

Astrodienst Ephemeris Tables for the year 1731

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

JANUARY 1731 00:00 UT

| Day | Sid.t | 0 | D | ğ | φ | ď | 4 | ħ |)∤(| 并 | В | R | Ω | Ç | ķ | Day |
|------|---------|----------|-----------------|----------------|----------------|---------------|---------------|----------------|----------------|-----------------|----------------|----------------|----------------|--------------|----------------|------|
| M 1 | 6 40 29 | 10중10'51 | 3 <u>₽</u> 42 | 10 ට 29 | 9°R23 | 20≈42 | 9°R45 | 16) 13 | 3 ~ 750 | 13°R 8 | 15 Ω 22 | 17 る 26 | 17 石 48 | 279548 | 24°R38 | M 1 |
| T 2 | 6 44 26 | 11°12'01 | 16°23 | 12° 6 | 9≈22 | 21°29 | 9 m 44 | 16°17 | 3°53 | 13 I I 6 | 15°23 | 17°R26 | 17°45 | 27°54 | 24 Y 38 | T 2 |
| W 3 | 6 48 22 | 12°13'11 | 29°28 | 13°44 | 9°19 | 22°16 | 9°43 | 16°22 | 3°56 | 13° 5 | 15°23 | 17°26 | 17°42 | 28° 1 | 24°38 | W 3 |
| T 4 | 6 52 19 | 13°14'21 | 12ML58 | 15°22 | 9°14 | 23° 3 | 9°41 | 16°26 | 3°59 | 13° 3 | 15°24 | 17°25 | 17°38 | 28° 7 | 24°38 | T 4 |
| F 5 | 6 56 15 | 14°15'32 | 26°57 | 17° 1 | 9° 5 | 23°50 | 9°39 | 16°31 | 4° 2 | 13° 2 | 15°24 | 17°25 | 17°35 | 28°14 | 24°D38 | F 5 |
| S 6 | 7 0 12 | 15°16'43 | 11 × 122 | 18°40 | 8°55 | 24°37 | 9°37 | 16°36 | 4° 5 | 13° 0 | 15°25 | 17°25 | 17°32 | 28°21 | 24°38 | S 6 |
| S 7 | 7 4 8 | 16°17'53 | 26°10 | 20°19 | 8°42 | 25°23 | 9°35 | 16°40 | 4° 8 | 12°59 | 15°25 | 17°25 | 17°29 | 28°27 | 24°38 | S 7 |
| M 8 | 7 8 5 | 17°19'04 | 11 궁 14 | 21°59 | 8°26 | 26°10 | 9°32 | 16°45 | 4°11 | 12°58 | 15°25 | 17°25 | 17°26 | 28°34 | 24°38 | M 8 |
| T 9 | 7 12 2 | 18°20'14 | 26°27 | 23°39 | 8° 9 | 26°57 | 9°30 | 16°50 | 4°14 | 12°56 | 15°26 | 17°25 | 17°22 | 28°41 | 24°39 | T 9 |
| W10 | 7 15 58 | 19°21'23 | 11 ≈ 37 | 25°20 | 7°48 | 27°44 | 9°27 | 16°55 | 4°17 | 12°55 | 15°26 | 17°25 | 17°19 | 28°47 | 24°39 | W10 |
| T 11 | 7 19 55 | 20°22'32 | 26°37 | 27° 1 | 7°26 | 28°31 | 9°24 | 17° 0 | 4°20 | 12°54 | 15°26 | 17°24 | 17°16 | 28°54 | 24°39 | T 11 |
| F 12 | 7 23 51 | 21°23'41 | 11) 18 | 28°42 | 7° 1 | 29°18 | 9°21 | 17° 6 | 4°23 | 12°52 | 15°27 | 17°24 | 17°13 | 29° 1 | 24°40 | F 12 |
| S 13 | 7 27 48 | 22°24'48 | 25°35 | 0≈24 | 6°34 | 0 米 5 | 9°17 | 17°11 | 4°25 | 12°51 | 15°27 | 17°23 | 17°10 | 29° 7 | 24°40 | S 13 |
| S 14 | 7 31 44 | 23°25'55 | 9 Ƴ 25 | 2° 5 | 6° 5 | 0°52 | 9°14 | 17°16 | 4°28 | 12°50 | 15°27 | 17°23 | 17° 7 | 29°14 | 24°41 | S 14 |
| M15 | 7 35 41 | 24°27'01 | 22°50 | 3°47 | 5°35 | 1°39 | 9°10 | 17°21 | 4°31 | 12°49 | 15°27 | 17°D23 | 17° 3 | 29°21 | 24°41 | M15 |
| T 16 | 7 39 37 | 25°28'06 | 5 8 51 | 5°29 | 5° 3 | 2°25 | 9° 6 | 17°27 | 4°34 | 12°48 | 15°27 | 17°23 | 17° 0 | 29°27 | 24°42 | T 16 |
| W17 | 7 43 34 | 26°29'10 | 18°31 | 7°11 | 4°29 | 3°12 | 9° 2 | 17°32 | 4°36 | 12°47 | 15°27 | 17°23 | 16°57 | 29°34 | 24°43 | W17 |
| T 18 | 7 47 31 | 27°30'13 | 0∏54 | 8°53 | 3°54 | 3°59 | 8°58 | 17°38 | 4°39 | 12°45 | 15°R27 | 17°24 | 16°54 | 29°41 | 24°43 | T 18 |
| F 19 | 7 51 27 | 28°31'16 | 13° 3 | 10°35 | 3°18 | 4°46 | 8°53 | 17°44 | 4°41 | 12°44 | 15°27 | 17°25 | 16°51 | 29°47 | 24°44 | F 19 |
| S 20 | 7 55 24 | 29°32'17 | 25° 3 | 12°16 | 2°42 | 5°33 | 8°49 | 17°49 | 4°44 | 12°43 | 15°27 | 17°27 | 16°48 | 29°54 | 24°45 | S 20 |
| S 21 | 7 59 20 | 0≈33'17 | 6956 | 13°57 | 2° 5 | 6°19 | 8°44 | 17°55 | 4°46 | 12°42 | 15°27 | 17°27 | 16°44 | 0Ω 1 | 24°46 | S 21 |
| M22 | 8 3 17 | 1°34'17 | 18°45 | 15°37 | 1°28 | 7° 6 | 8°39 | 18° 1 | 4°49 | 12°41 | 15°27 | 17°R28 | 16°41 | 0° 7 | 24°47 | M22 |
| T 23 | 8 7 13 | 2°35'16 | 0€33 | 17°15 | 0°51 | 7°53 | 8°34 | 18° 7 | 4°51 | 12°40 | 15°27 | 17°27 | 16°38 | 0°14 | 24°48 | T 23 |
| W24 | 8 11 10 | 3°36'13 | 12°22 | 18°52 | 0°14 | 8°40 | 8°29 | 18°13 | 4°54 | 12°39 | 15°27 | 17°26 | 16°35 | 0°20 | 24°49 | W24 |
| T 25 | 8 15 6 | 4°37'10 | 24°13 | 20°28 | 29 궁 38 | 9°26 | 8°23 | 18°19 | 4°56 | 12°38 | 15°26 | 17°24 | 16°32 | 0°27 | 24°51 | T 25 |
| F 26 | 8 19 3 | 5°38'06 | 6 m 9 | 22° 1 | 29° 2 | 10°13 | 8°18 | 18°25 | 4°58 | 12°37 | 15°26 | 17°21 | 16°28 | 0°34 | 24°52 | F 26 |
| S 27 | 8 23 0 | 6°39'01 | 18°13 | 23°31 | 28°28 | 10°59 | 8°12 | 18°31 | 5° 0 | 12°37 | 15°26 | 17°18 | 16°25 | 0°40 | 24°53 | S 27 |
| S 28 | 8 26 56 | 7°39'55 | 0 ჲ 25 | 24°58 | 27°55 | 11°46 | 8° 6 | 18°37 | 5° 3 | 12°36 | 15°25 | 17°14 | 16°22 | 0°47 | 24°54 | S 28 |
| M29 | 8 30 53 | 8°40'48 | 12°51 | 26°20 | 27°24 | 12°33 | 8° 0 | 18°44 | 5° 5 | 12°35 | 15°25 | 17°12 | 16°19 | 0°54 | 24°56 | M29 |
| T 30 | 8 34 49 | 9°41'41 | 25°31 | 27°39 | 26°54 | 13°19 | 7°54 | 18°50 | 5° 7 | 12°34 | 15°25 | 17°10 | 16°16 | 1° 0 | 24°57 | T 30 |
| W31 | 8 38 46 | 10≈42'33 | 8 M .30 | 28≈52 | 26 궁 26 | 14 米 6 | 7 M 48 | 18 ∺ 56 | 5 ₹ 9 | 12 II 33 | 15 ≏ 24 | 17°D 9 | 16 ට 13 | 1 0 7 | 24 Y 59 | W31 |

