



Astrodienst Ephemeris Tables for the year 1419

tropical geocentric zodiac

contains Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, True Node, Moon's Node, Lilith, Chiron

Programming
Dieter Koch and Alois Treindl
based on Swiss Ephemeris
Code D5EPX

ASTRODIENST EPHEMERIS for the year 1419

geocentric

JANUARY 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|-----------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|
| S 1 | 7 14 17 | 19°36'26" | 14°48'00" | 25°47'41" | 3°18'18" | 29°45'45" | 25°57'51" | 2°45'45" | 4°48'28" | 18°18'19" | 23°25'25" | 21°18'37" | 21°46'46" | 23°27'27" | 10°28'24" | S 1 |
| M 2 | 7 18 14 | 20° 7'33" | 26° 9' 0" | 26°52' 4" | 4°27' 0" | 0°26' 0" | 25°56' 0" | 2°42' 0" | 4°31' 0" | 18°18'18" | 23°22' 0" | 21°43' 0" | 21°43' 0" | 23°34' 0" | 10°29' 0" | M 2 |
| T 3 | 7 22 10 | 21° 8'38" | 8°54' 5" | 28° 5' 5" | 5°36' 1" | 1° 8' 0" | 26° 0' 0" | 2°39' 0" | 4°33' 0" | 18°18'16" | 23°23' 0" | 21°31' 0" | 21°40' 0" | 23°41' 0" | 10°35' 0" | T 3 |
| W 4 | 7 26 7 | 22° 9'43" | 19°54' 2" | 29°19' 6" | 6°44' 1" | 1°49' 0" | 26° 4' 0" | 2°36' 0" | 4°36' 0" | 18°18'14" | 23°22' 0" | 21°31' 0" | 21°37' 0" | 23°47' 0" | 10°41' 0" | W 4 |
| T 5 | 7 30 4 | 23°10'47" | 18°41' 0" | 0°35' 7" | 7°53' 2" | 2°30' 0" | 26° 9' 0" | 2°33' 0" | 4°39' 0" | 18°18'12" | 23°21' 0" | 21°31' 0" | 21°34' 0" | 23°54' 0" | 10°46' 0" | T 5 |
| F 6 | 7 34 0 | 24°11'50" | 13°33' 1" | 1°53' 9" | 9° 1' 3" | 3°12' 0" | 26°14' 0" | 2°30' 0" | 4°42' 0" | 18°18'11" | 23°20' 0" | 21°30' 0" | 21°30' 0" | 24° 1' 0" | 10°52' 0" | F 6 |
| S 7 | 7 37 57 | 25°12'52" | 25°34' 3" | 3°12' 10" | 10° 9' 3" | 3°53' 0" | 26°19' 0" | 2°27' 0" | 4°44' 0" | 18° 9' 0" | 23°19' 0" | 21°27' 0" | 21°27' 0" | 24° 7' 0" | 10°57' 0" | S 7 |
| S 8 | 7 41 53 | 26°13'53" | 7°11'48" | 4°32' 11" | 11°17' 4" | 4°34' 0" | 26°24' 0" | 2°23' 0" | 4°47' 0" | 18° 7' 0" | 23°18' 0" | 21°21' 0" | 21°24' 0" | 24°14' 0" | 11° 3' 0" | S 8 |
| M 9 | 7 45 50 | 27°14'53" | 20°21' 5" | 5°53' 12" | 12°25' 5" | 5°16' 0" | 26°30' 0" | 2°20' 0" | 4°50' 0" | 18° 6' 0" | 23°17' 0" | 21°13' 0" | 21°21' 0" | 24°20' 0" | 11° 8' 0" | M 9 |
| T 10 | 7 49 46 | 28°15'51" | 3°14' 7" | 7°15' 13" | 13°32' 5" | 5°57' 0" | 26°35' 0" | 2°16' 0" | 4°53' 0" | 18° 4' 0" | 23°16' 0" | 21° 2' 0" | 21°18' 0" | 24°27' 0" | 11°14' 0" | T 10 |
| W 11 | 7 53 43 | 29°16'49" | 16°27' 8" | 8°39' 14" | 14°39' 6" | 6°38' 0" | 26°41' 0" | 2°13' 0" | 4°56' 0" | 18° 2' 0" | 23°15' 0" | 20°49' 0" | 21°15' 0" | 24°34' 0" | 11°19' 0" | W 11 |
| T 12 | 7 57 39 | 0°17'46" | 29°59' 10" | 10° 3' 15" | 15°47' 7" | 7°20' 0" | 26°47' 0" | 2° 9' 0" | 4°59' 0" | 18° 1' 0" | 23°14' 0" | 20°36' 0" | 21°11' 0" | 24°40' 0" | 11°25' 0" | T 12 |
| F 13 | 8 1 36 | 1°18'42" | 13°48' 11" | 11°28' 16" | 16°53' 8" | 8° 1' 0" | 26°53' 0" | 2° 5' 0" | 5° 2' 0" | 17°59' 0" | 23°13' 0" | 20°24' 0" | 21° 8' 0" | 24°47' 0" | 11°30' 0" | F 13 |
| S 14 | 8 5 33 | 2°19'36" | 27°49' 12" | 12°55' 18" | 0° 8' 4" | 8°42' 0" | 26°59' 0" | 2° 2' 0" | 5° 5' 0" | 17°57' 0" | 23°12' 0" | 20°13' 0" | 21° 5' 0" | 24°54' 0" | 11°36' 0" | S 14 |
| S 15 | 8 9 29 | 3°20'30" | 11°57' 14" | 14°22' 19" | 19° 6' 9" | 9°23' 0" | 27° 6' 0" | 1°58' 0" | 5° 8' 0" | 17°56' 0" | 23°11' 0" | 20° 6' 0" | 21° 2' 0" | 25° 0' 0" | 11°41' 0" | S 15 |
| M 16 | 8 13 26 | 4°21'23" | 26° 9' 15" | 15°50' 20" | 10° 5' 10" | 5° 27' 12" | 1°54' 0" | 5°11' 0" | 17°54' 0" | 23°10' 0" | 20° 1' 0" | 20°59' 0" | 25° 7' 0" | 11°46' 0" | M 16 | |
| T 17 | 8 17 22 | 5°22'15" | 10°21' 17" | 17°18' 21" | 18°10' 46" | 27°19' 0" | 1°50' 0" | 5°14' 0" | 17°53' 0" | 23°10' 0" | 19°59' 0" | 20°56' 0" | 25°14' 0" | 11°52' 0" | T 17 | |
| W 18 | 8 21 19 | 6°23'06" | 24°30' 18" | 18°48' 22" | 22°24' 11" | 12°27' 26" | 1°46' 0" | 5°17' 0" | 17°51' 0" | 23° 9' 0" | 19°59' 0" | 20°52' 0" | 25°20' 0" | 11°57' 0" | W 18 | |
| T 19 | 8 25 15 | 7°23'56" | 8°11'36" | 20°18' 23" | 23°29' 12" | 8° 27' 33" | 1°42' 0" | 5°20' 0" | 17°49' 0" | 23° 8' 0" | 19°59' 0" | 20°49' 0" | 25°27' 0" | 12° 2' 0" | T 19 | |
| F 20 | 8 29 12 | 8°24'45" | 22°37' 21" | 15°50' 24" | 34°12' 49" | 27°40' 0" | 1°37' 0" | 5°23' 0" | 17°48' 0" | 23° 7' 0" | 19°59' 0" | 20°46' 0" | 25°34' 0" | 12° 8' 0" | F 20 | |
| S 21 | 8 33 8 | 9°25'34" | 6°33' 23" | 22°22' 25" | 39°13' 30" | 27°48' 0" | 1°33' 0" | 5°27' 0" | 17°46' 0" | 23° 6' 0" | 19°56' 0" | 20°43' 0" | 25°40' 0" | 12°13' 0" | S 21 | |
| S 22 | 8 37 5 | 10°26'21" | 20°23' 24" | 24°54' 26" | 43°14' 12" | 27°55' 0" | 1°29' 0" | 5°30' 0" | 17°45' 0" | 23° 6' 0" | 19°50' 0" | 20°40' 0" | 25°47' 0" | 12°18' 0" | S 22 | |
| M 23 | 8 41 2 | 11°27'07" | 4°36' 26" | 26°28' 27" | 47°14' 53" | 28° 3' 0" | 1°24' 0" | 5°33' 0" | 17°43' 0" | 23° 5' 0" | 19°42' 0" | 20°36' 0" | 25°53' 0" | 12°23' 0" | M 23 | |
| T 24 | 8 44 58 | 12°27'53" | 17°39' 28" | 2° 28' 51" | 53°15' 34" | 28°11' 0" | 1°20' 0" | 5°36' 0" | 17°42' 0" | 23° 4' 0" | 19°32' 0" | 20°33' 0" | 26° 0' 0" | 12°28' 0" | T 24 | |
| W 25 | 8 48 55 | 13°28'37" | 1°17' 29" | 29°38' 29" | 55°16' 15" | 28°19' 0" | 1°16' 0" | 5°39' 0" | 17°40' 0" | 23° 3' 0" | 19°20' 0" | 20°30' 0" | 26° 7' 0" | 12°33' 0" | W 25 | |
| T 26 | 8 52 51 | 14°29'19" | 14° 7' 1" | 1°14' 16" | 58°0°58" | 16°56' 28" | 1°11' 0" | 5°43' 0" | 17°39' 0" | 23° 3' 0" | 19° 8' 0" | 20°27' 0" | 26°13' 0" | 12°39' 0" | T 26 | |
| F 27 | 8 56 48 | 15°30'00" | 26°58' 2" | 51' 2° 1" | 17°37' 28" | 35°1° 7" | 5°46' 0" | 17°37' 0" | 23° 2' 0" | 18°57' 0" | 20°24' 0" | 26°20' 0" | 12°44' 0" | F 27 | | |
| S 28 | 9 0 44 | 16°30'40" | 9°33' 4° | 28' 3° 3" | 18°18' 28" | 44°1° 2" | 5°49' 0" | 17°36' 0" | 23° 1' 0" | 18°48' 0" | 20°21' 0" | 26°27' 0" | 12°49' 0" | S 28 | | |
| S 29 | 9 4 41 | 17°31'18" | 21°52' 6° | 7' 4° 5" | 18°59' 28" | 52°0°57" | 5°53' 0" | 17°34' 0" | 23° 1' 0" | 18°42' 0" | 20°17' 0" | 26°33' 0" | 12°53' 0" | S 29 | | |
| M 30 | 9 8 37 | 18°31'54" | 3°58' 7° | 46' 5° 7" | 19°40' 29° | 1° 0°53" | 5°56' 0" | 17°33' 0" | 23° 0' 0" | 18°39' 0" | 20°14' 0" | 26°40' 0" | 12°58' 0" | M 30 | | |
| T 31 | 9 12 34 | 19°32'29" | 15°53' 9° | 27' 6° 8" | 20°21' 29° | 10°0°48" | 5°59' 0" | 17°32' 0" | 22°59' 0" | 18°37' 0" | 20°11' 0" | 26°47' 0" | 13° 3' 0" | T 31 | | |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|-------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | lat |
| S 1 | 22s 9 | 3s28 | 3n 5 | 22s25 | 1n 2 | 11s25 | 1s10 | 0s17 | 0s12 | 8n56 | 1s10 | 12n10 | 1n45 | 10s36 | 0s45 | 21n42 |
| M 2 | 22 0 | 0n27 | 2 10 | 22 36 | 0 53 | 10 57 | 1 7 | 0n 1 | 0 11 | 8 57 | 1 10 | 12 11 | 1 45 | 10 35 | 0 45 | 21 43 |
| T 3 | 21 51 | 4 18 | 1 11 | 22 46 | 0 44 | 10 28 | 1 3 | 0 18 | 0 10 | 8 59 | 1 10 | 12 12 | 1 46 | 10 34 | 0 45 | 21 43 |
| W 4 | 21 41 | 7 56 | 0 9 | 22 56 | 0 35 | 9 59 | 0 59 | 0 36 | 0 9 | 9 1 | 1 10 | 12 13 | 1 46 | 10 33 | 0 44 | 21 43 |
| T 5 | 21 31 | 11 15 | 0s54 | 23 5 | 0 26 | 9 30 | 0 56 | 0 53 | 0 8 | 9 3 | 1 9 | 12 15 | 1 46 | 10 32 | 0 44 | 21 43 |
| F 6 | 21 20 | 14 8 | 1 54 | 23 12 | 0 17 | 9 1 | 0 52 | 1 10 | 0 7 | 9 5 | 1 9 | 12 16 | 1 46 | 10 31 | 0 44 | 21 44 |
| S 7 | 21 9 | 16 27 | 2 50 | 23 19 | 0 9 | 8 31 | 0 48 | 1 28 | 0 5 | 9 7 | 1 9 | 12 18 | 1 47 | 10 29 | 0 44 | 21 44 |
| S 8 | 20 58 | 18 4 | 3 39 | 23 25 | 0 1 | 8 2 | 0 44 | 1 45 | 0 4 | 9 9 | 1 8 | 12 19 | 1 47 | 10 28 | 0 44 | 21 44 |
| M 9 | 20 46 | 18 51 | 4 19 | 23 30 | 0s 7 | 7 32 | 0 39 | 2 3 | 0 3 | 9 12 | 1 8 | 12 20 | 1 47 | 10 27 | 0 44 | 21 44 |
| T 10 | 20 34 | 18 42 | 4 47 | 23 34 | 0 15 | 7 2 | 0 35 | 2 20 | 0 2 | 9 14 | 1 8 | 12 22 | 1 47 | 10 26 | 0 44 | 21 45 |
| W 11 | 20 22 | 17 32 | 5 0 | 23 37 | 0 23 | 6 32 | 0 31 | 2 37 | 0 1 | 9 16 | 1 8 | 12 23 | 1 47 | 10 25 | 0 44 | 21 45 |
| T 12 | 20 9 | 15 23 | 4 57 | 23 38 | 0 30 | 6 2 | 0 26 | 2 55 | 0 0 | 9 19 | 1 7 | 12 25 | 1 48 | 10 24 | 0 44 | 21 45 |
| F 13 | 19 56 | 12 19 | 4 36 | 23 38 | 0 38 | 5 31 | 0 21 | 3 12 | 0n 1 | 9 21 | 1 7 | 12 26 | 1 48 | 10 23 | 0 44 | 21 45 |
| S 14 | 19 42 | 8 32 | 3 59 | 23 37 | 0 45 | 5 1 | 0 17 | 3 29 | 0 2 | 9 24 | 1 7 | 12 28 | 1 48 | 10 22 | 0 44 | 21 45 |
| S 15 | 19 28 | 4 13 | 3 7 | 23 35 | 0 51 | 4 31 | 0 12 | 3 46 | 0 3 | 9 26 | 1 6 | 12 29 | 1 48 | 10 21 | 0 44 | 21 46 |
| M 16 | 19 14 | 0s21 | 2 3 | 23 32 | 1 0 | 4 0 | 0 7 | 4 4 | 0 4 | 9 29 | 1 6 | 12 31 | 1 48 | 10 20 | 0 44 | 21 46 |
| T 17 | 18 59 | 4 53 | 0 51 | 23 27 | 1 4 | 3 29 | 0 2 | 4 21 | 0 5 | 9 32 | 1 6 | 12 33 | 1 48 | 10 18 | 0 44 | 21 46 |
| W 18 | 18 44 | 9 9 | 0n24 | 23 21 | 1 10 | 2 59 | 0n 3 | 4 38 | 0 6 | 9 34 | 1 6 | 12 34 | 1 49 | 10 17 | 0 44 | 21 46 |
| T 19 | 18 29 | 12 53 | 1 37 | 23 13 | 1 16 | 2 28 | 0 8 | 4 55 | 0 7 | 9 37 | 1 5 | 12 36 | 1 49 | 10 16 | 0 44 | 21 47 |
| F 20 | 18 13 | 15 50 | 2 44 | 23 5 | 1 21 | 1 58 | 0 13 | 5 12 | 0 8 | 9 40 | 1 5 | 12 38 | 1 49 | 10 15 | 0 44 | 21 47 |
| S 21 | 17 57 | 17 50 | 3 41 | 22 54 | 1 27 | 1 27 | 0 19 | 5 29 | 0 8 | 9 43 | 1 5 | 12 39 | 1 49 | 10 14 | 0 44 | 21 47 |
| S 22 | 17 41 | 18 46 | 4 24 | 22 43 | 1 32 | 0 56 | 0 24 | 5 45 | 0 9 | 9 46 | 1 4 | 12 41 | 1 49 | 10 12 | 0 44 | 21 47 |
| M 23 | 17 24 | 18 35 | 4 52 | 22 30 | 1 36 | 0 26 | 0 30 | 6 2 | 0 10 | 9 49 | 1 4 | 12 43 | 1 49 | 10 11 | 0 44 | 21 48 |
| T 24 | 17 7 | 17 21 | 5 2 | 22 16 | 1 41 | 0n 5 | 0 35 | 6 19 | 0 11 | 9 52 | 1 4 | 12 44 | 1 50 | 10 10 | 0 44 | 21 48 |
| W 25 | 16 50 | 15 10 | 4 57 | 22 0 | 1 45 | 0 35 | 0 41 | 6 36 | 0 12 | 9 55 | 1 4 | 12 46 | 1 50 | 10 9 | 0 44 | 21 48 |
| T 26 | 16 32 | 12 15 | 4 35 | 21 42 | 1 48 | 1 6 | 0 47 | 6 52 | 0 13 | 9 58 | 1 3 | 12 48 | 1 50 | 10 8 | 0 44 | 21 48 |
| F 27 | 16 14 | 8 49 | 3 59 | 21 24 | 1 52 | 1 36 | 0 53 | 7 9 | 0 14 | 10 1 | 1 3 | 12 50 | 1 50 | 10 6 | 0 44 | 21 48 |
| S 28 | 15 56 | 5 2 | 3 13 | 21 3 | 1 55 | 2 7 | 0 59 | 7 25 | 0 15 | 10 4 | 1 3 | 12 51 | 1 50 | 10 5 | 0 44 | 21 49 |
| S 29 | 15 38 | 1 7 | 2 18 | 20 42 | 1 57 | 2 37 | 1 5 | 7 42 | 0 15 | 10 8 | 1 3 | 12 53 | 1 50 | 10 4 | 0 44 | 21 49 |
| M 30 | 15 19 | 2n46 | 1 18 | 20 19 | 2 0 | 3 7 | 1 11 | 7 58 | 0 16 | 10 11 | 1 2 | 12 55 | 1 50 | 10 3 | 0 44 | 21 49 |
| T 31 | 15s 0 | 6n30 | 0n15 | 19s54 | 2s 2 | 3n37 | 1n17 | 8n14 | 0n17 | 10n14 | 1s 2 | 12n57 | 1n51 | 10s 2 | 0s44 | 21n49 |

Julian Day Number = 2239347.5, Delta T = 07m22s

Ecliptic obliquity = 23°30'44", Nutation = 0°00'07", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°38'07", Lahiri = 15°45'07" Julian Calendar 1 Jan. 1419 == Greg. Calendar 10 Jan. 1419

ASTRODIENST EPHEMERIS for the year 1419

geocentric

FEBRUARY 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|------------------------|---------------------|--------------------|--------------------|--------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|--------------------|------|
| W 1 | 9 16 31 | 20 ³³ 01 | 27 ⁴² 42 | 11 ³⁸ 8 | 7 ⁴⁷ 9 | 21 ⁴⁷ 2 | 29 ⁴⁷ 19 | 0°R43 | 6 ³⁸ 3 | 17°R30 | 22°R59 | 18 ³⁸ 38 | 20 ³⁸ 8 | 26 ⁴⁷ 53 | 13 ³⁸ 8 | W 1 |
| T 2 | 9 20 27 | 21°33'32 | 9 ³⁸ 29 | 12°50 | 8°10 | 21°43 | 29°28 | 0 ³⁹ 39 | 6° 6 | 17°29 | 22°58 | 18°38 | 20° 5 | 27° 0 | 13°13 | T 2 |
| F 3 | 9 24 24 | 22°34'02 | 21°20 | 14°33 | 9°10 | 22°24 | 29°37 | 0°34 | 6° 9 | 17°28 | 22°58 | 18°R39 | 20° 2 | 27° 7 | 13°18 | F 3 |
| S 4 | 9 28 20 | 23°34'29 | 3 ¹² 20 | 16°17 | 10° 9 | 23° 5 | 29°46 | 0°29 | 6°13 | 17°26 | 22°57 | 18°39 | 19°58 | 27°13 | 13°22 | S 4 |
| S 5 | 9 32 17 | 24°34'54 | 15°35 | 18° 2 | 11° 8 | 23°46 | 29°56 | 0°24 | 6°16 | 17°25 | 22°57 | 18°36 | 19°55 | 27°20 | 13°27 | S 5 |
| M 6 | 9 36 13 | 25°35'18 | 28° 9 | 19°48 | 12° 7 | 24°27 | 0 ³⁸ 5 | 0°20 | 6°19 | 17°24 | 22°56 | 18°31 | 19°52 | 27°27 | 13°32 | M 6 |
| T 7 | 9 40 10 | 26°35'39 | 11 ³⁸ 5 | 21°35 | 13° 5 | 25° 8 | 0°15 | 0°15 | 6°23 | 17°22 | 22°56 | 18°25 | 19°49 | 27°33 | 13°36 | T 7 |
| W 8 | 9 44 6 | 27°35'59 | 24°26 | 23°22 | 14° 3 | 25°49 | 0°25 | 0°10 | 6°26 | 17°21 | 22°55 | 18°17 | 19°46 | 27°40 | 13°41 | W 8 |
| T 9 | 9 48 3 | 28°36'16 | 8 ³⁸ 11 | 25°11 | 15° 0 | 26°30 | 0°35 | 0° 5 | 6°30 | 17°20 | 22°55 | 18° 8 | 19°42 | 27°46 | 13°45 | T 9 |
| F 10 | 9 52 0 | 29°36'32 | 22°18 | 27° 1 | 15°56 | 27°10 | 0°45 | 0° 0 | 6°33 | 17°19 | 22°55 | 18° 0 | 19°39 | 27°53 | 13°50 | F 10 |
| S 11 | 9 55 56 | 0 ³⁸ 36'46 | 6 ³⁹ 42 | 28°52 | 16°52 | 27°51 | 0°55 | 29 ³⁸ 56 | 6°36 | 17°18 | 22°54 | 17°53 | 19°36 | 28° 0 | 13°54 | S 11 |
| S 12 | 9 59 53 | 1°36'58 | 21°18 | 0 ³⁸ 43 | 17°48 | 28°32 | 1° 5 | 29°51 | 6°40 | 17°17 | 22°54 | 17°48 | 19°33 | 28° 6 | 13°58 | S 12 |
| M13 | 10 3 49 | 2°37'09 | 5 ³⁸ 57 | 2°36 | 18°42 | 29°13 | 1°16 | 29°46 | 6°43 | 17°15 | 22°53 | 17°46 | 19°30 | 28°13 | 14° 3 | M13 |
| T 14 | 10 7 46 | 3°37'17 | 20°34 | 4°29 | 19°36 | 29°53 | 1°26 | 29°41 | 6°47 | 17°14 | 22°53 | 17°D45 | 19°27 | 28°20 | 14° 7 | T 14 |
| W15 | 10 11 42 | 4°37'25 | 5 ³⁸ 3 | 6°24 | 20°30 | 0 ³⁸ 34 | 1°37 | 29°36 | 6°50 | 17°13 | 22°53 | 17°46 | 19°23 | 28°26 | 14°11 | W15 |
| T 16 | 10 15 39 | 5°37'30 | 19°21 | 8°19 | 21°23 | 1°15 | 1°48 | 29°32 | 6°54 | 17°12 | 22°53 | 17°47 | 19°20 | 28°33 | 14°15 | T 16 |
| F 17 | 10 19 35 | 6°37'34 | 3 ³⁸ 27 | 10°15 | 22°15 | 1°55 | 1°59 | 29°27 | 6°57 | 17°11 | 22°52 | 17°R48 | 19°17 | 28°40 | 14°19 | F 17 |
| S 18 | 10 23 32 | 7°37'37 | 17°18 | 12°11 | 23° 6 | 2°36 | 2° 9 | 29°22 | 7° 1 | 17°10 | 22°52 | 17°48 | 19°14 | 28°46 | 14°23 | S 18 |
| S 19 | 10 27 29 | 8°37'38 | 0 ³⁸ 55 | 14° 8 | 23°57 | 3°17 | 2°21 | 29°17 | 7° 4 | 17° 9 | 22°52 | 17°46 | 19°11 | 28°53 | 14°27 | S 19 |
| M20 | 10 31 25 | 9°37'37 | 14°19 | 16° 5 | 24°46 | 3°57 | 2°32 | 29°13 | 7° 7 | 17° 9 | 22°52 | 17°42 | 19° 7 | 29° 0 | 14°31 | M20 |
| T 21 | 10 35 22 | 10°37'35 | 27°29 | 18° 2 | 25°35 | 4°38 | 2°43 | 29° 8 | 7°11 | 17° 8 | 22°52 | 17°36 | 19° 4 | 29° 6 | 14°35 | T 21 |
| W22 | 10 39 18 | 11°37'30 | 10 ³⁸ 26 | 19°59 | 26°23 | 5°18 | 2°54 | 29° 3 | 7°14 | 17° 7 | 22°52 | 17°30 | 19° 1 | 29°13 | 14°39 | W22 |
| T 23 | 10 43 15 | 12°37'24 | 23°10 | 21°56 | 27°11 | 5°59 | 3° 6 | 28°59 | 7°18 | 17° 6 | 22°51 | 17°24 | 18°58 | 29°20 | 14°42 | T 23 |
| F 24 | 10 47 11 | 13°37'16 | 5 ³⁸ 42 | 23°52 | 27°57 | 6°39 | 3°17 | 28°54 | 7°21 | 17° 5 | 22°51 | 17°18 | 18°55 | 29°26 | 14°46 | F 24 |
| S 25 | 10 51 8 | 14°37'06 | 18° 2 | 25°48 | 28°42 | 7°20 | 3°29 | 28°50 | 7°25 | 17° 4 | 22°51 | 17°13 | 18°52 | 29°33 | 14°50 | S 25 |
| S 26 | 10 55 4 | 15°36'54 | 0 ³⁸ 10 | 27°41 | 29°27 | 8° 0 | 3°40 | 28°45 | 7°28 | 17° 4 | 22°51 | 17°10 | 18°48 | 29°39 | 14°53 | S 26 |
| M27 | 10 59 1 | 16°36'40 | 12° 9 | 29°34 | 0 ³⁸ 10 | 8°41 | 3°52 | 28°41 | 7°31 | 17° 3 | 22°D51 | 17°D 9 | 18°45 | 29°46 | 14°57 | M27 |
| T 28 | 11 2 57 | 17 ³⁸ 36'24 | 24 ³⁸ 1 | 1 ³⁸ 24 | 0 ³⁸ 53 | 9 ³⁸ 21 | 4 ³⁸ 4 | 28 ³⁸ 36 | 7 ³⁸ 35 | 17 ³⁸ 2 | 22 ³⁸ 51 | 17 ³⁸ 9 | 18 ³⁸ 42 | 29 ³⁸ 53 | 15 ³⁸ 0 | T 28 |

