# The Nautical Almanac 2026
# For the Sun

TheNauticalAlmanac.com

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## Acknowledgment and Credits

### Dr. Enno Rodegerdts

The Nautical Almanac *Daily Pages* and Sun Almanacs found on our site were originally created from PyAlmanac written by the great Norwegian sailor Enno Rodegerdts. PyAlmanac used PyEphem to generate the almanacs and LaTex provided the final formatting. Visit Dr. Rodegerdts site and learn of his voyages at https://sv-inua.net/

*Without his work TheNauticalAlmanac.com wouldn't exist*

### Andrew Bauer

Mr. Bauer has taken the initial work of Dr. Rodegerdts and improved it to the excellence found in the following Daily Pages. Attending foremost to the accuracy of data and then formatting Mr. Bauer created SkyAlmanac which draws from Brandon Rhodes work *Ephem* and *Skyfield* and provides a clear arrangement of figures required for celestial navigation. He has also created the separate *Declination of the Sun and Planets* and *Local Mean Time of Meridian Passage* you'll find near the end of this almanac.

His work was determined, tireless and efficient. In our mutual writing across many lines of longitude he has always been pleasant, friendly and most affable.

As he has said, *"The art of celestial navigation should be promoted, not discouraged, even in the modern day".*

*To both of these men we all owe a large debt of gratitude and thanks*

## Disclaimer and Warning

Prior to use verify the accuracy of The Nautical Almanac or data you download from our site. They SHOULD NOT and MUST NOT be relied upon for celestial navigation work of any sorts or any purpose whatsoever. You use them at your own risk or peril.

## Errors & Corrections

Contact us if you find any significant errors and describe the correction that should be made.

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*freely ye received, freely give*

# Useful Information

## Time Signals- by telephone

**WWV** 303-499-7111 **WWVH** 808-335-4363

**CHU** **English:** 613-745-1576 (CHU provides only Eastern time announcements)
**French:** 613-745-9426

## Time signals- by Radio

| | |
|---|---|
| **WWV** (Fort Collins, Colorado) | 2.5, 5, 10, 15, 20 MHz (male voice) |
| **WWVH** ( Kauai, Hawaii) | 2.5, 5, 10, 15 MHz (female voice) |
| **CHU** (Ottawa, Canada) | 3330, 7850, and 14,670 kHz (USB) |

## Bowditch *2024- The American Practical Navigator*

https://TheNauticalAlmanac.com/2024_Bowditch-_American_Practical_Navigator.html

Organized in a convenient and useful manner. Download the Chapters, Parts or Tables you want or the entire work.

## Sight Reduction Tables

**Pub. No. 249** Download individual Latitudes or Volumes

*Epoch 2025* https://thenauticalalmanac.com/Pub_No_249_Epoch_2025.html

*Epoch 2020* https://www.thenauticalalmanac.com/Pub_No_249_Epoch_2020.html

**Pub. No. 229** Download individual Volumes covering a range of Latitudes

https://TheNauticalAlmanac.com/Pub_No_229.html

## Sight Reduction Forms & Methods

https://www.TheNauticalAlmanac.com/Methods.html

# Celestial Navigation

*useful Formulas*

**About Calculators**

The Casio *fx-300ES Plus* is an inexpensive calculator at about 11 USD. It features *natural input* so you enter a formula just as it would be written on paper. Entering degrees, minutes and seconds is very simple. The Casio *fx-300ES Plus* has 9 memory locations and you can review many of the previous entries you make using a special key on the calculator.

**Determine Hc using a calculator**

**The formula**

Hc = asin[sin(**Declination**)*sin(**Latitude**) + cos(**Latitude**)*cos(**Declination**)*cos(**LHA**)]

**As it would be entered into the Casio calculator** Note- $Sin^{-1}$ is the arc-sin key

$Sin^{-1}$(Sin(**Ap Latitude**) x Sin(**Declination**) + Cos(**Ap Latitude)** x Cos(**Declination**) x Cos(**LHA**)

***Declination*** is the declination of the Celestial body you're observing. When the heavenly body's declination is *Contrary name* to your Ap Latitude enter a negative sign before it.

***Latitude*** "The AP latitude is chosen to be the nearest whole degree in latitude to the DR latitude." *from Bowditch 2019 Vol. 1 Chapter 19 section 1902 p. 310* Consider this to be where you are, think you are or where you would like to determine Hc for. Typically, you'll be using an *Assumed position Latitude* or *Ap Latitude* as it's called. *See Bowditch 2019 Vol. 1 Chapter 19 section 1902 p. 310*

**About LHA determination**

***Assumed Position longitude*** (***a* λ**) "The AP longitude is that nearest the DR longitude resulting in a whole degree of LHA for the observed body." *From Bowditch 2019 Vol. 1 Chapter 19 section 1902 p. 310*

**In Western Longitudes** *see Bowditch 2019 Vol. 1 Chapter 19 section 1905 p. 313*

***LHA*** is the Local Hour Angle derived by subtracting your Assumed Longitude (***a* λ**) whole degree value from the whole degree ***GHA*** (Greenwich Hour Angle) value. If GHA is less than the ***a* λ** than the add 360° to it then subtract the ***a* λ.** *Ignore the arc minutes* of GHA and ***a* λ.**

**Example** when GHA is less than ***a* λ** **GHA**= 43° 25.2' ***a* λ**= W 55° 15.1'

360° + 43° = 403° Then....403° – 55° = 348° (LHA)

**In Eastern Longitudes** *see Bowditch 2019 Vol. 1 Chapter 19 section 1905 p. 313*

***LHA**, in **Eastern Longitudes,*** is determined by adding the entire GHA figure (degrees and minutes) to the whole degree figure of the Assumed longitude (***a* λ**) *plus* the amount of arc minutes required to get to the next degree of the GHA. If the resulting LHA figure is greater than 360° then subtract 360° from the figure to obtain the LHA.

**Example**- **GHA**= 58° 01.2' ***a* λ**= E 9° 10.1' (ignore the 10.1')

**Step 1**- *get GHA degree difference;* 59° - 58° 01.2' = 0° 58.8'

**Step 2**- add *a* λ degrees to *difference* found in step 1; 9° + 0°58.8' = 9° 58.8' *a* λ

**Step 3**- *get LHA;* 58° 01.2 + 9° 58.8' = 68° (LHA)

**Why would you want to determine Hc using a calculator?**

It's faster than looking up in Pub. No. 249 and Pub. No. 229, highly accurate and you don't need a lot of printed out pages of Latitudes from Pub. No. 249 and Pub. No. 229. Pub. No. 249 Vol. 2 & 3 don't cover any declination greater than 29 degrees so you'd have to use Pub. No. 229 which is extremely large.

# Celestial Navigation

## Determine Z

Z = acos[(sin(**Declination**) – sin(**Ap Latitude)** x sin(**Hc**)) ÷ (cos(**Ap Latitude**) x cos(**Hc**))]

**As it would be entered into the Casio calculator...** Note- $Cos^{-1}$ is the arc-cosine key

$Cos^{-1}$((Sin(**Declination**) – Sin(**AP Latitude**) x Sin(**Hc**)) ÷ (Cos(**AP Latitude**) x Cos(**Hc**)

If the heavenly body's declination is *Contrary name* to the Ap Latitude enter a negative sign before it.

**To obtain Zn see the rules below for Northern and Southern latitudes**.

## Determine Z independent of Hc

$$Z = \tan^{-1}\left(\frac{\sin \mathrm{LHA}}{(\cos \mathrm{L} \tan \mathrm{d}) - (\sin \mathrm{L} \cos \mathrm{LHA})}\right)$$

*"L"* is latitude and "*d"* is declination. When the heavenly body's declination is *Contrary name* to your Ap Latitude enter a negative sign before it.

**As it would be entered into the Casio calculator...** Note- $\tan^{-1}$ is the arc-tangent key

Z = $\tan^{-1}$ ((sin (**LHA**) ÷ (cos(**AP latitude**) x tan(**declination**) – (sin(**AP latitude**) x cos(**LHA**))

The sign convention used in the calculation of this azimuth formula is as follows:
from *Bowditch Chapter 22 CALCULATIONS AND CONVERSIONS, page 331*

1) If latitude and declination are of contrary name, declination is treated as a negative quantity;
2) If the local hour angle is greater than 180°, it is treated as a negative quantity. If the azimuth angle as calculated is negative, add 180° to obtain the desired value.

**To obtain Zn apply the following rules**

| **In Northern Latitudes** | **In Southern Latitudes** |
|---|---|
| LHA greater than 180°....Zn=Z | LHA greater than 180°....Zn= 180° – Z |
| LHA less than 180°.....Zn=360° – Z | LHA less than 180°.....Zn= 180° + Z |

**Determine Refraction** 0.96 ÷ Tan of (Ha)
Gives good results down to about 8° from the horizon but not less.

**Refraction** (good overall formula from 90° to below 8° from the horizon)

$$R_0 = \cot\left(H_a + \frac{7.31}{H_a + 4.4}\right)$$

**As it would be entered into the Casio calculator...**

1 ÷ Tan((Ha + (7.31 ÷ (Ha + 4.4))

Both refraction formulas use the standard pressure and temperature of;

1010 mb 10° C
29.83 in 53° F

**Determine Dip using feet** 0.97 x (Square Root of *He* (Height of Eye) in feet)

**Determine Dip using meters** 1.76 x (Square Root of *He* (Height of eye) in meters )

**Rules to Calculate Latitude using the Sun- *Noon-Sight***

**1-** Latitude and declination *Same name* but latitude is greater than declination:

Latitude= (90° – Ho) + declination

**2-** Latitude and declination *Same name* but declination greater than latitude:

Latitude= Declination – (90° – Ho)

**3-** Latitude and declination *Contrary name*:

Latitude= (90° – Ho) – Declination

**To get AP longitude (needed for plotting the LOP)**

**In Western longitudes**

Combine the DR Longitude figure with only the minutes (of arc) of the total GHA figure. The Ap λ figure will be used when plotting the LOP on the UPS.

**In Eastern longitudes**

In Eastern longitudes the Ap λ is determined as follows;

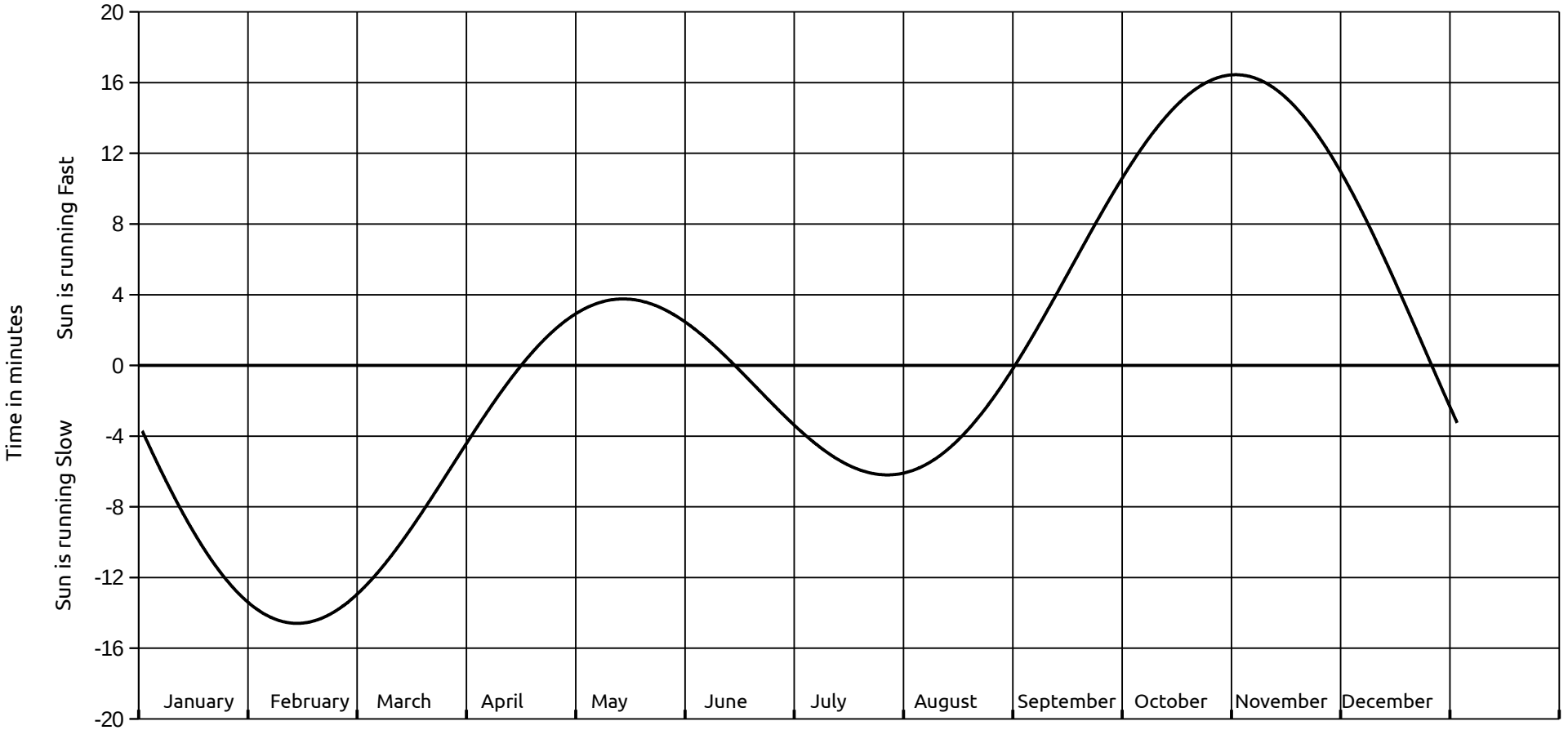
DR longitude + (0°60' *minus* GHA minutes of arc)

**Example- E 075° + (0°60' – 0° 02')= 75° 58' Ap longitude**

*fair winds...clear skies and following seas*
**TheNauticalAlmanac.com**

Formula Sheet added to NA.odt

# Equation of Time
*for the Sun*




Equation_of_Time_Curve.odt

DUT1 = UT1-UTC = +0.0880 sec  ΔT = TT-UT1 = +69.0960 sec

## 2026 January 01 to Jan. 15 UT

DUT1 = UT1-UTC = +0.0876 sec  ΔT = TT-UT1 = +69.0964 sec

## 2026 January 16 to Jan. 30 UT

| 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec | 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec | 28 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°10.1 | S23°01.0 | 0 | 178°49.2 | S22°44.4 | 0 | 178°29.3 | S22°23.8 | 0 | 178°10.4 | S21°59.2 | 0 | 177°52.8 | S21°30.7 | 0 | 177°36.5 | S20°58.5 | 0 | 177°21.7 | S20°22.6 | 0 | 177°08.6 | S19°43.3 | 0 | 176°57.2 | S19°00.7 | 0 | 176°47.7 | S18°15.0 |
| 1 | 194°09.8 | 00.8 | 1 | 193°49.0 | 44.2 | 1 | 193°29.0 | 23.5 | 1 | 193°10.2 | 58.8 | 1 | 192°52.5 | 30.3 | 1 | 192°36.3 | 58.0 | 1 | 192°21.5 | 22.1 | 1 | 192°08.4 | 42.8 | 1 | 191°57.1 | 19°00.1 | 1 | 191°47.6 | 14.4 |
| 2 | 209°09.5 | 00.6 | 2 | 208°48.7 | 43.9 | 2 | 208°28.8 | 23.2 | 2 | 208°09.9 | 58.5 | 2 | 207°52.3 | 29.9 | 2 | 207°36.1 | 57.5 | 2 | 207°21.3 | 21.6 | 2 | 207°08.3 | 42.2 | 2 | 206°56.9 | 18°59.5 | 2 | 206°47.4 | 13.7 |
| 3 | 224°09.2 | ·· 00.4 | 3 | 223°48.4 | ·· 43.7 | 3 | 223°28.5 | ·· 22.9 | 3 | 223°09.7 | ·· 58.1 | 3 | 222°52.1 | ·· 29.4 | 3 | 222°35.9 | ·· 57.1 | 3 | 222°21.1 | ·· 21.1 | 3 | 222°08.1 | ·· 41.6 | 3 | 221°56.8 | ·· 58.9 | 3 | 221°47.3 | ·· 13.0 |
| 4 | 239°08.9 | 00.2 | 4 | 238°48.1 | 43.4 | 4 | 238°28.2 | 22.5 | 4 | 238°09.4 | 57.7 | 4 | 237°51.8 | 29.0 | 4 | 237°35.6 | 56.6 | 4 | 237°21.0 | 20.5 | 4 | 237°07.9 | 41.1 | 4 | 236°56.7 | 58.3 | 4 | 236°47.2 | 12.4 |
| 5 | 254°08.6 | 23°00.0 | 5 | 253°47.8 | 43.1 | 5 | 253°28.0 | 22.2 | 5 | 253°09.2 | 57.3 | 5 | 252°51.6 | 28.6 | 5 | 252°35.4 | 56.1 | 5 | 252°20.8 | 20.0 | 5 | 252°07.8 | 40.5 | 5 | 251°56.5 | 57.7 | 5 | 251°47.1 | 11.7 |
| 6 | 269°08.3 | S22°59.8 | 6 | 268°47.5 | S22°42.9 | 6 | 268°27.7 | S22°21.9 | 6 | 268°08.9 | S21°57.0 | 6 | 267°51.4 | S21°28.2 | 6 | 267°35.2 | S20°55.6 | 6 | 267°20.6 | S20°19.5 | 6 | 267°07.6 | S19°39.9 | 6 | 266°56.4 | S18°57.0 | 6 | 266°47.0 | S18°11.1 |
| 7 | 284°08.0 | 59.6 | 7 | 283°47.3 | 42.6 | 7 | 283°27.4 | 21.6 | 7 | 283°08.7 | 56.6 | 7 | 282°51.1 | 27.7 | 7 | 282°35.0 | 55.2 | 7 | 282°20.4 | 19.0 | 7 | 282°07.4 | 39.3 | 7 | 281°56.2 | 56.4 | 7 | 281°46.9 | 10.4 |
| 8 | 299°07.7 | 59.4 | 8 | 298°47.0 | 42.4 | 8 | 298°27.2 | 21.3 | 8 | 298°08.4 | 56.2 | 8 | 297°50.9 | 27.3 | 8 | 297°34.8 | 54.7 | 8 | 297°20.2 | 18.4 | 8 | 297°07.3 | 38.8 | 8 | 296°56.1 | 55.8 | 8 | 296°46.7 | 09.7 |
| 9 | 314°07.4 | ·· 59.2 | 9 | 313°46.7 | ·· 42.1 | 9 | 313°26.9 | ·· 20.9 | 9 | 313°08.2 | ·· 55.8 | 9 | 312°50.7 | ·· 26.9 | 9 | 312°34.6 | ·· 54.2 | 9 | 312°20.0 | ·· 17.9 | 9 | 312°07.1 | ·· 38.2 | 9 | 311°55.9 | ·· 55.2 | 9 | 311°46.6 | ·· 09.1 |
| 10 | 329°07.1 | 59.0 | 10 | 328°46.4 | 41.8 | 10 | 328°26.6 | 20.6 | 10 | 328°07.9 | 55.5 | 10 | 327°50.4 | 26.5 | 10 | 327°34.4 | 53.7 | 10 | 327°19.8 | 17.4 | 10 | 327°06.9 | 37.6 | 10 | 326°55.8 | 54.6 | 10 | 326°46.5 | 08.4 |
| 11 | 344°06.8 | 58.8 | 11 | 343°46.1 | 41.6 | 11 | 343°26.4 | 20.3 | 11 | 343°07.7 | 55.1 | 11 | 342°50.2 | 26.0 | 11 | 342°34.1 | 53.2 | 11 | 342°19.6 | 16.9 | 11 | 342°06.8 | 37.0 | 11 | 341°55.7 | 53.9 | 11 | 341°46.4 | 07.8 |
| 12 | 359°06.5 | S22°58.6 | 12 | 358°45.8 | S22°41.3 | 12 | 358°26.1 | S22°20.0 | 12 | 358°07.4 | S21°54.7 | 12 | 357°50.0 | S21°25.6 | 12 | 357°33.9 | S20°52.8 | 12 | 357°19.4 | S20°16.3 | 12 | 357°06.6 | S19°36.5 | 12 | 356°55.5 | S18°53.3 | 12 | 356°46.3 | S18°07.1 |
| 13 | 14°06.2 | 58.3 | 13 | 13°45.6 | 41.0 | 13 | 13°25.8 | 19.7 | 13 | 13°07.2 | 54.3 | 13 | 12°49.7 | 25.2 | 13 | 12°33.7 | 52.3 | 13 | 12°19.2 | 15.8 | 13 | 12°06.4 | 35.9 | 13 | 11°55.4 | 52.7 | 13 | 11°46.2 | 06.4 |
| 14 | 29°05.9 | 58.1 | 14 | 28°45.3 | 40.7 | 14 | 28°25.6 | 19.3 | 14 | 28°06.9 | 54.0 | 14 | 27°49.5 | 24.7 | 14 | 27°33.5 | 51.8 | 14 | 27°19.0 | 15.3 | 14 | 27°06.3 | 35.3 | 14 | 26°55.2 | 52.1 | 14 | 26°46.0 | 05.8 |
| 15 | 44°05.6 | ·· 57.9 | 15 | 43°45.0 | ·· 40.5 | 15 | 43°25.3 | ·· 19.0 | 15 | 43°06.7 | ·· 53.6 | 15 | 42°49.3 | ·· 24.3 | 15 | 42°33.3 | ·· 51.3 | 15 | 42°18.9 | ·· 14.7 | 15 | 42°06.1 | ·· 34.7 | 15 | 41°55.1 | ·· 51.5 | 15 | 41°45.9 | ·· 05.1 |
| 16 | 59°05.4 | 57.7 | 16 | 58°44.7 | 40.2 | 16 | 58°25.0 | 18.7 | 16 | 58°06.4 | 53.2 | 16 | 57°49.0 | 23.9 | 16 | 57°33.1 | 50.8 | 16 | 57°18.7 | 14.2 | 16 | 57°05.9 | 34.1 | 16 | 56°55.0 | 50.8 | 16 | 56°45.8 | 04.4 |
| 17 | 74°05.1 | 57.5 | 17 | 73°44.4 | 39.9 | 17 | 73°24.8 | 18.4 | 17 | 73°06.2 | 52.8 | 17 | 72°48.8 | 23.4 | 17 | 72°32.9 | 50.3 | 17 | 72°18.5 | 13.7 | 17 | 72°05.8 | 33.6 | 17 | 71°54.8 | 50.2 | 17 | 71°45.7 | 03.8 |
| 18 | 89°04.8 | S22°57.3 | 18 | 88°44.2 | S22°39.7 | 18 | 88°24.5 | S22°18.0 | 18 | 88°05.9 | S21°52.4 | 18 | 87°48.6 | S21°23.0 | 18 | 87°32.7 | S20°49.9 | 18 | 87°18.3 | S20°13.1 | 18 | 87°05.6 | S19°33.0 | 18 | 86°54.7 | S18°49.6 | 18 | 86°45.6 | S18°03.1 |
| 19 | 104°04.5 | 57.1 | 19 | 103°43.9 | 39.4 | 19 | 103°24.2 | 17.7 | 19 | 103°05.7 | 52.1 | 19 | 102°48.3 | 22.6 | 19 | 102°32.4 | 49.4 | 19 | 102°18.1 | 12.6 | 19 | 102°05.4 | 32.4 | 19 | 101°54.5 | 49.0 | 19 | 101°45.5 | 02.4 |
| 20 | 119°04.2 | 56.8 | 20 | 118°43.6 | 39.1 | 20 | 118°24.0 | 17.4 | 20 | 118°05.4 | 51.7 | 20 | 117°48.1 | 22.1 | 20 | 117°32.2 | 48.9 | 20 | 117°17.9 | 12.1 | 20 | 117°05.3 | 31.8 | 20 | 116°54.4 | 48.3 | 20 | 116°45.4 | 01.8 |
| 21 | 134°03.9 | ·· 56.6 | 21 | 133°43.3 | ·· 38.8 | 21 | 133°23.7 | ·· 17.0 | 21 | 133°05.2 | ·· 51.3 | 21 | 132°47.9 | ·· 21.7 | 21 | 132°32.0 | ·· 48.4 | 21 | 132°17.7 | ·· 11.5 | 21 | 132°05.1 | ·· 31.2 | 21 | 131°54.3 | ·· 47.7 | 21 | 131°45.3 | ·· 01.1 |
| 22 | 149°03.6 | 56.4 | 22 | 148°43.0 | 38.6 | 22 | 148°23.4 | 16.7 | 22 | 148°04.9 | 50.9 | 22 | 147°47.7 | 21.3 | 22 | 147°31.8 | 47.9 | 22 | 147°17.5 | 11.0 | 22 | 147°04.9 | 30.7 | 22 | 146°54.1 | 47.1 | 22 | 146°45.1 | 18°00.4 |
| 23 | 164°03.3 | 56.2 | 23 | 163°42.8 | 38.3 | 23 | 163°23.2 | 16.4 | 23 | 163°04.7 | 50.5 | 23 | 162°47.4 | 20.8 | 23 | 162°31.6 | 47.4 | 23 | 162°17.4 | 10.5 | 23 | 162°04.8 | 30.1 | 23 | 161°54.0 | 46.5 | 23 | 161°45.0 | 17°59.8 |
| | SD=16.3′ | d=0.2′ | | SD=16.3′ | d=0.3′ | | SD=16.3′ | d=0.3′ | | SD=16.3′ | d=0.4′ | | SD=16.3′ | d=0.4′ | | SD=16.3′ | d=0.5′ | | SD=16.2′ | d=0.5′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.7′ |

| 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec | 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec | 29 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°03.0 | S22°56.0 | 0 | 178°42.5 | S22°38.0 | 0 | 178°22.9 | S22°16.0 | 0 | 178°04.4 | S21°50.1 | 0 | 177°47.2 | S21°20.4 | 0 | 177°31.4 | S20°46.9 | 0 | 177°17.2 | S20°09.9 | 0 | 177°04.6 | S19°29.5 | 0 | 176°53.8 | S18°45.8 | 0 | 176°44.9 | S17°59.1 |
| 1 | 194°02.7 | 55.7 | 1 | 193°42.2 | 37.7 | 1 | 193°22.6 | 15.7 | 1 | 193°04.2 | 49.7 | 1 | 192°47.0 | 19.9 | 1 | 192°31.2 | 46.4 | 1 | 192°17.0 | 09.4 | 1 | 192°04.5 | 28.9 | 1 | 191°53.7 | 45.2 | 1 | 191°44.8 | 58.4 |
| 2 | 209°02.4 | 55.5 | 2 | 208°41.9 | 37.5 | 2 | 208°22.4 | 15.4 | 2 | 208°03.9 | 49.4 | 2 | 207°46.7 | 19.5 | 2 | 207°31.0 | 45.9 | 2 | 207°16.8 | 08.8 | 2 | 207°04.3 | 28.3 | 2 | 206°53.6 | 44.6 | 2 | 206°44.7 | 57.8 |
| 3 | 224°02.2 | ·· 55.3 | 3 | 223°41.6 | ·· 37.2 | 3 | 223°22.1 | ·· 15.0 | 3 | 223°03.7 | ·· 49.0 | 3 | 222°46.5 | ·· 19.1 | 3 | 222°30.8 | ·· 45.5 | 3 | 222°16.6 | ·· 08.3 | 3 | 222°04.1 | ·· 27.7 | 3 | 221°53.4 | ·· 43.9 | 3 | 221°44.6 | ·· 57.1 |
| 4 | 239°01.9 | 55.1 | 4 | 238°41.4 | 36.9 | 4 | 238°21.8 | 14.7 | 4 | 238°03.4 | 48.6 | 4 | 237°46.3 | 18.6 | 4 | 237°30.6 | 45.0 | 4 | 237°16.4 | 07.8 | 4 | 237°04.0 | 27.1 | 4 | 236°53.3 | 43.3 | 4 | 236°44.5 | 56.4 |
| 5 | 254°01.6 | 54.8 | 5 | 253°41.1 | 36.6 | 5 | 253°21.6 | 14.4 | 5 | 253°03.2 | 48.2 | 5 | 252°46.1 | 18.2 | 5 | 252°30.4 | 44.5 | 5 | 252°16.2 | 07.2 | 5 | 252°03.8 | 26.6 | 5 | 251°53.2 | 42.7 | 5 | 251°44.4 | 55.7 |
| 6 | 269°01.3 | S22°54.6 | 6 | 268°40.8 | S22°36.3 | 6 | 268°21.3 | S22°14.0 | 6 | 268°02.9 | S21°47.8 | 6 | 267°45.8 | S21°17.7 | 6 | 267°30.2 | S20°44.0 | 6 | 267°16.1 | S20°06.7 | 6 | 267°03.6 | S19°26.0 | 6 | 266°53.0 | S18°42.0 | 6 | 266°44.3 | S17°55.1 |
| 7 | 284°01.0 | 54.4 | 7 | 283°40.5 | 36.1 | 7 | 283°21.0 | 13.7 | 7 | 283°02.7 | 47.4 | 7 | 282°45.6 | 17.3 | 7 | 282°29.9 | 43.5 | 7 | 282°15.9 | 06.1 | 7 | 282°03.5 | 25.4 | 7 | 281°52.9 | 41.4 | 7 | 281°44.2 | 54.4 |
| 8 | 299°00.7 | 54.2 | 8 | 298°40.3 | 35.8 | 8 | 298°20.8 | 13.4 | 8 | 298°02.4 | 47.0 | 8 | 297°45.4 | 16.8 | 8 | 297°29.7 | 43.0 | 8 | 297°15.7 | 05.6 | 8 | 297°03.3 | 24.8 | 8 | 296°52.8 | 40.8 | 8 | 296°44.0 | 53.7 |
| 9 | 314°00.4 | ·· 53.9 | 9 | 313°40.0 | ·· 35.5 | 9 | 313°20.5 | ·· 13.0 | 9 | 313°02.2 | ·· 46.6 | 9 | 312°45.1 | ·· 16.4 | 9 | 312°29.5 | ·· 42.5 | 9 | 312°15.5 | ·· 05.0 | 9 | 312°03.2 | ·· 24.2 | 9 | 311°52.6 | ·· 40.2 | 9 | 311°43.9 | ·· 53.1 |
| 10 | 329°00.1 | 53.7 | 10 | 328°39.7 | 35.2 | 10 | 328°20.3 | 12.7 | 10 | 328°01.9 | 46.2 | 10 | 327°44.9 | 16.0 | 10 | 327°29.3 | 42.0 | 10 | 327°15.3 | 04.5 | 10 | 327°03.0 | 23.6 | 10 | 326°52.5 | 39.5 | 10 | 326°43.8 | 52.4 |
| 11 | 343°59.8 | 53.5 | 11 | 343°39.4 | 34.9 | 11 | 343°20.0 | 12.3 | 11 | 343°01.7 | 45.8 | 11 | 342°44.7 | 15.5 | 11 | 342°29.1 | 41.5 | 11 | 342°15.1 | 04.0 | 11 | 342°02.9 | 23.0 | 11 | 341°52.4 | 38.9 | 11 | 341°43.7 | 51.7 |
| 12 | 358°59.5 | S22°53.3 | 12 | 358°39.2 | S22°34.6 | 12 | 358°19.7 | S22°12.0 | 12 | 358°01.4 | S21°45.4 | 12 | 357°44.5 | S21°15.1 | 12 | 357°28.9 | S20°41.0 | 12 | 357°15.0 | S20°03.4 | 12 | 357°02.7 | S19°22.4 | 12 | 356°52.2 | S18°38.2 | 12 | 356°43.6 | S17°51.0 |
| 13 | 13°59.3 | 53.0 | 13 | 13°38.9 | 34.3 | 13 | 13°19.5 | 11.7 | 13 | 13°01.2 | 45.0 | 13 | 12°44.2 | 14.6 | 13 | 12°28.7 | 40.5 | 13 | 12°14.8 | 02.9 | 13 | 12°02.5 | 21.8 | 13 | 11°52.1 | 37.6 | 13 | 11°43.5 | 50.4 |
| 14 | 28°59.0 | 52.8 | 14 | 28°38.6 | 34.1 | 14 | 28°19.2 | 11.3 | 14 | 28°01.0 | 44.6 | 14 | 27°44.0 | 14.2 | 14 | 27°28.5 | 40.0 | 14 | 27°14.6 | 02.3 | 14 | 27°02.4 | 21.2 | 14 | 26°52.0 | 37.0 | 14 | 26°43.4 | 49.7 |
| 15 | 43°58.7 | ·· 52.6 | 15 | 43°38.3 | ·· 33.8 | 15 | 43°18.9 | ·· 11.0 | 15 | 43°00.7 | ·· 44.2 | 15 | 42°43.8 | ·· 13.7 | 15 | 42°28.3 | ·· 39.5 | 15 | 42°14.4 | ·· 01.8 | 15 | 42°02.2 | ·· 20.7 | 15 | 41°51.8 | ·· 36.3 | 15 | 41°43.3 | ·· 49.0 |
| 16 | 58°58.4 | 52.3 | 16 | 58°38.0 | 33.5 | 16 | 58°18.7 | 10.6 | 16 | 58°00.5 | 43.8 | 16 | 57°43.6 | 13.3 | 16 | 57°28.1 | 39.0 | 16 | 57°14.2 | 01.2 | 16 | 57°02.1 | 20.1 | 16 | 56°51.7 | 35.7 | 16 | 56°43.2 | 48.3 |
| 17 | 73°58.1 | 52.1 | 17 | 73°37.8 | 33.2 | 17 | 73°18.4 | 10.3 | 17 | 73°00.2 | 43.4 | 17 | 72°43.3 | 12.8 | 17 | 72°27.9 | 38.5 | 17 | 72°14.0 | 00.7 | 17 | 72°01.9 | 19.5 | 17 | 71°51.6 | 35.1 | 17 | 71°43.1 | 47.6 |
| 18 | 88°57.8 | S22°51.9 | 18 | 88°37.5 | S22°32.9 | 18 | 88°18.2 | S22°09.9 | 18 | 88°00.0 | S21°43.0 | 18 | 87°43.1 | S21°12.4 | 18 | 87°27.7 | S20°38.0 | 18 | 87°13.9 | S20°00.1 | 18 | 87°01.8 | S19°18.9 | 18 | 86°51.4 | S18°34.4 | 18 | 86°43.0 | S17°47.0 |
| 19 | 103°57.5 | 51.6 | 19 | 103°37.2 | 32.6 | 19 | 103°17.9 | 09.6 | 19 | 102°59.7 | 42.6 | 19 | 102°42.9 | 11.9 | 19 | 102°27.5 | 37.5 | 19 | 102°13.7 | 19°59.6 | 19 | 102°01.6 | 18.3 | 19 | 101°51.3 | 33.8 | 19 | 101°42.9 | 46.3 |
| 20 | 118°57.2 | 51.4 | 20 | 118°36.9 | 32.3 | 20 | 118°17.6 | 09.2 | 20 | 117°59.5 | 42.2 | 20 | 117°42.7 | 11.5 | 20 | 117°27.3 | 37.0 | 20 | 117°13.5 | 59.0 | 20 | 117°01.4 | 17.7 | 20 | 116°51.2 | 33.1 | 20 | 116°42.8 | 45.6 |
| 21 | 133°56.9 | ·· 51.1 | 21 | 133°36.7 | ·· 32.0 | 21 | 133°17.4 | ·· 08.9 | 21 | 132°59.3 | ·· 41.8 | 21 | 132°42.4 | ·· 11.0 | 21 | 132°27.1 | ·· 36.5 | 21 | 132°13.3 | ·· 58.5 | 21 | 132°01.3 | ·· 17.1 | 21 | 131°51.0 | ·· 32.5 | 21 | 131°42.7 | ·· 44.9 |
| 22 | 148°56.7 | 50.9 | 22 | 148°36.4 | 31.7 | 22 | 148°17.1 | 08.5 | 22 | 147°59.0 | 41.4 | 22 | 147°42.2 | 10.5 | 22 | 147°26.9 | 36.0 | 22 | 147°13.1 | 57.9 | 22 | 147°01.1 | 16.5 | 22 | 146°50.9 | 31.9 | 22 | 146°42.6 | 44.2 |
| 23 | 163°56.4 | 50.7 | 23 | 163°36.1 | 31.4 | 23 | 163°16.9 | 08.2 | 23 | 162°58.8 | 41.0 | 23 | 162°42.0 | 10.1 | 23 | 162°26.7 | 35.5 | 23 | 162°13.0 | 57.4 | 23 | 162°01.0 | 15.9 | 23 | 161°50.8 | 31.2 | 23 | 161°42.5 | 43.6 |
| | SD=16.3′ | d=0.2′ | | SD=16.3′ | d=0.3′ | | SD=16.3′ | d=0.3′ | | SD=16.3′ | d=0.4′ | | SD=16.3′ | d=0.4′ | | SD=16.3′ | d=0.5′ | | SD=16.2′ | d=0.5′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.7′ |

| 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec | 30 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 178°56.1 | S22°50.4 | 0 | 178°35.8 | S22°31.1 | 0 | 178°16.6 | S22°07.8 | 0 | 177°58.5 | S21°40.6 | 0 | 177°41.8 | S21°09.6 | 0 | 177°26.5 | S20°35.0 | 0 | 177°12.8 | S19°56.8 | 0 | 177°00.8 | S19°15.3 | 0 | 176°50.7 | S18°30.6 | 0 | 176°42.4 | S17°42.9 |
| 1 | 193°55.8 | 50.2 | 1 | 193°35.6 | 30.8 | 1 | 193°16.3 | 07.5 | 1 | 192°58.3 | 40.2 | 1 | 192°41.5 | 09.2 | 1 | 192°26.3 | 34.5 | 1 | 192°12.6 | 56.3 | 1 | 192°00.7 | 14.7 | 1 | 191°50.5 | 29.9 | 1 | 191°42.3 | 42.2 |
| 2 | 208°55.5 | 49.9 | 2 | 208°35.3 | 30.5 | 2 | 208°16.1 | 07.1 | 2 | 207°58.0 | 39.8 | 2 | 207°41.3 | 08.7 | 2 | 207°26.1 | 34.0 | 2 | 207°12.4 | 55.7 | 2 | 207°00.5 | 14.1 | 2 | 206°50.4 | 29.3 | 2 | 206°42.2 | 41.5 |
| 3 | 223°55.2 | ·· 49.7 | 3 | 223°35.0 | ·· 30.2 | 3 | 223°15.8 | ·· 06.8 | 3 | 222°57.8 | ·· 39.4 | 3 | 222°41.1 | ·· 08.3 | 3 | 222°25.9 | ·· 33.5 | 3 | 222°12.3 | ·· 55.1 | 3 | 222°00.4 | ·· 13.5 | 3 | 221°50.3 | ·· 28.7 | 3 | 221°42.1 | ·· 40.8 |
| 4 | 238°54.9 | 49.5 | 4 | 238°34.7 | 29.9 | 4 | 238°15.6 | 06.4 | 4 | 237°57.6 | 39.0 | 4 | 237°40.9 | 07.8 | 4 | 237°25.7 | 32.9 | 4 | 237°12.1 | 54.6 | 4 | 237°00.2 | 12.9 | 4 | 236°50.2 | 28.0 | 4 | 236°42.0 | 40.1 |
| 5 | 253°54.6 | 49.2 | 5 | 253°34.5 | 29.6 | 5 | 253°15.3 | 06.1 | 5 | 252°57.3 | 38.6 | 5 | 252°40.7 | 07.3 | 5 | 252°25.5 | 32.4 | 5 | 252°11.9 | 54.0 | 5 | 252°00.1 | 12.3 | 5 | 251°50.0 | 27.4 | 5 | 251°41.9 | 39.5 |
| 6 | 268°54.4 | S22°49.0 | 6 | 268°34.2 | S22°29.3 | 6 | 268°15.0 | S22°05.7 | 6 | 267°57.1 | S21°38.2 | 6 | 267°40.4 | S21°06.9 | 6 | 267°25.3 | S20°31.9 | 6 | 267°11.7 | S19°53.5 | 6 | 266°59.9 | S19°11.7 | 6 | 266°49.9 | S18°26.7 | 6 | 266°41.8 | S17°38.8 |
| 7 | 283°54.1 | 48.7 | 7 | 283°33.9 | 29.0 | 7 | 283°14.8 | 05.4 | 7 | 282°56.8 | 37.8 | 7 | 282°40.2 | 06.4 | 7 | 282°25.1 | 31.4 | 7 | 282°11.5 | 52.9 | 7 | 281°59.8 | 11.1 | 7 | 281°49.8 | 26.1 | 7 | 281°41.7 | 38.1 |
| 8 | 298°53.8 | 48.5 | 8 | 298°33.7 | 28.7 | 8 | 298°14.5 | 05.0 | 8 | 297°56.6 | 37.4 | 8 | 297°40.0 | 06.0 | 8 | 297°24.9 | 30.9 | 8 | 297°11.4 | 52.4 | 8 | 296°59.6 | 10.5 | 8 | 296°49.6 | 25.4 | 8 | 296°41.6 | 37.4 |
| 9 | 313°53.5 | ·· 48.2 | 9 | 313°33.4 | ·· 28.4 | 9 | 313°14.3 | ·· 04.6 | 9 | 312°56.4 | ·· 37.0 | 9 | 312°39.8 | ·· 05.5 | 9 | 312°24.7 | ·· 30.4 | 9 | 312°11.2 | ·· 51.8 | 9 | 311°59.5 | ·· 09.9 | 9 | 311°49.5 | ·· 24.8 | 9 | 311°41.5 | ·· 36.7 |
| 10 | 328°53.2 | 48.0 | 10 | 328°33.1 | 28.1 | 10 | 328°14.0 | 04.3 | 10 | 327°56.1 | 36.6 | 10 | 327°39.6 | 05.0 | 10 | 327°24.5 | 29.9 | 10 | 327°11.0 | 51.2 | 10 | 326°59.3 | 09.3 | 10 | 326°49.4 | 24.1 | 10 | 326°41.4 | 36.0 |
| 11 | 343°52.9 | 47.7 | 11 | 343°32.8 | 27.8 | 11 | 343°13.8 | 03.9 | 11 | 342°55.9 | 36.1 | 11 | 342°39.3 | 04.6 | 11 | 342°24.3 | 29.4 | 11 | 342°10.8 | 50.7 | 11 | 341°59.2 | 08.7 | 11 | 341°49.3 | 23.5 | 11 | 341°41.3 | 35.3 |
| 12 | 358°52.6 | S22°47.5 | 12 | 358°32.6 | S22°27.5 | 12 | 358°13.5 | S22°03.6 | 12 | 357°55.6 | S21°35.7 | 12 | 357°39.1 | S21°04.1 | 12 | 357°24.1 | S20°28.9 | 12 | 357°10.7 | S19°50.1 | 12 | 356°59.0 | S19°08.1 | 12 | 356°49.1 | S18°22.8 | 12 | 356°41.2 | S17°34.6 |
| 13 | 13°52.4 | 47.2 | 13 | 13°32.3 | 27.2 | 13 | 13°13.2 | 03.2 | 13 | 12°55.4 | 35.3 | 13 | 12°38.9 | 03.6 | 13 | 12°23.9 | 28.3 | 13 | 12°10.5 | 49.6 | 13 | 11°58.9 | 07.4 | 13 | 11°49.0 | 22.2 | 13 | 11°41.1 | 34.0 |
| 14 | 28°52.1 | 47.0 | 14 | 28°32.0 | 26.9 | 14 | 28°13.0 | 02.9 | 14 | 27°55.2 | 34.9 | 14 | 27°38.7 | 03.2 | 14 | 27°23.7 | 27.8 | 14 | 27°10.3 | 49.0 | 14 | 26°58.7 | 06.8 | 14 | 26°48.9 | 21.5 | 14 | 26°41.0 | 33.3 |
| 15 | 43°51.8 | ·· 46.7 | 15 | 43°31.7 | ·· 26.6 | 15 | 43°12.7 | ·· 02.5 | 15 | 42°54.9 | ·· 34.5 | 15 | 42°38.5 | ·· 02.7 | 15 | 42°23.5 | ·· 27.3 | 15 | 42°10.1 | ·· 48.4 | 15 | 41°58.6 | ·· 06.2 | 15 | 41°48.8 | ·· 20.9 | 15 | 41°40.9 | ·· 32.6 |
| 16 | 58°51.5 | 46.5 | 16 | 58°31.5 | 26.3 | 16 | 58°12.5 | 02.1 | 16 | 57°54.7 | 34.1 | 16 | 57°38.2 | 02.2 | 16 | 57°23.3 | 26.8 | 16 | 57°10.0 | 47.9 | 16 | 56°58.4 | 05.6 | 16 | 56°48.7 | 20.2 | 16 | 56°40.8 | 31.9 |
| 17 | 73°51.2 | 46.2 | 17 | 73°31.2 | 26.0 | 17 | 73°12.2 | 01.8 | 17 | 72°54.4 | 33.7 | 17 | 72°38.0 | 01.8 | 17 | 72°23.1 | 26.3 | 17 | 72°09.8 | 47.3 | 17 | 71°58.3 | 05.0 | 17 | 71°48.5 | 19.6 | 17 | 71°40.7 | 31.2 |
| 18 | 88°50.9 | S22°46.0 | 18 | 88°30.9 | S22°25.7 | 18 | 88°12.0 | S22°01.4 | 18 | 87°54.2 | S21°33.2 | 18 | 87°37.8 | S21°01.3 | 18 | 87°22.9 | S20°25.8 | 18 | 87°09.6 | S19°46.7 | 18 | 86°58.1 | S19°04.4 | 18 | 86°48.4 | S18°18.9 | 18 | 86°40.6 | S17°30.5 |
| 19 | 103°50.7 | 45.7 | 19 | 103°30.7 | 25.4 | 19 | 103°11.7 | 01.0 | 19 | 102°54.0 | 32.8 | 19 | 102°37.6 | 00.8 | 19 | 102°22.7 | 25.2 | 19 | 102°09.5 | 46.2 | 19 | 101°58.0 | 03.8 | 19 | 101°48.3 | 18.3 | 19 | 101°40.5 | 29.8 |
| 20 | 118°50.4 | 45.5 | 20 | 118°30.4 | 25.1 | 20 | 118°11.5 | 00.7 | 20 | 117°53.7 | 32.4 | 20 | 117°37.4 | 21°00.4 | 20 | 117°22.5 | 24.7 | 20 | 117°09.3 | 45.6 | 20 | 116°57.8 | 03.2 | 20 | 116°48.2 | 17.6 | 20 | 116°40.4 | 29.1 |
| 21 | 133°50.1 | ·· 45.2 | 21 | 133°30.1 | ·· 24.7 | 21 | 133°11.2 | 22°00.3 | 21 | 132°53.5 | ·· 32.0 | 21 | 132°37.1 | 20°59.9 | 21 | 132°22.3 | ·· 24.2 | 21 | 132°09.1 | ·· 45.0 | 21 | 131°57.7 | ·· 02.6 | 21 | 131°48.0 | ·· 17.0 | 21 | 131°40.3 | ·· 28.4 |
| 22 | 148°49.8 | 45.0 | 22 | 148°29.9 | 24.4 | 22 | 148°10.9 | 21°59.9 | 22 | 147°53.3 | 31.6 | 22 | 147°36.9 | 59.4 | 22 | 147°22.1 | 23.7 | 22 | 147°08.9 | 44.5 | 22 | 146°57.5 | 02.0 | 22 | 146°47.9 | 16.3 | 22 | 146°40.2 | 27.7 |
| 23 | 163°49.5 | 44.7 | 23 | 163°29.6 | 24.1 | 23 | 163°10.7 | 59.6 | 23 | 162°53.0 | 31.1 | 23 | 162°36.7 | 59.0 | 23 | 162°21.9 | 23.2 | 23 | 162°08.8 | 43.9 | 23 | 161°57.4 | 01.3 | 23 | 161°47.8 | 15.7 | 23 | 161°40.1 | 27.0 |
| | SD=16.3′ | d=0.2′ | | SD=16.3′ | d=0.3′ | | SD=16.3′ | d=0.4′ | | SD=16.3′ | d=0.4′ | | SD=16.3′ | d=0.5′ | | SD=16.2′ | d=0.5′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.7′ |

DUT1 = UT1-UTC = +0.0868 sec  ΔT = TT-UT1 = +69.0972 sec

## 2026 January 31 to Feb. 14 UT

DUT1 = UT1-UTC = +0.0858 sec  ΔT = TT-UT1 = +69.0982 sec

## 2026 February 15 to Mar. 01 UT

| 31 | GHA | Dec | 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 176°40.0 | S17°26.3 | 0 | 176°34.2 | S16°34.9 | 0 | 176°30.2 | S15°40.9 | 0 | 176°27.9 | S14°44.4 | 0 | 176°27.4 | S13°45.7 |
| 1 | 191°39.9 | 25.6 | 1 | 191°34.1 | 34.2 | 1 | 191°30.1 | 40.1 | 1 | 191°27.9 | 43.6 | 1 | 191°27.4 | 44.9 |
| 2 | 206°39.8 | 24.9 | 2 | 206°34.0 | 33.4 | 2 | 206°30.1 | 39.3 | 2 | 206°27.9 | 42.8 | 2 | 206°27.4 | 44.0 |
| 3 | 221°39.7 | ·· 24.3 | 3 | 221°34.0 | ·· 32.7 | 3 | 221°30.0 | ·· 38.6 | 3 | 221°27.9 | ·· 42.0 | 3 | 221°27.4 | ·· 43.2 |
| 4 | 236°39.6 | 23.6 | 4 | 236°33.9 | 32.0 | 4 | 236°30.0 | 37.8 | 4 | 236°27.8 | 41.2 | 4 | 236°27.4 | 42.4 |
| 5 | 251°39.5 | 22.9 | 5 | 251°33.8 | 31.2 | 5 | 251°29.9 | 37.0 | 5 | 251°27.8 | 40.4 | 5 | 251°27.4 | 41.5 |
| 6 | 266°39.4 | S17°22.2 | 6 | 266°33.8 | S16°30.5 | 6 | 266°29.9 | S15°36.3 | 6 | 266°27.8 | S14°39.6 | 6 | 266°27.4 | S13°40.7 |
| 7 | 281°39.4 | 21.5 | 7 | 281°33.7 | 29.8 | 7 | 281°29.9 | 35.5 | 7 | 281°27.8 | 38.8 | 7 | 281°27.4 | 39.9 |
| 8 | 296°39.3 | 20.8 | 8 | 296°33.6 | 29.0 | 8 | 296°29.8 | 34.7 | 8 | 296°27.8 | 38.0 | 8 | 296°27.5 | 39.1 |
| 9 | 311°39.2 | ·· 20.1 | 9 | 311°33.6 | ·· 28.3 | 9 | 311°29.8 | ·· 33.9 | 9 | 311°27.8 | ·· 37.2 | 9 | 311°27.5 | ·· 38.2 |
| 10 | 326°39.1 | 19.4 | 10 | 326°33.5 | 27.6 | 10 | 326°29.7 | 33.2 | 10 | 326°27.7 | 36.4 | 10 | 326°27.5 | 37.4 |
| 11 | 341°39.0 | 18.7 | 11 | 341°33.4 | 26.8 | 11 | 341°29.7 | 32.4 | 11 | 341°27.7 | 35.6 | 11 | 341°27.5 | 36.6 |
| 12 | 356°38.9 | S17°18.0 | 12 | 356°33.4 | S16°26.1 | 12 | 356°29.7 | S15°31.6 | 12 | 356°27.7 | S14°34.8 | 12 | 356°27.5 | S13°35.7 |
| 13 | 11°38.8 | 17.3 | 13 | 11°33.3 | 25.3 | 13 | 11°29.6 | 30.9 | 13 | 11°27.7 | 34.0 | 13 | 11°27.5 | 34.9 |
| 14 | 26°38.7 | 16.6 | 14 | 26°33.3 | 24.6 | 14 | 26°29.6 | 30.1 | 14 | 26°27.7 | 33.2 | 14 | 26°27.5 | 34.0 |
| 15 | 41°38.6 | ·· 15.8 | 15 | 41°33.2 | ·· 23.9 | 15 | 41°29.6 | ·· 29.3 | 15 | 41°27.7 | ·· 32.4 | 15 | 41°27.5 | ·· 33.2 |
| 16 | 56°38.5 | 15.1 | 16 | 56°33.1 | 23.1 | 16 | 56°29.5 | 28.5 | 16 | 56°27.7 | 31.6 | 16 | 56°27.5 | 32.4 |
| 17 | 71°38.5 | 14.4 | 17 | 71°33.1 | 22.4 | 17 | 71°29.5 | 27.8 | 17 | 71°27.6 | 30.7 | 17 | 71°27.5 | 31.5 |
| 18 | 86°38.4 | S17°13.7 | 18 | 86°33.0 | S16°21.6 | 18 | 86°29.4 | S15°27.0 | 18 | 86°27.6 | S14°29.9 | 18 | 86°27.5 | S13°30.7 |
| 19 | 101°38.3 | 13.0 | 19 | 101°32.9 | 20.9 | 19 | 101°29.4 | 26.2 | 19 | 101°27.6 | 29.1 | 19 | 101°27.6 | 29.9 |
| 20 | 116°38.2 | 12.3 | 20 | 116°32.9 | 20.1 | 20 | 116°29.4 | 25.4 | 20 | 116°27.6 | 28.3 | 20 | 116°27.6 | 29.0 |
| 21 | 131°38.1 | ·· 11.6 | 21 | 131°32.8 | ·· 19.4 | 21 | 131°29.3 | ·· 24.6 | 21 | 131°27.6 | ·· 27.5 | 21 | 131°27.6 | ·· 28.2 |
| 22 | 146°38.0 | 10.9 | 22 | 146°32.8 | 18.7 | 22 | 146°29.3 | 23.9 | 22 | 146°27.6 | 26.7 | 22 | 146°27.6 | 27.3 |
| 23 | 161°37.9 | 10.2 | 23 | 161°32.7 | 17.9 | 23 | 161°29.3 | 23.1 | 23 | 161°27.6 | 25.9 | 23 | 161°27.6 | 26.5 |
| | SD=16.2′ | d=0.7′ | | SD=16.2′ | d=0.7′ | | SD=16.2′ | d=0.8′ | | SD=16.2′ | d=0.8′ | | SD=16.2′ | d=0.8′ |

| 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 176°28.6 | S12°44.9 | 0 | 176°31.3 | S11°42.3 | 0 | 176°35.7 | S10°38.0 | 0 | 176°41.5 | S09°32.3 | 0 | 176°48.7 | S08°25.2 |
| 1 | 191°28.6 | 44.1 | 1 | 191°31.4 | 41.4 | 1 | 191°35.7 | 37.1 | 1 | 191°41.6 | 31.4 | 1 | 191°48.8 | 24.3 |
| 2 | 206°28.6 | 43.2 | 2 | 206°31.4 | 40.6 | 2 | 206°35.8 | 36.2 | 2 | 206°41.7 | 30.4 | 2 | 206°48.9 | 23.4 |
| 3 | 221°28.7 | ·· 42.4 | 3 | 221°31.5 | ·· 39.7 | 3 | 221°35.9 | ·· 35.3 | 3 | 221°41.7 | ·· 29.5 | 3 | 221°49.0 | ·· 22.4 |
| 4 | 236°28.7 | 41.5 | 4 | 236°31.5 | 38.8 | 4 | 236°36.0 | 34.4 | 4 | 236°41.8 | 28.6 | 4 | 236°49.1 | 21.5 |
| 5 | 251°28.7 | 40.7 | 5 | 251°31.6 | 37.9 | 5 | 251°36.0 | 33.5 | 5 | 251°41.9 | 27.7 | 5 | 251°49.2 | 20.5 |
| 6 | 266°28.7 | S12°39.8 | 6 | 266°31.6 | S11°37.0 | 6 | 266°36.1 | S10°32.6 | 6 | 266°42.0 | S09°26.7 | 6 | 266°49.3 | S08°19.6 |
| 7 | 281°28.8 | 38.9 | 7 | 281°31.7 | 36.1 | 7 | 281°36.2 | 31.7 | 7 | 281°42.1 | 25.8 | 7 | 281°49.4 | 18.7 |
| 8 | 296°28.8 | 38.1 | 8 | 296°31.7 | 35.3 | 8 | 296°36.2 | 30.8 | 8 | 296°42.2 | 24.9 | 8 | 296°49.5 | 17.7 |
| 9 | 311°28.8 | ·· 37.2 | 9 | 311°31.8 | ·· 34.4 | 9 | 311°36.3 | ·· 29.9 | 9 | 311°42.3 | ·· 24.0 | 9 | 311°49.6 | ·· 16.8 |
| 10 | 326°28.9 | 36.4 | 10 | 326°31.8 | 33.5 | 10 | 326°36.4 | 29.0 | 10 | 326°42.4 | 23.0 | 10 | 326°49.8 | 15.8 |
| 11 | 341°28.9 | 35.5 | 11 | 341°31.9 | 32.6 | 11 | 341°36.5 | 28.1 | 11 | 341°42.5 | 22.1 | 11 | 341°49.9 | 14.9 |
| 12 | 356°28.9 | S12°34.6 | 12 | 356°32.0 | S11°31.7 | 12 | 356°36.5 | S10°27.2 | 12 | 356°42.6 | S09°21.2 | 12 | 356°50.0 | S08°14.0 |
| 13 | 11°29.0 | 33.8 | 13 | 11°32.0 | 30.8 | 13 | 11°36.6 | 26.3 | 13 | 11°42.7 | 20.3 | 13 | 11°50.1 | 13.0 |
| 14 | 26°29.0 | 32.9 | 14 | 26°32.1 | 29.9 | 14 | 26°36.7 | 25.4 | 14 | 26°42.8 | 19.3 | 14 | 26°50.2 | 12.1 |
| 15 | 41°29.0 | ·· 32.0 | 15 | 41°32.1 | ·· 29.1 | 15 | 41°36.8 | ·· 24.4 | 15 | 41°42.9 | ·· 18.4 | 15 | 41°50.3 | ·· 11.1 |
| 16 | 56°29.0 | 31.2 | 16 | 56°32.2 | 28.2 | 16 | 56°36.8 | 23.5 | 16 | 56°43.0 | 17.5 | 16 | 56°50.4 | 10.2 |
| 17 | 71°29.1 | 30.3 | 17 | 71°32.2 | 27.3 | 17 | 71°36.9 | 22.6 | 17 | 71°43.0 | 16.6 | 17 | 71°50.5 | 09.2 |
| 18 | 86°29.1 | S12°29.5 | 18 | 86°32.3 | S11°26.4 | 18 | 86°37.0 | S10°21.7 | 18 | 86°43.1 | S09°15.6 | 18 | 86°50.7 | S08°08.3 |
| 19 | 101°29.1 | 28.6 | 19 | 101°32.3 | 25.5 | 19 | 101°37.1 | 20.8 | 19 | 101°43.2 | 14.7 | 19 | 101°50.8 | 07.4 |
| 20 | 116°29.2 | 27.7 | 20 | 116°32.4 | 24.6 | 20 | 116°37.1 | 19.9 | 20 | 116°43.3 | 13.8 | 20 | 116°50.9 | 06.4 |
| 21 | 131°29.2 | ·· 26.9 | 21 | 131°32.4 | ·· 23.7 | 21 | 131°37.2 | ·· 19.0 | 21 | 131°43.4 | ·· 12.8 | 21 | 131°51.0 | ·· 05.5 |
| 22 | 146°29.2 | 26.0 | 22 | 146°32.5 | 22.8 | 22 | 146°37.3 | 18.1 | 22 | 146°43.5 | 11.9 | 22 | 146°51.1 | 04.5 |
| 23 | 161°29.3 | 25.1 | 23 | 161°32.6 | 22.0 | 23 | 161°37.4 | 17.2 | 23 | 161°43.6 | 11.0 | 23 | 161°51.2 | 03.6 |
| | SD=16.2′ | d=0.9′ | | SD=16.2′ | d=0.9′ | | SD=16.2′ | d=0.9′ | | SD=16.2′ | d=0.9′ | | SD=16.1′ | d=0.9′ |

| 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 176°37.9 | S17°09.5 | 0 | 176°32.6 | S16°17.2 | 0 | 176°29.2 | S15°22.3 | 0 | 176°27.6 | S14°25.1 | 0 | 176°27.6 | S13°25.7 |
| 1 | 191°37.8 | 08.8 | 1 | 191°32.6 | 16.4 | 1 | 191°29.2 | 21.5 | 1 | 191°27.6 | 24.3 | 1 | 191°27.6 | 24.8 |
| 2 | 206°37.7 | 08.1 | 2 | 206°32.5 | 15.7 | 2 | 206°29.2 | 20.8 | 2 | 206°27.5 | 23.5 | 2 | 206°27.6 | 24.0 |
| 3 | 221°37.6 | ·· 07.4 | 3 | 221°32.5 | ·· 14.9 | 3 | 221°29.1 | ·· 20.0 | 3 | 221°27.5 | ·· 22.6 | 3 | 221°27.7 | ·· 23.2 |
| 4 | 236°37.5 | 06.7 | 4 | 236°32.4 | 14.2 | 4 | 236°29.1 | 19.2 | 4 | 236°27.5 | 21.8 | 4 | 236°27.7 | 22.3 |
| 5 | 251°37.4 | 05.9 | 5 | 251°32.3 | 13.4 | 5 | 251°29.0 | 18.4 | 5 | 251°27.5 | 21.0 | 5 | 251°27.7 | 21.5 |
| 6 | 266°37.4 | S17°05.2 | 6 | 266°32.3 | S16°12.7 | 6 | 266°29.0 | S15°17.6 | 6 | 266°27.5 | S14°20.2 | 6 | 266°27.7 | S13°20.6 |
| 7 | 281°37.3 | 04.5 | 7 | 281°32.2 | 12.0 | 7 | 281°29.0 | 16.8 | 7 | 281°27.5 | 19.4 | 7 | 281°27.7 | 19.8 |
| 8 | 296°37.2 | 03.8 | 8 | 296°32.2 | 11.2 | 8 | 296°29.0 | 16.1 | 8 | 296°27.5 | 18.6 | 8 | 296°27.7 | 18.9 |
| 9 | 311°37.1 | ·· 03.1 | 9 | 311°32.1 | ·· 10.5 | 9 | 311°28.9 | ·· 15.3 | 9 | 311°27.5 | ·· 17.8 | 9 | 311°27.7 | ·· 18.1 |
| 10 | 326°37.0 | 02.4 | 10 | 326°32.1 | 09.7 | 10 | 326°28.9 | 14.5 | 10 | 326°27.5 | 17.0 | 10 | 326°27.8 | 17.3 |
| 11 | 341°36.9 | 01.7 | 11 | 341°32.0 | 09.0 | 11 | 341°28.9 | 13.7 | 11 | 341°27.5 | 16.1 | 11 | 341°27.8 | 16.4 |
| 12 | 356°36.9 | S17°01.0 | 12 | 356°31.9 | S16°08.2 | 12 | 356°28.8 | S15°12.9 | 12 | 356°27.5 | S14°15.3 | 12 | 356°27.8 | S13°15.6 |
| 13 | 11°36.8 | 17°00.2 | 13 | 11°31.9 | 07.5 | 13 | 11°28.8 | 12.1 | 13 | 11°27.4 | 14.5 | 13 | 11°27.8 | 14.7 |
| 14 | 26°36.7 | 16°59.5 | 14 | 26°31.8 | 06.7 | 14 | 26°28.8 | 11.4 | 14 | 26°27.4 | 13.7 | 14 | 26°27.8 | 13.9 |
| 15 | 41°36.6 | ·· 58.8 | 15 | 41°31.8 | ·· 05.9 | 15 | 41°28.7 | ·· 10.6 | 15 | 41°27.4 | ·· 12.9 | 15 | 41°27.8 | ·· 13.0 |
| 16 | 56°36.5 | 58.1 | 16 | 56°31.7 | 05.2 | 16 | 56°28.7 | 09.8 | 16 | 56°27.4 | 12.1 | 16 | 56°27.9 | 12.2 |
| 17 | 71°36.5 | 57.4 | 17 | 71°31.7 | 04.4 | 17 | 71°28.7 | 09.0 | 17 | 71°27.4 | 11.2 | 17 | 71°27.9 | 11.3 |
| 18 | 86°36.4 | S16°56.7 | 18 | 86°31.6 | S16°03.7 | 18 | 86°28.6 | S15°08.2 | 18 | 86°27.4 | S14°10.4 | 18 | 86°27.9 | S13°10.5 |
| 19 | 101°36.3 | 55.9 | 19 | 101°31.6 | 02.9 | 19 | 101°28.6 | 07.4 | 19 | 101°27.4 | 09.6 | 19 | 101°27.9 | 09.7 |
| 20 | 116°36.2 | 55.2 | 20 | 116°31.5 | 02.2 | 20 | 116°28.6 | 06.6 | 20 | 116°27.4 | 08.8 | 20 | 116°27.9 | 08.8 |
| 21 | 131°36.1 | ·· 54.5 | 21 | 131°31.5 | ·· 01.4 | 21 | 131°28.6 | ·· 05.9 | 21 | 131°27.4 | ·· 08.0 | 21 | 131°27.9 | ·· 08.0 |
| 22 | 146°36.1 | 53.8 | 22 | 146°31.4 | 16°00.7 | 22 | 146°28.5 | 05.1 | 22 | 146°27.4 | 07.2 | 22 | 146°28.0 | 07.1 |
| 23 | 161°36.0 | 53.1 | 23 | 161°31.4 | 15°59.9 | 23 | 161°28.5 | 04.3 | 23 | 161°27.4 | 06.3 | 23 | 161°28.0 | 06.3 |
| | SD=16.2′ | d=0.7′ | | SD=16.2′ | d=0.7′ | | SD=16.2′ | d=0.8′ | | SD=16.2′ | d=0.8′ | | SD=16.2′ | d=0.8′ |

| 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec | 28 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 176°29.3 | S12°24.3 | 0 | 176°32.6 | S11°21.1 | 0 | 176°37.4 | S10°16.3 | 0 | 176°43.7 | S09°10.1 | 0 | 176°51.3 | S08°02.6 |
| 1 | 191°29.4 | 23.4 | 1 | 191°32.7 | 20.2 | 1 | 191°37.5 | 15.4 | 1 | 191°43.8 | 09.1 | 1 | 191°51.5 | 01.7 |
| 2 | 206°29.4 | 22.5 | 2 | 206°32.7 | 19.3 | 2 | 206°37.6 | 14.4 | 2 | 206°43.9 | 08.2 | 2 | 206°51.6 | 08°00.8 |
| 3 | 221°29.4 | ·· 21.7 | 3 | 221°32.8 | ·· 18.4 | 3 | 221°37.7 | ·· 13.5 | 3 | 221°44.0 | ·· 07.3 | 3 | 221°51.7 | 07°59.8 |
| 4 | 236°29.5 | 20.8 | 4 | 236°32.8 | 17.5 | 4 | 236°37.8 | 12.6 | 4 | 236°44.1 | 06.3 | 4 | 236°51.8 | 58.9 |
| 5 | 251°29.5 | 19.9 | 5 | 251°32.9 | 16.6 | 5 | 251°37.8 | 11.7 | 5 | 251°44.2 | 05.4 | 5 | 251°51.9 | 57.9 |
| 6 | 266°29.5 | S12°19.1 | 6 | 266°33.0 | S11°15.7 | 6 | 266°37.9 | S10°10.8 | 6 | 266°44.3 | S09°04.5 | 6 | 266°52.0 | S07°57.0 |
| 7 | 281°29.6 | 18.2 | 7 | 281°33.0 | 14.8 | 7 | 281°38.0 | 09.9 | 7 | 281°44.4 | 03.6 | 7 | 281°52.2 | 56.0 |
| 8 | 296°29.6 | 17.3 | 8 | 296°33.1 | 13.9 | 8 | 296°38.1 | 09.0 | 8 | 296°44.5 | 02.6 | 8 | 296°52.3 | 55.1 |
| 9 | 311°29.6 | ·· 16.5 | 9 | 311°33.1 | ·· 13.1 | 9 | 311°38.1 | ·· 08.1 | 9 | 311°44.6 | ·· 01.7 | 9 | 311°52.4 | ·· 54.1 |
| 10 | 326°29.7 | 15.6 | 10 | 326°33.2 | 12.2 | 10 | 326°38.2 | 07.2 | 10 | 326°44.7 | 09°00.8 | 10 | 326°52.5 | 53.2 |
| 11 | 341°29.7 | 14.7 | 11 | 341°33.3 | 11.3 | 11 | 341°38.3 | 06.2 | 11 | 341°44.8 | 08°59.8 | 11 | 341°52.6 | 52.2 |
| 12 | 356°29.8 | S12°13.9 | 12 | 356°33.3 | S11°10.4 | 12 | 356°38.4 | S10°05.3 | 12 | 356°44.9 | S08°58.9 | 12 | 356°52.7 | S07°51.3 |
| 13 | 11°29.8 | 13.0 | 13 | 11°33.4 | 09.5 | 13 | 11°38.5 | 04.4 | 13 | 11°45.0 | 58.0 | 13 | 11°52.9 | 50.4 |
| 14 | 26°29.8 | 12.1 | 14 | 26°33.4 | 08.6 | 14 | 26°38.6 | 03.5 | 14 | 26°45.1 | 57.0 | 14 | 26°53.0 | 49.4 |
| 15 | 41°29.9 | ·· 11.2 | 15 | 41°33.5 | ·· 07.7 | 15 | 41°38.6 | ·· 02.6 | 15 | 41°45.2 | ·· 56.1 | 15 | 41°53.1 | ·· 48.5 |
| 16 | 56°29.9 | 10.4 | 16 | 56°33.6 | 06.8 | 16 | 56°38.7 | 01.7 | 16 | 56°45.3 | 55.2 | 16 | 56°53.2 | 47.5 |
| 17 | 71°30.0 | 09.5 | 17 | 71°33.6 | 05.9 | 17 | 71°38.8 | 10°00.8 | 17 | 71°45.4 | 54.2 | 17 | 71°53.3 | 46.6 |
| 18 | 86°30.0 | S12°08.6 | 18 | 86°33.7 | S11°05.0 | 18 | 86°38.9 | S09°59.8 | 18 | 86°45.5 | S08°53.3 | 18 | 86°53.4 | S07°45.6 |
| 19 | 101°30.0 | 07.8 | 19 | 101°33.7 | 04.1 | 19 | 101°39.0 | 58.9 | 19 | 101°45.6 | 52.4 | 19 | 101°53.6 | 44.7 |
| 20 | 116°30.1 | 06.9 | 20 | 116°33.8 | 03.2 | 20 | 116°39.0 | 58.0 | 20 | 116°45.7 | 51.4 | 20 | 116°53.7 | 43.7 |
| 21 | 131°30.1 | ·· 06.0 | 21 | 131°33.9 | ·· 02.3 | 21 | 131°39.1 | ·· 57.1 | 21 | 131°45.8 | ·· 50.5 | 21 | 131°53.8 | ·· 42.8 |
| 22 | 146°30.2 | 05.1 | 22 | 146°33.9 | 01.4 | 22 | 146°39.2 | 56.2 | 22 | 146°45.9 | 49.6 | 22 | 146°53.9 | 41.8 |
| 23 | 161°30.2 | 04.3 | 23 | 161°34.0 | 00.5 | 23 | 161°39.3 | 55.3 | 23 | 161°46.0 | 48.6 | 23 | 161°54.0 | 40.9 |
| | SD=16.2′ | d=0.9′ | | SD=16.2′ | d=0.9′ | | SD=16.2′ | d=0.9′ | | SD=16.2′ | d=0.9′ | | SD=16.1′ | d=0.9′ |

| 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 176°35.9 | S16°52.3 | 0 | 176°31.3 | S15°59.2 | 0 | 176°28.5 | S15°03.5 | 0 | 176°27.4 | S14°05.5 | 0 | 176°28.0 | S13°05.4 |
| 1 | 191°35.8 | 51.6 | 1 | 191°31.2 | 58.4 | 1 | 191°28.4 | 02.7 | 1 | 191°27.4 | 04.7 | 1 | 191°28.0 | 04.6 |
| 2 | 206°35.8 | 50.9 | 2 | 206°31.2 | 57.6 | 2 | 206°28.4 | 01.9 | 2 | 206°27.4 | 03.9 | 2 | 206°28.0 | 03.7 |
| 3 | 221°35.7 | ·· 50.2 | 3 | 221°31.1 | ·· 56.9 | 3 | 221°28.4 | ·· 01.1 | 3 | 221°27.4 | ·· 03.0 | 3 | 221°28.1 | ·· 02.9 |
| 4 | 236°35.6 | 49.5 | 4 | 236°31.1 | 56.1 | 4 | 236°28.4 | 15°00.3 | 4 | 236°27.4 | 02.2 | 4 | 236°28.1 | 02.0 |
| 5 | 251°35.5 | 48.7 | 5 | 251°31.0 | 55.4 | 5 | 251°28.3 | 14°59.5 | 5 | 251°27.4 | 01.4 | 5 | 251°28.1 | 01.2 |
| 6 | 266°35.5 | S16°48.0 | 6 | 266°31.0 | S15°54.6 | 6 | 266°28.3 | S14°58.7 | 6 | 266°27.4 | S14°00.6 | 6 | 266°28.1 | S13°00.3 |
| 7 | 281°35.4 | 47.3 | 7 | 281°30.9 | 53.9 | 7 | 281°28.3 | 58.0 | 7 | 281°27.4 | 13°59.8 | 7 | 281°28.1 | 12°59.5 |
| 8 | 296°35.3 | 46.6 | 8 | 296°30.9 | 53.1 | 8 | 296°28.3 | 57.2 | 8 | 296°27.4 | 58.9 | 8 | 296°28.2 | 58.6 |
| 9 | 311°35.2 | ·· 45.8 | 9 | 311°30.8 | ·· 52.3 | 9 | 311°28.2 | ·· 56.4 | 9 | 311°27.4 | ·· 58.1 | 9 | 311°28.2 | ·· 57.8 |
| 10 | 326°35.2 | 45.1 | 10 | 326°30.8 | 51.6 | 10 | 326°28.2 | 55.6 | 10 | 326°27.4 | 57.3 | 10 | 326°28.2 | 56.9 |
| 11 | 341°35.1 | 44.4 | 11 | 341°30.8 | 50.8 | 11 | 341°28.2 | 54.8 | 11 | 341°27.4 | 56.5 | 11 | 341°28.2 | 56.1 |
| 12 | 356°35.0 | S16°43.7 | 12 | 356°30.7 | S15°50.1 | 12 | 356°28.2 | S14°54.0 | 12 | 356°27.4 | S13°55.6 | 12 | 356°28.3 | S12°55.2 |
| 13 | 11°34.9 | 42.9 | 13 | 11°30.7 | 49.3 | 13 | 11°28.2 | 53.2 | 13 | 11°27.4 | 54.8 | 13 | 11°28.3 | 54.4 |
| 14 | 26°34.9 | 42.2 | 14 | 26°30.6 | 48.5 | 14 | 26°28.1 | 52.4 | 14 | 26°27.4 | 54.0 | 14 | 26°28.3 | 53.5 |
| 15 | 41°34.8 | ·· 41.5 | 15 | 41°30.6 | ·· 47.8 | 15 | 41°28.1 | ·· 51.6 | 15 | 41°27.4 | ·· 53.2 | 15 | 41°28.3 | ·· 52.6 |
| 16 | 56°34.7 | 40.8 | 16 | 56°30.5 | 47.0 | 16 | 56°28.1 | 50.8 | 16 | 56°27.4 | 52.3 | 16 | 56°28.4 | 51.8 |
| 17 | 71°34.7 | 40.0 | 17 | 71°30.5 | 46.2 | 17 | 71°28.1 | 50.0 | 17 | 71°27.4 | 51.5 | 17 | 71°28.4 | 50.9 |
| 18 | 86°34.6 | S16°39.3 | 18 | 86°30.4 | S15°45.5 | 18 | 86°28.0 | S14°49.2 | 18 | 86°27.4 | S13°50.7 | 18 | 86°28.4 | S12°50.1 |
| 19 | 101°34.5 | 38.6 | 19 | 101°30.4 | 44.7 | 19 | 101°28.0 | 48.4 | 19 | 101°27.4 | 49.9 | 19 | 101°28.4 | 49.2 |
| 20 | 116°34.4 | 37.8 | 20 | 116°30.3 | 43.9 | 20 | 116°28.0 | 47.6 | 20 | 116°27.4 | 49.0 | 20 | 116°28.5 | 48.4 |
| 21 | 131°34.4 | ·· 37.1 | 21 | 131°30.3 | ·· 43.2 | 21 | 131°28.0 | ·· 46.8 | 21 | 131°27.4 | ·· 48.2 | 21 | 131°28.5 | ·· 47.5 |
| 22 | 146°34.3 | 36.4 | 22 | 146°30.2 | 42.4 | 22 | 146°28.0 | 46.0 | 22 | 146°27.4 | 47.4 | 22 | 146°28.5 | 46.7 |
| 23 | 161°34.2 | 35.6 | 23 | 161°30.2 | 41.6 | 23 | 161°27.9 | 45.2 | 23 | 161°27.4 | 46.5 | 23 | 161°28.5 | 45.8 |
| | SD=16.2′ | d=0.7′ | | SD=16.2′ | d=0.8′ | | SD=16.2′ | d=0.8′ | | SD=16.2′ | d=0.8′ | | SD=16.2′ | d=0.8′ |

| 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec | 01 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 176°30.2 | S12°03.4 | 0 | 176°34.1 | S10°59.6 | 0 | 176°39.4 | S09°54.3 | 0 | 176°46.1 | S08°47.7 | 0 | 176°54.2 | S07°39.9 |
| 1 | 191°30.3 | 02.5 | 1 | 191°34.1 | 58.7 | 1 | 191°39.5 | 53.4 | 1 | 191°46.2 | 46.8 | 1 | 191°54.3 | 39.0 |
| 2 | 206°30.3 | 01.6 | 2 | 206°34.2 | 57.8 | 2 | 206°39.5 | 52.5 | 2 | 206°46.3 | 45.8 | 2 | 206°54.4 | 38.0 |
| 3 | 221°30.4 | 12°00.8 | 3 | 221°34.2 | ·· 56.9 | 3 | 221°39.6 | ·· 51.6 | 3 | 221°46.4 | ·· 44.9 | 3 | 221°54.5 | ·· 37.1 |
| 4 | 236°30.4 | 11°59.9 | 4 | 236°34.3 | 56.0 | 4 | 236°39.7 | 50.7 | 4 | 236°46.5 | 44.0 | 4 | 236°54.6 | 36.1 |
| 5 | 251°30.5 | 59.0 | 5 | 251°34.4 | 55.1 | 5 | 251°39.8 | 49.8 | 5 | 251°46.6 | 43.0 | 5 | 251°54.8 | 35.2 |
| 6 | 266°30.5 | S11°58.1 | 6 | 266°34.4 | S10°54.3 | 6 | 266°39.9 | S09°48.8 | 6 | 266°46.7 | S08°42.1 | 6 | 266°54.9 | S07°34.2 |
| 7 | 281°30.5 | 57.3 | 7 | 281°34.5 | 53.4 | 7 | 281°40.0 | 47.9 | 7 | 281°46.8 | 41.2 | 7 | 281°55.0 | 33.3 |
| 8 | 296°30.6 | 56.4 | 8 | 296°34.6 | 52.5 | 8 | 296°40.1 | 47.0 | 8 | 296°46.9 | 40.2 | 8 | 296°55.1 | 32.3 |
| 9 | 311°30.6 | ·· 55.5 | 9 | 311°34.6 | ·· 51.6 | 9 | 311°40.1 | ·· 46.1 | 9 | 311°47.1 | ·· 39.3 | 9 | 311°55.3 | ·· 31.4 |
| 10 | 326°30.7 | 54.6 | 10 | 326°34.7 | 50.7 | 10 | 326°40.2 | 45.2 | 10 | 326°47.2 | 38.4 | 10 | 326°55.4 | 30.4 |
| 11 | 341°30.7 | 53.8 | 11 | 341°34.8 | 49.8 | 11 | 341°40.3 | 44.2 | 11 | 341°47.3 | 37.4 | 11 | 341°55.5 | 29.5 |
| 12 | 356°30.8 | S11°52.9 | 12 | 356°34.8 | S10°48.9 | 12 | 356°40.4 | S09°43.3 | 12 | 356°47.4 | S08°36.5 | 12 | 356°55.6 | S07°28.5 |
| 13 | 11°30.8 | 52.0 | 13 | 11°34.9 | 48.0 | 13 | 11°40.5 | 42.4 | 13 | 11°47.5 | 35.6 | 13 | 11°55.7 | 27.6 |
| 14 | 26°30.9 | 51.1 | 14 | 26°35.0 | 47.1 | 14 | 26°40.6 | 41.5 | 14 | 26°47.6 | 34.6 | 14 | 26°55.9 | 26.6 |
| 15 | 41°30.9 | ·· 50.2 | 15 | 41°35.0 | ·· 46.2 | 15 | 41°40.7 | ·· 40.6 | 15 | 41°47.7 | ·· 33.7 | 15 | 41°56.0 | ·· 25.7 |
| 16 | 56°31.0 | 49.4 | 16 | 56°35.1 | 45.3 | 16 | 56°40.8 | 39.6 | 16 | 56°47.8 | 32.7 | 16 | 56°56.1 | 24.7 |
| 17 | 71°31.0 | 48.5 | 17 | 71°35.2 | 44.4 | 17 | 71°40.8 | 38.7 | 17 | 71°47.9 | 31.8 | 17 | 71°56.2 | 23.8 |
| 18 | 86°31.0 | S11°47.6 | 18 | 86°35.2 | S10°43.4 | 18 | 86°40.9 | S09°37.8 | 18 | 86°48.0 | S08°30.9 | 18 | 86°56.4 | S07°22.8 |
| 19 | 101°31.1 | 46.7 | 19 | 101°35.3 | 42.5 | 19 | 101°41.0 | 36.9 | 19 | 101°48.1 | 29.9 | 19 | 101°56.5 | 21.9 |
| 20 | 116°31.1 | 45.8 | 20 | 116°35.4 | 41.6 | 20 | 116°41.1 | 36.0 | 20 | 116°48.2 | 29.0 | 20 | 116°56.6 | 20.9 |
| 21 | 131°31.2 | ·· 45.0 | 21 | 131°35.5 | ·· 40.7 | 21 | 131°41.2 | ·· 35.0 | 21 | 131°48.3 | ·· 28.1 | 21 | 131°56.7 | ·· 20.0 |
| 22 | 146°31.2 | 44.1 | 22 | 146°35.5 | 39.8 | 22 | 146°41.3 | 34.1 | 22 | 146°48.4 | 27.1 | 22 | 146°56.9 | 19.0 |
| 23 | 161°31.3 | 43.2 | 23 | 161°35.6 | 38.9 | 23 | 161°41.4 | 33.2 | 23 | 161°48.6 | 26.2 | 23 | 161°57.0 | 18.1 |
| | SD=16.2′ | d=0.9′ | | SD=16.2′ | d=0.9′ | | SD=16.2′ | d=0.9′ | | SD=16.1′ | d=0.9′ | | SD=16.1′ | d=0.9′ |

DUT1 = UT1-UTC = +0.0807 sec  ΔT = TT-UT1 = +69.1033 sec

## 2026 March 02 to Mar. 16 UT

DUT1 = UT1-UTC = +0.0754 sec  ΔT = TT-UT1 = +69.1086 sec

## 2026 March 17 to Mar. 31 UT

| 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 176°57.1 | S07°17.1 | 0 | 177°06.7 | S06°08.1 | 0 | 177°17.2 | S04°58.2 | 0 | 177°28.6 | S03°47.8 | 0 | 177°40.6 | S02°36.9 |
| 1 | 191°57.2 | 16.2 | 1 | 192°06.8 | 07.1 | 1 | 192°17.4 | 57.3 | 1 | 192°28.8 | 46.8 | 1 | 192°40.8 | 35.9 |
| 2 | 206°57.4 | 15.2 | 2 | 207°07.0 | 06.1 | 2 | 207°17.5 | 56.3 | 2 | 207°28.9 | 45.8 | 2 | 207°41.0 | 35.0 |
| 3 | 221°57.5 | ·· 14.2 | 3 | 222°07.1 | ·· 05.2 | 3 | 222°17.7 | ·· 55.3 | 3 | 222°29.1 | ·· 44.8 | 3 | 222°41.1 | ·· 34.0 |
| 4 | 236°57.6 | 13.3 | 4 | 237°07.2 | 04.2 | 4 | 237°17.8 | 54.3 | 4 | 237°29.2 | 43.9 | 4 | 237°41.3 | 33.0 |
| 5 | 251°57.7 | 12.3 | 5 | 252°07.4 | 03.2 | 5 | 252°18.0 | 53.4 | 5 | 252°29.4 | 42.9 | 5 | 252°41.5 | 32.0 |
| 6 | 266°57.9 | S07°11.4 | 6 | 267°07.5 | S06°02.3 | 6 | 267°18.1 | S04°52.4 | 6 | 267°29.6 | S03°41.9 | 6 | 267°41.7 | S02°31.0 |
| 7 | 281°58.0 | 10.4 | 7 | 282°07.7 | 01.3 | 7 | 282°18.3 | 51.4 | 7 | 282°29.7 | 40.9 | 7 | 282°41.8 | 30.0 |
| 8 | 296°58.1 | 09.5 | 8 | 297°07.8 | 06°00.3 | 8 | 297°18.4 | 50.4 | 8 | 297°29.9 | 39.9 | 8 | 297°42.0 | 29.0 |
| 9 | 311°58.2 | ·· 08.5 | 9 | 312°08.0 | 05°59.4 | 9 | 312°18.6 | ·· 49.5 | 9 | 312°30.1 | ·· 39.0 | 9 | 312°42.2 | ·· 28.1 |
| 10 | 326°58.4 | 07.6 | 10 | 327°08.1 | 58.4 | 10 | 327°18.8 | 48.5 | 10 | 327°30.2 | 38.0 | 10 | 327°42.4 | 27.1 |
| 11 | 341°58.5 | 06.6 | 11 | 342°08.2 | 57.4 | 11 | 342°18.9 | 47.5 | 11 | 342°30.4 | 37.0 | 11 | 342°42.5 | 26.1 |
| 12 | 356°58.6 | S07°05.7 | 12 | 357°08.4 | S05°56.5 | 12 | 357°19.1 | S04°46.5 | 12 | 357°30.6 | S03°36.0 | 12 | 357°42.7 | S02°25.1 |
| 13 | 11°58.8 | 04.7 | 13 | 12°08.5 | 55.5 | 13 | 12°19.2 | 45.5 | 13 | 12°30.7 | 35.0 | 13 | 12°42.9 | 24.1 |
| 14 | 26°58.9 | 03.7 | 14 | 27°08.7 | 54.5 | 14 | 27°19.4 | 44.6 | 14 | 27°30.9 | 34.0 | 14 | 27°43.0 | 23.1 |
| 15 | 41°59.0 | ·· 02.8 | 15 | 42°08.8 | ·· 53.6 | 15 | 42°19.5 | ·· 43.6 | 15 | 42°31.0 | ·· 33.1 | 15 | 42°43.2 | ·· 22.1 |
| 16 | 56°59.1 | 01.8 | 16 | 57°08.9 | 52.6 | 16 | 57°19.7 | 42.6 | 16 | 57°31.2 | 32.1 | 16 | 57°43.4 | 21.1 |
| 17 | 71°59.3 | 07°00.9 | 17 | 72°09.1 | 51.6 | 17 | 72°19.8 | 41.6 | 17 | 72°31.4 | 31.1 | 17 | 72°43.6 | 20.2 |
| 18 | 86°59.4 | S06°59.9 | 18 | 87°09.2 | S05°50.7 | 18 | 87°20.0 | S04°40.7 | 18 | 87°31.5 | S03°30.1 | 18 | 87°43.7 | S02°19.2 |
| 19 | 101°59.5 | 59.0 | 19 | 102°09.4 | 49.7 | 19 | 102°20.1 | 39.7 | 19 | 102°31.7 | 29.1 | 19 | 102°43.9 | 18.2 |
| 20 | 116°59.7 | 58.0 | 20 | 117°09.5 | 48.7 | 20 | 117°20.3 | 38.7 | 20 | 117°31.9 | 28.1 | 20 | 117°44.1 | 17.2 |
| 21 | 131°59.8 | ·· 57.1 | 21 | 132°09.7 | ·· 47.8 | 21 | 132°20.5 | ·· 37.7 | 21 | 132°32.0 | ·· 27.2 | 21 | 132°44.3 | ·· 16.2 |
| 22 | 146°59.9 | 56.1 | 22 | 147°09.8 | 46.8 | 22 | 147°20.6 | 36.8 | 22 | 147°32.2 | 26.2 | 22 | 147°44.4 | 15.2 |
| 23 | 162°00.1 | 55.1 | 23 | 162°10.0 | 45.8 | 23 | 162°20.8 | 35.8 | 23 | 162°32.4 | 25.2 | 23 | 162°44.6 | 14.2 |
| | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ |

| 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec | 29 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 177°53.2 | S01°25.8 | 0 | 178°06.3 | S00°14.6 | 0 | 178°19.6 | N00°56.5 | 0 | 178°33.1 | N02°07.4 | 0 | 178°46.7 | N03°17.8 |
| 1 | 192°53.4 | 24.8 | 1 | 193°06.4 | 13.6 | 1 | 193°19.8 | 57.5 | 1 | 193°33.3 | 08.4 | 1 | 193°46.9 | 18.8 |
| 2 | 207°53.6 | 23.8 | 2 | 208°06.6 | 12.6 | 2 | 208°20.0 | 58.5 | 2 | 208°33.5 | 09.3 | 2 | 208°47.1 | 19.8 |
| 3 | 222°53.8 | ·· 22.8 | 3 | 223°06.8 | ·· 11.6 | 3 | 223°20.1 | 00°59.5 | 3 | 223°33.7 | ·· 10.3 | 3 | 223°47.3 | ·· 20.7 |
| 4 | 237°53.9 | 21.8 | 4 | 238°07.0 | 10.6 | 4 | 238°20.3 | 01°00.5 | 4 | 238°33.9 | 11.3 | 4 | 238°47.5 | 21.7 |
| 5 | 252°54.1 | 20.9 | 5 | 253°07.2 | 09.6 | 5 | 253°20.5 | 01.5 | 5 | 253°34.1 | 12.3 | 5 | 253°47.7 | 22.7 |
| 6 | 267°54.3 | S01°19.9 | 6 | 268°07.4 | S00°08.7 | 6 | 268°20.7 | N01°02.4 | 6 | 268°34.2 | N02°13.3 | 6 | 268°47.8 | N03°23.6 |
| 7 | 282°54.5 | 18.9 | 7 | 283°07.5 | 07.7 | 7 | 283°20.9 | 03.4 | 7 | 283°34.4 | 14.2 | 7 | 283°48.0 | 24.6 |
| 8 | 297°54.7 | 17.9 | 8 | 298°07.7 | 06.7 | 8 | 298°21.1 | 04.4 | 8 | 298°34.6 | 15.2 | 8 | 298°48.2 | 25.6 |
| 9 | 312°54.8 | ·· 16.9 | 9 | 313°07.9 | ·· 05.7 | 9 | 313°21.3 | ·· 05.4 | 9 | 313°34.8 | ·· 16.2 | 9 | 313°48.4 | ·· 26.6 |
| 10 | 327°55.0 | 15.9 | 10 | 328°08.1 | 04.7 | 10 | 328°21.5 | 06.4 | 10 | 328°35.0 | 17.2 | 10 | 328°48.6 | 27.5 |
| 11 | 342°55.2 | 14.9 | 11 | 343°08.3 | 03.7 | 11 | 343°21.6 | 07.4 | 11 | 343°35.2 | 18.2 | 11 | 343°48.8 | 28.5 |
| 12 | 357°55.4 | S01°13.9 | 12 | 358°08.5 | S00°02.7 | 12 | 358°21.8 | N01°08.4 | 12 | 358°35.4 | N02°19.2 | 12 | 358°49.0 | N03°29.5 |
| 13 | 12°55.6 | 12.9 | 13 | 13°08.6 | 01.7 | 13 | 13°22.0 | 09.3 | 13 | 13°35.6 | 20.1 | 13 | 13°49.2 | 30.5 |
| 14 | 27°55.7 | 12.0 | 14 | 28°08.8 | S00°00.8 | 14 | 28°22.2 | 10.3 | 14 | 28°35.8 | 21.1 | 14 | 28°49.4 | 31.4 |
| 15 | 42°55.9 | ·· 11.0 | 15 | 43°09.0 | N00°00.2 | 15 | 43°22.4 | ·· 11.3 | 15 | 43°35.9 | ·· 22.1 | 15 | 43°49.5 | ·· 32.4 |
| 16 | 57°56.1 | 10.0 | 16 | 58°09.2 | 01.2 | 16 | 58°22.6 | 12.3 | 16 | 58°36.1 | 23.1 | 16 | 58°49.7 | 33.4 |
| 17 | 72°56.3 | 09.0 | 17 | 73°09.4 | 02.2 | 17 | 73°22.8 | 13.3 | 17 | 73°36.3 | 24.1 | 17 | 73°49.9 | 34.4 |
| 18 | 87°56.4 | S01°08.0 | 18 | 88°09.6 | N00°03.2 | 18 | 88°23.0 | N01°14.3 | 18 | 88°36.5 | N02°25.0 | 18 | 88°50.1 | N03°35.3 |
| 19 | 102°56.6 | 07.0 | 19 | 103°09.7 | 04.2 | 19 | 103°23.1 | 15.3 | 19 | 103°36.7 | 26.0 | 19 | 103°50.3 | 36.3 |
| 20 | 117°56.8 | 06.0 | 20 | 118°09.9 | 05.2 | 20 | 118°23.3 | 16.2 | 20 | 118°36.9 | 27.0 | 20 | 118°50.5 | 37.3 |
| 21 | 132°57.0 | ·· 05.0 | 21 | 133°10.1 | ·· 06.2 | 21 | 133°23.5 | ·· 17.2 | 21 | 133°37.1 | ·· 28.0 | 21 | 133°50.7 | ·· 38.2 |
| 22 | 147°57.2 | 04.0 | 22 | 148°10.3 | 07.2 | 22 | 148°23.7 | 18.2 | 22 | 148°37.3 | 29.0 | 22 | 148°50.9 | 39.2 |
| 23 | 162°57.3 | 03.1 | 23 | 163°10.5 | 08.1 | 23 | 163°23.9 | 19.2 | 23 | 163°37.5 | 29.9 | 23 | 163°51.1 | 40.2 |
| | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.0′ | d=1.0′ | | SD=16.0′ | d=1.0′ | | SD=16.0′ | d=1.0′ |

| 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 177°00.2 | S06°54.2 | 0 | 177°10.1 | S05°44.9 | 0 | 177°20.9 | S04°34.8 | 0 | 177°32.5 | S03°24.2 | 0 | 177°44.8 | S02°13.2 |
| 1 | 192°00.3 | 53.2 | 1 | 192°10.2 | 43.9 | 1 | 192°21.1 | 33.8 | 1 | 192°32.7 | 23.2 | 1 | 192°45.0 | 12.3 |
| 2 | 207°00.4 | 52.3 | 2 | 207°10.4 | 42.9 | 2 | 207°21.2 | 32.9 | 2 | 207°32.9 | 22.2 | 2 | 207°45.1 | 11.3 |
| 3 | 222°00.6 | ·· 51.3 | 3 | 222°10.5 | ·· 41.9 | 3 | 222°21.4 | ·· 31.9 | 3 | 222°33.0 | ·· 21.3 | 3 | 222°45.3 | ·· 10.3 |
| 4 | 237°00.7 | 50.4 | 4 | 237°10.7 | 41.0 | 4 | 237°21.6 | 30.9 | 4 | 237°33.2 | 20.3 | 4 | 237°45.5 | 09.3 |
| 5 | 252°00.8 | 49.4 | 5 | 252°10.8 | 40.0 | 5 | 252°21.7 | 29.9 | 5 | 252°33.4 | 19.3 | 5 | 252°45.6 | 08.3 |
| 6 | 267°01.0 | S06°48.4 | 6 | 267°11.0 | S05°39.0 | 6 | 267°21.9 | S04°28.9 | 6 | 267°33.5 | S03°18.3 | 6 | 267°45.8 | S02°07.3 |
| 7 | 282°01.1 | 47.5 | 7 | 282°11.1 | 38.1 | 7 | 282°22.0 | 28.0 | 7 | 282°33.7 | 17.3 | 7 | 282°46.0 | 06.3 |
| 8 | 297°01.2 | 46.5 | 8 | 297°11.3 | 37.1 | 8 | 297°22.2 | 27.0 | 8 | 297°33.9 | 16.3 | 8 | 297°46.2 | 05.3 |
| 9 | 312°01.4 | ·· 45.6 | 9 | 312°11.4 | ·· 36.1 | 9 | 312°22.3 | ·· 26.0 | 9 | 312°34.0 | ·· 15.4 | 9 | 312°46.3 | ·· 04.4 |
| 10 | 327°01.5 | 44.6 | 10 | 327°11.5 | 35.2 | 10 | 327°22.5 | 25.0 | 10 | 327°34.2 | 14.4 | 10 | 327°46.5 | 03.4 |
| 11 | 342°01.6 | 43.6 | 11 | 342°11.7 | 34.2 | 11 | 342°22.7 | 24.1 | 11 | 342°34.4 | 13.4 | 11 | 342°46.7 | 02.4 |
| 12 | 357°01.8 | S06°42.7 | 12 | 357°11.8 | S05°33.2 | 12 | 357°22.8 | S04°23.1 | 12 | 357°34.5 | S03°12.4 | 12 | 357°46.9 | S02°01.4 |
| 13 | 12°01.9 | 41.7 | 13 | 12°12.0 | 32.3 | 13 | 12°23.0 | 22.1 | 13 | 12°34.7 | 11.4 | 13 | 12°47.0 | 02°00.4 |
| 14 | 27°02.0 | 40.8 | 14 | 27°12.1 | 31.3 | 14 | 27°23.1 | 21.1 | 14 | 27°34.9 | 10.4 | 14 | 27°47.2 | 01°59.4 |
| 15 | 42°02.2 | ·· 39.8 | 15 | 42°12.3 | ·· 30.3 | 15 | 42°23.3 | ·· 20.1 | 15 | 42°35.0 | ·· 09.5 | 15 | 42°47.4 | ·· 58.4 |
| 16 | 57°02.3 | 38.8 | 16 | 57°12.4 | 29.3 | 16 | 57°23.4 | 19.2 | 16 | 57°35.2 | 08.5 | 16 | 57°47.6 | 57.4 |
| 17 | 72°02.4 | 37.9 | 17 | 72°12.6 | 28.4 | 17 | 72°23.6 | 18.2 | 17 | 72°35.4 | 07.5 | 17 | 72°47.7 | 56.4 |
| 18 | 87°02.6 | S06°36.9 | 18 | 87°12.7 | S05°27.4 | 18 | 87°23.8 | S04°17.2 | 18 | 87°35.5 | S03°06.5 | 18 | 87°47.9 | S01°55.5 |
| 19 | 102°02.7 | 36.0 | 19 | 102°12.9 | 26.4 | 19 | 102°23.9 | 16.2 | 19 | 102°35.7 | 05.5 | 19 | 102°48.1 | 54.5 |
| 20 | 117°02.8 | 35.0 | 20 | 117°13.0 | 25.5 | 20 | 117°24.1 | 15.2 | 20 | 117°35.9 | 04.5 | 20 | 117°48.3 | 53.5 |
| 21 | 132°03.0 | ·· 34.0 | 21 | 132°13.2 | ·· 24.5 | 21 | 132°24.2 | ·· 14.3 | 21 | 132°36.0 | ·· 03.5 | 21 | 132°48.5 | ·· 52.5 |
| 22 | 147°03.1 | 33.1 | 22 | 147°13.3 | 23.5 | 22 | 147°24.4 | 13.3 | 22 | 147°36.2 | 02.6 | 22 | 147°48.6 | 51.5 |
| 23 | 162°03.2 | 32.1 | 23 | 162°13.5 | 22.5 | 23 | 162°24.6 | 12.3 | 23 | 162°36.4 | 01.6 | 23 | 162°48.8 | 50.5 |
| | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ |

| 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec | 30 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 177°57.5 | S01°02.1 | 0 | 178°10.7 | N00°09.1 | 0 | 178°24.1 | N01°20.2 | 0 | 178°37.6 | N02°30.9 | 0 | 178°51.2 | N03°41.2 |
| 1 | 192°57.7 | 01.1 | 1 | 193°10.8 | 10.1 | 1 | 193°24.3 | 21.2 | 1 | 193°37.8 | 31.9 | 1 | 193°51.4 | 42.1 |
| 2 | 207°57.9 | 01°00.1 | 2 | 208°11.0 | 11.1 | 2 | 208°24.5 | 22.2 | 2 | 208°38.0 | 32.9 | 2 | 208°51.6 | 43.1 |
| 3 | 222°58.1 | 00°59.1 | 3 | 223°11.2 | ·· 12.1 | 3 | 223°24.6 | ·· 23.1 | 3 | 223°38.2 | ·· 33.8 | 3 | 223°51.8 | ·· 44.1 |
| 4 | 237°58.2 | 58.1 | 4 | 238°11.4 | 13.1 | 4 | 238°24.8 | 24.1 | 4 | 238°38.4 | 34.8 | 4 | 238°52.0 | 45.0 |
| 5 | 252°58.4 | 57.1 | 5 | 253°11.6 | 14.1 | 5 | 253°25.0 | 25.1 | 5 | 253°38.6 | 35.8 | 5 | 253°52.2 | 46.0 |
| 6 | 267°58.6 | S00°56.1 | 6 | 268°11.8 | N00°15.1 | 6 | 268°25.2 | N01°26.1 | 6 | 268°38.8 | N02°36.8 | 6 | 268°52.4 | N03°47.0 |
| 7 | 282°58.8 | 55.1 | 7 | 283°12.0 | 16.0 | 7 | 283°25.4 | 27.1 | 7 | 283°39.0 | 37.8 | 7 | 283°52.6 | 48.0 |
| 8 | 297°59.0 | 54.2 | 8 | 298°12.1 | 17.0 | 8 | 298°25.6 | 28.1 | 8 | 298°39.2 | 38.7 | 8 | 298°52.7 | 48.9 |
| 9 | 312°59.2 | ·· 53.2 | 9 | 313°12.3 | ·· 18.0 | 9 | 313°25.8 | ·· 29.0 | 9 | 313°39.3 | ·· 39.7 | 9 | 313°52.9 | ·· 49.9 |
| 10 | 327°59.3 | 52.2 | 10 | 328°12.5 | 19.0 | 10 | 328°26.0 | 30.0 | 10 | 328°39.5 | 40.7 | 10 | 328°53.1 | 50.9 |
| 11 | 342°59.5 | 51.2 | 11 | 343°12.7 | 20.0 | 11 | 343°26.1 | 31.0 | 11 | 343°39.7 | 41.7 | 11 | 343°53.3 | 51.8 |
| 12 | 357°59.7 | S00°50.2 | 12 | 358°12.9 | N00°21.0 | 12 | 358°26.3 | N01°32.0 | 12 | 358°39.9 | N02°42.7 | 12 | 358°53.5 | N03°52.8 |
| 13 | 12°59.9 | 49.2 | 13 | 13°13.1 | 22.0 | 13 | 13°26.5 | 33.0 | 13 | 13°40.1 | 43.6 | 13 | 13°53.7 | 53.8 |
| 14 | 28°00.1 | 48.2 | 14 | 28°13.3 | 23.0 | 14 | 28°26.7 | 34.0 | 14 | 28°40.3 | 44.6 | 14 | 28°53.9 | 54.7 |
| 15 | 43°00.2 | ·· 47.2 | 15 | 43°13.4 | ·· 24.0 | 15 | 43°26.9 | ·· 34.9 | 15 | 43°40.5 | ·· 45.6 | 15 | 43°54.1 | ·· 55.7 |
| 16 | 58°00.4 | 46.2 | 16 | 58°13.6 | 24.9 | 16 | 58°27.1 | 35.9 | 16 | 58°40.7 | 46.6 | 16 | 58°54.3 | 56.7 |
| 17 | 73°00.6 | 45.3 | 17 | 73°13.8 | 25.9 | 17 | 73°27.3 | 36.9 | 17 | 73°40.9 | 47.5 | 17 | 73°54.4 | 57.7 |
| 18 | 88°00.8 | S00°44.3 | 18 | 88°14.0 | N00°26.9 | 18 | 88°27.5 | N01°37.9 | 18 | 88°41.0 | N02°48.5 | 18 | 88°54.6 | N03°58.6 |
| 19 | 103°01.0 | 43.3 | 19 | 103°14.2 | 27.9 | 19 | 103°27.6 | 38.9 | 19 | 103°41.2 | 49.5 | 19 | 103°54.8 | 03°59.6 |
| 20 | 118°01.1 | 42.3 | 20 | 118°14.4 | 28.9 | 20 | 118°27.8 | 39.9 | 20 | 118°41.4 | 50.5 | 20 | 118°55.0 | 04°00.6 |
| 21 | 133°01.3 | ·· 41.3 | 21 | 133°14.6 | ·· 29.9 | 21 | 133°28.0 | ·· 40.9 | 21 | 133°41.6 | ·· 51.5 | 21 | 133°55.2 | ·· 01.5 |
| 22 | 148°01.5 | 40.3 | 22 | 148°14.7 | 30.9 | 22 | 148°28.2 | 41.8 | 22 | 148°41.8 | 52.4 | 22 | 148°55.4 | 02.5 |
| 23 | 163°01.7 | 39.3 | 23 | 163°14.9 | 31.9 | 23 | 163°28.4 | 42.8 | 23 | 163°42.0 | 53.4 | 23 | 163°55.6 | 03.5 |
| | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.0′ | d=1.0′ | | SD=16.0′ | d=1.0′ | | SD=16.0′ | d=1.0′ |

| 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec | 16 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 177°03.4 | S06°31.2 | 0 | 177°13.6 | S05°21.6 | 0 | 177°24.7 | S04°11.3 | 0 | 177°36.6 | S03°00.6 | 0 | 177°49.0 | S01°49.5 |
| 1 | 192°03.5 | 30.2 | 1 | 192°13.8 | 20.6 | 1 | 192°24.9 | 10.3 | 1 | 192°36.7 | 02°59.6 | 1 | 192°49.2 | 48.5 |
| 2 | 207°03.6 | 29.2 | 2 | 207°13.9 | 19.6 | 2 | 207°25.0 | 09.4 | 2 | 207°36.9 | 58.6 | 2 | 207°49.3 | 47.6 |
| 3 | 222°03.8 | ·· 28.3 | 3 | 222°14.1 | ·· 18.7 | 3 | 222°25.2 | ·· 08.4 | 3 | 222°37.1 | ·· 57.6 | 3 | 222°49.5 | ·· 46.6 |
| 4 | 237°03.9 | 27.3 | 4 | 237°14.2 | 17.7 | 4 | 237°25.4 | 07.4 | 4 | 237°37.2 | 56.6 | 4 | 237°49.7 | 45.6 |
| 5 | 252°04.1 | 26.4 | 5 | 252°14.4 | 16.7 | 5 | 252°25.5 | 06.4 | 5 | 252°37.4 | 55.7 | 5 | 252°49.9 | 44.6 |
| 6 | 267°04.2 | S06°25.4 | 6 | 267°14.5 | S05°15.7 | 6 | 267°25.7 | S04°05.4 | 6 | 267°37.6 | S02°54.7 | 6 | 267°50.0 | S01°43.6 |
| 7 | 282°04.3 | 24.4 | 7 | 282°14.7 | 14.8 | 7 | 282°25.8 | 04.5 | 7 | 282°37.7 | 53.7 | 7 | 282°50.2 | 42.6 |
| 8 | 297°04.5 | 23.5 | 8 | 297°14.8 | 13.8 | 8 | 297°26.0 | 03.5 | 8 | 297°37.9 | 52.7 | 8 | 297°50.4 | 41.6 |
| 9 | 312°04.6 | ·· 22.5 | 9 | 312°15.0 | ·· 12.8 | 9 | 312°26.2 | ·· 02.5 | 9 | 312°38.1 | ·· 51.7 | 9 | 312°50.6 | ·· 40.6 |
| 10 | 327°04.7 | 21.5 | 10 | 327°15.1 | 11.9 | 10 | 327°26.3 | 01.5 | 10 | 327°38.2 | 50.7 | 10 | 327°50.7 | 39.6 |
| 11 | 342°04.9 | 20.6 | 11 | 342°15.3 | 10.9 | 11 | 342°26.5 | 04°00.5 | 11 | 342°38.4 | 49.7 | 11 | 342°50.9 | 38.7 |
| 12 | 357°05.0 | S06°19.6 | 12 | 357°15.4 | S05°09.9 | 12 | 357°26.6 | S03°59.6 | 12 | 357°38.6 | S02°48.8 | 12 | 357°51.1 | S01°37.7 |
| 13 | 12°05.2 | 18.7 | 13 | 12°15.6 | 08.9 | 13 | 12°26.8 | 58.6 | 13 | 12°38.8 | 47.8 | 13 | 12°51.3 | 36.7 |
| 14 | 27°05.3 | 17.7 | 14 | 27°15.7 | 08.0 | 14 | 27°27.0 | 57.6 | 14 | 27°38.9 | 46.8 | 14 | 27°51.5 | 35.7 |
| 15 | 42°05.4 | ·· 16.7 | 15 | 42°15.9 | ·· 07.0 | 15 | 42°27.1 | ·· 56.6 | 15 | 42°39.1 | ·· 45.8 | 15 | 42°51.6 | ·· 34.7 |
| 16 | 57°05.6 | 15.8 | 16 | 57°16.0 | 06.0 | 16 | 57°27.3 | 55.6 | 16 | 57°39.3 | 44.8 | 16 | 57°51.8 | 33.7 |
| 17 | 72°05.7 | 14.8 | 17 | 72°16.2 | 05.0 | 17 | 72°27.5 | 54.7 | 17 | 72°39.4 | 43.8 | 17 | 72°52.0 | 32.7 |
| 18 | 87°05.8 | S06°13.8 | 18 | 87°16.3 | S05°04.1 | 18 | 87°27.6 | S03°53.7 | 18 | 87°39.6 | S02°42.8 | 18 | 87°52.2 | S01°31.7 |
| 19 | 102°06.0 | 12.9 | 19 | 102°16.5 | 03.1 | 19 | 102°27.8 | 52.7 | 19 | 102°39.8 | 41.9 | 19 | 102°52.3 | 30.7 |
| 20 | 117°06.1 | 11.9 | 20 | 117°16.6 | 02.1 | 20 | 117°27.9 | 51.7 | 20 | 117°39.9 | 40.9 | 20 | 117°52.5 | 29.8 |
| 21 | 132°06.3 | ·· 10.9 | 21 | 132°16.8 | ·· 01.1 | 21 | 132°28.1 | ·· 50.7 | 21 | 132°40.1 | ·· 39.9 | 21 | 132°52.7 | ·· 28.8 |
| 22 | 147°06.4 | 10.0 | 22 | 147°16.9 | 05°00.2 | 22 | 147°28.3 | 49.8 | 22 | 147°40.3 | 38.9 | 22 | 147°52.9 | 27.8 |
| 23 | 162°06.5 | 09.0 | 23 | 162°17.1 | 04°59.2 | 23 | 162°28.4 | 48.8 | 23 | 162°40.5 | 37.9 | 23 | 162°53.1 | 26.8 |
| | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ | | SD=16.1′ | d=1.0′ |

| 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec | 28 | GHA | Dec | 31 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 178°01.9 | S00°38.3 | 0 | 178°15.1 | N00°32.8 | 0 | 178°28.6 | N01°43.8 | 0 | 178°42.2 | N02°54.4 | 0 | 178°55.8 | N04°04.4 |
| 1 | 193°02.1 | 37.3 | 1 | 193°15.3 | 33.8 | 1 | 193°28.8 | 44.8 | 1 | 193°42.4 | 55.4 | 1 | 193°55.9 | 05.4 |
| 2 | 208°02.2 | 36.4 | 2 | 208°15.5 | 34.8 | 2 | 208°29.0 | 45.8 | 2 | 208°42.6 | 56.3 | 2 | 208°56.1 | 06.4 |
| 3 | 223°02.4 | ·· 35.4 | 3 | 223°15.7 | ·· 35.8 | 3 | 223°29.2 | ·· 46.8 | 3 | 223°42.8 | ·· 57.3 | 3 | 223°56.3 | ·· 07.3 |
| 4 | 238°02.6 | 34.4 | 4 | 238°15.9 | 36.8 | 4 | 238°29.3 | 47.7 | 4 | 238°42.9 | 58.3 | 4 | 238°56.5 | 08.3 |
| 5 | 253°02.8 | 33.4 | 5 | 253°16.0 | 37.8 | 5 | 253°29.5 | 48.7 | 5 | 253°43.1 | 02°59.3 | 5 | 253°56.7 | 09.3 |
| 6 | 268°03.0 | S00°32.4 | 6 | 268°16.2 | N00°38.8 | 6 | 268°29.7 | N01°49.7 | 6 | 268°43.3 | N03°00.2 | 6 | 268°56.9 | N04°10.2 |
| 7 | 283°03.1 | 31.4 | 7 | 283°16.4 | 39.8 | 7 | 283°29.9 | 50.7 | 7 | 283°43.5 | 01.2 | 7 | 283°57.1 | 11.2 |
| 8 | 298°03.3 | 30.4 | 8 | 298°16.6 | 40.7 | 8 | 298°30.1 | 51.7 | 8 | 298°43.7 | 02.2 | 8 | 298°57.3 | 12.2 |
| 9 | 313°03.5 | ·· 29.4 | 9 | 313°16.8 | ·· 41.7 | 9 | 313°30.3 | ·· 52.7 | 9 | 313°43.9 | ·· 03.2 | 9 | 313°57.4 | ·· 13.1 |
| 10 | 328°03.7 | 28.4 | 10 | 328°17.0 | 42.7 | 10 | 328°30.5 | 53.6 | 10 | 328°44.1 | 04.2 | 10 | 328°57.6 | 14.1 |
| 11 | 343°03.9 | 27.4 | 11 | 343°17.2 | 43.7 | 11 | 343°30.7 | 54.6 | 11 | 343°44.3 | 05.1 | 11 | 343°57.8 | 15.1 |
| 12 | 358°04.1 | S00°26.5 | 12 | 358°17.3 | N00°44.7 | 12 | 358°30.9 | N01°55.6 | 12 | 358°44.5 | N03°06.1 | 12 | 358°58.0 | N04°16.0 |
| 13 | 13°04.2 | 25.5 | 13 | 13°17.5 | 45.7 | 13 | 13°31.0 | 56.6 | 13 | 13°44.6 | 07.1 | 13 | 13°58.2 | 17.0 |
| 14 | 28°04.4 | 24.5 | 14 | 28°17.7 | 46.7 | 14 | 28°31.2 | 57.6 | 14 | 28°44.8 | 08.1 | 14 | 28°58.4 | 18.0 |
| 15 | 43°04.6 | ·· 23.5 | 15 | 43°17.9 | ·· 47.6 | 15 | 43°31.4 | ·· 58.5 | 15 | 43°45.0 | ·· 09.0 | 15 | 43°58.6 | ·· 18.9 |
| 16 | 58°04.8 | 22.5 | 16 | 58°18.1 | 48.6 | 16 | 58°31.6 | 01°59.5 | 16 | 58°45.2 | 10.0 | 16 | 58°58.8 | 19.9 |
| 17 | 73°05.0 | 21.5 | 17 | 73°18.3 | 49.6 | 17 | 73°31.8 | 02°00.5 | 17 | 73°45.4 | 11.0 | 17 | 73°58.9 | 20.9 |
| 18 | 88°05.2 | S00°20.5 | 18 | 88°18.5 | N00°50.6 | 18 | 88°32.0 | N02°01.5 | 18 | 88°45.6 | N03°12.0 | 18 | 88°59.1 | N04°21.8 |
| 19 | 103°05.3 | 19.5 | 19 | 103°18.6 | 51.6 | 19 | 103°32.2 | 02.5 | 19 | 103°45.8 | 12.9 | 19 | 103°59.3 | 22.8 |
| 20 | 118°05.5 | 18.5 | 20 | 118°18.8 | 52.6 | 20 | 118°32.4 | 03.5 | 20 | 118°46.0 | 13.9 | 20 | 118°59.5 | 23.8 |
| 21 | 133°05.7 | ·· 17.6 | 21 | 133°19.0 | ·· 53.6 | 21 | 133°32.5 | ·· 04.4 | 21 | 133°46.2 | ·· 14.9 | 21 | 133°59.7 | ·· 24.7 |
| 22 | 148°05.9 | 16.6 | 22 | 148°19.2 | 54.6 | 22 | 148°32.7 | 05.4 | 22 | 148°46.3 | 15.9 | 22 | 148°59.9 | 25.7 |
| 23 | 163°06.1 | 15.6 | 23 | 163°19.4 | 55.5 | 23 | 163°32.9 | 06.4 | 23 | 163°46.5 | 16.8 | 23 | 164°00.1 | 26.7 |
| | SD=16.1′ | d=1.0′ | | SD=16.0′ | d=1.0′ | | SD=16.0′ | d=1.0′ | | SD=16.0′ | d=1.0′ | | SD=16.0′ | d=1.0′ |

