



LUNAR DISTANCE

2026

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Disclaimer: These are computer generated tables - use them at your own risk. They replicate Lunar Distance algorithms with no guarantee of accuracy. They are intended to encourage the use of sextants, be it as a hobby or as a backup when electronics fail. The author claims no liability for any consequences arising from use of these tables and accompanying charts.

Lunar Distance

The Lunar Distance method (or the old method of “lunars”) is an 18th century technique to find the time, typically to reset ship’s clocks or as an emergency procedure. The method uses the Moon’s apparent motion relative to the Sun, planets or stars like a clock to find a reference time (e.g. GMT). “Until 1906, the Nautical Almanac included lunar distance tables showing predicted geocentric angular distances between the Moon and selected bodies in 3-hour intervals. After the tables were dropped, lunar distances fell more or less into oblivion.”¹

“The methods are a good deal more laborious than the more commonplace procedures of celestial navigation. It is perhaps the most difficult possible operation within the discipline of celestial navigation. However, one argument for maintaining celestial skills is the utility of celestial navigation as an emergency substitute for electronic navigation.”² “Nothing else comes close to the lunar for developing skill with a sextant - and the observation is demanding enough to hold one’s interest for a lifetime.”³ Thus it is still a valuable process to learn and indeed worthwhile mastering. (A practised user can routinely find the correct time to within ± 30 seconds.)

“Because the Moon moves much slower across the sky than the stars, its changing position can be used in sort of a reverse process of sight reduction to find the time.”⁴ “The basic idea of the lunar distance method is easy to comprehend. Since the Moon moves across the celestial sphere at a rate of about 0.5° per hour, the angular distance between the Moon and a celestial body in her path varies at a similar rate and rapidly enough to be used to measure the time. The time corresponding with an observed lunar distance can be found by comparison with tabulated values.”⁵ (The continuous motion of the Moon through the sky day-by-day implies that different celestial bodies will be selected for LD measurements on different days.)

The following Lunar Distance tables can contain up to 8 celestial bodies per day (due to the page width limitation). Generally, an attempt is made to include an even number of objects to the east and west of the Moon. The maximum LD angle chosen for inclusion in the tables is 120° , which is about the maximum angle a sextant can measure.

The celestial bodies available for LD measurement include the Sun, four planets (Venus, Mars, Jupiter, Saturn), 21 navigational stars (with magnitude ≤ 1.5) and Polaris.

Three different strategies are available to select suitable celestial bodies for inclusion in a daily LD table:

- pick celestial bodies closest to the Moon
- pick celestial bodies with the highest hourly LD delta (for best accuracy in time determination)
- pick the brightest celestial bodies (possibly easier to locate in the sky)

The celestial body LD angle at a particular hour of day still needs to fulfill several requirements:

- the LD of the Sun is $>10^\circ$ as the Moon is hardly visible during New Moon. (This applies to all celestial bodies)
- the LD of the Sun is $>40^\circ$ (otherwise the Moon is not visible)
- only LD angles $<120^\circ$ are tabulated
- the angle between the celestial body and the Sun (“Solar Distance”) is $>10^\circ$ (otherwise the celestial body might not be visible)
- the Sun is not between the celestial body and the Moon (based on the Right Ascension of all three)
- the hourly LD delta is $>15'$ of arc (to avoid measurement errors). “The rate of change of LD becomes zero when LD passes through a minimum or maximum, making an observation useless.”⁶
- the rate of change of the hourly LD delta does not exceed 0.016° ($= 0.96'$). This empirical figure removes LD values where linear interpolation (between hours) becomes unreliable.

Suggested further reading: “Stark Tables: For Clearing the Lunar Distance and Finding Universal Time by Sextant Observation” by Bruce Stark, ISBN 978-0-914025-21-4

¹Henning Umland, Chapter 7 - Finding Time and Longitude by Lunar Distances

²Eric Romelczyk, The Journal of Navigation, Volume 72, Issue 6

³Bruce Stark, page vi, Tables For Clearing the Lunar Distance and Finding Universal Time by Sextant Observation

⁴Bruce Stark, <https://www.celestaire.com/product/tables-for-clearing-the-lunar-distance/>

⁵Henning Umland, Chapter 7 - Finding Time and Longitude by Lunar Distances

⁶Henning Umland, Chapter 7 - Finding Time and Longitude by Lunar Distances

h	Moon (1 st Jan)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Regulus	-Procyon	-Pollux	-Jupiter	+Saturn	+Achernar	+Fomalhaut	+Altair
0	36°44.5	2.4'	N26°24.2	6.7'	60.7'	83°27.9	53°15.1	46°38.0	44°50.2	70°51.2	89°48.7	94°08.2	116°44.2
1	51°06.0	2.3'	26°30.9	6.5'	60.7'	82°50.6	52°41.2	46°00.8	44°12.7	71°28.3	90°07.7	94°43.1	117°14.0
2	65°27.3	2.3'	26°37.4	6.3'	60.7'	82°13.2	52°07.3	45°23.5	43°35.2	72°05.4	90°26.7	95°18.1	117°43.8
3	79°48.6	2.2'	26°43.7	6.1'	60.7'	81°35.8	51°33.5	44°46.2	42°57.7	72°42.5	90°45.7	95°53.1	118°13.5
4	94°09.7	2.1'	26°49.8	5.9'	60.7'	80°58.5	50°59.8	44°09.0	42°20.2	73°19.7	91°04.7	96°28.1	118°43.1
5	108°30.8	2.0'	26°55.7	5.7'	60.7'	80°21.1	50°26.1	43°31.7	41°42.6	73°56.9	91°23.7	97°03.1	119°12.7
6	122°51.8	1.9'	N27°01.5	5.5'	60.7'	79°43.7	49°52.4	42°54.4	41°05.0	74°34.0	91°42.7	97°38.1	119°42.2
7	137°12.7	1.8'	27°07.0	5.3'	60.7'	79°06.3	49°18.8	42°17.1	40°27.5	75°11.2	92°01.7	98°13.1	
8	151°33.5	1.8'	27°12.3	5.1'	60.7'	78°28.9	48°45.2	41°39.8	39°49.9	75°48.4	92°20.7	98°48.1	
9	165°54.3	1.7'	27°17.4	4.9'	60.7'	77°51.4	48°11.8	41°02.5	39°12.3	76°25.6	92°39.7	99°23.1	
10	180°14.9	1.6'	27°22.3	4.7'	60.7'	77°14.0	47°38.3	40°25.1	38°34.8	77°02.8	92°58.7	99°58.1	
11	194°35.6	1.5'	27°27.0	4.5'	60.7'	76°36.5	47°05.0	39°47.8	37°57.2	77°40.1	93°17.6	100°33.1	
12	208°56.1	1.5'	N27°31.4	4.3'	60.7'	75°59.1	46°31.7	39°10.5	37°19.6	78°17.3	93°36.6	101°08.1	
13	223°16.6	1.4'	27°35.7	4.1'	60.8'	75°21.6	45°58.5	38°33.1	36°42.0	78°54.5	93°55.5	101°43.1	
14	237°37.0	1.4'	27°39.8	3.9'	60.8'	74°44.1	45°25.4	37°55.8	36°04.4	79°31.8	94°14.5	102°18.1	
15	251°57.3	1.3'	27°43.6	3.6'	60.8'	74°06.6	44°52.3	37°18.4	35°26.8	80°09.1	94°33.4	102°53.1	
16	266°17.6	1.2'	27°47.3	3.4'	60.8'	73°29.2	44°19.4	36°41.1	34°49.2	80°46.3	94°52.2	103°28.1	
17	280°37.9	1.2'	27°50.7	3.2'	60.8'	72°51.7	43°46.5	36°03.7	34°11.7	81°23.6	95°11.1	104°03.1	
18	294°58.1	1.2'	N27°53.9	3.0'	60.8'	72°14.2	43°13.7	35°26.4	33°34.1	82°00.9	95°29.9	104°38.0	
19	309°18.2	1.1'	27°56.9	2.8'	60.8'	71°36.7	42°41.1	34°49.0	32°56.5	82°38.2	95°48.7	105°13.0	
20	323°38.3	1.1'	27°59.7	2.6'	60.8'	70°59.2	42°08.5	34°11.7	32°18.9	83°15.4	96°07.5	105°47.9	
21	337°58.4	1.0'	28°02.2	2.3'	60.8'	70°21.6	41°36.0	33°34.3	31°41.3	83°52.7	96°26.2	106°22.9	
22	352°18.5	1.0'	28°04.6	2.1'	60.8'	69°44.1	41°03.7	32°57.0	31°03.8	84°30.0	96°44.9	106°57.8	
23	6°38.5	1.0'	28°06.7	1.9'	60.8'	69°06.6	40°31.5	32°19.6	30°26.2	85°07.3	97°03.6	107°32.7	
1 st	SD = 16.5' Mer. pass. 22:32												

h	Moon (2 nd Jan)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Spica	-Regulus	-Pollux	-Jupiter	+Aldebaran	+Capella	+Saturn	+Fomalhaut
0	20°58.4	1.0'	N28°08.6	1.7'	60.8'		68°29.1	31°42.3	29°48.7	15°35.3		85°44.6	108°07.6
1	35°18.4	0.9'	28°10.3	1.5'	60.8'		67°51.6	31°05.0	29°11.1	16°03.1		86°21.9	108°42.5
2	49°38.3	0.9'	28°11.8	1.3'	60.8'		67°14.1	30°27.6	28°33.6	16°31.6		86°59.2	109°17.3
3	63°58.2	0.9'	28°13.0	1.0'	60.8'		66°36.6	29°50.3	27°56.1	17°00.6		87°36.5	109°52.2
4	78°18.2	0.9'	28°14.1	0.8'	60.8'		65°59.1	29°13.0	27°18.6	17°30.2		88°13.8	110°27.0
5	92°38.0	0.9'	28°14.9	0.6'	60.8'	119°22.6	65°21.5	28°35.7	26°41.1	18°00.2		88°51.1	111°01.8
6	106°57.9	0.9'	N28°15.5	0.4'	60.8'	118°45.1	64°44.0	27°58.4	26°03.7	18°30.7		89°28.3	111°36.5
7	121°17.8	0.9'	28°15.8	0.1'	60.8'	118°07.6	64°06.5	27°21.2	25°26.3	19°01.5		90°05.6	112°11.3
8	135°37.7	0.9'	28°16.0	-0.1'	60.7'	117°30.2	63°29.0	26°43.9	24°48.9	19°32.8		90°42.9	112°46.0
9	149°57.6	0.9'	28°15.9	-0.3'	60.7'	116°52.7	62°51.5	26°06.7	24°11.5	20°04.3		91°20.2	113°20.7
10	164°17.5	0.9'	28°15.6	-0.5'	60.7'	116°15.2	62°14.1	25°29.4	23°34.1	20°36.2		91°57.4	113°55.3
11	178°37.4	0.9'	28°15.1	-0.7'	60.7'	115°37.7	61°36.6	24°52.2	22°56.8	21°08.4		92°34.7	114°29.9
12	192°57.3	0.9'	N28°14.4	-0.9'	60.7'	115°00.3	60°59.1	24°15.0	22°19.5	21°40.8		93°11.9	115°04.5
13	207°17.3	1.0'	28°13.4	-1.2'	60.7'	114°22.8	60°21.6	23°37.9	21°42.2	22°13.5		93°49.2	115°39.0
14	221°37.3	1.0'	28°12.3	-1.4'	60.7'	113°45.4	59°44.2	23°00.7	21°05.0	22°46.4		94°26.4	116°13.5
15	235°57.3	1.0'	28°10.9	-1.6'	60.7'	113°07.9	59°06.7	22°23.6	20°27.8	23°19.5	20°04.0	95°03.6	116°48.0
16	250°17.3	1.1'	28°09.3	-1.8'	60.7'	112°30.5	58°29.3	21°46.5	19°50.7	23°52.9	20°21.1	95°40.9	117°22.4
17	264°37.4	1.1'	28°07.4	-2.0'	60.7'	111°53.1	57°51.8	21°09.5	19°13.6	24°26.4	20°39.0	96°18.1	117°56.8
18	278°57.5	1.1'	N28°05.4	-2.3'	60.7'	111°15.7	57°14.4	20°32.4	18°36.6	25°00.0	20°57.8	96°55.3	118°31.2
19	293°17.6	1.2'	28°03.1	-2.5'	60.7'	110°38.3	56°37.0	19°55.5	17°59.6	25°33.8	21°17.3	97°32.4	119°05.5
20	307°37.8	1.2'	28°00.7	-2.7'	60.6'	110°00.9	55°59.6	19°18.5	17°22.7	26°07.8	21°37.6	98°09.6	119°39.7
21	321°58.0	1.3'	27°58.0	-2.9'	60.6'	109°23.5	55°22.2	18°41.6	16°45.9	26°41.8	21°58.6	98°46.8	
22	336°18.3	1.3'	27°55.1	-3.1'	60.6'	108°46.2	54°44.9	18°04.7	16°09.1	27°16.1	22°20.3	99°23.9	
23	350°38.7	1.4'	27°52.0	-3.3'	60.6'	108°08.8	54°07.5	17°27.9	15°32.4	27°50.4	22°42.6	100°01.0	
2 nd	SD = 16.6' Mer. pass. 23:39												

h Moon (3 rd Jan)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Spica	-Regulus	-Pollux	-Jupiter	+Betelgeuse	+Capella	+Aldebaran	+Saturn
0	4°59.1	1.5'	N27°48.6	-3.5'	60.6'	107°31.5	53°30.2	16°51.2	14°55.9		23°05.5	28°24.8	100°38.1
1	19°19.5	1.5'	27°45.1	-3.7'	60.6'	106°54.2	52°52.9	16°14.5	14°19.4		23°28.9	28°59.3	101°15.2
2	33°40.1	1.6'	27°41.4	-4.0'	60.6'	106°16.9	52°15.6	15°37.8	13°43.1		23°53.0	29°33.9	101°52.3
3	48°00.7	1.7'	27°37.4	-4.2'	60.6'	105°39.6	51°38.3	15°01.2	13°06.9		24°17.5	30°08.6	102°29.4
4	62°21.3	1.7'	27°33.2	-4.4'	60.5'	105°02.3	51°01.0	14°24.8	12°30.8		24°42.5	30°43.4	103°06.4
5	76°42.1	1.8'	27°28.9	-4.6'	60.5'	104°25.1	50°23.7	13°48.3	11°54.9	23°03.6	25°08.0	31°18.2	103°43.4
6	91°02.9	1.9'	N27°24.3	-4.8'	60.5'	103°47.9	49°46.5	13°12.0	11°19.3	23°19.6	25°34.0	31°53.1	104°20.5
7	105°23.8	2.0'	27°19.5	-5.0'	60.5'	103°10.7	49°09.3	12°35.8	10°43.8	23°36.3	26°00.3	32°28.0	104°57.4
8	119°44.8	2.1'	27°14.5	-5.2'	60.5'	102°33.5	48°32.1	11°59.8	10°08.6	23°53.8	26°27.0	33°03.0	105°34.4
9	134°05.9	2.2'	27°09.3	-5.4'	60.5'	101°56.3	47°54.9	11°23.8	9°33.8	24°12.0	26°54.1	33°38.1	106°11.3
10	148°27.0	2.3'	27°04.0	-5.6'	60.4'	101°19.2	47°17.8	10°48.0	8°59.3	24°30.8	27°21.6	34°13.2	106°48.3
11	162°48.3	2.3'	26°58.4	-5.8'	60.4'	100°42.1	46°40.6	10°12.4	8°25.2	24°50.3	27°49.4	34°48.4	107°25.2
12	177°09.6	2.4'	N26°52.6	-6.0'	60.4'	100°05.0	46°03.5	9°37.0	7°51.7	25°10.3	28°17.5	35°23.5	108°02.0
13	191°31.1	2.5'	26°46.6	-6.2'	60.4'	99°27.9	45°26.4	9°01.9	7°18.8	25°31.0	28°45.9	35°58.8	108°38.9
14	205°52.6	2.6'	26°40.5	-6.4'	60.4'	98°50.8	44°49.4	8°27.0	6°46.7	25°52.2	29°14.5	36°34.0	109°15.7
15	220°14.3	2.8'	26°34.1	-6.5'	60.3'	98°13.8	44°12.3	7°52.6		26°14.0	29°43.5	37°09.3	109°52.5
16	234°36.0	2.9'	26°27.6	-6.7'	60.3'	97°36.8	43°35.3	7°18.5		26°36.2	30°12.7	37°44.6	110°29.3
17	248°57.9	3.0'	26°20.8	-6.9'	60.3'	96°59.8	42°58.3	6°45.0		26°58.9	30°42.1	38°19.9	111°06.0
18	263°19.8	3.1'	N26°13.9	-7.1'	60.3'	96°22.9	42°21.4	6°12.2		27°22.1	31°11.7	38°55.2	111°42.8
19	277°41.9	3.2'	26°06.8	-7.3'	60.3'	95°45.9	41°44.4	5°40.2		27°45.8	31°41.6	39°30.6	112°19.5
20	292°04.1	3.3'	25°59.5	-7.5'	60.2'	95°09.1	41°07.5			28°09.8	32°11.6	40°06.0	112°56.1
21	306°26.4	3.4'	25°52.1	-7.6'	60.2'	94°32.2	40°30.7			28°34.3	32°41.8	40°41.3	113°32.8
22	320°48.8	3.5'	25°44.4	-7.8'	60.2'	93°55.3	39°53.8			28°59.2	33°12.3	41°16.7	114°09.4
23	335°11.4	3.7'	25°36.6	-8.0'	60.2'	93°18.5	39°17.0			29°24.4	33°42.8	41°52.1	114°45.9
3 rd	SD = 16.5' Mer. pass. --:--												

2026 January 04 to Jan. 06 UT

Moon (6 th Jan)						Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Antares	-Arcturus	-Spica	\pm Regulus	+Pollux	+Jupiter	+Capella	+Aldebaran
0	322°18.4	10.2'	N16°22.6	-13.9'	58.6'	109°53.5	67°08.9	64°00.1	9°58.4	27°05.6	29°38.5	60°04.4	70°25.6
1	336°47.6	10.3'	16°08.7	-13.9'	58.6'	109°18.6	66°41.4	63°25.3	9°23.6	27°40.2	30°13.4	60°37.0	70°59.7
2	351°16.9	10.4'	15°54.8	-14.0'	58.6'	108°43.9	66°13.9	62°50.5	8°48.9	28°14.8	30°48.2	61°09.6	71°33.8
3	5°46.3	10.6'	15°40.8	-14.1'	58.5'	108°09.1	65°46.5	62°15.8	8°14.2	28°49.3	31°23.0	61°42.1	72°07.9
4	20°15.9	10.7'	15°26.7	-14.1'	58.5'	107°34.4	65°19.2	61°41.1	7°39.5	29°23.8	31°57.8	62°14.6	72°41.9
5	34°45.5	10.8'	15°12.6	-14.2'	58.4'	106°59.8	64°52.0	61°06.5	7°05.0	29°58.3	32°32.5	62°47.1	73°15.9
6	49°15.3	10.9'	N14°58.4	-14.2'	58.4'	106°25.2	64°25.0	60°32.0	6°30.4	30°32.7	33°07.2	63°19.6	73°49.9
7	63°45.2	11.0'	14°44.1	-14.3'	58.4'	105°50.7	63°58.0	59°57.4	5°56.0	31°07.0	33°41.8	63°52.1	74°23.8
8	78°15.3	11.1'	14°29.8	-14.4'	58.3'	105°16.2	63°31.1	59°22.9	5°21.6	31°41.3	34°16.5	64°24.5	74°57.7
9	92°45.4	11.3'	14°15.5	-14.4'	58.3'	104°41.8	63°04.3	58°48.5	4°47.3	32°15.6	34°51.0	64°56.9	75°31.5
10	107°15.7	11.4'	14°01.1	-14.5'	58.2'	104°07.4	62°37.7	58°14.1	4°13.0	32°49.9	35°25.5	65°29.3	76°05.2
11	121°46.0	11.5'	13°46.6	-14.5'	58.2'	103°33.0	62°11.1	57°39.8	3°38.9	33°24.1	36°00.0	66°01.6	76°39.0
12	136°16.5	11.6'	N13°32.1	-14.6'	58.2'	102°58.7	61°44.7	57°05.5	3°04.9	33°58.2	36°34.5	66°33.9	77°12.7
13	150°47.1	11.7'	13°17.5	-14.6'	58.1'	102°24.5	61°18.3	56°31.3	2°31.0	34°32.3	37°08.9	67°06.2	77°46.3
14	165°17.8	11.8'	13°02.9	-14.6'	58.1'	101°50.3	60°52.1	55°57.1	1°57.5	35°06.4	37°43.2	67°38.5	78°19.9
15	179°48.6	11.9'	12°48.3	-14.7'	58.1'	101°16.1	60°26.0	55°23.0	1°24.5	35°40.4	38°17.5	68°10.7	78°53.5
16	194°19.5	12.0'	12°33.6	-14.7'	58.0'	100°42.0	60°00.0	54°48.9		36°14.4	38°51.8	68°42.9	79°27.0
17	208°50.5	12.1'	12°18.9	-14.8'	58.0'	100°07.9	59°34.2	54°14.8		36°48.3	39°26.0	69°15.1	80°00.4
18	223°21.6	12.2'	N12°04.1	-14.8'	57.9'	99°33.9	59°08.4	53°40.8		37°22.2	40°00.2	69°47.2	80°33.8
19	237°52.9	12.3'	11°49.3	-14.8'	57.9'	99°00.0	58°42.8	53°06.9		37°56.0	40°34.3	70°19.3	81°07.2
20	252°24.2	12.4'	11°34.5	-14.9'	57.9'	98°26.0	58°17.3	52°33.0		38°29.8	41°08.4	70°51.4	81°40.5
21	266°55.6	12.5'	11°19.6	-14.9'	57.8'	97°52.2	57°51.9	51°59.1		39°03.6	41°42.5	71°23.4	82°13.8
22	281°27.1	12.6'	11°04.7	-14.9'	57.8'	97°18.4	57°26.7	51°25.3	2°39.4	39°37.3	42°16.5	71°55.4	82°47.1
23	295°58.7	12.7'	10°49.7	-15.0'	57.7'	96°44.6	57°01.6	50°51.6	3°12.8	40°11.0	42°50.4	72°27.4	83°20.3
6 th	SD = 16.0' Mer. pass. 02:36												

DUT1 = UT1-UTC = +0.1057 sec $\Delta T = TT-UT1 = +69.0783$ sec

2026 January 07 to Jan. 09 UT

h	Moon (7 th Jan)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Antares	-Rigil Kent.	-Hadar	-Spica	+Regulus	+Pollux	+Jupiter	+Aldebaran
0	310°30.4	12.8'	N10°34.8	-15.0'	57.7'	96°10.9	87°19.1	83°22.1	50°17.9	3°46.3	40°44.6	43°24.3	83°53.4
1	325°02.2	12.9'	10°19.8	-15.0'	57.7'	95°37.2	86°52.5	82°56.1	49°44.2	4°19.7	41°18.2	43°58.2	84°26.5
2	339°34.1	13.0'	10°04.7	-15.1'	57.6'	95°03.6	86°25.8	82°30.2	49°10.6	4°53.2	41°51.7	44°32.0	84°59.6
3	354°06.1	13.1'	09°49.7	-15.1'	57.6'	94°30.0	85°59.3	82°04.3	48°37.1	5°26.7	42°25.2	45°05.8	85°32.6
4	8°38.2	13.2'	09°34.6	-15.1'	57.6'	93°56.5	85°32.7	81°38.5	48°03.5	6°00.1	42°58.6	45°39.5	86°05.5
5	23°10.4	13.3'	09°19.5	-15.1'	57.5'	93°23.0	85°06.2	81°12.8	47°30.1	6°33.5	43°32.0	46°13.2	86°38.4
6	37°42.6	13.3'	N09°04.4	-15.1'	57.5'	92°49.5	84°39.8	80°47.1	46°56.7	7°06.9	44°05.3	46°46.9	87°11.3
7	52°15.0	13.4'	08°49.3	-15.2'	57.4'	92°16.2	84°13.4	80°21.5	46°23.3	7°40.2	44°38.6	47°20.5	87°44.1
8	66°47.4	13.5'	08°34.1	-15.2'	57.4'	91°42.8	83°47.1	79°55.9	45°50.0	8°13.5	45°11.9	47°54.0	88°16.9
9	81°19.9	13.6'	08°18.9	-15.2'	57.4'	91°09.5	83°20.8	79°30.4	45°16.7	8°46.8	45°45.1	48°27.5	88°49.6
10	95°52.5	13.7'	08°03.7	-15.2'	57.3'	90°36.3	82°54.5	79°04.9	44°43.5	9°20.0	46°18.3	49°01.0	89°22.3
11	110°25.1	13.7'	07°48.5	-15.2'	57.3'	90°03.1	82°28.3	78°39.5	44°10.3	9°53.2	46°51.4	49°34.4	89°54.9
12	124°57.9	13.8'	N07°33.3	-15.2'	57.2'	89°29.9	82°02.2	78°14.2	43°37.2	10°26.3	47°24.4	50°07.8	90°27.5
13	139°30.7	13.9'	07°18.1	-15.2'	57.2'	88°56.8	81°36.1	77°48.9	43°04.1	10°59.4	47°57.5	50°41.1	91°00.1
14	154°03.6	14.0'	07°02.8	-15.3'	57.2'	88°23.8	81°10.1	77°23.7	42°31.0	11°32.4	48°30.5	51°14.4	91°32.6
15	168°36.6	14.0'	06°47.6	-15.3'	57.1'	87°50.7	80°44.1	76°58.6	41°58.1	12°05.4	49°03.4	51°47.7	92°05.0
16	183°09.6	14.1'	06°32.3	-15.3'	57.1'	87°17.8	80°18.2	76°33.5	41°25.1	12°38.3	49°36.3	52°20.9	92°37.4
17	197°42.7	14.2'	06°17.1	-15.3'	57.1'	86°44.9	79°52.3	76°08.5	40°52.2	13°11.2	50°09.1	52°54.0	93°09.8
18	212°15.9	14.3'	N06°01.8	-15.3'	57.0'	86°12.0	79°26.5	75°43.6	40°19.4	13°44.1	50°41.9	53°27.1	93°42.1
19	226°49.2	14.3'	05°46.5	-15.3'	57.0'	85°39.2	79°00.8	75°18.7	39°46.6	14°16.9	51°14.7	54°00.2	94°14.4
20	241°22.5	14.4'	05°31.2	-15.3'	56.9'	85°06.4	78°35.1	74°53.9	39°13.8	14°49.7	51°47.4	54°33.2	94°46.6
21	255°55.9	14.4'	05°15.9	-15.3'	56.9'	84°33.6	78°09.5	74°29.2	38°41.1	15°22.4	52°20.1	55°06.2	95°18.8
22	270°29.3	14.5'	05°00.7	-15.3'	56.9'	84°00.9	77°43.9	74°04.5	38°08.4	15°55.1	52°52.7	55°39.1	95°50.9
23	285°02.8	14.6'	04°45.4	-15.3'	56.8'	83°28.3	77°18.4	73°39.9	37°35.8	16°27.7	53°25.3	56°12.0	96°23.0
7 th	SD = 15.7' Mer. pass. 03:24												

h	Moon (8 th Jan)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Sun	-Antares	-Rigil Kent.	-Spica	+Regulus	+Pollux	+Jupiter	+Aldebaran
0	299°36.4	14.6'	N04°30.1	-15.3'	56.8'		82°55.7	76°53.0	37°03.2	17°00.3	53°57.8	56°44.8	96°55.0
1	314°10.0	14.7'	04°14.8	-15.3'	56.8'		82°23.1	76°27.6	36°30.7	17°32.9	54°30.3	57°17.6	97°27.0
2	328°43.7	14.7'	03°59.5	-15.3'	56.7'	119°32.1	81°50.6	76°02.3	35°58.2	18°05.4	55°02.8	57°50.4	97°59.0
3	343°17.5	14.8'	03°44.2	-15.3'	56.7'	119°02.3	81°18.2	75°37.0	35°25.8	18°37.8	55°35.2	58°23.1	98°30.9
4	357°51.3	14.9'	03°29.0	-15.3'	56.6'	118°32.5	80°45.7	75°11.9	34°53.4	19°10.2	56°07.5	58°55.8	99°02.7
5	12°25.1	14.9'	03°13.7	-15.3'	56.6'	118°02.8	80°13.4	74°46.7	34°21.1	19°42.6	56°39.8	59°28.4	99°34.6
6	26°59.0	15.0'	N02°58.4	-15.3'	56.6'	117°33.1	79°41.0	74°21.7	33°48.8	20°14.9	57°12.1	60°01.0	100°06.3
7	41°33.0	15.0'	02°43.2	-15.2'	56.5'	117°03.4	79°08.7	73°56.7	33°16.5	20°47.2	57°44.4	60°33.5	100°38.1
8	56°07.0	15.1'	02°27.9	-15.2'	56.5'	116°33.8	78°36.5	73°31.8	32°44.3	21°19.5	58°16.6	61°06.1	101°09.7
9	70°41.1	15.1'	02°12.7	-15.2'	56.5'	116°04.3	78°04.3	73°06.9	32°12.1	21°51.7	58°48.7	61°38.5	101°41.4
10	85°15.2	15.2'	01°57.5	-15.2'	56.4'	115°34.7	77°32.1	72°42.2	31°40.0	22°23.8	59°20.8	62°10.9	102°13.0
11	99°49.3	15.2'	01°42.3	-15.2'	56.4'	115°05.3	77°00.0	72°17.5	31°07.9	22°56.0	59°52.9	62°43.3	102°44.5
12	114°23.5	15.2'	N01°27.1	-15.2'	56.4'	114°35.8	76°27.9	71°52.8	30°35.9	23°28.0	60°24.9	63°15.6	103°16.0
13	128°57.8	15.3'	01°11.9	-15.2'	56.3'	114°06.4	75°55.9	71°28.3	30°03.9	24°00.1	60°56.9	63°47.9	103°47.5
14	143°32.0	15.3'	00°56.7	-15.2'	56.3'	113°37.1	75°23.9	71°03.8	29°31.9	24°32.1	61°28.8	64°20.2	104°18.9
15	158°06.4	15.4'	00°41.6	-15.1'	56.3'	113°07.7	74°51.9	70°39.4	29°00.0	25°04.0	62°00.7	64°52.4	104°50.3
16	172°40.7	15.4'	00°26.5	-15.1'	56.2'	112°38.5	74°20.0	70°15.0	28°28.1	25°35.9	62°32.6	65°24.6	105°21.6
17	187°15.1	15.4'	N00°11.3	-15.1'	56.2'	112°09.2	73°48.1	69°50.7	27°56.3	26°07.8	63°04.4	65°56.7	105°52.9
18	201°49.6	15.5'	S00°03.8	-15.1'	56.2'	111°40.0	73°16.3	69°26.6	27°24.5	26°39.6	63°36.2	66°28.8	106°24.2
19	216°24.0	15.5'	00°18.8	-15.1'	56.1'	111°10.9	72°44.5	69°02.4	26°52.8	27°11.4	64°07.9	67°00.9	106°55.4
20	230°58.6	15.5'	00°33.9	-15.0'	56.1'	110°41.8	72°12.7	68°38.4	26°21.1	27°43.2	64°39.6	67°32.9	107°26.5
21	245°33.1	15.6'	00°48.9	-15.0'	56.1'	110°12.7	71°41.0	68°14.5	25°49.4	28°14.9	65°11.3	68°04.9	107°57.6
22	260°07.7	15.6'	01°04.0	-15.0'	56.0'	109°43.6	71°09.4	67°50.6	25°17.8	28°46.5	65°42.9	68°36.8	108°28.7
23	274°42.3	15.6'	01°19.0	-15.0'	56.0'	109°14.6	70°37.7	67°26.8	24°46.2	29°18.2	66°14.5	69°08.7	108°59.7
8 th	SD = 15.5' Mer. pass. 04:09					Sun SD = 16.3'							

h	Moon (9 th Jan)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Sun	-Antares	-Rigil Kent.	-Spica	+Regulus	+Pollux	+Jupiter	+Aldebaran
0	289°16.9	15.7'	S01°33.9	-14.9'	56.0'	108°45.7	70°06.1	67°03.1	24°14.7	29°49.8	66°46.1	69°40.6	109°30.7
1	303°51.6	15.7'	01°48.9	-14.9'	55.9'	108°16.7	69°34.6	66°39.5	23°43.2	30°21.3	67°17.6	70°12.4	110°01.7
2	318°26.2	15.7'	02°03.8	-14.9'	55.9'	107°47.9	69°03.0	66°15.9	23°11.8	30°52.8	67°49.1	70°44.2	110°32.6
3	333°00.9	15.7'	02°18.7	-14.9'	55.9'	107°19.0	68°31.6	65°52.4	22°40.3	31°24.3	68°20.5	71°15.9	111°03.5
4	347°35.7	15.8'	02°33.6	-14.8'	55.8'	106°50.2	68°00.1	65°29.1	22°09.0	31°55.8	68°51.9	71°47.6	111°34.3
5	2°10.4	15.8'	02°48.4	-14.8'	55.8'	106°21.4	67°28.7	65°05.8	21°37.6	32°27.2	69°23.2	72°19.3	112°05.1
6	16°45.2	15.8'	S03°03.2	-14.8'	55.8'	105°52.7	66°57.3	64°42.6	21°06.4	32°58.5	69°54.6	72°50.9	112°35.8
7	31°20.0	15.8'	03°18.0	-14.8'	55.7'	105°24.0	66°26.0	64°19.5	20°35.1	33°29.9	70°25.9	73°22.5	113°06.5
8	45°54.8	15.8'	03°32.8	-14.7'	55.7'	104°55.3	65°54.7	63°56.4	20°03.9	34°01.2	70°57.1	73°54.1	113°37.2
9	60°29.6	15.8'	03°47.5	-14.7'	55.7'	104°26.6	65°23.5	63°33.5	19°32.7	34°32.4	71°28.3	74°25.6	114°07.8
10	75°04.5	15.9'	04°02.2	-14.7'	55.6'	103°58.0	64°52.2	63°10.7	19°01.6	35°03.6	71°59.5	74°57.1	114°38.4
11	89°39.3	15.9'	04°16.8	-14.6'	55.6'	103°29.5	64°21.0	62°47.9	18°30.5	35°34.8	72°30.7	75°28.6	115°08.9
12	104°14.2	15.9'	S04°31.5	-14.6'	55.6'	103°01.0	63°49.9	62°25.2	17°59.5	36°06.0	73°01.8	76°00.0	115°39.5
13	118°49.1	15.9'	04°46.1	-14.6'	55.6'	102°32.5	63°18.8	62°02.7	17°28.5	36°37.1	73°32.8	76°31.4	116°09.9
14	133°24.0	15.9'	05°00.6	-14.5'	55.5'	102°04.0	62°47.7	61°40.2	16°57.5	37°08.2	74°03.9	77°02.8	116°40.3
15	147°58.9	15.9'	05°15.2	-14.5'	55.5'	101°35.6	62°16.6	61°17.9	16°26.6	37°39.2	74°34.9	77°34.1	117°10.7
16	162°33.8	15.9'	05°29.6	-14.5'	55.5'	101°07.2	61°45.6	60°55.6	15°55.7	38°10.3	75°05.9	78°05.4	117°41.1
17	177°08.7	15.9'	05°44.1	-14.4'	55.4'	100°38.8	61°14.6	60°33.4	15°24.8	38°41.3	75°36.8	78°36.6	118°11.4
18	191°43.7	15.9'	S05°58.5	-14.4'	55.4'	100°10.5	60°43.7	60°11.3	14°54.0	39°12.2	76°07.7	79°07.9	118°41.7
19	206°18.6	15.9'	06°12.9	-14.3'	55.4'	99°42.2	60°12.8	59°49.4	14°23.3	39°43.1	76°38.6	79°39.1	119°11.9
20	220°53.5	15.9'	06°27.2	-14.3'	55.4'	99°13.9	59°41.9	59°27.5	13°52.6	40°14.0	77°09.5	80°10.2	119°42.1
21	235°28.5	15.9'	06°41.5	-14.3'	55.3'	98°45.7	59°11.0	59°05.7	13°21.9	40°44.9	77°40.3	80°41.3	
22	250°03.4	15.9'	06°55.8	-14.2'	55.3'	98°17.5	58°40.2	58°44.1	12°51.3	41°15.7	78°11.1	81°12.4	
23	264°38.4	15.9'	07°10.0	-14.2'	55.3'	97°49.3	58°09.4	58°22.5	12°20.7	41°46.5	78°41.8	81°43.5	
9 th	SD = 15.3' Mer. pass. 04:51					Sun SD = 16.3'							

DUT1 = UT1-UTC = +0.1050 sec $\Delta T = TT-UT1 = +69.0790$ sec

2026 January 10 to Jan. 12 UT

h	Moon (10 th Jan)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Sun	-Rigil Kent.	-Antares	-Spica	+Regulus	+Pollux	+Jupiter	+Capella
0	279°13.3	15.9'	S07°24.2	-14.1'	55.2'	97°21.1	58°01.1	57°38.6	11°50.2	42°17.2	79°12.5	82°14.6	109°36.3
1	293°48.2	15.9'	07°38.3	-14.1'	55.2'	96°53.0	57°39.8	57°07.9	11°19.7	42°48.0	79°43.2	82°45.6	110°05.4
2	308°23.2	15.9'	07°52.4	-14.0'	55.2'	96°24.9	57°18.5	56°37.2	10°49.3	43°18.7	80°13.9	83°16.5	110°34.4
3	322°58.1	15.9'	08°06.5	-14.0'	55.2'	95°56.9	56°57.4	56°06.5	10°19.0	43°49.4	80°44.5	83°47.5	111°03.4
4	337°33.0	15.9'	08°20.5	-14.0'	55.1'	95°28.8	56°36.4	55°35.9	9°48.7	44°20.0	81°15.1	84°18.4	111°32.3
5	352°07.9	15.9'	08°34.4	-13.9'	55.1'	95°00.8	56°15.6	55°05.3	9°18.4	44°50.6	81°45.7	84°49.3	112°01.2
6	6°42.8	15.9'	S08°48.3	-13.9'	55.1'	94°32.9	55°54.8	54°34.7	8°48.3	45°21.2	82°16.2	85°20.2	112°30.1
7	21°17.7	15.9'	09°02.2	-13.8'	55.1'	94°04.9	55°34.2	54°04.1	8°18.2	45°51.8	82°46.8	85°51.0	112°58.9
8	35°52.6	15.9'	09°16.0	-13.8'	55.0'	93°37.0	55°13.6	53°33.6	7°48.2	46°22.3	83°17.3	86°21.8	113°27.7
9	50°27.5	15.9'	09°29.8	-13.7'	55.0'	93°09.1	54°53.2	53°03.1	7°18.3	46°52.8	83°47.7	86°52.6	113°56.4
10	65°02.4	15.9'	09°43.5	-13.7'	55.0'	92°41.3	54°33.0	52°32.6	6°48.5	47°23.3	84°18.2	87°23.3	114°25.1
11	79°37.2	15.8'	09°57.2	-13.6'	55.0'	92°13.4	54°12.8	52°02.2	6°18.9	47°53.7	84°48.6	87°54.0	114°53.8
12	94°12.1	15.8'	S10°10.8	-13.6'	54.9'	91°45.6	53°52.8	51°31.8	5°49.4	48°24.1	85°18.9	88°24.7	115°22.4
13	108°46.9	15.8'	10°24.4	-13.5'	54.9'	91°17.8	53°32.9	51°01.4	5°20.2	48°54.5	85°49.3	88°55.4	115°51.0
14	123°21.7	15.8'	10°37.9	-13.5'	54.9'	90°50.1	53°13.1	50°31.0	4°51.1	49°24.9	86°19.6	89°26.1	116°19.6
15	137°56.5	15.8'	10°51.4	-13.4'	54.9'	90°22.4	52°53.5	50°00.6	4°22.5	49°55.2	86°49.9	89°56.7	116°48.1
16	152°31.2	15.7'	11°04.8	-13.4'	54.9'	89°54.6	52°34.0	49°30.3	3°54.2	50°25.6	87°20.2	90°27.3	117°16.5
17	167°06.0	15.7'	11°18.2	-13.3'	54.8'	89°27.0	52°14.6	49°00.0	3°26.6	50°55.9	87°50.5	90°57.9	117°45.0
18	181°40.7	15.7'	S11°31.5	-13.3'	54.8'	88°59.3	51°55.4	48°29.8	2°59.8	51°26.1	88°20.7	91°28.4	118°13.4
19	196°15.4	15.7'	11°44.8	-13.2'	54.8'	88°31.7	51°36.3	47°59.5		51°56.4	88°50.9	91°58.9	118°41.7
20	210°50.1	15.7'	11°58.0	-13.2'	54.8'	88°04.0	51°17.4	47°29.3		52°26.6	89°21.1	92°29.4	119°10.0
21	225°24.8	15.6'	12°11.1	-13.1'	54.7'	87°36.5	50°58.6	46°59.1		52°56.8	89°51.3	92°59.9	119°38.3
22	239°59.4	15.6'	12°24.2	-13.0'	54.7'	87°08.9	50°39.9	46°28.9		53°27.0	90°21.4	93°30.4	
23	254°34.0	15.6'	12°37.3	-13.0'	54.7'	86°41.3	50°21.4	45°58.7		53°57.1	90°51.5	94°00.8	
10 th	SD = 15.1' Mer. pass. 05:32					Sun SD = 16.3'							

h	Moon (11 th Jan)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Sun	-Rigil Kent.	-Hadar	-Antares	+Spica	+Regulus	+Pollux	+Jupiter
0	269°08.6	15.6'	S12°50.3	-12.9'	54.7'	86°13.8	50°03.1	48°13.5	45°28.6		54°27.3	91°21.6	94°31.2
1	283°43.1	15.5'	13°03.2	-12.9'	54.7'	85°46.3	49°44.9	47°57.6	44°58.5		54°57.4	91°51.7	95°01.6
2	298°17.7	15.5'	13°16.0	-12.8'	54.6'	85°18.8	49°26.8	47°41.8	44°28.4		55°27.5	92°21.8	95°32.0
3	312°52.2	15.5'	13°28.9	-12.7'	54.6'	84°51.4	49°09.0	47°26.3	43°58.3		55°57.6	92°51.8	96°02.3
4	327°26.6	15.4'	13°41.6	-12.7'	54.6'	84°23.9	48°51.2	47°10.9	43°28.3		56°27.6	93°21.8	96°32.6
5	342°01.1	15.4'	13°54.3	-12.6'	54.6'	83°56.5	48°33.7	46°55.8	42°58.3		56°57.6	93°51.8	97°02.9
6	356°35.5	15.4'	S14°06.9	-12.6'	54.6'	83°29.1	48°16.3		42°28.3	3°44.8	57°27.7	94°21.8	97°33.2
7	11°09.8	15.3'	14°19.5	-12.5'	54.6'	83°01.7	47°59.0		41°58.3	4°12.5	57°57.6	94°51.7	98°03.5
8	25°44.1	15.3'	14°32.0	-12.4'	54.5'	82°34.4	47°42.0		41°28.3	4°40.7	58°27.6	95°21.7	98°33.8
9	40°18.4	15.3'	14°44.4	-12.4'	54.5'	82°07.0	47°25.1		40°58.3	5°09.3	58°57.6	95°51.6	99°04.0
10	54°52.7	15.2'	14°56.8	-12.3'	54.5'	81°39.7	47°08.4		40°28.4	5°38.0	59°27.5	96°21.5	99°34.2
11	69°26.9	15.2'	15°09.1	-12.2'	54.5'	81°12.4	46°51.8		39°58.5	6°06.9	59°57.4	96°51.4	100°04.4
12	84°01.1	15.1'	S15°21.3	-12.2'	54.5'	80°45.1	46°35.5		39°28.6	6°36.0	60°27.3	97°21.2	100°34.6
13	98°35.2	15.1'	15°33.5	-12.1'	54.5'	80°17.8	46°19.3		38°58.7	7°05.1	60°57.2	97°51.1	101°04.7
14	113°09.3	15.1'	15°45.6	-12.0'	54.4'	79°50.5	46°03.3		38°28.8	7°34.4	61°27.1	98°20.9	101°34.9
15	127°43.4	15.0'	15°57.6	-12.0'	54.4'	79°23.3	45°47.5		37°59.0	8°03.6	61°56.9	98°50.7	102°05.0
16	142°17.4	15.0'	16°09.6	-11.9'	54.4'	78°56.1	45°31.9		37°29.1	8°33.0	62°26.8	99°20.5	102°35.1
17	156°51.4	14.9'	16°21.5	-11.8'	54.4'	78°28.9	45°16.4		36°59.3	9°02.4	62°56.6	99°50.3	103°05.2
18	171°25.3	14.9'	S16°33.3	-11.8'	54.4'	78°01.7	45°01.2		36°29.5	9°31.8	63°26.4	100°20.1	103°35.3
19	185°59.2	14.8'	16°45.0	-11.7'	54.4'	77°34.5	44°46.2		35°59.7	10°01.2	63°56.2	100°49.8	104°05.4
20	200°33.1	14.8'	16°56.7	-11.6'	54.4'	77°07.3			35°30.0	10°30.7	64°26.0	101°19.6	104°35.4
21	215°06.9	14.8'	17°08.3	-11.5'	54.3'	76°40.2			35°00.2	11°00.1	64°55.7	101°49.3	105°05.4
22	229°40.6	14.7'	17°19.9	-11.5'	54.3'	76°13.0			34°30.4	11°29.6	65°25.5	102°19.0	105°35.5
23	244°14.3	14.7'	17°31.3	-11.4'	54.3'	75°45.9			34°00.7	11°59.1	65°55.2	102°48.7	106°05.5
11 th	SD = 14.9' Mer. pass. 06:14					Sun SD = 16.3'							

h	Moon (12 th Jan)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Sun	-Antares	+Spica	+Regulus	+Procyon	+Pollux	+Sirius	+Jupiter
0	258°48.0	14.6'	S17°42.7	-11.3'	54.3'	75°18.8	33°31.0	12°28.6	66°25.0	98°43.5	103°18.4	103°56.9	106°35.5
1	273°21.6	14.6'	17°54.1	-11.2'	54.3'	74°51.7	33°01.3	12°58.1	66°54.7	99°11.5	103°48.1	104°17.7	107°05.4
2	287°55.2	14.5'	18°05.3	-11.2'	54.3'	74°24.6	32°31.6	13°27.6	67°24.4	99°39.4	104°17.7	104°38.5	107°35.4
3	302°28.7	14.5'	18°16.5	-11.1'	54.3'	73°57.5	32°01.9	13°57.1	67°54.1	100°07.3	104°47.4	104°59.2	108°05.4
4	317°02.1	14.4'	18°27.6	-11.0'	54.2'	73°30.4	31°32.2	14°26.6	68°23.7	100°35.3	105°17.0	105°19.9	108°35.3
5	331°35.5	14.4'	18°38.6	-10.9'	54.2'	73°03.4	31°02.6	14°56.1	68°53.4	101°03.1	105°46.6	105°40.5	109°05.3
6	346°08.9	14.3'	S18°49.5	-10.9'	54.2'	72°36.3	30°32.9	15°25.6	69°23.1	101°31.0	106°16.2	106°01.1	109°35.2
7	0°42.2	14.2'	19°00.3	-10.8'	54.2'	72°09.3	30°03.3	15°55.1	69°52.7	101°58.9	106°45.8	106°21.7	110°05.1
8	15°15.4	14.2'	19°11.1	-10.7'	54.2'	71°42.3	29°33.7	16°24.6	70°22.3	102°26.7	107°15.4	106°42.2	110°35.0
9	29°48.6	14.1'	19°21.8	-10.6'	54.2'	71°15.3	29°04.0	16°54.1	70°52.0	102°54.5	107°45.0	107°02.6	111°04.9
10	44°21.8	14.1'	19°32.4	-10.5'	54.2'	70°48.3	28°34.4	17°23.6	71°21.6	103°22.4	108°14.6	107°23.1	111°34.8
11	58°54.8	14.0'	19°42.9	-10.4'	54.2'	70°21.3	28°04.8	17°53.1	71°51.2	103°50.2	108°44.1	107°43.4	112°04.6
12	73°27.9	14.0'	S19°53.4	-10.4'	54.2'	69°54.3	27°35.2	18°22.6	72°20.8	104°17.9	109°13.7	108°03.7	112°34.5
13	88°00.8	13.9'	20°03.8	-10.3'	54.2'	69°27.3	27°05.6	18°52.1	72°50.4	104°45.7	109°43.3	108°24.0	113°04.4
14	102°33.8	13.9'	20°14.0	-10.2'	54.1'	69°00.3	26°36.1	19°21.6	73°20.0	105°13.4	110°12.8	108°44.2	113°34.2
15	117°06.6	13.8'	20°24.2	-10.1'	54.1'	68°33.4	26°06.5	19°51.1	73°49.5	105°41.2	110°42.3	109°04.4	114°04.0
16	131°39.4	13.7'	20°34.3	-10.0'	54.1'	68°06.4	25°36.9	20°20.6	74°19.1	106°08.9	111°11.8	109°24.5	114°33.9
17	146°12.2	13.7'	20°44.3	-9.9'	54.1'	67°39.5	25°07.4	20°50.1	74°48.7	106°36.6	111°41.4	109°44.6	115°03.7
18	160°44.8	13.6'	S20°54.3	-9.8'	54.1'	67°12.5	24°37.8	21°19.5	75°18.2	107°04.3	112°10.9	110°04.6	115°33.5
19	175°17.5	13.6'	21°04.1	-9.8'	54.1'	66°45.6	24°08.3	21°49.0	75°47.8	107°32.0	112°40.4	110°24.5	116°03.3
20	189°50.0	13.5'	21°13.9	-9.7'	54.1'	66°18.7	23°38.8	22°18.5	76°17.3	107°59.6	113°09.9	110°44.4	116°33.1
21	204°22.5	13.4'	21°23.5	-9.6'	54.1'	65°51.7	23°09.2	22°48.0	76°46.8	108°27.3	113°39.4	111°04.3	117°02.9
22	218°55.0	13.4'	21°33.1	-9.5'	54.1'	65°24.8	22°39.7	23°17.4	77°16.4	108°54.9	114°08.9	111°24.1	117°32.7
23	233°27.3	13.3'	21°42.6	-9.4'	54.1'	64°57.9	22°10.2	23°46.9	77°45.9	109°22.5	114°38.3	111°43.8	118°02.5
12 th	SD = 14.8' Mer. pass. 06:57					Sun SD = 16.3'							

DUT1 = UT1-UTC = +0.1054 sec $\Delta T = TT-UT1 = +69.0786$ sec

2026 January 13 to Jan. 15 UT

h	Moon (13 th Jan)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Sun	-Antares	+Spica	+Regulus	+Procyon	+Sirius	+Pollux	+Jupiter
0	247°59.7	13.3'	S21°52.0	-9.3'	54.1'	64°31.0	21°40.7	24°16.3	78°15.4	109°50.1	112°03.5	115°07.8	118°32.3
1	262°31.9	13.2'	22°01.3	-9.2'	54.1'	64°04.1	21°11.2	24°45.8	78°44.9	110°17.7	112°23.1	115°37.3	119°02.1
2	277°04.1	13.1'	22°10.5	-9.1'	54.1'	63°37.2	20°41.7	25°15.3	79°14.5	110°45.3	112°42.6	116°06.8	119°31.8
3	291°36.2	13.1'	22°19.6	-9.0'	54.1'	63°10.3	20°12.2	25°44.7	79°44.0	111°12.8	113°02.1	116°36.2	
4	306°08.3	13.0'	22°28.6	-8.9'	54.1'	62°43.4	19°42.7	26°14.2	80°13.5	111°40.3	113°21.5	117°05.7	
5	320°40.3	12.9'	22°37.5	-8.8'	54.1'	62°16.5	19°13.2	26°43.6	80°43.0	112°07.9	113°40.9	117°35.1	
6	335°12.3	12.9'	S22°46.3	-8.7'	54.0'	61°49.6	18°43.7	27°13.1	81°12.5	112°35.4	114°00.2	118°04.6	
7	349°44.1	12.8'	22°55.1	-8.6'	54.0'	61°22.7	18°14.2	27°42.5	81°42.0	113°02.9	114°19.4	118°34.1	
8	4°16.0	12.8'	23°03.7	-8.5'	54.0'	60°55.8	17°44.7	28°12.0	82°11.5	113°30.3	114°38.6	119°03.5	
9	18°47.7	12.7'	23°12.2	-8.4'	54.0'	60°29.0	17°15.2	28°41.5	82°41.0	113°57.8	114°57.7	119°33.0	
10	33°19.4	12.6'	23°20.6	-8.3'	54.0'	60°02.1	16°45.7	29°10.9	83°10.5	114°25.2	115°16.7		
11	47°51.0	12.6'	23°29.0	-8.2'	54.0'	59°35.2	16°16.2	29°40.4	83°40.0	114°52.7	115°35.7		
12	62°22.6	12.5'	S23°37.2	-8.1'	54.0'	59°08.3	15°46.8	30°09.8	84°09.5	115°20.1	115°54.5		
13	76°54.1	12.4'	23°45.3	-8.0'	54.0'	58°41.4	15°17.3	30°39.3	84°39.0	115°47.5	116°13.3		
14	91°25.5	12.4'	23°53.3	-7.9'	54.0'	58°14.6	14°47.8	31°08.7	85°08.5	116°14.8	116°32.1		
15	105°56.9	12.3'	24°01.2	-7.8'	54.0'	57°47.7	14°18.3	31°38.2	85°38.0	116°42.2	116°50.7		
16	120°28.2	12.2'	24°09.0	-7.7'	54.0'	57°20.8	13°48.9	32°07.7	86°07.5	117°09.5	117°09.3		
17	134°59.4	12.2'	24°16.7	-7.6'	54.0'	56°53.9	13°19.4	32°37.1	86°37.0	117°36.9	117°27.8		
18	149°30.6	12.1'	S24°24.3	-7.5'	54.0'	56°27.0	12°49.9	33°06.6	87°06.5	118°04.2	117°46.3		
19	164°01.7	12.0'	24°31.8	-7.4'	54.0'	56°00.2	12°20.4	33°36.1	87°36.0	118°31.5	118°04.6		
20	178°32.8	12.0'	24°39.2	-7.3'	54.0'	55°33.3	11°51.0	34°05.5	88°05.5	118°58.7	118°22.9		
21	193°03.7	11.9'	24°46.5	-7.2'	54.0'	55°06.4	11°21.5	34°35.0	88°35.0	119°26.0	118°41.1		
22	207°34.7	11.9'	24°53.6	-7.1'	54.0'	54°39.5	10°52.0	35°04.5	89°04.5	119°53.2	118°59.2		
23	222°05.5	11.8'	25°00.7	-6.9'	54.0'	54°12.6	10°22.5	35°34.0	89°34.0	119°17.2			
13 th	SD = 14.7' Mer. pass. 07:42					Sun SD = 16.3'							

h Moon (14 th Jan)						Lunar Distance (objects with largest hourly LD delta)				
Wed	GHA	ν	Dec	d	HP	-Sun	-Antares	+Spica	+Arcturus	+Regulus
0	236°36.3	11.7'	S25°07.6	-6.8'	54.0'	53°45.7	9°53.1	36°03.5	49°22.0	90°03.5
1	251°07.0	11.7'	25°14.5	-6.7'	54.0'	53°18.8	9°23.6	36°33.0	49°41.8	90°33.1
2	265°37.7	11.6'	25°21.2	-6.6'	54.0'	52°51.9	8°54.1	37°02.5	50°01.8	91°02.6
3	280°08.3	11.5'	25°27.8	-6.5'	54.0'	52°25.0	8°24.6	37°32.0	50°22.0	91°32.1
4	294°38.8	11.5'	25°34.3	-6.4'	54.0'	51°58.1	7°55.2	38°01.5	50°42.2	92°01.6
5	309°09.3	11.4'	25°40.6	-6.3'	54.0'	51°31.2	7°25.7	38°31.0	51°02.5	92°31.2
6	323°39.7	11.4'	S25°46.9	-6.1'	54.0'	51°04.3	6°56.3	39°00.5	51°23.0	93°00.7
7	338°10.1	11.3'	25°53.0	-6.0'	54.0'	50°37.4	6°26.8	39°30.0	51°43.5	93°30.3
8	352°40.4	11.2'	25°59.1	-5.9'	54.0'	50°10.5	5°57.4	39°59.5	52°04.2	93°59.8
9	7°10.6	11.2'	26°05.0	-5.8'	54.0'	49°43.6	5°28.0	40°29.1	52°25.0	94°29.4
10	21°40.8	11.1'	26°10.8	-5.7'	54.0'	49°16.6	4°58.6	40°58.6	52°45.8	94°58.9
11	36°10.9	11.1'	26°16.4	-5.5'	54.0'	48°49.7	4°29.2	41°28.2	53°06.8	95°28.5
12	50°40.9	11.0'	S26°22.0	-5.4'	54.0'	48°22.7	3°59.9	41°57.7	53°27.9	95°58.1
13	65°10.9	10.9'	26°27.4	-5.3'	54.1'	47°55.8	3°30.6	42°27.3	53°49.1	96°27.7
14	79°40.9	10.9'	26°32.7	-5.2'	54.1'	47°28.8	3°01.4	42°56.9	54°10.3	96°57.3
15	94°10.7	10.8'	26°37.9	-5.1'	54.1'	47°01.9	2°32.4	43°26.4	54°31.7	97°26.9
16	108°40.5	10.8'	26°43.0	-4.9'	54.1'	46°34.9	2°03.7	43°56.0	54°53.1	97°56.5
17	123°10.3	10.7'	26°47.9	-4.8'	54.1'	46°07.9	1°35.5	44°25.6	55°14.7	98°26.1
18	137°40.0	10.6'	S26°52.7	-4.7'	54.1'	45°41.0		44°55.2	55°36.3	98°55.7
19	152°09.7	10.6'	26°57.4	-4.6'	54.1'	45°14.0		45°24.8	55°58.0	99°25.3
20	166°39.3	10.5'	27°02.0	-4.4'	54.1'	44°47.0		45°54.5	56°19.8	99°55.0
21	181°08.8	10.5'	27°06.4	-4.3'	54.1'	44°20.0		46°24.1	56°41.7	100°24.6
22	195°38.3	10.4'	27°10.7	-4.2'	54.1'	43°53.0		46°53.7	57°03.7	100°54.3
23	210°07.7	10.4'	27°14.9	-4.1'	54.1'	43°26.0		47°23.4	57°25.7	101°24.0
14 th	SD = 14.7' Mer. pass. 08:30					Sun SD = 16.3'				

h Moon (15 th Jan)						Lunar Distance (objects with largest hourly LD delta)				
Thu	GHA	ν	Dec	d	HP	-Sun	+Antares	+Spica	+Arcturus	+Regulus
0	224°37.1	10.3'	S27°19.0	-3.9'	54.1'	42°58.9		47°53.0	57°47.9	101°53.6
1	239°06.4	10.3'	27°22.9	-3.8'	54.1'	42°31.9	2°31.3	48°22.7	58°10.1	102°23.3
2	253°35.7	10.2'	27°26.7	-3.7'	54.1'	42°04.9	3°00.4	48°52.4	58°32.4	102°53.0
3	268°05.0	10.2'	27°30.3	-3.5'	54.1'	41°37.8	3°29.7	49°22.1	58°54.7	103°22.7
4	282°34.1	10.1'	27°33.9	-3.4'	54.1'	41°10.7	3°59.1	49°51.8	59°17.2	103°52.4
5	297°03.3	10.1'	27°37.3	-3.3'	54.1'	40°43.7	4°28.6	50°21.5	59°39.7	104°22.2
6	311°32.4	10.0'	S27°40.5	-3.1'	54.2'	40°16.6	4°58.1	50°51.2	60°02.3	104°51.9
7	326°01.4	10.0'	27°43.7	-3.0'	54.2'		5°27.7	51°20.9	60°24.9	105°21.7
8	340°30.4	10.0'	27°46.7	-2.9'	54.2'		5°57.3	51°50.7	60°47.6	105°51.4
9	354°59.4	9.9'	27°49.6	-2.7'	54.2'		6°27.0	52°20.4	61°10.4	106°21.2
10	9°28.3	9.9'	27°52.3	-2.6'	54.2'		6°56.7	52°50.2	61°33.3	106°51.0
11	23°57.2	9.8'	27°54.9	-2.5'	54.2'		7°26.4	53°20.0	61°56.2	107°20.8
12	38°26.0	9.8'	S27°57.4	-2.3'	54.2'		7°56.1	53°49.8	62°19.2	107°50.6
13	52°54.8	9.8'	27°59.7	-2.2'	54.2'		8°25.9	54°19.6	62°42.3	108°20.4
14	67°23.6	9.7'	28°01.9	-2.1'	54.2'		8°55.6	54°49.4	63°05.4	108°50.3
15	81°52.3	9.7'	28°04.0	-1.9'	54.2'		9°25.4	55°19.3	63°28.6	109°20.1
16	96°21.0	9.7'	28°05.9	-1.8'	54.2'		9°55.2	55°49.1	63°51.8	109°50.0
17	110°49.6	9.6'	28°07.7	-1.6'	54.3'		10°25.1	56°19.0	64°15.1	110°19.9
18	125°18.2	9.6'	S28°09.3	-1.5'	54.3'		10°54.9	56°48.8	64°38.5	110°49.7
19	139°46.8	9.6'	28°10.8	-1.4'	54.3'		11°24.8	57°18.7	65°01.9	111°19.6
20	154°15.4	9.5'	28°12.2	-1.2'	54.3'		11°54.7	57°48.6	65°25.4	111°49.6
21	168°43.9	9.5'	28°13.4	-1.1'	54.3'		12°24.6	58°18.6	65°48.9	112°19.5
22	183°12.4	9.5'	28°14.5	-1.0'	54.3'		12°54.5	58°48.5	66°12.5	112°49.4
23	197°40.9	9.4'	28°15.5	-0.8'	54.3'		13°24.4	59°18.4	66°36.1	113°19.4
15 th	SD = 14.8' Mer. pass. 09:21					Sun SD = 16.3'				

DUT1 = UT1-UTC = +0.1072 sec $\Delta T = TT-UT1 = +69.0768$ sec

2026 January 16 to Jan. 18 UT

h	Moon (16 th Jan)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Altair	+Antares	+Rigil Kent.	+Hadar	+Spica	+Acrux	+Arcturus	+Regulus
0	212°09.3	9.4'	S28°16.3	-0.7'	54.3'		13°54.4		47°09.3	59°48.4		66°59.8	113°49.4
1	226°37.7	9.4'	28°17.0	-0.5'	54.3'		14°24.3		47°24.6	60°18.4		67°23.6	114°19.4
2	241°06.1	9.4'	28°17.5	-0.4'	54.3'		14°54.3		47°40.1	60°48.4		67°47.4	114°49.4
3	255°34.5	9.4'	28°17.9	-0.2'	54.4'		15°24.3		47°55.7	61°18.4		68°11.3	115°19.4
4	270°02.8	9.3'	28°18.1	-0.1'	54.4'	48°40.4	15°54.3		48°11.6	61°48.4	59°51.8	68°35.2	115°49.4
5	284°31.2	9.3'	28°18.2	0.0'	54.4'	48°19.3	16°24.4		48°27.6	62°18.4	60°07.0	68°59.1	116°19.5
6	298°59.5	9.3'	S28°18.2	0.2'	54.4'	47°58.4	16°54.4		48°43.8	62°48.5	60°22.4	69°23.1	116°49.5
7	313°27.8	9.3'	28°18.0	0.3'	54.4'	47°37.6	17°24.5	45°03.0	49°00.2	63°18.6	60°37.9	69°47.2	117°19.6
8	327°56.1	9.3'	28°17.7	0.5'	54.4'	47°16.9	17°54.6	45°18.4	49°16.7	63°48.6	60°53.5	70°11.3	117°49.7
9	342°24.3	9.3'	28°17.3	0.6'	54.4'	46°56.4	18°24.7	45°34.0	49°33.4	64°18.7	61°09.2	70°35.4	118°19.8
10	356°52.6	9.2'	28°16.6	0.7'	54.4'	46°35.9	18°54.8	45°49.8	49°50.3	64°48.9	61°25.0	70°59.6	118°50.0
11	11°20.8	9.2'	28°15.9	0.9'	54.5'	46°15.6	19°24.9	46°05.8	50°07.3	65°19.0	61°40.9	71°23.9	119°20.1
12	25°49.1	9.2'	S28°15.0	1.0'	54.5'	45°55.4	19°55.1	46°22.0	50°24.5	65°49.1	61°57.0	71°48.2	119°50.3
13	40°17.3	9.2'	28°14.0	1.2'	54.5'	45°35.3	20°25.3	46°38.4	50°41.9	66°19.3	62°13.1	72°12.5	
14	54°45.5	9.2'	28°12.8	1.3'	54.5'	45°15.4	20°55.4	46°54.9	50°59.4	66°49.5	62°29.4	72°36.9	
15	69°13.7	9.2'	28°11.5	1.5'	54.5'	44°55.6	21°25.7	47°11.7	51°17.1	67°19.7	62°45.8	73°01.3	
16	83°41.9	9.2'	28°10.0	1.6'	54.5'	44°36.0	21°55.9	47°28.6	51°34.9	67°49.9	63°02.3	73°25.7	
17	98°10.1	9.2'	28°08.4	1.7'	54.5'	44°16.4	22°26.1	47°45.7	51°52.8	68°20.2	63°18.8	73°50.2	
18	112°38.3	9.2'	S28°06.7	1.9'	54.6'	43°57.1	22°56.4	48°02.9	52°10.9	68°50.4	63°35.5	74°14.8	
19	127°06.5	9.2'	28°04.8	2.0'	54.6'	43°37.9	23°26.6	48°20.4	52°29.2	69°20.7	63°52.3	74°39.3	
20	141°34.7	9.2'	28°02.7	2.2'	54.6'	43°18.8	23°56.9	48°38.0	52°47.6	69°51.0	64°09.2	75°04.0	
21	156°02.9	9.2'	28°00.6	2.3'	54.6'	42°59.9	24°27.3	48°55.8	53°06.1	70°21.3	64°26.2	75°28.6	
22	170°31.1	9.2'	27°58.2	2.5'	54.6'	42°41.2	24°57.6	49°13.7	53°24.8	70°51.6	64°43.3	75°53.3	
23	184°59.3	9.2'	27°55.8	2.6'	54.6'	42°22.7	25°27.9	49°31.8	53°43.6	71°22.0	65°00.5	76°18.0	
16 th	SD = 14.8' Mer. pass. 10:13												

h	Moon (17 th Jan)					Lunar Distance (objects with largest hourly LD delta)						
Sat	GHA	ν	Dec	d	HP	-Altair	+Antares	+Rigil Kent.	+Hadar	+Acrux	+Spica	+Arcturus
0	199°27.6	9.2'	S27°53.2	2.8'	54.6'	42°04.3	25°58.3	49°50.1	54°02.5	65°17.8	71°52.3	76°42.8
1	213°55.8	9.2'	27°50.4	2.9'	54.7'	41°46.1	26°28.7	50°08.5	54°21.5	65°35.1	72°22.7	77°07.6
2	228°24.0	9.2'	27°47.5	3.0'	54.7'	41°28.1	26°59.1	50°27.1	54°40.7	65°52.6	72°53.1	77°32.4
3	242°52.3	9.3'	27°44.5	3.2'	54.7'	41°10.2	27°29.5	50°45.8	55°00.0	66°10.2	73°23.5	77°57.3
4	257°20.5	9.3'	27°41.3	3.3'	54.7'	40°52.6	28°00.0	51°04.6	55°19.5	66°27.8	73°54.0	78°22.2
5	271°48.8	9.3'	27°38.0	3.5'	54.7'	40°35.2	28°30.4	51°23.7	55°39.0	66°45.5	74°24.4	78°47.2
6	286°17.1	9.3'	S27°34.5	3.6'	54.7'	40°17.9	29°00.9	51°42.8	55°58.7	67°03.4	74°54.9	79°12.1
7	300°45.4	9.3'	27°30.9	3.7'	54.7'	40°00.9	29°31.4	52°02.1	56°18.5	67°21.3	75°25.4	79°37.1
8	315°13.7	9.3'	27°27.2	3.9'	54.8'	39°44.1	30°01.9	52°21.5	56°38.4	67°39.3	75°55.9	80°02.2
9	329°42.0	9.4'	27°23.3	4.0'	54.8'	39°27.5	30°32.5	52°41.1	56°58.5	67°57.4	76°26.4	80°27.3
10	344°10.4	9.4'	27°19.2	4.2'	54.8'	39°11.1	31°03.0	53°00.8	57°18.6	68°15.5	76°57.0	80°52.4
11	358°38.7	9.4'	27°15.1	4.3'	54.8'	38°55.0	31°33.6	53°20.6	57°38.9	68°33.8	77°27.6	81°17.5
12	13°07.1	9.4'	S27°10.8	4.5'	54.8'	38°39.0	32°04.2	53°40.6	57°59.3	68°52.1	77°58.2	81°42.6
13	27°35.6	9.4'	27°06.3	4.6'	54.8'	38°23.4	32°34.8	54°00.7	58°19.7	69°10.5	78°28.8	82°07.8
14	42°04.0	9.5'	27°01.7	4.7'	54.9'	38°07.9	33°05.4	54°20.9	58°40.3	69°29.0	78°59.4	82°33.0
15	56°32.5	9.5'	26°57.0	4.9'	54.9'	37°52.8	33°36.1	54°41.3	59°01.0	69°47.6	79°30.0	82°58.3
16	71°01.0	9.5'	26°52.1	5.0'	54.9'		34°06.8	55°01.7	59°21.8	70°06.2	80°00.7	83°23.6
17	85°29.5	9.5'	26°47.1	5.1'	54.9'		34°37.5	55°22.3	59°42.7	70°24.9	80°31.4	83°48.9
18	99°58.0	9.6'	S26°42.0	5.3'	54.9'		35°08.2	55°43.0	60°03.7	70°43.7	81°02.1	84°14.2
19	114°26.6	9.6'	26°36.7	5.4'	54.9'		35°38.9	56°03.8	60°24.7	71°02.6	81°32.8	84°39.5
20	128°55.2	9.6'	26°31.3	5.6'	55.0'		36°09.7	56°24.8	60°45.9	71°21.5	82°03.6	85°04.9
21	143°23.9	9.7'	26°25.7	5.7'	55.0'		36°40.5	56°45.8	61°07.2	71°40.5	82°34.4	85°30.3
22	157°52.5	9.7'	26°20.0	5.8'	55.0'		37°11.3	57°07.0	61°28.6	71°59.6	83°05.2	85°55.7
23	172°21.2	9.7'	26°14.2	6.0'	55.0'		37°42.1	57°28.2	61°50.0	72°18.7	83°36.0	86°21.2
17 th	SD = 14.9' Mer. pass. 11:06											

h Moon (18 th Jan)						Lunar Distance (objects with largest hourly LD delta)					
Sun	GHA	ν	Dec	d	HP	+Antares	+Rigil Kent.	+Hadar	+Acrux	+Spica	+Arcturus
0	186°50.0	9.8'	S26°08.2	6.1'	55.0'	38°12.9	57°49.6	62°11.6	72°37.9	84°06.8	86°46.6
1	201°18.8	9.8'	26°02.1	6.2'	55.0'			New Moon			
2	215°47.6	9.9'	25°55.9	6.4'	55.1'			New Moon			
3	230°16.4	9.9'	25°49.5	6.5'	55.1'			New Moon			
4	244°45.3	9.9'	25°43.0	6.6'	55.1'			New Moon			
5	259°14.3	10.0'	25°36.4	6.8'	55.1'			New Moon			
6	273°43.2	10.0'	S25°29.6	6.9'	55.1'			New Moon			
7	288°12.2	10.1'	25°22.7	7.0'	55.1'			New Moon			
8	302°41.3	10.1'	25°15.7	7.2'	55.2'			New Moon			
9	317°10.4	10.1'	25°08.5	7.3'	55.2'			New Moon			
10	331°39.5	10.2'	25°01.2	7.4'	55.2'			New Moon			
11	346°08.7	10.2'	24°53.8	7.5'	55.2'			New Moon			
12	0°38.0	10.3'	S24°46.2	7.7'	55.2'			New Moon			
13	15°07.2	10.3'	24°38.6	7.8'	55.3'			New Moon			
14	29°36.6	10.4'	24°30.8	7.9'	55.3'			New Moon			
15	44°05.9	10.4'	24°22.8	8.1'	55.3'			New Moon			
16	58°35.3	10.5'	24°14.8	8.2'	55.3'			New Moon			
17	73°04.8	10.5'	24°06.6	8.3'	55.3'			New Moon			
18	87°34.3	10.6'	S23°58.3	8.4'	55.3'			New Moon			
19	102°03.9	10.6'	23°49.9	8.5'	55.4'			New Moon			
20	116°33.5	10.7'	23°41.3	8.7'	55.4'			New Moon			
21	131°03.1	10.7'	23°32.7	8.8'	55.4'			New Moon			
22	145°32.9	10.8'	23°23.9	8.9'	55.4'			New Moon			
23	160°02.6	10.8'	23°15.0	9.0'	55.4'			New Moon			
18 th	SD = 15.0' Mer. pass. 11:57										

DUT1 = UT1-UTC = +0.1095 sec $\Delta T = TT-UT1 = +69.0745$ sec

2026 January 19 to Jan. 21 UT

Moon (19 th Jan)						Lunar Distance			
Mon	GHA	ν	Dec	d	HP	-Aldebaran	-Rigel	-Saturn	-Fomalhaut
0	174°32.4	10.9'	S23°05.9	9.1'	55.5'	—	—	—	—
1	189°02.3	10.9'	22°56.8	9.3'	55.5'	—	—	—	—
2	203°32.2	11.0'	22°47.5	9.4'	55.5'	—	—	—	—
3	218°02.2	11.0'	22°38.1	9.5'	55.5'	—	—	—	—
4	232°32.2	11.1'	22°28.6	9.6'	55.5'	—	—	—	—
5	247°02.3	11.1'	22°19.0	9.7'	55.6'	—	—	—	—
6	261°32.4	11.2'	S22°09.3	9.8'	55.6'	—	—	—	—
7	276°02.6	11.2'	21°59.5	10.0'	55.6'	—	—	—	—
8	290°32.8	11.3'	21°49.5	10.1'	55.6'	—	—	—	—
9	305°03.1	11.3'	21°39.4	10.2'	55.6'	—	—	—	—
10	319°33.4	11.4'	21°29.3	10.3'	55.7'	—	—	—	—
11	334°03.8	11.4'	21°19.0	10.4'	55.7'	—	—	—	—
12	348°34.3	11.5'	S21°08.6	10.5'	55.7'	—	—	—	—
13	3°04.8	11.6'	20°58.1	10.6'	55.7'	—	—	—	—
14	17°35.3	11.6'	20°47.5	10.7'	55.7'	—	—	—	—
15	32°05.9	11.7'	20°36.8	10.8'	55.8'	—	—	—	—
16	46°36.6	11.7'	20°26.0	10.9'	55.8'	—	—	—	—
17	61°07.3	11.8'	20°15.1	11.0'	55.8'	119°53.0	119°45.3	48°11.0	30°33.0
18	75°38.1	11.8'	S20°04.0	11.1'	55.8'	119°21.9	119°22.0	47°08.2	29°47.7
19	90°08.9	11.9'	19°52.9	11.2'	55.8'	118°50.9	118°58.7	46°36.8	29°25.4
20	104°39.8	11.9'	19°41.7	11.3'	55.9'	118°19.8	118°35.2	46°05.4	29°03.3
21	119°10.7	12.0'	19°30.4	11.4'	55.9'	117°48.8	118°11.7	45°33.9	28°41.5
22	133°41.7	12.0'	19°18.9	11.5'	55.9'	117°17.6	117°48.0	45°02.5	28°20.0
23	148°12.7	12.1'	19°07.4	11.6'	55.9'	116°46.5	117°24.3	44°31.0	27°58.8
19 th	SD = 15.1' Mer. pass. 12:47								

Moon (20 th Jan)						Lunar Distance (objects with largest hourly LD delta)				
Tue	GHA	ν	Dec	d	HP	-Capella	-Rigel	-Aldebaran	-Saturn	-Fomalhaut
0	162°43.8	12.1'	S18°55.8	11.7'	55.9'	—	117°00.5	116°15.3	43°59.5	27°37.9
1	177°14.9	12.2'	18°44.1	11.8'	55.9'	—	116°36.6	115°44.1	43°27.9	27°17.2
2	191°46.1	12.2'	18°32.3	11.9'	56.0'	—	116°12.6	115°12.9	42°56.4	26°56.9
3	206°17.4	12.3'	18°20.4	12.0'	56.0'	—	115°48.6	114°41.6	42°24.8	26°37.0
4	220°48.6	12.3'	18°08.4	12.1'	56.0'	—	115°24.5	114°10.3	41°53.3	26°17.4
5	235°20.0	12.4'	17°56.3	12.2'	56.0'	—	115°00.3	113°39.0	41°21.7	25°58.1
6	249°51.4	12.4'	S17°44.1	12.3'	56.0'	—	114°36.0	113°07.7	40°50.1	25°39.2
7	264°22.8	12.5'	17°31.9	12.4'	56.1'	—	114°11.6	112°36.3	40°18.4	25°20.8
8	278°54.3	12.5'	17°19.5	12.4'	56.1'	—	113°47.2	112°04.9	39°46.8	25°02.7
9	293°25.8	12.6'	17°07.1	12.5'	56.1'	—	113°22.7	111°33.5	39°15.1	24°45.1
10	307°57.4	12.6'	16°54.5	12.6'	56.1'	—	112°58.2	111°02.1	38°43.4	24°27.9
11	322°29.1	12.7'	16°41.9	12.7'	56.1'	—	112°33.5	110°30.6	38°11.7	24°11.2
12	337°00.8	12.7'	S16°29.2	12.8'	56.2'	—	112°08.8	109°59.1	37°40.0	23°55.0
13	351°32.5	12.8'	16°16.4	12.9'	56.2'	119°47.2	111°44.1	109°27.6	37°08.3	23°39.2
14	6°04.3	12.8'	16°03.6	12.9'	56.2'	119°17.1	111°19.2	108°56.1	36°36.6	23°24.0
15	20°36.1	12.9'	15°50.6	13.0'	56.2'	118°47.0	110°54.3	108°24.5	36°04.8	—
16	35°08.0	12.9'	15°37.6	13.1'	56.2'	118°16.8	110°29.4	107°52.9	35°33.0	—
17	49°39.9	13.0'	15°24.5	13.2'	56.3'	117°46.6	110°04.4	107°21.3	35°01.2	—
18	64°11.8	13.0'	S15°11.3	13.3'	56.3'	117°16.3	109°39.3	106°49.7	34°29.4	—
19	78°43.8	13.0'	14°58.0	13.3'	56.3'	116°46.0	109°14.1	106°18.0	33°57.6	—
20	93°15.9	13.1'	14°44.7	13.4'	56.3'	116°15.7	108°49.0	105°46.4	33°25.8	—
21	107°48.0	13.1'	14°31.3	13.5'	56.3'	115°45.3	108°23.7	105°14.6	32°53.9	—
22	122°20.1	13.2'	14°17.8	13.6'	56.4'	115°14.9	107°58.4	104°42.9	32°22.0	—
23	136°52.3	13.2'	14°04.2	13.6'	56.4'	114°44.4	107°33.0	104°11.2	31°50.2	—
20 th	SD = 15.3' Mer. pass. 13:35									

Moon (21 st Jan)						Lunar Distance (objects with largest hourly LD delta)						
Wed	GHA	ν	Dec	d	HP	-Sirius	-Betelgeuse	-Capella	-Rigel	-Aldebaran	-Polaris	-Saturn
0	151°24.5	13.3'	S13°50.6	13.7'	56.4'	—	—	114°14.0	107°07.6	103°39.4	—	31°18.3
1	165°56.7	13.3'	13°36.9	13.8'	56.4'	—	—	113°43.4	106°42.2	103°07.6	—	30°46.4
2	180°29.0	13.3'	13°23.1	13.8'	56.5'	—	—	113°12.9	106°16.6	102°35.7	—	30°14.4
3	195°01.4	13.4'	13°09.3	13.9'	56.5'	—	119°31.2	112°42.3	105°51.1	102°03.9	—	29°42.5
4	209°33.7	13.4'	12°55.4	14.0'	56.5'	—	119°01.6	112°11.7	105°25.5	101°32.0	—	29°10.6
5	224°06.1	13.4'	12°41.4	14.0'	56.5'	—	118°31.9	111°41.0	104°59.8	101°00.1	—	28°38.6
6	238°38.6	13.5'	S12°27.3	14.1'	56.5'	—	118°02.2	111°10.3	104°34.1	100°28.2	—	28°06.7
7	253°11.1	13.5'	12°13.2	14.2'	56.6'	—	117°32.4	110°39.6	104°08.3	99°56.3	—	27°34.7
8	267°43.6	13.5'	11°59.0	14.2'	56.6'	—	117°02.6	110°08.8	103°42.5	99°24.3	—	27°02.7
9	282°16.1	13.6'	11°44.8	14.3'	56.6'	—	116°32.8	109°38.1	103°16.7	98°52.3	—	26°30.7
10	296°48.7	13.6'	11°30.5	14.4'	56.6'	—	116°02.9	109°07.2	102°50.8	98°20.3	—	25°58.7
11	311°21.3	13.6'	11°16.2	14.4'	56.6'	—	115°33.0	108°36.4	102°24.8	97°48.3	—	25°26.7
12	325°53.9	13.7'	S11°01.7	14.5'	56.7'	—	115°03.0	108°05.5	101°58.9	97°16.2	—	24°54.7
13	340°26.6	13.7'	10°47.3	14.5'	56.7'	—	114°33.0	107°34.6	101°32.8	96°44.2	—	24°22.7
14	354°59.3	13.7'	10°32.7	14.6'	56.7'	119°42.1	114°02.9	107°03.6	101°06.8	96°12.1	—	23°50.7
15	9°32.0	13.8'	10°18.2	14.6'	56.7'	119°22.3	113°32.8	106°32.7	100°40.7	95°40.0	—	23°18.7
16	24°04.8	13.8'	10°03.5	14.7'	56.7'	119°02.4	113°02.7	106°01.7	100°14.6	95°07.8	—	22°46.7
17	38°37.5	13.8'	09°48.8	14.7'	56.8'	118°42.3	112°32.5	105°30.6	99°48.4	94°35.7	—	22°14.7
18	53°10.3	13.8'	S09°34.1	14.8'	56.8'	118°22.1	112°02.3	104°59.6	99°22.2	94°03.5	99°20.5	21°42.7
19	67°43.2	13.8'	09°19.3	14.8'	56.8'	118°01.8	111°32.0	104°28.5	98°55.9	93°31.3	99°05.4	21°10.7
20	82°16.0	13.9'	09°04.4	14.9'	56.8'	117°41.4	111°01.7	103°57.4	98°29.7	92°59.1	98°50.2	20°38.7
21	96°48.9	13.9'	08°49.5	14.9'	56.8'	117°20.9	110°31.4	103°26.2	98°03.4	92°26.8	98°35.0	20°06.7
22	111°21.8	13.9'	08°34.6	15.0'	56.9'	117°00.3	110°01.0	102°55.1	97°37.0	91°54.5	98°19.8	19°34.7
23	125°54.7	13.9'	08°19.6	15.0'	56.9'	116°39.5	109°30.6	102°23.9	97°10.7	91°22.3	98°04.5	19°02.7
21 st	SD = 15.4' Mer. pass. 14:21											

DUT1 = UT1-UTC = +0.1029 sec $\Delta T = TT-UT1 = +69.0811$ sec

2026 February 15 to Feb. 17 UT

h	Moon (15 th Feb)					Lunar Distance (objects with largest hourly LD delta)					
Sun	GHA	ν	Dec	d	HP	+Antares	+Rigil Kent.	+Hadar	+Acrux	+Spica	+Arcturus
0	205°31.4	10.3'	S24°17.4	8.3'	55.5'	46°28.6	63°42.4	68°05.4	77°51.0	92°22.4	93°37.5
1	220°00.8	10.4'	24°09.1	8.4'	55.5'	46°59.9	64°05.4	68°28.4	78°11.3	92°53.7	94°03.4
2	234°30.2	10.4'	24°00.7	8.5'	55.5'	47°31.3	64°28.6	68°51.5	78°31.7	93°25.0	94°29.2
3	248°59.6	10.5'	23°52.2	8.7'	55.6'	48°02.7	64°51.8	69°14.7	78°52.1	93°56.4	94°55.0
4	263°29.1	10.5'	23°43.5	8.8'	55.6'	48°34.0	65°15.1	69°37.9	79°12.6	94°27.8	95°20.9
5	277°58.6	10.6'	23°34.7	8.9'	55.6'	49°05.5	65°38.5	70°01.2	79°33.1	94°59.2	95°46.8
6	292°28.1	10.6'	S23°25.8	9.0'	55.6'	49°36.9	66°02.0	70°24.6	79°53.7	95°30.6	96°12.6
7	306°57.8	10.7'	23°16.8	9.1'	55.7'	50°08.4	66°25.6	70°48.0	80°14.3	96°02.1	96°38.5
8	321°27.4	10.7'	23°07.7	9.3'	55.7'	50°39.9	66°49.2	71°11.6	80°34.9	96°33.6	97°04.5
9	335°57.1	10.7'	22°58.4	9.4'	55.7'	51°11.5	67°12.9	71°35.1	80°55.7	97°05.1	97°30.4
10	350°26.8	10.8'	22°49.0	9.5'	55.7'	51°43.0	67°36.7	71°58.8	81°16.4	97°36.7	97°56.3
11	4°56.6	10.8'	22°39.5	9.6'	55.8'	52°14.6	68°00.5	72°22.5	81°37.2	98°08.3	98°22.3
12	19°26.5	10.9'	S22°29.9	9.7'	55.8'	52°46.3	68°24.4	72°46.2	81°58.1	98°39.9	98°48.2
13	33°56.3	10.9'	22°20.1	9.9'	55.8'	53°17.9	68°48.4	73°10.0	82°18.9	99°11.5	99°14.2
14	48°26.3	11.0'	22°10.3	10.0'	55.8'	53°49.6	69°12.5	73°33.9	82°39.9	99°43.2	99°40.2
15	62°56.2	11.0'	22°00.3	10.1'	55.9'	54°21.3	69°36.6	73°57.9	83°00.8	100°14.9	100°06.2
16	77°26.2	11.1'	21°50.2	10.2'	55.9'	54°53.1	70°00.9	74°21.9	83°21.8	100°46.7	100°32.2
17	91°56.3	11.1'	21°40.0	10.3'	55.9'	55°24.8	70°25.1	74°45.9	83°42.9	101°18.4	100°58.2
18	106°26.4	11.2'	S21°29.7	10.4'	55.9'	55°56.6	70°49.5	75°10.0	84°04.0	101°50.2	101°24.2
19	120°56.6	11.2'	21°19.2	10.6'	56.0'	56°28.5	71°13.9	75°34.2	84°25.1	102°22.0	101°50.2
20	135°26.8	11.3'	21°08.7	10.7'	56.0'	57°00.3	71°38.3	75°58.4	84°46.2	102°53.9	102°16.2
21	149°57.0	11.3'	20°58.0	10.8'	56.0'	57°32.2	72°02.9	76°22.7	85°07.4	103°25.8	102°42.2
22	164°27.3	11.3'	20°47.2	10.9'	56.0'	58°04.2	72°27.5	76°47.1	85°28.7	103°57.7	103°08.2
23	178°57.7	11.4'	20°36.4	11.0'	56.0'	58°36.1	72°52.1	77°11.4	85°49.9	104°29.6	103°34.2
15 th	SD = 15.1' Mer. pass. 10:40										

h	Moon (16 th Feb)					Lunar Distance (objects with largest hourly LD delta)					
Mon	GHA	ν	Dec	d	HP	+Antares	+Rigel Kent.	+Hadar	+Acrux	+Arcturus	+Spica
0	193°28.1	11.4'	S20°25.4	11.1'	56.1'	59°08.1	73°16.8	77°35.9	86°11.2	104°00.2	105°01.6
1	207°58.5	11.5'	20°14.3	11.2'	56.1'	59°40.1	73°41.6	78°00.4	86°32.5	104°26.2	105°33.6
2	222°29.0	11.5'	20°03.1	11.3'	56.1'	60°12.1	74°06.4	78°24.9	86°53.9	104°52.3	106°05.6
3	236°59.5	11.6'	19°51.8	11.4'	56.1'	60°44.2	74°31.3	78°49.5	87°15.2	105°18.3	106°37.7
4	251°30.1	11.6'	19°40.3	11.5'	56.2'	61°16.3	74°56.3	79°14.1	87°36.7	105°44.3	107°09.8
5	266°00.7	11.7'	19°28.8	11.6'	56.2'	61°48.5	75°21.3	79°38.8	87°58.1	106°10.3	107°41.9
6	280°31.4	11.7'	S19°17.2	11.7'	56.2'	62°20.6	75°46.3	80°03.5	88°19.6	106°36.3	108°14.1
7	295°02.1	11.8'	19°05.5	11.8'	56.2'	62°52.8	76°11.4	80°28.3	88°41.0	107°02.3	108°46.2
8	309°32.9	11.8'	18°53.6	11.9'	56.3'	63°25.0	76°36.6	80°53.1	89°02.5	107°28.2	109°18.4
9	324°03.7	11.9'	18°41.7	12.0'	56.3'	63°57.3	77°01.8	81°17.9	89°24.1	107°54.2	109°50.7
10	338°34.5	11.9'	18°29.7	12.1'	56.3'	64°29.6	77°27.1	81°42.8	89°45.6	108°20.2	110°23.0
11	353°05.4	11.9'	18°17.5	12.2'	56.3'	65°01.9	77°52.4	82°07.8	90°07.2	108°46.1	110°55.3
12	7°36.4	12.0'	S18°05.3	12.3'	56.4'	65°34.2	78°17.7	82°32.7	90°28.8	109°12.0	111°27.6
13	22°07.4	12.0'	17°53.0	12.4'	56.4'	66°06.6	78°43.1	82°57.7	90°50.4	109°38.0	111°59.9
14	36°38.4	12.1'	17°40.6	12.5'	56.4'	66°39.0	79°08.6	83°22.8	91°12.0	110°03.9	112°32.3
15	51°09.5	12.1'	17°28.1	12.6'	56.4'	67°11.4	79°34.1	83°47.9	91°33.7	110°29.8	113°04.7
16	65°40.6	12.2'	17°15.5	12.7'	56.5'	67°43.9	79°59.6	84°13.0	91°55.3	110°55.6	113°37.2
17	80°11.8	12.2'	17°02.8	12.8'	56.5'	New Moon					
18	94°43.0	12.2'	S16°50.0	12.9'	56.5'	New Moon					
19	109°14.2	12.3'	16°37.1	13.0'	56.5'	New Moon					
20	123°45.5	12.3'	16°24.1	13.1'	56.6'	New Moon					
21	138°16.8	12.4'	16°11.1	13.1'	56.6'	New Moon					
22	152°48.2	12.4'	15°57.9	13.2'	56.6'	New Moon					
23	167°19.6	12.5'	15°44.7	13.3'	56.6'	New Moon					
16 th	SD = 15.3' Mer. pass. 11:29										

h Moon (17 th Feb)					
Tue	GHA	ν	Dec	d	HP
0	181°51.1	12.5'	S15°31.4	13.4'	56.7'
1	196°22.6	12.5'	15°18.0	13.5'	56.7'
2	210°54.1	12.6'	15°04.5	13.6'	56.7'
3	225°25.7	12.6'	14°50.9	13.6'	56.7'
4	239°57.3	12.6'	14°37.3	13.7'	56.8'
5	254°28.9	12.7'	14°23.5	13.8'	56.8'
6	269°00.6	12.7'	S14°09.7	13.9'	56.8'
7	283°32.3	12.8'	13°55.9	14.0'	56.8'
8	298°04.1	12.8'	13°41.9	14.0'	56.9'
9	312°35.9	12.8'	13°27.9	14.1'	56.9'
10	327°07.7	12.9'	13°13.8	14.2'	56.9'
11	341°39.6	12.9'	12°59.6	14.3'	56.9'
12	356°11.5	12.9'	S12°45.3	14.3'	57.0'
13	10°43.4	13.0'	12°31.0	14.4'	57.0'
14	25°15.3	13.0'	12°16.6	14.5'	57.0'
15	39°47.3	13.0'	12°02.2	14.5'	57.0'
16	54°19.3	13.0'	11°47.6	14.6'	57.1'
17	68°51.4	13.1'	11°33.0	14.7'	57.1'
18	83°23.4	13.1'	S11°18.4	14.7'	57.1'
19	97°55.5	13.1'	11°03.7	14.8'	57.1'
20	112°27.6	13.1'	10°48.9	14.8'	57.1'
21	126°59.8	13.2'	10°34.0	14.9'	57.2'
22	141°32.0	13.2'	10°19.1	15.0'	57.2'
23	156°04.1	13.2'	10°04.2	15.0'	57.2'
17 th	SD = 15.5' Mer. pass. 12:16				

h Moon (8 th Mar)						Lunar Distance (objects with largest hourly LD delta)						
Sun	GHA	ν	Dec	d	HP	-Sun	-Mars	-Fomalhaut	-Antares	+Spica	+Regulus	+Pollux
0	309°29.6	13.6'	S19°15.2	-11.0'	54.7'		113°54.1	110°28.6	29°51.5	16°08.2	70°04.8	106°58.8
1	324°02.2	13.5'	19°26.1	-10.9'	54.7'		113°25.8	110°00.5	29°21.3	16°38.3	70°35.1	107°29.1
2	338°34.7	13.5'	19°37.0	-10.8'	54.7'		112°57.5	109°32.5	28°51.0	17°08.4	71°05.4	107°59.3
3	353°07.2	13.4'	19°47.8	-10.7'	54.7'		112°29.3	109°04.5	28°20.8	17°38.5	71°35.6	108°29.5
4	7°39.6	13.4'	19°58.5	-10.6'	54.6'		112°01.0	108°36.4	27°50.6	18°08.5	72°05.8	108°59.6
5	22°12.0	13.3'	20°09.1	-10.5'	54.6'		111°32.8	108°08.4	27°20.5	18°38.6	72°36.0	109°29.8
6	36°44.3	13.3'	S20°19.6	-10.4'	54.6'		111°04.6	107°40.4	26°50.3	19°08.6	73°06.1	109°59.9
7	51°16.6	13.2'	20°30.0	-10.3'	54.6'		110°36.4	107°12.3	26°20.2	19°38.7	73°36.3	110°30.0
8	65°48.8	13.2'	20°40.3	-10.2'	54.6'		110°08.2	106°44.3	25°50.1	20°08.7	74°06.4	111°00.1
9	80°21.0	13.1'	20°50.6	-10.1'	54.6'		109°40.1	106°16.3	25°20.0	20°38.7	74°36.5	111°30.1
10	94°53.1	13.1'	21°00.7	-10.0'	54.5'		109°12.0	105°48.3	24°49.9	21°08.7	75°06.6	112°00.2
11	109°25.2	13.0'	21°10.7	-9.9'	54.5'		108°43.8	105°20.3	24°19.8	21°38.6	75°36.7	112°30.2
12	123°57.2	13.0'	S21°20.7	-9.8'	54.5'		108°15.8	104°52.3	23°49.8	22°08.6	76°06.7	113°00.2
13	138°29.2	12.9'	21°30.5	-9.7'	54.5'		107°47.7	104°24.4	23°19.8	22°38.5	76°36.8	113°30.2
14	153°01.1	12.9'	21°40.3	-9.6'	54.5'		107°19.6	103°56.4	22°49.8	23°08.5	77°06.8	114°00.2
15	167°33.0	12.8'	21°49.9	-9.5'	54.5'		106°51.6	103°28.4	22°19.8	23°38.4	77°36.8	114°30.1
16	182°04.8	12.8'	21°59.4	-9.4'	54.5'	119°44.2	106°23.6	103°00.5	21°49.8	24°08.3	78°06.8	115°00.1
17	196°36.6	12.7'	22°08.9	-9.3'	54.5'	119°16.7	105°55.6	102°32.5	21°19.8	24°38.2	78°36.7	115°30.0
18	211°08.3	12.7'	S22°18.2	-9.2'	54.4'	118°49.3	105°27.6	102°04.6	20°49.9	25°08.1	79°06.7	115°59.9
19	225°40.0	12.6'	22°27.5	-9.1'	54.4'	118°21.8	104°59.6	101°36.7	20°20.0	25°37.9	79°36.6	116°29.8
20	240°11.6	12.6'	22°36.6	-9.0'	54.4'	117°54.4	104°31.6	101°08.7	19°50.1	26°07.8	80°06.6	116°59.6
21	254°43.2	12.5'	22°45.6	-8.9'	54.4'	117°27.0	104°03.7	100°40.8	19°20.2	26°37.6	80°36.5	117°29.5
22	269°14.7	12.5'	22°54.6	-8.8'	54.4'	116°59.6	103°35.8	100°12.9	18°50.3	27°07.4	81°06.3	117°59.3
23	283°46.1	12.4'	23°03.4	-8.7'	54.4'	116°32.2	103°07.9	99°45.0	18°20.5	27°37.3	81°36.2	118°29.2
8 th	SD = 14.9' Mer. pass. 03:28					Sun SD = 16.1'						

h Moon (9 th Mar)						Lunar Distance (objects with largest hourly LD delta)						
Mon	GHA	ν	Dec	d	HP	-Sun	-Mars	-Fomalhaut	-Antares	+Spica	+Regulus	+Procyon
0	298°17.5	12.4'	S23°12.1	-8.6'	54.4'	116°04.8	102°40.0	99°17.1	17°50.6	28°07.1	82°06.1	113°21.7
1	312°48.9	12.3'	23°20.7	-8.5'	54.4'	115°37.5	102°12.1	98°49.2	17°20.8	28°36.8	82°35.9	113°49.5
2	327°20.2	12.3'	23°29.3	-8.4'	54.3'	115°10.1	101°44.2	98°21.4	16°51.0	29°06.6	83°05.8	114°17.3
3	341°51.5	12.2'	23°37.7	-8.3'	54.3'	114°42.8	101°16.4	97°53.5	16°21.2	29°36.4	83°35.6	114°45.0
4	356°22.7	12.1'	23°46.0	-8.2'	54.3'	114°15.5	100°48.5	97°25.6	15°51.4	30°06.1	84°05.4	115°12.7
5	10°53.8	12.1'	23°54.1	-8.1'	54.3'	113°48.2	100°20.7	96°57.8	15°21.7	30°35.9	84°35.2	115°40.4
6	25°24.9	12.0'	S24°02.2	-8.0'	54.3'	113°20.9	99°52.9	96°29.9	14°51.9	31°05.6	85°05.0	116°08.0
7	39°55.9	12.0'	24°10.2	-7.9'	54.3'	112°53.6	99°25.1	96°02.1	14°22.2	31°35.3	85°34.7	116°35.6
8	54°26.9	11.9'	24°18.0	-7.7'	54.3'	112°26.4	98°57.3	95°34.3	13°52.5	32°05.0	86°04.5	117°03.2
9	68°57.9	11.9'	24°25.8	-7.6'	54.3'	111°59.1	98°29.5	95°06.4	13°22.8	32°34.7	86°34.2	117°30.8
10	83°28.7	11.8'	24°33.4	-7.5'	54.3'	111°31.9	98°01.7	94°38.6	12°53.1	33°04.4	87°04.0	117°58.3
11	97°59.6	11.8'	24°40.9	-7.4'	54.3'	111°04.6	97°33.9	94°10.8	12°23.4	33°34.1	87°33.7	118°25.8
12	112°30.4	11.7'	S24°48.3	-7.3'	54.3'	110°37.4	97°06.2	93°43.0	11°53.7	34°03.8	88°03.4	118°53.2
13	127°01.1	11.7'	24°55.6	-7.2'	54.3'	110°10.2	96°38.4	93°15.2	11°24.1	34°33.5	88°33.1	119°20.7
14	141°31.8	11.6'	25°02.8	-7.1'	54.2'	109°43.0	96°10.7	92°47.4	10°54.5	35°03.1	89°02.8	119°48.1
15	156°02.4	11.6'	25°09.9	-6.9'	54.2'	109°15.8	95°43.0	92°19.6	10°24.8	35°32.8	89°32.5	
16	170°33.0	11.5'	25°16.8	-6.8'	54.2'	108°48.6	95°15.3	91°51.9	9°55.2	36°02.4	90°02.2	
17	185°03.5	11.5'	25°23.7	-6.7'	54.2'	108°21.4	94°47.6	91°24.1	9°25.6	36°32.0	90°31.8	
18	199°33.9	11.4'	S25°30.4	-6.6'	54.2'	107°54.3	94°19.9	90°56.3	8°56.1	37°01.6	91°01.5	
19	214°04.4	11.4'	25°37.0	-6.5'	54.2'	107°27.1	93°52.2	90°28.6	8°26.5	37°31.3	91°31.1	
20	228°34.7	11.3'	25°43.5	-6.4'	54.2'	107°00.0	93°24.5	90°00.8	7°57.0	38°00.9	92°00.8	
21	243°05.1	11.3'	25°49.8	-6.2'	54.2'	106°32.8	92°56.8	89°33.1	7°27.5	38°30.5	92°30.4	
22	257°35.3	11.2'	25°56.1	-6.1'	54.2'	106°05.7	92°29.2	89°05.4	6°58.0	39°00.1	93°00.0	
23	272°05.5	11.2'	26°02.2	-6.0'	54.2'	105°38.6	92°01.5	88°37.7	6°28.5	39°29.7	93°29.7	
9 th	SD = 14.8' Mer. pass. 04:15					Sun SD = 16.1'						

h Moon (10 th Mar)						Lunar Distance (objects with largest hourly LD delta)						
Tue	GHA	ν	Dec	d	HP	-Sun	-Mars	-Fomalhaut	-Altair	±Antares	+Spica	+Arcturus
0	286°35.7	11.1'	S26°08.2	-5.9'	54.2'	105°11.4	91°33.9	88°09.9	65°26.5	5°59.1	39°59.2	52°10.4
1	301°05.8	11.1'	26°14.0	-5.8'	54.2'	104°44.3	91°06.2	87°42.2	65°02.6	5°29.7	40°28.8	52°31.1
2	315°35.9	11.0'	26°19.8	-5.6'	54.2'	104°17.2	90°38.6	87°14.5	64°38.7	5°00.4	40°58.4	52°52.0
3	330°05.9	11.0'	26°25.4	-5.5'	54.2'	103°50.1	90°10.9	86°46.8	64°14.9	4°31.1	41°28.0	53°12.9
4	344°35.9	10.9'	26°30.9	-5.4'	54.2'	103°23.0	89°43.3	86°19.1	63°51.1	4°01.9	41°57.5	53°33.9
5	359°05.9	10.9'	26°36.3	-5.3'	54.2'	102°55.9	89°15.7	85°51.4	63°27.4	3°32.8	42°27.1	53°55.0
6	13°35.8	10.8'	S26°41.6	-5.1'	54.2'	102°28.8	88°48.1	85°23.8	63°03.7	3°03.9	42°56.7	54°16.2
7	28°05.6	10.8'	26°46.7	-5.0'	54.2'	102°01.7	88°20.4	84°56.1	62°40.1	2°35.2	43°26.2	54°37.5
8	42°35.4	10.8'	26°51.7	-4.9'	54.2'	101°34.6	87°52.8	84°28.4	62°16.5	2°07.0	43°55.8	54°58.8
9	57°05.1	10.7'	26°56.6	-4.8'	54.2'	101°07.5	87°25.2	84°00.8	61°52.9	1°39.5	44°25.3	55°20.3
10	71°34.9	10.7'	27°01.4	-4.6'	54.2'	100°40.4	86°57.6	83°33.1	61°29.5		44°54.9	55°41.8
11	86°04.5	10.6'	27°06.0	-4.5'	54.2'	100°13.4	86°30.0	83°05.5	61°06.0		45°24.4	56°03.4
12	100°34.1	10.6'	S27°10.5	-4.4'	54.2'	99°46.3	86°02.4	82°37.8	60°42.7		45°53.9	56°25.1
13	115°03.7	10.5'	27°14.9	-4.2'	54.2'	99°19.2	85°34.8	82°10.2	60°19.3		46°23.5	56°46.9
14	129°33.3	10.5'	27°19.2	-4.1'	54.2'	98°52.1	85°07.2	81°42.5	59°56.1		46°53.0	57°08.7
15	144°02.8	10.5'	27°23.3	-4.0'	54.2'	98°25.1	84°39.6	81°14.9	59°32.9		47°22.6	57°30.6
16	158°32.2	10.4'	27°27.3	-3.9'	54.2'	97°58.0	84°12.0	80°47.3	59°09.7		47°52.1	57°52.6
17	173°01.7	10.4'	27°31.1	-3.7'	54.2'	97°30.9	83°44.4	80°19.7	58°46.6		48°21.7	58°14.7
18	187°31.0	10.3'	S27°34.9	-3.6'	54.2'	97°03.8	83°16.8	79°52.1	58°23.6	3°00.7	48°51.2	58°36.8
19	202°00.4	10.3'	27°38.5	-3.5'	54.2'	96°36.8	82°49.2	79°24.4	58°00.6	3°29.6	49°20.7	58°59.0
20	216°29.7	10.3'	27°41.9	-3.3'	54.2'	96°09.7	82°21.6	78°56.8	57°37.7	3°58.6	49°50.3	59°21.2
21	230°59.0	10.2'	27°45.3	-3.2'	54.2'	95°42.6	81°54.0	78°29.2	57°14.9	4°27.8	50°19.8	59°43.6
22	245°28.2	10.2'	27°48.5	-3.1'	54.2'	95°15.5	81°26.4	78°01.6	56°52.1	4°57.0	50°49.4	60°05.9
23	259°57.4	10.2'	27°51.6	-2.9'	54.2'	94°48.4	80°58.7	77°34.1	56°29.4	5°26.3	51°18.9	60°28.4
10 th	SD = 14.8' Mer. pass. 05:04					Sun SD = 16.1'						

DUT1 = UT1-UTC = +0.0943 sec $\Delta T = TT-UT1 = +69.0897$ sec

2026 March 17 to Mar. 19 UT

h Moon (17 th Mar)						Lunar Distance (objects with largest hourly LD delta)					
Tue	GHA	ν	Dec	d	HP	-Mars	+Altair	+Antares	+Rigel Kent.	+Hadar	+Acrux
0	201°49.4	12.8'	S12°03.8	14.6'	57.2'	10°56.4	40°25.2	80°14.7	89°54.3	93°55.7	100°12.5
1	216°21.3	12.9'	11°49.2	14.7'	57.3'	10°25.3	40°44.1	80°48.0	90°20.8	94°21.6	100°34.2
2	230°53.1	12.9'	11°34.5	14.7'	57.3'	9°54.2	41°03.3	81°21.4	90°47.3	94°47.4	100°56.0
3	245°25.0	12.9'	11°19.8	14.8'	57.3'	9°23.1	41°22.8	81°54.8	91°13.8	95°13.3	101°17.7
4	259°56.9	12.9'	11°05.0	14.9'	57.4'	8°51.9	41°42.6	82°28.2	91°40.4	95°39.2	101°39.5
5	274°28.8	12.9'	10°50.1	14.9'	57.4'	8°20.8	42°02.6	83°01.7	92°06.9	96°05.1	102°01.2
6	289°00.8	12.9'	S10°35.2	15.0'	57.4'	7°49.7	42°22.8	83°35.2	92°33.5	96°31.0	102°22.9
7	303°32.7	13.0'	10°20.2	15.1'	57.5'	7°18.7	42°43.3	84°08.7	93°00.2	96°57.0	102°44.6
8	318°04.7	13.0'	10°05.1	15.1'	57.5'	6°47.6	43°04.1	84°42.3	93°26.8	97°22.9	103°06.3
9	332°36.6	13.0'	09°50.0	15.2'	57.5'	6°16.6	43°25.1	85°15.9	93°53.5	97°48.9	103°27.9
10	347°08.6	13.0'	09°34.8	15.3'	57.6'	5°45.8	43°46.3	85°49.6	94°20.2	98°14.8	103°49.6
11	1°40.6	13.0'	09°19.6	15.3'	57.6'	5°15.0	44°07.7	86°23.3	94°46.9	98°40.8	104°11.2
12	16°12.6	13.0'	S09°04.3	15.4'	57.6'	4°44.4	44°29.4	86°57.0	95°13.7	99°06.8	104°32.7
13	30°44.7	13.0'	08°48.9	15.4'	57.6'	4°14.1	44°51.3	87°30.8	95°40.4	99°32.8	104°54.3
14	45°16.7	13.0'	08°33.5	15.5'	57.7'	3°44.2	45°13.4	88°04.6	96°07.2	99°58.8	105°15.8
15	59°48.7	13.0'	08°18.0	15.5'	57.7'	3°14.8	45°35.8	88°38.5	96°34.0	100°24.8	105°37.3
16	74°20.8	13.0'	08°02.4	15.6'	57.7'	2°46.3	45°58.3	89°12.3	97°00.8	100°50.8	105°58.8
17	88°52.8	13.1'	07°46.8	15.6'	57.8'		46°21.0	89°46.3	97°27.6	101°16.9	106°20.2
18	103°24.9	13.1'	S07°31.2	15.7'	57.8'		46°44.0	90°20.2	97°54.4	101°42.9	106°41.6
19	117°56.9	13.1'	07°15.5	15.7'	57.8'		47°07.1	90°54.2	98°21.3	102°08.9	107°02.9
20	132°29.0	13.1'	06°59.7	15.8'	57.9'		47°30.4	91°28.3	98°48.1	102°34.9	107°24.3
21	147°01.0	13.1'	06°43.9	15.8'	57.9'		47°54.0	92°02.3	99°15.0	103°00.9	107°45.5
22	161°33.1	13.1'	06°28.1	15.9'	57.9'		48°17.7	92°36.4	99°41.9	103°26.9	108°06.8
23	176°05.2	13.1'	06°12.2	15.9'	57.9'		48°41.5	93°10.6	100°08.7	103°52.9	108°27.9
17 th	SD = 15.6' Mer. pass. 10:53										

h	Moon (18 th Mar)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	+Mars	+Fomalhaut	+Altair	+Antares	+Rigel Kent.	+Hadar	+Acrux	
0	190°37.2	13.1'	S05°56.3	16.0'	58.0'	4°14.2	23°32.8	49°05.6	93°44.7	100°35.6	104°18.9	108°49.1	
1	205°09.3	13.1'	05°40.3	16.0'	58.0'		23°49.3	49°29.8	94°18.9	101°02.5	104°44.9	109°10.1	
2	219°41.3	13.0'	05°24.3	16.1'	58.0'		24°06.4	49°54.2	94°53.2	101°29.4	105°10.8	109°31.2	
3	234°13.4	13.0'	05°08.2	16.1'	58.1'		24°24.1	50°18.8	95°27.5	101°56.3	105°36.8	109°52.2	
4	248°45.4	13.0'	04°52.1	16.1'	58.1'	4°45.1	24°42.3	50°43.5	96°01.8	102°23.2	106°02.7	110°13.1	
5	263°17.5	13.0'	04°35.9	16.2'	58.1'		25°01.1	51°08.4	96°36.1	102°50.0	106°28.6	110°33.9	
6	277°49.5	13.0'	S04°19.7	16.2'	58.1'		5°16.3	25°20.4	51°33.5	97°10.5	103°16.9	106°54.6	110°54.8
7	292°21.5	13.0'	04°03.5	16.3'	58.2'			New Moon					
8	306°53.5	13.0'	03°47.3	16.3'	58.2'	New Moon							
9	321°25.5	13.0'	03°31.0	16.3'	58.2'	New Moon							
10	335°57.5	13.0'	03°14.7	16.4'	58.3'	New Moon							
11	350°29.5	13.0'	02°58.3	16.4'	58.3'	New Moon							
12	5°01.4	12.9'	S02°41.9	16.4'	58.3'	New Moon							
13	19°33.4	12.9'	02°25.5	16.4'	58.3'	New Moon							
14	34°05.3	12.9'	02°09.1	16.5'	58.4'	New Moon							
15	48°37.2	12.9'	01°52.6	16.5'	58.4'	New Moon							
16	63°09.1	12.9'	01°36.1	16.5'	58.4'	New Moon							
17	77°41.0	12.8'	01°19.6	16.5'	58.4'	New Moon							
18	92°12.8	12.8'	S01°03.1	16.6'	58.5'	New Moon							
19	106°44.7	12.8'	00°46.5	16.6'	58.5'	New Moon							
20	121°16.5	12.8'	00°30.0	16.6'	58.5'	New Moon							
21	135°48.2	12.8'	S00°13.4	16.6'	58.6'	New Moon							
22	150°20.0	12.7'	N00°03.2	16.6'	58.6'	New Moon							
23	164°51.7	12.7'	00°19.9	16.6'	58.6'	New Moon							
18 th	SD = 15.8' Mer. pass. 11:39												

h	Moon (19 th Mar)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Procyon	-Pollux	-Jupiter	-Betelgeuse	-Capella	-Rigel	-Aldebaran	-Venus
0	179°23.4	12.7'	N00°36.5	16.6'	58.6'				New Moon				
1	193°55.1	12.6'	00°53.1	16.6'	58.7'				New Moon				
2	208°26.7	12.6'	01°09.8	16.7'	58.7'				New Moon				
3	222°58.3	12.6'	01°26.4	16.7'	58.7'				New Moon				
4	237°29.9	12.5'	01°43.1	16.7'	58.7'				New Moon				
5	252°01.4	12.5'	01°59.8	16.7'	58.7'				New Moon				
6	266°32.9	12.5'	N02°16.4	16.7'	58.8'				New Moon				
7	281°04.4	12.4'	02°33.1	16.7'	58.8'				New Moon				
8	295°35.8	12.4'	02°49.8	16.7'	58.8'				New Moon				
9	310°07.2	12.4'	03°06.5	16.7'	58.8'				New Moon				
10	324°38.6	12.3'	03°23.1	16.7'	58.9'				New Moon				
11	339°09.9	12.3'	03°39.8	16.7'	58.9'				New Moon				
12	353°41.2	12.2'	N03°56.4	16.7'	58.9'				New Moon				
13	8°12.4	12.2'	04°13.1	16.6'	58.9'				New Moon				
14	22°43.6	12.1'	04°29.7	16.6'	58.9'				New Moon				
15	37°14.7	12.1'	04°46.4	16.6'	59.0'				New Moon				
16	51°45.8	12.0'	05°03.0	16.6'	59.0'				New Moon				
17	66°16.8	12.0'	05°19.6	16.6'	59.0'				New Moon				
18	80°47.8	11.9'	N05°36.2	16.6'	59.0'				New Moon				
19	95°18.7	11.9'	05°52.8	16.6'	59.1'				New Moon				
20	109°49.6	11.8'	06°09.3	16.5'	59.1'	106°51.9	103°47.1	95°49.3	80°54.9	73°11.2	72°37.3	61°15.7	8°04.6
21	124°20.5	11.8'	06°25.9	16.5'	59.1'	106°18.6	103°11.6	95°14.0	80°21.8	72°37.5	72°09.5	60°40.9	7°37.0
22	138°51.2	11.7'	06°42.4	16.5'	59.1'	105°45.3	102°36.1	94°38.6	79°48.7	72°03.8	71°41.7	60°06.2	7°10.1
23	153°22.0	11.7'	06°58.9	16.5'	59.1'	105°11.9	102°00.6	94°03.2	79°15.6	71°30.2	71°13.9	59°31.5	6°44.0
19 th	SD = 16.0' Mer. pass. 12:26												

DUT1 = UT1-UTC = +0.0889 sec $\Delta T = TT-UT1 = +69.0951$ sec

2026 April 01 to Apr. 03 UT

h Moon (1 st Apr)						Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Spica	+Regulus	+Pollux	+Jupiter	+Aldebaran
0	11°27.8	15.2'	S01°00.5	-15.2'	56.2'	119°52.8	71°34.4	68°03.4	25°43.2	28°21.9	65°19.3	72°43.3	108°03.3
1	26°01.9	15.2'	01°15.8	-15.2'	56.2'	119°27.5	71°02.3	67°39.2	25°11.2	28°54.0	65°51.3	73°15.2	108°34.8
2	40°36.1	15.2'	01°31.0	-15.2'	56.1'	119°02.1	70°30.2	67°15.1	24°39.1	29°26.1	66°23.4	73°47.1	109°06.3
3	55°10.3	15.2'	01°46.2	-15.2'	56.1'	118°36.7	69°58.1	66°51.0	24°07.1	29°58.2	66°55.4	74°18.9	109°37.8
4	69°44.5	15.2'	02°01.4	-15.2'	56.1'	118°11.2	69°26.0	66°27.0	23°35.2	30°30.3	67°27.4	74°50.7	110°09.2
5	84°18.8	15.2'	02°16.6	-15.2'	56.1'	117°45.7	68°54.0	66°03.0	23°03.2	31°02.3	67°59.4	75°22.5	110°40.6
6	98°53.0	15.2'	S02°31.7	-15.1'	56.0'	117°20.2	68°22.0	65°39.1	22°31.3	31°34.3	68°31.4	75°54.3	111°12.0
7	113°27.2	15.3'	02°46.8	-15.1'	56.0'	116°54.6	67°50.0	65°15.4	21°59.4	32°06.3	69°03.3	76°26.1	111°43.4
8	128°01.5	15.3'	03°01.9	-15.1'	56.0'	116°29.0	67°18.0	64°51.7	21°27.5	32°38.3	69°35.2	76°57.8	112°14.7
9	142°35.8	15.3'	03°17.0	-15.1'	56.0'	116°03.3	66°46.1	64°28.0	20°55.7	33°10.2	70°07.1	77°29.5	112°46.0
10	157°10.0	15.3'	03°32.1	-15.0'	56.0'	115°37.7	66°14.2	64°04.5	20°23.8	33°42.2	70°39.0	78°01.2	113°17.3
11	171°44.3	15.3'	03°47.1	-15.0'	55.9'	115°11.9	65°42.3	63°41.0	19°52.0	34°14.1	71°10.9	78°32.8	113°48.5
12	186°18.6	15.3'	S04°02.1	-15.0'	55.9'	114°46.2	65°10.4	63°17.6	19°20.3	34°45.9	71°42.7	79°04.5	114°19.7
13	200°52.8	15.3'	04°17.1	-15.0'	55.9'	114°20.4	64°38.5	62°54.3	18°48.5	35°17.8	72°14.5	79°36.1	114°50.9
14	215°27.1	15.3'	04°32.1	-14.9'	55.9'	113°54.6	64°06.7	62°31.1	18°16.8	35°49.6	72°46.3	80°07.7	115°22.1
15	230°01.4	15.3'	04°47.0	-14.9'	55.9'	113°28.8	63°34.9	62°08.0	17°45.2	36°21.4	73°18.1	80°39.3	115°53.2
16	244°35.7	15.3'	05°01.9	-14.9'	55.8'	113°02.9	63°03.1	61°45.0	17°13.5	36°53.2	73°49.8	81°10.8	116°24.3
17	259°09.9	15.3'	05°16.8	-14.8'	55.8'	112°37.0	62°31.3	61°22.0	16°41.9	37°25.0	74°21.5	81°42.4	116°55.4
18	273°44.2	15.3'	S05°31.6	-14.8'	55.8'	112°11.1	61°59.6	60°59.2	16°10.3	37°56.7	74°53.2	82°13.9	117°26.5
19	288°18.5	15.3'	05°46.4	-14.8'	55.8'	111°45.2	61°27.9	60°36.5	15°38.8	38°28.5	75°24.9	82°45.4	117°57.5
20	302°52.7	15.3'	06°01.2	-14.7'	55.8'	111°19.3	60°56.2	60°13.8	15°07.3	39°00.2	75°56.6	83°16.8	118°28.5
21	317°27.0	15.3'	06°15.9	-14.7'	55.7'	110°53.3	60°24.5	59°51.3	14°35.8	39°31.8	76°28.2	83°48.3	118°59.4
22	332°01.3	15.2'	06°30.6	-14.7'	55.7'	110°27.3	59°52.9	59°28.8	14°04.4	40°03.5	76°59.8	84°19.7	119°30.4
23	346°35.5	15.2'	06°45.2	-14.6'	55.7'	110°01.3	59°21.2	59°06.4	13°33.0	40°35.1	77°31.4	84°51.1	
1 st	SD = 15.3' Mer. pass. 23:55												

h Moon (2 nd Apr)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Spica	+Regulus	+Pollux	+Jupiter	+Capella
0	1°09.7	15.2'	S06°59.9	-14.6'	55.7'	109°35.3	58°49.6	58°44.2	13°01.6	41°06.7	78°02.9	85°22.4	108°33.0
1	15°44.0	15.2'	07°14.4	-14.5'	55.7'	109°09.3	58°18.0	58°22.1	12°30.3	41°38.3	78°34.5	85°53.8	109°02.9
2	30°18.2	15.2'	07°29.0	-14.5'	55.6'	108°43.2	57°46.5	58°00.0	11°59.0	42°09.9	79°06.0	86°25.1	109°32.8
3	44°52.4	15.2'	07°43.5	-14.5'	55.6'	108°17.2	57°14.9	57°38.1	11°27.8	42°41.4	79°37.5	86°56.4	110°02.6
4	59°26.6	15.2'	07°57.9	-14.4'	55.6'	107°51.1	56°43.4	57°16.3	10°56.6	43°12.9	80°09.0	87°27.7	110°32.4
5	74°00.8	15.2'	08°12.4	-14.4'	55.6'	107°25.0	56°11.9	56°54.6	10°25.5	43°44.4	80°40.4	87°58.9	111°02.1
6	88°34.9	15.2'	S08°26.7	-14.3'	55.6'	106°58.9	55°40.5	56°33.0	9°54.4	44°15.9	81°11.9	88°30.2	111°31.9
7	103°09.1	15.1'	08°41.1	-14.3'	55.5'	106°32.8	55°09.0	56°11.5	9°23.4	44°47.3	81°43.3	89°01.4	112°01.6
8	117°43.2	15.1'	08°55.3	-14.2'	55.5'	106°06.7	54°37.6	55°50.2	8°52.5	45°18.8	82°14.6	89°32.6	112°31.2
9	132°17.3	15.1'	09°09.6	-14.2'	55.5'	105°40.6	54°06.2	55°28.9	8°21.7	45°50.2	82°46.0	90°03.7	113°00.9
10	146°51.4	15.1'	09°23.8	-14.1'	55.5'	105°14.5	53°34.8	55°07.8	7°51.0	46°21.6	83°17.3	90°34.9	113°30.4
11	161°25.5	15.1'	09°37.9	-14.1'	55.5'	104°48.4	53°03.4	54°46.9	7°20.4	46°52.9	83°48.7	91°06.0	114°00.0
12	175°59.6	15.0'	S09°52.0	-14.0'	55.4'	104°22.2	52°32.1	54°26.0	6°49.9	47°24.3	84°20.0	91°37.1	114°29.5
13	190°33.6	15.0'	10°06.0	-14.0'	55.4'	103°56.1	52°00.8	54°05.3	6°19.6	47°55.6	84°51.2	92°08.2	114°59.0
14	205°07.7	15.0'	10°20.0	-13.9'	55.4'	103°30.0	51°29.5	53°44.7	5°49.5	48°26.9	85°22.5	92°39.2	115°28.4
15	219°41.7	15.0'	10°34.0	-13.9'	55.4'	103°03.8	50°58.2	53°24.2	5°19.6	48°58.1	85°53.7	93°10.3	115°57.9
16	234°15.6	15.0'	10°47.9	-13.8'	55.4'	102°37.7	50°27.0	53°03.9	4°50.0	49°29.4	86°24.9	93°41.3	116°27.2
17	248°49.6	14.9'	11°01.7	-13.8'	55.4'	102°11.5	49°55.8	52°43.7	4°20.9	50°00.6	86°56.1	94°12.3	116°56.6
18	263°23.5	14.9'	S11°15.5	-13.7'	55.3'	101°45.4	49°24.6	52°23.7	3°52.3	50°31.8	87°27.3	94°43.2	117°25.9
19	277°57.4	14.9'	11°29.2	-13.7'	55.3'	101°19.3	48°53.4	52°03.8	3°24.5	51°03.0	87°58.4	95°14.2	117°55.1
20	292°31.3	14.9'	11°42.9	-13.6'	55.3'	100°53.1	48°22.2	51°44.0		51°34.2	88°29.5	95°45.1	118°24.3
21	307°05.1	14.8'	11°56.5	-13.6'	55.3'	100°27.0	47°51.1	51°24.4		52°05.3	89°00.6	96°16.0	118°53.5
22	321°39.0	14.8'	12°10.0	-13.5'	55.3'	100°00.9	47°20.0	51°04.9		52°36.4	89°31.7	96°46.8	119°22.7
23	336°12.8	14.8'	12°23.5	-13.4'	55.2'	99°34.7	46°48.9	50°45.6		53°07.5	90°02.7	97°17.7	119°51.8
2 nd	SD = 15.2' Mer. pass. --:--												

h	Moon (3 rd Apr)					Lunar Distance (objects with largest hourly LD delta)								
Fri	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Rigel Kent.	-Antares	+Spica	+Regulus	+Pollux	+Jupiter	
0	350°46.5	14.7'	S12°37.0	-13.4'	55.2'		99°08.6	50°26.5	46°17.8		53°38.6	90°33.8	97°48.5	
1	5°20.3	14.7'	12°50.3	-13.3'	55.2'		98°42.5	50°07.5	45°46.8		54°09.6	91°04.8	98°19.3	
2	19°54.0	14.7'	13°03.7	-13.2'	55.2'		98°16.4	49°48.6	45°15.8		54°40.7	91°35.8	98°50.1	
3	34°27.6	14.6'	13°16.9	-13.2'	55.2'		97°50.3	49°30.0	44°44.8		55°11.7	92°06.7	99°20.9	
4	49°01.3	14.6'	13°30.1	-13.1'	55.1'		97°24.2	49°11.5	44°13.8		55°42.6	92°37.7	99°51.6	
5	63°34.9	14.6'	13°43.2	-13.1'	55.1'		96°58.1	48°53.1	43°42.8		56°13.6	93°08.6	100°22.3	
6	78°08.5	14.5'	S13°56.3	-13.0'	55.1'		96°32.0	48°35.0	43°11.9		56°44.6	93°39.5	100°53.0	
7	92°42.0	14.5'	14°09.3	-12.9'	55.1'		96°05.9	48°17.0	42°41.0		57°15.5	94°10.4	101°23.7	
8	107°15.5	14.5'	14°22.2	-12.9'	55.1'		95°39.8	47°59.2	42°10.1	4°04.9	57°46.4	94°41.2	101°54.4	
9	121°49.0	14.4'	14°35.0	-12.8'	55.1'		95°13.8	47°41.5	41°39.2	4°33.4	58°17.3	95°12.1	102°25.0	
10	136°22.4	14.4'	14°47.8	-12.7'	55.0'		94°47.7	47°24.1	41°08.3	5°02.4	58°48.1	95°42.9	102°55.6	
11	150°55.8	14.4'	15°00.5	-12.6'	55.0'		94°21.7	47°06.8	40°37.5	5°31.7	59°18.9	96°13.7	103°26.2	
12	165°29.2	14.3'	S15°13.2	-12.6'	55.0'	119°56.6	93°55.7	46°49.8	40°06.7	6°01.3	59°49.8	96°44.4	103°56.7	
13	180°02.5	14.3'	15°25.8	-12.5'	55.0'	119°28.5	93°29.7	46°32.9	39°35.9	6°31.0	60°20.5	97°15.2	104°27.3	
14	194°35.8	14.2'	15°38.3	-12.4'	55.0'	119°00.3	93°03.7	46°16.2	39°05.1	7°00.8	60°51.3	97°45.9	104°57.8	
15	209°09.0	14.2'	15°50.7	-12.4'	55.0'	118°32.2	92°37.7	45°59.7	38°34.4	7°30.8	61°22.1	98°16.6	105°28.3	
16	223°42.2	14.2'	16°03.1	-12.3'	54.9'	118°04.0	92°11.7	45°43.4	38°03.7	8°00.8	61°52.8	98°47.3	105°58.8	
17	238°15.4	14.1'	16°15.3	-12.2'	54.9'	117°35.8	91°45.8	45°27.3	37°32.9	8°30.9	62°23.5	99°18.0	106°29.3	
18	252°48.5	14.1'	S16°27.5	-12.1'	54.9'	117°07.7	91°19.8	45°11.5	37°02.3	9°01.0	62°54.2	99°48.6	106°59.7	
19	267°21.5	14.0'	16°39.7	-12.1'	54.9'	116°39.5	90°53.9	44°55.8	36°31.6	9°31.2	63°24.9	100°19.3	107°30.1	
20	281°54.6	14.0'	16°51.7	-12.0'	54.9'	116°11.3	90°28.0	44°40.3	36°01.0	10°01.4	63°55.5	100°49.9	108°00.5	
21	296°27.6	13.9'	17°03.7	-11.9'	54.9'	115°43.2	90°02.1	44°25.1	35°30.3	10°31.6	64°26.2	101°20.4	108°30.9	
22	311°00.5	13.9'	17°15.6	-11.8'	54.8'	115°15.0	89°36.2	44°10.1	34°59.7	11°01.9	64°56.8	101°51.0	109°01.2	
23	325°33.4	13.9'	17°27.4	-11.7'	54.8'	114°46.8	89°10.3		34°29.1	11°32.1	65°27.3	102°21.6	109°31.6	
3 rd	SD = 15.1' Mer. pass. 00:38													

Moon (4 th Apr)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	+Spica	+Regulus	+Procyon	+Pollux	+Jupiter
0	340°06.3	13.8'	S17°39.1	-11.7'	54.8'	114°18.6	88°44.5	33°58.6	12°02.4	65°57.9	98°15.9	102°52.1	110°01.9
1	354°39.1	13.8'	17°50.8	-11.6'	54.8'	113°50.5	88°18.7	33°28.0	12°32.7	66°28.5	98°44.7	103°22.6	110°32.2
2	9°11.9	13.7'	18°02.4	-11.5'	54.8'	113°22.3	87°52.9	32°57.5	13°02.9	66°59.0	99°13.4	103°53.1	111°02.4
3	23°44.6	13.7'	18°13.8	-11.4'	54.8'	112°54.1	87°27.1	32°27.0	13°33.2	67°29.5	99°42.2	104°23.5	111°32.7
4	38°17.3	13.6'	18°25.2	-11.3'	54.7'	112°25.9	87°01.3	31°56.5	14°03.5	68°00.0	100°10.8	104°54.0	112°02.9
5	52°49.9	13.6'	18°36.6	-11.2'	54.7'	111°57.8	86°35.6	31°26.1	14°33.8	68°30.5	100°39.5	105°24.4	112°33.1
6	67°22.5	13.5'	S18°47.8	-11.1'	54.7'	111°29.6	86°09.8	30°55.6	15°04.0	69°00.9	101°08.2	105°54.8	113°03.3
7	81°55.0	13.5'	18°58.9	-11.1'	54.7'	111°01.4	85°44.1	30°25.2	15°34.3	69°31.4	101°36.8	106°25.2	113°33.5
8	96°27.5	13.4'	19°10.0	-11.0'	54.7'	110°33.3	85°18.4	29°54.8	16°04.5	70°01.8	102°05.4	106°55.6	114°03.6
9	110°59.9	13.4'	19°21.0	-10.9'	54.7'	110°05.1	84°52.8	29°24.4	16°34.7	70°32.2	102°33.9	107°25.9	114°33.8
10	125°32.3	13.3'	19°31.8	-10.8'	54.7'	109°37.0	84°27.1	28°54.0	17°05.0	71°02.5	103°02.5	107°56.3	115°03.9
11	140°04.6	13.3'	19°42.6	-10.7'	54.6'	109°08.8	84°01.5	28°23.7	17°35.2	71°32.9	103°31.0	108°26.6	115°34.0
12	154°36.9	13.2'	S19°53.3	-10.6'	54.6'	108°40.6	83°35.9	27°53.3	18°05.4	72°03.2	103°59.5	108°56.9	116°04.1
13	169°09.2	13.2'	20°03.9	-10.5'	54.6'	108°12.5	83°10.4	27°23.0	18°35.6	72°33.6	104°28.0	109°27.1	116°34.1
14	183°41.4	13.1'	20°14.5	-10.4'	54.6'	107°44.4	82°44.8	26°52.7	19°05.8	73°03.9	104°56.4	109°57.4	117°04.2
15	198°13.5	13.1'	20°24.9	-10.3'	54.6'	107°16.2	82°19.3	26°22.4	19°36.0	73°34.1	105°24.9	110°27.6	117°34.2
16	212°45.6	13.0'	20°35.2	-10.2'	54.6'	106°48.1	81°53.8	25°52.2	20°06.1	74°04.4	105°53.3	110°57.8	118°04.2
17	227°17.6	13.0'	20°45.4	-10.1'	54.6'	106°20.0	81°28.3	25°21.9	20°36.3	74°34.7	106°21.6	111°28.0	118°34.2
18	241°49.6	12.9'	S20°55.6	-10.0'	54.5'	105°51.9	81°02.9	24°51.7	21°06.4	75°04.9	106°50.0	111°58.2	119°04.1
19	256°21.5	12.9'	21°05.6	-9.9'	54.5'	105°23.7	80°37.5	24°21.5	21°36.5	75°35.1	107°18.3	112°28.4	119°34.1
20	270°53.4	12.8'	21°15.6	-9.8'	54.5'	104°55.6	80°12.1	23°51.3	22°06.6	76°05.3	107°46.6	112°58.5	
21	285°25.3	12.8'	21°25.4	-9.7'	54.5'	104°27.5	79°46.7	23°21.2	22°36.7	76°35.5	108°14.9	113°28.7	
22	299°57.0	12.7'	21°35.2	-9.6'	54.5'	103°59.4	79°21.4	22°51.0	23°06.8	77°05.7	108°43.1	113°58.8	
23	314°28.8	12.7'	21°44.8	-9.5'	54.5'	103°31.4	78°56.1	22°20.9	23°36.9	77°35.8	109°11.3	114°28.9	
4 th	SD = 14.9' Mer. pass. 01:22												

Moon (5 th Apr)						Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Mars	-Fomalhaut	-Altair	-Antares	+Spica	+Regulus	+Procyon	+Pollux
0	329°00.5	12.6'	S21°54.4	-9.4'	54.5'		103°03.3	78°30.8	21°50.7	24°06.9	78°05.9	109°39.5	114°59.0
1	343°32.1	12.6'	22°03.8	-9.3'	54.4'		102°35.2	78°05.6	21°20.6	24°37.0	78°36.1	110°07.7	115°29.0
2	358°03.7	12.5'	22°13.2	-9.2'	54.4'		102°07.1	77°40.3	20°50.6	25°07.0	79°06.2	110°35.8	115°59.1
3	12°35.2	12.5'	22°22.4	-9.1'	54.4'		101°39.1	77°15.2	20°20.5	25°37.0	79°36.2	111°03.9	116°29.1
4	27°06.7	12.4'	22°31.5	-9.0'	54.4'		101°11.0	76°50.0	19°50.4	26°07.0	80°06.3	111°32.0	116°59.1
5	41°38.1	12.4'	22°40.6	-8.9'	54.4'		100°43.0	76°24.9	19°20.4	26°37.0	80°36.4	112°00.1	117°29.1
6	56°09.4	12.3'	S22°49.5	-8.8'	54.4'		100°15.0	75°59.8	18°50.4	27°07.0	81°06.4	112°28.1	117°59.1
7	70°40.8	12.3'	22°58.3	-8.7'	54.4'		99°46.9	75°34.7	18°20.4	27°36.9	81°36.4	112°56.1	118°29.1
8	85°12.0	12.2'	23°07.1	-8.6'	54.4'		99°18.9	75°09.7	17°50.4	28°06.9	82°06.4	113°24.0	118°59.0
9	99°43.2	12.2'	23°15.7	-8.5'	54.4'		98°50.9	74°44.7	17°20.4	28°36.8	82°36.4	113°52.0	119°29.0
10	114°14.4	12.1'	23°24.2	-8.4'	54.3'		98°22.9	74°19.7	16°50.4	29°06.8	83°06.4	114°19.9	119°58.9
11	128°45.5	12.1'	23°32.6	-8.3'	54.3'		97°54.9	73°54.8	16°20.5	29°36.7	83°36.4	114°47.8	
12	143°16.5	12.0'	S23°40.9	-8.2'	54.3'		97°26.9	73°29.9	15°50.6	30°06.6	84°06.3	115°15.6	
13	157°47.5	12.0'	23°49.0	-8.1'	54.3'		96°58.9	73°05.1	15°20.6	30°36.5	84°36.2	115°43.5	
14	172°18.5	11.9'	23°57.1	-8.0'	54.3'		96°31.0	72°40.3	14°50.8	31°06.3	85°06.2	116°11.2	
15	186°49.4	11.9'	24°05.1	-7.8'	54.3'		96°03.0	72°15.5	14°20.9	31°36.2	85°36.1	116°39.0	
16	201°20.2	11.8'	24°12.9	-7.7'	54.3'		95°35.1	71°50.7	13°51.0	32°06.0	86°06.0	117°06.7	
17	215°51.0	11.7'	24°20.7	-7.6'	54.3'	119°48.9	95°07.1	71°26.0	13°21.1	32°35.9	86°35.8	117°34.4	
18	230°21.8	11.7'	S24°28.3	-7.5'	54.3'	119°21.0	94°39.2	71°01.3	12°51.3	33°05.7	87°05.7	118°02.1	
19	244°52.5	11.6'	24°35.8	-7.4'	54.3'	118°53.2	94°11.3	70°36.7	12°21.5	33°35.5	87°35.6	118°29.8	
20	259°23.1	11.6'	24°43.2	-7.3'	54.2'	118°25.3	93°43.4	70°12.1	11°51.7	34°05.3	88°05.4	118°57.4	
21	273°53.7	11.6'	24°50.4	-7.2'	54.2'	117°57.5	93°15.5	69°47.6	11°21.9	34°35.1	88°35.2	119°24.9	
22	288°24.3	11.5'	24°57.6	-7.0'	54.2'	117°29.6	92°47.6	69°23.1	10°52.1	35°04.9	89°05.1	119°52.5	
23	302°54.8	11.5'	25°04.6	-6.9'	54.2'	117°01.8	92°19.7	68°58.6	10°22.3	35°34.7	89°34.9		
5 th	SD = 14.9' Mer. pass. 02:08												

Moon (6 th Apr)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Saturn	-Mars	-Fomalhaut	-Altair	-Antares	+Spica	+Arcturus	+Regulus
0	317°25.2	11.4'	S25°11.6	-6.8'	54.2'		116°34.0	91°51.8	68°34.2	9°52.6	36°04.4	49°25.3	90°04.7
1	331°55.7	11.4'	25°18.4	-6.7'	54.2'		116°06.2	91°24.0	68°09.8	9°22.9	36°34.2	49°45.3	90°34.5
2	346°26.0	11.3'	25°25.1	-6.6'	54.2'		115°38.4	90°56.1	67°45.4	8°53.2	37°03.9	50°05.4	91°04.2
3	0°56.3	11.3'	25°31.6	-6.5'	54.2'		115°10.6	90°28.3	67°21.1	8°23.5	37°33.6	50°25.6	91°34.0
4	15°26.6	11.2'	25°38.1	-6.3'	54.2'		114°42.8	90°00.4	66°56.9	7°53.8	38°03.4	50°45.9	92°03.7
5	29°56.8	11.2'	25°44.4	-6.2'	54.2'		114°15.1	89°32.6	66°32.7	7°24.1	38°33.1	51°06.3	92°33.5
6	44°27.0	11.1'	S25°50.6	-6.1'	54.2'		113°47.3	89°04.8	66°08.5	6°54.5	39°02.8	51°26.8	93°03.2
7	58°57.1	11.1'	25°56.7	-6.0'	54.2'		113°19.6	88°37.0	65°44.4	6°24.9	39°32.5	51°47.5	93°32.9
8	73°27.2	11.0'	26°02.7	-5.8'	54.2'		112°51.8	88°09.2	65°20.3	5°55.3	40°02.1	52°08.2	94°02.7
9	87°57.2	11.0'	26°08.5	-5.7'	54.2'		112°24.1	87°41.4	64°56.3	5°25.8	40°31.8	52°29.0	94°32.4
10	102°27.2	10.9'	26°14.3	-5.6'	54.1'		111°56.4	87°13.6	64°32.3	4°56.3	41°01.5	52°49.9	95°02.1
11	116°57.1	10.9'	26°19.9	-5.5'	54.1'		111°28.7	86°45.9	64°08.4	4°26.8	41°31.1	53°10.9	95°31.7
12	131°27.1	10.9'	S26°25.3	-5.3'	54.1'	119°38.8	111°01.0	86°18.1	63°44.5	3°57.4	42°00.8	53°32.0	96°01.4
13	145°56.9	10.8'	26°30.7	-5.2'	54.1'	119°09.5	110°33.3	85°50.4	63°20.7	3°28.1	42°30.4	53°53.1	96°31.1
14	160°26.7	10.8'	26°35.9	-5.1'	54.1'	118°40.3	110°05.6	85°22.6	62°56.9	2°59.0	43°00.1	54°14.4	97°00.7
15	174°56.5	10.7'	26°41.0	-5.0'	54.1'	118°11.1	109°37.9	84°54.9	62°33.2	2°30.0	43°29.7	54°35.7	97°30.4
16	189°26.3	10.7'	26°46.0	-4.8'	54.1'	117°41.8	109°10.3	84°27.2	62°09.5	2°01.4	43°59.3	54°57.1	98°00.0
17	203°56.0	10.7'	26°50.8	-4.7'	54.1'	117°12.6	108°42.6	83°59.5	61°45.9	1°33.4	44°28.9	55°18.6	98°29.7
18	218°25.6	10.6'	S26°55.5	-4.6'	54.1'	116°43.4	108°15.0	83°31.8	61°22.4		44°58.5	55°40.2	98°59.3
19	232°55.3	10.6'	27°00.1	-4.5'	54.1'	116°14.2	107°47.3	83°04.1	60°58.9		45°28.1	56°01.9	99°28.9
20	247°24.8	10.6'	27°04.6	-4.3'	54.1'	115°45.0	107°19.7	82°36.4	60°35.4		45°57.7	56°23.6	99°58.6
21	261°54.4	10.5'	27°08.9	-4.2'	54.1'	115°15.8	106°52.0	82°08.7	60°12.1		46°27.3	56°45.4	100°28.2
22	276°23.9	10.5'	27°13.1	-4.1'	54.1'	114°46.6	106°24.4	81°41.1	59°48.7		46°56.9	57°07.3	100°57.8
23	290°53.4	10.4'	27°17.2	-3.9'	54.1'	114°17.4	105°56.8	81°13.4	59°25.5		47°26.5	57°29.2	101°27.4
6 th	SD = 14.8'		Mer. pass. 02:56										

DUT1 = UT1-UTC = +0.0896 sec $\Delta T = TT-UT1 = +69.0944$ sec

2026 April 16 to Apr. 18 UT

h	Moon (16 th Apr)					Lunar Distance (objects with largest hourly LD delta)					
Thu	GHA	ν	Dec	d	HP	+Mars	+Saturn	+Fomalhaut	+Altair	+Antares	+Rigel Kent.
0	199°44.4	11.9'	N04°31.2	16.7'	59.2'			38°52.5	66°00.8	115°48.6	117°26.5
1	214°15.3	11.8'	04°47.9	16.7'	59.2'			39°22.0	66°29.7	116°24.3	117°52.3
2	228°46.1	11.8'	05°04.5	16.7'	59.3'			39°51.7	66°58.8	116°59.9	118°18.1
3	243°16.8	11.7'	05°21.2	16.6'	59.3'			40°21.5	67°27.9	117°35.6	118°43.8
4	257°47.5	11.6'	05°37.8	16.6'	59.3'			40°51.5	67°57.1	118°11.4	119°09.5
5	272°18.2	11.6'	05°54.5	16.6'	59.4'			41°21.7	68°26.4	118°47.1	119°35.1
6	286°48.7	11.5'	N06°11.1	16.6'	59.4'			41°52.0	68°55.8	119°22.9	
7	301°19.2	11.4'	06°27.7	16.6'	59.4'			42°22.5	69°25.2	119°58.8	
8	315°49.7	11.4'	06°44.3	16.6'	59.4'	6°40.9		42°53.1	69°54.7		
9	330°20.0	11.3'	07°00.8	16.6'	59.5'	7°10.8		43°23.8	70°24.3		
10	344°50.3	11.2'	07°17.4	16.5'	59.5'	7°41.3		43°54.7	70°54.0		
11	359°20.5	11.1'	07°33.9	16.5'	59.5'	8°12.3		44°25.7	71°23.7		
12	13°50.7	11.1'	N07°50.4	16.5'	59.6'	8°43.8		44°56.9	71°53.6		
13	28°20.7	11.0'	08°06.9	16.5'	59.6'	9°15.5		45°28.1	72°23.4		
14	42°50.7	10.9'	08°23.4	16.4'	59.6'	9°47.6	8°29.6	45°59.5	72°53.4		
15	57°20.6	10.8'	08°39.8	16.4'	59.6'	10°19.9	8°59.9	46°31.0	73°23.4		
16	71°50.5	10.8'	08°56.2	16.4'	59.7'	10°52.5	9°30.9	47°02.7	73°53.5		
17	86°20.2	10.7'	09°12.5	16.3'	59.7'	11°25.2	10°02.5	47°34.4	74°23.6		
18	100°49.9	10.6'	N09°28.9	16.3'	59.7'	11°58.1	10°34.5	48°06.3	74°53.8		
19	115°19.5	10.5'	09°45.2	16.3'	59.7'	12°31.2	11°07.0	48°38.2	75°24.1		
20	129°49.0	10.4'	10°01.4	16.2'	59.8'						
21	144°18.4	10.3'	10°17.6	16.2'	59.8'						
22	158°47.8	10.3'	10°33.8	16.1'	59.8'						
23	173°17.0	10.2'	10°49.9	16.1'	59.8'						
16 th	SD = 16.1' Mer. pass. 11:03										
									New Moon		
									New Moon		
									New Moon		
									New Moon		

h Moon (17 th Apr)					
Fri	GHA	ν	Dec	d	HP
0	187°46.2	10.1'	N11°06.0	16.0'	59.9'
1	202°15.3	10.0'	11°22.0	16.0'	59.9'
2	216°44.2	9.9'	11°38.0	15.9'	59.9'
3	231°13.1	9.8'	11°53.9	15.9'	59.9'
4	245°42.0	9.7'	12°09.8	15.8'	60.0'
5	260°10.7	9.6'	12°25.6	15.8'	60.0'
6	274°39.3	9.5'	N12°41.4	15.7'	60.0'
7	289°07.8	9.4'	12°57.1	15.6'	60.0'
8	303°36.2	9.3'	13°12.7	15.6'	60.1'
9	318°04.6	9.2'	13°28.3	15.5'	60.1'
10	332°32.8	9.1'	13°43.8	15.4'	60.1'
11	347°00.9	9.0'	13°59.2	15.4'	60.1'
12	1°29.0	8.9'	N14°14.6	15.3'	60.1'
13	15°56.9	8.8'	14°29.9	15.2'	60.2'
14	30°24.7	8.7'	14°45.1	15.1'	60.2'
15	44°52.5	8.6'	15°00.2	15.1'	60.2'
16	59°20.1	8.5'	15°15.3	15.0'	60.2'
17	73°47.6	8.4'	15°30.3	14.9'	60.2'
18	88°15.0	8.3'	N15°45.2	14.8'	60.2'
19	102°42.3	8.2'	16°00.0	14.7'	60.3'
20	117°09.6	8.1'	16°14.7	14.6'	60.3'
21	131°36.7	8.0'	16°29.3	14.5'	60.3'
22	146°03.7	7.9'	16°43.9	14.4'	60.3'
23	160°30.5	7.8'	16°58.3	14.3'	60.3'
17 th	SD = 16.3' Mer. pass. 11:54				

h	Moon (18 th Apr)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Regulus	-Procyon	-Pollux	-Jupiter	-Betelgeuse	-Capella	-Aldebaran	-Venus
0	174°57.3	7.7'	N17°12.7	14.2'	60.3'	New Moon							
1	189°24.0	7.6'	17°26.9	14.1'	60.4'	New Moon							
2	203°50.6	7.5'	17°41.1	14.0'	60.4'	New Moon							
3	218°17.0	7.3'	17°55.1	13.9'	60.4'	New Moon							
4	232°43.4	7.2'	18°09.1	13.8'	60.4'	112°39.6	80°25.9	75°45.6	69°54.3	55°03.2	47°01.0	34°08.5	15°46.9
5	247°09.6	7.1'	18°22.9	13.7'	60.4'	112°02.5	79°51.0	75°08.6	69°17.6	54°29.7	46°27.4	33°33.5	15°14.4
6	261°35.7	7.0'	N18°36.6	13.6'	60.4'	111°25.4	79°16.1	74°31.6	68°40.9	53°56.4	45°53.8	32°58.5	14°42.0
7	276°01.7	6.9'	18°50.2	13.5'	60.4'	110°48.3	78°41.2	73°54.5	68°04.1	53°23.1	45°20.3	32°23.6	14°09.8
8	290°27.6	6.8'	19°03.7	13.4'	60.4'	110°11.2	78°06.3	73°17.5	67°27.4	52°49.8	44°46.9	31°48.8	13°37.7
9	304°53.4	6.7'	19°17.1	13.3'	60.4'	109°34.1	77°31.3	72°40.4	66°50.6	52°16.6	44°13.5	31°14.0	13°05.7
10	319°19.1	6.6'	19°30.4	13.1'	60.5'	108°56.9	76°56.4	72°03.3	66°13.8	51°43.4	43°40.3	30°39.3	12°33.9
11	333°44.7	6.5'	19°43.5	13.0'	60.5'	108°19.8	76°21.5	71°26.2	65°37.0	51°10.3	43°07.0	30°04.7	12°02.4
12	348°10.1	6.3'	N19°56.5	12.9'	60.5'	107°42.6	75°46.5	70°49.1	65°00.2	50°37.2	42°33.9	29°30.2	11°31.0
13	2°35.5	6.2'	20°09.4	12.8'	60.5'	107°05.5	75°11.6	70°12.0	64°23.4	50°04.2	42°00.8	28°55.7	10°59.9
14	17°00.7	6.1'	20°22.2	12.6'	60.5'	106°28.3	74°36.7	69°34.9	63°46.6	49°31.3	41°27.9	28°21.4	10°29.1
15	31°25.8	6.0'	20°34.8	12.5'	60.5'	105°51.1	74°01.8	68°57.8	63°09.8	48°58.4	40°55.0	27°47.1	9°58.6
16	45°50.9	5.9'	20°47.3	12.4'	60.5'	105°13.9	73°26.9	68°20.6	62°33.0	48°25.6	40°22.2	27°13.0	9°28.5
17	60°15.8	5.8'	20°59.7	12.2'	60.5'	104°36.7	72°52.0	67°43.5	61°56.1	47°52.9	39°49.5	26°38.9	8°58.9
18	74°40.6	5.7'	N21°11.9	12.1'	60.5'	103°59.5	72°17.1	67°06.3	61°19.3	47°20.3	39°16.9	26°05.1	8°29.9
19	89°05.2	5.6'	21°24.0	12.0'	60.5'	103°22.2	71°42.2	66°29.2	60°42.4	46°47.7	38°44.4	25°31.3	8°01.6
20	103°29.8	5.5'	21°36.0	11.8'	60.5'	102°45.0	71°07.3	65°52.0	60°05.6	46°15.2	38°12.1	24°57.7	7°34.0
21	117°54.3	5.4'	21°47.8	11.7'	60.5'	102°07.8	70°32.5	65°14.9	59°28.7	45°42.9	37°39.9	24°24.2	7°07.3
22	132°18.6	5.3'	21°59.5	11.5'	60.5'	101°30.6	69°57.7	64°37.7	58°51.9	45°10.6	37°07.8	23°51.0	
23	146°42.9	5.1'	22°11.0	11.4'	60.5'	100°53.3	69°22.8	64°00.5	58°15.0	44°38.4	36°35.8	23°17.9	
18 th	SD = 16.5' Mer. pass. 12:49												

