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Nautical Almanac (Selected Stars)

2023

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Star Maps
The Nautical Almanac 2023 (Selected Stars)
Polaris Tables 2023

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 Wed Oct 19 12:12:26 2022

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 : 69.2 s	Apr : 69.2 s	Jul : 69.1 s	Oct : 69.1 s
Feb : 69.2 s	May : 69.2 s	Aug : 69.1 s	Nov : 69.1 s
Mar : 69.2 s	Jun : 69.2 s	Sep : 69.1 s	Dec : 69.1 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/>"

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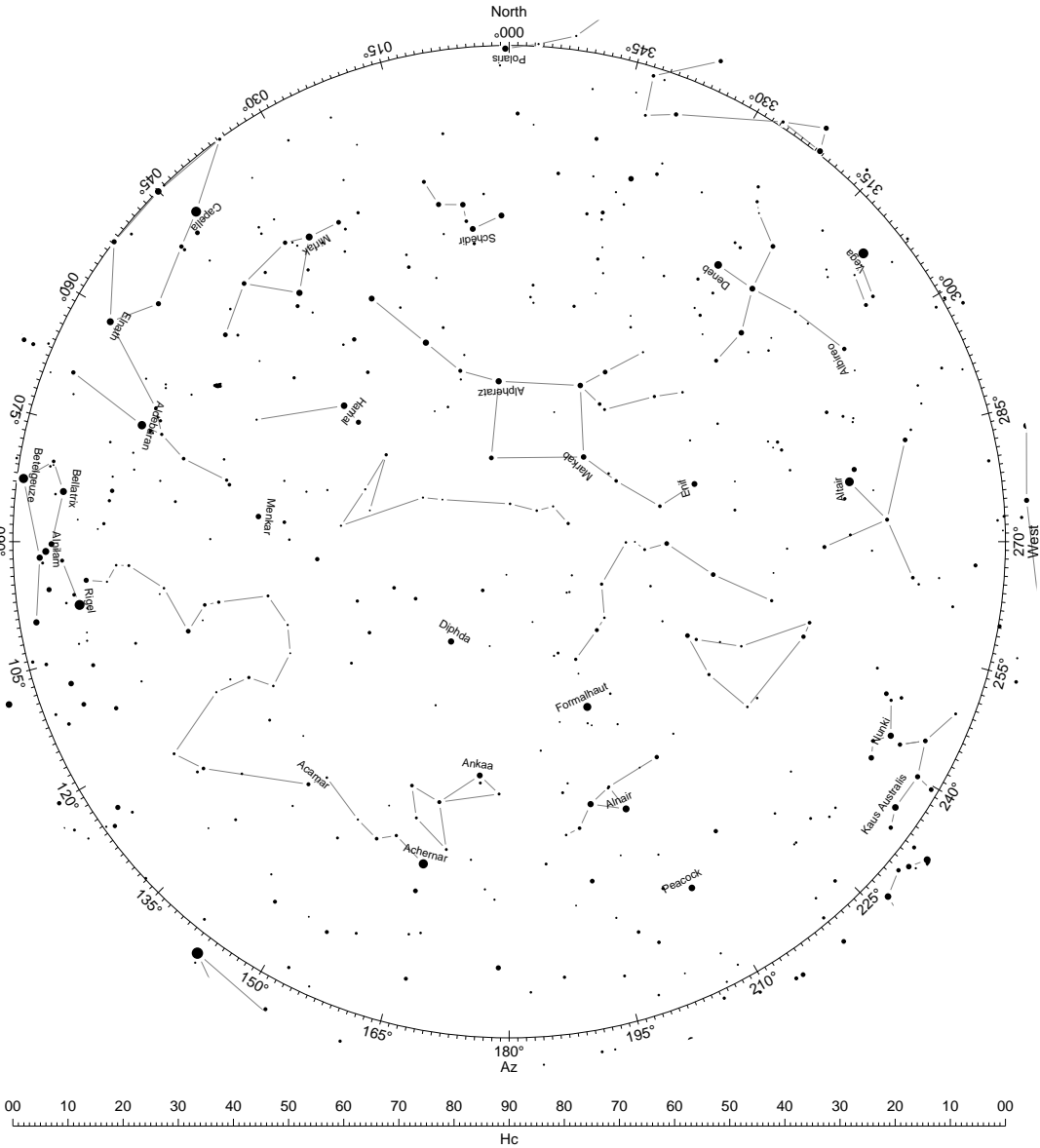
The following table shows the fundamental star data as used in this Almanac. The data refers to Equinox J2000 / Epoch J2000.0.

Star Name	RA			Dec ° ' "	mu_RA ["/yr]	mu_Dec ["/yr]	prllx ["]	rad.vel. [km/s]
	h	m	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
Acrux	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

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



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.

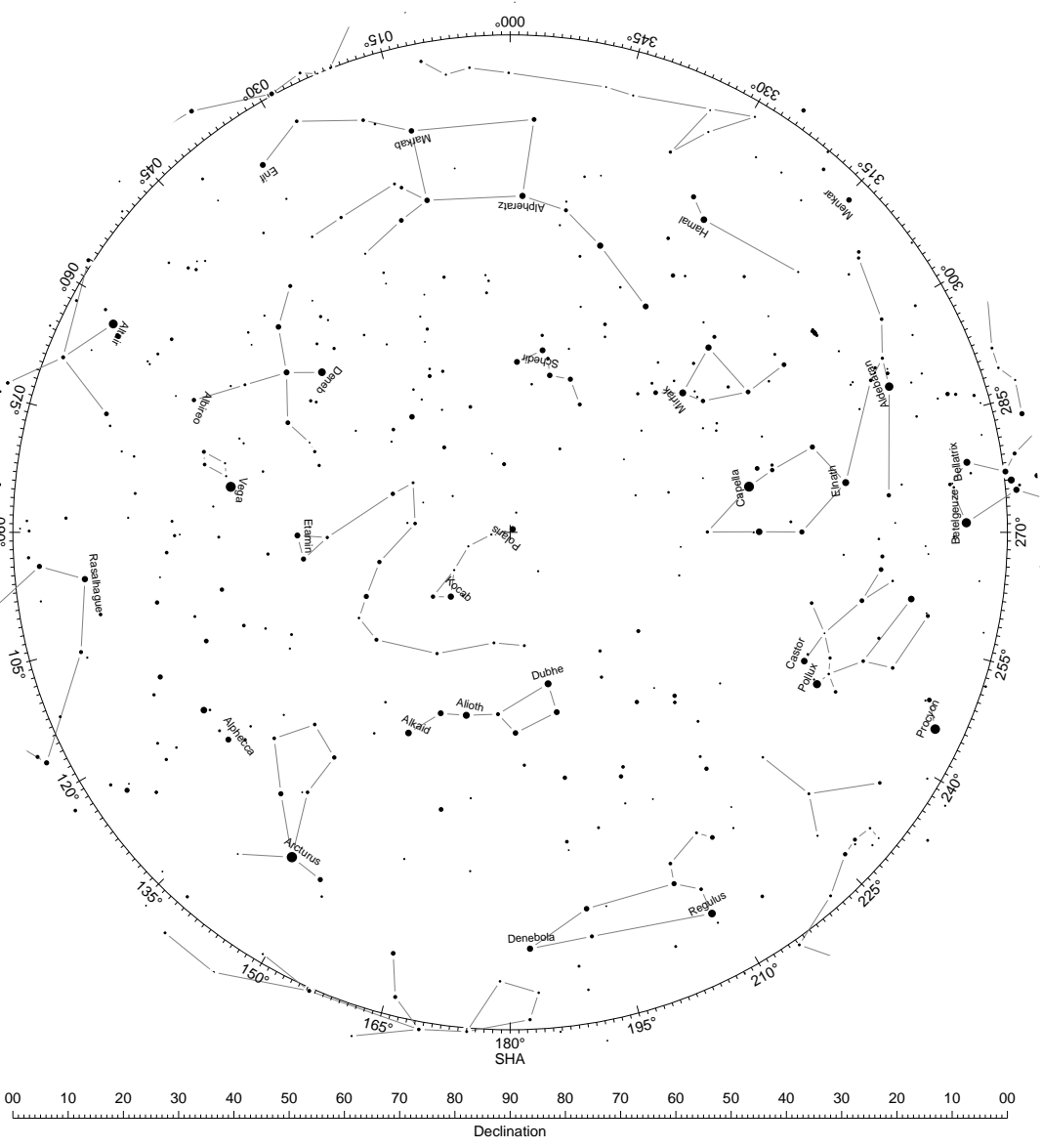
The first two maps are stereographic maps of the stars of the northern- and southern hemisphere, respectively. These maps are centered on the celestial poles and may be used for observations at locations in high northern- or southern latitudes.

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.

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.

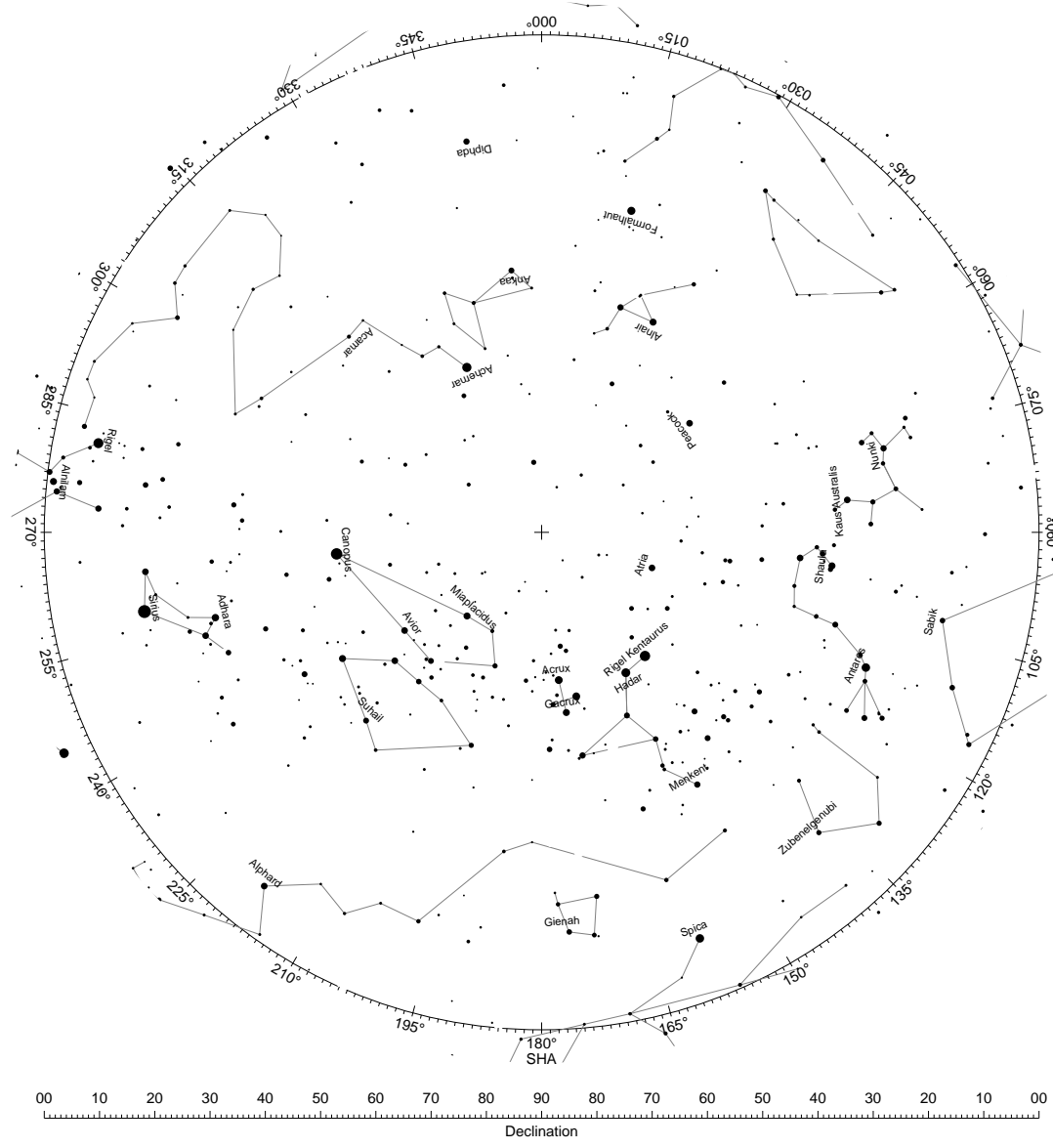
Each of these maps is valid for a location on the equator at a specific time of the day.

Map of bright Stars of the Northern Celestial Sphere



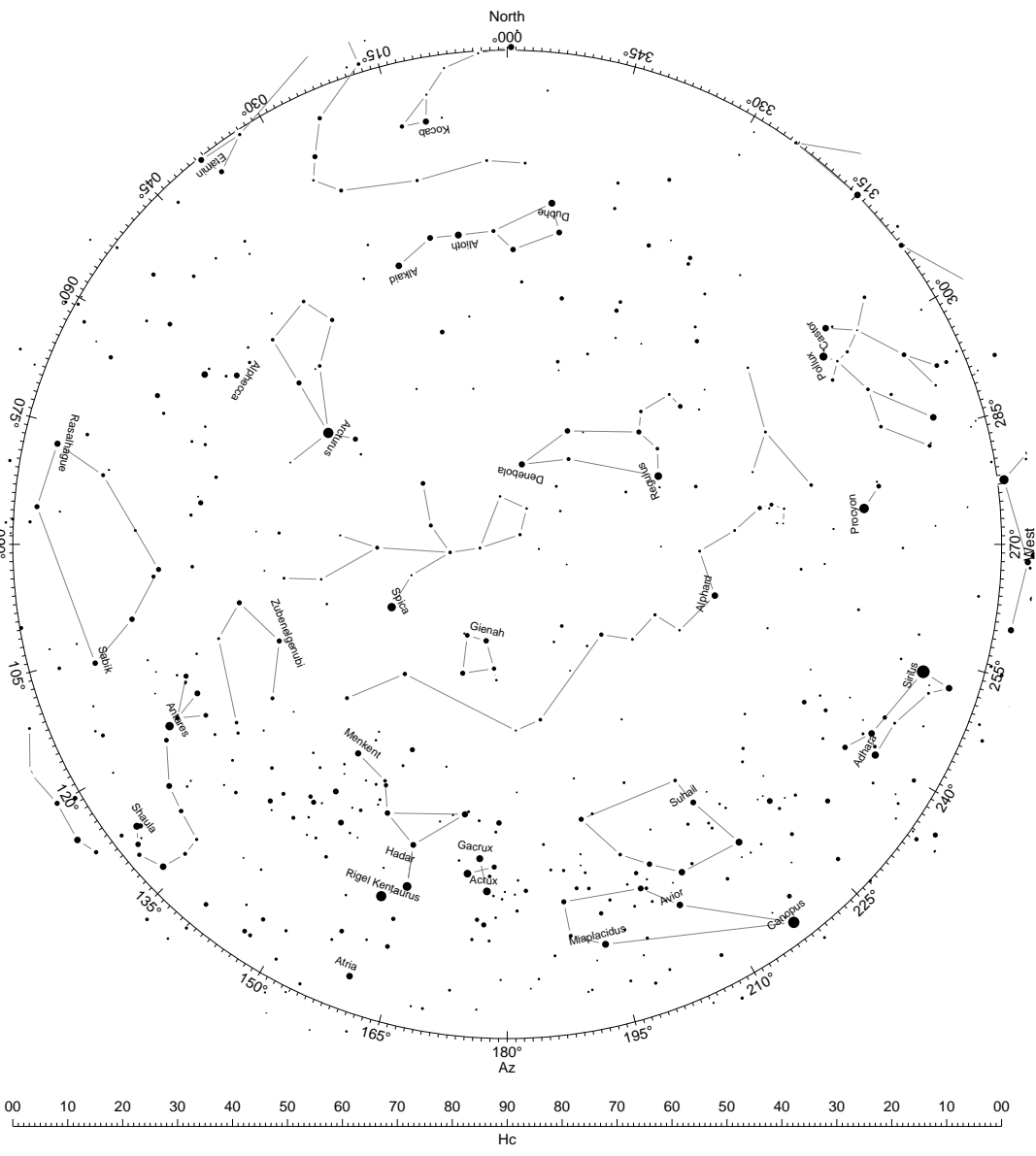
The map is centered on the celestial north pole and shows the brightest stars (up to magnitude 4.5) of the northern celestial hemisphere. The circle of constant declination is shown at 00° (Celestial Equator). The Sidereal Hour Angle of a specific star can be directly read from the SHA scale plotted 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.

Map of bright Stars of the Southern Celestial Sphere

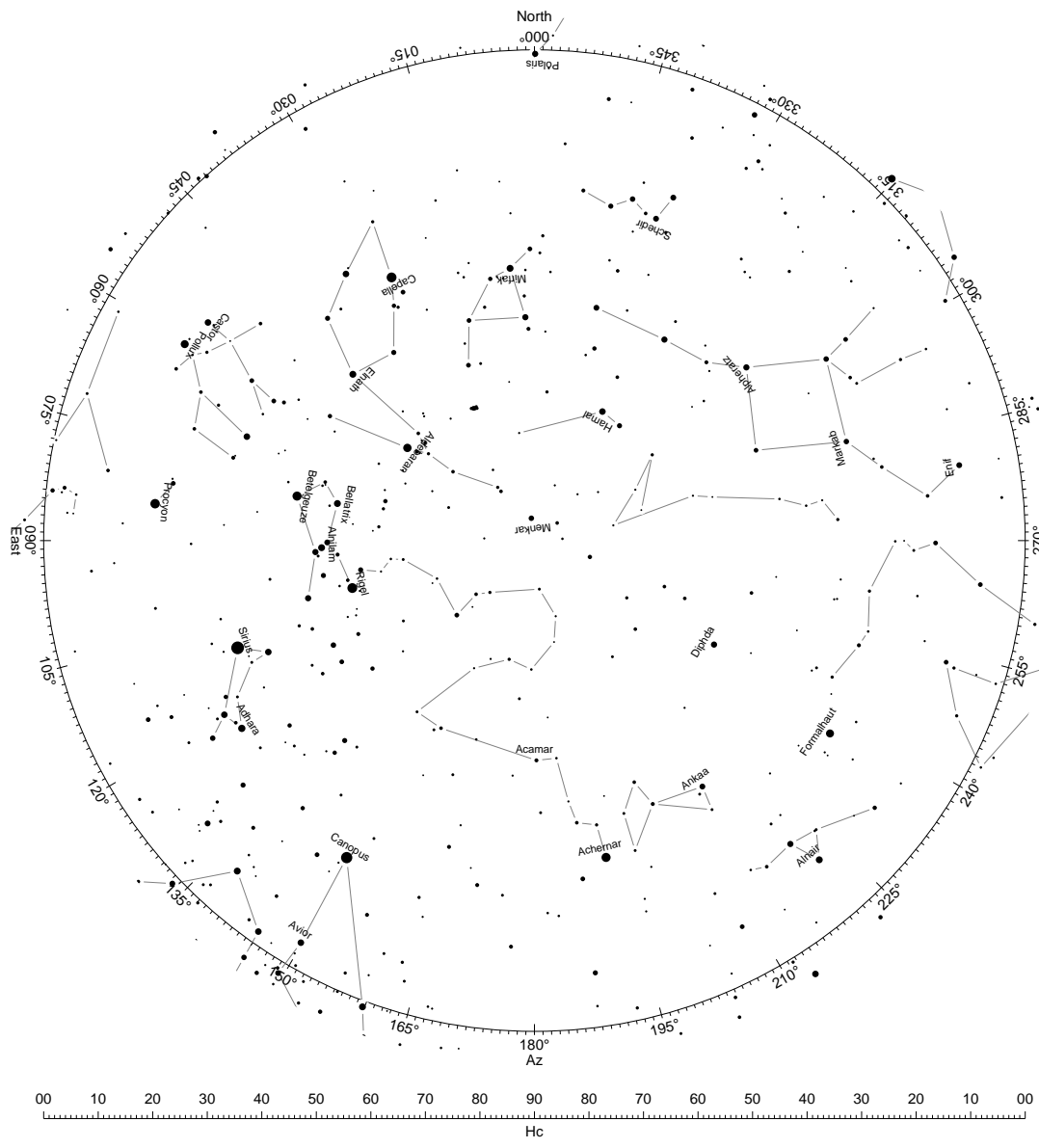


The map is centered on the celestial south pole and shows the brightest stars (up to magnitude 4.5) of the southern celestial hemisphere. The circle of constant declination is shown at 00° (Celestial Equator). The Sidereal Hour Angle of a specific star can be directly read from the SHA scale plotted 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 V



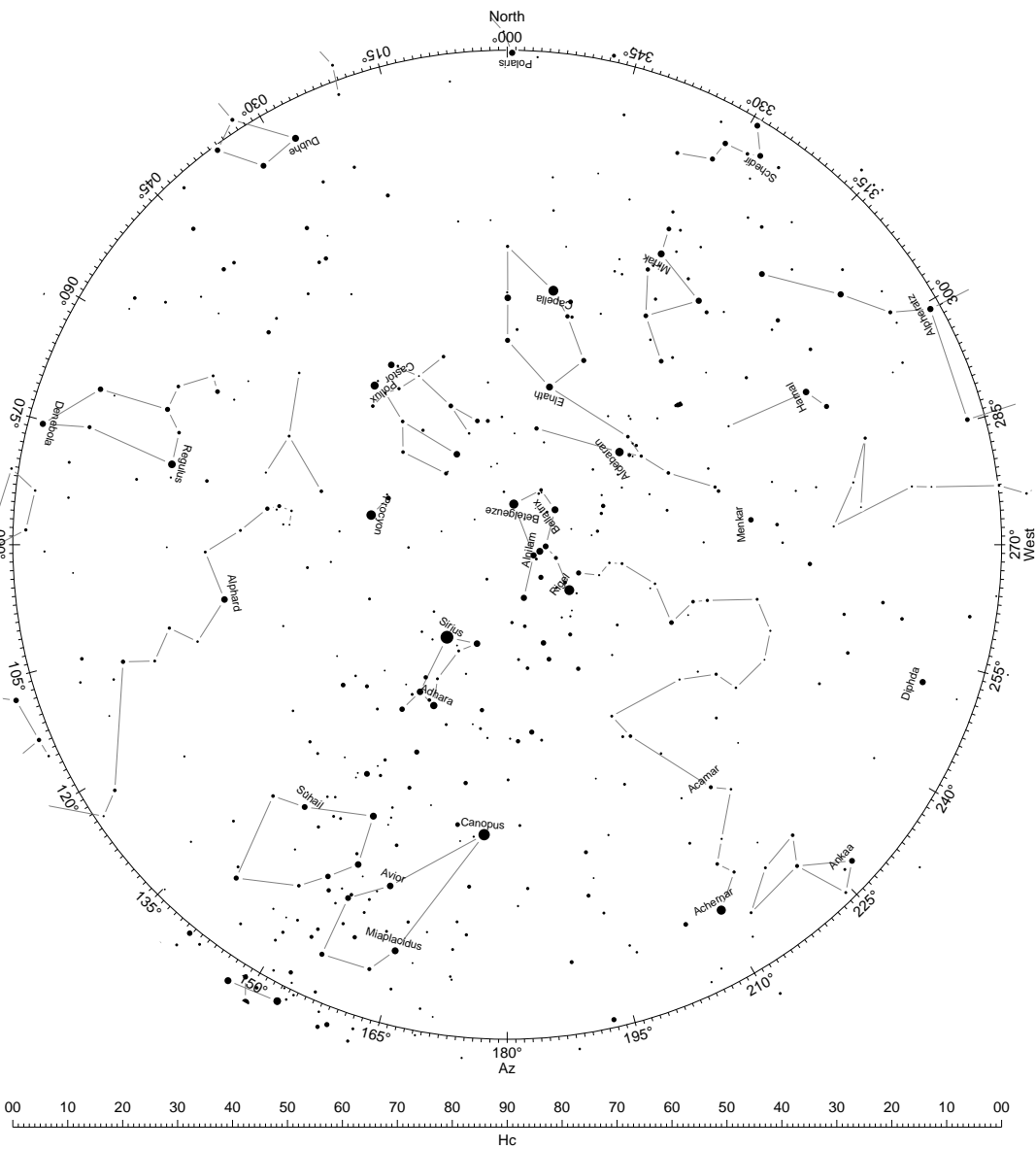
Horizontal-Coordinate-System Map of bright Stars - Part II



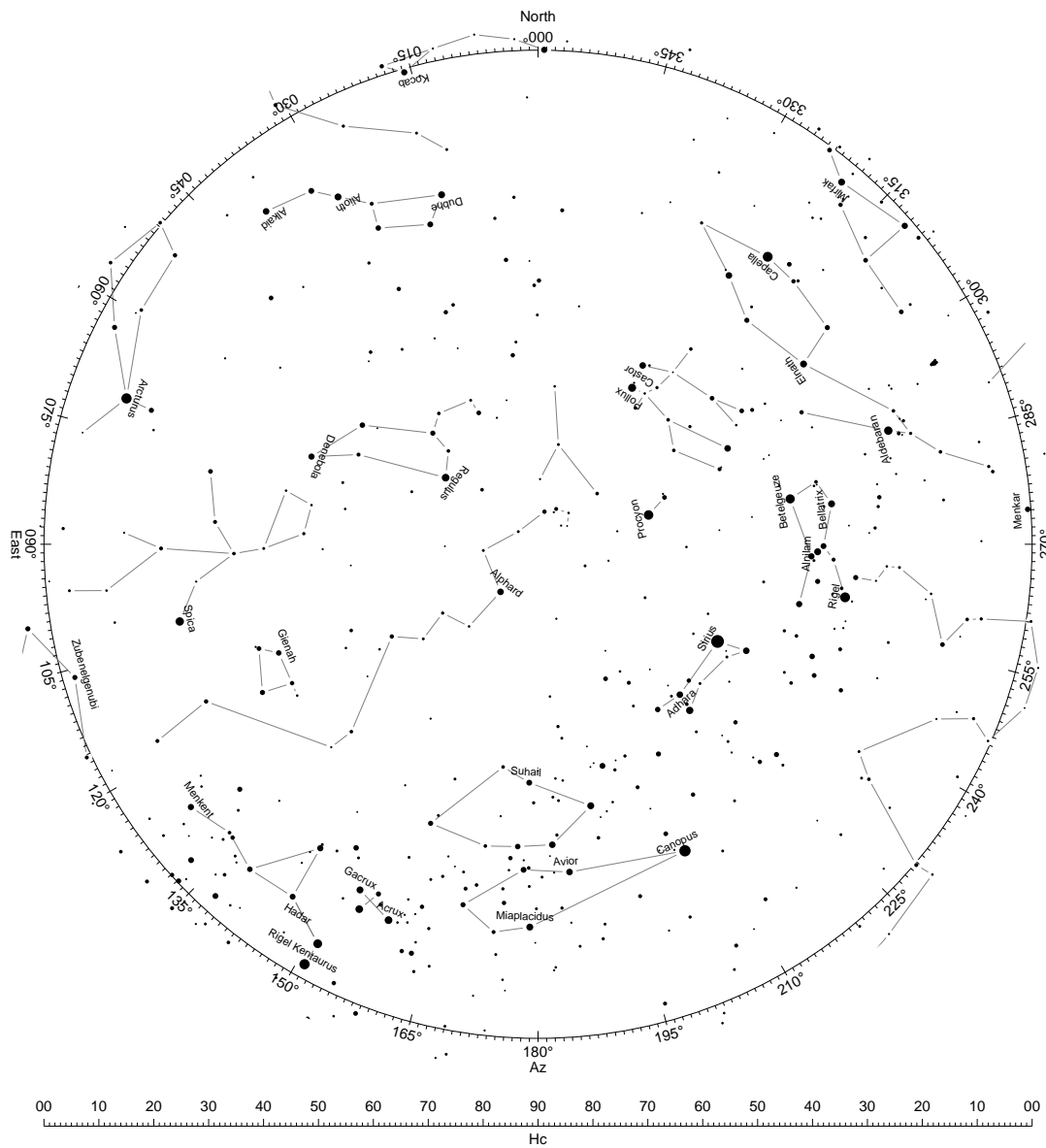
The Horizontal-Coordinate-System map shows the brightest stars (up to magnitude 4.5) of the local hemisphere for a location on the Equator. The stars are plotted with their Altitude (Hc) and Azimuth (Az) coordinates. The Azimuth scale is plotted on the circle of 0°-Altitude (local horizon). The Azimuth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

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 III



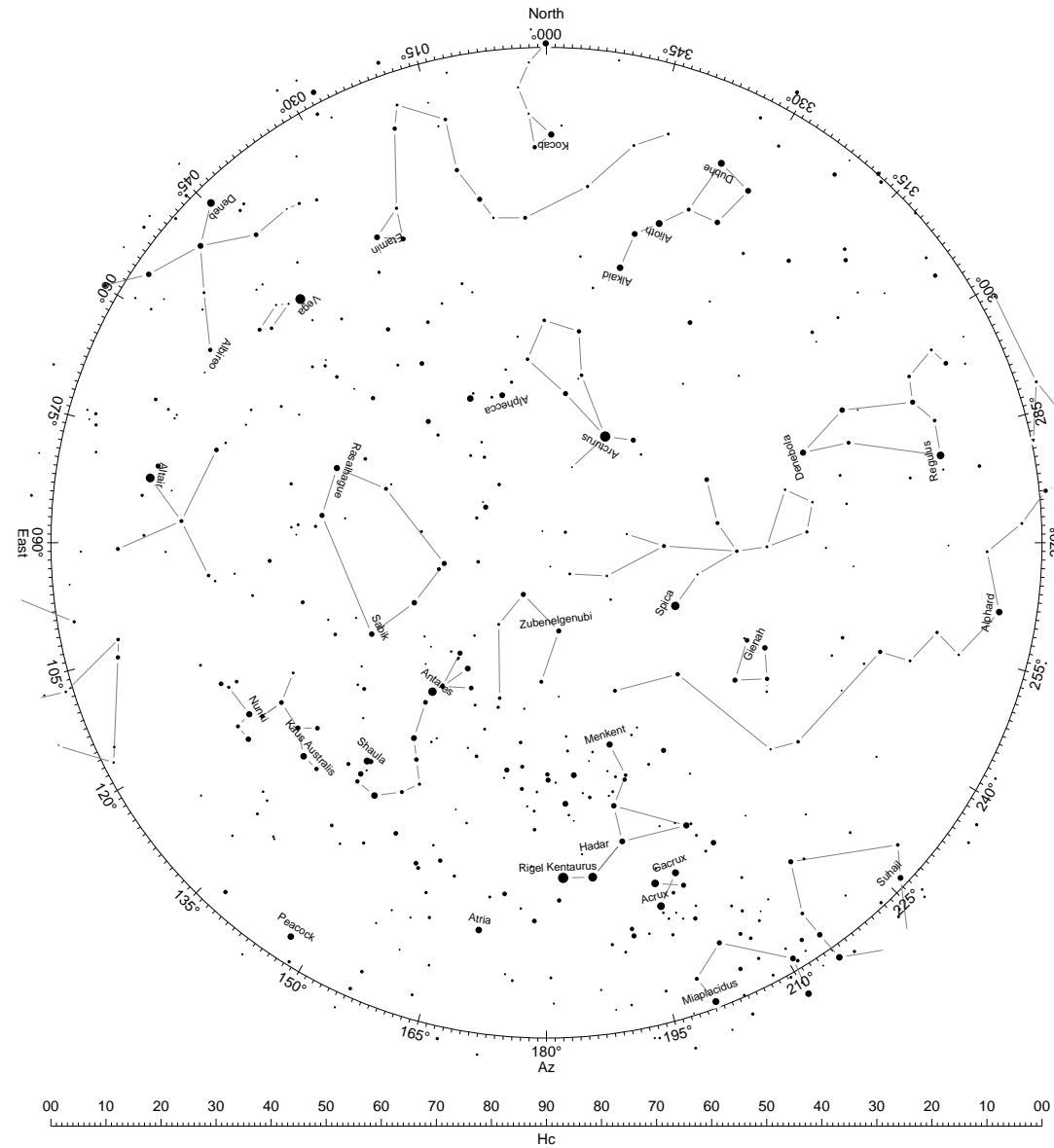
Horizontal-Coordinate-System Map of bright Stars - Part IV



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.

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.

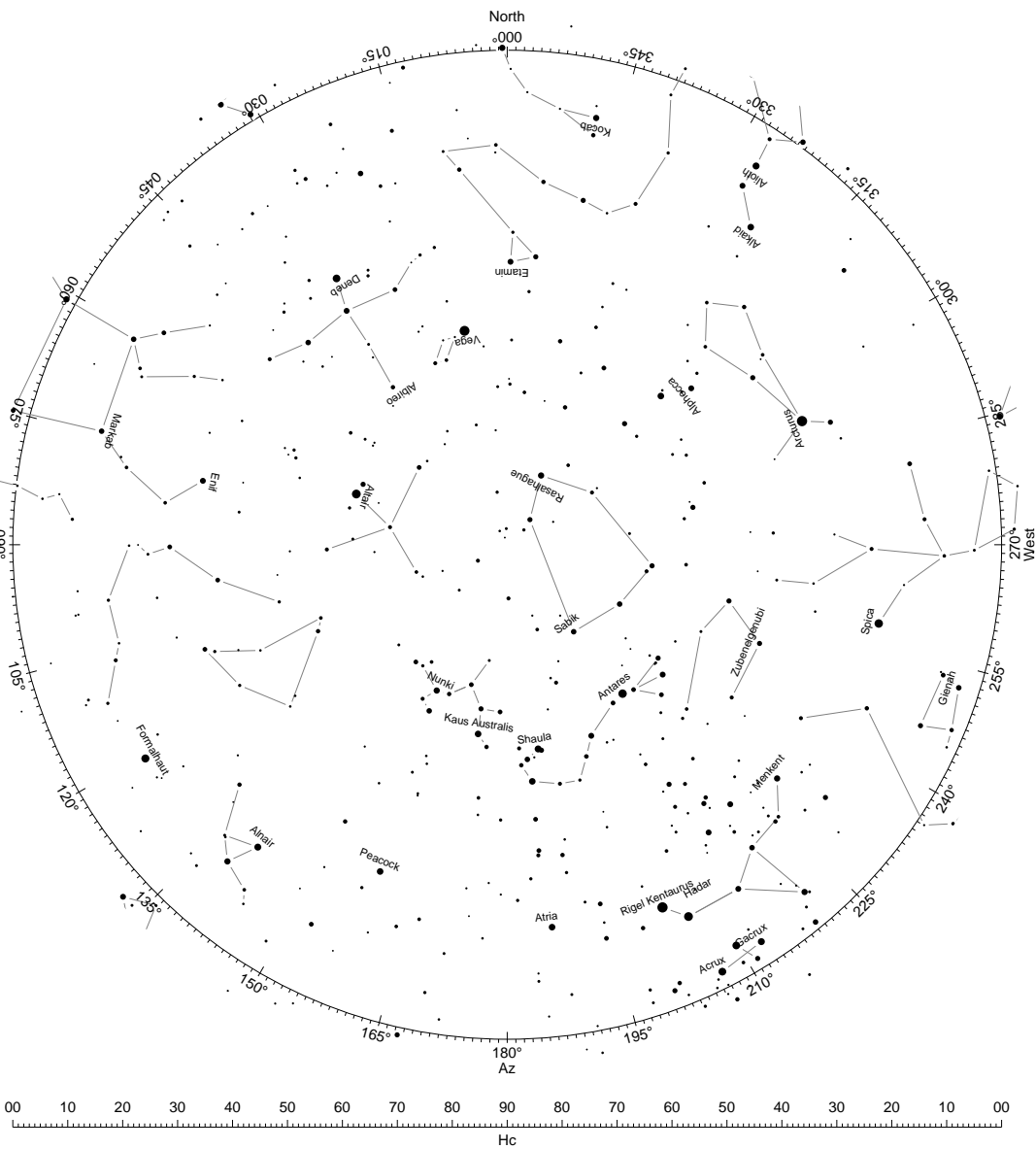
Horizontal-Coordinate-System Map of bright Stars - Part VI



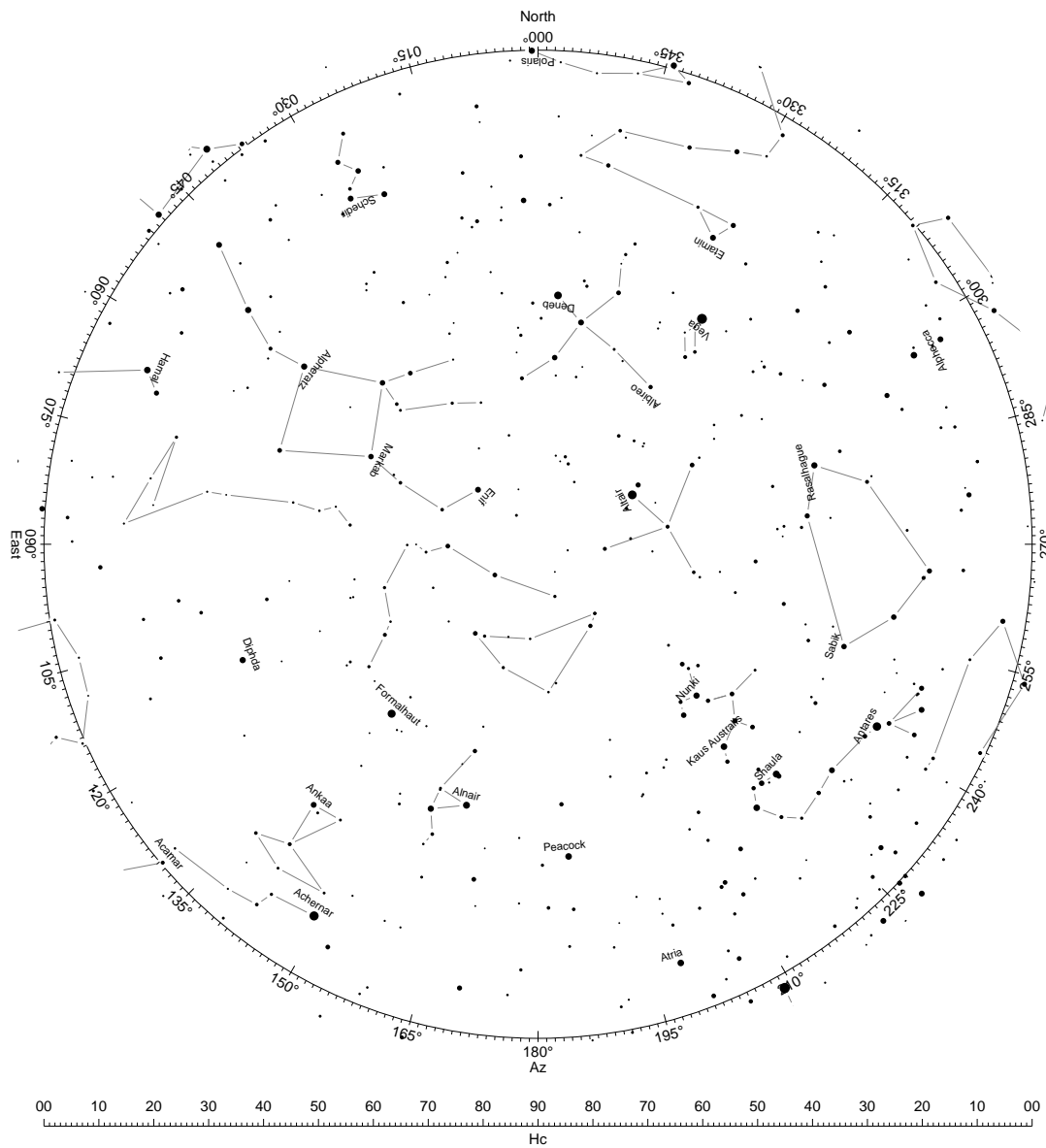
The Horizontal-Coordinate-System map shows the brightest stars (up to magnitude 4.5) of the local hemisphere for a location on the Equator. The stars are plotted with their Altitude (Hc) and Azimuth (Az) coordinates. The Azimuth scale is plotted on the circle of 0°-Altitude (local horizon). The Azimuth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



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.

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.

2023 - First Point of Aries / Selected Stars

UT	day 11 of 365 January 11		day 12 of 365 January 12		day 13 of 365 January 13		day 14 of 365 January 14		day 15 of 365 January 15		UT
	GHA ° / ' / "	ddGHA ° / ' / "	GHA ° / ' / "	ddGHA ° / ' / "	GHA ° / ' / "	ddGHA ° / ' / "	GHA ° / ' / "	ddGHA ° / ' / "	GHA ° / ' / "	ddGHA ° / ' / "	
00	110 14.7	+02.5	111 13.9	+02.4	112 13.0	+02.5	113 12.1	+02.5	114 11.3	+02.4	00
01	125 17.2	+02.4	126 16.3	+02.5	127 15.5	+02.4	128 14.6	+02.5	129 13.7	+02.5	01
02	140 19.6	+02.5	141 18.8	+02.5	142 17.9	+02.5	143 17.1	+02.4	144 16.2	+02.5	02
03	155 22.1	+02.5	156 21.3	+02.4	157 20.4	+02.5	158 19.5	+02.5	159 18.7	+02.4	03
04	170 24.6	+02.4	171 23.7	+02.5	172 22.9	+02.4	173 22.0	+02.5	174 21.1	+02.5	04
05	185 27.0	+02.5	186 26.2	+02.4	187 25.3	+02.5	188 24.5	+02.4	189 23.6	+02.5	05
06	200 29.5	+02.5	201 28.6	+02.5	202 27.8	+02.4	203 26.9	+02.5	204 26.1	+02.4	06
07	215 32.0	+02.4	216 31.1	+02.5	217 30.2	+02.5	218 29.4	+02.4	219 28.5	+02.5	07
08	230 34.4	+02.5	231 33.6	+02.4	232 32.7	+02.5	233 31.8	+02.5	234 31.0	+02.4	08
09	245 36.9	+02.5	246 36.0	+02.5	247 35.2	+02.4	248 34.3	+02.5	249 33.4	+02.5	09
10	260 39.4	+02.4	261 38.5	+02.5	262 37.6	+02.5	263 36.8	+02.4	264 35.9	+02.5	10
11	275 41.8	+02.5	276 41.0	+02.4	277 40.1	+02.5	278 39.2	+02.5	279 38.4	+02.4	11
12	290 44.3	+02.5	291 43.4	+02.5	292 42.6	+02.4	293 41.7	+02.5	294 40.8	+02.5	12
13	305 46.8	+02.4	306 45.9	+02.5	307 45.0	+02.5	308 44.2	+02.4	309 43.3	+02.5	13
14	320 49.2	+02.5	321 48.4	+02.4	322 47.5	+02.5	323 46.6	+02.5	324 45.8	+02.4	14
15	335 51.7	+02.4	336 50.8	+02.5	337 50.0	+02.4	338 49.1	+02.5	339 48.2	+02.5	15
16	350 54.1	+02.5	351 53.3	+02.4	352 52.4	+02.5	353 51.6	+02.4	354 50.7	+02.5	16
17	5 56.6	+02.5	6 55.7	+02.5	7 54.9	+02.4	8 54.0	+02.5	9 53.2	+02.4	17
18	20 59.1	+02.4	21 58.2	+02.5	22 57.3	+02.5	23 56.5	+02.5	24 55.6	+02.5	18
19	36 01.5	+02.5	37 00.7	+02.4	37 59.8	+02.5	38 59.0	+02.4	39 58.1	+02.5	19
20	51 04.0	+02.5	52 03.1	+02.5	53 02.3	+02.4	54 01.4	+02.5	55 00.6	+02.4	20
21	66 06.5	+02.4	67 05.6	+02.5	68 04.7	+02.5	69 03.9	+02.5	70 03.0	+02.5	21
22	81 08.9	+02.5	82 08.1	+02.4	83 07.2	+02.5	84 06.3	+02.5	85 05.5	+02.4	22
23	96 11.4	+02.5	97 10.5	+02.5	98 09.7	+02.4	99 08.8	+02.5	100 07.9	+02.5	23

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]

	SHA		Dec			SHA		Dec	
	° / ' / "	° / ' / "	° / ' / "	° / ' / "		° / ' / "	° / ' / "	° / ' / "	° / ' / "
Alpheratz	357	36.6	N 29	13.2	Gienah	175	45.1	S 17	40.1
Ankaa	353	09.0	S 42	11.0	Acrux	173	01.7	S 63	13.3
Schedir	349	33.0	N 56	40.0	Gacrux	171	53.4	S 57	14.1
Diphda	348	49.1	S 17	51.8	Alioth	166	14.5	N 55	49.8
Achernar	335	21.4	S 57	07.5	Spica	158	24.0	S 11	16.8
Hamal	327	53.0	N 23	34.4	Alkaid	152	53.3	N 49	11.7
Polaris	314	36.5	N 89	21.9	Hadar	148	38.5	S 60	28.7
Acamar	315	12.8	S 40	13.0	Menkent	147	59.3	S 36	28.5
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.1	N 19	04.4
Mirfak	308	30.3	N 49	56.7	Rigel Kentaurus	139	40.1	S 60	55.7
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	57.9	S 16	08.1
Capella	280	23.9	N 46	01.5	Kocab	137	20.2	N 74	03.3
Rigel	281	05.2	S 08	10.6	Alphecca	126	05.4	N 26	38.1
Bellatrix	278	24.3	N 06	22.2	Antares	112	18.3	S 26	28.9
Elnath	278	03.6	N 28	37.7	Atria	107	14.3	S 69	03.9
Alnilam	275	39.1	S 01	11.3	Sabik	102	05.0	S 15	45.2
Betelgeuze	270	53.6	N 07	24.6	Shaula	96	13.0	S 37	07.1
Canopus	263	52.6	S 52	42.5	Rasalhague	96	00.4	N 12	32.6
Sirius	258	27.1	S 16	44.4	Etamin	90	43.5	N 51	29.0
Adhara	255	06.8	S 29	00.2	Kaus Australis	83	35.1	S 34	22.4
Castor	245	58.7	N 31	50.3	Vega	80	34.8	N 38	48.1
Procyon	244	52.0	N 05	10.3	Nunki	75	50.2	S 26	16.1
Pollux	243	18.6	N 27	58.2	Albireo	67	05.8	N 28	00.4
Avior	234	14.7	S 59	34.9	Altair	62	02.1	N 08	55.5
Suhail	222	47.1	S 43	31.4	Peacock	53	08.9	S 56	39.8
Miaplacidus	221	37.6	S 69	48.5	Deneb	49	27.4	N 45	21.7
Alphard	217	49.1	S 08	45.5	Enif	33	40.7	N 09	58.8
Regulus	207	35.8	N 11	51.2	Alnair	27	35.4	S 46	51.2
Dubhe	193	42.5	N 61	37.4	Formalhaut	15	16.7	S 29	30.2
Denebola	182	26.3	N 14	26.6	Markab	13	31.7	N 15	19.7

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2023 - First Point of Aries / Selected Stars

2023 - 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	23.3	+02.5	101	22.5	+02.4	102	21.6	+02.5	103	20.7	+02.5	00
01	115	25.8	+02.4	116	24.9	+02.5	117	24.1	+02.4	118	23.2	+02.5	01
02	130	28.2	+02.5	131	27.4	+02.5	132	26.5	+02.5	133	25.7	+02.4	02
03	145	30.7	+02.5	146	29.9	+02.4	147	29.0	+02.5	148	28.1	+02.5	03
04	160	33.2	+02.4	161	32.3	+02.5	162	31.5	+02.4	163	30.6	+02.5	04
05	175	35.6	+02.5	176	34.8	+02.4	177	33.9	+02.5	178	33.1	+02.4	05
06	190	38.1	+02.5	191	37.2	+02.5	192	36.4	+02.4	193	35.5	+02.5	06
07	205	40.6	+02.4	206	39.7	+02.5	207	38.8	+02.5	208	38.0	+02.5	07
08	220	43.0	+02.5	221	42.2	+02.4	222	41.3	+02.5	223	40.5	+02.4	08
09	235	45.5	+02.5	236	44.6	+02.5	237	43.8	+02.4	238	42.9	+02.5	09
10	250	48.0	+02.4	251	47.1	+02.5	252	46.2	+02.5	253	45.4	+02.4	10
11	265	50.4	+02.5	266	49.6	+02.4	267	48.7	+02.5	268	47.8	+02.5	11
12	280	52.9	+02.5	281	52.0	+02.5	282	51.2	+02.4	283	50.3	+02.5	12
13	295	55.4	+02.4	296	54.5	+02.5	297	53.6	+02.5	298	52.8	+02.4	13
14	310	57.8	+02.5	311	57.0	+02.4	312	56.1	+02.5	313	55.2	+02.5	14
15	326	00.3	+02.4	326	59.4	+02.5	327	58.6	+02.4	328	57.7	+02.5	15
16	341	02.7	+02.5	342	01.9	+02.4	343	01.0	+02.5	344	00.2	+02.4	16
17	356	05.2	+02.5	357	04.3	+02.5	358	03.5	+02.5	359	02.6	+02.5	17
18	11	07.7	+02.4	12	06.8	+02.5	13	06.0	+02.4	14	05.1	+02.5	18
19	26	10.1	+02.5	27	09.3	+02.4	28	08.4	+02.5	29	07.6	+02.4	19
20	41	12.6	+02.5	42	11.7	+02.5	43	10.9	+02.4	44	10.0	+02.5	20
21	56	15.1	+02.4	57	14.2	+02.5	58	13.3	+02.5	59	12.5	+02.5	21
22	71	17.5	+02.5	72	16.7	+02.4	73	15.8	+02.5	74	15.0	+02.4	22
23	86	20.0	+02.5	87	19.1	+02.5	88	18.3	+02.4	89	17.4	+02.5	23

UT	day 6 of 365 <i>January 6</i>		day 7 of 365 <i>January 7</i>		day 8 of 365 <i>January 8</i>		day 9 of 365 <i>January 9</i>		day 10 of 365 <i>January 10</i>		UT		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
00	105	19.0	+02.5	106	18.2	+02.4	107	17.3	+02.5	108	16.4	+02.5	00
01	120	21.5	+02.4	121	20.6	+02.5	122	19.8	+02.4	123	18.9	+02.5	01
02	135	23.9	+02.5	136	23.1	+02.5	137	22.2	+02.5	138	21.4	+02.4	02
03	150	26.4	+02.5	151	25.6	+02.4	152	24.7	+02.5	153	23.8	+02.5	03
04	165	28.9	+02.4	166	28.0	+02.5	167	27.2	+02.4	168	26.3	+02.5	04
05	180	31.3	+02.5	181	30.5	+02.4	182	29.6	+02.5	183	28.8	+02.4	05
06	195	33.8	+02.5	196	32.9	+02.5	197	32.1	+02.5	198	31.2	+02.5	06
07	210	36.3	+02.4	211	35.4	+02.5	212	34.6	+02.4	213	33.7	+02.5	07
08	225	38.7	+02.5	226	37.9	+02.4	227	37.0	+02.5	228	36.2	+02.4	08
09	240	41.2	+02.5	241	40.3	+02.5	242	39.5	+02.4	243	38.6	+02.5	09
10	255	43.7	+02.4	256	42.8	+02.5	257	41.9	+02.5	258	41.1	+02.4	10
11	270	46.1	+02.4	271	45.3	+02.4	272	44.4	+02.5	273	43.5	+02.5	11
12	285	48.6	+02.5	286	47.7	+02.5	287	46.9	+02.4	288	46.0	+02.5	12
13	300	51.1	+02.4	301	50.2	+02.5	302	49.3	+02.5	303	48.5	+02.4	13
14	315	53.5	+02.5	316	52.7	+02.4	317	51.8	+02.5	318	50.9	+02.5	14
15	330	56.0	+02.4	331	55.1	+02.5	332	54.3	+02.4	333	53.4	+02.5	15
16	345	58.4	+02.5	346	57.6	+02.5	347	56.7	+02.5	348	55.9	+02.4	16
17	1	00.9	+02.5	2	00.1	+02.4	3	59.2	+02.5	4	58.3	+02.5	17
18	16	03.4	+02.4	17	02.5	+02.5	18	01.7	+02.4	19	00.8	+02.5	18
19	31	05.8	+02.5	32	05.0	+02.4	33	04.1	+02.5	34	03.3	+02.4	19
20	46	08.3	+02.5	47	07.4	+02.5	48	06.6	+02.4	49	05.7	+02.5	20
21	61	10.8	+02.4	62	09.9	+02.5	63	09.0	+02.5	64	08.2	+02.5	21
22	76	13.2	+02.5	77	12.4	+02.4	78	11.5	+02.5	79	10.7	+02.4	22
23	91	15.7	+02.5	92	14.8	+02.5	93	14.0	+02.4	94	13.1	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.6	N 29	13.2	
Ankaa	353	08.9	S 42	11.0	
Schedir	349	33.0	N 56	40.0	
Diphda	348	49.1	S 17	51.8	
Achernar	335	21.3	S 57	07.5	
Hamal	327	53.0	N 23	34.4	
Polaris	314	32.9	N 89	21.9	
Acamar	315	12.8	S 40	13.0	
Menkar	314	07.7	N 04	10.8	
Mirfak	308	30.3	N 49	56.7	
Aldebaran	290	41.3	N 16	33.4	
Capella	280	23.9	N 46	01.5	
Rigel	281	05.2	S 08	10.6	
Bellatrix	278	24.3	N 06	22.2	
Elnath	278	03.6	N 28	37.7	
Alnilam	275	39.1	S 01	11.3	
Betelgeuze	270	53.6	N 07	24.7	
Canopus	263	52.6	S 52	42.5	
Sirius	258	27.2	S 16	44.4	
Adhara	255	06.8	S 29	00.2	
Castor	245	58.7	N 31	50.3	
Procyon	244	52.0	N 05	10.3	
Pollux	243	18.6	N 27	58.2	
Avior	234	14.8	S 59	34.8	
Suhail	222	47.1	S 43	31.3	
Miaplacidus	221	37.7	S 69	48.5	
Alphard	217	49.1	S 08	45.4	
Regulus	207	35.9	N 11	51.3	
Dubhe	193	42.7	N 61	37.4	
Denebola	182	26.4	N 14	26.6	
Gienah	175	45.2	S 17	40.0	
Acrux	173	01.9	S 63	13.2	
Gacrux	171	53.5	S 57	14.1	
Alioth	166	14.6	N 55	49.9	
Spica	158	24.1	S 11	16.8	
Alkaid	152	53.4	N 49	11.7	
Hadar	148	38.6	S 60	28.7	
Menkent	147	59.5	S 36	28.5	
Arcturus	145	49.2	N 19	04.4	
Rigel Kentaurus	139	40.3	S 60	55.7	
Zubeneigenubi	136	58.0	S 16	08.1	
Kocab	137	20.4	N 74	03.4	
Alphecca	126	05.5	N 26	38.2	
Antares	112	18.3	S 26	28.9	
Atria	107	14.5	S 69	03.9	
Sabik	102	05.0	S 15	45.2	
Shaula	96	13.1	S 37	07.2	
Rasalhague	96	00.5	N 12	32.6	
Etamin	90	43.5	N 51	29.1	
Kaus Australis	83	35.1	S 34	22.4	
Vega	80	34.9	N 38	48.1	
Nunki	75	50.2	S 26	16.1	
Albireo	67	05.8	N 28	00.4	
Altair	62	02.1	N 08	55.5	
Peacock	53	08.9	S 56	39.8	
Deneb	49	27.4	N 45	21.8	
Enif	33	40.7	N 09	58.8	
Alnair	27	35.4	S 46	51.2	
Formalhaut	15	16.7	S 29	30.2	
Markab	13	31.7	N 15	19.7	