DUT1 = UT1-UTC = +0.0658 sec  ΔT = TT-UT1 = +69.1182 sec

## 2026 April 01 to Apr. 15 UT

DUT1 = UT1-UTC = +0.0585 sec  ΔT = TT-UT1 = +69.1255 sec

## 2026 April 16 to Apr. 30 UT

| 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec | 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec | 28 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°00.2 | N04°27.6 | 0 | 179°13.5 | N05°36.7 | 0 | 179°26.5 | N06°45.0 | 0 | 179°38.9 | N07°52.2 | 0 | 179°50.7 | N08°58.2 | 0 | 180°01.7 | N10°03.0 | 0 | 180°11.9 | N11°06.2 | 0 | 180°21.2 | N12°07.7 | 0 | 180°29.5 | N13°07.5 | 0 | 180°36.8 | N14°05.3 |
| 1 | 194°00.4 | 28.6 | 1 | 194°13.7 | 37.7 | 1 | 194°26.7 | 45.9 | 1 | 194°39.1 | 53.1 | 1 | 194°50.8 | 08°59.2 | 1 | 195°01.8 | 03.8 | 1 | 195°12.0 | 07.0 | 1 | 195°21.3 | 08.6 | 1 | 195°29.6 | 08.3 | 1 | 195°36.9 | 06.0 |
| 2 | 209°00.6 | 29.6 | 2 | 209°13.9 | 38.7 | 2 | 209°26.8 | 46.9 | 2 | 209°39.2 | 54.1 | 2 | 209°51.0 | 09°00.1 | 2 | 210°02.0 | 04.7 | 2 | 210°12.2 | 07.9 | 2 | 210°21.4 | 09.4 | 2 | 210°29.7 | 09.1 | 2 | 210°37.0 | 06.8 |
| 3 | 224°00.8 | ·· 30.5 | 3 | 224°14.1 | ·· 39.6 | 3 | 224°27.0 | ·· 47.8 | 3 | 224°39.4 | ·· 55.0 | 3 | 224°51.1 | ·· 01.0 | 3 | 225°02.1 | ·· 05.6 | 3 | 225°12.3 | ·· 08.8 | 3 | 225°21.5 | ·· 10.3 | 3 | 225°29.8 | ·· 09.9 | 3 | 225°37.0 | ·· 07.6 |
| 4 | 239°01.0 | 31.5 | 4 | 239°14.3 | 40.6 | 4 | 239°27.2 | 48.7 | 4 | 239°39.6 | 55.9 | 4 | 239°51.3 | 01.9 | 4 | 240°02.3 | 06.5 | 4 | 240°12.4 | 09.6 | 4 | 240°21.7 | 11.1 | 4 | 240°29.9 | 10.7 | 4 | 240°37.1 | 08.4 |
| 5 | 254°01.2 | 32.5 | 5 | 254°14.5 | 41.5 | 5 | 254°27.4 | 49.7 | 5 | 254°39.7 | 56.8 | 5 | 254°51.5 | 02.8 | 5 | 255°02.4 | 07.4 | 5 | 255°12.6 | 10.5 | 5 | 255°21.8 | 11.9 | 5 | 255°30.0 | 11.5 | 5 | 255°37.2 | 09.2 |
| 6 | 269°01.4 | N04°33.4 | 6 | 269°14.6 | N05°42.5 | 6 | 269°27.5 | N06°50.6 | 6 | 269°39.9 | N07°57.8 | 6 | 269°51.6 | N09°03.7 | 6 | 270°02.6 | N10°08.3 | 6 | 270°12.7 | N11°11.4 | 6 | 270°21.9 | N12°12.8 | 6 | 270°30.1 | N13°12.4 | 6 | 270°37.3 | N14°10.0 |
| 7 | 284°01.6 | 34.4 | 7 | 284°14.8 | 43.4 | 7 | 284°27.7 | 51.6 | 7 | 284°40.1 | 58.7 | 7 | 284°51.8 | 04.6 | 7 | 285°02.7 | 09.2 | 7 | 285°12.8 | 12.2 | 7 | 285°22.0 | 13.6 | 7 | 285°30.2 | 13.2 | 7 | 285°37.4 | 10.8 |
| 8 | 299°01.7 | 35.4 | 8 | 299°15.0 | 44.4 | 8 | 299°27.9 | 52.5 | 8 | 299°40.2 | 07°59.6 | 8 | 299°51.9 | 05.5 | 8 | 300°02.9 | 10.1 | 8 | 300°13.0 | 13.1 | 8 | 300°22.1 | 14.5 | 8 | 300°30.4 | 14.0 | 8 | 300°37.5 | 11.5 |
| 9 | 314°01.9 | ·· 36.3 | 9 | 314°15.2 | ·· 45.3 | 9 | 314°28.1 | ·· 53.4 | 9 | 314°40.4 | 08°00.5 | 9 | 314°52.1 | ·· 06.4 | 9 | 315°03.0 | ·· 10.9 | 9 | 315°13.1 | ·· 14.0 | 9 | 315°22.3 | ·· 15.3 | 9 | 315°30.5 | ·· 14.8 | 9 | 315°37.6 | ·· 12.3 |
| 10 | 329°02.1 | 37.3 | 10 | 329°15.4 | 46.3 | 10 | 329°28.2 | 54.4 | 10 | 329°40.6 | 01.4 | 10 | 329°52.2 | 07.3 | 10 | 330°03.2 | 11.8 | 10 | 330°13.2 | 14.8 | 10 | 330°22.4 | 16.1 | 10 | 330°30.6 | 15.6 | 10 | 330°37.7 | 13.1 |
| 11 | 344°02.3 | 38.2 | 11 | 344°15.6 | 47.2 | 11 | 344°28.4 | 55.3 | 11 | 344°40.7 | 02.4 | 11 | 344°52.4 | 08.2 | 11 | 345°03.3 | 12.7 | 11 | 345°13.4 | 15.7 | 11 | 345°22.5 | 17.0 | 11 | 345°30.7 | 16.4 | 11 | 345°37.8 | 13.9 |
| 12 | 359°02.5 | N04°39.2 | 12 | 359°15.7 | N05°48.2 | 12 | 359°28.6 | N06°56.3 | 12 | 359°40.9 | N08°03.3 | 12 | 359°52.6 | N09°09.1 | 12 | 0°03.5 | N10°13.6 | 12 | 0°13.5 | N11°16.5 | 12 | 0°22.6 | N12°17.8 | 12 | 0°30.8 | N13°17.2 | 12 | 0°37.9 | N14°14.7 |
| 13 | 14°02.7 | 40.2 | 13 | 14°15.9 | 49.1 | 13 | 14°28.8 | 57.2 | 13 | 14°41.1 | 04.2 | 13 | 14°52.7 | 10.0 | 13 | 15°03.6 | 14.5 | 13 | 15°13.6 | 17.4 | 13 | 15°22.7 | 18.7 | 13 | 15°30.9 | 18.1 | 13 | 15°38.0 | 15.5 |
| 14 | 29°02.9 | 41.1 | 14 | 29°16.1 | 50.1 | 14 | 29°28.9 | 58.1 | 14 | 29°41.2 | 05.1 | 14 | 29°52.9 | 10.9 | 14 | 30°03.7 | 15.4 | 14 | 30°13.8 | 18.3 | 14 | 30°22.9 | 19.5 | 14 | 30°31.0 | 18.9 | 14 | 30°38.1 | 16.2 |
| 15 | 44°03.0 | ·· 42.1 | 15 | 44°16.3 | ·· 51.0 | 15 | 44°29.1 | 06°59.1 | 15 | 44°41.4 | ·· 06.1 | 15 | 44°53.0 | ·· 11.8 | 15 | 45°03.9 | ·· 16.3 | 15 | 45°13.9 | ·· 19.1 | 15 | 45°23.0 | ·· 20.3 | 15 | 45°31.1 | ·· 19.7 | 15 | 45°38.1 | ·· 17.0 |
| 16 | 59°03.2 | 43.1 | 16 | 59°16.5 | 52.0 | 16 | 59°29.3 | 07°00.0 | 16 | 59°41.6 | 07.0 | 16 | 59°53.2 | 12.7 | 16 | 60°04.0 | 17.1 | 16 | 60°14.0 | 20.0 | 16 | 60°23.1 | 21.2 | 16 | 60°31.2 | 20.5 | 16 | 60°38.2 | 17.8 |
| 17 | 74°03.4 | 44.0 | 17 | 74°16.6 | 52.9 | 17 | 74°29.5 | 01.0 | 17 | 74°41.7 | 07.9 | 17 | 74°53.3 | 13.6 | 17 | 75°04.2 | 18.0 | 17 | 75°14.2 | 20.9 | 17 | 75°23.2 | 22.0 | 17 | 75°31.3 | 21.3 | 17 | 75°38.3 | 18.6 |
| 18 | 89°03.6 | N04°45.0 | 18 | 89°16.8 | N05°53.9 | 18 | 89°29.6 | N07°01.9 | 18 | 89°41.9 | N08°08.8 | 18 | 89°53.5 | N09°14.6 | 18 | 90°04.3 | N10°18.9 | 18 | 90°14.3 | N11°21.7 | 18 | 90°23.3 | N12°22.8 | 18 | 90°31.4 | N13°22.1 | 18 | 90°38.4 | N14°19.4 |
| 19 | 104°03.8 | 46.0 | 19 | 104°17.0 | 54.8 | 19 | 104°29.8 | 02.8 | 19 | 104°42.1 | 09.7 | 19 | 104°53.7 | 15.5 | 19 | 105°04.5 | 19.8 | 19 | 105°14.4 | 22.6 | 19 | 105°23.5 | 23.7 | 19 | 105°31.5 | 22.9 | 19 | 105°38.5 | 20.2 |
| 20 | 119°04.0 | 46.9 | 20 | 119°17.2 | 55.8 | 20 | 119°30.0 | 03.8 | 20 | 119°42.2 | 10.7 | 20 | 119°53.8 | 16.4 | 20 | 120°04.6 | 20.7 | 20 | 120°14.6 | 23.4 | 20 | 120°23.6 | 24.5 | 20 | 120°31.6 | 23.7 | 20 | 120°38.6 | 20.9 |
| 21 | 134°04.2 | ·· 47.9 | 21 | 134°17.4 | ·· 56.7 | 21 | 134°30.2 | ·· 04.7 | 21 | 134°42.4 | ·· 11.6 | 21 | 134°54.0 | ·· 17.3 | 21 | 135°04.8 | ·· 21.6 | 21 | 135°14.7 | ·· 24.3 | 21 | 135°23.7 | ·· 25.3 | 21 | 135°31.7 | ·· 24.5 | 21 | 135°38.7 | ·· 21.7 |
| 22 | 149°04.3 | 48.8 | 22 | 149°17.5 | 57.7 | 22 | 149°30.3 | 05.6 | 22 | 149°42.6 | 12.5 | 22 | 149°54.1 | 18.2 | 22 | 150°04.9 | 22.4 | 22 | 150°14.8 | 25.2 | 22 | 150°23.8 | 26.2 | 22 | 150°31.8 | 25.3 | 22 | 150°38.8 | 22.5 |
| 23 | 164°04.5 | 49.8 | 23 | 164°17.7 | 58.6 | 23 | 164°30.5 | 06.6 | 23 | 164°42.7 | 13.4 | 23 | 164°54.3 | 19.1 | 23 | 165°05.0 | 23.3 | 23 | 165°15.0 | 26.0 | 23 | 165°23.9 | 27.0 | 23 | 165°31.9 | 26.1 | 23 | 165°38.9 | 23.3 |
| | SD=16.0′ | $d=1.0'$ | | SD=16.0′ | $d=1.0'$ | | SD=16.0′ | $d=0.9'$ | | SD=16.0′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.8'$ | | SD=15.9′ | $d=0.8'$ | | SD=15.9′ | $d=0.8'$ |

| 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec | 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec | 29 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°04.7 | N04°50.8 | 0 | 179°17.9 | N05°59.6 | 0 | 179°30.7 | N07°07.5 | 0 | 179°42.9 | N08°14.4 | 0 | 179°54.4 | N09°20.0 | 0 | 180°05.2 | N10°24.2 | 0 | 180°15.1 | N11°26.9 | 0 | 180°24.1 | N12°27.8 | 0 | 180°32.0 | N13°27.0 | 0 | 180°39.0 | N14°24.1 |
| 1 | 194°04.9 | 51.7 | 1 | 194°18.1 | 06°00.5 | 1 | 194°30.9 | 08.4 | 1 | 194°43.1 | 15.3 | 1 | 194°54.6 | 20.9 | 1 | 195°05.3 | 25.1 | 1 | 195°15.2 | 27.7 | 1 | 195°24.2 | 28.7 | 1 | 195°32.1 | 27.8 | 1 | 195°39.0 | 24.8 |
| 2 | 209°05.1 | 52.7 | 2 | 209°18.3 | 01.5 | 2 | 209°31.0 | 09.4 | 2 | 209°43.2 | 16.2 | 2 | 209°54.7 | 21.8 | 2 | 210°05.5 | 26.0 | 2 | 210°15.3 | 28.6 | 2 | 210°24.3 | 29.5 | 2 | 210°32.2 | 28.6 | 2 | 210°39.1 | 25.6 |
| 3 | 224°05.3 | ·· 53.6 | 3 | 224°18.4 | ·· 02.4 | 3 | 224°31.2 | ·· 10.3 | 3 | 224°43.4 | ·· 17.1 | 3 | 224°54.9 | ·· 22.7 | 3 | 225°05.6 | ·· 26.8 | 3 | 225°15.5 | ·· 29.5 | 3 | 225°24.4 | ·· 30.4 | 3 | 225°32.3 | ·· 29.4 | 3 | 225°39.2 | ·· 26.4 |
| 4 | 239°05.5 | 54.6 | 4 | 239°18.6 | 03.4 | 4 | 239°31.4 | 11.3 | 4 | 239°43.6 | 18.0 | 4 | 239°55.0 | 23.6 | 4 | 240°05.8 | 27.7 | 4 | 240°15.6 | 30.3 | 4 | 240°24.5 | 31.2 | 4 | 240°32.4 | 30.2 | 4 | 240°39.3 | 27.2 |
| 5 | 254°05.6 | 55.6 | 5 | 254°18.8 | 04.3 | 5 | 254°31.5 | 12.2 | 5 | 254°43.7 | 19.0 | 5 | 254°55.2 | 24.5 | 5 | 255°05.9 | 28.6 | 5 | 255°15.7 | 31.2 | 5 | 255°24.6 | 32.0 | 5 | 255°32.6 | 31.0 | 5 | 255°39.4 | 27.9 |
| 6 | 269°05.8 | N04°56.5 | 6 | 269°19.0 | N06°05.3 | 6 | 269°31.7 | N07°13.1 | 6 | 269°43.9 | N08°19.9 | 6 | 269°55.4 | N09°25.4 | 6 | 270°06.0 | N10°29.5 | 6 | 270°15.9 | N11°32.0 | 6 | 270°24.8 | N12°32.8 | 6 | 270°32.7 | N13°31.8 | 6 | 270°39.5 | N14°28.7 |
| 7 | 284°06.0 | 57.5 | 7 | 284°19.2 | 06.2 | 7 | 284°31.9 | 14.1 | 7 | 284°44.0 | 20.8 | 7 | 284°55.5 | 26.3 | 7 | 285°06.2 | 30.4 | 7 | 285°16.0 | 32.9 | 7 | 285°24.9 | 33.7 | 7 | 285°32.8 | 32.6 | 7 | 285°39.6 | 29.5 |
| 8 | 299°06.2 | 58.5 | 8 | 299°19.3 | 07.2 | 8 | 299°32.1 | 15.0 | 8 | 299°44.2 | 21.7 | 8 | 299°55.7 | 27.2 | 8 | 300°06.3 | 31.2 | 8 | 300°16.1 | 33.7 | 8 | 300°25.0 | 34.5 | 8 | 300°32.9 | 33.4 | 8 | 300°39.6 | 30.3 |
| 9 | 314°06.4 | 04°59.4 | 9 | 314°19.5 | ·· 08.1 | 9 | 314°32.2 | ·· 15.9 | 9 | 314°44.4 | ·· 22.6 | 9 | 314°55.8 | ·· 28.1 | 9 | 315°06.5 | ·· 32.1 | 9 | 315°16.3 | ·· 34.6 | 9 | 315°25.1 | ·· 35.3 | 9 | 315°33.0 | ·· 34.2 | 9 | 315°39.7 | ·· 31.0 |
| 10 | 329°06.6 | 05°00.4 | 10 | 329°19.7 | 09.1 | 10 | 329°32.4 | 16.9 | 10 | 329°44.5 | 23.5 | 10 | 329°56.0 | 29.0 | 10 | 330°06.6 | 33.0 | 10 | 330°16.4 | 35.5 | 10 | 330°25.2 | 36.2 | 10 | 330°33.1 | 35.0 | 10 | 330°39.8 | 31.8 |
| 11 | 344°06.7 | 01.3 | 11 | 344°19.9 | 10.0 | 11 | 344°32.6 | 17.8 | 11 | 344°44.7 | 24.5 | 11 | 344°56.1 | 29.9 | 11 | 345°06.8 | 33.9 | 11 | 345°16.5 | 36.3 | 11 | 345°25.3 | 37.0 | 11 | 345°33.2 | 35.8 | 11 | 345°39.9 | 32.6 |
| 12 | 359°06.9 | N05°02.3 | 12 | 359°20.1 | N06°11.0 | 12 | 359°32.8 | N07°18.7 | 12 | 359°44.9 | N08°25.4 | 12 | 359°56.3 | N09°30.8 | 12 | 0°06.9 | N10°34.8 | 12 | 0°16.6 | N11°37.2 | 12 | 0°25.5 | N12°37.8 | 12 | 0°33.3 | N13°36.6 | 12 | 0°40.0 | N14°33.4 |
| 13 | 14°07.1 | 03.3 | 13 | 14°20.2 | 11.9 | 13 | 14°32.9 | 19.7 | 13 | 14°45.0 | 26.3 | 13 | 14°56.4 | 31.7 | 13 | 15°07.0 | 35.6 | 13 | 15°16.8 | 38.0 | 13 | 15°25.6 | 38.7 | 13 | 15°33.4 | 37.4 | 13 | 15°40.1 | 34.1 |
| 14 | 29°07.3 | 04.2 | 14 | 29°20.4 | 12.9 | 14 | 29°33.1 | 20.6 | 14 | 29°45.2 | 27.2 | 14 | 29°56.6 | 32.6 | 14 | 30°07.2 | 36.5 | 14 | 30°16.9 | 38.9 | 14 | 30°25.7 | 39.5 | 14 | 30°33.5 | 38.2 | 14 | 30°40.2 | 34.9 |
| 15 | 44°07.5 | ·· 05.2 | 15 | 44°20.6 | ·· 13.8 | 15 | 44°33.3 | ·· 21.5 | 15 | 44°45.4 | ·· 28.1 | 15 | 44°56.7 | ·· 33.5 | 15 | 45°07.3 | ·· 37.4 | 15 | 45°17.0 | ·· 39.7 | 15 | 45°25.8 | ·· 40.3 | 15 | 45°33.6 | ·· 39.0 | 15 | 45°40.2 | ·· 35.7 |
| 16 | 59°07.7 | 06.1 | 16 | 59°20.8 | 14.8 | 16 | 59°33.4 | 22.5 | 16 | 59°45.5 | 29.0 | 16 | 59°56.9 | 34.4 | 16 | 60°07.5 | 38.3 | 16 | 60°17.2 | 40.6 | 16 | 60°25.9 | 41.2 | 16 | 60°33.7 | 39.8 | 16 | 60°40.3 | 36.5 |
| 17 | 74°07.9 | 07.1 | 17 | 74°21.0 | 15.7 | 17 | 74°33.6 | 23.4 | 17 | 74°45.7 | 30.0 | 17 | 74°57.0 | 35.3 | 17 | 75°07.6 | 39.1 | 17 | 75°17.3 | 41.4 | 17 | 75°26.0 | 42.0 | 17 | 75°33.8 | 40.6 | 17 | 75°40.4 | 37.2 |
| 18 | 89°08.0 | N05°08.1 | 18 | 89°21.1 | N06°16.7 | 18 | 89°33.8 | N07°24.3 | 18 | 89°45.8 | N08°30.9 | 18 | 89°57.2 | N09°36.2 | 18 | 90°07.7 | N10°40.0 | 18 | 90°17.4 | N11°42.3 | 18 | 90°26.1 | N12°42.8 | 18 | 90°33.9 | N13°41.4 | 18 | 90°40.5 | N14°38.0 |
| 19 | 104°08.2 | 09.0 | 19 | 104°21.3 | 17.6 | 19 | 104°34.0 | 25.3 | 19 | 104°46.0 | 31.8 | 19 | 104°57.3 | 37.1 | 19 | 105°07.9 | 40.9 | 19 | 105°17.5 | 43.1 | 19 | 105°26.3 | 43.6 | 19 | 105°34.0 | 42.2 | 19 | 105°40.6 | 38.8 |
| 20 | 119°08.4 | 10.0 | 20 | 119°21.5 | 18.6 | 20 | 119°34.1 | 26.2 | 20 | 119°46.2 | 32.7 | 20 | 119°57.5 | 38.0 | 20 | 120°08.0 | 41.8 | 20 | 120°17.7 | 44.0 | 20 | 120°26.4 | 44.5 | 20 | 120°34.1 | 43.0 | 20 | 120°40.7 | 39.5 |
| 21 | 134°08.6 | ·· 10.9 | 21 | 134°21.7 | ·· 19.5 | 21 | 134°34.3 | ·· 27.1 | 21 | 134°46.3 | ·· 33.6 | 21 | 134°57.7 | ·· 38.9 | 21 | 135°08.2 | ·· 42.6 | 21 | 135°17.8 | ·· 44.8 | 21 | 135°26.5 | ·· 45.3 | 21 | 135°34.2 | ·· 43.8 | 21 | 135°40.8 | ·· 40.3 |
| 22 | 149°08.8 | 11.9 | 22 | 149°21.9 | 20.5 | 22 | 149°34.5 | 28.1 | 22 | 149°46.5 | 34.5 | 22 | 149°57.8 | 39.7 | 22 | 150°08.3 | 43.5 | 22 | 150°17.9 | 45.7 | 22 | 150°26.6 | 46.1 | 22 | 150°34.3 | 44.6 | 22 | 150°40.8 | 41.1 |
| 23 | 164°09.0 | 12.8 | 23 | 164°22.0 | 21.4 | 23 | 164°34.6 | 29.0 | 23 | 164°46.7 | 35.5 | 23 | 164°58.0 | 40.6 | 23 | 165°08.4 | 44.4 | 23 | 165°18.1 | 46.5 | 23 | 165°26.7 | 46.9 | 23 | 165°34.4 | 45.4 | 23 | 165°40.9 | 41.8 |
| | SD=16.0′ | $d=1.0'$ | | SD=16.0′ | $d=0.9'$ | | SD=16.0′ | $d=0.9'$ | | SD=16.0′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.8'$ | | SD=15.9′ | $d=0.8'$ | | SD=15.9′ | $d=0.8'$ |

| 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec | 30 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°09.1 | N05°13.8 | 0 | 179°22.2 | N06°22.3 | 0 | 179°34.8 | N07°29.9 | 0 | 179°46.8 | N08°36.4 | 0 | 179°58.1 | N09°41.5 | 0 | 180°08.6 | N10°45.3 | 0 | 180°18.2 | N11°47.4 | 0 | 180°26.8 | N12°47.8 | 0 | 180°34.5 | N13°46.2 | 0 | 180°41.0 | N14°42.6 |
| 1 | 194°09.3 | 14.8 | 1 | 194°22.4 | 23.3 | 1 | 194°35.0 | 30.8 | 1 | 194°47.0 | 37.3 | 1 | 194°58.3 | 42.4 | 1 | 195°08.7 | 46.1 | 1 | 195°18.3 | 48.3 | 1 | 195°26.9 | 48.6 | 1 | 195°34.6 | 47.0 | 1 | 195°41.1 | 43.4 |
| 2 | 209°09.5 | 15.7 | 2 | 209°22.6 | 24.2 | 2 | 209°35.2 | 31.8 | 2 | 209°47.1 | 38.2 | 2 | 209°58.4 | 43.3 | 2 | 210°08.9 | 47.0 | 2 | 210°18.4 | 49.1 | 2 | 210°27.1 | 49.4 | 2 | 210°34.7 | 47.8 | 2 | 210°41.2 | 44.2 |
| 3 | 224°09.7 | ·· 16.7 | 3 | 224°22.8 | ·· 25.2 | 3 | 224°35.3 | ·· 32.7 | 3 | 224°47.3 | ·· 39.1 | 3 | 224°58.6 | ·· 44.2 | 3 | 225°09.0 | ·· 47.9 | 3 | 225°18.6 | ·· 50.0 | 3 | 225°27.2 | ·· 50.2 | 3 | 225°34.8 | ·· 48.6 | 3 | 225°41.3 | ·· 44.9 |
| 4 | 239°09.9 | 17.6 | 4 | 239°22.9 | 26.1 | 4 | 239°35.5 | 33.6 | 4 | 239°47.5 | 40.0 | 4 | 239°58.7 | 45.1 | 4 | 240°09.1 | 48.8 | 4 | 240°18.7 | 50.8 | 4 | 240°27.3 | 51.1 | 4 | 240°34.9 | 49.4 | 4 | 240°41.3 | 45.7 |
| 5 | 254°10.1 | 18.6 | 5 | 254°23.1 | 27.1 | 5 | 254°35.7 | 34.6 | 5 | 254°47.6 | 40.9 | 5 | 254°58.9 | 46.0 | 5 | 255°09.3 | 49.6 | 5 | 255°18.8 | 51.7 | 5 | 255°27.4 | 51.9 | 5 | 255°35.0 | 50.2 | 5 | 255°41.4 | 46.5 |
| 6 | 269°10.3 | N05°19.5 | 6 | 269°23.3 | N06°28.0 | 6 | 269°35.8 | N07°35.5 | 6 | 269°47.8 | N08°41.9 | 6 | 269°59.0 | N09°46.9 | 6 | 270°09.4 | N10°50.5 | 6 | 270°18.9 | N11°52.5 | 6 | 270°27.5 | N12°52.7 | 6 | 270°35.1 | N13°51.0 | 6 | 270°41.5 | N14°47.2 |
| 7 | 284°10.4 | 20.5 | 7 | 284°23.5 | 29.0 | 7 | 284°36.0 | 36.4 | 7 | 284°47.9 | 42.8 | 7 | 284°59.2 | 47.8 | 7 | 285°09.6 | 51.4 | 7 | 285°19.1 | 53.3 | 7 | 285°27.6 | 53.5 | 7 | 285°35.1 | 51.8 | 7 | 285°41.6 | 48.0 |
| 8 | 299°10.6 | 21.5 | 8 | 299°23.6 | 29.9 | 8 | 299°36.2 | 37.4 | 8 | 299°48.1 | 43.7 | 8 | 299°59.3 | 48.7 | 8 | 300°09.7 | 52.3 | 8 | 300°19.2 | 54.2 | 8 | 300°27.7 | 54.4 | 8 | 300°35.2 | 52.6 | 8 | 300°41.7 | 48.8 |
| 9 | 314°10.8 | ·· 22.4 | 9 | 314°23.8 | ·· 30.8 | 9 | 314°36.4 | ·· 38.3 | 9 | 314°48.3 | ·· 44.6 | 9 | 314°59.5 | ·· 49.6 | 9 | 315°09.8 | ·· 53.1 | 9 | 315°19.3 | ·· 55.0 | 9 | 315°27.8 | ·· 55.2 | 9 | 315°35.3 | ·· 53.4 | 9 | 315°41.7 | ·· 49.5 |
| 10 | 329°11.0 | 23.4 | 10 | 329°24.0 | 31.8 | 10 | 329°36.5 | 39.2 | 10 | 329°48.4 | 45.5 | 10 | 329°59.6 | 50.5 | 10 | 330°10.0 | 54.0 | 10 | 330°19.4 | 55.9 | 10 | 330°28.0 | 56.0 | 10 | 330°35.4 | 54.2 | 10 | 330°41.8 | 50.3 |
| 11 | 344°11.2 | 24.3 | 11 | 344°24.2 | 32.7 | 11 | 344°36.7 | 40.1 | 11 | 344°48.6 | 46.4 | 11 | 344°59.8 | 51.4 | 11 | 345°10.1 | 54.9 | 11 | 345°19.6 | 56.7 | 11 | 345°28.1 | 56.8 | 11 | 345°35.5 | 55.0 | 11 | 345°41.9 | 51.0 |
| 12 | 359°11.4 | N05°25.3 | 12 | 359°24.4 | N06°33.7 | 12 | 359°36.9 | N07°41.1 | 12 | 359°48.8 | N08°47.3 | 12 | 359°59.9 | N09°52.3 | 12 | 0°10.2 | N10°55.7 | 12 | 0°19.7 | N11°57.6 | 12 | 0°28.2 | N12°57.6 | 12 | 0°35.6 | N13°55.8 | 12 | 0°42.0 | N14°51.8 |
| 13 | 14°11.5 | 26.2 | 13 | 14°24.5 | 34.6 | 13 | 14°37.0 | 42.0 | 13 | 14°48.9 | 48.2 | 13 | 15°00.1 | 53.2 | 13 | 15°10.4 | 56.6 | 13 | 15°19.8 | 58.4 | 13 | 15°28.3 | 58.5 | 13 | 15°35.7 | 56.6 | 13 | 15°42.1 | 52.6 |
| 14 | 29°11.7 | 27.2 | 14 | 29°24.7 | 35.6 | 14 | 29°37.2 | 42.9 | 14 | 29°49.1 | 49.1 | 14 | 30°00.2 | 54.1 | 14 | 30°10.5 | 57.5 | 14 | 30°19.9 | 11°59.3 | 14 | 30°28.4 | 12°59.3 | 14 | 30°35.8 | 57.4 | 14 | 30°42.1 | 53.3 |
| 15 | 44°11.9 | ·· 28.2 | 15 | 44°24.9 | ·· 36.5 | 15 | 44°37.4 | ·· 43.9 | 15 | 44°49.2 | ·· 50.1 | 15 | 45°00.4 | ·· 54.9 | 15 | 45°10.7 | ·· 58.4 | 15 | 45°20.1 | 12°00.1 | 15 | 45°28.5 | 13°00.1 | 15 | 45°35.9 | ·· 58.1 | 15 | 45°42.2 | ·· 54.1 |
| 16 | 59°12.1 | 29.1 | 16 | 59°25.1 | 37.5 | 16 | 59°37.5 | 44.8 | 16 | 59°49.4 | 51.0 | 16 | 60°00.5 | 55.8 | 16 | 60°10.8 | 10°59.2 | 16 | 60°20.2 | 01.0 | 16 | 60°28.6 | 00.9 | 16 | 60°36.0 | 58.9 | 16 | 60°42.3 | 54.9 |
| 17 | 74°12.3 | 30.1 | 17 | 74°25.2 | 38.4 | 17 | 74°37.7 | 45.7 | 17 | 74°49.6 | 51.9 | 17 | 75°00.7 | 56.7 | 17 | 75°10.9 | 11°00.1 | 17 | 75°20.3 | 01.8 | 17 | 75°28.7 | 01.7 | 17 | 75°36.1 | 13°59.7 | 17 | 75°42.4 | 55.6 |
| 18 | 89°12.5 | N05°31.0 | 18 | 89°25.4 | N06°39.3 | 18 | 89°37.9 | N07°46.6 | 18 | 89°49.7 | N08°52.8 | 18 | 90°00.8 | N09°57.6 | 18 | 90°11.1 | N11°01.0 | 18 | 90°20.4 | N12°02.7 | 18 | 90°28.8 | N13°02.6 | 18 | 90°36.2 | N14°00.5 | 18 | 90°42.5 | N14°56.4 |
| 19 | 104°12.6 | 32.0 | 19 | 104°25.6 | 40.3 | 19 | 104°38.0 | 47.6 | 19 | 104°49.9 | 53.7 | 19 | 105°01.0 | 58.5 | 19 | 105°11.2 | 01.8 | 19 | 105°20.6 | 03.5 | 19 | 105°28.9 | 03.4 | 19 | 105°36.3 | 01.3 | 19 | 105°42.5 | 57.1 |
| 20 | 119°12.8 | 32.9 | 20 | 119°25.8 | 41.2 | 20 | 119°38.2 | 48.5 | 20 | 119°50.0 | 54.6 | 20 | 120°01.1 | 09°59.4 | 20 | 120°11.3 | 02.7 | 20 | 120°20.7 | 04.4 | 20 | 120°29.1 | 04.2 | 20 | 120°36.4 | 02.1 | 20 | 120°42.6 | 57.9 |
| 21 | 134°13.0 | ·· 33.9 | 21 | 134°25.9 | ·· 42.2 | 21 | 134°38.4 | ·· 49.4 | 21 | 134°50.2 | ·· 55.5 | 21 | 135°01.2 | 10°00.3 | 21 | 135°11.5 | ·· 03.6 | 21 | 135°20.8 | ·· 05.2 | 21 | 135°29.2 | ·· 05.0 | 21 | 135°36.5 | ·· 02.9 | 21 | 135°42.7 | ·· 58.7 |
| 22 | 149°13.2 | 34.8 | 22 | 149°26.1 | 43.1 | 22 | 149°38.6 | 50.3 | 22 | 149°50.3 | 56.4 | 22 | 150°01.4 | 01.2 | 22 | 150°11.6 | 04.4 | 22 | 150°20.9 | 06.0 | 22 | 150°29.3 | 05.8 | 22 | 150°36.6 | 03.7 | 22 | 150°42.8 | 14°59.4 |
| 23 | 164°13.4 | 35.8 | 23 | 164°26.3 | 44.0 | 23 | 164°38.7 | 51.3 | 23 | 164°50.5 | 57.3 | 23 | 165°01.5 | 02.1 | 23 | 165°11.7 | 05.3 | 23 | 165°21.0 | 06.9 | 23 | 165°29.4 | 06.7 | 23 | 165°36.7 | 04.5 | 23 | 165°42.9 | 15°00.2 |
| | SD=16.0′ | $d=1.0'$ | | SD=16.0′ | $d=0.9'$ | | SD=16.0′ | $d=0.9'$ | | SD=16.0′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.8'$ | | SD=15.9′ | $d=0.8'$ | | SD=15.9′ | $d=0.8'$ |

| 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 180°42.9 | N15°00.9 | 0 | 180°47.9 | N15°54.4 | 0 | 180°51.6 | N16°45.5 | 0 | 180°54.0 | N17°34.1 | 0 | 180°55.1 | N18°20.0 |
| 1 | 195°43.0 | 01.7 | 1 | 195°48.0 | 55.1 | 1 | 195°51.6 | 46.2 | 1 | 195°54.0 | 34.7 | 1 | 195°55.1 | 20.6 |
| 2 | 210°43.1 | 02.5 | 2 | 210°48.0 | 55.8 | 2 | 210°51.7 | 46.9 | 2 | 210°54.0 | 35.4 | 2 | 210°55.1 | 21.3 |
| 3 | 225°43.2 | ·· 03.2 | 3 | 225°48.1 | ·· 56.6 | 3 | 225°51.7 | ·· 47.6 | 3 | 225°54.1 | ·· 36.0 | 3 | 225°55.1 | ·· 21.9 |
| 4 | 240°43.2 | 04.0 | 4 | 240°48.1 | 57.3 | 4 | 240°51.8 | 48.2 | 4 | 240°54.1 | 36.7 | 4 | 240°55.1 | 22.5 |
| 5 | 255°43.3 | 04.7 | 5 | 255°48.2 | 58.0 | 5 | 255°51.8 | 48.9 | 5 | 255°54.1 | 37.4 | 5 | 255°55.1 | 23.1 |
| 6 | 270°43.4 | N15°05.5 | 6 | 270°48.2 | N15°58.7 | 6 | 270°51.8 | N16°49.6 | 6 | 270°54.1 | N17°38.0 | 6 | 270°55.1 | N18°23.7 |
| 7 | 285°43.5 | 06.2 | 7 | 285°48.3 | 15°59.5 | 7 | 285°51.9 | 50.3 | 7 | 285°54.2 | 38.7 | 7 | 285°55.1 | 24.4 |
| 8 | 300°43.5 | 07.0 | 8 | 300°48.4 | 16°00.2 | 8 | 300°51.9 | 51.0 | 8 | 300°54.2 | 39.3 | 8 | 300°55.1 | 25.0 |
| 9 | 315°43.6 | ·· 07.7 | 9 | 315°48.4 | ·· 00.9 | 9 | 315°52.0 | ·· 51.7 | 9 | 315°54.2 | ·· 40.0 | 9 | 315°55.1 | ·· 25.6 |
| 10 | 330°43.7 | 08.5 | 10 | 330°48.5 | 01.6 | 10 | 330°52.0 | 52.4 | 10 | 330°54.2 | 40.6 | 10 | 330°55.1 | 26.2 |
| 11 | 345°43.8 | 09.3 | 11 | 345°48.5 | 02.4 | 11 | 345°52.0 | 53.1 | 11 | 345°54.2 | 41.3 | 11 | 345°55.1 | 26.8 |
| 12 | 0°43.8 | N15°10.0 | 12 | 0°48.6 | N16°03.1 | 12 | 0°52.1 | N16°53.8 | 12 | 0°54.3 | N17°41.9 | 12 | 0°55.1 | N18°27.4 |
| 13 | 15°43.9 | 10.8 | 13 | 15°48.7 | 03.8 | 13 | 15°52.1 | 54.4 | 13 | 15°54.3 | 42.6 | 13 | 15°55.1 | 28.0 |
| 14 | 30°44.0 | 11.5 | 14 | 30°48.7 | 04.5 | 14 | 30°52.2 | 55.1 | 14 | 30°54.3 | 43.2 | 14 | 30°55.1 | 28.6 |
| 15 | 45°44.1 | ·· 12.3 | 15 | 45°48.8 | ·· 05.2 | 15 | 45°52.2 | ·· 55.8 | 15 | 45°54.3 | ·· 43.9 | 15 | 45°55.1 | ·· 29.3 |
| 16 | 60°44.1 | 13.0 | 16 | 60°48.8 | 06.0 | 16 | 60°52.2 | 56.5 | 16 | 60°54.3 | 44.5 | 16 | 60°55.1 | 29.9 |
| 17 | 75°44.2 | 13.8 | 17 | 75°48.9 | 06.7 | 17 | 75°52.3 | 57.2 | 17 | 75°54.4 | 45.2 | 17 | 75°55.1 | 30.5 |
| 18 | 90°44.3 | N15°14.5 | 18 | 90°48.9 | N16°07.4 | 18 | 90°52.3 | N16°57.9 | 18 | 90°54.4 | N17°45.8 | 18 | 90°55.1 | N18°31.1 |
| 19 | 105°44.4 | 15.3 | 19 | 105°49.0 | 08.1 | 19 | 105°52.4 | 58.6 | 19 | 105°54.4 | 46.5 | 19 | 105°55.1 | 31.7 |
| 20 | 120°44.4 | 16.0 | 20 | 120°49.0 | 08.8 | 20 | 120°52.4 | 59.2 | 20 | 120°54.4 | 47.1 | 20 | 120°55.1 | 32.3 |
| 21 | 135°44.5 | ·· 16.8 | 21 | 135°49.1 | ·· 09.5 | 21 | 135°52.4 | 16°59.9 | 21 | 135°54.4 | ·· 47.8 | 21 | 135°55.1 | ·· 32.9 |
| 22 | 150°44.6 | 17.5 | 22 | 150°49.2 | 10.3 | 22 | 150°52.5 | 17°00.6 | 22 | 150°54.5 | 48.4 | 22 | 150°55.1 | 33.5 |
| 23 | 165°44.6 | 18.3 | 23 | 165°49.2 | 11.0 | 23 | 165°52.5 | 01.3 | 23 | 165°54.5 | 49.0 | 23 | 165°55.1 | 34.1 |
| | SD=15.9′ | $d=0.8'$ | | SD=15.9′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.6'$ |

| 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec | 28 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 180°54.8 | N19°03.2 | 0 | 180°53.3 | N19°43.5 | 0 | 180°50.5 | N20°20.7 | 0 | 180°46.7 | N20°54.8 | 0 | 180°41.7 | N21°25.6 |
| 1 | 195°54.8 | 03.8 | 1 | 195°53.3 | 44.0 | 1 | 195°50.5 | 21.2 | 1 | 195°46.6 | 55.3 | 1 | 195°41.6 | 26.1 |
| 2 | 210°54.8 | 04.4 | 2 | 210°53.2 | 44.6 | 2 | 210°50.4 | 21.7 | 2 | 210°46.5 | 55.7 | 2 | 210°41.6 | 26.5 |
| 3 | 225°54.8 | ·· 04.9 | 3 | 225°53.2 | ·· 45.1 | 3 | 225°50.4 | ·· 22.2 | 3 | 225°46.5 | ·· 56.2 | 3 | 225°41.5 | ·· 26.9 |
| 4 | 240°54.8 | 05.5 | 4 | 240°53.2 | 45.6 | 4 | 240°50.4 | 22.7 | 4 | 240°46.4 | 56.6 | 4 | 240°41.4 | 27.3 |
| 5 | 255°54.7 | 06.1 | 5 | 255°53.1 | 46.2 | 5 | 255°50.3 | 23.2 | 5 | 255°46.4 | 57.1 | 5 | 255°41.3 | 27.7 |
| 6 | 270°54.7 | N19°06.7 | 6 | 270°53.1 | N19°46.7 | 6 | 270°50.3 | N20°23.7 | 6 | 270°46.3 | N20°57.5 | 6 | 270°41.2 | N21°28.1 |
| 7 | 285°54.7 | 07.3 | 7 | 285°53.1 | 47.2 | 7 | 285°50.2 | 24.2 | 7 | 285°46.2 | 58.0 | 7 | 285°41.2 | 28.5 |
| 8 | 300°54.7 | 07.8 | 8 | 300°53.0 | 47.8 | 8 | 300°50.2 | 24.7 | 8 | 300°46.2 | 58.4 | 8 | 300°41.1 | 28.9 |
| 9 | 315°54.7 | ·· 08.4 | 9 | 315°53.0 | ·· 48.3 | 9 | 315°50.1 | ·· 25.2 | 9 | 315°46.1 | ·· 58.8 | 9 | 315°41.0 | ·· 29.3 |
| 10 | 330°54.7 | 09.0 | 10 | 330°53.0 | 48.8 | 10 | 330°50.1 | 25.6 | 10 | 330°46.0 | 59.3 | 10 | 330°40.9 | 29.7 |
| 11 | 345°54.7 | 09.6 | 11 | 345°52.9 | 49.4 | 11 | 345°50.0 | 26.1 | 11 | 345°46.0 | 20°59.7 | 11 | 345°40.9 | 30.1 |
| 12 | 0°54.6 | N19°10.1 | 12 | 0°52.9 | N19°49.9 | 12 | 0°50.0 | N20°26.6 | 12 | 0°45.9 | N21°00.2 | 12 | 0°40.8 | N21°30.5 |
| 13 | 15°54.6 | 10.7 | 13 | 15°52.9 | 50.4 | 13 | 15°49.9 | 27.1 | 13 | 15°45.8 | 00.6 | 13 | 15°40.7 | 30.9 |
| 14 | 30°54.6 | 11.3 | 14 | 30°52.8 | 51.0 | 14 | 30°49.9 | 27.6 | 14 | 30°45.8 | 01.1 | 14 | 30°40.6 | 31.3 |
| 15 | 45°54.6 | ·· 11.8 | 15 | 45°52.8 | ·· 51.5 | 15 | 45°49.8 | ·· 28.1 | 15 | 45°45.7 | ·· 01.5 | 15 | 45°40.5 | ·· 31.7 |
| 16 | 60°54.6 | 12.4 | 16 | 60°52.8 | 52.0 | 16 | 60°49.8 | 28.6 | 16 | 60°45.7 | 01.9 | 16 | 60°40.5 | 32.1 |
| 17 | 75°54.6 | 13.0 | 17 | 75°52.7 | 52.6 | 17 | 75°49.7 | 29.1 | 17 | 75°45.6 | 02.4 | 17 | 75°40.4 | 32.4 |
| 18 | 90°54.5 | N19°13.6 | 18 | 90°52.7 | N19°53.1 | 18 | 90°49.7 | N20°29.5 | 18 | 90°45.5 | N21°02.8 | 18 | 90°40.3 | N21°32.8 |
| 19 | 105°54.5 | 14.1 | 19 | 105°52.7 | 53.6 | 19 | 105°49.6 | 30.0 | 19 | 105°45.5 | 03.3 | 19 | 105°40.2 | 33.2 |
| 20 | 120°54.5 | 14.7 | 20 | 120°52.6 | 54.1 | 20 | 120°49.6 | 30.5 | 20 | 120°45.4 | 03.7 | 20 | 120°40.1 | 33.6 |
| 21 | 135°54.5 | ·· 15.3 | 21 | 135°52.6 | ·· 54.7 | 21 | 135°49.5 | ·· 31.0 | 21 | 135°45.3 | ·· 04.1 | 21 | 135°40.1 | ·· 34.0 |
| 22 | 150°54.5 | 15.8 | 22 | 150°52.6 | 55.2 | 22 | 150°49.5 | 31.5 | 22 | 150°45.3 | 04.6 | 22 | 150°40.0 | 34.4 |
| 23 | 165°54.5 | 16.4 | 23 | 165°52.5 | 55.7 | 23 | 165°49.4 | 32.0 | 23 | 165°45.2 | 05.0 | 23 | 165°39.9 | 34.8 |
| | SD=15.8′ | $d=0.6'$ | | SD=15.8′ | $d=0.5'$ | | SD=15.8′ | $d=0.5'$ | | SD=15.8′ | $d=0.5'$ | | SD=15.8′ | $d=0.4'$ |

| 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 180°44.7 | N15°19.0 | 0 | 180°49.3 | N16°11.7 | 0 | 180°52.5 | N17°02.0 | 0 | 180°54.5 | N17°49.7 | 0 | 180°55.1 | N18°34.7 |
| 1 | 195°44.8 | 19.8 | 1 | 195°49.3 | 12.4 | 1 | 195°52.6 | 02.6 | 1 | 195°54.5 | 50.3 | 1 | 195°55.1 | 35.3 |
| 2 | 210°44.9 | 20.5 | 2 | 210°49.4 | 13.1 | 2 | 210°52.6 | 03.3 | 2 | 210°54.5 | 51.0 | 2 | 210°55.1 | 35.9 |
| 3 | 225°44.9 | ·· 21.3 | 3 | 225°49.4 | ·· 13.8 | 3 | 225°52.6 | ·· 04.0 | 3 | 225°54.6 | ·· 51.6 | 3 | 225°55.1 | ·· 36.6 |
| 4 | 240°45.0 | 22.0 | 4 | 240°49.5 | 14.5 | 4 | 240°52.7 | 04.7 | 4 | 240°54.6 | 52.3 | 4 | 240°55.1 | 37.2 |
| 5 | 255°45.1 | 22.7 | 5 | 255°49.5 | 15.3 | 5 | 255°52.7 | 05.4 | 5 | 255°54.6 | 52.9 | 5 | 255°55.1 | 37.8 |
| 6 | 270°45.1 | N15°23.5 | 6 | 270°49.6 | N16°16.0 | 6 | 270°52.8 | N17°06.0 | 6 | 270°54.6 | N17°53.6 | 6 | 270°55.1 | N18°38.4 |
| 7 | 285°45.2 | 24.2 | 7 | 285°49.6 | 16.7 | 7 | 285°52.8 | 06.7 | 7 | 285°54.6 | 54.2 | 7 | 285°55.1 | 39.0 |
| 8 | 300°45.3 | 25.0 | 8 | 300°49.7 | 17.4 | 8 | 300°52.8 | 07.4 | 8 | 300°54.6 | 54.8 | 8 | 300°55.1 | 39.6 |
| 9 | 315°45.4 | ·· 25.7 | 9 | 315°49.7 | ·· 18.1 | 9 | 315°52.9 | ·· 08.1 | 9 | 315°54.7 | ·· 55.5 | 9 | 315°55.1 | ·· 40.2 |
| 10 | 330°45.4 | 26.5 | 10 | 330°49.8 | 18.8 | 10 | 330°52.9 | 08.7 | 10 | 330°54.7 | 56.1 | 10 | 330°55.1 | 40.8 |
| 11 | 345°45.5 | 27.2 | 11 | 345°49.9 | 19.5 | 11 | 345°52.9 | 09.4 | 11 | 345°54.7 | 56.8 | 11 | 345°55.1 | 41.4 |
| 12 | 0°45.6 | N15°28.0 | 12 | 0°49.9 | N16°20.2 | 12 | 0°53.0 | N17°10.1 | 12 | 0°54.7 | N17°57.4 | 12 | 0°55.1 | N18°42.0 |
| 13 | 15°45.6 | 28.7 | 13 | 15°50.0 | 21.0 | 13 | 15°53.0 | 10.8 | 13 | 15°54.7 | 58.0 | 13 | 15°55.1 | 42.6 |
| 14 | 30°45.7 | 29.4 | 14 | 30°50.0 | 21.7 | 14 | 30°53.0 | 11.4 | 14 | 30°54.7 | 58.7 | 14 | 30°55.1 | 43.2 |
| 15 | 45°45.8 | ·· 30.2 | 15 | 45°50.1 | ·· 22.4 | 15 | 45°53.1 | ·· 12.1 | 15 | 45°54.7 | ·· 59.3 | 15 | 45°55.1 | ·· 43.8 |
| 16 | 60°45.8 | 30.9 | 16 | 60°50.1 | 23.1 | 16 | 60°53.1 | 12.8 | 16 | 60°54.8 | 17°59.9 | 16 | 60°55.1 | 44.4 |
| 17 | 75°45.9 | 31.7 | 17 | 75°50.2 | 23.8 | 17 | 75°53.1 | 13.5 | 17 | 75°54.8 | 18°00.6 | 17 | 75°55.1 | 45.0 |
| 18 | 90°46.0 | N15°32.4 | 18 | 90°50.2 | N16°24.5 | 18 | 90°53.2 | N17°14.1 | 18 | 90°54.8 | N18°01.2 | 18 | 90°55.1 | N18°45.6 |
| 19 | 105°46.0 | 33.1 | 19 | 105°50.3 | 25.2 | 19 | 105°53.2 | 14.8 | 19 | 105°54.8 | 01.8 | 19 | 105°55.1 | 46.2 |
| 20 | 120°46.1 | 33.9 | 20 | 120°50.3 | 25.9 | 20 | 120°53.2 | 15.5 | 20 | 120°54.8 | 02.5 | 20 | 120°55.1 | 46.8 |
| 21 | 135°46.2 | ·· 34.6 | 21 | 135°50.4 | ·· 26.6 | 21 | 135°53.2 | ·· 16.2 | 21 | 135°54.8 | ·· 03.1 | 21 | 135°55.1 | ·· 47.3 |
| 22 | 150°46.2 | 35.4 | 22 | 150°50.4 | 27.3 | 22 | 150°53.3 | 16.8 | 22 | 150°54.8 | 03.7 | 22 | 150°55.1 | 47.9 |
| 23 | 165°46.3 | 36.1 | 23 | 165°50.5 | 28.0 | 23 | 165°53.3 | 17.5 | 23 | 165°54.8 | 04.4 | 23 | 165°55.0 | 48.5 |
| | SD=15.9′ | $d=0.7'$ | | SD=15.9′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.6'$ | | SD=15.8′ | $d=0.6'$ |

| 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec | 29 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 180°54.4 | N19°17.0 | 0 | 180°52.5 | N19°56.2 | 0 | 180°49.4 | N20°32.4 | 0 | 180°45.1 | N21°05.5 | 0 | 180°39.8 | N21°35.2 |
| 1 | 195°54.4 | 17.5 | 1 | 195°52.5 | 56.8 | 1 | 195°49.3 | 32.9 | 1 | 195°45.1 | 05.9 | 1 | 195°39.7 | 35.6 |
| 2 | 210°54.4 | 18.1 | 2 | 210°52.4 | 57.3 | 2 | 210°49.3 | 33.4 | 2 | 210°45.0 | 06.3 | 2 | 210°39.7 | 36.0 |
| 3 | 225°54.4 | ·· 18.7 | 3 | 225°52.4 | ·· 57.8 | 3 | 225°49.2 | ·· 33.9 | 3 | 225°44.9 | ·· 06.8 | 3 | 225°39.6 | ·· 36.4 |
| 4 | 240°54.4 | 19.2 | 4 | 240°52.4 | 58.3 | 4 | 240°49.2 | 34.4 | 4 | 240°44.9 | 07.2 | 4 | 240°39.5 | 36.7 |
| 5 | 255°54.3 | 19.8 | 5 | 255°52.3 | 58.9 | 5 | 255°49.1 | 34.8 | 5 | 255°44.8 | 07.6 | 5 | 255°39.4 | 37.1 |
| 6 | 270°54.3 | N19°20.3 | 6 | 270°52.3 | N19°59.4 | 6 | 270°49.1 | N20°35.3 | 6 | 270°44.7 | N21°08.1 | 6 | 270°39.3 | N21°37.5 |
| 7 | 285°54.3 | 20.9 | 7 | 285°52.2 | 19°59.9 | 7 | 285°49.0 | 35.8 | 7 | 285°44.7 | 08.5 | 7 | 285°39.3 | 37.9 |
| 8 | 300°54.3 | 21.5 | 8 | 300°52.2 | 20°00.4 | 8 | 300°49.0 | 36.3 | 8 | 300°44.6 | 08.9 | 8 | 300°39.2 | 38.3 |
| 9 | 315°54.3 | ·· 22.0 | 9 | 315°52.2 | ·· 00.9 | 9 | 315°48.9 | ·· 36.7 | 9 | 315°44.5 | ·· 09.4 | 9 | 315°39.1 | ·· 38.7 |
| 10 | 330°54.2 | 22.6 | 10 | 330°52.1 | 01.5 | 10 | 330°48.8 | 37.2 | 10 | 330°44.5 | 09.8 | 10 | 330°39.0 | 39.1 |
| 11 | 345°54.2 | 23.2 | 11 | 345°52.1 | 02.0 | 11 | 345°48.8 | 37.7 | 11 | 345°44.4 | 10.2 | 11 | 345°38.9 | 39.4 |
| 12 | 0°54.2 | N19°23.7 | 12 | 0°52.1 | N20°02.5 | 12 | 0°48.7 | N20°38.2 | 12 | 0°44.3 | N21°10.6 | 12 | 0°38.8 | N21°39.8 |
| 13 | 15°54.2 | 24.3 | 13 | 15°52.0 | 03.0 | 13 | 15°48.7 | 38.6 | 13 | 15°44.2 | 11.1 | 13 | 15°38.8 | 40.2 |
| 14 | 30°54.2 | 24.8 | 14 | 30°52.0 | 03.5 | 14 | 30°48.6 | 39.1 | 14 | 30°44.2 | 11.5 | 14 | 30°38.7 | 40.6 |
| 15 | 45°54.1 | ·· 25.4 | 15 | 45°51.9 | ·· 04.0 | 15 | 45°48.6 | ·· 39.6 | 15 | 45°44.1 | ·· 11.9 | 15 | 45°38.6 | ·· 41.0 |
| 16 | 60°54.1 | 25.9 | 16 | 60°51.9 | 04.6 | 16 | 60°48.5 | 40.1 | 16 | 60°44.0 | 12.4 | 16 | 60°38.5 | 41.3 |
| 17 | 75°54.1 | 26.5 | 17 | 75°51.9 | 05.1 | 17 | 75°48.5 | 40.5 | 17 | 75°44.0 | 12.8 | 17 | 75°38.4 | 41.7 |
| 18 | 90°54.1 | N19°27.1 | 18 | 90°51.8 | N20°05.6 | 18 | 90°48.4 | N20°41.0 | 18 | 90°43.9 | N21°13.2 | 18 | 90°38.3 | N21°42.1 |
| 19 | 105°54.0 | 27.6 | 19 | 105°51.8 | 06.1 | 19 | 105°48.4 | 41.5 | 19 | 105°43.8 | 13.6 | 19 | 105°38.3 | 42.5 |
| 20 | 120°54.0 | 28.2 | 20 | 120°51.7 | 06.6 | 20 | 120°48.3 | 41.9 | 20 | 120°43.8 | 14.0 | 20 | 120°38.2 | 42.9 |
| 21 | 135°54.0 | ·· 28.7 | 21 | 135°51.7 | ·· 07.1 | 21 | 135°48.2 | ·· 42.4 | 21 | 135°43.7 | ·· 14.5 | 21 | 135°38.1 | ·· 43.2 |
| 22 | 150°54.0 | 29.3 | 22 | 150°51.7 | 07.6 | 22 | 150°48.2 | 42.9 | 22 | 150°43.6 | 14.9 | 22 | 150°38.0 | 43.6 |
| 23 | 165°54.0 | 29.8 | 23 | 165°51.6 | 08.1 | 23 | 165°48.1 | 43.3 | 23 | 165°43.5 | 15.3 | 23 | 165°37.9 | 44.0 |
| | SD=15.8′ | $d=0.6'$ | | SD=15.8′ | $d=0.5'$ | | SD=15.8′ | $d=0.5'$ | | SD=15.8′ | $d=0.4'$ | | SD=15.8′ | $d=0.4'$ |

| 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 180°46.4 | N15°36.8 | 0 | 180°50.5 | N16°28.7 | 0 | 180°53.3 | N17°18.2 | 0 | 180°54.9 | N18°05.0 | 0 | 180°55.0 | N18°49.1 |
| 1 | 195°46.4 | 37.6 | 1 | 195°50.6 | 29.4 | 1 | 195°53.4 | 18.8 | 1 | 195°54.9 | 05.6 | 1 | 195°55.0 | 49.7 |
| 2 | 210°46.5 | 38.3 | 2 | 210°50.6 | 30.1 | 2 | 210°53.4 | 19.5 | 2 | 210°54.9 | 06.3 | 2 | 210°55.0 | 50.3 |
| 3 | 225°46.6 | ·· 39.0 | 3 | 225°50.6 | ·· 30.8 | 3 | 225°53.4 | ·· 20.2 | 3 | 225°54.9 | ·· 06.9 | 3 | 225°55.0 | ·· 50.9 |
| 4 | 240°46.6 | 39.8 | 4 | 240°50.7 | 31.5 | 4 | 240°53.5 | 20.8 | 4 | 240°54.9 | 07.5 | 4 | 240°55.0 | 51.5 |
| 5 | 255°46.7 | 40.5 | 5 | 255°50.7 | 32.2 | 5 | 255°53.5 | 21.5 | 5 | 255°54.9 | 08.2 | 5 | 255°55.0 | 52.1 |
| 6 | 270°46.8 | N15°41.2 | 6 | 270°50.8 | N16°32.9 | 6 | 270°53.5 | N17°22.2 | 6 | 270°54.9 | N18°08.8 | 6 | 270°55.0 | N18°52.7 |
| 7 | 285°46.8 | 42.0 | 7 | 285°50.8 | 33.6 | 7 | 285°53.5 | 22.8 | 7 | 285°54.9 | 09.4 | 7 | 285°55.0 | 53.3 |
| 8 | 300°46.9 | 42.7 | 8 | 300°50.9 | 34.3 | 8 | 300°53.6 | 23.5 | 8 | 300°54.9 | 10.1 | 8 | 300°55.0 | 53.9 |
| 9 | 315°47.0 | ·· 43.4 | 9 | 315°50.9 | ·· 35.0 | 9 | 315°53.6 | ·· 24.2 | 9 | 315°55.0 | ·· 10.7 | 9 | 315°55.0 | ·· 54.4 |
| 10 | 330°47.0 | 44.2 | 10 | 330°51.0 | 35.7 | 10 | 330°53.6 | 24.8 | 10 | 330°55.0 | 11.3 | 10 | 330°55.0 | 55.0 |
| 11 | 345°47.1 | 44.9 | 11 | 345°51.0 | 36.4 | 11 | 345°53.7 | 25.5 | 11 | 345°55.0 | 11.9 | 11 | 345°55.0 | 55.6 |
| 12 | 0°47.2 | N15°45.6 | 12 | 0°51.1 | N16°37.1 | 12 | 0°53.7 | N17°26.2 | 12 | 0°55.0 | N18°12.6 | 12 | 0°54.9 | N18°56.2 |
| 13 | 15°47.2 | 46.4 | 13 | 15°51.1 | 37.8 | 13 | 15°53.7 | 26.8 | 13 | 15°55.0 | 13.2 | 13 | 15°54.9 | 56.8 |
| 14 | 30°47.3 | 47.1 | 14 | 30°51.2 | 38.5 | 14 | 30°53.7 | 27.5 | 14 | 30°55.0 | 13.8 | 14 | 30°54.9 | 57.4 |
| 15 | 45°47.3 | ·· 47.8 | 15 | 45°51.2 | ·· 39.2 | 15 | 45°53.8 | ·· 28.1 | 15 | 45°55.0 | ·· 14.4 | 15 | 45°54.9 | ·· 58.0 |
| 16 | 60°47.4 | 48.6 | 16 | 60°51.2 | 39.9 | 16 | 60°53.8 | 28.8 | 16 | 60°55.0 | 15.1 | 16 | 60°54.9 | 58.6 |
| 17 | 75°47.5 | 49.3 | 17 | 75°51.3 | 40.6 | 17 | 75°53.8 | 29.5 | 17 | 75°55.0 | 15.7 | 17 | 75°54.9 | 59.1 |
| 18 | 90°47.5 | N15°50.0 | 18 | 90°51.3 | N16°41.3 | 18 | 90°53.8 | N17°30.1 | 18 | 90°55.0 | N18°16.3 | 18 | 90°54.9 | N18°59.7 |
| 19 | 105°47.6 | 50.8 | 19 | 105°51.4 | 42.0 | 19 | 105°53.9 | 30.8 | 19 | 105°55.0 | 16.9 | 19 | 105°54.9 | 19°00.3 |
| 20 | 120°47.6 | 51.5 | 20 | 120°51.4 | 42.7 | 20 | 120°53.9 | 31.4 | 20 | 120°55.0 | 17.5 | 20 | 120°54.9 | 00.9 |
| 21 | 135°47.7 | ·· 52.2 | 21 | 135°51.5 | ·· 43.4 | 21 | 135°53.9 | ·· 32.1 | 21 | 135°55.0 | ·· 18.2 | 21 | 135°54.9 | ·· 01.5 |
| 22 | 150°47.8 | 52.9 | 22 | 150°51.5 | 44.1 | 22 | 150°53.9 | 32.8 | 22 | 150°55.1 | 18.8 | 22 | 150°54.8 | 02.0 |
| 23 | 165°47.8 | 53.7 | 23 | 165°51.6 | 44.8 | 23 | 165°54.0 | 33.4 | 23 | 165°55.1 | 19.4 | 23 | 165°54.8 | 02.6 |
| | SD=15.9′ | $d=0.7'$ | | SD=15.9′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.6'$ | | SD=15.8′ | $d=0.6'$ |

| 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec | 30 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 180°53.9 | N19°30.4 | 0 | 180°51.6 | N20°08.7 | 0 | 180°48.1 | N20°43.8 | 0 | 180°43.5 | N21°15.7 | 0 | 180°37.8 | N21°44.4 |
| 1 | 195°53.9 | 30.9 | 1 | 195°51.5 | 09.2 | 1 | 195°48.0 | 44.3 | 1 | 195°43.4 | 16.2 | 1 | 195°37.8 | 44.7 |
| 2 | 210°53.9 | 31.5 | 2 | 210°51.5 | 09.7 | 2 | 210°48.0 | 44.7 | 2 | 210°43.3 | 16.6 | 2 | 210°37.7 | 45.1 |
| 3 | 225°53.9 | ·· 32.0 | 3 | 225°51.5 | ·· 10.2 | 3 | 225°47.9 | ·· 45.2 | 3 | 225°43.3 | ·· 17.0 | 3 | 225°37.6 | ·· 45.5 |
| 4 | 240°53.8 | 32.6 | 4 | 240°51.4 | 10.7 | 4 | 240°47.8 | 45.7 | 4 | 240°43.2 | 17.4 | 4 | 240°37.5 | 45.9 |
| 5 | 255°53.8 | 33.1 | 5 | 255°51.4 | 11.2 | 5 | 255°47.8 | 46.1 | 5 | 255°43.1 | 17.8 | 5 | 255°37.4 | 46.2 |
| 6 | 270°53.8 | N19°33.7 | 6 | 270°51.3 | N20°11.7 | 6 | 270°47.7 | N20°46.6 | 6 | 270°43.0 | N21°18.2 | 6 | 270°37.3 | N21°46.6 |
| 7 | 285°53.8 | 34.2 | 7 | 285°51.3 | 12.2 | 7 | 285°47.7 | 47.1 | 7 | 285°43.0 | 18.7 | 7 | 285°37.2 | 47.0 |
| 8 | 300°53.7 | 34.8 | 8 | 300°51.2 | 12.7 | 8 | 300°47.6 | 47.5 | 8 | 300°42.9 | 19.1 | 8 | 300°37.2 | 47.3 |
| 9 | 315°53.7 | ·· 35.3 | 9 | 315°51.2 | ·· 13.2 | 9 | 315°47.6 | ·· 48.0 | 9 | 315°42.8 | ·· 19.5 | 9 | 315°37.1 | ·· 47.7 |
| 10 | 330°53.7 | 35.9 | 10 | 330°51.2 | 13.7 | 10 | 330°47.5 | 48.4 | 10 | 330°42.8 | 19.9 | 10 | 330°37.0 | 48.1 |
| 11 | 345°53.6 | 36.4 | 11 | 345°51.1 | 14.2 | 11 | 345°47.4 | 48.9 | 11 | 345°42.7 | 20.3 | 11 | 345°36.9 | 48.4 |
| 12 | 0°53.6 | N19°37.0 | 12 | 0°51.1 | N20°14.7 | 12 | 0°47.4 | N20°49.4 | 12 | 0°42.6 | N21°20.7 | 12 | 0°36.8 | N21°48.8 |
| 13 | 15°53.6 | 37.5 | 13 | 15°51.0 | 15.2 | 13 | 15°47.3 | 49.8 | 13 | 15°42.5 | 21.2 | 13 | 15°36.7 | 49.2 |
| 14 | 30°53.6 | 38.1 | 14 | 30°51.0 | 15.7 | 14 | 30°47.3 | 50.3 | 14 | 30°42.5 | 21.6 | 14 | 30°36.6 | 49.5 |
| 15 | 45°53.5 | ·· 38.6 | 15 | 45°50.9 | ·· 16.2 | 15 | 45°47.2 | ·· 50.7 | 15 | 45°42.4 | ·· 22.0 | 15 | 45°36.5 | ·· 49.9 |
| 16 | 60°53.5 | 39.2 | 16 | 60°50.9 | 16.7 | 16 | 60°47.1 | 51.2 | 16 | 60°42.3 | 22.4 | 16 | 60°36.5 | 50.3 |
| 17 | 75°53.5 | 39.7 | 17 | 75°50.9 | 17.2 | 17 | 75°47.1 | 51.6 | 17 | 75°42.2 | 22.8 | 17 | 75°36.4 | 50.6 |
| 18 | 90°53.5 | N19°40.2 | 18 | 90°50.8 | N20°17.7 | 18 | 90°47.0 | N20°52.1 | 18 | 90°42.2 | N21°23.2 | 18 | 90°36.3 | N21°51.0 |
| 19 | 105°53.4 | 40.8 | 19 | 105°50.8 | 18.2 | 19 | 105°47.0 | 52.5 | 19 | 105°42.1 | 23.6 | 19 | 105°36.2 | 51.4 |
| 20 | 120°53.4 | 41.3 | 20 | 120°50.7 | 18.7 | 20 | 120°46.9 | 53.0 | 20 | 120°42.0 | 24.0 | 20 | 120°36.1 | 51.7 |
| 21 | 135°53.4 | ·· 41.9 | 21 | 135°50.7 | ·· 19.2 | 21 | 135°46.8 | ·· 53.5 | 21 | 135°41.9 | ·· 24.4 | 21 | 135°36.0 | ·· 52.1 |
| 22 | 150°53.3 | 42.4 | 22 | 150°50.6 | 19.7 | 22 | 150°46.8 | 53.9 | 22 | 150°41.9 | 24.8 | 22 | 150°35.9 | 52.4 |
| 23 | 165°53.3 | 42.9 | 23 | 165°50.6 | 20.2 | 23 | 165°46.7 | 54.4 | 23 | 165°41.8 | 25.2 | 23 | 165°35.8 | 52.8 |
| | SD=15.8′ | $d=0.6'$ | | SD=15.8′ | $d=0.5'$ | | SD=15.8′ | $d=0.5'$ | | SD=15.8′ | $d=0.4'$ | | SD=15.8′ | $d=0.4'$ |

DUT1 = UT1-UTC = +0.0527 sec  ΔT = TT-UT1 = +69.1313 sec

## 2026 May 31 to Jun. 14 UT

DUT1 = UT1-UTC = +0.0638 sec  ΔT = TT-UT1 = +69.1202 sec

## 2026 June 15 to Jun. 29 UT

| 31 | GHA | Dec | 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 180°35.7 | N21°53.2 | 0 | 180°28.9 | N22°17.2 | 0 | 180°21.1 | N22°37.8 | 0 | 180°12.7 | N22°54.8 | 0 | 180°03.6 | N23°08.2 | 0 | 179°54.0 | N23°17.9 | 0 | 179°44.2 | N23°24.0 | 0 | 179°34.4 | N23°26.3 | 0 | 179°24.6 | N23°24.8 | 0 | 179°15.1 | N23°19.7 |
| 1 | 195°35.7 | 53.5 | 1 | 195°28.8 | 17.5 | 1 | 195°21.0 | 38.1 | 1 | 195°12.5 | 55.0 | 1 | 195°03.4 | 08.4 | 1 | 194°53.9 | 18.1 | 1 | 194°44.1 | 24.0 | 1 | 194°34.2 | 26.3 | 1 | 194°24.5 | 24.8 | 1 | 194°15.0 | 19.6 |
| 2 | 210°35.6 | 53.9 | 2 | 210°28.6 | 17.9 | 2 | 210°20.9 | 38.3 | 2 | 210°12.4 | 55.3 | 2 | 210°03.3 | 08.5 | 2 | 209°53.8 | 18.2 | 2 | 209°44.0 | 24.1 | 2 | 209°34.1 | 26.3 | 2 | 209°24.3 | 24.7 | 2 | 209°14.8 | 19.5 |
| 3 | 225°35.5 | ·· 54.2 | 3 | 225°28.5 | ·· 18.2 | 3 | 225°20.8 | ·· 38.6 | 3 | 225°12.3 | ·· 55.5 | 3 | 225°03.2 | ·· 08.7 | 3 | 224°53.6 | ·· 18.3 | 3 | 224°43.8 | ·· 24.1 | 3 | 224°34.0 | ·· 26.3 | 3 | 224°24.2 | ·· 24.7 | 3 | 224°14.7 | ·· 19.4 |
| 4 | 240°35.4 | 54.6 | 4 | 240°28.4 | 18.5 | 4 | 240°20.7 | 38.9 | 4 | 240°12.2 | 55.7 | 4 | 240°03.1 | 08.9 | 4 | 239°53.5 | 18.4 | 4 | 239°43.7 | 24.2 | 4 | 239°33.8 | 26.3 | 4 | 239°24.1 | 24.6 | 4 | 239°14.6 | 19.3 |
| 5 | 255°35.3 | 54.9 | 5 | 255°28.3 | 18.8 | 5 | 255°20.6 | 39.1 | 5 | 255°12.0 | 55.9 | 5 | 255°02.9 | 09.0 | 5 | 254°53.4 | 18.5 | 5 | 254°43.6 | 24.2 | 5 | 254°33.7 | 26.3 | 5 | 254°23.9 | 24.6 | 5 | 254°14.5 | 19.2 |
| 6 | 270°35.2 | N21°55.3 | 6 | 270°28.2 | N22°19.1 | 6 | 270°20.4 | N22°39.4 | 6 | 270°11.9 | N22°56.1 | 6 | 270°02.8 | N23°09.2 | 6 | 269°53.2 | N23°18.6 | 6 | 269°43.4 | N23°24.3 | 6 | 269°33.6 | N23°26.3 | 6 | 269°23.8 | N23°24.5 | 6 | 269°14.3 | N23°19.1 |
| 7 | 285°35.1 | 55.6 | 7 | 285°28.1 | 19.4 | 7 | 285°20.3 | 39.6 | 7 | 285°11.8 | 56.3 | 7 | 285°02.7 | 09.3 | 7 | 284°53.1 | 18.7 | 7 | 284°43.3 | 24.3 | 7 | 284°33.4 | 26.3 | 7 | 284°23.7 | 24.5 | 7 | 284°14.2 | 19.0 |
| 8 | 300°35.0 | 56.0 | 8 | 300°28.0 | 19.7 | 8 | 300°20.2 | 39.9 | 8 | 300°11.7 | 56.5 | 8 | 300°02.5 | 09.5 | 8 | 299°53.0 | 18.8 | 8 | 299°43.2 | 24.4 | 8 | 299°33.3 | 26.3 | 8 | 299°23.5 | 24.4 | 8 | 299°14.1 | 18.9 |
| 9 | 315°34.9 | ·· 56.3 | 9 | 315°27.9 | ·· 20.0 | 9 | 315°20.1 | ·· 40.1 | 9 | 315°11.5 | ·· 56.7 | 9 | 315°02.4 | ·· 09.6 | 9 | 314°52.8 | ·· 18.9 | 9 | 314°43.0 | ·· 24.4 | 9 | 314°33.2 | ·· 26.3 | 9 | 314°23.4 | ·· 24.4 | 9 | 314°13.9 | ·· 18.8 |
| 10 | 330°34.8 | 56.7 | 10 | 330°27.8 | 20.3 | 10 | 330°20.0 | 40.4 | 10 | 330°11.4 | 56.9 | 10 | 330°02.3 | 09.8 | 10 | 329°52.7 | 19.0 | 10 | 329°42.9 | 24.5 | 10 | 329°33.0 | 26.3 | 10 | 329°23.3 | 24.3 | 10 | 329°13.8 | 18.7 |
| 11 | 345°34.8 | 57.1 | 11 | 345°27.7 | 20.6 | 11 | 345°19.9 | 40.7 | 11 | 345°11.3 | 57.1 | 11 | 345°02.1 | 10.0 | 11 | 344°52.6 | 19.1 | 11 | 344°42.7 | 24.6 | 11 | 344°32.9 | 26.3 | 11 | 344°23.1 | 24.3 | 11 | 344°13.7 | 18.6 |
| 12 | 0°34.7 | N21°57.4 | 12 | 0°27.6 | N22°20.9 | 12 | 0°19.8 | N22°40.9 | 12 | 0°11.2 | N22°57.3 | 12 | 0°02.0 | N23°10.1 | 12 | 359°52.4 | N23°19.2 | 12 | 359°42.6 | N23°24.6 | 12 | 359°32.7 | N23°26.3 | 12 | 359°23.0 | N23°24.2 | 12 | 359°13.5 | N23°18.5 |
| 13 | 15°34.6 | 57.8 | 13 | 15°27.5 | 21.2 | 13 | 15°19.6 | 41.2 | 13 | 15°11.1 | 57.5 | 13 | 15°01.9 | 10.3 | 13 | 14°52.3 | 19.3 | 13 | 14°42.5 | 24.6 | 13 | 14°32.6 | 26.3 | 13 | 14°22.9 | 24.2 | 13 | 14°13.4 | 18.4 |
| 14 | 30°34.5 | 58.1 | 14 | 30°27.4 | 21.5 | 14 | 30°19.5 | 41.4 | 14 | 30°10.9 | 57.7 | 14 | 30°01.7 | 10.4 | 14 | 29°52.2 | 19.4 | 14 | 29°42.3 | 24.7 | 14 | 29°32.5 | 26.3 | 14 | 29°22.7 | 24.1 | 14 | 29°13.3 | 18.3 |
| 15 | 45°34.4 | ·· 58.5 | 15 | 45°27.3 | ·· 21.8 | 15 | 45°19.4 | ·· 41.7 | 15 | 45°10.8 | ·· 57.9 | 15 | 45°01.6 | ·· 10.6 | 15 | 44°52.0 | ·· 19.5 | 15 | 44°42.2 | ·· 24.7 | 15 | 44°32.3 | ·· 26.3 | 15 | 44°22.6 | ·· 24.1 | 15 | 44°13.2 | ·· 18.1 |
| 16 | 60°34.3 | 58.8 | 16 | 60°27.2 | 22.1 | 16 | 60°19.3 | 41.9 | 16 | 60°10.7 | 58.1 | 16 | 60°01.5 | 10.7 | 16 | 59°51.9 | 19.6 | 16 | 59°42.1 | 24.8 | 16 | 59°32.2 | 26.3 | 16 | 59°22.5 | 24.0 | 16 | 59°13.0 | 18.0 |
| 17 | 75°34.2 | 59.1 | 17 | 75°27.1 | 22.4 | 17 | 75°19.2 | 42.2 | 17 | 75°10.6 | 58.3 | 17 | 75°01.4 | 10.9 | 17 | 74°51.7 | 19.7 | 17 | 74°41.9 | 24.8 | 17 | 74°32.1 | 26.2 | 17 | 74°22.3 | 23.9 | 17 | 74°12.9 | 17.9 |
| 18 | 90°34.1 | N21°59.5 | 18 | 90°27.0 | N22°22.7 | 18 | 90°19.1 | N22°42.4 | 18 | 90°10.4 | N22°58.5 | 18 | 90°01.2 | N23°11.0 | 18 | 89°51.6 | N23°19.8 | 18 | 89°41.8 | N23°24.9 | 18 | 89°31.9 | N23°26.2 | 18 | 89°22.2 | N23°23.9 | 18 | 89°12.8 | N23°17.8 |
| 19 | 105°34.0 | 21°59.8 | 19 | 105°26.9 | 23.0 | 19 | 105°19.0 | 42.7 | 19 | 105°10.3 | 58.7 | 19 | 105°01.1 | 11.2 | 19 | 104°51.5 | 19.9 | 19 | 104°41.6 | 24.9 | 19 | 104°31.8 | 26.2 | 19 | 104°22.1 | 23.8 | 19 | 104°12.6 | 17.7 |
| 20 | 120°33.9 | 22°00.2 | 20 | 120°26.8 | 23.3 | 20 | 120°18.8 | 42.9 | 20 | 120°10.2 | 58.9 | 20 | 120°01.0 | 11.3 | 20 | 119°51.3 | 20.0 | 20 | 119°41.5 | 25.0 | 20 | 119°31.7 | 26.2 | 20 | 119°21.9 | 23.8 | 20 | 119°12.5 | 17.6 |
| 21 | 135°33.8 | ·· 00.5 | 21 | 135°26.7 | ·· 23.6 | 21 | 135°18.7 | ·· 43.2 | 21 | 135°10.1 | ·· 59.1 | 21 | 135°00.8 | ·· 11.4 | 21 | 134°51.2 | ·· 20.1 | 21 | 134°41.4 | ·· 25.0 | 21 | 134°31.5 | ·· 26.2 | 21 | 134°21.8 | ·· 23.7 | 21 | 134°12.4 | ·· 17.5 |
| 22 | 150°33.7 | 00.9 | 22 | 150°26.6 | 23.9 | 22 | 150°18.6 | 43.4 | 22 | 150°09.9 | 59.3 | 22 | 150°00.7 | 11.6 | 22 | 149°51.1 | 20.2 | 22 | 149°41.2 | 25.1 | 22 | 149°31.4 | 26.2 | 22 | 149°21.7 | 23.6 | 22 | 149°12.3 | 17.4 |
| 23 | 165°33.6 | 01.2 | 23 | 165°26.5 | 24.2 | 23 | 165°18.5 | 43.6 | 23 | 165°09.8 | 59.5 | 23 | 165°00.6 | 11.7 | 23 | 164°50.9 | 20.3 | 23 | 164°41.1 | 25.1 | 23 | 164°31.2 | 26.2 | 23 | 164°21.5 | 23.6 | 23 | 164°12.1 | 17.3 |
| | SD=15.8′ | d = 0.4′ | | SD=15.8′ | d = 0.3′ | | SD=15.8′ | d = 0.3′ | | SD=15.8′ | d = 0.2′ | | SD=15.7′ | d = 0.2′ | | SD=15.7′ | d = 0.1′ | | SD=15.7′ | d = 0.1′ | | SD=15.7′ | d = 0.0′ | | SD=15.7′ | d = 0.0′ | | SD=15.7′ | d = 0.1′ |

| 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec | 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec | 28 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 180°33.5 | N22°01.6 | 0 | 180°26.4 | N22°24.5 | 0 | 180°18.4 | N22°43.9 | 0 | 180°09.7 | N22°59.7 | 0 | 180°00.4 | N23°11.9 | 0 | 179°50.8 | N23°20.4 | 0 | 179°41.0 | N23°25.1 | 0 | 179°31.1 | N23°26.2 | 0 | 179°21.4 | N23°23.5 | 0 | 179°12.0 | N23°17.1 |
| 1 | 195°33.5 | 01.9 | 1 | 195°26.3 | 24.8 | 1 | 195°18.3 | 44.1 | 1 | 195°09.6 | 22°59.9 | 1 | 195°00.3 | 12.0 | 1 | 194°50.7 | 20.5 | 1 | 194°40.8 | 25.2 | 1 | 194°31.0 | 26.2 | 1 | 194°21.3 | 23.5 | 1 | 194°11.9 | 17.0 |
| 2 | 210°33.4 | 02.2 | 2 | 210°26.2 | 25.1 | 2 | 210°18.1 | 44.4 | 2 | 210°09.4 | 23°00.1 | 2 | 210°00.2 | 12.2 | 2 | 209°50.5 | 20.5 | 2 | 209°40.7 | 25.2 | 2 | 209°30.8 | 26.2 | 2 | 209°21.1 | 23.4 | 2 | 209°11.8 | 16.9 |
| 3 | 225°33.3 | ·· 02.6 | 3 | 225°26.0 | ·· 25.4 | 3 | 225°18.0 | ·· 44.6 | 3 | 225°09.3 | ·· 00.3 | 3 | 225°00.0 | ·· 12.3 | 3 | 224°50.4 | ·· 20.6 | 3 | 224°40.5 | ·· 25.3 | 3 | 224°30.7 | ·· 26.2 | 3 | 224°21.0 | ·· 23.3 | 3 | 224°11.6 | ·· 16.8 |
| 4 | 240°33.2 | 02.9 | 4 | 240°25.9 | 25.7 | 4 | 240°17.9 | 44.9 | 4 | 240°09.2 | 00.5 | 4 | 239°59.9 | 12.4 | 4 | 239°50.3 | 20.7 | 4 | 239°40.4 | 25.3 | 4 | 239°30.6 | 26.1 | 4 | 239°20.9 | 23.3 | 4 | 239°11.5 | 16.7 |
| 5 | 255°33.1 | 03.3 | 5 | 255°25.8 | 25.9 | 5 | 255°17.8 | 45.1 | 5 | 255°09.1 | 00.7 | 5 | 254°59.8 | 12.6 | 5 | 254°50.1 | 20.8 | 5 | 254°40.3 | 25.3 | 5 | 254°30.4 | 26.1 | 5 | 254°20.7 | 23.2 | 5 | 254°11.4 | 16.6 |
| 6 | 270°33.0 | N22°03.6 | 6 | 270°25.7 | N22°26.2 | 6 | 270°17.7 | N22°45.3 | 6 | 270°08.9 | N23°00.9 | 6 | 269°59.6 | N23°12.7 | 6 | 269°50.0 | N23°20.9 | 6 | 269°40.1 | N23°25.4 | 6 | 269°30.3 | N23°26.1 | 6 | 269°20.6 | N23°23.1 | 6 | 269°11.2 | N23°16.5 |
| 7 | 285°32.9 | 03.9 | 7 | 285°25.6 | 26.5 | 7 | 285°17.6 | 45.6 | 7 | 285°08.8 | 01.1 | 7 | 284°59.5 | 12.9 | 7 | 284°49.8 | 21.0 | 7 | 284°40.0 | 25.4 | 7 | 284°30.2 | 26.1 | 7 | 284°20.5 | 23.1 | 7 | 284°11.1 | 16.3 |
| 8 | 300°32.8 | 04.3 | 8 | 300°25.5 | 26.8 | 8 | 300°17.4 | 45.8 | 8 | 300°08.7 | 01.2 | 8 | 299°59.4 | 13.0 | 8 | 299°49.7 | 21.1 | 8 | 299°39.9 | 25.4 | 8 | 299°30.0 | 26.1 | 8 | 299°20.3 | 23.0 | 8 | 299°11.0 | 16.2 |
| 9 | 315°32.7 | ·· 04.6 | 9 | 315°25.4 | ·· 27.1 | 9 | 315°17.3 | ·· 46.1 | 9 | 315°08.6 | ·· 01.4 | 9 | 314°59.3 | ·· 13.1 | 9 | 314°49.6 | ·· 21.2 | 9 | 314°39.7 | ·· 25.5 | 9 | 314°29.9 | ·· 26.1 | 9 | 314°20.2 | ·· 22.9 | 9 | 314°10.9 | ·· 16.1 |
| 10 | 330°32.6 | 05.0 | 10 | 330°25.3 | 27.4 | 10 | 330°17.2 | 46.3 | 10 | 330°08.4 | 01.6 | 10 | 329°59.1 | 13.3 | 10 | 329°49.4 | 21.2 | 10 | 329°39.6 | 25.5 | 10 | 329°29.7 | 26.0 | 10 | 329°20.1 | 22.9 | 10 | 329°10.7 | 16.0 |
| 11 | 345°32.5 | 05.3 | 11 | 345°25.2 | 27.7 | 11 | 345°17.1 | 46.5 | 11 | 345°08.3 | 01.8 | 11 | 344°59.0 | 13.4 | 11 | 344°49.3 | 21.3 | 11 | 344°39.4 | 25.5 | 11 | 344°29.6 | 26.0 | 11 | 344°19.9 | 22.8 | 11 | 344°10.6 | 15.9 |
| 12 | 0°32.4 | N22°05.6 | 12 | 0°25.1 | N22°28.0 | 12 | 0°17.0 | N22°46.8 | 12 | 0°08.2 | N23°02.0 | 12 | 359°58.9 | N23°13.5 | 12 | 359°49.2 | N23°21.4 | 12 | 359°39.3 | N23°25.6 | 12 | 359°29.5 | N23°26.0 | 12 | 359°19.8 | N23°22.7 | 12 | 359°10.5 | N23°15.7 |
| 13 | 15°32.3 | 06.0 | 13 | 15°25.0 | 28.3 | 13 | 15°16.9 | 47.0 | 13 | 15°08.1 | 02.2 | 13 | 14°58.7 | 13.7 | 13 | 14°49.0 | 21.5 | 13 | 14°39.2 | 25.6 | 13 | 14°29.3 | 26.0 | 13 | 14°19.7 | 22.6 | 13 | 14°10.4 | 15.6 |
| 14 | 30°32.2 | 06.3 | 14 | 30°24.9 | 28.5 | 14 | 30°16.7 | 47.2 | 14 | 30°07.9 | 02.4 | 14 | 29°58.6 | 13.8 | 14 | 29°48.9 | 21.6 | 14 | 29°39.0 | 25.6 | 14 | 29°29.2 | 26.0 | 14 | 29°19.6 | 22.6 | 14 | 29°10.2 | 15.5 |
| 15 | 45°32.1 | ·· 06.6 | 15 | 45°24.8 | ·· 28.8 | 15 | 45°16.6 | ·· 47.5 | 15 | 45°07.8 | ·· 02.5 | 15 | 44°58.5 | ·· 13.9 | 15 | 44°48.8 | ·· 21.7 | 15 | 44°38.9 | ·· 25.7 | 15 | 44°29.1 | ·· 25.9 | 15 | 44°19.4 | ·· 22.5 | 15 | 44°10.1 | ·· 15.4 |
| 16 | 60°32.0 | 07.0 | 16 | 60°24.7 | 29.1 | 16 | 60°16.5 | 47.7 | 16 | 60°07.7 | 02.7 | 16 | 59°58.3 | 14.1 | 16 | 59°48.6 | 21.7 | 16 | 59°38.8 | 25.7 | 16 | 59°28.9 | 25.9 | 16 | 59°19.3 | 22.4 | 16 | 59°10.0 | 15.2 |
| 17 | 75°31.9 | 07.3 | 17 | 75°24.5 | 29.4 | 17 | 75°16.4 | 48.0 | 17 | 75°07.5 | 02.9 | 17 | 74°58.2 | 14.2 | 17 | 74°48.5 | 21.8 | 17 | 74°38.6 | 25.7 | 17 | 74°28.8 | 25.9 | 17 | 74°19.2 | 22.3 | 17 | 74°09.8 | 15.1 |
| 18 | 90°31.8 | N22°07.6 | 18 | 90°24.4 | N22°29.7 | 18 | 90°16.3 | N22°48.2 | 18 | 90°07.4 | N23°03.1 | 18 | 89°58.1 | N23°14.3 | 18 | 89°48.3 | N23°21.9 | 18 | 89°38.5 | N23°25.7 | 18 | 89°28.7 | N23°25.9 | 18 | 89°19.0 | N23°22.3 | 18 | 89°09.7 | N23°15.0 |
| 19 | 105°31.7 | 07.9 | 19 | 105°24.3 | 30.0 | 19 | 105°16.1 | 48.4 | 19 | 105°07.3 | 03.3 | 19 | 104°57.9 | 14.5 | 19 | 104°48.2 | 22.0 | 19 | 104°38.4 | 25.8 | 19 | 104°28.5 | 25.8 | 19 | 104°18.9 | 22.2 | 19 | 104°09.6 | 14.9 |
| 20 | 120°31.6 | 08.3 | 20 | 120°24.2 | 30.2 | 20 | 120°16.0 | 48.6 | 20 | 120°07.2 | 03.5 | 20 | 119°57.8 | 14.6 | 20 | 119°48.1 | 22.1 | 20 | 119°38.2 | 25.8 | 20 | 119°28.4 | 25.8 | 20 | 119°18.8 | 22.1 | 20 | 119°09.5 | 14.7 |
| 21 | 135°31.5 | ·· 08.6 | 21 | 135°24.1 | ·· 30.5 | 21 | 135°15.9 | ·· 48.9 | 21 | 135°07.0 | ·· 03.6 | 21 | 134°57.7 | ·· 14.7 | 21 | 134°47.9 | ·· 22.1 | 21 | 134°38.1 | ·· 25.8 | 21 | 134°28.3 | ·· 25.8 | 21 | 134°18.6 | ·· 22.0 | 21 | 134°09.3 | ·· 14.6 |
| 22 | 150°31.4 | 08.9 | 22 | 150°24.0 | 30.8 | 22 | 150°15.8 | 49.1 | 22 | 150°06.9 | 03.8 | 22 | 149°57.5 | 14.9 | 22 | 149°47.8 | 22.2 | 22 | 149°37.9 | 25.9 | 22 | 149°28.1 | 25.8 | 22 | 149°18.5 | 22.0 | 22 | 149°09.2 | 14.5 |
| 23 | 165°31.3 | 09.3 | 23 | 165°23.9 | 31.1 | 23 | 165°15.7 | 49.3 | 23 | 165°06.8 | 04.0 | 23 | 164°57.4 | 15.0 | 23 | 164°47.7 | 22.3 | 23 | 164°37.8 | 25.9 | 23 | 164°28.0 | 25.7 | 23 | 164°18.4 | 21.9 | 23 | 164°09.1 | 14.3 |
| | SD=15.8′ | d = 0.3′ | | SD=15.8′ | d = 0.3′ | | SD=15.8′ | d = 0.2′ | | SD=15.7′ | d = 0.2′ | | SD=15.7′ | d = 0.1′ | | SD=15.7′ | d = 0.1′ | | SD=15.7′ | d = 0.0′ | | SD=15.7′ | d = 0.0′ | | SD=15.7′ | d = 0.1′ | | SD=15.7′ | d = 0.1′ |

| 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec | 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec | 29 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 180°31.2 | N22°09.6 | 0 | 180°23.8 | N22°31.3 | 0 | 180°15.5 | N22°49.6 | 0 | 180°06.7 | N23°04.2 | 0 | 179°57.3 | N23°15.1 | 0 | 179°47.5 | N23°22.4 | 0 | 179°37.7 | N23°25.9 | 0 | 179°27.8 | N23°25.7 | 0 | 179°18.2 | N23°21.8 | 0 | 179°09.0 | N23°14.2 |
| 1 | 195°31.2 | 09.9 | 1 | 195°23.7 | 31.6 | 1 | 195°15.4 | 49.8 | 1 | 195°06.5 | 04.3 | 1 | 194°57.1 | 15.2 | 1 | 194°47.4 | 22.4 | 1 | 194°37.5 | 25.9 | 1 | 194°27.7 | 25.7 | 1 | 194°18.1 | 21.7 | 1 | 194°08.8 | 14.1 |
| 2 | 210°31.1 | 10.2 | 2 | 210°23.6 | 31.9 | 2 | 210°15.3 | 50.0 | 2 | 210°06.4 | 04.5 | 2 | 209°57.0 | 15.4 | 2 | 209°47.3 | 22.5 | 2 | 209°37.4 | 25.9 | 2 | 209°27.6 | 25.7 | 2 | 209°18.0 | 21.6 | 2 | 209°08.7 | 13.9 |
| 3 | 225°31.0 | ·· 10.6 | 3 | 225°23.5 | ·· 32.2 | 3 | 225°15.2 | ·· 50.2 | 3 | 225°06.3 | ·· 04.7 | 3 | 224°56.9 | ·· 15.5 | 3 | 224°47.1 | ·· 22.6 | 3 | 224°37.3 | ·· 26.0 | 3 | 224°27.4 | ·· 25.6 | 3 | 224°17.8 | ·· 21.6 | 3 | 224°08.6 | ·· 13.8 |
| 4 | 240°30.9 | 10.9 | 4 | 240°23.3 | 32.5 | 4 | 240°15.1 | 50.5 | 4 | 240°06.1 | 04.9 | 4 | 239°56.7 | 15.6 | 4 | 239°47.0 | 22.7 | 4 | 239°37.1 | 26.0 | 4 | 239°27.3 | 25.6 | 4 | 239°17.7 | 21.5 | 4 | 239°08.5 | 13.7 |
| 5 | 255°30.8 | 11.2 | 5 | 255°23.2 | 32.7 | 5 | 255°14.9 | 50.7 | 5 | 255°06.0 | 05.0 | 5 | 254°56.6 | 15.7 | 5 | 254°46.8 | 22.7 | 5 | 254°37.0 | 26.0 | 5 | 254°27.2 | 25.6 | 5 | 254°17.6 | 21.4 | 5 | 254°08.3 | 13.5 |
| 6 | 270°30.7 | N22°11.5 | 6 | 270°23.1 | N22°33.0 | 6 | 270°14.8 | N22°50.9 | 6 | 270°05.9 | N23°05.2 | 6 | 269°56.5 | N23°15.9 | 6 | 269°46.7 | N23°22.8 | 6 | 269°36.8 | N23°26.0 | 6 | 269°27.0 | N23°25.5 | 6 | 269°17.4 | N23°21.3 | 6 | 269°08.2 | N23°13.4 |
| 7 | 285°30.6 | 11.9 | 7 | 285°23.0 | 33.3 | 7 | 285°14.7 | 51.1 | 7 | 285°05.8 | 05.4 | 7 | 284°56.3 | 16.0 | 7 | 284°46.6 | 22.9 | 7 | 284°36.7 | 26.0 | 7 | 284°26.9 | 25.5 | 7 | 284°17.3 | 21.2 | 7 | 284°08.1 | 13.3 |
| 8 | 300°30.5 | 12.2 | 8 | 300°22.9 | 33.5 | 8 | 300°14.6 | 51.4 | 8 | 300°05.6 | 05.6 | 8 | 299°56.2 | 16.1 | 8 | 299°46.4 | 22.9 | 8 | 299°36.6 | 26.1 | 8 | 299°26.8 | 25.5 | 8 | 299°17.2 | 21.1 | 8 | 299°08.0 | 13.1 |
| 9 | 315°30.4 | ·· 12.5 | 9 | 315°22.8 | ·· 33.8 | 9 | 315°14.5 | ·· 51.6 | 9 | 315°05.5 | ·· 05.7 | 9 | 314°56.1 | ·· 16.2 | 9 | 314°46.3 | ·· 23.0 | 9 | 314°36.4 | ·· 26.1 | 9 | 314°26.6 | ·· 25.4 | 9 | 314°17.1 | ·· 21.1 | 9 | 314°07.8 | ·· 13.0 |
| 10 | 330°30.3 | 12.8 | 10 | 330°22.7 | 34.1 | 10 | 330°14.3 | 51.8 | 10 | 330°05.4 | 05.9 | 10 | 329°55.9 | 16.3 | 10 | 329°46.2 | 23.1 | 10 | 329°36.3 | 26.1 | 10 | 329°26.5 | 25.4 | 10 | 329°16.9 | 21.0 | 10 | 329°07.7 | 12.9 |
| 11 | 345°30.2 | 13.1 | 11 | 345°22.6 | 34.4 | 11 | 345°14.2 | 52.0 | 11 | 345°05.3 | 06.1 | 11 | 344°55.8 | 16.5 | 11 | 344°46.0 | 23.1 | 11 | 344°36.2 | 26.1 | 11 | 344°26.4 | 25.4 | 11 | 344°16.8 | 20.9 | 11 | 344°07.6 | 12.7 |
| 12 | 0°30.1 | N22°13.5 | 12 | 0°22.5 | N22°34.6 | 12 | 0°14.1 | N22°52.3 | 12 | 0°05.1 | N23°06.3 | 12 | 359°55.7 | N23°16.6 | 12 | 359°45.9 | N23°23.2 | 12 | 359°36.0 | N23°26.1 | 12 | 359°26.2 | N23°25.3 | 12 | 359°16.7 | N23°20.8 | 12 | 359°07.5 | N23°12.6 |
| 13 | 15°30.0 | 13.8 | 13 | 15°22.4 | 34.9 | 13 | 15°14.0 | 52.5 | 13 | 15°05.0 | 06.4 | 13 | 14°55.5 | 16.7 | 13 | 14°45.8 | 23.3 | 13 | 14°35.9 | 26.1 | 13 | 14°26.1 | 25.3 | 13 | 14°16.5 | 20.7 | 13 | 14°07.3 | 12.4 |
| 14 | 30°29.9 | 14.1 | 14 | 30°22.2 | 35.2 | 14 | 30°13.9 | 52.7 | 14 | 30°04.9 | 06.6 | 14 | 29°55.4 | 16.8 | 14 | 29°45.6 | 23.3 | 14 | 29°35.7 | 26.2 | 14 | 29°26.0 | 25.2 | 14 | 29°16.4 | 20.6 | 14 | 29°07.2 | 12.3 |
| 15 | 45°29.8 | ·· 14.4 | 15 | 45°22.1 | ·· 35.4 | 15 | 45°13.7 | ·· 52.9 | 15 | 45°04.7 | ·· 06.8 | 15 | 44°55.3 | ·· 16.9 | 15 | 44°45.5 | ·· 23.4 | 15 | 44°35.6 | ·· 26.2 | 15 | 44°25.8 | ·· 25.2 | 15 | 44°16.3 | ·· 20.5 | 15 | 44°07.1 | ·· 12.2 |
| 16 | 60°29.7 | 14.7 | 16 | 60°22.0 | 35.7 | 16 | 60°13.6 | 53.1 | 16 | 60°04.6 | 06.9 | 16 | 59°55.1 | 17.0 | 16 | 59°45.3 | 23.5 | 16 | 59°35.5 | 26.2 | 16 | 59°25.7 | 25.2 | 16 | 59°16.1 | 20.4 | 16 | 59°07.0 | 12.0 |
| 17 | 75°29.6 | 15.0 | 17 | 75°21.9 | 36.0 | 17 | 75°13.5 | 53.3 | 17 | 75°04.5 | 07.1 | 17 | 74°55.0 | 17.2 | 17 | 74°45.2 | 23.5 | 17 | 74°35.3 | 26.2 | 17 | 74°25.6 | 25.1 | 17 | 74°16.0 | 20.3 | 17 | 74°06.8 | 11.9 |
| 18 | 90°29.5 | N22°15.4 | 18 | 90°21.8 | N22°36.2 | 18 | 90°13.4 | N22°53.6 | 18 | 90°04.3 | N23°07.3 | 18 | 89°54.8 | N23°17.3 | 18 | 89°45.1 | N23°23.6 | 18 | 89°35.2 | N23°26.2 | 18 | 89°25.4 | N23°25.1 | 18 | 89°15.9 | N23°20.3 | 18 | 89°06.7 | N23°11.7 |
| 19 | 105°29.4 | 15.7 | 19 | 105°21.7 | 36.5 | 19 | 105°13.3 | 53.8 | 19 | 105°04.2 | 07.4 | 19 | 104°54.7 | 17.4 | 19 | 104°44.9 | 23.7 | 19 | 104°35.1 | 26.2 | 19 | 104°25.3 | 25.0 | 19 | 104°15.7 | 20.2 | 19 | 104°06.6 | 11.6 |
| 20 | 120°29.3 | 16.0 | 20 | 120°21.6 | 36.8 | 20 | 120°13.1 | 54.0 | 20 | 120°04.1 | 07.6 | 20 | 119°54.6 | 17.5 | 20 | 119°44.8 | 23.7 | 20 | 119°34.9 | 26.2 | 20 | 119°25.2 | 25.0 | 20 | 119°15.6 | 20.1 | 20 | 119°06.5 | 11.4 |
| 21 | 135°29.2 | ·· 16.3 | 21 | 135°21.5 | ·· 37.0 | 21 | 135°13.0 | ·· 54.2 | 21 | 135°04.0 | ·· 07.7 | 21 | 134°54.4 | ·· 17.6 | 21 | 134°44.7 | ·· 23.8 | 21 | 134°34.8 | ·· 26.2 | 21 | 134°25.0 | ·· 25.0 | 21 | 134°15.5 | ·· 20.0 | 21 | 134°06.3 | ·· 11.3 |
| 22 | 150°29.1 | 16.6 | 22 | 150°21.3 | 37.3 | 22 | 150°12.9 | 54.4 | 22 | 150°03.8 | 07.9 | 22 | 149°54.3 | 17.7 | 22 | 149°44.5 | 23.8 | 22 | 149°34.7 | 26.2 | 22 | 149°24.9 | 24.9 | 22 | 149°15.4 | 19.9 | 22 | 149°06.2 | 11.2 |
| 23 | 165°29.0 | 16.9 | 23 | 165°21.2 | 37.6 | 23 | 165°12.8 | 54.6 | 23 | 165°03.7 | 08.1 | 23 | 164°54.2 | 17.8 | 23 | 164°44.4 | 23.9 | 23 | 164°34.5 | 26.2 | 23 | 164°24.7 | 24.9 | 23 | 164°15.2 | 19.8 | 23 | 164°06.1 | 11.0 |
| | SD=15.8′ | d = 0.3′ | | SD=15.8′ | d = 0.3′ | | SD=15.8′ | d = 0.2′ | | SD=15.7′ | d = 0.2′ | | SD=15.7′ | d = 0.1′ | | SD=15.7′ | d = 0.1′ | | SD=15.7′ | d = 0.0′ | | SD=15.7′ | d = 0.0′ | | SD=15.7′ | d = 0.1′ | | SD=15.7′ | d = 0.1′ |

DUT1 = UT1-UTC = +0.0778 sec  ΔT = TT-UT1 = +69.1062 sec

## 2026 June 30 to Jul. 14 UT

DUT1 = UT1-UTC = +0.0925 sec  ΔT = TT-UT1 = +69.0915 sec

## 2026 July 15 to Jul. 29 UT

| 30 | GHA | Dec | 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°06.0 | N23°10.9 | 0 | 178°57.4 | N22°58.4 | 0 | 178°49.4 | N22°42.3 | 0 | 178°42.2 | N22°22.7 | 0 | 178°35.9 | N21°59.6 | 0 | 178°30.6 | N21°33.1 | 0 | 178°26.4 | N21°03.3 | 0 | 178°23.5 | N20°30.3 | 0 | 178°21.8 | N19°54.2 | 0 | 178°21.6 | N19°15.1 |
| 1 | 194°05.9 | 10.7 | 1 | 193°57.3 | 58.2 | 1 | 193°49.3 | 42.1 | 1 | 193°42.1 | 22.4 | 1 | 193°35.8 | 59.3 | 1 | 193°30.5 | 32.7 | 1 | 193°26.4 | 02.8 | 1 | 193°23.4 | 29.8 | 1 | 193°21.8 | 53.6 | 1 | 193°21.6 | 14.5 |
| 2 | 209°05.7 | 10.6 | 2 | 208°57.1 | 58.0 | 2 | 208°49.2 | 41.8 | 2 | 208°42.0 | 22.1 | 2 | 208°35.7 | 58.9 | 2 | 208°30.4 | 32.3 | 2 | 208°26.3 | 02.4 | 2 | 208°23.4 | 29.3 | 2 | 208°21.8 | 53.1 | 2 | 208°21.6 | 14.0 |
| 3 | 224°05.6 | ·· 10.4 | 3 | 223°57.0 | ·· 57.8 | 3 | 223°49.1 | ·· 41.6 | 3 | 223°41.9 | ·· 21.8 | 3 | 223°35.7 | ·· 58.6 | 3 | 223°30.4 | ·· 31.9 | 3 | 223°26.3 | ·· 02.0 | 3 | 223°23.4 | ·· 28.8 | 3 | 223°21.8 | ·· 52.6 | 3 | 223°21.6 | ·· 13.4 |
| 4 | 239°05.5 | 10.3 | 4 | 238°56.9 | 57.6 | 4 | 238°49.0 | 41.3 | 4 | 238°41.8 | 21.5 | 4 | 238°35.6 | 58.2 | 4 | 238°30.3 | 31.5 | 4 | 238°26.2 | 01.5 | 4 | 238°23.3 | 28.3 | 4 | 238°21.8 | 52.1 | 4 | 238°21.6 | 12.8 |
| 5 | 254°05.4 | 10.1 | 5 | 253°56.8 | 57.4 | 5 | 253°48.9 | 41.1 | 5 | 253°41.8 | 21.2 | 5 | 253°35.5 | 57.9 | 5 | 253°30.3 | 31.1 | 5 | 253°26.2 | 01.1 | 5 | 253°23.3 | 27.8 | 5 | 253°21.8 | 51.5 | 5 | 253°21.6 | 12.3 |
| 6 | 269°05.2 | N23°10.0 | 6 | 268°56.7 | N22°57.2 | 6 | 268°48.8 | N22°40.8 | 6 | 268°41.7 | N22°20.9 | 6 | 268°35.4 | N21°57.5 | 6 | 268°30.2 | N21°30.7 | 6 | 268°26.1 | N21°00.6 | 6 | 268°23.3 | N20°27.4 | 6 | 268°21.8 | N19°51.0 | 6 | 268°21.6 | N19°11.7 |
| 7 | 284°05.1 | 09.8 | 7 | 283°56.6 | 57.0 | 7 | 283°48.7 | 40.6 | 7 | 283°41.6 | 20.6 | 7 | 283°35.3 | 57.2 | 7 | 283°30.1 | 30.3 | 7 | 283°26.1 | 21°00.2 | 7 | 283°23.2 | 26.9 | 7 | 283°21.8 | 50.5 | 7 | 283°21.6 | 11.1 |
| 8 | 299°05.0 | 09.7 | 8 | 298°56.5 | 56.8 | 8 | 298°48.6 | 40.3 | 8 | 298°41.5 | 20.3 | 8 | 298°35.3 | 56.8 | 8 | 298°30.1 | 29.9 | 8 | 298°26.0 | 20°59.8 | 8 | 298°23.2 | 26.4 | 8 | 298°21.7 | 50.0 | 8 | 298°21.6 | 10.6 |
| 9 | 314°04.9 | ·· 09.5 | 9 | 313°56.3 | ·· 56.6 | 9 | 313°48.5 | ·· 40.1 | 9 | 313°41.4 | ·· 20.0 | 9 | 313°35.2 | ·· 56.5 | 9 | 313°30.0 | ·· 29.5 | 9 | 313°26.0 | ·· 59.3 | 9 | 313°23.2 | ·· 25.9 | 9 | 313°21.7 | ·· 49.4 | 9 | 313°21.6 | ·· 10.0 |
| 10 | 329°04.7 | 09.3 | 10 | 328°56.2 | 56.4 | 10 | 328°48.4 | 39.8 | 10 | 328°41.3 | 19.7 | 10 | 328°35.1 | 56.1 | 10 | 328°29.9 | 29.1 | 10 | 328°25.9 | 58.9 | 10 | 328°23.2 | 25.4 | 10 | 328°21.7 | 48.9 | 10 | 328°21.6 | 09.4 |
| 11 | 344°04.6 | 09.2 | 11 | 343°56.1 | 56.2 | 11 | 343°48.3 | 39.6 | 11 | 343°41.2 | 19.4 | 11 | 343°35.0 | 55.8 | 11 | 343°29.9 | 28.7 | 11 | 343°25.9 | 58.4 | 11 | 343°23.1 | 24.9 | 11 | 343°21.7 | 48.4 | 11 | 343°21.7 | 08.9 |
| 12 | 359°04.5 | N23°09.0 | 12 | 358°56.0 | N22°56.0 | 12 | 358°48.2 | N22°39.3 | 12 | 358°41.1 | N22°19.1 | 12 | 358°34.9 | N21°55.4 | 12 | 358°29.8 | N21°28.3 | 12 | 358°25.8 | N20°58.0 | 12 | 358°23.1 | N20°24.4 | 12 | 358°21.7 | N19°47.8 | 12 | 358°21.7 | N19°08.3 |
| 13 | 14°04.4 | 08.9 | 13 | 13°55.9 | 55.8 | 13 | 13°48.1 | 39.0 | 13 | 13°41.0 | 18.8 | 13 | 13°34.9 | 55.1 | 13 | 13°29.7 | 27.9 | 13 | 13°25.8 | 57.5 | 13 | 13°23.1 | 24.0 | 13 | 13°21.7 | 47.3 | 13 | 13°21.7 | 07.7 |
| 14 | 29°04.3 | 08.7 | 14 | 28°55.8 | 55.6 | 14 | 28°48.0 | 38.8 | 14 | 28°40.9 | 18.5 | 14 | 28°34.8 | 54.7 | 14 | 28°29.7 | 27.5 | 14 | 28°25.7 | 57.1 | 14 | 28°23.0 | 23.5 | 14 | 28°21.7 | 46.8 | 14 | 28°21.7 | 07.1 |
| 15 | 44°04.1 | ·· 08.6 | 15 | 43°55.7 | ·· 55.3 | 15 | 43°47.9 | ·· 38.5 | 15 | 43°40.8 | ·· 18.2 | 15 | 43°34.7 | ·· 54.4 | 15 | 43°29.6 | ·· 27.1 | 15 | 43°25.7 | ·· 56.7 | 15 | 43°23.0 | ·· 23.0 | 15 | 43°21.7 | ·· 46.3 | 15 | 43°21.7 | ·· 06.6 |
| 16 | 59°04.0 | 08.4 | 16 | 58°55.5 | 55.1 | 16 | 58°47.7 | 38.3 | 16 | 58°40.7 | 17.9 | 16 | 58°34.6 | 54.0 | 16 | 58°29.5 | 26.7 | 16 | 58°25.6 | 56.2 | 16 | 58°23.0 | 22.5 | 16 | 58°21.7 | 45.7 | 16 | 58°21.7 | 06.0 |
| 17 | 74°03.9 | 08.2 | 17 | 73°55.4 | 54.9 | 17 | 73°47.6 | 38.0 | 17 | 73°40.6 | 17.6 | 17 | 73°34.5 | 53.6 | 17 | 73°29.5 | 26.3 | 17 | 73°25.6 | 55.8 | 17 | 73°23.0 | 22.0 | 17 | 73°21.7 | 45.2 | 17 | 73°21.7 | 05.4 |
| 18 | 89°03.8 | N23°08.1 | 18 | 88°55.3 | N22°54.7 | 18 | 88°47.5 | N22°37.8 | 18 | 88°40.6 | N22°17.3 | 18 | 88°34.5 | N21°53.3 | 18 | 88°29.4 | N21°25.9 | 18 | 88°25.5 | N20°55.3 | 18 | 88°22.9 | N20°21.5 | 18 | 88°21.6 | N19°44.7 | 18 | 88°21.7 | N19°04.9 |
| 19 | 104°03.7 | 07.9 | 19 | 103°55.2 | 54.5 | 19 | 103°47.4 | 37.5 | 19 | 103°40.5 | 16.9 | 19 | 103°34.4 | 52.9 | 19 | 103°29.4 | 25.5 | 19 | 103°25.5 | 54.9 | 19 | 103°22.9 | 21.0 | 19 | 103°21.6 | 44.1 | 19 | 103°21.7 | 04.3 |
| 20 | 119°03.5 | 07.8 | 20 | 118°55.1 | 54.3 | 20 | 118°47.3 | 37.2 | 20 | 118°40.4 | 16.6 | 20 | 118°34.3 | 52.6 | 20 | 118°29.3 | 25.1 | 20 | 118°25.5 | 54.4 | 20 | 118°22.9 | 20.5 | 20 | 118°21.6 | 43.6 | 20 | 118°21.7 | 03.7 |
| 21 | 134°03.4 | ·· 07.6 | 21 | 133°55.0 | ·· 54.1 | 21 | 133°47.2 | ·· 37.0 | 21 | 133°40.3 | ·· 16.3 | 21 | 133°34.2 | ·· 52.2 | 21 | 133°29.2 | ·· 24.7 | 21 | 133°25.4 | ·· 54.0 | 21 | 133°22.9 | ·· 20.0 | 21 | 133°21.6 | ·· 43.1 | 21 | 133°21.8 | ·· 03.1 |
| 22 | 149°03.3 | 07.4 | 22 | 148°54.9 | 53.9 | 22 | 148°47.1 | 36.7 | 22 | 148°40.2 | 16.0 | 22 | 148°34.2 | 51.9 | 22 | 148°29.2 | 24.3 | 22 | 148°25.4 | 53.5 | 22 | 148°22.8 | 19.5 | 22 | 148°21.6 | 42.5 | 22 | 148°21.8 | 02.6 |
| 23 | 164°03.2 | 07.3 | 23 | 163°54.8 | 53.7 | 23 | 163°47.0 | 36.4 | 23 | 163°40.1 | 15.7 | 23 | 163°34.1 | 51.5 | 23 | 163°29.1 | 23.9 | 23 | 163°25.3 | 53.1 | 23 | 163°22.8 | 19.1 | 23 | 163°21.6 | 42.0 | 23 | 163°21.8 | 02.0 |
| | SD=15.7′ | d = 0.1′ | | SD=15.7′ | d = 0.2′ | | SD=15.7′ | d = 0.2′ | | SD=15.7′ | d = 0.3′ | | SD=15.7′ | d = 0.3′ | | SD=15.7′ | d = 0.4′ | | SD=15.7′ | d = 0.4′ | | SD=15.7′ | d = 0.5′ | | SD=15.7′ | d = 0.5′ | | SD=15.7′ | d = 0.6′ |

| 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec | 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec | 28 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°03.0 | N23°07.1 | 0 | 178°54.6 | N22°53.4 | 0 | 178°46.9 | N22°36.2 | 0 | 178°40.0 | N22°15.4 | 0 | 178°34.0 | N21°51.1 | 0 | 178°29.1 | N21°23.5 | 0 | 178°25.3 | N20°52.6 | 0 | 178°22.8 | N20°18.6 | 0 | 178°21.6 | N19°41.5 | 0 | 178°21.8 | N19°01.4 |
| 1 | 194°02.9 | 06.9 | 1 | 193°54.5 | 53.2 | 1 | 193°46.8 | 35.9 | 1 | 193°39.9 | 15.1 | 1 | 193°33.9 | 50.8 | 1 | 193°29.0 | 23.1 | 1 | 193°25.2 | 52.2 | 1 | 193°22.8 | 18.1 | 1 | 193°21.6 | 40.9 | 1 | 193°21.8 | 00.8 |
| 2 | 209°02.8 | 06.8 | 2 | 208°54.4 | 53.0 | 2 | 208°46.7 | 35.6 | 2 | 208°39.8 | 14.8 | 2 | 208°33.9 | 50.4 | 2 | 208°28.9 | 22.7 | 2 | 208°25.2 | 51.7 | 2 | 208°22.7 | 17.6 | 2 | 208°21.6 | 40.4 | 2 | 208°21.8 | 19°00.3 |
| 3 | 224°02.7 | ·· 06.6 | 3 | 223°54.3 | ·· 52.8 | 3 | 223°46.6 | ·· 35.4 | 3 | 223°39.7 | ·· 14.4 | 3 | 223°33.8 | ·· 50.0 | 3 | 223°28.9 | ·· 22.3 | 3 | 223°25.1 | ·· 51.3 | 3 | 223°22.7 | ·· 17.1 | 3 | 223°21.6 | ·· 39.8 | 3 | 223°21.8 | 18°59.7 |
| 4 | 239°02.6 | 06.4 | 4 | 238°54.2 | 52.6 | 4 | 238°46.5 | 35.1 | 4 | 238°39.7 | 14.1 | 4 | 238°33.7 | 49.7 | 4 | 238°28.8 | 21.9 | 4 | 238°25.1 | 50.8 | 4 | 238°22.7 | 16.6 | 4 | 238°21.6 | 39.3 | 4 | 238°21.8 | 59.1 |
| 5 | 254°02.4 | 06.3 | 5 | 253°54.1 | 52.4 | 5 | 253°46.4 | 34.8 | 5 | 253°39.6 | 13.8 | 5 | 253°33.6 | 49.3 | 5 | 253°28.8 | 21.5 | 5 | 253°25.1 | 50.4 | 5 | 253°22.7 | 16.1 | 5 | 253°21.6 | 38.8 | 5 | 253°21.9 | 58.5 |
| 6 | 269°02.3 | N23°06.1 | 6 | 268°54.0 | N22°52.1 | 6 | 268°46.3 | N22°34.6 | 6 | 268°39.5 | N22°13.5 | 6 | 268°33.6 | N21°49.0 | 6 | 268°28.7 | N21°21.1 | 6 | 268°25.0 | N20°49.9 | 6 | 268°22.6 | N20°15.6 | 6 | 268°21.6 | N19°38.2 | 6 | 268°21.9 | N18°58.0 |
| 7 | 284°02.2 | 05.9 | 7 | 283°53.9 | 51.9 | 7 | 283°46.2 | 34.3 | 7 | 283°39.4 | 13.2 | 7 | 283°33.5 | 48.6 | 7 | 283°28.6 | 20.6 | 7 | 283°25.0 | 49.4 | 7 | 283°22.6 | 15.1 | 7 | 283°21.6 | 37.7 | 7 | 283°21.9 | 57.4 |
| 8 | 299°02.1 | 05.8 | 8 | 298°53.8 | 51.7 | 8 | 298°46.1 | 34.0 | 8 | 298°39.3 | 12.9 | 8 | 298°33.4 | 48.2 | 8 | 298°28.6 | 20.2 | 8 | 298°24.9 | 49.0 | 8 | 298°22.6 | 14.6 | 8 | 298°21.6 | 37.1 | 8 | 298°21.9 | 56.8 |
| 9 | 314°02.0 | ·· 05.6 | 9 | 313°53.6 | ·· 51.5 | 9 | 313°46.0 | ·· 33.8 | 9 | 313°39.2 | ·· 12.5 | 9 | 313°33.3 | ·· 47.9 | 9 | 313°28.5 | ·· 19.8 | 9 | 313°24.9 | ·· 48.5 | 9 | 313°22.6 | ·· 14.1 | 9 | 313°21.6 | ·· 36.6 | 9 | 313°21.9 | ·· 56.2 |
| 10 | 329°01.8 | 05.4 | 10 | 328°53.5 | 51.3 | 10 | 328°45.9 | 33.5 | 10 | 328°39.1 | 12.2 | 10 | 328°33.3 | 47.5 | 10 | 328°28.5 | 19.4 | 10 | 328°24.9 | 48.1 | 10 | 328°22.5 | 13.6 | 10 | 328°21.5 | 36.1 | 10 | 328°21.9 | 55.6 |
| 11 | 344°01.7 | 05.3 | 11 | 343°53.4 | 51.0 | 11 | 343°45.8 | 33.2 | 11 | 343°39.0 | 11.9 | 11 | 343°33.2 | 47.1 | 11 | 343°28.4 | 19.0 | 11 | 343°24.8 | 47.6 | 11 | 343°22.5 | 13.1 | 11 | 343°21.5 | 35.5 | 11 | 343°21.9 | 55.1 |
| 12 | 359°01.6 | N23°05.1 | 12 | 358°53.3 | N22°50.8 | 12 | 358°45.7 | N22°33.0 | 12 | 358°38.9 | N22°11.6 | 12 | 358°33.1 | N21°46.8 | 12 | 358°28.3 | N21°18.6 | 12 | 358°24.8 | N20°47.2 | 12 | 358°22.5 | N20°12.6 | 12 | 358°21.5 | N19°35.0 | 12 | 358°22.0 | N18°54.5 |
| 13 | 14°01.5 | 04.9 | 13 | 13°53.2 | 50.6 | 13 | 13°45.6 | 32.7 | 13 | 13°38.9 | 11.3 | 13 | 13°33.0 | 46.4 | 13 | 13°28.3 | 18.2 | 13 | 13°24.7 | 46.7 | 13 | 13°22.5 | 12.1 | 13 | 13°21.5 | 34.4 | 13 | 13°22.0 | 53.9 |
| 14 | 29°01.4 | 04.7 | 14 | 28°53.1 | 50.4 | 14 | 28°45.5 | 32.4 | 14 | 28°38.8 | 10.9 | 14 | 28°33.0 | 46.0 | 14 | 28°28.2 | 17.8 | 14 | 28°24.7 | 46.2 | 14 | 28°22.4 | 11.6 | 14 | 28°21.5 | 33.9 | 14 | 28°22.0 | 53.3 |
| 15 | 44°01.2 | ·· 04.6 | 15 | 43°53.0 | ·· 50.1 | 15 | 43°45.4 | ·· 32.1 | 15 | 43°38.7 | ·· 10.6 | 15 | 43°32.9 | ·· 45.7 | 15 | 43°28.2 | ·· 17.3 | 15 | 43°24.7 | ·· 45.8 | 15 | 43°22.4 | ·· 11.1 | 15 | 43°21.5 | ·· 33.4 | 15 | 43°22.0 | ·· 52.7 |
| 16 | 59°01.1 | 04.4 | 16 | 58°52.9 | 49.9 | 16 | 58°45.3 | 31.9 | 16 | 58°38.6 | 10.3 | 16 | 58°32.8 | 45.3 | 16 | 58°28.1 | 16.9 | 16 | 58°24.6 | 45.3 | 16 | 58°22.4 | 10.6 | 16 | 58°21.5 | 32.8 | 16 | 58°22.0 | 52.1 |
| 17 | 74°01.0 | 04.2 | 17 | 73°52.8 | 49.7 | 17 | 73°45.2 | 31.6 | 17 | 73°38.5 | 10.0 | 17 | 73°32.7 | 44.9 | 17 | 73°28.1 | 16.5 | 17 | 73°24.6 | 44.9 | 17 | 73°22.4 | 10.1 | 17 | 73°21.5 | 32.3 | 17 | 73°22.0 | 51.6 |
| 18 | 89°00.9 | N23°04.0 | 18 | 88°52.6 | N22°49.5 | 18 | 88°45.1 | N22°31.3 | 18 | 88°38.4 | N22°09.6 | 18 | 88°32.7 | N21°44.5 | 18 | 88°28.0 | N21°16.1 | 18 | 88°24.5 | N20°44.4 | 18 | 88°22.4 | N20°09.6 | 18 | 88°21.5 | N19°31.7 | 18 | 88°22.0 | N18°51.0 |
| 19 | 104°00.8 | 03.9 | 19 | 103°52.5 | 49.2 | 19 | 103°45.0 | 31.0 | 19 | 103°38.3 | 09.3 | 19 | 103°32.6 | 44.2 | 19 | 103°27.9 | 15.7 | 19 | 103°24.5 | 43.9 | 19 | 103°22.3 | 09.1 | 19 | 103°21.5 | 31.2 | 19 | 103°22.1 | 50.4 |
| 20 | 119°00.7 | 03.7 | 20 | 118°52.4 | 49.0 | 20 | 118°44.9 | 30.8 | 20 | 118°38.2 | 09.0 | 20 | 118°32.5 | 43.8 | 20 | 118°27.9 | 15.3 | 20 | 118°24.5 | 43.5 | 20 | 118°22.3 | 08.6 | 20 | 118°21.5 | 30.6 | 20 | 118°22.1 | 49.8 |
| 21 | 134°00.5 | ·· 03.5 | 21 | 133°52.3 | ·· 48.8 | 21 | 133°44.8 | ·· 30.5 | 21 | 133°38.2 | ·· 08.7 | 21 | 133°32.4 | ·· 43.4 | 21 | 133°27.8 | ·· 14.8 | 21 | 133°24.4 | ·· 43.0 | 21 | 133°22.3 | ·· 08.0 | 21 | 133°21.5 | ·· 30.1 | 21 | 133°22.1 | ·· 49.2 |
| 22 | 149°00.4 | 03.3 | 22 | 148°52.2 | 48.5 | 22 | 148°44.7 | 30.2 | 22 | 148°38.1 | 08.3 | 22 | 148°32.4 | 43.0 | 22 | 148°27.8 | 14.4 | 22 | 148°24.4 | 42.5 | 22 | 148°22.3 | 07.5 | 22 | 148°21.5 | 29.5 | 22 | 148°22.1 | 48.6 |
| 23 | 164°00.3 | 03.1 | 23 | 163°52.1 | 48.3 | 23 | 163°44.6 | 29.9 | 23 | 163°38.0 | 08.0 | 23 | 163°32.3 | 42.7 | 23 | 163°27.7 | 14.0 | 23 | 163°24.3 | 42.1 | 23 | 163°22.3 | 07.0 | 23 | 163°21.5 | 29.0 | 23 | 163°22.1 | 48.0 |
| | SD=15.7′ | d = 0.2′ | | SD=15.7′ | d = 0.2′ | | SD=15.7′ | d = 0.3′ | | SD=15.7′ | d = 0.3′ | | SD=15.7′ | d = 0.4′ | | SD=15.7′ | d = 0.4′ | | SD=15.7′ | d = 0.5′ | | SD=15.7′ | d = 0.5′ | | SD=15.7′ | d = 0.5′ | | SD=15.7′ | d = 0.6′ |

| 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec | 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec | 29 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°00.2 | N23°03.0 | 0 | 178°52.0 | N22°48.1 | 0 | 178°44.5 | N22°29.6 | 0 | 178°37.9 | N22°07.7 | 0 | 178°32.2 | N21°42.3 | 0 | 178°27.7 | N21°13.6 | 0 | 178°24.3 | N20°41.6 | 0 | 178°22.2 | N20°06.5 | 0 | 178°21.5 | N19°28.4 | 0 | 178°22.2 | N18°47.4 |
| 1 | 194°00.1 | 02.8 | 1 | 193°51.9 | 47.8 | 1 | 193°44.4 | 29.4 | 1 | 193°37.8 | 07.4 | 1 | 193°32.2 | 41.9 | 1 | 193°27.6 | 13.1 | 1 | 193°24.3 | 41.1 | 1 | 193°22.2 | 06.0 | 1 | 193°21.5 | 27.9 | 1 | 193°22.2 | 46.9 |
| 2 | 208°59.9 | 02.6 | 2 | 208°51.8 | 47.6 | 2 | 208°44.3 | 29.1 | 2 | 208°37.7 | 07.0 | 2 | 208°32.1 | 41.5 | 2 | 208°27.6 | 12.7 | 2 | 208°24.2 | 40.7 | 2 | 208°22.2 | 05.5 | 2 | 208°21.5 | 27.3 | 2 | 208°22.2 | 46.3 |
| 3 | 223°59.8 | ·· 02.4 | 3 | 223°51.7 | ·· 47.4 | 3 | 223°44.2 | ·· 28.8 | 3 | 223°37.6 | ·· 06.7 | 3 | 223°32.0 | ·· 41.2 | 3 | 223°27.5 | ·· 12.3 | 3 | 223°24.2 | ·· 40.2 | 3 | 223°22.2 | ·· 05.0 | 3 | 223°21.5 | ·· 26.8 | 3 | 223°22.2 | ·· 45.7 |
| 4 | 238°59.7 | 02.2 | 4 | 238°51.6 | 47.2 | 4 | 238°44.1 | 28.5 | 4 | 238°37.6 | 06.4 | 4 | 238°31.9 | 40.8 | 4 | 238°27.4 | 11.9 | 4 | 238°24.2 | 39.7 | 4 | 238°22.2 | 04.5 | 4 | 238°21.5 | 26.2 | 4 | 238°22.2 | 45.1 |
| 5 | 253°59.6 | 02.0 | 5 | 253°51.4 | 46.9 | 5 | 253°44.0 | 28.2 | 5 | 253°37.5 | 06.0 | 5 | 253°31.9 | 40.4 | 5 | 253°27.4 | 11.5 | 5 | 253°24.1 | 39.3 | 5 | 253°22.1 | 04.0 | 5 | 253°21.5 | 25.7 | 5 | 253°22.2 | 44.5 |
| 6 | 268°59.5 | N23°01.9 | 6 | 268°51.3 | N22°46.7 | 6 | 268°43.9 | N22°27.9 | 6 | 268°37.4 | N22°05.7 | 6 | 268°31.8 | N21°40.0 | 6 | 268°27.3 | N21°11.0 | 6 | 268°24.1 | N20°38.8 | 6 | 268°22.1 | N20°03.5 | 6 | 268°21.5 | N19°25.1 | 6 | 268°22.3 | N18°43.9 |
| 7 | 283°59.4 | 01.7 | 7 | 283°51.2 | 46.4 | 7 | 283°43.8 | 27.7 | 7 | 283°37.3 | 05.4 | 7 | 283°31.7 | 39.6 | 7 | 283°27.3 | 10.6 | 7 | 283°24.0 | 38.3 | 7 | 283°22.1 | 02.9 | 7 | 283°21.5 | 24.6 | 7 | 283°22.3 | 43.3 |
| 8 | 298°59.2 | 01.5 | 8 | 298°51.1 | 46.2 | 8 | 298°43.7 | 27.4 | 8 | 298°37.2 | 05.0 | 8 | 298°31.7 | 39.3 | 8 | 298°27.2 | 10.2 | 8 | 298°24.0 | 37.9 | 8 | 298°22.1 | 02.4 | 8 | 298°21.5 | 24.0 | 8 | 298°22.3 | 42.7 |
| 9 | 313°59.1 | ·· 01.3 | 9 | 313°51.0 | ·· 46.0 | 9 | 313°43.7 | ·· 27.1 | 9 | 313°37.1 | ·· 04.7 | 9 | 313°31.6 | ·· 38.9 | 9 | 313°27.2 | ·· 09.7 | 9 | 313°24.0 | ·· 37.4 | 9 | 313°22.1 | ·· 01.9 | 9 | 313°21.5 | ·· 23.5 | 9 | 313°22.3 | ·· 42.1 |
| 10 | 328°59.0 | 01.1 | 10 | 328°50.9 | 45.7 | 10 | 328°43.6 | 26.8 | 10 | 328°37.1 | 04.4 | 10 | 328°31.5 | 38.5 | 10 | 328°27.1 | 09.3 | 10 | 328°23.9 | 36.9 | 10 | 328°22.1 | 01.4 | 10 | 328°21.5 | 22.9 | 10 | 328°22.4 | 41.5 |
| 11 | 343°58.9 | 00.9 | 11 | 343°50.8 | 45.5 | 11 | 343°43.5 | 26.5 | 11 | 343°37.0 | 04.0 | 11 | 343°31.5 | 38.1 | 11 | 343°27.1 | 08.9 | 11 | 343°23.9 | 36.4 | 11 | 343°22.0 | 00.9 | 11 | 343°21.5 | 22.4 | 11 | 343°22.4 | 40.9 |
| 12 | 358°58.8 | N23°00.7 | 12 | 358°50.7 | N22°45.3 | 12 | 358°43.4 | N22°26.2 | 12 | 358°36.9 | N22°03.7 | 12 | 358°31.4 | N21°37.7 | 12 | 358°27.0 | N21°08.5 | 12 | 358°23.9 | N20°36.0 | 12 | 358°22.0 | N20°00.4 | 12 | 358°21.5 | N19°21.8 | 12 | 358°22.4 | N18°40.3 |
| 13 | 13°58.7 | 00.5 | 13 | 13°50.6 | 45.0 | 13 | 13°43.3 | 25.9 | 13 | 13°36.8 | 03.3 | 13 | 13°31.3 | 37.4 | 13 | 13°27.0 | 08.0 | 13 | 13°23.8 | 35.5 | 13 | 13°22.0 | 19°59.9 | 13 | 13°21.5 | 21.2 | 13 | 13°22.4 | 39.7 |
| 14 | 28°58.5 | 00.3 | 14 | 28°50.5 | 44.8 | 14 | 28°43.2 | 25.6 | 14 | 28°36.7 | 03.0 | 14 | 28°31.3 | 37.0 | 14 | 28°26.9 | 07.6 | 14 | 28°23.8 | 35.0 | 14 | 28°22.0 | 59.3 | 14 | 28°21.5 | 20.7 | 14 | 28°22.4 | 39.1 |
| 15 | 43°58.4 | ·· 00.2 | 15 | 43°50.4 | ·· 44.5 | 15 | 43°43.1 | ·· 25.4 | 15 | 43°36.6 | ·· 02.7 | 15 | 43°31.2 | ·· 36.6 | 15 | 43°26.9 | ·· 07.2 | 15 | 43°23.8 | ·· 34.6 | 15 | 43°22.0 | ·· 58.8 | 15 | 43°21.5 | ·· 20.1 | 15 | 43°22.5 | ·· 38.6 |
| 16 | 58°58.3 | 23°00.0 | 16 | 58°50.3 | 44.3 | 16 | 58°43.0 | 25.1 | 16 | 58°36.6 | 02.3 | 16 | 58°31.1 | 36.2 | 16 | 58°26.8 | 06.7 | 16 | 58°23.7 | 34.1 | 16 | 58°22.0 | 58.3 | 16 | 58°21.5 | 19.6 | 16 | 58°22.5 | 38.0 |
| 17 | 73°58.2 | 22°59.8 | 17 | 73°50.2 | 44.0 | 17 | 73°42.9 | 24.8 | 17 | 73°36.5 | 02.0 | 17 | 73°31.0 | 35.8 | 17 | 73°26.8 | 06.3 | 17 | 73°23.7 | 33.6 | 17 | 73°21.9 | 57.8 | 17 | 73°21.5 | 19.0 | 17 | 73°22.5 | 37.4 |
| 18 | 88°58.1 | N22°59.6 | 18 | 88°50.1 | N22°43.8 | 18 | 88°42.8 | N22°24.5 | 18 | 88°36.4 | N22°01.7 | 18 | 88°31.0 | N21°35.4 | 18 | 88°26.7 | N21°05.9 | 18 | 88°23.7 | N20°33.1 | 18 | 88°21.9 | N19°57.3 | 18 | 88°21.5 | N19°18.4 | 18 | 88°22.5 | N18°36.8 |
| 19 | 103°58.0 | 59.4 | 19 | 103°49.9 | 43.6 | 19 | 103°42.7 | 24.2 | 19 | 103°36.3 | 01.3 | 19 | 103°30.9 | 35.0 | 19 | 103°26.4 | 05.4 | 19 | 103°23.6 | 32.6 | 19 | 103°21.9 | 56.8 | 19 | 103°21.5 | 17.9 | 19 | 103°22.6 | 36.2 |
| 20 | 118°57.8 | 59.2 | 20 | 118°49.8 | 43.3 | 20 | 118°42.6 | 23.9 | 20 | 118°36.2 | 01.0 | 20 | 118°30.8 | 34.6 | 20 | 118°26.6 | 05.0 | 20 | 118°23.6 | 32.2 | 20 | 118°21.9 | 56.2 | 20 | 118°21.6 | 17.3 | 20 | 118°22.6 | 35.6 |
| 21 | 133°57.7 | ·· 59.0 | 21 | 133°49.7 | ·· 43.1 | 21 | 133°42.5 | ·· 23.6 | 21 | 133°36.1 | ·· 00.6 | 21 | 133°30.8 | ·· 34.3 | 21 | 133°26.6 | ·· 04.6 | 21 | 133°23.6 | ·· 31.7 | 21 | 133°21.9 | ·· 55.7 | 21 | 133°21.6 | ·· 16.8 | 21 | 133°22.6 | ·· 35.0 |
| 22 | 148°57.6 | 58.8 | 22 | 148°49.6 | 42.8 | 22 | 148°42.4 | 23.3 | 22 | 148°36.1 | 22°00.3 | 22 | 148°30.7 | 33.9 | 22 | 148°26.5 | 04.1 | 22 | 148°23.5 | 31.2 | 22 | 148°21.9 | 55.2 | 22 | 148°21.6 | 16.2 | 22 | 148°22.6 | 34.4 |
| 23 | 163°57.5 | 58.6 | 23 | 163°49.5 | 42.6 | 23 | 163°42.3 | 23.0 | 23 | 163°36.0 | 21°59.9 | 23 | 163°30.6 | 33.5 | 23 | 163°26.5 | 03.7 | 23 | 163°23.5 | 30.7 | 23 | 163°21.9 | 54.7 | 23 | 163°21.6 | 15.6 | 23 | 163°22.6 | 33.8 |
| | SD=15.7′ | d = 0.2′ | | SD=15.7′ | d = 0.2′ | | SD=15.7′ | d = 0.3′ | | SD=15.7′ | d = 0.3′ | | SD=15.7′ | d = 0.4′ | | SD=15.7′ | d = 0.4′ | | SD=15.7′ | d = 0.5′ | | SD=15.7′ | d = 0.5′ | | SD=15.7′ | d = 0.5′ | | SD=15.7′ | d = 0.6′ |