| Day | ☉ | ☾ | | ♀ | | ♀ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|-------|------|-----|------|-----|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| W 1 | 14s41 | 9n56 | 0s49 | 19s28 | 2s 3 | 4n 7 | 1n23 | 8n31 | 0n18 | 10n18 | 1s 2 | 12n58 | 1n51 | 10s 0 | 0s44 | 21n49 | 0s33 | 17n41 | 5s39 | 7s19 | 7s54 | 9n50 | 16s36 | 6n17 | | | |
| T 2 | 14 22 | 12 58 | 1 50 | 19 0 | 2 5 | 4 37 | 1 29 | 8 47 | 0 19 | 10 21 | 1 2 | 13 0 | 1 51 | 9 59 | 0 44 | 21 50 | 0 33 | 17 41 | 5 39 | 7 20 | 7 52 | 9 51 | 16 35 | 6 18 | | | |
| F 3 | 14 2 | 15 28 | 2 47 | 18 31 | 2 5 | 5 6 | 1 36 | 9 3 | 0 20 | 10 25 | 1 1 | 13 2 | 1 51 | 9 58 | 0 44 | 21 50 | 0 33 | 17 42 | 5 38 | 7 20 | 7 51 | 9 53 | 16 34 | 6 18 | | | |
| S 4 | 13 42 | 17 20 | 3 37 | 18 0 | 2 6 | 5 36 | 1 42 | 9 19 | 0 20 | 10 28 | 1 1 | 13 4 | 1 51 | 9 56 | 0 44 | 21 50 | 0 33 | 17 42 | 5 38 | 7 20 | 7 50 | 9 54 | 16 34 | 6 18 | | | |
| S 5 | 13 22 | 18 27 | 4 18 | 17 28 | 2 6 | 6 5 | 1 48 | 9 35 | 0 21 | 10 32 | 1 1 | 13 6 | 1 51 | 9 55 | 0 44 | 21 50 | 0 33 | 17 42 | 5 38 | 7 19 | 7 49 | 9 56 | 16 33 | 6 19 | | | |
| M 6 | 13 2 | 18 42 | 4 48 | 16 54 | 2 5 | 6 34 | 1 55 | 9 51 | 0 22 | 10 35 | 1 1 | 13 7 | 1 51 | 9 54 | 0 44 | 21 50 | 0 33 | 17 42 | 5 38 | 7 17 | 7 48 | 9 58 | 16 32 | 6 19 | | | |
| T 7 | 12 41 | 17 59 | 5 5 | 16 19 | 2 4 | 7 3 | 2 2 | 10 6 | 0 23 | 10 39 | 1 1 | 13 9 | 1 51 | 9 53 | 0 44 | 21 51 | 0 33 | 17 42 | 5 38 | 7 14 | 7 46 | 9 59 | 16 31 | 6 20 | | | |
| W 8 | 12 21 | 16 17 | 5 5 | 15 42 | 2 3 | 7 31 | 2 8 | 10 22 | 0 23 | 10 43 | 1 0 | 13 11 | 1 51 | 9 51 | 0 44 | 21 51 | 0 32 | 17 42 | 5 38 | 7 11 | 7 45 | 10 1 | 16 30 | 6 20 | | | |
| T 9 | 12 0 | 13 37 | 4 49 | 15 4 | 2 1 | 8 0 | 2 15 | 10 38 | 0 24 | 10 46 | 1 0 | 13 13 | 1 52 | 9 50 | 0 44 | 21 51 | 0 32 | 17 42 | 5 37 | 7 8 | 7 44 | 10 2 | 16 30 | 6 20 | | | |
| F 10 | 11 39 | 10 6 | 4 14 | 14 24 | 1 59 | 8 28 | 2 22 | 10 53 | 0 25 | 10 50 | 1 0 | 13 15 | 1 52 | 9 49 | 0 44 | 21 51 | 0 32 | 17 43 | 5 37 | 7 5 | 7 43 | 10 4 | 16 29 | 6 21 | | | |
| S 11 | 11 17 | 5 56 | 3 23 | 13 43 | 1 56 | 8 56 | 2 28 | 11 8 | 0 26 | 10 54 | 1 0 | 13 16 | 1 52 | 9 48 | 0 44 | 21 51 | 0 32 | 17 43 | 5 37 | 7 2 | 7 41 | 10 5 | 16 28 | 6 21 | | | |
| S 12 | 10 56 | 1 21 | 2 18 | 13 0 | 1 52 | 9 24 | 2 35 | 11 24 | 0 26 | 10 58 | 0 59 | 13 18 | 1 52 | 9 46 | 0 44 | 21 51 | 0 32 | 17 43 | 5 37 | 7 0 | 7 40 | 10 7 | 16 27 | 6 21 | | | |
| M13 | 10 34 | 3s20 | 1 4 | 12 16 | 1 48 | 9 51 | 2 42 | 11 39 | 0 27 | 11 1 | 0 59 | 13 20 | 1 52 | 9 45 | 0 44 | 21 52 | 0 32 | 17 43 | 5 37 | 6 59 | 7 39 | 10 9 | 16 26 | 6 22 | | | |
| T 14 | 10 13 | 7 49 | 0n15 | 11 30 | 1 44 | 10 18 | 2 49 | 11 54 | 0 28 | 11 5 | 0 59 | 13 22 | 1 52 | 9 44 | 0 44 | 21 52 | 0 32 | 17 43 | 5 36 | 6 59 | 7 38 | 10 10 | 16 26 | 6 22 | | | |
| W15 | 9 51 | 11 47 | 1 33 | 10 43 | 1 39 | 10 45 | 2 56 | 12 9 | 0 28 | 11 9 | 0 59 | 13 23 | 1 52 | 9 42 | 0 44 | 21 52 | 0 32 | 17 43 | 5 36 | 6 59 | 7 37 | 10 12 | 16 25 | 6 23 | | | |
| T 16 | 9 29 | 15 0 | 2 43 | 9 55 | 1 33 | 11 11 | 3 3 | 12 24 | 0 29 | 11 13 | 0 59 | 13 25 | 1 52 | 9 41 | 0 44 | 21 52 | 0 32 | 17 44 | 5 36 | 7 0 | 7 35 | 10 13 | 16 24 | 6 23 | | | |
| F 17 | 9 6 | 17 16 | 3 43 | 9 5 | 1 27 | 11 37 | 3 10 | 12 39 | 0 30 | 11 17 | 0 58 | 13 27 | 1 52 | 9 40 | 0 44 | 21 52 | 0 32 | 17 44 | 5 36 | 7 0 | 7 34 | 10 15 | 16 23 | 6 23 | | | |
| S 18 | 8 44 | 18 27 | 4 28 | 8 15 | 1 20 | 12 3 | 3 17 | 12 53 | 0 31 | 11 21 | 0 58 | 13 29 | 1 52 | 9 39 | 0 44 | 21 52 | 0 32 | 17 44 | 5 36 | 7 0 | 7 33 | 10 16 | 16 22 | 6 24 | | | |
| S 19 | 8 22 | 18 33 | 4 58 | 7 23 | 1 12 | 12 28 | 3 24 | 13 8 | 0 31 | 11 25 | 0 58 | 13 30 | 1 52 | 9 37 | 0 44 | 21 52 | 0 32 | 17 44 | 5 36 | 6 59 | 7 32 | 10 18 | 16 21 | 6 24 | | | |
| M20 | 7 59 | 17 36 | 5 10 | 6 30 | 1 4 | 12 54 | 3 31 | 13 22 | 0 32 | 11 29 | 0 58 | 13 32 | 1 52 | 9 36 | 0 44 | 21 53 | 0 32 | 17 44 | 5 35 | 6 58 | 7 31 | 10 19 | 16 21 | 6 25 | | | |
| T 21 | 7 36 | 15 43 | 5 6 | 5 36 | 0 56 | 13 18 | 3 38 | 13 37 | 0 32 | 11 33 | 0 58 | 13 34 | 1 52 | 9 35 | 0 44 | 21 53 | 0 32 | 17 44 | 5 35 | 6 56 | 7 29 | 10 21 | 16 20 | 6 25 | | | |
| W22 | 7 13 | 13 5 | 4 47 | 4 41 | 0 47 | 13 43 | 3 45 | 13 51 | 0 33 | 11 37 | 0 57 | 13 35 | 1 52 | 9 34 | 0 44 | 21 53 | 0 32 | 17 45 | 5 35 | 6 53 | 7 28 | 10 22 | 16 19 | 6 26 | | | |
| T 23 | 6 51 | 9 51 | 4 13 | 3 46 | 0 37 | 14 6 | 3 52 | 14 5 | 0 34 | 11 41 | 0 57 | 13 37 | 1 52 | 9 32 | 0 44 | 21 53 | 0 32 | 17 45 | 5 35 | 6 51 | 7 27 | 10 24 | 16 18 | 6 26 | | | |
| F 24 | 6 28 | 6 14 | 3 27 | 2 51 | 0 27 | 14 30 | 3 59 | 14 19 | 0 34 | 11 45 | 0 57 | 13 39 | 1 52 | 9 31 | 0 44 | 21 53 | 0 32 | 17 45 | 5 35 | 6 49 | 7 26 | 10 26 | 16 17 | 6 27 | | | |
| S 25 | 6 4 | 2 24 | 2 33 | 1 55 | 0 16 | 14 53 | 4 7 | 14 33 | 0 35 | 11 49 | 0 57 | 13 40 | 1 52 | 9 30 | 0 44 | 21 53 | 0 32 | 17 45 | 5 35 | 6 47 | 7 25 | 10 27 | 16 16 | 6 27 | | | |
| S 26 | 5 41 | 1n28 | 1 32 | 0 59 | 0 4 | 15 16 | 4 14 | 14 47 | 0 36 | 11 54 | 0 57 | 13 42 | 1 52 | 9 28 | 0 44 | 21 53 | 0 32 | 17 45 | 5 34 | 6 46 | 7 23 | 10 29 | 16 16 | 6 28 | | | |
| M27 | 5 18 | 5 14 | 0 27 | 0 4 | 0n 7 | 15 38 | 4 21 | 15 0 | 0 36 | 11 58 | 0 56 | 13 44 | 1 52 | 9 27 | 0 44 | 21 54 | 0 32 | 17 45 | 5 34 | 6 45 | 7 22 | 10 30 | 16 15 | 6 28 | | | |
| T 28 | 4s55 | 8n46 | 0s38 | 0n51 | 0n19 | 15n59 | 4n28 | 15n14 | 0n37 | 12n 2 | 0s56 | 13n45 | 1n52 | 9s26 | 0s44 | 21n54 | 0s32 | 17n46 | 5s34 | 6s45 | 7s21 | 10n32 | 16s14 | 6n28 | | | |

Julian Day Number = 2239378.5, Delta T = 07m

ASTRODIENST EPHEMERIS for the year 1419

geocentric

MARCH 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day | |
|------|----------|-----------|---------|--------|--------|--------|---|--------|---------|--------|---------|---------|---------|---------|--------|---------|------|
| W 1 | 11 6 54 | 18°36'06 | 5°49 | 3°11 | 1°34 | 10°8 | 1 | 4°16 | 28°R32 | 7°38 | 17°R 2 | 22°II51 | 17°12 | 18°39 | 29°V59 | 15°3 | W 1 |
| T 2 | 11 10 51 | 19°35'45 | 17°36 | 4°56 | 2°14 | 10°42 | | 4°28 | 28°Q27 | 7°42 | 17°1 | 22°51 | 17°12 | 18°36 | 0°8 | 6 | T 2 |
| F 3 | 11 14 47 | 20°35'23 | 29°27 | 6°37 | 2°53 | 11°22 | | 4°40 | 28°23 | 7°45 | 17° 0 | 22°51 | 17°14 | 18°33 | 0°13 | 15°10 | F 3 |
| S 4 | 11 18 44 | 21°34'57 | 11°II26 | 8°14 | 3°30 | 12° 2 | | 4°52 | 28°19 | 7°48 | 17° 0 | 22°52 | 17°15 | 18°29 | 0°19 | 15°13 | S 4 |
| S 5 | 11 22 40 | 22°34'30 | 23°39 | 9°47 | 4° 7 | 12°43 | | 5° 4 | 28°15 | 7°52 | 16°59 | 22°52 | 17°R16 | 18°26 | 0°26 | 15°16 | S 5 |
| M 6 | 11 26 37 | 23°34'01 | 6°9 | 11°15 | 4°42 | 13°23 | | 5°17 | 28°11 | 7°55 | 16°59 | 22°52 | 17°15 | 18°23 | 0°33 | 15°19 | M 6 |
| T 7 | 11 30 33 | 24°33'29 | 19° 2 | 12°38 | 5°15 | 14° 3 | | 5°29 | 28° 6 | 7°58 | 16°58 | 22°52 | 17°13 | 18°20 | 0°39 | 15°22 | T 7 |
| W 8 | 11 34 30 | 25°32'54 | 2°II21 | 13°55 | 5°47 | 14°43 | | 5°41 | 28° 2 | 8° 2 | 16°58 | 22°52 | 17°11 | 18°17 | 0°46 | 15°25 | W 8 |
| T 9 | 11 38 26 | 26°32'18 | 16° 6 | 15° 6 | 6°18 | 15°24 | | 5°54 | 27°59 | 8° 5 | 16°58 | 22°52 | 17° 8 | 18°13 | 0°53 | 15°28 | T 9 |
| F 10 | 11 42 23 | 27°31'39 | 0°II18 | 16°10 | 6°47 | 16° 4 | | 6° 7 | 27°55 | 8° 8 | 16°57 | 22°53 | 17° 5 | 18°10 | 0°59 | 15°30 | F 10 |
| S 11 | 11 46 20 | 28°30'57 | 14°52 | 17° 8 | 7°14 | 16°44 | | 6°19 | 27°51 | 8°12 | 16°57 | 22°53 | 17° 3 | 18° 7 | 1° 6 | 15°33 | S 11 |
| S 12 | 11 50 16 | 29°30'14 | 29°44 | 18° 0 | 7°40 | 17°24 | | 6°32 | 27°47 | 8°15 | 16°57 | 22°53 | 17° 1 | 18° 4 | 1°12 | 15°36 | S 12 |
| M13 | 11 54 13 | 0°V29'28 | 14°II44 | 18°44 | 8° 4 | 18° 4 | | 6°45 | 27°43 | 8°18 | 16°56 | 22°54 | 17°D 1 | 18° 1 | 1°19 | 15°38 | M13 |
| T 14 | 11 58 9 | 1°28'41 | 29°45 | 19°21 | 8°26 | 18°44 | | 6°57 | 27°40 | 8°21 | 16°56 | 22°54 | 17° 1 | 17°58 | 1°26 | 15°41 | T 14 |
| W15 | 12 2 6 | 2°27'52 | 14°II39 | 19°51 | 8°47 | 19°24 | | 7°10 | 27°36 | 8°25 | 16°56 | 22°54 | 17° 2 | 17°54 | 1°32 | 15°43 | W15 |
| T 16 | 12 6 2 | 3°27'01 | 29°18 | 20°14 | 9° 5 | 20° 4 | | 7°23 | 27°33 | 8°28 | 16°56 | 22°55 | 17° 3 | 17°51 | 1°39 | 15°45 | T 16 |
| F 17 | 12 9 59 | 4°26'08 | 13°II38 | 20°29 | 9°21 | 20°44 | | 7°36 | 27°30 | 8°31 | 16°56 | 22°55 | 17° 4 | 17°48 | 1°46 | 15°48 | F 17 |
| S 18 | 12 13 55 | 5°25'13 | 27°37 | 20°38 | 9°36 | 21°24 | | 7°49 | 27°26 | 8°34 | 16°56 | 22°55 | 17° 4 | 17°45 | 1°52 | 15°50 | S 18 |
| S 19 | 12 17 52 | 6°24'17 | 11°II14 | 20°R39 | 9°48 | 22° 4 | | 8° 2 | 27°23 | 8°37 | 16°56 | 22°56 | 17°R 4 | 17°42 | 1°59 | 15°52 | S 19 |
| M20 | 12 21 49 | 7°23'19 | 24°31 | 20°33 | 9°58 | 22°44 | | 8°16 | 27°20 | 8°41 | 16°D56 | 22°56 | 17° 4 | 17°39 | 2° 6 | 15°54 | M20 |
| T 21 | 12 25 45 | 8°22'19 | 7°II29 | 20°21 | 10° 6 | 23°23 | | 8°29 | 27°17 | 8°44 | 16°56 | 22°57 | 17° 3 | 17°35 | 2°12 | 15°56 | T 21 |
| W22 | 12 29 42 | 9°21'17 | 20° 9 | 20° 3 | 10°12 | 24° 3 | | 8°42 | 27°14 | 8°47 | 16°56 | 22°57 | 17° 2 | 17°32 | 2°19 | 15°58 | W22 |
| T 23 | 12 33 38 | 10°20'13 | 2°II36 | 19°40 | 10°15 | 24°43 | | 8°55 | 27°11 | 8°50 | 16°56 | 22°58 | 17° 1 | 17°29 | 2°26 | 16° 0 | T 23 |
| F 24 | 12 37 35 | 11°19'07 | 14°51 | 19°11 | 10°R16 | 25°23 | | 9° 9 | 27° 8 | 8°53 | 16°56 | 22°58 | 17° 0 | 17°26 | 2°32 | 16° 1 | F 24 |
| S 25 | 12 41 31 | 12°18'00 | 26°56 | 18°37 | 10°15 | 26° 3 | | 9°22 | 27° 6 | 8°56 | 16°56 | 22°59 | 17° 0 | 17°23 | 2°39 | 16° 3 | S 25 |
| S 26 | 12 45 28 | 13°16'50 | 8°V53 | 18° 0 | 10°11 | 26°42 | | 9°36 | 27° 3 | 8°59 | 16°56 | 23° 0 | 17° 0 | 17°19 | 2°46 | 16° 4 | S 26 |
| M27 | 12 49 24 | 14°15'39 | 20°45 | 17°20 | 10° 5 | 27°22 | | 9°49 | 27° 0 | 9° 2 | 16°56 | 23° 0 | 17°D 0 | 17°16 | 2°52 | 16° 6 | M27 |
| T 28 | 12 53 21 | 15°14'26 | 2°II34 | 16°38 | 9°56 | 28° 2 | | 10° 3 | 26°58 | 9° 5 | 16°57 | 23° 1 | 17° 0 | 17°13 | 2°59 | 16° 7 | T 28 |
| W29 | 12 57 17 | 16°13'10 | 14°21 | 15°54 | 9°45 | 28°41 | | 10°16 | 26°56 | 9° 8 | 16°57 | 23° 2 | 17° 0 | 17°10 | 3° 6 | 16° 9 | W29 |
| T 30 | 13 1 14 | 17°11'52 | 26°10 | 15°10 | 9°31 | 29°21 | | 10°30 | 26°53 | 9°11 | 16°57 | 23° 2 | 17°R 0 | 17° 7 | 3°12 | 16°10 | T 30 |
| F 31 | 13 5 11 | 18°V10'33 | 8°II 3 | 14°V26 | 9°R15 | 0°II 1 | | 10°R43 | 26°II51 | 9°II13 | 16°II58 | 23°II 3 | 17°II 0 | 17°II 4 | 3°II19 | 16°II11 | F 31 |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| W 1 | 4s31 | 11n55 | 1s41 | 1n45 | 0n32 | 16n20 | 4n35 | 15n27 | 0n37 | 12n 6 | 0s56 | 13n47 | 1n52 | 9s25 | 0s44 | 21n54 | 0s32 |
| T 2 | 4 8 | 14 35 | 2 40 | 2 39 | 0 44 | 16 41 | 4 42 | 15 41 | 0 38 | 12 10 | 0 56 | 13 48 | 1 52 | 9 23 | 0 44 | 21 54 | 0 32 |
| F 3 | 3 44 | 16 38 | 3 32 | 3 30 | 0 57 | 17 1 | 4 49 | 15 54 | 0 39 | 12 15 | 0 56 | 13 50 | 1 52 | 9 22 | 0 44 | 21 54 | 0 32 |
| S 4 | 3 21 | 18 0 | 4 16 | 4 21 | 1 10 | 17 21 | 4 55 | 16 7 | 0 39 | 12 19 | 0 55 | 13 51 | 1 52 | 9 21 | 0 44 | 21 54 | 0 32 |
| S 5 | 2 57 | 18 33 | 4 49 | 5 9 | 1 22 | 17 40 | 5 2 | 16 20 | 0 40 | 12 23 | 0 55 | 13 53 | 1 52 | 9 20 | 0 44 | 21 54 | 0 32 |
| M 6 | 2 34 | 18 13 | 5 10 | 5 55 | 1 35 | 17 58 | 5 9 | 16 33 | 0 40 | 12 27 | 0 55 | 13 54 | 1 52 | 9 18 | 0 44 | 21 54 | 0 32 |
| T 7 | 2 10 | 16 57 | 5 15 | 6 39 | 1 47 | 18 16 | 5 16 | 16 45 | 0 41 | 12 32 | 0 55 | 13 55 | 1 52 | 9 17 | 0 44 | 21 54 | 0 32 |
| W 8 | 1 46 | 14 45 | 5 5 | 7 20 | 1 59 | 18 33 | 5 22 | 16 58 | 0 41 | 12 36 | 0 55 | 13 57 | 1 52 | 9 16 | 0 44 | 21 54 | 0 32 |
| T 9 | 1 23 | 11 40 | 4 36 | 7 58 | 2 11 | 18 50 | 5 29 | 17 10 | 0 42 | 12 40 | 0 55 | 13 58 | 1 52 | 9 15 | 0 44 | 21 54 | 0 32 |
| F 10 | 0 59 | 7 48 | 3 50 | 8 34 | 2 22 | 19 5 | 5 35 | 17 22 | 0 42 | 12 44 | 0 54 | 13 59 | 1 52 | 9 13 | 0 44 | 21 55 | 0 32 |
| S 11 | 0 36 | 3 23 | 2 49 | 9 5 | 2 32 | 19 20 | 5 42 | 17 34 | 0 43 | 12 49 | 0 54 | 14 1 | 1 52 | 9 12 | 0 44 | 21 55 | 0 32 |
| S 12 | 0 12 | 1s20 | 1 34 | 9 34 | 2 42 | 19 35 | 5 48 | 17 46 | 0 43 | 12 53 | 0 54 | 14 2 | 1 52 | 9 11 | 0 44 | 21 55 | 0 32 |
| M13 | 0n12 | 6 1 | 0 13 | 9 59 | 2 50 | 19 48 | 5 54 | 17 58 | 0 44 | 12 57 | 0 54 | 14 3 | 1 52 | 9 10 | 0 44 | 21 55 | 0 32 |
| T 14 | 0 35 | 10 20 | 1n10 | 10 20 | 2 58 | 20 1 | 5 59 | 18 10 | 0 44 | 13 2 | 0 54 | 14 4 | 1 52 | 9 9 | 0 44 | 21 55 | 0 32 |
| W15 | 0 59 | 13 56 | 2 27 | 10 38 | 3 5 | 20 13 | 6 5 | 18 21 | 0 45 | 13 6 | 0 54 | 14 6 | 1 52 | 9 7 | 0 44 | 21 55 | 0 32 |
| T 16 | 1 23 | 16 35 | 3 34 | 10 52 | 3 10 | 20 24 | 6 10 | 18 32 | 0 45 | 13 11 | 0 54 | 14 7 | 1 52 | 9 6 | 0 44 | 21 55 | 0 32 |
| F 17 | 1 46 | 18 7 | 4 25 | 11 1 | 3 14 | 20 35 | 6 16 | 18 44 | 0 46 | 13 15 | 0 53 | 14 8 | 1 52 | 9 5 | 0 44 | 21 55 | 0 32 |
| S 18 | 2 10 | 18 30 | 4 59 | 11 7 | 3 17 | 20 44 | 6 21 | 18 55 | 0 46 | 13 19 | 0 53 | 14 9 | 1 52 | 9 4 | 0 44 | 21 55 | 0 31 |
| S 19 | 2 33 | 17 47 | 5 16 | 11 9 | 3 18 | 20 53 | 6 25 | 19 5 | 0 47 | 13 24 | 0 53 | 14 10 | 1 52 | 9 3 | 0 44 | 21 55 | 0 31 |
| M20 | 2 56 | 16 7 | 5 15 | 11 7 | 3 18 | 21 0 | 6 30 | 19 16 | 0 47 | 13 28 | 0 53 | 14 11 | 1 52 | 9 1 | 0 44 | 21 55 | 0 31 |
| T 21 | 3 20 | 13 40 | 4 58 | 11 1 | 3 17 | 21 6 | 6 34 | 19 27 | 0 48 | 13 32 | 0 53 | 14 12 | 1 52 | 9 0 | 0 44 | 21 55 | 0 31 |
| W22 | 3 43 | 10 36 | 4 26 | 10 51 | 3 14 | 21 12 | 6 38 | 19 37 | 0 48 | 13 37 | 0 53 | 14 13 | 1 52 | 8 59 | 0 44 | 21 55 | 0 31 |
| T 23 | 4 6 | 7 7 | 3 43 | 10 38 | 3 9 | 21 16 | 6 41 | 19 47 | 0 49 | 13 41 | 0 53 | 14 14 | 1 52 | 8 58 | 0 44 | 21 55 | 0 31 |
| F 24 | 4 29 | 3 23 | 2 49 | 10 21 | 3 3 | 21 19 | 6 44 | 19 58 | 0 49 | 13 46 | 0 52 | 14 15 | 1 52 | 8 57 | 0 44 | 21 55 | 0 31 |
| S 25 | 4 53 | 0n27 | 1 49 | 10 1 | 2 55 | 21 21 | 6 47 | 20 7 | 0 49 | 13 50 | 0 52 | 14 16 | 1 51 | 8 56 | 0 44 | 21 55 | 0 31 |
| S 26 | 5 15 | 4 13 | 0 45 | 9 38 | 2 45 | 21 22 | 6 49 | 20 17 | 0 50 | 13 54 | 0 52 | 14 17 | 1 51 | 8 55 | 0 44 | 21 55 | 0 31 |
| M27 | 5 38 | 7 48 | 0s21 | 9 12 | 2 35 | 21 22 | 6 50 | 20 27 | 0 50 | 13 59 | 0 52 | 14 17 | 1 51 | 8 54 | 0 44 | 21 55 | 0 31 |
| T 28 | 6 1 | 11 4 | 1 26 | 8 45 | 2 23 | 21 20 | 6 52 | 20 36 | 0 51 | 14 3 | 0 52 | 14 18 | 1 51 | 8 52 | 0 44 | 21 55 | 0 31 |
| W29 | 6 24 | 13 52 | 2 26 | 8 16 | 2 9 | 21 17 | 6 52 | 20 46 | 0 51 | 14 8 | 0 52 | 14 19 | 1 51 | 8 51 | 0 44 | 21 55 | 0 31 |
| T 30 | 6 46 | 16 6 | 3 21 | 7 45 | 1 55 | 21 12 | 6 52 | 20 55 | 0 51 | 14 12 | 0 52 | 14 19 | 1 51 | 8 50 | 0 44 | 21 55 | 0 31 |
| F 31 | 7n 9 | 17n39 | 4s 8 | 7n14 | 1n40 | 21n 6 | 6n52 | 21n 4 | 0n52 | 14n16 | 0s51 | 14n20 | 1n51 | 8s49 | 0s44 | 21n55 | 0s31 |

Julian Day Number = 2239406.5, Delta T = 07m22s

Ecliptic obliquity = 23°30'45, Nutation = 0°00'06, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°38'15, Lahiri = 15°45'15 Julian Calendar 1 March 1419 == Greg. Calendar 10 March 1419