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.6	N 29	13.2	
Ankaa	353	09.0	S 42	11.0	
Schedir	349	33.0	N 56	40.0	
Diphda	348	49.1	S 17	51.8	
Achernar	335	21.4	S 57	07.5	
Hamal	327	53.0	N 23	34.4	
Polaris	314	34.4	N 89	21.9	
Acamar	315	12.8	S 40	13.0	
Menkar	314	07.7	N 04	10.8	
Mirfak	308	30.3	N 49	56.7	
Aldebaran	290	41.3	N 16	33.4	
Capella	280	23.9	N 46	01.5	
Rigel	281	05.2	S 08	10.6	
Bellatrix	278	24.3	N 06	22.2	
Elnath	278	03.6	N 28	37.7	
Alnilam	275	39.1	S 01	11.3	
Betelgeuze	270	53.6	N 07	24.6	
Canopus	263	52.6	S 52	42.5	
Sirius	258	27.2	S 16	44.4	
Adhara	255	06.8	S 29	00.2	
Castor	245	58.7	N 31	50.3	
Procyon	244	52.0	N 05	10.3	
Pollux	243	18.6	N 27	58.2	
Avior	234	14.8	S 59	34.9	
Suhail	222	47.1	S 43	31.4	
Miaplacidus	221	37.6	S 69	48.5	
Alphard	217	49.1	S 08	45.5	
Regulus	207	35.9	N 11	51.3	
Dubhe	193	42.6	N 61	37.4	
Denebola	182	26.4	N 14	26.6	
Gienah	175	45.2	S 17	40.1	
Acrux	173	01.8	S 63	13.2	
Gacrux	171	53.4	S 57	14.1	
Alioth	166	14.5	N 55	49.9	
Spica	158	24.1	S 11	16.8	
Alkaid	152	53.4	N 49	11.7	
Hadar	148	38.5	S 60	28.7	
Menkent	147	59.4	S 36	28.5	
Arcturus	145	49.2	N 19	04.4	
Rigel Kentaurus	139	40.2	S 60	55.7	
Zubeneigenubi	136	58.0	S 16	08.1	
Kocab	137	20.4	N 74	03.4	
Alphecca	126	05.4	N 26	38.1	
Antares	112	18.3	S 26	28.9	
Atria	107	14.4	S 69	03.9	
Sabik	102	05.0	S 15	45.2	
Shaula	96	13.0	S 37	07.1	
Rasalhague	96	00.4	N 12	32.6	
Etamin	90	43.5	N 51	29.0	
Kaus Australis	83	35.1	S 34	22.4	
Vega	80	34.9	N 38	48.1	

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 31 of 365 <i>January 31</i>		day 32 of 365 <i>February 1</i>		day 33 of 365 <i>February 2</i>		day 34 of 365 <i>February 3</i>		day 35 of 365 <i>February 4</i>		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	129 57.5	+02.5	130 56.6	+02.5	131 55.8	+02.4	132 54.9	+02.5	133 54.1	+02.4	00
01	144 60.0	+02.4	145 59.1	+02.5	146 58.2	+02.5	147 57.4	+02.5	148 56.5	+02.5	01
02	160 02.4	+02.5	161 01.6	+02.4	162 00.7	+02.5	162 59.9	+02.4	163 59.0	+02.5	02
03	175 04.9	+02.5	176 04.0	+02.5	177 03.2	+02.4	178 02.3	+02.5	179 01.5	+02.4	03
04	190 07.4	+02.4	191 06.5	+02.5	192 05.6	+02.5	193 04.8	+02.4	194 03.9	+02.5	04
05	205 09.8	+02.5	206 09.0	+02.4	207 08.1	+02.5	208 07.2	+02.5	209 06.4	+02.5	05
06	220 12.3	+02.5	221 11.4	+02.5	222 10.6	+02.4	223 09.7	+02.5	224 08.9	+02.4	06
07	235 14.8	+02.4	236 13.9	+02.5	237 13.0	+02.5	238 12.2	+02.4	239 11.3	+02.5	07
08	250 17.2	+02.5	251 16.4	+02.4	252 15.5	+02.5	253 14.6	+02.5	254 13.8	+02.4	08
09	265 19.7	+02.4	266 18.8	+02.5	267 18.0	+02.4	268 17.1	+02.5	269 16.2	+02.5	09
10	280 22.1	+02.5	281 21.3	+02.5	282 20.4	+02.5	283 19.6	+02.4	284 18.7	+02.5	10
11	295 24.6	+02.5	296 23.8	+02.4	297 22.9	+02.5	298 22.0	+02.5	299 21.2	+02.4	11
12	310 27.1	+02.4	311 26.2	+02.5	312 25.4	+02.4	313 24.5	+02.5	314 23.6	+02.5	12
13	325 29.5	+02.5	326 28.7	+02.4	327 27.8	+02.5	328 27.0	+02.4	329 26.1	+02.5	13
14	340 32.0	+02.5	341 31.1	+02.5	342 30.3	+02.4	343 29.4	+02.5	344 28.6	+02.4	14
15	355 34.5	+02.4	356 33.6	+02.5	357 32.7	+02.5	358 31.9	+02.5	359 31.0	+02.5	15
16	10 36.9	+02.5	11 36.1	+02.4	12 35.2	+02.5	13 34.4	+02.4	14 33.5	+02.5	16
17	25 39.4	+02.5	26 38.5	+02.5	27 37.7	+02.4	28 36.8	+02.5	29 36.0	+02.4	17
18	40 41.9	+02.4	41 41.0	+02.5	42 40.1	+02.5	43 39.3	+02.4	44 38.4	+02.5	18
19	55 44.3	+02.5	56 43.5	+02.4	57 42.6	+02.5	58 41.7	+02.5	59 40.9	+02.4	19
20	70 46.8	+02.5	71 45.9	+02.5	72 45.1	+02.4	73 44.2	+02.5	74 43.3	+02.5	20
21	85 49.3	+02.4	86 48.4	+02.5	87 47.5	+02.5	88 46.7	+02.4	89 45.8	+02.5	21
22	100 51.7	+02.5	101 50.9	+02.4	102 50.0	+02.5	103 49.1	+02.5	104 48.3	+02.4	22
23	115 54.2	+02.4	116 53.3	+02.5	117 52.5	+02.4	118 51.6	+02.5	119 50.7	+02.5	23

	SHA °	Dec °		SHA °	Dec °
Alpheratz	357 36.7	N 29 13.1	Gienah	175 45.0	S 17 40.2
Ankaa	353 09.1	S 42 11.0	AcruX	173 01.5	S 63 13.3
Schedir	349 33.2	N 56 40.0	Gacrux	171 53.2	S 57 14.2
Diphda	348 49.1	S 17 51.8	Alioth	166 14.2	N 55 49.8
Achernar	335 21.6	S 57 07.5	Spica	158 23.9	S 11 16.9
Hamal	327 53.1	N 23 34.3	Alkaid	152 53.1	N 49 11.6
Polaris	314 45.5	N 89 22.0	Hadar	148 38.2	S 60 28.7
Acamar	315 12.9	S 40 13.0	Menkent	147 59.2	S 36 28.6
Menkar	314 07.8	N 04 10.7	Arcturus	145 49.0	N 19 04.3
Mirfak	308 30.4	N 49 56.7	Rigel Kentaurus	139 39.8	S 60 55.7
Aldebaran	290 41.3	N 16 33.4	Zubanelgenubi	136 57.8	S 16 08.2
Capella	280 24.0	N 46 01.5	Kocab	137 19.8	N 74 03.3
Rigel	281 05.2	S 08 10.6	Alphecca	126 05.2	N 26 38.0
Bellatrix	278 24.3	N 06 22.2	Antares	112 18.1	S 26 28.9
Elnath	278 03.6	N 28 37.7	Atria	107 14.0	S 69 03.9
Alnilam	275 39.1	S 01 11.3	Sabik	102 04.8	S 15 45.2
Betelgeuze	270 53.6	N 07 24.6	Shaula	96 12.8	S 37 07.1
Canopus	263 52.7	S 52 42.6	Rasalhague	96 00.3	N 12 32.5
Sirius	258 27.1	S 16 44.5	Etamin	90 43.3	N 51 28.9
Adhara	255 06.8	S 29 00.3	Kaus Australis	83 35.0	S 34 22.3
Castor	245 58.6	N 31 50.3	Vega	80 34.8	N 38 48.0
Procyon	244 52.0	N 05 10.3	Nunki	75 50.1	S 26 16.1
Pollux	243 18.5	N 27 58.2	Albireo	67 05.7	N 28 00.3
Avior	234 14.7	S 59 35.0	Altair	62 02.0	N 08 55.5
Suhail	222 47.0	S 43 31.5	Peacock	53 08.8	S 56 39.7
Miaplacidus	221 37.5	S 69 48.6	Deneb	49 27.4	N 45 21.6
Alphard	217 49.0	S 08 45.6	Enif	33 40.7	N 09 58.7
Regulus	207 35.7	N 11 51.2	Alnair	27 35.4	S 46 51.1
Dubhe	193 42.3	N 61 37.4	Formalhaut	15 16.7	S 29 30.2
Denebola	182 26.2	N 14 26.5	Markab	13 31.8	N 15 19.7

UT	day 16 of 365 <i>January 16</i>		day 17 of 365 <i>January 17</i>		day 18 of 365 <i>January 18</i>		day 19 of 365 <i>January 19</i>		day 20 of 365 <i>January 20</i>		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	115 10.4	+02.5	116 09.5	+02.5	117 08.7	+02.5	118 07.8	+02.5	119 07.0	+02.4	00
01	130 12.9	+02.4	131 12.0	+02.5	132 11.2	+02.4	133 10.3	+02.5	134 09.4	+02.5	01
02	145 15.3	+02.5	146 14.5	+02.5	147 13.6	+02.5	148 12.8	+02.4	149 11.9	+02.5	02
03	160 17.8	+02.5	161 16.9	+02.5	162 16.1	+02.4	163 15.2	+02.5	164 14.4	+02.4	03
04	175 20.3	+02.4	176 19.4	+02.5	177 18.5	+02.5	178 17.7	+02.5	179 16.8	+02.5	04
05	190 22.7	+02.5	191 21.9	+02.4	192 21.0	+02.5	193 20.2	+02.4	194 19.3	+02.5	05
06	205 25.2	+02.5	206 24.3	+02.5	207 23.5	+02.4	208 22.6	+02.5	209 21.8	+02.4	06
07	220 27.7	+02.4	221 26.8	+02.5	222 25.9	+02.5	223 25.1	+02.4	224 24.2	+02.5	07
08	235 30.1	+02.5	236 29.3	+02.4	237 28.4	+02.5	238 27.5	+02.5	239 26.7	+02.5	08
09	250 32.6	+02.5	251 31.7	+02.5	252 30.9	+02.4	253 30.0	+02.5	254 29.2	+02.4	09
10	265 35.1	+02.4	266 34.2	+02.5	267 33.3	+02.5	268 32.5	+02.4	269 31.6	+02.5	10
11	280 37.5	+02.4	281 36.7	+02.4	282 35.8	+02.5	283 34.9	+02.5	284 34.1	+02.4	11
12	295 40.0	+02.4	296 39.1	+02.5	297 38.3	+02.4	298 37.4	+02.5	299 36.5	+02.5	12
13	310 42.4	+02.5	311 41.6	+02.4	312 40.7	+02.5	313 39.9	+02.4	314 39.0	+02.5	13
14	325 44.9	+02.5	326 44.0	+02.5	327 43.2	+02.5	328 42.3	+02.5	329 41.5	+02.4	14
15	340 47.4	+02.4	341 46.5	+02.5	342 45.7	+02.4	343 44.8	+02.5	344 43.9	+02.5	15
16	355 49.8	+02.5	356 49.0	+02.4	357 48.1	+02.5	358 47.3	+02.4	359 46.4	+02.5	16
17	10 52.3	+02.5	11 51.4	+02.5	12 50.6	+02.4	13 49.7	+02.5	14 48.9	+02.4	17
18	25 54.8	+02.4	26 53.9	+02.5	27 53.0	+02.5	28 52.2	+02.5	29 51.3	+02.5	18
19	40 57.2	+02.5	41 56.4	+02.4	42 55.5	+02.5	43 54.7	+02.4	44 53.8	+02.5	19
20	55 59.7	+02.5	56 58.8	+02.5	57 58.0	+02.4	58 57.1	+02.5	59 56.3	+02.4	20
21	71 02.2	+02.4	72 01.3	+02.5	73 00.4	+02.5	73 59.6	+02.4	74 58.7	+02.5	21
22	86 04.6	+02.5	87 03.8	+02.4	88 02.9	+02.5	89 02.0	+02.5	90 01.2	+02.5	22
23	101 07.1	+02.4	102 06.2	+02.5	103 05.4	+02.4	104 04.5	+02.5	105 03.7	+02.4	23

	SHA °	Dec °		SHA °	Dec °
Alpheratz	357 36.7	N 29 13.2	Gienah	175 45.1	S 17 40.1
Ankaa	353 09.0	S 42 11.0	AcruX	173 01.7	S 63 13.3
Schedir	349 33.1	N 56 40.0	Gacrux	171 53.3	S 57 14.1
Diphda	348 49.1	S 17 51.8	Alioth	166 14.4	N 55 49.8
Achernar	335 21.5	S 57 07.5	Spica	158 24.0	S 11 16.8
Hamal	327 53.1	N 23 34.4	Alkaid	152 53.3	N 49 11.7
Polaris	314 38.8	N 89 22.0	Hadar	148 38.4	S 60 28.7
Acamar	315 12.8	S 40 13.0	Menkent	147 59.3	S 36 28.5
Menkar	314 07.7	N 04 10.8	Arcturus	145 49.1	N 19 04.4
Mirfak	308 30.4	N 49 56.7	Rigel Kentaurus	139 40.0	S 60 55.7
Aldebaran	290 41.3	N 16 33.4	Zubanelgenubi	136 57.9	S 16 08.1
Capella	280 23.9	N 46 01.5	Kocab	137 20.1	N 74 03.3
Rigel	281 05.2	S 08 10.6	Alphecca	126 05.4	N 26 38.1
Bellatrix	278 24.3	N 06 22.2	Antares	112 18.2	S 26 28.9
Elnath	278 03.6	N 28 37.7	Atria	107 14.3	S 69 03.9
Alnilam	275 39.1	S 01 11.3	Sabik	102 05.0	S 15 45.2
Betelgeuze	270 53.6	N 07 24.6	Shaula	96 13.0	S 37 07.1
Canopus	263 52.6	S 52 42.5	Rasalhague	96 00.4	N 12 32.6
Sirius	258 27.1	S 16 44.5	Etamin	90 43.4	N 51 29.0
Adhara	255 06.8	S 29 00.2	Kaus Australis	83 35.1	S 34 22.4
Castor	245 58.7	N 31 50.3	Vega	80 34.8	N 38 48.0
Procyon	244 52.0	N 05 10.3	Nunki	75 50.2	S 26 16.1
Pollux	243 18.6	N 27 58.2	Albireo	67 05.8	N 28 00.4
Avior	234 14.7	S 59 34.9	Altair	62 02.1	N 08 55.5
Suhail	222 47.1	S 43 31.4	Peacock	53 08.9	S 56 39.7
Miaplacidus	221 37.5	S 69 48.5	Deneb	49 27.4	N 45 21.7
Alphard	217 49.1	S 08 45.5	Enif	33 40.7	N 09 58.8
Regulus	207 35.8	N 11 51.2	Alnair	27 35.4	S 46 51.2
Dubhe	193 42.5	N 61 37.4	Formalhaut	15 16.7	S 29 30.2
Denebola	182 26.3	N 14 26.6	Markab	13 31.8	N 15 19.7

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 21 of 365 January 21		day 22 of 365 January 22		day 23 of 365 January 23		day 24 of 365 January 24		day 25 of 365 January 25		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	120 06.1	+02.5	121 05.3	+02.4	122 04.4	+02.5	123 03.5	+02.5	124 02.7	+02.4	00
01	135 08.6	+02.4	136 07.7	+02.5	137 06.9	+02.4	138 06.0	+02.5	139 05.1	+02.5	01
02	150 11.0	+02.5	151 10.2	+02.4	152 09.3	+02.5	153 08.5	+02.4	154 07.6	+02.5	02
03	165 13.5	+02.5	166 12.6	+02.5	167 11.8	+02.5	168 10.9	+02.5	169 10.1	+02.4	03
04	180 16.0	+02.4	181 15.1	+02.4	182 14.3	+02.4	183 13.4	+02.5	184 12.5	+02.5	04
05	195 18.4	+02.5	196 17.6	+02.4	197 16.7	+02.5	198 15.9	+02.4	199 15.0	+02.5	05
06	210 20.9	+02.5	211 20.0	+02.5	212 19.2	+02.4	213 18.3	+02.5	214 17.5	+02.4	06
07	225 23.4	+02.4	226 22.5	+02.5	227 21.6	+02.5	228 20.8	+02.4	229 19.9	+02.5	07
08	240 25.8	+02.5	241 25.0	+02.4	242 24.1	+02.5	243 23.2	+02.5	244 22.4	+02.5	08
09	255 28.3	+02.5	256 27.4	+02.5	257 26.6	+02.4	258 25.7	+02.5	259 24.9	+02.4	09
10	270 30.8	+02.4	271 29.9	+02.5	272 29.0	+02.5	273 28.2	+02.4	274 27.3	+02.5	10
11	285 33.2	+02.5	286 32.4	+02.4	287 31.5	+02.5	288 30.6	+02.5	289 29.8	+02.4	11
12	300 35.7	+02.4	301 34.8	+02.5	302 34.0	+02.4	303 33.1	+02.5	304 32.2	+02.5	12
13	315 38.1	+02.5	316 37.3	+02.5	317 36.4	+02.5	318 35.6	+02.4	319 34.7	+02.5	13
14	330 40.6	+02.5	331 39.8	+02.4	332 38.9	+02.5	333 38.0	+02.5	334 37.2	+02.4	14
15	345 43.1	+02.4	346 42.2	+02.5	347 41.4	+02.4	348 40.5	+02.5	349 39.6	+02.5	15
16	0 45.5	+02.5	1 44.7	+02.4	2 43.8	+02.5	3 43.0	+02.4	4 42.1	+02.5	16
17	15 48.0	+02.5	16 47.1	+02.5	17 46.3	+02.5	18 45.4	+02.5	19 44.6	+02.4	17
18	30 50.5	+02.4	31 49.6	+02.5	32 48.8	+02.4	33 47.9	+02.5	34 47.0	+02.5	18
19	45 52.9	+02.5	46 52.1	+02.4	47 51.2	+02.5	48 50.4	+02.4	49 49.5	+02.5	19
20	60 55.4	+02.5	61 54.5	+02.5	62 53.7	+02.4	63 52.8	+02.5	64 52.0	+02.4	20
21	75 57.9	+02.4	76 57.1	+02.5	77 56.1	+02.5	78 55.3	+02.4	79 54.4	+02.5	21
22	91 00.3	+02.5	91 59.5	+02.4	92 58.6	+02.5	93 57.7	+02.5	94 56.9	+02.4	22
23	106 02.8	+02.5	107 01.9	+02.5	108 01.1	+02.4	109 00.2	+02.5	109 59.3	+02.5	23

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	36.7	N 29	13.2	Gienah	175	45.1	S 17	40.1
Ankaa	353	09.0	S 42	11.0	Acruz	173	01.6	S 63	13.3
Schedir	349	33.1	N 56	40.0	Gacrux	171	53.3	S 57	14.2
Diphda	348	49.1	S 17	51.8	Alioth	166	14.4	N 55	49.8
Achernar	335	21.5	S 57	07.5	Spica	158	24.0	S 11	16.8
Hamal	327	53.1	N 23	34.4	Alkaid	152	53.2	N 49	11.6
Polaris	314	40.6	N 89	22.0	Hadar	148	38.3	S 60	28.7
Acamar	315	12.9	S 40	13.0	Menkent	147	59.2	S 36	28.5
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.0	N 19	04.4
Mirfak	308	30.4	N 49	56.7	Rigel Kentaurus	139	39.9	S 60	55.7
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	57.8	S 16	08.1
Capella	280	23.9	N 46	01.5	Kocab	137	20.0	N 74	03.3
Rigel	281	05.2	S 08	10.6	Alphecca	126	05.3	N 26	38.1
Bellatrix	278	24.3	N 06	22.2	Antares	112	18.2	S 26	28.9
Elnath	278	03.6	N 28	37.7	Atria	107	14.2	S 69	03.9
Alnilam	275	39.1	S 01	11.3	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	53.5	N 07	24.6	Shaula	96	12.9	S 37	07.1
Canopus	263	52.6	S 52	42.6	Rasalhague	96	00.4	N 12	32.6
Sirius	258	27.1	S 16	44.5	Etamin	90	43.4	N 51	28.9
Adhara	255	06.7	S 29	00.3	Kaus Australis	83	35.0	S 34	22.3
Castor	245	58.7	N 31	50.3	Vega	80	34.8	N 38	48.0
Procyon	244	52.0	N 05	10.3	Nunki	75	50.1	S 26	16.1
Pollux	243	18.6	N 27	58.2	Albireo	67	05.7	N 28	00.4
Avior	234	14.7	S 59	34.9	Altair	62	02.0	N 08	55.5
Suhail	222	47.0	S 43	31.4	Peacock	53	08.9	S 56	39.7
Miaplacidus	221	37.5	S 69	48.6	Deneb	49	27.4	N 45	21.7
Alphard	217	49.0	S 08	45.5	Enif	33	40.7	N 09	58.7
Regulus	207	35.8	N 11	51.2	Alnair	27	35.4	S 46	51.1
Dubhe	193	42.4	N 61	37.4	Formalhaut	15	16.7	S 29	30.2
Denebola	182	26.3	N 14	26.6	Markab	13	31.8	N 15	19.7

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 01.8	+02.5	126 00.9	+02.5	127 00.1	+02.5	127 59.2	+02.5	128 58.4	+02.4	00
01	140 04.3	+02.4	141 03.4	+02.5	142 02.6	+02.4	143 01.7	+02.5	144 00.8	+02.5	01
02	155 06.7	+02.5	156 05.9	+02.4	157 05.0	+02.5	158 04.2	+02.4	159 03.3	+02.5	02
03	170 09.2	+02.5	171 08.3	+02.5	172 07.5	+02.4	173 06.6	+02.5	174 05.8	+02.4	03
04	185 11.7	+02.4	186 10.8	+02.5	187 09.9	+02.5	188 09.1	+02.4	189 08.2	+02.5	04
05	200 14.1	+02.5	201 13.3	+02.4	202 12.4	+02.5	203 11.5	+02.5	204 10.7	+02.4	05
06	215 16.6	+02.5	216 15.7	+02.5	217 14.9	+02.4	218 14.0	+02.5	219 13.1	+02.5	06
07	230 19.1	+02.4	231 18.2	+02.5	232 17.3	+02.5	233 16.5	+02.4	234 15.6	+02.5	07
08	245 21.5	+02.5	246 20.7	+02.4	247 19.8	+02.5	248 18.9	+02.5	249 18.1	+02.4	08
09	260 24.0	+02.5	261 23.1	+02.5	262 22.3	+02.4	263 21.4	+02.4	264 20.5	+02.5	09
10	275 26.5	+02.4	276 25.6	+02.5	277 24.7	+02.5	278 23.9	+02.4	279 23.0	+02.5	10
11	290 28.9	+02.4	291 28.1	+02.4	292 27.2	+02.5	293 26.3	+02.5	294 25.5	+02.4	11
12	305 31.4	+02.4	306 30.5	+02.5	307 29.7	+02.4	308 28.8	+02.5	309 27.9	+02.5	12
13	320 33.8	+02.5	321 33.0	+02.4	322 32.1	+02.5	323 31.3	+02.4	324 30.4	+02.5	13
14	335 36.3	+02.5	336 35.4	+02.5	337 34.6	+02.4	338 33.7	+02.5	339 32.9	+02.4	14
15	350 38.8	+02.4	351 37.9	+02.5	352 37.0	+02.5	353 36.2	+02.5	354 35.3	+02.5	15
16	5 41.2	+02.5	6 40.4	+02.4	7 39.5	+02.5	8 38.7	+02.4	9 37.8	+02.5	16
17	20 43.7	+02.5	21 42.8	+02.5	22 42.0	+02.4	23 41.1	+02.5	24 40.3	+02.4	17
18	35 46.2	+02.4	36 45.3	+02.5	37 44.4	+02.5	38 43.6	+02.4	39 42.7	+02.5	18
19	50 48.6	+02.5	51 47.8	+02.4	52 46.9	+02.5	53 46.0	+02.5	54 45.2	+02.4	19
20	65 51.1	+02.5	66 50.2	+02.5	67 49.4	+02.4	68 48.5	+02.5	69 47.6	+02.5	20
21	80 53.6	+02.4	81 52.7	+02.5	82 51.8	+02.5	83 51.0	+02.4	84 50.1	+02.5	21
22	95 56.0	+02.5	96 55.2	+02.4	97 54.3	+02.5	98 53.4	+02.5	99 52.6	+02.4	22
23	110 58.5	+02.4	111 57.6	+02.5	112 56.8	+02.4	113 55.9	+02.5	114 55.0	+02.5	23

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	36.7	N 29	13.1	Gienah	175	45.0	S 17	40.1
Ankaa	353	09.0	S 42	11.0	Acruz	173	01.5	S 63	13.3
Schedir	349	33.1	N 56	40.0	Gacrux	171	53.2	S 57	14.2
Diphda	348	49.1	S 17	51.8	Alioth	166	14.3	N 55	49.8
Achernar	335	21.5	S 57	07.5	Spica	158	23.9	S 11	16.9
Hamal	327	53.1	N 23	34.4	Alkaid	152	53.2	N 49	11.6
Polaris	314	43.2	N 89	22.0	Hadar	148	38.2	S 60	28.7
Acamar	315	12.9	S 40	13.0	Menkent	147	59.2	S 36	28.5
Menkar	314	07.7	N 04	10.8	Arcturus	145	49.0	N 19	04.3
Mirfak	308	30.4	N 49	56.7	Rigel Kentaurus	139	39.9	S 60	55.7
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	57.8	S 16	08.2
Capella	280	23.9	N 46	01.5	Kocab	137	19.9	N 74	03.3
Rigel	281	05.2	S 08	10.6	Alphecca	126	05.3	N 26	38.1
Bellatrix	278	24.3	N 06	22.2	Antares	112	18.1	S 26	28.9
Elnath	278	03.6	N 28	37.7	Atria	107	14.1	S 69	03.9
Alnilam	275	39.1	S 01	11.3	Sabik	102	04.9	S 15	45.2
Betelgeuze	270	53.6	N 07	24.6	Shaula	96	12.9	S 37	07.1
Canopus	263	52.6	S 52	42.6	Rasalhague	96	00.3	N 12	32.5
Sirius	258	27.1	S 16	44.5	Etamin	90	43.4	N 51	28.9
Adhara	255	06.8	S 29	00.3	Kaus Australis	83	35.0	S 34	22.3
Castor	245	58.6	N 31	50.3	Vega	80	34.8	N 38	48.0
Procyon	244	52.0	N 05	10.3	Nunki	75	50.1	S 26	16.1
Pollux	243	18.5	N 27	58.2	Albireo	67	05.7	N 28	00.3
Avior	234	14.7	S 59	35.0	Altair	62	02.0	N 08	55.5
Suhail	222	47.0	S 43	31.5	Peacock	53	08.9	S 56	39.7
Miaplacidus	221	37.5	S 69	48.6	Deneb	49	27.4	N 45	21.7
Alphard	217	49.0	S 08	45.5	Enif	33	40.7	N 09	58.7
Regulus	207	35.7	N 11	51.2	Alnair	27	35.4	S 46	51.1
Dubhe	193	42.3	N 61	37.4	Formalhaut	15	16.7	S 29	30.2
Denebola	182	26.2	N 14	26.5	Markab	13	31.8	N 1	

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 51 of 365		day 52 of 365		day 53 of 365		day 54 of 365		day 55 of 365		UT		
	<i>February 20</i>		<i>February 21</i>		<i>February 22</i>		<i>February 23</i>		<i>February 24</i>				
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
00	149	40.3	+02.5	150	39.4	+02.5	151	38.6	+02.4	152	37.7	+02.5	00
01	164	42.8	+02.4	165	41.9	+02.5	166	41.0	+02.5	167	40.2	+02.4	01
02	179	45.2	+02.5	180	44.4	+02.4	181	43.5	+02.5	182	42.6	+02.5	02
03	194	47.7	+02.4	195	46.8	+02.5	196	46.0	+02.4	197	45.1	+02.5	03
04	209	50.1	+02.5	210	49.3	+02.4	211	48.4	+02.5	212	47.6	+02.4	04
05	224	52.6	+02.5	225	51.7	+02.5	226	50.9	+02.4	227	50.0	+02.5	05
06	239	55.1	+02.4	240	54.2	+02.5	241	53.3	+02.5	242	52.5	+02.4	06
07	254	57.5	+02.5	255	56.7	+02.4	256	55.8	+02.5	257	54.9	+02.5	07
08	270	00.0	+02.5	270	59.1	+02.5	271	58.3	+02.4	272	57.4	+02.5	08
09	285	02.5	+02.4	286	01.6	+02.5	287	00.7	+02.5	288	59.9	+02.4	09
10	300	04.9	+02.5	301	04.1	+02.4	302	03.2	+02.5	303	02.3	+02.5	10
11	315	07.4	+02.5	316	06.5	+02.5	317	05.7	+02.4	318	04.8	+02.5	11
12	330	09.9	+02.4	331	09.0	+02.5	332	08.1	+02.5	333	07.3	+02.4	12
13	345	12.3	+02.5	346	11.5	+02.4	347	10.6	+02.5	348	09.7	+02.5	13
14	0	14.8	+02.4	1	13.9	+02.5	2	13.1	+02.4	3	12.2	+02.5	14
15	15	17.2	+02.5	16	16.4	+02.5	17	15.5	+02.5	18	14.7	+02.4	15
16	30	19.7	+02.5	31	18.9	+02.4	32	18.0	+02.5	33	17.1	+02.5	16
17	45	22.2	+02.4	46	21.3	+02.5	47	20.5	+02.4	48	19.6	+02.5	17
18	60	24.6	+02.5	61	23.8	+02.4	62	22.9	+02.5	63	22.1	+02.4	18
19	75	27.1	+02.5	76	26.2	+02.5	77	25.4	+02.4	78	24.5	+02.5	19
20	90	29.6	+02.4	91	28.7	+02.5	92	27.8	+02.5	93	27.0	+02.4	20
21	105	32.0	+02.5	106	31.2	+02.4	107	30.3	+02.5	108	29.4	+02.5	21
22	120	34.5	+02.5	121	33.6	+02.5	122	32.8	+02.4	123	31.9	+02.5	22
23	135	37.0	+02.4	136	36.1	+02.5	137	35.2	+02.5	138	34.4	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.7	N 29	13.1	
Ankaa	353	09.1	S 42	11.0	
Schedir	349	33.3	N 56	39.9	
Diphda	348	49.2	S 17	51.8	
Achernar	335	21.7	S 57	07.5	
Hamal	327	53.2	N 23	34.3	
Polaris	314	55.0	N 89	22.0	
Acamar	315	13.0	S 40	13.0	
Menkar	314	07.8	N 04	10.7	
Mirfak	308	30.5	N 49	56.7	
Aldebaran	290	41.4	N 16	33.4	
Capella	280	24.0	N 46	01.6	
Rigel	281	05.2	S 08	10.6	
Bellatrix	278	24.4	N 06	22.2	
Elnath	278	03.7	N 28	37.7	
Alnilam	275	39.2	S 01	11.3	
Betelgeuze	270	53.6	N 07	24.6	
Canopus	263	52.8	S 52	42.7	
Sirius	258	27.2	S 16	44.5	
Adhara	255	06.8	S 29	00.4	
Castor	245	58.7	N 31	50.3	
Procyon	244	52.0	N 05	10.3	
Pollux	243	18.5	N 27	58.2	
Avior	234	14.8	S 59	35.1	
Suhail	222	47.0	S 43	31.6	
Miaplacidus	221	37.5	S 69	48.8	
Alphard	217	48.9	S 08	45.6	
Regulus	207	35.7	N 11	51.2	
Dubhe	193	42.1	N 61	37.5	
Denebola	182	26.1	N 14	26.5	
Gienah	175	44.9	S 17	40.2	
Acrux	173	01.3	S 63	13.4	
Gacrux	171	53.0	S 57	14.3	
Alioth	166	14.0	N 55	49.8	
Spica	158	23.7	S 11	16.9	
Alkaid	152	52.9	N 49	11.6	
Hadar	148	37.9	S 60	28.8	
Menkent	147	59.0	S 36	28.6	
Arcturus	145	48.8	N 19	04.3	
Rigel Kentaurus	139	39.5	S 60	55.8	
Zubenelgenubi	136	57.6	S 16	08.2	
Kocab	137	19.4	N 74	03.3	
Alphecca	126	05.1	N 26	38.0	
Antares	112	17.9	S 26	28.9	
Atria	107	13.6	S 69	03.8	
Sabik	102	04.7	S 15	45.3	
Shaula	96	12.6	S 37	07.1	
Rasalhague	96	00.2	N 12	32.5	
Etamin	90	43.2	N 51	28.8	
Kaus Australis	83	34.8	S 34	22.3	
Vega	80	34.6	N 38	47.9	
Nunki	75	49.9	S 26	16.1	
Albireo	67	05.6	N 28	00.2	
Altair	62	01.9	N 08	55.4	
Peacock	53	08.7	S 56	39.6	
Deneb	49	27.3	N 45	21.5	
Enif	33	40.7	N 09	58.7	
Alnair	27	35.4	S 46	51.0	
Formalhaut	15	16.7	S 29	30.1	
Markab	13	31.8	N 15	19.7	

UT	day 36 of 365		day 37 of 365		day 38 of 365		day 39 of 365		day 40 of 365		UT		
	<i>February 5</i>		<i>February 6</i>		<i>February 7</i>		<i>February 8</i>		<i>February 9</i>				
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
00	134	53.2	+02.5	135	52.3	+02.5	136	51.5	+02.4	137	50.6	+02.5	00
01	149	55.7	+02.4	150	54.8	+02.5	151	53.9	+02.5	152	53.1	+02.4	01
02	164	58.1	+02.5	165	57.3	+02.5	166	56.4	+02.5	167	55.5	+02.5	02
03	180	00.6	+02.5	180	59.7	+02.5	181	58.9	+02.4	182	58.0	+02.5	03
04	195	03.1	+02.4	196	02.2	+02.5	197	01.3	+02.5	198	00.5	+02.4	04
05	210	05.5	+02.5	211	04.7	+02.4	212	03.8	+02.5	213	02.9	+02.5	05
06	225	08.0	+02.5	226	07.1	+02.5	227	06.3	+02.4	228	05.4	+02.5	06
07	240	10.5	+02.4	241	09.6	+02.5	242	08.7	+02.5	243	07.9	+02.4	07
08	255	12.9	+02.5	256	12.1	+02.4	257	11.2	+02.5	258	10.3	+02.5	08
09	270	15.4	+02.4	271	14.5	+02.5	272	13.7	+02.4	273	12.8	+02.5	09
10	285	17.8	+02.5	286	17.0	+02.4	287	16.1	+02.5	288	15.3	+02.4	10
11	300	20.3	+02.5	301	19.4	+02.5	302	18.6	+02.5	303	17.7	+02.5	11
12	315	22.8	+02.4	316	21.9	+02.5	317	21.1	+02.4	318	20.2	+02.5	12
13	330	25.2	+02.5	331	24.4	+02.4	332	23.5	+02.5	333	22.7	+02.4	13
14	345	27.7	+02.5	346	26.8	+02.5	347	26.0	+02.4	348	25.1	+02.5	14
15	0	30.2	+02.4	1	29.3	+02.5	2	28.4	+02.5	3	27.6	+02.4	15
16	15	32.6	+02.5	16	31.8	+02.4	17	30.9	+02.5	18	30.0	+02.5	16
17	30	35.1	+02.5	31	34.2	+02.5	32	33.4	+02.4	33	32.5	+02.5	17
18	45	37.6	+02.4	46	36.7	+02.5	47	35.8	+02.5	48	35.0	+02.4	18
19	60	40.0	+02.5	61	39.2	+02.4	62	38.3	+02.5	63	37.4	+02.5	19
20	75	42.5	+02.5	76	41.6	+02.5	77	40.8	+02.4	78	39.9	+02.5	20
21	90	45.0	+02.4	91	44.1	+02.5	92	43.2	+02.5	93	42.4	+02.5	21
22	105	47.4	+02.5	106	46.6	+02.4	107	45.7	+02.5	108	44.8	+02.5	22
23	120	49.9	+02.4	121	49.0	+02.5	122	48.2	+02.4	123	47.3	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.7	N 29	13.1	
Ankaa	353	09.1	S 42	11.0	
Schedir	349	33.2	N 56	40.0	
Diphda	348	49.1	S 17	51.8	
Achernar	335	21.6	S 57	07.5	
Hamal	327	53.1	N 23	34.3	
Polaris	314	47.7	N 89	22.0	
Acamar	315	12.9	S 40	13.0	
Menkar	314	07.8	N 04	10.7	
Mirfak	308	30.4	N 49	56.7	
Aldebaran	290	41.3	N 16	33.4	
Capella	280	24.0	N 46	01.5	
Rigel	281	05.2	S 08	10.6	
Bellatrix	278	24.4	N 06	22.2	
Elnath	278	03.6	N 28	37.7	
Alnilam	275	39.1	S 01	11.3	
Betelgeuze	270	53.6	N 07	24.6	
Canopus	263	52.7	S 52	42.6	
Sirius	258	27.2	S 16	44.5	
Adhara	255	06.8	S 29	00.3	
Castor	245	58.6	N 31	50.3	
Procyon	244	51.9	N 05	10.3	
Pollux	243	18.5	N 27	58.2	
Avior	234	14.7	S 59	35.0	
Suhail	222	47.0	S 43	31.5	
Miaplacidus	221	37.5	S 69	48.7	
Alphard	217	49.0	S 08	45.6	
Regulus	207	35.7	N 11	51.2	
Dubhe	193	42.3	N 61	37.4	
Denebola	182	26.1	N 14	26.5	
Gienah	175	44.9	S 17	40.2	
Acrux	173	01.4	S 63	13.4	
Gacrux	171	53.1	S 57	14.2	
Alioth	166	14.2	N 55	49.8	
Spica	158	23.8	S 11	16.9	
Alkaid	152	53.1	N 49	11.6	
Hadar	148	38.1	S 60	28.8	
Menkent	147	59.1	S 36	28.6	
Arcturus	145	48.9	N 19	04.3	
Rigel Kentaurus	139	39.7	S 60	55.7	
Zubenelgenubi	136	57.7	S 16	08.2	
Kocab	137	19.7	N 74	03.3	
Alphecca	126	05.2	N 26	38.0	
Antares	112	18.0	S 26	28.9	
Atria	107	13.9	S 69	03.9	
Sabik	102	04.8	S 15	45.3	
Shaula	96	12.8	S 37	07.1	
Rasalhague	96	00.3	N 12	32.5	
Etamin	90	43.3	N 51	28.9	
Kaus Australis					

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

	day 41 of 365 <i>February 10</i>		day 42 of 365 <i>February 11</i>		day 43 of 365 <i>February 12</i>		day 44 of 365 <i>February 13</i>		day 45 of 365 <i>February 14</i>		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT
00	139 48.9	+02.5	140 48.0	+02.5	141 47.2	+02.4	142 46.3	+02.5	143 45.4	+02.5	00
01	154 51.4	+02.4	155 50.5	+02.5	156 49.6	+02.5	157 48.8	+02.4	158 47.9	+02.5	01
02	169 53.8	+02.5	170 53.0	+02.4	171 52.1	+02.5	172 51.2	+02.5	173 50.4	+02.4	02
03	184 56.3	+02.5	185 55.4	+02.5	186 54.6	+02.4	187 53.7	+02.5	188 52.8	+02.5	03
04	199 58.8	+02.4	200 57.9	+02.5	201 57.0	+02.5	202 56.2	+02.4	203 55.3	+02.5	04
05	215 01.2	+02.5	216 00.4	+02.4	216 59.5	+02.5	217 58.6	+02.5	218 57.8	+02.4	05
06	230 03.7	+02.4	231 02.8	+02.5	232 02.0	+02.4	233 01.1	+02.5	234 00.2	+02.5	06
07	245 06.1	+02.5	246 05.3	+02.4	247 04.4	+02.5	248 03.6	+02.4	249 02.7	+02.5	07
08	260 08.6	+02.5	261 07.7	+02.5	262 06.9	+02.4	263 06.0	+02.5	264 05.2	+02.4	08
09	275 11.1	+02.4	276 10.2	+02.5	277 09.3	+02.5	278 08.5	+02.4	279 07.6	+02.5	09
10	290 13.5	+02.5	291 12.7	+02.4	292 11.8	+02.5	293 10.9	+02.5	294 10.1	+02.5	10
11	305 16.0	+02.5	306 15.1	+02.5	307 14.3	+02.4	308 13.4	+02.4	309 12.6	+02.4	11
12	320 18.5	+02.4	321 17.6	+02.5	322 16.7	+02.5	323 15.9	+02.4	324 15.0	+02.5	12
13	335 20.9	+02.5	336 20.1	+02.4	337 19.2	+02.5	338 18.3	+02.5	339 17.5	+02.4	13
14	350 23.4	+02.5	351 22.5	+02.5	352 21.7	+02.4	353 20.8	+02.5	354 19.9	+02.5	14
15	5 25.9	+02.4	6 25.0	+02.5	7 24.1	+02.5	8 23.3	+02.4	9 22.4	+02.5	15
16	20 28.3	+02.5	21 27.5	+02.4	22 26.6	+02.5	23 25.7	+02.5	24 24.9	+02.4	16
17	35 30.8	+02.4	36 29.9	+02.5	37 29.1	+02.4	38 28.2	+02.5	39 27.3	+02.5	17
18	50 33.2	+02.5	51 32.4	+02.4	52 31.5	+02.5	53 30.7	+02.4	54 29.8	+02.5	18
19	65 35.7	+02.5	66 34.8	+02.5	67 34.0	+02.5	68 33.1	+02.5	69 32.3	+02.4	19
20	80 38.2	+02.4	81 37.3	+02.5	82 36.5	+02.4	83 35.6	+02.5	84 34.7	+02.5	20
21	95 40.6	+02.5	96 39.8	+02.4	97 38.9	+02.5	98 38.1	+02.4	99 37.2	+02.5	21
22	110 43.1	+02.5	111 42.2	+02.5	112 41.4	+02.4	113 40.5	+02.5	114 39.7	+02.4	22
23	125 45.6	+02.4	126 44.7	+02.5	127 43.8	+02.5	128 43.0	+02.4	129 42.1	+02.5	23

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	36.7	N 29	13.1	Gienah	175	44.9	S 17	40.2
Ankaa	353	09.1	S 42	11.0	AcruX	173	01.4	S 63	13.4
Schedir	349	33.2	N 56	40.0	Gacrux	171	53.1	S 57	14.2
Diphda	348	49.2	S 17	51.8	Alioth	166	14.1	N 55	49.8
Achernar	335	21.7	S 57	07.5	Spica	158	23.8	S 11	16.9
Hamal	327	53.1	N 23	34.3	Alkaid	152	53.0	N 49	11.6
Polaris	314	50.5	N 89	22.0	Hadar	148	38.0	S 60	28.8
Acamar	315	13.0	S 40	13.0	Menkent	147	59.1	S 36	28.6
Menkar	314	07.8	N 04	10.7	Arcturus	145	48.9	N 19	04.3
Mirfak	308	30.5	N 49	56.7	Rigel Kentaurus	139	39.7	S 60	55.7
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	57.7	S 16	08.2
Capella	280	24.0	N 46	01.5	Kocab	137	19.6	N 74	03.3
Rigel	281	05.2	S 08	10.6	Alphecca	126	05.2	N 26	38.0
Bellatrix	278	24.4	N 06	22.2	Antares	112	18.0	S 26	28.9
Elnath	278	03.7	N 28	37.7	Atria	107	13.8	S 69	03.9
Alnilam	275	39.1	S 01	11.3	Sabik	102	04.8	S 15	45.3
Betelgeuze	270	53.6	N 07	24.6	Shaula	96	12.7	S 37	07.1
Canopus	263	52.7	S 52	42.7	Rasalhague	96	00.2	N 12	32.5
Sirius	258	27.2	S 16	44.5	Etamin	90	43.3	N 51	28.8
Adhara	255	06.8	S 29	00.3	Kaus Australis	83	34.9	S 34	22.3
Castor	245	58.6	N 31	50.3	Vega	80	34.7	N 38	47.9
Procyon	244	52.0	N 05	10.3	Nunki	75	50.0	S 26	16.1
Pollux	243	18.5	N 27	58.2	Albireo	67	05.7	N 28	00.3
Avior	234	14.7	S 59	35.1	Altair	62	02.0	N 08	55.4
Suhail	222	47.0	S 43	31.6	Peacock	53	08.8	S 56	39.6
Miaplacidus	221	37.5	S 69	48.7	Deneb	49	27.3	N 45	21.6
Alphard	217	49.0	S 08	45.6	Enif	33	40.7	N 09	58.7
Regulus	207	35.7	N 11	51.2	Alnair	27	35.4	S 46	51.1
Dubhe	193	42.2	N 61	37.5	Formalhaut	15	16.7	S 29	30.2
Denebola	182	26.1	N 14	26.5	Markab	13	31.8	N 15	19.7

	day 46 of 365 <i>February 15</i>		day 47 of 365 <i>February 16</i>		day 48 of 365 <i>February 17</i>		day 49 of 365 <i>February 18</i>		day 50 of 365 <i>February 19</i>		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT
00	144 44.6	+02.5	145 43.7	+02.5	146 42.9	+02.4	147 42.0	+02.5	148 41.1	+02.5	00
01	159 47.1	+02.4	160 46.2	+02.5	161 45.3	+02.5	162 44.5	+02.4	163 43.6	+02.5	01
02	174 49.5	+02.5	175 48.7	+02.4	176 47.8	+02.5	177 46.9	+02.5	178 46.1	+02.4	02
03	189 52.0	+02.4	190 51.1	+02.5	191 50.3	+02.4	192 49.4	+02.5	193 48.5	+02.5	03
04	204 54.4	+02.5	205 53.6	+02.4	206 52.7	+02.5	207 51.9	+02.4	208 51.0	+02.5	04
05	219 56.9	+02.5	220 56.0	+02.5	221 55.2	+02.5	222 54.3	+02.5	223 53.5	+02.4	05
06	234 59.4	+02.4	235 58.5	+02.5	236 57.7	+02.4	237 56.8	+02.5	238 55.9	+02.5	06
07	250 01.8	+02.5	251 01.0	+02.4	252 00.1	+02.5	252 59.3	+02.4	253 58.4	+02.5	07
08	265 04.3	+02.5	266 03.4	+02.5	267 02.6	+02.4	268 01.7	+02.5	269 00.9	+02.4	08
09	280 06.8	+02.4	281 05.9	+02.5	282 05.0	+02.5	283 04.2	+02.5	284 03.3	+02.5	09
10	295 09.2	+02.5	296 08.4	+02.4	297 07.5	+02.5	298 06.7	+02.4	299 05.8	+02.5	10
11	310 11.7	+02.4	311 10.8	+02.5	312 10.0	+02.4	313 09.1	+02.4	314 08.3	+02.4	11
12	325 14.2	+02.4	326 13.3	+02.5	327 12.4	+02.5	328 11.6	+02.4	329 10.7	+02.5	12
13	340 16.6	+02.5	341 15.8	+02.4	342 14.9	+02.5	343 14.0	+02.5	344 13.2	+02.4	13
14	355 19.1	+02.4	356 18.2	+02.5	357 17.4	+02.4	358 16.5	+02.5	359 15.6	+02.5	14
15	10 21.5	+02.5	11 20.7	+02.5	12 19.8	+02.5	13 19.0	+02.4	14 18.1	+02.5	15
16	25 24.0	+02.5	26 23.2	+02.4	27 22.3	+02.5	28 21.4	+02.5	29 20.6	+02.4	16
17	40 26.5	+02.4	41 25.6	+02.5	42 24.8	+02.4	43 23.9	+02.5	44 23.0	+02.5	17
18	55 28.9	+02.5	56 28.1	+02.4	57 27.2	+02.5	58 26.4	+02.4	59 25.5	+02.5	18
19	70 31.4	+02.5	71 30.5	+02.5	72 29.7	+02.5	73 28.8	+02.5	74 28.0	+02.4	19
20	85 33.9	+02.4	86 33.0	+02.5	87 32.2	+02.4	88 31.3	+02.5	89 30.4	+02.5	20
21	100 36.3	+02.5	101 35.5	+02.4	102 34.6	+02.5	103 33.8	+02.4	104 32.9	+02.5	21
22	115 38.8	+02.5	116 37.9	+02.5	117 37.1	+02.4	118 36.2	+02.5	119 35.4	+02.4	22
23	130 41.3	+02.4	131 40.4	+02.5	132 39.5	+02.5	133 38.7	+02.4	134 37.8	+02.5	23

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	36.7	N 29	13.1	Gienah	175	44.9	S 17	40.2
Ankaa	353	09.1	S 42	11.0	AcruX	173	01.3	S 63	13.4
Schedir	349	33.3	N 56	39.9	Gacrux	171	53.0	S 57	14.3
Diphda	348	49.2	S 17	51.8	Alioth	166	14.1	N 55	49.8
Achernar	335	21.7	S 57	07.5	Spica	158	23.8	S 11	16.9
Hamal	327	53.2	N 23	34.3	Alkaid	152	53.0	N 49	11.6
Polaris	314	52.7	N 89	22.0	Hadar	148	38.0	S 60	28.8
Acamar	315	13.0	S 40	13.0	Menkent	147	59.0	S 36	28.6
Menkar	314	07.8	N 04	10.7	Arcturus	145	48.8	N 19	04.3
Mirfak	308	30.5	N 49	56.7	Rigel Kentaurus	139	39.6	S 60	55.8
Aldebaran	290	41.3	N 16	33.4	Zubenelgenubi	136	57.6	S 16	08.2
Capella	280	24.0	N 46	01.5	Kocab	137	19.5	N 74	03.3
Rigel	281	05.2	S 08	10.6	Alphecca	126	05.1	N 26	38.0
Bellatrix	278	24.4	N 06	22.2	Antares	112	18.0	S 26	28.9
Elnath	278	03.7	N 28	37.7	Atria	107	13.7	S 69	03.8
Alnilam	275	39.2	S 01	11.3	Sabik	102	04.7	S 15	45.3
Betelgeuze	270	53.6	N 07	24.6	Shaula	96	12.7	S 37	07.1
Canopus	263	52.7	S 52	42.7	Rasalhague	96	00.2	N 12	32.5
Sirius	258	27.2	S 16	44.5	Etamin	90	43.2	N 51	28.8
Adhara	255	06.8	S 29	00.3	Kaus Australis	83	34.8	S 34	22.3
Castor	245	58.7	N 31	50.3	Vega	80	34.7	N 38	47.9
Procyon	244	52.0	N 05	10.3	Nunki	75	50.0	S 26	16.1
Pollux	243	18.5	N 27	58.2	Albireo	67	05.6	N 28	00.3
Avior	234	14.8	S 59	35.1	Altair	62	02.0	N 08	55.4
Suhail	222	47.0	S 43	31.6	Peacock	53	08.7	S 56	39.6
Miaplacidus</									

2023 - First Point of Aries / Selected Stars

2023 - 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		
	<i>March</i>	<i>12</i>	<i>March</i>	<i>13</i>	<i>March</i>	<i>14</i>	<i>March</i>	<i>15</i>	<i>March</i>	<i>16</i>			
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
00	169	23.0	+02.5	170	22.2	+02.5	171	21.3	+02.5	172	20.5	+02.4	00
01	184	25.5	+02.5	185	24.7	+02.4	186	23.8	+02.5	187	22.9	+02.5	01
02	199	28.0	+02.4	200	27.1	+02.5	201	26.3	+02.4	202	25.4	+02.5	02
03	214	30.4	+02.5	215	29.6	+02.4	216	28.7	+02.5	217	27.9	+02.4	03
04	229	32.9	+02.5	230	32.0	+02.5	231	31.2	+02.4	232	30.3	+02.5	04
05	244	35.4	+02.4	245	34.5	+02.5	246	33.6	+02.5	247	32.8	+02.5	05
06	259	37.8	+02.5	260	37.0	+02.4	261	36.1	+02.5	262	35.3	+02.4	06
07	274	40.3	+02.5	275	39.4	+02.5	276	38.6	+02.4	277	37.7	+02.5	07
08	289	42.8	+02.4	290	41.9	+02.5	291	41.0	+02.5	292	40.2	+02.4	08
09	304	45.2	+02.5	305	44.4	+02.4	306	43.5	+02.5	307	42.6	+02.5	09
10	319	47.7	+02.5	320	46.8	+02.5	321	46.0	+02.4	322	45.1	+02.5	10
11	334	50.2	+02.4	335	49.3	+02.5	336	48.4	+02.5	337	47.6	+02.5	11
12	349	52.6	+02.5	350	51.8	+02.4	351	50.9	+02.5	352	50.0	+02.5	12
13	4	55.1	+02.4	5	54.2	+02.5	6	53.4	+02.4	7	52.5	+02.5	13
14	19	57.5	+02.5	20	56.7	+02.4	21	55.8	+02.5	22	55.0	+02.4	14
15	35	00.0	+02.5	35	59.1	+02.5	36	58.3	+02.5	37	57.4	+02.5	15
16	50	02.5	+02.4	51	01.6	+02.5	52	00.8	+02.4	52	59.9	+02.5	16
17	65	04.9	+02.5	66	04.1	+02.4	67	03.2	+02.5	68	02.4	+02.4	17
18	80	07.4	+02.5	81	06.5	+02.5	82	05.7	+02.4	83	04.8	+02.5	18
19	95	09.9	+02.4	96	09.0	+02.5	97	08.1	+02.5	98	07.3	+02.5	19
20	110	12.3	+02.5	111	11.5	+02.4	112	10.6	+02.5	113	09.8	+02.4	20
21	125	14.8	+02.5	126	13.9	+02.5	127	13.1	+02.4	128	12.2	+02.5	21
22	140	17.3	+02.4	141	16.4	+02.5	142	15.5	+02.5	143	14.7	+02.4	22
23	155	19.7	+02.5	156	18.9	+02.4	157	18.0	+02.5	158	17.1	+02.5	23