DUT1 = UT1-UTC = +0.0900 sec $\Delta T = TT-UT1 = +69.0940$ sec

2026 April 19 to Apr. 21 UT

h	Moon (19 th Apr)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Regulus	-Procyon	-Pollux	-Jupiter	-Betelgeuse	-Capella	-Aldebaran	+Venus
0	161°07.0	5.0'	N22°22.4	11.2'	60.5'	100°16.1	68°48.0	63°23.4	57°38.2	44°06.3	36°04.0	22°45.0	
1	175°31.1	4.9'	22°33.6	11.1'	60.5'	99°38.8	68°13.2	62°46.2	57°01.3	43°34.3	35°32.3	22°12.3	
2	189°55.0	4.8'	22°44.7	10.9'	60.6'	99°01.6	67°38.4	62°09.0	56°24.4	43°02.4	35°00.8	21°39.8	
3	204°18.8	4.7'	22°55.6	10.8'	60.6'	98°24.4	67°03.7	61°31.8	55°47.6	42°30.6	34°29.4	21°07.6	
4	218°42.6	4.6'	23°06.3	10.6'	60.6'	97°47.1	66°29.0	60°54.7	55°10.7	41°59.0	33°58.3	20°35.7	
5	233°06.2	4.5'	23°16.9	10.4'	60.6'	97°09.9	65°54.2	60°17.5	54°33.9	41°27.5	33°27.3	20°04.1	
6	247°29.7	4.4'	N23°27.4	10.3'	60.6'	96°32.6	65°19.6	59°40.3	53°57.0	40°56.1	32°56.5	19°32.8	
7	261°53.1	4.3'	23°37.7	10.1'	60.6'	95°55.4	64°44.9	59°03.2	53°20.2	40°24.8	32°25.9	19°01.8	
8	276°16.5	4.2'	23°47.8	10.0'	60.6'	95°18.1	64°10.3	58°26.0	52°43.3	39°53.7	31°55.5	18°31.2	
9	290°39.7	4.1'	23°57.7	9.8'	60.6'	94°40.9	63°35.7	57°48.8	52°06.5	39°22.8	31°25.3	18°01.0	
10	305°02.8	4.0'	24°07.5	9.6'	60.6'	94°03.7	63°01.1	57°11.7	51°29.6	38°52.0	30°55.4	17°31.2	
11	319°25.8	3.9'	24°17.1	9.4'	60.6'	93°26.5	62°26.5	56°34.5	50°52.8	38°21.3	30°25.7	17°01.9	
12	333°48.8	3.8'	N24°26.6	9.3'	60.5'	92°49.2	61°52.0	55°57.4	50°16.0	37°50.8	29°56.2	16°33.1	
13	348°11.6	3.8'	24°35.8	9.1'	60.5'	92°12.0	61°17.6	55°20.3	49°39.2	37°20.6	29°27.1	16°04.9	
14	2°34.4	3.7'	24°44.9	8.9'	60.5'	91°34.8	60°43.1	54°43.1	49°02.4	36°50.4	28°58.2	15°37.3	
15	16°57.0	3.6'	24°53.8	8.7'	60.5'	90°57.6	60°08.7	54°06.0	48°25.6	36°20.5	28°29.6	15°10.4	
16	31°19.6	3.5'	25°02.6	8.6'	60.5'	90°20.4	59°34.4	53°28.9	47°48.8	35°50.8	28°01.4	14°44.2	
17	45°42.1	3.4'	25°11.1	8.4'	60.5'	89°43.2	59°00.1	52°51.8	47°12.0	35°21.3	27°33.4	14°18.9	
18	60°04.5	3.3'	N25°19.5	8.2'	60.5'	89°06.0	58°25.8	52°14.7	46°35.2	34°52.0	27°05.8	13°54.3	
19	74°26.8	3.2'	25°27.7	8.0'	60.5'	88°28.8	57°51.6	51°37.6	45°58.5	34°23.0	26°38.6	13°30.8	8°25.5
20	88°49.1	3.2'	25°35.7	7.8'	60.5'	87°51.7	57°17.4	51°00.5	45°21.7	33°54.2	26°11.8		8°54.4
21	103°11.2	3.1'	25°43.6	7.6'	60.5'	87°14.5	56°43.2	50°23.4	44°45.0	33°25.6	25°45.3		9°23.8
22	117°33.3	3.0'	25°51.2	7.4'	60.5'	86°37.3	56°09.2	49°46.4	44°08.3	32°57.3	25°19.3		9°53.8
23	131°55.3	2.9'	25°58.6	7.3'	60.5'	86°00.2	55°35.1	49°09.3	43°31.6	32°29.2	24°53.8		10°24.2
19 th	SD = 16.5' Mer. pass. 13:49												

h	Moon (20 th Apr)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Arcturus	-Regulus	-Procyon	-Pollux	-Jupiter	-Betelgeuse	+Venus	+Sun
0	146°17.3	2.9'	N26°05.9	7.1'	60.5'		85°23.1	55°01.2	48°32.3	42°54.9	32°01.5	10°54.9	
1	160°39.1	2.8'	26°13.0	6.9'	60.5'		84°46.0	54°27.2	47°55.3	42°18.2	31°34.0	11°25.9	
2	175°00.9	2.7'	26°19.8	6.7'	60.5'		84°08.9	53°53.4	47°18.3	41°41.5	31°06.9	11°57.2	
3	189°22.7	2.7'	26°26.5	6.5'	60.5'		83°31.8	53°19.6	46°41.3	41°04.9	30°40.0	12°28.7	
4	203°44.3	2.6'	26°33.0	6.3'	60.5'		82°54.7	52°45.8	46°04.3	40°28.3	30°13.5	13°00.4	
5	218°06.0	2.6'	26°39.3	6.1'	60.4'		82°17.6	52°12.2	45°27.4	39°51.7	29°47.4	13°32.2	
6	232°27.5	2.5'	N26°45.4	5.9'	60.4'		81°40.6	51°38.6	44°50.4	39°15.1	29°21.6	14°04.3	
7	246°49.0	2.4'	26°51.3	5.7'	60.4'		81°03.5	51°05.0	44°13.5	38°38.5	28°56.2	14°36.4	
8	261°10.5	2.4'	26°57.0	5.5'	60.4'		80°26.5	50°31.6	43°36.6	38°01.9	28°31.2	15°08.7	
9	275°31.8	2.3'	27°02.4	5.3'	60.4'		79°49.5	49°58.2	42°59.7	37°25.4	28°06.6	15°41.0	
10	289°53.2	2.3'	27°07.7	5.1'	60.4'		79°12.5	49°24.9	42°22.9	36°48.9	27°42.4	16°13.5	
11	304°14.5	2.3'	27°12.8	4.9'	60.4'		78°35.6	48°51.6	41°46.0	36°12.4	27°18.7	16°46.0	41°29.2
12	318°35.8	2.2'	N27°17.7	4.7'	60.4'		77°58.6	48°18.5	41°09.2	35°36.0	26°55.5	17°18.7	42°03.5
13	332°57.0	2.2'	27°22.4	4.5'	60.4'		77°21.7	47°45.4	40°32.4	34°59.5	26°32.7	17°51.3	42°37.9
14	347°18.2	2.1'	27°26.9	4.3'	60.3'		76°44.7	47°12.5	39°55.6	34°23.1	26°10.5	18°24.0	43°12.1
15	1°39.3	2.1'	27°31.1	4.1'	60.3'		76°07.8	46°39.6	39°18.8	33°46.7	25°48.8	18°56.8	43°46.4
16	16°00.4	2.1'	27°35.2	3.9'	60.3'		75°31.0	46°06.8	38°42.1	33°10.3	25°27.6	19°29.6	44°20.7
17	30°21.5	2.1'	27°39.1	3.6'	60.3'	119°49.4	74°54.1	45°34.1	38°05.4	32°34.0	25°07.1	20°02.5	44°55.0
18	44°42.6	2.0'	N27°42.7	3.4'	60.3'	119°21.4	74°17.3	45°01.5	37°28.7	31°57.7	24°47.1	20°35.3	45°29.2
19	59°03.6	2.0'	27°46.1	3.2'	60.3'	118°53.3	73°40.4	44°29.0	36°52.0	31°21.4	24°27.7	21°08.2	46°03.4
20	73°24.6	2.0'	27°49.4	3.0'	60.3'	118°25.1	73°03.6	43°56.6	36°15.3	30°45.2	24°09.0	21°41.2	46°37.6
21	87°45.6	2.0'	27°52.4	2.8'	60.2'	117°56.9	72°26.8	43°24.4	35°38.7	30°08.9	23°51.0	22°14.1	47°11.8
22	102°06.6	2.0'	27°55.2	2.6'	60.2'	117°28.6	71°50.1	42°52.2	35°02.1	29°32.7	23°33.6	22°47.1	47°46.0
23	116°27.6	2.0'	27°57.8	2.4'	60.2'	117°00.2	71°13.3	42°20.2	34°25.6	28°56.6	23°17.0	23°20.0	48°20.1
20 th	SD = 16.5' Mer. pass. 14:53					Sun SD = 15.9'							

h	Moon (21 st Apr)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Spica	-Regulus	-Pollux	-Jupiter	+Aldebaran	+Capella	+Venus	+Sun
0	130°48.6	2.0'	N28°00.2	2.2'	60.2'		70°36.6	33°49.0	28°20.5	14°05.7		23°53.0	48°54.2
1	145°09.6	2.0'	28°02.4	2.0'	60.2'		69°59.9	33°12.5	27°44.4	14°30.3		24°26.0	49°28.3
2	159°30.5	2.0'	28°04.4	1.8'	60.2'		69°23.3	32°36.0	27°08.3	14°55.7		24°59.0	50°02.4
3	173°51.5	2.0'	28°06.2	1.6'	60.1'		68°46.6	31°59.6	26°32.3	15°21.8		25°32.0	50°36.5
4	188°12.5	2.0'	28°07.7	1.4'	60.1'		68°10.0	31°23.1	25°56.3	15°48.6		26°05.0	51°10.5
5	202°33.5	2.0'	28°09.1	1.1'	60.1'		67°33.4	30°46.7	25°20.4	16°16.0		26°38.0	51°44.5
6	216°54.5	2.0'	N28°10.2	0.9'	60.1'		66°56.8	30°10.4	24°44.5	16°43.9		27°11.0	52°18.5
7	231°15.5	2.0'	28°11.2	0.7'	60.1'		66°20.3	29°34.0	24°08.6	17°12.3		27°43.9	52°52.5
8	245°36.5	2.1'	28°11.9	0.5'	60.1'	119°45.4	65°43.7	28°57.8	23°32.8	17°41.2		28°16.9	53°26.5
9	259°57.6	2.1'	28°12.4	0.3'	60.0'	119°08.9	65°07.2	28°21.5	22°57.0	18°10.6		28°49.9	54°00.4
10	274°18.6	2.1'	28°12.7	0.1'	60.0'	118°32.4	64°30.8	27°45.3	22°21.3	18°40.3		29°22.9	54°34.3
11	288°39.7	2.1'	28°12.8	-0.1'	60.0'	117°56.0	63°54.3	27°09.1	21°45.6	19°10.3		29°55.8	55°08.2
12	303°00.9	2.2'	N28°12.7	-0.3'	60.0'	117°19.6	63°17.9	26°32.9	21°10.0	19°40.7		30°28.8	55°42.0
13	317°22.0	2.2'	28°12.4	-0.5'	60.0'	116°43.2	62°41.5	25°56.8	20°34.5	20°11.4		31°01.7	56°15.9
14	331°43.2	2.2'	28°11.9	-0.7'	59.9'	116°06.9	62°05.1	25°20.7	19°58.9	20°42.4		31°34.6	56°49.7
15	346°04.5	2.3'	28°11.1	-0.9'	59.9'	115°30.6	61°28.8	24°44.7	19°23.5	21°13.6		32°07.5	57°23.4
16	0°25.8	2.3'	28°10.2	-1.1'	59.9'	114°54.3	60°52.5	24°08.7	18°48.1	21°45.0		32°40.4	57°57.2
17	14°47.1	2.4'	28°09.1	-1.3'	59.9'	114°18.0	60°16.2	23°32.7	18°12.8	22°16.7		33°13.2	58°30.9
18	29°08.5	2.4'	N28°07.7	-1.5'	59.9'	113°41.8	59°39.9	22°56.8	17°37.5	22°48.5	19°53.8	33°46.1	59°04.6
19	43°29.9	2.5'	28°06.2	-1.7'	59.8'	113°05.5	59°03.7	22°21.0	17°02.4	23°20.5	20°09.7	34°18.9	59°38.3
20	57°51.4	2.5'	28°04.5	-1.9'	59.8'	112°29.4	58°27.5	21°45.2	16°27.3	23°52.7	20°26.4	34°51.7	60°11.9
21	72°12.9	2.6'	28°02.5	-2.1'	59.8'	111°53.2	57°51.3	21°09.4	15°52.3	24°25.1	20°43.8	35°24.5	60°45.6
22	86°34.5	2.7'	28°00.4	-2.3'	59.8'	111°17.1	57°15.2	20°33.7	15°17.4	24°57.5	21°02.1	35°57.3	61°19.2
23	100°56.1	2.7'	27°58.0	-2.5'	59.7'	110°41.0	56°39.1	19°58.0	14°42.6	25°30.1	21°21.0	36°30.1	61°52.7
21 st	SD = 16.4' Mer. pass. 15:58					Sun SD = 15.9'							

DUT1 = UT1-UTC = +0.0909 sec $\Delta T = TT-UT1 = +69.0931$ sec

2026 April 25 to Apr. 27 UT

h	Moon (25 th Apr)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Antares	-Arcturus	-Spica	-Regulus	+Pollux	+Jupiter	+Capella	+Aldebaran
0	73°52.8	10.7'	N17°46.6	-12.8'	57.8'	114°05.8	70°38.7	68°12.4	14°09.4	22°58.3	28°01.4	56°15.7	66°16.5
1	88°22.6	10.8'	17°33.8	-12.9'	57.8'	113°32.1	70°11.7	67°38.7	13°35.7	23°31.7	28°34.5	56°47.1	66°49.6
2	102°52.4	10.9'	17°20.9	-13.0'	57.7'	112°58.4	69°44.8	67°05.1	13°02.0	24°05.1	29°07.6	57°18.4	67°22.6
3	117°22.4	11.1'	17°07.9	-13.1'	57.7'	112°24.7	69°18.0	66°31.4	12°28.4	24°38.4	29°40.7	57°49.8	67°55.6
4	131°52.4	11.2'	16°54.9	-13.1'	57.7'	111°51.1	68°51.2	65°57.8	11°54.7	25°11.8	30°13.8	58°21.1	68°28.5
5	146°22.6	11.3'	16°41.7	-13.2'	57.7'	111°17.5	68°24.5	65°24.2	11°21.1	25°45.1	30°46.8	58°52.4	69°01.5
6	160°52.8	11.4'	N16°28.5	-13.3'	57.6'	110°43.9	67°57.9	64°50.7	10°47.6	26°18.4	31°19.8	59°23.8	69°34.4
7	175°23.2	11.5'	16°15.3	-13.3'	57.6'	110°10.4	67°31.3	64°17.2	10°14.0	26°51.7	31°52.8	59°55.1	70°07.3
8	189°53.6	11.6'	16°01.9	-13.4'	57.6'	109°36.9	67°04.8	63°43.7	9°40.5	27°24.9	32°25.8	60°26.4	70°40.2
9	204°24.2	11.7'	15°48.5	-13.5'	57.6'	109°03.4	66°38.4	63°10.2	9°07.1	27°58.2	32°58.8	60°57.8	71°13.0
10	218°54.9	11.8'	15°35.0	-13.5'	57.5'	108°29.9	66°12.0	62°36.8	8°33.6	28°31.4	33°31.7	61°29.1	71°45.8
11	233°25.6	11.9'	15°21.5	-13.6'	57.5'	107°56.5	65°45.8	62°03.4	8°00.2	29°04.6	34°04.6	62°00.4	72°18.6
12	247°56.5	12.0'	N15°07.9	-13.7'	57.5'	107°23.1	65°19.6	61°30.0	7°26.8	29°37.8	34°37.5	62°31.7	72°51.4
13	262°27.4	12.0'	14°54.3	-13.7'	57.4'	106°49.8	64°53.5	60°56.7	6°53.5	30°10.9	35°10.3	63°03.0	73°24.1
14	276°58.5	12.1'	14°40.5	-13.8'	57.4'	106°16.5	64°27.5	60°23.4	6°20.2	30°44.1	35°43.1	63°34.3	73°56.8
15	291°29.6	12.2'	14°26.8	-13.8'	57.4'	105°43.2	64°01.6	59°50.1	5°46.9	31°17.2	36°15.9	64°05.5	74°29.5
16	306°00.9	12.3'	14°12.9	-13.9'	57.4'	105°09.9	63°35.7	59°16.8	5°13.6	31°50.3	36°48.7	64°36.8	75°02.2
17	320°32.2	12.4'	13°59.0	-13.9'	57.3'	104°36.7	63°10.0	58°43.6	4°40.4	32°23.3	37°21.5	65°08.1	75°34.8
18	335°03.6	12.5'	N13°45.1	-14.0'	57.3'	104°03.4	62°44.3	58°10.4	4°07.2	32°56.4	37°54.2	65°39.3	76°07.4
19	349°35.1	12.6'	13°31.1	-14.0'	57.3'	103°30.3	62°18.7	57°37.3	3°34.1	33°29.4	38°26.9	66°10.6	76°40.0
20	4°06.7	12.7'	13°17.1	-14.1'	57.3'	102°57.1	61°53.2	57°04.1	3°01.0	34°02.4	38°59.6	66°41.8	77°12.6
21	18°38.4	12.8'	13°03.0	-14.1'	57.2'	102°24.0	61°27.8	56°31.0	2°27.9	34°35.3	39°32.2	67°13.0	77°45.1
22	33°10.1	12.8'	12°48.8	-14.2'	57.2'	101°50.9	61°02.5	55°57.9	1°54.9	35°08.3	40°04.8	67°44.2	78°17.6
23	47°42.0	12.9'	12°34.7	-14.2'	57.2'	101°17.8	60°37.3	55°24.9	1°22.0	35°41.2	40°37.4	68°15.4	78°50.1
25 th	SD = 15.8' Mer. pass. 19:43												

h	Moon (26 th Apr)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Spica	\pm Regulus	+Pollux	+Jupiter	+Capella	+Aldebaran
0	62°13.9	13.0'	N12°20.4	-14.3'	57.2'	100°44.8	90°46.7	54°51.9	0°49.4	36°14.1	41°10.0	68°46.6	79°22.6
1	76°45.9	13.1'	12°06.2	-14.3'	57.1'	100°11.8	90°20.6	54°18.9		36°47.0	41°42.6	69°17.7	79°55.0
2	91°18.0	13.2'	11°51.8	-14.4'	57.1'	99°38.8	89°54.4	53°45.9		37°19.8	42°15.1	69°48.9	80°27.4
3	105°50.2	13.2'	11°37.5	-14.4'	57.1'	99°05.9	89°28.3	53°13.0		37°52.6	42°47.6	70°20.0	80°59.8
4	120°22.4	13.3'	11°23.1	-14.4'	57.0'	98°32.9	89°02.2	52°40.1		38°25.4	43°20.1	70°51.2	81°32.1
5	134°54.8	13.4'	11°08.6	-14.5'	57.0'	98°00.0	88°36.1	52°07.2	1°56.9	38°58.2	43°52.5	71°22.3	82°04.5
6	149°27.2	13.5'	N10°54.2	-14.5'	57.0'	97°27.2	88°10.0	51°34.4	2°29.6	39°30.9	44°24.9	71°53.4	82°36.8
7	163°59.6	13.5'	10°39.6	-14.5'	57.0'	96°54.3	87°44.0	51°01.5	3°02.4	40°03.7	44°57.3	72°24.4	83°09.0
8	178°32.2	13.6'	10°25.1	-14.6'	56.9'	96°21.5	87°18.0	50°28.8	3°35.2	40°36.4	45°29.7	72°55.5	83°41.3
9	193°04.8	13.7'	10°10.5	-14.6'	56.9'	95°48.7	86°52.0	49°56.0	4°07.9	41°09.0	46°02.1	73°26.5	84°13.5
10	207°37.5	13.8'	09°55.9	-14.6'	56.9'	95°16.0	86°26.1	49°23.3	4°40.7	41°41.7	46°34.4	73°57.6	84°45.7
11	222°10.2	13.8'	09°41.3	-14.7'	56.9'	94°43.2	86°00.2	48°50.5	5°13.4	42°14.3	47°06.7	74°28.6	85°17.9
12	236°43.1	13.9'	N09°26.6	-14.7'	56.8'	94°10.5	85°34.3	48°17.9	5°46.1	42°46.9	47°38.9	74°59.6	85°50.1
13	251°15.9	14.0'	09°11.9	-14.7'	56.8'	93°37.8	85°08.4	47°45.2	6°18.8	43°19.5	48°11.2	75°30.6	86°22.2
14	265°48.9	14.0'	08°57.1	-14.8'	56.8'	93°05.2	84°42.6	47°12.6	6°51.4	43°52.0	48°43.4	76°01.5	86°54.3
15	280°21.9	14.1'	08°42.4	-14.8'	56.8'	92°32.6	84°16.8	46°40.0	7°24.0	44°24.6	49°15.6	76°32.5	87°26.4
16	294°55.0	14.1'	08°27.6	-14.8'	56.7'	92°00.0	83°51.0	46°07.4	7°56.6	44°57.1	49°47.8	77°03.4	87°58.4
17	309°28.1	14.2'	08°12.8	-14.8'	56.7'	91°27.4	83°25.3	45°34.8	8°29.2	45°29.5	50°19.9	77°34.3	88°30.4
18	324°01.3	14.3'	N07°57.9	-14.9'	56.7'	90°54.8	82°59.6	45°02.3	9°01.7	46°02.0	50°52.1	78°05.2	89°02.4
19	338°34.6	14.3'	07°43.1	-14.9'	56.7'	90°22.3	82°33.9	44°29.8	9°34.2	46°34.4	51°24.2	78°36.1	89°34.4
20	353°07.9	14.4'	07°28.2	-14.9'	56.6'	89°49.8	82°08.3	43°57.4	10°06.7	47°06.8	51°56.2	79°06.9	90°06.4
21	7°41.3	14.4'	07°13.3	-14.9'	56.6'	89°17.4	81°42.7	43°24.9	10°39.2	47°39.2	52°28.3	79°37.8	90°38.3
22	22°14.7	14.5'	06°58.4	-14.9'	56.6'	88°44.9	81°17.2	42°52.5	11°11.7	48°11.6	53°00.3	80°08.6	91°10.2
23	36°48.2	14.5'	06°43.5	-15.0'	56.6'	88°12.5	80°51.6	42°20.1	11°44.1	48°43.9	53°32.3	80°39.4	91°42.0
26 th	SD = 15.6' Mer. pass. 20:28												

h	Moon (27 th Apr)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Antares	-Rigil Kent.	-Hadar	-Spica	+Regulus	+Pollux	+Jupiter	+Aldebaran
0	51°21.7	14.6'	N06°28.5	-15.0'	56.6'	87°40.1	80°26.2	76°40.5	41°47.7	12°16.5	49°16.2	54°04.3	92°13.9
1	65°55.3	14.6'	06°13.5	-15.0'	56.5'	87°07.7	80°00.7	76°15.8	41°15.4	12°48.8	49°48.5	54°36.3	92°45.7
2	80°28.9	14.7'	05°58.6	-15.0'	56.5'	86°35.4	79°35.3	75°51.3	40°43.1	13°21.2	50°20.8	55°08.2	93°17.5
3	95°02.6	14.7'	05°43.6	-15.0'	56.5'	86°03.1	79°10.0	75°26.8	40°10.8	13°53.5	50°53.0	55°40.1	93°49.3
4	109°36.3	14.8'	05°28.6	-15.0'	56.5'	85°30.8	78°44.7	75°02.3	39°38.5	14°25.8	51°25.2	56°12.0	94°21.0
5	124°10.1	14.8'	05°13.5	-15.0'	56.4'	84°58.5	78°19.4	74°37.9	39°06.3	14°58.1	51°57.4	56°43.8	94°52.8
6	138°43.9	14.9'	N04°58.5	-15.0'	56.4'	84°26.2	77°54.1	74°13.6	38°34.1	15°30.3	52°29.6	57°15.7	95°24.5
7	153°17.8	14.9'	04°43.5	-15.0'	56.4'	83°54.0	77°29.0	73°49.3	38°01.9	16°02.5	53°01.7	57°47.5	95°56.1
8	167°51.7	14.9'	04°28.4	-15.1'	56.4'	83°21.8	77°03.8	73°25.0	37°29.7	16°34.7	53°33.9	58°19.3	96°27.8
9	182°25.6	15.0'	04°13.4	-15.1'	56.3'	82°49.6	76°38.7	73°00.9	36°57.6	17°06.9	54°06.0	58°51.0	96°59.4
10	196°59.6	15.0'	03°58.3	-15.1'	56.3'	82°17.5	76°13.7	72°36.7	36°25.5	17°39.1	54°38.1	59°22.8	97°31.0
11	211°33.6	15.1'	03°43.3	-15.1'	56.3'	81°45.4	75°48.7	72°12.7	35°53.4	18°11.2	55°10.1	59°54.5	98°02.6
12	226°07.7	15.1'	N03°28.2	-15.1'	56.3'	81°13.3	75°23.7	71°48.7	35°21.3	18°43.3	55°42.1	60°26.2	98°34.1
13	240°41.8	15.1'	03°13.1	-15.1'	56.2'	80°41.2	74°58.8	71°24.7	34°49.3	19°15.4	56°14.2	60°57.9	99°05.7
14	255°15.9	15.2'	02°58.1	-15.1'	56.2'	80°09.1	74°34.0	71°00.9	34°17.2	19°47.4	56°46.1	61°29.5	99°37.2
15	269°50.1	15.2'	02°43.0	-15.1'	56.2'	79°37.1	74°09.2	70°37.0	33°45.3	20°19.5	57°18.1	62°01.2	100°08.6
16	284°24.3	15.2'	02°27.9	-15.1'	56.2'	79°05.1	73°44.4	70°13.3	33°13.3	20°51.5	57°50.1	62°32.8	100°40.1
17	298°58.5	15.3'	02°12.9	-15.1'	56.2'	78°33.1	73°19.7	69°49.6	32°41.3	21°23.5	58°22.0	63°04.4	101°11.5
18	313°32.7	15.3'	N01°57.8	-15.1'	56.1'	78°01.1	72°55.1	69°26.0	32°09.4	21°55.4	58°53.9	63°35.9	101°42.9
19	328°07.0	15.3'	01°42.7	-15.1'	56.1'	77°29.2	72°30.5	69°02.4	31°37.5	22°27.4	59°25.7	64°07.5	102°14.3
20	342°41.3	15.3'	01°27.7	-15.1'	56.1'	76°57.3	72°06.0	68°39.0	31°05.7	22°59.3	59°57.6	64°39.0	102°45.7
21	357°15.7	15.4'	01°12.6	-15.1'	56.1'	76°25.4	71°41.5	68°15.6	30°33.8	23°31.2	60°29.4	65°10.5	103°17.0
22	11°50.0	15.4'	00°57.6	-15.0'	56.0'	75°53.5	71°17.1	67°52.2	30°02.0	24°03.1	61°01.3	65°42.0	103°48.3
23	26°24.4	15.4'	00°42.5	-15.0'	56.0'	75°21.6	70°52.7	67°28.9	29°30.2	24°34.9	61°33.0	66°13.4	104°19.6
27 th	SD = 15.4' Mer. pass. 21:11												

DUT1 = UT1-UTC = +0.0913 sec $\Delta T = TT-UT1 = +69.0927$ sec

2026 April 28 to Apr. 30 UT

h	Moon (28 th Apr)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Spica	+Regulus	+Pollux	+Jupiter	+Aldebaran
0	40°58.8	15.4'	N00°27.5	-15.0'	56.0'		74°49.8	70°28.4	28°58.4	25°06.7	62°04.8	66°44.8	104°50.8
1	55°33.2	15.4'	N00°12.4	-15.0'	56.0'		74°18.0	70°04.2	28°26.7	25°38.6	62°36.6	67°16.2	105°22.1
2	70°07.7	15.5'	S00°02.6	-15.0'	56.0'		73°46.2	69°40.0	27°54.9	26°10.3	63°08.3	67°47.6	105°53.3
3	84°42.2	15.5'	00°17.6	-15.0'	55.9'		73°14.5	69°15.9	27°23.2	26°42.1	63°40.0	68°19.0	106°24.5
4	99°16.6	15.5'	00°32.6	-15.0'	55.9'		72°42.7	68°51.9	26°51.5	27°13.9	64°11.7	68°50.3	106°55.6
5	113°51.1	15.5'	00°47.6	-15.0'	55.9'		72°11.0	68°27.9	26°19.9	27°45.6	64°43.3	69°21.7	107°26.8
6	128°25.7	15.5'	S01°02.5	-15.0'	55.9'	119°59.7	71°39.3	68°04.0	25°48.3	28°17.3	65°15.0	69°53.0	107°57.9
7	143°00.2	15.5'	01°17.5	-14.9'	55.9'	119°34.6	71°07.6	67°40.1	25°16.6	28°49.0	65°46.6	70°24.3	108°29.0
8	157°34.7	15.6'	01°32.4	-14.9'	55.8'	119°09.6	70°36.0	67°16.3	24°45.1	29°20.6	66°18.2	70°55.5	109°00.0
9	172°09.3	15.6'	01°47.3	-14.9'	55.8'	118°44.4	70°04.3	66°52.6	24°13.5	29°52.2	66°49.8	71°26.7	109°31.1
10	186°43.9	15.6'	02°02.2	-14.9'	55.8'	118°19.3	69°32.7	66°29.0	23°42.0	30°23.9	67°21.3	71°58.0	110°02.1
11	201°18.4	15.6'	02°17.1	-14.9'	55.8'	117°54.1	69°01.1	66°05.4	23°10.5	30°55.5	67°52.9	72°29.2	110°33.1
12	215°53.0	15.6'	S02°32.0	-14.8'	55.8'	117°28.8	68°29.5	65°41.9	22°39.0	31°27.0	68°24.4	73°00.3	111°04.0
13	230°27.6	15.6'	02°46.8	-14.8'	55.7'	117°03.5	67°58.0	65°18.5	22°07.5	31°58.6	68°55.9	73°31.5	111°35.0
14	245°02.2	15.6'	03°01.7	-14.8'	55.7'	116°38.2	67°26.5	64°55.1	21°36.1	32°30.1	69°27.4	74°02.6	112°05.9
15	259°36.8	15.6'	03°16.5	-14.8'	55.7'	116°12.9	66°55.0	64°31.9	21°04.7	33°01.6	69°58.8	74°33.8	112°36.8
16	274°11.4	15.6'	03°31.3	-14.8'	55.7'	115°47.5	66°23.5	64°08.7	20°33.3	33°33.1	70°30.3	75°04.8	113°07.6
17	288°46.0	15.6'	03°46.0	-14.7'	55.7'	115°22.1	65°52.0	63°45.6	20°01.9	34°04.6	71°01.7	75°35.9	113°38.5
18	303°20.6	15.6'	S04°00.7	-14.7'	55.6'	114°56.6	65°20.5	63°22.5	19°30.6	34°36.0	71°33.1	76°07.0	114°09.3
19	317°55.3	15.6'	04°15.5	-14.7'	55.6'	114°31.1	64°49.1	62°59.6	18°59.3	35°07.5	72°04.5	76°38.0	114°40.1
20	332°29.9	15.6'	04°30.1	-14.7'	55.6'	114°05.6	64°17.7	62°36.7	18°28.0	35°38.9	72°35.8	77°09.0	115°10.9
21	347°04.5	15.6'	04°44.8	-14.6'	55.6'	113°40.1	63°46.3	62°13.9	17°56.7	36°10.3	73°07.2	77°40.0	115°41.6
22	1°39.1	15.6'	04°59.4	-14.6'	55.6'	113°14.5	63°14.9	61°51.2	17°25.5	36°41.6	73°38.5	78°11.0	116°12.3
23	16°13.7	15.6'	05°14.0	-14.6'	55.5'	112°48.9	62°43.6	61°28.6	16°54.3	37°13.0	74°09.8	78°42.0	116°43.0
28 th	SD = 15.3' Mer. pass. 21:53												

h	Moon (29 th Apr)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Spica	+Regulus	+Pollux	+Jupiter	+Aldebaran
0	30°48.3	15.6'	S05°28.6	-14.5'	55.5'	112°23.3	62°12.3	61°06.1	16°23.1	37°44.3	74°41.1	79°12.9	117°13.7
1	45°22.9	15.6'	05°43.1	-14.5'	55.5'	111°57.7	61°41.0	60°43.7	15°52.0	38°15.6	75°12.3	79°43.8	117°44.3
2	59°57.5	15.6'	05°57.6	-14.5'	55.5'	111°32.1	61°09.7	60°21.3	15°20.8	38°46.9	75°43.6	80°14.7	118°14.9
3	74°32.1	15.6'	06°12.1	-14.4'	55.5'	111°06.4	60°38.4	59°59.1	14°49.8	39°18.2	76°14.8	80°45.6	118°45.5
4	89°06.6	15.6'	06°26.5	-14.4'	55.4'	110°40.7	60°07.1	59°36.9	14°18.7	39°49.5	76°46.0	81°16.5	119°16.1
5	103°41.2	15.6'	06°40.9	-14.4'	55.4'	110°15.0	59°35.9	59°14.9	13°47.7	40°20.7	77°17.2	81°47.3	119°46.6
6	118°15.8	15.5'	S06°55.3	-14.3'	55.4'	109°49.2	59°04.7	58°52.9	13°16.7	40°51.9	77°48.3	82°18.1	
7	132°50.3	15.5'	07°09.6	-14.3'	55.4'	109°23.5	58°33.5	58°31.1	12°45.8	41°23.1	78°19.5	82°48.9	
8	147°24.8	15.5'	07°23.9	-14.3'	55.4'	108°57.7	58°02.3	58°09.3	12°14.9	41°54.3	78°50.6	83°19.7	
9	161°59.4	15.5'	07°38.2	-14.2'	55.3'	108°31.9	57°31.1	57°47.7	11°44.0	42°25.5	79°21.7	83°50.5	
10	176°33.9	15.5'	07°52.4	-14.2'	55.3'	108°06.1	57°00.0	57°26.2	11°13.2	42°56.6	79°52.8	84°21.2	
11	191°08.3	15.5'	08°06.6	-14.1'	55.3'	107°40.3	56°28.9	57°04.7	10°42.4	43°27.7	80°23.9	84°51.9	
12	205°42.8	15.5'	S08°20.7	-14.1'	55.3'	107°14.5	55°57.8	56°43.4	10°11.7	43°58.8	80°55.0	85°22.7	
13	220°17.3	15.4'	08°34.8	-14.1'	55.3'	106°48.6	55°26.7	56°22.2	9°41.1	44°29.9	81°26.0	85°53.3	
14	234°51.7	15.4'	08°48.9	-14.0'	55.3'	106°22.8	54°55.6	56°01.1	9°10.5	45°01.0	81°57.0	86°24.0	
15	249°26.1	15.4'	09°02.9	-14.0'	55.2'	105°56.9	54°24.6	55°40.1	8°40.0	45°32.0	82°28.0	86°54.7	
16	264°00.5	15.4'	09°16.9	-13.9'	55.2'	105°31.1	53°53.6	55°19.2	8°09.5	46°03.1	82°59.0	87°25.3	
17	278°34.9	15.4'	09°30.8	-13.9'	55.2'	105°05.2	53°22.5	54°58.5	7°39.2	46°34.1	83°30.0	87°55.9	
18	293°09.2	15.3'	S09°44.7	-13.8'	55.2'	104°39.3	52°51.5	54°37.8	7°09.0	47°05.1	84°00.9	88°26.5	
19	307°43.6	15.3'	09°58.5	-13.8'	55.2'	104°13.4	52°20.6	54°17.3	6°38.9	47°36.0	84°31.8	88°57.1	
20	322°17.9	15.3'	10°12.3	-13.7'	55.1'	103°47.5	51°49.6	53°57.0	6°09.0	48°07.0	85°02.8	89°27.7	
21	336°52.2	15.3'	10°26.0	-13.7'	55.1'	103°21.6	51°18.7	53°36.7	5°39.3	48°38.0	85°33.7	89°58.2	
22	351°26.4	15.2'	10°39.7	-13.6'	55.1'	102°55.7	50°47.7	53°16.6	5°09.9	49°08.9	86°04.5	90°28.8	
23	6°00.6	15.2'	10°53.3	-13.6'	55.1'	102°29.8	50°16.8	52°56.6	4°40.7	49°39.8	86°35.4	90°59.3	
29 th	SD = 15.1' Mer. pass. 22:35												

h	Moon (30 th Apr)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	\pm Spica	+Regulus	+Procyon	+Pollux	+Jupiter
0	20°34.8	15.2'	S11°06.9	-13.5'	55.1'		102°03.9	49°46.0	4°12.1	50°10.7	83°23.0	87°06.2	91°29.8
1	35°09.0	15.1'	11°20.5	-13.5'	55.1'		101°37.9	49°15.1	3°44.0	50°41.6	83°52.1	87°37.1	92°00.2
2	49°43.2	15.1'	11°33.9	-13.4'	55.0'		101°12.0	48°44.2	3°16.8	51°12.4	84°21.2	88°07.9	92°30.7
3	64°17.3	15.1'	11°47.4	-13.4'	55.0'		100°46.1	48°13.4		51°43.2	84°50.3	88°38.7	93°01.1
4	78°51.4	15.1'	12°00.7	-13.3'	55.0'		100°20.2	47°42.6		52°14.1	85°19.3	89°09.4	93°31.6
5	93°25.4	15.0'	12°14.1	-13.3'	55.0'		99°54.2	47°11.8		52°44.9	85°48.4	89°40.2	94°02.0
6	107°59.4	15.0'	S12°27.3	-13.2'	55.0'		99°28.3	46°41.0		53°15.7	86°17.5	90°10.9	94°32.4
7	122°33.4	15.0'	12°40.5	-13.1'	55.0'		99°02.4	46°10.2		53°46.4	86°46.5	90°41.7	95°02.7
8	137°07.4	14.9'	12°53.7	-13.1'	54.9'		98°36.5	45°39.5		54°17.2	87°15.5	91°12.4	95°33.1
9	151°41.3	14.9'	13°06.7	-13.0'	54.9'		98°10.5	45°08.7		54°47.9	87°44.5	91°43.1	96°03.4
10	166°15.2	14.8'	13°19.8	-13.0'	54.9'		97°44.6	44°38.0		55°18.6	88°13.5	92°13.7	96°33.8
11	180°49.0	14.8'	13°32.7	-12.9'	54.9'		97°18.7	44°07.3		55°49.4	88°42.5	92°44.4	97°04.1
12	195°22.8	14.8'	S13°45.6	-12.8'	54.9'		96°52.8	43°36.6		56°20.0	89°11.5	93°15.0	97°34.3
13	209°56.6	14.7'	13°58.5	-12.8'	54.9'		96°26.9	43°05.9		56°50.7	89°40.4	93°45.7	98°04.6
14	224°30.3	14.7'	14°11.3	-12.7'	54.9'		96°00.9	42°35.3		57°21.4	90°09.3	94°16.3	98°34.9
15	239°04.0	14.7'	14°24.0	-12.6'	54.8'		95°35.0	42°04.7	4°09.7	57°52.0	90°38.3	94°46.9	99°05.1
16	253°37.7	14.6'	14°36.6	-12.6'	54.8'		95°09.1	41°34.0	4°38.1	58°22.6	91°07.2	95°17.4	99°35.3
17	268°11.3	14.6'	14°49.2	-12.5'	54.8'		94°43.3	41°03.4	5°06.9	58°53.2	91°36.1	95°48.0	100°05.6
18	282°44.9	14.5'	S15°01.7	-12.4'	54.8'		94°17.4	40°32.8	5°36.0	59°23.8	92°04.9	96°18.5	100°35.7
19	297°18.4	14.5'	15°14.2	-12.4'	54.8'	119°53.0	93°51.5	40°02.3	6°05.3	59°54.4	92°33.8	96°49.1	101°05.9
20	311°51.9	14.4'	15°26.5	-12.3'	54.8'	119°25.1	93°25.6	39°31.7	6°34.9	60°25.0	93°02.6	97°19.6	101°36.1
21	326°25.3	14.4'	15°38.9	-12.2'	54.8'	118°57.2	92°59.8	39°01.2	7°04.5	60°55.5	93°31.5	97°50.1	102°06.2
22	340°58.7	14.4'	15°51.1	-12.2'	54.7'	118°29.3	92°33.9	38°30.6	7°34.2	61°26.1	94°00.3	98°20.6	102°36.4
23	355°32.1	14.3'	16°03.3	-12.1'	54.7'	118°01.4	92°08.1	38°00.1	8°04.1	61°56.6	94°29.1	98°51.0	103°06.5
30 th	SD = 15.0' Mer. pass. 23:18												

DUT1 = UT1-UTC = +0.0917 sec ΔT = TT-UT1 = +69.0923 sec

2026 May 01 to May. 03 UT

h	Moon (1 st May)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Rigil Kent.	-Antares	+Spica	+Regulus	+Pollux	+Jupiter
0	10°05.4	14.3'	S16°15.4	-12.0'	54.7'	117°33.4	91°42.2	45°26.9	37°29.6	8°34.0	62°27.1	99°21.5	103°36.6
1	24°38.7	14.2'	16°27.4	-12.0'	54.7'	117°05.5	91°16.4	45°11.3	36°59.1	9°03.9	62°57.6	99°51.9	104°06.6
2	39°11.9	14.2'	16°39.3	-11.9'	54.7'	116°37.5	90°50.6	44°55.8	36°28.7	9°33.9	63°28.0	100°22.3	104°36.7
3	53°45.1	14.1'	16°51.2	-11.8'	54.7'	116°09.6	90°24.8	44°40.6	35°58.2	10°03.9	63°58.5	100°52.7	105°06.8
4	68°18.2	14.1'	17°03.0	-11.7'	54.7'	115°41.6	89°59.0	44°25.6	35°27.8	10°33.9	64°28.9	101°23.1	105°36.8
5	82°51.3	14.0'	17°14.7	-11.6'	54.6'	115°13.6	89°33.2		34°57.4	11°04.0	64°59.3	101°53.5	106°06.8
6	97°24.3	14.0'	S17°26.4	-11.6'	54.6'	114°45.7	89°07.5		34°27.0	11°34.1	65°29.7	102°23.9	106°36.8
7	111°57.3	13.9'	17°37.9	-11.5'	54.6'	114°17.7	88°41.7		33°56.6	12°04.2	66°00.1	102°54.2	107°06.8
8	126°30.3	13.9'	17°49.4	-11.4'	54.6'	113°49.7	88°16.0		33°26.2	12°34.3	66°30.5	103°24.5	107°36.8
9	141°03.2	13.8'	18°00.8	-11.3'	54.6'	113°21.7	87°50.3		32°55.8	13°04.4	67°00.9	103°54.8	108°06.7
10	155°36.0	13.8'	18°12.2	-11.2'	54.6'	112°53.7	87°24.6		32°25.5	13°34.5	67°31.2	104°25.1	108°36.7
11	170°08.8	13.7'	18°23.4	-11.2'	54.6'	112°25.7	86°58.9		31°55.1	14°04.6	68°01.6	104°55.4	109°06.6
12	184°41.5	13.7'	S18°34.6	-11.1'	54.5'	111°57.7	86°33.2		31°24.8	14°34.7	68°31.9	105°25.7	109°36.5
13	199°14.2	13.6'	18°45.7	-11.0'	54.5'	111°29.7	86°07.6		30°54.5	15°04.9	69°02.2	105°56.0	110°06.4
14	213°46.8	13.6'	18°56.7	-10.9'	54.5'	111°01.7	85°41.9		30°24.2	15°35.0	69°32.5	106°26.2	110°36.3
15	228°19.4	13.5'	19°07.6	-10.8'	54.5'	110°33.7	85°16.3		29°54.0	16°05.1	70°02.8	106°56.4	111°06.2
16	242°52.0	13.5'	19°18.4	-10.7'	54.5'	110°05.7	84°50.7		29°23.7	16°35.2	70°33.0	107°26.6	111°36.0
17	257°24.4	13.4'	19°29.1	-10.7'	54.5'	109°37.7	84°25.1		28°53.4	17°05.3	71°03.3	107°56.8	112°05.9
18	271°56.9	13.4'	S19°39.8	-10.6'	54.5'	109°09.7	83°59.5		28°23.2	17°35.4	71°33.5	108°27.0	112°35.7
19	286°29.2	13.3'	19°50.4	-10.5'	54.5'	108°41.7	83°34.0		27°53.0	18°05.5	72°03.8	108°57.2	113°05.5
20	301°01.6	13.3'	20°00.8	-10.4'	54.4'	108°13.7	83°08.4		27°22.8	18°35.6	72°34.0	109°27.4	113°35.3
21	315°33.8	13.2'	20°11.2	-10.3'	54.4'	107°45.6	82°42.9		26°52.6	19°05.6	73°04.2	109°57.5	114°05.1
22	330°06.0	13.2'	20°21.5	-10.2'	54.4'	107°17.6	82°17.4		26°22.4	19°35.7	73°34.4	110°27.6	114°34.9
23	344°38.2	13.1'	20°31.7	-10.1'	54.4'	106°49.6	81°52.0		25°52.2	20°05.8	74°04.5	110°57.8	115°04.6
1 st	SD = 14.9' Mer. pass. --:--												

h	Moon (2 nd May)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	+Spica	+Regulus	+Procyon	+Pollux	+Jupiter
0	359°10.3	13.1'	S20°41.8	-10.0'	54.4'	106°21.6	81°26.5	25°22.1	20°35.8	74°34.7	106°23.0	111°27.9	115°34.4
1	13°42.4	13.0'	20°51.8	-9.9'	54.4'	105°53.6	81°01.1	24°51.9	21°05.9	75°04.8	106°51.3	111°58.0	116°04.1
2	28°14.4	12.9'	21°01.8	-9.8'	54.4'	105°25.6	80°35.7	24°21.8	21°35.9	75°35.0	107°19.6	112°28.0	116°33.8
3	42°46.3	12.9'	21°11.6	-9.7'	54.4'	104°57.6	80°10.3	23°51.7	22°06.0	76°05.1	107°47.8	112°58.1	117°03.5
4	57°18.2	12.8'	21°21.3	-9.6'	54.4'	104°29.6	79°45.0	23°21.6	22°36.0	76°35.2	108°16.1	113°28.1	117°33.2
5	71°50.0	12.8'	21°30.9	-9.5'	54.3'	104°01.6	79°19.6	22°51.5	23°06.0	77°05.3	108°44.3	113°58.2	118°02.9
6	86°21.8	12.7'	S21°40.5	-9.4'	54.3'	103°33.6	78°54.3	22°21.4	23°36.0	77°35.4	109°12.5	114°28.2	118°32.6
7	100°53.5	12.7'	21°49.9	-9.3'	54.3'	103°05.6	78°29.1	21°51.4	24°06.0	78°05.5	109°40.7	114°58.2	119°02.2
8	115°25.2	12.6'	21°59.2	-9.2'	54.3'	102°37.6	78°03.8	21°21.3	24°36.0	78°35.5	110°08.8	115°28.2	119°31.9
9	129°56.8	12.6'	22°08.5	-9.1'	54.3'	102°09.7	77°38.6	20°51.3	25°05.9	79°05.6	110°36.9	115°58.2	
10	144°28.4	12.5'	22°17.6	-9.0'	54.3'	101°41.7	77°13.4	20°21.3	25°35.9	79°35.6	111°05.0	116°28.2	
11	158°59.9	12.4'	22°26.7	-8.9'	54.3'	101°13.7	76°48.2	19°51.2	26°05.9	80°05.6	111°33.1	116°58.1	
12	173°31.3	12.4'	S22°35.6	-8.8'	54.3'	100°45.7	76°23.0	19°21.2	26°35.8	80°35.6	112°01.2	117°28.1	
13	188°02.7	12.3'	22°44.4	-8.7'	54.3'	100°17.8	75°57.9	18°51.3	27°05.7	81°05.6	112°29.2	117°58.0	
14	202°34.0	12.3'	22°53.1	-8.6'	54.3'	99°49.8	75°32.8	18°21.3	27°35.7	81°35.6	112°57.2	118°28.0	
15	217°05.3	12.2'	23°01.8	-8.5'	54.2'	99°21.9	75°07.8	17°51.3	28°05.6	82°05.6	113°25.2	118°57.9	
16	231°36.6	12.2'	23°10.3	-8.4'	54.2'	98°53.9	74°42.8	17°21.4	28°35.5	82°35.5	113°53.1	119°27.8	
17	246°07.7	12.1'	23°18.7	-8.3'	54.2'	98°26.0	74°17.8	16°51.4	29°05.4	83°05.5	114°21.1	119°57.7	
18	260°38.9	12.1'	S23°27.0	-8.2'	54.2'	97°58.0	73°52.8	16°21.5	29°35.3	83°35.4	114°49.0		
19	275°09.9	12.0'	23°35.2	-8.1'	54.2'	97°30.1	73°27.9	15°51.6	30°05.2	84°05.4	115°16.8		
20	289°40.9	12.0'	23°43.3	-8.0'	54.2'	97°02.1	73°03.0	15°21.7	30°35.0	84°35.3	115°44.7		
21	304°11.9	11.9'	23°51.2	-7.9'	54.2'	96°34.2	72°38.1	14°51.8	31°04.9	85°05.2	116°12.5		
22	318°42.8	11.9'	23°59.1	-7.8'	54.2'	96°06.3	72°13.3	14°21.9	31°34.8	85°35.1	116°40.3		
23	333°13.7	11.8'	24°06.8	-7.6'	54.2'	95°38.4	71°48.5	13°52.0	32°04.6	86°05.0	117°08.1		
2 nd	SD = 14.8' Mer. pass. 00:03												

h	Moon (3 rd May)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	+Spica	+Arcturus	+Regulus	+Sirius	+Procyon
0	347°44.5	11.8'	S24°14.5	-7.5'	54.2'	95°10.5	71°23.7	13°22.1	32°34.4	47°03.5	86°34.9	117°28.1	117°35.8
1	2°15.2	11.7'	24°22.0	-7.4'	54.2'	94°42.6	70°59.0	12°52.3	33°04.3	47°22.5	87°04.7	117°46.9	118°03.5
2	16°45.9	11.6'	24°29.4	-7.3'	54.1'	94°14.7	70°34.3	12°22.5	33°34.1	47°41.8	87°34.6	118°05.6	118°31.2
3	31°16.6	11.6'	24°36.7	-7.2'	54.1'	93°46.8	70°09.6	11°52.6	34°03.9	48°01.1	88°04.4	118°24.2	118°58.9
4	45°47.2	11.5'	24°43.9	-7.1'	54.1'	93°18.9	69°45.0	11°22.8	34°33.7	48°20.5	88°34.3	118°42.8	119°26.5
5	60°17.7	11.5'	24°51.0	-7.0'	54.1'	92°51.1	69°20.4	10°53.0	35°03.5	48°40.1	89°04.1	119°01.2	119°54.1
6	74°48.2	11.4'	S24°58.0	-6.8'	54.1'	92°23.2	68°55.9	10°23.2	35°33.2	48°59.8	89°33.9	119°19.5	
7	89°18.7	11.4'	25°04.8	-6.7'	54.1'	91°55.4	68°31.4	9°53.4	36°03.0	49°19.7	90°03.7	119°37.8	
8	103°49.0	11.3'	25°11.5	-6.6'	54.1'	91°27.5	68°06.9	9°23.7	36°32.8	49°39.6	90°33.5	119°55.9	
9	118°19.4	11.3'	25°18.1	-6.5'	54.1'	90°59.7	67°42.5	8°53.9	37°02.5	49°59.7	91°03.3		
10	132°49.7	11.3'	25°24.6	-6.4'	54.1'	90°31.8	67°18.1	8°24.2	37°32.3	50°19.8	91°33.1		
11	147°19.9	11.2'	25°31.0	-6.2'	54.1'	90°04.0	66°53.8	7°54.5	38°02.0	50°40.1	92°02.9		
12	161°50.2	11.2'	S25°37.2	-6.1'	54.1'	89°36.2	66°29.5	7°24.7	38°31.8	51°00.5	92°32.6		
13	176°20.3	11.1'	25°43.4	-6.0'	54.1'	89°08.4	66°05.2	6°55.0	39°01.5	51°21.0	93°02.4		
14	190°50.4	11.1'	25°49.4	-5.9'	54.1'	88°40.6	65°41.0	6°25.4	39°31.2	51°41.6	93°32.1		
15	205°20.5	11.0'	25°55.3	-5.8'	54.1'	88°12.8	65°16.9	5°55.7	40°00.9	52°02.3	94°01.9		
16	219°50.5	11.0'	26°01.0	-5.6'	54.1'	87°45.0	64°52.8	5°26.1	40°30.6	52°23.1	94°31.6		
17	234°20.5	10.9'	26°06.7	-5.5'	54.0'	87°17.3	64°28.7	4°56.5	41°00.3	52°44.0	95°01.3		
18	248°50.4	10.9'	S26°12.2	-5.4'	54.0'	86°49.5	64°04.7	4°26.9	41°30.0	53°04.9	95°31.0		
19	263°20.3	10.9'	26°17.6	-5.3'	54.0'	86°21.7	63°40.7	3°57.3	41°59.7	53°26.0	96°00.8		
20	277°50.2	10.8'	26°22.8	-5.1'	54.0'	85°54.0	63°16.8	3°27.9	42°29.3	53°47.1	96°30.5		
21	292°20.0	10.8'	26°28.0	-5.0'	54.0'	85°26.3	62°52.9	2°58.5	42°59.0	54°08.4	97°00.1		
22	306°49.7	10.7'	26°33.0	-4.9'	54.0'	84°58.5	62°29.1	2°29.2	43°28.7	54°29.7	97°29.8		
23	321°19.5	10.7'	26°37.9	-4.8'	54.0'	84°30.8	62°05.4	2°00.1	43°58.3	54°51.1	97°59.5		
3 rd	SD = 14.8' Mer. pass. 00:51												

h Moon (4 th May)						Lunar Distance (objects with largest hourly LD delta)						
Mon	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	\pm Antares	+Spica	+Arcturus	+Regulus
0	335°49.2	10.7'	S26°42.7	-4.6'	54.0'		84°03.1	61°41.7	1°31.4	44°27.9	55°12.6	98°29.2
1	350°18.8	10.6'	26°47.3	-4.5'	54.0'	119°56.4	83°35.4	61°18.0	1°03.6	44°57.6	55°34.2	98°58.9
2	4°48.4	10.6'	26°51.8	-4.4'	54.0'	119°27.2	83°07.7	60°54.4		45°27.2	55°55.8	99°28.5
3	19°18.0	10.5'	26°56.2	-4.3'	54.0'	118°57.9	82°40.1	60°30.9		45°56.8	56°17.6	99°58.2
4	33°47.6	10.5'	27°00.4	-4.1'	54.0'	118°28.7	82°12.4	60°07.4		46°26.5	56°39.3	100°27.8
5	48°17.1	10.5'	27°04.6	-4.0'	54.0'	117°59.5	81°44.7	59°44.0		46°56.1	57°01.2	100°57.4
6	62°46.5	10.4'	S27°08.6	-3.9'	54.0'	117°30.2	81°17.1	59°20.7		47°25.7	57°23.2	101°27.1
7	77°16.0	10.4'	27°12.4	-3.7'	54.0'	117°01.0	80°49.5	58°57.4	2°03.1	47°55.3	57°45.2	101°56.7
8	91°45.4	10.4'	27°16.2	-3.6'	54.0'	116°31.8	80°21.8	58°34.1	2°32.1	48°24.9	58°07.2	102°26.3
9	106°14.8	10.4'	27°19.8	-3.5'	54.0'	116°02.6	79°54.2	58°11.0	3°01.3	48°54.5	58°29.4	102°55.9
10	120°44.1	10.3'	27°23.3	-3.3'	54.0'	115°33.4	79°26.6	57°47.9	3°30.7	49°24.1	58°51.6	103°25.6
11	135°13.5	10.3'	27°26.6	-3.2'	54.0'	115°04.2	78°59.0	57°24.8	4°00.1	49°53.7	59°13.9	103°55.2
12	149°42.8	10.3'	S27°29.8	-3.1'	54.0'	114°35.0	78°31.4	57°01.9	4°29.5	50°23.3	59°36.2	104°24.8
13	164°12.0	10.2'	27°32.9	-2.9'	54.0'	114°05.8	78°03.9	56°39.0	4°59.0	50°52.8	59°58.6	104°54.4
14	178°41.3	10.2'	27°35.8	-2.8'	54.0'	113°36.6	77°36.3	56°16.1	5°28.5	51°22.4	60°21.0	105°24.0
15	193°10.5	10.2'	27°38.7	-2.7'	54.0'	113°07.4	77°08.8	55°53.4	5°58.0	51°52.0	60°43.5	105°53.6
16	207°39.7	10.2'	27°41.3	-2.5'	54.0'	112°38.3	76°41.2	55°30.7	6°27.5	52°21.5	61°06.1	106°23.1
17	222°08.9	10.2'	27°43.9	-2.4'	54.0'	112°09.1	76°13.7	55°08.1	6°57.0	52°51.1	61°28.7	106°52.7
18	236°38.0	10.1'	S27°46.3	-2.3'	54.0'	111°39.9	75°46.2	54°45.6	7°26.5	53°20.7	61°51.4	107°22.3
19	251°07.2	10.1'	27°48.6	-2.1'	54.0'	111°10.7	75°18.7	54°23.1	7°56.0	53°50.2	62°14.1	107°51.9
20	265°36.3	10.1'	27°50.7	-2.0'	54.0'	110°41.5	74°51.2	54°00.7	8°25.6	54°19.8	62°36.9	108°21.4
21	280°05.4	10.1'	27°52.7	-1.9'	54.0'	110°12.4	74°23.7	53°38.4	8°55.1	54°49.3	62°59.7	108°51.0
22	294°34.4	10.1'	27°54.6	-1.7'	54.0'	109°43.2	73°56.3	53°16.2	9°24.6	55°18.9	63°22.6	109°20.6
23	309°03.5	10.0'	27°56.4	-1.6'	54.0'	109°14.0	73°28.8	52°54.1	9°54.1	55°48.4	63°45.6	109°50.1
4 th	SD = 14.7' Mer. pass. 01:40											

h	Moon (5 th May)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Mars	-Saturn	-Fomalhaut	-Altair	+Antares	+Spica	+Arcturus	+Regulus
0	323°32.5	10.0'	S27°58.0	-1.5'	54.0'	118°40.2	108°44.9	73°01.4	52°32.1	10°23.7	56°18.0	64°08.5	110°19.7
1	338°01.6	10.0'	27°59.5	-1.3'	54.0'	118°12.6	108°15.7	72°34.0	52°10.1	10°53.2	56°47.5	64°31.6	110°49.3
2	352°30.6	10.0'	28°00.8	-1.2'	54.0'	117°45.1	107°46.5	72°06.5	51°48.3	11°22.7	57°17.0	64°54.6	111°18.8
3	6°59.6	10.0'	28°02.0	-1.1'	54.0'	117°17.5	107°17.4	71°39.2	51°26.5	11°52.3	57°46.6	65°17.7	111°48.4
4	21°28.6	10.0'	28°03.1	-0.9'	54.0'	116°50.0	106°48.2	71°11.8	51°04.8	12°21.8	58°16.1	65°40.9	112°17.9
5	35°57.6	10.0'	28°04.0	-0.8'	54.0'	116°22.4	106°19.1	70°44.4	50°43.3	12°51.3	58°45.6	66°04.1	112°47.5
6	50°26.6	10.0'	S28°04.8	-0.7'	54.0'	115°54.9	105°49.9	70°17.0	50°21.8	13°20.9	59°15.2	66°27.4	113°17.0
7	64°55.6	10.0'	28°05.5	-0.5'	54.0'	115°27.3	105°20.7	69°49.7	50°00.4	13°50.4	59°44.7	66°50.6	113°46.6
8	79°24.5	10.0'	28°06.0	-0.4'	54.0'	114°59.8	104°51.6	69°22.4	49°39.1	14°19.9	60°14.2	67°14.0	114°16.1
9	93°53.5	10.0'	28°06.4	-0.3'	54.0'	114°32.2	104°22.4	68°55.0	49°18.0	14°49.5	60°43.8	67°37.3	114°45.7
10	108°22.5	10.0'	28°06.6	-0.1'	54.0'	114°04.7	103°53.3	68°27.7	48°56.9	15°19.0	61°13.3	68°00.7	115°15.2
11	122°51.4	10.0'	28°06.8	0.0'	54.0'	113°37.1	103°24.1	68°00.5	48°35.9	15°48.6	61°42.8	68°24.2	115°44.8
12	137°20.4	10.0'	S28°06.7	0.2'	54.0'	113°09.6	102°54.9	67°33.2	48°15.1	16°18.1	62°12.4	68°47.7	116°14.3
13	151°49.4	10.0'	28°06.6	0.3'	54.0'	112°42.0	102°25.8	67°05.9	47°54.4	16°47.6	62°41.9	69°11.2	116°43.9
14	166°18.3	10.0'	28°06.3	0.4'	54.0'	112°14.5	101°56.6	66°38.7	47°33.8	17°17.2	63°11.4	69°34.7	117°13.4
15	180°47.3	10.0'	28°05.9	0.6'	54.0'	111°46.9	101°27.4	66°11.5	47°13.3	17°46.7	63°41.0	69°58.3	117°43.0
16	195°16.2	10.0'	28°05.3	0.7'	54.0'	111°19.4	100°58.3	65°44.2	46°52.9	18°16.3	64°10.5	70°21.9	118°12.6
17	209°45.2	10.0'	28°04.6	0.8'	54.0'	110°51.8	100°29.1	65°17.1	46°32.6	18°45.8	64°40.1	70°45.6	118°42.1
18	224°14.2	10.0'	S28°03.8	1.0'	54.0'	110°24.2	99°59.9	64°49.9	46°12.5	19°15.4	65°09.6	71°09.3	119°11.7
19	238°43.2	10.0'	28°02.8	1.1'	54.0'	109°56.7	99°30.8	64°22.7	45°52.5	19°44.9	65°39.2	71°33.0	119°41.2
20	253°12.2	10.0'	28°01.7	1.2'	54.0'	109°29.1	99°01.6	63°55.6	45°32.7	20°14.5	66°08.7	71°56.7	
21	267°41.2	10.0'	28°00.5	1.4'	54.0'	109°01.5	98°32.4	63°28.4	45°12.9	20°44.0	66°38.2	72°20.5	
22	282°10.2	10.0'	27°59.1	1.5'	54.0'	108°34.0	98°03.2	63°01.3	44°53.4	21°13.6	67°07.8	72°44.3	
23	296°39.2	10.0'	27°57.6	1.6'	54.0'	108°06.4	97°34.0	62°34.2	44°33.9	21°43.2	67°37.4	73°08.2	
5 th	SD = 14.7' Mer. pass. 02:31												

h	Moon (6 th May)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Mars	-Saturn	-Fomalhaut	-Altair	+Antares	+Hadar	+Spica	+Arcturus
0	311°08.3	10.1'	S27°55.9	1.8'	54.0'	107°38.8	97°04.8	62°07.2	44°14.6	22°12.7	51°55.7	68°06.9	73°32.1
1	325°37.3	10.1'	27°54.1	1.9'	54.0'	107°11.2	96°35.6	61°40.1	43°55.5	22°42.3	52°13.4	68°36.5	73°56.0
2	340°06.4	10.1'	27°52.2	2.1'	54.0'	106°43.6	96°06.4	61°13.1	43°36.5	23°11.9	52°31.2	69°06.0	74°19.9
3	354°35.5	10.1'	27°50.2	2.2'	54.1'	106°16.0	95°37.2	60°46.1	43°17.6	23°41.4	52°49.2	69°35.6	74°43.9
4	9°04.6	10.1'	27°48.0	2.3'	54.1'	105°48.4	95°08.0	60°19.1	42°59.0	24°11.0	53°07.2	70°05.2	75°07.8
5	23°33.7	10.1'	27°45.7	2.5'	54.1'	105°20.8	94°38.8	59°52.1	42°40.4	24°40.6	53°25.4	70°34.8	75°31.9
6	38°02.8	10.2'	S27°43.2	2.6'	54.1'	104°53.2	94°09.6	59°25.2	42°22.1	25°10.2	53°43.7	71°04.4	75°55.9
7	52°32.0	10.2'	27°40.6	2.7'	54.1'	104°25.6	93°40.4	58°58.2	42°03.9	25°39.8	54°02.2	71°33.9	76°20.0
8	67°01.1	10.2'	27°37.9	2.9'	54.1'	103°58.0	93°11.2	58°31.3	41°45.9	26°09.4	54°20.7	72°03.5	76°44.1
9	81°30.3	10.2'	27°35.1	3.0'	54.1'	103°30.4	92°41.9	58°04.4	41°28.0	26°39.0	54°39.4	72°33.1	77°08.2
10	95°59.6	10.2'	27°32.1	3.1'	54.1'	103°02.8	92°12.7	57°37.6	41°10.4	27°08.6	54°58.2	73°02.8	77°32.3
11	110°28.8	10.3'	27°28.9	3.3'	54.1'	102°35.1	91°43.4	57°10.7	40°52.9	27°38.3	55°17.1	73°32.4	77°56.5
12	124°58.1	10.3'	S27°25.7	3.4'	54.1'	102°07.5	91°14.2	56°43.9	40°35.6	28°07.9	55°36.1	74°02.0	78°20.7
13	139°27.4	10.3'	27°22.3	3.5'	54.1'	101°39.8	90°44.9	56°17.1	40°18.6	28°37.5	55°55.2	74°31.6	78°44.9
14	153°56.7	10.3'	27°18.8	3.6'	54.1'	101°12.2	90°15.7	55°50.3	40°01.7	29°07.2	56°14.4	75°01.3	79°09.1
15	168°26.0	10.4'	27°15.2	3.8'	54.1'	100°44.5	89°46.4	55°23.6	39°45.0	29°36.8	56°33.7	75°30.9	79°33.4
16	182°55.4	10.4'	27°11.4	3.9'	54.2'	100°16.8	89°17.1	54°56.9	39°28.5	30°06.5	56°53.1	76°00.5	79°57.6
17	197°24.8	10.4'	27°07.5	4.0'	54.2'	99°49.2	88°47.8	54°30.2	39°12.2	30°36.2	57°12.7	76°30.2	80°21.9
18	211°54.3	10.5'	S27°03.4	4.2'	54.2'	99°21.5	88°18.5	54°03.5	38°56.2	31°05.8	57°32.3	76°59.9	80°46.2
19	226°23.7	10.5'	26°59.3	4.3'	54.2'	98°53.8	87°49.2	53°36.9	38°40.4	31°35.5	57°52.0	77°29.5	81°10.6
20	240°53.2	10.5'	26°55.0	4.4'	54.2'	98°26.1	87°19.9	53°10.3	38°24.8	32°05.2	58°11.8	77°59.2	81°34.9
21	255°22.8	10.6'	26°50.5	4.6'	54.2'	97°58.3	86°50.6	52°43.7	38°09.4	32°34.9	58°31.7	78°28.9	81°59.3
22	269°52.3	10.6'	26°46.0	4.7'	54.2'	97°30.6	86°21.2	52°17.2	37°54.3	33°04.6	58°51.7	78°58.6	82°23.7
23	284°21.9	10.6'	26°41.3	4.8'	54.2'	97°02.9	85°51.9	51°50.6		33°34.4	59°11.8	79°28.3	82°48.1
6 th	SD = 14.7' Mer. pass. 03:22												

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

2026 May 07 to May. 09 UT

h	Moon (7 th May)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Sun	-Mars	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Spica	+Arcturus
0	298°51.6	10.7'	S26°36.5	4.9'	54.2'		96°35.1	85°22.5	51°24.2	34°04.1	55°12.1	79°58.1	83°12.6
1	313°21.2	10.7'	26°31.6	5.1'	54.3'		96°07.4	84°53.2	50°57.7	34°33.8	55°32.1	80°27.8	83°37.0
2	327°50.9	10.7'	26°26.5	5.2'	54.3'		95°39.6	84°23.8	50°31.3	35°03.6	55°52.2	80°57.5	84°01.5
3	342°20.7	10.8'	26°21.3	5.3'	54.3'		95°11.8	83°54.4	50°04.9	35°33.4	56°12.3	81°27.3	84°26.0
4	356°50.4	10.8'	26°16.0	5.4'	54.3'		94°44.1	83°25.0	49°38.6	36°03.1	56°32.6	81°57.1	84°50.5
5	11°20.3	10.9'	26°10.5	5.6'	54.3'	119°48.5	94°16.3	82°55.6	49°12.3	36°32.9	56°53.0	82°26.8	85°15.0
6	25°50.1	10.9'	S26°05.0	5.7'	54.3'	119°21.3	93°48.4	82°26.2	48°46.0	37°02.7	57°13.4	82°56.6	85°39.6
7	40°20.0	10.9'	25°59.3	5.8'	54.3'	118°54.0	93°20.6	81°56.8	48°19.8	37°32.5	57°34.0	83°26.4	86°04.1
8	54°49.9	11.0'	25°53.5	5.9'	54.3'	118°26.7	92°52.8	81°27.3	47°53.6	38°02.4	57°54.7	83°56.2	86°28.7
9	69°19.9	11.0'	25°47.5	6.1'	54.4'	117°59.4	92°24.9	80°57.9	47°27.5	38°32.2	58°15.4	84°26.1	86°53.3
10	83°49.9	11.1'	25°41.5	6.2'	54.4'	117°32.1	91°57.1	80°28.4	47°01.4	39°02.0	58°36.3	84°55.9	87°17.9
11	98°20.0	11.1'	25°35.3	6.3'	54.4'	117°04.8	91°29.2	79°58.9	46°35.4	39°31.9	58°57.2	85°25.8	87°42.5
12	112°50.1	11.1'	S25°29.0	6.4'	54.4'	116°37.5	91°01.3	79°29.4	46°09.4	40°01.8	59°18.2	85°55.6	88°07.1
13	127°20.2	11.2'	25°22.5	6.5'	54.4'	116°10.1	90°33.4	78°59.9	45°43.4	40°31.7	59°39.3	86°25.5	88°31.8
14	141°50.4	11.2'	25°16.0	6.7'	54.4'	115°42.7	90°05.5	78°30.4	45°17.5	41°01.6	60°00.5	86°55.4	88°56.4
15	156°20.6	11.3'	25°09.3	6.8'	54.4'	115°15.4	89°37.5	78°00.9	44°51.7	41°31.5	60°21.8	87°25.3	89°21.1
16	170°50.9	11.3'	25°02.5	6.9'	54.5'	114°48.0	89°09.6	77°31.3	44°25.9	42°01.4	60°43.2	87°55.2	89°45.8
17	185°21.2	11.4'	24°55.6	7.0'	54.5'	114°20.5	88°41.6	77°01.8	44°00.2	42°31.4	61°04.6	88°25.2	90°10.5
18	199°51.5	11.4'	S24°48.6	7.1'	54.5'	113°53.1	88°13.7	76°32.2	43°34.5	43°01.4	61°26.2	88°55.1	90°35.2
19	214°21.9	11.4'	24°41.4	7.3'	54.5'	113°25.7	87°45.7	76°02.6	43°08.9	43°31.3	61°47.8	89°25.1	90°59.9
20	228°52.4	11.5'	24°34.2	7.4'	54.5'	112°58.2	87°17.7	75°33.0	42°43.3	44°01.3	62°09.5	89°55.1	91°24.7
21	243°22.9	11.5'	24°26.8	7.5'	54.5'	112°30.7	86°49.6	75°03.3	42°17.8	44°31.4	62°31.2	90°25.1	91°49.4
22	257°53.4	11.6'	24°19.3	7.6'	54.6'	112°03.2	86°21.6	74°33.7	41°52.4	45°01.4	62°53.1	90°55.1	92°14.2
23	272°24.0	11.6'	24°11.7	7.7'	54.6'	111°35.7	85°53.5	74°04.0	41°27.0	45°31.4	63°15.0	91°25.2	92°39.0
7 th	SD = 14.8' Mer. pass. 04:13					Sun SD = 15.8'							

h	Moon (8 th May)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Sun	-Mars	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Spica	+Arcturus
0	286°54.6	11.7'	S24°04.0	7.8'	54.6'	111°08.2	85°25.4	73°34.4	41°01.7	46°01.5	63°37.0	91°55.2	93°03.7
1	301°25.2	11.7'	23°56.1	8.0'	54.6'	110°40.6	84°57.3	73°04.7	40°36.5	46°31.6	63°59.0	92°25.3	93°28.5
2	315°56.0	11.8'	23°48.2	8.1'	54.6'	110°13.0	84°29.2	72°35.0	40°11.4	47°01.7	64°21.2	92°55.4	93°53.3
3	330°26.7	11.8'	23°40.1	8.2'	54.6'	109°45.5	84°01.1	72°05.2	39°46.3	47°31.8	64°43.4	93°25.5	94°18.2
4	344°57.5	11.8'	23°31.9	8.3'	54.7'	109°17.8	83°33.0	71°35.5	39°21.4	48°02.0	65°05.7	93°55.6	94°43.0
5	359°28.4	11.9'	23°23.6	8.4'	54.7'	108°50.2	83°04.8	71°05.7	38°56.5	48°32.1	65°28.0	94°25.8	95°07.8
6	13°59.3	11.9'	S23°15.2	8.5'	54.7'	108°22.6	82°36.6	70°35.9	38°31.7	49°02.3	65°50.5	94°55.9	95°32.6
7	28°30.2	12.0'	23°06.7	8.6'	54.7'	107°54.9	82°08.4	70°06.1	38°07.0	49°32.5	66°13.0	95°26.1	95°57.5
8	43°01.2	12.0'	22°58.1	8.7'	54.7'	107°27.2	81°40.2	69°36.3	37°42.4	50°02.7	66°35.5	95°56.3	96°22.3
9	57°32.2	12.1'	22°49.3	8.8'	54.8'	106°59.5	81°11.9	69°06.5	37°17.9	50°33.0	66°58.1	96°26.6	96°47.2
10	72°03.3	12.1'	22°40.5	9.0'	54.8'	106°31.7	80°43.6	68°36.6	36°53.5	51°03.2	67°20.8	96°56.8	97°12.1
11	86°34.4	12.2'	22°31.5	9.1'	54.8'	106°04.0	80°15.3	68°06.7	36°29.2	51°33.5	67°43.6	97°27.1	97°36.9
12	101°05.6	12.2'	S22°22.5	9.2'	54.8'	105°36.2	79°47.0	67°36.8	36°05.0	52°03.8	68°06.4	97°57.4	98°01.8
13	115°36.8	12.3'	22°13.3	9.3'	54.8'	105°08.4	79°18.7	67°06.9	35°41.0	52°34.2	68°29.3	98°27.7	98°26.7
14	130°08.1	12.3'	22°04.0	9.4'	54.9'	104°40.6	78°50.3	66°36.9	35°17.0	53°04.5	68°52.2	98°58.1	98°51.6
15	144°39.4	12.4'	21°54.7	9.5'	54.9'	104°12.7	78°22.0	66°07.0	34°53.2	53°34.9	69°15.2	99°28.4	99°16.5
16	159°10.7	12.4'	21°45.2	9.6'	54.9'	103°44.9	77°53.6	65°37.0	34°29.5	54°05.3	69°38.3	99°58.8	99°41.4
17	173°42.1	12.4'	21°35.6	9.7'	54.9'	103°17.0	77°25.1	65°06.9	34°06.0	54°35.7	70°01.4	100°29.2	100°06.3
18	188°13.6	12.5'	S21°25.9	9.8'	55.0'	102°49.1	76°56.7	64°36.9	33°42.6	55°06.2	70°24.6	100°59.6	100°31.2
19	202°45.0	12.5'	21°16.1	9.9'	55.0'	102°21.1	76°28.2	64°06.9	33°19.3	55°36.6	70°47.9	101°30.1	100°56.1
20	217°16.6	12.6'	21°06.2	10.0'	55.0'	101°53.2	75°59.7	63°36.8	32°56.2	56°07.1	71°11.2	102°00.6	101°21.0
21	231°48.1	12.6'	20°56.2	10.1'	55.0'	101°25.2	75°31.2	63°06.7	32°33.3	56°37.6	71°34.5	102°31.1	101°46.0
22	246°19.8	12.7'	20°46.1	10.2'	55.1'	100°57.1	75°02.7	62°36.5	32°10.5	57°08.2	71°58.0	103°01.6	102°10.9
23	260°51.4	12.7'	20°35.9	10.3'	55.1'	100°29.1	74°34.1	62°06.4	31°47.9	57°38.7	72°21.4	103°32.2	102°35.8
8 th	SD = 14.9' Mer. pass. 05:02					Sun SD = 15.8'							

h	Moon (9 th May)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Sun	-Mars	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Arcturus	+Spica
0	275°23.1	12.7'	S20°25.6	10.4'	55.1'	100°01.0	74°05.5	61°36.2	31°25.5	58°09.3	72°45.0	103°00.7	104°02.8
1	289°54.9	12.8'	20°15.2	10.5'	55.1'	99°32.9	73°36.9	61°06.0	31°03.3	58°40.0	73°08.5	103°25.6	104°33.4
2	304°26.7	12.8'	20°04.7	10.6'	55.2'	99°04.8	73°08.2	60°35.8	30°41.3	59°10.6	73°32.2	103°50.5	105°04.0
3	318°58.5	12.9'	19°54.1	10.7'	55.2'	98°36.7	72°39.6	60°05.5	30°19.5	59°41.3	73°55.9	104°15.5	105°34.7
4	333°30.4	12.9'	19°43.4	10.8'	55.2'	98°08.5	72°10.9	59°35.2	29°57.9	60°12.0	74°19.6	104°40.4	106°05.3
5	348°02.3	13.0'	19°32.7	10.9'	55.2'	97°40.3	71°42.1	59°04.9	29°36.5	60°42.7	74°43.4	105°05.3	106°36.1
6	2°34.2	13.0'	S19°21.8	11.0'	55.3'	97°12.1	71°13.4	58°34.6	29°15.4	61°13.5	75°07.3	105°30.2	107°06.8
7	17°06.2	13.0'	19°10.8	11.1'	55.3'	96°43.8	70°44.6	58°04.3	28°54.5	61°44.3	75°31.2	105°55.1	107°37.6
8	31°38.2	13.1'	18°59.7	11.2'	55.3'	96°15.5	70°15.8	57°33.9	28°33.8	62°15.1	75°55.1	106°20.0	108°08.4
9	46°10.3	13.1'	18°48.6	11.3'	55.3'	95°47.2	69°47.0	57°03.5	28°13.4	62°45.9	76°19.1	106°44.9	108°39.2
10	60°42.4	13.1'	18°37.3	11.3'	55.4'	95°18.9	69°18.1	56°33.0	27°53.3	63°16.8	76°43.2	107°09.8	109°10.1
11	75°14.6	13.2'	18°26.0	11.4'	55.4'	94°50.5	68°49.2	56°02.6	27°33.5	63°47.7	77°07.3	107°34.7	109°40.9
12	89°46.8	13.2'	S18°14.5	11.5'	55.4'	94°22.1	68°20.3	55°32.1	27°14.0	64°18.6	77°31.4	107°59.6	110°11.9
13	104°19.0	13.3'	18°03.0	11.6'	55.4'	93°53.6	67°51.3	55°01.5	26°54.8	64°49.6	77°55.6	108°24.4	110°42.8
14	118°51.2	13.3'	17°51.4	11.7'	55.5'	93°25.2	67°22.4	54°31.0	26°35.9	65°20.6	78°19.8	108°49.3	111°13.8
15	133°23.5	13.3'	17°39.7	11.8'	55.5'	92°56.7	66°53.3	54°00.4	26°17.3	65°51.6	78°44.1	109°14.2	111°44.8
16	147°55.9	13.4'	17°27.9	11.9'	55.5'	92°28.1	66°24.3	53°29.8	25°59.1	66°22.7	79°08.5	109°39.0	112°15.8
17	162°28.2	13.4'	17°16.0	12.0'	55.6'	91°59.6	65°55.2	52°59.2	25°41.3	66°53.7	79°32.8	110°03.8	112°46.9
18	177°00.6	13.4'	S17°04.0	12.1'	55.6'	91°31.0	65°26.1	52°28.5	25°23.8	67°24.9	79°57.3	110°28.7	113°18.0
19	191°33.1	13.5'	16°52.0	12.1'	55.6'	91°02.4	64°57.0	51°57.8	25°06.7	67°56.0	80°21.7	110°53.5	113°49.2
20	206°05.5	13.5'	16°39.8	12.2'	55.6'	90°33.7	64°27.8	51°27.1	24°50.1	68°27.2	80°46.2	111°18.3	114°20.3
21	220°38.0	13.5'	16°27.6	12.3'	55.7'	90°05.0	63°58.6	50°56.3	24°33.8	68°58.4	81°10.8	111°43.1	114°51.5
22	235°10.5	13.6'	16°15.3	12.4'	55.7'	89°36.3	63°29.4	50°25.5	24°18.0	69°29.7	81°35.4	112°07.8	115°22.8
23	249°43.1	13.6'	16°02.9	12.5'	55.7'	89°07.5	63°00.1	49°54.7	24°02.7	70°00.9	82°00.0	112°32.6	115°54.0
9 th	SD = 15.0' Mer. pass. 05:49					Sun SD = 15.8'							

DUT1 = UT1-UTC = +0.0929 sec $\Delta T = TT-UT1 = +69.0911$ sec

2026 May 10 to May. 12 UT

h Moon (10 th May)						Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Sun	-Mars	-Saturn	+Antares	+Rigil Kent.	+Hadar	+Arcturus	+Spica
0	264°15.7	13.6'	S15°50.4	12.6'	55.8'	88°38.7	62°30.8	49°23.9	70°32.3	82°24.7	86°36.1	112°57.3	116°25.3
1	278°48.3	13.6'	15°37.9	12.6'	55.8'	88°09.9	62°01.5	48°53.0	71°03.6	82°49.5	87°00.4	113°22.0	116°56.7
2	293°21.0	13.7'	15°25.2	12.7'	55.8'	87°41.0	61°32.1	48°22.1	71°35.0	83°14.2	87°24.7	113°46.7	117°28.0
3	307°53.6	13.7'	15°12.5	12.8'	55.9'	87°12.2	61°02.7	47°51.2	72°06.4	83°39.0	87°49.1	114°11.4	117°59.4
4	322°26.3	13.7'	14°59.7	12.9'	55.9'	86°43.2	60°33.3	47°20.2	72°37.9	84°03.9	88°13.5	114°36.0	118°30.9
5	336°59.0	13.7'	14°46.8	13.0'	55.9'	86°14.3	60°03.9	46°49.2	73°09.4	84°28.8	88°37.9	115°00.7	119°02.4
6	351°31.8	13.8'	S14°33.9	13.0'	55.9'	85°45.3	59°34.4	46°18.1	73°40.9	84°53.7	89°02.3	115°25.3	119°33.9
7	6°04.6	13.8'	14°20.8	13.1'	56.0'	85°16.2	59°04.8	45°47.1	74°12.5	85°18.7	89°26.8	115°49.8	
8	20°37.4	13.8'	14°07.7	13.2'	56.0'	84°47.1	58°35.2	45°16.0	74°44.1	85°43.7	89°51.3	116°14.4	
9	35°10.2	13.8'	13°54.5	13.3'	56.0'	84°18.0	58°05.6	44°44.8	75°15.7	86°08.7	90°15.8	116°38.9	
10	49°43.0	13.9'	13°41.3	13.3'	56.1'	83°48.9	57°36.0	44°13.7	75°47.4	86°33.8	90°40.4	117°03.4	
11	64°15.9	13.9'	13°27.9	13.4'	56.1'	83°19.7	57°06.3	43°42.5	76°19.1	86°58.9	91°04.9	117°27.9	
12	78°48.8	13.9'	S13°14.5	13.5'	56.1'	82°50.5	56°36.6	43°11.3	76°50.9	87°24.0	91°29.5	117°52.3	
13	93°21.7	13.9'	13°01.0	13.6'	56.2'	82°21.2	56°06.9	42°40.0	77°22.7	87°49.2	91°54.2	118°16.7	
14	107°54.6	13.9'	12°47.5	13.6'	56.2'	81°51.9	55°37.1	42°08.7	77°54.5	88°14.4	92°18.8	118°41.1	
15	122°27.5	14.0'	12°33.9	13.7'	56.2'	81°22.6	55°07.3	41°37.4	78°26.4	88°39.7	92°43.5	119°05.4	
16	137°00.5	14.0'	12°20.2	13.8'	56.3'	80°53.2	54°37.4	41°06.0	78°58.3	89°05.0	93°08.2	119°29.7	
17	151°33.4	14.0'	12°06.4	13.8'	56.3'	80°23.8	54°07.5	40°34.6	79°30.2	89°30.3	93°33.0	119°53.9	
18	166°06.4	14.0'	S11°52.6	13.9'	56.3'	79°54.3	53°37.6	40°03.2	80°02.2	89°55.7	93°57.7		
19	180°39.4	14.0'	11°38.7	14.0'	56.4'	79°24.9	53°07.6	39°31.7	80°34.2	90°21.0	94°22.5		
20	195°12.4	14.0'	11°24.7	14.0'	56.4'	78°55.3	52°37.6	39°00.2	81°06.3	90°46.5	94°47.3		
21	209°45.4	14.0'	11°10.6	14.1'	56.5'	78°25.7	52°07.5	38°28.7	81°38.4	91°11.9	95°12.2		
22	224°18.4	14.0'	10°56.5	14.2'	56.5'	77°56.1	51°37.4	37°57.1	82°10.6	91°37.4	95°37.0		
23	238°51.5	14.0'	10°42.4	14.2'	56.5'	77°26.5	51°07.3	37°25.5	82°42.7	92°02.9	96°01.9		
10 th	SD = 15.2' Mer. pass. 06:35					Sun SD = 15.8'							

h Moon (11 th May)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Polaris	-Sun	-Mars	-Saturn	+Altair	+Antares	+Rigil Kent.	+Hadar
0	253°24.5	14.0'	S10°28.1	14.3'	56.6'		76°56.8	50°37.2	36°53.9	41°56.5	83°15.0	92°28.4	96°26.7
1	267°57.6	14.1'	10°13.8	14.4'	56.6'		76°27.0	50°07.0	36°22.3	42°16.3	83°47.2	92°54.0	96°51.7
2	282°30.6	14.1'	09°59.5	14.4'	56.6'		75°57.3	49°36.7	35°50.6	42°36.3	84°19.6	93°19.6	97°16.6
3	297°03.7	14.1'	09°45.1	14.5'	56.7'		75°27.5	49°06.4	35°18.8	42°56.5	84°51.9	93°45.2	97°41.5
4	311°36.8	14.1'	09°30.6	14.5'	56.7'		74°57.6	48°36.1	34°47.1	43°16.9	85°24.3	94°10.8	98°06.5
5	326°09.8	14.1'	09°16.0	14.6'	56.7'		74°27.7	48°05.7	34°15.3	43°37.6	85°56.8	94°36.5	98°31.4
6	340°42.9	14.1'	S09°01.4	14.7'	56.8'		73°57.7	47°35.3	33°43.5	43°58.5	86°29.3	95°02.2	98°56.4
7	355°16.0	14.1'	08°46.8	14.7'	56.8'		73°27.8	47°04.9	33°11.6	44°19.6	87°01.8	95°27.9	99°21.4
8	9°49.0	14.1'	08°32.1	14.8'	56.8'	98°17.2	72°57.7	46°34.4	32°39.7	44°40.9	87°34.4	95°53.6	99°46.4
9	24°22.1	14.1'	08°17.3	14.8'	56.9'	98°02.1	72°27.7	46°03.9	32°07.8	45°02.4	88°07.0	96°19.4	100°11.4
10	38°55.2	14.1'	08°02.5	14.9'	56.9'	97°47.0	71°57.5	45°33.3	31°35.9	45°24.2	88°39.6	96°45.2	100°36.5
11	53°28.2	14.1'	07°47.6	14.9'	57.0'	97°31.8	71°27.4	45°02.7	31°03.9	45°46.1	89°12.3	97°11.0	101°01.5
12	68°01.3	14.0'	S07°32.6	15.0'	57.0'	97°16.6	70°57.2	44°32.1	30°31.9	46°08.2	89°45.1	97°36.8	101°26.6
13	82°34.3	14.0'	07°17.6	15.0'	57.0'	97°01.3	70°26.9	44°01.4	29°59.9	46°30.5	90°17.9	98°02.7	101°51.6
14	97°07.4	14.0'	07°02.6	15.1'	57.1'	96°46.0	69°56.6	43°30.7	29°27.8	46°53.0	90°50.7	98°28.5	102°16.7
15	111°40.4	14.0'	06°47.5	15.1'	57.1'	96°30.6	69°26.3	42°59.9	28°55.7	47°15.7	91°23.6	98°54.4	102°41.8
16	126°13.4	14.0'	06°32.4	15.2'	57.1'	96°15.2	68°55.9	42°29.1	28°23.6	47°38.6	91°56.6	99°20.3	103°06.8
17	140°46.4	14.0'	06°17.2	15.2'	57.2'	95°59.7	68°25.5	41°58.2	27°51.5	48°01.6	92°29.5	99°46.2	103°31.9
18	155°19.4	14.0'	S06°01.9	15.3'	57.2'	95°44.2	67°55.0	41°27.4	27°19.3	48°24.9	93°02.6	100°12.2	103°57.0
19	169°52.4	14.0'	05°46.6	15.3'	57.3'	95°28.6	67°24.5	40°56.4	26°47.1	48°48.3	93°35.6	100°38.1	104°22.1
20	184°25.4	14.0'	05°31.3	15.4'	57.3'	95°13.0	66°53.9	40°25.5	26°14.9	49°11.8	94°08.7	101°04.1	104°47.2
21	198°58.3	13.9'	05°15.9	15.4'	57.3'	94°57.3	66°23.3	39°54.4	25°42.7	49°35.6	94°41.9	101°30.0	105°12.3
22	213°31.3	13.9'	05°00.5	15.5'	57.4'	94°41.6	65°52.7	39°23.4	25°10.4	49°59.5	95°15.1	101°56.0	105°37.3
23	228°04.2	13.9'	04°45.0	15.5'	57.4'	94°25.9	65°22.0	38°52.3	24°38.2	50°23.6	95°48.4	102°22.0	106°02.4
11 th	SD = 15.4' Mer. pass. 07:20					Sun SD = 15.8'							

h Moon (12 th May)						Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Polaris	-Sun	-Mars	-Saturn	+Fomalhaut	+Altair	+Antares	+Rigil Kent.
0	242°37.1	13.9'	S04°29.5	15.6'	57.5'	94°10.1	64°51.2	38°21.2	24°05.9	25°05.5	50°47.8	96°21.7	102°48.0
1	257°10.0	13.9'	04°13.9	15.6'	57.5'	93°54.2	64°20.5	37°50.0	23°33.6	25°23.7	51°12.2	96°55.0	103°14.0
2	271°42.8	13.8'	03°58.3	15.6'	57.5'	93°38.4	63°49.6	37°18.8	23°01.3	25°42.5	51°36.7	97°28.4	103°40.0
3	286°15.6	13.8'	03°42.7	15.7'	57.6'	93°22.5	63°18.7	36°47.5	22°29.0	26°01.7	52°01.4	98°01.9	104°06.0
4	300°48.4	13.8'	03°27.0	15.7'	57.6'	93°06.5	62°47.8	36°16.2	21°56.7	26°21.4	52°26.3	98°35.3	104°32.1
5	315°21.2	13.8'	03°11.3	15.7'	57.7'	92°50.5	62°16.8	35°44.9	21°24.4	26°41.6	52°51.3	99°08.9	104°58.1
6	329°54.0	13.7'	S02°55.6	15.8'	57.7'	92°34.5	61°45.8	35°13.5	20°52.1	27°02.2	53°16.4	99°42.5	105°24.1
7	344°26.7	13.7'	02°39.8	15.8'	57.7'	92°18.5	61°14.8	34°42.1	20°19.8	27°23.2	53°41.7	100°16.1	105°50.2
8	358°59.4	13.7'	02°24.0	15.9'	57.8'	92°02.4	60°43.7	34°10.6	19°47.5	27°44.6	54°07.1	100°49.8	106°16.2
9	13°32.1	13.6'	02°08.1	15.9'	57.8'	91°46.3	60°12.5	33°39.2	19°15.2	28°06.5	54°32.7	101°23.5	106°42.2
10	28°04.7	13.6'	01°52.2	15.9'	57.9'	91°30.1	59°41.3	33°07.6	18°42.9	28°28.7	54°58.4	101°57.3	107°08.2
11	42°37.3	13.6'	01°36.3	15.9'	57.9'	91°13.9	59°10.0	32°36.1	18°10.7	28°51.3	55°24.2	102°31.1	107°34.3
12	57°09.8	13.5'	S01°20.4	16.0'	57.9'	90°57.7	58°38.7	32°04.5	17°38.5	29°14.3	55°50.2	103°05.0	108°00.3
13	71°42.4	13.5'	01°04.4	16.0'	58.0'	90°41.5	58°07.4	31°32.8	17°06.3	29°37.6	56°16.3	103°39.0	108°26.3
14	86°14.9	13.4'	00°48.4	16.0'	58.0'	90°25.2	57°36.0	31°01.1	16°34.2	30°01.3	56°42.5	104°12.9	108°52.3
15	100°47.3	13.4'	00°32.4	16.1'	58.1'	90°09.0	57°04.6	30°29.4	16°02.1	30°25.3	57°08.9	104°47.0	109°18.3
16	115°19.7	13.4'	00°16.3	16.1'	58.1'	89°52.6	56°33.1	29°57.7	15°30.1	30°49.6	57°35.4	105°21.0	109°44.3
17	129°52.1	13.3'	S00°00.2	16.1'	58.1'	89°36.3	56°01.5	29°25.9	14°58.3	31°14.2	58°02.0	105°55.2	110°10.2
18	144°24.4	13.3'	N00°15.9	16.1'	58.2'	89°20.0	55°30.0	28°54.1	14°26.5	31°39.1	58°28.7	106°29.3	110°36.2
19	158°56.7	13.2'	00°32.0	16.1'	58.2'	89°03.6	54°58.3	28°22.2	13°54.8	32°04.3	58°55.5	107°03.6	111°02.1
20	173°28.9	13.2'	00°48.1	16.2'	58.2'	88°47.2	54°26.7	27°50.3	13°23.2	32°29.8	59°22.5	107°37.8	111°28.0
21	188°01.1	13.1'	01°04.3	16.2'	58.3'	88°30.8	53°55.0	27°18.4	12°51.8	32°55.6	59°49.6	108°12.1	111°53.9
22	202°33.2	13.1'	01°20.5	16.2'	58.3'	88°14.4	53°23.2	26°46.5	12°20.6	33°21.6	60°16.8	108°46.5	112°1

DUT1 = UT1-UTC = +0.0933 sec $\Delta T = TT-UT1 = +69.0907$ sec

2026 May 13 to May. 15 UT

h		Moon (13 th May)					Lunar Distance (objects with largest hourly LD delta)						
Wed	GHA	ν	Dec	d	HP	-Polaris	-Sun	-Mars	-Saturn	+Fomalhaut	+Altair	+Antares	+Rigel Kent.
0	231°37.3	13.0'	N01°52.9	16.2'	58.4'	87°41.5	52°19.5	25°42.5	11°19.0	34°14.5	61°11.5	109°55.4	113°11.4
1	246°09.3	12.9'	02°09.1	16.2'	58.4'	87°25.0	51°47.6	25°10.5	10°48.5	34°41.3	61°39.0	110°29.9	113°37.2
2	260°41.2	12.9'	02°25.3	16.3'	58.5'	87°08.5	51°15.7	24°38.4	10°18.5	35°08.3	62°06.6	111°04.5	114°03.0
3	275°13.1	12.8'	02°41.6	16.3'	58.5'	86°52.0	50°43.7	24°06.4	9°48.8	35°35.5	62°34.4	111°39.1	114°28.7
4	289°44.9	12.7'	02°57.9	16.3'	58.6'	86°35.5	50°11.6	23°34.3	9°19.7	36°03.0	63°02.2	112°13.8	114°54.4
5	304°16.6	12.7'	03°14.1	16.3'	58.6'	86°19.0	49°39.5	23°02.2	8°51.1	36°30.7	63°30.2	112°48.5	115°20.1
6	318°48.3	12.6'	N03°30.4	16.3'	58.6'	86°02.5	49°07.4	22°30.0	8°23.2	36°58.6	63°58.2	113°23.3	115°45.7
7	333°20.0	12.6'	03°46.7	16.3'	58.7'	85°46.0	48°35.2	21°57.9	7°56.2	37°26.7	64°26.4	113°58.1	116°11.2
8	347°51.5	12.5'	04°03.0	16.3'	58.7'	85°29.5	48°03.0	21°25.8		37°55.0	64°54.6	114°32.9	116°36.8
9	2°23.0	12.4'	04°19.3	16.3'	58.8'	85°13.0	47°30.7	20°53.6		38°23.5	65°23.0	115°07.8	117°02.2
10	16°54.5	12.4'	04°35.6	16.3'	58.8'	84°56.4	46°58.4	20°21.4		38°52.2	65°51.4	115°42.8	117°27.7
11	31°25.8	12.3'	04°51.9	16.3'	58.8'	84°39.9	46°26.0	19°49.3		39°21.0	66°19.9	116°17.8	117°53.1
12	45°57.1	12.2'	N05°08.2	16.3'	58.9'	84°23.4	45°53.6	19°17.1		39°50.1	66°48.6	116°52.9	118°18.4
13	60°28.4	12.2'	05°24.4	16.3'	58.9'	84°06.9	45°21.2	18°45.0		40°19.3	67°17.3	117°28.0	118°43.7
14	74°59.5	12.1'	05°40.7	16.3'	59.0'	83°50.4	44°48.7	18°12.8		40°48.7	67°46.1	118°03.2	119°08.9
15	89°30.6	12.0'	05°57.0	16.3'	59.0'	83°33.9	44°16.1	17°40.7		41°18.3	68°15.0	118°38.4	119°34.0
16	104°01.6	11.9'	06°13.3	16.3'	59.0'	83°17.4	43°43.6	17°08.6		41°48.0	68°43.9	119°13.6	119°59.1
17	118°32.5	11.9'	06°29.5	16.3'	59.1'	83°00.9	43°10.9	16°36.6		42°17.8	69°13.0	119°48.9	
18	133°03.4	11.8'	N06°45.8	16.2'	59.1'	82°44.5	42°38.3	16°04.6		42°47.9	69°42.2		
19	147°34.2	11.7'	07°02.0	16.2'	59.1'	82°28.0	42°05.6	15°32.6		43°18.0	70°11.4		
20	162°04.9	11.6'	07°18.3	16.2'	59.2'	82°11.6	41°32.8	15°00.7		43°48.4	70°40.7		
21	176°35.5	11.5'	07°34.5	16.2'	59.2'	81°55.2	41°00.0	14°28.9		44°18.8	71°10.1		
22	191°06.0	11.4'	07°50.7	16.2'	59.3'	81°38.8	40°27.2	13°57.2		44°49.4	71°39.6		
23	205°36.5	11.4'	08°06.8	16.2'	59.3'	81°22.4		13°25.6		45°20.2	72°09.1		
13 th	SD = 15.9' Mer. pass. 08:50					Sun SD = 15.8'							

h		Moon (14 th May)					Lunar Distance (objects with largest hourly LD delta)						
Thu	GHA	ν	Dec	d	HP	-Polaris	-Mars	+Saturn	+Fomalhaut	+Altair	+Vega		
0	220°06.8	11.3'	N08°23.0	16.1'	59.3'	81°06.0	12°54.1		45°51.0	72°38.7			
1	234°37.1	11.2'	08°39.1	16.1'	59.4'	80°49.7	12°22.8		46°22.0	73°08.5			
2	249°07.3	11.1'	08°55.2	16.1'	59.4'	80°33.4	11°51.6		46°53.1	73°38.2			
3	263°37.4	11.0'	09°11.3	16.1'	59.4'	80°17.1	11°20.7		47°24.4	74°08.1			
4	278°07.4	10.9'	09°27.4	16.0'	59.5'	80°00.9	10°50.0		47°55.8	74°38.0			
5	292°37.3	10.8'	09°43.4	16.0'	59.5'	79°44.7	10°19.5		48°27.2	75°08.0			
6	307°07.1	10.7'	N09°59.4	16.0'	59.6'	79°28.5	9°49.5	8°55.1	48°58.8	75°38.0			
7	321°36.9	10.6'	10°15.3	15.9'	59.6'	79°12.4	9°19.8	9°24.8	49°30.6	76°08.2			
8	336°06.5	10.5'	10°31.3	15.9'	59.6'	78°56.3	8°50.7	9°55.2	50°02.4	76°38.4			
9	350°36.0	10.4'	10°47.1	15.8'	59.7'	78°40.2	8°22.1	10°26.2	50°34.3	77°08.6			
10	5°05.5	10.3'	11°03.0	15.8'	59.7'	78°24.2	7°54.2	10°57.8	51°06.4	77°38.9	88°55.3		
11	19°34.8	10.2'	11°18.8	15.8'	59.7'	78°08.2	7°27.1	11°29.7	51°38.5	78°09.3	89°10.3		
12	34°04.0	10.1'	N11°34.6	15.7'	59.8'	77°52.2		12°02.1	52°10.8	78°39.7	89°25.4		
13	48°33.1	10.0'	11°50.3	15.7'	59.8'	77°36.4		12°34.9	52°43.1	79°10.2	89°40.5		
14	63°02.2	9.9'	12°06.0	15.6'	59.8'	77°20.5		13°07.9	53°15.6	79°40.8	89°55.6		
15	77°31.1	9.8'	12°21.6	15.6'	59.9'	77°04.7		13°41.3	53°48.1	80°11.4	90°10.7		
16	91°59.9	9.7'	12°37.2	15.5'	59.9'	76°49.0		14°14.9	54°20.7	80°42.1	90°25.9		
17	106°28.6	9.6'	12°52.7	15.5'	59.9'	76°33.3		14°48.7	54°53.4	81°12.8	90°41.0		
18	120°57.2	9.5'	N13°08.1	15.4'	60.0'	76°17.7		15°22.8	55°26.3	81°43.6	90°56.2		
19	135°25.7	9.4'	13°23.5	15.4'	60.0'	76°02.1		15°57.0	55°59.2	82°14.4	91°11.4		
20	149°54.1	9.3'	13°38.9	15.3'	60.0'	75°46.6		16°31.4	56°32.1	82°45.3	91°26.6		
21	164°22.3	9.1'	13°54.2	15.2'	60.1'	75°31.2		17°06.0	57°05.2	83°16.2	91°41.8		
22	178°50.5	9.0'	14°09.4	15.2'	60.1'	75°15.8		17°40.7	57°38.4	83°47.2	91°57.0		
23	193°18.5	8.9'	14°24.6	15.1'	60.1'	75°00.5		18°15.6	58°11.6	84°18.2	92°12.3		
14 th	SD = 16.2' Mer. pass. 09:39												

h		Moon (15 th May)					Lunar Distance (objects with largest hourly LD delta)						
Fri	GHA	ν	Dec	d	HP	-Polaris	+Mars	+Saturn	+Fomalhaut	+Deneb	+Achernar	+Altair	+Vega
0	207°46.4	8.8'	N14°39.7	15.0'	60.2'	74°45.3		18°50.6	58°44.9		71°45.7	84°49.3	92°27.5
1	222°14.2	8.7'	14°54.7	15.0'	60.2'	74°30.1		19°25.7	59°18.3		72°00.9	85°20.4	92°42.7
2	236°41.9	8.6'	15°09.7	14.9'	60.2'	74°15.0		20°01.0	59°51.8		72°16.3	85°51.5	92°57.9
3	251°09.5	8.4'	15°24.5	14.8'	60.2'	74°00.0		20°36.3	60°25.3		72°31.7	86°22.7	93°13.2
4	265°36.9	8.3'	15°39.3	14.7'	60.3'			21°11.8	60°58.9		72°47.3	86°54.0	93°28.4
5	280°04.2	8.2'	15°54.1	14.6'	60.3'			21°47.3	61°32.6		73°03.0	87°25.2	93°43.6
6	294°31.4	8.1'	N16°08.7	14.6'	60.3'			22°22.9	62°06.3		73°18.8	87°56.5	93°58.8
7	308°58.5	8.0'	16°23.3	14.5'	60.4'			22°58.7	62°40.2		73°34.7	88°27.9	94°14.1
8	323°25.5	7.8'	16°37.7	14.4'	60.4'			23°34.5	63°14.0		73°50.8	88°59.3	94°29.3
9	337°52.3	7.7'	16°52.1	14.3'	60.4'		8°22.3	24°10.4	63°48.0	70°53.8	74°06.9	89°30.7	94°44.4
10	352°19.0	7.6'	17°06.4	14.2'	60.4'		8°51.7	24°46.3	64°22.0	71°09.1	74°23.2	90°02.1	94°59.6
11	6°45.6	7.5'	17°20.6	14.1'	60.5'		9°21.8	25°22.3	64°56.1	71°24.5	74°39.5	90°33.6	95°14.8
12	21°12.1	7.3'	N17°34.7	14.0'	60.5'		9°52.6	25°58.4	65°30.2	71°40.0	74°56.0	91°05.1	95°29.9
13	35°38.4	7.2'	17°48.8	13.9'	60.5'		10°23.8	26°34.6	66°04.4	71°55.6	75°12.5	91°36.6	95°45.1
14	50°04.6	7.1'	18°02.7	13.8'	60.5'		10°55.4	27°10.8	66°38.6	72°11.4	75°29.2	92°08.1	96°00.2
15	64°30.7	7.0'	18°16.5	13.7'	60.6'		11°27.5	27°47.1	67°12.9	72°27.3	75°45.9	92°39.7	96°15.3
16	78°56.7	6.8'	18°30.2	13.6'	60.6'		11°59.8	28°23.5	67°47.3	72°43.3	76°02.8	93°11.3	96°30.3
17	93°22.5	6.7'	18°43.8	13.5'	60.6'		12°32.5	28°59.9	68°21.7	72°59.4	76°19.7	93°42.9	96°45.4
18	107°48.2	6.6'	N18°57.3	13.4'	60.6'		13°05.4	29°36.3	68°56.2	73°15.6	76°36.8	94°14.5	97°00.4
19	122°13.8	6.4'	19°10.7	13.3'	60.7'		13°38.6	30°12.8	69°30.7	73°31.9	76°53.9	94°46.2	
20	136°39.2	6.3'	19°24.0	13.2'	60.7'		14°11.9	30°49.4	70°05.2	73°48.4	77°11.1	95°17.9	
21	151°04.5	6.2'	19°37.1	13.0'	60.7'		14°45.5	31°26.0	70°39.9	74°04.9	77°28.4	95°49.5	
22	165°29.7	6.1'	19°50.2	12.9'	60.7'		15°19.2	32°02.6	71°14.5	74°21.6	77°45.8	96°21.2	
23	179°54.8	5.9'	20°03.1	12.8'	60.7'		15°53.1	32°39.3	71°49.2	74°38.4	78°03.2	96°52.9	
15 th	SD = 16.4' Mer. pass. 10:32												

DUT1 = UT1-UTC = +0.0938 sec $\Delta T = TT-UT1 = +69.0902$ sec

2026 May 16 to May. 18 UT

h Moon (16 th May)						Lunar Distance (objects with largest hourly LD delta)					
Sat	GHA	ν	Dec	d	HP	+Mars	+Saturn	+Fomalhaut	+Deneb	+Achernar	+Altair
0	194°19.7	5.8'	N20°15.9	12.7'	60.8'	16°27.1	33°16.1	72°23.9	74°55.2	78°20.8	97°24.6
1	208°44.5	5.7'	20°28.5	12.5'	60.8'	17°01.2	33°52.9	72°58.7	75°12.2	78°38.4	97°56.3
2	223°09.2	5.5'	20°41.1	12.4'	60.8'	17°35.5	34°29.7	73°33.6	75°29.3	78°56.1	98°28.1
3	237°33.7	5.4'	20°53.5	12.3'	60.8'	18°09.9	35°06.5	74°08.4	75°46.5	79°13.8	98°59.8
4	251°58.1	5.3'	21°05.8	12.1'	60.8'	18°44.4	35°43.4	74°43.3	76°03.7	79°31.7	99°31.5
5	266°22.4	5.2'	21°17.9	12.0'	60.9'	19°18.9	36°20.4	75°18.3	76°21.1	79°49.6	100°03.2
6	280°46.6	5.0'	N21°29.9	11.9'	60.9'			New Moon			
7	295°10.6	4.9'	21°41.8	11.7'	60.9'			New Moon			
8	309°34.5	4.8'	21°53.5	11.6'	60.9'			New Moon			
9	323°58.3	4.6'	22°05.1	11.4'	60.9'			New Moon			
10	338°21.9	4.5'	22°16.5	11.3'	60.9'			New Moon			
11	352°45.4	4.4'	22°27.8	11.1'	61.0'			New Moon			
12	7°08.8	4.3'	N22°39.0	11.0'	61.0'			New Moon			
13	21°32.1	4.1'	22°50.0	10.8'	61.0'			New Moon			
14	35°55.3	4.0'	23°00.8	10.7'	61.0'			New Moon			
15	50°18.3	3.9'	23°11.5	10.5'	61.0'			New Moon			
16	64°41.2	3.8'	23°22.0	10.3'	61.0'			New Moon			
17	79°04.0	3.7'	23°32.3	10.2'	61.0'			New Moon			
18	93°26.7	3.6'	N23°42.5	10.0'	61.1'			New Moon			
19	107°49.2	3.4'	23°52.5	9.8'	61.1'			New Moon			
20	122°11.6	3.3'	24°02.4	9.7'	61.1'			New Moon			
21	136°34.0	3.2'	24°12.0	9.5'	61.1'			New Moon			
22	150°56.2	3.1'	24°21.5	9.3'	61.1'			New Moon			
23	165°18.3	3.0'	24°30.9	9.1'	61.1'			New Moon			
16 th	SD = 16.6' Mer. pass. 11:30										

h	Moon (17 th May)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Regulus	-Sirius	-Procyon	-Pollux	-Jupiter	-Betelgeuse	-Capella	-Venus
0	179°40.2	2.9'	N24°40.0	9.0'	61.1'	New Moon							
1	194°02.1	2.8'	24°49.0	8.8'	61.1'	New Moon							
2	208°23.9	2.7'	24°57.8	8.6'	61.1'	New Moon							
3	222°45.6	2.6'	25°06.4	8.4'	61.1'	New Moon							
4	237°07.1	2.5'	25°14.8	8.2'	61.1'	New Moon							
5	251°28.6	2.4'	25°23.0	8.0'	61.1'	New Moon							
6	265°49.9	2.3'	N25°31.1	7.9'	61.1'	New Moon							
7	280°11.2	2.2'	25°38.9	7.7'	61.1'	New Moon							
8	294°32.4	2.1'	25°46.6	7.5'	61.1'	New Moon							
9	308°53.5	2.0'	25°54.0	7.3'	61.2'	New Moon							
10	323°14.5	1.9'	26°01.3	7.1'	61.2'	New Moon							
11	337°35.4	1.8'	26°08.4	6.9'	61.2'	84°42.2	57°14.8	54°21.6	47°51.9	46°09.0	31°27.6	24°05.6	22°51.0
12	351°56.2	1.7'	N26°15.3	6.7'	61.2'	84°04.2	56°53.0	53°46.9	47°14.1	45°31.5	30°59.7	23°41.2	22°16.3
13	6°16.9	1.7'	26°21.9	6.5'	61.2'	83°26.2	56°31.4	53°12.2	46°36.2	44°54.1	30°32.1	23°17.4	21°41.6
14	20°37.6	1.6'	26°28.4	6.3'	61.2'	82°48.2	56°09.9	52°37.6	45°58.3	44°16.6	30°04.9	22°54.1	21°07.0
15	34°58.2	1.5'	26°34.7	6.1'	61.2'	82°10.2	55°48.7	52°03.0	45°20.5	43°39.1	29°38.0	22°31.5	20°32.4
16	49°18.7	1.4'	26°40.7	5.9'	61.2'	81°32.2	55°27.6	51°28.5	44°42.6	43°01.7	29°11.5	22°09.5	19°57.7
17	63°39.1	1.4'	26°46.6	5.6'	61.2'	80°54.2	55°06.8	50°54.0	44°04.8	42°24.2	28°45.4	21°48.3	19°23.2
18	77°59.5	1.3'	N26°52.2	5.4'	61.2'	80°16.3	54°46.2	50°19.6	43°26.9	41°46.8	28°19.6	21°27.8	18°48.6
19	92°19.8	1.3'	26°57.7	5.2'	61.1'	79°38.3	54°25.8	49°45.3	42°49.1	41°09.4	27°54.4	21°08.0	18°14.1
20	106°40.1	1.2'	27°02.9	5.0'	61.1'	79°00.3	54°05.5	49°11.0	42°11.2	40°31.9	27°29.5	20°49.1	17°39.6
21	121°00.3	1.1'	27°07.9	4.8'	61.1'	78°22.3	53°45.6	48°36.8	41°33.4	39°54.5	27°05.2	20°31.0	17°05.1
22	135°20.4	1.1'	27°12.7	4.6'	61.1'	77°44.4	53°25.8	48°02.7	40°55.6	39°17.1	26°41.3	20°13.7	16°30.7
23	149°40.5	1.0'	27°17.3	4.4'	61.1'	77°06.4	53°06.3	47°28.7	40°17.8	38°39.7	26°17.9	19°57.4	15°56.4
17 th	SD = 16.7' Mer. pass. 12:34												

h	Moon (18 th May)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Spica	-Arcturus	-Regulus	-Procyon	-Pollux	-Jupiter	-Venus	+Aldebaran
0	164°00.5	1.0'	N27°21.7	4.2'	61.1'			76°28.5	46°54.7	39°40.0	38°02.3	15°22.0	
1	178°20.5	1.0'	27°25.8	3.9'	61.1'			75°50.5	46°20.9	39°02.2	37°24.9	14°47.8	
2	192°40.5	0.9'	27°29.8	3.7'	61.1'			75°12.6	45°47.1	38°24.5	36°47.6	14°13.6	
3	207°00.4	0.9'	27°33.5	3.5'	61.1'		119°39.6	74°34.7	45°13.4	37°46.7	36°10.2	13°39.5	
4	221°20.3	0.8'	27°37.0	3.3'	61.1'		119°10.8	73°56.8	44°39.8	37°09.0	35°32.9	13°05.4	
5	235°40.1	0.8'	27°40.3	3.1'	61.1'		118°41.9	73°18.9	44°06.4	36°31.3	34°55.6	12°31.4	
6	249°59.9	0.8'	N27°43.4	2.9'	61.1'		118°12.9	72°41.0	43°33.0	35°53.6	34°18.3	11°57.6	
7	264°19.7	0.8'	27°46.2	2.6'	61.1'		117°43.8	72°03.1	42°59.7	35°15.9	33°41.0	11°23.8	
8	278°39.5	0.8'	27°48.9	2.4'	61.1'		117°14.6	71°25.3	42°26.6	34°38.3	33°03.8	10°50.2	
9	292°59.3	0.7'	27°51.3	2.2'	61.1'		116°45.4	70°47.4	41°53.6	34°00.6	32°26.5	10°16.8	
10	307°19.0	0.7'	27°53.5	2.0'	61.0'		116°16.1	70°09.6	41°20.7	33°23.0	31°49.3	9°43.5	14°17.5
11	321°38.7	0.7'	27°55.4	1.7'	61.0'		115°46.7	69°31.8	40°47.9	32°45.4	31°12.1	9°10.4	14°43.5
12	335°58.5	0.7'	N27°57.2	1.5'	61.0'		115°17.3	68°54.0	40°15.2	32°07.8	30°34.9	8°37.6	15°10.4
13	350°18.2	0.7'	27°58.7	1.3'	61.0'		114°47.8	68°16.2	39°42.7	31°30.3	29°57.8	8°05.0	15°38.0
14	4°37.9	0.7'	28°00.0	1.1'	61.0'		114°18.2	67°38.4	39°10.4	30°52.8	29°20.6	7°32.8	16°06.2
15	18°57.6	0.7'	28°01.1	0.9'	61.0'		113°48.6	67°00.7	38°38.2	30°15.3	28°43.5	7°01.0	16°35.1
16	33°17.4	0.7'	28°02.0	0.6'	61.0'		113°19.0	66°23.0	38°06.2	29°37.8	28°06.5	6°29.8	17°04.5
17	47°37.1	0.8'	28°02.6	0.4'	61.0'	119°47.3	112°49.2	65°45.3	37°34.3	29°00.4	27°29.4	5°59.2	17°34.4
18	61°56.9	0.8'	N28°03.0	0.2'	60.9'	119°09.7	112°19.5	65°07.6	37°02.6	28°23.0	26°52.4	5°29.4	18°04.7
19	76°16.7	0.8'	28°03.2	-0.0'	60.9'	118°32.0	111°49.6	64°29.9	36°31.0	27°45.6	26°15.4		18°35.5
20	90°36.5	0.8'	28°03.2	-0.2'	60.9'	117°54.4	111°19.8	63°52.3	35°59.7	27°08.2	25°38.5		19°06.6
21	104°56.3	0.9'	28°03.0	-0.5'	60.9'	117°16.8	110°49.9	63°14.6	35°28.6	26°30.9	25°01.6		19°38.1
22	119°16.2	0.9'	28°02.5	-0.7'	60.9'	116°39.2	110°19.9	62°37.0	34°57.6	25°53.7	24°24.7		20°09.9
23	133°36.1	0.9'	28°01.8	-0.9'	60.9'	116°01.7	109°49.9	61°59.5	34°26.9	25°16.4	23°47.9		20°42.0
18 th	SD = 16.7' Mer. pass. 13:41												

DUT1 = UT1-UTC = +0.0942 sec $\Delta T = TT-UT1 = +69.0898$ sec

2026 May 19 to May. 21 UT

h	Moon (19 th May)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Spica	-Regulus	-Pollux	-Jupiter	+Venus	+Capella	+Aldebaran	+Sun
0	147°56.0	1.0'	N28°00.9	-1.1'	60.8'	115°24.1	61°21.9	24°39.2	23°11.1			21°14.4	
1	162°16.0	1.0'	27°59.8	-1.3'	60.8'	114°46.6	60°44.4	24°02.1	22°34.3			21°47.0	
2	176°36.0	1.1'	27°58.5	-1.5'	60.8'	114°09.1	60°06.9	23°25.0	21°57.6			22°19.8	
3	190°56.1	1.1'	27°57.0	-1.8'	60.8'	113°31.7	59°29.4	22°47.9	21°20.9		20°07.6	22°52.9	
4	205°16.2	1.2'	27°55.2	-2.0'	60.8'	112°54.2	58°51.9	22°10.9	20°44.3		20°24.2	23°26.1	
5	219°36.3	1.2'	27°53.2	-2.2'	60.7'	112°16.8	58°14.5	21°34.0	20°07.7		20°41.7	23°59.5	
6	233°56.6	1.3'	N27°51.0	-2.4'	60.7'	111°39.4	57°37.1	20°57.1	19°31.2		21°00.1	24°33.1	
7	248°16.9	1.4'	27°48.6	-2.6'	60.7'	111°02.1	56°59.7	20°20.2	18°54.7		21°19.2	25°06.8	
8	262°37.2	1.4'	27°46.0	-2.8'	60.7'	110°24.8	56°22.4	19°43.4	18°18.3		21°39.0	25°40.6	
9	276°57.6	1.5'	27°43.2	-3.0'	60.7'	109°47.5	55°45.1	19°06.7	17°41.9		21°59.6	26°14.5	
10	291°18.1	1.6'	27°40.2	-3.2'	60.6'	109°10.2	55°07.8	18°30.0	17°05.7		22°20.8	26°48.6	
11	305°38.7	1.6'	27°36.9	-3.4'	60.6'	108°33.0	54°30.5	17°53.4	16°29.4		22°42.7	27°22.8	
12	319°59.3	1.7'	N27°33.5	-3.7'	60.6'	107°55.8	53°53.3	17°16.9	15°53.3	6°24.8	23°05.1	27°57.0	
13	334°20.1	1.8'	27°29.8	-3.9'	60.6'	107°18.6	53°16.1	16°40.5	15°17.2	6°55.5	23°28.2	28°31.4	
14	348°40.9	1.9'	27°26.0	-4.1'	60.5'	106°41.4	52°38.9	16°04.1	14°41.3	7°26.7	23°51.8	29°05.8	
15	3°01.8	2.0'	27°21.9	-4.3'	60.5'	106°04.3	52°01.8	15°27.9	14°05.4	7°58.2	24°15.9	29°40.3	
16	17°22.7	2.1'	27°17.6	-4.5'	60.5'	105°27.2	51°24.7	14°51.7	13°29.6	8°30.1	24°40.5	30°14.9	40°21.1
17	31°43.8	2.2'	27°13.2	-4.7'	60.5'	104°50.2	50°47.6	14°15.7	12°54.0	9°02.2	25°05.5	30°49.5	40°55.5
18	46°05.0	2.3'	N27°08.5	-4.9'	60.4'	104°13.2	50°10.6	13°39.7	12°18.4	9°34.4	25°31.0	31°24.2	41°29.8
19	60°26.2	2.4'	27°03.6	-5.1'	60.4'	103°36.2	49°33.6	13°04.0	11°43.1	10°06.9	25°56.9	31°58.9	42°04.1
20	74°47.6	2.5'	26°58.6	-5.2'	60.4'	102°59.2	48°56.6	12°28.3	11°07.8	10°39.5	26°23.1	32°33.7	42°38.3
21	89°09.0	2.6'	26°53.3	-5.4'	60.4'	102°22.3	48°19.7	11°52.8	10°32.8	11°12.2	26°49.8	33°08.5	43°12.6
22	103°30.6	2.7'	26°47.9	-5.6'	60.3'	101°45.5	47°42.8	11°17.6	9°57.9	11°44.9	27°16.8	33°43.3	43°46.8
23	117°52.3	2.8'	26°42.3	-5.8'	60.3'	101°08.6	47°05.9	10°42.5	9°23.3	12°17.8	27°44.1	34°18.2	44°21.0
19 th	SD = 16.6' Mer. pass. 14:47					Sun SD = 15.8'							

h	Moon (20 th May)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Spica	-Regulus	-Pollux	-Jupiter	+Venus	+Capella	+Aldebaran	+Sun
0	132°14.0	2.9'	N26°36.5	-6.0'	60.3'	100°31.8	46°29.1	10°07.7	8°49.0	12°50.7	28°11.7	34°53.1	44°55.1
1	146°35.9	3.0'	26°30.5	-6.2'	60.3'	99°55.0	45°52.3	9°33.1	8°15.0	13°23.6	28°39.6	35°28.0	45°29.2
2	160°57.9	3.1'	26°24.3	-6.4'	60.2'	99°18.3	45°15.6	8°58.9	7°41.3	13°56.6	29°07.8	36°02.9	46°03.3
3	175°20.0	3.2'	26°17.9	-6.6'	60.2'	98°41.6	44°38.8	8°25.0	7°08.2	14°29.6	29°36.2	36°37.9	46°37.4
4	189°42.3	3.3'	26°11.3	-6.7'	60.2'	98°04.9	44°02.2	7°51.7	6°35.6	15°02.6	30°04.9	37°12.8	47°11.4
5	204°04.6	3.5'	26°04.6	-6.9'	60.1'	97°28.3	43°25.5	7°18.8	6°03.8	15°35.6	30°33.8	37°47.8	47°45.4
6	218°27.1	3.6'	N25°57.7	-7.1'	60.1'	96°51.7	42°48.9	6°46.7	5°32.9	16°08.6	31°03.0	38°22.8	48°19.3
7	232°49.6	3.7'	25°50.6	-7.3'	60.1'	96°15.1	42°12.3	6°15.4		16°41.7	31°32.3	38°57.8	48°53.3
8	247°12.3	3.8'	25°43.3	-7.4'	60.1'	95°38.6	41°35.8			17°14.7	32°01.8	39°32.8	49°27.2
9	261°35.2	4.0'	25°35.9	-7.6'	60.0'	95°02.2	40°59.3			17°47.7	32°31.5	40°07.8	50°01.0
10	275°58.1	4.1'	25°28.3	-7.8'	60.0'	94°25.7	40°22.9			18°20.7	33°01.4	40°42.8	50°34.8
11	290°21.2	4.2'	25°20.5	-7.9'	60.0'	93°49.3	39°46.4			18°53.7	33°31.5	41°17.8	51°08.6
12	304°44.4	4.3'	N25°12.6	-8.1'	59.9'	93°13.0	39°10.1			19°26.7	34°01.7	41°52.7	51°42.4
13	319°07.7	4.5'	25°04.5	-8.3'	59.9'	92°36.6	38°33.7			19°59.7	34°32.0	42°27.7	52°16.1
14	333°31.2	4.6'	24°56.2	-8.4'	59.9'	92°00.4	37°57.4			20°32.6	35°02.4	43°02.7	52°49.8
15	347°54.8	4.7'	24°47.8	-8.6'	59.8'	91°24.1	37°21.2			21°05.5	35°33.0	43°37.7	53°23.4
16	2°18.5	4.9'	24°39.2	-8.7'	59.8'	90°47.9	36°45.0			21°38.4	36°03.7	44°12.6	53°57.0
17	16°42.4	5.0'	24°30.5	-8.9'	59.8'	90°11.8	36°08.8			22°11.3	36°34.6	44°47.5	54°30.6
18	31°06.4	5.1'	N24°21.6	-9.0'	59.8'	89°35.7	35°32.7			22°44.2	37°05.5	45°22.5	55°04.1
19	45°30.5	5.3'	24°12.6	-9.2'	59.7'	88°59.6	34°56.6			23°17.0	37°36.5	45°57.4	55°37.6
20	59°54.8	5.4'	24°03.4	-9.3'	59.7'	88°23.6	34°20.5			23°49.8	38°07.6	46°32.3	56°11.0
21	74°19.2	5.5'	23°54.0	-9.5'	59.7'	87°47.6	33°44.5			24°22.6	38°38.8	47°07.1	56°44.4
22	88°43.7	5.7'	23°44.5	-9.6'	59.6'	87°11.6	33°08.6			24°55.3	39°10.1	47°42.0	57°17.8
23	103°08.4	5.8'	23°34.9	-9.8'	59.6'	86°35.7	32°32.6			25°28.0	39°41.4	48°16.8	57°51.1
20 th	SD = 16.4' Mer. pass. 15:50					Sun SD = 15.8'							

Moon (21 st May)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Antares	-Spica	-Arcturus	-Regulus	+Jupiter	+Pollux	+Aldebaran	+Sun
0	117°33.2	5.9'	N23°25.2	-9.9'	59.6'		85°59.8	85°16.4	31°56.7	6°46.5		48°51.6	58°24.4
1	131°58.2	6.1'	23°15.3	-10.0'	59.5'		85°24.0	84°46.9	31°20.9	7°18.5		49°26.4	58°57.7
2	146°23.3	6.2'	23°05.2	-10.2'	59.5'		84°48.2	84°17.4	30°45.1	7°50.9	7°01.9	50°01.2	59°30.9
3	160°48.5	6.4'	22°55.0	-10.3'	59.5'		84°12.5	83°48.1	30°09.3	8°23.7	7°33.6	50°36.0	60°04.1
4	175°13.8	6.5'	22°44.7	-10.4'	59.4'		83°36.8	83°18.7	29°33.6	8°56.8	8°05.8	51°10.7	60°37.2
5	189°39.4	6.6'	22°34.3	-10.6'	59.4'		83°01.1	82°49.4	28°58.0	9°30.1	8°38.4	51°45.4	61°10.3
6	204°05.0	6.8'	N22°23.7	-10.7'	59.4'		82°25.5	82°20.2	28°22.3	10°03.6	9°11.4	52°20.0	61°43.3
7	218°30.8	6.9'	22°13.1	-10.8'	59.3'		81°50.0	81°51.0	27°46.8	10°37.2	9°44.6	52°54.7	62°16.3
8	232°56.7	7.1'	22°02.2	-10.9'	59.3'		81°14.4	81°21.9	27°11.2	11°10.9	10°18.1	53°29.3	62°49.3
9	247°22.7	7.2'	21°51.3	-11.1'	59.3'		80°39.0	80°52.8	26°35.7	11°44.7	10°51.7	54°03.9	63°22.2
10	261°48.9	7.3'	21°40.3	-11.2'	59.2'		80°03.5	80°23.7	26°00.3	12°18.6	11°25.5	54°38.4	63°55.1
11	276°15.3	7.5'	21°29.1	-11.3'	59.2'		79°28.1	79°54.8	25°24.9	12°52.5	11°59.4	55°13.0	64°27.9
12	290°41.7	7.6'	N21°17.8	-11.4'	59.1'		78°52.8	79°25.9	24°49.5	13°26.5	12°33.4	55°47.4	65°00.7
13	305°08.3	7.7'	21°06.4	-11.5'	59.1'		78°17.5	78°57.0	24°14.2	14°00.6	13°07.4	56°21.9	65°33.5
14	319°35.1	7.9'	20°54.9	-11.6'	59.1'		77°42.2	78°28.2	23°38.9	14°34.6	13°41.6	56°56.3	66°06.2
15	334°02.0	8.0'	20°43.3	-11.7'	59.0'		77°07.0	77°59.5	23°03.7	15°08.7	14°15.8	57°30.7	66°38.9
16	348°29.0	8.1'	20°31.5	-11.8'	59.0'		76°31.8	77°30.8	22°28.5	15°42.7	14°50.0	58°05.1	67°11.5
17	2°56.1	8.3'	20°19.7	-11.9'	59.0'		75°56.7	77°02.2	21°53.3	16°16.8	15°24.2	58°39.5	67°44.1
18	17°23.4	8.4'	N20°07.8	-12.0'	58.9'		75°21.6	76°33.6	21°18.2	16°50.9	15°58.5	59°13.8	68°16.6
19	31°50.8	8.5'	19°55.7	-12.1'	58.9'		74°46.6	76°05.1	20°43.1	17°25.0	16°32.8	59°48.0	68°49.1
20	46°18.4	8.7'	19°43.6	-12.2'	58.9'		74°11.6	75°36.7	20°08.1	17°59.0	17°07.1	60°22.3	69°21.6
21	60°46.0	8.8'	19°31.4	-12.3'	58.8'	119°29.9	73°36.6	75°08.4	19°33.2	18°33.1	17°41.3	60°56.5	69°54.0
22	75°13.8	8.9'	19°19.0	-12.4'	58.8'	118°55.0	73°01.7	74°40.1	18°58.2	19°07.1	18°15.6	61°30.6	70°26.4
23	89°41.8	9.1'	19°06.6	-12.5'	58.8'	118°20.1	72°26.8	74°11.9	18°23.3	19°41.1	18°49.9	62°04.8	70°58.7
21 st	SD = 16.2' Mer. pass. 16:48					Sun SD = 15.8'							

DUT1 = UT1-UTC = +0.0946 sec $\Delta T = TT-UT1 = +69.0894$ sec

2026 May 22 to May. 24 UT

h	Moon (22 nd May)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Antares	-Arcturus	-Spica	-Regulus	+Pollux	+Jupiter	+Aldebaran	+Sun
0	104°09.9	9.2'	N18°54.1	-12.6'	58.7'	117°45.2	73°43.7	71°52.0	17°48.5	19°24.2	20°15.1	62°38.9	71°31.0
1	118°38.1	9.3'	18°41.5	-12.7'	58.7'	117°10.4	73°15.7	71°17.2	17°13.7	19°58.5	20°49.1	63°12.9	72°03.2
2	133°06.4	9.5'	18°28.8	-12.8'	58.6'	116°35.7	72°47.7	70°42.5	16°39.0	20°32.7	21°23.0	63°47.0	72°35.4
3	147°34.9	9.6'	18°16.0	-12.9'	58.6'	116°01.0	72°19.7	70°07.8	16°04.2	21°06.9	21°56.9	64°21.0	73°07.6
4	162°03.4	9.7'	18°03.2	-12.9'	58.6'	115°26.3	71°51.9	69°33.2	15°29.6	21°41.2	22°30.8	64°54.9	73°39.7
5	176°32.1	9.8'	17°50.3	-13.0'	58.5'	114°51.7	71°24.1	68°58.6	14°55.0	22°15.4	23°04.7	65°28.8	74°11.8
6	191°01.0	10.0'	N17°37.2	-13.1'	58.5'	114°17.1	70°56.4	68°24.0	14°20.4	22°49.5	23°38.5	66°02.7	74°43.8
7	205°29.9	10.1'	17°24.1	-13.2'	58.5'	113°42.6	70°28.8	67°49.5	13°45.9	23°23.7	24°12.3	66°36.6	75°15.8
8	219°59.0	10.2'	17°11.0	-13.2'	58.4'	113°08.1	70°01.3	67°15.0	13°11.4	23°57.8	24°46.1	67°10.4	75°47.8
9	234°28.2	10.3'	16°57.7	-13.3'	58.4'	112°33.7	69°33.8	66°40.6	12°36.9	24°31.9	25°19.9	67°44.1	76°19.7
10	248°57.5	10.4'	16°44.4	-13.4'	58.4'	111°59.3	69°06.4	66°06.2	12°02.5	25°05.9	25°53.6	68°17.9	76°51.5
11	263°27.0	10.6'	16°31.0	-13.5'	58.3'	111°24.9	68°39.1	65°31.9	11°28.2	25°40.0	26°27.3	68°51.6	77°23.3
12	277°56.5	10.7'	N16°17.5	-13.5'	58.3'	110°50.6	68°11.9	64°57.6	10°53.8	26°14.0	27°00.9	69°25.2	77°55.1
13	292°26.2	10.8'	16°04.0	-13.6'	58.3'	110°16.3	67°44.8	64°23.3	10°19.6	26°48.0	27°34.5	69°58.9	78°26.8
14	306°56.0	10.9'	15°50.4	-13.7'	58.2'	109°42.1	67°17.7	63°49.1	9°45.3	27°21.9	28°08.1	70°32.4	78°58.5
15	321°25.9	11.0'	15°36.8	-13.7'	58.2'	109°07.9	66°50.8	63°14.9	9°11.2	27°55.8	28°41.6	71°06.0	79°30.2
16	335°55.9	11.1'	15°23.0	-13.8'	58.1'	108°33.8	66°23.9	62°40.8	8°37.0	28°29.7	29°15.1	71°39.5	80°01.8
17	350°26.1	11.2'	15°09.2	-13.8'	58.1'	107°59.7	65°57.2	62°06.7	8°02.9	29°03.5	29°48.6	72°13.0	80°33.3
18	4°56.3	11.4'	N14°55.4	-13.9'	58.1'	107°25.6	65°30.5	61°32.7	7°28.9	29°37.4	30°22.0	72°46.4	81°04.9
19	19°26.7	11.5'	14°41.5	-14.0'	58.0'	106°51.6	65°03.9	60°58.7	6°54.8	30°11.1	30°55.4	73°19.8	81°36.3
20	33°57.1	11.6'	14°27.5	-14.0'	58.0'	106°17.6	64°37.4	60°24.8	6°20.9	30°44.9	31°28.8	73°53.2	82°07.8
21	48°27.7	11.7'	14°13.5	-14.1'	58.0'	105°43.7	64°11.0	59°50.9	5°46.9	31°18.6	32°02.1	82°39.2	82°39.2
22	62°58.4	11.8'	13°59.5	-14.1'	57.9'	105°09.8	63°44.7	59°17.0	5°13.0	31°52.3	32°35.4	83°10.5	83°10.5
23	77°29.1	11.9'	13°45.4	-14.2'	57.9'	104°35.9	63°18.5	58°43.2	4°39.2	32°25.9	33°08.7	83°41.8	83°41.8
22 nd	SD = 16.0' Mer. pass. 17:40					Sun SD = 15.8'							

h	Moon (23 rd May)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Antares	-Rigil Kent.	-Spica	\pm Regulus	+Pollux	+Jupiter	+Capella	+Sun
0	92°00.0	12.0'	N13°31.2	-14.2'	57.9'	104°02.1	93°14.1	58°09.4	4°05.4	32°59.5	33°41.9	65°45.8	84°13.1
1	106°31.0	12.1'	13°17.0	-14.3'	57.8'	103°28.4	92°47.4	57°35.6	3°31.6	33°33.1	34°15.0	66°17.5	84°44.3
2	121°02.1	12.2'	13°02.7	-14.3'	57.8'	102°54.7	92°20.7	57°01.9	2°57.9	34°06.6	34°48.2	66°49.3	85°15.5
3	135°33.2	12.3'	12°48.4	-14.3'	57.8'	102°21.0	91°54.0	56°28.3	2°24.3	34°40.1	35°21.3	67°21.0	85°46.7
4	150°04.5	12.4'	12°34.1	-14.4'	57.7'	101°47.3	91°27.3	55°54.7	1°50.6	35°13.6	35°54.3	67°52.7	86°17.8
5	164°35.9	12.5'	12°19.7	-14.4'	57.7'	101°13.7	91°00.7	55°21.1	1°17.1	35°47.0	36°27.4	68°24.3	86°48.8
6	179°07.4	12.6'	N12°05.2	-14.5'	57.7'	100°40.2	90°34.1	54°47.6	0°43.6	36°20.4	37°00.3	68°56.0	87°19.9
7	193°38.9	12.7'	11°50.8	-14.5'	57.6'	100°06.7	90°07.6	54°14.1	0°10.7	36°53.8	37°33.3	69°27.6	87°50.8
8	208°10.6	12.7'	11°36.3	-14.5'	57.6'	99°33.2	89°41.0	53°40.6		37°27.1	38°06.2	69°59.2	88°21.8
9	222°42.3	12.8'	11°21.7	-14.6'	57.5'	98°59.8	89°14.5	53°07.2		38°00.4	38°39.1	70°30.8	88°52.7
10	237°14.2	12.9'	11°07.1	-14.6'	57.5'	98°26.4	88°48.1	52°33.8	1°30.5	38°33.6	39°11.9	71°02.3	89°23.6
11	251°46.1	13.0'	10°52.5	-14.6'	57.5'	97°53.0	88°21.6	52°00.5	2°03.8	39°06.8	39°44.7	71°33.8	89°54.4
12	266°18.1	13.1'	N10°37.9	-14.7'	57.4'	97°19.7	87°55.3	51°27.2	2°37.1	39°40.0	40°17.5	72°05.3	90°25.2
13	280°50.2	13.2'	10°23.2	-14.7'	57.4'	96°46.4	87°28.9	50°54.0	3°10.4	40°13.1	40°50.2	72°36.8	90°55.9
14	295°22.4	13.3'	10°08.5	-14.7'	57.4'	96°13.2	87°02.6	50°20.8	3°43.6	40°46.2	41°22.9	73°08.2	91°26.6
15	309°54.6	13.3'	09°53.8	-14.8'	57.3'	95°40.0	86°36.3	49°47.6	4°16.8	41°19.3	41°55.5	73°39.6	91°57.3
16	324°27.0	13.4'	09°39.0	-14.8'	57.3'	95°06.8	86°10.1	49°14.5	4°50.0	41°52.3	42°28.2	74°11.0	92°27.9
17	338°59.4	13.5'	09°24.2	-14.8'	57.3'	94°33.7	85°43.9	48°41.4	5°23.1	42°25.3	43°00.7	74°42.4	92°58.5
18	353°31.9	13.6'	N09°09.4	-14.8'	57.2'	94°00.6	85°17.7	48°08.3	5°56.2	42°58.3	43°33.3	75°13.7	93°29.0
19	8°04.4	13.6'	08°54.5	-14.9'	57.2'	93°27.6	84°51.6	47°35.3	6°29.2	43°31.2	44°05.8	75°45.0	93°59.5
20	22°37.1	13.7'	08°39.7	-14.9'	57.2'	92°54.6	84°25.5	47°02.3	7°02.2	44°04.1	44°38.2	76°16.3	94°30.0
21	37°09.8	13.8'	08°24.8	-14.9'	57.1'	92°21.6	83°59.4	46°29.4	7°35.2	44°36.9	45°10.7	76°47.5	95°00.4
22	51°42.6	13.9'	08°09.9	-14.9'	57.1'	91°48.7	83°33.4	45°56.5	8°08.1	45°09.7	45°43.1	77°18.8	95°30.8
23	66°15.5	13.9'	07°55.0	-14.9'	57.1'	91°15.8	83°07.5	45°23.6	8°41.0	45°42.5	46°15.4	77°49.9	96°01.2
23 rd	SD = 15.8' Mer. pass. 18:27					Sun SD = 15.8'							

h	Moon (24 th May)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Hadar	-Spica	+Regulus	+Pollux	+Jupiter	+Capella
0	80°48.4	14.0'	N07°40.0	-15.0'	57.0'	90°43.0	82°41.6	78°51.0	44°50.8	9°13.8	46°15.2	46°47.7	78°21.1
1	95°21.4	14.1'	07°25.1	-15.0'	57.0'	90°10.2	82°15.7	78°25.9	44°18.0	9°46.7	46°47.9	47°20.0	78°52.2
2	109°54.5	14.1'	07°10.1	-15.0'	57.0'	89°37.4	81°49.9	78°00.8	43°45.3	10°19.4	47°20.6	47°52.3	79°23.3
3	124°27.6	14.2'	06°55.1	-15.0'	56.9'	89°04.7	81°24.1	77°35.9	43°12.6	10°52.2	47°53.3	48°24.5	79°54.4
4	139°00.8	14.3'	06°40.1	-15.0'	56.9'	88°31.9	80°58.4	77°10.9	42°39.9	11°24.9	48°25.9	48°56.7	80°25.5
5	153°34.1	14.3'	06°25.1	-15.0'	56.9'	87°59.3	80°32.7	76°46.1	42°07.3	11°57.5	48°58.4	49°28.8	80°56.5
6	168°07.4	14.4'	N06°10.1	-15.0'	56.8'	87°26.7	80°07.1	76°21.3	41°34.7	12°30.2	49°31.0	50°00.9	81°27.5
7	182°40.8	14.4'	05°55.1	-15.0'	56.8'	86°54.1	79°41.5	75°56.5	41°02.1	13°02.8	50°03.5	50°33.0	81°58.4
8	197°14.2	14.5'	05°40.0	-15.0'	56.8'	86°21.5	79°15.9	75°31.8	40°29.6	13°35.3	50°35.9	51°05.0	82°29.3
9	211°47.7	14.5'	05°25.0	-15.1'	56.8'	85°49.0	78°50.4	75°07.2	39°57.1	14°07.8	51°08.4	51°37.0	83°00.2
10	226°21.2	14.6'	05°09.9	-15.1'	56.7'	85°16.5	78°25.0	74°42.6	39°24.7	14°40.3	51°40.8	52°09.0	83°31.1
11	240°54.8	14.7'	04°54.9	-15.1'	56.7'	84°44.0	77°59.6	74°18.1	38°52.3	15°12.8	52°13.1	52°41.0	84°01.9
12	255°28.5	14.7'	N04°39.8	-15.1'	56.7'	84°11.6	77°34.3	73°53.7	38°19.9	15°45.2	52°45.4	53°12.9	84°32.7
13	270°02.2	14.8'	04°24.7	-15.1'	56.6'	83°39.2	77°09.0	73°29.3	37°47.5	16°17.6	53°17.7	53°44.7	85°03.5
14	284°36.0	14.8'	04°09.7	-15.1'	56.6'	83°06.9	76°43.8	73°05.0	37°15.2	16°49.9	53°50.0	54°16.6	85°34.3
15	299°09.8	14.9'	03°54.6	-15.1'	56.6'	82°34.6	76°18.6	72°40.8	36°42.9	17°22.3	54°22.2	54°48.4	86°05.0
16	313°43.6	14.9'	03°39.5	-15.1'	56.5'	82°02.3	75°53.5	72°16.6	36°10.7	17°54.5	54°54.4	55°20.1	86°35.7
17	328°17.5	14.9'	03°24.4	-15.1'	56.5'	81°30.0	75°28.5	71°52.5	35°38.5	18°26.8	55°26.6	55°51.9	87°06.3
18	342°51.5	15.0'	N03°09.4	-15.1'	56.5'	80°57.8	75°03.5	71°28.4	35°06.3	18°59.0	55°58.7	56°23.6	87°36.9
19	357°25.5	15.0'	02°54.3	-15.1'	56.4'	80°25.6	74°38.5	71°04.4	34°34.2	19°31.2	56°30.8	56°55.3	88°07.5
20	11°59.5	15.1'	02°39.2	-15.1'	56.4'	79°53.5	74°13.6	70°40.5	34°02.1	20°03.3	57°02.9	57°26.9	88°38.1
21	26°33.5	15.1'	02°24.2	-15.1'	56.4'	79°21.4	73°48.8	70°16.7	33°30.0	20°35.5	57°35.0	57°58.5	89°08.6
22	41°07.7	15.1'	02°09.1	-15.0'	56.4'	78°49.3	73°24.1	69°53.0	32°58.0	21°07.5	58°07.0	58°30.1	89°39.1
23	55°41.8	15.2'	01°54.1	-15.0'	56.3'	78°17.2	72°59.3	69°29.3	32°26.0	21°39.6	58°38.9	59°01.6	90°09.6
24 th	SD = 15.6' Mer. pass. 19:11												