| Day | 0 | D | ğ | · | ð | 4 | ħ |)Å(| 1 | Р | S C | \$ ¢ | Ŗ |
|------|--------|----------------|-------------|---------------|--------------|-----------|-----------|-------------|--------------|------------|-------------|----------|-----------|
| | decl | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl de | cl decl | decl lat |
| M 1 | 23 s 5 | | | | 15 s40 1 s 7 | 9n 1 1n11 | | | 20n54 1s31 | 9n42 17n 5 | | | 9n30 0s 4 |
| T 2 | 23 0 | 11 20 5 18 | 24 48 1 53 | | 15 25 1 6 | 9 1 1 11 | 7 21 2 5 | 20 49 0 8 | 20 54 1 31 | | 22 20 22 | | 9 30 0 4 |
| W 3 | 22 55 | | 24 41 1 50 | | 15 9 1 6 | - | 7 19 2 5 | | 20 54 1 31 | | 22 20 22 | - | 9 30 0 4 |
| T 4 | - | | 24 33 1 59 | | | 9 3 1 11 | 7 17 2 5 | | | | 22 20 22 | | 9 30 0 4 |
| F 5 | 22 43 | | - | | 14 37 1 5 | - | 7 15 2 5 | | 20 54 1 31 | | 22 20 22 | | 9 29 0 4 |
| S 6 | 22 36 | 25 16 3 8 | 24 12 2 | 3 15 11 2 58 | 14 21 1 4 | 9 5 1 12 | 7 13 2 5 | 20 52 0 8 | 20 54 1 31 | 9 44 17 8 | 22 20 22 | 19 19 34 | 9 29 0 4 |
| S 7 | 22 29 | 25 21 1 56 | 23 59 2 | 4 15 0 3 13 | 14 4 1 3 | 9 6 1 12 | 7 11 2 5 | 20 52 0 8 | 20 54 1 31 | 9 44 17 9 | 22 20 22 | 20 19 32 | 9 29 0 4 |
| M 8 | 22 21 | 23 34 0 34 | 23 44 2 : | 5 14 49 3 29 | 13 48 1 3 | 9 7 1 12 | 7 9 2 5 | 20 53 0 8 | 20 53 1 30 | 9 45 17 9 | 22 20 22 | 20 19 30 | 9 29 0 4 |
| T 9 | 22 13 | 20 5 0n50 | 23 28 2 | 6 14 39 3 44 | 13 31 1 2 | 9 9 1 13 | 7 7 2 4 | 20 53 0 8 | 20 53 1 30 | 9 45 17 10 | 22 20 22 | 21 19 28 | 9 29 0 5 |
| W10 | 22 5 | 15 14 2 11 | 23 10 2 | 6 14 29 4 0 | 13 14 1 2 | 9 10 1 13 | 7 5 2 4 | 20 54 0 8 | 20 53 1 30 | 9 46 17 10 | 22 20 22 | 21 19 26 | 9 29 0 5 |
| T 11 | 21 56 | 9 30 3 21 | 22 51 2 | 6 14 20 4 15 | 12 58 1 1 | 9 11 1 13 | 7 3 2 4 | 20 54 0 8 | 20 53 1 30 | 9 46 17 11 | 22 20 22 | 21 19 24 | 9 30 0 5 |
| F 12 | 21 46 | 3 22 4 17 | 22 30 2 | 6 14 11 4 30 | 12 41 1 0 | 9 13 1 14 | 7 0 2 4 | 20 55 0 8 | 20 53 1 30 | 9 47 17 12 | 22 20 22 | 22 19 21 | 9 30 0 5 |
| S 13 | 21 36 | 2n45 4 55 | 22 7 2 | 4 14 3 4 45 | 12 24 1 0 | 9 14 1 14 | 6 58 2 4 | 20 56 0 8 | 20 53 1 30 | 9 47 17 12 | 22 21 22 | 22 19 19 | 9 30 0 5 |
| S 14 | 21 26 | 8 34 5 15 | 21 43 2 | 3 13 56 5 0 | 12 6 0 59 | 9 16 1 14 | 6 56 2 4 | 20 56 0 8 | 20 53 1 30 | 9 48 17 13 | 22 21 22 | 23 19 17 | 9 30 0 5 |
| M15 | 21 16 | 13 47 5 17 | 21 17 2 | 1 13 49 5 14 | 11 49 0 59 | 9 18 1 14 | 6 54 2 4 | 20 57 0 8 | 20 53 1 30 | 9 48 17 13 | 22 21 22 | 23 19 15 | 9 30 0 5 |
| T 16 | 21 5 | 18 14 5 2 | 20 50 1 5 | 8 13 43 5 28 | 11 32 0 58 | 9 19 1 15 | 6 52 2 4 | 20 57 0 8 | 20 53 1 30 | 9 49 17 14 | 22 21 22 | 23 19 12 | 9 30 0 5 |
| W17 | 20 53 | 21 43 4 32 | 20 21 1 5 | 5 13 38 5 42 | 11 14 0 57 | 9 21 1 15 | 6 49 2 3 | 20 58 0 8 | 20 52 1 30 | 9 49 17 15 | 22 21 22 | 24 19 10 | 9 30 0 5 |
| _ | 20 41 | 24 8 3 51 | 19 51 1 5 | 1 13 33 5 55 | 10 56 0 57 | 9 23 1 15 | 6 47 2 3 | 20 58 0 8 | 20 52 1 30 | 9 50 17 15 | 22 20 22 | 24 19 8 | 9 31 0 5 |
| | 20 29 | 25 22 3 0 | 19 19 1 40 | 6 13 29 6 8 | 10 39 0 56 | 9 25 1 15 | 6 45 2 3 | 20 58 0 8 | 20 52 1 30 | 9 50 17 16 | | 25 19 6 | 9 31 0 5 |
| S 20 | 20 17 | 25 24 2 1 | 18 46 1 4 | 1 13 25 6 20 | 10 21 0 55 | 9 27 1 16 | 6 42 2 3 | 20 59 0 8 | 20 52 1 30 | 9 51 17 16 | 22 20 22 | 25 19 4 | 9 31 0 5 |
| S 21 | 20 4 | 24 16 0 58 | 18 11 1 3: | 5 13 22 6 31 | 10 3 0 55 | 9 29 1 16 | 6 40 2 3 | 20 59 0 8 | 20 52 1 30 | 9 51 17 17 | 22 20 22 | 25 19 1 | 9 31 0 5 |
| M22 | 19 50 | 22 3 0s 7 | 17 35 1 29 | 9 13 20 6 41 | 9 45 0 54 | 9 31 1 16 | 6 38 2 3 | 21 0 0 8 | 20 52 1 30 | 9 52 17 17 | 22 20 22 | 26 18 59 | 9 32 0 6 |
| T 23 | 19 37 | 18 54 1 12 | 16 59 1 2 | 1 13 18 6 51 | 9 27 0 53 | 9 33 1 16 | 6 35 2 3 | 21 0 0 8 | 20 52 1 30 | 9 52 17 18 | 22 20 22 | 26 18 57 | 9 32 0 6 |
| W24 | 19 23 | 14 59 2 14 | 16 21 1 13 | 3 13 17 7 0 | 9 9 0 53 | 9 35 1 16 | 6 33 2 3 | 21 1 0 8 | 20 52 1 30 | 9 53 17 19 | 22 20 22 | 27 18 55 | 9 32 0 6 |
| T 25 | 19 8 | 10 29 3 10 | 15 42 1 | 4 13 17 7 8 | 8 51 0 52 | 9 37 1 17 | 6 30 2 2 | 21 1 0 8 | 20 52 1 30 | 9 54 17 19 | 22 21 22 | 27 18 52 | 9 33 0 6 |
| F 26 | 18 53 | 5 35 3 58 | 15 3 0 5 | 4 13 17 7 15 | 8 33 0 51 | 9 40 1 17 | 6 28 2 2 | 21 2 0 8 | 20 52 1 30 | 9 54 17 20 | 22 21 22 | 27 18 50 | 9 33 0 6 |
| S 27 | 18 38 | 0 26 4 36 | 14 23 0 4 | 4 13 17 7 21 | 8 14 0 51 | 9 42 1 17 | 6 25 2 2 | 21 2 0 8 | 20 52 1 30 | 9 55 17 20 | 22 21 22 | 28 18 48 | 9 33 0 6 |
| S 28 | 18 23 | 4 s47 5 2 | 13 44 0 32 | 2 13 19 7 27 | 7 56 0 50 | 9 44 1 17 | 6 23 2 2 | 21 2 0 8 | 20 52 1 30 | 9 56 17 21 | 22 22 22 | 28 18 46 | 9 34 0 6 |
| M29 | 18 7 | 9 54 5 14 | 13 4 0 20 | 0 13 20 7 31 | 7 37 0 49 | 9 47 1 18 | 6 20 2 2 | 21 3 0 8 | 20 52 1 30 | 9 56 17 21 | 22 22 22 | 29 18 43 | 9 34 0 6 |
| T 30 | 17 51 | 14 43 5 12 | 12 25 0 | 7 13 22 7 35 | 7 19 0 49 | 9 49 1 18 | 6 18 2 2 | 21 3 0 8 | 20 51 1 30 | 9 57 17 22 | 22 22 22 | 29 18 41 | 9 35 0 6 |
| W31 | 17 s35 | 18 s 59 4 s 54 | 11 s47 On ' | 7 13 s24 7n38 | 7 s 0 0 s 48 | 9n52 1n18 | 6s15 2s 2 | 21 s 3 0n 8 | 20n51 1s29 | 9n58 17n23 | 22 s22 22 s | 29 18n39 | 9n35 0s 6 |

