.1	+02.5	184	17.3	+02.4	185	16.4	+02.5	186	15.5	+02.5	12
13	197	21.4	+02.5	198	20.6	+02.4	199	19.7	+02.5	200	18.9	+02.4	201	18.0	+02.5	13
14	212	23.9	+02.5	213	23.0	+02.5	214	22.2	+02.4	215	21.3	+02.5	216	20.5	+02.4	14
15	227	26.4	+02.4	228	25.5	+02.5	229	24.6	+02.5	230	23.8	+02.4	231	22.9	+02.5	15
16	242	28.8	+02.5	243	28.0	+02.4	244	27.1	+02.5	245	26.2	+02.5	246	25.4	+02.4	16
17	257	31.3	+02.5	258	30.4	+02.5	259	29.6	+02.4	260	28.7	+02.5	261	27.8	+02.5	17
18	272	33.8	+02.4	273	32.9	+02.5	274	32.0	+02.5	275	31.2	+02.4	276	30.3	+02.5	18
19	287	36.2	+02.5	288	35.4	+02.4	289	34.5	+02.5	290	33.6	+02.5	291	32.8	+02.4	19
20	302	38.7	+02.5	303	37.8	+02.5	304	37.0	+02.4	305	36.1	+02.5	306	35.2	+02.5	20
21	317	41.2	+02.4	318	40.3	+02.5	319	39.4	+02.5	320	38.6	+02.4	321	37.7	+02.5	21
22	332	43.6	+02.5	333	42.8	+02.4	334	41.9	+02.5	335	41.0	+02.5	336	40.2	+02.4	22
23	347	46.1	+02.4	348	45.2	+02.5	349	44.4	+02.4	350	43.5	+02.5	351	42.6	+02.5	23

	SHA	Dec		SHA	Dec				
	° ' "	' "		° ' "	' "				
Alpheratz	357	36.4	N 29	13.1	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.7	S 42	10.8	Acrux	173	02.9	S 63	13.4
Schedir	349	32.7	N 56	39.7	Gacrux	171	54.4	S 57	14.2
Diphda	348	49.0	S 17	51.7	Alioth	166	15.3	N 55	50.4
Achernar	335	21.1	S 57	07.1	Spica	158	24.6	S 11	16.6
Hamal	327	53.1	N 23	34.2	Alkaid	152	53.9	N 49	12.2
Polaris	314	38.3	N 89	21.3	Hadar	148	39.2	S 60	28.9
Acamar	315	12.9	S 40	12.6	Menkent	147	59.9	S 36	28.6
Menkar	314	07.9	N 04	10.8	Arcturus	145	49.6	N 19	04.8
Mirfak	308	30.7	N 49	56.4	Rigel Kentaurus	139	40.8	S 60	56.0
Aldebaran	290	41.7	N 16	33.4	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	24.7	N 46	01.3	Kocab	137	20.6	N 74	04.0
Rigel	281	05.6	S 08	10.3	Alphecca	126	05.6	N 26	38.6
Bellatrix	278	24.9	N 06	22.3	Antares	112	18.4	S 26	28.9
Elnath	278	04.2	N 28	37.6	Atria	107	14.4	S 69	04.3
Alnilam	275	39.6	S 01	11.1	Sabik	102	05.0	S 15	45.2
Betelgeuze	270	54.1	N 07	24.8	Shaula	96	13.0	S 37	07.3
Canopus	263	53.3	S 52	42.1	Rasalhague	96	00.4	N 12	32.9
Sirius	258	27.8	S 16	44.1	Etamin	90	43.1	N 51	29.4
Adhara	255	07.4	S 28	59.9	Kaus Australis	83	35.0	S 34	22.4
Castor	245	59.6	N 31	50.3	Vega	80	34.5	N 38	48.4
Procyon	244	52.7	N 05	10.5	Nunki	75	50.0	S 26	16.1
Pollux	243	19.4	N 27	58.3	Albireo	67	05.5	N 28	00.6
Avior	234	15.9	S 59	34.6	Altair	62	01.8	N 08	55.7
Suhail	222	48.0	S 43	31.1	Peacock	53	08.4	S 56	39.9
Miaplacidus	221	39.2	S 69	48.3	Deneb	49	26.8	N 45	21.9
Alphard	217	49.9	S 08	45.2	Enif	33	40.4	N 09	58.8
Regulus	207	36.6	N 11	51.5	Alnair	27	35.0	S 46	51.1
Dubhe	193	43.9	N 61	37.8	Formalhaut	15	16.4	S 29	30.1
Denebola	182	27.0	N 14	27.0	Markab	13	31.5	N 15	19.7

2022 - First Point of Aries / Selected Stars

UT	day 271 of 365 September 28		day 272 of 365 September 29		day 273 of 365 September 30		day 274 of 365 October 1		day 275 of 365 October 2		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	6 45.1	+02.5	7 44.2	+02.5	8 43.4	+02.4	9 42.5	+02.5	10 41.7	+02.4	00
01	21 47.6	+02.4	22 46.7	+02.5	23 45.8	+02.5	24 45.0	+02.4	25 44.1	+02.5	01
02	36 50.0	+02.5	37 49.2	+02.4	38 48.3	+02.5	39 47.4	+02.5	40 46.6	+02.4	02
03	51 52.5	+02.5	52 51.6	+02.5	53 50.8	+02.4	54 49.9	+02.5	55 49.0	+02.5	03
04	66 55.0	+02.4	67 54.1	+02.5	68 53.2	+02.5	69 52.4	+02.4	70 51.5	+02.5	04
05	81 57.4	+02.5	82 56.6	+02.4	83 55.7	+02.5	84 54.8	+02.5	85 54.0	+02.4	05
06	96 59.9	+02.4	97 59.0	+02.5	98 58.2	+02.4	99 57.3	+02.5	100 56.4	+02.5	06
07	112 02.3	+02.5	113 01.5	+02.4	114 00.6	+02.5	114 59.8	+02.4	115 58.9	+02.5	07
08	127 04.8	+02.5	128 03.9	+02.5	129 03.1	+02.5	130 02.2	+02.5	131 01.4	+02.4	08
09	142 07.3	+02.4	143 06.4	+02.5	144 05.6	+02.4	145 04.7	+02.5	146 03.8	+02.5	09
10	157 09.7	+02.5	158 08.9	+02.4	159 08.0	+02.5	160 07.2	+02.4	161 06.3	+02.5	10
11	172 12.2	+02.5	173 11.3	+02.5	174 10.5	+02.4	175 09.6	+02.5	176 08.8	+02.4	11
12	187 14.7	+02.4	188 13.8	+02.5	189 12.9	+02.5	190 12.1	+02.4	191 11.2	+02.5	12
13	202 17.1	+02.5	203 16.3	+02.4	204 15.4	+02.5	205 14.5	+02.5	206 13.7	+02.5	13
14	217 19.6	+02.5	218 18.7	+02.5	219 17.9	+02.4	220 17.0	+02.5	221 16.2	+02.4	14
15	232 22.1	+02.4	233 21.2	+02.5	234 20.3	+02.5	235 19.5	+02.4	236 18.6	+02.5	15
16	247 24.5	+02.5	248 23.7	+02.4	249 22.8	+02.5	250 21.9	+02.5	251 21.1	+02.4	16
17	262 27.0	+02.4	263 26.1	+02.5	264 25.3	+02.4	265 24.4	+02.5	266 23.5	+02.5	17
18	277 29.4	+02.5	278 28.6	+02.5	279 27.7	+02.5	280 26.9	+02.4	281 26.0	+02.5	18
19	292 31.9	+02.5	293 31.1	+02.4	294 30.2	+02.5	295 29.3	+02.5	296 28.5	+02.4	19
20	307 34.4	+02.4	308 33.5	+02.5	309 32.7	+02.4	310 31.8	+02.5	311 30.9	+02.5	20
21	322 36.8	+02.5	323 36.0	+02.4	324 35.1	+02.5	325 34.3	+02.4	326 33.4	+02.5	21
22	337 39.3	+02.5	338 38.4	+02.5	339 37.6	+02.4	340 36.7	+02.5	341 35.9	+02.4	22
23	352 41.8	+02.4	353 40.9	+02.5	354 40.0	+02.5	355 39.2	+02.5	356 38.3	+02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 36.4	N 29 13.1	Gienah	175 45.8	S 17 39.9
Ankaa	353 08.7	S 42 10.8	Acrux	173 02.9	S 63 13.4
Schedir	349 32.7	N 56 39.7	Gacrux	171 54.4	S 57 14.2
Diphda	348 49.0	S 17 51.7	Alioth	166 15.3	N 55 50.4
Achernar	335 21.1	S 57 07.2	Spica	158 24.6	S 11 16.6
Hamal	327 53.1	N 23 34.3	Alkaid	152 53.9	N 49 12.2
Polaris	314 36.6	N 89 21.4	Hadar	148 39.3	S 60 28.9
Acamar	315 12.9	S 40 12.6	Menkent	147 59.9	S 36 28.5
Menkar	314 07.9	N 04 10.8	Arcturus	145 49.6	N 19 04.8
Mirfak	308 30.6	N 49 56.4	Rigel Kentaurus	139 40.8	S 60 55.9
Aldebaran	290 41.7	N 16 33.4	Zubenelgenubi	136 58.3	S 16 08.0
Capella	280 24.6	N 46 01.3	Kocab	137 20.6	N 74 03.9
Rigel	281 05.6	S 08 10.3	Alphecca	126 05.6	N 26 38.6
Bellatrix	278 24.8	N 06 22.3	Antares	112 18.4	S 26 28.9
Elnath	278 04.2	N 28 37.6	Atria	107 14.5	S 69 04.3
Alnilam	275 39.6	S 01 11.1	Sabik	102 05.1	S 15 45.2
Betelgeuze	270 54.1	N 07 24.8	Shaula	96 13.0	S 37 07.3
Canopus	263 53.3	S 52 42.1	Rasalhague	96 00.4	N 12 32.9
Sirius	258 27.8	S 16 44.1	Etamin	90 43.1	N 51 29.4
Adhara	255 07.4	S 28 59.8	Kaus Australis	83 35.0	S 34 22.4
Castor	245 59.5	N 31 50.3	Vega	80 34.6	N 38 48.4
Procyon	244 52.7	N 05 10.5	Nunki	75 50.1	S 26 16.1
Pollux	243 19.4	N 27 58.3	Albireo	67 05.5	N 28 00.6
Avior	234 15.8	S 59 34.6	Altair	62 01.9	N 08 55.7
Suhail	222 48.0	S 43 31.1	Peacock	53 08.4	S 56 39.9
Miaplacidus	221 39.1	S 69 48.3	Deneb	49 26.8	N 45 21.9
Alphard	217 49.9	S 08 45.2	Enif	33 40.4	N 09 58.8
Regulus	207 36.6	N 11 51.5	Alnair	27 35.0	S 46 51.1
Dubhe	193 43.9	N 61 37.8	Formalhaut	15 16.4	S 29 30.1
Denebola	182 27.0	N 14 26.9	Markab	13 31.5	N 15 19.7