DUT1 = UT1-UTC = +0.0950 sec $\Delta T = TT-UT1 = +69.0890$ sec

2026 May 25 to May. 27 UT

h	Moon (25 th May)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Spica	+Regulus	+Pollux	+Jupiter	+Capella
0	70°16.0	15.2'	N01°39.0	-15.0'	56.3'		77°45.2	72°34.7	31°54.0	22°11.6	59°10.9	59°33.1	90°40.1
1	84°50.2	15.2'	01°24.0	-15.0'	56.3'		77°13.2	72°10.1	31°22.1	22°43.6	59°42.8	60°04.6	91°10.5
2	99°24.4	15.3'	01°09.0	-15.0'	56.2'		76°41.3	71°45.6	30°50.2	23°15.6	60°14.7	60°36.1	91°40.9
3	113°58.7	15.3'	00°54.0	-15.0'	56.2'		76°09.3	71°21.2	30°18.3	23°47.5	60°46.5	61°07.5	92°11.2
4	128°33.0	15.3'	00°39.0	-15.0'	56.2'		75°37.4	70°56.8	29°46.5	24°19.4	61°18.4	61°38.9	92°41.5
5	143°07.4	15.4'	00°24.0	-15.0'	56.2'		75°05.6	70°32.5	29°14.7	24°51.3	61°50.2	62°10.3	93°11.8
6	157°41.8	15.4'	N00°09.0	-15.0'	56.1'		74°33.7	70°08.2	28°42.9	25°23.1	62°21.9	62°41.6	93°42.1
7	172°16.1	15.4'	S00°05.9	-14.9'	56.1'		74°01.9	69°44.0	28°11.2	25°54.9	62°53.7	63°12.9	94°12.3
8	186°50.6	15.4'	00°20.9	-14.9'	56.1'		73°30.2	69°19.9	27°39.5	26°26.7	63°25.4	63°44.2	94°42.5
9	201°25.0	15.5'	00°35.8	-14.9'	56.0'		72°58.4	68°55.9	27°07.8	26°58.4	63°57.0	64°15.4	95°12.7
10	215°59.5	15.5'	00°50.7	-14.9'	56.0'		72°26.7	68°31.9	26°36.1	27°30.1	64°28.7	64°46.6	95°42.8
11	230°34.0	15.5'	01°05.6	-14.9'	56.0'		71°55.0	68°08.0	26°04.5	28°01.8	65°00.3	65°17.8	96°12.9
12	245°08.5	15.5'	S01°20.5	-14.9'	56.0'	119°54.3	71°23.4	67°44.1	25°33.0	28°33.5	65°31.9	65°49.0	96°43.0
13	259°43.0	15.6'	01°35.4	-14.8'	55.9'	119°29.2	70°51.7	67°20.4	25°01.4	29°05.1	66°03.5	66°20.1	97°13.1
14	274°17.6	15.6'	01°50.2	-14.8'	55.9'	119°04.1	70°20.1	66°56.7	24°29.9	29°36.7	66°35.0	66°51.2	97°43.1
15	288°52.2	15.6'	02°05.0	-14.8'	55.9'	118°38.9	69°48.6	66°33.1	23°58.4	30°08.3	67°06.5	67°22.3	98°13.1
16	303°26.7	15.6'	02°19.8	-14.8'	55.9'	118°13.7	69°17.0	66°09.6	23°27.0	30°39.8	67°38.0	67°53.3	98°43.0
17	318°01.3	15.6'	02°34.6	-14.8'	55.8'	117°48.4	68°45.5	65°46.1	22°55.5	31°11.4	68°09.5	68°24.3	99°12.9
18	332°36.0	15.6'	S02°49.4	-14.7'	55.8'	117°23.1	68°14.0	65°22.7	22°24.1	31°42.8	68°40.9	68°55.3	99°42.8
19	347°10.6	15.6'	03°04.1	-14.7'	55.8'	116°57.8	67°42.6	64°59.4	21°52.8	32°14.3	69°12.3	69°26.3	100°12.7
20	1°45.2	15.6'	03°18.8	-14.7'	55.8'	116°32.5	67°11.1	64°36.2	21°21.5	32°45.7	69°43.7	69°57.2	100°42.5
21	16°19.9	15.7'	03°33.5	-14.7'	55.7'	116°07.1	66°39.7	64°13.1	20°50.2	33°17.2	70°15.0	70°28.1	101°12.3
22	30°54.5	15.7'	03°48.1	-14.6'	55.7'	115°41.7	66°08.3	63°50.0	20°18.9	33°48.5	70°46.3	70°59.0	101°42.1
23	45°29.2	15.7'	04°02.8	-14.6'	55.7'	115°16.3	65°37.0	63°27.1	19°47.7	34°19.9	71°17.6	71°29.9	102°11.8
25 th	SD = 15.4' Mer. pass. 19:53												

h	Moon (26 th May)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Spica	+Regulus	+Pollux	+Jupiter	+Capella
0	60°03.8	15.7'	S04°17.4	-14.6'	55.7'	114°50.9	65°05.6	63°04.2	19°16.5	34°51.2	71°48.9	72°00.7	102°41.5
1	74°38.5	15.7'	04°31.9	-14.5'	55.6'	114°25.4	64°34.3	62°41.4	18°45.3	35°22.5	72°20.1	72°31.5	103°11.2
2	89°13.2	15.7'	04°46.5	-14.5'	55.6'	113°59.9	64°03.1	62°18.7	18°14.2	35°53.8	72°51.4	73°02.3	103°40.9
3	103°47.9	15.7'	05°01.0	-14.5'	55.6'	113°34.4	63°31.8	61°56.1	17°43.1	36°25.1	73°22.6	73°33.1	104°10.5
4	118°22.5	15.7'	05°15.5	-14.4'	55.6'	113°08.9	63°00.6	61°33.6	17°12.0	36°56.3	73°53.7	74°03.8	104°40.1
5	132°57.2	15.7'	05°29.9	-14.4'	55.5'	112°43.3	62°29.4	61°11.1	16°41.0	37°27.5	74°24.9	74°34.5	105°09.6
6	147°31.9	15.7'	S05°44.3	-14.4'	55.5'	112°17.7	61°58.2	60°48.8	16°10.0	37°58.7	74°56.0	75°05.2	105°39.2
7	162°06.6	15.7'	05°58.7	-14.3'	55.5'	111°52.1	61°27.0	60°26.5	15°39.0	38°29.8	75°27.1	75°35.8	106°08.6
8	176°41.3	15.7'	06°13.0	-14.3'	55.5'	111°26.5	60°55.9	60°04.4	15°08.1	39°01.0	75°58.2	76°06.5	106°38.1
9	191°15.9	15.7'	06°27.4	-14.3'	55.4'	111°00.9	60°24.8	59°42.3	14°37.2	39°32.1	76°29.2	76°37.1	107°07.5
10	205°50.6	15.7'	06°41.6	-14.2'	55.4'	110°35.3	59°53.7	59°20.4	14°06.4	40°03.2	77°00.3	77°07.7	107°36.9
11	220°25.3	15.7'	06°55.9	-14.2'	55.4'	110°09.6	59°22.6	58°58.5	13°35.6	40°34.2	77°31.3	77°38.3	108°06.3
12	234°59.9	15.6'	S07°10.1	-14.2'	55.4'	109°43.9	58°51.6	58°36.8	13°04.8	41°05.3	78°02.2	78°08.8	108°35.6
13	249°34.6	15.6'	07°24.2	-14.1'	55.3'	109°18.3	58°20.6	58°15.1	12°34.1	41°36.3	78°33.2	78°39.3	109°04.9
14	264°09.2	15.6'	07°38.3	-14.1'	55.3'	108°52.6	57°49.6	57°53.6	12°03.4	42°07.3	79°04.1	79°09.8	109°34.2
15	278°43.8	15.6'	07°52.4	-14.0'	55.3'	108°26.9	57°18.6	57°32.2	11°32.8	42°38.3	79°35.1	79°40.3	110°03.4
16	293°18.4	15.6'	08°06.5	-14.0'	55.3'	108°01.1	56°47.7	57°10.8	11°02.3	43°09.2	80°05.9	80°10.7	110°32.6
17	307°53.0	15.6'	08°20.5	-14.0'	55.3'	107°35.4	56°16.8	56°49.6	10°31.8	43°40.1	80°36.8	80°41.2	111°01.8
18	322°27.6	15.6'	S08°34.4	-13.9'	55.2'	107°09.7	55°45.9	56°28.5	10°01.3	44°11.0	81°07.7	81°11.6	111°31.0
19	337°02.2	15.6'	08°48.3	-13.9'	55.2'	106°43.9	55°15.0	56°07.5	9°30.9	44°41.9	81°38.5	81°42.0	112°00.1
20	351°36.7	15.5'	09°02.2	-13.8'	55.2'	106°18.2	54°44.1	55°46.6	9°00.7	45°12.8	82°09.3	82°12.3	112°29.2
21	6°11.3	15.5'	09°16.0	-13.8'	55.2'	105°52.4	54°13.3	55°25.9	8°30.5	45°43.6	82°40.1	82°42.7	112°58.2
22	20°45.8	15.5'	09°29.8	-13.7'	55.2'	105°26.7	53°42.5	55°05.2	8°00.4	46°14.4	83°10.9	83°13.0	113°27.2
23	35°20.3	15.5'	09°43.5	-13.7'	55.1'	105°00.9	53°11.7	54°44.7	7°30.4	46°45.2	83°41.6	83°43.3	113°56.2
26 th	SD = 15.2' Mer. pass. 20:35												

h	Moon (27 th May)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Altair	-Rigel Kent.	-Antares	\pm Spica	+Regulus	+Procyon	+Pollux	+Jupiter
0	49°54.8	15.5'	S09°57.2	-13.6'	55.1'	104°35.1	54°24.3	52°40.9	7°00.5	47°16.0	80°35.5	84°12.3	84°13.6
1	64°29.2	15.4'	10°10.8	-13.6'	55.1'	104°09.3	54°04.0	52°10.1	6°30.8	47°46.8	81°04.5	84°43.0	84°43.9
2	79°03.7	15.4'	10°24.4	-13.5'	55.1'	103°43.6	53°43.9	51°39.4	6°01.3	48°17.5	81°33.5	85°13.7	85°14.1
3	93°38.1	15.4'	10°38.0	-13.5'	55.1'	103°17.8	53°23.9	51°08.7	5°32.1	48°48.2	82°02.5	85°44.4	85°44.3
4	108°12.5	15.4'	10°51.4	-13.4'	55.0'	102°52.0	53°04.0	50°38.0	5°03.2	49°18.9	82°31.5	86°15.0	86°14.5
5	122°46.9	15.3'	11°04.9	-13.4'	55.0'	102°26.2	52°44.2	50°07.3	4°34.6	49°49.6	83°00.4	86°45.7	86°44.7
6	137°21.2	15.3'	S11°18.3	-13.3'	55.0'	102°00.4	52°24.6	49°36.6	4°06.6	50°20.3	83°29.4	87°16.3	87°14.9
7	151°55.5	15.3'	11°31.6	-13.3'	55.0'	101°34.6	52°05.1	49°06.0	3°39.4	50°50.9	83°58.3	87°46.9	87°45.0
8	166°29.8	15.3'	11°44.9	-13.2'	55.0'	101°08.8	51°45.8	48°35.4		51°21.6	84°27.2	88°17.4	88°15.2
9	181°04.1	15.2'	11°58.1	-13.2'	54.9'	100°43.0	51°26.6	48°04.8		51°52.2	84°56.1	88°48.0	88°45.3
10	195°38.3	15.2'	12°11.3	-13.1'	54.9'	100°17.2	51°07.5	47°34.2		52°22.7	85°25.0	89°18.5	89°15.4
11	210°12.5	15.2'	12°24.4	-13.1'	54.9'	99°51.4	50°48.6	47°03.6		52°53.3	85°53.9	89°49.0	89°45.4
12	224°46.7	15.1'	S12°37.4	-13.0'	54.9'	99°25.6	50°29.9	46°33.0		53°23.9	86°22.8	90°19.5	90°15.5
13	239°20.8	15.1'	12°50.4	-12.9'	54.9'	98°59.8	50°11.2	46°02.5		53°54.4	86°51.6	90°50.0	90°45.5
14	253°54.9	15.1'	13°03.4	-12.9'	54.8'	98°34.0	49°52.8	45°32.0		54°24.9	87°20.5	91°20.5	91°15.6
15	268°29.0	15.0'	13°16.2	-12.8'	54.8'	98°08.2	49°34.5	45°01.5		54°55.4	87°49.3	91°50.9	91°45.6
16	283°03.0	15.0'	13°29.1	-12.8'	54.8'	97°42.4	49°16.3	44°31.0		55°25.9	88°18.1	92°21.4	92°15.5
17	297°37.0	15.0'	13°41.8	-12.7'	54.8'	97°16.7	48°58.4	44°00.6		55°56.4	88°46.9	92°51.8	92°45.5
18	312°11.0	14.9'	S13°54.5	-12.6'	54.8'	96°50.9	48°40.5	43°30.1		56°26.8	89°15.6	93°22.2	93°15.5
19	326°44.9	14.9'	14°07.2	-12.6'	54.8'	96°25.1	48°22.9	42°59.7		56°57.2	89°44.4	93°52.5	93°45.4
20	341°18.8	14.9'	14°19.7	-12.5'	54.7'	95°59.3	48°05.4	42°29.3		57°27.7	90°13.2	94°22.9	94°15.3
21	355°52.7	14.8'	14°32.2	-12.4'	54.7'	95°33.6	47°48.1	41°58.9	4°17.8	57°58.1	90°41.9	94°53.2	94°45.2
22	10°26.5	14.8'	14°44.7	-12.4'	54.7'	95°07.8	47°30.9	41°28.5	4°45.7	58°28.4	91°10.6	95°23.6	95°15.1
23	25°00.2	14.7'	14°57.1	-12.3'	54.7'	94°42.1	47°14.0	40°58.1	5°14.1	58°58.8	91°39.3	95°53.9	95°45.0
27 th	SD = 15.0' Mer. pass. 21:17												

DUT1 = UT1-UTC = +0.0962 sec $\Delta T = TT-UT1 = +69.0878$ sec

2026 June 03 to Jun. 05 UT

h	Moon (3 rd Jun)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Mars	-Saturn	-Fomalhaut	-Altair	+Antares	+Hadar	+Spica	+Arcturus
0	328°53.7	10.5'	S26°54.0	4.2'	54.1'	119°53.5	91°01.8	54°13.3	38°50.7	31°00.0	57°36.2	76°53.9	80°35.8
1	343°23.2	10.6'	26°49.8	4.4'	54.1'	119°25.8	90°32.5	53°46.7	38°34.7	31°29.7	57°56.0	77°23.6	81°00.1
2	357°52.7	10.6'	26°45.5	4.5'	54.1'	118°58.1	90°03.1	53°20.2	38°19.0	31°59.4	58°15.8	77°53.3	81°24.4
3	12°22.3	10.6'	26°41.0	4.6'	54.1'	118°30.4	89°33.8	52°53.7	38°03.4	32°29.1	58°35.7	78°23.0	81°48.7
4	26°51.9	10.7'	26°36.4	4.7'	54.1'	118°02.7	89°04.4	52°27.2	37°48.1	32°58.8	58°55.8	78°52.7	82°13.1
5	41°21.6	10.7'	26°31.6	4.9'	54.1'	117°35.0	88°35.0	52°00.8	37°33.0	33°28.5	59°15.9	79°22.4	82°37.4
6	55°51.3	10.7'	S26°26.8	5.0'	54.1'	117°07.3	88°05.6	51°34.4		33°58.2	59°36.1	79°52.1	83°01.8
7	70°21.0	10.8'	26°21.8	5.1'	54.1'	116°39.5	87°36.2	51°08.0		34°27.9	59°56.3	80°21.8	83°26.2
8	84°50.8	10.8'	26°16.7	5.2'	54.1'	116°11.8	87°06.8	50°41.6		34°57.7	60°16.7	80°51.5	83°50.6
9	99°20.6	10.9'	26°11.4	5.4'	54.1'	115°44.0	86°37.4	50°15.4		35°27.4	60°37.2	81°21.3	84°15.1
10	113°50.5	10.9'	26°06.0	5.5'	54.1'	115°16.3	86°08.0	49°49.1		35°57.2	60°57.7	81°51.0	84°39.5
11	128°20.4	10.9'	26°00.6	5.6'	54.1'	114°48.5	85°38.6	49°22.9		36°26.9	61°18.3	82°20.8	85°04.0
12	142°50.3	11.0'	S25°54.9	5.7'	54.2'	114°20.7	85°09.1	48°56.7		36°56.7	61°39.0	82°50.5	85°28.4
13	157°20.3	11.0'	25°49.2	5.9'	54.2'	113°52.9	84°39.7	48°30.6		37°26.5	61°59.8	83°20.3	85°52.9
14	171°50.4	11.1'	25°43.4	6.0'	54.2'	113°25.2	84°10.2	48°04.5		37°56.3	62°20.6	83°50.1	86°17.4
15	186°20.4	11.1'	25°37.4	6.1'	54.2'	112°57.3	83°40.8	47°38.5		38°26.1	62°41.5	84°19.8	86°41.9
16	200°50.6	11.2'	25°31.3	6.2'	54.2'	112°29.5	83°11.3	47°12.5		38°55.9	63°02.5	84°49.6	87°06.4
17	215°20.7	11.2'	25°25.1	6.3'	54.2'	112°01.7	82°41.8	46°46.6		39°25.7	63°23.6	85°19.4	87°31.0
18	229°50.9	11.3'	S25°18.7	6.5'	54.2'	111°33.9	82°12.3	46°20.7		39°55.5	63°44.7	85°49.2	87°55.5
19	244°21.2	11.3'	25°12.3	6.6'	54.2'	111°06.0	81°42.9	45°54.9		40°25.3	64°05.9	86°19.0	88°20.1
20	258°51.5	11.4'	25°05.7	6.7'	54.2'	110°38.2	81°13.3	45°29.1		40°55.2	64°27.2	86°48.9	88°44.6
21	273°21.9	11.4'	24°59.0	6.8'	54.3'	110°10.3	80°43.8	45°03.4		41°25.0	64°48.5	87°18.7	89°09.2
22	287°52.3	11.4'	24°52.2	6.9'	54.3'	109°42.4	80°14.3	44°37.7		41°54.9	65°09.9	87°48.6	89°33.8
23	302°22.7	11.5'	24°45.2	7.0'	54.3'	109°14.5	79°44.8	44°12.1		42°24.8	65°31.4	88°18.4	89°58.4
3 rd	SD = 14.7' Mer. pass. 02:09												

h	Moon (4 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Mars	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Hadar	+Spica	+Arcturus
0	316°53.2	11.5'	S24°38.2	7.2'	54.3'	108°46.6	79°15.2	43°46.6	42°54.6	61°30.0	65°53.0	88°48.3	90°23.0
1	331°23.7	11.6'	24°31.0	7.3'	54.3'	108°18.7	78°45.7	43°21.1	43°24.5	61°51.6	66°14.6	89°18.2	90°47.6
2	345°54.3	11.6'	24°23.8	7.4'	54.3'	107°50.8	78°16.1	42°55.7	43°54.4	62°13.2	66°36.2	89°48.1	91°12.2
3	0°25.0	11.7'	24°16.4	7.5'	54.3'	107°22.9	77°46.5	42°30.4	44°24.4	62°34.9	66°58.0	90°18.0	91°36.8
4	14°55.7	11.7'	24°08.9	7.6'	54.3'	106°54.9	77°17.0	42°05.1	44°54.3	62°56.7	67°19.8	90°47.9	92°01.5
5	29°26.4	11.8'	24°01.3	7.7'	54.3'	106°27.0	76°47.4	41°39.9	45°24.2	63°18.5	67°41.6	91°17.8	92°26.1
6	43°57.2	11.8'	S23°53.5	7.8'	54.4'	105°59.0	76°17.7	41°14.8	45°54.2	63°40.4	68°03.5	91°47.7	92°50.7
7	58°28.1	11.9'	23°45.7	7.9'	54.4'	105°31.0	75°48.1	40°49.8	46°24.1	64°02.4	68°25.5	92°17.7	93°15.4
8	72°59.0	11.9'	23°37.7	8.1'	54.4'	105°03.0	75°18.5	40°24.8	46°54.1	64°24.5	68°47.5	92°47.7	93°40.0
9	87°29.9	12.0'	23°29.7	8.2'	54.4'	104°35.0	74°48.8	40°00.0	47°24.1	64°46.6	69°09.6	93°17.6	94°04.7
10	102°00.9	12.1'	23°21.5	8.3'	54.4'	104°07.0	74°19.2	39°35.2	47°54.1	65°08.8	69°31.7	93°47.6	94°29.4
11	116°32.0	12.1'	23°13.2	8.4'	54.4'	103°38.9	73°49.5	39°10.5	48°24.1	65°31.0	69°53.9	94°17.6	94°54.0
12	131°03.1	12.2'	S23°04.8	8.5'	54.4'	103°10.9	73°19.8	38°45.9	48°54.2	65°53.3	70°16.2	94°47.6	95°18.7
13	145°34.2	12.2'	22°56.4	8.6'	54.5'	102°42.8	72°50.1	38°21.4	49°24.2	66°15.7	70°38.5	95°17.7	95°43.4
14	160°05.4	12.3'	22°47.8	8.7'	54.5'	102°14.8	72°20.4	37°57.0	49°54.3	66°38.1	71°00.8	95°47.7	96°08.0
15	174°36.7	12.3'	22°39.1	8.8'	54.5'	101°46.7	71°50.7	37°32.7	50°24.3	67°00.6	71°23.2	96°17.8	96°32.7
16	189°08.0	12.4'	22°30.2	8.9'	54.5'	101°18.6	71°21.0	37°08.6	50°54.4	67°23.2	71°45.7	96°47.8	96°57.4
17	203°39.4	12.4'	22°21.3	9.0'	54.5'	100°50.4	70°51.2	36°44.5	51°24.5	67°45.8	72°08.2	97°17.9	97°22.1
18	218°10.8	12.5'	S22°12.3	9.1'	54.5'	100°22.3	70°21.5	36°20.5	51°54.6	68°08.5	72°30.7	97°48.0	97°46.8
19	232°42.2	12.5'	22°03.2	9.2'	54.6'	99°54.1	69°51.7	35°56.7	52°24.8	68°31.2	72°53.3	98°18.1	98°11.4
20	247°13.8	12.6'	21°54.0	9.3'	54.6'	99°26.0	69°21.9	35°33.0	52°54.9	68°54.0	73°15.9	98°48.3	98°36.1
21	261°45.3	12.6'	21°44.6	9.4'	54.6'	98°57.8	68°52.1	35°09.4	53°25.1	69°16.9	73°38.6	99°18.4	99°00.8
22	276°16.9	12.7'	21°35.2	9.5'	54.6'	98°29.6	68°22.3	34°46.0	53°55.2	69°39.8	74°01.4	99°48.6	99°25.5
23	290°48.6	12.7'	21°25.7	9.6'	54.6'	98°01.4	67°52.5	34°22.7	54°25.4	70°02.7	74°24.1	100°18.7	99°50.2
4 th	SD = 14.8' Mer. pass. 02:58												

h	Moon (5 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Sun	-Mars	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Arcturus	+Spica
0	305°20.3	12.8'	S21°16.1	9.7'	54.6'		97°33.1	67°22.6	33°59.6	54°55.6	70°25.7	100°14.9	100°48.9
1	319°52.1	12.8'	21°06.4	9.8'	54.7'		97°04.9	66°52.7	33°36.6	55°25.9	70°48.8	100°39.5	101°19.1
2	334°23.9	12.9'	20°56.5	9.9'	54.7'		96°36.6	66°22.9	33°13.7	55°56.1	71°11.9	101°04.2	101°49.4
3	348°55.8	12.9'	20°46.6	10.0'	54.7'		96°08.3	65°53.0	32°51.1	56°26.4	71°35.1	101°28.9	102°19.6
4	3°27.7	13.0'	20°36.6	10.1'	54.7'		95°40.0	65°23.1	32°28.6	56°56.6	71°58.3	101°53.5	102°49.9
5	17°59.7	13.0'	20°26.5	10.2'	54.7'		95°11.7	64°53.1	32°06.2	57°26.9	72°21.5	102°18.2	103°20.1
6	32°31.7	13.1'	S20°16.3	10.3'	54.7'		94°43.4	64°23.2	31°44.1	57°57.2	72°44.8	102°42.8	103°50.4
7	47°03.8	13.1'	20°06.0	10.4'	54.8'		94°15.0	63°53.2	31°22.1	58°27.6	73°08.2	103°07.5	104°20.7
8	61°35.9	13.2'	19°55.6	10.5'	54.8'		93°46.6	63°23.2	31°00.4	58°57.9	73°31.6	103°32.1	104°51.1
9	76°08.0	13.2'	19°45.1	10.6'	54.8'		93°18.2	62°53.2	30°38.8	59°28.3	73°55.1	103°56.8	105°21.4
10	90°40.3	13.3'	19°34.6	10.7'	54.8'		92°49.8	62°23.2	30°17.5	59°58.7	74°18.6	104°21.4	105°51.8
11	105°12.5	13.3'	19°23.9	10.8'	54.8'		92°21.4	61°53.2	29°56.4	60°29.1	74°42.1	104°46.0	106°22.2
12	119°44.8	13.4'	S19°13.2	10.8'	54.9'		91°52.9	61°23.2	29°35.5	60°59.5	75°05.7	105°10.6	106°52.6
13	134°17.2	13.4'	19°02.3	10.9'	54.9'		91°24.5	60°53.1	29°14.8	61°29.9	75°29.3	105°35.2	107°23.0
14	148°49.6	13.4'	18°51.4	11.0'	54.9'		90°56.0	60°23.0	28°54.5	62°00.4	75°53.0	105°59.8	107°53.5
15	163°22.0	13.5'	18°40.4	11.1'	54.9'		90°27.5	59°52.9	28°34.3	62°30.9	76°16.7	106°24.4	108°23.9
16	177°54.5	13.5'	18°29.3	11.2'	54.9'		89°58.9	59°22.8	28°14.5	63°01.4	76°40.5	106°48.9	108°54.4
17	192°27.0	13.6'	18°18.1	11.3'	55.0'		89°30.4	58°52.6	27°54.9	63°31.9	77°04.3	107°13.5	109°24.9
18	206°59.6	13.6'	S18°06.8	11.4'	55.0'		89°01.8	58°22.5	27°35.6	64°02.4	77°28.1	107°38.0	109°55.5
19	221°32.3	13.7'	17°55.4	11.4'	55.0'		88°33.2	57°52.3	27°16.6	64°33.0	77°52.0	108°02.6	110°26.0
20	236°04.9	13.7'	17°44.0	11.5'	55.0'	119°54.9	88°04.6	57°22.1	26°57.9	65°03.6	78°15.9	108°27.1	110°56.6
21	250°37.6	13.7'	17°32.4	11.6'	55.0'	119°26.9	87°36.0	56°51.9	26°39.6	65°34.2	78°39.9	108°51.6	111°27.2
22	265°10.4	13.8'	17°20.8	11.7'	55.1'	118°58.8	87°07.3	56°21.7	26°21.6	66°04.8	79°03.9	109°16.1	111°57.8
23	279°43.2	13.8'	17°09.1	11.8'	55.1'	118°30.7	86°38.6	55°51.4	26°03.9	66°35.5	79°27.9	109°40.5	112°28.4
5 th	SD = 14.9'		Mer. pass. 03:46							Sun SD = 15.8'			

DUT1 = UT1-UTC = +0.0970 sec $\Delta T = TT-UT1 = +69.0870$ sec

2026 June 09 to Jun. 11 UT

h	Moon (9 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Sun	-Aldebaran	-Mars	-Saturn	+Fomalhaut	+Altair	+Antares	+Rigel Kent.
0	262°29.4	14.2'	S00°06.8	15.6'	57.3'	82°56.2		50°26.8	18°06.6	30°54.5	57°20.5	105°13.6	109°48.2
1	277°02.6	14.2'	N00°08.7	15.6'	57.3'	82°25.6		49°55.8	17°35.3	31°18.2	57°46.3	105°46.8	110°13.4
2	291°35.8	14.1'	00°24.3	15.6'	57.4'	81°54.9		49°24.7	17°04.1	31°42.1	58°12.3	106°19.9	110°38.5
3	306°08.9	14.1'	00°39.9	15.6'	57.4'	81°24.2		48°53.6	16°33.0	32°06.4	58°38.4	106°53.1	111°03.7
4	320°42.0	14.1'	00°55.5	15.6'	57.4'	80°53.5		48°22.4	16°02.0	32°30.9	59°04.6	107°26.4	111°28.9
5	335°15.1	14.0'	01°11.1	15.6'	57.5'	80°22.7		47°51.2	15°31.0	32°55.7	59°30.9	107°59.7	111°54.0
6	349°48.1	14.0'	N01°26.8	15.7'	57.5'	79°51.9		47°20.0	15°00.2	33°20.7	59°57.4	108°33.0	112°19.1
7	4°21.1	13.9'	01°42.5	15.7'	57.6'	79°21.0		46°48.7	14°29.4	33°46.0	60°23.9	109°06.4	112°44.2
8	18°54.0	13.9'	01°58.1	15.7'	57.6'	78°50.1		46°17.4	13°58.9	34°11.5	60°50.5	109°39.8	113°09.2
9	33°26.9	13.8'	02°13.8	15.7'	57.6'	78°19.1	70°15.4	45°46.0	13°28.5	34°37.2	61°17.2	110°13.3	113°34.3
10	47°59.7	13.8'	02°29.5	15.7'	57.7'	77°48.1	69°42.5	45°14.6	12°58.2	35°03.2	61°44.1	110°46.8	113°59.3
11	62°32.5	13.7'	02°45.2	15.7'	57.7'	77°17.1	69°09.5	44°43.2	12°28.2	35°29.4	62°11.0	111°20.4	114°24.2
12	77°05.2	13.7'	N03°01.0	15.7'	57.7'	76°46.0	68°36.6	44°11.7	11°58.5	35°55.8	62°38.0	111°54.0	114°49.2
13	91°37.9	13.6'	03°16.7	15.7'	57.8'	76°14.9	68°03.6	43°40.2	11°29.1	36°22.4	63°05.1	112°27.6	115°14.0
14	106°10.5	13.6'	03°32.4	15.7'	57.8'	75°43.7	67°30.5	43°08.6	10°59.9	36°49.2	63°32.4	113°01.3	115°38.9
15	120°43.1	13.5'	03°48.2	15.7'	57.9'	75°12.5	66°57.5	42°37.0	10°31.2	37°16.2	63°59.7	113°35.1	116°03.7
16	135°15.6	13.4'	04°03.9	15.7'	57.9'	74°41.2	66°24.3	42°05.4	10°02.9	37°43.4	64°27.1	114°08.8	116°28.5
17	149°48.0	13.4'	04°19.6	15.7'	57.9'	74°09.9	65°51.2	41°33.7	9°35.2	38°10.8	64°54.6	114°42.7	116°53.2
18	164°20.4	13.3'	N04°35.4	15.7'	58.0'	73°38.5	65°18.0	41°02.0	9°08.1	38°38.4	65°22.2	115°16.6	117°17.9
19	178°52.7	13.2'	04°51.1	15.7'	58.0'	73°07.1	64°44.7	40°30.3	8°41.7	39°06.1	65°49.8	115°50.5	117°42.6
20	193°24.9	13.2'	05°06.9	15.7'	58.0'	72°35.6	64°11.5	39°58.5	8°16.2	39°34.1	66°17.6	116°24.5	118°07.2
21	207°57.1	13.1'	05°22.6	15.7'	58.1'	72°04.1	63°38.2	39°26.6		40°02.2	66°45.5	116°58.5	118°31.7
22	222°29.2	13.0'	05°38.4	15.7'	58.1'	71°32.6	63°04.8	38°54.8		40°30.4	67°13.4	117°32.5	118°56.2
23	237°01.3	13.0'	05°54.1	15.7'	58.2'	71°01.0	62°31.4	38°22.9		40°58.8	67°41.4	118°06.7	119°20.6
9 th	SD = 15.6' Mer. pass. 06:42					Sun SD = 15.8' at 0h; 15.7' at 23h							

h	Moon (10 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Sun	-Rigel	-Aldebaran	-Mars	+Saturn	+Fomalhaut	+Altair	+Antares
0	251°33.2	12.9'	N06°09.8	15.7'	58.2'	70°29.4		61°58.0	37°50.9		41°27.4	68°09.5	118°40.8
1	266°05.1	12.8'	06°25.6	15.7'	58.2'	69°57.7		61°24.5	37°18.9		41°56.1	68°37.7	119°15.0
2	280°37.0	12.7'	06°41.3	15.7'	58.3'	69°26.0		60°51.0	36°46.9		42°25.0	69°06.0	119°49.3
3	295°08.7	12.7'	06°57.0	15.7'	58.3'	68°54.2		60°17.4	36°14.9		42°54.0	69°34.3	
4	309°40.4	12.6'	07°12.7	15.7'	58.4'	68°22.4		59°43.9	35°42.8		43°23.2	70°02.8	
5	324°12.0	12.5'	07°28.4	15.7'	58.4'	67°50.5		59°10.2	35°10.6		43°52.5	70°31.3	
6	338°43.5	12.4'	N07°44.0	15.6'	58.4'	67°18.6		58°36.6	34°38.5		44°22.0	70°59.8	
7	353°14.9	12.4'	07°59.7	15.6'	58.5'	66°46.6		58°02.9	34°06.3		44°51.5	71°28.5	
8	7°46.3	12.3'	08°15.3	15.6'	58.5'	66°14.6		57°29.1	33°34.1		45°21.3	71°57.3	
9	22°17.5	12.2'	08°30.9	15.6'	58.6'	65°42.6		56°55.4	33°01.8		45°51.1	72°26.1	
10	36°48.7	12.1'	08°46.5	15.6'	58.6'	65°10.5		56°21.6	32°29.5		46°21.1	72°54.9	
11	51°19.8	12.0'	09°02.1	15.5'	58.6'	64°38.3		55°47.7	31°57.2		46°51.2	73°23.9	
12	65°50.8	11.9'	N09°17.6	15.5'	58.7'	64°06.1		55°13.9	31°24.8		47°21.4	73°52.9	
13	80°21.7	11.8'	09°33.1	15.5'	58.7'	63°33.9		54°39.9	30°52.4		47°51.7	74°22.0	
14	94°52.6	11.7'	09°48.6	15.5'	58.7'	63°01.6		54°06.0	30°20.0		48°22.2	74°51.2	
15	109°23.3	11.6'	10°04.1	15.4'	58.8'	62°29.3		53°32.0	29°47.5		48°52.7	75°20.4	
16	123°53.9	11.5'	10°19.5	15.4'	58.8'	61°56.9		52°58.0	29°15.1		49°23.4	75°49.8	
17	138°24.5	11.4'	10°35.0	15.4'	58.9'	61°24.5		52°24.0	28°42.6		49°54.2	76°19.1	
18	152°54.9	11.3'	N10°50.3	15.3'	58.9'	60°52.0	65°16.4	51°49.9	28°10.0		50°25.1	76°48.6	
19	167°25.3	11.2'	11°05.7	15.3'	58.9'	60°19.5	64°49.7	51°15.8	27°37.5		50°56.1	77°18.1	
20	181°55.5	11.1'	11°21.0	15.3'	59.0'	59°46.9	64°23.1	50°41.6	27°04.9	9°23.8	51°27.2	77°47.6	
21	196°25.7	11.0'	11°36.2	15.2'	59.0'	59°14.3	63°56.4	50°07.5	26°32.3	9°52.4	51°58.5	78°17.3	
22	210°55.7	10.9'	11°51.5	15.2'	59.0'	58°41.7	63°29.8	49°33.3	25°59.7	10°21.6	52°29.8	78°47.0	
23	225°25.6	10.8'	12°06.7	15.1'	59.1'	58°09.0	63°03.3	48°59.1	25°27.1	10°51.5	53°01.2	79°16.7	
10 th	SD = 15.9' Mer. pass. 07:28					Sun SD = 15.7'							

h	Moon (11 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Sun	-Capella	-Aldebaran	-Mars	+Saturn	+Fomalhaut	+Achernar	+Altair
0	239°55.5	10.7'	N12°21.8	15.1'	59.1'	57°36.2		48°24.8	24°54.5	11°21.9	53°32.7		79°46.5
1	254°25.2	10.6'	12°36.9	15.1'	59.2'	57°03.4		47°50.5	24°21.8	11°52.7	54°04.3		80°16.4
2	268°54.8	10.5'	12°51.9	15.0'	59.2'	56°30.6		47°16.2	23°49.1	12°24.0	54°36.0		80°46.3
3	283°24.3	10.4'	13°06.9	15.0'	59.2'	55°57.7		46°41.9	23°16.5	12°55.7	55°07.8		81°16.3
4	297°53.7	10.3'	13°21.9	14.9'	59.3'	55°24.8		46°07.5	22°43.8	13°27.7	55°39.7		81°46.4
5	312°23.0	10.2'	13°36.8	14.8'	59.3'	54°51.8		45°33.1	22°11.1	14°00.0	56°11.7		82°16.5
6	326°52.2	10.1'	N13°51.6	14.8'	59.3'	54°18.8		44°58.7	21°38.5	14°32.6	56°43.8		82°46.6
7	341°21.2	9.9'	14°06.4	14.7'	59.4'	53°45.7		44°24.3	21°05.8	15°05.4	57°15.9		83°16.8
8	355°50.2	9.8'	14°21.2	14.7'	59.4'	53°12.6		43°49.9	20°33.2	15°38.5	57°48.2		83°47.1
9	10°19.0	9.7'	14°35.8	14.6'	59.5'	52°39.5		43°15.4	20°00.6	16°11.7	58°20.5		84°17.4
10	24°47.7	9.6'	14°50.4	14.5'	59.5'	52°06.3	55°05.4	42°40.9	19°28.0	16°45.2	58°52.9		84°47.7
11	39°16.3	9.5'	15°05.0	14.5'	59.5'	51°33.1	54°32.3	42°06.4	18°55.4	17°18.8	59°25.4		85°18.1
12	53°44.7	9.3'	N15°19.5	14.4'	59.6'	50°59.8	53°59.1	41°31.9	18°22.9	17°52.7	59°58.0		85°48.6
13	68°13.1	9.2'	15°33.9	14.3'	59.6'	50°26.5	53°26.0	40°57.4	17°50.4	18°26.6	60°30.6		86°19.1
14	82°41.3	9.1'	15°48.2	14.3'	59.6'	49°53.1	52°52.9	40°22.9	17°18.0	19°00.8	61°03.4	72°56.0	86°49.6
15	97°09.4	9.0'	16°02.5	14.2'	59.7'	49°19.7	52°19.7	39°48.3	16°45.6	19°35.0	61°36.2	73°11.2	87°20.2
16	111°37.4	8.8'	16°16.7	14.1'	59.7'	48°46.2	51°46.6	39°13.8	16°13.3	20°09.4	62°09.0	73°26.5	87°50.9
17	126°05.2	8.7'	16°30.8	14.0'	59.7'	48°12.8	51°13.5	38°39.2	15°41.1	20°43.9	62°42.0	73°41.9	88°21.5
18	140°32.9	8.6'	N16°44.9	14.0'	59.8'	47°39.2	50°40.4	38°04.7	15°09.0	21°18.6	63°15.0	73°57.4	88°52.3
19	155°00.5	8.5'	16°58.8	13.9'	59.8'	47°05.7	50°07.2	37°30.1	14°37.1	21°53.3	63°48.1	74°13.1	89°23.0
20	169°27.9	8.3'	17°12.7	13.8'	59.8'	46°32.0	49°34.1	36°55.6	14°05.2	22°28.1	64°21.3	74°28.8	89°53.8
21	183°55.3	8.2'	17°26.5	13.7'	59.9'	45°58.4	49°01.1	36°21.0	13°33.6	23°03.1	64°54.6	74°44.7	90°24.7
22	198°22.5	8.1'	17°40.2	13.6'	59.9'	45°24.7	48°28.0	35°46.5	13°02.1	23°38.1	65°27.9	75°00.6	90°55.5
23	212°49.5	7.9'	17°53.8	13.5'	60.0'	44°51.0	47°55.0	35°11.9	12°30.9	24°13.3	66°01.3	75°16.7	91°26.4
11 th	SD = 16.1' Mer. pass. 08:17					Sun SD = 15.7'							

DUT1 = UT1-UTC = +0.0974 sec $\Delta T = TT-UT1 = +69.0866$ sec

2026 June 12 to Jun. 14 UT

h	Moon (12 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Capella	-Sun	-Aldebaran	-Mars	+Saturn	+Fomalhaut	+Achernar	+Altair
0	227°16.5	7.8'	N18°07.3	13.4'	60.0'	47°21.9	44°17.2	34°37.4	11°59.9	24°48.5	66°34.7	75°32.9	91°57.4
1	241°43.3	7.7'	18°20.8	13.3'	60.0'	46°48.9	43°43.4	34°02.9	11°29.2	25°23.8	67°08.2	75°49.1	92°28.4
2	256°09.9	7.5'	18°34.1	13.2'	60.1'	46°16.0	43°09.6	33°28.4	10°58.8	25°59.2	67°41.8	76°05.5	92°59.4
3	270°36.4	7.4'	18°47.4	13.1'	60.1'	45°43.0	42°35.7	32°54.0	10°28.8	26°34.7	68°15.4	76°21.9	93°30.4
4	285°02.8	7.3'	19°00.5	13.0'	60.1'	45°10.1	42°01.8	32°19.5	9°59.4	27°10.3	68°49.1	76°38.4	94°01.5
5	299°29.1	7.1'	19°13.5	12.9'	60.1'	44°37.2	41°27.8	31°45.1	9°30.4	27°45.9	69°22.9	76°55.1	94°32.6
6	313°55.2	7.0'	N19°26.5	12.8'	60.2'	44°04.4	40°53.8	31°10.8	9°02.1	28°21.6	69°56.7	77°11.8	95°03.7
7	328°21.2	6.8'	19°39.3	12.7'	60.2'	43°31.6	40°19.8	30°36.5	8°34.6	28°57.4	70°30.6	77°28.6	95°34.8
8	342°47.0	6.7'	19°52.0	12.6'	60.2'	42°58.9		30°02.2	8°08.0	29°33.2	71°04.5	77°45.5	96°06.0
9	357°12.7	6.6'	20°04.6	12.5'	60.3'	42°26.2		29°28.0		30°09.1	71°38.5	78°02.5	96°37.2
10	11°38.3	6.4'	20°17.1	12.4'	60.3'	41°53.6		28°53.8		30°45.1	72°12.6	78°19.6	97°08.4
11	26°03.7	6.3'	20°29.5	12.3'	60.3'	41°21.0		28°19.7		31°21.1	72°46.7	78°36.7	97°39.6
12	40°29.0	6.2'	N20°41.8	12.1'	60.4'	40°48.5		27°45.6		31°57.2	73°20.8	78°54.0	98°10.9
13	54°54.2	6.0'	20°53.9	12.0'	60.4'	40°16.0		27°11.7		32°33.3	73°55.0	79°11.3	98°42.2
14	69°19.2	5.9'	21°05.9	11.9'	60.4'	39°43.7		26°37.8		33°09.5	74°29.3	79°28.7	99°13.4
15	83°44.1	5.7'	21°17.8	11.8'	60.4'	39°11.4		26°04.1		33°45.8	75°03.6	79°46.1	99°44.7
16	98°08.8	5.6'	21°29.6	11.6'	60.5'	38°39.2		25°30.4		34°22.1	75°38.0	80°03.6	100°16.0
17	112°33.4	5.5'	21°41.2	11.5'	60.5'	38°07.1		24°56.8		34°58.5	76°12.4	80°21.3	100°47.4
18	126°57.9	5.3'	N21°52.7	11.4'	60.5'	37°35.1		24°23.4		35°34.9	76°46.9	80°38.9	101°18.7
19	141°22.2	5.2'	22°04.0	11.2'	60.6'	37°03.2		23°50.1		36°11.4	77°21.4	80°56.7	101°50.0
20	155°46.3	5.0'	22°15.3	11.1'	60.6'	36°31.4		23°17.0		36°47.9	77°55.9	81°14.5	102°21.4
21	170°10.4	4.9'	22°26.3	10.9'	60.6'	35°59.7		22°44.0		37°24.5	78°30.5	81°32.4	102°52.7
22	184°34.3	4.8'	22°37.3	10.8'	60.6'	35°28.2		22°11.2		38°01.1	79°05.1	81°50.3	103°24.1
23	198°58.1	4.6'	22°48.1	10.7'	60.7'	34°56.8		21°38.7		38°37.8	79°39.8	82°08.3	103°55.4
12 th	SD = 16.4' Mer. pass. 09:12					Sun SD = 15.7'							

h	Moon (13 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Rigel	-Capella	-Aldebaran	+Mars	+Saturn	+Deneb	+Fomalhaut	+Altair
0	213°21.7	4.5'	N22°58.7	10.5'	60.7'	43°28.1	34°25.5	21°06.3		39°14.5	78°45.9	80°14.5	104°26.8
1	227°45.2	4.4'	23°09.2	10.3'	60.7'	43°08.8	33°54.4	20°34.2		39°51.2	79°03.9	80°49.3	104°58.1
2	242°08.5	4.2'	23°19.6	10.2'	60.7'	42°49.8	33°23.5	20°02.3		40°28.0	79°22.0	81°24.1	105°29.5
3	256°31.8	4.1'	23°29.8	10.0'	60.8'	42°31.2	32°52.7	19°30.7		41°04.9	79°40.2	81°58.9	106°00.8
4	270°54.9	4.0'	23°39.8	9.9'	60.8'	42°12.8	32°22.1	18°59.4		41°41.8	79°58.5	82°33.8	106°32.1
5	285°17.8	3.8'	23°49.7	9.7'	60.8'	41°54.8	31°51.7	18°28.5		42°18.7	80°16.8	83°08.7	107°03.4
6	299°40.6	3.7'	N23°59.4	9.6'	60.8'	41°37.1	31°21.5	17°58.0		42°55.6	80°35.2	83°43.7	107°34.7
7	314°03.3	3.6'	24°09.0	9.4'	60.9'	41°19.8	30°51.5	17°27.8	9°10.9	43°32.6	80°53.7	84°18.6	108°06.0
8	328°25.9	3.4'	24°18.4	9.2'	60.9'	41°02.8	30°21.7	16°58.1	9°40.1	44°09.7	81°12.2	84°53.7	108°37.3
9	342°48.3	3.3'	24°27.6	9.1'	60.9'	40°46.2	29°52.2	16°29.0	10°10.1	44°46.7	81°30.8	85°28.7	109°08.5
10	357°10.7	3.2'	24°36.7	8.9'	60.9'	40°30.0	29°23.0	16°00.3	10°40.7	45°23.8	81°49.4	86°03.8	109°39.8
11	11°32.8	3.1'	24°45.5	8.7'	60.9'	40°14.1	28°54.0	15°32.3	11°11.9	46°01.0	82°08.1	86°38.9	110°11.0
12	25°54.9	2.9'	N24°54.2	8.5'	61.0'	39°58.7	28°25.3	15°04.9	11°43.4	46°38.2	82°26.9	87°14.0	110°42.2
13	40°16.8	2.8'	25°02.8	8.4'	61.0'	39°43.6	27°56.9	14°38.3	12°15.5	47°15.4	82°45.7	87°49.1	111°13.3
14	54°38.7	2.7'	25°11.1	8.2'	61.0'		27°28.8	14°12.4	12°47.8	47°52.6	83°04.6	88°24.3	111°44.4
15	69°00.4	2.6'	25°19.3	8.0'	61.0'		27°01.1	13°47.5	13°20.5	48°29.9	83°23.5	88°59.5	112°15.5
16	83°22.0	2.5'	25°27.3	7.8'	61.0'		26°33.8		13°53.5	49°07.2	83°42.5	89°34.8	112°46.6
17	97°43.4	2.4'	25°35.1	7.6'	61.0'		26°06.8		14°26.7	49°44.5	84°01.5	90°10.0	113°17.6
18	112°04.8	2.2'	N25°42.7	7.4'	61.1'		25°40.2		15°00.1	50°21.9	84°20.5	90°45.3	113°48.6
19	126°26.0	2.1'	25°50.1	7.2'	61.1'		25°14.1		15°33.8	50°59.3	84°39.7	91°20.6	114°19.5
20	140°47.2	2.0'	25°57.4	7.0'	61.1'		24°48.4		16°07.6	51°36.7	84°58.8	91°55.9	114°50.4
21	155°08.2	1.9'	26°04.4	6.9'	61.1'		24°23.2		16°41.7	52°14.1	85°18.0	92°31.2	115°21.2
22	169°29.1	1.8'	26°11.3	6.7'	61.1'		23°58.6		17°15.8	52°51.6	85°37.2	93°06.5	115°52.0
23	183°50.0	1.7'	26°17.9	6.5'	61.1'		23°34.4		17°50.1	53°29.1	85°56.4	93°41.9	116°22.8
13 th	SD = 16.6' Mer. pass. 10:12												

h	Moon (14 th Jun)					Lunar Distance (objects with largest hourly LD delta)						
Sun	GHA	ν	Dec	d	HP	-Capella	+Mars	+Saturn	+Deneb	+Achernar	+Fomalhaut	+Altair
0	198°10.7	1.6'	N26°24.4	6.3'	61.2'	23°10.9	18°24.6	54°06.6	86°15.7	89°52.3	94°17.3	116°53.5
1	212°31.3	1.5'	26°30.7	6.1'	61.2'	22°47.9	18°59.1	54°44.1	86°35.0	90°11.2	94°52.6	117°24.1
2	226°51.8	1.4'	26°36.7	5.9'	61.2'	22°25.5	19°33.8	55°21.6	86°54.4	90°30.1	95°28.0	117°54.6
3	241°12.3	1.4'	26°42.6	5.6'	61.2'	22°03.9	20°08.5	55°59.2	87°13.7	90°49.0	96°03.4	118°25.1
4	255°32.7	1.3'	26°48.2	5.4'	61.2'	21°42.9	20°43.4	56°36.8	87°33.1	91°07.9	96°38.8	118°55.6
5	269°52.9	1.2'	26°53.7	5.2'	61.2'	21°22.7	21°18.3	57°14.4	87°52.5	91°26.8	97°14.3	119°25.9
6	284°13.1	1.1'	N26°58.9	5.0'	61.2'	21°03.2	21°53.4	57°52.0	88°12.0	91°45.7	97°49.7	119°56.2
7	298°33.2	1.0'	27°03.9	4.8'	61.2'	20°44.6	22°28.4	58°29.7	88°31.4	92°04.6	98°25.1	
8	312°53.3	1.0'	27°08.7	4.6'	61.2'	20°26.8	23°03.6	59°07.4	88°50.9	92°23.5	99°00.6	
9	327°13.2	0.9'	27°13.4	4.4'	61.3'	20°09.9	23°38.8	59°45.0	89°10.3	92°42.4	99°36.0	
10	341°33.1	0.8'	27°17.7	4.2'	61.3'	19°53.9	24°14.1	60°22.7	89°29.8	93°01.3	100°11.4	
11	355°52.9	0.8'	27°21.9	4.0'	61.3'		24°49.5	61°00.4	89°49.3	93°20.2	100°46.9	
12	10°12.7	0.7'	N27°25.9	3.7'	61.3'		25°24.8	61°38.1	90°08.8	93°39.0	101°22.3	
13	24°32.4	0.6'	27°29.6	3.5'	61.3'				New Moon			
14	38°52.0	0.6'	27°33.2	3.3'	61.3'				New Moon			
15	53°11.6	0.5'	27°36.5	3.1'	61.3'				New Moon			
16	67°31.2	0.5'	27°39.5	2.9'	61.3'				New Moon			
17	81°50.7	0.5'	27°42.4	2.6'	61.3'				New Moon			
18	96°10.1	0.4'	N27°45.1	2.4'	61.3'				New Moon			
19	110°29.5	0.4'	27°47.5	2.2'	61.3'				New Moon			
20	124°48.9	0.4'	27°49.7	2.0'	61.3'				New Moon			
21	139°08.3	0.3'	27°51.7	1.8'	61.3'				New Moon			
22	153°27.6	0.3'	27°53.4	1.5'	61.3'				New Moon			
23	167°46.9	0.3'	27°55.0	1.3'	61.3'				New Moon			
14 th	SD = 16.7' Mer. pass. 11:17											

h Moon (15 th Jun)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Acrux	-Spica	-Arcturus	-Regulus	-Procyon	-Venus	-Jupiter	-Pollux
0	182°06.2	0.3'	N27°56.3	1.1'	61.3'	New Moon							
1	196°25.4	0.3'	27°57.3	0.9'	61.3'	New Moon							
2	210°44.7	0.2'	27°58.2	0.6'	61.3'	New Moon							
3	225°04.0	0.2'	27°58.8	0.4'	61.3'	New Moon							
4	239°23.2	0.2'	27°59.2	0.2'	61.3'	New Moon							
5	253°42.4	0.2'	27°59.4	-0.0'	61.3'	New Moon							
6	268°01.7	0.3'	N27°59.4	-0.3'	61.3'	New Moon							
7	282°20.9	0.3'	27°59.1	-0.5'	61.3'	New Moon							
8	296°40.2	0.3'	27°58.6	-0.7'	61.3'	New Moon							
9	310°59.5	0.3'	27°57.9	-0.9'	61.3'	New Moon							
10	325°18.8	0.3'	27°56.9	-1.2'	61.3'	New Moon							
11	339°38.1	0.4'	27°55.7	-1.4'	61.3'	New Moon							
12	353°57.5	0.4'	N27°54.3	-1.6'	61.3'	New Moon							
13	8°16.8	0.4'	27°52.7	-1.8'	61.3'	New Moon							
14	22°36.3	0.5'	27°50.9	-2.1'	61.2'	New Moon							
15	36°55.7	0.5'	27°48.8	-2.3'	61.2'	New Moon							
16	51°15.2	0.5'	27°46.5	-2.5'	61.2'	New Moon							
17	65°34.8	0.6'	27°44.0	-2.7'	61.2'	New Moon							
18	79°54.4	0.6'	N27°41.3	-2.9'	61.2'	New Moon							
19	94°14.0	0.7'	27°38.4	-3.2'	61.2'	115°25.9	110°00.5	105°02.3	55°57.8	29°39.1	28°28.1	22°58.7	19°20.3
20	108°33.7	0.8'	27°35.2	-3.4'	61.2'	115°04.3	109°22.5	104°31.6	55°19.8	29°10.6	27°53.0	22°21.4	18°43.0
21	122°53.5	0.8'	27°31.8	-3.6'	61.2'	114°42.6	108°44.5	104°00.8	54°41.8	28°42.4	27°17.8	21°44.1	18°05.7
22	137°13.3	0.9'	27°28.2	-3.8'	61.2'	114°20.8	108°06.5	103°30.0	54°03.8	28°14.6	26°42.7	21°06.9	17°28.5
23	151°33.2	1.0'	27°24.4	-4.0'	61.1'	113°58.8	107°28.6	102°59.2	53°25.9	27°47.1	26°07.7	20°29.7	16°51.4
15 th	SD = 16.7' Mer. pass. 12:25												

h	Moon (16 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Spica	-Arcturus	-Regulus	-Procyon	-Venus	-Jupiter	-Pollux	+Betelgeuse
0	165°53.1	1.0'	N27°20.4	-4.2'	61.1'	106°50.6	102°28.4	52°47.9	27°20.1	25°32.6	19°52.6	16°14.3	
1	180°13.2	1.1'	27°16.1	-4.4'	61.1'	106°12.7	101°57.5	52°10.0	26°53.5	24°57.6	19°15.5	15°37.3	
2	194°33.3	1.2'	27°11.7	-4.7'	61.1'	105°34.8	101°26.6	51°32.0	26°27.3	24°22.5	18°38.4	15°00.5	
3	208°53.5	1.3'	27°07.0	-4.9'	61.1'	104°56.9	100°55.8	50°54.1	26°01.5	23°47.5	18°01.3	14°23.7	
4	223°13.8	1.4'	27°02.2	-5.1'	61.1'	104°19.1	100°24.9	50°16.3	25°36.3	23°12.6	17°24.3	13°47.0	22°43.3
5	237°34.1	1.5'	26°57.1	-5.3'	61.1'	103°41.2	99°54.0	49°38.4	25°11.6	22°37.6	16°47.4	13°10.5	22°59.6
6	251°54.6	1.5'	N26°51.8	-5.5'	61.0'	103°03.4	99°23.1	49°00.6	24°47.4	22°02.7	16°10.5	12°34.2	23°16.7
7	266°15.1	1.6'	26°46.3	-5.7'	61.0'	102°25.7	98°52.2	48°22.8	24°23.7	21°27.8	15°33.7	11°58.0	23°34.6
8	280°35.8	1.7'	26°40.6	-5.9'	61.0'	101°47.9	98°21.3	47°45.0	24°00.6	20°52.9	14°56.9	11°22.0	23°53.2
9	294°56.5	1.8'	26°34.7	-6.1'	61.0'	101°10.1	97°50.4	47°07.2	23°38.2	20°18.0	14°20.2	10°46.2	24°12.5
10	309°17.3	1.9'	26°28.7	-6.3'	61.0'	100°32.4	97°19.5	46°29.5	23°16.3	19°43.1	13°43.5	10°10.7	24°32.5
11	323°38.3	2.0'	26°22.4	-6.5'	60.9'	99°54.7	96°48.6	45°51.8	22°55.2	19°08.3	13°07.0	9°35.5	24°53.0
12	337°59.3	2.2'	N26°15.9	-6.7'	60.9'	99°17.1	96°17.7	45°14.1	22°34.7	18°33.5	12°30.5	9°00.7	25°14.2
13	352°20.5	2.3'	26°09.2	-6.9'	60.9'	98°39.4	95°46.8	44°36.4	22°15.0	17°58.8	11°54.1	8°26.3	25°36.0
14	6°41.7	2.4'	26°02.4	-7.0'	60.9'	98°01.8	95°15.9	43°58.8	21°56.0	17°24.0	11°17.8	7°52.4	25°58.3
15	21°03.1	2.5'	25°55.3	-7.2'	60.9'	97°24.2	94°45.0	43°21.2	21°37.8	16°49.3	10°41.7	7°19.1	26°21.1
16	35°24.6	2.6'	25°48.1	-7.4'	60.8'	96°46.7	94°14.2	42°43.6	21°20.4	16°14.6	10°05.7	6°46.6	26°44.5
17	49°46.2	2.7'	25°40.7	-7.6'	60.8'	96°09.2	93°43.3	42°06.1	21°03.8	15°40.0	9°29.8		27°08.3
18	64°07.9	2.8'	N25°33.1	-7.8'	60.8'	95°31.7	93°12.5	41°28.6	20°48.2	15°05.4	8°54.2		27°32.5
19	78°29.8	3.0'	25°25.3	-8.0'	60.8'	94°54.2	92°41.7	40°51.1		14°30.8	8°18.7		27°57.2
20	92°51.7	3.1'	25°17.3	-8.1'	60.7'	94°16.8	92°10.9	40°13.6		13°56.2	7°43.6		28°22.3
21	107°13.8	3.2'	25°09.2	-8.3'	60.7'	93°39.4	91°40.1	39°36.2		13°21.7	7°08.7		28°47.8
22	121°36.0	3.3'	25°00.8	-8.5'	60.7'	93°02.0	91°09.4	38°58.8		12°47.2	6°34.3		29°13.7
23	135°58.4	3.5'	24°52.4	-8.7'	60.7'	92°24.7	90°38.7	38°21.5		12°12.7	6°00.4		29°39.9
16 th	SD = 16.7' Mer. pass. 13:32												

h	Moon (17 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Rigel Kent.	-Spica	-Arcturus	-Regulus	-Venus	±Jupiter	+Pollux	+Betelgeuse
0	150°20.8	3.6'	N24°43.7	-8.8'	60.6'	118°53.5	91°47.3	90°08.0	37°44.1	11°38.3	5°27.2		30°06.4
1	164°43.4	3.7'	24°34.9	-9.0'	60.6'	118°26.6	91°10.1	89°37.3	37°06.8	11°03.9	4°54.8		30°33.3
2	179°06.2	3.9'	24°25.9	-9.2'	60.6'	117°59.7	90°32.8	89°06.7	36°29.6	10°29.6			31°00.4
3	193°29.0	4.0'	24°16.7	-9.3'	60.6'	117°32.8	89°55.6	88°36.1	35°52.4	9°55.2			31°27.9
4	207°52.0	4.1'	24°07.4	-9.5'	60.5'	117°05.7	89°18.5	88°05.5	35°15.2	9°21.0			31°55.6
5	222°15.2	4.3'	23°57.9	-9.6'	60.5'	116°38.6	88°41.3	87°35.0	34°38.0	8°46.7			32°23.5
6	236°38.4	4.4'	N23°48.2	-9.8'	60.5'	116°11.4	88°04.3	87°04.5	34°00.9	8°12.5			32°51.8
7	251°01.8	4.5'	23°38.4	-9.9'	60.5'	115°44.1	87°27.2	86°34.0	33°23.8	7°38.3			33°20.2
8	265°25.4	4.7'	23°28.5	-10.1'	60.4'	115°16.8	86°50.2	86°03.6	32°46.8	7°04.2			33°48.9
9	279°49.1	4.8'	23°18.4	-10.2'	60.4'	114°49.4	86°13.2	85°33.2	32°09.8	6°30.1			34°17.7
10	294°12.9	5.0'	23°08.1	-10.4'	60.4'	114°22.0	85°36.3	85°02.8	31°32.8	5°56.1			34°46.8
11	308°36.8	5.1'	22°57.8	-10.5'	60.3'	113°54.5	84°59.3	84°32.5	30°55.9	5°22.1			35°16.0
12	323°00.9	5.2'	N22°47.2	-10.7'	60.3'	113°27.0	84°22.5	84°02.3	30°19.0	4°48.1		7°30.1	35°45.4
13	337°25.2	5.4'	22°36.5	-10.8'	60.3'	112°59.4	83°45.7	83°32.1	29°42.2	4°14.2		8°02.9	36°15.0
14	351°49.5	5.5'	22°25.7	-11.0'	60.2'	112°31.8	83°08.9	83°01.9	29°05.4	3°40.4		8°36.2	36°44.8
15	6°14.1	5.7'	22°14.8	-11.1'	60.2'	112°04.1	82°32.1	82°31.8	28°28.6	3°06.6		9°09.9	37°14.7
16	20°38.7	5.8'	22°03.7	-11.2'	60.2'	111°36.4	81°55.4	82°01.7	27°51.9	2°32.9		9°43.9	37°44.7
17	35°03.5	5.9'	21°52.4	-11.4'	60.1'	111°08.7	81°18.8	81°31.7	27°15.2	1°59.4	5°59.4	10°18.2	38°14.9
18	49°28.5	6.1'	N21°41.1	-11.5'	60.1'	110°40.9	80°42.1	81°01.7	26°38.6	1°26.1	6°32.6	10°52.8	38°45.1
19	63°53.6	6.2'	21°29.6	-11.6'	60.1'	110°13.1	80°05.6	80°31.8	26°02.0	0°53.3	7°06.2	11°27.5	39°15.5
20	78°18.8	6.4'	21°18.0	-11.7'	60.1'	109°45.3	79°29.0	80°02.0	25°25.4		7°40.2	12°02.3	39°46.1
21	92°44.2	6.5'	21°06.3	-11.8'	60.0'	109°17.4	78°52.5	79°32.2	24°48.9		8°14.5	12°37.3	40°16.7
22	107°09.7	6.7'	20°54.4	-12.0'	60.0'	108°49.6	78°16.1	79°02.5	24°12.4		8°48.9	13°12.3	40°47.4
23	121°35.3	6.8'	20°42.5	-12.1'	60.0'	108°21.7	77°39.7	78°32.8	23°36.0		9°23.5	13°47.5	41°18.2
17 th	SD = 16.5' Mer. pass. 14:34												

DUT1 = UT1-UTC = +0.0982 sec $\Delta T = TT-UT1 = +69.0858$ sec

2026 June 18 to Jun. 20 UT

h	Moon (18 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Antares	-Arcturus	-Spica	-Regulus	+Venus	+Jupiter	+Pollux	+Sun
0	136°01.1	6.9'	N20°30.4	-12.2'	59.9'		78°03.2	77°03.3	22°59.6	1°58.2	9°58.2	14°22.7	40°30.1
1	150°27.1	7.1'	20°18.2	-12.3'	59.9'		77°33.6	76°27.0	22°23.3	2°31.4	10°32.9	14°57.9	41°03.7
2	164°53.1	7.2'	20°05.9	-12.4'	59.8'		77°04.2	75°50.7	21°47.0	3°04.7	11°07.8	15°33.2	41°37.4
3	179°19.4	7.4'	19°53.5	-12.5'	59.8'		76°34.8	75°14.5	21°10.7	3°38.0	11°42.7	16°08.5	42°11.0
4	193°45.7	7.5'	19°41.0	-12.6'	59.8'		76°05.4	74°38.3	20°34.5	4°11.2	12°17.6	16°43.9	42°44.6
5	208°12.2	7.6'	19°28.3	-12.7'	59.7'	119°55.2	75°36.1	74°02.2	19°58.4	4°44.4	12°52.6	17°19.2	43°18.1
6	222°38.9	7.8'	N19°15.6	-12.8'	59.7'	119°19.1	75°06.9	73°26.1	19°22.3	5°17.6	13°27.5	17°54.6	43°51.6
7	237°05.6	7.9'	19°02.8	-12.9'	59.7'	118°43.0	74°37.8	72°50.0	18°46.2	5°50.7	14°02.5	18°30.0	44°25.0
8	251°32.5	8.0'	18°49.9	-13.0'	59.6'	118°07.0	74°08.7	72°14.0	18°10.2	6°23.9	14°37.5	19°05.3	44°58.4
9	265°59.6	8.2'	18°36.9	-13.1'	59.6'	117°31.0	73°39.8	71°38.1	17°34.2	6°56.9	15°12.5	19°40.7	45°31.8
10	280°26.8	8.3'	18°23.7	-13.2'	59.6'	116°55.1	73°10.8	71°02.1	16°58.3	7°29.9	15°47.4	20°16.0	46°05.1
11	294°54.1	8.5'	18°10.5	-13.3'	59.5'	116°19.2	72°42.0	70°26.3	16°22.4	8°02.9	16°22.4	20°51.4	46°38.4
12	309°21.6	8.6'	N17°57.2	-13.4'	59.5'	115°43.4	72°13.3	69°50.5	15°46.6	8°35.9	16°57.3	21°26.7	47°11.6
13	323°49.1	8.7'	17°43.9	-13.5'	59.5'	115°07.6	71°44.6	69°14.7	15°10.8	9°08.8	17°32.2	22°02.0	47°44.8
14	338°16.9	8.9'	17°30.4	-13.5'	59.4'	114°31.9	71°16.0	68°39.0	14°35.0	9°41.6	18°07.1	22°37.2	48°18.0
15	352°44.7	9.0'	17°16.8	-13.6'	59.4'	113°56.2	70°47.5	68°03.3	13°59.3	10°14.4	18°41.9	23°12.5	48°51.1
16	7°12.7	9.1'	17°03.2	-13.7'	59.3'	113°20.5	70°19.1	67°27.7	13°23.7	10°47.2	19°16.8	23°47.7	49°24.2
17	21°40.8	9.2'	16°49.5	-13.8'	59.3'	112°44.9	69°50.7	66°52.1	12°48.1	11°19.9	19°51.6	24°22.9	49°57.2
18	36°09.1	9.4'	N16°35.7	-13.9'	59.3'	112°09.4	69°22.5	66°16.6	12°12.6	11°52.5	20°26.3	24°58.1	50°30.2
19	50°37.4	9.5'	16°21.9	-13.9'	59.2'	111°33.8	68°54.3	65°41.1	11°37.1	12°25.2	21°01.1	25°33.2	51°03.1
20	65°05.9	9.6'	16°07.9	-14.0'	59.2'	110°58.4	68°26.3	65°05.7	11°01.6	12°57.7	21°35.8	26°08.3	51°36.0
21	79°34.6	9.8'	15°53.9	-14.1'	59.1'	110°23.0	67°58.3	64°30.3	10°26.2	13°30.2	22°10.4	26°43.4	52°08.8
22	94°03.3	9.9'	15°39.9	-14.1'	59.1'	109°47.6	67°30.4	63°54.9	9°50.9	14°02.7	22°45.1	27°18.4	52°41.6
23	108°32.2	10.0'	15°25.7	-14.2'	59.1'	109°12.3	67°02.6	63°19.6	9°15.6	14°35.1	23°19.7	27°53.4	53°14.4
18 th	SD = 16.3' Mer. pass. 15:30					Sun SD = 15.7'							

h	Moon (19 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Spica	\pm Regulus	+Venus	+Jupiter	+Pollux	+Sun
0	123°01.2	10.1'	N15°11.5	-14.3'	59.0'	108°37.0	96°42.7	62°44.4	8°40.4	15°07.5	23°54.2	28°28.4	53°47.1
1	137°30.3	10.2'	14°57.3	-14.3'	59.0'	108°01.8	96°14.9	62°09.2	8°05.2	15°39.9	24°28.7	29°03.3	54°19.7
2	151°59.5	10.4'	14°43.0	-14.4'	59.0'	107°26.7	95°47.1	61°34.1	7°30.0	16°12.1	25°03.2	29°38.2	54°52.3
3	166°28.9	10.5'	14°28.6	-14.4'	58.9'	106°51.5	95°19.3	60°59.0	6°54.9	16°44.4	25°37.6	30°13.1	55°24.9
4	180°58.4	10.6'	14°14.1	-14.5'	58.9'	106°16.5	94°51.6	60°23.9	6°19.9	17°16.6	26°12.0	30°47.9	55°57.4
5	195°28.0	10.7'	13°59.6	-14.5'	58.8'	105°41.5	94°23.9	59°48.9	5°44.9	17°48.7	26°46.4	31°22.6	56°29.9
6	209°57.7	10.8'	N13°45.1	-14.6'	58.8'	105°06.5	93°56.2	59°14.0	5°10.0	18°20.8	27°20.7	31°57.4	57°02.3
7	224°27.5	10.9'	13°30.5	-14.6'	58.8'	104°31.6	93°28.5	58°39.1	4°35.2	18°52.8	27°54.9	32°32.1	57°34.7
8	238°57.4	11.0'	13°15.8	-14.7'	58.7'	103°56.7	93°00.9	58°04.3	4°00.4	19°24.8	28°29.1	33°06.7	58°07.0
9	253°27.5	11.2'	13°01.1	-14.7'	58.7'	103°21.9	92°33.3	57°29.5	3°25.7	19°56.8	29°03.3	33°41.3	58°39.3
10	267°57.6	11.3'	12°46.4	-14.8'	58.6'	102°47.1	92°05.7	56°54.7	2°51.1	20°28.6	29°37.4	34°15.9	59°11.6
11	282°27.9	11.4'	12°31.6	-14.8'	58.6'	102°12.4	91°38.2	56°20.0	2°16.6	21°00.5	30°11.5	34°50.4	59°43.8
12	296°58.2	11.5'	N12°16.8	-14.9'	58.6'	101°37.7	91°10.7	55°45.4	1°42.4	21°32.3	30°45.6	35°24.9	60°15.9
13	311°28.7	11.6'	12°01.9	-14.9'	58.5'	101°03.1	90°43.3	55°10.8	1°08.6	22°04.0	31°19.6	35°59.3	60°48.0
14	325°59.3	11.7'	11°47.0	-15.0'	58.5'	100°28.5	90°15.8	54°36.2		22°35.7	31°53.5	36°33.7	61°20.1
15	340°30.0	11.8'	11°32.0	-15.0'	58.4'	99°53.9	89°48.4	54°01.7		23°07.4	32°27.4	37°08.1	61°52.1
16	355°00.8	11.9'	11°17.1	-15.0'	58.4'	99°19.5	89°21.1	53°27.3		23°39.0	33°01.3	37°42.4	62°24.0
17	9°31.6	12.0'	11°02.0	-15.1'	58.4'	98°45.0	88°53.8	52°52.9		24°10.5	33°35.1	38°16.6	62°55.9
18	24°02.6	12.1'	N10°47.0	-15.1'	58.3'	98°10.6	88°26.5	52°18.5		24°42.0	34°08.9	38°50.9	63°27.8
19	38°33.7	12.2'	10°31.9	-15.1'	58.3'	97°36.3	87°59.3	51°44.2	2°22.0	25°13.5	34°42.6	39°25.0	63°59.6
20	53°04.9	12.3'	10°16.8	-15.1'	58.2'	97°02.0	87°32.1	51°09.9	2°56.0	25°44.9	35°16.3	39°59.2	64°31.4
21	67°36.1	12.4'	10°01.6	-15.2'	58.2'	96°27.8	87°05.0	50°35.7	3°30.1	26°16.3	35°49.9	40°33.2	65°03.1
22	82°07.5	12.5'	09°46.5	-15.2'	58.2'	95°53.6	86°37.9	50°01.6	4°04.2	26°47.6	36°23.5	41°07.3	65°34.8
23	96°38.9	12.5'	09°31.3	-15.2'	58.1'	95°19.5	86°10.9	49°27.5	4°38.2	27°18.8	36°57.0	41°41.3	66°06.4
19 th	SD = 16.1' Mer. pass. 16:21					Sun SD = 15.7'							

h	Moon (20 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Hadar	-Spica	+Regulus	+Jupiter	+Pollux	+Sun
0	111°10.5	12.6'	N09°16.0	-15.2'	58.1'	94°45.4	85°43.9	81°47.5	48°53.4	5°12.3	37°30.5	42°15.2	66°38.0
1	125°42.1	12.7'	09°00.8	-15.3'	58.0'	94°11.3	85°16.9	81°21.2	48°19.4	5°46.3	38°04.0	42°49.1	67°09.5
2	140°13.8	12.8'	08°45.5	-15.3'	58.0'	93°37.3	84°50.0	80°55.1	47°45.4	6°20.2	38°37.4	43°23.0	67°41.0
3	154°45.6	12.9'	08°30.2	-15.3'	58.0'	93°03.4	84°23.1	80°28.9	47°11.5	6°54.1	39°10.7	43°56.8	68°12.4
4	169°17.5	13.0'	08°14.9	-15.3'	57.9'	92°29.5	83°56.3	80°02.9	46°37.7	7°28.0	39°44.0	44°30.6	68°43.8
5	183°49.5	13.0'	07°59.6	-15.3'	57.9'	91°55.6	83°29.6	79°36.9	46°03.8	8°01.8	40°17.3	45°04.3	69°15.2
6	198°21.5	13.1'	N07°44.3	-15.4'	57.9'	91°21.8	83°02.9	79°11.0	45°30.1	8°35.6	40°50.5	45°38.0	69°46.5
7	212°53.7	13.2'	07°28.9	-15.4'	57.8'	90°48.0	82°36.2	78°45.1	44°56.3	9°09.3	41°23.7	46°11.6	70°17.7
8	227°25.9	13.3'	07°13.6	-15.4'	57.8'	90°14.3	82°09.6	78°19.3	44°22.7	9°43.0	41°56.8	46°45.2	70°48.9
9	241°58.2	13.4'	06°58.2	-15.4'	57.7'	89°40.7	81°43.1	77°53.6	43°49.1	10°16.7	42°29.9	47°18.8	71°20.1
10	256°30.5	13.4'	06°42.8	-15.4'	57.7'	89°07.1	81°16.6	77°27.9	43°15.5	10°50.3	43°02.9	47°52.3	71°51.2
11	271°03.0	13.5'	06°27.4	-15.4'	57.7'	88°33.5	80°50.2	77°02.3	42°41.9	11°23.8	43°35.9	48°25.7	72°22.3
12	285°35.5	13.6'	N06°12.0	-15.4'	57.6'	88°00.0	80°23.8	76°36.7	42°08.5	11°57.4	44°08.9	48°59.1	72°53.3
13	300°08.0	13.6'	05°56.6	-15.4'	57.6'	87°26.5	79°57.5	76°11.3	41°35.0	12°30.8	44°41.8	49°32.5	73°24.3
14	314°40.7	13.7'	05°41.2	-15.4'	57.5'	86°53.1	79°31.2	75°45.9	41°01.6	13°04.2	45°14.6	50°05.8	73°55.2
15	329°13.4	13.8'	05°25.8	-15.4'	57.5'	86°19.7	79°05.0	75°20.5	40°28.3	13°37.6	45°47.4	50°39.1	74°26.1
16	343°46.2	13.8'	05°10.3	-15.4'	57.5'	85°46.3	78°38.9	74°55.3	39°55.0	14°11.0	46°20.2	51°12.3	74°57.0
17	358°19.0	13.9'	04°54.9	-15.4'	57.4'	85°13.0	78°12.8	74°30.1	39°21.8	14°44.2	46°52.9	51°45.5	75°27.8
18	12°51.9	14.0'	N04°39.5	-15.4'	57.4'	84°39.8	77°46.8	74°04.9	38°48.6	15°17.5	47°25.6	52°18.7	75°58.5
19	27°24.9	14.0'	04°24.1	-15.4'	57.3'	84°06.6	77°20.9	73°39.9	38°15.4	15°50.7	47°58.2	52°51.8	76°29.2
20	41°57.9	14.1'	04°08.6	-15.4'	57.3'	83°33.4	76°55.0	73°14.9	37°42.3	16°23.8	48°30.8	53°24.9	76°59.9
21	56°31.0	14.1'	03°53.2	-15.4'	57.3'	83°00.3	76°29.1	72°50.0	37°09.3	16°56.9	49°03.3	53°57.9	77°30.5
22	71°04.2	14.2'	03°37.8	-15.4'	57.2'	82°27.2	76°03.4	72°25.2	36°36.2	17°30.0	49°35.8	54°30.8	78°01.1
23	85°37.4	14.3'	03°22.4	-15.4'	57.2'	81°54.2	75°37.7	72°00.5	36°03.3	18°03.0	50°08.3	55°03.8	78°31.6
20 th	SD = 15.8' Mer. pass. 17:07					Sun SD = 15.7'							

DUT1 = UT1-UTC = +0.0986 sec $\Delta T = TT-UT1 = +69.0854$ sec

2026 June 21 to Jun. 23 UT

Moon (21 st Jun)						Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Spica	+Regulus	+Jupiter	+Pollux	+Sun
0	100°10.6	14.3'	N03°07.0	-15.4'	57.2'		81°21.2	75°12.1	35°30.3	18°36.0	50°40.7	55°36.7	79°02.1
1	114°43.9	14.4'	02°51.6	-15.4'	57.1'		80°48.3	74°46.5	34°57.5	19°08.9	51°13.1	56°09.5	79°32.5
2	129°17.3	14.4'	02°36.2	-15.4'	57.1'		80°15.4	74°21.0	34°24.6	19°41.8	51°45.4	56°42.3	80°02.9
3	143°50.7	14.5'	02°20.8	-15.4'	57.0'		79°42.6	73°55.6	33°51.8	20°14.7	52°17.7	57°15.1	80°33.3
4	158°24.2	14.5'	02°05.4	-15.4'	57.0'		79°09.8	73°30.2	33°19.1	20°47.5	52°49.9	57°47.8	81°03.6
5	172°57.7	14.6'	01°50.1	-15.3'	57.0'		78°37.0	73°04.9	32°46.4	21°20.2	53°22.1	58°20.5	81°33.9
6	187°31.2	14.6'	N01°34.7	-15.3'	56.9'		78°04.3	72°39.7	32°13.8	21°52.9	53°54.3	58°53.1	82°04.1
7	202°04.8	14.6'	01°19.4	-15.3'	56.9'		77°31.6	72°14.6	31°41.1	22°25.6	54°26.4	59°25.7	82°34.3
8	216°38.5	14.7'	01°04.1	-15.3'	56.9'		76°59.0	71°49.5	31°08.6	22°58.2	54°58.5	59°58.2	83°04.5
9	231°12.2	14.7'	00°48.8	-15.3'	56.8'		76°26.4	71°24.5	30°36.1	23°30.8	55°30.5	60°30.7	83°34.6
10	245°45.9	14.8'	00°33.5	-15.3'	56.8'		75°53.8	70°59.6	30°03.6	24°03.4	56°02.5	61°03.2	84°04.6
11	260°19.7	14.8'	00°18.2	-15.3'	56.8'		75°21.3	70°34.8	29°31.2	24°35.9	56°34.4	61°35.6	84°34.7
12	274°53.5	14.8'	N00°02.9	-15.2'	56.7'		74°48.9	70°10.0	28°58.8	25°08.3	57°06.3	62°08.0	85°04.6
13	289°27.3	14.9'	S00°12.3	-15.2'	56.7'		74°16.4	69°45.3	28°26.4	25°40.8	57°38.2	62°40.4	85°34.6
14	304°01.2	14.9'	00°27.5	-15.2'	56.6'		73°44.1	69°20.7	27°54.1	26°13.1	58°10.0	63°12.7	86°04.5
15	318°35.1	14.9'	00°42.7	-15.2'	56.6'		73°11.7	68°56.2	27°21.9	26°45.5	58°41.8	63°45.0	86°34.3
16	333°09.0	15.0'	00°57.9	-15.1'	56.6'		72°39.4	68°31.7	26°49.7	27°17.8	59°13.6	64°17.2	87°04.2
17	347°43.0	15.0'	01°13.0	-15.1'	56.5'		72°07.2	68°07.4	26°17.5	27°50.0	59°45.3	64°49.4	87°33.9
18	2°17.0	15.0'	S01°28.1	-15.1'	56.5'		71°34.9	67°43.1	25°45.4	28°22.3	60°16.9	65°21.5	88°03.7
19	16°51.0	15.1'	01°43.2	-15.1'	56.5'	119°46.8	71°02.8	67°18.9	25°13.3	28°54.5	60°48.6	65°53.6	88°33.4
20	31°25.1	15.1'	01°58.3	-15.0'	56.4'	119°21.2	70°30.6	66°54.8	24°41.3	29°26.6	61°20.1	66°25.7	89°03.0
21	45°59.2	15.1'	02°13.4	-15.0'	56.4'	118°55.6	69°58.5	66°30.7	24°09.3	29°58.7	61°51.7	66°57.7	89°32.7
22	60°33.3	15.1'	02°28.4	-15.0'	56.4'	118°29.9	69°26.4	66°06.8	23°37.3	30°30.8	62°23.2	67°29.7	90°02.3
23	75°07.4	15.2'	02°43.4	-15.0'	56.3'	118°04.3	68°54.4	65°42.9	23°05.4	31°02.8	62°54.7	68°01.7	90°31.8
21 st	SD = 15.6' Mer. pass. 17:51					Sun SD = 15.7'							

Moon (22 nd Jun)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Spica	+Regulus	+Jupiter	+Procyon	+Pollux
0	89°41.6	15.2'	S02°58.4	-14.9'	56.3'	117°38.5	68°22.4	65°19.1	22°33.5	31°34.8	63°26.1	65°46.1	68°33.6
1	104°15.7	15.2'	03°13.3	-14.9'	56.3'	117°12.8	67°50.5	64°55.5	22°01.7	32°06.7	63°57.5	66°15.9	69°05.5
2	118°49.9	15.2'	03°28.2	-14.9'	56.2'	116°47.0	67°18.5	64°31.9	21°29.9	32°38.7	64°28.9	66°45.8	69°37.4
3	133°24.1	15.2'	03°43.1	-14.8'	56.2'	116°21.2	66°46.7	64°08.4	20°58.2	33°10.5	65°00.2	67°15.6	70°09.2
4	147°58.4	15.2'	03°57.9	-14.8'	56.2'	115°55.4	66°14.8	63°45.0	20°26.5	33°42.4	65°31.5	67°45.4	70°41.0
5	162°32.6	15.3'	04°12.7	-14.8'	56.1'	115°29.6	65°43.0	63°21.7	19°54.8	34°14.2	66°02.7	68°15.2	71°12.7
6	177°06.9	15.3'	S04°27.5	-14.7'	56.1'	115°03.8	65°11.2	62°58.4	19°23.2	34°46.0	66°34.0	68°45.0	71°44.4
7	191°41.1	15.3'	04°42.2	-14.7'	56.1'	114°37.9	64°39.5	62°35.3	18°51.7	35°17.7	67°05.1	69°14.7	72°16.1
8	206°15.4	15.3'	04°56.9	-14.7'	56.0'	114°12.0	64°07.8	62°12.3	18°20.2	35°49.4	67°36.3	69°44.5	72°47.7
9	220°49.7	15.3'	05°11.6	-14.6'	56.0'	113°46.1	63°36.2	61°49.4	17°48.7	36°21.0	68°07.4	70°14.2	73°19.3
10	235°24.0	15.3'	05°26.2	-14.6'	56.0'	113°20.2	63°04.5	61°26.5	17°17.3	36°52.7	68°38.5	70°43.9	73°50.9
11	249°58.3	15.3'	05°40.8	-14.6'	56.0'	112°54.3	62°32.9	61°03.8	16°45.9	37°24.3	69°09.5	71°13.5	74°22.4
12	264°32.6	15.3'	S05°55.4	-14.5'	55.9'	112°28.4	62°01.4	60°41.2	16°14.6	37°55.8	69°40.5	71°43.2	74°53.9
13	279°07.0	15.3'	06°09.9	-14.5'	55.9'	112°02.4	61°29.9	60°18.7	15°43.3	38°27.4	70°11.5	72°12.8	75°25.3
14	293°41.3	15.3'	06°24.4	-14.4'	55.9'	111°36.5	60°58.4	59°56.2	15°12.1	38°58.8	70°42.4	72°42.4	75°56.8
15	308°15.6	15.3'	06°38.8	-14.4'	55.8'	111°10.5	60°26.9	59°33.9	14°40.9	39°30.3	71°13.3	73°12.0	76°28.2
16	322°50.0	15.3'	06°53.2	-14.4'	55.8'	110°44.5	59°55.5	59°11.7	14°09.8	40°01.7	71°44.2	73°41.6	76°59.5
17	337°24.3	15.3'	07°07.6	-14.3'	55.8'	110°18.6	59°24.1	58°49.6	13°38.7	40°33.1	72°15.1	74°11.1	77°30.9
18	351°58.6	15.3'	S07°21.9	-14.3'	55.7'	109°52.6	58°52.7	58°27.7	13°07.7	41°04.5	72°45.9	74°40.7	78°02.2
19	6°33.0	15.3'	07°36.1	-14.2'	55.7'	109°26.6	58°21.4	58°05.8	12°36.7	41°35.8	73°16.6	75°10.2	78°33.4
20	21°07.3	15.3'	07°50.3	-14.2'	55.7'	109°00.6	57°50.1	57°44.0	12°05.8	42°07.1	73°47.4	75°39.6	79°04.7
21	35°41.6	15.3'	08°04.5	-14.1'	55.7'	108°34.6	57°18.8	57°22.4	11°35.0	42°38.4	74°18.1	76°09.1	79°35.9
22	50°15.9	15.3'	08°18.6	-14.1'	55.6'	108°08.6	56°47.6	57°00.9	11°04.3	43°09.6	74°48.8	76°38.5	80°07.0
23	64°50.2	15.3'	08°32.7	-14.0'	55.6'	107°42.6	56°16.4	56°39.5	10°33.6	43°40.8	75°19.4	77°08.0	80°38.2
22 nd	SD = 15.4' Mer. pass. 18:33												

h	Moon (23 rd Jun)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Altair	-Rigel Kent.	-Antares	-Spica	+Regulus	+Jupiter	+Procyon	+Pollux
0	79°24.6	15.3'	S08°46.8	-14.0'	55.6'	107°16.6	56°18.2	55°45.2	10°03.0	44°12.0	75°50.1	77°37.4	81°09.3
1	93°58.9	15.3'	09°00.7	-13.9'	55.5'	106°50.6	55°57.0	55°14.1	9°32.5	44°43.1	76°20.7	78°06.7	81°40.4
2	108°33.1	15.3'	09°14.7	-13.9'	55.5'	106°24.6	55°36.0	54°43.0	9°02.1	45°14.2	76°51.2	78°36.1	82°11.4
3	123°07.4	15.3'	09°28.6	-13.8'	55.5'	105°58.6	55°15.1	54°11.9	8°31.8	45°45.3	77°21.7	79°05.4	82°42.5
4	137°41.7	15.3'	09°42.4	-13.8'	55.5'	105°32.6	54°54.3	53°40.9	8°01.7	46°16.4	77°52.2	79°34.7	83°13.4
5	152°15.9	15.2'	09°56.2	-13.7'	55.4'	105°06.6	54°33.6	53°09.8	7°31.7	46°47.4	78°22.7	80°04.0	83°44.4
6	166°50.2	15.2'	S10°09.9	-13.7'	55.4'	104°40.5	54°13.1	52°38.8	7°01.8	47°18.4	78°53.2	80°33.3	84°15.3
7	181°24.4	15.2'	10°23.6	-13.6'	55.4'	104°14.5	53°52.7	52°07.9	6°32.2	47°49.3	79°23.6	81°02.5	84°46.3
8	195°58.6	15.2'	10°37.2	-13.6'	55.4'	103°48.5	53°32.4	51°36.9	6°02.8	48°20.3	79°54.0	81°31.7	85°17.1
9	210°32.8	15.2'	10°50.8	-13.5'	55.3'	103°22.5	53°12.3	51°06.0	5°33.8	48°51.2	80°24.3	82°00.9	85°48.0
10	225°07.0	15.2'	11°04.3	-13.5'	55.3'	102°56.6	52°52.3	50°35.1	5°05.1	49°22.1	80°54.7	82°30.1	86°18.8
11	239°41.2	15.1'	11°17.7	-13.4'	55.3'	102°30.6	52°32.5	50°04.3	4°36.9	49°52.9	81°25.0	82°59.3	86°49.6
12	254°15.3	15.1'	S11°31.1	-13.3'	55.3'	102°04.6	52°12.8	49°33.5	4°09.4	50°23.8	81°55.3	83°28.4	87°20.4
13	268°49.4	15.1'	11°44.5	-13.3'	55.2'	101°38.6	51°53.2	49°02.7	3°42.7	50°54.6	82°25.5	83°57.5	87°51.1
14	283°23.5	15.1'	11°57.8	-13.2'	55.2'	101°12.6	51°33.8	48°31.9		51°25.3	82°55.7	84°26.6	88°21.8
15	297°57.6	15.1'	12°11.0	-13.2'	55.2'	100°46.7	51°14.5	48°01.1		51°56.1	83°25.9	84°55.7	88°52.5
16	312°31.6	15.0'	12°24.2	-13.1'	55.2'	100°20.7	50°55.4	47°30.4		52°26.8	83°56.1	85°24.7	89°23.2
17	327°05.7	15.0'	12°37.3	-13.0'	55.1'	99°54.7	50°36.4	46°59.7		52°57.5	84°26.3	85°53.7	89°53.9
18	341°39.7	15.0'	S12°50.3	-13.0'	55.1'	99°28.8	50°17.6	46°29.0		53°28.2	84°56.4	86°22.8	90°24.5
19	356°13.7	14.9'	13°03.3	-12.9'	55.1'	99°02.9	49°59.0	45°58.4		53°58.8	85°26.5	86°51.7	90°55.1
20	10°47.6	14.9'	13°16.2	-12.9'	55.1'	98°36.9	49°40.5	45°27.8		54°29.5	85°56.6	87°20.7	91°25.6
21	25°21.5	14.9'	13°29.1	-12.8'	55.0'	98°11.0	49°22.4	44°57.2		55°00.1	86°26.6	87°49.6	91°56.2
22	39°55.4	14.9'	13°41.9	-12.7'	55.0'	97°45.1	49°04.0	44°26.6		55°30.6	86°56.7	88°18.6	92°26.7
23	54°29.3	14.8'	13°54.6	-12.7'	55.0'	97°19.2	48°46.0	43°56.0		56°01.2	87°26.7	88°47.5	92°57.2
23 rd	SD = 15.2' Mer. pass. 19:16												

DUT1 = UT1-UTC = +0.0990 sec $\Delta T = TT-UT1 = +69.0850$ sec

2026 June 24 to Jun. 26 UT

Moon (24 th Jun)						Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Rigel Kent.	-Antares	+Spica	+Regulus	+Jupiter	+Pollux
0	69°03.1	14.8'	S14°07.3	-12.6'	55.0'		96°53.3	48°28.2	43°25.5		56°31.7	87°56.7	93°27.7
1	83°36.9	14.8'	14°19.9	-12.5'	54.9'		96°27.4	48°10.5	42°55.0		57°02.2	88°26.6	93°58.1
2	98°10.7	14.7'	14°32.4	-12.5'	54.9'		96°01.5	47°53.0	42°24.5		57°32.7	88°56.6	94°28.6
3	112°44.4	14.7'	14°44.9	-12.4'	54.9'		95°35.7	47°35.7	41°54.0	4°27.3	58°03.2	89°26.5	94°59.0
4	127°18.1	14.7'	14°57.3	-12.3'	54.9'		95°09.8	47°18.6	41°23.6	4°54.9	58°33.6	89°56.4	95°29.4
5	141°51.8	14.6'	15°09.6	-12.3'	54.9'		94°44.0	47°01.7	40°53.2	5°23.0	59°04.1	90°26.2	95°59.7
6	156°25.4	14.6'	S15°21.9	-12.2'	54.8'		94°18.1	46°44.9	40°22.8	5°51.5	59°34.5	90°56.1	96°30.1
7	170°59.0	14.6'	15°34.1	-12.1'	54.8'	119°37.0	93°52.3	46°28.4	39°52.4	6°20.2	60°04.8	91°25.9	97°00.4
8	185°32.5	14.5'	15°46.2	-12.0'	54.8'	119°09.3	93°26.5	46°12.0	39°22.0	6°49.2	60°35.2	91°55.7	97°30.7
9	200°06.0	14.5'	15°58.2	-12.0'	54.8'	118°41.7	93°00.7	45°55.8	38°51.7	7°18.3	61°05.5	92°25.5	98°01.0
10	214°39.5	14.4'	16°10.2	-11.9'	54.8'	118°14.1	92°34.9	45°39.8	38°21.4	7°47.6	61°35.9	92°55.3	98°31.2
11	229°12.9	14.4'	16°22.1	-11.8'	54.7'	117°46.5	92°09.2	45°24.0	37°51.1	8°16.9	62°06.2	93°25.0	99°01.5
12	243°46.3	14.4'	S16°33.9	-11.8'	54.7'	117°18.9	91°43.4	45°08.4	37°20.8	8°46.4	62°36.4	93°54.8	99°31.7
13	258°19.7	14.3'	16°45.7	-11.7'	54.7'	116°51.2	91°17.7	44°53.1	36°50.5	9°15.9	63°06.7	94°24.5	100°01.9
14	272°53.0	14.3'	16°57.4	-11.6'	54.7'	116°23.6	90°52.0	44°37.9	36°20.3	9°45.5	63°36.9	94°54.2	100°32.1
15	287°26.3	14.2'	17°09.0	-11.5'	54.7'	115°55.9	90°26.2		35°50.1	10°15.1	64°07.2	95°23.9	101°02.2
16	301°59.5	14.2'	17°20.5	-11.4'	54.6'	115°28.3	90°00.5		35°19.9	10°44.8	64°37.4	95°53.5	101°32.4
17	316°32.7	14.1'	17°31.9	-11.4'	54.6'	115°00.6	89°34.9		34°49.7	11°14.5	65°07.6	96°23.2	102°02.5
18	331°05.8	14.1'	S17°43.3	-11.3'	54.6'	114°33.0	89°09.2		34°19.5	11°44.2	65°37.7	96°52.8	102°32.6
19	345°38.9	14.0'	17°54.6	-11.2'	54.6'	114°05.3	88°43.6		33°49.4	12°13.9	66°07.9	97°22.4	103°02.7
20	0°12.0	14.0'	18°05.8	-11.1'	54.6'	113°37.6	88°17.9		33°19.2	12°43.7	66°38.0	97°52.0	103°32.8
21	14°45.0	14.0'	18°16.9	-11.0'	54.6'	113°10.0	87°52.3		32°49.1	13°13.5	67°08.1	98°21.5	104°02.9
22	29°17.9	13.9'	18°27.9	-11.0'	54.5'	112°42.3	87°26.7		32°19.0	13°43.2	67°38.2	98°51.1	104°32.9
23	43°50.8	13.9'	18°38.9	-10.9'	54.5'	112°14.6	87°01.1		31°48.9	14°13.0	68°08.3	99°20.6	105°02.9
24 th	SD = 15.0'					Mer. pass. 19:59							

Moon (25 th Jun)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	+Spica	+Regulus	+Jupiter	+Procyon	+Pollux
0	58°23.7	13.8'	S18°49.8	-10.8'	54.5'	111°47.0	86°35.6	31°18.9	14°42.8	68°38.4	99°50.2	100°43.2	105°32.9
1	72°56.5	13.8'	19°00.6	-10.7'	54.5'	111°19.3	86°10.0	30°48.8	15°12.6	69°08.5	100°19.7	101°11.6	106°02.9
2	87°29.3	13.7'	19°11.3	-10.6'	54.5'	110°51.6	85°44.5	30°18.8	15°42.4	69°38.5	100°49.1	101°39.9	106°32.9
3	102°02.0	13.7'	19°21.9	-10.5'	54.5'	110°23.9	85°19.0	29°48.8	16°12.2	70°08.5	101°18.6	102°08.3	107°02.9
4	116°34.6	13.6'	19°32.4	-10.5'	54.4'	109°56.2	84°53.5	29°18.8	16°42.0	70°38.5	101°48.1	102°36.6	107°32.8
5	131°07.3	13.6'	19°42.9	-10.4'	54.4'	109°28.6	84°28.0	28°48.8	17°11.7	71°08.5	102°17.5	103°04.9	108°02.8
6	145°39.8	13.5'	S19°53.3	-10.3'	54.4'	109°00.9	84°02.5	28°18.8	17°41.5	71°38.5	102°47.0	103°33.1	108°32.7
7	160°12.3	13.5'	20°03.5	-10.2'	54.4'	108°33.2	83°37.1	27°48.8	18°11.3	72°08.5	103°16.4	104°01.4	109°02.6
8	174°44.8	13.4'	20°13.7	-10.1'	54.4'	108°05.5	83°11.7	27°18.9	18°41.1	72°38.4	103°45.8	104°29.6	109°32.5
9	189°17.2	13.4'	20°23.8	-10.0'	54.4'	107°37.8	82°46.3	26°48.9	19°10.9	73°08.4	104°15.2	104°57.8	110°02.3
10	203°49.6	13.3'	20°33.8	-9.9'	54.4'	107°10.2	82°20.9	26°19.0	19°40.6	73°38.3	104°44.5	105°26.0	110°32.2
11	218°21.9	13.2'	20°43.7	-9.8'	54.3'	106°42.5	81°55.5	25°49.1	20°10.4	74°08.2	105°13.9	105°54.1	111°02.1
12	232°54.1	13.2'	S20°53.6	-9.7'	54.3'	106°14.8	81°30.2	25°19.2	20°40.1	74°38.1	105°43.3	106°22.3	111°31.9
13	247°26.3	13.1'	21°03.3	-9.6'	54.3'	105°47.1	81°04.9	24°49.3	21°09.9	75°08.0	106°12.6	106°50.4	112°01.7
14	261°58.4	13.1'	21°12.9	-9.5'	54.3'	105°19.5	80°39.6	24°19.5	21°39.6	75°37.9	106°41.9	107°18.5	112°31.5
15	276°30.5	13.0'	21°22.5	-9.4'	54.3'	104°51.8	80°14.3	23°49.6	22°09.4	76°07.7	107°11.2	107°46.6	113°01.3
16	291°02.6	13.0'	21°31.9	-9.3'	54.3'	104°24.1	79°49.1	23°19.7	22°39.1	76°37.6	107°40.5	108°14.7	113°31.1
17	305°34.6	12.9'	21°41.3	-9.3'	54.3'	103°56.4	79°23.9	22°49.9	23°08.8	77°07.4	108°09.8	108°42.7	114°00.9
18	320°06.5	12.9'	S21°50.5	-9.2'	54.3'	103°28.8	78°58.7	22°20.1	23°38.6	77°37.3	108°39.1	109°10.7	114°30.6
19	334°38.4	12.8'	21°59.7	-9.1'	54.2'	103°01.1	78°33.5	21°50.3	24°08.3	78°07.1	109°08.4	109°38.7	115°00.4
20	349°10.2	12.8'	22°08.7	-9.0'	54.2'	102°33.4	78°08.3	21°20.5	24°38.0	78°36.9	109°37.6	110°06.7	115°30.1
21	3°41.9	12.7'	22°17.7	-8.9'	54.2'	102°05.7	77°43.2	20°50.7	25°07.7	79°06.7	110°06.9	110°34.7	115°59.9
22	18°13.6	12.7'	22°26.5	-8.8'	54.2'	101°38.1	77°18.1	20°20.9	25°37.4	79°36.5	110°36.1	111°02.6	116°29.6
23	32°45.3	12.6'	22°35.3	-8.7'	54.2'	101°10.4	76°53.0	19°51.1	26°07.1	80°06.3	111°05.3	111°30.5	116°59.3
25 th	SD = 14.9' Mer. pass. 20:45												

Moon (26 th Jun)						Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	+Spica	+Regulus	+Jupiter	+Procyon	+Pollux
0	47°16.9	12.5'	S22°44.0	-8.6'	54.2'	100°42.8	76°27.9	19°21.4	26°36.7	80°36.0	111°34.6	111°58.4	117°29.0
1	61°48.4	12.5'	22°52.5	-8.5'	54.2'	100°15.1	76°02.9	18°51.6	27°06.4	81°05.8	112°03.8	112°26.3	117°58.7
2	76°19.9	12.4'	23°01.0	-8.3'	54.2'	99°47.4	75°37.9	18°21.9	27°36.1	81°35.6	112°33.0	112°54.1	118°28.4
3	90°51.4	12.4'	23°09.3	-8.2'	54.2'	99°19.8	75°12.9	17°52.1	28°05.7	82°05.3	113°02.2	113°22.0	118°58.0
4	105°22.7	12.3'	23°17.6	-8.1'	54.1'	98°52.1	74°48.0	17°22.4	28°35.4	82°35.0	113°31.3	113°49.8	119°27.7
5	119°54.0	12.3'	23°25.7	-8.0'	54.1'	98°24.5	74°23.1	16°52.7	29°05.0	83°04.8	114°00.5	114°17.6	119°57.3
6	134°25.3	12.2'	S23°33.7	-7.9'	54.1'	97°56.8	73°58.2	16°23.0	29°34.7	83°34.5	114°29.7	114°45.3	
7	148°56.5	12.2'	23°41.7	-7.8'	54.1'	97°29.2	73°33.3	15°53.3	30°04.3	84°04.2	114°58.8	115°13.1	
8	163°27.7	12.1'	23°49.5	-7.7'	54.1'	97°01.5	73°08.5	15°23.6	30°34.0	84°33.9	115°28.0	115°40.8	
9	177°58.8	12.0'	23°57.2	-7.6'	54.1'	96°33.9	72°43.7	14°53.9	31°03.6	85°03.6	115°57.1	116°08.5	
10	192°29.8	12.0'	24°04.8	-7.5'	54.1'	96°06.3	72°18.9	14°24.2	31°33.2	85°33.3	116°26.2	116°36.2	
11	207°00.8	11.9'	24°12.3	-7.4'	54.1'	95°38.6	71°54.1	13°54.6	32°02.8	86°03.0	116°55.4	117°03.8	
12	221°31.8	11.9'	S24°19.7	-7.3'	54.1'	95°11.0	71°29.4	13°24.9	32°32.4	86°32.6	117°24.5	117°31.5	
13	236°02.6	11.8'	24°27.0	-7.2'	54.1'	94°43.4	71°04.7	12°55.3	33°02.0	87°02.3	117°53.6	117°59.1	
14	250°33.5	11.8'	24°34.1	-7.1'	54.1'	94°15.8	70°40.1	12°25.6	33°31.7	87°32.0	118°22.7	118°26.6	
15	265°04.3	11.7'	24°41.2	-6.9'	54.1'	93°48.1	70°15.5	11°56.0	34°01.2	88°01.6	118°51.8	118°54.2	
16	279°35.0	11.7'	24°48.1	-6.8'	54.0'	93°20.5	69°50.9	11°26.4	34°30.8	88°31.3	119°20.9	119°21.7	
17	294°05.7	11.6'	24°54.9	-6.7'	54.0'	92°52.9	69°26.3	10°56.7	35°00.4	89°00.9	119°50.0	119°49.2	
18	308°36.3	11.6'	S25°01.7	-6.6'	54.0'	92°25.3	69°01.8	10°27.1	35°30.0	89°30.5			
19	323°06.8	11.5'	25°08.3	-6.5'	54.0'	91°57.7	68°37.3	9°57.5	35°59.6	90°00.2			
20	337°37.4	11.5'	25°14.7	-6.4'	54.0'	91°30.1	68°12.9	9°27.9	36°29.2	90°29.8			
21	352°07.8	11.4'	25°21.1	-6.2'	54.0'	91°02.5	67°48.5	8°58.3	36°58.7	90°59.4			
22	6°38.2	11.4'	25°27.4	-6.1'	54.0'	90°34.9	67°24.1	8°28.8	37°28.3	91°29.0			
23	21°08.6	11.3'	25°33.5	-6.0'	54.0'	90°07.3	66°59.8	7°59.2	37°57.9	91°58.6			

DUT1 = UT1-UTC = +0.0994 sec $\Delta T = TT-UT1 = +69.0846$ sec

2026 June 27 to Jun. 29 UT

Moon (27 th Jun)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Deneb	-Fomalhaut	-Altair	\pm Antares	+Spica	+Arcturus	+Regulus	+Venus
0	35°38.9	11.3'	S25°39.5	-5.9'	54.0'		89°39.7	66°35.5	7°29.6	38°27.4	50°59.9	92°28.3	107°05.5
1	50°09.2	11.2'	25°45.4	-5.8'	54.0'		89°12.1	66°11.2	7°00.1	38°57.0	51°20.1	92°57.9	107°32.2
2	64°39.4	11.2'	25°51.2	-5.7'	54.0'		88°44.5	65°47.0	6°30.5	39°26.6	51°40.4	93°27.5	107°59.0
3	79°09.6	11.1'	25°56.8	-5.5'	54.0'		88°17.0	65°22.8	6°01.0	39°56.1	52°00.8	93°57.1	108°25.7
4	93°39.7	11.1'	26°02.4	-5.4'	54.0'	94°55.6	87°49.4	64°58.7	5°31.5	40°25.7	52°21.3	94°26.7	108°52.5
5	108°09.8	11.0'	26°07.8	-5.3'	54.0'	94°40.5	87°21.8	64°34.6	5°02.0	40°55.2	52°41.9	94°56.2	109°19.2
6	122°39.8	11.0'	S26°13.1	-5.2'	54.0'	94°25.5	86°54.3	64°10.5	4°32.6	41°24.8	53°02.6	95°25.8	109°45.9
7	137°09.8	10.9'	26°18.2	-5.0'	54.0'	94°10.4	86°26.7	63°46.5	4°03.1	41°54.3	53°23.4	95°55.4	110°12.7
8	151°39.7	10.9'	26°23.3	-4.9'	54.0'	93°55.4	85°59.2	63°22.6	3°33.8	42°23.9	53°44.3	96°25.0	110°39.4
9	166°09.6	10.8'	26°28.2	-4.8'	53.9'	93°40.3	85°31.6	62°58.7	3°04.4	42°53.4	54°05.3	96°54.6	111°06.1
10	180°39.4	10.8'	26°33.0	-4.7'	53.9'	93°25.2	85°04.1	62°34.8	2°35.2	43°22.9	54°26.4	97°24.2	111°32.9
11	195°09.2	10.8'	26°37.7	-4.6'	53.9'	93°10.1	84°36.5	62°11.0	2°06.2	43°52.5	54°47.5	97°53.7	111°59.6
12	209°39.0	10.7'	S26°42.2	-4.4'	53.9'	92°55.0	84°09.0	61°47.2	1°37.5	44°22.0	55°08.7	98°23.3	112°26.3
13	224°08.7	10.7'	26°46.7	-4.3'	53.9'	92°39.9	83°41.5	61°23.5	1°09.5	44°51.5	55°30.1	98°52.9	112°53.1
14	238°38.4	10.6'	26°51.0	-4.2'	53.9'	92°24.8	83°13.9	60°59.8		45°21.1	55°51.5	99°22.4	113°19.8
15	253°08.1	10.6'	26°55.1	-4.0'	53.9'	92°09.6	82°46.4	60°36.2		45°50.6	56°13.0	99°52.0	113°46.5
16	267°37.7	10.6'	26°59.2	-3.9'	53.9'	91°54.5	82°18.9	60°12.6		46°20.1	56°34.5	100°21.6	114°13.2
17	282°07.2	10.5'	27°03.1	-3.8'	53.9'	91°39.4	81°51.4	59°49.1		46°49.7	56°56.2	100°51.1	114°39.9
18	296°36.8	10.5'	S27°06.9	-3.7'	53.9'	91°24.2	81°23.9	59°25.7		47°19.2	57°17.9	101°20.7	115°06.7
19	311°06.3	10.5'	27°10.5	-3.5'	53.9'	91°09.1	80°56.4	59°02.2		47°48.7	57°39.7	101°50.3	115°33.4
20	325°35.7	10.4'	27°14.1	-3.4'	53.9'	90°53.9	80°28.9	58°38.9	2°25.2	48°18.3	58°01.6	102°19.8	116°00.1
21	340°05.1	10.4'	27°17.5	-3.3'	53.9'	90°38.7	80°01.4	58°15.6	2°54.3	48°47.8	58°23.5	102°49.4	116°26.8
22	354°34.5	10.4'	27°20.8	-3.1'	53.9'	90°23.6	79°34.0	57°52.4	3°23.6	49°17.3	58°45.5	103°19.0	116°53.5
23	9°03.9	10.3'	27°23.9	-3.0'	53.9'	90°08.4	79°06.5	57°29.2	3°53.0	49°46.9	59°07.6	103°48.5	117°20.2
27 th	SD = 14.7' Mer. pass. 22:22												

h	Moon (28 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	+Antares	+Spica	+Regulus	+Venus
0	23°33.2	10.3'	S27°26.9	-2.9'	53.9'	119°09.4	89°53.2	78°39.0	57°06.1	4°22.4	50°16.4	104°18.1	117°47.0
1	38°02.5	10.3'	27°29.8	-2.7'	53.9'	118°40.2	89°38.1	78°11.6	56°43.1	4°51.8	50°46.0	104°47.7	118°13.7
2	52°31.8	10.2'	27°32.5	-2.6'	53.9'	118°10.9	89°22.9	77°44.1	56°20.1	5°21.2	51°15.5	105°17.2	118°40.4
3	67°01.0	10.2'	27°35.2	-2.5'	53.9'	117°41.7	89°07.7	77°16.7	55°57.2	5°50.7	51°45.0	105°46.8	119°07.1
4	81°30.3	10.2'	27°37.6	-2.4'	53.9'	117°12.4	88°52.6	76°49.3	55°34.4	6°20.2	52°14.6	106°16.4	119°33.8
5	95°59.5	10.2'	27°40.0	-2.2'	53.9'	116°43.1	88°37.4	76°21.8	55°11.6	6°49.7	52°44.1	106°45.9	
6	110°28.6	10.1'	S27°42.2	-2.1'	53.9'	116°13.9	88°22.3	75°54.4	54°48.9	7°19.2	53°13.6	107°15.5	
7	124°57.8	10.1'	27°44.3	-2.0'	53.9'	115°44.6	88°07.1	75°27.0	54°26.3	7°48.7	53°43.2	107°45.1	
8	139°26.9	10.1'	27°46.2	-1.8'	53.9'	115°15.3	87°52.0	74°59.6	54°03.7	8°18.3	54°12.7	108°14.6	
9	153°56.0	10.1'	27°48.1	-1.7'	53.9'	114°46.1	87°36.8	74°32.2	53°41.3	8°47.8	54°42.3	108°44.2	
10	168°25.1	10.1'	27°49.8	-1.6'	53.9'	114°16.8	87°21.7	74°04.8	53°18.9	9°17.3	55°11.8	109°13.8	
11	182°54.1	10.0'	27°51.3	-1.4'	53.9'	113°47.5	87°06.6	73°37.4	52°56.6	9°46.9	55°41.4	109°43.4	
12	197°23.2	10.0'	S27°52.7	-1.3'	53.9'	113°18.2	86°51.4	73°10.1	52°34.3	10°16.4	56°10.9	110°12.9	
13	211°52.2	10.0'	27°54.0	-1.1'	53.9'	112°48.9	86°36.3	72°42.7	52°12.2	10°46.0	56°40.5	110°42.5	
14	226°21.2	10.0'	27°55.2	-1.0'	53.9'	112°19.7	86°21.2	72°15.4	51°50.1	11°15.5	57°10.0	111°12.1	
15	240°50.2	10.0'	27°56.2	-0.9'	53.9'	111°50.4	86°06.1	71°48.0	51°28.1	11°45.1	57°39.6	111°41.7	
16	255°19.2	10.0'	27°57.0	-0.7'	53.9'	111°21.1	85°51.1	71°20.7	51°06.2	12°14.7	58°09.2	112°11.3	
17	269°48.2	10.0'	27°57.8	-0.6'	53.9'	110°51.8	85°36.0	70°53.4	50°44.4	12°44.2	58°38.7	112°40.9	
18	284°17.1	10.0'	S27°58.4	-0.5'	53.9'	110°22.4	85°20.9	70°26.1	50°22.7	13°13.8	59°08.3	113°10.5	
19	298°46.1	9.9'	27°58.9	-0.3'	53.9'	109°53.1	85°05.9	69°58.8	50°01.1	13°43.4	59°37.9	113°40.1	
20	313°15.0	9.9'	27°59.2	-0.2'	53.9'	109°23.8	84°50.9	69°31.5	49°39.6	14°13.0	60°07.5	114°09.7	
21	327°44.0	9.9'	27°59.4	-0.1'	53.9'	108°54.5	84°35.9	69°04.2	49°18.2	14°42.6	60°37.0	114°39.3	
22	342°12.9	9.9'	27°59.5	0.1'	53.9'	108°25.2		68°36.9	48°56.9	15°12.2	61°06.6	115°08.9	
23	356°41.8	9.9'	27°59.4	0.2'	53.9'	107°55.8		68°09.7	48°35.7	15°41.8	61°36.2	115°38.5	
28 th	SD = 14.7' Mer. pass. 23:14												

h Moon (29 th Jun)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	+Antares	+Hadar	+Spica	+Arcturus	+Regulus
0	11°10.7	9.9'	S27°59.2	0.3'	53.9'	107°26.5	67°42.4	48°14.6	16°11.4	48°37.3	62°05.8	68°38.1	116°08.1
1	25°39.7	9.9'	27°58.8	0.5'	53.9'	106°57.2	67°15.2	47°53.6	16°41.0	48°53.4	62°35.4	69°01.6	116°37.7
2	40°08.6	9.9'	27°58.4	0.6'	53.9'	106°27.8	66°48.0	47°32.7	17°10.6	49°09.7	63°05.0	69°25.0	117°07.4
3	54°37.5	9.9'	27°57.7	0.8'	53.9'	105°58.5	66°20.8	47°12.0	17°40.2	49°26.1	63°34.6	69°48.6	117°37.0
4	69°06.4	9.9'	27°57.0	0.9'	53.9'	105°29.1	65°53.6	46°51.3	18°09.8	49°42.7	64°04.2	70°12.1	118°06.6
5	83°35.4	9.9'	27°56.1	1.0'	53.9'	104°59.8	65°26.4	46°30.8	18°39.5	49°59.5	64°33.8	70°35.7	118°36.2
6	98°04.3	9.9'	S27°55.1	1.2'	53.9'	104°30.4	64°59.3	46°10.4	19°09.1	50°16.4	65°03.5	70°59.3	119°05.9
7	112°33.2	9.9'	27°53.9	1.3'	54.0'	104°01.0	64°32.1	45°50.1	19°38.7	50°33.4	65°33.1	71°23.0	119°35.5
8	127°02.2	10.0'	27°52.6	1.4'	54.0'	103°31.7	64°05.0	45°30.0	20°08.4	50°50.6	66°02.7	71°46.7	
9	141°31.1	10.0'	27°51.2	1.6'	54.0'	103°02.3	63°37.9	45°10.0	20°38.0	51°07.9	66°32.4	72°10.5	
10	156°00.1	10.0'	27°49.6	1.7'	54.0'	102°32.9	63°10.8	44°50.1	21°07.7	51°25.4	67°02.0	72°34.2	
11	170°29.1	10.0'	27°47.9	1.8'	54.0'	102°03.5	62°43.7	44°30.3	21°37.4	51°43.0	67°31.6	72°58.0	
12	184°58.1	10.0'	S27°46.1	2.0'	54.0'	101°34.1	62°16.6	44°10.8	22°07.0	52°00.7	68°01.3	73°21.9	
13	199°27.1	10.0'	27°44.1	2.1'	54.0'	101°04.7	61°49.6	43°51.3	22°36.7	52°18.6	68°31.0	73°45.7	
14	213°56.1	10.0'	27°42.0	2.2'	54.0'	100°35.3	61°22.6	43°32.0	23°06.4	52°36.6	69°00.6	74°09.6	
15	228°25.1	10.0'	27°39.8	2.4'	54.0'	100°05.8	60°55.5	43°12.9	23°36.1	52°54.7	69°30.3	74°33.5	
16	242°54.2	10.1'	27°37.4	2.5'	54.0'	99°36.4	60°28.6	42°53.9	24°05.8	53°13.0	70°00.0	74°57.5	
17	257°23.2	10.1'	27°34.9	2.6'	54.0'	99°07.0	60°01.6	42°35.0	24°35.4	53°31.4	70°29.6	75°21.5	
18	271°52.3	10.1'	S27°32.2	2.8'	54.0'	98°37.5	59°34.6	42°16.4	25°05.2	53°49.9	70°59.3	75°45.5	
19	286°21.4	10.1'	27°29.5	2.9'	54.0'	98°08.1	59°07.7	41°57.9	25°34.9	54°08.5	71°29.0	76°09.5	
20	300°50.6	10.2'	27°26.6	3.0'	54.0'	97°38.6	58°40.8	41°39.5	26°04.6	54°27.2	71°58.7	76°33.6	
21	315°19.7	10.2'	27°23.5	3.2'	54.0'	97°09.2	58°13.9	41°21.4	26°34.3	54°46.0	72°28.4	76°57.7	
22	329°48.9	10.2'	27°20.3	3.3'	54.0'	96°39.7	57°47.1	41°03.4	27°04.0	55°05.0	72°58.1	77°21.8	
23	344°18.1	10.2'	27°17.0	3.4'	54.0'	96°10.2	57°20.2	40°45.6	27°33.8	55°24.1	73°27.9	77°46.0	
29 th	SD = 14.7' Mer. pass. --:--												

DUT1 = UT1-UTC = +0.0998 sec $\Delta T = TT-UT1 = +69.0842$ sec

2026 June 30 to Jul. 02 UT

h	Moon (30 th Jun)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	+Antares	+Rigel Kent.	+Hadar	+Spica	+Arcturus
0	358°47.3	10.3'	S27°13.6	3.6'	54.0'	95°40.8	56°53.4	40°28.0	28°03.5	51°28.8	55°43.2	73°57.6	78°10.1
1	13°16.6	10.3'	27°10.0	3.7'	54.0'	95°11.3	56°26.6	40°10.6	28°33.3	51°47.5	56°02.5	74°27.3	78°34.3
2	27°45.8	10.3'	27°06.3	3.8'	54.1'	94°41.8	55°59.9	39°53.4	29°03.0	52°06.4	56°21.9	74°57.1	78°58.6
3	42°15.2	10.3'	27°02.5	4.0'	54.1'	94°12.3	55°33.1	39°36.4	29°32.8	52°25.4	56°41.4	75°26.8	79°22.8
4	56°44.5	10.4'	26°58.5	4.1'	54.1'	93°42.8	55°06.4	39°19.6	30°02.6	52°44.5	57°01.0	75°56.6	79°47.1
5	71°13.9	10.4'	26°54.4	4.2'	54.1'	93°13.2	54°39.8	39°03.0	30°32.4	53°03.7	57°20.7	76°26.4	80°11.3
6	85°43.3	10.4'	S26°50.2	4.4'	54.1'	92°43.7	54°13.1	38°46.6	31°02.1	53°23.1	57°40.5	76°56.1	80°35.6
7	100°12.7	10.5'	26°45.8	4.5'	54.1'	92°14.2	53°46.5	38°30.5	31°31.9	53°42.5	58°00.4	77°25.9	81°00.0
8	114°42.2	10.5'	26°41.3	4.6'	54.1'	91°44.6	53°19.9	38°14.6	32°01.7	54°02.1	58°20.4	77°55.7	81°24.3
9	129°11.7	10.5'	26°36.7	4.7'	54.1'	91°15.1	52°53.4	37°58.9	32°31.6	54°21.8	58°40.4	78°25.5	81°48.7
10	143°41.2	10.6'	26°32.0	4.9'	54.1'	90°45.5	52°26.8	37°43.4	33°01.4	54°41.6	59°00.6	78°55.3	82°13.1
11	158°10.8	10.6'	26°27.1	5.0'	54.1'	90°15.9	52°00.4	37°28.2	33°31.2	55°01.5	59°20.9	79°25.1	82°37.5
12	172°40.4	10.7'	S26°22.1	5.1'	54.1'	89°46.4	51°33.9		34°01.0	55°21.5	59°41.2	79°54.9	83°01.9
13	187°10.1	10.7'	26°17.0	5.2'	54.1'	89°16.8	51°07.5		34°30.9	55°41.7	60°01.6	80°24.8	83°26.3
14	201°39.7	10.7'	26°11.7	5.4'	54.1'	88°47.2	50°41.1		35°00.8	56°01.9	60°22.2	80°54.6	83°50.8
15	216°09.5	10.8'	26°06.4	5.5'	54.2'	88°17.6	50°14.8		35°30.6	56°22.2	60°42.8	81°24.5	84°15.2
16	230°39.3	10.8'	26°00.9	5.6'	54.2'	87°48.0	49°48.5		36°00.5	56°42.6	61°03.5	81°54.3	84°39.7
17	245°09.1	10.9'	25°55.2	5.7'	54.2'	87°18.4	49°22.3		36°30.4	57°03.2	61°24.2	82°24.2	85°04.2
18	259°38.9	10.9'	S25°49.5	5.9'	54.2'	86°48.7	48°56.0		37°00.3	57°23.8	61°45.1	82°54.1	85°28.7
19	274°08.8	10.9'	25°43.6	6.0'	54.2'	86°19.1	48°29.9		37°30.2	57°44.5	62°06.0	83°24.0	85°53.3
20	288°38.8	11.0'	25°37.6	6.1'	54.2'	85°49.4	48°03.8		38°00.1	58°05.3	62°27.0	83°53.8	86°17.8
21	303°08.8	11.0'	25°31.5	6.2'	54.2'	85°19.8	47°37.7		38°30.0	58°26.2	62°48.1	84°23.8	86°42.4
22	317°38.8	11.1'	25°25.3	6.4'	54.2'	84°50.1	47°11.7		38°59.9	58°47.2	63°09.2	84°53.7	87°06.9
23	332°08.9	11.1'	25°18.9	6.5'	54.2'	84°20.4	46°45.7		39°29.9	59°08.2	63°30.4	85°23.6	87°31.5
30 th	SD = 14.7'					Mer. pass. 00:05							

h	Moon (1 st Jul)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Hadar	+Acrux	+Spica	+Arcturus
0	346°39.0	11.2'	S25°12.4	6.6'	54.2'	83°50.7	46°19.8	39°59.8	59°29.4	63°51.7	74°12.2	85°53.5	87°56.1
1	1°09.2	11.2'	25°05.8	6.7'	54.2'	83°21.0	45°53.9	40°29.8	59°50.6	64°13.1	74°31.3	86°23.5	88°20.7
2	15°39.4	11.3'	24°59.1	6.8'	54.3'	82°51.3	45°28.1	40°59.8	60°11.9	64°34.6	74°50.3	86°53.4	88°45.3
3	30°09.7	11.3'	24°52.3	7.0'	54.3'	82°21.6	45°02.4	41°29.7	60°33.3	64°56.1	75°09.5	87°23.4	89°10.0
4	44°40.0	11.4'	24°45.3	7.1'	54.3'	81°51.9	44°36.7	41°59.7	60°54.8	65°17.6	75°28.7	87°53.4	89°34.6
5	59°10.4	11.4'	24°38.3	7.2'	54.3'	81°22.1	44°11.1	42°29.7	61°16.4	65°39.3	75°47.9	88°23.4	89°59.2
6	73°40.8	11.5'	S24°31.1	7.3'	54.3'	80°52.4	43°45.5	42°59.8	61°38.0	66°01.0	76°07.2	88°53.4	90°23.9
7	88°11.2	11.5'	24°23.8	7.4'	54.3'	80°22.6	43°20.0	43°29.8	61°59.7	66°22.7	76°26.5	89°23.4	90°48.5
8	102°41.8	11.6'	24°16.4	7.5'	54.3'	79°52.9	42°54.6	43°59.8	62°21.5	66°44.6	76°45.9	89°53.4	91°13.2
9	117°12.3	11.6'	24°08.8	7.6'	54.3'	79°23.1	42°29.3	44°29.9	62°43.4	67°06.4	77°05.3	90°23.4	91°37.9
10	131°43.0	11.7'	24°01.2	7.8'	54.3'	78°53.3	42°04.0	44°59.9	63°05.3	67°28.4	77°24.8	90°53.4	92°02.6
11	146°13.6	11.7'	23°53.4	7.9'	54.4'	78°23.5	41°38.8	45°30.0	63°27.3	67°50.4	77°44.3	91°23.5	92°27.2
12	160°44.4	11.8'	S23°45.6	8.0'	54.4'	77°53.7	41°13.7	46°00.1	63°49.4	68°12.5	78°03.8	91°53.6	92°51.9
13	175°15.1	11.8'	23°37.6	8.1'	54.4'	77°23.9	40°48.6	46°30.2	64°11.5	68°34.6	78°23.4	92°23.6	93°16.6
14	189°46.0	11.9'	23°29.5	8.2'	54.4'	76°54.0	40°23.7	47°00.3	64°33.7	68°56.8	78°43.0	92°53.7	93°41.3
15	204°16.8	11.9'	23°21.3	8.3'	54.4'	76°24.2	39°58.8	47°30.4	64°56.0	69°19.0	79°02.7	93°23.8	94°06.0
16	218°47.8	12.0'	23°13.0	8.4'	54.4'	75°54.3	39°34.1	48°00.5	65°18.3	69°41.3	79°22.4	93°53.9	94°30.8
17	233°18.8	12.0'	23°04.6	8.5'	54.4'	75°24.5	39°09.4	48°30.6	65°40.7	70°03.6	79°42.1	94°24.0	94°55.5
18	247°49.8	12.1'	S22°56.0	8.6'	54.4'	74°54.6	38°44.8	49°00.8	66°03.2	70°26.0	80°01.9	94°54.2	95°20.2
19	262°20.9	12.1'	22°47.4	8.7'	54.5'	74°24.7	38°20.3	49°31.0	66°25.7	70°48.5	80°21.7	95°24.3	95°44.9
20	276°52.1	12.2'	22°38.7	8.8'	54.5'	73°54.8	37°55.9	50°01.1	66°48.3	71°11.0	80°41.5	95°54.5	96°09.6
21	291°23.3	12.3'	22°29.8	8.9'	54.5'	73°24.9	37°31.7	50°31.3	67°11.0	71°33.5	81°01.4	96°24.7	96°34.3
22	305°54.5	12.3'	22°20.9	9.1'	54.5'	72°55.0	37°07.5	51°01.5	67°33.7	71°56.1	81°21.3	96°54.8	96°59.0
23	320°25.8	12.4'	22°11.8	9.2'	54.5'	72°25.0	36°43.5	51°31.7	67°56.4	72°18.8	81°41.2	97°25.0	97°23.8
1 st	SD = 14.8'					Mer. pass. 00:55							

h Moon (2 nd Jul)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Mars	-Aldebaran	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Arcturus	+Spica
0	334°57.2	12.4'	S22°02.7	9.3'	54.5'	119°59.2		71°55.1	36°19.6	52°02.0	68°19.3	97°48.5	97°55.3
1	349°28.6	12.5'	21°53.4	9.4'	54.5'	119°30.9		71°25.1	35°55.8	52°32.2	68°42.1	98°13.2	98°25.5
2	4°00.1	12.5'	21°44.1	9.5'	54.5'	119°02.6		70°55.1	35°32.2	53°02.5	69°05.1	98°37.9	98°55.7
3	18°31.6	12.6'	21°34.6	9.6'	54.6'	118°34.3		70°25.2	35°08.7	53°32.7	69°28.0	99°02.6	99°26.0
4	33°03.2	12.6'	21°25.0	9.7'	54.6'	118°06.0		69°55.2	34°45.3	54°03.0	69°51.1	99°27.3	99°56.2
5	47°34.8	12.7'	21°15.4	9.8'	54.6'	117°37.6		69°25.1	34°22.1	54°33.3	70°14.2	99°52.0	100°26.5
6	62°06.5	12.7'	S21°05.6	9.9'	54.6'	117°09.3		68°55.1	33°59.0	55°03.6	70°37.3	100°16.7	100°56.8
7	76°38.3	12.8'	20°55.8	9.9'	54.6'	116°40.9		68°25.1	33°36.1	55°33.9	71°00.5	100°41.4	101°27.1
8	91°10.1	12.8'	20°45.8	10.0'	54.6'	116°12.5		67°55.0	33°13.3	56°04.3	71°23.7	101°06.1	101°57.4
9	105°41.9	12.9'	20°35.8	10.1'	54.6'	115°44.1		67°25.0	32°50.7	56°34.6	71°47.0	101°30.8	102°27.7
10	120°13.8	13.0'	20°25.7	10.2'	54.7'	115°15.7		66°54.9	32°28.3	57°05.0	72°10.3	101°55.5	102°58.1
11	134°45.8	13.0'	20°15.4	10.3'	54.7'	114°47.2		66°24.8	32°06.1	57°35.4	72°33.7	102°20.1	103°28.4
12	149°17.8	13.1'	S20°05.1	10.4'	54.7'	114°18.8		65°54.7	31°44.1	58°05.8	72°57.1	102°44.8	103°58.8
13	163°49.8	13.1'	19°54.7	10.5'	54.7'	113°50.3		65°24.6	31°22.2	58°36.2	73°20.6	103°09.4	104°29.2
14	178°21.9	13.2'	19°44.2	10.6'	54.7'	113°21.8		64°54.5	31°00.6	59°06.6	73°44.1	103°34.1	104°59.6
15	192°54.1	13.2'	19°33.6	10.7'	54.7'	112°53.3	119°59.0	64°24.3	30°39.2	59°37.0	74°07.7	103°58.7	105°30.0
16	207°26.3	13.3'	19°22.9	10.8'	54.8'	112°24.8	119°29.2	63°54.2	30°18.0	60°07.5	74°31.3	104°23.3	106°00.5
17	221°58.6	13.3'	19°12.1	10.9'	54.8'	111°56.2	118°59.4	63°24.0	29°57.0	60°38.0	74°54.9	104°47.9	106°30.9
18	236°30.9	13.4'	S19°01.3	11.0'	54.8'	111°27.7	118°29.6	62°53.8	29°36.3	61°08.4	75°18.6	105°12.5	107°01.4
19	251°03.3	13.4'	18°50.3	11.0'	54.8'	110°59.1	117°59.8	62°23.6	29°15.8	61°38.9	75°42.3	105°37.1	107°31.9
20	265°35.7	13.5'	18°39.3	11.1'	54.8'	110°30.5	117°29.9	61°53.4	28°55.6	62°09.5	76°06.1	106°01.7	108°02.4
21	280°08.2	13.5'	18°28.1	11.2'	54.8'	110°01.9	117°00.0	61°23.2	28°35.7	62°40.0	76°29.9	106°26.2	108°32.9
22	294°40.7	13.6'	18°16.9	11.3'	54.8'	109°33.3	116°30.1	60°52.9	28°16.0	63°10.5	76°53.7	106°50.8	109°03.4
23	309°13.2	13.6'	18°05.6	11.4'	54.9'	109°04.6	116°00.2	60°22.7	27°56.6	63°41.1	77°17.6	107°15.3	109°33.9
2 nd	SD = 14.9'		Mer. pass. 01:43										

DUT1 = UT1-UTC = +0.1002 sec $\Delta T = TT-UT1 = +69.0838$ sec

2026 July 03 to Jul. 05 UT

h	Moon (3 rd Jul)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Capella	-Aldebaran	-Mars	-Saturn	+Antares	+Rigel Kent.	+Arcturus	+Spica
0	323°45.9	13.7'	S17°54.3	11.5'	54.9'		115°30.3	108°36.0	59°52.4	64°11.7	77°41.5	107°39.8	110°04.5
1	338°18.5	13.7'	17°42.8	11.5'	54.9'		115°00.3	108°07.3	59°22.1	64°42.3	78°05.5	108°04.3	110°35.1
2	352°51.2	13.8'	17°31.3	11.6'	54.9'		114°30.3	107°38.6	58°51.9	65°12.9	78°29.5	108°28.7	111°05.7
3	7°24.0	13.8'	17°19.6	11.7'	54.9'		114°00.3	107°09.9	58°21.5	65°43.5	78°53.5	108°53.2	111°36.3
4	21°56.8	13.8'	17°08.0	11.8'	55.0'		113°30.3	106°41.2	57°51.2	66°14.2	79°17.5	109°17.6	112°06.9
5	36°29.6	13.9'	16°56.2	11.9'	55.0'		113°00.2	106°12.4	57°20.9	66°44.8	79°41.6	109°42.0	112°37.6
6	51°02.5	13.9'	S16°44.3	11.9'	55.0'		112°30.1	105°43.6	56°50.5	67°15.5	80°05.8	110°06.4	113°08.2
7	65°35.5	14.0'	16°32.4	12.0'	55.0'		112°00.0	105°14.9	56°20.2	67°46.2	80°29.9	110°30.7	113°38.9
8	80°08.5	14.0'	16°20.4	12.1'	55.0'		111°29.9	104°46.1	55°49.8	68°16.9	80°54.1	110°55.1	114°09.6
9	94°41.5	14.1'	16°08.3	12.2'	55.0'		110°59.8	104°17.2	55°19.4	68°47.7	81°18.3	111°19.4	114°40.3
10	109°14.5	14.1'	15°56.1	12.2'	55.1'		110°29.6	103°48.4	54°49.0	69°18.4	81°42.6	111°43.7	115°11.0
11	123°47.7	14.2'	15°43.9	12.3'	55.1'	119°52.7	109°59.4	103°19.5	54°18.5	69°49.2	82°06.8	112°07.9	115°41.8
12	138°20.8	14.2'	S15°31.6	12.4'	55.1'	119°24.0	109°29.2	102°50.7	53°48.1	70°20.0	82°31.1	112°32.1	116°12.6
13	152°54.0	14.2'	15°19.2	12.4'	55.1'	118°55.2	108°59.0	102°21.8	53°17.6	70°50.8	82°55.5	112°56.3	116°43.3
14	167°27.2	14.3'	15°06.8	12.5'	55.1'	118°26.3	108°28.7	101°52.9	52°47.2	71°21.6	83°19.8	113°20.5	117°14.1
15	182°00.5	14.3'	14°54.2	12.6'	55.2'	117°57.5	107°58.5	101°23.9	52°16.7	71°52.5	83°44.2	113°44.6	117°45.0
16	196°33.8	14.4'	14°41.7	12.7'	55.2'	117°28.6	107°28.2	100°55.0	51°46.2	72°23.4	84°08.6	114°08.8	118°15.8
17	211°07.2	14.4'	14°29.0	12.7'	55.2'	116°59.6	106°57.8	100°26.0	51°15.6	72°54.2	84°33.1	114°32.8	118°46.7
18	225°40.6	14.4'	S14°16.3	12.8'	55.2'	116°30.6	106°27.5	99°57.0	50°45.1	73°25.1	84°57.6	114°56.9	119°17.6
19	240°14.0	14.5'	14°03.5	12.9'	55.2'	116°01.6	105°57.1	99°28.0	50°14.6	73°56.1	85°22.0	115°20.9	119°48.5
20	254°47.5	14.5'	13°50.6	12.9'	55.3'	115°32.6	105°26.8	98°58.9	49°44.0	74°27.0	85°46.6	115°44.8	
21	269°21.0	14.5'	13°37.7	13.0'	55.3'	115°03.5	104°56.4	98°29.9	49°13.4	74°58.0	86°11.1	116°08.7	
22	283°54.5	14.6'	13°24.7	13.1'	55.3'	114°34.4	104°25.9	98°00.8	48°42.8	75°29.0	86°35.7	116°32.6	
23	298°28.0	14.6'	13°11.7	13.1'	55.3'	114°05.2	103°55.5	97°31.7	48°12.2	76°00.0	87°00.3	116°56.5	
3 rd	SD = 15.0'					Mer. pass. 02:29							

Moon (4 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Capella	-Aldebaran	-Mars	-Saturn	+Antares	+Rigel Kent.	+Hadar	+Arcturus
0	313°01.6	14.6'	S12°58.5	13.2'	55.3'	113°36.0	103°25.0	97°02.6	47°41.6	76°31.0	87°24.9	91°31.3	117°20.3
1	327°35.3	14.7'	12°45.4	13.2'	55.4'	113°06.8	102°54.5	96°33.5	47°10.9	77°02.0	87°49.5	91°55.4	117°44.0
2	342°08.9	14.7'	12°32.1	13.3'	55.4'	112°37.5	102°24.0	96°04.3	46°40.3	77°33.1	88°14.1	92°19.5	118°07.7
3	356°42.6	14.7'	12°18.8	13.4'	55.4'	112°08.3	101°53.5	95°35.1	46°09.6	78°04.2	88°38.8	92°43.6	118°31.4
4	11°16.3	14.7'	12°05.5	13.4'	55.4'	111°38.9	101°22.9	95°05.9	45°38.9	78°35.3	89°03.5	93°07.8	118°55.0
5	25°50.1	14.8'	11°52.1	13.5'	55.4'	111°09.6	100°52.3	94°36.7	45°08.2	79°06.4	89°28.2	93°31.9	119°18.5
6	40°23.8	14.8'	S11°38.6	13.5'	55.5'	110°40.2	100°21.7	94°07.5	44°37.5	79°37.6	89°52.9	93°56.1	119°42.1
7	54°57.6	14.8'	11°25.1	13.6'	55.5'	110°10.8	99°51.1	93°38.2	44°06.7	80°08.8	90°17.7	94°20.3	
8	69°31.5	14.8'	11°11.5	13.6'	55.5'	109°41.3	99°20.4	93°08.9	43°36.0	80°40.0	90°42.4	94°44.5	
9	84°05.3	14.9'	10°57.8	13.7'	55.5'	109°11.8	98°49.7	92°39.6	43°05.2	81°11.2	91°07.2	95°08.6	
10	98°39.2	14.9'	10°44.1	13.8'	55.5'	108°42.3	98°19.0	92°10.2	42°34.4	81°42.4	91°32.0	95°32.8	
11	113°13.1	14.9'	10°30.4	13.8'	55.6'	108°12.8	97°48.3	91°40.9	42°03.6	82°13.7	91°56.8	95°57.1	
12	127°47.0	14.9'	S10°16.6	13.9'	55.6'	107°43.2	97°17.6	91°11.5	41°32.8	82°45.0	92°21.6	96°21.3	
13	142°21.0	15.0'	10°02.7	13.9'	55.6'	107°13.6	96°46.8	90°42.1	41°02.0	83°16.3	92°46.5	96°45.5	
14	156°54.9	15.0'	09°48.8	14.0'	55.6'	106°44.0	96°16.0	90°12.7	40°31.1	83°47.6	93°11.3	97°09.7	
15	171°28.9	15.0'	09°34.9	14.0'	55.7'	106°14.3	95°45.2	89°43.2	40°00.3	84°19.0	93°36.2	97°33.9	
16	186°02.9	15.0'	09°20.9	14.1'	55.7'	105°44.6	95°14.3	89°13.8	39°29.4	84°50.3	94°01.1	97°58.1	
17	200°36.9	15.0'	09°06.8	14.1'	55.7'	105°14.9	94°43.4	88°44.3	38°58.5	85°21.7	94°26.0	98°22.4	
18	215°10.9	15.0'	S08°52.7	14.1'	55.7'	104°45.1	94°12.5	88°14.7	38°27.6	85°53.2	94°50.8	98°46.6	
19	229°45.0	15.1'	08°38.6	14.2'	55.8'	104°15.3	93°41.6	87°45.2	37°56.7	86°24.6	95°15.8	99°10.8	
20	244°19.0	15.1'	08°24.4	14.2'	55.8'	103°45.5	93°10.7	87°15.6	37°25.8	86°56.1	95°40.7	99°35.1	
21	258°53.1	15.1'	08°10.1	14.3'	55.8'	103°15.6	92°39.7	86°46.0	36°54.8	87°27.6	96°05.6	99°59.3	
22	273°27.2	15.1'	07°55.8	14.3'	55.8'	102°45.7	92°08.7	86°16.4	36°23.9	87°59.1	96°30.5	100°23.5	
23	288°01.3	15.1'	07°41.5	14.4'	55.9'	102°15.8	91°37.7	85°46.8	35°52.9	88°30.7	96°55.5	100°47.8	
4 th	SD = 15.1'					Mer. pass. 03:14							

h	Moon (5 th Jul)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Capella	-Aldebaran	-Mars	-Saturn	+Altair	+Antares	+Rigel Kent.	+Hadar
0	302°35.4	15.1'	S07°27.1	14.4'	55.9'	101°45.9	91°06.7	85°17.1	35°21.9	45°18.6	89°02.2	97°20.4	101°12.0
1	317°09.5	15.1'	07°12.7	14.5'	55.9'	101°15.9	90°35.6	84°47.4	34°50.9	45°40.0	89°33.8	97°45.4	101°36.2
2	331°43.6	15.1'	06°58.3	14.5'	55.9'	100°45.9	90°04.5	84°17.7	34°19.9	46°01.6	90°05.5	98°10.3	102°00.4
3	346°17.7	15.1'	06°43.8	14.5'	56.0'	100°15.8	89°33.4	83°47.9	33°48.9	46°23.3	90°37.1	98°35.3	102°24.6
4	0°51.8	15.1'	06°29.3	14.6'	56.0'	99°45.8	89°02.2	83°18.2	33°17.9	46°45.2	91°08.8	99°00.3	102°48.8
5	15°26.0	15.1'	06°14.7	14.6'	56.0'	99°15.7	88°31.1	82°48.4	32°46.9	47°07.3	91°40.5	99°25.2	103°13.0
6	30°00.1	15.1'	S06°00.1	14.6'	56.0'	98°45.6	87°59.9	82°18.6	32°15.8	47°29.5	92°12.2	99°50.2	103°37.2
7	44°34.2	15.1'	05°45.4	14.7'	56.1'	98°15.4	87°28.7	81°48.7	31°44.8	47°51.9	92°44.0	100°15.2	104°01.4
8	59°08.4	15.1'	05°30.7	14.7'	56.1'	97°45.2	86°57.4	81°18.8	31°13.7	48°14.4	93°15.8	100°40.2	104°25.5
9	73°42.5	15.1'	05°16.0	14.7'	56.1'	97°15.0	86°26.1	80°48.9	30°42.6	48°37.1	93°47.6	101°05.1	104°49.7
10	88°16.6	15.1'	05°01.3	14.8'	56.1'	96°44.7	85°54.9	80°19.0	30°11.6	48°59.9	94°19.4	101°30.1	105°13.8
11	102°50.8	15.1'	04°46.5	14.8'	56.2'	96°14.5	85°23.5	79°49.0	29°40.5	49°22.8	94°51.3	101°55.1	105°38.0
12	117°24.9	15.1'	S04°31.7	14.8'	56.2'	95°44.2	84°52.2	79°19.1	29°09.4	49°45.9	95°23.2	102°20.1	106°02.1
13	131°59.0	15.1'	04°16.8	14.9'	56.2'	95°13.8	84°20.8	78°49.1	28°38.3	50°09.2	95°55.1	102°45.0	106°26.2
14	146°33.1	15.1'	04°02.0	14.9'	56.2'	94°43.5	83°49.4	78°19.0	28°07.2	50°32.5	96°27.0	103°10.0	106°50.3
15	161°07.3	15.1'	03°47.1	14.9'	56.3'	94°13.1	83°18.0	77°49.0	27°36.1	50°56.1	96°59.0	103°35.0	107°14.3
16	175°41.4	15.1'	03°32.1	15.0'	56.3'	93°42.7	82°46.5	77°18.9	27°05.0	51°19.7	97°31.0	103°59.9	107°38.4
17	190°15.4	15.1'	03°17.2	15.0'	56.3'	93°12.2	82°15.0	76°48.7	26°34.0	51°43.5	98°03.1	104°24.9	108°02.4
18	204°49.5	15.1'	S03°02.2	15.0'	56.3'	92°41.7	81°43.5	76°18.6	26°02.9	52°07.4	98°35.1	104°49.8	108°26.4
19	219°23.6	15.1'	02°47.1	15.0'	56.4'	92°11.2	81°12.0	75°48.4	25°31.8	52°31.4	99°07.2	105°14.7	108°50.4
20	233°57.6	15.0'	02°32.1	15.1'	56.4'	91°40.7	80°40.4	75°18.2	25°00.7	52°55.5	99°39.3	105°39.6	109°14.3
21	248°31.7	15.0'	02°17.0	15.1'	56.4'	91°10.1	80°08.8	74°48.0	24°29.7	53°19.8	100°11.5	106°04.6	109°38.3
22	263°05.7	15.0'	02°01.9	15.1'	56.5'	90°39.5	79°37.2	74°17.7	23°58.6	53°44.2	100°43.7	106°29.4	110°02.2
23	277°39.7	15.0'	01°46.8	15.1'	56.5'	90°08.9	79°05.6	73°47.4	23°27.6	54°08.7	101°15.9	106°54.3	110°26.1
5 th	SD = 15.2'		Mer. pass. 03:56										