Julian Day Number = 2353294.5, Delta T = 11.36 sec Ecliptic obliquity = 23°28'30, Nutation = $0^{\circ}00'17$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^{\circ}59'06$, Lahiri = $20^{\circ}06'06$ Greg. Calendar

00:00 UT FEBRUARY 1731

| Day | Sid.t | 0 | D | ğ | φ | ď | 4 | ħ |)Å(| 卉 | Р | n | Ω | Ç | ę, | Day |
|------|----------|--------------------|-----------------|---------------|----------------|----------------|---------------|----------------|----------------|--------|----------------|----------------|----------------|---------------|---------------|------|
| T 1 | 8 42 42 | 11≈43'23 | 21 M .51 | 29≈59 | 26°R 0 | 14) 52 | 7°R42 | 19 米 3 | 5 ₹ 11 | 12°R33 | 15°R24 | 17る 9 | 16 ට 9 | 1Ω14 | 25 ° 0 | T 1 |
| F 2 | 8 46 39 | 12°44'14 | 5 ₹ 36 | 0 ¥ 59 | 25 궁 36 | 15°39 | 7 m 35 | 19° 9 | 5°13 | 12Ⅲ32 | 15 ≏ 23 | 17°11 | 16° 6 | 1°20 | 25° 2 | F 2 |
| S 3 | 8 50 35 | 13°45'03 | 19°45 | 1°51 | 25°14 | 16°25 | 7°28 | 19°16 | 5°15 | 12°31 | 15°23 | 17°12 | 16° 3 | 1°27 | 25° 4 | S 3 |
| S 4 | 8 54 32 | 14°45'51 | 4 궁 19 | 2°35 | 24°55 | 17°12 | 7°22 | 19°22 | 5°17 | 12°31 | 15°22 | 17°14 | 16° 0 | 1°34 | 25° 5 | S 4 |
| M 5 | 8 58 29 | 15°46'38 | 19°12 | 3°10 | 24°38 | 17°58 | 7°15 | 19°29 | 5°18 | 12°30 | 15°22 | 17°R14 | 15°57 | 1°40 | 25° 7 | M 5 |
| T 6 | 9 2 25 | 16°47'24 | 4≈20 | 3°35 | 24°24 | 18°44 | 7° 8 | 19°35 | 5°20 | 12°30 | 15°21 | 17°13 | 15°54 | 1°47 | 25° 9 | T 6 |
| W 7 | 9 6 22 | 17°48'09 | 19°32 | 3°50 | 24°12 | 19°31 | 7° 1 | 19°42 | 5°22 | 12°29 | 15°20 | 17°11 | 15°50 | 1°54 | 25°11 | W 7 |
| T 8 | 9 10 18 | 18°48'52 | 4) (40 | 3°R54 | 24° 2 | 20°17 | 6°54 | 19°49 | 5°23 | 12°29 | 15°20 | 17° 7 | 15°47 | 2° 0 | 25°13 | T 8 |
| F 9 | 9 14 15 | 19°49'34 | 19°34 | 3°48 | 23°55 | 21° 3 | 6°47 | 19°55 | 5°25 | 12°28 | 15°19 | 17° 2 | 15°44 | 2° 7 | 25°15 | F 9 |
| S 10 | 9 18 11 | 20°50'14 | 4Υ 5 | 3°31 | 23°51 | 21°50 | 6°39 | 20° 2 | 5°27 | 12°28 | 15°18 | 16°57 | 15°41 | 2°14 | 25°17 | S 10 |
| S 11 | 9 22 8 | 21°50'53 | 18° 8 | 3° 4 | 23°D49 | 22°36 | 6°32 | 20° 9 | 5°28 | 12°27 | 15°17 | 16°52 | 15°38 | 2°20 | 25°19 | S 11 |
| M12 | 9 26 4 | 22°51'30 | 1 8 43 | 2°27 | 23°49 | 23°22 | 6°25 | 20°16 | 5°30 | 12°27 | 15°16 | 16°48 | 15°34 | 2°27 | 25°21 | M12 |
| T 13 | 9 30 1 | 23°52'05 | 14°50 | 1°42 | 23°52 | 24° 8 | 6°17 | 20°23 | 5°31 | 12°27 | 15°16 | 16°46 | 15°31 | 2°33 | 25°24 | T 13 |
| W14 | 9 33 58 | 24°52'38 | 27°32 | 0°49 | 23°57 | 24°54 | 6°10 | 20°30 | 5°32 | 12°26 | 15°15 | 16°D46 | 15°28 | 2°40 | 25°26 | W14 |
| T 15 | 9 37 54 | 25°53'10 | 9Д53 | 29≈50 | 24° 4 | 25°41 | 6° 2 | 20°37 | 5°34 | 12°26 | 15°14 | 16°47 | 15°25 | 2°47 | 25°28 | T 15 |
| F 16 | 9 41 51 | 26°53'39 | 21°58 | 28°47 | 24°14 | 26°27 | 5°54 | 20°44 | 5°35 | 12°26 | 15°13 | 16°48 | 15°22 | 2°53 | 25°30 | F 16 |
| S 17 | 9 45 47 | 27°54'07 | 3953 | 27°41 | 24°25 | 27°13 | 5°47 | 20°51 | 5°36 | 12°26 | 15°12 | 16°50 | 15°19 | 3° 0 | 25°33 | S 17 |
| S 18 | 9 49 44 | 28°54'33 | 15°41 | 26°34 | 24°39 | 27°59 | 5°39 | 20°58 | 5°37 | 12°26 | 15°11 | 16°R51 | 15°15 | 3° 7 | 25°35 | S 18 |
| M19 | 9 53 40 | 29°54'57 | 27°27 | 25°28 | 24°55 | 28°45 | 5°31 | 21° 5 | 5°38 | 12°26 | 15°10 | 16°50 | 15°12 | 3°13 | 25°38 | M19 |
| T 20 | 9 57 37 | 0 ¥ 55'20 | 9 Ω 15 | 24°24 | 25°13 | 29°31 | 5°23 | 21°12 | 5°40 | 12°25 | 15° 9 | 16°47 | 15° 9 | 3°20 | 25°40 | T 20 |
| W21 | 10 1 33 | 1°55'40 | 21° 7 | 23°23 | 25°33 | 0 Υ 16 | 5°15 | 21°19 | 5°41 | 12°25 | 15° 8 | 16°43 | 15° 6 | 3°27 | 25°43 | W21 |
| T 22 | 10 5 30 | 2°55'59 | 3 Mg 6 | 22°28 | 25°55 | 1° 2 | 5° 7 | 21°26 | 5°41 | 12°D25 | 15° 7 | 16°36 | 15° 3 | 3°33 | 25°45 | T 22 |
| F 23 | 10 9 27 | 3°56'16 | 15°12 | 21°38 | 26°19 | 1°48 | 5° 0 | 21°34 | 5°42 | 12°25 | 15° 5 | 16°27 | 15° 0 | 3°40 | 25°48 | F 23 |
| S 24 | 10 13 23 | 4°56'31 | 27°28 | 20°54 | 26°44 | 2°34 | 4°52 | 21°41 | 5°43 | 12°25 | 15° 4 | 16°18 | 14°56 | 3°47 | 25°51 | S 24 |
| S 25 | 10 17 20 | 5°56'45 | 9 ≙ 54 | 20°18 | 27°11 | 3°20 | 4°44 | 21°48 | 5°44 | 12°26 | 15° 3 | 16° 8 | 14°53 | 3°53 | 25°54 | S 25 |
| M26 | 10 21 16 | 6°56'57 | 22°31 | 19°48 | 27°40 | 4° 5 | 4°36 | 21°55 | 5°45 | 12°26 | 15° 2 | 16° 0 | 14°50 | 4° 0 | 25°56 | M26 |
| T 27 | 10 25 13 | 7°57'08 | 5 M 20 | 19°25 | 28°10 | 4°51 | 4°28 | 22° 3 | 5°45 | 12°26 | 15° 1 | 15°53 | 14°47 | 4° 7 | 25°59 | T 27 |
| W28 | 10 29 9 | 8) (57'17 | 18 M 24 | 19≈10 | 28 궁 42 | 5 Ƴ 36 | 4 Mp 20 | 22) 10 | 5 ∡ 746 | 12Ⅲ26 | 14 ≏ 59 | 15 る 49 | 14 궁 44 | 4 Ω 13 | 26 Y 2 | W28 |