DUT1 = UT1-UTC = +0.1092 sec  ΔT = TT-UT1 = +69.0748 sec

## 2026 July 30 to Aug. 13 UT

DUT1 = UT1-UTC = +0.1189 sec  ΔT = TT-UT1 = +69.0651 sec

## 2026 August 14 to Aug. 28 UT

| 30 | GHA | Dec | 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec | 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 178°22.7 | N18°33.2 | 0 | 178°25.1 | N17°48.5 | 0 | 178°28.9 | N17°01.2 | 0 | 178°34.0 | N16°11.5 | 0 | 178°40.4 | N15°19.3 | 0 | 178°48.1 | N14°25.0 | 0 | 178°57.0 | N13°28.6 | 0 | 179°07.1 | N12°30.3 | 0 | 179°18.3 | N11°30.2 | 0 | 179°30.5 | N10°28.5 |
| 1 | 193°22.7 | 32.6 | 1 | 193°25.2 | 47.9 | 1 | 193°29.0 | 17°00.6 | 1 | 193°34.1 | 10.8 | 1 | 193°40.5 | 18.6 | 1 | 193°48.2 | 24.2 | 1 | 193°57.1 | 27.8 | 1 | 194°07.2 | 29.5 | 1 | 194°18.4 | 29.4 | 1 | 194°30.6 | 27.7 |
| 2 | 208°22.7 | 32.0 | 2 | 208°25.2 | 47.2 | 2 | 208°29.1 | 16°59.9 | 2 | 208°34.2 | 10.0 | 2 | 208°40.6 | 17.9 | 2 | 208°48.3 | 23.5 | 2 | 208°57.2 | 27.0 | 2 | 209°07.4 | 28.7 | 2 | 209°18.6 | 28.5 | 2 | 209°30.8 | 26.8 |
| 3 | 223°22.7 | ·· 31.4 | 3 | 223°25.3 | ·· 46.6 | 3 | 223°29.1 | ·· 59.2 | 3 | 223°34.3 | ·· 09.3 | 3 | 223°40.7 | ·· 17.1 | 3 | 223°48.4 | ·· 22.7 | 3 | 223°57.4 | ·· 26.2 | 3 | 224°07.5 | ·· 27.8 | 3 | 224°18.7 | ·· 27.7 | 3 | 224°31.0 | ·· 25.9 |
| 4 | 238°22.8 | 30.7 | 4 | 238°25.3 | 45.9 | 4 | 238°29.2 | 58.5 | 4 | 238°34.4 | 08.6 | 4 | 238°40.8 | 16.4 | 4 | 238°48.6 | 21.9 | 4 | 238°57.5 | 25.4 | 4 | 239°07.7 | 27.0 | 4 | 239°18.9 | 26.8 | 4 | 239°31.2 | 25.1 |
| 5 | 253°22.8 | 30.1 | 5 | 253°25.4 | 45.3 | 5 | 253°29.2 | 57.9 | 5 | 253°34.4 | 07.9 | 5 | 253°40.9 | 15.6 | 5 | 253°48.7 | 21.1 | 5 | 253°57.6 | 24.6 | 5 | 254°07.8 | 26.2 | 5 | 254°19.1 | 26.0 | 5 | 254°31.4 | 24.2 |
| 6 | 268°22.8 | N18°29.5 | 6 | 268°25.4 | N17°44.7 | 6 | 268°29.3 | N16°57.2 | 6 | 268°34.5 | N16°07.2 | 6 | 268°41.0 | N15°14.9 | 6 | 268°48.8 | N14°20.4 | 6 | 268°57.8 | N13°23.8 | 6 | 269°08.0 | N12°25.4 | 6 | 269°19.2 | N11°25.2 | 6 | 269°31.5 | N10°23.3 |
| 7 | 283°22.9 | 28.9 | 7 | 283°25.4 | 44.0 | 7 | 283°29.4 | 56.5 | 7 | 283°34.6 | 06.5 | 7 | 283°41.1 | 14.1 | 7 | 283°48.9 | 19.6 | 7 | 283°57.9 | 23.0 | 7 | 284°08.1 | 24.5 | 7 | 284°19.4 | 24.3 | 7 | 284°31.7 | 22.5 |
| 8 | 298°22.9 | 28.3 | 8 | 298°25.5 | 43.4 | 8 | 298°29.4 | 55.8 | 8 | 298°34.7 | 05.8 | 8 | 298°41.2 | 13.4 | 8 | 298°49.0 | 18.8 | 8 | 298°58.0 | 22.2 | 8 | 299°08.3 | 23.7 | 8 | 299°19.6 | 23.5 | 8 | 299°31.9 | 21.6 |
| 9 | 313°22.9 | ·· 27.7 | 9 | 313°25.5 | ·· 42.7 | 9 | 313°29.5 | ·· 55.1 | 9 | 313°34.8 | ·· 05.1 | 9 | 313°41.3 | ·· 12.7 | 9 | 313°49.1 | ·· 18.1 | 9 | 313°58.2 | ·· 21.4 | 9 | 314°08.4 | ·· 22.9 | 9 | 314°19.7 | ·· 22.6 | 9 | 314°32.1 | ·· 20.7 |
| 10 | 328°22.9 | 27.1 | 10 | 328°25.6 | 42.1 | 10 | 328°29.6 | 54.5 | 10 | 328°34.9 | 04.4 | 10 | 328°41.4 | 11.9 | 10 | 328°49.3 | 17.3 | 10 | 328°58.3 | 20.6 | 10 | 329°08.6 | 22.1 | 10 | 329°19.9 | 21.8 | 10 | 329°32.2 | 19.9 |
| 11 | 343°23.0 | 26.5 | 11 | 343°25.6 | 41.4 | 11 | 343°29.6 | 53.8 | 11 | 343°34.9 | 03.6 | 11 | 343°41.5 | 11.2 | 11 | 343°49.4 | 16.5 | 11 | 343°58.4 | 19.8 | 11 | 344°08.7 | 21.2 | 11 | 344°20.1 | 20.9 | 11 | 344°32.4 | 19.0 |
| 12 | 358°23.0 | N18°25.9 | 12 | 358°25.7 | N17°40.8 | 12 | 358°29.7 | N16°53.1 | 12 | 358°35.0 | N16°02.9 | 12 | 358°41.6 | N15°10.4 | 12 | 358°49.5 | N14°15.7 | 12 | 358°58.6 | N13°19.0 | 12 | 359°08.9 | N12°20.4 | 12 | 359°20.2 | N11°20.1 | 12 | 359°32.6 | N10°18.1 |
| 13 | 13°23.0 | 25.3 | 13 | 13°25.7 | 40.2 | 13 | 13°29.8 | 52.4 | 13 | 13°35.1 | 02.2 | 13 | 13°41.7 | 09.7 | 13 | 13°49.6 | 15.0 | 13 | 13°58.7 | 18.2 | 13 | 14°09.0 | 19.6 | 13 | 14°20.4 | 19.2 | 13 | 14°32.8 | 17.2 |
| 14 | 28°23.0 | 24.7 | 14 | 28°25.8 | 39.5 | 14 | 28°29.8 | 51.7 | 14 | 28°35.2 | 01.5 | 14 | 28°41.8 | 08.9 | 14 | 28°49.7 | 14.2 | 14 | 28°58.9 | 17.4 | 14 | 29°09.2 | 18.8 | 14 | 29°20.6 | 18.4 | 14 | 29°33.0 | 16.4 |
| 15 | 43°23.1 | ·· 24.1 | 15 | 43°25.8 | ·· 38.9 | 15 | 43°29.9 | ·· 51.1 | 15 | 43°35.3 | ·· 00.8 | 15 | 43°41.9 | ·· 08.2 | 15 | 43°49.8 | ·· 13.4 | 15 | 43°59.0 | ·· 16.6 | 15 | 44°09.3 | ·· 17.9 | 15 | 44°20.7 | ·· 17.5 | 15 | 44°33.1 | ·· 15.5 |
| 16 | 58°23.1 | 23.5 | 16 | 58°25.9 | 38.2 | 16 | 58°30.0 | 50.4 | 16 | 58°35.4 | 16°00.1 | 16 | 58°42.0 | 07.4 | 16 | 58°50.0 | 12.6 | 16 | 58°59.1 | 15.8 | 16 | 59°09.5 | 17.1 | 16 | 59°20.9 | 16.7 | 16 | 59°33.3 | 14.6 |
| 17 | 73°23.1 | 22.9 | 17 | 73°25.9 | 37.6 | 17 | 73°30.0 | 49.7 | 17 | 73°35.4 | 15°59.4 | 17 | 73°42.1 | 06.7 | 17 | 73°50.1 | 11.9 | 17 | 73°59.3 | 15.0 | 17 | 74°09.6 | 16.3 | 17 | 74°21.1 | 15.8 | 17 | 74°33.5 | 13.8 |
| 18 | 88°23.2 | N18°22.2 | 18 | 88°26.0 | N17°36.9 | 18 | 88°30.1 | N16°49.0 | 18 | 88°35.5 | N15°58.6 | 18 | 88°42.2 | N15°06.0 | 18 | 88°50.2 | N14°11.1 | 18 | 88°59.4 | N13°14.2 | 18 | 89°09.8 | N12°15.4 | 18 | 89°21.2 | N11°15.0 | 18 | 89°33.7 | N10°12.9 |
| 19 | 103°23.2 | 21.6 | 19 | 103°26.0 | 36.3 | 19 | 103°30.2 | 48.3 | 19 | 103°35.6 | 57.9 | 19 | 103°42.3 | 05.2 | 19 | 103°50.3 | 10.3 | 19 | 103°59.5 | 13.4 | 19 | 104°09.9 | 14.6 | 19 | 104°21.4 | 14.1 | 19 | 104°33.8 | 12.0 |
| 20 | 118°23.2 | 21.0 | 20 | 118°26.1 | 35.6 | 20 | 118°30.2 | 47.6 | 20 | 118°35.7 | 57.2 | 20 | 118°42.4 | 04.5 | 20 | 118°50.4 | 09.5 | 20 | 118°59.7 | 12.6 | 20 | 119°10.1 | 13.8 | 20 | 119°21.6 | 13.3 | 20 | 119°34.0 | 11.1 |
| 21 | 133°23.2 | ·· 20.4 | 21 | 133°26.1 | ·· 35.0 | 21 | 133°30.3 | ·· 47.0 | 21 | 133°35.8 | ·· 56.5 | 21 | 133°42.5 | ·· 03.7 | 21 | 133°50.6 | ·· 08.8 | 21 | 133°59.8 | ·· 11.8 | 21 | 134°10.2 | ·· 13.0 | 21 | 134°21.7 | ·· 12.4 | 21 | 134°34.2 | ·· 10.3 |
| 22 | 148°23.3 | 19.8 | 22 | 148°26.2 | 34.3 | 22 | 148°30.4 | 46.3 | 22 | 148°35.9 | 55.8 | 22 | 148°42.6 | 03.0 | 22 | 148°50.7 | 08.0 | 22 | 148°59.9 | 11.0 | 22 | 149°10.4 | 12.1 | 22 | 149°21.9 | 11.6 | 22 | 149°34.4 | 09.4 |
| 23 | 163°23.3 | 19.2 | 23 | 163°26.2 | 33.7 | 23 | 163°30.4 | 45.6 | 23 | 163°35.9 | 55.1 | 23 | 163°42.7 | 02.2 | 23 | 163°50.8 | 07.2 | 23 | 164°00.1 | 10.2 | 23 | 164°10.5 | 11.3 | 23 | 164°22.1 | 10.7 | 23 | 164°34.6 | 08.5 |
| | SD=15.7′ | $d=0.6'$ | | SD=15.8′ | $d=0.6'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.9'$ |

| 31 | GHA | Dec | 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 178°23.3 | N18°18.6 | 0 | 178°26.3 | N17°33.0 | 0 | 178°30.5 | N16°44.9 | 0 | 178°36.0 | N15°54.3 | 0 | 178°42.9 | N15°01.5 | 0 | 178°50.9 | N14°06.4 | 0 | 179°00.2 | N13°09.4 | 0 | 179°10.7 | N12°10.5 | 0 | 179°22.2 | N11°09.8 | 0 | 179°34.7 | N10°07.7 |
| 1 | 193°23.4 | 18.0 | 1 | 193°26.3 | 32.4 | 1 | 193°30.6 | 44.2 | 1 | 193°36.1 | 53.6 | 1 | 193°43.0 | 00.7 | 1 | 193°51.0 | 05.6 | 1 | 194°00.4 | 08.6 | 1 | 194°10.8 | 09.6 | 1 | 194°22.4 | 09.0 | 1 | 194°34.9 | 06.8 |
| 2 | 208°23.4 | 17.3 | 2 | 208°26.4 | 31.7 | 2 | 208°30.6 | 43.5 | 2 | 208°36.2 | 52.9 | 2 | 208°43.1 | 15°00.0 | 2 | 208°51.2 | 04.9 | 2 | 209°00.5 | 07.8 | 2 | 209°11.0 | 08.8 | 2 | 209°22.6 | 08.1 | 2 | 209°35.1 | 05.9 |
| 3 | 223°23.4 | ·· 16.7 | 3 | 223°26.4 | ·· 31.1 | 3 | 223°30.7 | ·· 42.8 | 3 | 223°36.3 | ·· 52.2 | 3 | 223°43.2 | 14°59.2 | 3 | 223°51.3 | ·· 04.1 | 3 | 224°00.6 | ·· 07.0 | 3 | 224°11.1 | ·· 08.0 | 3 | 224°22.7 | ·· 07.3 | 3 | 224°35.3 | ·· 05.0 |
| 4 | 238°23.5 | 16.1 | 4 | 238°26.5 | 30.4 | 4 | 238°30.8 | 42.2 | 4 | 238°36.4 | 51.5 | 4 | 238°43.3 | 58.5 | 4 | 238°51.4 | 03.3 | 4 | 239°00.8 | 06.2 | 4 | 239°11.3 | 07.1 | 4 | 239°22.9 | 06.4 | 4 | 239°35.5 | 04.2 |
| 5 | 253°23.5 | 15.5 | 5 | 253°26.5 | 29.8 | 5 | 253°30.8 | 41.5 | 5 | 253°36.5 | 50.7 | 5 | 253°43.4 | 57.7 | 5 | 253°51.5 | 02.5 | 5 | 254°00.9 | 05.3 | 5 | 254°11.4 | 06.3 | 5 | 254°23.1 | 05.6 | 5 | 254°35.7 | 03.3 |
| 6 | 268°23.5 | N18°14.9 | 6 | 268°26.6 | N17°29.1 | 6 | 268°30.9 | N16°40.8 | 6 | 268°36.6 | N15°50.0 | 6 | 268°43.5 | N14°57.0 | 6 | 268°51.6 | N14°01.7 | 6 | 269°01.0 | N13°04.5 | 6 | 269°11.6 | N12°05.5 | 6 | 269°23.2 | N11°04.7 | 6 | 269°35.8 | N10°02.4 |
| 7 | 283°23.6 | 14.3 | 7 | 283°26.6 | 28.5 | 7 | 283°31.0 | 40.1 | 7 | 283°36.6 | 49.3 | 7 | 283°43.6 | 56.2 | 7 | 283°51.8 | 01.0 | 7 | 284°01.2 | 03.7 | 7 | 284°11.8 | 04.6 | 7 | 284°23.4 | 03.9 | 7 | 284°36.0 | 01.5 |
| 8 | 298°23.6 | 13.6 | 8 | 298°26.7 | 27.8 | 8 | 298°31.0 | 39.4 | 8 | 298°36.7 | 48.6 | 8 | 298°43.7 | 55.4 | 8 | 298°51.9 | 14°00.2 | 8 | 299°01.3 | 02.9 | 8 | 299°11.9 | 03.8 | 8 | 299°23.6 | 03.0 | 8 | 299°36.2 | 10°00.6 |
| 9 | 313°23.6 | ·· 13.0 | 9 | 313°26.7 | ·· 27.2 | 9 | 313°31.1 | ·· 38.7 | 9 | 313°36.8 | ·· 47.9 | 9 | 313°43.8 | ·· 54.7 | 9 | 313°52.0 | 13°59.4 | 9 | 314°01.5 | ·· 02.1 | 9 | 314°12.1 | ·· 03.0 | 9 | 314°23.7 | ·· 02.2 | 9 | 314°36.4 | 09°59.8 |
| 10 | 328°23.7 | 12.4 | 10 | 328°26.8 | 26.5 | 10 | 328°31.2 | 38.0 | 10 | 328°36.9 | 47.1 | 10 | 328°43.9 | 53.9 | 10 | 328°52.1 | 58.6 | 10 | 329°01.6 | 01.3 | 10 | 329°12.2 | 02.1 | 10 | 329°23.9 | 01.3 | 10 | 329°36.6 | 58.9 |
| 11 | 343°23.7 | 11.8 | 11 | 343°26.8 | 25.8 | 11 | 343°31.3 | 37.3 | 11 | 343°37.0 | 46.4 | 11 | 343°44.0 | 53.2 | 11 | 343°52.3 | 57.8 | 11 | 344°01.7 | 13°00.5 | 11 | 344°12.4 | 01.3 | 11 | 344°24.1 | 11°00.4 | 11 | 344°36.7 | 58.0 |
| 12 | 358°23.7 | N18°11.2 | 12 | 358°26.9 | N17°25.2 | 12 | 358°31.3 | N16°36.6 | 12 | 358°37.1 | N15°45.7 | 12 | 358°44.1 | N14°52.4 | 12 | 358°52.4 | N13°57.1 | 12 | 359°01.9 | N12°59.7 | 12 | 359°12.5 | N12°00.5 | 12 | 359°24.2 | N10°59.6 | 12 | 359°36.9 | N09°57.1 |
| 13 | 13°23.8 | 10.5 | 13 | 13°26.9 | 24.5 | 13 | 13°31.4 | 36.0 | 13 | 13°37.2 | 45.0 | 13 | 13°44.2 | 51.7 | 13 | 13°52.5 | 56.3 | 13 | 14°02.0 | 58.9 | 13 | 14°12.7 | 11°59.6 | 13 | 14°24.4 | 58.7 | 13 | 14°37.1 | 56.3 |
| 14 | 28°23.8 | 09.9 | 14 | 28°27.0 | 23.9 | 14 | 28°31.5 | 35.3 | 14 | 28°37.3 | 44.2 | 14 | 28°44.3 | 50.9 | 14 | 28°52.6 | 55.5 | 14 | 29°02.2 | 58.1 | 14 | 29°12.8 | 58.8 | 14 | 29°24.6 | 57.9 | 14 | 29°37.3 | 55.4 |
| 15 | 43°23.8 | ·· 09.3 | 15 | 43°27.0 | ·· 23.2 | 15 | 43°31.5 | ·· 34.6 | 15 | 43°37.4 | ·· 43.5 | 15 | 43°44.4 | ·· 50.2 | 15 | 43°52.8 | ·· 54.7 | 15 | 44°02.3 | ·· 57.3 | 15 | 44°13.0 | ·· 58.0 | 15 | 44°24.8 | ·· 57.0 | 15 | 44°37.5 | ·· 54.5 |
| 16 | 58°23.9 | 08.7 | 16 | 58°27.1 | 22.6 | 16 | 58°31.6 | 33.9 | 16 | 58°37.4 | 42.8 | 16 | 58°44.5 | 49.4 | 16 | 58°52.9 | 53.9 | 16 | 59°02.4 | 56.4 | 16 | 59°13.2 | 57.1 | 16 | 59°24.9 | 56.2 | 16 | 59°37.7 | 53.6 |
| 17 | 73°23.9 | 08.1 | 17 | 73°27.1 | 21.9 | 17 | 73°31.7 | 33.2 | 17 | 73°37.5 | 42.1 | 17 | 73°44.6 | 48.7 | 17 | 73°53.0 | 53.1 | 17 | 74°02.6 | 55.6 | 17 | 74°13.3 | 56.3 | 17 | 74°25.1 | 55.3 | 17 | 74°37.8 | 52.8 |
| 18 | 88°23.9 | N18°07.4 | 18 | 88°27.2 | N17°21.2 | 18 | 88°31.8 | N16°32.5 | 18 | 88°37.6 | N15°41.3 | 18 | 88°44.8 | N14°47.9 | 18 | 88°53.1 | N13°52.3 | 18 | 89°02.7 | N12°54.8 | 18 | 89°13.5 | N11°55.5 | 18 | 89°25.3 | N10°54.4 | 18 | 89°38.0 | N09°51.9 |
| 19 | 103°24.0 | 06.8 | 19 | 103°27.2 | 20.6 | 19 | 103°31.8 | 31.8 | 19 | 103°37.7 | 40.6 | 19 | 103°44.9 | 47.1 | 19 | 103°53.3 | 51.6 | 19 | 104°02.9 | 54.0 | 19 | 104°13.6 | 54.6 | 19 | 104°25.4 | 53.6 | 19 | 104°38.2 | 51.0 |
| 20 | 118°24.0 | 06.2 | 20 | 118°27.3 | 19.9 | 20 | 118°31.9 | 31.1 | 20 | 118°37.8 | 39.9 | 20 | 118°45.0 | 46.4 | 20 | 118°53.4 | 50.8 | 20 | 119°03.0 | 53.2 | 20 | 119°13.8 | 53.8 | 20 | 119°25.6 | 52.7 | 20 | 119°38.4 | 50.1 |
| 21 | 133°24.1 | ·· 05.6 | 21 | 133°27.4 | ·· 19.3 | 21 | 133°32.0 | ·· 30.4 | 21 | 133°37.9 | ·· 39.1 | 21 | 133°45.1 | ·· 45.6 | 21 | 133°53.5 | ·· 50.0 | 21 | 134°03.1 | ·· 52.4 | 21 | 134°13.9 | ·· 53.0 | 21 | 134°25.8 | ·· 51.9 | 21 | 134°38.6 | ·· 49.2 |
| 22 | 148°24.1 | 04.9 | 22 | 148°27.4 | 18.6 | 22 | 148°32.1 | 29.7 | 22 | 148°38.0 | 38.4 | 22 | 148°45.2 | 44.9 | 22 | 148°53.6 | 49.2 | 22 | 149°03.3 | 51.6 | 22 | 149°14.1 | 52.1 | 22 | 149°25.9 | 51.0 | 22 | 149°38.8 | 48.4 |
| 23 | 163°24.1 | 04.3 | 23 | 163°27.5 | 17.9 | 23 | 163°32.1 | 29.0 | 23 | 163°38.1 | 37.7 | 23 | 163°45.3 | 44.1 | 23 | 163°53.8 | 48.4 | 23 | 164°03.4 | 50.8 | 23 | 164°14.3 | 51.3 | 23 | 164°26.1 | 50.1 | 23 | 164°38.9 | 47.5 |
| | SD=15.7′ | $d=0.6'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.9'$ | | SD=15.8′ | $d=0.9'$ |

| 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec | 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec | 28 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 178°24.2 | N18°03.7 | 0 | 178°27.5 | N17°17.3 | 0 | 178°32.2 | N16°28.3 | 0 | 178°38.2 | N15°37.0 | 0 | 178°45.4 | N14°43.3 | 0 | 178°53.9 | N13°47.6 | 0 | 179°03.6 | N12°49.9 | 0 | 179°14.4 | N11°50.4 | 0 | 179°26.3 | N10°49.3 | 0 | 179°39.1 | N09°46.6 |
| 1 | 193°24.2 | 03.1 | 1 | 193°27.6 | 16.6 | 1 | 193°32.3 | 27.6 | 1 | 193°38.3 | 36.2 | 1 | 193°45.5 | 42.6 | 1 | 193°54.0 | 46.8 | 1 | 194°03.7 | 49.1 | 1 | 194°14.6 | 49.6 | 1 | 194°26.5 | 48.4 | 1 | 194°39.3 | 45.7 |
| 2 | 208°24.2 | 02.4 | 2 | 208°27.6 | 15.9 | 2 | 208°32.3 | 26.9 | 2 | 208°38.4 | 35.5 | 2 | 208°45.6 | 41.8 | 2 | 208°54.1 | 46.0 | 2 | 209°03.9 | 48.3 | 2 | 209°14.7 | 48.8 | 2 | 209°26.6 | 47.6 | 2 | 209°39.5 | 44.8 |
| 3 | 223°24.3 | ·· 01.8 | 3 | 223°27.7 | ·· 15.3 | 3 | 223°32.4 | ·· 26.2 | 3 | 223°38.4 | ·· 34.8 | 3 | 223°45.7 | ·· 41.1 | 3 | 223°54.3 | ·· 45.3 | 3 | 224°04.0 | ·· 47.5 | 3 | 224°14.9 | ·· 47.9 | 3 | 224°26.8 | ·· 46.7 | 3 | 224°39.7 | ·· 43.9 |
| 4 | 238°24.3 | 01.2 | 4 | 238°27.7 | 14.6 | 4 | 238°32.5 | 25.5 | 4 | 238°38.5 | 34.0 | 4 | 238°45.8 | 40.3 | 4 | 238°54.4 | 44.5 | 4 | 239°04.1 | 46.7 | 4 | 239°15.0 | 47.1 | 4 | 239°27.0 | 45.8 | 4 | 239°39.9 | 43.1 |
| 5 | 253°24.4 | 18°00.5 | 5 | 253°27.8 | 13.9 | 5 | 253°32.6 | 24.8 | 5 | 253°38.6 | 33.3 | 5 | 253°46.0 | 39.5 | 5 | 253°54.5 | 43.7 | 5 | 254°04.3 | 45.9 | 5 | 254°15.2 | 46.2 | 5 | 254°27.2 | 45.0 | 5 | 254°40.0 | 42.2 |
| 6 | 268°24.4 | N17°59.9 | 6 | 268°27.9 | N17°13.3 | 6 | 268°32.6 | N16°24.1 | 6 | 268°38.7 | N15°32.6 | 6 | 268°46.1 | N14°38.8 | 6 | 268°54.6 | N13°42.9 | 6 | 269°04.4 | N12°45.0 | 6 | 269°15.4 | N11°45.4 | 6 | 269°27.3 | N10°44.1 | 6 | 269°40.2 | N09°41.3 |
| 7 | 283°24.4 | 59.3 | 7 | 283°27.9 | 12.6 | 7 | 283°32.7 | 23.4 | 7 | 283°38.8 | 31.8 | 7 | 283°46.2 | 38.0 | 7 | 283°54.8 | 42.1 | 7 | 284°04.6 | 44.2 | 7 | 284°15.5 | 44.6 | 7 | 284°27.5 | 43.3 | 7 | 284°40.4 | 40.4 |
| 8 | 298°24.5 | 58.7 | 8 | 298°28.0 | 12.0 | 8 | 298°32.8 | 22.7 | 8 | 298°38.9 | 31.1 | 8 | 298°46.3 | 37.3 | 8 | 298°54.9 | 41.3 | 8 | 299°04.7 | 43.4 | 8 | 299°15.7 | 43.7 | 8 | 299°27.7 | 42.4 | 8 | 299°40.6 | 39.5 |
| 9 | 313°24.5 | ·· 58.0 | 9 | 313°28.0 | ·· 11.3 | 9 | 313°32.9 | ·· 22.0 | 9 | 313°39.0 | ·· 30.4 | 9 | 313°46.4 | ·· 36.5 | 9 | 313°55.0 | ·· 40.5 | 9 | 314°04.9 | ·· 42.6 | 9 | 314°15.8 | ·· 42.9 | 9 | 314°27.8 | ·· 41.5 | 9 | 314°40.8 | ·· 38.7 |
| 10 | 328°24.5 | 57.4 | 10 | 328°28.1 | 10.6 | 10 | 328°33.0 | 21.3 | 10 | 328°39.1 | 29.6 | 10 | 328°46.5 | 35.7 | 10 | 328°55.2 | 39.7 | 10 | 329°05.0 | 41.8 | 10 | 329°16.0 | 42.0 | 10 | 329°28.0 | 40.7 | 10 | 329°41.0 | 37.8 |
| 11 | 343°24.6 | 56.8 | 11 | 343°28.2 | 10.0 | 11 | 343°33.0 | 20.6 | 11 | 343°39.2 | 28.9 | 11 | 343°46.6 | 35.0 | 11 | 343°55.3 | 38.9 | 11 | 344°05.2 | 41.0 | 11 | 344°16.2 | 41.2 | 11 | 344°28.2 | 39.8 | 11 | 344°41.2 | 36.9 |
| 12 | 358°24.6 | N17°56.1 | 12 | 358°28.2 | N17°09.3 | 12 | 358°33.1 | N16°19.9 | 12 | 358°39.3 | N15°28.2 | 12 | 358°46.7 | N14°34.2 | 12 | 358°55.4 | N13°38.1 | 12 | 359°05.3 | N12°40.1 | 12 | 359°16.3 | N11°40.4 | 12 | 359°28.4 | N10°38.9 | 12 | 359°41.3 | N09°36.0 |
| 13 | 13°24.7 | 55.5 | 13 | 13°28.3 | 08.6 | 13 | 13°33.2 | 19.2 | 13 | 13°39.4 | 27.4 | 13 | 13°46.8 | 33.4 | 13 | 13°55.5 | 37.3 | 13 | 14°05.4 | 39.3 | 13 | 14°16.5 | 39.5 | 13 | 14°28.5 | 38.1 | 13 | 14°41.5 | 35.1 |
| 14 | 28°24.7 | 54.9 | 14 | 28°28.3 | 07.9 | 14 | 28°33.3 | 18.5 | 14 | 28°39.5 | 26.7 | 14 | 28°47.0 | 32.7 | 14 | 28°55.7 | 36.6 | 14 | 29°05.6 | 38.5 | 14 | 29°16.6 | 38.7 | 14 | 29°28.7 | 37.2 | 14 | 29°41.7 | 34.2 |
| 15 | 43°24.8 | ·· 54.2 | 15 | 43°28.4 | ·· 07.3 | 15 | 43°33.3 | ·· 17.8 | 15 | 43°39.6 | ·· 26.0 | 15 | 43°47.1 | ·· 31.9 | 15 | 43°55.8 | ·· 35.8 | 15 | 44°05.7 | ·· 37.7 | 15 | 44°16.8 | ·· 37.8 | 15 | 44°28.9 | ·· 36.3 | 15 | 44°41.9 | ·· 33.4 |
| 16 | 58°24.8 | 53.6 | 16 | 58°28.4 | 06.6 | 16 | 58°33.4 | 17.1 | 16 | 58°39.7 | 25.2 | 16 | 58°47.2 | 31.1 | 16 | 58°55.9 | 35.0 | 16 | 59°05.9 | 36.9 | 16 | 59°17.0 | 37.0 | 16 | 59°29.1 | 35.5 | 16 | 59°42.1 | 32.5 |
| 17 | 73°24.8 | 53.0 | 17 | 73°28.5 | 05.9 | 17 | 73°33.5 | 16.4 | 17 | 73°39.8 | 24.5 | 17 | 73°47.3 | 30.4 | 17 | 73°56.1 | 34.2 | 17 | 74°06.0 | 36.1 | 17 | 74°17.1 | 36.1 | 17 | 74°29.2 | 34.6 | 17 | 74°42.3 | 31.6 |
| 18 | 88°24.9 | N17°52.3 | 18 | 88°28.6 | N17°05.3 | 18 | 88°33.6 | N16°15.7 | 18 | 88°39.9 | N15°23.8 | 18 | 88°47.4 | N14°29.6 | 18 | 88°56.2 | N13°33.4 | 18 | 89°06.2 | N12°35.2 | 18 | 89°17.3 | N11°35.3 | 18 | 89°29.4 | N10°33.7 | 18 | 89°42.5 | N09°30.7 |
| 19 | 103°24.9 | 51.7 | 19 | 103°28.6 | 04.6 | 19 | 103°33.6 | 15.0 | 19 | 103°40.0 | 23.0 | 19 | 103°47.5 | 28.8 | 19 | 103°56.3 | 32.6 | 19 | 104°06.3 | 34.4 | 19 | 104°17.4 | 34.5 | 19 | 104°29.6 | 32.9 | 19 | 104°42.7 | 29.8 |
| 20 | 118°25.0 | 51.1 | 20 | 118°28.7 | 03.9 | 20 | 118°33.7 | 14.3 | 20 | 118°40.0 | 22.3 | 20 | 118°47.6 | 28.1 | 20 | 118°56.5 | 31.8 | 20 | 119°06.5 | 33.6 | 20 | 119°17.6 | 33.6 | 20 | 119°29.8 | 32.0 | 20 | 119°42.8 | 28.9 |
| 21 | 133°25.0 | ·· 50.4 | 21 | 133°28.8 | ·· 03.2 | 21 | 133°33.8 | ·· 13.6 | 21 | 133°40.1 | ·· 21.6 | 21 | 133°47.7 | ·· 27.3 | 21 | 133°56.6 | ·· 31.0 | 21 | 134°06.6 | ·· 32.8 | 21 | 134°17.8 | ·· 32.8 | 21 | 134°29.9 | ·· 31.1 | 21 | 134°43.0 | ·· 28.0 |
| 22 | 148°25.0 | 49.8 | 22 | 148°28.8 | 02.6 | 22 | 148°33.9 | 12.9 | 22 | 148°40.2 | 20.8 | 22 | 148°47.9 | 26.5 | 22 | 148°56.7 | 30.2 | 22 | 149°06.8 | 31.9 | 22 | 149°17.9 | 31.9 | 22 | 149°30.1 | 30.3 | 22 | 149°43.2 | 27.2 |
| 23 | 163°25.1 | 49.1 | 23 | 163°28.9 | 01.9 | 23 | 163°34.0 | 12.2 | 23 | 163°40.3 | 20.1 | 23 | 163°48.0 | 25.8 | 23 | 163°56.9 | 29.4 | 23 | 164°06.9 | 31.1 | 23 | 164°18.1 | 31.1 | 23 | 164°30.3 | 29.4 | 23 | 164°43.4 | 26.3 |
| | SD=15.8′ | $d=0.6'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.7'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.8'$ | | SD=15.8′ | $d=0.9'$ | | SD=15.8′ | $d=0.9'$ |

| 29 | GHA | Dec | 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec | 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°43.6 | N09°25.4 | 0 | 179°57.5 | N08°20.9 | 0 | 180°12.1 | N07°15.1 | 0 | 180°27.1 | N06°08.3 | 0 | 180°42.6 | N05°00.5 | 0 | 180°58.4 | N03°52.0 | 0 | 181°14.4 | N02°42.9 | 0 | 181°30.5 | N01°33.3 | 0 | 181°46.5 | N00°23.4 | 0 | 182°02.3 | S00°46.6 |
| 1 | 194°43.8 | 24.5 | 1 | 194°57.7 | 20.0 | 1 | 195°12.3 | 14.2 | 1 | 195°27.3 | 07.4 | 1 | 195°42.8 | 04°59.6 | 1 | 195°58.6 | 51.1 | 1 | 196°14.6 | 41.9 | 1 | 196°30.7 | 32.3 | 1 | 196°46.7 | 22.4 | 1 | 197°02.5 | 47.6 |
| 2 | 209°44.0 | 23.6 | 2 | 209°57.9 | 19.0 | 2 | 210°12.5 | 13.3 | 2 | 210°27.6 | 06.4 | 2 | 210°43.1 | 58.6 | 2 | 210°58.8 | 50.1 | 2 | 211°14.8 | 41.0 | 2 | 211°30.9 | 31.4 | 2 | 211°46.9 | 21.5 | 2 | 212°02.7 | 48.6 |
| 3 | 224°44.2 | ·· 22.7 | 3 | 224°58.1 | ·· 18.1 | 3 | 225°12.7 | ·· 12.4 | 3 | 225°27.8 | ·· 05.5 | 3 | 225°43.3 | ·· 57.7 | 3 | 225°59.1 | ·· 49.2 | 3 | 226°15.1 | ·· 40.0 | 3 | 226°31.1 | ·· 30.4 | 3 | 226°47.1 | ·· 20.5 | 3 | 227°02.9 | ·· 49.5 |
| 4 | 239°44.3 | 21.8 | 4 | 239°58.3 | 17.2 | 4 | 240°12.9 | 11.4 | 4 | 240°28.0 | 04.6 | 4 | 240°43.5 | 56.8 | 4 | 240°59.3 | 48.2 | 4 | 241°15.3 | 39.0 | 4 | 241°31.4 | 29.4 | 4 | 241°47.4 | 19.5 | 4 | 242°03.2 | 50.5 |
| 5 | 254°44.5 | 20.9 | 5 | 254°58.5 | 16.3 | 5 | 255°13.1 | 10.5 | 5 | 255°28.2 | 03.6 | 5 | 255°43.7 | 55.8 | 5 | 255°59.5 | 47.2 | 5 | 256°15.5 | 38.1 | 5 | 256°31.6 | 28.5 | 5 | 256°47.6 | 18.6 | 5 | 257°03.4 | 51.5 |
| 6 | 269°44.7 | N09°20.1 | 6 | 269°58.7 | N08°15.4 | 6 | 270°13.3 | N07°09.6 | 6 | 270°28.4 | N06°02.7 | 6 | 270°43.9 | N04°54.9 | 6 | 270°59.7 | N03°46.3 | 6 | 271°15.7 | N02°37.1 | 6 | 271°31.8 | N01°27.5 | 6 | 271°47.8 | N00°17.6 | 6 | 272°03.6 | S00°52.5 |
| 7 | 284°44.9 | 19.2 | 7 | 284°58.9 | 14.5 | 7 | 285°13.5 | 08.7 | 7 | 285°28.6 | 01.7 | 7 | 285°43.9 | 53.9 | 7 | 286°00.0 | 45.3 | 7 | 286°16.0 | 36.1 | 7 | 286°32.0 | 26.5 | 7 | 286°48.0 | 16.6 | 7 | 287°03.8 | 53.4 |
| 8 | 299°45.1 | 18.3 | 8 | 299°59.1 | 13.6 | 8 | 300°13.7 | 07.7 | 8 | 300°28.8 | 06°00.8 | 8 | 300°44.4 | 53.0 | 8 | 301°00.2 | 44.4 | 8 | 301°16.2 | 35.2 | 8 | 301°32.2 | 25.6 | 8 | 301°48.2 | 15.6 | 8 | 302°04.0 | 54.4 |
| 9 | 314°45.3 | ·· 17.4 | 9 | 314°59.3 | ·· 12.7 | 9 | 315°13.9 | ·· 06.8 | 9 | 315°29.0 | 05°59.9 | 9 | 315°44.6 | ·· 52.0 | 9 | 316°00.4 | ·· 43.4 | 9 | 316°16.4 | ·· 34.2 | 9 | 316°32.5 | ·· 24.6 | 9 | 316°48.5 | ·· 14.7 | 9 | 317°04.3 | ·· 55.4 |
| 10 | 329°45.5 | 16.5 | 10 | 329°59.5 | 11.8 | 10 | 330°14.1 | 05.9 | 10 | 330°29.3 | 58.9 | 10 | 330°44.8 | 51.1 | 10 | 331°00.6 | 42.5 | 10 | 331°16.6 | 33.3 | 10 | 331°32.7 | 23.6 | 10 | 331°48.7 | 13.7 | 10 | 332°04.5 | 56.3 |
| 11 | 344°45.7 | 15.6 | 11 | 344°59.7 | 10.9 | 11 | 345°14.3 | 05.0 | 11 | 345°29.5 | 58.0 | 11 | 345°45.0 | 50.1 | 11 | 346°00.8 | 41.5 | 11 | 346°16.8 | 32.3 | 11 | 346°32.9 | 22.6 | 11 | 346°48.9 | 12.7 | 11 | 347°04.7 | 57.3 |
| 12 | 359°45.9 | N09°14.7 | 12 | 359°59.9 | N08°10.0 | 12 | 0°14.5 | N07°04.1 | 12 | 0°29.7 | N05°57.1 | 12 | 0°45.2 | N04°49.2 | 12 | 1°01.1 | N03°40.5 | 12 | 1°17.1 | N02°31.3 | 12 | 1°33.1 | N01°21.7 | 12 | 1°49.1 | N00°11.8 | 12 | 2°04.9 | S00°58.3 |
| 13 | 14°46.0 | 13.8 | 13 | 15°00.1 | 09.1 | 13 | 15°14.7 | 03.1 | 13 | 15°29.9 | 56.1 | 13 | 15°45.4 | 48.2 | 13 | 16°01.3 | 39.6 | 13 | 16°17.3 | 30.4 | 13 | 16°33.4 | 20.7 | 13 | 16°49.3 | 10.8 | 13 | 17°05.1 | 00°59.3 |
| 14 | 29°46.2 | 12.9 | 14 | 30°00.3 | 08.2 | 14 | 30°14.9 | 02.2 | 14 | 30°30.1 | 55.2 | 14 | 30°45.7 | 47.3 | 14 | 31°01.5 | 38.6 | 14 | 31°17.5 | 29.4 | 14 | 31°33.6 | 19.7 | 14 | 31°49.6 | 09.8 | 14 | 32°05.3 | 01°00.2 |
| 15 | 44°46.4 | ·· 12.0 | 15 | 45°00.5 | ·· 07.3 | 15 | 45°15.2 | ·· 01.3 | 15 | 45°30.3 | ·· 54.2 | 15 | 45°45.9 | ·· 46.3 | 15 | 46°01.7 | ·· 37.7 | 15 | 46°17.7 | ·· 28.4 | 15 | 46°33.8 | ·· 18.8 | 15 | 46°49.8 | ·· 08.8 | 15 | 47°05.6 | ·· 01.2 |
| 16 | 59°46.6 | 11.2 | 16 | 60°00.7 | 06.4 | 16 | 60°15.4 | 07°00.4 | 16 | 60°30.5 | 53.3 | 16 | 60°46.1 | 45.4 | 16 | 61°01.9 | 36.7 | 16 | 61°18.0 | 27.5 | 16 | 61°34.0 | 17.8 | 16 | 61°50.0 | 07.9 | 16 | 62°05.8 | 02.2 |
| 17 | 74°46.8 | 10.3 | 17 | 75°00.9 | 05.4 | 17 | 75°15.6 | 06°59.4 | 17 | 75°30.8 | 52.4 | 17 | 75°46.3 | 44.4 | 17 | 76°02.2 | 35.7 | 17 | 76°18.2 | 26.5 | 17 | 76°34.3 | 16.8 | 17 | 76°50.2 | 06.9 | 17 | 77°06.0 | 03.2 |
| 18 | 89°47.0 | N09°09.4 | 18 | 90°01.1 | N08°04.5 | 18 | 90°15.8 | N06°58.5 | 18 | 90°31.0 | N05°51.4 | 18 | 90°46.5 | N04°43.5 | 18 | 91°02.4 | N03°34.8 | 18 | 91°18.4 | N02°25.5 | 18 | 91°34.5 | N01°15.9 | 18 | 91°50.5 | N00°05.9 | 18 | 92°06.2 | S01°04.1 |
| 19 | 104°47.2 | 08.5 | 19 | 105°01.3 | 03.6 | 19 | 105°16.0 | 57.6 | 19 | 105°31.2 | 50.5 | 19 | 105°46.8 | 42.5 | 19 | 106°02.6 | 33.8 | 19 | 106°18.6 | 24.6 | 19 | 106°34.7 | 14.9 | 19 | 106°50.7 | 04.9 | 19 | 107°06.4 | 05.1 |
| 20 | 119°47.4 | 07.6 | 20 | 120°01.5 | 02.7 | 20 | 120°16.2 | 56.7 | 20 | 120°31.4 | 49.6 | 20 | 120°47.0 | 41.6 | 20 | 121°02.8 | 32.9 | 20 | 121°18.9 | 23.6 | 20 | 121°34.9 | 13.9 | 20 | 121°50.9 | 04.0 | 20 | 122°06.6 | 06.1 |
| 21 | 134°47.6 | ·· 06.7 | 21 | 135°01.7 | ·· 01.8 | 21 | 135°16.4 | ·· 55.7 | 21 | 135°31.6 | ·· 48.6 | 21 | 135°47.2 | ·· 40.6 | 21 | 136°03.1 | ·· 31.9 | 21 | 136°19.1 | ·· 22.6 | 21 | 136°35.1 | ·· 12.9 | 21 | 136°51.1 | ·· 03.0 | 21 | 137°06.9 | ·· 07.1 |
| 22 | 149°47.8 | 05.8 | 22 | 150°01.9 | 00.9 | 22 | 150°16.6 | 54.8 | 22 | 150°31.8 | 47.7 | 22 | 150°47.4 | 39.7 | 22 | 151°03.3 | 31.0 | 22 | 151°19.3 | 21.7 | 22 | 151°35.4 | 12.0 | 22 | 151°51.3 | 02.0 | 22 | 152°07.1 | 08.0 |
| 23 | 164°48.0 | 04.9 | 23 | 165°02.1 | 00.0 | 23 | 165°16.8 | 53.9 | 23 | 165°32.0 | 46.7 | 23 | 165°47.6 | 38.7 | 23 | 166°03.5 | 30.0 | 23 | 166°19.5 | 20.7 | 23 | 166°35.6 | 11.0 | 23 | 166°51.6 | 01.1 | 23 | 167°07.3 | 09.0 |
| | SD=15.8′ | $d=0.9'$ | | SD=15.8′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ |

| 30 | GHA | Dec | 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec | 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°48.1 | N09°04.0 | 0 | 180°02.3 | N07°59.1 | 0 | 180°17.0 | N06°53.0 | 0 | 180°32.3 | N05°45.8 | 0 | 180°47.9 | N04°37.8 | 0 | 181°03.7 | N03°29.0 | 0 | 181°19.7 | N02°19.7 | 0 | 181°35.8 | N01°10.0 | 0 | 181°51.8 | N00°00.1 | 0 | 182°07.5 | S01°10.0 |
| 1 | 194°48.3 | 03.1 | 1 | 195°02.5 | 58.2 | 1 | 195°17.2 | 52.0 | 1 | 195°32.5 | 44.9 | 1 | 195°48.1 | 36.8 | 1 | 196°03.9 | 28.1 | 1 | 196°20.0 | 18.8 | 1 | 196°36.0 | 09.1 | 1 | 196°52.0 | S00°00.9 | 1 | 197°07.7 | 10.9 |
| 2 | 209°48.5 | 02.2 | 2 | 210°02.7 | 57.3 | 2 | 210°17.4 | 51.1 | 2 | 210°32.7 | 43.9 | 2 | 210°48.3 | 35.9 | 2 | 211°04.2 | 27.1 | 2 | 211°20.2 | 17.8 | 2 | 211°36.3 | 08.1 | 2 | 211°52.2 | 01.9 | 2 | 212°07.9 | 11.9 |
| 3 | 224°48.7 | ·· 01.3 | 3 | 225°02.9 | ·· 56.3 | 3 | 225°17.7 | ·· 50.2 | 3 | 225°32.9 | ·· 43.0 | 3 | 225°48.5 | ·· 34.9 | 3 | 226°04.4 | ·· 26.2 | 3 | 226°20.4 | ·· 16.8 | 3 | 226°36.5 | ·· 07.1 | 3 | 226°52.4 | ·· 02.8 | 3 | 227°08.1 | ·· 12.9 |
| 4 | 239°48.9 | 09°00.4 | 4 | 240°03.1 | 55.4 | 4 | 240°17.9 | 49.3 | 4 | 240°33.1 | 42.0 | 4 | 240°48.7 | 34.0 | 4 | 241°04.6 | 25.2 | 4 | 241°20.6 | 15.9 | 4 | 241°36.7 | 06.2 | 4 | 241°52.7 | 03.8 | 4 | 242°08.4 | 13.9 |
| 5 | 254°49.1 | 08°59.5 | 5 | 255°03.3 | 54.5 | 5 | 255°18.1 | 48.3 | 5 | 255°33.3 | 41.1 | 5 | 255°48.9 | 33.0 | 5 | 256°04.8 | 24.2 | 5 | 256°20.9 | 14.9 | 5 | 256°36.9 | 05.2 | 5 | 256°52.9 | 04.8 | 5 | 257°08.6 | 14.8 |
| 6 | 269°49.3 | N08°58.7 | 6 | 270°03.5 | N07°53.6 | 6 | 270°18.3 | N06°47.4 | 6 | 270°33.5 | N05°40.2 | 6 | 270°49.2 | N04°32.1 | 6 | 271°05.1 | N03°23.3 | 6 | 271°21.1 | N02°13.9 | 6 | 271°37.1 | N01°04.2 | 6 | 271°53.1 | S00°05.8 | 6 | 272°08.8 | S01°15.8 |
| 7 | 284°49.5 | 57.8 | 7 | 285°03.7 | 52.7 | 7 | 285°18.5 | 46.5 | 7 | 285°33.8 | 39.2 | 7 | 285°49.4 | 31.1 | 7 | 286°05.3 | 22.3 | 7 | 286°21.3 | 13.0 | 7 | 286°37.4 | 03.2 | 7 | 286°53.3 | 06.7 | 7 | 287°09.0 | 16.8 |
| 8 | 299°49.7 | 56.9 | 8 | 300°03.9 | 51.8 | 8 | 300°18.7 | 45.5 | 8 | 300°34.0 | 38.3 | 8 | 300°49.6 | 30.2 | 8 | 301°05.5 | 21.4 | 8 | 301°21.5 | 12.0 | 8 | 301°37.6 | 02.3 | 8 | 301°53.5 | 07.7 | 8 | 302°09.2 | 17.8 |
| 9 | 314°49.9 | ·· 56.0 | 9 | 315°04.1 | ·· 50.9 | 9 | 315°18.9 | ·· 44.6 | 9 | 315°34.2 | ·· 37.3 | 9 | 315°49.8 | ·· 29.2 | 9 | 316°05.7 | ·· 20.4 | 9 | 316°21.8 | ·· 11.0 | 9 | 316°37.8 | ·· 01.3 | 9 | 316°53.8 | ·· 08.7 | 9 | 317°09.4 | ·· 18.7 |
| 10 | 329°50.1 | 55.1 | 10 | 330°04.3 | 50.0 | 10 | 330°19.1 | 43.7 | 10 | 330°34.4 | 36.4 | 10 | 330°50.0 | 28.3 | 10 | 331°05.9 | 19.4 | 10 | 331°22.0 | 10.1 | 10 | 331°38.0 | 01°00.3 | 10 | 331°54.0 | 09.6 | 10 | 332°09.7 | 19.7 |
| 11 | 344°50.3 | 54.2 | 11 | 345°04.5 | 49.0 | 11 | 345°19.3 | 42.8 | 11 | 345°34.6 | 35.5 | 11 | 345°50.3 | 27.3 | 11 | 346°06.2 | 18.5 | 11 | 346°22.2 | 09.1 | 11 | 346°38.3 | 00°59.4 | 11 | 346°54.2 | 10.6 | 11 | 347°09.9 | 20.7 |
| 12 | 359°50.5 | N08°53.3 | 12 | 0°04.7 | N07°48.1 | 12 | 0°19.5 | N06°41.8 | 12 | 0°34.8 | N05°34.5 | 12 | 0°50.5 | N04°26.4 | 12 | 1°06.4 | N03°17.5 | 12 | 1°22.4 | N02°08.1 | 12 | 1°38.5 | N00°58.4 | 12 | 1°54.4 | S00°11.6 | 12 | 2°10.1 | S01°21.6 |
| 13 | 14°50.6 | 52.4 | 13 | 15°04.9 | 47.2 | 13 | 15°19.7 | 40.9 | 13 | 15°35.0 | 33.6 | 13 | 15°50.7 | 25.4 | 13 | 16°06.6 | 16.6 | 13 | 16°22.6 | 07.2 | 13 | 16°38.7 | 57.4 | 13 | 16°54.6 | 12.6 | 13 | 17°10.3 | 22.6 |
| 14 | 29°50.8 | 51.5 | 14 | 30°05.1 | 46.3 | 14 | 30°20.0 | 40.0 | 14 | 30°35.3 | 32.6 | 14 | 30°50.9 | 24.5 | 14 | 31°06.8 | 15.6 | 14 | 31°22.9 | 06.2 | 14 | 31°38.9 | 56.4 | 14 | 31°54.9 | 13.5 | 14 | 32°10.5 | 23.6 |
| 15 | 44°51.0 | ·· 50.6 | 15 | 45°05.3 | ·· 45.4 | 15 | 45°20.2 | ·· 39.0 | 15 | 45°35.5 | ·· 31.7 | 15 | 45°51.1 | ·· 23.5 | 15 | 46°07.0 | ·· 14.6 | 15 | 46°23.1 | ·· 05.2 | 15 | 46°39.1 | ·· 55.5 | 15 | 46°55.1 | ·· 14.5 | 15 | 47°10.7 | ·· 24.6 |
| 16 | 59°51.2 | 49.7 | 16 | 60°05.5 | 44.5 | 16 | 60°20.4 | 38.1 | 16 | 60°35.7 | 30.8 | 16 | 60°51.4 | 22.6 | 16 | 61°07.3 | 13.7 | 16 | 61°23.3 | 04.3 | 16 | 61°39.4 | 54.5 | 16 | 61°55.3 | 15.5 | 16 | 62°10.9 | 25.5 |
| 17 | 74°51.4 | 48.8 | 17 | 75°05.7 | 43.6 | 17 | 75°20.6 | 37.2 | 17 | 75°35.9 | 29.8 | 17 | 75°51.6 | 21.6 | 17 | 76°07.5 | 12.7 | 17 | 76°23.5 | 03.3 | 17 | 76°39.6 | 53.5 | 17 | 76°55.5 | 16.5 | 17 | 77°11.2 | 26.5 |
| 18 | 89°51.6 | N08°47.9 | 18 | 90°05.9 | N07°42.6 | 18 | 90°20.8 | N06°36.3 | 18 | 90°36.1 | N05°28.9 | 18 | 90°51.8 | N04°20.7 | 18 | 91°07.7 | N03°11.8 | 18 | 91°23.8 | N02°02.3 | 18 | 91°39.8 | N00°52.6 | 18 | 91°55.7 | S00°17.4 | 18 | 92°11.4 | S01°27.5 |
| 19 | 104°51.8 | 47.0 | 19 | 105°06.1 | 41.7 | 19 | 105°21.0 | 35.3 | 19 | 105°36.3 | 27.9 | 19 | 105°52.0 | 19.7 | 19 | 106°07.9 | 10.8 | 19 | 106°24.0 | 01.4 | 19 | 106°40.0 | 51.6 | 19 | 106°56.0 | 18.4 | 19 | 107°11.6 | 28.5 |
| 20 | 119°52.0 | 46.1 | 20 | 120°06.3 | 40.8 | 20 | 120°21.2 | 34.4 | 20 | 120°36.6 | 27.0 | 20 | 120°52.2 | 18.7 | 20 | 121°08.2 | 09.8 | 20 | 121°24.2 | 02°00.4 | 20 | 121°40.3 | 50.6 | 20 | 121°56.2 | 19.4 | 20 | 122°11.8 | 29.4 |
| 21 | 134°52.2 | ·· 45.2 | 21 | 135°06.5 | ·· 39.9 | 21 | 135°21.4 | ·· 33.5 | 21 | 135°36.8 | ·· 26.0 | 21 | 135°52.5 | ·· 17.8 | 21 | 136°08.4 | ·· 08.9 | 21 | 136°24.4 | 01°59.4 | 21 | 136°40.5 | ·· 49.7 | 21 | 136°56.4 | ·· 20.3 | 21 | 137°12.0 | ·· 30.4 |
| 22 | 149°52.4 | 44.3 | 22 | 150°06.7 | 39.0 | 22 | 150°21.6 | 32.5 | 22 | 150°37.0 | 25.1 | 22 | 150°52.7 | 16.8 | 22 | 151°08.6 | 07.9 | 22 | 151°24.7 | 58.5 | 22 | 151°40.7 | 48.7 | 22 | 151°56.6 | 21.3 | 22 | 152°12.2 | 31.4 |
| 23 | 164°52.6 | 43.4 | 23 | 165°06.9 | 38.1 | 23 | 165°21.8 | 31.6 | 23 | 165°37.2 | 24.2 | 23 | 165°52.9 | 15.9 | 23 | 166°08.8 | 07.0 | 23 | 166°24.9 | 57.5 | 23 | 166°40.9 | 47.7 | 23 | 166°56.8 | 22.3 | 23 | 167°12.4 | 32.3 |
| | SD=15.8′ | $d=0.9'$ | | SD=15.8′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ |

| 31 | GHA | Dec | 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 179°52.8 | N08°42.5 | 0 | 180°07.1 | N07°37.2 | 0 | 180°22.1 | N06°30.7 | 0 | 180°37.4 | N05°23.2 | 0 | 180°53.1 | N04°14.9 | 0 | 181°09.0 | N03°06.0 | 0 | 181°25.1 | N01°56.5 | 0 | 181°41.1 | N00°46.7 | 0 | 181°57.1 | S00°23.3 | 0 | 182°12.7 | S01°33.3 |
| 1 | 194°53.0 | 41.6 | 1 | 195°07.3 | 36.2 | 1 | 195°22.3 | 29.7 | 1 | 195°37.6 | 22.3 | 1 | 195°53.3 | 14.0 | 1 | 196°09.3 | 05.0 | 1 | 196°25.3 | 55.6 | 1 | 196°41.4 | 45.8 | 1 | 196°57.3 | 24.2 | 1 | 197°12.9 | 34.3 |
| 2 | 209°53.2 | 40.7 | 2 | 210°07.5 | 35.3 | 2 | 210°22.5 | 28.8 | 2 | 210°37.8 | 21.3 | 2 | 210°53.6 | 13.0 | 2 | 211°09.5 | 04.1 | 2 | 211°25.5 | 54.6 | 2 | 211°41.6 | 44.8 | 2 | 211°57.5 | 25.2 | 2 | 212°13.1 | 35.3 |
| 3 | 224°53.4 | ·· 39.8 | 3 | 225°07.7 | ·· 34.4 | 3 | 225°22.7 | ·· 27.9 | 3 | 225°38.1 | ·· 20.4 | 3 | 225°53.8 | ·· 12.1 | 3 | 226°09.7 | ·· 03.1 | 3 | 226°25.8 | ·· 53.6 | 3 | 226°41.8 | ·· 43.8 | 3 | 226°57.7 | ·· 26.2 | 3 | 227°13.3 | ·· 36.2 |
| 4 | 239°53.6 | 38.9 | 4 | 240°08.0 | 33.5 | 4 | 240°22.9 | 27.0 | 4 | 240°38.3 | 19.4 | 4 | 240°54.0 | 11.1 | 4 | 241°09.9 | 02.1 | 4 | 241°26.0 | 52.7 | 4 | 241°42.0 | 42.9 | 4 | 241°57.9 | 27.2 | 4 | 242°13.5 | 37.2 |
| 5 | 254°53.8 | 38.0 | 5 | 255°08.2 | 32.6 | 5 | 255°23.1 | 26.0 | 5 | 255°38.5 | 18.5 | 5 | 255°54.2 | 10.2 | 5 | 256°10.2 | 01.2 | 5 | 256°26.2 | 51.7 | 5 | 256°42.3 | 41.9 | 5 | 256°58.1 | 28.1 | 5 | 257°13.7 | 38.2 |
| 6 | 269°54.0 | N08°37.1 | 6 | 270°08.4 | N07°31.7 | 6 | 270°23.3 | N06°25.1 | 6 | 270°38.7 | N05°17.6 | 6 | 270°54.4 | N04°09.2 | 6 | 271°10.4 | N03°00.2 | 6 | 271°26.4 | N01°50.7 | 6 | 271°42.5 | N00°40.9 | 6 | 271°58.4 | S00°29.1 | 6 | 272°13.9 | S01°39.2 |
| 7 | 284°54.2 | 36.2 | 7 | 285°08.6 | 30.7 | 7 | 285°23.5 | 24.2 | 7 | 285°38.9 | 16.6 | 7 | 285°54.7 | 08.3 | 7 | 286°10.6 | 02°59.3 | 7 | 286°26.7 | 49.8 | 7 | 286°42.7 | 39.9 | 7 | 286°58.6 | 30.1 | 7 | 287°14.2 | 40.1 |
| 8 | 299°54.3 | 35.3 | 8 | 300°08.8 | 29.8 | 8 | 300°23.7 | 23.2 | 8 | 300°39.1 | 15.7 | 8 | 300°54.9 | 07.3 | 8 | 301°10.8 | 58.3 | 8 | 301°26.9 | 48.8 | 8 | 301°42.9 | 39.0 | 8 | 301°58.8 | 31.0 | 8 | 302°14.4 | 41.1 |
| 9 | 314°54.5 | ·· 34.4 | 9 | 315°09.0 | ·· 28.9 | 9 | 315°24.0 | ·· 22.3 | 9 | 315°39.4 | ·· 14.7 | 9 | 315°55.1 | ·· 06.4 | 9 | 316°11.1 | ·· 57.3 | 9 | 316°27.1 | ·· 47.8 | 9 | 316°43.1 | ·· 38.0 | 9 | 316°59.0 | ·· 32.0 | 9 | 317°14.6 | ·· 42.1 |
| 10 | 329°54.7 | 33.5 | 10 | 330°09.2 | 28.0 | 10 | 330°24.2 | 21.4 | 10 | 330°39.6 | 13.8 | 10 | 330°55.3 | 05.4 | 10 | 331°11.3 | 56.4 | 10 | 331°27.3 | 46.9 | 10 | 331°43.4 | 37.0 | 10 | 331°59.2 | 33.0 | 10 | 332°14.8 | 43.0 |
| 11 | 344°54.9 | 32.6 | 11 | 345°09.4 | 27.1 | 11 | 345°24.4 | 20.4 | 11 | 345°39.8 | 12.8 | 11 | 345°55.5 | 04.4 | 11 | 346°11.5 | 55.4 | 11 | 346°27.6 | 45.9 | 11 | 346°43.6 | 36.1 | 11 | 346°59.5 | 34.0 | 11 | 347°15.0 | 44.0 |
| 12 | 359°55.1 | N08°31.7 | 12 | 0°09.6 | N07°26.2 | 12 | 0°24.6 | N06°19.5 | 12 | 0°40.0 | N05°11.9 | 12 | 0°55.8 | N04°03.5 | 12 | 1°11.7 | N02°54.4 | 12 | 1°27.8 | N01°44.9 | 12 | 1°43.8 | N00°35.1 | 12 | 1°59.7 | S00°34.9 | 12 | 2°15.2 | S01°45.0 |
| 13 | 14°55.3 | 30.8 | 13 | 15°09.8 | 25.2 | 13 | 15°24.8 | 18.6 | 13 | 15°40.2 | 10.9 | 13 | 15°56.0 | 02.5 | 13 | 16°11.9 | 53.5 | 13 | 16°28.0 | 44.0 | 13 | 16°44.0 | 34.1 | 13 | 16°59.9 | 35.9 | 13 | 17°15.4 | 46.0 |
| 14 | 29°55.5 | 29.9 | 14 | 30°10.0 | 24.3 | 14 | 30°25.0 | 17.6 | 14 | 30°40.4 | 10.0 | 14 | 30°56.2 | 01.6 | 14 | 31°12.2 | 52.5 | 14 | 31°28.2 | 43.0 | 14 | 31°44.3 | 33.1 | 14 | 32°00.1 | 36.9 | 14 | 32°15.6 | 46.9 |
| 15 | 44°55.7 | ·· 29.0 | 15 | 45°10.2 | ·· 23.4 | 15 | 45°25.2 | ·· 16.7 | 15 | 45°40.7 | ·· 09.1 | 15 | 45°56.4 | 04°00.6 | 15 | 46°12.4 | ·· 51.6 | 15 | 46°28.5 | ·· 42.0 | 15 | 46°44.5 | ·· 32.2 | 15 | 47°00.3 | ·· 37.9 | 15 | 47°15.9 | ·· 47.9 |
| 16 | 59°55.9 | 28.1 | 16 | 60°10.4 | 22.5 | 16 | 60°25.4 | 15.8 | 16 | 60°40.9 | 08.1 | 16 | 60°56.6 | 03°59.7 | 16 | 61°12.6 | 50.6 | 16 | 61°28.7 | 41.1 | 16 | 61°44.7 | 31.2 | 16 | 62°00.6 | 38.8 | 16 | 62°16.1 | 48.9 |
| 17 | 74°56.1 | 27.2 | 17 | 75°10.6 | 21.6 | 17 | 75°25.6 | 14.8 | 17 | 75°41.1 | 07.2 | 17 | 75°56.9 | 58.7 | 17 | 76°12.8 | 49.6 | 17 | 76°28.9 | 40.1 | 17 | 76°44.9 | 30.2 | 17 | 77°00.8 | 39.8 | 17 | 77°16.3 | 49.9 |
| 18 | 89°56.3 | N08°26.3 | 18 | 90°10.8 | N07°20.6 | 18 | 90°25.9 | N06°13.9 | 18 | 90°41.3 | N05°06.2 | 18 | 90°57.1 | N03°57.8 | 18 | 91°13.1 | N02°48.7 | 18 | 91°29.1 | N01°39.1 | 18 | 91°45.1 | N00°29.3 | 18 | 92°01.0 | S00°40.8 | 18 | 92°16.5 | S01°50.8 |
| 19 | 104°56.5 | 25.4 | 19 | 105°11.0 | 19.7 | 19 | 105°26.1 | 13.0 | 19 | 105°41.5 | 05.3 | 19 | 105°57.3 | 56.8 | 19 | 106°13.3 | 47.7 | 19 | 106°29.3 | 38.1 | 19 | 106°45.4 | 28.3 | 19 | 107°01.2 | 41.8 | 19 | 107°16.7 | 51.8 |
| 20 | 119°56.7 | 24.5 | 20 | 120°11.2 | 18.8 | 20 | 120°26.3 | 12.0 | 20 | 120°41.7 | 04.3 | 20 | 120°57.5 | 55.8 | 20 | 121°13.5 | 46.7 | 20 | 121°29.6 | 37.2 | 20 | 121°45.6 | 27.3 | 20 | 122°01.4 | 42.7 | 20 | 122°16.9 | 52.8 |
| 21 | 134°56.9 | ·· 23.6 | 21 | 135°11.4 | ·· 17.9 | 21 | 135°26.5 | ·· 11.1 | 21 | 135°42.0 | ·· 03.4 | 21 | 135°57.7 | ·· 54.9 | 21 | 136°13.7 | ·· 45.8 | 21 | 136°29.8 | ·· 36.2 | 21 | 136°45.8 | ·· 26.3 | 21 | 137°01.6 | ·· 43.7 | 21 | 137°17.1 | ·· 53.7 |
| 22 | 149°57.1 | 22.7 | 22 | 150°11.6 | 17.0 | 22 | 150°26.7 | 10.2 | 22 | 150°42.2 | 02.4 | 22 | 150°58.0 | 53.9 | 22 | 151°13.9 | 44.8 | 22 | 151°30.0 | 35.2 | 22 | 151°46.0 | 25.4 | 22 | 152°01.9 | 44.7 | 22 | 152°17.3 | 54.7 |
| 23 | 164°57.3 | 21.8 | 23 | 165°11.8 | 16.0 | 23 | 165°26.9 | 09.2 | 23 | 165°42.4 | 01.5 | 23 | 165°58.2 | 53.0 | 23 | 166°14.2 | 43.9 | 23 | 166°30.2 | 34.3 | 23 | 166°46.3 | 24.4 | 23 | 167°02.1 | 45.6 | 23 | 167°17.6 | 55.7 |
| | SD=15.8′ | $d=0.9'$ | | SD=15.8′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=0.9'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ | | SD=15.9′ | $d=1.0'$ |

| 28 | GHA | Dec | 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec | 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 182°17.8 | S01°56.7 | 0 | 182°32.7 | S03°06.6 | 0 | 182°47.0 | S04°16.2 | 0 | 183°00.5 | S05°25.4 | 0 | 183°13.1 | S06°34.0 | 0 | 183°24.5 | S07°41.8 | 0 | 183°34.9 | S08°48.6 | 0 | 183°44.0 | S09°54.3 | 0 | 183°51.7 | S10°58.7 | 0 | 183°58.0 | S12°01.6 |
| 1 | 197°18.0 | 57.6 | 1 | 197°32.9 | 07.5 | 1 | 197°47.2 | 17.2 | 1 | 198°00.7 | 26.4 | 1 | 198°13.2 | 34.9 | 1 | 198°24.7 | 42.7 | 1 | 198°35.0 | 49.5 | 1 | 198°44.1 | 55.2 | 1 | 198°51.8 | 10°59.6 | 1 | 198°58.0 | 02.5 |
| 2 | 212°18.2 | 58.6 | 2 | 212°33.1 | 08.5 | 2 | 212°47.4 | 18.1 | 2 | 213°00.9 | 27.3 | 2 | 213°13.4 | 35.9 | 2 | 213°24.9 | 43.7 | 2 | 213°35.2 | 50.5 | 2 | 213°44.2 | 56.1 | 2 | 213°51.9 | 11°00.5 | 2 | 213°58.1 | 03.3 |
| 3 | 227°18.4 | 01°59.6 | 3 | 227°33.3 | ·· 09.5 | 3 | 227°47.6 | ·· 19.1 | 3 | 228°01.0 | ·· 28.3 | 3 | 228°13.6 | ·· 36.8 | 3 | 228°25.0 | ·· 44.6 | 3 | 228°35.3 | ·· 51.4 | 3 | 228°44.3 | ·· 57.0 | 3 | 228°52.0 | ·· 01.4 | 3 | 228°58.2 | ·· 04.2 |
| 4 | 242°18.6 | 02°00.5 | 4 | 242°33.5 | 10.5 | 4 | 242°47.8 | 20.1 | 4 | 243°01.2 | 29.2 | 4 | 243°13.7 | 37.8 | 4 | 243°25.2 | 45.5 | 4 | 243°35.4 | 52.3 | 4 | 243°44.4 | 57.9 | 4 | 243°52.1 | 02.2 | 4 | 243°58.3 | 05.0 |
| 5 | 257°18.8 | 01.5 | 5 | 257°33.7 | 11.4 | 5 | 257°48.0 | 21.0 | 5 | 258°01.4 | 30.2 | 5 | 258°13.9 | 38.7 | 5 | 258°25.3 | 46.5 | 5 | 258°35.6 | 53.2 | 5 | 258°44.6 | 58.8 | 5 | 258°52.2 | 03.1 | 5 | 258°58.3 | 05.9 |
| 6 | 272°19.0 | S02°02.5 | 6 | 272°34.0 | S03°12.4 | 6 | 272°48.2 | S04°22.0 | 6 | 273°01.6 | S05°31.1 | 6 | 273°14.0 | S06°39.7 | 6 | 273°25.5 | S07°47.4 | 6 | 273°35.7 | S08°54.1 | 6 | 273°44.7 | S09°59.7 | 6 | 273°52.3 | S11°04.0 | 6 | 273°58.4 | S12°06.8 |
| 7 | 287°19.2 | 03.5 | 7 | 287°34.2 | 13.4 | 7 | 287°48.4 | 23.0 | 7 | 288°01.8 | 32.1 | 7 | 288°14.2 | 40.6 | 7 | 288°25.6 | 48.3 | 7 | 288°35.8 | 55.1 | 7 | 288°44.8 | 10°00.6 | 7 | 288°52.4 | 04.9 | 7 | 288°58.5 | 07.6 |
| 8 | 302°19.5 | 04.4 | 8 | 302°34.4 | 14.3 | 8 | 302°48.6 | 23.9 | 8 | 303°01.9 | 33.1 | 8 | 303°14.4 | 41.6 | 8 | 303°25.8 | 49.3 | 8 | 303°36.0 | 56.0 | 8 | 303°44.9 | 01.5 | 8 | 303°52.5 | 05.8 | 8 | 303°58.6 | 08.5 |
| 9 | 317°19.7 | ·· 05.4 | 9 | 317°34.6 | ·· 15.3 | 9 | 317°48.8 | ·· 24.9 | 9 | 318°02.1 | ·· 34.0 | 9 | 318°14.5 | ·· 42.5 | 9 | 318°25.9 | ·· 50.2 | 9 | 318°36.1 | ·· 56.9 | 9 | 318°45.0 | ·· 02.4 | 9 | 318°52.6 | ·· 06.6 | 9 | 318°58.6 | ·· 09.3 |
| 10 | 332°19.9 | 06.4 | 10 | 332°34.8 | 16.3 | 10 | 332°49.0 | 25.9 | 10 | 333°02.3 | 35.0 | 10 | 333°14.7 | 43.5 | 10 | 333°26.1 | 51.1 | 10 | 333°36.2 | 57.8 | 10 | 333°45.1 | 03.3 | 10 | 333°52.7 | 07.5 | 10 | 333°58.7 | 10.2 |
| 11 | 347°20.1 | 07.4 | 11 | 347°35.0 | 17.2 | 11 | 347°49.1 | 26.8 | 11 | 348°02.5 | 35.9 | 11 | 348°14.9 | 44.4 | 11 | 348°26.2 | 52.1 | 11 | 348°36.4 | 58.7 | 11 | 348°45.3 | 04.2 | 11 | 348°52.8 | 08.4 | 11 | 348°58.8 | 11.1 |
| 12 | 2°20.3 | S02°08.3 | 12 | 2°35.2 | S03°18.2 | 12 | 2°49.3 | S04°27.8 | 12 | 3°02.7 | S05°36.9 | 12 | 3°15.0 | S06°45.4 | 12 | 3°26.4 | S07°53.0 | 12 | 3°36.5 | S08°59.7 | 12 | 3°45.4 | S10°05.1 | 12 | 3°52.9 | S11°09.3 | 12 | 3°58.8 | S12°11.9 |
| 13 | 17°20.5 | 09.3 | 13 | 17°35.4 | 19.2 | 13 | 17°49.5 | 28.7 | 13 | 18°02.8 | 37.8 | 13 | 18°15.2 | 46.3 | 13 | 18°26.5 | 53.9 | 13 | 18°36.6 | 09°00.6 | 13 | 18°45.5 | 06.1 | 13 | 18°52.9 | 10.2 | 13 | 18°58.9 | 12.8 |
| 14 | 32°20.7 | 10.3 | 14 | 32°35.6 | 20.1 | 14 | 32°49.7 | 29.7 | 14 | 33°03.0 | 38.8 | 14 | 33°15.4 | 47.2 | 14 | 33°26.7 | 54.9 | 14 | 33°36.8 | 01.5 | 14 | 33°45.6 | 07.0 | 14 | 33°53.0 | 11.1 | 14 | 33°59.0 | 13.6 |
| 15 | 47°20.9 | ·· 11.2 | 15 | 47°35.8 | ·· 21.1 | 15 | 47°49.9 | ·· 30.7 | 15 | 48°03.2 | ·· 39.8 | 15 | 48°15.5 | ·· 48.2 | 15 | 48°26.8 | ·· 55.8 | 15 | 48°36.9 | ·· 02.4 | 15 | 48°45.7 | ·· 07.9 | 15 | 48°53.1 | ·· 11.9 | 15 | 48°59.1 | ·· 14.5 |
| 16 | 62°21.1 | 12.2 | 16 | 62°36.0 | 22.1 | 16 | 62°50.1 | 31.6 | 16 | 63°03.4 | 40.7 | 16 | 63°15.7 | 49.1 | 16 | 63°26.9 | 56.7 | 16 | 63°37.0 | 03.3 | 16 | 63°45.8 | 08.8 | 16 | 63°53.2 | 12.8 | 16 | 63°59.1 | 15.4 |
| 17 | 77°21.4 | 13.2 | 17 | 77°36.2 | 23.0 | 17 | 77°50.3 | 32.6 | 17 | 78°03.6 | 41.7 | 17 | 78°15.9 | 50.1 | 17 | 78°27.1 | 57.7 | 17 | 78°37.2 | 04.2 | 17 | 78°45.9 | 09.6 | 17 | 78°53.3 | 13.7 | 17 | 78°59.2 | 16.2 |
| 18 | 92°21.6 | S02°14.2 | 18 | 92°36.4 | S03°24.0 | 18 | 92°50.5 | S04°33.6 | 18 | 93°03.7 | S05°42.6 | 18 | 93°16.0 | S06°51.0 | 18 | 93°27.2 | S07°58.6 | 18 | 93°37.3 | S09°05.2 | 18 | 93°46.0 | S10°10.5 | 18 | 93°53.4 | S11°14.6 | 18 | 93°59.3 | S12°17.1 |
| 19 | 107°21.8 | 15.1 | 19 | 107°36.6 | 25.0 | 19 | 107°50.7 | 34.5 | 19 | 108°03.9 | 43.6 | 19 | 108°16.2 | 52.0 | 19 | 108°27.4 | 07°59.5 | 19 | 108°37.4 | 06.1 | 19 | 108°46.2 | 11.4 | 19 | 108°53.5 | 15.5 | 19 | 108°59.3 | 17.9 |
| 20 | 122°22.0 | 16.1 | 20 | 122°36.8 | 26.0 | 20 | 122°50.9 | 35.5 | 20 | 123°04.1 | 44.5 | 20 | 123°16.4 | 52.9 | 20 | 123°27.5 | 08°00.5 | 20 | 123°37.5 | 07.0 | 20 | 123°46.3 | 12.3 | 20 | 123°53.6 | 16.3 | 20 | 123°59.4 | 18.8 |
| 21 | 137°22.2 | ·· 17.1 | 21 | 137°37.0 | ·· 26.9 | 21 | 137°51.0 | ·· 36.4 | 21 | 138°04.3 | ·· 45.5 | 21 | 138°16.5 | ·· 53.9 | 21 | 138°27.7 | ·· 01.4 | 21 | 138°37.7 | ·· 07.9 | 21 | 138°46.4 | ·· 13.2 | 21 | 138°53.7 | ·· 17.2 | 21 | 138°59.5 | ·· 19.6 |
| 22 | 152°22.4 | 18.0 | 22 | 152°37.2 | 27.9 | 22 | 152°51.2 | 37.4 | 22 | 153°04.4 | 46.4 | 22 | 153°16.7 | 54.8 | 22 | 153°27.8 | 02.3 | 22 | 153°37.8 | 08.8 | 22 | 153°46.5 | 14.1 | 22 | 153°53.8 | 18.1 | 22 | 153°59.6 | 20.5 |
| 23 | 167°22.6 | 19.0 | 23 | 167°37.4 | 28.9 | 23 | 167°51.4 | 38.4 | 23 | 168°04.6 | 47.4 | 23 | 168°16.8 | 55.7 | 23 | 168°28.0 | 03.3 | 23 | 168°37.9 | 09.7 | 23 | 168°46.6 | 15.0 | 23 | 168°53.9 | 19.0 | 23 | 168°59.6 | 21.3 |
| | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=0.9′ | | SD=16.0′ | $d$=0.9′ | | SD=16.0′ | $d$=0.9′ | | SD=16.0′ | $d$=0.9′ | | SD=16.1′ | $d$=0.9′ | | SD=16.1′ | $d$=0.9′ |

| 29 | GHA | Dec | 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec | 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 182°22.8 | S02°20.0 | 0 | 182°37.6 | S03°29.8 | 0 | 182°51.6 | S04°39.3 | 0 | 183°04.8 | S05°48.3 | 0 | 183°17.0 | S06°56.7 | 0 | 183°28.1 | S08°04.2 | 0 | 183°38.1 | S09°10.7 | 0 | 183°46.7 | S10°15.9 | 0 | 183°54.0 | S11°19.8 | 0 | 183°59.7 | S12°22.2 |
| 1 | 197°23.0 | 21.0 | 1 | 197°37.8 | 30.8 | 1 | 197°51.8 | 40.3 | 1 | 198°05.0 | 49.3 | 1 | 198°17.2 | 57.6 | 1 | 198°28.3 | 05.1 | 1 | 198°38.2 | 11.6 | 1 | 198°46.8 | 16.8 | 1 | 198°54.1 | 20.7 | 1 | 198°59.8 | 23.1 |
| 2 | 212°23.2 | 21.9 | 2 | 212°38.0 | 31.8 | 2 | 212°52.0 | 41.3 | 2 | 213°05.2 | 50.3 | 2 | 213°17.3 | 58.6 | 2 | 213°28.4 | 06.0 | 2 | 213°38.3 | 12.5 | 2 | 213°46.9 | 17.7 | 2 | 213°54.1 | 21.6 | 2 | 213°59.8 | 23.9 |
| 3 | 227°23.4 | ·· 22.9 | 3 | 227°38.2 | ·· 32.7 | 3 | 227°52.2 | ·· 42.2 | 3 | 228°05.3 | ·· 51.2 | 3 | 228°17.5 | 06°59.5 | 3 | 228°28.6 | ·· 07.0 | 3 | 228°38.5 | ·· 13.4 | 3 | 228°47.0 | ·· 18.6 | 3 | 228°54.2 | ·· 22.5 | 3 | 228°59.9 | ·· 24.8 |
| 4 | 242°23.7 | 23.9 | 4 | 242°38.4 | 33.7 | 4 | 242°52.4 | 43.2 | 4 | 243°05.5 | 52.2 | 4 | 243°17.7 | 07°00.5 | 4 | 243°28.7 | 07.9 | 4 | 243°38.6 | 14.3 | 4 | 243°47.2 | 19.5 | 4 | 243°54.3 | 23.3 | 4 | 244°00.0 | 25.6 |
| 5 | 257°23.9 | 24.8 | 5 | 257°38.6 | 34.7 | 5 | 257°52.6 | 44.1 | 5 | 258°05.7 | 53.1 | 5 | 258°17.8 | 01.4 | 5 | 258°28.9 | 08.8 | 5 | 258°38.7 | 15.2 | 5 | 258°47.3 | 20.4 | 5 | 258°54.4 | 24.2 | 5 | 259°00.0 | 26.5 |
| 6 | 272°24.1 | S02°25.8 | 6 | 272°38.8 | S03°35.6 | 6 | 272°52.8 | S04°45.1 | 6 | 273°05.9 | S05°54.1 | 6 | 273°18.0 | S07°02.3 | 6 | 273°29.0 | S08°09.8 | 6 | 273°38.8 | S09°16.2 | 6 | 273°47.4 | S10°21.3 | 6 | 273°54.5 | S11°25.1 | 6 | 274°00.1 | S12°27.3 |
| 7 | 287°24.3 | 26.8 | 7 | 287°39.0 | 36.6 | 7 | 287°52.9 | 46.1 | 7 | 288°06.0 | 55.0 | 7 | 288°18.1 | 03.3 | 7 | 288°29.1 | 10.7 | 7 | 288°39.0 | 17.1 | 7 | 288°47.5 | 22.2 | 7 | 288°54.6 | 26.0 | 7 | 289°00.2 | 28.2 |
| 8 | 302°24.5 | 27.8 | 8 | 302°39.2 | 37.6 | 8 | 302°53.1 | 47.0 | 8 | 303°06.2 | 56.0 | 8 | 303°18.3 | 04.2 | 8 | 303°29.3 | 11.6 | 8 | 303°39.1 | 18.0 | 8 | 303°47.6 | 23.1 | 8 | 303°54.7 | 26.8 | 8 | 304°00.2 | 29.0 |
| 9 | 317°24.7 | ·· 28.7 | 9 | 317°39.4 | ·· 38.5 | 9 | 317°53.3 | ·· 48.0 | 9 | 318°06.4 | ·· 56.9 | 9 | 318°18.5 | ·· 05.2 | 9 | 318°29.4 | ·· 12.6 | 9 | 318°39.2 | ·· 18.9 | 9 | 318°47.7 | ·· 24.0 | 9 | 318°54.8 | ·· 27.7 | 9 | 319°00.3 | ·· 29.9 |
| 10 | 332°24.9 | 29.7 | 10 | 332°39.6 | 39.5 | 10 | 332°53.5 | 49.0 | 10 | 333°06.6 | 57.9 | 10 | 333°18.6 | 06.1 | 10 | 333°29.6 | 13.5 | 10 | 333°39.3 | 19.8 | 10 | 333°47.8 | 24.9 | 10 | 333°54.8 | 28.6 | 10 | 334°00.4 | 30.7 |
| 11 | 347°25.1 | 30.7 | 11 | 347°39.8 | 40.5 | 11 | 347°53.7 | 49.9 | 11 | 348°06.7 | 58.8 | 11 | 348°18.8 | 07.1 | 11 | 348°29.7 | 14.4 | 11 | 348°39.5 | 20.7 | 11 | 348°47.9 | 25.8 | 11 | 348°54.9 | 29.5 | 11 | 349°00.4 | 31.6 |
| 12 | 2°25.3 | S02°31.6 | 12 | 2°40.0 | S03°41.4 | 12 | 2°53.9 | S04°50.9 | 12 | 3°06.9 | S05°59.8 | 12 | 3°18.9 | S07°08.0 | 12 | 3°29.9 | S08°15.3 | 12 | 3°39.6 | S09°21.6 | 12 | 3°48.0 | S10°26.7 | 12 | 3°55.0 | S11°30.3 | 12 | 4°00.5 | S12°32.4 |
| 13 | 17°25.5 | 32.6 | 13 | 17°40.2 | 42.4 | 13 | 17°54.1 | 51.8 | 13 | 18°07.1 | 06°00.7 | 13 | 18°19.1 | 08.9 | 13 | 18°30.0 | 16.3 | 13 | 18°39.7 | 22.5 | 13 | 18°48.1 | 27.6 | 13 | 18°55.1 | 31.2 | 13 | 19°00.6 | 33.3 |
| 14 | 32°25.7 | 33.6 | 14 | 32°40.4 | 43.4 | 14 | 32°54.3 | 52.8 | 14 | 33°07.3 | 01.7 | 14 | 33°19.3 | 09.9 | 14 | 33°30.2 | 17.2 | 14 | 33°39.9 | 23.5 | 14 | 33°48.2 | 28.5 | 14 | 33°55.2 | 32.1 | 14 | 34°00.6 | 34.1 |
| 15 | 47°25.9 | ·· 34.6 | 15 | 47°40.6 | ·· 44.3 | 15 | 47°54.4 | ·· 53.8 | 15 | 48°07.4 | ·· 02.6 | 15 | 48°19.4 | ·· 10.8 | 15 | 48°30.3 | ·· 18.1 | 15 | 48°40.0 | ·· 24.4 | 15 | 48°48.3 | ·· 29.4 | 15 | 48°55.3 | ·· 33.0 | 15 | 49°00.7 | ·· 35.0 |
| 16 | 62°26.2 | 35.5 | 16 | 62°40.8 | 45.3 | 16 | 62°54.6 | 54.7 | 16 | 63°07.6 | 03.6 | 16 | 63°19.6 | 11.8 | 16 | 63°30.4 | 19.1 | 16 | 63°40.1 | 25.3 | 16 | 63°48.4 | 30.3 | 16 | 63°55.4 | 33.8 | 16 | 64°00.7 | 35.8 |
| 17 | 77°26.4 | 36.5 | 17 | 77°41.0 | 46.3 | 17 | 77°54.8 | 55.7 | 17 | 78°07.8 | 04.6 | 17 | 78°19.7 | 12.7 | 17 | 78°30.6 | 20.0 | 17 | 78°40.2 | 26.2 | 17 | 78°48.6 | 31.2 | 17 | 78°55.5 | 34.7 | 17 | 79°00.8 | 36.7 |
| 18 | 92°26.6 | S02°37.5 | 18 | 92°41.2 | S03°47.2 | 18 | 92°55.0 | S04°56.6 | 18 | 93°07.9 | S06°05.5 | 18 | 93°19.9 | S07°13.7 | 18 | 93°30.7 | S08°20.9 | 18 | 93°40.4 | S09°27.1 | 18 | 93°48.7 | S10°32.0 | 18 | 93°55.5 | S11°35.6 | 18 | 94°00.9 | S12°37.5 |
| 19 | 107°26.8 | 38.4 | 19 | 107°41.4 | 48.2 | 19 | 107°55.2 | 57.6 | 19 | 108°08.1 | 06.5 | 19 | 108°20.0 | 14.6 | 19 | 108°30.9 | 21.8 | 19 | 108°40.5 | 28.0 | 19 | 108°48.8 | 32.9 | 19 | 108°55.6 | 36.5 | 19 | 109°00.9 | 38.4 |
| 20 | 122°27.0 | 39.4 | 20 | 122°41.6 | 49.2 | 20 | 122°55.4 | 58.6 | 20 | 123°08.3 | 07.4 | 20 | 123°20.2 | 15.5 | 20 | 123°31.0 | 22.8 | 20 | 123°40.6 | 28.9 | 20 | 123°48.9 | 33.8 | 20 | 123°55.7 | 37.3 | 20 | 124°01.0 | 39.2 |
| 21 | 137°27.2 | ·· 40.4 | 21 | 137°41.8 | ·· 50.1 | 21 | 137°55.6 | 04°59.5 | 21 | 138°08.5 | ·· 08.4 | 21 | 138°20.4 | ·· 16.5 | 21 | 138°31.2 | ·· 23.7 | 21 | 138°40.7 | ·· 29.8 | 21 | 138°49.0 | ·· 34.7 | 21 | 138°55.8 | ·· 38.2 | 21 | 139°01.1 | ·· 40.1 |
| 22 | 152°27.4 | 41.4 | 22 | 152°42.0 | 51.1 | 22 | 152°55.7 | 05°00.5 | 22 | 153°08.6 | 09.3 | 22 | 153°20.5 | 17.4 | 22 | 153°31.3 | 24.6 | 22 | 153°40.9 | 30.7 | 22 | 153°49.1 | 35.6 | 22 | 153°55.9 | 39.1 | 22 | 154°01.1 | 40.9 |
| 23 | 167°27.6 | 42.3 | 23 | 167°42.1 | 52.1 | 23 | 167°55.9 | 01.4 | 23 | 168°08.8 | 10.3 | 23 | 168°20.7 | 18.4 | 23 | 168°31.4 | 25.5 | 23 | 168°41.0 | 31.7 | 23 | 168°49.2 | 36.5 | 23 | 168°56.0 | 39.9 | 23 | 169°01.2 | 41.8 |
| | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=0.9′ | | SD=16.0′ | $d$=0.9′ | | SD=16.0′ | $d$=0.9′ | | SD=16.1′ | $d$=0.9′ | | SD=16.1′ | $d$=0.9′ | | SD=16.1′ | $d$=0.9′ |

| 30 | GHA | Dec | 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec | 27 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 182°27.8 | S02°43.3 | 0 | 182°42.3 | S03°53.0 | 0 | 182°56.1 | S05°02.4 | 0 | 183°09.0 | S06°11.2 | 0 | 183°20.8 | S07°19.3 | 0 | 183°31.6 | S08°26.5 | 0 | 183°41.1 | S09°32.6 | 0 | 183°49.3 | S10°37.4 | 0 | 183°56.0 | S11°40.8 | 0 | 184°01.2 | S12°42.6 |
| 1 | 197°28.0 | 44.3 | 1 | 197°42.5 | 54.0 | 1 | 197°56.3 | 03.4 | 1 | 198°09.2 | 12.2 | 1 | 198°21.0 | 20.2 | 1 | 198°31.7 | 27.4 | 1 | 198°41.2 | 33.5 | 1 | 198°49.4 | 38.3 | 1 | 198°56.1 | 41.7 | 1 | 199°01.3 | 43.5 |
| 2 | 212°28.2 | 45.2 | 2 | 212°42.7 | 55.0 | 2 | 212°56.5 | 04.3 | 2 | 213°09.3 | 13.1 | 2 | 213°21.2 | 21.2 | 2 | 213°31.9 | 28.3 | 2 | 213°41.3 | 34.4 | 2 | 213°49.5 | 39.2 | 2 | 213°56.2 | 42.5 | 2 | 214°01.4 | 44.3 |
| 3 | 227°28.4 | ·· 46.2 | 3 | 227°42.9 | ·· 55.9 | 3 | 227°56.7 | ·· 05.3 | 3 | 228°09.5 | ·· 14.1 | 3 | 228°21.3 | ·· 22.1 | 3 | 228°32.0 | ·· 29.2 | 3 | 228°41.5 | ·· 35.3 | 3 | 228°49.6 | ·· 40.1 | 3 | 228°56.3 | ·· 43.4 | 3 | 229°01.4 | ·· 45.2 |
| 4 | 242°28.6 | 47.2 | 4 | 242°43.1 | 56.9 | 4 | 242°56.9 | 06.2 | 4 | 243°09.7 | 15.0 | 4 | 243°21.5 | 23.0 | 4 | 243°32.1 | 30.2 | 4 | 243°41.6 | 36.2 | 4 | 243°49.7 | 41.0 | 4 | 243°56.4 | 44.3 | 4 | 244°01.5 | 46.0 |
| 5 | 257°28.8 | 48.1 | 5 | 257°43.3 | 57.9 | 5 | 257°57.0 | 07.2 | 5 | 258°09.8 | 16.0 | 5 | 258°21.6 | 24.0 | 5 | 258°32.3 | 31.1 | 5 | 258°41.7 | 37.1 | 5 | 258°49.8 | 41.9 | 5 | 258°56.5 | 45.2 | 5 | 259°01.5 | 46.8 |
| 6 | 272°29.0 | S02°49.1 | 6 | 272°43.5 | S03°58.8 | 6 | 272°57.2 | S05°08.2 | 6 | 273°10.0 | S06°16.9 | 6 | 273°21.8 | S07°24.9 | 6 | 273°32.4 | S08°32.0 | 6 | 273°41.8 | S09°38.0 | 6 | 273°49.9 | S10°42.7 | 6 | 273°56.5 | S11°46.0 | 6 | 274°01.6 | S12°47.7 |
| 7 | 287°29.3 | 50.1 | 7 | 287°43.7 | 03°59.8 | 7 | 287°57.4 | 09.1 | 7 | 288°10.2 | 17.9 | 7 | 288°21.9 | 25.9 | 7 | 288°32.6 | 32.9 | 7 | 288°42.0 | 38.9 | 7 | 288°50.0 | 43.6 | 7 | 288°56.6 | 46.9 | 7 | 289°01.7 | 48.5 |
| 8 | 302°29.5 | 51.1 | 8 | 302°43.9 | 04°00.8 | 8 | 302°57.6 | 10.1 | 8 | 303°10.3 | 18.8 | 8 | 303°22.1 | 26.8 | 8 | 303°32.7 | 33.9 | 8 | 303°42.1 | 39.8 | 8 | 303°50.1 | 44.5 | 8 | 303°56.7 | 47.8 | 8 | 304°01.7 | 49.4 |
| 9 | 317°29.7 | ·· 52.0 | 9 | 317°44.1 | ·· 01.7 | 9 | 317°57.8 | ·· 11.0 | 9 | 318°10.5 | ·· 19.8 | 9 | 318°22.2 | ·· 27.7 | 9 | 318°32.8 | ·· 34.8 | 9 | 318°42.2 | ·· 40.7 | 9 | 318°50.2 | ·· 45.4 | 9 | 318°56.8 | ·· 48.6 | 9 | 319°01.8 | ·· 50.2 |
| 10 | 332°29.9 | 53.0 | 10 | 332°44.3 | 02.7 | 10 | 332°58.0 | 12.0 | 10 | 333°10.7 | 20.7 | 10 | 333°22.4 | 28.7 | 10 | 333°33.0 | 35.7 | 10 | 333°42.3 | 41.6 | 10 | 333°50.3 | 46.3 | 10 | 333°56.9 | 49.5 | 10 | 334°01.8 | 51.1 |
| 11 | 347°30.1 | 54.0 | 11 | 347°44.5 | 03.7 | 11 | 347°58.1 | 13.0 | 11 | 348°10.9 | 21.7 | 11 | 348°22.6 | 29.6 | 11 | 348°33.1 | 36.6 | 11 | 348°42.4 | 42.6 | 11 | 348°50.4 | 47.2 | 11 | 348°56.9 | 50.4 | 11 | 349°01.9 | 51.9 |
| 12 | 2°30.3 | S02°54.9 | 12 | 2°44.7 | S04°04.6 | 12 | 2°58.3 | S05°13.9 | 12 | 3°11.0 | S06°22.6 | 12 | 3°22.7 | S07°30.6 | 12 | 3°33.3 | S08°37.6 | 12 | 3°42.6 | S09°43.5 | 12 | 3°50.5 | S10°48.1 | 12 | 3°57.0 | S11°51.2 | 12 | 4°02.0 | S12°52.8 |
| 13 | 17°30.5 | 55.9 | 13 | 17°44.9 | 05.6 | 13 | 17°58.5 | 14.9 | 13 | 18°11.2 | 23.6 | 13 | 18°22.9 | 31.5 | 13 | 18°33.4 | 38.5 | 13 | 18°42.7 | 44.4 | 13 | 18°50.6 | 49.0 | 13 | 18°57.1 | 52.1 | 13 | 19°02.0 | 53.6 |
| 14 | 32°30.7 | 56.9 | 14 | 32°45.1 | 06.6 | 14 | 32°58.7 | 15.8 | 14 | 33°11.4 | 24.5 | 14 | 33°23.0 | 32.4 | 14 | 33°33.5 | 39.4 | 14 | 33°42.8 | 45.3 | 14 | 33°50.7 | 49.8 | 14 | 33°57.2 | 53.0 | 14 | 34°02.1 | 54.4 |
| 15 | 47°30.9 | ·· 57.8 | 15 | 47°45.3 | ·· 07.5 | 15 | 47°58.9 | ·· 16.8 | 15 | 48°11.5 | ·· 25.5 | 15 | 48°23.2 | ·· 33.4 | 15 | 48°33.7 | ·· 40.3 | 15 | 48°42.9 | ·· 46.2 | 15 | 48°50.8 | ·· 50.7 | 15 | 48°57.3 | ·· 53.8 | 15 | 49°02.1 | ·· 55.3 |
| 16 | 62°31.1 | 58.8 | 16 | 62°45.5 | 08.5 | 16 | 62°59.1 | 17.7 | 16 | 63°11.7 | 26.4 | 16 | 63°23.3 | 34.3 | 16 | 63°33.8 | 41.3 | 16 | 63°43.0 | 47.1 | 16 | 63°50.9 | 51.6 | 16 | 63°57.3 | 54.7 | 16 | 64°02.2 | 56.1 |
| 17 | 77°31.3 | 02°59.8 | 17 | 77°45.7 | 09.5 | 17 | 77°59.2 | 18.7 | 17 | 78°11.9 | 27.4 | 17 | 78°23.5 | 35.2 | 17 | 78°33.9 | 42.2 | 17 | 78°43.2 | 48.0 | 17 | 78°51.0 | 52.5 | 17 | 78°57.4 | 55.6 | 17 | 79°02.2 | 57.0 |
| 18 | 92°31.5 | S03°00.8 | 18 | 92°45.9 | S04°10.4 | 18 | 92°59.4 | S05°19.7 | 18 | 93°12.0 | S06°28.3 | 18 | 93°23.6 | S07°36.2 | 18 | 93°34.1 | S08°43.1 | 18 | 93°43.3 | S09°48.9 | 18 | 93°51.1 | S10°53.4 | 18 | 93°57.5 | S11°56.4 | 18 | 94°02.3 | S12°57.8 |
| 19 | 107°31.7 | 01.7 | 19 | 107°46.1 | 11.4 | 19 | 107°59.6 | 20.6 | 19 | 108°12.2 | 29.3 | 19 | 108°23.8 | 37.1 | 19 | 108°34.2 | 44.0 | 19 | 108°43.4 | 49.8 | 19 | 108°51.2 | 54.3 | 19 | 108°57.6 | 57.3 | 19 | 109°02.3 | 58.6 |
| 20 | 122°31.9 | 02.7 | 20 | 122°46.3 | 12.4 | 20 | 122°59.8 | 21.6 | 20 | 123°12.4 | 30.2 | 20 | 123°23.9 | 38.1 | 20 | 123°34.4 | 44.9 | 20 | 123°43.5 | 50.7 | 20 | 123°51.3 | 55.2 | 20 | 123°57.6 | 58.1 | 20 | 124°02.4 | 12°59.5 |
| 21 | 137°32.1 | ·· 03.7 | 21 | 137°46.4 | ·· 13.3 | 21 | 138°00.0 | ·· 22.5 | 21 | 138°12.5 | ·· 31.2 | 21 | 138°24.1 | ·· 39.0 | 21 | 138°34.5 | ·· 45.9 | 21 | 138°43.6 | ·· 51.6 | 21 | 138°51.4 | ·· 56.0 | 21 | 138°57.7 | ·· 59.0 | 21 | 139°02.5 | 13°00.3 |
| 22 | 152°32.3 | 04.6 | 22 | 152°46.6 | 14.3 | 22 | 153°00.1 | 23.5 | 22 | 153°12.7 | 32.1 | 22 | 153°24.2 | 39.9 | 22 | 153°34.6 | 46.8 | 22 | 153°43.7 | 52.5 | 22 | 153°51.5 | 56.9 | 22 | 153°57.8 | 11°59.9 | 22 | 154°02.5 | 01.2 |
| 23 | 167°32.5 | 05.6 | 23 | 167°46.8 | 15.2 | 23 | 168°00.3 | 24.5 | 23 | 168°12.9 | 33.0 | 23 | 168°24.4 | 40.9 | 23 | 168°34.8 | 47.7 | 23 | 168°43.9 | 53.4 | 23 | 168°51.6 | 57.8 | 23 | 168°57.9 | 12°00.7 | 23 | 169°02.6 | 02.0 |
| | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=1.0′ | | SD=16.0′ | $d$=0.9′ | | SD=16.0′ | $d$=0.9′ | | SD=16.0′ | $d$=0.9′ | | SD=16.1′ | $d$=0.9′ | | SD=16.1′ | $d$=0.9′ | | SD=16.1′ | $d$=0.8′ |

DUT1 = UT1-UTC = +0.1291 sec  ΔT = TT-UT1 = +69.0549 sec

## 2026 October 28 to Nov. 11 UT

DUT1 = UT1-UTC = +0.1306 sec  ΔT = TT-UT1 = +69.0534 sec

## 2026 November 12 to Nov. 26 UT

| 28 | GHA | Dec | 31 | GHA | Dec | 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 184°02.6 | S13°02.8 | 0 | 184°05.6 | S14°02.3 | 0 | 184°06.7 | S14°59.7 | 0 | 184°06.0 | S15°54.9 | 0 | 184°03.3 | S16°47.8 |
| 1 | 199°02.7 | 03.7 | 1 | 199°05.6 | 03.1 | 1 | 199°06.7 | 15°00.5 | 1 | 199°05.9 | 55.7 | 1 | 199°03.3 | 48.5 |
| 2 | 214°02.7 | 04.5 | 2 | 214°05.6 | 03.9 | 2 | 214°06.7 | 01.3 | 2 | 214°05.9 | 56.4 | 2 | 214°03.2 | 49.2 |
| 3 | 229°02.8 | ·· 05.4 | 3 | 229°05.6 | ·· 04.7 | 3 | 229°06.7 | ·· 02.0 | 3 | 229°05.9 | ·· 57.2 | 3 | 229°03.2 | ·· 50.0 |
| 4 | 244°02.8 | 06.2 | 4 | 244°05.7 | 05.5 | 4 | 244°06.7 | 02.8 | 4 | 244°05.9 | 57.9 | 4 | 244°03.1 | 50.7 |
| 5 | 259°02.9 | 07.0 | 5 | 259°05.7 | 06.3 | 5 | 259°06.7 | 03.6 | 5 | 259°05.8 | 58.7 | 5 | 259°03.1 | 51.4 |
| 6 | 274°02.9 | S13°07.9 | 6 | 274°05.7 | S14°07.1 | 6 | 274°06.7 | S15°04.4 | 6 | 274°05.8 | S15°59.4 | 6 | 274°03.0 | S16°52.1 |
| 7 | 289°03.0 | 08.7 | 7 | 289°05.7 | 07.9 | 7 | 289°06.7 | 05.2 | 7 | 289°05.8 | 16°00.2 | 7 | 289°03.0 | 52.8 |
| 8 | 304°03.0 | 09.5 | 8 | 304°05.8 | 08.7 | 8 | 304°06.7 | 05.9 | 8 | 304°05.8 | 00.9 | 8 | 304°02.9 | 53.5 |
| 9 | 319°03.1 | ·· 10.4 | 9 | 319°05.8 | ·· 09.6 | 9 | 319°06.7 | ·· 06.7 | 9 | 319°05.7 | ·· 01.7 | 9 | 319°02.9 | ·· 54.2 |
| 10 | 334°03.1 | 11.2 | 10 | 334°05.8 | 10.4 | 10 | 334°06.7 | 07.5 | 10 | 334°05.7 | 02.4 | 10 | 334°02.8 | 55.0 |
| 11 | 349°03.2 | 12.0 | 11 | 349°05.9 | 11.2 | 11 | 349°06.7 | 08.3 | 11 | 349°05.7 | 03.2 | 11 | 349°02.8 | 55.7 |
| 12 | 4°03.2 | S13°12.9 | 12 | 4°05.9 | S14°12.0 | 12 | 4°06.7 | S15°09.1 | 12 | 4°05.7 | S16°03.9 | 12 | 4°02.7 | S16°56.4 |
| 13 | 19°03.3 | 13.7 | 13 | 19°05.9 | 12.8 | 13 | 19°06.7 | 09.8 | 13 | 19°05.6 | 04.7 | 13 | 19°02.7 | 57.1 |
| 14 | 34°03.3 | 14.5 | 14 | 34°05.9 | 13.6 | 14 | 34°06.7 | 10.6 | 14 | 34°05.6 | 05.4 | 14 | 34°02.6 | 57.8 |
| 15 | 49°03.4 | ·· 15.4 | 15 | 49°05.9 | ·· 14.4 | 15 | 49°06.7 | ·· 11.4 | 15 | 49°05.6 | ·· 06.2 | 15 | 49°02.5 | ·· 58.5 |
| 16 | 64°03.4 | 16.2 | 16 | 64°06.0 | 15.2 | 16 | 64°06.7 | 12.2 | 16 | 64°05.5 | 06.9 | 16 | 64°02.5 | 59.2 |
| 17 | 79°03.5 | 17.0 | 17 | 79°06.0 | 16.0 | 17 | 79°06.7 | 12.9 | 17 | 79°05.5 | 07.6 | 17 | 79°02.4 | 16°59.9 |
| 18 | 94°03.5 | S13°17.9 | 18 | 94°06.0 | S14°16.8 | 18 | 94°06.7 | S15°13.7 | 18 | 94°05.5 | S16°08.4 | 18 | 94°02.4 | S17°00.6 |
| 19 | 109°03.6 | 18.7 | 19 | 109°06.0 | 17.6 | 19 | 109°06.7 | 14.5 | 19 | 109°05.5 | 09.1 | 19 | 109°02.3 | 01.3 |
| 20 | 124°03.6 | 19.5 | 20 | 124°06.1 | 18.4 | 20 | 124°06.7 | 15.3 | 20 | 124°05.4 | 09.9 | 20 | 124°02.3 | 02.0 |
| 21 | 139°03.7 | ·· 20.4 | 21 | 139°06.1 | ·· 19.2 | 21 | 139°06.7 | ·· 16.0 | 21 | 139°05.4 | ·· 10.6 | 21 | 139°02.2 | ·· 02.8 |
| 22 | 154°03.7 | 21.2 | 22 | 154°06.1 | 20.0 | 22 | 154°06.7 | 16.8 | 22 | 154°05.4 | 11.4 | 22 | 154°02.1 | 03.5 |
| 23 | 169°03.7 | 22.0 | 23 | 169°06.1 | 20.8 | 23 | 169°06.7 | 17.6 | 23 | 169°05.3 | 12.1 | 23 | 169°02.1 | 04.2 |
| | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.7′ |

| 12 | GHA | Dec | 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 183°58.8 | S17°38.1 | 0 | 183°52.4 | S18°25.7 | 0 | 183°44.1 | S19°10.3 | 0 | 183°33.9 | S19°51.8 | 0 | 183°22.0 | S20°30.1 |
| 1 | 198°58.7 | 38.8 | 1 | 198°52.3 | 26.3 | 1 | 198°43.9 | 10.9 | 1 | 198°33.8 | 52.4 | 1 | 198°21.9 | 30.6 |
| 2 | 213°58.6 | 39.5 | 2 | 213°52.1 | 27.0 | 2 | 213°43.8 | 11.5 | 2 | 213°33.6 | 52.9 | 2 | 213°21.7 | 31.1 |
| 3 | 228°58.6 | ·· 40.2 | 3 | 228°52.0 | ·· 27.6 | 3 | 228°43.7 | ·· 12.1 | 3 | 228°33.5 | ·· 53.5 | 3 | 228°21.5 | ·· 31.6 |
| 4 | 243°58.5 | 40.8 | 4 | 243°51.9 | 28.2 | 4 | 243°43.5 | 12.7 | 4 | 243°33.3 | 54.1 | 4 | 243°21.3 | 32.1 |
| 5 | 258°58.4 | 41.5 | 5 | 258°51.8 | 28.9 | 5 | 258°43.4 | 13.3 | 5 | 258°33.2 | 54.6 | 5 | 258°21.1 | 32.6 |
| 6 | 273°58.3 | S17°42.2 | 6 | 273°51.7 | S18°29.5 | 6 | 273°43.3 | S19°13.9 | 6 | 273°33.0 | S19°55.2 | 6 | 273°21.0 | S20°33.2 |
| 7 | 288°58.2 | 42.9 | 7 | 288°51.6 | 30.1 | 7 | 288°43.2 | 14.5 | 7 | 288°32.9 | 55.7 | 7 | 288°20.8 | 33.7 |
| 8 | 303°58.2 | 43.5 | 8 | 303°51.5 | 30.8 | 8 | 303°43.0 | 15.1 | 8 | 303°32.7 | 56.3 | 8 | 303°20.6 | 34.2 |
| 9 | 318°58.1 | ·· 44.2 | 9 | 318°51.4 | ·· 31.4 | 9 | 318°42.9 | ·· 15.7 | 9 | 318°32.5 | ·· 56.8 | 9 | 318°20.4 | ·· 34.7 |
| 10 | 333°58.0 | 44.9 | 10 | 333°51.3 | 32.0 | 10 | 333°42.8 | 16.3 | 10 | 333°32.4 | 57.4 | 10 | 333°20.2 | 35.2 |
| 11 | 348°57.9 | 45.6 | 11 | 348°51.2 | 32.7 | 11 | 348°42.6 | 16.9 | 11 | 348°32.2 | 57.9 | 11 | 348°20.1 | 35.7 |
| 12 | 3°57.8 | S17°46.2 | 12 | 3°51.1 | S18°33.3 | 12 | 3°42.5 | S19°17.4 | 12 | 3°32.1 | S19°58.4 | 12 | 3°19.9 | S20°36.2 |
| 13 | 18°57.8 | 46.9 | 13 | 18°51.0 | 34.0 | 13 | 18°42.4 | 18.0 | 13 | 18°31.9 | 59.0 | 13 | 18°19.7 | 36.7 |
| 14 | 33°57.7 | 47.6 | 14 | 33°50.9 | 34.6 | 14 | 33°42.2 | 18.6 | 14 | 33°31.8 | 19°59.5 | 14 | 33°19.5 | 37.2 |
| 15 | 48°57.6 | ·· 48.3 | 15 | 48°50.8 | ·· 35.2 | 15 | 48°42.1 | ·· 19.2 | 15 | 48°31.6 | 20°00.1 | 15 | 48°19.3 | ·· 37.7 |
| 16 | 63°57.5 | 48.9 | 16 | 63°50.7 | 35.8 | 16 | 63°42.0 | 19.8 | 16 | 63°31.4 | 00.6 | 16 | 63°19.2 | 38.2 |
| 17 | 78°57.4 | 49.6 | 17 | 78°50.6 | 36.5 | 17 | 78°41.8 | 20.4 | 17 | 78°31.3 | 01.2 | 17 | 78°19.0 | 38.7 |
| 18 | 93°57.4 | S17°50.3 | 18 | 93°50.5 | S18°37.1 | 18 | 93°41.7 | S19°21.0 | 18 | 93°31.1 | S20°01.7 | 18 | 93°18.8 | S20°39.2 |
| 19 | 108°57.3 | 50.9 | 19 | 108°50.3 | 37.7 | 19 | 108°41.6 | 21.6 | 19 | 108°31.0 | 02.3 | 19 | 108°18.6 | 39.7 |
| 20 | 123°57.2 | 51.6 | 20 | 123°50.2 | 38.4 | 20 | 123°41.4 | 22.2 | 20 | 123°30.8 | 02.8 | 20 | 123°18.4 | 40.2 |
| 21 | 138°57.1 | ·· 52.3 | 21 | 138°50.1 | ·· 39.0 | 21 | 138°41.3 | ·· 22.7 | 21 | 138°30.6 | ·· 03.3 | 21 | 138°18.2 | ·· 40.6 |
| 22 | 153°57.0 | 52.9 | 22 | 153°50.0 | 39.6 | 22 | 153°41.2 | 23.3 | 22 | 153°30.5 | 03.9 | 22 | 153°18.1 | 41.1 |
| 23 | 168°56.9 | 53.6 | 23 | 168°49.9 | 40.3 | 23 | 168°41.0 | 23.9 | 23 | 168°30.3 | 04.4 | 23 | 168°17.9 | 41.6 |
| | SD=16.1′ | d=0.7′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.5′ |

| 29 | GHA | Dec | 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 184°03.8 | S13°22.9 | 0 | 184°06.1 | S14°21.6 | 0 | 184°06.7 | S15°18.4 | 0 | 184°05.3 | S16°12.8 | 0 | 184°02.0 | S17°04.9 |
| 1 | 199°03.8 | 23.7 | 1 | 199°06.2 | 22.4 | 1 | 199°06.7 | 19.1 | 1 | 199°05.3 | 13.6 | 1 | 199°02.0 | 05.6 |
| 2 | 214°03.9 | 24.5 | 2 | 214°06.2 | 23.2 | 2 | 214°06.7 | 19.9 | 2 | 214°05.2 | 14.3 | 2 | 214°01.9 | 06.3 |
| 3 | 229°03.9 | ·· 25.3 | 3 | 229°06.2 | ·· 24.0 | 3 | 229°06.6 | ·· 20.7 | 3 | 229°05.2 | ·· 15.1 | 3 | 229°01.8 | ·· 07.0 |
| 4 | 244°04.0 | 26.2 | 4 | 244°06.2 | 24.8 | 4 | 244°06.6 | 21.4 | 4 | 244°05.2 | 15.8 | 4 | 244°01.8 | 07.7 |
| 5 | 259°04.0 | 27.0 | 5 | 259°06.2 | 25.6 | 5 | 259°06.6 | 22.2 | 5 | 259°05.1 | 16.5 | 5 | 259°01.7 | 08.4 |
| 6 | 274°04.1 | S13°27.8 | 6 | 274°06.3 | S14°26.4 | 6 | 274°06.6 | S15°23.0 | 6 | 274°05.1 | S16°17.3 | 6 | 274°01.7 | S17°09.1 |
| 7 | 289°04.1 | 28.7 | 7 | 289°06.3 | 27.2 | 7 | 289°06.6 | 23.8 | 7 | 289°05.1 | 18.0 | 7 | 289°01.6 | 09.8 |
| 8 | 304°04.1 | 29.5 | 8 | 304°06.3 | 28.0 | 8 | 304°06.6 | 24.5 | 8 | 304°05.0 | 18.7 | 8 | 304°01.5 | 10.5 |
| 9 | 319°04.2 | ·· 30.3 | 9 | 319°06.3 | ·· 28.8 | 9 | 319°06.6 | ·· 25.3 | 9 | 319°05.0 | ·· 19.5 | 9 | 319°01.5 | ·· 11.2 |
| 10 | 334°04.2 | 31.1 | 10 | 334°06.3 | 29.6 | 10 | 334°06.6 | 26.1 | 10 | 334°05.0 | 20.2 | 10 | 334°01.4 | 11.9 |
| 11 | 349°04.3 | 32.0 | 11 | 349°06.3 | 30.4 | 11 | 349°06.6 | 26.8 | 11 | 349°04.9 | 20.9 | 11 | 349°01.4 | 12.6 |
| 12 | 4°04.3 | S13°32.8 | 12 | 4°06.4 | S14°31.2 | 12 | 4°06.6 | S15°27.6 | 12 | 4°04.9 | S16°21.7 | 12 | 4°01.3 | S17°13.3 |
| 13 | 19°04.3 | 33.6 | 13 | 19°06.4 | 32.0 | 13 | 19°06.6 | 28.4 | 13 | 19°04.8 | 22.4 | 13 | 19°01.2 | 14.0 |
| 14 | 34°04.4 | 34.4 | 14 | 34°06.4 | 32.8 | 14 | 34°06.5 | 29.1 | 14 | 34°04.8 | 23.1 | 14 | 34°01.2 | 14.7 |
| 15 | 49°04.4 | ·· 35.3 | 15 | 49°06.4 | ·· 33.6 | 15 | 49°06.5 | ·· 29.9 | 15 | 49°04.8 | ·· 23.9 | 15 | 49°01.1 | ·· 15.4 |
| 16 | 64°04.5 | 36.1 | 16 | 64°06.4 | 34.4 | 16 | 64°06.5 | 30.7 | 16 | 64°04.7 | 24.6 | 16 | 64°01.0 | 16.1 |
| 17 | 79°04.5 | 36.9 | 17 | 79°06.4 | 35.2 | 17 | 79°06.5 | 31.4 | 17 | 79°04.7 | 25.3 | 17 | 79°01.0 | 16.8 |
| 18 | 94°04.5 | S13°37.7 | 18 | 94°06.4 | S14°36.0 | 18 | 94°06.5 | S15°32.2 | 18 | 94°04.7 | S16°26.1 | 18 | 94°00.9 | S17°17.5 |
| 19 | 109°04.6 | 38.6 | 19 | 109°06.5 | 36.8 | 19 | 109°06.5 | 33.0 | 19 | 109°04.6 | 26.8 | 19 | 109°00.8 | 18.2 |
| 20 | 124°04.6 | 39.4 | 20 | 124°06.5 | 37.6 | 20 | 124°06.5 | 33.7 | 20 | 124°04.6 | 27.5 | 20 | 124°00.8 | 18.9 |
| 21 | 139°04.7 | ·· 40.2 | 21 | 139°06.5 | ·· 38.4 | 21 | 139°06.5 | ·· 34.5 | 21 | 139°04.5 | ·· 28.3 | 21 | 139°00.7 | ·· 19.6 |
| 22 | 154°04.7 | 41.0 | 22 | 154°06.5 | 39.2 | 22 | 154°06.4 | 35.3 | 22 | 154°04.5 | 29.0 | 22 | 154°00.6 | 20.3 |
| 23 | 169°04.7 | 41.8 | 23 | 169°06.5 | 40.0 | 23 | 169°06.4 | 36.0 | 23 | 169°04.5 | 29.7 | 23 | 169°00.6 | 20.9 |
| | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.7′ | | SD=16.1′ | d=0.7′ |

| 13 | GHA | Dec | 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 183°56.9 | S17°54.3 | 0 | 183°49.8 | S18°40.9 | 0 | 183°40.9 | S19°24.5 | 0 | 183°30.2 | S20°05.0 | 0 | 183°17.7 | S20°42.1 |
| 1 | 198°56.8 | 54.9 | 1 | 198°49.7 | 41.5 | 1 | 198°40.7 | 25.1 | 1 | 198°30.0 | 05.5 | 1 | 198°17.5 | 42.6 |
| 2 | 213°56.7 | 55.6 | 2 | 213°49.6 | 42.1 | 2 | 213°40.6 | 25.7 | 2 | 213°29.8 | 06.0 | 2 | 213°17.3 | 43.1 |
| 3 | 228°56.6 | ·· 56.3 | 3 | 228°49.5 | ·· 42.8 | 3 | 228°40.5 | ·· 26.3 | 3 | 228°29.7 | ·· 06.6 | 3 | 228°17.1 | ·· 43.6 |
| 4 | 243°56.5 | 56.9 | 4 | 243°49.3 | 43.4 | 4 | 243°40.3 | 26.8 | 4 | 243°29.5 | 07.1 | 4 | 243°16.9 | 44.1 |
| 5 | 258°56.4 | 57.6 | 5 | 258°49.2 | 44.0 | 5 | 258°40.2 | 27.4 | 5 | 258°29.4 | 07.7 | 5 | 258°16.8 | 44.6 |
| 6 | 273°56.3 | S17°58.3 | 6 | 273°49.1 | S18°44.6 | 6 | 273°40.1 | S19°28.0 | 6 | 273°29.2 | S20°08.2 | 6 | 273°16.6 | S20°45.1 |
| 7 | 288°56.2 | 58.9 | 7 | 288°49.0 | 45.3 | 7 | 288°39.9 | 28.6 | 7 | 288°29.0 | 08.7 | 7 | 288°16.4 | 45.6 |
| 8 | 303°56.2 | 17°59.6 | 8 | 303°48.9 | 45.9 | 8 | 303°39.8 | 29.2 | 8 | 303°28.9 | 09.3 | 8 | 303°16.2 | 46.0 |
| 9 | 318°56.1 | 18°00.3 | 9 | 318°48.8 | ·· 46.5 | 9 | 318°39.6 | ·· 29.7 | 9 | 318°28.7 | ·· 09.8 | 9 | 318°16.0 | ·· 46.5 |
| 10 | 333°56.0 | 00.9 | 10 | 333°48.7 | 47.1 | 10 | 333°39.5 | 30.3 | 10 | 333°28.5 | 10.3 | 10 | 333°15.8 | 47.0 |
| 11 | 348°55.9 | 01.6 | 11 | 348°48.6 | 47.7 | 11 | 348°39.4 | 30.9 | 11 | 348°28.4 | 10.9 | 11 | 348°15.6 | 47.5 |
| 12 | 3°55.8 | S18°02.2 | 12 | 3°48.4 | S18°48.4 | 12 | 3°39.2 | S19°31.5 | 12 | 3°28.2 | S20°11.4 | 12 | 3°15.4 | S20°48.0 |
| 13 | 18°55.7 | 02.9 | 13 | 18°48.3 | 49.0 | 13 | 18°39.1 | 32.0 | 13 | 18°28.0 | 11.9 | 13 | 18°15.2 | 48.5 |
| 14 | 33°55.6 | 03.6 | 14 | 33°48.2 | 49.6 | 14 | 33°38.9 | 32.6 | 14 | 33°27.9 | 12.5 | 14 | 33°15.1 | 49.0 |
| 15 | 48°55.5 | ·· 04.2 | 15 | 48°48.1 | ·· 50.2 | 15 | 48°38.8 | ·· 33.2 | 15 | 48°27.7 | ·· 13.0 | 15 | 48°14.9 | ·· 49.4 |
| 16 | 63°55.4 | 04.9 | 16 | 63°48.0 | 50.8 | 16 | 63°38.7 | 33.8 | 16 | 63°27.5 | 13.5 | 16 | 63°14.7 | 49.9 |
| 17 | 78°55.4 | 05.5 | 17 | 78°47.9 | 51.5 | 17 | 78°38.5 | 34.3 | 17 | 78°27.4 | 14.0 | 17 | 78°14.5 | 50.4 |
| 18 | 93°55.3 | S18°06.2 | 18 | 93°47.7 | S18°52.1 | 18 | 93°38.4 | S19°34.9 | 18 | 93°27.2 | S20°14.6 | 18 | 93°14.3 | S20°50.9 |
| 19 | 108°55.2 | 06.9 | 19 | 108°47.6 | 52.7 | 19 | 108°38.2 | 35.5 | 19 | 108°27.0 | 15.1 | 19 | 108°14.1 | 51.4 |
| 20 | 123°55.1 | 07.5 | 20 | 123°47.5 | 53.3 | 20 | 123°38.1 | 36.1 | 20 | 123°26.9 | 15.6 | 20 | 123°13.9 | 51.8 |
| 21 | 138°55.0 | ·· 08.2 | 21 | 138°47.4 | ·· 53.9 | 21 | 138°37.9 | ·· 36.6 | 21 | 138°26.7 | ·· 16.2 | 21 | 138°13.7 | ·· 52.3 |
| 22 | 153°54.9 | 08.8 | 22 | 153°47.3 | 54.5 | 22 | 153°37.8 | 37.2 | 22 | 153°26.5 | 16.7 | 22 | 153°13.5 | 52.8 |
| 23 | 168°54.8 | 09.5 | 23 | 168°47.1 | 55.1 | 23 | 168°37.7 | 37.8 | 23 | 168°26.4 | 17.2 | 23 | 168°13.3 | 53.3 |
| | SD=16.2′ | d=0.7′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.5′ | | SD=16.2′ | d=0.5′ |

| 30 | GHA | Dec | 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 184°04.8 | S13°42.7 | 0 | 184°06.5 | S14°40.8 | 0 | 184°06.4 | S15°36.8 | 0 | 184°04.4 | S16°30.5 | 0 | 184°00.5 | S17°21.6 |
| 1 | 199°04.8 | 43.5 | 1 | 199°06.5 | 41.6 | 1 | 199°06.4 | 37.5 | 1 | 199°04.4 | 31.2 | 1 | 199°00.4 | 22.3 |
| 2 | 214°04.8 | 44.3 | 2 | 214°06.5 | 42.4 | 2 | 214°06.4 | 38.3 | 2 | 214°04.3 | 31.9 | 2 | 214°00.4 | 23.0 |
| 3 | 229°04.9 | ·· 45.1 | 3 | 229°06.6 | ·· 43.2 | 3 | 229°06.4 | ·· 39.1 | 3 | 229°04.3 | ·· 32.6 | 3 | 229°00.3 | ·· 23.7 |
| 4 | 244°04.9 | 45.9 | 4 | 244°06.6 | 44.0 | 4 | 244°06.4 | 39.8 | 4 | 244°04.3 | 33.4 | 4 | 244°00.2 | 24.4 |
| 5 | 259°05.0 | 46.8 | 5 | 259°06.6 | 44.7 | 5 | 259°06.3 | 40.6 | 5 | 259°04.2 | 34.1 | 5 | 259°00.2 | 25.1 |
| 6 | 274°05.0 | S13°47.6 | 6 | 274°06.6 | S14°45.5 | 6 | 274°06.3 | S15°41.3 | 6 | 274°04.2 | S16°34.8 | 6 | 274°00.1 | S17°25.8 |
| 7 | 289°05.0 | 48.4 | 7 | 289°06.6 | 46.3 | 7 | 289°06.3 | 42.1 | 7 | 289°04.1 | 35.5 | 7 | 289°00.0 | 26.5 |
| 8 | 304°05.1 | 49.2 | 8 | 304°06.6 | 47.1 | 8 | 304°06.3 | 42.9 | 8 | 304°04.1 | 36.3 | 8 | 304°00.0 | 27.2 |
| 9 | 319°05.1 | ·· 50.0 | 9 | 319°06.6 | ·· 47.9 | 9 | 319°06.3 | ·· 43.6 | 9 | 319°04.0 | ·· 37.0 | 9 | 318°59.9 | ·· 27.9 |
| 10 | 334°05.1 | 50.9 | 10 | 334°06.6 | 48.7 | 10 | 334°06.3 | 44.4 | 10 | 334°04.0 | 37.7 | 10 | 333°59.8 | 28.5 |
| 11 | 349°05.2 | 51.7 | 11 | 349°06.6 | 49.5 | 11 | 349°06.2 | 45.1 | 11 | 349°03.9 | 38.4 | 11 | 348°59.7 | 29.2 |
| 12 | 4°05.2 | S13°52.5 | 12 | 4°06.6 | S14°50.3 | 12 | 4°06.2 | S15°45.9 | 12 | 4°03.9 | S16°39.2 | 12 | 3°59.7 | S17°29.9 |
| 13 | 19°05.2 | 53.3 | 13 | 19°06.6 | 51.1 | 13 | 19°06.2 | 46.6 | 13 | 19°03.9 | 39.9 | 13 | 18°59.6 | 30.6 |
| 14 | 34°05.3 | 54.1 | 14 | 34°06.6 | 51.8 | 14 | 34°06.2 | 47.4 | 14 | 34°03.8 | 40.6 | 14 | 33°59.5 | 31.3 |
| 15 | 49°05.3 | ·· 54.9 | 15 | 49°06.7 | ·· 52.6 | 15 | 49°06.2 | ·· 48.2 | 15 | 49°03.8 | ·· 41.3 | 15 | 48°59.5 | ·· 32.0 |
| 16 | 64°05.3 | 55.8 | 16 | 64°06.7 | 53.4 | 16 | 64°06.1 | 48.9 | 16 | 64°03.7 | 42.1 | 16 | 63°59.4 | 32.7 |
| 17 | 79°05.3 | 56.6 | 17 | 79°06.7 | 54.2 | 17 | 79°06.1 | 49.7 | 17 | 79°03.7 | 42.8 | 17 | 78°59.3 | 33.3 |
| 18 | 94°05.4 | S13°57.4 | 18 | 94°06.7 | S14°55.0 | 18 | 94°06.1 | S15°50.4 | 18 | 94°03.6 | S16°43.5 | 18 | 93°59.2 | S17°34.0 |
| 19 | 109°05.4 | 58.2 | 19 | 109°06.7 | 55.8 | 19 | 109°06.1 | 51.2 | 19 | 109°03.6 | 44.2 | 19 | 108°59.2 | 34.7 |
| 20 | 124°05.4 | 59.0 | 20 | 124°06.7 | 56.6 | 20 | 124°06.1 | 51.9 | 20 | 124°03.5 | 44.9 | 20 | 123°59.1 | 35.4 |
| 21 | 139°05.5 | 13°59.8 | 21 | 139°06.7 | ·· 57.3 | 21 | 139°06.0 | ·· 52.7 | 21 | 139°03.5 | ·· 45.7 | 21 | 138°59.0 | ·· 36.1 |
| 22 | 154°05.5 | 14°00.6 | 22 | 154°06.7 | 58.1 | 22 | 154°06.0 | 53.4 | 22 | 154°03.4 | 46.4 | 22 | 153°58.9 | 36.8 |
| 23 | 169°05.5 | 01.5 | 23 | 169°06.7 | 58.9 | 23 | 169°06.0 | 54.2 | 23 | 169°03.4 | 47.1 | 23 | 168°58.9 | 37.4 |
| | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.8′ | | SD=16.1′ | d=0.7′ | | SD=16.1′ | d=0.7′ |

| 14 | GHA | Dec | 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 183°54.7 | S18°10.1 | 0 | 183°47.0 | S18°55.8 | 0 | 183°37.5 | S19°38.3 | 0 | 183°26.2 | S20°17.7 | 0 | 183°13.1 | S20°53.8 |
| 1 | 198°54.6 | 10.8 | 1 | 198°46.9 | 56.4 | 1 | 198°37.4 | 38.9 | 1 | 198°26.0 | 18.3 | 1 | 198°12.9 | 54.2 |
| 2 | 213°54.5 | 11.4 | 2 | 213°46.8 | 57.0 | 2 | 213°37.2 | 39.5 | 2 | 213°25.9 | 18.8 | 2 | 213°12.8 | 54.7 |
| 3 | 228°54.4 | ·· 12.1 | 3 | 228°46.7 | ·· 57.6 | 3 | 228°37.1 | ·· 40.1 | 3 | 228°25.7 | ·· 19.3 | 3 | 228°12.6 | ·· 55.2 |
| 4 | 243°54.3 | 12.7 | 4 | 243°46.5 | 58.2 | 4 | 243°36.9 | 40.6 | 4 | 243°25.5 | 19.8 | 4 | 243°12.4 | 55.7 |
| 5 | 258°54.2 | 13.4 | 5 | 258°46.4 | 58.8 | 5 | 258°36.8 | 41.2 | 5 | 258°25.3 | 20.3 | 5 | 258°12.2 | 56.1 |
| 6 | 273°54.1 | S18°14.0 | 6 | 273°46.3 | S18°59.4 | 6 | 273°36.6 | S19°41.8 | 6 | 273°25.2 | S20°20.9 | 6 | 273°12.0 | S20°56.6 |
| 7 | 288°54.0 | 14.7 | 7 | 288°46.2 | 19°00.0 | 7 | 288°36.5 | 42.3 | 7 | 288°25.0 | 21.4 | 7 | 288°11.8 | 57.1 |
| 8 | 303°53.9 | 15.4 | 8 | 303°46.1 | 00.6 | 8 | 303°36.3 | 42.9 | 8 | 303°24.8 | 21.9 | 8 | 303°11.6 | 57.5 |
| 9 | 318°53.8 | ·· 16.0 | 9 | 318°45.9 | ·· 01.3 | 9 | 318°36.2 | ·· 43.4 | 9 | 318°24.7 | ·· 22.4 | 9 | 318°11.4 | ·· 58.0 |
| 10 | 333°53.8 | 16.6 | 10 | 333°45.8 | 01.9 | 10 | 333°36.0 | 44.0 | 10 | 333°24.5 | 22.9 | 10 | 333°11.2 | 58.5 |
| 11 | 348°53.7 | 17.3 | 11 | 348°45.7 | 02.5 | 11 | 348°35.9 | 44.6 | 11 | 348°24.3 | 23.5 | 11 | 348°11.0 | 59.0 |
| 12 | 3°53.6 | S18°17.9 | 12 | 3°45.6 | S19°03.1 | 12 | 3°35.7 | S19°45.1 | 12 | 3°24.1 | S20°24.0 | 12 | 3°10.8 | S20°59.4 |
| 13 | 18°53.5 | 18.6 | 13 | 18°45.4 | 03.7 | 13 | 18°35.6 | 45.7 | 13 | 18°24.0 | 24.5 | 13 | 18°10.6 | 20°59.9 |
| 14 | 33°53.4 | 19.2 | 14 | 33°45.3 | 04.3 | 14 | 33°35.4 | 46.3 | 14 | 33°23.8 | 25.0 | 14 | 33°10.4 | 21°00.4 |
| 15 | 48°53.3 | ·· 19.9 | 15 | 48°45.2 | ·· 04.9 | 15 | 48°35.3 | ·· 46.8 | 15 | 48°23.6 | ·· 25.5 | 15 | 48°10.2 | ·· 00.8 |
| 16 | 63°53.2 | 20.5 | 16 | 63°45.1 | 05.5 | 16 | 63°35.1 | 47.4 | 16 | 63°23.4 | 26.0 | 16 | 63°10.0 | 01.3 |
| 17 | 78°53.1 | 21.2 | 17 | 78°44.9 | 06.1 | 17 | 78°35.0 | 47.9 | 17 | 78°23.3 | 26.5 | 17 | 78°09.8 | 01.8 |
| 18 | 93°53.0 | S18°21.8 | 18 | 93°44.8 | S19°06.7 | 18 | 93°34.8 | S19°48.5 | 18 | 93°23.1 | S20°27.1 | 18 | 93°09.6 | S21°02.2 |
| 19 | 108°52.9 | 22.5 | 19 | 108°44.7 | 07.3 | 19 | 108°34.7 | 49.1 | 19 | 108°22.9 | 27.6 | 19 | 108°09.4 | 02.7 |
| 20 | 123°52.8 | 23.1 | 20 | 123°44.6 | 07.9 | 20 | 123°34.5 | 49.6 | 20 | 123°22.7 | 28.1 | 20 | 123°09.2 | 03.1 |
| 21 | 138°52.7 | ·· 23.7 | 21 | 138°44.4 | ·· 08.5 | 21 | 138°34.4 | ·· 50.2 | 21 | 138°22.6 | ·· 28.6 | 21 | 138°09.0 | ·· 03.6 |
| 22 | 153°52.6 | 24.4 | 22 | 153°44.3 | 09.1 | 22 | 153°34.2 | 50.7 | 22 | 153°22.4 | 29.1 | 22 | 153°08.8 | 04.1 |
| 23 | 168°52.5 | 25.0 | 23 | 168°44.2 | 09.7 | 23 | 168°34.1 | 51.3 | 23 | 168°22.2 | 29.6 | 23 | 168°08.6 | 04.5 |
| | SD=16.2′ | d=0.7′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.6′ | | SD=16.2′ | d=0.5′ | | SD=16.2′ | d=0.5′ |