DUT1 = UT1-UTC = +0.1006 sec $\Delta T = TT-UT1 = +69.0834$ sec

2026 July 06 to Jul. 08 UT

h	Moon (6 th Jul)					Lunar Distance (objects with largest hourly LD delta)								
Mon	GHA	ν	Dec	d	HP	-Capella	-Aldebaran	-Mars	-Saturn	+Fomalhaut	+Altair	+Antares	+Rigel Kent.	
0	292°13.7	15.0'	S01°31.7	15.2'	56.5'	89°38.2	78°33.9	73°17.1	22°56.6	28°43.7	54°33.3	101°48.1	107°19.2	
1	306°47.6	14.9'	01°16.5	15.2'	56.5'	89°07.6	78°02.2	72°46.7	22°25.6	29°04.9	54°58.0	102°20.4	107°44.1	
2	321°21.6	14.9'	01°01.4	15.2'	56.6'	88°36.9	77°30.4	72°16.3	21°54.6	29°26.5	55°22.8	102°52.7	108°08.9	
3	335°55.5	14.9'	00°46.2	15.2'	56.6'	88°06.1	76°58.7	71°45.9	21°23.7	29°48.3	55°47.8	103°25.0	108°33.7	
4	350°29.4	14.9'	00°31.0	15.2'	56.6'	87°35.4	76°26.9	71°15.5	20°52.8	30°10.5	56°12.8	103°57.4	108°58.5	
5	5°03.3	14.8'	00°15.7	15.2'	56.7'	87°04.6	75°55.1	70°45.0	20°21.9	30°32.9	56°38.0	104°29.8	109°23.3	
6	19°37.1	14.8'	S00°00.5	15.3'	56.7'	86°33.7	75°23.2	70°14.5	19°51.1	30°55.7	57°03.2	105°02.2	109°48.1	
7	34°10.9	14.8'	N00°14.8	15.3'	56.7'	86°02.9	74°51.4	69°44.0	19°20.3	31°18.7	57°28.6	105°34.6	110°12.8	
8	48°44.7	14.8'	00°30.0	15.3'	56.7'	85°32.0	74°19.5	69°13.4	18°49.6	31°42.0	57°54.1	106°07.1	110°37.6	
9	63°18.5	14.7'	00°45.3	15.3'	56.8'	85°01.1	73°47.6	68°42.8	18°18.9	32°05.5	58°19.6	106°39.7	111°02.2	
10	77°52.2	14.7'	01°00.6	15.3'	56.8'	84°30.2	73°15.6	68°12.2	17°48.3	32°29.3	58°45.3	107°12.2	111°26.9	
11	92°25.9	14.7'	01°15.9	15.3'	56.8'	83°59.2	72°43.6	67°41.5	17°17.8	32°53.4	59°11.1	107°44.8	111°51.6	
12	106°59.6	14.6'	N01°31.2	15.3'	56.9'	83°28.2	72°11.6	67°10.8	16°47.4	33°17.7	59°36.9	108°17.4	112°16.2	
13	121°33.2	14.6'	01°46.6	15.3'	56.9'	82°57.2	71°39.6	66°40.1	16°17.1	33°42.2	60°02.9	108°50.1	112°40.8	
14	136°06.8	14.5'	02°01.9	15.3'	56.9'	82°26.1	71°07.5	66°09.4	15°46.9	34°07.0	60°28.9	109°22.7	113°05.3	
15	150°40.3	14.5'	02°17.3	15.3'	56.9'	81°55.0	70°35.4	65°38.6	15°16.8	34°32.0	60°55.0	109°55.5	113°29.8	
16	165°13.8	14.5'	02°32.6	15.4'	57.0'	81°23.9	70°03.3	65°07.8	14°46.9	34°57.1	61°21.2	110°28.2	113°54.3	
17	179°47.3	14.4'	02°48.0	15.4'	57.0'	80°52.8	69°31.1	64°36.9	14°17.1	35°22.5	61°47.5	111°01.0	114°18.8	
18	194°20.7	14.4'	N03°03.3	15.4'	57.0'	80°21.7	68°58.9	64°06.0	13°47.6	35°48.1	62°13.9	111°33.8	114°43.2	
19	208°54.1	14.3'	03°18.7	15.4'	57.1'	79°50.5	68°26.7	63°35.1	13°18.2	36°13.9	62°40.4	112°06.7	115°07.6	
20	223°27.4	14.3'	03°34.0	15.4'	57.1'	79°19.3	67°54.5	63°04.2	12°49.1	36°39.9	63°07.0	112°39.5	115°31.9	
21	238°00.7	14.2'	03°49.4	15.4'	57.1'	78°48.0	67°22.2	62°33.2	12°20.2	37°06.1	63°33.6	113°12.5	115°56.2	
22	252°33.9	14.2'	04°04.8	15.4'	57.2'	78°16.8	66°49.9	62°02.2	11°51.7	37°32.4	64°00.3	113°45.4	116°20.4	
23	267°07.1	14.1'	04°20.1	15.4'	57.2'	77°45.5	66°17.6	61°31.1	11°23.5	37°58.9	64°27.1	114°18.4	116°44.6	
6 th	SD = 15.4' Mer. pass. 04:39													

h Moon (7 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Betelgeuse	-Capella	-Aldebaran	-Mars	+Fomalhaut	+Altair	+Antares	+Rigel Kent.
0	281°40.3	14.1'	N04°35.5	15.4'	57.2'	85°17.7	77°14.2	65°45.2	61°00.0	38°25.6	64°54.0	114°51.4	117°08.8
1	296°13.3	14.0'	04°50.8	15.4'	57.3'	84°46.8	76°42.8	65°12.8	60°28.9	38°52.5	65°21.0	115°24.5	117°32.9
2	310°46.4	14.0'	05°06.2	15.3'	57.3'	84°15.8	76°11.4	64°40.4	59°57.8	39°19.5	65°48.0	115°57.6	117°56.9
3	325°19.4	13.9'	05°21.5	15.3'	57.3'	83°44.8	75°40.0	64°08.0	59°26.6	39°46.7	66°15.2	116°30.7	118°20.9
4	339°52.3	13.9'	05°36.9	15.3'	57.3'	83°13.8	75°08.6	63°35.5	58°55.4	40°14.0	66°42.3	117°03.9	118°44.8
5	354°25.1	13.8'	05°52.2	15.3'	57.4'	82°42.7	74°37.2	63°03.0	58°24.1	40°41.5	67°09.6	117°37.1	119°08.7
6	8°57.9	13.7'	N06°07.5	15.3'	57.4'	82°11.6	74°05.7	62°30.5	57°52.8	41°09.1	67°37.0	118°10.3	119°32.5
7	23°30.7	13.7'	06°22.8	15.3'	57.4'	81°40.5	73°34.2	61°57.9	57°21.5	41°36.9	68°04.4	118°43.6	119°56.3
8	38°03.4	13.6'	06°38.1	15.3'	57.5'	81°09.4	73°02.7	61°25.4	56°50.2	42°04.8	68°31.9	119°16.9	
9	52°36.0	13.6'	06°53.4	15.3'	57.5'	80°38.2	72°31.1	60°52.7	56°18.8	42°32.8	68°59.4	119°50.3	
10	67°08.5	13.5'	07°08.7	15.3'	57.5'	80°07.0	71°59.6	60°20.1	55°47.4	43°01.0	69°27.0		
11	81°41.0	13.4'	07°24.0	15.2'	57.6'	79°35.8	71°28.0	59°47.4	55°15.9	43°29.3	69°54.7		
12	96°13.4	13.3'	N07°39.2	15.2'	57.6'	79°04.5	70°56.4	59°14.7	54°44.4	43°57.7	70°22.5		
13	110°45.8	13.3'	07°54.4	15.2'	57.6'	78°33.2	70°24.7	58°42.0	54°12.9	44°26.3	70°50.3		
14	125°18.1	13.2'	08°09.6	15.2'	57.7'	78°01.9	69°53.1	58°09.3	53°41.3	44°55.0	71°18.2		
15	139°50.3	13.1'	08°24.8	15.2'	57.7'	77°30.6	69°21.4	57°36.5	53°09.8	45°23.8	71°46.2		
16	154°22.4	13.1'	08°40.0	15.1'	57.7'	76°59.2	68°49.7	57°03.7	52°38.1	45°52.7	72°14.2		
17	168°54.5	13.0'	08°55.1	15.1'	57.8'	76°27.9	68°17.9	56°30.9	52°06.5	46°21.7	72°42.3		
18	183°26.4	12.9'	N09°10.2	15.1'	57.8'	75°56.5	67°46.2	55°58.0	51°34.8	46°50.9	73°10.5		
19	197°58.3	12.8'	09°25.3	15.1'	57.8'	75°25.0	67°14.4	55°25.1	51°03.0	47°20.1	73°38.7		
20	212°30.2	12.7'	09°40.4	15.0'	57.9'	74°53.6	66°42.6	54°52.2	50°31.3	47°49.5	74°07.0		
21	227°01.9	12.7'	09°55.4	15.0'	57.9'	74°22.1	66°10.8	54°19.3	49°59.5	48°19.0	74°35.3		
22	241°33.6	12.6'	10°10.4	15.0'	57.9'	73°50.6	65°39.0	53°46.3	49°27.6	48°48.6	75°03.7		
23	256°05.1	12.5'	10°25.4	14.9'	58.0'	73°19.0	65°07.1	53°13.3	48°55.8	49°18.2	75°32.1		
7 th	SD = 15.6' Mer. pass. 05:23												

h	Moon (8 th Jul)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Sun	-Betelgeuse	-Capella	-Aldebaran	-Mars	+Saturn	+Fomalhaut	+Altair
0	270°36.6	12.4'	N10°40.3	14.9'	58.0'	87°38.2	72°47.5	64°35.3	52°40.3	48°23.9		49°48.0	76°00.7
1	285°08.0	12.3'	10°55.2	14.9'	58.0'	87°06.7	72°15.9	64°03.4	52°07.3	47°51.9		50°17.9	76°29.2
2	299°39.4	12.2'	11°10.1	14.8'	58.1'	86°35.1	71°44.3	63°31.5	51°34.2	47°19.9		50°47.9	76°57.9
3	314°10.6	12.1'	11°24.9	14.8'	58.1'	86°03.5	71°12.7	62°59.6	51°01.1	46°47.9		51°17.9	77°26.5
4	328°41.7	12.0'	11°39.7	14.8'	58.1'	85°31.9	70°41.1	62°27.6	50°28.0	46°15.9		51°48.1	77°55.3
5	343°12.8	12.0'	11°54.5	14.7'	58.2'	85°00.2	70°09.4	61°55.7	49°54.9	45°43.8		52°18.4	78°24.1
6	357°43.7	11.9'	N12°09.2	14.7'	58.2'	84°28.5	69°37.7	61°23.7	49°21.7	45°11.7	9°38.5	52°48.7	78°52.9
7	12°14.6	11.8'	12°23.9	14.6'	58.2'	83°56.8	69°06.0	60°51.7	48°48.6	44°39.5	10°05.7	53°19.1	79°21.8
8	26°45.3	11.7'	12°38.5	14.6'	58.3'	83°25.0	68°34.3	60°19.7	48°15.4	44°07.4	10°33.5	53°49.7	79°50.8
9	41°16.0	11.6'	12°53.1	14.5'	58.3'	82°53.2	68°02.6	59°47.7	47°42.2	43°35.2	11°01.9	54°20.3	80°19.8
10	55°46.6	11.5'	13°07.6	14.5'	58.3'	82°21.3	67°30.8	59°15.7	47°08.9	43°02.9	11°30.9	54°51.0	80°48.8
11	70°17.0	11.4'	13°22.1	14.4'	58.4'	81°49.4	66°59.1	58°43.7	46°35.7	42°30.6	12°00.4	55°21.7	81°17.9
12	84°47.4	11.3'	N13°36.6	14.4'	58.4'	81°17.4	66°27.3	58°11.6	46°02.4	41°58.3	12°30.3	55°52.6	81°47.1
13	99°17.7	11.2'	13°50.9	14.3'	58.4'	80°45.5	65°55.5	57°39.6	45°29.1	41°25.9	13°00.6	56°23.5	82°16.3
14	113°47.8	11.1'	14°05.3	14.3'	58.5'	80°13.4	65°23.7	57°07.5	44°55.8	40°53.6	13°31.2	56°54.6	82°45.5
15	128°17.9	10.9'	14°19.5	14.2'	58.5'	79°41.4	64°51.8	56°35.5	44°22.5	40°21.1	14°02.2	57°25.7	83°14.8
16	142°47.8	10.8'	14°33.8	14.2'	58.5'	79°09.3	64°20.0	56°03.4	43°49.1	39°48.7	14°33.5	57°56.8	83°44.1
17	157°17.6	10.7'	14°47.9	14.1'	58.6'	78°37.1	63°48.1	55°31.3	43°15.8	39°16.2	15°05.0	58°28.1	84°13.5
18	171°47.4	10.6'	N15°02.0	14.0'	58.6'	78°04.9	63°16.3	54°59.3	42°42.4	38°43.7	15°36.8	58°59.4	84°42.9
19	186°17.0	10.5'	15°16.1	14.0'	58.6'	77°32.7	62°44.4	54°27.2	42°09.1	38°11.2	16°08.8	59°30.8	85°12.4
20	200°46.5	10.4'	15°30.0	13.9'	58.7'	77°00.4	62°12.5	53°55.1	41°35.7	37°38.6	16°41.0	60°02.3	85°41.9
21	215°15.9	10.3'	15°44.0	13.8'	58.7'	76°28.1	61°40.6	53°23.0	41°02.3	37°06.0	17°13.4	60°33.9	86°11.5
22	229°45.2	10.2'	15°57.8	13.8'	58.7'	75°55.8	61°08.7	52°50.9	40°28.9	36°33.3	17°46.0	61°05.5	86°41.1
23	244°14.3	10.0'	16°11.6	13.7'	58.8'	75°23.4	60°36.8	52°18.9	39°55.5	36°00.7	18°18.7	61°37.2	87°10.7
8 th	SD = 15.8' Mer. pass. 06:09					Sun SD = 15.7'							

DUT1 = UT1-UTC = +0.1010 sec $\Delta T = TT-UT1 = +69.0830$ sec

2026 July 09 to Jul. 11 UT

Moon (9 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Sun	-Capella	-Aldebaran	-Mars	+Saturn	+Fomalhaut	+Achernar	+Altair
0	258°43.4	9.9'	N16°25.3	13.6'	58.8'	74°51.0	51°46.8	39°22.1	35°28.0	18°51.6	62°08.9		87°40.4
1	273°12.3	9.8'	16°38.9	13.6'	58.8'	74°18.5	51°14.7	38°48.7	34°55.2	19°24.7	62°40.8		88°10.1
2	287°41.1	9.7'	16°52.5	13.5'	58.9'	73°46.0	50°42.7	38°15.3	34°22.5	19°57.9	63°12.7		88°39.8
3	302°09.8	9.6'	17°05.9	13.4'	58.9'	73°13.4	50°10.6	37°41.8	33°49.7	20°31.2	63°44.6	74°19.4	89°09.6
4	316°38.4	9.4'	17°19.3	13.3'	58.9'	72°40.8	49°38.6	37°08.4	33°16.9	21°04.6	64°16.7	74°34.6	89°39.4
5	331°06.8	9.3'	17°32.7	13.2'	59.0'	72°08.2	49°06.6	36°35.0	32°44.0	21°38.1	64°48.8	74°49.8	90°09.3
6	345°35.2	9.2'	N17°45.9	13.2'	59.0'	71°35.5	48°34.6	36°01.6	32°11.2	22°11.8	65°20.9	75°05.1	90°39.2
7	0°03.4	9.1'	17°59.1	13.1'	59.0'	71°02.8	48°02.6	35°28.2	31°38.3	22°45.6	65°53.2	75°20.6	91°09.1
8	14°31.4	9.0'	18°12.1	13.0'	59.1'	70°30.1	47°30.6	34°54.9	31°05.4	23°19.4	66°25.5	75°36.1	91°39.1
9	28°59.4	8.8'	18°25.1	12.9'	59.1'	69°57.3	46°58.7	34°21.5	30°32.4	23°53.4	66°57.8	75°51.7	92°09.1
10	43°27.2	8.7'	18°38.0	12.8'	59.1'	69°24.5	46°26.7	33°48.1	29°59.5	24°27.5	67°30.2	76°07.4	92°39.1
11	57°54.9	8.6'	18°50.8	12.7'	59.2'	68°51.6	45°54.8	33°14.8	29°26.5	25°01.6	68°02.7	76°23.2	93°09.2
12	72°22.5	8.4'	N19°03.5	12.6'	59.2'	68°18.7	45°23.0	32°41.5	28°53.5	25°35.8	68°35.2	76°39.1	93°39.2
13	86°49.9	8.3'	19°16.1	12.5'	59.2'	67°45.7	44°51.1	32°08.2	28°20.5	26°10.1	69°07.8	76°55.0	94°09.3
14	101°17.2	8.2'	19°28.6	12.4'	59.3'	67°12.7	44°19.3	31°35.0	27°47.5	26°44.5	69°40.5	77°11.1	94°39.5
15	115°44.4	8.1'	19°41.1	12.3'	59.3'	66°39.7	43°47.6	31°01.8	27°14.4	27°19.0	70°13.2	77°27.2	95°09.6
16	130°11.5	7.9'	19°53.4	12.2'	59.3'	66°06.6	43°15.8	30°28.6	26°41.4	27°53.6	70°45.9	77°43.4	95°39.8
17	144°38.4	7.8'	20°05.6	12.1'	59.4'	65°33.5	42°44.2	29°55.5	26°08.3	28°28.2	71°18.8	77°59.7	96°10.0
18	159°05.2	7.7'	N20°17.7	12.0'	59.4'	65°00.4	42°12.5	29°22.4	25°35.2	29°02.9	71°51.6	78°16.1	96°40.3
19	173°31.8	7.5'	20°29.7	11.9'	59.4'	64°27.2	41°40.9	28°49.4	25°02.1	29°37.6	72°24.6	78°32.6	97°10.5
20	187°58.4	7.4'	20°41.6	11.8'	59.4'	63°54.0	41°09.4	28°16.4	24°29.0	30°12.5	72°57.5	78°49.1	97°40.8
21	202°24.7	7.3'	20°53.4	11.7'	59.5'	63°20.7	40°38.0	27°43.5	23°55.9	30°47.3	73°30.6	79°05.7	98°11.1
22	216°51.0	7.1'	21°05.0	11.5'	59.5'	62°47.4	40°06.5	27°10.7	23°22.8	31°22.3	74°03.7	79°22.4	98°41.4
23	231°17.1	7.0'	21°16.6	11.4'	59.5'	62°14.0	39°35.2	26°38.0	22°49.7	31°57.3	74°36.8	79°39.2	99°11.7
9 th	SD = 16.0' Mer. pass. 07:00					Sun SD = 15.7'							

Moon (10 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Sun	-Betelgeuse	-Aldebaran	-Mars	+Saturn	+Fomalhaut	+Deneb	+Altair
0	245°43.1	6.9'	N21°28.0	11.3'	59.6'	61°40.7	47°21.5	26°05.3	22°16.7	32°32.4	75°10.0	76°00.1	99°42.1
1	260°09.0	6.7'	21°39.3	11.2'	59.6'	61°07.2	46°50.0	25°32.8	21°43.6	33°07.6	75°43.2	76°16.9	100°12.4
2	274°34.7	6.6'	21°50.5	11.1'	59.6'	60°33.8	46°18.6	25°00.3	21°10.5	33°42.8	76°16.5	76°33.8	100°42.8
3	289°00.3	6.4'	22°01.6	10.9'	59.7'	60°00.3	45°47.2	24°28.0	20°37.5	34°18.0	76°49.9	76°50.8	101°13.2
4	303°25.7	6.3'	22°12.5	10.8'	59.7'	59°26.8	45°15.8	23°55.8	20°04.5	34°53.3	77°23.3	77°07.8	101°43.6
5	317°51.0	6.2'	22°23.3	10.7'	59.7'	58°53.2	44°44.6	23°23.7	19°31.5	35°28.7	77°56.7	77°25.0	102°14.0
6	332°16.2	6.0'	N22°34.0	10.5'	59.7'	58°19.6	44°13.3	22°51.8	18°58.5	36°04.1	78°30.2	77°42.2	102°44.4
7	346°41.2	5.9'	22°44.5	10.4'	59.8'	57°45.9	43°42.2	22°20.1	18°25.6	36°39.6	79°03.7	77°59.6	103°14.8
8	1°06.1	5.8'	22°54.9	10.3'	59.8'	57°12.3	43°11.1	21°48.5	17°52.8	37°15.1	79°37.3	78°17.0	103°45.3
9	15°30.9	5.6'	23°05.2	10.1'	59.8'	56°38.5	42°40.1	21°17.1	17°20.0	37°50.7	80°10.9	78°34.5	104°15.7
10	29°55.5	5.5'	23°15.3	10.0'	59.9'	56°04.8	42°09.1	20°46.0	16°47.2	38°26.4	80°44.5	78°52.0	104°46.1
11	44°20.1	5.4'	23°25.3	9.8'	59.9'	55°31.0	41°38.3	20°15.1	16°14.6	39°02.0	81°18.2	79°09.7	105°16.6
12	58°44.4	5.2'	N23°35.2	9.7'	59.9'	54°57.2	41°07.5	19°44.4	15°42.0	39°37.8	81°52.0	79°27.4	105°47.0
13	73°08.7	5.1'	23°44.9	9.6'	59.9'	54°23.3	40°36.9	19°14.0	15°09.6	40°13.6	82°25.8	79°45.2	106°17.5
14	87°32.8	5.0'	23°54.4	9.4'	60.0'	53°49.4	40°06.3	18°44.0	14°37.3	40°49.4	82°59.6	80°03.0	106°47.9
15	101°56.7	4.8'	24°03.8	9.3'	60.0'	53°15.5	39°35.8	18°14.3	14°05.1	41°25.3	83°33.4	80°20.9	107°18.3
16	116°20.6	4.7'	24°13.1	9.1'	60.0'	52°41.5	39°05.5	17°44.9	13°33.1	42°01.2	84°07.3	80°38.9	107°48.7
17	130°44.3	4.6'	24°22.2	8.9'	60.1'	52°07.5	38°35.2	17°16.0	13°01.3	42°37.1	84°41.3	80°57.0	108°19.2
18	145°07.9	4.5'	N24°31.1	8.8'	60.1'	51°33.5	38°05.1	16°47.5	12°29.7	43°13.2	85°15.3	81°15.1	108°49.6
19	159°31.3	4.3'	24°39.9	8.6'	60.1'	50°59.4	37°35.2	16°19.5	11°58.3	43°49.2	85°49.3	81°33.3	109°20.0
20	173°54.7	4.2'	24°48.5	8.5'	60.1'	50°25.3	37°05.3	15°52.0	11°27.3	44°25.3	86°23.3	81°51.5	109°50.3
21	188°17.9	4.1'	24°57.0	8.3'	60.2'	49°51.2	36°35.6	15°25.1	10°56.6	45°01.5	86°57.4	82°09.8	110°20.7
22	202°40.9	3.9'	25°05.3	8.1'	60.2'	49°17.0	36°06.1	14°58.9	10°26.3	45°37.6	87°31.5	82°28.2	110°51.0
23	217°03.9	3.8'	25°13.4	8.0'	60.2'	48°42.8	35°36.7	14°33.4	9°56.4	46°13.9	88°05.7	82°46.6	111°21.4
10 th	SD = 16.2' Mer. pass. 07:55					Sun SD = 15.7'							

Moon (11 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Sun	-Betelgeuse	-Capella	-Mars	+Saturn	+Deneb	+Fomalhaut	+Altair
0	231°26.7	3.7'	N25°21.4	7.8'	60.2'	48°08.6	35°07.5	27°13.6	9°27.2	46°50.1	83°05.1	88°39.9	111°51.7
1	245°49.4	3.6'	25°29.2	7.6'	60.3'	47°34.4	34°38.5	26°46.7	8°58.5	47°26.4	83°23.6	89°14.1	112°21.9
2	260°12.0	3.5'	25°36.8	7.4'	60.3'	47°00.1	34°09.7	26°20.2	8°30.6	48°02.8	83°42.2	89°48.3	112°52.2
3	274°34.5	3.3'	25°44.2	7.3'	60.3'	46°25.8	33°41.0	25°54.1	8°03.6	48°39.2	84°00.8	90°22.6	113°22.4
4	288°56.8	3.2'	25°51.5	7.1'	60.3'	45°51.4	33°12.6	25°28.3		49°15.6	84°19.4	90°56.9	113°52.6
5	303°19.0	3.1'	25°58.6	6.9'	60.4'	45°17.0	32°44.4	25°03.0		49°52.0	84°38.2	91°31.2	114°22.8
6	317°41.2	3.0'	N26°05.5	6.7'	60.4'	44°42.6	32°16.5	24°38.1		50°28.5	84°56.9	92°05.6	114°52.9
7	332°03.2	2.9'	26°12.2	6.5'	60.4'	44°08.2	31°48.8	24°13.7		51°05.1	85°15.7	92°40.0	115°23.0
8	346°25.1	2.8'	26°18.7	6.4'	60.4'	43°33.7	31°21.3	23°49.7		51°41.6	85°34.6	93°14.4	115°53.1
9	0°46.9	2.7'	26°25.1	6.2'	60.4'	42°59.2	30°54.2	23°26.2		52°18.2	85°53.4	93°48.8	116°23.1
10	15°08.6	2.6'	26°31.3	6.0'	60.5'	42°24.7	30°27.3	23°03.3		52°54.9	86°12.3	94°23.3	116°53.1
11	29°30.1	2.5'	26°37.2	5.8'	60.5'	41°50.2	30°00.7	22°41.0		53°31.5	86°31.3	94°57.8	117°23.0
12	43°51.6	2.4'	N26°43.0	5.6'	60.5'	41°15.6	29°34.4	22°19.3		54°08.2	86°50.3	95°32.3	117°52.9
13	58°13.0	2.3'	26°48.6	5.4'	60.5'	40°41.0	29°08.5	21°58.2		54°45.0	87°09.3	96°06.8	118°22.7
14	72°34.3	2.2'	26°54.0	5.2'	60.5'	40°06.4	28°42.9	21°37.7		55°21.7	87°28.3	96°41.4	118°52.5
15	86°55.5	2.1'	26°59.2	5.0'	60.6'		28°17.7	21°18.0		55°58.5	87°47.4	97°15.9	119°22.2
16	101°16.6	2.0'	27°04.2	4.8'	60.6'		27°52.9	20°59.0		56°35.4	88°06.5	97°50.5	119°51.8
17	115°37.6	1.9'	27°09.1	4.6'	60.6'		27°28.5	20°40.8		57°12.2	88°25.6	98°25.1	
18	129°58.5	1.8'	N27°13.7	4.4'	60.6'		27°04.6	20°23.4		57°49.1	88°44.7	98°59.7	
19	144°19.3	1.8'	27°18.1	4.2'	60.6'		26°41.1	20°06.8		58°26.0	89°03.9	99°34.3	
20	158°40.1	1.7'	27°22.3	4.0'	60.7'		26°18.0	19°51.1		59°03.0	89°23.0	100°09.0	
21	173°00.8	1.6'	27°26.3	3.8'	60.7'		25°55.5			59°39.9	89°42.2	100°43.6	
22	187°21.4	1.5'	27°30.1	3.6'	60.7'		25°33.5			60°16.9	90°01.4	101°18.3	
23	201°41.9	1.5'	27°33.6	3.4'	60.7'		25°12.0			60°54.0	90°20.6	101°53.0	
11 th	SD = 16.4' Mer. pass. 08:57					Sun SD = 15.7'							

DUT1 = UT1-UTC = +0.1014 sec $\Delta T = TT-UT1 = +69.0826$ sec

2026 July 12 to Jul. 14 UT

h	Moon (12 th Jul)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Adhara	-Sirius	-Betelgeuse	+Mars	+Aldebaran	+Saturn	+Deneb	+Fomalhaut
0	216°02.4	1.4'	N27°37.0	3.2'	60.7'	63°57.1	51°51.7	24°51.1			61°31.0	90°39.9	102°27.6
1	230°22.8	1.3'	27°40.2	3.0'	60.7'	63°41.3	51°33.4	24°30.8			62°08.1	90°59.1	103°02.3
2	244°43.1	1.3'	27°43.1	2.7'	60.8'	63°25.7	51°15.4	24°11.1	9°07.5		62°45.2	91°18.3	103°37.0
3	259°03.4	1.2'	27°45.9	2.5'	60.8'	63°10.2	50°57.6	23°52.1	9°37.0		63°22.3	91°37.6	104°11.7
4	273°23.6	1.2'	27°48.4	2.3'	60.8'	62°54.9	50°40.1	23°33.8	10°07.1		63°59.5	91°56.8	104°46.4
5	287°43.8	1.1'	27°50.7	2.1'	60.8'	62°39.7	50°22.8	23°16.2	10°37.8		64°36.6	92°16.1	105°21.1
6	302°03.9	1.1'	N27°52.8	1.9'	60.8'		50°05.7	22°59.3	11°09.1		65°13.8	92°35.3	105°55.8
7	316°23.9	1.0'	27°54.7	1.7'	60.8'		49°49.0	22°43.2	11°40.7		65°51.0	92°54.5	106°30.5
8	330°44.0	1.0'	27°56.4	1.5'	60.8'		49°32.5	22°27.9	12°12.8	14°44.1	66°28.3	93°13.8	107°05.3
9	345°03.9	0.9'	27°57.9	1.2'	60.8'		49°16.2		12°45.2	15°10.6	67°05.5	93°33.0	107°40.0
10	359°23.9	0.9'	27°59.1	1.0'	60.9'		49°00.3		13°17.9	15°37.8	67°42.8	93°52.2	108°14.7
11	13°43.8	0.9'	28°00.1	0.8'	60.9'		48°44.7		13°50.9	16°05.7	68°20.1	94°11.4	108°49.3
12	28°03.7	0.9'	N28°00.9	0.6'	60.9'		48°29.3		14°24.1	16°34.2	68°57.4	94°30.6	109°24.0
13	42°23.6	0.8'	28°01.5	0.4'	60.9'		48°14.2		14°57.5	17°03.4	69°34.7	94°49.8	109°58.7
14	56°43.4	0.8'	28°01.9	0.1'	60.9'				15°31.1	17°33.0	70°12.0	95°08.9	110°33.4
15	71°03.2	0.8'	28°02.0	-0.1'	60.9'				16°04.9	18°03.2	70°49.4	95°28.0	111°08.0
16	85°23.0	0.8'	28°02.0	-0.3'	60.9'				16°38.8	18°33.8	71°26.7	95°47.1	111°42.7
17	99°42.8	0.8'	28°01.7	-0.5'	60.9'				17°12.9	19°04.8	72°04.1	96°06.2	112°17.3
18	114°02.6	0.8'	N28°01.2	-0.7'	60.9'				17°47.1	19°36.2	72°41.5	96°25.3	112°51.9
19	128°22.4	0.8'	28°00.4	-1.0'	60.9'				18°21.5	20°07.9	73°18.9	96°44.3	113°26.5
20	142°42.1	0.8'	27°59.5	-1.2'	60.9'				18°55.9	20°40.0	73°56.3	97°03.3	114°01.1
21	157°01.9	0.8'	27°58.3	-1.4'	61.0'				19°30.4	21°12.4	74°33.7	97°22.3	114°35.7
22	171°21.7	0.8'	27°56.9	-1.6'	61.0'				20°05.0	21°45.1	75°11.2	97°41.2	115°10.2
23	185°41.5	0.8'	27°55.3	-1.8'	61.0'				20°39.7	22°18.0	75°48.6	98°00.1	115°44.7
12 th	SD = 16.6' Mer. pass. 10:03												

h Moon (13 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	+Capella	+Mars	+Betelgeuse	+Aldebaran	+Rigel	+Saturn	+Deneb	+Fomalhaut
0	200°01.3	0.8'	N27°53.4	-2.1'	61.0'	20°10.6	21°14.5		22°51.1		76°26.1	98°18.9	116°19.2
1	214°21.2	0.9'	27°51.4	-2.3'	61.0'	20°27.6	21°49.3		23°24.5		77°03.5	98°37.7	116°53.7
2	228°41.0	0.9'	27°49.1	-2.5'	61.0'	20°45.5	22°24.2		23°58.1		77°41.0	98°56.5	117°28.1
3	243°00.9	0.9'	27°46.6	-2.7'	61.0'	21°04.2	22°59.2		24°31.9		78°18.5	99°15.2	118°02.5
4	257°20.8	0.9'	27°43.9	-2.9'	61.0'	21°23.7	23°34.2		25°05.9		78°56.0	99°33.9	118°36.8
5	271°40.8	1.0'	27°41.0	-3.1'	61.0'	21°44.0	24°09.3		25°40.0		79°33.5	99°52.5	119°11.2
6	286°00.7	1.0'	N27°37.9	-3.4'	61.0'	22°05.0	24°44.4		26°14.3		80°11.0	100°11.1	119°45.5
7	300°20.8	1.1'	27°34.5	-3.6'	61.0'	22°26.7	25°19.6		26°48.8		80°48.4	100°29.6	
8	314°40.8	1.1'	27°30.9	-3.8'	61.0'	22°49.1	25°54.8		27°23.4		81°25.9	100°48.0	
9	329°00.9	1.2'	27°27.1	-4.0'	61.0'	23°12.1	26°30.0		27°58.1		82°03.4	101°06.4	
10	343°21.1	1.2'	27°23.1	-4.2'	61.0'	23°35.7	27°05.3		28°32.9	40°02.0	82°40.9	101°24.8	
11	357°41.3	1.3'	27°18.9	-4.4'	61.0'	23°59.8	27°40.6		29°07.9	40°17.5	83°18.4	101°43.0	
12	12°01.5	1.3'	N27°14.5	-4.6'	61.0'	24°24.5	28°15.9		29°42.9	40°33.4	83°56.0	102°01.2	
13	26°21.9	1.4'	27°09.9	-4.8'	61.0'	24°49.8	28°51.2		30°18.0	40°49.6	84°33.5	102°19.4	
14	40°42.2	1.4'	27°05.0	-5.1'	61.0'	25°15.5	29°26.6		30°53.3	41°06.3	85°11.0	102°37.4	
15	55°02.7	1.5'	27°00.0	-5.3'	61.0'	25°41.7	30°02.0	22°48.5	31°28.6	41°23.3	85°48.4	102°55.4	
16	69°23.2	1.6'	26°54.7	-5.5'	61.0'	26°08.3	30°37.4	23°05.0	32°04.0	41°40.7	86°25.9	103°13.3	
17	83°43.8	1.7'	26°49.2	-5.7'	61.0'	26°35.3	31°12.8	23°22.3	32°39.5	41°58.5	87°03.4	103°31.2	
18	98°04.5	1.7'	N26°43.5	-5.9'	61.0'	27°02.7	31°48.3	23°40.3	33°15.0	42°16.6	87°40.9	103°48.9	
19	112°25.2	1.8'	26°37.7	-6.1'	61.0'								
20	126°46.0	1.9'	26°31.6	-6.3'	60.9'								
21	141°06.9	2.0'	26°25.3	-6.5'	60.9'								
22	155°27.9	2.1'	26°18.8	-6.7'	60.9'								
23	169°49.0	2.2'	26°12.2	-6.9'	60.9'								
13 th	SD = 16.6' Mer. pass. 11:10												

h Moon (14 th Jul)						
Tue	GHA	ν	Dec	d	HP	
0	184°10.1	2.3'	N26°05.3	-7.1'	60.9'	New Moon
1	198°31.4	2.4'	25°58.2	-7.3'	60.9'	New Moon
2	212°52.7	2.5'	25°51.0	-7.4'	60.9'	New Moon
3	227°14.2	2.6'	25°43.5	-7.6'	60.9'	New Moon
4	241°35.7	2.7'	25°35.9	-7.8'	60.9'	New Moon
5	255°57.4	2.8'	25°28.1	-8.0'	60.9'	New Moon
6	270°19.2	2.9'	N25°20.1	-8.2'	60.9'	New Moon
7	284°41.0	3.0'	25°11.9	-8.4'	60.8'	New Moon
8	299°03.0	3.1'	25°03.5	-8.6'	60.8'	New Moon
9	313°25.1	3.2'	24°55.0	-8.7'	60.8'	New Moon
10	327°47.3	3.3'	24°46.2	-8.9'	60.8'	New Moon
11	342°09.6	3.4'	24°37.3	-9.1'	60.8'	New Moon
12	356°32.0	3.5'	N24°28.3	-9.2'	60.8'	New Moon
13	10°54.5	3.7'	24°19.0	-9.4'	60.8'	New Moon
14	25°17.2	3.8'	24°09.6	-9.6'	60.7'	New Moon
15	39°40.0	3.9'	24°00.0	-9.7'	60.7'	New Moon
16	54°02.9	4.0'	23°50.3	-9.9'	60.7'	New Moon
17	68°25.9	4.1'	23°40.3	-10.1'	60.7'	New Moon
18	82°49.0	4.3'	N23°30.3	-10.2'	60.7'	New Moon
19	97°12.3	4.4'	23°20.0	-10.4'	60.7'	New Moon
20	111°35.7	4.5'	23°09.7	-10.5'	60.6'	New Moon
21	125°59.2	4.6'	22°59.1	-10.7'	60.6'	New Moon
22	140°22.8	4.8'	22°48.4	-10.8'	60.6'	New Moon
23	154°46.6	4.9'	22°37.6	-11.0'	60.6'	New Moon
14 th	SD = 16.6' Mer. pass. 12:14					

DUT1 = UT1-UTC = +0.1018 sec $\Delta T = TT-UT1 = +69.0822$ sec

2026 July 15 to Jul. 17 UT

h	Moon (15 th Jul)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Arcturus	-Spica	-Venus	-Regulus	+Jupiter	+Procyon
0	169°10.5	5.0'	N22°26.6	-11.1'	60.6'	New Moon							
1	183°34.5	5.2'	22°15.5	-11.3'	60.5'	New Moon							
2	197°58.7	5.3'	22°04.2	-11.4'	60.5'	New Moon							
3	212°23.0	5.4'	21°52.8	-11.6'	60.5'	111°17.6	81°47.5	81°34.9	33°15.1	27°31.2			
4	226°47.4	5.6'	21°41.2	-11.7'	60.5'	110°49.4	81°17.2	80°57.7	32°40.8	26°54.1			
5	241°11.9	5.7'	21°29.5	-11.8'	60.5'	110°21.1	80°46.9	80°20.6	32°06.4	26°16.9			
6	255°36.6	5.8'	N21°17.7	-12.0'	60.4'	109°52.9	80°16.6	79°43.5	31°32.1	25°39.8			
7	270°01.4	5.9'	21°05.8	-12.1'	60.4'	109°24.5	79°46.5	79°06.5	30°57.8	25°02.8			
8	284°26.4	6.1'	20°53.7	-12.2'	60.4'	108°56.2	79°16.3	78°29.4	30°23.6	24°25.7			
9	298°51.5	6.2'	20°41.5	-12.3'	60.4'	108°27.8	78°46.2	77°52.5	29°49.4	23°48.7			
10	313°16.7	6.3'	20°29.2	-12.5'	60.3'	107°59.3	78°16.2	77°15.5	29°15.2	23°11.7			
11	327°42.0	6.5'	20°16.7	-12.6'	60.3'	107°30.9	77°46.2	76°38.6	28°41.1	22°34.8		21°02.1	
12	342°07.5	6.6'	N20°04.1	-12.7'	60.3'	107°02.4	77°16.3	76°01.7	28°07.0	21°57.9	5°10.7	21°35.8	
13	356°33.1	6.7'	19°51.4	-12.8'	60.3'	106°33.9	76°46.4	75°24.8	27°32.9	21°21.0	5°44.8	21°53.7	
14	10°58.8	6.9'	19°38.6	-12.9'	60.2'	106°05.4	76°16.6	74°48.0	26°58.9	20°44.1	6°19.3	22°12.4	
15	25°24.7	7.0'	19°25.7	-13.0'	60.2'	105°36.8	75°46.8	74°11.2	26°24.9	20°07.3	6°54.0	22°31.8	
16	39°50.7	7.1'	19°12.7	-13.1'	60.2'	119°27.3	105°08.3	75°17.1	73°34.4	25°50.9	7°29.0	22°51.9	
17	54°16.8	7.3'	18°59.6	-13.2'	60.1'	118°50.6	104°39.7	74°47.5	72°57.7	25°17.0	18°53.8	8°04.1	23°12.5
18	68°43.1	7.4'	N18°46.3	-13.3'	60.1'	118°13.9	104°11.1	74°17.9	72°21.0	24°43.1	18°17.1	8°39.3	23°33.8
19	83°09.5	7.5'	18°33.0	-13.4'	60.1'	117°37.2	103°42.5	73°48.4	71°44.3	24°09.3	17°40.4	9°14.6	23°55.6
20	97°36.0	7.7'	18°19.5	-13.5'	60.1'	117°00.5	103°13.9	73°19.0	71°07.7	23°35.5	17°03.7	9°50.0	
21	112°02.7	7.8'	18°06.0	-13.6'	60.0'	116°23.9	102°45.3	72°49.7	70°31.1	23°01.7	16°27.1	10°25.4	
22	126°29.4	7.9'	17°52.4	-13.7'	60.0'	115°47.4	102°16.6	72°20.4	69°54.6	22°28.0	15°50.6		
23	140°56.3	8.0'	17°38.6	-13.8'	60.0'	115°10.8	101°48.0	71°51.2	69°18.0	21°54.3	15°14.1		
15 th	SD = 16.5' Mer. pass. 13:14												

h	Moon (16 th Jul)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Hadar	-Acrux	-Arcturus	-Spica	-Venus	-Regulus
0	155°23.4	8.2'	N17°24.8	-13.9'	59.9'	114°34.3	101°19.4	97°03.6	89°01.6	71°22.1	68°41.6	21°20.7	14°37.6
1	169°50.5	8.3'	17°10.9	-14.0'	59.9'	113°57.9	100°50.8	96°35.4	88°37.2	70°53.0	68°05.1	20°47.1	14°01.1
2	184°17.8	8.4'	16°56.9	-14.1'	59.9'	113°21.4	100°22.1	96°07.2	88°12.8	70°24.0	67°28.7	20°13.5	13°24.7
3	198°45.2	8.5'	16°42.8	-14.2'	59.9'	112°45.0	99°53.5	95°39.0	87°48.4	69°55.2	66°52.4	19°40.1	12°48.4
4	213°12.8	8.7'	16°28.7	-14.2'	59.8'	112°08.7	99°24.9	95°10.9	87°24.1	69°26.3	66°16.1	19°06.6	12°12.1
5	227°40.4	8.8'	16°14.4	-14.3'	59.8'	111°32.4	98°56.3	94°42.7	86°59.8	68°57.6	65°39.8	18°33.2	11°35.8
6	242°08.2	8.9'	N16°00.1	-14.4'	59.8'	110°56.1	98°27.7	94°14.6	86°35.5	68°29.0	65°03.6	17°59.8	10°59.5
7	256°36.1	9.0'	15°45.7	-14.5'	59.7'	110°19.9	97°59.1	93°46.5	86°11.3	68°00.5	64°27.4	17°26.5	10°23.4
8	271°04.2	9.1'	15°31.2	-14.5'	59.7'	109°43.7	97°30.5	93°18.4	85°47.2	67°32.0	63°51.2	16°53.3	9°47.2
9	285°32.3	9.3'	15°16.7	-14.6'	59.7'	109°07.6	97°01.9	92°50.3	85°23.0	67°03.7	63°15.1	16°20.1	9°11.1
10	300°00.6	9.4'	15°02.0	-14.7'	59.6'	108°31.5	96°33.4	92°22.3	84°58.9	66°35.4	62°39.0	15°47.0	8°35.1
11	314°29.0	9.5'	14°47.4	-14.8'	59.6'	107°55.4	96°04.9	91°54.3	84°34.9	66°07.2	62°03.0	15°13.9	7°59.1
12	328°57.5	9.6'	N14°32.6	-14.8'	59.6'	107°19.4	95°36.3	91°26.3	84°10.9	65°39.2	61°27.0	14°40.8	7°23.1
13	343°26.1	9.7'	14°17.8	-14.9'	59.5'	106°43.5	95°07.9	90°58.3	83°47.0	65°11.2	60°51.1	14°07.9	6°47.2
14	357°54.8	9.8'	14°02.9	-14.9'	59.5'	106°07.5	94°39.4	90°30.4	83°23.1	64°43.3	60°15.2	13°35.0	6°11.4
15	12°23.7	10.0'	13°48.0	-15.0'	59.5'	105°31.7	94°10.9	90°02.5	82°59.3	64°15.6	59°39.4	13°02.1	5°35.6
16	26°52.6	10.1'	13°33.0	-15.1'	59.4'	104°55.8	93°42.5	89°34.6	82°35.5	63°47.9	59°03.5	12°29.4	4°59.9
17	41°21.7	10.2'	13°17.9	-15.1'	59.4'	104°20.0	93°14.1	89°06.8	82°11.8	63°20.4	58°27.8	11°56.7	4°24.3
18	55°50.9	10.3'	N13°02.8	-15.2'	59.4'	103°44.3	92°45.7	88°39.0	81°48.1	62°53.0	57°52.1	11°24.1	3°48.8
19	70°20.2	10.4'	12°47.7	-15.2'	59.3'	103°08.6	92°17.4	88°11.3	81°24.5	62°25.6	57°16.4	10°51.5	3°13.4
20	84°49.6	10.5'	12°32.4	-15.3'	59.3'	102°32.9	91°49.1	87°43.6	81°00.9	61°58.4	56°40.8	10°19.1	2°38.2
21	99°19.1	10.6'	12°17.2	-15.3'	59.2'	101°57.3	91°20.8	87°15.9	80°37.5	61°31.3	56°05.2	9°46.8	2°03.3
22	113°48.7	10.7'	12°01.9	-15.3'	59.2'	101°21.7	90°52.5	86°48.3	80°14.0	61°04.4	55°29.7	9°14.5	1°29.0
23	128°18.4	10.8'	11°46.5	-15.4'	59.2'	100°46.2	90°24.3	86°20.7	79°50.7	60°37.5	54°54.2	8°42.4	
16 th	SD = 16.3' Mer. pass. 14:09												

h	Moon (17 th Jul)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Hadar	-Arcturus	-Spica	\pm Venus	+Regulus	+Sun
0	142°48.3	10.9'	N11°31.2	-15.4'	59.1'	100°10.7	89°56.1	85°53.1	60°10.8	54°18.7	8°10.4		
1	157°18.2	11.0'	11°15.7	-15.5'	59.1'	99°35.3	89°28.0	85°25.6	59°44.2	53°43.3	7°38.6		
2	171°48.2	11.1'	11°00.3	-15.5'	59.1'	98°59.9	88°59.9	84°58.2	59°17.7	53°08.0	7°06.9		
3	186°18.3	11.2'	10°44.8	-15.5'	59.0'	98°24.6	88°31.8	84°30.8	58°51.4	52°32.7	6°35.5		
4	200°48.6	11.3'	10°29.2	-15.6'	59.0'	97°49.3	88°03.8	84°03.5	58°25.2	51°57.4	6°04.2		
5	215°18.9	11.4'	10°13.6	-15.6'	59.0'	97°14.0	87°35.8	83°36.2	57°59.1	51°22.2	5°33.3	2°45.5	
6	229°49.3	11.5'	N09°58.0	-15.6'	58.9'	96°38.8	87°07.9	83°08.9	57°33.2	50°47.0	5°02.8	3°20.3	
7	244°19.8	11.6'	09°42.4	-15.7'	58.9'	96°03.7	86°40.0	82°41.7	57°07.4	50°11.9	4°32.7	3°55.2	
8	258°50.4	11.7'	09°26.7	-15.7'	58.8'	95°28.6	86°12.1	82°14.6	56°41.8	49°36.9	4°03.3	4°30.1	
9	273°21.1	11.8'	09°11.0	-15.7'	58.8'	94°53.5	85°44.3	81°47.5	56°16.3	49°01.8	3°34.8	5°05.0	
10	287°51.9	11.9'	08°55.3	-15.7'	58.8'	94°18.5	85°16.6	81°20.5	55°50.9	48°26.9		5°39.9	
11	302°22.8	12.0'	08°39.6	-15.8'	58.7'	93°43.5	84°48.9	80°53.5	55°25.7	47°52.0		6°14.7	41°27.6
12	316°53.7	12.0'	N08°23.8	-15.8'	58.7'	93°08.6	84°21.2	80°26.6	55°00.6	47°17.1		6°49.6	42°00.0
13	331°24.8	12.1'	08°08.1	-15.8'	58.7'	92°33.8	83°53.6	79°59.8	54°35.7	46°42.3		7°24.3	42°32.4
14	345°55.9	12.2'	07°52.3	-15.8'	58.6'	91°58.9	83°26.0	79°33.0	54°11.0	46°07.5		7°59.1	43°04.7
15	0°27.1	12.3'	07°36.4	-15.8'	58.6'	91°24.2	82°58.5	79°06.3	53°46.4	45°32.8		8°33.8	43°37.0
16	14°58.4	12.4'	07°20.6	-15.8'	58.5'	90°49.4	82°31.1	78°39.6	53°22.0	44°58.1		9°08.5	44°09.3
17	29°29.8	12.5'	07°04.8	-15.9'	58.5'	90°14.8	82°03.7	78°13.0	52°57.7	44°23.5		9°43.1	44°41.5
18	44°01.2	12.5'	N06°48.9	-15.9'	58.5'	89°40.1	81°36.3	77°46.5	52°33.7	43°48.9		10°17.7	45°13.6
19	58°32.8	12.6'	06°33.0	-15.9'	58.4'	89°05.6	81°09.1	77°20.1	52°09.8	43°14.4		10°52.3	45°45.7
20	73°04.4	12.7'	06°17.2	-15.9'	58.4'	88°31.0	80°41.8	76°53.7	51°46.0	42°39.9		11°26.8	46°17.8
21	87°36.0	12.8'	06°01.3	-15.9'	58.3'	87°56.5	80°14.7	76°27.4	51°22.5	42°05.5		12°01.2	46°49.8
22	102°07.8	12.8'	05°45.4	-15.9'	58.3'	87°22.1	79°47.6	76°01.1	50°59.1	41°31.1		12°35.6	47°21.7
23	116°39.6	12.9'	05°29.5	-15.9'	58.3'	86°47.7	79°20.5	75°35.0	50°35.9	40°56.7	4°42.9	13°10.0	47°53.6
17 th	SD = 16.1' Mer. pass. 14:58					Sun SD = 15.7'							

DUT1 = UT1-UTC = +0.1022 sec $\Delta T = TT-UT1 = +69.0818$ sec

2026 July 18 to Jul. 20 UT

h	Moon (18 th Jul)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Hadar	-Arcturus	-Spica	+Venus	+Regulus	+Sun
0	131°11.5	13.0'	N05°13.6	-15.9'	58.2'	86°13.4	78°53.6	75°08.9	50°12.9	40°22.5	5°12.3	13°44.3	48°25.5
1	145°43.5	13.0'	04°57.7	-15.9'	58.2'	85°39.1	78°26.6	74°42.9	49°50.1	39°48.2	5°42.1	14°18.6	48°57.3
2	160°15.5	13.1'	04°41.8	-15.9'	58.1'	85°04.9	77°59.8	74°16.9	49°27.5	39°14.0	6°12.1	14°52.8	49°29.1
3	174°47.6	13.2'	04°25.9	-15.9'	58.1'	84°30.7	77°33.0	73°51.0	49°05.0	38°39.9	6°42.3	15°27.0	50°00.8
4	189°19.8	13.2'	04°10.0	-15.9'	58.1'	83°56.5	77°06.3	73°25.3	48°42.8	38°05.8	7°12.7	16°01.1	50°32.5
5	203°52.0	13.3'	03°54.1	-15.9'	58.0'	83°22.4	76°39.6	72°59.6	48°20.8	37°31.8	7°43.1	16°35.2	51°04.2
6	218°24.3	13.4'	N03°38.2	-15.9'	58.0'	82°48.4	76°13.1	72°33.9	47°59.0	36°57.8	8°13.6	17°09.2	51°35.7
7	232°56.7	13.4'	03°22.3	-15.9'	58.0'	82°14.4	75°46.5	72°08.4	47°37.4	36°23.9	8°44.2	17°43.2	52°07.3
8	247°29.1	13.5'	03°06.4	-15.9'	57.9'	81°40.5	75°20.1	71°42.9	47°16.0	35°50.0	9°14.8	18°17.2	52°38.8
9	262°01.5	13.5'	02°50.5	-15.9'	57.9'	81°06.5	74°53.7	71°17.6	46°54.8	35°16.2	9°45.4	18°51.0	53°10.2
10	276°34.1	13.6'	02°34.7	-15.9'	57.8'	80°32.7	74°27.4	70°52.3	46°33.9	34°42.4	10°16.0	19°24.9	53°41.6
11	291°06.6	13.6'	02°18.8	-15.8'	57.8'	79°58.9	74°01.2	70°27.1	46°13.2	34°08.7	10°46.6	19°58.7	54°13.0
12	305°39.3	13.7'	N02°03.0	-15.8'	57.8'	79°25.1	73°35.1	70°01.9	45°52.7	33°35.0	11°17.2	20°32.4	54°44.3
13	320°11.9	13.7'	01°47.1	-15.8'	57.7'	78°51.4	73°09.0	69°36.9	45°32.4	33°01.4	11°47.8	21°06.1	55°15.5
14	334°44.7	13.8'	01°31.3	-15.8'	57.7'	78°17.8	72°43.0	69°12.0	45°12.4	32°27.8	12°18.4	21°39.8	55°46.8
15	349°17.5	13.8'	01°15.5	-15.8'	57.6'	77°44.2	72°17.1	68°47.1	44°52.6	31°54.2	12°49.0	22°13.4	56°17.9
16	3°50.3	13.9'	00°59.7	-15.8'	57.6'	77°10.6	71°51.3	68°22.4	44°33.1	31°20.8	13°19.5	22°46.9	56°49.0
17	18°23.2	13.9'	00°44.0	-15.7'	57.6'	76°37.1	71°25.5	67°57.7	44°13.8	30°47.3	13°50.0	23°20.5	57°20.1
18	32°56.1	14.0'	N00°28.2	-15.7'	57.5'	76°03.6	70°59.8	67°33.2	43°54.8	30°14.0	14°20.5	23°53.9	57°51.1
19	47°29.1	14.0'	N00°12.5	-15.7'	57.5'	75°30.2	70°34.3	67°08.7	43°36.0	29°40.6	14°51.0	24°27.3	58°22.1
20	62°02.1	14.1'	S00°03.2	-15.7'	57.4'	74°56.8	70°08.7	66°44.4	43°17.5	29°07.3	15°21.4	25°00.7	58°53.1
21	76°35.1	14.1'	00°18.9	-15.7'	57.4'	74°23.5	69°43.3	66°20.1	42°59.2	28°34.1	15°51.8	25°34.0	59°23.9
22	91°08.2	14.1'	00°34.6	-15.6'	57.4'	73°50.2	69°18.0	65°55.9	42°41.2	28°00.9	16°22.2	26°07.3	59°54.8
23	105°41.4	14.2'	00°50.2	-15.6'	57.3'	73°17.0	68°52.7	65°31.9	42°23.5	27°27.8	16°52.5	26°40.5	60°25.6
18 th	SD = 15.9' Mer. pass. 15:44					Sun SD = 15.7'							

h	Moon (19 th Jul)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Hadar	-Spica	+Venus	+Regulus	+Sun
0	120°14.5	14.2'	S01°05.8	-15.6'	57.3'		72°43.8	68°27.6	65°07.9	26°54.7	17°22.8	27°13.7	60°56.3
1	134°47.7	14.2'	01°21.4	-15.6'	57.3'		72°10.6	68°02.5	64°44.0	26°21.7	17°53.0	27°46.9	61°27.0
2	149°21.0	14.3'	01°36.9	-15.5'	57.2'		71°37.5	67°37.5	64°20.3	25°48.7	18°23.3	28°20.0	61°57.7
3	163°54.3	14.3'	01°52.5	-15.5'	57.2'	119°55.1	71°04.5	67°12.6	63°56.7	25°15.8	18°53.4	28°53.0	62°28.3
4	178°27.6	14.3'	02°08.0	-15.5'	57.1'	119°28.8	70°31.5	66°47.8	63°33.1	24°42.9	19°23.6	29°26.0	62°58.9
5	193°00.9	14.4'	02°23.4	-15.4'	57.1'	119°02.4	69°58.5	66°23.1	63°09.7	24°10.1	19°53.7	29°59.0	63°29.4
6	207°34.3	14.4'	S02°38.9	-15.4'	57.1'	118°36.1	69°25.6	65°58.5	62°46.4	23°37.3	20°23.8	30°31.9	63°59.9
7	222°07.7	14.4'	02°54.3	-15.4'	57.0'	118°09.7	68°52.7	65°34.0	62°23.2	23°04.6	20°53.8	31°04.7	64°30.3
8	236°41.1	14.4'	03°09.6	-15.3'	57.0'	117°43.3	68°19.9	65°09.6	62°00.1	22°31.9	21°23.8	31°37.6	65°00.7
9	251°14.5	14.5'	03°25.0	-15.3'	57.0'	117°16.9	67°47.1	64°45.2	61°37.1	21°59.3	21°53.7	32°10.3	65°31.1
10	265°48.0	14.5'	03°40.3	-15.3'	56.9'	116°50.4	67°14.4	64°21.0	61°14.3	21°26.8	22°23.6	32°43.1	66°01.4
11	280°21.5	14.5'	03°55.5	-15.2'	56.9'	116°23.9	66°41.7	63°56.9	60°51.6	20°54.2	22°53.5	33°15.8	66°31.6
12	294°55.0	14.5'	S04°10.8	-15.2'	56.8'	115°57.5	66°09.1	63°32.9	60°28.9	20°21.8	23°23.3	33°48.4	67°01.8
13	309°28.5	14.6'	04°25.9	-15.1'	56.8'	115°31.0	65°36.5	63°09.0	60°06.5	19°49.4	23°53.1	34°21.0	67°32.0
14	324°02.1	14.6'	04°41.1	-15.1'	56.8'	115°04.4	65°03.9	62°45.2	59°44.1	19°17.0	24°22.9	34°53.6	68°02.1
15	338°35.7	14.6'	04°56.2	-15.1'	56.7'	114°37.9	64°31.4	62°21.4	59°21.8	18°44.7	24°52.6	35°26.1	68°32.2
16	353°09.2	14.6'	05°11.3	-15.0'	56.7'	114°11.4	63°58.9	61°57.9	58°59.7	18°12.5	25°22.2	35°58.5	69°02.3
17	7°42.9	14.6'	05°26.3	-15.0'	56.7'	113°44.8	63°26.5	61°34.4	58°37.7	17°40.3	25°51.9	36°31.0	69°32.3
18	22°16.5	14.6'	S05°41.3	-14.9'	56.6'	113°18.3	62°54.1	61°11.0	58°15.9	17°08.2	26°21.5	37°03.3	70°02.2
19	36°50.1	14.6'	05°56.2	-14.9'	56.6'	112°51.7	62°21.8	60°47.7	57°54.2	16°36.1	26°51.0	37°35.7	70°32.1
20	51°23.7	14.7'	06°11.1	-14.9'	56.6'	112°25.1	61°49.5	60°24.6	57°32.6	16°04.1	27°20.5	38°08.0	71°02.0
21	65°57.4	14.7'	06°26.0	-14.8'	56.5'	111°58.6	61°17.2	60°01.5	57°11.1	15°32.1	27°50.0	38°40.2	71°31.8
22	80°31.1	14.7'	06°40.8	-14.8'	56.5'	111°32.0	60°45.0	59°38.6	56°49.8	15°00.3	28°19.4	39°12.4	72°01.6
23	95°04.7	14.7'	06°55.5	-14.7'	56.4'	111°05.4	60°12.9	59°15.8	56°28.6	14°28.4	28°48.8	39°44.6	72°31.4
19 th	SD = 15.6' Mer. pass. 16:28					Sun SD = 15.7'							

h Moon (20 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Hadar	-Spica	+Venus	+Regulus	+Sun
0	109°38.4	14.7'	S07°10.2	-14.7'	56.4'	110°38.8	59°40.7	58°53.1	56°07.6	13°56.7	29°18.2	40°16.7	73°01.1
1	124°12.1	14.7'	07°24.9	-14.6'	56.4'	110°12.2	59°08.6	58°30.5	55°46.7	13°25.0	29°47.5	40°48.8	73°30.8
2	138°45.8	14.7'	07°39.5	-14.6'	56.3'	109°45.6	58°36.6	58°08.1	55°25.9	12°53.4	30°16.8	41°20.9	74°00.4
3	153°19.5	14.7'	07°54.1	-14.5'	56.3'	109°19.0	58°04.6	57°45.7	55°05.3	12°21.9	30°46.0	41°52.9	74°30.0
4	167°53.2	14.7'	08°08.6	-14.5'	56.3'	108°52.4	57°32.6	57°23.5	54°44.9	11°50.4	31°15.2	42°24.9	74°59.5
5	182°26.9	14.7'	08°23.0	-14.4'	56.2'	108°25.9	57°00.7	57°01.5	54°24.6	11°19.0	31°44.4	42°56.8	75°29.0
6	197°00.6	14.7'	S08°37.4	-14.4'	56.2'	107°59.3	56°28.8	56°39.5	54°04.4	10°47.8	32°13.5	43°28.7	75°58.5
7	211°34.3	14.7'	08°51.8	-14.3'	56.2'	107°32.7	55°56.9	56°17.7	53°44.4	10°16.6	32°42.6	44°00.5	76°27.9
8	226°08.0	14.7'	09°06.1	-14.2'	56.1'	107°06.1	55°25.1	55°56.0	53°24.5	9°45.5	33°11.6	44°32.3	76°57.3
9	240°41.6	14.7'	09°20.3	-14.2'	56.1'	106°39.5	54°53.4	55°34.5	53°04.8	9°14.6	33°40.6	45°04.1	77°26.7
10	255°15.3	14.7'	09°34.5	-14.1'	56.1'	106°13.0	54°21.6	55°13.0	52°45.3	8°43.8	34°09.6	45°35.8	77°56.0
11	269°49.0	14.7'	09°48.7	-14.1'	56.0'	105°46.4	53°49.9	54°51.8	52°26.0	8°13.2	34°38.5	46°07.5	78°25.3
12	284°22.7	14.7'	S10°02.7	-14.0'	56.0'	105°19.9	53°18.3	54°30.6	52°06.7	7°42.7	35°07.4	46°39.2	78°54.5
13	298°56.3	14.7'	10°16.7	-14.0'	56.0'	104°53.3	52°46.6	54°09.6	51°47.7	7°12.4	35°36.3	47°10.8	79°23.7
14	313°30.0	14.6'	10°30.7	-13.9'	55.9'	104°26.8	52°15.1	53°48.8	51°28.8	6°42.4	36°05.1	47°42.4	79°52.9
15	328°03.7	14.6'	10°44.6	-13.8'	55.9'	104°00.3	51°43.5	53°28.0	51°10.1	6°12.7	36°33.9	48°13.9	80°22.0
16	342°37.3	14.6'	10°58.4	-13.8'	55.9'	103°33.7	51°12.0	53°07.5	50°51.6	5°43.3	37°02.7	48°45.5	80°51.1
17	357°10.9	14.6'	11°12.2	-13.7'	55.8'	103°07.2	50°40.5	52°47.0	50°33.3	5°14.4	37°31.4	49°16.9	81°20.1
18	11°44.5	14.6'	S11°25.9	-13.7'	55.8'	102°40.7	50°09.1	52°26.8	50°15.1	4°46.0	38°00.1	49°48.4	81°49.2
19	26°18.1	14.6'	11°39.6	-13.6'	55.8'	102°14.3	49°37.7	52°06.7	49°57.1	4°18.4	38°28.7	50°19.8	82°18.1
20	40°51.7	14.6'	11°53.2	-13.5'	55.8'	101°47.8	49°06.3	51°46.7	49°39.3		38°57.4	50°55.1	82°47.1
21	55°25.3	14.6'	12°06.7	-13.5'	55.7'	101°21.3	48°35.0	51°26.9	49°21.7		39°26.0	51°22.5	83°16.0
22	69°58.8	14.5'	12°20.2	-13.4'	55.7'	100°54.9	48°03.7	51°07.2	49°04.2		39°54.5	51°53.8	83°44.9
23	84°32.4	14.5'	12°33.6	-13.3'	55.7'	100°28.5	47°32.5	50°47.8	48°47.0		40°23.0	52°25.0	84°13.7
20 th	SD = 15.4' Mer. pass 17:12					Sun SD = 15.7'							

2026 July 21 to Jul. 23 UT

h	Moon (23 rd Jul)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	+Spica	+Arcturus	+Venus	+Regulus	+Sun
0	77°17.0	12.7'	S21°54.8	-9.2'	54.5'	103°39.7	79°16.9	22°35.7	23°24.1	41°56.7	63°06.4	77°21.9	107°12.5
1	91°48.7	12.6'	22°04.1	-9.1'	54.5'	103°11.9	78°51.6	22°05.7	23°54.0	42°12.3	63°33.7	77°51.9	107°40.0
2	106°20.4	12.6'	22°13.2	-9.0'	54.5'	102°44.1	78°26.3	21°35.8	24°23.8	42°28.2	64°01.0	78°21.9	108°07.6
3	120°51.9	12.5'	22°22.2	-8.9'	54.5'	102°16.3	78°01.0	21°05.8	24°53.6	42°44.2	64°28.2	78°51.8	108°35.1
4	135°23.5	12.5'	22°31.1	-8.8'	54.5'	101°48.5	77°35.7	20°35.9	25°23.5	43°00.4	64°55.4	79°21.8	109°02.7
5	149°55.0	12.4'	22°39.9	-8.7'	54.4'	101°20.8	77°10.5	20°06.0	25°53.3	43°16.7	65°22.6	79°51.7	109°30.2
6	164°26.4	12.4'	S22°48.6	-8.6'	54.4'	100°53.0	76°45.3	19°36.1	26°23.1	43°33.3	65°49.8	80°21.6	109°57.7
7	178°57.8	12.3'	22°57.2	-8.5'	54.4'	100°25.3	76°20.1	19°06.2	26°52.9	43°50.1	66°17.0	80°51.5	110°25.2
8	193°29.2	12.3'	23°05.7	-8.4'	54.4'	99°57.5	75°55.0	18°36.4	27°22.6	44°07.0	66°44.2	81°21.0	110°52.6
9	208°00.4	12.2'	23°14.1	-8.3'	54.4'	99°29.8	75°29.9	18°06.5	27°52.4	44°24.1	67°11.3	81°51.2	111°20.1
10	222°31.7	12.2'	23°22.4	-8.2'	54.4'	99°02.0	75°04.8	17°36.7	28°22.2	44°41.4	67°38.5	82°21.1	111°47.5
11	237°02.9	12.1'	23°30.6	-8.1'	54.4'	98°34.3	74°39.8	17°06.9	28°51.9	44°58.8	68°05.6	82°50.9	112°14.9
12	251°34.0	12.1'	S23°38.6	-8.0'	54.3'	98°06.6	74°14.7	16°37.1	29°21.6	45°16.4	68°32.7	83°20.7	112°42.4
13	266°05.1	12.0'	23°46.6	-7.8'	54.3'	97°38.9	73°49.8	16°07.3	29°51.4	45°34.1	68°59.8	83°50.5	113°09.8
14	280°36.1	12.0'	23°54.4	-7.7'	54.3'	97°11.2	73°24.8	15°37.5	30°21.1	45°52.0	69°26.9	84°20.3	113°37.1
15	295°07.1	11.9'	24°02.2	-7.6'	54.3'	96°43.5	72°59.9	15°07.7	30°50.8	46°10.1	69°54.0	84°50.1	114°04.5
16	309°38.1	11.9'	24°09.8	-7.5'	54.3'	96°15.8	72°35.0	14°38.0	31°20.5	46°28.3	70°21.1	85°19.9	114°31.9
17	324°09.0	11.8'	24°17.3	-7.4'	54.3'	95°48.1	72°10.2	14°08.2	31°50.1	46°46.7	70°48.1	85°49.7	114°59.2
18	338°39.8	11.8'	S24°24.7	-7.3'	54.3'	95°20.4	71°45.4	13°38.5	32°19.8	47°05.2	71°15.2	86°19.4	115°26.6
19	353°10.6	11.7'	24°32.0	-7.2'	54.3'	94°52.8	71°20.6	13°08.8	32°49.5	47°23.8	71°42.2	86°49.1	115°53.9
20	7°41.3	11.7'	24°39.2	-7.1'	54.2'	94°25.1	70°55.8	12°39.1	33°19.1	47°42.6	72°09.2	87°18.9	116°21.2
21	22°12.0	11.6'	24°46.3	-7.0'	54.2'	93°57.4	70°31.1	12°09.4	33°48.8	48°01.5	72°36.3	87°48.6	116°48.5
22	36°42.6	11.6'	24°53.2	-6.8'	54.2'	93°29.8	70°06.5	11°39.7	34°18.4	48°20.5	73°03.3	88°18.3	117°15.8
23	51°13.2	11.5'	25°00.1	-6.7'	54.2'	93°02.1	69°41.8	11°10.1	34°48.1	48°39.7	73°30.3	88°48.0	117°43.1
23 rd	SD = 14.9'		Mer. pass. 19:28			Sun SD = 15.7'							

DUT1 = UT1-UTC = +0.1030 sec $\Delta T = TT-UT1 = +69.0810$ sec

2026 July 24 to Jul. 26 UT

h	Moon (24 th Jul)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Deneb	-Fomalhaut	-Altair	-Antares	+Spica	+Venus	+Regulus	+Sun
0	65°43.8	11.5'	S25°06.8	-6.6'	54.2'		92°34.5	69°17.2	10°40.4	35°17.7	73°57.2	89°17.7	118°10.4
1	80°14.3	11.4'	25°13.4	-6.5'	54.2'		92°06.9	68°52.7	10°10.8	35°47.3	74°24.2	89°47.4	118°37.6
2	94°44.7	11.4'	25°19.9	-6.4'	54.2'		91°39.3	68°28.2	9°41.2	36°16.9	74°51.2	90°17.0	119°04.9
3	109°15.1	11.3'	25°26.2	-6.3'	54.2'		91°11.7	68°03.7	9°11.5	36°46.5	75°18.2	90°46.7	119°32.2
4	123°45.5	11.3'	25°32.5	-6.1'	54.2'		90°44.0	67°39.3	8°41.9	37°16.1	75°45.1	91°16.4	119°59.4
5	138°15.8	11.3'	25°38.6	-6.0'	54.1'		90°16.4	67°14.9	8°12.4	37°45.7	76°12.1	91°46.0	
6	152°46.0	11.2'	S25°44.6	-5.9'	54.1'	96°08.9	89°48.8	66°50.5	7°42.8	38°15.3	76°39.0	92°15.6	
7	167°16.2	11.2'	25°50.5	-5.8'	54.1'	95°53.8	89°21.3	66°26.2	7°13.2	38°44.9	77°05.9	92°45.3	
8	181°46.4	11.1'	25°56.3	-5.7'	54.1'	95°38.8	88°53.7	66°01.9	6°43.7	39°14.5	77°32.9	93°14.9	
9	196°16.5	11.1'	26°02.0	-5.5'	54.1'	95°23.7	88°26.1	65°37.7	6°14.2	39°44.0	77°59.8	93°44.5	
10	210°46.6	11.0'	26°07.5	-5.4'	54.1'	95°08.7	87°58.5	65°13.5	5°44.7	40°13.6	78°26.7	94°14.1	
11	225°16.6	11.0'	26°12.9	-5.3'	54.1'	94°53.6	87°31.0	64°49.3	5°15.3	40°43.1	78°53.6	94°43.7	
12	239°46.6	10.9'	S26°18.2	-5.2'	54.1'	94°38.5	87°03.4	64°25.2	4°45.8	41°12.7	79°20.5	95°13.3	
13	254°16.5	10.9'	26°23.4	-5.0'	54.1'	94°23.4	86°35.9	64°01.2	4°16.5	41°42.2	79°47.4	95°42.9	
14	268°46.4	10.9'	26°28.4	-4.9'	54.1'	94°08.3	86°08.3	63°37.2	3°47.2	42°11.8	80°14.3	96°12.5	
15	283°16.3	10.8'	26°33.3	-4.8'	54.1'	93°53.1	85°40.8	63°13.2	3°18.0	42°41.3	80°41.2	96°42.1	
16	297°46.1	10.8'	26°38.1	-4.7'	54.1'	93°38.0	85°13.3	62°49.3	2°48.9	43°10.9	81°08.1	97°11.7	
17	312°15.9	10.7'	26°42.8	-4.5'	54.1'	93°22.8	84°45.8	62°25.4	2°20.0	43°40.4	81°35.0	97°41.3	
18	326°45.6	10.7'	S26°47.3	-4.4'	54.1'	93°07.7	84°18.2	62°01.6	1°51.5	44°09.9	82°01.9	98°10.8	
19	341°15.3	10.7'	26°51.8	-4.3'	54.1'	92°52.5	83°50.7	61°37.8	1°23.8	44°39.5	82°28.7	98°40.4	
20	355°45.0	10.6'	26°56.0	-4.2'	54.0'	92°37.3	83°23.2	61°14.1		45°09.0	82°55.6	99°10.0	
21	10°14.6	10.6'	27°00.2	-4.0'	54.0'	92°22.1	82°55.7	60°50.5		45°38.5	83°22.5	99°39.5	
22	24°44.2	10.5'	27°04.2	-3.9'	54.0'	92°06.9	82°28.3	60°26.9		46°08.0	83°49.3	100°09.1	
23	39°13.8	10.5'	27°08.1	-3.8'	54.0'	91°51.7	82°00.8	60°03.3		46°37.5	84°16.2	100°38.7	
24 th	SD = 14.8' Mer. pass. 20:18					Sun SD = 15.7'							

Moon (25 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	+Antares	+Spica	+Venus	+Regulus
0	53°43.3	10.5'	S27°11.9	-3.6'	54.0'		91°36.5	81°33.3	59°39.8		47°07.1	84°43.1	101°08.2
1	68°12.7	10.4'	27°15.6	-3.5'	54.0'		91°21.3	81°05.8	59°16.4		47°36.6	85°09.9	101°37.8
2	82°42.2	10.4'	27°19.1	-3.4'	54.0'		91°06.1	80°38.4	58°53.0	2°14.3	48°06.1	85°36.8	102°07.3
3	97°11.6	10.4'	27°22.5	-3.3'	54.0'		90°50.9	80°10.9	58°29.7	2°43.1	48°35.6	86°03.7	102°36.9
4	111°41.0	10.3'	27°25.7	-3.1'	54.0'		90°35.7	79°43.5	58°06.4	3°12.1	49°05.1	86°30.5	103°06.4
5	126°10.3	10.3'	27°28.9	-3.0'	54.0'		90°20.5	79°16.1	57°43.2	3°41.3	49°34.7	86°57.4	103°36.0
6	140°39.7	10.3'	S27°31.9	-2.9'	54.0'		90°05.3	78°48.6	57°20.0	4°10.6	50°04.2	87°24.3	104°05.5
7	155°08.9	10.3'	27°34.7	-2.7'	54.0'	119°32.4	89°50.0	78°21.2	56°57.0	4°39.9	50°33.7	87°51.1	104°35.1
8	169°38.2	10.2'	27°37.5	-2.6'	54.0'	119°03.1	89°34.8	77°53.8	56°33.9	5°09.2	51°03.2	88°18.0	105°04.6
9	184°07.4	10.2'	27°40.1	-2.5'	54.0'	118°33.8	89°19.6	77°26.4	56°11.0	5°38.6	51°32.7	88°44.8	105°34.2
10	198°36.6	10.2'	27°42.6	-2.3'	54.0'	118°04.4	89°04.4	76°59.0	55°48.1	6°08.0	52°02.2	89°11.7	106°03.7
11	213°05.8	10.2'	27°44.9	-2.2'	54.0'	117°35.1	88°49.2	76°31.6	55°25.3	6°37.5	52°31.7	89°38.6	106°33.3
12	227°35.0	10.1'	S27°47.1	-2.1'	54.0'	117°05.8	88°34.0	76°04.2	55°02.5	7°06.9	53°01.3	90°05.4	107°02.8
13	242°04.1	10.1'	27°49.2	-1.9'	54.0'	116°36.4	88°18.8	75°36.8	54°39.9	7°36.4	53°30.8	90°32.3	107°32.4
14	256°33.2	10.1'	27°51.1	-1.8'	54.0'	116°07.1	88°03.6	75°09.5	54°17.3	8°05.9	54°00.3	90°59.2	108°01.9
15	271°02.3	10.1'	27°52.9	-1.7'	54.0'	115°37.8	87°48.4	74°42.1	53°54.7	8°35.4	54°29.8	91°26.0	108°31.5
16	285°31.4	10.1'	27°54.6	-1.5'	54.0'	115°08.4	87°33.2	74°14.7	53°32.3	9°04.9	54°59.4	91°52.9	109°01.1
17	300°00.4	10.0'	27°56.1	-1.4'	54.0'	114°39.1	87°18.0	73°47.4	53°09.9	9°34.4	55°28.9	92°19.8	109°30.6
18	314°29.5	10.0'	S27°57.5	-1.3'	54.0'	114°09.7	87°02.8	73°20.1	52°47.6	10°03.9	55°58.4	92°46.7	110°00.2
19	328°58.5	10.0'	27°58.8	-1.1'	54.0'	113°40.3	86°47.6	72°52.7	52°25.4	10°33.4	56°28.0	93°13.5	110°29.7
20	343°27.5	10.0'	27°59.9	-1.0'	54.0'	113°11.0	86°32.5	72°25.4	52°03.3	11°03.0	56°57.5	93°40.4	110°59.3
21	357°56.5	10.0'	28°00.9	-0.9'	54.0'	112°41.6	86°17.3	71°58.1	51°41.3	11°32.5	57°27.1	94°07.3	111°28.9
22	12°25.5	10.0'	28°01.8	-0.7'	54.0'	112°12.2	86°02.2	71°30.8	51°19.3	12°02.0	57°56.6	94°34.2	111°58.5
23	26°54.4	9.9'	28°02.5	-0.6'	54.0'	111°42.8	85°47.1	71°03.5	50°57.4	12°31.6	58°26.2	95°01.1	112°28.0
25 th	SD = 14.7' Mer. pass. 21:09												

Moon (26 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	+Antares	+Spica	+Venus	+Regulus
0	41°23.4	9.9'	S28°03.1	-0.5'	54.0'	111°13.5	85°31.9	70°36.2	50°35.7	13°01.1	58°55.7	95°28.0	112°57.6
1	55°52.3	9.9'	28°03.6	-0.3'	54.0'	110°44.1	85°16.8	70°08.9	50°14.0	13°30.7	59°25.3	95°54.9	113°27.2
2	70°21.2	9.9'	28°03.9	-0.2'	54.0'	110°14.7	85°01.8	69°41.7	49°52.4	14°00.3	59°54.8	96°21.8	113°56.8
3	84°50.2	9.9'	28°04.1	-0.0'	54.0'	109°45.3	84°46.7	69°14.4	49°30.9	14°29.9	60°24.4	96°48.7	114°26.4
4	99°19.1	9.9'	28°04.1	0.1'	54.0'	109°15.9	84°31.6	68°47.2	49°09.5	14°59.4	60°54.0	97°15.7	114°56.0
5	113°48.0	9.9'	28°04.0	0.2'	54.0'	108°46.4	84°16.6	68°19.9	48°48.3	15°29.0	61°23.6	97°42.6	115°25.6
6	128°16.9	9.9'	S28°03.8	0.4'	54.0'	108°17.0	84°01.5	67°52.7	48°27.1	15°58.6	61°53.2	98°09.5	115°55.2
7	142°45.8	9.9'	28°03.4	0.5'	54.0'	107°47.6	83°46.5	67°25.5	48°06.0	16°28.2	62°22.7	98°36.5	116°24.9
8	157°14.7	9.9'	28°03.0	0.6'	54.0'	107°18.2		66°58.3	47°45.0	16°57.8	62°52.3	99°03.4	116°54.5
9	171°43.6	9.9'	28°02.3	0.8'	54.0'	106°48.7		66°31.1	47°24.2	17°27.4	63°22.0	99°30.4	117°24.1
10	186°12.5	9.9'	28°01.5	0.9'	54.0'	106°19.3		66°03.9	47°03.4	17°57.1	63°51.6	99°57.3	117°53.7
11	200°41.4	9.9'	28°00.6	1.0'	54.0'	105°49.8		65°36.8	46°42.8	18°26.7	64°21.2	100°24.3	118°23.4
12	215°10.3	9.9'	S27°59.6	1.2'	54.0'	105°20.3		65°09.6	46°22.3	18°56.3	64°50.8	100°51.2	118°53.0
13	229°39.2	9.9'	27°58.4	1.3'	54.0'	104°50.9		64°42.5	46°01.9	19°26.0	65°20.4	101°18.2	119°22.7
14	244°08.1	9.9'	27°57.1	1.5'	54.0'	104°21.4		64°15.4	45°41.7	19°55.6	65°50.1	101°45.2	119°52.4
15	258°37.0	9.9'	27°55.7	1.6'	54.1'	103°51.9		63°48.3	45°21.6	20°25.3	66°19.7	102°12.2	
16	273°05.9	9.9'	27°54.1	1.7'	54.1'	103°22.4		63°21.2	45°01.6	20°55.0	66°49.4	102°39.2	
17	287°34.9	9.9'	27°52.4	1.9'	54.1'	102°52.9		62°54.1	44°41.7	21°24.6	67°19.0	103°06.2	
18	302°03.8	10.0'	S27°50.5	2.0'	54.1'	102°23.4		62°27.0	44°22.0	21°54.3	67°48.7	103°33.2	
19	316°32.8	10.0'	27°48.5	2.1'	54.1'	101°53.8		62°00.0	44°02.4	22°24.0	68°18.4	104°00.3	
20	331°01.7	10.0'	27°46.4	2.3'	54.1'	101°24.3		61°32.9	43°43.0	22°53.7	68°48.1	104°27.3	
21	345°30.7	10.0'	27°44.1	2.4'	54.1'	100°54.8		61°05.9	43°23.7	23°23.4	69°17.8	104°54.3	
22	359°59.7	10.0'	27°41.7	2.5'	54.1'	100°25.2		60°38.9	43°04.6	23°53.1	69°47.5	105°21.4	
23	14°28.7	10.0'	27°39.2	2.7'	54.1'	99°55.7		60°11.9	42°45.6	24°22.9	70°17.2	105°48.4	
26 th	SD = 14.7' Mer. pass. 22:00												

DUT1 = UT1-UTC = +0.1034 sec $\Delta T = TT-UT1 = +69.0806$ sec

2026 July 27 to Jul. 29 UT

Moon (27 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	+Antares	+Hadar	+Spica	+Arcturus	+Venus
0	28°57.7	10.0'	S27°36.5	2.8'	54.1'	99°26.1	59°45.0	42°26.8	24°52.6	53°39.6	70°46.9	75°37.2	106°15.5
1	43°26.8	10.1'	27°33.7	2.9'	54.1'	98°56.5	59°18.0	42°08.2	25°22.4	53°58.3	71°16.6	76°01.2	106°42.6
2	57°55.8	10.1'	27°30.8	3.1'	54.1'	98°26.9	58°51.1	41°49.7	25°52.1	54°17.1	71°46.4	76°25.3	107°09.7
3	72°24.9	10.1'	27°27.7	3.2'	54.1'	97°57.3	58°24.2	41°31.4	26°21.9	54°36.0	72°16.1	76°49.4	107°36.8
4	86°54.0	10.1'	27°24.5	3.3'	54.1'	97°27.7	57°57.3	41°13.3	26°51.7	54°55.0	72°45.9	77°13.5	108°03.9
5	101°23.2	10.1'	27°21.1	3.5'	54.1'	96°58.1	57°30.4	40°55.3	27°21.4	55°14.1	73°15.7	77°37.6	108°31.0
6	115°52.3	10.2'	S27°17.7	3.6'	54.1'	96°28.5	57°03.6	40°37.6	27°51.2	55°33.3	73°45.4	78°01.8	108°58.1
7	130°21.5	10.2'	27°14.1	3.7'	54.2'	95°58.8	56°36.7	40°20.0	28°21.0	55°52.7	74°15.2	78°25.9	109°25.3
8	144°50.7	10.2'	27°10.3	3.9'	54.2'	95°29.2	56°09.9	40°02.6	28°50.9	56°12.1	74°45.0	78°50.1	109°52.4
9	159°19.9	10.2'	27°06.5	4.0'	54.2'	94°59.5	55°43.2	39°45.4	29°20.7	56°31.7	75°14.8	79°14.4	110°19.6
10	173°49.1	10.3'	27°02.5	4.1'	54.2'	94°29.8	55°16.4	39°28.5	29°50.5	56°51.4	75°44.7	79°38.6	110°46.7
11	188°18.4	10.3'	26°58.3	4.3'	54.2'	94°00.1	54°49.7	39°11.7	30°20.4	57°11.1	76°14.5	80°02.9	111°13.9
12	202°47.7	10.3'	S26°54.1	4.4'	54.2'	93°30.4	54°23.0	38°55.1	30°50.2	57°31.0	76°44.3	80°27.2	111°41.1
13	217°17.1	10.4'	26°49.7	4.5'	54.2'	93°00.7	53°56.3	38°38.8	31°20.1	57°51.0	77°14.2	80°51.6	112°08.3
14	231°46.4	10.4'	26°45.1	4.7'	54.2'	92°31.0	53°29.7	38°22.7	31°50.0	58°11.0	77°44.1	81°15.9	112°35.5
15	246°15.8	10.4'	26°40.5	4.8'	54.2'	92°01.3	53°03.1	38°06.8	32°19.9	58°31.2	78°13.9	81°40.3	113°02.8
16	260°45.3	10.5'	26°35.7	4.9'	54.2'	91°31.5	52°36.5	37°51.1	32°49.8	58°51.4	78°43.8	82°04.7	113°30.0
17	275°14.7	10.5'	26°30.8	5.0'	54.2'	91°01.8	52°09.9	37°35.7	33°19.7	59°11.8	79°13.7	82°29.1	113°57.3
18	289°44.2	10.5'	S26°25.7	5.2'	54.2'	90°32.0	51°43.4	37°20.5	33°49.7	59°32.2	79°43.6	82°53.6	114°24.5
19	304°13.8	10.6'	26°20.6	5.3'	54.3'	90°02.2	51°17.0		34°19.6	59°52.8	80°13.6	83°18.1	114°51.8
20	318°43.3	10.6'	26°15.3	5.4'	54.3'	89°32.5	50°50.5		34°49.6	60°13.4	80°43.5	83°42.5	115°19.1
21	333°12.9	10.6'	26°09.9	5.6'	54.3'	89°02.7	50°24.1		35°19.5	60°34.1	81°13.5	84°07.0	115°46.4
22	347°42.6	10.7'	26°04.3	5.7'	54.3'	88°32.8	49°57.7		35°49.5	60°54.9	81°43.4	84°31.6	116°13.7
23	2°12.3	10.7'	25°58.6	5.8'	54.3'	88°03.0	49°31.4		36°19.5	61°15.8	82°13.4	84°56.1	116°41.0
27 th	SD = 14.8'					Mer. pass. 22:51							

Moon (28 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Hadar	+Spica	+Arcturus	+Venus
0	16°42.0	10.8'	S25°52.8	5.9'	54.3'	87°33.2	49°05.1	36°49.5	57°15.5	61°36.7	82°43.4	85°20.7	117°08.4
1	31°11.8	10.8'	25°46.9	6.1'	54.3'	87°03.3	48°38.8	37°19.5	57°36.3	61°57.8	83°13.4	85°45.3	117°35.7
2	45°41.6	10.8'	25°40.8	6.2'	54.3'	86°33.4	48°12.6	37°49.6	57°57.2	62°18.9	83°43.4	86°09.9	118°03.1
3	60°11.4	10.9'	25°34.7	6.3'	54.3'	86°03.6	47°46.5	38°19.6	58°18.2	62°40.1	84°13.4	86°34.5	118°30.5
4	74°41.3	10.9'	25°28.4	6.4'	54.3'	85°33.7	47°20.4	38°49.7	58°39.3	63°01.3	84°43.5	86°59.1	118°57.9
5	89°11.2	11.0'	25°21.9	6.5'	54.4'	85°03.8	46°54.3	39°19.7	59°00.5	63°22.7	85°13.5	87°23.7	119°25.3
6	103°41.2	11.0'	S25°15.4	6.7'	54.4'	84°33.8	46°28.3	39°49.8	59°21.8	63°44.1	85°43.6	87°48.4	119°52.7
7	118°11.2	11.1'	25°08.7	6.8'	54.4'	84°03.9	46°02.3	40°19.9	59°43.2	64°05.6	86°13.7	88°13.1	
8	132°41.3	11.1'	25°01.9	6.9'	54.4'	83°34.0	45°36.4	40°50.0	60°04.6	64°27.2	86°43.8	88°37.8	
9	147°11.4	11.2'	24°55.0	7.0'	54.4'	83°04.0	45°10.5	41°20.2	60°26.2	64°48.9	87°13.9	89°02.5	
10	161°41.6	11.2'	24°48.0	7.1'	54.4'	82°34.0	44°44.7	41°50.3	60°47.8	65°10.6	87°44.0	89°27.2	
11	176°11.8	11.2'	24°40.9	7.3'	54.4'	82°04.0	44°19.0	42°20.5	61°09.5	65°32.4	88°14.1	89°51.9	
12	190°42.0	11.3'	S24°33.6	7.4'	54.4'	81°34.0	43°53.3	42°50.6	61°31.3	65°54.2	88°44.3	90°16.6	
13	205°12.3	11.3'	24°26.2	7.5'	54.5'	81°04.0	43°27.7	43°20.8	61°53.1	66°16.1	89°14.4	90°41.4	
14	219°42.7	11.4'	24°18.7	7.6'	54.5'	80°34.0	43°02.2	43°51.0	62°15.1	66°38.1	89°44.6	91°06.1	
15	234°13.0	11.4'	24°11.1	7.7'	54.5'	80°04.0	42°36.7	44°21.2	62°37.1	67°00.2	90°14.8	91°30.9	
16	248°43.5	11.5'	24°03.4	7.8'	54.5'	79°33.9	42°11.3	44°51.4	62°59.2	67°22.3	90°45.0	91°55.7	
17	263°14.0	11.5'	23°55.5	8.0'	54.5'	79°03.8	41°46.0	45°21.7	63°21.3	67°44.4	91°15.3	92°20.5	
18	277°44.5	11.6'	S23°47.6	8.1'	54.5'	78°33.7	41°20.7	45°52.0	63°43.6	68°06.7	91°45.5	92°45.3	
19	292°15.1	11.6'	23°39.5	8.2'	54.5'	78°03.6	40°55.5	46°22.2	64°05.9	68°29.0	92°15.8	93°10.1	
20	306°45.8	11.7'	23°31.3	8.3'	54.5'	77°33.5	40°30.5	46°52.5	64°28.3	68°51.3	92°46.0	93°34.9	
21	321°16.4	11.7'	23°23.0	8.4'	54.6'	77°03.4	40°05.5	47°22.8	64°50.7	69°13.7	93°16.3	93°59.7	
22	335°47.2	11.8'	23°14.6	8.5'	54.6'	76°33.2	39°40.5	47°53.1	65°13.2	69°36.2	93°46.6	94°24.5	
23	350°18.0	11.8'	23°06.1	8.6'	54.6'	76°03.1	39°15.7	48°23.5	65°35.8	69°58.7	94°16.9	94°49.4	
28 th	SD = 14.8'					Mer. pass. 23:40							

Moon (29 th Jul)						Lunar Distance (objects with largest hourly LD delta)								
Wed	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Hadar	+Acrux	+Spica	+Arcturus	
0	4°48.8	11.9'	S22°57.4	8.7'	54.6'	75°32.9	38°51.0	48°53.8	65°58.5	70°21.3	79°57.9	94°47.3	95°14.2	
1	19°19.7	11.9'	22°48.7	8.8'	54.6'	75°02.7	38°26.4	49°24.2	66°21.2	70°44.0	80°17.9	95°17.6	95°39.0	
2	33°50.7	12.0'	22°39.9	9.0'	54.6'	74°32.5	38°01.9	49°54.6	66°44.0	71°06.7	80°37.9	95°48.0	96°03.9	
3	48°21.7	12.0'	22°30.9	9.1'	54.6'	74°02.3	37°37.5	50°25.0	67°06.8	71°29.4	80°57.9	96°18.3	96°28.7	
4	62°52.7	12.1'	22°21.9	9.2'	54.6'	73°32.1	37°13.2	50°55.4	67°29.7	71°52.2	81°18.0	96°48.7	96°53.6	
5	77°23.8	12.2'	22°12.7	9.3'	54.7'	73°01.8	36°49.0	51°25.8	67°52.7	72°15.1	81°38.2	97°19.1	97°18.4	
6	91°55.0	12.2'	S22°03.4	9.4'	54.7'	72°31.6	36°24.9	51°56.3	68°15.7	72°37.9	81°58.3	97°49.6	97°43.3	
7	106°26.2	12.3'	21°54.0	9.5'	54.7'	72°01.3	36°01.0	52°26.7	68°38.8	73°00.9	82°18.5	98°20.0	98°08.1	
8	120°57.4	12.3'	21°44.6	9.6'	54.7'	71°31.0	35°37.2	52°57.2	69°01.9	73°23.9	82°38.7	98°50.5	98°33.0	
9	135°28.7	12.4'	21°35.0	9.7'	54.7'	71°00.7	35°13.5	53°27.7	69°25.1	73°46.9	82°59.0	99°20.9	98°57.9	
10	150°00.1	12.4'	21°25.3	9.8'	54.7'	70°30.3	34°50.0	53°58.2	69°48.4	74°10.0	83°19.3	99°51.4	99°22.7	
11	164°31.5	12.5'	21°15.5	9.9'	54.7'	70°00.0	34°26.6	54°28.7	70°11.7	74°33.1	83°39.6	100°21.9	99°47.6	
12	179°03.0	12.5'	S21°05.6	10.0'	54.8'	69°29.6	34°03.4	54°59.3	70°35.0	74°56.3	83°59.9	100°52.5	100°12.4	
13	193°34.5	12.6'	20°55.6	10.1'	54.8'	68°59.3	33°40.4	55°29.8	70°58.4	75°19.5	84°20.3	101°23.0	100°37.3	
14	208°06.1	12.6'	20°45.6	10.2'	54.8'	68°28.9	33°17.5	56°00.4	71°21.9	75°42.8	84°40.7	101°53.6	101°02.1	
15	222°37.7	12.7'	20°35.4	10.3'	54.8'	67°58.5	32°54.7	56°31.0	71°45.4	76°06.1	85°01.1	102°24.1	101°26.9	
16	237°09.4	12.7'	20°25.1	10.4'	54.8'	67°28.1	32°32.2	57°01.6	72°09.0	76°29.5	85°21.6	102°54.7	101°51.8	
17	251°41.1	12.8'	20°14.7	10.5'	54.8'	66°57.6	32°09.8	57°32.3	72°32.6	76°52.8	85°42.0	103°25.3	102°16.6	
18	266°12.9	12.8'	S20°04.3	10.6'	54.9'	66°27.2	31°47.6	58°02.9	72°56.2	77°16.3	86°02.5	103°56.0	102°41.4	
19	280°44.7	12.9'	19°53.7	10.7'	54.9'	65°56.7	31°25.7	58°33.6	73°20.0	77°39.7	86°23.1	104°26.6	103°06.2	
20	295°16.6	12.9'	19°43.1	10.7'	54.9'	65°26.2	31°03.9	59°04.2	73°43.7	78°03.2	86°43.6	104°57.3	103°31.0	
21	309°48.5	13.0'	19°32.3	10.8'	54.9'	64°55.8	30°42.4	59°34.9	74°07.5	78°26.8	87°04.1	105°27.9	103°55.8	
22	324°20.5	13.0'	19°21.5	10.9'	54.9'	64°25.2	30°21.0	60°05.7	74°31.3	78°50.4	87°24.7	105°58.6	104°20.6	
23	338°52.5	13.1'	19°10.5	11.0'	54.9'	63°54.7	29°59.9	60°36.4	74°55.2	79°14.0	87°45.3	106°29.3	104°45.4	
29 th	SD = 14.9'					Mer. pass. --:-								

DUT1 = UT1-UTC = +0.1038 sec $\Delta T = TT-UT1 = +69.0802$ sec

2026 July 30 to Aug. 01 UT

Moon (30 th Jul)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Capella	-Rigel	-Aldebaran	-Saturn	+Antares	+Rigel Kent.	+Arcturus	+Spica
0	353°24.6	13.1'	S18°59.5	11.1'	54.9'		119°07.7	118°31.6	63°24.2	61°07.1	75°19.2	105°10.2	107°00.1
1	7°56.8	13.2'	18°48.4	11.2'	55.0'		118°45.0	118°01.5	62°53.6	61°37.9	75°43.1	105°34.9	107°30.8
2	22°28.9	13.2'	18°37.2	11.3'	55.0'		118°22.1	117°31.4	62°23.0	62°08.7	76°07.2	105°59.7	108°01.6
3	37°01.2	13.3'	18°25.9	11.4'	55.0'		117°59.2	117°01.2	61°52.5	62°39.5	76°31.2	106°24.4	108°32.4
4	51°33.5	13.3'	18°14.6	11.5'	55.0'		117°36.2	116°31.1	61°21.8	63°10.3	76°55.3	106°49.1	109°03.2
5	66°05.8	13.4'	18°03.1	11.5'	55.0'		117°13.2	116°00.9	60°51.2	63°41.2	77°19.4	107°13.8	109°34.0
6	80°38.2	13.4'	S17°51.6	11.6'	55.0'		116°50.0	115°30.7	60°20.6	64°12.0	77°43.6	107°38.5	110°04.8
7	95°10.6	13.5'	17°39.9	11.7'	55.1'		116°26.8	115°00.5	59°49.9	64°42.9	78°07.8	108°03.1	110°35.7
8	109°43.1	13.5'	17°28.2	11.8'	55.1'		116°03.5	114°30.2	59°19.3	65°13.8	78°32.1	108°27.8	111°06.5
9	124°15.6	13.6'	17°16.4	11.9'	55.1'		115°40.2	113°59.9	58°48.6	65°44.7	78°56.3	108°52.4	111°37.4
10	138°48.2	13.6'	17°04.6	11.9'	55.1'		115°16.7	113°29.6	58°17.9	66°15.6	79°20.7	109°17.0	112°08.3
11	153°20.8	13.7'	16°52.6	12.0'	55.1'		114°53.2	112°59.3	57°47.2	66°46.6	79°45.0	109°41.6	112°39.2
12	167°53.4	13.7'	S16°40.6	12.1'	55.1'		114°29.6	112°29.0	57°16.5	67°17.5	80°09.4	110°06.1	113°10.2
13	182°26.1	13.7'	16°28.5	12.2'	55.2'		114°06.0	111°58.6	56°45.7	67°48.5	80°33.8	110°30.7	113°41.1
14	196°58.9	13.8'	16°16.3	12.3'	55.2'		113°42.3	111°28.2	56°15.0	68°19.5	80°58.3	110°55.2	114°12.1
15	211°31.7	13.8'	16°04.0	12.3'	55.2'		113°18.5	110°57.8	55°44.2	68°50.6	81°22.8	111°19.7	114°43.1
16	226°04.5	13.9'	15°51.7	12.4'	55.2'		112°54.7	110°27.4	55°13.4	69°21.6	81°47.3	111°44.1	115°14.1
17	240°37.4	13.9'	15°39.3	12.5'	55.2'	119°48.4	112°30.8	109°56.9	54°42.6	69°52.7	82°11.8	112°08.6	115°45.2
18	255°10.3	14.0'	S15°26.8	12.6'	55.3'	119°19.4	112°06.8	109°26.4	54°11.8	70°23.7	82°36.4	112°33.0	116°16.2
19	269°43.3	14.0'	15°14.3	12.6'	55.3'	118°50.3	111°42.8	108°55.9	53°40.9	70°54.8	83°01.0	112°57.3	116°47.3
20	284°16.3	14.0'	15°01.6	12.7'	55.3'	118°21.1	111°18.7	108°25.4	53°10.1	71°26.0	83°25.6	113°21.7	117°18.4
21	298°49.3	14.1'	14°48.9	12.8'	55.3'	117°52.0	110°54.6	107°54.9	52°39.2	71°57.1	83°50.3	113°46.0	117°49.5
22	313°22.4	14.1'	14°36.2	12.8'	55.3'	117°22.8	110°30.4	107°24.3	52°08.3	72°28.2	84°14.9	114°10.2	118°20.6
23	327°55.5	14.2'	14°23.3	12.9'	55.3'	116°53.6	110°06.1	106°53.7	51°37.4	72°59.4	84°39.7	114°34.5	118°51.8
30 th	SD = 15.0' Mer. pass. 00:27												

Moon (31 st Jul)						Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Mars	-Capella	-Aldebaran	-Saturn	+Antares	+Rigel Kent.	+Hadar	+Arcturus
0	342°28.7	14.2'	S14°10.4	13.0'	55.4'	118°45.0	116°24.3	106°23.1	51°06.5	73°30.6	85°04.4	89°13.7	114°58.7
1	357°01.9	14.2'	13°57.4	13.0'	55.4'	118°15.6	115°55.0	105°52.5	50°35.6	74°01.8	85°29.2	89°38.0	115°22.8
2	1°35.1	14.3'	13°44.4	13.1'	55.4'	117°46.2	115°25.6	105°21.8	50°04.7	74°33.1	85°53.9	90°02.3	115°47.0
3	26°08.4	14.3'	13°31.3	13.2'	55.4'	117°16.8	114°56.3	104°51.1	49°33.7	75°04.3	86°18.7	90°26.6	116°11.1
4	40°41.7	14.3'	13°18.1	13.2'	55.4'	116°47.4	114°26.9	104°20.4	49°02.7	75°35.6	86°43.6	90°51.0	116°35.1
5	55°15.0	14.4'	13°04.9	13.3'	55.5'	116°17.9	113°57.4	103°49.7	48°31.8	76°06.9	87°08.4	91°15.3	116°59.1
6	69°48.4	14.4'	S12°51.6	13.4'	55.5'	115°48.4	113°28.0	103°19.0	48°00.8	76°38.2	87°33.3	91°39.7	117°23.0
7	84°21.8	14.4'	12°38.2	13.4'	55.5'	115°18.9	112°58.4	102°48.2	47°29.7	77°09.5	87°58.2	92°04.0	117°46.9
8	98°55.3	14.5'	12°24.8	13.5'	55.5'	114°49.4	112°28.9	102°17.4	46°58.7	77°40.8	88°23.1	92°28.4	118°10.8
9	113°28.7	14.5'	12°11.3	13.5'	55.5'	114°19.8	111°59.3	101°46.6	46°27.7	78°12.2	88°48.0	92°52.8	118°34.6
10	128°02.2	14.5'	11°57.8	13.6'	55.5'	113°50.3	111°29.7	101°15.8	45°56.6	78°43.6	89°13.0	93°17.2	118°58.4
11	142°35.8	14.6'	11°44.2	13.7'	55.6'	113°20.7	111°00.1	100°44.9	45°25.6	79°15.0	89°37.9	93°41.6	119°22.1
12	157°09.3	14.6'	S11°30.5	13.7'	55.6'	112°51.1	110°30.4	100°14.1	44°54.5	79°46.4	90°02.9	94°06.0	119°45.7
13	171°42.9	14.6'	11°16.8	13.8'	55.6'	112°21.4	110°00.8	99°43.2	44°23.4	80°17.9	90°27.9	94°30.4	
14	186°16.6	14.6'	11°03.0	13.8'	55.6'	111°51.8	109°31.0	99°12.3	43°52.3	80°49.3	90°52.9	94°54.9	
15	200°50.2	14.7'	10°49.2	13.9'	55.6'	111°22.1	109°01.3	98°41.3	43°21.2	81°20.8	91°17.9	95°19.3	
16	215°23.9	14.7'	10°35.3	13.9'	55.7'	110°52.4	108°31.5	98°10.4	42°50.0	81°52.3	91°43.0	95°43.7	
17	229°57.6	14.7'	10°21.4	14.0'	55.7'	110°22.7	108°01.7	97°39.4	42°18.9	82°23.9	92°08.0	96°08.2	
18	244°31.3	14.7'	S10°07.4	14.0'	55.7'	109°53.0	107°31.8	97°08.4	41°47.8	82°55.4	92°33.1	96°32.6	
19	259°05.0	14.8'	09°53.4	14.1'	55.7'	109°23.2	107°02.0	96°37.4	41°16.6	83°27.0	92°58.1	96°57.1	
20	273°38.8	14.8'	09°39.3	14.1'	55.7'	108°53.4	106°32.1	96°06.3	40°45.4	83°58.6	93°23.2	97°21.5	
21	288°12.6	14.8'	09°25.2	14.2'	55.8'	108°23.6	106°02.2	95°35.3	40°14.2	84°30.2	93°48.3	97°46.0	
22	302°46.4	14.8'	09°11.0	14.2'	55.8'	107°53.8	105°32.2	95°04.2	39°43.0	85°01.8	94°13.4	98°10.4	
23	317°20.3	14.9'	08°56.8	14.3'	55.8'	107°24.0	105°02.2	94°33.1	39°11.8	85°33.4	94°38.5	98°34.9	
31 st	SD = 15.1' Mer. pass. 01:12												

Moon (1 st Aug)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Mars	-Capella	-Aldebaran	-Saturn	+Altair	+Antares	+Rigil Kent.	+Hadar
0	331°54.1	14.9'	S08°42.5	14.3'	55.8'	106°54.1	104°32.2	94°02.0	38°40.6	43°17.6	86°05.1	95°03.7	98°59.3
1	346°28.0	14.9'	08°28.2	14.4'	55.8'	106°24.2	104°02.2	93°30.8	38°09.4	43°38.1	86°36.8	95°28.8	99°23.8
2	1°01.9	14.9'	08°13.9	14.4'	55.9'	105°54.3	103°32.1	92°59.7	37°38.1	43°58.8	87°08.5	95°53.9	99°48.2
3	15°35.8	14.9'	07°59.5	14.4'	55.9'	105°24.4	103°02.0	92°28.5	37°06.9	44°19.7	87°40.2	96°19.1	100°12.6
4	30°09.7	14.9'	07°45.0	14.5'	55.9'	104°54.4	102°31.9	91°57.3	36°35.7	44°40.8	88°12.0	96°44.2	100°37.1
5	44°43.6	14.9'	07°30.5	14.5'	55.9'	104°24.5	102°01.8	91°26.0	36°04.4	45°02.0	88°43.8	97°09.4	101°01.5
6	59°17.6	15.0'	S07°16.0	14.6'	55.9'	103°54.5	101°31.6	90°54.8	35°33.1	45°23.4	89°15.6	97°34.5	101°25.9
7	73°51.5	15.0'	07°01.5	14.6'	56.0'	103°24.5	101°01.4	90°23.5	35°01.9	45°45.0	89°47.4	97°59.7	101°50.3
8	88°25.5	15.0'	06°46.9	14.6'	56.0'	102°54.4	100°31.2	89°52.2	34°30.6	46°06.8	90°19.2	98°24.8	102°14.7
9	102°59.5	15.0'	06°32.2	14.7'	56.0'	102°24.4	100°00.9	89°20.9	33°59.3	46°28.7	90°51.1	98°50.0	102°39.1
10	117°33.4	15.0'	06°17.5	14.7'	56.0'	101°54.3	99°30.7	88°49.6	33°28.0	46°50.8	91°22.9	99°15.1	103°03.5
11	132°07.4	15.0'	06°02.8	14.7'	56.0'	101°24.2	99°00.4	88°18.2	32°56.7	47°13.1	91°54.8	99°40.3	103°27.9
12	146°41.4	15.0'	S05°48.1	14.8'	56.1'	100°54.1	98°30.0	87°46.9	32°25.4	47°35.5	92°26.8	100°05.4	103°52.2
13	161°15.4	15.0'	05°33.3	14.8'	56.1'	100°23.9	97°59.7	87°15.5	31°54.1	47°58.0	92°58.7	100°30.5	104°16.5
14	175°49.5	15.0'	05°18.5	14.8'	56.1'	99°53.8	97°29.3	86°44.1	31°22.8	48°20.7	93°30.7	100°55.7	104°40.9
15	190°23.5	15.0'	05°03.6	14.9'	56.1'	99°23.6	96°58.9	86°12.6	30°51.5	48°43.6	94°02.6	101°20.8	105°05.2
16	204°57.5	15.0'	04°48.8	14.9'	56.1'	98°53.4	96°28.5	85°41.2	30°20.2	49°06.5	94°34.6	101°46.0	105°29.5
17	219°31.5	15.0'	04°33.9	14.9'	56.2'	98°23.1	95°58.1	85°09.7	29°49.0	49°29.7	95°06.7	102°11.1	105°53.7
18	234°05.5	15.0'	S04°18.9	15.0'	56.2'	97°52.9	95°27.6	84°38.2	29°17.7	49°52.9	95°38.7	102°36.2	106°18.0
19	248°39.6	15.0'	04°04.0	15.0'	56.2'	97°22.6	94°57.1	84°06.7	28°46.4	50°16.3	96°10.8	103°01.3	106°42.2
20	263°13.6	15.0'	03°49.0	15.0'	56.2'	96°52.3	94°26.6	83°35.2	28°15.1	50°39.9	96°42.9	103°26.4	107°06.4
21	277°47.6	15.0'	03°34.0	15.0'	56.3'	96°22.0	93°56.1	83°03.6	27°43.8	51°03.5	97°15.0	103°51.5	107°30.6
22	292°21.6	15.0'	03°18.9	15.1'	56.3'	95°51.6	93°25.5	82°32.0	27°12.6	51°27.3	97°47.1	104°16.6	107°54.8
23	306°55.6	15.0'	03°03.9	15.1'	56.3'	95°21.3	92°54.9	82°00.4	26°41.3	51°51.2	98°19.3	104°41.6	108°18.9
1 st	SD = 15.2'		Mer. pass. 01:56										

DUT1 = UT1-UTC = +0.1042 sec $\Delta T = TT-UT1 = +69.0798$ sec

2026 August 02 to Aug. 04 UT

h	Moon (2 nd Aug)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Pollux	-Capella	-Aldebaran	-Saturn	+Fomalhaut	+Altair	+Antares	+Rigel Kent.
0	321°29.6	15.0'	S02°48.8	15.1'	56.3'		92°24.3	81°28.8	26°10.1	26°58.8	52°15.3	98°51.5	105°06.7
1	336°03.6	15.0'	02°33.7	15.1'	56.3'		91°53.7	80°57.2	25°38.9	27°18.0	52°39.4	99°23.7	105°31.7
2	350°37.6	15.0'	02°18.5	15.2'	56.4'		91°23.0	80°25.5	25°07.7	27°37.6	53°03.7	99°55.9	105°56.7
3	5°11.6	15.0'	02°03.4	15.2'	56.4'		90°52.4	79°53.8	24°36.5	27°57.6	53°28.1	100°28.1	106°21.7
4	19°45.5	15.0'	01°48.2	15.2'	56.4'		90°21.7	79°22.1	24°05.3	28°18.0	53°52.6	101°00.4	106°46.7
5	34°19.5	14.9'	01°33.0	15.2'	56.4'		89°51.0	78°50.4	23°34.2	28°38.7	54°17.2	101°32.7	107°11.7
6	48°53.4	14.9'	S01°17.8	15.2'	56.5'		89°20.2	78°18.7	23°03.1	28°59.8	54°41.9	102°05.0	107°36.6
7	63°27.3	14.9'	01°02.6	15.2'	56.5'		88°49.5	77°46.9	22°32.0	29°21.2	55°06.7	102°37.4	108°01.5
8	78°01.3	14.9'	00°47.4	15.2'	56.5'	119°52.1	88°18.7	77°15.1	22°01.0	29°42.9	55°31.6	103°09.7	108°26.4
9	92°35.1	14.9'	00°32.1	15.3'	56.5'	119°19.8	87°47.9	76°43.4	21°30.0	30°04.9	55°56.7	103°42.1	108°51.3
10	107°09.0	14.9'	00°16.8	15.3'	56.5'	118°47.4	87°17.1	76°11.5	20°59.1	30°27.2	56°21.8	104°14.5	109°16.1
11	121°42.9	14.8'	S00°01.6	15.3'	56.6'	118°15.1	86°46.2	75°39.7	20°28.2	30°49.8	56°47.0	104°46.9	109°41.0
12	136°16.7	14.8'	N00°13.7	15.3'	56.6'	117°42.7	86°15.4	75°07.8	19°57.4	31°12.7	57°12.3	105°19.4	110°05.8
13	150°50.5	14.8'	00°29.0	15.3'	56.6'	117°10.3	85°44.5	74°36.0	19°26.6	31°35.8	57°37.7	105°51.9	110°30.5
14	165°24.3	14.8'	00°44.3	15.3'	56.6'	116°37.9	85°13.6	74°04.1	18°55.9	31°59.2	58°03.3	106°24.3	110°55.3
15	179°58.1	14.7'	00°59.6	15.3'	56.7'	116°05.5	84°42.7	73°32.2	18°25.3	32°22.8	58°28.9	106°56.9	111°20.0
16	194°31.8	14.7'	01°14.9	15.3'	56.7'	115°33.0	84°11.7	73°00.2	17°54.7	32°46.7	58°54.5	107°29.4	111°44.6
17	209°05.6	14.7'	01°30.3	15.3'	56.7'	115°00.5	83°40.8	72°28.3	17°24.3	33°10.8	59°20.3	108°02.0	112°09.3
18	223°39.3	14.7'	N01°45.6	15.3'	56.7'	114°28.0	83°09.8	71°56.3	16°54.0	33°35.2	59°46.2	108°34.6	112°33.9
19	238°12.9	14.6'	02°00.9	15.3'	56.7'	113°55.4	82°38.8	71°24.3	16°23.8	33°59.8	60°12.1	109°07.2	112°58.4
20	252°46.5	14.6'	02°16.3	15.3'	56.8'	113°22.9	82°07.8	70°52.3	15°53.7	34°24.6	60°38.2	109°39.8	113°23.0
21	267°20.1	14.6'	02°31.6	15.3'	56.8'	112°50.3	81°36.8	70°20.3	15°23.8	34°49.6	61°04.3	110°12.5	113°47.4
22	281°53.7	14.5'	02°46.9	15.3'	56.8'	112°17.7	81°05.7	69°48.2	14°54.0	35°14.8	61°30.5	110°45.2	114°11.9
23	296°27.3	14.5'	03°02.3	15.3'	56.8'	111°45.0	80°34.6	69°16.1	14°24.5	35°40.2	61°56.8	111°17.9	114°36.3
2 nd	SD = 15.4' Mer. pass. 02:39												

h Moon (3 rd Aug)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Procyon	-Pollux	-Mars	-Aldebaran	+Fomalhaut	+Altair	+Antares	+Rigel Kent.
0	311°00.8	14.5'	N03°17.6	15.3'	56.9'	114°07.0	111°12.4	82°34.7	68°44.1	36°05.7	62°23.1	111°50.6	115°00.6
1	325°34.2	14.4'	03°33.0	15.3'	56.9'	113°36.4	110°39.7	82°03.7	68°11.9	36°31.5	62°49.5	112°23.4	115°24.9
2	340°07.6	14.4'	03°48.3	15.3'	56.9'	113°05.7	110°07.0	81°32.7	67°39.8	36°57.5	63°16.1	112°56.1	115°49.2
3	354°41.0	14.3'	04°03.6	15.3'	56.9'	112°35.0	109°34.3	81°01.7	67°07.7	37°23.6	63°42.6	113°28.9	116°13.4
4	9°14.4	14.3'	04°18.9	15.3'	56.9'	112°04.3	109°01.5	80°30.7	66°35.5	37°49.9	64°09.3	114°01.8	116°37.5
5	23°47.7	14.3'	04°34.2	15.3'	57.0'	111°33.5	108°28.7	79°59.6	66°03.3	38°16.3	64°36.0	114°34.6	117°01.6
6	38°21.0	14.2'	N04°49.6	15.3'	57.0'	111°02.6	107°55.9	79°28.5	65°31.1	38°42.9	65°02.8	115°07.5	117°25.7
7	52°54.2	14.2'	05°04.8	15.3'	57.0'	110°31.8	107°23.1	78°57.4	64°58.9	39°09.7	65°29.7	115°40.4	117°49.6
8	67°27.4	14.1'	05°20.1	15.3'	57.0'	110°00.9	106°50.2	78°26.3	64°26.7	39°36.6	65°56.6	116°13.3	118°13.6
9	82°00.5	14.1'	05°35.4	15.3'	57.1'	109°29.9	106°17.3	77°55.1	63°54.4	40°03.6	66°23.6	116°46.3	118°37.4
10	96°33.6	14.0'	05°50.7	15.2'	57.1'	108°58.9	105°44.4	77°23.9	63°22.2	40°30.8	66°50.7	117°19.3	119°01.2
11	111°06.6	14.0'	06°05.9	15.2'	57.1'	108°27.9	105°11.5	76°52.7	62°49.9	40°58.2	67°17.8	117°52.3	119°24.9
12	125°39.6	13.9'	N06°21.1	15.2'	57.1'	107°56.9	104°38.5	76°21.5	62°17.6	41°25.7	67°45.0	118°25.3	119°48.6
13	140°12.5	13.9'	06°36.4	15.2'	57.2'	107°25.8	104°05.5	75°50.2	61°45.2	41°53.3	68°12.2	118°58.3	
14	154°45.4	13.8'	06°51.6	15.2'	57.2'	106°54.7	103°32.5	75°18.9	61°12.9	42°21.0	68°39.5	119°31.4	
15	169°18.2	13.8'	07°06.7	15.2'	57.2'	106°23.5	102°59.5	74°47.6	60°40.6	42°48.8	69°06.9		
16	183°51.0	13.7'	07°21.9	15.1'	57.2'	105°52.3	102°26.4	74°16.3	60°08.2	43°16.8	69°34.3		
17	198°23.7	13.7'	07°37.0	15.1'	57.3'	105°21.1	101°53.3	73°44.9	59°35.8	43°44.9	70°01.8		
18	212°56.4	13.6'	N07°52.1	15.1'	57.3'	104°49.8	101°20.2	73°13.5	59°03.4	44°13.1	70°29.4		
19	227°29.0	13.5'	08°07.2	15.1'	57.3'	104°18.6	100°47.1	72°42.1	58°31.0	44°41.4	70°57.0		
20	242°01.5	13.5'	08°22.3	15.0'	57.3'	103°47.2	100°13.9	72°10.7	57°58.5	45°09.9	71°24.7		
21	256°34.0	13.4'	08°37.3	15.0'	57.4'	103°15.9	99°40.7	71°39.2	57°26.1	45°38.4	71°52.4		
22	271°06.4	13.3'	08°52.4	15.0'	57.4'	102°44.5	99°07.5	71°07.7	56°53.6	46°07.1	72°20.1		
23	285°38.7	13.3'	09°07.3	15.0'	57.4'	102°13.1	98°34.3	70°36.2	56°21.1	46°35.8	72°48.0		
3 rd	SD = 15.5' Mer. pass. 03:22												

Moon (4 th Aug)						Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Sun	-Procyon	-Pollux	-Mars	-Aldebaran	+Saturn	+Fomalhaut	+Altair
0	300°11.0	13.2'	N09°22.3	14.9'	57.4'	116°33.1	101°41.6	98°01.0	70°04.7	55°48.6		47°04.6	73°15.8
1	314°43.2	13.1'	09°37.2	14.9'	57.4'	116°02.1	101°10.1	97°27.7	69°33.1	55°16.1		47°33.6	73°43.8
2	329°15.4	13.1'	09°52.1	14.9'	57.5'	115°31.1	100°38.6	96°54.4	69°01.5	54°43.6		48°02.6	74°11.7
3	343°47.5	13.0'	10°07.0	14.8'	57.5'	115°00.1	100°07.1	96°21.1	68°29.9	54°11.0		48°31.7	74°39.8
4	358°19.5	12.9'	10°21.8	14.8'	57.5'	114°29.1	99°35.5	95°47.7	67°58.3	53°38.5		49°01.0	75°07.8
5	12°51.4	12.9'	10°36.6	14.8'	57.5'	113°58.0	99°03.9	95°14.3	67°26.6	53°05.9		49°30.3	75°35.9
6	27°23.3	12.8'	N10°51.3	14.7'	57.6'	113°26.9	98°32.2	94°40.9	66°54.9	52°33.3		49°59.7	76°04.1
7	41°55.0	12.7'	11°06.1	14.7'	57.6'	112°55.8	98°00.5	94°07.4	66°23.2	52°00.8		50°29.2	76°32.3
8	56°26.8	12.6'	11°20.7	14.6'	57.6'	112°24.7	97°28.8	93°33.9	65°51.5	51°28.2		50°58.7	77°00.6
9	70°58.4	12.6'	11°35.4	14.6'	57.6'	111°53.5	96°57.1	93°00.4	65°19.7	50°55.5		51°28.4	77°28.9
10	85°29.9	12.5'	11°50.0	14.5'	57.7'	111°22.3	96°25.3	92°26.9	64°47.9	50°22.9		51°58.1	77°57.2
11	100°01.4	12.4'	12°04.5	14.5'	57.7'	110°51.1	95°53.6	91°53.3	64°16.1	49°50.3		52°27.9	78°25.6
12	114°32.8	12.3'	N12°19.0	14.5'	57.7'	110°19.8	95°21.7	91°19.7	63°44.2	49°17.6	9°43.4	52°57.8	78°54.0
13	129°04.1	12.2'	12°33.4	14.4'	57.7'	109°48.5	94°49.9	90°46.1	63°12.4	48°45.0	10°09.6	53°27.8	79°22.5
14	143°35.4	12.1'	12°47.8	14.4'	57.8'	109°17.2	94°18.0	90°12.5	62°40.5	48°12.3	10°36.5	53°57.8	79°51.0
15	158°06.5	12.1'	13°02.2	14.3'	57.8'	108°45.9	93°46.1	89°38.8	62°08.5	47°39.6	11°04.1	54°27.9	80°19.6
16	172°37.6	12.0'	13°16.5	14.2'	57.8'	108°14.5	93°14.2	89°05.1	61°36.6	47°07.0	11°32.2	54°58.1	80°48.2
17	187°08.5	11.9'	13°30.8	14.2'	57.8'	107°43.2	92°42.2	88°31.4	61°04.6	46°34.3	12°00.8	55°28.4	81°16.8
18	201°39.4	11.8'	N13°44.9	14.1'	57.9'	107°11.7	92°10.2	87°57.6	60°32.6	46°01.6	12°29.9	55°58.7	81°45.5
19	216°10.2	11.7'	13°59.1	14.1'	57.9'	106°40.3	91°38.2	87°23.9	60°00.6	45°28.9	12°59.4	56°29.1	82°14.2
20	230°40.9	11.6'	14°13.2	14.0'	57.9'	106°08.8	91°06.2	86°50.1	59°28.5	44°56.2	13°29.2	56°59.6	82°42.9
21	245°11.5	11.5'	14°27.2	14.0'	57.9'	105°37.3	90°34.1	86°16.2	58°56.4	44°23.5	13°59.4	57°30.1	83°11.7
22	259°42.0	11.4'	14°41.2	13.9'	58.0'	105°05.8	90°02.0	85°42.4	58°24.3	43°50.8	14°29.9	58°00.7	83°40.5
23	274°12.5	11.3'	14°55.1	13.8'	58.0'	104°34.3	89°29.9	85°08.5	57°52.2	43°18.0	15°00.6	58°31.3	84°09.3
4 th	SD = 15.7' Mer. pass. 04:07					Sun SD = 15.8'							

DUT1 = UT1-UTC = +0.1046 sec $\Delta T = TT-UT1 = +69.0794$ sec

2026 August 05 to Aug. 07 UT

h	Moon (5 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Procyon	-Pollux	-Mars	-Aldebaran	+Saturn	+Fomalhaut	+Achernar	+Altair
0	288°42.8	11.2'	N15°08.9	13.8'	58.0'	88°57.7	84°34.6	57°20.0	42°45.3	15°31.6	59°02.1		84°38.2
1	303°13.0	11.1'	15°22.7	13.7'	58.0'	88°25.5	84°00.6	56°47.8	42°12.6	16°02.8	59°32.8		85°07.1
2	317°43.2	11.0'	15°36.4	13.6'	58.1'	87°53.3	83°26.7	56°15.6	41°39.9	16°34.3	60°03.7		85°36.1
3	332°13.2	10.9'	15°50.0	13.6'	58.1'	87°21.1	82°52.7	55°43.4	41°07.2	17°05.9	60°34.6		86°05.0
4	346°43.1	10.8'	16°03.6	13.5'	58.1'	86°48.9	82°18.6	55°11.1	40°34.5	17°37.7	61°05.5		86°34.0
5	1°13.0	10.7'	16°17.1	13.4'	58.1'	86°16.6	81°44.6	54°38.8	40°01.8	18°09.6	61°36.6		87°03.1
6	15°42.7	10.6'	N16°30.5	13.4'	58.2'	85°44.3	81°10.5	54°06.5	39°29.1	18°41.7	62°07.6		87°32.1
7	30°12.3	10.5'	16°43.9	13.3'	58.2'	85°12.0	80°36.4	53°34.2	38°56.4	19°14.0	62°38.8		88°01.2
8	44°41.9	10.4'	16°57.2	13.2'	58.2'	84°39.6	80°02.2	53°01.8	38°23.7	19°46.3	63°10.0		88°30.3
9	59°11.3	10.3'	17°10.4	13.1'	58.2'	84°07.3	79°28.1	52°29.4	37°51.1	20°18.8	63°41.2		88°59.5
10	73°40.6	10.2'	17°23.5	13.0'	58.3'	83°34.9	78°53.9	51°57.0	37°18.4	20°51.5	64°12.5		89°28.7
11	88°09.8	10.1'	17°36.5	13.0'	58.3'	83°02.4	78°19.7	51°24.5	36°45.8	21°24.2	64°43.8		89°57.8
12	102°38.9	10.0'	N17°49.5	12.9'	58.3'	82°30.0	77°45.4	50°52.0	36°13.2	21°57.0	65°15.2		90°27.1
13	117°07.9	9.9'	18°02.3	12.8'	58.3'	81°57.5	77°11.1	50°19.5	35°40.6	22°30.0	65°46.7	75°22.9	90°56.3
14	131°36.8	9.8'	18°15.1	12.7'	58.4'	81°25.1	76°36.8	49°47.0	35°08.0	23°03.0	66°18.2	75°38.0	91°25.6
15	146°05.6	9.7'	18°27.8	12.6'	58.4'	80°52.6	76°02.5	49°14.5	34°35.4	23°36.1	66°49.8	75°53.2	91°54.9
16	160°34.2	9.6'	18°40.5	12.5'	58.4'	80°20.0	75°28.1	48°41.9	34°02.9	24°09.3	67°21.4	76°08.5	92°24.2
17	175°02.8	9.4'	18°53.0	12.4'	58.4'	79°47.5	74°53.7	48°09.3	33°30.4	24°42.6	67°53.0	76°23.8	92°53.5
18	189°31.2	9.3'	N19°05.4	12.3'	58.5'	79°14.9	74°19.3	47°36.6	32°57.9	25°16.0	68°24.7	76°39.3	93°22.8
19	203°59.6	9.2'	19°17.7	12.2'	58.5'	78°42.3	73°44.9	47°04.0	32°25.5	25°49.5	68°56.5	76°54.8	93°52.2
20	218°27.8	9.1'	19°30.0	12.1'	58.5'	78°09.7	73°10.4	46°31.3	31°53.1	26°23.0	69°28.3	77°10.4	94°21.6
21	232°55.9	9.0'	19°42.1	12.0'	58.5'	77°37.1	72°35.9	45°58.6	31°20.7	26°56.6	70°00.1	77°26.0	94°51.0
22	247°23.8	8.9'	19°54.2	11.9'	58.6'	77°04.5	72°01.4	45°25.9	30°48.4	27°30.2	70°32.0	77°41.8	95°20.4
23	261°51.7	8.7'	20°06.1	11.8'	58.6'	76°31.8	71°26.8	44°53.1	30°16.1	28°03.9	71°03.9	77°57.6	95°49.8
5 th	SD = 15.8' Mer. pass. 04:55												

h	Moon (6 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Sun	-Procyon	-Pollux	-Mars	+Saturn	+Fomalhaut	+Deneb	+Altair
0	276°19.5	8.6'	N20°17.9	11.7'	58.6'	91°16.2	75°59.1	70°52.2	44°20.3	28°37.7	71°35.9	74°05.3	96°19.3
1	290°47.1	8.5'	20°29.7	11.6'	58.6'	90°43.9	75°26.4	70°17.6	43°47.5	29°11.6	72°07.9	74°21.1	96°48.7
2	305°14.6	8.4'	20°41.3	11.5'	58.7'	90°11.6	74°53.7	69°42.9	43°14.7	29°45.5	72°40.0	74°37.0	97°18.2
3	319°42.0	8.3'	20°52.8	11.4'	58.7'	89°39.2	74°21.0	69°08.3	42°41.8	30°19.4	73°12.1	74°53.0	97°47.7
4	334°09.3	8.2'	21°04.2	11.3'	58.7'	89°06.8	73°48.2	68°33.6	42°08.9	30°53.5	73°44.3	75°09.0	98°17.2
5	348°36.4	8.0'	21°15.5	11.2'	58.7'	88°34.4	73°15.5	67°58.8	41°36.0	31°27.5	74°16.5	75°25.2	98°46.7
6	3°03.5	7.9'	N21°26.7	11.1'	58.8'	88°02.0	72°42.7	67°24.1	41°03.1	32°01.7	74°48.7	75°41.4	99°16.2
7	17°30.4	7.8'	21°37.8	11.0'	58.8'	87°29.5	72°09.9	66°49.3	40°30.1	32°35.8	75°21.0	75°57.7	99°45.7
8	31°57.2	7.7'	21°48.7	10.8'	58.8'	86°57.0	71°37.1	66°14.5	39°57.2	33°10.1	75°53.3	76°14.1	100°15.3
9	46°23.9	7.6'	21°59.6	10.7'	58.8'	86°24.5	71°04.3	65°39.6	39°24.2	33°44.4	76°25.6	76°30.6	100°44.8
10	60°50.4	7.4'	22°10.3	10.6'	58.8'	85°52.0	70°31.4	65°04.8	38°51.1	34°18.7	76°58.0	76°47.2	101°14.3
11	75°16.9	7.3'	22°20.9	10.5'	58.9'	85°19.4	69°58.6	64°29.9	38°18.1	34°53.1	77°30.5	77°03.8	101°43.9
12	89°43.2	7.2'	N22°31.3	10.3'	58.9'	84°46.8	69°25.7	63°54.9	37°45.0	35°27.5	78°02.9	77°20.5	102°13.4
13	104°09.4	7.1'	22°41.7	10.2'	58.9'	84°14.1	68°52.9	63°20.0	37°11.9	36°02.0	78°35.4	77°37.3	102°43.0
14	118°35.5	7.0'	22°51.9	10.1'	58.9'	83°41.4	68°20.0	62°45.0	36°38.8	36°36.5	79°08.0	77°54.2	103°12.5
15	133°01.4	6.8'	23°02.0	9.9'	59.0'	83°08.7	67°47.1	62°10.0	36°05.7	37°11.0	79°40.5	78°11.1	103°42.1
16	147°27.3	6.7'	23°11.9	9.8'	59.0'	82°36.0	67°14.2	61°35.0	35°32.5	37°45.6	80°13.2	78°28.1	104°11.6
17	161°53.0	6.6'	23°21.7	9.7'	59.0'	82°03.3	66°41.3	60°59.9	34°59.3	38°20.3	80°45.8	78°45.2	104°41.2
18	176°18.6	6.5'	N23°31.4	9.5'	59.0'	81°30.5	66°08.4	60°24.8	34°26.1	38°55.0	81°18.5	79°02.3	105°10.7
19	190°44.1	6.4'	23°40.9	9.4'	59.1'	80°57.7	65°35.5	59°49.7	33°52.9	39°29.7	81°51.2	79°19.5	105°40.3
20	205°09.4	6.2'	23°50.4	9.3'	59.1'	80°24.8	65°02.6	59°14.5	33°19.7	40°04.5	82°24.0	79°36.8	106°09.8
21	219°34.7	6.1'	23°59.6	9.1'	59.1'	79°52.0	64°29.6	58°39.4	32°46.4	40°39.3	82°56.7	79°54.1	106°39.3
22	233°59.8	6.0'	24°08.7	9.0'	59.1'	79°19.1	63°56.7	58°04.2	32°13.2	41°14.1	83°29.6	80°11.5	107°08.9
23	248°24.8	5.9'	24°17.7	8.8'	59.2'	78°46.1	63°23.8	57°28.9	31°39.9	41°49.0	84°02.4	80°29.0	107°38.4
6 th	SD = 16.0' Mer. pass. 05:47					Sun SD = 15.8'							

h	Moon (7 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Sun	-Procyon	-Pollux	-Mars	+Saturn	+Deneb	+Fomalhaut	+Altair
0	262°49.7	5.8'	N24°26.5	8.7'	59.2'	78°13.2	62°50.8	56°53.7	31°06.6	42°24.0	80°46.5	84°35.3	108°07.9
1	277°14.5	5.7'	24°35.2	8.5'	59.2'	77°40.2	62°17.9	56°18.4	30°33.3	42°58.9	81°04.1	85°08.2	108°37.3
2	291°39.1	5.5'	24°43.7	8.4'	59.2'	77°07.2	61°45.0	55°43.1	29°59.9	43°33.9	81°21.8	85°41.1	109°06.8
3	306°03.6	5.4'	24°52.1	8.2'	59.2'	76°34.1	61°12.0	55°07.8	29°26.6	44°09.0	81°39.5	86°14.1	109°36.3
4	320°28.1	5.3'	25°00.3	8.1'	59.3'	76°01.1	60°39.1	54°32.4	28°53.2	44°44.1	81°57.2	86°47.1	110°05.7
5	334°52.4	5.2'	25°08.4	7.9'	59.3'	75°28.0	60°06.1	53°57.0	28°19.8	45°19.2	82°15.0	87°20.1	110°35.1
6	349°16.6	5.1'	N25°16.3	7.8'	59.3'	74°54.9	59°33.2	53°21.6	27°46.4	45°54.3	82°32.9	87°53.2	111°04.5
7	3°40.6	5.0'	25°24.1	7.6'	59.3'	74°21.7	59°00.3	52°46.2	27°13.1	46°29.5	82°50.8	88°26.3	111°33.9
8	18°04.6	4.9'	25°31.7	7.4'	59.4'	73°48.5	58°27.4	52°10.7	26°39.6	47°04.7	83°08.7	88°59.4	112°03.2
9	32°28.5	4.8'	25°39.1	7.3'	59.4'	73°15.3	57°54.5	51°35.2	26°06.2	47°40.0	83°26.7	89°32.5	112°32.5
10	46°52.2	4.6'	25°46.3	7.1'	59.4'	72°42.1	57°21.6	50°59.7	25°32.8	48°15.3	83°44.8	90°05.7	113°01.8
11	61°15.9	4.5'	25°53.4	6.9'	59.4'	72°08.8	56°48.7	50°24.2	24°59.4	48°50.6	84°02.8	90°38.8	113°31.1
12	75°39.4	4.4'	N26°00.4	6.8'	59.4'	71°35.6	56°15.8	49°48.6	24°26.0	49°26.0	84°21.0	91°12.0	114°00.3
13	90°02.9	4.3'	26°07.1	6.6'	59.5'	71°02.3	55°42.9	49°13.0	23°52.5	50°01.4	84°39.1	91°45.3	114°29.5
14	104°26.2	4.2'	26°13.7	6.4'	59.5'	70°28.9	55°10.1	48°37.4	23°19.1	50°36.8	84°57.4	92°18.5	114°58.7
15	118°49.4	4.1'	26°20.1	6.2'	59.5'	69°55.6	54°37.2	48°01.8	22°45.7	51°12.2	85°15.6	92°51.8	115°27.8
16	133°12.5	4.0'	26°26.4	6.1'	59.5'	69°22.2	54°04.4	47°26.1	22°12.3	51°47.7	85°33.9	93°25.1	115°56.9
17	147°35.6	3.9'	26°32.5	5.9'	59.5'	68°48.7	53°31.6	46°50.4	21°38.9	52°23.3	85°52.2	93°58.4	116°26.0
18	161°58.5	3.8'	N26°38.4	5.7'	59.6'	68°15.3	52°58.8	46°14.7	21°05.5	52°58.8	86°10.6	94°31.8	116°55.0
19	176°21.3	3.7'	26°44.1	5.5'	59.6'	67°41.8	52°26.1	45°39.0	20°32.1	53°34.4	86°28.9	95°05.1	117°24.0
20	190°44.1	3.7'	26°49.6	5.4'	59.6'	67°08.3	51°53.3	45°03.2	19°58.7	54°10.0	86°47.4	95°38.5	117°52.9
21	205°06.7	3.6'	26°55.0	5.2'	59.6'	66°34.8	51°20.6	44°27.5	19°25.4	54°45.6	87°05.8	96°11.9	118°21.8
22	219°29.3	3.5'	27°00.1	5.0'	59.6'	66°01.3	50°48.0	43°51.7	18°52.1	55°21.3	87°24.3	96°45.3	118°50.6
23	233°51.8	3.4'	27°05.1	4.8'	59.7'	65°27.7	50°15.3	43°15.9	18°18.8	55°57.0	87°42.8	97°18.8	119°19.3
7 th	SD = 16.1'					Mer. pass. 06:45		Sun SD = 15.8'					

DUT1 = UT1-UTC = +0.1050 sec $\Delta T = TT-UT1 = +69.0790$ sec

2026 August 08 to Aug. 10 UT

h	Moon (8 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Sun	-Procyon	-Pollux	-Mars	+Aldebaran	+Saturn	+Deneb	+Fomalhaut
0	248°14.2	3.3'	N27°09.9	4.6'	59.7'	64°54.1	49°42.7	42°40.0	17°45.6		56°32.8	88°01.3	97°52.2
1	262°36.5	3.2'	27°14.5	4.4'	59.7'	64°20.5	49°10.1	42°04.2	17°12.4		57°08.5	88°19.8	98°25.7
2	276°58.7	3.1'	27°18.9	4.2'	59.7'	63°46.9	48°37.6	41°28.3	16°39.2		57°44.3	88°38.4	98°59.2
3	291°20.8	3.1'	27°23.2	4.0'	59.7'	63°13.2	48°05.1	40°52.4	16°06.1		58°20.1	88°57.0	99°32.7
4	305°42.9	3.0'	27°27.2	3.9'	59.7'	62°39.5	47°32.6	40°16.4	15°33.1		58°56.0	89°15.6	100°06.2
5	320°04.9	2.9'	27°31.1	3.7'	59.8'	62°05.8	47°00.2	39°40.5	15°00.2		59°31.8	89°34.2	100°39.7
6	334°26.8	2.8'	N27°34.7	3.5'	59.8'	61°32.1	46°27.8	39°04.5	14°27.3		60°07.7	89°52.8	101°13.2
7	348°48.7	2.8'	27°38.2	3.3'	59.8'	60°58.3	45°55.5	38°28.6	13°54.6		60°43.7	90°11.4	101°46.8
8	3°10.5	2.7'	27°41.5	3.1'	59.8'	60°24.5	45°23.3	37°52.6	13°22.0		61°19.6	90°30.1	102°20.3
9	17°32.2	2.7'	27°44.5	2.9'	59.8'	59°50.7	44°51.1	37°16.6	12°49.5		61°55.6	90°48.7	102°53.9
10	31°53.8	2.6'	27°47.4	2.7'	59.8'	59°16.9	44°18.9	36°40.5	12°17.1		62°31.6	91°07.4	103°27.5
11	46°15.4	2.5'	27°50.1	2.5'	59.9'	58°43.0	43°46.9	36°04.5	11°45.0		63°07.6	91°26.1	104°01.1
12	60°37.0	2.5'	N27°52.6	2.3'	59.9'	58°09.2	43°14.9	35°28.4	11°13.1		63°43.7	91°44.8	104°34.6
13	74°58.4	2.4'	27°54.8	2.1'	59.9'	57°35.3	42°42.9	34°52.3	10°41.4		64°19.7	92°03.4	105°08.2
14	89°19.9	2.4'	27°56.9	1.9'	59.9'	57°01.3	42°11.1	34°16.2	10°10.1		64°55.8	92°22.1	105°41.8
15	103°41.3	2.3'	27°58.8	1.7'	59.9'	56°27.4	41°39.3	33°40.1	9°39.1	14°09.9	65°32.0	92°40.8	106°15.4
16	118°02.6	2.3'	28°00.5	1.5'	59.9'	55°53.5	41°07.6	33°04.0	9°08.5	14°34.2	66°08.1	92°59.5	106°49.0
17	132°23.9	2.3'	28°01.9	1.3'	60.0'	55°19.5	40°36.0	32°27.9	8°38.4	14°59.3	66°44.3	93°18.2	107°22.7
18	146°45.1	2.2'	N28°03.2	1.1'	60.0'	54°45.5	40°04.5	31°51.7	8°08.9	15°25.1	67°20.5	93°36.8	107°56.3
19	161°06.4	2.2'	28°04.3	0.9'	60.0'	54°11.5	39°33.1	31°15.6	7°40.1	15°51.6	67°56.7	93°55.5	108°29.9
20	175°27.5	2.2'	28°05.1	0.6'	60.0'	53°37.4	39°01.8	30°39.4	7°12.1	16°18.8	68°32.9	94°14.1	109°03.5
21	189°48.7	2.1'	28°05.8	0.4'	60.0'	53°03.4	38°30.6	30°03.2		16°46.5	69°09.2	94°32.8	109°37.1
22	204°09.8	2.1'	28°06.2	0.2'	60.0'	52°29.3	37°59.5	29°27.0		17°14.8	69°45.5	94°51.4	110°10.7
23	218°30.9	2.1'	28°06.4	0.0'	60.0'	51°55.2	37°28.5	28°50.9		17°43.6	70°21.8	95°10.0	110°44.3
8 th	SD = 16.3' Mer. pass. 07:47					Sun SD = 15.8'							

h	Moon (9 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Sun	-Procyon	-Pollux	+Mars	+Aldebaran	+Capella	+Saturn	+Fomalhaut
0	232°52.0	2.1'	N28°06.5	-0.2'	60.1'	51°21.1	36°57.7	28°14.7		18°12.8		70°58.1	111°17.9
1	247°13.0	2.0'	28°06.3	-0.4'	60.1'	50°47.0	36°27.0	27°38.5		18°42.5		71°34.4	111°51.4
2	261°34.1	2.0'	28°05.9	-0.6'	60.1'	50°12.8	35°56.4	27°02.2		19°12.6		72°10.8	112°25.0
3	275°55.1	2.0'	28°05.3	-0.8'	60.1'	49°38.7	35°26.0	26°26.0		19°43.0		72°47.2	112°58.6
4	290°16.1	2.0'	28°04.5	-1.0'	60.1'	49°04.5	34°55.8	25°49.8		20°13.8		73°23.6	113°32.1
5	304°37.1	2.0'	28°03.5	-1.2'	60.1'	48°30.3	34°25.7	25°13.6		20°44.9		74°00.0	114°05.7
6	318°58.1	2.0'	N28°02.3	-1.4'	60.1'	47°56.1	33°55.8	24°37.4		21°16.2		74°36.4	114°39.2
7	333°19.1	2.0'	28°00.9	-1.6'	60.1'	47°21.9	33°26.0	24°01.2		21°47.9		75°12.9	115°12.7
8	347°40.2	2.0'	27°59.2	-1.8'	60.1'	46°47.6	32°56.5	23°25.0		22°19.8		75°49.3	115°46.2
9	2°01.2	2.0'	27°57.4	-2.0'	60.2'	46°13.4	32°27.1	22°48.8		22°51.9	20°06.6	76°25.8	116°19.7
10	16°22.2	2.0'	27°55.3	-2.3'	60.2'	45°39.1	31°58.0	22°12.6		23°24.3	20°23.2	77°02.3	116°53.2
11	30°43.2	2.0'	27°53.1	-2.5'	60.2'	45°04.8	31°29.1	21°36.4		23°56.9	20°40.6	77°38.8	117°26.6
12	45°04.3	2.1'	N27°50.6	-2.7'	60.2'	44°30.5	31°00.4	21°00.3		24°29.6	20°58.8	78°15.3	118°00.0
13	59°25.3	2.1'	27°47.9	-2.9'	60.2'	43°56.2	30°32.0	20°24.1		25°02.6	21°17.7	78°51.9	118°33.4
14	73°46.4	2.1'	27°45.1	-3.1'	60.2'	43°21.9	30°03.9	19°48.0		25°35.7	21°37.4	79°28.4	119°06.8
15	88°07.5	2.1'	27°42.0	-3.3'	60.2'	42°47.5	29°36.0	19°11.9		26°09.0	21°57.9	80°05.0	119°40.2
16	102°28.7	2.2'	27°38.7	-3.5'	60.2'	42°13.2	29°08.4	18°35.9		26°42.4	22°18.9	80°41.6	
17	116°49.8	2.2'	27°35.2	-3.7'	60.2'	41°38.8	28°41.1	17°59.8		27°16.0	22°40.6	81°18.2	
18	131°11.0	2.2'	N27°31.5	-3.9'	60.2'	41°04.4	28°14.1	17°23.8	8°22.0	27°49.7	23°03.0	81°54.8	
19	145°32.3	2.3'	27°27.6	-4.1'	60.2'	40°30.1	27°47.5	16°47.9	8°52.2	28°23.5	23°25.9	82°31.4	
20	159°53.5	2.3'	27°23.5	-4.3'	60.2'		27°21.2	16°12.0	9°22.9	28°57.5	23°49.3	83°08.0	
21	174°14.9	2.4'	27°19.2	-4.5'	60.2'		26°55.3	15°36.1	9°54.1	29°31.6	24°13.3	83°44.7	
22	188°36.2	2.4'	27°14.7	-4.7'	60.3'		26°29.7	15°00.3	10°25.7	30°05.7	24°37.8	84°21.3	
23	202°57.6	2.5'	27°09.9	-4.9'	60.3'		26°04.6	14°24.6	10°57.7	30°40.0	25°02.8	84°58.0	
9 th	SD = 16.4' Mer. pass. 08:52					Sun SD = 15.8'							

Moon (10 th Aug)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Procyon	-Pollux	+Mars	+Betelgeuse	+Capella	+Aldebaran	+Rigel	+Saturn
0	217°19.1	2.5'	N27°05.0	-5.1'	60.3'	25°39.9	13°49.0	11°30.0		25°28.2	31°14.4	41°18.5	85°34.6
1	231°40.6	2.6'	26°59.9	-5.3'	60.3'	25°15.7	13°13.5	12°02.6	22°59.9	25°54.1	31°48.8	41°35.2	86°11.3
2	246°02.2	2.6'	26°54.6	-5.5'	60.3'	24°52.0	12°38.1	12°35.4	23°16.3	26°20.3	32°23.4	41°52.3	86°48.0
3	260°23.8	2.7'	26°49.1	-5.7'	60.3'	24°28.7	12°02.9	13°08.5	23°33.5	26°47.0	32°58.0	42°09.7	87°24.7
4	274°45.5	2.7'	26°43.4	-5.9'	60.3'	24°06.0	11°27.7	13°41.7	23°51.3	27°14.0	33°32.7	42°27.5	88°01.4
5	289°07.2	2.8'	26°37.5	-6.1'	60.3'	23°43.8	10°52.8	14°15.0	24°09.8	27°41.4	34°07.5	42°45.6	88°38.1
6	303°29.0	2.9'	N26°31.4	-6.3'	60.3'	23°22.2	10°18.1	14°48.5	24°29.0	28°09.1	34°42.3	43°04.1	89°14.8
7	317°50.9	2.9'	26°25.1	-6.5'	60.3'	23°01.2	9°43.7	15°22.2	24°48.8	28°37.2	35°17.2	43°22.8	89°51.5
8	332°12.8	3.0'	26°18.6	-6.7'	60.3'	22°40.9	9°09.5	15°55.9	25°09.2	29°05.5	35°52.2	43°41.9	90°28.2
9	346°34.9	3.1'	26°12.0	-6.9'	60.3'	22°21.2	8°35.8	16°29.8	25°30.2	29°34.1	36°27.2	44°01.3	91°04.9
10	0°56.9	3.2'	26°05.1	-7.0'	60.3'	22°02.2	8°02.5	17°03.7	25°51.7	30°03.0	37°02.3	44°20.9	91°41.7
11	15°19.1	3.2'	25°58.1	-7.2'	60.3'	21°43.9	7°29.7	17°37.8	26°13.8	30°32.2	37°37.4	44°40.9	92°18.4
12	29°41.4	3.3'	N25°50.8	-7.4'	60.3'	21°26.4	6°57.6	18°11.9	26°36.4	31°01.6	38°12.6	45°01.1	92°55.1
13	44°03.7	3.4'	25°43.4	-7.6'	60.3'	21°09.7	6°26.4	18°46.1	26°59.5	31°31.3	38°47.9	45°21.7	93°31.9
14	58°26.1	3.5'	25°35.8	-7.8'	60.3'	20°53.8		19°20.3	27°23.0	32°01.2	39°23.1	45°42.4	94°08.6
15	72°48.6	3.6'	25°28.1	-8.0'	60.3'	20°38.8		19°54.6	27°47.0	32°31.3	39°58.4	46°03.5	94°45.3
16	87°11.2	3.7'	25°20.1	-8.1'	60.3'			20°29.0	28°11.4	33°01.6	40°33.8	46°24.8	95°22.1
17	101°33.9	3.8'	25°12.0	-8.3'	60.3'			21°03.3	28°36.2	33°32.1	41°09.2	46°46.3	95°58.8
18	115°56.6	3.9'	N25°03.6	-8.5'	60.3'			21°37.8	29°01.4	34°02.8	41°44.6	47°08.1	96°35.5
19	130°19.5	3.9'	24°55.2	-8.7'	60.3'			22°12.3	29°27.0	34°33.6	42°20.1	47°30.2	97°12.2
20	144°42.4	4.0'	24°46.5	-8.8'	60.3'			22°46.8	29°53.0	35°04.7	42°55.6	47°52.4	97°49.0
21	159°05.5	4.1'	24°37.7	-9.0'	60.3'			23°21.3	30°19.3	35°35.9	43°31.1	48°14.9	98°25.7
22	173°28.6	4.2'	24°28.6	-9.2'	60.3'			23°55.9	30°45.9	36°07.2	44°06.6	48°37.6	99°02.4
23	187°51.8	4.3'	24°19.5	-9.3'	60.3'			24°30.5	31°12.8	36°38.7	44°42.2	49°00.6	99°39.1
10 th	SD = 16.4' Mer. pass. 09:56												