| Day | 0 | D | ğ | φ | ď | 4 | ħ |)f(| \f | В | n | v | Ç | ķ |
|--------------|----------------|--------------------------|--------------------------|-------------------------------|--------------------------|--------------------------|--|----------------------|-------------------------------|----------------------------|--------|----------------------|----------|--------|
| | decl | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl | decl | decl dec | l lat |
| T 1 F 2 | | | 11 s10 0n22 | 2 13 s27 7n40 7 13 30 7 41 | 6 s42 0 s47 6 23 0 47 | 9n54 1n18 9 57 1 18 | | | 3 20n51 1 s29 3 20 51 1 29 | | | | n36 9n3 | |
| S 3 | -, - | 25 30 2 26 | | 3 13 33 7 41 | 6 4 0 46 | | | | 3 20 31 1 29 3 20 51 1 29 | | | 22 30 18 | - | |
| S 4 M 5 | - | 24 35 1 11 21 55 0n11 | 9 30 1 9 9 2 1 25 | 100 | 5 46 0 45 5 27 0 45 | | $\begin{bmatrix} 6 & 5 & 2 & 2 \\ 6 & 2 & 2 & 2 \end{bmatrix}$ | | 3 20 51 1 29 3 20 51 1 29 | | | 22 31 18 22 31 18 | | |
| T 6 | 15 50 | | | | 5 8 0 44 | 10 8 1 19 | 5 59 2 1 | 21 6 0 8 | | | | 22 32 18 | | - |
| W 7 T 8 | 15 31 15 12 | 12 19 2 48 6 13 3 51 | 8 17 1 59 8 0 2 15 | | 4 49 0 43 4 30 0 43 | | 5 57 2 1 5 54 2 1 | 21 6 0 8 21 6 0 8 | 3 20 51 1 29 3 20 51 1 29 | | | 22 32 18 22 32 18 | | |
| F 9 | 14 53 | 0n 7 4 37 | 7 47 2 31 | 1 13 58 7 29 | 4 11 0 42 | 10 16 1 20 | 5 51 2 1 | 21 6 0 8 | 3 20 51 1 29 | 10 4 17 27 | 22 23 | 22 33 18 | 18 9 4 | 1 0 7 |
| S 10 S 11 | 14 34 14 15 | 6 17 5 5 11 56 5 12 | | | 3 53 0 41 3 34 0 40 | 10 19 1 20 10 22 1 20 | 5 49 2 1 | | 3 20 51 1 29 3 20 51 1 29 | | | 22 33 18 22 33 18 | | |
| M12 | 13 55 | 16 48 5 2 | 7 38 3 12 | 2 14 12 7 16 | 3 15 0 40 | 10 25 1 20 | 5 43 2 1 | 21 7 0 8 | 3 20 51 1 29 | 10 6 17 29 | 22 25 | 22 34 18 | 11 9 4 | |
| T 13 W14 | 13 35 13 15 | 20 42 4 36 23 29 3 57 | | | 2 56 0 39 2 37 0 38 | 10 28 1 20 10 31 1 20 | 5 40 2 1 5 37 2 1 | 21 7 0 8 21 8 0 8 | 3 20 51 1 29 3 20 51 1 29 | | _ | 22 34 18 22 35 18 | | - |
| T 15 F 16 | 12 55 12 34 | | | | 2 18 0 38 1 59 0 37 | | 5 35 2 1 5 32 2 1 | 21 8 0 8 21 8 0 8 | | | - | | | |
| S 17 | _ | 25 25 2 11 24 35 1 10 | | | | 10 36 1 21 | | | | 10 9 17 31 10 10 17 31 | | 22 35 18 22 36 17 | | |
| S 18 M19 | 11 52 11 31 | 22 39 0 6 19 46 0s57 | | 1 14 40 6 40 2 14 44 6 33 | | 10 42 1 21 10 45 1 21 | 5 26 2 1 5 23 2 1 | | | 10 11 17 32 10 12 17 32 | - | | | |
| T 20 | 11 10 | | | | 1 2 0 35 0 43 0 34 | | 5 21 2 1 | | 3 20 31 1 28 3 20 51 1 28 | | | | | - |
| W21 T 22 | 10 48 | | 10 25 3 31 | | 0 24 0 33 | | 5 18 2 1 | | 3 20 52 1 28 | | | | | |
| F 23 | 10 27 10 5 | | 10 51 3 23 11 16 3 13 | 3 14 55 6 11 3 14 58 6 4 | 0 5 0 33 0n14 0 32 | 10 54 1 21 10 57 1 21 | 5 15 2 1 5 12 2 1 | | 8 20 52 1 28 8 20 52 1 28 | | | | - | - |
| S 24 | 9 43 | 3 s26 4 51 | 11 40 3 2 | 2 15 1 5 56 | 0 33 0 31 | 11 0 1 21 | 5 9 2 1 | 21 10 0 8 | 3 20 52 1 28 | 10 16 17 34 | 22 29 | 22 38 17 | 43 9 5 | 3 0 8 |
| S 25 M26 | 9 21 8 58 | | 12 3 2 50 12 24 2 38 | | 0 51 0 31 1 10 0 30 | - | 5 6 2 1 5 3 2 1 | | 8 20 52 1 28 8 20 52 1 28 | 10 16 17 35 10 17 17 35 | | | | |
| T 27 | 8 36 | | 12 24 2 38 | | 1 29 0 29 | | 5 0 2 1 | | 3 20 52 1 28 3 20 52 1 28 | 10 18 17 35 | 22 32 | 22 39 17 | 36 9 5 | |
| W28 | 8 s 1 3 | 21 s28 4 s19 | 13 s 1 2n1 | 1 15 s10 5n24 | 1n48 0s28 | 11n12 1n22 | 4s57 2s 1 | 21 s10 On 8 | 8 20n52 1 s28 | 10n19 17n36 | 22 s32 | 22 s40 17 | n34 9n5 | 6 0s 8 |

Julian Day Number = 2353325.5, Delta T = 11.37 sec Ecliptic obliquity = $23^{\circ}28'30$, Nutation = $0^{\circ}00'17$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^{\circ}59'10$, Lahiri = $20^{\circ}06'11$ Greg. Calendar