DUT1 = UT1-UTC = +0.1320 sec  ΔT = TT-UT1 = +69.0520 sec

## 2026 November 27 to Dec. 11 UT

DUT1 = UT1-UTC = +0.1334 sec  ΔT = TT-UT1 = +69.0506 sec

## 2026 December 12 to Dec. 26 UT

| 27 | GHA | Dec | 30 | GHA | Dec | 03 | GHA | Dec | 06 | GHA | Dec | 09 | GHA | Dec | 12 | GHA | Dec | 15 | GHA | Dec | 18 | GHA | Dec | 21 | GHA | Dec | 24 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 183°08.4 | S21°05.0 | 0 | 182°53.1 | S21°36.3 | 0 | 182°36.3 | S22°04.0 | 0 | 182°18.0 | S22°27.8 | 0 | 181°58.6 | S22°47.6 | 0 | 181°38.1 | S23°03.5 | 0 | 181°16.8 | S23°15.2 | 0 | 180°54.9 | S23°22.7 | 0 | 180°32.7 | S23°26.1 | 0 | 180°10.5 | S23°25.2 |
| 1 | 198°08.2 | 05.4 | 1 | 197°52.9 | 36.7 | 1 | 197°36.0 | 04.3 | 1 | 197°17.8 | 28.1 | 1 | 196°58.3 | 47.9 | 1 | 196°37.8 | 03.7 | 1 | 196°16.5 | 15.3 | 1 | 195°54.6 | 22.8 | 1 | 195°32.4 | 26.1 | 1 | 195°10.1 | 25.1 |
| 2 | 213°08.0 | 05.9 | 2 | 212°52.7 | 37.1 | 2 | 212°35.8 | 04.7 | 2 | 212°17.5 | 28.4 | 2 | 211°58.0 | 48.1 | 2 | 211°37.5 | 03.8 | 2 | 211°16.2 | 15.5 | 2 | 210°54.3 | 22.9 | 2 | 210°32.1 | 26.1 | 2 | 210°09.8 | 25.1 |
| 3 | 228°07.8 | ·· 06.4 | 3 | 227°52.5 | ·· 37.5 | 3 | 227°35.5 | ·· 05.0 | 3 | 227°17.2 | ·· 28.7 | 3 | 226°57.7 | ·· 48.4 | 3 | 226°37.2 | ·· 04.0 | 3 | 226°15.9 | ·· 15.6 | 3 | 225°54.0 | ·· 23.0 | 3 | 225°31.8 | ·· 26.1 | 3 | 225°09.5 | ·· 25.0 |
| 4 | 243°07.6 | 06.8 | 4 | 242°52.2 | 38.0 | 4 | 242°35.3 | 05.4 | 4 | 242°17.0 | 29.0 | 4 | 241°57.4 | 48.6 | 4 | 241°36.9 | 04.2 | 4 | 241°15.6 | 15.7 | 4 | 240°53.7 | 23.0 | 4 | 240°31.5 | 26.1 | 4 | 240°09.2 | 25.0 |
| 5 | 258°07.4 | 07.3 | 5 | 257°52.0 | 38.4 | 5 | 257°35.1 | 05.7 | 5 | 257°16.7 | 29.3 | 5 | 256°57.2 | 48.9 | 5 | 256°36.6 | 04.4 | 5 | 256°15.3 | 15.8 | 5 | 255°53.4 | 23.1 | 5 | 255°31.2 | 26.1 | 5 | 255°08.9 | 25.0 |
| 6 | 273°07.2 | S21°07.7 | 6 | 272°51.8 | S21°38.8 | 6 | 272°34.8 | S22°06.1 | 6 | 272°16.4 | S22°29.6 | 6 | 271°56.9 | S22°49.1 | 6 | 271°36.3 | S23°04.6 | 6 | 271°15.0 | S23°16.0 | 6 | 270°53.1 | S23°23.2 | 6 | 270°30.9 | S23°26.2 | 6 | 270°08.6 | S23°24.9 |
| 7 | 288°07.0 | 08.2 | 7 | 287°51.6 | 39.2 | 7 | 287°34.6 | 06.4 | 7 | 287°16.2 | 29.9 | 7 | 286°56.6 | 49.4 | 7 | 286°36.0 | 04.8 | 7 | 286°14.7 | 16.1 | 7 | 285°52.8 | 23.2 | 7 | 285°30.6 | 26.2 | 7 | 285°08.3 | 24.9 |
| 8 | 303°06.8 | 08.6 | 8 | 302°51.3 | 39.6 | 8 | 302°34.3 | 06.8 | 8 | 302°15.9 | 30.2 | 8 | 301°56.3 | 49.6 | 8 | 301°35.7 | 05.0 | 8 | 301°14.4 | 16.2 | 8 | 300°52.5 | 23.3 | 8 | 300°30.3 | 26.2 | 8 | 300°08.0 | 24.8 |
| 9 | 318°06.6 | ·· 09.1 | 9 | 317°51.1 | ·· 40.0 | 9 | 317°34.1 | ·· 07.1 | 9 | 317°15.7 | ·· 30.5 | 9 | 316°56.0 | ·· 49.8 | 9 | 316°35.4 | ·· 05.2 | 9 | 316°14.1 | ·· 16.4 | 9 | 315°52.2 | ·· 23.4 | 9 | 315°30.0 | ·· 26.2 | 9 | 315°07.7 | ·· 24.8 |
| 10 | 333°06.4 | 09.6 | 10 | 332°50.9 | 40.4 | 10 | 332°33.8 | 07.5 | 10 | 332°15.4 | 30.8 | 10 | 331°55.8 | 50.1 | 10 | 331°35.1 | 05.3 | 10 | 331°13.8 | 16.5 | 10 | 330°51.9 | 23.5 | 10 | 330°29.7 | 26.2 | 10 | 330°07.4 | 24.7 |
| 11 | 348°06.2 | 10.0 | 11 | 347°50.6 | 40.8 | 11 | 347°33.6 | 07.8 | 11 | 347°15.1 | 31.1 | 11 | 346°55.5 | 50.3 | 11 | 346°34.8 | 05.5 | 11 | 346°13.5 | 16.6 | 11 | 345°51.6 | 23.5 | 11 | 345°29.3 | 26.2 | 11 | 345°07.0 | 24.7 |
| 12 | 3°06.0 | S21°10.5 | 12 | 2°50.4 | S21°41.2 | 12 | 2°33.3 | S22°08.2 | 12 | 2°14.9 | S22°31.3 | 12 | 1°55.2 | S22°50.6 | 12 | 1°34.6 | S23°05.7 | 12 | 1°13.2 | S23°16.7 | 12 | 0°51.2 | S23°23.6 | 12 | 0°29.0 | S23°26.2 | 12 | 0°06.7 | S23°24.6 |
| 13 | 18°05.8 | 10.9 | 13 | 17°50.2 | 41.6 | 13 | 17°33.1 | 08.5 | 13 | 17°14.6 | 31.6 | 13 | 16°54.9 | 50.8 | 13 | 16°34.3 | 05.9 | 13 | 16°12.9 | 16.9 | 13 | 15°50.9 | 23.6 | 13 | 15°28.7 | 26.2 | 13 | 15°06.4 | 24.6 |
| 14 | 33°05.6 | 11.4 | 14 | 32°50.0 | 42.0 | 14 | 32°32.8 | 08.9 | 14 | 32°14.3 | 31.9 | 14 | 31°54.6 | 51.0 | 14 | 31°34.0 | 06.1 | 14 | 31°12.6 | 17.0 | 14 | 30°50.6 | 23.7 | 14 | 30°28.4 | 26.2 | 14 | 30°06.1 | 24.5 |
| 15 | 48°05.4 | ·· 11.8 | 15 | 47°49.7 | ·· 42.4 | 15 | 47°32.6 | ·· 09.2 | 15 | 47°14.1 | ·· 32.2 | 15 | 46°54.4 | ·· 51.3 | 15 | 46°33.7 | ·· 06.3 | 15 | 46°12.3 | ·· 17.1 | 15 | 45°50.3 | ·· 23.8 | 15 | 45°28.1 | ·· 26.2 | 15 | 45°05.8 | ·· 24.5 |
| 16 | 63°05.2 | 12.3 | 16 | 62°49.5 | 42.8 | 16 | 62°32.3 | 09.6 | 16 | 62°13.8 | 32.5 | 16 | 61°54.1 | 51.5 | 16 | 61°33.4 | 06.4 | 16 | 61°12.0 | 17.2 | 16 | 60°50.0 | 23.8 | 16 | 60°27.8 | 26.2 | 16 | 60°05.5 | 24.4 |
| 17 | 78°04.9 | 12.7 | 17 | 77°49.3 | 43.2 | 17 | 77°32.1 | 09.9 | 17 | 77°13.5 | 32.8 | 17 | 76°53.8 | 51.7 | 17 | 76°33.1 | 06.6 | 17 | 76°11.7 | 17.3 | 17 | 75°49.7 | 23.9 | 17 | 75°27.5 | 26.2 | 17 | 75°05.2 | 24.3 |
| 18 | 93°04.7 | S21°13.2 | 18 | 92°49.1 | S21°43.6 | 18 | 92°31.8 | S22°10.3 | 18 | 92°13.3 | S22°33.1 | 18 | 91°53.5 | S22°52.0 | 18 | 91°32.8 | S23°06.8 | 18 | 91°11.4 | S23°17.5 | 18 | 90°49.4 | S23°24.0 | 18 | 90°27.2 | S23°26.2 | 18 | 90°04.9 | S23°24.3 |
| 19 | 108°04.5 | 13.6 | 19 | 107°48.8 | 44.0 | 19 | 107°31.6 | 10.6 | 19 | 107°13.0 | 33.4 | 19 | 106°53.2 | 52.2 | 19 | 106°32.5 | 07.0 | 19 | 106°11.0 | 17.6 | 19 | 105°49.1 | 24.0 | 19 | 105°26.9 | 26.2 | 19 | 105°04.6 | 24.2 |
| 20 | 123°04.3 | 14.1 | 20 | 122°48.6 | 44.4 | 20 | 122°31.3 | 11.0 | 20 | 122°12.7 | 33.7 | 20 | 121°53.0 | 52.4 | 20 | 121°32.2 | 07.1 | 20 | 121°10.7 | 17.7 | 20 | 120°48.8 | 24.1 | 20 | 120°26.6 | 26.2 | 20 | 120°04.3 | 24.2 |
| 21 | 138°04.1 | ·· 14.5 | 21 | 137°48.4 | ·· 44.8 | 21 | 137°31.1 | ·· 11.3 | 21 | 137°12.5 | ·· 34.0 | 21 | 136°52.7 | ·· 52.7 | 21 | 136°31.9 | ·· 07.3 | 21 | 136°10.4 | ·· 17.8 | 21 | 135°48.5 | ·· 24.1 | 21 | 135°26.2 | ·· 26.2 | 21 | 135°04.0 | ·· 24.1 |
| 22 | 153°03.9 | 14.9 | 22 | 152°48.1 | 45.2 | 22 | 152°30.8 | 11.6 | 22 | 152°12.2 | 34.3 | 22 | 151°52.4 | 52.9 | 22 | 151°31.6 | 07.5 | 22 | 151°10.1 | 17.9 | 22 | 150°48.2 | 24.2 | 22 | 150°25.9 | 26.2 | 22 | 150°03.6 | 24.1 |
| 23 | 168°03.7 | 15.4 | 23 | 167°47.9 | 45.6 | 23 | 167°30.6 | 12.0 | 23 | 167°11.9 | 34.5 | 23 | 166°52.1 | 53.1 | 23 | 166°31.3 | 07.7 | 23 | 166°09.8 | 18.1 | 23 | 165°47.9 | 24.3 | 23 | 165°25.6 | 26.2 | 23 | 165°03.3 | 24.0 |
| | SD=16.2′ | $d=0.5'$ | | SD=16.2′ | $d=0.4'$ | | SD=16.2′ | $d=0.4'$ | | SD=16.2′ | $d=0.3'$ | | SD=16.2′ | $d=0.2'$ | | SD=16.2′ | $d=0.2'$ | | SD=16.2′ | $d=0.1'$ | | SD=16.2′ | $d=0.1'$ | | SD=16.3′ | $d=0.0'$ | | SD=16.3′ | $d=0.0'$ |

| 28 | GHA | Dec | 01 | GHA | Dec | 04 | GHA | Dec | 07 | GHA | Dec | 10 | GHA | Dec | 13 | GHA | Dec | 16 | GHA | Dec | 19 | GHA | Dec | 22 | GHA | Dec | 25 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 183°03.5 | S21°15.8 | 0 | 182°47.7 | S21°45.9 | 0 | 182°30.3 | S22°12.3 | 0 | 182°11.7 | S22°34.8 | 0 | 181°51.8 | S22°53.4 | 0 | 181°31.0 | S23°07.8 | 0 | 181°09.5 | S23°18.2 | 0 | 180°47.6 | S23°24.3 | 0 | 180°25.3 | S23°26.2 | 0 | 180°03.0 | S23°23.9 |
| 1 | 198°03.3 | 16.3 | 1 | 197°47.4 | 46.3 | 1 | 197°30.1 | 12.7 | 1 | 197°11.4 | 35.1 | 1 | 196°51.5 | 53.6 | 1 | 196°30.7 | 08.0 | 1 | 196°09.2 | 18.3 | 1 | 195°47.2 | 24.4 | 1 | 195°25.0 | 26.2 | 1 | 195°02.7 | 23.9 |
| 2 | 213°03.1 | 16.7 | 2 | 212°47.2 | 46.7 | 2 | 212°29.8 | 13.0 | 2 | 212°11.1 | 35.4 | 2 | 211°51.3 | 53.8 | 2 | 211°30.4 | 08.2 | 2 | 211°08.9 | 18.4 | 2 | 210°46.9 | 24.4 | 2 | 210°24.7 | 26.2 | 2 | 210°02.4 | 23.8 |
| 3 | 228°02.9 | ·· 17.2 | 3 | 227°47.0 | ·· 47.1 | 3 | 227°29.6 | ·· 13.3 | 3 | 227°10.9 | ·· 35.7 | 3 | 226°51.0 | ·· 54.0 | 3 | 226°30.2 | ·· 08.3 | 3 | 226°08.6 | ·· 18.5 | 3 | 225°46.6 | ·· 24.5 | 3 | 225°24.4 | ·· 26.2 | 3 | 225°02.1 | ·· 23.8 |
| 4 | 243°02.7 | 17.6 | 4 | 242°46.8 | 47.5 | 4 | 242°29.3 | 13.7 | 4 | 242°10.6 | 36.0 | 4 | 241°50.7 | 54.3 | 4 | 241°29.9 | 08.5 | 4 | 241°08.3 | 18.6 | 4 | 240°46.3 | 24.5 | 4 | 240°24.1 | 26.2 | 4 | 240°01.8 | 23.7 |
| 5 | 258°02.4 | 18.0 | 5 | 257°46.5 | 47.9 | 5 | 257°29.1 | 14.0 | 5 | 257°10.3 | 36.2 | 5 | 256°50.4 | 54.5 | 5 | 256°29.6 | 08.7 | 5 | 256°08.0 | 18.7 | 5 | 255°46.0 | 24.6 | 5 | 255°23.8 | 26.2 | 5 | 255°01.5 | 23.6 |
| 6 | 273°02.2 | S21°18.5 | 6 | 272°46.3 | S21°48.3 | 6 | 272°28.8 | S22°14.3 | 6 | 272°10.1 | S22°36.5 | 6 | 271°50.1 | S22°54.7 | 6 | 271°29.3 | S23°08.9 | 6 | 271°07.7 | S23°18.8 | 6 | 270°45.7 | S23°24.6 | 6 | 270°23.5 | S23°26.2 | 6 | 270°01.2 | S23°23.6 |
| 7 | 288°02.0 | 18.9 | 7 | 287°46.1 | 48.7 | 7 | 287°28.6 | 14.7 | 7 | 287°09.8 | 36.8 | 7 | 286°49.8 | 55.0 | 7 | 286°29.0 | 09.0 | 7 | 286°07.4 | 19.0 | 7 | 285°45.4 | 24.7 | 7 | 285°23.1 | 26.2 | 7 | 285°00.9 | 23.5 |
| 8 | 303°01.8 | 19.4 | 8 | 302°45.8 | 49.1 | 8 | 302°28.3 | 15.0 | 8 | 302°09.5 | 37.1 | 8 | 301°49.6 | 55.2 | 8 | 301°28.7 | 09.2 | 8 | 301°07.1 | 19.1 | 8 | 300°45.1 | 24.7 | 8 | 300°22.8 | 26.2 | 8 | 300°00.6 | 23.4 |
| 9 | 318°01.6 | ·· 19.8 | 9 | 317°45.6 | ·· 49.4 | 9 | 317°28.1 | ·· 15.3 | 9 | 317°09.2 | ·· 37.4 | 9 | 316°49.3 | ·· 55.4 | 9 | 316°28.4 | ·· 09.4 | 9 | 316°06.8 | ·· 19.2 | 9 | 315°44.8 | ·· 24.8 | 9 | 315°22.5 | ·· 26.2 | 9 | 315°00.2 | ·· 23.4 |
| 10 | 333°01.4 | 20.2 | 10 | 332°45.4 | 49.8 | 10 | 332°27.8 | 15.7 | 10 | 332°09.0 | 37.6 | 10 | 331°49.0 | 55.6 | 10 | 331°28.1 | 09.5 | 10 | 331°06.5 | 19.3 | 10 | 330°44.5 | 24.8 | 10 | 330°22.2 | 26.2 | 10 | 329°59.9 | 23.3 |
| 11 | 348°01.2 | 20.7 | 11 | 347°45.1 | 50.2 | 11 | 347°27.6 | 16.0 | 11 | 347°08.7 | 37.9 | 11 | 346°48.7 | 55.8 | 11 | 346°27.8 | 09.7 | 11 | 346°06.2 | 19.4 | 11 | 345°44.2 | 24.9 | 11 | 345°21.9 | 26.2 | 11 | 344°59.6 | 23.2 |
| 12 | 3°01.0 | S21°21.1 | 12 | 2°44.9 | S21°50.6 | 12 | 2°27.3 | S22°16.3 | 12 | 2°08.4 | S22°38.2 | 12 | 1°48.4 | S22°56.1 | 12 | 1°27.5 | S23°09.8 | 12 | 1°05.9 | S23°19.5 | 12 | 0°43.9 | S23°24.9 | 12 | 0°21.6 | S23°26.2 | 12 | 359°59.3 | S23°23.1 |
| 13 | 18°00.8 | 21.5 | 13 | 17°44.7 | 51.0 | 13 | 17°27.1 | 16.7 | 13 | 17°08.2 | 38.5 | 13 | 16°48.1 | 56.3 | 13 | 16°27.2 | 10.0 | 13 | 16°05.6 | 19.6 | 13 | 15°43.6 | 25.0 | 13 | 15°21.3 | 26.1 | 13 | 14°59.0 | 23.1 |
| 14 | 33°00.5 | 22.0 | 14 | 32°44.4 | 51.4 | 14 | 32°26.8 | 17.0 | 14 | 32°07.9 | 38.7 | 14 | 31°47.8 | 56.5 | 14 | 31°26.9 | 10.2 | 14 | 31°05.3 | 19.7 | 14 | 30°43.2 | 25.0 | 14 | 30°21.0 | 26.1 | 14 | 29°58.7 | 23.0 |
| 15 | 48°00.3 | ·· 22.4 | 15 | 47°44.2 | ·· 51.8 | 15 | 47°26.6 | ·· 17.3 | 15 | 47°07.6 | ·· 39.0 | 15 | 46°47.6 | ·· 56.7 | 15 | 46°26.6 | ·· 10.3 | 15 | 46°05.0 | ·· 19.8 | 15 | 45°42.9 | ·· 25.1 | 15 | 45°20.7 | ·· 26.1 | 15 | 44°58.4 | ·· 22.9 |
| 16 | 63°00.1 | 22.8 | 16 | 62°43.9 | 52.1 | 16 | 62°26.3 | 17.7 | 16 | 62°07.3 | 39.3 | 16 | 61°47.3 | 56.9 | 16 | 61°26.3 | 10.5 | 16 | 61°04.7 | 19.9 | 16 | 60°42.6 | 25.1 | 16 | 60°20.4 | 26.1 | 16 | 59°58.1 | 22.9 |
| 17 | 77°59.9 | 23.3 | 17 | 77°43.7 | 52.5 | 17 | 77°26.0 | 18.0 | 17 | 77°07.1 | 39.6 | 17 | 76°47.0 | 57.2 | 17 | 76°26.0 | 10.7 | 17 | 76°04.4 | 20.0 | 17 | 75°42.3 | 25.2 | 17 | 75°20.1 | 26.1 | 17 | 74°57.8 | 22.8 |
| 18 | 92°59.7 | S21°23.7 | 18 | 92°43.5 | S21°52.9 | 18 | 92°25.8 | S22°18.3 | 18 | 92°06.8 | S22°39.8 | 18 | 91°46.7 | S22°57.4 | 18 | 91°25.7 | S23°10.8 | 18 | 91°04.1 | S23°20.1 | 18 | 90°42.0 | S23°25.2 | 18 | 90°19.7 | S23°26.1 | 18 | 89°57.5 | S23°22.7 |
| 19 | 107°59.5 | 24.1 | 19 | 107°43.2 | 53.3 | 19 | 107°25.5 | 18.6 | 19 | 107°06.5 | 40.1 | 19 | 106°46.4 | 57.6 | 19 | 106°25.4 | 11.0 | 19 | 106°03.8 | 20.2 | 19 | 105°41.7 | 25.2 | 19 | 105°19.4 | 26.0 | 19 | 104°57.2 | 22.6 |
| 20 | 122°59.3 | 24.6 | 20 | 122°43.0 | 53.7 | 20 | 122°25.3 | 19.0 | 20 | 122°06.3 | 40.4 | 20 | 121°46.1 | 57.8 | 20 | 121°25.1 | 11.1 | 20 | 121°03.5 | 20.3 | 20 | 120°41.4 | 25.3 | 20 | 120°19.1 | 26.0 | 20 | 119°56.9 | 22.6 |
| 21 | 137°59.0 | ·· 25.0 | 21 | 137°42.8 | ·· 54.0 | 21 | 137°25.0 | ·· 19.3 | 21 | 137°06.0 | ·· 40.6 | 21 | 136°45.8 | ·· 58.0 | 21 | 136°24.8 | ·· 11.3 | 21 | 136°03.2 | ·· 20.4 | 21 | 135°41.1 | ·· 25.3 | 21 | 135°18.8 | ·· 26.0 | 21 | 134°56.5 | ·· 22.5 |
| 22 | 152°58.8 | 25.4 | 22 | 152°42.5 | 54.4 | 22 | 152°24.8 | 19.6 | 22 | 152°05.7 | 40.9 | 22 | 151°45.6 | 58.2 | 22 | 151°24.5 | 11.4 | 22 | 151°02.9 | 20.5 | 22 | 150°40.8 | 25.4 | 22 | 150°18.5 | 26.0 | 22 | 149°56.2 | 22.4 |
| 23 | 167°58.6 | 25.9 | 23 | 167°42.3 | 54.8 | 23 | 167°24.5 | 19.9 | 23 | 167°05.4 | 41.2 | 23 | 166°45.3 | 58.4 | 23 | 166°24.2 | 11.6 | 23 | 166°02.6 | 20.6 | 23 | 165°40.5 | 25.4 | 23 | 165°18.2 | 26.0 | 23 | 164°55.9 | 22.3 |
| | SD=16.2′ | $d=0.4'$ | | SD=16.2′ | $d=0.4'$ | | SD=16.2′ | $d=0.3'$ | | SD=16.2′ | $d=0.3'$ | | SD=16.2′ | $d=0.2'$ | | SD=16.2′ | $d=0.2'$ | | SD=16.2′ | $d=0.1'$ | | SD=16.2′ | $d=0.1'$ | | SD=16.3′ | $d=0.0'$ | | SD=16.3′ | $d=0.1'$ |

| 29 | GHA | Dec | 02 | GHA | Dec | 05 | GHA | Dec | 08 | GHA | Dec | 11 | GHA | Dec | 14 | GHA | Dec | 17 | GHA | Dec | 20 | GHA | Dec | 23 | GHA | Dec | 26 | GHA | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 182°58.4 | S21°26.3 | 0 | 182°42.1 | S21°55.2 | 0 | 182°24.3 | S22°20.3 | 0 | 182°05.2 | S22°41.5 | 0 | 181°45.0 | S22°58.6 | 0 | 181°23.9 | S23°11.7 | 0 | 181°02.3 | S23°20.7 | 0 | 180°40.2 | S23°25.4 | 0 | 180°17.9 | S23°25.9 | 0 | 179°55.6 | S23°22.2 |
| 1 | 197°58.2 | 26.7 | 1 | 197°41.8 | 55.5 | 1 | 197°24.0 | 20.6 | 1 | 197°04.9 | 41.7 | 1 | 196°44.7 | 58.9 | 1 | 196°23.6 | 11.9 | 1 | 196°01.9 | 20.8 | 1 | 195°39.9 | 25.5 | 1 | 195°17.6 | 25.9 | 1 | 194°55.3 | 22.2 |
| 2 | 212°58.0 | 27.1 | 2 | 212°41.6 | 55.9 | 2 | 212°23.7 | 20.9 | 2 | 212°04.6 | 42.0 | 2 | 211°44.4 | 59.1 | 2 | 211°23.3 | 12.0 | 2 | 211°01.6 | 20.9 | 2 | 210°39.5 | 25.5 | 2 | 210°17.3 | 25.9 | 2 | 209°55.0 | 22.1 |
| 3 | 227°57.7 | ·· 27.6 | 3 | 227°41.3 | ·· 56.3 | 3 | 227°23.5 | ·· 21.2 | 3 | 227°04.3 | ·· 42.2 | 3 | 226°44.1 | ·· 59.3 | 3 | 226°23.0 | ·· 12.2 | 3 | 226°01.3 | ·· 21.0 | 3 | 225°39.2 | ·· 25.5 | 3 | 225°17.0 | ·· 25.9 | 3 | 224°54.7 | ·· 22.0 |
| 4 | 242°57.5 | 28.0 | 4 | 242°41.1 | 56.7 | 4 | 242°23.2 | 21.5 | 4 | 242°04.1 | 42.5 | 4 | 241°43.8 | 59.5 | 4 | 241°22.7 | 12.3 | 4 | 241°01.0 | 21.1 | 4 | 240°38.9 | 25.6 | 4 | 240°16.6 | 25.8 | 4 | 239°54.4 | 21.9 |
| 5 | 257°57.3 | 28.4 | 5 | 257°40.9 | 57.0 | 5 | 257°23.0 | 21.9 | 5 | 257°03.8 | 42.8 | 5 | 256°43.6 | 59.7 | 5 | 256°22.5 | 12.5 | 5 | 256°00.7 | 21.2 | 5 | 255°38.6 | 25.6 | 5 | 255°16.3 | 25.8 | 5 | 254°54.1 | 21.8 |
| 6 | 272°57.1 | S21°28.8 | 6 | 272°40.6 | S21°57.4 | 6 | 272°22.7 | S22°22.2 | 6 | 272°03.5 | S22°43.0 | 6 | 271°43.3 | S22°59.9 | 6 | 271°22.2 | S23°12.6 | 6 | 271°00.4 | S23°21.2 | 6 | 270°38.3 | S23°25.6 | 6 | 270°16.0 | S23°25.8 | 6 | 269°53.8 | S23°21.7 |
| 7 | 287°56.9 | 29.2 | 7 | 287°40.4 | 57.8 | 7 | 287°22.5 | 22.5 | 7 | 287°03.2 | 43.3 | 7 | 286°43.0 | 23°00.1 | 7 | 286°21.9 | 12.8 | 7 | 286°00.1 | 21.3 | 7 | 285°38.0 | 25.7 | 7 | 285°15.7 | 25.8 | 7 | 284°53.5 | 21.7 |
| 8 | 302°56.7 | 29.7 | 8 | 302°40.2 | 58.1 | 8 | 302°22.2 | 22.8 | 8 | 302°03.0 | 43.6 | 8 | 301°42.7 | 00.3 | 8 | 301°21.6 | 12.9 | 8 | 300°59.8 | 21.4 | 8 | 300°37.7 | 25.7 | 8 | 300°15.4 | 25.7 | 8 | 299°53.2 | 21.6 |
| 9 | 317°56.4 | ·· 30.1 | 9 | 317°39.9 | ·· 58.5 | 9 | 317°21.9 | ·· 23.1 | 9 | 317°02.7 | ·· 43.8 | 9 | 316°42.4 | ·· 00.5 | 9 | 316°21.3 | ·· 13.1 | 9 | 315°59.5 | ·· 21.5 | 9 | 315°37.4 | ·· 25.7 | 9 | 315°15.1 | ·· 25.7 | 9 | 314°52.9 | ·· 21.5 |
| 10 | 332°56.2 | 30.5 | 10 | 332°39.7 | 58.9 | 10 | 332°21.7 | 23.4 | 10 | 332°02.4 | 44.1 | 10 | 331°42.1 | 00.7 | 10 | 331°21.0 | 13.2 | 10 | 330°59.2 | 21.6 | 10 | 330°37.1 | 25.8 | 10 | 330°14.8 | 25.7 | 10 | 329°52.5 | 21.4 |
| 11 | 347°56.0 | 30.9 | 11 | 347°39.4 | 59.2 | 11 | 347°21.4 | 23.8 | 11 | 347°02.1 | 44.3 | 11 | 346°41.8 | 00.9 | 11 | 346°20.7 | 13.4 | 11 | 345°58.9 | 21.7 | 11 | 345°36.8 | 25.8 | 11 | 345°14.5 | 25.7 | 11 | 344°52.2 | 21.3 |
| 12 | 2°55.8 | S21°31.3 | 12 | 2°39.2 | S21°59.6 | 12 | 2°21.2 | S22°24.1 | 12 | 2°01.9 | S22°44.6 | 12 | 1°41.5 | S23°01.1 | 12 | 1°20.4 | S23°13.5 | 12 | 0°58.6 | S23°21.8 | 12 | 0°36.5 | S23°25.8 | 12 | 0°14.2 | S23°25.6 | 12 | 359°51.9 | S23°21.2 |
| 13 | 17°55.6 | 31.8 | 13 | 17°38.9 | 22°00.0 | 13 | 17°20.9 | 24.4 | 13 | 17°01.6 | 44.9 | 13 | 16°41.2 | 01.3 | 13 | 16°20.1 | 13.7 | 13 | 15°58.3 | 21.9 | 13 | 15°36.1 | 25.8 | 13 | 15°13.9 | 25.6 | 13 | 14°51.6 | 21.1 |
| 14 | 32°55.3 | 32.2 | 14 | 32°38.7 | 00.3 | 14 | 32°20.6 | 24.7 | 14 | 32°01.3 | 45.1 | 14 | 31°41.0 | 01.5 | 14 | 31°19.8 | 13.8 | 14 | 30°58.0 | 21.9 | 14 | 30°35.8 | 25.9 | 14 | 30°13.5 | 25.6 | 14 | 29°51.3 | 21.0 |
| 15 | 47°55.1 | ·· 32.6 | 15 | 47°38.5 | ·· 00.7 | 15 | 47°20.4 | ·· 25.0 | 15 | 47°01.0 | ·· 45.4 | 15 | 46°40.7 | ·· 01.7 | 15 | 46°19.5 | ·· 14.0 | 15 | 45°57.7 | ·· 22.0 | 15 | 45°35.5 | ·· 25.9 | 15 | 45°13.2 | ·· 25.5 | 15 | 44°51.0 | ·· 20.9 |
| 16 | 62°54.9 | 33.0 | 16 | 62°38.2 | 01.1 | 16 | 62°20.1 | 25.3 | 16 | 62°00.8 | 45.6 | 16 | 61°40.4 | 01.9 | 16 | 61°19.2 | 14.1 | 16 | 60°57.4 | 22.1 | 16 | 60°35.2 | 25.9 | 16 | 60°12.9 | 25.5 | 16 | 59°50.7 | 20.8 |
| 17 | 77°54.7 | 33.4 | 17 | 77°38.0 | 01.4 | 17 | 77°19.9 | 25.6 | 17 | 77°00.5 | 45.9 | 17 | 76°40.1 | 02.1 | 17 | 76°18.9 | 14.2 | 17 | 75°57.1 | 22.2 | 17 | 75°34.9 | 25.9 | 17 | 75°12.6 | 25.4 | 17 | 74°50.4 | 20.7 |
| 18 | 92°54.5 | S21°33.8 | 18 | 92°37.7 | S22°01.8 | 18 | 92°19.6 | S22°25.9 | 18 | 92°00.2 | S22°46.1 | 18 | 91°39.8 | S23°02.3 | 18 | 91°18.6 | S23°14.4 | 18 | 90°56.8 | S23°22.3 | 18 | 90°34.6 | S23°26.0 | 18 | 90°12.3 | S23°25.4 | 18 | 89°50.1 | S23°20.6 |
| 19 | 107°54.2 | 34.3 | 19 | 107°37.5 | 02.2 | 19 | 107°19.3 | 26.2 | 19 | 106°59.9 | 46.4 | 19 | 106°39.5 | 02.5 | 19 | 106°18.3 | 14.5 | 19 | 105°56.5 | 22.3 | 19 | 105°34.3 | 26.0 | 19 | 105°12.0 | 25.4 | 19 | 104°49.8 | 20.6 |
| 20 | 122°54.0 | 34.7 | 20 | 122°37.3 | 02.5 | 20 | 122°19.1 | 26.5 | 20 | 121°59.7 | 46.6 | 20 | 121°39.2 | 02.7 | 20 | 121°18.0 | 14.6 | 20 | 120°56.1 | 22.4 | 20 | 120°34.0 | 26.0 | 20 | 120°11.7 | 25.3 | 20 | 119°49.5 | 20.5 |
| 21 | 137°53.8 | ·· 35.1 | 21 | 137°37.0 | ·· 02.9 | 21 | 137°18.8 | ·· 26.8 | 21 | 136°59.4 | ·· 46.9 | 21 | 136°38.9 | ·· 02.9 | 21 | 136°17.7 | ·· 14.8 | 21 | 135°55.8 | ·· 22.5 | 21 | 135°33.7 | ·· 26.0 | 21 | 135°11.4 | ·· 25.3 | 21 | 134°49.2 | ·· 20.4 |
| 22 | 152°53.6 | 35.5 | 22 | 152°36.8 | 03.2 | 22 | 152°18.6 | 27.2 | 22 | 151°59.1 | 47.1 | 22 | 151°38.6 | 03.1 | 22 | 151°17.4 | 14.9 | 22 | 150°55.5 | 22.6 | 22 | 150°33.4 | 26.0 | 22 | 150°11.1 | 25.3 | 22 | 149°48.9 | 20.3 |
| 23 | 167°53.3 | 35.9 | 23 | 167°36.5 | 03.6 | 23 | 167°18.3 | 27.5 | 23 | 166°58.8 | 47.4 | 23 | 166°38.3 | 03.3 | 23 | 166°17.1 | 15.1 | 23 | 165°55.2 | 22.7 | 23 | 165°33.1 | 26.1 | 23 | 165°10.8 | 25.2 | 23 | 164°48.5 | 20.2 |
| | SD=16.2′ | $d=0.4'$ | | SD=16.2′ | $d=0.4'$ | | SD=16.2′ | $d=0.3'$ | | SD=16.2′ | $d=0.3'$ | | SD=16.2′ | $d=0.2'$ | | SD=16.2′ | $d=0.2'$ | | SD=16.2′ | $d=0.1'$ | | SD=16.2′ | $d=0.0'$ | | SD=16.3′ | $d=0.0'$ | | SD=16.3′ | $d=0.1'$ |

# 2026 December 27 to Dec. 31 UT

| 27 | GHA | Dec |
|---|---|---|
| 0 | 179°48.2 | S23°20.1 |
| 1 | 194°47.9 | 20.0 |
| 2 | 209°47.6 | 19.9 |
| 3 | 224°47.3 | ·· 19.8 |
| 4 | 239°47.0 | 19.7 |
| 5 | 254°46.7 | 19.6 |
| 6 | 269°46.4 | S23°19.4 |
| 7 | 284°46.1 | 19.3 |
| 8 | 299°45.8 | 19.2 |
| 9 | 314°45.5 | ·· 19.1 |
| 10 | 329°45.2 | 19.0 |
| 11 | 344°44.9 | 18.9 |
| 12 | 359°44.6 | S23°18.8 |
| 13 | 14°44.3 | 18.7 |
| 14 | 29°43.9 | 18.6 |
| 15 | 44°43.6 | ·· 18.5 |
| 16 | 59°43.3 | 18.4 |
| 17 | 74°43.0 | 18.2 |
| 18 | 89°42.7 | S23°18.1 |
| 19 | 104°42.4 | 18.0 |
| 20 | 119°42.1 | 17.9 |
| 21 | 134°41.8 | ·· 17.8 |
| 22 | 149°41.5 | 17.7 |
| 23 | 164°41.2 | 17.5 |
| | SD=16.3′ | d = 0.1′ |

| 30 | GHA | Dec |
|---|---|---|
| 0 | 179°26.3 | S23°10.7 |
| 1 | 194°26.0 | 10.6 |
| 2 | 209°25.7 | 10.4 |
| 3 | 224°25.4 | ·· 10.3 |
| 4 | 239°25.1 | 10.1 |
| 5 | 254°24.8 | 09.9 |
| 6 | 269°24.5 | S23°09.8 |
| 7 | 284°24.2 | 09.6 |
| 8 | 299°23.9 | 09.4 |
| 9 | 314°23.6 | ·· 09.3 |
| 10 | 329°23.3 | 09.1 |
| 11 | 344°23.0 | 08.9 |
| 12 | 359°22.7 | S23°08.8 |
| 13 | 14°22.4 | 08.6 |
| 14 | 29°22.1 | 08.4 |
| 15 | 44°21.8 | ·· 08.3 |
| 16 | 59°21.5 | 08.1 |
| 17 | 74°21.2 | 07.9 |
| 18 | 89°20.9 | S23°07.7 |
| 19 | 104°20.6 | 07.6 |
| 20 | 119°20.3 | 07.4 |
| 21 | 134°20.0 | ·· 07.2 |
| 22 | 149°19.7 | 07.0 |
| 23 | 164°19.4 | 06.9 |
| | SD=16.3′ | d = 0.2′ |

| 28 | GHA | Dec |
|---|---|---|
| 0 | 179°40.9 | S23°17.4 |
| 1 | 194°40.6 | 17.3 |
| 2 | 209°40.3 | 17.2 |
| 3 | 224°40.0 | ·· 17.1 |
| 4 | 239°39.7 | 16.9 |
| 5 | 254°39.4 | 16.8 |
| 6 | 269°39.1 | S23°16.7 |
| 7 | 284°38.8 | 16.6 |
| 8 | 299°38.4 | 16.4 |
| 9 | 314°38.1 | ·· 16.3 |
| 10 | 329°37.8 | 16.2 |
| 11 | 344°37.5 | 16.1 |
| 12 | 359°37.2 | S23°15.9 |
| 13 | 14°36.9 | 15.8 |
| 14 | 29°36.6 | 15.7 |
| 15 | 44°36.3 | ·· 15.5 |
| 16 | 59°36.0 | 15.4 |
| 17 | 74°35.7 | 15.3 |
| 18 | 89°35.4 | S23°15.1 |
| 19 | 104°35.1 | 15.0 |
| 20 | 119°34.8 | 14.9 |
| 21 | 134°34.5 | ·· 14.7 |
| 22 | 149°34.2 | 14.6 |
| 23 | 164°33.9 | 14.4 |
| | SD=16.3′ | d = 0.1′ |

| 31 | GHA | Dec |
|---|---|---|
| 0 | 179°19.1 | S23°06.7 |
| 1 | 194°18.8 | 06.5 |
| 2 | 209°18.5 | 06.3 |
| 3 | 224°18.2 | ·· 06.2 |
| 4 | 239°17.9 | 06.0 |
| 5 | 254°17.6 | 05.8 |
| 6 | 269°17.3 | S23°05.6 |
| 7 | 284°17.0 | 05.4 |
| 8 | 299°16.7 | 05.2 |
| 9 | 314°16.4 | ·· 05.1 |
| 10 | 329°16.1 | 04.9 |
| 11 | 344°15.8 | 04.7 |
| 12 | 359°15.5 | S23°04.5 |
| 13 | 14°15.2 | 04.3 |
| 14 | 29°14.9 | 04.1 |
| 15 | 44°14.6 | ·· 03.9 |
| 16 | 59°14.3 | 03.7 |
| 17 | 74°14.0 | 03.6 |
| 18 | 89°13.7 | S23°03.4 |
| 19 | 104°13.4 | 03.2 |
| 20 | 119°13.1 | 03.0 |
| 21 | 134°12.8 | ·· 02.8 |
| 22 | 149°12.5 | 02.6 |
| 23 | 164°12.2 | 02.4 |
| | SD=16.3′ | d = 0.2′ |

| 29 | GHA | Dec |
|---|---|---|
| 0 | 179°33.6 | S23°14.3 |
| 1 | 194°33.3 | 14.2 |
| 2 | 209°33.0 | 14.0 |
| 3 | 224°32.7 | ·· 13.9 |
| 4 | 239°32.4 | 13.7 |
| 5 | 254°32.1 | 13.6 |
| 6 | 269°31.8 | S23°13.5 |
| 7 | 284°31.4 | 13.3 |
| 8 | 299°31.1 | 13.2 |
| 9 | 314°30.8 | ·· 13.0 |
| 10 | 329°30.5 | 12.9 |
| 11 | 344°30.2 | 12.7 |
| 12 | 359°29.9 | S23°12.6 |
| 13 | 14°29.6 | 12.4 |
| 14 | 29°29.3 | 12.3 |
| 15 | 44°29.0 | ·· 12.1 |
| 16 | 59°28.7 | 12.0 |
| 17 | 74°28.4 | 11.8 |
| 18 | 89°28.1 | S23°11.7 |
| 19 | 104°27.8 | 11.5 |
| 20 | 119°27.5 | 11.4 |
| 21 | 134°27.2 | ·· 11.2 |
| 22 | 149°26.9 | 11.1 |
| 23 | 164°26.6 | 10.9 |
| | SD=16.3′ | d = 0.1′ |

# Increments and Corrections

| m 0 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 0°00.0 | 0°00.0 | 0°00.0 | 0.0 - 0.0 | 6.0 - 0.1 | 12.0 - 0.1 |
| 1 | 0°00.3 | 0°00.3 | 0°00.2 | 0.1 - 0.0 | 6.1 - 0.1 | 12.1 - 0.1 |
| 2 | 0°00.5 | 0°00.5 | 0°00.5 | 0.2 - 0.0 | 6.2 - 0.1 | 12.2 - 0.1 |
| 3 | 0°00.8 | 0°00.8 | 0°00.7 | 0.3 - 0.0 | 6.3 - 0.1 | 12.3 - 0.1 |
| 4 | 0°01.0 | 0°01.0 | 0°01.0 | 0.4 - 0.0 | 6.4 - 0.1 | 12.4 - 0.1 |
| 5 | 0°01.3 | 0°01.3 | 0°01.2 | 0.5 - 0.0 | 6.5 - 0.1 | 12.5 - 0.1 |
| 6 | 0°01.5 | 0°01.5 | 0°01.4 | 0.6 - 0.0 | 6.6 - 0.1 | 12.6 - 0.1 |
| 7 | 0°01.8 | 0°01.8 | 0°01.7 | 0.7 - 0.0 | 6.7 - 0.1 | 12.7 - 0.1 |
| 8 | 0°02.0 | 0°02.0 | 0°01.9 | 0.8 - 0.0 | 6.8 - 0.1 | 12.8 - 0.1 |
| 9 | 0°02.3 | 0°02.3 | 0°02.1 | 0.9 - 0.0 | 6.9 - 0.1 | 12.9 - 0.1 |
| 10 | 0°02.5 | 0°02.5 | 0°02.4 | 1.0 - 0.0 | 7.0 - 0.1 | 13.0 - 0.1 |
| 11 | 0°02.8 | 0°02.8 | 0°02.6 | 1.1 - 0.0 | 7.1 - 0.1 | 13.1 - 0.1 |
| 12 | 0°03.0 | 0°03.0 | 0°02.9 | 1.2 - 0.0 | 7.2 - 0.1 | 13.2 - 0.1 |
| 13 | 0°03.3 | 0°03.3 | 0°03.1 | 1.3 - 0.0 | 7.3 - 0.1 | 13.3 - 0.1 |
| 14 | 0°03.5 | 0°03.5 | 0°03.3 | 1.4 - 0.0 | 7.4 - 0.1 | 13.4 - 0.1 |
| 15 | 0°03.8 | 0°03.8 | 0°03.6 | 1.5 - 0.0 | 7.5 - 0.1 | 13.5 - 0.1 |
| 16 | 0°04.0 | 0°04.0 | 0°03.8 | 1.6 - 0.0 | 7.6 - 0.1 | 13.6 - 0.1 |
| 17 | 0°04.3 | 0°04.3 | 0°04.1 | 1.7 - 0.0 | 7.7 - 0.1 | 13.7 - 0.1 |
| 18 | 0°04.5 | 0°04.5 | 0°04.3 | 1.8 - 0.0 | 7.8 - 0.1 | 13.8 - 0.1 |
| 19 | 0°04.8 | 0°04.8 | 0°04.5 | 1.9 - 0.0 | 7.9 - 0.1 | 13.9 - 0.1 |
| 20 | 0°05.0 | 0°05.0 | 0°04.8 | 2.0 - 0.0 | 8.0 - 0.1 | 14.0 - 0.1 |
| 21 | 0°05.3 | 0°05.3 | 0°05.0 | 2.1 - 0.0 | 8.1 - 0.1 | 14.1 - 0.1 |
| 22 | 0°05.5 | 0°05.5 | 0°05.2 | 2.2 - 0.0 | 8.2 - 0.1 | 14.2 - 0.1 |
| 23 | 0°05.8 | 0°05.8 | 0°05.5 | 2.3 - 0.0 | 8.3 - 0.1 | 14.3 - 0.1 |
| 24 | 0°06.0 | 0°06.0 | 0°05.7 | 2.4 - 0.0 | 8.4 - 0.1 | 14.4 - 0.1 |
| 25 | 0°06.3 | 0°06.3 | 0°06.0 | 2.5 - 0.0 | 8.5 - 0.1 | 14.5 - 0.1 |
| 26 | 0°06.5 | 0°06.5 | 0°06.2 | 2.6 - 0.0 | 8.6 - 0.1 | 14.6 - 0.1 |
| 27 | 0°06.8 | 0°06.8 | 0°06.4 | 2.7 - 0.0 | 8.7 - 0.1 | 14.7 - 0.1 |
| 28 | 0°07.0 | 0°07.0 | 0°06.7 | 2.8 - 0.0 | 8.8 - 0.1 | 14.8 - 0.1 |
| 29 | 0°07.3 | 0°07.3 | 0°06.9 | 2.9 - 0.0 | 8.9 - 0.1 | 14.9 - 0.1 |
| 30 | 0°07.5 | 0°07.5 | 0°07.2 | 3.0 - 0.0 | 9.0 - 0.1 | 15.0 - 0.1 |
| 31 | 0°07.8 | 0°07.8 | 0°07.4 | 3.1 - 0.0 | 9.1 - 0.1 | 15.1 - 0.1 |
| 32 | 0°08.0 | 0°08.0 | 0°07.6 | 3.2 - 0.0 | 9.2 - 0.1 | 15.2 - 0.1 |
| 33 | 0°08.3 | 0°08.3 | 0°07.9 | 3.3 - 0.0 | 9.3 - 0.1 | 15.3 - 0.1 |
| 34 | 0°08.5 | 0°08.5 | 0°08.1 | 3.4 - 0.0 | 9.4 - 0.1 | 15.4 - 0.1 |
| 35 | 0°08.8 | 0°08.8 | 0°08.4 | 3.5 - 0.0 | 9.5 - 0.1 | 15.5 - 0.1 |
| 36 | 0°09.0 | 0°09.0 | 0°08.6 | 3.6 - 0.0 | 9.6 - 0.1 | 15.6 - 0.1 |
| 37 | 0°09.3 | 0°09.3 | 0°08.8 | 3.7 - 0.0 | 9.7 - 0.1 | 15.7 - 0.1 |
| 38 | 0°09.5 | 0°09.5 | 0°09.1 | 3.8 - 0.0 | 9.8 - 0.1 | 15.8 - 0.1 |
| 39 | 0°09.8 | 0°09.8 | 0°09.3 | 3.9 - 0.0 | 9.9 - 0.1 | 15.9 - 0.1 |
| 40 | 0°10.0 | 0°10.0 | 0°09.5 | 4.0 - 0.0 | 10.0 - 0.1 | 16.0 - 0.1 |
| 41 | 0°10.3 | 0°10.3 | 0°09.8 | 4.1 - 0.0 | 10.1 - 0.1 | 16.1 - 0.1 |
| 42 | 0°10.5 | 0°10.5 | 0°10.0 | 4.2 - 0.0 | 10.2 - 0.1 | 16.2 - 0.1 |
| 43 | 0°10.8 | 0°10.8 | 0°10.3 | 4.3 - 0.0 | 10.3 - 0.1 | 16.3 - 0.1 |
| 44 | 0°11.0 | 0°11.0 | 0°10.5 | 4.4 - 0.0 | 10.4 - 0.1 | 16.4 - 0.1 |
| 45 | 0°11.3 | 0°11.3 | 0°10.7 | 4.5 - 0.0 | 10.5 - 0.1 | 16.5 - 0.1 |
| 46 | 0°11.5 | 0°11.5 | 0°11.0 | 4.6 - 0.0 | 10.6 - 0.1 | 16.6 - 0.1 |
| 47 | 0°11.8 | 0°11.8 | 0°11.2 | 4.7 - 0.0 | 10.7 - 0.1 | 16.7 - 0.1 |
| 48 | 0°12.0 | 0°12.0 | 0°11.5 | 4.8 - 0.0 | 10.8 - 0.1 | 16.8 - 0.1 |
| 49 | 0°12.3 | 0°12.3 | 0°11.7 | 4.9 - 0.0 | 10.9 - 0.1 | 16.9 - 0.1 |
| 50 | 0°12.5 | 0°12.5 | 0°11.9 | 5.0 - 0.0 | 11.0 - 0.1 | 17.0 - 0.1 |
| 51 | 0°12.8 | 0°12.8 | 0°12.2 | 5.1 - 0.0 | 11.1 - 0.1 | 17.1 - 0.1 |
| 52 | 0°13.0 | 0°13.0 | 0°12.4 | 5.2 - 0.0 | 11.2 - 0.1 | 17.2 - 0.1 |
| 53 | 0°13.3 | 0°13.3 | 0°12.6 | 5.3 - 0.0 | 11.3 - 0.1 | 17.3 - 0.1 |
| 54 | 0°13.5 | 0°13.5 | 0°12.9 | 5.4 - 0.0 | 11.4 - 0.1 | 17.4 - 0.1 |
| 55 | 0°13.8 | 0°13.8 | 0°13.1 | 5.5 - 0.0 | 11.5 - 0.1 | 17.5 - 0.1 |
| 56 | 0°14.0 | 0°14.0 | 0°13.4 | 5.6 - 0.0 | 11.6 - 0.1 | 17.6 - 0.1 |
| 57 | 0°14.2 | 0°14.3 | 0°13.6 | 5.7 - 0.0 | 11.7 - 0.1 | 17.7 - 0.1 |
| 58 | 0°14.5 | 0°14.5 | 0°13.8 | 5.8 - 0.0 | 11.8 - 0.1 | 17.8 - 0.1 |
| 59 | 0°14.7 | 0°14.8 | 0°14.1 | 5.9 - 0.0 | 11.9 - 0.1 | 17.9 - 0.1 |

| m 1 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 0°15.0 | 0°15.0 | 0°14.3 | 0.0 - 0.0 | 6.0 - 0.2 | 12.0 - 0.3 |
| 1 | 0°15.3 | 0°15.3 | 0°14.6 | 0.1 - 0.0 | 6.1 - 0.2 | 12.1 - 0.3 |
| 2 | 0°15.5 | 0°15.5 | 0°14.8 | 0.2 - 0.0 | 6.2 - 0.2 | 12.2 - 0.3 |
| 3 | 0°15.8 | 0°15.8 | 0°15.0 | 0.3 - 0.0 | 6.3 - 0.2 | 12.3 - 0.3 |
| 4 | 0°16.0 | 0°16.0 | 0°15.3 | 0.4 - 0.0 | 6.4 - 0.2 | 12.4 - 0.3 |
| 5 | 0°16.3 | 0°16.3 | 0°15.5 | 0.5 - 0.0 | 6.5 - 0.2 | 12.5 - 0.3 |
| 6 | 0°16.5 | 0°16.5 | 0°15.7 | 0.6 - 0.0 | 6.6 - 0.2 | 12.6 - 0.3 |
| 7 | 0°16.8 | 0°16.8 | 0°16.0 | 0.7 - 0.0 | 6.7 - 0.2 | 12.7 - 0.3 |
| 8 | 0°17.0 | 0°17.0 | 0°16.2 | 0.8 - 0.0 | 6.8 - 0.2 | 12.8 - 0.3 |
| 9 | 0°17.3 | 0°17.3 | 0°16.5 | 0.9 - 0.0 | 6.9 - 0.2 | 12.9 - 0.3 |
| 10 | 0°17.5 | 0°17.5 | 0°16.7 | 1.0 - 0.0 | 7.0 - 0.2 | 13.0 - 0.3 |
| 11 | 0°17.8 | 0°17.8 | 0°16.9 | 1.1 - 0.0 | 7.1 - 0.2 | 13.1 - 0.3 |
| 12 | 0°18.0 | 0°18.0 | 0°17.2 | 1.2 - 0.0 | 7.2 - 0.2 | 13.2 - 0.3 |
| 13 | 0°18.3 | 0°18.3 | 0°17.4 | 1.3 - 0.0 | 7.3 - 0.2 | 13.3 - 0.3 |
| 14 | 0°18.5 | 0°18.6 | 0°17.7 | 1.4 - 0.0 | 7.4 - 0.2 | 13.4 - 0.3 |
| 15 | 0°18.8 | 0°18.8 | 0°17.9 | 1.5 - 0.0 | 7.5 - 0.2 | 13.5 - 0.3 |
| 16 | 0°19.0 | 0°19.1 | 0°18.1 | 1.6 - 0.0 | 7.6 - 0.2 | 13.6 - 0.3 |
| 17 | 0°19.3 | 0°19.3 | 0°18.4 | 1.7 - 0.0 | 7.7 - 0.2 | 13.7 - 0.3 |
| 18 | 0°19.5 | 0°19.6 | 0°18.6 | 1.8 - 0.0 | 7.8 - 0.2 | 13.8 - 0.3 |
| 19 | 0°19.8 | 0°19.8 | 0°18.9 | 1.9 - 0.0 | 7.9 - 0.2 | 13.9 - 0.3 |
| 20 | 0°20.0 | 0°20.1 | 0°19.1 | 2.0 - 0.1 | 8.0 - 0.2 | 14.0 - 0.4 |
| 21 | 0°20.3 | 0°20.3 | 0°19.3 | 2.1 - 0.1 | 8.1 - 0.2 | 14.1 - 0.4 |
| 22 | 0°20.5 | 0°20.6 | 0°19.6 | 2.2 - 0.1 | 8.2 - 0.2 | 14.2 - 0.4 |
| 23 | 0°20.8 | 0°20.8 | 0°19.8 | 2.3 - 0.1 | 8.3 - 0.2 | 14.3 - 0.4 |
| 24 | 0°21.0 | 0°21.1 | 0°20.0 | 2.4 - 0.1 | 8.4 - 0.2 | 14.4 - 0.4 |
| 25 | 0°21.3 | 0°21.3 | 0°20.3 | 2.5 - 0.1 | 8.5 - 0.2 | 14.5 - 0.4 |
| 26 | 0°21.5 | 0°21.6 | 0°20.5 | 2.6 - 0.1 | 8.6 - 0.2 | 14.6 - 0.4 |
| 27 | 0°21.8 | 0°21.8 | 0°20.8 | 2.7 - 0.1 | 8.7 - 0.2 | 14.7 - 0.4 |
| 28 | 0°22.0 | 0°22.1 | 0°21.0 | 2.8 - 0.1 | 8.8 - 0.2 | 14.8 - 0.4 |
| 29 | 0°22.3 | 0°22.3 | 0°21.2 | 2.9 - 0.1 | 8.9 - 0.2 | 14.9 - 0.4 |
| 30 | 0°22.5 | 0°22.6 | 0°21.5 | 3.0 - 0.1 | 9.0 - 0.2 | 15.0 - 0.4 |
| 31 | 0°22.8 | 0°22.8 | 0°21.7 | 3.1 - 0.1 | 9.1 - 0.2 | 15.1 - 0.4 |
| 32 | 0°23.0 | 0°23.1 | 0°22.0 | 3.2 - 0.1 | 9.2 - 0.2 | 15.2 - 0.4 |
| 33 | 0°23.3 | 0°23.3 | 0°22.2 | 3.3 - 0.1 | 9.3 - 0.2 | 15.3 - 0.4 |
| 34 | 0°23.5 | 0°23.6 | 0°22.4 | 3.4 - 0.1 | 9.4 - 0.2 | 15.4 - 0.4 |
| 35 | 0°23.8 | 0°23.8 | 0°22.7 | 3.5 - 0.1 | 9.5 - 0.2 | 15.5 - 0.4 |
| 36 | 0°24.0 | 0°24.1 | 0°22.9 | 3.6 - 0.1 | 9.6 - 0.2 | 15.6 - 0.4 |
| 37 | 0°24.3 | 0°24.3 | 0°23.1 | 3.7 - 0.1 | 9.7 - 0.2 | 15.7 - 0.4 |
| 38 | 0°24.5 | 0°24.6 | 0°23.4 | 3.8 - 0.1 | 9.8 - 0.2 | 15.8 - 0.4 |
| 39 | 0°24.8 | 0°24.8 | 0°23.6 | 3.9 - 0.1 | 9.9 - 0.2 | 15.9 - 0.4 |
| 40 | 0°25.0 | 0°25.1 | 0°23.9 | 4.0 - 0.1 | 10.0 - 0.3 | 16.0 - 0.4 |
| 41 | 0°25.3 | 0°25.3 | 0°24.1 | 4.1 - 0.1 | 10.1 - 0.3 | 16.1 - 0.4 |
| 42 | 0°25.5 | 0°25.6 | 0°24.3 | 4.2 - 0.1 | 10.2 - 0.3 | 16.2 - 0.4 |
| 43 | 0°25.8 | 0°25.8 | 0°24.6 | 4.3 - 0.1 | 10.3 - 0.3 | 16.3 - 0.4 |
| 44 | 0°26.0 | 0°26.1 | 0°24.8 | 4.4 - 0.1 | 10.4 - 0.3 | 16.4 - 0.4 |
| 45 | 0°26.3 | 0°26.3 | 0°25.1 | 4.5 - 0.1 | 10.5 - 0.3 | 16.5 - 0.4 |
| 46 | 0°26.5 | 0°26.6 | 0°25.3 | 4.6 - 0.1 | 10.6 - 0.3 | 16.6 - 0.4 |
| 47 | 0°26.8 | 0°26.8 | 0°25.5 | 4.7 - 0.1 | 10.7 - 0.3 | 16.7 - 0.4 |
| 48 | 0°27.0 | 0°27.1 | 0°25.8 | 4.8 - 0.1 | 10.8 - 0.3 | 16.8 - 0.4 |
| 49 | 0°27.3 | 0°27.3 | 0°26.0 | 4.9 - 0.1 | 10.9 - 0.3 | 16.9 - 0.4 |
| 50 | 0°27.5 | 0°27.6 | 0°26.2 | 5.0 - 0.1 | 11.0 - 0.3 | 17.0 - 0.4 |
| 51 | 0°27.8 | 0°27.8 | 0°26.5 | 5.1 - 0.1 | 11.1 - 0.3 | 17.1 - 0.4 |
| 52 | 0°28.0 | 0°28.1 | 0°26.7 | 5.2 - 0.1 | 11.2 - 0.3 | 17.2 - 0.4 |
| 53 | 0°28.3 | 0°28.3 | 0°27.0 | 5.3 - 0.1 | 11.3 - 0.3 | 17.3 - 0.4 |
| 54 | 0°28.5 | 0°28.6 | 0°27.2 | 5.4 - 0.1 | 11.4 - 0.3 | 17.4 - 0.4 |
| 55 | 0°28.7 | 0°28.8 | 0°27.4 | 5.5 - 0.1 | 11.5 - 0.3 | 17.5 - 0.4 |
| 56 | 0°29.0 | 0°29.1 | 0°27.7 | 5.6 - 0.1 | 11.6 - 0.3 | 17.6 - 0.4 |
| 57 | 0°29.3 | 0°29.3 | 0°27.9 | 5.7 - 0.1 | 11.7 - 0.3 | 17.7 - 0.4 |
| 58 | 0°29.5 | 0°29.6 | 0°28.2 | 5.8 - 0.1 | 11.8 - 0.3 | 17.8 - 0.4 |
| 59 | 0°29.7 | 0°29.8 | 0°28.4 | 5.9 - 0.1 | 11.9 - 0.3 | 17.9 - 0.4 |

| m 2 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 0°30.0 | 0°30.1 | 0°28.6 | 0.0 - 0.0 | 6.0 - 0.3 | 12.0 - 0.5 |
| 1 | 0°30.3 | 0°30.3 | 0°28.9 | 0.1 - 0.0 | 6.1 - 0.3 | 12.1 - 0.5 |
| 2 | 0°30.5 | 0°30.6 | 0°29.1 | 0.2 - 0.0 | 6.2 - 0.3 | 12.2 - 0.5 |
| 3 | 0°30.7 | 0°30.8 | 0°29.3 | 0.3 - 0.0 | 6.3 - 0.3 | 12.3 - 0.5 |
| 4 | 0°31.0 | 0°31.1 | 0°29.6 | 0.4 - 0.0 | 6.4 - 0.3 | 12.4 - 0.5 |
| 5 | 0°31.3 | 0°31.3 | 0°29.8 | 0.5 - 0.0 | 6.5 - 0.3 | 12.5 - 0.5 |
| 6 | 0°31.5 | 0°31.6 | 0°30.1 | 0.6 - 0.0 | 6.6 - 0.3 | 12.6 - 0.5 |
| 7 | 0°31.8 | 0°31.8 | 0°30.3 | 0.7 - 0.0 | 6.7 - 0.3 | 12.7 - 0.5 |
| 8 | 0°32.0 | 0°32.1 | 0°30.5 | 0.8 - 0.0 | 6.8 - 0.3 | 12.8 - 0.5 |
| 9 | 0°32.3 | 0°32.3 | 0°30.8 | 0.9 - 0.0 | 6.9 - 0.3 | 12.9 - 0.5 |
| 10 | 0°32.5 | 0°32.6 | 0°31.0 | 1.0 - 0.0 | 7.0 - 0.3 | 13.0 - 0.5 |
| 11 | 0°32.8 | 0°32.8 | 0°31.3 | 1.1 - 0.0 | 7.1 - 0.3 | 13.1 - 0.5 |
| 12 | 0°33.0 | 0°33.1 | 0°31.5 | 1.2 - 0.1 | 7.2 - 0.3 | 13.2 - 0.5 |
| 13 | 0°33.3 | 0°33.3 | 0°31.7 | 1.3 - 0.1 | 7.3 - 0.3 | 13.3 - 0.6 |
| 14 | 0°33.5 | 0°33.6 | 0°32.0 | 1.4 - 0.1 | 7.4 - 0.3 | 13.4 - 0.6 |
| 15 | 0°33.8 | 0°33.8 | 0°32.2 | 1.5 - 0.1 | 7.5 - 0.3 | 13.5 - 0.6 |
| 16 | 0°34.0 | 0°34.1 | 0°32.5 | 1.6 - 0.1 | 7.6 - 0.3 | 13.6 - 0.6 |
| 17 | 0°34.3 | 0°34.3 | 0°32.7 | 1.7 - 0.1 | 7.7 - 0.3 | 13.7 - 0.6 |
| 18 | 0°34.5 | 0°34.6 | 0°32.9 | 1.8 - 0.1 | 7.8 - 0.3 | 13.8 - 0.6 |
| 19 | 0°34.8 | 0°34.8 | 0°33.2 | 1.9 - 0.1 | 7.9 - 0.3 | 13.9 - 0.6 |
| 20 | 0°35.0 | 0°35.1 | 0°33.4 | 2.0 - 0.1 | 8.0 - 0.3 | 14.0 - 0.6 |
| 21 | 0°35.3 | 0°35.3 | 0°33.6 | 2.1 - 0.1 | 8.1 - 0.3 | 14.1 - 0.6 |
| 22 | 0°35.5 | 0°35.6 | 0°33.9 | 2.2 - 0.1 | 8.2 - 0.3 | 14.2 - 0.6 |
| 23 | 0°35.8 | 0°35.8 | 0°34.1 | 2.3 - 0.1 | 8.3 - 0.3 | 14.3 - 0.6 |
| 24 | 0°36.0 | 0°36.1 | 0°34.4 | 2.4 - 0.1 | 8.4 - 0.3 | 14.4 - 0.6 |
| 25 | 0°36.3 | 0°36.3 | 0°34.6 | 2.5 - 0.1 | 8.5 - 0.4 | 14.5 - 0.6 |
| 26 | 0°36.5 | 0°36.6 | 0°34.8 | 2.6 - 0.1 | 8.6 - 0.4 | 14.6 - 0.6 |
| 27 | 0°36.8 | 0°36.9 | 0°35.1 | 2.7 - 0.1 | 8.7 - 0.4 | 14.7 - 0.6 |
| 28 | 0°37.0 | 0°37.1 | 0°35.3 | 2.8 - 0.1 | 8.8 - 0.4 | 14.8 - 0.6 |
| 29 | 0°37.3 | 0°37.4 | 0°35.6 | 2.9 - 0.1 | 8.9 - 0.4 | 14.9 - 0.6 |
| 30 | 0°37.5 | 0°37.6 | 0°35.8 | 3.0 - 0.1 | 9.0 - 0.4 | 15.0 - 0.6 |
| 31 | 0°37.8 | 0°37.9 | 0°36.0 | 3.1 - 0.1 | 9.1 - 0.4 | 15.1 - 0.6 |
| 32 | 0°38.0 | 0°38.1 | 0°36.3 | 3.2 - 0.1 | 9.2 - 0.4 | 15.2 - 0.6 |
| 33 | 0°38.3 | 0°38.4 | 0°36.5 | 3.3 - 0.1 | 9.3 - 0.4 | 15.3 - 0.6 |
| 34 | 0°38.5 | 0°38.6 | 0°36.7 | 3.4 - 0.1 | 9.4 - 0.4 | 15.4 - 0.6 |
| 35 | 0°38.8 | 0°38.9 | 0°37.0 | 3.5 - 0.1 | 9.5 - 0.4 | 15.5 - 0.6 |
| 36 | 0°39.0 | 0°39.1 | 0°37.2 | 3.6 - 0.1 | 9.6 - 0.4 | 15.6 - 0.6 |
| 37 | 0°39.3 | 0°39.4 | 0°37.5 | 3.7 - 0.2 | 9.7 - 0.4 | 15.7 - 0.7 |
| 38 | 0°39.5 | 0°39.6 | 0°37.7 | 3.8 - 0.2 | 9.8 - 0.4 | 15.8 - 0.7 |
| 39 | 0°39.8 | 0°39.9 | 0°37.9 | 3.9 - 0.2 | 9.9 - 0.4 | 15.9 - 0.7 |
| 40 | 0°40.0 | 0°40.1 | 0°38.2 | 4.0 - 0.2 | 10.0 - 0.4 | 16.0 - 0.7 |
| 41 | 0°40.3 | 0°40.4 | 0°38.4 | 4.1 - 0.2 | 10.1 - 0.4 | 16.1 - 0.7 |
| 42 | 0°40.5 | 0°40.6 | 0°38.7 | 4.2 - 0.2 | 10.2 - 0.4 | 16.2 - 0.7 |
| 43 | 0°40.8 | 0°40.9 | 0°38.9 | 4.3 - 0.2 | 10.3 - 0.4 | 16.3 - 0.7 |
| 44 | 0°41.0 | 0°41.1 | 0°39.1 | 4.4 - 0.2 | 10.4 - 0.4 | 16.4 - 0.7 |
| 45 | 0°41.3 | 0°41.4 | 0°39.4 | 4.5 - 0.2 | 10.5 - 0.4 | 16.5 - 0.7 |
| 46 | 0°41.5 | 0°41.6 | 0°39.6 | 4.6 - 0.2 | 10.6 - 0.4 | 16.6 - 0.7 |
| 47 | 0°41.8 | 0°41.9 | 0°39.8 | 4.7 - 0.2 | 10.7 - 0.4 | 16.7 - 0.7 |
| 48 | 0°42.0 | 0°42.1 | 0°40.1 | 4.8 - 0.2 | 10.8 - 0.5 | 16.8 - 0.7 |
| 49 | 0°42.3 | 0°42.4 | 0°40.3 | 4.9 - 0.2 | 10.9 - 0.5 | 16.9 - 0.7 |
| 50 | 0°42.5 | 0°42.6 | 0°40.6 | 5.0 - 0.2 | 11.0 - 0.5 | 17.0 - 0.7 |
| 51 | 0°42.8 | 0°42.9 | 0°40.8 | 5.1 - 0.2 | 11.1 - 0.5 | 17.1 - 0.7 |
| 52 | 0°43.0 | 0°43.1 | 0°41.0 | 5.2 - 0.2 | 11.2 - 0.5 | 17.2 - 0.7 |
| 53 | 0°43.3 | 0°43.4 | 0°41.3 | 5.3 - 0.2 | 11.3 - 0.5 | 17.3 - 0.7 |
| 54 | 0°43.5 | 0°43.6 | 0°41.5 | 5.4 - 0.2 | 11.4 - 0.5 | 17.4 - 0.7 |
| 55 | 0°43.8 | 0°43.9 | 0°41.8 | 5.5 - 0.2 | 11.5 - 0.5 | 17.5 - 0.7 |
| 56 | 0°44.0 | 0°44.1 | 0°42.0 | 5.6 - 0.2 | 11.6 - 0.5 | 17.6 - 0.7 |
| 57 | 0°44.3 | 0°44.4 | 0°42.2 | 5.7 - 0.2 | 11.7 - 0.5 | 17.7 - 0.7 |
| 58 | 0°44.5 | 0°44.6 | 0°42.5 | 5.8 - 0.2 | 11.8 - 0.5 | 17.8 - 0.7 |
| 59 | 0°44.8 | 0°44.9 | 0°42.7 | 5.9 - 0.2 | 11.9 - 0.5 | 17.9 - 0.7 |

# Increments and Corrections

| m<br>3 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| **0** | 0°45.0 | 0°45.1 | 0°43.0 | 0.0 - 0.0 | 6.0 - 0.3 | 12.0 - 0.7 |
| **1** | 0°45.3 | 0°45.4 | 0°43.2 | 0.1 - 0.0 | 6.1 - 0.4 | 12.1 - 0.7 |
| **2** | 0°45.5 | 0°45.6 | 0°43.4 | 0.2 - 0.0 | 6.2 - 0.4 | 12.2 - 0.7 |
| **3** | 0°45.8 | 0°45.9 | 0°43.7 | 0.3 - 0.0 | 6.3 - 0.4 | 12.3 - 0.7 |
| **4** | 0°46.0 | 0°46.1 | 0°43.9 | 0.4 - 0.0 | 6.4 - 0.4 | 12.4 - 0.7 |
| **5** | 0°46.3 | 0°46.4 | 0°44.1 | 0.5 - 0.0 | 6.5 - 0.4 | 12.5 - 0.7 |
| **6** | 0°46.5 | 0°46.6 | 0°44.4 | 0.6 - 0.0 | 6.6 - 0.4 | 12.6 - 0.7 |
| **7** | 0°46.8 | 0°46.9 | 0°44.6 | 0.7 - 0.0 | 6.7 - 0.4 | 12.7 - 0.7 |
| **8** | 0°47.0 | 0°47.1 | 0°44.9 | 0.8 - 0.0 | 6.8 - 0.4 | 12.8 - 0.7 |
| **9** | 0°47.3 | 0°47.4 | 0°45.1 | 0.9 - 0.1 | 6.9 - 0.4 | 12.9 - 0.8 |
| **10** | 0°47.5 | 0°47.6 | 0°45.3 | 1.0 - 0.1 | 7.0 - 0.4 | 13.0 - 0.8 |
| **11** | 0°47.8 | 0°47.9 | 0°45.6 | 1.1 - 0.1 | 7.1 - 0.4 | 13.1 - 0.8 |
| **12** | 0°48.0 | 0°48.1 | 0°45.8 | 1.2 - 0.1 | 7.2 - 0.4 | 13.2 - 0.8 |
| **13** | 0°48.3 | 0°48.4 | 0°46.1 | 1.3 - 0.1 | 7.3 - 0.4 | 13.3 - 0.8 |
| **14** | 0°48.5 | 0°48.6 | 0°46.3 | 1.4 - 0.1 | 7.4 - 0.4 | 13.4 - 0.8 |
| **15** | 0°48.8 | 0°48.9 | 0°46.5 | 1.5 - 0.1 | 7.5 - 0.4 | 13.5 - 0.8 |
| **16** | 0°49.0 | 0°49.1 | 0°46.8 | 1.6 - 0.1 | 7.6 - 0.4 | 13.6 - 0.8 |
| **17** | 0°49.3 | 0°49.4 | 0°47.0 | 1.7 - 0.1 | 7.7 - 0.4 | 13.7 - 0.8 |
| **18** | 0°49.5 | 0°49.6 | 0°47.2 | 1.8 - 0.1 | 7.8 - 0.5 | 13.8 - 0.8 |
| **19** | 0°49.8 | 0°49.9 | 0°47.5 | 1.9 - 0.1 | 7.9 - 0.5 | 13.9 - 0.8 |
| **20** | 0°50.0 | 0°50.1 | 0°47.7 | 2.0 - 0.1 | 8.0 - 0.5 | 14.0 - 0.8 |
| **21** | 0°50.3 | 0°50.4 | 0°48.0 | 2.1 - 0.1 | 8.1 - 0.5 | 14.1 - 0.8 |
| **22** | 0°50.5 | 0°50.6 | 0°48.2 | 2.2 - 0.1 | 8.2 - 0.5 | 14.2 - 0.8 |
| **23** | 0°50.8 | 0°50.9 | 0°48.4 | 2.3 - 0.1 | 8.3 - 0.5 | 14.3 - 0.8 |
| **24** | 0°51.0 | 0°51.1 | 0°48.7 | 2.4 - 0.1 | 8.4 - 0.5 | 14.4 - 0.8 |
| **25** | 0°51.3 | 0°51.4 | 0°48.9 | 2.5 - 0.1 | 8.5 - 0.5 | 14.5 - 0.8 |
| **26** | 0°51.5 | 0°51.6 | 0°49.2 | 2.6 - 0.2 | 8.6 - 0.5 | 14.6 - 0.9 |
| **27** | 0°51.8 | 0°51.9 | 0°49.4 | 2.7 - 0.2 | 8.7 - 0.5 | 14.7 - 0.9 |
| **28** | 0°52.0 | 0°52.1 | 0°49.6 | 2.8 - 0.2 | 8.8 - 0.5 | 14.8 - 0.9 |
| **29** | 0°52.3 | 0°52.4 | 0°49.9 | 2.9 - 0.2 | 8.9 - 0.5 | 14.9 - 0.9 |
| **30** | 0°52.5 | 0°52.6 | 0°50.1 | 3.0 - 0.2 | 9.0 - 0.5 | 15.0 - 0.9 |
| **31** | 0°52.8 | 0°52.9 | 0°50.3 | 3.1 - 0.2 | 9.1 - 0.5 | 15.1 - 0.9 |
| **32** | 0°53.0 | 0°53.1 | 0°50.6 | 3.2 - 0.2 | 9.2 - 0.5 | 15.2 - 0.9 |
| **33** | 0°53.3 | 0°53.4 | 0°50.8 | 3.3 - 0.2 | 9.3 - 0.5 | 15.3 - 0.9 |
| **34** | 0°53.5 | 0°53.6 | 0°51.1 | 3.4 - 0.2 | 9.4 - 0.5 | 15.4 - 0.9 |
| **35** | 0°53.8 | 0°53.9 | 0°51.3 | 3.5 - 0.2 | 9.5 - 0.6 | 15.5 - 0.9 |
| **36** | 0°54.0 | 0°54.1 | 0°51.5 | 3.6 - 0.2 | 9.6 - 0.6 | 15.6 - 0.9 |
| **37** | 0°54.3 | 0°54.4 | 0°51.8 | 3.7 - 0.2 | 9.7 - 0.6 | 15.7 - 0.9 |
| **38** | 0°54.5 | 0°54.6 | 0°52.0 | 3.8 - 0.2 | 9.8 - 0.6 | 15.8 - 0.9 |
| **39** | 0°54.8 | 0°54.9 | 0°52.3 | 3.9 - 0.2 | 9.9 - 0.6 | 15.9 - 0.9 |
| **40** | 0°55.0 | 0°55.2 | 0°52.5 | 4.0 - 0.2 | 10.0 - 0.6 | 16.0 - 0.9 |
| **41** | 0°55.3 | 0°55.4 | 0°52.7 | 4.1 - 0.2 | 10.1 - 0.6 | 16.1 - 0.9 |
| **42** | 0°55.5 | 0°55.7 | 0°53.0 | 4.2 - 0.2 | 10.2 - 0.6 | 16.2 - 0.9 |
| **43** | 0°55.8 | 0°55.9 | 0°53.2 | 4.3 - 0.3 | 10.3 - 0.6 | 16.3 - 1.0 |
| **44** | 0°56.0 | 0°56.2 | 0°53.4 | 4.4 - 0.3 | 10.4 - 0.6 | 16.4 - 1.0 |
| **45** | 0°56.3 | 0°56.4 | 0°53.7 | 4.5 - 0.3 | 10.5 - 0.6 | 16.5 - 1.0 |
| **46** | 0°56.5 | 0°56.7 | 0°53.9 | 4.6 - 0.3 | 10.6 - 0.6 | 16.6 - 1.0 |
| **47** | 0°56.8 | 0°56.9 | 0°54.2 | 4.7 - 0.3 | 10.7 - 0.6 | 16.7 - 1.0 |
| **48** | 0°57.0 | 0°57.2 | 0°54.4 | 4.8 - 0.3 | 10.8 - 0.6 | 16.8 - 1.0 |
| **49** | 0°57.3 | 0°57.4 | 0°54.6 | 4.9 - 0.3 | 10.9 - 0.6 | 16.9 - 1.0 |
| **50** | 0°57.5 | 0°57.7 | 0°54.9 | 5.0 - 0.3 | 11.0 - 0.6 | 17.0 - 1.0 |
| **51** | 0°57.7 | 0°57.9 | 0°55.1 | 5.1 - 0.3 | 11.1 - 0.6 | 17.1 - 1.0 |
| **52** | 0°58.0 | 0°58.2 | 0°55.4 | 5.2 - 0.3 | 11.2 - 0.7 | 17.2 - 1.0 |
| **53** | 0°58.3 | 0°58.4 | 0°55.6 | 5.3 - 0.3 | 11.3 - 0.7 | 17.3 - 1.0 |
| **54** | 0°58.5 | 0°58.7 | 0°55.8 | 5.4 - 0.3 | 11.4 - 0.7 | 17.4 - 1.0 |
| **55** | 0°58.8 | 0°58.9 | 0°56.1 | 5.5 - 0.3 | 11.5 - 0.7 | 17.5 - 1.0 |
| **56** | 0°59.0 | 0°59.2 | 0°56.3 | 5.6 - 0.3 | 11.6 - 0.7 | 17.6 - 1.0 |
| **57** | 0°59.3 | 0°59.4 | 0°56.6 | 5.7 - 0.3 | 11.7 - 0.7 | 17.7 - 1.0 |
| **58** | 0°59.5 | 0°59.7 | 0°56.8 | 5.8 - 0.3 | 11.8 - 0.7 | 17.8 - 1.0 |
| **59** | 0°59.8 | 0°59.9 | 0°57.0 | 5.9 - 0.3 | 11.9 - 0.7 | 17.9 - 1.0 |

| m<br>4 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| **0** | 1°00.0 | 1°00.2 | 0°57.3 | 0.0 - 0.0 | 6.0 - 0.4 | 12.0 - 0.9 |
| **1** | 1°00.2 | 1°00.4 | 0°57.5 | 0.1 - 0.0 | 6.1 - 0.5 | 12.1 - 0.9 |
| **2** | 1°00.5 | 1°00.7 | 0°57.7 | 0.2 - 0.0 | 6.2 - 0.5 | 12.2 - 0.9 |
| **3** | 1°00.7 | 1°00.9 | 0°58.0 | 0.3 - 0.0 | 6.3 - 0.5 | 12.3 - 0.9 |
| **4** | 1°01.0 | 1°01.2 | 0°58.2 | 0.4 - 0.0 | 6.4 - 0.5 | 12.4 - 0.9 |
| **5** | 1°01.2 | 1°01.4 | 0°58.5 | 0.5 - 0.0 | 6.5 - 0.5 | 12.5 - 0.9 |
| **6** | 1°01.5 | 1°01.7 | 0°58.7 | 0.6 - 0.0 | 6.6 - 0.5 | 12.6 - 0.9 |
| **7** | 1°01.7 | 1°01.9 | 0°58.9 | 0.7 - 0.1 | 6.7 - 0.5 | 12.7 - 1.0 |
| **8** | 1°02.0 | 1°02.2 | 0°59.2 | 0.8 - 0.1 | 6.8 - 0.5 | 12.8 - 1.0 |
| **9** | 1°02.3 | 1°02.4 | 0°59.4 | 0.9 - 0.1 | 6.9 - 0.5 | 12.9 - 1.0 |
| **10** | 1°02.5 | 1°02.7 | 0°59.7 | 1.0 - 0.1 | 7.0 - 0.5 | 13.0 - 1.0 |
| **11** | 1°02.8 | 1°02.9 | 0°59.9 | 1.1 - 0.1 | 7.1 - 0.5 | 13.1 - 1.0 |
| **12** | 1°03.0 | 1°03.2 | 1°00.1 | 1.2 - 0.1 | 7.2 - 0.5 | 13.2 - 1.0 |
| **13** | 1°03.3 | 1°03.4 | 1°00.4 | 1.3 - 0.1 | 7.3 - 0.5 | 13.3 - 1.0 |
| **14** | 1°03.5 | 1°03.7 | 1°00.6 | 1.4 - 0.1 | 7.4 - 0.6 | 13.4 - 1.0 |
| **15** | 1°03.8 | 1°03.9 | 1°00.8 | 1.5 - 0.1 | 7.5 - 0.6 | 13.5 - 1.0 |
| **16** | 1°04.0 | 1°04.2 | 1°01.1 | 1.6 - 0.1 | 7.6 - 0.6 | 13.6 - 1.0 |
| **17** | 1°04.2 | 1°04.4 | 1°01.3 | 1.7 - 0.1 | 7.7 - 0.6 | 13.7 - 1.0 |
| **18** | 1°04.5 | 1°04.7 | 1°01.6 | 1.8 - 0.1 | 7.8 - 0.6 | 13.8 - 1.0 |
| **19** | 1°04.7 | 1°04.9 | 1°01.8 | 1.9 - 0.1 | 7.9 - 0.6 | 13.9 - 1.0 |
| **20** | 1°05.0 | 1°05.2 | 1°02.0 | 2.0 - 0.1 | 8.0 - 0.6 | 14.0 - 1.1 |
| **21** | 1°05.2 | 1°05.4 | 1°02.3 | 2.1 - 0.2 | 8.1 - 0.6 | 14.1 - 1.1 |
| **22** | 1°05.5 | 1°05.7 | 1°02.5 | 2.2 - 0.2 | 8.2 - 0.6 | 14.2 - 1.1 |
| **23** | 1°05.8 | 1°05.9 | 1°02.8 | 2.3 - 0.2 | 8.3 - 0.6 | 14.3 - 1.1 |
| **24** | 1°06.0 | 1°06.2 | 1°03.0 | 2.4 - 0.2 | 8.4 - 0.6 | 14.4 - 1.1 |
| **25** | 1°06.3 | 1°06.4 | 1°03.2 | 2.5 - 0.2 | 8.5 - 0.6 | 14.5 - 1.1 |
| **26** | 1°06.5 | 1°06.7 | 1°03.5 | 2.6 - 0.2 | 8.6 - 0.6 | 14.6 - 1.1 |
| **27** | 1°06.8 | 1°06.9 | 1°03.7 | 2.7 - 0.2 | 8.7 - 0.7 | 14.7 - 1.1 |
| **28** | 1°07.0 | 1°07.2 | 1°03.9 | 2.8 - 0.2 | 8.8 - 0.7 | 14.8 - 1.1 |
| **29** | 1°07.3 | 1°07.4 | 1°04.2 | 2.9 - 0.2 | 8.9 - 0.7 | 14.9 - 1.1 |
| **30** | 1°07.5 | 1°07.7 | 1°04.4 | 3.0 - 0.2 | 9.0 - 0.7 | 15.0 - 1.1 |
| **31** | 1°07.7 | 1°07.9 | 1°04.7 | 3.1 - 0.2 | 9.1 - 0.7 | 15.1 - 1.1 |
| **32** | 1°08.0 | 1°08.2 | 1°04.9 | 3.2 - 0.2 | 9.2 - 0.7 | 15.2 - 1.1 |
| **33** | 1°08.2 | 1°08.4 | 1°05.1 | 3.3 - 0.2 | 9.3 - 0.7 | 15.3 - 1.1 |
| **34** | 1°08.5 | 1°08.7 | 1°05.4 | 3.4 - 0.3 | 9.4 - 0.7 | 15.4 - 1.2 |
| **35** | 1°08.7 | 1°08.9 | 1°05.6 | 3.5 - 0.3 | 9.5 - 0.7 | 15.5 - 1.2 |
| **36** | 1°09.0 | 1°09.2 | 1°05.9 | 3.6 - 0.3 | 9.6 - 0.7 | 15.6 - 1.2 |
| **37** | 1°09.3 | 1°09.4 | 1°06.1 | 3.7 - 0.3 | 9.7 - 0.7 | 15.7 - 1.2 |
| **38** | 1°09.5 | 1°09.7 | 1°06.3 | 3.8 - 0.3 | 9.8 - 0.7 | 15.8 - 1.2 |
| **39** | 1°09.8 | 1°09.9 | 1°06.6 | 3.9 - 0.3 | 9.9 - 0.7 | 15.9 - 1.2 |
| **40** | 1°10.0 | 1°10.2 | 1°06.8 | 4.0 - 0.3 | 10.0 - 0.8 | 16.0 - 1.2 |
| **41** | 1°10.3 | 1°10.4 | 1°07.0 | 4.1 - 0.3 | 10.1 - 0.8 | 16.1 - 1.2 |
| **42** | 1°10.5 | 1°10.7 | 1°07.3 | 4.2 - 0.3 | 10.2 - 0.8 | 16.2 - 1.2 |
| **43** | 1°10.8 | 1°10.9 | 1°07.5 | 4.3 - 0.3 | 10.3 - 0.8 | 16.3 - 1.2 |
| **44** | 1°11.0 | 1°11.2 | 1°07.8 | 4.4 - 0.3 | 10.4 - 0.8 | 16.4 - 1.2 |
| **45** | 1°11.3 | 1°11.4 | 1°08.0 | 4.5 - 0.3 | 10.5 - 0.8 | 16.5 - 1.2 |
| **46** | 1°11.5 | 1°11.7 | 1°08.2 | 4.6 - 0.3 | 10.6 - 0.8 | 16.6 - 1.2 |
| **47** | 1°11.7 | 1°11.9 | 1°08.5 | 4.7 - 0.4 | 10.7 - 0.8 | 16.7 - 1.3 |
| **48** | 1°12.0 | 1°12.2 | 1°08.7 | 4.8 - 0.4 | 10.8 - 0.8 | 16.8 - 1.3 |
| **49** | 1°12.2 | 1°12.4 | 1°09.0 | 4.9 - 0.4 | 10.9 - 0.8 | 16.9 - 1.3 |
| **50** | 1°12.5 | 1°12.7 | 1°09.2 | 5.0 - 0.4 | 11.0 - 0.8 | 17.0 - 1.3 |
| **51** | 1°12.7 | 1°12.9 | 1°09.4 | 5.1 - 0.4 | 11.1 - 0.8 | 17.1 - 1.3 |
| **52** | 1°13.0 | 1°13.2 | 1°09.7 | 5.2 - 0.4 | 11.2 - 0.8 | 17.2 - 1.3 |
| **53** | 1°13.2 | 1°13.5 | 1°09.9 | 5.3 - 0.4 | 11.3 - 0.8 | 17.3 - 1.3 |
| **54** | 1°13.5 | 1°13.7 | 1°10.2 | 5.4 - 0.4 | 11.4 - 0.9 | 17.4 - 1.3 |
| **55** | 1°13.8 | 1°14.0 | 1°10.4 | 5.5 - 0.4 | 11.5 - 0.9 | 17.5 - 1.3 |
| **56** | 1°14.0 | 1°14.2 | 1°10.6 | 5.6 - 0.4 | 11.6 - 0.9 | 17.6 - 1.3 |
| **57** | 1°14.3 | 1°14.5 | 1°10.9 | 5.7 - 0.4 | 11.7 - 0.9 | 17.7 - 1.3 |
| **58** | 1°14.5 | 1°14.7 | 1°11.1 | 5.8 - 0.4 | 11.8 - 0.9 | 17.8 - 1.3 |
| **59** | 1°14.8 | 1°15.0 | 1°11.3 | 5.9 - 0.4 | 11.9 - 0.9 | 17.9 - 1.3 |

| m<br>5 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| **0** | 1°15.0 | 1°15.2 | 1°11.6 | 0.0 - 0.0 | 6.0 - 0.5 | 12.0 - 1.1 |
| **1** | 1°15.3 | 1°15.5 | 1°11.8 | 0.1 - 0.0 | 6.1 - 0.6 | 12.1 - 1.1 |
| **2** | 1°15.5 | 1°15.7 | 1°12.1 | 0.2 - 0.0 | 6.2 - 0.6 | 12.2 - 1.1 |
| **3** | 1°15.7 | 1°16.0 | 1°12.3 | 0.3 - 0.0 | 6.3 - 0.6 | 12.3 - 1.1 |
| **4** | 1°16.0 | 1°16.2 | 1°12.5 | 0.4 - 0.0 | 6.4 - 0.6 | 12.4 - 1.1 |
| **5** | 1°16.2 | 1°16.5 | 1°12.8 | 0.5 - 0.0 | 6.5 - 0.6 | 12.5 - 1.1 |
| **6** | 1°16.5 | 1°16.7 | 1°13.0 | 0.6 - 0.1 | 6.6 - 0.6 | 12.6 - 1.2 |
| **7** | 1°16.7 | 1°17.0 | 1°13.3 | 0.7 - 0.1 | 6.7 - 0.6 | 12.7 - 1.2 |
| **8** | 1°17.0 | 1°17.2 | 1°13.5 | 0.8 - 0.1 | 6.8 - 0.6 | 12.8 - 1.2 |
| **9** | 1°17.3 | 1°17.5 | 1°13.7 | 0.9 - 0.1 | 6.9 - 0.6 | 12.9 - 1.2 |
| **10** | 1°17.5 | 1°17.7 | 1°14.0 | 1.0 - 0.1 | 7.0 - 0.6 | 13.0 - 1.2 |
| **11** | 1°17.8 | 1°18.0 | 1°14.2 | 1.1 - 0.1 | 7.1 - 0.7 | 13.1 - 1.2 |
| **12** | 1°18.0 | 1°18.2 | 1°14.4 | 1.2 - 0.1 | 7.2 - 0.7 | 13.2 - 1.2 |
| **13** | 1°18.3 | 1°18.5 | 1°14.7 | 1.3 - 0.1 | 7.3 - 0.7 | 13.3 - 1.2 |
| **14** | 1°18.5 | 1°18.7 | 1°14.9 | 1.4 - 0.1 | 7.4 - 0.7 | 13.4 - 1.2 |
| **15** | 1°18.8 | 1°19.0 | 1°15.2 | 1.5 - 0.1 | 7.5 - 0.7 | 13.5 - 1.2 |
| **16** | 1°19.0 | 1°19.2 | 1°15.4 | 1.6 - 0.1 | 7.6 - 0.7 | 13.6 - 1.2 |
| **17** | 1°19.3 | 1°19.5 | 1°15.6 | 1.7 - 0.2 | 7.7 - 0.7 | 13.7 - 1.3 |
| **18** | 1°19.5 | 1°19.7 | 1°15.9 | 1.8 - 0.2 | 7.8 - 0.7 | 13.8 - 1.3 |
| **19** | 1°19.7 | 1°20.0 | 1°16.1 | 1.9 - 0.2 | 7.9 - 0.7 | 13.9 - 1.3 |
| **20** | 1°20.0 | 1°20.2 | 1°16.4 | 2.0 - 0.2 | 8.0 - 0.7 | 14.0 - 1.3 |
| **21** | 1°20.2 | 1°20.5 | 1°16.6 | 2.1 - 0.2 | 8.1 - 0.7 | 14.1 - 1.3 |
| **22** | 1°20.5 | 1°20.7 | 1°16.8 | 2.2 - 0.2 | 8.2 - 0.8 | 14.2 - 1.3 |
| **23** | 1°20.8 | 1°21.0 | 1°17.1 | 2.3 - 0.2 | 8.3 - 0.8 | 14.3 - 1.3 |
| **24** | 1°21.0 | 1°21.2 | 1°17.3 | 2.4 - 0.2 | 8.4 - 0.8 | 14.4 - 1.3 |
| **25** | 1°21.3 | 1°21.5 | 1°17.5 | 2.5 - 0.2 | 8.5 - 0.8 | 14.5 - 1.3 |
| **26** | 1°21.5 | 1°21.7 | 1°17.8 | 2.6 - 0.2 | 8.6 - 0.8 | 14.6 - 1.3 |
| **27** | 1°21.8 | 1°22.0 | 1°18.0 | 2.7 - 0.2 | 8.7 - 0.8 | 14.7 - 1.3 |
| **28** | 1°22.0 | 1°22.2 | 1°18.3 | 2.8 - 0.3 | 8.8 - 0.8 | 14.8 - 1.4 |
| **29** | 1°22.3 | 1°22.5 | 1°18.5 | 2.9 - 0.3 | 8.9 - 0.8 | 14.9 - 1.4 |
| **30** | 1°22.5 | 1°22.7 | 1°18.7 | 3.0 - 0.3 | 9.0 - 0.8 | 15.0 - 1.4 |
| **31** | 1°22.8 | 1°23.0 | 1°19.0 | 3.1 - 0.3 | 9.1 - 0.8 | 15.1 - 1.4 |
| **32** | 1°23.0 | 1°23.2 | 1°19.2 | 3.2 - 0.3 | 9.2 - 0.8 | 15.2 - 1.4 |
| **33** | 1°23.2 | 1°23.5 | 1°19.5 | 3.3 - 0.3 | 9.3 - 0.9 | 15.3 - 1.4 |
| **34** | 1°23.5 | 1°23.7 | 1°19.7 | 3.4 - 0.3 | 9.4 - 0.9 | 15.4 - 1.4 |
| **35** | 1°23.7 | 1°24.0 | 1°19.9 | 3.5 - 0.3 | 9.5 - 0.9 | 15.5 - 1.4 |
| **36** | 1°24.0 | 1°24.2 | 1°20.2 | 3.6 - 0.3 | 9.6 - 0.9 | 15.6 - 1.4 |
| **37** | 1°24.3 | 1°24.5 | 1°20.4 | 3.7 - 0.3 | 9.7 - 0.9 | 15.7 - 1.4 |
| **38** | 1°24.5 | 1°24.7 | 1°20.7 | 3.8 - 0.3 | 9.8 - 0.9 | 15.8 - 1.4 |
| **39** | 1°24.8 | 1°25.0 | 1°20.9 | 3.9 - 0.4 | 9.9 - 0.9 | 15.9 - 1.5 |
| **40** | 1°25.0 | 1°25.2 | 1°21.1 | 4.0 - 0.4 | 10.0 - 0.9 | 16.0 - 1.5 |
| **41** | 1°25.3 | 1°25.5 | 1°21.4 | 4.1 - 0.4 | 10.1 - 0.9 | 16.1 - 1.5 |
| **42** | 1°25.5 | 1°25.7 | 1°21.6 | 4.2 - 0.4 | 10.2 - 0.9 | 16.2 - 1.5 |
| **43** | 1°25.8 | 1°26.0 | 1°21.8 | 4.3 - 0.4 | 10.3 - 0.9 | 16.3 - 1.5 |
| **44** | 1°26.0 | 1°26.2 | 1°22.1 | 4.4 - 0.4 | 10.4 - 1.0 | 16.4 - 1.5 |
| **45** | 1°26.3 | 1°26.5 | 1°22.3 | 4.5 - 0.4 | 10.5 - 1.0 | 16.5 - 1.5 |
| **46** | 1°26.5 | 1°26.7 | 1°22.6 | 4.6 - 0.4 | 10.6 - 1.0 | 16.6 - 1.5 |
| **47** | 1°26.8 | 1°27.0 | 1°22.8 | 4.7 - 0.4 | 10.7 - 1.0 | 16.7 - 1.5 |
| **48** | 1°27.0 | 1°27.2 | 1°23.0 | 4.8 - 0.4 | 10.8 - 1.0 | 16.8 - 1.5 |
| **49** | 1°27.2 | 1°27.5 | 1°23.3 | 4.9 - 0.4 | 10.9 - 1.0 | 16.9 - 1.5 |
| **50** | 1°27.5 | 1°27.7 | 1°23.5 | 5.0 - 0.5 | 11.0 - 1.0 | 17.0 - 1.6 |
| **51** | 1°27.7 | 1°28.0 | 1°23.8 | 5.1 - 0.5 | 11.1 - 1.0 | 17.1 - 1.6 |
| **52** | 1°28.0 | 1°28.2 | 1°24.0 | 5.2 - 0.5 | 11.2 - 1.0 | 17.2 - 1.6 |
| **53** | 1°28.2 | 1°28.5 | 1°24.2 | 5.3 - 0.5 | 11.3 - 1.0 | 17.3 - 1.6 |
| **54** | 1°28.5 | 1°28.7 | 1°24.5 | 5.4 - 0.5 | 11.4 - 1.0 | 17.4 - 1.6 |
| **55** | 1°28.8 | 1°29.0 | 1°24.7 | 5.5 - 0.5 | 11.5 - 1.1 | 17.5 - 1.6 |
| **56** | 1°29.0 | 1°29.2 | 1°24.9 | 5.6 - 0.5 | 11.6 - 1.1 | 17.6 - 1.6 |
| **57** | 1°29.3 | 1°29.5 | 1°25.2 | 5.7 - 0.5 | 11.7 - 1.1 | 17.7 - 1.6 |
| **58** | 1°29.5 | 1°29.7 | 1°25.4 | 5.8 - 0.5 | 11.8 - 1.1 | 17.8 - 1.6 |
| **59** | 1°29.8 | 1°30.0 | 1°25.7 | 5.9 - 0.5 | 11.9 - 1.1 | 17.9 - 1.6 |

# Increments and Corrections

| m<br>6 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| **0** | 1°30.0 | 1°30.2 | 1°25.9 | 0.0 - 0.0 | 6.0 - 0.7 | 12.0 - 1.3 |
| **1** | 1°30.3 | 1°30.5 | 1°26.1 | 0.1 - 0.0 | 6.1 - 0.7 | 12.1 - 1.3 |
| **2** | 1°30.5 | 1°30.7 | 1°26.4 | 0.2 - 0.0 | 6.2 - 0.7 | 12.2 - 1.3 |
| **3** | 1°30.7 | 1°31.0 | 1°26.6 | 0.3 - 0.0 | 6.3 - 0.7 | 12.3 - 1.3 |
| **4** | 1°31.0 | 1°31.2 | 1°26.9 | 0.4 - 0.0 | 6.4 - 0.7 | 12.4 - 1.3 |
| **5** | 1°31.2 | 1°31.5 | 1°27.1 | 0.5 - 0.1 | 6.5 - 0.7 | 12.5 - 1.4 |
| **6** | 1°31.5 | 1°31.8 | 1°27.3 | 0.6 - 0.1 | 6.6 - 0.7 | 12.6 - 1.4 |
| **7** | 1°31.7 | 1°32.0 | 1°27.6 | 0.7 - 0.1 | 6.7 - 0.7 | 12.7 - 1.4 |
| **8** | 1°32.0 | 1°32.3 | 1°27.8 | 0.8 - 0.1 | 6.8 - 0.7 | 12.8 - 1.4 |
| **9** | 1°32.3 | 1°32.5 | 1°28.0 | 0.9 - 0.1 | 6.9 - 0.7 | 12.9 - 1.4 |
| **10** | 1°32.5 | 1°32.8 | 1°28.3 | 1.0 - 0.1 | 7.0 - 0.8 | 13.0 - 1.4 |
| **11** | 1°32.8 | 1°33.0 | 1°28.5 | 1.1 - 0.1 | 7.1 - 0.8 | 13.1 - 1.4 |
| **12** | 1°33.0 | 1°33.3 | 1°28.8 | 1.2 - 0.1 | 7.2 - 0.8 | 13.2 - 1.4 |
| **13** | 1°33.3 | 1°33.5 | 1°29.0 | 1.3 - 0.1 | 7.3 - 0.8 | 13.3 - 1.4 |
| **14** | 1°33.5 | 1°33.8 | 1°29.2 | 1.4 - 0.2 | 7.4 - 0.8 | 13.4 - 1.5 |
| **15** | 1°33.8 | 1°34.0 | 1°29.5 | 1.5 - 0.2 | 7.5 - 0.8 | 13.5 - 1.5 |
| **16** | 1°34.0 | 1°34.3 | 1°29.7 | 1.6 - 0.2 | 7.6 - 0.8 | 13.6 - 1.5 |
| **17** | 1°34.3 | 1°34.5 | 1°30.0 | 1.7 - 0.2 | 7.7 - 0.8 | 13.7 - 1.5 |
| **18** | 1°34.5 | 1°34.8 | 1°30.2 | 1.8 - 0.2 | 7.8 - 0.8 | 13.8 - 1.5 |
| **19** | 1°34.8 | 1°35.0 | 1°30.4 | 1.9 - 0.2 | 7.9 - 0.9 | 13.9 - 1.5 |
| **20** | 1°35.0 | 1°35.3 | 1°30.7 | 2.0 - 0.2 | 8.0 - 0.9 | 14.0 - 1.5 |
| **21** | 1°35.2 | 1°35.5 | 1°30.9 | 2.1 - 0.2 | 8.1 - 0.9 | 14.1 - 1.5 |
| **22** | 1°35.5 | 1°35.8 | 1°31.1 | 2.2 - 0.2 | 8.2 - 0.9 | 14.2 - 1.5 |
| **23** | 1°35.8 | 1°36.0 | 1°31.4 | 2.3 - 0.2 | 8.3 - 0.9 | 14.3 - 1.5 |
| **24** | 1°36.0 | 1°36.3 | 1°31.6 | 2.4 - 0.3 | 8.4 - 0.9 | 14.4 - 1.6 |
| **25** | 1°36.3 | 1°36.5 | 1°31.9 | 2.5 - 0.3 | 8.5 - 0.9 | 14.5 - 1.6 |
| **26** | 1°36.5 | 1°36.8 | 1°32.1 | 2.6 - 0.3 | 8.6 - 0.9 | 14.6 - 1.6 |
| **27** | 1°36.8 | 1°37.0 | 1°32.3 | 2.7 - 0.3 | 8.7 - 0.9 | 14.7 - 1.6 |
| **28** | 1°37.0 | 1°37.3 | 1°32.6 | 2.8 - 0.3 | 8.8 - 1.0 | 14.8 - 1.6 |
| **29** | 1°37.3 | 1°37.5 | 1°32.8 | 2.9 - 0.3 | 8.9 - 1.0 | 14.9 - 1.6 |
| **30** | 1°37.5 | 1°37.8 | 1°33.1 | 3.0 - 0.3 | 9.0 - 1.0 | 15.0 - 1.6 |
| **31** | 1°37.8 | 1°38.0 | 1°33.3 | 3.1 - 0.3 | 9.1 - 1.0 | 15.1 - 1.6 |
| **32** | 1°38.0 | 1°38.3 | 1°33.5 | 3.2 - 0.3 | 9.2 - 1.0 | 15.2 - 1.6 |
| **33** | 1°38.3 | 1°38.5 | 1°33.8 | 3.3 - 0.4 | 9.3 - 1.0 | 15.3 - 1.7 |
| **34** | 1°38.5 | 1°38.8 | 1°34.0 | 3.4 - 0.4 | 9.4 - 1.0 | 15.4 - 1.7 |
| **35** | 1°38.7 | 1°39.0 | 1°34.3 | 3.5 - 0.4 | 9.5 - 1.0 | 15.5 - 1.7 |
| **36** | 1°39.0 | 1°39.3 | 1°34.5 | 3.6 - 0.4 | 9.6 - 1.0 | 15.6 - 1.7 |
| **37** | 1°39.3 | 1°39.5 | 1°34.7 | 3.7 - 0.4 | 9.7 - 1.1 | 15.7 - 1.7 |
| **38** | 1°39.5 | 1°39.8 | 1°35.0 | 3.8 - 0.4 | 9.8 - 1.1 | 15.8 - 1.7 |
| **39** | 1°39.8 | 1°40.0 | 1°35.2 | 3.9 - 0.4 | 9.9 - 1.1 | 15.9 - 1.7 |
| **40** | 1°40.0 | 1°40.3 | 1°35.4 | 4.0 - 0.4 | 10.0 - 1.1 | 16.0 - 1.7 |
| **41** | 1°40.3 | 1°40.5 | 1°35.7 | 4.1 - 0.4 | 10.1 - 1.1 | 16.1 - 1.7 |
| **42** | 1°40.5 | 1°40.8 | 1°35.9 | 4.2 - 0.5 | 10.2 - 1.1 | 16.2 - 1.8 |
| **43** | 1°40.8 | 1°41.0 | 1°36.2 | 4.3 - 0.5 | 10.3 - 1.1 | 16.3 - 1.8 |
| **44** | 1°41.0 | 1°41.3 | 1°36.4 | 4.4 - 0.5 | 10.4 - 1.1 | 16.4 - 1.8 |
| **45** | 1°41.3 | 1°41.5 | 1°36.6 | 4.5 - 0.5 | 10.5 - 1.1 | 16.5 - 1.8 |
| **46** | 1°41.5 | 1°41.8 | 1°36.9 | 4.6 - 0.5 | 10.6 - 1.1 | 16.6 - 1.8 |
| **47** | 1°41.8 | 1°42.0 | 1°37.1 | 4.7 - 0.5 | 10.7 - 1.2 | 16.7 - 1.8 |
| **48** | 1°42.0 | 1°42.3 | 1°37.4 | 4.8 - 0.5 | 10.8 - 1.2 | 16.8 - 1.8 |
| **49** | 1°42.3 | 1°42.5 | 1°37.6 | 4.9 - 0.5 | 10.9 - 1.2 | 16.9 - 1.8 |
| **50** | 1°42.5 | 1°42.8 | 1°37.8 | 5.0 - 0.5 | 11.0 - 1.2 | 17.0 - 1.8 |
| **51** | 1°42.7 | 1°43.0 | 1°38.1 | 5.1 - 0.6 | 11.1 - 1.2 | 17.1 - 1.9 |
| **52** | 1°43.0 | 1°43.3 | 1°38.3 | 5.2 - 0.6 | 11.2 - 1.2 | 17.2 - 1.9 |
| **53** | 1°43.2 | 1°43.5 | 1°38.5 | 5.3 - 0.6 | 11.3 - 1.2 | 17.3 - 1.9 |
| **54** | 1°43.5 | 1°43.8 | 1°38.8 | 5.4 - 0.6 | 11.4 - 1.2 | 17.4 - 1.9 |
| **55** | 1°43.8 | 1°44.0 | 1°39.0 | 5.5 - 0.6 | 11.5 - 1.2 | 17.5 - 1.9 |
| **56** | 1°44.0 | 1°44.3 | 1°39.3 | 5.6 - 0.6 | 11.6 - 1.3 | 17.6 - 1.9 |
| **57** | 1°44.3 | 1°44.5 | 1°39.5 | 5.7 - 0.6 | 11.7 - 1.3 | 17.7 - 1.9 |
| **58** | 1°44.5 | 1°44.8 | 1°39.7 | 5.8 - 0.6 | 11.8 - 1.3 | 17.8 - 1.9 |
| **59** | 1°44.8 | 1°45.0 | 1°40.0 | 5.9 - 0.6 | 11.9 - 1.3 | 17.9 - 1.9 |

| m<br>7 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| **0** | 1°45.0 | 1°45.3 | 1°40.2 | 0.0 - 0.0 | 6.0 - 0.8 | 12.0 - 1.5 |
| **1** | 1°45.3 | 1°45.5 | 1°40.5 | 0.1 - 0.0 | 6.1 - 0.8 | 12.1 - 1.5 |
| **2** | 1°45.5 | 1°45.8 | 1°40.7 | 0.2 - 0.0 | 6.2 - 0.8 | 12.2 - 1.5 |
| **3** | 1°45.8 | 1°46.0 | 1°40.9 | 0.3 - 0.0 | 6.3 - 0.8 | 12.3 - 1.5 |
| **4** | 1°46.0 | 1°46.3 | 1°41.2 | 0.4 - 0.1 | 6.4 - 0.8 | 12.4 - 1.6 |
| **5** | 1°46.2 | 1°46.5 | 1°41.4 | 0.5 - 0.1 | 6.5 - 0.8 | 12.5 - 1.6 |
| **6** | 1°46.5 | 1°46.8 | 1°41.6 | 0.6 - 0.1 | 6.6 - 0.8 | 12.6 - 1.6 |
| **7** | 1°46.7 | 1°47.0 | 1°41.9 | 0.7 - 0.1 | 6.7 - 0.8 | 12.7 - 1.6 |
| **8** | 1°47.0 | 1°47.3 | 1°42.1 | 0.8 - 0.1 | 6.8 - 0.8 | 12.8 - 1.6 |
| **9** | 1°47.3 | 1°47.5 | 1°42.4 | 0.9 - 0.1 | 6.9 - 0.9 | 12.9 - 1.6 |
| **10** | 1°47.5 | 1°47.8 | 1°42.6 | 1.0 - 0.1 | 7.0 - 0.9 | 13.0 - 1.6 |
| **11** | 1°47.8 | 1°48.0 | 1°42.8 | 1.1 - 0.1 | 7.1 - 0.9 | 13.1 - 1.6 |
| **12** | 1°48.0 | 1°48.3 | 1°43.1 | 1.2 - 0.2 | 7.2 - 0.9 | 13.2 - 1.6 |
| **13** | 1°48.3 | 1°48.5 | 1°43.3 | 1.3 - 0.2 | 7.3 - 0.9 | 13.3 - 1.7 |
| **14** | 1°48.5 | 1°48.8 | 1°43.6 | 1.4 - 0.2 | 7.4 - 0.9 | 13.4 - 1.7 |
| **15** | 1°48.8 | 1°49.0 | 1°43.8 | 1.5 - 0.2 | 7.5 - 0.9 | 13.5 - 1.7 |
| **16** | 1°49.0 | 1°49.3 | 1°44.0 | 1.6 - 0.2 | 7.6 - 0.9 | 13.6 - 1.7 |
| **17** | 1°49.3 | 1°49.5 | 1°44.3 | 1.7 - 0.2 | 7.7 - 1.0 | 13.7 - 1.7 |
| **18** | 1°49.5 | 1°49.8 | 1°44.5 | 1.8 - 0.2 | 7.8 - 1.0 | 13.8 - 1.7 |
| **19** | 1°49.8 | 1°50.0 | 1°44.8 | 1.9 - 0.2 | 7.9 - 1.0 | 13.9 - 1.7 |
| **20** | 1°50.0 | 1°50.3 | 1°45.0 | 2.0 - 0.3 | 8.0 - 1.0 | 14.0 - 1.8 |
| **21** | 1°50.2 | 1°50.6 | 1°45.2 | 2.1 - 0.3 | 8.1 - 1.0 | 14.1 - 1.8 |
| **22** | 1°50.5 | 1°50.8 | 1°45.5 | 2.2 - 0.3 | 8.2 - 1.0 | 14.2 - 1.8 |
| **23** | 1°50.8 | 1°51.1 | 1°45.7 | 2.3 - 0.3 | 8.3 - 1.0 | 14.3 - 1.8 |
| **24** | 1°51.0 | 1°51.3 | 1°45.9 | 2.4 - 0.3 | 8.4 - 1.1 | 14.4 - 1.8 |
| **25** | 1°51.3 | 1°51.6 | 1°46.2 | 2.5 - 0.3 | 8.5 - 1.1 | 14.5 - 1.8 |
| **26** | 1°51.5 | 1°51.8 | 1°46.4 | 2.6 - 0.3 | 8.6 - 1.1 | 14.6 - 1.8 |
| **27** | 1°51.8 | 1°52.1 | 1°46.7 | 2.7 - 0.3 | 8.7 - 1.1 | 14.7 - 1.8 |
| **28** | 1°52.0 | 1°52.3 | 1°46.9 | 2.8 - 0.4 | 8.8 - 1.1 | 14.8 - 1.9 |
| **29** | 1°52.3 | 1°52.6 | 1°47.1 | 2.9 - 0.4 | 8.9 - 1.1 | 14.9 - 1.9 |
| **30** | 1°52.5 | 1°52.8 | 1°47.4 | 3.0 - 0.4 | 9.0 - 1.1 | 15.0 - 1.9 |
| **31** | 1°52.7 | 1°53.1 | 1°47.6 | 3.1 - 0.4 | 9.1 - 1.1 | 15.1 - 1.9 |
| **32** | 1°53.0 | 1°53.3 | 1°47.9 | 3.2 - 0.4 | 9.2 - 1.1 | 15.2 - 1.9 |
| **33** | 1°53.3 | 1°53.6 | 1°48.1 | 3.3 - 0.4 | 9.3 - 1.2 | 15.3 - 1.9 |
| **34** | 1°53.5 | 1°53.8 | 1°48.3 | 3.4 - 0.4 | 9.4 - 1.2 | 15.4 - 1.9 |
| **35** | 1°53.7 | 1°54.1 | 1°48.6 | 3.5 - 0.4 | 9.5 - 1.2 | 15.5 - 1.9 |
| **36** | 1°54.0 | 1°54.3 | 1°48.8 | 3.6 - 0.5 | 9.6 - 1.2 | 15.6 - 1.9 |
| **37** | 1°54.2 | 1°54.6 | 1°49.0 | 3.7 - 0.5 | 9.7 - 1.2 | 15.7 - 2.0 |
| **38** | 1°54.5 | 1°54.8 | 1°49.3 | 3.8 - 0.5 | 9.8 - 1.2 | 15.8 - 2.0 |
| **39** | 1°54.8 | 1°55.1 | 1°49.5 | 3.9 - 0.5 | 9.9 - 1.2 | 15.9 - 2.0 |
| **40** | 1°55.0 | 1°55.3 | 1°49.8 | 4.0 - 0.5 | 10.0 - 1.3 | 16.0 - 2.0 |
| **41** | 1°55.3 | 1°55.6 | 1°50.0 | 4.1 - 0.5 | 10.1 - 1.3 | 16.1 - 2.0 |
| **42** | 1°55.5 | 1°55.8 | 1°50.2 | 4.2 - 0.5 | 10.2 - 1.3 | 16.2 - 2.0 |
| **43** | 1°55.8 | 1°56.1 | 1°50.5 | 4.3 - 0.5 | 10.3 - 1.3 | 16.3 - 2.0 |
| **44** | 1°56.0 | 1°56.3 | 1°50.7 | 4.4 - 0.6 | 10.4 - 1.3 | 16.4 - 2.0 |
| **45** | 1°56.3 | 1°56.6 | 1°51.0 | 4.5 - 0.6 | 10.5 - 1.3 | 16.5 - 2.1 |
| **46** | 1°56.5 | 1°56.8 | 1°51.2 | 4.6 - 0.6 | 10.6 - 1.3 | 16.6 - 2.1 |
| **47** | 1°56.7 | 1°57.1 | 1°51.4 | 4.7 - 0.6 | 10.7 - 1.3 | 16.7 - 2.1 |
| **48** | 1°57.0 | 1°57.3 | 1°51.7 | 4.8 - 0.6 | 10.8 - 1.4 | 16.8 - 2.1 |
| **49** | 1°57.3 | 1°57.6 | 1°51.9 | 4.9 - 0.6 | 10.9 - 1.4 | 16.9 - 2.1 |
| **50** | 1°57.5 | 1°57.8 | 1°52.1 | 5.0 - 0.6 | 11.0 - 1.4 | 17.0 - 2.1 |
| **51** | 1°57.7 | 1°58.1 | 1°52.4 | 5.1 - 0.6 | 11.1 - 1.4 | 17.1 - 2.1 |
| **52** | 1°58.0 | 1°58.3 | 1°52.6 | 5.2 - 0.7 | 11.2 - 1.4 | 17.2 - 2.1 |
| **53** | 1°58.2 | 1°58.6 | 1°52.9 | 5.3 - 0.7 | 11.3 - 1.4 | 17.3 - 2.2 |
| **54** | 1°58.5 | 1°58.8 | 1°53.1 | 5.4 - 0.7 | 11.4 - 1.4 | 17.4 - 2.2 |
| **55** | 1°58.8 | 1°59.1 | 1°53.3 | 5.5 - 0.7 | 11.5 - 1.4 | 17.5 - 2.2 |
| **56** | 1°59.0 | 1°59.3 | 1°53.6 | 5.6 - 0.7 | 11.6 - 1.5 | 17.6 - 2.2 |
| **57** | 1°59.3 | 1°59.6 | 1°53.8 | 5.7 - 0.7 | 11.7 - 1.5 | 17.7 - 2.2 |
| **58** | 1°59.5 | 1°59.8 | 1°54.1 | 5.8 - 0.7 | 11.8 - 1.5 | 17.8 - 2.2 |
| **59** | 1°59.8 | 2°00.1 | 1°54.3 | 5.9 - 0.7 | 11.9 - 1.5 | 17.9 - 2.2 |

| m<br>8 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| **0** | 2°00.0 | 2°00.3 | 1°54.5 | 0.0 - 0.0 | 6.0 - 0.8 | 12.0 - 1.7 |
| **1** | 2°00.3 | 2°00.6 | 1°54.8 | 0.1 - 0.0 | 6.1 - 0.9 | 12.1 - 1.7 |
| **2** | 2°00.5 | 2°00.8 | 1°55.0 | 0.2 - 0.0 | 6.2 - 0.9 | 12.2 - 1.7 |
| **3** | 2°00.8 | 2°01.1 | 1°55.2 | 0.3 - 0.0 | 6.3 - 0.9 | 12.3 - 1.7 |
| **4** | 2°01.0 | 2°01.3 | 1°55.5 | 0.4 - 0.1 | 6.4 - 0.9 | 12.4 - 1.8 |
| **5** | 2°01.3 | 2°01.6 | 1°55.7 | 0.5 - 0.1 | 6.5 - 0.9 | 12.5 - 1.8 |
| **6** | 2°01.5 | 2°01.8 | 1°56.0 | 0.6 - 0.1 | 6.6 - 0.9 | 12.6 - 1.8 |
| **7** | 2°01.8 | 2°02.1 | 1°56.2 | 0.7 - 0.1 | 6.7 - 0.9 | 12.7 - 1.8 |
| **8** | 2°02.0 | 2°02.3 | 1°56.4 | 0.8 - 0.1 | 6.8 - 1.0 | 12.8 - 1.8 |
| **9** | 2°02.3 | 2°02.6 | 1°56.7 | 0.9 - 0.1 | 6.9 - 1.0 | 12.9 - 1.8 |
| **10** | 2°02.5 | 2°02.8 | 1°56.9 | 1.0 - 0.1 | 7.0 - 1.0 | 13.0 - 1.8 |
| **11** | 2°02.8 | 2°03.1 | 1°57.2 | 1.1 - 0.2 | 7.1 - 1.0 | 13.1 - 1.9 |
| **12** | 2°03.0 | 2°03.3 | 1°57.4 | 1.2 - 0.2 | 7.2 - 1.0 | 13.2 - 1.9 |
| **13** | 2°03.3 | 2°03.6 | 1°57.6 | 1.3 - 0.2 | 7.3 - 1.0 | 13.3 - 1.9 |
| **14** | 2°03.5 | 2°03.8 | 1°57.9 | 1.4 - 0.2 | 7.4 - 1.0 | 13.4 - 1.9 |
| **15** | 2°03.8 | 2°04.1 | 1°58.1 | 1.5 - 0.2 | 7.5 - 1.1 | 13.5 - 1.9 |
| **16** | 2°04.0 | 2°04.3 | 1°58.4 | 1.6 - 0.2 | 7.6 - 1.1 | 13.6 - 1.9 |
| **17** | 2°04.2 | 2°04.6 | 1°58.6 | 1.7 - 0.2 | 7.7 - 1.1 | 13.7 - 1.9 |
| **18** | 2°04.5 | 2°04.8 | 1°58.8 | 1.8 - 0.3 | 7.8 - 1.1 | 13.8 - 2.0 |
| **19** | 2°04.7 | 2°05.1 | 1°59.1 | 1.9 - 0.3 | 7.9 - 1.1 | 13.9 - 2.0 |
| **20** | 2°05.0 | 2°05.3 | 1°59.3 | 2.0 - 0.3 | 8.0 - 1.1 | 14.0 - 2.0 |
| **21** | 2°05.2 | 2°05.6 | 1°59.5 | 2.1 - 0.3 | 8.1 - 1.1 | 14.1 - 2.0 |
| **22** | 2°05.5 | 2°05.8 | 1°59.8 | 2.2 - 0.3 | 8.2 - 1.2 | 14.2 - 2.0 |
| **23** | 2°05.7 | 2°06.1 | 2°00.0 | 2.3 - 0.3 | 8.3 - 1.2 | 14.3 - 2.0 |
| **24** | 2°06.0 | 2°06.3 | 2°00.3 | 2.4 - 0.3 | 8.4 - 1.2 | 14.4 - 2.0 |
| **25** | 2°06.2 | 2°06.6 | 2°00.5 | 2.5 - 0.4 | 8.5 - 1.2 | 14.5 - 2.1 |
| **26** | 2°06.5 | 2°06.8 | 2°00.7 | 2.6 - 0.4 | 8.6 - 1.2 | 14.6 - 2.1 |
| **27** | 2°06.7 | 2°07.1 | 2°01.0 | 2.7 - 0.4 | 8.7 - 1.2 | 14.7 - 2.1 |
| **28** | 2°07.0 | 2°07.3 | 2°01.2 | 2.8 - 0.4 | 8.8 - 1.2 | 14.8 - 2.1 |
| **29** | 2°07.2 | 2°07.6 | 2°01.5 | 2.9 - 0.4 | 8.9 - 1.3 | 14.9 - 2.1 |
| **30** | 2°07.5 | 2°07.8 | 2°01.7 | 3.0 - 0.4 | 9.0 - 1.3 | 15.0 - 2.1 |
| **31** | 2°07.8 | 2°08.1 | 2°01.9 | 3.1 - 0.4 | 9.1 - 1.3 | 15.1 - 2.1 |
| **32** | 2°08.0 | 2°08.3 | 2°02.2 | 3.2 - 0.5 | 9.2 - 1.3 | 15.2 - 2.2 |
| **33** | 2°08.3 | 2°08.6 | 2°02.4 | 3.3 - 0.5 | 9.3 - 1.3 | 15.3 - 2.2 |
| **34** | 2°08.5 | 2°08.9 | 2°02.6 | 3.4 - 0.5 | 9.4 - 1.3 | 15.4 - 2.2 |
| **35** | 2°08.8 | 2°09.1 | 2°02.9 | 3.5 - 0.5 | 9.5 - 1.3 | 15.5 - 2.2 |
| **36** | 2°09.0 | 2°09.4 | 2°03.1 | 3.6 - 0.5 | 9.6 - 1.4 | 15.6 - 2.2 |
| **37** | 2°09.3 | 2°09.6 | 2°03.4 | 3.7 - 0.5 | 9.7 - 1.4 | 15.7 - 2.2 |
| **38** | 2°09.5 | 2°09.9 | 2°03.6 | 3.8 - 0.5 | 9.8 - 1.4 | 15.8 - 2.2 |
| **39** | 2°09.8 | 2°10.1 | 2°03.8 | 3.9 - 0.6 | 9.9 - 1.4 | 15.9 - 2.3 |
| **40** | 2°10.0 | 2°10.4 | 2°04.1 | 4.0 - 0.6 | 10.0 - 1.4 | 16.0 - 2.3 |
| **41** | 2°10.3 | 2°10.6 | 2°04.3 | 4.1 - 0.6 | 10.1 - 1.4 | 16.1 - 2.3 |
| **42** | 2°10.5 | 2°10.9 | 2°04.6 | 4.2 - 0.6 | 10.2 - 1.4 | 16.2 - 2.3 |
| **43** | 2°10.8 | 2°11.1 | 2°04.8 | 4.3 - 0.6 | 10.3 - 1.5 | 16.3 - 2.3 |
| **44** | 2°11.0 | 2°11.4 | 2°05.0 | 4.4 - 0.6 | 10.4 - 1.5 | 16.4 - 2.3 |
| **45** | 2°11.3 | 2°11.6 | 2°05.3 | 4.5 - 0.6 | 10.5 - 1.5 | 16.5 - 2.3 |
| **46** | 2°11.5 | 2°11.9 | 2°05.5 | 4.6 - 0.7 | 10.6 - 1.5 | 16.6 - 2.4 |
| **47** | 2°11.7 | 2°12.1 | 2°05.7 | 4.7 - 0.7 | 10.7 - 1.5 | 16.7 - 2.4 |
| **48** | 2°12.0 | 2°12.4 | 2°06.0 | 4.8 - 0.7 | 10.8 - 1.5 | 16.8 - 2.4 |
| **49** | 2°12.2 | 2°12.6 | 2°06.2 | 4.9 - 0.7 | 10.9 - 1.5 | 16.9 - 2.4 |
| **50** | 2°12.5 | 2°12.9 | 2°06.5 | 5.0 - 0.7 | 11.0 - 1.6 | 17.0 - 2.4 |
| **51** | 2°12.7 | 2°13.1 | 2°06.7 | 5.1 - 0.7 | 11.1 - 1.6 | 17.1 - 2.4 |
| **52** | 2°13.0 | 2°13.4 | 2°06.9 | 5.2 - 0.7 | 11.2 - 1.6 | 17.2 - 2.4 |
| **53** | 2°13.2 | 2°13.6 | 2°07.2 | 5.3 - 0.8 | 11.3 - 1.6 | 17.3 - 2.5 |
| **54** | 2°13.5 | 2°13.9 | 2°07.4 | 5.4 - 0.8 | 11.4 - 1.6 | 17.4 - 2.5 |
| **55** | 2°13.7 | 2°14.1 | 2°07.7 | 5.5 - 0.8 | 11.5 - 1.6 | 17.5 - 2.5 |
| **56** | 2°14.0 | 2°14.4 | 2°07.9 | 5.6 - 0.8 | 11.6 - 1.6 | 17.6 - 2.5 |
| **57** | 2°14.2 | 2°14.6 | 2°08.1 | 5.7 - 0.8 | 11.7 - 1.7 | 17.7 - 2.5 |
| **58** | 2°14.5 | 2°14.9 | 2°08.4 | 5.8 - 0.8 | 11.8 - 1.7 | 17.8 - 2.5 |
| **59** | 2°14.7 | 2°15.1 | 2°08.6 | 5.9 - 0.8 | 11.9 - 1.7 | 17.9 - 2.5 |