2022 - First Point of Aries / Selected Stars

UT	day 276 of 365		day 277 of 365		day 278 of 365		day 279 of 365		day 280 of 365		UT					
	October 3		October 4		October 5		October 6		October 7							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	11	40.8	+02.5	12	39.9	+02.5	13	39.1	+02.4	14	38.2	+02.5	15	37.4	+02.4	00
01	26	43.3	+02.4	27	42.4	+02.5	28	41.5	+02.5	29	40.7	+02.4	30	39.8	+02.5	01
02	41	45.7	+02.5	42	44.9	+02.4	43	44.0	+02.5	44	43.1	+02.5	45	42.3	+02.4	02
03	56	48.2	+02.5	57	47.3	+02.5	58	46.5	+02.4	59	45.6	+02.5	60	44.7	+02.5	03
04	71	50.7	+02.4	72	49.8	+02.5	73	48.9	+02.5	74	48.1	+02.4	75	47.2	+02.5	04
05	86	53.1	+02.5	87	52.3	+02.4	88	51.4	+02.5	89	50.5	+02.5	90	49.7	+02.4	05
06	101	55.6	+02.4	102	54.7	+02.5	103	53.9	+02.4	104	53.0	+02.5	105	52.1	+02.5	06
07	116	58.0	+02.5	117	57.2	+02.4	118	56.3	+02.5	119	55.5	+02.4	120	54.6	+02.5	07
08	132	00.5	+02.5	132	59.6	+02.5	133	58.8	+02.5	134	57.9	+02.5	135	57.1	+02.4	08
09	147	03.0	+02.4	148	02.1	+02.5	149	01.3	+02.4	150	00.4	+02.5	150	59.5	+02.5	09
10	162	05.4	+02.5	163	04.6	+02.4	164	03.7	+02.5	165	02.9	+02.4	166	02.0	+02.5	10
11	177	07.9	+02.5	178	07.0	+02.5	179	06.2	+02.4	180	05.3	+02.5	181	04.5	+02.4	11
12	192	10.4	+02.4	193	09.5	+02.5	194	08.6	+02.5	195	07.8	+02.4	196	06.9	+02.5	12
13	207	12.8	+02.5	208	12.0	+02.4	209	11.1	+02.5	210	10.2	+02.5	211	09.4	+02.4	13
14	222	15.3	+02.5	223	14.4	+02.5	224	13.6	+02.4	225	12.7	+02.5	226	11.8	+02.5	14
15	237	17.8	+02.4	238	16.9	+02.5	239	16.0	+02.5	240	15.2	+02.4	241	14.3	+02.5	15
16	252	20.2	+02.5	253	19.4	+02.4	254	18.5	+02.5	255	17.6	+02.5	256	16.8	+02.4	16
17	267	22.7	+02.4	268	21.8	+02.5	269	21.0	+02.4	270	20.1	+02.5	271	19.2	+02.5	17
18	282	25.1	+02.5	283	24.3	+02.5	284	23.4	+02.5	285	22.6	+02.4	286	21.7	+02.5	18
19	297	27.6	+02.5	298	26.8	+02.4	299	25.9	+02.5	300	25.0	+02.5	301	24.2	+02.4	19
20	312	30.1	+02.4	313	29.2	+02.5	314	28.4	+02.4	315	27.5	+02.5	316	26.6	+02.5	20
21	327	32.5	+02.5	328	31.7	+02.4	329	30.8	+02.5	330	30.0	+02.4	331	29.1	+02.5	21
22	342	35.0	+02.5	343	34.1	+02.5	344	33.3	+02.4	345	32.4	+02.5	346	31.6	+02.4	22
23	357	37.5	+02.4	358	36.6	+02.5	359	35.7	+02.5	0	34.9	+02.5	1	34.0	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.4	N 29	13.1	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.7	S 42	10.8	Acrux	173	02.9	S 63	13.3
Schedir	349	32.7	N 56	39.7	Gacrux	171	54.4	S 57	14.2
Diphda	348	48.9	S 17	51.7	Alioth	166	15.3	N 55	50.3
Achernar	335	21.1	S 57	07.2	Spica	158	24.6	S 11	16.6
Hamal	327	53.1	N 23	34.3	Alkaid	152	53.9	N 49	12.2
Polaris	314	34.4	N 89	21.4	Hadar	148	39.3	S 60	28.9
Acamar	315	12.8	S 40	12.6	Menkent	147	59.9	S 36	28.5
Menkar	314	07.9	N 04	10.8	Arcturus	145	49.6	N 19	04.8
Mirfak	308	30.6	N 49	56.4	Rigel Kentaurus	139	40.8	S 60	55.9
Aldebaran	290	41.6	N 16	33.4	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	24.6	N 46	01.3	Kocab	137	20.7	N 74	03.9
Rigel	281	05.6	S 08	10.3	Alphecca	126	05.6	N 26	38.6
Bellatrix	278	24.8	N 06	22.3	Antares	112	18.5	S 26	28.9
Elnath	278	04.1	N 28	37.6	Atria	107	14.5	S 69	04.3
Alnilam	275	39.6	S 01	11.1	Sabik	102	05.1	S 15	45.2
Betelgeuze	270	54.1	N 07	24.8	Shaula	96	13.0	S 37	07.3
Canopus	263	53.2	S 52	42.1	Rasalhague	96	00.4	N 12	32.9
Sirius	258	27.7	S 16	44.1	Etamin	90	43.2	N 51	29.4
Adhara	255	07.4	S 28	59.9	Kaus Australis	83	35.0	S 34	22.4
Castor	245	59.5	N 31	50.3	Vega	80	34.6	N 38	48.4
Procyon	244	52.7	N 05	10.5	Nunki	75	50.1	S 26	16.1
Pollux	243	19.4	N 27	58.3	Albireo	67	05.5	N 28	00.6
Avior	234	15.8	S 59	34.6	Altair	62	01.9	N 08	55.7
Suhail	222	47.9	S 43	31.1	Peacock	53	08.5	S 56	39.9
Miaplacidus	221	39.0	S 69	48.3	Deneb	49	26.9	N 45	21.9
Alphard	217	49.8	S 08	45.2	Enif	33	40.4	N 09	58.9
Regulus	207	36.6	N 11	51.5	Alnair	27	35.0	S 46	51.1
Dubhe	193	43.8	N 61	37.7	Formalhaut	15	16.4	S 29	30.1
Denebola	182	27.0	N 14	26.9	Markab	13	31.5	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 281 of 365		day 282 of 365		day 283 of 365		day 284 of 365		day 285 of 365		UT					
	October 8		October 9		October 10		October 11		October 12							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	16	36.5	+02.5	17	35.6	+02.5	18	34.8	+02.4	19	33.9	+02.5	20	33.0	+02.5	00
01	31	39.0	+02.4	32	38.1	+02.5	33	37.2	+02.5	34	36.4	+02.4	35	35.5	+02.5	01
02	46	41.4	+02.5	47	40.6	+02.4	48	39.7	+02.5	49	38.8	+02.5	50	38.0	+02.4	02
03	61	43.9	+02.4	62	43.0	+02.5	63	42.2	+02.4	64	41.3	+02.5	65	40.4	+02.5	03
04	76	46.3	+02.5	77	45.5	+02.4	78	44.6	+02.5	79	43.8	+02.4	80	42.9	+02.5	04
05	91	48.8	+02.5	92	47.9	+02.5	93	47.1	+02.4	94	46.2	+02.5	95	45.4	+02.4	05
06	106	51.3	+02.4	107	50.4	+02.5	108	49.5	+02.5	109	48.7	+02.4	110	47.8	+02.5	06
07	121	53.7	+02.5	122	52.9	+02.4	123	52.0	+02.5	124	51.1	+02.5	125	50.3	+02.4	07
08	136	56.2	+02.5	137	55.3	+02.5	138	54.5	+02.4	139	53.6	+02.5	140	52.7	+02.5	08
09	151	58.7	+02.4	152	57.8	+02.5	153	56.9	+02.5	154	56.1	+02.4	155	55.2	+02.5	09
10	167	01.1	+02.5	168	00.3	+02.4	168	59.4	+02.5	169	58.5	+02.5	170	57.7	+02.4	10
11	182	03.6	+02.5	183	02.7	+02.5	184	01.9	+02.4	185	01.0	+02.5	186	00.1	+02.5	11
12	197	06.1	+02.4	198	05.2	+02.5	199	04.3	+02.5	200	03.5	+02.4	201	02.6	+02.5	12
13	212	08.5	+02.5	213	07.7	+02.4	214	06.8	+02.5	215	05.9	+02.5	216	05.1	+02.4	13
14	227	11.0	+02.4	228	10.1	+02.5	229	09.3	+02.4	230	08.4	+02.5	231	07.5	+02.5	14
15	242	13.4	+02.5	243	12.6	+02.4	244	11.7	+02.5	245	10.9	+02.4	246	10.0	+02.5	15
16	257	15.9	+02.5	258	15.0	+02.5	259	14.2	+02.4	260	13.3	+02.5	261	12.5	+02.4	16
17	272	18.4	+02.4	273	17.5	+02.5	274	16.6	+02.5	275	15.8	+02.5	276	14.9	+02.5	17
18	287	20.8	+02.5	288	20.0	+02.4	289	19.1	+02.5	290	18.3	+02.4	291	17.4	+02.5	18
19	302	23.3	+02.5	303	22.4	+02.5	304	21.6	+02.4	305	20.7	+02.5	306	19.9	+02.4	19
20	317	25.8	+02.4	318	24.9	+02.5	319	24.0	+02.5	320	23.2	+02.4	321	22.3	+02.5	20
21	332	28.2	+02.5	333	27.4	+02.4	334	26.5	+02.5	335	25.6	+02.5	336	24.8	+02.4	21
22	347	30.7	+02.5	348	29.8	+02.5	349	29.0	+02.4	350	28.1	+02.5	351	27.2	+02.5	22
23	2	33.2	+02.4	3	32.3	+02.5	4	31.4	+02.5	5	30.6	+02.4	6	29.7	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.4	N 29	13.1	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.7	S 42	10.8	Acrux	173	02.9	S 63	13.3
Schedir	349	32.6	N 56	39.8	Gacrux	171	54.4	S 57	14.2
Diphda	348	48.9	S 17	51.7	Alioth	166	15.3	N 55	50.3
Achernar	335	21.1	S 57	07.2	Spica	158	24.6	S 11	16.6
Hamal	327	53.1	N 23	34.3	Alkaid	152	53.9	N 49	12.2
Polaris	314	32.9	N 89	21.4	Hadar	148	39.3	S 60	28.9
Acamar	315	12.8	S 40	12.7	Menkent	147	59.9	S 36	28.5
Menkar	314	07.8	N 04	10.8	Arcturus	145	49.6	N 19	04.8
Mirfak	308	30.6	N 49	56.4	Rigel Kentaurus	139	40.8	S 60	55.9
Aldebaran	290	41.6	N 16	33.4	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	24.5	N 46	01.3	Kocab	137	20.8	N 74	03.9
Rigel	281	05.5	S 08	10.3	Alphecca	126	05.7	N 26	38.5
Bellatrix	278	24.8	N 06	22.3	Antares	112	18.5	S 26	28.9
Elnath	278	04.1	N 28	37.6	Atria	107	14.6	S 69	04.2
Alnilam	275	39.5	S 01	11.1	Sabik	102	05.1	S 15	45.2
Betelgeuze	270	54.0	N 07	24.8	Shaula	96	13.1	S 37	07.3
Canopus	263	53.1	S 52	42.1	Rasalhague	96	00.4	N 12	32.9
Sirius	258	27.7	S 16	44.1	Etamin	90	43.2	N 51	29.4
Adhara	255	07.3	S 28	59.9	Kaus Australis	83	35.1	S 34	22.4
Castor	245	59.4	N 31	50.3	Vega	80	34.6	N 38	48.4
Procyon	244	52.6	N 05	10.5	Nunki	75	50.1	S 26	16.1
Pollux	243	19.3	N 27	58.3	Albireo	67	05.5	N 28	00.6
Avior	234	15.7	S 59	34.6	Altair	62	01.9	N 08	55.7
Suhail	222	47.9	S 43	31.1	Peacock	53	08.5	S 56	39.9
Miaplacidus	221	39.0	S 69	48.3	Deneb	49	26.9	N 45	21.9
Alphard	217	49.8	S 08	45.2	Enif	33	40.4	N 09	58.9
Regulus	207	36.6	N 11	51.5	Alnair	27	35.0	S 46	51.1
Dubhe	193	43.8	N 61	37.7	Formalhaut	15	16.4	S 29	30.1
Denebola	182	27.0	N 14	26.9	Markab	13	31.5	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 286 of 365		day 287 of 365		day 288 of 365		day 289 of 365		day 290 of 365		UT		
	October 13		October 14		October 15		October 16		October 17				
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
	°	'	°	'	°	'	°	'	°	'			
00	21	32.2	+02.4	22	31.3	+02.5	23	30.5	+02.4	24	29.6	+02.5	00
01	36	34.6	+02.5	37	33.8	+02.4	38	32.9	+02.5	39	32.1	+02.4	01
02	51	37.1	+02.5	52	36.2	+02.5	53	35.4	+02.4	54	34.5	+02.5	02
03	66	39.6	+02.4	67	38.7	+02.5	68	37.8	+02.5	69	37.0	+02.4	03
04	81	42.0	+02.5	82	41.2	+02.4	83	40.3	+02.5	84	39.4	+02.5	04
05	96	44.5	+02.5	97	43.6	+02.5	98	42.8	+02.4	99	41.9	+02.5	05
06	111	47.0	+02.4	112	46.1	+02.5	113	45.2	+02.5	114	44.4	+02.4	06
07	126	49.4	+02.5	127	48.6	+02.4	128	47.7	+02.5	129	46.8	+02.5	07
08	141	51.9	+02.5	142	51.0	+02.5	143	50.2	+02.4	144	49.3	+02.5	08
09	156	54.4	+02.4	157	53.5	+02.5	158	52.6	+02.5	159	51.8	+02.4	09
10	171	56.8	+02.5	172	56.0	+02.4	173	55.1	+02.5	174	54.2	+02.5	10
11	186	59.3	+02.4	187	58.4	+02.5	188	57.6	+02.4	189	56.7	+02.5	11
12	202	01.7	+02.5	203	00.9	+02.4	204	00.0	+02.5	204	59.2	+02.4	12
13	217	04.2	+02.5	218	03.3	+02.5	219	02.5	+02.5	220	01.6	+02.5	13
14	232	06.7	+02.4	233	05.8	+02.5	234	05.0	+02.4	235	04.1	+02.5	14
15	247	09.1	+02.5	248	08.3	+02.4	249	07.4	+02.5	250	06.6	+02.4	15
16	262	11.6	+02.5	263	10.7	+02.5	264	09.9	+02.4	265	09.0	+02.5	16
17	277	14.1	+02.4	278	13.2	+02.5	279	12.3	+02.5	280	11.5	+02.4	17
18	292	16.5	+02.5	293	15.7	+02.4	294	14.8	+02.5	295	13.9	+02.5	18
19	307	19.0	+02.5	308	18.1	+02.5	309	17.3	+02.4	310	16.4	+02.5	19
20	322	21.5	+02.4	323	20.6	+02.5	324	19.7	+02.5	325	18.9	+02.4	20
21	337	23.9	+02.5	338	23.1	+02.4	339	22.2	+02.5	340	21.3	+02.5	21
22	352	26.4	+02.4	353	25.5	+02.5	354	24.7	+02.4	355	23.8	+02.5	22
23	7	28.8	+02.5	8	28.0	+02.5	9	27.1	+02.5	10	26.3	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.4	N 29	13.1	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.7	S 42	10.8	Acrux	173	02.9	S 63	13.3
Schedir	349	32.6	N 56	39.8	Gacrux	171	54.3	S 57	14.1
Diphda	348	48.9	S 17	51.7	Alioth	166	15.3	N 55	50.3
Achernar	335	21.1	S 57	07.2	Spica	158	24.6	S 11	16.6
Hamal	327	53.0	N 23	34.3	Alkaid	152	53.9	N 49	12.1
Polaris	314	31.3	N 89	21.4	Hadar	148	39.3	S 60	28.9
Acamar	315	12.8	S 40	12.7	Menkent	147	59.9	S 36	28.5
Menkar	314	07.8	N 04	10.8	Arcturus	145	49.6	N 19	04.8
Mirfak	308	30.5	N 49	56.4	Rigel Kentaurus	139	40.9	S 60	55.9
Aldebaran	290	41.6	N 16	33.4	Zubenelgenubi	136	58.4	S 16	08.0
Capella	280	24.5	N 46	01.3	Kocab	137	20.8	N 74	03.9
Rigel	281	05.5	S 08	10.4	Alphecca	126	05.7	N 26	38.5
Bellatrix	278	24.7	N 06	22.3	Antares	112	18.5	S 26	28.9
Elnath	278	04.1	N 28	37.6	Atria	107	14.6	S 69	04.2
Alnilam	275	39.5	S 01	11.1	Sabik	102	05.1	S 15	45.2
Betelgeuze	270	54.0	N 07	24.8	Shaula	96	13.1	S 37	07.3
Canopus	263	53.1	S 52	42.1	Rasalhague	96	00.5	N 12	32.9
Sirius	258	27.6	S 16	44.1	Etamin	90	43.2	N 51	29.4
Adhara	255	07.3	S 28	59.9	Kaus Australis	83	35.1	S 34	22.4
Castor	245	59.4	N 31	50.3	Vega	80	34.7	N 38	48.4
Procyon	244	52.6	N 05	10.5	Nunki	75	50.1	S 26	16.1
Pollux	243	19.3	N 27	58.3	Albireo	67	05.6	N 28	00.6
Avior	234	15.6	S 59	34.5	Altair	62	01.9	N 08	55.7
Suhail	222	47.9	S 43	31.1	Peacock	53	08.5	S 56	39.9
Miaplacidus	221	38.9	S 69	48.3	Deneb	49	26.9	N 45	21.9
Alphard	217	49.8	S 08	45.2	Enif	33	40.5	N 09	58.9
Regulus	207	36.5	N 11	51.5	Alnair	27	35.0	S 46	51.1
Dubhe	193	43.7	N 61	37.7	Formalhaut	15	16.4	S 29	30.1
Denebola	182	27.0	N 14	26.9	Markab	13	31.5	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 291 of 365		day 292 of 365		day 293 of 365		day 294 of 365		day 295 of 365		UT					
	October 18		October 19		October 20		October 21		October 22							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "						
00	26	27.9	+02.4	27	27.0	+02.5	28	26.1	+02.5	29	25.3	+02.5	30	24.4	+02.5	00
01	41	30.3	+02.5	42	29.5	+02.4	43	28.6	+02.5	44	27.8	+02.4	45	26.9	+02.5	01
02	56	32.8	+02.5	57	31.9	+02.5	58	31.1	+02.4	59	30.2	+02.5	60	29.4	+02.4	02
03	71	35.3	+02.4	72	34.4	+02.5	73	33.5	+02.5	74	32.7	+02.4	75	31.8	+02.5	03
04	86	37.7	+02.5	87	36.9	+02.4	88	36.0	+02.5	89	35.1	+02.5	90	34.3	+02.4	04
05	101	40.2	+02.5	102	39.3	+02.5	103	38.5	+02.4	104	37.6	+02.5	105	36.7	+02.5	05
06	116	42.7	+02.4	117	41.8	+02.5	118	40.9	+02.5	119	40.1	+02.4	120	39.2	+02.5	06
07	131	45.1	+02.5	132	44.3	+02.4	133	43.4	+02.5	134	42.5	+02.5	135	41.7	+02.4	07
08	146	47.6	+02.4	147	46.7	+02.5	148	45.9	+02.4	149	45.0	+02.5	150	44.1	+02.5	08
09	161	50.0	+02.5	162	49.2	+02.5	163	48.3	+02.5	164	47.5	+02.4	165	46.6	+02.5	09
10	176	52.5	+02.5	177	51.7	+02.4	178	50.8	+02.5	179	49.9	+02.5	180	49.1	+02.4	10
11	191	55.0	+02.4	192	54.1	+02.5	193	53.3	+02.4	194	52.4	+02.5	195	51.5	+02.5	11
12	206	57.4	+02.5	207	56.6	+02.4	208	55.7	+02.5	209	54.9	+02.4	210	54.0	+02.5	12
13	221	59.9	+02.5	222	59.0	+02.5	223	58.2	+02.4	224	57.3	+02.5	225	56.5	+02.4	13
14	237	02.4	+02.4	238	01.5	+02.5	239	00.6	+02.5	239	59.8	+02.4	240	58.9	+02.5	14
15	252	04.8	+02.5	253	04.0	+02.4	254	03.1	+02.5	255	02.2	+02.5	256	01.4	+02.4	15
16	267	07.3	+02.5	268	06.4	+02.5	269	05.6	+02.4	270	04.7	+02.5	271	03.8	+02.5	16
17	282	09.8	+02.4	283	08.9	+02.5	284	08.0	+02.5	285	07.2	+02.4	286	06.3	+02.5	17
18	297	12.2	+02.5	298	11.4	+02.4	299	10.5	+02.5	300	09.6	+02.5	301	08.8	+02.4	18
19	312	14.7	+02.5	313	13.8	+02.5	314	13.0	+02.4	315	12.1	+02.5	316	11.2	+02.5	19
20	327	17.2	+02.4	328	16.3	+02.5	329	15.4	+02.5	330	14.6	+02.4	331	13.7	+02.5	20
21	342	19.6	+02.5	343	18.8	+02.4	344	17.9	+02.5	345	17.0	+02.5	346	16.2	+02.4	21
22	357	22.1	+02.4	358	21.2	+02.5	359	20.4	+02.4	0	19.5	+02.5	1	18.6	+02.5	22
23	12	24.5	+02.5	13	23.7	+02.4	14	22.8	+02.5	15	22.0	+02.4	16	21.1	+02.5	23