ASTRODIENST EPHEMERIS for the year 1419
geocentric

APRIL 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|--------|-------|-------|-------|--------|-------|-------|-------|--------|-------|------|--------|------|
| S 1 | 13 9 7 | 19♌ 9'11 | 20♊ 5 | 13°R43 | 8°R57 | 0♊40 | 10♌57 | 26°R49 | 9♌16 | 16♌58 | 23♊ 4 | 16°R59 | 17♊ 0 | 3♌25 | 16♌12 | S 1 |
| S 2 | 13 13 4 | 20° 7'47 | 2♌18 | 13♌ 2 | 8♌36 | 1°20 | 11°11 | 26♌47 | 9°19 | 16°58 | 23° 4 | 16♌59 | 16°57 | 3°32 | 16°13 | S 2 |
| M 3 | 13 17 0 | 21° 6'20 | 14°46 | 12°24 | 8°13 | 1°59 | 11°25 | 26°46 | 9°22 | 16°59 | 23° 5 | 16°59 | 16°54 | 3°39 | 16°14 | M 3 |
| T 4 | 13 20 57 | 22° 4'52 | 27°35 | 11°48 | 7°47 | 2°39 | 11°38 | 26°44 | 9°25 | 16°59 | 23° 6 | 16°D59 | 16°51 | 3°45 | 16°15 | T 4 |
| W 5 | 13 24 53 | 23° 3'21 | 10♌47 | 11°16 | 7°20 | 3°19 | 11°52 | 26°42 | 9°27 | 17° 0 | 23° 7 | 16°59 | 16°48 | 3°52 | 16°16 | W 5 |
| T 6 | 13 28 50 | 24° 1'48 | 24°24 | 10°49 | 6°51 | 3°58 | 12° 6 | 26°41 | 9°30 | 17° 0 | 23° 8 | 17° 0 | 16°44 | 3°59 | 16°17 | T 6 |
| F 7 | 13 32 46 | 25° 0'13 | 8♌28 | 10°25 | 6°20 | 4°37 | 12°20 | 26°39 | 9°33 | 17° 1 | 23° 8 | 17° 0 | 16°41 | 4° 5 | 16°17 | F 7 |
| S 8 | 13 36 43 | 25°58'36 | 22°58 | 10° 6 | 5°47 | 5°17 | 12°34 | 26°38 | 9°35 | 17° 2 | 23° 9 | 17° 1 | 16°38 | 4°12 | 16°18 | S 8 |
| S 9 | 13 40 40 | 26°56'56 | 7♌49 | 9°52 | 5°13 | 5°56 | 12°48 | 26°37 | 9°38 | 17° 2 | 23°10 | 17° 2 | 16°35 | 4°19 | 16°18 | S 9 |
| M10 | 13 44 36 | 27°55'15 | 22°56 | 9°43 | 4°37 | 6°36 | 13° 1 | 26°36 | 9°40 | 17° 3 | 23°11 | 17°R 2 | 16°32 | 4°25 | 16°19 | M10 |
| T 11 | 13 48 33 | 28°53'32 | 8♌ 9 | 9°D39 | 4° 1 | 7°15 | 13°15 | 26°35 | 9°43 | 17° 4 | 23°12 | 17° 1 | 16°29 | 4°32 | 16°19 | T 11 |
| W12 | 13 52 29 | 29°51'47 | 23°19 | 9°40 | 3°24 | 7°54 | 13°29 | 26°34 | 9°45 | 17° 4 | 23°13 | 17° 0 | 16°25 | 4°39 | 16°19 | W12 |
| T 13 | 13 56 26 | 0♌50'01 | 8♌16 | 9°45 | 2°46 | 8°34 | 13°43 | 26°33 | 9°48 | 17° 5 | 23°14 | 16°59 | 16°22 | 4°45 | 16°19 | T 13 |
| F 14 | 14 0 22 | 1°48'13 | 22°54 | 9°56 | 2° 8 | 9°13 | 13°57 | 26°32 | 9°50 | 17° 6 | 23°15 | 16°57 | 16°19 | 4°52 | 16°19 | F 14 |
| S 15 | 14 4 19 | 2°46'23 | 7♌ 6 | 10°11 | 1°30 | 9°52 | 14°11 | 26°32 | 9°53 | 17° 7 | 23°16 | 16°55 | 16°16 | 4°59 | 16°R20 | S 15 |
| S 16 | 14 8 15 | 3°44'32 | 20°52 | 10°30 | 0°53 | 10°31 | 14°25 | 26°31 | 9°55 | 17° 8 | 23°17 | 16°54 | 16°13 | 5° 5 | 16°19 | S 16 |
| M17 | 14 12 12 | 4°42'40 | 4♌11 | 10°54 | 0°15 | 11°11 | 14°39 | 26°31 | 9°57 | 17° 9 | 23°18 | 16°D54 | 16°10 | 5°12 | 16°19 | M17 |
| T 18 | 14 16 9 | 5°40'46 | 17° 6 | 11°23 | 29♌39 | 11°50 | 14°54 | 26°30 | 10° 0 | 17°10 | 23°19 | 16°54 | 16° 6 | 5°19 | 16°19 | T 18 |
| W19 | 14 20 5 | 6°38'50 | 29°40 | 11°55 | 29° 3 | 12°29 | 15° 8 | 26°30 | 10° 2 | 17°10 | 23°20 | 16°55 | 16° 3 | 5°25 | 16°19 | W19 |
| T 20 | 14 24 2 | 7°36'53 | 11♌57 | 12°32 | 28°29 | 13° 8 | 15°22 | 26°D30 | 10° 4 | 17°11 | 23°21 | 16°57 | 16° 0 | 5°32 | 16°18 | T 20 |
| F 21 | 14 27 58 | 8°34'55 | 24° 2 | 13°12 | 27°56 | 13°47 | 15°36 | 26°30 | 10° 6 | 17°12 | 23°22 | 16°58 | 15°57 | 5°39 | 16°18 | F 21 |
| S 22 | 14 31 55 | 9°32'55 | 5♌58 | 13°56 | 27°25 | 14°26 | 15°50 | 26°30 | 10° 9 | 17°14 | 23°23 | 16°59 | 15°54 | 5°45 | 16°17 | S 22 |
| S 23 | 14 35 51 | 10°30'54 | 17°48 | 14°44 | 26°55 | 15° 5 | 16° 4 | 26°30 | 10°11 | 17°15 | 23°24 | 17°R 0 | 15°50 | 5°52 | 16°17 | S 23 |
| M24 | 14 39 48 | 11°28'52 | 29°35 | 15°35 | 26°27 | 15°44 | 16°18 | 26°31 | 10°13 | 17°16 | 23°25 | 16°59 | 15°47 | 5°58 | 16°16 | M24 |
| T 25 | 14 43 44 | 12°26'47 | 11♌22 | 16°29 | 26° 1 | 16°23 | 16°32 | 26°31 | 10°15 | 17°17 | 23°26 | 16°57 | 15°44 | 6° 5 | 16°15 | T 25 |
| W26 | 14 47 41 | 13°24'42 | 23°12 | 17°27 | 25°37 | 17° 2 | 16°46 | 26°32 | 10°17 | 17°18 | 23°28 | 16°54 | 15°41 | 6°12 | 16°14 | W26 |
| T 27 | 14 51 38 | 14°22'35 | 5♌ 6 | 18°27 | 25°16 | 17°41 | 17° 1 | 26°32 | 10°19 | 17°19 | 23°29 | 16°50 | 15°38 | 6°18 | 16°14 | T 27 |
| F 28 | 14 55 34 | 15°20'26 | 17° 6 | 19°31 | 24°57 | 18°20 | 17°15 | 26°33 | 10°20 | 17°20 | 23°30 | 16°45 | 15°35 | 6°25 | 16°13 | F 28 |
| S 29 | 14 59 31 | 16°18'15 | 29°14 | 20°37 | 24°40 | 18°59 | 17°29 | 26°34 | 10°22 | 17°22 | 23°31 | 16°40 | 15°31 | 6°32 | 16°12 | S 29 |
| S 30 | 15 3 27 | 17♌16'03 | 11♌33 | 21♌47 | 24♌25 | 19♊38 | 17♌43 | 26♌35 | 10♌24 | 17♌23 | 23♊32 | 16♌36 | 15♌28 | 6♌38 | 16♌10 | S 30 |

| Day | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|-------|------------|-----------|------------|------------|------------|------------|-----------|------------|------------|-----------|-------------|----------|----------|----------|-----|
| | decl | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | |
| S 1 | 7n31 | 18n25 4s44 | 6n43 1n24 | 20n59 6n50 | 21n12 0n52 | 14n21 0s51 | 14n21 1n51 | 8s48 0s44 | 21n55 0s31 | 17n52 5s28 | 6s42 6s42 | 11n19 15s49 | 6n46 | | | |
| S 2 | 7 53 | 18 22 5 8 | 6 12 1 8 | 20 51 6 48 | 21 21 0 53 | 14 25 0 51 | 14 21 1 51 | 8 47 0 44 | 21 55 0 31 | 17 52 5 28 | 6 42 6 41 | 11 21 15 48 | 6 46 | | | |
| M 3 | 8 16 | 17 26 5 18 | 5 42 0 51 | 20 40 6 46 | 21 29 0 53 | 14 29 0 51 | 14 22 1 51 | 8 46 0 44 | 21 55 0 31 | 17 52 5 28 | 6 42 6 40 | 11 22 15 47 | 6 47 | | | |
| T 4 | 8 38 | 15 36 5 13 | 5 12 0 34 | 20 29 6 43 | 21 38 0 53 | 14 34 0 51 | 14 22 1 51 | 8 45 0 44 | 21 55 0 31 | 17 52 5 28 | 6 42 6 38 | 11 24 15 47 | 6 47 | | | |
| W 5 | 8 59 | 12 55 4 51 | 4 44 0 18 | 20 16 6 39 | 21 46 0 54 | 14 38 0 51 | 14 23 1 50 | 8 44 0 45 | 21 55 0 31 | 17 53 5 28 | 6 42 6 37 | 11 25 15 46 | 6 48 | | | |
| T 6 | 9 21 | 9 27 4 13 | 4 18 0 1 | 20 2 6 34 | 21 53 0 54 | 14 42 0 51 | 14 23 1 50 | 8 43 0 45 | 21 55 0 31 | 17 53 5 28 | 6 42 6 36 | 11 27 15 45 | 6 49 | | | |
| F 7 | 9 42 | 5 21 3 18 | 3 54 0s15 | 19 46 6 28 | 22 1 0 54 | 14 47 0 51 | 14 24 1 50 | 8 42 0 45 | 21 55 0 31 | 17 53 5 27 | 6 42 6 35 | 11 28 15 45 | 6 49 | | | |
| S 8 | 10 4 | 0 49 2 10 | 3 32 0 31 | 19 29 6 22 | 22 9 0 55 | 14 51 0 51 | 14 24 1 50 | 8 41 0 45 | 21 55 0 31 | 17 53 5 27 | 6 42 6 33 | 11 30 15 44 | 6 50 | | | |
| S 9 | 10 25 | 3s54 0 51 | 3 13 0 46 | 19 11 6 15 | 22 16 0 55 | 14 55 0 50 | 14 24 1 50 | 8 40 0 45 | 21 55 0 31 | 17 53 5 27 | 6 43 6 32 | 11 31 15 43 | 6 50 | | | |
| M10 | 10 46 | 8 26 0n33 | 2 56 1 1 | 18 51 6 7 | 22 23 0 55 | 15 0 0 50 | 14 25 1 50 | 8 39 0 45 | 21 55 0 31 | 17 54 5 27 | 6 43 6 31 | 11 32 15 43 | 6 51 | | | |
| T 11 | 11 7 | 12 28 1 55 | 2 41 1 15 | 18 31 5 59 | 22 30 0 56 | 15 4 0 50 | 14 25 1 50 | 8 38 0 45 | 21 55 0 31 | 17 54 5 27 | 6 42 6 30 | 11 34 15 42 | 6 51 | | | |
| W12 | 11 27 | 15 37 3 8 | 2 29 1 28 | 18 9 5 49 | 22 37 0 56 | 15 8 0 50 | 14 25 1 50 | 8 37 0 45 | 21 55 0 31 | 17 54 5 27 | 6 42 6 29 | 11 35 15 42 | 6 52 | | | |
| T 13 | 11 48 | 17 41 4 8 | 2 20 1 41 | 17 47 5 40 | 22 44 0 56 | 15 13 0 50 | 14 25 1 50 | 8 37 0 45 | 21 55 0 31 | 17 54 5 27 | 6 41 6 27 | 11 37 15 41 | 6 53 | | | |
| F 14 | 12 8 | 18 30 4 49 | 2 13 1 53 | 17 23 5 29 | 22 50 0 57 | 15 17 0 50 | 14 25 1 49 | 8 36 0 45 | 21 54 0 31 | 17 54 5 26 | 6 41 6 26 | 11 38 15 40 | 6 53 | | | |
| S 15 | 12 28 | 18 8 5 12 | 2 9 2 3 | 16 59 5 18 | 22 56 0 57 | 15 21 0 50 | 14 25 1 49 | 8 35 0 45 | 21 54 0 31 | 17 55 5 26 | 6 40 6 25 | 11 40 15 40 | 6 54 | | | |
| S 16 | 12 48 | 16 41 5 16 | 2 8 2 13 | 16 35 5 6 | 23 2 0 57 | 15 25 0 50 | 14 26 1 49 | 8 34 0 45 | 21 54 0 31 | 17 55 5 26 | 6 40 6 24 | 11 41 15 39 | 6 54 | | | |
| M17 | 13 8 | 14 22 5 2 | 2 9 2 23 | 16 10 4 54 | 23 8 0 58 | 15 30 0 50 | 14 26 1 49 | 8 33 0 45 | 21 54 0 31 | 17 55 5 26 | 6 39 6 22 | 11 43 15 39 | 6 55 | | | |
| T 18 | 13 27 | 11 24 4 34 | 2 12 2 31 | 15 45 4 41 | 23 14 0 58 | 15 34 0 50 | 14 26 1 49 | 8 32 0 45 | 21 54 0 31 | 17 55 5 26 | 6 40 6 21 | 11 44 15 38 | 6 55 | | | |
| W19 | 13 47 | 7 59 3 53 | 2 18 2 39 | 15 20 4 28 | 23 20 0 58 | 15 38 0 49 | 14 26 1 49 | 8 31 0 45 | 21 54 0 31 | 17 55 5 26 | 6 40 6 20 | 11 45 15 38 | 6 56 | | | |
| T 20 | 14 6 | 4 18 3 2 | 2 26 2 45 | 14 55 4 14 | 23 25 0 59 | 15 42 0 49 | 14 25 1 49 | 8 31 0 45 | 21 54 0 31 | 17 56 5 26 | 6 41 6 19 | 11 47 15 37 | 6 57 | | | |
| F 21 | 14 24 | 0 29 2 4 | 2 36 2 51 | 14 30 4 0 | 23 30 0 59 | 15 46 0 49 | 14 25 1 49 | 8 30 0 45 | 21 54 0 31 | 17 56 5 25 | 6 41 6 18 | 11 48 15 37 | 6 57 | | | |
| S 22 | 14 43 | 3n18 1 1 | 2 48 2 56 | 14 6 3 46 | 23 35 0 59 | 15 51 0 49 | 14 25 1 49 | 8 29 0 45 | 21 54 0 30 | 17 56 5 25 | 6 42 6 16 | 11 50 15 36 | 6 58 | | | |
| S 23 | 15 1 | 6 56 0s 4 | 3 3 3 1 | 13 42 3 32 | 23 40 0 59 | 15 55 0 49 | 14 25 1 48 | 8 28 0 45 | 21 54 0 30 | 17 56 5 25 | 6 42 6 15 | 11 51 15 36 | 6 58 | | | |
| M24 | 15 19 | 10 17 1 9 | 3 39 3 4 | 13 18 3 18 | 23 44 1 0 | 15 59 0 49 | 14 25 1 48 | 8 27 0 45 | 21 53 0 30 | 17 56 5 25 | 6 42 6 14 | 11 52 15 35 | 6 59 | | | |
| T 25 | 15 37 | 13 13 2 10 | 3 37 3 7 | 12 55 3 3 | 23 49 1 0 | 16 3 0 49 | 14 24 1 48 | 8 27 0 45 | 21 53 0 30 | 17 56 5 25 | 6 41 6 13 | 11 54 15 35 | 6 59 | | | |
| W26 | 15 55 | 15 38 3 6 | 3 38 3 9 | 12 33 2 49 | 23 53 1 0 | 16 7 0 49 | 14 24 1 48 | 8 26 0 45 | 21 53 0 30 | 17 57 5 25 | 6 40 6 11 | 11 55 15 34 | 7 0 | | | |
| T 27 | 16 12 | 17 22 3 54 | 4 19 3 10 | 12 12 2 35 | 23 57 1 1 | 16 11 0 49 | 14 24 1 48 | 8 25 0 45 | 21 53 0 30 | 17 57 5 25 | 6 38 6 10 | 11 57 15 34 | 7 0 | | | |
| F 28 | 16 29 | 18 22 4 32 | 4 43 3 11 | 11 52 2 20 | 24 0 1 1 | 16 15 0 49 | 14 23 1 48 | 8 25 0 45 | 21 53 0 30 | 17 57 5 24 | 6 36 6 9 | 11 58 15 33 | 7 1 | | | |
| S 29 | 16 46 | 18 32 4 59 | 5 8 3 11 | 11 32 2 6 | 24 4 1 1 | 16 19 0 49 | 14 23 1 48 | 8 24 0 45 | 21 53 0 30 | 17 57 5 24 | 6 34 6 8 | 11 59 15 33 | 7 2 | | | |
| S 30 | 17n 2 | 17n50 5s12 | 5n34 3s10 | 11n14 1n52 | 24n 7 1n 1 | 16n23 0s49 | 14n23 1n48 | 8s23 0s45 | 21n53 0s30 | 17n57 5s24 | 6s32 6s 7 | 12n 1 15s33 | 7n 2 | | | |

Julian Day Number = 2239437.5, Delta T = 07m22s

Ecliptic obliquity = 23°30'45", Nutation = 0°00'04", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°38'19", Lahiri = 15°45'20" Julian Calendar 1 Apr. 1419 == Greg. Calendar 10 Apr. 1419

ASTRODIENST EPHEMERIS for the year 1419

geocentric

MAY 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|--------|-------|--------|-------|-------|-------|-------|-------|-------|--------|-------|-------|--------|------|
| M 1 | 15 7 24 | 18°13'50 | 24°5 5 | 22°58 | 24°R13 | 20°17 | 17°57 | 26°36 | 10°26 | 17°24 | 23°33 | 16°R32 | 15°25 | 6°45 | 16°R 9 | M 1 |
| T 2 | 15 11 20 | 19°11'34 | 6°53 | 24°13 | 24°Y 3 | 20°56 | 18°11 | 26°37 | 10°28 | 17°26 | 23°35 | 16°230 | 15°22 | 6°52 | 16°R 8 | T 2 |
| W 3 | 15 15 17 | 20° 9'17 | 20° 1 | 25°30 | 23°56 | 21°35 | 18°26 | 26°39 | 10°29 | 17°27 | 23°36 | 16°D29 | 15°19 | 6°58 | 16° 7 | W 3 |
| T 4 | 15 19 13 | 21° 6'59 | 3°30 | 26°50 | 23°51 | 22°14 | 18°40 | 26°40 | 10°31 | 17°28 | 23°37 | 16°30 | 15°15 | 7° 5 | 16° 5 | T 4 |
| F 5 | 15 23 10 | 22° 4'38 | 17°23 | 28°12 | 23°48 | 22°53 | 18°54 | 26°42 | 10°33 | 17°30 | 23°38 | 16°31 | 15°12 | 7°12 | 16° 4 | F 5 |
| S 6 | 15 27 7 | 23° 2'16 | 1°39 | 29°37 | 23°D48 | 23°32 | 19° 8 | 26°43 | 10°34 | 17°31 | 23°40 | 16°32 | 15° 9 | 7°18 | 16° 2 | S 6 |
| S 7 | 15 31 3 | 23°59'53 | 16°19 | 1° 4 | 23°50 | 24°10 | 19°22 | 26°45 | 10°36 | 17°33 | 23°41 | 16°R33 | 15° 6 | 7°25 | 16° 0 | S 7 |
| M 8 | 15 35 0 | 24°57'28 | 1°16 | 2°34 | 23°54 | 24°49 | 19°36 | 26°47 | 10°37 | 17°34 | 23°42 | 16°32 | 15° 3 | 7°32 | 15°59 | M 8 |
| T 9 | 15 38 56 | 25°55'02 | 16°25 | 4° 6 | 24° 1 | 25°28 | 19°50 | 26°48 | 10°39 | 17°36 | 23°44 | 16°30 | 15° 0 | 7°38 | 15°57 | T 9 |
| W10 | 15 42 53 | 26°52'34 | 1°35 | 5°40 | 24°10 | 26° 7 | 20° 4 | 26°50 | 10°40 | 17°37 | 23°45 | 16°26 | 14°56 | 7°45 | 15°55 | W10 |
| T 11 | 15 46 49 | 27°50'06 | 16°39 | 7°17 | 24°21 | 26°45 | 20°18 | 26°53 | 10°41 | 17°39 | 23°46 | 16°20 | 14°53 | 7°52 | 15°53 | T 11 |
| F 12 | 15 50 46 | 28°47'36 | 1°325 | 8°56 | 24°34 | 27°24 | 20°32 | 26°55 | 10°43 | 17°40 | 23°48 | 16°14 | 14°50 | 7°58 | 15°51 | F 12 |
| S 13 | 15 54 42 | 29°45'06 | 15°47 | 10°38 | 24°49 | 28° 3 | 20°46 | 26°57 | 10°44 | 17°42 | 23°49 | 16° 8 | 14°47 | 8° 5 | 15°49 | S 13 |
| S 14 | 15 58 39 | 0°42'34 | 29°41 | 12°21 | 25° 6 | 28°42 | 21° 0 | 26°59 | 10°45 | 17°43 | 23°50 | 16° 3 | 14°44 | 8°12 | 15°47 | S 14 |
| M15 | 16 2 36 | 1°40'02 | 13°36 | 14° 8 | 25°25 | 29°20 | 21°14 | 27° 2 | 10°46 | 17°45 | 23°52 | 15°59 | 14°41 | 8°18 | 15°45 | M15 |
| T 16 | 16 6 32 | 2°37'29 | 26° 4 | 15°56 | 25°45 | 29°59 | 21°28 | 27° 4 | 10°47 | 17°47 | 23°53 | 15°57 | 14°37 | 8°25 | 15°43 | T 16 |
| W17 | 16 10 29 | 3°34'55 | 8°39 | 17°47 | 26° 8 | 0°37 | 21°42 | 27° 7 | 10°48 | 17°48 | 23°54 | 15°D57 | 14°34 | 8°32 | 15°40 | W17 |
| T 18 | 16 14 25 | 4°32'21 | 20°54 | 19°40 | 26°32 | 1°16 | 21°56 | 27°10 | 10°49 | 17°50 | 23°56 | 15°58 | 14°31 | 8°38 | 15°38 | T 18 |
| F 19 | 16 18 22 | 5°29'46 | 2°55 | 21°36 | 26°58 | 1°55 | 22°10 | 27°13 | 10°50 | 17°52 | 23°57 | 15°59 | 14°28 | 8°45 | 15°36 | F 19 |
| S 20 | 16 22 18 | 6°27'10 | 14°47 | 23°33 | 27°25 | 2°33 | 22°24 | 27°16 | 10°51 | 17°54 | 23°58 | 16°R 0 | 14°25 | 8°52 | 15°33 | S 20 |
| S 21 | 16 26 15 | 7°24'33 | 26°34 | 25°33 | 27°54 | 3°12 | 22°38 | 27°19 | 10°52 | 17°55 | 24° 0 | 16° 0 | 14°21 | 8°58 | 15°31 | S 21 |
| M22 | 16 30 11 | 8°21'56 | 8°21 | 27°35 | 28°25 | 3°50 | 22°52 | 27°22 | 10°53 | 17°57 | 24° 1 | 15°57 | 14°18 | 9° 5 | 15°28 | M22 |
| T 23 | 16 34 8 | 9°19'18 | 20°10 | 29°39 | 28°56 | 4°29 | 23° 6 | 27°25 | 10°54 | 17°59 | 24° 3 | 15°52 | 14°15 | 9°12 | 15°26 | T 23 |
| W24 | 16 38 5 | 10°16'40 | 2°11 | 29°30 | 5° 7 | 5° 7 | 23°20 | 27°28 | 10°54 | 18° 1 | 24° 4 | 15°45 | 14°12 | 9°18 | 15°23 | W24 |
| T 25 | 16 42 1 | 11°14'01 | 14° 7 | 3°51 | 0° 4 | 5°46 | 23°33 | 27°32 | 10°55 | 18° 3 | 24° 6 | 15°36 | 14° 9 | 9°25 | 15°20 | T 25 |
| F 26 | 16 45 58 | 12°11'21 | 26°18 | 6° 0 | 0°40 | 6°24 | 23°47 | 27°35 | 10°56 | 18° 5 | 24° 7 | 15°26 | 14° 6 | 9°31 | 15°17 | F 26 |
| S 27 | 16 49 54 | 13° 8'40 | 8°39 | 8° 9 | 1°17 | 7° 3 | 24° 1 | 27°39 | 10°56 | 18° 6 | 24° 8 | 15°15 | 14° 2 | 9°38 | 15°15 | S 27 |
| S 28 | 16 53 51 | 14° 5'59 | 21°10 | 10°20 | 1°55 | 7°41 | 24°14 | 27°43 | 10°57 | 18° 8 | 24°10 | 15° 6 | 13°59 | 9°45 | 15°12 | S 28 |
| M29 | 16 57 47 | 15° 3'16 | 3°53 | 12°31 | 2°34 | 8°20 | 24°28 | 27°46 | 10°57 | 18°10 | 24°11 | 14°58 | 13°56 | 9°51 | 15° 9 | M29 |
| T 30 | 17 1 44 | 16° 0'33 | 16°49 | 14°43 | 3°14 | 8°58 | 24°42 | 27°50 | 10°58 | 18°12 | 24°13 | 14°52 | 13°53 | 9°58 | 15° 6 | T 30 |
| W31 | 17 5 40 | 16°57'49 | 0°10 | 16°55 | 3°55 | 9°37 | 24°55 | 27°54 | 10°58 | 18°14 | 24°14 | 14°54 | 13°55 | 10° 5 | 15° 3 | W31 |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| M 1 | 17n19 | 16n16 | 5s10 | 6n 2 | 3s 9 | 10n57 | 1n39 | 24n11 | 1n 2 | 16n27 | 0s48 | 14n22 | 1n47 | 8s23 | 0s45 | 21n53 | 0s30 |
| T 2 | 17 35 | 13 52 | 4 53 | 6 32 | 3 7 | 10 41 | 1 25 | 24 14 | 1 2 | 16 31 | 0 48 | 14 22 | 1 47 | 8 22 | 0 45 | 21 52 | 0 30 |
| W 3 | 17 50 | 10 43 | 4 21 | 7 2 | 3 4 | 10 26 | 1 12 | 24 17 | 1 2 | 16 35 | 0 48 | 14 21 | 1 47 | 8 21 | 0 45 | 21 52 | 0 30 |
| T 4 | 18 6 | 6 56 | 3 34 | 7 34 | 3 1 | 10 12 | 0 59 | 24 19 | 1 2 | 16 39 | 0 48 | 14 20 | 1 47 | 8 21 | 0 45 | 21 52 | 0 30 |
| F 5 | 18 21 | 2 40 | 2 33 | 8 7 | 2 57 | 9 59 | 0 47 | 24 22 | 1 2 | 16 43 | 0 48 | 14 20 | 1 47 | 8 20 | 0 45 | 21 52 | 0 30 |
| S 6 | 18 35 | 1s53 | 1 20 | 8 41 | 2 52 | 9 48 | 0 34 | 24 24 | 1 3 | 16 47 | 0 48 | 14 19 | 1 47 | 8 20 | 0 45 | 21 52 | 0 30 |
| S 7 | 18 50 | 6 27 | 0 1 | 9 16 | 2 47 | 9 38 | 0 22 | 24 26 | 1 3 | 16 51 | 0 48 | 14 18 | 1 47 | 8 19 | 0 46 | 21 52 | 0 30 |
| M 8 | 19 4 | 10 43 | 1n19 | 9 52 | 2 41 | 9 28 | 0 11 | 24 28 | 1 3 | 16 55 | 0 48 | 14 18 | 1 47 | 8 19 | 0 46 | 21 51 | 0 30 |
| T 9 | 19 18 | 14 19 | 2 35 | 10 29 | 2 35 | 9 20 | 0s 0 | 24 29 | 1 3 | 16 59 | 0 48 | 14 17 | 1 46 | 8 18 | 0 46 | 21 51 | 0 30 |
| W10 | 19 31 | 16 57 | 3 40 | 11 7 | 2 29 | 9 13 | 0 11 | 24 31 | 1 4 | 17 3 | 0 48 | 14 16 | 1 46 | 8 18 | 0 46 | 21 51 | 0 30 |
| T 11 | 19 44 | 18 22 | 4 30 | 11 45 | 2 21 | 9 8 | 0 22 | 24 32 | 1 4 | 17 7 | 0 48 | 14 15 | 1 46 | 8 17 | 0 46 | 21 51 | 0 30 |
| F 12 | 19 57 | 18 31 | 5 0 | 12 24 | 2 14 | 9 3 | 0 32 | 24 33 | 1 4 | 17 10 | 0 48 | 14 14 | 1 46 | 8 17 | 0 46 | 21 51 | 0 30 |
| S 13 | 20 10 | 17 27 | 5 10 | 13 4 | 2 6 | 8 59 | 0 42 | 24 34 | 1 4 | 17 14 | 0 48 | 14 13 | 1 46 | 8 16 | 0 46 | 21 51 | 0 30 |
| S 14 | 20 22 | 15 22 | 5 1 | 13 44 | 1 57 | 8 57 | 0 51 | 24 35 | 1 4 | 17 18 | 0 48 | 14 13 | 1 46 | 8 16 | 0 46 | 21 50 | 0 30 |
| M15 | 20 33 | 12 31 | 4 36 | 14 24 | 1 48 | 8 55 | 1 0 | 24 35 | 1 5 | 17 22 | 0 48 | 14 12 | 1 46 | 8 15 | 0 46 | 21 50 | 0 30 |
| T 16 | 20 45 | 9 9 | 3 57 | 15 5 | 1 39 | 8 55 | 1 9 | 24 35 | 1 5 | 17 25 | 0 48 | 14 11 | 1 46 | 8 15 | 0 46 | 21 50 | 0 30 |
| W17 | 20 56 | 5 27 | 3 8 | 15 46 | 1 29 | 8 55 | 1 17 | 24 36 | 1 5 | 17 29 | 0 48 | 14 10 | 1 46 | 8 15 | 0 46 | 21 50 | 0 30 |
| T 18 | 21 7 | 1 36 | 2 12 | 16 26 | 1 19 | 8 56 | 1 26 | 24 35 | 1 5 | 17 33 | 0 47 | 14 8 | 1 45 | 8 14 | 0 46 | 21 50 | 0 30 |
| F 19 | 21 17 | 2n14 | 1 10 | 17 7 | 1 9 | 8 58 | 1 33 | 24 35 | 1 5 | 17 36 | 0 47 | 14 7 | 1 45 | 8 14 | 0 46 | 21 49 | 0 30 |
| S 20 | 21 27 | 5 57 | 0 7 | 17 47 | 0 58 | 9 1 | 1 41 | 24 35 | 1 5 | 17 40 | 0 47 | 14 6 | 1 45 | 8 14 | 0 46 | 21 49 | 0 30 |
| S 21 | 21 37 | 9 24 | 0s57 | 18 26 | 0 47 | 9 5 | 1 48 | 24 34 | 1 6 | 17 43 | 0 47 | 14 5 | 1 45 | 8 13 | 0 46 | 21 49 | 0 30 |
| M22 | 21 46 | 12 29 | 1 57 | 19 5 | 0 37 | 9 10 | 1 54 | 24 33 | 1 6 | 17 47 | 0 47 | 14 4 | 1 45 | 8 13 | 0 46 | 21 49 | 0 30 |
| T 23 | 21 55 | 15 3 | 2 53 | 19 43 | 0 26 | 9 15 | 2 1 | 24 32 | 1 6 | 17 50 | 0 47 | 14 3 | 1 45 | 8 13 | 0 46 | 21 49 | 0 30 |
| W24 | 22 3 | 17 1 | 3 42 | 20 20 | 0 15 | 9 21 | 2 7 | 24 31 | 1 6 | 17 54 | 0 47 | 14 1 | 1 45 | 8 13 | 0 46 | 21 48 | 0 30 |
| T 25 | 22 12 | 18 15 | 4 21 | 20 55 | 0 4 | 9 27 | 2 13 | 24 29 | 1 6 | 17 57 | 0 47 | 14 0 | 1 45 | 8 12 | 0 46 | 21 48 | 0 30 |
| F 26 | 22 19 | 18 40 | 4 48 | 21 29 | 0n 7 | 9 35 | 2 18 | 24 28 | 1 6 | 18 1 | 0 47 | 13 59 | 1 44 | 8 12 | 0 46 | 21 48 | 0 30 |
| S 27 | 22 27 | 18 12 | 5 3 | 22 1 | 0 18 | 9 42 | 2 24 | 24 26 | 1 6 | 18 4 | 0 47 | 13 57 | 1 44 | 8 12 | 0 46 | 21 48 | 0 30 |
| S 28 | 22 34 | 16 51 | 5 3 | 22 31 | 0 28 | 9 51 | 2 29 | 24 24 | 1 7 | 18 8 | 0 47 | 13 56 | 1 44 | 8 12 | 0 46 | 21 47 | 0 30 |
| M29 | 22 40 | 14 40 | 4 48 | 22 59 | 0 38 | 10 0 | 2 33 | 24 22 | 1 7 | 18 11 | 0 47 | 13 55 | 1 44 | 8 12 | 0 46 | 21 47 | 0 30 |
| T 30 | 22 46 | 11 43 | 4 19 | 23 25 | 0 47 | 10 9 | 2 38 | 24 19 | 1 7 | 18 14 | 0 47 | 13 53 | 1 44 | 8 12 | 0 46 | 21 47 | 0 30 |
| W31 | 22n52 | 8n 8 | 3s35 | 23n48 | 0n57 | 10n19 | 2s42 | 24n17 | 1n 7 | 18n18 | 0s47 | 13n52 | 1n44 | 8s11 | 0s46 | 21n47 | 0s30 |