# Increments and Corrections

| m<br>9 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 2°15.0 | 2°15.4 | 2°08.8 | 0.0 - 0.0 | 6.0 - 0.9 | 12.0 - 1.9 |
| 1 | 2°15.3 | 2°15.6 | 2°09.1 | 0.1 - 0.0 | 6.1 - 1.0 | 12.1 - 1.9 |
| 2 | 2°15.5 | 2°15.9 | 2°09.3 | 0.2 - 0.0 | 6.2 - 1.0 | 12.2 - 1.9 |
| 3 | 2°15.8 | 2°16.1 | 2°09.6 | 0.3 - 0.0 | 6.3 - 1.0 | 12.3 - 1.9 |
| 4 | 2°16.0 | 2°16.4 | 2°09.8 | 0.4 - 0.1 | 6.4 - 1.0 | 12.4 - 2.0 |
| 5 | 2°16.3 | 2°16.6 | 2°10.0 | 0.5 - 0.1 | 6.5 - 1.0 | 12.5 - 2.0 |
| 6 | 2°16.5 | 2°16.9 | 2°10.3 | 0.6 - 0.1 | 6.6 - 1.0 | 12.6 - 2.0 |
| 7 | 2°16.8 | 2°17.1 | 2°10.5 | 0.7 - 0.1 | 6.7 - 1.1 | 12.7 - 2.0 |
| 8 | 2°17.0 | 2°17.4 | 2°10.8 | 0.8 - 0.1 | 6.8 - 1.1 | 12.8 - 2.0 |
| 9 | 2°17.3 | 2°17.6 | 2°11.0 | 0.9 - 0.1 | 6.9 - 1.1 | 12.9 - 2.0 |
| 10 | 2°17.5 | 2°17.9 | 2°11.2 | 1.0 - 0.2 | 7.0 - 1.1 | 13.0 - 2.1 |
| 11 | 2°17.8 | 2°18.1 | 2°11.5 | 1.1 - 0.2 | 7.1 - 1.1 | 13.1 - 2.1 |
| 12 | 2°18.0 | 2°18.4 | 2°11.7 | 1.2 - 0.2 | 7.2 - 1.1 | 13.2 - 2.1 |
| 13 | 2°18.3 | 2°18.6 | 2°12.0 | 1.3 - 0.2 | 7.3 - 1.2 | 13.3 - 2.1 |
| 14 | 2°18.5 | 2°18.9 | 2°12.2 | 1.4 - 0.2 | 7.4 - 1.2 | 13.4 - 2.1 |
| 15 | 2°18.8 | 2°19.1 | 2°12.4 | 1.5 - 0.2 | 7.5 - 1.2 | 13.5 - 2.1 |
| 16 | 2°19.0 | 2°19.4 | 2°12.7 | 1.6 - 0.3 | 7.6 - 1.2 | 13.6 - 2.2 |
| 17 | 2°19.3 | 2°19.6 | 2°12.9 | 1.7 - 0.3 | 7.7 - 1.2 | 13.7 - 2.2 |
| 18 | 2°19.5 | 2°19.9 | 2°13.1 | 1.8 - 0.3 | 7.8 - 1.2 | 13.8 - 2.2 |
| 19 | 2°19.7 | 2°20.1 | 2°13.4 | 1.9 - 0.3 | 7.9 - 1.3 | 13.9 - 2.2 |
| 20 | 2°20.0 | 2°20.4 | 2°13.6 | 2.0 - 0.3 | 8.0 - 1.3 | 14.0 - 2.2 |
| 21 | 2°20.2 | 2°20.6 | 2°13.9 | 2.1 - 0.3 | 8.1 - 1.3 | 14.1 - 2.2 |
| 22 | 2°20.5 | 2°20.9 | 2°14.1 | 2.2 - 0.3 | 8.2 - 1.3 | 14.2 - 2.2 |
| 23 | 2°20.7 | 2°21.1 | 2°14.3 | 2.3 - 0.4 | 8.3 - 1.3 | 14.3 - 2.3 |
| 24 | 2°21.0 | 2°21.4 | 2°14.6 | 2.4 - 0.4 | 8.4 - 1.3 | 14.4 - 2.3 |
| 25 | 2°21.2 | 2°21.6 | 2°14.8 | 2.5 - 0.4 | 8.5 - 1.3 | 14.5 - 2.3 |
| 26 | 2°21.5 | 2°21.9 | 2°15.1 | 2.6 - 0.4 | 8.6 - 1.4 | 14.6 - 2.3 |
| 27 | 2°21.7 | 2°22.1 | 2°15.3 | 2.7 - 0.4 | 8.7 - 1.4 | 14.7 - 2.3 |
| 28 | 2°22.0 | 2°22.4 | 2°15.5 | 2.8 - 0.4 | 8.8 - 1.4 | 14.8 - 2.3 |
| 29 | 2°22.2 | 2°22.6 | 2°15.8 | 2.9 - 0.5 | 8.9 - 1.4 | 14.9 - 2.4 |
| 30 | 2°22.5 | 2°22.9 | 2°16.0 | 3.0 - 0.5 | 9.0 - 1.4 | 15.0 - 2.4 |
| 31 | 2°22.8 | 2°23.1 | 2°16.2 | 3.1 - 0.5 | 9.1 - 1.4 | 15.1 - 2.4 |
| 32 | 2°23.0 | 2°23.4 | 2°16.5 | 3.2 - 0.5 | 9.2 - 1.5 | 15.2 - 2.4 |
| 33 | 2°23.3 | 2°23.6 | 2°16.7 | 3.3 - 0.5 | 9.3 - 1.5 | 15.3 - 2.4 |
| 34 | 2°23.5 | 2°23.9 | 2°17.0 | 3.4 - 0.5 | 9.4 - 1.5 | 15.4 - 2.4 |
| 35 | 2°23.8 | 2°24.1 | 2°17.2 | 3.5 - 0.6 | 9.5 - 1.5 | 15.5 - 2.5 |
| 36 | 2°24.0 | 2°24.4 | 2°17.4 | 3.6 - 0.6 | 9.6 - 1.5 | 15.6 - 2.5 |
| 37 | 2°24.3 | 2°24.6 | 2°17.7 | 3.7 - 0.6 | 9.7 - 1.5 | 15.7 - 2.5 |
| 38 | 2°24.5 | 2°24.9 | 2°17.9 | 3.8 - 0.6 | 9.8 - 1.6 | 15.8 - 2.5 |
| 39 | 2°24.8 | 2°25.1 | 2°18.2 | 3.9 - 0.6 | 9.9 - 1.6 | 15.9 - 2.5 |
| 40 | 2°25.0 | 2°25.4 | 2°18.4 | 4.0 - 0.6 | 10.0 - 1.6 | 16.0 - 2.5 |
| 41 | 2°25.3 | 2°25.6 | 2°18.6 | 4.1 - 0.6 | 10.1 - 1.6 | 16.1 - 2.5 |
| 42 | 2°25.5 | 2°25.9 | 2°18.9 | 4.2 - 0.7 | 10.2 - 1.6 | 16.2 - 2.6 |
| 43 | 2°25.8 | 2°26.1 | 2°19.1 | 4.3 - 0.7 | 10.3 - 1.6 | 16.3 - 2.6 |
| 44 | 2°26.0 | 2°26.4 | 2°19.3 | 4.4 - 0.7 | 10.4 - 1.6 | 16.4 - 2.6 |
| 45 | 2°26.3 | 2°26.6 | 2°19.6 | 4.5 - 0.7 | 10.5 - 1.7 | 16.5 - 2.6 |
| 46 | 2°26.5 | 2°26.9 | 2°19.8 | 4.6 - 0.7 | 10.6 - 1.7 | 16.6 - 2.6 |
| 47 | 2°26.8 | 2°27.2 | 2°20.1 | 4.7 - 0.7 | 10.7 - 1.7 | 16.7 - 2.6 |
| 48 | 2°27.0 | 2°27.4 | 2°20.3 | 4.8 - 0.8 | 10.8 - 1.7 | 16.8 - 2.7 |
| 49 | 2°27.2 | 2°27.7 | 2°20.5 | 4.9 - 0.8 | 10.9 - 1.7 | 16.9 - 2.7 |
| 50 | 2°27.5 | 2°27.9 | 2°20.8 | 5.0 - 0.8 | 11.0 - 1.7 | 17.0 - 2.7 |
| 51 | 2°27.7 | 2°28.2 | 2°21.0 | 5.1 - 0.8 | 11.1 - 1.8 | 17.1 - 2.7 |
| 52 | 2°28.0 | 2°28.4 | 2°21.3 | 5.2 - 0.8 | 11.2 - 1.8 | 17.2 - 2.7 |
| 53 | 2°28.2 | 2°28.7 | 2°21.5 | 5.3 - 0.8 | 11.3 - 1.8 | 17.3 - 2.7 |
| 54 | 2°28.5 | 2°28.9 | 2°21.7 | 5.4 - 0.9 | 11.4 - 1.8 | 17.4 - 2.8 |
| 55 | 2°28.7 | 2°29.2 | 2°22.0 | 5.5 - 0.9 | 11.5 - 1.8 | 17.5 - 2.8 |
| 56 | 2°29.0 | 2°29.4 | 2°22.2 | 5.6 - 0.9 | 11.6 - 1.8 | 17.6 - 2.8 |
| 57 | 2°29.2 | 2°29.7 | 2°22.5 | 5.7 - 0.9 | 11.7 - 1.9 | 17.7 - 2.8 |
| 58 | 2°29.5 | 2°29.9 | 2°22.7 | 5.8 - 0.9 | 11.8 - 1.9 | 17.8 - 2.8 |
| 59 | 2°29.7 | 2°30.2 | 2°22.9 | 5.9 - 0.9 | 11.9 - 1.9 | 17.9 - 2.8 |

| m<br>10 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 2°30.0 | 2°30.4 | 2°23.2 | 0.0 - 0.0 | 6.0 - 1.0 | 12.0 - 2.1 |
| 1 | 2°30.3 | 2°30.7 | 2°23.4 | 0.1 - 0.0 | 6.1 - 1.1 | 12.1 - 2.1 |
| 2 | 2°30.5 | 2°30.9 | 2°23.6 | 0.2 - 0.0 | 6.2 - 1.1 | 12.2 - 2.1 |
| 3 | 2°30.8 | 2°31.2 | 2°23.9 | 0.3 - 0.1 | 6.3 - 1.1 | 12.3 - 2.2 |
| 4 | 2°31.0 | 2°31.4 | 2°24.1 | 0.4 - 0.1 | 6.4 - 1.1 | 12.4 - 2.2 |
| 5 | 2°31.3 | 2°31.7 | 2°24.4 | 0.5 - 0.1 | 6.5 - 1.1 | 12.5 - 2.2 |
| 6 | 2°31.5 | 2°31.9 | 2°24.6 | 0.6 - 0.1 | 6.6 - 1.2 | 12.6 - 2.2 |
| 7 | 2°31.8 | 2°32.2 | 2°24.8 | 0.7 - 0.1 | 6.7 - 1.2 | 12.7 - 2.2 |
| 8 | 2°32.0 | 2°32.4 | 2°25.1 | 0.8 - 0.1 | 6.8 - 1.2 | 12.8 - 2.2 |
| 9 | 2°32.3 | 2°32.7 | 2°25.3 | 0.9 - 0.2 | 6.9 - 1.2 | 12.9 - 2.3 |
| 10 | 2°32.5 | 2°32.9 | 2°25.6 | 1.0 - 0.2 | 7.0 - 1.2 | 13.0 - 2.3 |
| 11 | 2°32.8 | 2°33.2 | 2°25.8 | 1.1 - 0.2 | 7.1 - 1.2 | 13.1 - 2.3 |
| 12 | 2°33.0 | 2°33.4 | 2°26.0 | 1.2 - 0.2 | 7.2 - 1.3 | 13.2 - 2.3 |
| 13 | 2°33.3 | 2°33.7 | 2°26.3 | 1.3 - 0.2 | 7.3 - 1.3 | 13.3 - 2.3 |
| 14 | 2°33.5 | 2°33.9 | 2°26.5 | 1.4 - 0.2 | 7.4 - 1.3 | 13.4 - 2.3 |
| 15 | 2°33.8 | 2°34.2 | 2°26.7 | 1.5 - 0.3 | 7.5 - 1.3 | 13.5 - 2.4 |
| 16 | 2°34.0 | 2°34.4 | 2°27.0 | 1.6 - 0.3 | 7.6 - 1.3 | 13.6 - 2.4 |
| 17 | 2°34.3 | 2°34.7 | 2°27.2 | 1.7 - 0.3 | 7.7 - 1.3 | 13.7 - 2.4 |
| 18 | 2°34.5 | 2°34.9 | 2°27.5 | 1.8 - 0.3 | 7.8 - 1.4 | 13.8 - 2.4 |
| 19 | 2°34.8 | 2°35.2 | 2°27.7 | 1.9 - 0.3 | 7.9 - 1.4 | 13.9 - 2.4 |
| 20 | 2°35.0 | 2°35.4 | 2°27.9 | 2.0 - 0.3 | 8.0 - 1.4 | 14.0 - 2.4 |
| 21 | 2°35.2 | 2°35.7 | 2°28.2 | 2.1 - 0.4 | 8.1 - 1.4 | 14.1 - 2.5 |
| 22 | 2°35.5 | 2°35.9 | 2°28.4 | 2.2 - 0.4 | 8.2 - 1.4 | 14.2 - 2.5 |
| 23 | 2°35.7 | 2°36.2 | 2°28.7 | 2.3 - 0.4 | 8.3 - 1.5 | 14.3 - 2.5 |
| 24 | 2°36.0 | 2°36.4 | 2°28.9 | 2.4 - 0.4 | 8.4 - 1.5 | 14.4 - 2.5 |
| 25 | 2°36.2 | 2°36.7 | 2°29.1 | 2.5 - 0.4 | 8.5 - 1.5 | 14.5 - 2.5 |
| 26 | 2°36.5 | 2°36.9 | 2°29.4 | 2.6 - 0.5 | 8.6 - 1.5 | 14.6 - 2.6 |
| 27 | 2°36.7 | 2°37.2 | 2°29.6 | 2.7 - 0.5 | 8.7 - 1.5 | 14.7 - 2.6 |
| 28 | 2°37.0 | 2°37.4 | 2°29.8 | 2.8 - 0.5 | 8.8 - 1.5 | 14.8 - 2.6 |
| 29 | 2°37.2 | 2°37.7 | 2°30.1 | 2.9 - 0.5 | 8.9 - 1.6 | 14.9 - 2.6 |
| 30 | 2°37.5 | 2°37.9 | 2°30.3 | 3.0 - 0.5 | 9.0 - 1.6 | 15.0 - 2.6 |
| 31 | 2°37.8 | 2°38.2 | 2°30.6 | 3.1 - 0.5 | 9.1 - 1.6 | 15.1 - 2.6 |
| 32 | 2°38.0 | 2°38.4 | 2°30.8 | 3.2 - 0.6 | 9.2 - 1.6 | 15.2 - 2.7 |
| 33 | 2°38.3 | 2°38.7 | 2°31.0 | 3.3 - 0.6 | 9.3 - 1.6 | 15.3 - 2.7 |
| 34 | 2°38.5 | 2°38.9 | 2°31.3 | 3.4 - 0.6 | 9.4 - 1.6 | 15.4 - 2.7 |
| 35 | 2°38.8 | 2°39.2 | 2°31.5 | 3.5 - 0.6 | 9.5 - 1.7 | 15.5 - 2.7 |
| 36 | 2°39.0 | 2°39.4 | 2°31.8 | 3.6 - 0.6 | 9.6 - 1.7 | 15.6 - 2.7 |
| 37 | 2°39.3 | 2°39.7 | 2°32.0 | 3.7 - 0.6 | 9.7 - 1.7 | 15.7 - 2.7 |
| 38 | 2°39.5 | 2°39.9 | 2°32.2 | 3.8 - 0.7 | 9.8 - 1.7 | 15.8 - 2.8 |
| 39 | 2°39.8 | 2°40.2 | 2°32.5 | 3.9 - 0.7 | 9.9 - 1.7 | 15.9 - 2.8 |
| 40 | 2°40.0 | 2°40.4 | 2°32.7 | 4.0 - 0.7 | 10.0 - 1.8 | 16.0 - 2.8 |
| 41 | 2°40.3 | 2°40.7 | 2°32.9 | 4.1 - 0.7 | 10.1 - 1.8 | 16.1 - 2.8 |
| 42 | 2°40.5 | 2°40.9 | 2°33.2 | 4.2 - 0.7 | 10.2 - 1.8 | 16.2 - 2.8 |
| 43 | 2°40.8 | 2°41.2 | 2°33.4 | 4.3 - 0.8 | 10.3 - 1.8 | 16.3 - 2.9 |
| 44 | 2°41.0 | 2°41.4 | 2°33.7 | 4.4 - 0.8 | 10.4 - 1.8 | 16.4 - 2.9 |
| 45 | 2°41.3 | 2°41.7 | 2°33.9 | 4.5 - 0.8 | 10.5 - 1.8 | 16.5 - 2.9 |
| 46 | 2°41.5 | 2°41.9 | 2°34.1 | 4.6 - 0.8 | 10.6 - 1.9 | 16.6 - 2.9 |
| 47 | 2°41.8 | 2°42.2 | 2°34.4 | 4.7 - 0.8 | 10.7 - 1.9 | 16.7 - 2.9 |
| 48 | 2°42.0 | 2°42.4 | 2°34.6 | 4.8 - 0.8 | 10.8 - 1.9 | 16.8 - 2.9 |
| 49 | 2°42.3 | 2°42.7 | 2°34.9 | 4.9 - 0.9 | 10.9 - 1.9 | 16.9 - 3.0 |
| 50 | 2°42.5 | 2°42.9 | 2°35.1 | 5.0 - 0.9 | 11.0 - 1.9 | 17.0 - 3.0 |
| 51 | 2°42.7 | 2°43.2 | 2°35.3 | 5.1 - 0.9 | 11.1 - 1.9 | 17.1 - 3.0 |
| 52 | 2°43.0 | 2°43.4 | 2°35.6 | 5.2 - 0.9 | 11.2 - 2.0 | 17.2 - 3.0 |
| 53 | 2°43.2 | 2°43.7 | 2°35.8 | 5.3 - 0.9 | 11.3 - 2.0 | 17.3 - 3.0 |
| 54 | 2°43.5 | 2°43.9 | 2°36.1 | 5.4 - 0.9 | 11.4 - 2.0 | 17.4 - 3.0 |
| 55 | 2°43.7 | 2°44.2 | 2°36.3 | 5.5 - 1.0 | 11.5 - 2.0 | 17.5 - 3.1 |
| 56 | 2°44.0 | 2°44.4 | 2°36.5 | 5.6 - 1.0 | 11.6 - 2.0 | 17.6 - 3.1 |
| 57 | 2°44.2 | 2°44.7 | 2°36.8 | 5.7 - 1.0 | 11.7 - 2.0 | 17.7 - 3.1 |
| 58 | 2°44.5 | 2°44.9 | 2°37.0 | 5.8 - 1.0 | 11.8 - 2.1 | 17.8 - 3.1 |
| 59 | 2°44.7 | 2°45.2 | 2°37.2 | 5.9 - 1.0 | 11.9 - 2.1 | 17.9 - 3.1 |

| m<br>11 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 2°45.0 | 2°45.5 | 2°37.5 | 0.0 - 0.0 | 6.0 - 1.2 | 12.0 - 2.3 |
| 1 | 2°45.3 | 2°45.7 | 2°37.7 | 0.1 - 0.0 | 6.1 - 1.2 | 12.1 - 2.3 |
| 2 | 2°45.5 | 2°46.0 | 2°38.0 | 0.2 - 0.0 | 6.2 - 1.2 | 12.2 - 2.3 |
| 3 | 2°45.8 | 2°46.2 | 2°38.2 | 0.3 - 0.1 | 6.3 - 1.2 | 12.3 - 2.4 |
| 4 | 2°46.0 | 2°46.5 | 2°38.4 | 0.4 - 0.1 | 6.4 - 1.2 | 12.4 - 2.4 |
| 5 | 2°46.3 | 2°46.7 | 2°38.7 | 0.5 - 0.1 | 6.5 - 1.2 | 12.5 - 2.4 |
| 6 | 2°46.5 | 2°47.0 | 2°38.9 | 0.6 - 0.1 | 6.6 - 1.3 | 12.6 - 2.4 |
| 7 | 2°46.8 | 2°47.2 | 2°39.2 | 0.7 - 0.1 | 6.7 - 1.3 | 12.7 - 2.4 |
| 8 | 2°47.0 | 2°47.5 | 2°39.4 | 0.8 - 0.2 | 6.8 - 1.3 | 12.8 - 2.5 |
| 9 | 2°47.3 | 2°47.7 | 2°39.6 | 0.9 - 0.2 | 6.9 - 1.3 | 12.9 - 2.5 |
| 10 | 2°47.5 | 2°48.0 | 2°39.9 | 1.0 - 0.2 | 7.0 - 1.3 | 13.0 - 2.5 |
| 11 | 2°47.8 | 2°48.2 | 2°40.1 | 1.1 - 0.2 | 7.1 - 1.4 | 13.1 - 2.5 |
| 12 | 2°48.0 | 2°48.5 | 2°40.3 | 1.2 - 0.2 | 7.2 - 1.4 | 13.2 - 2.5 |
| 13 | 2°48.3 | 2°48.7 | 2°40.6 | 1.3 - 0.2 | 7.3 - 1.4 | 13.3 - 2.5 |
| 14 | 2°48.5 | 2°49.0 | 2°40.8 | 1.4 - 0.3 | 7.4 - 1.4 | 13.4 - 2.6 |
| 15 | 2°48.8 | 2°49.2 | 2°41.1 | 1.5 - 0.3 | 7.5 - 1.4 | 13.5 - 2.6 |
| 16 | 2°49.0 | 2°49.5 | 2°41.3 | 1.6 - 0.3 | 7.6 - 1.5 | 13.6 - 2.6 |
| 17 | 2°49.3 | 2°49.7 | 2°41.5 | 1.7 - 0.3 | 7.7 - 1.5 | 13.7 - 2.6 |
| 18 | 2°49.5 | 2°50.0 | 2°41.8 | 1.8 - 0.3 | 7.8 - 1.5 | 13.8 - 2.6 |
| 19 | 2°49.8 | 2°50.2 | 2°42.0 | 1.9 - 0.4 | 7.9 - 1.5 | 13.9 - 2.7 |
| 20 | 2°50.0 | 2°50.5 | 2°42.3 | 2.0 - 0.4 | 8.0 - 1.5 | 14.0 - 2.7 |
| 21 | 2°50.2 | 2°50.7 | 2°42.5 | 2.1 - 0.4 | 8.1 - 1.6 | 14.1 - 2.7 |
| 22 | 2°50.5 | 2°51.0 | 2°42.7 | 2.2 - 0.4 | 8.2 - 1.6 | 14.2 - 2.7 |
| 23 | 2°50.7 | 2°51.2 | 2°43.0 | 2.3 - 0.4 | 8.3 - 1.6 | 14.3 - 2.7 |
| 24 | 2°51.0 | 2°51.5 | 2°43.2 | 2.4 - 0.5 | 8.4 - 1.6 | 14.4 - 2.8 |
| 25 | 2°51.2 | 2°51.7 | 2°43.4 | 2.5 - 0.5 | 8.5 - 1.6 | 14.5 - 2.8 |
| 26 | 2°51.5 | 2°52.0 | 2°43.7 | 2.6 - 0.5 | 8.6 - 1.6 | 14.6 - 2.8 |
| 27 | 2°51.7 | 2°52.2 | 2°43.9 | 2.7 - 0.5 | 8.7 - 1.7 | 14.7 - 2.8 |
| 28 | 2°52.0 | 2°52.5 | 2°44.2 | 2.8 - 0.5 | 8.8 - 1.7 | 14.8 - 2.8 |
| 29 | 2°52.2 | 2°52.7 | 2°44.4 | 2.9 - 0.6 | 8.9 - 1.7 | 14.9 - 2.9 |
| 30 | 2°52.5 | 2°53.0 | 2°44.6 | 3.0 - 0.6 | 9.0 - 1.7 | 15.0 - 2.9 |
| 31 | 2°52.8 | 2°53.2 | 2°44.9 | 3.1 - 0.6 | 9.1 - 1.7 | 15.1 - 2.9 |
| 32 | 2°53.0 | 2°53.5 | 2°45.1 | 3.2 - 0.6 | 9.2 - 1.8 | 15.2 - 2.9 |
| 33 | 2°53.3 | 2°53.7 | 2°45.4 | 3.3 - 0.6 | 9.3 - 1.8 | 15.3 - 2.9 |
| 34 | 2°53.5 | 2°54.0 | 2°45.6 | 3.4 - 0.7 | 9.4 - 1.8 | 15.4 - 3.0 |
| 35 | 2°53.8 | 2°54.2 | 2°45.8 | 3.5 - 0.7 | 9.5 - 1.8 | 15.5 - 3.0 |
| 36 | 2°54.0 | 2°54.5 | 2°46.1 | 3.6 - 0.7 | 9.6 - 1.8 | 15.6 - 3.0 |
| 37 | 2°54.3 | 2°54.7 | 2°46.3 | 3.7 - 0.7 | 9.7 - 1.9 | 15.7 - 3.0 |
| 38 | 2°54.5 | 2°55.0 | 2°46.6 | 3.8 - 0.7 | 9.8 - 1.9 | 15.8 - 3.0 |
| 39 | 2°54.8 | 2°55.2 | 2°46.8 | 3.9 - 0.7 | 9.9 - 1.9 | 15.9 - 3.0 |
| 40 | 2°55.0 | 2°55.5 | 2°47.0 | 4.0 - 0.8 | 10.0 - 1.9 | 16.0 - 3.1 |
| 41 | 2°55.3 | 2°55.7 | 2°47.3 | 4.1 - 0.8 | 10.1 - 1.9 | 16.1 - 3.1 |
| 42 | 2°55.5 | 2°56.0 | 2°47.5 | 4.2 - 0.8 | 10.2 - 2.0 | 16.2 - 3.1 |
| 43 | 2°55.8 | 2°56.2 | 2°47.7 | 4.3 - 0.8 | 10.3 - 2.0 | 16.3 - 3.1 |
| 44 | 2°56.0 | 2°56.5 | 2°48.0 | 4.4 - 0.8 | 10.4 - 2.0 | 16.4 - 3.1 |
| 45 | 2°56.3 | 2°56.7 | 2°48.2 | 4.5 - 0.9 | 10.5 - 2.0 | 16.5 - 3.2 |
| 46 | 2°56.5 | 2°57.0 | 2°48.5 | 4.6 - 0.9 | 10.6 - 2.0 | 16.6 - 3.2 |
| 47 | 2°56.8 | 2°57.2 | 2°48.7 | 4.7 - 0.9 | 10.7 - 2.1 | 16.7 - 3.2 |
| 48 | 2°57.0 | 2°57.5 | 2°48.9 | 4.8 - 0.9 | 10.8 - 2.1 | 16.8 - 3.2 |
| 49 | 2°57.3 | 2°57.7 | 2°49.2 | 4.9 - 0.9 | 10.9 - 2.1 | 16.9 - 3.2 |
| 50 | 2°57.5 | 2°58.0 | 2°49.4 | 5.0 - 1.0 | 11.0 - 2.1 | 17.0 - 3.3 |
| 51 | 2°57.7 | 2°58.2 | 2°49.7 | 5.1 - 1.0 | 11.1 - 2.1 | 17.1 - 3.3 |
| 52 | 2°58.0 | 2°58.5 | 2°49.9 | 5.2 - 1.0 | 11.2 - 2.1 | 17.2 - 3.3 |
| 53 | 2°58.2 | 2°58.7 | 2°50.1 | 5.3 - 1.0 | 11.3 - 2.2 | 17.3 - 3.3 |
| 54 | 2°58.5 | 2°59.0 | 2°50.4 | 5.4 - 1.0 | 11.4 - 2.2 | 17.4 - 3.3 |
| 55 | 2°58.7 | 2°59.2 | 2°50.6 | 5.5 - 1.1 | 11.5 - 2.2 | 17.5 - 3.4 |
| 56 | 2°59.0 | 2°59.5 | 2°50.8 | 5.6 - 1.1 | 11.6 - 2.2 | 17.6 - 3.4 |
| 57 | 2°59.2 | 2°59.7 | 2°51.1 | 5.7 - 1.1 | 11.7 - 2.2 | 17.7 - 3.4 |
| 58 | 2°59.5 | 3°00.0 | 2°51.3 | 5.8 - 1.1 | 11.8 - 2.3 | 17.8 - 3.4 |
| 59 | 2°59.7 | 3°00.2 | 2°51.6 | 5.9 - 1.1 | 11.9 - 2.3 | 17.9 - 3.4 |

# Increments and Corrections

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 12 | Plan. | | | | | |
| 0 | 3°00.0 | 3°00.5 | 2°51.8 | 0.0 - 0.0 | 6.0 - 1.3 | 12.0 - 2.5 |
| 1 | 3°00.3 | 3°00.7 | 2°52.0 | 0.1 - 0.0 | 6.1 - 1.3 | 12.1 - 2.5 |
| 2 | 3°00.5 | 3°01.0 | 2°52.3 | 0.2 - 0.0 | 6.2 - 1.3 | 12.2 - 2.5 |
| 3 | 3°00.8 | 3°01.2 | 2°52.5 | 0.3 - 0.1 | 6.3 - 1.3 | 12.3 - 2.6 |
| 4 | 3°01.0 | 3°01.5 | 2°52.8 | 0.4 - 0.1 | 6.4 - 1.3 | 12.4 - 2.6 |
| 5 | 3°01.3 | 3°01.7 | 2°53.0 | 0.5 - 0.1 | 6.5 - 1.4 | 12.5 - 2.6 |
| 6 | 3°01.5 | 3°02.0 | 2°53.2 | 0.6 - 0.1 | 6.6 - 1.4 | 12.6 - 2.6 |
| 7 | 3°01.8 | 3°02.2 | 2°53.5 | 0.7 - 0.1 | 6.7 - 1.4 | 12.7 - 2.6 |
| 8 | 3°02.0 | 3°02.5 | 2°53.7 | 0.8 - 0.2 | 6.8 - 1.4 | 12.8 - 2.7 |
| 9 | 3°02.3 | 3°02.7 | 2°53.9 | 0.9 - 0.2 | 6.9 - 1.4 | 12.9 - 2.7 |
| 10 | 3°02.5 | 3°03.0 | 2°54.2 | 1.0 - 0.2 | 7.0 - 1.5 | 13.0 - 2.7 |
| 11 | 3°02.8 | 3°03.2 | 2°54.4 | 1.1 - 0.2 | 7.1 - 1.5 | 13.1 - 2.7 |
| 12 | 3°03.0 | 3°03.5 | 2°54.7 | 1.2 - 0.3 | 7.2 - 1.5 | 13.2 - 2.8 |
| 13 | 3°03.3 | 3°03.8 | 2°54.9 | 1.3 - 0.3 | 7.3 - 1.5 | 13.3 - 2.8 |
| 14 | 3°03.5 | 3°04.0 | 2°55.1 | 1.4 - 0.3 | 7.4 - 1.5 | 13.4 - 2.8 |
| 15 | 3°03.8 | 3°04.3 | 2°55.4 | 1.5 - 0.3 | 7.5 - 1.6 | 13.5 - 2.8 |
| 16 | 3°04.0 | 3°04.5 | 2°55.6 | 1.6 - 0.3 | 7.6 - 1.6 | 13.6 - 2.8 |
| 17 | 3°04.2 | 3°04.8 | 2°55.9 | 1.7 - 0.4 | 7.7 - 1.6 | 13.7 - 2.9 |
| 18 | 3°04.5 | 3°05.0 | 2°56.1 | 1.8 - 0.4 | 7.8 - 1.6 | 13.8 - 2.9 |
| 19 | 3°04.7 | 3°05.3 | 2°56.3 | 1.9 - 0.4 | 7.9 - 1.6 | 13.9 - 2.9 |
| 20 | 3°05.0 | 3°05.5 | 2°56.6 | 2.0 - 0.4 | 8.0 - 1.7 | 14.0 - 2.9 |
| 21 | 3°05.2 | 3°05.8 | 2°56.8 | 2.1 - 0.4 | 8.1 - 1.7 | 14.1 - 2.9 |
| 22 | 3°05.5 | 3°06.0 | 2°57.0 | 2.2 - 0.5 | 8.2 - 1.7 | 14.2 - 3.0 |
| 23 | 3°05.7 | 3°06.3 | 2°57.3 | 2.3 - 0.5 | 8.3 - 1.7 | 14.3 - 3.0 |
| 24 | 3°06.0 | 3°06.5 | 2°57.5 | 2.4 - 0.5 | 8.4 - 1.8 | 14.4 - 3.0 |
| 25 | 3°06.2 | 3°06.8 | 2°57.8 | 2.5 - 0.5 | 8.5 - 1.8 | 14.5 - 3.0 |
| 26 | 3°06.5 | 3°07.0 | 2°58.0 | 2.6 - 0.5 | 8.6 - 1.8 | 14.6 - 3.0 |
| 27 | 3°06.7 | 3°07.3 | 2°58.2 | 2.7 - 0.6 | 8.7 - 1.8 | 14.7 - 3.1 |
| 28 | 3°07.0 | 3°07.5 | 2°58.5 | 2.8 - 0.6 | 8.8 - 1.8 | 14.8 - 3.1 |
| 29 | 3°07.2 | 3°07.8 | 2°58.7 | 2.9 - 0.6 | 8.9 - 1.9 | 14.9 - 3.1 |
| 30 | 3°07.5 | 3°08.0 | 2°59.0 | 3.0 - 0.6 | 9.0 - 1.9 | 15.0 - 3.1 |
| 31 | 3°07.8 | 3°08.3 | 2°59.2 | 3.1 - 0.6 | 9.1 - 1.9 | 15.1 - 3.1 |
| 32 | 3°08.0 | 3°08.5 | 2°59.4 | 3.2 - 0.7 | 9.2 - 1.9 | 15.2 - 3.2 |
| 33 | 3°08.3 | 3°08.8 | 2°59.7 | 3.3 - 0.7 | 9.3 - 1.9 | 15.3 - 3.2 |
| 34 | 3°08.5 | 3°09.0 | 2°59.9 | 3.4 - 0.7 | 9.4 - 2.0 | 15.4 - 3.2 |
| 35 | 3°08.8 | 3°09.3 | 3°00.2 | 3.5 - 0.7 | 9.5 - 2.0 | 15.5 - 3.2 |
| 36 | 3°09.0 | 3°09.5 | 3°00.4 | 3.6 - 0.8 | 9.6 - 2.0 | 15.6 - 3.3 |
| 37 | 3°09.3 | 3°09.8 | 3°00.6 | 3.7 - 0.8 | 9.7 - 2.0 | 15.7 - 3.3 |
| 38 | 3°09.5 | 3°10.0 | 3°00.9 | 3.8 - 0.8 | 9.8 - 2.0 | 15.8 - 3.3 |
| 39 | 3°09.8 | 3°10.3 | 3°01.1 | 3.9 - 0.8 | 9.9 - 2.1 | 15.9 - 3.3 |
| 40 | 3°10.0 | 3°10.5 | 3°01.3 | 4.0 - 0.8 | 10.0 - 2.1 | 16.0 - 3.3 |
| 41 | 3°10.3 | 3°10.8 | 3°01.6 | 4.1 - 0.9 | 10.1 - 2.1 | 16.1 - 3.4 |
| 42 | 3°10.5 | 3°11.0 | 3°01.8 | 4.2 - 0.9 | 10.2 - 2.1 | 16.2 - 3.4 |
| 43 | 3°10.8 | 3°11.3 | 3°02.1 | 4.3 - 0.9 | 10.3 - 2.1 | 16.3 - 3.4 |
| 44 | 3°11.0 | 3°11.5 | 3°02.3 | 4.4 - 0.9 | 10.4 - 2.2 | 16.4 - 3.4 |
| 45 | 3°11.3 | 3°11.8 | 3°02.5 | 4.5 - 0.9 | 10.5 - 2.2 | 16.5 - 3.4 |
| 46 | 3°11.5 | 3°12.0 | 3°02.8 | 4.6 - 1.0 | 10.6 - 2.2 | 16.6 - 3.5 |
| 47 | 3°11.7 | 3°12.3 | 3°03.0 | 4.7 - 1.0 | 10.7 - 2.2 | 16.7 - 3.5 |
| 48 | 3°12.0 | 3°12.5 | 3°03.3 | 4.8 - 1.0 | 10.8 - 2.3 | 16.8 - 3.5 |
| 49 | 3°12.2 | 3°12.8 | 3°03.5 | 4.9 - 1.0 | 10.9 - 2.3 | 16.9 - 3.5 |
| 50 | 3°12.5 | 3°13.0 | 3°03.7 | 5.0 - 1.0 | 11.0 - 2.3 | 17.0 - 3.5 |
| 51 | 3°12.7 | 3°13.3 | 3°04.0 | 5.1 - 1.1 | 11.1 - 2.3 | 17.1 - 3.6 |
| 52 | 3°13.0 | 3°13.5 | 3°04.2 | 5.2 - 1.1 | 11.2 - 2.3 | 17.2 - 3.6 |
| 53 | 3°13.2 | 3°13.8 | 3°04.4 | 5.3 - 1.1 | 11.3 - 2.4 | 17.3 - 3.6 |
| 54 | 3°13.5 | 3°14.0 | 3°04.7 | 5.4 - 1.1 | 11.4 - 2.4 | 17.4 - 3.6 |
| 55 | 3°13.7 | 3°14.3 | 3°04.9 | 5.5 - 1.1 | 11.5 - 2.4 | 17.5 - 3.6 |
| 56 | 3°14.0 | 3°14.5 | 3°05.2 | 5.6 - 1.2 | 11.6 - 2.4 | 17.6 - 3.7 |
| 57 | 3°14.2 | 3°14.8 | 3°05.4 | 5.7 - 1.2 | 11.7 - 2.4 | 17.7 - 3.7 |
| 58 | 3°14.5 | 3°15.0 | 3°05.6 | 5.8 - 1.2 | 11.8 - 2.5 | 17.8 - 3.7 |
| 59 | 3°14.7 | 3°15.3 | 3°05.9 | 5.9 - 1.2 | 11.9 - 2.5 | 17.9 - 3.7 |

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 13 | Plan. | | | | | |
| 0 | 3°15.0 | 3°15.5 | 3°06.1 | 0.0 - 0.0 | 6.0 - 1.4 | 12.0 - 2.7 |
| 1 | 3°15.3 | 3°15.8 | 3°06.4 | 0.1 - 0.0 | 6.1 - 1.4 | 12.1 - 2.7 |
| 2 | 3°15.5 | 3°16.0 | 3°06.6 | 0.2 - 0.0 | 6.2 - 1.4 | 12.2 - 2.7 |
| 3 | 3°15.8 | 3°16.3 | 3°06.8 | 0.3 - 0.1 | 6.3 - 1.4 | 12.3 - 2.8 |
| 4 | 3°16.0 | 3°16.5 | 3°07.1 | 0.4 - 0.1 | 6.4 - 1.4 | 12.4 - 2.8 |
| 5 | 3°16.3 | 3°16.8 | 3°07.3 | 0.5 - 0.1 | 6.5 - 1.5 | 12.5 - 2.8 |
| 6 | 3°16.5 | 3°17.0 | 3°07.5 | 0.6 - 0.1 | 6.6 - 1.5 | 12.6 - 2.8 |
| 7 | 3°16.8 | 3°17.3 | 3°07.8 | 0.7 - 0.2 | 6.7 - 1.5 | 12.7 - 2.9 |
| 8 | 3°17.0 | 3°17.5 | 3°08.0 | 0.8 - 0.2 | 6.8 - 1.5 | 12.8 - 2.9 |
| 9 | 3°17.3 | 3°17.8 | 3°08.3 | 0.9 - 0.2 | 6.9 - 1.6 | 12.9 - 2.9 |
| 10 | 3°17.5 | 3°18.0 | 3°08.5 | 1.0 - 0.2 | 7.0 - 1.6 | 13.0 - 2.9 |
| 11 | 3°17.8 | 3°18.3 | 3°08.7 | 1.1 - 0.2 | 7.1 - 1.6 | 13.1 - 2.9 |
| 12 | 3°18.0 | 3°18.5 | 3°09.0 | 1.2 - 0.3 | 7.2 - 1.6 | 13.2 - 3.0 |
| 13 | 3°18.3 | 3°18.8 | 3°09.2 | 1.3 - 0.3 | 7.3 - 1.6 | 13.3 - 3.0 |
| 14 | 3°18.5 | 3°19.0 | 3°09.5 | 1.4 - 0.3 | 7.4 - 1.7 | 13.4 - 3.0 |
| 15 | 3°18.8 | 3°19.3 | 3°09.7 | 1.5 - 0.3 | 7.5 - 1.7 | 13.5 - 3.0 |
| 16 | 3°19.0 | 3°19.5 | 3°09.9 | 1.6 - 0.4 | 7.6 - 1.7 | 13.6 - 3.1 |
| 17 | 3°19.3 | 3°19.8 | 3°10.2 | 1.7 - 0.4 | 7.7 - 1.7 | 13.7 - 3.1 |
| 18 | 3°19.5 | 3°20.0 | 3°10.4 | 1.8 - 0.4 | 7.8 - 1.8 | 13.8 - 3.1 |
| 19 | 3°19.7 | 3°20.3 | 3°10.7 | 1.9 - 0.4 | 7.9 - 1.8 | 13.9 - 3.1 |
| 20 | 3°20.0 | 3°20.5 | 3°10.9 | 2.0 - 0.5 | 8.0 - 1.8 | 14.0 - 3.1 |
| 21 | 3°20.2 | 3°20.8 | 3°11.1 | 2.1 - 0.5 | 8.1 - 1.8 | 14.1 - 3.2 |
| 22 | 3°20.5 | 3°21.0 | 3°11.4 | 2.2 - 0.5 | 8.2 - 1.8 | 14.2 - 3.2 |
| 23 | 3°20.7 | 3°21.3 | 3°11.6 | 2.3 - 0.5 | 8.3 - 1.9 | 14.3 - 3.2 |
| 24 | 3°21.0 | 3°21.5 | 3°11.8 | 2.4 - 0.5 | 8.4 - 1.9 | 14.4 - 3.2 |
| 25 | 3°21.2 | 3°21.8 | 3°12.1 | 2.5 - 0.6 | 8.5 - 1.9 | 14.5 - 3.3 |
| 26 | 3°21.5 | 3°22.1 | 3°12.3 | 2.6 - 0.6 | 8.6 - 1.9 | 14.6 - 3.3 |
| 27 | 3°21.7 | 3°22.3 | 3°12.6 | 2.7 - 0.6 | 8.7 - 2.0 | 14.7 - 3.3 |
| 28 | 3°22.0 | 3°22.6 | 3°12.8 | 2.8 - 0.6 | 8.8 - 2.0 | 14.8 - 3.3 |
| 29 | 3°22.2 | 3°22.8 | 3°13.0 | 2.9 - 0.7 | 8.9 - 2.0 | 14.9 - 3.4 |
| 30 | 3°22.5 | 3°23.1 | 3°13.3 | 3.0 - 0.7 | 9.0 - 2.0 | 15.0 - 3.4 |
| 31 | 3°22.8 | 3°23.3 | 3°13.5 | 3.1 - 0.7 | 9.1 - 2.0 | 15.1 - 3.4 |
| 32 | 3°23.0 | 3°23.6 | 3°13.8 | 3.2 - 0.7 | 9.2 - 2.1 | 15.2 - 3.4 |
| 33 | 3°23.3 | 3°23.8 | 3°14.0 | 3.3 - 0.7 | 9.3 - 2.1 | 15.3 - 3.4 |
| 34 | 3°23.5 | 3°24.1 | 3°14.2 | 3.4 - 0.8 | 9.4 - 2.1 | 15.4 - 3.5 |
| 35 | 3°23.8 | 3°24.3 | 3°14.5 | 3.5 - 0.8 | 9.5 - 2.1 | 15.5 - 3.5 |
| 36 | 3°24.0 | 3°24.6 | 3°14.7 | 3.6 - 0.8 | 9.6 - 2.2 | 15.6 - 3.5 |
| 37 | 3°24.3 | 3°24.8 | 3°14.9 | 3.7 - 0.8 | 9.7 - 2.2 | 15.7 - 3.5 |
| 38 | 3°24.5 | 3°25.1 | 3°15.2 | 3.8 - 0.9 | 9.8 - 2.2 | 15.8 - 3.6 |
| 39 | 3°24.8 | 3°25.3 | 3°15.4 | 3.9 - 0.9 | 9.9 - 2.2 | 15.9 - 3.6 |
| 40 | 3°25.0 | 3°25.6 | 3°15.7 | 4.0 - 0.9 | 10.0 - 2.3 | 16.0 - 3.6 |
| 41 | 3°25.3 | 3°25.8 | 3°15.9 | 4.1 - 0.9 | 10.1 - 2.3 | 16.1 - 3.6 |
| 42 | 3°25.5 | 3°26.1 | 3°16.1 | 4.2 - 0.9 | 10.2 - 2.3 | 16.2 - 3.6 |
| 43 | 3°25.8 | 3°26.3 | 3°16.4 | 4.3 - 1.0 | 10.3 - 2.3 | 16.3 - 3.7 |
| 44 | 3°26.0 | 3°26.6 | 3°16.6 | 4.4 - 1.0 | 10.4 - 2.3 | 16.4 - 3.7 |
| 45 | 3°26.3 | 3°26.8 | 3°16.9 | 4.5 - 1.0 | 10.5 - 2.4 | 16.5 - 3.7 |
| 46 | 3°26.5 | 3°27.1 | 3°17.1 | 4.6 - 1.0 | 10.6 - 2.4 | 16.6 - 3.7 |
| 47 | 3°26.8 | 3°27.3 | 3°17.3 | 4.7 - 1.1 | 10.7 - 2.4 | 16.7 - 3.8 |
| 48 | 3°27.0 | 3°27.6 | 3°17.6 | 4.8 - 1.1 | 10.8 - 2.4 | 16.8 - 3.8 |
| 49 | 3°27.2 | 3°27.8 | 3°17.8 | 4.9 - 1.1 | 10.9 - 2.5 | 16.9 - 3.8 |
| 50 | 3°27.5 | 3°28.1 | 3°18.0 | 5.0 - 1.1 | 11.0 - 2.5 | 17.0 - 3.8 |
| 51 | 3°27.7 | 3°28.3 | 3°18.3 | 5.1 - 1.1 | 11.1 - 2.5 | 17.1 - 3.8 |
| 52 | 3°28.0 | 3°28.6 | 3°18.5 | 5.2 - 1.2 | 11.2 - 2.5 | 17.2 - 3.9 |
| 53 | 3°28.2 | 3°28.8 | 3°18.8 | 5.3 - 1.2 | 11.3 - 2.5 | 17.3 - 3.9 |
| 54 | 3°28.5 | 3°29.1 | 3°19.0 | 5.4 - 1.2 | 11.4 - 2.6 | 17.4 - 3.9 |
| 55 | 3°28.7 | 3°29.3 | 3°19.2 | 5.5 - 1.2 | 11.5 - 2.6 | 17.5 - 3.9 |
| 56 | 3°29.0 | 3°29.6 | 3°19.5 | 5.6 - 1.3 | 11.6 - 2.6 | 17.6 - 4.0 |
| 57 | 3°29.2 | 3°29.8 | 3°19.7 | 5.7 - 1.3 | 11.7 - 2.6 | 17.7 - 4.0 |
| 58 | 3°29.5 | 3°30.1 | 3°20.0 | 5.8 - 1.3 | 11.8 - 2.7 | 17.8 - 4.0 |
| 59 | 3°29.7 | 3°30.3 | 3°20.2 | 5.9 - 1.3 | 11.9 - 2.7 | 17.9 - 4.0 |

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 14 | Plan. | | | | | |
| 0 | 3°30.0 | 3°30.6 | 3°20.4 | 0.0 - 0.0 | 6.0 - 1.4 | 12.0 - 2.9 |
| 1 | 3°30.3 | 3°30.8 | 3°20.7 | 0.1 - 0.0 | 6.1 - 1.5 | 12.1 - 2.9 |
| 2 | 3°30.5 | 3°31.1 | 3°20.9 | 0.2 - 0.0 | 6.2 - 1.5 | 12.2 - 2.9 |
| 3 | 3°30.8 | 3°31.3 | 3°21.1 | 0.3 - 0.1 | 6.3 - 1.5 | 12.3 - 3.0 |
| 4 | 3°31.0 | 3°31.6 | 3°21.4 | 0.4 - 0.1 | 6.4 - 1.5 | 12.4 - 3.0 |
| 5 | 3°31.3 | 3°31.8 | 3°21.6 | 0.5 - 0.1 | 6.5 - 1.6 | 12.5 - 3.0 |
| 6 | 3°31.5 | 3°32.1 | 3°21.9 | 0.6 - 0.1 | 6.6 - 1.6 | 12.6 - 3.0 |
| 7 | 3°31.8 | 3°32.3 | 3°22.1 | 0.7 - 0.2 | 6.7 - 1.6 | 12.7 - 3.1 |
| 8 | 3°32.0 | 3°32.6 | 3°22.3 | 0.8 - 0.2 | 6.8 - 1.6 | 12.8 - 3.1 |
| 9 | 3°32.3 | 3°32.8 | 3°22.6 | 0.9 - 0.2 | 6.9 - 1.7 | 12.9 - 3.1 |
| 10 | 3°32.5 | 3°33.1 | 3°22.8 | 1.0 - 0.2 | 7.0 - 1.7 | 13.0 - 3.1 |
| 11 | 3°32.8 | 3°33.3 | 3°23.1 | 1.1 - 0.3 | 7.1 - 1.7 | 13.1 - 3.2 |
| 12 | 3°33.0 | 3°33.6 | 3°23.3 | 1.2 - 0.3 | 7.2 - 1.7 | 13.2 - 3.2 |
| 13 | 3°33.3 | 3°33.8 | 3°23.5 | 1.3 - 0.3 | 7.3 - 1.8 | 13.3 - 3.2 |
| 14 | 3°33.5 | 3°34.1 | 3°23.8 | 1.4 - 0.3 | 7.4 - 1.8 | 13.4 - 3.2 |
| 15 | 3°33.8 | 3°34.3 | 3°24.0 | 1.5 - 0.4 | 7.5 - 1.8 | 13.5 - 3.3 |
| 16 | 3°34.0 | 3°34.6 | 3°24.3 | 1.6 - 0.4 | 7.6 - 1.8 | 13.6 - 3.3 |
| 17 | 3°34.3 | 3°34.8 | 3°24.5 | 1.7 - 0.4 | 7.7 - 1.9 | 13.7 - 3.3 |
| 18 | 3°34.5 | 3°35.1 | 3°24.7 | 1.8 - 0.4 | 7.8 - 1.9 | 13.8 - 3.3 |
| 19 | 3°34.8 | 3°35.3 | 3°25.0 | 1.9 - 0.5 | 7.9 - 1.9 | 13.9 - 3.4 |
| 20 | 3°35.0 | 3°35.6 | 3°25.2 | 2.0 - 0.5 | 8.0 - 1.9 | 14.0 - 3.4 |
| 21 | 3°35.2 | 3°35.8 | 3°25.4 | 2.1 - 0.5 | 8.1 - 2.0 | 14.1 - 3.4 |
| 22 | 3°35.5 | 3°36.1 | 3°25.7 | 2.2 - 0.5 | 8.2 - 2.0 | 14.2 - 3.4 |
| 23 | 3°35.7 | 3°36.3 | 3°25.9 | 2.3 - 0.6 | 8.3 - 2.0 | 14.3 - 3.5 |
| 24 | 3°36.0 | 3°36.6 | 3°26.2 | 2.4 - 0.6 | 8.4 - 2.0 | 14.4 - 3.5 |
| 25 | 3°36.2 | 3°36.8 | 3°26.4 | 2.5 - 0.6 | 8.5 - 2.1 | 14.5 - 3.5 |
| 26 | 3°36.5 | 3°37.1 | 3°26.6 | 2.6 - 0.6 | 8.6 - 2.1 | 14.6 - 3.5 |
| 27 | 3°36.7 | 3°37.3 | 3°26.9 | 2.7 - 0.7 | 8.7 - 2.1 | 14.7 - 3.6 |
| 28 | 3°37.0 | 3°37.6 | 3°27.1 | 2.8 - 0.7 | 8.8 - 2.1 | 14.8 - 3.6 |
| 29 | 3°37.2 | 3°37.8 | 3°27.4 | 2.9 - 0.7 | 8.9 - 2.2 | 14.9 - 3.6 |
| 30 | 3°37.5 | 3°38.1 | 3°27.6 | 3.0 - 0.7 | 9.0 - 2.2 | 15.0 - 3.6 |
| 31 | 3°37.8 | 3°38.3 | 3°27.8 | 3.1 - 0.7 | 9.1 - 2.2 | 15.1 - 3.6 |
| 32 | 3°38.0 | 3°38.6 | 3°28.1 | 3.2 - 0.8 | 9.2 - 2.2 | 15.2 - 3.7 |
| 33 | 3°38.3 | 3°38.8 | 3°28.3 | 3.3 - 0.8 | 9.3 - 2.2 | 15.3 - 3.7 |
| 34 | 3°38.5 | 3°39.1 | 3°28.5 | 3.4 - 0.8 | 9.4 - 2.3 | 15.4 - 3.7 |
| 35 | 3°38.8 | 3°39.3 | 3°28.8 | 3.5 - 0.8 | 9.5 - 2.3 | 15.5 - 3.7 |
| 36 | 3°39.0 | 3°39.6 | 3°29.0 | 3.6 - 0.9 | 9.6 - 2.3 | 15.6 - 3.8 |
| 37 | 3°39.3 | 3°39.8 | 3°29.3 | 3.7 - 0.9 | 9.7 - 2.3 | 15.7 - 3.8 |
| 38 | 3°39.5 | 3°40.1 | 3°29.5 | 3.8 - 0.9 | 9.8 - 2.4 | 15.8 - 3.8 |
| 39 | 3°39.8 | 3°40.4 | 3°29.7 | 3.9 - 0.9 | 9.9 - 2.4 | 15.9 - 3.8 |
| 40 | 3°40.0 | 3°40.6 | 3°30.0 | 4.0 - 1.0 | 10.0 - 2.4 | 16.0 - 3.9 |
| 41 | 3°40.3 | 3°40.9 | 3°30.2 | 4.1 - 1.0 | 10.1 - 2.4 | 16.1 - 3.9 |
| 42 | 3°40.5 | 3°41.1 | 3°30.5 | 4.2 - 1.0 | 10.2 - 2.5 | 16.2 - 3.9 |
| 43 | 3°40.8 | 3°41.4 | 3°30.7 | 4.3 - 1.0 | 10.3 - 2.5 | 16.3 - 3.9 |
| 44 | 3°41.0 | 3°41.6 | 3°30.9 | 4.4 - 1.1 | 10.4 - 2.5 | 16.4 - 4.0 |
| 45 | 3°41.3 | 3°41.9 | 3°31.2 | 4.5 - 1.1 | 10.5 - 2.5 | 16.5 - 4.0 |
| 46 | 3°41.5 | 3°42.1 | 3°31.4 | 4.6 - 1.1 | 10.6 - 2.6 | 16.6 - 4.0 |
| 47 | 3°41.8 | 3°42.4 | 3°31.6 | 4.7 - 1.1 | 10.7 - 2.6 | 16.7 - 4.0 |
| 48 | 3°42.0 | 3°42.6 | 3°31.9 | 4.8 - 1.2 | 10.8 - 2.6 | 16.8 - 4.1 |
| 49 | 3°42.3 | 3°42.9 | 3°32.1 | 4.9 - 1.2 | 10.9 - 2.6 | 16.9 - 4.1 |
| 50 | 3°42.5 | 3°43.1 | 3°32.4 | 5.0 - 1.2 | 11.0 - 2.7 | 17.0 - 4.1 |
| 51 | 3°42.7 | 3°43.4 | 3°32.6 | 5.1 - 1.2 | 11.1 - 2.7 | 17.1 - 4.1 |
| 52 | 3°43.0 | 3°43.6 | 3°32.8 | 5.2 - 1.3 | 11.2 - 2.7 | 17.2 - 4.2 |
| 53 | 3°43.2 | 3°43.9 | 3°33.1 | 5.3 - 1.3 | 11.3 - 2.7 | 17.3 - 4.2 |
| 54 | 3°43.5 | 3°44.1 | 3°33.3 | 5.4 - 1.3 | 11.4 - 2.8 | 17.4 - 4.2 |
| 55 | 3°43.7 | 3°44.4 | 3°33.6 | 5.5 - 1.3 | 11.5 - 2.8 | 17.5 - 4.2 |
| 56 | 3°44.0 | 3°44.6 | 3°33.8 | 5.6 - 1.4 | 11.6 - 2.8 | 17.6 - 4.3 |
| 57 | 3°44.2 | 3°44.9 | 3°34.0 | 5.7 - 1.4 | 11.7 - 2.8 | 17.7 - 4.3 |
| 58 | 3°44.5 | 3°45.1 | 3°34.3 | 5.8 - 1.4 | 11.8 - 2.9 | 17.8 - 4.3 |
| 59 | 3°44.7 | 3°45.4 | 3°34.5 | 5.9 - 1.4 | 11.9 - 2.9 | 17.9 - 4.3 |

# Increments and Corrections

| m 15 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 3°45.0 | 3°45.6 | 3°34.8 | 0.0 - 0.0 | 6.0 - 1.6 | 12.0 - 3.1 |
| 1 | 3°45.2 | 3°45.9 | 3°35.0 | 0.1 - 0.0 | 6.1 - 1.6 | 12.1 - 3.1 |
| 2 | 3°45.5 | 3°46.1 | 3°35.2 | 0.2 - 0.1 | 6.2 - 1.6 | 12.2 - 3.2 |
| 3 | 3°45.8 | 3°46.4 | 3°35.5 | 0.3 - 0.1 | 6.3 - 1.6 | 12.3 - 3.2 |
| 4 | 3°46.0 | 3°46.6 | 3°35.7 | 0.4 - 0.1 | 6.4 - 1.7 | 12.4 - 3.2 |
| 5 | 3°46.2 | 3°46.9 | 3°35.9 | 0.5 - 0.1 | 6.5 - 1.7 | 12.5 - 3.2 |
| 6 | 3°46.5 | 3°47.1 | 3°36.2 | 0.6 - 0.2 | 6.6 - 1.7 | 12.6 - 3.3 |
| 7 | 3°46.8 | 3°47.4 | 3°36.4 | 0.7 - 0.2 | 6.7 - 1.7 | 12.7 - 3.3 |
| 8 | 3°47.0 | 3°47.6 | 3°36.7 | 0.8 - 0.2 | 6.8 - 1.8 | 12.8 - 3.3 |
| 9 | 3°47.3 | 3°47.9 | 3°36.9 | 0.9 - 0.2 | 6.9 - 1.8 | 12.9 - 3.3 |
| 10 | 3°47.5 | 3°48.1 | 3°37.1 | 1.0 - 0.3 | 7.0 - 1.8 | 13.0 - 3.4 |
| 11 | 3°47.7 | 3°48.4 | 3°37.4 | 1.1 - 0.3 | 7.1 - 1.8 | 13.1 - 3.4 |
| 12 | 3°48.0 | 3°48.6 | 3°37.6 | 1.2 - 0.3 | 7.2 - 1.9 | 13.2 - 3.4 |
| 13 | 3°48.3 | 3°48.9 | 3°37.9 | 1.3 - 0.3 | 7.3 - 1.9 | 13.3 - 3.4 |
| 14 | 3°48.5 | 3°49.1 | 3°38.1 | 1.4 - 0.4 | 7.4 - 1.9 | 13.4 - 3.5 |
| 15 | 3°48.8 | 3°49.4 | 3°38.3 | 1.5 - 0.4 | 7.5 - 1.9 | 13.5 - 3.5 |
| 16 | 3°49.0 | 3°49.6 | 3°38.6 | 1.6 - 0.4 | 7.6 - 2.0 | 13.6 - 3.5 |
| 17 | 3°49.3 | 3°49.9 | 3°38.8 | 1.7 - 0.4 | 7.7 - 2.0 | 13.7 - 3.5 |
| 18 | 3°49.5 | 3°50.1 | 3°39.0 | 1.8 - 0.5 | 7.8 - 2.0 | 13.8 - 3.6 |
| 19 | 3°49.8 | 3°50.4 | 3°39.3 | 1.9 - 0.5 | 7.9 - 2.0 | 13.9 - 3.6 |
| 20 | 3°50.0 | 3°50.6 | 3°39.5 | 2.0 - 0.5 | 8.0 - 2.1 | 14.0 - 3.6 |
| 21 | 3°50.2 | 3°50.9 | 3°39.8 | 2.1 - 0.5 | 8.1 - 2.1 | 14.1 - 3.6 |
| 22 | 3°50.5 | 3°51.1 | 3°40.0 | 2.2 - 0.6 | 8.2 - 2.1 | 14.2 - 3.7 |
| 23 | 3°50.7 | 3°51.4 | 3°40.2 | 2.3 - 0.6 | 8.3 - 2.1 | 14.3 - 3.7 |
| 24 | 3°51.0 | 3°51.6 | 3°40.5 | 2.4 - 0.6 | 8.4 - 2.2 | 14.4 - 3.7 |
| 25 | 3°51.2 | 3°51.9 | 3°40.7 | 2.5 - 0.6 | 8.5 - 2.2 | 14.5 - 3.7 |
| 26 | 3°51.5 | 3°52.1 | 3°41.0 | 2.6 - 0.7 | 8.6 - 2.2 | 14.6 - 3.8 |
| 27 | 3°51.8 | 3°52.4 | 3°41.2 | 2.7 - 0.7 | 8.7 - 2.2 | 14.7 - 3.8 |
| 28 | 3°52.0 | 3°52.6 | 3°41.4 | 2.8 - 0.7 | 8.8 - 2.3 | 14.8 - 3.8 |
| 29 | 3°52.2 | 3°52.9 | 3°41.7 | 2.9 - 0.7 | 8.9 - 2.3 | 14.9 - 3.8 |
| 30 | 3°52.5 | 3°53.1 | 3°41.9 | 3.0 - 0.8 | 9.0 - 2.3 | 15.0 - 3.9 |
| 31 | 3°52.8 | 3°53.4 | 3°42.1 | 3.1 - 0.8 | 9.1 - 2.4 | 15.1 - 3.9 |
| 32 | 3°53.0 | 3°53.6 | 3°42.4 | 3.2 - 0.8 | 9.2 - 2.4 | 15.2 - 3.9 |
| 33 | 3°53.2 | 3°53.9 | 3°42.6 | 3.3 - 0.9 | 9.3 - 2.4 | 15.3 - 4.0 |
| 34 | 3°53.5 | 3°54.1 | 3°42.9 | 3.4 - 0.9 | 9.4 - 2.4 | 15.4 - 4.0 |
| 35 | 3°53.8 | 3°54.4 | 3°43.1 | 3.5 - 0.9 | 9.5 - 2.5 | 15.5 - 4.0 |
| 36 | 3°54.0 | 3°54.6 | 3°43.3 | 3.6 - 0.9 | 9.6 - 2.5 | 15.6 - 4.0 |
| 37 | 3°54.3 | 3°54.9 | 3°43.6 | 3.7 - 1.0 | 9.7 - 2.5 | 15.7 - 4.1 |
| 38 | 3°54.5 | 3°55.1 | 3°43.8 | 3.8 - 1.0 | 9.8 - 2.5 | 15.8 - 4.1 |
| 39 | 3°54.8 | 3°55.4 | 3°44.1 | 3.9 - 1.0 | 9.9 - 2.6 | 15.9 - 4.1 |
| 40 | 3°55.0 | 3°55.6 | 3°44.3 | 4.0 - 1.0 | 10.0 - 2.6 | 16.0 - 4.1 |
| 41 | 3°55.3 | 3°55.9 | 3°44.5 | 4.1 - 1.1 | 10.1 - 2.6 | 16.1 - 4.2 |
| 42 | 3°55.5 | 3°56.1 | 3°44.8 | 4.2 - 1.1 | 10.2 - 2.6 | 16.2 - 4.2 |
| 43 | 3°55.7 | 3°56.4 | 3°45.0 | 4.3 - 1.1 | 10.3 - 2.7 | 16.3 - 4.2 |
| 44 | 3°56.0 | 3°56.6 | 3°45.2 | 4.4 - 1.1 | 10.4 - 2.7 | 16.4 - 4.2 |
| 45 | 3°56.3 | 3°56.9 | 3°45.5 | 4.5 - 1.2 | 10.5 - 2.7 | 16.5 - 4.3 |
| 46 | 3°56.5 | 3°57.1 | 3°45.7 | 4.6 - 1.2 | 10.6 - 2.7 | 16.6 - 4.3 |
| 47 | 3°56.8 | 3°57.4 | 3°46.0 | 4.7 - 1.2 | 10.7 - 2.8 | 16.7 - 4.3 |
| 48 | 3°57.0 | 3°57.6 | 3°46.2 | 4.8 - 1.2 | 10.8 - 2.8 | 16.8 - 4.3 |
| 49 | 3°57.3 | 3°57.9 | 3°46.4 | 4.9 - 1.3 | 10.9 - 2.8 | 16.9 - 4.4 |
| 50 | 3°57.5 | 3°58.1 | 3°46.7 | 5.0 - 1.3 | 11.0 - 2.8 | 17.0 - 4.4 |
| 51 | 3°57.7 | 3°58.4 | 3°46.9 | 5.1 - 1.3 | 11.1 - 2.9 | 17.1 - 4.4 |
| 52 | 3°58.0 | 3°58.7 | 3°47.2 | 5.2 - 1.3 | 11.2 - 2.9 | 17.2 - 4.4 |
| 53 | 3°58.2 | 3°58.9 | 3°47.4 | 5.3 - 1.4 | 11.3 - 2.9 | 17.3 - 4.5 |
| 54 | 3°58.5 | 3°59.2 | 3°47.6 | 5.4 - 1.4 | 11.4 - 2.9 | 17.4 - 4.5 |
| 55 | 3°58.7 | 3°59.4 | 3°47.9 | 5.5 - 1.4 | 11.5 - 3.0 | 17.5 - 4.5 |
| 56 | 3°59.0 | 3°59.7 | 3°48.1 | 5.6 - 1.4 | 11.6 - 3.0 | 17.6 - 4.5 |
| 57 | 3°59.2 | 3°59.9 | 3°48.4 | 5.7 - 1.5 | 11.7 - 3.0 | 17.7 - 4.6 |
| 58 | 3°59.5 | 4°00.2 | 3°48.6 | 5.8 - 1.5 | 11.8 - 3.0 | 17.8 - 4.6 |
| 59 | 3°59.8 | 4°00.4 | 3°48.8 | 5.9 - 1.5 | 11.9 - 3.1 | 17.9 - 4.6 |

| m 16 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 4°00.0 | 4°00.7 | 3°49.1 | 0.0 - 0.0 | 6.0 - 1.7 | 12.0 - 3.3 |
| 1 | 4°00.2 | 4°00.9 | 3°49.3 | 0.1 - 0.0 | 6.1 - 1.7 | 12.1 - 3.3 |
| 2 | 4°00.5 | 4°01.2 | 3°49.5 | 0.2 - 0.1 | 6.2 - 1.7 | 12.2 - 3.4 |
| 3 | 4°00.8 | 4°01.4 | 3°49.8 | 0.3 - 0.1 | 6.3 - 1.7 | 12.3 - 3.4 |
| 4 | 4°01.0 | 4°01.7 | 3°50.0 | 0.4 - 0.1 | 6.4 - 1.8 | 12.4 - 3.4 |
| 5 | 4°01.2 | 4°01.9 | 3°50.3 | 0.5 - 0.1 | 6.5 - 1.8 | 12.5 - 3.4 |
| 6 | 4°01.5 | 4°02.2 | 3°50.5 | 0.6 - 0.2 | 6.6 - 1.8 | 12.6 - 3.5 |
| 7 | 4°01.8 | 4°02.4 | 3°50.7 | 0.7 - 0.2 | 6.7 - 1.8 | 12.7 - 3.5 |
| 8 | 4°02.0 | 4°02.7 | 3°51.0 | 0.8 - 0.2 | 6.8 - 1.9 | 12.8 - 3.5 |
| 9 | 4°02.2 | 4°02.9 | 3°51.2 | 0.9 - 0.2 | 6.9 - 1.9 | 12.9 - 3.5 |
| 10 | 4°02.5 | 4°03.2 | 3°51.5 | 1.0 - 0.3 | 7.0 - 1.9 | 13.0 - 3.6 |
| 11 | 4°02.8 | 4°03.4 | 3°51.7 | 1.1 - 0.3 | 7.1 - 2.0 | 13.1 - 3.6 |
| 12 | 4°03.0 | 4°03.7 | 3°51.9 | 1.2 - 0.3 | 7.2 - 2.0 | 13.2 - 3.6 |
| 13 | 4°03.2 | 4°03.9 | 3°52.2 | 1.3 - 0.4 | 7.3 - 2.0 | 13.3 - 3.7 |
| 14 | 4°03.5 | 4°04.2 | 3°52.4 | 1.4 - 0.4 | 7.4 - 2.0 | 13.4 - 3.7 |
| 15 | 4°03.8 | 4°04.4 | 3°52.6 | 1.5 - 0.4 | 7.5 - 2.1 | 13.5 - 3.7 |
| 16 | 4°04.0 | 4°04.7 | 3°52.9 | 1.6 - 0.4 | 7.6 - 2.1 | 13.6 - 3.7 |
| 17 | 4°04.3 | 4°04.9 | 3°53.1 | 1.7 - 0.5 | 7.7 - 2.1 | 13.7 - 3.8 |
| 18 | 4°04.5 | 4°05.2 | 3°53.4 | 1.8 - 0.5 | 7.8 - 2.1 | 13.8 - 3.8 |
| 19 | 4°04.7 | 4°05.4 | 3°53.6 | 1.9 - 0.5 | 7.9 - 2.2 | 13.9 - 3.8 |
| 20 | 4°05.0 | 4°05.7 | 3°53.8 | 2.0 - 0.6 | 8.0 - 2.2 | 14.0 - 3.9 |
| 21 | 4°05.3 | 4°05.9 | 3°54.1 | 2.1 - 0.6 | 8.1 - 2.2 | 14.1 - 3.9 |
| 22 | 4°05.5 | 4°06.2 | 3°54.3 | 2.2 - 0.6 | 8.2 - 2.3 | 14.2 - 3.9 |
| 23 | 4°05.7 | 4°06.4 | 3°54.6 | 2.3 - 0.6 | 8.3 - 2.3 | 14.3 - 3.9 |
| 24 | 4°06.0 | 4°06.7 | 3°54.8 | 2.4 - 0.7 | 8.4 - 2.3 | 14.4 - 4.0 |
| 25 | 4°06.3 | 4°06.9 | 3°55.0 | 2.5 - 0.7 | 8.5 - 2.3 | 14.5 - 4.0 |
| 26 | 4°06.5 | 4°07.2 | 3°55.3 | 2.6 - 0.7 | 8.6 - 2.4 | 14.6 - 4.0 |
| 27 | 4°06.7 | 4°07.4 | 3°55.5 | 2.7 - 0.7 | 8.7 - 2.4 | 14.7 - 4.0 |
| 28 | 4°07.0 | 4°07.7 | 3°55.7 | 2.8 - 0.8 | 8.8 - 2.4 | 14.8 - 4.1 |
| 29 | 4°07.3 | 4°07.9 | 3°56.0 | 2.9 - 0.8 | 8.9 - 2.4 | 14.9 - 4.1 |
| 30 | 4°07.5 | 4°08.2 | 3°56.2 | 3.0 - 0.8 | 9.0 - 2.5 | 15.0 - 4.1 |
| 31 | 4°07.7 | 4°08.4 | 3°56.5 | 3.1 - 0.9 | 9.1 - 2.5 | 15.1 - 4.2 |
| 32 | 4°08.0 | 4°08.7 | 3°56.7 | 3.2 - 0.9 | 9.2 - 2.5 | 15.2 - 4.2 |
| 33 | 4°08.3 | 4°08.9 | 3°56.9 | 3.3 - 0.9 | 9.3 - 2.6 | 15.3 - 4.2 |
| 34 | 4°08.5 | 4°09.2 | 3°57.2 | 3.4 - 0.9 | 9.4 - 2.6 | 15.4 - 4.2 |
| 35 | 4°08.7 | 4°09.4 | 3°57.4 | 3.5 - 1.0 | 9.5 - 2.6 | 15.5 - 4.3 |
| 36 | 4°09.0 | 4°09.7 | 3°57.7 | 3.6 - 1.0 | 9.6 - 2.6 | 15.6 - 4.3 |
| 37 | 4°09.3 | 4°09.9 | 3°57.9 | 3.7 - 1.0 | 9.7 - 2.7 | 15.7 - 4.3 |
| 38 | 4°09.5 | 4°10.2 | 3°58.1 | 3.8 - 1.0 | 9.8 - 2.7 | 15.8 - 4.3 |
| 39 | 4°09.7 | 4°10.4 | 3°58.4 | 3.9 - 1.1 | 9.9 - 2.7 | 15.9 - 4.4 |
| 40 | 4°10.0 | 4°10.7 | 3°58.6 | 4.0 - 1.1 | 10.0 - 2.8 | 16.0 - 4.4 |
| 41 | 4°10.3 | 4°10.9 | 3°58.8 | 4.1 - 1.1 | 10.1 - 2.8 | 16.1 - 4.4 |
| 42 | 4°10.5 | 4°11.2 | 3°59.1 | 4.2 - 1.2 | 10.2 - 2.8 | 16.2 - 4.5 |
| 43 | 4°10.7 | 4°11.4 | 3°59.3 | 4.3 - 1.2 | 10.3 - 2.8 | 16.3 - 4.5 |
| 44 | 4°11.0 | 4°11.7 | 3°59.6 | 4.4 - 1.2 | 10.4 - 2.9 | 16.4 - 4.5 |
| 45 | 4°11.3 | 4°11.9 | 3°59.8 | 4.5 - 1.2 | 10.5 - 2.9 | 16.5 - 4.5 |
| 46 | 4°11.5 | 4°12.2 | 4°00.0 | 4.6 - 1.3 | 10.6 - 2.9 | 16.6 - 4.6 |
| 47 | 4°11.8 | 4°12.4 | 4°00.3 | 4.7 - 1.3 | 10.7 - 2.9 | 16.7 - 4.6 |
| 48 | 4°12.0 | 4°12.7 | 4°00.5 | 4.8 - 1.3 | 10.8 - 3.0 | 16.8 - 4.6 |
| 49 | 4°12.2 | 4°12.9 | 4°00.8 | 4.9 - 1.3 | 10.9 - 3.0 | 16.9 - 4.6 |
| 50 | 4°12.5 | 4°13.2 | 4°01.0 | 5.0 - 1.4 | 11.0 - 3.0 | 17.0 - 4.7 |
| 51 | 4°12.8 | 4°13.4 | 4°01.2 | 5.1 - 1.4 | 11.1 - 3.1 | 17.1 - 4.7 |
| 52 | 4°13.0 | 4°13.7 | 4°01.5 | 5.2 - 1.4 | 11.2 - 3.1 | 17.2 - 4.7 |
| 53 | 4°13.2 | 4°13.9 | 4°01.7 | 5.3 - 1.5 | 11.3 - 3.1 | 17.3 - 4.8 |
| 54 | 4°13.5 | 4°14.2 | 4°02.0 | 5.4 - 1.5 | 11.4 - 3.1 | 17.4 - 4.8 |
| 55 | 4°13.8 | 4°14.4 | 4°02.2 | 5.5 - 1.5 | 11.5 - 3.2 | 17.5 - 4.8 |
| 56 | 4°14.0 | 4°14.7 | 4°02.4 | 5.6 - 1.5 | 11.6 - 3.2 | 17.6 - 4.8 |
| 57 | 4°14.2 | 4°14.9 | 4°02.7 | 5.7 - 1.6 | 11.7 - 3.2 | 17.7 - 4.9 |
| 58 | 4°14.5 | 4°15.2 | 4°02.9 | 5.8 - 1.6 | 11.8 - 3.2 | 17.8 - 4.9 |
| 59 | 4°14.8 | 4°15.4 | 4°03.1 | 5.9 - 1.6 | 11.9 - 3.3 | 17.9 - 4.9 |

| m 17 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 4°15.0 | 4°15.7 | 4°03.4 | 0.0 - 0.0 | 6.0 - 1.8 | 12.0 - 3.5 |
| 1 | 4°15.2 | 4°15.9 | 4°03.6 | 0.1 - 0.0 | 6.1 - 1.8 | 12.1 - 3.5 |
| 2 | 4°15.5 | 4°16.2 | 4°03.9 | 0.2 - 0.1 | 6.2 - 1.8 | 12.2 - 3.6 |
| 3 | 4°15.8 | 4°16.4 | 4°04.1 | 0.3 - 0.1 | 6.3 - 1.8 | 12.3 - 3.6 |
| 4 | 4°16.0 | 4°16.7 | 4°04.3 | 0.4 - 0.1 | 6.4 - 1.9 | 12.4 - 3.6 |
| 5 | 4°16.2 | 4°17.0 | 4°04.6 | 0.5 - 0.1 | 6.5 - 1.9 | 12.5 - 3.6 |
| 6 | 4°16.5 | 4°17.2 | 4°04.8 | 0.6 - 0.2 | 6.6 - 1.9 | 12.6 - 3.7 |
| 7 | 4°16.8 | 4°17.5 | 4°05.1 | 0.7 - 0.2 | 6.7 - 2.0 | 12.7 - 3.7 |
| 8 | 4°17.0 | 4°17.7 | 4°05.3 | 0.8 - 0.2 | 6.8 - 2.0 | 12.8 - 3.7 |
| 9 | 4°17.2 | 4°18.0 | 4°05.5 | 0.9 - 0.3 | 6.9 - 2.0 | 12.9 - 3.8 |
| 10 | 4°17.5 | 4°18.2 | 4°05.8 | 1.0 - 0.3 | 7.0 - 2.0 | 13.0 - 3.8 |
| 11 | 4°17.8 | 4°18.5 | 4°06.0 | 1.1 - 0.3 | 7.1 - 2.1 | 13.1 - 3.8 |
| 12 | 4°18.0 | 4°18.7 | 4°06.2 | 1.2 - 0.4 | 7.2 - 2.1 | 13.2 - 3.9 |
| 13 | 4°18.2 | 4°19.0 | 4°06.5 | 1.3 - 0.4 | 7.3 - 2.1 | 13.3 - 3.9 |
| 14 | 4°18.5 | 4°19.2 | 4°06.7 | 1.4 - 0.4 | 7.4 - 2.2 | 13.4 - 3.9 |
| 15 | 4°18.8 | 4°19.5 | 4°07.0 | 1.5 - 0.4 | 7.5 - 2.2 | 13.5 - 3.9 |
| 16 | 4°19.0 | 4°19.7 | 4°07.2 | 1.6 - 0.5 | 7.6 - 2.2 | 13.6 - 4.0 |
| 17 | 4°19.3 | 4°20.0 | 4°07.4 | 1.7 - 0.5 | 7.7 - 2.2 | 13.7 - 4.0 |
| 18 | 4°19.5 | 4°20.2 | 4°07.7 | 1.8 - 0.5 | 7.8 - 2.3 | 13.8 - 4.0 |
| 19 | 4°19.7 | 4°20.5 | 4°07.9 | 1.9 - 0.6 | 7.9 - 2.3 | 13.9 - 4.1 |
| 20 | 4°20.0 | 4°20.7 | 4°08.2 | 2.0 - 0.6 | 8.0 - 2.3 | 14.0 - 4.1 |
| 21 | 4°20.3 | 4°21.0 | 4°08.4 | 2.1 - 0.6 | 8.1 - 2.4 | 14.1 - 4.1 |
| 22 | 4°20.5 | 4°21.2 | 4°08.6 | 2.2 - 0.6 | 8.2 - 2.4 | 14.2 - 4.1 |
| 23 | 4°20.7 | 4°21.5 | 4°08.9 | 2.3 - 0.7 | 8.3 - 2.4 | 14.3 - 4.2 |
| 24 | 4°21.0 | 4°21.7 | 4°09.1 | 2.4 - 0.7 | 8.4 - 2.5 | 14.4 - 4.2 |
| 25 | 4°21.3 | 4°22.0 | 4°09.3 | 2.5 - 0.7 | 8.5 - 2.5 | 14.5 - 4.2 |
| 26 | 4°21.5 | 4°22.2 | 4°09.6 | 2.6 - 0.8 | 8.6 - 2.5 | 14.6 - 4.3 |
| 27 | 4°21.7 | 4°22.5 | 4°09.8 | 2.7 - 0.8 | 8.7 - 2.5 | 14.7 - 4.3 |
| 28 | 4°22.0 | 4°22.7 | 4°10.1 | 2.8 - 0.8 | 8.8 - 2.6 | 14.8 - 4.3 |
| 29 | 4°22.3 | 4°23.0 | 4°10.3 | 2.9 - 0.8 | 8.9 - 2.6 | 14.9 - 4.3 |
| 30 | 4°22.5 | 4°23.2 | 4°10.5 | 3.0 - 0.9 | 9.0 - 2.6 | 15.0 - 4.4 |
| 31 | 4°22.7 | 4°23.5 | 4°10.8 | 3.1 - 0.9 | 9.1 - 2.7 | 15.1 - 4.4 |
| 32 | 4°23.0 | 4°23.7 | 4°11.0 | 3.2 - 0.9 | 9.2 - 2.7 | 15.2 - 4.4 |
| 33 | 4°23.3 | 4°24.0 | 4°11.3 | 3.3 - 1.0 | 9.3 - 2.7 | 15.3 - 4.5 |
| 34 | 4°23.5 | 4°24.2 | 4°11.5 | 3.4 - 1.0 | 9.4 - 2.7 | 15.4 - 4.5 |
| 35 | 4°23.7 | 4°24.5 | 4°11.7 | 3.5 - 1.0 | 9.5 - 2.8 | 15.5 - 4.5 |
| 36 | 4°24.0 | 4°24.7 | 4°12.0 | 3.6 - 1.1 | 9.6 - 2.8 | 15.6 - 4.5 |
| 37 | 4°24.3 | 4°25.0 | 4°12.2 | 3.7 - 1.1 | 9.7 - 2.8 | 15.7 - 4.6 |
| 38 | 4°24.5 | 4°25.2 | 4°12.5 | 3.8 - 1.1 | 9.8 - 2.9 | 15.8 - 4.6 |
| 39 | 4°24.7 | 4°25.5 | 4°12.7 | 3.9 - 1.1 | 9.9 - 2.9 | 15.9 - 4.6 |
| 40 | 4°25.0 | 4°25.7 | 4°12.9 | 4.0 - 1.2 | 10.0 - 2.9 | 16.0 - 4.7 |
| 41 | 4°25.3 | 4°26.0 | 4°13.2 | 4.1 - 1.2 | 10.1 - 2.9 | 16.1 - 4.7 |
| 42 | 4°25.5 | 4°26.2 | 4°13.4 | 4.2 - 1.2 | 10.2 - 3.0 | 16.2 - 4.7 |
| 43 | 4°25.7 | 4°26.5 | 4°13.6 | 4.3 - 1.3 | 10.3 - 3.0 | 16.3 - 4.8 |
| 44 | 4°26.0 | 4°26.7 | 4°13.9 | 4.4 - 1.3 | 10.4 - 3.0 | 16.4 - 4.8 |
| 45 | 4°26.3 | 4°27.0 | 4°14.1 | 4.5 - 1.3 | 10.5 - 3.1 | 16.5 - 4.8 |
| 46 | 4°26.5 | 4°27.2 | 4°14.4 | 4.6 - 1.3 | 10.6 - 3.1 | 16.6 - 4.8 |
| 47 | 4°26.8 | 4°27.5 | 4°14.6 | 4.7 - 1.4 | 10.7 - 3.1 | 16.7 - 4.9 |
| 48 | 4°27.0 | 4°27.7 | 4°14.8 | 4.8 - 1.4 | 10.8 - 3.2 | 16.8 - 4.9 |
| 49 | 4°27.2 | 4°28.0 | 4°15.1 | 4.9 - 1.4 | 10.9 - 3.2 | 16.9 - 4.9 |
| 50 | 4°27.5 | 4°28.2 | 4°15.3 | 5.0 - 1.5 | 11.0 - 3.2 | 17.0 - 5.0 |
| 51 | 4°27.8 | 4°28.5 | 4°15.6 | 5.1 - 1.5 | 11.1 - 3.2 | 17.1 - 5.0 |
| 52 | 4°28.0 | 4°28.7 | 4°15.8 | 5.2 - 1.5 | 11.2 - 3.3 | 17.2 - 5.0 |
| 53 | 4°28.2 | 4°29.0 | 4°16.0 | 5.3 - 1.5 | 11.3 - 3.3 | 17.3 - 5.0 |
| 54 | 4°28.5 | 4°29.2 | 4°16.3 | 5.4 - 1.6 | 11.4 - 3.3 | 17.4 - 5.1 |
| 55 | 4°28.8 | 4°29.5 | 4°16.5 | 5.5 - 1.6 | 11.5 - 3.4 | 17.5 - 5.1 |
| 56 | 4°29.0 | 4°29.7 | 4°16.7 | 5.6 - 1.6 | 11.6 - 3.4 | 17.6 - 5.1 |
| 57 | 4°29.2 | 4°30.0 | 4°17.0 | 5.7 - 1.7 | 11.7 - 3.4 | 17.7 - 5.2 |
| 58 | 4°29.5 | 4°30.2 | 4°17.2 | 5.8 - 1.7 | 11.8 - 3.4 | 17.8 - 5.2 |
| 59 | 4°29.8 | 4°30.5 | 4°17.5 | 5.9 - 1.7 | 11.9 - 3.5 | 17.9 - 5.2 |

# Increments and Corrections

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 18 | Plan. | | | | | |
| 0 | 4°30.0 | 4°30.7 | 4°17.7 | 0.0 - 0.0 | 6.0 - 1.9 | 12.0 - 3.7 |
| 1 | 4°30.2 | 4°31.0 | 4°17.9 | 0.1 - 0.0 | 6.1 - 1.9 | 12.1 - 3.7 |
| 2 | 4°30.5 | 4°31.2 | 4°18.2 | 0.2 - 0.1 | 6.2 - 1.9 | 12.2 - 3.8 |
| 3 | 4°30.8 | 4°31.5 | 4°18.4 | 0.3 - 0.1 | 6.3 - 1.9 | 12.3 - 3.8 |
| 4 | 4°31.0 | 4°31.7 | 4°18.7 | 0.4 - 0.1 | 6.4 - 2.0 | 12.4 - 3.8 |
| 5 | 4°31.2 | 4°32.0 | 4°18.9 | 0.5 - 0.2 | 6.5 - 2.0 | 12.5 - 3.9 |
| 6 | 4°31.5 | 4°32.2 | 4°19.1 | 0.6 - 0.2 | 6.6 - 2.0 | 12.6 - 3.9 |
| 7 | 4°31.8 | 4°32.5 | 4°19.4 | 0.7 - 0.2 | 6.7 - 2.1 | 12.7 - 3.9 |
| 8 | 4°32.0 | 4°32.7 | 4°19.6 | 0.8 - 0.2 | 6.8 - 2.1 | 12.8 - 3.9 |
| 9 | 4°32.2 | 4°33.0 | 4°19.8 | 0.9 - 0.3 | 6.9 - 2.1 | 12.9 - 4.0 |
| 10 | 4°32.5 | 4°33.2 | 4°20.1 | 1.0 - 0.3 | 7.0 - 2.2 | 13.0 - 4.0 |
| 11 | 4°32.8 | 4°33.5 | 4°20.3 | 1.1 - 0.3 | 7.1 - 2.2 | 13.1 - 4.0 |
| 12 | 4°33.0 | 4°33.7 | 4°20.6 | 1.2 - 0.4 | 7.2 - 2.2 | 13.2 - 4.1 |
| 13 | 4°33.2 | 4°34.0 | 4°20.8 | 1.3 - 0.4 | 7.3 - 2.3 | 13.3 - 4.1 |
| 14 | 4°33.5 | 4°34.2 | 4°21.0 | 1.4 - 0.4 | 7.4 - 2.3 | 13.4 - 4.1 |
| 15 | 4°33.8 | 4°34.5 | 4°21.3 | 1.5 - 0.5 | 7.5 - 2.3 | 13.5 - 4.2 |
| 16 | 4°34.0 | 4°34.7 | 4°21.5 | 1.6 - 0.5 | 7.6 - 2.3 | 13.6 - 4.2 |
| 17 | 4°34.3 | 4°35.0 | 4°21.8 | 1.7 - 0.5 | 7.7 - 2.4 | 13.7 - 4.2 |
| 18 | 4°34.5 | 4°35.3 | 4°22.0 | 1.8 - 0.6 | 7.8 - 2.4 | 13.8 - 4.3 |
| 19 | 4°34.8 | 4°35.5 | 4°22.2 | 1.9 - 0.6 | 7.9 - 2.4 | 13.9 - 4.3 |
| 20 | 4°35.0 | 4°35.8 | 4°22.5 | 2.0 - 0.6 | 8.0 - 2.5 | 14.0 - 4.3 |
| 21 | 4°35.3 | 4°36.0 | 4°22.7 | 2.1 - 0.6 | 8.1 - 2.5 | 14.1 - 4.3 |
| 22 | 4°35.5 | 4°36.3 | 4°22.9 | 2.2 - 0.7 | 8.2 - 2.5 | 14.2 - 4.4 |
| 23 | 4°35.7 | 4°36.5 | 4°23.2 | 2.3 - 0.7 | 8.3 - 2.6 | 14.3 - 4.4 |
| 24 | 4°36.0 | 4°36.8 | 4°23.4 | 2.4 - 0.7 | 8.4 - 2.6 | 14.4 - 4.4 |
| 25 | 4°36.3 | 4°37.0 | 4°23.7 | 2.5 - 0.8 | 8.5 - 2.6 | 14.5 - 4.5 |
| 26 | 4°36.5 | 4°37.3 | 4°23.9 | 2.6 - 0.8 | 8.6 - 2.7 | 14.6 - 4.5 |
| 27 | 4°36.7 | 4°37.5 | 4°24.1 | 2.7 - 0.8 | 8.7 - 2.7 | 14.7 - 4.5 |
| 28 | 4°37.0 | 4°37.8 | 4°24.4 | 2.8 - 0.9 | 8.8 - 2.7 | 14.8 - 4.6 |
| 29 | 4°37.3 | 4°38.0 | 4°24.6 | 2.9 - 0.9 | 8.9 - 2.7 | 14.9 - 4.6 |
| 30 | 4°37.5 | 4°38.3 | 4°24.9 | 3.0 - 0.9 | 9.0 - 2.8 | 15.0 - 4.6 |
| 31 | 4°37.7 | 4°38.5 | 4°25.1 | 3.1 - 1.0 | 9.1 - 2.8 | 15.1 - 4.7 |
| 32 | 4°38.0 | 4°38.8 | 4°25.3 | 3.2 - 1.0 | 9.2 - 2.8 | 15.2 - 4.7 |
| 33 | 4°38.3 | 4°39.0 | 4°25.6 | 3.3 - 1.0 | 9.3 - 2.9 | 15.3 - 4.7 |
| 34 | 4°38.5 | 4°39.3 | 4°25.8 | 3.4 - 1.0 | 9.4 - 2.9 | 15.4 - 4.7 |
| 35 | 4°38.7 | 4°39.5 | 4°26.1 | 3.5 - 1.1 | 9.5 - 2.9 | 15.5 - 4.8 |
| 36 | 4°39.0 | 4°39.8 | 4°26.3 | 3.6 - 1.1 | 9.6 - 3.0 | 15.6 - 4.8 |
| 37 | 4°39.3 | 4°40.0 | 4°26.5 | 3.7 - 1.1 | 9.7 - 3.0 | 15.7 - 4.8 |
| 38 | 4°39.5 | 4°40.3 | 4°26.8 | 3.8 - 1.2 | 9.8 - 3.0 | 15.8 - 4.9 |
| 39 | 4°39.7 | 4°40.5 | 4°27.0 | 3.9 - 1.2 | 9.9 - 3.1 | 15.9 - 4.9 |
| 40 | 4°40.0 | 4°40.8 | 4°27.2 | 4.0 - 1.2 | 10.0 - 3.1 | 16.0 - 4.9 |
| 41 | 4°40.3 | 4°41.0 | 4°27.5 | 4.1 - 1.3 | 10.1 - 3.1 | 16.1 - 5.0 |
| 42 | 4°40.5 | 4°41.3 | 4°27.7 | 4.2 - 1.3 | 10.2 - 3.1 | 16.2 - 5.0 |
| 43 | 4°40.7 | 4°41.5 | 4°28.0 | 4.3 - 1.3 | 10.3 - 3.2 | 16.3 - 5.0 |
| 44 | 4°41.0 | 4°41.8 | 4°28.2 | 4.4 - 1.4 | 10.4 - 3.2 | 16.4 - 5.1 |
| 45 | 4°41.3 | 4°42.0 | 4°28.4 | 4.5 - 1.4 | 10.5 - 3.2 | 16.5 - 5.1 |
| 46 | 4°41.5 | 4°42.3 | 4°28.7 | 4.6 - 1.4 | 10.6 - 3.3 | 16.6 - 5.1 |
| 47 | 4°41.8 | 4°42.5 | 4°28.9 | 4.7 - 1.4 | 10.7 - 3.3 | 16.7 - 5.1 |
| 48 | 4°42.0 | 4°42.8 | 4°29.2 | 4.8 - 1.5 | 10.8 - 3.3 | 16.8 - 5.2 |
| 49 | 4°42.3 | 4°43.0 | 4°29.4 | 4.9 - 1.5 | 10.9 - 3.4 | 16.9 - 5.2 |
| 50 | 4°42.5 | 4°43.3 | 4°29.6 | 5.0 - 1.5 | 11.0 - 3.4 | 17.0 - 5.2 |
| 51 | 4°42.8 | 4°43.5 | 4°29.9 | 5.1 - 1.6 | 11.1 - 3.4 | 17.1 - 5.3 |
| 52 | 4°43.0 | 4°43.8 | 4°30.1 | 5.2 - 1.6 | 11.2 - 3.5 | 17.2 - 5.3 |
| 53 | 4°43.2 | 4°44.0 | 4°30.3 | 5.3 - 1.6 | 11.3 - 3.5 | 17.3 - 5.3 |
| 54 | 4°43.5 | 4°44.3 | 4°30.6 | 5.4 - 1.7 | 11.4 - 3.5 | 17.4 - 5.4 |
| 55 | 4°43.8 | 4°44.5 | 4°30.8 | 5.5 - 1.7 | 11.5 - 3.5 | 17.5 - 5.4 |
| 56 | 4°44.0 | 4°44.8 | 4°31.1 | 5.6 - 1.7 | 11.6 - 3.6 | 17.6 - 5.4 |
| 57 | 4°44.2 | 4°45.0 | 4°31.3 | 5.7 - 1.8 | 11.7 - 3.6 | 17.7 - 5.5 |
| 58 | 4°44.5 | 4°45.3 | 4°31.5 | 5.8 - 1.8 | 11.8 - 3.6 | 17.8 - 5.5 |
| 59 | 4°44.8 | 4°45.5 | 4°31.8 | 5.9 - 1.8 | 11.9 - 3.7 | 17.9 - 5.5 |

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 19 | Plan. | | | | | |
| 0 | 4°45.0 | 4°45.8 | 4°32.0 | 0.0 - 0.0 | 6.0 - 2.0 | 12.0 - 3.9 |
| 1 | 4°45.2 | 4°46.0 | 4°32.3 | 0.1 - 0.0 | 6.1 - 2.0 | 12.1 - 3.9 |
| 2 | 4°45.5 | 4°46.3 | 4°32.5 | 0.2 - 0.1 | 6.2 - 2.0 | 12.2 - 4.0 |
| 3 | 4°45.8 | 4°46.5 | 4°32.7 | 0.3 - 0.1 | 6.3 - 2.0 | 12.3 - 4.0 |
| 4 | 4°46.0 | 4°46.8 | 4°33.0 | 0.4 - 0.1 | 6.4 - 2.1 | 12.4 - 4.0 |
| 5 | 4°46.2 | 4°47.0 | 4°33.2 | 0.5 - 0.2 | 6.5 - 2.1 | 12.5 - 4.1 |
| 6 | 4°46.5 | 4°47.3 | 4°33.4 | 0.6 - 0.2 | 6.6 - 2.1 | 12.6 - 4.1 |
| 7 | 4°46.8 | 4°47.5 | 4°33.7 | 0.7 - 0.2 | 6.7 - 2.2 | 12.7 - 4.1 |
| 8 | 4°47.0 | 4°47.8 | 4°33.9 | 0.8 - 0.3 | 6.8 - 2.2 | 12.8 - 4.2 |
| 9 | 4°47.2 | 4°48.0 | 4°34.2 | 0.9 - 0.3 | 6.9 - 2.2 | 12.9 - 4.2 |
| 10 | 4°47.5 | 4°48.3 | 4°34.4 | 1.0 - 0.3 | 7.0 - 2.3 | 13.0 - 4.2 |
| 11 | 4°47.8 | 4°48.5 | 4°34.6 | 1.1 - 0.4 | 7.1 - 2.3 | 13.1 - 4.3 |
| 12 | 4°48.0 | 4°48.8 | 4°34.9 | 1.2 - 0.4 | 7.2 - 2.3 | 13.2 - 4.3 |
| 13 | 4°48.2 | 4°49.0 | 4°35.1 | 1.3 - 0.4 | 7.3 - 2.4 | 13.3 - 4.3 |
| 14 | 4°48.5 | 4°49.3 | 4°35.4 | 1.4 - 0.5 | 7.4 - 2.4 | 13.4 - 4.4 |
| 15 | 4°48.8 | 4°49.5 | 4°35.6 | 1.5 - 0.5 | 7.5 - 2.4 | 13.5 - 4.4 |
| 16 | 4°49.0 | 4°49.8 | 4°35.8 | 1.6 - 0.5 | 7.6 - 2.5 | 13.6 - 4.4 |
| 17 | 4°49.3 | 4°50.0 | 4°36.1 | 1.7 - 0.6 | 7.7 - 2.5 | 13.7 - 4.5 |
| 18 | 4°49.5 | 4°50.3 | 4°36.3 | 1.8 - 0.6 | 7.8 - 2.5 | 13.8 - 4.5 |
| 19 | 4°49.8 | 4°50.5 | 4°36.6 | 1.9 - 0.6 | 7.9 - 2.6 | 13.9 - 4.5 |
| 20 | 4°50.0 | 4°50.8 | 4°36.8 | 2.0 - 0.7 | 8.0 - 2.6 | 14.0 - 4.5 |
| 21 | 4°50.3 | 4°51.0 | 4°37.0 | 2.1 - 0.7 | 8.1 - 2.6 | 14.1 - 4.6 |
| 22 | 4°50.5 | 4°51.3 | 4°37.3 | 2.2 - 0.7 | 8.2 - 2.7 | 14.2 - 4.6 |
| 23 | 4°50.7 | 4°51.5 | 4°37.5 | 2.3 - 0.7 | 8.3 - 2.7 | 14.3 - 4.6 |
| 24 | 4°51.0 | 4°51.8 | 4°37.7 | 2.4 - 0.8 | 8.4 - 2.7 | 14.4 - 4.7 |
| 25 | 4°51.3 | 4°52.0 | 4°38.0 | 2.5 - 0.8 | 8.5 - 2.8 | 14.5 - 4.7 |
| 26 | 4°51.5 | 4°52.3 | 4°38.2 | 2.6 - 0.8 | 8.6 - 2.8 | 14.6 - 4.7 |
| 27 | 4°51.7 | 4°52.5 | 4°38.5 | 2.7 - 0.9 | 8.7 - 2.8 | 14.7 - 4.8 |
| 28 | 4°52.0 | 4°52.8 | 4°38.7 | 2.8 - 0.9 | 8.8 - 2.9 | 14.8 - 4.8 |
| 29 | 4°52.3 | 4°53.0 | 4°38.9 | 2.9 - 0.9 | 8.9 - 2.9 | 14.9 - 4.8 |
| 30 | 4°52.5 | 4°53.3 | 4°39.2 | 3.0 - 1.0 | 9.0 - 2.9 | 15.0 - 4.9 |
| 31 | 4°52.7 | 4°53.6 | 4°39.4 | 3.1 - 1.0 | 9.1 - 3.0 | 15.1 - 4.9 |
| 32 | 4°53.0 | 4°53.8 | 4°39.7 | 3.2 - 1.0 | 9.2 - 3.0 | 15.2 - 4.9 |
| 33 | 4°53.3 | 4°54.1 | 4°39.9 | 3.3 - 1.1 | 9.3 - 3.0 | 15.3 - 5.0 |
| 34 | 4°53.5 | 4°54.3 | 4°40.1 | 3.4 - 1.1 | 9.4 - 3.1 | 15.4 - 5.0 |
| 35 | 4°53.7 | 4°54.6 | 4°40.4 | 3.5 - 1.1 | 9.5 - 3.1 | 15.5 - 5.0 |
| 36 | 4°54.0 | 4°54.8 | 4°40.6 | 3.6 - 1.2 | 9.6 - 3.1 | 15.6 - 5.1 |
| 37 | 4°54.3 | 4°55.1 | 4°40.8 | 3.7 - 1.2 | 9.7 - 3.2 | 15.7 - 5.1 |
| 38 | 4°54.5 | 4°55.3 | 4°41.1 | 3.8 - 1.2 | 9.8 - 3.2 | 15.8 - 5.1 |
| 39 | 4°54.7 | 4°55.6 | 4°41.3 | 3.9 - 1.3 | 9.9 - 3.2 | 15.9 - 5.2 |
| 40 | 4°55.0 | 4°55.8 | 4°41.6 | 4.0 - 1.3 | 10.0 - 3.3 | 16.0 - 5.2 |
| 41 | 4°55.3 | 4°56.1 | 4°41.8 | 4.1 - 1.3 | 10.1 - 3.3 | 16.1 - 5.2 |
| 42 | 4°55.5 | 4°56.3 | 4°42.0 | 4.2 - 1.4 | 10.2 - 3.3 | 16.2 - 5.3 |
| 43 | 4°55.7 | 4°56.6 | 4°42.3 | 4.3 - 1.4 | 10.3 - 3.3 | 16.3 - 5.3 |
| 44 | 4°56.0 | 4°56.8 | 4°42.5 | 4.4 - 1.4 | 10.4 - 3.4 | 16.4 - 5.3 |
| 45 | 4°56.3 | 4°57.1 | 4°42.8 | 4.5 - 1.5 | 10.5 - 3.4 | 16.5 - 5.4 |
| 46 | 4°56.5 | 4°57.3 | 4°43.0 | 4.6 - 1.5 | 10.6 - 3.4 | 16.6 - 5.4 |
| 47 | 4°56.8 | 4°57.6 | 4°43.2 | 4.7 - 1.5 | 10.7 - 3.5 | 16.7 - 5.4 |
| 48 | 4°57.0 | 4°57.8 | 4°43.5 | 4.8 - 1.6 | 10.8 - 3.5 | 16.8 - 5.5 |
| 49 | 4°57.3 | 4°58.1 | 4°43.7 | 4.9 - 1.6 | 10.9 - 3.5 | 16.9 - 5.5 |
| 50 | 4°57.5 | 4°58.3 | 4°43.9 | 5.0 - 1.6 | 11.0 - 3.6 | 17.0 - 5.5 |
| 51 | 4°57.8 | 4°58.6 | 4°44.2 | 5.1 - 1.7 | 11.1 - 3.6 | 17.1 - 5.6 |
| 52 | 4°58.0 | 4°58.8 | 4°44.4 | 5.2 - 1.7 | 11.2 - 3.6 | 17.2 - 5.6 |
| 53 | 4°58.2 | 4°59.1 | 4°44.7 | 5.3 - 1.7 | 11.3 - 3.7 | 17.3 - 5.6 |
| 54 | 4°58.5 | 4°59.3 | 4°44.9 | 5.4 - 1.8 | 11.4 - 3.7 | 17.4 - 5.7 |
| 55 | 4°58.8 | 4°59.6 | 4°45.1 | 5.5 - 1.8 | 11.5 - 3.7 | 17.5 - 5.7 |
| 56 | 4°59.0 | 4°59.8 | 4°45.4 | 5.6 - 1.8 | 11.6 - 3.8 | 17.6 - 5.7 |
| 57 | 4°59.2 | 5°00.1 | 4°45.6 | 5.7 - 1.9 | 11.7 - 3.8 | 17.7 - 5.8 |
| 58 | 4°59.5 | 5°00.3 | 4°45.9 | 5.8 - 1.9 | 11.8 - 3.8 | 17.8 - 5.8 |
| 59 | 4°59.8 | 5°00.6 | 4°46.1 | 5.9 - 1.9 | 11.9 - 3.9 | 17.9 - 5.8 |

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 20 | Plan. | | | | | |
| 0 | 5°00.0 | 5°00.8 | 4°46.3 | 0.0 - 0.0 | 6.0 - 2.0 | 12.0 - 4.1 |
| 1 | 5°00.2 | 5°01.1 | 4°46.6 | 0.1 - 0.0 | 6.1 - 2.1 | 12.1 - 4.1 |
| 2 | 5°00.5 | 5°01.3 | 4°46.8 | 0.2 - 0.1 | 6.2 - 2.1 | 12.2 - 4.2 |
| 3 | 5°00.8 | 5°01.6 | 4°47.0 | 0.3 - 0.1 | 6.3 - 2.2 | 12.3 - 4.2 |
| 4 | 5°01.0 | 5°01.8 | 4°47.3 | 0.4 - 0.1 | 6.4 - 2.2 | 12.4 - 4.2 |
| 5 | 5°01.2 | 5°02.1 | 4°47.5 | 0.5 - 0.2 | 6.5 - 2.2 | 12.5 - 4.3 |
| 6 | 5°01.5 | 5°02.3 | 4°47.8 | 0.6 - 0.2 | 6.6 - 2.3 | 12.6 - 4.3 |
| 7 | 5°01.8 | 5°02.6 | 4°48.0 | 0.7 - 0.2 | 6.7 - 2.3 | 12.7 - 4.3 |
| 8 | 5°02.0 | 5°02.8 | 4°48.2 | 0.8 - 0.3 | 6.8 - 2.3 | 12.8 - 4.4 |
| 9 | 5°02.2 | 5°03.1 | 4°48.5 | 0.9 - 0.3 | 6.9 - 2.4 | 12.9 - 4.4 |
| 10 | 5°02.5 | 5°03.3 | 4°48.7 | 1.0 - 0.3 | 7.0 - 2.4 | 13.0 - 4.4 |
| 11 | 5°02.8 | 5°03.6 | 4°49.0 | 1.1 - 0.4 | 7.1 - 2.4 | 13.1 - 4.5 |
| 12 | 5°03.0 | 5°03.8 | 4°49.2 | 1.2 - 0.4 | 7.2 - 2.5 | 13.2 - 4.5 |
| 13 | 5°03.2 | 5°04.1 | 4°49.4 | 1.3 - 0.4 | 7.3 - 2.5 | 13.3 - 4.5 |
| 14 | 5°03.5 | 5°04.3 | 4°49.7 | 1.4 - 0.5 | 7.4 - 2.5 | 13.4 - 4.6 |
| 15 | 5°03.8 | 5°04.6 | 4°49.9 | 1.5 - 0.5 | 7.5 - 2.6 | 13.5 - 4.6 |
| 16 | 5°04.0 | 5°04.8 | 4°50.2 | 1.6 - 0.5 | 7.6 - 2.6 | 13.6 - 4.6 |
| 17 | 5°04.3 | 5°05.1 | 4°50.4 | 1.7 - 0.6 | 7.7 - 2.6 | 13.7 - 4.7 |
| 18 | 5°04.5 | 5°05.3 | 4°50.6 | 1.8 - 0.6 | 7.8 - 2.7 | 13.8 - 4.7 |
| 19 | 5°04.7 | 5°05.6 | 4°50.9 | 1.9 - 0.6 | 7.9 - 2.7 | 13.9 - 4.7 |
| 20 | 5°05.0 | 5°05.8 | 4°51.1 | 2.0 - 0.7 | 8.0 - 2.7 | 14.0 - 4.8 |
| 21 | 5°05.3 | 5°06.1 | 4°51.3 | 2.1 - 0.7 | 8.1 - 2.8 | 14.1 - 4.8 |
| 22 | 5°05.5 | 5°06.3 | 4°51.6 | 2.2 - 0.8 | 8.2 - 2.8 | 14.2 - 4.9 |
| 23 | 5°05.7 | 5°06.6 | 4°51.8 | 2.3 - 0.8 | 8.3 - 2.8 | 14.3 - 4.9 |
| 24 | 5°06.0 | 5°06.8 | 4°52.1 | 2.4 - 0.8 | 8.4 - 2.9 | 14.4 - 4.9 |
| 25 | 5°06.3 | 5°07.1 | 4°52.3 | 2.5 - 0.9 | 8.5 - 2.9 | 14.5 - 5.0 |
| 26 | 5°06.5 | 5°07.3 | 4°52.5 | 2.6 - 0.9 | 8.6 - 2.9 | 14.6 - 5.0 |
| 27 | 5°06.7 | 5°07.6 | 4°52.8 | 2.7 - 0.9 | 8.7 - 3.0 | 14.7 - 5.0 |
| 28 | 5°07.0 | 5°07.8 | 4°53.0 | 2.8 - 1.0 | 8.8 - 3.0 | 14.8 - 5.1 |
| 29 | 5°07.3 | 5°08.1 | 4°53.3 | 2.9 - 1.0 | 8.9 - 3.0 | 14.9 - 5.1 |
| 30 | 5°07.5 | 5°08.3 | 4°53.5 | 3.0 - 1.0 | 9.0 - 3.1 | 15.0 - 5.1 |
| 31 | 5°07.7 | 5°08.6 | 4°53.7 | 3.1 - 1.1 | 9.1 - 3.1 | 15.1 - 5.2 |
| 32 | 5°08.0 | 5°08.8 | 4°54.0 | 3.2 - 1.1 | 9.2 - 3.1 | 15.2 - 5.2 |
| 33 | 5°08.3 | 5°09.1 | 4°54.2 | 3.3 - 1.1 | 9.3 - 3.2 | 15.3 - 5.2 |
| 34 | 5°08.5 | 5°09.3 | 4°54.4 | 3.4 - 1.2 | 9.4 - 3.2 | 15.4 - 5.3 |
| 35 | 5°08.7 | 5°09.6 | 4°54.7 | 3.5 - 1.2 | 9.5 - 3.2 | 15.5 - 5.3 |
| 36 | 5°09.0 | 5°09.8 | 4°54.9 | 3.6 - 1.2 | 9.6 - 3.3 | 15.6 - 5.3 |
| 37 | 5°09.3 | 5°10.1 | 4°55.2 | 3.7 - 1.3 | 9.7 - 3.3 | 15.7 - 5.4 |
| 38 | 5°09.5 | 5°10.3 | 4°55.4 | 3.8 - 1.3 | 9.8 - 3.3 | 15.8 - 5.4 |
| 39 | 5°09.7 | 5°10.6 | 4°55.6 | 3.9 - 1.3 | 9.9 - 3.4 | 15.9 - 5.4 |
| 40 | 5°10.0 | 5°10.8 | 4°55.9 | 4.0 - 1.4 | 10.0 - 3.4 | 16.0 - 5.5 |
| 41 | 5°10.3 | 5°11.1 | 4°56.1 | 4.1 - 1.4 | 10.1 - 3.5 | 16.1 - 5.5 |
| 42 | 5°10.5 | 5°11.3 | 4°56.4 | 4.2 - 1.4 | 10.2 - 3.5 | 16.2 - 5.5 |
| 43 | 5°10.7 | 5°11.6 | 4°56.6 | 4.3 - 1.5 | 10.3 - 3.5 | 16.3 - 5.6 |
| 44 | 5°11.0 | 5°11.9 | 4°56.8 | 4.4 - 1.5 | 10.4 - 3.6 | 16.4 - 5.6 |
| 45 | 5°11.3 | 5°12.1 | 4°57.1 | 4.5 - 1.5 | 10.5 - 3.6 | 16.5 - 5.6 |
| 46 | 5°11.5 | 5°12.4 | 4°57.3 | 4.6 - 1.6 | 10.6 - 3.6 | 16.6 - 5.7 |
| 47 | 5°11.8 | 5°12.6 | 4°57.5 | 4.7 - 1.6 | 10.7 - 3.7 | 16.7 - 5.7 |
| 48 | 5°12.0 | 5°12.9 | 4°57.8 | 4.8 - 1.6 | 10.8 - 3.7 | 16.8 - 5.7 |
| 49 | 5°12.2 | 5°13.1 | 4°58.0 | 4.9 - 1.7 | 10.9 - 3.7 | 16.9 - 5.8 |
| 50 | 5°12.5 | 5°13.4 | 4°58.3 | 5.0 - 1.7 | 11.0 - 3.8 | 17.0 - 5.8 |
| 51 | 5°12.8 | 5°13.6 | 4°58.5 | 5.1 - 1.7 | 11.1 - 3.8 | 17.1 - 5.8 |
| 52 | 5°13.0 | 5°13.9 | 4°58.7 | 5.2 - 1.8 | 11.2 - 3.8 | 17.2 - 5.9 |
| 53 | 5°13.2 | 5°14.1 | 4°59.0 | 5.3 - 1.8 | 11.3 - 3.9 | 17.3 - 5.9 |
| 54 | 5°13.5 | 5°14.4 | 4°59.2 | 5.4 - 1.8 | 11.4 - 3.9 | 17.4 - 5.9 |
| 55 | 5°13.8 | 5°14.6 | 4°59.5 | 5.5 - 1.9 | 11.5 - 3.9 | 17.5 - 6.0 |
| 56 | 5°14.0 | 5°14.9 | 4°59.7 | 5.6 - 1.9 | 11.6 - 4.0 | 17.6 - 6.0 |
| 57 | 5°14.2 | 5°15.1 | 4°59.9 | 5.7 - 1.9 | 11.7 - 4.0 | 17.7 - 6.0 |
| 58 | 5°14.5 | 5°15.4 | 5°00.2 | 5.8 - 2.0 | 11.8 - 4.0 | 17.8 - 6.1 |
| 59 | 5°14.8 | 5°15.6 | 5°00.4 | 5.9 - 2.0 | 11.9 - 4.1 | 17.9 - 6.1 |

# Increments and Corrections

| m 21 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 5°15.0 | 5°15.9 | 5°00.6 | 0.0 - 0.0 | 6.0 - 2.1 | 12.0 - 4.3 |
| 1 | 5°15.2 | 5°16.1 | 5°00.9 | 0.1 - 0.0 | 6.1 - 2.2 | 12.1 - 4.3 |
| 2 | 5°15.5 | 5°16.4 | 5°01.1 | 0.2 - 0.1 | 6.2 - 2.2 | 12.2 - 4.4 |
| 3 | 5°15.8 | 5°16.6 | 5°01.4 | 0.3 - 0.1 | 6.3 - 2.3 | 12.3 - 4.4 |
| 4 | 5°16.0 | 5°16.9 | 5°01.6 | 0.4 - 0.1 | 6.4 - 2.3 | 12.4 - 4.4 |
| 5 | 5°16.2 | 5°17.1 | 5°01.8 | 0.5 - 0.2 | 6.5 - 2.3 | 12.5 - 4.5 |
| 6 | 5°16.5 | 5°17.4 | 5°02.1 | 0.6 - 0.2 | 6.6 - 2.4 | 12.6 - 4.5 |
| 7 | 5°16.8 | 5°17.6 | 5°02.3 | 0.7 - 0.3 | 6.7 - 2.4 | 12.7 - 4.6 |
| 8 | 5°17.0 | 5°17.9 | 5°02.6 | 0.8 - 0.3 | 6.8 - 2.4 | 12.8 - 4.6 |
| 9 | 5°17.2 | 5°18.1 | 5°02.8 | 0.9 - 0.3 | 6.9 - 2.5 | 12.9 - 4.6 |
| 10 | 5°17.5 | 5°18.4 | 5°03.0 | 1.0 - 0.4 | 7.0 - 2.5 | 13.0 - 4.7 |
| 11 | 5°17.8 | 5°18.6 | 5°03.3 | 1.1 - 0.4 | 7.1 - 2.5 | 13.1 - 4.7 |
| 12 | 5°18.0 | 5°18.9 | 5°03.5 | 1.2 - 0.4 | 7.2 - 2.6 | 13.2 - 4.7 |
| 13 | 5°18.2 | 5°19.1 | 5°03.8 | 1.3 - 0.5 | 7.3 - 2.6 | 13.3 - 4.8 |
| 14 | 5°18.5 | 5°19.4 | 5°04.0 | 1.4 - 0.5 | 7.4 - 2.7 | 13.4 - 4.8 |
| 15 | 5°18.8 | 5°19.6 | 5°04.2 | 1.5 - 0.5 | 7.5 - 2.7 | 13.5 - 4.8 |
| 16 | 5°19.0 | 5°19.9 | 5°04.5 | 1.6 - 0.6 | 7.6 - 2.7 | 13.6 - 4.9 |
| 17 | 5°19.3 | 5°20.1 | 5°04.7 | 1.7 - 0.6 | 7.7 - 2.8 | 13.7 - 4.9 |
| 18 | 5°19.5 | 5°20.4 | 5°04.9 | 1.8 - 0.6 | 7.8 - 2.8 | 13.8 - 4.9 |
| 19 | 5°19.7 | 5°20.6 | 5°05.2 | 1.9 - 0.7 | 7.9 - 2.8 | 13.9 - 5.0 |
| 20 | 5°20.0 | 5°20.9 | 5°05.4 | 2.0 - 0.7 | 8.0 - 2.9 | 14.0 - 5.0 |
| 21 | 5°20.3 | 5°21.1 | 5°05.7 | 2.1 - 0.8 | 8.1 - 2.9 | 14.1 - 5.1 |
| 22 | 5°20.5 | 5°21.4 | 5°05.9 | 2.2 - 0.8 | 8.2 - 2.9 | 14.2 - 5.1 |
| 23 | 5°20.7 | 5°21.6 | 5°06.1 | 2.3 - 0.8 | 8.3 - 3.0 | 14.3 - 5.1 |
| 24 | 5°21.0 | 5°21.9 | 5°06.4 | 2.4 - 0.9 | 8.4 - 3.0 | 14.4 - 5.2 |
| 25 | 5°21.3 | 5°22.1 | 5°06.6 | 2.5 - 0.9 | 8.5 - 3.0 | 14.5 - 5.2 |
| 26 | 5°21.5 | 5°22.4 | 5°06.9 | 2.6 - 0.9 | 8.6 - 3.1 | 14.6 - 5.2 |
| 27 | 5°21.7 | 5°22.6 | 5°07.1 | 2.7 - 1.0 | 8.7 - 3.1 | 14.7 - 5.3 |
| 28 | 5°22.0 | 5°22.9 | 5°07.3 | 2.8 - 1.0 | 8.8 - 3.2 | 14.8 - 5.3 |
| 29 | 5°22.3 | 5°23.1 | 5°07.6 | 2.9 - 1.0 | 8.9 - 3.2 | 14.9 - 5.3 |
| 30 | 5°22.5 | 5°23.4 | 5°07.8 | 3.0 - 1.1 | 9.0 - 3.2 | 15.0 - 5.4 |
| 31 | 5°22.7 | 5°23.6 | 5°08.0 | 3.1 - 1.1 | 9.1 - 3.3 | 15.1 - 5.4 |
| 32 | 5°23.0 | 5°23.9 | 5°08.3 | 3.2 - 1.1 | 9.2 - 3.3 | 15.2 - 5.4 |
| 33 | 5°23.3 | 5°24.1 | 5°08.5 | 3.3 - 1.2 | 9.3 - 3.3 | 15.3 - 5.5 |
| 34 | 5°23.5 | 5°24.4 | 5°08.8 | 3.4 - 1.2 | 9.4 - 3.4 | 15.4 - 5.5 |
| 35 | 5°23.7 | 5°24.6 | 5°09.0 | 3.5 - 1.3 | 9.5 - 3.4 | 15.5 - 5.6 |
| 36 | 5°24.0 | 5°24.9 | 5°09.2 | 3.6 - 1.3 | 9.6 - 3.4 | 15.6 - 5.6 |
| 37 | 5°24.3 | 5°25.1 | 5°09.5 | 3.7 - 1.3 | 9.7 - 3.5 | 15.7 - 5.6 |
| 38 | 5°24.5 | 5°25.4 | 5°09.7 | 3.8 - 1.4 | 9.8 - 3.5 | 15.8 - 5.7 |
| 39 | 5°24.7 | 5°25.6 | 5°10.0 | 3.9 - 1.4 | 9.9 - 3.5 | 15.9 - 5.7 |
| 40 | 5°25.0 | 5°25.9 | 5°10.2 | 4.0 - 1.4 | 10.0 - 3.6 | 16.0 - 5.7 |
| 41 | 5°25.3 | 5°26.1 | 5°10.4 | 4.1 - 1.5 | 10.1 - 3.6 | 16.1 - 5.8 |
| 42 | 5°25.5 | 5°26.4 | 5°10.7 | 4.2 - 1.5 | 10.2 - 3.7 | 16.2 - 5.8 |
| 43 | 5°25.7 | 5°26.6 | 5°10.9 | 4.3 - 1.5 | 10.3 - 3.7 | 16.3 - 5.8 |
| 44 | 5°26.0 | 5°26.9 | 5°11.1 | 4.4 - 1.6 | 10.4 - 3.7 | 16.4 - 5.9 |
| 45 | 5°26.3 | 5°27.1 | 5°11.4 | 4.5 - 1.6 | 10.5 - 3.8 | 16.5 - 5.9 |
| 46 | 5°26.5 | 5°27.4 | 5°11.6 | 4.6 - 1.6 | 10.6 - 3.8 | 16.6 - 5.9 |
| 47 | 5°26.8 | 5°27.6 | 5°11.9 | 4.7 - 1.7 | 10.7 - 3.8 | 16.7 - 6.0 |
| 48 | 5°27.0 | 5°27.9 | 5°12.1 | 4.8 - 1.7 | 10.8 - 3.9 | 16.8 - 6.0 |
| 49 | 5°27.2 | 5°28.1 | 5°12.3 | 4.9 - 1.8 | 10.9 - 3.9 | 16.9 - 6.1 |
| 50 | 5°27.5 | 5°28.4 | 5°12.6 | 5.0 - 1.8 | 11.0 - 3.9 | 17.0 - 6.1 |
| 51 | 5°27.8 | 5°28.6 | 5°12.8 | 5.1 - 1.8 | 11.1 - 4.0 | 17.1 - 6.1 |
| 52 | 5°28.0 | 5°28.9 | 5°13.1 | 5.2 - 1.9 | 11.2 - 4.0 | 17.2 - 6.2 |
| 53 | 5°28.2 | 5°29.1 | 5°13.3 | 5.3 - 1.9 | 11.3 - 4.0 | 17.3 - 6.2 |
| 54 | 5°28.5 | 5°29.4 | 5°13.5 | 5.4 - 1.9 | 11.4 - 4.1 | 17.4 - 6.2 |
| 55 | 5°28.8 | 5°29.6 | 5°13.8 | 5.5 - 2.0 | 11.5 - 4.1 | 17.5 - 6.3 |
| 56 | 5°29.0 | 5°29.9 | 5°14.0 | 5.6 - 2.0 | 11.6 - 4.2 | 17.6 - 6.3 |
| 57 | 5°29.2 | 5°30.1 | 5°14.3 | 5.7 - 2.0 | 11.7 - 4.2 | 17.7 - 6.3 |
| 58 | 5°29.5 | 5°30.4 | 5°14.5 | 5.8 - 2.1 | 11.8 - 4.2 | 17.8 - 6.4 |
| 59 | 5°29.8 | 5°30.7 | 5°14.7 | 5.9 - 2.1 | 11.9 - 4.3 | 17.9 - 6.4 |

| m 22 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 5°30.0 | 5°30.9 | 5°15.0 | 0.0 - 0.0 | 6.0 - 2.3 | 12.0 - 4.5 |
| 1 | 5°30.2 | 5°31.2 | 5°15.2 | 0.1 - 0.0 | 6.1 - 2.3 | 12.1 - 4.5 |
| 2 | 5°30.5 | 5°31.4 | 5°15.4 | 0.2 - 0.1 | 6.2 - 2.3 | 12.2 - 4.6 |
| 3 | 5°30.8 | 5°31.7 | 5°15.7 | 0.3 - 0.1 | 6.3 - 2.4 | 12.3 - 4.6 |
| 4 | 5°31.0 | 5°31.9 | 5°15.9 | 0.4 - 0.2 | 6.4 - 2.4 | 12.4 - 4.7 |
| 5 | 5°31.2 | 5°32.2 | 5°16.2 | 0.5 - 0.2 | 6.5 - 2.4 | 12.5 - 4.7 |
| 6 | 5°31.5 | 5°32.4 | 5°16.4 | 0.6 - 0.2 | 6.6 - 2.5 | 12.6 - 4.7 |
| 7 | 5°31.8 | 5°32.7 | 5°16.6 | 0.7 - 0.3 | 6.7 - 2.5 | 12.7 - 4.8 |
| 8 | 5°32.0 | 5°32.9 | 5°16.9 | 0.8 - 0.3 | 6.8 - 2.5 | 12.8 - 4.8 |
| 9 | 5°32.2 | 5°33.2 | 5°17.1 | 0.9 - 0.3 | 6.9 - 2.6 | 12.9 - 4.8 |
| 10 | 5°32.5 | 5°33.4 | 5°17.4 | 1.0 - 0.4 | 7.0 - 2.6 | 13.0 - 4.9 |
| 11 | 5°32.8 | 5°33.7 | 5°17.6 | 1.1 - 0.4 | 7.1 - 2.7 | 13.1 - 4.9 |
| 12 | 5°33.0 | 5°33.9 | 5°17.8 | 1.2 - 0.5 | 7.2 - 2.7 | 13.2 - 4.9 |
| 13 | 5°33.2 | 5°34.2 | 5°18.1 | 1.3 - 0.5 | 7.3 - 2.7 | 13.3 - 5.0 |
| 14 | 5°33.5 | 5°34.4 | 5°18.3 | 1.4 - 0.5 | 7.4 - 2.8 | 13.4 - 5.0 |
| 15 | 5°33.8 | 5°34.7 | 5°18.5 | 1.5 - 0.6 | 7.5 - 2.8 | 13.5 - 5.1 |
| 16 | 5°34.0 | 5°34.9 | 5°18.8 | 1.6 - 0.6 | 7.6 - 2.8 | 13.6 - 5.1 |
| 17 | 5°34.3 | 5°35.2 | 5°19.0 | 1.7 - 0.6 | 7.7 - 2.9 | 13.7 - 5.1 |
| 18 | 5°34.5 | 5°35.4 | 5°19.3 | 1.8 - 0.7 | 7.8 - 2.9 | 13.8 - 5.2 |
| 19 | 5°34.8 | 5°35.7 | 5°19.5 | 1.9 - 0.7 | 7.9 - 3.0 | 13.9 - 5.2 |
| 20 | 5°35.0 | 5°35.9 | 5°19.7 | 2.0 - 0.8 | 8.0 - 3.0 | 14.0 - 5.3 |
| 21 | 5°35.3 | 5°36.2 | 5°20.0 | 2.1 - 0.8 | 8.1 - 3.0 | 14.1 - 5.3 |
| 22 | 5°35.5 | 5°36.4 | 5°20.2 | 2.2 - 0.8 | 8.2 - 3.1 | 14.2 - 5.3 |
| 23 | 5°35.7 | 5°36.7 | 5°20.5 | 2.3 - 0.9 | 8.3 - 3.1 | 14.3 - 5.4 |
| 24 | 5°36.0 | 5°36.9 | 5°20.7 | 2.4 - 0.9 | 8.4 - 3.2 | 14.4 - 5.4 |
| 25 | 5°36.3 | 5°37.2 | 5°20.9 | 2.5 - 0.9 | 8.5 - 3.2 | 14.5 - 5.4 |
| 26 | 5°36.5 | 5°37.4 | 5°21.2 | 2.6 - 1.0 | 8.6 - 3.2 | 14.6 - 5.5 |
| 27 | 5°36.7 | 5°37.7 | 5°21.4 | 2.7 - 1.0 | 8.7 - 3.3 | 14.7 - 5.5 |
| 28 | 5°37.0 | 5°37.9 | 5°21.6 | 2.8 - 1.1 | 8.8 - 3.3 | 14.8 - 5.6 |
| 29 | 5°37.3 | 5°38.2 | 5°21.9 | 2.9 - 1.1 | 8.9 - 3.3 | 14.9 - 5.6 |
| 30 | 5°37.5 | 5°38.4 | 5°22.1 | 3.0 - 1.1 | 9.0 - 3.4 | 15.0 - 5.6 |
| 31 | 5°37.7 | 5°38.7 | 5°22.4 | 3.1 - 1.2 | 9.1 - 3.4 | 15.1 - 5.7 |
| 32 | 5°38.0 | 5°38.9 | 5°22.6 | 3.2 - 1.2 | 9.2 - 3.4 | 15.2 - 5.7 |
| 33 | 5°38.3 | 5°39.2 | 5°22.8 | 3.3 - 1.2 | 9.3 - 3.5 | 15.3 - 5.7 |
| 34 | 5°38.5 | 5°39.4 | 5°23.1 | 3.4 - 1.3 | 9.4 - 3.5 | 15.4 - 5.8 |
| 35 | 5°38.7 | 5°39.7 | 5°23.3 | 3.5 - 1.3 | 9.5 - 3.6 | 15.5 - 5.8 |
| 36 | 5°39.0 | 5°39.9 | 5°23.6 | 3.6 - 1.4 | 9.6 - 3.6 | 15.6 - 5.8 |
| 37 | 5°39.3 | 5°40.2 | 5°23.8 | 3.7 - 1.4 | 9.7 - 3.6 | 15.7 - 5.9 |
| 38 | 5°39.5 | 5°40.4 | 5°24.0 | 3.8 - 1.4 | 9.8 - 3.7 | 15.8 - 5.9 |
| 39 | 5°39.7 | 5°40.7 | 5°24.3 | 3.9 - 1.5 | 9.9 - 3.7 | 15.9 - 6.0 |
| 40 | 5°40.0 | 5°40.9 | 5°24.5 | 4.0 - 1.5 | 10.0 - 3.8 | 16.0 - 6.0 |
| 41 | 5°40.3 | 5°41.2 | 5°24.7 | 4.1 - 1.5 | 10.1 - 3.8 | 16.1 - 6.0 |
| 42 | 5°40.5 | 5°41.4 | 5°25.0 | 4.2 - 1.6 | 10.2 - 3.8 | 16.2 - 6.1 |
| 43 | 5°40.7 | 5°41.7 | 5°25.2 | 4.3 - 1.6 | 10.3 - 3.9 | 16.3 - 6.1 |
| 44 | 5°41.0 | 5°41.9 | 5°25.5 | 4.4 - 1.7 | 10.4 - 3.9 | 16.4 - 6.1 |
| 45 | 5°41.3 | 5°42.2 | 5°25.7 | 4.5 - 1.7 | 10.5 - 3.9 | 16.5 - 6.2 |
| 46 | 5°41.5 | 5°42.4 | 5°25.9 | 4.6 - 1.7 | 10.6 - 4.0 | 16.6 - 6.2 |
| 47 | 5°41.8 | 5°42.7 | 5°26.2 | 4.7 - 1.8 | 10.7 - 4.0 | 16.7 - 6.3 |
| 48 | 5°42.0 | 5°42.9 | 5°26.4 | 4.8 - 1.8 | 10.8 - 4.1 | 16.8 - 6.3 |
| 49 | 5°42.3 | 5°43.2 | 5°26.7 | 4.9 - 1.8 | 10.9 - 4.1 | 16.9 - 6.3 |
| 50 | 5°42.5 | 5°43.4 | 5°26.9 | 5.0 - 1.9 | 11.0 - 4.1 | 17.0 - 6.4 |
| 51 | 5°42.8 | 5°43.7 | 5°27.1 | 5.1 - 1.9 | 11.1 - 4.2 | 17.1 - 6.4 |
| 52 | 5°43.0 | 5°43.9 | 5°27.4 | 5.2 - 2.0 | 11.2 - 4.2 | 17.2 - 6.4 |
| 53 | 5°43.2 | 5°44.2 | 5°27.6 | 5.3 - 2.0 | 11.3 - 4.2 | 17.3 - 6.5 |
| 54 | 5°43.5 | 5°44.4 | 5°27.9 | 5.4 - 2.0 | 11.4 - 4.3 | 17.4 - 6.5 |
| 55 | 5°43.8 | 5°44.7 | 5°28.1 | 5.5 - 2.1 | 11.5 - 4.3 | 17.5 - 6.6 |
| 56 | 5°44.0 | 5°44.9 | 5°28.3 | 5.6 - 2.1 | 11.6 - 4.4 | 17.6 - 6.6 |
| 57 | 5°44.2 | 5°45.2 | 5°28.6 | 5.7 - 2.1 | 11.7 - 4.4 | 17.7 - 6.6 |
| 58 | 5°44.5 | 5°45.4 | 5°28.8 | 5.8 - 2.2 | 11.8 - 4.4 | 17.8 - 6.7 |
| 59 | 5°44.8 | 5°45.7 | 5°29.0 | 5.9 - 2.2 | 11.9 - 4.5 | 17.9 - 6.7 |

| m 23 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 5°45.0 | 5°45.9 | 5°29.3 | 0.0 - 0.0 | 6.0 - 2.4 | 12.0 - 4.7 |
| 1 | 5°45.2 | 5°46.2 | 5°29.5 | 0.1 - 0.0 | 6.1 - 2.4 | 12.1 - 4.7 |
| 2 | 5°45.5 | 5°46.4 | 5°29.8 | 0.2 - 0.1 | 6.2 - 2.4 | 12.2 - 4.8 |
| 3 | 5°45.8 | 5°46.7 | 5°30.0 | 0.3 - 0.1 | 6.3 - 2.5 | 12.3 - 4.8 |
| 4 | 5°46.0 | 5°46.9 | 5°30.2 | 0.4 - 0.2 | 6.4 - 2.5 | 12.4 - 4.9 |
| 5 | 5°46.2 | 5°47.2 | 5°30.5 | 0.5 - 0.2 | 6.5 - 2.5 | 12.5 - 4.9 |
| 6 | 5°46.5 | 5°47.4 | 5°30.7 | 0.6 - 0.2 | 6.6 - 2.6 | 12.6 - 4.9 |
| 7 | 5°46.8 | 5°47.7 | 5°31.0 | 0.7 - 0.3 | 6.7 - 2.6 | 12.7 - 5.0 |
| 8 | 5°47.0 | 5°47.9 | 5°31.2 | 0.8 - 0.3 | 6.8 - 2.7 | 12.8 - 5.0 |
| 9 | 5°47.2 | 5°48.2 | 5°31.4 | 0.9 - 0.4 | 6.9 - 2.7 | 12.9 - 5.1 |
| 10 | 5°47.5 | 5°48.4 | 5°31.7 | 1.0 - 0.4 | 7.0 - 2.7 | 13.0 - 5.1 |
| 11 | 5°47.8 | 5°48.7 | 5°31.9 | 1.1 - 0.4 | 7.1 - 2.8 | 13.1 - 5.1 |
| 12 | 5°48.0 | 5°49.0 | 5°32.1 | 1.2 - 0.5 | 7.2 - 2.8 | 13.2 - 5.2 |
| 13 | 5°48.2 | 5°49.2 | 5°32.4 | 1.3 - 0.5 | 7.3 - 2.9 | 13.3 - 5.2 |
| 14 | 5°48.5 | 5°49.5 | 5°32.6 | 1.4 - 0.5 | 7.4 - 2.9 | 13.4 - 5.2 |
| 15 | 5°48.8 | 5°49.7 | 5°32.9 | 1.5 - 0.6 | 7.5 - 2.9 | 13.5 - 5.3 |
| 16 | 5°49.0 | 5°50.0 | 5°33.1 | 1.6 - 0.6 | 7.6 - 3.0 | 13.6 - 5.3 |
| 17 | 5°49.3 | 5°50.2 | 5°33.3 | 1.7 - 0.7 | 7.7 - 3.0 | 13.7 - 5.4 |
| 18 | 5°49.5 | 5°50.5 | 5°33.6 | 1.8 - 0.7 | 7.8 - 3.1 | 13.8 - 5.4 |
| 19 | 5°49.8 | 5°50.7 | 5°33.8 | 1.9 - 0.7 | 7.9 - 3.1 | 13.9 - 5.4 |
| 20 | 5°50.0 | 5°51.0 | 5°34.1 | 2.0 - 0.8 | 8.0 - 3.1 | 14.0 - 5.5 |
| 21 | 5°50.3 | 5°51.2 | 5°34.3 | 2.1 - 0.8 | 8.1 - 3.2 | 14.1 - 5.5 |
| 22 | 5°50.5 | 5°51.5 | 5°34.5 | 2.2 - 0.9 | 8.2 - 3.2 | 14.2 - 5.6 |
| 23 | 5°50.7 | 5°51.7 | 5°34.8 | 2.3 - 0.9 | 8.3 - 3.3 | 14.3 - 5.6 |
| 24 | 5°51.0 | 5°52.0 | 5°35.0 | 2.4 - 0.9 | 8.4 - 3.3 | 14.4 - 5.6 |
| 25 | 5°51.3 | 5°52.2 | 5°35.2 | 2.5 - 1.0 | 8.5 - 3.3 | 14.5 - 5.7 |
| 26 | 5°51.5 | 5°52.5 | 5°35.5 | 2.6 - 1.0 | 8.6 - 3.4 | 14.6 - 5.7 |
| 27 | 5°51.7 | 5°52.7 | 5°35.7 | 2.7 - 1.1 | 8.7 - 3.4 | 14.7 - 5.8 |
| 28 | 5°52.0 | 5°53.0 | 5°36.0 | 2.8 - 1.1 | 8.8 - 3.4 | 14.8 - 5.8 |
| 29 | 5°52.3 | 5°53.2 | 5°36.2 | 2.9 - 1.1 | 8.9 - 3.5 | 14.9 - 5.8 |
| 30 | 5°52.5 | 5°53.5 | 5°36.4 | 3.0 - 1.2 | 9.0 - 3.5 | 15.0 - 5.9 |
| 31 | 5°52.7 | 5°53.7 | 5°36.7 | 3.1 - 1.2 | 9.1 - 3.6 | 15.1 - 5.9 |
| 32 | 5°53.0 | 5°54.0 | 5°36.9 | 3.2 - 1.3 | 9.2 - 3.6 | 15.2 - 6.0 |
| 33 | 5°53.3 | 5°54.2 | 5°37.2 | 3.3 - 1.3 | 9.3 - 3.6 | 15.3 - 6.0 |
| 34 | 5°53.5 | 5°54.5 | 5°37.4 | 3.4 - 1.3 | 9.4 - 3.7 | 15.4 - 6.0 |
| 35 | 5°53.7 | 5°54.7 | 5°37.6 | 3.5 - 1.4 | 9.5 - 3.7 | 15.5 - 6.1 |
| 36 | 5°54.0 | 5°55.0 | 5°37.9 | 3.6 - 1.4 | 9.6 - 3.8 | 15.6 - 6.1 |
| 37 | 5°54.3 | 5°55.2 | 5°38.1 | 3.7 - 1.4 | 9.7 - 3.8 | 15.7 - 6.1 |
| 38 | 5°54.5 | 5°55.5 | 5°38.4 | 3.8 - 1.5 | 9.8 - 3.8 | 15.8 - 6.2 |
| 39 | 5°54.7 | 5°55.7 | 5°38.6 | 3.9 - 1.5 | 9.9 - 3.9 | 15.9 - 6.2 |
| 40 | 5°55.0 | 5°56.0 | 5°38.8 | 4.0 - 1.6 | 10.0 - 3.9 | 16.0 - 6.3 |
| 41 | 5°55.3 | 5°56.2 | 5°39.1 | 4.1 - 1.6 | 10.1 - 4.0 | 16.1 - 6.3 |
| 42 | 5°55.5 | 5°56.5 | 5°39.3 | 4.2 - 1.6 | 10.2 - 4.0 | 16.2 - 6.3 |
| 43 | 5°55.7 | 5°56.7 | 5°39.5 | 4.3 - 1.7 | 10.3 - 4.0 | 16.3 - 6.4 |
| 44 | 5°56.0 | 5°57.0 | 5°39.8 | 4.4 - 1.7 | 10.4 - 4.1 | 16.4 - 6.4 |
| 45 | 5°56.3 | 5°57.2 | 5°40.0 | 4.5 - 1.8 | 10.5 - 4.1 | 16.5 - 6.5 |
| 46 | 5°56.5 | 5°57.5 | 5°40.3 | 4.6 - 1.8 | 10.6 - 4.2 | 16.6 - 6.5 |
| 47 | 5°56.8 | 5°57.7 | 5°40.5 | 4.7 - 1.8 | 10.7 - 4.2 | 16.7 - 6.5 |
| 48 | 5°57.0 | 5°58.0 | 5°40.7 | 4.8 - 1.9 | 10.8 - 4.2 | 16.8 - 6.6 |
| 49 | 5°57.3 | 5°58.2 | 5°41.0 | 4.9 - 1.9 | 10.9 - 4.3 | 16.9 - 6.6 |
| 50 | 5°57.5 | 5°58.5 | 5°41.2 | 5.0 - 2.0 | 11.0 - 4.3 | 17.0 - 6.7 |
| 51 | 5°57.8 | 5°58.7 | 5°41.5 | 5.1 - 2.0 | 11.1 - 4.3 | 17.1 - 6.7 |
| 52 | 5°58.0 | 5°59.0 | 5°41.7 | 5.2 - 2.0 | 11.2 - 4.4 | 17.2 - 6.7 |
| 53 | 5°58.2 | 5°59.2 | 5°41.9 | 5.3 - 2.1 | 11.3 - 4.4 | 17.3 - 6.8 |
| 54 | 5°58.5 | 5°59.5 | 5°42.2 | 5.4 - 2.1 | 11.4 - 4.5 | 17.4 - 6.8 |
| 55 | 5°58.8 | 5°59.7 | 5°42.4 | 5.5 - 2.2 | 11.5 - 4.5 | 17.5 - 6.9 |
| 56 | 5°59.0 | 6°00.0 | 5°42.6 | 5.6 - 2.2 | 11.6 - 4.5 | 17.6 - 6.9 |
| 57 | 5°59.2 | 6°00.2 | 5°42.9 | 5.7 - 2.2 | 11.7 - 4.6 | 17.7 - 6.9 |
| 58 | 5°59.5 | 6°00.5 | 5°43.1 | 5.8 - 2.3 | 11.8 - 4.6 | 17.8 - 7.0 |
| 59 | 5°59.8 | 6°00.7 | 5°43.4 | 5.9 - 2.3 | 11.9 - 4.7 | 17.9 - 7.0 |