MARCH 1731 00:00 UT

| _ | 1 | | | 1 | 1 | 1 | | 1 1 | | 1 | 1 | 1 | | | 1 | |
|------|----------|--------------------|-----------------|----------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|----------------|------|
| Day | Sid.t | 0 | D | ğ | φ | ð | 4 | ħ |)∤(| ¥ | Р | ß | Ω | Ç | , k | Day |
| T 1 | 10 33 6 | 9) (57'24 | 1 ∡ 743 | 19°R 1 | 29 궁 15 | 6 Υ 22 | 4°R13 | 22) 17 | 5 ∡ 147 | 12Ⅲ26 | 14°R58 | 15°R47 | 14 궁 40 | $4\Omega 20$ | 26 Y 5 | T 1 |
| F 2 | 10 37 2 | 10°57'30 | 15°19 | 18°D59 | 29°49 | 7° 8 | 4MD 5 | 22°25 | 5°47 | 12°27 | 14 ♀ 57 | 15°D47 | 14°37 | 4°27 | 26° 8 | F 2 |
| S 3 | 10 40 59 | 11°57'34 | 29°15 | 19≈ 3 | 0≈25 | 7°53 | 3°57 | 22°32 | 5°48 | 12°27 | 14°55 | 15 云 47 | 14°34 | 4°33 | 26°11 | S 3 |
| S 4 | 10 44 56 | 12°57'37 | 13중30 | 19°13 | 1° 3 | 8°38 | 3°49 | 22°39 | 5°48 | 12°27 | 14°54 | 15°R48 | 14°31 | 4°40 | 26°14 | S 4 |
| M 5 | 10 44 50 | 13°57'38 | 28° 3 | 19°29 | 1°41 | 9°24 | 3°42 | 22°47 | 5°48 | 12°28 | 14°53 | 15°48 | 14°28 | 4°47 | 26°17 | M 5 |
| T 6 | 10 52 49 | 14°57'38 | 12≈50 | 19°51 | 2°21 | 10° 9 | 3°34 | 22°54 | 5°49 | 12°28 | 14°51 | 15°45 | 14°25 | 4°53 | 26°20 | T 6 |
| W 7 | 10 56 45 | 15°57'36 | 27°47 | 20°17 | 3° 1 | 10°55 | 3°26 | 23° 1 | 5°49 | 12°28 | 14°50 | 15°39 | 14°21 | 5° 0 | 26°23 | W 7 |
| T 8 | 11 0 42 | 16°57'31 | 12) (43 | 20°49 | 3°43 | 11°40 | 3°19 | 23° 9 | 5°49 | 12°29 | 14°49 | 15°32 | 14°18 | 5° 6 | 26°26 | T 8 |
| F 9 | 11 4 38 | 17°57'25 | 27°32 | 21°24 | 4°26 | 12°25 | 3°11 | 23°16 | 5°49 | 12°29 | 14°47 | 15°22 | 14°15 | 5°13 | 26°30 | F 9 |
| S 10 | 11 8 35 | 18°57'17 | 12 Υ 3 | 22° 4 | 5°10 | 13°10 | 3° 4 | 23°24 | 5°49 | 12°30 | 14°46 | 15°12 | 14°12 | 5°20 | 26°33 | S 10 |
| S 11 | 11 12 31 | 19°57'07 | 26°11 | 22°48 | 5°55 | 13°55 | 2°57 | 23°31 | 5°R49 | 12°30 | 14°44 | 15° 2 | 14° 9 | 5°26 | 26°36 | S 11 |
| M12 | 11 16 28 | 20°56'54 | 9851 | 23°35 | 6°41 | 14°40 | 2°50 | 23°39 | 5°49 | 12°31 | 14°43 | 14°54 | 14° 5 | 5°33 | 26°39 | M12 |
| T 13 | 11 20 25 | 21°56'40 | 23° 4 | 24°25 | 7°27 | 15°26 | 2°43 | 23°46 | 5°49 | 12°32 | 14°41 | 14°48 | 14° 2 | 5°40 | 26°43 | T 13 |
| W14 | 11 24 21 | 22°56'23 | 5 I I50 | 25°19 | 8°15 | 16°11 | 2°35 | 23°53 | 5°49 | 12°32 | 14°40 | 14°44 | 13°59 | 5°46 | 26°46 | W14 |
| T 15 | 11 28 18 | 23°56'04 | 18°15 | 26°16 | 9° 3 | 16°55 | 2°29 | 24° 1 | 5°49 | 12°33 | 14°38 | 14°43 | 13°56 | 5°53 | 26°49 | T 15 |
| F 16 | 11 32 14 | 24°55'43 | 09521 | 27°15 | 9°52 | 17°40 | 2°22 | 24° 8 | 5°49 | 12°34 | 14°37 | 14°D43 | 13°53 | 6° 0 | 26°53 | F 16 |
| S 17 | 11 36 11 | 25°55'19 | 12°16 | 28°18 | 10°42 | 18°25 | 2°15 | 24°16 | 5°48 | 12°35 | 14°35 | 14°R43 | 13°50 | 6° 6 | 26°56 | S 17 |
| S 18 | 11 40 7 | 26°54'53 | 24° 4 | 29°22 | 11°32 | 19°10 | 2° 8 | 24°23 | 5°48 | 12°35 | 14°33 | 14°43 | 13°46 | 6°13 | 27° 0 | S 18 |
| M19 | 11 44 4 | 27°54'25 | 5Ω51 | 0 ¥ 29 | 12°23 | 19°55 | 2° 2 | 24°31 | 5°48 | 12°36 | 14°32 | 14°41 | 13°43 | 6°20 | 27° 3 | M19 |
| T 20 | 11 48 0 | 28°53'55 | 17°41 | 1°39 | 13°15 | 20°40 | 1°56 | 24°38 | 5°47 | 12°37 | 14°30 | 14°36 | 13°40 | 6°26 | 27° 7 | T 20 |
| W21 | 11 51 57 | 29°53'22 | 29°38 | 2°50 | 14° 8 | 21°24 | 1°49 | 24°46 | 5°47 | 12°38 | 14°29 | 14°29 | 13°37 | 6°33 | 27°10 | W21 |
| T 22 | 11 55 54 | 0 Υ 52'47 | 11 mp 45 | 4° 4 | 15° 1 | 22° 9 | 1°43 | 24°53 | 5°46 | 12°39 | 14°27 | 14°19 | 13°34 | 6°40 | 27°14 | T 22 |
| F 23 | 11 59 50 | 1°52'10 | 24° 4 | 5°19 | 15°55 | 22°53 | 1°37 | 25° 0 | 5°46 | 12°40 | 14°25 | 14° 7 | 13°31 | 6°46 | 27°17 | F 23 |
| S 24 | 12 3 47 | 2°51'30 | 6 ₽ 35 | 6°36 | 16°49 | 23°38 | 1°31 | 25° 8 | 5°45 | 12°41 | 14°24 | 13°54 | 13°27 | 6°53 | 27°21 | S 24 |
| S 25 | 12 7 43 | 3°50'49 | 19°19 | 7°56 | 17°44 | 24°22 | 1°26 | 25°15 | 5°44 | 12°42 | 14°22 | 13°40 | 13°24 | 7° 0 | 27°24 | S 25 |
| M26 | 12 11 40 | 4°50'06 | 2M 15 | 9°17 | 18°39 | 25° 7 | 1°20 | 25°23 | 5°44 | 12°43 | 14°20 | 13°28 | 13°21 | 7° 6 | 27°28 | M26 |
| T 27 | 12 15 36 | 5°49'21 | 15°22 | 10°39 | 19°35 | 25°51 | 1°15 | 25°30 | 5°43 | 12°44 | 14°19 | 13°18 | 13°18 | 7°13 | 27°32 | T 27 |
| W28 | 12 19 33 | 6°48'34 | 28°41 | 12° 4 | 20°32 | 26°36 | 1° 9 | 25°37 | 5°42 | 12°45 | 14°17 | 13°11 | 13°15 | 7°20 | 27°35 | W28 |
| T 29 | 12 23 29 | 7°47'46 | 12 × 10 | 13°30 | 21°29 | 27°20 | 1° 4 | 25°45 | 5°41 | 12°46 | 14°15 | 13° 7 | 13°11 | 7°26 | 27°39 | T 29 |
| F 30 | 12 27 26 | 8°46'55 | 25°51 | 14°57 | 22°26 | 28° 4 | 0°59 | 25°52 | 5°40 | 12°47 | 14°14 | 13° 5 | 13° 8 | 7°33 | 27°43 | F 30 |
| S 31 | 12 31 23 | 9 Y 46'03 | 9 ප 43 | 16 ∺ 27 | 23≈24 | 28 Y 48 | 0 m 54 | 25 米 59 | 5 ₹ 39 | 12 Ⅱ 49 | 14 ₽ 12 | 13중 5 | 13 る 5 | $7\Omega 40$ | 27 Y 47 | S 31 |

| Day | 0 | D | ğ | φ | ♂ | 4 | ħ |)∤(| ¥ | Р | W U | Ç | ķ |
|--|--|---|--|---|--|--|--|--|--|---|---|--|---|
| | decl | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl decl | decl de | cl lat |
| T 1 F 2 S 3 | 7 s51 7 28 7 5 | 25 15 2 36 | 13 31 1 | 44 15 12 5 8 | 2 25 0 27 | 11n15 1n22 11 18 1 22 11 21 1 22 | 4s55 2s 1 4 52 2 1 4 49 2 1 | 21 10 0 8 | 20n52 1 s28 20 52 1 28 20 52 1 28 | 10 21 17 36 | 22 32 22 40 | 17 29 9 | 58 0 9 |
| S 4 M 5 T 6 W 7 T 8 F 9 | 6 42 6 19 5 56 5 33 5 9 4 46 | 19 31 1n 5 14 45 2 19 9 3 3 25 2 51 4 16 | 14 0 1 14 6 0 14 10 0 14 12 0 | 3 15 12 4 43 49 15 12 4 35 36 15 11 4 27 24 15 9 4 19 | 3 21 0 25 3 39 0 24 3 58 0 24 4 16 0 23 | - | 4 46 2 1 4 43 2 1 4 40 2 1 4 37 2 1 4 34 2 1 4 31 2 1 | 21 11 0 8 21 11 0 8 21 11 0 8 21 11 0 8 | 20 52 1 28 20 53 1 28 | | 22 32 22 41 22 33 22 42 22 33 22 42 22 34 22 42 | 17 22 10 17 19 10 17 17 10 17 14 10 | 0 0 9 1 0 9 2 0 9 4 0 9 5 0 9 6 0 9 |
| S 10 S 11 M12 T 13 | 4 23 3 59 3 36 3 12 | 9 25 5 3 14 45 4 58 19 9 4 36 | 14 11 0s 14 7 0 14 2 0 | s 0 15 5 4 3 12 15 2 3 55 23 14 58 3 47 | 4 53 0 21 5 11 0 21 5 29 0 20 5 47 0 19 | 11 40 1 22 11 43 1 22 11 45 1 22 | - | 21 11 0 8 | 20 53 1 27 20 53 1 27 | 10 27 17 39 10 28 17 39 | 22 36 22 43 22 38 22 43 22 38 22 44 | 17 10 10 17 7 10 17 5 10 | 7 0 9 8 0 9 9 0 9 10 0 9 |
| W14 T 15 F 16 S 17 | 2 48 2 25 2 1 1 37 | 25 13 2 16 24 44 1 16 | 13 37 0 13 25 1 | 2 14 40 3 15 | 6 5 0 19 6 23 0 18 6 41 0 17 6 59 0 17 | 11 53 1 22 | 4 17 2 1 4 14 2 1 4 11 2 1 4 8 2 1 | | 20 54 1 27 20 54 1 27 20 54 1 27 20 54 1 27 | 10 30 17 40 10 31 17 40 10 32 17 40 10 33 17 41 | 22 40 22 45 22 40 22 45 | 16 58 10 16 55 10 | 14 0 10 |
| S 18 M19 T 20 W21 T 22 F 23 S 24 | 1 14 0 50 0 26 0 3 0n21 0 45 1 8 | 17 4 1 50 12 56 2 46 8 16 3 34 3 15 4 14 1 s58 4 43 | 12 40 1 12 22 1 12 3 1 11 42 1 11 20 1 | | | 12 2 1 22 12 4 1 21 12 7 1 21 | 4 5 2 1 4 2 2 1 3 59 2 1 3 56 2 1 3 53 2 1 3 50 2 1 3 47 2 1 | 21 11 0 8 21 10 0 8 | 20 54 1 27 20 54 1 27 20 55 1 27 | 10 34 17 41 10 35 17 41 10 36 17 41 10 36 17 42 10 37 17 42 | 22 40 22 46 22 40 22 46 22 41 22 47 22 42 22 47 22 44 22 47 | 16 48 10 16 45 10 16 43 10 16 41 10 16 38 10 | 17 0 10 18 0 10 20 0 10 21 0 10 22 0 10 |
| S 25 M26 T 27 W28 T 29 F 30 S 31 | 2 19 2 42 3 6 3 29 | 16 43 4 45 20 32 4 15 23 20 3 32 | 10 5 2 9 37 2 9 8 2 8 38 2 8 7 2 | 8 13 21 2 0 12 13 10 1 53 16 12 59 1 46 19 12 48 1 39 | 9 51 0 10 10 8 0 9 10 25 0 8 10 41 0 8 | 12 17 1 21 12 19 1 21 12 20 1 21 12 22 1 21 | | 21 10 0 8 21 10 0 8 21 10 0 8 21 10 0 8 21 9 0 8 21 9 0 8 | 20 56 1 26 20 56 1 26 | 10 39 17 42 10 40 17 42 10 41 17 42 10 42 17 42 10 42 17 43 | 22 48 22 48 22 49 22 49 22 49 22 49 22 50 22 49 22 50 22 50 | 16 31 10 16 28 10 16 26 10 16 23 10 16 21 10 | 26 0 10 27 0 10 28 0 10 29 0 11 31 0 11 |