Julian Day Number = 2239467.5, Delta T = 07m22s

Ecliptic obliquity = 23°30'44", Nutation = 0°00'04", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°38'23", Lahiri = 15°45'24" Julian Calendar 1 May 1419 == Greg. Calendar 10 May 1419

ASTRODIENST EPHEMERIS for the year 1419

geocentric

JUNE 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|-----------|--------|--------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|--------|------|
| T 1 | 17 9 37 | 17II55'04 | 13II28 | 19II 6 | 4837 | 10515 | 258 9 | 27858 | 10558 | 18516 | 24II16 | 14°D47 | 13447 | 10811 | 15°R 0 | T 1 |
| F 2 | 17 13 34 | 18°52'19 | 27°13 | 21°18 | 5°21 | 10°54 | 25°22 | 28° 2 | 10°59 | 18°18 | 24°17 | 14447 | 13°43 | 10°18 | 14357 | F 2 |
| S 3 | 17 17 30 | 19°49'32 | 11417 | 23°28 | 6° 5 | 11°32 | 25°36 | 28° 7 | 10°59 | 18°20 | 24°18 | 14°R48 | 13°40 | 10°25 | 14°54 | S 3 |
| S 4 | 17 21 27 | 20°46'45 | 25°40 | 25°38 | 6°50 | 12°10 | 25°49 | 28°11 | 10°59 | 18°22 | 24°20 | 14°47 | 13°37 | 10°31 | 14°50 | S 4 |
| M 5 | 17 25 23 | 21°43'57 | 10II19 | 27°47 | 7°35 | 12°49 | 26° 3 | 28°15 | 10°59 | 18°24 | 24°21 | 14°45 | 13°34 | 10°38 | 14°47 | M 5 |
| T 6 | 17 29 20 | 22°41'09 | 25°11 | 29°54 | 8°22 | 13°27 | 26°16 | 28°20 | 10°59 | 18°26 | 24°23 | 14°40 | 13°31 | 10°45 | 14°44 | T 6 |
| W 7 | 17 33 16 | 23°38'20 | 1057 | 29° 0 | 9° 9 | 14° 5 | 26°29 | 28°24 | 10°59 | 18°28 | 24°24 | 14°33 | 13°27 | 10°51 | 14°41 | W 7 |
| T 8 | 17 37 13 | 24°35'31 | 25° 0 | 4° 4 | 9°57 | 14°44 | 26°42 | 28°29 | 10°59 | 18°30 | 24°26 | 14°24 | 13°24 | 10°58 | 14°37 | T 8 |
| F 9 | 17 41 9 | 25°32'41 | 9341 | 6° 7 | 10°46 | 15°22 | 26°56 | 28°33 | 10°59 | 18°32 | 24°27 | 14°14 | 13°21 | 11° 5 | 14°34 | F 9 |
| S 10 | 17 45 6 | 26°29'52 | 24° 1 | 8° 7 | 11°36 | 16° 0 | 27° 9 | 28°38 | 10°59 | 18°34 | 24°29 | 14° 4 | 13°18 | 11°11 | 14°31 | S 10 |
| S 11 | 17 49 3 | 27°27'02 | 7357 | 10° 6 | 12°26 | 16°39 | 27°22 | 28°43 | 10°59 | 18°37 | 24°30 | 13°55 | 13°15 | 11°18 | 14°27 | S 11 |
| M12 | 17 52 59 | 28°24'12 | 21°25 | 12° 3 | 13°17 | 17°17 | 27°35 | 28°48 | 10°59 | 18°39 | 24°32 | 13°48 | 13°12 | 11°25 | 14°24 | M12 |
| T 13 | 17 56 56 | 29°21'22 | 4326 | 13°58 | 14° 9 | 17°55 | 27°48 | 28°53 | 10°59 | 18°41 | 24°33 | 13°43 | 13° 8 | 11°31 | 14°20 | T 13 |
| W14 | 18 0 52 | 0518'32 | 17° 3 | 15°50 | 15° 1 | 18°33 | 28° 1 | 28°58 | 10°58 | 18°43 | 24°35 | 13°41 | 13° 5 | 11°38 | 14°17 | W14 |
| T 15 | 18 4 49 | 1°15'43 | 29°19 | 17°41 | 15°54 | 19°12 | 28°14 | 29° 3 | 10°58 | 18°45 | 24°36 | 13°D40 | 13° 2 | 11°45 | 14°13 | T 15 |
| F 16 | 18 8 45 | 2°12'54 | 11121 | 19°30 | 16°47 | 19°50 | 28°27 | 29° 8 | 10°58 | 18°47 | 24°37 | 13°R40 | 12°59 | 11°51 | 14°10 | F 16 |
| S 17 | 18 12 42 | 3°10'05 | 23°13 | 21°16 | 17°41 | 20°28 | 28°39 | 29°13 | 10°57 | 18°49 | 24°39 | 13°40 | 12°56 | 11°58 | 14° 6 | S 17 |
| S 18 | 18 16 38 | 4° 7'16 | 58 0 | 23° 1 | 18°36 | 21° 6 | 28°52 | 29°18 | 10°57 | 18°52 | 24°40 | 13°38 | 12°53 | 12° 5 | 14° 3 | S 18 |
| M19 | 18 20 35 | 5° 4'27 | 16°49 | 24°43 | 19°31 | 21°45 | 29° 5 | 29°24 | 10°56 | 18°54 | 24°42 | 13°35 | 12°49 | 12°11 | 13°59 | M19 |
| T 20 | 18 24 32 | 6° 1'39 | 28°42 | 26°24 | 20°26 | 22°23 | 29°17 | 29°29 | 10°56 | 18°56 | 24°43 | 13°28 | 12°46 | 12°18 | 13°56 | T 20 |
| W21 | 18 28 28 | 6°58'51 | 10II44 | 28° 2 | 21°22 | 23° 1 | 29°30 | 29°35 | 10°55 | 18°58 | 24°45 | 13°19 | 12°43 | 12°25 | 13°52 | W21 |
| T 22 | 18 32 25 | 7°56'03 | 22°56 | 29°38 | 22°18 | 23°39 | 29°43 | 29°40 | 10°54 | 19° 0 | 24°46 | 13° 8 | 12°40 | 12°31 | 13°48 | T 22 |
| F 23 | 18 36 21 | 8°53'16 | 5520 | 1412 | 23°15 | 24°18 | 29°55 | 29°46 | 10°54 | 19° 2 | 24°47 | 12°55 | 12°37 | 12°38 | 13°45 | F 23 |
| S 24 | 18 40 18 | 9°50'29 | 17°57 | 2°44 | 24°12 | 24°56 | 0II 7 | 29°52 | 10°53 | 19° 5 | 24°49 | 12°42 | 12°33 | 12°45 | 13°41 | S 24 |
| S 25 | 18 44 14 | 10°47'42 | 0847 | 4°14 | 25°10 | 25°34 | 0°20 | 29°57 | 10°52 | 19° 7 | 24°50 | 12°29 | 12°30 | 12°51 | 13°38 | S 25 |
| M26 | 18 48 11 | 11°44'55 | 13°48 | 5°42 | 26° 8 | 26°12 | 0°32 | 0II 3 | 10°51 | 19° 9 | 24°52 | 12°19 | 12°27 | 12°58 | 13°34 | M26 |
| T 27 | 18 52 7 | 12°42'08 | 27° 1 | 7° 8 | 27° 7 | 26°50 | 0°44 | 0° 9 | 10°50 | 19°11 | 24°53 | 12°11 | 12°24 | 13° 5 | 13°30 | T 27 |
| W28 | 18 56 4 | 13°39'21 | 10II25 | 8°31 | 28° 5 | 27°29 | 0°56 | 0°15 | 10°50 | 19°14 | 24°55 | 12° 6 | 12°21 | 13°11 | 13°27 | W28 |
| T 29 | 19 0 1 | 14°36'35 | 24° 0 | 9°52 | 29° 5 | 28° 7 | 1° 8 | 0°21 | 10°49 | 19°16 | 24°56 | 12° 4 | 12°18 | 13°18 | 13°23 | T 29 |
| F 30 | 19 3 57 | 15533'48 | 7447 | 11411 | 0II 4 | 28545 | 1II20 | 0II27 | 10548 | 19518 | 24II57 | 124 3 | 12414 | 13525 | 13519 | F 30 |

| Day | ☉ | ☾ | | ♀ | | ♀ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|-------|------|-----|------|-----|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| T 1 | 22n58 | 4n 4 | 2s39 | 24n 9 | 1n 5 | 10n30 | 2s46 | 24n14 | 1n 7 | 18n21 | 0s47 | 13n50 | 1n44 | 8s11 | 0s46 | 21n46 | 0s30 | 18n 2 | 5s21 | 5s51 | 5s27 | 12n44 | 15s27 | 7n16 | | | |
| F 2 | 23 3 | 0s18 | 1 32 | 24 27 | 1 13 | 10 41 | 2 50 | 24 11 | 1 7 | 18 24 | 0 47 | 13 49 | 1 44 | 8 11 | 0 47 | 21 46 | 0 30 | 18 2 | 5 21 | 5 51 | 5 26 | 12 46 | 15 27 | 7 16 | | | |
| S 3 | 23 7 | 4 46 | 0 19 | 24 42 | 1 21 | 10 52 | 2 53 | 24 8 | 1 7 | 18 28 | 0 47 | 13 47 | 1 44 | 8 11 | 0 47 | 21 46 | 0 30 | 18 3 | 5 21 | 5 51 | 5 25 | 12 47 | 15 27 | 7 16 | | | |
| S 4 | 23 11 | 9 3 | 0n58 | 24 54 | 1 27 | 11 4 | 2 56 | 24 4 | 1 7 | 18 31 | 0 47 | 13 46 | 1 44 | 8 11 | 0 47 | 21 46 | 0 30 | 18 3 | 5 21 | 5 51 | 5 23 | 12 48 | 15 27 | 7 17 | | | |
| M 5 | 23 15 | 12 53 | 2 12 | 25 3 | 1 33 | 11 16 | 2 59 | 24 1 | 1 8 | 18 34 | 0 47 | 13 44 | 1 43 | 8 11 | 0 47 | 21 45 | 0 29 | 18 3 | 5 21 | 5 50 | 5 22 | 12 50 | 15 27 | 7 17 | | | |
| T 6 | 23 19 | 15 55 | 3 17 | 25 10 | 1 39 | 11 28 | 3 2 | 23 57 | 1 8 | 18 37 | 0 47 | 13 42 | 1 43 | 8 11 | 0 47 | 21 45 | 0 29 | 18 3 | 5 21 | 5 48 | 5 21 | 12 51 | 15 27 | 7 17 | | | |
| W 7 | 23 22 | 17 55 | 4 10 | 25 13 | 1 43 | 11 41 | 3 4 | 23 53 | 1 8 | 18 40 | 0 47 | 13 41 | 1 43 | 8 11 | 0 47 | 21 45 | 0 29 | 18 3 | 5 21 | 5 45 | 5 20 | 12 52 | 15 27 | 7 18 | | | |
| T 8 | 23 24 | 18 40 | 4 46 | 25 14 | 1 47 | 11 54 | 3 7 | 23 49 | 1 8 | 18 43 | 0 47 | 13 39 | 1 43 | 8 11 | 0 47 | 21 45 | 0 29 | 18 3 | 5 21 | 5 42 | 5 18 | 12 54 | 15 27 | 7 18 | | | |
| F 9 | 23 26 | 18 9 | 5 1 | 25 13 | 1 51 | 12 7 | 3 9 | 23 45 | 1 8 | 18 46 | 0 47 | 13 37 | 1 43 | 8 11 | 0 47 | 21 44 | 0 29 | 18 3 | 5 21 | 5 38 | 5 17 | 12 55 | 15 27 | 7 18 | | | |
| S 10 | 23 28 | 16 29 | 4 58 | 25 8 | 1 53 | 12 20 | 3 11 | 23 41 | 1 8 | 18 49 | 0 47 | 13 36 | 1 43 | 8 11 | 0 47 | 21 44 | 0 29 | 18 3 | 5 21 | 5 34 | 5 16 | 12 56 | 15 27 | 7 18 | | | |
| S 11 | 23 29 | 13 53 | 4 37 | 25 2 | 1 55 | 12 34 | 3 12 | 23 36 | 1 8 | 18 52 | 0 47 | 13 34 | 1 43 | 8 11 | 0 47 | 21 44 | 0 29 | 18 3 | 5 21 | 5 30 | 5 15 | 12 58 | 15 27 | 7 18 | | | |
| M12 | 23 30 | 10 37 | 4 0 | 24 53 | 1 56 | 12 48 | 3 14 | 23 31 | 1 8 | 18 55 | 0 47 | 13 32 | 1 43 | 8 12 | 0 47 | 21 44 | 0 29 | 18 4 | 5 21 | 5 27 | 5 13 | 12 59 | 15 28 | 7 19 | | | |
| T 13 | 23 31 | 6 56 | 3 12 | 24 42 | 1 56 | 13 2 | 3 15 | 23 26 | 1 8 | 18 58 | 0 47 | 13 30 | 1 43 | 8 12 | 0 47 | 21 43 | 0 29 | 18 4 | 5 21 | 5 26 | 5 12 | 13 0 | 15 28 | 7 19 | | | |
| W14 | 23 31 | 3 2 | 2 16 | 24 29 | 1 55 | 13 16 | 3 16 | 23 21 | 1 8 | 19 1 | 0 47 | 13 28 | 1 43 | 8 12 | 0 47 | 21 43 | 0 29 | 18 4 | 5 21 | 5 25 | 5 11 | 13 2 | 15 28 | 7 19 | | | |
| T 15 | 23 30 | 0n53 | 1 16 | 24 14 | 1 54 | 13 30 | 3 17 | 23 16 | 1 9 | 19 4 | 0 47 | 13 26 | 1 43 | 8 12 | 0 47 | 21 43 | 0 29 | 18 4 | 5 20 | 5 25 | 5 10 | 13 3 | 15 28 | 7 19 | | | |
| F 16 | 23 30 | 4 41 | 0 12 | 23 57 | 1 53 | 13 44 | 3 18 | 23 10 | 1 9 | 19 7 | 0 47 | 13 25 | 1 42 | 8 12 | 0 47 | 21 42 | 0 29 | 18 4 | 5 20 | 5 25 | 5 8 | 13 4 | 15 28 | 7 19 | | | |
| S 17 | 23 28 | 8 16 | 0s50 | 23 38 | 1 50 | 13 59 | 3 19 | 23 5 | 1 9 | 19 10 | 0 47 | 13 23 | 1 42 | 8 12 | 0 47 | 21 42 | 0 29 | 18 4 | 5 20 | 5 25 | 5 7 | 13 5 | 15 29 | 7 20 | | | |
| S 18 | 23 27 | 11 30 | 1 51 | 23 18 | 1 47 | 14 13 | 3 19 | 22 59 | 1 9 | 19 13 | 0 47 | 13 21 | 1 42 | 8 13 | 0 47 | 21 42 | 0 29 | 18 4 | 5 20 | 5 24 | 5 6 | 13 7 | 15 29 | 7 20 | | | |
| M19 | 23 25 | 14 15 | 2 46 | 22 57 | 1 44 | 14 28 | 3 19 | 22 53 | 1 9 | 19 15 | 0 47 | 13 19 | 1 42 | 8 13 | 0 47 | 21 42 | 0 29 | 18 4 | 5 20 | 5 22 | 5 5 | 13 8 | 15 29 | 7 20 | | | |
| T 20 | 23 22 | 16 27 | 3 35 | 22 34 | 1 39 | 14 42 | 3 19 | 22 47 | 1 9 | 19 18 | 0 47 | 13 17 | 1 42 | 8 13 | 0 47 | 21 41 | 0 29 | 18 4 | 5 20 | 5 20 | 5 4 | 13 9 | 15 29 | 7 20 | | | |
| W21 | 23 20 | 17 56 | 4 14 | 22 10 | 1 35 | 14 57 | 3 19 | 22 40 | 1 9 | 19 21 | 0 47 | 13 15 | 1 42 | 8 13 | 0 47 | 21 41 | 0 29 | 18 4 | 5 20 | 5 16 | 5 2 | 13 11 | 15 29 | 7 20 | | | |
| T 22 | 23 16 | 18 38 | 4 42 | 21 45 | 1 29 | 15 11 | 3 19 | 22 34 | 1 9 | 19 23 | 0 47 | 13 13 | 1 42 | 8 14 | 0 47 | 21 41 | 0 29 | 18 4 | 5 20 | 5 12 | 5 1 | 13 12 | 15 30 | 7 20 | | | |
| F 23 | 23 13 | 18 27 | 4 58 | 21 19 | 1 24 | 15 26 | 3 19 | 22 27 | 1 9 | 19 26 | 0 47 | 13 11 | 1 42 | 8 14 | 0 47 | 21 40 | 0 29 | 18 5 | 5 20 | 5 7 | 5 0 | 13 13 | 15 30 | 7 20 | | | |
| S 24 | 23 9 | 17 22 | 4 59 | 20 52 | 1 17 | 15 40 | 3 18 | 22 20 | 1 9 | 19 29 | 0 47 | 13 9 | 1 42 | 8 14 | 0 47 | 21 40 | 0 29 | 18 5 | 5 20 | 5 2 | 4 59 | 13 14 | 15 30 | 7 20 | | | |
| S 25 | 23 4 | 15 24 | 4 45 | 20 24 | 1 10 | 15 55 | 3 18 | 22 14 | 1 9 | 19 31 | 0 47 | 13 7 | 1 42 | 8 15 | 0 47 | 21 40 | 0 29 | 18 5 | 5 20 | 4 57 | 4 57 | 13 16 | 15 31 | 7 20 | | | |
| M26 | 22 59 | 12 38 | 4 17 | 19 55 | 1 3 | 16 9 | 3 17 | 22 6 | 1 9 | 19 34 | 0 47 | 13 4 | 1 42 | 8 15 | 0 47 | 21 39 | 0 29 | 18 5 | 5 20 | 4 53 | 4 56 | 13 17 | 15 31 | 7 20 | | | |
| T 27 | 22 54 | 9 11 | 3 34 | 19 26 | 0 55 | 16 23 | 3 16 | 21 59 | 1 9 | 19 36 | 0 47 | 13 2 | 1 42 | 8 15 | 0 47 | 21 39 | 0 29 | 18 5 | 5 20 | 4 50 | 4 55 | 13 18 | 15 31 | 7 20 | | | |
| W28 | 22 49 | 5 14 | 2 39 | 18 57 | 0 47 | 16 37 | 3 15 | 21 52 | 1 9 | 19 39 | 0 47 | 13 0 | 1 42 | 8 16 | 0 47 | 21 39 | 0 29 | 18 5 | 5 20 | 4 48 | 4 54 | 13 19 | 15 31 | 7 20 | | | |
| T 29 | 22 42 | 0 57 | 1 34 | 18 27 | 0 39 | 16 51 | 3 14 | 21 44 | 1 9 | 19 41 | 0 47 | 12 58 | 1 42 | 8 16 | 0 48 | 21 39 | 0 29 | 18 5 | 5 20 | 4 47 | 4 52 | 13 21 | 15 32 | 7 21 | | | |
| F 30 | 22n36 | 3s26 | 0s23 | 17n57 | 0n30 | 17n 5 | 3s13 | 21n36 | 1n 9 | 19n44 | 0s47 | 12n56 | 1n41 | 8s17 | 0s48 | 21n38 | 0s29 | 18n 5 | 5s20 | 4s47 | 4s51 | 13n22 | 15s32 | 7n21 | | | |

ASTRODIENST EPHEMERIS for the year 1419

geocentric

JULY 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|--------|--------|--------|--------|------|--------|-------|--------|--------|-------|-------|--------|------|
| S 1 | 19 7 54 | 16°31'02 | 21°46 | 12°28 | 1°11 4 | 29°23 | 1°1132 | 0°33 | 10°R46 | 19°20 | 24°159 | 12°R 3 | 12°11 | 13°31 | 13°R16 | S 1 |
| S 2 | 19 11 50 | 17°28'16 | 5°56 | 13°42 | 2° 4 | 0°01 1 | 1°44 | 0°39 | 10°45 | 19°22 | 25° 0 | 12° 2 | 12° 8 | 13°38 | 13°12 | S 2 |
| M 3 | 19 15 47 | 18°25'30 | 20°18 | 14°54 | 3° 5 | 0°39 | 1°55 | 0°45 | 10°44 | 19°25 | 25° 1 | 12° 0 | 12° 5 | 13°45 | 13° 9 | M 3 |
| T 4 | 19 19 43 | 19°22'44 | 4°48 | 16° 3 | 4° 6 | 1°17 | 2° 7 | 0°52 | 10°43 | 19°27 | 25° 3 | 11°55 | 12° 2 | 13°51 | 13° 5 | T 4 |
| W 5 | 19 23 40 | 20°19'59 | 19°21 | 17° 9 | 5° 7 | 1°56 | 2°18 | 0°58 | 10°42 | 19°29 | 25° 4 | 11°47 | 11°59 | 13°58 | 13° 1 | W 5 |
| T 6 | 19 27 36 | 21°17'14 | 3°52 | 18°13 | 6° 8 | 2°34 | 2°30 | 1° 4 | 10°41 | 19°31 | 25° 5 | 11°37 | 11°55 | 14° 5 | 12°58 | T 6 |
| F 7 | 19 31 33 | 22°14'30 | 18°14 | 19°15 | 7°10 | 3°12 | 2°41 | 1°11 | 10°39 | 19°34 | 25° 7 | 11°26 | 11°52 | 14°11 | 12°54 | F 7 |
| S 8 | 19 35 30 | 23°11'46 | 2°20 | 20°13 | 8°12 | 3°50 | 2°52 | 1°17 | 10°38 | 19°36 | 25° 8 | 11°15 | 11°49 | 14°18 | 12°51 | S 8 |
| S 9 | 19 39 26 | 24° 9'03 | 16° 6 | 21° 8 | 9°14 | 4°28 | 3° 4 | 1°24 | 10°36 | 19°38 | 25° 9 | 11° 5 | 11°46 | 14°25 | 12°47 | S 9 |
| M10 | 19 43 23 | 25° 6'21 | 29°28 | 22° 1 | 10°17 | 5° 6 | 3°15 | 1°30 | 10°35 | 19°40 | 25°11 | 10°57 | 11°43 | 14°31 | 12°44 | M10 |
| T 11 | 19 47 19 | 26° 3'40 | 12°27 | 22°50 | 11°20 | 5°44 | 3°26 | 1°37 | 10°34 | 19°42 | 25°12 | 10°52 | 11°39 | 14°38 | 12°40 | T 11 |
| W12 | 19 51 16 | 27° 0'59 | 25° 3 | 23°35 | 12°23 | 6°22 | 3°37 | 1°43 | 10°32 | 19°45 | 25°13 | 10°49 | 11°36 | 14°45 | 12°37 | W12 |
| T 13 | 19 55 12 | 27°58'20 | 7°20 | 24°17 | 13°26 | 7° 1 | 3°48 | 1°50 | 10°30 | 19°47 | 25°14 | 10°D48 | 11°33 | 14°51 | 12°33 | T 13 |
| F 14 | 19 59 9 | 28°55'41 | 19°23 | 24°56 | 14°30 | 7°39 | 3°58 | 1°57 | 10°29 | 19°49 | 25°16 | 10°48 | 11°30 | 14°58 | 12°30 | F 14 |
| S 15 | 20 3 5 | 29°53'04 | 1°16 | 25°30 | 15°34 | 8°17 | 4° 9 | 2° 4 | 10°27 | 19°51 | 25°17 | 10°R48 | 11°27 | 15° 5 | 12°27 | S 15 |
| S 16 | 20 7 2 | 0°50'28 | 13° 6 | 26° 0 | 16°38 | 8°55 | 4°19 | 2°10 | 10°26 | 19°54 | 25°18 | 10°47 | 11°24 | 15°11 | 12°23 | S 16 |
| M17 | 20 10 59 | 1°47'54 | 24°56 | 26°27 | 17°42 | 9°33 | 4°30 | 2°17 | 10°24 | 19°56 | 25°19 | 10°45 | 11°20 | 15°18 | 12°20 | M17 |
| T 18 | 20 14 55 | 2°45'20 | 6°53 | 26°48 | 18°47 | 10°11 | 4°40 | 2°24 | 10°22 | 19°58 | 25°21 | 10°40 | 11°17 | 15°25 | 12°17 | T 18 |
| W19 | 20 18 52 | 3°42'48 | 19° 1 | 27° 5 | 19°51 | 10°49 | 4°51 | 2°31 | 10°20 | 20° 0 | 25°22 | 10°33 | 11°14 | 15°31 | 12°13 | W19 |
| T 20 | 20 22 48 | 4°40'17 | 1°21 | 27°18 | 20°56 | 11°27 | 5° 1 | 2°38 | 10°19 | 20° 2 | 25°23 | 10°23 | 11°11 | 15°38 | 12°10 | T 20 |
| F 21 | 20 26 45 | 5°37'47 | 13°58 | 27°25 | 22° 1 | 12° 6 | 5°11 | 2°45 | 10°17 | 20° 4 | 25°24 | 10°13 | 11° 8 | 15°45 | 12° 7 | F 21 |
| S 22 | 20 30 41 | 6°35'18 | 26°51 | 27°R27 | 23° 7 | 12°44 | 5°21 | 2°52 | 10°15 | 20° 7 | 25°25 | 10° 2 | 11° 5 | 15°51 | 12° 4 | S 22 |
| S 23 | 20 34 38 | 7°32'50 | 10°0 | 27°24 | 24°12 | 13°22 | 5°30 | 2°59 | 10°13 | 20° 9 | 25°26 | 9°51 | 11° 1 | 15°58 | 12° 1 | S 23 |
| M24 | 20 38 34 | 8°30'24 | 23°23 | 27°15 | 25°18 | 14° 0 | 5°40 | 3° 6 | 10°11 | 20°11 | 25°28 | 9°43 | 10°58 | 16° 5 | 11°58 | M24 |
| T 25 | 20 42 31 | 9°27'58 | 6°59 | 27° 1 | 26°24 | 14°38 | 5°50 | 3°13 | 10° 9 | 20°13 | 25°29 | 9°36 | 10°55 | 16°11 | 11°55 | T 25 |
| W26 | 20 46 28 | 10°25'34 | 20°44 | 26°42 | 27°30 | 15°16 | 5°59 | 3°20 | 10° 7 | 20°15 | 25°30 | 9°32 | 10°52 | 16°18 | 11°52 | W26 |
| T 27 | 20 50 24 | 11°23'10 | 4°38 | 26°17 | 28°36 | 15°54 | 6° 8 | 3°27 | 10° 5 | 20°17 | 25°31 | 9°D31 | 10°49 | 16°25 | 11°49 | T 27 |
| F 28 | 20 54 21 | 12°20'48 | 18°38 | 25°47 | 29°43 | 16°33 | 6°18 | 3°35 | 10° 3 | 20°19 | 25°32 | 9°31 | 10°45 | 16°31 | 11°46 | F 28 |
| S 29 | 20 58 17 | 13°18'26 | 2°42 | 25°12 | 0°50 | 17°11 | 6°27 | 3°42 | 10° 1 | 20°21 | 25°33 | 9°32 | 10°42 | 16°38 | 11°43 | S 29 |
| S 30 | 21 2 14 | 14°16'06 | 16°51 | 24°33 | 1°56 | 17°49 | 6°36 | 3°49 | 9°59 | 20°24 | 25°34 | 9°R32 | 10°39 | 16°45 | 11°40 | S 30 |
| M31 | 21 6 10 | 15°13'46 | 1°2 | 23°49 | 3°3 | 18°27 | 6°45 | 3°56 | 9°57 | 20°26 | 25°35 | 9°31 | 10°36 | 16°51 | 11°37 | M31 |