# Increments and Corrections

| m 24 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 6°00.0 | 6°01.0 | 5°43.6 | 0.0 - 0.0 | 6.0 - 2.5 | 12.0 - 4.9 |
| 1 | 6°00.2 | 6°01.2 | 5°43.8 | 0.1 - 0.0 | 6.1 - 2.5 | 12.1 - 4.9 |
| 2 | 6°00.5 | 6°01.5 | 5°44.1 | 0.2 - 0.1 | 6.2 - 2.5 | 12.2 - 5.0 |
| 3 | 6°00.8 | 6°01.7 | 5°44.3 | 0.3 - 0.1 | 6.3 - 2.6 | 12.3 - 5.0 |
| 4 | 6°01.0 | 6°02.0 | 5°44.6 | 0.4 - 0.2 | 6.4 - 2.6 | 12.4 - 5.1 |
| 5 | 6°01.2 | 6°02.2 | 5°44.8 | 0.5 - 0.2 | 6.5 - 2.7 | 12.5 - 5.1 |
| 6 | 6°01.5 | 6°02.5 | 5°45.0 | 0.6 - 0.2 | 6.6 - 2.7 | 12.6 - 5.1 |
| 7 | 6°01.8 | 6°02.7 | 5°45.3 | 0.7 - 0.3 | 6.7 - 2.7 | 12.7 - 5.2 |
| 8 | 6°02.0 | 6°03.0 | 5°45.5 | 0.8 - 0.3 | 6.8 - 2.8 | 12.8 - 5.2 |
| 9 | 6°02.2 | 6°03.2 | 5°45.7 | 0.9 - 0.4 | 6.9 - 2.8 | 12.9 - 5.3 |
| 10 | 6°02.5 | 6°03.5 | 5°46.0 | 1.0 - 0.4 | 7.0 - 2.9 | 13.0 - 5.3 |
| 11 | 6°02.8 | 6°03.7 | 5°46.2 | 1.1 - 0.4 | 7.1 - 2.9 | 13.1 - 5.3 |
| 12 | 6°03.0 | 6°04.0 | 5°46.5 | 1.2 - 0.5 | 7.2 - 2.9 | 13.2 - 5.4 |
| 13 | 6°03.2 | 6°04.2 | 5°46.7 | 1.3 - 0.5 | 7.3 - 3.0 | 13.3 - 5.4 |
| 14 | 6°03.5 | 6°04.5 | 5°46.9 | 1.4 - 0.6 | 7.4 - 3.0 | 13.4 - 5.5 |
| 15 | 6°03.8 | 6°04.7 | 5°47.2 | 1.5 - 0.6 | 7.5 - 3.1 | 13.5 - 5.5 |
| 16 | 6°04.0 | 6°05.0 | 5°47.4 | 1.6 - 0.7 | 7.6 - 3.1 | 13.6 - 5.6 |
| 17 | 6°04.3 | 6°05.2 | 5°47.7 | 1.7 - 0.7 | 7.7 - 3.1 | 13.7 - 5.6 |
| 18 | 6°04.5 | 6°05.5 | 5°47.9 | 1.8 - 0.7 | 7.8 - 3.2 | 13.8 - 5.6 |
| 19 | 6°04.7 | 6°05.7 | 5°48.1 | 1.9 - 0.8 | 7.9 - 3.2 | 13.9 - 5.7 |
| 20 | 6°05.0 | 6°06.0 | 5°48.4 | 2.0 - 0.8 | 8.0 - 3.3 | 14.0 - 5.7 |
| 21 | 6°05.3 | 6°06.2 | 5°48.6 | 2.1 - 0.9 | 8.1 - 3.3 | 14.1 - 5.8 |
| 22 | 6°05.5 | 6°06.5 | 5°48.8 | 2.2 - 0.9 | 8.2 - 3.3 | 14.2 - 5.8 |
| 23 | 6°05.7 | 6°06.7 | 5°49.1 | 2.3 - 0.9 | 8.3 - 3.4 | 14.3 - 5.8 |
| 24 | 6°06.0 | 6°07.0 | 5°49.3 | 2.4 - 1.0 | 8.4 - 3.4 | 14.4 - 5.9 |
| 25 | 6°06.3 | 6°07.3 | 5°49.6 | 2.5 - 1.0 | 8.5 - 3.5 | 14.5 - 5.9 |
| 26 | 6°06.5 | 6°07.5 | 5°49.8 | 2.6 - 1.1 | 8.6 - 3.5 | 14.6 - 6.0 |
| 27 | 6°06.7 | 6°07.8 | 5°50.0 | 2.7 - 1.1 | 8.7 - 3.6 | 14.7 - 6.0 |
| 28 | 6°07.0 | 6°08.0 | 5°50.3 | 2.8 - 1.1 | 8.8 - 3.6 | 14.8 - 6.0 |
| 29 | 6°07.3 | 6°08.3 | 5°50.5 | 2.9 - 1.2 | 8.9 - 3.6 | 14.9 - 6.1 |
| 30 | 6°07.5 | 6°08.5 | 5°50.8 | 3.0 - 1.2 | 9.0 - 3.7 | 15.0 - 6.1 |
| 31 | 6°07.7 | 6°08.8 | 5°51.0 | 3.1 - 1.3 | 9.1 - 3.7 | 15.1 - 6.2 |
| 32 | 6°08.0 | 6°09.0 | 5°51.2 | 3.2 - 1.3 | 9.2 - 3.8 | 15.2 - 6.2 |
| 33 | 6°08.3 | 6°09.3 | 5°51.5 | 3.3 - 1.3 | 9.3 - 3.8 | 15.3 - 6.2 |
| 34 | 6°08.5 | 6°09.5 | 5°51.7 | 3.4 - 1.4 | 9.4 - 3.8 | 15.4 - 6.3 |
| 35 | 6°08.7 | 6°09.8 | 5°52.0 | 3.5 - 1.4 | 9.5 - 3.9 | 15.5 - 6.3 |
| 36 | 6°09.0 | 6°10.0 | 5°52.2 | 3.6 - 1.5 | 9.6 - 3.9 | 15.6 - 6.4 |
| 37 | 6°09.3 | 6°10.3 | 5°52.4 | 3.7 - 1.5 | 9.7 - 4.0 | 15.7 - 6.4 |
| 38 | 6°09.5 | 6°10.5 | 5°52.7 | 3.8 - 1.6 | 9.8 - 4.0 | 15.8 - 6.5 |
| 39 | 6°09.7 | 6°10.8 | 5°52.9 | 3.9 - 1.6 | 9.9 - 4.0 | 15.9 - 6.5 |
| 40 | 6°10.0 | 6°11.0 | 5°53.1 | 4.0 - 1.6 | 10.0 - 4.1 | 16.0 - 6.5 |
| 41 | 6°10.3 | 6°11.3 | 5°53.4 | 4.1 - 1.7 | 10.1 - 4.1 | 16.1 - 6.6 |
| 42 | 6°10.5 | 6°11.5 | 5°53.6 | 4.2 - 1.7 | 10.2 - 4.2 | 16.2 - 6.6 |
| 43 | 6°10.7 | 6°11.8 | 5°53.9 | 4.3 - 1.8 | 10.3 - 4.2 | 16.3 - 6.7 |
| 44 | 6°11.0 | 6°12.0 | 5°54.1 | 4.4 - 1.8 | 10.4 - 4.2 | 16.4 - 6.7 |
| 45 | 6°11.3 | 6°12.3 | 5°54.3 | 4.5 - 1.8 | 10.5 - 4.3 | 16.5 - 6.7 |
| 46 | 6°11.5 | 6°12.5 | 5°54.6 | 4.6 - 1.9 | 10.6 - 4.3 | 16.6 - 6.8 |
| 47 | 6°11.8 | 6°12.8 | 5°54.8 | 4.7 - 1.9 | 10.7 - 4.4 | 16.7 - 6.8 |
| 48 | 6°12.0 | 6°13.0 | 5°55.1 | 4.8 - 2.0 | 10.8 - 4.4 | 16.8 - 6.9 |
| 49 | 6°12.2 | 6°13.3 | 5°55.3 | 4.9 - 2.0 | 10.9 - 4.5 | 16.9 - 6.9 |
| 50 | 6°12.5 | 6°13.5 | 5°55.5 | 5.0 - 2.0 | 11.0 - 4.5 | 17.0 - 6.9 |
| 51 | 6°12.8 | 6°13.8 | 5°55.8 | 5.1 - 2.1 | 11.1 - 4.5 | 17.1 - 7.0 |
| 52 | 6°13.0 | 6°14.0 | 5°56.0 | 5.2 - 2.1 | 11.2 - 4.6 | 17.2 - 7.0 |
| 53 | 6°13.2 | 6°14.3 | 5°56.2 | 5.3 - 2.2 | 11.3 - 4.6 | 17.3 - 7.1 |
| 54 | 6°13.5 | 6°14.5 | 5°56.5 | 5.4 - 2.2 | 11.4 - 4.7 | 17.4 - 7.1 |
| 55 | 6°13.8 | 6°14.8 | 5°56.7 | 5.5 - 2.2 | 11.5 - 4.7 | 17.5 - 7.1 |
| 56 | 6°14.0 | 6°15.0 | 5°57.0 | 5.6 - 2.3 | 11.6 - 4.7 | 17.6 - 7.2 |
| 57 | 6°14.2 | 6°15.3 | 5°57.2 | 5.7 - 2.3 | 11.7 - 4.8 | 17.7 - 7.2 |
| 58 | 6°14.5 | 6°15.5 | 5°57.4 | 5.8 - 2.4 | 11.8 - 4.8 | 17.8 - 7.3 |
| 59 | 6°14.8 | 6°15.8 | 5°57.7 | 5.9 - 2.4 | 11.9 - 4.9 | 17.9 - 7.3 |

| m 25 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 6°15.0 | 6°16.0 | 5°57.9 | 0.0 - 0.0 | 6.0 - 2.5 | 12.0 - 5.1 |
| 1 | 6°15.2 | 6°16.3 | 5°58.2 | 0.1 - 0.0 | 6.1 - 2.6 | 12.1 - 5.1 |
| 2 | 6°15.5 | 6°16.5 | 5°58.4 | 0.2 - 0.1 | 6.2 - 2.6 | 12.2 - 5.2 |
| 3 | 6°15.8 | 6°16.8 | 5°58.6 | 0.3 - 0.1 | 6.3 - 2.7 | 12.3 - 5.2 |
| 4 | 6°16.0 | 6°17.0 | 5°58.9 | 0.4 - 0.2 | 6.4 - 2.7 | 12.4 - 5.3 |
| 5 | 6°16.2 | 6°17.3 | 5°59.1 | 0.5 - 0.2 | 6.5 - 2.8 | 12.5 - 5.3 |
| 6 | 6°16.5 | 6°17.5 | 5°59.3 | 0.6 - 0.3 | 6.6 - 2.8 | 12.6 - 5.4 |
| 7 | 6°16.8 | 6°17.8 | 5°59.6 | 0.7 - 0.3 | 6.7 - 2.8 | 12.7 - 5.4 |
| 8 | 6°17.0 | 6°18.0 | 5°59.8 | 0.8 - 0.3 | 6.8 - 2.9 | 12.8 - 5.4 |
| 9 | 6°17.2 | 6°18.3 | 6°00.1 | 0.9 - 0.4 | 6.9 - 2.9 | 12.9 - 5.5 |
| 10 | 6°17.5 | 6°18.5 | 6°00.3 | 1.0 - 0.4 | 7.0 - 3.0 | 13.0 - 5.5 |
| 11 | 6°17.8 | 6°18.8 | 6°00.5 | 1.1 - 0.5 | 7.1 - 3.0 | 13.1 - 5.6 |
| 12 | 6°18.0 | 6°19.0 | 6°00.8 | 1.2 - 0.5 | 7.2 - 3.1 | 13.2 - 5.6 |
| 13 | 6°18.2 | 6°19.3 | 6°01.0 | 1.3 - 0.6 | 7.3 - 3.1 | 13.3 - 5.7 |
| 14 | 6°18.5 | 6°19.5 | 6°01.3 | 1.4 - 0.6 | 7.4 - 3.1 | 13.4 - 5.7 |
| 15 | 6°18.8 | 6°19.8 | 6°01.5 | 1.5 - 0.6 | 7.5 - 3.2 | 13.5 - 5.7 |
| 16 | 6°19.0 | 6°20.0 | 6°01.7 | 1.6 - 0.7 | 7.6 - 3.2 | 13.6 - 5.8 |
| 17 | 6°19.3 | 6°20.3 | 6°02.0 | 1.7 - 0.7 | 7.7 - 3.3 | 13.7 - 5.8 |
| 18 | 6°19.5 | 6°20.5 | 6°02.2 | 1.8 - 0.8 | 7.8 - 3.3 | 13.8 - 5.9 |
| 19 | 6°19.7 | 6°20.8 | 6°02.5 | 1.9 - 0.8 | 7.9 - 3.4 | 13.9 - 5.9 |
| 20 | 6°20.0 | 6°21.0 | 6°02.7 | 2.0 - 0.8 | 8.0 - 3.4 | 14.0 - 6.0 |
| 21 | 6°20.3 | 6°21.3 | 6°02.9 | 2.1 - 0.9 | 8.1 - 3.4 | 14.1 - 6.0 |
| 22 | 6°20.5 | 6°21.5 | 6°03.2 | 2.2 - 0.9 | 8.2 - 3.5 | 14.2 - 6.0 |
| 23 | 6°20.7 | 6°21.8 | 6°03.4 | 2.3 - 1.0 | 8.3 - 3.5 | 14.3 - 6.1 |
| 24 | 6°21.0 | 6°22.0 | 6°03.6 | 2.4 - 1.0 | 8.4 - 3.6 | 14.4 - 6.1 |
| 25 | 6°21.3 | 6°22.3 | 6°03.9 | 2.5 - 1.1 | 8.5 - 3.6 | 14.5 - 6.2 |
| 26 | 6°21.5 | 6°22.5 | 6°04.1 | 2.6 - 1.1 | 8.6 - 3.7 | 14.6 - 6.2 |
| 27 | 6°21.7 | 6°22.8 | 6°04.4 | 2.7 - 1.1 | 8.7 - 3.7 | 14.7 - 6.2 |
| 28 | 6°22.0 | 6°23.0 | 6°04.6 | 2.8 - 1.2 | 8.8 - 3.7 | 14.8 - 6.3 |
| 29 | 6°22.3 | 6°23.3 | 6°04.8 | 2.9 - 1.2 | 8.9 - 3.8 | 14.9 - 6.3 |
| 30 | 6°22.5 | 6°23.5 | 6°05.1 | 3.0 - 1.3 | 9.0 - 3.8 | 15.0 - 6.4 |
| 31 | 6°22.7 | 6°23.8 | 6°05.3 | 3.1 - 1.3 | 9.1 - 3.9 | 15.1 - 6.4 |
| 32 | 6°23.0 | 6°24.0 | 6°05.6 | 3.2 - 1.4 | 9.2 - 3.9 | 15.2 - 6.5 |
| 33 | 6°23.3 | 6°24.3 | 6°05.8 | 3.3 - 1.4 | 9.3 - 4.0 | 15.3 - 6.5 |
| 34 | 6°23.5 | 6°24.5 | 6°06.0 | 3.4 - 1.4 | 9.4 - 4.0 | 15.4 - 6.5 |
| 35 | 6°23.7 | 6°24.8 | 6°06.3 | 3.5 - 1.5 | 9.5 - 4.0 | 15.5 - 6.6 |
| 36 | 6°24.0 | 6°25.0 | 6°06.5 | 3.6 - 1.5 | 9.6 - 4.1 | 15.6 - 6.6 |
| 37 | 6°24.3 | 6°25.3 | 6°06.7 | 3.7 - 1.6 | 9.7 - 4.1 | 15.7 - 6.7 |
| 38 | 6°24.5 | 6°25.6 | 6°07.0 | 3.8 - 1.6 | 9.8 - 4.2 | 15.8 - 6.7 |
| 39 | 6°24.7 | 6°25.8 | 6°07.2 | 3.9 - 1.7 | 9.9 - 4.2 | 15.9 - 6.8 |
| 40 | 6°25.0 | 6°26.1 | 6°07.5 | 4.0 - 1.7 | 10.0 - 4.3 | 16.0 - 6.8 |
| 41 | 6°25.3 | 6°26.3 | 6°07.7 | 4.1 - 1.7 | 10.1 - 4.3 | 16.1 - 6.8 |
| 42 | 6°25.5 | 6°26.6 | 6°07.9 | 4.2 - 1.8 | 10.2 - 4.3 | 16.2 - 6.9 |
| 43 | 6°25.7 | 6°26.8 | 6°08.2 | 4.3 - 1.8 | 10.3 - 4.4 | 16.3 - 6.9 |
| 44 | 6°26.0 | 6°27.1 | 6°08.4 | 4.4 - 1.9 | 10.4 - 4.4 | 16.4 - 7.0 |
| 45 | 6°26.3 | 6°27.3 | 6°08.7 | 4.5 - 1.9 | 10.5 - 4.5 | 16.5 - 7.0 |
| 46 | 6°26.5 | 6°27.6 | 6°08.9 | 4.6 - 2.0 | 10.6 - 4.5 | 16.6 - 7.1 |
| 47 | 6°26.8 | 6°27.8 | 6°09.1 | 4.7 - 2.0 | 10.7 - 4.5 | 16.7 - 7.1 |
| 48 | 6°27.0 | 6°28.1 | 6°09.4 | 4.8 - 2.0 | 10.8 - 4.6 | 16.8 - 7.1 |
| 49 | 6°27.2 | 6°28.3 | 6°09.6 | 4.9 - 2.1 | 10.9 - 4.6 | 16.9 - 7.2 |
| 50 | 6°27.5 | 6°28.6 | 6°09.8 | 5.0 - 2.1 | 11.0 - 4.7 | 17.0 - 7.2 |
| 51 | 6°27.8 | 6°28.8 | 6°10.1 | 5.1 - 2.2 | 11.1 - 4.7 | 17.1 - 7.3 |
| 52 | 6°28.0 | 6°29.1 | 6°10.3 | 5.2 - 2.2 | 11.2 - 4.8 | 17.2 - 7.3 |
| 53 | 6°28.2 | 6°29.3 | 6°10.6 | 5.3 - 2.3 | 11.3 - 4.8 | 17.3 - 7.4 |
| 54 | 6°28.5 | 6°29.6 | 6°10.8 | 5.4 - 2.3 | 11.4 - 4.8 | 17.4 - 7.4 |
| 55 | 6°28.8 | 6°29.8 | 6°11.0 | 5.5 - 2.3 | 11.5 - 4.9 | 17.5 - 7.4 |
| 56 | 6°29.0 | 6°30.1 | 6°11.3 | 5.6 - 2.4 | 11.6 - 4.9 | 17.6 - 7.5 |
| 57 | 6°29.2 | 6°30.3 | 6°11.5 | 5.7 - 2.4 | 11.7 - 5.0 | 17.7 - 7.5 |
| 58 | 6°29.5 | 6°30.6 | 6°11.8 | 5.8 - 2.5 | 11.8 - 5.0 | 17.8 - 7.6 |
| 59 | 6°29.8 | 6°30.8 | 6°12.0 | 5.9 - 2.5 | 11.9 - 5.1 | 17.9 - 7.6 |

| m 26 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 6°30.0 | 6°31.1 | 6°12.2 | 0.0 - 0.0 | 6.0 - 2.6 | 12.0 - 5.3 |
| 1 | 6°30.2 | 6°31.3 | 6°12.5 | 0.1 - 0.0 | 6.1 - 2.7 | 12.1 - 5.3 |
| 2 | 6°30.5 | 6°31.6 | 6°12.7 | 0.2 - 0.1 | 6.2 - 2.7 | 12.2 - 5.4 |
| 3 | 6°30.8 | 6°31.8 | 6°12.9 | 0.3 - 0.1 | 6.3 - 2.8 | 12.3 - 5.4 |
| 4 | 6°31.0 | 6°32.1 | 6°13.2 | 0.4 - 0.2 | 6.4 - 2.8 | 12.4 - 5.5 |
| 5 | 6°31.2 | 6°32.3 | 6°13.4 | 0.5 - 0.2 | 6.5 - 2.9 | 12.5 - 5.5 |
| 6 | 6°31.5 | 6°32.6 | 6°13.7 | 0.6 - 0.3 | 6.6 - 2.9 | 12.6 - 5.6 |
| 7 | 6°31.8 | 6°32.8 | 6°13.9 | 0.7 - 0.3 | 6.7 - 3.0 | 12.7 - 5.6 |
| 8 | 6°32.0 | 6°33.1 | 6°14.1 | 0.8 - 0.4 | 6.8 - 3.0 | 12.8 - 5.7 |
| 9 | 6°32.2 | 6°33.3 | 6°14.4 | 0.9 - 0.4 | 6.9 - 3.0 | 12.9 - 5.7 |
| 10 | 6°32.5 | 6°33.6 | 6°14.6 | 1.0 - 0.4 | 7.0 - 3.1 | 13.0 - 5.7 |
| 11 | 6°32.8 | 6°33.8 | 6°14.9 | 1.1 - 0.5 | 7.1 - 3.1 | 13.1 - 5.8 |
| 12 | 6°33.0 | 6°34.1 | 6°15.1 | 1.2 - 0.5 | 7.2 - 3.2 | 13.2 - 5.8 |
| 13 | 6°33.2 | 6°34.3 | 6°15.3 | 1.3 - 0.6 | 7.3 - 3.2 | 13.3 - 5.9 |
| 14 | 6°33.5 | 6°34.6 | 6°15.6 | 1.4 - 0.6 | 7.4 - 3.3 | 13.4 - 5.9 |
| 15 | 6°33.8 | 6°34.8 | 6°15.8 | 1.5 - 0.7 | 7.5 - 3.3 | 13.5 - 6.0 |
| 16 | 6°34.0 | 6°35.1 | 6°16.1 | 1.6 - 0.7 | 7.6 - 3.4 | 13.6 - 6.0 |
| 17 | 6°34.3 | 6°35.3 | 6°16.3 | 1.7 - 0.8 | 7.7 - 3.4 | 13.7 - 6.1 |
| 18 | 6°34.5 | 6°35.6 | 6°16.5 | 1.8 - 0.8 | 7.8 - 3.4 | 13.8 - 6.1 |
| 19 | 6°34.8 | 6°35.8 | 6°16.8 | 1.9 - 0.8 | 7.9 - 3.5 | 13.9 - 6.1 |
| 20 | 6°35.0 | 6°36.1 | 6°17.0 | 2.0 - 0.9 | 8.0 - 3.5 | 14.0 - 6.2 |
| 21 | 6°35.3 | 6°36.3 | 6°17.2 | 2.1 - 0.9 | 8.1 - 3.6 | 14.1 - 6.2 |
| 22 | 6°35.5 | 6°36.6 | 6°17.5 | 2.2 - 1.0 | 8.2 - 3.6 | 14.2 - 6.3 |
| 23 | 6°35.7 | 6°36.8 | 6°17.7 | 2.3 - 1.0 | 8.3 - 3.7 | 14.3 - 6.3 |
| 24 | 6°36.0 | 6°37.1 | 6°18.0 | 2.4 - 1.1 | 8.4 - 3.7 | 14.4 - 6.4 |
| 25 | 6°36.3 | 6°37.3 | 6°18.2 | 2.5 - 1.1 | 8.5 - 3.8 | 14.5 - 6.4 |
| 26 | 6°36.5 | 6°37.6 | 6°18.4 | 2.6 - 1.1 | 8.6 - 3.8 | 14.6 - 6.4 |
| 27 | 6°36.7 | 6°37.8 | 6°18.7 | 2.7 - 1.2 | 8.7 - 3.8 | 14.7 - 6.5 |
| 28 | 6°37.0 | 6°38.1 | 6°18.9 | 2.8 - 1.2 | 8.8 - 3.9 | 14.8 - 6.5 |
| 29 | 6°37.3 | 6°38.3 | 6°19.2 | 2.9 - 1.3 | 8.9 - 3.9 | 14.9 - 6.6 |
| 30 | 6°37.5 | 6°38.6 | 6°19.4 | 3.0 - 1.3 | 9.0 - 4.0 | 15.0 - 6.6 |
| 31 | 6°37.7 | 6°38.8 | 6°19.6 | 3.1 - 1.4 | 9.1 - 4.0 | 15.1 - 6.7 |
| 32 | 6°38.0 | 6°39.1 | 6°19.9 | 3.2 - 1.4 | 9.2 - 4.1 | 15.2 - 6.7 |
| 33 | 6°38.3 | 6°39.3 | 6°20.1 | 3.3 - 1.5 | 9.3 - 4.1 | 15.3 - 6.8 |
| 34 | 6°38.5 | 6°39.6 | 6°20.3 | 3.4 - 1.5 | 9.4 - 4.2 | 15.4 - 6.8 |
| 35 | 6°38.7 | 6°39.8 | 6°20.6 | 3.5 - 1.5 | 9.5 - 4.2 | 15.5 - 6.8 |
| 36 | 6°39.0 | 6°40.1 | 6°20.8 | 3.6 - 1.6 | 9.6 - 4.2 | 15.6 - 6.9 |
| 37 | 6°39.3 | 6°40.3 | 6°21.1 | 3.7 - 1.6 | 9.7 - 4.3 | 15.7 - 6.9 |
| 38 | 6°39.5 | 6°40.6 | 6°21.3 | 3.8 - 1.7 | 9.8 - 4.3 | 15.8 - 7.0 |
| 39 | 6°39.7 | 6°40.8 | 6°21.5 | 3.9 - 1.7 | 9.9 - 4.4 | 15.9 - 7.0 |
| 40 | 6°40.0 | 6°41.1 | 6°21.8 | 4.0 - 1.8 | 10.0 - 4.4 | 16.0 - 7.1 |
| 41 | 6°40.3 | 6°41.3 | 6°22.0 | 4.1 - 1.8 | 10.1 - 4.5 | 16.1 - 7.1 |
| 42 | 6°40.5 | 6°41.6 | 6°22.3 | 4.2 - 1.9 | 10.2 - 4.5 | 16.2 - 7.2 |
| 43 | 6°40.7 | 6°41.8 | 6°22.5 | 4.3 - 1.9 | 10.3 - 4.5 | 16.3 - 7.2 |
| 44 | 6°41.0 | 6°42.1 | 6°22.7 | 4.4 - 1.9 | 10.4 - 4.6 | 16.4 - 7.2 |
| 45 | 6°41.3 | 6°42.3 | 6°23.0 | 4.5 - 2.0 | 10.5 - 4.6 | 16.5 - 7.3 |
| 46 | 6°41.5 | 6°42.6 | 6°23.2 | 4.6 - 2.0 | 10.6 - 4.7 | 16.6 - 7.3 |
| 47 | 6°41.8 | 6°42.8 | 6°23.4 | 4.7 - 2.1 | 10.7 - 4.7 | 16.7 - 7.4 |
| 48 | 6°42.0 | 6°43.1 | 6°23.7 | 4.8 - 2.1 | 10.8 - 4.8 | 16.8 - 7.4 |
| 49 | 6°42.3 | 6°43.3 | 6°23.9 | 4.9 - 2.2 | 10.9 - 4.8 | 16.9 - 7.5 |
| 50 | 6°42.5 | 6°43.6 | 6°24.2 | 5.0 - 2.2 | 11.0 - 4.9 | 17.0 - 7.5 |
| 51 | 6°42.8 | 6°43.9 | 6°24.4 | 5.1 - 2.3 | 11.1 - 4.9 | 17.1 - 7.6 |
| 52 | 6°43.0 | 6°44.1 | 6°24.6 | 5.2 - 2.3 | 11.2 - 4.9 | 17.2 - 7.6 |
| 53 | 6°43.2 | 6°44.4 | 6°24.9 | 5.3 - 2.3 | 11.3 - 5.0 | 17.3 - 7.6 |
| 54 | 6°43.5 | 6°44.6 | 6°25.1 | 5.4 - 2.4 | 11.4 - 5.0 | 17.4 - 7.7 |
| 55 | 6°43.8 | 6°44.9 | 6°25.4 | 5.5 - 2.4 | 11.5 - 5.1 | 17.5 - 7.7 |
| 56 | 6°44.0 | 6°45.1 | 6°25.6 | 5.6 - 2.5 | 11.6 - 5.1 | 17.6 - 7.8 |
| 57 | 6°44.2 | 6°45.4 | 6°25.8 | 5.7 - 2.5 | 11.7 - 5.2 | 17.7 - 7.8 |
| 58 | 6°44.5 | 6°45.6 | 6°26.1 | 5.8 - 2.6 | 11.8 - 5.2 | 17.8 - 7.9 |
| 59 | 6°44.8 | 6°45.9 | 6°26.3 | 5.9 - 2.6 | 11.9 - 5.3 | 17.9 - 7.9 |

# Increments and Corrections

| m 27 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 6°45.0 | 6°46.1 | 6°26.5 | 0.0 - 0.0 | 6.0 - 2.8 | 12.0 - 5.5 |
| 1 | 6°45.2 | 6°46.4 | 6°26.8 | 0.1 - 0.0 | 6.1 - 2.8 | 12.1 - 5.5 |
| 2 | 6°45.5 | 6°46.6 | 6°27.0 | 0.2 - 0.1 | 6.2 - 2.8 | 12.2 - 5.6 |
| 3 | 6°45.8 | 6°46.9 | 6°27.3 | 0.3 - 0.1 | 6.3 - 2.9 | 12.3 - 5.6 |
| 4 | 6°46.0 | 6°47.1 | 6°27.5 | 0.4 - 0.2 | 6.4 - 2.9 | 12.4 - 5.7 |
| 5 | 6°46.2 | 6°47.4 | 6°27.7 | 0.5 - 0.2 | 6.5 - 3.0 | 12.5 - 5.7 |
| 6 | 6°46.5 | 6°47.6 | 6°28.0 | 0.6 - 0.3 | 6.6 - 3.0 | 12.6 - 5.8 |
| 7 | 6°46.8 | 6°47.9 | 6°28.2 | 0.7 - 0.3 | 6.7 - 3.1 | 12.7 - 5.8 |
| 8 | 6°47.0 | 6°48.1 | 6°28.5 | 0.8 - 0.4 | 6.8 - 3.1 | 12.8 - 5.9 |
| 9 | 6°47.2 | 6°48.4 | 6°28.7 | 0.9 - 0.4 | 6.9 - 3.2 | 12.9 - 5.9 |
| 10 | 6°47.5 | 6°48.6 | 6°28.9 | 1.0 - 0.5 | 7.0 - 3.2 | 13.0 - 6.0 |
| 11 | 6°47.8 | 6°48.9 | 6°29.2 | 1.1 - 0.5 | 7.1 - 3.3 | 13.1 - 6.0 |
| 12 | 6°48.0 | 6°49.1 | 6°29.4 | 1.2 - 0.6 | 7.2 - 3.3 | 13.2 - 6.0 |
| 13 | 6°48.2 | 6°49.4 | 6°29.7 | 1.3 - 0.6 | 7.3 - 3.3 | 13.3 - 6.1 |
| 14 | 6°48.5 | 6°49.6 | 6°29.9 | 1.4 - 0.6 | 7.4 - 3.4 | 13.4 - 6.1 |
| 15 | 6°48.8 | 6°49.9 | 6°30.1 | 1.5 - 0.7 | 7.5 - 3.4 | 13.5 - 6.2 |
| 16 | 6°49.0 | 6°50.1 | 6°30.4 | 1.6 - 0.7 | 7.6 - 3.5 | 13.6 - 6.2 |
| 17 | 6°49.3 | 6°50.4 | 6°30.6 | 1.7 - 0.8 | 7.7 - 3.5 | 13.7 - 6.3 |
| 18 | 6°49.5 | 6°50.6 | 6°30.8 | 1.8 - 0.8 | 7.8 - 3.6 | 13.8 - 6.3 |
| 19 | 6°49.8 | 6°50.9 | 6°31.1 | 1.9 - 0.9 | 7.9 - 3.6 | 13.9 - 6.4 |
| 20 | 6°50.0 | 6°51.1 | 6°31.3 | 2.0 - 0.9 | 8.0 - 3.7 | 14.0 - 6.4 |
| 21 | 6°50.3 | 6°51.4 | 6°31.6 | 2.1 - 1.0 | 8.1 - 3.7 | 14.1 - 6.5 |
| 22 | 6°50.5 | 6°51.6 | 6°31.8 | 2.2 - 1.0 | 8.2 - 3.8 | 14.2 - 6.5 |
| 23 | 6°50.7 | 6°51.9 | 6°32.0 | 2.3 - 1.1 | 8.3 - 3.8 | 14.3 - 6.6 |
| 24 | 6°51.0 | 6°52.1 | 6°32.3 | 2.4 - 1.1 | 8.4 - 3.9 | 14.4 - 6.6 |
| 25 | 6°51.3 | 6°52.4 | 6°32.5 | 2.5 - 1.1 | 8.5 - 3.9 | 14.5 - 6.6 |
| 26 | 6°51.5 | 6°52.6 | 6°32.8 | 2.6 - 1.2 | 8.6 - 3.9 | 14.6 - 6.7 |
| 27 | 6°51.7 | 6°52.9 | 6°33.0 | 2.7 - 1.2 | 8.7 - 4.0 | 14.7 - 6.7 |
| 28 | 6°52.0 | 6°53.1 | 6°33.2 | 2.8 - 1.3 | 8.8 - 4.0 | 14.8 - 6.8 |
| 29 | 6°52.3 | 6°53.4 | 6°33.5 | 2.9 - 1.3 | 8.9 - 4.1 | 14.9 - 6.8 |
| 30 | 6°52.5 | 6°53.6 | 6°33.7 | 3.0 - 1.4 | 9.0 - 4.1 | 15.0 - 6.9 |
| 31 | 6°52.7 | 6°53.9 | 6°33.9 | 3.1 - 1.4 | 9.1 - 4.2 | 15.1 - 6.9 |
| 32 | 6°53.0 | 6°54.1 | 6°34.2 | 3.2 - 1.5 | 9.2 - 4.2 | 15.2 - 7.0 |
| 33 | 6°53.3 | 6°54.4 | 6°34.4 | 3.3 - 1.5 | 9.3 - 4.3 | 15.3 - 7.0 |
| 34 | 6°53.5 | 6°54.6 | 6°34.7 | 3.4 - 1.6 | 9.4 - 4.3 | 15.4 - 7.1 |
| 35 | 6°53.7 | 6°54.9 | 6°34.9 | 3.5 - 1.6 | 9.5 - 4.4 | 15.5 - 7.1 |
| 36 | 6°54.0 | 6°55.1 | 6°35.1 | 3.6 - 1.6 | 9.6 - 4.4 | 15.6 - 7.1 |
| 37 | 6°54.3 | 6°55.4 | 6°35.4 | 3.7 - 1.7 | 9.7 - 4.4 | 15.7 - 7.2 |
| 38 | 6°54.5 | 6°55.6 | 6°35.6 | 3.8 - 1.7 | 9.8 - 4.5 | 15.8 - 7.2 |
| 39 | 6°54.7 | 6°55.9 | 6°35.9 | 3.9 - 1.8 | 9.9 - 4.5 | 15.9 - 7.3 |
| 40 | 6°55.0 | 6°56.1 | 6°36.1 | 4.0 - 1.8 | 10.0 - 4.6 | 16.0 - 7.3 |
| 41 | 6°55.3 | 6°56.4 | 6°36.3 | 4.1 - 1.9 | 10.1 - 4.6 | 16.1 - 7.4 |
| 42 | 6°55.5 | 6°56.6 | 6°36.6 | 4.2 - 1.9 | 10.2 - 4.7 | 16.2 - 7.4 |
| 43 | 6°55.7 | 6°56.9 | 6°36.8 | 4.3 - 2.0 | 10.3 - 4.7 | 16.3 - 7.5 |
| 44 | 6°56.0 | 6°57.1 | 6°37.0 | 4.4 - 2.0 | 10.4 - 4.8 | 16.4 - 7.5 |
| 45 | 6°56.3 | 6°57.4 | 6°37.3 | 4.5 - 2.1 | 10.5 - 4.8 | 16.5 - 7.6 |
| 46 | 6°56.5 | 6°57.6 | 6°37.5 | 4.6 - 2.1 | 10.6 - 4.9 | 16.6 - 7.6 |
| 47 | 6°56.8 | 6°57.9 | 6°37.8 | 4.7 - 2.2 | 10.7 - 4.9 | 16.7 - 7.7 |
| 48 | 6°57.0 | 6°58.1 | 6°38.0 | 4.8 - 2.2 | 10.8 - 5.0 | 16.8 - 7.7 |
| 49 | 6°57.3 | 6°58.4 | 6°38.2 | 4.9 - 2.2 | 10.9 - 5.0 | 16.9 - 7.7 |
| 50 | 6°57.5 | 6°58.6 | 6°38.5 | 5.0 - 2.3 | 11.0 - 5.0 | 17.0 - 7.8 |
| 51 | 6°57.8 | 6°58.9 | 6°38.7 | 5.1 - 2.3 | 11.1 - 5.1 | 17.1 - 7.8 |
| 52 | 6°58.0 | 6°59.1 | 6°39.0 | 5.2 - 2.4 | 11.2 - 5.1 | 17.2 - 7.9 |
| 53 | 6°58.2 | 6°59.4 | 6°39.2 | 5.3 - 2.4 | 11.3 - 5.2 | 17.3 - 7.9 |
| 54 | 6°58.5 | 6°59.6 | 6°39.4 | 5.4 - 2.5 | 11.4 - 5.2 | 17.4 - 8.0 |
| 55 | 6°58.8 | 6°59.9 | 6°39.7 | 5.5 - 2.5 | 11.5 - 5.3 | 17.5 - 8.0 |
| 56 | 6°59.0 | 7°00.1 | 6°39.9 | 5.6 - 2.6 | 11.6 - 5.3 | 17.6 - 8.1 |
| 57 | 6°59.2 | 7°00.4 | 6°40.2 | 5.7 - 2.6 | 11.7 - 5.4 | 17.7 - 8.1 |
| 58 | 6°59.5 | 7°00.6 | 6°40.4 | 5.8 - 2.7 | 11.8 - 5.4 | 17.8 - 8.2 |
| 59 | 6°59.8 | 7°00.9 | 6°40.6 | 5.9 - 2.7 | 11.9 - 5.5 | 17.9 - 8.2 |

| m 28 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 7°00.0 | 7°01.1 | 6°40.9 | 0.0 - 0.0 | 6.0 - 2.8 | 12.0 - 5.7 |
| 1 | 7°00.2 | 7°01.4 | 6°41.1 | 0.1 - 0.0 | 6.1 - 2.9 | 12.1 - 5.7 |
| 2 | 7°00.5 | 7°01.6 | 6°41.3 | 0.2 - 0.1 | 6.2 - 2.9 | 12.2 - 5.8 |
| 3 | 7°00.8 | 7°01.9 | 6°41.6 | 0.3 - 0.1 | 6.3 - 3.0 | 12.3 - 5.8 |
| 4 | 7°01.0 | 7°02.2 | 6°41.8 | 0.4 - 0.2 | 6.4 - 3.0 | 12.4 - 5.9 |
| 5 | 7°01.2 | 7°02.4 | 6°42.1 | 0.5 - 0.2 | 6.5 - 3.1 | 12.5 - 5.9 |
| 6 | 7°01.5 | 7°02.7 | 6°42.3 | 0.6 - 0.3 | 6.6 - 3.1 | 12.6 - 6.0 |
| 7 | 7°01.8 | 7°02.9 | 6°42.5 | 0.7 - 0.3 | 6.7 - 3.2 | 12.7 - 6.0 |
| 8 | 7°02.0 | 7°03.2 | 6°42.8 | 0.8 - 0.4 | 6.8 - 3.2 | 12.8 - 6.1 |
| 9 | 7°02.2 | 7°03.4 | 6°43.0 | 0.9 - 0.4 | 6.9 - 3.3 | 12.9 - 6.1 |
| 10 | 7°02.5 | 7°03.7 | 6°43.3 | 1.0 - 0.5 | 7.0 - 3.3 | 13.0 - 6.2 |
| 11 | 7°02.8 | 7°03.9 | 6°43.5 | 1.1 - 0.5 | 7.1 - 3.4 | 13.1 - 6.2 |
| 12 | 7°03.0 | 7°04.2 | 6°43.7 | 1.2 - 0.6 | 7.2 - 3.4 | 13.2 - 6.3 |
| 13 | 7°03.2 | 7°04.4 | 6°44.0 | 1.3 - 0.6 | 7.3 - 3.5 | 13.3 - 6.3 |
| 14 | 7°03.5 | 7°04.7 | 6°44.2 | 1.4 - 0.7 | 7.4 - 3.5 | 13.4 - 6.4 |
| 15 | 7°03.8 | 7°04.9 | 6°44.4 | 1.5 - 0.7 | 7.5 - 3.6 | 13.5 - 6.4 |
| 16 | 7°04.0 | 7°05.2 | 6°44.7 | 1.6 - 0.8 | 7.6 - 3.6 | 13.6 - 6.5 |
| 17 | 7°04.3 | 7°05.4 | 6°44.9 | 1.7 - 0.8 | 7.7 - 3.7 | 13.7 - 6.5 |
| 18 | 7°04.5 | 7°05.7 | 6°45.2 | 1.8 - 0.9 | 7.8 - 3.7 | 13.8 - 6.6 |
| 19 | 7°04.7 | 7°05.9 | 6°45.4 | 1.9 - 0.9 | 7.9 - 3.8 | 13.9 - 6.6 |
| 20 | 7°05.0 | 7°06.2 | 6°45.6 | 2.0 - 0.9 | 8.0 - 3.8 | 14.0 - 6.6 |
| 21 | 7°05.3 | 7°06.4 | 6°45.9 | 2.1 - 1.0 | 8.1 - 3.8 | 14.1 - 6.7 |
| 22 | 7°05.5 | 7°06.7 | 6°46.1 | 2.2 - 1.0 | 8.2 - 3.9 | 14.2 - 6.7 |
| 23 | 7°05.7 | 7°06.9 | 6°46.4 | 2.3 - 1.1 | 8.3 - 3.9 | 14.3 - 6.8 |
| 24 | 7°06.0 | 7°07.2 | 6°46.6 | 2.4 - 1.1 | 8.4 - 4.0 | 14.4 - 6.8 |
| 25 | 7°06.3 | 7°07.4 | 6°46.8 | 2.5 - 1.2 | 8.5 - 4.0 | 14.5 - 6.9 |
| 26 | 7°06.5 | 7°07.7 | 6°47.1 | 2.6 - 1.2 | 8.6 - 4.1 | 14.6 - 6.9 |
| 27 | 7°06.7 | 7°07.9 | 6°47.3 | 2.7 - 1.3 | 8.7 - 4.1 | 14.7 - 7.0 |
| 28 | 7°07.0 | 7°08.2 | 6°47.5 | 2.8 - 1.3 | 8.8 - 4.2 | 14.8 - 7.0 |
| 29 | 7°07.3 | 7°08.4 | 6°47.8 | 2.9 - 1.4 | 8.9 - 4.2 | 14.9 - 7.1 |
| 30 | 7°07.5 | 7°08.7 | 6°48.0 | 3.0 - 1.4 | 9.0 - 4.3 | 15.0 - 7.1 |
| 31 | 7°07.7 | 7°08.9 | 6°48.3 | 3.1 - 1.5 | 9.1 - 4.3 | 15.1 - 7.2 |
| 32 | 7°08.0 | 7°09.2 | 6°48.5 | 3.2 - 1.5 | 9.2 - 4.4 | 15.2 - 7.2 |
| 33 | 7°08.3 | 7°09.4 | 6°48.7 | 3.3 - 1.6 | 9.3 - 4.4 | 15.3 - 7.3 |
| 34 | 7°08.5 | 7°09.7 | 6°49.0 | 3.4 - 1.6 | 9.4 - 4.5 | 15.4 - 7.3 |
| 35 | 7°08.7 | 7°09.9 | 6°49.2 | 3.5 - 1.7 | 9.5 - 4.5 | 15.5 - 7.4 |
| 36 | 7°09.0 | 7°10.2 | 6°49.5 | 3.6 - 1.7 | 9.6 - 4.6 | 15.6 - 7.4 |
| 37 | 7°09.3 | 7°10.4 | 6°49.7 | 3.7 - 1.8 | 9.7 - 4.6 | 15.7 - 7.5 |
| 38 | 7°09.5 | 7°10.7 | 6°49.9 | 3.8 - 1.8 | 9.8 - 4.7 | 15.8 - 7.5 |
| 39 | 7°09.7 | 7°10.9 | 6°50.2 | 3.9 - 1.9 | 9.9 - 4.7 | 15.9 - 7.6 |
| 40 | 7°10.0 | 7°11.2 | 6°50.4 | 4.0 - 1.9 | 10.0 - 4.8 | 16.0 - 7.6 |
| 41 | 7°10.3 | 7°11.4 | 6°50.6 | 4.1 - 1.9 | 10.1 - 4.8 | 16.1 - 7.6 |
| 42 | 7°10.5 | 7°11.7 | 6°50.9 | 4.2 - 2.0 | 10.2 - 4.8 | 16.2 - 7.7 |
| 43 | 7°10.7 | 7°11.9 | 6°51.1 | 4.3 - 2.0 | 10.3 - 4.9 | 16.3 - 7.7 |
| 44 | 7°11.0 | 7°12.2 | 6°51.4 | 4.4 - 2.1 | 10.4 - 4.9 | 16.4 - 7.8 |
| 45 | 7°11.3 | 7°12.4 | 6°51.6 | 4.5 - 2.1 | 10.5 - 5.0 | 16.5 - 7.8 |
| 46 | 7°11.5 | 7°12.7 | 6°51.8 | 4.6 - 2.2 | 10.6 - 5.0 | 16.6 - 7.9 |
| 47 | 7°11.8 | 7°12.9 | 6°52.1 | 4.7 - 2.2 | 10.7 - 5.1 | 16.7 - 7.9 |
| 48 | 7°12.0 | 7°13.2 | 6°52.3 | 4.8 - 2.3 | 10.8 - 5.1 | 16.8 - 8.0 |
| 49 | 7°12.2 | 7°13.4 | 6°52.6 | 4.9 - 2.3 | 10.9 - 5.2 | 16.9 - 8.0 |
| 50 | 7°12.5 | 7°13.7 | 6°52.8 | 5.0 - 2.4 | 11.0 - 5.2 | 17.0 - 8.1 |
| 51 | 7°12.8 | 7°13.9 | 6°53.0 | 5.1 - 2.4 | 11.1 - 5.3 | 17.1 - 8.1 |
| 52 | 7°13.0 | 7°14.2 | 6°53.3 | 5.2 - 2.5 | 11.2 - 5.3 | 17.2 - 8.2 |
| 53 | 7°13.2 | 7°14.4 | 6°53.5 | 5.3 - 2.5 | 11.3 - 5.4 | 17.3 - 8.2 |
| 54 | 7°13.5 | 7°14.7 | 6°53.8 | 5.4 - 2.6 | 11.4 - 5.4 | 17.4 - 8.3 |
| 55 | 7°13.8 | 7°14.9 | 6°54.0 | 5.5 - 2.6 | 11.5 - 5.5 | 17.5 - 8.3 |
| 56 | 7°14.0 | 7°15.2 | 6°54.2 | 5.6 - 2.7 | 11.6 - 5.5 | 17.6 - 8.4 |
| 57 | 7°14.2 | 7°15.4 | 6°54.5 | 5.7 - 2.7 | 11.7 - 5.6 | 17.7 - 8.4 |
| 58 | 7°14.5 | 7°15.7 | 6°54.7 | 5.8 - 2.8 | 11.8 - 5.6 | 17.8 - 8.5 |
| 59 | 7°14.8 | 7°15.9 | 6°54.9 | 5.9 - 2.8 | 11.9 - 5.7 | 17.9 - 8.5 |

| m 29 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 7°15.0 | 7°16.2 | 6°55.2 | 0.0 - 0.0 | 6.0 - 2.9 | 12.0 - 5.9 |
| 1 | 7°15.2 | 7°16.4 | 6°55.4 | 0.1 - 0.0 | 6.1 - 3.0 | 12.1 - 5.9 |
| 2 | 7°15.5 | 7°16.7 | 6°55.7 | 0.2 - 0.1 | 6.2 - 3.0 | 12.2 - 6.0 |
| 3 | 7°15.8 | 7°16.9 | 6°55.9 | 0.3 - 0.1 | 6.3 - 3.1 | 12.3 - 6.0 |
| 4 | 7°16.0 | 7°17.2 | 6°56.1 | 0.4 - 0.2 | 6.4 - 3.1 | 12.4 - 6.1 |
| 5 | 7°16.2 | 7°17.4 | 6°56.4 | 0.5 - 0.2 | 6.5 - 3.2 | 12.5 - 6.1 |
| 6 | 7°16.5 | 7°17.7 | 6°56.6 | 0.6 - 0.3 | 6.6 - 3.2 | 12.6 - 6.2 |
| 7 | 7°16.8 | 7°17.9 | 6°56.9 | 0.7 - 0.3 | 6.7 - 3.3 | 12.7 - 6.2 |
| 8 | 7°17.0 | 7°18.2 | 6°57.1 | 0.8 - 0.4 | 6.8 - 3.3 | 12.8 - 6.3 |
| 9 | 7°17.2 | 7°18.4 | 6°57.3 | 0.9 - 0.4 | 6.9 - 3.4 | 12.9 - 6.3 |
| 10 | 7°17.5 | 7°18.7 | 6°57.6 | 1.0 - 0.5 | 7.0 - 3.4 | 13.0 - 6.4 |
| 11 | 7°17.8 | 7°18.9 | 6°57.8 | 1.1 - 0.5 | 7.1 - 3.5 | 13.1 - 6.4 |
| 12 | 7°18.0 | 7°19.2 | 6°58.0 | 1.2 - 0.6 | 7.2 - 3.5 | 13.2 - 6.5 |
| 13 | 7°18.2 | 7°19.4 | 6°58.3 | 1.3 - 0.6 | 7.3 - 3.6 | 13.3 - 6.5 |
| 14 | 7°18.5 | 7°19.7 | 6°58.5 | 1.4 - 0.7 | 7.4 - 3.6 | 13.4 - 6.6 |
| 15 | 7°18.8 | 7°19.9 | 6°58.8 | 1.5 - 0.7 | 7.5 - 3.7 | 13.5 - 6.6 |
| 16 | 7°19.0 | 7°20.2 | 6°59.0 | 1.6 - 0.8 | 7.6 - 3.7 | 13.6 - 6.7 |
| 17 | 7°19.3 | 7°20.5 | 6°59.2 | 1.7 - 0.8 | 7.7 - 3.8 | 13.7 - 6.7 |
| 18 | 7°19.5 | 7°20.7 | 6°59.5 | 1.8 - 0.9 | 7.8 - 3.8 | 13.8 - 6.8 |
| 19 | 7°19.7 | 7°21.0 | 6°59.7 | 1.9 - 0.9 | 7.9 - 3.9 | 13.9 - 6.8 |
| 20 | 7°20.0 | 7°21.2 | 7°00.0 | 2.0 - 1.0 | 8.0 - 3.9 | 14.0 - 6.9 |
| 21 | 7°20.3 | 7°21.5 | 7°00.2 | 2.1 - 1.0 | 8.1 - 4.0 | 14.1 - 6.9 |
| 22 | 7°20.5 | 7°21.7 | 7°00.4 | 2.2 - 1.1 | 8.2 - 4.0 | 14.2 - 7.0 |
| 23 | 7°20.7 | 7°22.0 | 7°00.7 | 2.3 - 1.1 | 8.3 - 4.1 | 14.3 - 7.0 |
| 24 | 7°21.0 | 7°22.2 | 7°00.9 | 2.4 - 1.2 | 8.4 - 4.1 | 14.4 - 7.1 |
| 25 | 7°21.3 | 7°22.5 | 7°01.1 | 2.5 - 1.2 | 8.5 - 4.2 | 14.5 - 7.1 |
| 26 | 7°21.5 | 7°22.7 | 7°01.4 | 2.6 - 1.3 | 8.6 - 4.2 | 14.6 - 7.2 |
| 27 | 7°21.7 | 7°23.0 | 7°01.6 | 2.7 - 1.3 | 8.7 - 4.3 | 14.7 - 7.2 |
| 28 | 7°22.0 | 7°23.2 | 7°01.9 | 2.8 - 1.4 | 8.8 - 4.3 | 14.8 - 7.3 |
| 29 | 7°22.3 | 7°23.5 | 7°02.1 | 2.9 - 1.4 | 8.9 - 4.4 | 14.9 - 7.3 |
| 30 | 7°22.5 | 7°23.7 | 7°02.3 | 3.0 - 1.5 | 9.0 - 4.4 | 15.0 - 7.4 |
| 31 | 7°22.7 | 7°24.0 | 7°02.6 | 3.1 - 1.5 | 9.1 - 4.5 | 15.1 - 7.4 |
| 32 | 7°23.0 | 7°24.2 | 7°02.8 | 3.2 - 1.6 | 9.2 - 4.5 | 15.2 - 7.5 |
| 33 | 7°23.3 | 7°24.5 | 7°03.1 | 3.3 - 1.6 | 9.3 - 4.6 | 15.3 - 7.5 |
| 34 | 7°23.5 | 7°24.7 | 7°03.3 | 3.4 - 1.7 | 9.4 - 4.6 | 15.4 - 7.6 |
| 35 | 7°23.7 | 7°25.0 | 7°03.5 | 3.5 - 1.7 | 9.5 - 4.7 | 15.5 - 7.6 |
| 36 | 7°24.0 | 7°25.2 | 7°03.8 | 3.6 - 1.8 | 9.6 - 4.7 | 15.6 - 7.7 |
| 37 | 7°24.3 | 7°25.5 | 7°04.0 | 3.7 - 1.8 | 9.7 - 4.8 | 15.7 - 7.7 |
| 38 | 7°24.5 | 7°25.7 | 7°04.3 | 3.8 - 1.9 | 9.8 - 4.8 | 15.8 - 7.8 |
| 39 | 7°24.7 | 7°26.0 | 7°04.5 | 3.9 - 1.9 | 9.9 - 4.9 | 15.9 - 7.8 |
| 40 | 7°25.0 | 7°26.2 | 7°04.7 | 4.0 - 2.0 | 10.0 - 4.9 | 16.0 - 7.9 |
| 41 | 7°25.3 | 7°26.5 | 7°05.0 | 4.1 - 2.0 | 10.1 - 5.0 | 16.1 - 7.9 |
| 42 | 7°25.5 | 7°26.7 | 7°05.2 | 4.2 - 2.1 | 10.2 - 5.0 | 16.2 - 8.0 |
| 43 | 7°25.7 | 7°27.0 | 7°05.4 | 4.3 - 2.1 | 10.3 - 5.1 | 16.3 - 8.0 |
| 44 | 7°26.0 | 7°27.2 | 7°05.7 | 4.4 - 2.2 | 10.4 - 5.1 | 16.4 - 8.1 |
| 45 | 7°26.3 | 7°27.5 | 7°05.9 | 4.5 - 2.2 | 10.5 - 5.2 | 16.5 - 8.1 |
| 46 | 7°26.5 | 7°27.7 | 7°06.2 | 4.6 - 2.3 | 10.6 - 5.2 | 16.6 - 8.2 |
| 47 | 7°26.8 | 7°28.0 | 7°06.4 | 4.7 - 2.3 | 10.7 - 5.3 | 16.7 - 8.2 |
| 48 | 7°27.0 | 7°28.2 | 7°06.6 | 4.8 - 2.4 | 10.8 - 5.3 | 16.8 - 8.3 |
| 49 | 7°27.2 | 7°28.5 | 7°06.9 | 4.9 - 2.4 | 10.9 - 5.4 | 16.9 - 8.3 |
| 50 | 7°27.5 | 7°28.7 | 7°07.1 | 5.0 - 2.5 | 11.0 - 5.4 | 17.0 - 8.4 |
| 51 | 7°27.8 | 7°29.0 | 7°07.4 | 5.1 - 2.5 | 11.1 - 5.5 | 17.1 - 8.4 |
| 52 | 7°28.0 | 7°29.2 | 7°07.6 | 5.2 - 2.6 | 11.2 - 5.5 | 17.2 - 8.5 |
| 53 | 7°28.2 | 7°29.5 | 7°07.8 | 5.3 - 2.6 | 11.3 - 5.6 | 17.3 - 8.5 |
| 54 | 7°28.5 | 7°29.7 | 7°08.1 | 5.4 - 2.7 | 11.4 - 5.6 | 17.4 - 8.6 |
| 55 | 7°28.8 | 7°30.0 | 7°08.3 | 5.5 - 2.7 | 11.5 - 5.7 | 17.5 - 8.6 |
| 56 | 7°29.0 | 7°30.2 | 7°08.5 | 5.6 - 2.8 | 11.6 - 5.7 | 17.6 - 8.7 |
| 57 | 7°29.2 | 7°30.5 | 7°08.8 | 5.7 - 2.8 | 11.7 - 5.8 | 17.7 - 8.7 |
| 58 | 7°29.5 | 7°30.7 | 7°09.0 | 5.8 - 2.9 | 11.8 - 5.8 | 17.8 - 8.8 |
| 59 | 7°29.8 | 7°31.0 | 7°09.3 | 5.9 - 2.9 | 11.9 - 5.9 | 17.9 - 8.8 |

# Increments and Corrections

| m 30 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 7°30.0 | 7°31.2 | 7°09.5 | 0.0 - 0.0 | 6.0 - 3.0 | 12.0 - 6.1 |
| 1 | 7°30.2 | 7°31.5 | 7°09.7 | 0.1 - 0.1 | 6.1 - 3.1 | 12.1 - 6.2 |
| 2 | 7°30.5 | 7°31.7 | 7°10.0 | 0.2 - 0.1 | 6.2 - 3.2 | 12.2 - 6.2 |
| 3 | 7°30.8 | 7°32.0 | 7°10.2 | 0.3 - 0.2 | 6.3 - 3.2 | 12.3 - 6.3 |
| 4 | 7°31.0 | 7°32.2 | 7°10.5 | 0.4 - 0.2 | 6.4 - 3.3 | 12.4 - 6.3 |
| 5 | 7°31.2 | 7°32.5 | 7°10.7 | 0.5 - 0.3 | 6.5 - 3.3 | 12.5 - 6.4 |
| 6 | 7°31.5 | 7°32.7 | 7°10.9 | 0.6 - 0.3 | 6.6 - 3.4 | 12.6 - 6.4 |
| 7 | 7°31.7 | 7°33.0 | 7°11.2 | 0.7 - 0.4 | 6.7 - 3.4 | 12.7 - 6.5 |
| 8 | 7°32.0 | 7°33.2 | 7°11.4 | 0.8 - 0.4 | 6.8 - 3.5 | 12.8 - 6.5 |
| 9 | 7°32.2 | 7°33.5 | 7°11.6 | 0.9 - 0.5 | 6.9 - 3.5 | 12.9 - 6.6 |
| 10 | 7°32.5 | 7°33.7 | 7°11.9 | 1.0 - 0.5 | 7.0 - 3.6 | 13.0 - 6.6 |
| 11 | 7°32.8 | 7°34.0 | 7°12.1 | 1.1 - 0.6 | 7.1 - 3.6 | 13.1 - 6.7 |
| 12 | 7°33.0 | 7°34.2 | 7°12.4 | 1.2 - 0.6 | 7.2 - 3.7 | 13.2 - 6.7 |
| 13 | 7°33.3 | 7°34.5 | 7°12.6 | 1.3 - 0.7 | 7.3 - 3.7 | 13.3 - 6.8 |
| 14 | 7°33.5 | 7°34.7 | 7°12.8 | 1.4 - 0.7 | 7.4 - 3.8 | 13.4 - 6.8 |
| 15 | 7°33.8 | 7°35.0 | 7°13.1 | 1.5 - 0.8 | 7.5 - 3.8 | 13.5 - 6.9 |
| 16 | 7°34.0 | 7°35.2 | 7°13.3 | 1.6 - 0.8 | 7.6 - 3.9 | 13.6 - 6.9 |
| 17 | 7°34.3 | 7°35.5 | 7°13.6 | 1.7 - 0.9 | 7.7 - 3.9 | 13.7 - 7.0 |
| 18 | 7°34.5 | 7°35.7 | 7°13.8 | 1.8 - 0.9 | 7.8 - 4.0 | 13.8 - 7.0 |
| 19 | 7°34.8 | 7°36.0 | 7°14.0 | 1.9 - 1.0 | 7.9 - 4.0 | 13.9 - 7.1 |
| 20 | 7°35.0 | 7°36.2 | 7°14.3 | 2.0 - 1.0 | 8.0 - 4.1 | 14.0 - 7.1 |
| 21 | 7°35.3 | 7°36.5 | 7°14.5 | 2.1 - 1.1 | 8.1 - 4.1 | 14.1 - 7.2 |
| 22 | 7°35.5 | 7°36.7 | 7°14.7 | 2.2 - 1.1 | 8.2 - 4.2 | 14.2 - 7.2 |
| 23 | 7°35.7 | 7°37.0 | 7°15.0 | 2.3 - 1.2 | 8.3 - 4.2 | 14.3 - 7.3 |
| 24 | 7°36.0 | 7°37.2 | 7°15.2 | 2.4 - 1.2 | 8.4 - 4.3 | 14.4 - 7.3 |
| 25 | 7°36.2 | 7°37.5 | 7°15.5 | 2.5 - 1.3 | 8.5 - 4.3 | 14.5 - 7.4 |
| 26 | 7°36.5 | 7°37.7 | 7°15.7 | 2.6 - 1.3 | 8.6 - 4.4 | 14.6 - 7.4 |
| 27 | 7°36.7 | 7°38.0 | 7°15.9 | 2.7 - 1.4 | 8.7 - 4.4 | 14.7 - 7.5 |
| 28 | 7°37.0 | 7°38.2 | 7°16.2 | 2.8 - 1.4 | 8.8 - 4.5 | 14.8 - 7.5 |
| 29 | 7°37.3 | 7°38.5 | 7°16.4 | 2.9 - 1.5 | 8.9 - 4.5 | 14.9 - 7.6 |
| 30 | 7°37.5 | 7°38.8 | 7°16.7 | 3.0 - 1.5 | 9.0 - 4.6 | 15.0 - 7.6 |
| 31 | 7°37.7 | 7°39.0 | 7°16.9 | 3.1 - 1.6 | 9.1 - 4.6 | 15.1 - 7.7 |
| 32 | 7°38.0 | 7°39.3 | 7°17.1 | 3.2 - 1.6 | 9.2 - 4.7 | 15.2 - 7.7 |
| 33 | 7°38.3 | 7°39.5 | 7°17.4 | 3.3 - 1.7 | 9.3 - 4.7 | 15.3 - 7.8 |
| 34 | 7°38.5 | 7°39.8 | 7°17.6 | 3.4 - 1.7 | 9.4 - 4.8 | 15.4 - 7.8 |
| 35 | 7°38.7 | 7°40.0 | 7°17.9 | 3.5 - 1.8 | 9.5 - 4.8 | 15.5 - 7.9 |
| 36 | 7°39.0 | 7°40.3 | 7°18.1 | 3.6 - 1.8 | 9.6 - 4.9 | 15.6 - 7.9 |
| 37 | 7°39.3 | 7°40.5 | 7°18.3 | 3.7 - 1.9 | 9.7 - 4.9 | 15.7 - 8.0 |
| 38 | 7°39.5 | 7°40.8 | 7°18.6 | 3.8 - 1.9 | 9.8 - 5.0 | 15.8 - 8.0 |
| 39 | 7°39.8 | 7°41.0 | 7°18.8 | 3.9 - 2.0 | 9.9 - 5.0 | 15.9 - 8.1 |
| 40 | 7°40.0 | 7°41.3 | 7°19.0 | 4.0 - 2.0 | 10.0 - 5.1 | 16.0 - 8.1 |
| 41 | 7°40.3 | 7°41.5 | 7°19.3 | 4.1 - 2.1 | 10.1 - 5.1 | 16.1 - 8.2 |
| 42 | 7°40.5 | 7°41.8 | 7°19.5 | 4.2 - 2.1 | 10.2 - 5.2 | 16.2 - 8.2 |
| 43 | 7°40.7 | 7°42.0 | 7°19.8 | 4.3 - 2.2 | 10.3 - 5.2 | 16.3 - 8.3 |
| 44 | 7°41.0 | 7°42.3 | 7°20.0 | 4.4 - 2.2 | 10.4 - 5.3 | 16.4 - 8.3 |
| 45 | 7°41.2 | 7°42.5 | 7°20.2 | 4.5 - 2.3 | 10.5 - 5.3 | 16.5 - 8.4 |
| 46 | 7°41.5 | 7°42.8 | 7°20.5 | 4.6 - 2.3 | 10.6 - 5.4 | 16.6 - 8.4 |
| 47 | 7°41.8 | 7°43.0 | 7°20.7 | 4.7 - 2.4 | 10.7 - 5.4 | 16.7 - 8.5 |
| 48 | 7°42.0 | 7°43.3 | 7°21.0 | 4.8 - 2.4 | 10.8 - 5.5 | 16.8 - 8.5 |
| 49 | 7°42.3 | 7°43.5 | 7°21.2 | 4.9 - 2.5 | 10.9 - 5.5 | 16.9 - 8.6 |
| 50 | 7°42.5 | 7°43.8 | 7°21.4 | 5.0 - 2.5 | 11.0 - 5.6 | 17.0 - 8.6 |
| 51 | 7°42.8 | 7°44.0 | 7°21.7 | 5.1 - 2.6 | 11.1 - 5.6 | 17.1 - 8.7 |
| 52 | 7°43.0 | 7°44.3 | 7°21.9 | 5.2 - 2.6 | 11.2 - 5.7 | 17.2 - 8.7 |
| 53 | 7°43.2 | 7°44.5 | 7°22.1 | 5.3 - 2.7 | 11.3 - 5.7 | 17.3 - 8.8 |
| 54 | 7°43.5 | 7°44.8 | 7°22.4 | 5.4 - 2.7 | 11.4 - 5.8 | 17.4 - 8.8 |
| 55 | 7°43.8 | 7°45.0 | 7°22.6 | 5.5 - 2.8 | 11.5 - 5.8 | 17.5 - 8.9 |
| 56 | 7°44.0 | 7°45.3 | 7°22.9 | 5.6 - 2.8 | 11.6 - 5.9 | 17.6 - 8.9 |
| 57 | 7°44.3 | 7°45.5 | 7°23.1 | 5.7 - 2.9 | 11.7 - 5.9 | 17.7 - 9.0 |
| 58 | 7°44.5 | 7°45.8 | 7°23.3 | 5.8 - 2.9 | 11.8 - 6.0 | 17.8 - 9.0 |
| 59 | 7°44.8 | 7°46.0 | 7°23.6 | 5.9 - 3.0 | 11.9 - 6.0 | 17.9 - 9.1 |

| m 31 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 7°45.0 | 7°46.3 | 7°23.8 | 0.0 - 0.0 | 6.0 - 3.2 | 12.0 - 6.3 |
| 1 | 7°45.2 | 7°46.5 | 7°24.1 | 0.1 - 0.1 | 6.1 - 3.2 | 12.1 - 6.4 |
| 2 | 7°45.5 | 7°46.8 | 7°24.3 | 0.2 - 0.1 | 6.2 - 3.3 | 12.2 - 6.4 |
| 3 | 7°45.7 | 7°47.0 | 7°24.5 | 0.3 - 0.2 | 6.3 - 3.3 | 12.3 - 6.5 |
| 4 | 7°46.0 | 7°47.3 | 7°24.8 | 0.4 - 0.2 | 6.4 - 3.4 | 12.4 - 6.5 |
| 5 | 7°46.2 | 7°47.5 | 7°25.0 | 0.5 - 0.3 | 6.5 - 3.4 | 12.5 - 6.6 |
| 6 | 7°46.5 | 7°47.8 | 7°25.2 | 0.6 - 0.3 | 6.6 - 3.5 | 12.6 - 6.6 |
| 7 | 7°46.8 | 7°48.0 | 7°25.5 | 0.7 - 0.4 | 6.7 - 3.5 | 12.7 - 6.7 |
| 8 | 7°47.0 | 7°48.3 | 7°25.7 | 0.8 - 0.4 | 6.8 - 3.6 | 12.8 - 6.7 |
| 9 | 7°47.2 | 7°48.5 | 7°26.0 | 0.9 - 0.5 | 6.9 - 3.6 | 12.9 - 6.8 |
| 10 | 7°47.5 | 7°48.8 | 7°26.2 | 1.0 - 0.5 | 7.0 - 3.7 | 13.0 - 6.8 |
| 11 | 7°47.7 | 7°49.0 | 7°26.4 | 1.1 - 0.6 | 7.1 - 3.7 | 13.1 - 6.9 |
| 12 | 7°48.0 | 7°49.3 | 7°26.7 | 1.2 - 0.6 | 7.2 - 3.8 | 13.2 - 6.9 |
| 13 | 7°48.2 | 7°49.5 | 7°26.9 | 1.3 - 0.7 | 7.3 - 3.8 | 13.3 - 7.0 |
| 14 | 7°48.5 | 7°49.8 | 7°27.2 | 1.4 - 0.7 | 7.4 - 3.9 | 13.4 - 7.0 |
| 15 | 7°48.8 | 7°50.0 | 7°27.4 | 1.5 - 0.8 | 7.5 - 3.9 | 13.5 - 7.1 |
| 16 | 7°49.0 | 7°50.3 | 7°27.6 | 1.6 - 0.8 | 7.6 - 4.0 | 13.6 - 7.1 |
| 17 | 7°49.3 | 7°50.5 | 7°27.9 | 1.7 - 0.9 | 7.7 - 4.0 | 13.7 - 7.2 |
| 18 | 7°49.5 | 7°50.8 | 7°28.1 | 1.8 - 0.9 | 7.8 - 4.1 | 13.8 - 7.2 |
| 19 | 7°49.8 | 7°51.0 | 7°28.4 | 1.9 - 1.0 | 7.9 - 4.1 | 13.9 - 7.3 |
| 20 | 7°50.0 | 7°51.3 | 7°28.6 | 2.0 - 1.1 | 8.0 - 4.2 | 14.0 - 7.4 |
| 21 | 7°50.3 | 7°51.5 | 7°28.8 | 2.1 - 1.1 | 8.1 - 4.3 | 14.1 - 7.4 |
| 22 | 7°50.5 | 7°51.8 | 7°29.1 | 2.2 - 1.2 | 8.2 - 4.3 | 14.2 - 7.5 |
| 23 | 7°50.7 | 7°52.0 | 7°29.3 | 2.3 - 1.2 | 8.3 - 4.4 | 14.3 - 7.5 |
| 24 | 7°51.0 | 7°52.3 | 7°29.5 | 2.4 - 1.3 | 8.4 - 4.4 | 14.4 - 7.6 |
| 25 | 7°51.3 | 7°52.5 | 7°29.8 | 2.5 - 1.3 | 8.5 - 4.5 | 14.5 - 7.6 |
| 26 | 7°51.5 | 7°52.8 | 7°30.0 | 2.6 - 1.4 | 8.6 - 4.5 | 14.6 - 7.7 |
| 27 | 7°51.7 | 7°53.0 | 7°30.3 | 2.7 - 1.4 | 8.7 - 4.6 | 14.7 - 7.7 |
| 28 | 7°52.0 | 7°53.3 | 7°30.5 | 2.8 - 1.5 | 8.8 - 4.6 | 14.8 - 7.8 |
| 29 | 7°52.2 | 7°53.5 | 7°30.7 | 2.9 - 1.5 | 8.9 - 4.7 | 14.9 - 7.8 |
| 30 | 7°52.5 | 7°53.8 | 7°31.0 | 3.0 - 1.6 | 9.0 - 4.7 | 15.0 - 7.9 |
| 31 | 7°52.7 | 7°54.0 | 7°31.2 | 3.1 - 1.6 | 9.1 - 4.8 | 15.1 - 7.9 |
| 32 | 7°53.0 | 7°54.3 | 7°31.5 | 3.2 - 1.7 | 9.2 - 4.8 | 15.2 - 8.0 |
| 33 | 7°53.3 | 7°54.5 | 7°31.7 | 3.3 - 1.7 | 9.3 - 4.9 | 15.3 - 8.0 |
| 34 | 7°53.5 | 7°54.8 | 7°31.9 | 3.4 - 1.8 | 9.4 - 4.9 | 15.4 - 8.1 |
| 35 | 7°53.8 | 7°55.0 | 7°32.2 | 3.5 - 1.8 | 9.5 - 5.0 | 15.5 - 8.1 |
| 36 | 7°54.0 | 7°55.3 | 7°32.4 | 3.6 - 1.9 | 9.6 - 5.0 | 15.6 - 8.2 |
| 37 | 7°54.3 | 7°55.5 | 7°32.6 | 3.7 - 1.9 | 9.7 - 5.1 | 15.7 - 8.2 |
| 38 | 7°54.5 | 7°55.8 | 7°32.9 | 3.8 - 2.0 | 9.8 - 5.1 | 15.8 - 8.3 |
| 39 | 7°54.7 | 7°56.0 | 7°33.1 | 3.9 - 2.0 | 9.9 - 5.2 | 15.9 - 8.3 |
| 40 | 7°55.0 | 7°56.3 | 7°33.4 | 4.0 - 2.1 | 10.0 - 5.3 | 16.0 - 8.4 |
| 41 | 7°55.3 | 7°56.5 | 7°33.6 | 4.1 - 2.2 | 10.1 - 5.3 | 16.1 - 8.5 |
| 42 | 7°55.5 | 7°56.8 | 7°33.8 | 4.2 - 2.2 | 10.2 - 5.4 | 16.2 - 8.5 |
| 43 | 7°55.7 | 7°57.1 | 7°34.1 | 4.3 - 2.3 | 10.3 - 5.4 | 16.3 - 8.6 |
| 44 | 7°56.0 | 7°57.3 | 7°34.3 | 4.4 - 2.3 | 10.4 - 5.5 | 16.4 - 8.6 |
| 45 | 7°56.3 | 7°57.6 | 7°34.6 | 4.5 - 2.4 | 10.5 - 5.5 | 16.5 - 8.7 |
| 46 | 7°56.5 | 7°57.8 | 7°34.8 | 4.6 - 2.4 | 10.6 - 5.6 | 16.6 - 8.7 |
| 47 | 7°56.7 | 7°58.1 | 7°35.0 | 4.7 - 2.5 | 10.7 - 5.6 | 16.7 - 8.8 |
| 48 | 7°57.0 | 7°58.3 | 7°35.3 | 4.8 - 2.5 | 10.8 - 5.7 | 16.8 - 8.8 |
| 49 | 7°57.2 | 7°58.6 | 7°35.5 | 4.9 - 2.6 | 10.9 - 5.7 | 16.9 - 8.9 |
| 50 | 7°57.5 | 7°58.8 | 7°35.7 | 5.0 - 2.6 | 11.0 - 5.8 | 17.0 - 8.9 |
| 51 | 7°57.8 | 7°59.1 | 7°36.0 | 5.1 - 2.7 | 11.1 - 5.8 | 17.1 - 9.0 |
| 52 | 7°58.0 | 7°59.3 | 7°36.2 | 5.2 - 2.7 | 11.2 - 5.9 | 17.2 - 9.0 |
| 53 | 7°58.2 | 7°59.6 | 7°36.5 | 5.3 - 2.8 | 11.3 - 5.9 | 17.3 - 9.1 |
| 54 | 7°58.5 | 7°59.8 | 7°36.7 | 5.4 - 2.8 | 11.4 - 6.0 | 17.4 - 9.1 |
| 55 | 7°58.8 | 8°00.1 | 7°36.9 | 5.5 - 2.9 | 11.5 - 6.0 | 17.5 - 9.2 |
| 56 | 7°59.0 | 8°00.3 | 7°37.2 | 5.6 - 2.9 | 11.6 - 6.1 | 17.6 - 9.2 |
| 57 | 7°59.2 | 8°00.6 | 7°37.4 | 5.7 - 3.0 | 11.7 - 6.1 | 17.7 - 9.3 |
| 58 | 7°59.5 | 8°00.8 | 7°37.7 | 5.8 - 3.0 | 11.8 - 6.2 | 17.8 - 9.3 |
| 59 | 7°59.8 | 8°01.1 | 7°37.9 | 5.9 - 3.1 | 11.9 - 6.2 | 17.9 - 9.4 |

| m 32 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 8°00.0 | 8°01.3 | 7°38.1 | 0.0 - 0.0 | 6.0 - 3.3 | 12.0 - 6.5 |
| 1 | 8°00.2 | 8°01.6 | 7°38.4 | 0.1 - 0.1 | 6.1 - 3.3 | 12.1 - 6.6 |
| 2 | 8°00.5 | 8°01.8 | 7°38.6 | 0.2 - 0.1 | 6.2 - 3.4 | 12.2 - 6.6 |
| 3 | 8°00.7 | 8°02.1 | 7°38.8 | 0.3 - 0.2 | 6.3 - 3.4 | 12.3 - 6.7 |
| 4 | 8°01.0 | 8°02.3 | 7°39.1 | 0.4 - 0.2 | 6.4 - 3.5 | 12.4 - 6.7 |
| 5 | 8°01.3 | 8°02.6 | 7°39.3 | 0.5 - 0.3 | 6.5 - 3.5 | 12.5 - 6.8 |
| 6 | 8°01.5 | 8°02.8 | 7°39.6 | 0.6 - 0.3 | 6.6 - 3.6 | 12.6 - 6.8 |
| 7 | 8°01.8 | 8°03.1 | 7°39.8 | 0.7 - 0.4 | 6.7 - 3.6 | 12.7 - 6.9 |
| 8 | 8°02.0 | 8°03.3 | 7°40.0 | 0.8 - 0.4 | 6.8 - 3.7 | 12.8 - 6.9 |
| 9 | 8°02.2 | 8°03.6 | 7°40.3 | 0.9 - 0.5 | 6.9 - 3.7 | 12.9 - 7.0 |
| 10 | 8°02.5 | 8°03.8 | 7°40.5 | 1.0 - 0.5 | 7.0 - 3.8 | 13.0 - 7.0 |
| 11 | 8°02.7 | 8°04.1 | 7°40.8 | 1.1 - 0.6 | 7.1 - 3.8 | 13.1 - 7.1 |
| 12 | 8°03.0 | 8°04.3 | 7°41.0 | 1.2 - 0.7 | 7.2 - 3.9 | 13.2 - 7.1 |
| 13 | 8°03.3 | 8°04.6 | 7°41.2 | 1.3 - 0.7 | 7.3 - 4.0 | 13.3 - 7.2 |
| 14 | 8°03.5 | 8°04.8 | 7°41.5 | 1.4 - 0.8 | 7.4 - 4.0 | 13.4 - 7.3 |
| 15 | 8°03.8 | 8°05.1 | 7°41.7 | 1.5 - 0.8 | 7.5 - 4.1 | 13.5 - 7.3 |
| 16 | 8°04.0 | 8°05.3 | 7°42.0 | 1.6 - 0.9 | 7.6 - 4.1 | 13.6 - 7.4 |
| 17 | 8°04.2 | 8°05.6 | 7°42.2 | 1.7 - 0.9 | 7.7 - 4.2 | 13.7 - 7.4 |
| 18 | 8°04.5 | 8°05.8 | 7°42.4 | 1.8 - 1.0 | 7.8 - 4.2 | 13.8 - 7.5 |
| 19 | 8°04.8 | 8°06.1 | 7°42.7 | 1.9 - 1.0 | 7.9 - 4.3 | 13.9 - 7.5 |
| 20 | 8°05.0 | 8°06.3 | 7°42.9 | 2.0 - 1.1 | 8.0 - 4.3 | 14.0 - 7.6 |
| 21 | 8°05.3 | 8°06.6 | 7°43.1 | 2.1 - 1.1 | 8.1 - 4.4 | 14.1 - 7.6 |
| 22 | 8°05.5 | 8°06.8 | 7°43.4 | 2.2 - 1.2 | 8.2 - 4.4 | 14.2 - 7.7 |
| 23 | 8°05.7 | 8°07.1 | 7°43.6 | 2.3 - 1.2 | 8.3 - 4.5 | 14.3 - 7.7 |
| 24 | 8°06.0 | 8°07.3 | 7°43.9 | 2.4 - 1.3 | 8.4 - 4.5 | 14.4 - 7.8 |
| 25 | 8°06.2 | 8°07.6 | 7°44.1 | 2.5 - 1.4 | 8.5 - 4.6 | 14.5 - 7.9 |
| 26 | 8°06.5 | 8°07.8 | 7°44.3 | 2.6 - 1.4 | 8.6 - 4.7 | 14.6 - 7.9 |
| 27 | 8°06.8 | 8°08.1 | 7°44.6 | 2.7 - 1.5 | 8.7 - 4.7 | 14.7 - 8.0 |
| 28 | 8°07.0 | 8°08.3 | 7°44.8 | 2.8 - 1.5 | 8.8 - 4.8 | 14.8 - 8.0 |
| 29 | 8°07.3 | 8°08.6 | 7°45.1 | 2.9 - 1.6 | 8.9 - 4.8 | 14.9 - 8.1 |
| 30 | 8°07.5 | 8°08.8 | 7°45.3 | 3.0 - 1.6 | 9.0 - 4.9 | 15.0 - 8.1 |
| 31 | 8°07.7 | 8°09.1 | 7°45.5 | 3.1 - 1.7 | 9.1 - 4.9 | 15.1 - 8.2 |
| 32 | 8°08.0 | 8°09.3 | 7°45.8 | 3.2 - 1.7 | 9.2 - 5.0 | 15.2 - 8.2 |
| 33 | 8°08.2 | 8°09.6 | 7°46.0 | 3.3 - 1.8 | 9.3 - 5.0 | 15.3 - 8.3 |
| 34 | 8°08.5 | 8°09.8 | 7°46.2 | 3.4 - 1.8 | 9.4 - 5.1 | 15.4 - 8.3 |
| 35 | 8°08.8 | 8°10.1 | 7°46.5 | 3.5 - 1.9 | 9.5 - 5.1 | 15.5 - 8.4 |
| 36 | 8°09.0 | 8°10.3 | 7°46.7 | 3.6 - 1.9 | 9.6 - 5.2 | 15.6 - 8.4 |
| 37 | 8°09.3 | 8°10.6 | 7°47.0 | 3.7 - 2.0 | 9.7 - 5.3 | 15.7 - 8.5 |
| 38 | 8°09.5 | 8°10.8 | 7°47.2 | 3.8 - 2.1 | 9.8 - 5.3 | 15.8 - 8.6 |
| 39 | 8°09.7 | 8°11.1 | 7°47.4 | 3.9 - 2.1 | 9.9 - 5.4 | 15.9 - 8.6 |
| 40 | 8°10.0 | 8°11.3 | 7°47.7 | 4.0 - 2.2 | 10.0 - 5.4 | 16.0 - 8.7 |
| 41 | 8°10.2 | 8°11.6 | 7°47.9 | 4.1 - 2.2 | 10.1 - 5.5 | 16.1 - 8.7 |
| 42 | 8°10.5 | 8°11.8 | 7°48.2 | 4.2 - 2.3 | 10.2 - 5.5 | 16.2 - 8.8 |
| 43 | 8°10.8 | 8°12.1 | 7°48.4 | 4.3 - 2.3 | 10.3 - 5.6 | 16.3 - 8.8 |
| 44 | 8°11.0 | 8°12.3 | 7°48.6 | 4.4 - 2.4 | 10.4 - 5.6 | 16.4 - 8.9 |
| 45 | 8°11.3 | 8°12.6 | 7°48.9 | 4.5 - 2.4 | 10.5 - 5.7 | 16.5 - 8.9 |
| 46 | 8°11.5 | 8°12.8 | 7°49.1 | 4.6 - 2.5 | 10.6 - 5.7 | 16.6 - 9.0 |
| 47 | 8°11.7 | 8°13.1 | 7°49.3 | 4.7 - 2.5 | 10.7 - 5.8 | 16.7 - 9.0 |
| 48 | 8°12.0 | 8°13.3 | 7°49.6 | 4.8 - 2.6 | 10.8 - 5.8 | 16.8 - 9.1 |
| 49 | 8°12.3 | 8°13.6 | 7°49.8 | 4.9 - 2.7 | 10.9 - 5.9 | 16.9 - 9.2 |
| 50 | 8°12.5 | 8°13.8 | 7°50.1 | 5.0 - 2.7 | 11.0 - 6.0 | 17.0 - 9.2 |
| 51 | 8°12.8 | 8°14.1 | 7°50.3 | 5.1 - 2.8 | 11.1 - 6.0 | 17.1 - 9.3 |
| 52 | 8°13.0 | 8°14.3 | 7°50.5 | 5.2 - 2.8 | 11.2 - 6.1 | 17.2 - 9.3 |
| 53 | 8°13.2 | 8°14.6 | 7°50.8 | 5.3 - 2.9 | 11.3 - 6.1 | 17.3 - 9.4 |
| 54 | 8°13.5 | 8°14.8 | 7°51.0 | 5.4 - 2.9 | 11.4 - 6.2 | 17.4 - 9.4 |
| 55 | 8°13.7 | 8°15.1 | 7°51.3 | 5.5 - 3.0 | 11.5 - 6.2 | 17.5 - 9.5 |
| 56 | 8°14.0 | 8°15.4 | 7°51.5 | 5.6 - 3.0 | 11.6 - 6.3 | 17.6 - 9.5 |
| 57 | 8°14.3 | 8°15.6 | 7°51.7 | 5.7 - 3.1 | 11.7 - 6.3 | 17.7 - 9.6 |
| 58 | 8°14.5 | 8°15.9 | 7°52.0 | 5.8 - 3.1 | 11.8 - 6.4 | 17.8 - 9.6 |
| 59 | 8°14.8 | 8°16.1 | 7°52.2 | 5.9 - 3.2 | 11.9 - 6.4 | 17.9 - 9.7 |

# Increments and Corrections

| m 33 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 8°15.0 | 8°16.4 | 7°52.5 | 0.0 - 0.0 | 6.0 - 3.4 | 12.0 - 6.7 |
| 1 | 8°15.2 | 8°16.6 | 7°52.7 | 0.1 - 0.1 | 6.1 - 3.4 | 12.1 - 6.8 |
| 2 | 8°15.5 | 8°16.9 | 7°52.9 | 0.2 - 0.1 | 6.2 - 3.5 | 12.2 - 6.8 |
| 3 | 8°15.7 | 8°17.1 | 7°53.2 | 0.3 - 0.2 | 6.3 - 3.5 | 12.3 - 6.9 |
| 4 | 8°16.0 | 8°17.4 | 7°53.4 | 0.4 - 0.2 | 6.4 - 3.6 | 12.4 - 6.9 |
| 5 | 8°16.3 | 8°17.6 | 7°53.6 | 0.5 - 0.3 | 6.5 - 3.6 | 12.5 - 7.0 |
| 6 | 8°16.5 | 8°17.9 | 7°53.9 | 0.6 - 0.3 | 6.6 - 3.7 | 12.6 - 7.0 |
| 7 | 8°16.8 | 8°18.1 | 7°54.1 | 0.7 - 0.4 | 6.7 - 3.7 | 12.7 - 7.1 |
| 8 | 8°17.0 | 8°18.4 | 7°54.4 | 0.8 - 0.4 | 6.8 - 3.8 | 12.8 - 7.1 |
| 9 | 8°17.2 | 8°18.6 | 7°54.6 | 0.9 - 0.5 | 6.9 - 3.9 | 12.9 - 7.2 |
| 10 | 8°17.5 | 8°18.9 | 7°54.8 | 1.0 - 0.6 | 7.0 - 3.9 | 13.0 - 7.3 |
| 11 | 8°17.7 | 8°19.1 | 7°55.1 | 1.1 - 0.6 | 7.1 - 4.0 | 13.1 - 7.3 |
| 12 | 8°18.0 | 8°19.4 | 7°55.3 | 1.2 - 0.7 | 7.2 - 4.0 | 13.2 - 7.4 |
| 13 | 8°18.3 | 8°19.6 | 7°55.6 | 1.3 - 0.7 | 7.3 - 4.1 | 13.3 - 7.4 |
| 14 | 8°18.5 | 8°19.9 | 7°55.8 | 1.4 - 0.8 | 7.4 - 4.1 | 13.4 - 7.5 |
| 15 | 8°18.8 | 8°20.1 | 7°56.0 | 1.5 - 0.8 | 7.5 - 4.2 | 13.5 - 7.5 |
| 16 | 8°19.0 | 8°20.4 | 7°56.3 | 1.6 - 0.9 | 7.6 - 4.2 | 13.6 - 7.6 |
| 17 | 8°19.2 | 8°20.6 | 7°56.5 | 1.7 - 0.9 | 7.7 - 4.3 | 13.7 - 7.6 |
| 18 | 8°19.5 | 8°20.9 | 7°56.7 | 1.8 - 1.0 | 7.8 - 4.4 | 13.8 - 7.7 |
| 19 | 8°19.8 | 8°21.1 | 7°57.0 | 1.9 - 1.1 | 7.9 - 4.4 | 13.9 - 7.8 |
| 20 | 8°20.0 | 8°21.4 | 7°57.2 | 2.0 - 1.1 | 8.0 - 4.5 | 14.0 - 7.8 |
| 21 | 8°20.3 | 8°21.6 | 7°57.5 | 2.1 - 1.2 | 8.1 - 4.5 | 14.1 - 7.9 |
| 22 | 8°20.5 | 8°21.9 | 7°57.7 | 2.2 - 1.2 | 8.2 - 4.6 | 14.2 - 7.9 |
| 23 | 8°20.7 | 8°22.1 | 7°57.9 | 2.3 - 1.3 | 8.3 - 4.6 | 14.3 - 8.0 |
| 24 | 8°21.0 | 8°22.4 | 7°58.2 | 2.4 - 1.3 | 8.4 - 4.7 | 14.4 - 8.0 |
| 25 | 8°21.2 | 8°22.6 | 7°58.4 | 2.5 - 1.4 | 8.5 - 4.7 | 14.5 - 8.1 |
| 26 | 8°21.5 | 8°22.9 | 7°58.7 | 2.6 - 1.5 | 8.6 - 4.8 | 14.6 - 8.2 |
| 27 | 8°21.8 | 8°23.1 | 7°58.9 | 2.7 - 1.5 | 8.7 - 4.9 | 14.7 - 8.2 |
| 28 | 8°22.0 | 8°23.4 | 7°59.1 | 2.8 - 1.6 | 8.8 - 4.9 | 14.8 - 8.3 |
| 29 | 8°22.3 | 8°23.6 | 7°59.4 | 2.9 - 1.6 | 8.9 - 5.0 | 14.9 - 8.3 |
| 30 | 8°22.5 | 8°23.9 | 7°59.6 | 3.0 - 1.7 | 9.0 - 5.0 | 15.0 - 8.4 |
| 31 | 8°22.7 | 8°24.1 | 7°59.8 | 3.1 - 1.7 | 9.1 - 5.1 | 15.1 - 8.4 |
| 32 | 8°23.0 | 8°24.4 | 8°00.1 | 3.2 - 1.8 | 9.2 - 5.1 | 15.2 - 8.5 |
| 33 | 8°23.2 | 8°24.6 | 8°00.3 | 3.3 - 1.8 | 9.3 - 5.2 | 15.3 - 8.5 |
| 34 | 8°23.5 | 8°24.9 | 8°00.6 | 3.4 - 1.9 | 9.4 - 5.2 | 15.4 - 8.6 |
| 35 | 8°23.8 | 8°25.1 | 8°00.8 | 3.5 - 2.0 | 9.5 - 5.3 | 15.5 - 8.7 |
| 36 | 8°24.0 | 8°25.4 | 8°01.0 | 3.6 - 2.0 | 9.6 - 5.4 | 15.6 - 8.7 |
| 37 | 8°24.3 | 8°25.6 | 8°01.3 | 3.7 - 2.1 | 9.7 - 5.4 | 15.7 - 8.8 |
| 38 | 8°24.5 | 8°25.9 | 8°01.5 | 3.8 - 2.1 | 9.8 - 5.5 | 15.8 - 8.8 |
| 39 | 8°24.7 | 8°26.1 | 8°01.8 | 3.9 - 2.2 | 9.9 - 5.5 | 15.9 - 8.9 |
| 40 | 8°25.0 | 8°26.4 | 8°02.0 | 4.0 - 2.2 | 10.0 - 5.6 | 16.0 - 8.9 |
| 41 | 8°25.2 | 8°26.6 | 8°02.2 | 4.1 - 2.3 | 10.1 - 5.6 | 16.1 - 9.0 |
| 42 | 8°25.5 | 8°26.9 | 8°02.5 | 4.2 - 2.3 | 10.2 - 5.7 | 16.2 - 9.0 |
| 43 | 8°25.8 | 8°27.1 | 8°02.7 | 4.3 - 2.4 | 10.3 - 5.8 | 16.3 - 9.1 |
| 44 | 8°26.0 | 8°27.4 | 8°02.9 | 4.4 - 2.5 | 10.4 - 5.8 | 16.4 - 9.2 |
| 45 | 8°26.3 | 8°27.6 | 8°03.2 | 4.5 - 2.5 | 10.5 - 5.9 | 16.5 - 9.2 |
| 46 | 8°26.5 | 8°27.9 | 8°03.4 | 4.6 - 2.6 | 10.6 - 5.9 | 16.6 - 9.3 |
| 47 | 8°26.7 | 8°28.1 | 8°03.7 | 4.7 - 2.6 | 10.7 - 6.0 | 16.7 - 9.3 |
| 48 | 8°27.0 | 8°28.4 | 8°03.9 | 4.8 - 2.7 | 10.8 - 6.0 | 16.8 - 9.4 |
| 49 | 8°27.3 | 8°28.6 | 8°04.1 | 4.9 - 2.7 | 10.9 - 6.1 | 16.9 - 9.4 |
| 50 | 8°27.5 | 8°28.9 | 8°04.4 | 5.0 - 2.8 | 11.0 - 6.1 | 17.0 - 9.5 |
| 51 | 8°27.8 | 8°29.1 | 8°04.6 | 5.1 - 2.8 | 11.1 - 6.2 | 17.1 - 9.5 |
| 52 | 8°28.0 | 8°29.4 | 8°04.9 | 5.2 - 2.9 | 11.2 - 6.3 | 17.2 - 9.6 |
| 53 | 8°28.2 | 8°29.6 | 8°05.1 | 5.3 - 3.0 | 11.3 - 6.3 | 17.3 - 9.7 |
| 54 | 8°28.5 | 8°29.9 | 8°05.3 | 5.4 - 3.0 | 11.4 - 6.4 | 17.4 - 9.7 |
| 55 | 8°28.7 | 8°30.1 | 8°05.6 | 5.5 - 3.1 | 11.5 - 6.4 | 17.5 - 9.8 |
| 56 | 8°29.0 | 8°30.4 | 8°05.8 | 5.6 - 3.1 | 11.6 - 6.5 | 17.6 - 9.8 |
| 57 | 8°29.3 | 8°30.6 | 8°06.1 | 5.7 - 3.2 | 11.7 - 6.5 | 17.7 - 9.9 |
| 58 | 8°29.5 | 8°30.9 | 8°06.3 | 5.8 - 3.2 | 11.8 - 6.6 | 17.8 - 9.9 |
| 59 | 8°29.8 | 8°31.1 | 8°06.5 | 5.9 - 3.3 | 11.9 - 6.6 | 17.9 - 10.0 |

| m 34 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 8°30.0 | 8°31.4 | 8°06.8 | 0.0 - 0.0 | 6.0 - 3.4 | 12.0 - 6.9 |
| 1 | 8°30.2 | 8°31.6 | 8°07.0 | 0.1 - 0.1 | 6.1 - 3.5 | 12.1 - 7.0 |
| 2 | 8°30.5 | 8°31.9 | 8°07.2 | 0.2 - 0.1 | 6.2 - 3.6 | 12.2 - 7.0 |
| 3 | 8°30.7 | 8°32.1 | 8°07.5 | 0.3 - 0.2 | 6.3 - 3.6 | 12.3 - 7.1 |
| 4 | 8°31.0 | 8°32.4 | 8°07.7 | 0.4 - 0.2 | 6.4 - 3.7 | 12.4 - 7.1 |
| 5 | 8°31.3 | 8°32.6 | 8°08.0 | 0.5 - 0.3 | 6.5 - 3.7 | 12.5 - 7.2 |
| 6 | 8°31.5 | 8°32.9 | 8°08.2 | 0.6 - 0.3 | 6.6 - 3.8 | 12.6 - 7.2 |
| 7 | 8°31.8 | 8°33.1 | 8°08.4 | 0.7 - 0.4 | 6.7 - 3.9 | 12.7 - 7.3 |
| 8 | 8°32.0 | 8°33.4 | 8°08.7 | 0.8 - 0.5 | 6.8 - 3.9 | 12.8 - 7.4 |
| 9 | 8°32.2 | 8°33.7 | 8°08.9 | 0.9 - 0.5 | 6.9 - 4.0 | 12.9 - 7.4 |
| 10 | 8°32.5 | 8°33.9 | 8°09.2 | 1.0 - 0.6 | 7.0 - 4.0 | 13.0 - 7.5 |
| 11 | 8°32.7 | 8°34.2 | 8°09.4 | 1.1 - 0.6 | 7.1 - 4.1 | 13.1 - 7.5 |
| 12 | 8°33.0 | 8°34.4 | 8°09.6 | 1.2 - 0.7 | 7.2 - 4.1 | 13.2 - 7.6 |
| 13 | 8°33.3 | 8°34.7 | 8°09.9 | 1.3 - 0.7 | 7.3 - 4.2 | 13.3 - 7.6 |
| 14 | 8°33.5 | 8°34.9 | 8°10.1 | 1.4 - 0.8 | 7.4 - 4.3 | 13.4 - 7.7 |
| 15 | 8°33.8 | 8°35.2 | 8°10.3 | 1.5 - 0.9 | 7.5 - 4.3 | 13.5 - 7.8 |
| 16 | 8°34.0 | 8°35.4 | 8°10.6 | 1.6 - 0.9 | 7.6 - 4.4 | 13.6 - 7.8 |
| 17 | 8°34.2 | 8°35.7 | 8°10.8 | 1.7 - 1.0 | 7.7 - 4.4 | 13.7 - 7.9 |
| 18 | 8°34.5 | 8°35.9 | 8°11.1 | 1.8 - 1.0 | 7.8 - 4.5 | 13.8 - 7.9 |
| 19 | 8°34.8 | 8°36.2 | 8°11.3 | 1.9 - 1.1 | 7.9 - 4.5 | 13.9 - 8.0 |
| 20 | 8°35.0 | 8°36.4 | 8°11.5 | 2.0 - 1.1 | 8.0 - 4.6 | 14.0 - 8.0 |
| 21 | 8°35.3 | 8°36.7 | 8°11.8 | 2.1 - 1.2 | 8.1 - 4.7 | 14.1 - 8.1 |
| 22 | 8°35.5 | 8°36.9 | 8°12.0 | 2.2 - 1.3 | 8.2 - 4.7 | 14.2 - 8.2 |
| 23 | 8°35.7 | 8°37.2 | 8°12.3 | 2.3 - 1.3 | 8.3 - 4.8 | 14.3 - 8.2 |
| 24 | 8°36.0 | 8°37.4 | 8°12.5 | 2.4 - 1.4 | 8.4 - 4.8 | 14.4 - 8.3 |
| 25 | 8°36.2 | 8°37.7 | 8°12.7 | 2.5 - 1.4 | 8.5 - 4.9 | 14.5 - 8.3 |
| 26 | 8°36.5 | 8°37.9 | 8°13.0 | 2.6 - 1.5 | 8.6 - 4.9 | 14.6 - 8.4 |
| 27 | 8°36.8 | 8°38.2 | 8°13.2 | 2.7 - 1.6 | 8.7 - 5.0 | 14.7 - 8.5 |
| 28 | 8°37.0 | 8°38.4 | 8°13.4 | 2.8 - 1.6 | 8.8 - 5.1 | 14.8 - 8.5 |
| 29 | 8°37.3 | 8°38.7 | 8°13.7 | 2.9 - 1.7 | 8.9 - 5.1 | 14.9 - 8.6 |
| 30 | 8°37.5 | 8°38.9 | 8°13.9 | 3.0 - 1.7 | 9.0 - 5.2 | 15.0 - 8.6 |
| 31 | 8°37.7 | 8°39.2 | 8°14.2 | 3.1 - 1.8 | 9.1 - 5.2 | 15.1 - 8.7 |
| 32 | 8°38.0 | 8°39.4 | 8°14.4 | 3.2 - 1.8 | 9.2 - 5.3 | 15.2 - 8.7 |
| 33 | 8°38.2 | 8°39.7 | 8°14.6 | 3.3 - 1.9 | 9.3 - 5.3 | 15.3 - 8.8 |
| 34 | 8°38.5 | 8°39.9 | 8°14.9 | 3.4 - 2.0 | 9.4 - 5.4 | 15.4 - 8.9 |
| 35 | 8°38.8 | 8°40.2 | 8°15.1 | 3.5 - 2.0 | 9.5 - 5.5 | 15.5 - 8.9 |
| 36 | 8°39.0 | 8°40.4 | 8°15.4 | 3.6 - 2.1 | 9.6 - 5.5 | 15.6 - 9.0 |
| 37 | 8°39.3 | 8°40.7 | 8°15.6 | 3.7 - 2.1 | 9.7 - 5.6 | 15.7 - 9.0 |
| 38 | 8°39.5 | 8°40.9 | 8°15.8 | 3.8 - 2.2 | 9.8 - 5.6 | 15.8 - 9.1 |
| 39 | 8°39.7 | 8°41.2 | 8°16.1 | 3.9 - 2.2 | 9.9 - 5.7 | 15.9 - 9.1 |
| 40 | 8°40.0 | 8°41.4 | 8°16.3 | 4.0 - 2.3 | 10.0 - 5.8 | 16.0 - 9.2 |
| 41 | 8°40.2 | 8°41.7 | 8°16.5 | 4.1 - 2.4 | 10.1 - 5.8 | 16.1 - 9.3 |
| 42 | 8°40.5 | 8°41.9 | 8°16.8 | 4.2 - 2.4 | 10.2 - 5.9 | 16.2 - 9.3 |
| 43 | 8°40.8 | 8°42.2 | 8°17.0 | 4.3 - 2.5 | 10.3 - 5.9 | 16.3 - 9.4 |
| 44 | 8°41.0 | 8°42.4 | 8°17.3 | 4.4 - 2.5 | 10.4 - 6.0 | 16.4 - 9.4 |
| 45 | 8°41.3 | 8°42.7 | 8°17.5 | 4.5 - 2.6 | 10.5 - 6.0 | 16.5 - 9.5 |
| 46 | 8°41.5 | 8°42.9 | 8°17.7 | 4.6 - 2.6 | 10.6 - 6.1 | 16.6 - 9.5 |
| 47 | 8°41.7 | 8°43.2 | 8°18.0 | 4.7 - 2.7 | 10.7 - 6.2 | 16.7 - 9.6 |
| 48 | 8°42.0 | 8°43.4 | 8°18.2 | 4.8 - 2.8 | 10.8 - 6.2 | 16.8 - 9.7 |
| 49 | 8°42.3 | 8°43.7 | 8°18.5 | 4.9 - 2.8 | 10.9 - 6.3 | 16.9 - 9.7 |
| 50 | 8°42.5 | 8°43.9 | 8°18.7 | 5.0 - 2.9 | 11.0 - 6.3 | 17.0 - 9.8 |
| 51 | 8°42.8 | 8°44.2 | 8°18.9 | 5.1 - 2.9 | 11.1 - 6.4 | 17.1 - 9.8 |
| 52 | 8°43.0 | 8°44.4 | 8°19.2 | 5.2 - 3.0 | 11.2 - 6.4 | 17.2 - 9.9 |
| 53 | 8°43.2 | 8°44.7 | 8°19.4 | 5.3 - 3.0 | 11.3 - 6.5 | 17.3 - 9.9 |
| 54 | 8°43.5 | 8°44.9 | 8°19.7 | 5.4 - 3.1 | 11.4 - 6.6 | 17.4 - 10.0 |
| 55 | 8°43.7 | 8°45.2 | 8°19.9 | 5.5 - 3.2 | 11.5 - 6.6 | 17.5 - 10.1 |
| 56 | 8°44.0 | 8°45.4 | 8°20.1 | 5.6 - 3.2 | 11.6 - 6.7 | 17.6 - 10.1 |
| 57 | 8°44.3 | 8°45.7 | 8°20.4 | 5.7 - 3.3 | 11.7 - 6.7 | 17.7 - 10.2 |
| 58 | 8°44.5 | 8°45.9 | 8°20.6 | 5.8 - 3.3 | 11.8 - 6.8 | 17.8 - 10.2 |
| 59 | 8°44.8 | 8°46.2 | 8°20.8 | 5.9 - 3.4 | 11.9 - 6.8 | 17.9 - 10.3 |

| m 35 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 8°45.0 | 8°46.4 | 8°21.1 | 0.0 - 0.0 | 6.0 - 3.5 | 12.0 - 7.1 |
| 1 | 8°45.2 | 8°46.7 | 8°21.3 | 0.1 - 0.1 | 6.1 - 3.6 | 12.1 - 7.2 |
| 2 | 8°45.5 | 8°46.9 | 8°21.6 | 0.2 - 0.1 | 6.2 - 3.7 | 12.2 - 7.2 |
| 3 | 8°45.7 | 8°47.2 | 8°21.8 | 0.3 - 0.2 | 6.3 - 3.7 | 12.3 - 7.3 |
| 4 | 8°46.0 | 8°47.4 | 8°22.0 | 0.4 - 0.2 | 6.4 - 3.8 | 12.4 - 7.3 |
| 5 | 8°46.3 | 8°47.7 | 8°22.3 | 0.5 - 0.3 | 6.5 - 3.8 | 12.5 - 7.4 |
| 6 | 8°46.5 | 8°47.9 | 8°22.5 | 0.6 - 0.4 | 6.6 - 3.9 | 12.6 - 7.5 |
| 7 | 8°46.8 | 8°48.2 | 8°22.8 | 0.7 - 0.4 | 6.7 - 4.0 | 12.7 - 7.5 |
| 8 | 8°47.0 | 8°48.4 | 8°23.0 | 0.8 - 0.5 | 6.8 - 4.0 | 12.8 - 7.6 |
| 9 | 8°47.2 | 8°48.7 | 8°23.2 | 0.9 - 0.5 | 6.9 - 4.1 | 12.9 - 7.6 |
| 10 | 8°47.5 | 8°48.9 | 8°23.5 | 1.0 - 0.6 | 7.0 - 4.1 | 13.0 - 7.7 |
| 11 | 8°47.7 | 8°49.2 | 8°23.7 | 1.1 - 0.7 | 7.1 - 4.2 | 13.1 - 7.8 |
| 12 | 8°48.0 | 8°49.4 | 8°23.9 | 1.2 - 0.7 | 7.2 - 4.3 | 13.2 - 7.8 |
| 13 | 8°48.3 | 8°49.7 | 8°24.2 | 1.3 - 0.8 | 7.3 - 4.3 | 13.3 - 7.9 |
| 14 | 8°48.5 | 8°49.9 | 8°24.4 | 1.4 - 0.8 | 7.4 - 4.4 | 13.4 - 7.9 |
| 15 | 8°48.8 | 8°50.2 | 8°24.7 | 1.5 - 0.9 | 7.5 - 4.4 | 13.5 - 8.0 |
| 16 | 8°49.0 | 8°50.4 | 8°24.9 | 1.6 - 0.9 | 7.6 - 4.5 | 13.6 - 8.0 |
| 17 | 8°49.2 | 8°50.7 | 8°25.1 | 1.7 - 1.0 | 7.7 - 4.6 | 13.7 - 8.1 |
| 18 | 8°49.5 | 8°50.9 | 8°25.4 | 1.8 - 1.1 | 7.8 - 4.6 | 13.8 - 8.2 |
| 19 | 8°49.8 | 8°51.2 | 8°25.6 | 1.9 - 1.1 | 7.9 - 4.7 | 13.9 - 8.2 |
| 20 | 8°50.0 | 8°51.4 | 8°25.9 | 2.0 - 1.2 | 8.0 - 4.7 | 14.0 - 8.3 |
| 21 | 8°50.3 | 8°51.7 | 8°26.1 | 2.1 - 1.2 | 8.1 - 4.8 | 14.1 - 8.3 |
| 22 | 8°50.5 | 8°52.0 | 8°26.3 | 2.2 - 1.3 | 8.2 - 4.9 | 14.2 - 8.4 |
| 23 | 8°50.7 | 8°52.2 | 8°26.6 | 2.3 - 1.4 | 8.3 - 4.9 | 14.3 - 8.5 |
| 24 | 8°51.0 | 8°52.5 | 8°26.8 | 2.4 - 1.4 | 8.4 - 5.0 | 14.4 - 8.5 |
| 25 | 8°51.2 | 8°52.7 | 8°27.0 | 2.5 - 1.5 | 8.5 - 5.0 | 14.5 - 8.6 |
| 26 | 8°51.5 | 8°53.0 | 8°27.3 | 2.6 - 1.5 | 8.6 - 5.1 | 14.6 - 8.6 |
| 27 | 8°51.8 | 8°53.2 | 8°27.5 | 2.7 - 1.6 | 8.7 - 5.1 | 14.7 - 8.7 |
| 28 | 8°52.0 | 8°53.5 | 8°27.8 | 2.8 - 1.7 | 8.8 - 5.2 | 14.8 - 8.8 |
| 29 | 8°52.3 | 8°53.7 | 8°28.0 | 2.9 - 1.7 | 8.9 - 5.3 | 14.9 - 8.8 |
| 30 | 8°52.5 | 8°54.0 | 8°28.2 | 3.0 - 1.8 | 9.0 - 5.3 | 15.0 - 8.9 |
| 31 | 8°52.7 | 8°54.2 | 8°28.5 | 3.1 - 1.8 | 9.1 - 5.4 | 15.1 - 8.9 |
| 32 | 8°53.0 | 8°54.5 | 8°28.7 | 3.2 - 1.9 | 9.2 - 5.4 | 15.2 - 9.0 |
| 33 | 8°53.2 | 8°54.7 | 8°29.0 | 3.3 - 2.0 | 9.3 - 5.5 | 15.3 - 9.1 |
| 34 | 8°53.5 | 8°55.0 | 8°29.2 | 3.4 - 2.0 | 9.4 - 5.6 | 15.4 - 9.1 |
| 35 | 8°53.8 | 8°55.2 | 8°29.4 | 3.5 - 2.1 | 9.5 - 5.6 | 15.5 - 9.2 |
| 36 | 8°54.0 | 8°55.5 | 8°29.7 | 3.6 - 2.1 | 9.6 - 5.7 | 15.6 - 9.2 |
| 37 | 8°54.3 | 8°55.7 | 8°29.9 | 3.7 - 2.2 | 9.7 - 5.7 | 15.7 - 9.3 |
| 38 | 8°54.5 | 8°56.0 | 8°30.2 | 3.8 - 2.2 | 9.8 - 5.8 | 15.8 - 9.3 |
| 39 | 8°54.7 | 8°56.2 | 8°30.4 | 3.9 - 2.3 | 9.9 - 5.9 | 15.9 - 9.4 |
| 40 | 8°55.0 | 8°56.5 | 8°30.6 | 4.0 - 2.4 | 10.0 - 5.9 | 16.0 - 9.5 |
| 41 | 8°55.2 | 8°56.7 | 8°30.9 | 4.1 - 2.4 | 10.1 - 6.0 | 16.1 - 9.5 |
| 42 | 8°55.5 | 8°57.0 | 8°31.1 | 4.2 - 2.5 | 10.2 - 6.0 | 16.2 - 9.6 |
| 43 | 8°55.8 | 8°57.2 | 8°31.3 | 4.3 - 2.5 | 10.3 - 6.1 | 16.3 - 9.6 |
| 44 | 8°56.0 | 8°57.5 | 8°31.6 | 4.4 - 2.6 | 10.4 - 6.2 | 16.4 - 9.7 |
| 45 | 8°56.3 | 8°57.7 | 8°31.8 | 4.5 - 2.7 | 10.5 - 6.2 | 16.5 - 9.8 |
| 46 | 8°56.5 | 8°58.0 | 8°32.1 | 4.6 - 2.7 | 10.6 - 6.3 | 16.6 - 9.8 |
| 47 | 8°56.7 | 8°58.2 | 8°32.3 | 4.7 - 2.8 | 10.7 - 6.3 | 16.7 - 9.9 |
| 48 | 8°57.0 | 8°58.5 | 8°32.5 | 4.8 - 2.8 | 10.8 - 6.4 | 16.8 - 9.9 |
| 49 | 8°57.3 | 8°58.7 | 8°32.8 | 4.9 - 2.9 | 10.9 - 6.4 | 16.9 - 10.0 |
| 50 | 8°57.5 | 8°59.0 | 8°33.0 | 5.0 - 3.0 | 11.0 - 6.5 | 17.0 - 10.1 |
| 51 | 8°57.8 | 8°59.2 | 8°33.3 | 5.1 - 3.0 | 11.1 - 6.6 | 17.1 - 10.1 |
| 52 | 8°58.0 | 8°59.5 | 8°33.5 | 5.2 - 3.1 | 11.2 - 6.6 | 17.2 - 10.2 |
| 53 | 8°58.2 | 8°59.7 | 8°33.7 | 5.3 - 3.1 | 11.3 - 6.7 | 17.3 - 10.2 |
| 54 | 8°58.5 | 9°00.0 | 8°34.0 | 5.4 - 3.2 | 11.4 - 6.7 | 17.4 - 10.3 |
| 55 | 8°58.7 | 9°00.2 | 8°34.2 | 5.5 - 3.3 | 11.5 - 6.8 | 17.5 - 10.4 |
| 56 | 8°59.0 | 9°00.5 | 8°34.4 | 5.6 - 3.3 | 11.6 - 6.9 | 17.6 - 10.4 |
| 57 | 8°59.3 | 9°00.7 | 8°34.7 | 5.7 - 3.4 | 11.7 - 6.9 | 17.7 - 10.5 |
| 58 | 8°59.5 | 9°01.0 | 8°34.9 | 5.8 - 3.4 | 11.8 - 7.0 | 17.8 - 10.5 |
| 59 | 8°59.8 | 9°01.2 | 8°35.2 | 5.9 - 3.5 | 11.9 - 7.0 | 17.9 - 10.6 |