Julian Day Number = 2353353.5, Delta T = 11.39 sec Ecliptic obliquity = 23°28'30, Nutation = 0°00'17, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^\circ59'14$, Lahiri = $20^\circ06'14$ Greg. Calendar

APRIL 1731 00:00 UT

| Day | Sid.t | 0 | D | ğ | φ | ♂ | 4 | ħ |)∤(| ¥ | Р | ß | Ω | Ç | ę, | Day |
|------|----------|-------------------|----------------|----------------|------------------|----------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|---------------|----------------|------|
| S 1 | 12 35 19 | 10 Y 45'09 | 23 る 47 | 17) 57 | 24≈22 | 29 Y 32 | 0°R50 | 26) 7 | 5°R38 | 12耳50 | 14°R10 | 13°R 5 | 13る 2 | 7 Ω 46 | 27 Υ 50 | S 1 |
| M 2 | 12 39 16 | 11°44'13 | 8 ≈ 3 | 19°30 | 25°21 | 0817 | 0 m 45 | 26°14 | 5 ₹ 37 | 12°51 | 14 ♀ 9 | 13る 3 | 12°59 | 7°53 | 27°54 | M 2 |
| T 3 | 12 43 12 | 12°43'16 | 22°28 | 21° 4 | 26°20 | 1° 1 | 0°41 | 26°21 | 5°36 | 12°52 | 14° 7 | 13° 0 | 12°56 | 8° 0 | 27°58 | T 3 |
| W 4 | 12 47 9 | 13°42'17 | 7 ₩ 0 | 22°39 | 27°20 | 1°45 | 0°37 | 26°28 | 5°35 | 12°54 | 14° 5 | 12°54 | 12°52 | 8° 6 | 28° 2 | W 4 |
| T 5 | 12 51 5 | 14°41'15 | 21°33 | 24°16 | 28°19 | 2°29 | 0°33 | 26°36 | 5°33 | 12°55 | 14° 4 | 12°44 | 12°49 | 8°13 | 28° 5 | T 5 |
| F 6 | 12 55 2 | 15°40'12 | 6 ℃ 0 | 25°54 | 29°20 | 3°12 | 0°29 | 26°43 | 5°32 | 12°56 | 14° 2 | 12°33 | 12°46 | 8°20 | 28° 9 | F 6 |
| S 7 | 12 58 58 | 16°39'07 | 20°15 | 27°34 | 0 ∺ 20 | 3°56 | 0°25 | 26°50 | 5°31 | 12°58 | 14° 0 | 12°21 | 12°43 | 8°26 | 28°13 | S 7 |
| S 8 | 13 2 55 | 17°38'00 | 4 8 12 | 29°16 | 1°21 | 4°40 | 0°22 | 26°57 | 5°30 | 12°59 | 13°59 | 12° 9 | 12°40 | 8°33 | 28°17 | S 8 |
| M 9 | 13 6 51 | 18°36'51 | 17°47 | 0 Υ 59 | 2°22 | 5°24 | 0°18 | 27° 4 | 5°28 | 13° 1 | 13°57 | 11°59 | 12°37 | 8°39 | 28°21 | M 9 |
| T 10 | 13 10 48 | 19°35'40 | 0 Ⅲ 57 | 2°43 | 3°24 | 6° 8 | 0°15 | 27°11 | 5°27 | 13° 2 | 13°55 | 11°51 | 12°33 | 8°46 | 28°24 | T 10 |
| W11 | 13 14 45 | 20°34'26 | 13°44 | 4°30 | 4°25 | 6°51 | 0°12 | 27°18 | 5°25 | 13° 4 | 13°54 | 11°46 | 12°30 | 8°53 | 28°28 | W11 |
| T 12 | 13 18 41 | 21°33'11 | 26°10 | 6°17 | 5°27 | 7°35 | 0° 9 | 27°25 | 5°24 | 13° 5 | 13°52 | 11°43 | 12°27 | 8°59 | 28°32 | T 12 |
| F 13 | 13 22 38 | 22°31'53 | 89519 | 8° 6 | 6°30 | 8°18 | 0° 7 | 27°32 | 5°22 | 13° 7 | 13°50 | 11°D43 | 12°24 | 9° 6 | 28°36 | F 13 |
| S 14 | 13 26 34 | 23°30'33 | 20°15 | 9°57 | 7°32 | 9° 2 | 0° 4 | 27°39 | 5°21 | 13° 8 | 13°49 | 11°R43 | 12°21 | 9°13 | 28°40 | S 14 |
| S 15 | 13 30 31 | 24°29'10 | 2 N 5 | 11°50 | 8°35 | 9°45 | 0° 2 | 27°46 | 5°19 | 13°10 | 13°47 | 11°42 | 12°17 | 9°19 | 28°44 | S 15 |
| M16 | 13 34 27 | 25°27'46 | 13°54 | 13°44 | 9°38 | 10°29 | 29€59 | 27°53 | 5°17 | 13°11 | 13°45 | 11°41 | 12°14 | 9°26 | 28°48 | M16 |
| T 17 | 13 38 24 | 26°26'19 | 25°47 | 15°39 | 10°42 | 11°12 | 29°58 | 28° 0 | 5°15 | 13°13 | 13°44 | 11°37 | 12°11 | 9°33 | 28°52 | T 17 |
| W18 | 13 42 20 | 27°24'50 | 7 m /48 | 17°36 | 11°45 | 11°55 | 29°56 | 28° 7 | 5°14 | 13°15 | 13°42 | 11°31 | 12° 8 | 9°39 | 28°55 | W18 |
| T 19 | 13 46 17 | 28°23'19 | 20° 2 | 19°35 | 12°49 | 12°39 | 29°55 | 28°14 | 5°12 | 13°16 | 13°40 | 11°23 | 12° 5 | 9°46 | 28°59 | T 19 |
| F 20 | 13 50 14 | 29°21'46 | 2 ≏ 31 | 21°35 | 13°53 | 13°22 | 29°54 | 28°21 | 5°10 | 13°18 | 13°39 | 11°12 | 12° 2 | 9°53 | 29° 3 | F 20 |
| S 21 | 13 54 10 | 0820'10 | 15°16 | 23°37 | 14°57 | 14° 5 | 29°52 | 28°27 | 5° 8 | 13°20 | 13°37 | 11° 0 | 11°58 | 9°59 | 29° 7 | S 21 |
| S 22 | 13 58 7 | 1°18'33 | 28°18 | 25°40 | 16° 2 | 14°48 | 29°51 | 28°34 | 5° 6 | 13°22 | 13°36 | 10°49 | 11°55 | 10° 6 | 29°11 | S 22 |
| M23 | 14 2 3 | 2°16'54 | 11 M 35 | 27°44 | 17° 6 | 15°31 | 29°51 | 28°41 | 5° 4 | 13°23 | 13°34 | 10°38 | 11°52 | 10°13 | 29°15 | M23 |
| T 24 | 14 6 0 | 3°15'14 | 25° 6 | 29°50 | 18°11 | 16°14 | 29°50 | 28°47 | 5° 2 | 13°25 | 13°32 | 10°29 | 11°49 | 10°19 | 29°19 | T 24 |
| W25 | 14 9 56 | 4°13'31 | 8 ₮ 48 | 1856 | 19°16 | 16°57 | 29°50 | 28°54 | 5° 0 | 13°27 | 13°31 | 10°23 | 11°46 | 10°26 | 29°23 | W25 |
| T 26 | 14 13 53 | 5°11'48 | 22°38 | 4° 4 | 20°22 | 17°40 | 29°49 | 29° 0 | 4°58 | 13°29 | 13°29 | 10°19 | 11°42 | 10°33 | 29°27 | T 26 |
| F 27 | 14 17 49 | 6°10'02 | 6 ප 35 | 6°13 | 21°27 | 18°23 | 29°D49 | 29° 7 | 4°56 | 13°31 | 13°28 | 10°D18 | 11°39 | 10°39 | 29°30 | F 27 |
| S 28 | 14 21 46 | 7° 8'15 | 20°37 | 8°22 | 22°33 | 19° 6 | 29°50 | 29°13 | 4°54 | 13°32 | 13°26 | 10°18 | 11°36 | 10°46 | 29°34 | S 28 |
| S 29 | 14 25 43 | 8° 6'27 | 4≈43 | 10°31 | 23°38 | 19°48 | 29°50 | 29°20 | 4°52 | 13°34 | 13°25 | 10°R18 | 11°33 | 10°53 | 29°38 | S 29 |
| M30 | 14 29 39 | 9 8 4'37 | 18 ≈ 52 | 12841 | 24) (44 | 20831 | 29 Ω 50 | 29 米 26 | 4 ₹ 50 | 13 耳 36 | 13 ≏ 23 | 10 궁 18 | 11 궁 30 | $10\Omega 59$ | 29 Y 42 | M30 |