	SHA	Dec		SHA	Dec				
	° ' "	' "		° ' "	' "				
Alpheratz	357	36.4	N 29	13.1	Gienah	175	45.8	S 17	39.9
Ankaa	353	08.7	S 42	10.9	Acrux	173	02.8	S 63	13.3
Schedir	349	32.6	N 56	39.8	Gacrux	171	54.3	S 57	14.1
Diphda	348	48.9	S 17	51.7	Alioth	166	15.3	N 55	50.3
Achernar	335	21.1	S 57	07.3	Spica	158	24.6	S 11	16.6
Hamal	327	53.0	N 23	34.3	Alkaid	152	53.9	N 49	12.1
Polaris	314	29.7	N 89	21.5	Hadar	148	39.3	S 60	28.8
Acamar	315	12.8	S 40	12.7	Menkent	147	59.9	S 36	28.5
Menkar	314	07.8	N 04	10.8	Arcturus	145	49.6	N 19	04.8
Mirfak	308	30.5	N 49	56.4	Rigel Kentaurus	139	40.9	S 60	55.9
Aldebaran	290	41.5	N 16	33.4	Zubenelgenubi	136	58.4	S 16	08.0
Capella	280	24.4	N 46	01.3	Kocab	137	20.9	N 74	03.8
Rigel	281	05.5	S 08	10.4	Alphecca	126	05.7	N 26	38.5
Bellatrix	278	24.7	N 06	22.3	Antares	112	18.5	S 26	28.9
Elnath	278	04.0	N 28	37.6	Atria	107	14.7	S 69	04.2
Alnilam	275	39.5	S 01	11.1	Sabik	102	05.1	S 15	45.2
Betelgeuze	270	54.0	N 07	24.8	Shaula	96	13.1	S 37	07.2
Canopus	263	53.0	S 52	42.1	Rasalhague	96	00.5	N 12	32.9
Sirius	258	27.6	S 16	44.1	Etamin	90	43.3	N 51	29.4
Adhara	255	07.2	S 28	59.9	Kaus Australis	83	35.1	S 34	22.4
Castor	245	59.3	N 31	50.3	Vega	80	34.7	N 38	48.4
Procyon	244	52.5	N 05	10.5	Nunki	75	50.1	S 26	16.1
Pollux	243	19.2	N 27	58.3	Albireo	67	05.6	N 28	00.6
Avior	234	15.6	S 59	34.5	Altair	62	01.9	N 08	55.7
Suhail	222	47.8	S 43	31.1	Peacock	53	08.6	S 56	39.9
Miaplacidus	221	38.8	S 69	48.3	Deneb	49	27.0	N 45	21.9
Alphard	217	49.7	S 08	45.2	Enif	33	40.5	N 09	58.9
Regulus	207	36.5	N 11	51.5	Alnair	27	35.0	S 46	51.2
Dubhe	193	43.7	N 61	37.6	Formalhaut	15	16.4	S 29	30.1
Denebola	182	27.0	N 14	26.9	Markab	13	31.5	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 296 of 365			day 297 of 365			day 298 of 365			day 299 of 365			day 300 of 365			UT		
	October 23			October 24			October 25			October 26			October 27					
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA				
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"
00	31	23.6	+02.4	32	22.7	+02.5	33	21.8	+02.5	34	21.0	+02.4	35	20.1	+02.5	00		
01	46	26.0	+02.5	47	25.2	+02.4	48	24.3	+02.5	49	23.4	+02.5	50	22.6	+02.4	01		
02	61	28.5	+02.5	62	27.6	+02.5	63	26.8	+02.4	64	25.9	+02.5	65	25.0	+02.5	02		
03	76	31.0	+02.4	77	30.1	+02.5	78	29.2	+02.5	79	28.4	+02.4	80	27.5	+02.5	03		
04	91	33.4	+02.5	92	32.6	+02.4	93	31.7	+02.5	94	30.8	+02.5	95	30.0	+02.4	04		
05	106	35.9	+02.4	107	35.0	+02.5	108	34.2	+02.4	109	33.3	+02.5	110	32.4	+02.5	05		
06	121	38.3	+02.5	122	37.5	+02.4	123	36.6	+02.5	124	35.8	+02.4	125	34.9	+02.5	06		
07	136	40.8	+02.5	137	39.9	+02.5	138	39.1	+02.4	139	38.2	+02.5	140	37.4	+02.4	07		
08	151	43.3	+02.4	152	42.4	+02.5	153	41.5	+02.5	154	40.7	+02.5	155	39.8	+02.5	08		
09	166	45.7	+02.5	167	44.9	+02.4	168	44.0	+02.5	169	43.2	+02.4	170	42.3	+02.5	09		
10	181	48.2	+02.5	182	47.3	+02.5	183	46.5	+02.4	184	45.6	+02.5	185	44.8	+02.4	10		
11	196	50.7	+02.4	197	49.8	+02.5	198	48.9	+02.5	199	48.1	+02.4	200	47.2	+02.5	11		
12	211	53.1	+02.5	212	52.3	+02.4	213	51.4	+02.5	214	50.5	+02.5	215	49.7	+02.4	12		
13	226	55.6	+02.5	227	54.7	+02.5	228	53.9	+02.4	229	53.0	+02.5	230	52.1	+02.5	13		
14	241	58.1	+02.4	242	57.2	+02.5	243	56.3	+02.5	244	55.5	+02.4	245	54.6	+02.5	14		
15	257	00.5	+02.5	257	59.7	+02.4	258	58.8	+02.5	259	57.9	+02.5	260	57.1	+02.4	15		
16	272	03.0	+02.5	273	02.1	+02.5	274	01.3	+02.4	275	00.4	+02.5	275	59.5	+02.5	16		
17	287	05.5	+02.4	288	04.6	+02.5	289	03.7	+02.5	290	02.9	+02.4	291	02.0	+02.5	17		
18	302	07.9	+02.5	303	07.1	+02.4	304	06.2	+02.5	305	05.3	+02.5	306	04.5	+02.4	18		
19	317	10.4	+02.4	318	09.5	+02.5	319	08.7	+02.4	320	07.8	+02.5	321	06.9	+02.5	19		
20	332	12.8	+02.5	333	12.0	+02.4	334	11.1	+02.5	335	10.3	+02.4	336	09.4	+02.5	20		
21	347	15.3	+02.5	348	14.4	+02.5	349	13.6	+02.4	350	12.7	+02.5	351	11.9	+02.4	21		
22	2	17.8	+02.4	3	16.9	+02.5	4	16.0	+02.5	5	15.2	+02.4	6	14.3	+02.5	22		
23	17	20.2	+02.5	18	19.4	+02.4	19	18.5	+02.5	20	17.6	+02.5	21	16.8	+02.5	23		

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.4	N 29	13.1	Gienah	175	45.7	S 17	39.9
Ankaa	353	08.7	S 42	10.9	Acrux	173	02.8	S 63	13.3
Schedir	349	32.6	N 56	39.8	Gacrux	171	54.3	S 57	14.1
Diphda	348	48.9	S 17	51.7	Alioth	166	15.3	N 55	50.2
Achernar	335	21.0	S 57	07.3	Spica	158	24.6	S 11	16.6
Hamal	327	53.0	N 23	34.3	Alkaid	152	53.9	N 49	12.1
Polaris	314	28.8	N 89	21.5	Hadar	148	39.3	S 60	28.8
Acamar	315	12.7	S 40	12.7	Menkent	147	59.9	S 36	28.5
Menkar	314	07.8	N 04	10.8	Arcturus	145	49.6	N 19	04.7
Mirfak	308	30.4	N 49	56.5	Rigel Kentaurus	139	40.9	S 60	55.8
Aldebaran	290	41.5	N 16	33.4	Zubenelgenubi	136	58.4	S 16	08.0
Capella	280	24.4	N 46	01.3	Kocab	137	20.9	N 74	03.8
Rigel	281	05.4	S 08	10.4	Alphecca	126	05.7	N 26	38.5
Bellatrix	278	24.6	N 06	22.3	Antares	112	18.5	S 26	28.9
Elnath	278	04.0	N 28	37.6	Atria	107	14.7	S 69	04.2
Alnilam	275	39.4	S 01	11.1	Sabik	102	05.2	S 15	45.2
Betelgeuze	270	53.9	N 07	24.8	Shaula	96	13.1	S 37	07.2
Canopus	263	53.0	S 52	42.1	Rasalhague	96	00.5	N 12	32.8
Sirius	258	27.6	S 16	44.1	Etamin	90	43.3	N 51	29.4
Adhara	255	07.2	S 28	59.9	Kaus Australis	83	35.1	S 34	22.4
Castor	245	59.3	N 31	50.3	Vega	80	34.7	N 38	48.4
Procyon	244	52.5	N 05	10.5	Nunki	75	50.2	S 26	16.1
Pollux	243	19.2	N 27	58.3	Albireo	67	05.6	N 28	00.6
Avior	234	15.5	S 59	34.5	Altair	62	02.0	N 08	55.7
Suhail	222	47.8	S 43	31.1	Peacock	53	08.6	S 56	39.9
Miaplacidus	221	38.7	S 69	48.2	Deneb	49	27.0	N 45	21.9
Alphard	217	49.7	S 08	45.2	Enif	33	40.5	N 09	58.9
Regulus	207	36.5	N 11	51.5	Alnair	27	35.1	S 46	51.2
Dubhe	193	43.6	N 61	37.6	Formalhaut	15	16.4	S 29	30.1
Denebola	182	27.0	N 14	26.9	Markab	13	31.5	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 301 of 365		day 302 of 365		day 303 of 365		day 304 of 365		day 305 of 365		UT
	<i>October 28</i>		<i>October 29</i>		<i>October 30</i>		<i>October 31</i>		<i>November 1</i>		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	36	19.3 +02.4	37	18.4 +02.5	38	17.5 +02.5	39	16.7 +02.4	40	15.8 +02.5	00
01	51	21.7 +02.5	52	20.9 +02.4	53	20.0 +02.5	54	19.1 +02.5	55	18.3 +02.4	01
02	66	24.2 +02.4	67	23.3 +02.5	68	22.5 +02.4	69	21.6 +02.5	70	20.7 +02.5	02
03	81	26.6 +02.5	82	25.8 +02.4	83	24.9 +02.5	84	24.1 +02.4	85	23.2 +02.5	03
04	96	29.1 +02.5	97	28.2 +02.5	98	27.4 +02.5	99	26.5 +02.5	100	25.7 +02.4	04
05	111	31.6 +02.4	112	30.7 +02.5	113	29.9 +02.4	114	29.0 +02.5	115	28.1 +02.5	05
06	126	34.0 +02.5	127	33.2 +02.4	128	32.3 +02.5	129	31.5 +02.4	130	30.6 +02.5	06
07	141	36.5 +02.5	142	35.6 +02.5	143	34.8 +02.4	144	33.9 +02.5	145	33.1 +02.4	07
08	156	39.0 +02.4	157	38.1 +02.5	158	37.2 +02.5	159	36.4 +02.5	160	35.5 +02.5	08
09	171	41.4 +02.5	172	40.6 +02.4	173	39.7 +02.5	174	38.9 +02.4	175	38.0 +02.5	09
10	186	43.9 +02.5	187	43.0 +02.5	188	42.2 +02.4	189	41.3 +02.5	190	40.5 +02.4	10
11	201	46.4 +02.4	202	45.5 +02.5	203	44.6 +02.5	204	43.8 +02.4	205	42.9 +02.5	11
12	216	48.8 +02.5	217	48.0 +02.4	218	47.1 +02.5	219	46.2 +02.5	220	45.4 +02.4	12
13	231	51.3 +02.5	232	50.4 +02.5	233	49.6 +02.4	234	48.7 +02.5	235	47.8 +02.5	13
14	246	53.8 +02.4	247	52.9 +02.5	248	52.0 +02.5	249	51.2 +02.4	250	50.3 +02.5	14
15	261	56.2 +02.5	262	55.4 +02.4	263	54.5 +02.5	264	53.6 +02.5	265	52.8 +02.4	15
16	276	58.7 +02.4	277	57.8 +02.5	278	57.0 +02.4	279	56.1 +02.5	280	55.2 +02.5	16
17	292	01.1 +02.5	293	00.3 +02.4	293	59.4 +02.5	294	58.6 +02.4	295	57.7 +02.5	17
18	307	03.6 +02.5	308	02.7 +02.5	309	01.9 +02.5	310	01.0 +02.5	311	00.2 +02.4	18
19	322	06.1 +02.4	323	05.2 +02.5	324	04.4 +02.4	325	03.5 +02.5	326	02.6 +02.5	19
20	337	08.5 +02.5	338	07.7 +02.4	339	06.8 +02.5	340	06.0 +02.4	341	05.1 +02.5	20
21	352	11.0 +02.5	353	10.1 +02.5	354	09.3 +02.4	355	08.4 +02.5	356	07.6 +02.4	21
22	7	13.5 +02.4	8	12.6 +02.5	9	11.7 +02.5	10	10.9 +02.5	11	10.0 +02.5	22
23	22	15.9 +02.5	23	15.1 +02.4	24	14.2 +02.5	25	13.4 +02.4	26	12.5 +02.5	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 36.4	N 29 13.1	Gienah	175 45.7	S 17 39.9
Ankaa	353 08.7	S 42 10.9	Acrux	173 02.8	S 63 13.2
Schedir	349 32.6	N 56 39.9	Gacrux	171 54.3	S 57 14.1
Diphda	348 48.9	S 17 51.7	Alioth	166 15.2	N 55 50.2
Achernar	335 21.1	S 57 07.3	Spica	158 24.6	S 11 16.6
Hamal	327 53.0	N 23 34.3	Alkaid	152 53.9	N 49 12.1
Polaris	314 27.6	N 89 21.5	Hadar	148 39.3	S 60 28.8
Acamar	315 12.7	S 40 12.7	Menkent	147 59.9	S 36 28.5
Menkar	314 07.8	N 04 10.8	Arcturus	145 49.6	N 19 04.7
Mirfak	308 30.4	N 49 56.5	Rigel Kentaurus	139 40.9	S 60 55.8
Aldebaran	290 41.5	N 16 33.4	Zubenelgenubi	136 58.4	S 16 08.0
Capella	280 24.3	N 46 01.3	Kocab	137 20.9	N 74 03.8
Rigel	281 05.4	S 08 10.4	Alphecca	126 05.7	N 26 38.5
Bellatrix	278 24.6	N 06 22.3	Antares	112 18.5	S 26 28.9
Elnath	278 04.0	N 28 37.6	Atria	107 14.8	S 69 04.2
Alnilam	275 39.4	S 01 11.1	Sabik	102 05.2	S 15 45.2
Betelgeuze	270 53.9	N 07 24.8	Shaula	96 13.2	S 37 07.2
Canopus	263 53.0	S 52 42.1	Rasalhague	96 00.5	N 12 32.8
Sirius	258 27.5	S 16 44.2	Etamin	90 43.4	N 51 29.4
Adhara	255 07.2	S 28 59.9	Kaus Australis	83 35.2	S 34 22.4
Castor	245 59.3	N 31 50.3	Vega	80 34.8	N 38 48.4
Procyon	244 52.5	N 05 10.5	Nunki	75 50.2	S 26 16.1
Pollux	243 19.2	N 27 58.3	Albireo	67 05.6	N 28 00.6
Avior	234 15.5	S 59 34.6	Altair	62 02.0	N 08 55.7
Suhail	222 47.7	S 43 31.1	Peacock	53 08.6	S 56 39.9
Miaplacidus	221 38.7	S 69 48.2	Deneb	49 27.0	N 45 21.9
Alphard	217 49.7	S 08 45.2	Enif	33 40.5	N 09 58.9
Regulus	207 36.4	N 11 51.5	Alnair	27 35.1	S 46 51.2
Dubhe	193 43.6	N 61 37.6	Formalhaut	15 16.5	S 29 30.1
Denebola	182 26.9	N 14 26.9	Markab	13 31.5	N 15 19.8