# Increments and Corrections

| m<br>36 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 9°00.0 | 9°01.5 | 8°35.4 | 0.0 - 0.0 | 6.0 - 3.6 | 12.0 - 7.3 |
| 1 | 9°00.2 | 9°01.7 | 8°35.6 | 0.1 - 0.1 | 6.1 - 3.7 | 12.1 - 7.4 |
| 2 | 9°00.5 | 9°02.0 | 8°35.9 | 0.2 - 0.1 | 6.2 - 3.8 | 12.2 - 7.4 |
| 3 | 9°00.7 | 9°02.2 | 8°36.1 | 0.3 - 0.2 | 6.3 - 3.8 | 12.3 - 7.5 |
| 4 | 9°01.0 | 9°02.5 | 8°36.4 | 0.4 - 0.2 | 6.4 - 3.9 | 12.4 - 7.5 |
| 5 | 9°01.3 | 9°02.7 | 8°36.6 | 0.5 - 0.3 | 6.5 - 4.0 | 12.5 - 7.6 |
| 6 | 9°01.5 | 9°03.0 | 8°36.8 | 0.6 - 0.4 | 6.6 - 4.0 | 12.6 - 7.7 |
| 7 | 9°01.8 | 9°03.2 | 8°37.1 | 0.7 - 0.4 | 6.7 - 4.1 | 12.7 - 7.7 |
| 8 | 9°02.0 | 9°03.5 | 8°37.3 | 0.8 - 0.5 | 6.8 - 4.1 | 12.8 - 7.8 |
| 9 | 9°02.2 | 9°03.7 | 8°37.5 | 0.9 - 0.5 | 6.9 - 4.2 | 12.9 - 7.8 |
| 10 | 9°02.5 | 9°04.0 | 8°37.8 | 1.0 - 0.6 | 7.0 - 4.3 | 13.0 - 7.9 |
| 11 | 9°02.7 | 9°04.2 | 8°38.0 | 1.1 - 0.7 | 7.1 - 4.3 | 13.1 - 8.0 |
| 12 | 9°03.0 | 9°04.5 | 8°38.3 | 1.2 - 0.7 | 7.2 - 4.4 | 13.2 - 8.0 |
| 13 | 9°03.3 | 9°04.7 | 8°38.5 | 1.3 - 0.8 | 7.3 - 4.4 | 13.3 - 8.1 |
| 14 | 9°03.5 | 9°05.0 | 8°38.7 | 1.4 - 0.9 | 7.4 - 4.5 | 13.4 - 8.2 |
| 15 | 9°03.8 | 9°05.2 | 8°39.0 | 1.5 - 0.9 | 7.5 - 4.6 | 13.5 - 8.2 |
| 16 | 9°04.0 | 9°05.5 | 8°39.2 | 1.6 - 1.0 | 7.6 - 4.6 | 13.6 - 8.3 |
| 17 | 9°04.2 | 9°05.7 | 8°39.5 | 1.7 - 1.0 | 7.7 - 4.7 | 13.7 - 8.3 |
| 18 | 9°04.5 | 9°06.0 | 8°39.7 | 1.8 - 1.1 | 7.8 - 4.7 | 13.8 - 8.4 |
| 19 | 9°04.8 | 9°06.2 | 8°39.9 | 1.9 - 1.2 | 7.9 - 4.8 | 13.9 - 8.5 |
| 20 | 9°05.0 | 9°06.5 | 8°40.2 | 2.0 - 1.2 | 8.0 - 4.9 | 14.0 - 8.5 |
| 21 | 9°05.3 | 9°06.7 | 8°40.4 | 2.1 - 1.3 | 8.1 - 4.9 | 14.1 - 8.6 |
| 22 | 9°05.5 | 9°07.0 | 8°40.6 | 2.2 - 1.3 | 8.2 - 5.0 | 14.2 - 8.6 |
| 23 | 9°05.7 | 9°07.2 | 8°40.9 | 2.3 - 1.4 | 8.3 - 5.0 | 14.3 - 8.7 |
| 24 | 9°06.0 | 9°07.5 | 8°41.1 | 2.4 - 1.5 | 8.4 - 5.1 | 14.4 - 8.8 |
| 25 | 9°06.2 | 9°07.7 | 8°41.4 | 2.5 - 1.5 | 8.5 - 5.2 | 14.5 - 8.8 |
| 26 | 9°06.5 | 9°08.0 | 8°41.6 | 2.6 - 1.6 | 8.6 - 5.2 | 14.6 - 8.9 |
| 27 | 9°06.8 | 9°08.2 | 8°41.8 | 2.7 - 1.6 | 8.7 - 5.3 | 14.7 - 8.9 |
| 28 | 9°07.0 | 9°08.5 | 8°42.1 | 2.8 - 1.7 | 8.8 - 5.4 | 14.8 - 9.0 |
| 29 | 9°07.3 | 9°08.7 | 8°42.3 | 2.9 - 1.8 | 8.9 - 5.4 | 14.9 - 9.1 |
| 30 | 9°07.5 | 9°09.0 | 8°42.6 | 3.0 - 1.8 | 9.0 - 5.5 | 15.0 - 9.1 |
| 31 | 9°07.7 | 9°09.2 | 8°42.8 | 3.1 - 1.9 | 9.1 - 5.5 | 15.1 - 9.2 |
| 32 | 9°08.0 | 9°09.5 | 8°43.0 | 3.2 - 1.9 | 9.2 - 5.6 | 15.2 - 9.2 |
| 33 | 9°08.2 | 9°09.7 | 8°43.3 | 3.3 - 2.0 | 9.3 - 5.7 | 15.3 - 9.3 |
| 34 | 9°08.5 | 9°10.0 | 8°43.5 | 3.4 - 2.1 | 9.4 - 5.7 | 15.4 - 9.4 |
| 35 | 9°08.8 | 9°10.2 | 8°43.8 | 3.5 - 2.1 | 9.5 - 5.8 | 15.5 - 9.4 |
| 36 | 9°09.0 | 9°10.5 | 8°44.0 | 3.6 - 2.2 | 9.6 - 5.8 | 15.6 - 9.5 |
| 37 | 9°09.3 | 9°10.8 | 8°44.2 | 3.7 - 2.3 | 9.7 - 5.9 | 15.7 - 9.6 |
| 38 | 9°09.5 | 9°11.0 | 8°44.5 | 3.8 - 2.3 | 9.8 - 6.0 | 15.8 - 9.6 |
| 39 | 9°09.7 | 9°11.3 | 8°44.7 | 3.9 - 2.4 | 9.9 - 6.0 | 15.9 - 9.7 |
| 40 | 9°10.0 | 9°11.5 | 8°44.9 | 4.0 - 2.4 | 10.0 - 6.1 | 16.0 - 9.7 |
| 41 | 9°10.2 | 9°11.8 | 8°45.2 | 4.1 - 2.5 | 10.1 - 6.1 | 16.1 - 9.8 |
| 42 | 9°10.5 | 9°12.0 | 8°45.4 | 4.2 - 2.6 | 10.2 - 6.2 | 16.2 - 9.9 |
| 43 | 9°10.8 | 9°12.3 | 8°45.7 | 4.3 - 2.6 | 10.3 - 6.3 | 16.3 - 9.9 |
| 44 | 9°11.0 | 9°12.5 | 8°45.9 | 4.4 - 2.7 | 10.4 - 6.3 | 16.4 - 10.0 |
| 45 | 9°11.3 | 9°12.8 | 8°46.1 | 4.5 - 2.7 | 10.5 - 6.4 | 16.5 - 10.0 |
| 46 | 9°11.5 | 9°13.0 | 8°46.4 | 4.6 - 2.8 | 10.6 - 6.4 | 16.6 - 10.1 |
| 47 | 9°11.7 | 9°13.3 | 8°46.6 | 4.7 - 2.9 | 10.7 - 6.5 | 16.7 - 10.2 |
| 48 | 9°12.0 | 9°13.5 | 8°46.9 | 4.8 - 2.9 | 10.8 - 6.6 | 16.8 - 10.2 |
| 49 | 9°12.3 | 9°13.8 | 8°47.1 | 4.9 - 3.0 | 10.9 - 6.6 | 16.9 - 10.3 |
| 50 | 9°12.5 | 9°14.0 | 8°47.3 | 5.0 - 3.0 | 11.0 - 6.7 | 17.0 - 10.3 |
| 51 | 9°12.8 | 9°14.3 | 8°47.6 | 5.1 - 3.1 | 11.1 - 6.8 | 17.1 - 10.4 |
| 52 | 9°13.0 | 9°14.5 | 8°47.8 | 5.2 - 3.2 | 11.2 - 6.8 | 17.2 - 10.5 |
| 53 | 9°13.2 | 9°14.8 | 8°48.0 | 5.3 - 3.2 | 11.3 - 6.9 | 17.3 - 10.5 |
| 54 | 9°13.5 | 9°15.0 | 8°48.3 | 5.4 - 3.3 | 11.4 - 6.9 | 17.4 - 10.6 |
| 55 | 9°13.7 | 9°15.3 | 8°48.5 | 5.5 - 3.3 | 11.5 - 7.0 | 17.5 - 10.6 |
| 56 | 9°14.0 | 9°15.5 | 8°48.8 | 5.6 - 3.4 | 11.6 - 7.1 | 17.6 - 10.7 |
| 57 | 9°14.3 | 9°15.8 | 8°49.0 | 5.7 - 3.5 | 11.7 - 7.1 | 17.7 - 10.8 |
| 58 | 9°14.5 | 9°16.0 | 8°49.2 | 5.8 - 3.5 | 11.8 - 7.2 | 17.8 - 10.8 |
| 59 | 9°14.8 | 9°16.3 | 8°49.5 | 5.9 - 3.6 | 11.9 - 7.2 | 17.9 - 10.9 |

| m<br>37 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 9°15.0 | 9°16.5 | 8°49.7 | 0.0 - 0.0 | 6.0 - 3.8 | 12.0 - 7.5 |
| 1 | 9°15.2 | 9°16.8 | 8°50.0 | 0.1 - 0.1 | 6.1 - 3.8 | 12.1 - 7.6 |
| 2 | 9°15.5 | 9°17.0 | 8°50.2 | 0.2 - 0.1 | 6.2 - 3.9 | 12.2 - 7.6 |
| 3 | 9°15.7 | 9°17.3 | 8°50.4 | 0.3 - 0.2 | 6.3 - 3.9 | 12.3 - 7.7 |
| 4 | 9°16.0 | 9°17.5 | 8°50.7 | 0.4 - 0.3 | 6.4 - 4.0 | 12.4 - 7.8 |
| 5 | 9°16.3 | 9°17.8 | 8°50.9 | 0.5 - 0.3 | 6.5 - 4.1 | 12.5 - 7.8 |
| 6 | 9°16.5 | 9°18.0 | 8°51.1 | 0.6 - 0.4 | 6.6 - 4.1 | 12.6 - 7.9 |
| 7 | 9°16.8 | 9°18.3 | 8°51.4 | 0.7 - 0.4 | 6.7 - 4.2 | 12.7 - 7.9 |
| 8 | 9°17.0 | 9°18.5 | 8°51.6 | 0.8 - 0.5 | 6.8 - 4.3 | 12.8 - 8.0 |
| 9 | 9°17.2 | 9°18.8 | 8°51.9 | 0.9 - 0.6 | 6.9 - 4.3 | 12.9 - 8.1 |
| 10 | 9°17.5 | 9°19.0 | 8°52.1 | 1.0 - 0.6 | 7.0 - 4.4 | 13.0 - 8.1 |
| 11 | 9°17.7 | 9°19.3 | 8°52.3 | 1.1 - 0.7 | 7.1 - 4.4 | 13.1 - 8.2 |
| 12 | 9°18.0 | 9°19.5 | 8°52.6 | 1.2 - 0.8 | 7.2 - 4.5 | 13.2 - 8.3 |
| 13 | 9°18.3 | 9°19.8 | 8°52.8 | 1.3 - 0.8 | 7.3 - 4.6 | 13.3 - 8.3 |
| 14 | 9°18.5 | 9°20.0 | 8°53.1 | 1.4 - 0.9 | 7.4 - 4.6 | 13.4 - 8.4 |
| 15 | 9°18.8 | 9°20.3 | 8°53.3 | 1.5 - 0.9 | 7.5 - 4.7 | 13.5 - 8.4 |
| 16 | 9°19.0 | 9°20.5 | 8°53.5 | 1.6 - 1.0 | 7.6 - 4.8 | 13.6 - 8.5 |
| 17 | 9°19.2 | 9°20.8 | 8°53.8 | 1.7 - 1.1 | 7.7 - 4.8 | 13.7 - 8.6 |
| 18 | 9°19.5 | 9°21.0 | 8°54.0 | 1.8 - 1.1 | 7.8 - 4.9 | 13.8 - 8.6 |
| 19 | 9°19.8 | 9°21.3 | 8°54.3 | 1.9 - 1.2 | 7.9 - 4.9 | 13.9 - 8.7 |
| 20 | 9°20.0 | 9°21.5 | 8°54.5 | 2.0 - 1.3 | 8.0 - 5.0 | 14.0 - 8.8 |
| 21 | 9°20.3 | 9°21.8 | 8°54.7 | 2.1 - 1.3 | 8.1 - 5.1 | 14.1 - 8.8 |
| 22 | 9°20.5 | 9°22.0 | 8°55.0 | 2.2 - 1.4 | 8.2 - 5.1 | 14.2 - 8.9 |
| 23 | 9°20.7 | 9°22.3 | 8°55.2 | 2.3 - 1.4 | 8.3 - 5.2 | 14.3 - 8.9 |
| 24 | 9°21.0 | 9°22.5 | 8°55.4 | 2.4 - 1.5 | 8.4 - 5.3 | 14.4 - 9.0 |
| 25 | 9°21.2 | 9°22.8 | 8°55.7 | 2.5 - 1.6 | 8.5 - 5.3 | 14.5 - 9.1 |
| 26 | 9°21.5 | 9°23.0 | 8°55.9 | 2.6 - 1.6 | 8.6 - 5.4 | 14.6 - 9.1 |
| 27 | 9°21.8 | 9°23.3 | 8°56.2 | 2.7 - 1.7 | 8.7 - 5.4 | 14.7 - 9.2 |
| 28 | 9°22.0 | 9°23.5 | 8°56.4 | 2.8 - 1.8 | 8.8 - 5.5 | 14.8 - 9.3 |
| 29 | 9°22.3 | 9°23.8 | 8°56.6 | 2.9 - 1.8 | 8.9 - 5.6 | 14.9 - 9.3 |
| 30 | 9°22.5 | 9°24.0 | 8°56.9 | 3.0 - 1.9 | 9.0 - 5.6 | 15.0 - 9.4 |
| 31 | 9°22.7 | 9°24.3 | 8°57.1 | 3.1 - 1.9 | 9.1 - 5.7 | 15.1 - 9.4 |
| 32 | 9°23.0 | 9°24.5 | 8°57.4 | 3.2 - 2.0 | 9.2 - 5.8 | 15.2 - 9.5 |
| 33 | 9°23.2 | 9°24.8 | 8°57.6 | 3.3 - 2.1 | 9.3 - 5.8 | 15.3 - 9.6 |
| 34 | 9°23.5 | 9°25.0 | 8°57.8 | 3.4 - 2.1 | 9.4 - 5.9 | 15.4 - 9.6 |
| 35 | 9°23.8 | 9°25.3 | 8°58.1 | 3.5 - 2.2 | 9.5 - 5.9 | 15.5 - 9.7 |
| 36 | 9°24.0 | 9°25.5 | 8°58.3 | 3.6 - 2.3 | 9.6 - 6.0 | 15.6 - 9.8 |
| 37 | 9°24.3 | 9°25.8 | 8°58.5 | 3.7 - 2.3 | 9.7 - 6.1 | 15.7 - 9.8 |
| 38 | 9°24.5 | 9°26.0 | 8°58.8 | 3.8 - 2.4 | 9.8 - 6.1 | 15.8 - 9.9 |
| 39 | 9°24.7 | 9°26.3 | 8°59.0 | 3.9 - 2.4 | 9.9 - 6.2 | 15.9 - 9.9 |
| 40 | 9°25.0 | 9°26.5 | 8°59.3 | 4.0 - 2.5 | 10.0 - 6.3 | 16.0 - 10.0 |
| 41 | 9°25.2 | 9°26.8 | 8°59.5 | 4.1 - 2.6 | 10.1 - 6.3 | 16.1 - 10.1 |
| 42 | 9°25.5 | 9°27.0 | 8°59.7 | 4.2 - 2.6 | 10.2 - 6.4 | 16.2 - 10.1 |
| 43 | 9°25.8 | 9°27.3 | 9°00.0 | 4.3 - 2.7 | 10.3 - 6.4 | 16.3 - 10.2 |
| 44 | 9°26.0 | 9°27.5 | 9°00.2 | 4.4 - 2.8 | 10.4 - 6.5 | 16.4 - 10.3 |
| 45 | 9°26.3 | 9°27.8 | 9°00.5 | 4.5 - 2.8 | 10.5 - 6.6 | 16.5 - 10.3 |
| 46 | 9°26.5 | 9°28.0 | 9°00.7 | 4.6 - 2.9 | 10.6 - 6.6 | 16.6 - 10.4 |
| 47 | 9°26.7 | 9°28.3 | 9°00.9 | 4.7 - 2.9 | 10.7 - 6.7 | 16.7 - 10.4 |
| 48 | 9°27.0 | 9°28.5 | 9°01.2 | 4.8 - 3.0 | 10.8 - 6.8 | 16.8 - 10.5 |
| 49 | 9°27.3 | 9°28.8 | 9°01.4 | 4.9 - 3.1 | 10.9 - 6.8 | 16.9 - 10.6 |
| 50 | 9°27.5 | 9°29.1 | 9°01.6 | 5.0 - 3.1 | 11.0 - 6.9 | 17.0 - 10.6 |
| 51 | 9°27.8 | 9°29.3 | 9°01.9 | 5.1 - 3.2 | 11.1 - 6.9 | 17.1 - 10.7 |
| 52 | 9°28.0 | 9°29.6 | 9°02.1 | 5.2 - 3.3 | 11.2 - 7.0 | 17.2 - 10.8 |
| 53 | 9°28.2 | 9°29.8 | 9°02.4 | 5.3 - 3.3 | 11.3 - 7.1 | 17.3 - 10.8 |
| 54 | 9°28.5 | 9°30.1 | 9°02.6 | 5.4 - 3.4 | 11.4 - 7.1 | 17.4 - 10.9 |
| 55 | 9°28.7 | 9°30.3 | 9°02.8 | 5.5 - 3.4 | 11.5 - 7.2 | 17.5 - 10.9 |
| 56 | 9°29.0 | 9°30.6 | 9°03.1 | 5.6 - 3.5 | 11.6 - 7.3 | 17.6 - 11.0 |
| 57 | 9°29.3 | 9°30.8 | 9°03.3 | 5.7 - 3.6 | 11.7 - 7.3 | 17.7 - 11.1 |
| 58 | 9°29.5 | 9°31.1 | 9°03.6 | 5.8 - 3.6 | 11.8 - 7.4 | 17.8 - 11.1 |
| 59 | 9°29.8 | 9°31.3 | 9°03.8 | 5.9 - 3.7 | 11.9 - 7.4 | 17.9 - 11.2 |

| m<br>38 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 9°30.0 | 9°31.6 | 9°04.0 | 0.0 - 0.0 | 6.0 - 3.9 | 12.0 - 7.7 |
| 1 | 9°30.2 | 9°31.8 | 9°04.3 | 0.1 - 0.1 | 6.1 - 3.9 | 12.1 - 7.8 |
| 2 | 9°30.5 | 9°32.1 | 9°04.5 | 0.2 - 0.1 | 6.2 - 4.0 | 12.2 - 7.8 |
| 3 | 9°30.7 | 9°32.3 | 9°04.7 | 0.3 - 0.2 | 6.3 - 4.0 | 12.3 - 7.9 |
| 4 | 9°31.0 | 9°32.6 | 9°05.0 | 0.4 - 0.3 | 6.4 - 4.1 | 12.4 - 8.0 |
| 5 | 9°31.3 | 9°32.8 | 9°05.2 | 0.5 - 0.3 | 6.5 - 4.2 | 12.5 - 8.0 |
| 6 | 9°31.5 | 9°33.1 | 9°05.5 | 0.6 - 0.4 | 6.6 - 4.2 | 12.6 - 8.1 |
| 7 | 9°31.8 | 9°33.3 | 9°05.7 | 0.7 - 0.4 | 6.7 - 4.3 | 12.7 - 8.1 |
| 8 | 9°32.0 | 9°33.6 | 9°05.9 | 0.8 - 0.5 | 6.8 - 4.4 | 12.8 - 8.2 |
| 9 | 9°32.2 | 9°33.8 | 9°06.2 | 0.9 - 0.6 | 6.9 - 4.4 | 12.9 - 8.3 |
| 10 | 9°32.5 | 9°34.1 | 9°06.4 | 1.0 - 0.6 | 7.0 - 4.5 | 13.0 - 8.3 |
| 11 | 9°32.7 | 9°34.3 | 9°06.7 | 1.1 - 0.7 | 7.1 - 4.6 | 13.1 - 8.4 |
| 12 | 9°33.0 | 9°34.6 | 9°06.9 | 1.2 - 0.8 | 7.2 - 4.6 | 13.2 - 8.5 |
| 13 | 9°33.3 | 9°34.8 | 9°07.1 | 1.3 - 0.8 | 7.3 - 4.7 | 13.3 - 8.5 |
| 14 | 9°33.5 | 9°35.1 | 9°07.4 | 1.4 - 0.9 | 7.4 - 4.7 | 13.4 - 8.6 |
| 15 | 9°33.8 | 9°35.3 | 9°07.6 | 1.5 - 1.0 | 7.5 - 4.8 | 13.5 - 8.7 |
| 16 | 9°34.0 | 9°35.6 | 9°07.9 | 1.6 - 1.0 | 7.6 - 4.9 | 13.6 - 8.7 |
| 17 | 9°34.2 | 9°35.8 | 9°08.1 | 1.7 - 1.1 | 7.7 - 4.9 | 13.7 - 8.8 |
| 18 | 9°34.5 | 9°36.1 | 9°08.3 | 1.8 - 1.2 | 7.8 - 5.0 | 13.8 - 8.9 |
| 19 | 9°34.8 | 9°36.3 | 9°08.6 | 1.9 - 1.2 | 7.9 - 5.1 | 13.9 - 8.9 |
| 20 | 9°35.0 | 9°36.6 | 9°08.8 | 2.0 - 1.3 | 8.0 - 5.1 | 14.0 - 9.0 |
| 21 | 9°35.3 | 9°36.8 | 9°09.0 | 2.1 - 1.3 | 8.1 - 5.2 | 14.1 - 9.0 |
| 22 | 9°35.5 | 9°37.1 | 9°09.3 | 2.2 - 1.4 | 8.2 - 5.3 | 14.2 - 9.1 |
| 23 | 9°35.7 | 9°37.3 | 9°09.5 | 2.3 - 1.5 | 8.3 - 5.3 | 14.3 - 9.2 |
| 24 | 9°36.0 | 9°37.6 | 9°09.8 | 2.4 - 1.5 | 8.4 - 5.4 | 14.4 - 9.2 |
| 25 | 9°36.2 | 9°37.8 | 9°10.0 | 2.5 - 1.6 | 8.5 - 5.5 | 14.5 - 9.3 |
| 26 | 9°36.5 | 9°38.1 | 9°10.2 | 2.6 - 1.7 | 8.6 - 5.5 | 14.6 - 9.4 |
| 27 | 9°36.8 | 9°38.3 | 9°10.5 | 2.7 - 1.7 | 8.7 - 5.6 | 14.7 - 9.4 |
| 28 | 9°37.0 | 9°38.6 | 9°10.7 | 2.8 - 1.8 | 8.8 - 5.6 | 14.8 - 9.5 |
| 29 | 9°37.3 | 9°38.8 | 9°11.0 | 2.9 - 1.9 | 8.9 - 5.7 | 14.9 - 9.6 |
| 30 | 9°37.5 | 9°39.1 | 9°11.2 | 3.0 - 1.9 | 9.0 - 5.8 | 15.0 - 9.6 |
| 31 | 9°37.7 | 9°39.3 | 9°11.4 | 3.1 - 2.0 | 9.1 - 5.8 | 15.1 - 9.7 |
| 32 | 9°38.0 | 9°39.6 | 9°11.7 | 3.2 - 2.1 | 9.2 - 5.9 | 15.2 - 9.8 |
| 33 | 9°38.2 | 9°39.8 | 9°11.9 | 3.3 - 2.1 | 9.3 - 6.0 | 15.3 - 9.8 |
| 34 | 9°38.5 | 9°40.1 | 9°12.1 | 3.4 - 2.2 | 9.4 - 6.0 | 15.4 - 9.9 |
| 35 | 9°38.8 | 9°40.3 | 9°12.4 | 3.5 - 2.2 | 9.5 - 6.1 | 15.5 - 9.9 |
| 36 | 9°39.0 | 9°40.6 | 9°12.6 | 3.6 - 2.3 | 9.6 - 6.2 | 15.6 - 10.0 |
| 37 | 9°39.3 | 9°40.8 | 9°12.9 | 3.7 - 2.4 | 9.7 - 6.2 | 15.7 - 10.1 |
| 38 | 9°39.5 | 9°41.1 | 9°13.1 | 3.8 - 2.4 | 9.8 - 6.3 | 15.8 - 10.1 |
| 39 | 9°39.7 | 9°41.3 | 9°13.3 | 3.9 - 2.5 | 9.9 - 6.4 | 15.9 - 10.2 |
| 40 | 9°40.0 | 9°41.6 | 9°13.6 | 4.0 - 2.6 | 10.0 - 6.4 | 16.0 - 10.3 |
| 41 | 9°40.2 | 9°41.8 | 9°13.8 | 4.1 - 2.6 | 10.1 - 6.5 | 16.1 - 10.3 |
| 42 | 9°40.5 | 9°42.1 | 9°14.1 | 4.2 - 2.7 | 10.2 - 6.5 | 16.2 - 10.4 |
| 43 | 9°40.8 | 9°42.3 | 9°14.3 | 4.3 - 2.8 | 10.3 - 6.6 | 16.3 - 10.5 |
| 44 | 9°41.0 | 9°42.6 | 9°14.5 | 4.4 - 2.8 | 10.4 - 6.7 | 16.4 - 10.5 |
| 45 | 9°41.3 | 9°42.8 | 9°14.8 | 4.5 - 2.9 | 10.5 - 6.7 | 16.5 - 10.6 |
| 46 | 9°41.5 | 9°43.1 | 9°15.0 | 4.6 - 3.0 | 10.6 - 6.8 | 16.6 - 10.7 |
| 47 | 9°41.7 | 9°43.3 | 9°15.2 | 4.7 - 3.0 | 10.7 - 6.9 | 16.7 - 10.7 |
| 48 | 9°42.0 | 9°43.6 | 9°15.5 | 4.8 - 3.1 | 10.8 - 6.9 | 16.8 - 10.8 |
| 49 | 9°42.3 | 9°43.8 | 9°15.7 | 4.9 - 3.1 | 10.9 - 7.0 | 16.9 - 10.8 |
| 50 | 9°42.5 | 9°44.1 | 9°16.0 | 5.0 - 3.2 | 11.0 - 7.1 | 17.0 - 10.9 |
| 51 | 9°42.8 | 9°44.3 | 9°16.2 | 5.1 - 3.3 | 11.1 - 7.1 | 17.1 - 11.0 |
| 52 | 9°43.0 | 9°44.6 | 9°16.4 | 5.2 - 3.3 | 11.2 - 7.2 | 17.2 - 11.0 |
| 53 | 9°43.2 | 9°44.8 | 9°16.7 | 5.3 - 3.4 | 11.3 - 7.3 | 17.3 - 11.1 |
| 54 | 9°43.5 | 9°45.1 | 9°16.9 | 5.4 - 3.5 | 11.4 - 7.3 | 17.4 - 11.2 |
| 55 | 9°43.7 | 9°45.3 | 9°17.2 | 5.5 - 3.5 | 11.5 - 7.4 | 17.5 - 11.2 |
| 56 | 9°44.0 | 9°45.6 | 9°17.4 | 5.6 - 3.6 | 11.6 - 7.4 | 17.6 - 11.3 |
| 57 | 9°44.3 | 9°45.8 | 9°17.6 | 5.7 - 3.7 | 11.7 - 7.5 | 17.7 - 11.4 |
| 58 | 9°44.5 | 9°46.1 | 9°17.9 | 5.8 - 3.7 | 11.8 - 7.6 | 17.8 - 11.4 |
| 59 | 9°44.8 | 9°46.3 | 9°18.1 | 5.9 - 3.8 | 11.9 - 7.6 | 17.9 - 11.5 |

# Increments and Corrections

| m 39 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 9°45.0 | 9°46.6 | 9°18.4 | 0.0 - 0.0 | 6.0 - 4.0 | 12.0 - 7.9 |
| 1 | 9°45.2 | 9°46.8 | 9°18.6 | 0.1 - 0.1 | 6.1 - 4.0 | 12.1 - 8.0 |
| 2 | 9°45.5 | 9°47.1 | 9°18.8 | 0.2 - 0.1 | 6.2 - 4.1 | 12.2 - 8.0 |
| 3 | 9°45.7 | 9°47.4 | 9°19.1 | 0.3 - 0.2 | 6.3 - 4.1 | 12.3 - 8.1 |
| 4 | 9°46.0 | 9°47.6 | 9°19.3 | 0.4 - 0.3 | 6.4 - 4.2 | 12.4 - 8.2 |
| 5 | 9°46.3 | 9°47.9 | 9°19.5 | 0.5 - 0.3 | 6.5 - 4.3 | 12.5 - 8.2 |
| 6 | 9°46.5 | 9°48.1 | 9°19.8 | 0.6 - 0.4 | 6.6 - 4.3 | 12.6 - 8.3 |
| 7 | 9°46.8 | 9°48.4 | 9°20.0 | 0.7 - 0.5 | 6.7 - 4.4 | 12.7 - 8.4 |
| 8 | 9°47.0 | 9°48.6 | 9°20.3 | 0.8 - 0.5 | 6.8 - 4.5 | 12.8 - 8.4 |
| 9 | 9°47.2 | 9°48.9 | 9°20.5 | 0.9 - 0.6 | 6.9 - 4.5 | 12.9 - 8.5 |
| 10 | 9°47.5 | 9°49.1 | 9°20.7 | 1.0 - 0.7 | 7.0 - 4.6 | 13.0 - 8.6 |
| 11 | 9°47.7 | 9°49.4 | 9°21.0 | 1.1 - 0.7 | 7.1 - 4.7 | 13.1 - 8.6 |
| 12 | 9°48.0 | 9°49.6 | 9°21.2 | 1.2 - 0.8 | 7.2 - 4.7 | 13.2 - 8.7 |
| 13 | 9°48.3 | 9°49.9 | 9°21.5 | 1.3 - 0.9 | 7.3 - 4.8 | 13.3 - 8.8 |
| 14 | 9°48.5 | 9°50.1 | 9°21.7 | 1.4 - 0.9 | 7.4 - 4.9 | 13.4 - 8.8 |
| 15 | 9°48.8 | 9°50.4 | 9°21.9 | 1.5 - 1.0 | 7.5 - 4.9 | 13.5 - 8.9 |
| 16 | 9°49.0 | 9°50.6 | 9°22.2 | 1.6 - 1.1 | 7.6 - 5.0 | 13.6 - 9.0 |
| 17 | 9°49.2 | 9°50.9 | 9°22.4 | 1.7 - 1.1 | 7.7 - 5.1 | 13.7 - 9.0 |
| 18 | 9°49.5 | 9°51.1 | 9°22.6 | 1.8 - 1.2 | 7.8 - 5.1 | 13.8 - 9.1 |
| 19 | 9°49.8 | 9°51.4 | 9°22.9 | 1.9 - 1.3 | 7.9 - 5.2 | 13.9 - 9.2 |
| 20 | 9°50.0 | 9°51.6 | 9°23.1 | 2.0 - 1.3 | 8.0 - 5.3 | 14.0 - 9.2 |
| 21 | 9°50.3 | 9°51.9 | 9°23.4 | 2.1 - 1.4 | 8.1 - 5.3 | 14.1 - 9.3 |
| 22 | 9°50.5 | 9°52.1 | 9°23.6 | 2.2 - 1.4 | 8.2 - 5.4 | 14.2 - 9.3 |
| 23 | 9°50.7 | 9°52.4 | 9°23.8 | 2.3 - 1.5 | 8.3 - 5.5 | 14.3 - 9.4 |
| 24 | 9°51.0 | 9°52.6 | 9°24.1 | 2.4 - 1.6 | 8.4 - 5.5 | 14.4 - 9.5 |
| 25 | 9°51.2 | 9°52.9 | 9°24.3 | 2.5 - 1.6 | 8.5 - 5.6 | 14.5 - 9.5 |
| 26 | 9°51.5 | 9°53.1 | 9°24.6 | 2.6 - 1.7 | 8.6 - 5.7 | 14.6 - 9.6 |
| 27 | 9°51.8 | 9°53.4 | 9°24.8 | 2.7 - 1.8 | 8.7 - 5.7 | 14.7 - 9.7 |
| 28 | 9°52.0 | 9°53.6 | 9°25.0 | 2.8 - 1.8 | 8.8 - 5.8 | 14.8 - 9.7 |
| 29 | 9°52.3 | 9°53.9 | 9°25.3 | 2.9 - 1.9 | 8.9 - 5.9 | 14.9 - 9.8 |
| 30 | 9°52.5 | 9°54.1 | 9°25.5 | 3.0 - 2.0 | 9.0 - 5.9 | 15.0 - 9.9 |
| 31 | 9°52.7 | 9°54.4 | 9°25.7 | 3.1 - 2.0 | 9.1 - 6.0 | 15.1 - 9.9 |
| 32 | 9°53.0 | 9°54.6 | 9°26.0 | 3.2 - 2.1 | 9.2 - 6.1 | 15.2 - 10.0 |
| 33 | 9°53.2 | 9°54.9 | 9°26.2 | 3.3 - 2.2 | 9.3 - 6.1 | 15.3 - 10.1 |
| 34 | 9°53.5 | 9°55.1 | 9°26.5 | 3.4 - 2.2 | 9.4 - 6.2 | 15.4 - 10.1 |
| 35 | 9°53.8 | 9°55.4 | 9°26.7 | 3.5 - 2.3 | 9.5 - 6.3 | 15.5 - 10.2 |
| 36 | 9°54.0 | 9°55.6 | 9°26.9 | 3.6 - 2.4 | 9.6 - 6.3 | 15.6 - 10.3 |
| 37 | 9°54.3 | 9°55.9 | 9°27.2 | 3.7 - 2.4 | 9.7 - 6.4 | 15.7 - 10.3 |
| 38 | 9°54.5 | 9°56.1 | 9°27.4 | 3.8 - 2.5 | 9.8 - 6.5 | 15.8 - 10.4 |
| 39 | 9°54.7 | 9°56.4 | 9°27.7 | 3.9 - 2.6 | 9.9 - 6.5 | 15.9 - 10.5 |
| 40 | 9°55.0 | 9°56.6 | 9°27.9 | 4.0 - 2.6 | 10.0 - 6.6 | 16.0 - 10.5 |
| 41 | 9°55.2 | 9°56.9 | 9°28.1 | 4.1 - 2.7 | 10.1 - 6.6 | 16.1 - 10.6 |
| 42 | 9°55.5 | 9°57.1 | 9°28.4 | 4.2 - 2.8 | 10.2 - 6.7 | 16.2 - 10.7 |
| 43 | 9°55.8 | 9°57.4 | 9°28.6 | 4.3 - 2.8 | 10.3 - 6.8 | 16.3 - 10.7 |
| 44 | 9°56.0 | 9°57.6 | 9°28.8 | 4.4 - 2.9 | 10.4 - 6.8 | 16.4 - 10.8 |
| 45 | 9°56.3 | 9°57.9 | 9°29.1 | 4.5 - 3.0 | 10.5 - 6.9 | 16.5 - 10.9 |
| 46 | 9°56.5 | 9°58.1 | 9°29.3 | 4.6 - 3.0 | 10.6 - 7.0 | 16.6 - 10.9 |
| 47 | 9°56.7 | 9°58.4 | 9°29.6 | 4.7 - 3.1 | 10.7 - 7.0 | 16.7 - 11.0 |
| 48 | 9°57.0 | 9°58.6 | 9°29.8 | 4.8 - 3.2 | 10.8 - 7.1 | 16.8 - 11.1 |
| 49 | 9°57.3 | 9°58.9 | 9°30.0 | 4.9 - 3.2 | 10.9 - 7.2 | 16.9 - 11.1 |
| 50 | 9°57.5 | 9°59.1 | 9°30.3 | 5.0 - 3.3 | 11.0 - 7.2 | 17.0 - 11.2 |
| 51 | 9°57.8 | 9°59.4 | 9°30.5 | 5.1 - 3.4 | 11.1 - 7.3 | 17.1 - 11.3 |
| 52 | 9°58.0 | 9°59.6 | 9°30.8 | 5.2 - 3.4 | 11.2 - 7.4 | 17.2 - 11.3 |
| 53 | 9°58.2 | 9°59.9 | 9°31.0 | 5.3 - 3.5 | 11.3 - 7.4 | 17.3 - 11.4 |
| 54 | 9°58.5 | 10°00.1 | 9°31.2 | 5.4 - 3.6 | 11.4 - 7.5 | 17.4 - 11.5 |
| 55 | 9°58.7 | 10°00.4 | 9°31.5 | 5.5 - 3.6 | 11.5 - 7.6 | 17.5 - 11.5 |
| 56 | 9°59.0 | 10°00.6 | 9°31.7 | 5.6 - 3.7 | 11.6 - 7.6 | 17.6 - 11.6 |
| 57 | 9°59.3 | 10°00.9 | 9°32.0 | 5.7 - 3.8 | 11.7 - 7.7 | 17.7 - 11.7 |
| 58 | 9°59.5 | 10°01.1 | 9°32.2 | 5.8 - 3.8 | 11.8 - 7.8 | 17.8 - 11.7 |
| 59 | 9°59.8 | 10°01.4 | 9°32.4 | 5.9 - 3.9 | 11.9 - 7.8 | 17.9 - 11.8 |

| m 40 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 10°00.0 | 10°01.6 | 9°32.7 | 0.0 - 0.0 | 6.0 - 4.1 | 12.0 - 8.1 |
| 1 | 10°00.2 | 10°01.9 | 9°32.9 | 0.1 - 0.1 | 6.1 - 4.1 | 12.1 - 8.2 |
| 2 | 10°00.5 | 10°02.1 | 9°33.1 | 0.2 - 0.1 | 6.2 - 4.2 | 12.2 - 8.2 |
| 3 | 10°00.7 | 10°02.4 | 9°33.4 | 0.3 - 0.2 | 6.3 - 4.3 | 12.3 - 8.3 |
| 4 | 10°01.0 | 10°02.6 | 9°33.6 | 0.4 - 0.3 | 6.4 - 4.3 | 12.4 - 8.4 |
| 5 | 10°01.3 | 10°02.9 | 9°33.9 | 0.5 - 0.3 | 6.5 - 4.4 | 12.5 - 8.4 |
| 6 | 10°01.5 | 10°03.1 | 9°34.1 | 0.6 - 0.4 | 6.6 - 4.5 | 12.6 - 8.5 |
| 7 | 10°01.8 | 10°03.4 | 9°34.3 | 0.7 - 0.5 | 6.7 - 4.5 | 12.7 - 8.6 |
| 8 | 10°02.0 | 10°03.6 | 9°34.6 | 0.8 - 0.5 | 6.8 - 4.6 | 12.8 - 8.6 |
| 9 | 10°02.2 | 10°03.9 | 9°34.8 | 0.9 - 0.6 | 6.9 - 4.7 | 12.9 - 8.7 |
| 10 | 10°02.5 | 10°04.1 | 9°35.1 | 1.0 - 0.7 | 7.0 - 4.7 | 13.0 - 8.8 |
| 11 | 10°02.7 | 10°04.4 | 9°35.3 | 1.1 - 0.7 | 7.1 - 4.8 | 13.1 - 8.8 |
| 12 | 10°03.0 | 10°04.6 | 9°35.5 | 1.2 - 0.8 | 7.2 - 4.9 | 13.2 - 8.9 |
| 13 | 10°03.3 | 10°04.9 | 9°35.8 | 1.3 - 0.9 | 7.3 - 4.9 | 13.3 - 9.0 |
| 14 | 10°03.5 | 10°05.1 | 9°36.0 | 1.4 - 0.9 | 7.4 - 5.0 | 13.4 - 9.0 |
| 15 | 10°03.8 | 10°05.4 | 9°36.2 | 1.5 - 1.0 | 7.5 - 5.1 | 13.5 - 9.1 |
| 16 | 10°04.0 | 10°05.7 | 9°36.5 | 1.6 - 1.1 | 7.6 - 5.1 | 13.6 - 9.2 |
| 17 | 10°04.2 | 10°05.9 | 9°36.7 | 1.7 - 1.1 | 7.7 - 5.2 | 13.7 - 9.2 |
| 18 | 10°04.5 | 10°06.2 | 9°37.0 | 1.8 - 1.2 | 7.8 - 5.3 | 13.8 - 9.3 |
| 19 | 10°04.8 | 10°06.4 | 9°37.2 | 1.9 - 1.3 | 7.9 - 5.3 | 13.9 - 9.4 |
| 20 | 10°05.0 | 10°06.7 | 9°37.4 | 2.0 - 1.4 | 8.0 - 5.4 | 14.0 - 9.5 |
| 21 | 10°05.3 | 10°06.9 | 9°37.7 | 2.1 - 1.4 | 8.1 - 5.5 | 14.1 - 9.5 |
| 22 | 10°05.5 | 10°07.2 | 9°37.9 | 2.2 - 1.5 | 8.2 - 5.5 | 14.2 - 9.6 |
| 23 | 10°05.7 | 10°07.4 | 9°38.2 | 2.3 - 1.6 | 8.3 - 5.6 | 14.3 - 9.7 |
| 24 | 10°06.0 | 10°07.7 | 9°38.4 | 2.4 - 1.6 | 8.4 - 5.7 | 14.4 - 9.7 |
| 25 | 10°06.2 | 10°07.9 | 9°38.6 | 2.5 - 1.7 | 8.5 - 5.7 | 14.5 - 9.8 |
| 26 | 10°06.5 | 10°08.2 | 9°38.9 | 2.6 - 1.8 | 8.6 - 5.8 | 14.6 - 9.9 |
| 27 | 10°06.8 | 10°08.4 | 9°39.1 | 2.7 - 1.8 | 8.7 - 5.9 | 14.7 - 9.9 |
| 28 | 10°07.0 | 10°08.7 | 9°39.3 | 2.8 - 1.9 | 8.8 - 5.9 | 14.8 - 10.0 |
| 29 | 10°07.3 | 10°08.9 | 9°39.6 | 2.9 - 2.0 | 8.9 - 6.0 | 14.9 - 10.1 |
| 30 | 10°07.5 | 10°09.2 | 9°39.8 | 3.0 - 2.0 | 9.0 - 6.1 | 15.0 - 10.1 |
| 31 | 10°07.7 | 10°09.4 | 9°40.1 | 3.1 - 2.1 | 9.1 - 6.1 | 15.1 - 10.2 |
| 32 | 10°08.0 | 10°09.7 | 9°40.3 | 3.2 - 2.2 | 9.2 - 6.2 | 15.2 - 10.3 |
| 33 | 10°08.2 | 10°09.9 | 9°40.5 | 3.3 - 2.2 | 9.3 - 6.3 | 15.3 - 10.3 |
| 34 | 10°08.5 | 10°10.2 | 9°40.8 | 3.4 - 2.3 | 9.4 - 6.3 | 15.4 - 10.4 |
| 35 | 10°08.8 | 10°10.4 | 9°41.0 | 3.5 - 2.4 | 9.5 - 6.4 | 15.5 - 10.5 |
| 36 | 10°09.0 | 10°10.7 | 9°41.3 | 3.6 - 2.4 | 9.6 - 6.5 | 15.6 - 10.5 |
| 37 | 10°09.3 | 10°10.9 | 9°41.5 | 3.7 - 2.5 | 9.7 - 6.5 | 15.7 - 10.6 |
| 38 | 10°09.5 | 10°11.2 | 9°41.7 | 3.8 - 2.6 | 9.8 - 6.6 | 15.8 - 10.7 |
| 39 | 10°09.7 | 10°11.4 | 9°42.0 | 3.9 - 2.6 | 9.9 - 6.7 | 15.9 - 10.7 |
| 40 | 10°10.0 | 10°11.7 | 9°42.2 | 4.0 - 2.7 | 10.0 - 6.8 | 16.0 - 10.8 |
| 41 | 10°10.2 | 10°11.9 | 9°42.4 | 4.1 - 2.8 | 10.1 - 6.8 | 16.1 - 10.9 |
| 42 | 10°10.5 | 10°12.2 | 9°42.7 | 4.2 - 2.8 | 10.2 - 6.9 | 16.2 - 10.9 |
| 43 | 10°10.8 | 10°12.4 | 9°42.9 | 4.3 - 2.9 | 10.3 - 7.0 | 16.3 - 11.0 |
| 44 | 10°11.0 | 10°12.7 | 9°43.2 | 4.4 - 3.0 | 10.4 - 7.0 | 16.4 - 11.1 |
| 45 | 10°11.3 | 10°12.9 | 9°43.4 | 4.5 - 3.0 | 10.5 - 7.1 | 16.5 - 11.1 |
| 46 | 10°11.5 | 10°13.2 | 9°43.6 | 4.6 - 3.1 | 10.6 - 7.2 | 16.6 - 11.2 |
| 47 | 10°11.7 | 10°13.4 | 9°43.9 | 4.7 - 3.2 | 10.7 - 7.2 | 16.7 - 11.3 |
| 48 | 10°12.0 | 10°13.7 | 9°44.1 | 4.8 - 3.2 | 10.8 - 7.3 | 16.8 - 11.3 |
| 49 | 10°12.3 | 10°13.9 | 9°44.4 | 4.9 - 3.3 | 10.9 - 7.4 | 16.9 - 11.4 |
| 50 | 10°12.5 | 10°14.2 | 9°44.6 | 5.0 - 3.4 | 11.0 - 7.4 | 17.0 - 11.5 |
| 51 | 10°12.8 | 10°14.4 | 9°44.8 | 5.1 - 3.4 | 11.1 - 7.5 | 17.1 - 11.5 |
| 52 | 10°13.0 | 10°14.7 | 9°45.1 | 5.2 - 3.5 | 11.2 - 7.6 | 17.2 - 11.6 |
| 53 | 10°13.2 | 10°14.9 | 9°45.3 | 5.3 - 3.6 | 11.3 - 7.6 | 17.3 - 11.7 |
| 54 | 10°13.5 | 10°15.2 | 9°45.6 | 5.4 - 3.6 | 11.4 - 7.7 | 17.4 - 11.7 |
| 55 | 10°13.7 | 10°15.4 | 9°45.8 | 5.5 - 3.7 | 11.5 - 7.8 | 17.5 - 11.8 |
| 56 | 10°14.0 | 10°15.7 | 9°46.0 | 5.6 - 3.8 | 11.6 - 7.8 | 17.6 - 11.9 |
| 57 | 10°14.3 | 10°15.9 | 9°46.3 | 5.7 - 3.8 | 11.7 - 7.9 | 17.7 - 11.9 |
| 58 | 10°14.5 | 10°16.2 | 9°46.5 | 5.8 - 3.9 | 11.8 - 8.0 | 17.8 - 12.0 |
| 59 | 10°14.8 | 10°16.4 | 9°46.7 | 5.9 - 4.0 | 11.9 - 8.0 | 17.9 - 12.1 |

| m 41 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 10°15.0 | 10°16.7 | 9°47.0 | 0.0 - 0.0 | 6.0 - 4.2 | 12.0 - 8.3 |
| 1 | 10°15.2 | 10°16.9 | 9°47.2 | 0.1 - 0.1 | 6.1 - 4.2 | 12.1 - 8.4 |
| 2 | 10°15.5 | 10°17.2 | 9°47.5 | 0.2 - 0.1 | 6.2 - 4.3 | 12.2 - 8.4 |
| 3 | 10°15.7 | 10°17.4 | 9°47.7 | 0.3 - 0.2 | 6.3 - 4.4 | 12.3 - 8.5 |
| 4 | 10°16.0 | 10°17.7 | 9°47.9 | 0.4 - 0.3 | 6.4 - 4.4 | 12.4 - 8.6 |
| 5 | 10°16.3 | 10°17.9 | 9°48.2 | 0.5 - 0.3 | 6.5 - 4.5 | 12.5 - 8.6 |
| 6 | 10°16.5 | 10°18.2 | 9°48.4 | 0.6 - 0.4 | 6.6 - 4.6 | 12.6 - 8.7 |
| 7 | 10°16.8 | 10°18.4 | 9°48.7 | 0.7 - 0.5 | 6.7 - 4.6 | 12.7 - 8.8 |
| 8 | 10°17.0 | 10°18.7 | 9°48.9 | 0.8 - 0.6 | 6.8 - 4.7 | 12.8 - 8.9 |
| 9 | 10°17.2 | 10°18.9 | 9°49.1 | 0.9 - 0.6 | 6.9 - 4.8 | 12.9 - 8.9 |
| 10 | 10°17.5 | 10°19.2 | 9°49.4 | 1.0 - 0.7 | 7.0 - 4.8 | 13.0 - 9.0 |
| 11 | 10°17.7 | 10°19.4 | 9°49.6 | 1.1 - 0.8 | 7.1 - 4.9 | 13.1 - 9.1 |
| 12 | 10°18.0 | 10°19.7 | 9°49.8 | 1.2 - 0.8 | 7.2 - 5.0 | 13.2 - 9.1 |
| 13 | 10°18.3 | 10°19.9 | 9°50.1 | 1.3 - 0.9 | 7.3 - 5.0 | 13.3 - 9.2 |
| 14 | 10°18.5 | 10°20.2 | 9°50.3 | 1.4 - 1.0 | 7.4 - 5.1 | 13.4 - 9.3 |
| 15 | 10°18.8 | 10°20.4 | 9°50.6 | 1.5 - 1.0 | 7.5 - 5.2 | 13.5 - 9.3 |
| 16 | 10°19.0 | 10°20.7 | 9°50.8 | 1.6 - 1.1 | 7.6 - 5.3 | 13.6 - 9.4 |
| 17 | 10°19.2 | 10°20.9 | 9°51.0 | 1.7 - 1.2 | 7.7 - 5.3 | 13.7 - 9.5 |
| 18 | 10°19.5 | 10°21.2 | 9°51.3 | 1.8 - 1.2 | 7.8 - 5.4 | 13.8 - 9.5 |
| 19 | 10°19.8 | 10°21.4 | 9°51.5 | 1.9 - 1.3 | 7.9 - 5.5 | 13.9 - 9.6 |
| 20 | 10°20.0 | 10°21.7 | 9°51.8 | 2.0 - 1.4 | 8.0 - 5.5 | 14.0 - 9.7 |
| 21 | 10°20.3 | 10°21.9 | 9°52.0 | 2.1 - 1.5 | 8.1 - 5.6 | 14.1 - 9.8 |
| 22 | 10°20.5 | 10°22.2 | 9°52.2 | 2.2 - 1.5 | 8.2 - 5.7 | 14.2 - 9.8 |
| 23 | 10°20.7 | 10°22.4 | 9°52.5 | 2.3 - 1.6 | 8.3 - 5.7 | 14.3 - 9.9 |
| 24 | 10°21.0 | 10°22.7 | 9°52.7 | 2.4 - 1.7 | 8.4 - 5.8 | 14.4 - 10.0 |
| 25 | 10°21.2 | 10°22.9 | 9°52.9 | 2.5 - 1.7 | 8.5 - 5.9 | 14.5 - 10.0 |
| 26 | 10°21.5 | 10°23.2 | 9°53.2 | 2.6 - 1.8 | 8.6 - 5.9 | 14.6 - 10.1 |
| 27 | 10°21.8 | 10°23.4 | 9°53.4 | 2.7 - 1.9 | 8.7 - 6.0 | 14.7 - 10.2 |
| 28 | 10°22.0 | 10°23.7 | 9°53.7 | 2.8 - 1.9 | 8.8 - 6.1 | 14.8 - 10.2 |
| 29 | 10°22.3 | 10°24.0 | 9°53.9 | 2.9 - 2.0 | 8.9 - 6.2 | 14.9 - 10.3 |
| 30 | 10°22.5 | 10°24.2 | 9°54.1 | 3.0 - 2.1 | 9.0 - 6.2 | 15.0 - 10.4 |
| 31 | 10°22.7 | 10°24.5 | 9°54.4 | 3.1 - 2.1 | 9.1 - 6.3 | 15.1 - 10.4 |
| 32 | 10°23.0 | 10°24.7 | 9°54.6 | 3.2 - 2.2 | 9.2 - 6.4 | 15.2 - 10.5 |
| 33 | 10°23.2 | 10°25.0 | 9°54.9 | 3.3 - 2.3 | 9.3 - 6.4 | 15.3 - 10.6 |
| 34 | 10°23.5 | 10°25.2 | 9°55.1 | 3.4 - 2.4 | 9.4 - 6.5 | 15.4 - 10.7 |
| 35 | 10°23.8 | 10°25.5 | 9°55.3 | 3.5 - 2.4 | 9.5 - 6.6 | 15.5 - 10.7 |
| 36 | 10°24.0 | 10°25.7 | 9°55.6 | 3.6 - 2.5 | 9.6 - 6.6 | 15.6 - 10.8 |
| 37 | 10°24.3 | 10°26.0 | 9°55.8 | 3.7 - 2.6 | 9.7 - 6.7 | 15.7 - 10.9 |
| 38 | 10°24.5 | 10°26.2 | 9°56.1 | 3.8 - 2.6 | 9.8 - 6.8 | 15.8 - 10.9 |
| 39 | 10°24.7 | 10°26.5 | 9°56.3 | 3.9 - 2.7 | 9.9 - 6.8 | 15.9 - 11.0 |
| 40 | 10°25.0 | 10°26.7 | 9°56.5 | 4.0 - 2.8 | 10.0 - 6.9 | 16.0 - 11.1 |
| 41 | 10°25.2 | 10°27.0 | 9°56.8 | 4.1 - 2.8 | 10.1 - 7.0 | 16.1 - 11.1 |
| 42 | 10°25.5 | 10°27.2 | 9°57.0 | 4.2 - 2.9 | 10.2 - 7.1 | 16.2 - 11.2 |
| 43 | 10°25.8 | 10°27.5 | 9°57.2 | 4.3 - 3.0 | 10.3 - 7.1 | 16.3 - 11.3 |
| 44 | 10°26.0 | 10°27.7 | 9°57.5 | 4.4 - 3.0 | 10.4 - 7.2 | 16.4 - 11.3 |
| 45 | 10°26.3 | 10°28.0 | 9°57.7 | 4.5 - 3.1 | 10.5 - 7.3 | 16.5 - 11.4 |
| 46 | 10°26.5 | 10°28.2 | 9°58.0 | 4.6 - 3.2 | 10.6 - 7.3 | 16.6 - 11.5 |
| 47 | 10°26.7 | 10°28.5 | 9°58.2 | 4.7 - 3.3 | 10.7 - 7.4 | 16.7 - 11.6 |
| 48 | 10°27.0 | 10°28.7 | 9°58.4 | 4.8 - 3.3 | 10.8 - 7.5 | 16.8 - 11.6 |
| 49 | 10°27.3 | 10°29.0 | 9°58.7 | 4.9 - 3.4 | 10.9 - 7.5 | 16.9 - 11.7 |
| 50 | 10°27.5 | 10°29.2 | 9°58.9 | 5.0 - 3.5 | 11.0 - 7.6 | 17.0 - 11.8 |
| 51 | 10°27.8 | 10°29.5 | 9°59.2 | 5.1 - 3.5 | 11.1 - 7.7 | 17.1 - 11.8 |
| 52 | 10°28.0 | 10°29.7 | 9°59.4 | 5.2 - 3.6 | 11.2 - 7.7 | 17.2 - 11.9 |
| 53 | 10°28.2 | 10°30.0 | 9°59.6 | 5.3 - 3.7 | 11.3 - 7.8 | 17.3 - 12.0 |
| 54 | 10°28.5 | 10°30.2 | 9°59.9 | 5.4 - 3.7 | 11.4 - 7.9 | 17.4 - 12.0 |
| 55 | 10°28.7 | 10°30.5 | 10°00.1 | 5.5 - 3.8 | 11.5 - 8.0 | 17.5 - 12.1 |
| 56 | 10°29.0 | 10°30.7 | 10°00.3 | 5.6 - 3.9 | 11.6 - 8.0 | 17.6 - 12.2 |
| 57 | 10°29.3 | 10°31.0 | 10°00.6 | 5.7 - 3.9 | 11.7 - 8.1 | 17.7 - 12.2 |
| 58 | 10°29.5 | 10°31.2 | 10°00.8 | 5.8 - 4.0 | 11.8 - 8.2 | 17.8 - 12.3 |
| 59 | 10°29.8 | 10°31.5 | 10°01.1 | 5.9 - 4.1 | 11.9 - 8.2 | 17.9 - 12.4 |

# Increments and Corrections

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 42 | Plan. | | | | | |
| 0 | 10°30.0 | 10°31.7 | 10°01.3 | 0.0 - 0.0 | 6.0 - 4.3 | 12.0 - 8.5 |
| 1 | 10°30.2 | 10°32.0 | 10°01.5 | 0.1 - 0.1 | 6.1 - 4.3 | 12.1 - 8.6 |
| 2 | 10°30.5 | 10°32.2 | 10°01.8 | 0.2 - 0.1 | 6.2 - 4.4 | 12.2 - 8.6 |
| 3 | 10°30.7 | 10°32.5 | 10°02.0 | 0.3 - 0.2 | 6.3 - 4.5 | 12.3 - 8.7 |
| 4 | 10°31.0 | 10°32.7 | 10°02.3 | 0.4 - 0.3 | 6.4 - 4.5 | 12.4 - 8.8 |
| 5 | 10°31.3 | 10°33.0 | 10°02.5 | 0.5 - 0.4 | 6.5 - 4.6 | 12.5 - 8.9 |
| 6 | 10°31.5 | 10°33.2 | 10°02.7 | 0.6 - 0.4 | 6.6 - 4.7 | 12.6 - 8.9 |
| 7 | 10°31.8 | 10°33.5 | 10°03.0 | 0.7 - 0.5 | 6.7 - 4.7 | 12.7 - 9.0 |
| 8 | 10°32.0 | 10°33.7 | 10°03.2 | 0.8 - 0.6 | 6.8 - 4.8 | 12.8 - 9.1 |
| 9 | 10°32.2 | 10°34.0 | 10°03.4 | 0.9 - 0.6 | 6.9 - 4.9 | 12.9 - 9.1 |
| 10 | 10°32.5 | 10°34.2 | 10°03.7 | 1.0 - 0.7 | 7.0 - 5.0 | 13.0 - 9.2 |
| 11 | 10°32.7 | 10°34.5 | 10°03.9 | 1.1 - 0.8 | 7.1 - 5.0 | 13.1 - 9.3 |
| 12 | 10°33.0 | 10°34.7 | 10°04.2 | 1.2 - 0.9 | 7.2 - 5.1 | 13.2 - 9.3 |
| 13 | 10°33.3 | 10°35.0 | 10°04.4 | 1.3 - 0.9 | 7.3 - 5.2 | 13.3 - 9.4 |
| 14 | 10°33.5 | 10°35.2 | 10°04.6 | 1.4 - 1.0 | 7.4 - 5.2 | 13.4 - 9.5 |
| 15 | 10°33.8 | 10°35.5 | 10°04.9 | 1.5 - 1.1 | 7.5 - 5.3 | 13.5 - 9.6 |
| 16 | 10°34.0 | 10°35.7 | 10°05.1 | 1.6 - 1.1 | 7.6 - 5.4 | 13.6 - 9.6 |
| 17 | 10°34.2 | 10°36.0 | 10°05.4 | 1.7 - 1.2 | 7.7 - 5.5 | 13.7 - 9.7 |
| 18 | 10°34.5 | 10°36.2 | 10°05.6 | 1.8 - 1.3 | 7.8 - 5.5 | 13.8 - 9.8 |
| 19 | 10°34.8 | 10°36.5 | 10°05.8 | 1.9 - 1.3 | 7.9 - 5.6 | 13.9 - 9.8 |
| 20 | 10°35.0 | 10°36.7 | 10°06.1 | 2.0 - 1.4 | 8.0 - 5.7 | 14.0 - 9.9 |
| 21 | 10°35.3 | 10°37.0 | 10°06.3 | 2.1 - 1.5 | 8.1 - 5.7 | 14.1 - 10.0 |
| 22 | 10°35.5 | 10°37.2 | 10°06.5 | 2.2 - 1.6 | 8.2 - 5.8 | 14.2 - 10.1 |
| 23 | 10°35.7 | 10°37.5 | 10°06.8 | 2.3 - 1.6 | 8.3 - 5.9 | 14.3 - 10.1 |
| 24 | 10°36.0 | 10°37.7 | 10°07.0 | 2.4 - 1.7 | 8.4 - 6.0 | 14.4 - 10.2 |
| 25 | 10°36.2 | 10°38.0 | 10°07.3 | 2.5 - 1.8 | 8.5 - 6.0 | 14.5 - 10.3 |
| 26 | 10°36.5 | 10°38.2 | 10°07.5 | 2.6 - 1.8 | 8.6 - 6.1 | 14.6 - 10.3 |
| 27 | 10°36.8 | 10°38.5 | 10°07.7 | 2.7 - 1.9 | 8.7 - 6.2 | 14.7 - 10.4 |
| 28 | 10°37.0 | 10°38.7 | 10°08.0 | 2.8 - 2.0 | 8.8 - 6.2 | 14.8 - 10.5 |
| 29 | 10°37.3 | 10°39.0 | 10°08.2 | 2.9 - 2.1 | 8.9 - 6.3 | 14.9 - 10.6 |
| 30 | 10°37.5 | 10°39.2 | 10°08.5 | 3.0 - 2.1 | 9.0 - 6.4 | 15.0 - 10.6 |
| 31 | 10°37.7 | 10°39.5 | 10°08.7 | 3.1 - 2.2 | 9.1 - 6.4 | 15.1 - 10.7 |
| 32 | 10°38.0 | 10°39.7 | 10°08.9 | 3.2 - 2.3 | 9.2 - 6.5 | 15.2 - 10.8 |
| 33 | 10°38.2 | 10°40.0 | 10°09.2 | 3.3 - 2.3 | 9.3 - 6.6 | 15.3 - 10.8 |
| 34 | 10°38.5 | 10°40.2 | 10°09.4 | 3.4 - 2.4 | 9.4 - 6.7 | 15.4 - 10.9 |
| 35 | 10°38.8 | 10°40.5 | 10°09.7 | 3.5 - 2.5 | 9.5 - 6.7 | 15.5 - 11.0 |
| 36 | 10°39.0 | 10°40.7 | 10°09.9 | 3.6 - 2.6 | 9.6 - 6.8 | 15.6 - 11.1 |
| 37 | 10°39.3 | 10°41.0 | 10°10.1 | 3.7 - 2.6 | 9.7 - 6.9 | 15.7 - 11.1 |
| 38 | 10°39.5 | 10°41.2 | 10°10.4 | 3.8 - 2.7 | 9.8 - 6.9 | 15.8 - 11.2 |
| 39 | 10°39.7 | 10°41.5 | 10°10.6 | 3.9 - 2.8 | 9.9 - 7.0 | 15.9 - 11.3 |
| 40 | 10°40.0 | 10°41.7 | 10°10.8 | 4.0 - 2.8 | 10.0 - 7.1 | 16.0 - 11.3 |
| 41 | 10°40.2 | 10°42.0 | 10°11.1 | 4.1 - 2.9 | 10.1 - 7.2 | 16.1 - 11.4 |
| 42 | 10°40.5 | 10°42.3 | 10°11.3 | 4.2 - 3.0 | 10.2 - 7.2 | 16.2 - 11.5 |
| 43 | 10°40.8 | 10°42.5 | 10°11.6 | 4.3 - 3.0 | 10.3 - 7.3 | 16.3 - 11.5 |
| 44 | 10°41.0 | 10°42.8 | 10°11.8 | 4.4 - 3.1 | 10.4 - 7.4 | 16.4 - 11.6 |
| 45 | 10°41.3 | 10°43.0 | 10°12.0 | 4.5 - 3.2 | 10.5 - 7.4 | 16.5 - 11.7 |
| 46 | 10°41.5 | 10°43.3 | 10°12.3 | 4.6 - 3.3 | 10.6 - 7.5 | 16.6 - 11.8 |
| 47 | 10°41.7 | 10°43.5 | 10°12.5 | 4.7 - 3.3 | 10.7 - 7.6 | 16.7 - 11.8 |
| 48 | 10°42.0 | 10°43.8 | 10°12.8 | 4.8 - 3.4 | 10.8 - 7.7 | 16.8 - 11.9 |
| 49 | 10°42.3 | 10°44.0 | 10°13.0 | 4.9 - 3.5 | 10.9 - 7.7 | 16.9 - 12.0 |
| 50 | 10°42.5 | 10°44.3 | 10°13.2 | 5.0 - 3.5 | 11.0 - 7.8 | 17.0 - 12.0 |
| 51 | 10°42.8 | 10°44.5 | 10°13.5 | 5.1 - 3.6 | 11.1 - 7.9 | 17.1 - 12.1 |
| 52 | 10°43.0 | 10°44.8 | 10°13.7 | 5.2 - 3.7 | 11.2 - 7.9 | 17.2 - 12.2 |
| 53 | 10°43.2 | 10°45.0 | 10°13.9 | 5.3 - 3.8 | 11.3 - 8.0 | 17.3 - 12.3 |
| 54 | 10°43.5 | 10°45.3 | 10°14.2 | 5.4 - 3.8 | 11.4 - 8.1 | 17.4 - 12.3 |
| 55 | 10°43.7 | 10°45.5 | 10°14.4 | 5.5 - 3.9 | 11.5 - 8.1 | 17.5 - 12.4 |
| 56 | 10°44.0 | 10°45.8 | 10°14.7 | 5.6 - 4.0 | 11.6 - 8.2 | 17.6 - 12.5 |
| 57 | 10°44.3 | 10°46.0 | 10°14.9 | 5.7 - 4.0 | 11.7 - 8.3 | 17.7 - 12.5 |
| 58 | 10°44.5 | 10°46.3 | 10°15.1 | 5.8 - 4.1 | 11.8 - 8.4 | 17.8 - 12.6 |
| 59 | 10°44.8 | 10°46.5 | 10°15.4 | 5.9 - 4.2 | 11.9 - 8.4 | 17.9 - 12.7 |

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 43 | Plan. | | | | | |
| 0 | 10°45.0 | 10°46.8 | 10°15.6 | 0.0 - 0.0 | 6.0 - 4.3 | 12.0 - 8.7 |
| 1 | 10°45.2 | 10°47.0 | 10°15.9 | 0.1 - 0.1 | 6.1 - 4.4 | 12.1 - 8.8 |
| 2 | 10°45.5 | 10°47.3 | 10°16.1 | 0.2 - 0.1 | 6.2 - 4.5 | 12.2 - 8.8 |
| 3 | 10°45.7 | 10°47.5 | 10°16.3 | 0.3 - 0.2 | 6.3 - 4.6 | 12.3 - 8.9 |
| 4 | 10°46.0 | 10°47.8 | 10°16.6 | 0.4 - 0.3 | 6.4 - 4.6 | 12.4 - 9.0 |
| 5 | 10°46.3 | 10°48.0 | 10°16.8 | 0.5 - 0.4 | 6.5 - 4.7 | 12.5 - 9.1 |
| 6 | 10°46.5 | 10°48.3 | 10°17.0 | 0.6 - 0.4 | 6.6 - 4.8 | 12.6 - 9.1 |
| 7 | 10°46.8 | 10°48.5 | 10°17.3 | 0.7 - 0.5 | 6.7 - 4.9 | 12.7 - 9.2 |
| 8 | 10°47.0 | 10°48.8 | 10°17.5 | 0.8 - 0.6 | 6.8 - 4.9 | 12.8 - 9.3 |
| 9 | 10°47.2 | 10°49.0 | 10°17.8 | 0.9 - 0.7 | 6.9 - 5.0 | 12.9 - 9.4 |
| 10 | 10°47.5 | 10°49.3 | 10°18.0 | 1.0 - 0.7 | 7.0 - 5.1 | 13.0 - 9.4 |
| 11 | 10°47.7 | 10°49.5 | 10°18.2 | 1.1 - 0.8 | 7.1 - 5.1 | 13.1 - 9.5 |
| 12 | 10°48.0 | 10°49.8 | 10°18.5 | 1.2 - 0.9 | 7.2 - 5.2 | 13.2 - 9.6 |
| 13 | 10°48.3 | 10°50.0 | 10°18.7 | 1.3 - 0.9 | 7.3 - 5.3 | 13.3 - 9.6 |
| 14 | 10°48.5 | 10°50.3 | 10°19.0 | 1.4 - 1.0 | 7.4 - 5.4 | 13.4 - 9.7 |
| 15 | 10°48.8 | 10°50.5 | 10°19.2 | 1.5 - 1.1 | 7.5 - 5.4 | 13.5 - 9.8 |
| 16 | 10°49.0 | 10°50.8 | 10°19.4 | 1.6 - 1.2 | 7.6 - 5.5 | 13.6 - 9.9 |
| 17 | 10°49.2 | 10°51.0 | 10°19.7 | 1.7 - 1.2 | 7.7 - 5.6 | 13.7 - 9.9 |
| 18 | 10°49.5 | 10°51.3 | 10°19.9 | 1.8 - 1.3 | 7.8 - 5.7 | 13.8 - 10.0 |
| 19 | 10°49.8 | 10°51.5 | 10°20.2 | 1.9 - 1.4 | 7.9 - 5.7 | 13.9 - 10.1 |
| 20 | 10°50.0 | 10°51.8 | 10°20.4 | 2.0 - 1.4 | 8.0 - 5.8 | 14.0 - 10.2 |
| 21 | 10°50.3 | 10°52.0 | 10°20.6 | 2.1 - 1.5 | 8.1 - 5.9 | 14.1 - 10.2 |
| 22 | 10°50.5 | 10°52.3 | 10°20.9 | 2.2 - 1.6 | 8.2 - 5.9 | 14.2 - 10.3 |
| 23 | 10°50.7 | 10°52.5 | 10°21.1 | 2.3 - 1.7 | 8.3 - 6.0 | 14.3 - 10.4 |
| 24 | 10°51.0 | 10°52.8 | 10°21.3 | 2.4 - 1.7 | 8.4 - 6.1 | 14.4 - 10.4 |
| 25 | 10°51.2 | 10°53.0 | 10°21.6 | 2.5 - 1.8 | 8.5 - 6.2 | 14.5 - 10.5 |
| 26 | 10°51.5 | 10°53.3 | 10°21.8 | 2.6 - 1.9 | 8.6 - 6.2 | 14.6 - 10.6 |
| 27 | 10°51.8 | 10°53.5 | 10°22.1 | 2.7 - 2.0 | 8.7 - 6.3 | 14.7 - 10.7 |
| 28 | 10°52.0 | 10°53.8 | 10°22.3 | 2.8 - 2.0 | 8.8 - 6.4 | 14.8 - 10.7 |
| 29 | 10°52.3 | 10°54.0 | 10°22.5 | 2.9 - 2.1 | 8.9 - 6.5 | 14.9 - 10.8 |
| 30 | 10°52.5 | 10°54.3 | 10°22.8 | 3.0 - 2.2 | 9.0 - 6.5 | 15.0 - 10.9 |
| 31 | 10°52.7 | 10°54.5 | 10°23.0 | 3.1 - 2.2 | 9.1 - 6.6 | 15.1 - 10.9 |
| 32 | 10°53.0 | 10°54.8 | 10°23.3 | 3.2 - 2.3 | 9.2 - 6.7 | 15.2 - 11.0 |
| 33 | 10°53.2 | 10°55.0 | 10°23.5 | 3.3 - 2.4 | 9.3 - 6.7 | 15.3 - 11.1 |
| 34 | 10°53.5 | 10°55.3 | 10°23.7 | 3.4 - 2.5 | 9.4 - 6.8 | 15.4 - 11.2 |
| 35 | 10°53.8 | 10°55.5 | 10°24.0 | 3.5 - 2.5 | 9.5 - 6.9 | 15.5 - 11.2 |
| 36 | 10°54.0 | 10°55.8 | 10°24.2 | 3.6 - 2.6 | 9.6 - 7.0 | 15.6 - 11.3 |
| 37 | 10°54.3 | 10°56.0 | 10°24.4 | 3.7 - 2.7 | 9.7 - 7.0 | 15.7 - 11.4 |
| 38 | 10°54.5 | 10°56.3 | 10°24.7 | 3.8 - 2.8 | 9.8 - 7.1 | 15.8 - 11.5 |
| 39 | 10°54.7 | 10°56.5 | 10°24.9 | 3.9 - 2.8 | 9.9 - 7.2 | 15.9 - 11.5 |
| 40 | 10°55.0 | 10°56.8 | 10°25.2 | 4.0 - 2.9 | 10.0 - 7.3 | 16.0 - 11.6 |
| 41 | 10°55.2 | 10°57.0 | 10°25.4 | 4.1 - 3.0 | 10.1 - 7.3 | 16.1 - 11.7 |
| 42 | 10°55.5 | 10°57.3 | 10°25.6 | 4.2 - 3.0 | 10.2 - 7.4 | 16.2 - 11.7 |
| 43 | 10°55.8 | 10°57.5 | 10°25.9 | 4.3 - 3.1 | 10.3 - 7.5 | 16.3 - 11.8 |
| 44 | 10°56.0 | 10°57.8 | 10°26.1 | 4.4 - 3.2 | 10.4 - 7.5 | 16.4 - 11.9 |
| 45 | 10°56.3 | 10°58.0 | 10°26.4 | 4.5 - 3.3 | 10.5 - 7.6 | 16.5 - 12.0 |
| 46 | 10°56.5 | 10°58.3 | 10°26.6 | 4.6 - 3.3 | 10.6 - 7.7 | 16.6 - 12.0 |
| 47 | 10°56.7 | 10°58.5 | 10°26.8 | 4.7 - 3.4 | 10.7 - 7.8 | 16.7 - 12.1 |
| 48 | 10°57.0 | 10°58.8 | 10°27.1 | 4.8 - 3.5 | 10.8 - 7.8 | 16.8 - 12.2 |
| 49 | 10°57.3 | 10°59.0 | 10°27.3 | 4.9 - 3.6 | 10.9 - 7.9 | 16.9 - 12.3 |
| 50 | 10°57.5 | 10°59.3 | 10°27.5 | 5.0 - 3.6 | 11.0 - 8.0 | 17.0 - 12.3 |
| 51 | 10°57.8 | 10°59.5 | 10°27.8 | 5.1 - 3.7 | 11.1 - 8.0 | 17.1 - 12.4 |
| 52 | 10°58.0 | 10°59.8 | 10°28.0 | 5.2 - 3.8 | 11.2 - 8.1 | 17.2 - 12.5 |
| 53 | 10°58.2 | 11°00.0 | 10°28.3 | 5.3 - 3.8 | 11.3 - 8.2 | 17.3 - 12.5 |
| 54 | 10°58.5 | 11°00.3 | 10°28.5 | 5.4 - 3.9 | 11.4 - 8.3 | 17.4 - 12.6 |
| 55 | 10°58.7 | 11°00.6 | 10°28.7 | 5.5 - 4.0 | 11.5 - 8.3 | 17.5 - 12.7 |
| 56 | 10°59.0 | 11°00.8 | 10°29.0 | 5.6 - 4.1 | 11.6 - 8.4 | 17.6 - 12.8 |
| 57 | 10°59.3 | 11°01.1 | 10°29.2 | 5.7 - 4.1 | 11.7 - 8.5 | 17.7 - 12.8 |
| 58 | 10°59.5 | 11°01.3 | 10°29.5 | 5.8 - 4.2 | 11.8 - 8.6 | 17.8 - 12.9 |
| 59 | 10°59.8 | 11°01.6 | 10°29.7 | 5.9 - 4.3 | 11.9 - 8.6 | 17.9 - 13.0 |

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 44 | Plan. | | | | | |
| 0 | 11°00.0 | 11°01.8 | 10°29.9 | 0.0 - 0.0 | 6.0 - 4.5 | 12.0 - 8.9 |
| 1 | 11°00.2 | 11°02.1 | 10°30.2 | 0.1 - 0.1 | 6.1 - 4.5 | 12.1 - 9.0 |
| 2 | 11°00.5 | 11°02.3 | 10°30.4 | 0.2 - 0.1 | 6.2 - 4.6 | 12.2 - 9.0 |
| 3 | 11°00.7 | 11°02.6 | 10°30.6 | 0.3 - 0.2 | 6.3 - 4.7 | 12.3 - 9.1 |
| 4 | 11°01.0 | 11°02.8 | 10°30.9 | 0.4 - 0.3 | 6.4 - 4.7 | 12.4 - 9.2 |
| 5 | 11°01.3 | 11°03.1 | 10°31.1 | 0.5 - 0.4 | 6.5 - 4.8 | 12.5 - 9.3 |
| 6 | 11°01.5 | 11°03.3 | 10°31.4 | 0.6 - 0.4 | 6.6 - 4.9 | 12.6 - 9.3 |
| 7 | 11°01.8 | 11°03.6 | 10°31.6 | 0.7 - 0.5 | 6.7 - 5.0 | 12.7 - 9.4 |
| 8 | 11°02.0 | 11°03.8 | 10°31.8 | 0.8 - 0.6 | 6.8 - 5.0 | 12.8 - 9.5 |
| 9 | 11°02.2 | 11°04.1 | 10°32.1 | 0.9 - 0.7 | 6.9 - 5.1 | 12.9 - 9.6 |
| 10 | 11°02.5 | 11°04.3 | 10°32.3 | 1.0 - 0.7 | 7.0 - 5.2 | 13.0 - 9.6 |
| 11 | 11°02.7 | 11°04.6 | 10°32.6 | 1.1 - 0.8 | 7.1 - 5.3 | 13.1 - 9.7 |
| 12 | 11°03.0 | 11°04.8 | 10°32.8 | 1.2 - 0.9 | 7.2 - 5.3 | 13.2 - 9.8 |
| 13 | 11°03.3 | 11°05.1 | 10°33.0 | 1.3 - 1.0 | 7.3 - 5.4 | 13.3 - 9.9 |
| 14 | 11°03.5 | 11°05.3 | 10°33.3 | 1.4 - 1.0 | 7.4 - 5.5 | 13.4 - 9.9 |
| 15 | 11°03.8 | 11°05.6 | 10°33.5 | 1.5 - 1.1 | 7.5 - 5.6 | 13.5 - 10.0 |
| 16 | 11°04.0 | 11°05.8 | 10°33.8 | 1.6 - 1.2 | 7.6 - 5.6 | 13.6 - 10.1 |
| 17 | 11°04.2 | 11°06.1 | 10°34.0 | 1.7 - 1.3 | 7.7 - 5.7 | 13.7 - 10.2 |
| 18 | 11°04.5 | 11°06.3 | 10°34.2 | 1.8 - 1.3 | 7.8 - 5.8 | 13.8 - 10.2 |
| 19 | 11°04.8 | 11°06.6 | 10°34.5 | 1.9 - 1.4 | 7.9 - 5.9 | 13.9 - 10.3 |
| 20 | 11°05.0 | 11°06.8 | 10°34.7 | 2.0 - 1.5 | 8.0 - 5.9 | 14.0 - 10.4 |
| 21 | 11°05.3 | 11°07.1 | 10°34.9 | 2.1 - 1.6 | 8.1 - 6.0 | 14.1 - 10.5 |
| 22 | 11°05.5 | 11°07.3 | 10°35.2 | 2.2 - 1.6 | 8.2 - 6.1 | 14.2 - 10.5 |
| 23 | 11°05.7 | 11°07.6 | 10°35.4 | 2.3 - 1.7 | 8.3 - 6.2 | 14.3 - 10.6 |
| 24 | 11°06.0 | 11°07.8 | 10°35.7 | 2.4 - 1.8 | 8.4 - 6.2 | 14.4 - 10.7 |
| 25 | 11°06.2 | 11°08.1 | 10°35.9 | 2.5 - 1.9 | 8.5 - 6.3 | 14.5 - 10.8 |
| 26 | 11°06.5 | 11°08.3 | 10°36.1 | 2.6 - 1.9 | 8.6 - 6.4 | 14.6 - 10.8 |
| 27 | 11°06.8 | 11°08.6 | 10°36.4 | 2.7 - 2.0 | 8.7 - 6.5 | 14.7 - 10.9 |
| 28 | 11°07.0 | 11°08.8 | 10°36.6 | 2.8 - 2.1 | 8.8 - 6.5 | 14.8 - 11.0 |
| 29 | 11°07.3 | 11°09.1 | 10°36.9 | 2.9 - 2.2 | 8.9 - 6.6 | 14.9 - 11.1 |
| 30 | 11°07.5 | 11°09.3 | 10°37.1 | 3.0 - 2.2 | 9.0 - 6.7 | 15.0 - 11.1 |
| 31 | 11°07.7 | 11°09.6 | 10°37.3 | 3.1 - 2.3 | 9.1 - 6.7 | 15.1 - 11.2 |
| 32 | 11°08.0 | 11°09.8 | 10°37.6 | 3.2 - 2.4 | 9.2 - 6.8 | 15.2 - 11.3 |
| 33 | 11°08.2 | 11°10.1 | 10°37.8 | 3.3 - 2.4 | 9.3 - 6.9 | 15.3 - 11.3 |
| 34 | 11°08.5 | 11°10.3 | 10°38.0 | 3.4 - 2.5 | 9.4 - 7.0 | 15.4 - 11.4 |
| 35 | 11°08.8 | 11°10.6 | 10°38.3 | 3.5 - 2.6 | 9.5 - 7.0 | 15.5 - 11.5 |
| 36 | 11°09.0 | 11°10.8 | 10°38.5 | 3.6 - 2.7 | 9.6 - 7.1 | 15.6 - 11.6 |
| 37 | 11°09.3 | 11°11.1 | 10°38.8 | 3.7 - 2.7 | 9.7 - 7.2 | 15.7 - 11.6 |
| 38 | 11°09.5 | 11°11.3 | 10°39.0 | 3.8 - 2.8 | 9.8 - 7.3 | 15.8 - 11.7 |
| 39 | 11°09.7 | 11°11.6 | 10°39.2 | 3.9 - 2.9 | 9.9 - 7.3 | 15.9 - 11.8 |
| 40 | 11°10.0 | 11°11.8 | 10°39.5 | 4.0 - 3.0 | 10.0 - 7.4 | 16.0 - 11.9 |
| 41 | 11°10.2 | 11°12.1 | 10°39.7 | 4.1 - 3.0 | 10.1 - 7.5 | 16.1 - 11.9 |
| 42 | 11°10.5 | 11°12.3 | 10°40.0 | 4.2 - 3.1 | 10.2 - 7.6 | 16.2 - 12.0 |
| 43 | 11°10.8 | 11°12.6 | 10°40.2 | 4.3 - 3.2 | 10.3 - 7.6 | 16.3 - 12.1 |
| 44 | 11°11.0 | 11°12.8 | 10°40.4 | 4.4 - 3.3 | 10.4 - 7.7 | 16.4 - 12.2 |
| 45 | 11°11.3 | 11°13.1 | 10°40.7 | 4.5 - 3.3 | 10.5 - 7.8 | 16.5 - 12.2 |
| 46 | 11°11.5 | 11°13.3 | 10°40.9 | 4.6 - 3.4 | 10.6 - 7.9 | 16.6 - 12.3 |
| 47 | 11°11.7 | 11°13.6 | 10°41.1 | 4.7 - 3.5 | 10.7 - 7.9 | 16.7 - 12.4 |
| 48 | 11°12.0 | 11°13.8 | 10°41.4 | 4.8 - 3.6 | 10.8 - 8.0 | 16.8 - 12.5 |
| 49 | 11°12.3 | 11°14.1 | 10°41.6 | 4.9 - 3.6 | 10.9 - 8.1 | 16.9 - 12.5 |
| 50 | 11°12.5 | 11°14.3 | 10°41.9 | 5.0 - 3.7 | 11.0 - 8.2 | 17.0 - 12.6 |
| 51 | 11°12.8 | 11°14.6 | 10°42.1 | 5.1 - 3.8 | 11.1 - 8.2 | 17.1 - 12.7 |
| 52 | 11°13.0 | 11°14.8 | 10°42.3 | 5.2 - 3.9 | 11.2 - 8.3 | 17.2 - 12.8 |
| 53 | 11°13.2 | 11°15.1 | 10°42.6 | 5.3 - 3.9 | 11.3 - 8.4 | 17.3 - 12.8 |
| 54 | 11°13.5 | 11°15.3 | 10°42.8 | 5.4 - 4.0 | 11.4 - 8.5 | 17.4 - 12.9 |
| 55 | 11°13.7 | 11°15.6 | 10°43.1 | 5.5 - 4.1 | 11.5 - 8.5 | 17.5 - 13.0 |
| 56 | 11°14.0 | 11°15.8 | 10°43.3 | 5.6 - 4.2 | 11.6 - 8.6 | 17.6 - 13.1 |
| 57 | 11°14.3 | 11°16.1 | 10°43.5 | 5.7 - 4.2 | 11.7 - 8.7 | 17.7 - 13.1 |
| 58 | 11°14.5 | 11°16.3 | 10°43.8 | 5.8 - 4.3 | 11.8 - 8.8 | 17.8 - 13.2 |
| 59 | 11°14.8 | 11°16.6 | 10°44.0 | 5.9 - 4.4 | 11.9 - 8.8 | 17.9 - 13.3 |

# Increments and Corrections

| m<br>45 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| **0** | 11°15.0 | 11°16.8 | 10°44.3 | 0.0 - 0.0 | 6.0 - 4.5 | 12.0 - 9.1 |
| **1** | 11°15.2 | 11°17.1 | 10°44.5 | 0.1 - 0.1 | 6.1 - 4.6 | 12.1 - 9.2 |
| **2** | 11°15.5 | 11°17.3 | 10°44.7 | 0.2 - 0.2 | 6.2 - 4.7 | 12.2 - 9.3 |
| **3** | 11°15.7 | 11°17.6 | 10°45.0 | 0.3 - 0.2 | 6.3 - 4.8 | 12.3 - 9.3 |
| **4** | 11°16.0 | 11°17.8 | 10°45.2 | 0.4 - 0.3 | 6.4 - 4.9 | 12.4 - 9.4 |
| **5** | 11°16.3 | 11°18.1 | 10°45.4 | 0.5 - 0.4 | 6.5 - 4.9 | 12.5 - 9.5 |
| **6** | 11°16.5 | 11°18.3 | 10°45.7 | 0.6 - 0.5 | 6.6 - 5.0 | 12.6 - 9.6 |
| **7** | 11°16.8 | 11°18.6 | 10°45.9 | 0.7 - 0.5 | 6.7 - 5.1 | 12.7 - 9.6 |
| **8** | 11°17.0 | 11°18.9 | 10°46.2 | 0.8 - 0.6 | 6.8 - 5.2 | 12.8 - 9.7 |
| **9** | 11°17.2 | 11°19.1 | 10°46.4 | 0.9 - 0.7 | 6.9 - 5.2 | 12.9 - 9.8 |
| **10** | 11°17.5 | 11°19.4 | 10°46.6 | 1.0 - 0.8 | 7.0 - 5.3 | 13.0 - 9.9 |
| **11** | 11°17.7 | 11°19.6 | 10°46.9 | 1.1 - 0.8 | 7.1 - 5.4 | 13.1 - 9.9 |
| **12** | 11°18.0 | 11°19.9 | 10°47.1 | 1.2 - 0.9 | 7.2 - 5.5 | 13.2 - 10.0 |
| **13** | 11°18.3 | 11°20.1 | 10°47.4 | 1.3 - 1.0 | 7.3 - 5.5 | 13.3 - 10.1 |
| **14** | 11°18.5 | 11°20.4 | 10°47.6 | 1.4 - 1.1 | 7.4 - 5.6 | 13.4 - 10.2 |
| **15** | 11°18.8 | 11°20.6 | 10°47.8 | 1.5 - 1.1 | 7.5 - 5.7 | 13.5 - 10.2 |
| **16** | 11°19.0 | 11°20.9 | 10°48.1 | 1.6 - 1.2 | 7.6 - 5.8 | 13.6 - 10.3 |
| **17** | 11°19.2 | 11°21.1 | 10°48.3 | 1.7 - 1.3 | 7.7 - 5.8 | 13.7 - 10.4 |
| **18** | 11°19.5 | 11°21.4 | 10°48.5 | 1.8 - 1.4 | 7.8 - 5.9 | 13.8 - 10.5 |
| **19** | 11°19.8 | 11°21.6 | 10°48.8 | 1.9 - 1.4 | 7.9 - 6.0 | 13.9 - 10.5 |
| **20** | 11°20.0 | 11°21.9 | 10°49.0 | 2.0 - 1.5 | 8.0 - 6.1 | 14.0 - 10.6 |
| **21** | 11°20.3 | 11°22.1 | 10°49.3 | 2.1 - 1.6 | 8.1 - 6.1 | 14.1 - 10.7 |
| **22** | 11°20.5 | 11°22.4 | 10°49.5 | 2.2 - 1.7 | 8.2 - 6.2 | 14.2 - 10.8 |
| **23** | 11°20.7 | 11°22.6 | 10°49.7 | 2.3 - 1.7 | 8.3 - 6.3 | 14.3 - 10.8 |
| **24** | 11°21.0 | 11°22.9 | 10°50.0 | 2.4 - 1.8 | 8.4 - 6.4 | 14.4 - 10.9 |
| **25** | 11°21.2 | 11°23.1 | 10°50.2 | 2.5 - 1.9 | 8.5 - 6.4 | 14.5 - 11.0 |
| **26** | 11°21.5 | 11°23.4 | 10°50.5 | 2.6 - 2.0 | 8.6 - 6.5 | 14.6 - 11.1 |
| **27** | 11°21.8 | 11°23.6 | 10°50.7 | 2.7 - 2.0 | 8.7 - 6.6 | 14.7 - 11.1 |
| **28** | 11°22.0 | 11°23.9 | 10°50.9 | 2.8 - 2.1 | 8.8 - 6.7 | 14.8 - 11.2 |
| **29** | 11°22.3 | 11°24.1 | 10°51.2 | 2.9 - 2.2 | 8.9 - 6.7 | 14.9 - 11.3 |
| **30** | 11°22.5 | 11°24.4 | 10°51.4 | 3.0 - 2.3 | 9.0 - 6.8 | 15.0 - 11.4 |
| **31** | 11°22.7 | 11°24.6 | 10°51.6 | 3.1 - 2.4 | 9.1 - 6.9 | 15.1 - 11.5 |
| **32** | 11°23.0 | 11°24.9 | 10°51.9 | 3.2 - 2.4 | 9.2 - 7.0 | 15.2 - 11.5 |
| **33** | 11°23.2 | 11°25.1 | 10°52.1 | 3.3 - 2.5 | 9.3 - 7.1 | 15.3 - 11.6 |
| **34** | 11°23.5 | 11°25.4 | 10°52.4 | 3.4 - 2.6 | 9.4 - 7.1 | 15.4 - 11.7 |
| **35** | 11°23.8 | 11°25.6 | 10°52.6 | 3.5 - 2.7 | 9.5 - 7.2 | 15.5 - 11.8 |
| **36** | 11°24.0 | 11°25.9 | 10°52.8 | 3.6 - 2.7 | 9.6 - 7.3 | 15.6 - 11.8 |
| **37** | 11°24.3 | 11°26.1 | 10°53.1 | 3.7 - 2.8 | 9.7 - 7.4 | 15.7 - 11.9 |
| **38** | 11°24.5 | 11°26.4 | 10°53.3 | 3.8 - 2.9 | 9.8 - 7.4 | 15.8 - 12.0 |
| **39** | 11°24.7 | 11°26.6 | 10°53.6 | 3.9 - 3.0 | 9.9 - 7.5 | 15.9 - 12.1 |
| **40** | 11°25.0 | 11°26.9 | 10°53.8 | 4.0 - 3.0 | 10.0 - 7.6 | 16.0 - 12.1 |
| **41** | 11°25.2 | 11°27.1 | 10°54.0 | 4.1 - 3.1 | 10.1 - 7.7 | 16.1 - 12.2 |
| **42** | 11°25.5 | 11°27.4 | 10°54.3 | 4.2 - 3.2 | 10.2 - 7.7 | 16.2 - 12.3 |
| **43** | 11°25.8 | 11°27.6 | 10°54.5 | 4.3 - 3.3 | 10.3 - 7.8 | 16.3 - 12.4 |
| **44** | 11°26.0 | 11°27.9 | 10°54.7 | 4.4 - 3.3 | 10.4 - 7.9 | 16.4 - 12.4 |
| **45** | 11°26.3 | 11°28.1 | 10°55.0 | 4.5 - 3.4 | 10.5 - 8.0 | 16.5 - 12.5 |
| **46** | 11°26.5 | 11°28.4 | 10°55.2 | 4.6 - 3.5 | 10.6 - 8.0 | 16.6 - 12.6 |
| **47** | 11°26.7 | 11°28.6 | 10°55.5 | 4.7 - 3.6 | 10.7 - 8.1 | 16.7 - 12.7 |
| **48** | 11°27.0 | 11°28.9 | 10°55.7 | 4.8 - 3.6 | 10.8 - 8.2 | 16.8 - 12.7 |
| **49** | 11°27.3 | 11°29.1 | 10°55.9 | 4.9 - 3.7 | 10.9 - 8.3 | 16.9 - 12.8 |
| **50** | 11°27.5 | 11°29.4 | 10°56.2 | 5.0 - 3.8 | 11.0 - 8.3 | 17.0 - 12.9 |
| **51** | 11°27.8 | 11°29.6 | 10°56.4 | 5.1 - 3.9 | 11.1 - 8.4 | 17.1 - 13.0 |
| **52** | 11°28.0 | 11°29.9 | 10°56.7 | 5.2 - 3.9 | 11.2 - 8.5 | 17.2 - 13.0 |
| **53** | 11°28.2 | 11°30.1 | 10°56.9 | 5.3 - 4.0 | 11.3 - 8.6 | 17.3 - 13.1 |
| **54** | 11°28.5 | 11°30.4 | 10°57.1 | 5.4 - 4.1 | 11.4 - 8.6 | 17.4 - 13.2 |
| **55** | 11°28.7 | 11°30.6 | 10°57.4 | 5.5 - 4.2 | 11.5 - 8.7 | 17.5 - 13.3 |
| **56** | 11°29.0 | 11°30.9 | 10°57.6 | 5.6 - 4.2 | 11.6 - 8.8 | 17.6 - 13.3 |
| **57** | 11°29.3 | 11°31.1 | 10°57.9 | 5.7 - 4.3 | 11.7 - 8.9 | 17.7 - 13.4 |
| **58** | 11°29.5 | 11°31.4 | 10°58.1 | 5.8 - 4.4 | 11.8 - 8.9 | 17.8 - 13.5 |
| **59** | 11°29.8 | 11°31.6 | 10°58.3 | 5.9 - 4.5 | 11.9 - 9.0 | 17.9 - 13.6 |

| m<br>46 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| **0** | 11°30.0 | 11°31.9 | 10°58.6 | 0.0 - 0.0 | 6.0 - 4.7 | 12.0 - 9.3 |
| **1** | 11°30.2 | 11°32.1 | 10°58.8 | 0.1 - 0.1 | 6.1 - 4.7 | 12.1 - 9.4 |
| **2** | 11°30.5 | 11°32.4 | 10°59.0 | 0.2 - 0.2 | 6.2 - 4.8 | 12.2 - 9.5 |
| **3** | 11°30.7 | 11°32.6 | 10°59.3 | 0.3 - 0.2 | 6.3 - 4.9 | 12.3 - 9.5 |
| **4** | 11°31.0 | 11°32.9 | 10°59.5 | 0.4 - 0.3 | 6.4 - 5.0 | 12.4 - 9.6 |
| **5** | 11°31.3 | 11°33.1 | 10°59.8 | 0.5 - 0.4 | 6.5 - 5.0 | 12.5 - 9.7 |
| **6** | 11°31.5 | 11°33.4 | 11°00.0 | 0.6 - 0.5 | 6.6 - 5.1 | 12.6 - 9.8 |
| **7** | 11°31.8 | 11°33.6 | 11°00.2 | 0.7 - 0.5 | 6.7 - 5.2 | 12.7 - 9.8 |
| **8** | 11°32.0 | 11°33.9 | 11°00.5 | 0.8 - 0.6 | 6.8 - 5.3 | 12.8 - 9.9 |
| **9** | 11°32.2 | 11°34.1 | 11°00.7 | 0.9 - 0.7 | 6.9 - 5.3 | 12.9 - 10.0 |
| **10** | 11°32.5 | 11°34.4 | 11°01.0 | 1.0 - 0.8 | 7.0 - 5.4 | 13.0 - 10.1 |
| **11** | 11°32.7 | 11°34.6 | 11°01.2 | 1.1 - 0.9 | 7.1 - 5.5 | 13.1 - 10.2 |
| **12** | 11°33.0 | 11°34.9 | 11°01.4 | 1.2 - 0.9 | 7.2 - 5.6 | 13.2 - 10.2 |
| **13** | 11°33.3 | 11°35.1 | 11°01.7 | 1.3 - 1.0 | 7.3 - 5.7 | 13.3 - 10.3 |
| **14** | 11°33.5 | 11°35.4 | 11°01.9 | 1.4 - 1.1 | 7.4 - 5.7 | 13.4 - 10.4 |
| **15** | 11°33.8 | 11°35.6 | 11°02.1 | 1.5 - 1.2 | 7.5 - 5.8 | 13.5 - 10.5 |
| **16** | 11°34.0 | 11°35.9 | 11°02.4 | 1.6 - 1.2 | 7.6 - 5.9 | 13.6 - 10.5 |
| **17** | 11°34.2 | 11°36.1 | 11°02.6 | 1.7 - 1.3 | 7.7 - 6.0 | 13.7 - 10.6 |
| **18** | 11°34.5 | 11°36.4 | 11°02.9 | 1.8 - 1.4 | 7.8 - 6.0 | 13.8 - 10.7 |
| **19** | 11°34.8 | 11°36.6 | 11°03.1 | 1.9 - 1.5 | 7.9 - 6.1 | 13.9 - 10.8 |
| **20** | 11°35.0 | 11°36.9 | 11°03.3 | 2.0 - 1.6 | 8.0 - 6.2 | 14.0 - 10.8 |
| **21** | 11°35.3 | 11°37.2 | 11°03.6 | 2.1 - 1.6 | 8.1 - 6.3 | 14.1 - 10.9 |
| **22** | 11°35.5 | 11°37.4 | 11°03.8 | 2.2 - 1.7 | 8.2 - 6.4 | 14.2 - 11.0 |
| **23** | 11°35.7 | 11°37.7 | 11°04.1 | 2.3 - 1.8 | 8.3 - 6.4 | 14.3 - 11.1 |
| **24** | 11°36.0 | 11°37.9 | 11°04.3 | 2.4 - 1.9 | 8.4 - 6.5 | 14.4 - 11.2 |
| **25** | 11°36.2 | 11°38.2 | 11°04.5 | 2.5 - 1.9 | 8.5 - 6.6 | 14.5 - 11.2 |
| **26** | 11°36.5 | 11°38.4 | 11°04.8 | 2.6 - 2.0 | 8.6 - 6.7 | 14.6 - 11.3 |
| **27** | 11°36.8 | 11°38.7 | 11°05.0 | 2.7 - 2.1 | 8.7 - 6.7 | 14.7 - 11.4 |
| **28** | 11°37.0 | 11°38.9 | 11°05.2 | 2.8 - 2.2 | 8.8 - 6.8 | 14.8 - 11.5 |
| **29** | 11°37.3 | 11°39.2 | 11°05.5 | 2.9 - 2.2 | 8.9 - 6.9 | 14.9 - 11.5 |
| **30** | 11°37.5 | 11°39.4 | 11°05.7 | 3.0 - 2.3 | 9.0 - 7.0 | 15.0 - 11.6 |
| **31** | 11°37.7 | 11°39.7 | 11°06.0 | 3.1 - 2.4 | 9.1 - 7.1 | 15.1 - 11.7 |
| **32** | 11°38.0 | 11°39.9 | 11°06.2 | 3.2 - 2.5 | 9.2 - 7.1 | 15.2 - 11.8 |
| **33** | 11°38.2 | 11°40.2 | 11°06.4 | 3.3 - 2.6 | 9.3 - 7.2 | 15.3 - 11.9 |
| **34** | 11°38.5 | 11°40.4 | 11°06.7 | 3.4 - 2.6 | 9.4 - 7.3 | 15.4 - 11.9 |
| **35** | 11°38.8 | 11°40.7 | 11°06.9 | 3.5 - 2.7 | 9.5 - 7.4 | 15.5 - 12.0 |
| **36** | 11°39.0 | 11°40.9 | 11°07.2 | 3.6 - 2.8 | 9.6 - 7.4 | 15.6 - 12.1 |
| **37** | 11°39.3 | 11°41.2 | 11°07.4 | 3.7 - 2.9 | 9.7 - 7.5 | 15.7 - 12.2 |
| **38** | 11°39.5 | 11°41.4 | 11°07.6 | 3.8 - 2.9 | 9.8 - 7.6 | 15.8 - 12.2 |
| **39** | 11°39.7 | 11°41.7 | 11°07.9 | 3.9 - 3.0 | 9.9 - 7.7 | 15.9 - 12.3 |
| **40** | 11°40.0 | 11°41.9 | 11°08.1 | 4.0 - 3.1 | 10.0 - 7.8 | 16.0 - 12.4 |
| **41** | 11°40.2 | 11°42.2 | 11°08.3 | 4.1 - 3.2 | 10.1 - 7.8 | 16.1 - 12.5 |
| **42** | 11°40.5 | 11°42.4 | 11°08.6 | 4.2 - 3.3 | 10.2 - 7.9 | 16.2 - 12.6 |
| **43** | 11°40.8 | 11°42.7 | 11°08.8 | 4.3 - 3.3 | 10.3 - 8.0 | 16.3 - 12.6 |
| **44** | 11°41.0 | 11°42.9 | 11°09.1 | 4.4 - 3.4 | 10.4 - 8.1 | 16.4 - 12.7 |
| **45** | 11°41.3 | 11°43.2 | 11°09.3 | 4.5 - 3.5 | 10.5 - 8.1 | 16.5 - 12.8 |
| **46** | 11°41.5 | 11°43.4 | 11°09.5 | 4.6 - 3.6 | 10.6 - 8.2 | 16.6 - 12.9 |
| **47** | 11°41.7 | 11°43.7 | 11°09.8 | 4.7 - 3.6 | 10.7 - 8.3 | 16.7 - 12.9 |
| **48** | 11°42.0 | 11°43.9 | 11°10.0 | 4.8 - 3.7 | 10.8 - 8.4 | 16.8 - 13.0 |
| **49** | 11°42.3 | 11°44.2 | 11°10.3 | 4.9 - 3.8 | 10.9 - 8.4 | 16.9 - 13.1 |
| **50** | 11°42.5 | 11°44.4 | 11°10.5 | 5.0 - 3.9 | 11.0 - 8.5 | 17.0 - 13.2 |
| **51** | 11°42.8 | 11°44.7 | 11°10.7 | 5.1 - 4.0 | 11.1 - 8.6 | 17.1 - 13.3 |
| **52** | 11°43.0 | 11°44.9 | 11°11.0 | 5.2 - 4.0 | 11.2 - 8.7 | 17.2 - 13.3 |
| **53** | 11°43.2 | 11°45.2 | 11°11.2 | 5.3 - 4.1 | 11.3 - 8.8 | 17.3 - 13.4 |
| **54** | 11°43.5 | 11°45.4 | 11°11.5 | 5.4 - 4.2 | 11.4 - 8.8 | 17.4 - 13.5 |
| **55** | 11°43.7 | 11°45.7 | 11°11.7 | 5.5 - 4.3 | 11.5 - 8.9 | 17.5 - 13.6 |
| **56** | 11°44.0 | 11°45.9 | 11°11.9 | 5.6 - 4.3 | 11.6 - 9.0 | 17.6 - 13.6 |
| **57** | 11°44.3 | 11°46.2 | 11°12.2 | 5.7 - 4.4 | 11.7 - 9.1 | 17.7 - 13.7 |
| **58** | 11°44.5 | 11°46.4 | 11°12.4 | 5.8 - 4.5 | 11.8 - 9.1 | 17.8 - 13.8 |
| **59** | 11°44.8 | 11°46.7 | 11°12.6 | 5.9 - 4.6 | 11.9 - 9.2 | 17.9 - 13.9 |

| m<br>47 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| **0** | 11°45.0 | 11°46.9 | 11°12.9 | 0.0 - 0.0 | 6.0 - 4.8 | 12.0 - 9.5 |
| **1** | 11°45.2 | 11°47.2 | 11°13.1 | 0.1 - 0.1 | 6.1 - 4.8 | 12.1 - 9.6 |
| **2** | 11°45.5 | 11°47.4 | 11°13.4 | 0.2 - 0.2 | 6.2 - 4.9 | 12.2 - 9.7 |
| **3** | 11°45.7 | 11°47.7 | 11°13.6 | 0.3 - 0.2 | 6.3 - 5.0 | 12.3 - 9.7 |
| **4** | 11°46.0 | 11°47.9 | 11°13.8 | 0.4 - 0.3 | 6.4 - 5.1 | 12.4 - 9.8 |
| **5** | 11°46.3 | 11°48.2 | 11°14.1 | 0.5 - 0.4 | 6.5 - 5.1 | 12.5 - 9.9 |
| **6** | 11°46.5 | 11°48.4 | 11°14.3 | 0.6 - 0.5 | 6.6 - 5.2 | 12.6 - 10.0 |
| **7** | 11°46.8 | 11°48.7 | 11°14.6 | 0.7 - 0.6 | 6.7 - 5.3 | 12.7 - 10.1 |
| **8** | 11°47.0 | 11°48.9 | 11°14.8 | 0.8 - 0.6 | 6.8 - 5.4 | 12.8 - 10.1 |
| **9** | 11°47.2 | 11°49.2 | 11°15.0 | 0.9 - 0.7 | 6.9 - 5.5 | 12.9 - 10.2 |
| **10** | 11°47.5 | 11°49.4 | 11°15.3 | 1.0 - 0.8 | 7.0 - 5.5 | 13.0 - 10.3 |
| **11** | 11°47.7 | 11°49.7 | 11°15.5 | 1.1 - 0.9 | 7.1 - 5.6 | 13.1 - 10.4 |
| **12** | 11°48.0 | 11°49.9 | 11°15.7 | 1.2 - 1.0 | 7.2 - 5.7 | 13.2 - 10.4 |
| **13** | 11°48.3 | 11°50.2 | 11°16.0 | 1.3 - 1.0 | 7.3 - 5.8 | 13.3 - 10.5 |
| **14** | 11°48.5 | 11°50.4 | 11°16.2 | 1.4 - 1.1 | 7.4 - 5.9 | 13.4 - 10.6 |
| **15** | 11°48.8 | 11°50.7 | 11°16.5 | 1.5 - 1.2 | 7.5 - 5.9 | 13.5 - 10.7 |
| **16** | 11°49.0 | 11°50.9 | 11°16.7 | 1.6 - 1.3 | 7.6 - 6.0 | 13.6 - 10.8 |
| **17** | 11°49.2 | 11°51.2 | 11°16.9 | 1.7 - 1.3 | 7.7 - 6.1 | 13.7 - 10.8 |
| **18** | 11°49.5 | 11°51.4 | 11°17.2 | 1.8 - 1.4 | 7.8 - 6.2 | 13.8 - 10.9 |
| **19** | 11°49.8 | 11°51.7 | 11°17.4 | 1.9 - 1.5 | 7.9 - 6.3 | 13.9 - 11.0 |
| **20** | 11°50.0 | 11°51.9 | 11°17.7 | 2.0 - 1.6 | 8.0 - 6.3 | 14.0 - 11.1 |
| **21** | 11°50.3 | 11°52.2 | 11°17.9 | 2.1 - 1.7 | 8.1 - 6.4 | 14.1 - 11.2 |
| **22** | 11°50.5 | 11°52.4 | 11°18.1 | 2.2 - 1.7 | 8.2 - 6.5 | 14.2 - 11.2 |
| **23** | 11°50.7 | 11°52.7 | 11°18.4 | 2.3 - 1.8 | 8.3 - 6.6 | 14.3 - 11.3 |
| **24** | 11°51.0 | 11°52.9 | 11°18.6 | 2.4 - 1.9 | 8.4 - 6.7 | 14.4 - 11.4 |
| **25** | 11°51.2 | 11°53.2 | 11°18.8 | 2.5 - 2.0 | 8.5 - 6.7 | 14.5 - 11.5 |
| **26** | 11°51.5 | 11°53.4 | 11°19.1 | 2.6 - 2.1 | 8.6 - 6.8 | 14.6 - 11.6 |
| **27** | 11°51.8 | 11°53.7 | 11°19.3 | 2.7 - 2.1 | 8.7 - 6.9 | 14.7 - 11.6 |
| **28** | 11°52.0 | 11°53.9 | 11°19.6 | 2.8 - 2.2 | 8.8 - 7.0 | 14.8 - 11.7 |
| **29** | 11°52.3 | 11°54.2 | 11°19.8 | 2.9 - 2.3 | 8.9 - 7.0 | 14.9 - 11.8 |
| **30** | 11°52.5 | 11°54.4 | 11°20.0 | 3.0 - 2.4 | 9.0 - 7.1 | 15.0 - 11.9 |
| **31** | 11°52.7 | 11°54.7 | 11°20.3 | 3.1 - 2.5 | 9.1 - 7.2 | 15.1 - 12.0 |
| **32** | 11°53.0 | 11°54.9 | 11°20.5 | 3.2 - 2.5 | 9.2 - 7.3 | 15.2 - 12.0 |
| **33** | 11°53.2 | 11°55.2 | 11°20.8 | 3.3 - 2.6 | 9.3 - 7.4 | 15.3 - 12.1 |
| **34** | 11°53.5 | 11°55.5 | 11°21.0 | 3.4 - 2.7 | 9.4 - 7.4 | 15.4 - 12.2 |
| **35** | 11°53.8 | 11°55.7 | 11°21.2 | 3.5 - 2.8 | 9.5 - 7.5 | 15.5 - 12.3 |
| **36** | 11°54.0 | 11°56.0 | 11°21.5 | 3.6 - 2.9 | 9.6 - 7.6 | 15.6 - 12.3 |
| **37** | 11°54.3 | 11°56.2 | 11°21.7 | 3.7 - 2.9 | 9.7 - 7.7 | 15.7 - 12.4 |
| **38** | 11°54.5 | 11°56.5 | 11°22.0 | 3.8 - 3.0 | 9.8 - 7.8 | 15.8 - 12.5 |
| **39** | 11°54.7 | 11°56.7 | 11°22.2 | 3.9 - 3.1 | 9.9 - 7.8 | 15.9 - 12.6 |
| **40** | 11°55.0 | 11°57.0 | 11°22.4 | 4.0 - 3.2 | 10.0 - 7.9 | 16.0 - 12.7 |
| **41** | 11°55.2 | 11°57.2 | 11°22.7 | 4.1 - 3.2 | 10.1 - 8.0 | 16.1 - 12.7 |
| **42** | 11°55.5 | 11°57.5 | 11°22.9 | 4.2 - 3.3 | 10.2 - 8.1 | 16.2 - 12.8 |
| **43** | 11°55.8 | 11°57.7 | 11°23.1 | 4.3 - 3.4 | 10.3 - 8.2 | 16.3 - 12.9 |
| **44** | 11°56.0 | 11°58.0 | 11°23.4 | 4.4 - 3.5 | 10.4 - 8.2 | 16.4 - 13.0 |
| **45** | 11°56.3 | 11°58.2 | 11°23.6 | 4.5 - 3.6 | 10.5 - 8.3 | 16.5 - 13.1 |
| **46** | 11°56.5 | 11°58.5 | 11°23.9 | 4.6 - 3.6 | 10.6 - 8.4 | 16.6 - 13.1 |
| **47** | 11°56.7 | 11°58.7 | 11°24.1 | 4.7 - 3.7 | 10.7 - 8.5 | 16.7 - 13.2 |
| **48** | 11°57.0 | 11°59.0 | 11°24.3 | 4.8 - 3.8 | 10.8 - 8.6 | 16.8 - 13.3 |
| **49** | 11°57.3 | 11°59.2 | 11°24.6 | 4.9 - 3.9 | 10.9 - 8.6 | 16.9 - 13.4 |
| **50** | 11°57.5 | 11°59.5 | 11°24.8 | 5.0 - 4.0 | 11.0 - 8.7 | 17.0 - 13.5 |
| **51** | 11°57.8 | 11°59.7 | 11°25.1 | 5.1 - 4.0 | 11.1 - 8.8 | 17.1 - 13.5 |
| **52** | 11°58.0 | 12°00.0 | 11°25.3 | 5.2 - 4.1 | 11.2 - 8.9 | 17.2 - 13.6 |
| **53** | 11°58.2 | 12°00.2 | 11°25.5 | 5.3 - 4.2 | 11.3 - 8.9 | 17.3 - 13.7 |
| **54** | 11°58.5 | 12°00.5 | 11°25.8 | 5.4 - 4.3 | 11.4 - 9.0 | 17.4 - 13.8 |
| **55** | 11°58.7 | 12°00.7 | 11°26.0 | 5.5 - 4.4 | 11.5 - 9.1 | 17.5 - 13.9 |
| **56** | 11°59.0 | 12°01.0 | 11°26.2 | 5.6 - 4.4 | 11.6 - 9.2 | 17.6 - 13.9 |
| **57** | 11°59.3 | 12°01.2 | 11°26.5 | 5.7 - 4.5 | 11.7 - 9.3 | 17.7 - 14.0 |
| **58** | 11°59.5 | 12°01.5 | 11°26.7 | 5.8 - 4.6 | 11.8 - 9.3 | 17.8 - 14.1 |
| **59** | 11°59.8 | 12°01.7 | 11°27.0 | 5.9 - 4.7 | 11.9 - 9.4 | 17.9 - 14.2 |

# Increments and Corrections

| m 48 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 12°00.0 | 12°02.0 | 11°27.2 | 0.0 - 0.0 | 6.0 - 4.8 | 12.0 - 9.7 |
| 1 | 12°00.2 | 12°02.2 | 11°27.4 | 0.1 - 0.1 | 6.1 - 4.9 | 12.1 - 9.8 |
| 2 | 12°00.5 | 12°02.5 | 11°27.7 | 0.2 - 0.2 | 6.2 - 5.0 | 12.2 - 9.9 |
| 3 | 12°00.7 | 12°02.7 | 11°27.9 | 0.3 - 0.2 | 6.3 - 5.1 | 12.3 - 9.9 |
| 4 | 12°01.0 | 12°03.0 | 11°28.2 | 0.4 - 0.3 | 6.4 - 5.2 | 12.4 - 10.0 |
| 5 | 12°01.3 | 12°03.2 | 11°28.4 | 0.5 - 0.4 | 6.5 - 5.3 | 12.5 - 10.1 |
| 6 | 12°01.5 | 12°03.5 | 11°28.6 | 0.6 - 0.5 | 6.6 - 5.3 | 12.6 - 10.2 |
| 7 | 12°01.8 | 12°03.7 | 11°28.9 | 0.7 - 0.6 | 6.7 - 5.4 | 12.7 - 10.3 |
| 8 | 12°02.0 | 12°04.0 | 11°29.1 | 0.8 - 0.6 | 6.8 - 5.5 | 12.8 - 10.3 |
| 9 | 12°02.2 | 12°04.2 | 11°29.3 | 0.9 - 0.7 | 6.9 - 5.6 | 12.9 - 10.4 |
| 10 | 12°02.5 | 12°04.5 | 11°29.6 | 1.0 - 0.8 | 7.0 - 5.7 | 13.0 - 10.5 |
| 11 | 12°02.7 | 12°04.7 | 11°29.8 | 1.1 - 0.9 | 7.1 - 5.7 | 13.1 - 10.6 |
| 12 | 12°03.0 | 12°05.0 | 11°30.1 | 1.2 - 1.0 | 7.2 - 5.8 | 13.2 - 10.7 |
| 13 | 12°03.3 | 12°05.2 | 11°30.3 | 1.3 - 1.1 | 7.3 - 5.9 | 13.3 - 10.8 |
| 14 | 12°03.5 | 12°05.5 | 11°30.5 | 1.4 - 1.1 | 7.4 - 6.0 | 13.4 - 10.8 |
| 15 | 12°03.8 | 12°05.7 | 11°30.8 | 1.5 - 1.2 | 7.5 - 6.1 | 13.5 - 10.9 |
| 16 | 12°04.0 | 12°06.0 | 11°31.0 | 1.6 - 1.3 | 7.6 - 6.1 | 13.6 - 11.0 |
| 17 | 12°04.2 | 12°06.2 | 11°31.3 | 1.7 - 1.4 | 7.7 - 6.2 | 13.7 - 11.1 |
| 18 | 12°04.5 | 12°06.5 | 11°31.5 | 1.8 - 1.5 | 7.8 - 6.3 | 13.8 - 11.2 |
| 19 | 12°04.8 | 12°06.7 | 11°31.7 | 1.9 - 1.5 | 7.9 - 6.4 | 13.9 - 11.2 |
| 20 | 12°05.0 | 12°07.0 | 11°32.0 | 2.0 - 1.6 | 8.0 - 6.5 | 14.0 - 11.3 |
| 21 | 12°05.3 | 12°07.2 | 11°32.2 | 2.1 - 1.7 | 8.1 - 6.5 | 14.1 - 11.4 |
| 22 | 12°05.5 | 12°07.5 | 11°32.4 | 2.2 - 1.8 | 8.2 - 6.6 | 14.2 - 11.5 |
| 23 | 12°05.7 | 12°07.7 | 11°32.7 | 2.3 - 1.9 | 8.3 - 6.7 | 14.3 - 11.6 |
| 24 | 12°06.0 | 12°08.0 | 11°32.9 | 2.4 - 1.9 | 8.4 - 6.8 | 14.4 - 11.6 |
| 25 | 12°06.2 | 12°08.2 | 11°33.2 | 2.5 - 2.0 | 8.5 - 6.9 | 14.5 - 11.7 |
| 26 | 12°06.5 | 12°08.5 | 11°33.4 | 2.6 - 2.1 | 8.6 - 7.0 | 14.6 - 11.8 |
| 27 | 12°06.8 | 12°08.7 | 11°33.6 | 2.7 - 2.2 | 8.7 - 7.0 | 14.7 - 11.9 |
| 28 | 12°07.0 | 12°09.0 | 11°33.9 | 2.8 - 2.3 | 8.8 - 7.1 | 14.8 - 12.0 |
| 29 | 12°07.3 | 12°09.2 | 11°34.1 | 2.9 - 2.3 | 8.9 - 7.2 | 14.9 - 12.0 |
| 30 | 12°07.5 | 12°09.5 | 11°34.4 | 3.0 - 2.4 | 9.0 - 7.3 | 15.0 - 12.1 |
| 31 | 12°07.7 | 12°09.7 | 11°34.6 | 3.1 - 2.5 | 9.1 - 7.4 | 15.1 - 12.2 |
| 32 | 12°08.0 | 12°10.0 | 11°34.8 | 3.2 - 2.6 | 9.2 - 7.4 | 15.2 - 12.3 |
| 33 | 12°08.2 | 12°10.2 | 11°35.1 | 3.3 - 2.7 | 9.3 - 7.5 | 15.3 - 12.4 |
| 34 | 12°08.5 | 12°10.5 | 11°35.3 | 3.4 - 2.7 | 9.4 - 7.6 | 15.4 - 12.4 |
| 35 | 12°08.8 | 12°10.7 | 11°35.6 | 3.5 - 2.8 | 9.5 - 7.7 | 15.5 - 12.5 |
| 36 | 12°09.0 | 12°11.0 | 11°35.8 | 3.6 - 2.9 | 9.6 - 7.8 | 15.6 - 12.6 |
| 37 | 12°09.3 | 12°11.2 | 11°36.0 | 3.7 - 3.0 | 9.7 - 7.8 | 15.7 - 12.7 |
| 38 | 12°09.5 | 12°11.5 | 11°36.3 | 3.8 - 3.1 | 9.8 - 7.9 | 15.8 - 12.8 |
| 39 | 12°09.7 | 12°11.7 | 11°36.5 | 3.9 - 3.2 | 9.9 - 8.0 | 15.9 - 12.9 |
| 40 | 12°10.0 | 12°12.0 | 11°36.7 | 4.0 - 3.2 | 10.0 - 8.1 | 16.0 - 12.9 |
| 41 | 12°10.2 | 12°12.2 | 11°37.0 | 4.1 - 3.3 | 10.1 - 8.2 | 16.1 - 13.0 |
| 42 | 12°10.5 | 12°12.5 | 11°37.2 | 4.2 - 3.4 | 10.2 - 8.2 | 16.2 - 13.1 |
| 43 | 12°10.8 | 12°12.7 | 11°37.5 | 4.3 - 3.5 | 10.3 - 8.3 | 16.3 - 13.2 |
| 44 | 12°11.0 | 12°13.0 | 11°37.7 | 4.4 - 3.6 | 10.4 - 8.4 | 16.4 - 13.3 |
| 45 | 12°11.3 | 12°13.2 | 11°37.9 | 4.5 - 3.6 | 10.5 - 8.5 | 16.5 - 13.3 |
| 46 | 12°11.5 | 12°13.5 | 11°38.2 | 4.6 - 3.7 | 10.6 - 8.6 | 16.6 - 13.4 |
| 47 | 12°11.7 | 12°13.8 | 11°38.4 | 4.7 - 3.8 | 10.7 - 8.6 | 16.7 - 13.5 |
| 48 | 12°12.0 | 12°14.0 | 11°38.7 | 4.8 - 3.9 | 10.8 - 8.7 | 16.8 - 13.6 |
| 49 | 12°12.3 | 12°14.3 | 11°38.9 | 4.9 - 4.0 | 10.9 - 8.8 | 16.9 - 13.7 |
| 50 | 12°12.5 | 12°14.5 | 11°39.1 | 5.0 - 4.0 | 11.0 - 8.9 | 17.0 - 13.7 |
| 51 | 12°12.8 | 12°14.8 | 11°39.4 | 5.1 - 4.1 | 11.1 - 9.0 | 17.1 - 13.8 |
| 52 | 12°13.0 | 12°15.0 | 11°39.6 | 5.2 - 4.2 | 11.2 - 9.1 | 17.2 - 13.9 |
| 53 | 12°13.2 | 12°15.3 | 11°39.8 | 5.3 - 4.3 | 11.3 - 9.1 | 17.3 - 14.0 |
| 54 | 12°13.5 | 12°15.5 | 11°40.1 | 5.4 - 4.4 | 11.4 - 9.2 | 17.4 - 14.1 |
| 55 | 12°13.7 | 12°15.8 | 11°40.3 | 5.5 - 4.4 | 11.5 - 9.3 | 17.5 - 14.1 |
| 56 | 12°14.0 | 12°16.0 | 11°40.6 | 5.6 - 4.5 | 11.6 - 9.4 | 17.6 - 14.2 |
| 57 | 12°14.3 | 12°16.3 | 11°40.8 | 5.7 - 4.6 | 11.7 - 9.5 | 17.7 - 14.3 |
| 58 | 12°14.5 | 12°16.5 | 11°41.0 | 5.8 - 4.7 | 11.8 - 9.5 | 17.8 - 14.4 |
| 59 | 12°14.8 | 12°16.8 | 11°41.3 | 5.9 - 4.8 | 11.9 - 9.6 | 17.9 - 14.5 |

| m 49 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 12°15.0 | 12°17.0 | 11°41.5 | 0.0 - 0.0 | 6.0 - 4.9 | 12.0 - 9.9 |
| 1 | 12°15.2 | 12°17.3 | 11°41.8 | 0.1 - 0.1 | 6.1 - 5.0 | 12.1 - 10.0 |
| 2 | 12°15.5 | 12°17.5 | 11°42.0 | 0.2 - 0.2 | 6.2 - 5.1 | 12.2 - 10.1 |
| 3 | 12°15.7 | 12°17.8 | 11°42.2 | 0.3 - 0.2 | 6.3 - 5.2 | 12.3 - 10.1 |
| 4 | 12°16.0 | 12°18.0 | 11°42.5 | 0.4 - 0.3 | 6.4 - 5.3 | 12.4 - 10.2 |
| 5 | 12°16.3 | 12°18.3 | 11°42.7 | 0.5 - 0.4 | 6.5 - 5.4 | 12.5 - 10.3 |
| 6 | 12°16.5 | 12°18.5 | 11°42.9 | 0.6 - 0.5 | 6.6 - 5.4 | 12.6 - 10.4 |
| 7 | 12°16.8 | 12°18.8 | 11°43.2 | 0.7 - 0.6 | 6.7 - 5.5 | 12.7 - 10.5 |
| 8 | 12°17.0 | 12°19.0 | 11°43.4 | 0.8 - 0.7 | 6.8 - 5.6 | 12.8 - 10.6 |
| 9 | 12°17.2 | 12°19.3 | 11°43.7 | 0.9 - 0.7 | 6.9 - 5.7 | 12.9 - 10.6 |
| 10 | 12°17.5 | 12°19.5 | 11°43.9 | 1.0 - 0.8 | 7.0 - 5.8 | 13.0 - 10.7 |
| 11 | 12°17.7 | 12°19.8 | 11°44.1 | 1.1 - 0.9 | 7.1 - 5.9 | 13.1 - 10.8 |
| 12 | 12°18.0 | 12°20.0 | 11°44.4 | 1.2 - 1.0 | 7.2 - 5.9 | 13.2 - 10.9 |
| 13 | 12°18.3 | 12°20.3 | 11°44.6 | 1.3 - 1.1 | 7.3 - 6.0 | 13.3 - 11.0 |
| 14 | 12°18.5 | 12°20.5 | 11°44.9 | 1.4 - 1.2 | 7.4 - 6.1 | 13.4 - 11.1 |
| 15 | 12°18.8 | 12°20.8 | 11°45.1 | 1.5 - 1.2 | 7.5 - 6.2 | 13.5 - 11.1 |
| 16 | 12°19.0 | 12°21.0 | 11°45.3 | 1.6 - 1.3 | 7.6 - 6.3 | 13.6 - 11.2 |
| 17 | 12°19.2 | 12°21.3 | 11°45.6 | 1.7 - 1.4 | 7.7 - 6.4 | 13.7 - 11.3 |
| 18 | 12°19.5 | 12°21.5 | 11°45.8 | 1.8 - 1.5 | 7.8 - 6.4 | 13.8 - 11.4 |
| 19 | 12°19.8 | 12°21.8 | 11°46.1 | 1.9 - 1.6 | 7.9 - 6.5 | 13.9 - 11.5 |
| 20 | 12°20.0 | 12°22.0 | 11°46.3 | 2.0 - 1.6 | 8.0 - 6.6 | 14.0 - 11.5 |
| 21 | 12°20.3 | 12°22.3 | 11°46.5 | 2.1 - 1.7 | 8.1 - 6.7 | 14.1 - 11.6 |
| 22 | 12°20.5 | 12°22.5 | 11°46.8 | 2.2 - 1.8 | 8.2 - 6.8 | 14.2 - 11.7 |
| 23 | 12°20.7 | 12°22.8 | 11°47.0 | 2.3 - 1.9 | 8.3 - 6.8 | 14.3 - 11.8 |
| 24 | 12°21.0 | 12°23.0 | 11°47.2 | 2.4 - 2.0 | 8.4 - 6.9 | 14.4 - 11.9 |
| 25 | 12°21.2 | 12°23.3 | 11°47.5 | 2.5 - 2.1 | 8.5 - 7.0 | 14.5 - 12.0 |
| 26 | 12°21.5 | 12°23.5 | 11°47.7 | 2.6 - 2.1 | 8.6 - 7.1 | 14.6 - 12.0 |
| 27 | 12°21.8 | 12°23.8 | 11°48.0 | 2.7 - 2.2 | 8.7 - 7.2 | 14.7 - 12.1 |
| 28 | 12°22.0 | 12°24.0 | 11°48.2 | 2.8 - 2.3 | 8.8 - 7.3 | 14.8 - 12.2 |
| 29 | 12°22.3 | 12°24.3 | 11°48.4 | 2.9 - 2.4 | 8.9 - 7.3 | 14.9 - 12.3 |
| 30 | 12°22.5 | 12°24.5 | 11°48.7 | 3.0 - 2.5 | 9.0 - 7.4 | 15.0 - 12.4 |
| 31 | 12°22.7 | 12°24.8 | 11°48.9 | 3.1 - 2.6 | 9.1 - 7.5 | 15.1 - 12.5 |
| 32 | 12°23.0 | 12°25.0 | 11°49.2 | 3.2 - 2.6 | 9.2 - 7.6 | 15.2 - 12.5 |
| 33 | 12°23.2 | 12°25.3 | 11°49.4 | 3.3 - 2.7 | 9.3 - 7.7 | 15.3 - 12.6 |
| 34 | 12°23.5 | 12°25.5 | 11°49.6 | 3.4 - 2.8 | 9.4 - 7.8 | 15.4 - 12.7 |
| 35 | 12°23.8 | 12°25.8 | 11°49.9 | 3.5 - 2.9 | 9.5 - 7.8 | 15.5 - 12.8 |
| 36 | 12°24.0 | 12°26.0 | 11°50.1 | 3.6 - 3.0 | 9.6 - 7.9 | 15.6 - 12.9 |
| 37 | 12°24.3 | 12°26.3 | 11°50.3 | 3.7 - 3.1 | 9.7 - 8.0 | 15.7 - 13.0 |
| 38 | 12°24.5 | 12°26.5 | 11°50.6 | 3.8 - 3.1 | 9.8 - 8.1 | 15.8 - 13.0 |
| 39 | 12°24.7 | 12°26.8 | 11°50.8 | 3.9 - 3.2 | 9.9 - 8.2 | 15.9 - 13.1 |
| 40 | 12°25.0 | 12°27.0 | 11°51.1 | 4.0 - 3.3 | 10.0 - 8.3 | 16.0 - 13.2 |
| 41 | 12°25.2 | 12°27.3 | 11°51.3 | 4.1 - 3.4 | 10.1 - 8.3 | 16.1 - 13.3 |
| 42 | 12°25.5 | 12°27.5 | 11°51.5 | 4.2 - 3.5 | 10.2 - 8.4 | 16.2 - 13.4 |
| 43 | 12°25.8 | 12°27.8 | 11°51.8 | 4.3 - 3.5 | 10.3 - 8.5 | 16.3 - 13.4 |
| 44 | 12°26.0 | 12°28.0 | 11°52.0 | 4.4 - 3.6 | 10.4 - 8.6 | 16.4 - 13.5 |
| 45 | 12°26.3 | 12°28.3 | 11°52.3 | 4.5 - 3.7 | 10.5 - 8.7 | 16.5 - 13.6 |
| 46 | 12°26.5 | 12°28.5 | 11°52.5 | 4.6 - 3.8 | 10.6 - 8.7 | 16.6 - 13.7 |
| 47 | 12°26.7 | 12°28.8 | 11°52.7 | 4.7 - 3.9 | 10.7 - 8.8 | 16.7 - 13.8 |
| 48 | 12°27.0 | 12°29.0 | 11°53.0 | 4.8 - 4.0 | 10.8 - 8.9 | 16.8 - 13.9 |
| 49 | 12°27.3 | 12°29.3 | 11°53.2 | 4.9 - 4.0 | 10.9 - 9.0 | 16.9 - 13.9 |
| 50 | 12°27.5 | 12°29.5 | 11°53.4 | 5.0 - 4.1 | 11.0 - 9.1 | 17.0 - 14.0 |
| 51 | 12°27.8 | 12°29.8 | 11°53.7 | 5.1 - 4.2 | 11.1 - 9.2 | 17.1 - 14.1 |
| 52 | 12°28.0 | 12°30.0 | 11°53.9 | 5.2 - 4.3 | 11.2 - 9.2 | 17.2 - 14.2 |
| 53 | 12°28.2 | 12°30.3 | 11°54.2 | 5.3 - 4.4 | 11.3 - 9.3 | 17.3 - 14.3 |
| 54 | 12°28.5 | 12°30.5 | 11°54.4 | 5.4 - 4.5 | 11.4 - 9.4 | 17.4 - 14.4 |
| 55 | 12°28.7 | 12°30.8 | 11°54.6 | 5.5 - 4.5 | 11.5 - 9.5 | 17.5 - 14.4 |
| 56 | 12°29.0 | 12°31.0 | 11°54.9 | 5.6 - 4.6 | 11.6 - 9.6 | 17.6 - 14.5 |
| 57 | 12°29.3 | 12°31.3 | 11°55.1 | 5.7 - 4.7 | 11.7 - 9.7 | 17.7 - 14.6 |
| 58 | 12°29.5 | 12°31.5 | 11°55.4 | 5.8 - 4.8 | 11.8 - 9.7 | 17.8 - 14.7 |
| 59 | 12°29.8 | 12°31.8 | 11°55.6 | 5.9 - 4.9 | 11.9 - 9.8 | 17.9 - 14.8 |

| m 50 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 12°30.0 | 12°32.1 | 11°55.8 | 0.0 - 0.0 | 6.0 - 5.0 | 12.0 - 10.1 |
| 1 | 12°30.2 | 12°32.3 | 11°56.1 | 0.1 - 0.1 | 6.1 - 5.1 | 12.1 - 10.2 |
| 2 | 12°30.5 | 12°32.6 | 11°56.3 | 0.2 - 0.2 | 6.2 - 5.2 | 12.2 - 10.3 |
| 3 | 12°30.7 | 12°32.8 | 11°56.5 | 0.3 - 0.3 | 6.3 - 5.3 | 12.3 - 10.4 |
| 4 | 12°31.0 | 12°33.1 | 11°56.8 | 0.4 - 0.3 | 6.4 - 5.4 | 12.4 - 10.4 |
| 5 | 12°31.3 | 12°33.3 | 11°57.0 | 0.5 - 0.4 | 6.5 - 5.5 | 12.5 - 10.5 |
| 6 | 12°31.5 | 12°33.6 | 11°57.3 | 0.6 - 0.5 | 6.6 - 5.6 | 12.6 - 10.6 |
| 7 | 12°31.8 | 12°33.8 | 11°57.5 | 0.7 - 0.6 | 6.7 - 5.6 | 12.7 - 10.7 |
| 8 | 12°32.0 | 12°34.1 | 11°57.7 | 0.8 - 0.7 | 6.8 - 5.7 | 12.8 - 10.8 |
| 9 | 12°32.2 | 12°34.3 | 11°58.0 | 0.9 - 0.8 | 6.9 - 5.8 | 12.9 - 10.9 |
| 10 | 12°32.5 | 12°34.6 | 11°58.2 | 1.0 - 0.8 | 7.0 - 5.9 | 13.0 - 10.9 |
| 11 | 12°32.7 | 12°34.8 | 11°58.5 | 1.1 - 0.9 | 7.1 - 6.0 | 13.1 - 11.0 |
| 12 | 12°33.0 | 12°35.1 | 11°58.7 | 1.2 - 1.0 | 7.2 - 6.1 | 13.2 - 11.1 |
| 13 | 12°33.3 | 12°35.3 | 11°58.9 | 1.3 - 1.1 | 7.3 - 6.1 | 13.3 - 11.2 |
| 14 | 12°33.5 | 12°35.6 | 11°59.2 | 1.4 - 1.2 | 7.4 - 6.2 | 13.4 - 11.3 |
| 15 | 12°33.8 | 12°35.8 | 11°59.4 | 1.5 - 1.3 | 7.5 - 6.3 | 13.5 - 11.4 |
| 16 | 12°34.0 | 12°36.1 | 11°59.7 | 1.6 - 1.3 | 7.6 - 6.4 | 13.6 - 11.4 |
| 17 | 12°34.2 | 12°36.3 | 11°59.9 | 1.7 - 1.4 | 7.7 - 6.5 | 13.7 - 11.5 |
| 18 | 12°34.5 | 12°36.6 | 12°00.1 | 1.8 - 1.5 | 7.8 - 6.6 | 13.8 - 11.6 |
| 19 | 12°34.8 | 12°36.8 | 12°00.4 | 1.9 - 1.6 | 7.9 - 6.6 | 13.9 - 11.7 |
| 20 | 12°35.0 | 12°37.1 | 12°00.6 | 2.0 - 1.7 | 8.0 - 6.7 | 14.0 - 11.8 |
| 21 | 12°35.3 | 12°37.3 | 12°00.8 | 2.1 - 1.8 | 8.1 - 6.8 | 14.1 - 11.9 |
| 22 | 12°35.5 | 12°37.6 | 12°01.1 | 2.2 - 1.9 | 8.2 - 6.9 | 14.2 - 12.0 |
| 23 | 12°35.7 | 12°37.8 | 12°01.3 | 2.3 - 1.9 | 8.3 - 7.0 | 14.3 - 12.0 |
| 24 | 12°36.0 | 12°38.1 | 12°01.6 | 2.4 - 2.0 | 8.4 - 7.1 | 14.4 - 12.1 |
| 25 | 12°36.2 | 12°38.3 | 12°01.8 | 2.5 - 2.1 | 8.5 - 7.2 | 14.5 - 12.2 |
| 26 | 12°36.5 | 12°38.6 | 12°02.0 | 2.6 - 2.2 | 8.6 - 7.2 | 14.6 - 12.3 |
| 27 | 12°36.8 | 12°38.8 | 12°02.3 | 2.7 - 2.3 | 8.7 - 7.3 | 14.7 - 12.4 |
| 28 | 12°37.0 | 12°39.1 | 12°02.5 | 2.8 - 2.4 | 8.8 - 7.4 | 14.8 - 12.5 |
| 29 | 12°37.3 | 12°39.3 | 12°02.8 | 2.9 - 2.4 | 8.9 - 7.5 | 14.9 - 12.5 |
| 30 | 12°37.5 | 12°39.6 | 12°03.0 | 3.0 - 2.5 | 9.0 - 7.6 | 15.0 - 12.6 |
| 31 | 12°37.7 | 12°39.8 | 12°03.2 | 3.1 - 2.6 | 9.1 - 7.7 | 15.1 - 12.7 |
| 32 | 12°38.0 | 12°40.1 | 12°03.5 | 3.2 - 2.7 | 9.2 - 7.7 | 15.2 - 12.8 |
| 33 | 12°38.2 | 12°40.3 | 12°03.7 | 3.3 - 2.8 | 9.3 - 7.8 | 15.3 - 12.9 |
| 34 | 12°38.5 | 12°40.6 | 12°03.9 | 3.4 - 2.9 | 9.4 - 7.9 | 15.4 - 13.0 |
| 35 | 12°38.8 | 12°40.8 | 12°04.2 | 3.5 - 2.9 | 9.5 - 8.0 | 15.5 - 13.0 |
| 36 | 12°39.0 | 12°41.1 | 12°04.4 | 3.6 - 3.0 | 9.6 - 8.1 | 15.6 - 13.1 |
| 37 | 12°39.3 | 12°41.3 | 12°04.7 | 3.7 - 3.1 | 9.7 - 8.2 | 15.7 - 13.2 |
| 38 | 12°39.5 | 12°41.6 | 12°04.9 | 3.8 - 3.2 | 9.8 - 8.2 | 15.8 - 13.3 |
| 39 | 12°39.7 | 12°41.8 | 12°05.1 | 3.9 - 3.3 | 9.9 - 8.3 | 15.9 - 13.4 |
| 40 | 12°40.0 | 12°42.1 | 12°05.4 | 4.0 - 3.4 | 10.0 - 8.4 | 16.0 - 13.5 |
| 41 | 12°40.2 | 12°42.3 | 12°05.6 | 4.1 - 3.5 | 10.1 - 8.5 | 16.1 - 13.6 |
| 42 | 12°40.5 | 12°42.6 | 12°05.9 | 4.2 - 3.5 | 10.2 - 8.6 | 16.2 - 13.6 |
| 43 | 12°40.8 | 12°42.8 | 12°06.1 | 4.3 - 3.6 | 10.3 - 8.7 | 16.3 - 13.7 |
| 44 | 12°41.0 | 12°43.1 | 12°06.3 | 4.4 - 3.7 | 10.4 - 8.8 | 16.4 - 13.8 |
| 45 | 12°41.3 | 12°43.3 | 12°06.6 | 4.5 - 3.8 | 10.5 - 8.8 | 16.5 - 13.9 |
| 46 | 12°41.5 | 12°43.6 | 12°06.8 | 4.6 - 3.9 | 10.6 - 8.9 | 16.6 - 14.0 |
| 47 | 12°41.7 | 12°43.8 | 12°07.0 | 4.7 - 4.0 | 10.7 - 9.0 | 16.7 - 14.1 |
| 48 | 12°42.0 | 12°44.1 | 12°07.3 | 4.8 - 4.0 | 10.8 - 9.1 | 16.8 - 14.1 |
| 49 | 12°42.3 | 12°44.3 | 12°07.5 | 4.9 - 4.1 | 10.9 - 9.2 | 16.9 - 14.2 |
| 50 | 12°42.5 | 12°44.6 | 12°07.8 | 5.0 - 4.2 | 11.0 - 9.3 | 17.0 - 14.3 |
| 51 | 12°42.8 | 12°44.8 | 12°08.0 | 5.1 - 4.3 | 11.1 - 9.3 | 17.1 - 14.4 |
| 52 | 12°43.0 | 12°45.1 | 12°08.2 | 5.2 - 4.4 | 11.2 - 9.4 | 17.2 - 14.5 |
| 53 | 12°43.2 | 12°45.3 | 12°08.5 | 5.3 - 4.5 | 11.3 - 9.5 | 17.3 - 14.6 |
| 54 | 12°43.5 | 12°45.6 | 12°08.7 | 5.4 - 4.5 | 11.4 - 9.6 | 17.4 - 14.6 |
| 55 | 12°43.7 | 12°45.8 | 12°09.0 | 5.5 - 4.6 | 11.5 - 9.7 | 17.5 - 14.7 |
| 56 | 12°44.0 | 12°46.1 | 12°09.2 | 5.6 - 4.7 | 11.6 - 9.8 | 17.6 - 14.8 |
| 57 | 12°44.3 | 12°46.3 | 12°09.4 | 5.7 - 4.8 | 11.7 - 9.8 | 17.7 - 14.9 |
| 58 | 12°44.5 | 12°46.6 | 12°09.7 | 5.8 - 4.9 | 11.8 - 9.9 | 17.8 - 15.0 |
| 59 | 12°44.8 | 12°46.8 | 12°09.9 | 5.9 - 5.0 | 11.9 - 10.0 | 17.9 - 15.1 |