UT	day 56 of 365		day 57 of 365		day 58 of 365		day 59 of 365		day 60 of 365		UT		
	<i>February</i>	<i>25</i>	<i>February</i>	<i>26</i>	<i>February</i>	<i>27</i>	<i>February</i>	<i>28</i>	<i>March</i>	<i>1</i>			
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
00	154	36.0	+02.4	155	35.1	+02.5	156	34.3	+02.4	157	33.4	+02.5	00
01	169	38.4	+02.5	170	37.6	+02.4	171	36.7	+02.5	172	35.9	+02.4	01
02	184	40.9	+02.5	185	40.0	+02.5	186	39.2	+02.4	187	38.3	+02.5	02
03	199	43.4	+02.4	200	42.5	+02.5	201	41.6	+02.5	202	40.8	+02.4	03
04	214	45.8	+02.5	215	45.0	+02.4	216	44.1	+02.5	217	43.2	+02.5	04
05	229	48.3	+02.5	230	47.4	+02.5	231	46.6	+02.4	232	45.7	+02.5	05
06	244	50.8	+02.4	245	49.9	+02.5	246	49.0	+02.5	247	48.2	+02.4	06
07	259	53.2	+02.5	260	52.4	+02.4	261	51.5	+02.5	262	50.6	+02.5	07
08	274	55.7	+02.5	275	54.8	+02.5	276	54.0	+02.4	277	53.1	+02.5	08
09	289	58.2	+02.4	290	57.3	+02.5	291	56.4	+02.5	292	55.6	+02.4	09
10	305	00.6	+02.5	305	59.8	+02.4	306	58.9	+02.5	307	58.0	+02.5	10
11	320	03.1	+02.5	321	02.2	+02.5	322	01.4	+02.4	323	00.5	+02.5	11
12	335	05.5	+02.5	336	04.7	+02.4	337	03.8	+02.5	338	03.0	+02.4	12
13	350	08.0	+02.5	351	07.1	+02.5	352	06.3	+02.5	353	05.4	+02.5	13
14	5	10.5	+02.4	6	09.6	+02.5	7	08.8	+02.4	8	07.9	+02.5	14
15	20	12.9	+02.5	21	12.1	+02.4	22	11.2	+02.5	23	10.4	+02.4	15
16	35	15.4	+02.5	36	14.5	+02.5	37	13.7	+02.4	38	12.8	+02.5	16
17	50	17.9	+02.4	51	17.0	+02.5	52	16.1	+02.5	53	15.3	+02.4	17
18	65	20.3	+02.5	66	19.5	+02.4	67	18.6	+02.5	68	17.7	+02.5	18
19	80	22.8	+02.5	81	21.9	+02.5	82	21.1	+02.4	83	20.2	+02.5	19
20	95	25.3	+02.4	96	24.4	+02.5	97	23.5	+02.5	98	22.7	+02.4	20
21	110	27.7	+02.4	111	26.9	+02.4	112	26.0	+02.5	113	25.1	+02.5	21
22	125	30.2	+02.4	126	29.3	+02.5	127	28.5	+02.4	128	27.6	+02.5	22
23	140	32.6	+02.5	141	31.8	+02.5	142	30.9	+02.5	143	30.1	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.8	N 29	13.0	
Ankaa	353	09.1	S 42	10.9	
Schedir	349	33.4	N 56	39.8	
Diphda	348	49.2	S 17	51.8	
Achernar	335	21.8	S 57	07.4	
Hamal	327	53.2	N 23	34.3	
Polaris	315	04.1	N 89	22.0	
Acamar	315	13.1	S 40	13.0	
Menkar	314	07.9	N 04	10.7	
Mirfak	308	30.7	N 49	56.7	
Aldebaran	290	41.4	N 16	33.4	
Capella	280	24.2	N 46	01.6	
Rigel	281	05.3	S 08	10.7	
Bellatrix	278	24.5	N 06	22.2	
Elnath	278	03.8	N 28	37.7	
Alnilam	275	39.3	S 01	11.3	
Betelgeuze	270	53.7	N 07	24.6	
Canopus	263	52.9	S 52	42.7	
Sirius	258	27.3	S 16	44.6	
Adhara	255	06.9	S 29	00.4	
Castor	245	58.7	N 31	50.3	
Procyon	244	52.0	N 05	10.2	
Pollux	243	18.6	N 27	58.3	
Avior	234	14.9	S 59	35.2	
Suhail	222	47.1	S 43	31.7	
Miaplacidus	221	37.7	S 69	48.9	
Alphard	217	49.0	S 08	45.6	
Regulus	207	35.6	N 11	51.2	
Dubhe	193	42.1	N 61	37.6	
Denebola	182	26.0	N 14	26.5	
Gienah	175	44.8	S 17	40.3	
Acrux	173	01.1	S 63	13.6	
Gacrux	171	52.8	S 57	14.4	
Alioth	166	13.9	N 55	49.9	
Spica	158	23.6	S 11	17.0	
Alkaid	152	52.8	N 49	11.7	
Hadar	148	37.7	S 60	28.9	
Menkent	147	58.8	S 36	28.7	
Arcturus	145	48.7	N 19	04.3	
Rigel Kentaurus	139	39.3	S 60	55.9	
Zubenelgenubi	136	57.5	S 16	08.3	
Kocab	137	19.0	N 74	03.3	
Alphecca	126	04.9	N 26	38.0	
Antares	112	17.7	S 26	29.0	
Atria	107	13.2	S 69	03.9	
Sabik	102	04.5	S 15	45.3	
Shaula	96	12.5	S 37	07.1	
Rasalhague	96	00.0	N 12	32.4	
Etamin	90	43.0	N 51	28.8	
Kaus Australis	83	34.6	S 34	22.3	
Vega	80	34.5	N 38	47.8	
Nunki	75	49.8	S 26	16.1	
Albireo	67	05.5	N 28	00.2	
Altair	62	01.8	N 08	55.4	
Peacock	53	08.5	S 56	39.5	
Deneb	49	27.2	N 45	21.5	
Enif	33	40.6	N 09	58.7	
Alnair	27	35.3	S 46	50.9	
Formalhaut	15	16.7	S 29	30.1	
Markab	13	31.8	N 15	19.6	

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.7	N 29	13.1	
Ankaa	353	09.1	S 42	10.9	
Schedir	349	33.3	N 56	39.9	
Diphda	348	49.2	S 17	51.8	
Achernar	335	21.8	S 57	07.5	
Hamal	327	53.2	N 23	34.3	
Polaris	314	57.6	N 89	22.0	
Acamar	315	13.0	S 40	13.0	
Menkar	314	07.9	N 04	10.7	
Mirfak	308	30.6	N 49	56.7	
Aldebaran	290	41.4	N 16	33.4	
Capella	280	24.1	N 46	01.6	
Rigel	281	05.3	S 08	10.6	
Bellatrix	278	24.4	N 06	22.2	
Elnath	278	03.7	N 28	37.7	
Alnilam	275	39.2	S 01	11.3	
Betelgeuze	270	53.6	N 07	24.6	
Canopus	263	52.8	S 52	42.7	
Sirius	258	27.2	S 16	44.6	
Adhara	255	06.8	S 29	00.4	
Castor	245	58.7	N 31	50.3	
Procyon	244	52.0	N 05	10.2	
Pollux	243	18.6	N 27	58.3	
Avior	234	14.8	S 59	35.1	
Suhail	222	47.0	S 43	31.6	
Miaplacidus	221	37.6	S 69	48.8	
Alphard	217	49.0	S 08	45.6	
Regulus	207	35.6	N 11	51.2	
Dubhe	193	42.1	N 61	37.6	
Denebola	182	26.1	N 14	26.5	
Gienah	175	44.8	S 17	40.2	
Acrux	173	01.2	S 63	13.5	
Gacrux	171	52.9	S 57	14.3	
Alioth	166	14.0	N 55	49.9	
Spica	158	23.7	S 11	16.9	
Alkaid	152	52.9	N 49	11.6	
Hadar	148	37.8	S 60	28.8	
Menkent	147	58.9	S 36	28.6	
Arcturus	145	48.8	N 19	04.3	
Rigel Kentaurus	139	39.5	S 60	55.8	
Zubenelgenubi	136	57.6	S 16	08.2	
Kocab	137	19.3	N 74	03.3	
Alphecca	126	05.0	N 26	38.0	
Antares	112	17.9	S 26	28.9	
Atria	107	13.5	S 69	03.8	
Sabik	102	04.6	S 15	45.3	
Shaula	96	12.6	S 37	07.1	
Rasalhague	96	00.1</			

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UT	day 61 of 365		day 62 of 365		day 63 of 365		day 64 of 365		day 65 of 365		UT
	<i>March 2</i>		<i>March 3</i>		<i>March 4</i>		<i>March 5</i>		<i>March 6</i>		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	159	31.7 +02.4	160	30.8 +02.5	161	30.0 +02.4	162	29.1 +02.5	163	28.2 +02.5	00
01	174	34.1 +02.5	175	33.3 +02.4	176	32.4 +02.5	177	31.6 +02.4	178	30.7 +02.5	01
02	189	36.6 +02.5	190	35.7 +02.5	191	34.9 +02.4	192	34.0 +02.5	193	33.2 +02.4	02
03	204	39.1 +02.4	205	38.2 +02.5	206	37.3 +02.5	207	36.5 +02.4	208	35.6 +02.5	03
04	219	41.5 +02.5	220	40.7 +02.4	221	39.8 +02.5	222	38.9 +02.5	223	38.1 +02.4	04
05	234	44.0 +02.5	235	43.1 +02.5	236	42.3 +02.4	237	41.4 +02.5	238	40.5 +02.5	05
06	249	46.5 +02.4	250	45.6 +02.5	251	44.7 +02.5	252	43.9 +02.4	253	43.0 +02.5	06
07	264	48.9 +02.5	265	48.1 +02.4	266	47.2 +02.5	267	46.3 +02.5	268	45.5 +02.4	07
08	279	51.4 +02.4	280	50.5 +02.5	281	49.7 +02.4	282	48.8 +02.5	283	47.9 +02.5	08
09	294	53.8 +02.5	295	53.0 +02.5	296	52.1 +02.5	297	51.3 +02.4	298	50.4 +02.5	09
10	309	56.3 +02.5	310	55.5 +02.4	311	54.6 +02.5	312	53.7 +02.5	313	52.9 +02.4	10
11	324	58.8 +02.4	325	57.9 +02.4	326	57.1 +02.4	327	56.2 +02.5	328	55.3 +02.5	11
12	340	01.2 +02.5	341	00.4 +02.4	341	59.5 +02.5	342	58.7 +02.4	343	57.8 +02.5	12
13	355	03.7 +02.5	356	02.8 +02.5	357	02.0 +02.4	358	01.1 +02.5	359	00.3 +02.4	13
14	10	06.2 +02.4	11	05.3 +02.5	12	04.4 +02.5	13	03.6 +02.5	14	02.7 +02.5	14
15	25	08.6 +02.5	26	07.8 +02.4	27	06.9 +02.5	28	06.1 +02.4	29	05.2 +02.5	15
16	40	11.1 +02.5	41	10.2 +02.5	42	09.4 +02.4	43	08.5 +02.5	44	07.7 +02.4	16
17	55	13.6 +02.4	56	12.7 +02.5	57	11.8 +02.5	58	11.0 +02.4	59	10.1 +02.5	17
18	70	16.0 +02.5	71	15.2 +02.4	72	14.3 +02.5	73	13.4 +02.5	74	12.6 +02.4	18
19	85	18.5 +02.5	86	17.6 +02.5	87	16.8 +02.4	88	15.9 +02.5	89	15.0 +02.5	19
20	100	21.0 +02.4	101	20.1 +02.5	102	19.2 +02.5	103	18.4 +02.4	104	17.5 +02.5	20
21	115	23.4 +02.5	116	22.6 +02.4	117	21.7 +02.5	118	20.8 +02.5	119	20.0 +02.4	21
22	130	25.9 +02.4	131	25.0 +02.5	132	24.2 +02.4	133	23.3 +02.5	134	22.4 +02.5	22
23	145	28.3 +02.5	146	27.5 +02.5	147	26.6 +02.5	148	25.8 +02.4	149	24.9 +02.5	23

UT	day 66 of 365		day 67 of 365		day 68 of 365		day 69 of 365		day 70 of 365		UT
	<i>March 7</i>		<i>March 8</i>		<i>March 9</i>		<i>March 10</i>		<i>March 11</i>		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	164	27.4 +02.4	165	26.5 +02.5	166	25.6 +02.5	167	24.8 +02.4	168	23.9 +02.5	00
01	179	29.8 +02.5	180	29.0 +02.4	181	28.1 +02.5	182	27.2 +02.5	183	26.4 +02.4	01
02	194	32.3 +02.5	195	31.4 +02.5	196	30.6 +02.4	197	29.7 +02.5	198	28.8 +02.5	02
03	209	34.8 +02.4	210	33.9 +02.5	211	33.0 +02.5	212	32.2 +02.4	213	31.3 +02.5	03
04	224	37.2 +02.5	225	36.4 +02.4	226	35.5 +02.5	227	34.6 +02.5	228	33.8 +02.4	04
05	239	39.7 +02.4	240	38.8 +02.5	241	38.0 +02.4	242	37.1 +02.5	243	36.2 +02.5	05
06	254	42.1 +02.5	255	41.3 +02.4	256	40.4 +02.5	257	39.6 +02.4	258	38.7 +02.5	06
07	269	44.6 +02.5	270	43.7 +02.5	271	42.9 +02.4	272	42.0 +02.5	273	41.2 +02.4	07
08	284	47.1 +02.4	285	46.2 +02.5	286	45.3 +02.5	287	44.5 +02.5	288	43.6 +02.5	08
09	299	49.5 +02.5	300	48.7 +02.4	301	47.8 +02.5	302	47.0 +02.4	303	46.1 +02.5	09
10	314	52.0 +02.5	315	51.1 +02.5	316	50.3 +02.4	317	49.4 +02.5	318	48.6 +02.4	10
11	329	54.5 +02.4	330	53.6 +02.5	331	52.7 +02.5	332	51.9 +02.5	333	51.0 +02.5	11
12	344	56.9 +02.5	345	56.1 +02.4	346	55.2 +02.5	347	54.3 +02.5	348	53.5 +02.4	12
13	359	59.4 +02.5	0	58.5 +02.5	1	57.7 +02.4	2	56.8 +02.5	3	55.9 +02.5	13
14	15	01.9 +02.5	16	01.0 +02.5	17	00.1 +02.5	17	59.3 +02.4	18	58.4 +02.5	14
15	30	04.3 +02.5	31	03.5 +02.4	32	02.6 +02.5	33	01.7 +02.5	34	00.9 +02.4	15
16	45	06.8 +02.5	46	05.9 +02.5	47	05.1 +02.4	48	04.2 +02.5	49	03.3 +02.5	16
17	60	09.3 +02.4	61	08.4 +02.5	62	07.5 +02.5	63	06.7 +02.4	64	05.8 +02.5	17
18	75	11.7 +02.5	76	10.9 +02.4	77	10.0 +02.5	78	09.1 +02.5	79	08.3 +02.4	18
19	90	14.2 +02.4	91	13.3 +02.5	92	12.5 +02.4	93	11.6 +02.5	94	10.7 +02.5	19
20	105	16.6 +02.5	106	15.8 +02.4	107	14.9 +02.5	108	14.1 +02.4	109	13.2 +02.5	20
21	120	19.1 +02.5	121	18.2 +02.5	122	17.4 +02.4	123	16.5 +02.5	124	15.7 +02.4	21
22	135	21.6 +02.4	136	20.7 +02.5	137	19.8 +02.5	138	19.0 +02.4	139	18.1 +02.5	22
23	150	24.0 +02.5	151	23.2 +02.4	152	22.3 +02.5	153	21.4 +02.5	154	20.6 +02.4	23

	SHA	Dec		SHA	Dec
Alpheratz	357 36.7	N 29 13.1	Gienah	175 44.8	S 17 40.3
Ankaa	353 09.1	S 42 10.9	Acrux	173 01.2	S 63 13.5
Schedir	349 33.3	N 56 39.9	Gacrux	171 52.9	S 57 14.4
Diphda	348 49.2	S 17 51.8	Alioth	166 13.9	N 55 49.9
Achernar	335 21.8	S 57 07.4	Spica	158 23.7	S 11 17.0
Hamal	327 53.2	N 23 34.3	Alkaid	152 52.8	N 49 11.6
Polaris	314 59.6	N 89 22.0	Hadar	148 37.8	S 60 28.9
Acamar	315 13.1	S 40 13.0	Menkent	147 58.9	S 36 28.7
Menkar	314 07.9	N 04 10.7	Arcturus	145 48.7	N 19 04.3
Mirfak	308 30.6	N 49 56.7	Rigel Kentaurus	139 39.4	S 60 55.8
Aldebaran	290 41.4	N 16 33.4	Zubenelgenubi	136 57.5	S 16 08.3
Capella	280 24.1	N 46 01.6	Kocab	137 19.2	N 74 03.3
Rigel	281 05.3	S 08 10.7	Alphecca	126 05.0	N 26 38.0
Bellatrix	278 24.4	N 06 22.2	Antares	112 17.8	S 26 28.9
Elnath	278 03.7	N 28 37.7	Atria	107 13.4	S 69 03.8
Alnilam	275 39.2	S 01 11.3	Sabik	102 04.6	S 15 45.3
Betelgeuze	270 53.6	N 07 24.6	Shaula	96 12.5	S 37 07.1
Canopus	263 52.9	S 52 42.7	Rasalhague	96 00.1	N 12 32.5
Sirius	258 27.2	S 16 44.6	Etamin	90 43.1	N 51 28.8
Adhara	255 06.8	S 29 00.4	Kaus Australis	83 34.7	S 34 22.3
Castor	245 58.7	N 31 50.3	Vega	80 34.5	N 38 47.9
Procyon	244 52.0	N 05 10.2	Nunki	75 49.9	S 26 16.1
Pollux	243 18.6	N 27 58.3	Albireo	67 05.5	N 28 00.2
Avior	234 14.8	S 59 35.2	Altair	62 01.9	N 08 55.4
Suhail	222 47.0	S 43 31.7	Peacock	53 08.6	S 56 39.6
Miaplacidus	221 37.6	S 69 48.8	Deneb	49 27.2	N 45 21.5
Alphard	217 49.0	S 08 45.6	Enif	33 40.6	N 09 58.7
Regulus	207 35.6	N 11 51.2	Alnair	27 35.3	S 46 51.0
Dubhe	193 42.1	N 61 37.5	Formalhaut	15 16.7	S 29 30.1
Denebola	182 26.0	N 14 26.5	Markab	13 31.8	N 15 19.6

	SHA	Dec		SHA	Dec
Alpheratz	357 36.8	N 29 13.0	Gienah	175 44.8	S 17 40.3
Ankaa	353 09.1	S 42 10.9	Acrux	173 01.2	S 63 13.5
Schedir	349 33.3	N 56 39.9	Gacrux	171 52.9	S 57 14.4
Diphda	348 49.2	S 17 51.8	Alioth	166 13.9	N 55 49.9
Achernar	335 21.8	S 57 07.4	Spica	158 23.6	S 11 17.0
Hamal	327 53.2	N 23 34.3	Alkaid	152 52.8	N 49 11.6
Polaris	315 01.9	N 89 22.0	Hadar	148 37.7	S 60 28.9
Acamar	315 13.1	S 40 13.0	Menkent	147 58.9	S 36 28.7
Menkar	314 07.9	N 04 10.7	Arcturus	145 48.7	N 19 04.3
Mirfak	308 30.6	N 49 56.7	Rigel Kentaurus	139 39.3	S 60 55.8
Aldebaran	290 41.4	N 16 33.4	Zubenelgenubi	136 57.5	S 16 08.3
Capella	280 24.1	N 46 01.6	Kocab	137 19.1	N 74 03.3
Rigel	281 05.3	S 08 10.6	Alphecca	126 05.0	N 26 38.0
Bellatrix	278 24.5	N 06 22.2	Antares	112 17.8	S 26 29.0
Elnath	278 03.8	N 28 37.7	Atria	107 13.3	S 69 03.9
Alnilam	275 39.2	S 01 11.3	Sabik	102 04.6	S 15 45.3
Betelgeuze	270 53.7	N 07 24.6	Shaula	96 12.5	S 37 07.1
Canopus	263 52.9	S 52 42.7	Rasalhague	96 00.0	N 12 32.4
Sirius	258 27.2	S 16 44.6	Etamin	90 43.0	N 51 28.8
Adhara	255 06.9	S 29 00.4	Kaus Australis	83 34.7	S 34 22.3
Castor	245 58.7	N 31 50.3	Vega	80 34.5	N 38 47.9
Procyon	244 52.0	N 05 10.2	Nunki	75 49.8	S 26 16.1
Pollux	243 18.6	N 27 58.3	Albireo	67 05.5	N 28 00.2
Avior	234 14.9	S 59 35.2	Altair	62 01.8	N 08 55.4
Suhail	222 47.0	S 43 31.7	Peacock	53 08.6	S 56 39.5
Miaplacidus	221 37.6	S 69 48.9	Deneb	49 27.2	N 45 21.5
Alphard	217 49.0	S 08 45.6	Enif	33 40.6	N 09 58.7
Regulus	207 35.6	N 11 51.2	Alnair	27 35.3	S 46 51.0
Dubhe	193 42.1	N 61 37.5	Formalhaut	15 16.7	S 29 30.1
Denebola	182 26.0	N 14 26.5	Markab	13 31.8	N 15 19.6

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2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

Table with columns for UT, day 91 of 365 (April 1), day 92 of 365 (April 2), day 93 of 365 (April 3), day 94 of 365 (April 4), day 95 of 365 (April 5), and UT. Rows list stars with GHA, ddGHA, and UT values.

Table with columns for UT, day 76 of 365 (March 17), day 77 of 365 (March 18), day 78 of 365 (March 19), day 79 of 365 (March 20), day 80 of 365 (March 21), and UT. Rows list stars with GHA, ddGHA, and UT values.

Table with columns for Star Name, SHA, Dec, SHA, Dec. Lists stars like Alpheratz, Ankaa, Schedir, Diphda, Achernar, Hamal, Polaris, etc.

Table with columns for Star Name, SHA, Dec, SHA, Dec. Lists stars like Alpheratz, Ankaa, Schedir, Diphda, Achernar, Hamal, Polaris, etc.

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2023 - First Point of Aries / Selected Stars

2023 - 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		
	<i>March 22</i>		<i>March 23</i>		<i>March 24</i>		<i>March 25</i>		<i>March 26</i>				
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
00	179	14.4	+02.5	180	13.6	+02.4	181	12.7	+02.5	182	11.9	+02.4	00
01	194	16.9	+02.5	195	16.0	+02.5	196	15.2	+02.4	197	14.3	+02.5	01
02	209	19.4	+02.4	210	18.5	+02.5	211	17.6	+02.5	212	16.8	+02.4	02
03	224	21.8	+02.5	225	21.0	+02.4	226	20.1	+02.5	227	19.2	+02.5	03
04	239	24.3	+02.5	240	23.4	+02.5	241	22.6	+02.4	242	21.7	+02.5	04
05	254	26.8	+02.4	255	25.9	+02.5	256	25.0	+02.5	257	24.2	+02.4	05
06	269	29.2	+02.5	270	28.4	+02.4	271	27.5	+02.5	272	26.6	+02.5	06
07	284	31.7	+02.5	285	30.8	+02.5	286	30.0	+02.4	287	29.1	+02.5	07
08	299	34.2	+02.4	300	33.3	+02.5	301	32.4	+02.5	302	31.6	+02.4	08
09	314	36.6	+02.5	315	35.8	+02.4	316	34.9	+02.5	317	34.0	+02.5	09
10	329	39.1	+02.4	330	38.2	+02.5	331	37.4	+02.4	332	36.5	+02.5	10
11	344	41.5	+02.5	345	40.7	+02.4	346	39.8	+02.5	347	39.0	+02.5	11
12	359	44.0	+02.5	0	43.1	+02.5	1	42.3	+02.4	2	41.4	+02.5	12
13	14	46.5	+02.4	15	45.6	+02.5	16	44.7	+02.5	17	43.9	+02.4	13
14	29	48.9	+02.5	30	48.1	+02.4	31	47.2	+02.5	32	46.3	+02.5	14
15	44	51.4	+02.5	45	50.5	+02.5	46	49.7	+02.4	47	48.8	+02.5	15
16	59	53.9	+02.4	60	53.0	+02.5	61	52.1	+02.5	62	51.3	+02.4	16
17	74	56.3	+02.5	75	55.5	+02.4	76	54.6	+02.5	77	53.7	+02.5	17
18	89	58.8	+02.5	90	57.9	+02.5	91	57.1	+02.4	92	56.2	+02.5	18
19	105	01.3	+02.4	106	00.4	+02.5	106	59.5	+02.5	107	58.7	+02.4	19
20	120	03.7	+02.5	121	02.9	+02.4	122	02.0	+02.5	123	01.1	+02.5	20
21	135	06.2	+02.4	136	05.3	+02.5	137	04.5	+02.4	138	03.6	+02.5	21
22	150	08.6	+02.5	151	07.8	+02.4	152	06.9	+02.5	153	06.1	+02.4	22
23	165	11.1	+02.5	166	10.2	+02.5	167	09.4	+02.5	168	08.5	+02.5	23

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	36.7	N	29 13.0	Gienah	175	44.8	S	17 40.3
Ankaa	353	09.1	S	42 10.8	Acrux	173	01.1	S	63 13.6
Schedir	349	33.4	N	56 39.8	Gacrux	171	52.8	S	57 14.5
Diphda	348	49.2	S	17 51.8	Alioth	166	13.8	N	55 49.9
Achernar	335	21.9	S	57 07.3	Spica	158	23.6	S	11 17.0
Hamal	327	53.3	N	23 34.3	Alkaid	152	52.7	N	49 11.7
Polaris	315	07.7	N	89 21.9	Hadar	148	37.6	S	60 29.0
Acamar	315	13.2	S	40 13.0	Menkent	147	58.8	S	36 28.7
Menkar	314	07.9	N	04 10.7	Arcturus	145	48.6	N	19 04.3
Mirfak	308	30.7	N	49 56.7	Rigel Kentaurus	139	39.2	S	60 55.9
Aldebaran	290	41.5	N	16 33.4	Zubenelgenubi	136	57.4	S	16 08.3
Capella	280	24.2	N	46 01.6	Kocab	137	18.8	N	74 03.3
Rigel	281	05.4	S	08 10.6	Alphecca	126	04.8	N	26 38.0
Bellatrix	278	24.5	N	06 22.2	Antares	112	17.7	S	26 29.0
Elnath	278	03.8	N	28 37.7	Atria	107	13.0	S	69 03.9
Alnilam	275	39.3	S	01 11.3	Sabik	102	04.4	S	15 45.3
Betelgeuze	270	53.7	N	07 24.6	Shaula	96	12.4	S	37 07.1
Canopus	263	53.0	S	52 42.7	Rasalhague	95	59.9	N	12 32.4
Sirius	258	27.3	S	16 44.6	Etamin	90	42.9	N	51 28.8
Adhara	255	06.9	S	29 00.4	Kaus Australis	83	34.5	S	34 22.3
Castor	245	58.8	N	31 50.4	Vega	80	34.4	N	38 47.8
Procyon	244	52.0	N	05 10.2	Nunki	75	49.7	S	26 16.1
Pollux	243	18.6	N	27 58.3	Albireo	67	05.4	N	28 00.2
Avior	234	15.0	S	59 35.3	Altair	62	01.7	N	08 55.4
Suhail	222	47.1	S	43 31.7	Peacock	53	08.4	S	56 39.5
Miaplacidus	221	37.8	S	69 48.9	Deneb	49	27.1	N	45 21.4
Alphard	217	49.0	S	08 45.7	Enif	33	40.5	N	09 58.7
Regulus	207	35.6	N	11 51.2	Alnair	27	35.2	S	46 50.9
Dubhe	193	42.1	N	61 37.6	Formalhaut	15	16.6	S	29 30.0
Denebola	182	26.0	N	14 26.5	Markab	13	31.7	N	15 19.6

UT	day 86 of 365		day 87 of 365		day 88 of 365		day 89 of 365		day 90 of 365		UT		
	<i>March 27</i>		<i>March 28</i>		<i>March 29</i>		<i>March 30</i>		<i>March 31</i>				
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
00	184	10.1	+02.5	185	09.3	+02.4	186	08.4	+02.5	187	07.5	+02.5	00
01	199	12.6	+02.5	200	11.7	+02.5	201	10.9	+02.4	202	10.0	+02.5	01
02	214	15.1	+02.4	215	14.2	+02.5	216	13.3	+02.5	217	12.5	+02.4	02
03	229	17.5	+02.5	230	16.7	+02.4	231	15.8	+02.5	232	14.9	+02.5	03
04	244	20.0	+02.4	245	19.1	+02.5	246	18.3	+02.4	247	17.4	+02.5	04
05	259	22.4	+02.5	260	21.6	+02.5	261	20.7	+02.5	262	19.9	+02.4	05
06	274	24.9	+02.5	275	24.1	+02.4	276	23.2	+02.5	277	22.3	+02.5	06
07	289	27.4	+02.4	290	26.5	+02.5	291	25.7	+02.4	292	24.8	+02.5	07
08	304	29.8	+02.5	305	29.0	+02.4	306	28.1	+02.5	307	27.3	+02.4	08
09	319	32.3	+02.5	320	31.4	+02.5	321	30.6	+02.4	322	29.7	+02.5	09
10	334	34.8	+02.4	335	33.9	+02.5	336	33.0	+02.5	337	32.2	+02.5	10
11	349	37.2	+02.5	350	36.4	+02.4	351	35.5	+02.5	352	34.7	+02.5	11
12	4	39.7	+02.5	5	38.8	+02.5	6	38.0	+02.4	7	37.1	+02.5	12
13	19	42.2	+02.4	20	41.3	+02.5	21	40.4	+02.5	22	39.6	+02.4	13
14	34	44.6	+02.5	35	43.8	+02.4	36	42.9	+02.5	37	42.0	+02.5	14
15	49	47.1	+02.5	50	46.2	+02.5	51	45.4	+02.4	52	44.5	+02.5	15
16	64	49.6	+02.4	65	48.7	+02.5	66	47.8	+02.5	67	47.0	+02.4	16
17	79	52.0	+02.5	80	51.2	+02.4	81	50.3	+02.5	82	49.4	+02.5	17
18	94	54.5	+02.4	95	53.6	+02.5	96	52.8	+02.4	97	51.9	+02.5	18
19	109	56.9	+02.5	110	56.1	+02.5	111	55.2	+02.5	112	54.4	+02.4	19
20	124	59.4	+02.5	125	58.6	+02.4	126	57.7	+02.5	127	56.8	+02.5	20
21	140	01.9	+02.4	141	01.0	+02.5	142	00.2	+02.4	142	59.3	+02.5	21
22	155	04.3	+02.5	156	03.5	+02.4	157	02.6	+02.5	158	01.8	+02.4	22
23	170	06.8	+02.5	171	05.9	+02.5	172	05.1	+02.4	173	04.2	+02.5	23

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	36.7	N	29 13.0	Gienah	175	44.7	S	17 40.3
Ankaa	353	09.1	S	42 10.8	Acrux	173	01.1	S	63 13.7
Schedir	349	33.4	N	56 39.8	Gacrux	171	52.8	S	57 14.5
Diphda	348	49.2	S	17 51.8	Alioth	166	13.8	N	55 50.0
Achernar	335	21.9	S	57 07.3	Spica	158	23.6	S	11 17.0
Hamal	327	53.3	N	23 34.3	Alkaid	152	52.7	N	49 11.7
Polaris	315	09.1	N	89 21.9	Hadar	148	37.6	S	60 29.0
Acamar	315	13.2	S	40 13.0	Menkent	147	58.7	S	36 28.8
Menkar	314	08.0	N	04 10.7	Arcturus	145	48.6	N	19 04.3
Mirfak	308	30.8	N	49 56.7	Rigel Kentaurus	139	39.1	S	60 55.9
Aldebaran	290	41.5	N	16 33.4	Zubenelgenubi	136	57.4	S	16 08.3
Capella	280	24.3	N	46 01.5	Kocab	137	18.8	N	74 03.4
Rigel	281	05.4	S	08 10.6	Alphecca	126	04.8	N	26 38.0
Bellatrix	278	24.5	N	06 22.2	Antares	112	17.6	S	26 29.0
Elnath	278	03.9	N	28 37.7	Atria	107	12.9	S	69 03.9
Alnilam	275	39.3	S	01 11.3	Sabik	102	04.4	S	15 45.3
Betelgeuze	270	53.8	N	07 24.6	Shaula	96	12.3	S	37 07.1
Canopus	263	53.1	S	52 42.8	Rasalhague	95	59.9	N	12 32.4
Sirius	258	27.3	S	16 44.6	Etamin	90	42.8	N	51 28.8
Adhara	255	07.0	S	29 00.4	Kaus Australis	83	34.5	S	34 22.3
Castor	245	58.8	N	31 50.4	Vega	80	34.3	N	38 47.8
Procyon	244	52.1	N	05 10.2	Nunki	75	49.7	S	26 16.1
Pollux	243	18.7	N	27 58.3	Albireo	67	05.4	N	28 00.2
Avior	234	15.0	S	59 35.3	Altair	62	01.7	N	08 55.4
Suhail	222	47.1	S	43 31.8	Peacock	53	08.4	S	56 39.5
Miaplacidus	221	37.8	S	69 49.0	Deneb	49	27.1	N	45 21.4
Alphard	217	49.0	S	08 45.7	Enif	33	40.5	N	09 58.7
Regulus	207	35.7	N	11 51.2	Alnair	27	35.2	S	46 50.9
Dubhe	193	42.1	N	61 37.6	Formalhaut	15	16.6	S	29 30.0
Denebola	182	26.0	N	14 26.5	Markab	13	31.7	N	15 19.6

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2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 111 of 365		day 112 of 365		day 113 of 365		day 114 of 365		day 115 of 365		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	208 48.6	+02.5	209 47.7	+02.5	210 46.9	+02.4	211 46.0	+02.5	212 45.1	+02.5	00
01	223 51.1	+02.4	224 50.2	+02.5	225 49.3	+02.5	226 48.5	+02.4	227 47.6	+02.5	01
02	238 53.5	+02.5	239 52.7	+02.4	240 51.8	+02.5	241 50.9	+02.5	242 50.1	+02.4	02
03	253 56.0	+02.4	254 55.1	+02.5	255 54.3	+02.4	256 53.4	+02.5	257 52.5	+02.5	03
04	268 58.4	+02.5	269 57.6	+02.4	270 56.7	+02.5	271 55.9	+02.4	272 55.0	+02.5	04
05	284 00.9	+02.5	285 00.0	+02.5	285 59.2	+02.5	286 58.3	+02.5	287 57.5	+02.4	05
06	299 03.4	+02.4	300 02.5	+02.5	301 01.7	+02.4	302 00.8	+02.5	302 59.9	+02.5	06
07	314 05.8	+02.5	315 05.0	+02.4	316 04.1	+02.5	317 03.3	+02.4	318 02.4	+02.5	07
08	329 08.3	+02.5	330 07.4	+02.5	331 06.6	+02.4	332 05.7	+02.5	333 04.9	+02.4	08
09	344 10.8	+02.4	345 09.9	+02.5	346 09.0	+02.5	347 08.2	+02.4	348 07.3	+02.5	09
10	359 13.2	+02.5	0 12.4	+02.4	1 11.5	+02.5	2 10.6	+02.5	3 09.8	+02.5	10
11	14 15.7	+02.5	15 14.8	+02.5	16 14.0	+02.4	17 13.1	+02.5	18 12.3	+02.4	11
12	29 18.2	+02.4	30 17.3	+02.5	31 16.4	+02.5	32 15.6	+02.4	33 14.7	+02.5	12
13	44 20.6	+02.5	45 19.8	+02.4	46 18.9	+02.5	47 18.0	+02.5	48 17.2	+02.4	13
14	59 23.1	+02.5	60 22.2	+02.5	61 21.4	+02.4	62 20.5	+02.5	63 19.6	+02.5	14
15	74 25.6	+02.4	75 24.7	+02.5	76 23.8	+02.5	77 23.0	+02.4	78 22.1	+02.5	15
16	89 28.0	+02.5	90 27.2	+02.4	91 26.3	+02.5	92 25.4	+02.5	93 24.6	+02.4	16
17	104 30.5	+02.4	105 29.6	+02.5	106 28.8	+02.4	107 27.9	+02.5	108 27.0	+02.5	17
18	119 32.9	+02.5	120 32.1	+02.4	121 31.2	+02.5	122 30.4	+02.4	123 29.5	+02.5	18
19	134 35.4	+02.5	135 34.5	+02.5	136 33.7	+02.5	137 32.8	+02.5	138 32.0	+02.4	19
20	149 37.9	+02.4	150 37.0	+02.5	151 36.2	+02.4	152 35.3	+02.5	153 34.4	+02.5	20
21	164 40.3	+02.5	165 39.5	+02.4	166 38.6	+02.5	167 37.8	+02.4	168 36.9	+02.5	21
22	179 42.8	+02.5	180 41.9	+02.5	181 41.1	+02.4	182 40.2	+02.5	183 39.4	+02.4	22
23	194 45.3	+02.4	195 44.4	+02.5	196 43.5	+02.5	197 42.7	+02.4	198 41.8	+02.5	23

UT	day 96 of 365		day 97 of 365		day 98 of 365		day 99 of 365		day 100 of 365		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	194 01.5	+02.5	195 00.6	+02.5	195 59.8	+02.4	196 58.9	+02.5	197 58.1	+02.4	00
01	209 04.0	+02.4	210 03.1	+02.5	211 02.2	+02.5	212 01.4	+02.5	213 00.5	+02.5	01
02	224 06.4	+02.5	225 05.6	+02.4	226 04.7	+02.5	227 03.9	+02.4	228 03.0	+02.5	02
03	239 08.9	+02.5	240 08.0	+02.5	241 07.2	+02.4	242 06.3	+02.5	243 05.5	+02.4	03
04	254 11.4	+02.4	255 10.5	+02.5	256 09.6	+02.5	257 08.8	+02.4	258 07.9	+02.5	04
05	269 13.8	+02.5	270 13.0	+02.4	271 12.1	+02.5	272 11.2	+02.5	273 10.4	+02.4	05
06	284 16.3	+02.5	285 15.4	+02.5	286 14.6	+02.4	287 13.7	+02.5	288 12.8	+02.5	06
07	299 18.8	+02.4	300 17.9	+02.5	301 17.0	+02.5	302 16.2	+02.4	303 15.3	+02.5	07
08	314 21.2	+02.5	315 20.4	+02.4	316 19.5	+02.5	317 18.6	+02.5	318 17.8	+02.4	08
09	329 23.7	+02.5	330 22.8	+02.5	331 22.0	+02.4	332 21.1	+02.5	333 20.2	+02.5	09
10	344 26.2	+02.4	345 25.3	+02.5	346 24.4	+02.5	347 23.6	+02.4	348 22.7	+02.5	10
11	359 28.6	+02.4	0 27.8	+02.4	1 26.9	+02.5	2 26.0	+02.4	3 25.2	+02.4	11
12	14 31.1	+02.4	15 30.2	+02.5	16 29.4	+02.4	17 28.5	+02.5	18 27.6	+02.5	12
13	29 33.5	+02.5	30 32.7	+02.4	31 31.8	+02.5	32 31.0	+02.4	33 30.1	+02.5	13
14	44 36.0	+02.5	45 35.1	+02.5	46 34.3	+02.4	47 33.4	+02.4	48 32.6	+02.4	14
15	59 38.5	+02.4	60 37.6	+02.5	61 36.7	+02.5	62 35.9	+02.5	63 35.0	+02.5	15
16	74 40.9	+02.5	75 40.1	+02.4	76 39.2	+02.5	77 38.4	+02.4	78 37.5	+02.5	16
17	89 43.4	+02.5	90 42.5	+02.5	91 41.7	+02.4	92 40.8	+02.5	93 40.0	+02.4	17
18	104 45.9	+02.4	105 45.0	+02.5	106 44.1	+02.5	107 43.3	+02.4	108 42.4	+02.5	18
19	119 48.3	+02.5	120 47.5	+02.4	121 46.6	+02.5	122 45.7	+02.5	123 44.9	+02.4	19
20	134 50.8	+02.5	135 49.9	+02.5	136 49.1	+02.4	137 48.2	+02.5	138 47.3	+02.5	20
21	149 53.3	+02.4	150 52.4	+02.5	151 51.5	+02.5	152 50.7	+02.4	153 49.8	+02.5	21
22	164 55.7	+02.5	165 54.9	+02.4	166 54.0	+02.5	167 53.1	+02.5	168 52.3	+02.4	22
23	179 58.2	+02.4	180 57.3	+02.5	181 56.5	+02.4	182 55.6	+02.5	183 54.7	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 36.7	N 29 13.0	Gienah	175 44.7	S 17 40.4
Ankaa	353 09.1	S 42 10.7	AcruX	173 01.1	S 63 13.8
Schedir	349 33.3	N 56 39.7	Gacrux	171 52.8	S 57 14.6
Diphda	348 49.1	S 17 51.7	Alioth	166 13.8	N 55 50.1
Achernar	335 21.9	S 57 07.2	Spica	158 23.5	S 11 17.0
Hamal	327 53.3	N 23 34.3	Alkaid	152 52.6	N 49 11.8
Polaris	315 13.9	N 89 21.8	Hadar	148 37.4	S 60 29.1
Acamar	315 13.2	S 40 12.8	Menkent	147 58.6	S 36 28.8
Menkar	314 08.0	N 04 10.8	Arcturus	145 48.5	N 19 04.3
Mirfak	308 30.8	N 49 56.6	Rigel Kentaurus	139 38.9	S 60 56.0
Aldebaran	290 41.6	N 16 33.4	Zubenelgenubi	136 57.2	S 16 08.3
Capella	280 24.4	N 46 01.5	Kocab	137 18.6	N 74 03.5
Rigel	281 05.5	S 08 10.6	Alphecca	126 04.7	N 26 38.1
Bellatrix	278 24.6	N 06 22.2	Antares	112 17.4	S 26 29.0
Elnath	278 04.0	N 28 37.7	Atria	107 12.5	S 69 04.0
Alnilam	275 39.4	S 01 11.3	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 53.8	N 07 24.6	Shaula	96 12.1	S 37 07.2
Canopus	263 53.3	S 52 42.7	Rasalhague	95 59.7	N 12 32.5
Sirius	258 27.5	S 16 44.6	Etamin	90 42.6	N 51 28.8
Adhara	255 07.1	S 29 00.4	Kaus Australis	83 34.3	S 34 22.3
Castor	245 58.9	N 31 50.4	Vega	80 34.1	N 38 47.9
Procyon	244 52.2	N 05 10.3	Nunki	75 49.4	S 26 16.0
Pollux	243 18.8	N 27 58.3	Albireo	67 05.2	N 28 00.2
Avior	234 15.3	S 59 35.3	Altair	62 01.5	N 08 55.4
Suhail	222 47.3	S 43 31.8	Peacock	53 08.0	S 56 39.4
Miaplacidus	221 38.2	S 69 49.0	Deneb	49 26.9	N 45 21.4
Alphard	217 49.1	S 08 45.7	Enif	33 40.4	N 09 58.7
Regulus	207 35.7	N 11 51.2	Alnair	27 35.0	S 46 50.8
Dubhe	193 42.2	N 61 37.7	Formalhaut	15 16.5	S 29 29.9
Denebola	182 26.0	N 14 26.6	Markab	13 31.6	N 15 19.6

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 36.7	N 29 13.0	Gienah	175 44.7	S 17 40.4
Ankaa	353 09.1	S 42 10.8	AcruX	173 01.1	S 63 13.7
Schedir	349 33.4	N 56 39.7	Gacrux	171 52.8	S 57 14.6
Diphda	348 49.2	S 17 51.7	Alioth	166 13.8	N 55 50.0
Achernar	335 21.9	S 57 07.3	Spica	158 23.5	S 11 17.0
Hamal	327 53.3	N 23 34.3	Alkaid	152 52.6	N 49 11.7
Polaris	315 11.8	N 89 21.9	Hadar	148 37.5	S 60 29.0
Acamar	315 13.2	S 40 12.9	Menkent	147 58.7	S 36 28.8
Menkar	314 08.0	N 04 10.7	Arcturus	145 48.6	N 19 04.3
Mirfak	308 30.8	N 49 56.6	Rigel Kentaurus	139 39.0	S 60 56.0
Aldebaran	290 41.5	N 16 33.4	Zubenelgenubi	136 57.3	S 16 08.3
Capella	280 24.3	N 46 01.5	Kocab	137 18.7	N 74 03.4
Rigel	281 05.4	S 08 10.6	Alphecca	126 04.8	N 26 38.0
Bellatrix	278 24.6	N 06 22.2	Antares	112 17.5	S 26 29.0
Elnath	278 03.9	N 28 37.7	Atria	107 12.7	S 69 03.9
Alnilam	275 39.4	S 01 11.3	Sabik	102 04.3	S 15 45.3
Betelgeuze	270 53.8	N 07 24.6	Shaula	96 12.2	S 37 07.2
Canopus	263 53.2	S 52 42.7	Rasalhague	95 59.8	N 12 32.5
Sirius	258 27.4	S 16 44.6	Etamin	90 42.7	N 51 28.8
Adhara	255 07.0	S 29 00.4	Kaus Australis	83 34.4	S 34 22.3
Castor	245 58.8	N 31 50.4	Vega	80 34.3	N 38 47.8
Procyon	244 52.1	N 05 10.2	Nunki	75 49.6	S 26 16.1
Pollux	243 18.7	N 27 58.3	Albireo	67 05.3	N 28 00.2
Avior	234 15.1	S 59 35.3	Altair	62 01.6	N 08 55.4
Suhail	222 47.2	S 43 31.8	Peacock	53 08.2	S 56 39.4
Miaplacidus	221 38.0	S 69 49.0	Deneb	49 27.0	N 45 21.4
Alphard	217 49.0	S 08 45.7	Enif	33 40.5	N 09 58.7
Regulus	207 35.7	N 11 51.2	Alnair	27 35.1	S 46 50.8
Dubhe	193 42.1	N 61 37.7	Formalhaut	15 16.6	S 29 30.0
Denebola	182 26.0	N 14 26.5	Markab	13 31.7	N 15 19.6

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2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

	day 101 of 365 April 11		day 102 of 365 April 12		day 103 of 365 April 13		day 104 of 365 April 14		day 105 of 365 April 15		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT
00	198 57.2	+02.5	199 56.3	+02.5	200 55.5	+02.4	201 54.6	+02.5	202 53.8	+02.4	00
01	213 59.7	+02.4	214 58.8	+02.5	215 57.9	+02.5	216 57.1	+02.5	217 56.2	+02.5	01
02	229 02.1	+02.5	230 01.3	+02.4	231 00.4	+02.5	231 59.6	+02.4	232 58.7	+02.5	02
03	244 04.6	+02.5	245 03.7	+02.5	246 02.9	+02.4	247 02.0	+02.5	248 01.2	+02.4	03
04	259 07.1	+02.4	260 06.2	+02.5	261 05.3	+02.5	262 04.5	+02.4	263 03.6	+02.5	04
05	274 09.5	+02.5	275 08.7	+02.4	276 07.8	+02.5	277 06.9	+02.5	278 06.1	+02.4	05
06	289 12.0	+02.5	290 11.1	+02.5	291 10.3	+02.4	292 09.4	+02.5	293 08.5	+02.5	06
07	304 14.5	+02.4	305 13.6	+02.5	306 12.7	+02.5	307 11.9	+02.4	308 11.0	+02.5	07
08	319 16.9	+02.5	320 16.1	+02.4	321 15.2	+02.5	322 14.3	+02.5	323 13.5	+02.4	08
09	334 19.4	+02.4	335 18.5	+02.5	336 17.7	+02.4	337 16.8	+02.5	338 15.9	+02.5	09
10	349 21.8	+02.5	350 21.0	+02.5	351 20.1	+02.5	352 19.3	+02.4	353 18.4	+02.5	10
11	4 24.3	+02.5	5 23.5	+02.4	6 22.6	+02.5	7 21.7	+02.5	8 20.9	+02.4	11
12	19 26.8	+02.4	20 25.9	+02.5	21 25.1	+02.4	22 24.2	+02.5	23 23.3	+02.5	12
13	34 29.2	+02.5	35 28.4	+02.4	36 27.5	+02.5	37 26.7	+02.4	38 25.8	+02.5	13
14	49 31.7	+02.5	50 30.8	+02.5	51 30.0	+02.4	52 29.1	+02.5	53 28.3	+02.4	14
15	64 34.2	+02.4	65 33.3	+02.5	66 32.4	+02.5	67 31.6	+02.5	68 30.7	+02.5	15
16	79 36.6	+02.5	80 35.8	+02.4	81 34.9	+02.5	82 34.1	+02.4	83 33.2	+02.5	16
17	94 39.1	+02.5	95 38.2	+02.5	96 37.4	+02.4	97 36.5	+02.5	98 35.7	+02.4	17
18	109 41.6	+02.4	110 40.7	+02.5	111 39.8	+02.5	112 39.0	+02.4	113 38.1	+02.5	18
19	124 44.0	+02.5	125 43.2	+02.4	126 42.3	+02.5	127 41.4	+02.5	128 40.6	+02.4	19
20	139 46.5	+02.5	140 45.6	+02.5	141 44.8	+02.4	142 43.9	+02.5	143 43.0	+02.5	20
21	154 49.0	+02.4	155 48.1	+02.5	156 47.2	+02.5	157 46.4	+02.4	158 45.5	+02.5	21
22	169 51.4	+02.5	170 50.6	+02.4	171 49.7	+02.5	172 48.8	+02.5	173 48.0	+02.4	22
23	184 53.9	+02.4	185 53.0	+02.5	186 52.2	+02.4	187 51.3	+02.5	188 50.4	+02.5	23

	day 106 of 365 April 16		day 107 of 365 April 17		day 108 of 365 April 18		day 109 of 365 April 19		day 110 of 365 April 20		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT
00	203 52.9	+02.5	204 52.0	+02.5	205 51.2	+02.4	206 50.3	+02.5	207 49.5	+02.4	00
01	218 55.4	+02.4	219 54.5	+02.5	220 53.6	+02.5	221 52.8	+02.4	222 51.9	+02.5	01
02	233 57.8	+02.5	234 57.0	+02.4	235 56.1	+02.5	236 55.2	+02.5	237 54.4	+02.4	02
03	249 00.3	+02.5	249 59.4	+02.5	250 58.6	+02.4	251 57.7	+02.5	252 56.8	+02.5	03
04	264 02.8	+02.4	265 01.9	+02.5	266 01.0	+02.5	267 00.2	+02.4	267 59.3	+02.5	04
05	279 05.2	+02.5	280 04.4	+02.4	281 03.5	+02.5	282 02.6	+02.5	283 01.8	+02.4	05
06	294 07.7	+02.5	295 06.8	+02.5	296 06.0	+02.4	297 05.1	+02.5	298 04.2	+02.5	06
07	309 10.2	+02.4	310 09.3	+02.5	311 08.4	+02.5	312 07.6	+02.4	313 06.7	+02.5	07
08	324 12.6	+02.5	325 11.8	+02.4	326 10.9	+02.5	327 10.0	+02.5	328 09.2	+02.4	08
09	339 15.1	+02.4	340 14.2	+02.5	341 13.4	+02.4	342 12.5	+02.5	343 11.6	+02.5	09
10	354 17.5	+02.5	355 16.7	+02.4	356 15.8	+02.5	357 15.0	+02.4	358 14.1	+02.5	10
11	9 20.0	+02.5	10 19.1	+02.5	11 18.3	+02.4	12 17.4	+02.5	13 16.6	+02.4	11
12	24 22.5	+02.4	25 21.6	+02.5	26 20.7	+02.5	27 19.9	+02.4	28 19.0	+02.5	12
13	39 24.9	+02.5	40 24.1	+02.4	41 23.2	+02.5	42 22.3	+02.5	43 21.5	+02.4	13
14	54 27.4	+02.5	55 26.5	+02.5	56 25.7	+02.4	57 24.8	+02.5	58 23.9	+02.5	14
15	69 29.9	+02.4	70 29.0	+02.5	71 28.1	+02.5	72 27.3	+02.4	73 26.4	+02.5	15
16	84 32.3	+02.5	85 31.5	+02.4	86 30.6	+02.5	87 29.7	+02.5	88 28.9	+02.4	16
17	99 34.8	+02.5	100 33.9	+02.5	101 33.1	+02.4	102 32.2	+02.5	103 31.3	+02.5	17
18	114 37.3	+02.4	115 36.4	+02.5	116 35.5	+02.5	117 34.7	+02.4	118 33.8	+02.5	18
19	129 39.7	+02.5	130 38.9	+02.4	131 38.0	+02.5	132 37.1	+02.5	133 36.3	+02.4	19
20	144 42.2	+02.4	145 41.3	+02.5	146 40.5	+02.4	147 39.6	+02.5	148 38.7	+02.5	20
21	159 44.6	+02.5	160 43.8	+02.4	161 42.9	+02.5	162 42.1	+02.4	163 41.2	+02.5	21
22	174 47.1	+02.5	175 46.2	+02.5	176 45.4	+02.4	177 44.5	+02.5	178 43.7	+02.4	22
23	189 49.6	+02.4	190 48.7	+02.5	191 47.8	+02.5	192 47.0	+02.5	193 46.1	+02.5	23

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	36.7	N 29	13.0	Gienah	175	44.7	S 17	40.4
Ankaa	353	09.1	S 42	10.7	Acrux	173	01.1	S 63	13.7
Schedir	349	33.3	N 56	39.7	Gacrux	171	52.8	S 57	14.6
Diphda	348	49.2	S 17	51.7	Alioth	166	13.8	N 55	50.0
Achernar	335	21.9	S 57	07.2	Spica	158	23.5	S 11	17.0
Hamal	327	53.3	N 23	34.3	Alkaid	152	52.6	N 49	11.8
Polaris	315	12.5	N 89	21.8	Hadar	148	37.5	S 60	29.1
Acamar	315	13.2	S 40	12.9	Menkent	147	58.7	S 36	28.8
Menkar	314	08.0	N 04	10.7	Arcturus	145	48.5	N 19	04.3
Mirfak	308	30.8	N 49	56.6	Rigel Kentaurus	139	39.0	S 60	56.0
Aldebaran	290	41.6	N 16	33.4	Zubenelgenubi	136	57.3	S 16	08.3
Capella	280	24.3	N 46	01.5	Kocab	137	18.6	N 74	03.4
Rigel	281	05.5	S 08	10.6	Alphecca	126	04.7	N 26	38.0
Bellatrix	278	24.6	N 06	22.2	Antares	112	17.5	S 26	29.0
Elnath	278	03.9	N 28	37.7	Atria	107	12.7	S 69	03.9
Alnilam	275	39.4	S 01	11.3	Sabik	102	04.3	S 15	45.3
Betelgeuze	270	53.8	N 07	24.6	Shaula	96	12.2	S 37	07.2
Canopus	263	53.2	S 52	42.7	Rasalhague	95	59.8	N 12	32.5
Sirius	258	27.4	S 16	44.6	Etamin	90	42.7	N 51	28.8
Adhara	255	07.1	S 29	00.4	Kaus Australis	83	34.3	S 34	22.3
Castor	245	58.9	N 31	50.4	Vega	80	34.2	N 38	47.9
Procyon	244	52.1	N 05	10.2	Nunki	75	49.5	S 26	16.0
Pollux	243	18.7	N 27	58.3	Albireo	67	05.3	N 28	00.2
Avior	234	15.2	S 59	35.3	Altair	62	01.6	N 08	55.4
Suhail	222	47.2	S 43	31.8	Peacock	53	08.2	S 56	39.4
Miaplacidus	221	38.0	S 69	49.0	Deneb	49	27.0	N 45	21.4
Alphard	217	49.0	S 08	45.7	Enif	33	40.4	N 09	58.7
Regulus	207	35.7	N 11	51.2	Alnair	27	35.1	S 46	50.8
Dubhe	193	42.1	N 61	37.7	Formalhaut	15	16.5	S 29	30.0
Denebola	182	26.0	N 14	26.5	Markab	13	31.7	N 15	19.6

	SHA		Dec			SHA		Dec	
	°	'	°	'		°	'	°	'
Alpheratz	357	36.7	N 29	13.0	Gienah	175	44.7	S 17	40.4
Ankaa	353	09.1	S 42	10.7	Acrux	173	01.1	S 63	13.8
Schedir	349	33.3	N 56	39.7	Gacrux	171	52.8	S 57	14.6
Diphda	348	49.2	S 17	51.7	Alioth	166	13.8	N 55	50.1
Achernar	335	21.9	S 57	07.2	Spica	158	23.5	S 11	17.0
Hamal	327	53.3	N 23	34.3	Alkaid	152	52.6	N 49	11.8
Polaris	315	13.2	N 89	21.8	Hadar	148	37.4	S 60	29.1
Acamar	315	13.2	S 40	12.9	Menkent	147	58.6	S 36	28.8
Menkar	314	08.0	N 04	10.7	Arcturus	145	48.5	N 19	04.3
Mirfak	308	30.8	N 49	56.6	Rigel Kentaurus	139	39.0	S 60	56.0
Aldebaran	290	41.6	N 16	33.4	Zubenelgenubi	136	57.3	S 16	08.3
Capella	280	24.4	N 46	01.5	Kocab	137	18.6	N 74	03.5
Rigel	281	05.5	S 08	10.6	Alphecca	126	04.7	N 26	38.0
Bellatrix	278	24.6	N 06	22.2	Antares	112	17.5	S 26	29.0
Elnath	278	03.9	N 28	37.7	Atria	107	12.6	S 69	03.9
Alnilam	275	39.4	S 01	11.3	Sabik	102	04.3	S 15	45.3
Betelgeuze	270	53.8	N 07	24.6	Shaula	96	12.1	S 37	07.2
Canopus	263	53.2	S 52	42.7	Rasalhague	95	59.7	N 12	32.5
Sirius	258	27.4	S 16	44.6	Etamin	90	42.6	N 51	28.8
Adhara	255	07.1	S 29	00.4	Kaus Australis	83	34.3	S 34	22.3
Castor	245	58.9	N 31	50.4	Vega	80	34.2	N 38	47.9
Procyon	244	52.1	N 05	10.3	Nunki	75	49.5	S 26	16.0
Pollux	243	18.7	N 27	58.3	Albireo	67	05.2	N 28	00.2
Avior	234	15.2	S 59	35.3	Altair	62	01.6	N 08	55.4
Suhail	222	47.2	S 43	31.8	Peacock	53	08.1	S 56	39.4