2022 - First Point of Aries / Selected Stars

UT	day 306 of 365		day 307 of 365		day 308 of 365		day 309 of 365		day 310 of 365		UT		
	November 2		November 3		November 4		November 5		November 6				
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
	°	'	°	'	°	'	°	'	°	'			
00	41	15.0	+02.4	42	14.1	+02.5	43	13.2	+02.5	44	12.4	+02.4	00
01	56	17.4	+02.5	57	16.6	+02.4	58	15.7	+02.5	59	14.8	+02.5	01
02	71	19.9	+02.4	72	19.0	+02.5	73	18.2	+02.4	74	17.3	+02.5	02
03	86	22.3	+02.5	87	21.5	+02.4	88	20.6	+02.5	89	19.8	+02.4	03
04	101	24.8	+02.5	102	23.9	+02.5	103	23.1	+02.5	104	22.2	+02.5	04
05	116	27.3	+02.4	117	26.4	+02.5	118	25.6	+02.4	119	24.7	+02.5	05
06	131	29.7	+02.5	132	28.9	+02.4	133	28.0	+02.5	134	27.2	+02.4	06
07	146	32.2	+02.5	147	31.3	+02.5	148	30.5	+02.4	149	29.6	+02.5	07
08	161	34.7	+02.4	162	33.8	+02.5	163	32.9	+02.5	164	32.1	+02.4	08
09	176	37.1	+02.5	177	36.3	+02.4	178	35.4	+02.5	179	34.5	+02.5	09
10	191	39.6	+02.5	192	38.7	+02.5	193	37.9	+02.4	194	37.0	+02.5	10
11	206	42.1	+02.4	207	41.2	+02.5	208	40.3	+02.5	209	39.5	+02.4	11
12	221	44.5	+02.5	222	43.7	+02.4	223	42.8	+02.5	224	41.9	+02.5	12
13	236	47.0	+02.5	237	46.1	+02.5	238	45.3	+02.4	239	44.4	+02.5	13
14	251	49.5	+02.4	252	48.6	+02.5	253	47.7	+02.5	254	46.9	+02.4	14
15	266	51.9	+02.5	267	51.1	+02.4	268	50.2	+02.5	269	49.3	+02.5	15
16	281	54.4	+02.4	282	53.5	+02.5	283	52.7	+02.4	284	51.8	+02.5	16
17	296	56.8	+02.5	297	56.0	+02.4	298	55.1	+02.5	299	54.3	+02.4	17
18	311	59.3	+02.5	312	58.4	+02.5	313	57.6	+02.4	314	56.7	+02.5	18
19	327	01.8	+02.4	328	00.9	+02.5	329	00.0	+02.5	329	59.2	+02.4	19
20	342	04.2	+02.5	343	03.4	+02.4	344	02.5	+02.5	345	01.6	+02.5	20
21	357	06.7	+02.5	358	05.8	+02.5	359	05.0	+02.4	0	04.1	+02.5	21
22	12	09.2	+02.4	13	08.3	+02.5	14	07.4	+02.5	15	06.6	+02.4	22
23	27	11.6	+02.5	28	10.8	+02.4	29	09.9	+02.5	30	09.0	+02.5	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.4	N 29	13.2	Gienah	175	45.7	S 17	39.9
Ankaa	353	08.7	S 42	10.9	Acrux	173	02.7	S 63	13.2
Schedir	349	32.6	N 56	39.9	Gacrux	171	54.2	S 57	14.1
Diphda	348	48.9	S 17	51.7	Alioth	166	15.2	N 55	50.2
Achernar	335	21.0	S 57	07.3	Spica	158	24.5	S 11	16.6
Hamal	327	53.0	N 23	34.3	Alkaid	152	53.9	N 49	12.0
Polaris	314	26.6	N 89	21.6	Hadar	148	39.2	S 60	28.8
Acamar	315	12.7	S 40	12.8	Menkent	147	59.9	S 36	28.5
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.6	N 19	04.7
Mirfak	308	30.4	N 49	56.5	Rigel Kentaurus	139	40.8	S 60	55.8
Aldebaran	290	41.4	N 16	33.4	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	24.3	N 46	01.3	Kocab	137	20.9	N 74	03.7
Rigel	281	05.4	S 08	10.4	Alphecca	126	05.7	N 26	38.5
Bellatrix	278	24.6	N 06	22.3	Antares	112	18.5	S 26	28.9
Elnath	278	03.9	N 28	37.6	Atria	107	14.8	S 69	04.2
Alnilam	275	39.3	S 01	11.1	Sabik	102	05.2	S 15	45.2
Betelgeuze	270	53.9	N 07	24.7	Shaula	96	13.2	S 37	07.2
Canopus	263	52.9	S 52	42.2	Rasalhague	96	00.5	N 12	32.8
Sirius	258	27.5	S 16	44.2	Etamin	90	43.4	N 51	29.4
Adhara	255	07.1	S 28	59.9	Kaus Australis	83	35.2	S 34	22.4
Castor	245	59.2	N 31	50.3	Vega	80	34.8	N 38	48.4
Procyon	244	52.4	N 05	10.5	Nunki	75	50.2	S 26	16.1
Pollux	243	19.1	N 27	58.3	Albireo	67	05.7	N 28	00.6
Avior	234	15.4	S 59	34.6	Altair	62	02.0	N 08	55.7
Suhail	222	47.7	S 43	31.1	Peacock	53	08.7	S 56	39.9
Miaplacidus	221	38.6	S 69	48.3	Deneb	49	27.1	N 45	21.9
Alphard	217	49.6	S 08	45.2	Enif	33	40.5	N 09	58.9
Regulus	207	36.4	N 11	51.4	Alnair	27	35.1	S 46	51.2
Dubhe	193	43.5	N 61	37.6	Formalhaut	15	16.5	S 29	30.1
Denebola	182	26.9	N 14	26.8	Markab	13	31.6	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 311 of 365		day 312 of 365		day 313 of 365		day 314 of 365		day 315 of 365		UT					
	<i>November 7</i>		<i>November 8</i>		<i>November 9</i>		<i>November 10</i>		<i>November 11</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	46	10.6	+02.5	47	09.8	+02.4	48	08.9	+02.5	49	08.1	+02.4	50	07.2	+02.5	00
01	61	13.1	+02.5	62	12.2	+02.5	63	11.4	+02.4	64	10.5	+02.5	65	09.7	+02.4	01
02	76	15.6	+02.4	77	14.7	+02.5	78	13.8	+02.5	79	13.0	+02.5	80	12.1	+02.5	02
03	91	18.0	+02.5	92	17.2	+02.4	93	16.3	+02.5	94	15.5	+02.4	95	14.6	+02.5	03
04	106	20.5	+02.5	107	19.6	+02.5	108	18.8	+02.4	109	17.9	+02.5	110	17.1	+02.4	04
05	121	23.0	+02.4	122	22.1	+02.5	123	21.2	+02.5	124	20.4	+02.4	125	19.5	+02.5	05
06	136	25.4	+02.5	137	24.6	+02.4	138	23.7	+02.5	139	22.8	+02.5	140	22.0	+02.4	06
07	151	27.9	+02.5	152	27.0	+02.5	153	26.2	+02.4	154	25.3	+02.5	155	24.4	+02.5	07
08	166	30.4	+02.4	167	29.5	+02.5	168	28.6	+02.5	169	27.8	+02.4	170	26.9	+02.5	08
09	181	32.8	+02.5	182	32.0	+02.4	183	31.1	+02.5	184	30.2	+02.5	185	29.4	+02.4	09
10	196	35.3	+02.4	197	34.4	+02.5	198	33.6	+02.4	199	32.7	+02.5	200	31.8	+02.5	10
11	211	37.7	+02.5	212	36.9	+02.5	213	36.0	+02.5	214	35.2	+02.4	215	34.3	+02.5	11
12	226	40.2	+02.5	227	39.4	+02.4	228	38.5	+02.5	229	37.6	+02.5	230	36.8	+02.4	12
13	241	42.7	+02.4	242	41.8	+02.5	243	41.0	+02.4	244	40.1	+02.5	245	39.2	+02.5	13
14	256	45.1	+02.5	257	44.3	+02.4	258	43.4	+02.5	259	42.6	+02.4	260	41.7	+02.5	14
15	271	47.6	+02.5	272	46.7	+02.5	273	45.9	+02.4	274	45.0	+02.5	275	44.2	+02.4	15
16	286	50.1	+02.4	287	49.2	+02.5	288	48.3	+02.5	289	47.5	+02.5	290	46.6	+02.5	16
17	301	52.5	+02.5	302	51.7	+02.4	303	50.8	+02.5	304	50.0	+02.4	305	49.1	+02.5	17
18	316	55.0	+02.5	317	54.1	+02.5	318	53.3	+02.4	319	52.4	+02.5	320	51.6	+02.4	18
19	331	57.5	+02.4	332	56.6	+02.5	333	55.7	+02.5	334	54.9	+02.4	335	54.0	+02.5	19
20	346	59.9	+02.5	347	59.1	+02.4	348	58.2	+02.5	349	57.3	+02.5	350	56.5	+02.4	20
21	2	02.4	+02.5	3	01.5	+02.5	4	00.7	+02.4	4	59.8	+02.5	5	58.9	+02.5	21
22	17	04.9	+02.4	18	04.0	+02.5	19	03.1	+02.5	20	02.3	+02.4	21	01.4	+02.5	22
23	32	07.3	+02.5	33	06.5	+02.4	34	05.6	+02.5	35	04.7	+02.5	36	03.9	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.4	N 29	13.2	Gienah	175	45.7	S 17	39.9
Ankaa	353	08.7	S 42	10.9	Acrux	173	02.7	S 63	13.2
Schedir	349	32.7	N 56	39.9	Gacrux	171	54.2	S 57	14.1
Diphda	348	48.9	S 17	51.7	Alioth	166	15.2	N 55	50.1
Achernar	335	21.1	S 57	07.4	Spica	158	24.5	S 11	16.6
Hamal	327	53.0	N 23	34.3	Alkaid	152	53.9	N 49	12.0
Polaris	314	26.2	N 89	21.6	Hadar	148	39.2	S 60	28.8
Acamar	315	12.7	S 40	12.8	Menkent	147	59.9	S 36	28.5
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.5	N 19	04.7
Mirfak	308	30.4	N 49	56.5	Rigel Kentaurus	139	40.8	S 60	55.8
Aldebaran	290	41.4	N 16	33.4	Zubenelgenubi	136	58.3	S 16	08.0
Capella	280	24.2	N 46	01.3	Kocab	137	20.9	N 74	03.7
Rigel	281	05.3	S 08	10.4	Alphecca	126	05.7	N 26	38.4
Bellatrix	278	24.6	N 06	22.3	Antares	112	18.5	S 26	28.9
Elnath	278	03.9	N 28	37.6	Atria	107	14.8	S 69	04.1
Alnilam	275	39.3	S 01	11.1	Sabik	102	05.2	S 15	45.2
Betelgeuze	270	53.8	N 07	24.7	Shaula	96	13.2	S 37	07.2
Canopus	263	52.9	S 52	42.2	Rasalhague	96	00.5	N 12	32.8
Sirius	258	27.5	S 16	44.2	Etamin	90	43.4	N 51	29.3
Adhara	255	07.1	S 28	59.9	Kaus Australis	83	35.2	S 34	22.4
Castor	245	59.2	N 31	50.3	Vega	80	34.8	N 38	48.4
Procyon	244	52.4	N 05	10.5	Nunki	75	50.2	S 26	16.1
Pollux	243	19.1	N 27	58.3	Albireo	67	05.7	N 28	00.6
Avior	234	15.3	S 59	34.6	Altair	62	02.0	N 08	55.7
Suhail	222	47.6	S 43	31.1	Peacock	53	08.7	S 56	39.9
Miaplacidus	221	38.5	S 69	48.3	Deneb	49	27.1	N 45	21.9
Alphard	217	49.6	S 08	45.2	Enif	33	40.5	N 09	58.9
Regulus	207	36.4	N 11	51.4	Alnair	27	35.1	S 46	51.2
Dubhe	193	43.5	N 61	37.5	Formalhaut	15	16.5	S 29	30.2
Denebola	182	26.9	N 14	26.8	Markab	13	31.6	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 316 of 365 November 12		day 317 of 365 November 13		day 318 of 365 November 14		day 319 of 365 November 15		day 320 of 365 November 16		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	
00	51 06.3	+02.5	52 05.5	+02.4	53 04.6	+02.5	54 03.8	+02.4	55 02.9	+02.5	00
01	66 08.8	+02.5	67 07.9	+02.5	68 07.1	+02.4	69 06.2	+02.5	70 05.4	+02.4	01
02	81 11.3	+02.4	82 10.4	+02.5	83 09.5	+02.5	84 08.7	+02.5	85 07.8	+02.5	02
03	96 13.7	+02.5	97 12.9	+02.4	98 12.0	+02.5	99 11.2	+02.4	100 10.3	+02.5	03
04	111 16.2	+02.5	112 15.3	+02.5	113 14.5	+02.4	114 13.6	+02.5	115 12.8	+02.4	04
05	126 18.7	+02.4	127 17.8	+02.5	128 16.9	+02.5	129 16.1	+02.4	130 15.2	+02.5	05
06	141 21.1	+02.5	142 20.3	+02.4	143 19.4	+02.5	144 18.5	+02.5	145 17.7	+02.4	06
07	156 23.6	+02.5	157 22.7	+02.5	158 21.9	+02.4	159 21.0	+02.5	160 20.1	+02.5	07
08	171 26.1	+02.4	172 25.2	+02.5	173 24.3	+02.5	174 23.5	+02.4	175 22.6	+02.5	08
09	186 28.5	+02.5	187 27.7	+02.4	188 26.8	+02.5	189 25.9	+02.5	190 25.1	+02.4	09
10	201 31.0	+02.4	202 30.1	+02.5	203 29.3	+02.4	204 28.4	+02.5	205 27.5	+02.5	10
11	216 33.4	+02.5	217 32.6	+02.5	218 31.7	+02.5	219 30.9	+02.4	220 30.0	+02.5	11
12	231 35.9	+02.5	232 35.1	+02.4	233 34.2	+02.5	234 33.3	+02.5	235 32.5	+02.4	12
13	246 38.4	+02.4	247 37.5	+02.5	248 36.7	+02.4	249 35.8	+02.5	250 34.9	+02.5	13
14	261 40.8	+02.5	262 40.0	+02.4	263 39.1	+02.5	264 38.3	+02.4	265 37.4	+02.5	14
15	276 43.3	+02.5	277 42.4	+02.5	278 41.6	+02.4	279 40.7	+02.5	280 39.9	+02.4	15
16	291 45.8	+02.4	292 44.9	+02.5	293 44.0	+02.5	294 43.2	+02.5	295 42.3	+02.5	16
17	306 48.2	+02.5	307 47.4	+02.4	308 46.5	+02.5	309 45.7	+02.4	310 44.8	+02.5	17
18	321 50.7	+02.5	322 49.8	+02.5	323 49.0	+02.4	324 48.1	+02.5	325 47.3	+02.4	18
19	336 53.2	+02.4	337 52.3	+02.5	338 51.4	+02.5	339 50.6	+02.4	340 49.7	+02.5	19
20	351 55.6	+02.5	352 54.8	+02.4	353 53.9	+02.5	354 53.0	+02.5	355 52.2	+02.4	20
21	6 58.1	+02.5	7 57.2	+02.5	8 56.4	+02.4	9 55.5	+02.5	10 54.6	+02.5	21
22	22 00.6	+02.4	22 59.7	+02.5	23 58.8	+02.5	24 58.0	+02.4	25 57.1	+02.5	22
23	37 03.0	+02.5	38 02.2	+02.4	39 01.3	+02.5	40 00.4	+02.5	40 59.6	+02.4	23

	SHA	Dec		SHA	Dec
	° ' "	° ' "		° ' "	° ' "
Alpheratz	357 36.5	N 29 13.2	Gienah	175 45.6	S 17 39.9
Ankaa	353 08.7	S 42 10.9	Acrux	173 02.6	S 63 13.2
Schedir	349 32.7	N 56 39.9	Gacrux	171 54.1	S 57 14.1
Diphda	348 48.9	S 17 51.7	Alioth	166 15.1	N 55 50.1
Achernar	335 21.1	S 57 07.4	Spica	158 24.5	S 11 16.6
Hamal	327 53.0	N 23 34.3	Alkaid	152 53.9	N 49 12.0
Polaris	314 25.5	N 89 21.6	Hadar	148 39.2	S 60 28.8
Acamar	315 12.7	S 40 12.8	Menkent	147 59.8	S 36 28.5
Menkar	314 07.7	N 04 10.8	Arcturus	145 49.5	N 19 04.7
Mirfak	308 30.3	N 49 56.5	Rigel Kentaurus	139 40.8	S 60 55.8
Aldebaran	290 41.4	N 16 33.4	Zubenelgenubi	136 58.3	S 16 08.0
Capella	280 24.2	N 46 01.3	Kocab	137 20.9	N 74 03.7
Rigel	281 05.3	S 08 10.4	Alphecca	126 05.7	N 26 38.4
Bellatrix	278 24.5	N 06 22.3	Antares	112 18.5	S 26 28.9
Elnath	278 03.8	N 28 37.6	Atria	107 14.8	S 69 04.1
Alnilam	275 39.3	S 01 11.2	Sabik	102 05.2	S 15 45.2
Betelgeuze	270 53.8	N 07 24.7	Shaula	96 13.2	S 37 07.2
Canopus	263 52.8	S 52 42.2	Rasalhague	96 00.6	N 12 32.8
Sirius	258 27.4	S 16 44.2	Etamin	90 43.4	N 51 29.3
Adhara	255 07.0	S 28 59.9	Kaus Australis	83 35.2	S 34 22.4
Castor	245 59.1	N 31 50.3	Vega	80 34.8	N 38 48.4
Procyon	244 52.4	N 05 10.4	Nunki	75 50.2	S 26 16.1
Pollux	243 19.0	N 27 58.2	Albireo	67 05.7	N 28 00.6
Avior	234 15.3	S 59 34.6	Altair	62 02.0	N 08 55.7
Suhail	222 47.6	S 43 31.1	Peacock	53 08.7	S 56 39.9
Miaplacidus	221 38.4	S 69 48.3	Deneb	49 27.1	N 45 21.9
Alphard	217 49.5	S 08 45.3	Enif	33 40.6	N 09 58.9
Regulus	207 36.3	N 11 51.4	Alnair	27 35.2	S 46 51.2
Dubhe	193 43.4	N 61 37.5	Formalhaut	15 16.5	S 29 30.2
Denebola	182 26.8	N 14 26.8	Markab	13 31.6	N 15 19.8

2022 - First Point of Aries / Selected Stars

UT	day 321 of 365 November 17		day 322 of 365 November 18		day 323 of 365 November 19		day 324 of 365 November 20		day 325 of 365 November 21		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	
00	56	02.0 +02.5	57	01.2 +02.4	58	00.3 +02.5	58	59.5 +02.4	59	58.6 +02.5	00
01	71	04.5 +02.5	72	03.6 +02.5	73	02.8 +02.4	74	01.9 +02.5	75	01.1 +02.4	01
02	86	07.0 +02.4	87	06.1 +02.5	88	05.2 +02.5	89	04.4 +02.4	90	03.5 +02.5	02
03	101	09.4 +02.5	102	08.6 +02.4	103	07.7 +02.5	104	06.8 +02.5	105	06.0 +02.4	03
04	116	11.9 +02.5	117	11.0 +02.5	118	10.2 +02.4	119	09.3 +02.5	120	08.4 +02.5	04
05	131	14.4 +02.4	132	13.5 +02.5	133	12.6 +02.5	134	11.8 +02.4	135	10.9 +02.5	05
06	146	16.8 +02.5	147	16.0 +02.4	148	15.1 +02.5	149	14.2 +02.5	150	13.4 +02.4	06
07	161	19.3 +02.5	162	18.4 +02.5	163	17.6 +02.4	164	16.7 +02.5	165	15.8 +02.5	07
08	176	21.8 +02.4	177	20.9 +02.5	178	20.0 +02.5	179	19.2 +02.4	180	18.3 +02.5	08
09	191	24.2 +02.5	192	23.4 +02.4	193	22.5 +02.5	194	21.6 +02.5	195	20.8 +02.4	09
10	206	26.7 +02.4	207	25.8 +02.5	208	25.0 +02.4	209	24.1 +02.5	210	23.2 +02.5	10
11	221	29.1 +02.5	222	28.3 +02.4	223	27.4 +02.5	224	26.6 +02.4	225	25.7 +02.5	11
12	236	31.6 +02.5	237	30.7 +02.5	238	29.9 +02.4	239	29.0 +02.5	240	28.2 +02.4	12
13	251	34.1 +02.4	252	33.2 +02.5	253	32.3 +02.5	254	31.5 +02.4	255	30.6 +02.5	13
14	266	36.5 +02.5	267	35.7 +02.4	268	34.8 +02.5	269	33.9 +02.5	270	33.1 +02.5	14
15	281	39.0 +02.5	282	38.1 +02.5	283	37.3 +02.4	284	36.4 +02.5	285	35.6 +02.4	15
16	296	41.5 +02.4	297	40.6 +02.5	298	39.7 +02.5	299	38.9 +02.4	300	38.0 +02.5	16
17	311	43.9 +02.5	312	43.1 +02.4	313	42.2 +02.5	314	41.3 +02.5	315	40.5 +02.4	17
18	326	46.4 +02.5	327	45.5 +02.5	328	44.7 +02.4	329	43.8 +02.5	330	42.9 +02.5	18
19	341	48.9 +02.4	342	48.0 +02.5	343	47.1 +02.5	344	46.3 +02.4	345	45.4 +02.5	19
20	356	51.3 +02.5	357	50.5 +02.4	358	49.6 +02.5	359	48.7 +02.5	0	47.9 +02.4	20
21	11	53.8 +02.4	12	52.9 +02.5	13	52.1 +02.4	14	51.2 +02.5	15	50.3 +02.5	21
22	26	56.2 +02.5	27	55.4 +02.5	28	54.5 +02.5	29	53.7 +02.4	30	52.8 +02.5	22
23	41	58.7 +02.5	42	57.9 +02.4	43	57.0 +02.5	44	56.1 +02.5	45	55.3 +02.4	23