# Increments and Corrections

| m 51 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 12°45.0 | 12°47.1 | 12°10.1 | 0.0 - 0.0 | 6.0 - 5.1 | 12.0 - 10.3 |
| 1 | 12°45.2 | 12°47.3 | 12°10.4 | 0.1 - 0.1 | 6.1 - 5.2 | 12.1 - 10.4 |
| 2 | 12°45.5 | 12°47.6 | 12°10.6 | 0.2 - 0.2 | 6.2 - 5.3 | 12.2 - 10.5 |
| 3 | 12°45.7 | 12°47.8 | 12°10.9 | 0.3 - 0.3 | 6.3 - 5.4 | 12.3 - 10.6 |
| 4 | 12°46.0 | 12°48.1 | 12°11.1 | 0.4 - 0.3 | 6.4 - 5.5 | 12.4 - 10.6 |
| 5 | 12°46.3 | 12°48.3 | 12°11.3 | 0.5 - 0.4 | 6.5 - 5.6 | 12.5 - 10.7 |
| 6 | 12°46.5 | 12°48.6 | 12°11.6 | 0.6 - 0.5 | 6.6 - 5.7 | 12.6 - 10.8 |
| 7 | 12°46.8 | 12°48.8 | 12°11.8 | 0.7 - 0.6 | 6.7 - 5.8 | 12.7 - 10.9 |
| 8 | 12°47.0 | 12°49.1 | 12°12.1 | 0.8 - 0.7 | 6.8 - 5.8 | 12.8 - 11.0 |
| 9 | 12°47.2 | 12°49.3 | 12°12.3 | 0.9 - 0.8 | 6.9 - 5.9 | 12.9 - 11.1 |
| 10 | 12°47.5 | 12°49.6 | 12°12.5 | 1.0 - 0.9 | 7.0 - 6.0 | 13.0 - 11.2 |
| 11 | 12°47.7 | 12°49.8 | 12°12.8 | 1.1 - 0.9 | 7.1 - 6.1 | 13.1 - 11.2 |
| 12 | 12°48.0 | 12°50.1 | 12°13.0 | 1.2 - 1.0 | 7.2 - 6.2 | 13.2 - 11.3 |
| 13 | 12°48.3 | 12°50.3 | 12°13.3 | 1.3 - 1.1 | 7.3 - 6.3 | 13.3 - 11.4 |
| 14 | 12°48.5 | 12°50.6 | 12°13.5 | 1.4 - 1.2 | 7.4 - 6.4 | 13.4 - 11.5 |
| 15 | 12°48.8 | 12°50.9 | 12°13.7 | 1.5 - 1.3 | 7.5 - 6.4 | 13.5 - 11.6 |
| 16 | 12°49.0 | 12°51.1 | 12°14.0 | 1.6 - 1.4 | 7.6 - 6.5 | 13.6 - 11.7 |
| 17 | 12°49.2 | 12°51.4 | 12°14.2 | 1.7 - 1.5 | 7.7 - 6.6 | 13.7 - 11.8 |
| 18 | 12°49.5 | 12°51.6 | 12°14.4 | 1.8 - 1.5 | 7.8 - 6.7 | 13.8 - 11.8 |
| 19 | 12°49.8 | 12°51.9 | 12°14.7 | 1.9 - 1.6 | 7.9 - 6.8 | 13.9 - 11.9 |
| 20 | 12°50.0 | 12°52.1 | 12°14.9 | 2.0 - 1.7 | 8.0 - 6.9 | 14.0 - 12.0 |
| 21 | 12°50.3 | 12°52.4 | 12°15.2 | 2.1 - 1.8 | 8.1 - 7.0 | 14.1 - 12.1 |
| 22 | 12°50.5 | 12°52.6 | 12°15.4 | 2.2 - 1.9 | 8.2 - 7.0 | 14.2 - 12.2 |
| 23 | 12°50.7 | 12°52.9 | 12°15.6 | 2.3 - 2.0 | 8.3 - 7.1 | 14.3 - 12.3 |
| 24 | 12°51.0 | 12°53.1 | 12°15.9 | 2.4 - 2.1 | 8.4 - 7.2 | 14.4 - 12.4 |
| 25 | 12°51.2 | 12°53.4 | 12°16.1 | 2.5 - 2.1 | 8.5 - 7.3 | 14.5 - 12.4 |
| 26 | 12°51.5 | 12°53.6 | 12°16.4 | 2.6 - 2.2 | 8.6 - 7.4 | 14.6 - 12.5 |
| 27 | 12°51.8 | 12°53.9 | 12°16.6 | 2.7 - 2.3 | 8.7 - 7.5 | 14.7 - 12.6 |
| 28 | 12°52.0 | 12°54.1 | 12°16.8 | 2.8 - 2.4 | 8.8 - 7.6 | 14.8 - 12.7 |
| 29 | 12°52.3 | 12°54.4 | 12°17.1 | 2.9 - 2.5 | 8.9 - 7.6 | 14.9 - 12.8 |
| 30 | 12°52.5 | 12°54.6 | 12°17.3 | 3.0 - 2.6 | 9.0 - 7.7 | 15.0 - 12.9 |
| 31 | 12°52.7 | 12°54.9 | 12°17.5 | 3.1 - 2.7 | 9.1 - 7.8 | 15.1 - 13.0 |
| 32 | 12°53.0 | 12°55.1 | 12°17.8 | 3.2 - 2.7 | 9.2 - 7.9 | 15.2 - 13.0 |
| 33 | 12°53.2 | 12°55.4 | 12°18.0 | 3.3 - 2.8 | 9.3 - 8.0 | 15.3 - 13.1 |
| 34 | 12°53.5 | 12°55.6 | 12°18.3 | 3.4 - 2.9 | 9.4 - 8.1 | 15.4 - 13.2 |
| 35 | 12°53.8 | 12°55.9 | 12°18.5 | 3.5 - 3.0 | 9.5 - 8.2 | 15.5 - 13.3 |
| 36 | 12°54.0 | 12°56.1 | 12°18.7 | 3.6 - 3.1 | 9.6 - 8.2 | 15.6 - 13.4 |
| 37 | 12°54.3 | 12°56.4 | 12°19.0 | 3.7 - 3.2 | 9.7 - 8.3 | 15.7 - 13.5 |
| 38 | 12°54.5 | 12°56.6 | 12°19.2 | 3.8 - 3.3 | 9.8 - 8.4 | 15.8 - 13.6 |
| 39 | 12°54.7 | 12°56.9 | 12°19.5 | 3.9 - 3.3 | 9.9 - 8.5 | 15.9 - 13.6 |
| 40 | 12°55.0 | 12°57.1 | 12°19.7 | 4.0 - 3.4 | 10.0 - 8.6 | 16.0 - 13.7 |
| 41 | 12°55.2 | 12°57.4 | 12°19.9 | 4.1 - 3.5 | 10.1 - 8.7 | 16.1 - 13.8 |
| 42 | 12°55.5 | 12°57.6 | 12°20.2 | 4.2 - 3.6 | 10.2 - 8.8 | 16.2 - 13.9 |
| 43 | 12°55.8 | 12°57.9 | 12°20.4 | 4.3 - 3.7 | 10.3 - 8.8 | 16.3 - 14.0 |
| 44 | 12°56.0 | 12°58.1 | 12°20.6 | 4.4 - 3.8 | 10.4 - 8.9 | 16.4 - 14.1 |
| 45 | 12°56.3 | 12°58.4 | 12°20.9 | 4.5 - 3.9 | 10.5 - 9.0 | 16.5 - 14.2 |
| 46 | 12°56.5 | 12°58.6 | 12°21.1 | 4.6 - 3.9 | 10.6 - 9.1 | 16.6 - 14.2 |
| 47 | 12°56.7 | 12°58.9 | 12°21.4 | 4.7 - 4.0 | 10.7 - 9.2 | 16.7 - 14.3 |
| 48 | 12°57.0 | 12°59.1 | 12°21.6 | 4.8 - 4.1 | 10.8 - 9.3 | 16.8 - 14.4 |
| 49 | 12°57.3 | 12°59.4 | 12°21.8 | 4.9 - 4.2 | 10.9 - 9.4 | 16.9 - 14.5 |
| 50 | 12°57.5 | 12°59.6 | 12°22.1 | 5.0 - 4.3 | 11.0 - 9.4 | 17.0 - 14.6 |
| 51 | 12°57.8 | 12°59.9 | 12°22.3 | 5.1 - 4.4 | 11.1 - 9.5 | 17.1 - 14.7 |
| 52 | 12°58.0 | 13°00.1 | 12°22.6 | 5.2 - 4.5 | 11.2 - 9.6 | 17.2 - 14.8 |
| 53 | 12°58.2 | 13°00.4 | 12°22.8 | 5.3 - 4.5 | 11.3 - 9.7 | 17.3 - 14.8 |
| 54 | 12°58.5 | 13°00.6 | 12°23.0 | 5.4 - 4.6 | 11.4 - 9.8 | 17.4 - 14.9 |
| 55 | 12°58.7 | 13°00.9 | 12°23.3 | 5.5 - 4.7 | 11.5 - 9.9 | 17.5 - 15.0 |
| 56 | 12°59.0 | 13°01.1 | 12°23.5 | 5.6 - 4.8 | 11.6 - 10.0 | 17.6 - 15.1 |
| 57 | 12°59.3 | 13°01.4 | 12°23.8 | 5.7 - 4.9 | 11.7 - 10.0 | 17.7 - 15.2 |
| 58 | 12°59.5 | 13°01.6 | 12°24.0 | 5.8 - 5.0 | 11.8 - 10.1 | 17.8 - 15.3 |
| 59 | 12°59.8 | 13°01.9 | 12°24.2 | 5.9 - 5.1 | 11.9 - 10.2 | 17.9 - 15.4 |

| m 52 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 13°00.0 | 13°02.1 | 12°24.5 | 0.0 - 0.0 | 6.0 - 5.3 | 12.0 - 10.5 |
| 1 | 13°00.2 | 13°02.4 | 12°24.7 | 0.1 - 0.1 | 6.1 - 5.3 | 12.1 - 10.6 |
| 2 | 13°00.5 | 13°02.6 | 12°24.9 | 0.2 - 0.2 | 6.2 - 5.4 | 12.2 - 10.7 |
| 3 | 13°00.7 | 13°02.9 | 12°25.2 | 0.3 - 0.3 | 6.3 - 5.5 | 12.3 - 10.8 |
| 4 | 13°01.0 | 13°03.1 | 12°25.4 | 0.4 - 0.4 | 6.4 - 5.6 | 12.4 - 10.8 |
| 5 | 13°01.3 | 13°03.4 | 12°25.7 | 0.5 - 0.4 | 6.5 - 5.7 | 12.5 - 10.9 |
| 6 | 13°01.5 | 13°03.6 | 12°25.9 | 0.6 - 0.5 | 6.6 - 5.8 | 12.6 - 11.0 |
| 7 | 13°01.8 | 13°03.9 | 12°26.1 | 0.7 - 0.6 | 6.7 - 5.9 | 12.7 - 11.1 |
| 8 | 13°02.0 | 13°04.1 | 12°26.4 | 0.8 - 0.7 | 6.8 - 6.0 | 12.8 - 11.2 |
| 9 | 13°02.2 | 13°04.4 | 12°26.6 | 0.9 - 0.8 | 6.9 - 6.0 | 12.9 - 11.3 |
| 10 | 13°02.5 | 13°04.6 | 12°26.9 | 1.0 - 0.9 | 7.0 - 6.1 | 13.0 - 11.4 |
| 11 | 13°02.7 | 13°04.9 | 12°27.1 | 1.1 - 1.0 | 7.1 - 6.2 | 13.1 - 11.5 |
| 12 | 13°03.0 | 13°05.1 | 12°27.3 | 1.2 - 1.1 | 7.2 - 6.3 | 13.2 - 11.5 |
| 13 | 13°03.3 | 13°05.4 | 12°27.6 | 1.3 - 1.1 | 7.3 - 6.4 | 13.3 - 11.6 |
| 14 | 13°03.5 | 13°05.6 | 12°27.8 | 1.4 - 1.2 | 7.4 - 6.5 | 13.4 - 11.7 |
| 15 | 13°03.8 | 13°05.9 | 12°28.0 | 1.5 - 1.3 | 7.5 - 6.6 | 13.5 - 11.8 |
| 16 | 13°04.0 | 13°06.1 | 12°28.3 | 1.6 - 1.4 | 7.6 - 6.6 | 13.6 - 11.9 |
| 17 | 13°04.2 | 13°06.4 | 12°28.5 | 1.7 - 1.5 | 7.7 - 6.7 | 13.7 - 12.0 |
| 18 | 13°04.5 | 13°06.6 | 12°28.8 | 1.8 - 1.6 | 7.8 - 6.8 | 13.8 - 12.1 |
| 19 | 13°04.8 | 13°06.9 | 12°29.0 | 1.9 - 1.7 | 7.9 - 6.9 | 13.9 - 12.2 |
| 20 | 13°05.0 | 13°07.1 | 12°29.2 | 2.0 - 1.8 | 8.0 - 7.0 | 14.0 - 12.3 |
| 21 | 13°05.3 | 13°07.4 | 12°29.5 | 2.1 - 1.8 | 8.1 - 7.1 | 14.1 - 12.3 |
| 22 | 13°05.5 | 13°07.6 | 12°29.7 | 2.2 - 1.9 | 8.2 - 7.2 | 14.2 - 12.4 |
| 23 | 13°05.7 | 13°07.9 | 12°30.0 | 2.3 - 2.0 | 8.3 - 7.3 | 14.3 - 12.5 |
| 24 | 13°06.0 | 13°08.1 | 12°30.2 | 2.4 - 2.1 | 8.4 - 7.4 | 14.4 - 12.6 |
| 25 | 13°06.2 | 13°08.4 | 12°30.4 | 2.5 - 2.2 | 8.5 - 7.4 | 14.5 - 12.7 |
| 26 | 13°06.5 | 13°08.6 | 12°30.7 | 2.6 - 2.3 | 8.6 - 7.5 | 14.6 - 12.8 |
| 27 | 13°06.8 | 13°08.9 | 12°30.9 | 2.7 - 2.4 | 8.7 - 7.6 | 14.7 - 12.9 |
| 28 | 13°07.0 | 13°09.2 | 12°31.1 | 2.8 - 2.5 | 8.8 - 7.7 | 14.8 - 13.0 |
| 29 | 13°07.3 | 13°09.4 | 12°31.4 | 2.9 - 2.5 | 8.9 - 7.8 | 14.9 - 13.0 |
| 30 | 13°07.5 | 13°09.7 | 12°31.6 | 3.0 - 2.6 | 9.0 - 7.9 | 15.0 - 13.1 |
| 31 | 13°07.7 | 13°09.9 | 12°31.9 | 3.1 - 2.7 | 9.1 - 8.0 | 15.1 - 13.2 |
| 32 | 13°08.0 | 13°10.2 | 12°32.1 | 3.2 - 2.8 | 9.2 - 8.0 | 15.2 - 13.3 |
| 33 | 13°08.2 | 13°10.4 | 12°32.3 | 3.3 - 2.9 | 9.3 - 8.1 | 15.3 - 13.4 |
| 34 | 13°08.5 | 13°10.7 | 12°32.6 | 3.4 - 3.0 | 9.4 - 8.2 | 15.4 - 13.5 |
| 35 | 13°08.8 | 13°10.9 | 12°32.8 | 3.5 - 3.1 | 9.5 - 8.3 | 15.5 - 13.6 |
| 36 | 13°09.0 | 13°11.2 | 12°33.1 | 3.6 - 3.1 | 9.6 - 8.4 | 15.6 - 13.7 |
| 37 | 13°09.3 | 13°11.4 | 12°33.3 | 3.7 - 3.2 | 9.7 - 8.5 | 15.7 - 13.7 |
| 38 | 13°09.5 | 13°11.7 | 12°33.5 | 3.8 - 3.3 | 9.8 - 8.6 | 15.8 - 13.8 |
| 39 | 13°09.7 | 13°11.9 | 12°33.8 | 3.9 - 3.4 | 9.9 - 8.7 | 15.9 - 13.9 |
| 40 | 13°10.0 | 13°12.2 | 12°34.0 | 4.0 - 3.5 | 10.0 - 8.8 | 16.0 - 14.0 |
| 41 | 13°10.2 | 13°12.4 | 12°34.2 | 4.1 - 3.6 | 10.1 - 8.8 | 16.1 - 14.1 |
| 42 | 13°10.5 | 13°12.7 | 12°34.5 | 4.2 - 3.7 | 10.2 - 8.9 | 16.2 - 14.2 |
| 43 | 13°10.8 | 13°12.9 | 12°34.7 | 4.3 - 3.8 | 10.3 - 9.0 | 16.3 - 14.3 |
| 44 | 13°11.0 | 13°13.2 | 12°35.0 | 4.4 - 3.9 | 10.4 - 9.1 | 16.4 - 14.3 |
| 45 | 13°11.3 | 13°13.4 | 12°35.2 | 4.5 - 3.9 | 10.5 - 9.2 | 16.5 - 14.4 |
| 46 | 13°11.5 | 13°13.7 | 12°35.4 | 4.6 - 4.0 | 10.6 - 9.3 | 16.6 - 14.5 |
| 47 | 13°11.7 | 13°13.9 | 12°35.7 | 4.7 - 4.1 | 10.7 - 9.4 | 16.7 - 14.6 |
| 48 | 13°12.0 | 13°14.2 | 12°35.9 | 4.8 - 4.2 | 10.8 - 9.5 | 16.8 - 14.7 |
| 49 | 13°12.3 | 13°14.4 | 12°36.2 | 4.9 - 4.3 | 10.9 - 9.5 | 16.9 - 14.8 |
| 50 | 13°12.5 | 13°14.7 | 12°36.4 | 5.0 - 4.4 | 11.0 - 9.6 | 17.0 - 14.9 |
| 51 | 13°12.8 | 13°14.9 | 12°36.6 | 5.1 - 4.5 | 11.1 - 9.7 | 17.1 - 15.0 |
| 52 | 13°13.0 | 13°15.2 | 12°36.9 | 5.2 - 4.5 | 11.2 - 9.8 | 17.2 - 15.0 |
| 53 | 13°13.2 | 13°15.4 | 12°37.1 | 5.3 - 4.6 | 11.3 - 9.9 | 17.3 - 15.1 |
| 54 | 13°13.5 | 13°15.7 | 12°37.4 | 5.4 - 4.7 | 11.4 - 10.0 | 17.4 - 15.2 |
| 55 | 13°13.7 | 13°15.9 | 12°37.6 | 5.5 - 4.8 | 11.5 - 10.1 | 17.5 - 15.3 |
| 56 | 13°14.0 | 13°16.2 | 12°37.8 | 5.6 - 4.9 | 11.6 - 10.2 | 17.6 - 15.4 |
| 57 | 13°14.3 | 13°16.4 | 12°38.1 | 5.7 - 5.0 | 11.7 - 10.2 | 17.7 - 15.5 |
| 58 | 13°14.5 | 13°16.7 | 12°38.3 | 5.8 - 5.1 | 11.8 - 10.3 | 17.8 - 15.6 |
| 59 | 13°14.8 | 13°16.9 | 12°38.5 | 5.9 - 5.2 | 11.9 - 10.4 | 17.9 - 15.7 |

| m 53 | Sun Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 13°15.0 | 13°17.2 | 12°38.8 | 0.0 - 0.0 | 6.0 - 5.4 | 12.0 - 10.7 |
| 1 | 13°15.2 | 13°17.4 | 12°39.0 | 0.1 - 0.1 | 6.1 - 5.4 | 12.1 - 10.8 |
| 2 | 13°15.5 | 13°17.7 | 12°39.3 | 0.2 - 0.2 | 6.2 - 5.5 | 12.2 - 10.9 |
| 3 | 13°15.7 | 13°17.9 | 12°39.5 | 0.3 - 0.3 | 6.3 - 5.6 | 12.3 - 11.0 |
| 4 | 13°16.0 | 13°18.2 | 12°39.7 | 0.4 - 0.4 | 6.4 - 5.7 | 12.4 - 11.1 |
| 5 | 13°16.3 | 13°18.4 | 12°40.0 | 0.5 - 0.4 | 6.5 - 5.8 | 12.5 - 11.1 |
| 6 | 13°16.5 | 13°18.7 | 12°40.2 | 0.6 - 0.5 | 6.6 - 5.9 | 12.6 - 11.2 |
| 7 | 13°16.8 | 13°18.9 | 12°40.5 | 0.7 - 0.6 | 6.7 - 6.0 | 12.7 - 11.3 |
| 8 | 13°17.0 | 13°19.2 | 12°40.7 | 0.8 - 0.7 | 6.8 - 6.1 | 12.8 - 11.4 |
| 9 | 13°17.2 | 13°19.4 | 12°40.9 | 0.9 - 0.8 | 6.9 - 6.2 | 12.9 - 11.5 |
| 10 | 13°17.5 | 13°19.7 | 12°41.2 | 1.0 - 0.9 | 7.0 - 6.2 | 13.0 - 11.6 |
| 11 | 13°17.7 | 13°19.9 | 12°41.4 | 1.1 - 1.0 | 7.1 - 6.3 | 13.1 - 11.7 |
| 12 | 13°18.0 | 13°20.2 | 12°41.6 | 1.2 - 1.1 | 7.2 - 6.4 | 13.2 - 11.8 |
| 13 | 13°18.3 | 13°20.4 | 12°41.9 | 1.3 - 1.2 | 7.3 - 6.5 | 13.3 - 11.9 |
| 14 | 13°18.5 | 13°20.7 | 12°42.1 | 1.4 - 1.2 | 7.4 - 6.6 | 13.4 - 11.9 |
| 15 | 13°18.8 | 13°20.9 | 12°42.4 | 1.5 - 1.3 | 7.5 - 6.7 | 13.5 - 12.0 |
| 16 | 13°19.0 | 13°21.2 | 12°42.6 | 1.6 - 1.4 | 7.6 - 6.8 | 13.6 - 12.1 |
| 17 | 13°19.2 | 13°21.4 | 12°42.8 | 1.7 - 1.5 | 7.7 - 6.9 | 13.7 - 12.2 |
| 18 | 13°19.5 | 13°21.7 | 12°43.1 | 1.8 - 1.6 | 7.8 - 7.0 | 13.8 - 12.3 |
| 19 | 13°19.8 | 13°21.9 | 12°43.3 | 1.9 - 1.7 | 7.9 - 7.0 | 13.9 - 12.4 |
| 20 | 13°20.0 | 13°22.2 | 12°43.6 | 2.0 - 1.8 | 8.0 - 7.1 | 14.0 - 12.5 |
| 21 | 13°20.3 | 13°22.4 | 12°43.8 | 2.1 - 1.9 | 8.1 - 7.2 | 14.1 - 12.6 |
| 22 | 13°20.5 | 13°22.7 | 12°44.0 | 2.2 - 2.0 | 8.2 - 7.3 | 14.2 - 12.7 |
| 23 | 13°20.7 | 13°22.9 | 12°44.3 | 2.3 - 2.1 | 8.3 - 7.4 | 14.3 - 12.8 |
| 24 | 13°21.0 | 13°23.2 | 12°44.5 | 2.4 - 2.1 | 8.4 - 7.5 | 14.4 - 12.8 |
| 25 | 13°21.2 | 13°23.4 | 12°44.7 | 2.5 - 2.2 | 8.5 - 7.6 | 14.5 - 12.9 |
| 26 | 13°21.5 | 13°23.7 | 12°45.0 | 2.6 - 2.3 | 8.6 - 7.7 | 14.6 - 13.0 |
| 27 | 13°21.8 | 13°23.9 | 12°45.2 | 2.7 - 2.4 | 8.7 - 7.8 | 14.7 - 13.1 |
| 28 | 13°22.0 | 13°24.2 | 12°45.5 | 2.8 - 2.5 | 8.8 - 7.8 | 14.8 - 13.2 |
| 29 | 13°22.3 | 13°24.4 | 12°45.7 | 2.9 - 2.6 | 8.9 - 7.9 | 14.9 - 13.3 |
| 30 | 13°22.5 | 13°24.7 | 12°45.9 | 3.0 - 2.7 | 9.0 - 8.0 | 15.0 - 13.4 |
| 31 | 13°22.7 | 13°24.9 | 12°46.2 | 3.1 - 2.8 | 9.1 - 8.1 | 15.1 - 13.5 |
| 32 | 13°23.0 | 13°25.2 | 12°46.4 | 3.2 - 2.9 | 9.2 - 8.2 | 15.2 - 13.6 |
| 33 | 13°23.2 | 13°25.4 | 12°46.7 | 3.3 - 2.9 | 9.3 - 8.3 | 15.3 - 13.6 |
| 34 | 13°23.5 | 13°25.7 | 12°46.9 | 3.4 - 3.0 | 9.4 - 8.4 | 15.4 - 13.7 |
| 35 | 13°23.8 | 13°25.9 | 12°47.1 | 3.5 - 3.1 | 9.5 - 8.5 | 15.5 - 13.8 |
| 36 | 13°24.0 | 13°26.2 | 12°47.4 | 3.6 - 3.2 | 9.6 - 8.6 | 15.6 - 13.9 |
| 37 | 13°24.3 | 13°26.4 | 12°47.6 | 3.7 - 3.3 | 9.7 - 8.6 | 15.7 - 14.0 |
| 38 | 13°24.5 | 13°26.7 | 12°47.9 | 3.8 - 3.4 | 9.8 - 8.7 | 15.8 - 14.1 |
| 39 | 13°24.7 | 13°26.9 | 12°48.1 | 3.9 - 3.5 | 9.9 - 8.8 | 15.9 - 14.2 |
| 40 | 13°25.0 | 13°27.2 | 12°48.3 | 4.0 - 3.6 | 10.0 - 8.9 | 16.0 - 14.3 |
| 41 | 13°25.2 | 13°27.5 | 12°48.6 | 4.1 - 3.7 | 10.1 - 9.0 | 16.1 - 14.4 |
| 42 | 13°25.5 | 13°27.7 | 12°48.8 | 4.2 - 3.7 | 10.2 - 9.1 | 16.2 - 14.4 |
| 43 | 13°25.8 | 13°28.0 | 12°49.0 | 4.3 - 3.8 | 10.3 - 9.2 | 16.3 - 14.5 |
| 44 | 13°26.0 | 13°28.2 | 12°49.3 | 4.4 - 3.9 | 10.4 - 9.3 | 16.4 - 14.6 |
| 45 | 13°26.3 | 13°28.5 | 12°49.5 | 4.5 - 4.0 | 10.5 - 9.4 | 16.5 - 14.7 |
| 46 | 13°26.5 | 13°28.7 | 12°49.8 | 4.6 - 4.1 | 10.6 - 9.5 | 16.6 - 14.8 |
| 47 | 13°26.7 | 13°29.0 | 12°50.0 | 4.7 - 4.2 | 10.7 - 9.5 | 16.7 - 14.9 |
| 48 | 13°27.0 | 13°29.2 | 12°50.2 | 4.8 - 4.3 | 10.8 - 9.6 | 16.8 - 15.0 |
| 49 | 13°27.3 | 13°29.5 | 12°50.5 | 4.9 - 4.4 | 10.9 - 9.7 | 16.9 - 15.1 |
| 50 | 13°27.5 | 13°29.7 | 12°50.7 | 5.0 - 4.5 | 11.0 - 9.8 | 17.0 - 15.2 |
| 51 | 13°27.8 | 13°30.0 | 12°51.0 | 5.1 - 4.5 | 11.1 - 9.9 | 17.1 - 15.2 |
| 52 | 13°28.0 | 13°30.2 | 12°51.2 | 5.2 - 4.6 | 11.2 - 10.0 | 17.2 - 15.3 |
| 53 | 13°28.2 | 13°30.5 | 12°51.4 | 5.3 - 4.7 | 11.3 - 10.1 | 17.3 - 15.4 |
| 54 | 13°28.5 | 13°30.7 | 12°51.7 | 5.4 - 4.8 | 11.4 - 10.2 | 17.4 - 15.5 |
| 55 | 13°28.7 | 13°31.0 | 12°51.9 | 5.5 - 4.9 | 11.5 - 10.3 | 17.5 - 15.6 |
| 56 | 13°29.0 | 13°31.2 | 12°52.1 | 5.6 - 5.0 | 11.6 - 10.3 | 17.6 - 15.7 |
| 57 | 13°29.3 | 13°31.5 | 12°52.4 | 5.7 - 5.1 | 11.7 - 10.4 | 17.7 - 15.8 |
| 58 | 13°29.5 | 13°31.7 | 12°52.6 | 5.8 - 5.2 | 11.8 - 10.5 | 17.8 - 15.9 |
| 59 | 13°29.8 | 13°32.0 | 12°52.9 | 5.9 - 5.3 | 11.9 - 10.6 | 17.9 - 16.0 |

# Increments and Corrections

| m<br>54 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 13°30.0 | 13°32.2 | 12°53.1 | 0.0 - 0.0 | 6.0 - 5.5 | 12.0 - 10.9 |
| 1 | 13°30.2 | 13°32.5 | 12°53.3 | 0.1 - 0.1 | 6.1 - 5.5 | 12.1 - 11.0 |
| 2 | 13°30.5 | 13°32.7 | 12°53.6 | 0.2 - 0.2 | 6.2 - 5.6 | 12.2 - 11.1 |
| 3 | 13°30.7 | 13°33.0 | 12°53.8 | 0.3 - 0.3 | 6.3 - 5.7 | 12.3 - 11.2 |
| 4 | 13°31.0 | 13°33.2 | 12°54.1 | 0.4 - 0.4 | 6.4 - 5.8 | 12.4 - 11.3 |
| 5 | 13°31.3 | 13°33.5 | 12°54.3 | 0.5 - 0.5 | 6.5 - 5.9 | 12.5 - 11.4 |
| 6 | 13°31.5 | 13°33.7 | 12°54.5 | 0.6 - 0.5 | 6.6 - 6.0 | 12.6 - 11.4 |
| 7 | 13°31.8 | 13°34.0 | 12°54.8 | 0.7 - 0.6 | 6.7 - 6.1 | 12.7 - 11.5 |
| 8 | 13°32.0 | 13°34.2 | 12°55.0 | 0.8 - 0.7 | 6.8 - 6.2 | 12.8 - 11.6 |
| 9 | 13°32.2 | 13°34.5 | 12°55.2 | 0.9 - 0.8 | 6.9 - 6.3 | 12.9 - 11.7 |
| 10 | 13°32.5 | 13°34.7 | 12°55.5 | 1.0 - 0.9 | 7.0 - 6.4 | 13.0 - 11.8 |
| 11 | 13°32.7 | 13°35.0 | 12°55.7 | 1.1 - 1.0 | 7.1 - 6.4 | 13.1 - 11.9 |
| 12 | 13°33.0 | 13°35.2 | 12°56.0 | 1.2 - 1.1 | 7.2 - 6.5 | 13.2 - 12.0 |
| 13 | 13°33.3 | 13°35.5 | 12°56.2 | 1.3 - 1.2 | 7.3 - 6.6 | 13.3 - 12.1 |
| 14 | 13°33.5 | 13°35.7 | 12°56.4 | 1.4 - 1.3 | 7.4 - 6.7 | 13.4 - 12.2 |
| 15 | 13°33.8 | 13°36.0 | 12°56.7 | 1.5 - 1.4 | 7.5 - 6.8 | 13.5 - 12.3 |
| 16 | 13°34.0 | 13°36.2 | 12°56.9 | 1.6 - 1.5 | 7.6 - 6.9 | 13.6 - 12.4 |
| 17 | 13°34.2 | 13°36.5 | 12°57.2 | 1.7 - 1.5 | 7.7 - 7.0 | 13.7 - 12.4 |
| 18 | 13°34.5 | 13°36.7 | 12°57.4 | 1.8 - 1.6 | 7.8 - 7.1 | 13.8 - 12.5 |
| 19 | 13°34.8 | 13°37.0 | 12°57.6 | 1.9 - 1.7 | 7.9 - 7.2 | 13.9 - 12.6 |
| 20 | 13°35.0 | 13°37.2 | 12°57.9 | 2.0 - 1.8 | 8.0 - 7.3 | 14.0 - 12.7 |
| 21 | 13°35.3 | 13°37.5 | 12°58.1 | 2.1 - 1.9 | 8.1 - 7.4 | 14.1 - 12.8 |
| 22 | 13°35.5 | 13°37.7 | 12°58.3 | 2.2 - 2.0 | 8.2 - 7.4 | 14.2 - 12.9 |
| 23 | 13°35.7 | 13°38.0 | 12°58.6 | 2.3 - 2.1 | 8.3 - 7.5 | 14.3 - 13.0 |
| 24 | 13°36.0 | 13°38.2 | 12°58.8 | 2.4 - 2.2 | 8.4 - 7.6 | 14.4 - 13.1 |
| 25 | 13°36.2 | 13°38.5 | 12°59.1 | 2.5 - 2.3 | 8.5 - 7.7 | 14.5 - 13.2 |
| 26 | 13°36.5 | 13°38.7 | 12°59.3 | 2.6 - 2.4 | 8.6 - 7.8 | 14.6 - 13.3 |
| 27 | 13°36.8 | 13°39.0 | 12°59.5 | 2.7 - 2.5 | 8.7 - 7.9 | 14.7 - 13.4 |
| 28 | 13°37.0 | 13°39.2 | 12°59.8 | 2.8 - 2.5 | 8.8 - 8.0 | 14.8 - 13.4 |
| 29 | 13°37.3 | 13°39.5 | 13°00.0 | 2.9 - 2.6 | 8.9 - 8.1 | 14.9 - 13.5 |
| 30 | 13°37.5 | 13°39.7 | 13°00.3 | 3.0 - 2.7 | 9.0 - 8.2 | 15.0 - 13.6 |
| 31 | 13°37.7 | 13°40.0 | 13°00.5 | 3.1 - 2.8 | 9.1 - 8.3 | 15.1 - 13.7 |
| 32 | 13°38.0 | 13°40.2 | 13°00.7 | 3.2 - 2.9 | 9.2 - 8.4 | 15.2 - 13.8 |
| 33 | 13°38.2 | 13°40.5 | 13°01.0 | 3.3 - 3.0 | 9.3 - 8.4 | 15.3 - 13.9 |
| 34 | 13°38.5 | 13°40.7 | 13°01.2 | 3.4 - 3.1 | 9.4 - 8.5 | 15.4 - 14.0 |
| 35 | 13°38.8 | 13°41.0 | 13°01.5 | 3.5 - 3.2 | 9.5 - 8.6 | 15.5 - 14.1 |
| 36 | 13°39.0 | 13°41.2 | 13°01.7 | 3.6 - 3.3 | 9.6 - 8.7 | 15.6 - 14.2 |
| 37 | 13°39.3 | 13°41.5 | 13°01.9 | 3.7 - 3.4 | 9.7 - 8.8 | 15.7 - 14.3 |
| 38 | 13°39.5 | 13°41.7 | 13°02.2 | 3.8 - 3.5 | 9.8 - 8.9 | 15.8 - 14.4 |
| 39 | 13°39.7 | 13°42.0 | 13°02.4 | 3.9 - 3.5 | 9.9 - 9.0 | 15.9 - 14.4 |
| 40 | 13°40.0 | 13°42.2 | 13°02.6 | 4.0 - 3.6 | 10.0 - 9.1 | 16.0 - 14.5 |
| 41 | 13°40.2 | 13°42.5 | 13°02.9 | 4.1 - 3.7 | 10.1 - 9.2 | 16.1 - 14.6 |
| 42 | 13°40.5 | 13°42.7 | 13°03.1 | 4.2 - 3.8 | 10.2 - 9.3 | 16.2 - 14.7 |
| 43 | 13°40.8 | 13°43.0 | 13°03.4 | 4.3 - 3.9 | 10.3 - 9.4 | 16.3 - 14.8 |
| 44 | 13°41.0 | 13°43.2 | 13°03.6 | 4.4 - 4.0 | 10.4 - 9.4 | 16.4 - 14.9 |
| 45 | 13°41.3 | 13°43.5 | 13°03.8 | 4.5 - 4.1 | 10.5 - 9.5 | 16.5 - 15.0 |
| 46 | 13°41.5 | 13°43.7 | 13°04.1 | 4.6 - 4.2 | 10.6 - 9.6 | 16.6 - 15.1 |
| 47 | 13°41.7 | 13°44.0 | 13°04.3 | 4.7 - 4.3 | 10.7 - 9.7 | 16.7 - 15.2 |
| 48 | 13°42.0 | 13°44.2 | 13°04.6 | 4.8 - 4.4 | 10.8 - 9.8 | 16.8 - 15.3 |
| 49 | 13°42.3 | 13°44.5 | 13°04.8 | 4.9 - 4.5 | 10.9 - 9.9 | 16.9 - 15.4 |
| 50 | 13°42.5 | 13°44.7 | 13°05.0 | 5.0 - 4.5 | 11.0 - 10.0 | 17.0 - 15.4 |
| 51 | 13°42.8 | 13°45.0 | 13°05.3 | 5.1 - 4.6 | 11.1 - 10.1 | 17.1 - 15.5 |
| 52 | 13°43.0 | 13°45.2 | 13°05.5 | 5.2 - 4.7 | 11.2 - 10.2 | 17.2 - 15.6 |
| 53 | 13°43.2 | 13°45.5 | 13°05.7 | 5.3 - 4.8 | 11.3 - 10.3 | 17.3 - 15.7 |
| 54 | 13°43.5 | 13°45.8 | 13°06.0 | 5.4 - 4.9 | 11.4 - 10.4 | 17.4 - 15.8 |
| 55 | 13°43.7 | 13°46.0 | 13°06.2 | 5.5 - 5.0 | 11.5 - 10.4 | 17.5 - 15.9 |
| 56 | 13°44.0 | 13°46.3 | 13°06.5 | 5.6 - 5.1 | 11.6 - 10.5 | 17.6 - 16.0 |
| 57 | 13°44.3 | 13°46.5 | 13°06.7 | 5.7 - 5.2 | 11.7 - 10.6 | 17.7 - 16.1 |
| 58 | 13°44.5 | 13°46.8 | 13°06.9 | 5.8 - 5.3 | 11.8 - 10.7 | 17.8 - 16.2 |
| 59 | 13°44.8 | 13°47.0 | 13°07.2 | 5.9 - 5.4 | 11.9 - 10.8 | 17.9 - 16.3 |

| m<br>55 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 13°45.0 | 13°47.3 | 13°07.4 | 0.0 - 0.0 | 6.0 - 5.6 | 12.0 - 11.1 |
| 1 | 13°45.2 | 13°47.5 | 13°07.7 | 0.1 - 0.1 | 6.1 - 5.6 | 12.1 - 11.2 |
| 2 | 13°45.5 | 13°47.8 | 13°07.9 | 0.2 - 0.2 | 6.2 - 5.7 | 12.2 - 11.3 |
| 3 | 13°45.7 | 13°48.0 | 13°08.1 | 0.3 - 0.3 | 6.3 - 5.8 | 12.3 - 11.4 |
| 4 | 13°46.0 | 13°48.3 | 13°08.4 | 0.4 - 0.4 | 6.4 - 5.9 | 12.4 - 11.5 |
| 5 | 13°46.3 | 13°48.5 | 13°08.6 | 0.5 - 0.5 | 6.5 - 6.0 | 12.5 - 11.6 |
| 6 | 13°46.5 | 13°48.8 | 13°08.8 | 0.6 - 0.6 | 6.6 - 6.1 | 12.6 - 11.7 |
| 7 | 13°46.8 | 13°49.0 | 13°09.1 | 0.7 - 0.6 | 6.7 - 6.2 | 12.7 - 11.7 |
| 8 | 13°47.0 | 13°49.3 | 13°09.3 | 0.8 - 0.7 | 6.8 - 6.3 | 12.8 - 11.8 |
| 9 | 13°47.2 | 13°49.5 | 13°09.6 | 0.9 - 0.8 | 6.9 - 6.4 | 12.9 - 11.9 |
| 10 | 13°47.5 | 13°49.8 | 13°09.8 | 1.0 - 0.9 | 7.0 - 6.5 | 13.0 - 12.0 |
| 11 | 13°47.7 | 13°50.0 | 13°10.0 | 1.1 - 1.0 | 7.1 - 6.6 | 13.1 - 12.1 |
| 12 | 13°48.0 | 13°50.3 | 13°10.3 | 1.2 - 1.1 | 7.2 - 6.7 | 13.2 - 12.2 |
| 13 | 13°48.3 | 13°50.5 | 13°10.5 | 1.3 - 1.2 | 7.3 - 6.8 | 13.3 - 12.3 |
| 14 | 13°48.5 | 13°50.8 | 13°10.8 | 1.4 - 1.3 | 7.4 - 6.8 | 13.4 - 12.4 |
| 15 | 13°48.8 | 13°51.0 | 13°11.0 | 1.5 - 1.4 | 7.5 - 6.9 | 13.5 - 12.5 |
| 16 | 13°49.0 | 13°51.3 | 13°11.2 | 1.6 - 1.5 | 7.6 - 7.0 | 13.6 - 12.6 |
| 17 | 13°49.2 | 13°51.5 | 13°11.5 | 1.7 - 1.6 | 7.7 - 7.1 | 13.7 - 12.7 |
| 18 | 13°49.5 | 13°51.8 | 13°11.7 | 1.8 - 1.7 | 7.8 - 7.2 | 13.8 - 12.8 |
| 19 | 13°49.8 | 13°52.0 | 13°12.0 | 1.9 - 1.8 | 7.9 - 7.3 | 13.9 - 12.9 |
| 20 | 13°50.0 | 13°52.3 | 13°12.2 | 2.0 - 1.9 | 8.0 - 7.4 | 14.0 - 13.0 |
| 21 | 13°50.3 | 13°52.5 | 13°12.4 | 2.1 - 1.9 | 8.1 - 7.5 | 14.1 - 13.0 |
| 22 | 13°50.5 | 13°52.8 | 13°12.7 | 2.2 - 2.0 | 8.2 - 7.6 | 14.2 - 13.1 |
| 23 | 13°50.7 | 13°53.0 | 13°12.9 | 2.3 - 2.1 | 8.3 - 7.7 | 14.3 - 13.2 |
| 24 | 13°51.0 | 13°53.3 | 13°13.1 | 2.4 - 2.2 | 8.4 - 7.8 | 14.4 - 13.3 |
| 25 | 13°51.2 | 13°53.5 | 13°13.4 | 2.5 - 2.3 | 8.5 - 7.9 | 14.5 - 13.4 |
| 26 | 13°51.5 | 13°53.8 | 13°13.6 | 2.6 - 2.4 | 8.6 - 8.0 | 14.6 - 13.5 |
| 27 | 13°51.8 | 13°54.0 | 13°13.9 | 2.7 - 2.5 | 8.7 - 8.0 | 14.7 - 13.6 |
| 28 | 13°52.0 | 13°54.3 | 13°14.1 | 2.8 - 2.6 | 8.8 - 8.1 | 14.8 - 13.7 |
| 29 | 13°52.3 | 13°54.5 | 13°14.3 | 2.9 - 2.7 | 8.9 - 8.2 | 14.9 - 13.8 |
| 30 | 13°52.5 | 13°54.8 | 13°14.6 | 3.0 - 2.8 | 9.0 - 8.3 | 15.0 - 13.9 |
| 31 | 13°52.7 | 13°55.0 | 13°14.8 | 3.1 - 2.9 | 9.1 - 8.4 | 15.1 - 14.0 |
| 32 | 13°53.0 | 13°55.3 | 13°15.1 | 3.2 - 3.0 | 9.2 - 8.5 | 15.2 - 14.1 |
| 33 | 13°53.2 | 13°55.5 | 13°15.3 | 3.3 - 3.1 | 9.3 - 8.6 | 15.3 - 14.2 |
| 34 | 13°53.5 | 13°55.8 | 13°15.5 | 3.4 - 3.1 | 9.4 - 8.7 | 15.4 - 14.2 |
| 35 | 13°53.8 | 13°56.0 | 13°15.8 | 3.5 - 3.2 | 9.5 - 8.8 | 15.5 - 14.3 |
| 36 | 13°54.0 | 13°56.3 | 13°16.0 | 3.6 - 3.3 | 9.6 - 8.9 | 15.6 - 14.4 |
| 37 | 13°54.3 | 13°56.5 | 13°16.2 | 3.7 - 3.4 | 9.7 - 9.0 | 15.7 - 14.5 |
| 38 | 13°54.5 | 13°56.8 | 13°16.5 | 3.8 - 3.5 | 9.8 - 9.1 | 15.8 - 14.6 |
| 39 | 13°54.7 | 13°57.0 | 13°16.7 | 3.9 - 3.6 | 9.9 - 9.2 | 15.9 - 14.7 |
| 40 | 13°55.0 | 13°57.3 | 13°17.0 | 4.0 - 3.7 | 10.0 - 9.3 | 16.0 - 14.8 |
| 41 | 13°55.2 | 13°57.5 | 13°17.2 | 4.1 - 3.8 | 10.1 - 9.3 | 16.1 - 14.9 |
| 42 | 13°55.5 | 13°57.8 | 13°17.4 | 4.2 - 3.9 | 10.2 - 9.4 | 16.2 - 15.0 |
| 43 | 13°55.8 | 13°58.0 | 13°17.7 | 4.3 - 4.0 | 10.3 - 9.5 | 16.3 - 15.1 |
| 44 | 13°56.0 | 13°58.3 | 13°17.9 | 4.4 - 4.1 | 10.4 - 9.6 | 16.4 - 15.2 |
| 45 | 13°56.3 | 13°58.5 | 13°18.2 | 4.5 - 4.2 | 10.5 - 9.7 | 16.5 - 15.3 |
| 46 | 13°56.5 | 13°58.8 | 13°18.4 | 4.6 - 4.3 | 10.6 - 9.8 | 16.6 - 15.4 |
| 47 | 13°56.7 | 13°59.0 | 13°18.6 | 4.7 - 4.3 | 10.7 - 9.9 | 16.7 - 15.4 |
| 48 | 13°57.0 | 13°59.3 | 13°18.9 | 4.8 - 4.4 | 10.8 - 10.0 | 16.8 - 15.5 |
| 49 | 13°57.3 | 13°59.5 | 13°19.1 | 4.9 - 4.5 | 10.9 - 10.1 | 16.9 - 15.6 |
| 50 | 13°57.5 | 13°59.8 | 13°19.3 | 5.0 - 4.6 | 11.0 - 10.2 | 17.0 - 15.7 |
| 51 | 13°57.8 | 14°00.0 | 13°19.6 | 5.1 - 4.7 | 11.1 - 10.3 | 17.1 - 15.8 |
| 52 | 13°58.0 | 14°00.3 | 13°19.8 | 5.2 - 4.8 | 11.2 - 10.4 | 17.2 - 15.9 |
| 53 | 13°58.2 | 14°00.5 | 13°20.1 | 5.3 - 4.9 | 11.3 - 10.5 | 17.3 - 16.0 |
| 54 | 13°58.5 | 14°00.8 | 13°20.3 | 5.4 - 5.0 | 11.4 - 10.5 | 17.4 - 16.1 |
| 55 | 13°58.7 | 14°01.0 | 13°20.5 | 5.5 - 5.1 | 11.5 - 10.6 | 17.5 - 16.2 |
| 56 | 13°59.0 | 14°01.3 | 13°20.8 | 5.6 - 5.2 | 11.6 - 10.7 | 17.6 - 16.3 |
| 57 | 13°59.3 | 14°01.5 | 13°21.0 | 5.7 - 5.3 | 11.7 - 10.8 | 17.7 - 16.4 |
| 58 | 13°59.5 | 14°01.8 | 13°21.3 | 5.8 - 5.4 | 11.8 - 10.9 | 17.8 - 16.5 |
| 59 | 13°59.8 | 14°02.0 | 13°21.5 | 5.9 - 5.5 | 11.9 - 11.0 | 17.9 - 16.6 |

| m<br>56 | Sun<br>Plan. | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 0 | 14°00.0 | 14°02.3 | 13°21.7 | 0.0 - 0.0 | 6.0 - 5.7 | 12.0 - 11.3 |
| 1 | 14°00.2 | 14°02.5 | 13°22.0 | 0.1 - 0.1 | 6.1 - 5.7 | 12.1 - 11.4 |
| 2 | 14°00.5 | 14°02.8 | 13°22.2 | 0.2 - 0.2 | 6.2 - 5.8 | 12.2 - 11.5 |
| 3 | 14°00.7 | 14°03.0 | 13°22.4 | 0.3 - 0.3 | 6.3 - 5.9 | 12.3 - 11.6 |
| 4 | 14°01.0 | 14°03.3 | 13°22.7 | 0.4 - 0.4 | 6.4 - 6.0 | 12.4 - 11.7 |
| 5 | 14°01.3 | 14°03.5 | 13°22.9 | 0.5 - 0.5 | 6.5 - 6.1 | 12.5 - 11.8 |
| 6 | 14°01.5 | 14°03.8 | 13°23.2 | 0.6 - 0.6 | 6.6 - 6.2 | 12.6 - 11.9 |
| 7 | 14°01.8 | 14°04.1 | 13°23.4 | 0.7 - 0.7 | 6.7 - 6.3 | 12.7 - 12.0 |
| 8 | 14°02.0 | 14°04.3 | 13°23.6 | 0.8 - 0.8 | 6.8 - 6.4 | 12.8 - 12.1 |
| 9 | 14°02.2 | 14°04.6 | 13°23.9 | 0.9 - 0.8 | 6.9 - 6.5 | 12.9 - 12.1 |
| 10 | 14°02.5 | 14°04.8 | 13°24.1 | 1.0 - 0.9 | 7.0 - 6.6 | 13.0 - 12.2 |
| 11 | 14°02.7 | 14°05.1 | 13°24.4 | 1.1 - 1.0 | 7.1 - 6.7 | 13.1 - 12.3 |
| 12 | 14°03.0 | 14°05.3 | 13°24.6 | 1.2 - 1.1 | 7.2 - 6.8 | 13.2 - 12.4 |
| 13 | 14°03.3 | 14°05.6 | 13°24.8 | 1.3 - 1.2 | 7.3 - 6.9 | 13.3 - 12.5 |
| 14 | 14°03.5 | 14°05.8 | 13°25.1 | 1.4 - 1.3 | 7.4 - 7.0 | 13.4 - 12.6 |
| 15 | 14°03.8 | 14°06.1 | 13°25.3 | 1.5 - 1.4 | 7.5 - 7.1 | 13.5 - 12.7 |
| 16 | 14°04.0 | 14°06.3 | 13°25.6 | 1.6 - 1.5 | 7.6 - 7.2 | 13.6 - 12.8 |
| 17 | 14°04.2 | 14°06.6 | 13°25.8 | 1.7 - 1.6 | 7.7 - 7.3 | 13.7 - 12.9 |
| 18 | 14°04.5 | 14°06.8 | 13°26.0 | 1.8 - 1.7 | 7.8 - 7.3 | 13.8 - 13.0 |
| 19 | 14°04.8 | 14°07.1 | 13°26.3 | 1.9 - 1.8 | 7.9 - 7.4 | 13.9 - 13.1 |
| 20 | 14°05.0 | 14°07.3 | 13°26.5 | 2.0 - 1.9 | 8.0 - 7.5 | 14.0 - 13.2 |
| 21 | 14°05.3 | 14°07.6 | 13°26.7 | 2.1 - 2.0 | 8.1 - 7.6 | 14.1 - 13.3 |
| 22 | 14°05.5 | 14°07.8 | 13°27.0 | 2.2 - 2.1 | 8.2 - 7.7 | 14.2 - 13.4 |
| 23 | 14°05.7 | 14°08.1 | 13°27.2 | 2.3 - 2.2 | 8.3 - 7.8 | 14.3 - 13.5 |
| 24 | 14°06.0 | 14°08.3 | 13°27.5 | 2.4 - 2.3 | 8.4 - 7.9 | 14.4 - 13.6 |
| 25 | 14°06.2 | 14°08.6 | 13°27.7 | 2.5 - 2.4 | 8.5 - 8.0 | 14.5 - 13.7 |
| 26 | 14°06.5 | 14°08.8 | 13°27.9 | 2.6 - 2.4 | 8.6 - 8.1 | 14.6 - 13.7 |
| 27 | 14°06.8 | 14°09.1 | 13°28.2 | 2.7 - 2.5 | 8.7 - 8.2 | 14.7 - 13.8 |
| 28 | 14°07.0 | 14°09.3 | 13°28.4 | 2.8 - 2.6 | 8.8 - 8.3 | 14.8 - 13.9 |
| 29 | 14°07.3 | 14°09.6 | 13°28.7 | 2.9 - 2.7 | 8.9 - 8.4 | 14.9 - 14.0 |
| 30 | 14°07.5 | 14°09.8 | 13°28.9 | 3.0 - 2.8 | 9.0 - 8.5 | 15.0 - 14.1 |
| 31 | 14°07.7 | 14°10.1 | 13°29.1 | 3.1 - 2.9 | 9.1 - 8.6 | 15.1 - 14.2 |
| 32 | 14°08.0 | 14°10.3 | 13°29.4 | 3.2 - 3.0 | 9.2 - 8.7 | 15.2 - 14.3 |
| 33 | 14°08.2 | 14°10.6 | 13°29.6 | 3.3 - 3.1 | 9.3 - 8.8 | 15.3 - 14.4 |
| 34 | 14°08.5 | 14°10.8 | 13°29.8 | 3.4 - 3.2 | 9.4 - 8.9 | 15.4 - 14.5 |
| 35 | 14°08.8 | 14°11.1 | 13°30.1 | 3.5 - 3.3 | 9.5 - 8.9 | 15.5 - 14.6 |
| 36 | 14°09.0 | 14°11.3 | 13°30.3 | 3.6 - 3.4 | 9.6 - 9.0 | 15.6 - 14.7 |
| 37 | 14°09.3 | 14°11.6 | 13°30.6 | 3.7 - 3.5 | 9.7 - 9.1 | 15.7 - 14.8 |
| 38 | 14°09.5 | 14°11.8 | 13°30.8 | 3.8 - 3.6 | 9.8 - 9.2 | 15.8 - 14.9 |
| 39 | 14°09.7 | 14°12.1 | 13°31.0 | 3.9 - 3.7 | 9.9 - 9.3 | 15.9 - 15.0 |
| 40 | 14°10.0 | 14°12.3 | 13°31.3 | 4.0 - 3.8 | 10.0 - 9.4 | 16.0 - 15.1 |
| 41 | 14°10.2 | 14°12.6 | 13°31.5 | 4.1 - 3.9 | 10.1 - 9.5 | 16.1 - 15.2 |
| 42 | 14°10.5 | 14°12.8 | 13°31.8 | 4.2 - 4.0 | 10.2 - 9.6 | 16.2 - 15.3 |
| 43 | 14°10.8 | 14°13.1 | 13°32.0 | 4.3 - 4.0 | 10.3 - 9.7 | 16.3 - 15.3 |
| 44 | 14°11.0 | 14°13.3 | 13°32.2 | 4.4 - 4.1 | 10.4 - 9.8 | 16.4 - 15.4 |
| 45 | 14°11.3 | 14°13.6 | 13°32.5 | 4.5 - 4.2 | 10.5 - 9.9 | 16.5 - 15.5 |
| 46 | 14°11.5 | 14°13.8 | 13°32.7 | 4.6 - 4.3 | 10.6 - 10.0 | 16.6 - 15.6 |
| 47 | 14°11.7 | 14°14.1 | 13°32.9 | 4.7 - 4.4 | 10.7 - 10.1 | 16.7 - 15.7 |
| 48 | 14°12.0 | 14°14.3 | 13°33.2 | 4.8 - 4.5 | 10.8 - 10.2 | 16.8 - 15.8 |
| 49 | 14°12.3 | 14°14.6 | 13°33.4 | 4.9 - 4.6 | 10.9 - 10.3 | 16.9 - 15.9 |
| 50 | 14°12.5 | 14°14.8 | 13°33.7 | 5.0 - 4.7 | 11.0 - 10.4 | 17.0 - 16.0 |
| 51 | 14°12.8 | 14°15.1 | 13°33.9 | 5.1 - 4.8 | 11.1 - 10.5 | 17.1 - 16.1 |
| 52 | 14°13.0 | 14°15.3 | 13°34.1 | 5.2 - 4.9 | 11.2 - 10.5 | 17.2 - 16.2 |
| 53 | 14°13.2 | 14°15.6 | 13°34.4 | 5.3 - 5.0 | 11.3 - 10.6 | 17.3 - 16.3 |
| 54 | 14°13.5 | 14°15.8 | 13°34.6 | 5.4 - 5.1 | 11.4 - 10.7 | 17.4 - 16.4 |
| 55 | 14°13.7 | 14°16.1 | 13°34.9 | 5.5 - 5.2 | 11.5 - 10.8 | 17.5 - 16.5 |
| 56 | 14°14.0 | 14°16.3 | 13°35.1 | 5.6 - 5.3 | 11.6 - 10.9 | 17.6 - 16.6 |
| 57 | 14°14.3 | 14°16.6 | 13°35.3 | 5.7 - 5.4 | 11.7 - 11.0 | 17.7 - 16.7 |
| 58 | 14°14.5 | 14°16.8 | 13°35.6 | 5.8 - 5.5 | 11.8 - 11.1 | 17.8 - 16.8 |
| 59 | 14°14.8 | 14°17.1 | 13°35.8 | 5.9 - 5.6 | 11.9 - 11.2 | 17.9 - 16.9 |

# Increments and Corrections

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 57 | Plan. | | | | | |
| 0 | 14°15.0 | 14°17.3 | 13°36.0 | 0.0 - 0.0 | 6.0 - 5.8 | 12.0 - 11.5 |
| 1 | 14°15.2 | 14°17.6 | 13°36.3 | 0.1 - 0.1 | 6.1 - 5.8 | 12.1 - 11.6 |
| 2 | 14°15.5 | 14°17.8 | 13°36.5 | 0.2 - 0.2 | 6.2 - 5.9 | 12.2 - 11.7 |
| 3 | 14°15.7 | 14°18.1 | 13°36.8 | 0.3 - 0.3 | 6.3 - 6.0 | 12.3 - 11.8 |
| 4 | 14°16.0 | 14°18.3 | 13°37.0 | 0.4 - 0.4 | 6.4 - 6.1 | 12.4 - 11.9 |
| 5 | 14°16.3 | 14°18.6 | 13°37.2 | 0.5 - 0.5 | 6.5 - 6.2 | 12.5 - 12.0 |
| 6 | 14°16.5 | 14°18.8 | 13°37.5 | 0.6 - 0.6 | 6.6 - 6.3 | 12.6 - 12.1 |
| 7 | 14°16.8 | 14°19.1 | 13°37.7 | 0.7 - 0.7 | 6.7 - 6.4 | 12.7 - 12.2 |
| 8 | 14°17.0 | 14°19.3 | 13°38.0 | 0.8 - 0.8 | 6.8 - 6.5 | 12.8 - 12.3 |
| 9 | 14°17.2 | 14°19.6 | 13°38.2 | 0.9 - 0.9 | 6.9 - 6.6 | 12.9 - 12.4 |
| 10 | 14°17.5 | 14°19.8 | 13°38.4 | 1.0 - 1.0 | 7.0 - 6.7 | 13.0 - 12.5 |
| 11 | 14°17.7 | 14°20.1 | 13°38.7 | 1.1 - 1.1 | 7.1 - 6.8 | 13.1 - 12.6 |
| 12 | 14°18.0 | 14°20.3 | 13°38.9 | 1.2 - 1.2 | 7.2 - 6.9 | 13.2 - 12.7 |
| 13 | 14°18.3 | 14°20.6 | 13°39.2 | 1.3 - 1.2 | 7.3 - 7.0 | 13.3 - 12.7 |
| 14 | 14°18.5 | 14°20.8 | 13°39.4 | 1.4 - 1.3 | 7.4 - 7.1 | 13.4 - 12.8 |
| 15 | 14°18.8 | 14°21.1 | 13°39.6 | 1.5 - 1.4 | 7.5 - 7.2 | 13.5 - 12.9 |
| 16 | 14°19.0 | 14°21.3 | 13°39.9 | 1.6 - 1.5 | 7.6 - 7.3 | 13.6 - 13.0 |
| 17 | 14°19.2 | 14°21.6 | 13°40.1 | 1.7 - 1.6 | 7.7 - 7.4 | 13.7 - 13.1 |
| 18 | 14°19.5 | 14°21.8 | 13°40.3 | 1.8 - 1.7 | 7.8 - 7.5 | 13.8 - 13.2 |
| 19 | 14°19.8 | 14°22.1 | 13°40.6 | 1.9 - 1.8 | 7.9 - 7.6 | 13.9 - 13.3 |
| 20 | 14°20.0 | 14°22.4 | 13°40.8 | 2.0 - 1.9 | 8.0 - 7.7 | 14.0 - 13.4 |
| 21 | 14°20.3 | 14°22.6 | 13°41.1 | 2.1 - 2.0 | 8.1 - 7.8 | 14.1 - 13.5 |
| 22 | 14°20.5 | 14°22.9 | 13°41.3 | 2.2 - 2.1 | 8.2 - 7.9 | 14.2 - 13.6 |
| 23 | 14°20.7 | 14°23.1 | 13°41.5 | 2.3 - 2.2 | 8.3 - 8.0 | 14.3 - 13.7 |
| 24 | 14°21.0 | 14°23.4 | 13°41.8 | 2.4 - 2.3 | 8.4 - 8.1 | 14.4 - 13.8 |
| 25 | 14°21.2 | 14°23.6 | 13°42.0 | 2.5 - 2.4 | 8.5 - 8.1 | 14.5 - 13.9 |
| 26 | 14°21.5 | 14°23.9 | 13°42.3 | 2.6 - 2.5 | 8.6 - 8.2 | 14.6 - 14.0 |
| 27 | 14°21.8 | 14°24.1 | 13°42.5 | 2.7 - 2.6 | 8.7 - 8.3 | 14.7 - 14.1 |
| 28 | 14°22.0 | 14°24.4 | 13°42.7 | 2.8 - 2.7 | 8.8 - 8.4 | 14.8 - 14.2 |
| 29 | 14°22.3 | 14°24.6 | 13°43.0 | 2.9 - 2.8 | 8.9 - 8.5 | 14.9 - 14.3 |
| 30 | 14°22.5 | 14°24.9 | 13°43.2 | 3.0 - 2.9 | 9.0 - 8.6 | 15.0 - 14.4 |
| 31 | 14°22.7 | 14°25.1 | 13°43.4 | 3.1 - 3.0 | 9.1 - 8.7 | 15.1 - 14.5 |
| 32 | 14°23.0 | 14°25.4 | 13°43.7 | 3.2 - 3.1 | 9.2 - 8.8 | 15.2 - 14.6 |
| 33 | 14°23.2 | 14°25.6 | 13°43.9 | 3.3 - 3.2 | 9.3 - 8.9 | 15.3 - 14.7 |
| 34 | 14°23.5 | 14°25.9 | 13°44.2 | 3.4 - 3.3 | 9.4 - 9.0 | 15.4 - 14.8 |
| 35 | 14°23.8 | 14°26.1 | 13°44.4 | 3.5 - 3.4 | 9.5 - 9.1 | 15.5 - 14.9 |
| 36 | 14°24.0 | 14°26.4 | 13°44.6 | 3.6 - 3.5 | 9.6 - 9.2 | 15.6 - 15.0 |
| 37 | 14°24.3 | 14°26.6 | 13°44.9 | 3.7 - 3.5 | 9.7 - 9.3 | 15.7 - 15.0 |
| 38 | 14°24.5 | 14°26.9 | 13°45.1 | 3.8 - 3.6 | 9.8 - 9.4 | 15.8 - 15.1 |
| 39 | 14°24.7 | 14°27.1 | 13°45.4 | 3.9 - 3.7 | 9.9 - 9.5 | 15.9 - 15.2 |
| 40 | 14°25.0 | 14°27.4 | 13°45.6 | 4.0 - 3.8 | 10.0 - 9.6 | 16.0 - 15.3 |
| 41 | 14°25.2 | 14°27.6 | 13°45.8 | 4.1 - 3.9 | 10.1 - 9.7 | 16.1 - 15.4 |
| 42 | 14°25.5 | 14°27.9 | 13°46.1 | 4.2 - 4.0 | 10.2 - 9.8 | 16.2 - 15.5 |
| 43 | 14°25.8 | 14°28.1 | 13°46.3 | 4.3 - 4.1 | 10.3 - 9.9 | 16.3 - 15.6 |
| 44 | 14°26.0 | 14°28.4 | 13°46.5 | 4.4 - 4.2 | 10.4 - 10.0 | 16.4 - 15.7 |
| 45 | 14°26.3 | 14°28.6 | 13°46.8 | 4.5 - 4.3 | 10.5 - 10.1 | 16.5 - 15.8 |
| 46 | 14°26.5 | 14°28.9 | 13°47.0 | 4.6 - 4.4 | 10.6 - 10.2 | 16.6 - 15.9 |
| 47 | 14°26.7 | 14°29.1 | 13°47.3 | 4.7 - 4.5 | 10.7 - 10.3 | 16.7 - 16.0 |
| 48 | 14°27.0 | 14°29.4 | 13°47.5 | 4.8 - 4.6 | 10.8 - 10.4 | 16.8 - 16.1 |
| 49 | 14°27.3 | 14°29.6 | 13°47.7 | 4.9 - 4.7 | 10.9 - 10.4 | 16.9 - 16.2 |
| 50 | 14°27.5 | 14°29.9 | 13°48.0 | 5.0 - 4.8 | 11.0 - 10.5 | 17.0 - 16.3 |
| 51 | 14°27.8 | 14°30.1 | 13°48.2 | 5.1 - 4.9 | 11.1 - 10.6 | 17.1 - 16.4 |
| 52 | 14°28.0 | 14°30.4 | 13°48.5 | 5.2 - 5.0 | 11.2 - 10.7 | 17.2 - 16.5 |
| 53 | 14°28.2 | 14°30.6 | 13°48.7 | 5.3 - 5.1 | 11.3 - 10.8 | 17.3 - 16.6 |
| 54 | 14°28.5 | 14°30.9 | 13°48.9 | 5.4 - 5.2 | 11.4 - 10.9 | 17.4 - 16.7 |
| 55 | 14°28.7 | 14°31.1 | 13°49.2 | 5.5 - 5.3 | 11.5 - 11.0 | 17.5 - 16.8 |
| 56 | 14°29.0 | 14°31.4 | 13°49.4 | 5.6 - 5.4 | 11.6 - 11.1 | 17.6 - 16.9 |
| 57 | 14°29.3 | 14°31.6 | 13°49.7 | 5.7 - 5.5 | 11.7 - 11.2 | 17.7 - 17.0 |
| 58 | 14°29.5 | 14°31.9 | 13°49.9 | 5.8 - 5.6 | 11.8 - 11.3 | 17.8 - 17.1 |
| 59 | 14°29.8 | 14°32.1 | 13°50.1 | 5.9 - 5.7 | 11.9 - 11.4 | 17.9 - 17.2 |

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 58 | Plan. | | | | | |
| 0 | 14°30.0 | 14°32.4 | 13°50.4 | 0.0 - 0.0 | 6.0 - 5.8 | 12.0 - 11.7 |
| 1 | 14°30.2 | 14°32.6 | 13°50.6 | 0.1 - 0.1 | 6.1 - 5.9 | 12.1 - 11.8 |
| 2 | 14°30.5 | 14°32.9 | 13°50.8 | 0.2 - 0.2 | 6.2 - 6.0 | 12.2 - 11.9 |
| 3 | 14°30.7 | 14°33.1 | 13°51.1 | 0.3 - 0.3 | 6.3 - 6.1 | 12.3 - 12.0 |
| 4 | 14°31.0 | 14°33.4 | 13°51.3 | 0.4 - 0.4 | 6.4 - 6.2 | 12.4 - 12.1 |
| 5 | 14°31.3 | 14°33.6 | 13°51.6 | 0.5 - 0.5 | 6.5 - 6.3 | 12.5 - 12.2 |
| 6 | 14°31.5 | 14°33.9 | 13°51.8 | 0.6 - 0.6 | 6.6 - 6.4 | 12.6 - 12.3 |
| 7 | 14°31.8 | 14°34.1 | 13°52.0 | 0.7 - 0.7 | 6.7 - 6.5 | 12.7 - 12.4 |
| 8 | 14°32.0 | 14°34.4 | 13°52.3 | 0.8 - 0.8 | 6.8 - 6.6 | 12.8 - 12.5 |
| 9 | 14°32.2 | 14°34.6 | 13°52.5 | 0.9 - 0.9 | 6.9 - 6.7 | 12.9 - 12.6 |
| 10 | 14°32.5 | 14°34.9 | 13°52.8 | 1.0 - 1.0 | 7.0 - 6.8 | 13.0 - 12.7 |
| 11 | 14°32.7 | 14°35.1 | 13°53.0 | 1.1 - 1.1 | 7.1 - 6.9 | 13.1 - 12.8 |
| 12 | 14°33.0 | 14°35.4 | 13°53.2 | 1.2 - 1.2 | 7.2 - 7.0 | 13.2 - 12.9 |
| 13 | 14°33.3 | 14°35.6 | 13°53.5 | 1.3 - 1.3 | 7.3 - 7.1 | 13.3 - 13.0 |
| 14 | 14°33.5 | 14°35.9 | 13°53.7 | 1.4 - 1.4 | 7.4 - 7.2 | 13.4 - 13.1 |
| 15 | 14°33.8 | 14°36.1 | 13°53.9 | 1.5 - 1.5 | 7.5 - 7.3 | 13.5 - 13.2 |
| 16 | 14°34.0 | 14°36.4 | 13°54.2 | 1.6 - 1.6 | 7.6 - 7.4 | 13.6 - 13.3 |
| 17 | 14°34.2 | 14°36.6 | 13°54.4 | 1.7 - 1.7 | 7.7 - 7.5 | 13.7 - 13.4 |
| 18 | 14°34.5 | 14°36.9 | 13°54.7 | 1.8 - 1.8 | 7.8 - 7.6 | 13.8 - 13.5 |
| 19 | 14°34.8 | 14°37.1 | 13°54.9 | 1.9 - 1.9 | 7.9 - 7.7 | 13.9 - 13.6 |
| 20 | 14°35.0 | 14°37.4 | 13°55.1 | 2.0 - 1.9 | 8.0 - 7.8 | 14.0 - 13.7 |
| 21 | 14°35.3 | 14°37.6 | 13°55.4 | 2.1 - 2.0 | 8.1 - 7.9 | 14.1 - 13.7 |
| 22 | 14°35.5 | 14°37.9 | 13°55.6 | 2.2 - 2.1 | 8.2 - 8.0 | 14.2 - 13.8 |
| 23 | 14°35.7 | 14°38.1 | 13°55.9 | 2.3 - 2.2 | 8.3 - 8.1 | 14.3 - 13.9 |
| 24 | 14°36.0 | 14°38.4 | 13°56.1 | 2.4 - 2.3 | 8.4 - 8.2 | 14.4 - 14.0 |
| 25 | 14°36.2 | 14°38.6 | 13°56.3 | 2.5 - 2.4 | 8.5 - 8.3 | 14.5 - 14.1 |
| 26 | 14°36.5 | 14°38.9 | 13°56.6 | 2.6 - 2.5 | 8.6 - 8.4 | 14.6 - 14.2 |
| 27 | 14°36.8 | 14°39.1 | 13°56.8 | 2.7 - 2.6 | 8.7 - 8.5 | 14.7 - 14.3 |
| 28 | 14°37.0 | 14°39.4 | 13°57.0 | 2.8 - 2.7 | 8.8 - 8.6 | 14.8 - 14.4 |
| 29 | 14°37.3 | 14°39.6 | 13°57.3 | 2.9 - 2.8 | 8.9 - 8.7 | 14.9 - 14.5 |
| 30 | 14°37.5 | 14°39.9 | 13°57.5 | 3.0 - 2.9 | 9.0 - 8.8 | 15.0 - 14.6 |
| 31 | 14°37.7 | 14°40.1 | 13°57.8 | 3.1 - 3.0 | 9.1 - 8.9 | 15.1 - 14.7 |
| 32 | 14°38.0 | 14°40.4 | 13°58.0 | 3.2 - 3.1 | 9.2 - 9.0 | 15.2 - 14.8 |
| 33 | 14°38.2 | 14°40.7 | 13°58.2 | 3.3 - 3.2 | 9.3 - 9.1 | 15.3 - 14.9 |
| 34 | 14°38.5 | 14°40.9 | 13°58.5 | 3.4 - 3.3 | 9.4 - 9.2 | 15.4 - 15.0 |
| 35 | 14°38.8 | 14°41.2 | 13°58.7 | 3.5 - 3.4 | 9.5 - 9.3 | 15.5 - 15.1 |
| 36 | 14°39.0 | 14°41.4 | 13°59.0 | 3.6 - 3.5 | 9.6 - 9.4 | 15.6 - 15.2 |
| 37 | 14°39.3 | 14°41.7 | 13°59.2 | 3.7 - 3.6 | 9.7 - 9.5 | 15.7 - 15.3 |
| 38 | 14°39.5 | 14°41.9 | 13°59.4 | 3.8 - 3.7 | 9.8 - 9.6 | 15.8 - 15.4 |
| 39 | 14°39.7 | 14°42.2 | 13°59.7 | 3.9 - 3.8 | 9.9 - 9.7 | 15.9 - 15.5 |
| 40 | 14°40.0 | 14°42.4 | 13°59.9 | 4.0 - 3.9 | 10.0 - 9.8 | 16.0 - 15.6 |
| 41 | 14°40.2 | 14°42.7 | 14°00.1 | 4.1 - 4.0 | 10.1 - 9.8 | 16.1 - 15.7 |
| 42 | 14°40.5 | 14°42.9 | 14°00.4 | 4.2 - 4.1 | 10.2 - 9.9 | 16.2 - 15.8 |
| 43 | 14°40.8 | 14°43.2 | 14°00.6 | 4.3 - 4.2 | 10.3 - 10.0 | 16.3 - 15.9 |
| 44 | 14°41.0 | 14°43.4 | 14°00.9 | 4.4 - 4.3 | 10.4 - 10.1 | 16.4 - 16.0 |
| 45 | 14°41.3 | 14°43.7 | 14°01.1 | 4.5 - 4.4 | 10.5 - 10.2 | 16.5 - 16.1 |
| 46 | 14°41.5 | 14°43.9 | 14°01.3 | 4.6 - 4.5 | 10.6 - 10.3 | 16.6 - 16.2 |
| 47 | 14°41.7 | 14°44.2 | 14°01.6 | 4.7 - 4.6 | 10.7 - 10.4 | 16.7 - 16.3 |
| 48 | 14°42.0 | 14°44.4 | 14°01.8 | 4.8 - 4.7 | 10.8 - 10.5 | 16.8 - 16.4 |
| 49 | 14°42.3 | 14°44.7 | 14°02.1 | 4.9 - 4.8 | 10.9 - 10.6 | 16.9 - 16.5 |
| 50 | 14°42.5 | 14°44.9 | 14°02.3 | 5.0 - 4.9 | 11.0 - 10.7 | 17.0 - 16.6 |
| 51 | 14°42.8 | 14°45.2 | 14°02.5 | 5.1 - 5.0 | 11.1 - 10.8 | 17.1 - 16.7 |
| 52 | 14°43.0 | 14°45.4 | 14°02.8 | 5.2 - 5.1 | 11.2 - 10.9 | 17.2 - 16.8 |
| 53 | 14°43.2 | 14°45.7 | 14°03.0 | 5.3 - 5.2 | 11.3 - 11.0 | 17.3 - 16.9 |
| 54 | 14°43.5 | 14°45.9 | 14°03.3 | 5.4 - 5.3 | 11.4 - 11.1 | 17.4 - 17.0 |
| 55 | 14°43.7 | 14°46.2 | 14°03.5 | 5.5 - 5.4 | 11.5 - 11.2 | 17.5 - 17.1 |
| 56 | 14°44.0 | 14°46.4 | 14°03.7 | 5.6 - 5.5 | 11.6 - 11.3 | 17.6 - 17.2 |
| 57 | 14°44.3 | 14°46.7 | 14°04.0 | 5.7 - 5.6 | 11.7 - 11.4 | 17.7 - 17.3 |
| 58 | 14°44.5 | 14°46.9 | 14°04.2 | 5.8 - 5.7 | 11.8 - 11.5 | 17.8 - 17.4 |
| 59 | 14°44.8 | 14°47.2 | 14°04.4 | 5.9 - 5.8 | 11.9 - 11.6 | 17.9 - 17.5 |

| m | Sun | Aries | Moon | v and d corr | | |
|---|---|---|---|---|---|---|
| 59 | Plan. | | | | | |
| 0 | 14°45.0 | 14°47.4 | 14°04.7 | 0.0 - 0.0 | 6.0 - 6.0 | 12.0 - 11.9 |
| 1 | 14°45.2 | 14°47.7 | 14°04.9 | 0.1 - 0.1 | 6.1 - 6.0 | 12.1 - 12.0 |
| 2 | 14°45.5 | 14°47.9 | 14°05.2 | 0.2 - 0.2 | 6.2 - 6.1 | 12.2 - 12.1 |
| 3 | 14°45.7 | 14°48.2 | 14°05.4 | 0.3 - 0.3 | 6.3 - 6.2 | 12.3 - 12.2 |
| 4 | 14°46.0 | 14°48.4 | 14°05.6 | 0.4 - 0.4 | 6.4 - 6.3 | 12.4 - 12.3 |
| 5 | 14°46.3 | 14°48.7 | 14°05.9 | 0.5 - 0.5 | 6.5 - 6.4 | 12.5 - 12.4 |
| 6 | 14°46.5 | 14°48.9 | 14°06.1 | 0.6 - 0.6 | 6.6 - 6.5 | 12.6 - 12.5 |
| 7 | 14°46.8 | 14°49.2 | 14°06.4 | 0.7 - 0.7 | 6.7 - 6.6 | 12.7 - 12.6 |
| 8 | 14°47.0 | 14°49.4 | 14°06.6 | 0.8 - 0.8 | 6.8 - 6.7 | 12.8 - 12.7 |
| 9 | 14°47.2 | 14°49.7 | 14°06.8 | 0.9 - 0.9 | 6.9 - 6.8 | 12.9 - 12.8 |
| 10 | 14°47.5 | 14°49.9 | 14°07.1 | 1.0 - 1.0 | 7.0 - 6.9 | 13.0 - 12.9 |
| 11 | 14°47.7 | 14°50.2 | 14°07.3 | 1.1 - 1.1 | 7.1 - 7.0 | 13.1 - 13.0 |
| 12 | 14°48.0 | 14°50.4 | 14°07.5 | 1.2 - 1.2 | 7.2 - 7.1 | 13.2 - 13.1 |
| 13 | 14°48.3 | 14°50.7 | 14°07.8 | 1.3 - 1.3 | 7.3 - 7.2 | 13.3 - 13.2 |
| 14 | 14°48.5 | 14°50.9 | 14°08.0 | 1.4 - 1.4 | 7.4 - 7.3 | 13.4 - 13.3 |
| 15 | 14°48.8 | 14°51.2 | 14°08.3 | 1.5 - 1.5 | 7.5 - 7.4 | 13.5 - 13.4 |
| 16 | 14°49.0 | 14°51.4 | 14°08.5 | 1.6 - 1.6 | 7.6 - 7.5 | 13.6 - 13.5 |
| 17 | 14°49.2 | 14°51.7 | 14°08.7 | 1.7 - 1.7 | 7.7 - 7.6 | 13.7 - 13.6 |
| 18 | 14°49.5 | 14°51.9 | 14°09.0 | 1.8 - 1.8 | 7.8 - 7.7 | 13.8 - 13.7 |
| 19 | 14°49.8 | 14°52.2 | 14°09.2 | 1.9 - 1.9 | 7.9 - 7.8 | 13.9 - 13.8 |
| 20 | 14°50.0 | 14°52.4 | 14°09.5 | 2.0 - 2.0 | 8.0 - 7.9 | 14.0 - 13.9 |
| 21 | 14°50.3 | 14°52.7 | 14°09.7 | 2.1 - 2.1 | 8.1 - 8.0 | 14.1 - 14.0 |
| 22 | 14°50.5 | 14°52.9 | 14°09.9 | 2.2 - 2.2 | 8.2 - 8.1 | 14.2 - 14.1 |
| 23 | 14°50.7 | 14°53.2 | 14°10.2 | 2.3 - 2.3 | 8.3 - 8.2 | 14.3 - 14.2 |
| 24 | 14°51.0 | 14°53.4 | 14°10.4 | 2.4 - 2.4 | 8.4 - 8.3 | 14.4 - 14.3 |
| 25 | 14°51.2 | 14°53.7 | 14°10.6 | 2.5 - 2.5 | 8.5 - 8.4 | 14.5 - 14.4 |
| 26 | 14°51.5 | 14°53.9 | 14°10.9 | 2.6 - 2.6 | 8.6 - 8.5 | 14.6 - 14.5 |
| 27 | 14°51.8 | 14°54.2 | 14°11.1 | 2.7 - 2.7 | 8.7 - 8.6 | 14.7 - 14.6 |
| 28 | 14°52.0 | 14°54.4 | 14°11.4 | 2.8 - 2.8 | 8.8 - 8.7 | 14.8 - 14.7 |
| 29 | 14°52.3 | 14°54.7 | 14°11.6 | 2.9 - 2.9 | 8.9 - 8.8 | 14.9 - 14.8 |
| 30 | 14°52.5 | 14°54.9 | 14°11.8 | 3.0 - 3.0 | 9.0 - 8.9 | 15.0 - 14.9 |
| 31 | 14°52.7 | 14°55.2 | 14°12.1 | 3.1 - 3.1 | 9.1 - 9.0 | 15.1 - 15.0 |
| 32 | 14°53.0 | 14°55.4 | 14°12.3 | 3.2 - 3.2 | 9.2 - 9.1 | 15.2 - 15.1 |
| 33 | 14°53.2 | 14°55.7 | 14°12.6 | 3.3 - 3.3 | 9.3 - 9.2 | 15.3 - 15.2 |
| 34 | 14°53.5 | 14°55.9 | 14°12.8 | 3.4 - 3.4 | 9.4 - 9.3 | 15.4 - 15.3 |
| 35 | 14°53.8 | 14°56.2 | 14°13.0 | 3.5 - 3.5 | 9.5 - 9.4 | 15.5 - 15.4 |
| 36 | 14°54.0 | 14°56.4 | 14°13.3 | 3.6 - 3.6 | 9.6 - 9.5 | 15.6 - 15.5 |
| 37 | 14°54.3 | 14°56.7 | 14°13.5 | 3.7 - 3.7 | 9.7 - 9.6 | 15.7 - 15.6 |
| 38 | 14°54.5 | 14°56.9 | 14°13.8 | 3.8 - 3.8 | 9.8 - 9.7 | 15.8 - 15.7 |
| 39 | 14°54.7 | 14°57.2 | 14°14.0 | 3.9 - 3.9 | 9.9 - 9.8 | 15.9 - 15.8 |
| 40 | 14°55.0 | 14°57.4 | 14°14.2 | 4.0 - 4.0 | 10.0 - 9.9 | 16.0 - 15.9 |
| 41 | 14°55.2 | 14°57.7 | 14°14.5 | 4.1 - 4.1 | 10.1 - 10.0 | 16.1 - 16.0 |
| 42 | 14°55.5 | 14°57.9 | 14°14.7 | 4.2 - 4.2 | 10.2 - 10.1 | 16.2 - 16.1 |
| 43 | 14°55.8 | 14°58.2 | 14°14.9 | 4.3 - 4.3 | 10.3 - 10.2 | 16.3 - 16.2 |
| 44 | 14°56.0 | 14°58.4 | 14°15.2 | 4.4 - 4.4 | 10.4 - 10.3 | 16.4 - 16.3 |
| 45 | 14°56.3 | 14°58.7 | 14°15.4 | 4.5 - 4.5 | 10.5 - 10.4 | 16.5 - 16.4 |
| 46 | 14°56.5 | 14°59.0 | 14°15.7 | 4.6 - 4.6 | 10.6 - 10.5 | 16.6 - 16.5 |
| 47 | 14°56.7 | 14°59.2 | 14°15.9 | 4.7 - 4.7 | 10.7 - 10.6 | 16.7 - 16.6 |
| 48 | 14°57.0 | 14°59.5 | 14°16.1 | 4.8 - 4.8 | 10.8 - 10.7 | 16.8 - 16.7 |
| 49 | 14°57.3 | 14°59.7 | 14°16.4 | 4.9 - 4.9 | 10.9 - 10.8 | 16.9 - 16.8 |
| 50 | 14°57.5 | 15°00.0 | 14°16.6 | 5.0 - 5.0 | 11.0 - 10.9 | 17.0 - 16.9 |
| 51 | 14°57.8 | 15°00.2 | 14°16.9 | 5.1 - 5.1 | 11.1 - 11.0 | 17.1 - 17.0 |
| 52 | 14°58.0 | 15°00.5 | 14°17.1 | 5.2 - 5.2 | 11.2 - 11.1 | 17.2 - 17.1 |
| 53 | 14°58.2 | 15°00.7 | 14°17.3 | 5.3 - 5.3 | 11.3 - 11.2 | 17.3 - 17.2 |
| 54 | 14°58.5 | 15°01.0 | 14°17.6 | 5.4 - 5.4 | 11.4 - 11.3 | 17.4 - 17.3 |
| 55 | 14°58.7 | 15°01.2 | 14°17.8 | 5.5 - 5.5 | 11.5 - 11.4 | 17.5 - 17.4 |
| 56 | 14°59.0 | 15°01.5 | 14°18.0 | 5.6 - 5.6 | 11.6 - 11.5 | 17.6 - 17.5 |
| 57 | 14°59.3 | 15°01.7 | 14°18.3 | 5.7 - 5.7 | 11.7 - 11.6 | 17.7 - 17.6 |
| 58 | 14°59.5 | 15°02.0 | 14°18.5 | 5.8 - 5.8 | 11.8 - 11.7 | 17.8 - 17.7 |
| 59 | 14°59.8 | 15°02.2 | 14°18.8 | 5.9 - 5.9 | 11.9 - 11.8 | 17.9 - 17.8 |

# Conversion of Arc to Time

| 0° - 59° | | |
|---|---|---|
| ° | h | m |
| 0 | 0 | 00 |
| 1 | 0 | 04 |
| 2 | 0 | 08 |
| 3 | 0 | 12 |
| 4 | 0 | 16 |
| 5 | 0 | 20 |
| 6 | 0 | 24 |
| 7 | 0 | 28 |
| 8 | 0 | 32 |
| 9 | 0 | 36 |
| 10 | 0 | 40 |
| 11 | 0 | 44 |
| 12 | 0 | 48 |
| 13 | 0 | 52 |
| 14 | 0 | 56 |
| 15 | 1 | 00 |
| 16 | 1 | 04 |
| 17 | 1 | 08 |
| 18 | 1 | 12 |
| 19 | 1 | 16 |
| 20 | 1 | 20 |
| 21 | 1 | 24 |
| 22 | 1 | 28 |
| 23 | 1 | 32 |
| 24 | 1 | 36 |
| 25 | 1 | 40 |
| 26 | 1 | 44 |
| 27 | 1 | 48 |
| 28 | 1 | 52 |
| 29 | 1 | 56 |
| 30 | 2 | 00 |
| 31 | 2 | 04 |
| 32 | 2 | 08 |
| 33 | 2 | 12 |
| 34 | 2 | 16 |
| 35 | 2 | 20 |
| 36 | 2 | 24 |
| 37 | 2 | 28 |
| 38 | 2 | 32 |
| 39 | 2 | 36 |
| 40 | 2 | 40 |
| 41 | 2 | 44 |
| 42 | 2 | 48 |
| 43 | 2 | 52 |
| 44 | 2 | 56 |
| 45 | 3 | 00 |
| 46 | 3 | 04 |
| 47 | 3 | 08 |
| 48 | 3 | 12 |
| 49 | 3 | 16 |
| 50 | 3 | 20 |
| 51 | 3 | 24 |
| 52 | 3 | 28 |
| 53 | 3 | 32 |
| 54 | 3 | 36 |
| 55 | 3 | 40 |
| 56 | 3 | 44 |
| 57 | 3 | 48 |
| 58 | 3 | 52 |
| 59 | 3 | 56 |
| 60 | 4 | 00 |

| 60° - 119° | | |
|---|---|---|
| ° | h | m |
| 60 | 4 | 00 |
| 61 | 4 | 04 |
| 62 | 4 | 08 |
| 63 | 4 | 12 |
| 64 | 4 | 16 |
| 65 | 4 | 20 |
| 66 | 4 | 24 |
| 67 | 4 | 28 |
| 68 | 4 | 32 |
| 69 | 4 | 36 |
| 70 | 4 | 40 |
| 71 | 4 | 44 |
| 72 | 4 | 48 |
| 73 | 4 | 52 |
| 74 | 4 | 56 |
| 75 | 5 | 00 |
| 76 | 5 | 04 |
| 77 | 5 | 08 |
| 78 | 5 | 12 |
| 79 | 5 | 16 |
| 80 | 5 | 20 |
| 81 | 5 | 24 |
| 82 | 5 | 28 |
| 83 | 5 | 32 |
| 84 | 5 | 36 |
| 85 | 5 | 40 |
| 86 | 5 | 44 |
| 87 | 5 | 48 |
| 88 | 5 | 52 |
| 89 | 5 | 56 |
| 90 | 6 | 00 |
| 91 | 6 | 04 |
| 92 | 6 | 08 |
| 93 | 6 | 12 |
| 94 | 6 | 16 |
| 95 | 6 | 20 |
| 96 | 6 | 24 |
| 97 | 6 | 28 |
| 98 | 6 | 32 |
| 99 | 6 | 36 |
| 100 | 6 | 40 |
| 101 | 6 | 44 |
| 102 | 6 | 48 |
| 103 | 6 | 52 |
| 104 | 6 | 56 |
| 105 | 7 | 00 |
| 106 | 7 | 04 |
| 107 | 7 | 08 |
| 108 | 7 | 12 |
| 109 | 7 | 16 |
| 110 | 7 | 20 |
| 111 | 7 | 24 |
| 112 | 7 | 28 |
| 113 | 7 | 32 |
| 114 | 7 | 36 |
| 115 | 7 | 40 |
| 116 | 7 | 44 |
| 117 | 7 | 48 |
| 118 | 7 | 52 |
| 119 | 7 | 56 |
| 120 | 8 | 00 |

| 120° - 179° | | |
|---|---|---|
| ° | h | m |
| 120 | 8 | 00 |
| 121 | 8 | 04 |
| 122 | 8 | 08 |
| 123 | 8 | 12 |
| 124 | 8 | 16 |
| 125 | 8 | 20 |
| 126 | 8 | 24 |
| 127 | 8 | 28 |
| 128 | 8 | 32 |
| 129 | 8 | 36 |
| 130 | 8 | 40 |
| 131 | 8 | 44 |
| 132 | 8 | 48 |
| 133 | 8 | 52 |
| 134 | 8 | 56 |
| 135 | 9 | 00 |
| 136 | 9 | 04 |
| 137 | 9 | 08 |
| 138 | 9 | 12 |
| 139 | 9 | 16 |
| 140 | 9 | 20 |
| 141 | 9 | 24 |
| 142 | 9 | 28 |
| 143 | 9 | 32 |
| 144 | 9 | 36 |
| 145 | 9 | 40 |
| 146 | 9 | 44 |
| 147 | 9 | 48 |
| 148 | 9 | 52 |
| 149 | 9 | 56 |
| 150 | 10 | 00 |
| 151 | 10 | 04 |
| 152 | 10 | 08 |
| 153 | 10 | 12 |
| 154 | 10 | 16 |
| 155 | 10 | 20 |
| 156 | 10 | 24 |
| 157 | 10 | 28 |
| 158 | 10 | 32 |
| 159 | 10 | 36 |
| 160 | 10 | 40 |
| 161 | 10 | 44 |
| 162 | 10 | 48 |
| 163 | 10 | 52 |
| 164 | 10 | 56 |
| 165 | 11 | 00 |
| 166 | 11 | 04 |
| 167 | 11 | 08 |
| 168 | 11 | 12 |
| 169 | 11 | 16 |
| 170 | 11 | 20 |
| 171 | 11 | 24 |
| 172 | 11 | 28 |
| 173 | 11 | 32 |
| 174 | 11 | 36 |
| 175 | 11 | 40 |
| 176 | 11 | 44 |
| 177 | 11 | 48 |
| 178 | 11 | 52 |
| 179 | 11 | 56 |
| 180 | 12 | 00 |

| 180° - 239° | | |
|---|---|---|
| ° | h | m |
| 180 | 12 | 00 |
| 181 | 12 | 04 |
| 182 | 12 | 08 |
| 183 | 12 | 12 |
| 184 | 12 | 16 |
| 185 | 12 | 20 |
| 186 | 12 | 24 |
| 187 | 12 | 28 |
| 188 | 12 | 32 |
| 189 | 12 | 36 |
| 190 | 12 | 40 |
| 191 | 12 | 44 |
| 192 | 12 | 48 |
| 193 | 12 | 52 |
| 194 | 12 | 56 |
| 195 | 13 | 00 |
| 196 | 13 | 04 |
| 197 | 13 | 08 |
| 198 | 13 | 12 |
| 199 | 13 | 16 |
| 200 | 13 | 20 |
| 201 | 13 | 24 |
| 202 | 13 | 28 |
| 203 | 13 | 32 |
| 204 | 13 | 36 |
| 205 | 13 | 40 |
| 206 | 13 | 44 |
| 207 | 13 | 48 |
| 208 | 13 | 52 |
| 209 | 13 | 56 |
| 210 | 14 | 00 |
| 211 | 14 | 04 |
| 212 | 14 | 08 |
| 213 | 14 | 12 |
| 214 | 14 | 16 |
| 215 | 14 | 20 |
| 216 | 14 | 24 |
| 217 | 14 | 28 |
| 218 | 14 | 32 |
| 219 | 14 | 36 |
| 220 | 14 | 40 |
| 221 | 14 | 44 |
| 222 | 14 | 48 |
| 223 | 14 | 52 |
| 224 | 14 | 56 |
| 225 | 15 | 00 |
| 226 | 15 | 04 |
| 227 | 15 | 08 |
| 228 | 15 | 12 |
| 229 | 15 | 16 |
| 230 | 15 | 20 |
| 231 | 15 | 24 |
| 232 | 15 | 28 |
| 233 | 15 | 32 |
| 234 | 15 | 36 |
| 235 | 15 | 40 |
| 236 | 15 | 44 |
| 237 | 15 | 48 |
| 238 | 15 | 52 |
| 239 | 15 | 56 |
| 240 | 16 | 00 |

| 240° - 299° | | |
|---|---|---|
| ° | h | m |
| 240 | 16 | 00 |
| 241 | 16 | 04 |
| 242 | 16 | 08 |
| 243 | 16 | 12 |
| 244 | 16 | 16 |
| 245 | 16 | 20 |
| 246 | 16 | 24 |
| 247 | 16 | 28 |
| 248 | 16 | 32 |
| 249 | 16 | 36 |
| 250 | 16 | 40 |
| 251 | 16 | 44 |
| 252 | 16 | 48 |
| 253 | 16 | 52 |
| 254 | 16 | 56 |
| 255 | 17 | 00 |
| 256 | 17 | 04 |
| 257 | 17 | 08 |
| 258 | 17 | 12 |
| 259 | 17 | 16 |
| 260 | 17 | 20 |
| 261 | 17 | 24 |
| 262 | 17 | 28 |
| 263 | 17 | 32 |
| 264 | 17 | 36 |
| 265 | 17 | 40 |
| 266 | 17 | 44 |
| 267 | 17 | 48 |
| 268 | 17 | 52 |
| 269 | 17 | 56 |
| 270 | 18 | 00 |
| 271 | 18 | 04 |
| 272 | 18 | 08 |
| 273 | 18 | 12 |
| 274 | 18 | 16 |
| 275 | 18 | 20 |
| 276 | 18 | 24 |
| 277 | 18 | 28 |
| 278 | 18 | 32 |
| 279 | 18 | 36 |
| 280 | 18 | 40 |
| 281 | 18 | 44 |
| 282 | 18 | 48 |
| 283 | 18 | 52 |
| 284 | 18 | 56 |
| 285 | 19 | 00 |
| 286 | 19 | 04 |
| 287 | 19 | 08 |
| 288 | 19 | 12 |
| 289 | 19 | 16 |
| 290 | 19 | 20 |
| 291 | 19 | 24 |
| 292 | 19 | 28 |
| 293 | 19 | 32 |
| 294 | 19 | 36 |
| 295 | 19 | 40 |
| 296 | 19 | 44 |
| 297 | 19 | 48 |
| 298 | 19 | 52 |
| 299 | 19 | 56 |
| 300 | 20 | 00 |

| 300° - 360° | | |
|---|---|---|
| ° | h | m |
| 300 | 20 | 00 |
| 301 | 20 | 04 |
| 302 | 20 | 08 |
| 303 | 20 | 12 |
| 304 | 20 | 16 |
| 305 | 20 | 20 |
| 306 | 20 | 24 |
| 307 | 20 | 28 |
| 308 | 20 | 32 |
| 309 | 20 | 36 |
| 310 | 20 | 40 |
| 311 | 20 | 44 |
| 312 | 20 | 48 |
| 313 | 20 | 52 |
| 314 | 20 | 56 |
| 315 | 21 | 00 |
| 316 | 21 | 04 |
| 317 | 21 | 08 |
| 318 | 21 | 12 |
| 319 | 21 | 16 |
| 320 | 21 | 20 |
| 321 | 21 | 24 |
| 322 | 21 | 28 |
| 323 | 21 | 32 |
| 324 | 21 | 36 |
| 325 | 21 | 40 |
| 326 | 21 | 44 |
| 327 | 21 | 48 |
| 328 | 21 | 52 |
| 329 | 21 | 56 |
| 330 | 22 | 00 |
| 331 | 22 | 04 |
| 332 | 22 | 08 |
| 333 | 22 | 12 |
| 334 | 22 | 16 |
| 335 | 22 | 20 |
| 336 | 22 | 24 |
| 337 | 22 | 28 |
| 338 | 22 | 32 |
| 339 | 22 | 36 |
| 340 | 22 | 40 |
| 341 | 22 | 44 |
| 342 | 22 | 48 |
| 343 | 22 | 52 |
| 344 | 22 | 56 |
| 345 | 23 | 00 |
| 346 | 23 | 04 |
| 347 | 23 | 08 |
| 348 | 23 | 12 |
| 349 | 23 | 16 |
| 350 | 23 | 20 |
| 351 | 23 | 24 |
| 352 | 23 | 28 |
| 353 | 23 | 32 |
| 354 | 23 | 36 |
| 355 | 23 | 40 |
| 356 | 23 | 44 |
| 357 | 23 | 48 |
| 358 | 23 | 52 |
| 359 | 23 | 56 |
| 360 | 24 | 00 |

| 0′ - 59′ | | |
|---|---|---|
| ′ | m | s |
| 0 | 0 | 00 |
| 1 | 0 | 04 |
| 2 | 0 | 08 |
| 3 | 0 | 12 |
| 4 | 0 | 16 |
| 5 | 0 | 20 |
| 6 | 0 | 24 |
| 7 | 0 | 28 |
| 8 | 0 | 32 |
| 9 | 0 | 36 |
| 10 | 0 | 40 |
| 11 | 0 | 44 |
| 12 | 0 | 48 |
| 13 | 0 | 52 |
| 14 | 0 | 56 |
| 15 | 1 | 00 |
| 16 | 1 | 04 |
| 17 | 1 | 08 |
| 18 | 1 | 12 |
| 19 | 1 | 16 |
| 20 | 1 | 20 |
| 21 | 1 | 24 |
| 22 | 1 | 28 |
| 23 | 1 | 32 |
| 24 | 1 | 36 |
| 25 | 1 | 40 |
| 26 | 1 | 44 |
| 27 | 1 | 48 |
| 28 | 1 | 52 |
| 29 | 1 | 56 |
| 30 | 2 | 00 |
| 31 | 2 | 04 |
| 32 | 2 | 08 |
| 33 | 2 | 12 |
| 34 | 2 | 16 |
| 35 | 2 | 20 |
| 36 | 2 | 24 |
| 37 | 2 | 28 |
| 38 | 2 | 32 |
| 39 | 2 | 36 |
| 40 | 2 | 40 |
| 41 | 2 | 44 |
| 42 | 2 | 48 |
| 43 | 2 | 52 |
| 44 | 2 | 56 |
| 45 | 3 | 00 |
| 46 | 3 | 04 |
| 47 | 3 | 08 |
| 48 | 3 | 12 |
| 49 | 3 | 16 |
| 50 | 3 | 20 |
| 51 | 3 | 24 |
| 52 | 3 | 28 |
| 53 | 3 | 32 |
| 54 | 3 | 36 |
| 55 | 3 | 40 |
| 56 | 3 | 44 |
| 57 | 3 | 48 |
| 58 | 3 | 52 |
| 59 | 3 | 56 |
| 60 | 4 | 00 |

| 0″ - 59″ | |
|---|---|
| ″ | s |
| 0 | 0.00 |
| 1 | 0.07 |
| 2 | 0.13 |
| 3 | 0.20 |
| 4 | 0.27 |
| 5 | 0.33 |
| 6 | 0.40 |
| 7 | 0.47 |
| 8 | 0.53 |
| 9 | 0.60 |
| 10 | 0.67 |
| 11 | 0.73 |
| 12 | 0.80 |
| 13 | 0.87 |
| 14 | 0.93 |
| 15 | 1.00 |
| 16 | 1.07 |
| 17 | 1.13 |
| 18 | 1.20 |
| 19 | 1.27 |
| 20 | 1.33 |
| 21 | 1.40 |
| 22 | 1.47 |
| 23 | 1.53 |
| 24 | 1.60 |
| 25 | 1.67 |
| 26 | 1.73 |
| 27 | 1.80 |
| 28 | 1.87 |
| 29 | 1.93 |
| 30 | 2.00 |
| 31 | 2.07 |
| 32 | 2.13 |
| 33 | 2.20 |
| 34 | 2.27 |
| 35 | 2.33 |
| 36 | 2.40 |
| 37 | 2.47 |
| 38 | 2.53 |
| 39 | 2.60 |
| 40 | 2.67 |
| 41 | 2.73 |
| 42 | 2.80 |
| 43 | 2.87 |
| 44 | 2.93 |
| 45 | 3.00 |
| 46 | 3.07 |
| 47 | 3.13 |
| 48 | 3.20 |
| 49 | 3.27 |
| 50 | 3.33 |
| 51 | 3.40 |
| 52 | 3.47 |
| 53 | 3.53 |
| 54 | 3.60 |
| 55 | 3.67 |
| 56 | 3.73 |
| 57 | 3.80 |
| 58 | 3.87 |
| 59 | 3.93 |
| 60 | 4.00 |

**h**= hours of time **m**= minutes of time **s** = seconds of time **′** = minutes of arc **″** = seconds of arc

# Altitude Correction Tables for 10° to 90° — Sun, Stars, Planets

## SUN
### October – March

| App. Alt. | Lower Limb | Upper Limb |
|---|---|---|
| ° ′ | ′ | ′ |
| 9 33 | +10.8 | – 21.5 |
| 9 45 | +10.9 | – 21.4 |
| 9 56 | +11.0 | – 21.3 |
| 10 08 | +11.1 | – 21.2 |
| 10 20 | +11.2 | – 21.1 |
| 10 33 | +11.3 | – 21.0 |
| 10 46 | +11.4 | – 20.9 |
| 11 00 | +11.5 | – 20.8 |
| 11 15 | +11.6 | – 20.7 |
| 11 30 | +11.7 | – 20.6 |
| 11 45 | +11.8 | – 20.5 |
| 12 01 | +11.9 | – 20.4 |
| 12 18 | +12.0 | – 20.3 |
| 12 36 | +12.1 | – 20.2 |
| 12 54 | +12.2 | – 20.1 |
| 13 14 | +12.3 | – 20.0 |
| 13 34 | +12.4 | – 19.9 |
| 13 55 | +12.5 | – 19.8 |
| 14 17 | +12.6 | – 19.7 |
| 14 41 | +12.7 | – 19.6 |
| 15 05 | +12.8 | – 19.5 |
| 15 31 | +12.9 | – 19.4 |
| 15 59 | +13.0 | – 19.3 |
| 16 27 | +13.1 | – 19.2 |
| 16 58 | +13.2 | – 19.1 |
| 17 30 | +13.3 | – 19.0 |
| 18 05 | +13.4 | – 18.9 |
| 18 41 | +13.5 | – 18.8 |
| 19 20 | +13.6 | – 18.7 |
| 20 02 | +13.7 | – 18.6 |
| 20 46 | +13.8 | – 18.5 |
| 21 34 | +13.9 | – 18.4 |
| 22 25 | +14.0 | – 18.3 |
| 23 20 | +14.1 | – 18.2 |
| 24 20 | +14.2 | – 18.1 |
| 25 24 | +14.3 | – 18.0 |
| 26 34 | +14.4 | – 17.9 |
| 27 50 | +14.5 | – 17.8 |
| 29 13 | +14.6 | – 17.7 |
| 30 44 | +14.7 | – 17.6 |
| 32 24 | +14.8 | – 17.5 |
| 34 15 | +14.9 | – 17.4 |
| 36 17 | +15.0 | – 17.3 |
| 38 34 | +15.1 | – 17.2 |
| 41 06 | +15.2 | – 17.1 |
| 43 56 | +15.3 | – 17.0 |
| 47 07 | +15.4 | – 16.9 |
| 50 43 | +15.5 | – 16.8 |
| 54 46 | +15.6 | – 16.7 |
| 59 21 | +15.7 | – 16.6 |
| 64 28 | +15.8 | – 16.5 |
| 70 10 | +15.9 | – 16.4 |
| 76 24 | +16.0 | – 16.3 |
| 83 05 | +16.1 | – 16.2 |
| 90 00 | | |

## SUN
### April – September

| App. Alt. | Lower Limb | Upper Limb |
|---|---|---|
| ° ′ | ′ | ′ |
| 9 39 | +10.6 | – 21.2 |
| 9 50 | +10.7 | – 21.1 |
| 10 02 | +10.8 | – 21.0 |
| 10 14 | +10.9 | – 20.9 |
| 10 27 | +11.0 | – 20.8 |
| 10 40 | +11.1 | – 20.7 |
| 10 53 | +11.2 | – 20.6 |
| 11 07 | +11.3 | – 20.5 |
| 11 22 | +11.4 | – 20.4 |
| 11 37 | +11.5 | – 20.3 |
| 11 53 | +11.6 | – 20.2 |
| 12 10 | +11.7 | – 20.1 |
| 12 27 | +11.8 | – 20.0 |
| 14 45 | +11.9 | – 19.9 |
| 13 04 | +12.0 | – 19.8 |
| 13 24 | +12.1 | – 19.7 |
| 13 44 | +12.2 | – 19.6 |
| 14 06 | +12.3 | – 19.5 |
| 14 29 | +12.4 | – 19.4 |
| 14 53 | +12.5 | – 19.3 |
| 15 18 | +12.6 | – 19.2 |
| 15 45 | +12.7 | – 19.1 |
| 16 13 | +12.8 | – 19.0 |
| 16 43 | +12.9 | – 18.9 |
| 17 14 | +13.0 | – 18.8 |
| 17 47 | +13.1 | – 18.7 |
| 18 23 | +13.2 | – 18.6 |
| 19 00 | +13.3 | – 18.5 |
| 19 41 | +13.4 | – 18.4 |
| 20 24 | +13.5 | – 18.3 |
| 21 10 | +13.6 | – 18.2 |
| 21 59 | +13.7 | – 18.1 |
| 22 52 | +13.8 | – 18.0 |
| 23 49 | +13.9 | – 17.9 |
| 24 51 | +14.0 | – 17.8 |
| 25 58 | +14.1 | – 17.7 |
| 27 11 | +14.2 | – 17.6 |
| 28 31 | +14.3 | – 17.5 |
| 29 58 | +14.4 | – 17.4 |
| 31 33 | +14.5 | – 17.3 |
| 33 18 | +14.6 | – 17.2 |
| 35 15 | +14.7 | – 17.1 |
| 37 24 | +14.8 | – 17.0 |
| 39 48 | +14.9 | – 16.9 |
| 42 28 | +15.0 | – 16.8 |
| 45 29 | +15.1 | – 16.7 |
| 48 52 | +15.2 | – 16.6 |
| 51 41 | +15.3 | – 16.5 |
| 56 59 | +15.4 | – 16.4 |
| 61 50 | +15.5 | – 16.3 |
| 67 15 | +15.6 | – 16.2 |
| 73 14 | +15.7 | – 16.1 |
| 79 42 | +15.8 | – 16.0 |
| 86 21 | +15.9 | – 15.9 |
| 90 00 | | |

## Stars & Planets

| App. Alt. | Corr |
|---|---|
| ° ′ | ′ |
| 9 55 | – 5.3 |
| 10 07 | – 5.2 |
| 10 20 | – 5.1 |
| 10 32 | – 5.0 |
| 10 46 | – 4.9 |
| 10 59 | – 4.8 |
| 11 14 | – 4.7 |
| 11 29 | – 4.6 |
| 11 44 | – 4.5 |
| 12 00 | – 4.4 |
| 12 17 | – 4.3 |
| 12 35 | – 4.2 |
| 12 53 | – 4.1 |
| 13 12 | – 4.0 |
| 13 32 | – 3.9 |
| 13 53 | – 3.8 |
| 14 16 | – 3.7 |
| 14 39 | – 3.6 |
| 15 03 | – 3.5 |
| 15 29 | – 3.4 |
| 15 56 | – 3.3 |
| 16 25 | – 3.2 |
| 16 55 | – 3.1 |
| 17 27 | – 3.0 |
| 18 01 | – 2.9 |
| 18 37 | – 2.8 |
| 19 16 | – 2.7 |
| 19 56 | – 2.6 |
| 20 40 | – 2.5 |
| 21 27 | – 2.4 |
| 22 17 | – 2.3 |
| 23 11 | – 2.2 |
| 24 09 | – 2.1 |
| 25 12 | – 2.0 |
| 26 20 | – 1.9 |
| 27 34 | – 1.8 |
| 28 54 | – 1.7 |
| 30 22 | – 1.6 |
| 31 58 | – 1.5 |
| 33 43 | – 1.4 |
| 35 38 | – 1.3 |
| 37 45 | – 1.2 |
| 40 06 | – 1.1 |
| 42 42 | – 1.0 |
| 45 34 | – 0.9 |
| 48 45 | – 0.8 |
| 52 16 | – 0.7 |
| 56 09 | – 0.6 |
| 60 26 | – 0.5 |
| 65 06 | – 0.4 |
| 70 09 | – 0.3 |
| 75 32 | – 0.2 |
| 81 12 | – 0.1 |
| 87 03 | 0.0 |
| 90 00 | |

## Additional Altitude Correction for Mars & Venus

A small additional altitude correction for Mars & Venus can be obtained in the Daily Pages of The Nautical Almanac for the day of the observation.

Find the correction in the block labeled **Horizontal parallax**.

The figure will cover the range of 3 days found on that Daily Page.

The correction is to be added to Apparent Altitude.

## Refraction

| App. Alt. | Corr |
|---|---|
| ° | ′ |
| 5.5 | – 9.1 |
| 6.0 | – 8.5 |
| 6.5 | – 7.9 |
| 7.0 | – 7.5 |
| 7.5 | – 7.0 |
| 8.0 | – 6.6 |
| 8.5 | – 6.3 |
| 9.0 | – 5.9 |
| 9.5 | – 5.7 |
| 10.0 | – 5.4 |
| 10.5 | – 5.1 |
| 11.0 | – 4.9 |
| 11.5 | – 4.7 |
| 12.0 | – 4.5 |
| 12.5 | – 4.4 |
| 13.0 | – 4.2 |
| 13.5 | – 4.0 |
| 14.0 | – 3.9 |
| 14.5 | – 3.8 |
| 15.0 | – 3.6 |
| 15.5 | – 3.5 |
| 16.0 | – 3.4 |
| 16.5 | – 3.3 |
| 17.0 | – 3.2 |
| 17.5 | – 3.1 |
| 18.0 | – 3.0 |
| 18.5 | – 2.9 |
| 19.0 | – 2.9 |
| 19.5 | – 2.8 |
| 20.0 | – 2.7 |
| 21.0 | – 2.6 |
| 22.0 | – 2.4 |
| 23.0 | – 2.3 |
| 24.0 | – 2.2 |
| 25.0 | – 2.1 |
| 26.0 | – 2.0 |
| 27.0 | – 1.9 |
| 28.0 | – 1.9 |
| 29.0 | – 1.8 |
| 30.0 | – 1.7 |
| 31.0 | – 1.7 |
| 32.0 | – 1.6 |
| 33.0 | – 1.5 |
| 34.0 | – 1.5 |
| 35.0 | – 1.4 |
| 36.0 | – 1.4 |
| 37.0 | – 1.3 |
| 38.0 | – 1.3 |
| 39.0 | – 1.2 |
| 40.0 | – 1.2 |
| 45.0 | – 1.0 |
| 50.0 | – 0.8 |
| 55.0 | – 0.7 |
| 60.0 | – 0.6 |
| 65.0 | – 0.5 |
| 70.0 | – 0.4 |
| 75.0 | – 0.3 |
| 80.0 | – 0.2 |
| 85.0 | – 0.1 |

## DIP
*always subtracted from Hs*

| Ht. of Eye | Corr | Ht. of Eye | Ht. of Eye | Corr |
|---|---|---|---|---|
| **meters** | ′ | **feet** | **meters** | ′ |
| 2.4 | **– 2.8** | 8.0 | 1.0 | **– 1.8** |
| 2.6 | **– 2.9** | 8.6 | 1.5 | **– 2.2** |
| 2.8 | **– 3.0** | 9.2 | 2.0 | **– 2.5** |
| 3.0 | **– 3.1** | 9.8 | 2.5 | **– 2.8** |
| 3.2 | **– 3.2** | 10.5 | 3.0 | **– 3.0** |
| 3.4 | **– 3.3** | 11.2 | See table ← | |
| 3.6 | **– 3.4** | 11.9 | | |
| 3.8 | **– 3.5** | 12.6 | **meters** | |
| 4.0 | **– 3.6** | 13.3 | 20 | **– 7.9** |
| 4.3 | **– 3.7** | 14.1 | 22 | **– 8.3** |
| 4.5 | **– 3.8** | 14.9 | 24 | **– 8.6** |
| 4.7 | **– 3.9** | 15.7 | 26 | **– 9.0** |
| 5.0 | **– 4.0** | 16.5 | 28 | **– 9.3** |
| 5.2 | **– 4.1** | 17.4 | | |
| 5.5 | **– 4.2** | 18.3 | 30 | **– 9.6** |
| 5.8 | **– 4.3** | 19.1 | 32 | **– 10.0** |
| 6.1 | **– 4.4** | 20.1 | 34 | **– 10.3** |
| 6.3 | **– 4.5** | 21.0 | 36 | **– 10.6** |
| 6.6 | **– 4.6** | 22.0 | 38 | **– 10.8** |
| 6.9 | **– 4.7** | 22.9 | | |
| 7.2 | **– 4.8** | 23.9 | 40 | **– 11.1** |
| 7.5 | **– 4.9** | 24.9 | 42 | **– 11.4** |
| 7.9 | **– 5.0** | 26.0 | 44 | **– 11.7** |
| 8.2 | **– 5.1** | 27.1 | 46 | **– 11.9** |
| 8.5 | **– 5.2** | 28.1 | 48 | **– 12.2** |
| 8.8 | **– 5.3** | 29.2 | **feet** | ′ |
| 9.2 | **– 5.4** | 30.4 | 2 | **– 1.4** |
| 9.5 | **– 5.5** | 31.5 | 4 | **– 1.9** |
| 9.9 | **– 5.6** | 32.7 | 6 | **– 2.4** |
| 10.3 | **– 5.7** | 33.9 | 8 | **– 2.7** |
| 10.6 | **– 5.8** | 35.1 | 10 | **– 3.1** |
| 11.0 | **– 5.9** | 36.3 | See table ← | |
| 11.4 | **– 6.0** | 37.6 | | |
| 11.8 | **– 6.1** | 38.9 | **feet** | ′ |
| 12.2 | **– 6.2** | 40.1 | 70 | **– 8.1** |
| 12.6 | **– 6.3** | 41.5 | 75 | **– 8.4** |
| 13.0 | **– 6.4** | 42.8 | 80 | **– 8.7** |
| 13.4 | **– 6.5** | 44.2 | 85 | **– 8.9** |
| 13.8 | **– 6.6** | 45.5 | 90 | **– 9.2** |
| 14.2 | **– 6.7** | 46.9 | 95 | **9.5** |
| 14.7 | **– 6.8** | 48.4 | | |
| 15.1 | **– 6.9** | 49.8 | 100 | **– 9.7** |
| 15.5 | **– 7.0** | 51.3 | 105 | **– 9.9** |
| 16.0 | **– 7.1** | 52.8 | 110 | **– 10.2** |
| 16.5 | **– 7.2** | 54.3 | 115 | **– 10.4** |
| 16.9 | **– 7.3** | 55.8 | 120 | **– 10.6** |
| 17.4 | **– 7.4** | 57.4 | 125 | **– 10.8** |
| 17.9 | **– 7.5** | 58.9 | 130 | **– 11.1** |
| 18.4 | **– 7.6** | 60.5 | 135 | **– 11.3** |
| 18.8 | **– 7.7** | 62.1 | 140 | **– 11.5** |
| 19.3 | **– 7.8** | 63.8 | 145 | **– 11.7** |
| 19.8 | **– 7.9** | 65.4 | 150 | **– 11.9** |
| 20.4 | **– 8.0** | 67.1 | 155 | **– 12.1** |
| 20.9 | **– 8.1** | 68.8 | | |
| 21.4 | | 70.5 | | |

App. Alt. = Apparent altitude = Sextant altitude corrected for index error and dip.

# Altitude Correction Tables for 0° to 10° — Sun, Stars, Planets

| App. Alt. | Sun October – March Lower Limb | Sun October – March Upper Limb | Sun April – September Lower Limb | Sun April – September Upper Limb | Stars & Planets |
|---|---|---|---|---|---|
| ° ′ | ′ | ′ | ′ | ′ | ′ |
| 0 00 | – 17.5 | – 49.8 | – 17.8 | – 49.6 | – 33.8 |
| 0 03 | 16.9 | 49.2 | 17.2 | 49.0 | 33.2 |
| 0 06 | 16.3 | 48.6 | 16.6 | 48.4 | 32.6 |
| 0 09 | 15.7 | 48.0 | 16.0 | 47.8 | 32.0 |
| 0 12 | 15.2 | 47.5 | 15.4 | 47.2 | 31.5 |
| 0 15 | 14.6 | 46.9 | 14.8 | 46.6 | 30.9 |
| 0 18 | – 14.1 | – 46.4 | – 14.3 | – 46.1 | – 30.4 |
| 0 21 | 13.5 | 45.8 | 13.8 | 33.8 | 29.8 |
| 0 24 | 13.0 | 45.3 | 13.3 | 45.1 | 29.3 |
| 0 27 | 12.5 | 44.8 | 12.8 | 44.6 | 28.8 |
| 0 30 | 12.0 | 44.3 | 12.3 | 44.1 | 28.3 |
| 0 33 | 11.6 | 43.9 | 11.8 | 43.6 | 27.9 |
| 0 36 | – 11.1 | – 10.0 | – 11.3 | – 43.1 | – 27.4 |
| 0 39 | 10.6 | 42.9 | 10.9 | 42.7 | 26.9 |
| 0 42 | 10.2 | 42.5 | 10.5 | 42.3 | 26.5 |
| 0 45 | 9.8 | 42.1 | 10.0 | 41.8 | 26.1 |
| 0 48 | 9.4 | 41.7 | 9.6 | 41.4 | 25.7 |
| 0 51 | 9.0 | 41.3 | 9.2 | 41.0 | 25.3 |
| 0 54 | – 8.6 | – 40.9 | – 8.8 | – 40.6 | – 24.9 |
| 0 57 | 8.2 | 40.5 | 8.4 | 40.2 | 24.5 |
| 1 00 | 7.8 | 40.1 | 8.0 | 39.8 | 24.1 |
| 1 03 | 7.4 | 39.7 | 7.7 | 39.5 | 23.7 |
| 1 06 | 7.1 | 39.4 | 7.3 | 39.1 | 23.4 |
| 1 09 | 6.7 | 39.0 | 7.0 | 38.8 | 23.0 |
| 1 12 | – 6.4 | – 38.7 | – 6.6 | – 38.4 | – 22.7 |
| 1 15 | 6.0 | 38.3 | 6.3 | 38.1 | 22.3 |
| 1 18 | 5.7 | 38.0 | 6.0 | 37.8 | 22.0 |
| 1 21 | 5.4 | 37.7 | 5.7 | 37.5 | 21.7 |
| 1 24 | 5.1 | 37.4 | 5.3 | 37.1 | 21.4 |
| 1 27 | 4.8 | 37.1 | 5.0 | 33.8 | 21.1 |
| 1 30 | – 4.5 | – 36.8 | – 4.7 | – 36.5 | – 20.8 |
| 1 35 | 4.0 | 36.3 | 4.3 | 36.1 | 20.3 |
| 1 40 | 3.6 | 35.9 | 3.8 | 35.6 | 19.9 |
| 1 45 | 3.1 | 35.4 | 3.4 | 35.2 | 19.4 |
| 1 50 | 2.7 | 35.0 | 2.9 | 34.7 | 19.0 |
| 1 55 | 2.3 | 34.6 | 2.5 | 34.3 | 18.6 |
| 2 00 | – 1.9 | – 34.2 | – 2.1 | – 33.9 | – 18.2 |
| 2 05 | 1.5 | 33.8 | 1.7 | 33.5 | 17.8 |
| 2 10 | 1.1 | 33.4 | 1.4 | 33.2 | 17.4 |
| 2 15 | 0.8 | 33.1 | 1.0 | 32.8 | 17.1 |
| 2 20 | 0.4 | 32.7 | 0.7 | 32.5 | 16.7 |
| 2 25 | – 0.1 | 32.4 | – 0.3 | 32.1 | 16.4 |
| 2 30 | + 0.2 | – 32.1 | 0.0 | – 31.8 | – 16.1 |
| 2 35 | 0.5 | 31.8 | + 0.3 | 31.5 | 15.8 |
| 2 40 | 0.8 | 31.5 | 0.6 | 31.2 | 15.4 |
| 2 45 | 1.1 | 31.2 | 0.9 | 30.9 | 15.2 |
| 2 50 | 1.4 | 30.9 | 1.2 | 30.6 | 14.9 |
| 2 55 | 1.7 | 30.6 | 1.4 | 30.4 | 14.9 |
| 3 00 | + 2.0 | – 30.3 | + 1.7 | – 30.1 | – 14.3 |
| 3 05 | 2.2 | 30.1 | 2.0 | 29.8 | 14.1 |
| 3 10 | 2.5 | 29.8 | 2.2 | 29.6 | 13.8 |
| 3 15 | 2.7 | 29.6 | 2.5 | 29.3 | 13.6 |
| 3 20 | 2.9 | 29.4 | 2.7 | 29.1 | 13.4 |
| 3 25 | 3.2 | 29.1 | 2.9 | 28.9 | 13.4 |
| 3 30 | 3.4 | – 28.9 | + 3.1 | – 28.7 | – 12.9 |

| App. Alt. | Sun October – March Lower Limb | Sun October – March Upper Limb | Sun April – September Lower Limb | Sun April – September Upper Limb | Stars & Planets |
|---|---|---|---|---|---|
| ° ′ | ′ | ′ | ′ | ′ | ′ |
| 3 30 | + 3.4 | – 28.9 | + 3.1 | – 28.7 | – 12.9 |
| 3 35 | 3.6 | 28.7 | 3.3 | 28.5 | 12.7 |
| 3 40 | 3.8 | 28.5 | 3.6 | 28.2 | 12.5 |
| 3 45 | 4.0 | 28.3 | 3.8 | 28.0 | 12.3 |
| 3 50 | 4.2 | 28.1 | 4.0 | 27.8 | 12.1 |
| 3 55 | 4.4 | 27.9 | 4.1 | 27.7 | 11.9 |
| 4 00 | + 4.6 | – 27.7 | + 4.3 | – 27.5 | – 11.7 |
| 4 05 | 4.8 | 27.5 | 4.5 | 27.3 | 11.5 |
| 4 10 | 4.9 | 27.4 | 4.7 | 27.1 | 11.4 |
| 4 15 | 5.1 | 27.2 | 4.9 | 26.9 | 11.2 |
| 4 20 | 5.3 | 27.0 | 5.0 | 26.8 | 11.0 |
| 4 25 | 5.4 | 26.9 | 5.2 | 26.6 | 10.9 |
| 4 30 | + 5.6 | – 26.7 | + 5.3 | – 26.5 | – 10.7 |
| 4 35 | 5.7 | 26.6 | 5.5 | 26.3 | 10.6 |
| 4 40 | 5.9 | 26.4 | 5.6 | 26.2 | 10.4 |
| 4 45 | 6.0 | 26.3 | 5.8 | 26.0 | 10.3 |
| 4 50 | 6.2 | 26.1 | 5.9 | 25.9 | 10.1 |
| 4 55 | 6.3 | 26.0 | 6.1 | 25.7 | 10.0 |
| 5 00 | + 6.4 | – 25.9 | + 6.2 | – 25.6 | – 9.9 |
| 5 05 | 6.6 | 25.7 | 6.3 | 25.5 | 9.7 |
| 5 10 | 6.7 | 25.6 | 6.5 | 25.3 | 9.6 |
| 5 15 | 6.8 | 25.5 | 6.6 | 25.2 | 9.5 |
| 5 20 | 7.0 | 25.3 | 6.7 | 25.1 | 9.3 |
| 5 25 | 7.1 | 25.2 | 6.8 | 25.0 | 9.2 |
| 5 30 | + 7.2 | – 25.1 | + 6.9 | – 24.9 | – 9.1 |
| 5 35 | 7.3 | 25.0 | 7.1 | 24.7 | 9.0 |
| 5 40 | 7.4 | 24.9 | 7.2 | 24.6 | 8.9 |
| 5 45 | 7.5 | 24.8 | 7.3 | 24.5 | 8.8 |
| 5 50 | 7.6 | 24.7 | 7.4 | 24.4 | 8.7 |
| 5 55 | 7.7 | 24.6 | 7.5 | 24.3 | 8.6 |
| 6 00 | + 7.8 | – 24.5 | + 7.6 | – 24.2 | – 8.5 |
| 6 10 | 8.0 | 24.3 | 7.8 | 24.0 | 8.3 |
| 6 20 | 8.2 | 24.1 | 8.0 | 23.8 | 8.1 |
| 6 30 | 8.4 | 23.9 | 8.2 | 23.6 | 7.9 |
| 6 40 | 8.6 | 23.7 | 8.3 | 23.5 | 7.7 |
| 6 50 | 8.7 | 23.6 | 8.5 | 23.3 | 7.6 |
| 7 00 | + 8.9 | – 23.4 | + 8.7 | – 23.1 | – 7.4 |
| 7 10 | 9.1 | 23.2 | 8.8 | 23.0 | 7.2 |
| 7 20 | 9.2 | 23.1 | 9.0 | 22.8 | 7.1 |
| 7 30 | 9.3 | 23.0 | 9.1 | 22.7 | 6.9 |
| 7 40 | 9.5 | 22.8 | 9.2 | 22.6 | 6.8 |
| 7 50 | 9.6 | 22.7 | 9.4 | 22.4 | 6.7 |
| 8 00 | + 9.7 | – 22.6 | + 9.5 | – 22.3 | – 6.6 |
| 8 10 | 9.9 | 22.4 | 9.6 | 22.2 | 6.4 |
| 8 20 | 10.0 | 22.3 | 9.7 | 22.1 | 6.3 |
| 8 30 | 10.1 | 22.2 | 9.9 | 21.9 | 6.2 |
| 8 40 | 10.2 | 22.1 | 10.0 | 21.8 | 6.1 |
| 8 50 | 10.3 | 22.0 | 10.1 | 21.7 | 6.0 |
| 9 00 | + 10.4 | – 21.9 | + 10.2 | – 21.6 | – 5.9 |
| 9 10 | 10.5 | 21.8 | 10.3 | 21.5 | 5.8 |
| 9 20 | 10.6 | 21.7 | 10.4 | 21.4 | 5.7 |
| 9 30 | 10.7 | 21.6 | 10.5 | 21.3 | 5.6 |
| 9 40 | 10.8 | 21.5 | 10.6 | 21.2 | 5.5 |
| 9 50 | 10.9 | 21.4 | 10.6 | 21.2 | 5.4 |
| 10 00 | + 11.0 | – 21.3 | + 10.7 | – 21.1 | – 5.3 |

For bubble sextant observations- ignore dip and use star corrections for the Sun, planets and stars.

# NAVIGATIONAL STAR CHART

U.S. Naval Observatory / Astronomical Applications Dept.