| Day | 0 | J | | ğ | | φ | | С | 7 | 2 | + | ħ | l. |); | ł(| 4 | | Е |) | n | Ω | Ç | ď | Š |
|--------------|----------------|----------------|--------------|----------------|---------------|----------------|-------------|----------------|--------------|----------------|--------------|---------------|-------------|----------------|-----|-------------------------|--------------|----------------|-------|-------|----------------|-------|----------------|----------------|
| | decl | decl l | at | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| S 1 M 2 | 4n16 4 39 | | 0n56 2 8 | 7s 0 6 24 | 2 s25 2 26 | 12s10 11 57 | - | 11n14 11 30 | 0s 6 | | 1n20 1 20 | 3 s25 3 22 | 2s 2 2 2 | 21 s 9 21 9 | | 3 20n57 3 20 57 | | 10n44 10 44 | | | | | | 0 s1 1 0 11 |
| T 3 W 4 | 5 2 | | 3 12 | 5 48 | 2 27 | 11 43 | | 11 46 | 0 5 | | 1 20 | 3 19 | 2 2 | - | | | 1 26 | | | | 22 51 | | | 0 11 |
| T 5 | 5 25 5 48 | 5 10 0n56 | 4 4 40 | 5 10 4 32 | 2 27 2 27 | 11 29 11 14 | - | 12 2 12 18 | 0 4 | 12 31 12 33 | 1 20 1 20 | 3 16 3 13 | 2 2 2 2 | | 0 8 | 3 20 57 3 20 58 | 1 26 1 26 | | | | 22 51 22 51 | | 10 37 10 38 | 0 11 0 11 |
| F 6 S 7 | 6 11 6 33 | 6 57 12 31 | 4 58 4 58 | 3 52 3 11 | 2 26 2 25 | 10 59 10 44 | | 12 33 12 49 | 0 3 0 2 | 12 34 12 35 | 1 20 1 20 | 3 11 3 8 | | 21 8 21 8 | - | 20 58 20 58 | 1 26 1 26 | 10 47 10 48 | | | 22 52 22 52 | | 10 40 10 41 | 0 11 0 11 |
| S 8 M 9 | 6 56 7 18 | | 4 39 4 5 | 2 29 1 45 | 2 23 2 20 | 10 28 10 11 | | 13 4 13 20 | 0 2 | 12 36 12 37 | 1 20 1 19 | 3 5 3 2 | 2 2 2 2 | | | 20 58 20 58 | 1 26 1 26 | | | | 22 52 22 53 | | | 0 11 |
| T 10 W11 | 7 41 8 3 | 23 36 | 3 18 2 22 | 1 1 0 16 | 2 18 2 14 | 9 55 9 37 | 0 24 | 13 35 13 50 | 0 0 | 12 38 12 39 | 1 19 1 19 | 3 0 2 57 | 2 3 2 3 | 21 7 | 0 8 | 20 59 20 59 20 59 | 1 26 | 10 49 | 17 43 | 22 57 | 22 53 | 15 54 | 10 45 | 0 11 0 12 |
| T 12 F 13 | - | 24 47 23 31 | 1 21 0 18 | 0n30 1 18 | 2 10 2 6 | 9 20 9 2 | - | 14 5 14 19 | 0 1 0 2 | 12 40 12 41 | 1 19 1 19 | 2 54 2 51 | 2 3 2 3 | | | 20 59 20 59 | | | | | | | | 0 12 0 12 |
| S 14 | 9 9 | 21 12 | 0s45 | 2 6 | 2 1 | 8 44 | 0 2 | 14 34 | | | 1 19 | 2 49 | 2 3 | 21 6 | 0 8 | 21 0 | 1 26 | 10 52 | 17 42 | 22 57 | 22 54 | 15 44 | 10 50 | 0 12 |
| S 15 M16 | 9 30 9 52 | | 1 46 2 42 | 2 55 3 44 | 1 56 1 50 | 8 25 8 6 | 0s 4 0 9 | 14 48 15 3 | 0 3 0 4 | | 1 19 1 18 | 2 46 2 43 | 2 3 2 3 | | | 3 21 0 3 21 0 | 1 26 1 25 | | | | 22 54 22 55 | | | 0 12 0 12 |
| T 17 W18 | 10 13 10 34 | | 3 31 4 12 | 4 35 5 26 | 1 43 1 36 | 7 47 7 27 | - | 15 17 15 31 | 0 4 0 5 | 12 43 12 44 | 1 18 1 18 | 2 41 2 38 | 2 3 2 3 | | | 3 21 0 3 21 1 | 1 25 1 25 | | | | 22 55 22 55 | | | 0 12 0 12 |
| | 10 55 11 16 | 5 34 | 4 41 4 58 | 6 18 7 10 | 1 29 1 21 | 7 7 6 47 | 0 28 | 15 45 15 58 | 0 6 | 12 44 12 44 | 1 18 1 18 | 2 36 2 33 | | 21 4 | 0 8 | 3 21 1 3 21 1 | 1 25 1 25 | 10 55 | 17 42 | 23 0 | 22 56 22 56 | 15 29 | 10 58 | 0 12 0 12 |
| | 11 36 | | 5 1 | 8 3 | 1 13 | 6 26 | | 16 12 | | 12 45 | 1 18 | 2 31 | 2 4 | | | 3 21 1 | 1 25 | | | | 22 56 | | | 0 12 |
| S 22 M23 | | - | 4 48 4 20 | 8 56 9 49 | 1 4 0 55 | 6 5 5 44 | | 16 25 16 39 | 0 8 | 12 45 12 45 | 1 17 1 17 | 2 28 2 25 | 2 4 2 4 | | | 3 21 2 3 21 2 | | | | | 22 56 22 57 | - | | 0 12 |
| T 24 | | - | | 10 43 | 0 46 | 5 23 | - | 16 52 | | 12 45 | 1 17 | 2 23 | 2 4 | | | 21 2 | 1 25 | 10 56 | | | 22 57 | | | 0 13 |
| W25 T 26 | | 24 25 24 49 | | 11 36 12 29 | 0 36 0 26 | 5 1 4 39 | | 17 4 17 17 | 0 9 0 10 | 12 45 12 45 | 1 17 1 17 | 2 21 2 18 | 2 4 2 5 | 21 2 21 2 | | 3 21 2 3 21 3 | 1 25 1 25 | 10 57 10 57 | | | 22 57 22 57 | | | 0 13 0 13 |
| F 27 S 28 | | 23 38 20 59 | - | 13 22 14 14 | 0 16 0 5 | 4 17 3 55 | | 17 30 17 42 | 0 11 0 11 | 12 45 12 45 | 1 17 1 16 | 2 16 2 13 | | 21 2 21 1 | | 3 21 3 21 3 | 1 25 1 25 | | | | 22 58 22 58 | - | | 0 13 0 13 |
| S 29 M30 | 14 14 14n33 | | 2 7 3n11 | 15 5 15n55 | 0n 6 0n16 | 3 32 3s 9 | - | 17 54 18n 6 | | 12 44 12n44 | - | 2 11 2s 8 | 2 5 2s 5 | 21 1 21 s 0 | - | 3 21 3 21n 4 | | 10 58 10n59 | | | | - | - | |