| Day | ☉ | ☾ | | ♂ | | ♀ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| S 1 | 22n29 | 7s43 | 0n51 | 17n26 | 0n20 | 17n19 | 3s11 | 21n28 | 1n 9 | 19n46 | 0s47 | 12n53 | 1n41 | 8s17 | 0s48 | 21n38 | 0s29 | 18n 5 | 5s20 | 4s47 | 4s50 | 13n23 | 15s32 | 7n21 |
| S 2 | 22 22 | 11 37 | 2 3 | 16 56 | 0 10 | 17 32 | 3 10 | 21 20 | 1 9 | 19 49 | 0 47 | 12 51 | 1 41 | 8 17 | 0 48 | 21 38 | 0 29 | 18 5 | 5 20 | 4 46 | 4 49 | 13 24 | 15 33 | 7 20 |
| M 3 | 22 14 | 14 52 | 3 8 | 16 25 | 0 0 | 17 45 | 3 8 | 21 12 | 1 9 | 19 51 | 0 47 | 12 49 | 1 41 | 8 18 | 0 48 | 21 37 | 0 29 | 18 5 | 5 20 | 4 45 | 4 47 | 13 26 | 15 33 | 7 20 |
| T 4 | 22 6 | 17 13 | 4 1 | 15 55 | 0s10 | 17 58 | 3 7 | 21 4 | 1 9 | 19 53 | 0 47 | 12 47 | 1 41 | 8 18 | 0 48 | 21 37 | 0 29 | 18 5 | 5 20 | 4 43 | 4 46 | 13 27 | 15 34 | 7 20 |
| W 5 | 21 58 | 18 27 | 4 39 | 15 24 | 0 21 | 18 11 | 3 5 | 20 55 | 1 9 | 19 55 | 0 47 | 12 44 | 1 41 | 8 19 | 0 48 | 21 37 | 0 29 | 18 5 | 5 20 | 4 40 | 4 45 | 13 28 | 15 34 | 7 20 |
| T 6 | 21 49 | 18 29 | 4 58 | 14 54 | 0 32 | 18 24 | 3 3 | 20 46 | 1 9 | 19 58 | 0 47 | 12 42 | 1 41 | 8 19 | 0 48 | 21 36 | 0 29 | 18 5 | 5 20 | 4 37 | 4 44 | 13 30 | 15 34 | 7 20 |
| F 7 | 21 40 | 17 20 | 4 59 | 14 25 | 0 43 | 18 36 | 3 1 | 20 38 | 1 9 | 20 0 | 0 47 | 12 40 | 1 41 | 8 20 | 0 48 | 21 36 | 0 29 | 18 5 | 5 20 | 4 32 | 4 42 | 13 31 | 15 35 | 7 20 |
| S 8 | 21 31 | 15 8 | 4 41 | 13 55 | 0 55 | 18 48 | 2 59 | 20 29 | 1 9 | 20 2 | 0 47 | 12 37 | 1 41 | 8 20 | 0 48 | 21 36 | 0 29 | 18 5 | 5 20 | 4 28 | 4 41 | 13 32 | 15 35 | 7 20 |
| S 9 | 21 21 | 12 7 | 4 7 | 13 26 | 1 7 | 19 0 | 2 57 | 20 20 | 1 9 | 20 4 | 0 47 | 12 35 | 1 41 | 8 21 | 0 48 | 21 36 | 0 29 | 18 5 | 5 20 | 4 24 | 4 40 | 13 33 | 15 36 | 7 20 |
| M10 | 21 11 | 8 34 | 3 21 | 12 58 | 1 19 | 19 11 | 2 54 | 20 10 | 1 9 | 20 6 | 0 47 | 12 33 | 1 41 | 8 22 | 0 48 | 21 35 | 0 29 | 18 6 | 5 20 | 4 21 | 4 39 | 13 34 | 15 36 | 7 20 |
| T 11 | 21 0 | 4 41 | 2 25 | 12 31 | 1 31 | 19 22 | 2 52 | 20 1 | 1 9 | 20 8 | 0 47 | 12 30 | 1 41 | 8 22 | 0 48 | 21 35 | 0 29 | 18 6 | 5 20 | 4 19 | 4 37 | 13 36 | 15 36 | 7 20 |
| W12 | 20 49 | 0 43 | 1 23 | 12 4 | 1 43 | 19 33 | 2 49 | 19 51 | 1 9 | 20 10 | 0 47 | 12 28 | 1 41 | 8 23 | 0 48 | 21 35 | 0 29 | 18 6 | 5 20 | 4 17 | 4 36 | 13 37 | 15 37 | 7 20 |
| T 13 | 20 38 | 3n12 | 0 18 | 11 39 | 1 56 | 19 43 | 2 47 | 19 42 | 1 9 | 20 12 | 0 47 | 12 25 | 1 41 | 8 23 | 0 48 | 21 34 | 0 29 | 18 6 | 5 20 | 4 17 | 4 35 | 13 38 | 15 37 | 7 20 |
| F 14 | 20 26 | 6 54 | 0s46 | 11 14 | 2 9 | 19 53 | 2 44 | 19 32 | 1 9 | 20 14 | 0 47 | 12 23 | 1 41 | 8 24 | 0 48 | 21 34 | 0 29 | 18 6 | 5 20 | 4 17 | 4 34 | 13 39 | 15 38 | 7 19 |
| S 15 | 20 14 | 10 17 | 1 47 | 10 51 | 2 21 | 20 3 | 2 42 | 19 22 | 1 9 | 20 16 | 0 47 | 12 21 | 1 41 | 8 25 | 0 48 | 21 34 | 0 29 | 18 6 | 5 20 | 4 17 | 4 32 | 13 41 | 15 38 | 7 19 |
| S 16 | 20 2 | 13 14 | 2 43 | 10 29 | 2 34 | 20 12 | 2 39 | 19 12 | 1 9 | 20 18 | 0 47 | 12 18 | 1 41 | 8 25 | 0 48 | 21 33 | 0 29 | 18 6 | 5 20 | 4 17 | 4 31 | 13 42 | 15 39 | 7 19 |
| M17 | 19 49 | 15 37 | 3 32 | 10 8 | 2 46 | 20 21 | 2 36 | 19 2 | 1 9 | 20 20 | 0 47 | 12 16 | 1 41 | 8 26 | 0 48 | 21 33 | 0 29 | 18 6 | 5 20 | 4 16 | 4 30 | 13 43 | 15 39 | 7 19 |
| T 18 | 19 36 | 17 22 | 4 13 | 9 49 | 2 59 | 20 30 | 2 33 | 18 51 | 1 9 | 20 22 | 0 47 | 12 13 | 1 41 | 8 27 | 0 48 | 21 33 | 0 29 | 18 6 | 5 20 | 4 14 | 4 29 | 13 44 | 15 40 | 7 19 |
| W19 | 19 23 | 18 22 | 4 42 | 9 32 | 3 11 | 20 38 | 2 30 | 18 41 | 1 9 | 20 24 | 0 47 | 12 11 | 1 41 | 8 27 | 0 48 | 21 32 | 0 29 | 18 6 | 5 20 | 4 11 | 4 27 | 13 46 | 15 40 | 7 19 |
| T 20 | 19 9 | 18 31 | 5 0 | 9 16 | 3 23 | 20 45 | 2 27 | 18 30 | 1 9 | 20 26 | 0 47 | 12 8 | 1 41 | 8 28 | 0 48 | 21 32 | 0 29 | 18 6 | 5 20 | 4 8 | 4 26 | 13 47 | 15 41 | 7 18 |
| F 21 | 18 55 | 17 46 | 5 3 | 9 3 | 3 34 | 20 53 | 2 24 | 18 20 | 1 9 | 20 27 | 0 47 | 12 5 | 1 41 | 8 29 | 0 48 | 21 32 | 0 29 | 18 6 | 5 20 | 4 3 | 4 25 | 13 48 | 15 41 | 7 18 |
| S 22 | 18 41 | 16 6 | 4 51 | 8 52 | 3 45 | 20 59 | 2 21 | 18 9 | 1 9 | 20 29 | 0 47 | 12 3 | 1 41 | 8 29 | 0 48 | 21 31 | 0 29 | 18 6 | 5 20 | 3 59 | 4 24 | 13 49 | 15 42 | 7 18 |
| S 23 | 18 26 | 13 34 | 4 23 | 8 43 | 3 56 | 21 6 | 2 18 | 17 58 | 1 9 | 20 31 | 0 47 | 12 0 | 1 41 | 8 30 | 0 48 | 21 31 | 0 29 | 18 6 | 5 20 | 3 55 | 4 22 | 13 50 | 15 42 | 7 18 |
| M24 | 18 11 | 10 18 | 3 40 | 8 37 | 4 6 | 21 12 | 2 14 | 17 47 | 1 9 | 20 33 | 0 47 | 11 58 | 1 41 | 8 31 | 0 48 | 21 31 | 0 29 | 18 6 | 5 20 | 3 51 | 4 21 | 13 52 | 15 43 | 7 17 |
| T 25 | 17 56 | 6 26 | 2 45 | 8 33 | 4 15 | 21 17 | 2 11 | 17 36 | 1 9 | 20 34 | 0 47 | 11 55 | 1 41 | 8 32 | 0 48 | 21 31 | 0 29 | 18 6 | 5 20 | 3 49 | 4 20 | 13 53 | 15 43 | 7 17 |
| W26 | 17 41 | 2 10 | 1 39 | 8 32 | 4 23 | 21 22 | 2 8 | 17 24 | 1 9 | 20 36 | 0 47 | 11 53 | 1 41 | 8 32 | 0 48 | 21 30 | 0 29 | 18 6 | 5 20 | 3 47 | 4 19 | 13 54 | 15 44 | 7 17 |
| T 27 | 17 25 | 2s15 | 0 26 | 8 33 | 4 30 | 21 26 | 2 4 | 17 13 | 1 9 | 20 37 | 0 47 | 11 50 | 1 41 | 8 33 | 0 48 | 21 30 | 0 29 | 18 6 | 5 21 | 3 47 | 4 17 | 13 55 | 15 44 | 7 17 |
| F 28 | 17 9 | 6 34 | 0n49 | 8 38 | 4 36 | 21 30 | 2 1 | 17 1 | 1 9 | 20 39 | 0 47 | 11 47 | 1 41 | 8 34 | 0 48 | 21 30 | 0 29 | 18 6 | 5 21 | 3 47 | 4 16 | 13 56 | 15 45 | 7 16 |
| S 29 | 16 53 | 10 33 | 2 1 | 8 45 | 4 40 | 21 33 | 1 57 | 16 50 | 1 9 | 20 41 | 0 47 | 11 45 | 1 41 | 8 35 | 0 48 | 21 29 | 0 29 | 18 6 | 5 21 | 3 47 | 4 15 | 13 58 | 15 45 | 7 16 |
| S 30 | 16 36 | 13 56 | 3 6 | 8 55 | 4 43 | 21 36 | 1 54 | 16 38 | 1 9 | 20 42 | 0 47 | 11 42 | 1 41 | 8 36 | 0 48 | 21 29 | 0 29 | 18 6 | 5 21 | 3 47 | 4 14 | 13 59 | 15 46 | 7 16 |
| M31 | 16n19 | 16s30 | 4n 1 | 9n 8 | 4s45 | 21n38 | 1s50 | 16n26 | 1n 9 | 20n43 | 0s47 | 11n39 | 1n41 | 8s36 | 0s48 | 21n29 | 0s29 | 18n 6 | 5s21 | 3s47 | 4s12 | 14n 0 | 15s46 | 7n15 |

ASTRODIENST EPHEMERIS for the year 1419

geocentric

AUGUST 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|------------|----------|---------|---------|----------|---------|---------|---------|-------|---------|---------|----------|----------|----------|------|
| T 1 | 21 10 7 | 16°11'28 | 15°13' | 23°R 2 | 4°51'11 | 19°18' 5 | 6°11'53 | 4°11' 4 | 9°R55 | 20°28 | 25°II36 | 9°R28 | 10°13'33 | 16°18'58 | 11°R35 | T 1 |
| W 2 | 21 14 3 | 17° 9'10 | 29°23 | 22°13 | 5°18 | 19°43 | 7° 2 | 4°11 | 9°R53 | 20°30 | 25°37 | 9°13 | 10°30 | 17° 5 | 11°13'32 | W 2 |
| T 3 | 21 18 0 | 18° 6'54 | 13°38'28 | 21°21 | 6°25 | 20°21 | 7°11 | 4°18 | 9°51 | 20°32 | 25°38 | 9°16 | 10°26 | 17°11 | 11°30 | T 3 |
| F 4 | 21 21 57 | 19° 4'39 | 27°23 | 20°29 | 7°33 | 21° 0 | 7°19 | 4°26 | 9°48 | 20°34 | 25°39 | 9° 8 | 10°23 | 17°18 | 11°27 | F 4 |
| S 5 | 21 25 53 | 20° 2'26 | 11°18' 5 | 19°36 | 8°41 | 21°38 | 7°27 | 4°33 | 9°46 | 20°36 | 25°40 | 8°59 | 10°20 | 17°25 | 11°25 | S 5 |
| S 6 | 21 29 50 | 21° 0'14 | 24°32 | 18°45 | 9°49 | 22°16 | 7°35 | 4°40 | 9°44 | 20°38 | 25°41 | 8°52 | 10°17 | 17°31 | 11°22 | S 6 |
| M 7 | 21 33 46 | 21°58'03 | 7°18'39 | 17°56 | 10°57 | 22°54 | 7°43 | 4°48 | 9°42 | 20°40 | 25°42 | 8°47 | 10°14 | 17°38 | 11°20 | M 7 |
| T 8 | 21 37 43 | 22°55'54 | 20°28 | 17°10 | 12° 5 | 23°32 | 7°51 | 4°55 | 9°40 | 20°42 | 25°43 | 8°43 | 10°10 | 17°45 | 11°17 | T 8 |
| W 9 | 21 41 39 | 23°53'46 | 2°17'59 | 16°29 | 13°13 | 24°11 | 7°59 | 5° 3 | 9°37 | 20°44 | 25°43 | 8°D41 | 10° 7 | 17°51 | 11°15 | W 9 |
| T 10 | 21 45 36 | 24°51'40 | 15°13 | 15°52 | 14°22 | 24°49 | 8° 6 | 5°10 | 9°35 | 20°45 | 25°44 | 8°41 | 10° 4 | 17°58 | 11°13 | T 10 |
| F 11 | 21 49 32 | 25°49'36 | 27°15 | 15°22 | 15°30 | 25°27 | 8°14 | 5°18 | 9°33 | 20°47 | 25°45 | 8°42 | 10° 1 | 18° 5 | 11°11 | F 11 |
| S 12 | 21 53 29 | 26°47'34 | 9°18' 9 | 14°59 | 16°39 | 26° 5 | 8°21 | 5°25 | 9°30 | 20°49 | 25°46 | 8°44 | 9°58 | 18°12 | 11° 9 | S 12 |
| S 13 | 21 57 26 | 27°45'34 | 20°59 | 14°43 | 17°48 | 26°43 | 8°28 | 5°32 | 9°28 | 20°51 | 25°47 | 8°45 | 9°55 | 18°18 | 11° 7 | S 13 |
| M14 | 22 1 22 | 28°43'35 | 2°11'51 | 14°D34 | 18°57 | 27°22 | 8°35 | 5°40 | 9°26 | 20°53 | 25°48 | 8°R45 | 9°51 | 18°25 | 11° 5 | M14 |
| T 15 | 22 5 19 | 29°41'39 | 14°49 | 14°35 | 20° 6 | 28° 0 | 8°42 | 5°47 | 9°23 | 20°55 | 25°48 | 8°44 | 9°48 | 18°32 | 11° 3 | T 15 |
| W16 | 22 9 15 | 0°11'39'44 | 26°59 | 14°43 | 21°16 | 28°38 | 8°48 | 5°55 | 9°21 | 20°57 | 25°49 | 8°41 | 9°45 | 18°38 | 11° 1 | W16 |
| T 17 | 22 13 12 | 1°37'52 | 9°28'24 | 15° 0 | 22°25 | 29°16 | 8°55 | 6° 3 | 9°19 | 20°58 | 25°50 | 8°37 | 9°42 | 18°45 | 11° 0 | T 17 |
| F 18 | 22 17 8 | 2°36'01 | 22° 7 | 15°25 | 23°35 | 29°55 | 9° 1 | 6°10 | 9°16 | 21° 0 | 25°50 | 8°31 | 9°39 | 18°52 | 10°58 | F 18 |
| S 19 | 22 21 5 | 3°34'13 | 5°11 | 15°59 | 24°44 | 0°11'33 | 9° 7 | 6°18 | 9°14 | 21° 2 | 25°51 | 8°25 | 9°36 | 18°58 | 10°56 | S 19 |
| S 20 | 22 25 1 | 4°32'26 | 18°35 | 16°41 | 25°54 | 1°11 | 9°13 | 6°25 | 9°11 | 21° 4 | 25°52 | 8°20 | 9°32 | 19° 5 | 10°55 | S 20 |
| M21 | 22 28 58 | 5°30'41 | 2°11'18 | 17°31 | 27° 4 | 1°49 | 9°19 | 6°33 | 9° 9 | 21° 5 | 25°52 | 8°15 | 9°29 | 19°12 | 10°53 | M21 |
| T 22 | 22 32 55 | 6°28'58 | 16°17 | 18°29 | 28°14 | 2°28 | 9°25 | 6°40 | 9° 7 | 21° 7 | 25°53 | 8°12 | 9°26 | 19°18 | 10°52 | T 22 |
| W23 | 22 36 51 | 7°27'16 | 0°12'49 | 19°34 | 29°24 | 3° 6 | 9°30 | 6°48 | 9° 4 | 21° 9 | 25°54 | 8°11 | 9°23 | 19°25 | 10°51 | W23 |
| T 24 | 22 40 48 | 8°25'36 | 14°48 | 20°45 | 0°13'35 | 3°44 | 9°36 | 6°55 | 9° 2 | 21°10 | 25°54 | 8°D10 | 9°20 | 19°32 | 10°49 | T 24 |
| F 25 | 22 44 44 | 9°23'58 | 29°11 | 22° 3 | 1°45 | 4°23 | 9°41 | 7° 3 | 8°59 | 21°12 | 25°55 | 8°11 | 9°16 | 19°38 | 10°48 | F 25 |
| S 26 | 22 48 41 | 10°22'22 | 13°11'33 | 23°26 | 2°56 | 5° 1 | 9°46 | 7°10 | 8°57 | 21°14 | 25°55 | 8°13 | 9°13 | 19°45 | 10°47 | S 26 |
| S 27 | 22 52 37 | 11°20'47 | 27°50 | 24°54 | 4° 6 | 5°39 | 9°51 | 7°18 | 8°55 | 21°15 | 25°56 | 8°14 | 9°10 | 19°52 | 10°46 | S 27 |
| M28 | 22 56 34 | 12°19'14 | 12°18' 2 | 26°26 | 5°17 | 6°18 | 9°56 | 7°25 | 8°52 | 21°17 | 25°56 | 8°R15 | 9° 7 | 19°58 | 10°45 | M28 |
| T 29 | 23 0 30 | 13°17'42 | 26° 4 | 28° 3 | 6°28 | 6°56 | 10° 0 | 7°33 | 8°50 | 21°18 | 25°57 | 8°14 | 9° 4 | 20° 5 | 10°44 | T 29 |
| W30 | 23 4 27 | 14°16'12 | 9°18'57 | 29°43 | 7°39 | 7°34 | 10° 4 | 7°40 | 8°47 | 21°20 | 25°57 | 8°12 | 9° 1 | 20°12 | 10°43 | W30 |
| T 31 | 23 8 23 | 15°11'44 | 23°18'39 | 1°11'25 | 8°12'50 | 8°11'13 | 10°II 9 | 7°11'48 | 8°11'45 | 21°21 | 25°II58 | 8°12'10 | 8°11'57 | 20°18'18 | 10°18'43 | T 31 |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | lat |
| T 1 | 16n 2 | 18s 3 | 4n40 | 9n24 | 4s44 | 21n40 | 1s47 | 16n14 | 1n 9 | 20n45 | 0s47 | 11n37 | 1n41 | 8s37 | 0s48 | 21n28 |
| W 2 | 15 44 | 18 29 | 5 2 | 9 42 | 4 42 | 21 41 | 1 43 | 16 2 | 1 9 | 20 46 | 0 47 | 11 34 | 1 41 | 8 38 | 0 48 | 21 28 |
| T 3 | 15 27 | 17 45 | 5 6 | 10 2 | 4 38 | 21 42 | 1 39 | 15 50 | 1 9 | 20 48 | 0 47 | 11 31 | 1 41 | 8 39 | 0 48 | 21 28 |
| F 4 | 15 9 | 15 59 | 4 52 | 10 25 | 4 32 | 21 42 | 1 36 | 15 38 | 1 9 | 20 49 | 0 47 | 11 29 | 1 41 | 8 40 | 0 48 | 21 27 |
| S 5 | 14 51 | 13 19 | 4 20 | 10 49 | 4 24 | 21 42 | 1 32 | 15 25 | 1 9 | 20 50 | 0 47 | 11 26 | 1 41 | 8 41 | 0 48 | 21 27 |
| S 6 | 14 32 | 10 0 | 3 35 | 11 14 | 4 14 | 21 41 | 1 28 | 15 13 | 1 9 | 20 52 | 0 48 | 11 23 | 1 41 | 8 41 | 0 48 | 21 27 |
| M 7 | 14 14 | 6 15 | 2 40 | 11 39 | 4 2 | 21 39 | 1 25 | 15 0 | 1 8 | 20 53 | 0 48 | 11 21 | 1 41 | 8 42 | 0 48 | 21 27 |
| T 8 | 13 55 | 2 18 | 1 37 | 12 6 | 3 49 | 21 37 | 1 21 | 14 47 | 1 8 | 20 54 | 0 48 | 11 18 | 1 41 | 8 43 | 0 49 | 21 26 |
| W 9 | 13 36 | 1n40 | 0 31 | 12 32 | 3 35 | 21 34 | 1 17 | 14 35 | 1 8 | 20 55 | 0 48 | 11 15 | 1 41 | 8 44 | 0 49 | 21 26 |
| T 10 | 13 16 | 5 28 | 0s35 | 12 58 | 3 19 | 21 31 | 1 14 | 14 22 | 1 8 | 20 56 | 0 48 | 11 12 | 1 41 | 8 45 | 0 49 | 21 26 |
| F 11 | 12 57 | 8 59 | 1 39 | 13 22 | 3 2 | 21 27 | 1 10 | 14 9 | 1 8 | 20 58 | 0 48 | 11 10 | 1 41 | 8 46 | 0 49 | 21 25 |
| S 12 | 12 37 | 12 6 | 2 38 | 13 46 | 2 45 | 21 23 | 1 6 | 13 56 | 1 8 | 20 59 | 0 48 | 11 7 | 1 41 | 8 47 | 0 49 | 21 25 |
| S 13 | 12 17 | 14 41 | 3 30 | 14 8 | 2 26 | 21 18 | 1 2 | 13 43 | 1 8 | 21 0 | 0 48 | 11 4 | 1 41 | 8 48 | 0 49 | 21 25 |
| M14 | 11 57 | 16 40 | 4 12 | 14 28 | 2 8 | 21 12 | 0 59 | 13 29 | 1 8 | 21 1 | 0 48 | 11 2 | 1 41 | 8 48 | 0 49 | 21 25 |
| T 15 | 11 37 | 17 56 | 4 45 | 14 46 | 1 49 | 21 6 | 0 55 | 13 16 | 1 8 | 21 2 | 0 48 | 10 59 | 1 41 | 8 49 | 0 49 | 21 24 |
| W16 | 11 16 | 18 24 | 5 5 | 15 1 | 1 31 | 20 59 | 0 51 | 13 3 | 1 8 | 21 3 | 0 48 | 10 56 | 1 41 | 8 50 | 0 49 | 21 24 |
| T 17 | 10 56 | 18 0 | 5 11 | 15 14 | 1 13 | 20 52 | 0 47 | 12 49 | 1 8 | 21 4 | 0 48 | 10 53 | 1 41 | 8 51 | 0 49 | 21 24 |
| F 18 | 10 35 | 16 43 | 5 3 | 15 23 | 0 55 | 20 44 | 0 44 | 12 35 | 1 7 | 21 5 | 0 48 | 10 51 | 1 41 | 8 52 | 0 49 | 21 23 |
| S 19 | 10 14 | 14 32 | 4 38 | 15 30 | 0 37 | 20 35 | 0 40 | 12 22 | 1 7 | 21 6 | 0 48 | 10 48 | 1 41 | 8 53 | 0 49 | 21 23 |
| S 20 | 9 52 | 11 32 | 3 58 | 15 33 | 0 21 | 20 26 | 0 36 | 12 8 | 1 7 | 21 6 | 0 48 | 10 45 | 1 41 | 8 54 | 0 49 | 21 23 |
| M21 | 9 31 | 7 50 | 3 4 | 15 33 | 0 5 | 20 17 | 0 32 | 11 54 | 1 7 | 21 7 | 0 48 | 10 42 | 1 41 | 8 55 | 0 49 | 21 23 |
| T 22 | 9 10 | 3 38 | 1 57 | 15 30 | 0n10 | 20 6 | 0 29 | 11 40 | 1 7 | 21 8 | 0 48 | 10 40 | 1 41 | 8 56 | 0 49 | 21 22 |
| W23 | 8 48 | 0s50 | 0 42 | 15 23 | 0 24 | 19 56 | 0 25 | 11 26 | 1 7 | 21 9 | 0 48 | 10 37 | 1 41 | 8 57 | 0 49 | 21 22 |
| T 24 | 8 26 | 5 18 | 0n36 | 15 12 | 0 37 | 19 44 | 0 22 | 11 12 | 1 7 | 21 10 | 0 48 | 10 34 | 1 41 | 8 58 | 0 49 | 21 22 |
| F 25 | 8 4 | 9 28 | 1 53 | 14 59 | 0 49 | 19 32 | 0 18 | 10 58 | 1 7 | 21 10 | 0 48 | 10 31 | 1 42 | 8 58 | 0 49 | 21 22 |
| S 26 | 7 42 | 13 3 | 3 2 | 14 42 | 1 0 | 19 20 | 0 14 | 10 44 | 1 7 | 21 11 | 0 48 | 10 29 | 1 42 | 8 59 | 0 49 | 21 21 |
| S 27 | 7 20 | 15 51 | 4 0 | 14 21 | 1 10 | 19 7 | 0 11 | 10 30 | 1 6 | 21 12 | 0 49 | 10 26 | 1 42 | 9 0 | 0 49 | 21 21 |
| M28 | 6 58 | 17 38 | 4 42 | 13 58 | 1 18 | 18 53 | 0 7 | 10 15 | 1 6 | 21 12 | 0 49 | 10 23 | 1 42 | 9 1 | 0 49 | 21 21 |
| T 29 | 6 35 | 18 20 | 5 7 | 13 32 | 1 26 | 18 39 | 0 4 | 10 1 | 1 6 | 21 13 | 0 49 | 10 20 | 1 42 | 9 2 | 0 49 | 21 21 |
| W30 | 6 13 | 17 55 | 5 14 | 13 3 | 1 32 | 18 24 | 0 0 | 9 47 | 1 6 | 21 14 | 0 49 | 10 18 | 1 42 | 9 3 | 0 49 | 21 20 |
| T 31 | 5n50 | 16s27 | 5n 3 | 12n31 | 1n38 | 18n 9 | 0n 3 | 9n32 | 1n 6 | 21n14 | 0s49 | 10n15 | 1n42 | 9s 4 | 0s49 | 21n20 |