	SHA	Dec		SHA	Dec
	° ' "	° ' "		° ' "	° ' "
Alpheratz	357 36.5	N 29 13.2	Gienah	175 45.6	S 17 39.9
Ankaa	353 08.7	S 42 11.0	Acrux	173 02.6	S 63 13.2
Schedir	349 32.7	N 56 39.9	Gacrux	171 54.1	S 57 14.0
Diphda	348 48.9	S 17 51.8	Alioth	166 15.1	N 55 50.1
Achernar	335 21.1	S 57 07.4	Spica	158 24.5	S 11 16.6
Hamal	327 53.0	N 23 34.3	Alkaid	152 53.8	N 49 11.9
Polaris	314 25.3	N 89 21.7	Hadar	148 39.1	S 60 28.7
Acamar	315 12.7	S 40 12.8	Menkent	147 59.8	S 36 28.5
Menkar	314 07.7	N 04 10.8	Arcturus	145 49.5	N 19 04.6
Mirfak	308 30.3	N 49 56.6	Rigel Kentaurus	139 40.8	S 60 55.8
Aldebaran	290 41.4	N 16 33.4	Zubenelgenubi	136 58.3	S 16 08.0
Capella	280 24.1	N 46 01.3	Kocab	137 20.9	N 74 03.6
Rigel	281 05.3	S 08 10.4	Alphecca	126 05.7	N 26 38.4
Bellatrix	278 24.5	N 06 22.3	Antares	112 18.5	S 26 28.9
Elnath	278 03.8	N 28 37.7	Atria	107 14.8	S 69 04.1
Alnilam	275 39.3	S 01 11.2	Sabik	102 05.2	S 15 45.2
Betelgeuze	270 53.8	N 07 24.7	Shaula	96 13.2	S 37 07.2
Canopus	263 52.8	S 52 42.2	Rasalhague	96 00.6	N 12 32.8
Sirius	258 27.4	S 16 44.2	Etamin	90 43.5	N 51 29.3
Adhara	255 07.0	S 28 59.9	Kaus Australis	83 35.2	S 34 22.4
Castor	245 59.1	N 31 50.3	Vega	80 34.8	N 38 48.3
Procyon	244 52.3	N 05 10.4	Nunki	75 50.2	S 26 16.1
Pollux	243 19.0	N 27 58.2	Albireo	67 05.7	N 28 00.6
Avior	234 15.2	S 59 34.6	Altair	62 02.1	N 08 55.7
Suhail	222 47.5	S 43 31.1	Peacock	53 08.8	S 56 39.9
Miaplacidus	221 38.3	S 69 48.3	Deneb	49 27.2	N 45 21.9
Alphard	217 49.5	S 08 45.3	Enif	33 40.6	N 09 58.9
Regulus	207 36.3	N 11 51.4	Alnair	27 35.2	S 46 51.2
Dubhe	193 43.3	N 61 37.5	Formalhaut	15 16.5	S 29 30.2
Denebola	182 26.8	N 14 26.8	Markab	13 31.6	N 15 19.8

2022 - First Point of Aries / Selected Stars

UT	day 326 of 365		day 327 of 365		day 328 of 365		day 329 of 365		day 330 of 365		UT
	November 22		November 23		November 24		November 25		November 26		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	60	57.7 +02.5	61	56.9 +02.4	62	56.0 +02.5	63	55.1 +02.5	64	54.3 +02.5	00
01	76	00.2 +02.5	76	59.3 +02.5	77	58.5 +02.4	78	57.6 +02.5	79	56.8 +02.4	01
02	91	02.7 +02.4	92	01.8 +02.5	93	00.9 +02.5	94	00.1 +02.4	94	59.2 +02.5	02
03	106	05.1 +02.5	107	04.3 +02.4	108	03.4 +02.5	109	02.5 +02.5	110	01.7 +02.4	03
04	121	07.6 +02.4	122	06.7 +02.5	123	05.9 +02.4	124	05.0 +02.5	125	04.1 +02.5	04
05	136	10.0 +02.5	137	09.2 +02.5	138	08.3 +02.5	139	07.5 +02.4	140	06.6 +02.5	05
06	151	12.5 +02.5	152	11.7 +02.4	153	10.8 +02.5	154	09.9 +02.5	155	09.1 +02.4	06
07	166	15.0 +02.4	167	14.1 +02.5	168	13.3 +02.4	169	12.4 +02.5	170	11.5 +02.5	07
08	181	17.4 +02.5	182	16.6 +02.4	183	15.7 +02.5	184	14.9 +02.4	185	14.0 +02.5	08
09	196	19.9 +02.5	197	19.0 +02.5	198	18.2 +02.4	199	17.3 +02.5	200	16.5 +02.4	09
10	211	22.4 +02.4	212	21.5 +02.5	213	20.6 +02.5	214	19.8 +02.5	215	18.9 +02.5	10
11	226	24.8 +02.5	227	24.0 +02.4	228	23.1 +02.5	229	22.3 +02.4	230	21.4 +02.5	11
12	241	27.3 +02.5	242	26.4 +02.5	243	25.6 +02.4	244	24.7 +02.5	245	23.9 +02.4	12
13	256	29.8 +02.4	257	28.9 +02.5	258	28.0 +02.5	259	27.2 +02.4	260	26.3 +02.5	13
14	271	32.2 +02.5	272	31.4 +02.4	273	30.5 +02.5	274	29.6 +02.5	275	28.8 +02.5	14
15	286	34.7 +02.5	287	33.8 +02.5	288	33.0 +02.4	289	32.1 +02.5	290	31.3 +02.4	15
16	301	37.2 +02.4	302	36.3 +02.5	303	35.4 +02.5	304	34.6 +02.4	305	33.7 +02.5	16
17	316	39.6 +02.5	317	38.8 +02.4	318	37.9 +02.5	319	37.0 +02.5	320	36.2 +02.4	17
18	331	42.1 +02.4	332	41.2 +02.5	333	40.4 +02.4	334	39.5 +02.5	335	38.6 +02.5	18
19	346	44.5 +02.5	347	43.7 +02.5	348	42.8 +02.5	349	42.0 +02.4	350	41.1 +02.5	19
20	1	47.0 +02.5	2	46.2 +02.4	3	45.3 +02.5	4	44.4 +02.5	5	43.6 +02.4	20
21	16	49.5 +02.4	17	48.6 +02.5	18	47.8 +02.4	19	46.9 +02.5	20	46.0 +02.5	21
22	31	51.9 +02.5	32	51.1 +02.4	33	50.2 +02.5	34	49.4 +02.4	35	48.5 +02.5	22
23	46	54.4 +02.5	47	53.5 +02.5	48	52.7 +02.4	49	51.8 +02.5	50	51.0 +02.4	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 36.5	N 29 13.2	Gienah	175 45.6	S 17 39.9
Ankaa	353 08.8	S 42 11.0	Acrux	173 02.5	S 63 13.2
Schedir	349 32.7	N 56 40.0	Gacrux	171 54.0	S 57 14.0
Diphda	348 49.0	S 17 51.8	Alioth	166 15.1	N 55 50.0
Achernar	335 21.1	S 57 07.4	Spica	158 24.4	S 11 16.6
Hamal	327 53.0	N 23 34.3	Alkaid	152 53.8	N 49 11.9
Polaris	314 25.5	N 89 21.7	Hadar	148 39.1	S 60 28.7
Acamar	315 12.7	S 40 12.8	Menkent	147 59.8	S 36 28.4
Menkar	314 07.7	N 04 10.8	Arcturus	145 49.5	N 19 04.6
Mirfak	308 30.3	N 49 56.6	Rigel Kentaurus	139 40.7	S 60 55.7
Aldebaran	290 41.4	N 16 33.4	Zubenelgenubi	136 58.3	S 16 08.0
Capella	280 24.1	N 46 01.4	Kocab	137 20.9	N 74 03.6
Rigel	281 05.3	S 08 10.4	Alphecca	126 05.7	N 26 38.4
Bellatrix	278 24.5	N 06 22.3	Antares	112 18.5	S 26 28.9
Elnath	278 03.8	N 28 37.7	Atria	107 14.8	S 69 04.1
Alnilam	275 39.2	S 01 11.2	Sabik	102 05.2	S 15 45.2
Betelgeuze	270 53.7	N 07 24.7	Shaula	96 13.2	S 37 07.2
Canopus	263 52.7	S 52 42.2	Rasalhague	96 00.6	N 12 32.8
Sirius	258 27.4	S 16 44.2	Etamin	90 43.5	N 51 29.3
Adhara	255 07.0	S 28 60.0	Kaus Australis	83 35.2	S 34 22.4
Castor	245 59.0	N 31 50.3	Vega	80 34.9	N 38 48.3
Procyon	244 52.3	N 05 10.4	Nunki	75 50.3	S 26 16.1
Pollux	243 18.9	N 27 58.2	Albireo	67 05.7	N 28 00.6
Avior	234 15.2	S 59 34.6	Altair	62 02.1	N 08 55.6
Suhail	222 47.5	S 43 31.1	Peacock	53 08.8	S 56 39.9
Miaplacidus	221 38.2	S 69 48.3	Deneb	49 27.2	N 45 21.9
Alphard	217 49.5	S 08 45.3	Enif	33 40.6	N 09 58.8
Regulus	207 36.2	N 11 51.4	Alnair	27 35.2	S 46 51.2
Dubhe	193 43.3	N 61 37.5	Formalhaut	15 16.5	S 29 30.2
Denebola	182 26.8	N 14 26.8	Markab	13 31.6	N 15 19.8

2022 - First Point of Aries / Selected Stars

UT	day 331 of 365 November 27		day 332 of 365 November 28		day 333 of 365 November 29		day 334 of 365 November 30		day 335 of 365 December 1		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	
00	65	53.4 +02.5	66	52.6 +02.4	67	51.7 +02.5	68	50.9 +02.4	69	50.0 +02.5	00
01	80	55.9 +02.5	81	55.0 +02.5	82	54.2 +02.4	83	53.3 +02.5	84	52.5 +02.4	01
02	95	58.4 +02.4	96	57.5 +02.5	97	56.6 +02.5	98	55.8 +02.4	99	54.9 +02.5	02
03	111	00.8 +02.5	111	60.0 +02.4	112	59.1 +02.5	113	58.2 +02.5	114	57.4 +02.4	03
04	126	03.3 +02.5	127	02.4 +02.5	128	01.6 +02.4	129	00.7 +02.5	129	59.8 +02.5	04
05	141	05.8 +02.4	142	04.9 +02.5	143	04.0 +02.5	144	03.2 +02.4	145	02.3 +02.5	05
06	156	08.2 +02.5	157	07.4 +02.4	158	06.5 +02.5	159	05.6 +02.5	160	04.8 +02.4	06
07	171	10.7 +02.4	172	09.8 +02.5	173	09.0 +02.4	174	08.1 +02.5	175	07.2 +02.5	07
08	186	13.1 +02.5	187	12.3 +02.5	188	11.4 +02.5	189	10.6 +02.4	190	09.7 +02.5	08
09	201	15.6 +02.5	202	14.8 +02.4	203	13.9 +02.5	204	13.0 +02.5	205	12.2 +02.4	09
10	216	18.1 +02.4	217	17.2 +02.5	218	16.4 +02.4	219	15.5 +02.5	220	14.6 +02.5	10
11	231	20.5 +02.5	232	19.7 +02.4	233	18.8 +02.5	234	18.0 +02.4	235	17.1 +02.5	11
12	246	23.0 +02.5	247	22.1 +02.5	248	21.3 +02.4	249	20.4 +02.5	250	19.6 +02.4	12
13	261	25.5 +02.4	262	24.6 +02.5	263	23.7 +02.5	264	22.9 +02.5	265	22.0 +02.5	13
14	276	27.9 +02.5	277	27.1 +02.4	278	26.2 +02.5	279	25.4 +02.4	280	24.5 +02.5	14
15	291	30.4 +02.5	292	29.5 +02.5	293	28.7 +02.4	294	27.8 +02.5	295	27.0 +02.4	15
16	306	32.9 +02.4	307	32.0 +02.5	308	31.1 +02.5	309	30.3 +02.4	310	29.4 +02.5	16
17	321	35.3 +02.5	322	34.5 +02.4	323	33.6 +02.5	324	32.7 +02.5	325	31.9 +02.4	17
18	336	37.8 +02.5	337	36.9 +02.5	338	36.1 +02.4	339	35.2 +02.5	340	34.3 +02.5	18
19	351	40.3 +02.4	352	39.4 +02.5	353	38.5 +02.5	354	37.7 +02.4	355	36.8 +02.5	19
20	6	42.7 +02.5	7	41.9 +02.4	8	41.0 +02.5	9	40.1 +02.5	10	39.3 +02.4	20
21	21	45.2 +02.4	22	44.3 +02.5	23	43.5 +02.4	24	42.6 +02.5	25	41.7 +02.5	21
22	36	47.6 +02.5	37	46.8 +02.5	38	45.9 +02.5	39	45.1 +02.4	40	44.2 +02.5	22
23	51	50.1 +02.5	52	49.3 +02.4	53	48.4 +02.5	54	47.5 +02.5	55	46.7 +02.4	23

	SHA	Dec		SHA	Dec
	° ' "	° ' "		° ' "	° ' "
Alpheratz	357 36.5	N 29 13.2	Gienah	175 45.5	S 17 39.9
Ankaa	353 08.8	S 42 11.0	Acrux	173 02.4	S 63 13.2
Schedir	349 32.7	N 56 40.0	Gacrux	171 54.0	S 57 14.0
Diphda	348 49.0	S 17 51.8	Alioth	166 15.0	N 55 50.0
Achernar	335 21.1	S 57 07.4	Spica	158 24.4	S 11 16.7
Hamal	327 53.0	N 23 34.4	Alkaid	152 53.8	N 49 11.9
Polaris	314 25.3	N 89 21.7	Hadar	148 39.1	S 60 28.7
Acamar	315 12.7	S 40 12.9	Menkent	147 59.8	S 36 28.4
Menkar	314 07.7	N 04 10.8	Arcturus	145 49.5	N 19 04.6
Mirfak	308 30.3	N 49 56.6	Rigel Kentaurus	139 40.7	S 60 55.7
Aldebaran	290 41.3	N 16 33.4	Zubenelgenubi	136 58.3	S 16 08.0
Capella	280 24.1	N 46 01.4	Kocab	137 20.9	N 74 03.6
Rigel	281 05.2	S 08 10.5	Alphecca	126 05.7	N 26 38.3
Bellatrix	278 24.4	N 06 22.3	Antares	112 18.5	S 26 28.9
Elnath	278 03.7	N 28 37.7	Atria	107 14.8	S 69 04.1
Alnilam	275 39.2	S 01 11.2	Sabik	102 05.2	S 15 45.2
Betelgeuze	270 53.7	N 07 24.7	Shaula	96 13.2	S 37 07.2
Canopus	263 52.7	S 52 42.3	Rasalhague	96 00.6	N 12 32.8
Sirius	258 27.3	S 16 44.3	Etamin	90 43.5	N 51 29.3
Adhara	255 06.9	S 28 60.0	Kaus Australis	83 35.2	S 34 22.4
Castor	245 59.0	N 31 50.3	Vega	80 34.9	N 38 48.3
Procyon	244 52.2	N 05 10.4	Nunki	75 50.3	S 26 16.1
Pollux	243 18.9	N 27 58.2	Albireo	67 05.8	N 28 00.6
Avior	234 15.1	S 59 34.6	Altair	62 02.1	N 08 55.6
Suhail	222 47.4	S 43 31.2	Peacock	53 08.8	S 56 39.9
Miaplacidus	221 38.1	S 69 48.3	Deneb	49 27.2	N 45 21.9
Alphard	217 49.4	S 08 45.3	Enif	33 40.6	N 09 58.8
Regulus	207 36.2	N 11 51.4	Alnair	27 35.2	S 46 51.2
Dubhe	193 43.2	N 61 37.5	Formalhaut	15 16.6	S 29 30.2
Denebola	182 26.7	N 14 26.7	Markab	13 31.6	N 15 19.8