DUT1 = UT1-UTC = +0.1054 sec $\Delta T = TT-UT1 = +69.0786$ sec

2026 August 11 to Aug. 13 UT

h	Moon (11 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	+Pollux	+Procyon	+Mars	+Betelgeuse	+Capella	+Aldebaran	+Rigel	+Saturn
0	202°15.2	4.4'	N24°10.1	-9.5'	60.3'			25°05.1	31°40.0	37°10.3	45°17.8	49°23.7	100°15.9
1	216°38.6	4.5'	24°00.6	-9.7'	60.2'			25°39.8	32°07.5	37°42.1	45°53.4	49°47.0	100°52.6
2	231°02.2	4.6'	23°51.0	-9.8'	60.2'			26°14.4	32°35.3	38°14.0	46°29.0	50°10.5	101°29.3
3	245°25.8	4.7'	23°41.1	-10.0'	60.2'			26°49.1	33°03.4	38°46.0	47°04.7	50°34.3	102°06.0
4	259°49.6	4.9'	23°31.1	-10.1'	60.2'			27°23.8	33°31.7	39°18.1	47°40.4	50°58.2	102°42.7
5	274°13.4	5.0'	23°21.0	-10.3'	60.2'			27°58.5	34°00.2	39°50.4	48°16.1	51°22.2	103°19.3
6	288°37.4	5.1'	N23°10.7	-10.5'	60.2'			28°33.2	34°28.9	40°22.7	48°51.8	51°46.5	103°56.0
7	303°01.4	5.2'	23°00.2	-10.6'	60.2'			29°08.0	34°57.9	40°55.1	49°27.5	52°10.9	104°32.7
8	317°25.6	5.3'	22°49.6	-10.8'	60.2'	7°14.1		29°42.7	35°27.1	41°27.7	50°03.2	52°35.5	105°09.3
9	331°49.9	5.4'	22°38.9	-10.9'	60.2'	7°46.5		30°17.4	35°56.5	42°00.3	50°39.0	53°00.3	105°46.0
10	346°14.3	5.5'	22°28.0	-11.0'	60.2'	8°19.5		30°52.2	36°26.0	42°33.0	51°14.7	53°25.2	106°22.6
11	0°38.8	5.6'	22°16.9	-11.2'	60.2'	8°53.0		31°26.9	36°55.8	43°05.8	51°50.5	53°50.2	106°59.2
12	15°03.4	5.7'	N22°05.7	-11.3'	60.2'	9°26.8		32°01.7	37°25.7	43°38.6	52°26.2	54°15.4	107°35.8
13	29°28.2	5.8'	21°54.4	-11.5'	60.1'	10°01.0		32°36.4	37°55.7	44°11.6	53°02.0	54°40.8	108°12.4
14	43°53.0	6.0'	21°42.9	-11.6'	60.1'	10°35.5		33°11.2	38°26.0	44°44.6	53°37.8	55°06.3	108°49.0
15	58°18.0	6.1'	21°31.3	-11.7'	60.1'	11°10.2		33°46.0	38°56.3	45°17.7	54°13.6	55°31.9	109°25.6
16	72°43.0	6.2'	21°19.6	-11.9'	60.1'	11°45.1		34°20.7	39°26.9	45°50.8	54°49.4	55°57.6	110°02.2
17	87°08.2	6.3'	21°07.7	-12.0'	60.1'	12°20.2		34°55.5	39°57.5	46°24.0	55°25.1	56°23.5	110°38.7
18	101°33.5	6.4'	N20°55.7	-12.1'	60.1'	12°55.4		35°30.2	40°28.3	46°57.2	56°00.9	56°49.5	111°15.2
19	115°58.9	6.5'	20°43.5	-12.3'	60.1'	13°30.7		36°04.9	40°59.2	47°30.5	56°36.7	57°15.6	111°51.7
20	130°24.4	6.6'	20°31.3	-12.4'	60.1'	14°06.2	20°59.3	36°39.7	41°30.2	48°03.9	57°12.5	57°41.8	112°28.2
21	144°50.1	6.8'	20°18.9	-12.5'	60.0'	14°41.7	21°15.4	37°14.4	42°01.4	48°37.3	57°48.3	58°08.2	113°04.7
22	159°15.8	6.9'	20°06.4	-12.6'	60.0'	15°17.2	21°32.3	37°49.1	42°32.6	49°10.7	58°24.0	58°34.6	113°41.2
23	173°41.7	7.0'	19°53.7	-12.8'	60.0'	15°52.9	21°49.9	38°23.8	43°04.0	49°44.2	58°59.8	59°01.1	114°17.6
11 th	SD = 16.4' Mer. pass. 10:57												

h	Moon (12 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	+Pollux	+Procyon	+Mars	+Betelgeuse	+Capella	+Rigel	+Aldebaran	+Saturn
0	188°07.7	7.1'	N19°41.0	-12.9'	60.0'	16°28.6	22°08.3	38°58.5	43°35.4	50°17.7	59°27.8	59°35.6	114°54.0
1	202°33.8	7.2'	19°28.1	-13.0'	60.0'				New Moon				
2	217°00.0	7.3'	19°15.1	-13.1'	60.0'				New Moon				
3	231°26.3	7.4'	19°02.0	-13.2'	60.0'				New Moon				
4	245°52.8	7.6'	18°48.8	-13.3'	59.9'				New Moon				
5	260°19.3	7.7'	18°35.5	-13.4'	59.9'				New Moon				
6	274°46.0	7.8'	N18°22.1	-13.5'	59.9'				New Moon				
7	289°12.8	7.9'	18°08.6	-13.6'	59.9'				New Moon				
8	303°39.7	8.0'	17°54.9	-13.7'	59.9'				New Moon				
9	318°06.7	8.1'	17°41.2	-13.8'	59.9'				New Moon				
10	332°33.8	8.2'	17°27.4	-13.9'	59.8'				New Moon				
11	347°01.0	8.3'	17°13.5	-14.0'	59.8'				New Moon				
12	1°28.4	8.5'	N16°59.5	-14.1'	59.8'				New Moon				
13	15°55.8	8.6'	16°45.4	-14.2'	59.8'				New Moon				
14	30°23.4	8.7'	16°31.2	-14.3'	59.8'				New Moon				
15	44°51.1	8.8'	16°16.9	-14.4'	59.7'				New Moon				
16	59°18.8	8.9'	16°02.5	-14.4'	59.7'				New Moon				
17	73°46.7	9.0'	15°48.1	-14.5'	59.7'				New Moon				
18	88°14.7	9.1'	N15°33.6	-14.6'	59.7'				New Moon				
19	102°42.8	9.2'	15°19.0	-14.7'	59.6'				New Moon				
20	117°11.0	9.3'	15°04.3	-14.8'	59.6'				New Moon				
21	131°39.3	9.4'	14°49.5	-14.8'	59.6'				New Moon				
22	146°07.8	9.5'	14°34.7	-14.9'	59.6'				New Moon				
23	160°36.3	9.6'	14°19.8	-15.0'	59.6'	New Moon							
12 th	SD = 16.4' Mer. pass. 11:54												

h Moon (13 th Aug)						Lunar Distance (objects with largest hourly LD delta)						
Thu	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Hadar	-Acrux	-Arcturus	-Spica	-Venus
0	175°04.9	9.7'	N14°04.9	-15.0'	59.5'				New Moon			
1	189°33.6	9.8'	13°49.8	-15.1'	59.5'				New Moon			
2	204°02.4	9.9'	13°34.7	-15.2'	59.5'				New Moon			
3	218°31.4	10.0'	13°19.6	-15.2'	59.5'				New Moon			
4	233°00.4	10.1'	13°04.4	-15.3'	59.4'				New Moon			
5	247°29.5	10.2'	12°49.1	-15.3'	59.4'				New Moon			
6	261°58.7	10.3'	N12°33.8	-15.4'	59.4'				New Moon			
7	276°28.0	10.4'	12°18.4	-15.4'	59.4'				New Moon			
8	290°57.4	10.5'	12°02.9	-15.5'	59.3'				New Moon			
9	305°26.9	10.6'	11°47.4	-15.5'	59.3'				New Moon			
10	319°56.5	10.7'	11°31.9	-15.6'	59.3'				New Moon			
11	334°26.2	10.8'	11°16.3	-15.6'	59.3'				New Moon			
12	348°56.0	10.9'	N11°00.7	-15.7'	59.2'	99°05.7	89°03.0	85°01.1	78°42.9	59°23.6	53°13.8	35°38.8
13	3°25.9	11.0'	10°45.0	-15.7'	59.2'	98°30.0	88°34.7	84°33.5	78°19.6	58°57.0	52°38.2	35°05.6
14	17°55.8	11.0'	10°29.3	-15.8'	59.2'	97°54.4	88°06.3	84°05.8	77°56.4	58°30.6	52°02.6	34°32.5
15	32°25.9	11.1'	10°13.5	-15.8'	59.1'	97°18.9	87°38.1	83°38.3	77°33.2	58°04.3	51°27.1	33°59.4
16	46°56.0	11.2'	09°57.8	-15.8'	59.1'	96°43.3	87°09.8	83°10.7	77°10.1	57°38.2	50°51.6	33°26.4
17	61°26.2	11.3'	09°41.9	-15.9'	59.1'	96°07.8	86°41.6	82°43.2	76°47.0	57°12.2	50°16.2	32°53.4
18	75°56.5	11.4'	N09°26.1	-15.9'	59.1'	95°32.4	86°13.5	82°15.8	76°24.1	56°46.3	49°40.7	32°20.4
19	90°26.8	11.5'	09°10.2	-15.9'	59.0'	94°56.9	85°45.3	81°48.4	76°01.2	56°20.5	49°05.4	31°47.5
20	104°57.3	11.5'	08°54.2	-16.0'	59.0'	94°21.5	85°17.2	81°21.0	75°38.3	55°54.9	48°30.0	31°14.6
21	119°27.8	11.6'	08°38.3	-16.0'	59.0'	93°46.2	84°49.2	80°53.7	75°15.6	55°29.5	47°54.7	30°41.7
22	133°58.5	11.7'	08°22.3	-16.0'	58.9'	93°10.8	84°21.2	80°26.5	74°52.9	55°04.2	47°19.4	30°08.9
23	148°29.1	11.8'	08°06.3	-16.0'	58.9'	92°35.6	83°53.2	79°59.3	74°30.3	54°39.0	46°44.2	29°36.1
13 th	SD = 16.2' Mer. pass. 12:46											

DUT1 = UT1-UTC = +0.1058 sec $\Delta T = TT-UT1 = +69.0782$ sec

2026 August 14 to Aug. 16 UT

h	Moon (14 th Aug)					Lunar Distance (objects with largest hourly LD delta)						
Fri	GHA	ν	Dec	d	HP	-Antares	-Rigel Kent.	-Hadar	-Acrux	-Arcturus	-Spica	-Venus
0	162°59.9	11.8'	N07°50.3	-16.1'	58.9'	92°00.3	83°25.3	79°32.1	74°07.8	54°14.0	46°09.0	29°03.4
1	177°30.7	11.9'	07°34.2	-16.1'	58.8'	91°25.1	82°57.4	79°05.0	73°45.4	53°49.1	45°33.8	28°30.7
2	192°01.7	12.0'	07°18.2	-16.1'	58.8'	90°49.9	82°29.5	78°38.0	73°23.1	53°24.4	44°58.7	27°58.0
3	206°32.7	12.1'	07°02.1	-16.1'	58.8'	90°14.8	82°01.8	78°11.0	73°00.9	52°59.9	44°23.6	27°25.4
4	221°03.7	12.1'	06°46.0	-16.1'	58.7'	89°39.7	81°34.0	77°44.1	72°38.7	52°35.6	43°48.6	26°52.8
5	235°34.8	12.2'	06°29.8	-16.1'	58.7'	89°04.7	81°06.3	77°17.3	72°16.7	52°11.4	43°13.6	26°20.3
6	250°06.0	12.3'	N06°13.7	-16.2'	58.7'	88°29.7	80°38.7	76°50.5	71°54.7	51°47.3	42°38.6	25°47.8
7	264°37.3	12.3'	05°57.5	-16.2'	58.7'	87°54.7	80°11.1	76°23.8	71°32.8	51°23.5	42°03.7	25°15.3
8	279°08.6	12.4'	05°41.4	-16.2'	58.6'	87°19.7	79°43.6	75°57.1	71°11.1	50°59.8	41°28.8	24°42.9
9	293°40.0	12.5'	05°25.2	-16.2'	58.6'	86°44.9	79°16.1	75°30.5	70°49.4	50°36.4	40°54.0	24°10.5
10	308°11.5	12.5'	05°09.0	-16.2'	58.6'	86°10.0	78°48.7	75°04.0	70°27.8	50°13.1	40°19.2	23°38.2
11	322°43.0	12.6'	04°52.8	-16.2'	58.5'	85°35.2	78°21.4	74°37.6	70°06.4	49°50.0	39°44.5	23°05.9
12	337°14.6	12.6'	N04°36.7	-16.2'	58.5'	85°00.4	77°54.1	74°11.2	69°45.0	49°27.1	39°09.8	22°33.7
13	351°46.2	12.7'	04°20.5	-16.2'	58.5'	84°25.7	77°26.9	73°44.9	69°23.8	49°04.3	38°35.1	22°01.5
14	6°17.9	12.8'	04°04.3	-16.2'	58.4'	83°51.0	76°59.7	73°18.7	69°02.6	48°41.8	38°00.5	21°29.3
15	20°49.7	12.8'	03°48.1	-16.2'	58.4'	83°16.3	76°32.6	72°52.5	68°41.6	48°19.5	37°25.9	20°57.2
16	35°21.5	12.9'	03°31.9	-16.2'	58.4'	82°41.7	76°05.5	72°26.5	68°20.6	47°57.4	36°51.3	20°25.2
17	49°53.4	12.9'	03°15.7	-16.2'	58.3'	82°07.2	75°38.6	72°00.5	67°59.8	47°35.6	36°16.9	19°53.2
18	64°25.3	13.0'	N02°59.5	-16.2'	58.3'	81°32.6	75°11.7	71°34.6	67°39.1	47°13.9	35°42.4	19°21.2
19	78°57.3	13.0'	02°43.3	-16.2'	58.3'	80°58.2	74°44.8	71°08.7	67°18.5	46°52.5	35°08.0	18°49.3
20	93°29.3	13.1'	02°27.1	-16.2'	58.2'	80°23.7	74°18.0	70°43.0	66°58.1	46°31.3	34°33.6	18°17.4
21	108°01.4	13.1'	02°11.0	-16.2'	58.2'	79°49.3	73°51.3	70°17.3	66°37.7	46°10.3	33°59.3	17°45.6
22	122°33.5	13.2'	01°54.8	-16.1'	58.2'	79°15.0	73°24.7	69°51.8	66°17.5	45°49.5	33°25.0	17°13.9
23	137°05.7	13.2'	01°38.7	-16.1'	58.1'	78°40.7	72°58.2	69°26.3	65°57.4	45°29.0	32°50.8	16°42.2
14 th	SD = 16.1' Mer. pass. 13:34											

h	Moon (15 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Hadar	-Arcturus	-Spica	-Venus	+Sun
0	151°37.9	13.3'	N01°22.5	-16.1'	58.1'		78°06.4	72°31.7	69°00.9	45°08.7	32°16.6	16°10.5	
1	166°10.1	13.3'	01°06.4	-16.1'	58.1'		77°32.2	72°05.3	68°35.6	44°48.7	31°42.5	15°38.9	
2	180°42.4	13.3'	00°50.3	-16.1'	58.0'		76°58.0	71°39.0	68°10.4	44°28.9	31°08.4	15°07.4	
3	195°14.8	13.4'	00°34.2	-16.1'	58.0'		76°23.8	71°12.7	67°45.2	44°09.4	30°34.4	14°35.9	
4	209°47.2	13.4'	00°18.2	-16.1'	57.9'		75°49.7	70°46.6	67°20.2	43°50.2	30°00.4	14°04.5	
5	224°19.6	13.5'	N00°02.1	-16.0'	57.9'		75°15.7	70°20.5	66°55.3	43°31.2	29°26.4	13°33.1	
6	238°52.1	13.5'	S00°13.9	-16.0'	57.9'		74°41.7	69°54.5	66°30.5	43°12.5	28°52.5	13°01.8	
7	253°24.6	13.5'	00°29.9	-16.0'	57.8'		74°07.7	69°28.6	66°05.7	42°54.0	28°18.6	12°30.6	
8	267°57.1	13.6'	00°45.9	-16.0'	57.8'		73°33.8	69°02.7	65°41.1	42°35.9	27°44.8	11°59.5	
9	282°29.7	13.6'	01°01.9	-15.9'	57.8'		72°59.9	68°37.0	65°16.6	42°18.0	27°11.1	11°28.4	
10	297°02.3	13.6'	01°17.8	-15.9'	57.7'		72°26.0	68°11.3	64°52.2	42°00.4	26°37.4	10°57.4	
11	311°34.9	13.7'	01°33.7	-15.9'	57.7'		71°52.2	67°45.8	64°27.8	41°43.1	26°03.7	10°26.5	
12	326°07.6	13.7'	S01°49.6	-15.9'	57.7'		71°18.5	67°20.3	64°03.6	41°26.1	25°30.1	9°55.7	
13	340°40.3	13.7'	02°05.5	-15.8'	57.6'	119°42.0	70°44.8	66°54.9	63°39.5	41°09.4	24°56.5	9°24.9	
14	355°13.0	13.8'	02°21.3	-15.8'	57.6'	119°15.1	70°11.1	66°29.6	63°15.6	40°53.0	24°23.0	8°54.3	
15	9°45.8	13.8'	02°37.1	-15.8'	57.6'	118°48.2	69°37.5	66°04.4	62°51.7	40°37.0	23°49.5	8°23.8	
16	24°18.5	13.8'	02°52.9	-15.7'	57.5'	118°21.3	69°03.9	65°39.3	62°27.9	40°21.2	23°16.1	7°53.5	
17	38°51.3	13.8'	03°08.6	-15.7'	57.5'	117°54.4	68°30.4	65°14.4	62°04.3	40°05.8	22°42.7	7°23.3	
18	53°24.2	13.8'	S03°24.3	-15.7'	57.5'	117°27.4	67°56.9	64°49.5	61°40.8	39°50.7	22°09.4	6°53.2	
19	67°57.0	13.9'	03°39.9	-15.6'	57.4'	117°00.4	67°23.4	64°24.7	61°17.4		21°36.1	6°23.4	
20	82°29.9	13.9'	03°55.6	-15.6'	57.4'	116°33.3	66°50.0	64°00.0	60°54.1		21°02.9	5°53.8	40°14.3
21	97°02.8	13.9'	04°11.2	-15.5'	57.4'	116°06.3	66°16.7	63°35.4	60°30.9		20°29.8	5°24.6	40°45.2
22	111°35.7	13.9'	04°26.7	-15.5'	57.3'	115°39.2	65°43.4	63°10.9	60°07.9		19°56.7	4°55.7	41°16.2
23	126°08.6	13.9'	04°42.2	-15.5'	57.3'	115°12.1	65°10.1	62°46.5	59°45.0		19°23.6	4°27.3	41°47.0
15 th	SD = 15.8' Mer. pass. 14:20					Sun SD = 15.8'							

h	Moon (16 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Hadar	\pm Acrux	-Spica	\pm Venus	+Sun
0	140°41.6	14.0'	S04°57.7	-15.4'	57.2'	114°45.0	64°36.8	62°22.2	59°22.2	58°20.3	18°50.6	3°59.6	42°17.9
1	155°14.5	14.0'	05°13.1	-15.4'	57.2'	114°17.9	64°03.7	61°58.1	58°59.5	58°04.1	18°17.7	3°32.8	42°48.7
2	169°47.5	14.0'	05°28.5	-15.3'	57.2'	113°50.8	63°30.5	61°34.0	58°37.0	57°48.0	17°44.8		43°19.4
3	184°20.5	14.0'	05°43.8	-15.3'	57.1'	113°23.6	62°57.4	61°10.1	58°14.7	57°32.1	17°12.0		43°50.1
4	198°53.5	14.0'	05°59.1	-15.2'	57.1'	112°56.5	62°24.4	60°46.3	57°52.4	57°16.4	16°39.2		44°20.8
5	213°26.5	14.0'	06°14.4	-15.2'	57.1'	112°29.3	61°51.3	60°22.6	57°30.3	57°00.9	16°06.5		44°51.4
6	227°59.5	14.0'	S06°29.6	-15.2'	57.0'	112°02.2	61°18.4	59°59.0	57°08.3	56°45.5	15°33.9		45°22.0
7	242°32.5	14.0'	06°44.7	-15.1'	57.0'	111°35.0	60°45.4	59°35.5	56°46.5	56°30.3	15°01.3		45°52.5
8	257°05.6	14.0'	06°59.8	-15.1'	57.0'	111°07.8	60°12.6	59°12.2	56°24.8		14°28.8		46°23.0
9	271°38.6	14.0'	07°14.9	-15.0'	56.9'	110°40.6	59°39.7	58°49.0	56°03.3		13°56.4		46°53.4
10	286°11.7	14.1'	07°29.9	-15.0'	56.9'	110°13.5	59°06.9	58°25.9	55°41.9		13°24.0		47°23.8
11	300°44.7	14.1'	07°44.8	-14.9'	56.9'	109°46.3	58°34.1	58°02.9	55°20.7		12°51.7		47°54.2
12	315°17.8	14.1'	S07°59.7	-14.8'	56.8'	109°19.1	58°01.4	57°40.1	54°59.6		12°19.6		48°24.5
13	329°50.8	14.1'	08°14.6	-14.8'	56.8'	108°51.9	57°28.8	57°17.4	54°38.7		11°47.5		48°54.8
14	344°23.9	14.1'	08°29.3	-14.7'	56.8'	108°24.7	56°56.1	56°54.8	54°17.9		11°15.4		49°25.0
15	358°56.9	14.1'	08°44.1	-14.7'	56.7'	107°57.6	56°23.5	56°32.4	53°57.3		10°43.5	4°28.7	49°55.2
16	13°30.0	14.1'	08°58.8	-14.6'	56.7'	107°30.4	55°51.0	56°10.1	53°36.9		10°11.8	4°56.5	50°25.4
17	28°03.1	14.1'	09°13.4	-14.6'	56.7'	107°03.2	55°18.5	55°47.9	53°16.6		9°40.1	5°24.6	50°55.5
18	42°36.1	14.0'	S09°27.9	-14.5'	56.6'	106°36.1	54°46.0	55°25.9	52°56.5		9°08.6	5°53.0	51°25.6
19	57°09.2	14.0'	09°42.4	-14.4'	56.6'	106°08.9	54°13.6	55°04.0	52°36.5		8°37.2	6°21.7	51°55.6
20	71°42.2	14.0'	09°56.9	-14.4'	56.6'	105°41.8	53°41.2	54°42.3	52°16.7		8°06.0	6°50.5	52°25.6
21	86°15.2	14.0'	10°11.3	-14.3'	56.5'	105°14.6	53°08.9	54°20.7	51°57.1		7°35.0	7°19.4	52°55.6
22	100°48.3	14.0'	10°25.6	-14.3'	56.5'	104°47.5	52°36.6	53°59.2	51°37.7		7°04.3	7°48.4	53°25.5
23	115°21.3	14.0'	10°39.8	-14.2'	56.5'	104°20.4	52°04.3	53°37.9	51°18.5		6°33.8	8°17.5	53°55.3
16 th	SD = 15.6' Mer. pass. 15:04					Sun SD = 15.8'							

DUT1 = UT1-UTC = +0.1062 sec $\Delta T = TT-UT1 = +69.0778$ sec

2026 August 17 to Aug. 19 UT

h	Moon (17 th Aug)					Lunar Distance (objects with largest hourly LD delta)								
Mon	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Rigel Kent.	-Antares	-Hadar	\pm Spica	+Venus	+Sun	
0	129°54.3	14.0'	S10°54.0	-14.1'	56.4'		103°53.3	53°16.8	51°32.1	50°59.4	6°03.7	8°46.6	54°25.2	
1	144°27.3	14.0'	11°08.2	-14.1'	56.4'		103°26.2	52°55.8	50°59.9	50°40.5	5°34.0	9°15.8	54°54.9	
2	159°00.3	14.0'	11°22.2	-14.0'	56.4'		102°59.1	52°35.0	50°27.7	50°21.8	5°04.8	9°45.0	55°24.7	
3	173°33.3	14.0'	11°36.2	-13.9'	56.3'		102°32.1	52°14.3	49°55.6	50°03.3	4°36.4	10°14.2	55°54.4	
4	188°06.2	14.0'	11°50.1	-13.9'	56.3'		102°05.0	51°53.8	49°23.6	49°45.0	4°08.8	10°43.4	56°24.1	
5	202°39.2	13.9'	12°04.0	-13.8'	56.3'		101°38.0	51°33.5	48°51.6	49°26.8		11°12.7	56°53.7	
6	217°12.1	13.9'	S12°17.8	-13.7'	56.2'		101°11.0	51°13.3	48°19.6	49°08.9		11°41.9	57°23.3	
7	231°45.1	13.9'	12°31.5	-13.7'	56.2'		100°44.0	50°53.3	47°47.6	48°51.2		12°11.1	57°52.8	
8	246°18.0	13.9'	12°45.2	-13.6'	56.2'		100°17.0	50°33.4	47°15.7	48°33.6		12°40.3	58°22.3	
9	260°50.9	13.9'	12°58.8	-13.5'	56.1'		99°50.0	50°13.8	46°43.9	48°16.3		13°09.5	58°51.8	
10	275°23.7	13.9'	13°12.3	-13.4'	56.1'		99°23.0	49°54.3	46°12.0	47°59.2		13°38.7	59°21.3	
11	289°56.6	13.8'	13°25.7	-13.4'	56.1'		98°56.1	49°35.0	45°40.2	47°42.3		14°07.8	59°50.7	
12	304°29.4	13.8'	S13°39.1	-13.3'	56.0'		98°29.2	49°15.9	45°08.5	47°25.6		14°37.0	60°20.0	
13	319°02.2	13.8'	13°52.4	-13.2'	56.0'		98°02.3	48°56.9	44°36.8	47°09.1		15°06.1	60°49.3	
14	333°35.0	13.8'	14°05.6	-13.1'	56.0'		97°35.4	48°38.2	44°05.1	46°52.8		15°35.2	61°18.6	
15	348°07.8	13.7'	14°18.7	-13.1'	55.9'		97°08.6	48°19.6	43°33.5	46°36.8		16°04.2	61°47.9	
16	2°40.5	13.7'	14°31.8	-13.0'	55.9'		96°41.7	48°01.2	43°01.8	46°21.0		16°33.3	62°17.1	
17	17°13.2	13.7'	14°44.7	-12.9'	55.9'		96°14.9	47°43.1	42°30.3	46°05.4		17°02.3	62°46.3	
18	31°45.9	13.7'	S14°57.7	-12.8'	55.9'		95°48.1	47°25.1	41°58.7	45°50.0		17°31.3	63°15.4	
19	46°18.6	13.6'	15°10.5	-12.7'	55.8'		95°21.4	47°07.3	41°27.3	45°34.9	4°58.7	18°00.3	63°44.5	
20	60°51.3	13.6'	15°23.2	-12.7'	55.8'		94°54.6	46°49.7	40°55.8		5°27.1	18°29.2	64°13.6	
21	75°23.9	13.6'	15°35.9	-12.6'	55.8'	119°59.4	94°27.9	46°32.4	40°24.4		5°56.0	18°58.2	64°42.6	
22	89°56.5	13.6'	15°48.5	-12.5'	55.7'	119°31.0	94°01.2	46°15.2	39°53.0		6°25.2	19°27.0	65°11.6	
23	104°29.0	13.5'	16°01.0	-12.4'	55.7'	119°02.5	93°34.5	45°58.3	39°21.6		6°54.7	19°55.9	65°40.6	
17 th	SD = 15.4' Mer. pass. 15:49							Sun SD = 15.8'						

h	Moon (18 th Aug)					Lunar Distance (objects with largest hourly LD delta)						
Tue	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Rigel Kent.	-Antares	+Spica	+Venus	+Sun
0	119°01.6	13.5'	S16°13.4	-12.3'	55.7'	118°34.0	93°07.9	45°41.5	38°50.3	7°24.5	20°24.7	66°09.5
1	133°34.1	13.5'	16°25.7	-12.3'	55.6'	118°05.6	92°41.3	45°25.0	38°19.0	7°54.4	20°53.6	66°38.4
2	148°06.5	13.4'	16°38.0	-12.2'	55.6'	117°37.1	92°14.7	45°08.7	37°47.8	8°24.4	21°22.3	67°07.2
3	162°39.0	13.4'	16°50.2	-12.1'	55.6'	117°08.7	91°48.1	44°52.6	37°16.6	8°54.6	21°51.1	67°36.1
4	177°11.4	13.4'	17°02.2	-12.0'	55.6'	116°40.2	91°21.5	44°36.8	36°45.4	9°24.8	22°19.8	68°04.9
5	191°43.7	13.3'	17°14.2	-11.9'	55.5'	116°11.8	90°55.0	44°21.2	36°14.2	9°55.1	22°48.5	68°33.6
6	206°16.1	13.3'	S17°26.1	-11.8'	55.5'	115°43.3	90°28.5	44°05.8	35°43.1	10°25.5	23°17.2	69°02.3
7	220°48.4	13.3'	17°38.0	-11.7'	55.5'	115°14.9	90°02.1	43°50.7	35°12.0	10°55.9	23°45.8	69°31.0
8	235°20.7	13.2'	17°49.7	-11.6'	55.5'	114°46.5	89°35.6		34°41.0	11°26.3	24°14.4	69°59.7
9	249°52.9	13.2'	18°01.3	-11.6'	55.4'	114°18.1	89°09.2		34°10.0	11°56.7	24°43.0	70°28.3
10	264°25.1	13.2'	18°12.9	-11.5'	55.4'	113°49.7	88°42.8		33°39.0	12°27.2	25°11.6	70°56.9
11	278°57.3	13.1'	18°24.3	-11.4'	55.4'	113°21.3	88°16.5		33°08.0	12°57.7	25°40.1	71°25.5
12	293°29.4	13.1'	S18°35.7	-11.3'	55.3'	112°52.9	87°50.1		32°37.1	13°28.1	26°08.6	71°54.0
13	308°01.5	13.1'	18°47.0	-11.2'	55.3'	112°24.6	87°23.8		32°06.2	13°58.6	26°37.1	72°22.5
14	322°33.6	13.0'	18°58.2	-11.1'	55.3'	111°56.2	86°57.6		31°35.3	14°29.1	27°05.5	72°51.0
15	337°05.6	13.0'	19°09.3	-11.0'	55.3'	111°27.8	86°31.3		31°04.5	14°59.6	27°34.0	73°19.4
16	351°37.6	12.9'	19°20.3	-10.9'	55.2'	110°59.5	86°05.1		30°33.7	15°30.0	28°02.4	73°47.9
17	6°09.5	12.9'	19°31.2	-10.8'	55.2'	110°31.2	85°38.9		30°02.9	16°00.5	28°30.7	74°16.2
18	20°41.4	12.9'	S19°42.0	-10.7'	55.2'	110°02.9	85°12.8		29°32.2	16°30.9	28°59.1	74°44.6
19	35°13.3	12.8'	19°52.7	-10.6'	55.2'	109°34.5	84°46.7		29°01.5	17°01.4	29°27.4	75°12.9
20	49°45.1	12.8'	20°03.3	-10.5'	55.1'	109°06.3	84°20.6		28°30.8	17°31.8	29°55.7	75°41.2
21	64°16.9	12.7'	20°13.8	-10.4'	55.1'	108°38.0	83°54.5		28°00.1	18°02.2	30°23.9	76°09.5
22	78°48.6	12.7'	20°24.2	-10.3'	55.1'	108°09.7	83°28.5		27°29.5	18°32.6	30°52.2	76°37.7
23	93°20.3	12.7'	20°34.5	-10.2'	55.1'	107°41.4	83°02.5		26°58.9	19°03.0	31°20.4	77°05.9
18 th	SD = 15.2' Mer. pass. 16:35					Sun SD = 15.8'						

h	Moon (19 th Aug)					Lunar Distance (objects with largest hourly LD delta)						
Wed	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	+Spica	+Venus	+Arcturus	+Sun
0	107°51.9	12.6'	S20°44.7	-10.1'	55.1'	107°13.2	82°36.6	26°28.3	19°33.4	31°48.6		77°34.1
1	122°23.6	12.6'	20°54.9	-10.0'	55.0'	106°45.0	82°10.6	25°57.7	20°03.7	32°16.8		78°02.3
2	136°55.1	12.5'	21°04.9	-9.9'	55.0'	106°16.7	81°44.7	25°27.2	20°34.1	32°44.9		78°30.4
3	151°26.7	12.5'	21°14.8	-9.8'	55.0'	105°48.5	81°18.9	24°56.7	21°04.4	33°13.0		78°58.5
4	165°58.1	12.4'	21°24.6	-9.7'	55.0'	105°20.3	80°53.1	24°26.3	21°34.7	33°41.1		79°26.6
5	180°29.6	12.4'	21°34.3	-9.6'	54.9'	104°52.1	80°27.3	23°55.8	22°05.0	34°09.2	41°20.3	79°54.7
6	195°01.0	12.4'	S21°43.9	-9.5'	54.9'	104°24.0	80°01.5	23°25.4	22°35.3	34°37.2	41°35.5	80°22.7
7	209°32.3	12.3'	21°53.4	-9.4'	54.9'	103°55.8	79°35.8	22°55.0	23°05.5	35°05.3	41°51.0	80°50.7
8	224°03.6	12.3'	22°02.8	-9.3'	54.9'	103°27.7	79°10.1	22°24.6	23°35.7	35°33.3	42°06.6	81°18.7
9	238°34.9	12.2'	22°12.1	-9.2'	54.9'	102°59.5	78°44.4	21°54.3	24°06.0	36°01.3	42°22.5	81°46.7
10	253°06.1	12.2'	22°21.3	-9.1'	54.8'	102°31.4	78°18.8	21°24.0	24°36.2	36°29.2	42°38.5	82°14.6
11	267°37.3	12.1'	22°30.4	-9.0'	54.8'	102°03.3	77°53.2	20°53.7	25°06.3	36°57.1	42°54.8	82°42.5
12	282°08.4	12.1'	S22°39.3	-8.9'	54.8'	101°35.2	77°27.7	20°23.4	25°36.5	37°25.1	43°11.2	83°10.4
13	296°39.5	12.0'	22°48.2	-8.8'	54.8'	101°07.1	77°02.2	19°53.2	26°06.6	37°53.0	43°27.8	83°38.3
14	311°10.6	12.0'	22°56.9	-8.6'	54.8'	100°39.1	76°36.7	19°22.9	26°36.8	38°20.8	43°44.6	84°06.1
15	325°41.6	12.0'	23°05.6	-8.5'	54.7'	100°11.0	76°11.3	18°52.7	27°06.9	38°48.7	44°01.6	84°34.0
16	340°12.5	11.9'	23°14.1	-8.4'	54.7'	99°43.0	75°45.9	18°22.5	27°37.0	39°16.5	44°18.8	85°01.8
17	354°43.4	11.9'	23°22.5	-8.3'	54.7'	99°14.9	75°20.5	17°52.4	28°07.0	39°44.4	44°36.1	85°29.5
18	9°14.3	11.8'	S23°30.8	-8.2'	54.7'	98°46.9	74°55.2	17°22.2	28°37.1	40°12.1	44°53.6	85°57.3
19	23°45.1	11.8'	23°39.0	-8.1'	54.7'	98°18.9	74°29.9	16°52.1	29°07.1	40°39.9	45°11.3	86°25.0
20	38°15.9	11.7'	23°47.1	-8.0'	54.6'	97°50.9	74°04.6	16°22.0	29°37.1	41°07.7	45°29.1	86°52.8
21	52°46.6	11.7'	23°55.1	-7.9'	54.6'	97°23.0	73°39.4	15°52.0	30°07.2	41°35.4	45°47.1	87°20.5
22	67°17.3	11.6'	24°02.9	-7.7'	54.6'	96°55.0	73°14.2	15°21.9	30°37.1	42°03.2	46°05.2	87°48.1
23	81°48.0	11.6'	24°10.7	-7.6'	54.6'	96°27.1	72°49.1	14°51.9	31°07.1	42°30.9	46°23.5	88°15.8
19 th	SD = 15.0' Mer. pass. 17:22					Sun SD = 15.8'						

DUT1 = UT1-UTC = +0.1065 sec $\Delta T = TT-UT1 = +69.0775$ sec

2026 August 20 to Aug. 22 UT

h	Moon (20 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Deneb	-Fomalhaut	-Altair	-Antares	+Spica	+Venus	+Arcturus	+Sun
0	96°18.6	11.6'	S24°18.3	-7.5'	54.6'		95°59.1	72°24.0	14°21.9	31°37.1	42°58.6	46°41.9	88°43.5
1	110°49.1	11.5'	24°25.8	-7.4'	54.6'		95°31.2	71°59.0	13°51.9	32°07.0	43°26.2	47°00.5	89°11.1
2	125°19.6	11.5'	24°33.2	-7.3'	54.5'		95°03.3	71°33.9	13°21.9	32°36.9	43°53.9	47°19.2	89°38.7
3	139°50.1	11.4'	24°40.5	-7.2'	54.5'		94°35.4	71°09.0	12°51.9	33°06.8	44°21.5	47°38.0	90°06.3
4	154°20.5	11.4'	24°47.7	-7.0'	54.5'		94°07.5	70°44.0	12°22.0	33°36.7	44°49.2	47°57.0	90°33.8
5	168°50.9	11.3'	24°54.7	-6.9'	54.5'		93°39.6	70°19.2	11°52.1	34°06.6	45°16.8	48°16.1	91°01.4
6	183°21.2	11.3'	S25°01.6	-6.8'	54.5'		93°11.8	69°54.3	11°22.2	34°36.5	45°44.4	48°35.4	91°28.9
7	197°51.5	11.3'	25°08.4	-6.7'	54.5'	97°48.4	92°44.0	69°29.5	10°52.3	35°06.3	46°11.9	48°54.7	91°56.5
8	212°21.8	11.2'	25°15.1	-6.6'	54.5'	97°33.4	92°16.1	69°04.8	10°22.5	35°36.2	46°39.5	49°14.2	92°24.0
9	226°52.0	11.2'	25°21.7	-6.4'	54.4'	97°18.3	91°48.3	68°40.0	9°52.6	36°06.0	47°07.1	49°33.8	92°51.5
10	241°22.2	11.1'	25°28.1	-6.3'	54.4'	97°03.3	91°20.5	68°15.4	9°22.8	36°35.8	47°34.6	49°53.5	93°19.0
11	255°52.3	11.1'	25°34.5	-6.2'	54.4'	96°48.2	90°52.7	67°50.7	8°53.0	37°05.6	48°02.1	50°13.3	93°46.4
12	270°22.4	11.0'	S25°40.7	-6.1'	54.4'	96°33.1	90°24.9	67°26.2	8°23.3	37°35.4	48°29.6	50°33.3	94°13.9
13	284°52.4	11.0'	25°46.8	-6.0'	54.4'	96°18.0	89°57.2	67°01.6	7°53.5	38°05.2	48°57.1	50°53.3	94°41.3
14	299°22.4	11.0'	25°52.7	-5.8'	54.4'	96°02.9	89°29.4	66°37.1	7°23.8	38°34.9	49°24.6	51°13.5	95°08.7
15	313°52.4	10.9'	25°58.6	-5.7'	54.4'	95°47.7	89°01.7	66°12.7	6°54.1	39°04.7	49°52.1	51°33.7	95°36.1
16	328°22.3	10.9'	26°04.3	-5.6'	54.4'	95°32.6	88°33.9	65°48.3	6°24.5	39°34.4	50°19.6	51°54.1	96°03.5
17	342°52.2	10.8'	26°09.9	-5.5'	54.3'	95°17.4	88°06.2	65°24.0	5°54.8	40°04.1	50°47.0	52°14.5	96°30.9
18	357°22.0	10.8'	S26°15.3	-5.3'	54.3'	95°02.2	87°38.5	64°59.7	5°25.2	40°33.9	51°14.5	52°35.1	96°58.3
19	11°51.8	10.8'	26°20.7	-5.2'	54.3'	94°47.0	87°10.8	64°35.4	4°55.7	41°03.6	51°41.9	52°55.7	97°25.7
20	26°21.6	10.7'	26°25.9	-5.1'	54.3'	94°31.8	86°43.1	64°11.2	4°26.2	41°33.3	52°09.3	53°16.4	97°53.0
21	40°51.3	10.7'	26°31.0	-5.0'	54.3'	94°16.6	86°15.5	63°47.1	3°56.8	42°02.9	52°36.7	53°37.3	98°20.3
22	55°21.0	10.7'	26°35.9	-4.8'	54.3'	94°01.4	85°47.8	63°23.0	3°27.5	42°32.6	53°04.1	53°58.2	98°47.7
23	69°50.7	10.6'	26°40.8	-4.7'	54.3'	93°46.2	85°20.2	62°59.0	2°58.4	43°02.3	53°31.5	54°19.2	99°15.0
20 th	SD = 14.9' Mer. pass. 18:11					Sun SD = 15.8'							

h	Moon (21 st Aug)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	\pm Antares	+Spica	+Venus	+Arcturus	+Sun
0	84°20.3	10.6'	S26°45.5	-4.6'	54.3'		84°52.5	62°35.0	2°29.4	43°31.9	53°58.9	54°40.3	99°42.3
1	98°49.9	10.6'	26°50.1	-4.5'	54.3'		84°24.9	62°11.0	2°00.9	44°01.6	54°26.3	55°01.5	100°09.6
2	113°19.5	10.5'	26°54.5	-4.3'	54.2'		83°57.3	61°47.2	1°33.1	44°31.2	54°53.7	55°22.7	100°36.9
3	127°49.0	10.5'	26°58.8	-4.2'	54.2'		83°29.7	61°23.3		45°00.9	55°21.0	55°44.0	101°04.2
4	142°18.5	10.5'	27°03.0	-4.1'	54.2'		83°02.1	60°59.6		45°30.5	55°48.4	56°05.5	101°31.5
5	156°48.0	10.4'	27°07.1	-3.9'	54.2'		82°34.6	60°35.9		46°00.1	56°15.8	56°26.9	101°58.7
6	171°17.4	10.4'	S27°11.0	-3.8'	54.2'		82°07.0	60°12.2		46°29.7	56°43.1	56°48.5	102°26.0
7	185°46.8	10.4'	27°14.8	-3.7'	54.2'		81°39.4	59°48.6		46°59.3	57°10.4	57°10.1	102°53.2
8	200°16.2	10.3'	27°18.5	-3.5'	54.2'		81°11.9	59°25.1		47°28.9	57°37.8	57°31.9	103°20.5
9	214°45.5	10.3'	27°22.0	-3.4'	54.2'		80°44.4	59°01.6		47°58.5	58°05.1	57°53.6	103°47.7
10	229°14.8	10.3'	27°25.5	-3.3'	54.2'		80°16.9	58°38.2	2°36.5	48°28.1	58°32.4	58°15.5	104°14.9
11	243°44.1	10.3'	27°28.7	-3.2'	54.2'		79°49.3	58°14.9	3°05.4	48°57.7	58°59.7	58°37.4	104°42.2
12	258°13.4	10.2'	S27°31.9	-3.0'	54.2'		79°21.9	57°51.6	3°34.4	49°27.3	59°27.0	58°59.4	105°09.4
13	272°42.6	10.2'	27°34.9	-2.9'	54.2'	119°35.1	78°54.4	57°28.4	4°03.7	49°56.8	59°54.4	59°21.4	105°36.6
14	287°11.8	10.2'	27°37.8	-2.8'	54.2'	119°05.6	78°26.9	57°05.3	4°32.9	50°26.4	60°21.7	59°43.5	106°03.8
15	301°41.0	10.2'	27°40.5	-2.6'	54.2'	118°36.2	77°59.4	56°42.2	5°02.3	50°56.0	60°49.0	60°05.7	106°31.0
16	316°10.2	10.1'	27°43.2	-2.5'	54.2'	118°06.7	77°32.0	56°19.2	5°31.7	51°25.5	61°16.3	60°27.9	106°58.2
17	330°39.3	10.1'	27°45.7	-2.4'	54.2'	117°37.2	77°04.6	55°56.2	6°01.1	51°55.1	61°43.6	60°50.2	107°25.4
18	345°08.4	10.1'	S27°48.0	-2.2'	54.1'	117°07.8	76°37.1	55°33.4	6°30.6	52°24.7	62°10.8	61°12.6	107°52.6
19	359°37.5	10.1'	27°50.2	-2.1'	54.1'	116°38.3	76°09.7	55°10.6	7°00.0	52°54.2	62°38.1	61°35.0	108°19.8
20	14°06.6	10.1'	27°52.3	-2.0'	54.1'	116°08.8	75°42.3	54°47.9	7°29.5	53°23.8	63°05.4	61°57.5	108°47.0
21	28°35.7	10.0'	27°54.3	-1.8'	54.1'	115°39.3	75°14.9	54°25.2	7°59.0	53°53.3	63°32.7	62°20.0	109°14.2
22	43°04.7	10.0'	27°56.1	-1.7'	54.1'	115°09.9	74°47.5	54°02.6	8°28.5	54°22.9	64°00.0	62°42.5	109°41.4
23	57°33.8	10.0'	27°57.8	-1.5'	54.1'	114°40.4	74°20.2	53°40.2	8°58.0	54°52.4	64°27.3	63°05.2	110°08.6
21 st	SD = 14.8' Mer. pass. 19:02					Sun SD = 15.8'							

Moon (22 nd Aug)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	+Antares	+Spica	+Venus	+Sun
0	72°02.8	10.0'	S27°59.3	-1.4'	54.1'	114°10.9	87°24.8	73°52.8	53°17.7	9°27.5	55°22.0	64°54.6	110°35.7
1	86°31.8	10.0'	28°00.7	-1.3'	54.1'	113°41.5	87°09.6	73°25.5	52°55.4	9°57.0	55°51.5	65°21.9	111°02.9
2	101°00.8	10.0'	28°02.0	-1.1'	54.1'	113°12.0	86°54.4	72°58.1	52°33.2	10°26.5	56°21.1	65°49.2	111°30.1
3	115°29.7	10.0'	28°03.1	-1.0'	54.1'	112°42.5	86°39.3	72°30.8	52°11.0	10°56.1	56°50.6	66°16.5	111°57.3
4	129°58.7	10.0'	28°04.2	-0.9'	54.1'	112°13.0	86°24.1	72°03.5	51°49.0	11°25.6	57°20.1	66°43.7	112°24.5
5	144°27.7	9.9'	28°05.0	-0.7'	54.1'	111°43.5	86°08.9	71°36.2	51°27.0	11°55.1	57°49.7	67°11.0	112°51.7
6	158°56.6	9.9'	S28°05.8	-0.6'	54.1'	111°14.1	85°53.8	71°08.9	51°05.1	12°24.7	58°19.2	67°38.3	113°18.8
7	173°25.5	9.9'	28°06.4	-0.5'	54.1'	110°44.6	85°38.6	70°41.6	50°43.3	12°54.2	58°48.8	68°05.6	113°46.0
8	187°54.5	9.9'	28°06.8	-0.3'	54.1'	110°15.1	85°23.5	70°14.4	50°21.6	13°23.8	59°18.3	68°32.9	114°13.2
9	202°23.4	9.9'	28°07.2	-0.2'	54.1'	109°45.6	85°08.4	69°47.1	50°00.0	13°53.3	59°47.9	69°00.2	114°40.4
10	216°52.3	9.9'	28°07.3	-0.1'	54.1'	109°16.1	84°53.3	69°19.9	49°38.5	14°22.9	60°17.5	69°27.5	115°07.6
11	231°21.2	9.9'	28°07.4	0.1'	54.1'	108°46.6	84°38.2	68°52.6	49°17.1	14°52.4	60°47.0	69°54.9	115°34.8
12	245°50.1	9.9'	S28°07.3	0.2'	54.1'	108°17.1	84°23.1	68°25.4	48°55.8	15°22.0	61°16.6	70°22.2	116°02.0
13	260°19.1	9.9'	28°07.1	0.4'	54.1'	107°47.6	84°08.1	67°58.2	48°34.6	15°51.6	61°46.1	70°49.5	116°29.2
14	274°48.0	9.9'	28°06.7	0.5'	54.1'	107°18.1	83°53.1	67°31.0	48°13.5	16°21.2	62°15.7	71°16.8	116°56.4
15	289°16.9	9.9'	28°06.3	0.6'	54.1'	106°48.6	83°38.1	67°03.9	47°52.5	16°50.7	62°45.3	71°44.1	117°23.6
16	303°45.8	9.9'	28°05.6	0.8'	54.1'	106°19.1		66°36.7	47°31.6	17°20.3	63°14.9	72°11.5	117°50.8
17	318°14.7	9.9'	28°04.9	0.9'	54.1'	105°49.5		66°09.5	47°10.9	17°49.9	63°44.4	72°38.8	118°18.0
18	332°43.6	9.9'	S28°04.0	1.0'	54.1'	105°20.0		65°42.4	46°50.2	18°19.5	64°14.0	73°06.1	118°45.2
19	347°12.5	9.9'	28°02.9	1.2'	54.1'	104°50.5		65°15.3	46°29.7	18°49.1	64°43.6	73°33.5	119°12.4
20	1°41.5	9.9'	28°01.8	1.3'	54.1'	104°20.9		64°48.2	46°09.3	19°18.7	65°13.2	74°00.9	119°39.7
21	16°10.4	9.9'	28°00.5	1.4'	54.1'	103°51.4		64°21.1	45°49.0	19°48.3	65°42.8	74°28.2	
22	30°39.3	9.9'	27°59.0	1.6'	54.1'	103°21.8		63°54.0	45°28.9	20°18.0	66°12.4	74°55.6	
23	45°08.3	10.0'	27°57.5	1.7'	54.1'	102°52.2		63°26.9	45°08.9	20°47.6	66°42.0	75°23.0	
22 nd	SD = 14.8' Mer. pass. 19:53					Sun SD = 15.8'							

DUT1 = UT1-UTC = +0.1069 sec $\Delta T = TT-UT1 = +69.0771$ sec

2026 August 23 to Aug. 25 UT

Moon (23 rd Aug)						Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	+Antares	+Hadar	+Spica	+Arcturus	+Venus
0	59°37.2	10.0'	S27°55.7	1.8'	54.2'	102°22.7	62°59.9	44°49.0	21°17.2	51°25.7	67°11.7	72°45.8	75°50.3
1	74°06.2	10.0'	27°53.9	2.0'	54.2'	101°53.1	62°32.9	44°29.3	21°46.9	51°43.5	67°41.3	73°09.5	76°17.7
2	88°35.2	10.0'	27°51.9	2.1'	54.2'	101°23.5	62°05.8	44°09.7	22°16.5	52°01.4	68°10.9	73°33.3	76°45.1
3	103°04.2	10.0'	27°49.8	2.3'	54.2'	100°53.9	61°38.8	43°50.3	22°46.2	52°19.4	68°40.6	73°57.1	77°12.6
4	117°33.2	10.0'	27°47.5	2.4'	54.2'	100°24.3	61°11.9	43°31.0	23°15.9	52°37.5	69°10.2	74°20.9	77°40.0
5	132°02.2	10.0'	27°45.1	2.5'	54.2'	99°54.7	60°44.9	43°11.8	23°45.5	52°55.8	69°39.9	74°44.8	78°07.4
6	146°31.2	10.1'	S27°42.6	2.7'	54.2'	99°25.1	60°17.9	42°52.8	24°15.2	53°14.2	70°09.6	75°08.7	78°34.8
7	161°00.3	10.1'	27°40.0	2.8'	54.2'	98°55.4	59°51.0	42°34.0	24°44.9	53°32.7	70°39.3	75°32.6	79°02.3
8	175°29.3	10.1'	27°37.2	2.9'	54.2'	98°25.8	59°24.1	42°15.3	25°14.6	53°51.3	71°08.9	75°56.6	79°29.7
9	189°58.4	10.1'	27°34.2	3.1'	54.2'	97°56.1	58°57.2	41°56.8	25°44.3	54°10.1	71°38.6	76°20.5	79°57.2
10	204°27.5	10.1'	27°31.2	3.2'	54.2'	97°26.5	58°30.3	41°38.5	26°14.1	54°28.9	72°08.3	76°44.6	80°24.7
11	218°56.7	10.2'	27°28.0	3.3'	54.2'	96°56.8	58°03.5	41°20.3	26°43.8	54°47.9	72°38.1	77°08.6	80°52.2
12	233°25.8	10.2'	S27°24.7	3.5'	54.2'	96°27.1	57°36.7	41°02.3	27°13.5	55°07.0	73°07.8	77°32.7	81°19.7
13	247°55.0	10.2'	27°21.2	3.6'	54.2'	95°57.4	57°09.8	40°44.5	27°43.3	55°26.2	73°37.5	77°56.8	81°47.2
14	262°24.2	10.2'	27°17.6	3.7'	54.2'	95°27.7	56°43.1	40°26.9	28°13.0	55°45.5	74°07.3	78°20.9	82°14.7
15	276°53.4	10.2'	27°13.9	3.9'	54.2'	94°58.0	56°16.3	40°09.5	28°42.8	56°05.0	74°37.0	78°45.1	82°42.2
16	291°22.7	10.3'	27°10.0	4.0'	54.3'	94°28.3	55°49.5	39°52.3	29°12.6	56°24.5	75°06.8	79°09.3	83°09.8
17	305°51.9	10.3'	27°06.0	4.1'	54.3'	93°58.5	55°22.8	39°35.3	29°42.4	56°44.1	75°36.6	79°33.5	83°37.3
18	320°21.2	10.3'	S27°01.9	4.3'	54.3'	93°28.8	54°56.1	39°18.4	30°12.2	57°03.9	76°06.4	79°57.7	84°04.9
19	334°50.6	10.4'	26°57.7	4.4'	54.3'	92°59.0	54°29.5	39°01.8	30°42.0	57°23.7	76°36.2	80°22.0	84°32.5
20	349°19.9	10.4'	26°53.3	4.5'	54.3'	92°29.3	54°02.8	38°45.4	31°11.9	57°43.7	77°06.0	80°46.2	85°00.1
21	3°49.3	10.4'	26°48.8	4.6'	54.3'	91°59.5	53°36.2	38°29.3	31°41.7	58°03.7	77°35.8	81°10.5	85°27.7
22	18°18.7	10.4'	26°44.1	4.8'	54.3'	91°29.7	53°09.6	38°13.3	32°11.6	58°23.9	78°05.7	81°34.9	85°55.3
23	32°48.2	10.5'	26°39.4	4.9'	54.3'	90°59.9	52°43.1	37°57.6	32°41.5	58°44.1	78°35.5	81°59.2	86°23.0
23 rd	SD = 14.8'					Mer. pass. 20:44							

Moon (24 th Aug)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Hadar	+Spica	+Arcturus	+Venus
0	47°17.6	10.5'	S26°34.5	5.0'	54.3'	90°30.0	52°16.5	33°11.4	54°45.3	59°04.4	79°05.4	82°23.6	86°50.6
1	61°47.2	10.5'	26°29.4	5.2'	54.3'	90°00.2	51°50.0	33°41.3	55°05.4	59°24.9	79°35.3	82°48.0	87°18.3
2	76°16.7	10.6'	26°24.3	5.3'	54.3'	89°30.3	51°23.6	34°11.2	55°25.6	59°45.4	80°05.2	83°12.5	87°46.0
3	90°46.3	10.6'	26°19.0	5.4'	54.4'	89°00.5	50°57.1	34°41.1	55°45.9	60°06.0	80°35.1	83°36.9	88°13.7
4	105°15.9	10.7'	26°13.6	5.5'	54.4'	88°30.6	50°30.7	35°11.0	56°06.3	60°26.7	81°05.0	84°01.4	88°41.4
5	119°45.6	10.7'	26°08.0	5.7'	54.4'	88°00.7	50°04.4	35°41.0	56°26.8	60°47.4	81°35.0	84°25.9	89°09.1
6	134°15.2	10.7'	S26°02.4	5.8'	54.4'	87°30.8	49°38.1	36°11.0	56°47.4	61°08.3	82°04.9	84°50.4	89°36.9
7	148°45.0	10.8'	25°56.6	5.9'	54.4'	87°00.8	49°11.8	36°41.0	57°08.1	61°29.3	82°34.9	85°14.9	90°04.6
8	163°14.7	10.8'	25°50.7	6.0'	54.4'	86°30.9	48°45.5	37°11.0	57°28.9	61°50.3	83°04.9	85°39.4	90°32.4
9	177°44.5	10.8'	25°44.6	6.2'	54.4'	86°00.9	48°19.3	37°41.0	57°49.8	62°11.4	83°34.9	86°04.0	91°00.2
10	192°14.4	10.9'	25°38.4	6.3'	54.4'	85°31.0	47°53.1	38°11.0	58°10.8	62°32.6	84°04.9	86°28.6	91°28.0
11	206°44.2	10.9'	25°32.1	6.4'	54.4'	85°01.0	47°27.0	38°41.1	58°31.9	62°53.9	84°34.9	86°53.2	91°55.8
12	221°14.2	11.0'	S25°25.7	6.5'	54.5'	84°31.0	47°01.0	39°11.1	58°53.1	63°15.2	85°05.0	87°17.8	92°23.7
13	235°44.1	11.0'	25°19.2	6.7'	54.5'	84°00.9	46°34.9	39°41.2	59°14.4	63°36.7	85°35.1	87°42.5	92°51.6
14	250°14.1	11.0'	25°12.5	6.8'	54.5'	83°30.9	46°08.9	40°11.3	59°35.8	63°58.2	86°05.1	88°07.1	93°19.4
15	264°44.2	11.1'	25°05.8	6.9'	54.5'	83°00.9	45°43.0	40°41.5	59°57.2	64°19.8	86°35.2	88°31.8	93°47.3
16	279°14.2	11.1'	24°58.9	7.0'	54.5'	82°30.8	45°17.1	41°11.6	60°18.8	64°41.4	87°05.3	88°56.5	94°15.3
17	293°44.4	11.2'	24°51.8	7.1'	54.5'	82°00.7	44°51.3	41°41.7	60°40.4	65°03.1	87°35.5	89°21.2	94°43.2
18	308°14.5	11.2'	S24°44.7	7.3'	54.5'	81°30.6	44°25.6	42°11.9	61°02.1	65°24.9	88°05.6	89°45.9	95°11.1
19	322°44.7	11.3'	24°37.4	7.4'	54.6'	81°00.5	43°59.8	42°42.1	61°23.9	65°46.8	88°35.8	90°10.7	95°39.1
20	337°15.0	11.3'	24°30.0	7.5'	54.6'	80°30.3	43°34.2	43°12.3	61°45.8	66°08.8	89°06.0	90°35.4	96°07.1
21	351°45.3	11.3'	24°22.5	7.6'	54.6'	80°00.2	43°08.6	43°42.5	62°07.7	66°30.8	89°36.2	91°00.2	96°35.1
22	6°15.7	11.4'	24°14.9	7.7'	54.6'	79°30.0	42°43.1	44°12.8	62°29.8	66°52.8	90°06.4	91°24.9	97°03.1
23	20°46.0	11.4'	24°07.2	7.9'	54.6'	78°59.8	42°17.7	44°43.0	62°51.9	67°15.0	90°36.7	91°49.7	97°31.2
24 th	SD = 14.8'		Mer. pass. 21:34										

h	Moon (25 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Rigil Kent.	+Hadar	+Spica	+Arcturus	+Venus
0	35°16.5	11.5'	S23°59.3	8.0'	54.6'	78°29.6	41°52.3	45°13.3	63°14.1	67°37.2	91°06.9	92°14.5	97°59.3
1	49°47.0	11.5'	23°51.4	8.1'	54.6'	77°59.4	41°27.0	45°43.6	63°36.4	67°59.5	91°37.2	92°39.4	98°27.3
2	64°17.5	11.6'	23°43.3	8.2'	54.7'	77°29.1	41°01.8	46°13.9	63°58.7	68°21.8	92°07.5	93°04.2	98°55.5
3	78°48.1	11.6'	23°35.1	8.3'	54.7'	76°58.9	40°36.6	46°44.3	64°21.1	68°44.2	92°37.8	93°29.0	99°23.6
4	93°18.7	11.7'	23°26.8	8.4'	54.7'	76°28.6	40°11.5	47°14.6	64°43.6	69°06.7	93°08.1	93°53.9	99°51.7
5	107°49.4	11.7'	23°18.4	8.5'	54.7'	75°58.3	39°46.6	47°45.0	65°06.2	69°29.2	93°38.5	94°18.7	100°19.9
6	122°20.1	11.8'	S23°09.8	8.6'	54.7'	75°28.0	39°21.7	48°15.4	65°28.8	69°51.8	94°08.9	94°43.6	100°48.1
7	136°50.8	11.8'	23°01.2	8.8'	54.7'	74°57.6	38°56.9	48°45.8	65°51.5	70°14.4	94°39.3	95°08.5	101°16.3
8	151°21.6	11.9'	22°52.4	8.9'	54.7'	74°27.3	38°32.2	49°16.2	66°14.3	70°37.1	95°09.7	95°33.4	101°44.5
9	165°52.5	11.9'	22°43.6	9.0'	54.8'	73°56.9	38°07.6	49°46.7	66°37.2	70°59.9	95°40.1	95°58.2	102°12.8
10	180°23.4	12.0'	22°34.6	9.1'	54.8'	73°26.5	37°43.1	50°17.2	67°00.1	71°22.7	96°10.6	96°23.1	102°41.1
11	194°54.3	12.0'	22°25.5	9.2'	54.8'	72°56.1	37°18.7	50°47.6	67°23.0	71°45.5	96°41.0	96°48.1	103°09.4
12	209°25.3	12.0'	S22°16.3	9.3'	54.8'	72°25.6	36°54.4	51°18.2	67°46.1	72°08.5	97°11.5	97°13.0	103°37.7
13	223°56.4	12.1'	22°07.0	9.4'	54.8'	71°55.2	36°30.3	51°48.7	68°09.2	72°31.4	97°42.0	97°37.9	104°06.0
14	238°27.5	12.1'	21°57.6	9.5'	54.8'	71°24.7	36°06.2	52°19.3	68°32.3	72°54.5	98°12.6	98°02.8	104°34.4
15	252°58.6	12.2'	21°48.1	9.6'	54.9'	70°54.2	35°42.3	52°49.8	68°55.5	73°17.5	98°43.1	98°27.7	105°02.8
16	267°29.8	12.2'	21°38.5	9.7'	54.9'	70°23.7	35°18.6	53°20.4	69°18.8	73°40.7	99°13.7	98°52.7	105°31.2
17	282°01.1	12.3'	21°28.8	9.8'	54.9'	69°53.2	34°54.9	53°51.1	69°42.2	74°03.8	99°44.3	99°17.6	105°59.6
18	296°32.3	12.3'	S21°18.9	9.9'	54.9'	69°22.6	34°31.4	54°21.7	70°05.6	74°27.1	100°14.9	99°42.5	106°28.0
19	311°03.7	12.4'	21°09.0	10.0'	54.9'	68°52.0	34°08.1	54°52.4	70°29.0	74°50.3	100°45.6	100°07.5	106°56.5
20	325°35.1	12.4'	20°59.0	10.1'	54.9'	68°21.4	33°44.9	55°23.1	70°52.5	75°13.7	101°16.2	100°32.4	107°25.0
21	340°06.5	12.5'	20°48.9	10.2'	55.0'	67°50.8	33°21.9	55°53.8	71°16.1	75°37.0	101°46.9	100°57.4	107°53.5
22	354°38.0	12.5'	20°38.6	10.3'	55.0'	67°20.2	32°59.0	56°24.5	71°39.7	76°00.5	102°17.6	101°22.3	108°22.1
23	9°09.5	12.6'	20°28.3	10.4'	55.0'	66°49.5	32°36.3	56°55.2	72°03.4	76°23.9	102°48.4	101°47.2	108°50.7
25 th	SD = 14.9'		Mer. pass. 22:22										

DUT1 = UT1-UTC = +0.1073 sec $\Delta T = TT-UT1 = +69.0767$ sec

2026 August 26 to Aug. 28 UT

h	Moon (26 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Rigel	-Aldebaran	-Saturn	-Fomalhaut	+Antares	+Arcturus	+Spica	+Venus
0	23°41.1	12.6'	S20°17.9	10.5'	55.0'			66°18.9	32°13.8	57°26.0	102°12.2	103°19.1	109°19.2
1	38°12.7	12.7'	20°07.3	10.6'	55.0'			65°48.2	31°51.5	57°56.8	102°37.1	103°49.9	109°47.9
2	52°44.3	12.7'	19°56.7	10.7'	55.1'			65°17.4	31°29.4	58°27.6	103°02.0	104°20.7	110°16.5
3	67°16.1	12.8'	19°46.0	10.8'	55.1'			64°46.7	31°07.5	58°58.5	103°27.0	104°51.5	110°45.2
4	81°47.8	12.8'	19°35.2	10.9'	55.1'			64°15.9	30°45.8	59°29.4	103°51.9	105°22.4	111°13.8
5	96°19.6	12.9'	19°24.3	11.0'	55.1'	119°56.6	119°37.1	63°45.2	30°24.3	60°00.2	104°16.8	105°53.2	111°42.5
6	110°51.5	12.9'	S19°13.3	11.1'	55.1'	119°33.9	119°06.9	63°14.4	30°03.0	60°31.2	104°41.7	106°24.1	112°11.3
7	125°23.4	12.9'	19°02.2	11.2'	55.2'	119°11.1	118°36.6	62°43.5	29°42.0	61°02.1	105°06.6	106°55.0	112°40.0
8	139°55.3	13.0'	18°51.0	11.3'	55.2'	118°48.3	118°06.4	62°12.7	29°21.3	61°33.0	105°31.5	107°26.0	113°08.8
9	154°27.3	13.0'	18°39.7	11.4'	55.2'	118°25.3	117°36.1	61°41.8	29°00.8	62°04.0	105°56.4	107°56.9	113°37.6
10	168°59.3	13.1'	18°28.4	11.5'	55.2'	118°02.3	117°05.7	61°10.9	28°40.6	62°35.0	106°21.3	108°27.9	114°06.5
11	183°31.4	13.1'	18°16.9	11.5'	55.2'	117°39.2	116°35.4	60°40.0	28°20.6	63°06.1	106°46.2	108°58.9	114°35.3
12	198°03.5	13.2'	S18°05.3	11.6'	55.2'	117°16.0	116°05.0	60°09.1	28°01.0	63°37.1	107°11.0	109°29.9	115°04.2
13	212°35.7	13.2'	17°53.7	11.7'	55.3'	116°52.7	115°34.6	59°38.1	27°41.6	64°08.2	107°35.9	110°01.0	115°33.1
14	227°07.9	13.3'	17°42.0	11.8'	55.3'	116°29.3	115°04.1	59°07.2	27°22.6	64°39.3	108°00.7	110°32.1	116°02.0
15	241°40.2	13.3'	17°30.2	11.9'	55.3'	116°05.9	114°33.7	58°36.2	27°03.9	65°10.4	108°25.5	111°03.2	116°31.0
16	256°12.4	13.3'	17°18.3	12.0'	55.3'	115°42.4	114°03.2	58°05.2	26°45.6	65°41.6	108°50.3	111°34.3	117°00.0
17	270°44.8	13.4'	17°06.3	12.1'	55.3'	115°18.8	113°32.6	57°34.1	26°27.6	66°12.7	109°15.1	112°05.4	117°29.0
18	285°17.2	13.4'	S16°54.3	12.1'	55.4'	114°55.1	113°02.1	57°03.1	26°09.9	66°43.9	109°39.9	112°36.6	117°58.0
19	299°49.6	13.5'	16°42.1	12.2'	55.4'	114°31.3	112°31.5	56°32.0	25°52.7	67°15.1	110°04.6	113°07.8	118°27.1
20	314°22.0	13.5'	16°29.9	12.3'	55.4'	114°07.5	112°00.9	56°00.9	25°35.8	67°46.4	110°29.3	113°39.0	118°56.1
21	328°54.5	13.5'	16°17.6	12.4'	55.4'	113°43.6	111°30.2	55°29.8	25°19.4	68°17.7	110°54.1	114°10.3	119°25.2
22	343°27.1	13.6'	16°05.2	12.5'	55.5'	113°19.7	110°59.6	54°58.7	25°03.4	68°48.9	111°18.7	114°41.5	119°54.4
23	357°59.6	13.6'	15°52.7	12.5'	55.5'	112°55.6	110°28.9	54°27.5	24°47.8	69°20.3	111°43.4	115°12.8	
26 th	SD = 15.0' Mer. pass. 23:08												

Moon (27 th Aug)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Betelgeuse	-Capella	-Aldebaran	-Saturn	+Antares	+Rigel Kent.	+Hadar	+Spica
0	12°32.3	13.7'	S15°40.2	12.6'	55.5'		119°49.8	109°58.1	53°56.3	69°51.6	82°10.7	86°23.2	115°44.1
1	27°04.9	13.7'	15°27.6	12.7'	55.5'		119°20.5	109°27.4	53°25.1	70°23.0	82°35.5	86°47.6	116°15.5
2	41°37.6	13.7'	15°14.9	12.8'	55.5'		118°51.2	108°56.6	52°53.9	70°54.4	83°00.7	87°12.0	116°46.8
3	56°10.3	13.8'	15°02.1	12.8'	55.6'		118°21.7	108°25.8	52°22.7	71°25.8	83°25.3	87°36.4	117°18.2
4	70°43.1	13.8'	14°49.3	12.9'	55.6'		117°52.3	107°54.9	51°51.4	71°57.2	83°50.2	88°00.9	117°49.6
5	85°15.9	13.8'	14°36.4	13.0'	55.6'		117°22.8	107°24.1	51°20.1	72°28.7	84°15.1	88°25.4	118°21.1
6	99°48.7	13.9'	S14°23.4	13.1'	55.6'		116°53.2	106°53.2	50°48.8	73°00.2	84°40.1	88°49.9	118°52.5
7	114°21.6	13.9'	14°10.3	13.1'	55.6'		116°23.7	106°22.3	50°17.5	73°31.7	85°05.1	89°14.4	119°24.0
8	128°54.5	13.9'	13°57.2	13.2'	55.7'		115°54.0	105°51.3	49°46.2	74°03.2	85°30.1	89°39.0	119°55.5
9	143°27.4	14.0'	13°44.0	13.3'	55.7'		115°24.4	105°20.3	49°14.8	74°34.8	85°55.2	90°03.5	
10	158°00.4	14.0'	13°30.7	13.3'	55.7'		114°54.7	104°49.3	48°43.4	75°06.4	86°20.3	90°28.1	
11	172°33.4	14.0'	13°17.4	13.4'	55.7'		114°25.0	104°18.3	48°12.0	75°38.0	86°45.4	90°52.7	
12	187°06.4	14.1'	S13°04.0	13.5'	55.7'		113°55.2	103°47.2	47°40.6	76°09.6	87°10.5	91°17.3	
13	201°39.5	14.1'	12°50.5	13.5'	55.8'		113°25.4	103°16.2	47°09.2	76°41.3	87°35.7	91°42.0	
14	216°12.6	14.1'	12°37.0	13.6'	55.8'		112°55.5	102°45.0	46°37.7	77°13.0	88°00.9	92°06.6	
15	230°45.7	14.1'	12°23.4	13.7'	55.8'	119°52.1	112°25.6	102°13.9	46°06.2	77°44.7	88°26.1	92°31.3	
16	245°18.8	14.2'	12°09.7	13.7'	55.8'	119°23.1	111°55.7	101°42.7	45°34.8	78°16.4	88°51.3	92°56.0	
17	259°52.0	14.2'	11°56.0	13.8'	55.9'	118°54.0	111°25.7	101°11.5	45°03.2	78°48.2	89°16.6	93°20.7	
18	274°25.2	14.2'	S11°42.2	13.8'	55.9'	118°24.9	110°55.7	100°40.3	44°31.7	79°20.0	89°41.8	93°45.4	
19	288°58.4	14.3'	11°28.3	13.9'	55.9'	117°55.8	110°25.7	100°09.1	44°00.2	79°51.8	90°07.1	94°10.1	
20	303°31.7	14.3'	11°14.4	14.0'	55.9'	117°26.5	109°55.6	99°37.8	43°28.6	80°23.6	90°32.4	94°34.9	
21	318°05.0	14.3'	11°00.5	14.0'	55.9'	116°57.3	109°25.5	99°06.5	42°57.0	80°55.5	90°57.8	94°59.6	
22	332°38.3	14.3'	10°46.4	14.1'	56.0'	116°28.0	108°55.4	98°35.2	42°25.4	81°27.4	91°23.1	95°24.4	
23	347°11.6	14.3'	10°32.4	14.1'	56.0'	115°58.6	108°25.2	98°03.8	41°53.8	81°59.3	91°48.5	95°49.1	
27 th	SD = 15.1' Mer. pass. 23:53												

h	Moon (28 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Mars	-Capella	-Aldebaran	-Saturn	+Altair	+Antares	+Rigil Kent.	+Hadar
0	1°44.9	14.4'	S10°18.2	14.2'	56.0'		107°55.0	97°32.5	41°22.2	41°04.2	82°31.2	92°13.9	96°13.9
1	16°18.3	14.4'	10°04.0	14.2'	56.0'		107°24.8	97°01.1	40°50.6	41°23.5	83°03.2	92°39.3	96°38.7
2	30°51.7	14.4'	09°49.8	14.3'	56.0'		106°54.5	96°29.6	40°18.9	41°43.1	83°35.2	93°04.7	97°03.5
3	45°25.1	14.4'	09°35.5	14.3'	56.1'		106°24.2	95°58.2	39°47.2	42°02.9	84°07.2	93°30.1	97°28.2
4	59°58.5	14.4'	09°21.2	14.4'	56.1'		105°53.8	95°26.7	39°15.5	42°22.9	84°39.2	93°55.6	97°53.0
5	74°31.9	14.5'	09°06.8	14.4'	56.1'		105°23.5	94°55.2	38°43.8	42°43.1	85°11.3	94°21.0	98°17.8
6	89°05.4	14.5'	S08°52.3	14.5'	56.1'		104°53.1	94°23.7	38°12.1	43°03.6	85°43.4	94°46.5	98°42.6
7	103°38.9	14.5'	08°37.8	14.5'	56.2'		104°22.6	93°52.1	37°40.4	43°24.2	86°15.5	95°12.0	99°07.4
8	118°12.4	14.5'	08°23.3	14.6'	56.2'		103°52.2	93°20.5	37°08.7	43°45.0	86°47.6	95°37.5	99°32.2
9	132°45.9	14.5'	08°08.7	14.6'	56.2'		103°21.7	92°48.9	36°36.9	44°06.1	87°19.8	96°03.0	99°57.0
10	147°19.4	14.5'	07°54.1	14.7'	56.2'		102°51.1	92°17.3	36°05.2	44°27.3	87°52.0	96°28.5	100°21.8
11	161°52.9	14.5'	07°39.4	14.7'	56.2'		102°20.6	91°45.6	35°33.4	44°48.8	88°24.2	96°54.0	100°46.6
12	176°26.4	14.5'	S07°24.7	14.8'	56.3'		101°50.0	91°13.9	35°01.6	45°10.4	88°56.4	97°19.5	101°11.4
13	191°00.0	14.6'	07°09.9	14.8'	56.3'		101°19.4	90°42.2	34°29.8	45°32.2	89°28.7	97°45.0	101°36.1
14	205°33.5	14.6'	06°55.1	14.8'	56.3'		100°48.7	90°10.5	33°58.0	45°54.1	90°00.9	98°10.5	102°00.9
15	220°07.1	14.6'	06°40.2	14.9'	56.3'		100°18.0	89°38.8	33°26.2	46°16.3	90°33.2	98°36.1	102°25.7
16	234°40.7	14.6'	06°25.4	14.9'	56.4'		99°47.3	89°07.0	32°54.4	46°38.6	91°05.6	99°01.6	102°50.4
17	249°14.2	14.6'	06°10.4	15.0'	56.4'	119°35.5	99°16.6	88°35.2	32°22.6	47°01.1	91°37.9	99°27.1	103°15.2
18	263°47.8	14.6'	S05°55.5	15.0'	56.4'	119°04.8	98°45.8	88°03.4	31°50.8	47°23.7	92°10.3	99°52.7	103°39.9
19	278°21.4	14.6'	05°40.5	15.0'	56.4'	118°34.1	98°15.0	87°31.5	31°19.0	47°46.5	92°42.7	100°18.2	104°04.6
20	292°55.0	14.6'	05°25.5	15.1'	56.4'	118°03.3	97°44.2	86°59.6	30°47.2	48°09.5	93°15.2	100°43.7	104°29.3
21	307°28.6	14.6'	05°10.4	15.1'	56.5'	117°32.5	97°13.4	86°27.7	30°15.4	48°32.6	93°47.6	101°09.2	104°54.0
22	322°02.2	14.6'	04°55.3	15.1'	56.5'	117°01.7	96°42.5	85°55.8	29°43.5	48°55.8	94°20.1	101°34.8	105°18.7
23	336°35.8	14.6'	04°40.2	15.2'	56.5'	116°30.9	96°11.6	85°23.9	29°11.7	49°19.2	94°52.6	102°00.3	105°43.3
28 th	SD = 15.3' Mer. pass. --:--												

Moon (29 th Aug)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Pollux	-Capella	-Aldebaran	-Saturn	+Altair	+Antares	+Rigel Kent.	+Hadar
0	351°09.4	14.6'	S04°25.0	15.2'	56.5'		95°40.7	84°51.9	28°39.9	49°42.8	95°25.1	102°25.8	106°08.0
1	5°43.0	14.6'	04°09.8	15.2'	56.5'		95°09.7	84°19.9	28°08.1	50°06.5	95°57.7	102°51.3	106°32.6
2	20°16.5	14.6'	03°54.6	15.2'	56.6'		94°38.8	83°47.9	27°36.3	50°30.3	96°30.3	103°16.8	106°57.2
3	34°50.1	14.6'	03°39.3	15.3'	56.6'		94°07.8	83°15.9	27°04.5	50°54.3	97°02.9	103°42.3	107°21.8
4	49°23.7	14.6'	03°24.1	15.3'	56.6'		93°36.7	82°43.8	26°32.8	51°18.4	97°35.5	104°07.8	107°46.3
5	63°57.3	14.6'	03°08.8	15.3'	56.6'		93°05.7	82°11.8	26°01.0	51°42.6	98°08.1	104°33.2	108°10.8
6	78°30.8	14.6'	S02°53.5	15.3'	56.7'		92°34.6	81°39.7	25°29.2	52°07.0	98°40.8	104°58.7	108°35.3
7	93°04.4	14.5'	02°38.1	15.4'	56.7'		92°03.5	81°07.5	24°57.5	52°31.4	99°13.5	105°24.1	108°59.8
8	107°38.0	14.5'	02°22.7	15.4'	56.7'		91°32.4	80°35.4	24°25.8	52°56.1	99°46.2	105°49.5	109°24.3
9	122°11.5	14.5'	02°07.3	15.4'	56.7'		91°01.2	80°03.2	23°54.1	53°20.8	100°18.9	106°14.9	109°48.7
10	136°45.0	14.5'	01°51.9	15.4'	56.7'		90°30.1	79°31.1	23°22.5	53°45.6	100°51.7	106°40.3	110°13.0
11	151°18.5	14.5'	01°36.5	15.4'	56.8'		89°58.9	78°58.8	22°50.9	54°10.6	101°24.5	107°05.7	110°37.4
12	165°52.0	14.5'	S01°21.1	15.5'	56.8'		89°27.7	78°26.6	22°19.3	54°35.6	101°57.3	107°31.0	111°01.7
13	180°25.5	14.5'	01°05.6	15.5'	56.8'		88°56.4	77°54.4	21°47.8	55°00.8	102°30.2	107°56.3	111°26.0
14	194°59.0	14.5'	00°50.1	15.5'	56.8'	119°58.9	88°25.2	77°22.1	21°16.3	55°26.1	103°03.0	108°21.6	111°50.2
15	209°32.5	14.4'	00°34.6	15.5'	56.8'	119°26.1	87°53.9	76°49.8	20°44.9	55°51.5	103°35.9	108°46.9	112°14.4
16	224°05.9	14.4'	00°19.1	15.5'	56.9'	118°53.3	87°22.6	76°17.5	20°13.5	56°17.0	104°08.8	109°12.2	112°38.5
17	238°39.3	14.4'	S00°03.6	15.5'	56.9'	118°20.5	86°51.3	75°45.2	19°42.2	56°42.6	104°41.7	109°37.4	113°02.6
18	253°12.7	14.4'	N00°11.9	15.5'	56.9'	117°47.6	86°19.9	75°12.8	19°10.9	57°08.3	105°14.7	110°02.6	113°26.7
19	267°46.1	14.4'	00°27.5	15.5'	56.9'	117°14.7	85°48.6	74°40.5	18°39.8	57°34.1	105°47.7	110°27.7	113°50.7
20	282°19.5	14.3'	00°43.0	15.6'	57.0'	116°41.8	85°17.2	74°08.1	18°08.7	58°00.0	106°20.7	110°52.9	114°14.7
21	296°52.8	14.3'	00°58.6	15.6'	57.0'	116°08.8	84°45.8	73°35.7	17°37.7	58°25.9	106°53.7	111°18.0	114°38.6
22	311°26.1	14.3'	01°14.1	15.6'	57.0'	115°35.9	84°14.4	73°03.3	17°06.9	58°52.0	107°26.7	111°43.0	115°02.4
23	325°59.4	14.3'	01°29.7	15.6'	57.0'	115°02.9	83°42.9	72°30.8	16°36.1	59°18.2	107°59.8	112°08.0	115°26.3
29 th	SD = 15.4' Mer. pass. 00:36												

h	Moon (30 th Aug)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Pollux	-Mars	-Capella	-Aldebaran	+Fomalhaut	+Altair	+Antares	+Rigel Kent.
0	340°32.6	14.2'	N01°45.3	15.6'	57.0'	114°29.9	103°32.0	83°11.5	71°58.4	33°34.2	59°44.4	108°32.9	112°33.0
1	355°05.9	14.2'	02°00.9	15.6'	57.1'	113°56.8	103°00.6	82°40.0	71°25.9	33°59.2	60°10.8	109°06.0	112°58.0
2	9°39.1	14.2'	02°16.4	15.6'	57.1'	113°23.8	102°29.1	82°08.5	70°53.4	34°24.3	60°37.2	109°39.1	113°22.9
3	24°12.2	14.1'	02°32.0	15.6'	57.1'	112°50.7	101°57.6	81°37.0	70°20.9	34°49.7	61°03.7	110°12.3	113°47.7
4	38°45.4	14.1'	02°47.6	15.6'	57.1'	112°17.6	101°26.0	81°05.5	69°48.3	35°15.3	61°30.3	110°45.4	114°12.5
5	53°18.5	14.1'	03°03.2	15.6'	57.1'	111°44.5	100°54.5	80°34.0	69°15.8	35°41.1	61°57.0	111°18.6	114°37.3
6	67°51.5	14.0'	N03°18.7	15.6'	57.2'	111°11.3	100°22.9	80°02.4	68°43.2	36°07.0	62°23.7	111°51.9	115°02.0
7	82°24.6	14.0'	03°34.3	15.6'	57.2'	110°38.1	99°51.3	79°30.9	68°10.6	36°33.2	62°50.5	112°25.1	115°26.7
8	96°57.6	14.0'	03°49.9	15.6'	57.2'	110°04.9	99°19.7	78°59.3	67°38.0	36°59.5	63°17.4	112°58.4	115°51.3
9	111°30.5	13.9'	04°05.4	15.5'	57.2'	109°31.7	98°48.1	78°27.7	67°05.4	37°26.0	63°44.4	113°31.7	116°15.9
10	126°03.5	13.9'	04°21.0	15.5'	57.2'	108°58.5	98°16.4	77°56.1	66°32.8	37°52.7	64°11.5	114°05.0	116°40.4
11	140°36.3	13.8'	04°36.5	15.5'	57.3'	108°25.2	97°44.7	77°24.4	66°00.2	38°19.6	64°38.6	114°38.3	117°04.8
12	155°09.2	13.8'	N04°52.0	15.5'	57.3'	107°51.9	97°13.0	76°52.8	65°27.5	38°46.6	65°05.7	115°11.6	117°29.2
13	169°42.0	13.8'	05°07.5	15.5'	57.3'	107°18.6	96°41.3	76°21.1	64°54.8	39°13.7	65°33.0	115°45.0	117°53.5
14	184°14.8	13.7'	05°23.0	15.5'	57.3'	106°45.3	96°09.5	75°49.5	64°22.1	39°41.0	66°00.3	116°18.4	118°17.7
15	198°47.5	13.7'	05°38.5	15.5'	57.3'	106°12.0	95°37.7	75°17.8	63°49.4	40°08.5	66°27.7	116°51.8	118°41.9
16	213°20.1	13.6'	05°54.0	15.5'	57.4'	105°38.6	95°05.9	74°46.1	63°16.7	40°36.1	66°55.1	117°25.3	119°06.0
17	227°52.8	13.6'	06°09.5	15.4'	57.4'	105°05.2	94°34.1	74°14.4	62°44.0	41°03.8	67°22.7	117°58.7	119°30.1
18	242°25.3	13.5'	N06°24.9	15.4'	57.4'	104°31.8	94°02.3	73°42.7	62°11.2	41°31.7	67°50.2	118°32.2	119°54.1
19	256°57.9	13.5'	06°40.3	15.4'	57.4'	103°58.4	93°30.4	73°11.0	61°38.5	41°59.7	68°17.9	119°05.7	
20	271°30.3	13.4'	06°55.7	15.4'	57.4'	103°24.9	92°58.6	72°39.3	61°05.7	42°27.8	68°45.5	119°39.2	
21	286°02.8	13.4'	07°11.1	15.4'	57.5'	102°51.4	92°26.7	72°07.5	60°32.9	42°56.1	69°13.3		
22	300°35.1	13.3'	07°26.5	15.3'	57.5'	102°17.9	91°54.7	71°35.8	60°00.1	43°24.4	69°41.1		
23	315°07.5	13.3'	07°41.8	15.3'	57.5'	101°44.4	91°22.8	71°04.0	59°27.3	43°52.9	70°09.0		
30 th	SD = 15.6' Mer. pass. 01:20												

h	Moon (31 st Aug)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Jupiter	-Procyon	-Pollux	-Mars	-Aldebaran	+Saturn	+Fomalhaut	+Altair
0	329°39.7	13.2'	N07°57.1	15.3'	57.5'		104°41.3	101°10.9	90°50.8	58°54.5		44°21.5	70°36.9
1	344°11.9	13.2'	08°12.4	15.2'	57.5'		104°09.6	100°37.3	90°18.8	58°21.7		44°50.2	71°04.8
2	358°44.1	13.1'	08°27.6	15.2'	57.6'		103°37.9	100°03.8	89°46.8	57°48.8		45°19.0	71°32.8
3	13°16.2	13.0'	08°42.8	15.2'	57.6'	119°50.9	103°06.2	99°30.2	89°14.8	57°16.0		45°47.9	72°00.9
4	27°48.2	13.0'	08°58.0	15.2'	57.6'	119°17.8	102°34.4	98°56.5	88°42.8	56°43.1		46°16.9	72°29.0
5	42°20.2	12.9'	09°13.2	15.1'	57.6'	118°44.6	102°02.6	98°22.9	88°10.7	56°10.3		46°46.1	72°57.2
6	56°52.1	12.8'	N09°28.3	15.1'	57.6'	118°11.4	101°30.8	97°49.2	87°38.6	55°37.4		47°15.3	73°25.4
7	71°23.9	12.8'	09°43.4	15.0'	57.7'	117°38.2	100°58.9	97°15.6	87°06.5	55°04.5		47°44.6	73°53.7
8	85°55.7	12.7'	09°58.4	15.0'	57.7'	117°05.0	100°27.0	96°41.9	86°34.4	54°31.6		48°14.0	74°22.0
9	100°27.5	12.7'	10°13.4	15.0'	57.7'	116°31.7	99°55.1	96°08.1	86°02.2	53°58.7		48°43.4	74°50.3
10	114°59.1	12.6'	10°28.4	14.9'	57.7'	115°58.4	99°23.2	95°34.4	85°30.1	53°25.8		49°13.0	75°18.7
11	129°30.7	12.5'	10°43.3	14.9'	57.7'	115°25.1	98°51.2	95°00.6	84°57.9	52°52.9		49°42.7	75°47.1
12	144°02.2	12.4'	N10°58.2	14.8'	57.8'	114°51.8	98°19.3	94°26.9	84°25.7	52°20.0		50°12.4	76°15.6
13	158°33.7	12.4'	11°13.1	14.8'	57.8'	114°18.5	97°47.3	93°53.1	83°53.5	51°47.1		50°42.2	76°44.1
14	173°05.0	12.3'	11°27.9	14.8'	57.8'	113°45.1	97°15.2	93°19.3	83°21.2	51°14.2		51°12.1	77°12.7
15	187°36.3	12.2'	11°42.6	14.7'	57.8'	113°11.8	96°43.2	92°45.4	82°49.0	50°41.2		51°42.0	77°41.2
16	202°07.6	12.2'	11°57.3	14.7'	57.8'	112°38.4	96°11.1	92°11.6	82°16.7	50°08.3		52°12.1	78°09.9
17	216°38.7	12.1'	12°12.0	14.6'	57.8'	112°05.0	95°39.0	91°37.7	81°44.4	49°35.4	9°51.7	52°42.2	78°38.5
18	231°09.8	12.0'	N12°26.6	14.6'	57.9'	111°31.5	95°06.9	91°03.8	81°12.0	49°02.4	10°45.5	53°12.4	79°07.2
19	245°40.8	11.9'	12°41.1	14.5'	57.9'	110°58.1	94°34.8	90°29.9	80°39.7	48°29.5	11°13.4	53°42.6	79°36.0
20	260°11.8	11.9'	12°55.6	14.4'	57.9'	110°24.6	94°02.6	89°56.0	80°07.4	47°56.6	11°41.8	54°13.0	80°04.7
21	274°42.6	11.8'	13°10.0	14.4'	57.9'	109°51.1	93°30.5	89°22.0	79°35.0	47°23.6	12°10.8	54°43.3	80°33.5
22	289°13.4	11.7'	13°24.4	14.3'	57.9'	109°17.6	92°58.3	88°48.0	79°02.6	46°50.7	12°40.2	55°13.8	81°02.4
23	303°44.1	11.6'	13°38.8	14.3'	58.0'	108°44.1	92°26.1	88°14.1	78°30.2	46°17.8	13°10.0	55°44.3	81°31.2
31 st	SD = 15.7'		Mer. pass. 02:05										

DUT1 = UT1-UTC = +0.1081 sec $\Delta T = TT-UT1 = +69.0759$ sec

2026 September 01 to Sep. 03 UT

h	Moon (1 st Sep)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Jupiter	-Pollux	-Mars	-Aldebaran	+Saturn	+Fomalhaut	+Achernar	+Altair
0	318°14.7	11.5'	N13°53.0	14.2'	58.0'	108°10.6	87°40.1	77°57.7	45°44.9	13°40.1	56°14.9		82°00.1
1	332°45.2	11.4'	14°07.2	14.1'	58.0'	107°37.0	87°06.0	77°25.3	45°11.9	14°10.6	56°45.5		82°29.0
2	347°15.7	11.4'	14°21.4	14.1'	58.0'	107°03.4	86°32.0	76°52.8	44°39.0	14°41.3	57°16.2		82°58.0
3	1°46.0	11.3'	14°35.5	14.0'	58.0'	106°29.8	85°57.9	76°20.3	44°06.1	15°12.4	57°46.9		83°27.0
4	16°16.3	11.2'	14°49.5	13.9'	58.0'	105°56.2	85°23.9	75°47.8	43°33.2	15°43.6	58°17.8		83°56.0
5	30°46.5	11.1'	15°03.4	13.9'	58.1'	105°22.6	84°49.8	75°15.3	43°00.3	16°15.1	58°48.6		84°25.0
6	45°16.6	11.0'	N15°17.3	13.8'	58.1'	104°48.9	84°15.7	74°42.8	42°27.4	16°46.7	59°19.5		84°54.0
7	59°46.6	10.9'	15°31.1	13.7'	58.1'	104°15.3	83°41.5	74°10.2	41°54.5	17°18.6	59°50.5		85°23.1
8	74°16.5	10.8'	15°44.8	13.7'	58.1'	103°41.6	83°07.4	73°37.6	41°21.7	17°50.6	60°21.5		85°52.2
9	88°46.4	10.7'	15°58.5	13.6'	58.1'	103°07.9	82°33.2	73°05.0	40°48.8	18°22.7	60°52.6		86°21.3
10	103°16.1	10.7'	16°12.1	13.5'	58.1'	102°34.2	81°59.0	72°32.4	40°16.0	18°55.0	61°23.7		86°50.5
11	117°45.7	10.6'	16°25.6	13.4'	58.2'	102°00.4	81°24.8	71°59.8	39°43.2	19°27.5	61°54.9		87°19.6
12	132°15.3	10.5'	N16°39.0	13.3'	58.2'	101°26.7	80°50.6	71°27.1	39°10.4	20°00.0	62°26.1		87°48.8
13	146°44.8	10.4'	16°52.3	13.3'	58.2'	100°52.9	80°16.4	70°54.5	38°37.6	20°32.7	62°57.4		88°18.0
14	161°14.1	10.3'	17°05.6	13.2'	58.2'	100°19.1	79°42.1	70°21.8	38°04.8	21°05.5	63°28.7		88°47.2
15	175°43.4	10.2'	17°18.8	13.1'	58.2'	99°45.3	79°07.9	69°49.1	37°32.1	21°38.4	64°00.0		89°16.4
16	190°12.6	10.1'	17°31.9	13.0'	58.2'	99°11.5	78°33.6	69°16.4	36°59.4	22°11.3	64°31.4		89°45.7
17	204°41.7	10.0'	17°44.9	12.9'	58.3'	98°37.6	77°59.3	68°43.6	36°26.7	22°44.4	65°02.8		90°15.0
18	219°10.7	9.9'	N17°57.8	12.8'	58.3'	98°03.8	77°25.0	68°10.9	35°54.0	23°17.5	65°34.3	75°17.5	90°44.2
19	233°39.6	9.8'	18°10.7	12.7'	58.3'	97°29.9	76°50.6	67°38.1	35°21.4	23°50.8	66°05.8	75°32.6	91°13.5
20	248°08.3	9.7'	18°23.4	12.7'	58.3'	96°56.0	76°16.3	67°05.3	34°48.8	24°24.1	66°37.4	75°47.7	91°42.8
21	262°37.0	9.6'	18°36.1	12.6'	58.3'	96°22.1	75°41.9	66°32.5	34°16.3	24°57.4	67°09.0	76°03.0	92°12.1
22	277°05.6	9.5'	18°48.6	12.5'	58.3'	95°48.1	75°07.5	65°59.7	33°43.7	25°30.9	67°40.6	76°18.3	92°41.5
23	291°34.1	9.4'	19°01.1	12.4'	58.4'	95°14.2	74°33.1	65°26.9	33°11.3	26°04.4	68°12.3	76°33.7	93°10.8
1 st	SD = 15.8' Mer. pass. 02:53												

h	Moon (2 nd Sep)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Pollux	-Mars	+Saturn	+Fomalhaut	+Deneb	+Altair
0	306°02.5	9.3'	N19°13.4	12.3'	58.4'		94°40.2	73°58.7	64°54.0	26°37.9	68°44.0	72°41.1	93°40.1
1	320°30.8	9.2'	19°25.7	12.2'	58.4'		94°06.3	73°24.3	64°21.2	27°11.5	69°15.8	72°56.4	94°09.5
2	334°59.0	9.1'	19°37.9	12.1'	58.4'		93°32.3	72°49.8	63°48.3	27°45.2	69°47.5	73°11.8	94°38.9
3	349°27.0	9.0'	19°49.9	12.0'	58.4'		92°58.2	72°15.4	63°15.4	28°18.9	70°19.3	73°27.2	95°08.2
4	3°55.0	8.9'	20°01.9	11.8'	58.4'		92°24.2	71°40.9	62°42.5	28°52.7	70°51.2	73°42.7	95°37.6
5	18°22.9	8.8'	20°13.7	11.7'	58.5'		91°50.2	71°06.4	62°09.5	29°26.5	71°23.1	73°58.4	96°07.0
6	32°50.7	8.7'	N20°25.5	11.6'	58.5'		91°16.1	70°31.9	61°36.6	30°00.4	71°55.0	74°14.1	96°36.3
7	47°18.3	8.6'	20°37.1	11.5'	58.5'		90°42.0	69°57.4	61°03.6	30°34.3	72°26.9	74°29.9	97°05.7
8	61°45.9	8.5'	20°48.6	11.4'	58.5'		90°07.9	69°22.8	60°30.7	31°08.3	72°58.9	74°45.8	97°35.1
9	76°13.4	8.4'	21°00.0	11.3'	58.5'		89°33.8	68°48.3	59°57.7	31°42.3	73°30.9	75°01.7	98°04.5
10	90°40.7	8.2'	21°11.3	11.2'	58.5'		88°59.7	68°13.7	59°24.7	32°16.3	74°03.0	75°17.8	98°33.9
11	105°08.0	8.1'	21°22.5	11.1'	58.5'		88°25.6	67°39.1	58°51.6	32°50.4	74°35.0	75°33.9	99°03.2
12	119°35.1	8.0'	N21°33.6	10.9'	58.6'		87°51.4	67°04.5	58°18.6	33°24.5	75°07.1	75°50.1	99°32.6
13	134°02.1	7.9'	21°44.5	10.8'	58.6'		87°17.2	66°29.9	57°45.5	33°58.7	75°39.2	76°06.4	100°02.0
14	148°29.1	7.8'	21°55.3	10.7'	58.6'		86°43.0	65°55.2	57°12.5	34°32.9	76°11.4	76°22.7	100°31.4
15	162°55.9	7.7'	22°06.0	10.6'	58.6'		86°08.8	65°20.6	56°39.4	35°07.1	76°43.6	76°39.2	101°00.7
16	177°22.6	7.6'	22°16.6	10.4'	58.6'	101°39.8	85°34.6	64°45.9	56°06.3	35°41.4	77°15.8	76°55.7	101°30.1
17	191°49.2	7.5'	22°27.0	10.3'	58.6'	101°05.0	85°00.4	64°11.3	55°33.2	36°15.6	77°48.0	77°12.2	101°59.4
18	206°15.7	7.4'	N22°37.4	10.2'	58.7'	100°30.3	84°26.1	63°36.6	55°00.1	36°50.0	78°20.3	77°28.9	102°28.8
19	220°42.1	7.3'	22°47.5	10.1'	58.7'	99°55.5	83°51.9	63°01.9	54°26.9	37°24.3	78°52.5	77°45.6	102°58.1
20	235°08.4	7.2'	22°57.6	9.9'	58.7'	99°20.7	83°17.6	62°27.1	53°53.8	37°58.7	79°24.8	78°02.3	103°27.4
21	249°34.6	7.1'	23°07.5	9.8'	58.7'	98°45.9	82°43.3	61°52.4	53°20.6	38°33.1	79°57.2	78°19.2	103°56.7
22	264°00.7	7.0'	23°17.3	9.7'	58.7'	98°11.0	82°09.0	61°17.6	52°47.4	39°07.6	80°29.5	78°36.1	104°26.0
23	278°26.7	6.9'	23°27.0	9.5'	58.7'	97°36.2	81°34.6	60°42.9	52°14.2	39°42.0	81°01.9	78°53.0	104°55.3
2 nd	SD = 15.9' Mer. pass. 03:44												

h	Moon (3 rd Sep)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Pollux	-Mars	+Saturn	+Deneb	+Fomalhaut	+Altair
0	292°52.6	6.8'	N23°36.5	9.4'	58.7'	97°01.3	81°00.3	60°08.1	51°41.0	40°16.5	79°10.1	81°34.3	105°24.6
1	307°18.4	6.7'	23°45.9	9.2'	58.7'	96°26.4	80°25.9	59°33.3	51°07.7	40°51.1	79°27.1	82°06.7	105°53.9
2	321°44.0	6.6'	23°55.1	9.1'	58.8'	95°51.5	79°51.6	58°58.5	50°34.5	41°25.6	79°44.3	82°39.1	106°23.1
3	336°09.6	6.5'	24°04.2	8.9'	58.8'	95°16.6	79°17.2	58°23.7	50°01.2	42°00.2	80°01.5	83°11.6	106°52.3
4	350°35.1	6.4'	24°13.1	8.8'	58.8'	94°41.7	78°42.8	57°48.9	49°28.0	42°34.8	80°18.7	83°44.0	107°21.5
5	5°00.4	6.3'	24°22.0	8.7'	58.8'	94°06.8	78°08.4	57°14.0	48°54.7	43°09.4	80°36.0	84°16.5	107°50.7
6	19°25.7	6.2'	N24°30.6	8.5'	58.8'	93°31.8	77°33.9	56°39.2	48°21.4	43°44.1	80°53.4	84°49.0	108°19.8
7	33°50.9	6.1'	24°39.1	8.4'	58.8'	92°56.8	76°59.5	56°04.3	47°48.1	44°18.8	81°10.8	85°21.6	108°49.0
8	48°15.9	6.0'	24°47.5	8.2'	58.8'	92°21.9	76°25.0	55°29.4	47°14.8	44°53.5	81°28.2	85°54.1	109°18.1
9	62°40.9	5.9'	24°55.7	8.1'	58.9'	91°46.9	75°50.5	54°54.5	46°41.4	45°28.2	81°45.7	86°26.7	109°47.1
10	77°05.8	5.8'	25°03.7	7.9'	58.9'	91°11.8	75°16.1	54°19.6	46°08.1	46°02.9	82°03.3	86°59.3	110°16.2
11	91°30.5	5.7'	25°11.6	7.7'	58.9'	90°36.8	74°41.5	53°44.7	45°34.7	46°37.7	82°20.9	87°31.8	110°45.2
12	105°55.2	5.6'	N25°19.4	7.6'	58.9'	90°01.8	74°07.0	53°09.7	45°01.3	47°12.5	82°38.5	88°04.5	111°14.2
13	120°19.8	5.5'	25°27.0	7.4'	58.9'	89°26.7	73°32.5	52°34.8	44°27.9	47°47.3	82°56.2	88°37.1	111°43.1
14	134°44.3	5.4'	25°34.4	7.3'	58.9'	88°51.7	72°58.0	51°59.8	43°54.5	48°22.1	83°13.9	89°09.7	112°12.1
15	149°08.7	5.3'	25°41.6	7.1'	58.9'	88°16.6	72°23.4	51°24.9	43°21.1	48°57.0	83°31.6	89°42.4	112°41.0
16	163°33.0	5.2'	25°48.7	6.9'	58.9'	87°41.5	71°48.8	50°49.9	42°47.7	49°31.9	83°49.4	90°15.0	113°09.8
17	177°57.2	5.1'	25°55.7	6.8'	59.0'	87°06.4	71°14.2	50°14.9	42°14.3	50°06.8	84°07.3	90°47.7	113°38.6
18	192°21.3	5.0'	N26°02.5	6.6'	59.0'	86°31.2	70°39.6	49°39.9	41°40.8	50°41.7	84°25.1	91°20.4	114°07.4
19	206°45.4	4.9'	26°09.1	6.4'	59.0'	85°56.1	70°05.0	49°04.8	41°07.4	51°16.6	84°43.0	91°53.1	114°36.1
20	221°09.3	4.9'	26°15.5	6.3'	59.0'	85°21.0	69°30.4	48°29.8	40°33.9	51°51.6	85°00.9	92°25.8	115°04.8
21	235°33.2	4.8'	26°21.8	6.1'	59.0'	84°45.8	68°55.7	47°54.8	40°00.4	52°26.5	85°18.9	92°58.5	115°33.4
22	249°56.9	4.7'	26°27.9	5.9'	59.0'	84°10.6	68°21.1	47°19.7	39°26.9	53°01.5	85°36.9	93°31.3	116°02.0
23	264°20.6	4.6'	26°33.8	5.8'	59.0'	83°35.4	67°46.4	46°44.6	38°53.4	53°36.5	85°54.9	94°04.0	116°30.6
3 rd	SD = 16.0' Mer. pass. 04:39												

h	Moon (4 th Sep)					Lunar Distance (objects with largest hourly LD delta)								
Fri	GHA	<i>ν</i>	Dec	<i>d</i>	HP	-Regulus	-Jupiter	-Pollux	-Mars	+Aldebaran	+Saturn	+Fomalhaut	+Altair	
0	278°44.3	4.5'	N26°39.5	5.6'	59.0'	83°00.2	67°11.7	46°09.6	38°19.9		54°11.6	94°36.8	116°59.1	
1	293°07.8	4.5'	26°45.1	5.4'	59.0'	82°25.0	66°37.0	45°34.5	37°46.4		54°46.6	95°09.5	117°27.5	
2	307°31.3	4.4'	26°50.5	5.2'	59.1'	81°49.8	66°02.3	44°59.4	37°12.8		55°21.7	95°42.3	117°55.9	
3	321°54.6	4.3'	26°55.8	5.0'	59.1'	81°14.5	65°27.6	44°24.3	36°39.3		55°56.8	96°15.1	118°24.2	
4	336°18.0	4.2'	27°00.8	4.9'	59.1'	80°39.3	64°52.9	43°49.2	36°05.7		56°31.9	96°47.8	118°52.5	
5	350°41.2	4.2'	27°05.7	4.7'	59.1'	80°04.0	64°18.1	43°14.0	35°32.2		57°07.0	97°20.6	119°20.7	
6	5°04.4	4.1'	N27°10.4	4.5'	59.1'	79°28.7	63°43.4	42°38.9	34°58.6		57°42.1	97°53.4	119°48.8	
7	19°27.5	4.0'	27°14.9	4.3'	59.1'	78°53.4	63°08.6	42°03.8	34°25.0		58°17.3	98°26.2		
8	33°50.5	4.0'	27°19.2	4.1'	59.1'	78°18.1	62°33.8	41°28.6	33°51.4		58°52.4	98°59.0		
9	48°13.5	3.9'	27°23.3	4.0'	59.1'	77°42.8	61°59.0	40°53.4	33°17.8		59°27.6	99°31.8		
10	62°36.4	3.8'	27°27.3	3.8'	59.1'	77°07.5	61°24.2	40°18.3	32°44.2		60°02.8	100°04.6		
11	76°59.2	3.8'	27°31.1	3.6'	59.2'	76°32.1	60°49.4	39°43.1	32°10.6		60°38.0	100°37.4		
12	91°22.0	3.7'	N27°34.7	3.4'	59.2'	75°56.8	60°14.5	39°07.9	31°36.9		61°13.2	101°10.2		
13	105°44.8	3.7'	27°38.1	3.2'	59.2'	75°21.4	59°39.7	38°32.7	31°03.3		61°48.5	101°43.1		
14	120°07.4	3.6'	27°41.3	3.0'	59.2'	74°46.0	59°04.8	37°57.5	30°29.7		62°23.7	102°15.9		
15	134°30.1	3.6'	27°44.3	2.8'	59.2'	74°10.6	58°29.9	37°22.3	29°56.0		62°59.0	102°48.7		
16	148°52.7	3.5'	27°47.1	2.6'	59.2'	73°35.2	57°55.1	36°47.1	29°22.4		63°34.3	103°21.5		
17	163°15.2	3.5'	27°49.8	2.5'	59.2'	72°59.8	57°20.2	36°11.9	28°48.7		64°09.6	103°54.3		
18	177°37.7	3.4'	N27°52.2	2.3'	59.2'	72°24.4	56°45.3	35°36.6	28°15.1		64°44.9	104°27.1		
19	192°00.1	3.4'	27°54.5	2.1'	59.2'	71°49.0	56°10.3	35°01.4	27°41.4		65°20.3	104°59.9		
20	206°22.5	3.4'	27°56.6	1.9'	59.2'	71°13.5	55°35.4	34°26.2	27°07.7		65°55.6	105°32.7		
21	220°44.9	3.3'	27°58.4	1.7'	59.3'	70°38.1	55°00.5	33°50.9	26°34.1	14°02.9	66°31.0	106°05.5		
22	235°07.3	3.3'	28°00.1	1.5'	59.3'	70°02.6	54°25.5	33°15.7	26°00.4	14°26.4	67°06.3	106°38.3		
23	249°29.6	3.3'	28°01.6	1.3'	59.3'	69°27.1	53°50.5	32°40.4	25°26.7	14°50.6	67°41.7	107°11.1		
4 th	SD = 16.1' Mer. pass. 05:39													

Moon (5 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Pollux	-Mars	+Aldebaran	+Capella	+Saturn	+Fomalhaut
0	263°51.8	3.2'	N28°02.9	1.1'	59.3'	68°51.6	53°15.6	32°05.2	24°53.0	15°15.5		68°17.1	107°43.9
1	278°14.1	3.2'	28°04.0	0.9'	59.3'	68°16.1	52°40.6	31°29.9	24°19.4	15°41.1		68°52.5	108°16.7
2	292°36.3	3.2'	28°04.9	0.7'	59.3'	67°40.6	52°05.6	30°54.6	23°45.7	16°07.3		69°28.0	108°49.4
3	306°58.5	3.2'	28°05.6	0.5'	59.3'	67°05.1	51°30.6	30°19.4	23°12.0	16°34.1		70°03.4	109°22.2
4	321°20.7	3.2'	28°06.2	0.3'	59.3'	66°29.5	50°55.6	29°44.1	22°38.3	17°01.4		70°38.8	109°54.9
5	335°42.9	3.2'	28°06.5	0.1'	59.3'	65°54.0	50°20.5	29°08.8	22°04.7	17°29.2		71°14.3	110°27.7
6	350°05.0	3.1'	N28°06.6	-0.1'	59.3'	65°18.4	49°45.5	28°33.6	21°31.0	17°57.5		71°49.8	111°00.4
7	4°27.2	3.1'	28°06.5	-0.3'	59.3'	64°42.9	49°10.5	27°58.3	20°57.4	18°26.2		72°25.2	111°33.1
8	18°49.3	3.1'	28°06.3	-0.5'	59.3'	64°07.3	48°35.4	27°23.1	20°23.7	18°55.2		73°00.7	112°05.8
9	33°11.4	3.1'	28°05.8	-0.7'	59.3'	63°31.7	48°00.3	26°47.8	19°50.1	19°24.6		73°36.2	112°38.5
10	47°33.5	3.1'	28°05.1	-0.9'	59.4'	62°56.1	47°25.3	26°12.6	19°16.5	19°54.4		74°11.8	113°11.2
11	61°55.7	3.1'	28°04.3	-1.1'	59.4'	62°20.5	46°50.2	25°37.3	18°42.8	20°24.4		74°47.3	113°43.8
12	76°17.8	3.1'	N28°03.2	-1.3'	59.4'	61°44.9	46°15.1	25°02.1	18°09.3	20°54.8		75°22.8	114°16.4
13	90°39.9	3.1'	28°01.9	-1.5'	59.4'	61°09.3	45°40.0	24°26.9	17°35.7	21°25.4		75°58.4	114°49.1
14	105°02.0	3.1'	28°00.5	-1.6'	59.4'	60°33.6	45°04.9	23°51.6	17°02.1	21°56.2		76°33.9	115°21.7
15	119°24.2	3.2'	27°58.9	-1.8'	59.4'	59°58.0	44°29.8	23°16.4	16°28.6	22°27.3		77°09.5	115°54.2
16	133°46.3	3.2'	27°57.0	-2.0'	59.4'	59°22.4	43°54.6	22°41.2	15°55.1	22°58.6	20°09.9	77°45.1	116°26.8
17	148°08.5	3.2'	27°55.0	-2.2'	59.4'	58°46.7	43°19.5	22°06.1	15°21.6	23°30.1	20°26.2	78°20.7	116°59.3
18	162°30.7	3.2'	N27°52.7	-2.4'	59.4'	58°11.0	42°44.4	21°30.9	14°48.2	24°01.8	20°43.2	78°56.3	117°31.8
19	176°52.9	3.2'	27°50.3	-2.6'	59.4'	57°35.4	42°09.2	20°55.7	14°14.8	24°33.7	21°01.0	79°31.9	118°04.3
20	191°15.1	3.3'	27°47.7	-2.8'	59.4'	56°59.7	41°34.0	20°20.6	13°41.5	25°05.7	21°19.6	80°07.5	118°36.8
21	205°37.4	3.3'	27°44.9	-3.0'	59.4'	56°24.0	40°58.9	19°45.5	13°08.2	25°37.9	21°38.8	80°43.1	119°09.2
22	219°59.7	3.3'	27°41.8	-3.2'	59.4'	55°48.3	40°23.7	19°10.4	12°35.0	26°10.3	21°58.6	81°18.7	119°41.6
23	234°22.0	3.3'	27°38.6	-3.4'	59.4'	55°12.6	39°48.5	18°35.4	12°01.9	26°42.8	22°19.1	81°54.4	
5 th	SD = 16.2' Mer. pass. 06:41												

h	Moon (6 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Sun	-Regulus	-Jupiter	-Pollux	+Capella	+Betelgeuse	+Aldebaran	+Saturn
0	248°44.3	3.4'	N27°35.2	-3.6'	59.4'	67°50.8	54°36.9	39°13.3	18°00.4	22°40.2		27°15.4	82°30.0
1	263°06.7	3.4'	27°31.6	-3.8'	59.4'	67°17.5	54°01.2	38°38.1	17°25.4	23°01.9		27°48.1	83°05.7
2	277°29.1	3.5'	27°27.9	-4.0'	59.4'	66°44.2	53°25.4	38°02.9	16°50.5	23°24.1		28°21.0	83°41.3
3	291°51.6	3.5'	27°23.9	-4.2'	59.4'	66°10.9	52°49.7	37°27.7	16°15.6	23°46.9		28°53.9	84°17.0
4	306°14.1	3.5'	27°19.7	-4.4'	59.4'	65°37.6	52°14.0	36°52.5	15°40.8	24°10.1		29°27.0	84°52.7
5	320°36.6	3.6'	27°15.3	-4.5'	59.4'	65°04.3	51°38.2	36°17.3	15°06.1	24°33.8		30°00.2	85°28.4
6	334°59.2	3.6'	N27°10.8	-4.7'	59.5'	64°30.9	51°02.5	35°42.0	14°31.4	24°58.0		30°33.5	86°04.1
7	349°21.8	3.7'	27°06.1	-4.9'	59.5'	63°57.6	50°26.7	35°06.8	13°56.8	25°22.6		31°06.8	86°39.8
8	3°44.5	3.7'	27°01.1	-5.1'	59.5'	63°24.3	49°51.0	34°31.6	13°22.3	25°47.6	22°55.9	31°40.2	87°15.5
9	18°07.3	3.8'	26°56.0	-5.3'	59.5'	62°50.9	49°15.2	33°56.3	12°47.9	26°13.0	23°11.6	32°13.8	87°51.2
10	32°30.1	3.9'	26°50.7	-5.5'	59.5'	62°17.6	48°39.4	33°21.1	12°13.6	26°38.8	23°28.1	32°47.3	88°26.9
11	46°52.9	3.9'	26°45.3	-5.7'	59.5'	61°44.2	48°03.7	32°45.8	11°39.5	27°04.9	23°45.2	33°21.0	89°02.6
12	61°15.8	4.0'	N26°39.6	-5.8'	59.5'	61°10.9	47°27.9	32°10.6	11°05.5	27°31.4	24°02.9	33°54.7	89°38.3
13	75°38.8	4.0'	26°33.7	-6.0'	59.5'	60°37.5	46°52.1	31°35.3	10°31.8	27°58.2	24°21.3	34°28.5	90°14.1
14	90°01.9	4.1'	26°27.7	-6.2'	59.5'	60°04.2	46°16.3	31°00.0	9°58.2	28°25.3	24°40.3	35°02.4	90°49.8
15	104°25.0	4.2'	26°21.5	-6.4'	59.5'	59°30.8	45°40.5	30°24.8	9°24.9	28°52.6	24°59.8	35°36.3	91°25.5
16	118°48.1	4.2'	26°15.1	-6.6'	59.5'	58°57.4	45°04.7	29°49.5	8°52.0	29°20.3	25°19.9	36°10.3	92°01.3
17	133°11.4	4.3'	26°08.5	-6.7'	59.5'	58°24.1	44°28.9	29°14.2	8°19.4	29°48.2	25°40.6	36°44.3	92°37.0
18	147°34.7	4.4'	N26°01.8	-6.9'	59.5'	57°50.7	43°53.1	28°39.0	7°47.3	30°16.4	26°01.7	37°18.4	93°12.7
19	161°58.1	4.5'	25°54.9	-7.1'	59.5'	57°17.3	43°17.3	28°03.7	7°15.8	30°44.9	26°23.4	37°52.5	93°48.5
20	176°21.5	4.5'	25°47.8	-7.3'	59.5'	56°43.9	42°41.5	27°28.4	6°45.0	31°13.5	26°45.5	38°26.7	94°24.2
21	190°45.1	4.6'	25°40.5	-7.4'	59.5'	56°10.6	42°05.7	26°53.1	6°15.0	31°42.4	27°08.1	39°00.9	95°00.0
22	205°08.7	4.7'	25°33.1	-7.6'	59.5'	55°37.2	41°29.9	26°17.8		32°11.5	27°31.1	39°35.2	95°35.8
23	219°32.4	4.8'	25°25.5	-7.8'	59.5'	55°03.8	40°54.1	25°42.5		32°40.8	27°54.5	40°09.5	96°11.5
6 th	SD = 16.2' Mer. pass. 07:44					Sun SD = 15.9'							

h	Moon (7 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Sun	-Regulus	-Jupiter	+Mars	+Pollux	+Capella	+Aldebaran	+Saturn
0	233°56.1	4.9'	N25°17.7	-8.0'	59.5'	54°30.4	40°18.3	25°07.2			33°10.3	40°43.8	96°47.3
1	248°20.0	4.9'	25°09.7	-8.1'	59.5'	53°57.0	39°42.5	24°31.9			33°39.9	41°18.2	97°23.0
2	262°43.9	5.0'	25°01.6	-8.3'	59.5'	53°23.6	39°06.6	23°56.7			34°09.8	41°52.6	97°58.8
3	277°08.0	5.1'	24°53.3	-8.4'	59.5'	52°50.3	38°30.8	23°21.4			34°39.8	42°27.0	98°34.6
4	291°32.1	5.2'	24°44.9	-8.6'	59.5'	52°16.9	37°55.0	22°46.1			35°09.9	43°01.5	99°10.3
5	305°56.3	5.3'	24°36.3	-8.8'	59.5'	51°43.5	37°19.2	22°10.8	6°11.3		35°40.3	43°36.0	99°46.1
6	320°20.5	5.4'	N24°27.5	-8.9'	59.5'	51°10.1	36°43.4	21°35.5	6°41.8		36°10.7	44°10.5	100°21.8
7	334°44.9	5.5'	24°18.6	-9.1'	59.5'	50°36.7	36°07.5	21°00.2	7°12.8		36°41.3	44°45.1	100°57.6
8	349°09.4	5.6'	24°09.5	-9.2'	59.5'	50°03.3	35°31.7	20°24.9	7°44.3		37°12.1	45°19.7	101°33.4
9	3°33.9	5.6'	24°00.3	-9.4'	59.5'	49°29.9	34°55.9	19°49.6	8°16.1		37°42.9	45°54.3	102°09.1
10	17°58.6	5.7'	23°50.9	-9.6'	59.5'	48°56.5	34°20.1	19°14.3	8°48.2		38°13.9	46°28.9	102°44.9
11	32°23.3	5.8'	23°41.3	-9.7'	59.4'	48°23.2	33°44.3	18°39.1	9°20.6		38°45.0	47°03.5	103°20.6
12	46°48.1	5.9'	N23°31.6	-9.9'	59.4'	47°49.8	33°08.4	18°03.8	9°53.2		39°16.2	47°38.2	103°56.4
13	61°13.1	6.0'	23°21.7	-10.0'	59.4'	47°16.4	32°32.6	17°28.5	10°26.0		39°47.6	48°12.9	104°32.1
14	75°38.1	6.1'	23°11.7	-10.1'	59.4'	46°43.0	31°56.8	16°53.2	10°58.9		40°19.0	48°47.6	105°07.9
15	90°03.2	6.2'	23°01.6	-10.3'	59.4'	46°09.7	31°21.0	16°18.0	11°31.9		40°50.5	49°22.3	105°43.6
16	104°28.4	6.3'	22°51.3	-10.4'	59.4'	45°36.3	30°45.2	15°42.7	12°05.1	7°08.7	41°22.1	49°57.1	106°19.4
17	118°53.7	6.4'	22°40.9	-10.6'	59.4'	45°02.9	30°09.4	15°07.5	12°38.3	7°40.1	41°53.8	50°31.8	106°55.1
18	133°19.2	6.5'	N22°30.3	-10.7'	59.4'	44°29.6	29°33.6	14°32.2	13°11.7	8°12.1	42°25.6	51°06.6	107°30.8
19	147°44.7	6.6'	22°19.6	-10.9'	59.4'	43°56.2	28°57.8	13°57.0	13°45.1	8°44.5	42°57.5	51°41.4	108°06.5
20	162°10.3	6.7'	22°08.7	-11.0'	59.4'	43°22.8	28°22.0	13°21.8	14°18.5	9°17.4	43°29.5	52°16.2	108°42.3
21	176°36.0	6.8'	21°57.7	-11.1'	59.4'	42°49.5	27°46.2	12°46.5	14°52.0	9°50.6	44°01.5	52°51.0	109°18.0
22	191°01.8	6.9'	21°46.6	-11.3'	59.4'	42°16.2	27°10.4	12°11.3	15°25.6	10°24.1	44°33.6	53°25.8	109°53.7
23	205°27.7	7.0'	21°35.4	-11.4'	59.4'	41°42.8	26°34.7	11°36.1	15°59.2	10°57.8	45°05.8	54°00.7	110°29.4
7 th	SD = 16.2' Mer. pass. 08:45					Sun SD = 15.9'							

h	Moon (8 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Sun	-Regulus	-Jupiter	+Pollux	+Mars	+Capella	+Aldebaran	+Saturn
0	219°53.7	7.1'	N21°24.0	-11.5'	59.4'	41°09.5	25°58.9	11°00.9	11°31.7	16°32.9	45°38.0	54°35.5	111°05.1
1	234°19.8	7.2'	21°12.5	-11.6'	59.4'	40°36.2	25°23.1	10°25.8	12°05.8	17°06.5	46°10.3	55°10.4	111°40.8
2	248°46.0	7.3'	21°00.8	-11.8'	59.4'	40°02.8	24°47.4	9°50.6	12°40.0	17°40.2	46°42.7	55°45.2	112°16.4
3	263°12.4	7.4'	20°49.0	-11.9'	59.4'		24°11.6	9°15.5	13°14.4	18°14.0	47°15.1	56°20.1	112°52.1
4	277°38.8	7.5'	20°37.2	-12.0'	59.4'		23°35.9	8°40.4	13°48.9	18°47.7	47°47.6	56°54.9	113°27.8
5	292°05.3	7.6'	20°25.1	-12.1'	59.3'		23°00.1	8°05.3	14°23.4	19°21.5	48°20.1	57°29.8	114°03.4
6	306°31.9	7.7'	N20°13.0	-12.3'	59.3'		22°24.4	7°30.2	14°58.1	19°55.3	48°52.7	58°04.7	114°39.1
7	320°58.6	7.8'	20°00.7	-12.4'	59.3'		21°48.7	6°55.2	15°32.8	20°29.1	49°25.3	58°39.6	115°14.7
8	335°25.4	7.9'	19°48.4	-12.5'	59.3'		21°13.0	6°20.2	16°07.6	21°02.9	49°57.9	59°14.5	115°50.3
9	349°52.4	8.0'	19°35.9	-12.6'	59.3'		20°37.2	5°45.3	16°42.5	21°36.7	50°30.7	59°49.4	116°25.9
10	4°19.4	8.1'	19°23.3	-12.7'	59.3'		20°01.5	5°10.5	17°17.3	22°10.5	51°03.4	60°24.2	117°01.5
11	18°46.5	8.2'	19°10.6	-12.8'	59.3'		19°25.9	4°35.7	17°52.3	22°44.4	51°36.2	60°59.1	117°37.1
12	33°13.7	8.3'	N18°57.8	-12.9'	59.3'		18°50.2	4°01.1	18°27.3	23°18.2	52°09.0	61°34.0	118°12.7
13	47°41.0	8.4'	18°44.8	-13.0'	59.3'		18°14.5	3°26.7	19°02.3	23°52.1	52°41.9	62°08.9	118°48.3
14	62°08.5	8.5'	18°31.8	-13.1'	59.3'		17°38.9	2°52.6	19°37.3	24°25.9	53°14.8	62°43.8	119°23.8
15	76°36.0	8.6'	18°18.7	-13.2'	59.3'		17°03.2	2°19.1	20°12.4	24°59.8	53°47.7	63°18.7	119°59.4
16	91°03.6	8.7'	18°05.4	-13.3'	59.2'		16°27.6		20°47.5	25°33.6	54°20.7	63°53.6	
17	105°31.3	8.8'	17°52.1	-13.4'	59.2'		15°51.9		21°22.6	26°07.5	54°53.7	64°28.5	
18	119°59.1	8.9'	N17°38.7	-13.5'	59.2'		15°16.3		21°57.7	26°41.3	55°26.7	65°03.3	
19	134°27.0	9.0'	17°25.1	-13.6'	59.2'		14°40.7		22°32.8	27°15.2	55°59.7	65°38.2	
20	148°55.0	9.1'	17°11.5	-13.7'	59.2'		14°05.2		23°08.0	27°49.0	56°32.8	66°13.1	
21	163°23.1	9.2'	16°57.8	-13.8'	59.2'		13°29.6		23°43.1	28°22.9	57°05.9	66°48.0	
22	177°51.3	9.3'	16°44.0	-13.9'	59.2'		12°54.0		24°18.3	28°56.7	57°39.0	67°22.8	
23	192°19.6	9.4'	16°30.1	-14.0'	59.2'		12°18.5		24°53.5	29°30.5	58°12.1	67°57.7	
8 th	SD = 16.2' Mer. pass. 09:42					Sun SD = 15.9'							

h	Moon (9 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Regulus	+Jupiter	+Pollux	+Procyon	+Mars	+Betelgeuse	+Capella	+Aldebaran
0	206°48.0	9.5'	N16°16.1	-14.1'	59.1'	11°43.0	3°10.5	25°28.6	27°53.3	30°04.4	51°37.3	58°45.2	68°32.5
1	221°16.5	9.6'	16°02.1	-14.2'	59.1'	11°07.5	3°44.6	26°03.8	28°19.1	30°38.2	52°09.1	59°18.4	69°07.3
2	235°45.1	9.7'	15°47.9	-14.2'	59.1'	10°32.0	4°19.0	26°39.0	28°45.2	31°12.0	52°41.0	59°51.6	69°42.2
3	250°13.7	9.8'	15°33.7	-14.3'	59.1'	9°56.5	4°53.5	27°14.2	29°11.7	31°45.8	53°12.8	60°24.7	70°17.0
4	264°42.5	9.9'	15°19.4	-14.4'	59.1'	9°21.0	5°28.1	27°49.4	29°38.4	32°19.6	53°44.8	60°57.9	70°51.8
5	279°11.4	9.9'	15°05.0	-14.5'	59.1'	8°45.6	6°02.8	28°24.5	30°05.3	32°53.4	54°16.7	61°31.1	71°26.6
6	293°40.3	10.0'	N14°50.5	-14.5'	59.1'	8°10.2	6°37.5	28°59.7	30°32.5	33°27.1	54°48.7	62°04.4	72°01.4
7	308°09.3	10.1'	14°36.0	-14.6'	59.0'	7°34.8	7°12.2	29°34.9	31°00.0	34°00.9	55°20.7	62°37.6	72°36.2
8	322°38.4	10.2'	14°21.4	-14.7'	59.0'	6°59.5	7°46.9	30°10.0	31°27.7	34°34.6	55°52.8	63°10.8	73°11.0
9	337°07.7	10.3'	14°06.7	-14.8'	59.0'	6°24.1	8°21.7	30°45.2	31°55.6	35°08.4	56°24.9	63°44.1	73°45.7
10	351°36.9	10.4'	13°51.9	-14.8'	59.0'	5°48.9	8°56.5	31°20.3	32°23.7	35°42.1	56°57.0	64°17.3	74°20.5
11	6°06.3	10.5'	13°37.1	-14.9'	59.0'	5°13.6	9°31.2	31°55.5	32°52.0	36°15.8	57°29.2	64°50.6	74°55.2
12	20°35.8	10.6'	N13°22.2	-14.9'	59.0'	4°38.4	10°06.0	32°30.6	33°20.5	36°49.5	58°01.3	65°23.8	75°29.9
13	35°05.3	10.6'	13°07.3	-15.0'	59.0'	4°03.3	10°40.7	33°05.7	33°49.1	37°23.2	58°33.5	65°57.1	76°04.6
14	49°35.0	10.7'	12°52.3	-15.1'	58.9'	3°28.3	11°15.5	33°40.8	34°18.0	37°56.9	59°05.7	66°30.4	76°39.3
15	64°04.7	10.8'	12°37.2	-15.1'	58.9'	2°53.4	11°50.2	34°15.9	34°46.9	38°30.5	59°38.0	67°03.6	77°14.0
16	78°34.5	10.9'	12°22.1	-15.2'	58.9'	2°18.8	12°24.9	34°51.0	35°16.1	39°04.2	60°10.2	67°36.9	77°48.7
17	93°04.4	11.0'	12°06.9	-15.2'	58.9'	1°44.6	12°59.6	35°26.1	35°45.4	39°37.8	60°42.5	68°10.2	78°23.3
18	107°34.3	11.0'	N11°51.6	-15.3'	58.9'		13°34.3	36°01.1	36°14.8	40°11.4	61°14.8	68°43.4	78°57.9
19	122°04.4	11.1'	11°36.4	-15.3'	58.8'		14°09.0	36°36.2	36°44.4	40°45.0	61°47.1	69°16.7	79°32.5
20	136°34.5	11.2'	11°21.0	-15.4'	58.8'		14°43.7	37°11.2	37°14.1	41°18.6	62°19.4	69°49.9	80°07.1
21	151°04.7	11.3'	11°05.6	-15.4'	58.8'		15°18.3	37°46.2	37°43.9	41°52.1	62°51.7	70°23.2	80°41.7
22	165°34.9	11.3'	10°50.2	-15.5'	58.8'		15°52.9	38°21.2	38°13.8	42°25.7	63°24.0	70°56.4	81°16.3
23	180°05.3	11.4'	10°34.7	-15.5'	58.8'		16°27.5	38°56.2	38°43.8	42°59.2	63°56.3	71°29.6	81°50.8
9 th	SD = 16.1' Mer. pass. 10:35												

DUT1 = UT1-UTC = +0.1092 sec $\Delta T = TT-UT1 = +69.0748$ sec

2026 September 10 to Sep. 12 UT

h	Moon (10 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	+Regulus	+Jupiter	+Procyon	+Pollux	+Mars	+Betelgeuse	+Capella	+Aldebaran
0	194°35.7	11.5'	N10°19.2	-15.6'	58.8'	2°29.2	17°02.1	39°13.9	39°31.2	43°32.7	64°28.7	72°02.9	82°25.3
1	209°06.2	11.6'	10°03.6	-15.6'	58.7'	3°03.7	17°36.7	39°44.2	40°06.1	44°06.1	65°01.0	72°36.1	82°59.8
2	223°36.8	11.6'	09°48.0	-15.7'	58.7'	3°38.4	18°11.3	40°14.5	40°41.1	44°39.6	65°33.4	73°09.3	83°34.3
3	238°07.4	11.7'	09°32.3	-15.7'	58.7'	4°13.2	18°45.8	40°44.9	41°16.0	45°13.0	66°05.8	73°42.5	84°08.8
4	252°38.1	11.8'	09°16.6	-15.7'	58.7'	4°48.0	19°20.3	41°15.4	41°50.9	45°46.5	66°38.1	74°15.7	84°43.2
5	267°08.8	11.8'	09°00.9	-15.8'	58.7'	5°22.9	19°54.8	41°45.9	42°25.7	46°19.9	67°10.5	74°48.9	85°17.6
6	281°39.7	11.9'	N08°45.1	-15.8'	58.6'	5°57.7	20°29.3	42°16.6	43°00.6	46°53.2	67°42.8	75°22.0	85°52.0
7	296°10.6	12.0'	08°29.3	-15.8'	58.6'	6°32.6	21°03.7	42°47.3	43°35.4	47°26.6	68°15.2	75°55.2	86°26.4
8	310°41.5	12.0'	08°13.5	-15.9'	58.6'	7°07.5	21°38.1	43°18.0	44°10.2	47°59.9	68°47.6	76°28.3	87°00.7
9	325°12.6	12.1'	07°57.6	-15.9'	58.6'					New Moon			
10	339°43.7	12.2'	07°41.8	-15.9'	58.6'					New Moon			
11	354°14.8	12.2'	07°25.9	-15.9'	58.5'					New Moon			
12	8°46.0	12.3'	N07°09.9	-16.0'	58.5'					New Moon			
13	23°17.3	12.3'	06°54.0	-16.0'	58.5'					New Moon			
14	37°48.6	12.4'	06°38.0	-16.0'	58.5'					New Moon			
15	52°20.0	12.4'	06°22.0	-16.0'	58.4'					New Moon			
16	66°51.5	12.5'	06°06.0	-16.0'	58.4'					New Moon			
17	81°23.0	12.6'	05°49.9	-16.1'	58.4'					New Moon			
18	95°54.5	12.6'	N05°33.9	-16.1'	58.4'					New Moon			
19	110°26.1	12.7'	05°17.8	-16.1'	58.3'					New Moon			
20	124°57.8	12.7'	05°01.7	-16.1'	58.3'					New Moon			
21	139°29.5	12.8'	04°45.6	-16.1'	58.3'					New Moon			
22	154°01.2	12.8'	04°29.5	-16.1'	58.3'					New Moon			
23	168°33.0	12.8'	04°13.4	-16.1'	58.3'					New Moon			
10 th	SD = 16.0' Mer. pass. 11:24												

h Moon (11 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Hadar	-Acrux	-Arcturus	-Venus	-Spica
0	183°04.9	12.9'	N03°57.3	-16.1'	58.2'					New Moon			
1	197°36.8	12.9'	03°41.2	-16.1'	58.2'					New Moon			
2	212°08.7	13.0'	03°25.1	-16.1'	58.2'					New Moon			
3	226°40.7	13.0'	03°08.9	-16.1'	58.2'					New Moon			
4	241°12.7	13.1'	02°52.8	-16.1'	58.1'					New Moon			
5	255°44.8	13.1'	02°36.7	-16.1'	58.1'					New Moon			
6	270°16.9	13.1'	N02°20.6	-16.1'	58.1'					New Moon			
7	284°49.0	13.2'	02°04.4	-16.1'	58.1'					New Moon			
8	299°21.2	13.2'	01°48.3	-16.1'	58.0'					New Moon			
9	313°53.4	13.2'	01°32.2	-16.1'	58.0'					New Moon			
10	328°25.6	13.3'	01°16.1	-16.1'	58.0'					New Moon			
11	342°57.9	13.3'	01°00.0	-16.1'	57.9'					New Moon			
12	357°30.2	13.3'	N00°43.9	-16.1'	57.9'					New Moon			
13	12°02.6	13.4'	00°27.9	-16.1'	57.9'					New Moon			
14	26°34.9	13.4'	N00°11.8	-16.0'	57.9'					New Moon			
15	41°07.3	13.4'	S00°04.2	-16.0'	57.8'					New Moon			
16	55°39.8	13.5'	00°20.3	-16.0'	57.8'					New Moon			
17	70°12.2	13.5'	00°36.3	-16.0'	57.8'					New Moon			
18	84°44.7	13.5'	S00°52.3	-16.0'	57.8'					New Moon			
19	99°17.2	13.5'	01°08.3	-16.0'	57.7'					New Moon			
20	113°49.8	13.6'	01°24.2	-15.9'	57.7'					New Moon			
21	128°22.3	13.6'	01°40.1	-15.9'	57.7'					New Moon			
22	142°54.9	13.6'	01°56.1	-15.9'	57.7'	119°55.9	71°02.9	67°09.2	63°53.1	61°40.5	41°17.5	32°04.1	25°14.5
23	157°27.5	13.6'	02°11.9	-15.9'	57.6'	119°29.0	70°29.1	66°43.8	63°29.0	61°22.3	41°00.9	31°31.8	24°40.9
11 th	SD = 15.9' Mer. pass. 12:10												

h Moon (12 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Altair	-Antares	-Rigel Kent.	-Hadar	\pm Acrux	-Arcturus	-Venus	-Spica
0	172°00.1	13.6'	S02°27.8	-15.8'	57.6'	119°02.0	69°55.3	66°18.4	63°05.0	61°04.3	40°44.6	30°59.6	24°07.2
1	186°32.7	13.6'	02°43.6	-15.8'	57.6'	118°34.9	69°21.6	65°53.2	62°41.1	60°46.5	40°28.5	30°27.4	23°33.6
2	201°05.4	13.7'	02°59.4	-15.8'	57.5'	118°07.9	68°47.9	65°28.0	62°17.3	60°28.7	40°12.8	29°55.3	23°00.1
3	215°38.0	13.7'	03°15.2	-15.7'	57.5'	117°40.8	68°14.2	65°03.0	61°53.6	60°11.2	39°57.5	29°23.2	22°26.6
4	230°10.7	13.7'	03°30.9	-15.7'	57.5'	117°13.6	67°40.6	64°38.0	61°30.1	59°53.8	39°42.4	28°51.1	21°53.1
5	244°43.4	13.7'	03°46.7	-15.7'	57.5'	116°46.4	67°07.0	64°13.2	61°06.6	59°36.5		28°19.1	21°19.7
6	259°16.1	13.7'	S04°02.3	-15.6'	57.4'	116°19.2	66°33.4	63°48.4	60°43.3	59°19.5		27°47.1	20°46.3
7	273°48.8	13.7'	04°18.0	-15.6'	57.4'	115°52.0	65°59.9	63°23.7	60°20.0	59°02.5		27°15.1	20°13.0
8	288°21.6	13.7'	04°33.6	-15.6'	57.4'	115°24.8	65°26.4	62°59.2	59°56.9	58°45.8		26°43.1	19°39.7
9	302°54.3	13.7'	04°49.2	-15.5'	57.3'	114°57.5	64°52.9	62°34.7	59°34.0	58°29.2		26°11.2	19°06.4
10	317°27.0	13.8'	05°04.7	-15.5'	57.3'	114°30.2	64°19.5	62°10.3	59°11.1	58°12.8		25°39.3	18°33.2
11	331°59.8	13.8'	05°20.2	-15.5'	57.3'	114°02.9	63°46.1	61°46.1	58°48.4	57°56.5		25°07.5	18°00.1
12	346°32.5	13.8'	S05°35.6	-15.4'	57.3'	113°35.5	63°12.7	61°21.9	58°25.8	57°40.4		24°35.7	17°27.0
13	1°05.3	13.8'	05°51.0	-15.4'	57.2'	113°08.2	62°39.4	60°57.9	58°03.4	57°24.5		24°03.9	16°54.0
14	15°38.1	13.8'	06°06.4	-15.3'	57.2'	112°40.8	62°06.1	60°34.0	57°41.0	57°08.8		23°32.1	16°21.0
15	30°10.8	13.8'	06°21.7	-15.3'	57.2'	112°13.4	61°32.8	60°10.2	57°18.8	56°53.3		23°00.4	15°48.0
16	44°43.6	13.8'	06°37.0	-15.2'	57.1'	111°46.0	60°59.6	59°46.5	56°56.8	56°37.9		22°28.7	15°15.1
17	59°16.4	13.8'	06°52.3	-15.2'	57.1'	111°18.6	60°26.4	59°22.9	56°34.9	56°22.7		21°57.1	14°42.3
18	73°49.2	13.8'	S07°07.4	-15.1'	57.1'	110°51.1	59°53.2	58°59.4	56°13.1	56°07.7		21°25.5	14°09.6
19	88°21.9	13.8'	07°22.6	-15.1'	57.1'	110°23.7	59°20.1	58°36.1	55°51.5			20°53.9	13°36.9
20	102°54.7	13.8'	07°37.7	-15.0'	57.0'	109°56.3	58°47.0	58°12.9	55°30.0			20°22.3	13°04.3
21	117°27.5	13.8'	07°52.7	-15.0'	57.0'	109°28.8	58°14.0	57°49.8	55°08.7			19°50.8	12°31.7
22	132°00.2	13.8'	08°07.7	-14.9'	57.0'	109°01.4	57°41.0	57°26.8	54°47.5			19°19.4	11°59.3
23	146°33.0	13.8'	08°22.7	-14.9'	56.9'	108°33.9	57°08.0	57°04.0	54°26.5			18°47.9	11°26.9
12 th	SD = 15.7' Mer. pass. 12:56												

DUT1 = UT1-UTC = +0.1096 sec $\Delta T = TT-UT1 = +69.0744$ sec

2026 September 13 to Sep. 15 UT

Moon (13 th Sep)						Lunar Distance (objects with largest hourly LD delta)					
Sun	GHA	ν	Dec	d	HP	-Altair	-Rigil Kent.	-Antares	-Hadar	-Venus	-Spica
0	161°05.7	13.7'	S08°37.5	-14.8'	56.9'	108°06.4	56°41.3	56°35.1	54°05.7	18°16.5	10°54.6
1	175°38.5	13.7'	08°52.4	-14.8'	56.9'	107°39.0	56°18.7	56°02.2	53°45.0	17°45.1	10°22.4
2	190°11.2	13.7'	09°07.1	-14.7'	56.8'	107°11.5	55°56.3	55°29.3	53°24.4	17°13.8	9°50.3
3	204°43.9	13.7'	09°21.9	-14.7'	56.8'	106°44.1	55°34.0	54°56.5	53°04.1	16°42.5	9°18.4
4	219°16.7	13.7'	09°36.5	-14.6'	56.8'	106°16.6	55°11.9	54°23.7	52°43.9	16°11.2	8°46.6
5	233°49.4	13.7'	09°51.1	-14.5'	56.8'	105°49.1	54°49.9	53°50.9	52°23.8	15°40.0	8°15.0
6	248°22.1	13.7'	S10°05.7	-14.5'	56.7'	105°21.7	54°28.0	53°18.2	52°04.0	15°08.8	7°43.5
7	262°54.8	13.7'	10°20.2	-14.4'	56.7'	104°54.2	54°06.3	52°45.5	51°44.3	14°37.6	7°12.3
8	277°27.4	13.7'	10°34.6	-14.4'	56.7'	104°26.8	53°44.7	52°12.9	51°24.8	14°06.4	6°41.4
9	292°00.1	13.6'	10°48.9	-14.3'	56.6'	103°59.4	53°23.3	51°40.2	51°05.5	13°35.3	6°10.8
10	306°32.7	13.6'	11°03.2	-14.2'	56.6'	103°31.9	53°02.1	51°07.7	50°46.3	13°04.3	5°40.5
11	321°05.4	13.6'	11°17.5	-14.2'	56.6'	103°04.5	52°41.0	50°35.1	50°27.4	12°33.3	5°10.8
12	335°38.0	13.6'	S11°31.6	-14.1'	56.6'	102°37.1	52°20.0	50°02.6	50°08.6	12°02.3	4°41.7
13	350°10.6	13.6'	11°45.7	-14.0'	56.5'	102°09.7	51°59.2	49°30.1	49°50.1	11°31.3	4°13.6
14	4°43.1	13.6'	11°59.8	-14.0'	56.5'	101°42.3	51°38.6	48°57.7	49°31.7	11°00.4	
15	19°15.7	13.5'	12°13.7	-13.9'	56.5'	101°14.9	51°18.2	48°25.3	49°13.5	10°29.5	
16	33°48.2	13.5'	12°27.6	-13.8'	56.4'	100°47.6	50°57.9	47°52.9	48°55.5	9°58.6	
17	48°20.7	13.5'	12°41.4	-13.8'	56.4'	100°20.2	50°37.8	47°20.6	48°37.8	9°27.8	
18	62°53.2	13.5'	S12°55.2	-13.7'	56.4'	99°52.9	50°17.9	46°48.3	48°20.2	8°57.1	
19	77°25.7	13.5'	13°08.9	-13.6'	56.4'	99°25.6	49°58.2	46°16.0	48°02.8	8°26.3	
20	91°58.2	13.4'	13°22.5	-13.5'	56.3'	98°58.2	49°38.6	45°43.8	47°45.7	7°55.6	
21	106°30.6	13.4'	13°36.0	-13.5'	56.3'	98°31.0	49°19.2	45°11.6	47°28.8	7°25.0	
22	121°03.0	13.4'	13°49.5	-13.4'	56.3'	98°03.7	49°00.0	44°39.5	47°12.1	6°54.4	
23	135°35.4	13.4'	14°02.9	-13.3'	56.2'	97°36.4	48°41.0	44°07.4	46°55.6	6°23.8	
13 th	SD = 15.5' Mer. pass. 13:41										

Moon (14 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Rigel Kent.	-Hadar	-Antares	\pm Venus	+ Spica	+ Sun
0	150°07.7	13.3'	S14°16.2	-13.2'	56.2'		97°09.2	48°22.2	46°39.3	43°35.3	5°53.3		
1	164°40.1	13.3'	14°29.4	-13.1'	56.2'		96°42.0	48°03.6	46°23.3	43°03.2	5°22.8		
2	179°12.4	13.3'	14°42.5	-13.1'	56.2'		96°14.8	47°45.2	46°07.5	42°31.2	4°52.4		
3	193°44.6	13.2'	14°55.6	-13.0'	56.1'		95°47.6	47°26.9	45°51.9	41°59.2	4°22.0		
4	208°16.9	13.2'	15°08.6	-12.9'	56.1'		95°20.4	47°08.9	45°36.6	41°27.3	3°51.7	4°57.7	
5	222°49.1	13.2'	15°21.5	-12.8'	56.1'		94°53.3	46°51.1	45°21.5	40°55.4	3°21.6	5°26.6	
6	237°21.3	13.2'	S15°34.3	-12.7'	56.0'	119°59.6	94°26.2	46°33.5		40°23.5	2°51.5	5°55.9	
7	251°53.4	13.1'	15°47.1	-12.7'	56.0'	119°30.8	93°59.1	46°16.2		39°51.7	2°21.6	6°25.7	
8	266°25.5	13.1'	15°59.7	-12.6'	56.0'	119°01.9	93°32.0	45°59.0		39°19.9	1°52.1	6°55.7	
9	280°57.6	13.1'	16°12.3	-12.5'	56.0'	118°33.0	93°05.0	45°42.1		38°48.1	1°23.1	7°25.9	
10	295°29.7	13.0'	16°24.8	-12.4'	55.9'	118°04.1	92°38.0	45°25.4		38°16.4		7°56.3	
11	310°01.7	13.0'	16°37.2	-12.3'	55.9'	117°35.3	92°11.0	45°08.9		37°44.6		8°26.8	
12	324°33.7	13.0'	S16°49.5	-12.2'	55.9'	117°06.4	91°44.0	44°52.6		37°13.0		8°57.5	41°18.8
13	339°05.7	12.9'	17°01.8	-12.1'	55.8'	116°37.6	91°17.1	44°36.6		36°41.3		9°28.2	41°48.0
14	353°37.6	12.9'	17°13.9	-12.0'	55.8'	116°08.7	90°50.1	44°20.8		36°09.7		9°58.9	42°17.1
15	8°09.5	12.9'	17°25.9	-12.0'	55.8'	115°39.9	90°23.2	44°05.3		35°38.2		10°29.8	42°46.3
16	22°41.3	12.8'	17°37.9	-11.9'	55.8'	115°11.0	89°56.4	43°50.0		35°06.6	2°16.5	11°00.6	43°15.3
17	37°13.2	12.8'	17°49.8	-11.8'	55.7'	114°42.2	89°29.6	43°34.9		34°35.1	2°46.0	11°31.5	43°44.4
18	51°44.9	12.7'	S18°01.5	-11.7'	55.7'	114°13.4	89°02.7			34°03.7	3°15.7	12°02.4	44°13.4
19	66°16.7	12.7'	18°13.2	-11.6'	55.7'	113°44.6	88°36.0			33°32.2	3°45.4	12°33.3	44°42.4
20	80°48.4	12.7'	18°24.8	-11.5'	55.7'	113°15.8	88°09.2			33°00.8	4°15.2	13°04.3	45°11.3
21	95°20.1	12.6'	18°36.3	-11.4'	55.6'	112°47.0	87°42.5			32°29.4	4°45.0	13°35.2	45°40.3
22	109°51.7	12.6'	18°47.7	-11.3'	55.6'	112°18.2	87°15.8			31°58.1	5°14.8	14°06.2	46°09.2
23	124°23.3	12.6'	18°59.0	-11.2'	55.6'	111°49.4	86°49.2			31°26.8	5°44.6	14°37.1	46°38.0
14 th	SD = 15.3' Mer. pass. 14:26					Sun SD = 15.9'							