Julian Day Number = 2239559.5, Delta T = 07m21s

Ecliptic obliquity = 23°30'44", Nutation = 0°00'04", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°38'36", Lahiri = 15°45'36" Julian Calendar 1 Aug. 1419 == Greg. Calendar 10 Aug. 1419

ASTRODIENST EPHEMERIS for the year 1419

geocentric

SEPTEMBER 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|------------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|---------------------|--------------------|-------------------|--------------------|---------------------|------|
| F 1 | 23 12 20 | 16 ^h 13'17" | 7 ^h 9 | 3 ^h 10 | 10 ^h 1 | 8 ^h 51 | 10 ^h 11 | 7 ^h 55 | 8 ^h R43 | 21 ^h 23 | 25 ^h 58 | 8 ^h R 7 | 8 ^h 54 | 20 ^h 25 | 10 ^h R42 | F 1 |
| S 2 | 23 16 17 | 17 ^h 11'53" | 20 ^h 25 | 4 ^h 57 | 11 ^h 12 | 9 ^h 29 | 10 ^h 16 | 8 ^h 3 | 8 ^h R40 | 21 ^h 24 | 25 ^h 58 | 8 ^h 4 | 8 ^h 51 | 20 ^h 32 | 10 ^h R41 | S 2 |
| S 3 | 23 20 13 | 18 ^h 10'29" | 3 ^h 27 | 6 ^h 45 | 12 ^h 23 | 10 ^h 8 | 10 ^h 20 | 8 ^h 10 | 8 ^h 38 | 21 ^h 26 | 25 ^h 59 | 8 ^h 1 | 8 ^h 48 | 20 ^h 38 | 10 ^h 41 | S 3 |
| M 4 | 23 24 10 | 19 ^h 9'08" | 16 ^h 15 | 8 ^h 35 | 13 ^h 35 | 10 ^h 46 | 10 ^h 23 | 8 ^h 18 | 8 ^h 36 | 21 ^h 27 | 25 ^h 59 | 7 ^h 59 | 8 ^h 45 | 20 ^h 45 | 10 ^h 40 | M 4 |
| T 5 | 23 28 6 | 20 ^h 7'49" | 28 ^h 49 | 10 ^h 25 | 14 ^h 46 | 11 ^h 25 | 10 ^h 27 | 8 ^h 25 | 8 ^h 33 | 21 ^h 28 | 25 ^h 59 | 7 ^h 58 | 8 ^h 42 | 20 ^h 52 | 10 ^h 40 | T 5 |
| W 6 | 23 32 3 | 21 ^h 6'32" | 11 ^h 9 | 12 ^h 15 | 15 ^h 58 | 12 ^h 3 | 10 ^h 30 | 8 ^h 33 | 8 ^h 31 | 21 ^h 30 | 26 ^h 0 | 7 ^h D57 | 8 ^h 38 | 20 ^h 58 | 10 ^h 40 | W 6 |
| T 7 | 23 35 59 | 22 ^h 5'16" | 23 ^h 17 | 14 ^h 6 | 17 ^h 10 | 12 ^h 41 | 10 ^h 33 | 8 ^h 40 | 8 ^h 29 | 21 ^h 31 | 26 ^h 0 | 7 ^h 58 | 8 ^h 35 | 21 ^h 5 | 10 ^h 40 | T 7 |
| F 8 | 23 39 56 | 23 ^h 4'03" | 5 ^h 16 | 15 ^h 57 | 18 ^h 21 | 13 ^h 20 | 10 ^h 35 | 8 ^h 47 | 8 ^h 26 | 21 ^h 32 | 26 ^h 0 | 7 ^h 59 | 8 ^h 32 | 21 ^h 12 | 10 ^h 40 | F 8 |
| S 9 | 23 43 52 | 24 ^h 2'53" | 17 ^h 9 | 17 ^h 47 | 19 ^h 33 | 13 ^h 58 | 10 ^h 38 | 8 ^h 55 | 8 ^h 24 | 21 ^h 34 | 26 ^h 0 | 8 ^h 0 | 8 ^h 29 | 21 ^h 18 | 10 ^h D39 | S 9 |
| S 10 | 23 47 49 | 25 ^h 1'44" | 28 ^h 58 | 19 ^h 38 | 20 ^h 45 | 14 ^h 37 | 10 ^h 40 | 9 ^h 2 | 8 ^h 22 | 21 ^h 35 | 26 ^h 1 | 8 ^h 2 | 8 ^h 26 | 21 ^h 25 | 10 ^h 40 | S 10 |
| M 11 | 23 51 46 | 26 ^h 0'38" | 10 ^h 50 | 21 ^h 28 | 21 ^h 57 | 15 ^h 15 | 10 ^h 42 | 9 ^h 10 | 8 ^h 19 | 21 ^h 36 | 26 ^h 1 | 8 ^h 3 | 8 ^h 22 | 21 ^h 32 | 10 ^h 40 | M 11 |
| T 12 | 23 55 42 | 26 ^h 59'34" | 22 ^h 47 | 23 ^h 17 | 23 ^h 10 | 15 ^h 54 | 10 ^h 44 | 9 ^h 17 | 8 ^h 17 | 21 ^h 37 | 26 ^h 1 | 8 ^h R 3 | 8 ^h 19 | 21 ^h 39 | 10 ^h 40 | T 12 |
| W 13 | 23 59 39 | 27 ^h 58'33" | 4 ^h 55 | 25 ^h 5 | 24 ^h 22 | 16 ^h 32 | 10 ^h 46 | 9 ^h 24 | 8 ^h 15 | 21 ^h 38 | 26 ^h 1 | 8 ^h 3 | 8 ^h 16 | 21 ^h 45 | 10 ^h 40 | W 13 |
| T 14 | 0 3 35 | 28 ^h 57'33" | 17 ^h 19 | 26 ^h 53 | 25 ^h 34 | 17 ^h 11 | 10 ^h 47 | 9 ^h 31 | 8 ^h 13 | 21 ^h 39 | 26 ^h 1 | 8 ^h 2 | 8 ^h 13 | 21 ^h 52 | 10 ^h 40 | T 14 |
| F 15 | 0 7 32 | 29 ^h 56'37" | 0 ^h 1 | 28 ^h 41 | 26 ^h 47 | 17 ^h 50 | 10 ^h 49 | 9 ^h 39 | 8 ^h 11 | 21 ^h 40 | 26 ^h 1 | 8 ^h 2 | 8 ^h 10 | 21 ^h 59 | 10 ^h 41 | F 15 |
| S 16 | 0 11 28 | 0 ^h 55'42" | 13 ^h 7 | 0 ^h 27 | 27 ^h 59 | 18 ^h 28 | 10 ^h 50 | 9 ^h 46 | 8 ^h 8 | 21 ^h 41 | 26 ^h 1 | 8 ^h 1 | 8 ^h 7 | 22 ^h 5 | 10 ^h 41 | S 16 |
| S 17 | 0 15 25 | 1 ^h 54'50" | 26 ^h 36 | 2 ^h 13 | 29 ^h 12 | 19 ^h 7 | 10 ^h 51 | 9 ^h 53 | 8 ^h 6 | 21 ^h 42 | 26 ^h 1 | 8 ^h 0 | 8 ^h 3 | 22 ^h 12 | 10 ^h 42 | S 17 |
| M 18 | 0 19 21 | 2 ^h 53'59" | 10 ^h 30 | 3 ^h 58 | 0 ^h 24 | 19 ^h 45 | 10 ^h 52 | 10 ^h 0 | 8 ^h 4 | 21 ^h 43 | 26 ^h R 1 | 7 ^h 59 | 8 ^h 0 | 22 ^h 19 | 10 ^h 43 | M 18 |
| T 19 | 0 23 18 | 3 ^h 53'11" | 24 ^h 46 | 5 ^h 42 | 1 ^h 37 | 20 ^h 24 | 10 ^h 52 | 10 ^h 7 | 8 ^h 2 | 21 ^h 44 | 26 ^h 1 | 7 ^h 59 | 7 ^h 57 | 22 ^h 25 | 10 ^h 43 | T 19 |
| W 20 | 0 27 15 | 4 ^h 52'25" | 9 ^h 20 | 7 ^h 25 | 2 ^h 50 | 21 ^h 3 | 10 ^h 52 | 10 ^h 14 | 8 ^h 0 | 21 ^h 45 | 26 ^h 1 | 7 ^h D59 | 7 ^h 54 | 22 ^h 32 | 10 ^h 44 | W 20 |
| T 21 | 0 31 11 | 5 ^h 51'42" | 24 ^h 5 | 9 ^h 8 | 4 ^h 3 | 21 ^h 41 | 10 ^h R53 | 10 ^h 22 | 7 ^h 58 | 21 ^h 46 | 26 ^h 1 | 7 ^h 59 | 7 ^h 51 | 22 ^h 39 | 10 ^h 45 | T 21 |
| F 22 | 0 35 8 | 6 ^h 51'00" | 8 ^h 55 | 10 ^h 50 | 5 ^h 16 | 22 ^h 20 | 10 ^h 52 | 10 ^h 29 | 7 ^h 56 | 21 ^h 47 | 26 ^h 1 | 7 ^h 59 | 7 ^h 47 | 22 ^h 45 | 10 ^h 46 | F 22 |
| S 23 | 0 39 4 | 7 ^h 50'20" | 23 ^h 41 | 12 ^h 31 | 6 ^h 29 | 22 ^h 59 | 10 ^h 52 | 10 ^h 36 | 7 ^h 54 | 21 ^h 48 | 26 ^h 1 | 7 ^h R59 | 7 ^h 44 | 22 ^h 52 | 10 ^h 47 | S 23 |
| S 24 | 0 43 1 | 8 ^h 49'42" | 8 ^h 19 | 14 ^h 11 | 7 ^h 42 | 23 ^h 37 | 10 ^h 52 | 10 ^h 43 | 7 ^h 52 | 21 ^h 49 | 26 ^h 1 | 7 ^h 59 | 7 ^h 41 | 22 ^h 59 | 10 ^h 48 | S 24 |
| M 25 | 0 46 57 | 9 ^h 49'06" | 22 ^h 42 | 15 ^h 50 | 8 ^h 55 | 24 ^h 16 | 10 ^h 51 | 10 ^h 49 | 7 ^h 50 | 21 ^h 49 | 26 ^h 1 | 7 ^h 59 | 7 ^h 38 | 23 ^h 5 | 10 ^h 49 | M 25 |
| T 26 | 0 50 54 | 10 ^h 48'31" | 6 ^h 47 | 17 ^h 29 | 10 ^h 8 | 24 ^h 55 | 10 ^h 50 | 10 ^h 56 | 7 ^h 48 | 21 ^h 50 | 26 ^h 1 | 7 ^h D59 | 7 ^h 35 | 23 ^h 12 | 10 ^h 51 | T 26 |
| W 27 | 0 54 50 | 11 ^h 47'59" | 20 ^h 35 | 19 ^h 7 | 11 ^h 22 | 25 ^h 33 | 10 ^h 49 | 11 ^h 3 | 7 ^h 46 | 21 ^h 51 | 26 ^h 0 | 7 ^h 59 | 7 ^h 32 | 23 ^h 19 | 10 ^h 52 | W 27 |
| T 28 | 0 58 47 | 12 ^h 47'28" | 4 ^h 3 | 20 ^h 44 | 12 ^h 35 | 26 ^h 12 | 10 ^h 48 | 11 ^h 10 | 7 ^h 44 | 21 ^h 51 | 26 ^h 0 | 7 ^h 59 | 7 ^h 28 | 23 ^h 25 | 10 ^h 53 | T 28 |
| F 29 | 1 2 43 | 13 ^h 46'59" | 17 ^h 14 | 22 ^h 21 | 13 ^h 49 | 26 ^h 51 | 10 ^h 46 | 11 ^h 17 | 7 ^h 43 | 21 ^h 52 | 26 ^h 0 | 8 ^h 0 | 7 ^h 25 | 23 ^h 32 | 10 ^h 55 | F 29 |
| S 30 | 1 6 40 | 14 ^h 46'31" | 0 ^h 9 | 23 ^h 57 | 15 ^h 2 | 27 ^h 30 | 10 ^h 45 | 11 ^h 24 | 7 ^h 41 | 21 ^h 53 | 26 ^h 0 | 8 ^h 0 | 7 ^h 22 | 23 ^h 39 | 10 ^h 56 | S 30 |

| Day | ☉ | ☾ | | ♂ | | ♀ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | |
|------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|-------|------|-----|------|-----|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| F 1 | 5n27 | 14s 6 | 4n35 | 11n58 | 1n42 | 17n54 | 0n 6 | 9n17 | 1n 6 | 21n15 | 0s49 | 10n12 | 1n42 | 9s 5 | 0s49 | 21n20 | 0s29 | 18n 5 | 5s23 | 3s14 | 3s32 | 14n37 | 16s 4 | 7n 2 | | | |
| S 2 | 5 4 | 11 3 | 3 53 | 11 22 | 1 46 | 17 37 | 0 10 | 9 3 | 1 6 | 21 15 | 0 49 | 10 9 | 1 42 | 9 6 | 0 49 | 21 20 | 0 29 | 18 5 | 5 23 | 3 12 | 3 31 | 14 38 | 16 5 | 7 2 | | | |
| S 3 | 4 41 | 7 29 | 2 59 | 10 44 | 1 48 | 17 21 | 0 13 | 8 48 | 1 5 | 21 16 | 0 49 | 10 7 | 1 42 | 9 6 | 0 49 | 21 20 | 0 29 | 18 5 | 5 23 | 3 11 | 3 30 | 14 39 | 16 5 | 7 1 | | | |
| M 4 | 4 18 | 3 39 | 1 57 | 10 4 | 1 50 | 17 3 | 0 16 | 8 33 | 1 5 | 21 16 | 0 49 | 10 4 | 1 42 | 9 7 | 0 49 | 21 19 | 0 29 | 18 4 | 5 23 | 3 10 | 3 29 | 14 40 | 16 6 | 7 1 | | | |
| T 5 | 3 55 | 0n18 | 0 50 | 9 23 | 1 51 | 16 46 | 0 19 | 8 19 | 1 5 | 21 16 | 0 49 | 10 1 | 1 42 | 9 8 | 0 49 | 21 19 | 0 29 | 18 4 | 5 23 | 3 10 | 3 27 | 14 41 | 16 6 | 7 0 | | | |
| W 6 | 3 32 | 4 9 | 0s18 | 8 41 | 1 51 | 16 28 | 0 23 | 8 4 | 1 5 | 21 17 | 0 49 | 9 58 | 1 43 | 9 9 | 0 49 | 21 19 | 0 29 | 18 4 | 5 23 | 3 10 | 3 26 | 14 42 | 16 7 | 7 0 | | | |
| T 7 | 3 9 | 7 47 | 1 24 | 7 58 | 1 50 | 16 9 | 0 26 | 7 49 | 1 5 | 21 17 | 0 49 | 9 56 | 1 43 | 9 10 | 0 49 | 21 19 | 0 29 | 18 4 | 5 23 | 3 10 | 3 25 | 14 43 | 16 7 | 6 59 | | | |
| F 8 | 2 46 | 11 2 | 2 26 | 7 14 | 1 49 | 15 50 | 0 29 | 7 34 | 1 5 | 21 18 | 0 49 | 9 53 | 1 43 | 9 11 | 0 49 | 21 18 | 0 29 | 18 4 | 5 23 | 3 11 | 3 24 | 14 45 | 16 8 | 6 59 | | | |
| S 9 | 2 22 | 13 48 | 3 20 | 6 29 | 1 47 | 15 30 | 0 32 | 7 19 | 1 5 | 21 18 | 0 49 | 9 50 | 1 43 | 9 12 | 0 49 | 21 18 | 0 29 | 18 4 | 5 23 | 3 11 | 3 22 | 14 46 | 16 8 | 6 58 | | | |
| S 10 | 1 59 | 15 59 | 4 7 | 5 43 | 1 44 | 15 10 | 0 35 | 7 4 | 1 4 | 21 18 | 0 49 | 9 48 | 1 43 | 9 13 | 0 49 | 21 18 | 0 29 | 18 4 | 5 23 | 3 12 | 3 21 | 14 47 | 16 9 | 6 58 | | | |
| M11 | 1 35 | 17 29 | 4 42 | 4 57 | 1 41 | 14 50 | 0 38 | 6 49 | 1 4 | 21 18 | 0 49 | 9 45 | 1 43 | 9 13 | 0 48 | 21 18 | 0 29 | 18 4 | 5 23 | 3 12 | 3 20 | 14 48 | 16 9 | 6 57 | | | |
| T 12 | 1 12 | 18 13 | 5 6 | 4 11 | 1 38 | 14 29 | 0 40 | 6 34 | 1 4 | 21 19 | 0 49 | 9 42 | 1 43 | 9 14 | 0 48 | 21 18 | 0 29 | 18 4 | 5 23 | 3 12 | 3 19 | 14 49 | 16 10 | 6 57 | | | |
| W13 | 0 48 | 18 9 | 5 17 | 3 24 | 1 34 | 14 7 | 0 43 | 6 18 | 1 4 | 21 19 | 0 49 | 9 40 | 1 43 | 9 15 | 0 48 | 21 18 | 0 29 | 18 4 | 5 23 | 3 12 | 3 17 | 14 50 | 16 10 | 6 56 | | | |
| T 14 | 0 25 | 17 13 | 5 13 | 2 37 | 1 30 | 13 45 | 0 46 | 6 3 | 1 4 | 21 19 | 0 49 | 9 37 | 1 43 | 9 16 | 0 48 | 21 17 | 0 29 | 18 4 | 5 23 | 3 12 | 3 16 | 14 51 | 16 11 | 6 56 | | | |
| F 15 | 0 1 | 15 25 | 4 54 | 1 50 | 1 26 | 13 23 | 0 49 | 5 48 | 1 3 | 21 19 | 0 49 | 9 34 | 1 43 | 9 17 | 0 48 | 21 17 | 0 29 | 18 4 | 5 24 | 3 12 | 3 15 | 14 52 | 16 11 | 6 55 | | | |
| S 16 | 0s22 | 12 47 | 4 20 | 1 3 | 1 21 | 13 1 | 0 51 | 5 33 | 1 3 | 21 19 | 0 50 | 9 32 | 1 44 | 9 17 | 0 48 | 21 17 | 0 29 | 18 4 | 5 24 | 3 11 | 3 14 | 14 53 | 16 12 | 6 55 | | | |
| S 17 | 0 46 | 9 23 | 3 30 | 0 16 | 1 15 | 12 38 | 0 54 | 5 17 | 1 3 | 21 19 | 0 50 | 9 29 | 1 44 | 9 18 | 0 48 | 21 17 | 0 29 | 18 4 | 5 24 | 3 11 | 3 12 | 14 54 | 16 12 | 6 54 | | | |
| M18 | 1 9 | 5 23 | 2 27 | 0s31 | 1 10 | 12 14 | 0 56 | 5 2 | 1 3 | 21 19 | 0 50 | 9 26 | 1 44 | 9 19 | 0 48 | 21 17 | 0 29 | 18 3 | 5 24 | 3 11 | 3 11 | 14 55 | 16 13 | 6 53 | | | |
| T 19 | 1 33 | 0 58 | 1 13 | 1 17 | 1 4 | 11 51 | 0 59 | 4 47 | 1 3 | 21 19 | 0 50 | 9 24 | 1 44 | 9 20 | 0 48 | 21 17 | 0 29 | 18 3 | 5 24 | 3 11 | 3 10 | 14 56 | 16 13 | 6 53 | | | |
| W20 | 1 57 | 3s36 | 0n 8 | 2 3 | 0 59 | 11 27 | 1 1 | 4 31 | 1 3 | 21 19 | 0 50 | 9 21 | 1 44 | 9 21 | 0 48 | 21 16 | 0 29 | 18 3 | 5 24 | 3 11 | 3 9 | 14 57 | 16 13 | 6 52 | | | |
| T 21 | 2 20 | 8 0 | 1 28 | 2 50 | 0 53 | 11 2 | 1 3 | 4 16 | 1 2 | 21 19 | 0 50 | 9 19 | 1 44 | 9 21 | 0 48 | 21 16 | 0 29 | 18 3 | 5 24 | 3 11 | 3 7 | 14 59 | 16 14 | 6 52 | | | |
| F 22 | 2 44 | 11 56 | 2 44 | 3 35 | 0 46 | 10 38 | 1 6 | 4 0 | 1 2 | 21 19 | 0 50 | 9 16 | 1 44 | 9 22 | 0 48 | 21 16 | 0 29 | 18 3 | 5 24 | 3 11 | 3 6 | 15 0 | 16 14 | 6 51 | | | |
| S 23 | 3 7 | 15 5 | 3 48 | 4 21 | 0 40 | 10 13 | 1 8 | 3 45 | 1 2 | 21 19 | 0 50 | 9 14 | 1 44 | 9 23 | 0 48 | 21 16 | 0 29 | 18 3 | 5 24 | 3 11 | 3 5 | 15 1 | 16 15 | 6 51 | | | |
| S 24 | 3 31 | 17 13 | 4 36 | 5 6 | 0 34 | 9 47 | 1 10 | 3 29 | 1 2 | 21 19 | 0 50 | 9 11 | 1 45 | 9 23 | 0 48 | 21 16 | 0 29 | 18 3 | 5 24 | 3 11 | 3 3 | 15 2 | 16 15 | 6 50 | | | |
| M25 | 3 54 | 18 13 | 5 6 | 5 50 | 0 27 | 9 22 | 1 12 | 3 14 | 1 2 | 21 19 | 0 50 | 9 9 | 1 45 | 9 24 | 0 48 | 21 16 | 0 29 | 18 3 | 5 24 | 3 11 | 3 2 | 15 3 | 16 16 | 6 50 | | | |
| T 26 | 4 17 | 18 3 | 5 18 | 6 34 | 0 20 | 8 56 | 1 14 | 2 58 | 1 1 | 21 19 | 0 50 | 9 6 | 1 45 | 9 25 | 0 48 | 21 16 | 0 29 | 18 3 | 5 24 | 3 11 | 3 1 | 15 4 | 16 16 | 6 49 | | | |
| W27 | 4 41 | 16 49 | 5 10 | 7 18 | 0 14 | 8 29 | 1 16 | 2 42 | 1 1 | 21 19 | 0 50 | 9 4 | 1 45 | 9 26 | 0 48 | 21 15 | 0 29 | 18 3 | 5 24 | 3 11 | 3 0 | 15 5 | 16 16 | 6 49 | | | |
| T 28 | 5 4 | 14 41 | 4 45 | 8 1 | 0 7 | 8 3 | 1 17 | 2 27 | 1 1 | 21 18 | 0 50 | 9 1 | 1 45 | 9 26 | 0 48 | 21 15 | 0 29 | 18 3 | 5 24 | 3 11 | 2 58 | 15 6 | 16 17 | 6 48 | | | |
| F 29 | 5 27 | 11 48 | 4 6 | 8 44 | 0 0 | 7 36 | 1 19 | 2 11 | 1 1 | 21 18 | 0 50 | 8 59 | 1 45 | 9 27 | 0 48 | 21 15 | 0 29 | 18 3 | 5 25 | 3 11 | 2 57 | 15 7 | 16 17 | 6 48 | | | |
| S 30 | 5s50 | 8s24 | 3n15 | 9s26 | 0s 7 | 7n 9 | 1n21 | 1n55 | 1n 0 | 21n18 | 0s50 | 8n56 | 1n45 | 9s27 | 0s48 | 21n15 | 0s29 | 18n 3 | 5s25 | 3s11 | 2s56 | 15n 8 | 16s18 | 6n47 | | | |