2022 - First Point of Aries / Selected Stars

UT	day 336 of 365		day 337 of 365		day 338 of 365		day 339 of 365		day 340 of 365		UT					
	<i>December 2</i>		<i>December 3</i>		<i>December 4</i>		<i>December 5</i>		<i>December 6</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	70	49.1	+02.5	71	48.3	+02.4	72	47.4	+02.5	73	46.5	+02.5	74	45.7	+02.4	00
01	85	51.6	+02.5	86	50.7	+02.5	87	49.9	+02.4	88	49.0	+02.5	89	48.1	+02.5	01
02	100	54.1	+02.4	101	53.2	+02.5	102	52.3	+02.5	103	51.5	+02.4	104	50.6	+02.5	02
03	115	56.5	+02.5	116	55.7	+02.4	117	54.8	+02.5	118	53.9	+02.5	119	53.1	+02.4	03
04	130	59.0	+02.5	131	58.1	+02.5	132	57.3	+02.4	133	56.4	+02.5	134	55.5	+02.5	04
05	146	01.5	+02.4	147	00.6	+02.5	147	59.7	+02.5	148	58.9	+02.4	149	58.0	+02.5	05
06	161	03.9	+02.5	162	03.1	+02.4	163	02.2	+02.5	164	01.3	+02.5	165	00.5	+02.4	06
07	176	06.4	+02.4	177	05.5	+02.5	178	04.7	+02.4	179	03.8	+02.5	180	02.9	+02.5	07
08	191	08.8	+02.5	192	08.0	+02.4	193	07.1	+02.5	194	06.3	+02.4	195	05.4	+02.5	08
09	206	11.3	+02.5	207	10.4	+02.5	208	09.6	+02.4	209	08.7	+02.5	210	07.9	+02.4	09
10	221	13.8	+02.4	222	12.9	+02.5	223	12.0	+02.5	224	11.2	+02.5	225	10.3	+02.5	10
11	236	16.2	+02.5	237	15.4	+02.4	238	14.5	+02.5	239	13.7	+02.4	240	12.8	+02.5	11
12	251	18.7	+02.5	252	17.8	+02.5	253	17.0	+02.4	254	16.1	+02.5	255	15.3	+02.4	12
13	266	21.2	+02.4	267	20.3	+02.5	268	19.4	+02.5	269	18.6	+02.4	270	17.7	+02.5	13
14	281	23.6	+02.5	282	22.8	+02.4	283	21.9	+02.5	284	21.0	+02.5	285	20.2	+02.4	14
15	296	26.1	+02.5	297	25.2	+02.5	298	24.4	+02.4	299	23.5	+02.5	300	22.6	+02.5	15
16	311	28.6	+02.4	312	27.7	+02.5	313	26.8	+02.5	314	26.0	+02.4	315	25.1	+02.5	16
17	326	31.0	+02.5	327	30.2	+02.4	328	29.3	+02.5	329	28.4	+02.5	330	27.6	+02.4	17
18	341	33.5	+02.4	342	32.6	+02.5	343	31.8	+02.4	344	30.9	+02.5	345	30.0	+02.5	18
19	356	35.9	+02.5	357	35.1	+02.5	358	34.2	+02.5	359	33.4	+02.4	0	32.5	+02.5	19
20	11	38.4	+02.5	12	37.6	+02.4	13	36.7	+02.5	14	35.8	+02.5	15	35.0	+02.4	20
21	26	40.9	+02.4	27	40.0	+02.5	28	39.2	+02.4	29	38.3	+02.5	30	37.4	+02.5	21
22	41	43.3	+02.5	42	42.5	+02.4	43	41.6	+02.5	44	40.8	+02.4	45	39.9	+02.5	22
23	56	45.8	+02.5	57	44.9	+02.5	58	44.1	+02.4	59	43.2	+02.5	60	42.4	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.5	N 29	13.2	Gienah	175	45.5	S 17	39.9
Ankaa	353	08.8	S 42	11.0	Acrux	173	02.4	S 63	13.2
Schedir	349	32.8	N 56	40.0	Gacrux	171	53.9	S 57	14.0
Diphda	348	49.0	S 17	51.8	Alioth	166	15.0	N 55	50.0
Achernar	335	21.1	S 57	07.5	Spica	158	24.4	S 11	16.7
Hamal	327	53.0	N 23	34.4	Alkaid	152	53.7	N 49	11.8
Polaris	314	26.0	N 89	21.8	Hadar	148	39.0	S 60	28.7
Acamar	315	12.7	S 40	12.9	Menkent	147	59.7	S 36	28.4
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.4	N 19	04.6
Mirfak	308	30.3	N 49	56.6	Rigel Kentaurus	139	40.6	S 60	55.7
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	24.0	N 46	01.4	Kocab	137	20.8	N 74	03.5
Rigel	281	05.2	S 08	10.5	Alphecca	126	05.6	N 26	38.3
Bellatrix	278	24.4	N 06	22.3	Antares	112	18.5	S 26	28.9
Elnath	278	03.7	N 28	37.7	Atria	107	14.8	S 69	04.0
Alnilam	275	39.2	S 01	11.2	Sabik	102	05.2	S 15	45.2
Betelgeuze	270	53.7	N 07	24.7	Shaula	96	13.2	S 37	07.2
Canopus	263	52.7	S 52	42.3	Rasalhague	96	00.6	N 12	32.7
Sirius	258	27.3	S 16	44.3	Etamin	90	43.5	N 51	29.2
Adhara	255	06.9	S 29	00.0	Kaus Australis	83	35.2	S 34	22.4
Castor	245	58.9	N 31	50.3	Vega	80	34.9	N 38	48.3
Procyon	244	52.2	N 05	10.4	Nunki	75	50.3	S 26	16.1
Pollux	243	18.8	N 27	58.2	Albireo	67	05.8	N 28	00.6
Avior	234	15.0	S 59	34.7	Altair	62	02.1	N 08	55.6
Suhail	222	47.4	S 43	31.2	Peacock	53	08.9	S 56	39.9
Miaplacidus	221	38.1	S 69	48.3	Deneb	49	27.2	N 45	21.9
Alphard	217	49.4	S 08	45.3	Enif	33	40.6	N 09	58.8
Regulus	207	36.2	N 11	51.4	Alnair	27	35.3	S 46	51.2
Dubhe	193	43.1	N 61	37.4	Formalhaut	15	16.6	S 29	30.2
Denebola	182	26.7	N 14	26.7	Markab	13	31.6	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 341 of 365		day 342 of 365		day 343 of 365		day 344 of 365		day 345 of 365		UT					
	<i>December 7</i>		<i>December 8</i>		<i>December 9</i>		<i>December 10</i>		<i>December 11</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	75	44.8	+02.5	76	44.0	+02.4	77	43.1	+02.5	78	42.2	+02.5	79	41.4	+02.5	00
01	90	47.3	+02.5	91	46.4	+02.5	92	45.6	+02.4	93	44.7	+02.5	94	43.9	+02.4	01
02	105	49.8	+02.4	106	48.9	+02.5	107	48.0	+02.5	108	47.2	+02.4	109	46.3	+02.5	02
03	120	52.2	+02.5	121	51.4	+02.4	122	50.5	+02.5	123	49.6	+02.5	124	48.8	+02.4	03
04	135	54.7	+02.4	136	53.8	+02.5	137	53.0	+02.4	138	52.1	+02.5	139	51.2	+02.5	04
05	150	57.1	+02.5	151	56.3	+02.4	152	55.4	+02.5	153	54.6	+02.4	154	53.7	+02.5	05
06	165	59.6	+02.5	166	58.7	+02.5	167	57.9	+02.5	168	57.0	+02.5	169	56.2	+02.4	06
07	181	02.1	+02.4	182	01.2	+02.5	183	00.4	+02.4	183	59.5	+02.5	184	58.6	+02.5	07
08	196	04.5	+02.5	197	03.7	+02.4	198	02.8	+02.5	199	02.0	+02.4	200	01.1	+02.5	08
09	211	07.0	+02.5	212	06.1	+02.5	213	05.3	+02.4	214	04.4	+02.5	215	03.6	+02.4	09
10	226	09.5	+02.4	227	08.6	+02.5	228	07.7	+02.5	229	06.9	+02.5	230	06.0	+02.5	10
11	241	11.9	+02.5	242	11.1	+02.4	243	10.2	+02.5	244	09.4	+02.4	245	08.5	+02.5	11
12	256	14.4	+02.5	257	13.5	+02.5	258	12.7	+02.4	259	11.8	+02.5	260	11.0	+02.4	12
13	271	16.9	+02.4	272	16.0	+02.5	273	15.1	+02.5	274	14.3	+02.4	275	13.4	+02.5	13
14	286	19.3	+02.5	287	18.5	+02.4	288	17.6	+02.5	289	16.7	+02.5	290	15.9	+02.5	14
15	301	21.8	+02.5	302	20.9	+02.5	303	20.1	+02.4	304	19.2	+02.5	305	18.4	+02.4	15
16	316	24.3	+02.4	317	23.4	+02.5	318	22.5	+02.5	319	21.7	+02.4	320	20.8	+02.5	16
17	331	26.7	+02.5	332	25.9	+02.4	333	25.0	+02.5	334	24.1	+02.5	335	23.3	+02.4	17
18	346	29.2	+02.4	347	28.3	+02.5	348	27.5	+02.4	349	26.6	+02.5	350	25.7	+02.5	18
19	1	31.6	+02.5	2	30.8	+02.4	3	29.9	+02.5	4	29.1	+02.4	5	28.2	+02.5	19
20	16	34.1	+02.5	17	33.2	+02.5	18	32.4	+02.5	19	31.5	+02.5	20	30.7	+02.4	20
21	31	36.6	+02.4	32	35.7	+02.5	33	34.9	+02.4	34	34.0	+02.5	35	33.1	+02.5	21
22	46	39.0	+02.5	47	38.2	+02.4	48	37.3	+02.5	49	36.5	+02.4	50	35.6	+02.5	22
23	61	41.5	+02.5	62	40.6	+02.5	63	39.8	+02.4	64	38.9	+02.5	65	38.1	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.5	N 29	13.2	Gienah	175	45.4	S 17	40.0
Ankaa	353	08.8	S 42	11.0	Acrux	173	02.3	S 63	13.2
Schedir	349	32.8	N 56	40.0	Gacrux	171	53.9	S 57	14.0
Diphda	348	49.0	S 17	51.8	Alioth	166	14.9	N 55	50.0
Achernar	335	21.2	S 57	07.5	Spica	158	24.3	S 11	16.7
Hamal	327	53.0	N 23	34.4	Alkaid	152	53.7	N 49	11.8
Polaris	314	26.6	N 89	21.8	Hadar	148	38.9	S 60	28.7
Acamar	315	12.7	S 40	12.9	Menkent	147	59.7	S 36	28.4
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.4	N 19	04.5
Mirfak	308	30.3	N 49	56.6	Rigel Kentaurus	139	40.6	S 60	55.7
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	24.0	N 46	01.4	Kocab	137	20.8	N 74	03.5
Rigel	281	05.2	S 08	10.5	Alphecca	126	05.6	N 26	38.3
Bellatrix	278	24.4	N 06	22.2	Antares	112	18.5	S 26	28.9
Elnath	278	03.7	N 28	37.7	Atria	107	14.8	S 69	04.0
Alnilam	275	39.2	S 01	11.2	Sabik	102	05.2	S 15	45.2
Betelgeuze	270	53.7	N 07	24.7	Shaula	96	13.2	S 37	07.2
Canopus	263	52.7	S 52	42.3	Rasalhague	96	00.6	N 12	32.7
Sirius	258	27.3	S 16	44.3	Etamin	90	43.5	N 51	29.2
Adhara	255	06.9	S 29	00.0	Kaus Australis	83	35.2	S 34	22.4
Castor	245	58.9	N 31	50.3	Vega	80	34.9	N 38	48.3
Procyon	244	52.2	N 05	10.4	Nunki	75	50.3	S 26	16.1
Pollux	243	18.8	N 27	58.2	Albireo	67	05.8	N 28	00.5
Avior	234	15.0	S 59	34.7	Altair	62	02.1	N 08	55.6
Suhail	222	47.3	S 43	31.2	Peacock	53	08.9	S 56	39.9
Miaplacidus	221	38.0	S 69	48.3	Deneb	49	27.3	N 45	21.9
Alphard	217	49.3	S 08	45.3	Enif	33	40.6	N 09	58.8
Regulus	207	36.1	N 11	51.3	Alnair	27	35.3	S 46	51.2
Dubhe	193	43.1	N 61	37.4	Formalhaut	15	16.6	S 29	30.2
Denebola	182	26.6	N 14	26.7	Markab	13	31.7	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 346 of 365			day 347 of 365			day 348 of 365			day 349 of 365			day 350 of 365			UT		
	<i>December 12</i>			<i>December 13</i>			<i>December 14</i>			<i>December 15</i>			<i>December 16</i>					
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA				
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"
00	80	40.5	+02.5	81	39.7	+02.4	82	38.8	+02.5	83	37.9	+02.5	84	37.1	+02.4	00		
01	95	43.0	+02.5	96	42.1	+02.5	97	41.3	+02.4	98	40.4	+02.5	99	39.5	+02.5	01		
02	110	45.5	+02.4	111	44.6	+02.5	112	43.7	+02.5	113	42.9	+02.4	114	42.0	+02.5	02		
03	125	47.9	+02.5	126	47.1	+02.4	127	46.2	+02.5	128	45.3	+02.5	129	44.5	+02.4	03		
04	140	50.4	+02.4	141	49.5	+02.5	142	48.7	+02.4	143	47.8	+02.5	144	46.9	+02.5	04		
05	155	52.8	+02.5	156	52.0	+02.5	157	51.1	+02.5	158	50.3	+02.4	159	49.4	+02.5	05		
06	170	55.3	+02.5	171	54.5	+02.4	172	53.6	+02.5	173	52.7	+02.5	174	51.9	+02.4	06		
07	185	57.8	+02.4	186	56.9	+02.5	187	56.1	+02.4	188	55.2	+02.5	189	54.3	+02.5	07		
08	201	00.2	+02.5	201	59.4	+02.4	202	58.5	+02.5	203	57.7	+02.4	204	56.8	+02.5	08		
09	216	02.7	+02.5	217	01.8	+02.5	218	01.0	+02.4	219	00.1	+02.5	219	59.3	+02.4	09		
10	231	05.2	+02.4	232	04.3	+02.5	233	03.4	+02.5	234	02.6	+02.5	235	01.7	+02.5	10		
11	246	07.6	+02.5	247	06.8	+02.4	248	05.9	+02.5	249	05.1	+02.4	250	04.2	+02.5	11		
12	261	10.1	+02.5	262	09.2	+02.5	263	08.4	+02.4	264	07.5	+02.5	265	06.7	+02.4	12		
13	276	12.6	+02.4	277	11.7	+02.5	278	10.8	+02.5	279	10.0	+02.4	280	09.1	+02.5	13		
14	291	15.0	+02.5	292	14.2	+02.4	293	13.3	+02.5	294	12.4	+02.5	295	11.6	+02.4	14		
15	306	17.5	+02.5	307	16.6	+02.5	308	15.8	+02.4	309	14.9	+02.5	310	14.0	+02.5	15		
16	321	20.0	+02.4	322	19.1	+02.5	323	18.2	+02.5	324	17.4	+02.4	325	16.5	+02.5	16		
17	336	22.4	+02.5	337	21.6	+02.4	338	20.7	+02.5	339	19.8	+02.5	340	19.0	+02.4	17		
18	351	24.9	+02.4	352	24.0	+02.5	353	23.2	+02.4	354	22.3	+02.5	355	21.4	+02.5	18		
19	6	27.3	+02.5	7	26.5	+02.5	8	25.6	+02.5	9	24.8	+02.4	10	23.9	+02.5	19		
20	21	29.8	+02.5	22	29.0	+02.4	23	28.1	+02.5	24	27.2	+02.5	25	26.4	+02.4	20		
21	36	32.3	+02.4	37	31.4	+02.5	38	30.6	+02.4	39	29.7	+02.5	40	28.8	+02.5	21		
22	51	34.7	+02.5	52	33.9	+02.4	53	33.0	+02.5	54	32.2	+02.4	55	31.3	+02.5	22		
23	66	37.2	+02.5	67	36.3	+02.5	68	35.5	+02.4	69	34.6	+02.5	70	33.8	+02.4	23		