Moon (15 th Sep)						Lunar Distance (objects with largest hourly LD delta)						
Tue	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	+Venus	+Spica	+Arcturus	+Sun
0	138°54.9	12.5'	S19°10.2	-11.1'	55.6'	111°20.7	86°22.5	30°55.5	6°14.3	15°08.0		47°06.9
1	153°26.4	12.5'	19°21.3	-11.0'	55.5'	110°51.9	85°55.9	30°24.2	6°44.1	15°38.9		47°35.7
2	167°57.9	12.4'	19°32.3	-10.9'	55.5'	110°23.2	85°29.4	29°53.0	7°13.8	16°09.9		48°04.4
3	182°29.3	12.4'	19°43.3	-10.8'	55.5'	109°54.4	85°02.8	29°21.8	7°43.6	16°40.8		48°33.2
4	197°00.7	12.4'	19°54.1	-10.7'	55.5'	109°25.7	84°36.4	28°50.7	8°13.3	17°11.6		49°01.9
5	211°32.1	12.3'	20°04.8	-10.6'	55.4'	108°57.0	84°09.9	28°19.6	8°42.9	17°42.5		49°30.5
6	226°03.4	12.3'	S20°15.4	-10.5'	55.4'	108°28.4	83°43.5	27°48.5	9°12.6	18°13.4		49°59.2
7	240°34.7	12.2'	20°25.9	-10.4'	55.4'	107°59.7	83°17.1	27°17.4	9°42.2	18°44.2		50°27.8
8	255°05.9	12.2'	20°36.3	-10.3'	55.4'	107°31.0	82°50.7	26°46.4	10°11.8	19°15.0		50°56.4
9	269°37.1	12.2'	20°46.6	-10.2'	55.3'	107°02.4	82°24.4	26°15.4	10°41.4	19°45.8		51°24.9
10	284°08.3	12.1'	20°56.8	-10.1'	55.3'	106°33.8	81°58.1	25°44.4	11°11.0	20°16.6		51°53.5
11	298°39.4	12.1'	21°06.9	-10.0'	55.3'	106°05.2	81°31.8	25°13.5	11°40.5	20°47.4		52°22.0
12	313°10.5	12.0'	S21°16.9	-9.9'	55.3'	105°36.6	81°05.6	24°42.6	12°10.0	21°18.1		52°50.4
13	327°41.5	12.0'	21°26.8	-9.8'	55.2'	105°08.0	80°39.4	24°11.7	12°39.5	21°48.8	41°10.1	53°18.9
14	342°12.5	11.9'	21°36.5	-9.7'	55.2'	104°39.4	80°13.3	23°40.8	13°09.0	22°19.5	41°25.4	53°47.3
15	356°43.4	11.9'	21°46.2	-9.6'	55.2'	104°10.9	79°47.2	23°10.0	13°38.4	22°50.2	41°41.0	54°15.7
16	11°14.3	11.9'	21°55.8	-9.4'	55.2'	103°42.3	79°21.1	22°39.2	14°07.8	23°20.9	41°56.7	54°44.0
17	25°45.2	11.8'	22°05.2	-9.3'	55.1'	103°13.8	78°55.1	22°08.4	14°37.2	23°51.5	42°12.7	55°12.4
18	40°16.0	11.8'	S22°14.5	-9.2'	55.1'	102°45.3	78°29.1	21°37.7	15°06.6	24°22.1	42°28.9	55°40.7
19	54°46.8	11.7'	22°23.8	-9.1'	55.1'	102°16.8	78°03.1	21°07.0	15°35.9	24°52.7	42°45.2	56°08.9
20	69°17.5	11.7'	22°32.9	-9.0'	55.1'	101°48.4	77°37.2	20°36.3	16°05.3	25°23.3	43°01.8	56°37.2
21	83°48.2	11.7'	22°41.9	-8.9'	55.1'	101°19.9	77°11.3	20°05.6	16°34.6	25°53.9	43°18.6	57°05.4
22	98°18.9	11.6'	22°50.8	-8.8'	55.0'	100°51.5	76°45.5	19°35.0	17°03.8	26°24.4	43°35.5	57°33.6
23	112°49.5	11.6'	22°59.6	-8.7'	55.0'	100°23.0	76°19.7	19°04.4	17°33.1	26°54.9	43°52.7	58°01.8
15 th	SD = 15.2' Mer. pass. 15:14					Sun SD = 15.9'						

DUT1 = UT1-UTC = +0.1100 sec $\Delta T = TT-UT1 = +69.0740$ sec

2026 September 16 to Sep. 18 UT

h	Moon (16 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Fomalhaut	-Deneb	-Altair	-Antares	+Venus	+Spica	+Arcturus	+Sun
0	127°20.1	11.5'	S23°08.2	-8.6'	55.0'	99°54.6		75°53.9	18°33.8	18°02.3	27°25.4	44°10.0	58°29.9
1	141°50.6	11.5'	23°16.8	-8.4'	55.0'	99°26.3		75°28.2	18°03.2	18°31.5	27°55.8	44°27.5	58°58.0
2	156°21.1	11.4'	23°25.2	-8.3'	55.0'	98°57.9		75°02.6	17°32.7	19°00.7	28°26.3	44°45.1	59°26.1
3	170°51.6	11.4'	23°33.5	-8.2'	54.9'	98°29.5		74°36.9	17°02.2	19°29.8	28°56.7	45°03.0	59°54.2
4	185°22.0	11.4'	23°41.7	-8.1'	54.9'	98°01.2		74°11.3	16°31.7	19°59.0	29°27.1	45°20.9	60°22.2
5	199°52.3	11.3'	23°49.8	-8.0'	54.9'	97°32.9		73°45.8	16°01.3	20°28.1	29°57.5	45°39.1	60°50.2
6	214°22.7	11.3'	S23°57.8	-7.9'	54.9'	97°04.6		73°20.3	15°30.9	20°57.2	30°27.8	45°57.4	61°18.2
7	228°52.9	11.2'	24°05.7	-7.7'	54.9'	96°36.3	99°49.7	72°54.9	15°00.5	21°26.3	30°58.2	46°15.8	61°46.2
8	243°23.2	11.2'	24°13.4	-7.6'	54.8'	96°08.1	99°34.7	72°29.4	14°30.1	21°55.3	31°28.5	46°34.4	62°14.2
9	257°53.4	11.2'	24°21.0	-7.5'	54.8'	95°39.8	99°19.7	72°04.1	13°59.7	22°24.3	31°58.8	46°53.2	62°42.1
10	272°23.6	11.1'	24°28.5	-7.4'	54.8'	95°11.6	99°04.6	71°38.8	13°29.4	22°53.4	32°29.1	47°12.1	63°10.0
11	286°53.7	11.1'	24°35.9	-7.3'	54.8'	94°43.4	98°49.5	71°13.5	12°59.1	23°22.3	32°59.3	47°31.1	63°37.9
12	301°23.8	11.0'	S24°43.1	-7.1'	54.8'	94°15.2	98°34.4	70°48.3	12°28.8	23°51.3	33°29.5	47°50.3	64°05.7
13	315°53.8	11.0'	24°50.3	-7.0'	54.7'	93°47.0	98°19.2	70°23.1	11°58.6	24°20.3	33°59.7	48°09.5	64°33.6
14	330°23.8	11.0'	24°57.3	-6.9'	54.7'	93°18.9	98°04.1	69°57.9	11°28.3	24°49.2	34°29.9	48°29.0	65°01.4
15	344°53.8	10.9'	25°04.2	-6.8'	54.7'	92°50.7	97°48.9	69°32.9	10°58.1	25°18.1	35°00.1	48°48.5	65°29.2
16	359°23.7	10.9'	25°10.9	-6.6'	54.7'	92°22.6	97°33.7	69°07.8	10°28.0	25°47.0	35°30.3	49°08.2	65°56.9
17	13°53.6	10.9'	25°17.6	-6.5'	54.7'	91°54.5	97°18.5	68°42.8	9°57.8	26°15.9	36°00.4	49°27.9	66°24.7
18	28°23.5	10.8'	S25°24.1	-6.4'	54.7'	91°26.4	97°03.3	68°17.9	9°27.7	26°44.7	36°30.5	49°47.8	66°52.4
19	42°53.3	10.8'	25°30.5	-6.3'	54.6'	90°58.4	96°48.0	67°53.0	8°57.6	27°13.6	37°00.6	50°07.8	67°20.1
20	57°23.1	10.7'	25°36.7	-6.1'	54.6'	90°30.3	96°32.8	67°28.2	8°27.5	27°42.4	37°30.7	50°27.9	67°47.8
21	71°52.8	10.7'	25°42.9	-6.0'	54.6'	90°02.3	96°17.5	67°03.4	7°57.5	28°11.2	38°00.8	50°48.2	68°15.5
22	86°22.5	10.7'	25°48.9	-5.9'	54.6'	89°34.3	96°02.2	66°38.6	7°27.4	28°40.0	38°30.8	51°08.5	68°43.1
23	100°52.2	10.6'	25°54.8	-5.8'	54.6'	89°06.3	95°47.0	66°14.0	6°57.5	29°08.8	39°00.8	51°28.9	69°10.8
16 th	SD = 15.0' Mer. pass. 16:03					Sun SD = 15.9'							

h	Moon (17 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	\pm Antares	+Venus	+Spica	+Arcturus	+Sun
0	115°21.9	10.6'	S26°00.6	-5.6'	54.6'		88°38.3	65°49.3	6°27.5	29°37.5	39°30.8	51°49.4	69°38.4
1	129°51.5	10.6'	26°06.2	-5.5'	54.5'		88°10.4	65°24.8	5°57.6	30°06.3	40°00.8	52°10.1	70°06.0
2	144°21.1	10.5'	26°11.7	-5.4'	54.5'		87°42.4	65°00.2	5°27.7	30°35.0	40°30.8	52°30.8	70°33.5
3	158°50.6	10.5'	26°17.1	-5.3'	54.5'		87°14.5	64°35.8	4°57.9	31°03.7	41°00.8	52°51.6	71°01.1
4	173°20.1	10.5'	26°22.4	-5.1'	54.5'		86°46.6	64°11.4	4°28.1	31°32.4	41°30.7	53°12.5	71°28.6
5	187°49.6	10.5'	26°27.5	-5.0'	54.5'		86°18.7	63°47.0	3°58.4	32°01.1	42°00.6	53°33.5	71°56.2
6	202°19.1	10.4'	S26°32.5	-4.9'	54.5'		85°50.8	63°22.7	3°28.8	32°29.8	42°30.5	53°54.6	72°23.7
7	216°48.5	10.4'	26°37.3	-4.7'	54.5'		85°23.0	62°58.5	2°59.3	32°58.4	43°00.4	54°15.7	72°51.2
8	231°17.9	10.4'	26°42.1	-4.6'	54.5'		84°55.1	62°34.3	2°30.0	33°27.1	43°30.3	54°37.0	73°18.6
9	245°47.3	10.3'	26°46.7	-4.5'	54.4'		84°27.3	62°10.2	2°01.1	33°55.7	44°00.2	54°58.3	73°46.1
10	260°16.6	10.3'	26°51.2	-4.3'	54.4'		83°59.5	61°46.1	1°32.8	34°24.3	44°30.0	55°19.7	74°13.5
11	274°45.9	10.3'	26°55.5	-4.2'	54.4'		83°31.7	61°22.1		34°52.9	44°59.9	55°41.2	74°41.0
12	289°15.2	10.3'	S26°59.7	-4.1'	54.4'		83°04.0	60°58.2		35°21.5	45°29.7	56°02.7	75°08.4
13	303°44.5	10.2'	27°03.8	-4.0'	54.4'		82°36.2	60°34.3		35°50.1	45°59.5	56°24.4	75°35.8
14	318°13.7	10.2'	27°07.8	-3.8'	54.4'		82°08.5	60°10.5		36°18.7	46°29.3	56°46.1	76°03.2
15	332°42.9	10.2'	27°11.6	-3.7'	54.4'		81°40.8	59°46.7		36°47.3	46°59.1	57°07.8	76°30.6
16	347°12.1	10.2'	27°15.3	-3.6'	54.4'		81°13.1	59°23.1		37°15.8	47°28.9	57°29.7	76°57.9
17	1°41.3	10.1'	27°18.8	-3.4'	54.3'	119°56.8	80°45.4	58°59.4		37°44.4	47°58.6	57°51.6	77°25.3
18	16°10.4	10.1'	S27°22.2	-3.3'	54.3'	119°27.0	80°17.8	58°35.9	2°36.2	38°12.9	48°28.4	58°13.6	77°52.6
19	30°39.6	10.1'	27°25.5	-3.2'	54.3'	118°57.3	79°50.1	58°12.4	3°05.3	38°41.4	48°58.1	58°35.6	78°19.9
20	45°08.7	10.1'	27°28.7	-3.0'	54.3'	118°27.6	79°22.5	57°49.0	3°34.7	39°09.9	49°27.8	58°57.7	78°47.2
21	59°37.8	10.1'	27°31.7	-2.9'	54.3'	117°57.9	78°54.9	57°25.7	4°04.1	39°38.4	49°57.5	59°19.8	79°14.5
22	74°06.8	10.1'	27°34.6	-2.8'	54.3'	117°28.2	78°27.3	57°02.4	4°33.6	40°06.9	50°27.3	59°42.1	79°41.8
23	88°35.9	10.0'	27°37.3	-2.6'	54.3'	116°58.5	77°59.7	56°39.2	5°03.1	40°35.4	50°56.9	60°04.3	80°09.1
17 th	SD = 14.9' Mer. pass. 16:53					Sun SD = 15.9'							

h	Moon (18 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	+Antares	+Venus	+Spica	+Sun
0	103°04.9	10.0'	S27°39.9	-2.5'	54.3'	116°28.8	89°23.3	77°32.1	56°16.1	5°32.6	41°03.9	51°26.6	80°36.4
1	117°34.0	10.0'	27°42.4	-2.3'	54.3'	115°59.1	89°08.0	77°04.6	55°53.1	6°02.2	41°32.4	51°56.3	81°03.6
2	132°03.0	10.0'	27°44.8	-2.2'	54.3'	115°29.5	88°52.7	76°37.1	55°30.1	6°31.8	42°00.8	52°26.0	81°30.9
3	146°32.0	10.0'	27°47.0	-2.1'	54.3'	114°59.8	88°37.4	76°09.6	55°07.2	7°01.4	42°29.3	52°55.6	81°58.1
4	161°01.0	10.0'	27°49.1	-1.9'	54.3'	114°30.1	88°22.1	75°42.1	54°44.4	7°31.0	42°57.7	53°25.3	82°25.4
5	175°29.9	10.0'	27°51.0	-1.8'	54.2'	114°00.5	88°06.8	75°14.6	54°21.7	8°00.6	43°26.2	53°54.9	82°52.6
6	189°58.9	10.0'	S27°52.8	-1.7'	54.2'	113°30.9	87°51.5	74°47.2	53°59.0	8°30.2	43°54.6	54°24.6	83°19.8
7	204°27.9	9.9'	27°54.5	-1.5'	54.2'	113°01.2	87°36.2	74°19.7	53°36.5	8°59.8	44°23.1	54°54.2	83°47.0
8	218°56.8	9.9'	27°56.0	-1.4'	54.2'	112°31.6	87°21.0	73°52.3	53°14.0	9°29.4	44°51.5	55°23.8	84°14.2
9	233°25.7	9.9'	27°57.4	-1.3'	54.2'	112°02.0	87°05.7	73°24.9	52°51.6	9°59.0	45°19.9	55°53.4	84°41.4
10	247°54.7	9.9'	27°58.7	-1.1'	54.2'	111°32.3	86°50.5	72°57.5	52°29.3	10°28.6	45°48.4	56°23.1	85°08.6
11	262°23.6	9.9'	27°59.8	-1.0'	54.2'	111°02.7	86°35.3	72°30.1	52°07.1	10°58.2	46°16.8	56°52.7	85°35.8
12	276°52.5	9.9'	S28°00.8	-0.9'	54.2'	110°33.1	86°20.1	72°02.8	51°45.0	11°27.8	46°45.2	57°22.3	86°03.0
13	291°21.4	9.9'	28°01.7	-0.7'	54.2'	110°03.5	86°04.9	71°35.4	51°23.0	11°57.3	47°13.6	57°51.9	86°30.1
14	305°50.4	9.9'	28°02.4	-0.6'	54.2'	109°33.9	85°49.7	71°08.1	51°01.1	12°26.9	47°42.0	58°21.4	86°57.3
15	320°19.3	9.9'	28°03.0	-0.4'	54.2'	109°04.3	85°34.5	70°40.8	50°39.2	12°56.5	48°10.5	58°51.0	87°24.5
16	334°48.2	9.9'	28°03.4	-0.3'	54.2'	108°34.7	85°19.4	70°13.5	50°17.5	13°26.1	48°38.9	59°20.6	87°51.6
17	349°17.1	9.9'	28°03.7	-0.2'	54.2'	108°05.1	85°04.3	69°46.3	49°55.9	13°55.7	49°07.3	59°50.2	88°18.8
18	3°46.0	9.9'	S28°03.9	-0.0'	54.2'	107°35.5	84°49.2	69°19.0	49°34.3	14°25.3	49°35.7	60°19.8	88°45.9
19	18°14.9	9.9'	28°04.0	0.1'	54.2'	107°05.9	84°34.1	68°51.8	49°12.9	14°54.8	50°04.1	60°49.3	89°13.1
20	32°43.9	9.9'	28°03.9	0.2'	54.2'	106°36.3	84°19.0	68°24.6	48°51.6	15°24.4	50°32.5	61°18.9	89°40.2
21	47°12.8	9.9'	28°03.6	0.4'	54.2'	106°06.8	84°04.0	67°57.4	48°30.4	15°54.0	51°00.9	61°48.5	90°07.3
22	61°41.7	9.9'	28°03.3	0.5'	54.2'	105°37.2	83°48.9	67°30.2	48°09.3	16°23.6	51°29.3	62°18.0	90°34.5
23	76°10.6	9.9'	28°02.8	0.6'	54.2'	105°07.6	83°33.9	67°03.0	47°48.3	16°53.1	51°57.7	62°47.6	91°01.6
18 th	SD = 14.8' Mer. pass. 17:44					Sun SD = 15.9'							

DUT1 = UT1-UTC = +0.1104 sec $\Delta T = TT-UT1 = +69.0736$ sec

2026 September 19 to Sep. 21 UT

h	Moon (19 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	+Antares	+Venus	+Spica	+Arcturus	+Sun
0	90°39.6	10.0'	S28°02.1	0.8'	54.2'	104°38.0	66°35.9	47°27.5	17°22.7	52°26.1	63°17.2	69°37.0	91°28.7
1	105°08.5	10.0'	28°01.4	0.9'	54.2'	104°08.4	66°08.8	47°06.7	17°52.3	52°54.6	63°46.7	70°00.5	91°55.9
2	119°37.5	10.0'	28°00.5	1.0'	54.2'	103°38.8	65°41.7	46°46.1	18°21.9	53°23.0	64°16.3	70°23.9	92°23.0
3	134°06.5	10.0'	27°59.4	1.2'	54.2'	103°09.2	65°14.6	46°25.6	18°51.4	53°51.4	64°45.9	70°47.4	92°50.1
4	148°35.5	10.0'	27°58.2	1.3'	54.2'	102°39.6	64°47.5	46°05.2	19°21.0	54°19.8	65°15.4	71°11.0	93°17.3
5	163°04.5	10.0'	27°56.9	1.4'	54.2'	102°10.1	64°20.4	45°45.0	19°50.6	54°48.2	65°45.0	71°34.5	93°44.4
6	177°33.5	10.0'	S27°55.5	1.6'	54.2'	101°40.5	63°53.4	45°24.9	20°20.2	55°16.7	66°14.6	71°58.1	94°11.5
7	192°02.5	10.0'	27°53.9	1.7'	54.2'	101°10.9	63°26.4	45°04.9	20°49.8	55°45.1	66°44.1	72°21.8	94°38.7
8	206°31.5	10.1'	27°52.2	1.9'	54.2'	100°41.3	62°59.4	44°45.1	21°19.3	56°13.5	67°13.7	72°45.4	95°05.8
9	221°00.6	10.1'	27°50.3	2.0'	54.2'	100°11.7	62°32.4	44°25.4	21°48.9	56°42.0	67°43.3	73°09.1	95°32.9
10	235°29.6	10.1'	27°48.3	2.1'	54.2'	99°42.1	62°05.5	44°05.8	22°18.5	57°10.4	68°12.8	73°32.9	96°00.1
11	249°58.7	10.1'	27°46.2	2.3'	54.2'	99°12.5	61°38.6	43°46.4	22°48.1	57°38.9	68°42.4	73°56.6	96°27.2
12	264°27.8	10.1'	S27°44.0	2.4'	54.2'	98°42.9	61°11.7	43°27.1	23°17.7	58°07.3	69°12.0	74°20.4	96°54.4
13	278°57.0	10.1'	27°41.6	2.5'	54.2'	98°13.2	60°44.8	43°08.0	23°47.3	58°35.8	69°41.6	74°44.2	97°21.5
14	293°26.1	10.2'	27°39.0	2.7'	54.2'	97°43.6	60°17.9	42°49.1	24°16.9	59°04.3	70°11.2	75°08.0	97°48.7
15	307°55.3	10.2'	27°36.4	2.8'	54.2'	97°14.0	59°51.1	42°30.3	24°46.5	59°32.8	70°40.8	75°31.9	98°15.8
16	322°24.5	10.2'	27°33.6	2.9'	54.2'	96°44.4	59°24.2	42°11.7	25°16.1	60°01.2	71°10.4	75°55.8	98°43.0
17	336°53.7	10.2'	27°30.7	3.1'	54.2'	96°14.7	58°57.4	41°53.2	25°45.8	60°29.7	71°40.0	76°19.7	99°10.2
18	351°22.9	10.3'	S27°27.6	3.2'	54.2'	95°45.1	58°30.7	41°35.0	26°15.4	60°58.2	72°09.6	76°43.6	99°37.3
19	5°52.2	10.3'	27°24.5	3.3'	54.2'	95°15.5	58°03.9	41°16.9	26°45.0	61°26.7	72°39.2	77°07.6	100°04.5
20	20°21.5	10.3'	27°21.1	3.4'	54.2'	94°45.8	57°37.2	40°58.9	27°14.7	61°55.3	73°08.8	77°31.6	100°31.7
21	34°50.8	10.3'	27°17.7	3.6'	54.2'	94°16.1	57°10.5	40°41.2	27°44.3	62°23.8	73°38.4	77°55.6	100°58.9
22	49°20.1	10.4'	27°14.1	3.7'	54.2'	93°46.5	56°43.8	40°23.7	28°14.0	62°52.3	74°08.1	78°19.7	101°26.1
23	63°49.5	10.4'	27°10.4	3.8'	54.2'	93°16.8	56°17.1	40°06.3	28°43.6	63°20.9	74°37.7	78°43.7	101°53.3
19 th	SD = 14.8' Mer. pass. 18:36					Sun SD = 15.9'							

h	Moon (20 th Sep)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	+Antares	+Venus	+Spica	+Arcturus	+Sun
0	78°18.9	10.4'	S27°06.6	4.0'	54.2'	92°47.1	55°50.5	39°49.1	29°13.3	63°49.4	75°07.4	79°07.8	102°20.5
1	92°48.3	10.5'	27°02.6	4.1'	54.2'	92°17.4	55°23.9	39°32.2	29°43.0	64°18.0	75°37.0	79°31.9	102°47.7
2	107°17.8	10.5'	26°58.5	4.2'	54.3'	91°47.7	54°57.3	39°15.4	30°12.6	64°46.6	76°06.7	79°56.1	103°14.9
3	121°47.3	10.5'	26°54.3	4.4'	54.3'	91°18.0	54°30.8	38°58.9	30°42.3	65°15.2	76°36.4	80°20.2	103°42.2
4	136°16.8	10.6'	26°49.9	4.5'	54.3'	90°48.3	54°04.3	38°42.5	31°12.0	65°43.8	77°06.0	80°44.4	104°09.4
5	150°46.4	10.6'	26°45.4	4.6'	54.3'	90°18.6	53°37.8	38°26.4	31°41.7	66°12.4	77°35.7	81°08.6	104°36.7
6	165°15.9	10.6'	S26°40.8	4.7'	54.3'	89°48.9	53°11.3	38°10.6	32°11.5	66°41.0	78°05.4	81°32.8	105°03.9
7	179°45.6	10.7'	26°36.1	4.9'	54.3'	89°19.1	52°44.9	37°54.9	32°41.2	67°09.7	78°35.2	81°57.1	105°31.2
8	194°15.2	10.7'	26°31.2	5.0'	54.3'	88°49.4	52°18.5	37°39.5	33°10.9	67°38.3	79°04.9	82°21.4	105°58.5
9	208°44.9	10.7'	26°26.2	5.1'	54.3'	88°19.6	51°52.2	37°24.3	33°40.7	68°07.0	79°34.6	82°45.6	106°25.8
10	223°14.6	10.8'	26°21.1	5.2'	54.3'	87°49.8	51°25.8		34°10.5	68°35.7	80°04.4	83°10.0	106°53.1
11	237°44.4	10.8'	26°15.9	5.4'	54.3'	87°20.0	50°59.5		34°40.2	69°04.4	80°34.1	83°34.3	107°20.4
12	252°14.2	10.8'	S26°10.5	5.5'	54.3'	86°50.2	50°33.3		35°10.0	69°33.1	81°03.9	83°58.6	107°47.7
13	266°44.0	10.9'	26°05.0	5.6'	54.3'	86°20.4	50°07.1		35°39.8	70°01.8	81°33.7	84°23.0	108°15.1
14	281°13.9	10.9'	25°59.4	5.7'	54.4'	85°50.6	49°40.9		36°09.6	70°30.5	82°03.5	84°47.4	108°42.4
15	295°43.8	11.0'	25°53.6	5.9'	54.4'	85°20.7	49°14.7		36°39.5	70°59.3	82°33.3	85°11.8	109°09.8
16	310°13.8	11.0'	25°47.8	6.0'	54.4'	84°50.9	48°48.7		37°09.3	71°28.1	83°03.1	85°36.2	109°37.1
17	324°43.8	11.0'	25°41.8	6.1'	54.4'	84°21.0	48°22.6		37°39.2	71°56.9	83°32.9	86°00.6	110°04.5
18	339°13.8	11.1'	S25°35.7	6.2'	54.4'	83°51.1	47°56.6		38°09.0	72°25.7	84°02.8	86°25.1	110°31.9
19	353°43.9	11.1'	25°29.4	6.4'	54.4'	83°21.3	47°30.6		38°38.9	72°54.5	84°32.6	86°49.6	110°59.3
20	8°14.0	11.2'	25°23.1	6.5'	54.4'	82°51.4	47°04.7		39°08.8	73°23.3	85°02.5	87°14.1	111°26.8
21	22°44.1	11.2'	25°16.6	6.6'	54.4'	82°21.4	46°38.8		39°38.7	73°52.2	85°32.4	87°38.6	111°54.2
22	37°14.3	11.2'	25°10.0	6.7'	54.4'	81°51.5	46°13.0		40°08.6	74°21.1	86°02.3	88°03.1	112°21.7
23	51°44.6	11.3'	25°03.3	6.8'	54.5'	81°21.5	45°47.2		40°38.6	74°50.0	86°32.2	88°27.6	112°49.2
20 th	SD = 14.8' Mer. pass. 19:26					Sun SD = 15.9'							

h	Moon (21 st Sep)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Venus	+Spica	+Arcturus	+Sun
0	66°14.8	11.3'	S24°56.5	7.0'	54.5'	80°51.6	45°21.5	41°08.5	60°18.9	75°18.9	87°02.2	88°52.2	113°16.6
1	80°45.2	11.4'	24°49.5	7.1'	54.5'	80°21.6	44°55.8	41°38.5	60°40.3	75°47.8	87°32.1	89°16.7	113°44.1
2	95°15.5	11.4'	24°42.4	7.2'	54.5'	79°51.6	44°30.2	42°08.5	61°01.9	76°16.8	88°02.1	89°41.3	114°11.7
3	109°45.9	11.5'	24°35.2	7.3'	54.5'	79°21.6	44°04.6	42°38.5	61°23.5	76°45.7	88°32.1	90°05.9	114°39.2
4	124°16.4	11.5'	24°27.9	7.4'	54.5'	78°51.6	43°39.1	43°08.5	61°45.3	77°14.7	89°02.1	90°30.5	115°06.8
5	138°46.9	11.5'	24°20.5	7.5'	54.5'	78°21.5	43°13.7	43°38.6	62°07.1	77°43.7	89°32.1	90°55.2	115°34.3
6	153°17.4	11.6'	S24°13.0	7.7'	54.6'	77°51.4	42°48.3	44°08.6	62°29.0	78°12.8	90°02.2	91°19.8	116°01.9
7	167°48.0	11.6'	24°05.3	7.8'	54.6'	77°21.4	42°23.0	44°38.7	62°50.9	78°41.8	90°32.2	91°44.4	116°29.5
8	182°18.6	11.7'	23°57.6	7.9'	54.6'	76°51.3	41°57.8	45°08.8	63°13.0	79°10.9	91°02.3	92°09.1	116°57.1
9	196°49.3	11.7'	23°49.7	8.0'	54.6'	76°21.1	41°32.7	45°38.9	63°35.1	79°40.0	91°32.4	92°33.8	117°24.8
10	211°20.0	11.8'	23°41.7	8.1'	54.6'	75°51.0	41°07.6	46°09.1	63°57.3	80°09.1	92°02.5	92°58.5	117°52.5
11	225°50.8	11.8'	23°33.6	8.2'	54.6'	75°20.9	40°42.6	46°39.2	64°19.5	80°38.2	92°32.6	93°23.2	118°20.1
12	240°21.6	11.8'	S23°25.3	8.3'	54.6'	74°50.7	40°17.6	47°09.4	64°41.8	81°07.4	93°02.8	93°47.9	118°47.8
13	254°52.4	11.9'	23°17.0	8.4'	54.7'	74°20.5	39°52.8	47°39.6	65°04.2	81°36.6	93°33.0	94°12.6	119°15.6
14	269°23.3	11.9'	23°08.6	8.6'	54.7'	73°50.3	39°28.0	48°09.8	65°26.7	82°05.8	94°03.2	94°37.3	119°43.3
15	283°54.2	12.0'	23°00.0	8.7'	54.7'	73°20.1	39°03.4	48°40.0	65°49.3	82°35.0	94°33.4	95°02.1	
16	298°25.2	12.0'	22°51.3	8.8'	54.7'	72°49.8	38°38.8	49°10.3	66°11.9	83°04.3	95°03.6	95°26.8	
17	312°56.3	12.1'	22°42.6	8.9'	54.7'	72°19.5	38°14.3	49°40.6	66°34.6	83°33.6	95°33.9	95°51.6	
18	327°27.3	12.1'	S22°33.7	9.0'	54.7'	71°49.2	37°50.0	50°10.9	66°57.3	84°02.9	96°04.2	96°16.3	
19	341°58.5	12.2'	22°24.7	9.1'	54.8'	71°18.9	37°25.7	50°41.2	67°20.1	84°32.2	96°34.5	96°41.1	
20	356°29.6	12.2'	22°15.6	9.2'	54.8'	70°48.6	37°01.5	51°11.5	67°43.0	85°01.6	97°04.8	97°05.9	
21	11°00.8	12.3'	22°06.4	9.3'	54.8'	70°18.2	36°37.5	51°41.9	68°05.9	85°30.9	97°35.1	97°30.7	
22	25°32.1	12.3'	21°57.1	9.4'	54.8'	69°47.9	36°13.6	52°12.3	68°28.9	86°00.3	98°05.5	97°55.5	
23	40°03.4	12.3'	21°47.7	9.5'	54.8'	69°17.5	35°49.8	52°42.7	68°52.0	86°29.8	98°35.9	98°20.3	
21 st	SD = 14.9' Mer. pass. 20:14					Sun SD = 15.9'							

DUT1 = UT1-UTC = +0.1108 sec $\Delta T = TT-UT1 = +69.0732$ sec

2026 September 22 to Sep. 24 UT

Moon (22 nd Sep)						Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Aldebaran	-Rigel	-Saturn	-Fomalhaut	+Antares	+Venus	+Arcturus	+Spica
0	54°34.7	12.4'	S21°38.2	9.6'	54.9'			68°47.1	35°26.1	53°13.1	86°59.2	98°45.1	99°06.3
1	69°06.1	12.4'	21°28.5	9.7'	54.9'			68°16.6	35°02.5	53°43.6	87°28.7	99°09.9	99°36.7
2	83°37.6	12.5'	21°18.8	9.8'	54.9'			67°46.2	34°39.1	54°14.1	87°58.2	99°34.7	100°07.2
3	98°09.1	12.5'	21°09.0	9.9'	54.9'			67°15.7	34°15.9	54°44.6	88°27.8	99°59.6	100°37.7
4	112°40.6	12.6'	20°59.1	10.0'	54.9'			66°45.2	33°52.8	55°15.1	88°57.3	100°24.4	101°08.2
5	127°12.1	12.6'	20°49.0	10.1'	55.0'			66°14.6	33°29.8	55°45.7	89°26.9	100°49.2	101°38.7
6	141°43.8	12.7'	S20°38.9	10.2'	55.0'			65°44.1	33°07.0	56°16.2	89°56.5	101°14.0	102°09.3
7	156°15.4	12.7'	20°28.7	10.3'	55.0'			65°13.5	32°44.4	56°46.8	90°26.2	101°38.9	102°39.8
8	170°47.1	12.7'	20°18.3	10.4'	55.0'			64°42.9	32°21.9	57°17.5	90°55.9	102°03.7	103°10.5
9	185°18.9	12.8'	20°07.9	10.5'	55.0'			64°12.3	31°59.7	57°48.1	91°25.6	102°28.6	103°41.1
10	199°50.6	12.8'	19°57.4	10.6'	55.1'			63°41.6	31°37.6	58°18.8	91°55.3	102°53.4	104°11.7
11	214°22.5	12.9'	19°46.8	10.7'	55.1'			63°11.0	31°15.7	58°49.5	92°25.0	103°18.2	104°42.4
12	228°54.3	12.9'	S19°36.1	10.8'	55.1'			62°40.3	30°54.0	59°20.2	92°54.8	103°43.1	105°13.1
13	243°26.2	13.0'	19°25.3	10.9'	55.1'	119°46.9		62°09.6	30°32.6	59°51.0	93°24.7	104°07.9	105°43.9
14	257°58.2	13.0'	19°14.4	11.0'	55.1'	119°16.8	119°42.7	61°38.8	30°11.3	60°21.8	93°54.5	104°32.7	106°14.6
15	272°30.2	13.0'	19°03.4	11.1'	55.2'	118°46.7	119°20.0	61°08.1	29°50.3	60°52.6	94°24.4	104°57.5	106°45.4
16	287°02.2	13.1'	18°52.3	11.2'	55.2'	118°16.5	118°57.2	60°37.3	29°29.6	61°23.4	94°54.3	105°22.4	107°16.2
17	301°34.3	13.1'	18°41.1	11.3'	55.2'	117°46.3	118°34.4	60°06.5	29°09.1	61°54.3	95°24.2	105°47.2	107°47.1
18	316°06.4	13.2'	S18°29.8	11.4'	55.2'	117°16.1	118°11.4	59°35.6	28°48.8	62°25.2	95°54.2	106°12.0	108°18.0
19	330°38.6	13.2'	18°18.4	11.5'	55.3'	116°45.9	117°48.4	59°04.7	28°28.9	62°56.1	96°24.2	106°36.8	108°48.9
20	345°10.8	13.2'	18°07.0	11.5'	55.3'	116°15.6	117°25.2	58°33.9	28°09.2	63°27.1	96°54.2	107°01.6	109°19.8
21	359°43.0	13.3'	17°55.4	11.6'	55.3'	115°45.2	117°02.0	58°02.9	27°49.8	63°58.0	97°24.3	107°26.4	109°50.7
22	14°15.3	13.3'	17°43.8	11.7'	55.3'	115°14.9	116°38.7	57°32.0	27°30.7	64°29.1	97°54.4	107°51.2	110°21.7
23	28°47.6	13.3'	17°32.1	11.8'	55.3'	114°44.5	116°15.4	57°01.0	27°11.9	65°00.1	98°24.5	108°15.9	110°52.7
22 nd	SD = 15.0' Mer. pass. 21:01												

Moon (23 rd Sep)						Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Capella	-Rigel	-Aldebaran	-Saturn	+Antares	+Rigel Kent.	+Venus	+Spica
0	43°19.9	13.4'	S17°20.3	11.9'	55.4'		115°51.9	114°14.1	56°30.0	65°31.2	78°46.7	98°54.7	111°23.8
1	57°52.3	13.4'	17°08.4	12.0'	55.4'		115°28.4	113°43.6	55°59.0	66°02.3	79°11.2	99°24.9	111°54.8
2	72°24.7	13.5'	16°56.4	12.1'	55.4'		115°04.7	113°13.1	55°28.0	66°33.4	79°35.6	99°55.1	112°25.9
3	86°57.2	13.5'	16°44.4	12.1'	55.4'		114°41.0	112°42.6	54°56.9	67°04.5	80°00.1	100°25.3	112°57.1
4	101°29.7	13.5'	16°32.2	12.2'	55.5'		114°17.3	112°12.0	54°25.8	67°35.7	80°24.7	100°55.6	113°28.2
5	116°02.2	13.6'	16°20.0	12.3'	55.5'		113°53.4	111°41.4	53°54.7	68°06.9	80°49.3	101°25.9	113°59.4
6	130°34.7	13.6'	S16°07.7	12.4'	55.5'		113°29.5	111°10.8	53°23.5	68°38.2	81°13.9	101°56.3	114°30.6
7	145°07.3	13.6'	15°55.3	12.5'	55.5'		113°05.5	110°40.2	52°52.4	69°09.4	81°38.6	102°26.7	115°01.9
8	159°39.9	13.7'	15°42.8	12.5'	55.6'	119°59.6	112°41.4	110°09.5	52°21.2	69°40.7	82°03.4	102°57.1	115°33.1
9	174°12.6	13.7'	15°30.3	12.6'	55.6'	119°30.3	112°17.3	109°38.7	51°49.9	70°12.1	82°28.1	103°27.5	116°04.4
10	188°45.3	13.7'	15°17.6	12.7'	55.6'	119°01.0	111°53.0	109°08.0	51°18.7	70°43.4	82°52.9	103°58.0	116°35.8
11	203°18.0	13.7'	15°04.9	12.8'	55.6'	118°31.6	111°28.8	108°37.2	50°47.4	71°14.8	83°17.7	104°28.5	117°07.1
12	217°50.7	13.8'	S14°52.2	12.9'	55.7'	118°02.2	111°04.4	108°06.3	50°16.1	71°46.2	83°42.6	104°59.1	117°38.5
13	232°23.5	13.8'	14°39.3	12.9'	55.7'	117°32.7	110°40.0	107°35.5	49°44.8	72°17.7	84°07.5	105°29.7	118°10.0
14	246°56.3	13.8'	14°26.4	13.0'	55.7'	117°03.2	110°15.5	107°04.6	49°13.4	72°49.2	84°32.5	106°00.3	118°41.4
15	261°29.2	13.9'	14°13.4	13.1'	55.7'	116°33.7	109°50.9	106°33.7	48°42.0	73°20.7	84°57.4	106°30.9	119°12.9
16	276°02.0	13.9'	14°00.3	13.2'	55.8'	116°04.1	109°26.3	106°02.7	48°10.6	73°52.3	85°22.5	107°01.6	119°44.4
17	290°34.9	13.9'	13°47.1	13.2'	55.8'	115°34.4	109°01.6	105°31.7	47°39.2	74°23.8	85°47.5	107°32.4	
18	305°07.8	13.9'	S13°33.9	13.3'	55.8'	115°04.7	108°36.9	105°00.6	47°07.7	74°55.4	86°12.6	108°03.1	
19	319°40.8	14.0'	13°20.6	13.4'	55.8'	114°35.0	108°12.0	104°29.6	46°36.3	75°27.1	86°37.7	108°33.9	
20	334°13.7	14.0'	13°07.2	13.4'	55.9'	114°05.2	107°47.2	103°58.5	46°04.7	75°58.8	87°02.8	109°04.7	
21	348°46.7	14.0'	12°53.8	13.5'	55.9'	113°35.3	107°22.2	103°27.3	45°33.2	76°30.5	87°28.0	109°35.6	
22	3°19.7	14.0'	12°40.3	13.6'	55.9'	113°05.4	106°57.2	102°56.2	45°01.6	77°02.2	87°53.2	110°06.5	
23	17°52.7	14.1'	12°26.7	13.6'	55.9'	112°35.5	106°32.2	102°25.0	44°30.1	77°34.0	88°18.5	110°37.4	
23 rd	SD = 15.1' Mer. pass. 21:46												

Moon (24 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Betelgeuse	-Capella	-Aldebaran	-Saturn	+Antares	+Rigel Kent.	+Hadar	+Venus
0	32°25.8	14.1'	S12°13.1	13.7'	56.0'	119°33.7	112°05.6	101°53.7	43°58.4	78°05.8	88°43.7	92°48.6	111°08.4
1	46°58.9	14.1'	11°59.4	13.8'	56.0'	119°04.5	111°35.5	101°22.5	43°26.8	78°37.6	89°09.0	93°13.4	111°39.4
2	61°32.0	14.1'	11°45.6	13.8'	56.0'	118°35.3	111°05.5	100°51.1	42°55.2	79°09.5	89°34.3	93°38.1	112°10.4
3	76°05.1	14.1'	11°31.8	13.9'	56.1'	118°06.1	110°35.4	100°19.8	42°23.5	79°41.4	89°59.7	94°02.9	112°41.5
4	90°38.2	14.1'	11°17.9	14.0'	56.1'	117°36.8	110°05.2	99°48.4	41°51.8	80°13.3	90°25.1	94°27.7	113°12.6
5	105°11.3	14.2'	11°03.9	14.0'	56.1'	117°07.4	109°35.0	99°17.0	41°20.0	80°45.3	90°50.5	94°52.5	113°43.8
6	119°44.5	14.2'	S10°49.9	14.1'	56.1'	116°38.0	109°04.8	98°45.6	40°48.3	81°17.3	91°15.9	95°17.3	114°14.9
7	134°17.7	14.2'	10°35.8	14.1'	56.2'	116°08.5	108°34.5	98°14.1	40°16.5	81°49.3	91°41.3	95°42.2	114°46.2
8	148°50.9	14.2'	10°21.7	14.2'	56.2'	115°39.0	108°04.2	97°42.6	39°44.7	82°21.4	92°06.8	96°07.0	115°17.4
9	163°24.1	14.2'	10°07.5	14.3'	56.2'	115°09.4	107°33.9	97°11.0	39°12.9	82°53.5	92°32.3	96°31.9	115°48.7
10	177°57.3	14.2'	09°53.2	14.3'	56.2'	114°39.7	107°03.5	96°39.5	38°41.0	83°25.6	92°57.8	96°56.7	116°20.0
11	192°30.5	14.2'	09°38.9	14.4'	56.3'	114°10.1	106°33.0	96°07.8	38°09.2	83°57.8	93°23.3	97°21.6	116°51.4
12	207°03.8	14.3'	S09°24.5	14.4'	56.3'	113°40.3	106°02.6	95°36.2	37°37.3	84°30.0	93°48.9	97°46.5	117°22.8
13	221°37.0	14.3'	09°10.1	14.5'	56.3'	113°10.5	105°32.0	95°04.5	37°05.4	85°02.2	94°14.4	98°11.4	117°54.2
14	236°10.3	14.3'	08°55.6	14.5'	56.4'	112°40.7	105°01.5	94°32.8	36°33.4	85°34.5	94°40.0	98°36.3	118°25.7
15	250°43.6	14.3'	08°41.1	14.6'	56.4'	112°10.8	104°30.9	94°01.0	36°01.5	86°06.8	95°05.6	99°01.3	118°57.2
16	265°16.9	14.3'	08°26.5	14.6'	56.4'	111°40.9	104°00.2	93°29.3	35°29.5	86°39.1	95°31.2	99°26.2	119°28.7
17	279°50.1	14.3'	08°11.9	14.7'	56.4'	111°10.9	103°29.6	92°57.5	34°57.5	87°11.5	95°56.9	99°51.1	
18	294°23.4	14.3'	S07°57.2	14.7'	56.5'	110°40.9	102°58.8	92°25.6	34°25.5	87°43.9	96°22.5	100°16.0	
19	308°56.7	14.3'	07°42.5	14.8'	56.5'	110°10.8	102°28.1	91°53.7	33°53.5	88°16.3	96°48.2	100°41.0	
20	323°30.0	14.3'	07°27.7	14.8'	56.5'	109°40.7	101°57.3	91°21.8	33°21.5	88°48.8	97°13.9	101°05.9	
21	338°03.3	14.3'	07°12.8	14.9'	56.5'	109°10.5	101°26.5	90°49.9	32°49.4	89°21.3	97°39.6	101°30.9	
22	352°36.6	14.3'	06°58.0	14.9'	56.6'	108°40.3	100°55.6	90°17.9	32°17.4	89°53.8	98°05.3	101°55.8	
23	7°09.9	14.3'	06°43.1	15.0'	56.6'	108°10.0	100°24.7	89°45.9	31°45.3	90°26.4	98°31.0	102°20.7	
24 th	SD = 15.3'		Mer. pass. 22:30										

DUT1 = UT1-UTC = +0.1111 sec $\Delta T = TT-UT1 = +69.0729$ sec

2026 September 25 to Sep. 27 UT

h	Moon (25 th Sep)					Lunar Distance (objects with largest hourly LD delta)								
Fri	GHA	ν	Dec	d	HP	-Betelgeuse	-Capella	-Aldebaran	-Saturn	+Altair	+Antares	+Rigil Kent.	+Hadar	
0	21°43.2	14.3'	S06°28.1	15.0'	56.6'	107°39.7	99°53.7	89°13.8	31°13.2	46°33.8	90°59.0	98°56.7	102°45.7	
1	36°16.5	14.3'	06°13.1	15.0'	56.7'	107°09.4	99°22.8	88°41.7	30°41.1	46°56.4	91°31.7	99°22.4	103°10.6	
2	50°49.8	14.3'	05°58.0	15.1'	56.7'	106°39.0	98°51.7	88°09.6	30°09.0	47°19.3	92°04.3	99°48.2	103°35.5	
3	65°23.1	14.3'	05°43.0	15.1'	56.7'	106°08.5	98°20.7	87°37.5	29°36.9	47°42.3	92°37.0	100°13.9	104°00.5	
4	79°56.4	14.3'	05°27.8	15.2'	56.7'	105°38.0	97°49.6	87°05.3	29°04.8	48°05.5	93°09.8	100°39.6	104°25.4	
5	94°29.7	14.3'	05°12.7	15.2'	56.8'	105°07.5	97°18.5	86°33.1	28°32.7	48°28.8	93°42.5	101°05.4	104°50.3	
6	109°03.0	14.3'	S04°57.5	15.2'	56.8'	104°36.9	96°47.3	86°00.8	28°00.5	48°52.3	94°15.3	101°31.1	105°15.2	
7	123°36.3	14.3'	04°42.2	15.3'	56.8'	104°06.3	96°16.1	85°28.6	27°28.4	49°16.0	94°48.2	101°56.9	105°40.0	
8	138°09.6	14.3'	04°26.9	15.3'	56.8'	103°35.7	95°44.9	84°56.3	26°56.3	49°39.8	95°21.0	102°22.6	106°04.9	
9	152°42.8	14.2'	04°11.6	15.3'	56.9'	103°05.0	95°13.6	84°23.9	26°24.2	50°03.8	95°53.9	102°48.4	106°29.8	
10	167°16.1	14.2'	03°56.3	15.4'	56.9'	102°34.3	94°42.3	83°51.5	25°52.0	50°27.9	96°26.9	103°14.1	106°54.6	
11	181°49.3	14.2'	03°40.9	15.4'	56.9'	102°03.5	94°11.0	83°19.1	25°19.9	50°52.1	96°59.8	103°39.9	107°19.4	
12	196°22.5	14.2'	S03°25.5	15.4'	57.0'	101°32.7	93°39.6	82°46.7	24°47.8	51°16.5	97°32.8	104°05.6	107°44.2	
13	210°55.7	14.2'	03°10.1	15.5'	57.0'	101°01.8	93°08.2	82°14.3	24°15.7	51°41.1	98°05.9	104°31.4	108°09.0	
14	225°28.9	14.2'	02°54.6	15.5'	57.0'	100°30.9	92°36.8	81°41.8	23°43.7	52°05.8	98°38.9	104°57.1	108°33.8	
15	240°02.1	14.2'	02°39.1	15.5'	57.0'	100°00.0	92°05.3	81°09.2	23°11.6	52°30.6	99°12.0	105°22.8	108°58.5	
16	254°35.3	14.1'	02°23.6	15.5'	57.1'	99°29.0	91°33.8	80°36.7	22°39.6	52°55.5	99°45.2	105°48.5	109°23.3	
17	269°08.4	14.1'	02°08.1	15.6'	57.1'	98°58.0	91°02.3	80°04.1	22°07.6	53°20.6	100°18.3	106°14.2	109°48.0	
18	283°41.5	14.1'	S01°52.5	15.6'	57.1'	98°27.0	90°30.7	79°31.5	21°35.7	53°45.8	100°51.5	106°39.9	110°12.6	
19	298°14.6	14.1'	01°36.9	15.6'	57.1'	97°55.9	89°59.1	78°58.8	21°03.7	54°11.1	101°24.7	107°05.6	110°37.3	
20	312°47.7	14.1'	01°21.3	15.6'	57.2'	97°24.8	89°27.5	78°26.2	20°31.9	54°36.5	101°58.0	107°31.2	111°01.9	
21	327°20.8	14.0'	01°05.6	15.7'	57.2'	96°53.7	88°55.8	77°53.4	20°00.1	55°02.1	102°31.3	107°56.9	111°26.4	
22	341°53.8	14.0'	00°50.0	15.7'	57.2'	96°22.5	88°24.1	77°20.7	19°28.3	55°27.8	103°04.6	108°22.5	111°51.0	
23	356°26.8	14.0'	00°34.3	15.7'	57.3'	95°51.3	87°52.4	76°47.9	18°56.6	55°53.6	103°38.0	108°48.1	112°15.5	
25 th	SD = 15.4' Mer. pass. 23:15													

h Moon (26 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Mars	-Pollux	-Capella	-Aldebaran	+Fomalhaut	+Altair	+Antares	+Rigel Kent.
0	10°59.8	14.0'	S00°18.6	15.7'	57.3'		118°51.1	87°20.7	76°15.2	30°24.7	56°19.5	104°11.4	109°13.7
1	25°32.8	13.9'	S00°02.9	15.7'	57.3'		118°17.8	86°48.9	75°42.3	30°48.0	56°45.5	104°44.8	109°39.2
2	40°05.7	13.9'	N00°12.8	15.7'	57.3'		117°44.4	86°17.1	75°09.5	31°11.5	57°11.6	105°18.3	110°04.8
3	54°38.6	13.9'	00°28.5	15.7'	57.4'		117°11.0	85°45.3	74°36.6	31°35.3	57°37.8	105°51.7	110°30.3
4	69°11.5	13.8'	00°44.3	15.8'	57.4'		116°37.6	85°13.4	74°03.7	31°59.4	58°04.2	106°25.3	110°55.8
5	83°44.3	13.8'	01°00.0	15.8'	57.4'		116°04.1	84°41.6	73°30.8	32°23.8	58°30.6	106°58.8	111°21.2
6	98°17.2	13.8'	N01°15.8	15.8'	57.4'		115°30.6	84°09.6	72°57.8	32°48.4	58°57.1	107°32.4	111°46.6
7	112°49.9	13.7'	01°31.6	15.8'	57.5'		114°57.1	83°37.7	72°24.8	33°13.3	59°23.8	108°06.0	112°12.0
8	127°22.7	13.7'	01°47.4	15.8'	57.5'		114°23.5	83°05.8	71°51.8	33°38.5	59°50.5	108°39.6	112°37.4
9	141°55.4	13.7'	02°03.2	15.8'	57.5'	119°39.8	113°49.9	82°33.8	71°18.8	34°03.9	60°17.3	109°13.3	113°02.7
10	156°28.0	13.6'	02°19.0	15.8'	57.5'	119°07.6	113°16.3	82°01.8	70°45.7	34°29.5	60°44.3	109°47.0	113°28.0
11	171°00.7	13.6'	02°34.8	15.8'	57.6'	118°35.3	112°42.6	81°29.7	70°12.6	34°55.3	61°11.3	110°20.7	113°53.2
12	185°33.3	13.6'	N02°50.6	15.8'	57.6'	118°03.1	112°08.9	80°57.7	69°39.5	35°21.4	61°38.4	110°54.5	114°18.4
13	200°05.8	13.5'	03°06.4	15.8'	57.6'	117°30.8	111°35.2	80°25.6	69°06.4	35°47.6	62°05.6	111°28.3	114°43.6
14	214°38.3	13.5'	03°22.2	15.8'	57.6'	116°58.4	111°01.5	79°53.5	68°33.2	36°14.1	62°32.8	112°02.1	115°08.7
15	229°10.8	13.4'	03°38.0	15.8'	57.7'	116°26.1	110°27.7	79°21.4	68°00.0	36°40.7	63°00.2	112°36.0	115°33.7
16	243°43.2	13.4'	03°53.8	15.8'	57.7'	115°53.7	109°53.9	78°49.2	67°26.8	37°07.6	63°27.6	113°09.8	115°58.7
17	258°15.6	13.3'	04°09.6	15.8'	57.7'	115°21.2	109°20.1	78°17.0	66°53.6	37°34.6	63°55.2	113°43.7	116°23.7
18	272°47.9	13.3'	N04°25.3	15.8'	57.7'	114°48.8	108°46.2	77°44.8	66°20.3	38°01.9	64°22.8	114°17.7	116°48.6
19	287°20.2	13.2'	04°41.1	15.8'	57.8'	114°16.3	108°12.3	77°12.6	65°47.0	38°29.3	64°50.4	114°51.7	117°13.4
20	301°52.5	13.2'	04°56.9	15.8'	57.8'	113°43.8	107°38.4	76°40.4	65°13.7	38°56.8	65°18.2	115°25.7	117°38.2
21	316°24.7	13.1'	05°12.7	15.8'	57.8'	113°11.3	107°04.4	76°08.2	64°40.4	39°24.6	65°46.0	115°59.7	118°02.9
22	330°56.8	13.1'	05°28.4	15.7'	57.8'	112°38.7	106°30.5	75°35.9	64°07.1	39°52.4	66°13.9	116°33.7	118°27.6
23	345°28.9	13.0'	05°44.1	15.7'	57.9'	112°06.1	105°56.4	75°03.6	63°33.7	40°20.5	66°41.9	117°07.8	118°52.1
26 th	SD = 15.6' Mer. pass. ---												

Moon (27 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Jupiter	-Mars	-Pollux	-Aldebaran	+Saturn	+Fomalhaut	+Altair	+Antares
0	0°00.9	13.0'	N05°59.9	15.7'	57.9'		111°33.5	105°22.4	63°00.3		40°48.7	67°10.0	117°41.9
1	14°32.9	12.9'	06°15.6	15.7'	57.9'		111°00.8	104°48.4	62°26.9		41°17.0	67°38.1	118°16.1
2	29°04.8	12.9'	06°31.3	15.7'	57.9'		110°28.1	104°14.3	61°53.5		41°45.5	68°06.3	118°50.2
3	43°36.7	12.8'	06°46.9	15.7'	58.0'		109°55.4	103°40.1	61°20.1		42°14.1	68°34.5	119°24.4
4	58°08.5	12.8'	07°02.6	15.6'	58.0'		109°22.7	103°06.0	60°46.6		42°42.9	69°02.8	119°58.6
5	72°40.3	12.7'	07°18.2	15.6'	58.0'		108°49.9	102°31.8	60°13.1		43°11.8	69°31.2	
6	87°11.9	12.6'	N07°33.8	15.6'	58.0'		108°17.1	101°57.6	59°39.6		43°40.8	69°59.6	
7	101°43.6	12.6'	07°49.4	15.6'	58.1'		107°44.3	101°23.4	59°06.1		44°09.9	70°28.1	
8	116°15.1	12.5'	08°05.0	15.5'	58.1'		107°11.5	100°49.1	58°32.6		44°39.2	70°56.7	
9	130°46.6	12.4'	08°20.5	15.5'	58.1'		106°38.6	100°14.8	57°59.0		45°08.5	71°25.3	
10	145°18.1	12.4'	08°36.0	15.5'	58.1'		106°05.7	99°40.5	57°25.5		45°38.0	71°54.0	
11	159°49.5	12.3'	08°51.5	15.4'	58.1'		105°32.8	99°06.2	56°51.9		46°07.6	72°22.7	
12	174°20.8	12.2'	N09°06.9	15.4'	58.2'		104°59.9	98°31.9	56°18.3		46°37.3	72°51.5	
13	188°52.0	12.2'	09°22.3	15.4'	58.2'		104°26.9	97°57.5	55°44.7		47°07.1	73°20.3	
14	203°23.2	12.1'	09°37.7	15.3'	58.2'		103°53.9	97°23.1	55°11.1		47°37.0	73°49.2	
15	217°54.3	12.0'	09°53.0	15.3'	58.2'		103°20.9	96°48.6	54°37.5		48°07.0	74°18.2	
16	232°25.3	12.0'	10°08.3	15.3'	58.3'		102°47.8	96°14.2	54°03.8		48°37.1	74°47.2	
17	246°56.3	11.9'	10°23.6	15.2'	58.3'		102°14.7	95°39.7	53°30.2		49°07.3	75°16.2	
18	261°27.2	11.8'	N10°38.8	15.2'	58.3'		101°41.6	95°05.2	52°56.5		49°37.6	75°45.3	
19	275°58.0	11.7'	10°54.0	15.1'	58.3'		101°08.5	94°30.7	52°22.8		50°07.9	76°14.4	
20	290°28.7	11.7'	11°09.1	15.1'	58.3'	119°44.5	100°35.4	93°56.1	51°49.2	9°53.8	50°38.4	76°43.6	
21	304°59.4	11.6'	11°24.2	15.0'	58.4'	119°10.3	100°02.2	93°21.5	51°15.5	10°21.3	51°08.9	77°12.8	
22	319°30.0	11.5'	11°39.2	15.0'	58.4'	118°36.1	99°29.0	92°46.9	50°41.8	10°49.5	51°39.6	77°42.1	
23	334°00.5	11.4'	11°54.2	14.9'	58.4'	118°01.9	98°55.8	92°12.3	50°08.1	11°18.4	52°10.3	78°11.4	
27 th	SD = 15.8' Mer. pass. 00:00												

Moon (28 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Pollux	-Aldebaran	+Saturn	+Fomalhaut	+Achernar	+Altair
0	348°30.9	11.3'	N12°09.2	14.9'	58.4'		117°27.7	91°37.7	49°34.4	11°47.8	52°41.1		78°40.7
1	3°01.3	11.3'	12°24.0	14.8'	58.4'		116°53.4	91°03.0	49°00.7	12°17.7	53°11.9		79°10.1
2	17°31.5	11.2'	12°38.9	14.8'	58.5'		116°19.1	90°28.3	48°27.0	12°48.0	53°42.9		79°39.5
3	32°01.7	11.1'	12°53.7	14.7'	58.5'		115°44.8	89°53.6	47°53.3	13°18.7	54°13.9		80°09.0
4	46°31.8	11.0'	13°08.4	14.7'	58.5'		115°10.4	89°18.9	47°19.6	13°49.8	54°44.9		80°38.4
5	61°01.8	10.9'	13°23.0	14.6'	58.5'		114°36.1	88°44.2	46°45.9	14°21.2	55°16.1		81°08.0
6	75°31.8	10.8'	N13°37.6	14.5'	58.5'		114°01.7	88°09.4	46°12.2	14°52.9	55°47.3		81°37.5
7	90°01.6	10.8'	13°52.2	14.5'	58.5'		113°27.3	87°34.6	45°38.4	15°24.8	56°18.6		82°07.1
8	104°31.4	10.7'	14°06.6	14.4'	58.6'		112°52.9	86°59.8	45°04.7	15°56.9	56°49.9		82°36.7
9	119°01.0	10.6'	14°21.0	14.3'	58.6'		112°18.4	86°25.0	44°31.0	16°29.3	57°21.3		83°06.4
10	133°30.6	10.5'	14°35.4	14.3'	58.6'		111°44.0	85°50.1	43°57.3	17°01.9	57°52.8		83°36.0
11	148°00.1	10.4'	14°49.6	14.2'	58.6'		111°09.5	85°15.3	43°23.7	17°34.6	58°24.3		84°05.7
12	162°29.5	10.3'	N15°03.8	14.1'	58.6'		110°35.0	84°40.4	42°50.0	18°07.5	58°55.8		84°35.5
13	176°58.8	10.2'	15°18.0	14.0'	58.7'		110°00.5	84°05.5	42°16.3	18°40.5	59°27.5		85°05.2
14	191°28.1	10.1'	15°32.0	14.0'	58.7'		109°25.9	83°30.6	41°42.7	19°13.7	59°59.2		85°35.0
15	205°57.2	10.0'	15°46.0	13.9'	58.7'	119°51.5	108°51.4	82°55.6	41°09.0	19°47.0	60°30.9		86°04.8
16	220°26.2	9.9'	15°59.9	13.8'	58.7'	119°16.5	108°16.8	82°20.7	40°35.4	20°20.5	61°02.7		86°34.6
17	234°55.2	9.8'	16°13.7	13.7'	58.7'	118°41.4	107°42.2	81°45.7	40°01.8	20°54.0	61°34.5		87°04.5
18	249°24.0	9.8'	N16°27.4	13.6'	58.7'	118°06.4	107°07.6	81°10.7	39°28.2	21°27.7	62°06.4		87°34.3
19	263°52.8	9.7'	16°41.1	13.6'	58.7'	117°31.3	106°33.0	80°35.7	38°54.6	22°01.4	62°38.4		88°04.2
20	278°21.4	9.6'	16°54.6	13.5'	58.8'	116°56.2	105°58.3	80°00.7	38°21.1	22°35.2	63°10.3		88°34.1
21	292°50.0	9.5'	17°08.1	13.4'	58.8'	116°21.1	105°23.7	79°25.7	37°47.5	23°09.2	63°42.4	74°21.4	89°04.0
22	307°18.5	9.4'	17°21.5	13.3'	58.8'	115°46.0	104°49.0	78°50.6	37°14.0	23°43.1	64°14.4	74°36.5	89°33.9
23	321°46.8	9.3'	17°34.8	13.2'	58.8'	115°10.8	104°14.3	78°15.6	36°40.6	24°17.2	64°46.6	74°51.6	90°03.9
28 th	SD = 15.9' Mer. pass. 00:48												

Moon (29 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Mars	-Pollux	+Saturn	+Fomalhaut	+Deneb	+Altair
0	336°15.1	9.2'	N17°48.0	13.1'	58.8'	114°35.7	103°39.6	84°59.0	77°40.5	24°51.4	65°18.7		90°33.8
1	350°43.3	9.1'	18°01.1	13.0'	58.8'	114°00.5	103°04.9	84°25.3	77°05.4	25°25.6	65°50.9		91°03.8
2	5°11.3	9.0'	18°14.1	12.9'	58.9'	113°25.3	102°30.2	83°51.6	76°30.3	25°59.8	66°23.2	71°39.5	91°33.8
3	19°39.3	8.9'	18°27.1	12.8'	58.9'	112°50.1	101°55.4	83°17.9	75°55.1	26°34.2	66°55.4	71°54.7	92°03.8
4	34°07.2	8.8'	18°39.9	12.7'	58.9'	112°14.9	101°20.7	82°44.1	75°20.0	27°08.5	67°27.7	72°10.0	92°33.8
5	48°34.9	8.7'	18°52.6	12.6'	58.9'	111°39.7	100°45.9	82°10.4	74°44.9	27°43.0	68°00.1	72°25.4	93°03.8
6	63°02.6	8.6'	N19°05.2	12.5'	58.9'	111°04.4	100°11.1	81°36.6	74°09.7	28°17.5	68°32.5	72°40.9	93°33.8
7	77°30.2	8.5'	19°17.7	12.4'	58.9'	110°29.2	99°36.3	81°02.8	73°34.5	28°52.0	69°04.9	72°56.5	94°03.8
8	91°57.6	8.4'	19°30.1	12.3'	58.9'	109°53.9	99°01.5	80°29.0	72°59.3	29°26.6	69°37.3	73°12.2	94°33.8
9	106°25.0	8.3'	19°42.4	12.2'	58.9'	109°18.7	98°26.7	79°55.2	72°24.1	30°01.2	70°09.8	73°28.0	95°03.9
10	120°52.3	8.2'	19°54.6	12.1'	59.0'	108°43.4	97°51.8	79°21.4	71°48.9	30°35.9	70°42.3	73°43.9	95°33.9
11	135°19.4	8.1'	20°06.7	12.0'	59.0'	108°08.1	97°17.0	78°47.6	71°13.7	31°10.6	71°14.9	73°59.8	96°03.9
12	149°46.5	8.0'	N20°18.6	11.8'	59.0'	107°32.8	96°42.1	78°13.7	70°38.5	31°45.3	71°47.4	74°15.9	96°33.9
13	164°13.4	7.9'	20°30.5	11.7'	59.0'	106°57.4	96°07.2	77°39.9	70°03.2	32°20.1	72°20.1	74°32.0	97°03.9
14	178°40.3	7.7'	20°42.2	11.6'	59.0'	106°22.1	95°32.3	77°06.0	69°28.0	32°54.9	72°52.7	74°48.3	97°34.0
15	193°07.0	7.6'	20°53.8	11.5'	59.0'	105°46.7	94°57.4	76°32.1	68°52.7	33°29.8	73°25.3	75°04.6	98°04.0
16	207°33.7	7.5'	21°05.3	11.4'	59.0'	105°11.4	94°22.5	75°58.2	68°17.4	34°04.6	73°58.0	75°21.0	98°34.0
17	222°00.2	7.4'	21°16.7	11.2'	59.0'	104°36.0	93°47.6	75°24.3	67°42.1	34°39.5	74°30.7	75°37.5	99°04.0
18	236°26.6	7.3'	N21°27.9	11.1'	59.0'	104°00.6	93°12.7	74°50.4	67°06.8	35°14.5	75°03.4	75°54.0	99°34.0
19	250°53.0	7.2'	21°39.0	11.0'	59.1'	103°25.3	92°37.7	74°16.5	66°31.5	35°49.5	75°36.2	76°10.7	100°04.0
20	265°19.2	7.1'	21°50.0	10.9'	59.1'	102°49.9	92°02.8	73°42.5	65°56.2	36°24.4	76°09.0	76°27.4	100°34.0
21	279°45.4	7.0'	22°00.9	10.7'	59.1'	102°14.4	91°27.8	73°08.6	65°20.9	36°59.5	76°41.8	76°44.1	101°03.9
22	294°11.4	6.9'	22°11.6	10.6'	59.1'	101°39.0	90°52.9	72°34.6	64°45.6	37°34.5	77°14.6	77°01.0	101°33.9
23	308°37.3	6.8'	22°22.2	10.5'	59.1'	101°03.6	90°17.9	72°00.7	64°10.2	38°09.6	77°47.4	77°17.9	102°03.8
29 th	SD = 16.0' Mer. pass. 01:38												

Moon (30 th Sep)						Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Mars	-Pollux	+Saturn	+Deneb	+Fomalhaut	+Altair
0	323°03.1	6.7'	N22°32.7	10.3'	59.1'	100°28.2	89°42.9	71°26.7	63°34.9	38°44.7	77°34.9	78°20.3	102°33.8
1	337°28.9	6.6'	22°43.0	10.2'	59.1'	99°52.7	89°07.9	70°52.7	62°59.5	39°19.8	77°52.0	78°53.1	103°03.7
2	351°54.5	6.5'	22°53.2	10.0'	59.1'	99°17.3	88°32.9	70°18.7	62°24.2	39°54.9	78°09.1	79°26.0	103°33.5
3	6°20.0	6.4'	23°03.2	9.9'	59.1'	98°41.8	87°57.9	69°44.8	61°48.8	40°30.1	78°26.3	79°58.9	104°03.4
4	20°45.5	6.3'	23°13.1	9.8'	59.1'	98°06.4	87°22.9	69°10.8	61°13.4	41°05.2	78°43.5	80°31.9	104°33.3
5	35°10.8	6.2'	23°22.9	9.6'	59.1'	97°30.9	86°47.9	68°36.7	60°38.1	41°40.4	79°00.8	81°04.8	105°03.1
6	49°36.0	6.1'	N23°32.5	9.5'	59.2'	96°55.4	86°12.8	68°02.7	60°02.7	42°15.6	79°18.1	81°37.8	105°32.9
7	64°01.2	6.0'	23°42.0	9.3'	59.2'	96°19.9	85°37.8	67°28.7	59°27.3	42°50.9	79°35.6	82°10.7	106°02.7
8	78°26.2	5.9'	23°51.3	9.2'	59.2'	95°44.4	85°02.7	66°54.7	58°51.9	43°26.1	79°53.0	82°43.7	106°32.4
9	92°51.2	5.9'	24°00.5	9.0'	59.2'	95°08.9	84°27.7	66°20.6	58°16.5	44°01.4	80°10.5	83°16.7	107°02.2
10	107°16.0	5.8'	24°09.5	8.9'	59.2'	94°33.4	83°52.6	65°46.6	57°41.1	44°36.6	80°28.1	83°49.7	107°31.9
11	121°40.8	5.7'	24°18.4	8.7'	59.2'	93°57.9	83°17.6	65°12.5	57°05.7	45°11.9	80°45.7	84°22.7	108°01.5
12	136°05.4	5.6'	N24°27.1	8.6'	59.2'	93°22.4	82°42.5	64°38.5	56°30.3	45°47.2	81°03.4	84°55.7	108°31.2
13	150°30.0	5.5'	24°35.6	8.4'	59.2'	92°46.9	82°07.4	64°04.4	55°54.9	46°22.5	81°21.1	85°28.7	109°00.8
14	164°54.5	5.4'	24°44.0	8.2'	59.2'	92°11.4	81°32.4	63°30.4	55°19.4	46°57.9	81°38.9	86°01.8	109°30.4
15	179°18.9	5.3'	24°52.3	8.1'	59.2'	91°35.9	80°57.3	62°56.3	54°44.0	47°33.2	81°56.7	86°34.8	109°59.9
16	193°43.2	5.2'	25°00.4	7.9'	59.2'	91°00.3	80°22.2	62°22.2	54°08.6	48°08.5	82°14.5	87°07.9	110°29.4
17	208°07.4	5.1'	25°08.3	7.8'	59.2'	90°24.8	79°47.1	61°48.2	53°33.2	48°43.9	82°32.4	87°40.9	110°58.9
18	222°31.5	5.0'	N25°16.0	7.6'	59.2'	89°49.2	79°12.0	61°14.1	52°57.7	49°19.3	82°50.3	88°14.0	111°28.3
19	236°55.6	5.0'	25°23.6	7.4'	59.2'	89°13.7	78°36.9	60°40.0	52°22.3	49°54.7	83°08.3	88°47.1	111°57.6
20	251°19.5	4.9'	25°31.1	7.3'	59.2'	88°38.2	78°01.8	60°05.9	51°46.9	50°30.0	83°26.3	89°20.1	112°27.0
21	265°43.4	4.8'	25°38.3	7.1'	59.2'	88°02.6	77°26.7	59°31.8	51°11.4	51°05.4	83°44.3	89°53.2	112°56.3
22	280°07.2	4.7'	25°45.4	6.9'	59.3'	87°27.0	76°51.6	58°57.7	50°36.0	51°40.8	84°02.4	90°26.3	113°25.5
23	294°30.9	4.6'	25°52.3	6.7'	59.3'	86°51.5	76°16.5	58°23.6	50°00.6	52°16.3	84°20.4	90°59.4	113°54.7
30 th	SD = 16.1' Mer. pass. 02:34												

DUT1 = UT1-UTC = +0.1119 sec $\Delta T = TT-UT1 = +69.0721$ sec

2026 October 01 to Oct. 03 UT

h	Moon (1 st Oct)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Mars	-Pollux	+Saturn	+Deneb	+Fomalhaut	+Altair
0	308°54.6	4.6'	N25°59.1	6.6'	59.3'	86°15.9	75°41.4	57°49.5	49°25.1	52°51.7	84°38.6	91°32.5	114°23.8
1	323°18.1	4.5'	26°05.6	6.4'	59.3'	85°40.4	75°06.2	57°15.4	48°49.7	53°27.1	84°56.7	92°05.6	114°52.9
2	337°41.6	4.4'	26°12.0	6.2'	59.3'	85°04.8	74°31.1	56°41.3	48°14.3	54°02.6	85°14.9	92°38.6	115°21.9
3	352°05.0	4.3'	26°18.3	6.0'	59.3'	84°29.2	73°56.0	56°07.2	47°38.8	54°38.0	85°33.1	93°11.7	115°50.9
4	6°28.4	4.3'	26°24.3	5.9'	59.3'	83°53.7	73°20.9	55°33.1	47°03.4	55°13.5	85°51.3	93°44.8	116°19.8
5	20°51.7	4.2'	26°30.2	5.7'	59.3'	83°18.1	72°45.8	54°59.0	46°28.0	55°48.9	86°09.5	94°17.9	116°48.7
6	35°14.9	4.1'	N26°35.9	5.5'	59.3'	82°42.5	72°10.6	54°24.9	45°52.5	56°24.4	86°27.8	94°51.0	117°17.5
7	49°38.0	4.1'	26°41.4	5.3'	59.3'	82°07.0	71°35.5	53°50.8	45°17.1	56°59.8	86°46.0	95°24.0	117°46.2
8	64°01.1	4.0'	26°46.7	5.1'	59.3'	81°31.4	71°00.4	53°16.7	44°41.7	57°35.3	87°04.3	95°57.1	118°14.8
9	78°24.1	4.0'	26°51.9	5.0'	59.3'	80°55.8	70°25.2	52°42.5	44°06.3	58°10.8	87°22.6	96°30.2	118°43.4
10	92°47.1	3.9'	26°56.8	4.8'	59.3'	80°20.3	69°50.1	52°08.4	43°30.8	58°46.3	87°40.9	97°03.2	119°11.9
11	107°10.0	3.9'	27°01.6	4.6'	59.3'	79°44.7	69°15.0	51°34.3	42°55.4	59°21.8	87°59.3	97°36.3	119°40.4
12	121°32.9	3.8'	N27°06.2	4.4'	59.3'	79°09.1	68°39.9	51°00.2	42°20.0	59°57.3	88°17.6	98°09.3	
13	135°55.7	3.7'	27°10.6	4.2'	59.3'	78°33.5	68°04.7	50°26.1	41°44.6	60°32.7	88°35.9	98°42.4	
14	150°18.4	3.7'	27°14.9	4.0'	59.3'	77°58.0	67°29.6	49°52.0	41°09.2	61°08.2	88°54.3	99°15.4	
15	164°41.1	3.7'	27°18.9	3.9'	59.3'	77°22.4	66°54.5	49°17.9	40°33.8	61°43.7	89°12.6	99°48.4	
16	179°03.8	3.6'	27°22.7	3.7'	59.3'	76°46.8	66°19.3	48°43.7	39°58.4	62°19.2	89°31.0	100°21.4	
17	193°26.4	3.6'	27°26.4	3.5'	59.3'	76°11.3	65°44.2	48°09.6	39°23.0	62°54.7	89°49.3	100°54.4	
18	207°48.9	3.5'	N27°29.9	3.3'	59.3'	75°35.7	65°09.1	47°35.5	38°47.6	63°30.2	90°07.7	101°27.4	
19	222°11.5	3.5'	27°33.2	3.1'	59.3'	75°00.1	64°34.0	47°01.4	38°12.2	64°05.8	90°26.1	102°00.4	
20	236°33.9	3.5'	27°36.3	2.9'	59.3'	74°24.6	63°58.8	46°27.3	37°36.9	64°41.3	90°44.4	102°33.4	
21	250°56.4	3.4'	27°39.2	2.7'	59.3'	73°49.0	63°23.7	45°53.2	37°01.5	65°16.8	91°02.8	103°06.3	
22	265°18.8	3.4'	27°41.9	2.5'	59.3'	73°13.4	62°48.6	45°19.1	36°26.1	65°52.3	91°21.1	103°39.3	
23	279°41.2	3.4'	27°44.4	2.3'	59.3'	72°37.9	62°13.5	44°45.0	35°50.8	66°27.8	91°39.4	104°12.2	
1 st	SD = 16.2' Mer. pass. 03:33												

h	Moon (2 nd Oct)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Mars	-Pollux	+Aldebaran	+Saturn	+Deneb	+Fomalhaut
0	294°03.6	3.3'	N27°46.7	2.1'	59.3'	72°02.3	61°38.4	44°10.9	35°15.5		67°03.3	91°57.8	104°45.1
1	308°25.9	3.3'	27°48.8	1.9'	59.3'	71°26.8	61°03.2	43°36.8	34°40.1		67°38.8	92°16.1	105°18.0
2	322°48.3	3.3'	27°50.8	1.7'	59.3'	70°51.2	60°28.1	43°02.7	34°04.8	13°49.1	68°14.3	92°34.4	105°50.9
3	337°10.6	3.3'	27°52.5	1.5'	59.3'	70°15.7	59°53.0	42°28.6	33°29.5	14°12.4	68°49.8	92°52.7	106°23.7
4	351°32.8	3.3'	27°54.1	1.4'	59.3'	69°40.1	59°17.9	41°54.5	32°54.2	14°36.5	69°25.3	93°11.0	106°56.6
5	5°55.1	3.3'	27°55.4	1.2'	59.3'	69°04.6	58°42.8	41°20.4	32°18.9	15°01.3	70°00.8	93°29.2	107°29.4
6	20°17.4	3.2'	N27°56.6	1.0'	59.3'	68°29.1	58°07.7	40°46.4	31°43.6	15°26.8	70°36.3	93°47.5	108°02.2
7	34°39.6	3.2'	27°57.6	0.8'	59.3'	67°53.5	57°32.6	40°12.3	31°08.3	15°53.0	71°11.8	94°05.7	108°35.0
8	49°01.9	3.2'	27°58.3	0.6'	59.3'	67°18.0	56°57.5	39°38.2	30°33.1	16°19.7	71°47.3	94°23.9	109°07.7
9	63°24.1	3.2'	27°58.9	0.4'	59.3'	66°42.5	56°22.4	39°04.1	29°57.8	16°46.9	72°22.8	94°42.1	109°40.4
10	77°46.3	3.2'	27°59.3	0.2'	59.3'	66°06.9	55°47.3	38°30.1	29°22.6	17°14.7	72°58.3	95°00.2	110°13.2
11	92°08.6	3.2'	27°59.5	-0.0'	59.3'	65°31.4	55°12.3	37°56.0	28°47.4	17°42.8	73°33.8	95°18.4	110°45.8
12	106°30.8	3.2'	N27°59.5	-0.2'	59.3'	64°55.9	54°37.2	37°21.9	28°12.2	18°11.4	74°09.3	95°36.5	111°18.5
13	120°53.0	3.3'	27°59.2	-0.4'	59.3'	64°20.4	54°02.1	36°47.9	27°37.0	18°40.4	74°44.8	95°54.5	111°51.1
14	135°15.3	3.3'	27°58.8	-0.6'	59.3'	63°44.9	53°27.0	36°13.8	27°01.8	19°09.7	75°20.3	96°12.6	112°23.8
15	149°37.6	3.3'	27°58.2	-0.8'	59.3'	63°09.4	52°52.0	35°39.8	26°26.7	19°39.4	75°55.8	96°30.6	112°56.3
16	163°59.8	3.3'	27°57.5	-1.0'	59.3'	62°33.9	52°16.9	35°05.7	25°51.6	20°09.3	76°31.2	96°48.6	113°28.9
17	178°22.1	3.3'	27°56.5	-1.2'	59.3'	61°58.4	51°41.9	34°31.7	25°16.5	20°39.5	77°06.7	97°06.5	114°01.4
18	192°44.4	3.3'	N27°55.3	-1.4'	59.3'	61°22.9	51°06.8	33°57.7	24°41.4	21°10.0	77°42.2	97°24.4	114°33.9
19	207°06.8	3.4'	27°53.9	-1.6'	59.3'	60°47.4	50°31.8	33°23.6	24°06.3	21°40.7	78°17.6	97°42.3	115°06.4
20	221°29.1	3.4'	27°52.4	-1.8'	59.3'	60°11.9	49°56.7	32°49.6	23°31.3	22°11.7	78°53.1	98°00.1	115°38.8
21	235°51.5	3.4'	27°50.6	-2.0'	59.3'	59°36.4	49°21.7	32°15.6	22°56.3	22°42.8	79°28.6	98°17.9	116°11.2
22	250°13.9	3.4'	27°48.6	-2.1'	59.2'	59°01.0	48°46.6	31°41.6	22°21.3	23°14.2	80°04.0	98°35.7	116°43.5
23	264°36.4	3.5'	27°46.5	-2.3'	59.2'	58°25.5	48°11.6	31°07.6	21°46.4	23°45.7	80°39.5	98°53.4	117°15.9
2 nd	SD = 16.2' Mer. pass. 04:35												

h Moon (3 rd Oct)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Mars	-Pollux	+Capella	+Aldebaran	+Saturn	+Fomalhaut
0	278°58.9	3.5'	N27°44.2	-2.5'	59.2'	57°50.1	47°36.6	30°33.6	21°11.5	20°59.8	24°17.3	81°14.9	117°48.1
1	293°21.4	3.6'	27°41.6	-2.7'	59.2'	57°14.6	47°01.6	29°59.6	20°36.6	21°17.9	24°49.2	81°50.3	118°20.4
2	307°43.9	3.6'	27°38.9	-2.9'	59.2'	56°39.2	46°26.6	29°25.6	20°01.7	21°36.6	25°21.2	82°25.8	118°52.6
3	322°06.5	3.6'	27°36.0	-3.1'	59.2'	56°03.7	45°51.6	28°51.6	19°26.9	21°55.9	25°53.3	83°01.2	119°24.8
4	336°29.2	3.7'	27°32.9	-3.3'	59.2'	55°28.3	45°16.6	28°17.7	18°52.2	22°15.9	26°25.5	83°36.6	119°56.9
5	350°51.9	3.7'	27°29.6	-3.5'	59.2'	54°52.9	44°41.6	27°43.7	18°17.5	22°36.5	26°57.9	84°12.0	
6	5°14.6	3.8'	N27°26.2	-3.7'	59.2'	54°17.4	44°06.6	27°09.8	17°42.8	22°57.7	27°30.4	84°47.5	
7	19°37.4	3.8'	27°22.5	-3.8'	59.2'	53°42.0	43°31.6	26°35.8	17°08.2	23°19.4	28°02.9	85°22.9	
8	34°00.2	3.9'	27°18.7	-4.0'	59.2'	53°06.6	42°56.6	26°01.9	16°33.7	23°41.6	28°35.6	85°58.3	
9	48°23.1	3.9'	27°14.6	-4.2'	59.2'	52°31.2	42°21.7	25°27.9	15°59.2	24°04.3	29°08.4	86°33.7	
10	62°46.1	4.0'	27°10.4	-4.4'	59.2'	51°55.8	41°46.7	24°54.0	15°24.8	24°27.4	29°41.2	87°09.0	
11	77°09.1	4.1'	27°06.0	-4.6'	59.2'	51°20.4	41°11.8	24°20.1	14°50.5	24°51.1	30°14.2	87°44.4	
12	91°32.1	4.1'	N27°01.4	-4.8'	59.2'	50°45.1	40°36.8	23°46.2	14°16.3	25°15.1	30°47.2	88°19.8	
13	105°55.3	4.2'	26°56.7	-4.9'	59.2'	50°09.7	40°01.9	23°12.3	13°42.2	25°39.6	31°20.2	88°55.2	
14	120°18.4	4.3'	26°51.7	-5.1'	59.2'	49°34.3	39°26.9	22°38.4	13°08.2	26°04.4	31°53.4	89°30.5	
15	134°41.7	4.3'	26°46.6	-5.3'	59.2'	48°59.0	38°52.0	22°04.5	12°34.3	26°29.6	32°26.6	90°05.9	
16	149°05.0	4.4'	26°41.3	-5.5'	59.2'	48°23.6	38°17.1	21°30.6	12°00.6	26°55.1	32°59.9	90°41.2	
17	163°28.4	4.5'	26°35.8	-5.7'	59.1'	47°48.3	37°42.2	20°56.8	11°27.1	27°21.0	33°33.2	91°16.5	
18	177°51.9	4.5'	N26°30.2	-5.8'	59.1'	47°12.9	37°07.3	20°22.9	10°53.7	27°47.2	34°06.6	91°51.9	
19	192°15.4	4.6'	26°24.4	-6.0'	59.1'	46°37.6	36°32.4	19°49.1	10°20.6	28°13.7	34°40.0	92°27.2	
20	206°39.1	4.7'	26°18.4	-6.2'	59.1'	46°02.3	35°57.5	19°15.2	9°47.7	28°40.5	35°13.5	93°02.5	
21	221°02.7	4.8'	26°12.2	-6.3'	59.1'	45°27.0	35°22.6	18°41.4	9°15.2	29°07.6	35°47.0	93°37.8	
22	235°26.5	4.9'	26°05.8	-6.5'	59.1'	44°51.7	34°47.8	18°07.6	8°43.0	29°34.9	36°20.5	94°13.1	
23	249°50.4	4.9'	25°59.3	-6.7'	59.1'	44°16.4	34°12.9	17°33.8	8°11.2	30°02.4	36°54.1	94°48.4	
3 rd	SD = 16.2' Mer. pass. 05:38												

DUT1 = UT1-UTC = +0.1123 sec $\Delta T = TT-UT1 = +69.0717$ sec

2026 October 04 to Oct. 06 UT

h	Moon (4 th Oct)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Sun	-Regulus	-Jupiter	-Mars	+Betelgeuse	+Capella	+Aldebaran	+Saturn
0	264°14.3	5.0'	N25°52.6	-6.9'	59.1'	84°12.8	43°41.1	33°38.0	17°00.0	26°03.4	30°30.2	37°27.8	95°23.7
1	278°38.3	5.1'	25°45.8	-7.0'	59.1'	83°40.0	43°05.8	33°03.2	16°26.3	26°25.0	30°58.2	38°01.4	95°58.9
2	293°02.4	5.2'	25°38.8	-7.2'	59.1'	83°07.3	42°30.5	32°28.3	15°52.5	26°47.0	31°26.5	38°35.2	96°34.2
3	307°26.6	5.3'	25°31.6	-7.3'	59.1'	82°34.5	41°55.3	31°53.5	15°18.7	27°09.4	31°54.9	39°08.9	97°09.5
4	321°50.9	5.4'	25°24.2	-7.5'	59.1'	82°01.8	41°20.0	31°18.7	14°45.0	27°32.3	32°23.5	39°42.6	97°44.7
5	336°15.2	5.4'	25°16.7	-7.7'	59.1'	81°29.1	40°44.8	30°43.9	14°11.3	27°55.5	32°52.3	40°16.4	98°19.9
6	350°39.7	5.5'	N25°09.0	-7.8'	59.1'	80°56.4	40°09.6	30°09.1	13°37.6	28°19.1	33°21.3	40°50.3	98°55.2
7	5°04.2	5.6'	25°01.2	-8.0'	59.0'	80°23.7	39°34.3	29°34.3	13°03.9	28°43.1	33°50.5	41°24.1	99°30.4
8	19°28.9	5.7'	24°53.2	-8.1'	59.0'	79°51.0	38°59.1	28°59.5	12°30.2	29°07.4	34°19.8	41°58.0	100°05.6
9	33°53.6	5.8'	24°45.1	-8.3'	59.0'	79°18.3	38°23.9	28°24.7	11°56.6	29°32.1	34°49.3	42°31.8	100°40.8
10	48°18.4	5.9'	24°36.8	-8.5'	59.0'	78°45.6	37°48.7	27°49.9	11°23.0	29°57.0	35°18.9	43°05.7	101°16.0
11	62°43.3	6.0'	24°28.3	-8.6'	59.0'	78°12.9	37°13.5	27°15.2	10°49.4	30°22.3	35°48.6	43°39.7	101°51.2
12	77°08.3	6.1'	N24°19.7	-8.8'	59.0'	77°40.3	36°38.3	26°40.4	10°15.8	30°47.8	36°18.5	44°13.6	102°26.3
13	91°33.4	6.2'	24°11.0	-8.9'	59.0'	77°07.6	36°03.2	26°05.7	9°42.3	31°13.6	36°48.5	44°47.6	103°01.5
14	105°58.6	6.3'	24°02.1	-9.1'	59.0'	76°35.0	35°28.0	25°31.0	9°08.8	31°39.7	37°18.7	45°21.5	103°36.6
15	120°23.9	6.4'	23°53.0	-9.2'	59.0'	76°02.4	34°52.9	24°56.2	8°35.3	32°06.1	37°48.9	45°55.5	104°11.8
16	134°49.3	6.5'	23°43.8	-9.3'	59.0'	75°29.7	34°17.7	24°21.5	8°01.9	32°32.7	38°19.3	46°29.5	104°46.9
17	149°14.8	6.6'	23°34.5	-9.5'	59.0'	74°57.1	33°42.6	23°46.8	7°28.5	32°59.5	38°49.7	47°03.5	105°22.0
18	163°40.3	6.7'	N23°25.0	-9.6'	58.9'	74°24.5	33°07.5	23°12.1	6°55.2	33°26.5	39°20.3	47°37.6	105°57.1
19	178°06.0	6.8'	23°15.4	-9.8'	58.9'	73°52.0	32°32.4	22°37.4	6°22.0	33°53.7	39°51.0	48°11.6	106°32.2
20	192°31.8	6.9'	23°05.6	-9.9'	58.9'	73°19.4	31°57.3	22°02.8	5°48.9	34°21.2	40°21.7	48°45.6	107°07.3
21	206°57.7	7.0'	22°55.7	-10.0'	58.9'	72°46.8	31°22.2	21°28.1	5°15.8	34°48.8	40°52.6	49°19.7	107°42.3
22	221°23.7	7.1'	22°45.7	-10.2'	58.9'	72°14.3	30°47.1	20°53.5	4°43.0	35°16.6	41°23.5	49°53.7	108°17.4
23	235°49.8	7.2'	22°35.5	-10.3'	58.9'	71°41.7	30°12.0	20°18.8	4°10.4	35°44.6	41°54.5	50°27.8	108°52.4
4 th	SD = 16.1' Mer. pass. 06:39					Sun SD = 16.0'							

Moon (5 th Oct)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Sun	-Regulus	-Jupiter	\pm Mars	+Pollux	+Capella	+Aldebaran	+Saturn
0	250°15.9	7.3'	N22°25.2	-10.4'	58.9'	71°09.2	29°37.0	19°44.2	3°38.1	8°11.9	42°25.6	51°01.9	109°27.5
1	264°42.2	7.4'	22°14.7	-10.6'	58.9'	70°36.7	29°01.9	19°09.6	3°06.3	8°43.4	42°56.7	51°36.0	110°02.5
2	279°08.6	7.5'	22°04.2	-10.7'	58.9'	70°04.2	28°26.9	18°35.0	2°35.3	9°15.4	43°28.0	52°10.0	110°37.5
3	293°35.1	7.6'	21°53.5	-10.8'	58.9'	69°31.7	27°51.9	18°00.4		9°47.7	43°59.3	52°44.1	111°12.5
4	308°01.7	7.7'	21°42.7	-10.9'	58.8'	68°59.2	27°16.8	17°25.8		10°20.3	44°30.6	53°18.2	111°47.5
5	322°28.4	7.8'	21°31.7	-11.1'	58.8'	68°26.7	26°41.8	16°51.2		10°53.1	45°02.0	53°52.3	112°22.4
6	336°55.2	7.9'	N21°20.6	-11.2'	58.8'	67°54.2	26°06.9	16°16.6		11°26.2	45°33.5	54°26.4	112°57.4
7	351°22.1	8.0'	21°09.4	-11.3'	58.8'	67°21.8	25°31.9	15°42.1		11°59.4	46°05.1	55°00.5	113°32.3
8	5°49.1	8.1'	20°58.1	-11.4'	58.8'	66°49.4	24°56.9	15°07.5		12°32.7	46°36.6	55°34.6	114°07.3
9	20°16.2	8.2'	20°46.7	-11.5'	58.8'	66°16.9	24°22.0	14°33.0		13°06.2	47°08.3	56°08.7	114°42.2
10	34°43.4	8.3'	20°35.2	-11.7'	58.8'	65°44.5	23°47.0	13°58.5		13°39.8	47°40.0	56°42.8	115°17.1
11	49°10.7	8.4'	20°23.5	-11.8'	58.8'	65°12.1	23°12.1	13°23.9		14°13.5	48°11.7	57°16.9	115°52.0
12	63°38.1	8.5'	N20°11.7	-11.9'	58.8'	64°39.7	22°37.2	12°49.5	3°25.4	14°47.2	48°43.5	57°51.0	116°26.9
13	78°05.6	8.6'	19°59.8	-12.0'	58.7'	64°07.4	22°02.3	12°15.0	3°57.4	15°21.1	49°15.3	58°25.1	117°01.7
14	92°33.2	8.7'	19°47.8	-12.1'	58.7'	63°35.0	21°27.4	11°40.5	4°29.7	15°55.0	49°47.2	58°59.2	117°36.6
15	107°00.9	8.8'	19°35.7	-12.2'	58.7'	63°02.7	20°52.5	11°06.0	5°02.3	16°28.9	50°19.1	59°33.3	118°11.4
16	121°28.7	8.9'	19°23.5	-12.3'	58.7'	62°30.3	20°17.6	10°31.6	5°35.0	17°03.0	50°51.0	60°07.4	118°46.2
17	135°56.6	9.0'	19°11.2	-12.4'	58.7'	61°58.0	19°42.8	9°57.1	6°07.9	17°37.0	51°23.0	60°41.5	119°21.0
18	150°24.6	9.1'	N18°58.8	-12.5'	58.7'	61°25.7	19°07.9	9°22.7	6°40.8	18°11.1	51°55.0	61°15.6	119°55.8
19	164°52.7	9.2'	18°46.3	-12.6'	58.7'	60°53.4	18°33.1	8°48.3	7°13.9	18°45.2	52°27.0	61°49.7	
20	179°20.9	9.3'	18°33.7	-12.7'	58.7'	60°21.1	17°58.3	8°13.9	7°46.9	19°19.4	52°59.1	62°23.8	
21	193°49.2	9.4'	18°20.9	-12.8'	58.6'	59°48.8	17°23.5	7°39.5	8°20.0	19°53.6	53°31.2	62°57.8	
22	208°17.6	9.5'	18°08.1	-12.9'	58.6'	59°16.6	16°48.7	7°05.1	8°53.1	20°27.8	54°03.3	63°31.9	
23	222°46.0	9.6'	17°55.2	-13.0'	58.6'	58°44.3	16°13.9	6°30.8	9°26.2	21°02.0	54°35.5	64°06.0	
5 th	SD = 16.1' Mer. pass. 07:36					Sun SD = 16.0'							

Moon (6 th Oct)						Lunar Distance (objects with largest hourly LD delta)								
Tue	GHA	ν	Dec	d	HP	-Acrux	-Sun	-Regulus	\pm Jupiter	+Mars	+Pollux	+Capella	+Aldebaran	
0	237°14.6	9.7'	N17°42.2	-13.1'	58.6'	89°37.7	58°12.1	15°39.1	5°56.4	9°59.4	21°36.2	55°07.6	64°40.0	
1	251°43.3	9.8'	17°29.1	-13.2'	58.6'	89°14.4	57°39.9	15°04.4	5°22.1	10°32.5	22°10.5	55°39.8	65°14.1	
2	266°12.1	9.9'	17°16.0	-13.3'	58.6'	88°51.1	57°07.7	14°29.7	4°47.8	11°05.7	22°44.7	56°12.0	65°48.1	
3	280°40.9	10.0'	17°02.7	-13.4'	58.6'	88°27.9	56°35.5	13°55.0	4°13.5	11°38.9	23°19.0	56°44.3	66°22.2	
4	295°09.9	10.0'	16°49.3	-13.4'	58.6'	88°04.6	56°03.4	13°20.3	3°39.2	12°12.0	23°53.3	57°16.5	66°56.2	
5	309°38.9	10.1'	16°35.9	-13.5'	58.5'	87°41.4	55°31.2	12°45.6	3°05.0	12°45.2	24°27.6	57°48.8	67°30.2	
6	324°08.1	10.2'	N16°22.4	-13.6'	58.5'	87°18.1	54°59.1	12°10.9	2°30.8	13°18.4	25°01.9	58°21.1	68°04.2	
7	338°37.3	10.3'	16°08.8	-13.7'	58.5'	86°54.9	54°26.9	11°36.3	1°56.6	13°51.5	25°36.2	58°53.4	68°38.3	
8	353°06.6	10.4'	15°55.1	-13.8'	58.5'	86°31.7	53°54.8	11°01.6	1°22.5	14°24.7	26°10.5	59°25.7	69°12.3	
9	7°36.0	10.5'	15°41.3	-13.8'	58.5'	86°08.6	53°22.7	10°27.0	0°48.6	14°57.8	26°44.8	59°58.1	69°46.3	
10	22°05.5	10.6'	15°27.5	-13.9'	58.5'	85°45.4	52°50.7	9°52.4		15°31.0	27°19.1	60°30.4	70°20.2	
11	36°35.1	10.7'	15°13.5	-14.0'	58.5'	85°22.3	52°18.6	9°17.8		16°04.1	27°53.4	61°02.8	70°54.2	
12	51°04.7	10.8'	N14°59.6	-14.1'	58.4'	84°59.2	51°46.6	8°43.3		16°37.2	28°27.7	61°35.2	71°28.2	
13	65°34.5	10.8'	14°45.5	-14.1'	58.4'	84°36.1	51°14.5	8°08.8	1°29.6	17°10.3	29°02.0	62°07.6	72°02.1	
14	80°04.3	10.9'	14°31.4	-14.2'	58.4'	84°13.1	50°42.5	7°34.3	2°03.6	17°43.4	29°36.3	62°39.9	72°36.1	
15	94°34.2	11.0'	14°17.2	-14.3'	58.4'	83°50.1	50°10.5	6°59.8	2°37.7	18°16.5	30°10.5	63°12.3	73°10.0	
16	109°04.2	11.1'	14°02.9	-14.3'	58.4'	83°27.1	49°38.6	6°25.4	3°11.8	18°49.6	30°44.8	63°44.8	73°44.0	
17	123°34.3	11.2'	13°48.6	-14.4'	58.4'	83°04.1	49°06.6	5°51.0	3°45.9	19°22.7	31°19.1	64°17.2	74°17.9	
18	138°04.5	11.2'	N13°34.2	-14.5'	58.4'	82°41.2	48°34.7	5°16.6	4°19.9	19°55.7	31°53.4	64°49.6	74°51.8	
19	152°34.7	11.3'	13°19.7	-14.5'	58.3'	82°18.3	48°02.7	4°42.3	4°54.0	20°28.8	32°27.6	65°22.0	75°25.7	
20	167°05.0	11.4'	13°05.2	-14.6'	58.3'	81°55.5	47°30.8	4°08.1	5°28.1	21°01.8	33°01.9	65°54.4	75°59.5	
21	181°35.4	11.5'	12°50.6	-14.6'	58.3'	81°32.7	46°58.9	3°34.0	6°02.1	21°34.8	33°36.1	66°26.9	76°33.4	
22	196°05.9	11.5'	12°36.0	-14.7'	58.3'	81°09.9	46°27.1	3°00.0	6°36.2	22°07.9	34°10.4	66°59.3	77°07.3	
23	210°36.5	11.6'	12°21.3	-14.7'	58.3'	80°47.2	45°55.2	2°26.3	7°10.2	22°40.8	34°44.6	67°31.7	77°41.1	
6 th	SD = 16.0'					Mer. pass. 08:29				Sun SD = 16.0'				

DUT1 = UT1-UTC = +0.1127 sec $\Delta T = TT-UT1 = +69.0713$ sec

2026 October 07 to Oct. 09 UT

Moon (7 th Oct)						Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Acrux	-Sun	\pm Regulus	+Jupiter	+Mars	+Pollux	+Capella	+Aldebaran
0	225°07.1	11.7'	N12°06.5	-14.8'	58.3'	80°24.5	45°23.4	1°53.1	7°44.2	23°13.8	35°18.8	68°04.2	78°14.9
1	239°37.8	11.8'	11°51.7	-14.9'	58.2'	80°01.9	44°51.5		8°18.2	23°46.8	35°53.0	68°36.6	78°48.8
2	254°08.6	11.8'	11°36.9	-14.9'	58.2'	79°39.3	44°19.7		8°52.1	24°19.8	36°27.2	69°09.1	79°22.6
3	268°39.4	11.9'	11°22.0	-15.0'	58.2'	79°16.7	43°48.0		9°26.1	24°52.7	37°01.4	69°41.5	79°56.4
4	283°10.3	12.0'	11°07.0	-15.0'	58.2'	78°54.2	43°16.2		10°00.0	25°25.6	37°35.6	70°13.9	80°30.1
5	297°41.3	12.0'	10°52.0	-15.0'	58.2'	78°31.8	42°44.5		10°34.0	25°58.5	38°09.8	70°46.4	81°03.9
6	312°12.3	12.1'	N10°37.0	-15.1'	58.2'	78°09.4	42°12.7		11°07.9	26°31.4	38°43.9	71°18.8	81°37.6
7	326°43.4	12.2'	10°21.9	-15.1'	58.1'	77°47.0	41°41.0		11°41.8	27°04.3	39°18.1	71°51.2	82°11.4
8	341°14.6	12.2'	10°06.7	-15.2'	58.1'	77°24.8	41°09.4	2°50.3	12°15.7	27°37.2	39°52.2	72°23.6	82°45.1
9	355°45.9	12.3'	09°51.5	-15.2'	58.1'	77°02.5	40°37.7	3°24.0	12°49.5	28°10.0	40°26.3	72°56.1	83°18.8
10	10°17.2	12.4'	09°36.3	-15.3'	58.1'	76°40.3	40°06.1	3°57.9	13°23.4	28°42.8	41°00.4	73°28.5	83°52.5
11	24°48.5	12.4'	09°21.1	-15.3'	58.1'	76°18.2		4°31.8	13°57.2	29°15.7	41°34.5	74°00.9	84°26.2
12	39°20.0	12.5'	N09°05.8	-15.3'	58.1'	75°56.2		5°05.8	14°31.0	29°48.5	42°08.6	74°33.3	84°59.8
13	53°51.5	12.5'	08°50.5	-15.4'	58.0'	75°34.2		5°39.9	15°04.8	30°21.2	42°42.7	75°05.7	85°33.5
14	68°23.0	12.6'	08°35.1	-15.4'	58.0'	75°12.2		6°13.9	15°38.6	30°54.0	43°16.7	75°38.1	86°07.1
15	82°54.6	12.7'	08°19.7	-15.4'	58.0'	74°50.3		6°48.0	16°12.4	31°26.8	43°50.8	76°10.4	86°40.7
16	97°26.3	12.7'	08°04.3	-15.5'	58.0'	74°28.5		7°22.0	16°46.1	31°59.5	44°24.8	76°42.8	87°14.3
17	111°58.0	12.8'	07°48.8	-15.5'	58.0'	74°06.8		7°56.1	17°19.8	32°32.2	44°58.8	77°15.2	87°47.8
18	126°29.8	12.8'	N07°33.3	-15.5'	58.0'	73°45.1		8°30.1	17°53.5	33°04.9	45°32.8	77°47.5	88°21.4
19	141°01.6	12.9'	07°17.8	-15.5'	57.9'	73°23.5		9°04.2	18°27.2	33°37.6	46°06.7	78°19.9	88°54.9
20	155°33.5	12.9'	07°02.3	-15.6'	57.9'	73°02.0		9°38.2	19°00.9	34°10.2	46°40.7	78°52.2	89°28.5
21	170°05.4	13.0'	06°46.7	-15.6'	57.9'	72°40.6		10°12.2	19°34.6	34°42.9	47°14.6	79°24.5	90°02.0
22	184°37.4	13.0'	06°31.2	-15.6'	57.9'	72°19.2		10°46.2	20°08.2	35°15.5	47°48.6	79°56.8	90°35.4
23	199°09.4	13.1'	06°15.6	-15.6'	57.9'	71°57.9		11°20.2	20°41.8	35°48.1	48°22.5	80°29.1	91°08.9
7 th	SD = 15.9' Mer. pass. 09:18					Sun SD = 16.0'							

Moon (8 th Oct)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Acrux	+Regulus	+Jupiter	+Mars	+Pollux	+Betelgeuse	+Capella	+Aldebaran
0	213°41.5	13.1'	N05°59.9	-15.6'	57.9'	71°36.7	11°54.2	21°15.4	36°20.7	48°56.4	73°13.1	81°01.4	91°42.3
1	228°13.6	13.2'	05°44.3	-15.7'	57.8'	71°15.5	12°28.2	21°49.0	36°53.3	49°30.2	73°44.7	81°33.7	92°15.8
2	242°45.8	13.2'	05°28.6	-15.7'	57.8'	70°54.5	13°02.1	22°22.5	37°25.8	50°04.1	74°16.4	82°05.9	92°49.2
3	257°18.0	13.3'	05°12.9	-15.7'	57.8'	70°33.5	13°36.0	22°56.1	37°58.4	50°37.9	74°48.0	82°38.2	93°22.6
4	271°50.2	13.3'	04°57.3	-15.7'	57.8'	70°12.6	14°09.9	23°29.6	38°30.9	51°11.8	75°19.7	83°10.4	93°55.9
5	286°22.5	13.3'	04°41.6	-15.7'	57.8'	69°51.8	14°43.8	24°03.1	39°03.4	51°45.6	75°51.3	83°42.6	94°29.3
6	300°54.9	13.4'	N04°25.8	-15.7'	57.7'	69°31.1	15°17.7	24°36.6	39°35.9	52°19.4	76°22.9	84°14.8	95°02.6
7	315°27.2	13.4'	04°10.1	-15.7'	57.7'	69°10.5	15°51.6	25°10.0	40°08.3	52°53.1	76°54.5	84°47.0	95°35.9
8	329°59.6	13.4'	03°54.4	-15.7'	57.7'	68°49.9	16°25.4	25°43.5	40°40.7	53°26.9	77°26.2	85°19.2	96°09.2
9	344°32.1	13.5'	03°38.6	-15.8'	57.7'	68°29.5	16°59.2	26°16.9	41°13.2	54°00.6	77°57.8	85°51.3	96°42.5
10	359°04.6	13.5'	03°22.9	-15.8'	57.7'	68°09.2	17°33.0	26°50.3	41°45.6	54°34.3	78°29.3	86°23.5	97°15.7
11	13°37.1	13.5'	03°07.1	-15.8'	57.6'	67°48.9	18°06.8	27°23.7	42°17.9	55°08.0	79°00.9	86°55.6	97°48.9
12	28°09.6	13.6'	N02°51.4	-15.8'	57.6'	67°28.8	18°40.6	27°57.0	42°50.3	55°41.7	79°32.5	87°27.7	98°22.1
13	42°42.2	13.6'	02°35.6	-15.8'	57.6'	67°08.8	19°14.3	28°30.4	43°22.6	56°15.3	80°04.0	87°59.7	98°55.3
14	57°14.8	13.6'	02°19.8	-15.8'	57.6'	66°48.8	19°48.0	29°03.7	43°54.9	56°49.0	80°35.6	88°31.8	99°28.5
15	71°47.5	13.7'	02°04.1	-15.8'	57.6'	66°29.0	20°21.7	29°37.0	44°27.2	57°22.6	81°07.1	89°03.8	100°01.6
16	86°20.1	13.7'	01°48.3	-15.8'	57.5'	66°09.3	20°55.4	30°10.3	44°59.5	57°56.2	81°38.6	89°35.9	100°34.7
17	100°52.8	13.7'	01°32.5	-15.8'	57.5'	65°49.7	21°29.1	30°43.5	45°31.8	58°29.8	82°10.1	90°07.9	101°07.8
18	115°25.6	13.7'	N01°16.8	-15.8'	57.5'	65°30.2	22°02.7	31°16.8	46°04.0	59°03.3	82°41.6	90°39.8	101°40.9
19	129°58.3	13.8'	01°01.0	-15.7'	57.5'	65°10.8	22°36.3	31°50.0	46°36.2	59°36.8	83°13.1	91°11.8	102°13.9
20	144°31.1	13.8'	00°45.3	-15.7'	57.5'	64°51.5	23°09.9	32°23.2	47°08.4	60°10.4	83°44.6	91°43.7	102°46.9
21	159°03.9	13.8'	00°29.5	-15.7'	57.4'	64°32.3	23°43.5	32°56.3	47°40.6	60°43.8	84°16.0	92°15.7	103°19.9
22	173°36.7	13.8'	N00°13.8	-15.7'	57.4'	64°13.3	24°17.0	33°29.5	48°12.7	61°17.3	84°47.4	92°47.5	103°52.9
23	188°09.5	13.9'	S00°01.9	-15.7'	57.4'	63°54.4	24°50.6	34°02.6	48°44.8	61°50.8	85°18.9	93°19.4	104°25.8
8 th	SD = 15.8' Mer. pass. 10:04												

Moon (9 th Oct)						Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Acrux	+Regulus	+Jupiter	+Mars	+Pollux	+Betelgeuse	+Capella	+Aldebaran
0	202° 42.4	13.9'	S00° 17.7	-15.7'	57.4'	63° 35.6	25° 24.1	34° 35.7	49° 17.0	62° 24.2	85° 50.2	93° 51.3	104° 58.7
1	217° 15.3	13.9'	00° 33.4	-15.7'	57.4'	63° 16.9	25° 57.6	35° 08.8	49° 49.0	62° 57.6	86° 21.6	94° 23.1	105° 31.6
2	231° 48.2	13.9'	00° 49.0	-15.7'	57.3'	62° 58.3	26° 31.0	35° 41.8	50° 21.1	63° 31.0	86° 53.0	94° 54.9	106° 04.5
3	246° 21.1	13.9'	01° 04.7	-15.7'	57.3'	62° 39.9	27° 04.5	36° 14.9	50° 53.1	64° 04.3	87° 24.3	95° 26.7	106° 37.3
4	260° 54.0	13.9'	01° 20.4	-15.6'	57.3'	62° 21.6	27° 37.9	36° 47.9	51° 25.1	64° 37.7	87° 55.6	95° 58.4	107° 10.1
5	275° 26.9	14.0'	01° 36.0	-15.6'	57.3'	62° 03.5	28° 11.3	37° 20.9	51° 57.1	65° 11.0	88° 26.9	96° 30.1	107° 42.9
6	289° 59.9	14.0'	S01° 51.6	-15.6'	57.3'	61° 45.5	28° 44.6	37° 53.8	52° 29.1	65° 44.3	88° 58.2	97° 01.8	108° 15.7
7	304° 32.9	14.0'	02° 07.2	-15.6'	57.2'	61° 27.6	29° 18.0	38° 26.8	53° 01.0	66° 17.6	89° 29.5	97° 33.5	108° 48.4
8	319° 05.8	14.0'	02° 22.8	-15.6'	57.2'	61° 09.8	29° 51.3	38° 59.7	53° 33.0	66° 50.8	90° 00.7	98° 05.1	109° 21.1
9	333° 38.8	14.0'	02° 38.4	-15.5'	57.2'	60° 52.2	30° 24.6	39° 32.6	54° 04.9	67° 24.0	90° 31.9	98° 36.8	109° 53.8
10	348° 11.8	14.0'	02° 53.9	-15.5'	57.2'	60° 34.8	30° 57.9	40° 05.5	54° 36.7	67° 57.3	91° 03.1	99° 08.3	110° 26.5
11	2° 44.8	14.0'	03° 09.4	-15.5'	57.1'	60° 17.4	31° 31.2	40° 38.3	55° 08.6	68° 30.4	91° 34.3	99° 39.9	110° 59.1
12	17° 17.8	14.0'	S03° 24.9	-15.5'	57.1'	60° 00.3	32° 04.4	41° 11.1	55° 40.4	69° 03.6	92° 05.4	100° 11.4	111° 31.7
13	31° 50.8	14.0'	03° 40.4	-15.4'	57.1'	59° 43.3	32° 37.6	41° 43.9	56° 12.2	69° 36.7	92° 36.5	100° 43.0	112° 04.2
14	46° 23.8	14.0'	03° 55.8	-15.4'	57.1'	59° 26.4	33° 10.8	42° 16.7	56° 44.0	70° 09.8	93° 07.6	101° 14.4	112° 36.8
15	60° 56.9	14.0'	04° 11.2	-15.4'	57.1'	59° 09.7	33° 43.9	42° 49.5	57° 15.8	70° 42.9	93° 38.7	101° 45.9	113° 09.3
16	75° 29.9	14.0'	04° 26.6	-15.3'	57.0'	58° 53.1	34° 17.1	43° 22.2	57° 47.5	71° 16.0	94° 09.7	102° 17.3	113° 41.8
17	90° 02.9	14.0'	04° 41.9	-15.3'	57.0'	58° 36.7	34° 50.2	43° 54.9	58° 19.2	71° 49.0	94° 40.8	102° 48.7	114° 14.2
18	104° 35.9	14.0'	S04° 57.2	-15.3'	57.0'	58° 20.4	35° 23.3	44° 27.6	58° 50.9	72° 22.0	95° 11.7	103° 20.0	114° 46.7
19	119° 08.9	14.0'	05° 12.5	-15.2'	57.0'	58° 04.4	35° 56.3	45° 00.2	59° 22.6	72° 55.0	95° 42.7	103° 51.4	115° 19.0
20	133° 42.0	14.0'	05° 27.8	-15.2'	56.9'	57° 48.4	36° 29.4	45° 32.9	59° 54.2	73° 28.0	96° 13.7	104° 22.7	115° 51.4
21	148° 15.0	14.0'	05° 43.0	-15.2'	56.9'	57° 32.7	37° 02.4	46° 05.5	60° 25.8	74° 00.9	96° 44.6	104° 53.9	116° 23.7
22	162° 48.0	14.0'	05° 58.1	-15.1'	56.9'					New Moon			
23	177° 21.0	14.0'	06° 13.3	-15.1'	56.9'					New Moon			
9 th	SD = 15.6'		Mer. pass. 10:49										

DUT1 = UT1-UTC = +0.1130 sec $\Delta T = TT-UT1 = +69.0710$ sec

2026 October 10 to Oct. 12 UT

h Moon (10 th Oct)					
Sat	GHA	ν	Dec	d	HP
0	191°54.0	14.0'	S06°28.4	-15.1'	56.9'
1	206°27.0	14.0'	06°43.4	-15.0'	56.8'
2	221°00.0	14.0'	06°58.4	-15.0'	56.8'
3	235°33.0	14.0'	07°13.4	-14.9'	56.8'
4	250°05.9	14.0'	07°28.3	-14.9'	56.8'
5	264°38.9	13.9'	07°43.2	-14.8'	56.7'
6	279°11.8	13.9'	S07°58.0	-14.8'	56.7'
7	293°44.8	13.9'	08°12.8	-14.7'	56.7'
8	308°17.7	13.9'	08°27.6	-14.7'	56.7'
9	322°50.6	13.9'	08°42.3	-14.6'	56.7'
10	337°23.5	13.9'	08°56.9	-14.6'	56.6'
11	351°56.4	13.9'	09°11.5	-14.5'	56.6'
12	6°29.2	13.8'	S09°26.0	-14.5'	56.6'
13	21°02.1	13.8'	09°40.5	-14.4'	56.6'
14	35°34.9	13.8'	09°55.0	-14.4'	56.5'
15	50°07.7	13.8'	10°09.3	-14.3'	56.5'
16	64°40.5	13.8'	10°23.7	-14.3'	56.5'
17	79°13.2	13.7'	10°37.9	-14.2'	56.5'
18	93°46.0	13.7'	S10°52.1	-14.1'	56.4'
19	108°18.7	13.7'	11°06.3	-14.1'	56.4'
20	122°51.4	13.7'	11°20.3	-14.0'	56.4'
21	137°24.1	13.6'	11°34.4	-14.0'	56.4'
22	151°56.7	13.6'	11°48.3	-13.9'	56.4'
23	166°29.3	13.6'	12°02.2	-13.8'	56.3'
10 th	SD = 15.5' Mer. pass. 11:33				

h Moon (11 th Oct)						Lunar Distance (objects with largest hourly LD delta)					
Sun	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Rigel Kent.	-Hadar	-Antares	-Venus
0	181°01.9	13.6'	S12°16.0	-13.8'	56.3'			New Moon			
1	195°34.5	13.5'	12°29.8	-13.7'	56.3'			New Moon			
2	210°07.0	13.5'	12°43.5	-13.6'	56.3'			New Moon			
3	224°39.5	13.5'	12°57.1	-13.6'	56.2'			New Moon			
4	239°12.0	13.4'	13°10.7	-13.5'	56.2'			New Moon			
5	253°44.5	13.4'	13°24.2	-13.4'	56.2'			New Moon			
6	268°16.9	13.4'	S13°37.6	-13.3'	56.2'			New Moon			
7	282°49.3	13.4'	13°51.0	-13.3'	56.1'			New Moon			
8	297°21.6	13.3'	14°04.2	-13.2'	56.1'			New Moon			
9	311°53.9	13.3'	14°17.4	-13.1'	56.1'			New Moon			
10	326°26.2	13.3'	14°30.6	-13.1'	56.1'						
11	340°58.5	13.2'	14°43.6	-13.0'	56.1'						
12	355°30.7	13.2'	S14°56.6	-12.9'	56.0'						
13	10°02.9	13.1'	15°09.5	-12.8'	56.0'						
14	24°35.0	13.1'	15°22.3	-12.7'	56.0'						
15	39°07.1	13.1'	15°35.0	-12.7'	56.0'						
16	53°39.2	13.0'	15°47.7	-12.6'	55.9'						
17	68°11.2	13.0'	16°00.3	-12.5'	55.9'						
18	82°43.2	13.0'	S16°12.8	-12.4'	55.9'						
19	97°15.2	12.9'	16°25.2	-12.3'	55.9'						
20	111°47.1	12.9'	16°37.5	-12.2'	55.8'						
21	126°19.0	12.8'	16°49.7	-12.2'	55.8'						
22	140°50.9	12.8'	17°01.9	-12.1'	55.8'						
23	155°22.7	12.8'	17°14.0	-12.0'	55.8'						
11 th	SD = 15.4' Mer. pass. 12:19										

h Moon (12 th Oct)						Lunar Distance (objects with largest hourly LD delta)				
Mon	GHA	ν	Dec	d	HP	-Fomalhaut	-Altair	-Antares	+Venus	+Arcturus
0	169°54.4	12.7'	S17°25.9	-11.9'	55.8'	115°30.6	90°10.0	35°25.7		
1	184°26.1	12.7'	17°37.8	-11.8'	55.7'	115°01.7	89°43.0	34°54.0		
2	198°57.8	12.6'	17°49.6	-11.7'	55.7'	114°32.8	89°16.1	34°22.4		
3	213°29.5	12.6'	18°01.3	-11.6'	55.7'	114°03.9	88°49.1	33°50.9		
4	228°01.1	12.6'	18°13.0	-11.5'	55.7'	113°35.0	88°22.2	33°19.3		
5	242°32.6	12.5'	18°24.5	-11.4'	55.6'	113°06.1	87°55.3	32°47.8		
6	257°04.1	12.5'	S18°35.9	-11.3'	55.6'	112°37.2	87°28.5	32°16.3		
7	271°35.6	12.4'	18°47.2	-11.2'	55.6'	112°08.3	87°01.7	31°44.8		
8	286°07.0	12.4'	18°58.5	-11.1'	55.6'	111°39.5	86°34.9	31°13.4		
9	300°38.4	12.3'	19°09.6	-11.0'	55.6'	111°10.6	86°08.1	30°42.0		
10	315°09.8	12.3'	19°20.7	-11.0'	55.5'	110°41.7	85°41.3	30°10.6		
11	329°41.1	12.3'	19°31.6	-10.9'	55.5'	110°12.9	85°14.6	29°39.2		
12	344°12.3	12.2'	S19°42.5	-10.8'	55.5'	109°44.0	84°47.9	29°07.9		
13	358°43.5	12.2'	19°53.2	-10.7'	55.5'	109°15.2	84°21.3	28°36.6		
14	13°14.7	12.1'	20°03.9	-10.6'	55.4'	108°46.4	83°54.6	28°05.3	5°47.1	
15	27°45.8	12.1'	20°14.4	-10.4'	55.4'	108°17.5	83°28.0	27°34.0	6°15.4	
16	42°16.9	12.0'	20°24.9	-10.3'	55.4'	107°48.7	83°01.5	27°02.8	6°44.3	
17	56°47.9	12.0'	20°35.2	-10.2'	55.4'	107°19.9	82°34.9	26°31.6	7°13.7	
18	71°18.9	11.9'	S20°45.5	-10.1'	55.4'	106°51.2	82°08.4	26°00.4	7°43.3	
19	85°49.8	11.9'	20°55.6	-10.0'	55.3'	106°22.4	81°42.0	25°29.3	8°13.3	
20	100°20.7	11.9'	21°05.6	-9.9'	55.3'	105°53.6	81°15.5	24°58.2	8°43.5	
21	114°51.6	11.8'	21°15.6	-9.8'	55.3'	105°24.9	80°49.1	24°27.1	9°13.9	40°56.7
22	129°22.4	11.8'	21°25.4	-9.7'	55.3'	104°56.1	80°22.7	23°56.0	9°44.4	41°12.0
23	143°53.2	11.7'	21°35.1	-9.6'	55.3'	104°27.4	79°56.4	23°24.9	10°15.1	41°27.5
12 th	SD = 15.2' Mer. pass. 13:05									

DUT1 = UT1-UTC = +0.1134 sec $\Delta T = TT-UT1 = +69.0706$ sec

2026 October 13 to Oct. 15 UT

h	Moon (13 th Oct)					Lunar Distance (objects with largest hourly LD delta)					
Tue	GHA	ν	Dec	d	HP	-Fomalhaut	-Deneb	-Altair	-Antares	+Venus	+Arcturus
0	158°23.9	11.7'	S21°44.7	-9.5'	55.2'	103°58.7		79°30.1	22°53.9	10°45.8	41°43.2
1	172°54.6	11.6'	21°54.2	-9.4'	55.2'	103°30.0		79°03.8	22°22.9	11°16.7	41°59.1
2	187°25.2	11.6'	22°03.6	-9.3'	55.2'	103°01.3		78°37.6	21°51.9	11°47.6	42°15.3
3	201°55.8	11.5'	22°12.9	-9.2'	55.2'	102°32.6		78°11.4	21°21.0	12°18.6	42°31.7
4	216°26.3	11.5'	22°22.0	-9.1'	55.1'	102°04.0		77°45.3	20°50.1	12°49.6	42°48.2
5	230°56.8	11.5'	22°31.1	-8.9'	55.1'	101°35.4		77°19.1	20°19.2	13°20.7	43°05.0
6	245°27.3	11.4'	S22°40.0	-8.8'	55.1'	101°06.7		76°53.1	19°48.3	13°51.8	43°22.0
7	259°57.7	11.4'	22°48.8	-8.7'	55.1'	100°38.1		76°27.0	19°17.5	14°23.0	43°39.1
8	274°28.0	11.3'	22°57.5	-8.6'	55.1'	100°09.5		76°01.0	18°46.7	14°54.2	43°56.5
9	288°58.4	11.3'	23°06.1	-8.5'	55.1'	99°40.9		75°35.1	18°15.9	15°25.4	44°14.0
10	303°28.6	11.2'	23°14.6	-8.4'	55.0'	99°12.4	101°04.2	75°09.1	17°45.1	15°56.6	44°31.7
11	317°58.9	11.2'	23°23.0	-8.2'	55.0'	98°43.8	100°49.2	74°43.3	17°14.3	16°27.8	44°49.6
12	332°29.1	11.2'	S23°31.2	-8.1'	55.0'	98°15.3	100°34.1	74°17.4	16°43.6	16°59.0	45°07.6
13	346°59.2	11.1'	23°39.4	-8.0'	55.0'	97°46.8	100°19.0	73°51.6	16°12.9	17°30.3	45°25.8
14	1°29.3	11.1'	23°47.4	-7.9'	55.0'	97°18.3	100°03.8	73°25.9	15°42.3	18°01.5	45°44.2
15	15°59.4	11.0'	23°55.3	-7.8'	54.9'	96°49.8	99°48.7	73°00.2	15°11.6	18°32.8	46°02.7
16	30°29.4	11.0'	24°03.0	-7.7'	54.9'	96°21.4	99°33.5	72°34.5	14°41.0	19°04.1	46°21.4
17	44°59.4	10.9'	24°10.7	-7.5'	54.9'	95°52.9	99°18.3	72°08.9	14°10.4	19°35.3	46°40.2
18	59°29.4	10.9'	S24°18.2	-7.4'	54.9'	95°24.5	99°03.1	71°43.3	13°39.8	20°06.6	46°59.1
19	73°59.3	10.9'	24°25.6	-7.3'	54.9'	94°56.1	98°47.8	71°17.8	13°09.2	20°37.8	47°18.3
20	88°29.1	10.8'	24°32.9	-7.2'	54.8'	94°27.7	98°32.5	70°52.3	12°38.7	21°09.1	47°37.5
21	102°59.0	10.8'	24°40.1	-7.0'	54.8'	93°59.3	98°17.2	70°26.9	12°08.2	21°40.3	47°56.9
22	117°28.8	10.8'	24°47.1	-6.9'	54.8'	93°30.9	98°01.9	70°01.5	11°37.7	22°11.6	48°16.4
23	131°58.5	10.7'	24°54.0	-6.8'	54.8'	93°02.6	97°46.6	69°36.2	11°07.3	22°42.8	48°36.0
13 th	SD = 15.1' Mer. pass. 13:54										

h	Moon (14 th Oct)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	-Antares	+Venus	+Sun	+Arcturus
0	146°28.2	10.7'	S25°00.8	-6.7'	54.8'		97°31.3	92°34.3	69°10.9	10°36.8	23°14.0		48°55.8
1	160°57.9	10.6'	25°07.5	-6.5'	54.8'		97°15.9	92°06.0	68°45.6	10°06.4	23°45.2		49°15.7
2	175°27.6	10.6'	25°14.1	-6.4'	54.7'		97°00.5	91°37.7	68°20.5	9°36.0	24°16.4		49°35.7
3	189°57.2	10.6'	25°20.5	-6.3'	54.7'		96°45.1	91°09.4	67°55.3	9°05.7	24°47.6		49°55.8
4	204°26.7	10.5'	25°26.8	-6.2'	54.7'		96°29.7	90°41.2	67°30.2	8°35.3	25°18.8	40°57.7	50°16.0
5	218°56.3	10.5'	25°32.9	-6.0'	54.7'		96°14.3	90°13.0	67°05.2	8°05.0	25°50.0	41°25.4	50°36.3
6	233°25.8	10.5'	S25°39.0	-5.9'	54.7'		95°58.9	89°44.8	66°40.2	7°34.7	26°21.2	41°53.1	50°56.8
7	247°55.2	10.4'	25°44.9	-5.8'	54.7'		95°43.4	89°16.6	66°15.3	7°04.5	26°52.4	42°20.8	51°17.3
8	262°24.7	10.4'	25°50.7	-5.7'	54.6'		95°28.0	88°48.4	65°50.4	6°34.2	27°23.5	42°48.5	51°38.0
9	276°54.1	10.4'	25°56.3	-5.5'	54.6'		95°12.5	88°20.3	65°25.6	6°04.0	27°54.7	43°16.1	51°58.7
10	291°23.5	10.3'	26°01.8	-5.4'	54.6'		94°57.1	87°52.1	65°00.9	5°33.9	28°25.8	43°43.8	52°19.6
11	305°52.8	10.3'	26°07.2	-5.3'	54.6'		94°41.6	87°24.0	64°36.2	5°03.7	28°56.9	44°11.4	52°40.5
12	320°22.1	10.3'	S26°12.5	-5.1'	54.6'		94°26.1	86°55.9	64°11.5	4°33.6	29°28.0	44°39.0	53°01.5
13	334°51.4	10.3'	26°17.6	-5.0'	54.6'		94°10.6	86°27.9	63°46.9	4°03.6	29°59.2	45°06.6	53°22.6
14	349°20.7	10.2'	26°22.6	-4.9'	54.6'		93°55.2	85°59.8	63°22.4	3°33.6	30°30.2	45°34.1	53°43.8
15	3°49.9	10.2'	26°27.5	-4.7'	54.5'		93°39.7	85°31.8	62°57.9	3°03.7	31°01.3	46°01.7	54°05.1
16	18°19.1	10.2'	26°32.3	-4.6'	54.5'		93°24.2	85°03.8	62°33.5	2°33.9	31°32.4	46°29.2	54°26.5
17	32°48.3	10.2'	26°36.9	-4.5'	54.5'		93°08.7	84°35.8	62°09.2	2°04.2	32°03.5	46°56.7	54°47.9
18	47°17.5	10.1'	S26°41.3	-4.3'	54.5'		92°53.2	84°07.8	61°44.9	1°34.9	32°34.5	47°24.2	55°09.5
19	61°46.6	10.1'	26°45.7	-4.2'	54.5'		92°37.7	83°39.9	61°20.7	1°06.4	33°05.6	47°51.7	55°31.1
20	76°15.7	10.1'	26°49.9	-4.1'	54.5'		92°22.2	83°12.0	60°56.6		33°36.6	48°19.2	55°52.8
21	90°44.8	10.1'	26°54.0	-3.9'	54.5'	119°56.3	92°06.7	82°44.0	60°32.5		34°07.6	48°46.6	56°14.5
22	105°13.9	10.1'	26°57.9	-3.8'	54.4'	119°26.4	91°51.2	82°16.2	60°08.4		34°38.6	49°14.1	56°36.3
23	119°42.9	10.0'	27°01.7	-3.7'	54.4'	118°56.4	91°35.7	81°48.3	59°44.5		35°09.6	49°41.5	56°58.2
14 th	SD = 14.9' Mer. pass. 14:44					Sun SD = 16.0'							

h	Moon (15 th Oct)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	+Antares	+Venus	+Sun	+Arcturus
0	134°12.0	10.0'	S27°05.4	-3.5'	54.4'	118°26.4	91°20.2	81°20.4	59°20.6		35°40.6	50°08.9	57°20.2
1	148°41.0	10.0'	27°09.0	-3.4'	54.4'	117°56.5	91°04.7	80°52.6	58°56.8	2°01.2	36°11.6	50°36.3	57°42.2
2	163°10.0	10.0'	27°12.4	-3.3'	54.4'	117°26.5	90°49.2	80°24.8	58°33.1	2°30.7	36°42.6	51°03.7	58°04.3
3	177°39.0	10.0'	27°15.7	-3.1'	54.4'	116°56.6	90°33.7	79°57.0	58°09.4	3°00.3	37°13.5	51°31.0	58°26.4
4	192°07.9	10.0'	27°18.8	-3.0'	54.4'	116°26.7	90°18.2	79°29.3	57°45.8	3°30.0	37°44.5	51°58.4	58°48.7
5	206°36.9	9.9'	27°21.8	-2.9'	54.4'	115°56.8	90°02.8	79°01.5	57°22.3	3°59.7	38°15.4	52°25.7	59°10.9
6	221°05.8	9.9'	S27°24.7	-2.7'	54.3'	115°26.9	89°47.3	78°33.8	56°58.8	4°29.5	38°46.4	52°53.0	59°33.3
7	235°34.8	9.9'	27°27.4	-2.6'	54.3'	114°57.0	89°31.9	78°06.1	56°35.4	4°59.2	39°17.3	53°20.3	59°55.6
8	250°03.7	9.9'	27°30.0	-2.5'	54.3'	114°27.2	89°16.4	77°38.4	56°12.1	5°29.0	39°48.2	53°47.6	60°18.1
9	264°32.6	9.9'	27°32.5	-2.3'	54.3'	113°57.3	89°01.0	77°10.8	55°48.9	5°58.8	40°19.1	54°14.9	60°40.6
10	279°01.5	9.9'	27°34.8	-2.2'	54.3'	113°27.5	88°45.6	76°43.1	55°25.8	6°28.6	40°50.0	54°42.2	61°03.1
11	293°30.4	9.9'	27°37.0	-2.1'	54.3'	112°57.7	88°30.1	76°15.5	55°02.8	6°58.4	41°20.9	55°09.4	61°25.7
12	307°59.2	9.9'	S27°39.1	-1.9'	54.3'	112°27.9	88°14.7	75°47.9	54°39.8	7°28.1	41°51.8	55°36.7	61°48.4
13	322°28.1	9.9'	27°41.0	-1.8'	54.3'	111°58.1	87°59.4	75°20.3	54°16.9	7°57.9	42°22.7	56°03.9	62°11.1
14	336°57.0	9.9'	27°42.8	-1.7'	54.3'	111°28.3	87°44.0	74°52.8	53°54.1	8°27.6	42°53.5	56°31.1	62°33.8
15	351°25.9	9.9'	27°44.4	-1.5'	54.3'	110°58.5	87°28.6	74°25.3	53°31.4	8°57.4	43°24.4	56°58.3	62°56.6
16	5°54.7	9.9'	27°45.9	-1.4'	54.3'	110°28.7	87°13.3	73°57.7	53°08.8	9°27.1	43°55.2	57°25.5	63°19.4
17	20°23.6	9.9'	27°47.3	-1.2'	54.2'	109°59.0	86°57.9	73°30.3	52°46.2	9°56.9	44°26.1	57°52.7	63°42.3
18	34°52.5	9.9'	S27°48.6	-1.1'	54.2'	109°29.2	86°42.6	73°02.8	52°23.8	10°26.6	44°56.9	58°19.9	64°05.2
19	49°21.3	9.9'	27°49.7	-1.0'	54.2'	108°59.5	86°27.3	72°35.3	52°01.5	10°56.3	45°27.8	58°47.0	64°28.2
20	63°50.2	9.9'	27°50.6	-0.8'	54.2'	108°29.8	86°12.0	72°07.9	51°39.2	11°26.0	45°58.6	59°14.2	64°51.2
21	78°19.1	9.9'	27°51.5	-0.7'	54.2'	108°00.1	85°56.8	71°40.5	51°17.1	11°55.7	46°29.4	59°41.3	65°14.2
22	92°47.9	9.9'	27°52.2	-0.6'	54.2'	107°30.4	85°41.5	71°13.2	50°55.0	12°25.4	47°00.2	60°08.5	65°37.3
23	107°16.8	9.9'	27°52.7	-0.4'	54.2'	107°00.7	85°26.3	70°45.8	50°33.1	12°55.1	47°31.0	60°35.6	66°00.4
15 th	SD = 14.8' Mer. pass. 15:36					Sun SD = 16.0'							

DUT1 = UT1-UTC = +0.1138 sec $\Delta T = TT-UT1 = +69.0702$ sec

2026 October 16 to Oct. 18 UT

h	Moon (16 th Oct)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	+Antares	+Venus	+Sun	+Arcturus
0	121°45.7	9.9'	S27°53.1	-0.3'	54.2'	106°31.0	85°11.1	70°18.5	50°11.2	13°24.8	48°01.8	61°02.7	66°23.6
1	136°14.6	9.9'	27°53.4	-0.2'	54.2'	106°01.3	84°55.9	69°51.2	49°49.5	13°54.4	48°32.6	61°29.8	66°46.8
2	150°43.5	9.9'	27°53.6	-0.0'	54.2'	105°31.6	84°40.7	69°23.9	49°27.8	14°24.1	49°03.4	61°56.9	67°10.0
3	165°12.4	9.9'	27°53.6	0.1'	54.2'	105°01.9	84°25.6	68°56.6	49°06.3	14°53.7	49°34.2	62°24.0	67°33.3
4	179°41.3	9.9'	27°53.5	0.3'	54.2'	104°32.3	84°10.5	68°29.4	48°44.9	15°23.4	50°05.0	62°51.1	67°56.6
5	194°10.2	9.9'	27°53.2	0.4'	54.2'	104°02.6	83°55.4	68°02.1	48°23.6	15°53.0	50°35.8	63°18.2	68°19.9
6	208°39.2	10.0'	S27°52.8	0.5'	54.2'	103°33.0	83°40.3	67°35.0	48°02.4	16°22.6	51°06.6	63°45.2	68°43.3
7	223°08.1	10.0'	27°52.3	0.7'	54.2'	103°03.4	83°25.2	67°07.8	47°41.4	16°52.2	51°37.3	64°12.3	69°06.6
8	237°37.1	10.0'	27°51.7	0.8'	54.1'	102°33.7	83°10.2	66°40.6	47°20.4	17°21.9	52°08.1	64°39.4	69°30.1
9	252°06.0	10.0'	27°50.9	0.9'	54.1'	102°04.1		66°13.5	46°59.6	17°51.5	52°38.9	65°06.4	69°53.5
10	266°35.0	10.0'	27°49.9	1.1'	54.1'	101°34.5		65°46.4	46°38.9	18°21.1	53°09.6	65°33.5	70°17.0
11	281°04.1	10.0'	27°48.9	1.2'	54.1'	101°04.9		65°19.3	46°18.3	18°50.7	53°40.4	66°00.5	70°40.5
12	295°33.1	10.1'	S27°47.7	1.3'	54.1'	100°35.3		64°52.3	45°57.9	19°20.2	54°11.2	66°27.5	71°04.1
13	310°02.1	10.1'	27°46.4	1.5'	54.1'	100°05.7		64°25.3	45°37.6	19°49.8	54°41.9	66°54.6	71°27.6
14	324°31.2	10.1'	27°44.9	1.6'	54.1'	99°36.1		63°58.3	45°17.4	20°19.4	55°12.7	67°21.6	71°51.2
15	339°00.3	10.1'	27°43.3	1.7'	54.1'	99°06.5		63°31.3	44°57.4	20°49.0	55°43.4	67°48.6	72°14.9
16	353°29.4	10.1'	27°41.6	1.9'	54.1'	98°36.9		63°04.3	44°37.5	21°18.6	56°14.2	68°15.6	72°38.5
17	7°58.5	10.2'	27°39.7	2.0'	54.1'	98°07.3		62°37.4	44°17.7	21°48.1	56°45.0	68°42.6	73°02.2
18	22°27.7	10.2'	S27°37.7	2.1'	54.1'	97°37.7		62°10.5	43°58.2	22°17.7	57°15.7	69°09.6	73°25.9
19	36°56.9	10.2'	27°35.6	2.3'	54.1'	97°08.1		61°43.6	43°38.7	22°47.2	57°46.5	69°36.6	73°49.6
20	51°26.1	10.2'	27°33.3	2.4'	54.1'	96°38.5		61°16.8	43°19.4	23°16.8	58°17.2	70°03.6	74°13.4
21	65°55.3	10.3'	27°30.9	2.5'	54.1'	96°09.0		60°50.0	43°00.3	23°46.4	58°48.0	70°30.6	74°37.1
22	80°24.6	10.3'	27°28.4	2.7'	54.1'	95°39.4		60°23.2	42°41.3	24°15.9	59°18.8	70°57.6	75°00.9
23	94°53.9	10.3'	27°25.7	2.8'	54.1'	95°09.8		59°56.4	42°22.5	24°45.5	59°49.5	71°24.6	75°24.7
16 th	SD = 14.8' Mer. pass. 16:27					Sun SD = 16.0'							

h Moon (17 th Oct)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	+Antares	+Hadar	+Venus	+Sun	+Arcturus
0	109°23.2	10.4'	S27°22.9	2.9'	54.1'	94°40.2	59°29.7	42°03.9	25°15.0	54°02.8	60°20.3	71°51.6	75°48.6
1	123°52.6	10.4'	27°20.0	3.0'	54.1'	94°10.7	59°03.0	41°45.4	25°44.6	54°21.4	60°51.1	72°18.6	76°12.4
2	138°21.9	10.4'	27°17.0	3.2'	54.1'	93°41.1	58°36.3	41°27.1	26°14.1	54°40.1	61°21.8	72°45.6	76°36.3
3	152°51.4	10.4'	27°13.8	3.3'	54.1'	93°11.5	58°09.7	41°09.0	26°43.7	54°59.0	61°52.6	73°12.6	77°00.2
4	167°20.8	10.5'	27°10.5	3.4'	54.1'	92°42.0	57°43.0	40°51.0	27°13.2	55°17.9	62°23.4	73°39.6	77°24.1
5	181°50.3	10.5'	27°07.1	3.6'	54.1'	92°12.4	57°16.5	40°33.3	27°42.8	55°36.9	62°54.1	74°06.6	77°48.1
6	196°19.8	10.5'	S27°03.5	3.7'	54.1'	91°42.8	56°49.9	40°15.7	28°12.3	55°56.1	63°24.9	74°33.6	78°12.0
7	210°49.3	10.6'	26°59.8	3.8'	54.1'	91°13.2	56°23.4	39°58.4	28°41.9	56°15.3	63°55.7	75°00.6	78°36.0
8	225°18.9	10.6'	26°56.0	3.9'	54.1'	90°43.7	55°56.9	39°41.2	29°11.4	56°34.7	64°26.5	75°27.6	79°00.0
9	239°48.5	10.7'	26°52.1	4.1'	54.1'	90°14.1	55°30.4	39°24.2	29°41.0	56°54.1	64°57.3	75°54.6	79°24.0
10	254°18.2	10.7'	26°48.0	4.2'	54.1'	89°44.5	55°04.0	39°07.5	30°10.5	57°13.6	65°28.1	76°21.6	79°48.1
11	268°47.9	10.7'	26°43.8	4.3'	54.1'	89°14.9	54°37.6	38°50.9	30°40.1	57°33.2	65°58.9	76°48.6	80°12.1
12	283°17.6	10.8'	S26°39.5	4.4'	54.1'	88°45.4	54°11.2	38°34.6	31°09.6	57°53.0	66°29.7	77°15.6	80°36.2
13	297°47.4	10.8'	26°35.0	4.6'	54.1'	88°15.8	53°44.9	38°18.5	31°39.2	58°12.8	67°00.5	77°42.6	81°00.3
14	312°17.2	10.8'	26°30.4	4.7'	54.2'	87°46.2	53°18.6	38°02.6	32°08.8	58°32.7	67°31.4	78°09.6	81°24.4
15	326°47.0	10.9'	26°25.7	4.8'	54.2'	87°16.6	52°52.4	37°47.0	32°38.3	58°52.6	68°02.2	78°36.6	81°48.5
16	341°16.9	10.9'	26°20.9	4.9'	54.2'	86°47.0	52°26.2	37°31.6	33°07.9	59°12.7	68°33.0	79°03.6	82°12.6
17	355°46.9	11.0'	26°16.0	5.1'	54.2'	86°17.4	52°00.0	37°16.4	33°37.5	59°32.9	69°03.9	79°30.6	82°36.8
18	10°16.8	11.0'	S26°10.9	5.2'	54.2'	85°47.8	51°33.8		34°07.1	59°53.1	69°34.7	79°57.7	83°00.9
19	24°46.8	11.1'	26°05.7	5.3'	54.2'	85°18.2	51°07.7		34°36.7	60°13.4	70°05.6	80°24.7	83°25.1
20	39°16.9	11.1'	26°00.4	5.4'	54.2'	84°48.6	50°41.7		35°06.3	60°33.8	70°36.5	80°51.7	83°49.3
21	53°47.0	11.1'	25°55.0	5.6'	54.2'	84°19.0	50°15.7		35°35.9	60°54.3	71°07.4	81°18.8	84°13.5
22	68°17.1	11.2'	25°49.4	5.7'	54.2'	83°49.3	49°49.7		36°05.5	61°14.9	71°38.3	81°45.8	84°37.7
23	82°47.3	11.2'	25°43.7	5.8'	54.2'	83°19.7	49°23.8		36°35.1	61°35.5	72°09.2	82°12.9	85°02.0
17 th	SD = 14.8' Mer. pass. 17:17					Sun SD = 16.0'							

h	Moon (18 th Oct)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Hadar	+Venus	+Sun	+Arcturus
0	97°17.5	11.3'	S25°37.9	5.9'	54.2'	82°50.1	48°57.9	37°04.7	57°35.0	61°56.2	72°40.1	82°39.9	85°26.2
1	111°47.8	11.3'	25°32.0	6.0'	54.2'	82°20.4	48°32.1	37°34.4	57°55.5	62°17.0	73°11.0	83°07.0	85°50.5
2	126°18.1	11.4'	25°26.0	6.2'	54.2'	81°50.8	48°06.3	38°04.0	58°16.2	62°37.9	73°41.9	83°34.1	86°14.7
3	140°48.5	11.4'	25°19.8	6.3'	54.2'	81°21.1	47°40.5	38°33.6	58°36.9	62°58.8	74°12.9	84°01.2	86°39.0
4	155°18.9	11.5'	25°13.6	6.4'	54.2'	80°51.4	47°14.8	39°03.3	58°57.8	63°19.8	74°43.8	84°28.3	87°03.3
5	169°49.3	11.5'	25°07.2	6.5'	54.3'	80°21.7	46°49.2	39°33.0	59°18.7	63°40.9	75°14.8	84°55.4	87°27.6
6	184°19.8	11.5'	S25°00.7	6.6'	54.3'	79°52.1	46°23.6	40°02.6	59°39.7	64°02.0	75°45.8	85°22.5	87°51.9
7	198°50.4	11.6'	24°54.0	6.7'	54.3'	79°22.4	45°58.1	40°32.3	60°00.8	64°23.2	76°16.8	85°49.6	88°16.3
8	213°21.0	11.6'	24°47.3	6.8'	54.3'	78°52.7	45°32.6	41°02.0	60°21.9	64°44.5	76°47.8	86°16.8	88°40.6
9	227°51.6	11.7'	24°40.5	7.0'	54.3'	78°22.9	45°07.2	41°31.7	60°43.2	65°05.8	77°18.8	86°43.9	89°04.9
10	242°22.3	11.7'	24°33.5	7.1'	54.3'	77°53.2	44°41.9	42°01.4	61°04.5	65°27.2	77°49.8	87°11.1	89°29.3
11	256°53.0	11.8'	24°26.4	7.2'	54.3'	77°23.5	44°16.6	42°31.2	61°25.9	65°48.7	78°20.9	87°38.2	89°53.7
12	271°23.8	11.8'	S24°19.2	7.3'	54.3'	76°53.7	43°51.3	43°00.9	61°47.3	66°10.3	78°51.9	88°05.4	90°18.1
13	285°54.7	11.9'	24°11.9	7.4'	54.3'	76°24.0	43°26.2	43°30.6	62°08.9	66°31.9	79°23.0	88°32.6	90°42.4
14	300°25.5	11.9'	24°04.5	7.5'	54.3'	75°54.2	43°01.1	44°00.4	62°30.5	66°53.5	79°54.1	88°59.8	91°06.8
15	314°56.5	12.0'	23°57.0	7.6'	54.4'	75°24.4	42°36.0	44°30.2	62°52.2	67°15.2	80°25.2	89°27.0	91°31.3
16	329°27.4	12.0'	23°49.3	7.7'	54.4'	74°54.6	42°11.1	45°00.0	63°13.9	67°37.0	80°56.3	89°54.2	91°55.7
17	343°58.5	12.1'	23°41.6	7.9'	54.4'	74°24.8	41°46.2	45°29.8	63°35.8	67°58.9	81°27.4	90°21.5	92°20.1
18	358°29.5	12.1'	S23°33.7	8.0'	54.4'	73°55.0	41°21.4	45°59.6	63°57.7	68°20.8	81°58.6	90°48.7	92°44.5
19	13°00.6	12.2'	23°25.8	8.1'	54.4'	73°25.2	40°56.7	46°29.4	64°19.6	68°42.7	82°29.8	91°16.0	93°09.0
20	27°31.8	12.2'	23°17.7	8.2'	54.4'	72°55.3	40°32.0	46°59.3	64°41.7	69°04.7	83°00.9	91°43.3	93°33.4
21	42°03.0	12.3'	23°09.5	8.3'	54.4'	72°25.5	40°07.5	47°29.1	65°03.8	69°26.8	83°32.2	92°10.6	93°57.9
22	56°34.3	12.3'	23°01.2	8.4'	54.4'	71°55.6	39°43.0	47°59.0	65°26.0	69°48.9	84°03.4	92°37.9	94°22.3
23	71°05.6	12.4'	22°52.9	8.5'	54.5'	71°25.7	39°18.6	48°28.9	65°48.2	70°11.1	84°34.6	93°05.2	94°46.8
18 th	SD = 14.8' Mer. pass. 18:06					Sun SD = 16.0'							