2023 - First Point of Aries / Selected Stars

2023 - 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 31.4	+02.4	229 30.5	+02.5	230 29.7	+02.4	231 28.8	+02.5	232 27.9	+02.5	00
01	243 33.8	+02.5	244 33.0	+02.4	245 32.1	+02.5	246 31.3	+02.4	247 30.4	+02.5	01
02	258 36.3	+02.5	259 35.4	+02.5	260 34.6	+02.4	261 33.7	+02.5	262 32.9	+02.4	02
03	273 38.8	+02.4	274 37.9	+02.5	275 37.0	+02.5	276 36.2	+02.4	277 35.3	+02.5	03
04	288 41.2	+02.5	289 40.4	+02.4	290 39.5	+02.5	291 38.6	+02.5	292 37.8	+02.4	04
05	303 43.7	+02.5	304 42.8	+02.5	305 42.0	+02.4	306 41.1	+02.5	307 40.2	+02.5	05
06	318 46.2	+02.4	319 45.3	+02.5	320 44.4	+02.5	321 43.6	+02.4	322 42.7	+02.5	06
07	333 48.6	+02.5	334 47.8	+02.4	335 46.9	+02.5	336 46.0	+02.5	337 45.2	+02.4	07
08	348 51.1	+02.5	349 50.2	+02.5	350 49.4	+02.4	351 48.5	+02.5	352 47.6	+02.5	08
09	3 53.6	+02.4	4 52.7	+02.5	5 51.8	+02.5	6 51.0	+02.4	7 50.1	+02.5	09
10	18 56.0	+02.5	19 55.2	+02.4	20 54.3	+02.5	21 53.4	+02.5	22 52.6	+02.4	10
11	33 58.5	+02.4	34 57.6	+02.5	35 56.8	+02.4	36 55.9	+02.5	37 55.0	+02.5	11
12	49 00.9	+02.5	50 00.1	+02.4	50 59.2	+02.5	51 58.4	+02.4	52 57.5	+02.5	12
13	64 03.4	+02.5	65 02.5	+02.5	66 01.7	+02.5	67 00.8	+02.5	67 60.0	+02.4	13
14	79 05.9	+02.4	80 05.0	+02.5	81 04.2	+02.4	82 03.3	+02.5	83 02.4	+02.5	14
15	94 08.3	+02.5	95 07.5	+02.4	96 06.6	+02.5	97 05.8	+02.4	98 04.9	+02.5	15
16	109 10.8	+02.5	110 09.9	+02.5	111 09.1	+02.4	112 08.2	+02.5	113 07.4	+02.4	16
17	124 13.3	+02.4	125 12.4	+02.5	126 11.5	+02.5	127 10.7	+02.4	128 09.8	+02.5	17
18	139 15.7	+02.5	140 14.9	+02.4	141 14.0	+02.5	142 13.1	+02.5	143 12.3	+02.4	18
19	154 18.2	+02.5	155 17.3	+02.5	156 16.5	+02.4	157 15.6	+02.5	158 14.7	+02.5	19
20	169 20.7	+02.4	170 19.8	+02.5	171 18.9	+02.5	172 18.1	+02.4	173 17.2	+02.5	20
21	184 23.1	+02.5	185 22.3	+02.4	186 21.4	+02.5	187 20.5	+02.5	188 19.7	+02.4	21
22	199 25.6	+02.4	200 24.7	+02.5	201 23.9	+02.4	202 23.0	+02.5	203 22.1	+02.5	22
23	214 28.0	+02.5	215 27.2	+02.5	216 26.3	+02.5	217 25.5	+02.4	218 24.6	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 36.5	N 29 13.0	Gienah	175 44.8	S 17 40.4
Ankaa	353 08.9	S 42 10.6	Acrux	173 01.1	S 63 13.9
Schedir	349 33.1	N 56 39.6	Gacrux	171 52.8	S 57 14.7
Diphda	348 49.0	S 17 51.6	Alioth	166 13.8	N 55 50.2
Achernar	335 21.8	S 57 07.0	Spica	158 23.5	S 11 17.0
Hamal	327 53.2	N 23 34.2	Alkaid	152 52.6	N 49 11.9
Polaris	315 13.2	N 89 21.7	Hadar	148 37.4	S 60 29.2
Acamar	315 13.2	S 40 12.7	Menkent	147 58.6	S 36 28.9
Menkar	314 07.9	N 04 10.8	Arcturus	145 48.5	N 19 04.4
Mirfak	308 30.8	N 49 56.5	Rigel Kentaurus	139 38.9	S 60 56.1
Aldebaran	290 41.6	N 16 33.4	Zubenelgenubi	136 57.2	S 16 08.3
Capella	280 24.4	N 46 01.5	Kocab	137 18.5	N 74 03.6
Rigel	281 05.5	S 08 10.6	Alphecca	126 04.6	N 26 38.1
Bellatrix	278 24.7	N 06 22.2	Antares	112 17.3	S 26 29.0
Elnath	278 04.0	N 28 37.7	Atria	107 12.2	S 69 04.0
Alnilam	275 39.4	S 01 11.3	Sabik	102 04.1	S 15 45.3
Betelgeuze	270 53.9	N 07 24.6	Shaula	96 11.9	S 37 07.2
Canopus	263 53.4	S 52 42.7	Rasalhague	95 59.6	N 12 32.5
Sirius	258 27.5	S 16 44.5	Etamin	90 42.4	N 51 28.9
Adhara	255 07.2	S 29 00.4	Kaus Australis	83 34.1	S 34 22.3
Castor	245 59.0	N 31 50.4	Vega	80 34.0	N 38 47.9
Procyon	244 52.2	N 05 10.3	Nunki	75 49.3	S 26 16.0
Pollux	243 18.8	N 27 58.3	Albireo	67 05.0	N 28 00.2
Avior	234 15.5	S 59 35.3	Altair	62 01.4	N 08 55.5
Suhail	222 47.4	S 43 31.8	Peacock	53 07.8	S 56 39.4
Miaplacidus	221 38.5	S 69 49.1	Deneb	49 26.7	N 45 21.5
Alphard	217 49.1	S 08 45.7	Enif	33 40.2	N 09 58.7
Regulus	207 35.8	N 11 51.2	Alnair	27 34.8	S 46 50.7
Dubhe	193 42.3	N 61 37.8	Formalhaut	15 16.3	S 29 29.8
Denebola	182 26.0	N 14 26.6	Markab	13 31.5	N 15 19.6

UT	day 116 of 365		day 117 of 365		day 118 of 365		day 119 of 365		day 120 of 365		UT
	April 26		April 27		April 28		April 29		April 30		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	213 44.3	+02.5	214 43.4	+02.5	215 42.6	+02.4	216 41.7	+02.5	217 40.8	+02.5	00
01	228 46.8	+02.4	229 45.9	+02.5	230 45.0	+02.5	231 44.2	+02.4	232 43.3	+02.5	01
02	243 49.2	+02.5	244 48.4	+02.4	245 47.5	+02.5	246 46.6	+02.5	247 45.8	+02.4	02
03	258 51.7	+02.4	259 50.8	+02.5	260 50.0	+02.4	261 49.1	+02.5	262 48.2	+02.5	03
04	273 54.1	+02.5	274 53.3	+02.4	275 52.4	+02.5	276 51.6	+02.4	277 50.7	+02.5	04
05	288 56.6	+02.5	289 55.7	+02.5	290 54.9	+02.5	291 54.0	+02.5	292 53.2	+02.4	05
06	303 59.1	+02.4	304 58.2	+02.5	305 57.4	+02.4	306 56.5	+02.5	307 55.6	+02.5	06
07	319 01.5	+02.5	320 00.7	+02.4	320 59.8	+02.5	321 59.0	+02.4	322 58.1	+02.5	07
08	334 04.0	+02.5	335 03.1	+02.5	336 02.3	+02.4	337 01.4	+02.5	338 00.6	+02.4	08
09	349 06.5	+02.4	350 05.6	+02.5	351 04.7	+02.5	352 03.9	+02.4	353 03.0	+02.5	09
10	4 08.9	+02.5	5 08.1	+02.4	6 07.2	+02.5	7 06.3	+02.5	8 05.5	+02.4	10
11	19 11.4	+02.5	20 10.5	+02.5	21 09.7	+02.4	22 08.8	+02.5	23 07.9	+02.4	11
12	34 13.9	+02.4	35 13.0	+02.5	36 12.1	+02.5	37 11.3	+02.4	38 10.4	+02.5	12
13	49 16.3	+02.5	50 15.5	+02.4	51 14.6	+02.5	52 13.7	+02.5	53 12.9	+02.4	13
14	64 18.8	+02.5	65 17.9	+02.5	66 17.1	+02.4	67 16.2	+02.5	68 15.3	+02.5	14
15	79 21.3	+02.4	80 20.4	+02.5	81 19.5	+02.5	82 18.7	+02.4	83 17.8	+02.5	15
16	94 23.7	+02.5	95 22.9	+02.4	96 22.0	+02.5	97 21.1	+02.5	98 20.3	+02.4	16
17	109 26.2	+02.4	110 25.3	+02.5	111 24.5	+02.4	112 23.6	+02.5	113 22.7	+02.5	17
18	124 28.6	+02.5	125 27.8	+02.4	126 26.9	+02.5	127 26.1	+02.4	128 25.2	+02.5	18
19	139 31.1	+02.5	140 30.2	+02.5	141 29.4	+02.4	142 28.5	+02.5	143 27.7	+02.4	19
20	154 33.6	+02.4	155 32.7	+02.5	156 31.8	+02.5	157 31.0	+02.5	158 30.1	+02.5	20
21	169 36.0	+02.5	170 35.2	+02.4	171 34.3	+02.5	172 33.5	+02.4	173 32.6	+02.5	21
22	184 38.5	+02.5	185 37.6	+02.5	186 36.8	+02.4	187 35.9	+02.5	188 35.1	+02.4	22
23	199 41.0	+02.4	200 40.1	+02.5	201 39.2	+02.5	202 38.4	+02.4	203 37.5	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 36.6	N 29 13.0	Gienah	175 44.7	S 17 40.4
Ankaa	353 09.0	S 42 10.7	Acrux	173 01.1	S 63 13.8
Schedir	349 33.2	N 56 39.7	Gacrux	171 52.8	S 57 14.7
Diphda	348 49.1	S 17 51.7	Alioth	166 13.8	N 55 50.1
Achernar	335 21.9	S 57 07.1	Spica	158 23.5	S 11 17.0
Hamal	327 53.2	N 23 34.2	Alkaid	152 52.6	N 49 11.8
Polaris	315 13.8	N 89 21.8	Hadar	148 37.4	S 60 29.1
Acamar	315 13.2	S 40 12.8	Menkent	147 58.6	S 36 28.9
Menkar	314 08.0	N 04 10.8	Arcturus	145 48.5	N 19 04.4
Mirfak	308 30.8	N 49 56.6	Rigel Kentaurus	139 38.9	S 60 56.1
Aldebaran	290 41.6	N 16 33.4	Zubenelgenubi	136 57.2	S 16 08.3
Capella	280 24.4	N 46 01.5	Kocab	137 18.5	N 74 03.5
Rigel	281 05.5	S 08 10.6	Alphecca	126 04.7	N 26 38.1
Bellatrix	278 24.6	N 06 22.2	Antares	112 17.4	S 26 29.0
Elnath	278 04.0	N 28 37.7	Atria	107 12.4	S 69 04.0
Alnilam	275 39.4	S 01 11.3	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 53.9	N 07 24.6	Shaula	96 12.0	S 37 07.2
Canopus	263 53.3	S 52 42.7	Rasalhague	95 59.7	N 12 32.5
Sirius	258 27.5	S 16 44.6	Etamin	90 42.5	N 51 28.8
Adhara	255 07.1	S 29 00.4	Kaus Australis	83 34.2	S 34 22.3
Castor	245 58.9	N 31 50.4	Vega	80 34.1	N 38 47.9
Procyon	244 52.2	N 05 10.3	Nunki	75 49.4	S 26 16.0
Pollux	243 18.8	N 27 58.3	Albireo	67 05.1	N 28 00.2
Avior	234 15.3	S 59 35.3	Altair	62 01.5	N 08 55.4
Suhail	222 47.3	S 43 31.8	Peacock	53 08.0	S 56 39.4
Miaplacidus	221 38.2	S 69 49.0	Deneb	49 26.8	N 45 21.4
Alphard	217 49.1	S 08 45.7	Enif	33 40.3	N 09 58.7
Regulus	207 35.7	N 11 51.2	Alnair	27 35.0	S 46 50.8
Dubhe	193 42.2	N 61 37.8	Formalhaut	15 16.4	S 29 29.9
Denebola	182 26.0	N 14 26.6	Markab	13 31.6	N 15 19.6

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2023 - First Point of Aries / Selected Stars

2023 - 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	40.0	+02.4	219	39.1	+02.5	220	38.3	+02.4	221	37.4	+02.5	00
01	233	42.4	+02.5	234	41.6	+02.4	235	40.7	+02.5	236	39.9	+02.4	01
02	248	44.9	+02.5	249	44.0	+02.5	250	43.2	+02.4	251	42.3	+02.5	02
03	263	47.4	+02.4	264	46.5	+02.5	265	45.6	+02.5	266	44.8	+02.4	03
04	278	49.8	+02.5	279	49.0	+02.4	280	48.1	+02.5	281	47.2	+02.5	04
05	293	52.3	+02.5	294	51.4	+02.5	295	50.6	+02.4	296	49.7	+02.5	05
06	308	54.8	+02.4	309	53.9	+02.5	310	53.0	+02.5	311	52.2	+02.4	06
07	323	57.2	+02.5	324	56.4	+02.4	325	55.5	+02.5	326	54.6	+02.5	07
08	338	59.7	+02.5	339	58.8	+02.5	340	58.0	+02.4	341	57.1	+02.5	08
09	354	02.2	+02.4	355	01.3	+02.5	356	00.4	+02.5	357	59.6	+02.4	09
10	9	04.6	+02.5	10	03.8	+02.4	11	02.9	+02.5	12	02.0	+02.5	10
11	24	07.1	+02.5	25	05.4	+02.5	26	05.4	+02.4	27	04.5	+02.4	11
12	39	09.6	+02.4	40	08.7	+02.5	41	07.8	+02.5	42	07.0	+02.4	12
13	54	12.0	+02.5	55	11.2	+02.5	56	10.3	+02.5	57	09.4	+02.5	13
14	69	14.5	+02.4	70	13.6	+02.5	71	12.8	+02.4	72	11.9	+02.5	14
15	84	16.9	+02.5	85	16.1	+02.4	86	15.2	+02.5	87	14.4	+02.4	15
16	99	19.4	+02.5	100	18.5	+02.5	101	17.7	+02.4	102	16.8	+02.5	16
17	114	21.9	+02.4	115	21.0	+02.5	116	20.1	+02.5	117	19.3	+02.4	17
18	129	24.3	+02.5	130	23.5	+02.4	131	22.6	+02.5	132	21.7	+02.5	18
19	144	26.8	+02.5	145	25.9	+02.5	146	25.1	+02.4	147	24.2	+02.5	19
20	159	29.3	+02.4	160	28.4	+02.5	161	27.5	+02.5	162	26.7	+02.4	20
21	174	31.7	+02.5	175	30.9	+02.4	176	30.0	+02.5	177	29.1	+02.5	21
22	189	34.2	+02.5	190	33.3	+02.5	191	32.5	+02.4	192	31.6	+02.5	22
23	204	36.7	+02.4	205	35.8	+02.5	206	34.9	+02.5	207	34.1	+02.4	23

UT	day 126 of 365		day 127 of 365		day 128 of 365		day 129 of 365		day 130 of 365		UT		
	May	6	May	7	May	8	May	9	May	10			
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
00	223	35.7	+02.4	224	34.8	+02.5	225	34.0	+02.4	226	33.1	+02.5	00
01	238	38.1	+02.5	239	37.3	+02.4	240	36.4	+02.5	241	35.6	+02.4	01
02	253	40.6	+02.5	254	39.7	+02.5	255	38.9	+02.4	256	38.0	+02.5	02
03	268	43.1	+02.4	269	42.2	+02.5	270	41.3	+02.5	271	40.5	+02.4	03
04	283	45.5	+02.5	284	44.7	+02.4	285	43.8	+02.5	286	42.9	+02.5	04
05	298	48.0	+02.5	299	47.1	+02.5	300	46.3	+02.4	301	45.4	+02.5	05
06	313	50.5	+02.4	314	49.6	+02.5	315	48.7	+02.5	316	47.9	+02.4	06
07	328	52.9	+02.5	329	52.1	+02.4	330	51.2	+02.5	331	50.3	+02.5	07
08	343	55.4	+02.4	344	54.5	+02.5	345	53.7	+02.4	346	52.8	+02.5	08
09	358	57.8	+02.5	359	57.0	+02.5	0	56.1	+02.5	1	55.3	+02.4	09
10	14	00.3	+02.5	14	59.5	+02.4	15	58.6	+02.5	16	57.7	+02.5	10
11	29	02.8	+02.4	30	01.9	+02.5	31	01.1	+02.4	32	00.2	+02.5	11
12	44	05.2	+02.5	45	04.4	+02.4	46	03.5	+02.5	47	02.7	+02.4	12
13	59	07.7	+02.5	60	06.8	+02.5	61	06.0	+02.4	62	05.1	+02.5	13
14	74	10.2	+02.4	75	09.3	+02.5	76	08.4	+02.5	77	07.6	+02.5	14
15	89	12.6	+02.5	90	11.8	+02.4	91	10.9	+02.5	92	10.1	+02.4	15
16	104	15.1	+02.5	105	14.2	+02.5	106	13.4	+02.4	107	12.5	+02.5	16
17	119	17.6	+02.4	120	16.7	+02.5	121	15.8	+02.5	122	15.0	+02.4	17
18	134	20.0	+02.5	135	19.2	+02.4	136	18.3	+02.5	137	17.4	+02.5	18
19	149	22.5	+02.5	150	21.6	+02.5	151	20.8	+02.4	152	19.9	+02.5	19
20	164	25.0	+02.4	165	24.1	+02.5	166	23.2	+02.5	167	22.4	+02.4	20
21	179	27.4	+02.5	180	26.6	+02.4	181	25.7	+02.5	182	24.8	+02.5	21
22	194	29.9	+02.4	195	29.0	+02.5	196	28.2	+02.4	197	27.3	+02.5	22
23	209	32.3	+02.5	210	31.5	+02.5	211	30.6	+02.5	212	29.8	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.6	N 29	13.0	
Ankaa	353	09.0	S 42	10.6	
Schedir	349	33.2	N 56	39.7	
Diphda	348	49.1	S 17	51.6	
Achernar	335	21.9	S 57	07.1	
Hamal	327	53.2	N 23	34.2	
Polaris	315	14.1	N 89	21.7	
Acamar	315	13.2	S 40	12.8	
Menkar	314	08.0	N 04	10.8	
Mirfak	308	30.8	N 49	56.6	
Aldebaran	290	41.6	N 16	33.4	
Capella	280	24.4	N 46	01.5	
Rigel	281	05.5	S 08	10.6	
Bellatrix	278	24.7	N 06	22.2	
Elnath	278	04.0	N 28	37.7	
Alnilam	275	39.4	S 01	11.3	
Betelgeuze	270	53.9	N 07	24.6	
Canopus	263	53.4	S 52	42.7	
Sirius	258	27.5	S 16	44.6	
Adhara	255	07.1	S 29	00.4	
Castor	245	58.9	N 31	50.4	
Procyon	244	52.2	N 05	10.3	
Pollux	243	18.8	N 27	58.3	
Avior	234	15.4	S 59	35.3	
Suhail	222	47.3	S 43	31.8	
Miaplacidus	221	38.3	S 69	49.1	
Alphard	217	49.1	S 08	45.7	
Regulus	207	35.7	N 11	51.2	
Dubhe	193	42.3	N 61	37.8	
Denebola	182	26.0	N 14	26.6	
Gienah	175	44.8	S 17	40.4	
Acruz	173	01.1	S 63	13.8	
Gacrux	171	52.8	S 57	14.7	
Alioth	166	13.8	N 55	50.1	
Spica	158	23.5	S 11	17.0	
Alkaid	152	52.6	N 49	11.9	
Hadar	148	37.4	S 60	29.2	
Menkent	147	58.6	S 36	28.9	
Arcturus	145	48.5	N 19	04.4	
Rigel Kentaurus	139	38.9	S 60	56.1	
Zubeneigenubi	136	57.2	S 16	08.3	
Kocab	137	18.5	N 74	03.5	
Alphecca	126	04.6	N 26	38.1	
Antares	112	17.4	S 26	29.0	
Atria	107	12.3	S 69	04.0	
Sabik	102	04.2	S 15	45.3	
Shaula	96	12.0	S 37	07.2	
Rasalhague	95	59.7	N 12	32.5	
Etamin	90	42.5	N 51	28.8	
Kaus Australis	83	34.2	S 34	22.3	
Vega	80	34.0	N 38	47.9	
Nunki	75	49.4	S 26	16.0	
Albireo	67	05.1	N 28	00.2	
Altair	62	01.4	N 08	55.4	
Peacock	53	07.9	S 56	39.4	
Deneb	49	26.8	N 45	21.4	
Enif	33	40.3	N 09	58.7	
Alnair	27	34.9	S 46	50.7	
Formalhaut	15	16.4	S 29	29.9	
Markab	13	31.5	N 15	19.6	

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.6	N 29	13.0	
Ankaa	353	09.0	S 42	10.6	
Schedir	349	33.2	N 56	39.6	
Diphda	348	49.1	S 17	51.6	
Achernar	335	21.9	S 57	07.1	
Hamal	327	53.2	N 23	34.2	
Polaris	315	13.9	N 89	21.7	
Acamar	315	13.2	S 40	12.8	
Menkar	314	08.0	N 04	10.8	
Mirfak	308	30.8	N 49	56.6	
Aldebaran	290	41.6	N 16	33.4	
Capella	280	24.4	N 46	01.5	
Rigel	281	05.5	S 08	10.6	
Bellatrix	278	24.7	N 06	22.2	
Elnath	278	04.0	N 28	37.7	
Alnilam	275	39.4	S 01	11.3	
Betelgeuze	270	53.9	N 07	24.6	
Canopus	263	53.4	S 52	42.7	
Sirius	258	27.5	S 16	44.5	
Adhara	255	07.2	S 29	00.4	
Castor	245	59.0	N 31	50.4	
Procyon	244	52.2	N 05	10.3	
Pollux	243	18.8	N 27	58.3	
Avior	234	15.4	S 59	35.3	
Suhail	222	47.3	S 43	31.8	
Miaplacidus	221	38.4	S 69	49.1	
Alphard	217	49.1	S 08	45.7	
Regulus	207	35.8	N 11	51.2	
Dubhe	193	42.3	N 61	37.8	
Denebola	182	26.0	N 14	26.6	
Gienah	175	44.8	S 17	40.4	
Acruz	173	01.1	S 63	13.9	
Gacrux	171	52.8	S 57	14.7	
Alioth	166	13.8	N 55	50.1	
Spica	158	23.5	S 11	17.0	
Alkaid	152	52.6	N 49	11.9	
Hadar	148	37.4	S 60	29.2	
Menkent	147	58.6	S 36	28.9	
Arcturus	145	48.5	N 19	04.4	
Rigel Kentaurus	139	38.9	S 60	56.1	
Zubeneigenubi	136	57.2	S 16	08.3	
Kocab	137	18.5	N 74	03.6	
Alphecca	126	04.6	N 26	38.1	
Antares	112	17.4	S 26	29.0	
Atria	107	12.3	S 69	04.0	
Sabik	102	04.1	S 15	45.3	
Shaula	96	12.0	S 37	07.2	
Rasalhague	95	59.6	N 12	32.5	
Etamin	90	42.4	N 51	28.9	

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

	day 151 of 365 May 31		day 152 of 365 June 1		day 153 of 365 June 2		day 154 of 365 June 3		day 155 of 365 June 4		UT		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT		
00	248	14.2	+02.4	249	13.3	+02.5	250	12.4	+02.5	251	11.6	+02.4	00
01	263	16.6	+02.5	264	15.8	+02.4	265	14.9	+02.5	267	13.2	+02.4	01
02	278	19.1	+02.4	279	18.2	+02.5	280	17.4	+02.4	282	15.6	+02.5	02
03	293	21.5	+02.5	294	20.7	+02.4	295	19.8	+02.5	297	18.1	+02.5	03
04	308	24.0	+02.5	309	23.1	+02.5	310	22.3	+02.5	311	21.4	+02.5	04
05	323	26.5	+02.4	324	25.6	+02.5	325	24.8	+02.4	327	23.0	+02.5	05
06	338	28.9	+02.5	339	28.1	+02.4	340	27.2	+02.5	342	25.5	+02.5	06
07	353	31.4	+02.5	354	30.5	+02.5	355	29.7	+02.4	357	28.0	+02.4	07
08	8	33.9	+02.4	9	33.0	+02.5	10	32.1	+02.5	11	31.3	+02.4	08
09	23	36.3	+02.5	24	35.5	+02.4	25	34.6	+02.5	26	33.7	+02.5	09
10	38	38.8	+02.5	39	37.9	+02.5	40	37.1	+02.4	41	36.2	+02.5	10
11	53	41.3	+02.4	54	40.4	+02.5	55	39.5	+02.5	56	38.7	+02.4	11
12	68	43.7	+02.5	69	42.9	+02.4	70	42.0	+02.5	71	41.1	+02.5	12
13	83	46.2	+02.5	84	45.3	+02.5	85	44.5	+02.4	86	43.6	+02.5	13
14	98	48.7	+02.4	99	47.8	+02.5	100	46.9	+02.5	101	46.1	+02.4	14
15	113	51.1	+02.5	114	50.3	+02.4	115	49.4	+02.5	116	48.5	+02.5	15
16	128	53.6	+02.4	129	52.7	+02.5	130	51.9	+02.4	132	50.1	+02.5	16
17	143	56.0	+02.5	144	55.2	+02.4	145	54.3	+02.5	146	53.5	+02.4	17
18	158	58.5	+02.5	159	57.6	+02.5	160	56.8	+02.5	162	55.1	+02.4	18
19	174	01.0	+02.4	175	00.1	+02.5	176	59.3	+02.4	177	57.5	+02.5	19
20	189	03.4	+02.5	190	02.6	+02.4	191	01.7	+02.5	192	00.9	+02.4	20
21	204	05.9	+02.5	205	05.0	+02.5	206	04.2	+02.4	207	03.3	+02.5	21
22	219	08.4	+02.4	220	07.5	+02.5	221	06.6	+02.5	222	05.8	+02.4	22
23	234	10.8	+02.5	235	10.0	+02.4	236	09.1	+02.5	237	08.2	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.4	N 29	13.0	
Ankaa	353	08.8	S 42	10.5	
Schedir	349	32.9	N 56	39.6	
Diphda	348	48.9	S 17	51.5	
Achernar	335	21.7	S 57	06.9	
Hamal	327	53.1	N 23	34.3	
Polaris	315	09.7	N 89	21.6	
Acamar	315	13.2	S 40	12.6	
Menkar	314	07.9	N 04	10.8	
Mirfak	308	30.7	N 49	56.5	
Aldebaran	290	41.6	N 16	33.4	
Capella	280	24.4	N 46	01.4	
Rigel	281	05.5	S 08	10.5	
Bellatrix	278	24.7	N 06	22.2	
Elnath	278	04.0	N 28	37.7	
Alnilam	275	39.4	S 01	11.3	
Betelgeuze	270	53.9	N 07	24.7	
Canopus	263	53.5	S 52	42.6	
Sirius	258	27.6	S 16	44.5	
Adhara	255	07.2	S 29	00.3	
Castor	245	59.0	N 31	50.4	
Procyon	244	52.3	N 05	10.3	
Pollux	243	18.9	N 27	58.3	
Avior	234	15.7	S 59	35.3	
Suhail	222	47.5	S 43	31.8	
Miaplacidus	221	38.8	S 69	49.0	
Alphard	217	49.2	S 08	45.6	
Regulus	207	35.8	N 11	51.2	
Dubhe	193	42.5	N 61	37.8	
Denebola	182	26.1	N 14	26.6	
Gienah	175	44.8	S 17	40.4	
Acrux	173	01.3	S 63	13.9	
Gacrux	171	52.9	S 57	14.8	
Alioth	166	13.9	N 55	50.2	
Spica	158	23.5	S 11	17.0	
Alkaid	152	52.7	N 49	12.0	
Hadar	148	37.4	S 60	29.3	
Menkent	147	58.6	S 36	28.9	
Arcturus	145	48.5	N 19	04.5	
Rigel Kentaurus	139	38.9	S 60	56.2	
Zubeneigenubi	136	57.2	S 16	08.4	
Kocab	137	18.6	N 74	03.7	
Alphecca	126	04.6	N 26	38.2	
Antares	112	17.2	S 26	29.0	
Atria	107	12.0	S 69	04.1	
Sabik	102	04.0	S 15	45.3	
Shaula	96	11.8	S 37	07.2	
Rasalhague	95	59.5	N 12	32.6	
Etamin	90	42.3	N 51	29.0	
Kaus Australis	83	33.9	S 34	22.3	
Vega	80	33.9	N 38	48.0	
Nunki	75	49.1	S 26	16.0	
Albireo	67	04.9	N 28	00.3	
Altair	62	01.2	N 08	55.5	
Peacock	53	07.5	S 56	39.4	
Deneb	49	26.5	N 45	21.5	
Enif	33	40.1	N 09	58.8	
Alnair	27	34.6	S 46	50.6	
Formalhaut	15	16.2	S 29	29.8	
Markab	13	31.3	N 15	19.7	

	day 136 of 365 May 16		day 137 of 365 May 17		day 138 of 365 May 18		day 139 of 365 May 19		day 140 of 365 May 20		UT		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT		
00	233	27.1	+02.4	234	26.2	+02.5	235	25.3	+02.5	236	24.5	+02.4	00
01	248	29.5	+02.5	249	28.7	+02.4	250	27.8	+02.5	251	26.9	+02.5	01
02	263	32.0	+02.5	264	31.1	+02.5	265	30.3	+02.4	266	29.4	+02.5	02
03	278	34.5	+02.4	279	33.6	+02.5	280	32.7	+02.5	281	31.9	+02.4	03
04	293	36.9	+02.5	294	36.1	+02.4	295	35.2	+02.5	296	34.3	+02.5	04
05	308	39.4	+02.5	309	38.5	+02.5	310	37.7	+02.4	311	36.8	+02.5	05
06	323	41.9	+02.4	324	41.0	+02.5	325	40.1	+02.5	326	39.3	+02.4	06
07	338	44.3	+02.5	339	43.5	+02.4	340	42.6	+02.5	341	41.7	+02.5	07
08	353	46.8	+02.4	354	45.9	+02.5	355	45.1	+02.4	356	44.2	+02.5	08
09	8	49.2	+02.5	9	48.4	+02.4	10	47.5	+02.5	11	46.7	+02.4	09
10	23	51.7	+02.5	24	50.8	+02.5	25	50.0	+02.4	26	49.1	+02.5	10
11	38	54.2	+02.4	39	53.3	+02.5	40	52.4	+02.5	41	51.6	+02.5	11
12	53	56.6	+02.5	54	55.8	+02.4	55	54.9	+02.5	56	54.1	+02.4	12
13	68	59.1	+02.5	69	58.2	+02.5	70	57.4	+02.4	71	56.5	+02.5	13
14	84	01.6	+02.5	85	00.7	+02.5	86	59.8	+02.5	87	58.1	+02.5	14
15	99	04.0	+02.5	100	03.2	+02.4	101	02.3	+02.5	102	01.4	+02.5	15
16	114	06.5	+02.5	115	05.6	+02.5	116	04.8	+02.4	117	03.9	+02.5	16
17	129	09.0	+02.4	130	08.1	+02.5	131	07.2	+02.5	132	06.4	+02.4	17
18	144	11.4	+02.5	145	10.6	+02.4	146	09.7	+02.5	147	08.8	+02.5	18
19	159	13.9	+02.4	160	13.0	+02.5	161	12.2	+02.4	162	11.3	+02.5	19
20	174	16.3	+02.5	175	15.5	+02.4	176	14.6	+02.5	177	13.8	+02.4	20
21	189	18.8	+02.5	190	17.9	+02.5	191	17.1	+02.5	192	16.2	+02.5	21
22	204	21.3	+02.4	205	20.4	+02.5	206	19.6	+02.4	207	18.7	+02.5	22
23	219	23.7	+02.5	220	22.9	+02.4	221	22.0	+02.5	222	21.2	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.5	N 29	13.0	
Ankaa	353	08.9	S 42	10.6	
Schedir	349	33.1	N 56	39.6	
Diphda	348	49.0	S 17	51.6	
Achernar	335	21.8	S 57	07.0	
Hamal	327	53.2	N 23	34.3	
Polaris	315	12.9	N 89	21.7	
Acamar	315	13.2	S 40	12.7	
Menkar	314	07.9	N 04	10.8	
Mirfak	308	30.8	N 49	56.5	
Aldebaran	290	41.6	N 16	33.4	
Capella	280	24.4	N 46	01.5	
Rigel	281	05.5	S 08	10.6	
Bellatrix	278	24.7	N 06	22.2	
Elnath	278	04.0	N 28	37.7	
Alnilam	275	39.4	S 01	11.3	
Betelgeuze	270	53.9	N 07	24.6	
Canopus	263	53.5	S 52	42.6	
Sirius	258	27.5	S 16	44.5	
Adhara	255	07.2	S 29	00.4	
Castor	245	59.0	N 31	50.4	
Procyon	244	52.2	N 05	10.3	
Pollux	243	18.9	N 27	58.3	
Avior	234	15.5	S 59	35.3	
Suhail	222	47.4	S 43	31.8	
Miaplacidus	221	38.5	S 69	49.0	
Alphard	217	49.2	S 08	45.7	
Regulus	207	35.8	N 11	51.2	
Dubhe	193	42.4	N 61	37.8	
Denebola	182	26.0	N 14	26.6	
Gienah	175	44.8	S 17	40.4	
Acrux	173	01.2	S 63	13.9	
Gacrux	171	52.8	S 57	14.7	
Alioth	166	13.9	N 55	50.2	
Spica	158	23.5	S 11	17.0	
Alkaid	152	52.6	N 49	11.9	
Hadar	148	37.4	S 60	29.2	
Menkent	147	58.6	S 36	28.9	
Arcturus	145	48.5	N 19	04.4	
Rigel Kentaurus	139	38.9	S 60	56.2	
Zubeneigenubi	136	57.2	S 16	08.4	
Kocab	137	18.6	N 74	03.6	
Alphecca	126	04.6	N 26	38.1	
Antares	112	17.3	S 26	29.0	
Atria	107	12.2	S 69	04.1	
Sabik	102	04.1	S 15	45.3	
Shaula	96	11.9	S 37	07.2	
Rasalhague	95	59.6	N 12	32.5	
Etamin	90	42.4	N 51	28.9	
Kaus Australis	83	34.0	S 34	22.3	
Vega					

2023 - First Point of Aries / Selected Stars

2023 - 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	22.8	+02.4	239	21.9	+02.5	240	21.0	+02.5	241	20.2	+02.4	00
01	253	25.2	+02.5	254	24.4	+02.4	255	23.5	+02.5	257	21.8	+02.5	01
02	268	27.7	+02.5	269	26.8	+02.5	270	26.0	+02.4	272	24.3	+02.4	02
03	283	30.2	+02.4	284	29.3	+02.5	285	28.4	+02.5	287	26.7	+02.5	03
04	298	32.6	+02.5	299	31.8	+02.4	300	30.9	+02.5	302	29.2	+02.4	04
05	313	35.1	+02.4	314	34.2	+02.5	315	33.4	+02.4	317	31.6	+02.5	05
06	328	37.5	+02.5	329	36.7	+02.5	330	35.8	+02.5	332	34.1	+02.5	06
07	343	40.0	+02.5	344	39.2	+02.4	345	38.3	+02.5	347	36.6	+02.4	07
08	358	42.5	+02.4	359	41.6	+02.5	0	40.8	+02.4	2	39.0	+02.5	08
09	13	44.9	+02.5	14	44.1	+02.4	15	43.2	+02.5	16	42.4	+02.4	09
10	28	47.4	+02.5	29	46.5	+02.5	30	45.7	+02.4	31	44.8	+02.5	10
11	43	49.9	+02.4	44	49.0	+02.5	45	48.1	+02.5	46	47.3	+02.5	11
12	58	52.3	+02.5	59	51.5	+02.4	60	50.6	+02.5	61	49.8	+02.4	12
13	73	54.8	+02.5	74	53.9	+02.5	75	53.1	+02.4	76	52.2	+02.5	13
14	88	57.3	+02.4	89	56.4	+02.5	90	55.5	+02.5	91	54.7	+02.4	14
15	103	59.7	+02.5	104	58.9	+02.4	105	58.0	+02.5	106	57.1	+02.5	15
16	119	02.2	+02.5	120	01.3	+02.5	121	00.5	+02.4	122	58.8	+02.4	16
17	134	04.7	+02.4	135	03.8	+02.5	136	02.9	+02.5	137	02.1	+02.4	17
18	149	07.1	+02.5	150	06.3	+02.4	151	05.4	+02.5	152	04.5	+02.5	18
19	164	09.6	+02.4	165	08.7	+02.5	166	07.9	+02.4	167	07.0	+02.5	19
20	179	12.0	+02.5	180	11.2	+02.5	181	10.3	+02.5	182	09.5	+02.4	20
21	194	14.5	+02.5	195	13.7	+02.4	196	12.8	+02.5	197	11.9	+02.5	21
22	209	17.0	+02.4	210	16.1	+02.5	211	15.3	+02.4	212	14.4	+02.5	22
23	224	19.4	+02.5	225	18.6	+02.4	226	17.7	+02.5	227	16.9	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.5	N 29	13.0	
Ankaa	353	08.9	S 42	10.5	
Schedir	349	33.0	N 56	39.6	
Diphda	348	49.0	S 17	51.6	
Achernar	335	21.8	S 57	07.0	
Hamal	327	53.1	N 23	34.3	
Polaris	315	11.8	N 89	21.6	
Acamar	315	13.2	S 40	12.7	
Menkar	314	07.9	N 04	10.8	
Mirfak	308	30.8	N 49	56.5	
Aldebaran	290	41.6	N 16	33.4	
Capella	280	24.4	N 46	01.5	
Rigel	281	05.5	S 08	10.6	
Bellatrix	278	24.7	N 06	22.2	
Elnath	278	04.0	N 28	37.7	
Alnilam	275	39.4	S 01	11.3	
Betelgeuze	270	53.9	N 07	24.6	
Canopus	263	53.5	S 52	42.6	
Sirius	258	27.5	S 16	44.5	
Adhara	255	07.2	S 29	00.3	
Castor	245	59.0	N 31	50.4	
Procyon	244	52.3	N 05	10.3	
Pollux	243	18.9	N 27	58.3	
Avior	234	15.6	S 59	35.3	
Suhail	222	47.4	S 43	31.8	
Miaplacidus	221	38.6	S 69	49.1	
Alphard	217	49.2	S 08	45.7	
Regulus	207	35.8	N 11	51.2	
Dubhe	193	42.4	N 61	37.8	
Denebola	182	26.0	N 14	26.6	
Gienah	175	44.8	S 17	40.4	
Acrux	173	01.2	S 63	13.9	
Gacrux	171	52.9	S 57	14.7	
Alioth	166	13.9	N 55	50.2	
Spica	158	23.5	S 11	17.0	
Alkaid	152	52.6	N 49	11.9	
Hadar	148	37.4	S 60	29.2	
Menkent	147	58.6	S 36	28.9	
Arcturus	145	48.5	N 19	04.4	
Rigel Kentaurus	139	38.9	S 60	56.2	
Zubengelgenubi	136	57.2	S 16	08.3	
Kocab	137	18.6	N 74	03.6	
Alphecca	126	04.6	N 26	38.2	
Antares	112	17.3	S 26	29.0	
Atria	107	12.1	S 69	04.1	
Sabik	102	04.0	S 15	45.3	
Shaula	96	11.9	S 37	07.2	
Rasalhague	95	59.5	N 12	32.6	
Etamin	90	42.3	N 51	28.9	
Kaus Australis	83	34.0	S 34	22.3	
Vega	80	33.9	N 38	48.0	
Nunki	75	49.2	S 26	16.0	
Albireo	67	04.9	N 28	00.3	
Altair	62	01.3	N 08	55.5	
Peacock	53	07.6	S 56	39.4	
Deneb	49	26.6	N 45	21.5	
Enif	33	40.1	N 09	58.7	
Alnair	27	34.7	S 46	50.7	
Formalhaut	15	16.3	S 29	29.8	
Markab	13	31.4	N 15	19.7	

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	18.5	+02.4	244	17.6	+02.5	245	16.7	+02.5	246	15.9	+02.4	00
01	258	20.9	+02.5	259	20.1	+02.4	260	19.2	+02.5	261	18.3	+02.5	01
02	273	23.4	+02.5	274	22.5	+02.5	275	21.7	+02.4	276	20.8	+02.5	02
03	288	25.9	+02.4	289	25.0	+02.5	290	24.1	+02.5	291	23.3	+02.4	03
04	303	28.3	+02.5	304	27.5	+02.4	305	26.6	+02.5	306	25.7	+02.5	04
05	318	30.8	+02.4	319	29.9	+02.5	320	29.1	+02.4	321	28.2	+02.5	05
06	333	33.2	+02.5	334	32.4	+02.5	335	31.5	+02.5	336	30.7	+02.4	06
07	348	35.7	+02.5	349	34.9	+02.4	350	34.0	+02.5	351	33.1	+02.5	07
08	3	38.2	+02.4	4	37.3	+02.5	5	36.5	+02.4	6	35.6	+02.5	08
09	18	40.6	+02.5	19	39.8	+02.4	20	38.9	+02.5	21	38.1	+02.4	09
10	33	43.1	+02.5	34	42.2	+02.5	35	41.4	+02.4	36	40.5	+02.5	10
11	48	45.6	+02.4	49	44.7	+02.5	50	43.8	+02.5	51	43.0	+02.4	11
12	63	48.0	+02.5	64	47.2	+02.4	65	46.3	+02.5	66	45.4	+02.5	12
13	78	50.5	+02.5	79	49.6	+02.5	80	48.8	+02.4	81	47.9	+02.5	13
14	93	53.0	+02.4	94	52.1	+02.5	95	51.2	+02.5	96	50.4	+02.4	14
15	108	55.4	+02.5	109	54.6	+02.4	110	53.7	+02.5	111	52.8	+02.5	15
16	123	57.9	+02.5	124	57.0	+02.5	125	56.2	+02.4	126	55.3	+02.5	16
17	139	00.4	+02.4	139	59.5	+02.5	140	58.6	+02.5	141	57.8	+02.4	17
18	154	02.8	+02.5	155	02.0	+02.4	156	01.1	+02.5	157	00.2	+02.5	18
19	169	05.3	+02.4	170	04.4	+02.5	171	03.6	+02.4	172	02.7	+02.5	19
20	184	07.7	+02.5	185	06.9	+02.4	186	06.0	+02.5	187	05.2	+02.4	20
21	199	10.2	+02.5	200	09.3	+02.5	201	08.5	+02.5	202	07.6	+02.5	21
22	214	12.7	+02.4	215	11.8	+02.5	216	11.0	+02.4	217	10.1	+02.5	22
23	229	15.1	+02.5	230	14.3	+02.4	231	13.4	+02.5	232	12.6	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.4	N 29	13.0	
Ankaa	353	08.8	S 42	10.5	
Schedir	349	33.0	N 56	39.6	
Diphda	348	48.9	S 17	51.5	
Achernar	335	21.7	S 57	07.0	
Hamal	327	53.1	N 23	34.3	
Polaris	315	10.7	N 89	21.6	
Acamar	315	13.2	S 40	12.7	
Menkar	314	07.9	N 04	10.8	
Mirfak	308	30.7	N 49	56.5	
Aldebaran	290	41.6	N 16	33.4	
Capella	280	24.4	N 46	01.4	
Rigel	281	05.5	S 08	10.5	
Bellatrix	278	24.7	N 06	22.2	
Elnath	278	04.0	N 28	37.7	
Alnilam	275	39.4	S 01	11.3	
Betelgeuze	270	53.9	N 07	24.6	
Canopus	263	53.5	S 52	42.6	
Sirius	258	27.5	S 16	44.5	
Adhara	255	07.2	S 29	00.3	
Castor	245	59.0	N 31	50.4	
Procyon	244	52.3	N 05	10.3	
Pollux	243	18.9	N 27	58.3	
Avior	234	15.6	S 59	35.3	
Suhail	222	47.4	S 43	31.8	
Miaplacidus	221	38.7	S 69	49.1	
Alphard	217	49.2	S 08	45.7	
Regulus	207	35.8	N 11	51.2	
Dubhe	193	42.4	N 61	37.8	
Denebola	182	26.0	N 14	26.6	
Gienah	175	44.8	S 17	40.4	
Acrux	173	01.2	S 63	13.9	
Gacrux	171	52.9	S 57	14.8	
Alioth	166	13.9	N 55	50.2	
Spica	158	23.5	S 11	17.0	
Alkaid	152	52.6	N 49	12.0	
Hadar	148	37.4	S 60	29.3	
Menkent	147	58.6	S 36	28.9	
Arcturus	145	48.5	N 19	04.4	
Rigel Kentaurus	139	38.8	S 60	56.2	
Zubengelgenubi	136	57.2	S 16	08.4	
Kocab	137	18.6	N 74	03.7	
Alphecca	126	04.6	N 26	38.2	
Antares	112	17.3	S 26	29.0	
Atria	107	12.1	S 69	04.1	
Sabik	102	04.0	S 15	45.3	
Shaula	96	11.8	S 37	07.2	
Rasalhague	95	59.5	N 12	32.6	
Etamin	90	42.3	N 51	29.0	

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

Table with columns for UT, day 171 of 365 (June 20), day 172 of 365 (June 21), day 173 of 365 (June 22), day 174 of 365 (June 23), day 175 of 365 (June 24), and UT. Rows list stars like Alpheratz, Ankaa, Schedir, etc., with GHA and ddGHA values.

Table with columns for UT, day 156 of 365 (June 5), day 157 of 365 (June 6), day 158 of 365 (June 7), day 159 of 365 (June 8), day 160 of 365 (June 9), and UT. Rows list stars like Alpheratz, Ankaa, Schedir, etc., with GHA and ddGHA values.

Table with columns for star name, SHA, and Dec. Rows list stars like Alpheratz, Ankaa, Schedir, Diphda, Achernar, Hamal, Polaris, etc., with their corresponding SHA and Dec coordinates.

Table with columns for star name, SHA, and Dec. Rows list stars like Alpheratz, Ankaa, Schedir, Diphda, Achernar, Hamal, Polaris, etc., with their corresponding SHA and Dec coordinates.

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

	day 161 of 365		day 162 of 365		day 163 of 365		day 164 of 365		day 165 of 365		
	June 10		June 11		June 12		June 13		June 14		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT
00	258 05.6	+02.4	259 04.7	+02.5	260 03.8	+02.5	261 03.0	+02.4	262 02.1	+02.5	00
01	273 08.0	+02.5	274 07.2	+02.4	275 06.3	+02.5	276 05.4	+02.5	277 04.6	+02.4	01
02	288 10.5	+02.4	289 09.6	+02.5	290 08.8	+02.4	291 07.9	+02.5	292 07.0	+02.5	02
03	303 12.9	+02.5	304 12.1	+02.5	305 11.2	+02.5	306 10.4	+02.4	307 09.5	+02.5	03
04	318 15.4	+02.5	319 14.6	+02.4	320 13.7	+02.5	321 12.8	+02.5	322 12.0	+02.4	04
05	333 17.9	+02.4	334 17.0	+02.5	335 16.2	+02.4	336 15.3	+02.5	337 14.4	+02.5	05
06	348 20.3	+02.5	349 19.5	+02.4	350 18.6	+02.5	351 17.8	+02.4	352 16.9	+02.5	06
07	3 22.8	+02.5	4 21.9	+02.5	5 21.1	+02.4	6 20.2	+02.5	7 19.4	+02.4	07
08	18 25.3	+02.4	19 24.4	+02.5	20 23.5	+02.5	21 22.7	+02.4	22 21.8	+02.5	08
09	33 27.7	+02.5	34 26.9	+02.4	35 26.0	+02.5	36 25.1	+02.5	37 24.3	+02.5	09
10	48 30.2	+02.5	49 29.3	+02.5	50 28.5	+02.4	51 27.6	+02.5	52 26.8	+02.4	10
11	63 32.7	+02.4	64 31.8	+02.5	65 30.9	+02.5	66 30.1	+02.4	67 29.2	+02.5	11
12	78 35.1	+02.5	79 34.3	+02.4	80 33.4	+02.5	81 32.5	+02.5	82 31.7	+02.4	12
13	93 37.6	+02.5	94 36.7	+02.5	95 35.9	+02.4	96 35.0	+02.5	97 34.1	+02.5	13
14	108 40.1	+02.4	109 39.2	+02.5	110 38.3	+02.5	111 37.5	+02.4	112 36.6	+02.5	14
15	123 42.5	+02.5	124 41.7	+02.4	125 40.8	+02.5	126 39.9	+02.5	127 39.1	+02.4	15
16	138 45.0	+02.4	139 44.1	+02.5	140 43.3	+02.4	141 42.4	+02.5	142 41.5	+02.5	16
17	153 47.4	+02.5	154 46.6	+02.4	155 45.7	+02.5	156 44.9	+02.4	157 44.0	+02.5	17
18	168 49.9	+02.5	169 49.0	+02.5	170 48.2	+02.5	171 47.3	+02.5	172 46.5	+02.4	18
19	183 52.4	+02.4	184 51.5	+02.5	185 50.7	+02.4	186 49.8	+02.5	187 48.9	+02.5	19
20	198 54.8	+02.5	199 54.0	+02.4	200 53.1	+02.5	201 52.3	+02.4	202 51.4	+02.5	20
21	213 57.3	+02.5	214 56.4	+02.5	215 55.6	+02.4	216 54.7	+02.5	217 53.9	+02.4	21
22	228 59.8	+02.4	229 58.9	+02.5	230 58.0	+02.5	231 57.2	+02.4	232 56.3	+02.5	22
23	244 02.2	+02.5	245 01.4	+02.4	246 00.5	+02.5	246 59.6	+02.5	247 58.8	+02.4	23

	day 166 of 365		day 167 of 365		day 168 of 365		day 169 of 365		day 170 of 365		
	June 15		June 16		June 17		June 18		June 19		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT
00	263 01.2	+02.5	264 00.4	+02.5	264 59.5	+02.5	265 58.7	+02.4	266 57.8	+02.5	00
01	278 03.7	+02.5	279 02.9	+02.4	280 02.0	+02.5	281 01.1	+02.5	282 00.3	+02.4	01
02	293 06.2	+02.4	294 05.3	+02.5	294 04.5	+02.4	295 03.6	+02.5	296 02.7	+02.5	02
03	308 08.6	+02.5	309 07.8	+02.4	310 06.9	+02.5	311 06.1	+02.4	312 05.2	+02.5	03
04	323 11.1	+02.5	324 10.2	+02.5	325 09.4	+02.4	326 08.5	+02.5	327 07.7	+02.4	04
05	338 13.6	+02.4	339 12.7	+02.5	340 11.8	+02.5	341 11.0	+02.5	342 10.1	+02.5	05
06	353 16.0	+02.5	354 15.2	+02.4	355 14.3	+02.5	356 13.5	+02.4	357 12.6	+02.5	06
07	8 18.5	+02.5	9 17.6	+02.5	10 16.8	+02.4	11 15.9	+02.5	12 15.1	+02.4	07
08	23 21.0	+02.4	24 20.1	+02.5	25 19.2	+02.5	26 18.4	+02.4	27 17.5	+02.5	08
09	38 23.4	+02.5	39 22.6	+02.4	40 21.7	+02.5	41 20.8	+02.5	42 20.0	+02.5	09
10	53 25.9	+02.5	54 25.0	+02.5	55 24.2	+02.4	56 23.3	+02.5	57 22.5	+02.4	10
11	68 28.4	+02.4	69 27.5	+02.5	70 26.6	+02.5	71 25.8	+02.4	72 24.9	+02.5	11
12	83 30.8	+02.5	84 30.0	+02.4	85 29.1	+02.5	86 28.2	+02.5	87 27.4	+02.4	12
13	98 33.3	+02.4	99 32.4	+02.5	100 31.6	+02.4	101 30.7	+02.5	102 29.8	+02.5	13
14	113 35.7	+02.5	114 34.9	+02.5	115 34.0	+02.5	116 33.2	+02.4	117 32.3	+02.5	14
15	128 38.2	+02.5	129 37.4	+02.4	130 36.5	+02.5	131 35.6	+02.5	132 34.8	+02.4	15
16	143 40.7	+02.4	144 39.8	+02.5	145 39.0	+02.4	146 38.1	+02.5	147 37.2	+02.5	16
17	158 43.1	+02.5	159 42.3	+02.4	160 41.4	+02.5	161 40.6	+02.4	162 39.7	+02.5	17
18	173 45.6	+02.5	174 44.7	+02.5	175 43.9	+02.4	176 43.0	+02.5	177 42.2	+02.4	18
19	188 48.1	+02.4	189 47.2	+02.5	190 46.3	+02.5	191 45.5	+02.5	192 44.6	+02.5	19
20	203 50.5	+02.5	204 49.7	+02.4	205 48.8	+02.5	206 48.0	+02.4	207 47.1	+02.5	20
21	218 53.0	+02.5	219 52.1	+02.5	220 51.3	+02.4	221 50.4	+02.4	222 49.6	+02.4	21
22	233 55.5	+02.4	234 54.6	+02.5	235 53.7	+02.5	236 52.9	+02.4	237 52.0	+02.5	22
23	248 57.9	+02.5	249 57.1	+02.4	250 56.2	+02.5	251 55.3	+02.5	252 54.5	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 36.3	N 29 13.0	Gienah	175 44.8	S 17 40.4
Ankaa	353 08.7	S 42 10.4	Acrux	173 01.3	S 63 14.0
Schedir	349 32.8	N 56 39.6	Gacrux	171 53.0	S 57 14.8
Diphda	348 48.8	S 17 51.5	Alioth	166 14.0	N 55 50.2
Achernar	335 21.6	S 57 06.9	Spica	158 23.5	S 11 17.0
Hamal	327 53.0	N 23 34.3	Alkaid	152 52.7	N 49 12.0
Polaris	315 06.5	N 89 21.6	Hadar	148 37.4	S 60 29.3
Acamar	315 13.1	S 40 12.6	Menkent	147 58.6	S 36 29.0
Menkar	314 07.8	N 04 10.9	Arcturus	145 48.5	N 19 04.5
Mirfak	308 30.6	N 49 56.5	Rigel Kentaurus	139 38.9	S 60 56.3
Aldebaran	290 41.5	N 16 33.4	Zubenelgenubi	136 57.2	S 16 08.4
Capella	280 24.4	N 46 01.4	Kocab	137 18.7	N 74 03.7
Rigel	281 05.5	S 08 10.5	Alphecca	126 04.6	N 26 38.2
Bellatrix	278 24.6	N 06 22.2	Antares	112 17.2	S 26 29.1
Elnath	278 03.9	N 28 37.7	Atria	107 12.0	S 69 04.2
Alnilam	275 39.4	S 01 11.2	Sabik	102 04.0	S 15 45.3
Betelgeuze	270 53.9	N 07 24.7	Shaula	96 11.7	S 37 07.2
Canopus	263 53.5	S 52 42.5	Rasalhague	95 59.5	N 12 32.6
Sirius	258 27.5	S 16 44.4	Etamin	90 42.3	N 51 29.0
Adhara	255 07.2	S 29 00.3	Kaus Australis	83 33.9	S 34 22.3
Castor	245 59.0	N 31 50.3	Vega	80 33.8	N 38 48.1
Procyon	244 52.3	N 05 10.3	Nunki	75 49.1	S 26 16.0
Pollux	243 18.9	N 27 58.3	Albireo	67 04.8	N 28 00.4
Avior	234 15.7	S 59 35.2	Altair	62 01.2	N 08 55.6
Suhail	222 47.5	S 43 31.8	Peacock	53 07.4	S 56 39.4
Miaplacidus	221 38.9	S 69 49.0	Deneb	49 26.4	N 45 21.6
Alphard	217 49.2	S 08 45.6	Enif	33 40.0	N 09 58.8
Regulus	207 35.8	N 11 51.3	Alnair	27 34.5	S 46 50.6
Dubhe	193 42.6	N 61 37.8	Formalhaut	15 16.1	S 29 29.7
Denebola	182 26.1	N 14 26.6	Markab	13 31.2	N 15 19.7