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.5	N 29	13.2	Gienah	175	45.4	S 17	40.0
Ankaa	353	08.8	S 42	11.0	Acrux	173	02.2	S 63	13.2
Schedir	349	32.8	N 56	40.0	Gacrux	171	53.8	S 57	14.0
Diphda	348	49.0	S 17	51.8	Alioth	166	14.9	N 55	49.9
Achernar	335	21.2	S 57	07.5	Spica	158	24.3	S 11	16.7
Hamal	327	53.0	N 23	34.4	Alkaid	152	53.6	N 49	11.8
Polaris	314	27.2	N 89	21.8	Hadar	148	38.9	S 60	28.7
Acamar	315	12.7	S 40	12.9	Menkent	147	59.6	S 36	28.5
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.4	N 19	04.5
Mirfak	308	30.3	N 49	56.6	Rigel Kentaurus	139	40.5	S 60	55.7
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	58.2	S 16	08.0
Capella	280	24.0	N 46	01.4	Kocab	137	20.7	N 74	03.5
Rigel	281	05.2	S 08	10.5	Alphecca	126	05.6	N 26	38.3
Bellatrix	278	24.4	N 06	22.2	Antares	112	18.4	S 26	28.9
Elnath	278	03.7	N 28	37.7	Atria	107	14.7	S 69	04.0
Alnilam	275	39.1	S 01	11.2	Sabik	102	05.1	S 15	45.2
Betelgeuze	270	53.6	N 07	24.7	Shaula	96	13.1	S 37	07.2
Canopus	263	52.6	S 52	42.3	Rasalhague	96	00.5	N 12	32.7
Sirius	258	27.2	S 16	44.3	Etamin	90	43.5	N 51	29.2
Adhara	255	06.9	S 29	00.1	Kaus Australis	83	35.2	S 34	22.4
Castor	245	58.9	N 31	50.3	Vega	80	34.9	N 38	48.2
Procyon	244	52.1	N 05	10.4	Nunki	75	50.3	S 26	16.1
Pollux	243	18.8	N 27	58.2	Albireo	67	05.8	N 28	00.5
Avior	234	14.9	S 59	34.7	Altair	62	02.1	N 08	55.6
Suhail	222	47.3	S 43	31.2	Peacock	53	08.9	S 56	39.9
Miaplacidus	221	37.9	S 69	48.4	Deneb	49	27.3	N 45	21.9
Alphard	217	49.3	S 08	45.4	Enif	33	40.6	N 09	58.8
Regulus	207	36.1	N 11	51.3	Alnair	27	35.3	S 46	51.2
Dubhe	193	43.0	N 61	37.4	Formalhaut	15	16.6	S 29	30.2
Denebola	182	26.6	N 14	26.7	Markab	13	31.7	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 351 of 365		day 352 of 365		day 353 of 365		day 354 of 365		day 355 of 365		UT					
	<i>December 17</i>		<i>December 18</i>		<i>December 19</i>		<i>December 20</i>		<i>December 21</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	°	'	°	'	°	'	°	'	°	'						
00	85	36.2	+02.5	86	35.4	+02.4	87	34.5	+02.5	88	33.6	+02.5	89	32.8	+02.4	00
01	100	38.7	+02.5	101	37.8	+02.5	102	37.0	+02.4	103	36.1	+02.5	104	35.2	+02.5	01
02	115	41.2	+02.4	116	40.3	+02.5	117	39.4	+02.5	118	38.6	+02.4	119	37.7	+02.5	02
03	130	43.6	+02.5	131	42.8	+02.4	132	41.9	+02.5	133	41.0	+02.5	134	40.2	+02.4	03
04	145	46.1	+02.4	146	45.2	+02.5	147	44.4	+02.4	148	43.5	+02.5	149	42.6	+02.5	04
05	160	48.5	+02.5	161	47.7	+02.4	162	46.8	+02.5	163	46.0	+02.4	164	45.1	+02.5	05
06	175	51.0	+02.5	176	50.1	+02.5	177	49.3	+02.4	178	48.4	+02.5	179	47.6	+02.4	06
07	190	53.5	+02.4	191	52.6	+02.5	192	51.7	+02.5	193	50.9	+02.5	194	50.0	+02.5	07
08	205	55.9	+02.5	206	55.1	+02.4	207	54.2	+02.5	208	53.4	+02.4	209	52.5	+02.5	08
09	220	58.4	+02.5	221	57.5	+02.5	222	56.7	+02.4	223	55.8	+02.5	224	55.0	+02.4	09
10	236	00.9	+02.4	237	00.0	+02.5	237	59.1	+02.5	238	58.3	+02.4	239	57.4	+02.5	10
11	251	03.3	+02.5	252	02.5	+02.4	253	01.6	+02.5	254	00.7	+02.5	254	59.9	+02.4	11
12	266	05.8	+02.5	267	04.9	+02.5	268	04.1	+02.4	269	03.2	+02.5	270	02.3	+02.5	12
13	281	08.3	+02.4	282	07.4	+02.5	283	06.5	+02.5	284	05.7	+02.4	285	04.8	+02.5	13
14	296	10.7	+02.5	297	09.9	+02.4	298	09.0	+02.5	299	08.1	+02.5	300	07.3	+02.4	14
15	311	13.2	+02.4	312	12.3	+02.5	313	11.5	+02.4	314	10.6	+02.5	315	09.7	+02.5	15
16	326	15.6	+02.5	327	14.8	+02.5	328	13.9	+02.5	329	13.1	+02.4	330	12.2	+02.5	16
17	341	18.1	+02.5	342	17.3	+02.4	343	16.4	+02.5	344	15.5	+02.5	345	14.7	+02.4	17
18	356	20.6	+02.4	357	19.7	+02.5	358	18.9	+02.4	359	18.0	+02.5	0	17.1	+02.5	18
19	11	23.0	+02.5	12	22.2	+02.4	13	21.3	+02.5	14	20.5	+02.4	15	19.6	+02.5	19
20	26	25.5	+02.5	27	24.6	+02.5	28	23.8	+02.4	29	22.9	+02.5	30	22.1	+02.4	20
21	41	28.0	+02.4	42	27.1	+02.5	43	26.2	+02.5	44	25.4	+02.4	45	24.5	+02.5	21
22	56	30.4	+02.5	57	29.6	+02.4	58	28.7	+02.5	59	27.8	+02.5	60	27.0	+02.5	22
23	71	32.9	+02.5	72	32.0	+02.5	73	31.2	+02.4	74	30.3	+02.5	75	29.5	+02.4	23

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.6	N 29	13.2	Gienah	175	45.4	S 17	40.0
Ankaa	353	08.9	S 42	11.0	Acrux	173	02.1	S 63	13.2
Schedir	349	32.9	N 56	40.0	Gacrux	171	53.7	S 57	14.0
Diphda	348	49.0	S 17	51.8	Alioth	166	14.8	N 55	49.9
Achernar	335	21.2	S 57	07.5	Spica	158	24.3	S 11	16.7
Hamal	327	53.0	N 23	34.4	Alkaid	152	53.6	N 49	11.8
Polaris	314	28.6	N 89	21.8	Hadar	148	38.8	S 60	28.7
Acamar	315	12.7	S 40	12.9	Menkent	147	59.6	S 36	28.5
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.3	N 19	04.5
Mirfak	308	30.3	N 49	56.7	Rigel Kentaurus	139	40.5	S 60	55.7
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	24.0	N 46	01.4	Kocab	137	20.7	N 74	03.5
Rigel	281	05.2	S 08	10.5	Alphecca	126	05.6	N 26	38.2
Bellatrix	278	24.4	N 06	22.2	Antares	112	18.4	S 26	28.9
Elnath	278	03.7	N 28	37.7	Atria	107	14.7	S 69	04.0
Alnilam	275	39.1	S 01	11.2	Sabik	102	05.1	S 15	45.2
Betelgeuze	270	53.6	N 07	24.7	Shaula	96	13.1	S 37	07.2
Canopus	263	52.6	S 52	42.4	Rasalhague	96	00.5	N 12	32.7
Sirius	258	27.2	S 16	44.3	Etamin	90	43.5	N 51	29.1
Adhara	255	06.8	S 29	00.1	Kaus Australis	83	35.2	S 34	22.4
Castor	245	58.8	N 31	50.3	Vega	80	34.9	N 38	48.2
Procyon	244	52.1	N 05	10.4	Nunki	75	50.3	S 26	16.1
Pollux	243	18.7	N 27	58.2	Albireo	67	05.8	N 28	00.5
Avior	234	14.9	S 59	34.7	Altair	62	02.1	N 08	55.6
Suhail	222	47.3	S 43	31.2	Peacock	53	08.9	S 56	39.8
Miaplacidus	221	37.8	S 69	48.4	Deneb	49	27.3	N 45	21.8
Alphard	217	49.2	S 08	45.4	Enif	33	40.7	N 09	58.8
Regulus	207	36.0	N 11	51.3	Alnair	27	35.3	S 46	51.2
Dubhe	193	42.9	N 61	37.4	Formalhaut	15	16.6	S 29	30.2
Denebola	182	26.6	N 14	26.7	Markab	13	31.7	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 356 of 365			day 357 of 365			day 358 of 365			day 359 of 365			day 360 of 365			UT		
	<i>December 22</i>			<i>December 23</i>			<i>December 24</i>			<i>December 25</i>			<i>December 26</i>					
	GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA		GHA	ddGHA				
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"
00	90	31.9	+02.5	91	31.1	+02.4	92	30.2	+02.5	93	29.3	+02.5	94	28.5	+02.5	00		
01	105	34.4	+02.4	106	33.5	+02.5	107	32.7	+02.4	108	31.8	+02.5	109	31.0	+02.4	01		
02	120	36.8	+02.5	121	36.0	+02.5	122	35.1	+02.5	123	34.3	+02.4	124	33.4	+02.5	02		
03	135	39.3	+02.5	136	38.5	+02.4	137	37.6	+02.5	138	36.7	+02.5	139	35.9	+02.4	03		
04	150	41.8	+02.4	151	40.9	+02.5	152	40.1	+02.4	153	39.2	+02.5	154	38.3	+02.5	04		
05	165	44.2	+02.5	166	43.4	+02.4	167	42.5	+02.5	168	41.7	+02.4	169	40.8	+02.5	05		
06	180	46.7	+02.5	181	45.8	+02.5	182	45.0	+02.5	183	44.1	+02.5	184	43.3	+02.4	06		
07	195	49.2	+02.4	196	48.3	+02.5	197	47.5	+02.4	198	46.6	+02.5	199	45.7	+02.5	07		
08	210	51.6	+02.5	211	50.8	+02.4	212	49.9	+02.5	213	49.1	+02.4	214	48.2	+02.5	08		
09	225	54.1	+02.5	226	53.2	+02.5	227	52.4	+02.4	228	51.5	+02.5	229	50.7	+02.4	09		
10	240	56.6	+02.4	241	55.7	+02.5	242	54.8	+02.5	243	54.0	+02.5	244	53.1	+02.5	10		
11	255	59.0	+02.5	256	58.2	+02.4	257	57.3	+02.5	258	56.5	+02.4	259	55.6	+02.5	11		
12	271	01.5	+02.5	272	00.6	+02.5	272	59.8	+02.4	273	58.9	+02.5	274	58.1	+02.4	12		
13	286	04.0	+02.4	287	03.1	+02.5	288	02.2	+02.5	289	01.4	+02.4	290	00.5	+02.5	13		
14	301	06.4	+02.5	302	05.6	+02.4	303	04.7	+02.5	304	03.8	+02.5	305	03.0	+02.4	14		
15	316	08.9	+02.4	317	08.0	+02.5	318	07.2	+02.4	319	06.3	+02.5	320	05.4	+02.5	15		
16	331	11.3	+02.5	332	10.5	+02.5	333	09.6	+02.5	334	08.8	+02.4	335	07.9	+02.5	16		
17	346	13.8	+02.5	347	13.0	+02.4	348	12.1	+02.5	349	11.2	+02.5	350	10.4	+02.4	17		
18	1	16.3	+02.4	2	15.4	+02.5	3	14.6	+02.4	4	13.7	+02.5	5	12.8	+02.5	18		
19	16	18.7	+02.5	17	17.9	+02.4	18	17.0	+02.5	19	16.2	+02.4	20	15.3	+02.5	19		
20	31	21.2	+02.5	32	20.3	+02.5	33	19.5	+02.5	34	18.6	+02.5	35	17.8	+02.4	20		
21	46	23.7	+02.4	47	22.8	+02.5	48	22.0	+02.4	49	21.1	+02.5	50	20.2	+02.5	21		
22	61	26.1	+02.5	62	25.3	+02.4	63	24.4	+02.5	64	23.6	+02.4	65	22.7	+02.5	22		
23	76	28.6	+02.5	77	27.7	+02.5	78	26.9	+02.4	79	26.0	+02.5	80	25.2	+02.4	23		

	SHA	Dec		SHA	Dec				
	°	'		°	'				
Alpheratz	357	36.6	N 29	13.2	Gienah	175	45.3	S 17	40.0
Ankaa	353	08.9	S 42	11.0	Acrux	173	02.1	S 63	13.2
Schedir	349	32.9	N 56	40.0	Gacrux	171	53.7	S 57	14.1
Diphda	348	49.0	S 17	51.8	Alioth	166	14.7	N 55	49.9
Achernar	335	21.3	S 57	07.5	Spica	158	24.2	S 11	16.7
Hamal	327	53.0	N 23	34.4	Alkaid	152	53.6	N 49	11.7
Polaris	314	29.7	N 89	21.9	Hadar	148	38.8	S 60	28.7
Acamar	315	12.7	S 40	13.0	Menkent	147	59.6	S 36	28.5
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.3	N 19	04.5
Mirfak	308	30.3	N 49	56.7	Rigel Kentaurus	139	40.4	S 60	55.7
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	58.1	S 16	08.1
Capella	280	24.0	N 46	01.4	Kocab	137	20.6	N 74	03.4
Rigel	281	05.2	S 08	10.5	Alphecca	126	05.6	N 26	38.2
Bellatrix	278	24.4	N 06	22.2	Antares	112	18.4	S 26	28.9
Elnath	278	03.6	N 28	37.7	Atria	107	14.6	S 69	04.0
Alnilam	275	39.1	S 01	11.2	Sabik	102	05.1	S 15	45.2
Betelgeuze	270	53.6	N 07	24.7	Shaula	96	13.1	S 37	07.2
Canopus	263	52.6	S 52	42.4	Rasalhague	96	00.5	N 12	32.7
Sirius	258	27.2	S 16	44.4	Etamin	90	43.5	N 51	29.1
Adhara	255	06.8	S 29	00.1	Kaus Australis	83	35.2	S 34	22.4
Castor	245	58.8	N 31	50.3	Vega	80	34.9	N 38	48.2
Procyon	244	52.1	N 05	10.4	Nunki	75	50.3	S 26	16.1
Pollux	243	18.7	N 27	58.2	Albireo	67	05.8	N 28	00.5
Avior	234	14.9	S 59	34.8	Altair	62	02.1	N 08	55.6
Suhail	222	47.2	S 43	31.3	Peacock	53	08.9	S 56	39.8
Miaplacidus	221	37.8	S 69	48.4	Deneb	49	27.3	N 45	21.8
Alphard	217	49.2	S 08	45.4	Enif	33	40.7	N 09	58.8
Regulus	207	36.0	N 11	51.3	Alnair	27	35.4	S 46	51.2
Dubhe	193	42.8	N 61	37.4	Formalhaut	15	16.6	S 29	30.2
Denebola	182	26.5	N 14	26.6	Markab	13	31.7	N 15	19.8

2022 - First Point of Aries / Selected Stars

UT	day 361 of 365		day 362 of 365		day 363 of 365		day 364 of 365		day 365 of 365		UT					
	<i>December 27</i>		<i>December 28</i>		<i>December 29</i>		<i>December 30</i>		<i>December 31</i>							
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA						
	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "	° ' "	' "						
00	95	27.6	+02.5	96	26.8	+02.4	97	25.9	+02.5	98	25.0	+02.5	99	24.2	+02.4	00
01	110	30.1	+02.5	111	29.2	+02.5	112	28.4	+02.4	113	27.5	+02.5	114	26.6	+02.5	01
02	125	32.6	+02.4	126	31.7	+02.5	127	30.8	+02.5	128	30.0	+02.4	129	29.1	+02.5	02
03	140	35.0	+02.5	141	34.2	+02.4	142	33.3	+02.5	143	32.4	+02.5	144	31.6	+02.4	03
04	155	37.5	+02.4	156	36.6	+02.5	157	35.8	+02.4	158	34.9	+02.5	159	34.0	+02.5	04
05	170	39.9	+02.5	171	39.1	+02.5	172	38.2	+02.5	173	37.4	+02.4	174	36.5	+02.5	05
06	185	42.4	+02.5	186	41.6	+02.4	187	40.7	+02.5	188	39.8	+02.5	189	39.0	+02.4	06
07	200	44.9	+02.4	201	44.0	+02.5	202	43.2	+02.4	203	42.3	+02.5	204	41.4	+02.5	07
08	215	47.3	+02.5	216	46.5	+02.4	217	45.6	+02.5	218	44.8	+02.4	219	43.9	+02.5	08
09	230	49.8	+02.5	231	48.9	+02.5	232	48.1	+02.4	233	47.2	+02.5	234	46.4	+02.4	09
10	245	52.3	+02.4	246	51.4	+02.5	247	50.5	+02.5	248	49.7	+02.4	249	48.8	+02.5	10
11	260	54.7	+02.5	261	53.9	+02.4	262	53.0	+02.5	263	52.1	+02.5	264	51.3	+02.4	11
12	275	57.2	+02.5	276	56.3	+02.5	277	55.5	+02.4	278	54.6	+02.5	279	53.7	+02.5	12
13	290	59.7	+02.4	291	58.8	+02.5	292	57.9	+02.5	293	57.1	+02.4	294	56.2	+02.5	13
14	306	02.1	+02.5	307	01.3	+02.4	308	00.4	+02.5	308	59.5	+02.5	309	58.7	+02.4	14
15	321	04.6	+02.5	322	03.7	+02.5	323	02.9	+02.4	324	02.0	+02.5	325	01.1	+02.5	15
16	336	07.1	+02.4	337	06.2	+02.5	338	05.3	+02.5	339	04.5	+02.4	340	03.6	+02.5	16
17	351	09.5	+02.5	352	08.7	+02.4	353	07.8	+02.5	354	06.9	+02.5	355	06.1	+02.4	17
18	6	12.0	+02.4	7	11.1	+02.5	8	10.3	+02.4	9	09.4	+02.5	10	08.5	+02.5	18
19	21	14.4	+02.5	22	13.6	+02.4	23	12.7	+02.5	24	11.9	+02.4	25	11.0	+02.5	19
20	36	16.9	+02.5	37	16.0	+02.5	38	15.2	+02.4	39	14.3	+02.5	40	13.5	+02.4	20
21	51	19.4	+02.4	52	18.5	+02.5	53	17.6	+02.5	54	16.8	+02.5	55	15.9	+02.5	21
22	66	21.8	+02.5	67	21.0	+02.4	68	20.1	+02.5	69	19.3	+02.4	70	18.4	+02.5	22
23	81	24.3	+02.5	82	23.4	+02.5	83	22.6	+02.4	84	21.7	+02.5	85	20.9	+02.4	23