DUT1 = UT1-UTC = +0.1142 sec ΔT = TT-UT1 = +69.0698 sec

2026 October 19 to Oct. 21 UT

h	Moon (19 th Oct)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Rigel Kent.	+Hadar	+Venus	+Sun	+Arcturus
0	85°36.9	12.4'	S22°44.4	8.6'	54.5'	70°55.8	38°54.3	48°58.8	66°10.5	70°33.3	85°05.9	93°32.6	95°11.3
1	100°08.3	12.5'	22°35.8	8.7'	54.5'	70°25.9	38°30.2	49°28.7	66°32.9	70°55.6	85°37.1	93°59.9	95°35.7
2	114°39.8	12.5'	22°27.0	8.8'	54.5'	69°56.0	38°06.1	49°58.7	66°55.3	71°18.0	86°08.4	94°27.3	96°00.2
3	129°11.3	12.5'	22°18.2	8.9'	54.5'	69°26.0	37°42.1	50°28.6	67°17.8	71°40.4	86°39.8	94°54.7	96°24.7
4	143°42.8	12.6'	22°09.3	9.0'	54.5'	68°56.0	37°18.2	50°58.6	67°40.3	72°02.8	87°11.1	95°22.1	96°49.2
5	158°14.4	12.6'	22°00.3	9.1'	54.6'	68°26.1	36°54.5	51°28.6	68°02.9	72°25.3	87°42.5	95°49.5	97°13.7
6	172°46.1	12.7'	S21°51.2	9.2'	54.6'	67°56.1	36°30.8	51°58.6	68°25.6	72°47.9	88°13.8	96°17.0	97°38.2
7	187°17.7	12.7'	21°42.0	9.3'	54.6'	67°26.0	36°07.3	52°28.6	68°48.3	73°10.4	88°45.2	96°44.4	98°02.7
8	201°49.5	12.8'	21°32.6	9.4'	54.6'	66°56.0	35°43.9	52°58.7	69°11.1	73°33.1	89°16.7	97°11.9	98°27.2
9	216°21.3	12.8'	21°23.2	9.5'	54.6'	66°26.0	35°20.6	53°28.8	69°33.9	73°55.8	89°48.1	97°39.4	98°51.7
10	230°53.1	12.9'	21°13.7	9.6'	54.6'	65°55.9	34°57.5	53°58.8	69°56.8	74°18.5	90°19.6	98°07.0	99°16.3
11	245°25.0	12.9'	21°04.1	9.7'	54.7'	65°25.8	34°34.5	54°29.0	70°19.8	74°41.3	90°51.0	98°34.5	99°40.8
12	259°56.9	13.0'	S20°54.4	9.8'	54.7'	64°55.7	34°11.7	54°59.1	70°42.8	75°04.1	91°22.6	99°02.1	100°05.3
13	274°28.8	13.0'	20°44.6	9.9'	54.7'	64°25.6	33°49.0	55°29.2	71°05.8	75°27.0	91°54.1	99°29.6	100°29.8
14	289°00.8	13.0'	20°34.7	10.0'	54.7'	63°55.4	33°26.4	55°59.4	71°29.0	75°49.9	92°25.6	99°57.2	100°54.3
15	303°32.9	13.1'	20°24.7	10.1'	54.7'	63°25.3	33°04.1	56°29.6	71°52.1	76°12.9	92°57.2	100°24.9	101°18.8
16	318°05.0	13.1'	20°14.6	10.2'	54.7'	62°55.1	32°41.8	56°59.8	72°15.3	76°35.9	93°28.8	100°52.5	101°43.4
17	332°37.1	13.2'	20°04.4	10.3'	54.8'	62°24.9	32°19.8	57°30.0	72°38.6	76°59.0	94°00.5	101°20.2	102°07.9
18	347°09.3	13.2'	S19°54.1	10.4'	54.8'	61°54.6	31°58.0	58°00.3	73°01.9	77°22.1		101°47.9	102°32.4
19	1°41.5	13.3'	19°43.7	10.5'	54.8'	61°24.4	31°36.3	58°30.6	73°25.3	77°45.2		102°15.6	102°56.9
20	16°13.8	13.3'	19°33.2	10.6'	54.8'	60°54.1	31°14.9	59°00.9	73°48.7	78°08.4		102°43.3	103°21.4
21	30°46.1	13.3'	19°22.7	10.7'	54.8'	60°23.8	30°53.6	59°31.2	74°12.2	78°31.6		103°11.1	103°45.9
22	45°18.4	13.4'	19°12.0	10.7'	54.9'	59°53.5	30°32.6	60°01.6	74°35.7	78°54.9		103°38.8	104°10.5
23	59°50.8	13.4'	19°01.3	10.8'	54.9'	59°23.2	30°11.7	60°32.0	74°59.3	79°18.2		104°06.7	104°35.0
19 th	SD = 14.9' Mer. pass. 18:53					Sun SD = 16.0' at 0h; 16.1' at 23h							

Moon (20 th Oct)						Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Capella	-Rigel	-Aldebaran	-Saturn	+Antares	+Rigel Kent.	+Sun	+Arcturus
0	74°23.3	13.5'	S18°50.4	10.9'	54.9'		119°19.7	118°39.4	58°52.9	61°02.4	75°22.9	104°34.5	104°59.5
1	88°55.7	13.5'	18°39.5	11.0'	54.9'		118°57.2	118°09.6	58°22.5	61°32.8	75°46.6	105°02.3	105°23.9
2	103°28.2	13.5'	18°28.5	11.1'	55.0'		118°34.6	117°39.8	57°52.1	62°03.3	76°10.3	105°30.2	105°48.4
3	118°00.8	13.6'	18°17.4	11.2'	55.0'		118°11.8	117°10.0	57°21.7	62°33.7	76°34.1	105°58.1	106°12.9
4	132°33.4	13.6'	18°06.2	11.3'	55.0'		117°49.1	116°40.1	56°51.2	63°04.2	76°57.9	106°26.0	106°37.4
5	147°06.0	13.7'	17°54.9	11.4'	55.0'		117°26.2	116°10.2	56°20.7	63°34.8	77°21.7	106°54.0	107°01.9
6	161°38.7	13.7'	S17°43.6	11.4'	55.0'		117°03.2	115°40.3	55°50.2	64°05.3	77°45.6	107°22.0	107°26.3
7	176°11.4	13.7'	17°32.1	11.5'	55.1'		116°40.2	115°10.3	55°19.7	64°35.9	78°09.5	107°50.0	107°50.8
8	190°44.1	13.8'	17°20.6	11.6'	55.1'		116°17.0	114°40.3	54°49.2	65°06.5	78°33.5	108°18.0	108°15.2
9	205°16.9	13.8'	17°09.0	11.7'	55.1'		115°53.8	114°10.3	54°18.6	65°37.2	78°57.6	108°46.1	108°39.7
10	219°49.7	13.8'	16°57.3	11.8'	55.1'		115°30.6	113°40.2	53°48.0	66°07.9	79°21.6	109°14.2	109°04.1
11	234°22.5	13.9'	16°45.5	11.9'	55.2'		115°07.2	113°10.1	53°17.4	66°38.6	79°45.7	109°42.3	109°28.5
12	248°55.4	13.9'	S16°33.7	11.9'	55.2'		114°43.8	112°40.0	52°46.8	67°09.3	80°09.9	110°10.4	109°52.9
13	263°28.3	13.9'	16°21.7	12.0'	55.2'		114°20.3	112°09.8	52°16.1	67°40.0	80°34.1	110°38.6	110°17.3
14	278°01.2	14.0'	16°09.7	12.1'	55.2'		113°56.7	111°39.7	51°45.4	68°10.8	80°58.3	111°06.8	110°41.6
15	292°34.2	14.0'	15°57.6	12.2'	55.3'		113°33.0	111°09.4	51°14.7	68°41.7	81°22.6	111°35.0	111°06.0
16	307°07.2	14.0'	15°45.4	12.3'	55.3'		113°09.3	110°39.2	50°44.0	69°12.5	81°46.9	112°03.3	111°30.3
17	321°40.2	14.1'	15°33.2	12.3'	55.3'	119°54.0	112°45.5	110°08.9	50°13.2	69°43.4	82°11.2	112°31.6	111°54.6
18	336°13.3	14.1'	S15°20.9	12.4'	55.3'	119°25.1	112°21.6	109°38.5	49°42.4	70°14.3	82°35.6	112°59.9	112°18.9
19	350°46.3	14.1'	15°08.5	12.5'	55.4'	118°56.2	111°57.7	109°08.2	49°11.6	70°45.2	83°00.1	113°28.3	112°43.2
20	5°19.5	14.1'	14°56.0	12.6'	55.4'	118°27.3	111°33.7	108°37.8	48°40.8	71°16.2	83°24.5	113°56.6	113°07.5
21	19°52.6	14.2'	14°43.4	12.6'	55.4'	117°58.3	111°09.6	108°07.3	48°09.9	71°47.2	83°49.0	114°25.1	113°31.7
22	34°25.8	14.2'	14°30.8	12.7'	55.4'	117°29.2	110°45.4	107°36.9	47°39.0	72°18.2	84°13.6	114°53.5	113°55.9
23	48°59.0	14.2'	14°18.1	12.8'	55.5'	117°00.2	110°21.2	107°06.4	47°08.1	72°49.3	84°38.1	115°22.0	114°20.1
20 th	SD = 15.0' Mer. pass. 19:38					Sun SD = 16.1'							

h	Moon (21 st Oct)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Betelgeuse	-Capella	-Aldebaran	-Saturn	+Antares	+Rigel Kent.	+Hadar	+Sun
0	63°32.2	14.2'	S14°05.3	12.9'	55.5'		116°31.0	106°35.8	46°37.1	73°20.4	85°02.8	89°12.5	115°50.5
1	78°05.4	14.3'	13°52.5	12.9'	55.5'		116°01.8	106°05.3	46°06.1	73°51.5	85°27.4	89°36.6	116°19.0
2	92°38.7	14.3'	13°39.5	13.0'	55.6'		115°32.6	105°34.7	45°35.1	74°22.7	85°52.1	90°00.8	116°47.6
3	107°12.0	14.3'	13°26.5	13.1'	55.6'		115°03.3	105°04.0	45°04.1	74°53.9	86°16.8	90°25.1	117°16.2
4	121°45.3	14.3'	13°13.5	13.1'	55.6'		114°34.0	104°33.3	44°33.0	75°25.1	86°41.6	90°49.3	117°44.8
5	136°18.6	14.3'	13°00.3	13.2'	55.6'		114°04.6	104°02.6	44°02.0	75°56.4	87°06.3	91°13.6	118°13.5
6	150°51.9	14.4'	S12°47.1	13.3'	55.7'		113°35.2	103°31.9	43°30.8	76°27.7	87°31.1	91°37.9	118°42.2
7	165°25.3	14.4'	12°33.9	13.3'	55.7'		113°05.7	103°01.1	42°59.7	76°59.0	87°56.0	92°02.2	119°10.9
8	179°58.7	14.4'	12°20.5	13.4'	55.7'		112°36.2	102°30.3	42°28.5	77°30.4	88°20.9	92°26.6	119°39.7
9	194°32.1	14.4'	12°07.1	13.5'	55.8'	119°40.9	112°06.7	101°59.4	41°57.4	78°01.8	88°45.8	92°50.9	
10	209°05.5	14.4'	11°53.7	13.5'	55.8'	119°12.1	111°37.0	101°28.5	41°26.1	78°33.3	89°10.7	93°15.3	
11	223°38.9	14.4'	11°40.1	13.6'	55.8'	118°43.2	111°07.4	100°57.6	40°54.9	79°04.7	89°35.7	93°39.7	
12	238°12.4	14.5'	S11°26.6	13.7'	55.8'	118°14.3	110°37.7	100°26.6	40°23.6	79°36.2	90°00.7	94°04.2	
13	252°45.8	14.5'	11°12.9	13.7'	55.9'	117°45.3	110°07.9	99°55.6	39°52.3	80°07.8	90°25.7	94°28.6	
14	267°19.3	14.5'	10°59.2	13.8'	55.9'	117°16.2	109°38.2	99°24.5	39°21.0	80°39.4	90°50.8	94°53.1	
15	281°52.8	14.5'	10°45.4	13.8'	55.9'	116°47.1	109°08.3	98°53.4	38°49.6	81°11.0	91°15.8	95°17.6	
16	296°26.3	14.5'	10°31.6	13.9'	56.0'	116°18.0	108°38.4	98°22.3	38°18.3	81°42.7	91°40.9	95°42.1	
17	310°59.8	14.5'	10°17.7	14.0'	56.0'	115°48.7	108°08.5	97°51.2	37°46.9	82°14.4	92°06.1	96°06.6	
18	325°33.3	14.5'	S10°03.7	14.0'	56.0'	115°19.5	107°38.5	97°20.0	37°15.4	82°46.1	92°31.2	96°31.2	
19	340°06.8	14.5'	09°49.7	14.1'	56.1'	114°50.1	107°08.5	96°48.7	36°44.0	83°17.9	92°56.4	96°55.7	
20	354°40.3	14.5'	09°35.6	14.1'	56.1'	114°20.7	106°38.4	96°17.5	36°12.5	83°49.7	93°21.6	97°20.3	
21	9°13.9	14.5'	09°21.5	14.2'	56.1'	113°51.3	106°08.3	95°46.1	35°41.0	84°21.5	93°46.9	97°44.9	
22	23°47.4	14.5'	09°07.3	14.2'	56.2'	113°21.8	105°38.2	95°14.8	35°09.5	84°53.4	94°12.1	98°09.5	
23	38°20.9	14.5'	08°53.0	14.3'	56.2'	112°52.3	105°08.0	94°43.4	34°37.9	85°25.3	94°37.4	98°34.1	
21 st	SD = 15.1' Mer. pass. 20:22					Sun SD = 16.1'							

DUT1 = UT1-UTC = +0.1145 sec $\Delta T = TT-UT1 = +69.0695$ sec

2026 October 22 to Oct. 24 UT

h Moon (22 nd Oct)						Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Betelgeuse	-Capella	-Aldebaran	-Saturn	+Altair	+Antares	+Rigil Kent.	+Hadar
0	52°54.5	14.5'	S08°38.7	14.4'	56.2'	112°22.7	104°37.7	94°12.0	34°06.4	43°06.3	85°57.3	95°02.7	98°58.7
1	67°28.0	14.5'	08°24.4	14.4'	56.3'	111°53.0	104°07.4	93°40.5	33°34.8	43°27.1	86°29.3	95°28.0	99°23.3
2	82°01.6	14.5'	08°10.0	14.5'	56.3'	111°23.3	103°37.1	93°09.0	33°03.1	43°48.1	87°01.3	95°53.3	99°48.0
3	96°35.1	14.5'	07°55.5	14.5'	56.3'	110°53.5	103°06.7	92°37.5	32°31.5	44°09.3	87°33.4	96°18.7	100°12.6
4	111°08.7	14.5'	07°41.0	14.6'	56.3'	110°23.7	102°36.3	92°05.9	31°59.9	44°30.7	88°05.5	96°44.1	100°37.3
5	125°42.2	14.5'	07°26.5	14.6'	56.4'	109°53.8	102°05.8	91°34.2	31°28.2	44°52.3	88°37.7	97°09.5	101°02.0
6	140°15.7	14.5'	S07°11.9	14.7'	56.4'	109°23.9	101°35.3	91°02.6	30°56.5	45°14.0	89°09.9	97°34.9	101°26.6
7	154°49.3	14.5'	06°57.2	14.7'	56.4'	108°53.9	101°04.8	90°30.9	30°24.8	45°36.0	89°42.1	98°00.3	101°51.3
8	169°22.8	14.5'	06°42.5	14.7'	56.5'	108°23.9	100°34.2	89°59.1	29°53.0	45°58.1	90°14.4	98°25.7	102°16.0
9	183°56.3	14.5'	06°27.8	14.8'	56.5'	107°53.8	100°03.5	89°27.3	29°21.3	46°20.5	90°46.7	98°51.2	102°40.7
10	198°29.8	14.5'	06°13.0	14.8'	56.5'	107°23.7	99°32.8	88°55.5	28°49.5	46°43.0	91°19.1	99°16.7	103°05.4
11	213°03.3	14.5'	05°58.1	14.9'	56.6'	106°53.6	99°02.1	88°23.7	28°17.8	47°05.7	91°51.5	99°42.1	103°30.0
12	227°36.8	14.5'	S05°43.3	14.9'	56.6'	106°23.3	98°31.3	87°51.8	27°46.0	47°28.5	92°23.9	100°07.6	103°54.7
13	242°10.3	14.5'	05°28.3	15.0'	56.6'	105°53.0	98°00.5	87°19.8	27°14.2	47°51.6	92°56.4	100°33.1	104°19.4
14	256°43.7	14.5'	05°13.4	15.0'	56.7'	105°22.7	97°29.6	86°47.8	26°42.4	48°14.8	93°28.9	100°58.7	104°44.1
15	271°17.2	14.4'	04°58.4	15.0'	56.7'	104°52.4	96°58.7	86°15.8	26°10.6	48°38.1	94°01.5	101°24.2	105°08.8
16	285°50.6	14.4'	04°43.3	15.1'	56.7'	104°21.9	96°27.8	85°43.8	25°38.8	49°01.7	94°34.1	101°49.7	105°33.4
17	300°24.0	14.4'	04°28.2	15.1'	56.8'	103°51.5	95°56.8	85°11.7	25°07.0	49°25.3	95°06.7	102°15.3	105°58.1
18	314°57.4	14.4'	S04°13.1	15.2'	56.8'	103°20.9	95°25.8	84°39.5	24°35.2	49°49.2	95°39.4	102°40.8	106°22.8
19	329°30.8	14.4'	03°58.0	15.2'	56.8'	102°50.4	94°54.7	84°07.3	24°03.4	50°13.2	96°12.1	103°06.4	106°47.4
20	344°04.2	14.3'	03°42.8	15.2'	56.9'	102°19.7	94°23.6	83°35.1	23°31.6	50°37.3	96°44.9	103°31.9	107°12.1
21	358°37.5	14.3'	03°27.5	15.3'	56.9'	101°49.1	93°52.4	83°02.9	22°59.8	51°01.6	97°17.7	103°57.5	107°36.7
22	13°10.9	14.3'	03°12.3	15.3'	56.9'	101°18.4	93°21.2	82°30.6	22°28.1	51°26.0	97°50.5	104°23.0	108°01.3
23	27°44.2	14.3'	02°57.0	15.3'	57.0'	100°47.6	92°50.0	81°58.2	21°56.3	51°50.6	98°23.4	104°48.6	108°25.9
22 nd	SD = 15.3' Mer. pass. 21:06												

h Moon (23 rd Oct)						Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Pollux	-Betelgeuse	-Capella	-Aldebaran	+Fomalhaut	+Altair	+Antares	+Rigil Kent.
0	42°17.4	14.3'	S02°41.6	15.4'	57.0'		100°16.8	92°18.7	81°25.8	27°06.1	52°15.3	98°56.4	105°14.1
1	56°50.7	14.2'	02°26.3	15.4'	57.0'		99°46.0	91°47.4	80°53.4	27°25.7	52°40.2	99°29.4	105°39.7
2	71°23.9	14.2'	02°10.9	15.4'	57.1'		99°15.1	91°16.0	80°21.0	27°45.8	53°05.1	100°02.4	106°05.2
3	85°57.1	14.2'	01°55.5	15.4'	57.1'		98°44.1	90°44.6	79°48.5	28°06.2	53°30.3	100°35.4	106°30.8
4	100°30.3	14.1'	01°40.0	15.5'	57.2'		98°13.1	90°13.2	79°15.9	28°27.0	53°55.5	101°08.5	106°56.3
5	115°03.4	14.1'	01°24.6	15.5'	57.2'		97°42.1	89°41.7	78°43.3	28°48.3	54°20.9	101°41.7	107°21.9
6	129°36.5	14.1'	S01°09.1	15.5'	57.2'		97°11.0	89°10.2	78°10.7	29°09.8	54°46.4	102°14.9	107°47.4
7	144°09.6	14.0'	00°53.5	15.5'	57.3'		96°39.9	88°38.6	77°38.1	29°31.8	55°12.0	102°48.1	108°12.9
8	158°42.7	14.0'	00°38.0	15.6'	57.3'	119°40.9	96°08.7	88°07.0	77°05.4	29°54.0	55°37.8	103°21.4	108°38.4
9	173°15.7	14.0'	00°22.4	15.6'	57.3'	119°07.6	95°37.5	87°35.4	76°32.6	30°16.6	56°03.7	103°54.7	109°03.9
10	187°48.6	13.9'	S00°06.8	15.6'	57.4'	118°34.4	95°06.2	87°03.7	75°59.9	30°39.6	56°29.7	104°28.0	109°29.4
11	202°21.6	13.9'	N00°08.8	15.6'	57.4'	118°01.1	94°34.9	86°32.0	75°27.0	31°02.8	56°55.8	105°01.4	109°54.9
12	216°54.5	13.9'	N00°24.4	15.6'	57.4'	117°27.7	94°03.6	86°00.2	74°54.2	31°26.4	57°22.0	105°34.9	110°20.3
13	231°27.3	13.8'	00°40.0	15.7'	57.5'	116°54.3	93°32.2	85°28.4	74°21.3	31°50.2	57°48.4	106°08.4	110°45.7
14	246°00.1	13.8'	00°55.7	15.7'	57.5'	116°20.9	93°00.8	84°56.6	73°48.4	32°14.4	58°14.8	106°41.9	111°11.1
15	260°32.9	13.7'	01°11.4	15.7'	57.5'	115°47.4	92°29.3	84°24.7	73°15.4	32°38.8	58°41.4	107°15.5	111°36.5
16	275°05.6	13.7'	01°27.1	15.7'	57.6'	115°13.9	91°57.8	83°52.8	72°42.4	33°03.4	59°08.1	107°49.1	112°01.9
17	289°38.3	13.6'	01°42.8	15.7'	57.6'	114°40.3	91°26.2	83°20.9	72°09.4	33°28.4	59°34.8	108°22.7	112°27.2
18	304°11.0	13.6'	N01°58.5	15.7'	57.6'	114°06.7	90°54.6	82°48.9	71°36.3	33°53.6	60°01.7	108°56.4	112°52.5
19	318°43.6	13.5'	02°14.2	15.7'	57.7'	113°33.1	90°23.0	82°16.9	71°03.2	34°19.0	60°28.7	109°30.2	113°17.8
20	333°16.1	13.5'	02°30.0	15.7'	57.7'	112°59.4	89°51.3	81°44.8	70°30.0	34°44.7	60°55.8	110°03.9	113°43.0
21	347°48.6	13.4'	02°45.7	15.8'	57.7'	112°25.7	89°19.6	81°12.7	69°56.8	35°10.6	61°23.0	110°37.8	114°08.2
22	2°21.1	13.4'	03°01.5	15.8'	57.8'	111°51.9	88°47.9	80°40.6	69°23.6	35°36.8	61°50.3	111°11.6	114°33.4
23	16°53.5	13.3'	03°17.2	15.8'	57.8'	111°18.1	88°16.1	80°08.4	68°50.3	36°03.1	62°17.7	111°45.5	114°58.6
23 rd	SD = 15.5' Mer. pass. 21:50												

h	Moon (24 th Oct)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Procyon	-Pollux	-Capella	-Aldebaran	+Fomalhaut	+Altair	+Antares	+Rigel Kent.
0	31°25.8	13.3'	N03°33.0	15.8'	57.8'	113°41.5	110°44.2	79°36.3	68°17.0	36°29.7	62°45.1	112°19.5	115°23.7
1	45°58.1	13.2'	03°48.7	15.8'	57.9'	113°09.7	110°10.3	79°04.0	67°43.7	36°56.5	63°12.7	112°53.5	115°48.7
2	60°30.3	13.2'	04°04.5	15.8'	57.9'	112°37.8	109°36.3	78°31.8	67°10.3	37°23.4	63°40.4	113°27.5	116°13.7
3	75°02.5	13.1'	04°20.3	15.8'	57.9'	112°05.8	109°02.4	77°59.5	66°36.9	37°50.6	64°08.1	114°01.6	116°38.7
4	89°34.6	13.1'	04°36.0	15.8'	58.0'	111°33.8	108°28.3	77°27.2	66°03.5	38°18.0	64°36.0	114°35.7	117°03.6
5	104°06.7	13.0'	04°51.8	15.8'	58.0'	111°01.7	107°54.3	76°54.8	65°30.0	38°45.5	65°03.9	115°09.8	117°28.5
6	118°38.7	12.9'	N05°07.5	15.8'	58.0'	110°29.5	107°20.1	76°22.4	64°56.5	39°13.2	65°31.9	115°44.0	117°53.3
7	133°10.6	12.9'	05°23.3	15.7'	58.1'	109°57.4	106°46.0	75°50.0	64°22.9	39°41.1	66°00.0	116°18.3	118°18.0
8	147°42.5	12.8'	05°39.0	15.7'	58.1'	109°25.1	106°11.8	75°17.6	63°49.3	40°09.2	66°28.2	116°52.6	118°42.7
9	162°14.3	12.7'	05°54.8	15.7'	58.1'	108°52.8	105°37.6	74°45.1	63°15.7	40°37.4	66°56.5	117°26.9	119°07.4
10	176°46.0	12.7'	06°10.5	15.7'	58.2'	108°20.5	105°03.3	74°12.6	62°42.1	41°05.8	67°24.8	118°01.2	119°31.9
11	191°17.7	12.6'	06°26.2	15.7'	58.2'	107°48.1	104°29.0	73°40.1	62°08.4	41°34.4	67°53.2	118°35.6	119°56.4
12	205°49.3	12.5'	N06°41.9	15.7'	58.2'	107°15.6	103°54.6	73°07.5	61°34.7	42°03.1	68°21.7	119°10.1	
13	220°20.8	12.5'	06°57.6	15.7'	58.3'	106°43.1	103°20.2	72°35.0	61°00.9	42°32.0	68°50.3	119°44.6	
14	234°52.3	12.4'	07°13.3	15.7'	58.3'	106°10.6	102°45.8	72°02.4	60°27.2	43°01.0	69°19.0		
15	249°23.7	12.3'	07°28.9	15.6'	58.3'	105°38.0	102°11.3	71°29.7	59°53.4	43°30.1	69°47.7		
16	263°55.0	12.2'	07°44.6	15.6'	58.4'	105°05.3	101°36.8	70°57.1	59°19.5	43°59.4	70°16.5		
17	278°26.3	12.2'	08°00.2	15.6'	58.4'	104°32.6	101°02.2	70°24.4	58°45.7	44°28.8	70°45.4		
18	292°57.4	12.1'	N08°15.8	15.6'	58.4'	103°59.9	100°27.6	69°51.7	58°11.8	44°58.3	71°14.3		
19	307°28.5	12.0'	08°31.3	15.5'	58.5'	103°27.1	99°53.0	69°19.0	57°37.9	45°28.0	71°43.3		
20	321°59.6	11.9'	08°46.9	15.5'	58.5'	102°54.3	99°18.3	68°46.2	57°03.9	45°57.8	72°12.4		
21	336°30.5	11.9'	09°02.4	15.5'	58.5'	102°21.4	98°43.6	68°13.5	56°29.9	46°27.7	72°41.5		
22	351°01.4	11.8'	09°17.9	15.5'	58.5'	101°48.5	98°08.8	67°40.7	55°55.9	46°57.8	73°10.7		
23	5°32.1	11.7'	09°33.3	15.4'	58.6'	101°15.5	97°34.0	67°07.9	55°21.9	47°27.9	73°40.0		
24 th	SD = 15.8'		Mer. pass. 22:37										

h	Moon (25 th Oct)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Jupiter	-Mars	-Pollux	-Aldebaran	+Saturn	+Fomalhaut	+Altair	+Vega
0	20°02.8	11.6'	N09°48.8	15.4'	58.6'		118°44.4	96°59.2	54°47.8		47°58.2	74°09.4	
1	34°33.4	11.5'	10°04.2	15.4'	58.6'		118°10.7	96°24.3	54°13.8		48°28.6	74°38.8	
2	49°04.0	11.4'	10°19.5	15.3'	58.7'		117°37.1	95°49.4	53°39.7	9°57.5	48°59.1	75°08.2	
3	63°34.4	11.4'	10°34.9	15.3'	58.7'		117°03.3	95°14.5	53°05.5	10°25.7	49°29.7	75°37.7	
4	78°04.8	11.3'	10°50.1	15.2'	58.7'		116°29.6	94°39.5	52°31.4	10°54.6	50°00.4	76°07.3	
5	92°35.0	11.2'	11°05.4	15.2'	58.8'		115°55.8	94°04.5	51°57.2	11°24.2	50°31.2	76°36.9	
6	107°05.2	11.1'	N11°20.6	15.2'	58.8'		115°22.0	93°29.4	51°23.0	11°54.2	51°02.1	77°06.6	
7	121°35.3	11.0'	11°35.7	15.1'	58.8'		114°48.1	92°54.3	50°48.8	12°24.8	51°33.1	77°36.4	
8	136°05.3	10.9'	11°50.9	15.1'	58.8'		114°14.2	92°19.2	50°14.6	12°55.8	52°04.2	78°06.1	
9	150°35.2	10.8'	12°05.9	15.0'	58.9'		113°40.3	91°44.1	49°40.4	13°27.2	52°35.4	78°36.0	
10	165°05.0	10.7'	12°20.9	15.0'	58.9'		113°06.3	91°08.9	49°06.1	13°58.9	53°06.7	79°05.9	
11	179°34.7	10.6'	12°35.9	14.9'	58.9'		112°32.3	90°33.6	48°31.8	14°30.9	53°38.0	79°35.8	
12	194°04.3	10.5'	N12°50.8	14.9'	59.0'		111°58.2	89°58.4	47°57.5	15°03.2	54°09.5	80°05.8	89°50.6
13	208°33.9	10.4'	13°05.7	14.8'	59.0'	119°37.6	111°24.2	89°23.1	47°23.2	15°35.8	54°41.0	80°35.9	90°05.6
14	223°03.3	10.3'	13°20.5	14.7'	59.0'	119°02.5	110°50.1	88°47.7	46°48.9	16°08.6	55°12.6	81°05.9	90°20.7
15	237°32.6	10.2'	13°35.2	14.7'	59.0'	118°27.4	110°15.9	88°12.4	46°14.6	16°41.7	55°44.3	81°36.1	90°35.7
16	252°01.8	10.1'	13°49.9	14.6'	59.1'	117°52.3	109°41.7	87°37.0	45°40.2	17°14.9	56°16.1	82°06.2	90°50.8
17	266°31.0	10.0'	14°04.6	14.6'	59.1'	117°17.1	109°07.5	87°01.6	45°05.9	17°48.3	56°48.0	82°36.4	91°05.9
18	281°00.0	9.9'	N14°19.1	14.5'	59.1'	116°41.9	108°33.3	86°26.1	44°31.5	18°21.9	57°19.9	83°06.7	91°20.9
19	295°28.9	9.8'	14°33.6	14.4'	59.1'	116°06.7	107°59.0	85°50.6	43°57.2	18°55.6	57°51.9	83°37.0	91°36.0
20	309°57.7	9.7'	14°48.0	14.4'	59.2'	115°31.4	107°24.7	85°15.1	43°22.8	19°29.5	58°24.0	84°07.3	91°51.1
21	324°26.4	9.6'	15°02.4	14.3'	59.2'	114°56.1	106°50.4	84°39.5	42°48.4	20°03.5	58°56.1	84°37.7	92°06.2
22	338°55.0	9.5'	15°16.7	14.2'	59.2'	114°20.8	106°16.0	84°03.9	42°14.1	20°37.6	59°28.3	85°08.1	92°21.3
23	353°23.5	9.4'	15°30.9	14.1'	59.2'	113°45.4	105°41.6	83°28.3	41°39.7	21°11.9	60°00.6	85°38.5	92°36.4
25 th	SD = 16.0' Mer. pass. 23:27												

Moon (26 th Oct)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Mars	-Pollux	+Saturn	+Fomalhaut	+Deneb	+Altair
0	7°51.9	9.3'	N15°45.0	14.1'	59.3'	119°48.4	113°10.1	105°07.2	82°52.7	21°46.2	60°33.0		86°09.0
1	22°20.2	9.2'	15°59.1	14.0'	59.3'	119°12.6	112°34.6	104°32.7	82°17.0	22°20.7	61°05.4		86°39.5
2	36°48.4	9.1'	16°13.1	13.9'	59.3'	118°36.8	111°59.2	103°58.2	81°41.3	22°55.3	61°37.8		87°10.1
3	51°16.5	9.0'	16°27.0	13.8'	59.3'	118°01.0	111°23.7	103°23.7	81°05.6	23°29.9	62°10.4		87°40.6
4	65°44.4	8.9'	16°40.8	13.7'	59.4'	117°25.2	110°48.2	102°49.2	80°29.8	24°04.7	62°43.0		88°11.2
5	80°12.3	8.7'	16°54.5	13.6'	59.4'	116°49.3	110°12.7	102°14.6	79°54.1	24°39.5	63°15.6		88°41.8
6	94°40.0	8.6'	N17°08.2	13.6'	59.4'	116°13.4	109°37.1	101°40.0	79°18.2	25°14.4	63°48.3	70°31.3	89°12.5
7	109°07.7	8.5'	17°21.7	13.5'	59.4'	115°37.5	109°01.5	101°05.4	78°42.4	25°49.4	64°21.1	70°46.4	89°43.2
8	123°35.2	8.4'	17°35.2	13.4'	59.5'	115°01.6	108°25.9	100°30.7	78°06.5	26°24.5	64°53.9	71°01.7	90°13.9
9	138°02.6	8.3'	17°48.6	13.3'	59.5'	114°25.6	107°50.3	99°56.0	77°30.6	26°59.6	65°26.8	71°17.0	90°44.6
10	152°29.9	8.2'	18°01.8	13.2'	59.5'	113°49.6	107°14.6	99°21.3	76°54.7	27°34.8	65°59.7	71°32.5	91°15.3
11	166°57.1	8.1'	18°15.0	13.1'	59.5'	113°13.6	106°38.9	98°46.6	76°18.8	28°10.1	66°32.7	71°48.1	91°46.1
12	181°24.1	8.0'	N18°28.1	13.0'	59.5'	112°37.5	106°03.2	98°11.8	75°42.8	28°45.4	67°05.7	72°03.8	92°16.8
13	195°51.1	7.8'	18°41.1	12.9'	59.6'	112°01.4	105°27.4	97°37.0	75°06.8	29°20.8	67°38.8	72°19.7	92°47.6
14	210°17.9	7.7'	18°54.0	12.8'	59.6'	111°25.4	104°51.7	97°02.2	74°30.8	29°56.2	68°11.9	72°35.6	93°18.4
15	224°44.7	7.6'	19°06.7	12.7'	59.6'	110°49.2	104°15.9	96°27.4	73°54.8	30°31.7	68°45.1	72°51.6	93°49.3
16	239°11.3	7.5'	19°19.4	12.6'	59.6'	110°13.1	103°40.1	95°52.5	73°18.7	31°07.2	69°18.3	73°07.8	94°20.1
17	253°37.8	7.4'	19°31.9	12.4'	59.6'	109°36.9	103°04.2	95°17.7	72°42.7	31°42.8	69°51.5	73°24.0	94°50.9
18	268°04.1	7.3'	N19°44.4	12.3'	59.7'	109°00.7	102°28.4	94°42.8	72°06.6	32°18.4	70°24.8	73°40.3	95°21.8
19	282°30.4	7.2'	19°56.7	12.2'	59.7'	108°24.5	101°52.5	94°07.8	71°30.4	32°54.1	70°58.1	73°56.8	95°52.7
20	296°56.6	7.0'	20°08.9	12.1'	59.7'	107°48.3	101°16.6	93°32.9	70°54.3	33°29.8	71°31.5	74°13.3	96°23.5
21	311°22.6	6.9'	20°21.0	12.0'	59.7'	107°12.1	100°40.7	92°57.9	70°18.1	34°05.6	72°04.9	74°30.0	96°54.4
22	325°48.5	6.8'	20°33.0	11.9'	59.7'	106°35.8	100°04.7	92°23.0	69°42.0	34°41.4	72°38.4	74°46.7	97°25.3
23	340°14.3	6.7'	20°44.8	11.7'	59.7'	105°59.5	99°28.8	91°48.0	69°05.8	35°17.2	73°11.8	75°03.5	97°56.2
26 th	SD = 16.2' Mer. pass. ---												

h Moon (27 th Oct)						Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Regulus	-Jupiter	-Mars	-Pollux	+Saturn	+Fomalhaut	+Deneb	+Altair
0	354°40.0	6.6'	N20°56.6	11.6'	59.8'	105°23.2	98°52.8	91°12.9	68°29.5	35°53.1	73°45.4	75°20.4	98°27.1
1	9°05.6	6.5'	21°08.2	11.5'	59.8'	104°46.9	98°16.8	90°37.9	67°53.3	36°29.0	74°18.9	75°37.4	98°58.0
2	23°31.1	6.3'	21°19.6	11.3'	59.8'	104°10.5	97°40.8	90°02.8	67°17.1	37°04.9	74°52.5	75°54.5	99°28.9
3	37°56.4	6.2'	21°31.0	11.2'	59.8'	103°34.2	97°04.7	89°27.8	66°40.8	37°40.9	75°26.1	76°11.7	99°59.7
4	52°21.6	6.1'	21°42.2	11.1'	59.8'	102°57.8	96°28.7	88°52.7	66°04.5	38°16.9	75°59.8	76°28.9	100°30.6
5	66°46.8	6.0'	21°53.3	10.9'	59.8'	102°21.4	95°52.6	88°17.6	65°28.2	38°52.9	76°33.4	76°46.2	101°01.5
6	81°11.8	5.9'	N22°04.2	10.8'	59.8'	101°45.0	95°16.5	87°42.4	64°51.9	39°29.0	77°07.1	77°03.6	101°32.4
7	95°36.7	5.8'	22°15.0	10.7'	59.9'	101°08.5	94°40.4	87°07.3	64°15.6	40°05.1	77°40.8	77°21.1	102°03.2
8	110°01.4	5.7'	22°25.7	10.5'	59.9'	100°32.1	94°04.3	86°32.1	63°39.2	40°41.2	78°14.6	77°38.7	102°34.1
9	124°26.1	5.6'	22°36.2	10.4'	59.9'	99°55.6	93°28.2	85°57.0	63°02.9	41°17.4	78°48.4	77°56.3	103°04.9
10	138°50.7	5.5'	22°46.5	10.2'	59.9'	99°19.2	92°52.0	85°21.8	62°26.5	41°53.5	79°22.2	78°14.0	103°35.7
11	153°15.1	5.3'	22°56.8	10.1'	59.9'	98°42.7	92°15.9	84°46.6	61°50.1	42°29.7	79°56.0	78°31.8	104°06.5
12	167°39.5	5.2'	N23°06.9	9.9'	59.9'	98°06.2	91°39.7	84°11.3	61°13.7	43°06.0	80°29.8	78°49.6	104°37.3
13	182°03.7	5.1'	23°16.8	9.8'	59.9'	97°29.7	91°03.5	83°36.1	60°37.3	43°42.2	81°03.7	79°07.5	105°08.1
14	196°27.8	5.0'	23°26.6	9.6'	59.9'	96°53.2	90°27.3	83°00.9	60°00.9	44°18.5	81°37.6	79°25.5	105°38.8
15	210°51.9	4.9'	23°36.2	9.5'	60.0'	96°16.6	89°51.1	82°25.6	59°24.5	44°54.8	82°11.5	79°43.5	106°09.6
16	225°15.8	4.8'	23°45.7	9.3'	60.0'	95°40.1	89°14.9	81°50.4	58°48.0	45°31.1	82°45.4	80°01.6	106°40.3
17	239°39.6	4.7'	23°55.0	9.2'	60.0'	95°03.5	88°38.7	81°15.1	58°11.6	46°07.4	83°19.4	80°19.7	107°11.0
18	254°03.3	4.6'	N24°04.1	9.0'	60.0'	94°27.0	88°02.4	80°39.8	57°35.2	46°43.7	83°53.3	80°37.9	107°41.6
19	268°26.9	4.5'	24°13.1	8.8'	60.0'	93°50.4	87°26.2	80°04.5	56°58.7	47°20.1	84°27.3	80°56.1	108°12.2
20	282°50.4	4.4'	24°21.9	8.7'	60.0'	93°13.8	86°49.9	79°29.2	56°22.2	47°56.5	85°01.3	81°14.4	108°42.8
21	297°13.8	4.3'	24°30.6	8.5'	60.0'	92°37.2	86°13.6	78°53.9	55°45.8	48°32.9	85°35.3	81°32.8	109°13.4
22	311°37.2	4.2'	24°39.1	8.3'	60.0'	92°00.6	85°37.4	78°18.6	55°09.3	49°09.3	86°09.3	81°51.2	109°43.9
23	326°00.4	4.1'	24°47.4	8.2'	60.0'	91°24.0	85°01.1	77°43.3	54°32.8	49°45.7	86°43.3	82°09.6	110°14.4
27 th	SD = 16.3' Mer. pass. 00:22												

2026 October 28 to Oct. 30 UT

Moon (30 th Oct)						Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Venus	-Spica	-Regulus	-Jupiter	+Capella	+Aldebaran	+Saturn	+Fomalhaut
0	309°45.6	2.4'	N27°43.7	-1.4'	59.9'	118°47.8	115°33.6	61°31.3	55°23.9		20°56.9	79°33.7	114°21.8
1	324°07.0	2.4'	27°42.3	-1.6'	59.9'	118°10.0	114°57.2	60°54.9	54°47.8		21°28.4	80°10.0	114°55.0
2	338°28.4	2.5'	27°40.6	-1.8'	59.9'	117°32.3	114°20.9	60°18.6	54°11.8		22°00.2	80°46.4	115°28.2
3	352°49.9	2.5'	27°38.8	-2.0'	59.9'	116°54.6	113°44.6	59°42.2	53°35.7	20°18.6	22°32.2	81°22.7	116°01.3
4	7°11.4	2.6'	27°36.8	-2.2'	59.9'	116°16.8	113°08.3	59°05.9	52°59.7	20°34.6	23°04.3	81°59.0	116°34.4
5	21°33.0	2.6'	27°34.6	-2.4'	59.9'	115°39.2	112°32.0	58°29.6	52°23.7	20°51.4	23°36.7	82°35.2	117°07.5
6	35°54.6	2.7'	N27°32.2	-2.6'	59.9'	115°01.5	111°55.7	57°53.3	51°47.7	21°09.0	24°09.2	83°11.5	117°40.5
7	50°16.3	2.7'	27°29.5	-2.8'	59.9'	114°23.8	111°19.5	57°17.0	51°11.7	21°27.2	24°41.9	83°47.7	118°13.5
8	64°38.0	2.8'	27°26.7	-3.0'	59.9'	113°46.2	110°43.2	56°40.7	50°35.8	21°46.2	25°14.7	84°23.9	118°46.4
9	78°59.7	2.8'	27°23.7	-3.2'	59.8'	113°08.6	110°07.0	56°04.5	49°59.9	22°05.9	25°47.6	85°00.1	119°19.2
10	93°21.6	2.9'	27°20.5	-3.4'	59.8'	112°31.0	109°30.8	55°28.3	49°23.9	22°26.3	26°20.6	85°36.3	119°52.0
11	107°43.4	2.9'	27°17.1	-3.6'	59.8'	111°53.5	108°54.6	54°52.1	48°48.0	22°47.2	26°53.8	86°12.5	
12	122°05.4	3.0'	N27°13.5	-3.8'	59.8'	111°15.9	108°18.4	54°15.9	48°12.1	23°08.7	27°27.1	86°48.7	
13	136°27.4	3.1'	27°09.7	-4.0'	59.8'	110°38.4	107°42.3	53°39.7	47°36.3	23°30.8	28°00.4	87°24.8	
14	150°49.5	3.1'	27°05.8	-4.2'	59.8'	110°00.9	107°06.2	53°03.5	47°00.4	23°53.4	28°33.9	88°00.9	
15	165°11.6	3.2'	27°01.6	-4.4'	59.8'	109°23.4	106°30.0	52°27.4	46°24.6	24°16.5	29°07.4	88°37.0	
16	179°33.8	3.3'	26°57.2	-4.5'	59.8'	108°45.9	105°54.0	51°51.3	45°48.8	24°40.1	29°41.0	89°13.1	
17	193°56.1	3.4'	26°52.7	-4.7'	59.7'	108°08.5	105°17.9	51°15.2	45°13.0	25°04.2	30°14.7	89°49.2	
18	208°18.5	3.5'	N26°48.0	-4.9'	59.7'	107°31.0	104°41.8	50°39.1	44°37.2	25°28.6	30°48.4	90°25.2	
19	222°41.0	3.5'	26°43.0	-5.1'	59.7'	106°53.6	104°05.8	50°03.0	44°01.5	25°53.5	31°22.2	91°01.2	
20	237°03.5	3.6'	26°37.9	-5.3'	59.7'	106°16.3	103°29.8	49°27.0	43°25.7	26°18.8	31°56.1	91°37.2	
21	251°26.1	3.7'	26°32.7	-5.5'	59.7'	105°38.9	102°53.8	48°51.0	42°50.0	26°44.4	32°30.0	92°13.2	
22	265°48.8	3.8'	26°27.2	-5.6'	59.7'	105°01.6	102°17.8	48°15.0	42°14.3	27°10.4	33°03.9	92°49.2	
23	280°11.6	3.9'	26°21.6	-5.8'	59.6'	104°24.3	101°41.8	47°39.0	41°38.7	27°36.7	33°37.9	93°25.1	
30 th	SD = 16.3'		Mer. pass. 03:30										

DUT1 = UT1-UTC = +0.1156 sec ΔT = TT-UT1 = +69.0684 sec

2026 October 31 to Nov. 02 UT

h	Moon (31 st Oct)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Venus	-Spica	-Regulus	-Jupiter	+Betelgeuse	+Capella	+Aldebaran	+Saturn
0	294°34.5	4.0'	N26°15.7	-6.0'	59.6'	103°47.0	101°05.9	47°03.1	41°03.0	23°58.6	28°03.4	34°11.9	94°01.0
1	308°57.4	4.1'	26°09.7	-6.2'	59.6'	103°09.7	100°30.0	46°27.1	40°27.4	24°17.7	28°30.3	34°46.0	94°36.9
2	323°20.5	4.2'	26°03.6	-6.3'	59.6'	102°32.5	99°54.1	45°51.2	39°51.8	24°37.3	28°57.5	35°20.1	95°12.8
3	337°43.7	4.2'	25°57.2	-6.5'	59.6'	101°55.3	99°18.2	45°15.3	39°16.2	24°57.5	29°25.0	35°54.2	95°48.6
4	352°06.9	4.3'	25°50.7	-6.7'	59.6'	101°18.1	98°42.4	44°39.4	38°40.6	25°18.3	29°52.8	36°28.4	96°24.5
5	6°30.2	4.4'	25°44.0	-6.9'	59.6'	100°40.9	98°06.6	44°03.6	38°05.1	25°39.5	30°20.7	37°02.6	97°00.3
6	20°53.7	4.5'	N25°37.1	-7.0'	59.5'	100°03.8	97°30.8	43°27.8	37°29.6	26°01.2	30°49.0	37°36.8	97°36.1
7	35°17.2	4.6'	25°30.1	-7.2'	59.5'	99°26.6	96°55.0	42°52.0	36°54.0	26°23.4	31°17.4	38°11.0	98°11.8
8	49°40.9	4.7'	25°22.9	-7.4'	59.5'	98°49.5	96°19.2	42°16.2	36°18.6	26°46.1	31°46.0	38°45.3	98°47.6
9	64°04.6	4.8'	25°15.5	-7.5'	59.5'	98°12.5	95°43.5	41°40.4	35°43.1	27°09.1	32°14.9	39°19.6	99°23.3
10	78°28.5	5.0'	25°08.0	-7.7'	59.5'	97°35.4	95°07.8	41°04.7	35°07.7	27°32.6	32°43.9	39°53.9	99°59.0
11	92°52.4	5.1'	25°00.3	-7.8'	59.4'	96°58.4	94°32.1	40°29.0	34°32.3	27°56.4	33°13.1	40°28.2	100°34.6
12	107°16.5	5.2'	N24°52.5	-8.0'	59.4'	96°21.4	93°56.4	39°53.3	33°56.9	28°20.6	33°42.4	41°02.5	101°10.3
13	121°40.6	5.3'	24°44.5	-8.2'	59.4'	95°44.5	93°20.7	39°17.6	33°21.5	28°45.2	34°11.9	41°36.8	101°45.9
14	136°04.9	5.4'	24°36.3	-8.3'	59.4'	95°07.5	92°45.1	38°42.0	32°46.2	29°10.1	34°41.6	42°11.1	102°21.5
15	150°29.3	5.5'	24°28.0	-8.5'	59.4'	94°30.6	92°09.5	38°06.4	32°10.9	29°35.3	35°11.4	42°45.4	102°57.1
16	164°53.8	5.6'	24°19.5	-8.6'	59.4'	93°53.7	91°33.9	37°30.8	31°35.6	30°00.8	35°41.4	43°19.8	103°32.6
17	179°18.4	5.7'	24°10.9	-8.8'	59.3'	93°16.9	90°58.4	36°55.2	31°00.3	30°26.6	36°11.4	43°54.1	104°08.2
18	193°43.1	5.8'	N24°02.1	-8.9'	59.3'	92°40.0	90°22.9	36°19.7	30°25.1	30°52.7	36°41.6	44°28.5	104°43.7
19	208°07.9	5.9'	23°53.2	-9.1'	59.3'	92°03.2	89°47.4	35°44.1	29°49.8	31°19.0	37°11.9	45°02.8	105°19.1
20	222°32.9	6.1'	23°44.1	-9.2'	59.3'	91°26.5	89°11.9	35°08.6	29°14.6	31°45.6	37°42.3	45°37.2	105°54.6
21	236°57.9	6.2'	23°34.9	-9.4'	59.3'	90°49.7	88°36.4	34°33.2	28°39.5	32°12.5	38°12.9	46°11.5	106°30.0
22	251°23.1	6.3'	23°25.6	-9.5'	59.2'	90°13.0	88°01.0	33°57.7	28°04.3	32°39.5	38°43.5	46°45.9	107°05.4
23	265°48.4	6.4'	23°16.1	-9.6'	59.2'	89°36.3	87°25.6	33°22.3	27°29.2	33°06.8	39°14.2	47°20.2	107°40.8
31 st	SD = 16.3' Mer. pass. 04:33												

Moon (1 st Nov)						Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Venus	-Spica	-Regulus	-Jupiter	+Pollux	+Capella	+Aldebaran	+Saturn
0	280°13.8	6.5'	N23°06.4	-9.8'	59.2'	88°59.6	86°50.2	32°46.9	26°54.1		39°45.0	47°54.5	108°16.1
1	294°39.3	6.6'	22°56.7	-9.9'	59.2'	88°23.0	86°14.8	32°11.5	26°19.0		40°15.9	48°28.9	108°51.4
2	309°04.9	6.7'	22°46.8	-10.0'	59.2'	87°46.3	85°39.5	31°36.2	25°44.0		40°46.9	49°03.2	109°26.7
3	323°30.7	6.9'	22°36.7	-10.2'	59.1'	87°09.8	85°04.2	31°00.9	25°08.9		41°17.9	49°37.5	110°02.0
4	337°56.5	7.0'	22°26.6	-10.3'	59.1'	86°33.2	84°28.9	30°25.6	24°33.9	7°35.9	41°49.0	50°11.8	110°37.2
5	352°22.5	7.1'	22°16.3	-10.4'	59.1'	85°56.7	83°53.7	29°50.3	23°58.9	8°06.5	42°20.2	50°46.1	111°12.5
6	6°48.6	7.2'	N22°05.8	-10.6'	59.1'	85°20.2	83°18.4	29°15.0	23°24.0	8°37.7	42°51.5	51°20.4	111°47.6
7	21°14.8	7.3'	21°55.3	-10.7'	59.1'	84°43.7	82°43.2	28°39.8	22°49.1	9°09.4	43°22.8	51°54.7	112°22.8
8	35°41.1	7.4'	21°44.6	-10.8'	59.0'	84°07.2	82°08.0	28°04.6	22°14.2	9°41.4	43°54.1	52°29.0	112°57.9
9	50°07.5	7.6'	21°33.8	-10.9'	59.0'	83°30.8	81°32.9	27°29.4	21°39.3	10°13.8	44°25.5	53°03.3	113°33.0
10	64°34.1	7.7'	21°22.9	-11.0'	59.0'	82°54.4	80°57.7	26°54.3	21°04.4	10°46.4	44°57.0	53°37.5	114°08.1
11	79°00.8	7.8'	21°11.8	-11.2'	59.0'	82°18.0	80°22.6	26°19.2	20°29.6	11°19.3	45°28.5	54°11.8	114°43.2
12	93°27.5	7.9'	N21°00.7	-11.3'	59.0'	81°41.7	79°47.6	25°44.1	19°54.8	11°52.3	46°00.1	54°46.0	115°18.2
13	107°54.4	8.0'	20°49.4	-11.4'	58.9'	81°05.4	79°12.5	25°09.0	19°20.0	12°25.5	46°31.7	55°20.3	115°53.2
14	122°21.5	8.1'	20°38.0	-11.5'	58.9'	80°29.1	78°37.5	24°34.0	18°45.3	12°58.9	47°03.3	55°54.5	116°28.2
15	136°48.6	8.2'	20°26.5	-11.6'	58.9'	79°52.9	78°02.5	23°59.0	18°10.6	13°32.3	47°35.0	56°28.7	117°03.1
16	151°15.8	8.4'	20°14.9	-11.7'	58.9'	79°16.7	77°27.5	23°24.0	17°35.9	14°05.9	48°06.8	57°02.9	117°38.0
17	165°43.2	8.5'	20°03.2	-11.8'	58.9'	78°40.5	76°52.5	22°49.0	17°01.2	14°39.5	48°38.5	57°37.0	118°12.9
18	180°10.6	8.6'	N19°51.4	-11.9'	58.8'	78°04.3	76°17.6	22°14.1	16°26.6	15°13.3	49°10.3	58°11.2	118°47.8
19	194°38.2	8.7'	19°39.4	-12.0'	58.8'	77°28.2	75°42.7	21°39.2	15°51.9	15°47.0	49°42.1	58°45.3	119°22.6
20	209°05.9	8.8'	19°27.4	-12.1'	58.8'	76°52.0	75°07.8	21°04.3	15°17.3	16°20.9	50°14.0	59°19.4	119°57.4
21	223°33.7	8.9'	19°15.3	-12.2'	58.8'	76°16.0	74°33.0	20°29.4	14°42.8	16°54.8	50°45.8	59°53.6	
22	238°01.6	9.0'	19°03.0	-12.3'	58.7'	75°39.9	73°58.1	19°54.6	14°08.2	17°28.7	51°17.7	60°27.6	
23	252°29.7	9.1'	18°50.7	-12.4'	58.7'	75°03.9	73°23.3	19°19.8	13°33.7	18°02.6	51°49.6	61°01.7	
1 st	SD = 16.1' Mer. pass. 05:32												

h	Moon (2 nd Nov)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Venus	-Spica	-Regulus	-Jupiter	+Pollux	+Betelgeuse	+Capella	+Aldebaran
0	266°57.8	9.2'	N18°38.3	-12.5'	58.7'	74°27.9	72°48.6	18°45.0	12°59.3	18°36.6	45°16.0	52°21.6	61°35.8
1	281°26.0	9.4'	18°25.8	-12.6'	58.7'	73°51.9	72°13.8	18°10.3	12°24.8	19°10.6	45°46.4	52°53.5	62°09.8
2	295°54.4	9.5'	18°13.1	-12.7'	58.7'	73°16.0	71°39.1	17°35.6	11°50.4	19°44.7	46°16.9	53°25.5	62°43.8
3	310°22.9	9.6'	18°00.4	-12.8'	58.6'	72°40.1	71°04.4	17°00.9	11°16.0	20°18.7	46°47.4	53°57.5	63°17.9
4	324°51.4	9.7'	17°47.6	-12.9'	58.6'	72°04.2	70°29.7	16°26.2	10°41.6	20°52.7	47°17.9	54°29.5	63°51.8
5	339°20.1	9.8'	17°34.8	-13.0'	58.6'	71°28.4	69°55.1	15°51.6	10°07.3	21°26.8	47°48.6	55°01.5	64°25.8
6	353°48.9	9.9'	N17°21.8	-13.1'	58.6'	70°52.5	69°20.5	15°17.0	9°32.9	22°00.9	48°19.2	55°33.5	64°59.8
7	8°17.8	10.0'	17°08.7	-13.1'	58.5'	70°16.8	68°45.9	14°42.4	8°58.7	22°34.9	48°49.9	56°05.6	65°33.7
8	22°46.7	10.1'	16°55.6	-13.2'	58.5'	69°41.0	68°11.3	14°07.8	8°24.4	23°09.0	49°20.7	56°37.6	66°07.6
9	37°15.8	10.2'	16°42.4	-13.3'	58.5'	69°05.3	67°36.8	13°33.3	7°50.2	23°43.0	49°51.4	57°09.7	66°41.5
10	51°45.0	10.3'	16°29.1	-13.4'	58.5'	68°29.6	67°02.2	12°58.8	7°16.0	24°17.1	50°22.3	57°41.7	67°15.4
11	66°14.3	10.4'	16°15.7	-13.4'	58.5'	67°53.9	66°27.7	12°24.4	6°41.9	24°51.2	50°53.1	58°13.8	67°49.3
12	80°43.7	10.5'	N16°02.3	-13.5'	58.4'	67°18.2	65°53.3	11°49.9	6°07.8	25°25.2	51°24.0	58°45.9	68°23.1
13	95°13.2	10.6'	15°48.8	-13.6'	58.4'	66°42.6	65°18.8	11°15.5	5°33.7	25°59.3	51°54.9	59°18.0	68°56.9
14	109°42.8	10.7'	15°35.2	-13.7'	58.4'	66°07.0	64°44.4	10°41.2	4°59.7	26°33.3	52°25.9	59°50.0	69°30.7
15	124°12.5	10.8'	15°21.5	-13.7'	58.4'	65°31.5	64°10.0	10°06.9	4°25.8	27°07.3	52°56.9	60°22.1	70°04.5
16	138°42.3	10.9'	15°07.8	-13.8'	58.3'	64°55.9	63°35.7	9°32.6	3°51.9	27°41.3	53°27.9	60°54.2	70°38.2
17	153°12.1	11.0'	14°54.0	-13.9'	58.3'	64°20.4	63°01.3	8°58.3	3°18.1	28°15.4	53°58.9	61°26.3	71°12.0
18	167°42.1	11.1'	N14°40.1	-13.9'	58.3'	63°45.0	62°27.0	8°24.1	2°44.5	28°49.3	54°30.0	61°58.4	71°45.7
19	182°12.2	11.2'	14°26.2	-14.0'	58.3'	63°09.5	61°52.7	7°49.9	2°11.2	29°23.3	55°01.0	62°30.5	72°19.4
20	196°42.3	11.2'	14°12.2	-14.1'	58.3'	62°34.1	61°18.5	7°15.8	1°38.3	29°57.3	55°32.1	63°02.6	72°53.1
21	211°12.6	11.3'	13°58.1	-14.1'	58.2'	61°58.7	60°44.3	6°41.7		30°31.3	56°03.2	63°34.7	73°26.7
22	225°42.9	11.4'	13°44.0	-14.2'	58.2'	61°23.3	60°10.0	6°07.7		31°05.2	56°34.4	64°06.7	74°00.4
23	240°13.3	11.5'	13°29.8	-14.2'	58.2'	60°48.0	59°35.9	5°33.8		31°39.1	57°05.5	64°38.8	74°34.0
2 nd	SD = 16.0'					Mer. pass. 06:26							

DUT1 = UT1-UTC = +0.1160 sec $\Delta T = TT-UT1 = +69.0680$ sec

2026 November 03 to Nov. 05 UT

h	Moon (3 rd Nov)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Sun	-Venus	-Spica	\pm Regulus	+Jupiter	+Mars	+Pollux	+Aldebaran
0	254°43.8	11.6'	N13°15.6	-14.3'	58.2'	75°21.9	60°12.7	59°01.7	5°00.0		5°47.1	32°13.0	75°07.5
1	269°14.4	11.7'	13°01.3	-14.3'	58.1'	74°50.4	59°37.4	58°27.6	4°26.2		6°19.6	32°46.9	75°41.1
2	283°45.1	11.8'	12°47.0	-14.4'	58.1'	74°18.9	59°02.2	57°53.5	3°52.7		6°52.2	33°20.8	76°14.7
3	298°15.9	11.8'	12°32.6	-14.4'	58.1'	73°47.4	58°27.0	57°19.4	3°19.3	2°26.3	7°24.7	33°54.6	76°48.2
4	312°46.7	11.9'	12°18.1	-14.5'	58.1'	73°15.9	57°51.8	56°45.3	2°46.3	2°59.6	7°57.3	34°28.5	77°21.7
5	327°17.6	12.0'	12°03.6	-14.5'	58.1'	72°44.5	57°16.6	56°11.3	2°13.8	3°33.0	8°29.9	35°02.3	77°55.2
6	341°48.7	12.1'	N11°49.1	-14.6'	58.0'	72°13.1	56°41.5	55°37.3		4°06.4	9°02.5	35°36.1	78°28.6
7	356°19.7	12.2'	11°34.5	-14.6'	58.0'	71°41.7	56°06.4	55°03.3		4°40.0	9°35.2	36°09.9	79°02.1
8	10°50.9	12.2'	11°19.9	-14.7'	58.0'	71°10.4	55°31.3	54°29.4		5°13.5	10°07.8	36°43.7	79°35.5
9	25°22.1	12.3'	11°05.2	-14.7'	58.0'	70°39.0	54°56.3	53°55.4		5°47.0	10°40.4	37°17.4	80°08.9
10	39°53.4	12.4'	10°50.4	-14.8'	57.9'	70°07.7	54°21.3	53°21.5		6°20.6	11°12.9	37°51.1	80°42.2
11	54°24.8	12.5'	10°35.7	-14.8'	57.9'	69°36.5	53°46.3	52°47.7		6°54.1	11°45.5	38°24.9	81°15.6
12	68°56.3	12.5'	N10°20.9	-14.8'	57.9'	69°05.2	53°11.3	52°13.8		7°27.7	12°18.1	38°58.6	81°48.9
13	83°27.8	12.6'	10°06.0	-14.9'	57.9'	68°34.0	52°36.4	51°40.0		8°01.2	12°50.6	39°32.2	82°22.2
14	97°59.4	12.7'	09°51.2	-14.9'	57.9'	68°02.8	52°01.5	51°06.2	3°05.1	8°34.7	13°23.1	40°05.9	82°55.5
15	112°31.1	12.7'	09°36.2	-14.9'	57.8'	67°31.6	51°26.6	50°32.4	3°38.0	9°08.2	13°55.6	40°39.5	83°28.8
16	127°02.8	12.8'	09°21.3	-15.0'	57.8'	67°00.5	50°51.8	49°58.6	4°11.2	9°41.6	14°28.1	41°13.1	84°02.0
17	141°34.6	12.9'	09°06.3	-15.0'	57.8'	66°29.4	50°16.9	49°24.9	4°44.5	10°15.1	15°00.6	41°46.7	84°35.2
18	156°06.5	12.9'	N08°51.3	-15.0'	57.8'	65°58.3	49°42.1	48°51.2	5°17.8	10°48.5	15°33.1	42°20.3	85°08.4
19	170°38.4	13.0'	08°36.3	-15.1'	57.7'	65°27.2	49°07.4	48°17.5	5°51.2	11°21.9	16°05.5	42°53.8	85°41.6
20	185°10.4	13.1'	08°21.2	-15.1'	57.7'	64°56.1	48°32.6	47°43.9	6°24.7	11°55.3	16°37.9	43°27.4	86°14.7
21	199°42.5	13.1'	08°06.1	-15.1'	57.7'	64°25.1	47°57.9	47°10.3	6°58.1	12°28.6	17°10.3	44°00.9	86°47.8
22	214°14.6	13.2'	07°51.0	-15.2'	57.7'	63°54.1	47°23.3	46°36.6	7°31.6	13°02.0	17°42.7	44°34.4	87°20.9
23	228°46.8	13.2'	07°35.8	-15.2'	57.7'	63°23.1	46°48.6	46°03.1	8°05.1	13°35.3	18°15.0	45°07.8	87°54.0
3 rd	SD = 15.9' Mer. pass. 07:15					Sun SD = 16.1'							

h	Moon (4 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Hadar	-Sun	-Venus	-Spica	+Regulus	+Jupiter	+Pollux	+Aldebaran
0	243°19.0	13.3'	N07°20.6	-15.2'	57.6'	78°52.8	62°52.2	46°14.0	45°29.5	8°38.5	14°08.6	45°41.3	88°27.0
1	257°51.3	13.3'	07°05.4	-15.2'	57.6'	78°27.1	62°21.3	45°39.4	44°56.0	9°12.0	14°41.9	46°14.7	89°00.1
2	272°23.6	13.4'	06°50.2	-15.2'	57.6'	78°01.4	61°50.4	45°04.8	44°22.5	9°45.4	15°15.1	46°48.1	89°33.1
3	286°56.0	13.4'	06°35.0	-15.3'	57.6'	77°35.8	61°19.5	44°30.3	43°49.0	10°18.9	15°48.3	47°21.5	90°06.1
4	301°28.4	13.5'	06°19.7	-15.3'	57.5'	77°10.2	60°48.7	43°55.7	43°15.6	10°52.3	16°21.6	47°54.9	90°39.0
5	316°00.9	13.5'	06°04.4	-15.3'	57.5'	76°44.7	60°17.9	43°21.3	42°42.1	11°25.7	16°54.7	48°28.2	91°12.0
6	330°33.5	13.6'	N05°49.1	-15.3'	57.5'	76°19.2	59°47.1	42°46.8	42°08.7	11°59.1	17°27.9	49°01.5	91°44.9
7	345°06.1	13.6'	05°33.8	-15.3'	57.5'	75°53.8	59°16.3	42°12.4	41°35.3	12°32.4	18°01.0	49°34.8	92°17.8
8	359°38.7	13.7'	05°18.5	-15.3'	57.5'	75°28.5	58°45.5	41°38.0	41°02.0	13°05.8	18°34.2	50°08.1	92°50.6
9	14°11.4	13.7'	05°03.2	-15.3'	57.4'	75°03.1	58°14.8	41°03.6	40°28.6	13°39.1	19°07.3	50°41.4	93°23.5
10	28°44.1	13.8'	04°47.8	-15.4'	57.4'	74°37.9	57°44.1	40°29.2	39°55.3	14°12.5	19°40.3	51°14.6	93°56.3
11	43°16.9	13.8'	04°32.5	-15.4'	57.4'	74°12.7	57°13.5	39°54.9	39°22.1	14°45.7	20°13.4	51°47.8	94°29.1
12	57°49.7	13.9'	N04°17.1	-15.4'	57.4'	73°47.5	56°42.8	39°20.6	38°48.8	15°19.0	20°46.4	52°21.0	95°01.8
13	72°22.6	13.9'	04°01.7	-15.4'	57.3'	73°22.5	56°12.2	38°46.3	38°15.6	15°52.3	21°19.4	52°54.2	95°34.6
14	86°55.5	13.9'	03°46.3	-15.4'	57.3'	72°57.4	55°41.6	38°12.1	37°42.4	16°25.5	21°52.4	53°27.3	96°07.3
15	101°28.4	14.0'	03°30.9	-15.4'	57.3'	72°32.5	55°11.0	37°37.9	37°09.2	16°58.7	22°25.4	54°00.5	96°40.0
16	116°01.4	14.0'	03°15.5	-15.4'	57.3'	72°07.6	54°40.5	37°03.7	36°36.0	17°31.9	22°58.3	54°33.6	97°12.7
17	130°34.4	14.0'	03°00.2	-15.4'	57.3'	71°42.7	54°10.0	36°29.5	36°02.9	18°05.1	23°31.2	55°06.7	97°45.3
18	145°07.4	14.1'	N02°44.8	-15.4'	57.2'	71°17.9	53°39.5	35°55.4	35°29.8	18°38.2	24°04.1	55°39.7	98°18.0
19	159°40.5	14.1'	02°29.4	-15.4'	57.2'	70°53.2	53°09.0	35°21.3	34°56.7	19°11.4	24°37.0	56°12.8	98°50.6
20	174°13.6	14.1'	02°14.0	-15.4'	57.2'	70°28.6	52°38.6	34°47.2	34°23.6	19°44.5	25°09.8	56°45.8	99°23.2
21	188°46.7	14.2'	01°58.6	-15.4'	57.2'	70°04.0	52°08.2	34°13.2	33°50.6	20°17.6	25°42.6	57°18.8	99°55.7
22	203°19.9	14.2'	01°43.2	-15.4'	57.1'	69°39.5	51°37.8	33°39.2	33°17.6	20°50.6	26°15.5	57°51.8	100°28.2
23	217°53.0	14.2'	01°27.8	-15.4'	57.1'	69°15.1	51°07.4	33°05.2	32°44.6	21°23.7	26°48.2	58°24.8	101°00.8
4 th	SD = 15.7' Mer. pass. 08:01					Sun SD = 16.1'							

h	Moon (5 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Rigel Kent.	-Sun	-Venus	-Spica	+Regulus	+Jupiter	+Pollux	+Aldebaran
0	232°26.3	14.2'	N01°12.4	-15.4'	57.1'		50°37.1	32°31.2	32°11.6	21°56.7	27°21.0	58°57.7	101°33.2
1	246°59.5	14.3'	00°57.0	-15.4'	57.1'		50°06.7	31°57.2	31°38.7	22°29.7	27°53.7	59°30.6	102°05.7
2	261°32.8	14.3'	00°41.6	-15.4'	57.1'		49°36.4	31°23.3	31°05.8	23°02.7	28°26.4	60°03.5	102°38.1
3	276°06.0	14.3'	00°26.2	-15.4'	57.0'		49°06.2	30°49.4	30°32.9	23°35.6	28°59.1	60°36.4	103°10.5
4	290°39.4	14.3'	N00°10.9	-15.4'	57.0'		48°35.9	30°15.6	30°00.0	24°08.6	29°31.8	61°09.2	103°42.9
5	305°12.7	14.3'	S00°04.5	-15.3'	57.0'		48°05.7	29°41.7	29°27.2	24°41.5	30°04.5	61°42.1	104°15.3
6	319°46.0	14.4'	S00°19.8	-15.3'	57.0'	69°50.4	47°35.5	29°07.9	28°54.4	25°14.4	30°37.1	62°14.9	104°47.6
7	334°19.4	14.4'	00°35.1	-15.3'	56.9'	69°25.4	47°05.4	28°34.1	28°21.6	25°47.3	31°09.7	62°47.7	105°19.9
8	348°52.8	14.4'	00°50.4	-15.3'	56.9'	69°00.5	46°35.2	28°00.4	27°48.9	26°20.1	31°42.3	63°20.4	105°52.2
9	3°26.2	14.4'	01°05.7	-15.3'	56.9'	68°35.7	46°05.1	27°26.7	27°16.1	26°52.9	32°14.8	63°53.2	106°24.5
10	17°59.6	14.4'	01°21.0	-15.3'	56.9'	68°10.9	45°35.0	26°53.0	26°43.4	27°25.7	32°47.4	64°25.9	106°56.7
11	32°33.0	14.4'	01°36.3	-15.3'	56.9'	67°46.2	45°05.0	26°19.3	26°10.7	27°58.5	33°19.9	64°58.6	107°28.9
12	47°06.5	14.4'	S01°51.6	-15.2'	56.8'	67°21.6	44°34.9	25°45.6	25°38.1	28°31.3	33°52.4	65°31.3	108°01.1
13	61°39.9	14.5'	02°06.8	-15.2'	56.8'	66°57.0	44°04.9	25°12.0	25°05.5	29°04.0	34°24.9	66°04.0	108°33.3
14	76°13.4	14.5'	02°22.0	-15.2'	56.8'	66°32.6	43°34.9	24°38.4	24°32.9	29°36.8	34°57.3	66°36.6	109°05.4
15	90°46.8	14.5'	02°37.2	-15.2'	56.8'	66°08.2	43°05.0	24°04.8	24°00.3	30°09.5	35°29.8	67°09.2	109°37.5
16	105°20.3	14.5'	02°52.4	-15.1'	56.8'	65°43.8	42°35.1	23°31.3	23°27.8	30°42.1	36°02.2	67°41.8	110°09.6
17	119°53.8	14.5'	03°07.5	-15.1'	56.7'	65°19.6	42°05.1	22°57.8	22°55.2	31°14.8	36°34.6	68°14.4	110°41.7
18	134°27.3	14.5'	S03°22.6	-15.1'	56.7'	64°55.4	41°35.3	22°24.3	22°22.8	31°47.4	37°06.9	68°47.0	111°13.7
19	149°00.8	14.5'	03°37.7	-15.1'	56.7'	64°31.3	41°05.4	21°50.8	21°50.3	32°20.0	37°39.3	69°19.5	111°45.7
20	163°34.3	14.5'	03°52.8	-15.0'	56.7'	64°07.3	40°35.6	21°17.4	21°17.9	32°52.6	38°11.6	69°52.0	112°17.7
21	178°07.7	14.5'	04°07.9	-15.0'	56.6'	63°43.4	40°05.8	20°44.0	20°45.5	33°25.2	38°43.9	70°24.5	112°49.7
22	192°41.2	14.5'	04°22.9	-15.0'	56.6'	63°19.6		20°10.6	20°13.1	33°57.8	39°16.2	70°57.0	113°21.6
23	207°14.7	14.5'	04°37.9	-15.0'	56.6'	62°55.8		19°37.3	19°40.8	34°30.3	39°48.5	71°29.4	113°53.5
5 th	SD = 15.6'					Sun SD = 16.1'							

DUT1 = UT1-UTC = +0.1164 sec ΔT = TT-UT1 = +69.0676 sec

2026 November 06 to Nov. 08 UT

h Moon (6 th Nov)						Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Rigil Kent.	-Hadar	-Spica	-Venus	+Regulus	+Jupiter	+Pollux	+Aldebaran
0	221°48.2	14.5'	S04°52.8	-14.9'	56.6'	62°32.2	59°31.2	19°08.5	19°04.0	35°02.8	40°20.7	72°01.9	114°25.4
1	236°21.7	14.5'	05°07.8	-14.9'	56.6'	62°08.6	59°09.1	18°36.2	18°30.7	35°35.3	40°52.9	72°34.3	114°57.2
2	250°55.2	14.5'	05°22.7	-14.9'	56.5'	61°45.2	58°47.1	18°04.0	17°57.4	36°07.7	41°25.1	73°06.7	115°29.0
3	265°28.7	14.5'	05°37.5	-14.8'	56.5'	61°21.8	58°25.3	17°31.8	17°24.2	36°40.2	41°57.3	73°39.0	116°00.8
4	280°02.2	14.5'	05°52.3	-14.8'	56.5'	60°58.5	58°03.5	16°59.6	16°50.9	37°12.6	42°29.5	74°11.4	116°32.6
5	294°35.7	14.5'	06°07.1	-14.8'	56.5'	60°35.3	57°41.9	16°27.5	16°17.8	37°45.0	43°01.6	74°43.7	117°04.4
6	309°09.1	14.5'	S06°21.9	-14.7'	56.5'	60°12.3	57°20.4	15°55.4	15°44.6	38°17.4	43°33.7	75°16.0	117°36.1
7	323°42.6	14.4'	06°36.6	-14.7'	56.4'	59°49.3	56°59.1	15°23.3	15°11.5	38°49.7	44°05.8	75°48.3	118°07.8
8	338°16.0	14.4'	06°51.3	-14.6'	56.4'	59°26.4	56°37.8	14°51.3	14°38.4	39°22.1	44°37.9	76°20.6	118°39.4
9	352°49.4	14.4'	07°06.0	-14.6'	56.4'	59°03.6	56°16.7	14°19.4	14°05.3	39°54.4	45°09.9	76°52.8	119°11.1
10	7°22.9	14.4'	07°20.6	-14.6'	56.4'	58°41.0	55°55.7	13°47.5	13°32.3	40°26.7	45°41.9	77°25.0	119°42.7
11	21°56.3	14.4'	07°35.1	-14.5'	56.4'	58°18.4	55°34.9	13°15.6	12°59.3	40°59.0	46°14.0	77°57.2	
12	36°29.7	14.4'	S07°49.7	-14.5'	56.3'	57°56.0	55°14.1	12°43.8	12°26.3	41°31.2	46°45.9	78°29.4	
13	51°03.1	14.4'	08°04.1	-14.4'	56.3'	57°33.7	54°53.6	12°12.1	11°53.4	42°03.5	47°17.9	79°01.6	
14	65°36.4	14.3'	08°18.6	-14.4'	56.3'	57°11.4	54°33.1	11°40.4	11°20.5	42°35.7	47°49.9	79°33.7	
15	80°09.8	14.3'	08°33.0	-14.3'	56.3'	56°49.4	54°12.8	11°08.8	10°47.7	43°07.9	48°21.8	80°05.8	
16	94°43.1	14.3'	08°47.3	-14.3'	56.3'	56°27.4	53°52.7	10°37.3	10°14.8	43°40.0	48°53.7	80°37.9	
17	109°16.4	14.3'	09°01.6	-14.2'	56.2'	56°05.5	53°32.7	10°05.9	9°42.0	44°12.2	49°25.6	81°10.0	
18	123°49.7	14.3'	S09°15.8	-14.2'	56.2'	55°43.8	53°12.8	9°34.6	9°09.3	44°44.3	49°57.4	81°42.1	
19	138°23.0	14.2'	09°30.1	-14.2'	56.2'	55°22.2	52°53.1	9°03.3	8°36.6	45°16.4	50°29.3	82°14.1	
20	152°56.2	14.2'	09°44.2	-14.1'	56.2'	55°00.7	52°33.6	8°32.3	8°04.0	45°48.5	51°01.1	82°46.1	
21	167°29.4	14.2'	09°58.3	-14.0'	56.2'	54°39.4	52°14.2	8°01.3	7°31.4	46°20.6	51°32.9	83°18.1	
22	182°02.7	14.2'	10°12.3	-14.0'	56.1'	54°18.2	51°55.0	7°30.6	6°58.9	46°52.6	52°04.7	83°50.1	
23	196°35.8	14.2'	10°26.3	-13.9'	56.1'	53°57.1	51°35.9	7°00.0	6°26.4	47°24.6	52°36.5	84°22.0	
6 th	SD = 15.4' Mer. pass. 09:30												

h Moon (7 th Nov)						Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Rigil Kent.	-Hadar	±Spica	±Venus	+Regulus	+Jupiter	+Mars	+Pollux
0	211°09.0	14.1'	S10°40.3	-13.9'	56.1'	53°36.1	51°17.0	6°29.7	5°54.0	47°56.6	53°08.2	56°38.8	84°54.0
1	225°42.1	14.1'	10°54.2	-13.8'	56.1'	53°15.3	50°58.3	5°59.7	5°21.8	48°28.6	53°39.9	57°09.5	85°25.9
2	240°15.2	14.1'	11°08.0	-13.8'	56.0'	52°54.7	50°39.7	5°30.2	4°49.6	49°00.6	54°11.6	57°40.3	85°57.8
3	254°48.3	14.0'	11°21.8	-13.7'	56.0'	52°34.2	50°21.3	5°01.1	4°17.7	49°32.5	54°43.3	58°11.1	86°29.6
4	269°21.3	14.0'	11°35.5	-13.7'	56.0'	52°13.8	50°03.1	4°32.7	3°46.0	50°04.4	55°15.0	58°41.8	87°01.5
5	283°54.4	14.0'	11°49.1	-13.6'	56.0'	51°53.6	49°45.1	4°05.1	3°14.6	50°36.3	55°46.6	59°12.5	87°33.3
6	298°27.3	14.0'	S12°02.7	-13.5'	56.0'	51°33.5	49°27.2		2°43.7	51°08.2	56°18.2	59°43.2	88°05.1
7	313°00.3	13.9'	12°16.3	-13.5'	55.9'	51°13.6	49°09.6		2°13.6	51°40.1	56°49.8	60°13.8	88°36.9
8	327°33.2	13.9'	12°29.8	-13.4'	55.9'	50°53.9	48°52.1			52°11.9	57°21.4	60°44.5	89°08.7
9	342°06.1	13.9'	12°43.2	-13.3'	55.9'	50°34.3	48°34.8			52°43.7	57°52.9	61°15.1	89°40.4
10	356°39.0	13.8'	12°56.5	-13.3'	55.9'	50°14.9	48°17.8			53°15.5	58°24.5	61°45.7	90°12.2
11	11°11.8	13.8'	13°09.8	-13.2'	55.9'	49°55.6	48°00.9			53°47.3	58°56.0	62°16.3	90°43.9
12	25°44.6	13.8'	S13°23.0	-13.2'	55.9'	49°36.5	47°44.2			54°19.1	59°27.5	62°46.8	91°15.5
13	40°17.3	13.7'	13°36.2	-13.1'	55.8'	49°17.6	47°27.7			54°50.8	59°59.0	63°17.4	91°47.2
14	54°50.1	13.7'	13°49.2	-13.0'	55.8'	48°58.9	47°11.5			55°22.5	60°30.4	63°47.9	92°18.9
15	69°22.8	13.6'	14°02.3	-12.9'	55.8'	48°40.3	46°55.4			55°54.2	61°01.9	64°18.4	92°50.5
16	83°55.4	13.6'	14°15.2	-12.9'	55.8'	48°21.9	46°39.6			56°25.9	61°33.3	64°48.9	93°22.1
17	98°28.0	13.6'	14°28.1	-12.8'	55.8'	48°03.8	46°24.0		3°31.5	56°57.5	62°04.7	65°19.3	93°53.7
18	113°00.6	13.5'	S14°40.9	-12.7'	55.7'	47°45.7	46°08.5		4°02.8	57°29.2	62°36.0	65°49.8	94°25.2
19	127°33.1	13.5'	14°53.6	-12.7'	55.7'	47°27.9	45°53.4		4°34.3	58°00.8	63°07.4	66°20.2	94°56.8
20	142°05.6	13.5'	15°06.3	-12.6'	55.7'	47°10.3		4°58.4	5°05.9	58°32.4	63°38.7	66°50.6	95°28.3
21	156°38.0	13.4'	15°18.9	-12.5'	55.7'	46°52.9		5°27.1	5°37.6	59°04.0	64°10.1	67°21.0	95°59.8
22	171°10.5	13.4'	15°31.4	-12.4'	55.7'	46°35.7		5°56.3	6°09.4	59°35.5	64°41.3	67°51.3	96°31.3
23	185°42.8	13.3'	15°43.8	-12.4'	55.6'	46°18.7		6°25.8	6°41.3	60°07.0	65°12.6	68°21.6	97°02.7
7 th	SD = 15.3' Mer. pass. 10:14												

h Moon (8 th Nov)						Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Rigil Kent.	+Spica	+Venus	+Regulus	+Jupiter	+Mars	+Procyon	+Pollux
0	200°15.1	13.3'	S15°56.1	-12.3'	55.6'	46°01.9	6°55.6	7°13.1	60°38.5	65°43.9	68°52.0	93°06.4	97°34.2
1	214°47.4	13.2'	16°08.6	-12.2'	55.6'	45°45.3	7°25.6	7°45.0	61°10.0	66°15.1	69°22.3	93°36.2	98°05.6
2	229°19.7	13.2'	16°20.4	-12.1'	55.6'	45°28.9	7°55.8	8°16.9	61°41.5	66°46.3	69°52.6	94°06.1	98°37.0
3	243°51.9	13.2'	16°32.7	-12.0'	55.6'	45°12.7	8°26.1	8°48.8	62°13.0	67°17.5	70°22.8	94°35.9	99°08.4
4	258°24.0	13.1'	16°44.8	-12.0'	55.5'	44°56.8	8°56.5	9°20.7	62°44.4	67°48.7	70°53.1	95°05.7	99°39.7
5	272°56.1	13.1'	16°56.7	-11.9'	55.5'	44°41.1	9°27.0	9°52.6	63°15.8	68°19.9	71°23.3	95°35.5	100°11.1
6	287°28.2	13.0'	S17°08.6	-11.8'	55.5'	44°25.6	9°57.6	10°24.4	63°47.2	68°51.0	71°53.5	96°05.2	100°42.4
7	302°00.2	13.0'	17°20.4	-11.7'	55.5'	44°10.3	10°28.3	10°56.3	64°18.6	69°22.1	72°23.7	96°35.0	101°13.7
8	316°32.2	12.9'	17°32.1	-11.6'	55.5'	43°55.3	10°59.0	11°28.2	64°49.9	69°53.2	72°53.8	97°04.7	101°45.0
9	331°04.1	12.9'	17°43.7	-11.5'	55.4'		11°29.7	12°00.0	65°21.3	70°24.3	73°24.0	97°34.4	102°16.2
10	345°36.0	12.8'	17°55.2	-11.4'	55.4'		12°00.5	12°31.8	65°52.6	70°55.3	73°54.1	98°04.0	102°47.5
11	0°07.8	12.8'	18°06.7	-11.4'	55.4'		12°31.3	13°03.6	66°23.9	71°26.4	74°24.2	98°33.7	103°18.7
12	14°39.6	12.7'	S18°18.0	-11.3'	55.4'		13°02.1	13°35.4	66°55.1	71°57.4	74°54.3	99°03.3	103°49.9
13	29°11.3	12.7'	18°29.3	-11.2'	55.4'					New Moon			
14	43°43.0	12.6'	18°40.5	-11.1'	55.4'					New Moon			
15	58°14.7	12.6'	18°51.6	-11.0'	55.3'					New Moon			
16	72°46.3	12.5'	19°02.5	-10.9'	55.3'					New Moon			
17	87°17.8	12.5'	19°13.4	-10.8'	55.3'					New Moon			
18	101°49.3	12.4'	S19°24.2	-10.7'	55.3'					New Moon			
19	116°20.8	12.4'	19°35.0	-10.6'	55.3'					New Moon			
20	130°52.2	12.3'	19°45.6	-10.5'	55.2'					New Moon			
21	145°23.5	12.3'	19°56.1	-10.4'	55.2'					New Moon			
22	159°54.8	12.3'	20°06.5	-10.3'	55.2'					New Moon			
23	174°26.1	12.2'	20°16.8	-10.2'	55.2'					New Moon			
8 th	SD = 15.2' Mer. pass. 10:59												

DUT1 = UT1-UTC = +0.1167 sec $\Delta T = TT-UT1 = +69.0673$ sec

2026 November 09 to Nov. 11 UT

h Moon (9 th Nov)					
Mon	GHA	ν	Dec	d	HP
0	188°57.3	12.2'	S20°27.1	-10.1'	55.2'
1	203°28.4	12.1'	20°37.2	-10.0'	55.2'
2	217°59.5	12.1'	20°47.2	-9.9'	55.1'
3	232°30.6	12.0'	20°57.1	-9.8'	55.1'
4	247°01.6	12.0'	21°06.9	-9.7'	55.1'
5	261°32.5	11.9'	21°16.6	-9.6'	55.1'
6	276°03.4	11.9'	S21°26.3	-9.5'	55.1'
7	290°34.3	11.8'	21°35.8	-9.4'	55.1'
8	305°05.1	11.8'	21°45.2	-9.3'	55.0'
9	319°35.8	11.7'	21°54.5	-9.2'	55.0'
10	334°06.5	11.7'	22°03.6	-9.1'	55.0'
11	348°37.2	11.6'	22°12.7	-9.0'	55.0'
12	3°07.8	11.6'	S22°21.7	-8.9'	55.0'
13	17°38.4	11.5'	22°30.5	-8.7'	55.0'
14	32°08.9	11.5'	22°39.3	-8.6'	54.9'
15	46°39.3	11.4'	22°47.9	-8.5'	54.9'
16	61°09.7	11.4'	22°56.4	-8.4'	54.9'
17	75°40.1	11.3'	23°04.9	-8.3'	54.9'
18	90°10.4	11.3'	S23°13.1	-8.2'	54.9'
19	104°40.7	11.2'	23°21.3	-8.1'	54.9'
20	119°10.9	11.2'	23°29.4	-8.0'	54.8'
21	133°41.1	11.1'	23°37.3	-7.8'	54.8'
22	148°11.2	11.1'	23°45.2	-7.7'	54.8'
23	162°41.3	11.0'	23°52.9	-7.6'	54.8'
9 th	SD = 15.0' Mer. pass. 11:47				

h Moon (10 th Nov)						Lunar Distance			
Tue	GHA	ν	Dec	d	HP	-Deneb	-Fomalhaut	-Altair	-Antares
0	177°11.4	11.0'	S24°00.5	-7.5'	54.8'	New Moon			
1	191°41.4	11.0'	24°08.0	-7.4'	54.8'	New Moon			
2	206°11.3	10.9'	24°15.3	-7.2'	54.8'	98°51.7	95°15.3	71°29.8	13°27.5
3	220°41.2	10.9'	24°22.6	-7.1'	54.7'	98°36.3	94°47.0	71°04.2	12°56.9
4	235°11.1	10.8'	24°29.7	-7.0'	54.7'	98°21.0	94°18.7	70°38.7	12°26.4
5	249°40.9	10.8'	24°36.7	-6.9'	54.7'	98°05.6	93°50.4	70°13.2	11°55.9
6	264°10.7	10.7'	S24°43.6	-6.8'	54.7'	97°50.2	93°22.1	69°47.8	11°25.5
7	278°40.4	10.7'	24°50.3	-6.6'	54.7'	97°34.8	92°53.8	69°22.4	10°55.0
8	293°10.1	10.7'	24°57.0	-6.5'	54.7'	97°19.3	92°25.5	68°57.1	10°24.6
9	307°39.8	10.6'	25°03.5	-6.4'	54.6'	97°03.8	91°57.2	68°31.8	9°54.1
10	322°09.4	10.6'	25°09.8	-6.3'	54.6'	96°48.4	91°29.0	68°06.5	9°23.7
11	336°39.0	10.5'	25°16.1	-6.1'	54.6'	96°32.9	91°00.8	67°41.4	8°53.4
12	351°08.6	10.5'	S25°22.2	-6.0'	54.6'	96°17.4	90°32.6	67°16.2	8°23.0
13	5°38.1	10.5'	25°28.2	-5.9'	54.6'	96°01.9	90°04.4	66°51.1	7°52.6
14	20°07.5	10.4'	25°34.1	-5.8'	54.6'	95°46.3	89°36.2	66°26.1	7°22.3
15	34°37.0	10.4'	25°39.9	-5.6'	54.6'	95°30.8	89°08.0	66°01.1	6°52.0
16	49°06.4	10.4'	25°45.5	-5.5'	54.5'	95°15.2	88°39.9	65°36.1	6°21.7
17	63°35.8	10.3'	25°51.0	-5.4'	54.5'	94°59.7	88°11.7	65°11.2	5°51.5
18	78°05.1	10.3'	S25°56.4	-5.2'	54.5'	94°44.1	87°43.6	64°46.4	5°21.2
19	92°34.4	10.3'	26°01.6	-5.1'	54.5'	94°28.5	87°15.5	64°21.6	4°51.0
20	107°03.7	10.2'	26°06.7	-5.0'	54.5'	94°12.9	86°47.5	63°56.8	4°20.8
21	121°32.9	10.2'	26°11.7	-4.9'	54.5'	93°57.3	86°19.4	63°32.2	3°50.6
22	136°02.1	10.2'	26°16.5	-4.7'	54.5'	93°41.7	85°51.3	63°07.6	3°20.5
23	150°31.3	10.2'	26°21.3	-4.6'	54.5'	93°26.1	85°23.3	62°43.0	2°50.4
10 th	SD = 14.9' Mer. pass. 12:37								

h Moon (11 th Nov)						Lunar Distance (objects with largest hourly LD delta)				
Wed	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	±Antares
0	165°00.5	10.1'	S26°25.9	-4.5'	54.4'		93°10.5	84°55.3	62°18.5	2°20.4
1	179°29.6	10.1'	26°30.3	-4.3'	54.4'	119°59.0	92°54.9	84°27.3	61°54.0	1°50.5
2	193°58.7	10.1'	26°34.6	-4.2'	54.4'	119°29.0	92°39.3	83°59.3	61°29.7	1°20.8
3	208°27.8	10.1'	26°38.8	-4.1'	54.4'	118°58.9	92°23.6	83°31.4	61°05.3	0°51.6
4	222°56.9	10.0'	26°42.9	-3.9'	54.4'	118°28.9	92°08.0	83°03.4	60°41.1	
5	237°25.9	10.0'	26°46.8	-3.8'	54.4'	117°58.9	91°52.4	82°35.5	60°16.9	
6	251°54.9	10.0'	S26°50.6	-3.7'	54.4'	117°28.9	91°36.8	82°07.6	59°52.8	
7	266°23.9	10.0'	26°54.3	-3.5'	54.4'	116°58.9	91°21.2	81°39.7	59°28.7	
8	280°52.9	10.0'	26°57.8	-3.4'	54.3'	116°28.9	91°05.6	81°11.9	59°04.7	1°42.7
9	295°21.9	9.9'	27°01.2	-3.3'	54.3'	115°59.0	90°49.9	80°44.0	58°40.8	2°12.5
10	309°50.8	9.9'	27°04.4	-3.1'	54.3'	115°29.0	90°34.3	80°16.2	58°16.9	2°42.3
11	324°19.7	9.9'	27°07.6	-3.0'	54.3'	114°59.1	90°18.7	79°48.4	57°53.2	3°12.2
12	338°48.6	9.9'	S27°10.6	-2.9'	54.3'	114°29.2	90°03.2	79°20.6	57°29.5	3°42.1
13	353°17.5	9.9'	27°13.4	-2.7'	54.3'	113°59.3	89°47.6	78°52.9	57°05.8	4°12.1
14	7°46.4	9.9'	27°16.1	-2.6'	54.3'	113°29.4	89°32.0	78°25.1	56°42.3	4°42.0
15	22°15.3	9.9'	27°18.7	-2.4'	54.3'	112°59.5	89°16.4	77°57.4	56°18.8	5°11.9
16	36°44.2	9.9'	27°21.2	-2.3'	54.3'	112°29.6	89°00.9	77°29.7	55°55.4	5°41.8
17	51°13.0	9.8'	27°23.5	-2.2'	54.2'	111°59.7	88°45.3	77°02.0	55°32.0	6°11.7
18	65°41.9	9.8'	S27°25.7	-2.0'	54.2'	111°29.9	88°29.8	76°34.4	55°08.8	6°41.6
19	80°10.7	9.8'	27°27.7	-1.9'	54.2'	111°00.0	88°14.2	76°06.7	54°45.6	7°11.5
20	94°39.5	9.8'	27°29.6	-1.8'	54.2'	110°30.2	87°58.7	75°39.1	54°22.5	7°41.4
21	109°08.4	9.8'	27°31.4	-1.6'	54.2'	110°00.4	87°43.2	75°11.5	53°59.5	8°11.2
22	123°37.2	9.8'	27°33.0	-1.5'	54.2'	109°30.6	87°27.7	74°43.9	53°36.6	8°41.1
23	138°06.0	9.8'	27°34.5	-1.4'	54.2'	109°00.8	87°12.2	74°16.4	53°13.8	9°10.9
11 th	SD = 14.8' Mer. pass. 13:28									

DUT1 = UT1-UTC = +0.1171 sec $\Delta T = TT-UT1 = +69.0669$ sec

2026 November 12 to Nov. 14 UT

h Moon (12 th Nov)						Lunar Distance (objects with largest hourly LD delta)				
Thu	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair	+Antares
0	152°34.8	9.8'	S27°35.9	-1.2'	54.2'	108°31.0	86°56.8	73°48.9	52°51.1	9°40.8
1	167°03.7	9.8'	27°37.1	-1.1'	54.2'	108°01.3	86°41.3	73°21.3	52°28.4	10°10.6
2	181°32.5	9.8'	27°38.2	-1.0'	54.2'	107°31.5	86°25.9	72°53.9	52°05.9	10°40.4
3	196°01.3	9.8'	27°39.1	-0.8'	54.2'	107°01.7	86°10.5	72°26.4	51°43.4	11°10.2
4	210°30.1	9.8'	27°40.0	-0.7'	54.1'	106°32.0	85°55.1	71°59.0	51°21.1	11°40.0
5	224°59.0	9.8'	27°40.6	-0.5'	54.1'	106°02.3	85°39.7	71°31.6	50°58.8	12°09.8
6	239°27.8	9.9'	S27°41.2	-0.4'	54.1'	105°32.6	85°24.4	71°04.2	50°36.7	12°39.6
7	253°56.7	9.9'	27°41.6	-0.3'	54.1'	105°02.9	85°09.0	70°36.8	50°14.6	13°09.3
8	268°25.5	9.9'	27°41.9	-0.1'	54.1'	104°33.2	84°53.7	70°09.5	49°52.7	13°39.1
9	282°54.4	9.9'	27°42.0	-0.0'	54.1'	104°03.5	84°38.4	69°42.1	49°30.8	14°08.8
10	297°23.3	9.9'	27°42.0	0.1'	54.1'	103°33.8	84°23.2	69°14.8	49°09.1	14°38.5
11	311°52.2	9.9'	27°41.9	0.3'	54.1'	103°04.1	84°07.9	68°47.6	48°47.5	15°08.3
12	326°21.1	9.9'	S27°41.6	0.4'	54.1'	102°34.5	83°52.7	68°20.3	48°26.0	15°38.0
13	340°50.0	9.9'	27°41.2	0.5'	54.1'	102°04.8	83°37.5	67°53.1	48°04.6	16°07.7
14	355°18.9	10.0'	27°40.7	0.7'	54.1'	101°35.2	83°22.3	67°25.9	47°43.3	16°37.4
15	9°47.9	10.0'	27°40.0	0.8'	54.1'	101°05.5	83°07.2	66°58.8	47°22.2	17°07.0
16	24°16.9	10.0'	27°39.2	0.9'	54.1'	100°35.9	82°52.1	66°31.6	47°01.2	17°36.7
17	38°45.9	10.0'	27°38.3	1.1'	54.1'	100°06.3	82°37.0	66°04.5	46°40.2	18°06.4
18	53°14.9	10.0'	S27°37.2	1.2'	54.1'	99°36.7	82°21.9	65°37.4	46°19.5	18°36.0
19	67°43.9	10.1'	27°36.0	1.3'	54.0'	99°07.1	82°06.9	65°10.4	45°58.8	19°05.7
20	82°13.0	10.1'	27°34.6	1.5'	54.0'	98°37.5		64°43.3	45°38.3	19°35.3
21	96°42.0	10.1'	27°33.2	1.6'	54.0'	98°07.9		64°16.3	45°18.0	20°04.9
22	111°11.1	10.1'	27°31.6	1.7'	54.0'	97°38.4		63°49.4	44°57.7	20°34.6
23	125°40.3	10.2'	27°29.8	1.9'	54.0'	97°08.8		63°22.4	44°37.6	21°04.2
12 th	SD = 14.8' Mer. pass. 14:19									

h Moon (13 th Nov)						Lunar Distance (objects with largest hourly LD delta)				
Fri	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair	+Antares	+Sun
0	140°09.4	10.2'	S27°27.9	2.0'	54.0'	96°39.2	62°55.5	44°17.7	21°33.8	41°17.9
1	154°38.6	10.2'	27°25.9	2.1'	54.0'	96°09.7	62°28.6	43°57.9	22°03.4	41°44.8
2	169°07.8	10.2'	27°23.8	2.3'	54.0'	95°40.1	62°01.7	43°38.2	22°33.0	42°11.6
3	183°37.0	10.3'	27°21.5	2.4'	54.0'	95°10.6	61°34.9	43°18.7	23°02.6	42°38.4
4	198°06.3	10.3'	27°19.1	2.5'	54.0'	94°41.1	61°08.1	42°59.4	23°32.2	43°05.3
5	212°35.6	10.3'	27°16.6	2.7'	54.0'	94°11.5	60°41.3	42°40.2	24°01.7	43°32.1
6	227°04.9	10.4'	S27°13.9	2.8'	54.0'	93°42.0	60°14.6	42°21.2	24°31.3	43°58.9
7	241°34.3	10.4'	27°11.2	2.9'	54.0'	93°12.5	59°47.9	42°02.4	25°00.9	44°25.8
8	256°03.7	10.4'	27°08.2	3.0'	54.0'	92°43.0	59°21.2	41°43.7	25°30.4	44°52.6
9	270°33.2	10.5'	27°05.2	3.2'	54.0'	92°13.5	58°54.6	41°25.2	26°00.0	45°19.4
10	285°02.6	10.5'	27°02.0	3.3'	54.0'	91°44.0	58°28.0	41°06.9	26°29.5	45°46.2
11	299°32.1	10.5'	26°58.7	3.4'	54.0'	91°14.5	58°01.4	40°48.8	26°59.1	46°13.1
12	314°01.7	10.6'	S26°55.3	3.6'	54.0'	90°45.0	57°34.9	40°30.8	27°28.6	46°39.9
13	328°31.3	10.6'	26°51.7	3.7'	54.0'	90°15.5	57°08.4	40°13.1	27°58.1	47°06.7
14	343°00.9	10.7'	26°48.1	3.8'	54.0'	89°46.0	56°41.9	39°55.5	28°27.7	47°33.5
15	357°30.6	10.7'	26°44.2	3.9'	54.0'	89°16.6	56°15.5	39°38.2	28°57.2	48°00.3
16	12°00.3	10.7'	26°40.3	4.1'	54.0'	88°47.1	55°49.1	39°21.0	29°26.7	48°27.2
17	26°30.0	10.8'	26°36.3	4.2'	54.0'	88°17.6	55°22.8	39°04.0	29°56.2	48°54.0
18	40°59.8	10.8'	S26°32.1	4.3'	54.0'	87°48.1	54°56.4	38°47.3	30°25.8	49°20.8
19	55°29.7	10.9'	26°27.8	4.4'	54.0'	87°18.7	54°30.2	38°30.8	30°55.3	49°47.6
20	69°59.5	10.9'	26°23.3	4.6'	54.0'	86°49.2	54°03.9	38°14.5	31°24.8	50°14.4
21	84°29.5	11.0'	26°18.8	4.7'	54.0'	86°19.8	53°37.7	37°58.4	31°54.3	50°41.2
22	98°59.4	11.0'	26°14.1	4.8'	54.0'	85°50.3	53°11.6	37°42.6	32°23.8	51°08.0
23	113°29.4	11.1'	26°09.3	4.9'	54.0'	85°20.8	52°45.5	37°27.0	32°53.3	51°34.8
13 th	SD = 14.7' Mer. pass. 15:10					Sun SD = 16.2'				

h Moon (14 th Nov)						Lunar Distance			
Sat	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Sun
0	127°59.5	11.1'	S26°04.4	5.0'	54.0'	84°51.4	52°19.4	33°22.8	52°01.7
1	142°29.6	11.2'	25°59.4	5.2'	54.0'	84°21.9	51°53.4	33°52.3	52°28.5
2	156°59.8	11.2'	25°54.2	5.3'	54.0'	83°52.5	51°27.4	34°21.8	52°55.3
3	171°30.0	11.3'	25°48.9	5.4'	54.0'	83°23.0	51°01.5	34°51.3	53°22.1
4	186°00.2	11.3'	25°43.5	5.5'	54.0'	82°53.6	50°35.6	35°20.8	53°48.9
5	200°30.5	11.4'	25°38.0	5.6'	54.0'	82°24.1	50°09.8	35°50.4	54°15.8
6	215°00.9	11.4'	S25°32.4	5.7'	54.0'	81°54.7	49°44.0	36°19.9	54°42.6
7	229°31.3	11.5'	25°26.6	5.9'	54.0'	81°25.2	49°18.2	36°49.4	55°09.4
8	244°01.7	11.5'	25°20.8	6.0'	54.0'	80°55.8	48°52.6	37°18.9	55°36.2
9	258°32.2	11.6'	25°14.8	6.1'	54.0'	80°26.3	48°26.9	37°48.4	56°03.1
10	273°02.8	11.6'	25°08.7	6.2'	54.0'	79°56.9	48°01.4	38°17.9	56°29.9
11	287°33.4	11.7'	25°02.5	6.3'	54.0'	79°27.4	47°35.8	38°47.4	56°56.7
12	302°04.1	11.7'	S24°56.2	6.4'	54.0'	78°58.0	47°10.4	39°16.9	57°23.6
13	316°34.8	11.8'	24°49.7	6.5'	54.0'	78°28.5	46°45.0	39°46.4	57°50.4
14	331°05.5	11.8'	24°43.2	6.7'	54.0'	77°59.0	46°19.6	40°15.9	58°17.3
15	345°36.3	11.9'	24°36.5	6.8'	54.0'	77°29.6	45°54.3	40°45.5	58°44.1
16	0°07.2	11.9'	24°29.7	6.9'	54.0'	77°00.1	45°29.1	41°15.0	59°11.0
17	14°38.1	12.0'	24°22.8	7.0'	54.1'	76°30.7	45°03.9	41°44.5	59°37.9
18	29°09.1	12.0'	S24°15.9	7.1'	54.1'	76°01.2	44°38.9	42°14.1	60°04.7
19	43°40.1	12.1'	24°08.8	7.2'	54.1'	75°31.7	44°13.8	42°43.6	60°31.6
20	58°11.2	12.1'	24°01.5	7.3'	54.1'	75°02.2	43°48.9	43°13.1	60°58.5
21	72°42.3	12.2'	23°54.2	7.4'	54.1'	74°32.8	43°24.0	43°42.7	61°25.4
22	87°13.5	12.2'	23°46.8	7.5'	54.1'	74°03.3	42°59.2	44°12.2	61°52.3
23	101°44.8	12.3'	23°39.3	7.6'	54.1'	73°33.8	42°34.5	44°41.8	62°19.2
14 th	SD = 14.7' Mer. pass. 16:00					Sun SD = 16.2'			

DUT1 = UT1-UTC = +0.1175 sec $\Delta T = TT-UT1 = +69.0665$ sec

2026 November 15 to Nov. 17 UT

h Moon (15 th Nov)						Lunar Distance			
Sun	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Antares	+Sun
0	116°16.1	12.4'	S23°31.6	7.7'	54.1'	73°04.3	42°09.8	45°11.4	62°46.1
1	130°47.4	12.4'	23°23.9	7.8'	54.1'	72°34.8	41°45.3	45°40.9	63°13.0
2	145°18.8	12.5'	23°16.0	8.0'	54.1'	72°05.3	41°20.8	46°10.5	63°39.9
3	159°50.3	12.5'	23°08.1	8.1'	54.1'	71°35.8	40°56.4	46°40.1	64°06.8
4	174°21.8	12.6'	23°00.0	8.2'	54.1'	71°06.2	40°32.1	47°09.7	64°33.8
5	188°53.4	12.6'	22°51.9	8.3'	54.1'	70°36.7	40°07.8	47°39.3	65°00.7
6	203°25.0	12.7'	S22°43.6	8.4'	54.2'	70°07.2	39°43.7	48°08.9	65°27.7
7	217°56.7	12.7'	22°35.3	8.5'	54.2'	69°37.7	39°19.7	48°38.5	65°54.6
8	232°28.4	12.8'	22°26.8	8.6'	54.2'	69°08.1	38°55.8	49°08.2	66°21.6
9	247°00.2	12.8'	22°18.2	8.7'	54.2'	68°38.6	38°31.9	49°37.8	66°48.6
10	261°32.0	12.9'	22°09.6	8.8'	54.2'	68°09.0	38°08.2	50°07.4	67°15.6
11	276°03.9	12.9'	22°00.8	8.9'	54.2'	67°39.4	37°44.6	50°37.1	67°42.6
12	290°35.8	13.0'	S21°52.0	9.0'	54.2'	67°09.8	37°21.1	51°06.8	68°09.6
13	305°07.8	13.0'	21°43.0	9.0'	54.2'	66°40.3	36°57.8	51°36.4	68°36.6
14	319°39.9	13.1'	21°34.0	9.1'	54.2'	66°10.7	36°34.5	52°06.1	69°03.7
15	334°12.0	13.1'	21°24.8	9.2'	54.3'	65°41.1	36°11.4	52°35.8	69°30.7
16	348°44.1	13.2'	21°15.6	9.3'	54.3'	65°11.4	35°48.4	53°05.5	69°57.8
17	3°16.3	13.3'	21°06.3	9.4'	54.3'	64°41.8	35°25.5	53°35.2	70°24.9
18	17°48.6	13.3'	S20°56.8	9.5'	54.3'	64°12.2	35°02.8	54°05.0	70°52.0
19	32°20.9	13.4'	20°47.3	9.6'	54.3'	63°42.5	34°40.2	54°34.7	71°19.1
20	46°53.2	13.4'	20°37.7	9.7'	54.3'	63°12.9	34°17.8	55°04.5	71°46.2
21	61°25.6	13.5'	20°28.0	9.8'	54.3'	62°43.2	33°55.5	55°34.2	72°13.3
22	75°58.1	13.5'	20°18.2	9.9'	54.3'	62°13.5	33°33.4	56°04.0	72°40.4
23	90°30.6	13.6'	20°08.3	10.0'	54.4'	61°43.8	33°11.5	56°33.8	73°07.6
15 th	SD = 14.8' Mer. pass. 16:46					Sun SD = 16.2'			

h Moon (16 th Nov)						Lunar Distance (objects with largest hourly LD delta)					
Mon	GHA	ν	Dec	d	HP	-Rigel	-Aldebaran	-Saturn	-Fomalhaut	+Antares	+Sun
0	105°03.1	13.6'	S19°58.4	10.1'	54.4'			61°14.1	32°49.7	57°03.6	73°34.8
1	119°35.7	13.6'	19°48.3	10.1'	54.4'			60°44.4	32°28.1	57°33.5	74°02.0
2	134°08.4	13.7'	19°38.2	10.2'	54.4'			60°14.7	32°06.7	58°03.3	74°29.2
3	148°41.1	13.7'	19°27.9	10.3'	54.4'			59°45.0	31°45.5	58°33.2	74°56.4
4	163°13.8	13.8'	19°17.6	10.4'	54.4'			59°15.2	31°24.5	59°03.0	75°23.6
5	177°46.6	13.8'	19°07.2	10.5'	54.5'			58°45.4	31°03.7	59°32.9	75°50.9
6	192°19.5	13.9'	S18°56.7	10.6'	54.5'		119°41.0	58°15.7	30°43.1	60°02.8	76°18.1
7	206°52.4	13.9'	18°46.1	10.7'	54.5'	119°52.3	119°11.7	57°45.9	30°22.7	60°32.8	76°45.4
8	221°25.3	14.0'	18°35.5	10.7'	54.5'	119°30.2	118°42.4	57°16.1	30°02.6	61°02.7	77°12.7
9	235°58.3	14.0'	18°24.7	10.8'	54.5'	119°08.0	118°13.1	56°46.2	29°42.7	61°32.7	77°40.0
10	250°31.3	14.1'	18°13.9	10.9'	54.5'	118°45.6	117°43.7	56°16.4	29°23.0	62°02.6	78°07.4
11	265°04.3	14.1'	18°03.0	11.0'	54.6'	118°23.3	117°14.3	55°46.5	29°03.6	62°32.6	78°34.7
12	279°37.4	14.1'	S17°52.0	11.1'	54.6'	118°00.8	116°44.9	55°16.7	28°44.4	63°02.6	79°02.1
13	294°10.6	14.2'	17°41.0	11.1'	54.6'	117°38.3	116°15.5	54°46.8	28°25.6	63°32.7	79°29.5
14	308°43.8	14.2'	17°29.8	11.2'	54.6'	117°15.7	115°46.1	54°16.9	28°07.0	64°02.7	79°56.9
15	323°17.0	14.3'	17°18.6	11.3'	54.6'	116°53.0	115°16.6	53°47.0	27°48.7	64°32.8	80°24.3
16	337°50.3	14.3'	17°07.3	11.4'	54.6'	116°30.2	114°47.1	53°17.0	27°30.7	65°02.9	80°51.8
17	352°23.6	14.3'	16°55.9	11.5'	54.7'	116°07.4	114°17.6	52°47.1	27°13.1	65°33.0	81°19.3
18	6°56.9	14.4'	S16°44.4	11.5'	54.7'	115°44.5	113°48.0	52°17.1	26°55.7	66°03.1	81°46.8
19	21°30.3	14.4'	16°32.9	11.6'	54.7'	115°21.5	113°18.5	51°47.1	26°38.7	66°33.3	82°14.3
20	36°03.7	14.5'	16°21.3	11.7'	54.7'	114°58.5	112°48.9	51°17.1	26°22.1	67°03.5	82°41.8
21	50°37.2	14.5'	16°09.6	11.8'	54.7'	114°35.4	112°19.2	50°47.1	26°05.8	67°33.7	83°09.4
22	65°10.7	14.5'	15°57.9	11.8'	54.8'	114°12.2	111°49.6	50°17.1	25°49.9	68°03.9	83°37.0
23	79°44.2	14.6'	15°46.0	11.9'	54.8'	113°48.9	111°19.9	49°47.0	25°34.4	68°34.1	84°04.6
16 th	SD = 14.8' Mer. pass. 17:31					Sun SD = 16.2'					

h	Moon (17 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Capella	-Betelgeuse	-Rigel	-Aldebaran	-Saturn	+Altair	+Antares	+Sun
0	94°17.8	14.6'	S15°34.1	12.0'	54.8'			113°25.6	110°50.2	49°16.9		69°04.4	84°32.2
1	108°51.4	14.6'	15°22.2	12.0'	54.8'	119°56.4		113°02.3	110°20.5	48°46.8		69°34.7	84°59.8
2	123°25.0	14.7'	15°10.1	12.1'	54.9'	119°28.2		112°38.8	109°50.7	48°16.7		70°05.0	85°27.5
3	137°58.6	14.7'	14°58.0	12.2'	54.9'	118°59.9		112°15.3	109°20.9	47°46.6		70°35.3	85°55.2
4	152°32.3	14.7'	14°45.8	12.3'	54.9'	118°31.6		111°51.8	108°51.1	47°16.4		71°05.7	86°22.9
5	167°06.1	14.8'	14°33.5	12.3'	54.9'	118°03.2		111°28.2	108°21.3	46°46.3		71°36.1	86°50.7
6	181°39.8	14.8'	S14°21.2	12.4'	54.9'	117°34.8		111°04.5	107°51.4	46°16.1		72°06.5	87°18.5
7	196°13.6	14.8'	14°08.8	12.5'	55.0'	117°06.3		110°40.7	107°21.5	45°45.9		72°36.9	87°46.3
8	210°47.4	14.8'	13°56.4	12.5'	55.0'	116°37.8		110°16.9	106°51.6	45°15.6		73°07.4	88°14.1
9	225°21.2	14.9'	13°43.8	12.6'	55.0'	116°09.2		109°53.0	106°21.7	44°45.4		73°37.9	88°41.9
10	239°55.1	14.9'	13°31.2	12.7'	55.0'	115°40.7		109°29.1	105°51.7	44°15.1		74°08.4	89°09.8
11	254°29.0	14.9'	13°18.6	12.7'	55.1'	115°12.0		109°05.1	105°21.7	43°44.8		74°39.0	89°37.7
12	269°02.9	14.9'	S13°05.9	12.8'	55.1'	114°43.4		108°41.1	104°51.6	43°14.5	36°39.3	75°09.5	90°05.7
13	283°36.8	15.0'	12°53.1	12.9'	55.1'	114°14.7		108°17.0	104°21.6	42°44.2	36°54.7	75°40.1	90°33.6
14	298°10.8	15.0'	12°40.2	12.9'	55.1'	113°45.9		107°52.8	103°51.5	42°13.8	37°10.3	76°10.8	91°01.6
15	312°44.7	15.0'	12°27.3	13.0'	55.2'	113°17.1		107°28.6	103°21.3	41°43.5	37°26.3	76°41.4	91°29.6
16	327°18.7	15.0'	12°14.3	13.0'	55.2'	112°48.3		107°04.4	102°51.2	41°13.1	37°42.5	77°12.1	91°57.7
17	341°52.8	15.0'	12°01.3	13.1'	55.2'	112°19.4		106°40.1	102°21.0	40°42.7	37°59.0	77°42.8	92°25.8
18	356°26.8	15.1'	S11°48.2	13.2'	55.2'	111°50.5	119°36.4	106°15.7	101°50.7	40°12.2	38°15.8	78°13.6	92°53.9
19	11°00.8	15.1'	11°35.0	13.2'	55.3'	111°21.5	119°08.1	105°51.3	101°20.5	39°41.8	38°32.8	78°44.3	93°22.0
20	25°34.9	15.1'	11°21.8	13.3'	55.3'	110°52.5	118°39.8	105°26.8	100°50.2	39°11.3	38°50.1	79°15.1	93°50.2
21	40°09.0	15.1'	11°08.6	13.3'	55.3'	110°23.5	118°11.4	105°02.2	100°19.9	38°40.8	39°07.6	79°46.0	94°18.4
22	54°43.1	15.1'	10°55.2	13.4'	55.4'	109°54.4	117°43.0	104°37.7	99°49.5	38°10.3	39°25.4	80°16.8	94°46.6
23	69°17.2	15.1'	10°41.8	13.4'	55.4'	109°25.3	117°14.5	104°13.0	99°19.1	37°39.8	39°43.4	80°47.7	95°14.9
17 th	SD = 14.9' Mer. pass. 18:15					Sun SD = 16.2'							

h	Moon (18 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Betelgeuse	-Capella	-Rigel	-Aldebaran	-Saturn	+Altair	+Antares	+Sun
0	83°51.3	15.1'	S10°28.4	13.5'	55.4'	116°46.0	108°56.1	103°48.3	98°48.7	37°09.2	40°01.7	81°18.7	95°43.1
1	98°25.5	15.1'	10°14.9	13.6'	55.4'	116°17.5	108°26.9	103°23.6	98°18.3	36°38.6	40°20.2	81°49.6	96°11.5
2	112°59.6	15.2'	10°01.3	13.6'	55.5'	115°48.8	107°57.7	102°58.8	97°47.8	36°08.0	40°38.9	82°20.6	96°39.8
3	127°33.8	15.2'	09°47.7	13.7'	55.5'	115°20.2	107°28.4	102°34.0	97°17.3	35°37.4	40°57.8	82°51.7	97°08.2
4	142°07.9	15.2'	09°34.1	13.7'	55.5'	114°51.4	106°59.1	102°09.1	96°46.7	35°06.8	41°17.0	83°22.7	97°36.6
5	156°42.1	15.2'	09°20.3	13.8'	55.6'	114°22.7	106°29.7	101°44.1	96°16.1	34°36.1	41°36.4	83°53.8	98°05.1
6	171°16.3	15.2'	S09°06.6	13.8'	55.6'	113°53.9	106°00.3	101°19.2	95°45.5	34°05.4	41°56.0	84°25.0	98°33.6
7	185°50.5	15.2'	08°52.7	13.9'	55.6'	113°25.0	105°30.9	100°54.1	95°14.9	33°34.7	42°15.8	84°56.1	99°02.1
8	200°24.7	15.2'	08°38.9	13.9'	55.6'	112°56.1	105°01.4	100°29.0	94°44.2	33°04.0	42°35.8	85°27.3	99°30.7
9	214°58.9	15.2'	08°24.9	14.0'	55.7'	112°27.1	104°31.8	100°03.9	94°13.5	32°33.3	42°56.0	85°58.6	99°59.2
10	229°33.1	15.2'	08°11.0	14.0'	55.7'	111°58.1	104°02.3	99°38.7	93°42.7	32°02.5	43°16.5	86°29.8	100°27.9
11	244°07.2	15.2'	07°57.0	14.1'	55.7'	111°29.0	103°32.6	99°13.5	93°11.9	31°31.8	43°37.1	87°01.1	100°56.5
12	258°41.4	15.2'	S07°42.9	14.1'	55.8'	110°59.9	103°03.0	98°48.3	92°41.1	31°01.0	43°57.9	87°32.5	101°25.2
13	273°15.6	15.2'	07°28.8	14.2'	55.8'	110°30.7	102°33.3	98°23.0	92°10.2	30°30.2	44°18.9	88°03.9	101°54.0
14	287°49.8	15.2'	07°14.6	14.2'	55.8'	110°01.5	102°03.6	97°57.6	91°39.3	29°59.4	44°40.1	88°35.3	102°22.7
15	302°24.0	15.2'	07°00.4	14.3'	55.9'	109°32.3	101°33.8	97°32.2	91°08.3	29°28.6	45°01.4	89°06.7	102°51.5
16	316°58.2	15.2'	06°46.1	14.3'	55.9'	109°02.9	101°04.0	97°06.8	90°37.4	28°57.7	45°23.0	89°38.2	103°20.4
17	331°32.4	15.2'	06°31.9	14.3'	55.9'	108°33.6	100°34.1	96°41.3	90°06.4	28°26.9	45°44.7	90°09.7	103°49.2
18	346°06.5	15.2'	S06°17.5	14.4'	56.0'	108°04.2	100°04.2	96°15.8	89°35.3	27°56.0	46°06.6	90°41.3	104°18.2
19	0°40.7	15.1'	06°03.1	14.4'	56.0'	107°34.7	99°34.2	95°50.2	89°04.2	27°25.2	46°28.7	91°12.9	104°47.1
20	15°14.8	15.1'	05°48.7	14.5'	56.0'	107°05.2	99°04.3	95°24.6	88°33.1	26°54.3	46°50.9	91°44.5	105°16.1
21	29°49.0	15.1'	05°34.2	14.5'	56.1'	106°35.7	98°34.2	94°58.9	88°01.9	26°23.4	47°13.3	92°16.2	105°45.1
22	44°23.1	15.1'	05°19.7	14.5'	56.1'	106°06.1	98°04.2	94°33.2	87°30.7	25°52.5	47°35.9	92°47.9	106°14.2
23	58°57.2	15.1'	05°05.2	14.6'	56.1'	105°36.4	97°34.0	94°07.5	86°59.5	25°21.6	47°58.6	93°19.7	106°43.3
18 th	SD = 15.1' Mer. pass. 18:57					Sun SD = 16.2'							

h	Moon (19 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Pollux	-Capella	-Aldebaran	-Saturn	+Fomalhaut	+Altair	+Antares	+Sun
0	73°31.3	15.1'	S04°50.6	14.6'	56.2'		97°03.9	86°28.2	24°50.7		48°21.5	93°51.5	107°12.4
1	88°05.4	15.1'	04°36.0	14.7'	56.2'		96°33.7	85°56.9	24°19.8		48°44.5	94°23.3	107°41.6
2	102°39.5	15.0'	04°21.3	14.7'	56.2'		96°03.5	85°25.5	23°49.0	25°08.0	49°07.7	94°55.2	108°10.9
3	117°13.5	15.0'	04°06.6	14.7'	56.3'		95°33.2	84°54.1	23°18.1	25°23.6	49°31.0	95°27.1	108°40.1
4	131°47.5	15.0'	03°51.9	14.8'	56.3'		95°02.9	84°22.7	22°47.2	25°39.7	49°54.5	95°59.1	109°09.4
5	146°21.6	15.0'	03°37.1	14.8'	56.3'		94°32.5	83°51.2	22°16.4	25°56.3	50°18.1	96°31.1	109°38.8
6	160°55.5	15.0'	S03°22.3	14.8'	56.4'		94°02.1	83°19.7	21°45.5	26°13.3	50°41.9	97°03.2	110°08.2
7	175°29.5	14.9'	03°07.5	14.9'	56.4'		93°31.7	82°48.1	21°14.7	26°30.8	51°05.8	97°35.2	110°37.6
8	190°03.5	14.9'	02°52.6	14.9'	56.4'		93°01.2	82°16.5	20°43.9	26°48.8	51°29.9	98°07.4	111°07.0
9	204°37.4	14.9'	02°37.7	14.9'	56.5'		92°30.6	81°44.9	20°13.2	27°07.2	51°54.1	98°39.5	111°36.6
10	219°11.3	14.9'	02°22.8	15.0'	56.5'		92°00.1	81°13.2	19°42.4	27°25.9	52°18.4	99°11.8	112°06.1
11	233°45.1	14.8'	02°07.8	15.0'	56.6'		91°29.5	80°41.5	19°11.8	27°45.1	52°42.8	99°44.0	112°35.7
12	248°19.0	14.8'	S01°52.9	15.0'	56.6'		90°58.8	80°09.7	18°41.1	28°04.7	53°07.4	100°16.3	113°05.3
13	262°52.8	14.8'	01°37.8	15.0'	56.6'		90°28.1	79°37.9	18°10.6	28°24.7	53°32.1	100°48.7	113°35.0
14	277°26.5	14.7'	01°22.8	15.1'	56.7'		89°57.4	79°06.1	17°40.1	28°45.0	53°57.0	101°21.0	114°04.7
15	292°00.3	14.7'	01°07.7	15.1'	56.7'		89°26.6	78°34.2	17°09.6	29°05.7	54°22.0	101°53.5	114°34.5
16	306°34.0	14.7'	00°52.6	15.1'	56.7'		88°55.8	78°02.2	16°39.3	29°26.8	54°47.0	102°25.9	115°04.3
17	321°07.6	14.6'	00°37.5	15.1'	56.8'		88°24.9	77°30.3	16°09.0	29°48.2	55°12.3	102°58.5	115°34.1
18	335°41.3	14.6'	S00°22.4	15.2'	56.8'	119°30.4	87°54.0	76°58.3	15°38.9	30°09.9	55°37.6	103°31.0	116°04.0
19	350°14.9	14.6'	S00°07.2	15.2'	56.8'	118°57.9	87°23.1	76°26.2	15°08.9	30°32.0	56°03.0	104°03.6	116°34.0
20	4°48.4	14.5'	N00°08.0	15.2'	56.9'	118°25.3	86°52.1	75°54.1	14°39.0	30°54.3	56°28.6	104°36.3	117°03.9
21	19°21.9	14.5'	00°23.2	15.2'	56.9'	117°52.7	86°21.0	75°22.0	14°09.3	31°17.0	56°54.3	105°09.0	117°34.0
22	33°55.4	14.4'	00°38.4	15.2'	57.0'	117°20.1	85°50.0	74°49.8	13°39.9	31°39.9	57°20.1	105°41.7	118°04.0
23	48°28.8	14.4'	00°53.6	15.3'	57.0'	116°47.4	85°18.9	74°17.6	13°10.6	32°03.2	57°46.0	106°14.5	118°34.1
19 th	SD = 15.3' Mer. pass. 19:40					Sun SD = 16.2'							

h	Moon (20 th Nov)					Lunar Distance (objects with largest hourly LD delta)								
Fri	GHA	ν	Dec	d	HP	-Procyon	-Pollux	-Betelgeuse	-Capella	-Aldebaran	+Fomalhaut	+Altair	+Antares	
0	63°02.2	14.3'	N01°08.9	15.3'	57.0'	118°56.3	116°14.7	92°59.9	84°47.7	73°45.3	32°26.7	58°12.0	106°47.4	
1	77°35.5	14.3'	01°24.2	15.3'	57.1'	118°25.6	115°41.9	92°29.0	84°16.5	73°13.0	32°50.5	58°38.1	107°20.3	
2	92°08.8	14.2'	01°39.4	15.3'	57.1'	117°54.9	115°09.1	91°58.1	83°45.3	72°40.7	33°14.6	59°04.3	107°53.2	
3	106°42.1	14.2'	01°54.8	15.3'	57.1'	117°24.1	114°36.2	91°27.2	83°14.0	72°08.3	33°38.9	59°30.7	108°26.2	
4	121°15.3	14.1'	02°10.1	15.3'	57.2'	116°53.2	114°03.3	90°56.2	82°42.7	71°35.8	34°03.5	59°57.1	108°59.2	
5	135°48.4	14.1'	02°25.4	15.3'	57.2'	116°22.3	113°30.3	90°25.1	82°11.3	71°03.4	34°28.3	60°23.7	109°32.2	
6	150°21.5	14.0'	N02°40.7	15.4'	57.3'	115°51.3	112°57.3	89°54.1	81°39.9	70°30.9	34°53.3	60°50.3	110°05.4	
7	164°54.5	14.0'	02°56.1	15.4'	57.3'	115°20.2	112°24.2	89°22.9	81°08.5	69°58.3	35°18.6	61°17.1	110°38.5	
8	179°27.5	13.9'	03°11.5	15.4'	57.3'	114°49.1	111°51.1	88°51.8	80°37.0	69°25.7	35°44.1	61°43.9	111°11.7	
9	194°00.4	13.9'	03°26.8	15.4'	57.4'	114°17.9	111°17.9	88°20.5	80°05.5	68°53.1	36°09.8	62°10.9	111°45.0	
10	208°33.3	13.8'	03°42.2	15.4'	57.4'	113°46.6	110°44.7	87°49.3	79°34.0	68°20.4	36°35.7	62°37.9	112°18.3	
11	223°06.1	13.7'	03°57.6	15.4'	57.5'	113°15.3	110°11.5	87°18.0	79°02.4	67°47.6	37°01.9	63°05.1	112°51.7	
12	237°38.8	13.7'	N04°13.0	15.4'	57.5'	112°43.9	109°38.1	86°46.6	78°30.7	67°14.9	37°28.2	63°32.3	113°25.1	
13	252°11.5	13.6'	04°28.3	15.4'	57.5'	112°12.5	109°04.8	86°15.2	77°59.1	66°42.1	37°54.7	63°59.6	113°58.5	
14	266°44.1	13.5'	04°43.7	15.4'	57.6'	111°41.0	108°31.4	85°43.8	77°27.4	66°09.2	38°21.4	64°27.0	114°32.0	
15	281°16.6	13.5'	04°59.1	15.4'	57.6'	111°09.4	107°57.9	85°12.3	76°55.6	65°36.3	38°48.4	64°54.5	115°05.6	
16	295°49.1	13.4'	05°14.5	15.4'	57.7'	110°37.8	107°24.4	84°40.8	76°23.8	65°03.4	39°15.5	65°22.1	115°39.2	
17	310°21.5	13.3'	05°29.9	15.4'	57.7'	110°06.1	106°50.9	84°09.2	75°52.0	64°30.4	39°42.7	65°49.8	116°12.8	
18	324°53.9	13.3'	N05°45.3	15.4'	57.7'	109°34.4	106°17.3	83°37.6	75°20.2	63°57.4	40°10.2	66°17.6	116°46.5	
19	339°26.1	13.2'	06°00.6	15.4'	57.8'	109°02.6	105°43.6	83°06.0	74°48.3	63°24.3	40°37.8	66°45.5	117°20.2	
20	353°58.3	13.1'	06°16.0	15.4'	57.8'	108°30.7	105°09.9	82°34.3	74°16.3	62°51.2	41°05.6	67°13.4	117°54.0	
21	8°30.5	13.1'	06°31.4	15.4'	57.9'	107°58.8	104°36.2	82°02.6	73°44.4	62°18.1	41°33.5	67°41.5	118°27.9	
22	23°02.5	13.0'	06°46.7	15.3'	57.9'	107°26.8	104°02.4	81°30.8	73°12.4	61°44.9	42°01.6	68°09.6	119°01.8	
23	37°34.5	12.9'	07°02.1	15.3'	57.9'	106°54.8	103°28.5	80°59.0	72°40.3	61°11.7	42°29.9	68°37.8	119°35.7	
20 th	SD = 15.6' Mer. pass. 20:25													

h	Moon (21 st Nov)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Procyon	-Pollux	-Betelgeuse	-Capella	-Aldebaran	+Saturn	+Fomalhaut	+Altair
0	52°06.4	12.8'	N07°17.4	15.3'	58.0'	106°22.7	102°54.6	80°27.1	72°08.2	60°38.4		42°58.3	69°06.1
1	66°38.2	12.7'	07°32.7	15.3'	58.0'	105°50.6	102°20.7	79°55.3	71°36.1	60°05.1		43°26.9	69°34.4
2	81°09.9	12.7'	07°48.1	15.3'	58.1'	105°18.4	101°46.7	79°23.3	71°04.0	59°31.7		43°55.6	70°02.9
3	95°41.6	12.6'	08°03.4	15.3'	58.1'	104°46.1	101°12.6	78°51.4	70°31.8	58°58.4		44°24.4	70°31.4
4	110°13.2	12.5'	08°18.6	15.3'	58.1'	104°13.8	100°38.6	78°19.4	69°59.6	58°24.9		44°53.4	71°00.0
5	124°44.7	12.4'	08°33.9	15.2'	58.2'	103°41.4	100°04.4	77°47.3	69°27.4	57°51.5		45°22.5	71°28.7
6	139°16.1	12.3'	N08°49.1	15.2'	58.2'	103°09.0	99°30.2	77°15.3	68°55.1	57°18.0		45°51.8	71°57.4
7	153°47.4	12.2'	09°04.3	15.2'	58.2'	102°36.5	98°56.0	76°43.1	68°22.8	56°44.4		46°21.2	72°26.2
8	168°18.6	12.1'	09°19.5	15.2'	58.3'	102°04.0	98°21.7	76°11.0	67°50.5	56°10.8		46°50.7	72°55.1
9	182°49.7	12.0'	09°34.7	15.1'	58.3'	101°31.4	97°47.3	75°38.8	67°18.1	55°37.2		47°20.3	73°24.1
10	197°20.8	11.9'	09°49.9	15.1'	58.4'	100°58.7	97°13.0	75°06.6	66°45.7	55°03.6	9°59.5	47°50.1	73°53.1
11	211°51.7	11.9'	10°05.0	15.1'	58.4'	100°26.0	96°38.5	74°34.3	66°13.3	54°29.9	10°27.3	48°20.0	74°22.3
12	226°22.6	11.8'	N10°20.1	15.1'	58.4'	99°53.3	96°04.0	74°02.1	65°40.9	53°56.2	10°55.8	48°50.0	74°51.4
13	240°53.3	11.7'	10°35.1	15.0'	58.5'	99°20.5	95°29.5	73°29.7	65°08.4	53°22.4	11°24.9	49°20.1	75°20.7
14	255°24.0	11.6'	10°50.2	15.0'	58.5'	98°47.6	94°54.9	72°57.4	64°35.9	52°48.6	11°54.5	49°50.4	75°50.0
15	269°54.6	11.5'	11°05.1	15.0'	58.6'	98°14.7	94°20.3	72°25.0	64°03.4	52°14.8	12°24.6	50°20.7	76°19.4
16	284°25.0	11.4'	11°20.1	14.9'	58.6'	97°41.8	93°45.6	71°52.6	63°30.8	51°40.9	12°55.2	50°51.2	76°48.8
17	298°55.4	11.3'	11°35.0	14.9'	58.6'	97°08.8	93°10.9	71°20.2	62°58.2	51°07.0	13°26.1	51°21.8	77°18.3
18	313°25.7	11.2'	N11°49.9	14.8'	58.7'	96°35.7	92°36.1	70°47.7	62°25.6	50°33.1	13°57.4	51°52.4	77°47.9
19	327°55.8	11.1'	12°04.8	14.8'	58.7'	96°02.6	92°01.3	70°15.2	61°53.0	49°59.2	14°29.0	52°23.2	78°17.6
20	342°25.9	10.9'	12°19.6	14.8'	58.8'	95°29.4	91°26.4	69°42.7	61°20.4	49°25.2	15°00.9	52°54.1	78°47.3
21	356°55.8	10.8'	12°34.3	14.7'	58.8'	94°56.2	90°51.5	69°10.1	60°47.7	48°51.1	15°33.0	53°25.1	79°17.0
22	11°25.7	10.7'	12°49.0	14.7'	58.8'	94°23.0	90°16.5	68°37.5	60°15.1	48°17.1	16°05.4	53°56.2	79°46.8
23	25°55.4	10.6'	13°03.7	14.6'	58.9'	93°49.6	89°41.5	68°04.9	59°42.4	47°43.0	16°38.1	54°27.4	80°16.7
21 st	SD = 15.8' Mer. pass. 21:13												

h	Moon (22 nd Nov)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Jupiter	-Regulus	-Mars	-Pollux	+Saturn	+Fomalhaut	+Deneb	+Altair
0	40°25.0	10.5'	N13°18.3	14.6'	58.9'				89°06.4	17°10.9	54°58.7		80°46.7
1	54°54.5	10.4'	13°32.9	14.5'	58.9'				88°31.3	17°43.9	55°30.0		81°16.7
2	69°23.9	10.3'	13°47.4	14.5'	59.0'				87°56.1	18°17.1	56°01.5		81°46.7
3	83°53.2	10.2'	14°01.8	14.4'	59.0'				87°20.9	18°50.5	56°33.1		82°16.8
4	98°22.4	10.1'	14°16.2	14.3'	59.1'	119°48.7			86°45.7	19°24.0	57°04.7		82°47.0
5	112°51.5	9.9'	14°30.6	14.3'	59.1'	119°13.5			86°10.4	19°57.7	57°36.4		83°17.2
6	127°20.4	9.8'	N14°44.8	14.2'	59.1'	118°38.2			85°35.0	20°31.5	58°08.3		83°47.4
7	141°49.2	9.7'	14°59.0	14.2'	59.2'	118°02.9			84°59.6	21°05.5	58°40.2		84°17.8
8	156°17.9	9.6'	15°13.2	14.1'	59.2'	117°27.6		119°29.0	84°24.2	21°39.6	59°12.2		84°48.1
9	170°46.5	9.5'	15°27.3	14.0'	59.2'	116°52.2		118°54.5	83°48.7	22°13.8	59°44.2		85°18.5
10	185°15.0	9.3'	15°41.3	13.9'	59.3'	116°16.7		118°19.9	83°13.2	22°48.1	60°16.4		85°49.0
11	199°43.3	9.2'	15°55.2	13.9'	59.3'	115°41.2	119°33.5	117°45.3	82°37.6	23°22.5	60°48.6		86°19.5
12	214°11.6	9.1'	N16°09.1	13.8'	59.3'	115°05.7	118°57.8	117°10.7	82°02.0	23°57.0	61°20.9		86°50.0
13	228°39.7	9.0'	16°22.9	13.7'	59.4'	114°30.1	118°22.0	116°36.0	81°26.3	24°31.7	61°53.3		87°20.6
14	243°07.7	8.9'	16°36.6	13.6'	59.4'	113°54.4	117°46.2	116°01.3	80°50.6	25°06.4	62°25.8		87°51.3
15	257°35.5	8.7'	16°50.3	13.6'	59.4'	113°18.8	117°10.4	115°26.5	80°14.9	25°41.2	62°58.3		88°22.0
16	272°03.2	8.6'	17°03.8	13.5'	59.5'	112°43.0	116°34.5	114°51.7	79°39.1	26°16.1	63°31.0	70°19.1	88°52.7
17	286°30.8	8.5'	17°17.3	13.4'	59.5'	112°07.3	115°58.6	114°16.8	79°03.2	26°51.1	64°03.6	70°34.3	89°23.4
18	300°58.3	8.3'	N17°30.7	13.3'	59.6'	111°31.4	115°22.6	113°41.9	78°27.3	27°26.2	64°36.4	70°49.7	89°54.2
19	315°25.7	8.2'	17°44.0	13.2'	59.6'	110°55.6	114°46.6	113°06.9	77°51.4	28°01.3	65°09.2	71°05.1	90°25.1
20	329°52.9	8.1'	17°57.2	13.1'	59.6'	110°19.7	114°10.6	112°31.9	77°15.5	28°36.6	65°42.1	71°20.7	90°55.9
21	344°20.0	8.0'	18°10.4	13.0'	59.7'	109°43.8	113°34.5	111°56.9	76°39.5	29°11.9	66°15.1	71°36.4	91°26.8
22	358°46.9	7.8'	18°23.4	12.9'	59.7'	109°07.8	112°58.3	111°21.8	76°03.4	29°47.3	66°48.1	71°52.3	91°57.8
23	13°13.8	7.7'	18°36.3	12.8'	59.7'	108°31.7	112°22.1	110°46.7	75°27.3	30°22.7	67°21.2	72°08.2	92°28.8
22 nd	SD = 16.1' Mer. pass. 22:05												

Moon (23 rd Nov)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Regulus	-Mars	-Jupiter	-Pollux	+Saturn	+Fomalhaut	+Deneb	+Altair
0	27°40.4	7.6'	N18°49.2	12.7'	59.7'	111°45.9	110°11.5	107°55.7	74°51.2	30°58.2	67°54.4	72°24.3	92°59.8
1	42°07.0	7.4'	19°01.9	12.6'	59.8'	111°09.7	109°36.3	107°19.6	74°15.0	31°33.8	68°27.6	72°40.5	93°30.8
2	56°33.5	7.3'	19°14.6	12.5'	59.8'	110°33.4	109°01.1	106°43.4	73°38.8	32°09.5	69°00.8	72°56.8	94°01.8
3	70°59.8	7.2'	19°27.1	12.4'	59.8'	109°57.0	108°25.8	106°07.2	73°02.6	32°45.2	69°34.2	73°13.2	94°32.9
4	85°25.9	7.0'	19°39.5	12.3'	59.9'	109°20.6	107°50.5	105°31.0	72°26.3	33°21.0	70°07.6	73°29.8	95°04.0
5	99°52.0	6.9'	19°51.8	12.2'	59.9'	108°44.2	107°15.1	104°54.7	71°50.0	33°56.8	70°41.0	73°46.4	95°35.2
6	114°17.9	6.8'	N20°04.1	12.1'	59.9'	108°07.8	106°39.7	104°18.4	71°13.6	34°32.7	71°14.5	74°03.1	96°06.3
7	128°43.6	6.6'	20°16.1	12.0'	60.0'	107°31.3	106°04.2	103°42.1	70°37.2	35°08.6	71°48.1	74°20.0	96°37.5
8	143°09.3	6.5'	20°28.1	11.9'	60.0'	106°54.7	105°28.7	103°05.7	70°00.8	35°44.6	72°21.7	74°36.9	97°08.7
9	157°34.8	6.4'	20°40.0	11.7'	60.0'	106°18.1	104°53.2	102°29.3	69°24.3	36°20.7	72°55.4	74°54.0	97°39.9
10	172°00.2	6.2'	20°51.7	11.6'	60.1'	105°41.5	104°17.7	101°52.8	68°47.8	36°56.8	73°29.1	75°11.1	98°11.2
11	186°25.4	6.1'	21°03.3	11.5'	60.1'	105°04.9	103°42.1	101°16.3	68°11.2	37°33.0	74°02.9	75°28.4	98°42.4
12	200°50.5	6.0'	N21°14.8	11.4'	60.1'	104°28.2	103°06.4	100°39.8	67°34.7	38°09.2	74°36.7	75°45.7	99°13.7
13	215°15.5	5.8'	21°26.2	11.2'	60.1'	103°51.5	102°30.8	100°03.2	66°58.0	38°45.5	75°10.6	76°03.2	99°45.0
14	229°40.3	5.7'	21°37.4	11.1'	60.2'	103°14.7	101°55.1	99°26.6	66°21.4	39°21.8	75°44.5	76°20.7	100°16.3
15	244°05.0	5.6'	21°48.5	11.0'	60.2'	102°38.0	101°19.3	98°50.0	65°44.7	39°58.1	76°18.5	76°38.3	100°47.6
16	258°29.6	5.4'	21°59.5	10.8'	60.2'	102°01.1	100°43.5	98°13.3	65°08.0	40°34.5	76°52.5	76°56.1	101°18.9
17	272°54.0	5.3'	22°10.3	10.7'	60.2'	101°24.3	100°07.7	97°36.6	64°31.3	41°11.0	77°26.6	77°13.9	101°50.2
18	287°18.4	5.2'	N22°21.0	10.6'	60.3'	100°47.4	99°31.9	96°59.9	63°54.5	41°47.5	78°00.7	77°31.7	102°21.5
19	301°42.5	5.1'	22°31.6	10.4'	60.3'	100°10.5	98°56.0	96°23.1	63°17.7	42°24.0	78°34.8	77°49.7	102°52.9
20	316°06.6	4.9'	22°42.0	10.3'	60.3'	99°33.5	98°20.1	95°46.3	62°40.8	43°00.6	79°09.0	78°07.8	103°24.2
21	330°30.5	4.8'	22°52.3	10.1'	60.3'	98°56.5	97°44.2	95°09.5	62°04.0	43°37.2	79°43.2	78°25.9	103°55.5
22	344°54.3	4.7'	23°02.4	10.0'	60.4'	98°19.5	97°08.2	94°32.6	61°27.1	44°13.9	80°17.5	78°44.1	104°26.8
23	359°18.0	4.5'	23°12.4	9.8'	60.4'	97°42.5	96°32.2	93°55.7	60°50.1	44°50.6	80°51.8	79°02.4	104°58.2
23 rd	SD = 16.3'		Mer. pass. 23:03										