ASTRODIENST EPHEMERIS for the year 1419

geocentric

OCTOBER 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|------------------------|----------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|---------------------|----------------------|-----------------------|---------------------|--------------------|---------------------|---------------------|------|
| S 1 | 1 10 37 | 15 ⁴⁶ 06'06 | 12 ⁴⁹ 49 | 25 ³² 32 | 16 ¹⁶ 16 | 28 ⁸ 16 | 10 ^{R43} 43 | 11 ³⁰ 30 | 7 ^{R39} 39 | 21 ⁵³ 53 | 25 ^{R59} 59 | 8 ¹ 1 | 7 ¹⁹ 19 | 23 ⁴⁶ 46 | 10 ⁵⁸ 58 | S 1 |
| M 2 | 1 14 33 | 16 ⁴⁵ 42'42 | 25 ¹⁸ 18 | 27 ⁷ 7 | 17 ²⁹ 29 | 28 ⁴⁷ 47 | 10 ^{II41} 41 | 11 ³⁷ 37 | 7 ³⁷ 37 | 21 ⁵⁴ 54 | 25 ^{II59} 59 | 8 ² 2 | 7 ¹⁶ 16 | 23 ⁵² 52 | 11 ⁰ 0 | M 2 |
| T 3 | 1 18 30 | 17 ⁴⁵ 20'20 | 7 ³⁵ 35 | 28 ⁴¹ 41 | 18 ⁴³ 43 | 29 ²⁶ 26 | 10 ³⁸ 38 | 11 ⁴³ 43 | 7 ³⁶ 36 | 21 ⁵⁴ 54 | 25 ⁵⁹ 59 | 8 ^{R 2} 2 | 7 ¹³ 13 | 23 ⁵⁹ 59 | 11 ² 2 | T 3 |
| W 4 | 1 22 26 | 18 ⁴⁵ 00'00 | 19 ⁴³ 43 | 0 ¹⁵ 15 | 19 ⁵⁷ 57 | 0 ⁵ 5 | 10 ³⁶ 36 | 11 ⁵⁰ 50 | 7 ³⁴ 34 | 21 ⁵⁵ 55 | 25 ⁵⁸ 58 | 8 ² 2 | 7 ⁹ 9 | 24 ⁶ 6 | 11 ³ 3 | W 4 |
| T 5 | 1 26 23 | 19 ⁴⁴ 43'43 | 1 ⁴³ 43 | 1 ⁴⁷ 47 | 21 ¹⁰ 10 | 0 ⁴⁴ 44 | 10 ³³ 33 | 11 ⁵⁷ 57 | 7 ³³ 33 | 21 ⁵⁵ 55 | 25 ⁵⁸ 58 | 8 ¹ 1 | 7 ⁶ 6 | 24 ¹² 12 | 11 ⁵ 5 | T 5 |
| F 6 | 1 30 19 | 20 ⁴⁴ 27'27 | 13 ³⁷ 37 | 3 ²⁰ 20 | 22 ²⁴ 24 | 1 ²² 22 | 10 ³⁰ 30 | 12 ³ 3 | 7 ³¹ 31 | 21 ⁵⁶ 56 | 25 ⁵⁸ 58 | 7 ⁵⁹ 59 | 7 ³ 3 | 24 ¹⁹ 19 | 11 ⁷ 7 | F 6 |
| S 7 | 1 34 16 | 21 ⁴⁴ 14'14 | 25 ²⁸ 28 | 4 ⁵¹ 51 | 23 ³⁸ 38 | 2 ¹ 1 | 10 ²⁷ 27 | 12 ⁹ 9 | 7 ²⁹ 29 | 21 ⁵⁶ 56 | 25 ⁵⁷ 57 | 7 ⁵⁷ 57 | 7 ⁰ 0 | 24 ²⁶ 26 | 11 ⁹ 9 | S 7 |
| S 8 | 1 38 12 | 22 ⁴⁴ 02'02 | 7 ^{II18} 18 | 6 ²³ 23 | 24 ⁵² 52 | 2 ⁴⁰ 40 | 10 ²⁴ 24 | 12 ¹⁶ 16 | 7 ²⁸ 28 | 21 ⁵⁶ 56 | 25 ⁵⁷ 57 | 7 ⁵⁵ 55 | 6 ⁵⁷ 57 | 24 ³² 32 | 11 ¹² 12 | S 8 |
| M 9 | 1 42 9 | 23 ⁴³ 53'53 | 19 ¹⁰ 10 | 7 ⁵³ 53 | 26 ⁶ 6 | 3 ¹⁹ 19 | 10 ²¹ 21 | 12 ²² 22 | 7 ²⁷ 27 | 21 ⁵⁷ 57 | 25 ⁵⁶ 56 | 7 ⁵³ 53 | 6 ⁵³ 53 | 24 ³⁹ 39 | 11 ¹⁴ 14 | M 9 |
| T 10 | 1 46 6 | 24 ⁴³ 46'46 | 1 ⁶ 6 | 9 ²³ 23 | 27 ²⁰ 20 | 3 ⁵⁸ 58 | 10 ¹⁷ 17 | 12 ²⁸ 28 | 7 ²⁵ 25 | 21 ⁵⁷ 57 | 25 ⁵⁶ 56 | 7 ⁵¹ 51 | 6 ⁵⁰ 50 | 24 ⁴⁶ 46 | 11 ¹⁶ 16 | T 10 |
| W11 | 1 50 2 | 25 ⁴³ 41'41 | 13 ¹² 12 | 10 ⁵³ 53 | 28 ³⁴ 34 | 4 ³⁷ 37 | 10 ¹³ 13 | 12 ³⁵ 35 | 7 ²⁴ 24 | 21 ⁵⁷ 57 | 25 ⁵⁵ 55 | 7 ⁴⁹ 49 | 6 ⁴⁷ 47 | 24 ⁵² 52 | 11 ¹⁸ 18 | W11 |
| T 12 | 1 53 59 | 26 ⁴³ 39'39 | 25 ³² 32 | 12 ²² 22 | 29 ⁴⁹ 49 | 5 ¹⁶ 16 | 10 ⁹ 9 | 12 ⁴¹ 41 | 7 ²² 22 | 21 ⁵⁷ 57 | 25 ⁵⁵ 55 | 7 ^{D49} 49 | 6 ⁴⁴ 44 | 24 ⁵⁹ 59 | 11 ²¹ 21 | T 12 |
| F 13 | 1 57 55 | 27 ⁴³ 38'38 | 8 ⁹ 9 | 13 ⁵⁰ 50 | 1 ³ 3 | 5 ⁵⁵ 55 | 10 ⁵ 5 | 12 ⁴⁷ 47 | 7 ²¹ 21 | 21 ⁵⁷ 57 | 25 ⁵⁴ 54 | 7 ⁴⁹ 49 | 6 ⁴¹ 41 | 25 ⁶ 6 | 11 ²³ 23 | F 13 |
| S 14 | 2 1 52 | 28 ⁴³ 40'40 | 21 ⁸ 8 | 15 ¹⁸ 18 | 2 ¹⁷ 17 | 6 ³⁴ 34 | 10 ¹ 1 | 12 ⁵³ 53 | 7 ²⁰ 20 | 21 ⁵⁷ 57 | 25 ⁵⁴ 54 | 7 ⁵⁰ 50 | 6 ³⁸ 38 | 25 ¹² 12 | 11 ²⁶ 26 | S 14 |
| S 15 | 2 5 48 | 29 ⁴³ 44'44 | 4 ³³ 33 | 16 ⁴⁵ 45 | 3 ³¹ 31 | 7 ¹³ 13 | 9 ⁵⁶ 56 | 12 ⁵⁹ 59 | 7 ¹⁹ 19 | 21 ⁵⁸ 58 | 25 ⁵³ 53 | 7 ⁵² 52 | 6 ³⁴ 34 | 25 ¹⁹ 19 | 11 ²⁹ 29 | S 15 |
| M16 | 2 9 45 | 0 ⁴³ 50'50 | 18 ²⁴ 24 | 18 ¹² 12 | 4 ⁴⁶ 46 | 7 ⁵² 52 | 9 ⁵¹ 51 | 13 ⁵ 5 | 7 ¹⁸ 18 | 21 ⁵⁸ 58 | 25 ⁵³ 53 | 7 ⁵³ 53 | 6 ³¹ 31 | 25 ²⁶ 26 | 11 ³¹ 31 | M16 |
| T 17 | 2 13 41 | 1 ⁴³ 59'59 | 2 ⁴³ 43 | 19 ³⁷ 37 | 6 ⁰ 0 | 8 ³¹ 31 | 9 ⁴⁶ 46 | 13 ¹⁰ 10 | 7 ¹⁶ 16 | 21 ^{R58} 58 | 25 ⁵² 52 | 7 ^{R54} 54 | 6 ²⁸ 28 | 25 ³³ 33 | 11 ³⁴ 34 | T 17 |
| W18 | 2 17 38 | 2 ⁴⁴ 09'09 | 17 ²⁵ 25 | 21 ³ 3 | 7 ¹⁵ 15 | 9 ¹⁰ 10 | 9 ⁴¹ 41 | 13 ¹⁶ 16 | 7 ¹⁵ 15 | 21 ⁵⁸ 58 | 25 ⁵¹ 51 | 7 ⁵⁴ 54 | 6 ²⁵ 25 | 25 ³⁹ 39 | 11 ³⁷ 37 | W18 |
| T 19 | 2 21 35 | 3 ⁴⁴ 21'21 | 2 ²⁶ 26 | 22 ²⁷ 27 | 8 ²⁹ 29 | 9 ⁴⁹ 49 | 9 ³⁶ 36 | 13 ²² 22 | 7 ¹⁴ 14 | 21 ⁵⁸ 58 | 25 ⁵¹ 51 | 7 ⁵² 52 | 6 ²² 22 | 25 ⁴⁶ 46 | 11 ⁴⁰ 40 | T 19 |
| F 20 | 2 25 31 | 4 ⁴⁴ 35'35 | 17 ³⁶ 36 | 23 ⁵¹ 51 | 9 ⁴⁴ 44 | 10 ²⁸ 28 | 9 ³¹ 31 | 13 ²⁸ 28 | 7 ¹³ 13 | 21 ⁵⁷ 57 | 25 ⁵⁰ 50 | 7 ⁵⁰ 50 | 6 ¹⁸ 18 | 25 ⁵³ 53 | 11 ⁴³ 43 | F 20 |
| S 21 | 2 29 28 | 5 ⁴⁴ 51'51 | 2 ⁴⁶ 46 | 25 ¹⁴ 14 | 10 ⁵⁸ 58 | 11 ⁷ 7 | 9 ²⁵ 25 | 13 ³³ 33 | 7 ¹² 12 | 21 ⁵⁷ 57 | 25 ⁴⁹ 49 | 7 ⁴⁶ 46 | 6 ¹⁵ 15 | 25 ⁵⁹ 59 | 11 ⁴⁶ 46 | S 21 |
| S 22 | 2 33 24 | 6 ⁴⁵ 08'08 | 17 ⁴⁶ 46 | 26 ³⁶ 36 | 12 ¹³ 13 | 11 ⁴⁷ 47 | 9 ¹⁹ 19 | 13 ³⁹ 39 | 7 ¹² 12 | 21 ⁵⁷ 57 | 25 ⁴⁸ 48 | 7 ⁴² 42 | 6 ¹² 12 | 26 ⁶ 6 | 11 ⁴⁹ 49 | S 22 |
| M23 | 2 37 21 | 7 ⁴⁵ 27'27 | 2 ³⁸ 38 | 27 ⁵⁷ 57 | 13 ²⁸ 28 | 12 ²⁶ 26 | 9 ¹³ 13 | 13 ⁴⁴ 44 | 7 ¹¹ 11 | 21 ⁵⁷ 57 | 25 ⁴⁸ 48 | 7 ³⁸ 38 | 6 ⁹ 9 | 26 ¹³ 13 | 11 ⁵² 52 | M23 |
| T 24 | 2 41 17 | 8 ⁴⁵ 48'48 | 16 ⁴⁷ 47 | 29 ¹⁷ 17 | 14 ⁴² 42 | 13 ⁵ 5 | 9 ⁷ 7 | 13 ⁵⁰ 50 | 7 ¹⁰ 10 | 21 ⁵⁷ 57 | 25 ⁴⁷ 47 | 7 ³⁵ 35 | 6 ⁶ 6 | 26 ¹⁹ 19 | 11 ⁵⁵ 55 | T 24 |
| W25 | 2 45 14 | 9 ⁴⁶ 10'10 | 0 ⁴⁰ 40 | 0 ³⁶ 36 | 15 ⁵⁷ 57 | 13 ⁴⁴ 44 | 9 ¹ 1 | 13 ⁵⁵ 55 | 7 ⁹ 9 | 21 ⁵⁷ 57 | 25 ⁴⁶ 46 | 7 ³³ 33 | 6 ³ 3 | 26 ²⁶ 26 | 11 ⁵⁹ 59 | W25 |
| T 26 | 2 49 10 | 10 ⁴⁶ 33'33 | 14 ⁷ 7 | 1 ⁵³ 53 | 17 ¹² 12 | 14 ²³ 23 | 8 ⁵⁵ 55 | 14 ⁰ 0 | 7 ⁹ 9 | 21 ⁵⁶ 56 | 25 ⁴⁵ 45 | 7 ^{D33} 33 | 5 ⁵⁹ 59 | 26 ³³ 33 | 12 ² 2 | T 26 |
| F 27 | 2 53 7 | 11 ⁴⁶ 58'58 | 27 ¹⁰ 10 | 3 ⁹ 9 | 18 ²⁷ 27 | 15 ² 2 | 8 ⁴⁸ 48 | 14 ⁵ 5 | 7 ⁸ 8 | 21 ⁵⁶ 56 | 25 ⁴⁵ 45 | 7 ³³ 33 | 5 ⁵⁶ 56 | 26 ³⁹ 39 | 12 ⁵ 5 | F 27 |
| S 28 | 2 57 4 | 12 ⁴⁷ 24'24 | 9 ⁵³ 53 | 4 ²⁴ 24 | 19 ⁴¹ 41 | 15 ⁴² 42 | 8 ⁴² 42 | 14 ¹⁰ 10 | 7 ⁷ 7 | 21 ⁵⁶ 56 | 25 ⁴⁴ 44 | 7 ³⁵ 35 | 5 ⁵³ 53 | 26 ⁴⁶ 46 | 12 ⁹ 9 | S 28 |
| S 29 | 3 1 0 | 13 ⁴⁷ 51'51 | 22 ¹⁹ 19 | 5 ³⁶ 36 | 20 ⁵⁶ 56 | 16 ²¹ 21 | 8 ³⁵ 35 | 14 ¹⁵ 15 | 7 ⁷ 7 | 21 ⁵⁵ 55 | 25 ⁴³ 43 | 7 ³⁷ 37 | 5 ⁵⁰ 50 | 26 ⁵³ 53 | 12 ¹² 12 | S 29 |
| M30 | 3 4 57 | 14 ⁴⁸ 20'20 | 4 ³³ 33 | 6 ⁴⁷ 47 | 22 ¹¹ 11 | 17 ⁰ 0 | 8 ²⁸ 28 | 14 ²⁰ 20 | 7 ⁶ 6 | 21 ⁵⁵ 55 | 25 ⁴² 42 | 7 ^{R38} 38 | 5 ⁴⁷ 47 | 26 ⁵⁹ 59 | 12 ¹⁶ 16 | M30 |
| T 31 | 3 8 53 | 15 ⁴⁸ 50'50 | 16 ³⁷ 37 | 7 ⁵⁵ 55 | 23 ²⁶ 26 | 17 ⁴⁰ 40 | 8 ^{II21} 21 | 14 ²⁵ 25 | 7 ⁶ 6 | 21 ⁵⁴ 54 | 25 ^{II41} 41 | 7 ⁴³ 37 | 5 ⁴⁴ 44 | 27 ⁸ 6 | 12 ³⁰ 30 | T 31 |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|-------|-------|------|-------|------|------|------|------|------|-------|------|------|------|------|------|-------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | lat |
| S 1 | 6s13 | 4s41 | 2n15 | 10s 7 | 0s14 | 6n42 | 1n22 | 1n40 | 1n 0 | 21n18 | 0s50 | 8n54 | 1n46 | 9s28 | 0s48 | 21n15 |
| M 2 | 6 36 | 0 48 | 1 10 | 10 48 | 0 21 | 6 15 | 1 24 | 1 24 | 1 0 | 21 17 | 0 50 | 8 51 | 1 46 | 9 29 | 0 48 | 21 15 |
| T 3 | 6 59 | 3n 3 | 0 3 | 11 28 | 0 27 | 5 47 | 1 25 | 1 8 | 1 0 | 21 17 | 0 50 | 8 49 | 1 46 | 9 29 | 0 48 | 21 15 |
| W 4 | 7 22 | 6 44 | 1s 4 | 12 7 | 0 34 | 5 19 | 1 27 | 0 53 | 0 59 | 21 17 | 0 50 | 8 47 | 1 46 | 9 30 | 0 48 | 21 15 |
| T 5 | 7 45 | 10 7 | 2 8 | 12 46 | 0 41 | 4 51 | 1 28 | 0 37 | 0 59 | 21 16 | 0 50 | 8 44 | 1 46 | 9 30 | 0 48 | 21 15 |
| F 6 | 8 7 | 13 2 | 3 5 | 13 25 | 0 48 | 4 23 | 1 29 | 0 21 | 0 59 | 21 16 | 0 50 | 8 42 | 1 46 | 9 31 | 0 48 | 21 15 |
| S 7 | 8 30 | 15 24 | 3 53 | 14 2 | 0 54 | 3 55 | 1 30 | 0 6 | 0 59 | 21 15 | 0 50 | 8 40 | 1 47 | 9 32 | 0 48 | 21 15 |
| S 8 | 8 52 | 17 7 | 4 32 | 14 39 | 1 1 | 3 26 | 1 31 | 0s10 | 0 59 | 21 15 | 0 50 | 8 37 | 1 47 | 9 32 | 0 48 | 21 15 |
| M 9 | 9 14 | 18 6 | 4 59 | 15 15 | 1 7 | 2 58 | 1 32 | 0 26 | 0 58 | 21 14 | 0 50 | 8 35 | 1 47 | 9 33 | 0 48 | 21 14 |
| T 10 | 9 36 | 18 17 | 5 14 | 15 50 | 1 14 | 2 29 | 1 33 | 0 42 | 0 58 | 21 14 | 0 50 | 8 33 | 1 47 | 9 33 | 0 48 | 21 14 |
| W11 | 9 58 | 17 38 | 5 14 | 16 24 | 1 20 | 2 0 | 1 34 | 0 57 | 0 58 | 21 13 | 0 50 | 8 31 | 1 47 | 9 34 | 0 48 | 21 14 |
| T 12 | 10 20 | 16 10 | 5 1 | 16 58 | 1 26 | 1 31 | 1 35 | 1 13 | 0 57 | 21 13 | 0 50 | 8 29 | 1 47 | 9 34 | 0 48 | 21 14 |
| F 13 | 10 42 | 13 53 | 4 33 | 17 30 | 1 32 | 1 2 | 1 35 | 1 29 | 0 57 | 21 12 | 0 50 | 8 26 | 1 48 | 9 34 | 0 48 | 21 14 |
| S 14 | 11 3 | 10 52 | 3 50 | 18 2 | 1 38 | 0 33 | 1 36 | 1 45 | 0 57 | 21 11 | 0 50 | 8 24 | 1 48 | 9 35 | 0 48 | 21 14 |
| S 15 | 11 25 | 7 11 | 2 54 | 18 33 | 1 44 | 0 4 | 1 36 | 2 0 | 0 57 | 21 11 | 0 50 | 8 22 | 1 48 | 9 35 | 0 48 | 21 14 |
| M16 | 11 46 | 2 59 | 1 45 | 19 3 | 1 50 | 0s25 | 1 37 | 2 16 | 0 56 | 21 10 | 0 50 | 8 20 | 1 48 | 9 36 | 0 48 | 21 14 |
| T 17 | 12 7 | 1s31 | 0 29 | 19 32 | 1 55 | 0 54 | 1 37 | 2 32 | 0 56 | 21 9 | 0 50 | 8 18 | 1 48 | 9 36 | 0 48 | 21 14 |
| W18 | 12 28 | 6 3 | 0n52 | 20 0 | 2 0 | 1 24 | 1 37 | 2 47 | 0 56 | 21 9 | 0 50 | 8 16 | 1 49 | 9 36 | 0 48 | 21 14 |
| T 19 | 12 48 | 10 18 | 2 11 | 20 27 | 2 5 | 1 53 | 1 38 | 3 3 | 0 56 | 21 8 | 0 50 | 8 14 | 1 49 | 9 37 | 0 48 | 21 14 |
| F 20 | 13 8 | 13 55 | 3 21 | 20 53 | 2 10 | 2 22 | 1 38 | 3 19 | 0 55 | 21 7 | 0 50 | 8 12 | 1 49 | 9 37 | 0 47 | 21 14 |
| S 21 | 13 29 | 16 34 | 4 17 | 21 18 | 2 14 | 2 51 | 1 38 | 3 34 | 0 55 | 21 6 | 0 50 | 8 10 | 1 49 | 9 37 | 0 47 | 21 14 |
| S 22 | 13 49 | 18 4 | 4 55 | 21 42 | 2 18 | 3 21 | 1 38 | 3 50 | 0 55 | 21 5 | 0 50 | 8 8 | 1 49 | 9 38 | 0 47 | 21 14 |
| M23 | 14 8 | 18 18 | 5 12 | 22 4 | 2 22 | 3 50 | 1 38 | 4 5 | 0 54 | 21 5 | 0 50 | 8 6 | 1 50 | 9 38 | 0 47 | 21 14 |
| T 24 | 14 28 | 17 20 | 5 9 | 22 26 | 2 26 | 4 19 | 1 38 | 4 21 | 0 54 | 21 4 | 0 50 | 8 4 | 1 50 | 9 38 | 0 47 | 21 14 |
| W25 | 14 47 | 15 23 | 4 48 | 22 46 | 2 29 | 4 48 | 1 37 | 4 37 | 0 54 | 21 3 | 0 50 | 8 2 | 1 50 | 9 39 | 0 47 | 21 14 |
| T 26 | 15 6 | 12 37 | 4 12 | 23 4 | 2 31 | 5 17 | 1 37 | 4 52 | 0 53 | 21 2 | 0 50 | 8 0 | 1 50 | 9 39 | 0 47 | 21 14 |
| F 27 | 15 25 | 9 19 | 3 23 | 23 22 | 2 34 | 5 46 | 1 37 | 5 8 | 0 53 | 21 1 | 0 50 | 7 59 | 1 50 | 9 39 | 0 47 | 21 14 |
| S 28 | 15 43 | 5 38 | 2 26 | 23 38 | 2 36 | 6 15 | 1 36 | 5 23 | 0 53 | 21 0 | 0 50 | 7 57 | 1 51 | 9 39 | 0 47 | 21 15 |
| S 29 | 16 2 | 1 47 | 1 23 | 23 53 | 2 37 | 6 43 | 1 36 | 5 38 | 0 52 | 20 59 | 0 50 | 7 55 | 1 51 | 9 39 | 0 47 | 21 15 |
| M30 | 16 20 | 2n 4 | 0 17 | 24 6 | 2 38 | 7 12 | 1 35 | 5 54 | 0 52 | 20 58 | 0 50 | 7 53 | 1 51 | 9 39 | 0 47 | 21 15 |
| T 31 | 16s37 | 5n48 | 0s49 | 24s17 | 2s38 | 7s40 | 1n34 | 6s 9 | 0n52 | 20n57 | 0s50 | 7n52 | 1n51 | 9s40 | 0s47 | 21n15 |

Julian Day Number = 2239620.5, Delta T = 07m21s

Ecliptic obliquity = 23°30'44", Nutation = 0°00'02", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°38'44", Lahiri = 15°45'45" Julian Calendar 1 Oct. 1419 == Greg. Calendar 10 Oct. 1419