	SHA	Dec		SHA	Dec
	° ' "	° ' "		° ' "	° ' "
Alpheratz	357 36.6	N 29 13.2	Gienah	175 45.3	S 17 40.0
Ankaa	353 08.9	S 42 11.0	Acrux	173 02.0	S 63 13.2
Schedir	349 32.9	N 56 40.0	Gacrux	171 53.6	S 57 14.1
Diphda	348 49.0	S 17 51.8	Alioth	166 14.7	N 55 49.9
Achernar	335 21.3	S 57 07.5	Spica	158 24.2	S 11 16.7
Hamal	327 53.0	N 23 34.4	Alkaid	152 53.5	N 49 11.7
Polaris	314 31.0	N 89 21.9	Hadar	148 38.7	S 60 28.7
Acamar	315 12.7	S 40 13.0	Menkent	147 59.5	S 36 28.5
Menkar	314 07.7	N 04 10.8	Arcturus	145 49.3	N 19 04.4
Mirfak	308 30.3	N 49 56.7	Rigel Kentaurus	139 40.3	S 60 55.7
Aldebaran	290 41.2	N 16 33.4	Zubenelgenubi	136 58.1	S 16 08.1
Capella	280 23.9	N 46 01.4	Kocab	137 20.5	N 74 03.4
Rigel	281 05.2	S 08 10.5	Alphecca	126 05.5	N 26 38.2
Bellatrix	278 24.3	N 06 22.2	Antares	112 18.4	S 26 28.9
Elnath	278 03.6	N 28 37.7	Atria	107 14.5	S 69 03.9
Alnilam	275 39.1	S 01 11.3	Sabik	102 05.1	S 15 45.2
Betelgeuze	270 53.6	N 07 24.7	Shaula	96 13.1	S 37 07.2
Canopus	263 52.6	S 52 42.4	Rasalhague	96 00.5	N 12 32.7
Sirius	258 27.2	S 16 44.4	Etamin	90 43.5	N 51 29.1
Adhara	255 06.8	S 29 00.1	Kaus Australis	83 35.1	S 34 22.4
Castor	245 58.8	N 31 50.3	Vega	80 34.9	N 38 48.2
Procyon	244 52.0	N 05 10.3	Nunki	75 50.2	S 26 16.1
Pollux	243 18.7	N 27 58.2	Albireo	67 05.8	N 28 00.5
Avior	234 14.8	S 59 34.8	Altair	62 02.1	N 08 55.6
Suhail	222 47.2	S 43 31.3	Peacock	53 08.9	S 56 39.8
Miaplacidus	221 37.7	S 69 48.4	Deneb	49 27.3	N 45 21.8
Alphard	217 49.2	S 08 45.4	Enif	33 40.7	N 09 58.8
Regulus	207 35.9	N 11 51.3	Alnair	27 35.4	S 46 51.2
Dubhe	193 42.8	N 61 37.4	Formalhaut	15 16.6	S 29 30.2
Denebola	182 26.5	N 14 26.6	Markab	13 31.7	N 15 19.8

Polaris (Pole Star) Tables, 2022

For determining Latitude from Sextant Altitude and for Azimuth

LHA ARIES	000° - 009°	010° - 019°	020° - 029°	030° - 039°	040° - 049°	050° - 059°	060° - 069°	070° - 079°	080° - 089°	090° - 099°	100° - 109°	110° - 119°
	a0	a0	a0	a0	a0	a0	a0	a0	a0	a0	a0	a0
	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,
0	0 31.7	0 27.4	0 24.1	0 21.8	0 20.6	0 20.6	0 21.8	0 24.1	0 27.5	0 31.8	0 36.9	0 42.7
1	0 31.3	0 27.1	0 23.8	0 21.6	0 20.6	0 20.7	0 22.0	0 24.4	0 27.9	0 32.3	0 37.5	0 43.4
2	0 30.8	0 26.7	0 23.5	0 21.5	0 20.5	0 20.8	0 22.2	0 24.7	0 28.3	0 32.8	0 38.0	0 44.0
3	0 30.4	0 26.3	0 23.3	0 21.3	0 20.5	0 20.9	0 22.4	0 25.0	0 28.7	0 33.3	0 38.6	0 44.6
4	0 29.9	0 26.0	0 23.0	0 21.2	0 20.5	0 21.0	0 22.6	0 25.3	0 29.1	0 33.8	0 39.2	0 45.2
5	0 29.5	0 25.6	0 22.8	0 21.1	0 20.5	0 21.1	0 22.8	0 25.7	0 29.5	0 34.3	0 39.8	0 45.9
6	0 29.1	0 25.3	0 22.6	0 21.0	0 20.5	0 21.2	0 23.1	0 26.0	0 30.0	0 34.8	0 40.4	0 46.5
7	0 28.6	0 25.0	0 22.4	0 20.9	0 20.5	0 21.3	0 23.3	0 26.4	0 30.4	0 35.3	0 40.9	0 47.1
8	0 28.2	0 24.7	0 22.2	0 20.8	0 20.5	0 21.5	0 23.6	0 26.7	0 30.9	0 35.8	0 41.5	0 47.8
9	0 27.8	0 24.4	0 22.0	0 20.7	0 20.6	0 21.6	0 23.8	0 27.1	0 31.3	0 36.4	0 42.1	0 48.4
Lat.	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1
	,	,	,	,	,	,	,	,	,	,	,	,
10	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8
20	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9
30	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	0.9
40	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.9	1.0
45	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9	0.9	1.0
50	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.0
55	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1
60	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1
62	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	1.0	1.1	1.2
64	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.9	1.0	1.1	1.2
66	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.9	1.0	1.1	1.2
68	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.8	0.9	1.0	1.2	1.3
70	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.8	0.9	1.1	1.2	1.3
Month	a2	a2	a2	a2	a2	a2	a2	a2	a2	a2	a2	a2
	,	,	,	,	,	,	,	,	,	,	,	,
Jan	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3
Feb	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5
Mar	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
Apr	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.7
May	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8
Jun	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7
Jul	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6
Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5
Sep	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Oct	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Nov	0.7	0.6	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.1	0.1
Dec	0.8	0.8	0.8	0.7	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.1
Lat.	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo
	°	°	°	°	°	°	°	°	°	°	°	°
10	0.4	0.3	0.2	0.1	360.0	359.9	359.8	359.7	359.6	359.5	359.4	359.4
20	0.4	0.3	0.2	0.1	360.0	359.9	359.8	359.7	359.6	359.5	359.4	359.4
30	0.5	0.4	0.3	0.1	360.0	359.9	359.7	359.6	359.5	359.4	359.4	359.3
40	0.5	0.4	0.3	0.1	360.0	359.9	359.7	359.6	359.5	359.4	359.3	359.2
45	0.6	0.5	0.3	0.2	360.0	359.8	359.7	359.5	359.4	359.3	359.2	359.1
50	0.6	0.5	0.3	0.2	360.0	359.8	359.7	359.5	359.4	359.2	359.1	359.1
55	0.7	0.6	0.4	0.2	360.0	359.8	359.6	359.4	359.3	359.1	359.0	358.9
60	0.8	0.7	0.4	0.2	360.0	359.8	359.6	359.3	359.2	359.0	358.9	358.8
62	0.9	0.7	0.5	0.2	360.0	359.8	359.5	359.3	359.1	358.9	358.8	358.7
64	1.0	0.7	0.5	0.3	360.0	359.7	359.5	359.3	359.0	358.9	358.7	358.6
66	1.0	0.8	0.6	0.3	360.0	359.7	359.4	359.2	359.0	358.8	358.6	358.5
68	1.1	0.9	0.6	0.3	360.0	359.7	359.4	359.1	358.9	358.7	358.5	358.4
70	1.2	1.0	0.7	0.3	360.0	359.7	359.3	359.0	358.8	358.5	358.3	358.2

Latitude = Apparent Altitude (corrected for refraction and dip) - 1° + a0 + a1 + a2

To determine Latitude, the table is entered with LHA Aries, which is obtained by addition of the observer's Longitude and the GHA Aries from the daily pages of this Almanac. The value of LHA Aries determines which column of the Polaris Tables to be used. Each column refers to a range of 10° of LHA. The value a0 is taken with mental interpolation (taking into account the fractional part of LHA Aries), from the upper table with the units of LHA Aries in degrees as argument. The values of a1 and a2 are taken, without interpolation, from the second and third table with arguments Latitude and Month respectively. The correction terms a0, a1 and a2 are always positive. The final table gives the Azimuth of Polaris.

Polaris (Pole Star) Tables, 2022

For determining Latitude from Sextant Altitude and for Azimuth

LHA ARIES	120° - 129°	130° - 139°	140° - 149°	150° - 159°	160° - 169°	170° - 179°	180° - 189°	190° - 199°	200° - 209°	210° - 219°	220° - 229°	230° - 239°
	a0	a0	a0	a0	a0	a0	a0	a0	a0	a0	a0	a0
	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "
0	0 49.1	0 55.7	1 02.4	1 09.0	1 15.3	1 21.1	1 26.3	1 30.6	1 33.9	1 36.2	1 37.4	1 37.4
1	0 49.7	0 56.3	1 03.1	1 09.6	1 15.9	1 21.7	1 26.7	1 30.9	1 34.2	1 36.4	1 37.4	1 37.3
2	0 50.4	0 57.0	1 03.7	1 10.3	1 16.5	1 22.2	1 27.2	1 31.3	1 34.5	1 36.5	1 37.5	1 37.2
3	0 51.0	0 57.7	1 04.4	1 10.9	1 17.1	1 22.7	1 27.6	1 31.7	1 34.7	1 36.7	1 37.5	1 37.1
4	0 51.7	0 58.4	1 05.1	1 11.6	1 17.7	1 23.3	1 28.1	1 32.0	1 35.0	1 36.8	1 37.5	1 37.0
5	0 52.3	0 59.0	1 05.7	1 12.2	1 18.3	1 23.8	1 28.5	1 32.4	1 35.2	1 36.9	1 37.5	1 36.9
6	0 53.0	0 59.7	1 06.4	1 12.8	1 18.9	1 24.3	1 28.9	1 32.7	1 35.4	1 37.0	1 37.5	1 36.8
7	0 53.7	1 00.4	1 07.0	1 13.5	1 19.4	1 24.8	1 29.4	1 33.0	1 35.6	1 37.1	1 37.5	1 36.7
8	0 54.3	1 01.0	1 07.7	1 14.1	1 20.0	1 25.3	1 29.8	1 33.3	1 35.8	1 37.2	1 37.5	1 36.5
9	0 55.0	1 01.7	1 08.3	1 14.7	1 20.6	1 25.8	1 30.2	1 33.6	1 36.0	1 37.3	1 37.4	1 36.4
Lat.	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1
	' "	' "	' "	' "	' "	' "	' "	' "	' "	' "	' "	' "
10	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.5
20	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.5
30	0.9	1.0	1.0	0.9	0.9	0.9	0.8	0.7	0.7	0.6	0.5	0.5
40	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.5	0.5
45	1.0	1.1	1.0	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.5	0.5
50	1.1	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.7	0.6	0.5	0.5
55	1.1	1.1	1.1	1.1	1.0	1.0	0.9	0.8	0.7	0.6	0.5	0.5
60	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.5
62	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.5
64	1.3	1.3	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.5
66	1.3	1.3	1.3	1.3	1.2	1.1	0.9	0.8	0.7	0.6	0.5	0.5
68	1.3	1.4	1.4	1.3	1.2	1.1	1.0	0.8	0.7	0.6	0.5	0.5
70	1.4	1.4	1.4	1.3	1.3	1.1	1.0	0.9	0.7	0.6	0.5	0.5
Month	a2	a2	a2	a2	a2	a2	a2	a2	a2	a2	a2	a2
	' "	' "	' "	' "	' "	' "	' "	' "	' "	' "	' "	' "
Jan	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5
Feb	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Mar	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Apr	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3
May	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.4	0.4
Jun	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.5
Jul	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7
Aug	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
Sep	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8
Oct	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.7
Nov	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.6
Dec	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4
Lat.	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo
	°	°	°	°	°	°	°	°	°	°	°	°
10	359.4	359.3	359.4	359.4	359.4	359.5	359.6	359.7	359.8	359.9	0.0	0.1
20	359.3	359.3	359.3	359.4	359.4	359.5	359.6	359.7	359.8	359.9	0.0	0.1
30	359.3	359.3	359.3	359.3	359.4	359.4	359.5	359.6	359.7	359.9	0.0	0.1
40	359.2	359.2	359.2	359.2	359.3	359.4	359.5	359.6	359.7	359.9	0.0	0.1
45	359.1	359.1	359.1	359.2	359.2	359.3	359.4	359.6	359.7	359.8	0.0	0.2
50	359.0	359.0	359.0	359.1	359.1	359.2	359.4	359.5	359.7	359.8	0.0	0.2
55	358.9	358.9	358.9	359.0	359.0	359.2	359.3	359.4	359.6	359.8	0.0	0.2
60	358.7	358.7	358.7	358.8	358.9	359.0	359.2	359.4	359.6	359.8	0.0	0.2
62	358.6	358.6	358.7	358.7	358.8	359.0	359.1	359.3	359.5	359.8	0.0	0.2
64	358.6	358.5	358.6	358.6	358.7	358.9	359.1	359.3	359.5	359.8	0.0	0.2
66	358.4	358.4	358.5	358.5	358.7	358.8	359.0	359.2	359.5	359.7	0.0	0.3
68	358.3	358.3	358.3	358.4	358.5	358.7	358.9	359.2	359.4	359.7	0.0	0.3
70	358.1	358.1	358.2	358.3	358.4	358.6	358.8	359.1	359.4	359.7	0.0	0.3

Latitude = Apparent Altitude (corrected for refraction and dip) - 1° + a0 + a1 + a2

To determine Latitude, the table is entered with LHA Aries, which is obtained by addition of the observer's Longitude and the GHA Aries from the daily pages of this Almanac. The value of LHA Aries determines which column of the Polaris Tables to be used. Each column refers to a range of 10° of LHA. The value a0 is taken with mental interpolation (taking into account the fractional part of LHA Aries), from the upper table with the units of LHA Aries in degrees as argument. The values of a1 and a2 are taken, without interpolation, from the second and third table with arguments Latitude and Month respectively. The correction terms a0, a1 and a2 are always positive. The final table gives the Azimuth of Polaris.

Polaris (Pole Star) Tables, 2022

For determining Latitude from Sextant Altitude and for Azimuth

LHA ARIES	240° - 249°	250° - 259°	260° - 269°	270° - 279°	280° - 289°	290° - 299°	300° - 309°	310° - 319°	320° - 329°	330° - 339°	340° - 349°	350° - 359°
	a0	a0	a0	a0	a0	a0	a0	a0	a0	a0	a0	a0
	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,
0	1 36.2	1 33.9	1 30.5	1 26.2	1 21.1	1 15.3	1 08.9	1 02.3	0 55.6	0 49.0	0 42.7	0 36.9
1	1 36.0	1 33.6	1 30.1	1 25.7	1 20.5	1 14.6	1 08.3	1 01.7	0 54.9	0 48.4	0 42.1	0 36.3
2	1 35.8	1 33.3	1 29.7	1 25.2	1 20.0	1 14.0	1 07.6	1 01.0	0 54.3	0 47.7	0 41.5	0 35.8
3	1 35.6	1 33.0	1 29.3	1 24.7	1 19.4	1 13.4	1 07.0	1 00.3	0 53.6	0 47.1	0 40.9	0 35.3
4	1 35.4	1 32.7	1 28.9	1 24.2	1 18.8	1 12.8	1 06.3	0 59.6	0 52.9	0 46.4	0 40.3	0 34.7
5	1 35.2	1 32.3	1 28.5	1 23.7	1 18.2	1 12.1	1 05.7	0 59.0	0 52.3	0 45.8	0 39.7	0 34.2
6	1 34.9	1 32.0	1 28.0	1 23.2	1 17.6	1 11.5	1 05.0	0 58.3	0 51.6	0 45.2	0 39.1	0 33.7
7	1 34.7	1 31.6	1 27.6	1 22.7	1 17.1	1 10.9	1 04.3	0 57.6	0 51.0	0 44.5	0 38.6	0 33.2
8	1 34.4	1 31.3	1 27.1	1 22.2	1 16.5	1 10.2	1 03.7	0 57.0	0 50.3	0 43.9	0 38.0	0 32.7
9	1 34.2	1 30.9	1 26.7	1 21.6	1 15.9	1 09.6	1 03.0	0 56.3	0 49.7	0 43.3	0 37.4	0 32.2
Lat.	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1
	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,
10	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
20	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3
30	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
40	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
45	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
50	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
55	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
60	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
62	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5
64	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
66	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
68	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.5
70	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.7	0.7	0.6	0.6
Month	a2	a2	a2	a2	a2	a2	a2	a2	a2	a2	a2	a2
	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,	° ,
Jan	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Feb	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6
Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5
Apr	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4
May	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Jun	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Jul	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1
Aug	0.7	0.7	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2
Sep	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3
Oct	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5
Nov	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Dec	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Lat.	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo	Zo
	°	°	°	°	°	°	°	°	°	°	°	°
10	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.5
20	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.5
30	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6
40	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.6
45	0.3	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.7
50	0.3	0.5	0.6	0.8	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.8
55	0.4	0.6	0.7	0.8	1.0	1.0	1.1	1.1	1.1	1.1	1.0	0.9
60	0.4	0.6	0.8	1.0	1.1	1.2	1.3	1.3	1.3	1.2	1.1	1.0
62	0.5	0.7	0.9	1.0	1.2	1.3	1.3	1.4	1.4	1.3	1.2	1.1
64	0.5	0.7	0.9	1.1	1.3	1.4	1.4	1.5	1.4	1.4	1.3	1.1
66	0.5	0.8	1.0	1.2	1.4	1.5	1.5	1.6	1.6	1.5	1.4	1.2
68	0.6	0.8	1.1	1.3	1.5	1.6	1.7	1.7	1.7	1.6	1.5	1.3
70	0.6	0.9	1.2	1.4	1.6	1.7	1.8	1.9	1.9	1.8	1.6	1.5

Latitude = Apparent Altitude (corrected for refraction and dip) - 1° + a0 + a1 + a2

To determine Latitude, the table is entered with LHA Aries, which is obtained by addition of the observer's Longitude and the GHA Aries from the daily pages of this Almanac. The value of LHA Aries determines which column of the Polaris Tables to be used. Each column refers to a range of 10° of LHA. The value a0 is taken with mental interpolation (taking into account the fractional part of LHA Aries), from the upper table with the units of LHA Aries in degrees as argument. The values of a1 and a2 are taken, without interpolation, from the second and third table with arguments Latitude and Month respectively. The correction terms a0, a1 and a2 are always positive. The final table gives the Azimuth of Polaris.