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 36.2	N 29 13.0	Gienah	175 44.8	S 17 40.4
Ankaa	353 08.7	S 42 10.4	Acrux	173 01.4	S 63 14.0
Schedir	349 32.7	N 56 39.6	Gacrux	171 53.0	S 57 14.8
Diphda	348 48.8	S 17 51.5	Alioth	166 14.0	N 55 50.3
Achernar	335 21.5	S 57 06.8	Spica	158 23.5	S 11 17.0
Hamal	327 53.0	N 23 34.3	Alkaid	152 52.7	N 49 12.0
Polaris	315 04.8	N 89 21.5	Hadar	148 37.4	S 60 29.3
Acamar	315 13.1	S 40 12.5	Menkent	147 58.6	S 36 29.0
Menkar	314 07.8	N 04 10.9	Arcturus	145 48.5	N 19 04.5
Mirfak	308 30.6	N 49 56.5	Rigel Kentaurus	139 38.9	S 60 56.3
Aldebaran	290 41.5	N 16 33.4	Zubenelgenubi	136 57.2	S 16 08.4
Capella	280 24.4	N 46 01.4	Kocab	137 18.8	N 74 03.7
Rigel	281 05.5	S 08 10.5	Alphecca	126 04.6	N 26 38.3
Bellatrix	278 24.6	N 06 22.2	Antares	112 17.2	S 26 29.1
Elnath	278 03.9	N 28 37.7	Atria	107 12.0	S 69 04.2
Alnilam	275 39.4	S 01 11.2	Sabik	102 04.0	S 15 45.3
Betelgeuze	270 53.9	N 07 24.7	Shaula	96 11.7	S 37 07.2
Canopus	263 53.5	S 52 42.5	Rasalhague	95 59.5	N 12 32.6
Sirius	258 27.5	S 16 44.4	Etamin	90 42.2	N 51 29.1
Adhara	255 07.3	S 29 00.3	Kaus Australis	83 33.8	S 34 22.3
Castor	245 59.0	N 31 50.3	Vega	80 33.8	N 38 48.1
Procyon	244 52.3	N 05 10.3	Nunki	75 49.0	S 26 16.0
Pollux	243 18.9	N 27 58.3	Albireo	67 04.8	N 28 00.4
Avior	234 15.8	S 59 35.2	Altair	62 01.1	N 08 55.6
Suhail	222 47.5	S 43 31.8	Peacock	53 07.3	S 56 39.4
Miaplacidus	221 39.0	S 69 49.0	Deneb	49 26.4	N 45 21.6
Alphard	217 49.2	S 08 45.6	Enif	33 39.9	N 09 58.8
Regulus	207 35.9	N 11 51.3	Alnair	27 34.4	S 46 50.6
Dubhe	193 42.6	N 61 37.8	Formalhaut	15 16.0	S 29 29.7
Denebola	182 26.1	N 14 26.6	Markab	13 31.2	N 15 19.7

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

	day 191 of 365 July 10		day 192 of 365 July 11		day 193 of 365 July 12		day 194 of 365 July 13		day 195 of 365 July 14		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT
00	287 39.7	+02.5	288 38.9	+02.4	289 38.0	+02.5	290 37.2	+02.4	291 36.3	+02.5	00
01	302 42.2	+02.5	303 41.3	+02.5	304 40.5	+02.4	305 39.6	+02.5	306 38.8	+02.4	01
02	317 44.7	+02.4	318 43.8	+02.5	319 42.9	+02.5	320 42.1	+02.5	321 41.2	+02.5	02
03	332 47.1	+02.5	333 46.3	+02.4	334 45.4	+02.5	335 44.6	+02.4	336 43.7	+02.5	03
04	347 49.6	+02.5	348 48.7	+02.5	349 47.9	+02.4	350 47.0	+02.5	351 46.2	+02.4	04
05	2 52.1	+02.4	3 51.2	+02.5	4 50.3	+02.5	5 49.5	+02.4	6 48.6	+02.5	05
06	17 54.5	+02.5	18 53.7	+02.4	19 52.8	+02.5	20 51.9	+02.5	21 51.1	+02.4	06
07	32 57.0	+02.5	33 56.1	+02.5	34 55.3	+02.4	35 54.4	+02.5	36 53.5	+02.5	07
08	47 59.5	+02.4	48 58.6	+02.5	49 57.7	+02.5	50 56.9	+02.4	51 56.0	+02.5	08
09	63 01.9	+02.5	64 01.1	+02.4	65 00.2	+02.5	65 59.3	+02.5	66 58.5	+02.4	09
10	78 04.4	+02.4	79 03.5	+02.5	80 02.7	+02.4	81 01.8	+02.5	82 00.9	+02.5	10
11	93 06.8	+02.5	94 06.0	+02.4	95 05.1	+02.5	96 04.3	+02.5	97 03.4	+02.5	11
12	108 09.3	+02.5	109 08.4	+02.5	110 07.6	+02.5	111 06.7	+02.5	112 05.9	+02.4	12
13	123 11.8	+02.4	124 10.9	+02.5	125 10.1	+02.4	126 09.2	+02.5	127 08.3	+02.5	13
14	138 14.2	+02.5	139 13.4	+02.4	140 12.5	+02.5	141 11.7	+02.4	142 10.8	+02.5	14
15	153 16.7	+02.5	154 15.8	+02.5	155 15.0	+02.4	156 14.1	+02.5	157 13.3	+02.4	15
16	168 19.2	+02.4	169 18.3	+02.5	170 17.4	+02.5	171 16.6	+02.4	172 15.7	+02.5	16
17	183 21.6	+02.5	184 20.8	+02.4	185 19.9	+02.5	186 19.0	+02.5	187 18.2	+02.5	17
18	198 24.1	+02.5	199 23.2	+02.5	200 22.4	+02.4	201 21.5	+02.5	202 20.7	+02.4	18
19	213 26.6	+02.4	214 25.7	+02.5	215 24.8	+02.5	216 24.0	+02.4	217 23.1	+02.5	19
20	228 29.0	+02.5	229 28.2	+02.4	230 27.3	+02.5	231 26.4	+02.5	232 25.6	+02.4	20
21	243 31.5	+02.5	244 30.6	+02.5	245 29.8	+02.4	246 28.9	+02.5	247 28.0	+02.5	21
22	258 34.0	+02.4	259 33.1	+02.5	260 32.2	+02.5	261 31.4	+02.4	262 30.5	+02.5	22
23	273 36.4	+02.5	274 35.6	+02.4	275 34.7	+02.5	276 33.8	+02.5	277 33.0	+02.4	23

	day 176 of 365 June 25		day 177 of 365 June 26		day 178 of 365 June 27		day 179 of 365 June 28		day 180 of 365 June 29		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT
00	272 52.6	+02.5	273 51.8	+02.5	274 50.9	+02.5	275 50.1	+02.4	276 49.2	+02.5	00
01	287 55.1	+02.5	288 54.3	+02.4	289 53.4	+02.5	290 52.5	+02.5	291 51.7	+02.4	01
02	302 57.6	+02.4	303 56.7	+02.5	304 55.9	+02.4	305 55.0	+02.5	306 54.1	+02.5	02
03	318 00.0	+02.5	318 59.2	+02.4	319 58.3	+02.5	320 57.5	+02.4	321 56.6	+02.5	03
04	333 02.5	+02.5	334 01.6	+02.5	335 00.8	+02.4	335 59.9	+02.5	336 59.1	+02.4	04
05	348 05.0	+02.4	349 04.1	+02.5	350 03.2	+02.5	351 02.4	+02.4	352 01.5	+02.5	05
06	3 07.4	+02.5	4 06.6	+02.4	5 05.7	+02.5	6 04.8	+02.5	7 04.0	+02.5	06
07	18 09.9	+02.5	19 09.0	+02.5	20 08.2	+02.4	21 07.3	+02.5	22 06.5	+02.4	07
08	33 12.4	+02.4	34 11.5	+02.5	35 10.6	+02.5	36 09.8	+02.4	37 08.9	+02.5	08
09	48 14.8	+02.5	49 14.0	+02.4	50 13.1	+02.5	51 12.2	+02.5	52 11.4	+02.4	09
10	63 17.3	+02.5	64 16.4	+02.5	65 15.6	+02.4	66 14.7	+02.5	67 13.8	+02.5	10
11	78 19.8	+02.4	79 18.9	+02.5	80 18.0	+02.5	81 17.2	+02.5	82 16.3	+02.5	11
12	93 22.2	+02.5	94 21.4	+02.4	95 20.5	+02.5	96 19.6	+02.5	97 18.8	+02.4	12
13	108 24.7	+02.4	109 23.8	+02.5	110 23.0	+02.4	111 22.1	+02.5	112 21.2	+02.5	13
14	123 27.1	+02.5	124 26.3	+02.4	125 25.4	+02.5	126 24.6	+02.4	127 23.7	+02.5	14
15	138 29.6	+02.5	139 28.7	+02.5	140 27.9	+02.4	141 27.0	+02.5	142 26.2	+02.4	15
16	153 32.1	+02.4	154 31.2	+02.5	155 30.3	+02.5	156 29.5	+02.5	157 28.6	+02.5	16
17	168 34.5	+02.5	169 33.7	+02.4	170 32.8	+02.5	171 32.0	+02.4	172 31.1	+02.5	17
18	183 37.0	+02.5	184 36.1	+02.5	185 35.3	+02.4	186 34.4	+02.5	187 33.6	+02.4	18
19	198 39.5	+02.4	199 38.6	+02.5	200 37.7	+02.5	201 36.9	+02.4	202 36.0	+02.5	19
20	213 41.9	+02.5	214 41.1	+02.4	215 40.2	+02.5	216 39.3	+02.5	217 38.5	+02.4	20
21	228 44.4	+02.5	229 43.5	+02.5	230 42.7	+02.4	231 41.8	+02.5	232 40.9	+02.5	21
22	243 46.9	+02.4	244 46.0	+02.5	245 45.1	+02.5	246 44.3	+02.4	247 43.4	+02.5	22
23	258 49.3	+02.5	259 48.5	+02.4	260 47.6	+02.5	261 46.7	+02.5	262 45.9	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 36.0	N 29 13.1	Gienah	175 44.9	S 17 40.4
Ankaa	353 08.4	S 42 10.3	Acrux	173 01.6	S 63 14.0
Schedir	349 32.4	N 56 39.7	Gacrux	171 53.2	S 57 14.8
Diphda	348 48.6	S 17 51.4	Alioth	166 14.2	N 55 50.3
Achernar	335 21.3	S 57 06.8	Spica	158 23.6	S 11 17.0
Hamal	327 52.8	N 23 34.3	Alkaid	152 52.8	N 49 12.1
Polaris	314 54.0	N 89 21.5	Hadar	148 37.6	S 60 29.4
Acamar	315 12.9	S 40 12.4	Menkent	147 58.7	S 36 29.0
Menkar	314 07.6	N 04 10.9	Arcturus	145 48.5	N 19 04.5
Mirfak	308 30.3	N 49 56.5	Rigel Kentaurus	139 39.0	S 60 56.3
Aldebaran	290 41.3	N 16 33.4	Zubenelgenubi	136 57.2	S 16 08.3
Capella	280 24.2	N 46 01.4	Kocab	137 19.2	N 74 03.8
Rigel	281 05.4	S 08 10.4	Alphecca	126 04.6	N 26 38.3
Bellatrix	278 24.5	N 06 22.3	Antares	112 17.2	S 26 29.1
Elnath	278 03.8	N 28 37.7	Atria	107 11.9	S 69 04.3
Alnilam	275 39.3	S 01 11.2	Sabik	102 03.9	S 15 45.3
Betelgeuze	270 53.8	N 07 24.7	Shaula	96 11.7	S 37 07.3
Canopus	263 53.5	S 52 42.4	Rasalhague	95 59.4	N 12 32.7
Sirius	258 27.5	S 16 44.3	Etamin	90 42.2	N 51 29.2
Adhara	255 07.2	S 29 00.1	Kaus Australis	83 33.7	S 34 22.4
Castor	245 59.0	N 31 50.3	Vega	80 33.7	N 38 48.2
Procyon	244 52.2	N 05 10.3	Nunki	75 48.9	S 26 16.0
Pollux	243 18.9	N 27 58.3	Albireo	67 04.7	N 28 00.5
Avior	234 15.9	S 59 35.1	Altair	62 01.0	N 08 55.7
Suhail	222 47.6	S 43 31.7	Peacock	53 07.1	S 56 39.4
Miaplacidus	221 39.2	S 69 48.9	Deneb	49 26.2	N 45 21.7
Alphard	217 49.3	S 08 45.6	Enif	33 39.8	N 09 58.9
Regulus	207 35.9	N 11 51.3	Alnair	27 34.2	S 46 50.6
Dubhe	193 42.8	N 61 37.8	Formalhaut	15 15.8	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 31.0	N 15 19.8

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 36.2	N 29 13.1	Gienah	175 44.8	S 17 40.4
Ankaa	353 08.6	S 42 10.4	Acrux	173 01.5	S 63 14.0
Schedir	349 32.6	N 56 39.6	Gacrux	171 53.1	S 57 14.8
Diphda	348 48.7	S 17 51.4	Alioth	166 14.1	N 55 50.3
Achernar	335 21.4	S 57 06.8	Spica	158 23.5	S 11 17.0
Hamal	327 52.9	N 23 34.3	Alkaid	152 52.8	N 49 12.0
Polaris	315 00.8	N 89 21.5	Hadar	148 37.5	S 60 29.4
Acamar	315 13.0	S 40 12.5	Menkent	147 58.6	S 36 29.0
Menkar	314 07.7	N 04 10.9	Arcturus	145 48.5	N 19 04.5
Mirfak	308 30.5	N 49 56.5	Rigel Kentaurus	139 38.9	S 60 56.3
Aldebaran	290 41.4	N 16 33.4	Zubenelgenubi	136 57.2	S 16 08.4
Capella	280 24.3	N 46 01.4	Kocab	137 18.9	N 74 03.8
Rigel	281 05.4	S 08 10.4	Alphecca	126 04.6	N 26 38.3
Bellatrix	278 24.6	N 06 22.3	Antares	112 17.2	S 26 29.1
Elnath	278 03.9	N 28 37.7	Atria	107 11.9	S 69 04.2
Alnilam	275 39.4	S 01 11.2	Sabik	102 03.9	S 15 45.3
Betelgeuze	270 53.8	N 07 24.7	Shaula	96 11.7	S 37 07.2
Canopus	263 53.5	S 52 42.4	Rasalhague	95 59.4	N 12 32.7
Sirius	258 27.5	S 16 44.4	Etamin	90 42.2	N 51 29.1
Adhara	255 07.2	S 29 00.2	Kaus Australis	83 33.8	S 34 22.3
Castor	245 59.0	N 31 50.3	Vega	80 33.7	N 38 48.1
Procyon	244 52.3	N 05 10.3	Nunki	75 49.0	S 26 16.0
Pollux	243 18.9	N 27 58.3	Albireo	67 04.7	N 28 00.4
Avior	234 15.8	S 59 35.2	Altair	62 01.1	N 08 55.6
Suhail	222 47.6	S 43 31.7	Peacock	53 07.2	S 56 39.4
Miaplacidus	221 39.1	S 69 49.0	Deneb	49 26.3	N 45 21.6
Alphard	217 49.2	S 08 45.6	Enif	33 39.9	N 09 58.9
Regulus	207 35.9	N 11 51.3	Alnair	27 34.3	S 46 50.6
Dubhe	193 42.7	N 61 37.8	Formalhaut	15 15.9	S 29 29.7
Denebola	182 26.1	N 14 26.6	Markab	13 31.1	N 15 19.8

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2023 - First Point of Aries / Selected Stars

2023 - 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	277	48.3	+02.5	278	47.5	+02.4	279	46.6	+02.5	280	45.8	+02.4	00
01	292	50.8	+02.5	293	49.9	+02.5	294	49.1	+02.5	296	47.4	+02.4	01
02	307	53.3	+02.4	308	52.4	+02.5	309	51.6	+02.4	311	49.8	+02.5	02
03	322	55.7	+02.5	323	54.9	+02.4	324	54.0	+02.5	325	53.2	+02.4	03
04	337	58.2	+02.5	338	57.3	+02.5	339	56.5	+02.4	340	55.6	+02.5	04
05	353	00.7	+02.4	353	59.8	+02.5	354	58.9	+02.5	355	58.1	+02.5	05
06	8	03.1	+02.5	9	02.3	+02.4	10	01.4	+02.5	11	00.6	+02.4	06
07	23	05.6	+02.5	24	04.7	+02.5	25	03.9	+02.4	26	03.0	+02.5	07
08	38	08.1	+02.4	39	07.2	+02.5	40	06.3	+02.5	41	05.5	+02.4	08
09	53	10.5	+02.5	54	09.7	+02.4	55	08.8	+02.5	56	07.9	+02.5	09
10	68	13.0	+02.4	69	12.1	+02.5	70	11.3	+02.4	71	10.4	+02.5	10
11	83	15.4	+02.5	84	14.6	+02.5	85	13.7	+02.5	86	12.9	+02.5	11
12	98	17.9	+02.5	99	17.1	+02.4	100	16.2	+02.5	101	15.3	+02.5	12
13	113	20.4	+02.4	114	19.5	+02.5	115	18.7	+02.4	116	17.8	+02.5	13
14	128	22.8	+02.5	129	22.0	+02.4	130	21.1	+02.5	131	20.3	+02.4	14
15	143	25.3	+02.5	144	24.4	+02.5	145	23.6	+02.5	146	22.7	+02.5	15
16	158	27.8	+02.4	159	26.9	+02.5	160	26.1	+02.4	161	25.2	+02.5	16
17	173	30.2	+02.5	174	29.4	+02.4	175	28.5	+02.5	176	27.7	+02.4	17
18	188	32.7	+02.5	189	31.8	+02.5	190	31.0	+02.4	191	30.1	+02.5	18
19	203	35.2	+02.4	204	34.3	+02.5	205	33.4	+02.5	206	32.6	+02.4	19
20	218	37.6	+02.5	219	36.8	+02.4	220	35.9	+02.5	221	35.0	+02.5	20
21	233	40.1	+02.5	234	39.2	+02.5	235	38.4	+02.4	236	37.5	+02.5	21
22	248	42.6	+02.4	249	41.7	+02.5	250	40.8	+02.5	251	40.0	+02.4	22
23	263	45.0	+02.5	264	44.2	+02.4	265	43.3	+02.5	266	42.4	+02.5	23

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	44.0	+02.5	283	43.2	+02.5	284	42.3	+02.5	285	41.5	+02.4	00
01	297	46.5	+02.5	298	45.7	+02.4	299	44.8	+02.5	300	43.9	+02.5	01
02	312	49.0	+02.4	313	48.1	+02.5	314	47.3	+02.4	315	46.4	+02.5	02
03	327	51.4	+02.5	328	50.6	+02.4	329	49.7	+02.5	330	48.9	+02.4	03
04	342	53.9	+02.5	343	53.0	+02.5	344	52.2	+02.4	345	51.3	+02.5	04
05	357	56.4	+02.4	358	55.5	+02.5	359	54.6	+02.5	0	53.8	+02.5	05
06	12	58.8	+02.5	13	58.0	+02.4	14	57.1	+02.5	15	56.3	+02.4	06
07	28	01.3	+02.5	29	00.4	+02.5	29	59.6	+02.4	30	58.7	+02.5	07
08	43	03.8	+02.4	44	02.9	+02.5	45	02.0	+02.5	46	01.2	+02.4	08
09	58	06.2	+02.5	59	05.4	+02.4	60	04.5	+02.5	61	03.6	+02.5	09
10	73	08.7	+02.5	74	07.8	+02.5	75	07.0	+02.4	76	06.1	+02.5	10
11	88	11.2	+02.4	89	10.3	+02.5	90	09.4	+02.5	91	08.6	+02.4	11
12	103	13.6	+02.5	104	12.8	+02.4	105	11.9	+02.5	106	11.0	+02.5	12
13	118	16.1	+02.4	119	15.2	+02.5	120	14.4	+02.4	121	13.5	+02.5	13
14	133	18.5	+02.5	134	17.7	+02.5	135	16.8	+02.5	136	16.0	+02.4	14
15	148	21.0	+02.5	149	20.2	+02.4	150	19.3	+02.5	151	18.4	+02.5	15
16	163	23.5	+02.4	164	22.6	+02.5	165	21.8	+02.4	166	20.9	+02.5	16
17	178	25.9	+02.5	179	25.1	+02.4	180	24.2	+02.5	181	23.4	+02.4	17
18	193	28.4	+02.5	194	27.5	+02.5	195	26.7	+02.4	196	25.8	+02.5	18
19	208	30.9	+02.4	209	30.0	+02.5	210	29.1	+02.5	211	28.3	+02.4	19
20	223	33.3	+02.5	224	32.5	+02.4	225	31.6	+02.5	226	30.7	+02.5	20
21	238	35.8	+02.5	239	34.9	+02.5	240	34.1	+02.4	241	33.2	+02.5	21
22	253	38.3	+02.4	254	37.4	+02.5	255	36.5	+02.5	256	35.7	+02.4	22
23	268	40.7	+02.5	269	39.9	+02.4	270	39.0	+02.5	271	38.1	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.1	N 29	13.1	
Ankaa	353	08.5	S 42	10.4	
Schedir	349	32.6	N 56	39.7	
Diphda	348	48.7	S 17	51.4	
Achernar	335	21.4	S 57	06.8	
Hamal	327	52.9	N 23	34.3	
Polaris	314	58.6	N 89	21.5	
Acamar	315	13.0	S 40	12.5	
Menkar	314	07.7	N 04	10.9	
Mirfak	308	30.5	N 49	56.5	
Aldebaran	290	41.4	N 16	33.4	
Capella	280	24.3	N 46	01.4	
Rigel	281	05.4	S 08	10.4	
Bellatrix	278	24.6	N 06	22.3	
Elnath	278	03.9	N 28	37.7	
Alnilam	275	39.4	S 01	11.2	
Betelgeuze	270	53.8	N 07	24.7	
Canopus	263	53.5	S 52	42.4	
Sirius	258	27.5	S 16	44.4	
Adhara	255	07.2	S 29	00.2	
Castor	245	59.0	N 31	50.3	
Procyon	244	52.3	N 05	10.3	
Pollux	243	18.9	N 27	58.3	
Avior	234	15.8	S 59	35.2	
Suhail	222	47.6	S 43	31.7	
Miaplacidus	221	39.1	S 69	49.0	
Alphard	217	49.2	S 08	45.6	
Regulus	207	35.9	N 11	51.3	
Dubhe	193	42.7	N 61	37.8	
Denebola	182	26.1	N 14	26.6	
Gienah	175	44.9	S 17	40.4	
Acrux	173	01.5	S 63	14.0	
Gacrux	171	53.1	S 57	14.8	
Alioth	166	14.1	N 55	50.3	
Spica	158	23.6	S 11	17.0	
Alkaid	152	52.8	N 49	12.1	
Hadar	148	37.5	S 60	29.4	
Menkent	147	58.6	S 36	29.0	
Arcturus	145	48.5	N 19	04.5	
Rigel Kentaurus	139	39.0	S 60	56.3	
Zubenelgenubi	136	57.2	S 16	08.3	
Kocab	137	19.0	N 74	03.8	
Alphecca	126	04.6	N 26	38.3	
Antares	112	17.2	S 26	29.1	
Atria	107	11.9	S 69	04.3	
Sabik	102	03.9	S 15	45.3	
Shaula	96	11.7	S 37	07.3	
Rasalhague	95	59.4	N 12	32.7	
Etamin	90	42.2	N 51	29.2	
Kaus Australis	83	33.8	S 34	22.3	
Vega	80	33.7	N 38	48.2	
Nunki	75	49.0	S 26	16.0	
Albireo	67	04.7	N 28	00.5	
Altair	62	01.1	N 08	55.6	
Peacock	53	07.2	S 56	39.4	
Deneb	49	26.3	N 45	21.7	
Enif	33	39.8	N 09	58.9	
Alnair	27	34.3	S 46	50.6	
Formalhaut	15	15.9	S 29	29.7	
Markab	13	31.1	N 15	19.8	

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.1	N 29	13.1	
Ankaa	353	08.5	S 42	10.4	
Schedir	349	32.5	N 56	39.7	
Diphda	348	48.6	S 17	51.4	
Achernar	335	21.3	S 57	06.8	
Hamal	327	52.8	N 23	34.3	
Polaris	314	56.0	N 89	21.5	
Acamar	315	12.9	S 40	12.4	
Menkar	314	07.6	N 04	10.9	
Mirfak	308	30.4	N 49	56.5	
Aldebaran	290	41.4	N 16	33.4	
Capella	280	24.2	N 46	01.4	
Rigel	281	05.4	S 08	10.4	
Bellatrix	278	24.5	N 06	22.3	
Elnath	278	03.8	N 28	37.7	
Alnilam	275	39.3	S 01	11.2	
Betelgeuze	270	53.8	N 07	24.7	
Canopus	263	53.5	S 52	42.4	
Sirius	258	27.5	S 16	44.4	
Adhara	255	07.2	S 29	00.2	
Castor	245	59.0	N 31	50.3	
Procyon	244	52.2	N 05	10.3	
Pollux	243	18.9	N 27	58.3	
Avior	234	15.8	S 59	35.1	
Suhail	222	47.6	S 43	31.7	
Miaplacidus	221	39.2	S 69	49.0	
Alphard	217	49.2	S 08	45.6	
Regulus	207	35.9	N 11	51.3	
Dubhe	193	42.7	N 61	37.8	
Denebola	182	26.1	N 14	26.6	
Gienah	175	44.9	S 17	40.4	
Acrux	173	01.5	S 63	14.0	
Gacrux	171	53.1	S 57	14.8	
Alioth	166	14.2	N 55	50.3	
Spica	158	23.6	S 11	17.0	
Alkaid	152	52.8	N 49	12.1	
Hadar	148	37.5	S 60	29.4	
Menkent	147	58.6	S 36	29.0	
Arcturus	145	48.5	N 19	04.5	
Rigel Kentaurus	139	39.0	S 60	56.3	
Zubenelgenubi	136	57.2	S 16	08.3	
Kocab	137	19.1	N 74	03.8	
Alphecca	126	04.6	N 26	38.3	
Antares	112	17.2	S 26	29.1	
Atria	107	11.9	S 69	04.3	
Sabik	102	03.9	S 15	45.3	
Shaula	96	11.7	S 37	07.3	
Rasalhague	95	59.4	N 12	32.7	
Etamin	90	42.2	N 51	29.2	

2023 - First Point of Aries / Selected Stars

2023 - 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	22.5 +02.5	308	21.7 +02.4	309	20.8 +02.5	310	20.0 +02.4	311	19.1 +02.5	00
01	322	25.0 +02.5	323	24.1 +02.5	324	23.3 +02.4	325	22.4 +02.5	326	21.6 +02.4	01
02	337	27.5 +02.4	338	26.6 +02.5	339	25.7 +02.5	340	24.9 +02.4	341	24.0 +02.5	02
03	352	29.9 +02.5	353	29.1 +02.4	354	28.2 +02.5	355	27.3 +02.5	356	26.5 +02.4	03
04	7	32.4 +02.4	8	31.5 +02.5	9	30.7 +02.4	10	29.8 +02.5	11	28.9 +02.5	04
05	22	34.8 +02.5	23	34.0 +02.5	24	33.1 +02.5	25	32.3 +02.4	26	31.4 +02.5	05
06	37	37.3 +02.5	38	36.5 +02.4	39	35.6 +02.5	40	34.7 +02.5	41	33.9 +02.4	06
07	52	39.8 +02.4	53	38.9 +02.5	54	38.1 +02.4	55	37.2 +02.5	56	36.3 +02.5	07
08	67	42.2 +02.5	68	41.4 +02.4	69	40.5 +02.5	70	39.7 +02.4	71	38.8 +02.5	08
09	82	44.7 +02.5	83	43.8 +02.5	84	43.0 +02.5	85	42.1 +02.5	86	41.3 +02.4	09
10	97	47.2 +02.4	98	46.3 +02.5	99	45.5 +02.4	100	44.6 +02.5	101	43.7 +02.5	10
11	112	49.6 +02.5	113	48.8 +02.4	114	47.9 +02.5	115	47.1 +02.4	116	46.2 +02.5	11
12	127	52.1 +02.5	128	51.2 +02.5	129	50.4 +02.4	130	49.5 +02.5	131	48.7 +02.4	12
13	142	54.6 +02.4	143	53.7 +02.5	144	52.8 +02.5	145	52.0 +02.4	146	51.1 +02.5	13
14	157	57.0 +02.5	158	56.2 +02.4	159	55.3 +02.5	160	54.4 +02.5	161	53.6 +02.5	14
15	172	59.5 +02.5	173	58.6 +02.5	174	57.8 +02.4	175	56.9 +02.5	176	56.1 +02.4	15
16	188	02.0 +02.4	189	01.1 +02.5	190	00.2 +02.5	190	59.4 +02.4	191	58.5 +02.5	16
17	203	04.4 +02.5	204	03.6 +02.4	205	02.7 +02.5	206	01.8 +02.5	207	01.0 +02.4	17
18	218	06.9 +02.4	219	06.0 +02.5	220	05.2 +02.4	221	04.3 +02.5	222	03.4 +02.5	18
19	233	09.3 +02.5	234	08.5 +02.5	235	07.6 +02.5	236	06.8 +02.4	237	05.9 +02.5	19
20	248	11.8 +02.5	249	11.0 +02.4	250	10.1 +02.5	251	09.2 +02.5	252	08.4 +02.4	20
21	263	14.3 +02.4	264	13.4 +02.5	265	12.6 +02.4	266	11.7 +02.5	267	10.8 +02.5	21
22	278	16.7 +02.5	279	15.9 +02.4	280	15.0 +02.5	281	14.2 +02.4	282	13.3 +02.5	22
23	293	19.2 +02.5	294	18.3 +02.5	295	17.5 +02.5	296	16.6 +02.5	297	15.8 +02.4	23

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	35.4 +02.5	293	34.6 +02.4	294	33.7 +02.5	295	32.9 +02.4	296	32.0 +02.5	00
01	307	37.9 +02.5	308	37.0 +02.5	309	36.2 +02.4	310	35.3 +02.5	311	34.5 +02.4	01
02	322	40.4 +02.4	323	39.5 +02.5	324	38.6 +02.5	325	37.8 +02.5	326	36.9 +02.5	02
03	337	42.8 +02.5	338	42.0 +02.4	339	41.1 +02.5	340	40.3 +02.4	341	39.4 +02.5	03
04	352	45.3 +02.5	353	44.4 +02.5	354	43.6 +02.4	355	42.7 +02.5	356	41.9 +02.4	04
05	7	47.8 +02.4	8	46.9 +02.5	9	46.0 +02.5	10	45.2 +02.4	11	44.3 +02.5	05
06	22	50.2 +02.5	23	49.4 +02.4	24	48.5 +02.5	25	47.6 +02.5	26	46.8 +02.5	06
07	37	52.7 +02.5	38	51.8 +02.5	39	51.0 +02.4	40	50.1 +02.5	41	49.3 +02.4	07
08	52	55.2 +02.4	53	54.3 +02.5	54	53.4 +02.5	55	52.6 +02.4	56	51.7 +02.5	08
09	67	57.6 +02.5	68	56.8 +02.4	69	55.9 +02.5	70	55.0 +02.5	71	54.2 +02.4	09
10	83	00.1 +02.4	83	59.2 +02.5	84	58.4 +02.4	85	57.5 +02.5	86	56.6 +02.5	10
11	98	02.5 +02.5	99	01.7 +02.5	100	00.8 +02.5	100	60.0 +02.4	101	59.1 +02.5	11
12	113	05.0 +02.5	114	04.2 +02.4	115	03.3 +02.5	116	02.4 +02.5	117	01.6 +02.4	12
13	128	07.5 +02.4	129	06.6 +02.5	130	05.8 +02.4	131	04.9 +02.5	132	04.0 +02.5	13
14	143	09.9 +02.5	144	09.1 +02.4	145	08.2 +02.5	146	07.4 +02.4	147	06.5 +02.5	14
15	158	12.4 +02.5	159	11.5 +02.5	160	10.7 +02.4	161	09.8 +02.5	162	09.0 +02.4	15
16	173	14.9 +02.4	174	14.0 +02.5	175	13.1 +02.5	176	12.3 +02.5	177	11.4 +02.5	16
17	188	17.3 +02.5	189	16.5 +02.4	190	15.6 +02.5	191	14.8 +02.4	192	13.9 +02.5	17
18	203	19.8 +02.5	204	18.9 +02.5	205	18.1 +02.4	206	17.2 +02.5	207	16.4 +02.4	18
19	218	22.3 +02.4	219	21.4 +02.5	220	20.5 +02.5	221	19.7 +02.4	222	18.8 +02.5	19
20	233	24.7 +02.5	234	23.9 +02.4	235	23.0 +02.5	236	22.1 +02.5	237	21.3 +02.4	20
21	248	27.2 +02.5	249	26.3 +02.5	250	25.5 +02.4	251	24.6 +02.5	252	23.7 +02.5	21
22	263	29.7 +02.4	264	28.8 +02.5	265	27.9 +02.5	266	27.1 +02.4	267	26.2 +02.5	22
23	278	32.1 +02.5	279	31.3 +02.4	280	30.4 +02.5	281	29.5 +02.5	282	28.7 +02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	35.9	N 29	13.2	
Ankaa	353	08.2	S 42	10.3	
Schedir	349	32.2	N 56	39.8	
Diphda	348	48.4	S 17	51.3	
Achernar	335	21.0	S 57	06.7	
Hamal	327	52.6	N 23	34.4	
Polaris	314	43.5	N 89	21.5	
Acamar	315	12.7	S 40	12.4	
Menkar	314	07.5	N 04	11.0	
Mirfak	308	30.1	N 49	56.5	
Aldebaran	290	41.2	N 16	33.5	
Capella	280	24.0	N 46	01.3	
Rigel	281	05.2	S 08	10.3	
Bellatrix	278	24.4	N 06	22.3	
Elnath	278	03.7	N 28	37.7	
Alnilam	275	39.2	S 01	11.1	
Betelgeuze	270	53.7	N 07	24.8	
Canopus	263	53.4	S 52	42.3	
Sirius	258	27.4	S 16	44.3	
Adhara	255	07.1	S 29	00.1	
Castor	245	58.9	N 31	50.3	
Procyon	244	52.2	N 05	10.4	
Pollux	243	18.8	N 27	58.3	
Avior	234	15.9	S 59	35.0	
Suhail	222	47.6	S 43	31.6	
Miaplacidus	221	39.3	S 69	48.8	
Alphard	217	49.2	S 08	45.5	
Regulus	207	35.9	N 11	51.3	
Dubhe	193	42.9	N 61	37.7	
Denebola	182	26.2	N 14	26.7	
Gienah	175	44.9	S 17	40.3	
Acrux	173	01.8	S 63	14.0	
Gacrux	171	53.3	S 57	14.8	
Alioth	166	14.3	N 55	50.2	
Spica	158	23.6	S 11	17.0	
Alkaid	152	53.0	N 49	12.1	
Hadar	148	37.7	S 60	29.4	
Menkent	147	58.7	S 36	29.0	
Arcturus	145	48.6	N 19	04.6	
Rigel Kentaurus	139	39.2	S 60	56.3	
Zubenelgenubi	136	57.2	S 16	08.3	
Kocab	137	19.6	N 74	03.8	
Alphecca	126	04.7	N 26	38.4	
Antares	112	17.2	S 26	29.1	
Atria	107	12.1	S 69	04.4	
Sabik	102	03.9	S 15	45.3	
Shaula	96	11.7	S 37	07.3	
Rasalhague	95	59.4	N 12	32.8	
Etamin	90	42.3	N 51	29.3	
Kaus Australis	83	33.7	S 34	22.4	
Vega	80	33.7	N 38	48.3	
Nunki	75	48.9	S 26	16.0	
Albireo	67	04.7	N 28	00.6	
Altair	62	01.0	N 08	55.7	
Peacock	53	07.0	S 56	39.5	
Deneb	49	26.2	N 45	21.8	
Enif	33	39.7	N 09	59.0	
Alnair	27	34.0	S 46	50.6	
Formalhaut	15	15.7	S 29	29.6	
Markab	13	30.9	N 15	19.9	

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357	36.0	N 29	13.1	
Ankaa	353	08.4	S 42	10.3	
Schedir	349	32.4	N 56	39.7	
Diphda	348	48.6	S 17	51.4	
Achernar	335	21.2	S 57	06.7	
Hamal	327	52.7	N 23	34.4	
Polaris	314	51.3	N 89	21.5	
Acamar	315	12.9	S 40	12.4	
Menkar	314	07.6	N 04	11.0	
Mirfak	308	30.3	N 49	56.5	
Aldebaran	290	41.3	N 16	33.4	
Capella	280	24.2	N 46	01.3	
Rigel	281	05.3	S 08	10.4	
Bellatrix	278	24.5	N 06	22.3	
Elnath	278	03.8	N 28	37.7	
Alnilam	275	39.3	S 01	11.1	
Betelgeuze	270	53.7	N 07	24.7	
Canopus	263	53.5	S 52	42.3	
Sirius	258	27.5	S 16	44.3	
Adhara	255	07.2	S 29	00.1	
Castor	245	59.0	N 31	50.3	
Procyon	244	52.2	N 05	10.3	
Pollux	243	18.8	N 27	58.3	
Avior	234	15.9	S 59	35.1	
Suhail	222	47.6	S 43	31.7	
Miaplacidus	221	39.2	S 69	48.9	
Alphard	217	49.3	S 08	45.6	
Regulus	207	35.9	N 11	51.3	
Dubhe	193	42.8	N 61	37.9	
Denebola	182	26.2	N 14	26.7	
Gienah	175	44.9	S 17	40.4	
Acrux	173	01.6	S 63	14.0	
Gacrux	171	53.2	S 57	14.8	
Alioth	166	14.2	N 55	50.3	
Spica	158	23.6	S 11	17.0	
Alkaid	152	52.9	N 49	12.1	
Hadar	148	37.6	S 60	29.4	
Menkent	147	58.7	S 36	29.0	
Arcturus	145	48.6	N 19	04.5	
Rigel Kentaurus	139	39.0	S 60	56.3	
Zubenelgenubi	136	57.2	S 16	08.3	
Kocab	137	19.3	N 74	03.8	
Alphecca	126	04.6	N 26	38.3	
Antares	112	17.2	S 26	29.1	

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

Table with columns for day (201-205 of 365), UT, GHA, and ddGHA for various stars.

Table with columns for day (206-210 of 365), UT, GHA, and ddGHA for various stars.

Table with columns for Star Name, SHA, Dec, and additional data for stars like Alpheratz, Ankaa, Schedir, etc.

Table with columns for Star Name, SHA, Dec, and additional data for stars like Alpheratz, Ankaa, Schedir, etc.

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2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 231 of 365		day 232 of 365		day 233 of 365		day 234 of 365		day 235 of 365		UT
	August 19		August 20		August 21		August 22		August 23		
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	327 05.3	+02.5	328 04.4	+02.5	329 03.6	+02.4	330 02.7	+02.5	331 01.9	+02.4	00
01	342 07.8	+02.4	343 06.9	+02.5	344 06.0	+02.5	345 05.2	+02.4	346 04.3	+02.5	01
02	357 10.2	+02.5	358 09.4	+02.4	359 08.5	+02.5	0 07.6	+02.5	1 06.8	+02.5	02
03	12 12.7	+02.5	13 11.8	+02.5	14 11.0	+02.4	15 10.1	+02.5	16 09.3	+02.4	03
04	27 15.2	+02.4	28 14.3	+02.5	29 13.4	+02.5	30 12.6	+02.4	31 11.7	+02.5	04
05	42 17.6	+02.5	43 16.8	+02.4	44 15.9	+02.5	45 15.0	+02.5	46 14.2	+02.4	05
06	57 20.1	+02.5	58 19.2	+02.5	59 18.4	+02.4	60 17.5	+02.5	61 16.6	+02.5	06
07	72 22.6	+02.4	73 21.7	+02.5	74 20.8	+02.5	75 20.0	+02.4	76 19.1	+02.5	07
08	87 25.0	+02.5	88 24.2	+02.4	89 23.3	+02.5	90 22.4	+02.5	91 21.6	+02.4	08
09	102 27.5	+02.5	103 26.6	+02.5	104 25.8	+02.4	105 24.9	+02.5	106 24.0	+02.5	09
10	117 30.0	+02.4	118 29.1	+02.5	119 28.2	+02.5	120 27.4	+02.4	121 26.5	+02.5	10
11	132 32.4	+02.5	133 31.6	+02.4	134 30.7	+02.5	135 29.8	+02.5	136 29.0	+02.4	11
12	147 34.9	+02.4	148 34.0	+02.5	149 33.2	+02.4	150 32.3	+02.5	151 31.4	+02.5	12
13	162 37.3	+02.5	163 36.5	+02.5	164 35.6	+02.5	165 34.8	+02.4	166 33.9	+02.5	13
14	177 39.8	+02.5	178 38.9	+02.5	179 38.1	+02.4	180 37.2	+02.5	181 36.4	+02.4	14
15	192 42.3	+02.4	193 41.4	+02.5	194 40.5	+02.5	195 39.7	+02.4	196 38.8	+02.5	15
16	207 44.7	+02.5	208 43.9	+02.4	209 43.0	+02.5	210 42.1	+02.5	211 41.3	+02.4	16
17	222 47.2	+02.5	223 46.3	+02.5	224 45.5	+02.4	225 44.6	+02.5	226 43.7	+02.5	17
18	237 49.7	+02.4	238 48.8	+02.5	239 47.9	+02.5	240 47.1	+02.4	241 46.2	+02.5	18
19	252 52.1	+02.5	253 51.3	+02.4	254 50.4	+02.5	255 49.5	+02.5	256 48.7	+02.4	19
20	267 54.6	+02.5	268 53.7	+02.5	269 52.9	+02.4	270 52.0	+02.5	271 51.1	+02.5	20
21	282 57.1	+02.4	283 56.2	+02.5	284 55.3	+02.5	285 54.5	+02.4	286 53.6	+02.5	21
22	297 59.5	+02.5	298 58.7	+02.4	299 57.8	+02.5	300 56.9	+02.5	301 56.1	+02.4	22
23	313 02.0	+02.4	314 01.1	+02.5	315 00.3	+02.4	315 59.4	+02.5	316 58.5	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.7	N 29 13.3	Gienah	175 45.0	S 17 40.3
Ankaa	353 08.1	S 42 10.3	Acrux	173 01.9	S 63 13.9
Schedir	349 32.0	N 56 39.9	Gacrux	171 53.4	S 57 14.7
Diphda	348 48.3	S 17 51.3	Alioth	166 14.4	N 55 50.2
Achernar	335 20.8	S 57 06.7	Spica	158 23.7	S 11 17.0
Hamal	327 52.4	N 23 34.5	Alkaid	152 53.1	N 49 12.0
Polaris	314 33.1	N 89 21.5	Hadar	148 37.9	S 60 29.4
Acamar	315 12.5	S 40 12.3	Menkent	147 58.8	S 36 28.9
Menkar	314 07.3	N 04 11.1	Arcturus	145 48.7	N 19 04.5
Mirfak	308 29.9	N 49 56.5	Rigel Kentaurus	139 39.3	S 60 56.3
Aldebaran	290 41.0	N 16 33.5	Zubenelgenubi	136 57.3	S 16 08.3
Capella	280 23.8	N 46 01.3	Kocab	137 19.9	N 74 03.8
Rigel	281 05.1	S 08 10.3	Alphecca	126 04.8	N 26 38.4
Bellatrix	278 24.2	N 06 22.4	Antares	112 17.3	S 26 29.1
Elnath	278 03.5	N 28 37.7	Atria	107 12.2	S 69 04.4
Alnilam	275 39.1	S 01 11.1	Sabik	102 04.0	S 15 45.3
Betelgeuze	270 53.5	N 07 24.8	Shaula	96 11.7	S 37 07.3
Canopus	263 53.3	S 52 42.2	Rasalhague	95 59.5	N 12 32.8
Sirius	258 27.3	S 16 44.2	Etamin	90 42.4	N 51 29.4
Adhara	255 07.0	S 28 60.0	Kaus Australis	83 33.8	S 34 22.4
Castor	245 58.8	N 31 50.3	Vega	80 33.8	N 38 48.4
Procyon	244 52.1	N 05 10.4	Nunki	75 48.9	S 26 16.0
Pollux	243 18.7	N 27 58.2	Albireo	67 04.7	N 28 00.7
Avior	234 15.8	S 59 34.9	Altair	62 01.0	N 08 55.8
Suhail	222 47.6	S 43 31.5	Peacock	53 07.0	S 56 39.6
Miaplacidus	221 39.3	S 69 48.7	Deneb	49 26.2	N 45 21.9
Alphard	217 49.2	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.9	N 11 51.3	Alnair	27 33.9	S 46 50.7
Dubhe	193 42.9	N 61 37.6	Formalhaut	15 15.6	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.8	N 15 20.0

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 18.2	+02.5	313 17.4	+02.4	314 16.5	+02.5	315 15.6	+02.5	316 14.8	+02.4	00
01	327 20.7	+02.5	328 19.8	+02.5	329 19.0	+02.4	330 18.1	+02.5	331 17.2	+02.5	01
02	342 23.2	+02.4	343 22.3	+02.5	344 21.4	+02.5	345 20.6	+02.4	346 19.7	+02.5	02
03	357 25.6	+02.5	358 24.8	+02.4	359 23.9	+02.5	0 23.0	+02.5	1 22.2	+02.4	03
04	12 28.1	+02.4	13 27.2	+02.5	14 26.4	+02.4	15 25.5	+02.5	16 24.6	+02.5	04
05	27 30.5	+02.5	28 29.7	+02.5	29 28.8	+02.5	30 28.0	+02.4	31 27.1	+02.5	05
06	42 33.0	+02.5	43 32.2	+02.4	44 31.3	+02.5	45 30.4	+02.5	46 29.6	+02.4	06
07	57 35.5	+02.4	58 34.6	+02.5	59 33.8	+02.4	60 32.9	+02.5	61 32.0	+02.5	07
08	72 37.9	+02.5	73 37.1	+02.4	74 36.2	+02.5	75 35.4	+02.4	76 34.5	+02.5	08
09	87 40.4	+02.5	88 39.5	+02.5	89 38.7	+02.4	90 37.8	+02.5	91 37.0	+02.4	09
10	102 42.9	+02.4	103 42.0	+02.5	104 41.1	+02.5	105 40.3	+02.4	106 39.4	+02.5	10
11	117 45.3	+02.4	118 44.5	+02.4	119 43.6	+02.5	120 42.7	+02.5	121 41.9	+02.4	11
12	132 47.8	+02.5	133 46.9	+02.5	134 46.1	+02.4	135 45.2	+02.5	136 44.3	+02.5	12
13	147 50.3	+02.4	148 49.4	+02.5	149 48.5	+02.5	150 47.7	+02.4	151 46.8	+02.5	13
14	162 52.7	+02.4	163 51.9	+02.4	164 51.0	+02.5	165 50.1	+02.5	166 49.3	+02.4	14
15	177 55.2	+02.5	178 54.3	+02.5	179 53.5	+02.4	180 52.6	+02.5	181 51.7	+02.5	15
16	192 57.7	+02.4	193 56.8	+02.5	194 55.9	+02.5	195 55.1	+02.4	196 54.2	+02.5	16
17	208 00.1	+02.5	209 59.3	+02.4	209 58.4	+02.5	210 57.5	+02.5	211 56.7	+02.4	17
18	223 02.6	+02.4	224 01.7	+02.5	225 00.9	+02.4	225 60.0	+02.5	226 59.1	+02.5	18
19	238 05.0	+02.5	239 04.2	+02.4	240 03.3	+02.5	241 02.5	+02.4	242 01.6	+02.5	19
20	253 07.5	+02.5	254 06.6	+02.5	255 05.8	+02.4	256 04.9	+02.5	257 04.1	+02.4	20
21	268 10.0	+02.4	269 09.1	+02.5	270 08.2	+02.5	271 07.4	+02.5	272 06.5	+02.5	21
22	283 12.4	+02.5	284 11.6	+02.4	285 10.7	+02.5	286 09.9	+02.4	287 09.0	+02.5	22
23	298 14.9	+02.5	299 14.0	+02.5	300 13.2	+02.4	301 12.3	+02.5	302 11.5	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.8	N 29 13.2	Gienah	175 44.9	S 17 40.3
Ankaa	353 08.2	S 42 10.3	Acrux	173 01.8	S 63 13.9
Schedir	349 32.1	N 56 39.8	Gacrux	171 53.3	S 57 14.8
Diphda	348 48.4	S 17 51.3	Alioth	166 14.3	N 55 50.2
Achernar	335 21.0	S 57 06.7	Spica	158 23.6	S 11 17.0
Hamal	327 52.6	N 23 34.4	Alkaid	152 53.0	N 49 12.1
Polaris	314 41.0	N 89 21.5	Hadar	148 37.8	S 60 29.4
Acamar	315 12.7	S 40 12.3	Menkent	147 58.8	S 36 29.0
Menkar	314 07.4	N 04 11.0	Arcturus	145 48.6	N 19 04.5
Mirfak	308 30.1	N 49 56.5	Rigel Kentaurus	139 39.2	S 60 56.4
Aldebaran	290 41.2	N 16 33.5	Zubenelgenubi	136 57.2	S 16 08.3
Capella	280 24.0	N 46 01.3	Kocab	137 19.6	N 74 03.8
Rigel	281 05.2	S 08 10.3	Alphecca	126 04.7	N 26 38.4
Bellatrix	278 24.4	N 06 22.3	Antares	112 17.2	S 26 29.1
Elnath	278 03.6	N 28 37.7	Atria	107 12.1	S 69 04.4
Alnilam	275 39.2	S 01 11.1	Sabik	102 03.9	S 15 45.3
Betelgeuze	270 53.6	N 07 24.8	Shaula	96 11.7	S 37 07.3
Canopus	263 53.4	S 52 42.2	Rasalhague	95 59.4	N 12 32.8
Sirius	258 27.4	S 16 44.3	Etamin	90 42.3	N 51 29.3
Adhara	255 07.1	S 29 00.0	Kaus Australis	83 33.7	S 34 22.4
Castor	245 58.9	N 31 50.3	Vega	80 33.7	N 38 48.3
Procyon	244 52.1	N 05 10.4	Nunki	75 48.9	S 26 16.0
Pollux	243 18.8	N 27 58.3	Albireo	67 04.7	N 28 00.6
Avior	234 15.9	S 59 35.0	Altair	62 01.0	N 08 55.7
Suhail	222 47.6	S 43 31.6	Peacock	53 07.0	S 56 39.5
Miaplacidus	221 39.3	S 69 48.7	Deneb	49 26.1	N 45 21.9
Alphard	217 49.2	S 08 45.5	Enif	33 39.6	N 09 59.0
Regulus	207 35.9	N 11 51.3	Alnair	27 34.0	S 46 50.6
Dubhe	193 42.9	N 61 37.7	Formalhaut	15 15.6	S 29 29.6
Denebola	182 26.2	N 14 26.6	Markab	13 30.8	N 15 19.9

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2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 221 of 365		day 222 of 365		day 223 of 365		day 224 of 365		day 225 of 365		UT		
	August 9		August 10		August 11		August 12		August 13				
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA			
00	317	13.9	+02.5	318	13.1	+02.4	319	12.2	+02.5	320	11.3	+02.5	00
01	332	16.4	+02.4	333	15.5	+02.5	334	14.7	+02.4	335	13.8	+02.5	01
02	347	18.8	+02.5	348	18.0	+02.5	349	17.1	+02.5	350	16.3	+02.4	02
03	2	21.3	+02.5	3	20.5	+02.4	4	19.6	+02.5	5	18.7	+02.5	03
04	17	23.8	+02.4	18	22.9	+02.5	19	22.1	+02.4	20	21.2	+02.5	04
05	32	26.2	+02.5	33	25.4	+02.4	34	24.5	+02.5	35	23.7	+02.4	05
06	47	28.7	+02.5	48	27.8	+02.5	49	27.0	+02.4	50	26.1	+02.5	06
07	62	31.2	+02.4	63	30.3	+02.5	64	29.4	+02.5	65	28.6	+02.5	07
08	77	33.6	+02.5	78	32.8	+02.4	79	31.9	+02.5	80	31.1	+02.4	08
09	92	36.1	+02.5	93	35.2	+02.5	94	34.4	+02.4	95	33.5	+02.5	09
10	107	38.6	+02.4	108	37.7	+02.5	109	36.8	+02.5	110	36.0	+02.4	10
11	122	41.0	+02.5	123	40.2	+02.4	124	39.3	+02.5	125	38.4	+02.5	11
12	137	43.5	+02.5	138	42.6	+02.5	139	41.8	+02.4	140	40.9	+02.5	12
13	152	46.0	+02.4	153	45.1	+02.5	154	44.2	+02.5	155	43.4	+02.4	13
14	167	48.4	+02.5	168	47.6	+02.4	169	46.7	+02.5	170	45.8	+02.5	14
15	182	50.9	+02.4	183	50.0	+02.5	184	49.2	+02.4	185	48.3	+02.5	15
16	197	53.3	+02.5	198	52.5	+02.4	199	51.6	+02.5	200	50.8	+02.4	16
17	212	55.8	+02.5	213	54.9	+02.5	214	54.1	+02.5	215	53.2	+02.5	17
18	227	58.3	+02.4	228	57.4	+02.5	229	56.6	+02.4	230	55.7	+02.5	18
19	243	00.7	+02.5	243	59.9	+02.4	244	59.0	+02.5	245	58.2	+02.4	19
20	258	03.2	+02.5	259	02.3	+02.5	260	01.5	+02.4	261	00.6	+02.5	20
21	273	05.7	+02.4	274	04.8	+02.5	275	03.9	+02.5	276	03.1	+02.5	21
22	288	08.1	+02.5	289	07.3	+02.4	290	06.4	+02.5	291	05.6	+02.4	22
23	303	10.6	+02.5	304	09.7	+02.5	305	08.9	+02.4	306	08.0	+02.5	23

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	09.6	+02.5	323	08.8	+02.4	324	07.9	+02.5	325	07.0	+02.5	00
01	337	12.1	+02.4	338	11.2	+02.5	339	10.4	+02.4	340	09.5	+02.5	01
02	352	14.5	+02.5	353	13.7	+02.5	354	12.8	+02.5	355	12.0	+02.4	02
03	7	17.0	+02.5	8	16.2	+02.4	9	15.3	+02.5	10	14.4	+02.5	03
04	22	19.5	+02.4	23	18.6	+02.5	24	17.8	+02.4	25	16.9	+02.5	04
05	37	21.9	+02.5	38	21.1	+02.4	39	20.2	+02.5	40	19.4	+02.4	05
06	52	24.4	+02.5	53	23.5	+02.5	54	22.7	+02.4	55	21.8	+02.5	06
07	67	26.9	+02.4	68	26.0	+02.5	69	25.1	+02.5	70	24.3	+02.4	07
08	82	29.3	+02.5	83	28.5	+02.4	84	27.6	+02.5	85	26.7	+02.5	08
09	97	31.8	+02.5	98	30.9	+02.5	99	30.1	+02.4	100	29.2	+02.5	09
10	112	34.3	+02.4	113	33.4	+02.5	114	32.5	+02.5	115	31.7	+02.4	10
11	127	36.7	+02.4	128	35.9	+02.4	129	35.0	+02.5	130	34.1	+02.5	11
12	142	39.2	+02.5	143	38.3	+02.5	144	37.5	+02.4	145	36.6	+02.5	12
13	157	41.7	+02.4	158	40.8	+02.5	159	39.9	+02.5	160	39.1	+02.4	13
14	172	44.1	+02.4	173	43.3	+02.4	174	42.4	+02.5	175	41.5	+02.5	14
15	187	46.6	+02.4	188	45.7	+02.5	189	44.9	+02.4	190	44.0	+02.5	15
16	202	49.0	+02.5	203	48.2	+02.4	204	47.3	+02.5	205	46.5	+02.4	16
17	217	51.5	+02.5	218	50.6	+02.5	219	49.8	+02.5	220	48.9	+02.5	17
18	232	54.0	+02.4	233	53.1	+02.5	234	52.3	+02.4	235	51.4	+02.5	18
19	247	56.4	+02.5	248	55.6	+02.4	249	54.7	+02.5	250	53.9	+02.4	19
20	262	58.9	+02.5	263	58.0	+02.5	264	57.2	+02.4	265	56.3	+02.5	20
21	278	01.4	+02.4	279	00.5	+02.5	279	59.6	+02.5	280	58.8	+02.5	21
22	293	03.8	+02.5	294	03.0	+02.4	295	02.1	+02.5	296	01.2	+02.5	22
23	308	06.3	+02.5	309	05.4	+02.5	310	04.6	+02.4	311	03.7	+02.5	23