ASTRODIENST EPHEMERIS for the year 1419

geocentric

NOVEMBER 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|-----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------|---------|-------------------|-------------------|--------------------|--------------------|------|
| W 1 | 3 12 50 | 16 ^m 49'22 | 28 ^Y 35 | 9 [♂] 0 | 24 [♂] 41 | 18 [♂] 19 | 8°R14 | 14 ^m 30 | 7°R 5 | 21°R54 | 25°R40 | 7°R35 | 5 [♂] 40 | 27 [♂] 13 | 12 [♂] 23 | W 1 |
| T 2 | 3 16 46 | 17°49'55 | 10 [♂] 28 | 10° 2 | 25°56 | 18°58 | 8 ^{II} 7 | 14°35 | 7 [♂] 5 | 21°553 | 25°II39 | 7 [♂] 31 | 5°37 | 27°20 | 12°27 | T 2 |
| F 3 | 3 20 43 | 18°50'30 | 22°19 | 11° 1 | 27°11 | 19°37 | 8° 0 | 14°39 | 7° 5 | 21°53 | 25°39 | 7°25 | 5°34 | 27°26 | 12°31 | F 3 |
| S 4 | 3 24 39 | 19°51'06 | 4 ^{II} 10 | 11°56 | 28°26 | 20°17 | 7°52 | 14°44 | 7° 5 | 21°52 | 25°38 | 7°17 | 5°31 | 27°33 | 12°35 | S 4 |
| S 5 | 3 28 36 | 20°51'44 | 16° 2 | 12°47 | 29°41 | 20°56 | 7°45 | 14°48 | 7° 4 | 21°52 | 25°37 | 7° 8 | 5°28 | 27°40 | 12°39 | S 5 |
| M 6 | 3 32 32 | 21°52'23 | 27°57 | 13°33 | 0 ^m 56 | 21°36 | 7°37 | 14°53 | 7° 4 | 21°51 | 25°36 | 6°59 | 5°24 | 27°46 | 12°42 | M 6 |
| T 7 | 3 36 29 | 22°53'04 | 9 [♂] 57 | 14°13 | 2°11 | 22°15 | 7°30 | 14°57 | 7° 4 | 21°50 | 25°35 | 6°51 | 5°21 | 27°53 | 12°46 | T 7 |
| W 8 | 3 40 26 | 23°53'47 | 22° 4 | 14°47 | 3°26 | 22°54 | 7°22 | 15° 1 | 7°D 4 | 21°50 | 25°34 | 6°45 | 5°18 | 28° 0 | 12°51 | W 8 |
| T 9 | 3 44 22 | 24°54'31 | 4 [♂] 23 | 15°13 | 4°41 | 23°34 | 7°14 | 15° 5 | 7° 4 | 21°49 | 25°33 | 6°40 | 5°15 | 28° 6 | 12°55 | T 9 |
| F 10 | 3 48 19 | 25°55'16 | 16°56 | 15°32 | 5°56 | 24°13 | 7° 6 | 15° 9 | 7° 4 | 21°48 | 25°32 | 6°38 | 5°12 | 28°13 | 12°59 | F 10 |
| S 11 | 3 52 15 | 26°56'03 | 29°48 | 15°43 | 7°12 | 24°53 | 6°58 | 15°13 | 7° 4 | 21°47 | 25°31 | 6°D38 | 5° 9 | 28°20 | 13° 3 | S 11 |
| S 12 | 3 56 12 | 27°56'52 | 13 ^m 3 | 15°R43 | 8°27 | 25°32 | 6°50 | 15°17 | 7° 5 | 21°46 | 25°30 | 6°38 | 5° 5 | 28°27 | 13° 7 | S 12 |
| M13 | 4 0 8 | 28°57'42 | 26°43 | 15°34 | 9°42 | 26°12 | 6°42 | 15°21 | 7° 5 | 21°46 | 25°29 | 6°39 | 5° 2 | 28°33 | 13°12 | M13 |
| T 14 | 4 4 5 | 29°58'34 | 10 [♂] 50 | 15°14 | 10°57 | 26°52 | 6°34 | 15°24 | 7° 5 | 21°45 | 25°28 | 6°R40 | 4°59 | 28°40 | 13°16 | T 14 |
| W15 | 4 8 1 | 0 [♂] 59'27 | 25°25 | 14°43 | 12°12 | 27°31 | 6°26 | 15°28 | 7° 5 | 21°44 | 25°26 | 6°38 | 4°56 | 28°47 | 13°20 | W15 |
| T 16 | 4 11 58 | 2° 0'22 | 10 ^m 23 | 14° 1 | 13°28 | 28°11 | 6°18 | 15°31 | 7° 6 | 21°43 | 25°25 | 6°34 | 4°53 | 28°53 | 13°25 | T 16 |
| F 17 | 4 15 55 | 3° 1'17 | 25°36 | 13° 8 | 14°43 | 28°50 | 6°10 | 15°35 | 7° 6 | 21°42 | 25°24 | 6°28 | 4°50 | 29° 0 | 13°29 | F 17 |
| S 18 | 4 19 51 | 4° 2'14 | 10 [♂] 56 | 12° 5 | 15°58 | 29°30 | 6° 2 | 15°38 | 7° 7 | 21°41 | 25°23 | 6°19 | 4°46 | 29° 7 | 13°34 | S 18 |
| S 19 | 4 23 48 | 5° 3'12 | 26°11 | 10°54 | 17°14 | 0 ^m 10 | 5°53 | 15°41 | 7° 7 | 21°40 | 25°22 | 6°10 | 4°43 | 29°13 | 13°38 | S 19 |
| M20 | 4 27 44 | 6° 4'11 | 11 [♂] 9 | 9°37 | 18°29 | 0°49 | 5°45 | 15°44 | 7° 8 | 21°39 | 25°21 | 6° 1 | 4°40 | 29°20 | 13°43 | M20 |
| T 21 | 4 31 41 | 7° 5'11 | 25°43 | 8°15 | 19°44 | 1°29 | 5°37 | 15°47 | 7° 8 | 21°38 | 25°20 | 5°53 | 4°37 | 29°27 | 13°47 | T 21 |
| W22 | 4 35 37 | 8° 6'11 | 9 [♂] 47 | 6°52 | 20°59 | 2° 9 | 5°29 | 15°50 | 7° 9 | 21°37 | 25°19 | 5°47 | 4°34 | 29°33 | 13°52 | W22 |
| T 23 | 4 39 34 | 9° 7'12 | 23°22 | 5°30 | 22°15 | 2°48 | 5°21 | 15°53 | 7°10 | 21°35 | 25°17 | 5°44 | 4°30 | 29°40 | 13°57 | T 23 |
| F 24 | 4 43 31 | 10° 8'14 | 6 [♂] 28 | 4°13 | 23°30 | 3°28 | 5°13 | 15°56 | 7°11 | 21°34 | 25°16 | 5°D42 | 4°27 | 29°47 | 14° 2 | F 24 |
| S 25 | 4 47 27 | 11° 9'16 | 19°10 | 3° 2 | 24°46 | 4° 8 | 5° 5 | 15°58 | 7°11 | 21°33 | 25°15 | 5°43 | 4°24 | 29°54 | 14° 6 | S 25 |
| S 26 | 4 51 24 | 12°10'18 | 1 ^Y 32 | 2° 0 | 26° 1 | 4°48 | 4°56 | 16° 1 | 7°12 | 21°32 | 25°14 | 5°R43 | 4°21 | 0 ^{II} 0 | 14°11 | S 26 |
| M27 | 4 55 20 | 13°11'21 | 13°39 | 1° 8 | 27°16 | 5°27 | 4°48 | 16° 3 | 7°13 | 21°31 | 25°13 | 5°43 | 4°18 | 0° 7 | 14°16 | M27 |
| T 28 | 4 59 17 | 14°12'25 | 25°36 | 0°26 | 28°32 | 6° 7 | 4°40 | 16° 5 | 7°14 | 21°29 | 25°12 | 5°41 | 4°15 | 0°14 | 14°21 | T 28 |
| W29 | 5 3 13 | 15°13'29 | 7 [♂] 27 | 29 ^m 56 | 29°47 | 6°47 | 4°33 | 16° 8 | 7°15 | 21°28 | 25°10 | 5°36 | 4°11 | 0°20 | 14°26 | W29 |
| T 30 | 5 7 10 | 16 [♂] 14'33 | 19 [♂] 17 | 29 ^m 37 | 1 [♂] 2 | 7 ^m 27 | 4 ^{II} 25 | 16 ^m 10 | 7 [♂] 16 | 21°27 | 25°II 9 | 5 [♂] 29 | 4 [♂] 8 | 0 ^{II} 27 | 14 [♂] 31 | T 30 |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|------|-------|
| decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| W 1 | 16s55 | 9n16 | 1s52 | 24s27 | 2s37 | 8s 8 | 1n34 | 6s24 | 0n51 | 20n56 | 0s50 | 7n50 | 1n52 | 9s40 | 0s47 | 21n15 |
| T 2 | 17 12 | 12 20 | 2 49 | 24 36 | 2 36 | 8 36 | 1 33 | 6 40 | 0 51 | 20 55 | 0 50 | 7 48 | 1 52 | 9 40 | 0 47 | 21 15 |
| F 3 | 17 29 | 14 53 | 3 39 | 24 42 | 2 34 | 9 4 | 1 32 | 6 55 | 0 51 | 20 54 | 0 50 | 7 47 | 1 52 | 9 40 | 0 47 | 21 15 |
| S 4 | 17 45 | 16 48 | 4 19 | 24 47 | 2 31 | 9 32 | 1 31 | 7 10 | 0 50 | 20 52 | 0 49 | 7 45 | 1 52 | 9 40 | 0 47 | 21 15 |
| S 5 | 18 2 | 18 1 | 4 48 | 24 50 | 2 28 | 10 0 | 1 30 | 7 25 | 0 50 | 20 51 | 0 49 | 7 44 | 1 52 | 9 40 | 0 47 | 21 15 |
| M 6 | 18 17 | 18 26 | 5 4 | 24 52 | 2 23 | 10 27 | 1 29 | 7 40 | 0 50 | 20 50 | 0 49 | 7 42 | 1 53 | 9 40 | 0 47 | 21 15 |
| T 7 | 18 33 | 18 2 | 5 7 | 24 51 | 2 17 | 10 54 | 1 28 | 7 55 | 0 49 | 20 49 | 0 49 | 7 41 | 1 53 | 9 40 | 0 47 | 21 15 |
| W 8 | 18 48 | 16 49 | 4 57 | 24 48 | 2 10 | 11 21 | 1 26 | 8 11 | 0 49 | 20 48 | 0 49 | 7 39 | 1 53 | 9 40 | 0 47 | 21 15 |
| T 9 | 19 3 | 14 48 | 4 33 | 24 43 | 2 2 | 11 47 | 1 25 | 8 25 | 0 49 | 20 47 | 0 49 | 7 38 | 1 53 | 9 40 | 0 47 | 21 16 |
| F 10 | 19 18 | 12 4 | 3 55 | 24 35 | 1 52 | 12 13 | 1 24 | 8 40 | 0 48 | 20 45 | 0 49 | 7 37 | 1 54 | 9 40 | 0 47 | 21 16 |
| S 11 | 19 32 | 8 41 | 3 5 | 24 26 | 1 42 | 12 39 | 1 22 | 8 55 | 0 48 | 20 44 | 0 49 | 7 35 | 1 54 | 9 40 | 0 47 | 21 16 |
| S 12 | 19 46 | 4 47 | 2 4 | 24 13 | 1 29 | 13 5 | 1 21 | 9 10 | 0 48 | 20 43 | 0 49 | 7 34 | 1 54 | 9 40 | 0 47 | 21 16 |
| M13 | 19 59 | 0 30 | 0 53 | 23 58 | 1 15 | 13 30 | 1 20 | 9 25 | 0 47 | 20 42 | 0 49 | 7 33 | 1 54 | 9 40 | 0 47 | 21 16 |
| T 14 | 20 12 | 3s57 | 0n22 | 23 41 | 1 0 | 13 55 | 1 18 | 9 39 | 0 47 | 20 40 | 0 49 | 7 32 | 1 55 | 9 39 | 0 47 | 21 16 |
| W15 | 20 25 | 8 19 | 1 39 | 23 21 | 0 43 | 14 20 | 1 16 | 9 54 | 0 46 | 20 39 | 0 48 | 7 31 | 1 55 | 9 39 | 0 46 | 21 16 |
| T 16 | 20 38 | 12 17 | 2 51 | 22 58 | 0 25 | 14 44 | 1 15 | 10 9 | 0 46 | 20 38 | 0 48 | 7 29 | 1 55 | 9 39 | 0 46 | 21 16 |
| F 17 | 20 50 | 15 29 | 3 51 | 22 32 | 0 6 | 15 8 | 1 13 | 10 23 | 0 46 | 20 37 | 0 48 | 7 28 | 1 55 | 9 39 | 0 46 | 21 17 |
| S 18 | 21 1 | 17 36 | 4 36 | 22 4 | 0n14 | 15 32 | 1 11 | 10 37 | 0 45 | 20 35 | 0 48 | 7 27 | 1 56 | 9 39 | 0 46 | 21 17 |
| S 19 | 21 12 | 18 28 | 5 0 | 21 34 | 0 35 | 15 55 | 1 10 | 10 52 | 0 45 | 20 34 | 0 48 | 7 26 | 1 56 | 9 38 | 0 46 | 21 17 |
| M20 | 21 23 | 18 0 | 5 3 | 21 3 | 0 55 | 16 18 | 1 8 | 11 6 | 0 44 | 20 33 | 0 48 | 7 25 | 1 56 | 9 38 | 0 46 | 21 17 |
| T 21 | 21 34 | 16 22 | 4 47 | 20 31 | 1 15 | 16 40 | 1 6 | 11 20 | 0 44 | 20 31 | 0 48 | 7 24 | 1 56 | 9 38 | 0 46 | 21 17 |
| W22 | 21 44 | 13 47 | 4 13 | 19 59 | 1 34 | 17 2 | 1 4 | 11 34 | 0 43 | 20 30 | 0 48 | 7 24 | 1 57 | 9 38 | 0 46 | 21 17 |
| T 23 | 21 53 | 10 32 | 3 26 | 19 28 | 1 51 | 17 23 | 1 2 | 11 49 | 0 43 | 20 29 | 0 47 | 7 23 | 1 57 | 9 37 | 0 46 | 21 18 |
| F 24 | 22 2 | 6 51 | 2 29 | 18 59 | 2 6 | 17 44 | 1 0 | 12 2 | 0 43 | 20 28 | 0 47 | 7 22 | 1 57 | 9 37 | 0 46 | 21 18 |
| S 25 | 22 11 | 2 58 | 1 27 | 18 33 | 2 20 | 18 5 | 0 58 | 12 16 | 0 42 | 20 26 | 0 47 | 7 21 | 1 57 | 9 37 | 0 46 | 21 18 |
| S 26 | 22 19 | 0n57 | 0 22 | 18 10 | 2 31 | 18 25 | 0 56 | 12 30 | 0 42 | 20 25 | 0 47 | 7 20 | 1 58 | 9 36 | 0 46 | 21 18 |
| M27 | 22 27 | 4 45 | 0s42 | 17 51 | 2 39 | 18 44 | 0 54 | 12 44 | 0 41 | 20 24 | 0 47 | 7 20 | 1 58 | 9 36 | 0 46 | 21 18 |
| T 28 | 22 34 | 8 19 | 1 44 | 17 36 | 2 46 | 19 3 | 0 51 | 12 58 | 0 41 | 20 22 | 0 47 | 7 19 | 1 58 | 9 35 | 0 46 | 21 19 |
| W29 | 22 41 | 11 31 | 2 40 | 17 26 | 2 50 | 19 22 | 0 49 | 13 11 | 0 40 | 20 21 | 0 46 | 7 18 | 1 59 | 9 35 | 0 46 | 21 19 |
| T 30 | 22s48 | 14n14 | 3s29 | 17s19 | 2n53 | 19s40 | 0n47 | 13s25 | 0n40 | 20n20 | 0s46 | 7n18 | 1n59 | 9s35 | 0s46 | 21n19 |

Julian Day Number = 2239651.5, Delta T = 07m21s

Ecliptic obliquity = 23°30'43", Nutation = 0°00'00", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°38'49", Lahiri = 15°45'49" Julian Calendar 1 Nov. 1419 == Greg. Calendar 10 Nov. 1419

ASTRODIENST EPHEMERIS for the year 1419
geocentric

DECEMBER 1419 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|---------|---------|----------|-----------|------|
| F 1 | 5 11 6 | 17°15'39 | 1°11' 7 | 29°D28 | 2°18' 8 | 8°11' 7 | 4°R17 | 16°12' 12 | 7°11' 17 | 21°R25 | 25°R 8 | 5°R18 | 4°11' 5 | 0°11' 34 | 14°36' 14 | F 1 |
| S 2 | 5 15 3 | 18°16'44 | 13° 0 | 29°M30 | 3°33' 3 | 8°47' 8 | 4°II 9 | 16°14' 16 | 7°19' 7 | 21°24' 24 | 25°II 7 | 5°11' 6 | 4° 2 | 0°40' 0 | 14°41' 14 | S 2 |
| S 3 | 5 19 0 | 19°17'50 | 24°57' 29 | 29°41' 4 | 4°49' 9 | 9°26' 4 | 4° 2 | 16°15' 16 | 7°20' 7 | 21°23' 21 | 25° 6 | 4°52' 4 | 3°59' 3 | 0°47' 0 | 14°46' 14 | S 3 |
| M 4 | 5 22 56 | 20°18'57 | 7°52' 0 | 0°18' 0 | 6° 4 | 10° 6 | 3°54' 3 | 16°17' 16 | 7°21' 7 | 21°21' 21 | 25° 4 | 4°37' 4 | 3°56' 3 | 0°54' 0 | 14°51' 14 | M 4 |
| T 5 | 5 26 53 | 21°20'04 | 19° 8 | 0°28' 0 | 7°19' 7 | 10°46' 10 | 3°47' 3 | 16°18' 16 | 7°23' 7 | 21°20' 21 | 25° 3 | 4°24' 4 | 3°52' 3 | 1° 1 | 14°56' 14 | T 5 |
| W 6 | 5 30 49 | 22°21'12 | 1°12' 25 | 1° 2 | 8°35' 8 | 11°26' 11 | 3°39' 3 | 16°20' 16 | 7°24' 7 | 21°19' 21 | 25° 2 | 4°13' 4 | 3°49' 3 | 1° 7 | 15° 1 | W 6 |
| T 7 | 5 34 46 | 23°22'21 | 13°51' 1 | 1°43' 9 | 9°50' 12 | 12° 6 | 3°32' 3 | 16°21' 16 | 7°25' 7 | 21°17' 21 | 25° 1 | 4° 4 | 3°46' 3 | 1°14' 1 | 15° 6 | T 7 |
| F 8 | 5 38 42 | 24°23'29 | 26°28' 2 | 2°29' 2 | 11° 6 | 12°46' 12 | 3°25' 3 | 16°22' 16 | 7°27' 7 | 21°16' 21 | 25° 0 | 3°58' 3 | 3°43' 3 | 1°21' 1 | 15°11' 15 | F 8 |
| S 9 | 5 42 39 | 25°24'39 | 9°12' 20 | 3°20' 12 | 12°21' 13 | 13°26' 13 | 3°18' 3 | 16°24' 16 | 7°28' 7 | 21°14' 21 | 24°58' 24 | 3°56' 3 | 3°40' 3 | 1°27' 1 | 15°16' 15 | S 9 |
| S 10 | 5 46 35 | 26°25'49 | 22°29' 4 | 4°16' 13 | 13°37' 14 | 14° 6 | 3°11' 3 | 16°25' 16 | 7°30' 7 | 21°13' 21 | 24°57' 24 | 3°55' 3 | 3°36' 3 | 1°34' 1 | 15°21' 15 | S 10 |
| M 11 | 5 50 32 | 27°26'59 | 6°11' 0 | 5°16' 14 | 14°52' 14 | 14°46' 14 | 3° 4 | 16°25' 16 | 7°32' 7 | 21°11' 21 | 24°56' 24 | 3°55' 3 | 3°33' 3 | 1°41' 1 | 15°27' 15 | M 11 |
| T 12 | 5 54 29 | 28°28'10 | 19°53' 6 | 6°19' 16 | 15°26' 15 | 15°26' 15 | 2°57' 2 | 16°26' 16 | 7°33' 7 | 21°10' 21 | 24°55' 24 | 3°54' 3 | 3°30' 3 | 1°48' 1 | 15°32' 15 | T 12 |
| W 13 | 5 58 25 | 29°29'22 | 4°11' 10 | 7°25' 17 | 17°23' 16 | 16° 6 | 2°51' 2 | 16°27' 16 | 7°35' 7 | 21° 8 | 24°54' 24 | 3°52' 3 | 3°27' 3 | 1°54' 1 | 15°37' 15 | W 13 |
| T 14 | 6 2 22 | 0°30'34 | 18°51' 8 | 8°33' 18 | 18°38' 16 | 16°47' 16 | 2°44' 2 | 16°27' 16 | 7°37' 7 | 21° 7 | 24°52' 24 | 3°47' 3 | 3°24' 3 | 2° 1 | 15°42' 15 | T 14 |
| F 15 | 6 6 18 | 1°31'46 | 3°11' 49 | 9°44' 19 | 19°54' 17 | 17°27' 17 | 2°38' 2 | 16°28' 16 | 7°38' 7 | 21° 5 | 24°51' 24 | 3°39' 3 | 3°21' 3 | 2° 8 | 15°48' 15 | F 15 |
| S 16 | 6 10 15 | 2°32'59 | 18°58' 10 | 10°57' 21 | 18° 7 | 18° 7 | 2°32' 2 | 16°28' 16 | 7°40' 7 | 21° 3 | 24°50' 24 | 3°28' 3 | 3°17' 3 | 2°14' 1 | 15°53' 15 | S 16 |
| S 17 | 6 14 11 | 3°34'12 | 4°11' 8 | 12°12' 22 | 22°25' 18 | 18°47' 18 | 2°26' 2 | 16°28' 16 | 7°42' 7 | 21° 2 | 24°49' 24 | 3°16' 3 | 3°14' 3 | 2°21' 1 | 15°58' 15 | S 17 |
| M 18 | 6 18 8 | 4°35'24 | 19° 7 | 13°29' 23 | 23°40' 19 | 19°27' 19 | 2°20' 2 | 16°29' 16 | 7°44' 7 | 21° 0 | 24°48' 24 | 3° 4 | 3°11' 3 | 2°28' 1 | 16° 4 | M 18 |
| T 19 | 6 22 4 | 5°36'37 | 3°11' 46 | 14°47' 24 | 24°56' 20 | 20° 7 | 2°14' 2 | 16°29' 16 | 7°46' 7 | 20°59' 20 | 24°46' 24 | 2°54' 2 | 3° 8 | 2°34' 1 | 16° 9 | T 19 |
| W 20 | 6 26 1 | 6°37'49 | 17°58' 16 | 16° 7 | 26°11' 20 | 20°48' 20 | 2° 9 | 16°29' 16 | 7°48' 7 | 20°57' 20 | 24°45' 24 | 2°45' 2 | 3° 5 | 2°41' 1 | 16°14' 16 | W 20 |
| T 21 | 6 29 58 | 7°39'01 | 1°11' 41 | 17°28' 27 | 27°26' 21 | 21°28' 21 | 2° 3 | 16°28' 16 | 7°50' 7 | 20°55' 20 | 24°44' 24 | 2°40' 2 | 3° 2 | 2°48' 1 | 16°20' 16 | T 21 |
| F 22 | 6 33 54 | 8°40'12 | 14°55' 18 | 18°49' 28 | 28°42' 22 | 22° 8 | 1°58' 1 | 16°28' 16 | 7°52' 7 | 20°54' 20 | 24°43' 24 | 2°37' 2 | 2°58' 2 | 2°55' 1 | 16°25' 16 | F 22 |
| S 23 | 6 37 51 | 9°41'23 | 27°42' 20 | 10°12' 29 | 29°57' 22 | 22°48' 22 | 1°53' 1 | 16°28' 16 | 7°54' 7 | 20°52' 20 | 24°42' 24 | 2°36' 2 | 2°55' 2 | 3° 1 | 16°30' 16 | S 23 |
| S 24 | 6 41 47 | 10°42'33 | 10°11' 7 | 21°36' 13 | 23°29' 23 | 23°29' 23 | 1°48' 1 | 16°27' 16 | 7°57' 7 | 20°50' 20 | 24°41' 24 | 2°36' 2 | 2°52' 2 | 3° 8 | 16°36' 16 | S 24 |
| M 25 | 6 45 44 | 11°43'43 | 22°15' 23 | 23° 1 | 2°28' 24 | 24° 9 | 1°43' 1 | 16°26' 16 | 7°59' 7 | 20°49' 20 | 24°39' 24 | 2°36' 2 | 2°49' 2 | 3°15' 1 | 16°41' 16 | M 25 |
| T 26 | 6 49 40 | 12°44'52 | 4°11' 11 | 24°26' 3 | 3°44' 24 | 24°49' 24 | 1°39' 1 | 16°26' 16 | 8° 1 | 20°47' 20 | 24°38' 24 | 2°34' 2 | 2°46' 2 | 3°21' 1 | 16°46' 16 | T 26 |
| W 27 | 6 53 37 | 13°46'01 | 16° 2 | 25°52' 4 | 4°59' 25 | 25°29' 25 | 1°35' 1 | 16°25' 16 | 8° 3 | 20°45' 20 | 24°37' 24 | 2°30' 2 | 2°42' 2 | 3°28' 1 | 16°52' 16 | W 27 |
| T 28 | 6 57 33 | 14°47'09 | 27°51' 27 | 17°19' 6 | 14° 26 | 10°10' 10 | 1°30' 1 | 16°24' 16 | 8° 6 | 20°44' 20 | 24°36' 24 | 2°22' 2 | 2°39' 2 | 3°35' 1 | 16°57' 16 | T 28 |
| F 29 | 7 1 30 | 15°48'16 | 9°11' 42 | 28°47' 9 | 28°47' 9 | 7°30' 7 | 1°27' 1 | 16°23' 16 | 8° 8 | 20°42' 20 | 24°35' 24 | 2°13' 2 | 2°36' 2 | 3°41' 1 | 17° 2 | F 29 |
| S 30 | 7 5 27 | 16°49'23 | 21°39' 0 | 13°15' 8 | 8°45' 27 | 31° 1 | 1°23' 1 | 16°21' 16 | 8°10' 8 | 20°40' 20 | 24°34' 24 | 2° 0 | 2°33' 2 | 3°48' 1 | 17° 8 | S 30 |
| S 31 | 7 9 23 | 17°50'29 | 3°11' 43 | 13°44' 1 | 10°13' 1 | 28°11' 28 | 1°11' 1 | 16°20' 16 | 8°13' 8 | 20°39' 20 | 24°33' 24 | 1°47' 1 | 2°30' 2 | 3°11' 1 | 17°13' 17 | S 31 |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|------|-------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | lat |
| F 1 | 22s54 | 16n22 | 4s10 | 17s17 | 2n53 | 19s57 | 0n45 | 13s38 | 0n39 | 20n19 | 0s46 | 7n17 | 1n59 | 9s34 | 0s46 | 21n19 |
| S 2 | 23 0 | 17 49 | 4 39 | 17 18 | 2 52 | 20 14 | 0 43 | 13 51 | 0 39 | 20 17 | 0 46 | 7 17 | 1 59 | 9 34 | 0 46 | 21 19 |
| S 3 | 23 5 | 18 29 | 4 56 | 17 23 | 2 50 | 20 30 | 0 40 | 14 4 | 0 39 | 20 16 | 0 46 | 7 16 | 2 0 | 9 33 | 0 46 | 21 20 |
| M 4 | 23 9 | 18 20 | 5 0 | 17 30 | 2 46 | 20 46 | 0 38 | 14 17 | 0 38 | 20 15 | 0 46 | 7 16 | 2 0 | 9 33 | 0 46 | 21 20 |
| T 5 | 23 14 | 17 21 | 4 51 | 17 40 | 2 42 | 21 1 | 0 36 | 14 30 | 0 38 | 20 14 | 0 45 | 7 16 | 2 0 | 9 32 | 0 46 | 21 20 |
| W 6 | 23 17 | 15 33 | 4 28 | 17 52 | 2 37 | 21 15 | 0 33 | 14 43 | 0 37 | 20 12 | 0 45 | 7 15 | 2 0 | 9 32 | 0 46 | 21 20 |
| T 7 | 23 21 | 13 1 | 3 52 | 18 6 | 2 31 | 21 29 | 0 31 | 14 56 | 0 37 | 20 11 | 0 45 | 7 15 | 2 1 | 9 31 | 0 46 | 21 21 |
| F 8 | 23 24 | 9 51 | 3 4 | 18 22 | 2 24 | 21 42 | 0 29 | 15 9 | 0 36 | 20 10 | 0 45 | 7 15 | 2 1 | 9 30 | 0 46 | 21 21 |
| S 9 | 23 26 | 6 9 | 2 6 | 18 38 | 2 17 | 21 55 | 0 26 | 15 21 | 0 36 | 20 9 | 0 45 | 7 15 | 2 1 | 9 30 | 0 46 | 21 21 |
| S 10 | 23 28 | 2 4 | 1 0 | 18 56 | 2 10 | 22 7 | 0 24 | 15 34 | 0 35 | 20 8 | 0 44 | 7 15 | 2 2 | 9 29 | 0 46 | 21 21 |
| M 11 | 23 29 | 2s13 | 0n11 | 19 14 | 2 2 | 22 18 | 0 21 | 15 46 | 0 35 | 20 7 | 0 44 | 7 15 | 2 2 | 9 29 | 0 45 | 21 21 |
| T 12 | 23 30 | 6 31 | 1 23 | 19 33 | 1 54 | 22 28 | 0 19 | 15 58 | 0 34 | 20 6 | 0 44 | 7 14 | 2 2 | 9 28 | 0 45 | 21 22 |
| W 13 | 23 31 | 10 33 | 2 33 | 19 52 | 1 46 | 22 38 | 0 16 | 16 10 | 0 33 | 20 5 | 0 44 | 7 14 | 2 2 | 9 27 | 0 45 | 21 22 |
| T 14 | 23 31 | 14 3 | 3 33 | 20 11 | 1 38 | 22 48 | 0 14 | 16 22 | 0 33 | 20 3 | 0 44 | 7 15 | 2 3 | 9 27 | 0 45 | 21 22 |
| F 15 | 23 30 | 16 42 | 4 21 | 20 30 | 1 30 | 22 56 | 0 11 | 16 34 | 0 32 | 20 2 | 0 43 | 7 15 | 2 3 | 9 26 | 0 45 | 21 22 |
| S 16 | 23 29 | 18 13 | 4 51 | 20 49 | 1 21 | 23 4 | 0 9 | 16 46 | 0 32 | 20 1 | 0 43 | 7 15 | 2 3 | 9 25 | 0 45 | 21 23 |
| S 17 | 23 28 | 18 27 | 5 0 | 21 7 | 1 13 | 23 11 | 0 7 | 16 58 | 0 31 | 20 0 | 0 43 | 7 15 | 2 3 | 9 24 | 0 45 | 21 23 |
| M 18 | 23 26 | 17 23 | 4 49 | 21 25 | 1 4 | 23 17 | 0 4 | 17 9 | 0 31 | 20 0 | 0 43 | 7 15 | 2 4 | 9 24 | 0 45 | 21 23 |
| T 19 | 23 24 | 15 11 | 4 18 | 21 43 | 0 56 | 23 23 | 0 2 | 17 21 | 0 30 | 19 59 | 0 43 | 7 15 | 2 4 | 9 23 | 0 45 | 21 23 |
| W 20 | 23 21 | 12 7 | 3 32 | 22 0 | 0 48 | 23 28 | 0s 1 | 17 32 | 0 30 | 19 58 | 0 42 | 7 16 | 2 4 | 9 22 | 0 45 | 21 24 |
| T 21 | 23 17 | 8 29 | 2 36 | 22 16 | 0 40 | 23 32 | 0 3 | 17 43 | 0 29 | 19 57 | 0 42 | 7 16 | 2 5 | 9 21 | 0 45 | 21 24 |
| F 22 | 23 14 | 4 33 | 1 32 | 22 31 | 0 31 | 23 36 | 0 6 | 17 54 | 0 28 | 19 56 | 0 42 | 7 16 | 2 5 | 9 20 | 0 45 | 21 24 |
| S 23 | 23 9 | 0 31 | 0 26 | 22 46 | 0 23 | 23 39 | 0 8 | 18 5 | 0 28 | 19 55 | 0 42 | 7 17 | 2 5 | 9 20 | 0 45 | 21 24 |
| S 24 | 23 5 | 3n24 | 0s40 | 22 59 | 0 15 | 23 41 | 0 11 | 18 16 | 0 27 | 19 55 | 0 41 | 7 17 | 2 5 | 9 19 | 0 45 | 21 25 |
| M 25 | 23 0 | 7 6 | 1 42 | 23 12 | 0 7 | 23 42 | 0 13 | 18 26 | 0 27 | 19 54 | 0 41 | 7 18 | 2 6 | 9 18 | 0 45 | 21 25 |
| T 26 | 22 54 | 10 28 | 2 39 | 23 24 | 0s 0 | 23 43 | 0 15 | 18 37 | 0 26 | 19 53 | 0 41 | 7 18 | 2 6 | 9 17 | 0 45 | 21 25 |
| W 27 | 22 48 | 13 22 | 3 28 | 23 35 | 0 8 | 23 43 | 0 18 | 18 47 | 0 25 | 19 52 | 0 41 | 7 19 | 2 6 | 9 16 | 0 45 | 21 26 |
| T 28 | 22 41 | 15 42 | 4 9 | 23 44 | 0 15 | 23 42 | 0 20 | 18 57 | 0 25 | 19 52 | 0 40 | 7 20 | 2 6 | 9 15 | 0 45 | 21 26 |
| F 29 | 22 34 | 17 23 | 4 38 | 23 53 | 0 22 | 23 40 | 0 22 | 19 7 | 0 24 | 19 51 | 0 40 | 7 20 | 2 7 | 9 14 | 0 45 | 21 26 |
| S 30 | 22 27 | 18 20 | 4 56 | 24 0 | 0 29 | 23 38 | 0 25 | 19 17 | 0 24 | 19 51 | 0 40 | 7 21 | 2 7 | 9 13 | 0 45 | 21 26 |
| S 31 | 22s19 | 18n27 | 5s 0 | 24s 6 | 0s36 | 23s35 | 0s27 | 19s27 | 0n23 | 19n50 | 0s40 | 7n22 | 2n 7 | 9s12 | 0s45 | 21n27 |

Julian Day Number = 2239681.5, Delta T = 07m21s

Ecliptic obliquity = 23°30'43, Nutation = 0°00'00, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°38'53, Lahiri = 15°45'53 Julian Calendar 1 Dec. 1419 == Greg. Calendar 10 Dec. 1419