DUT1 = UT1-UTC = +0.1186 sec $\Delta T = TT-UT1 = +69.0654$ sec

2026 November 24 to Nov. 26 UT

h	Moon (24 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Regulus	-Mars	-Jupiter	-Pollux	+Saturn	+Deneb	+Fomalhaut	+Altair
0	13°41.5	4.4'	N23°22.2	9.7'	60.4'	97°05.4	95°56.2	93°18.8	60°13.2	45°27.3	79°20.7	81°26.1	105°29.5
1	28°04.9	4.3'	23°31.8	9.5'	60.4'	96°28.3	95°20.1	92°41.9	59°36.2	46°04.1	79°39.2	82°00.5	106°00.8
2	42°28.2	4.2'	23°41.4	9.4'	60.5'	95°51.2	94°44.0	92°04.9	58°59.2	46°40.9	79°57.7	82°34.9	106°32.1
3	56°51.4	4.0'	23°50.7	9.2'	60.5'	95°14.0	94°07.9	91°27.9	58°22.2	47°17.7	80°16.2	83°09.3	107°03.4
4	71°14.4	3.9'	23°59.9	9.0'	60.5'	94°36.8	93°31.8	90°50.8	57°45.1	47°54.6	80°34.8	83°43.8	107°34.7
5	85°37.3	3.8'	24°08.9	8.9'	60.5'	93°59.6	92°55.6	90°13.8	57°08.0	48°31.5	80°53.5	84°18.3	108°05.9
6	100°00.1	3.7'	N24°17.8	8.7'	60.5'	93°22.4	92°19.4	89°36.7	56°30.9	49°08.5	81°12.3	84°52.8	108°37.2
7	114°22.8	3.6'	24°26.5	8.5'	60.6'	92°45.1	91°43.2	88°59.6	55°53.8	49°45.4	81°31.1	85°27.3	109°08.4
8	128°45.4	3.4'	24°35.0	8.4'	60.6'	92°07.9	91°07.0	88°22.4	55°16.7	50°22.5	81°50.0	86°01.9	109°39.6
9	143°07.8	3.3'	24°43.4	8.2'	60.6'	91°30.5	90°30.7	87°45.3	54°39.5	50°59.5	82°08.9	86°36.5	110°10.8
10	157°30.2	3.2'	24°51.6	8.0'	60.6'	90°53.2	89°54.4	87°08.1	54°02.3	51°36.6	82°27.9	87°11.2	110°41.9
11	171°52.4	3.1'	24°59.6	7.8'	60.6'	90°15.9	89°18.1	86°30.9	53°25.1	52°13.7	82°46.9	87°45.8	111°13.1
12	186°14.5	3.0'	N25°07.4	7.7'	60.7'	89°38.5	88°41.7	85°53.6	52°47.8	52°50.8	83°06.0	88°20.5	111°44.2
13	200°36.5	2.9'	25°15.1	7.5'	60.7'	89°01.1	88°05.4	85°16.4	52°10.6	53°27.9	83°25.1	88°55.2	112°15.2
14	214°58.4	2.8'	25°22.5	7.3'	60.7'	88°23.7	87°29.0	84°39.1	51°33.3	54°05.1	83°44.3	89°29.9	112°46.2
15	229°20.2	2.7'	25°29.8	7.1'	60.7'	87°46.2	86°52.6	84°01.8	50°56.0	54°42.3	84°03.5	90°04.7	113°17.2
16	243°41.9	2.6'	25°36.9	6.9'	60.7'	87°08.8	86°16.2	83°24.5	50°18.7	55°19.5	84°22.8	90°39.4	113°48.2
17	258°03.5	2.5'	25°43.8	6.7'	60.7'	86°31.3	85°39.7	82°47.2	49°41.4	55°56.8	84°42.1	91°14.2	114°19.1
18	272°25.0	2.4'	N25°50.6	6.5'	60.7'	85°53.8	85°03.3	82°09.8	49°04.1	56°34.0	85°01.4	91°49.0	114°50.0
19	286°46.4	2.3'	25°57.1	6.4'	60.8'	85°16.3	84°26.8	81°32.4	48°26.7	57°11.3	85°20.8	92°23.8	115°20.8
20	301°07.7	2.2'	26°03.5	6.2'	60.8'	84°38.7	83°50.3	80°55.1	47°49.4	57°48.6	85°40.2	92°58.6	115°51.6
21	315°28.9	2.1'	26°09.6	6.0'	60.8'	84°01.2	83°13.8	80°17.7	47°12.0	58°26.0	85°59.6	93°33.4	116°22.3
22	329°50.0	2.0'	26°15.6	5.8'	60.8'	83°23.6	82°37.3	79°40.2	46°34.6	59°03.3	86°19.1	94°08.3	116°53.0
23	344°11.0	2.0'	26°21.4	5.6'	60.8'	82°46.1	82°00.7	79°02.8	45°57.2	59°40.7	86°38.6	94°43.1	117°23.6
24 th	SD = 16.5' Mer. pass. ---												

h	Moon (25 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Regulus	-Mars	-Jupiter	-Pollux	+Aldebaran	+Saturn	+Fomalhaut	+Altair
0	358°32.0	1.9'	N26°27.0	5.4'	60.8'	82°08.5	81°24.2	78°25.3	45°19.8		60°18.1	95°18.0	117°54.1
1	12°52.9	1.8'	26°32.3	5.2'	60.8'	81°30.9	80°47.6	77°47.9	44°42.4		60°55.5	95°52.9	118°24.6
2	27°13.7	1.7'	26°37.5	5.0'	60.8'	80°53.3	80°11.0	77°10.4	44°05.0		61°32.9	96°27.7	118°55.0
3	41°34.4	1.6'	26°42.5	4.8'	60.9'	80°15.6	79°34.4	76°32.9	43°27.5		62°10.3	97°02.6	119°25.4
4	55°55.0	1.6'	26°47.2	4.6'	60.9'	79°38.0	78°57.8	75°55.4	42°50.1		62°47.7	97°37.5	119°55.7
5	70°15.6	1.5'	26°51.8	4.4'	60.9'	79°00.3	78°21.2	75°17.9	42°12.7		63°25.2	98°12.3	
6	84°36.1	1.5'	N26°56.2	4.2'	60.9'	78°22.7	77°44.6	74°40.4	41°35.2		64°02.7	98°47.2	
7	98°56.6	1.4'	27°00.3	3.9'	60.9'	77°45.0	77°08.0	74°02.9	40°57.8		64°40.2	99°22.1	
8	113°17.0	1.3'	27°04.3	3.7'	60.9'	77°07.3	76°31.3	73°25.3	40°20.3		65°17.6	99°57.0	
9	127°37.3	1.3'	27°08.0	3.5'	60.9'	76°29.7	75°54.7	72°47.8	39°42.9		65°55.1	100°31.8	
10	141°57.6	1.2'	27°11.5	3.3'	60.9'	75°52.0	75°18.0	72°10.2	39°05.4		66°32.7	101°06.7	
11	156°17.8	1.2'	27°14.9	3.1'	60.9'	75°14.3	74°41.4	71°32.7	38°28.0		67°10.2	101°41.6	
12	170°38.0	1.1'	N27°18.0	2.9'	60.9'	74°36.6	74°04.7	70°55.1	37°50.5		67°47.7	102°16.4	
13	184°58.1	1.1'	27°20.9	2.7'	60.9'	73°58.9	73°28.0	70°17.6	37°13.1		68°25.2	102°51.3	
14	199°18.2	1.1'	27°23.5	2.5'	60.9'	73°21.2	72°51.3	69°40.0	36°35.6		69°02.8	103°26.1	
15	213°38.3	1.0'	27°26.0	2.3'	60.9'	72°43.4	72°14.7	69°02.4	35°58.2		69°40.3	104°00.9	
16	227°58.3	1.0'	27°28.3	2.0'	60.9'	72°05.7	71°38.0	68°24.8	35°20.7		70°17.9	104°35.7	
17	242°18.3	1.0'	27°30.3	1.8'	60.9'	71°28.0	71°01.3	67°47.2	34°43.3		70°55.4	105°10.5	
18	256°38.3	1.0'	N27°32.1	1.6'	60.9'	70°50.3	70°24.6	67°09.7	34°05.9		71°33.0	105°45.3	
19	270°58.3	0.9'	27°33.7	1.4'	60.9'	70°12.6	69°47.9	66°32.1	33°28.5		72°10.5	106°20.1	
20	285°18.2	0.9'	27°35.1	1.2'	60.9'	69°34.8	69°11.2	65°54.5	32°51.1	14°26.6	72°48.1	106°54.8	
21	299°38.1	0.9'	27°36.3	1.0'	60.9'	68°57.1	68°34.5	65°16.9	32°13.7	14°53.3	73°25.7	107°29.5	
22	313°58.0	0.9'	27°37.2	0.7'	60.9'	68°19.4	67°57.9	64°39.3	31°36.3	15°20.8	74°03.2	108°04.2	
23	328°17.9	0.9'	27°38.0	0.5'	60.9'	67°41.7	67°21.2	64°01.7	30°59.0	15°49.0	74°40.8	108°38.9	
25 th	SD = 16.6' Mer. pass. 00:06												

h	Moon (26 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Spica	-Regulus	-Jupiter	-Pollux	+Aldebaran	+Capella	+Saturn	+Fomalhaut
0	342°37.8	0.9'	N27°38.5	0.3'	60.9'		67°04.0	63°24.2	30°21.6	16°17.8		75°18.3	109°13.6
1	356°57.7	0.9'	27°38.8	0.1'	60.9'		66°26.3	62°46.6	29°44.3	16°47.2		75°55.9	109°48.2
2	11°17.6	0.9'	27°38.9	-0.1'	60.9'	119°50.8	65°48.6	62°09.0	29°07.0	17°17.1		76°33.4	110°22.8
3	25°37.5	0.9'	27°38.8	-0.3'	60.9'	119°13.1	65°10.9	61°31.5	28°29.7	17°47.5		77°11.0	110°57.4
4	39°57.4	0.9'	27°38.4	-0.6'	60.9'	118°35.5	64°33.2	60°53.9	27°52.4	18°18.3		77°48.5	111°31.9
5	54°17.3	0.9'	27°37.9	-0.8'	60.9'	117°57.8	63°55.5	60°16.3	27°15.2	18°49.5		78°26.1	112°06.4
6	68°37.3	1.0'	N27°37.1	-1.0'	60.9'	117°20.2	63°17.8	59°38.8	26°38.0	19°21.1		79°03.6	112°40.9
7	82°57.2	1.0'	27°36.1	-1.2'	60.9'	116°42.5	62°40.1	59°01.3	26°00.8	19°53.0		79°41.1	113°15.3
8	97°17.2	1.0'	27°34.9	-1.4'	60.9'	116°04.9	62°02.5	58°23.7	25°23.7	20°25.2		80°18.6	113°49.7
9	111°37.2	1.0'	27°33.5	-1.6'	60.9'	115°27.3	61°24.8	57°46.2	24°46.5	20°57.7		80°56.2	114°24.1
10	125°57.2	1.1'	27°31.8	-1.9'	60.9'	114°49.7	60°47.2	57°08.7	24°09.5	21°30.5		81°33.7	114°58.4
11	140°17.3	1.1'	27°30.0	-2.1'	60.9'	114°12.0	60°09.5	56°31.2	23°32.4	22°03.5		82°11.1	115°32.7
12	154°37.4	1.2'	N27°27.9	-2.3'	60.9'	113°34.5	59°31.9	55°53.7	22°55.4	22°36.7	20°32.6	82°48.6	116°06.9
13	168°57.6	1.2'	27°25.6	-2.5'	60.9'	112°56.9	58°54.3	55°16.2	22°18.5	23°10.1	20°49.4	83°26.1	116°41.1
14	183°17.8	1.2'	27°23.1	-2.7'	60.9'	112°19.3	58°16.7	54°38.7	21°41.6	23°43.7	21°07.0	84°03.5	117°15.2
15	197°38.0	1.3'	27°20.4	-2.9'	60.9'	111°41.7	57°39.1	54°01.3	21°04.7	24°17.5	21°25.5	84°41.0	117°49.3
16	211°58.3	1.3'	27°17.5	-3.1'	60.9'	111°04.2	57°01.6	53°23.9	20°27.9	24°51.5	21°44.7	85°18.4	118°23.4
17	226°18.7	1.4'	27°14.4	-3.3'	60.8'	110°26.7	56°24.0	52°46.4	19°51.2	25°25.5	22°04.7	85°55.8	118°57.4
18	240°39.1	1.5'	N27°11.0	-3.5'	60.8'	109°49.1	55°46.5	52°09.0	19°14.5	25°59.8	22°25.4	86°33.2	119°31.3
19	254°59.5	1.5'	27°07.5	-3.7'	60.8'	109°11.6	55°08.9	51°31.6	18°37.9	26°34.1	22°46.7	87°10.6	
20	269°20.1	1.6'	27°03.7	-4.0'	60.8'	108°34.2	54°31.4	50°54.2	18°01.4	27°08.6	23°08.7	87°48.0	
21	283°40.7	1.7'	26°59.8	-4.2'	60.8'	107°56.7	53°53.9	50°16.9	17°24.9	27°43.2	23°31.3	88°25.3	
22	298°01.3	1.7'	26°55.6	-4.4'	60.8'	107°19.2	53°16.4	49°39.5	16°48.6	28°17.8	23°54.5	89°02.7	
23	312°22.1	1.8'	26°51.3	-4.6'	60.8'	106°41.8	52°39.0	49°02.2	16°12.3	28°52.6	24°18.3	89°40.0	
26 th	SD = 16.6' Mer. pass. 01:13												

DUT1 = UT1-UTC = +0.1189 sec $\Delta T = TT-UT1 = +69.0651$ sec

2026 November 27 to Nov. 29 UT

h	Moon (27 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Spica	-Mars	-Regulus	-Jupiter	+Betelgeuse	+Capella	+Aldebaran	+Saturn
0	326°42.9	1.9'	N26°46.7	-4.8'	60.8'	106°04.4	52°06.9	52°01.5	48°24.9		24°42.5	29°27.4	90°17.3
1	341°03.8	2.0'	26°41.9	-5.0'	60.7'	105°27.0	51°30.5	51°24.1	47°47.6		25°07.3	30°02.4	90°54.6
2	355°24.7	2.1'	26°37.0	-5.2'	60.7'	104°49.6	50°54.2	50°46.7	47°10.3		25°32.5	30°37.3	91°31.8
3	9°45.8	2.1'	26°31.8	-5.4'	60.7'	104°12.3	50°17.8	50°09.3	46°33.1	22°19.3	25°58.2	31°12.4	92°09.1
4	24°06.9	2.2'	26°26.4	-5.6'	60.7'	103°34.9	49°41.5	49°32.0	45°55.8	22°35.6	26°24.2	31°47.5	92°46.3
5	38°28.2	2.3'	26°20.9	-5.7'	60.7'	102°57.6	49°05.2	48°54.6	45°18.6	22°52.6	26°50.7	32°22.7	93°23.5
6	52°49.5	2.4'	N26°15.1	-5.9'	60.7'	102°20.3	48°28.9	48°17.3	44°41.4	23°10.4	27°17.6	32°57.9	94°00.7
7	67°10.9	2.5'	26°09.2	-6.1'	60.7'	101°43.0	47°52.7	47°40.0	44°04.2	23°28.9	27°44.8	33°33.2	94°37.8
8	81°32.4	2.6'	26°03.1	-6.3'	60.6'	101°05.8	47°16.4	47°02.8	43°27.1	23°48.1	28°12.4	34°08.5	95°15.0
9	95°54.0	2.7'	25°56.8	-6.5'	60.6'	100°28.5	46°40.2	46°25.5	42°50.0	24°08.0	28°40.2	34°43.9	95°52.1
10	110°15.7	2.8'	25°50.3	-6.7'	60.6'	99°51.3	46°04.1	45°48.3	42°12.9	24°28.4	29°08.4	35°19.2	96°29.2
11	124°37.6	2.9'	25°43.6	-6.9'	60.6'	99°14.2	45°27.9	45°11.1	41°35.8	24°49.5	29°36.9	35°54.7	97°06.2
12	138°59.5	3.0'	N25°36.7	-7.1'	60.6'	98°37.0	44°51.8	44°33.9	40°58.8	25°11.1	30°05.6	36°30.1	97°43.2
13	153°21.5	3.1'	25°29.6	-7.2'	60.6'	97°59.9	44°15.7	43°56.8	40°21.7	25°33.3	30°34.6	37°05.6	98°20.2
14	167°43.6	3.2'	25°22.4	-7.4'	60.5'	97°22.8	43°39.6	43°19.6	39°44.7	25°56.0	31°03.8	37°41.1	98°57.2
15	182°05.9	3.4'	25°15.0	-7.6'	60.5'	96°45.7	43°03.6	42°42.5	39°07.8	26°19.2	31°33.3	38°16.6	99°34.2
16	196°28.2	3.5'	25°07.4	-7.8'	60.5'	96°08.6	42°27.6	42°05.5	38°30.8	26°42.9	32°03.0	38°52.1	100°11.1
17	210°50.7	3.6'	24°59.6	-7.9'	60.5'	95°31.6	41°51.6	41°28.4	37°53.9	27°07.0	32°32.9	39°27.6	100°48.0
18	225°13.3	3.7'	N24°51.7	-8.1'	60.5'	94°54.6	41°15.6	40°51.4	37°17.0	27°31.5	33°02.9	40°03.2	101°24.9
19	239°36.0	3.8'	24°43.6	-8.3'	60.4'	94°17.7	40°39.7	40°14.4	36°40.2	27°56.4	33°33.2	40°38.8	102°01.7
20	253°58.8	3.9'	24°35.3	-8.4'	60.4'	93°40.7	40°03.8	39°37.5	36°03.2	28°21.7	34°03.6	41°14.3	102°38.5
21	268°21.7	4.1'	24°26.9	-8.6'	60.4'	93°03.8	39°28.0	39°00.6	35°26.5	28°47.4	34°34.2	41°49.9	103°15.3
22	282°44.8	4.2'	24°18.3	-8.8'	60.4'	92°26.9	38°52.1	38°23.7	34°49.7	29°13.4	35°05.0	42°25.5	103°52.1
23	297°08.0	4.3'	24°09.5	-8.9'	60.3'	91°50.1	38°16.3	37°46.8	34°13.0	29°39.8	35°35.9	43°01.1	104°28.8
27 th	SD = 16.6' Mer. pass. 02:19												

h	Moon (28 th Nov)					Lunar Distance (objects with largest hourly LD delta)								
Sat	GHA	ν	Dec	d	HP	-Spica	-Mars	-Regulus	-Jupiter	+Pollux	+Capella	+Aldebaran	+Saturn	
0	311°31.3	4.4'	N24°00.6	-9.1'	60.3'	91°13.3	37°40.6	37°10.0	33°36.3		36°06.9	43°36.6	105°05.5	
1	325°54.7	4.5'	23°51.5	-9.2'	60.3'	90°36.5	37°04.8	36°33.2	32°59.6		36°38.1	44°12.2	105°42.1	
2	340°18.2	4.7'	23°42.3	-9.4'	60.3'	89°59.7	36°29.1	35°56.4	32°23.0		37°09.4	44°47.8	106°18.7	
3	354°41.9	4.8'	23°32.9	-9.5'	60.3'	89°23.0	35°53.5	35°19.6	31°46.3		37°40.8	45°23.4	106°55.3	
4	9°05.7	4.9'	23°23.3	-9.7'	60.2'	88°46.3	35°17.8	34°42.9	31°09.7		38°12.3	45°58.9	107°31.9	
5	23°29.6	5.1'	23°13.6	-9.8'	60.2'	88°09.6	34°42.2	34°06.3	30°33.2		38°43.9	46°34.5	108°08.4	
6	37°53.7	5.2'	N23°03.8	-10.0'	60.2'	87°33.0	34°06.7	33°29.6	29°56.7		39°15.6	47°10.0	108°44.9	
7	52°17.9	5.3'	22°53.8	-10.1'	60.2'	86°56.4	33°31.2	32°53.0	29°20.2		39°47.4	47°45.6	109°21.3	
8	66°42.2	5.4'	22°43.7	-10.3'	60.1'	86°19.8	32°55.7	32°16.4	28°43.7		40°19.3	48°21.1	109°57.8	
9	81°06.6	5.6'	22°33.4	-10.4'	60.1'	85°43.3	32°20.2	31°39.9	28°07.3		40°51.2	48°56.6	110°34.2	
10	95°31.2	5.7'	22°23.0	-10.6'	60.1'	85°06.8	31°44.8	31°03.4	27°30.9		41°23.3	49°32.1	111°10.5	
11	109°55.9	5.8'	22°12.4	-10.7'	60.1'	84°30.3	31°09.5	30°26.9	26°54.6		41°55.4	50°07.6	111°46.8	
12	124°20.7	6.0'	N22°01.7	-10.8'	60.0'	83°53.9	30°34.2	29°50.5	26°18.2	8°14.2	42°27.6	50°43.1	112°23.1	
13	138°45.7	6.1'	21°50.9	-10.9'	60.0'	83°17.5	29°58.9	29°14.0	25°42.0	8°46.0	42°59.8	51°18.5	112°59.3	
14	153°10.8	6.2'	21°40.0	-11.1'	60.0'	82°41.1	29°23.6	28°37.7	25°05.7	9°18.4	43°32.1	51°53.9	113°35.5	
15	167°36.0	6.4'	21°28.9	-11.2'	59.9'	82°04.8	28°48.4	28°01.3	24°29.5	9°51.1	44°04.5	52°29.4	114°11.7	
16	182°01.4	6.5'	21°17.7	-11.3'	59.9'	81°28.5	28°13.3	27°25.1	23°53.3	10°24.3	44°36.9	53°04.7	114°47.8	
17	196°26.9	6.6'	21°06.4	-11.4'	59.9'	80°52.2	27°38.1	26°48.8	23°17.2	10°57.7	45°09.3	53°40.1	115°23.9	
18	210°52.5	6.8'	N20°54.9	-11.6'	59.9'	80°16.0	27°03.1	26°12.6	22°41.1	11°31.4	45°41.8	54°15.5	116°00.0	
19	225°18.2	6.9'	20°43.4	-11.7'	59.8'	79°39.8	26°28.0	25°36.4	22°05.1	12°05.3	46°14.3	54°50.8	116°36.0	
20	239°44.1	7.0'	20°31.7	-11.8'	59.8'	79°03.7	25°53.1	25°00.2	21°29.0	12°39.4	46°46.9	55°26.1	117°12.0	
21	254°10.1	7.1'	20°19.9	-11.9'	59.8'	78°27.6	25°18.1	24°24.1	20°53.0	13°13.6	47°19.5	56°01.4	117°47.9	
22	268°36.3	7.3'	20°07.9	-12.0'	59.8'	77°51.5	24°43.2	23°48.1	20°17.1	13°47.9	47°52.1	56°36.7	118°23.8	
23	283°02.5	7.4'	19°55.9	-12.1'	59.7'	77°15.5	24°08.4	23°12.0	19°41.2	14°22.4	48°24.8	57°11.9	118°59.7	
28 th	SD = 16.5' Mer. pass. 03:22													

h	Moon (29 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Spica	-Mars	-Regulus	-Jupiter	+Pollux	+Betelgeuse	+Capella	+Aldebaran
0	297°28.9	7.5'	N19°43.8	-12.2'	59.7'	76°39.5	23°33.6	22°36.0	19°05.3	14°56.9	41°48.7	48°57.5	57°47.1
1	311°55.5	7.7'	19°31.5	-12.4'	59.7'	76°03.5	22°58.9	22°00.1	18°29.5	15°31.5	42°19.6	49°30.2	58°22.3
2	326°22.1	7.8'	19°19.2	-12.5'	59.6'	75°27.6	22°24.2	21°24.2	17°53.7	16°06.2	42°50.6	50°03.0	58°57.4
3	340°48.9	7.9'	19°06.7	-12.6'	59.6'	74°51.7	21°49.5	20°48.3	17°18.0	16°41.0	43°21.6	50°35.7	59°32.6
4	355°15.8	8.0'	18°54.2	-12.7'	59.6'	74°15.9	21°15.0	20°12.5	16°42.3	17°15.7	43°52.7	51°08.5	60°07.7
5	9°42.9	8.2'	18°41.5	-12.8'	59.5'	73°40.1	20°40.4	19°36.7	16°06.6	17°50.5	44°23.9	51°41.3	60°42.8
6	24°10.0	8.3'	N18°28.8	-12.8'	59.5'	73°04.3	20°06.0	19°00.9	15°31.0	18°25.4	44°55.1	52°14.1	61°17.8
7	38°37.3	8.4'	18°15.9	-12.9'	59.5'	72°28.5	19°31.6	18°25.2	14°55.5	19°00.2	45°26.4	52°46.9	61°52.8
8	53°04.8	8.5'	18°03.0	-13.0'	59.5'	71°52.9	18°57.2	17°49.6	14°19.9	19°35.1	45°57.7	53°19.7	62°27.8
9	67°32.3	8.7'	17°50.0	-13.1'	59.4'	71°17.2	18°22.9	17°13.9	13°44.5	20°10.0	46°29.1	53°52.5	63°02.8
10	82°00.0	8.8'	17°36.8	-13.2'	59.4'	70°41.6	17°48.7	16°38.3	13°09.0	20°44.8	47°00.5	54°25.4	63°37.7
11	96°27.7	8.9'	17°23.6	-13.3'	59.4'	70°06.0	17°14.6	16°02.8	12°33.6	21°19.7	47°32.0	54°58.2	64°12.6
12	110°55.7	9.0'	N17°10.3	-13.4'	59.3'	69°30.5	16°40.5	15°27.3	11°58.3	21°54.6	48°03.5	55°31.0	64°47.5
13	125°23.7	9.1'	16°57.0	-13.5'	59.3'	68°55.0	16°06.5	14°51.9	11°23.0	22°29.5	48°35.0	56°03.9	65°22.3
14	139°51.8	9.3'	16°43.5	-13.5'	59.3'	68°19.5	15°32.6	14°16.5	10°47.8	23°04.4	49°06.6	56°36.7	65°57.1
15	154°20.1	9.4'	16°30.0	-13.6'	59.2'	67°44.1	14°58.8	13°41.1	10°12.6	23°39.2	49°38.2	57°09.5	66°31.9
16	168°48.5	9.5'	16°16.4	-13.7'	59.2'	67°08.7	14°25.0	13°05.8	9°37.5	24°14.1	50°09.8	57°42.4	67°06.6
17	183°17.0	9.6'	16°02.7	-13.8'	59.2'	66°33.4	13°51.4	12°30.5	9°02.5	24°48.9	50°41.5	58°15.2	67°41.3
18	197°45.6	9.7'	N15°48.9	-13.8'	59.1'	65°58.1	13°17.8	11°55.3	8°27.5	25°23.8	51°13.2	58°48.0	68°16.0
19	212°14.3	9.8'	15°35.1	-13.9'	59.1'	65°22.8	12°44.4	11°20.2	7°52.6	25°58.6	51°44.9	59°20.9	68°50.6
20	226°43.2	10.0'	15°21.2	-14.0'	59.1'	64°47.6	12°11.1	10°45.1	7°17.8	26°33.4	52°16.6	59°53.7	69°25.2
21	241°12.2	10.1'	15°07.2	-14.0'	59.1'	64°12.4	11°38.0	10°10.0	6°43.1	27°08.1	52°48.3	60°26.5	69°59.8
22	255°41.2	10.2'	14°53.2	-14.1'	59.0'	63°37.3	11°04.9	9°35.0	6°08.5	27°42.9	53°20.1	60°59.3	70°34.3
23	270°10.4	10.3'	14°39.1	-14.2'	59.0'	63°02.2	10°32.1	9°00.1	5°34.1	28°17.6	53°51.8	61°32.0	71°08.8
29 th	SD = 16.3' Mer. pass. 04:20												

h	Moon (30 th Nov)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Venus	-Spica	\pm Regulus	\pm Jupiter	+Pollux	+Betelgeuse	+Capella	+Aldebaran
0	284°39.7	10.4'	N14°24.9	-14.2'	59.0'	65°39.9	62°27.1	8°25.3	4°59.8	28°52.3	54°23.6	62°04.8	71°43.3
1	299°09.1	10.5'	14°10.7	-14.3'	58.9'	65°06.4	61°52.1	7°50.5	4°25.7	29°27.0	54°55.4	62°37.6	72°17.7
2	313°38.6	10.6'	13°56.4	-14.3'	58.9'	64°32.9	61°17.1	7°15.8	3°51.9	30°01.6	55°27.2	63°10.3	72°52.1
3	328°08.2	10.7'	13°42.1	-14.4'	58.9'	63°59.5	60°42.2	6°41.2	3°18.6	30°36.2	55°59.0	63°43.0	73°26.5
4	342°37.9	10.8'	13°27.7	-14.5'	58.8'	63°26.1	60°07.3	6°06.7	2°45.9	31°10.8	56°30.8	64°15.8	74°00.8
5	357°07.7	10.9'	13°13.2	-14.5'	58.8'	62°52.8	59°32.4	5°32.3		31°45.4	57°02.6	64°48.4	74°35.1
6	11°37.7	11.0'	N12°58.7	-14.6'	58.8'	62°19.5	58°57.6	4°58.2		32°19.9	57°34.4	65°21.1	75°09.4
7	26°07.7	11.1'	12°44.1	-14.6'	58.7'	61°46.3	58°22.8	4°24.2		32°54.4	58°06.3	65°53.8	75°43.6
8	40°37.8	11.2'	12°29.5	-14.7'	58.7'	61°13.1	57°48.1	3°50.5		33°28.9	58°38.1	66°26.4	76°17.8
9	55°08.0	11.3'	12°14.9	-14.7'	58.7'	60°40.0	57°13.4	3°17.2		34°03.4	59°09.9	66°59.1	76°51.9
10	69°38.3	11.4'	12°00.2	-14.7'	58.6'	60°06.9	56°38.7	2°44.6		34°37.8	59°41.7	67°31.7	77°26.0
11	84°08.7	11.5'	11°45.4	-14.8'	58.6'	59°33.9	56°04.1			35°12.2	60°13.5	68°04.2	78°00.1
12	98°39.2	11.6'	N11°30.7	-14.8'	58.6'	59°00.9	55°29.5			35°46.5	60°45.3	68°36.8	78°34.1
13	113°09.8	11.7'	11°15.8	-14.9'	58.5'	58°27.9	54°55.0			36°20.9	61°17.1	69°09.4	79°08.1
14	127°40.5	11.8'	11°01.0	-14.9'	58.5'	57°55.0	54°20.5		3°22.8	36°55.1	61°48.9	69°41.9	79°42.1
15	142°11.3	11.9'	10°46.1	-14.9'	58.5'	57°22.1	53°46.0		3°55.8	37°29.4	62°20.7	70°14.4	80°16.0
16	156°42.1	11.9'	10°31.1	-15.0'	58.4'	56°49.3	53°11.6		4°29.0	38°03.6	62°52.5	70°46.9	80°49.9
17	171°13.1	12.0'	10°16.1	-15.0'	58.4'	56°16.5	52°37.2		5°02.5	38°37.8	63°24.2	71°19.3	81°23.8
18	185°44.1	12.1'	N10°01.1	-15.0'	58.4'	55°43.8	52°02.9		5°36.1	39°12.0	63°56.0	71°51.7	81°57.6
19	200°15.2	12.2'	09°46.1	-15.1'	58.3'	55°11.1	51°28.6		6°09.8	39°46.1	64°27.7	72°24.1	82°31.4
20	214°46.4	12.3'	09°31.0	-15.1'	58.3'	54°38.5	50°54.3	3°21.6	6°43.5	40°20.2	64°59.4	72°56.5	83°05.1
21	229°17.7	12.4'	09°15.9	-15.1'	58.3'	54°05.9	50°20.1	3°54.5	7°17.3	40°54.3	65°31.2	73°28.9	83°38.8
22	243°49.1	12.4'	09°00.8	-15.2'	58.2'	53°33.4	49°45.9	4°27.7	7°51.1	41°28.3	66°02.9	74°01.2	84°12.5
23	258°20.5	12.5'	08°45.6	-15.2'	58.2'	53°00.9	49°11.7	5°01.1	8°24.9	42°02.3	66°34.5	74°33.5	84°46.1
30 th	SD = 16.1' Mer. pass. 05:12												

h	Moon (1 st Dec)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Sun	-Rigel Kent.	-Venus	-Spica	+Regulus	+Jupiter	+Pollux	+Aldebaran
0	272°52.0	12.6'	N08°30.5	-15.2'	58.2'	93°12.7	85°03.6	52°28.4	48°37.6	5°34.6	8°58.7	42°36.2	85°19.7
1	287°23.6	12.7'	08°15.3	-15.2'	58.1'	92°41.2	84°36.7	51°56.0	48°03.6	6°08.2	9°32.5	43°10.2	85°53.3
2	301°55.3	12.7'	08°00.0	-15.2'	58.1'	92°09.8	84°09.7	51°23.7	47°29.6	6°41.8	10°06.3	43°44.1	86°26.8
3	316°27.0	12.8'	07°44.8	-15.3'	58.1'	91°38.4	83°42.8	50°51.3	46°55.6	7°15.5	10°40.1	44°17.9	87°00.3
4	330°58.9	12.9'	07°29.5	-15.3'	58.0'	91°07.1	83°16.0	50°19.1	46°21.6	7°49.2	11°13.8	44°51.7	87°33.8
5	345°30.7	13.0'	07°14.2	-15.3'	58.0'	90°35.8	82°49.2	49°46.9	45°47.7	8°22.9	11°47.6	45°25.5	88°07.2
6	0°02.7	13.0'	N06°58.9	-15.3'	58.0'	90°04.5	82°22.5	49°14.7	45°13.8	8°56.6	12°21.3	45°59.3	88°40.6
7	14°34.7	13.1'	06°43.6	-15.3'	57.9'	89°33.3	81°55.8	48°42.6	44°40.0	9°30.2	12°54.9	46°33.0	89°13.9
8	29°06.8	13.1'	06°28.3	-15.3'	57.9'	89°02.1	81°29.1	48°10.5	44°06.2	10°03.9	13°28.6	47°06.7	89°47.2
9	43°38.9	13.2'	06°12.9	-15.4'	57.9'	88°30.9	81°02.5	47°38.4	43°32.5	10°37.5	14°02.2	47°40.3	90°20.5
10	58°11.1	13.3'	05°57.6	-15.4'	57.9'	87°59.8	80°35.9	47°06.5	42°58.7	11°11.2	14°35.8	48°14.0	90°53.7
11	72°43.4	13.3'	05°42.2	-15.4'	57.8'	87°28.7	80°09.4	46°34.5	42°25.1	11°44.8	15°09.4	48°47.5	91°26.9
12	87°15.8	13.4'	N05°26.8	-15.4'	57.8'	86°57.7	79°43.0	46°02.6	41°51.4	12°18.3	15°42.9	49°21.1	92°00.1
13	101°48.1	13.4'	05°11.4	-15.4'	57.8'	86°26.7	79°16.5	45°30.8	41°17.8	12°51.9	16°16.4	49°54.6	92°33.2
14	116°20.6	13.5'	04°56.1	-15.4'	57.7'	85°55.7	78°50.2	44°59.0	40°44.3	13°25.4	16°49.9	50°28.1	93°06.3
15	130°53.1	13.6'	04°40.7	-15.4'	57.7'	85°24.8	78°23.9	44°27.2	40°10.7	13°58.9	17°23.3	51°01.5	93°39.3
16	145°25.7	13.6'	04°25.3	-15.4'	57.7'	84°53.9	77°57.6	43°55.5	39°37.2	14°32.4	17°56.7	51°34.9	94°12.3
17	159°58.3	13.7'	04°09.9	-15.4'	57.6'	84°23.0	77°31.5	43°23.9	39°03.8	15°05.8	18°30.1	52°08.3	94°45.3
18	174°30.9	13.7'	N03°54.4	-15.4'	57.6'	83°52.2	77°05.3	42°52.2	38°30.4	15°39.2	19°03.4	52°41.7	95°18.2
19	189°03.6	13.8'	03°39.0	-15.4'	57.6'	83°21.4	76°39.2	42°20.7	37°57.0	16°12.6	19°36.7	53°15.0	95°51.1
20	203°36.4	13.8'	03°23.6	-15.4'	57.5'	82°50.6	76°13.2	41°49.2	37°23.7	16°46.0	20°10.0	53°48.3	96°24.0
21	218°09.2	13.9'	03°08.2	-15.4'	57.5'	82°19.9	75°47.3	41°17.7	36°50.4	17°19.3	20°43.2	54°21.5	96°56.8
22	232°42.1	13.9'	02°52.8	-15.4'	57.5'	81°49.2	75°21.4	40°46.3	36°17.1	17°52.5	21°16.4	54°54.7	97°29.6
23	247°15.0	13.9'	02°37.4	-15.4'	57.4'	81°18.5	74°55.5	40°14.9	35°43.9	18°25.8	21°49.6	55°27.9	98°02.4
1 st	SD = 15.9' Mer. pass. 06:00					Sun SD = 16.2'							

h	Moon (2 nd Dec)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Sun	-Rigel Kent.	-Venus	-Spica	+Regulus	+Jupiter	+Pollux	+Aldebaran
0	261°47.9	14.0'	N02°22.0	-15.4'	57.4'	80°47.9	74°29.7	39°43.6	35°10.7	18°59.0	22°22.7	56°01.0	98°35.1
1	276°20.9	14.0'	02°06.6	-15.4'	57.4'	80°17.4	74°04.0	39°12.3	34°37.5	19°32.2	22°55.9	56°34.1	99°07.8
2	290°53.9	14.1'	01°51.3	-15.4'	57.4'	79°46.8	73°38.4	38°41.1	34°04.4	20°05.4	23°28.9	57°07.2	99°40.4
3	305°27.0	14.1'	01°35.9	-15.4'	57.3'	79°16.3	73°12.8	38°09.9	33°31.4	20°38.5	24°02.0	57°40.3	100°13.0
4	320°00.1	14.1'	01°20.5	-15.4'	57.3'	78°45.8	72°47.3	37°38.7	32°58.3	21°11.6	24°35.0	58°13.3	100°45.6
5	334°33.2	14.2'	01°05.2	-15.3'	57.3'	78°15.4	72°21.8	37°07.7	32°25.3	21°44.6	25°08.0	58°46.3	101°18.2
6	349°06.4	14.2'	N00°49.8	-15.3'	57.2'	77°45.0	71°56.4	36°36.6	31°52.3	22°17.7	25°40.9	59°19.2	101°50.7
7	3°39.6	14.2'	00°34.5	-15.3'	57.2'	77°14.6	71°31.1	36°05.7	31°19.4	22°50.6	26°13.8	59°52.1	102°23.1
8	18°12.8	14.3'	00°19.2	-15.3'	57.2'	76°44.3	71°05.9	35°34.7	30°46.5	23°23.6	26°46.7	60°25.0	102°55.6
9	32°46.1	14.3'	N00°03.9	-15.3'	57.1'	76°13.9	70°40.7	35°03.8	30°13.7	23°56.5	27°19.6	60°57.9	103°28.0
10	47°19.4	14.3'	S00°11.4	-15.3'	57.1'	75°43.7	70°15.6	34°33.0	29°40.8	24°29.4	27°52.4	61°30.7	104°00.4
11	61°52.7	14.4'	00°26.7	-15.3'	57.1'	75°13.4	69°50.6	34°02.2	29°08.1	25°02.3	28°25.2	62°03.5	104°32.7
12	76°26.1	14.4'	S00°42.0	-15.2'	57.1'	74°43.2	69°25.6	33°31.5	28°35.3	25°35.1	28°57.9	62°36.2	105°05.0
13	90°59.5	14.4'	00°57.2	-15.2'	57.0'	74°13.1	69°00.7	33°00.9	28°02.6	26°07.9	29°30.7	63°08.9	105°37.2
14	105°32.9	14.4'	01°12.4	-15.2'	57.0'	73°42.9	68°35.9	32°30.2	27°29.9	26°40.7	30°03.3	63°41.6	106°09.5
15	120°06.3	14.4'	01°27.6	-15.2'	57.0'	73°12.8	68°11.2	31°59.7	26°57.3	27°13.5	30°36.0	64°14.3	106°41.7
16	134°39.7	14.5'	01°42.8	-15.2'	56.9'	72°42.7	67°46.5	31°29.2	26°24.7	27°46.2	31°08.6	64°46.9	107°13.8
17	149°13.2	14.5'	01°58.0	-15.1'	56.9'	72°12.7	67°21.9	30°58.7	25°52.1	28°18.9	31°41.2	65°19.5	107°45.9
18	163°46.7	14.5'	S02°13.1	-15.1'	56.9'	71°42.7	66°57.5	30°28.3	25°19.6	28°51.5	32°13.8	65°52.1	108°18.0
19	178°20.2	14.5'	02°28.2	-15.1'	56.8'	71°12.7	66°33.0	29°58.0	24°47.1	29°24.1	32°46.4	66°24.6	108°50.1
20	192°53.7	14.5'	02°43.3	-15.1'	56.8'	70°42.7	66°08.7	29°27.7	24°14.7	29°56.7	33°18.9	66°57.1	109°22.1
21	207°27.3	14.6'	02°58.3	-15.0'	56.8'	70°12.8	65°44.5	28°57.5	23°42.2	30°29.3	33°51.3	67°29.6	109°54.1
22	222°00.8	14.6'	03°13.4	-15.0'	56.8'	69°42.9	65°20.3	28°27.4	23°09.9	31°01.8	34°23.8	68°02.1	110°26.0
23	236°34.4	14.6'	03°28.4	-15.0'	56.7'	69°13.1	64°56.2	27°57.3	22°37.5	31°34.3	34°56.2	68°34.5	110°58.0
2 nd	SD = 15.7' Mer. pass. 06:45					Sun SD = 16.2'							

DUT1 = UT1-UTC = +0.1197 sec ΔT = TT-UT1 = +69.0643 sec

2026 December 03 to Dec. 05 UT

h	Moon (3 rd Dec)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Sun	-Rigil Kent.	-Venus	-Spica	+Regulus	+Jupiter	+Pollux	+Aldebaran
0	251°08.0	14.6'	S03°43.3	-14.9'	56.7'	68°43.3	64°32.2	27°27.2	22°05.2	32°06.8	35°28.6	69°06.9	111°29.8
1	265°41.5	14.6'	03°58.3	-14.9'	56.7'	68°13.5	64°08.3	26°57.3	21°33.0	32°39.2	36°01.0	69°39.2	112°01.7
2	280°15.1	14.6'	04°13.2	-14.9'	56.6'	67°43.7	63°44.5	26°27.4	21°00.8	33°11.6	36°33.3	70°11.6	112°33.5
3	294°48.8	14.6'	04°28.1	-14.8'	56.6'	67°14.0	63°20.8	25°57.6	20°28.6	33°44.0	37°05.6	70°43.9	113°05.3
4	309°22.4	14.6'	04°42.9	-14.8'	56.6'	66°44.3	62°57.2	25°27.8	19°56.4	34°16.3	37°37.9	71°16.1	113°37.0
5	323°56.0	14.6'	04°57.7	-14.8'	56.6'	66°14.6	62°33.7	24°58.1	19°24.3	34°48.6	38°10.1	71°48.4	114°08.7
6	338°29.6	14.6'	S05°12.5	-14.7'	56.5'	65°45.0	62°10.2	24°28.5	18°52.3	35°20.9	38°42.3	72°20.6	114°40.4
7	353°03.2	14.6'	05°27.3	-14.7'	56.5'	65°15.4	61°46.9	23°59.0	18°20.3	35°53.2	39°14.5	72°52.8	115°12.1
8	7°36.9	14.6'	05°42.0	-14.7'	56.5'	64°45.8	61°23.7	23°29.5	17°48.3	36°25.4	39°46.7	73°24.9	115°43.7
9	22°10.5	14.6'	05°56.7	-14.6'	56.5'	64°16.2	61°00.5	23°00.2	17°16.4	36°57.6	40°18.8	73°57.1	116°15.2
10	36°44.1	14.6'	06°11.3	-14.6'	56.4'	63°46.7	60°37.5	22°30.9	16°44.5	37°29.8	40°50.9	74°29.2	116°46.8
11	51°17.7	14.6'	06°25.9	-14.6'	56.4'	63°17.2	60°14.6	22°01.7	16°12.6	38°02.0	41°23.0	75°01.3	117°18.3
12	65°51.4	14.6'	S06°40.4	-14.5'	56.4'	62°47.7	59°51.7	21°32.6	15°40.9	38°34.1	41°55.0	75°33.3	117°49.8
13	80°25.0	14.6'	06°55.0	-14.5'	56.4'	62°18.3	59°29.0	21°03.6	15°09.1	39°06.2	42°27.0	76°05.3	118°21.2
14	94°58.6	14.6'	07°09.4	-14.4'	56.3'	61°48.9	59°06.4	20°34.7	14°37.5	39°38.3	42°59.0	76°37.3	118°52.6
15	109°32.2	14.6'	07°23.9	-14.4'	56.3'	61°19.5	58°43.9	20°05.9	14°05.8	40°10.3	43°31.0	77°09.3	119°24.0
16	124°05.8	14.6'	07°38.3	-14.3'	56.3'	60°50.2	58°21.5	19°37.2	13°34.3	40°42.3	44°02.9	77°41.2	119°55.3
17	138°39.4	14.6'	07°52.6	-14.3'	56.2'	60°20.8	57°59.3	19°08.6	13°02.8	41°14.3	44°34.9	78°13.1	
18	153°13.0	14.6'	S08°06.9	-14.3'	56.2'	59°51.5	57°37.1	18°40.1	12°31.3	41°46.3	45°06.7	78°45.0	
19	167°46.6	14.6'	08°21.1	-14.2'	56.2'	59°22.3	57°15.0	18°11.8	12°00.0	42°18.2	45°38.6	79°16.9	
20	182°20.1	14.6'	08°35.3	-14.2'	56.2'	58°53.0	56°53.1	17°43.6	11°28.7	42°50.1	46°10.4	79°48.7	
21	196°53.7	14.5'	08°49.5	-14.1'	56.1'	58°23.8	56°31.3	17°15.6	10°57.5	43°22.0	46°42.3	80°20.5	
22	211°27.2	14.5'	09°03.6	-14.1'	56.1'	57°54.6	56°09.6	16°47.7	10°26.4	43°53.9	47°14.0	80°52.3	
23	226°00.7	14.5'	09°17.7	-14.0'	56.1'	57°25.5	55°48.1	16°20.0	9°55.4	44°25.7	47°45.8	81°24.1	
3 rd	SD = 15.5' Mer. pass. 07:29					Sun SD = 16.2'							

h	Moon (4 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Sun	-Rigil Kent.	-Venus	-Spica	+Mars	+Regulus	+Jupiter	+Pollux
0	240°34.2	14.5'	S09°31.7	-14.0'	56.1'	56°56.3	55°26.6	15°52.5	9°24.6	42°24.7	44°57.5	48°17.5	81°55.8
1	255°07.7	14.5'	09°45.6	-13.9'	56.0'	56°27.2	55°05.3	15°25.1	8°53.8	42°55.5	45°29.3	48°49.2	82°27.5
2	269°41.2	14.5'	09°59.5	-13.9'	56.0'	55°58.2	54°44.2	14°58.0	8°23.3	43°26.3	46°01.0	49°20.9	82°59.2
3	284°14.7	14.4'	10°13.4	-13.8'	56.0'	55°29.1	54°23.1	14°31.0	7°52.9	43°57.1	46°32.8	49°52.6	83°30.8
4	298°48.1	14.4'	10°27.2	-13.7'	56.0'	55°00.1	54°02.2	14°04.4	7°22.7	44°27.8	47°04.5	50°24.2	84°02.5
5	313°21.5	14.4'	10°40.9	-13.7'	56.0'	54°31.1	53°41.5	13°37.9	6°52.7	44°58.5	47°36.1	50°55.8	84°34.1
6	327°54.9	14.4'	S10°54.6	-13.6'	55.9'	54°02.1	53°20.8	13°11.8	6°23.1	45°29.3	48°07.8	51°27.4	85°05.7
7	342°28.3	14.3'	11°08.3	-13.6'	55.9'	53°33.2	53°00.3	12°45.9	5°53.8	45°59.9	48°39.4	51°59.0	85°37.2
8	357°01.6	14.3'	11°21.8	-13.5'	55.9'	53°04.2	52°40.0	12°20.4	5°25.0	46°30.6	49°11.1	52°30.5	86°08.8
9	11°34.9	14.3'	11°35.4	-13.5'	55.9'	52°35.3	52°19.8	11°55.3	4°56.8	47°01.3	49°42.6	53°02.1	86°40.3
10	26°08.2	14.3'	11°48.8	-13.4'	55.8'	52°06.5	51°59.7	11°30.6	4°29.4	47°31.9	50°14.2	53°33.5	87°11.8
11	40°41.5	14.2'	12°02.2	-13.3'	55.8'	51°37.6	51°39.8	11°06.3		48°02.5	50°45.7	54°05.0	87°43.2
12	55°14.8	14.2'	S12°15.6	-13.3'	55.8'	51°08.8	51°20.1	10°42.5		48°33.1	51°17.3	54°36.5	88°14.7
13	69°48.0	14.2'	12°28.8	-13.2'	55.8'	50°40.0	51°00.5	10°19.3		49°03.6	51°48.8	55°07.9	88°46.1
14	84°21.2	14.2'	12°42.0	-13.1'	55.7'	50°11.2	50°41.1	9°56.6		49°34.1	52°20.2	55°39.3	89°17.5
15	98°54.3	14.1'	12°55.2	-13.1'	55.7'	49°42.5	50°21.8	9°34.7		50°04.7	52°51.7	56°10.7	89°48.9
16	113°27.5	14.1'	13°08.3	-13.0'	55.7'	49°13.8	50°02.7	9°13.5		50°35.2	53°23.1	56°42.0	90°20.2
17	128°00.6	14.1'	13°21.3	-13.0'	55.7'	48°45.1	49°43.8	8°53.1		51°05.6	53°54.5	57°13.4	90°51.5
18	142°33.6	14.0'	S13°34.3	-12.9'	55.7'	48°16.4	49°25.0	8°33.7		51°36.1	54°25.9	57°44.7	91°22.9
19	157°06.6	14.0'	13°47.1	-12.8'	55.6'	47°47.8	49°06.4			52°06.5	54°57.2	58°16.0	91°54.1
20	171°39.6	14.0'	14°00.0	-12.8'	55.6'	47°19.1	48°48.0			52°36.9	55°28.6	58°47.2	92°25.4
21	186°12.6	13.9'	14°12.7	-12.7'	55.6'	46°50.5	48°29.7			53°07.3	55°59.9	59°18.5	92°56.6
22	200°45.5	13.9'	14°25.4	-12.6'	55.6'	46°22.0	48°11.6			53°37.7	56°31.2	59°49.7	93°27.9
23	215°18.4	13.9'	14°38.0	-12.5'	55.5'	45°53.4	47°53.8			54°08.0	57°02.5	60°20.9	93°59.1
4 th	SD = 15.3' Mer. pass. 08:12					Sun SD = 16.2'							

h	Moon (5 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Rigil Kent.	-Sun	+Spica	+Mars	+Regulus	+Jupiter	+Procyon	+Pollux
0	229°51.3	13.8'	S14°50.5	-12.5'	55.5'	47°36.1	45°24.9		54°38.4	57°33.7	60°52.1	90°08.3	94°30.2
1	244°24.1	13.8'	15°03.0	-12.4'	55.5'	47°18.5	44°56.4		55°08.7	58°04.9	61°23.3	90°37.9	95°01.4
2	258°56.9	13.7'	15°15.4	-12.3'	55.5'	47°01.2	44°27.9	5°05.5	55°39.0	58°36.2	61°54.4	91°07.6	95°32.5
3	273°29.6	13.7'	15°27.7	-12.2'	55.5'	46°44.1	43°59.4	5°33.5	56°09.3	59°07.3	62°25.6	91°37.2	96°03.6
4	288°02.3	13.7'	15°40.0	-12.2'	55.4'	46°27.2	43°31.0	6°02.0	56°39.5	59°38.5	62°56.7	92°06.8	96°34.7
5	302°35.0	13.6'	15°52.2	-12.1'	55.4'	46°10.5	43°02.6	6°31.0	57°09.8	60°09.7	63°27.8	92°36.4	97°05.8
6	317°07.6	13.6'	S16°04.3	-12.0'	55.4'	45°53.9	42°34.2	7°00.2	57°40.0	60°40.8	63°58.8	93°05.9	97°36.9
7	331°40.2	13.5'	16°16.3	-11.9'	55.4'	45°37.6	42°05.8	7°29.6	58°10.2	61°11.9	64°29.9	93°35.5	98°07.9
8	346°12.7	13.5'	16°28.2	-11.9'	55.4'	45°21.5	41°37.5	7°59.3	58°40.4	61°43.0	65°00.9	94°05.0	98°38.9
9	0°45.2	13.5'	16°40.1	-11.8'	55.3'	45°05.7	41°09.2	8°29.1	59°10.5	62°14.1	65°31.9	94°34.5	99°09.9
10	15°17.7	13.4'	16°51.9	-11.7'	55.3'	44°50.0	40°40.9	8°59.0	59°40.7	62°45.1	66°02.9	95°03.9	99°40.9
11	29°50.1	13.4'	17°03.6	-11.6'	55.3'	44°34.5	40°12.6	9°29.0	60°10.8	63°16.1	66°33.9	95°33.4	100°11.8
12	44°22.5	13.3'	S17°15.2	-11.5'	55.3'	44°19.3		9°59.1	60°40.9	63°47.2	67°04.8	96°02.8	100°42.8
13	58°54.8	13.3'	17°26.7	-11.5'	55.3'			10°29.3	61°11.0	64°18.1	67°35.8	96°32.3	101°13.7
14	73°27.1	13.2'	17°38.2	-11.4'	55.2'			10°59.5	61°41.1	64°49.1	68°06.7	97°01.6	101°44.6
15	87°59.3	13.2'	17°49.6	-11.3'	55.2'			11°29.8	62°11.1	65°20.1	68°37.6	97°31.0	102°15.4
16	102°31.5	13.1'	18°00.8	-11.2'	55.2'			12°00.1	62°41.1	65°51.0	69°08.4	98°00.4	102°46.3
17	117°03.6	13.1'	18°12.0	-11.1'	55.2'			12°30.5	63°11.2	66°21.9	69°39.3	98°29.7	103°17.1
18	131°35.7	13.0'	S18°23.2	-11.0'	55.2'			13°00.9	63°41.2	66°52.8	70°10.1	98°59.0	103°48.0
19	146°07.7	13.0'	18°34.2	-10.9'	55.1'			13°31.3	64°11.2	67°23.7	70°41.0	99°28.3	104°18.8
20	160°39.7	12.9'	18°45.1	-10.9'	55.1'			14°01.7	64°41.1	67°54.6	71°11.8	99°57.6	104°49.6
21	175°11.7	12.9'	18°56.0	-10.8'	55.1'			14°32.1	65°11.1	68°25.4	71°42.6	100°26.8	105°20.3
22	189°43.6	12.8'	19°06.7	-10.7'	55.1'			15°02.6	65°41.0	68°56.3	72°13.3	100°56.0	105°51.1
23	204°15.4	12.8'	19°17.4	-10.6'	55.1'			15°33.0	66°10.9	69°27.1	72°44.1	101°25.2	106°21.8
5 th	SD = 15.1'					Sun SD = 16.2'							
	Mer. pass. 08:57												

DUT1 = UT1-UTC = +0.1200 sec $\Delta T = TT-UT1 = +69.0640$ sec

2026 December 06 to Dec. 08 UT

h	Moon (6 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	+Venus	+Spica	+Mars	+Regulus	+Jupiter	+Procyon	+Sirius	+Pollux
0	218°47.2	12.8'	S19°28.0	-10.5'	55.1'	11°20.1	16°03.5	66°40.8	69°57.9	73°14.8	101°54.4	106°05.5	106°52.5
1	233°19.0	12.7'	19°38.5	-10.4'	55.0'	11°43.9	16°33.9	67°10.7	70°28.6	73°45.6	102°23.6	106°27.3	107°23.2
2	247°50.7	12.7'	19°48.9	-10.3'	55.0'	12°08.1	17°04.4	67°40.6	70°59.4	74°16.3	102°52.7	106°49.1	107°53.9
3	262°22.3	12.6'	19°59.2	-10.2'	55.0'	12°32.6	17°34.8	68°10.4	71°30.1	74°46.9	103°21.8	107°10.8	108°24.5
4	276°53.9	12.6'	20°09.4	-10.1'	55.0'	12°57.4	18°05.3	68°40.3	72°00.9	75°17.6	103°50.9	107°32.4	108°55.2
5	291°25.5	12.5'	20°19.5	-10.0'	55.0'	13°22.4	18°35.8	69°10.1	72°31.6	75°48.3	104°20.0	107°54.0	109°25.8
6	305°57.0	12.4'	S20°29.5	-9.9'	55.0'	13°47.7	19°06.2	69°39.9	73°02.3	76°18.9	104°49.0	108°15.6	109°56.4
7	320°28.4	12.4'	20°39.4	-9.8'	54.9'	14°13.2	19°36.7	70°09.7	73°32.9	76°49.5	105°18.0	108°37.0	110°27.0
8	334°59.8	12.3'	20°49.2	-9.7'	54.9'	14°39.0	20°07.1	70°39.5	74°03.6	77°20.1	105°47.0	108°58.4	110°57.6
9	349°31.2	12.3'	20°59.0	-9.6'	54.9'	15°04.8	20°37.6	71°09.2	74°34.3	77°50.7	106°16.0	109°19.8	111°28.1
10	4°02.5	12.2'	21°08.6	-9.5'	54.9'	15°30.9	21°08.0	71°39.0	75°04.9	78°21.3	106°45.0	109°41.1	111°58.7
11	18°33.7	12.2'	21°18.1	-9.4'	54.9'	15°57.1	21°38.4	72°08.7	75°35.5	78°51.9	107°13.9	110°02.3	112°29.2
12	33°04.9	12.1'	S21°27.5	-9.3'	54.9'	16°23.4	22°08.8	72°38.4	76°06.1	79°22.4	107°42.8	110°23.5	112°59.7
13	47°36.1	12.1'	21°36.8	-9.2'	54.8'	16°49.8	22°39.2	73°08.1	76°36.7	79°52.9	108°11.7	110°44.6	113°30.2
14	62°07.2	12.0'	21°46.0	-9.1'	54.8'	17°16.4	23°09.6	73°37.8	77°07.2	80°23.5	108°40.5	111°05.7	114°00.7
15	76°38.2	12.0'	21°55.2	-9.0'	54.8'	17°43.0	23°40.0	74°07.5	77°37.8	80°54.0	109°09.3	111°26.7	114°31.1
16	91°09.2	11.9'	22°04.2	-8.9'	54.8'	18°09.8	24°10.4	74°37.1	78°08.3	81°24.4	109°38.2	111°47.6	115°01.6
17	105°40.1	11.9'	22°13.1	-8.8'	54.8'	18°36.6	24°40.8	75°06.8	78°38.8	81°54.9	110°06.9	112°08.4	115°32.0
18	120°11.0	11.8'	S22°21.8	-8.7'	54.8'	19°03.5	25°11.2	75°36.4	79°09.4	82°25.4	110°35.7	112°29.2	116°02.4
19	134°41.8	11.8'	22°30.5	-8.6'	54.7'	19°30.5	25°41.5	76°06.0	79°39.8	82°55.8	111°04.4	112°49.9	116°32.8
20	149°12.6	11.7'	22°39.1	-8.5'	54.7'	19°57.5	26°11.9	76°35.6	80°10.3	83°26.2	111°33.1	113°10.5	117°03.2
21	163°43.4	11.7'	22°47.6	-8.4'	54.7'	20°24.6	26°42.2	77°05.2	80°40.8	83°56.6	112°01.8	113°31.1	117°33.5
22	178°14.0	11.6'	22°55.9	-8.3'	54.7'	20°51.8	27°12.6	77°34.8	81°11.2	84°27.0	112°30.5	113°51.6	118°03.9
23	192°44.7	11.6'	23°04.2	-8.1'	54.7'	21°19.0	27°42.9	78°04.3	81°41.7	84°57.4	112°59.1	114°12.0	118°34.2
6 th	SD = 15.0'					Mer. pass. 09:43							

Moon (7 th Dec)						Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	+Venus	+Spica	+Arcturus	+Mars	+Regulus	+Jupiter	+Procyon	+Sirius
0	207°15.3	11.5'	S23°12.3	-8.0'	54.7'	21°46.2	28°13.2	44°29.7	78°33.9	82°12.1	85°27.8	113°27.7	114°32.3
1	221°45.8	11.5'	23°20.4	-7.9'	54.7'	22°13.5	28°43.5	44°47.2	79°03.4	82°42.5	85°58.1	113°56.3	114°52.6
2	236°16.3	11.4'	23°28.3	-7.8'	54.6'	22°40.8	29°13.8	45°04.8	79°32.9	83°12.9	86°28.5	114°24.8	115°12.8
3	250°46.7	11.4'	23°36.1	-7.7'	54.6'	23°08.2	29°44.0	45°22.7	80°02.4	83°43.2	86°58.8	114°53.3	115°32.9
4	265°17.1	11.3'	23°43.8	-7.6'	54.6'	23°35.6	30°14.3	45°40.6	80°31.9	84°13.6	87°29.1	115°21.8	115°52.9
5	279°47.5	11.3'	23°51.3	-7.5'	54.6'	24°03.0	30°44.6	45°58.8	81°01.4	84°44.0	87°59.4	115°50.3	116°12.9
6	294°17.7	11.2'	S23°58.8	-7.3'	54.6'	24°30.5	31°14.8	46°17.1	81°30.9	85°14.3	88°29.7	116°18.7	116°32.7
7	308°48.0	11.2'	24°06.1	-7.2'	54.6'	24°57.9	31°45.0	46°35.6	82°00.3	85°44.6	89°00.0	116°47.1	116°52.5
8	323°18.2	11.2'	24°13.4	-7.1'	54.6'	25°25.4	32°15.3	46°54.2	82°29.8	86°14.9	89°30.3	117°15.5	117°12.2
9	337°48.3	11.1'	24°20.5	-7.0'	54.5'	25°52.9	32°45.5	47°12.9	82°59.2	86°45.2	90°00.5	117°43.8	117°31.8
10	352°18.4	11.1'	24°27.5	-6.9'	54.5'	26°20.5	33°15.7	47°31.8	83°28.6	87°15.5	90°30.7	118°12.2	117°51.3
11	6°48.5	11.0'	24°34.4	-6.8'	54.5'	26°48.0	33°45.9	47°50.9	83°58.0	87°45.8	91°01.0	118°40.5	118°10.7
12	21°18.5	11.0'	S24°41.1	-6.6'	54.5'	27°15.6	34°16.0	48°10.0	84°27.4	88°16.0	91°31.2	119°08.7	118°30.0
13	35°48.5	10.9'	24°47.8	-6.5'	54.5'	27°43.2	34°46.2	48°29.3	84°56.8	88°46.3	92°01.4	119°36.9	118°49.3
14	50°18.4	10.9'	24°54.3	-6.4'	54.5'	28°10.8	35°16.4	48°48.8	85°26.2	89°16.5	92°31.6		119°08.4
15	64°48.3	10.8'	25°00.7	-6.3'	54.5'	28°38.4	35°46.5	49°08.3	85°55.5	89°46.7	93°01.7		119°27.4
16	79°18.1	10.8'	25°06.9	-6.2'	54.5'	29°06.0	36°16.7	49°28.0	86°24.9	90°16.9	93°31.9		119°46.4
17	93°47.9	10.8'	25°13.1	-6.0'	54.4'	29°33.6	36°46.8	49°47.8	86°54.2	90°47.1	94°02.0		
18	108°17.7	10.7'	S25°19.1	-5.9'	54.4'	30°01.3	37°16.9	50°07.8	87°23.5	91°17.3	94°32.2		
19	122°47.4	10.7'	25°25.0	-5.8'	54.4'	30°28.9	37°47.0	50°27.8	87°52.8	91°47.5	95°02.3		
20	137°17.1	10.6'	25°30.8	-5.7'	54.4'	30°56.6	38°17.1	50°48.0	88°22.1	92°17.6	95°32.4		
21	151°46.7	10.6'	25°36.5	-5.5'	54.4'	31°24.2	38°47.2	51°08.2	88°51.4	92°47.8	96°02.5		
22	166°16.3	10.6'	25°42.0	-5.4'	54.4'	31°51.9	39°17.3	51°28.6	89°20.7	93°17.9	96°32.6		
23	180°45.9	10.5'	25°47.4	-5.3'	54.4'	32°19.6	39°47.3	51°49.1	89°50.0	93°48.0	97°02.7		
7 th	SD = 14.9'					Mer. pass. 10:32							

h	Moon (8 th Dec)					Lunar Distance (objects with largest hourly LD delta)						
Tue	GHA	ν	Dec	d	HP	+Venus	+Spica	+Arcturus	+Mars	+Regulus	+Jupiter	+Adhara
0	195°15.4	10.5'	S25°52.7	-5.2'	54.4'	32°47.2	40°17.4	52°09.7	90°19.2	94°18.1	97°32.8	111°05.7
1	209°44.9	10.5'	25°57.8	-5.0'	54.3'	33°14.9	40°47.4	52°30.4	90°48.4	94°48.2	98°02.8	111°20.8
2	224°14.3	10.4'	26°02.9	-4.9'	54.3'	33°42.6	41°17.5	52°51.2	91°17.7	95°18.3	98°32.9	
3	238°43.8	10.4'	26°07.8	-4.8'	54.3'	34°10.2	41°47.5	53°12.0	91°46.9	95°48.4	99°02.9	
4	253°13.2	10.4'	26°12.5	-4.6'	54.3'	34°37.9	42°17.5	53°33.0	92°16.1	96°18.4	99°32.9	
5	267°42.5	10.3'	26°17.2	-4.5'	54.3'	35°05.6	42°47.5	53°54.1	92°45.3	96°48.5	100°02.9	
6	282°11.8	10.3'	S26°21.7	-4.4'	54.3'				New Moon			
7	296°41.1	10.3'	26°26.1	-4.3'	54.3'				New Moon			
8	311°10.4	10.2'	26°30.3	-4.1'	54.3'				New Moon			
9	325°39.6	10.2'	26°34.5	-4.0'	54.3'				New Moon			
10	340°08.8	10.2'	26°38.5	-3.9'	54.3'				New Moon			
11	354°38.0	10.2'	26°42.3	-3.7'	54.2'				New Moon			
12	9°07.1	10.1'	S26°46.1	-3.6'	54.2'				New Moon			
13	23°36.3	10.1'	26°49.7	-3.5'	54.2'				New Moon			
14	38°05.4	10.1'	26°53.1	-3.3'	54.2'				New Moon			
15	52°34.5	10.1'	26°56.5	-3.2'	54.2'				New Moon			
16	67°03.5	10.0'	26°59.7	-3.1'	54.2'				New Moon			
17	81°32.6	10.0'	27°02.7	-2.9'	54.2'				New Moon			
18	96°01.6	10.0'	S27°05.7	-2.8'	54.2'				New Moon			
19	110°30.6	10.0'	27°08.5	-2.7'	54.2'				New Moon			
20	124°59.6	10.0'	27°11.2	-2.5'	54.2'				New Moon			
21	139°28.6	10.0'	27°13.7	-2.4'	54.1'				New Moon			
22	153°57.5	9.9'	27°16.1	-2.3'	54.1'				New Moon			
23	168°26.5	9.9'	27°18.4	-2.1'	54.1'				New Moon			
8 th	SD = 14.8'					Mer. pass. 11:22						

DUT1 = UT1-UTC = +0.1204 sec $\Delta T = TT-UT1 = +69.0636$ sec

2026 December 09 to Dec. 11 UT

h Moon (9 th Dec)						Lunar Distance			
Wed	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair
0	182°55.4	9.9'	S27°20.5	-2.0'	54.1'	_____	New Moon	_____	_____
1	197°24.3	9.9'	27°22.5	-1.9'	54.1'	_____	New Moon	_____	_____
2	211°53.2	9.9'	27°24.4	-1.7'	54.1'	_____	New Moon	_____	_____
3	226°22.1	9.9'	27°26.1	-1.6'	54.1'	_____	New Moon	_____	_____
4	240°51.0	9.9'	27°27.7	-1.5'	54.1'	_____	New Moon	_____	_____
5	255°19.9	9.9'	27°29.2	-1.3'	54.1'	_____	New Moon	_____	_____
6	269°48.8	9.9'	S27°30.5	-1.2'	54.1'	_____	New Moon	_____	_____
7	284°17.7	9.9'	27°31.7	-1.1'	54.1'	_____	New Moon	_____	_____
8	298°46.6	9.9'	27°32.7	-0.9'	54.1'	_____	New Moon	_____	_____
9	313°15.5	9.9'	27°33.7	-0.8'	54.1'	_____	New Moon	_____	_____
10	327°44.3	9.9'	27°34.5	-0.7'	54.0'	_____	New Moon	_____	_____
11	342°13.2	9.9'	27°35.1	-0.5'	54.0'	_____	New Moon	_____	_____
12	356°42.1	9.9'	S27°35.6	-0.4'	54.0'	_____	New Moon	_____	_____
13	11°11.0	9.9'	27°36.0	-0.2'	54.0'	_____	New Moon	_____	_____
14	25°39.9	9.9'	27°36.2	-0.1'	54.0'	_____	New Moon	_____	_____
15	40°08.8	9.9'	27°36.4	0.0'	54.0'	_____	New Moon	_____	_____
16	54°37.7	9.9'	27°36.3	0.2'	54.0'	_____	New Moon	_____	_____
17	69°06.6	9.9'	27°36.2	0.3'	54.0'	_____	New Moon	_____	_____
18	83°35.6	9.9'	S27°35.9	0.4'	54.0'	_____	New Moon	_____	_____
19	98°04.5	10.0'	27°35.4	0.6'	54.0'	_____	New Moon	_____	_____
20	112°33.5	10.0'	27°34.9	0.7'	54.0'	_____	New Moon	_____	_____
21	127°02.4	10.0'	27°34.2	0.8'	54.0'	100°44.7	83°12.0	67°19.7	47°32.1
22	141°31.4	10.0'	27°33.4	1.0'	54.0'	100°15.2	82°56.8	66°52.6	47°10.9
23	156°00.4	10.0'	27°32.4	1.1'	54.0'	99°45.7	82°41.6	66°25.5	46°49.8
9 th	SD = 14.8' Mer. pass. 12:14								

h Moon (10 th Dec)						Lunar Distance			
Thu	GHA	ν	Dec	d	HP	-Saturn	-Deneb	-Fomalhaut	-Altair
0	170°29.4	10.0'	S27°31.3	1.2'	54.0'	99°16.2	82°26.4	65°58.5	46°28.8
1	184°58.5	10.1'	27°30.1	1.4'	54.0'	98°46.7	82°11.2	65°31.4	46°07.9
2	199°27.5	10.1'	27°28.7	1.5'	54.0'	98°17.2	81°56.1	65°04.4	45°47.2
3	213°56.6	10.1'	27°27.2	1.6'	53.9'	97°47.7	81°41.0	64°37.4	45°26.6
4	228°25.7	10.1'	27°25.6	1.8'	53.9'	97°18.2	81°25.9	64°10.5	45°06.2
5	242°54.9	10.2'	27°23.8	1.9'	53.9'	96°48.8	81°10.9	63°43.6	44°45.8
6	257°24.0	10.2'	S27°21.9	2.0'	53.9'	96°19.3	80°55.8	63°16.7	44°25.7
7	271°53.2	10.2'	27°19.9	2.2'	53.9'	95°49.8		62°49.8	44°05.6
8	286°22.4	10.2'	27°17.7	2.3'	53.9'	95°20.4		62°22.9	43°45.8
9	300°51.6	10.3'	27°15.4	2.4'	53.9'	94°50.9		61°56.1	43°26.0
10	315°20.9	10.3'	27°13.0	2.6'	53.9'	94°21.4		61°29.3	43°06.4
11	329°50.2	10.3'	27°10.4	2.7'	53.9'	93°52.0		61°02.6	42°47.0
12	344°19.5	10.4'	S27°07.8	2.8'	53.9'	93°22.6		60°35.9	42°27.8
13	358°48.9	10.4'	27°05.0	2.9'	53.9'	92°53.1		60°09.2	42°08.7
14	13°18.3	10.4'	27°02.0	3.1'	53.9'	92°23.7		59°42.5	41°49.7
15	27°47.7	10.5'	26°59.0	3.2'	53.9'	91°54.3		59°15.9	41°31.0
16	42°17.1	10.5'	26°55.8	3.3'	53.9'	91°24.9		58°49.3	41°12.4
17	56°46.6	10.5'	26°52.4	3.5'	53.9'	90°55.4		58°22.7	40°54.0
18	71°16.2	10.6'	S26°49.0	3.6'	53.9'	90°26.0		57°56.2	40°35.8
19	85°45.7	10.6'	26°45.4	3.7'	53.9'	89°56.6		57°29.7	40°17.7
20	100°15.4	10.7'	26°41.7	3.8'	53.9'	89°27.2		57°03.3	39°59.9
21	114°45.0	10.7'	26°37.9	4.0'	53.9'	88°57.8		56°36.8	39°42.2
22	129°14.7	10.7'	26°33.9	4.1'	53.9'	88°28.4		56°10.5	39°24.8
23	143°44.4	10.8'	26°29.8	4.2'	53.9'	87°59.0		55°44.1	39°07.6
10 th	SD = 14.7' Mer. pass. 13:05								

h Moon (11 th Dec)						Lunar Distance		
Fri	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	-Altair
0	158°14.2	10.8'	S26°25.6	4.3'	53.9'	87°29.6	55°17.8	38°50.5
1	172°44.1	10.9'	26°21.3	4.5'	53.9'	87°00.2	54°51.5	38°33.7
2	187°13.9	10.9'	26°16.8	4.6'	53.9'	86°30.9	54°25.3	38°17.1
3	201°43.8	11.0'	26°12.3	4.7'	53.9'	86°01.5	53°59.1	38°00.7
4	216°13.8	11.0'	26°07.6	4.8'	53.9'	85°32.1	53°33.0	37°44.6
5	230°43.8	11.1'	26°02.8	4.9'	53.9'	85°02.7	53°06.9	37°28.7
6	245°13.9	11.1'	S25°57.8	5.1'	53.9'	84°33.4	52°40.8	37°13.0
7	259°44.0	11.2'	25°52.8	5.2'	53.9'	84°04.0	52°14.8	36°57.6
8	274°14.1	11.2'	25°47.6	5.3'	53.9'	83°34.6	51°48.9	36°42.4
9	288°44.3	11.3'	25°42.3	5.4'	53.9'	83°05.3	51°23.0	
10	303°14.6	11.3'	25°36.9	5.5'	53.9'	82°35.9	50°57.1	
11	317°44.9	11.4'	25°31.3	5.6'	53.9'	82°06.5	50°31.3	
12	332°15.2	11.4'	S25°25.7	5.8'	53.9'	81°37.2	50°05.5	
13	346°45.6	11.5'	25°19.9	5.9'	53.9'	81°07.8	49°39.8	
14	1°16.1	11.5'	25°14.1	6.0'	53.9'	80°38.5	49°14.2	
15	15°46.6	11.6'	25°08.1	6.1'	53.9'	80°09.1	48°48.6	
16	30°17.2	11.6'	25°01.9	6.2'	53.9'	79°39.8	48°23.0	
17	44°47.8	11.7'	24°55.7	6.3'	53.9'	79°10.4	47°57.5	
18	59°18.5	11.7'	S24°49.4	6.4'	53.9'	78°41.1	47°32.1	
19	73°49.2	11.8'	24°42.9	6.6'	53.9'	78°11.7	47°06.7	
20	88°20.0	11.8'	24°36.4	6.7'	53.9'	77°42.4	46°41.4	
21	102°50.8	11.9'	24°29.7	6.8'	53.9'	77°13.0	46°16.2	
22	117°21.7	12.0'	24°22.9	6.9'	53.9'	76°43.7	45°51.0	
23	131°52.7	12.0'	24°16.0	7.0'	53.9'	76°14.4	45°25.9	
11 th	SD = 14.7' Mer. pass. 13:55							

DUT1 = UT1-UTC = +0.1207 sec $\Delta T = TT-UT1 = +69.0633$ sec

2026 December 12 to Dec. 14 UT

h Moon (12 th Dec)						Lunar Distance		
Sat	GHA	ν	Dec	d	HP	-Saturn	-Fomalhaut	+Sun
0	146°23.7	12.1'	S24°09.0	7.1'	53.9'	75°45.0	45°00.8	
1	160°54.7	12.1'	24°01.9	7.2'	53.9'	75°15.7	44°35.9	
2	175°25.9	12.2'	23°54.7	7.3'	53.9'	74°46.3	44°11.0	
3	189°57.0	12.2'	23°47.4	7.4'	53.9'	74°17.0	43°46.2	
4	204°28.3	12.3'	23°40.0	7.5'	53.9'	73°47.6	43°21.4	
5	218°59.6	12.4'	23°32.4	7.6'	53.9'	73°18.3	42°56.8	
6	233°30.9	12.4'	S23°24.8	7.7'	53.9'	72°48.9	42°32.2	
7	248°02.3	12.5'	23°17.1	7.8'	53.9'	72°19.6	42°07.7	
8	262°33.8	12.5'	23°09.2	7.9'	53.9'	71°50.2	41°43.3	
9	277°05.3	12.6'	23°01.3	8.0'	53.9'	71°20.9	41°18.9	
10	291°36.9	12.6'	22°53.2	8.1'	54.0'	70°51.5	40°54.7	
11	306°08.6	12.7'	22°45.1	8.2'	54.0'	70°22.2	40°30.6	
12	320°40.3	12.8'	S22°36.9	8.3'	54.0'	69°52.8	40°06.5	
13	335°12.0	12.8'	22°28.5	8.4'	54.0'	69°23.5	39°42.6	
14	349°43.9	12.9'	22°20.1	8.5'	54.0'	68°54.1	39°18.8	
15	4°15.7	12.9'	22°11.5	8.6'	54.0'	68°24.8	38°55.0	
16	18°47.7	13.0'	22°02.9	8.7'	54.0'	67°55.4	38°31.4	
17	33°19.7	13.1'	21°54.2	8.8'	54.0'	67°26.0	38°07.9	
18	47°51.7	13.1'	S21°45.3	8.9'	54.0'	66°56.7	37°44.5	40°15.0
19	62°23.8	13.2'	21°36.4	9.0'	54.0'	66°27.3	37°21.3	40°41.9
20	76°56.0	13.2'	21°27.4	9.1'	54.0'	65°57.9	36°58.1	41°08.7
21	91°28.2	13.3'	21°18.3	9.2'	54.0'	65°28.5	36°35.1	41°35.5
22	106°00.5	13.3'	21°09.1	9.3'	54.0'	64°59.1	36°12.2	42°02.4
23	120°32.8	13.4'	20°59.8	9.4'	54.0'	64°29.8	35°49.5	42°29.3
12 th	SD = 14.7'		Mer. pass. 14:42			Sun SD = 16.2'		

h Moon (13 th Dec)						Lunar Distance (objects with largest hourly LD delta)				
Sun	GHA	ν	Dec	d	HP	-Rigel	-Aldebaran	-Saturn	-Fomalhaut	+Sun
0	135°05.2	13.5'	S20°50.4	9.5'	54.0'			64°00.4	35°26.9	42°56.2
1	149°37.7	13.5'	20°41.0	9.6'	54.1'			63°31.0	35°04.4	43°23.0
2	164°10.2	13.6'	20°31.4	9.6'	54.1'			63°01.6	34°42.1	43°49.9
3	178°42.7	13.6'	20°21.8	9.7'	54.1'			62°32.2	34°20.0	44°16.8
4	193°15.4	13.7'	20°12.0	9.8'	54.1'			62°02.8	33°58.0	44°43.8
5	207°48.0	13.7'	20°02.2	9.9'	54.1'			61°33.3	33°36.2	45°10.7
6	222°20.8	13.8'	S19°52.3	10.0'	54.1'			61°03.9	33°14.5	45°37.6
7	236°53.5	13.8'	19°42.3	10.1'	54.1'			60°34.5	32°53.0	46°04.6
8	251°26.4	13.9'	19°32.3	10.2'	54.1'			60°05.1	32°31.8	46°31.5
9	265°59.3	13.9'	19°22.1	10.2'	54.1'			59°35.6	32°10.7	46°58.5
10	280°32.2	14.0'	19°11.9	10.3'	54.1'			59°06.2	31°49.8	47°25.5
11	295°05.2	14.0'	19°01.5	10.4'	54.1'			58°36.7	31°29.1	47°52.5
12	309°38.3	14.1'	S18°51.1	10.5'	54.2'			58°07.3	31°08.6	48°19.5
13	324°11.4	14.2'	18°40.7	10.6'	54.2'		119°36.6	57°37.8	30°48.3	48°46.5
14	338°44.5	14.2'	18°30.1	10.6'	54.2'	119°56.6	119°07.5	57°08.4	30°28.3	49°13.5
15	353°17.7	14.3'	18°19.4	10.7'	54.2'	119°34.6	118°38.4	56°38.9	30°08.5	49°40.5
16	7°51.0	14.3'	18°08.7	10.8'	54.2'	119°12.6	118°09.3	56°09.4	29°49.0	50°07.6
17	22°24.3	14.4'	17°57.9	10.9'	54.2'	118°50.4	117°40.2	55°39.9	29°29.7	50°34.6
18	36°57.6	14.4'	S17°47.1	10.9'	54.2'	118°28.2	117°11.0	55°10.4	29°10.6	51°01.7
19	51°31.0	14.5'	17°36.1	11.0'	54.2'	118°05.9	116°41.9	54°40.9	28°51.8	51°28.8
20	66°04.5	14.5'	17°25.1	11.1'	54.3'	117°43.5	116°12.7	54°11.4	28°33.3	51°55.9
21	80°38.0	14.5'	17°14.0	11.2'	54.3'	117°21.1	115°43.5	53°41.9	28°15.1	52°23.0
22	95°11.5	14.6'	17°02.8	11.2'	54.3'	116°58.6	115°14.3	53°12.4	27°57.2	52°50.1
23	109°45.1	14.6'	16°51.6	11.3'	54.3'	116°36.0	114°45.0	52°42.8	27°39.6	53°17.3
13 th	SD = 14.7'		Mer. pass. 15:28			Sun SD = 16.2'				

h	Moon (14 th Dec)					Lunar Distance (objects with largest hourly LD delta)						
Mon	GHA	ν	Dec	d	HP	-Capella	-Rigel	-Aldebaran	-Saturn	-Fomalhaut	+Altair	+Sun
0	124°18.8	14.7'	S16°40.3	11.4'	54.3'		116°13.4	114°15.8	52°13.3	27°22.3		53°44.4
1	138°52.4	14.7'	16°28.9	11.5'	54.3'		115°50.7	113°46.5	51°43.7	27°05.4		54°11.6
2	153°26.2	14.8'	16°17.4	11.5'	54.3'		115°28.0	113°17.2	51°14.2	26°48.7		54°38.8
3	167°59.9	14.8'	16°05.9	11.6'	54.3'		115°05.2	112°47.9	50°44.6	26°32.5		55°06.0
4	182°33.7	14.9'	15°54.3	11.7'	54.4'		114°42.3	112°18.6	50°15.0	26°16.6		55°33.2
5	197°07.6	14.9'	15°42.6	11.7'	54.4'		114°19.4	111°49.3	49°45.4	26°01.0		56°00.4
6	211°41.5	14.9'	S15°30.9	11.8'	54.4'		113°56.4	111°19.9	49°15.8	25°45.9		56°27.6
7	226°15.4	15.0'	15°19.1	11.9'	54.4'		113°33.3	110°50.6	48°46.2			56°54.9
8	240°49.4	15.0'	15°07.2	11.9'	54.4'	119°48.8	113°10.2	110°21.2	48°16.6			57°22.2
9	255°23.4	15.1'	14°55.3	12.0'	54.4'	119°20.9	112°47.0	109°51.8	47°47.0			57°49.4
10	269°57.5	15.1'	14°43.3	12.1'	54.5'	118°52.9	112°23.8	109°22.3	47°17.4			58°16.7
11	284°31.6	15.1'	14°31.2	12.1'	54.5'	118°25.0	112°00.6	108°52.9	46°47.7			58°44.1
12	299°05.7	15.2'	S14°19.1	12.2'	54.5'	117°57.0	111°37.2	108°23.4	46°18.1			59°11.4
13	313°39.9	15.2'	14°06.9	12.2'	54.5'	117°28.9	111°13.8	107°54.0	45°48.4			59°38.8
14	328°14.1	15.2'	13°54.7	12.3'	54.5'	117°00.8	110°50.4	107°24.5	45°18.7			60°06.1
15	342°48.3	15.3'	13°42.3	12.4'	54.5'	116°32.7	110°26.9	106°54.9	44°49.0			60°33.5
16	357°22.6	15.3'	13°30.0	12.4'	54.6'	116°04.6	110°03.4	106°25.4	44°19.3			61°00.9
17	11°56.9	15.3'	13°17.5	12.5'	54.6'	115°36.4	109°39.8	105°55.8	43°49.6			61°28.4
18	26°31.2	15.4'	S13°05.1	12.5'	54.6'	115°08.2	109°16.2	105°26.3	43°19.9			61°55.8
19	41°05.6	15.4'	12°52.5	12.6'	54.6'	114°40.0	108°52.5	104°56.7	42°50.2			62°23.3
20	55°39.9	15.4'	12°39.9	12.7'	54.6'	114°11.7	108°28.7	104°27.1	42°20.4		36°39.9	62°50.8
21	70°14.4	15.5'	12°27.2	12.7'	54.7'	113°43.4	108°05.0	103°57.4	41°50.7		36°55.3	63°18.3
22	84°48.8	15.5'	12°14.5	12.8'	54.7'	113°15.1	107°41.1	103°27.8	41°20.9		37°11.1	63°45.8
23	99°23.3	15.5'	12°01.7	12.8'	54.7'	112°46.7	107°17.3	102°58.1	40°51.2		37°27.1	64°13.3
14 th	SD = 14.8'		Mer. pass. 16:11			Sun SD = 16.2'						

DUT1 = UT1-UTC = +0.1211 sec $\Delta T = TT-UT1 = +69.0629$ sec

2026 December 15 to Dec. 17 UT

h	Moon (15 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Sirius	-Betelgeuse	-Capella	-Rigel	-Aldebaran	-Saturn	+Altair	+Sun
0	113°57.8	15.5'	S11°48.9	12.9'	54.7'			112°18.3	106°53.3	102°28.4	40°21.4	37°43.3	64°40.9
1	128°32.3	15.6'	11°36.0	12.9'	54.7'		119°47.4	111°49.9	106°29.4	101°58.6	39°51.6	37°59.8	65°08.5
2	143°06.9	15.6'	11°23.1	13.0'	54.8'		119°19.6	111°21.5	106°05.3	101°28.9	39°21.8	38°16.6	65°36.1
3	157°41.5	15.6'	11°10.1	13.0'	54.8'		118°51.7	110°53.0	105°41.3	100°59.1	38°52.0	38°33.6	66°03.7
4	172°16.1	15.6'	10°57.1	13.1'	54.8'		118°23.8	110°24.5	105°17.2	100°29.3	38°22.1	38°50.8	66°31.4
5	186°50.7	15.6'	10°44.0	13.1'	54.8'		117°55.9	109°55.9	104°53.0	99°59.5	37°52.3	39°08.3	66°59.0
6	201°25.3	15.7'	S10°30.8	13.2'	54.8'		117°27.9	109°27.3	104°28.8	99°29.7	37°22.5	39°26.0	67°26.7
7	216°00.0	15.7'	10°17.6	13.2'	54.9'		116°59.9	108°58.7	104°04.6	98°59.8	36°52.6	39°43.9	67°54.4
8	230°34.7	15.7'	10°04.4	13.3'	54.9'		116°31.9	108°30.1	103°40.3	98°30.0	36°22.7	40°02.1	68°22.2
9	245°09.4	15.7'	09°51.1	13.3'	54.9'		116°03.8	108°01.4	103°16.0	98°00.1	35°52.9	40°20.5	68°49.9
10	259°44.1	15.7'	09°37.8	13.4'	54.9'		115°35.7	107°32.7	102°51.7	97°30.1	35°23.0	40°39.1	69°17.7
11	274°18.8	15.7'	09°24.4	13.4'	54.9'		115°07.5	107°04.0	102°27.3	97°00.2	34°53.1	40°57.9	69°45.5
12	288°53.6	15.8'	S09°10.9	13.5'	55.0'		114°39.3	106°35.2	102°02.8	96°30.2	34°23.2	41°16.9	70°13.4
13	303°28.3	15.8'	08°57.5	13.5'	55.0'		114°11.1	106°06.4	101°38.4	96°00.2	33°53.3	41°36.1	70°41.2
14	318°03.1	15.8'	08°43.9	13.6'	55.0'		113°42.8	105°37.6	101°13.8	95°30.2	33°23.3	41°55.5	71°09.1
15	332°37.9	15.8'	08°30.4	13.6'	55.0'	119°58.9	113°14.4	105°08.7	100°49.3	95°00.1	32°53.4	42°15.1	71°37.0
16	347°12.7	15.8'	08°16.8	13.7'	55.1'	119°39.8	112°46.1	104°39.8	100°24.7	94°30.1	32°23.5	42°34.9	72°04.9
17	1°47.5	15.8'	08°03.1	13.7'	55.1'	119°20.5	112°17.7	104°10.9	100°00.1	94°00.0	31°53.5	42°54.8	72°32.9
18	16°22.3	15.8'	S07°49.4	13.7'	55.1'	119°01.2	111°49.2	103°41.9	99°35.4	93°29.8	31°23.6	43°15.0	73°00.9
19	30°57.1	15.8'	07°35.7	13.8'	55.1'	118°41.8	111°20.7	103°12.9	99°10.7	92°59.7	30°53.6	43°35.3	73°28.9
20	45°31.9	15.8'	07°21.9	13.8'	55.2'	118°22.2	110°52.2	102°43.9	98°45.9	92°29.5	30°23.6	43°55.8	73°56.9
21	60°06.7	15.8'	07°08.1	13.9'	55.2'	118°02.6	110°23.7	102°14.9	98°21.2	91°59.3	29°53.7	44°16.5	74°25.0
22	74°41.6	15.8'	06°54.2	13.9'	55.2'	117°42.8	109°55.1	101°45.8	97°56.4	91°29.1	29°23.7	44°37.4	74°53.1
23	89°16.4	15.8'	06°40.3	13.9'	55.2'	117°23.0	109°26.4	101°16.7	97°31.5	90°58.8	28°53.7	44°58.4	75°21.2
15 th	SD = 14.9' Mer. pass. 16:53					Sun SD = 16.2'							

h	Moon (16 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Betelgeuse	-Capella	-Rigel	-Aldebaran	-Saturn	+Fomalhaut	+Altair	+Sun
0	103°51.2	15.8'	S06°26.4	14.0'	55.3'	108°57.8	100°47.5	97°06.6	90°28.5	28°23.8		45°19.6	75°49.4
1	118°26.1	15.8'	06°12.4	14.0'	55.3'	108°29.0	100°18.3	96°41.7	89°58.2	27°53.8		45°41.0	76°17.5
2	133°00.9	15.8'	05°58.4	14.0'	55.3'	108°00.3	99°49.1	96°16.8	89°27.9	27°23.8		46°02.5	76°45.7
3	147°35.7	15.8'	05°44.3	14.1'	55.3'	107°31.5	99°19.9	95°51.8	88°57.5	26°53.8		46°24.2	77°14.0
4	162°10.6	15.8'	05°30.2	14.1'	55.4'	107°02.7	98°50.6	95°26.8	88°27.1	26°23.8		46°46.0	77°42.2
5	176°45.4	15.8'	05°16.1	14.2'	55.4'	106°33.8	98°21.3	95°01.7	87°56.7	25°53.9		47°08.0	78°10.5
6	191°20.2	15.8'	S05°02.0	14.2'	55.4'	106°04.9	97°52.0	94°36.6	87°26.2	25°23.9		47°30.1	78°38.8
7	205°55.0	15.8'	04°47.8	14.2'	55.5'	105°35.9	97°22.6	94°11.5	86°55.7	24°54.0		47°52.3	79°07.2
8	220°29.8	15.8'	04°33.6	14.2'	55.5'	105°07.0	96°53.2	93°46.4	86°25.2	24°24.0		48°14.8	79°35.6
9	235°04.6	15.8'	04°19.3	14.3'	55.5'	104°37.9	96°23.8	93°21.2	85°54.7	23°54.1		48°37.3	80°04.0
10	249°39.4	15.8'	04°05.0	14.3'	55.5'	104°08.9	95°54.3	92°56.0	85°24.1	23°24.2		49°00.0	80°32.4
11	264°14.2	15.8'	03°50.7	14.3'	55.6'	103°39.8	95°24.8	92°30.7	84°53.5	22°54.3	25°39.4	49°22.8	81°00.9
12	278°48.9	15.7'	S03°36.4	14.4'	55.6'	103°10.6	94°55.2	92°05.5	84°22.9	22°24.4	25°55.0	49°45.8	81°29.4
13	293°23.7	15.7'	03°22.0	14.4'	55.6'	102°41.5	94°25.7	91°40.2	83°52.2	21°54.5	26°11.0	50°08.9	81°58.0
14	307°58.4	15.7'	03°07.6	14.4'	55.7'	102°12.3	93°56.1	91°14.8	83°21.5	21°24.7	26°27.5	50°32.1	82°26.5
15	322°33.1	15.7'	02°53.2	14.5'	55.7'	101°43.0	93°26.4	90°49.5	82°50.8	20°54.9	26°44.4	50°55.5	82°55.2
16	337°07.8	15.7'	02°38.7	14.5'	55.7'	101°13.7	92°56.8	90°24.1	82°20.0	20°25.2	27°01.7	51°18.9	83°23.8
17	351°42.5	15.7'	02°24.3	14.5'	55.7'	100°44.4	92°27.1	89°58.7	81°49.3	19°55.4	27°19.4	51°42.5	83°52.5
18	6°17.2	15.6'	S02°09.8	14.5'	55.8'	100°15.0	91°57.4	89°33.2	81°18.4	19°25.8	27°37.5	52°06.3	84°21.2
19	20°51.8	15.6'	01°55.2	14.5'	55.8'	99°45.6	91°27.6	89°07.8	80°47.6	18°56.1	27°56.0	52°30.1	84°49.9
20	35°26.4	15.6'	01°40.7	14.6'	55.8'	99°16.2	90°57.8	88°42.3	80°16.7	18°26.6	28°14.9	52°54.1	85°18.7
21	50°01.0	15.6'	01°26.1	14.6'	55.9'	98°46.7	90°28.0	88°16.8	79°45.8	17°57.1	28°34.1	53°18.2	85°47.5
22	64°35.6	15.5'	01°11.5	14.6'	55.9'	98°17.2	89°58.1	87°51.2	79°14.8	17°27.7	28°53.6	53°42.4	86°16.3
23	79°10.1	15.5'	00°56.9	14.6'	55.9'	97°47.6	89°28.2	87°25.7	78°43.9	16°58.3	29°13.6	54°06.7	86°45.2
16 th	SD = 15.1' Mer. pass. 17:34					Sun SD = 16.2'							

h	Moon (17 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Procyon	-Pollux	-Betelgeuse	-Capella	-Aldebaran	+Fomalhaut	+Altair	+Sun
0	93°44.7	15.5'	S00°42.3	14.7'	56.0'			97°18.1	88°58.3	78°12.8	29°33.8	54°31.1	87°14.1
1	108°19.1	15.5'	00°27.6	14.7'	56.0'			96°48.4	88°28.3	77°41.8	29°54.3	54°55.6	87°43.1
2	122°53.6	15.4'	S00°12.9	14.7'	56.0'		119°38.9	96°18.7	87°58.3	77°10.7	30°15.2	55°20.3	88°12.1
3	137°28.0	15.4'	N00°01.8	14.7'	56.1'		119°07.4	95°49.0	87°28.3	76°39.6	30°36.4	55°45.0	88°41.1
4	152°02.4	15.4'	00°16.5	14.7'	56.1'		118°35.8	95°19.3	86°58.2	76°08.4	30°57.9	56°09.9	89°10.2
5	166°36.8	15.3'	00°31.2	14.7'	56.1'		118°04.1	94°49.5	86°28.1	75°37.3	31°19.6	56°34.8	89°39.3
6	181°11.1	15.3'	N00°45.9	14.8'	56.2'		117°32.5	94°19.7	85°58.0	75°06.0	31°41.6	56°59.9	90°08.4
7	195°45.4	15.2'	01°00.7	14.8'	56.2'	119°46.2	117°00.8	93°49.8	85°27.8	74°34.8	32°03.9	57°25.0	90°37.6
8	210°19.6	15.2'	01°15.4	14.8'	56.2'	119°16.5	116°29.1	93°19.9	84°57.6	74°03.5	32°26.5	57°50.3	91°06.8
9	224°53.8	15.2'	01°30.2	14.8'	56.3'	118°46.7	115°57.3	92°50.0	84°27.3	73°32.2	32°49.3	58°15.7	91°36.1
10	239°28.0	15.1'	01°45.0	14.8'	56.3'	118°16.9	115°25.5	92°20.0	83°57.1	73°00.8	33°12.4	58°41.1	92°05.4
11	254°02.1	15.1'	01°59.8	14.8'	56.3'	117°47.0	114°53.6	91°50.0	83°26.8	72°29.4	33°35.7	59°06.7	92°34.7
12	268°36.2	15.0'	N02°14.6	14.8'	56.4'	117°17.1	114°21.7	91°19.9	82°56.4	71°58.0	33°59.3	59°32.3	93°04.1
13	283°10.2	15.0'	02°29.5	14.8'	56.4'	116°47.1	113°49.8	90°49.9	82°26.1	71°26.5	34°23.1	59°58.1	93°33.5
14	297°44.2	14.9'	02°44.3	14.8'	56.4'	116°17.0	113°17.8	90°19.7	81°55.6	70°55.0	34°47.1	60°23.9	94°02.9
15	312°18.1	14.9'	02°59.1	14.8'	56.5'	115°46.9	112°45.8	89°49.6	81°25.2	70°23.5	35°11.3	60°49.8	94°32.4
16	326°52.0	14.8'	03°14.0	14.9'	56.5'	115°16.7	112°13.7	89°19.4	80°54.7	69°51.9	35°35.7	61°15.9	95°02.0
17	341°25.9	14.8'	03°28.8	14.9'	56.5'	114°46.5	111°41.6	88°49.1	80°24.2	69°20.3	36°00.4	61°42.0	95°31.5
18	355°59.7	14.7'	N03°43.7	14.9'	56.6'	114°16.2	111°09.5	88°18.8	79°53.7	68°48.7	36°25.2	62°08.2	96°01.1
19	10°33.4	14.7'	03°58.6	14.9'	56.6'	113°45.9	110°37.3	87°48.5	79°23.1	68°17.0	36°50.3	62°34.5	96°30.8
20	25°07.1	14.6'	04°13.4	14.9'	56.7'	113°15.5	110°05.0	87°18.1	78°52.5	67°45.3	37°15.5	63°00.9	97°00.5
21	39°40.7	14.6'	04°28.3	14.9'	56.7'	112°45.0	109°32.8	86°47.7	78°21.8	67°13.5	37°40.9	63°27.3	97°30.2
22	54°14.3	14.5'	04°43.1	14.9'	56.7'	112°14.5	109°00.5	86°17.3	77°51.2	66°41.7	38°06.5	63°53.9	98°00.0
23	68°47.2	14.4'	04°58.0	14.9'	56.8'	111°44.0	108°28.1	85°46.8	77°20.4	66°09.9	38°32.3	64°20.5	98°29.9
17 th	SD = 15.3' Mer. pass. 18:17					Sun SD = 16.2'							

2026 December 18 to Dec. 20 UT

	Moon (19 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Jupiter	-Regulus	-Pollux	-Aldebaran	+Saturn	+Fomalhaut	+Altair	+Sun
0	72°22.1	12.5'	N11°06.3	14.5'	57.7'			94°44.3	52°42.1	12°19.9	50°05.5	75°51.4	111°10.1
1	86°53.6	12.4'	11°20.7	14.4'	57.8'			94°10.8	52°09.3	12°49.1	50°34.8	76°19.9	111°41.1
2	101°25.0	12.3'	11°35.1	14.4'	57.8'			93°37.1	51°36.4	13°18.8	51°04.3	76°48.6	112°12.2
3	115°56.3	12.2'	11°49.5	14.4'	57.9'			93°03.5	51°03.6	13°48.7	51°33.9	77°17.2	112°43.3
4	130°27.4	12.1'	12°03.9	14.3'	57.9'			92°29.8	50°30.7	14°19.0	52°03.5	77°46.0	113°14.5
5	144°58.5	12.0'	12°18.2	14.3'	57.9'			91°56.0	49°57.8	14°49.6	52°33.3	78°14.8	113°45.7
6	159°29.5	11.9'	N12°32.5	14.2'	58.0'			91°22.2	49°24.8	15°20.4	53°03.2	78°43.6	114°17.0
7	174°00.3	11.8'	12°46.7	14.2'	58.0'			90°48.3	48°51.8	15°51.5	53°33.2	79°12.6	114°48.3
8	188°31.1	11.7'	13°00.9	14.1'	58.1'			90°14.4	48°18.8	16°22.8	54°03.3	79°41.6	115°19.6
9	203°01.8	11.5'	13°15.0	14.1'	58.1'			89°40.4	47°45.8	16°54.3	54°33.4	80°10.6	115°51.1
10	217°32.3	11.4'	13°29.1	14.1'	58.1'			89°06.4	47°12.7	17°26.1	55°03.7	80°39.7	116°22.5
11	232°02.7	11.3'	13°43.2	14.0'	58.2'			88°32.4	46°39.6	17°58.0	55°34.1	81°08.9	116°54.0
12	246°33.1	11.2'	N13°57.2	14.0'	58.2'			87°58.2	46°06.4	18°30.1	56°04.5	81°38.1	117°25.6
13	261°03.3	11.1'	14°11.2	13.9'	58.3'			87°24.1	45°33.3	19°02.3	56°35.1	82°07.4	117°57.2
14	275°33.4	11.0'	14°25.1	13.9'	58.3'			86°49.9	45°00.1	19°34.7	57°05.7	82°36.7	118°28.8
15	290°03.3	10.9'	14°38.9	13.8'	58.3'	119°55.8		86°15.6	44°26.8	20°07.3	57°36.4	83°06.1	119°00.6
16	304°33.2	10.7'	14°52.7	13.7'	58.4'	119°21.3		85°41.3	43°53.6	20°40.0	58°07.3	83°35.5	119°32.3
17	319°03.0	10.6'	15°06.5	13.7'	58.4'	118°46.8		85°06.9	43°20.3	21°18.8	58°38.2	84°05.0	
18	333°32.6	10.5'	N15°20.1	13.6'	58.5'	118°12.3		84°32.5	42°47.0	21°45.7	59°09.2	84°34.6	
19	348°02.1	10.4'	15°33.8	13.6'	58.5'	117°37.7		83°58.0	42°13.7	22°18.8	59°40.2	85°04.2	
20	2°31.5	10.3'	15°47.3	13.5'	58.6'	117°03.0		83°23.5	41°40.3	22°52.0	60°11.4	85°33.8	
21	17°00.7	10.1'	16°00.8	13.4'	58.6'	116°28.3	119°45.5	82°48.9	41°07.0	23°25.3	60°42.6	86°03.5	
22	31°29.9	10.0'	16°14.2	13.4'	58.6'	115°53.5	119°10.8	82°14.3	40°33.6	23°58.7	61°14.0	86°33.3	
23	45°58.9	9.9'	16°27.6	13.3'	58.7'	115°18.7	118°36.0	81°39.7	40°00.2	24°32.2	61°45.4	87°03.1	
19 th	SD = 15.7'		Mer. pass. 19:50					Sun SD = 16.2'					

No IERS EOP prediction data available Page 120 <https://pypi.org/project/skyalmanac/>

DUT1 = UT1-UTC = +0.1218 sec $\Delta T = TT-UT1 = +69.0622$ sec

2026 December 21 to Dec. 23 UT

h	Moon (21 st Dec)					Lunar Distance (objects with largest hourly LD delta)							
Mon	GHA	ν	Dec	d	HP	-Mars	-Regulus	-Jupiter	-Pollux	+Saturn	+Fomalhaut	+Deneb	+Altair
0	47°21.0	6.5'	N21°33.9	10.9'	59.7'	111°19.5	103°50.7	100°31.9	66°56.7	38°57.0	75°14.5	75°56.8	99°41.7
1	61°46.5	6.3'	21°44.8	10.8'	59.7'	110°44.1	103°14.6	99°55.8	66°20.8	39°32.5	75°47.8	76°14.2	100°12.5
2	76°11.8	6.2'	21°55.6	10.7'	59.7'	110°08.7	102°38.5	99°19.6	65°44.8	40°08.1	76°21.1	76°31.6	100°43.3
3	90°37.0	6.0'	22°06.3	10.5'	59.8'	109°33.2	102°02.4	98°43.4	65°08.7	40°43.7	76°54.4	76°49.1	101°14.1
4	105°02.0	5.9'	22°16.8	10.4'	59.8'	108°57.6	101°26.2	98°07.1	64°32.6	41°19.4	77°27.8	77°06.7	101°44.9
5	119°26.9	5.8'	22°27.2	10.3'	59.9'	108°22.0	100°49.9	97°30.8	63°56.5	41°55.1	78°01.2	77°24.4	102°15.8
6	133°51.7	5.6'	N22°37.5	10.1'	59.9'	107°46.4	100°13.6	96°54.4	63°20.3	42°30.9	78°34.7	77°42.2	102°46.6
7	148°16.3	5.5'	22°47.6	10.0'	59.9'	107°10.7	99°37.3	96°18.0	62°44.1	43°06.8	79°08.3	78°00.1	103°17.5
8	162°40.8	5.3'	22°57.6	9.9'	60.0'	106°34.9	99°00.9	95°41.6	62°07.8	43°42.7	79°41.9	78°18.1	103°48.4
9	177°05.1	5.2'	23°07.4	9.7'	60.0'	105°59.1	98°24.5	95°05.1	61°31.5	44°18.6	80°15.6	78°36.1	104°19.3
10	191°29.3	5.1'	23°17.1	9.6'	60.0'	105°23.3	97°48.0	94°28.5	60°55.2	44°54.6	80°49.3	78°54.2	104°50.3
11	205°53.4	4.9'	23°26.7	9.4'	60.1'	104°47.4	97°11.5	93°51.9	60°18.7	45°30.7	81°23.1	79°12.5	105°21.2
12	220°17.3	4.8'	N23°36.1	9.3'	60.1'	104°11.5	96°34.9	93°15.3	59°42.3	46°06.8	81°56.9	79°30.7	105°52.1
13	234°41.1	4.6'	23°45.4	9.1'	60.1'	103°35.5	95°58.3	92°38.6	59°05.8	46°43.0	82°30.8	79°49.1	106°23.1
14	249°04.7	4.5'	23°54.5	9.0'	60.2'	102°59.5	95°21.6	92°01.9	58°29.3	47°19.2	83°04.7	80°07.5	106°54.0
15	263°28.2	4.4'	24°03.5	8.8'	60.2'	102°23.4	94°44.9	91°25.1	57°52.7	47°55.5	83°38.7	80°26.0	107°25.0
16	277°51.6	4.2'	24°12.3	8.7'	60.2'	101°47.3	94°08.2	90°48.3	57°16.1	48°31.8	84°12.7	80°44.6	107°55.9
17	292°14.8	4.1'	24°21.0	8.5'	60.3'	101°11.2	93°31.4	90°11.4	56°39.5	49°08.1	84°46.7	81°03.3	108°26.9
18	306°37.9	4.0'	N24°29.5	8.3'	60.3'	100°35.0	92°54.5	89°34.5	56°02.8	49°44.6	85°20.8	81°22.0	108°57.8
19	321°00.9	3.8'	24°37.8	8.2'	60.3'	99°58.7	92°17.7	88°57.6	55°26.0	50°21.0	85°55.0	81°40.8	109°28.8
20	335°23.7	3.7'	24°46.0	8.0'	60.4'	99°22.4	91°40.7	88°20.6	54°49.3	50°57.5	86°29.2	81°59.6	109°59.7
21	349°46.4	3.6'	24°54.0	7.8'	60.4'	98°46.1	91°03.8	87°43.6	54°12.4	51°34.1	87°03.4	82°18.5	110°30.6
22	4°09.0	3.4'	25°01.8	7.7'	60.4'	98°09.7	90°26.8	87°06.5	53°35.6	52°10.7	87°37.7	82°37.5	111°01.6
23	18°31.4	3.3'	25°09.5	7.5'	60.5'	97°33.3	89°49.8	86°29.4	52°58.7	52°47.4	88°12.0	82°56.6	111°32.5
21 st	SD = 16.3' Mer. pass. 21:43												

h	Moon (22 nd Dec)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Mars	-Regulus	-Jupiter	-Pollux	+Saturn	+Deneb	+Fomalhaut	+Altair
0	32°53.7	3.2'	N25°17.0	7.3'	60.5'	96°56.9	89°12.7	85°52.2	52°21.8	53°24.1	83°15.6	88°46.3	112°03.4
1	47°15.9	3.1'	25°24.3	7.1'	60.5'	96°20.4	88°35.6	85°15.0	51°44.8	54°00.8	83°34.8	89°20.7	112°34.2
2	61°38.0	2.9'	25°31.5	7.0'	60.5'	95°43.9	87°58.4	84°37.8	51°07.8	54°37.6	83°54.0	89°55.1	113°05.1
3	76°00.0	2.8'	25°38.4	6.8'	60.6'	95°07.3	87°21.2	84°00.6	50°30.8	55°14.4	84°13.2	90°29.6	113°35.9
4	90°21.8	2.7'	25°45.2	6.6'	60.6'	94°30.7	86°44.0	83°23.2	49°53.7	55°51.3	84°32.5	91°04.1	114°06.7
5	104°43.5	2.6'	25°51.8	6.4'	60.6'	93°54.0	86°06.7	82°45.9	49°16.6	56°28.2	84°51.9	91°38.6	114°37.5
6	119°05.1	2.5'	N25°58.3	6.2'	60.7'	93°17.4	85°29.4	82°08.5	48°39.5	57°05.2	85°11.3	92°13.1	115°08.3
7	133°26.6	2.4'	26°04.5	6.1'	60.7'	92°40.6	84°52.1	81°31.1	48°02.3	57°42.1	85°30.7	92°47.7	115°39.0
8	147°47.9	2.3'	26°10.6	5.9'	60.7'	92°03.9	84°14.7	80°53.7	47°25.1	58°19.2	85°50.2	93°22.4	116°09.7
9	162°09.2	2.2'	26°16.4	5.7'	60.7'	91°27.1	83°37.3	80°16.2	46°47.9	58°56.2	86°09.7	93°57.0	116°40.3
10	176°30.4	2.1'	26°22.1	5.5'	60.8'	90°50.3	82°59.8	79°38.6	46°10.6	59°33.4	86°29.3	94°31.7	117°11.0
11	190°51.4	2.0'	26°27.6	5.3'	60.8'	90°13.4	82°22.3	79°01.1	45°33.3	60°10.5	86°48.9	95°06.4	117°41.5
12	205°12.4	1.9'	N26°32.9	5.1'	60.8'	89°36.5	81°44.8	78°23.5	44°56.0	60°47.7	87°08.5	95°41.1	118°12.1
13	219°33.2	1.8'	26°37.9	4.9'	60.8'	88°59.6	81°07.3	77°45.9	44°18.7	61°24.9	87°28.2	96°15.9	118°42.5
14	233°54.0	1.7'	26°42.8	4.7'	60.9'	88°22.6	80°29.7	77°08.2	43°41.3	62°02.2	87°47.9	96°50.6	119°13.0
15	248°14.6	1.6'	26°47.5	4.5'	60.9'	87°45.6	79°52.1	76°30.5	43°03.9	62°39.4	88°07.6	97°25.4	119°43.4
16	262°35.2	1.5'	26°52.0	4.3'	60.9'	87°08.6	79°14.4	75°52.8	42°26.5	63°16.8	88°27.3	98°00.3	
17	276°55.7	1.4'	26°56.3	4.1'	60.9'	86°31.5	78°36.8	75°15.1	41°49.0	63°54.1	88°47.1	98°35.1	
18	291°16.1	1.3'	N27°00.4	3.9'	61.0'	85°54.4	77°59.1	74°37.3	41°11.5	64°31.5	89°06.9	99°09.9	
19	305°36.4	1.2'	27°04.2	3.7'	61.0'	85°17.3	77°21.3	73°59.5	40°34.0	65°08.9	89°26.7	99°44.8	
20	319°56.6	1.2'	27°07.9	3.5'	61.0'	84°40.2	76°43.6	73°21.6	39°56.5	65°46.4	89°46.5	100°19.7	
21	334°16.8	1.1'	27°11.3	3.2'	61.0'	84°03.0	76°05.8	72°43.8	39°19.0	66°23.9	90°06.4	100°54.6	
22	348°36.9	1.0'	27°14.6	3.0'	61.0'	83°25.8	75°28.0	72°05.9	38°41.4	67°01.4	90°26.2	101°29.5	
23	2°56.9	1.0'	27°17.6	2.8'	61.1'	82°48.6	74°50.1	71°27.9	38°03.8	67°38.9	90°46.1	102°04.5	
22 nd	SD = 16.5' Mer. pass. 22:48												

h	Moon (23 rd Dec)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Spica	-Regulus	-Jupiter	-Pollux	+Aldebaran	+Saturn	+Deneb	+Fomalhaut
0	17°16.9	0.9'	N27°20.4	2.6'	61.1'		74°12.3	70°50.0	37°26.3		68°16.5	91°06.0	102°39.4
1	31°36.7	0.8'	27°23.1	2.4'	61.1'		73°34.4	70°12.0	36°48.6		68°54.1	91°25.9	103°14.3
2	45°56.6	0.8'	27°25.4	2.2'	61.1'		72°56.5	69°34.0	36°11.0		69°31.7	91°45.8	103°49.3
3	60°16.4	0.7'	27°27.6	2.0'	61.1'		72°18.5	68°56.0	35°33.4		70°09.3	92°05.7	104°24.3
4	74°36.1	0.7'	27°29.6	1.7'	61.2'		71°40.6	68°18.0	34°55.7		70°47.0	92°25.6	104°59.2
5	88°55.7	0.6'	27°31.3	1.5'	61.2'		71°02.6	67°39.9	34°18.0		71°24.7	92°45.5	105°34.2
6	103°15.4	0.6'	N27°32.9	1.3'	61.2'		70°24.6	67°01.8	33°40.4		72°02.4	93°05.4	106°09.2
7	117°35.0	0.5'	27°34.2	1.1'	61.2'		69°46.5	66°23.7	33°02.7		72°40.1	93°25.3	106°44.1
8	131°54.5	0.5'	27°35.3	0.9'	61.2'		69°08.5	65°45.6	32°25.0	14°44.8	73°17.9	93°45.2	107°19.1
9	146°14.0	0.5'	27°36.1	0.6'	61.2'		68°30.4	65°07.4	31°47.3	15°12.3	73°55.7	94°05.0	107°54.1
10	160°33.5	0.5'	27°36.8	0.4'	61.2'		67°52.4	64°29.3	31°09.6	15°40.5	74°33.4	94°24.9	108°29.0
11	174°53.0	0.4'	27°37.2	0.2'	61.3'		67°14.2	63°51.1	30°31.9	16°09.3	75°11.3	94°44.7	109°04.0
12	189°12.4	0.4'	N27°37.4	-0.0'	61.3'		66°36.1	63°12.9	29°54.2	16°38.8	75°49.1	95°04.6	109°38.9
13	203°31.8	0.4'	27°37.4	-0.2'	61.3'		65°58.0	62°34.7	29°16.4	17°08.9	76°26.9	95°24.4	110°13.9
14	217°51.2	0.4'	27°37.2	-0.5'	61.3'	119°22.1	65°19.8	61°56.4	28°38.7	17°39.4	77°04.8	95°44.2	110°48.8
15	232°10.6	0.4'	27°36.7	-0.7'	61.3'	118°44.0	64°41.7	61°18.2	28°01.0	18°10.5	77°42.7	96°04.0	111°23.7
16	246°30.0	0.4'	27°36.0	-0.9'	61.3'	118°05.9	64°03.5	60°39.9	27°23.3	18°41.9	78°20.6	96°23.7	111°58.6
17	260°49.3	0.4'	27°35.1	-1.1'	61.3'	117°27.7	63°25.3	60°01.7	26°45.7	19°13.8	78°58.5	96°43.4	112°33.5
18	275°08.7	0.4'	N27°34.0	-1.3'	61.3'	116°49.5	62°47.1	59°23.4	26°08.0	19°46.1	79°36.4	97°03.1	113°08.3
19	289°28.1	0.4'	27°32.6	-1.6'	61.3'	116°11.4	62°08.9	58°45.1	25°30.3	20°18.6	80°14.4	97°22.7	113°43.2
20	303°47.5	0.4'	27°31.1	-1.8'	61.4'	115°33.2	61°30.7	58°06.8	24°52.7	20°51.5	80°52.3	97°42.4	114°18.0
21	318°06.9	0.4'	27°29.3	-2.0'	61.4'	114°55.0	60°52.4	57°28.5	24°15.0	21°24.7	81°30.3	98°01.9	114°52.8
22	332°26.3	0.4'	27°27.3	-2.2'	61.4'	114°16.8	60°14.2	56°50.1	23°37.4	21°58.2	82°08.2	98°21.5	115°27.6
23	346°45.7	0.4'	27°25.0	-2.5'	61.4'	113°38.5	59°36.0	56°11.8	22°59.8	22°31.9	82°46.2	98°41.0	116°02.3
23 rd	SD = 16.7' Mer. pass. 23:55												

DUT1 = UT1-UTC = +0.1222 sec $\Delta T = TT-UT1 = +69.0618$ sec

2026 December 24 to Dec. 26 UT

h	Moon (24 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Spica	-Mars	-Regulus	-Jupiter	+Capella	+Aldebaran	+Saturn	+Fomalhaut
0	1°05.1	0.5'	N27°22.6	-2.7'	61.4'	113°00.3	67°11.4	58°57.7	55°33.4	20°50.9	23°05.9	83°24.2	116°37.0
1	15°24.6	0.5'	27°19.9	-2.9'	61.4'	112°22.1	66°33.7	58°19.4	54°55.1	21°08.9	23°40.0	84°02.2	117°11.7
2	29°44.1	0.5'	27°17.0	-3.1'	61.4'	111°43.8	65°56.1	57°41.2	54°16.7	21°27.7	24°14.4	84°40.2	117°46.3
3	44°03.7	0.6'	27°13.9	-3.3'	61.4'	111°05.6	65°18.4	57°02.9	53°38.4	21°47.3	24°48.9	85°18.2	118°20.9
4	58°23.2	0.6'	27°10.5	-3.6'	61.4'	110°27.3	64°40.8	56°24.6	53°00.0	22°07.8	25°23.6	85°56.2	118°55.5
5	72°42.9	0.7'	27°07.0	-3.8'	61.4'	109°49.1	64°03.1	55°46.3	52°21.7	22°28.9	25°58.5	86°34.2	119°30.0
6	87°02.5	0.7'	N27°03.2	-4.0'	61.4'	109°10.8	63°25.4	55°08.1	51°43.3	22°50.8	26°33.5	87°12.2	
7	101°22.2	0.8'	26°59.2	-4.2'	61.4'	108°32.6	62°47.8	54°29.8	51°04.9	23°13.4	27°08.7	87°50.2	
8	115°42.0	0.8'	26°55.0	-4.4'	61.4'	107°54.3	62°10.1	53°51.5	50°26.5	23°36.6	27°44.0	88°28.2	
9	130°01.8	0.9'	26°50.6	-4.6'	61.4'	107°16.1	61°32.4	53°13.2	49°48.2	24°00.4	28°19.4	89°06.2	
10	144°21.7	0.9'	26°46.0	-4.8'	61.4'	106°37.8	60°54.7	52°34.9	49°09.8	24°24.8	28°54.9	89°44.2	
11	158°41.6	1.0'	26°41.1	-5.1'	61.4'	105°59.5	60°17.1	51°56.6	48°31.4	24°49.7	29°30.5	90°22.3	
12	173°01.6	1.1'	N26°36.1	-5.3'	61.4'	105°21.3	59°39.4	51°18.4	47°53.1	25°15.1	30°06.2	91°00.3	
13	187°21.7	1.1'	26°30.8	-5.5'	61.4'	104°43.0	59°01.8	50°40.1	47°14.7	25°41.1	30°42.0	91°38.3	
14	201°41.8	1.2'	26°25.4	-5.7'	61.4'	104°04.8	58°24.1	50°01.8	46°36.3	26°07.5	31°17.9	92°16.3	
15	216°02.0	1.3'	26°19.7	-5.9'	61.4'	103°26.6	57°46.5	49°23.5	45°58.0	26°34.4	31°53.9	92°54.3	
16	230°22.3	1.4'	26°13.8	-6.1'	61.4'	102°48.3	57°08.8	48°45.3	45°19.6	27°01.6	32°30.0	93°32.3	
17	244°42.6	1.4'	26°07.7	-6.3'	61.4'	102°10.1	56°31.2	48°07.0	44°41.3	27°29.3	33°06.1	94°10.2	
18	259°03.1	1.5'	N26°01.4	-6.5'	61.4'	101°31.9	55°53.6	47°28.8	44°02.9	27°57.4	33°42.2	94°48.2	
19	273°23.6	1.6'	25°54.9	-6.7'	61.4'	100°53.6	55°16.0	46°50.5	43°24.6	28°25.8	34°18.5	95°26.2	
20	287°44.2	1.7'	25°48.2	-6.9'	61.4'	100°15.4	54°38.4	46°12.3	42°46.3	28°54.6	34°54.8	96°04.1	
21	302°04.9	1.8'	25°41.4	-7.1'	61.4'	99°37.2	54°00.8	45°34.1	42°08.0	29°23.7	35°31.1	96°42.1	
22	316°25.7	1.9'	25°34.3	-7.3'	61.3'	98°59.0	53°23.2	44°55.9	41°29.7	29°53.0	36°07.5	97°20.0	
23	330°46.6	2.0'	25°27.0	-7.5'	61.3'	98°20.9	52°45.7	44°17.7	40°51.4	30°22.7	36°43.9	97°57.9	
24 th	SD = 16.7' Mer. pass. -:-												

h	Moon (25 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Fri	GHA	ν	Dec	d	HP	-Spica	-Mars	-Regulus	-Jupiter	+Betelgeuse	+Capella	+Aldebaran	+Saturn
0	345°07.6	2.1'	N25°19.5	-7.7'	61.3'	97°42.7	52°08.1	43°39.5	40°13.1	25°38.6	30°52.7	37°20.4	98°35.8
1	359°28.7	2.2'	25°11.9	-7.9'	61.3'	97°04.6	51°30.6	43°01.3	39°34.9	26°02.2	31°22.9	37°56.9	99°13.7
2	13°49.9	2.3'	25°04.0	-8.0'	61.3'	96°26.4	50°53.1	42°23.2	38°56.6	26°26.3	31°53.4	38°33.5	99°51.6
3	28°11.2	2.4'	24°56.0	-8.2'	61.3'	95°48.3	50°15.6	41°45.0	38°18.4	26°50.8	32°24.0	39°10.0	100°29.5
4	42°32.6	2.5'	24°47.7	-8.4'	61.3'	95°10.2	49°38.1	41°06.9	37°40.2	27°15.9	32°55.0	39°46.6	101°07.3
5	56°54.1	2.6'	24°39.3	-8.6'	61.3'	94°32.1	49°00.6	40°28.8	37°02.0	27°41.4	33°26.1	40°23.3	101°45.2
6	71°15.8	2.7'	N24°30.8	-8.8'	61.3'	93°54.0	48°23.2	39°50.7	36°23.8	28°07.3	33°57.4	40°59.9	102°23.0
7	85°37.5	2.9'	24°22.0	-8.9'	61.3'	93°16.0	47°45.8	39°12.6	35°45.6	28°33.7	34°28.9	41°36.6	103°00.8
8	99°59.4	3.0'	24°13.0	-9.1'	61.2'	92°37.9	47°08.4	38°34.6	35°07.5	29°00.4	35°00.6	42°13.3	103°38.6
9	114°21.3	3.1'	24°03.9	-9.3'	61.2'	91°59.9	46°31.0	37°56.5	34°29.4	29°27.5	35°32.4	42°50.0	104°16.3
10	128°43.4	3.2'	23°54.6	-9.5'	61.2'	91°21.9	45°53.7	37°18.5	33°51.2	29°54.9	36°04.4	43°26.7	104°54.1
11	143°05.6	3.3'	23°45.2	-9.6'	61.2'	90°43.9	45°16.3	36°40.5	33°13.2	30°22.7	36°36.6	44°03.4	105°31.8
12	157°28.0	3.4'	N23°35.5	-9.8'	61.2'	90°05.9	44°39.0	36°02.6	32°35.1	30°50.8	37°08.9	44°40.1	106°09.5
13	171°50.4	3.6'	23°25.8	-10.0'	61.2'	89°28.0	44°01.8	35°24.6	31°57.1	31°19.1	37°41.3	45°16.9	106°47.1
14	186°13.0	3.7'	23°15.8	-10.1'	61.1'	88°50.1	43°24.5	34°46.7	31°19.0	31°47.8	38°13.9	45°53.6	107°24.8
15	200°35.7	3.8'	23°05.7	-10.3'	61.1'	88°12.2	42°47.3	34°08.8	30°41.0	32°16.7	38°46.6	46°30.3	108°02.4
16	214°58.5	3.9'	22°55.4	-10.4'	61.1'	87°34.3	42°10.1	33°30.9	30°03.1	32°45.9	39°19.4	47°07.1	108°40.0
17	229°21.5	4.1'	22°45.0	-10.6'	61.1'	86°56.5	41°32.9	32°53.0	29°25.1	33°15.4	39°52.3	47°43.8	109°17.6
18	243°44.5	4.2'	N22°34.4	-10.7'	61.1'	86°18.6	40°55.8	32°15.2	28°47.2	33°45.0	40°25.2	48°20.6	109°55.1
19	258°07.7	4.3'	22°23.6	-10.9'	61.1'	85°40.8	40°18.7	31°37.4	28°09.3	34°14.9	40°58.3	48°57.3	110°32.6
20	272°31.1	4.5'	22°12.7	-11.0'	61.0'	85°03.1	39°41.6	30°59.6	27°31.5	34°45.0	41°31.5	49°34.0	111°10.1
21	286°54.5	4.6'	22°01.7	-11.2'	61.0'	84°25.3	39°04.6	30°21.9	26°53.6	35°15.3	42°04.8	50°10.8	111°47.6
22	301°18.1	4.7'	21°50.5	-11.3'	61.0'	83°47.6	38°27.6	29°44.2	26°15.8	35°45.7	42°38.1	50°47.5	112°25.0
23	315°41.9	4.9'	21°39.2	-11.5'	61.0'	83°09.9	37°50.7	29°06.5	25°38.1	36°16.4	43°11.5	51°24.2	113°02.4
25 th	SD = 16.7' Mer. pass. 01:02												

h	Moon (26 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Sat	GHA	ν	Dec	d	HP	-Antares	-Spica	-Regulus	-Jupiter	+Pollux	+Capella	+Aldebaran	+Saturn
0	330°05.7	5.0'	N21°27.7	-11.6'	61.0'		82°32.3	28°28.8	25°00.3	9°31.1	43°45.0	52°00.9	113°39.7
1	344°29.7	5.1'	21°16.1	-11.7'	60.9'		81°54.7	27°51.2	24°22.6	10°05.0	44°18.6	52°37.6	114°17.1
2	358°53.8	5.3'	21°04.3	-11.9'	60.9'		81°17.1	27°13.6	23°44.9	10°39.3	44°52.2	53°14.2	114°54.4
3	13°18.1	5.4'	20°52.5	-12.0'	60.9'		80°39.5	26°36.1	23°07.3	11°13.8	45°25.8	53°50.9	115°31.6
4	27°42.5	5.5'	20°40.4	-12.1'	60.9'		80°02.0	25°58.5	22°29.7	11°48.7	45°59.5	54°27.5	116°08.9
5	42°07.0	5.7'	20°28.3	-12.3'	60.8'		79°24.5	25°21.1	21°52.1	12°23.8	46°33.3	55°04.2	116°46.1
6	56°31.7	5.8'	N20°16.0	-12.4'	60.8'		78°47.0	24°43.6	21°14.6	12°59.1	47°07.1	55°40.8	117°23.2
7	70°56.4	5.9'	20°03.6	-12.5'	60.8'		78°09.6	24°06.2	20°37.1	13°34.6	47°40.9	56°17.3	118°00.3
8	85°21.4	6.1'	19°51.1	-12.6'	60.8'		77°32.1	23°28.8	19°59.6	14°10.2	48°14.8	56°53.9	118°37.4
9	99°46.4	6.2'	19°38.5	-12.7'	60.7'		76°54.8	22°51.4	19°22.2	14°45.9	48°48.7	57°30.5	119°14.5
10	114°11.6	6.3'	19°25.8	-12.9'	60.7'		76°17.4	22°14.1	18°44.8	15°21.7	49°22.7	58°07.0	119°51.5
11	128°36.9	6.5'	19°12.9	-13.0'	60.7'		75°40.2	21°36.9	18°07.5	15°57.6	49°56.7	58°43.5	
12	143°02.4	6.6'	N18°59.9	-13.1'	60.7'		75°02.9	20°59.6	17°30.2	16°33.5	50°30.7	59°19.9	
13	157°28.0	6.7'	18°46.8	-13.2'	60.6'		74°25.7	20°22.4	16°53.0	17°09.5	51°04.7	59°56.4	
14	171°53.7	6.9'	18°33.6	-13.3'	60.6'	119°39.4	73°48.5	19°45.3	16°15.8	17°45.6	51°38.7	60°32.8	
15	186°19.5	7.0'	18°20.3	-13.4'	60.6'	119°02.3	73°11.3	19°08.2	15°38.6	18°21.7	52°12.8	61°09.2	
16	200°45.5	7.1'	18°06.9	-13.5'	60.5'	118°25.1	72°34.2	18°31.1	15°01.5	18°57.8	52°46.9	61°45.6	
17	215°11.6	7.2'	17°53.4	-13.6'	60.5'	117°48.0	71°57.1	17°54.1	14°24.5	19°34.0	53°20.9	62°21.9	
18	229°37.9	7.4'	N17°39.8	-13.7'	60.5'	117°10.9	71°20.1	17°17.1	13°47.4	20°10.2	53°55.0	62°58.2	
19	244°04.3	7.5'	17°26.2	-13.8'	60.5'	116°33.9	70°43.1	16°40.2	13°10.5	20°46.4	54°29.2	63°34.5	
20	258°30.8	7.6'	17°12.4	-13.9'	60.4'	115°56.9	70°06.2	16°03.3	12°33.6	21°22.6	55°03.3	64°10.8	
21	272°57.4	7.8'	16°58.5	-14.0'	60.4'	115°19.9	69°29.3	15°26.5	11°56.8	21°58.8	55°37.4	64°47.0	
22	287°24.2	7.9'	16°44.5	-14.1'	60.4'	114°43.0	68°52.4	14°49.7	11°20.0	22°34.9	56°11.5	65°23.2	
23	301°51.0	8.0'	16°30.5	-14.1'	60.3'	114°06.1	68°15.5	14°12.9	10°43.3	23°11.1	56°45.6	65°59.3	
26 th	SD = 16.6' Mer. pass. 02:05												

DUT1 = UT1-UTC = +0.1225 sec ΔT = TT-UT1 = +69.0615 sec

2026 December 27 to Dec. 29 UT

h	Moon (27 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Sun	GHA	ν	Dec	d	HP	-Antares	-Spica	-Regulus	\pm Jupiter	+Pollux	+Betelgeuse	+Capella	+Aldebaran
0	316°18.1	8.1'	N16°16.3	-14.2'	60.3'	113°29.3	67°38.8	13°36.3	10°06.7	23°47.3	49°38.1	57°19.8	66°35.4
1	330°45.2	8.3'	16°02.1	-14.3'	60.3'	112°52.5	67°02.0	12°59.6	9°30.2	24°23.5	50°10.9	57°53.9	67°11.5
2	345°12.5	8.4'	15°47.8	-14.4'	60.2'	112°15.8	66°25.3	12°23.1	8°53.7	24°59.7	50°43.8	58°28.0	67°47.6
3	359°39.8	8.5'	15°33.4	-14.5'	60.2'	111°39.1	65°48.6	11°46.6	8°17.4	25°35.8	51°16.8	59°02.1	68°23.6
4	14°07.4	8.6'	15°19.0	-14.5'	60.2'	111°02.4	65°12.0	11°10.1	7°41.2	26°11.9	51°49.7	59°36.2	68°59.5
5	28°35.0	8.8'	15°04.4	-14.6'	60.1'	110°25.8	64°35.4	10°33.8	7°05.1	26°48.0	52°22.7	60°10.3	69°35.5
6	43°02.7	8.9'	N14°49.8	-14.7'	60.1'	109°49.2	63°58.9	9°57.5	6°29.2	27°24.1	52°55.7	60°44.4	70°11.4
7	57°30.6	9.0'	14°35.2	-14.7'	60.1'	109°12.7	63°22.4	9°21.2	5°53.5	28°00.2	53°28.7	61°18.4	70°47.3
8	71°58.6	9.1'	14°20.4	-14.8'	60.0'	108°36.2	62°46.0	8°45.1	5°18.0	28°36.2	54°01.7	61°52.5	71°23.1
9	86°26.7	9.2'	14°05.6	-14.9'	60.0'	107°59.7	62°09.6	8°09.1	4°42.9	29°12.3	54°34.8	62°26.5	71°58.9
10	100°54.9	9.3'	13°50.8	-14.9'	60.0'	107°23.3	61°33.2	7°33.1	4°08.2	29°48.2	55°07.8	63°00.6	72°34.6
11	115°23.3	9.5'	13°35.9	-15.0'	59.9'	106°47.0	60°56.9	6°57.3	3°34.1	30°24.2	55°40.8	63°34.6	73°10.3
12	129°51.7	9.6'	N13°20.9	-15.0'	59.9'	106°10.7	60°20.6	6°21.7		31°00.1	56°13.9	64°08.6	73°46.0
13	144°20.3	9.7'	13°05.8	-15.1'	59.9'	105°34.4	59°44.4	5°46.2		31°36.0	56°46.9	64°42.5	74°21.6
14	158°49.0	9.8'	12°50.7	-15.1'	59.8'	104°58.2	59°08.3	5°10.9		32°11.9	57°20.0	65°16.5	74°57.2
15	173°17.7	9.9'	12°35.6	-15.2'	59.8'	104°22.0	58°32.1	4°36.0		32°47.7	57°53.0	65°50.4	75°32.7
16	187°46.6	10.0'	12°20.4	-15.2'	59.8'	103°45.9	57°56.1	4°01.4		33°23.5	58°26.1	66°24.3	76°08.2
17	202°15.7	10.1'	12°05.2	-15.3'	59.7'	103°09.8	57°20.0	3°27.4		33°59.2	58°59.1	66°58.2	76°43.7
18	216°44.8	10.2'	N11°49.9	-15.3'	59.7'	102°33.8	56°44.0	2°54.3		34°35.0	59°32.2	67°32.0	77°19.1
19	231°14.0	10.3'	11°34.5	-15.4'	59.6'	101°57.8	56°08.1			35°10.6	60°05.2	68°05.9	77°54.5
20	245°43.3	10.4'	11°19.1	-15.4'	59.6'	101°21.9	55°32.2			35°46.3	60°38.2	68°39.7	78°29.8
21	260°12.7	10.5'	11°03.7	-15.5'	59.6'	100°46.0	54°56.4			36°21.9	61°11.2	69°13.4	79°05.1
22	274°42.3	10.6'	10°48.3	-15.5'	59.5'	100°10.1	54°20.6			36°57.5	61°44.2	69°47.2	79°40.4
23	289°11.9	10.7'	10°32.8	-15.5'	59.5'	99°34.3	53°44.8		4°10.7	37°33.0	62°17.2	70°20.9	80°15.6
27 th	SD = 16.4' Mer. pass. 03:01												

Moon (28 th Dec)					Lunar Distance (objects with largest hourly LD delta)								
Mon	GHA	ν	Dec	d	HP	-Sun	-Antares	-Venus	-Spica	+Regulus	+Jupiter	+Pollux	+Aldebaran
0	303°41.6	10.8'	N10°17.2	-15.6'	59.5'		98°58.6	78°33.9	53°09.1		4°44.8	38°08.5	80°50.7
1	318°11.4	10.9'	10°01.7	-15.6'	59.4'		98°22.9	78°01.1	52°33.5		5°19.2	38°43.9	81°25.8
2	332°41.3	11.0'	09°46.1	-15.6'	59.4'		97°47.2	77°28.2	51°57.9		5°53.9	39°19.3	82°00.9
3	347°11.4	11.1'	09°30.4	-15.7'	59.3'		97°11.6	76°55.4	51°22.3		6°28.7	39°54.7	82°35.9
4	1°41.5	11.2'	09°14.8	-15.7'	59.3'		96°36.1	76°22.7	50°46.8		7°03.6	40°30.0	83°10.9
5	16°11.7	11.3'	08°59.1	-15.7'	59.3'		96°00.5	75°50.0	50°11.4	4°07.5	7°38.6	41°05.3	83°45.8
6	30°42.0	11.4'	N08°43.4	-15.7'	59.2'		95°25.1	75°17.4	49°36.0	4°41.5	8°13.7	41°40.5	84°20.7
7	45°12.3	11.5'	08°27.6	-15.8'	59.2'		94°49.7	74°44.8	49°00.6	5°15.8	8°48.7	42°15.7	84°55.5
8	59°42.8	11.6'	08°11.9	-15.8'	59.2'		94°14.3	74°12.3	48°25.3	5°50.3	9°23.8	42°50.9	85°30.3
9	74°13.4	11.6'	07°56.1	-15.8'	59.1'		93°39.0	73°39.8	47°50.1	6°24.8	9°58.9	43°26.0	86°05.0
10	88°44.0	11.7'	07°40.3	-15.8'	59.1'	119°42.4	93°03.7	73°07.4	47°14.9	6°59.5	10°34.0	44°01.1	86°39.7
11	103°14.7	11.8'	07°24.5	-15.8'	59.0'	119°09.8	92°28.5	72°35.0	46°39.7	7°34.2	11°09.0	44°36.1	87°14.4
12	117°45.5	11.9'	N07°08.6	-15.8'	59.0'	118°37.2	91°53.3	72°02.7	46°04.6	8°08.9	11°44.0	45°11.0	87°49.0
13	132°16.4	12.0'	06°52.8	-15.9'	59.0'	118°04.8	91°18.2	71°30.4	45°29.6	8°43.6	12°19.1	45°46.0	88°23.5
14	146°47.4	12.0'	06°36.9	-15.9'	58.9'	117°32.3	90°43.1	70°58.2	44°54.6	9°18.4	12°54.0	46°20.9	88°58.0
15	161°18.4	12.1'	06°21.1	-15.9'	58.9'	116°59.9	90°08.1	70°26.1	44°19.6	9°53.1	13°29.0	46°55.7	89°32.5
16	175°49.5	12.2'	06°05.2	-15.9'	58.8'	116°27.6	89°33.1	69°54.0	43°44.7	10°27.8	14°03.9	47°30.5	90°06.9
17	190°20.7	12.3'	05°49.3	-15.9'	58.8'	115°55.3	88°58.2	69°21.9	43°09.8	11°02.5	14°38.8	48°05.3	90°41.2
18	204°52.0	12.3'	N05°33.4	-15.9'	58.8'	115°23.0	88°23.3	68°49.9	42°35.0	11°37.1	15°13.7	48°40.0	91°15.5
19	219°23.3	12.4'	05°17.5	-15.9'	58.7'	114°50.8	87°48.5	68°17.9	42°00.3	12°11.8	15°48.5	49°14.6	91°49.8
20	233°54.7	12.5'	05°01.6	-15.9'	58.7'	114°18.7	87°13.7	67°46.0	41°25.6	12°46.4	16°23.3	49°49.2	92°24.0
21	248°26.2	12.5'	04°45.7	-15.9'	58.6'	113°46.6	86°39.0	67°14.2	40°50.9	13°20.9	16°58.0	50°23.8	92°58.2
22	262°57.7	12.6'	04°29.8	-15.9'	58.6'	113°14.5	86°04.3	66°42.4	40°16.3	13°55.5	17°32.7	50°58.3	93°32.3
23	277°29.3	12.7'	04°13.9	-15.9'	58.6'	112°42.5	85°29.7	66°10.6	39°41.8	14°30.0	18°07.3	51°32.8	94°06.4
28 th	SD = 16.2' Mer. pass. 03:53					Sun SD = 16.3'							

h	Moon (29 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Tue	GHA	ν	Dec	d	HP	-Sun	-Antares	-Venus	-Spica	+Regulus	+Jupiter	+Pollux	+Aldebaran
0	292°01.0	12.7'	N03°58.0	-15.9'	58.5'	112°10.6	84°55.1	65°38.9	39°07.3	15°04.4	18°42.0	52°07.2	94°40.4
1	306°32.7	12.8'	03°42.1	-15.9'	58.5'	111°38.6	84°20.6	65°07.3	38°32.8	15°38.9	19°16.5	52°41.6	95°14.4
2	321°04.5	12.9'	03°26.2	-15.9'	58.4'	111°06.8	83°46.1	64°35.7	37°58.4	16°13.2	19°51.1	53°16.0	95°48.3
3	335°36.4	12.9'	03°10.3	-15.9'	58.4'	110°35.0	83°11.6	64°04.2	37°24.1	16°47.6	20°25.5	53°50.3	96°22.2
4	350°08.3	13.0'	02°54.4	-15.9'	58.4'	110°03.2	82°37.2	63°32.7	36°49.8	17°21.9	21°00.0	54°24.5	96°56.0
5	4°40.3	13.0'	02°38.5	-15.9'	58.3'	109°31.5	82°02.9	63°01.2	36°15.5	17°56.1	21°34.4	54°58.7	97°29.8
6	19°12.3	13.1'	N02°22.7	-15.9'	58.3'	108°59.8	81°28.6	62°29.9	35°41.3	18°30.3	22°08.7	55°32.9	98°03.5
7	33°44.4	13.1'	02°06.8	-15.8'	58.3'	108°28.2	80°54.3	61°58.5	35°07.2	19°04.5	22°43.1	56°07.0	98°37.2
8	48°16.5	13.2'	01°51.0	-15.8'	58.2'	107°56.6	80°20.1	61°27.3	34°33.1	19°38.6	23°17.3	56°41.1	99°10.8
9	62°48.7	13.2'	01°35.2	-15.8'	58.2'	107°25.0	79°46.0	60°56.0	33°59.0	20°12.7	23°51.5	57°15.1	99°44.4
10	77°20.9	13.3'	01°19.3	-15.8'	58.1'	106°53.6	79°11.9	60°24.9	33°25.0	20°46.8	24°25.7	57°49.0	100°17.9
11	91°53.2	13.3'	01°03.6	-15.8'	58.1'	106°22.1	78°37.8	59°53.7	32°51.1	21°20.8	24°59.9	58°23.0	100°51.4
12	106°25.6	13.4'	N00°47.8	-15.8'	58.1'	105°50.7	78°03.8	59°22.7	32°17.2	21°54.7	25°34.0	58°56.9	101°24.8
13	120°57.9	13.4'	00°32.0	-15.7'	58.0'	105°19.4	77°29.9	58°51.7	31°43.3	22°28.6	26°08.0	59°30.7	101°58.2
14	135°30.4	13.5'	00°16.3	-15.7'	58.0'	104°48.1	76°55.9	58°20.7	31°09.5	23°02.5	26°42.0	60°04.5	102°31.6
15	150°02.8	13.5'	N00°00.5	-15.7'	57.9'	104°16.8	76°22.1	57°49.8	30°35.8	23°36.3	27°16.0	60°38.2	103°04.8
16	164°35.3	13.5'	S00°15.2	-15.7'	57.9'	103°45.6	75°48.2	57°18.9	30°02.1	24°10.1	27°49.9	61°11.9	103°38.1
17	179°07.9	13.6'	00°30.8	-15.7'	57.9'	103°14.4	75°14.5	56°48.1	29°28.5	24°43.8	28°23.7	61°45.6	104°11.3
18	193°40.5	13.6'	S00°46.5	-15.6'	57.8'	102°43.3	74°40.7	56°17.4	28°54.9	25°17.5	28°57.6	62°19.2	104°44.4
19	208°13.1	13.7'	01°02.1	-15.6'	57.8'	102°12.2	74°07.1	55°46.7	28°21.3	25°51.1	29°31.3	62°52.8	105°17.5
20	222°45.7	13.7'	01°17.7	-15.6'	57.7'	101°41.2	73°33.4	55°16.0	27°47.8	26°24.7	30°05.1	63°26.3	105°50.6
21	237°18.4	13.7'	01°33.3	-15.5'	57.7'	101°10.2	72°59.8	54°45.5	27°14.4	26°58.3	30°38.8	63°59.8	106°23.6
22	251°51.2	13.8'	01°48.8	-15.5'	57.7'	100°39.3	72°26.3	54°14.9	26°41.0	27°31.8	31°12.4	64°33.2	106°56.5
23	266°23.9	13.8'	02°04.4	-15.5'	57.6'	100°08.4	71°52.8	53°44.4	26°07.7	28°05.2	31°46.0	65°06.6	107°29.4
29 th	SD = 16.0' Mer. pass. 04:41					Sun SD = 16.3'							

DUT1 = UT1-UTC = +0.1229 sec $\Delta T = TT-UT1 = +69.0611$ sec

2026 December 30 to Dec. 31 UT

h	Moon (30 th Dec)					Lunar Distance (objects with largest hourly LD delta)							
Wed	GHA	ν	Dec	d	HP	-Sun	-Antares	-Venus	-Spica	+Regulus	+Jupiter	+Pollux	+Aldebaran
0	280°56.7	13.8'	S02°19.9	-15.5'	57.6'	99°37.6	71°19.3	53°14.0	25°34.4	28°38.7	32°19.6	65°39.9	108°02.3
1	295°29.5	13.8'	02°35.3	-15.4'	57.6'	99°06.8	70°45.9	52°43.6	25°01.2	29°12.0	32°53.1	66°13.2	108°35.1
2	310°02.4	13.9'	02°50.7	-15.4'	57.5'	98°36.0	70°12.6	52°13.3	24°28.0	29°45.4	33°26.5	66°46.5	109°07.8
3	324°35.2	13.9'	03°06.1	-15.4'	57.5'	98°05.3	69°39.2	51°43.0	23°54.9	30°18.7	34°00.0	67°19.7	109°40.5
4	339°08.1	13.9'	03°21.5	-15.3'	57.4'	97°34.6	69°06.0	51°12.8	23°21.8	30°51.9	34°33.3	67°52.9	110°13.2
5	353°41.1	13.9'	03°36.8	-15.3'	57.4'	97°04.0	68°32.7	50°42.6	22°48.8	31°25.1	35°06.7	68°26.0	110°45.8
6	8°14.0	14.0'	S03°52.1	-15.2'	57.4'	96°33.4	67°59.5	50°12.5	22°15.8	31°58.3	35°40.0	68°59.1	111°18.4
7	22°47.0	14.0'	04°07.3	-15.2'	57.3'	96°02.9	67°26.4	49°42.4	21°42.9	32°31.4	36°13.2	69°32.1	111°50.9
8	37°19.9	14.0'	04°22.6	-15.2'	57.3'	95°32.4	66°53.3	49°12.4	21°10.1	33°04.5	36°46.5	70°05.1	112°23.4
9	51°53.0	14.0'	04°37.7	-15.1'	57.3'	95°01.9	66°20.2	48°42.4	20°37.3	33°37.5	37°19.6	70°38.1	112°55.8
10	66°26.0	14.0'	04°52.9	-15.1'	57.2'	94°31.5	65°47.2	48°12.5	20°04.5	34°10.5	37°52.8	71°11.0	113°28.2
11	80°59.0	14.1'	05°07.9	-15.0'	57.2'	94°01.2	65°14.3	47°42.7	19°31.8	34°43.4	38°25.8	71°43.8	114°00.5
12	95°32.1	14.1'	S05°23.0	-15.0'	57.1'	93°30.8	64°41.3	47°12.9	18°59.2	35°16.3	38°58.9	72°16.7	114°32.8
13	110°05.1	14.1'	05°38.0	-15.0'	57.1'	93°00.6	64°08.5	46°43.1	18°26.6	35°49.2	39°31.9	72°49.5	115°05.0
14	124°38.2	14.1'	05°53.0	-14.9'	57.1'	92°30.3	63°35.6	46°13.4	17°54.1	36°22.0	40°04.8	73°22.2	115°37.2
15	139°11.3	14.1'	06°07.9	-14.9'	57.0'	92°00.1	63°02.8	45°43.7	17°21.7	36°54.8	40°37.8	73°54.9	116°09.3
16	153°44.4	14.1'	06°22.8	-14.8'	57.0'	91°30.0	62°30.0	45°14.2	16°49.3	37°27.5	41°10.6	74°27.6	116°41.4
17	168°17.5	14.1'	06°37.6	-14.8'	57.0'	90°59.9	61°57.3	44°44.6	16°17.0	38°00.2	41°43.5	75°00.2	117°13.5
18	182°50.6	14.1'	S06°52.4	-14.7'	56.9'	90°29.8	61°24.7	44°15.1	15°44.7	38°32.9	42°16.3	75°32.8	117°45.5
19	197°23.7	14.1'	07°07.1	-14.7'	56.9'	89°59.7	60°52.0	43°45.7	15°12.5	39°05.5	42°49.0	76°05.3	118°17.4
20	211°56.9	14.1'	07°21.8	-14.6'	56.9'	89°29.8	60°19.4	43°16.3	14°40.4	39°38.1	43°21.8	76°37.8	118°49.3
21	226°30.0	14.1'	07°36.4	-14.6'	56.8'	88°59.8	59°46.9	42°47.0	14°08.4	40°10.6	43°54.4	77°10.3	119°21.2
22	241°03.1	14.1'	07°51.0	-14.5'	56.8'	88°29.9	59°14.4	42°17.7	13°36.4	40°43.1	44°27.1	77°42.7	119°53.0
23	255°36.3	14.1'	08°05.5	-14.5'	56.8'	88°00.0	58°41.9	41°48.5	13°04.6	41°15.6	44°59.7	78°15.1	
30 th	SD = 15.7' Mer. pass. 05:26					Sun SD = 16.3'							

h	Moon (31 st Dec)					Lunar Distance (objects with largest hourly LD delta)							
Thu	GHA	ν	Dec	d	HP	-Sun	-Antares	-Venus	-Spica	+Mars	+Regulus	+Jupiter	+Pollux
0	270°09.4	14.1'	S08°20.0	-14.4'	56.7'	87°30.2	58°09.5	41°19.3	12°32.8	32°50.1	41°48.0	45°32.2	78°47.4
1	284°42.5	14.1'	08°34.4	-14.4'	56.7'	87°00.4	57°37.1	40°50.2	12°01.1	33°21.8	42°20.4	46°04.8	79°19.7
2	299°15.7	14.1'	08°48.8	-14.3'	56.6'	86°30.6	57°04.7	40°21.1	11°29.5	33°53.5	42°52.7	46°37.2	79°52.0
3	313°48.8	14.1'	09°03.1	-14.3'	56.6'	86°00.9	56°32.4	39°52.1	10°58.1	34°25.2	43°25.0	47°09.7	80°24.2
4	328°21.9	14.1'	09°17.3	-14.2'	56.6'	85°31.2	56°00.1	39°23.2	10°26.7	34°56.8	43°57.3	47°42.1	80°56.4
5	342°55.1	14.1'	09°31.5	-14.1'	56.5'	85°01.6	55°27.9	38°54.3	9°55.5	35°28.5	44°29.5	48°14.5	81°28.6
6	357°28.2	14.1'	S09°45.7	-14.1'	56.5'	84°32.0	54°55.7	38°25.4	9°24.4	36°00.0	45°01.7	48°46.8	82°00.7
7	12°01.3	14.1'	09°59.8	-14.0'	56.5'	84°02.4	54°23.5	37°56.7	8°53.5	36°31.6	45°33.8	49°19.1	82°32.7
8	26°34.4	14.1'	10°13.8	-14.0'	56.4'	83°32.9	53°51.4	37°27.9	8°22.9	37°03.1	46°05.9	49°51.4	83°04.8
9	41°07.5	14.1'	10°27.8	-13.9'	56.4'	83°03.4	53°19.3	36°59.3	7°52.4	37°34.6	46°38.0	50°23.6	83°36.8
10	55°40.6	14.1'	10°41.7	-13.8'	56.4'	82°33.9	52°47.2	36°30.6	7°22.2	38°06.1	47°10.1	50°55.8	84°08.8
11	70°13.6	14.1'	10°55.5	-13.8'	56.3'	82°04.5	52°15.2	36°02.1	6°52.3	38°37.5	47°42.1	51°27.9	84°40.7
12	84°46.7	14.0'	S11°09.3	-13.7'	56.3'	81°35.1	51°43.2	35°33.6	6°22.7	39°08.9	48°14.0	52°00.0	85°12.6
13	99°19.7	14.0'	11°23.0	-13.7'	56.3'	81°05.8	51°11.3	35°05.1	5°53.7	39°40.3	48°46.0	52°32.1	85°44.4
14	113°52.8	14.0'	11°36.7	-13.6'	56.3'	80°36.5	50°39.4	34°36.8	5°25.2	40°11.7	49°17.9	53°04.2	86°16.3
15	128°25.8	14.0'	11°50.2	-13.5'	56.2'	80°07.2	50°07.5	34°08.4	4°57.4	40°43.0	49°49.7	53°36.2	86°48.0
16	142°58.8	14.0'	12°03.8	-13.5'	56.2'	79°38.0	49°35.6	33°40.2	4°30.6	41°14.3	50°21.6	54°08.2	87°19.8
17	157°31.8	14.0'	12°17.2	-13.4'	56.2'	79°08.7	49°03.8	33°12.0		41°45.6	50°53.4	54°40.1	87°51.5
18	172°04.7	13.9'	S12°30.6	-13.3'	56.1'	78°39.6	48°32.1	32°43.8		42°16.8	51°25.1	55°12.0	88°23.2
19	186°37.7	13.9'	12°43.9	-13.3'	56.1'	78°10.4	48°00.3	32°15.8		42°48.0	51°56.8	55°43.9	88°54.9
20	201°10.6	13.9'	12°57.2	-13.2'	56.1'	77°41.3	47°28.6	31°47.7		43°19.2	52°28.5	56°15.7	89°26.5
21	215°43.5	13.9'	13°10.4	-13.1'	56.0'	77°12.2	46°56.9	31°19.8		43°50.4	53°00.2	56°47.5	89°58.1
22	230°16.4	13.9'	13°23.5	-13.0'	56.0'	76°43.2	46°25.3	30°51.9		44°21.5	53°31.8	57°19.3	90°29.6
23	244°49.2	13.8'	13°36.5	-13.0'	56.0'	76°14.2	45°53.7	30°24.1		44°52.6	54°03.4	57°51.1	91°01.1
31 st	SD = 15.5' Mer. pass. 06:10					Sun SD = 16.3'							