	SHA	Dec		SHA	Dec
Alpheratz	357 35.8	N 29 13.2	Gienah	175 45.0	S 17 40.3
Ankaa	353 08.1	S 42 10.3	Acrux	173 01.8	S 63 13.9
Schedir	349 32.1	N 56 39.8	Gacrux	171 53.4	S 57 14.7
Diphda	348 48.4	S 17 51.3	Alioth	166 14.4	N 55 50.2
Achernar	335 20.9	S 57 06.7	Spica	158 23.7	S 11 17.0
Hamal	327 52.5	N 23 34.4	Alkaid	152 53.0	N 49 12.1
Polaris	314 38.4	N 89 21.5	Hadar	148 37.8	S 60 29.4
Acamar	315 12.6	S 40 12.3	Menkent	147 58.8	S 36 29.0
Menkar	314 07.4	N 04 11.0	Arcturus	145 48.6	N 19 04.6
Mirfak	308 30.0	N 49 56.5	Rigel Kentaurus	139 39.2	S 60 56.3
Aldebaran	290 41.1	N 16 33.5	Zubenelgenubi	136 57.3	S 16 08.3
Capella	280 23.9	N 46 01.3	Kocab	137 19.7	N 74 03.8
Rigel	281 05.2	S 08 10.3	Alphecca	126 04.7	N 26 38.4
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Alnilam	275 39.1	S 01 11.1	Sabik	102 03.9	S 15 45.3
Betelgeuze	270 53.6	N 07 24.8	Shaula	96 11.7	S 37 07.3
Canopus	263 53.4	S 52 42.2	Rasalhague	95 59.5	N 12 32.8
Sirius	258 27.4	S 16 44.2	Etamin	90 42.3	N 51 29.3
Adhara	255 07.1	S 29 00.0	Kaus Australis	83 33.7	S 34 22.4
Castor	245 58.8	N 31 50.3	Vega	80 33.8	N 38 48.4
Procyon	244 52.1	N 05 10.4	Nunki	75 48.9	S 26 16.0
Pollux	243 18.7	N 27 58.2	Albireo	67 04.7	N 28 00.6
Avior	234 15.9	S 59 35.0	Altair	62 01.0	N 08 55.8
Suhail	222 47.6	S 43 31.5	Peacock	53 07.0	S 56 39.5
Miaplacidus	221 39.3	S 69 48.8	Deneb	49 26.1	N 45 21.9
Alphard	217 49.2	S 08 45.5	Enif	33 39.6	N 09 59.0
Regulus	207 35.9	N 11 51.3	Alnair	27 34.0	S 46 50.6
Dubhe	193 42.9	N 61 37.7	Formalhaut	15 15.6	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.8	N 15 19.9

	SHA	Dec		SHA	Dec
Alpheratz	357 35.8	N 29 13.3	Gienah	175 45.0	S 17 40.3
Ankaa	353 08.1	S 42 10.3	Acrux	173 01.9	S 63 13.9
Schedir	349 32.0	N 56 39.8	Gacrux	171 53.4	S 57 14.7
Diphda	348 48.3	S 17 51.3	Alioth	166 14.4	N 55 50.2
Achernar	335 20.8	S 57 06.7	Spica	158 23.7	S 11 17.0
Hamal	327 52.5	N 23 34.4	Alkaid	152 53.0	N 49 12.0
Polaris	314 35.5	N 89 21.5	Hadar	148 37.8	S 60 29.4
Acamar	315 12.6	S 40 12.3	Menkent	147 58.8	S 36 29.0
Menkar	314 07.3	N 04 11.0	Arcturus	145 48.7	N 19 04.6
Mirfak	308 29.9	N 49 56.5	Rigel Kentaurus	139 39.3	S 60 56.3
Aldebaran	290 41.1	N 16 33.5	Zubenelgenubi	136 57.3	S 16 08.3
Capella	280 23.9	N 46 01.3	Kocab	137 19.8	N 74 03.8
Rigel	281 05.1	S 08 10.3	Alphecca	126 04.7	N 26 38.4
Bellatrix	278 24.3	N 06 22.4	Antares	112 17.3	S 26 29.1
Elnath	278 03.5	N 28 37.7	Atria	107 12.2	S 69 04.4
Alnilam	275 39.1	S 01 11.1	Sabik	102 04.0	S 15 45.3
Betelgeuze	270 53.6	N 07 24.8	Shaula	96 11.7	S 37 07.3
Canopus	263 53.3	S 52 42.2	Rasalhague	95 59.5	N 12 32.8
Sirius	258 27.3	S 16 44.2	Etamin	90 42.4	N 51 29.3
Adhara	255 07.1	S 29 00.0	Kaus Australis	83 33.7	S 34 22.4
Castor	245 58.8	N 31 50.3	Vega	80 33.8	N 38 48.4
Procyon	244 52.1	N 05 10.4	Nunki	75 48.9	S 26 16.0
Pollux	243 18.7	N 27 58.2	Albireo	67 04.7	N 28 00.7
Avior	234 15.8	S 59 34.9	Altair	62 01.0	N 08 55.8
Suhail	222 47.6	S 43 31.5	Peacock	53 07.0	S 56 39.5
Miaplacidus	221 39.3	S 69 48.8	Deneb	49 26.1	N 45 21.9
Alphard	217 49.2	S 08 45.5	Enif	33 39.6	N 09 59.0
Regulus	207 35.9	N 11 51.3	Alnair	27 33.9	S 46 50.7
Dubhe	193 42.9	N 61 37.7	Formalhaut	15 15.6	S 29 29.6
Denebola	182 26.2	N 14 26.6	Markab	13 30.8	N 15 20.0

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2023 - First Point of Aries / Selected Stars

2023 - 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	346 48.1	+02.4	347 47.2	+02.5	348 46.4	+02.4	349 45.5	+02.5	350 44.6	+02.5	00
01	1 50.5	+02.5	2 49.7	+02.5	3 48.8	+02.5	4 48.0	+02.4	5 47.1	+02.5	01
02	16 53.0	+02.5	17 52.0	+02.4	18 51.3	+02.5	19 50.4	+02.5	20 49.6	+02.4	02
03	31 55.5	+02.4	32 54.6	+02.5	33 53.8	+02.4	34 52.9	+02.5	35 52.0	+02.5	03
04	46 57.9	+02.5	47 57.1	+02.4	48 56.2	+02.5	49 55.4	+02.4	50 54.5	+02.5	04
05	62 00.4	+02.5	62 59.5	+02.5	63 58.7	+02.4	64 57.8	+02.5	65 57.0	+02.4	05
06	77 02.9	+02.4	78 02.0	+02.5	79 01.1	+02.5	80 00.3	+02.5	80 59.4	+02.5	06
07	92 05.3	+02.5	93 04.5	+02.4	94 03.6	+02.5	95 02.8	+02.4	96 01.9	+02.5	07
08	107 07.8	+02.5	108 06.9	+02.5	109 06.1	+02.4	110 05.2	+02.5	111 04.4	+02.4	08
09	122 10.3	+02.4	123 09.4	+02.5	124 08.5	+02.5	125 07.7	+02.4	126 06.8	+02.5	09
10	137 12.7	+02.5	138 11.9	+02.4	139 11.0	+02.5	140 10.1	+02.5	141 09.3	+02.4	10
11	152 15.2	+02.5	153 14.3	+02.4	154 13.5	+02.4	155 12.6	+02.5	156 11.7	+02.5	11
12	167 17.7	+02.4	168 16.8	+02.5	169 15.9	+02.5	170 15.1	+02.4	171 14.2	+02.5	12
13	182 20.1	+02.5	183 19.3	+02.4	184 18.4	+02.5	185 17.5	+02.5	186 16.7	+02.4	13
14	197 22.6	+02.4	198 21.7	+02.5	199 20.9	+02.4	200 20.0	+02.5	201 19.1	+02.5	14
15	212 25.0	+02.5	213 24.2	+02.4	214 23.3	+02.5	215 22.5	+02.4	216 21.6	+02.5	15
16	227 27.5	+02.5	228 26.6	+02.5	229 25.8	+02.5	230 24.9	+02.5	231 24.1	+02.4	16
17	242 30.0	+02.4	243 29.1	+02.5	244 28.3	+02.4	245 27.4	+02.5	246 26.5	+02.5	17
18	257 32.4	+02.5	258 31.6	+02.4	259 30.7	+02.5	260 29.9	+02.4	261 29.0	+02.5	18
19	272 34.9	+02.5	273 34.0	+02.5	274 33.2	+02.4	275 32.3	+02.5	276 31.5	+02.4	19
20	287 37.4	+02.4	288 36.5	+02.5	289 35.6	+02.5	290 34.8	+02.4	291 33.9	+02.5	20
21	302 39.8	+02.5	303 39.0	+02.4	304 38.1	+02.5	305 37.2	+02.5	306 36.4	+02.4	21
22	317 42.3	+02.5	318 41.4	+02.5	319 40.6	+02.4	320 39.7	+02.5	321 38.8	+02.5	22
23	332 44.8	+02.4	333 43.9	+02.5	334 43.0	+02.5	335 42.2	+02.4	336 41.3	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.4	Gienah	175 45.0	S 17 40.3
Ankaa	353 07.9	S 42 10.4	Acruz	173 02.0	S 63 13.8
Schedir	349 31.9	N 56 40.0	Gacrux	171 53.5	S 57 14.6
Diphda	348 48.2	S 17 51.3	Alioth	166 14.5	N 55 50.1
Achernar	335 20.6	S 57 06.8	Spica	158 23.7	S 11 17.0
Hamal	327 52.3	N 23 34.5	Alkaid	152 53.2	N 49 12.0
Polaris	314 22.8	N 89 21.6	Hadar	148 38.0	S 60 29.3
Acamar	315 12.4	S 40 12.3	Menkent	147 58.9	S 36 28.9
Menkar	314 07.2	N 04 11.1	Arcturus	145 48.7	N 19 04.5
Mirfak	308 29.7	N 49 56.6	Rigel Kentaurus	139 39.5	S 60 56.3
Aldebaran	290 40.9	N 16 33.5	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.6	N 46 01.3	Kocab	137 20.3	N 74 03.7
Rigel	281 05.0	S 08 10.3	Alphecca	126 04.8	N 26 38.4
Bellatrix	278 24.1	N 06 22.4	Antares	112 17.4	S 26 29.1
Elnath	278 03.3	N 28 37.7	Atria	107 12.5	S 69 04.4
Alnilam	275 38.9	S 01 11.0	Sabik	102 04.0	S 15 45.3
Betelgeuze	270 53.4	N 07 24.8	Shaula	96 11.8	S 37 07.3
Canopus	263 53.1	S 52 42.1	Rasalhague	95 59.6	N 12 32.8
Sirius	258 27.2	S 16 44.2	Etamin	90 42.6	N 51 29.4
Adhara	255 06.9	S 28 59.9	Kaus Australis	83 33.8	S 34 22.4
Castor	245 58.6	N 31 50.2	Vega	80 33.9	N 38 48.4
Procyon	244 52.0	N 05 10.4	Nunki	75 49.0	S 26 16.0
Pollux	243 18.5	N 27 58.2	Albireo	67 04.7	N 28 00.7
Avior	234 15.7	S 59 34.8	Altair	62 01.0	N 08 55.8
Suhail	222 47.5	S 43 31.4	Peacock	53 07.0	S 56 39.6
Miaplacidus	221 39.2	S 69 48.6	Deneb	49 26.2	N 45 22.0
Alphard	217 49.1	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.8	N 11 51.3	Alnair	27 33.9	S 46 50.7
Dubhe	193 42.9	N 61 37.5	Formalhaut	15 15.5	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.7	N 15 20.0

UT	day 236 of 365 August 24		day 237 of 365 August 25		day 238 of 365 August 26		day 239 of 365 August 27		day 240 of 365 August 28		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	332 01.0	+02.5	333 00.1	+02.5	333 59.3	+02.4	334 58.4	+02.5	335 57.6	+02.4	00
01	347 03.5	+02.4	348 02.6	+02.5	349 01.7	+02.5	350 00.9	+02.4	351 00.0	+02.5	01
02	2 05.9	+02.5	3 05.1	+02.4	4 04.2	+02.5	5 03.3	+02.5	6 02.5	+02.5	02
03	17 08.4	+02.5	18 07.5	+02.5	19 06.7	+02.4	20 05.8	+02.5	21 05.0	+02.4	03
04	32 10.9	+02.4	33 10.0	+02.5	34 09.1	+02.5	35 08.3	+02.4	36 07.4	+02.5	04
05	47 13.3	+02.5	49 11.6	+02.5	49 11.6	+02.5	50 10.7	+02.4	51 09.9	+02.4	05
06	62 15.8	+02.4	63 14.9	+02.5	64 14.1	+02.4	65 13.2	+02.5	66 12.3	+02.5	06
07	77 18.2	+02.5	78 17.4	+02.5	79 16.5	+02.5	80 15.7	+02.4	81 14.8	+02.5	07
08	92 20.7	+02.5	93 19.9	+02.4	94 19.0	+02.5	95 18.1	+02.5	96 17.3	+02.4	08
09	107 23.2	+02.4	108 22.3	+02.5	109 21.5	+02.4	110 20.6	+02.5	111 19.7	+02.5	09
10	122 25.6	+02.5	123 24.8	+02.4	124 23.9	+02.5	125 23.1	+02.4	126 22.2	+02.5	10
11	137 28.1	+02.5	138 27.2	+02.5	139 26.4	+02.4	140 25.5	+02.5	141 24.7	+02.4	11
12	152 30.6	+02.4	153 29.7	+02.5	154 28.8	+02.5	155 28.0	+02.5	156 27.1	+02.5	12
13	167 33.0	+02.5	168 32.2	+02.4	169 31.3	+02.5	170 30.5	+02.4	171 29.6	+02.5	13
14	182 35.5	+02.5	183 34.6	+02.5	184 33.8	+02.4	185 32.9	+02.5	186 32.1	+02.4	14
15	197 38.0	+02.4	198 37.1	+02.5	199 36.2	+02.5	200 35.4	+02.4	201 34.5	+02.5	15
16	212 40.4	+02.5	213 39.6	+02.4	214 38.7	+02.5	215 37.8	+02.5	216 37.0	+02.5	16
17	227 42.9	+02.5	228 42.0	+02.5	229 41.2	+02.4	230 40.3	+02.5	231 39.5	+02.4	17
18	242 45.4	+02.4	243 44.5	+02.5	244 43.6	+02.5	245 42.8	+02.4	246 41.9	+02.5	18
19	257 47.8	+02.5	258 47.0	+02.4	259 46.1	+02.5	260 45.2	+02.5	261 44.4	+02.4	19
20	272 50.3	+02.4	273 49.4	+02.5	274 48.6	+02.4	275 47.7	+02.5	276 46.8	+02.5	20
21	287 52.7	+02.5	288 51.9	+02.4	289 51.0	+02.5	290 50.2	+02.4	291 49.3	+02.5	21
22	302 55.2	+02.5	303 54.3	+02.5	304 53.5	+02.5	305 52.6	+02.5	306 51.8	+02.4	22
23	317 57.7	+02.4	318 56.8	+02.5	319 56.0	+02.4	320 55.1	+02.5	321 54.2	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.7	N 29 13.3	Gienah	175 45.0	S 17 40.3
Ankaa	353 08.0	S 42 10.3	Acruz	173 01.9	S 63 13.9
Schedir	349 32.0	N 56 39.9	Gacrux	171 53.4	S 57 14.7
Diphda	348 48.3	S 17 51.3	Alioth	166 14.5	N 55 50.2
Achernar	335 20.7	S 57 06.7	Spica	158 23.7	S 11 17.0
Hamal	327 52.4	N 23 34.5	Alkaid	152 53.1	N 49 12.0
Polaris	314 30.6	N 89 21.5	Hadar	148 37.9	S 60 29.4
Acamar	315 12.5	S 40 12.3	Menkent	147 58.9	S 36 28.9
Menkar	314 07.3	N 04 11.1	Arcturus	145 48.7	N 19 04.5
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Aldebaran	290 41.0	N 16 33.5	Zubenelgenubi	136 57.3	S 16 08.3
Capella	280 23.8	N 46 01.3	Kocab	137 20.0	N 74 03.8
Rigel	281 05.1	S 08 10.3	Alphecca	126 04.8	N 26 38.4
Bellatrix	278 24.2	N 06 22.4	Antares	112 17.3	S 26 29.1
Elnath	278 03.5	N 28 37.7	Atria	107 12.3	S 69 04.4
Alnilam	275 39.0	S 01 11.1	Sabik	102 04.0	S 15 45.3
Betelgeuze	270 53.5	N 07 24.8	Shaula	96 11.7	S 37 07.3
Canopus	263 53.2	S 52 42.2	Rasalhague	95 59.5	N 12 32.8
Sirius	258 27.3	S 16 44.2	Etamin	90 42.4	N 51 29.4
Adhara	255 07.0	S 28 60.0	Kaus Australis	83 33.8	S 34 22.4
Castor	245 58.8	N 31 50.3	Vega	80 33.8	N 38 48.4
Procyon	244 52.1	N 05 10.4	Nunki	75 48.9	S 26 16.0
Pollux	243 18.7	N 27 58.2	Albireo	67 04.7	N 28 00.7
Avior	234 15.8	S 59 34.9	Altair	62 01.0	N 08 55.8
Suhail	222 47.6	S 43 31.5	Peacock	53 07.0	S 56 39.6
Miaplacidus	221 39.3	S 69 48.7	Deneb	49 26.2	N 45 22.0
Alphard	217 49.2	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.9	N 11 51.3	Alnair	27 33.9	S 46 50.7
Dubhe	193 42.9	N 61 37.5	Formalhaut	15 15.5	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.7	N 15 20.0

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2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

	day 241 of 365		day 242 of 365		day 243 of 365		day 244 of 365		day 245 of 365				
	August 29		August 30		August 31		September 1		September 2				
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT		
00	336	56.7	+02.5	337	55.8	+02.5	338	55.0	+02.4	339	54.1	+02.5	00
01	351	59.2	+02.4	352	58.3	+02.5	353	57.4	+02.5	354	56.6	+02.4	01
02	7	01.6	+02.5	8	00.8	+02.4	8	59.9	+02.5	9	59.0	+02.5	02
03	22	04.1	+02.5	23	03.2	+02.5	24	02.4	+02.4	25	01.5	+02.5	03
04	37	06.6	+02.4	38	05.7	+02.5	39	04.8	+02.5	40	04.0	+02.4	04
05	52	09.0	+02.5	53	08.2	+02.4	54	07.3	+02.5	55	06.4	+02.5	05
06	67	11.5	+02.4	68	10.6	+02.5	69	09.8	+02.4	70	08.9	+02.5	06
07	82	13.9	+02.5	83	13.1	+02.5	84	12.2	+02.5	85	11.4	+02.4	07
08	97	16.4	+02.5	98	15.6	+02.4	99	14.7	+02.5	100	13.8	+02.5	08
09	112	18.9	+02.4	113	18.0	+02.5	114	17.2	+02.4	115	16.3	+02.5	09
10	127	21.3	+02.5	128	20.5	+02.4	129	19.6	+02.5	130	18.8	+02.4	10
11	142	23.8	+02.5	143	22.9	+02.4	144	22.1	+02.4	145	21.2	+02.5	11
12	157	26.3	+02.4	158	25.4	+02.5	159	24.5	+02.5	160	23.7	+02.4	12
13	172	28.7	+02.5	173	27.9	+02.4	174	27.0	+02.5	175	26.1	+02.5	13
14	187	31.2	+02.5	188	30.3	+02.5	189	29.5	+02.4	190	28.6	+02.5	14
15	202	33.7	+02.4	203	32.8	+02.5	204	31.9	+02.5	205	31.1	+02.4	15
16	217	36.1	+02.5	218	35.3	+02.4	219	34.4	+02.5	220	33.5	+02.5	16
17	232	38.6	+02.5	233	37.7	+02.5	234	36.9	+02.4	235	36.0	+02.5	17
18	247	41.1	+02.4	248	40.2	+02.5	249	39.3	+02.5	250	38.5	+02.4	18
19	262	43.5	+02.5	263	42.7	+02.4	264	41.8	+02.5	265	40.9	+02.5	19
20	277	46.0	+02.4	278	45.1	+02.5	279	44.3	+02.4	280	43.4	+02.5	20
21	292	48.4	+02.5	293	47.6	+02.4	294	46.7	+02.5	295	45.9	+02.4	21
22	307	50.9	+02.5	308	50.0	+02.5	309	49.2	+02.5	310	48.3	+02.5	22
23	322	53.4	+02.4	323	52.5	+02.5	324	51.7	+02.4	325	50.8	+02.5	23

	day 246 of 365		day 247 of 365		day 248 of 365		day 249 of 365		day 250 of 365				
	September 3		September 4		September 5		September 6		September 7				
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT		
00	341	52.4	+02.5	342	51.5	+02.5	343	50.7	+02.4	344	49.8	+02.5	00
01	356	54.9	+02.4	357	54.0	+02.5	358	53.1	+02.5	359	52.3	+02.4	01
02	11	57.3	+02.5	12	56.5	+02.4	13	55.6	+02.5	14	54.7	+02.5	02
03	26	59.8	+02.4	27	58.9	+02.5	28	58.1	+02.4	29	57.2	+02.5	03
04	42	02.2	+02.5	43	01.4	+02.4	44	00.5	+02.5	45	59.7	+02.4	04
05	57	04.7	+02.5	58	03.8	+02.5	59	03.0	+02.4	60	02.1	+02.5	05
06	72	07.2	+02.4	73	06.3	+02.5	74	05.4	+02.5	75	04.6	+02.5	06
07	87	09.6	+02.5	88	08.8	+02.4	89	07.9	+02.5	90	07.1	+02.4	07
08	102	12.1	+02.5	103	11.2	+02.5	104	10.4	+02.4	105	09.5	+02.5	08
09	117	14.6	+02.4	118	13.7	+02.5	119	12.8	+02.5	120	12.0	+02.4	09
10	132	17.0	+02.5	133	16.2	+02.4	134	15.3	+02.5	135	14.4	+02.5	10
11	147	19.5	+02.4	148	18.6	+02.5	149	17.8	+02.4	150	16.9	+02.5	11
12	162	22.0	+02.4	163	21.1	+02.5	164	20.2	+02.5	165	19.4	+02.4	12
13	177	24.4	+02.5	178	23.6	+02.4	179	22.7	+02.5	180	21.8	+02.5	13
14	192	26.9	+02.4	193	26.0	+02.5	194	25.2	+02.4	195	24.3	+02.5	14
15	207	29.3	+02.5	208	28.5	+02.5	209	27.6	+02.5	210	26.8	+02.4	15
16	222	31.8	+02.5	223	31.0	+02.4	224	30.1	+02.5	225	29.2	+02.5	16
17	237	34.3	+02.5	238	33.4	+02.5	239	32.6	+02.4	240	31.7	+02.5	17
18	252	36.7	+02.5	253	35.9	+02.4	254	35.0	+02.5	255	34.2	+02.4	18
19	267	39.2	+02.5	268	38.3	+02.5	269	37.5	+02.4	270	36.6	+02.5	19
20	282	41.7	+02.4	283	40.8	+02.5	284	39.9	+02.5	285	39.1	+02.5	20
21	297	44.1	+02.5	298	43.3	+02.4	299	42.4	+02.5	300	41.6	+02.4	21
22	312	46.6	+02.5	313	45.7	+02.5	314	44.9	+02.4	315	44.0	+02.5	22
23	327	49.1	+02.4	328	48.2	+02.5	329	47.3	+02.5	330	46.5	+02.4	23

	SHA	Dec		SHA	Dec
Alpheratz	357 35.7	N 29 13.3	Gienah	175 45.0	S 17 40.3
Ankaa	353 08.0	S 42 10.3	Acrux	173 02.0	S 63 13.9
Schedir	349 31.9	N 56 39.9	Gacrux	171 53.5	S 57 14.7
Diphda	348 48.2	S 17 51.3	Alioth	166 14.5	N 55 50.2
Achernar	335 20.7	S 57 06.7	Spica	158 23.7	S 11 17.0
Hamal	327 52.4	N 23 34.5	Alkaid	152 53.1	N 49 12.0
Polaris	314 27.7	N 89 21.5	Hadar	148 38.0	S 60 29.3
Acamar	315 12.4	S 40 12.3	Menkent	147 58.9	S 36 28.9
Menkar	314 07.2	N 04 11.1	Arcturus	145 48.7	N 19 04.5
Mirfak	308 29.8	N 49 56.5	Rigel Kentaurus	139 39.4	S 60 56.3
Aldebaran	290 41.0	N 16 33.5	Zubenelgenubi	136 57.3	S 16 08.3
Capella	280 23.7	N 46 01.3	Kocab	137 20.1	N 74 03.8
Rigel	281 05.0	S 08 10.3	Alphecca	126 04.8	N 26 38.4
Bellatrix	278 24.2	N 06 22.4	Antares	112 17.3	S 26 29.1
Elnath	278 03.4	N 28 37.7	Atria	107 12.3	S 69 04.4
Alnilam	275 39.0	S 01 11.1	Sabik	102 04.0	S 15 45.3
Betelgeuze	270 53.4	N 07 24.8	Shaula	96 11.8	S 37 07.3
Canopus	263 53.2	S 52 42.1	Rasalhague	95 59.5	N 12 32.8
Sirius	258 27.2	S 16 44.2	Etamin	90 42.5	N 51 29.4
Adhara	255 07.0	S 28 60.0	Kaus Australis	83 33.8	S 34 22.4
Castor	245 58.7	N 31 50.2	Vega	80 33.8	N 38 48.4
Procyon	244 52.0	N 05 10.4	Nunki	75 48.9	S 26 16.0
Pollux	243 18.6	N 27 58.2	Albireo	67 04.7	N 28 00.7
Avior	234 15.8	S 59 34.9	Altair	62 01.0	N 08 55.8
Suhail	222 47.6	S 43 31.5	Peacock	53 07.0	S 56 39.6
Miaplacidus	221 39.3	S 69 48.7	Deneb	49 26.2	N 45 22.0
Alphard	217 49.2	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.9	N 11 51.3	Alnair	27 33.9	S 46 50.7
Dubhe	193 42.9	N 61 37.6	Formalhaut	15 15.5	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.7	N 15 20.0

	SHA	Dec		SHA	Dec
Alpheratz	357 35.7	N 29 13.3	Gienah	175 45.0	S 17 40.3
Ankaa	353 08.0	S 42 10.3	Acrux	173 02.0	S 63 13.8
Schedir	349 31.9	N 56 39.9	Gacrux	171 53.5	S 57 14.7
Diphda	348 48.2	S 17 51.3	Alioth	166 14.5	N 55 50.1
Achernar	335 20.6	S 57 06.7	Spica	158 23.7	S 11 17.0
Hamal	327 52.3	N 23 34.5	Alkaid	152 53.1	N 49 12.0
Polaris	314 25.6	N 89 21.5	Hadar	148 38.0	S 60 29.3
Acamar	315 12.4	S 40 12.3	Menkent	147 58.9	S 36 28.9
Menkar	314 07.2	N 04 11.1	Arcturus	145 48.7	N 19 04.5
Mirfak	308 29.7	N 49 56.5	Rigel Kentaurus	139 39.4	S 60 56.3
Aldebaran	290 40.9	N 16 33.5	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.7	N 46 01.3	Kocab	137 20.2	N 74 03.8
Rigel	281 05.0	S 08 10.3	Alphecca	126 04.8	N 26 38.4
Bellatrix	278 24.1	N 06 22.4	Antares	112 17.3	S 26 29.1
Elnath	278 03.4	N 28 37.7	Atria	107 12.4	S 69 04.4
Alnilam	275 39.0	S 01 11.0	Sabik	102 04.0	S 15 45.3
Betelgeuze	270 53.4	N 07 24.8	Shaula	96 11.8	S 37 07.3
Canopus	263 53.1	S 52 42.1	Rasalhague	95 59.5	N 12 32.8
Sirius	258 27.2	S 16 44.2	Etamin	90 42.5	N 51 29.4
Adhara	255 06.9	S 28 59.9	Kaus Australis	83 33.8	S 34 22.4
Castor	245 58.7	N 31 50.2	Vega	80 33.9	N 38 48.4
Procyon	244 52.0	N 05 10.4	Nunki	75 48.9	S 26 16.0
Pollux	243 18.6	N 27 58.2	Albireo	67 04.7	N 28 00.7
Avior	234 15.7	S 59 34.8	Altair	62 01.0	N 08 55.8
Suhail	222 47.5	S 43 31.4	Peacock	53 07.0	S 56 39.6
Miaplacidus	221 39.2	S 69 48.7	Deneb	49 26.2	N 45 22.0
Alphard	217 49.2	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.8	N 11 51.3	Alnair	27 33.9	S 46 50.7
Dubhe	193 42.9	N 61 37.6	Formalhaut	15 15.5	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.7	N 15 20.0

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2023 - First Point of Aries / Selected Stars

2023 - 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 30.9	+02.4	7 30.0	+02.5	8 29.1	+02.5	9 28.3	+02.4	10 27.4	+02.5	00
01	21 33.3	+02.5	22 32.5	+02.4	23 31.6	+02.5	24 30.7	+02.5	25 29.9	+02.4	01
02	36 35.8	+02.4	37 34.9	+02.5	38 34.1	+02.4	39 33.2	+02.5	40 32.3	+02.5	02
03	51 38.2	+02.5	52 37.4	+02.4	53 36.5	+02.5	54 35.7	+02.4	55 34.8	+02.5	03
04	66 40.7	+02.5	67 39.8	+02.5	68 39.0	+02.4	69 38.1	+02.5	70 37.3	+02.4	04
05	81 43.2	+02.4	82 42.3	+02.5	83 41.4	+02.5	84 40.6	+02.4	85 39.7	+02.5	05
06	96 45.6	+02.5	97 44.8	+02.4	98 43.9	+02.5	99 43.0	+02.5	100 42.2	+02.4	06
07	111 48.1	+02.5	112 47.2	+02.5	113 46.4	+02.4	114 45.5	+02.5	115 44.6	+02.5	07
08	126 50.6	+02.4	127 49.7	+02.5	128 48.8	+02.5	129 48.0	+02.4	130 47.1	+02.5	08
09	141 53.0	+02.5	142 52.2	+02.4	143 51.3	+02.5	144 50.4	+02.5	145 49.6	+02.4	09
10	156 55.5	+02.5	157 54.6	+02.5	158 53.8	+02.4	159 52.9	+02.5	160 52.0	+02.5	10
11	171 58.0	+02.4	172 57.1	+02.5	173 56.2	+02.5	174 55.4	+02.5	175 54.5	+02.5	11
12	187 00.4	+02.5	187 59.6	+02.4	188 58.7	+02.5	189 57.8	+02.5	190 57.0	+02.4	12
13	202 02.9	+02.4	203 02.0	+02.5	204 01.2	+02.4	205 00.3	+02.5	205 59.4	+02.5	13
14	217 05.3	+02.5	218 04.5	+02.4	219 03.6	+02.5	220 02.8	+02.4	221 01.9	+02.5	14
15	232 07.8	+02.5	233 06.9	+02.5	234 06.1	+02.5	235 05.2	+02.5	236 04.4	+02.4	15
16	247 10.3	+02.4	248 09.4	+02.5	249 08.6	+02.4	250 07.7	+02.5	251 06.8	+02.5	16
17	262 12.7	+02.5	263 11.9	+02.5	264 11.0	+02.5	265 10.2	+02.4	266 09.3	+02.5	17
18	277 15.2	+02.5	278 14.3	+02.5	279 13.5	+02.4	280 12.6	+02.5	281 11.8	+02.4	18
19	292 17.7	+02.4	293 16.8	+02.5	294 15.9	+02.5	295 15.1	+02.4	296 14.2	+02.5	19
20	307 20.1	+02.5	308 19.3	+02.4	309 18.4	+02.5	310 17.5	+02.5	311 16.7	+02.4	20
21	322 22.6	+02.5	323 21.7	+02.5	324 20.9	+02.4	325 20.0	+02.5	326 19.1	+02.5	21
22	337 25.1	+02.4	338 24.2	+02.5	339 23.3	+02.5	340 22.5	+02.4	341 21.6	+02.5	22
23	352 27.5	+02.5	353 26.7	+02.4	354 25.8	+02.5	355 24.9	+02.5	356 24.1	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.4	Gienah	175 45.0	S 17 40.3
Ankaa	353 07.9	S 42 10.4	Acrux	173 02.0	S 63 13.7
Schedir	349 31.8	N 56 40.1	Gacrux	171 53.5	S 57 14.6
Diphda	348 48.1	S 17 51.3	Alioth	166 14.5	N 55 50.0
Achernar	335 20.5	S 57 06.8	Spica	158 23.7	S 11 17.0
Hamal	327 52.2	N 23 34.6	Alkaid	152 53.2	N 49 11.9
Polaris	314 14.2	N 89 21.6	Hadar	148 38.1	S 60 29.3
Acamar	315 12.2	S 40 12.3	Menkent	147 58.9	S 36 28.9
Menkar	314 07.0	N 04 11.1	Arcturus	145 48.8	N 19 04.5
Mirfak	308 29.5	N 49 56.6	Rigel Kentaurus	139 39.6	S 60 56.2
Aldebaran	290 40.7	N 16 33.6	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.4	N 46 01.4	Kocab	137 20.6	N 74 03.7
Rigel	281 04.8	S 08 10.2	Alphecca	126 04.9	N 26 38.3
Bellatrix	278 23.9	N 06 22.4	Antares	112 17.4	S 26 29.1
Elnath	278 03.2	N 28 37.7	Atria	107 12.7	S 69 04.4
Alnilam	275 38.8	S 01 11.0	Sabik	102 04.1	S 15 45.3
Betelgeuze	270 53.2	N 07 24.8	Shaula	96 11.9	S 37 07.3
Canopus	263 52.9	S 52 42.1	Rasalhague	95 59.6	N 12 32.8
Sirius	258 27.0	S 16 44.2	Etamin	90 42.7	N 51 29.4
Adhara	255 06.8	S 28 59.9	Kaus Australis	83 33.9	S 34 22.4
Castor	245 58.5	N 31 50.2	Vega	80 34.0	N 38 48.5
Procyon	244 51.8	N 05 10.4	Nunki	75 49.0	S 26 16.1
Pollux	243 18.4	N 27 58.2	Albireo	67 04.8	N 28 00.8
Avior	234 15.5	S 59 34.8	Altair	62 01.1	N 08 55.8
Suhail	222 47.4	S 43 31.4	Peacock	53 07.1	S 56 39.7
Miaplacidus	221 39.0	S 69 48.6	Deneb	49 26.3	N 45 22.1
Alphard	217 49.0	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.7	N 11 51.2	Alnair	27 33.9	S 46 50.8
Dubhe	193 42.8	N 61 37.4	Formalhaut	15 15.5	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.7	N 15 20.1

UT	day 256 of 365 September 13		day 257 of 365 September 14		day 258 of 365 September 15		day 259 of 365 September 16		day 260 of 365 September 17		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	351 43.8	+02.4	352 42.9	+02.5	353 42.1	+02.4	354 41.2	+02.5	355 40.3	+02.5	00
01	6 46.2	+02.5	7 45.4	+02.4	8 44.5	+02.5	9 43.7	+02.4	10 42.8	+02.5	01
02	21 48.7	+02.5	22 47.8	+02.5	23 47.0	+02.4	24 46.1	+02.5	25 45.3	+02.4	02
03	36 51.2	+02.4	37 50.3	+02.5	38 49.4	+02.5	39 48.6	+02.4	40 47.7	+02.5	03
04	51 53.6	+02.5	52 52.8	+02.4	53 51.9	+02.5	54 51.0	+02.5	55 50.2	+02.4	04
05	66 56.1	+02.5	67 55.2	+02.5	68 54.4	+02.4	69 53.5	+02.5	70 52.6	+02.5	05
06	81 58.6	+02.4	82 57.7	+02.5	83 56.8	+02.5	84 56.0	+02.4	85 55.1	+02.5	06
07	97 01.0	+02.5	98 00.2	+02.4	98 59.3	+02.5	99 58.4	+02.5	100 57.6	+02.4	07
08	112 03.5	+02.5	113 02.6	+02.5	114 01.8	+02.4	115 00.9	+02.5	116 00.0	+02.5	08
09	127 06.0	+02.4	128 05.1	+02.5	129 04.2	+02.5	130 03.4	+02.5	131 02.5	+02.5	09
10	142 08.4	+02.5	143 07.6	+02.4	144 06.7	+02.5	145 05.8	+02.5	146 05.0	+02.4	10
11	157 10.9	+02.4	158 10.0	+02.5	159 09.2	+02.4	160 08.3	+02.5	161 07.4	+02.5	11
12	172 13.3	+02.5	173 12.5	+02.4	174 11.6	+02.5	175 10.8	+02.4	176 09.9	+02.5	12
13	187 15.8	+02.5	188 14.9	+02.5	189 14.1	+02.4	190 13.2	+02.5	191 12.4	+02.4	13
14	202 18.3	+02.5	203 17.4	+02.5	204 16.5	+02.5	205 15.7	+02.4	206 14.8	+02.5	14
15	217 20.7	+02.5	218 19.9	+02.4	219 19.0	+02.5	220 18.1	+02.5	221 17.3	+02.4	15
16	232 23.2	+02.5	233 22.3	+02.5	234 21.5	+02.4	235 20.6	+02.5	236 19.7	+02.5	16
17	247 25.7	+02.4	248 24.8	+02.5	249 23.9	+02.5	250 23.1	+02.4	251 22.2	+02.5	17
18	262 28.1	+02.5	263 27.3	+02.4	264 26.4	+02.5	265 25.5	+02.5	266 24.7	+02.4	18
19	277 30.6	+02.5	278 29.7	+02.5	279 28.9	+02.4	280 28.0	+02.5	281 27.1	+02.5	19
20	292 33.1	+02.4	293 32.2	+02.5	294 31.3	+02.5	295 30.5	+02.4	296 29.6	+02.5	20
21	307 35.5	+02.5	308 34.7	+02.4	309 33.8	+02.5	310 32.9	+02.5	311 32.1	+02.4	21
22	322 38.0	+02.5	323 37.1	+02.5	324 36.3	+02.4	325 35.4	+02.5	326 34.5	+02.5	22
23	337 40.5	+02.4	338 39.6	+02.5	339 38.7	+02.5	340 37.9	+02.4	341 37.0	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.4	Gienah	175 45.0	S 17 40.3
Ankaa	353 07.9	S 42 10.4	Acrux	173 02.0	S 63 13.8
Schedir	349 31.8	N 56 40.0	Gacrux	171 53.5	S 57 14.6
Diphda	348 48.2	S 17 51.3	Alioth	166 14.5	N 55 50.1
Achernar	335 20.6	S 57 06.8	Spica	158 23.7	S 11 17.0
Hamal	327 52.3	N 23 34.5	Alkaid	152 53.2	N 49 12.0
Polaris	314 20.6	N 89 21.6	Hadar	148 38.1	S 60 29.3
Acamar	315 12.3	S 40 12.3	Menkent	147 58.9	S 36 28.9
Menkar	314 07.1	N 04 11.1	Arcturus	145 48.8	N 19 04.5
Mirfak	308 29.6	N 49 56.6	Rigel Kentaurus	139 39.5	S 60 56.3
Aldebaran	290 40.8	N 16 33.5	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.6	N 46 01.3	Kocab	137 20.4	N 74 03.7
Rigel	281 04.9	S 08 10.2	Alphecca	126 04.9	N 26 38.4
Bellatrix	278 24.1	N 06 22.4	Antares	112 17.4	S 26 29.1
Elnath	278 03.3	N 28 37.7	Atria	107 12.5	S 69 04.4
Alnilam	275 38.9	S 01 11.0	Sabik	102 04.1	S 15 45.3
Betelgeuze	270 53.3	N 07 24.8	Shaula	96 11.8	S 37 07.3
Canopus	263 53.0	S 52 42.1	Rasalhague	95 59.6	N 12 32.8
Sirius	258 27.1	S 16 44.2	Etamin	90 42.6	N 51 29.4
Adhara	255 06.9	S 28 59.9	Kaus Australis	83 33.8	S 34 22.4
Castor	245 58.6	N 31 50.2	Vega	80 33.9	N 38 48.4
Procyon	244 51.9	N 05 10.4	Nunki	75 49.0	S 26 16.0
Pollux	243 18.5	N 27 58.2	Albireo	67 04.8	N 28 00.7
Avior	234 15.6	S 59 34.8	Altair	62 01.0	N 08 55.8
Suhail	222 47.5	S 43 31.4	Peacock	53 07.0	S 56 39.6
Miaplacidus	221 39.2	S 69 48.6	Deneb	49 26.2	N 45 22.0
Alphard	217 49.1	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.8	N 11 51.2	Alnair	27 33.9	S 46 50.7
Dubhe	193 42.9	N 61 37.4	Formalhaut	15 15.5	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.7	N 15 20.1

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2023 - First Point of Aries / Selected Stars

2023 - 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 39.5	+02.4	357 38.6	+02.5	358 37.7	+02.5	359 36.9	+02.4	0 36.0	+02.5	00
01	11 41.9	+02.5	12 41.1	+02.4	13 40.2	+02.5	14 39.3	+02.5	15 38.5	+02.4	01
02	26 44.4	+02.5	27 43.5	+02.5	28 42.7	+02.4	29 41.8	+02.5	30 40.9	+02.5	02
03	41 46.9	+02.4	42 46.0	+02.5	43 45.1	+02.5	44 44.3	+02.4	45 43.4	+02.5	03
04	56 49.3	+02.5	57 48.5	+02.4	58 47.6	+02.5	59 46.7	+02.5	60 45.9	+02.4	04
05	71 51.8	+02.4	72 50.9	+02.5	73 50.1	+02.4	74 49.2	+02.5	75 48.3	+02.5	05
06	86 54.2	+02.5	87 53.4	+02.4	88 52.5	+02.5	89 51.7	+02.4	90 50.8	+02.5	06
07	101 56.7	+02.5	102 55.8	+02.5	103 55.0	+02.5	104 54.1	+02.5	105 53.3	+02.4	07
08	116 59.2	+02.4	117 58.3	+02.5	118 57.5	+02.4	119 56.6	+02.5	120 55.7	+02.5	08
09	132 01.6	+02.5	133 00.8	+02.4	133 59.9	+02.5	134 59.1	+02.4	135 58.2	+02.5	09
10	147 04.1	+02.5	148 03.2	+02.5	149 02.4	+02.4	150 01.5	+02.5	151 00.7	+02.4	10
11	162 06.6	+02.4	163 05.7	+02.5	164 04.8	+02.5	165 04.0	+02.4	166 03.1	+02.5	11
12	177 09.0	+02.5	178 08.2	+02.4	179 07.3	+02.5	180 06.4	+02.5	181 05.6	+02.5	12
13	192 11.5	+02.5	193 10.6	+02.5	194 09.8	+02.4	195 08.9	+02.5	196 08.1	+02.4	13
14	207 14.0	+02.4	208 13.1	+02.5	209 12.2	+02.5	210 11.4	+02.4	211 10.5	+02.5	14
15	222 16.4	+02.5	223 15.6	+02.4	224 14.7	+02.5	225 13.8	+02.5	226 13.0	+02.4	15
16	237 18.9	+02.5	238 18.0	+02.5	239 17.2	+02.4	240 16.3	+02.5	241 15.4	+02.5	16
17	252 21.4	+02.4	253 20.5	+02.5	254 19.6	+02.5	255 18.8	+02.4	256 17.9	+02.5	17
18	267 23.8	+02.5	268 23.0	+02.4	269 22.1	+02.5	270 21.2	+02.5	271 20.4	+02.4	18
19	282 26.3	+02.4	283 25.4	+02.5	284 24.6	+02.4	285 23.7	+02.5	286 22.8	+02.5	19
20	297 28.7	+02.5	298 27.9	+02.4	299 27.0	+02.5	300 26.2	+02.4	301 25.3	+02.5	20
21	312 31.2	+02.5	313 30.3	+02.5	314 29.5	+02.4	315 28.6	+02.5	316 27.8	+02.4	21
22	327 33.7	+02.4	328 32.8	+02.5	329 31.9	+02.5	330 31.1	+02.5	331 30.2	+02.5	22
23	342 36.1	+02.5	343 35.3	+02.4	344 34.4	+02.5	345 33.6	+02.4	346 32.7	+02.5	23

	SHA ° / ' / "	Dec °		SHA ° / ' / "	Dec °
Alpheratz	357 35.6	N 29 13.4	Gienah	175 45.0	S 17 40.3
Ankaa	353 07.9	S 42 10.4	Acrux	173 02.0	S 63 13.8
Schedir	349 31.8	N 56 40.0	Gacrux	171 53.5	S 57 14.6
Diphda	348 48.2	S 17 51.3	Alioth	166 14.5	N 55 50.1
Achernar	335 20.5	S 57 06.8	Spica	158 23.7	S 11 17.0
Hamal	327 52.2	N 23 34.5	Alkaid	152 53.2	N 49 11.9
Polaris	314 18.5	N 89 21.6	Hadar	148 38.1	S 60 29.3
Acamar	315 12.3	S 40 12.3	Menkent	147 58.9	S 36 28.9
Menkar	314 07.1	N 04 11.1	Arcturus	145 48.8	N 19 04.5
Mirfak	308 29.6	N 49 56.6	Rigel Kentaurus	139 39.6	S 60 56.3
Aldebaran	290 40.8	N 16 33.5	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.5	N 46 01.3	Kocab	137 20.4	N 74 03.7
Rigel	281 04.9	S 08 10.2	Alphecca	126 04.9	N 26 38.4
Bellatrix	278 24.0	N 06 22.4	Antares	112 17.4	S 26 29.1
Elnath	278 03.3	N 28 37.7	Atria	107 12.6	S 69 04.4
Alnilam	275 38.8	S 01 11.0	Sabik	102 04.1	S 15 45.3
Betelgeuze	270 53.3	N 07 24.8	Shaula	96 11.9	S 37 07.3
Canopus	263 53.0	S 52 42.1	Rasalhague	95 59.6	N 12 32.8
Sirius	258 27.1	S 16 44.2	Etamin	90 42.6	N 51 29.4
Adhara	255 06.8	S 28 59.9	Kaus Australis	83 33.9	S 34 22.4
Castor	245 58.6	N 31 50.2	Vega	80 34.0	N 38 48.4
Procyon	244 51.9	N 05 10.4	Nunki	75 49.0	S 26 16.1
Pollux	243 18.5	N 27 58.2	Albireo	67 04.8	N 28 00.7
Avior	234 15.6	S 59 34.8	Altair	62 01.0	N 08 55.8
Suhail	222 47.5	S 43 31.4	Peacock	53 07.1	S 56 39.6
Miaplacidus	221 39.1	S 69 48.6	Deneb	49 26.3	N 45 22.1
Alphard	217 49.1	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.8	N 11 51.2	Alnair	27 33.9	S 46 50.8
Dubhe	193 42.8	N 61 37.5	Formalhaut	15 15.5	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.7	N 15 20.1

UT	day 266 of 365 September 23		day 267 of 365 September 24		day 268 of 365 September 25		day 269 of 365 September 26		day 270 of 365 September 27		UT
	GHA ° / ' / "	ddGHA °	GHA ° / ' / "	ddGHA °	GHA ° / ' / "	ddGHA °	GHA ° / ' / "	ddGHA °	GHA ° / ' / "	ddGHA °	
00	1 35.2	+02.4	2 34.3	+02.5	3 33.4	+02.5	4 32.6	+02.4	5 31.7	+02.5	00
01	16 37.6	+02.5	17 36.8	+02.4	18 35.9	+02.5	19 35.0	+02.5	20 34.2	+02.4	01
02	31 40.1	+02.4	32 39.2	+02.5	33 38.4	+02.4	34 37.5	+02.5	35 36.6	+02.5	02
03	46 42.5	+02.5	47 41.7	+02.5	48 40.8	+02.5	49 40.0	+02.4	50 39.1	+02.5	03
04	61 45.0	+02.5	62 44.2	+02.4	63 43.3	+02.5	64 42.4	+02.5	65 41.6	+02.4	04
05	76 47.5	+02.4	77 46.6	+02.5	78 45.8	+02.4	79 44.9	+02.5	80 44.0	+02.5	05
06	91 49.9	+02.5	92 49.1	+02.4	93 48.2	+02.5	94 47.4	+02.4	95 46.5	+02.5	06
07	106 52.4	+02.5	107 51.5	+02.5	108 50.7	+02.5	109 49.8	+02.5	110 49.0	+02.4	07
08	121 54.9	+02.4	122 54.0	+02.5	123 53.2	+02.4	124 52.3	+02.5	125 51.4	+02.5	08
09	136 57.3	+02.5	137 56.5	+02.4	138 55.6	+02.5	139 54.8	+02.4	140 53.9	+02.5	09
10	151 59.8	+02.5	152 58.9	+02.5	153 58.1	+02.4	154 57.2	+02.5	155 56.4	+02.4	10
11	167 02.3	+02.5	168 01.4	+02.5	169 00.5	+02.5	169 59.7	+02.5	170 58.8	+02.5	11
12	182 04.7	+02.5	183 03.9	+02.4	184 03.0	+02.5	185 02.1	+02.5	186 01.3	+02.4	12
13	197 07.2	+02.5	198 06.3	+02.5	199 05.5	+02.4	200 04.6	+02.5	201 03.7	+02.5	13
14	212 09.7	+02.4	213 08.8	+02.5	214 07.9	+02.5	215 07.1	+02.4	216 06.2	+02.5	14
15	227 12.1	+02.5	228 11.3	+02.4	229 10.4	+02.5	230 09.5	+02.5	231 08.7	+02.4	15
16	242 14.6	+02.4	243 13.7	+02.5	244 12.9	+02.4	245 12.0	+02.5	246 11.1	+02.5	16
17	257 17.0	+02.5	258 16.2	+02.5	259 15.3	+02.5	260 14.5	+02.4	261 13.6	+02.5	17
18	272 19.5	+02.5	273 18.7	+02.4	274 17.8	+02.5	275 16.9	+02.5	276 16.1	+02.4	18
19	287 22.0	+02.4	288 21.1	+02.5	289 20.3	+02.4	290 19.4	+02.5	291 18.5	+02.5	19
20	302 24.4	+02.5	303 23.6	+02.4	304 22.7	+02.5	305 21.9	+02.4	306 21.0	+02.5	20
21	317 26.9	+02.5	318 26.0	+02.5	319 25.2	+02.4	320 24.3	+02.5	321 23.5	+02.4	21
22	332 29.4	+02.4	333 28.5	+02.5	334 27.6	+02.5	335 26.8	+02.5	336 25.9	+02.5	22
23	347 31.8	+02.5	348 31.0	+02.4	349 30.1	+02.5	350 29.3	+02.4	351 28.4	+02.5	23

	SHA ° / ' / "	Dec °		SHA ° / ' / "	Dec °
Alpheratz	357 35.6	N 29 13.4	Gienah	175 45.0	S 17 40.3
Ankaa	353 07.9	S 42 10.4	Acrux	173 02.0	S 63 13.8
Schedir	349 31.8	N 56 40.0	Gacrux	171 53.5	S 57 14.6
Diphda	348 48.1	S 17 51.3	Alioth	166 14.5	N 55 50.0
Achernar	335 20.5	S 57 06.8	Spica	158 23.7	S 11 17.0
Hamal	327 52.2	N 23 34.6	Alkaid	152 53.2	N 49 11.9
Polaris	314 16.1	N 89 21.6	Hadar	148 38.1	S 60 29.3
Acamar	315 12.3	S 40 12.3	Menkent	147 58.9	S 36 28.9
Menkar	314 07.1	N 04 11.1	Arcturus	145 48.8	N 19 04.5
Mirfak	308 29.5	N 49 56.6	Rigel Kentaurus	139 39.6	S 60 56.3
Aldebaran	290 40.8	N 16 33.5	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.5	N 46 01.3	Kocab	137 20.5	N 74 03.7
Rigel	281 04.9	S 08 10.2	Alphecca	126 04.9	N 26 38.3
Bellatrix	278 24.0	N 06 22.4	Antares	112 17.4	S 26 29.1
Elnath	278 03.2	N 28 37.7	Atria	107 12.7	S 69 04.4
Alnilam	275 38.8	S 01 11.0	Sabik	102 04.1	S 15 45.3
Betelgeuze	270 53.3	N 07 24.8	Shaula	96 11.9	S 37 07.3
Canopus	263 52.9	S 52 42.1	Rasalhague	95 59.6	N 12 32.8
Sirius	258 27.1	S 16 44.2	Etamin	90 42.7	N 51 29.4
Adhara	255 06.8	S 28 59.9	Kaus Australis	83 33.9	S 34 22.4
Castor	245 58.5	N 31 50.2	Vega	80 34.0	N 38 48.5
Procyon	244 51.9	N 05 10.4	Nunki	75 49.0	S 26 16.1
Pollux	243 18.4	N 27 58.2	Albireo	67 04.8	N 28 00.8
Avior	234 15.6	S 59 34.8	Altair	62 01.1	N 08 55.8
Suhail	222 47.4	S 43 31.4	Peacock	53 07.1	S 56 39.7
Miaplacidus	221 39.0	S 69 48.6	Deneb	49 26.3	N 45 22.1
Alphard	217 49.1	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.8	N 11 51.2	Alnair	27 33.9	S 46 50.8
Dubhe	193 42.8	N 61 37.4	Formalhaut	15 15.5	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.7	N 15 20.1

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2023 - First Point of Aries / Selected Stars

2023 - 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
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
	October 18		October 19		October 20		October 21		October 22		
00	26	13.6 +02.5	27	12.8 +02.4	28	11.9 +02.5	29	11.0 +02.5	30	10.2 +02.4	00
01	41	16.1 +02.4	42	15.2 +02.5	43	14.4 +02.4	44	13.5 +02.5	45	12.6 +02.5	01
02	56	18.5 +02.5	57	17.7 +02.4	58	16.8 +02.5	59	16.0 +02.4	60	15.1 +02.5	02
03	71	21.0 +02.5	72	20.1 +02.5	73	19.3 +02.5	74	18.4 +02.5	75	17.6 +02.4	03
04	86	23.5 +02.4	87	22.6 +02.5	88	21.8 +02.4	89	20.9 +02.5	90	20.0 +02.5	04
05	101	25.9 +02.5	102	25.1 +02.4	103	24.2 +02.5	104	23.4 +02.4	105	22.5 +02.5	05
06	116	28.4 +02.5	117	27.5 +02.5	118	26.7 +02.4	119	25.8 +02.5	120	25.0 +02.4	06
07	131	30.9 +02.4	132	30.0 +02.5	133	29.1 +02.5	134	28.3 +02.4	135	27.4 +02.5	07
08	146	33.3 +02.5	147	32.5 +02.4	148	31.6 +02.5	149	30.7 +02.5	150	29.9 +02.5	08
09	161	35.8 +02.5	162	34.9 +02.5	163	34.1 +02.4	164	33.2 +02.5	165	32.4 +02.4	09
10	176	38.3 +02.4	177	37.4 +02.5	178	36.5 +02.5	179	35.7 +02.4	180	34.8 +02.5	10
11	191	40.7 +02.5	192	39.9 +02.4	193	39.0 +02.5	194	38.1 +02.5	195	37.3 +02.4	11
12	206	43.2 +02.4	207	42.3 +02.5	208	41.5 +02.4	209	40.6 +02.5	210	39.7 +02.5	12
13	221	45.6 +02.5	222	44.8 +02.5	223	43.9 +02.5	224	43.1 +02.4	225	42.2 +02.5	13
14	236	48.1 +02.5	237	47.3 +02.4	238	46.4 +02.5	239	45.5 +02.5	240	44.7 +02.4	14
15	251	50.6 +02.4	252	49.7 +02.5	253	48.9 +02.4	254	48.0 +02.5	255	47.1 +02.5	15
16	266	53.0 +02.5	267	52.2 +02.4	268	51.3 +02.5	269	50.5 +02.4	270	49.6 +02.5	16
17	281	55.5 +02.5	282	54.6 +02.5	283	53.8 +02.5	284	52.9 +02.5	285	52.1 +02.4	17
18	296	58.0 +02.4	297	57.1 +02.5	298	56.3 +02.4	299	55.4 +02.5	300	54.5 +02.5	18
19	312	00.4 +02.5	312	59.6 +02.4	313	58.7 +02.5	314	57.9 +02.4	315	57.0 +02.5	19
20	327	02.9 +02.5	328	02.0 +02.5	329	01.2 +02.4	330	00.3 +02.5	330	59.5 +02.4	20
21	342	05.4 +02.4	343	04.5 +02.5	344	03.6 +02.5	345	02.8 +02.4	346	01.9 +02.5	21
22	357	07.8 +02.5	358	07.0 +02.4	359	06.1 +02.5	0	05.2 +02.5	1	04.4 +02.5	22
23	12	10.3 +02.5	13	09.4 +02.5	14	08.6 +02.4	15	07.7 +02.5	16	06.9 +02.4	23

UT	day 276 of 365		day 277 of 365		day 278 of 365		day 279 of 365		day 280 of 365		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
	October 3		October 4		October 5		October 6		October 7		
00	11	26.5 +02.5	12	25.7 +02.4	13	24.8 +02.5	14	24.0 +02.4	15	23.1 +02.5	00
01	26	29.0 +02.5	27	28.1 +02.5	28	27.3 +02.4	29	26.4 +02.5	30	25.6 +02.4	01
02	41	31.5 +02.4	42	30.6 +02.5	43	29.7 +02.5	44	28.9 +02.5	45	28.0 +02.5	02
03	56	33.9 +02.5	57	33.1 +02.4	58	32.2 +02.5	59	31.4 +02.4	60	30.5 +02.5	03
04	71	36.4 +02.5	72	35.5 +02.5	73	34.7 +02.4	74	33.8 +02.5	75	33.0 +02.4	04
05	86	38.9 +02.4	87	38.0 +02.5	88	37.1 +02.5	89	36.3 +02.4	90	35.4 +02.5	05
06	101	41.3 +02.5	102	40.5 +02.4	103	39.6 +02.5	104	38.7 +02.5	105	37.9 +02.4	06
07	116	43.8 +02.5	117	42.9 +02.5	118	42.1 +02.4	119	41.2 +02.5	120	40.3 +02.5	07
08	131	46.3 +02.4	132	45.4 +02.5	133	44.5 +02.5	134	43.7 +02.4	135	42.8 +02.5	08
09	146	48.7 +02.5	147	47.9 +02.4	148	47.0 +02.5	149	46.1 +02.5	150	45.3 +02.4	09
10	161	51.2 +02.4	162	50.3 +02.5	163	49.5 +02.4	164	48.6 +02.5	165	47.7 +02.5	10
11	176	53.6 +02.4	177	52.8 +02.4	178	51.9 +02.5	179	51.1 +02.4	180	50.2 +02.5	11
12	191	56.1 +02.5	192	55.2 +02.5	193	54.4 +02.5	194	53.5 +02.5	195	52.7 +02.4	12
13	206	58.6 +02.4	207	57.7 +02.5	208	56.9 +02.4	209	56.0 +02.5	210	55.1 +02.5	13
14	222	01.0 +02.4	223	00.2 +02.4	223	59.3 +02.5	224	58.5 +02.4	225	57.6 +02.5	14
15	237	03.5 +02.5	238	02.6 +02.5	239	01.8 +02.4	240	00.9 +02.5	241	00.1 +02.4	15
16	252	06.0 +02.4	253	05.1 +02.5	254	04.2 +02.5	255	03.4 +02.4	256	02.5 +02.5	16
17	267	08.4 +02.5	268	07.6 +02.5	269	06.7 +02.5	270	05.8 +02.5	271	05.0 +02.5	17
18	282	10.9 +02.5	283	10.0 +02.5	284	09.2 +02.4	285	08.3 +02.5	286	07.5 +02.4	18
19	297	13.4 +02.4	298	12.5 +02.5	299	11.6 +02.5	300	10.8 +02.4	301	09.9 +02.5	19
20	312	15.8 +02.5	313	15.0 +02.4	314	14.1 +02.5	315	13.2 +02.5	316	12.4 +02.4	20
21	327	18.3 +02.5	328	17.4 +02.5	329	16.6 +02.4	330	15.7 +02.5	331	14.8 +02.5	21
22	342	20.8 +02.4	343	19.9 +02.5	344	19.0 +02.5	345	18.2 +02.4	346	17.3 +02.5	22
23	357	23.2 +02.5	358	22.4 +02.4	359	21.5 +02.5	0	20.6 +02.5	1	19.8 +02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.5	Gienah	175 44.9	S 17 40.2
Ankaa	353 07.9	S 42 10.5	Acrux	173 02.0	S 63 13.6
Schedir	349 31.7	N 56 40.2	Gacrux	171 53.4	S 57 14.5
Diphda	348 48.1	S 17 51.3	Alioth	166 14.5	N 55 49.9
Achernar	335 20.4	S 57 06.9	Spica	158 23.7	S 11 17.0
Hamal	327 52.1	N 23 34.6	Alkaid	152 53.2	N 49 11.8
Polaris	314 07.5	N 89 21.7	Hadar	148 38.2	S 60 29.2
Acamar	315 12.1	S 40 12.4	Menkent	147 59.0	S 36 28.8
Menkar	314 06.9	N 04 11.1	Arcturus	145 48.8	N 19 04.4
Mirfak	308 29.3	N 49 56.7	Rigel Kentaurus	139 39.6	S 60 56.2
Aldebaran	290 40.6	N 16 33.6	Zubenelgenubi	136 57.5	S 16 08.3
Capella	280 23.2	N 46 01.4	Kocab	137 20.8	N 74 03.5
Rigel	281 04.7	S 08 10.3	Alphecca	126 05.0	N 26 38.3
Bellatrix	278 23.8	N 06 22.4	Antares	112 17.5	S 26 29.0
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Alnilam	275 38.6	S 01 11.0	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 53.1	N 07 24.8	Shaula	96 12.0	S 37 07.3
Canopus	263 52.7	S 52 42.1	Rasalhague	95 59.7	N 12 32.8
Sirius	258 26.9	S 16 44.2	Etamin	90 42.9	N 51 29.4
Adhara	255 06.6	S 28 59.9	Kaus Australis	83 34.0	S 34 22.4
Castor	245 58.3	N 31 50.2	Vega	80 34.1	N 38 48.4
Procyon	244 51.7	N 05 10.4	Nunki	75 49.1	S 26 16.1
Pollux	243 18.2	N 27 58.1	Albireo	67 04.9	N 28 00.8
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Suhail	222 47.2	S 43 31.3	Peacock	53 07.3	S 56 39.7
Miaplacidus	221 38.7	S 69 48.5	Deneb	49 26.4	N 45 22.1
Alphard	217 48.9	S 08 45.5	Enif	33 39.7	N 09 59.1
Regulus	207 35.6	N 11 51.2	Alnair	27 34.0	S 46 50.8
Dubhe	193 42.7	N 61 37.3	Formalhaut	15 15.5	S 29 29.8
Denebola	182 26.1	N 14 26.5	Markab	13 30.7	N 15 20.1

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.4	Gienah	175 45.0	S 17 40.2
Ankaa	353 07.9	S 42 10.4	Acrux	173 02.0	S 63 13.7
Schedir	349 31.8	N 56 40.1	Gacrux	171 53.5	S 57 14.5
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Aldebaran	290 40.7	N 16 33.6	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.4	N 46 01.4	Kocab	137 20.7	N 74 03.6
Rigel	281 04.8	S 08 10.2	Alphecca	126 04.9	N 26 38.3
Bellatrix	278 23.9	N 06 22.4	Antares	112 17.5	S 26 29.1
Elnath	278 03.1	N 28 37.7	Atria	107 12.8	S 69 04.4
Alnilam	275 38.7	S 01 11.0	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 53.2	N 07 24.8	Shaula	96 11.9	S 37 07.3
Canopus	263 52.8	S 52 42.1	Rasalhague	95 59.7	N 12 32.8
Sirius	258 27.0	S 16 44.2	Etamin	90 42.8	N 51 29.4
Adhara	255 06.7	S 28 59.9	Kaus Australis	83 33.9	S 34 22.4
Castor	245 58.4	N 31 50.2	Vega	80 34.1	N 38 48.5
Procyon	244 51.8	N 05 10.4	Nunki	75 49.1	S 26 16.1
Pollux	243 18.4	N 27 58.2	Albireo	67 04.9	N 28 00.8
Avior	234 15.5	S 59 34.7	Altair	62 01.1	N 08 55.8
Suhail	222 47.4	S 43 31.4	Peacock	53 07.1	S 56 39.7
Miaplacidus	221 38.9	S 69 48.5	Deneb	49 26.3	N 45 22.1
Alphard	217 49.0	S 08 45.5	Enif	33 39.	

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 281 of 365 October 8		day 282 of 365 October 9		day 283 of 365 October 10		day 284 of 365 October 11		day 285 of 365 October 12		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	16 22.2	+02.5	17 21.4	+02.4	18 20.5	+02.5	19 19.7	+02.4	20 18.8	+02.5	00
01	31 24.7	+02.5	32 23.8	+02.5	33 23.0	+02.4	34 22.1	+02.5	35 21.3	+02.4	01
02	46 27.2	+02.4	47 26.3	+02.5	48 25.4	+02.5	49 24.6	+02.4	50 23.7	+02.5	02
03	61 29.6	+02.5	62 28.8	+02.4	63 27.9	+02.5	64 27.0	+02.5	65 26.2	+02.4	03
04	76 32.1	+02.5	77 31.2	+02.5	78 30.4	+02.4	79 29.5	+02.5	80 28.6	+02.5	04
05	91 34.6	+02.4	92 33.7	+02.5	93 32.8	+02.5	94 32.0	+02.4	95 31.1	+02.5	05
06	106 37.0	+02.5	107 36.2	+02.4	108 35.3	+02.5	109 34.4	+02.5	110 33.6	+02.4	06
07	121 39.5	+02.5	122 38.6	+02.5	123 37.8	+02.4	124 36.9	+02.5	125 36.0	+02.5	07
08	136 42.0	+02.4	137 41.1	+02.5	138 40.2	+02.5	139 39.4	+02.4	140 38.5	+02.5	08
09	151 44.4	+02.5	152 43.6	+02.4	153 42.7	+02.5	154 41.8	+02.5	155 41.0	+02.4	09
10	166 46.9	+02.4	167 46.0	+02.5	168 45.2	+02.4	169 44.3	+02.5	170 43.4	+02.5	10
11	181 49.3	+02.5	182 48.5	+02.4	183 47.6	+02.5	184 46.8	+02.4	185 45.9	+02.5	11
12	196 51.8	+02.5	197 50.9	+02.5	198 50.1	+02.4	199 49.2	+02.5	200 48.4	+02.4	12
13	211 54.3	+02.4	212 53.4	+02.5	213 52.5	+02.5	214 51.7	+02.4	215 50.8	+02.5	13
14	226 56.7	+02.5	227 55.9	+02.4	228 55.0	+02.5	229 54.1	+02.5	230 53.3	+02.4	14
15	241 59.2	+02.5	242 58.3	+02.5	243 57.5	+02.4	244 56.6	+02.5	245 55.7	+02.5	15
16	257 01.7	+02.4	258 00.8	+02.5	258 59.9	+02.5	259 59.1	+02.4	260 58.2	+02.5	16
17	272 04.1	+02.5	273 03.3	+02.4	274 02.4	+02.5	275 01.5	+02.5	276 00.7	+02.4	17
18	287 06.6	+02.5	288 05.7	+02.5	289 04.9	+02.4	290 04.0	+02.5	291 03.1	+02.5	18
19	302 09.1	+02.4	303 08.2	+02.5	304 07.3	+02.5	305 06.5	+02.4	306 05.6	+02.5	19
20	317 11.5	+02.5	318 10.7	+02.4	319 09.8	+02.5	320 08.9	+02.5	321 08.1	+02.4	20
21	332 14.0	+02.4	333 13.1	+02.5	334 12.3	+02.4	335 11.4	+02.5	336 10.5	+02.5	21
22	347 16.4	+02.5	348 15.6	+02.5	349 14.7	+02.5	350 13.9	+02.4	351 13.0	+02.5	22
23	2 18.9	+02.5	3 18.1	+02.4	4 17.2	+02.5	5 16.3	+02.5	6 15.5	+02.4	23

UT	day 286 of 365 October 13		day 287 of 365 October 14		day 288 of 365 October 15		day 289 of 365 October 16		day 290 of 365 October 17		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	21 17.9	+02.5	22 17.1	+02.4	23 16.2	+02.5	24 15.3	+02.5	25 14.5	+02.4	00
01	36 20.4	+02.5	37 19.5	+02.5	38 18.7	+02.4	39 17.8	+02.5	40 16.9	+02.5	01
02	51 22.9	+02.4	52 22.0	+02.5	53 21.1	+02.5	54 20.3	+02.4	55 19.4	+02.5	02
03	66 25.3	+02.5	67 24.5	+02.4	68 23.6	+02.5	69 22.7	+02.5	70 21.9	+02.4	03
04	81 27.8	+02.4	82 26.9	+02.5	83 26.1	+02.4	84 25.2	+02.5	85 24.3	+02.5	04
05	96 30.2	+02.5	97 29.4	+02.4	98 28.5	+02.5	99 27.7	+02.4	100 26.8	+02.5	05
06	111 32.7	+02.5	112 31.8	+02.5	113 31.0	+02.4	114 30.1	+02.5	115 29.3	+02.4	06
07	126 35.2	+02.4	127 34.3	+02.5	128 33.4	+02.5	129 32.6	+02.4	130 31.7	+02.5	07
08	141 37.6	+02.5	142 36.8	+02.4	143 35.9	+02.5	144 35.0	+02.5	145 34.2	+02.5	08
09	156 40.1	+02.5	157 39.2	+02.5	158 38.4	+02.4	159 37.5	+02.5	160 36.7	+02.4	09
10	171 42.6	+02.4	172 41.7	+02.5	173 40.8	+02.5	174 40.0	+02.4	175 39.1	+02.5	10
11	186 45.0	+02.5	187 44.2	+02.4	188 43.3	+02.5	189 42.4	+02.5	190 41.6	+02.4	11
12	201 47.5	+02.5	202 46.6	+02.5	203 45.8	+02.4	204 44.9	+02.5	205 44.0	+02.5	12
13	216 50.0	+02.4	217 49.1	+02.5	218 48.2	+02.5	219 47.4	+02.4	220 46.5	+02.5	13
14	231 52.4	+02.5	232 51.6	+02.4	233 50.7	+02.5	234 49.8	+02.5	235 49.0	+02.4	14
15	246 54.9	+02.5	247 54.0	+02.5	248 53.2	+02.4	249 52.3	+02.5	250 51.4	+02.5	15
16	261 57.4	+02.4	262 56.5	+02.5	263 55.6	+02.5	264 54.8	+02.4	265 53.9	+02.5	16
17	276 59.8	+02.4	277 59.0	+02.4	278 58.1	+02.5	279 57.2	+02.5	280 56.4	+02.4	17
18	292 02.3	+02.4	293 01.4	+02.5	294 00.6	+02.4	294 59.7	+02.5	295 58.8	+02.5	18
19	307 04.7	+02.5	308 03.9	+02.4	309 03.0	+02.5	310 02.2	+02.4	311 01.3	+02.5	19
20	322 07.2	+02.5	323 06.3	+02.5	324 05.5	+02.4	325 04.6	+02.5	326 03.8	+02.4	20
21	337 09.7	+02.4	338 08.8	+02.5	339 07.9	+02.5	340 07.1	+02.4	341 06.2	+02.5	21
22	352 12.1	+02.5	353 11.3	+02.4	354 10.4	+02.5	355 09.5	+02.5	356 08.7	+02.5	22
23	7 14.6	+02.5	8 13.7	+02.5	9 12.9	+02.4	10 12.0	+02.5	11 11.2	+02.4	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.5	Gienah	175 45.0	S 17 40.2
Ankaa	353 07.9	S 42 10.5	Acrux	173 02.0	S 63 13.7
Schedir	349 31.7	N 56 40.1	Gacrux	171 53.5	S 57 14.5
Diphda	348 48.1	S 17 51.3	Alioth	166 14.5	N 55 50.0
Achernar	335 20.4	S 57 06.9	Spica	158 23.7	S 11 17.0
Hamal	327 52.1	N 23 34.6	Alkaid	152 53.2	N 49 11.8
Polaris	314 10.3	N 89 21.7	Hadar	148 38.1	S 60 29.2
Acamar	315 12.2	S 40 12.4	Menkent	147 59.0	S 36 28.8
Menkar	314 07.0	N 04 11.1	Arcturus	145 48.8	N 19 04.5
Mirfak	308 29.4	N 49 56.7	Rigel Kentaurus	139 39.6	S 60 56.2
Aldebaran	290 40.7	N 16 33.6	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.3	N 46 01.4	Kocab	137 20.7	N 74 03.6
Rigel	281 04.7	S 08 10.3	Alphecca	126 05.0	N 26 38.3
Bellatrix	278 23.9	N 06 22.4	Antares	112 17.5	S 26 29.1
Elnath	278 03.1	N 28 37.7	Atria	107 12.8	S 69 04.4
Alnilam	275 38.7	S 01 11.0	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 53.1	N 07 24.8	Shaula	96 12.0	S 37 07.3
Canopus	263 52.8	S 52 42.1	Rasalhague	95 59.7	N 12 32.8
Sirius	258 26.9	S 16 44.2	Etamin	90 42.8	N 51 29.4
Adhara	255 06.7	S 28 59.9	Kaus Australis	83 34.0	S 34 22.4
Castor	245 58.4	N 31 50.2	Vega	80 34.1	N 38 48.5
Procyon	244 51.8	N 05 10.4	Nunki	75 49.1	S 26 16.1
Pollux	243 18.3	N 27 58.2	Albireo	67 04.9	N 28 00.8
Avior	234 15.4	S 59 34.7	Altair	62 01.1	N 08 55.8
Suhail	222 47.3	S 43 31.3	Peacock	53 07.2	S 56 39.7
Miaplacidus	221 38.9	S 69 48.5	Deneb	49 26.4	N 45 22.1
Alphard	217 49.0	S 08 45.5	Enif	33 39.6	N 09 59.1
Regulus	207 35.7	N 11 51.2	Alnair	27 33.9	S 46 50.8
Dubhe	193 42.7	N 61 37.3	Formalhaut	15 15.5	S 29 29.7
Denebola	182 26.2	N 14 26.6	Markab	13 30.7	N 15 20.1

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.5	Gienah	175 44.9	S 17 40.2
Ankaa	353 07.9	S 42 10.5	Acrux	173 02.0	S 63 13.7
Schedir	349 31.7	N 56 40.2	Gacrux	171 53.5	S 57 14.5
Diphda	348 48.1	S 17 51.3	Alioth	166 14.5	N 55 49.9
Achernar	335 20.4	S 57 06.9	Spica	158 23.7	S 11 17.0
Hamal	327 52.1	N 23 34.6	Alkaid	152 53.2	N 49 11.8
Polaris	314 09.0	N 89 21.7	Hadar	148 38.2	S 60 29.2
Acamar	315 12.1	S 40 12.4	Menkent	147 59.0	S 36 28.8
Menkar	314 07.0	N 04 11.1	Arcturus	145 48.8	N 19 04.4
Mirfak	308 29.4	N 49 56.7	Rigel Kentaurus	139 39.6	S 60 56.2
Aldebaran	290 40.6	N 16 33.6	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.2	N 46 01.4	Kocab	137 20.8	N 74 03.6
Rigel	281 04.7	S 08 10.3	Alphecca	126 05.0	N 26 38.3
Bellatrix	278 23.8	N 06 22.4	Antares	112 17.5	S 26 29.1
Elnath	278 03.0	N 28 37.7	Atria	107 12.9	S 69 04.4
Alnilam	275 38.7	S 01 11.0	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 53.1	N 07 24.8	Shaula	96 12.0	S 37 07.3
Canopus	263 52.7	S 52 42.1	Rasalhague	95 59.7	N 12 32.8
Sirius	258 26.9	S 16 44.2	Etamin	90 42.9	N 51 29.4
Adhara	255 06.6	S 28 59.9	Kaus Australis	83 34.0	S 34 22.4
Castor	245 58.3	N 31 50.2	Vega	80 34.1	N 38 48.5
Procyon	244 51.7	N 05 10.4	Nunki	75 49.1	S 26 16.1
Pollux	243 18.3	N 27 58.2	Albireo	67 04.9	N 28 00.8
Avior	234 15.3	S 59 34.7	Altair	62 01.1	N 08 55.8
Suhail	222 47.3	S 43 31.3	Peacock	53 07.2	S 56 39.7
Miaplacidus	221 38.8	S 69 48.5	Deneb	49 26.4	N 45 22.1
Alphard	217 49.0	S 08 45.5	Enif	33 39.7	N 09 59.1
Regulus	207 35.7	N 11 51.2	Alnair	27 34.0	S 46 50.8
Dubhe	193 42.7	N 61 37.3	Formalhaut	15 15.5	S 29 29.8
Denebola	182 26.1	N 14 26.5	Markab	13 30.7	N 15 20.1

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 311 of 365 November 7		day 312 of 365 November 8		day 313 of 365 November 9		day 314 of 365 November 10		day 315 of 365 November 11		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	45 56.4	+02.5	46 55.5	+02.5	47 54.7	+02.4	48 53.8	+02.5	49 52.9	+02.5	00
01	60 58.9	+02.4	61 58.0	+02.5	62 57.1	+02.5	63 56.3	+02.4	64 55.4	+02.5	01
02	76 01.3	+02.5	77 00.5	+02.4	77 59.6	+02.5	78 58.7	+02.5	79 57.9	+02.4	02
03	91 03.8	+02.5	92 02.9	+02.5	93 02.1	+02.4	94 01.2	+02.5	95 00.3	+02.5	03
04	106 06.3	+02.4	107 05.4	+02.5	108 04.5	+02.5	109 03.7	+02.4	110 02.8	+02.5	04
05	121 08.7	+02.5	122 07.9	+02.4	123 07.0	+02.5	124 06.1	+02.5	125 05.3	+02.4	05
06	136 11.2	+02.4	137 10.3	+02.5	138 09.5	+02.4	139 08.6	+02.5	140 07.7	+02.5	06
07	151 13.6	+02.5	152 12.8	+02.4	153 11.9	+02.5	154 11.1	+02.4	155 10.2	+02.5	07
08	166 16.1	+02.5	167 15.2	+02.5	168 14.4	+02.5	169 13.5	+02.5	170 12.7	+02.4	08
09	181 18.6	+02.4	182 17.7	+02.5	183 16.9	+02.4	184 16.0	+02.5	185 15.1	+02.5	09
10	196 21.0	+02.5	197 20.2	+02.4	198 19.3	+02.5	199 18.5	+02.4	200 17.6	+02.5	10
11	211 23.5	+02.5	212 22.6	+02.5	213 21.8	+02.4	214 20.9	+02.4	215 20.1	+02.4	11
12	226 26.0	+02.4	227 25.1	+02.5	228 24.2	+02.5	229 23.4	+02.4	230 22.5	+02.5	12
13	241 28.4	+02.5	242 27.6	+02.4	243 26.7	+02.5	244 25.8	+02.5	245 25.0	+02.4	13
14	256 30.9	+02.5	257 30.0	+02.5	258 29.2	+02.4	259 28.3	+02.5	260 27.4	+02.5	14
15	271 33.4	+02.4	272 32.5	+02.5	273 31.6	+02.5	274 30.8	+02.4	275 29.9	+02.5	15
16	286 35.8	+02.5	287 35.0	+02.4	288 34.1	+02.5	289 33.2	+02.5	290 32.4	+02.4	16
17	301 38.3	+02.5	302 37.4	+02.5	303 36.6	+02.4	304 35.7	+02.5	305 34.8	+02.5	17
18	316 40.8	+02.4	317 39.9	+02.5	318 39.0	+02.5	319 38.2	+02.4	320 37.3	+02.5	18
19	331 43.2	+02.5	332 42.4	+02.4	333 41.5	+02.5	334 40.6	+02.5	335 39.8	+02.4	19
20	346 45.7	+02.4	347 44.8	+02.5	348 44.0	+02.4	349 43.1	+02.5	350 42.2	+02.5	20
21	1 48.1	+02.5	2 47.3	+02.4	3 46.4	+02.5	4 45.6	+02.4	5 44.7	+02.5	21
22	16 50.6	+02.5	17 49.7	+02.5	18 48.9	+02.4	19 48.0	+02.5	20 47.2	+02.4	22
23	31 53.1	+02.4	32 52.2	+02.5	33 51.3	+02.5	34 50.5	+02.4	35 49.6	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.5	Gienah	175 44.8	S 17 40.3
Ankaa	353 07.9	S 42 10.6	Acrux	173 01.8	S 63 13.6
Schedir	349 31.8	N 56 40.3	Gacrux	171 53.3	S 57 14.4
Diphda	348 48.1	S 17 51.4	Alioth	166 14.4	N 55 49.8
Achernar	335 20.4	S 57 07.0	Spica	158 23.7	S 11 17.0
Hamal	327 52.1	N 23 34.7	Alkaid	152 53.2	N 49 11.7
Polaris	314 03.4	N 89 21.9	Hadar	148 38.1	S 60 29.1
Acamar	315 12.1	S 40 12.5	Menkent	147 58.9	S 36 28.8
Menkar	314 06.9	N 04 11.1	Arcturus	145 48.8	N 19 04.4
Mirfak	308 29.2	N 49 56.8	Rigel Kentaurus	139 39.6	S 60 56.1
Aldebaran	290 40.5	N 16 33.6	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.0	N 46 01.4	Kocab	137 20.9	N 74 03.4
Rigel	281 04.5	S 08 10.3	Alphecca	126 05.0	N 26 38.2
Bellatrix	278 23.7	N 06 22.4	Antares	112 17.5	S 26 29.0
Elnath	278 02.8	N 28 37.7	Atria	107 13.1	S 69 04.3
Alnilam	275 38.5	S 01 11.1	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 52.9	N 07 24.8	Shaula	96 12.1	S 37 07.3
Canopus	263 52.5	S 52 42.2	Rasalhague	95 59.8	N 12 32.8
Sirius	258 26.7	S 16 44.2	Etamin	90 43.0	N 51 29.3
Adhara	255 06.4	S 28 60.0	Kaus Australis	83 34.1	S 34 22.4
Castor	245 58.1	N 31 50.2	Vega	80 34.3	N 38 48.4
Procyon	244 51.5	N 05 10.3	Nunki	75 49.2	S 26 16.1
Pollux	243 18.0	N 27 58.1	Albireo	67 05.0	N 28 00.7
Avior	234 15.0	S 59 34.8	Altair	62 01.2	N 08 55.8
Suhail	222 47.0	S 43 31.4	Peacock	53 07.4	S 56 39.7
Miaplacidus	221 38.4	S 69 48.5	Deneb	49 26.6	N 45 22.1
Alphard	217 48.8	S 08 45.5	Enif	33 39.7	N 09 59.1
Regulus	207 35.5	N 11 51.1	Alnair	27 34.1	S 46 50.9
Dubhe	193 42.4	N 61 37.2	Formalhaut	15 15.6	S 29 29.8
Denebola	182 26.0	N 14 26.5	Markab	13 30.8	N 15 20.1

UT	day 296 of 365 October 23		day 297 of 365 October 24		day 298 of 365 October 25		day 299 of 365 October 26		day 300 of 365 October 27		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	31 09.3	+02.5	32 08.5	+02.4	33 07.6	+02.5	34 06.7	+02.5	35 05.9	+02.4	00
01	46 11.8	+02.4	47 10.9	+02.5	48 10.1	+02.4	49 09.2	+02.5	50 08.3	+02.5	01
02	61 14.2	+02.5	62 13.4	+02.4	63 12.5	+02.5	64 11.7	+02.4	65 10.8	+02.5	02
03	76 16.7	+02.5	77 15.8	+02.5	78 15.0	+02.4	79 14.1	+02.5	80 13.3	+02.4	03
04	91 19.2	+02.4	92 18.3	+02.5	93 17.4	+02.5	94 16.6	+02.5	95 15.7	+02.5	04
05	106 21.6	+02.5	107 20.8	+02.4	108 19.9	+02.5	109 19.1	+02.4	110 18.2	+02.5	05
06	121 24.1	+02.5	122 23.2	+02.5	123 22.4	+02.4	124 21.5	+02.5	125 20.7	+02.4	06
07	136 26.6	+02.4	137 25.7	+02.5	138 24.8	+02.5	139 24.0	+02.4	140 23.1	+02.5	07
08	151 29.0	+02.5	152 28.2	+02.4	153 27.3	+02.5	154 26.4	+02.5	155 25.6	+02.4	08
09	166 31.5	+02.5	167 30.6	+02.5	168 29.8	+02.4	169 28.9	+02.4	170 28.0	+02.5	09
10	181 34.0	+02.4	182 33.1	+02.5	183 32.2	+02.5	184 31.4	+02.4	185 30.5	+02.5	10
11	196 36.4	+02.5	197 35.6	+02.4	198 34.7	+02.5	199 33.8	+02.5	200 33.0	+02.4	11
12	211 38.9	+02.4	212 38.0	+02.5	213 37.2	+02.4	214 36.3	+02.5	215 35.4	+02.5	12
13	226 41.3	+02.5	227 40.5	+02.5	228 39.6	+02.5	229 38.8	+02.4	230 37.9	+02.5	13
14	241 43.8	+02.5	242 43.0	+02.4	243 42.1	+02.5	244 41.2	+02.5	245 40.4	+02.4	14
15	256 46.3	+02.4	257 45.4	+02.5	258 44.6	+02.4	259 43.7	+02.5	260 42.8	+02.5	15
16	271 48.7	+02.5	272 47.9	+02.4	273 47.0	+02.5	274 46.2	+02.4	275 45.3	+02.5	16
17	286 51.2	+02.5	287 50.3	+02.5	288 49.5	+02.4	289 48.6	+02.5	290 47.8	+02.4	17
18	301 53.7	+02.4	302 52.8	+02.5	303 51.9	+02.5	304 51.1	+02.4	305 50.2	+02.5	18
19	316 56.1	+02.5	317 55.3	+02.4	318 54.4	+02.5	319 53.5	+02.5	320 52.7	+02.4	19
20	331 58.6	+02.5	332 57.7	+02.5	333 56.9	+02.4	334 56.0	+02.5	335 55.1	+02.5	20
21	347 01.1	+02.4	348 00.2	+02.5	348 59.3	+02.5	349 58.5	+02.4	350 57.6	+02.5	21
22	2 03.5	+02.5	3 02.7	+02.4	4 01.8	+02.5	5 00.9	+02.5	6 00.1	+02.4	22
23	17 06.0	+02.5	18 05.1	+02.5	19 04.3	+02.4	20 03.4	+02.5	21 02.5	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.5	Gienah	175 44.9	S 17 40.2
Ankaa	353 07.9	S 42 10.5	Acrux	173 01.9	S 63 13.6
Schedir	349 31.7	N 56 40.2	Gacrux	171 53.4	S 57 14.5
Diphda	348 48.1	S 17 51.3	Alioth	166 14.5	N 55 49.9
Achernar	335 20.4	S 57 06.9	Spica	158 23.7	S 11 17.0
Hamal	327 52.1	N 23 34.6	Alkaid	152 53.2	N 49 11.8
Polaris	314 06.0	N 89 21.8	Hadar	148 38.1	S 60 29.2
Acamar	315 12.1	S 40 12.4	Menkent	147 58.9	S 36 28.8
Menkar	314 06.9	N 04 11.1	Arcturus	145 48.8	N 19 04.4
Mirfak	308 29.3	N 49 56.7	Rigel Kentaurus	139 39.6	S 60 56.1
Aldebaran	290 40.6	N 16 33.6	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.1	N 46 01.4	Kocab	137 20.8	N 74 03.5
Rigel	281 04.6	S 08 10.3	Alphecca	126 05.0	N 26 38.3
Bellatrix	278 23.8	N 06 22.4	Antares	112 17.5	S 26 29.0
Elnath	278 02.9	N 28 37.7	Atria	107 13.0	S 69 04.3
Alnilam	275 38.6	S 01 11.1	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 53.0	N 07 24.8	Shaula	96 12.0	S 37 07.3
Canopus	263 52.6	S 52 42.1	Rasalhague	95 59.7	N 12 32.8
Sirius	258 26.8	S 16 44.2	Etamin	90 42.9	N 51 29.4
Adhara	255 06.6	S 28 59.9	Kaus Australis	83 34.0	S 34 22.4
Castor	245 58.2	N 31 50.2	Vega	80 34.2	N 38 48.4
Procyon	244 51.6	N 05 10.4	Nunki	75 49.1	S 26 16.1
Pollux	243 18.2	N 27 58.1	Albireo	67 05.0	N 28 00.8
Avior	234 15.2	S 59 34.7	Altair	62 01.2	N 08 55.8
Suhail	222 47.2	S 43 31.3	Peacock	53 07.3	S 56 39.7
Miaplacidus	221 38.6	S 69 48.5	Deneb	49 26.5	N 45 22.1
Alphard	217 48.9	S 08 45.5	Enif	33 39.7	N 09 59.2
Regulus	207 35.6	N 11 51.2	Alnair	27 34.0	S 46 50.9
Dubhe	193 42.6	N 61 37.2	Formalhaut	15 15.5	S 29 29.8
Denebola	182 26.1	N 14 26.5	Markab	13 30.7	N 15 20.1

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Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

2023 - First Point of Aries / Selected Stars

2023 - 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
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
	October 28		October 29		October 30		October 31		November 1		
00	36 05.0	+02.5	37 04.1	+02.5	38 03.3	+02.4	39 02.4	+02.5	40 01.6	+02.4	00
01	51 07.5	+02.4	52 06.6	+02.5	53 05.7	+02.5	54 04.9	+02.4	55 04.0	+02.5	01
02	66 09.9	+02.5	67 09.1	+02.4	68 08.2	+02.5	69 07.3	+02.5	70 06.5	+02.5	02
03	81 12.4	+02.5	82 11.5	+02.5	83 10.7	+02.4	84 09.8	+02.5	85 09.0	+02.4	03
04	96 14.9	+02.4	97 14.0	+02.5	98 13.1	+02.5	99 12.3	+02.4	100 11.4	+02.5	04
05	111 17.3	+02.5	112 16.5	+02.4	113 15.6	+02.5	114 14.7	+02.5	115 13.9	+02.4	05
06	126 19.8	+02.5	127 18.9	+02.5	128 18.1	+02.4	129 17.2	+02.5	130 16.3	+02.5	06
07	141 22.3	+02.4	142 21.4	+02.5	143 20.5	+02.5	144 19.7	+02.4	145 18.8	+02.5	07
08	156 24.7	+02.5	157 23.9	+02.4	158 23.0	+02.5	159 22.1	+02.5	160 21.3	+02.4	08
09	171 27.2	+02.4	172 26.3	+02.5	173 25.5	+02.4	174 24.6	+02.5	175 23.7	+02.5	09
10	186 29.6	+02.5	187 28.8	+02.4	188 27.9	+02.5	189 27.1	+02.4	190 26.2	+02.5	10
11	201 32.1	+02.5	202 31.2	+02.5	203 30.4	+02.5	204 29.5	+02.5	205 28.7	+02.4	11
12	216 34.6	+02.4	217 33.7	+02.5	218 32.9	+02.4	219 32.0	+02.5	220 31.1	+02.5	12
13	231 37.0	+02.5	232 36.2	+02.4	233 35.3	+02.5	234 34.5	+02.4	235 33.6	+02.5	13
14	246 39.5	+02.5	247 38.6	+02.5	248 37.8	+02.4	249 36.9	+02.5	250 36.1	+02.4	14
15	261 42.0	+02.4	262 41.1	+02.5	263 40.2	+02.5	264 39.4	+02.4	265 38.5	+02.5	15
16	276 44.4	+02.5	277 43.6	+02.4	278 42.7	+02.5	279 41.8	+02.5	280 41.0	+02.5	16
17	291 46.9	+02.5	292 46.0	+02.5	293 45.2	+02.4	294 44.3	+02.5	295 43.5	+02.4	17
18	306 49.4	+02.4	307 48.5	+02.5	308 47.6	+02.5	309 46.8	+02.4	310 45.9	+02.5	18
19	321 51.8	+02.5	322 51.0	+02.4	323 50.1	+02.5	324 49.2	+02.5	325 48.4	+02.4	19
20	336 54.3	+02.4	337 53.4	+02.5	338 52.6	+02.4	339 51.7	+02.5	340 50.8	+02.5	20
21	351 56.7	+02.5	352 55.9	+02.5	353 55.0	+02.5	354 54.2	+02.4	355 53.3	+02.5	21
22	6 59.2	+02.5	7 58.4	+02.4	8 57.5	+02.5	9 56.6	+02.5	10 55.8	+02.4	22
23	22 01.7	+02.4	23 00.8	+02.5	23 60.0	+02.4	24 59.1	+02.5	25 58.2	+02.5	23

UT	day 306 of 365		day 307 of 365		day 308 of 365		day 309 of 365		day 310 of 365		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
	November 2		November 3		November 4		November 5		November 6		
00	41 00.7	+02.5	41 59.8	+02.5	42 59.0	+02.4	43 58.1	+02.5	44 57.3	+02.4	00
01	56 03.2	+02.4	57 02.3	+02.5	58 01.4	+02.5	59 00.6	+02.5	59 59.7	+02.5	01
02	71 05.6	+02.5	72 04.8	+02.4	73 03.9	+02.5	74 03.1	+02.4	75 02.2	+02.5	02
03	86 08.1	+02.5	87 07.2	+02.5	88 06.4	+02.4	89 05.5	+02.5	90 04.7	+02.4	03
04	101 10.6	+02.4	102 09.7	+02.5	103 08.8	+02.5	104 08.0	+02.4	105 07.1	+02.5	04
05	116 13.0	+02.5	117 12.2	+02.4	118 11.3	+02.5	119 10.4	+02.5	120 09.6	+02.4	05
06	131 15.5	+02.5	132 14.6	+02.5	133 13.8	+02.4	134 12.9	+02.5	135 12.0	+02.5	06
07	146 18.0	+02.4	147 17.1	+02.5	148 16.2	+02.5	149 15.4	+02.4	150 14.5	+02.5	07
08	161 20.4	+02.5	162 19.6	+02.4	163 18.7	+02.5	164 17.8	+02.5	165 17.0	+02.4	08
09	176 22.9	+02.4	177 22.0	+02.5	178 21.2	+02.4	179 20.3	+02.5	180 19.4	+02.5	09
10	191 25.3	+02.5	192 24.5	+02.4	193 23.6	+02.5	194 22.8	+02.4	195 21.9	+02.5	10
11	206 27.8	+02.4	207 26.9	+02.5	208 26.1	+02.5	209 25.2	+02.5	210 24.4	+02.4	11
12	221 30.3	+02.4	222 29.4	+02.5	223 28.6	+02.4	224 27.7	+02.5	225 26.8	+02.5	12
13	236 32.7	+02.5	237 31.9	+02.4	238 31.0	+02.5	239 30.2	+02.4	240 29.3	+02.5	13
14	251 35.2	+02.4	252 34.3	+02.5	253 33.5	+02.4	254 32.6	+02.5	255 31.8	+02.4	14
15	266 37.7	+02.4	267 36.8	+02.5	268 35.9	+02.5	269 35.1	+02.4	270 34.2	+02.5	15
16	281 40.1	+02.5	282 39.3	+02.4	283 38.4	+02.5	284 37.5	+02.5	285 36.7	+02.5	16
17	296 42.6	+02.5	297 41.7	+02.5	298 40.9	+02.4	299 40.0	+02.5	300 39.2	+02.4	17
18	311 45.1	+02.4	312 44.2	+02.5	313 43.3	+02.5	314 42.5	+02.4	315 41.6	+02.5	18
19	326 47.5	+02.5	327 46.7	+02.4	328 45.8	+02.5	329 44.9	+02.5	330 44.1	+02.4	19
20	341 50.0	+02.4	342 49.1	+02.5	343 48.3	+02.4	344 47.4	+02.5	345 46.5	+02.5	20
21	356 52.4	+02.5	357 51.6	+02.5	358 50.7	+02.5	359 49.9	+02.4	0 49.0	+02.5	21
22	11 54.9	+02.5	12 54.1	+02.4	13 53.2	+02.5	14 52.3	+02.5	15 51.5	+02.4	22
23	26 57.4	+02.4	27 56.5	+02.5	28 55.7	+02.4	29 54.8	+02.5	30 53.9	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.5	Gienah	175 44.9	S 17 40.2
Ankaa	353 07.9	S 42 10.5	Acrux	173 01.9	S 63 13.6
Schedir	349 31.8	N 56 40.2	Gacrux	171 53.4	S 57 14.5
Diphda	348 48.1	S 17 51.4	Alioth	166 14.5	N 55 49.8
Achernar	335 20.4	S 57 07.0	Spica	158 23.7	S 11 17.0
Hamal	327 52.1	N 23 34.6	Alkaid	152 53.2	N 49 11.7
Polaris	314 05.2	N 89 21.8	Hadar	148 38.1	S 60 29.1
Acamar	315 12.1	S 40 12.5	Menkent	147 58.9	S 36 28.8
Menkar	314 06.9	N 04 11.1	Arcturus	145 48.8	N 19 04.4
Mirfak	308 29.3	N 49 56.7	Rigel Kentaurus	139 39.6	S 60 56.1
Aldebaran	290 40.5	N 16 33.6	Zubeneigenubi	136 57.4	S 16 08.3
Capella	280 23.1	N 46 01.4	Kocab	137 20.9	N 74 03.5
Rigel	281 04.6	S 08 10.3	Alphecca	126 05.0	N 26 38.2
Bellatrix	278 23.7	N 06 22.4	Antares	112 17.5	S 26 29.0
Elnath	278 02.9	N 28 37.7	Atria	107 13.0	S 69 04.3
Alnilam	275 38.6	S 01 11.1	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 53.0	N 07 24.8	Shaula	96 12.0	S 37 07.3
Canopus	263 52.6	S 52 42.1	Rasalhague	95 59.8	N 12 32.8
Sirius	258 26.8	S 16 44.2	Etamin	90 43.0	N 51 29.4
Adhara	255 06.5	S 28 59.9	Kaus Australis	83 34.1	S 34 22.4
Castor	245 58.2	N 31 50.2	Vega	80 34.2	N 38 48.4
Procyon	244 51.6	N 05 10.4	Nunki	75 49.2	S 26 16.1
Pollux	243 18.1	N 27 58.1	Albireo	67 05.0	N 28 00.8
Avior	234 15.2	S 59 34.7	Altair	62 01.2	N 08 55.8
Suhail	222 47.1	S 43 31.3	Peacock	53 07.3	S 56 39.7
Miaplacidus	221 38.5	S 69 48.5	Deneb	49 26.5	N 45 22.1
Alphard	217 48.9	S 08 45.5	Enif	33 39.7	N 09 59.1
Regulus	207 35.6	N 11 51.2	Alnair	27 34.0	S 46 50.9
Dubhe	193 42.5	N 61 37.2	Formalhaut	15 15.5	S 29 29.8
Denebola	182 26.1	N 14 26.5	Markab	13 30.7	N 15 20.1

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.5	Gienah	175 44.9	S 17 40.3
Ankaa	353 07.9	S 42 10.5	Acrux	173 01.8	S 63 13.6
Schedir	349 31.7	N 56 40.2	Gacrux	171 53.3	S 57 14.4
Diphda	348 48.1	S 17 51.4	Alioth	166 14.5	N 55 49.8
Achernar	335 20.4	S 57 07.0	Spica	158 23.7	S 11 17.0
Hamal	327 52.1	N 23 34.6	Alkaid	152 53.2	N 49 11.7
Polaris	314 04.0	N 89 21.8	Hadar	148 38.1	S 60 29.1
Acamar	315 12.1	S 40 12.5	Menkent	147 58.9	S 36 28.8
Menkar	314 06.9	N 04 11.1	Arcturus	145 48.8	N 19 04.4
Mirfak	308 29.2	N 49 56.7	Rigel Kentaurus	139 39.6	S 60 56.1
Aldebaran	290 40.5	N 16 33.6	Zubeneigenubi	136 57.4	S 16 08.3
Capella	280 23.1	N 46 01.4	Kocab	137 20.9	N 74 03.5
Rigel	281 04.6	S 08 10.3	Alphecca	126 05.0	N 26 38.2
Bellatrix	278 23.7	N 06 22.4	Antares	112 17.5	S 26 29.0
Elnath	278 02.9	N 28 37.7	Atria	107 13.0	S 69 04.3
Alnilam	275 38.5	S 01 11.1	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 53.0	N 07 24.8	Shaula	96 12.0	S 37 07.3
Canopus	263 52.5	S 52 42.2	Rasalhague	95 59.8	N 12 32.8
Sirius	258 26.8	S 16 44.2	Etamin	90 43.0	N 51 29.3
Adhara	255 06.5	S 28 60.0	Kaus Australis	83 34.1	S 34 22.4
Castor	245 58.2	N 31 50.2	Vega	80 34.2	N 38 48.4
Procyon	244 51.6	N 05 10.3	Nunki	75 49.2	S 26 16.1
Pollux	243 18.1	N 27 58.1	Albireo	67 05.0	N 28 00.7
Avior	234 15.1	S 59 34.7	Altair	62 01.2	N 08 55.8
Suhail	222 47.1	S 43 31.3	Peacock	53 07.4	S 56 39.7
Miaplacidus	221 38.4	S 69 48.5	Deneb	49 26.5	N 45 22.1
Alphard	217 48.8	S 08 45.5	Enif	33 39.7	

2023 - First Point of Aries / Selected Stars

2023 - 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 39.2	+02.4	66 38.3	+02.5	67 37.5	+02.4	68 36.6	+02.5	69 35.7	+02.5	00
01	80 41.6	+02.5	81 40.8	+02.4	82 39.9	+02.5	83 39.1	+02.4	84 38.2	+02.5	01
02	95 44.1	+02.5	96 43.2	+02.5	97 42.4	+02.5	98 41.5	+02.5	99 40.7	+02.4	02
03	110 46.6	+02.4	111 45.7	+02.5	112 44.9	+02.4	113 44.0	+02.5	114 43.1	+02.5	03
04	125 49.0	+02.5	126 48.2	+02.4	127 47.3	+02.5	128 46.5	+02.4	129 45.6	+02.5	04
05	140 51.5	+02.5	141 50.6	+02.5	142 49.8	+02.4	143 48.9	+02.5	144 48.1	+02.4	05
06	155 54.0	+02.4	156 53.1	+02.5	157 52.2	+02.5	158 51.4	+02.5	159 50.5	+02.5	06
07	170 56.4	+02.5	171 55.6	+02.4	172 54.7	+02.5	173 53.9	+02.4	174 53.0	+02.5	07
08	185 58.9	+02.5	186 58.0	+02.5	187 57.2	+02.4	188 56.3	+02.5	189 55.5	+02.4	08
09	201 01.4	+02.4	202 00.5	+02.5	202 59.6	+02.5	203 58.8	+02.4	204 57.9	+02.5	09
10	216 03.8	+02.5	217 03.0	+02.4	218 02.1	+02.5	219 01.2	+02.5	220 00.4	+02.4	10
11	231 06.3	+02.4	232 05.4	+02.5	233 04.6	+02.4	234 03.7	+02.5	235 02.8	+02.5	11
12	246 08.7	+02.5	247 07.9	+02.5	248 07.0	+02.5	249 06.2	+02.4	250 05.3	+02.5	12
13	261 11.2	+02.5	262 10.4	+02.4	263 09.5	+02.5	264 08.6	+02.5	265 07.8	+02.4	13
14	276 13.7	+02.4	277 12.8	+02.5	278 12.0	+02.4	279 11.1	+02.5	280 10.2	+02.5	14
15	291 16.1	+02.5	292 15.3	+02.4	293 14.4	+02.5	294 13.6	+02.4	295 12.7	+02.5	15
16	306 18.6	+02.5	307 17.7	+02.5	308 16.9	+02.5	309 16.0	+02.5	310 15.2	+02.4	16
17	321 21.1	+02.4	322 20.2	+02.5	323 19.4	+02.4	324 18.5	+02.5	325 17.6	+02.5	17
18	336 23.5	+02.5	337 22.7	+02.4	338 21.8	+02.5	339 21.0	+02.4	340 20.1	+02.5	18
19	351 26.0	+02.5	352 25.1	+02.5	353 24.3	+02.4	354 23.4	+02.5	355 22.6	+02.4	19
20	6 28.5	+02.4	7 27.6	+02.5	8 26.7	+02.5	9 25.9	+02.5	10 25.0	+02.5	20
21	21 30.9	+02.5	22 30.1	+02.4	23 29.2	+02.5	24 28.4	+02.4	25 27.5	+02.5	21
22	36 33.4	+02.5	37 32.5	+02.5	38 31.7	+02.4	39 30.8	+02.5	40 30.0	+02.4	22
23	51 35.9	+02.4	52 35.0	+02.5	53 34.1	+02.5	54 33.3	+02.4	55 32.4	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.7	N 29 13.6	Gienah	175 44.7	S 17 40.3
Ankaa	353 08.0	S 42 10.6	Acrux	173 01.6	S 63 13.5
Schedir	349 31.8	N 56 40.3	Gacrux	171 53.1	S 57 14.4
Diphda	348 48.1	S 17 51.4	Alioth	166 14.3	N 55 49.7
Achernar	335 20.5	S 57 07.1	Spica	158 23.5	S 11 17.0
Hamal	327 52.0	N 23 34.7	Alkaid	152 53.1	N 49 11.5
Polaris	314 02.7	N 89 22.0	Hadar	148 37.9	S 60 29.0
Acamar	315 12.1	S 40 12.6	Menkent	147 58.8	S 36 28.8
Menkar	314 06.8	N 04 11.1	Arcturus	145 48.7	N 19 04.3
Mirfak	308 29.1	N 49 56.8	Rigel Kentaurus	139 39.5	S 60 56.0
Aldebaran	290 40.4	N 16 33.6	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 22.9	N 46 01.5	Kocab	137 20.8	N 74 03.3
Rigel	281 04.5	S 08 10.4	Alphecca	126 05.0	N 26 38.1
Bellatrix	278 23.6	N 06 22.3	Antares	112 17.5	S 26 29.0
Elnath	278 02.7	N 28 37.7	Atria	107 13.1	S 69 04.2
Alnilam	275 38.4	S 01 11.1	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 52.8	N 07 24.7	Shaula	96 12.1	S 37 07.3
Canopus	263 52.3	S 52 42.3	Rasalhague	95 59.8	N 12 32.7
Sirius	258 26.6	S 16 44.3	Etamin	90 43.1	N 51 29.2
Adhara	255 06.3	S 29 00.1	Kaus Australis	83 34.1	S 34 22.4
Castor	245 57.9	N 31 50.1	Vega	80 34.3	N 38 48.3
Procyon	244 51.4	N 05 10.3	Nunki	75 49.2	S 26 16.1
Pollux	243 17.9	N 27 58.1	Albireo	67 05.1	N 28 00.7
Avior	234 14.8	S 59 34.8	Altair	62 01.3	N 08 55.8
Suhail	222 46.8	S 43 31.4	Peacock	53 07.5	S 56 39.7
Miaplacidus	221 38.0	S 69 48.5	Deneb	49 26.7	N 45 22.1
Alphard	217 48.6	S 08 45.6	Enif	33 39.8	N 09 59.1
Regulus	207 35.3	N 11 51.1	Alnair	27 34.2	S 46 50.9
Dubhe	193 42.2	N 61 37.1	Formalhaut	15 15.6	S 29 29.8
Denebola	182 25.9	N 14 26.4	Markab	13 30.8	N 15 20.1

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	50 52.1	+02.5	51 51.2	+02.5	52 50.4	+02.4	53 49.5	+02.5	54 48.6	+02.5	00
01	65 54.6	+02.4	66 53.7	+02.5	67 52.8	+02.5	68 52.0	+02.4	69 51.1	+02.5	01
02	80 57.0	+02.5	81 56.2	+02.4	82 55.3	+02.5	83 54.4	+02.5	84 53.6	+02.4	02
03	95 59.5	+02.4	96 58.6	+02.5	97 57.8	+02.4	98 56.9	+02.5	99 56.0	+02.5	03
04	111 01.9	+02.5	112 01.1	+02.4	113 00.2	+02.5	113 59.4	+02.4	114 58.5	+02.5	04
05	126 04.4	+02.5	127 03.5	+02.5	128 02.7	+02.5	129 01.8	+02.5	130 01.0	+02.4	05
06	141 06.9	+02.4	142 06.0	+02.5	143 05.2	+02.4	144 04.3	+02.5	145 03.4	+02.5	06
07	156 09.3	+02.5	157 08.5	+02.4	158 07.6	+02.5	159 06.8	+02.4	160 05.9	+02.5	07
08	171 11.8	+02.5	172 10.9	+02.5	173 10.1	+02.4	174 09.2	+02.5	175 08.4	+02.4	08
09	186 14.3	+02.4	187 13.4	+02.5	188 12.5	+02.5	189 11.7	+02.4	190 10.8	+02.5	09
10	201 16.7	+02.5	202 15.9	+02.4	203 15.0	+02.5	204 14.1	+02.5	205 13.3	+02.5	10
11	216 19.2	+02.5	217 18.3	+02.5	218 17.5	+02.4	219 16.6	+02.5	220 15.8	+02.4	11
12	231 21.7	+02.4	232 20.8	+02.5	233 19.9	+02.5	234 19.1	+02.4	235 18.2	+02.5	12
13	246 24.1	+02.5	247 23.3	+02.4	248 22.4	+02.5	249 21.5	+02.5	250 20.7	+02.4	13
14	261 26.6	+02.4	262 25.7	+02.5	263 24.9	+02.4	264 24.0	+02.5	265 23.1	+02.5	14
15	276 29.0	+02.5	277 28.2	+02.5	278 27.3	+02.5	279 26.5	+02.4	280 25.6	+02.5	15
16	291 31.5	+02.5	292 30.7	+02.4	293 29.8	+02.5	294 28.9	+02.5	295 28.1	+02.4	16
17	306 34.0	+02.4	307 33.1	+02.5	308 32.3	+02.4	309 31.4	+02.5	310 30.5	+02.5	17
18	321 36.4	+02.5	322 35.6	+02.4	323 34.7	+02.5	324 33.9	+02.4	325 33.0	+02.5	18
19	336 38.9	+02.5	337 38.0	+02.5	338 37.2	+02.4	339 36.3	+02.5	340 35.5	+02.4	19
20	351 41.4	+02.4	352 40.5	+02.5	353 39.6	+02.5	354 38.8	+02.5	355 37.9	+02.5	20
21	6 43.8	+02.5	7 43.0	+02.4	8 42.1	+02.5	9 41.3	+02.4	10 40.4	+02.5	21
22	21 46.3	+02.5	22 45.4	+02.5	23 44.6	+02.4	24 43.7	+02.5	25 42.9	+02.4	22
23	36 48.8	+02.4	37 47.9	+02.5	38 47.0	+02.5	39 46.2	+02.4	40 45.3	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.6	N 29 13.5	Gienah	175 44.8	S 17 40.3
Ankaa	353 07.9	S 42 10.6	Acrux	173 01.7	S 63 13.6
Schedir	349 31.8	N 56 40.3	Gacrux	171 53.3	S 57 14.4
Diphda	348 48.1	S 17 51.4	Alioth	166 14.4	N 55 49.7
Achernar	335 20.4	S 57 07.0	Spica	158 23.6	S 11 17.0
Hamal	327 52.1	N 23 34.7	Alkaid	152 53.2	N 49 11.6
Polaris	314 03.1	N 89 21.9	Hadar	148 38.1	S 60 29.1
Acamar	315 12.1	S 40 12.5	Menkent	147 58.9	S 36 28.8
Menkar	314 06.9	N 04 11.1	Arcturus	145 48.8	N 19 04.3
Mirfak	308 29.2	N 49 56.8	Rigel Kentaurus	139 39.6	S 60 56.1
Aldebaran	290 40.5	N 16 33.6	Zubenelgenubi	136 57.4	S 16 08.3
Capella	280 23.0	N 46 01.4	Kocab	137 20.9	N 74 03.4
Rigel	281 04.5	S 08 10.3	Alphecca	126 05.0	N 26 38.2
Bellatrix	278 23.6	N 06 22.4	Antares	112 17.5	S 26 29.0
Elnath	278 02.8	N 28 37.7	Atria	107 13.1	S 69 04.3
Alnilam	275 38.5	S 01 11.1	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 52.9	N 07 24.8	Shaula	96 12.1	S 37 07.3
Canopus	263 52.5	S 52 42.2	Rasalhague	95 59.8	N 12 32.7
Sirius	258 26.7	S 16 44.2	Etamin	90 43.1	N 51 29.3
Adhara	255 06.4	S 28 60.0	Kaus Australis	83 34.1	S 34 22.4
Castor	245 58.1	N 31 50.1	Vega	80 34.3	N 38 48.4
Procyon	244 51.5	N 05 10.3	Nunki	75 49.2	S 26 16.1
Pollux	243 18.0	N 27 58.1	Albireo	67 05.1	N 28 00.7
Avior	234 15.0	S 59 34.8	Altair	62 01.3	N 08 55.8
Suhail	222 47.0	S 43 31.4	Peacock	53 07.4	S 56 39.7
Miaplacidus	221 38.3	S 69 48.5	Deneb	49 26.6	N 45 22.1
Alphard	217 48.7	S 08 45.5	Enif	33 39.8	N 09 59.1
Regulus	207 35.4	N 11 51.1	Alnair	27 34.1	S 46 50.9
Dubhe	193 42.4	N 61 37.1	Formalhaut	15 15.6	S 29 29.8
Denebola	182 26.0	N 14 26.4	Markab	13 30.8	N 15 20.1

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2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 321 of 365		day 322 of 365		day 323 of 365		day 324 of 365		day 325 of 365		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	55 47.8	+02.5	56 46.9	+02.5	57 46.1	+02.4	58 45.2	+02.5	59 44.3	+02.5	00
01	70 50.3	+02.4	71 49.4	+02.5	72 48.5	+02.5	73 47.7	+02.4	74 46.8	+02.5	01
02	85 52.7	+02.5	86 51.9	+02.4	87 51.0	+02.5	88 50.1	+02.5	89 49.3	+02.4	02
03	100 55.2	+02.4	101 54.3	+02.5	102 53.5	+02.4	103 52.6	+02.5	104 51.7	+02.5	03
04	115 57.6	+02.5	116 56.8	+02.5	117 55.9	+02.5	118 55.1	+02.4	119 54.2	+02.5	04
05	131 00.1	+02.5	131 59.3	+02.4	132 58.4	+02.5	133 57.5	+02.5	134 56.7	+02.4	05
06	146 02.6	+02.4	147 01.7	+02.5	148 00.9	+02.4	148 60.0	+02.5	149 59.1	+02.5	06
07	161 05.0	+02.5	162 04.2	+02.4	163 03.3	+02.5	164 02.5	+02.4	165 01.6	+02.5	07
08	176 07.5	+02.5	177 06.6	+02.5	178 05.8	+02.4	179 04.9	+02.5	180 04.1	+02.4	08
09	191 10.0	+02.4	192 09.1	+02.5	193 08.2	+02.5	194 07.4	+02.5	195 06.5	+02.5	09
10	206 12.4	+02.5	207 11.6	+02.4	208 10.7	+02.5	209 09.9	+02.4	210 09.0	+02.5	10
11	221 14.9	+02.5	222 14.0	+02.5	223 13.2	+02.4	224 12.3	+02.4	225 11.5	+02.4	11
12	236 17.4	+02.4	237 16.5	+02.5	238 15.6	+02.5	239 14.8	+02.4	240 13.9	+02.5	12
13	251 19.8	+02.5	252 19.0	+02.4	253 18.1	+02.5	254 17.2	+02.5	255 16.4	+02.4	13
14	266 22.3	+02.5	267 21.4	+02.5	268 20.6	+02.4	269 19.7	+02.5	270 18.8	+02.5	14
15	281 24.8	+02.4	282 23.9	+02.5	283 23.0	+02.5	284 22.2	+02.4	285 21.3	+02.5	15
16	296 27.2	+02.5	297 26.4	+02.4	298 25.5	+02.5	299 24.6	+02.5	300 23.8	+02.4	16
17	311 29.7	+02.4	312 28.8	+02.5	313 28.0	+02.4	314 27.1	+02.5	315 26.2	+02.5	17
18	326 32.1	+02.5	327 31.3	+02.4	328 30.4	+02.5	329 29.6	+02.4	330 28.7	+02.5	18
19	341 34.6	+02.5	342 33.7	+02.5	343 32.9	+02.5	344 32.0	+02.5	345 31.2	+02.4	19
20	356 37.1	+02.4	357 36.2	+02.5	358 35.4	+02.4	0 33.6	+02.5	0 33.6	+02.5	20
21	11 39.5	+02.5	12 38.7	+02.4	13 37.8	+02.5	14 37.0	+02.4	15 36.1	+02.5	21
22	26 42.0	+02.5	27 41.1	+02.5	28 40.3	+02.4	29 39.4	+02.5	30 38.6	+02.4	22
23	41 44.5	+02.4	42 43.6	+02.5	43 42.7	+02.5	44 41.9	+02.4	45 41.0	+02.5	23

UT	day 326 of 365		day 327 of 365		day 328 of 365		day 329 of 365		day 330 of 365		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	60 43.5	+02.5	61 42.6	+02.5	62 41.8	+02.4	63 40.9	+02.5	64 40.0	+02.5	00
01	75 46.0	+02.4	76 45.1	+02.5	77 44.2	+02.5	78 43.4	+02.4	79 42.5	+02.5	01
02	90 48.4	+02.5	91 47.6	+02.4	92 46.7	+02.5	93 45.8	+02.5	94 45.0	+02.4	02
03	105 50.9	+02.4	106 50.0	+02.5	107 49.2	+02.4	108 48.3	+02.5	109 47.4	+02.5	03
04	120 53.3	+02.5	121 52.5	+02.4	122 51.6	+02.5	123 50.8	+02.4	124 49.9	+02.5	04
05	135 55.8	+02.5	136 54.9	+02.5	137 54.1	+02.4	138 53.2	+02.5	139 52.4	+02.4	05
06	150 58.3	+02.4	151 57.4	+02.5	152 56.5	+02.5	153 55.7	+02.4	154 54.8	+02.5	06
07	166 00.7	+02.5	166 59.9	+02.4	167 59.0	+02.5	168 58.1	+02.5	169 57.3	+02.5	07
08	181 03.2	+02.5	182 02.3	+02.5	183 01.5	+02.4	184 00.6	+02.5	184 59.8	+02.4	08
09	196 05.7	+02.4	197 04.8	+02.5	198 03.9	+02.5	199 03.1	+02.4	200 02.2	+02.5	09
10	211 08.1	+02.5	212 07.3	+02.4	213 06.4	+02.5	214 05.5	+02.5	215 04.7	+02.4	10
11	226 10.6	+02.5	227 09.7	+02.5	228 08.9	+02.4	229 08.0	+02.5	230 07.1	+02.5	11
12	241 13.1	+02.4	242 12.2	+02.5	243 11.3	+02.5	244 10.5	+02.4	245 09.6	+02.5	12
13	256 15.5	+02.5	257 14.7	+02.4	258 13.8	+02.5	259 12.9	+02.5	260 12.1	+02.4	13
14	271 18.0	+02.5	272 17.1	+02.5	273 16.3	+02.4	274 15.4	+02.5	275 14.5	+02.5	14
15	286 20.4	+02.5	287 19.6	+02.4	288 18.7	+02.5	289 17.9	+02.4	290 17.0	+02.5	15
16	301 22.9	+02.5	302 22.0	+02.5	303 21.2	+02.5	304 20.3	+02.5	305 19.5	+02.4	16
17	316 25.4	+02.4	317 24.5	+02.5	318 23.7	+02.4	319 22.8	+02.5	320 21.9	+02.5	17
18	331 27.8	+02.5	332 27.0	+02.4	333 26.1	+02.5	334 25.3	+02.4	335 24.4	+02.5	18
19	346 30.3	+02.5	347 29.4	+02.5	348 28.6	+02.4	349 27.7	+02.5	350 26.9	+02.4	19
20	1 32.8	+02.4	2 31.9	+02.5	3 31.0	+02.5	4 30.2	+02.4	5 29.3	+02.5	20
21	16 35.2	+02.5	17 34.4	+02.4	18 33.5	+02.5	19 32.6	+02.5	20 31.8	+02.5	21
22	31 37.7	+02.5	32 36.8	+02.5	33 36.0	+02.4	34 35.1	+02.5	35 34.3	+02.4	22
23	46 40.2	+02.4	47 39.3	+02.5	48 38.4	+02.5	49 37.6	+02.4	50 36.7	+02.5	23

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	°	'		°	'
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Capella	280 22.9	N 46 01.4	Kocab	137 20.9	N 74 03.4
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Canopus	263 52.4	S 52 42.2	Rasalhague	95 59.8	N 12 32.7
Sirius	258 26.7	S 16 44.3	Etamin	90 43.1	N 51 29.3
Adhara	255 06.4	S 29 00.0	Kaus Australis	83 34.1	S 34 22.4
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Suhail	222 46.9	S 43 31.4			

2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 351 of 365 <i>December 17</i>		day 352 of 365 <i>December 18</i>		day 353 of 365 <i>December 19</i>		day 354 of 365 <i>December 20</i>		day 355 of 365 <i>December 21</i>		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	85	22.0 +02.4	86	21.1 +02.5	87	20.3 +02.4	88	19.4 +02.5	89	18.5 +02.5	00
01	100	24.4 +02.5	101	23.6 +02.4	102	22.7 +02.5	103	21.9 +02.4	104	21.0 +02.5	01
02	115	26.9 +02.5	116	26.0 +02.5	117	25.2 +02.5	118	24.3 +02.5	119	23.5 +02.4	02
03	130	29.4 +02.4	131	28.5 +02.5	132	27.7 +02.4	133	26.8 +02.5	134	25.9 +02.5	03
04	145	31.8 +02.5	146	31.0 +02.4	147	30.1 +02.5	148	29.3 +02.4	149	28.4 +02.5	04
05	160	34.3 +02.5	161	33.4 +02.5	162	32.6 +02.4	163	31.7 +02.5	164	30.9 +02.4	05
06	175	36.8 +02.4	176	35.9 +02.5	177	35.0 +02.5	178	34.2 +02.4	179	33.3 +02.5	06
07	190	39.2 +02.5	191	38.4 +02.4	192	37.5 +02.5	193	36.6 +02.5	194	35.8 +02.4	07
08	205	41.7 +02.5	206	40.8 +02.5	207	40.0 +02.4	208	39.1 +02.5	209	38.2 +02.5	08
09	220	44.2 +02.4	221	43.3 +02.5	222	42.4 +02.5	223	41.6 +02.4	224	40.7 +02.5	09
10	235	46.6 +02.5	236	45.8 +02.4	237	44.9 +02.5	238	44.0 +02.5	239	43.2 +02.4	10
11	250	49.1 +02.4	251	48.2 +02.4	252	47.4 +02.4	253	46.5 +02.5	254	45.6 +02.5	11
12	265	51.5 +02.5	266	50.7 +02.5	267	49.8 +02.5	268	49.0 +02.4	269	48.1 +02.5	12
13	280	54.0 +02.5	281	53.2 +02.5	282	52.3 +02.5	283	51.4 +02.5	284	50.6 +02.4	13
14	295	56.5 +02.4	296	55.6 +02.5	297	54.8 +02.4	298	53.9 +02.5	299	53.0 +02.5	14
15	310	58.9 +02.5	311	58.1 +02.4	312	57.2 +02.5	313	56.4 +02.4	314	55.5 +02.5	15
16	326	01.4 +02.5	327	00.5 +02.5	327	59.7 +02.4	328	58.8 +02.5	329	58.0 +02.4	16
17	341	03.9 +02.4	342	03.0 +02.5	343	02.1 +02.5	344	01.3 +02.4	345	00.4 +02.5	17
18	356	06.3 +02.5	357	05.5 +02.4	358	04.6 +02.5	359	03.7 +02.5	0	02.9 +02.5	18
19	11	08.8 +02.5	12	07.9 +02.5	13	07.1 +02.4	14	06.2 +02.5	15	05.4 +02.4	19
20	26	11.3 +02.4	27	10.4 +02.5	28	09.5 +02.5	29	08.7 +02.4	30	07.8 +02.5	20
21	41	13.7 +02.5	42	12.9 +02.4	43	12.0 +02.5	44	11.1 +02.5	45	10.3 +02.4	21
22	56	16.2 +02.5	57	15.3 +02.5	58	14.5 +02.4	59	13.6 +02.5	60	12.7 +02.5	22
23	71	18.7 +02.4	72	17.8 +02.5	73	16.9 +02.5	74	16.1 +02.4	75	15.2 +02.5	23

UT	day 336 of 365 <i>December 2</i>		day 337 of 365 <i>December 3</i>		day 338 of 365 <i>December 4</i>		day 339 of 365 <i>December 5</i>		day 340 of 365 <i>December 6</i>		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	70	34.9 +02.4	71	34.0 +02.5	72	33.2 +02.4	73	32.3 +02.5	74	31.4 +02.5	00
01	85	37.3 +02.5	86	36.5 +02.5	87	35.6 +02.5	88	34.8 +02.4	89	33.9 +02.5	01
02	100	39.8 +02.5	101	39.0 +02.4	102	38.1 +02.5	103	37.2 +02.5	104	36.4 +02.4	02
03	115	42.3 +02.4	116	41.4 +02.5	117	40.6 +02.4	118	39.7 +02.5	119	38.8 +02.5	03
04	130	44.7 +02.5	131	43.9 +02.4	132	43.0 +02.5	133	42.2 +02.4	134	41.3 +02.5	04
05	145	47.2 +02.5	146	46.3 +02.5	147	45.5 +02.4	148	44.6 +02.5	149	43.8 +02.4	05
06	160	49.7 +02.4	161	48.8 +02.5	162	47.9 +02.5	163	47.1 +02.4	164	46.2 +02.5	06
07	175	52.1 +02.5	176	51.3 +02.4	177	50.4 +02.5	178	49.5 +02.5	179	48.7 +02.5	07
08	190	54.6 +02.5	191	53.7 +02.5	192	52.9 +02.4	193	52.0 +02.5	194	51.2 +02.4	08
09	205	57.1 +02.4	206	56.2 +02.5	207	55.3 +02.5	208	54.5 +02.4	209	53.6 +02.5	09
10	220	59.5 +02.5	221	58.7 +02.4	222	57.8 +02.5	223	56.9 +02.5	224	56.1 +02.4	10
11	236	02.0 +02.5	237	01.1 +02.5	238	00.3 +02.4	239	59.4 +02.5	240	58.5 +02.5	11
12	251	04.5 +02.4	252	03.6 +02.5	253	02.7 +02.5	254	01.9 +02.4	255	01.0 +02.5	12
13	266	06.9 +02.5	267	06.1 +02.4	268	05.2 +02.5	269	04.3 +02.5	270	03.5 +02.4	13
14	281	09.4 +02.5	282	08.5 +02.5	283	07.7 +02.4	284	06.8 +02.5	285	05.9 +02.5	14
15	296	11.8 +02.5	297	11.0 +02.4	298	10.1 +02.5	299	09.3 +02.4	300	08.4 +02.5	15
16	311	14.3 +02.5	312	13.4 +02.5	313	12.6 +02.5	314	11.7 +02.5	315	10.9 +02.4	16
17	326	16.8 +02.4	327	15.9 +02.5	328	15.1 +02.4	329	14.2 +02.5	330	13.3 +02.5	17
18	341	19.2 +02.5	342	18.4 +02.4	343	17.5 +02.5	344	16.7 +02.4	345	15.8 +02.5	18
19	356	21.7 +02.5	357	20.8 +02.5	358	20.0 +02.4	359	19.1 +02.5	0	18.3 +02.4	19
20	11	24.2 +02.4	12	23.3 +02.5	13	22.4 +02.5	14	21.6 +02.4	15	20.7 +02.5	20
21	26	26.6 +02.5	27	25.8 +02.4	28	24.9 +02.5	29	24.0 +02.5	30	23.2 +02.4	21
22	41	29.1 +02.5	42	28.2 +02.5	43	27.4 +02.4	44	26.5 +02.5	45	25.6 +02.5	22
23	56	31.6 +02.4	57	30.7 +02.5	58	29.8 +02.5	59	29.0 +02.4	60	28.1 +02.5	23

	SHA	Dec		SHA	Dec
Alpheratz	357 35.7	N 29 13.6	Gienah	175 44.5	S 17 40.4
Ankaa	353 08.0	S 42 10.7	Acrux	173 01.2	S 63 13.6
Schedir	349 31.9	N 56 40.4	Gacrux	171 52.8	S 57 14.4
Diphda	348 48.2	S 17 51.4	Alioth	166 14.0	N 55 49.6
Achernar	335 20.6	S 57 07.2	Spica	158 23.4	S 11 17.1
Hamal	327 52.1	N 23 34.7	Alkaid	152 52.9	N 49 11.4
Polaris	314 05.3	N 89 22.1	Hadar	148 37.7	S 60 29.0
Acamar	315 12.1	S 40 12.7	Menkent	147 58.6	S 36 28.8
Menkar	314 06.8	N 04 11.1	Arcturus	145 48.6	N 19 04.2
Mirfak	308 29.1	N 49 56.9	Rigel Kentaurus	139 39.2	S 60 56.0
Aldebaran	290 40.3	N 16 33.6	Zubeneigenubi	136 57.2	S 16 08.3
Capella	280 22.8	N 46 01.5	Kocab	137 20.6	N 74 03.2
Rigel	281 04.4	S 08 10.4	Alphecca	126 04.9	N 26 38.0
Bellatrix	278 23.5	N 06 22.3	Antares	112 17.4	S 26 29.0
Elnath	278 02.6	N 28 37.7	Atria	107 12.9	S 69 04.1
Alnilam	275 38.3	S 01 11.2	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 52.7	N 07 24.7	Shaula	96 12.0	S 37 07.2
Canopus	263 52.2	S 52 42.4	Rasalhague	95 59.8	N 12 32.6
Sirius	258 26.5	S 16 44.4	Etamin	90 43.1	N 51 29.1
Adhara	255 06.2	S 29 00.2	Kaus Australis	83 34.1	S 34 22.4
Castor	245 57.8	N 31 50.1	Vega	80 34.3	N 38 48.2
Procyon	244 51.2	N 05 10.2	Nunki	75 49.2	S 26 16.0
Pollux	243 17.7	N 27 58.1	Albireo	67 05.1	N 28 00.6
Avior	234 14.6	S 59 34.9	Altair	62 01.3	N 08 55.7
Suhail	222 46.7	S 43 31.5	Peacock	53 07.6	S 56 39.6
Miaplacidus	221 37.7	S 69 48.6	Deneb	49 26.8	N 45 22.1
Alphard	217 48.4	S 08 45.7	Enif	33 39.9	N 09 59.1
Regulus	207 35.1	N 11 51.0	Alnair	27 34.3	S 46 50.9
Dubhe	193 41.9	N 61 37.1	Formalhaut	15 15.7	S 29 29.9
Denebola	182 25.7	N 14 26.3	Markab	13 30.9	N 15 20.1

	SHA	Dec		SHA	Dec
Alpheratz	357 35.7	N 29 13.6	Gienah	175 44.6	S 17 40.3
Ankaa	353 08.0	S 42 10.6	Acrux	173 01.5	S 63 13.5
Schedir	349 31.9	N 56 40.4	Gacrux	171 53.0	S 57 14.4
Diphda	348 48.1	S 17 51.4	Alioth	166 14.2	N 55 49.6
Achernar	335 20.5	S 57 07.1	Spica	158 23.5	S 11 17.1
Hamal	327 52.0	N 23 34.7	Alkaid	152 53.1	N 49 11.5
Polaris	314 02.9	N 89 22.0	Hadar	148 37.9	S 60 29.0
Acamar	315 12.0	S 40 12.6	Menkent	147 58.7	S 36 28.8
Menkar	314 06.8	N 04 11.1	Arcturus	145 48.7	N 19 04.2
Mirfak	308 29.1	N 49 56.9	Rigel Kentaurus	139 39.4	S 60 56.0
Aldebaran	290 40.4	N 16 33.6	Zubeneigenubi	136 57.3	S 16 08.3
Capella	280 22.8	N 46 01.5	Kocab	137 20.8	N 74 03.3
Rigel	281 04.4	S 08 10.4	Alphecca	126 04.9	N 26 38.1
Bellatrix	278 23.5	N 06 22.3	Antares	112 17.5	S 26 29.0
Elnath	278 02.7	N 28 37.7	Atria	107 13.0	S 69 04.2
Alnilam	275 38.4	S 01 11.1	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 52.8	N 07 24.7	Shaula	96 12.1	S 37 07.3
Canopus	263 52.3	S 52 42.3	Rasalhague	95 59.8	N 12 32.7
Sirius	258 26.6	S 16 44.3	Etamin	90 43.1	N 51 29.2
Adhara	255 06.3	S 29 00.1	Kaus Australis	83 34.1	S 34 22.4
Castor	245 57.9	N 31 50.1	Vega	80 34.3	N 38 48.3
Procyon	244 51.3	N 05 10.3	Nunki	75 49.2	S 26 16.1
Pollux	243 17.8	N 27 58.1	Albireo	67 05.1	N 28 00.7
Avior	234 14.7	S 59 34.8	Altair	62 01.3	N 08 55.8
Suhail	222 46.8	S 43 31.4	Peacock	53 07.5	S 56 39.7
Miaplacidus	221 37.9	S 69 48.6	Deneb	49 26.7	N 45 22.1
Alphard	217 48.6	S 08 45.6	Enif	33 39.8	N 09 59.1
Regulus	207 35.3	N 11 51.0	Alnair	27 34.2	S 46 50.9
Dubhe	193 42.1	N 61 37.1	Formalhaut	15 15.7	S 29 29.8
Denebola	182 25.8	N 14 26.4	Markab	13 30.8	N 15 20.1

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2023 - First Point of Aries / Selected Stars

2023 - First Point of Aries / Selected Stars

UT	day 341 of 365 <i>December 7</i>		day 342 of 365 <i>December 8</i>		day 343 of 365 <i>December 9</i>		day 344 of 365 <i>December 10</i>		day 345 of 365 <i>December 11</i>		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	75 30.6	+02.4	76 29.7	+02.5	77 28.9	+02.4	78 28.0	+02.5	79 27.1	+02.5	00
01	90 33.0	+02.5	91 32.2	+02.4	92 31.3	+02.5	93 30.5	+02.4	94 29.6	+02.5	01
02	105 35.5	+02.5	106 34.6	+02.5	107 33.8	+02.4	108 32.9	+02.5	109 32.1	+02.4	02
03	120 38.0	+02.4	121 37.1	+02.5	122 36.2	+02.5	123 35.4	+02.4	124 34.5	+02.5	03
04	135 40.4	+02.5	136 39.6	+02.4	137 38.7	+02.5	138 37.8	+02.5	139 37.0	+02.5	04
05	150 42.9	+02.5	151 42.0	+02.5	152 41.2	+02.4	153 40.3	+02.5	154 39.5	+02.4	05
06	165 45.4	+02.4	166 44.5	+02.5	167 43.6	+02.5	168 42.8	+02.4	169 41.9	+02.5	06
07	180 47.8	+02.5	181 47.0	+02.4	182 46.1	+02.5	183 45.2	+02.5	184 44.4	+02.4	07
08	195 50.3	+02.5	196 49.4	+02.5	197 48.6	+02.4	198 47.7	+02.5	199 46.8	+02.5	08
09	210 52.8	+02.4	211 51.9	+02.5	212 51.0	+02.5	213 50.2	+02.4	214 49.3	+02.5	09
10	225 55.2	+02.5	226 54.4	+02.4	227 53.5	+02.5	228 52.6	+02.5	229 51.8	+02.4	10
11	240 57.7	+02.4	241 56.8	+02.5	242 56.0	+02.4	243 55.1	+02.5	244 54.2	+02.5	11
12	256 00.1	+02.5	256 59.3	+02.4	257 58.4	+02.5	258 57.6	+02.4	259 56.7	+02.5	12
13	271 02.6	+02.5	272 01.7	+02.5	273 00.9	+02.5	274 00.0	+02.5	274 59.2	+02.4	13
14	286 05.1	+02.4	287 04.2	+02.5	288 03.4	+02.4	289 02.5	+02.5	290 01.6	+02.5	14
15	301 07.5	+02.5	302 06.7	+02.4	303 05.8	+02.5	304 05.0	+02.4	305 04.1	+02.5	15
16	316 10.0	+02.5	317 09.1	+02.5	318 08.3	+02.4	319 07.4	+02.5	320 06.6	+02.4	16
17	331 12.5	+02.4	332 11.6	+02.5	333 10.7	+02.5	334 09.9	+02.4	335 09.0	+02.5	17
18	346 14.9	+02.5	347 14.1	+02.4	348 13.2	+02.5	349 12.3	+02.5	350 11.5	+02.5	18
19	1 17.4	+02.5	2 16.5	+02.5	3 15.7	+02.4	4 14.8	+02.5	5 14.0	+02.4	19
20	16 19.9	+02.4	17 19.0	+02.5	18 18.1	+02.5	19 17.3	+02.4	20 16.4	+02.5	20
21	31 22.3	+02.5	32 21.5	+02.4	33 20.6	+02.5	34 19.7	+02.5	35 18.9	+02.4	21
22	46 24.8	+02.5	47 23.9	+02.5	48 23.1	+02.4	49 22.2	+02.5	50 21.3	+02.5	22
23	61 27.3	+02.4	62 26.4	+02.5	63 25.5	+02.5	64 24.7	+02.4	65 23.8	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.7	N 29 13.6	Gienah	175 44.6	S 17 40.3
Ankaa	353 08.0	S 42 10.6	Acrux	173 01.4	S 63 13.5
Schedir	349 31.9	N 56 40.4	Gacrux	171 53.0	S 57 14.4
Diphda	348 48.2	S 17 51.4	Alioth	166 14.2	N 55 49.6
Achernar	335 20.5	S 57 07.1	Spica	158 23.5	S 11 17.0
Hamal	327 52.0	N 23 34.7	Alkaid	152 53.0	N 49 11.5
Polaris	314 03.8	N 89 22.1	Hadar	148 37.8	S 60 29.0
Acamar	315 12.1	S 40 12.6	Menkent	147 58.7	S 36 28.8
Menkar	314 06.8	N 04 11.1	Arcturus	145 48.6	N 19 04.2
Mirfak	308 29.1	N 49 56.9	Rigel Kentaurus	139 39.4	S 60 56.0
Aldebaran	290 40.4	N 16 33.6	Zubenelgenubi	136 57.3	S 16 08.3
Capella	280 22.8	N 46 01.5	Kocab	137 20.8	N 74 03.2
Rigel	281 04.4	S 08 10.4	Alphecca	126 04.9	N 26 38.1
Bellatrix	278 23.5	N 06 22.3	Antares	112 17.5	S 26 29.0
Elnath	278 02.7	N 28 37.7	Atria	107 13.0	S 69 04.2
Alnilam	275 38.3	S 01 11.1	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 52.8	N 07 24.7	Shaula	96 12.0	S 37 07.2
Canopus	263 52.3	S 52 42.3	Rasalhague	95 59.8	N 12 32.7
Sirius	258 26.5	S 16 44.3	Etamin	90 43.1	N 51 29.2
Adhara	255 06.2	S 29 00.1	Kaus Australis	83 34.1	S 34 22.4
Castor	245 57.9	N 31 50.1	Vega	80 34.3	N 38 48.3
Procyon	244 51.3	N 05 10.3	Nunki	75 49.2	S 26 16.1
Pollux	243 17.8	N 27 58.1	Albireo	67 05.1	N 28 00.7
Avior	234 14.7	S 59 34.9	Altair	62 01.3	N 08 55.8
Suhail	222 46.8	S 43 31.4	Peacock	53 07.6	S 56 39.7
Miaplacidus	221 37.9	S 69 48.6	Deneb	49 26.7	N 45 22.1
Alphard	217 48.5	S 08 45.6	Enif	33 39.8	N 09 59.1
Regulus	207 35.2	N 11 51.0	Alnair	27 34.2	S 46 50.9
Dubhe	193 42.0	N 61 37.1	Formalhaut	15 15.7	S 29 29.8
Denebola	182 25.8	N 14 26.3	Markab	13 30.8	N 15 20.1

UT	day 346 of 365 <i>December 12</i>		day 347 of 365 <i>December 13</i>		day 348 of 365 <i>December 14</i>		day 349 of 365 <i>December 15</i>		day 350 of 365 <i>December 16</i>		UT
	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	
00	80 26.3	+02.4	81 25.4	+02.5	82 24.6	+02.4	83 23.7	+02.5	84 22.8	+02.5	00
01	95 28.7	+02.5	96 27.9	+02.4	97 27.0	+02.5	98 26.2	+02.4	99 25.3	+02.5	01
02	110 31.2	+02.5	111 30.3	+02.5	112 29.5	+02.4	113 28.6	+02.5	114 27.8	+02.4	02
03	125 33.7	+02.4	126 32.8	+02.5	127 31.9	+02.5	128 31.1	+02.5	129 30.2	+02.5	03
04	140 36.1	+02.5	141 35.3	+02.4	142 34.4	+02.5	143 33.6	+02.4	144 32.7	+02.5	04
05	155 38.6	+02.5	156 37.7	+02.5	157 36.9	+02.4	158 36.0	+02.5	159 35.2	+02.4	05
06	170 41.1	+02.4	171 40.2	+02.5	172 39.3	+02.5	173 38.5	+02.4	174 37.6	+02.5	06
07	185 43.5	+02.5	186 42.7	+02.4	187 41.8	+02.5	188 40.9	+02.5	189 40.1	+02.5	07
08	200 46.0	+02.5	201 45.1	+02.5	202 44.3	+02.4	203 43.4	+02.5	204 42.6	+02.4	08
09	215 48.5	+02.4	216 47.6	+02.5	217 46.7	+02.5	218 45.9	+02.4	219 45.0	+02.5	09
10	230 50.9	+02.5	231 50.1	+02.4	232 49.2	+02.5	233 48.3	+02.5	234 47.5	+02.4	10
11	245 53.4	+02.4	246 52.5	+02.5	247 51.7	+02.4	248 50.8	+02.5	249 49.9	+02.5	11
12	260 55.8	+02.5	261 55.0	+02.4	262 54.1	+02.5	263 53.3	+02.4	264 52.4	+02.5	12
13	275 58.3	+02.5	276 57.4	+02.5	277 56.6	+02.5	278 55.7	+02.5	279 54.9	+02.4	13
14	291 00.8	+02.5	291 59.9	+02.5	292 59.1	+02.4	293 58.2	+02.5	294 57.3	+02.5	14
15	306 03.2	+02.5	307 02.4	+02.4	308 01.5	+02.5	309 00.7	+02.4	309 59.8	+02.5	15
16	321 05.7	+02.5	322 04.8	+02.5	323 04.0	+02.4	324 03.1	+02.5	325 02.3	+02.4	16
17	336 08.2	+02.4	337 07.3	+02.5	338 06.4	+02.5	339 05.6	+02.5	340 04.7	+02.5	17
18	351 10.6	+02.5	352 09.8	+02.4	353 08.9	+02.5	354 08.1	+02.4	355 07.2	+02.5	18
19	6 13.1	+02.5	7 12.2	+02.5	8 11.4	+02.4	9 10.5	+02.5	10 09.7	+02.4	19
20	21 15.6	+02.4	22 14.7	+02.5	23 13.8	+02.5	24 13.0	+02.4	25 12.1	+02.5	20
21	36 18.0	+02.5	37 17.2	+02.4	38 16.3	+02.5	39 15.4	+02.5	40 14.6	+02.5	21
22	51 20.5	+02.5	52 19.6	+02.5	53 18.8	+02.4	54 17.9	+02.5	55 17.1	+02.4	22
23	66 23.0	+02.4	67 22.1	+02.5	68 21.2	+02.5	69 20.4	+02.4	70 19.5	+02.5	23

	SHA	Dec		SHA	Dec
	°	'		°	'
Alpheratz	357 35.7	N 29 13.6	Gienah	175 44.6	S 17 40.3
Ankaa	353 08.0	S 42 10.7	Acrux	173 01.3	S 63 13.5
Schedir	349 31.9	N 56 40.4	Gacrux	171 52.9	S 57 14.4
Diphda	348 48.2	S 17 51.4	Alioth	166 14.1	N 55 49.6
Achernar	335 20.6	S 57 07.1	Spica	158 23.4	S 11 17.0
Hamal	327 52.1	N 23 34.7	Alkaid	152 53.0	N 49 11.5
Polaris	314 04.5	N 89 22.1	Hadar	148 37.8	S 60 29.0
Acamar	315 12.1	S 40 12.7	Menkent	147 58.7	S 36 28.8
Menkar	314 06.8	N 04 11.1	Arcturus	145 48.6	N 19 04.2
Mirfak	308 29.1	N 49 56.9	Rigel Kentaurus	139 39.3	S 60 56.0
Aldebaran	290 40.3	N 16 33.6	Zubenelgenubi	136 57.3	S 16 08.3
Capella	280 22.8	N 46 01.5	Kocab	137 20.7	N 74 03.2
Rigel	281 04.4	S 08 10.4	Alphecca	126 04.9	N 26 38.0
Bellatrix	278 23.5	N 06 22.3	Antares	112 17.4	S 26 29.0
Elnath	278 02.6	N 28 37.7	Atria	107 13.0	S 69 04.1
Alnilam	275 38.3	S 01 11.2	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 52.7	N 07 24.7	Shaula	96 12.0	S 37 07.2
Canopus	263 52.3	S 52 42.4	Rasalhague	95 59.8	N 12 32.6
Sirius	258 26.5	S 16 44.4	Etamin	90 43.1	N 51 29.1
Adhara	255 06.2	S 29 00.1	Kaus Australis	83 34.1	S 34 22.4
Castor	245 57.8	N 31 50.1	Vega	80 34.4	N 38 48.3
Procyon	244 51.3	N 05 10.2	Nunki	75 49.2	S 26 16.0
Pollux	243 17.8	N 27 58.1	Albireo	67 05.1	N 28 00.6
Avior	234 14.6	S 59 34.9	Altair	62 01.3	N 08 55.8
Suhail	222 46.7	S 43 31.5	Peacock	53 07.6	S 56 39.7
Miaplacidus	221 37.8	S 69 48.6	Deneb	49 26.7	N 45 22.1
Alphard	217 48.5	S 08 45.6	Enif	33 39.8	N 09 59.1
Regulus	207 35.2	N 11 51.0	Alnair	27 34.3	S 46 50.9
Dubhe	193 41.9	N 61 37.1	Formalhaut	15 15.7	S 29 29.9
Denebola	182 25.7	N 14 26.3	Markab	13 30.9	N 15 20.1

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2023 - First Point of Aries / Selected Stars

	day 356 of 365 December 22		day 357 of 365 December 23		day 358 of 365 December 24		day 359 of 365 December 25		day 360 of 365 December 26		
UT	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	GHA	ddGHA	UT
00	90 17.7	+02.4	91 16.8	+02.5	92 16.0	+02.4	93 15.1	+02.5	94 14.2	+02.5	00
01	105 20.1	+02.5	106 19.3	+02.4	107 18.4	+02.5	108 17.6	+02.4	109 16.7	+02.5	01
02	120 22.6	+02.5	121 21.7	+02.5	122 20.9	+02.4	123 20.0	+02.5	124 19.2	+02.4	02
03	135 25.1	+02.4	136 24.2	+02.5	137 23.3	+02.5	138 22.5	+02.4	139 21.6	+02.5	03
04	150 27.5	+02.5	151 26.7	+02.4	152 25.8	+02.5	153 24.9	+02.5	154 24.1	+02.5	04
05	165 30.0	+02.5	166 29.1	+02.5	167 28.3	+02.4	168 27.4	+02.5	169 26.6	+02.4	05
06	180 32.5	+02.4	181 31.6	+02.5	182 30.7	+02.5	183 29.9	+02.4	184 29.0	+02.5	06
07	195 34.9	+02.5	196 34.1	+02.4	197 33.2	+02.5	198 32.3	+02.5	199 31.5	+02.4	07
08	210 37.4	+02.4	211 36.5	+02.5	212 35.7	+02.4	213 34.8	+02.5	214 33.9	+02.5	08
09	225 39.8	+02.5	226 39.0	+02.5	227 38.1	+02.5	228 37.3	+02.4	229 36.4	+02.5	09
10	240 42.3	+02.5	241 41.5	+02.4	242 40.6	+02.5	243 39.7	+02.5	244 38.9	+02.4	10
11	255 44.8	+02.4	256 43.9	+02.5	257 43.1	+02.4	258 42.2	+02.5	259 41.3	+02.5	11
12	270 47.2	+02.5	271 46.4	+02.4	272 45.5	+02.5	273 44.7	+02.4	274 43.8	+02.5	12
13	285 49.7	+02.5	286 48.8	+02.5	287 48.0	+02.5	288 47.1	+02.5	289 46.3	+02.4	13
14	300 52.2	+02.4	301 51.3	+02.5	302 50.5	+02.4	303 49.6	+02.5	304 48.7	+02.5	14
15	315 54.6	+02.5	316 53.8	+02.4	317 52.9	+02.5	318 52.1	+02.4	319 51.2	+02.5	15
16	330 57.1	+02.5	331 56.2	+02.5	332 55.4	+02.4	333 54.5	+02.5	334 53.7	+02.4	16
17	345 59.6	+02.4	346 58.7	+02.5	347 57.8	+02.5	348 57.0	+02.4	349 56.1	+02.5	17
18	1 02.0	+02.5	2 01.2	+02.4	3 00.3	+02.5	3 59.4	+02.5	4 58.6	+02.5	18
19	16 04.5	+02.5	17 03.6	+02.5	18 02.8	+02.4	19 01.9	+02.5	20 01.1	+02.4	19
20	31 07.0	+02.4	32 06.1	+02.5	33 05.2	+02.5	34 04.4	+02.4	35 03.5	+02.5	20
21	46 09.4	+02.5	47 08.6	+02.4	48 07.7	+02.5	49 06.8	+02.5	50 06.0	+02.4	21
22	61 11.9	+02.4	62 11.0	+02.5	63 10.2	+02.4	64 09.3	+02.5	65 08.4	+02.5	22
23	76 14.3	+02.5	77 13.5	+02.5	78 12.6	+02.5	79 11.8	+02.4	80 10.9	+02.5	23

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	SHA	Dec		SHA	Dec
Alpheratz	357 35.7	N 29 13.6	Gienah	175 44.5	S 17 40.4
Ankaa	353 08.1	S 42 10.7	Acrux	173 01.2	S 63 13.6
Schedir	349 32.0	N 56 40.4	Gacrux	171 52.8	S 57 14.4
Diphda	348 48.2	S 17 51.5	Alioth	166 14.0	N 55 49.5
Achernar	335 20.6	S 57 07.2	Spica	158 23.4	S 11 17.1
Hamal	327 52.1	N 23 34.7	Alkaid	152 52.9	N 49 11.4
Polaris	314 06.8	N 89 22.1	Hadar	148 37.6	S 60 29.0
Acamar	315 12.1	S 40 12.7	Menkent	147 58.6	S 36 28.8
Menkar	314 06.8	N 04 11.1	Arcturus	145 48.5	N 19 04.2
Mirfak	308 29.1	N 49 56.9	Rigel Kentaurus	139 39.2	S 60 56.0
Aldebaran	290 40.3	N 16 33.6	Zubenelgenubi	136 57.2	S 16 08.4
Capella	280 22.7	N 46 01.5	Kocab	137 20.6	N 74 03.1
Rigel	281 04.4	S 08 10.4	Alphecca	126 04.8	N 26 38.0
Bellatrix	278 23.5	N 06 22.3	Antares	112 17.4	S 26 29.0
Elnath	278 02.6	N 28 37.8	Atria	107 12.9	S 69 04.1
Alnilam	275 38.3	S 01 11.2	Sabik	102 04.2	S 15 45.3
Betelgeuze	270 52.7	N 07 24.7	Shaula	96 12.0	S 37 07.2
Canopus	263 52.2	S 52 42.4	Rasalhague	95 59.8	N 12 32.6
Sirius	258 26.5	S 16 44.4	Etamin	90 43.1	N 51 29.1
Adhara	255 06.2	S 29 00.2	Kaus Australis	83 34.1	S 34 22.4
Castor	245 57.7	N 31 50.1	Vega	80 34.3	N 38 48.2
Procyon	244 51.2	N 05 10.2	Nunki	75 49.2	S 26 16.0
Pollux	243 17.7	N 27 58.1	Albireo	67 05.1	N 28 00.6
Avior	234 14.5	S 59 34.9	Altair	62 01.3	N 08 55.7
Suhail	222 46.6	S 43 31.5	Peacock	53 07.6	S 56 39.6
Miaplacidus	221 37.6	S 69 48.7	Deneb	49 26.8	N 45 22.0
Alphard	217 48.4	S 08 45.7	Enif	33 39.9	N 09 59.1
Regulus	207 35.1	N 11 51.0	Alnair	27 34.3	S 46 50.9
Dubhe	193 41.8	N 61 37.1	Formalhaut	15 15.7	S 29 29.9
Denebola	182 25.7	N 14 26.3	Markab	13 30.9	N 15 20.1

2023 - 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	13.4	+02.4	96	12.5	+02.5	97	11.7	+02.4	98	10.8	+02.5	00
01	110	15.8	+02.5	111	15.0	+02.4	112	14.1	+02.5	113	13.3	+02.4	01
02	125	18.3	+02.5	126	17.4	+02.5	127	16.6	+02.4	128	15.7	+02.5	02
03	140	20.8	+02.4	141	19.9	+02.5	142	19.0	+02.5	143	18.2	+02.5	03
04	155	23.2	+02.5	156	22.4	+02.4	157	21.5	+02.5	158	20.7	+02.4	04
05	170	25.7	+02.5	171	24.8	+02.5	172	24.0	+02.4	173	23.1	+02.5	05
06	185	28.2	+02.4	186	27.3	+02.5	187	26.4	+02.5	188	25.6	+02.4	06
07	200	30.6	+02.5	201	29.8	+02.4	202	28.9	+02.5	203	28.0	+02.5	07
08	215	33.1	+02.5	216	32.2	+02.5	217	31.4	+02.4	218	30.5	+02.5	08
09	230	35.6	+02.4	231	34.7	+02.5	232	33.8	+02.5	233	33.0	+02.4	09
10	245	38.0	+02.5	246	37.2	+02.4	247	36.3	+02.5	248	35.4	+02.5	10
11	260	40.5	+02.4	261	39.6	+02.5	262	38.8	+02.4	263	37.9	+02.5	11
12	275	42.9	+02.5	276	42.1	+02.5	277	41.2	+02.5	278	40.4	+02.4	12
13	290	45.4	+02.5	291	44.6	+02.4	292	43.7	+02.5	293	42.8	+02.5	13
14	305	47.9	+02.4	306	47.0	+02.5	307	46.2	+02.4	308	45.3	+02.5	14
15	320	50.3	+02.5	321	49.5	+02.4	322	48.6	+02.5	323	47.8	+02.4	15
16	335	52.8	+02.5	336	51.9	+02.5	337	51.1	+02.4	338	50.2	+02.5	16
17	350	55.3	+02.4	351	54.4	+02.5	352	53.5	+02.5	353	52.7	+02.5	17
18	5	57.7	+02.5	6	56.9	+02.4	7	56.0	+02.5	8	55.2	+02.4	18
19	21	00.2	+02.5	21	59.3	+02.5	22	58.5	+02.4	23	57.6	+02.5	19
20	36	02.7	+02.4	37	01.8	+02.5	38	00.9	+02.5	39	00.1	+02.4	20
21	51	05.1	+02.5	52	04.3	+02.4	53	03.4	+02.5	54	02.5	+02.5	21
22	66	07.6	+02.5	67	06.7	+02.5	68	05.9	+02.4	69	05.0	+02.5	22
23	81	10.1	+02.4	82	09.2	+02.5	83	08.3	+02.5	84	07.5	+02.4	23

	SHA	Dec		SHA	Dec
	° ,	° ,		° ,	° ,
Alpheratz	357 35.7	N 29 13.6	Gienah	175 44.4	S 17 40.4
Ankaa	353 08.1	S 42 10.7	Acrux	173 01.1	S 63 13.6
Schedir	349 32.0	N 56 40.4	Gacrux	171 52.7	S 57 14.4
Diphda	348 48.2	S 17 51.5	Alioth	166 13.9	N 55 49.5
Achernar	335 20.7	S 57 07.2	Spica	158 23.3	S 11 17.1
Hamal	327 52.1	N 23 34.7	Alkaid	152 52.8	N 49 11.4
Polaris	314 07.9	N 89 22.2	Hadar	148 37.5	S 60 29.0
Acamar	315 12.1	S 40 12.7	Menkent	147 58.5	S 36 28.8
Menkar	314 06.8	N 04 11.1	Arcturus	145 48.5	N 19 04.1
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Capella	280 22.7	N 46 01.5	Kocab	137 20.5	N 74 03.1
Rigel	281 04.4	S 08 10.4	Alphecca	126 04.8	N 26 38.0
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Alnilam	275 38.3	S 01 11.2	Sabik	102 04.1	S 15 45.3
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Canopus	263 52.2	S 52 42.5	Rasalhague	95 59.7	N 12 32.6
Sirius	258 26.4	S 16 44.4	Etamin	90 43.1	N 51 29.1
Adhara	255 06.1	S 29 00.2	Kaus Australis	83 34.1	S 34 22.4
Castor	245 57.7	N 31 50.1	Vega	80 34.3	N 38 48.2
Procyon	244 51.2	N 05 10.2	Nunki	75 49.2	S 26 16.0
Pollux	243 17.6	N 27 58.1	Albireo	67 05.1	N 28 00.6
Avior	234 14.5	S 59 35.0	Altair	62 01.3	N 08 55.7
Suhail	222 46.6	S 43 31.6	Peacock	53 07.6	S 56 39.6
Miaplacidus	221 37.6	S 69 48.7	Deneb	49 26.8	N 45 22.0
Alphard	217 48.4	S 08 45.7	Enif	33 39.9	N 09 59.1
Regulus	207 35.1	N 11 51.0	Alnair	27 34.3	S 46 50.9
Dubhe	193 41.7	N 61 37.0	Formalhaut	15 15.7	S 29 29.9
Denebola	182 25.6	N 14 26.3	Markab	13 30.9	N 15 20.1

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Polaris (Pole Star) Tables, 2023
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 32.1	0 27.8	0 24.4	0 22.1	0 20.9	0 20.9	0 22.0	0 24.3	0 27.6	0 31.8	0 36.9	0 42.6
1	0 31.6	0 27.4	0 24.2	0 22.0	0 20.9	0 21.0	0 22.2	0 24.5	0 27.9	0 32.3	0 37.4	0 43.3
2	0 31.2	0 27.1	0 23.9	0 21.8	0 20.8	0 21.0	0 22.4	0 24.8	0 28.3	0 32.8	0 38.0	0 43.9
3	0 30.7	0 26.7	0 23.6	0 21.6	0 20.8	0 21.1	0 22.6	0 25.1	0 28.7	0 33.3	0 38.6	0 44.5
4	0 30.3	0 26.3	0 23.4	0 21.5	0 20.8	0 21.2	0 22.8	0 25.5	0 29.2	0 33.8	0 39.1	0 45.1
5	0 29.9	0 26.0	0 23.1	0 21.4	0 20.8	0 21.3	0 23.0	0 25.8	0 29.6	0 34.3	0 39.7	0 45.7
6	0 29.4	0 25.7	0 22.9	0 21.3	0 20.8	0 21.4	0 23.2	0 26.1	0 30.0	0 34.8	0 40.3	0 46.3
7	0 29.0	0 25.3	0 22.7	0 21.2	0 20.8	0 21.6	0 23.5	0 26.5	0 30.4	0 35.3	0 40.9	0 47.0
8	0 28.6	0 25.0	0 22.5	0 21.1	0 20.8	0 21.7	0 23.7	0 26.8	0 30.9	0 35.8	0 41.5	0 47.6
9	0 28.2	0 24.7	0 22.3	0 21.0	0 20.8	0 21.9	0 24.0	0 27.2	0 31.3	0 36.4	0 42.0	0 48.3
Lat.	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1	a1
10	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.8
20	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9
30	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.9	0.9
40	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.9	1.0
45	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.9	1.0
50	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0
55	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1
60	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1
62	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.1
64	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.9	1.0	1.1	1.2
66	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.9	1.0	1.1	1.2
68	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.8	0.9	1.0	1.2	1.3
70	0.5	0.4	0.4	0.4	0.4	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	0.8	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	0.0	359.9	359.8	359.7	359.6	359.5	359.4	359.4
20	0.4	0.3	0.2	0.1	0.0	359.9	359.8	359.7	359.6	359.5	359.4	359.4
30	0.5	0.4	0.3	0.1	0.0	359.9	359.8	359.6	359.5	359.4	359.4	359.3
40	0.5	0.4	0.3	0.2	0.0	359.9	359.7	359.6	359.5	359.4	359.3	359.2
45	0.6	0.5	0.3	0.2	0.0	359.8	359.7	359.5	359.4	359.3	359.2	359.2
50	0.6	0.5	0.3	0.2	0.0	359.8	359.7	359.5	359.4	359.2	359.1	359.1
55	0.7	0.6	0.4	0.2	0.0	359.8	359.6	359.4	359.3	359.1	359.0	359.0
60	0.8	0.7	0.5	0.2	0.0	359.8	359.6	359.4	359.2	359.0	358.9	358.8
62	0.9	0.7	0.5	0.2	0.0	359.8	359.5	359.3	359.1	359.0	358.8	358.7
64	1.0	0.7	0.5	0.3	0.0	359.8	359.5	359.3	359.1	358.9	358.7	358.6
66	1.0	0.8	0.6	0.3	0.0	359.7	359.5	359.2	359.0	358.8	358.6	358.5
68	1.1	0.9	0.6	0.3	0.0	359.7	359.4	359.1	358.9	358.7	358.5	358.4
70	1.2	1.0	0.7	0.3	0.0	359.7	359.4	359.1	358.8	358.6	358.4	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, 2023

For determining Latitude from Sextant Altitude and for Azimuth

Polaris (Pole Star) Tables, 2023

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 48.9	0 55.5	1 02.1	1 08.7	1 15.0	1 20.8	1 25.9	1 30.2	1 33.6	1 35.9	1 37.1	1 37.1
1	0 49.5	0 56.1	1 02.8	1 09.3	1 15.6	1 21.3	1 26.4	1 30.6	1 33.8	1 36.0	1 37.1	1 37.0
2	0 50.2	0 56.8	1 03.4	1 10.0	1 16.2	1 21.8	1 26.8	1 30.9	1 34.1	1 36.2	1 37.2	1 37.0
3	0 50.8	0 57.4	1 04.1	1 10.6	1 16.8	1 22.4	1 27.3	1 31.3	1 34.4	1 36.4	1 37.2	1 36.9
4	0 51.5	0 58.1	1 04.8	1 11.2	1 17.3	1 22.9	1 27.7	1 31.7	1 34.6	1 36.5	1 37.2	1 36.8
5	0 52.1	0 58.8	1 05.4	1 11.9	1 17.9	1 23.4	1 28.1	1 32.0	1 34.9	1 36.6	1 37.2	1 36.7
6	0 52.8	0 59.5	1 06.1	1 12.5	1 18.5	1 23.9	1 28.6	1 32.3	1 35.1	1 36.7	1 37.2	1 36.6
7	0 53.5	1 00.1	1 06.7	1 13.1	1 19.1	1 24.4	1 29.0	1 32.7	1 35.3	1 36.8	1 37.2	1 36.4
8	0 54.1	1 00.8	1 07.4	1 13.7	1 19.6	1 24.9	1 29.4	1 33.0	1 35.5	1 36.9	1 37.2	1 36.3
9	0 54.8	1 01.5	1 08.0	1 14.4	1 20.2	1 25.4	1 29.8	1 33.3	1 35.7	1 37.0	1 37.2	1 36.1

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 36.0	1 33.7	1 30.4	1 26.2	1 21.1	1 15.4	1 09.1	1 02.5	0 55.9	0 49.3	0 43.0	0 37.2
1	1 35.8	1 33.5	1 30.1	1 25.7	1 20.6	1 14.7	1 08.5	1 01.9	0 55.2	0 48.7	0 42.4	0 36.7
2	1 35.6	1 33.2	1 29.7	1 25.2	1 20.0	1 14.1	1 07.8	1 01.2	0 54.6	0 48.0	0 41.8	0 36.2
3	1 35.4	1 32.9	1 29.3	1 24.7	1 19.4	1 13.5	1 07.2	1 00.6	0 53.9	0 47.4	0 41.2	0 35.6
4	1 35.2	1 32.5	1 28.8	1 24.2	1 18.9	1 12.9	1 06.5	0 59.9	0 53.2	0 46.8	0 40.7	0 35.1
5	1 35.0	1 32.2	1 28.4	1 23.7	1 18.3	1 12.3	1 05.9	0 59.2	0 52.6	0 46.1	0 40.1	0 34.6
6	1 34.8	1 31.9	1 28.0	1 23.2	1 17.7	1 11.7	1 05.2	0 58.5	0 51.9	0 45.5	0 39.5	0 34.1
7	1 34.5	1 31.5	1 27.6	1 22.7	1 17.1	1 11.0	1 04.5	0 57.9	0 51.3	0 44.9	0 38.9	0 33.6
8	1 34.3	1 31.2	1 27.1	1 22.2	1 16.5	1 10.4	1 03.9	0 57.2	0 50.6	0 44.3	0 38.4	0 33.1
9	1 34.0	1 30.8	1 26.7	1 21.6	1 16.0	1 09.7	1 03.2	0 56.5	0 50.0	0 43.6	0 37.8	0 32.6

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	0.6	0.5
20	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5
30	0.9	1.0	1.0	0.9	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5
40	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5
45	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.5
50	1.1	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.7	0.6	0.6	0.5
55	1.1	1.1	1.1	1.1	1.0	1.0	0.9	0.8	0.7	0.6	0.6	0.5
60	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.5
62	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.5
64	1.2	1.3	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.5
66	1.3	1.3	1.3	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.5
68	1.3	1.4	1.3	1.3	1.2	1.1	1.0	0.8	0.7	0.6	0.6	0.5
70	1.4	1.4	1.4	1.3	1.2	1.1	1.0	0.9	0.7	0.6	0.6	0.5

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	0.3	0.3	0.3	0.3	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	0.4	0.4	0.4	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	0.4	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	0.5	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	0.5	0.6	0.6	0.6	0.6	0.6	0.5
64	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5
66	0.5	0.5	0.5	0.5	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	0.6	0.7	0.7	0.7	0.7	0.6	0.5
70	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6	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	0.5	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	0.4	0.4	0.3	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	0.7	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	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.4

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	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6
Mar	0.2	0.2	0.2	0.2	0.2	0.2	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	0.1	0.2	0.2	0.3	0.4
May	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	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	0.7	0.6	0.6	0.6	0.5
Nov	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7
Dec	0.5	0.6	0.6	0.6	0.7	0.7	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	359.4	359.4	359.4	359.4	359.4	359.5	359.6	359.7	359.8	359.9	360.0	0.1
20	359.3	359.3	359.3	359.4	359.4	359.5	359.6	359.7	359.8	359.9	360.0	0.1
30	359.3	359.3	359.3	359.3	359.4	359.5	359.6	359.7	359.8	359.9	360.0	0.1
40	359.2	359.2	359.2	359.2	359.3	359.4	359.5	359.6	359.7	359.9	360.0	0.1
45	359.1	359.1	359.1	359.2	359.2	359.3	359.4	359.5	359.7	359.8	360.0	0.1
50	359.0	359.0	359.0	359.1	359.1	359.2	359.4	359.5	359.7	359.8	360.0	0.2
55	358.9	358.9	358.9	359.0	359.0	359.2	359.3	359.4	359.6	359.8	360.0	0.2
60	358.7	358.7	358.7	358.8	358.9	359.0	359.2	359.4	359.6	359.8	360.0	0.2</