Julian Day Number = 2353384.5, Delta T = 11.40 sec Ecliptic obliquity = $23^{\circ}28'30$, Nutation = $0^{\circ}00'17$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^{\circ}59'18$, Lahiri = $20^{\circ}06'19$ Greg. Calendar

MAY 1731 00:00 UT

| | | | | | | | | | | | | | | | | + |
|------|----------|------------------|----------------|--------|----------------|-----------------|----------------|----------------|---------------|-------|----------------|---------------|----------------|-----------------|--------------|------|
| Day | Sid.t | \odot | D | φ | φ | ♂ | 4 | ħ |)f(| 并 | Р | ያ | Ω | Ç | ę, | Day |
| T 1 | 14 33 36 | 10 8 2'45 | 3 ∺ 2 | 14850 | 25) 50 | 21814 | 29 Ω 51 | 29) 32 | 4°R48 | 13耳38 | 13°R22 | 10°R16 | 11 궁 27 | 11 0 6 | 29Υ46 | T 1 |
| W 2 | 14 37 32 | 11° 0'52 | 17°13 | 17° 0 | 26°57 | 21°56 | 29°52 | 29°38 | 4 ₹ 46 | 13°40 | 13 ≏ 20 | 10る12 | 11°23 | 11°13 | 29°50 | W 2 |
| T 3 | 14 41 29 | 11°58'58 | 1 Y 20 | 19°8 | 28° 3 | 22°39 | 29°53 | 29°45 | 4°44 | 13°42 | 13°19 | 10° 5 | 11°20 | 11°19 | 29°54 | T 3 |
| F 4 | 14 45 25 | 12°57'02 | 15°20 | 21°15 | 29°10 | 23°22 | 29°54 | 29°51 | 4°41 | 13°44 | 13°18 | 9°56 | 11°17 | 11°26 | 29°57 | F 4 |
| S 5 | 14 49 22 | 13°55'05 | 29° 9 | 23°22 | 0 Υ 16 | 24° 4 | 29°56 | 29°57 | 4°39 | 13°46 | 13°16 | 9°47 | 11°14 | 11°33 | 0 8 1 | S 5 |
| S 6 | 14 53 18 | 14°53'06 | 12844 | 25°26 | 1°23 | 24°46 | 29°57 | 0 Υ 3 | 4°37 | 13°48 | 13°15 | 9°38 | 11°11 | 11°39 | 0° 5 | S 6 |
| M 7 | 14 57 15 | 15°51'06 | 26° 2 | 27°29 | 2°30 | 25°29 | 29°59 | 0° 9 | 4°35 | 13°50 | 13°13 | 9°30 | 11° 8 | 11°46 | 0° 9 | M 7 |
| T 8 | 15 1 12 | 16°49'04 | 9 I I 0 | 29°30 | 3°37 | 26°11 | 0 Mp 1 | 0°15 | 4°32 | 13°52 | 13°12 | 9°24 | 11° 4 | 11°53 | 0°13 | T 8 |
| W 9 | 15 5 8 | 17°47'00 | 21°40 | 1Ⅲ28 | 4°44 | 26°53 | 0° 3 | 0°21 | 4°30 | 13°54 | 13°11 | 9°20 | 11° 1 | 11°59 | 0°16 | W 9 |
| T 10 | 15 9 5 | 18°44'55 | 499 2 | 3°24 | 5°52 | 27°36 | 0° 5 | 0°26 | 4°28 | 13°56 | 13° 9 | 9°D19 | 10°58 | 12° 6 | 0°20 | T 10 |
| F 11 | 15 13 1 | 19°42'48 | 16° 9 | 5°17 | 6°59 | 28°18 | 0° 8 | 0°32 | 4°25 | 13°58 | 13° 8 | 9°19 | 10°55 | 12°13 | 0°24 | F 11 |
| S 12 | 15 16 58 | 20°40'39 | 28° 6 | 7° 7 | 8° 7 | 29° 0 | 0°11 | 0°38 | 4°23 | 14° 0 | 13° 7 | 9°20 | 10°52 | 12°19 | 0°27 | S 12 |
| S 13 | 15 20 54 | 21°38'29 | 9 Ω 57 | 8°55 | 9°14 | 29°42 | 0°13 | 0°43 | 4°20 | 14° 2 | 13° 6 | 9°21 | 10°48 | 12°26 | 0°31 | S 13 |
| M14 | 15 24 51 | 22°36'17 | 21°47 | 10°39 | 10°22 | 0∏24 | 0°16 | 0°49 | 4°18 | 14° 5 | 13° 5 | 9°R22 | 10°45 | 12°33 | 0°35 | M14 |
| T 15 | 15 28 47 | 23°34'03 | 3 m 41 | 12°20 | 11°30 | 1° 6 | 0°20 | 0°54 | 4°16 | 14° 7 | 13° 3 | 9°21 | 10°42 | 12°39 | 0°39 | T 15 |
| W16 | 15 32 44 | 24°31'47 | 15°44 | 13°58 | 12°38 | 1°48 | 0°23 | 1° 0 | 4°13 | 14° 9 | 13° 2 | 9°19 | 10°39 | 12°46 | 0°42 | W16 |
| T 17 | 15 36 41 | 25°29'30 | 28° 1 | 15°33 | 13°46 | 2°30 | 0°26 | 1° 5 | 4°11 | 14°11 | 13° 1 | 9°14 | 10°36 | 12°53 | 0°46 | T 17 |
| F 18 | 15 40 37 | 26°27'11 | 10 ≏ 36 | 17° 5 | 14°54 | 3°12 | 0°30 | 1°11 | 4° 8 | 14°13 | 13° 0 | 9° 9 | 10°33 | 12°59 | 0°49 | F 18 |
| S 19 | 15 44 34 | 27°24'51 | 23°30 | 18°33 | 16° 3 | 3°54 | 0°34 | 1°16 | 4° 6 | 14°15 | 12°59 | 9° 2 | 10°29 | 13° 6 | 0°53 | S 19 |
| S 20 | 15 48 30 | 28°22'29 | 6 M .44 | 19°57 | 17°11 | 4°35 | 0°38 | 1°21 | 4° 3 | 14°17 | 12°58 | 8°55 | 10°26 | 13°13 | 0°57 | S 20 |
| M21 | 15 52 27 | 29°20'06 | 20°19 | 21°19 | 18°19 | 5°17 | 0°42 | 1°26 | 4° 1 | 14°20 | 12°57 | 8°49 | 10°23 | 13°19 | 1° 0 | M21 |
| T 22 | 15 56 23 | 0 Ⅲ 17'42 | 4 ₹ 12 | 22°36 | 19°28 | 5°59 | 0°47 | 1°31 | 3°58 | 14°22 | 12°56 | 8°44 | 10°20 | 13°26 | 1° 4 | T 22 |
| W23 | 16 0 20 | 1°15'17 | 1 <u>8</u> °18 | 23°50 | 20°37 | 6°40 | 0°51 | 1°36 | 3°56 | 14°24 | 12°55 | 8°41 | 10°17 | 13°33 | 1° 7 | W23 |
| T 24 | 16 4 16 | 2°12'50 | 2 る 35 | 25° 1 | 21°45 | 7°22 | 0°56 | 1°41 | 3°53 | 14°26 | 12°54 | 8°D39 | 10°14 | 13°39 | 1°11 | T 24 |
| F 25 | 16 8 13 | 3°10'23 | 16°56 | 26° 8 | 22°54 | 8° 3 | 1° 0 | 1°46 | 3°51 | 14°28 | 12°53 | 8°39 | 10°10 | 13°46 | 1°14 | F 25 |
| S 26 | 16 12 10 | 4° 7'54 | 1 ≈ 19 | 27°11 | 24° 3 | 8°45 | 1° 5 | 1°50 | 3°48 | 14°31 | 12°52 | 8°41 | 10° 7 | 13°53 | 1°17 | S 26 |
| S 27 | 16 16 6 | 5° 5'25 | 15°38 | 28°11 | 25°12 | 9°26 | 1°11 | 1°55 | 3°46 | 14°33 | 12°51 | 8°42 | 10° 4 | 13°59 | 1°21 | S 27 |
| M28 | 16 20 3 | 6° 2'55 | 29°53 | 29° 6 | 26°21 | 10° 8 | 1°16 | 2° 0 | 3°43 | 14°35 | 12°50 | 8°R43 | 10° 1 | 14° 6 | 1°24 | M28 |
| T 29 | 16 23 59 | 7° 0'24 | 14 米 0 | 29°58 | 27°30 | 10°49 | 1°21 | 2° 4 | 3°41 | 14°37 | 12°49 | 8°43 | 9°58 | 14°13 | 1°28 | T 29 |
| W30 | 16 27 56 | <u>7</u> °57'52 | 27°58 | 09୍ଦ46 | 28°40 | 11°30 | 1°27 | 2° 9 | 3°38 | 14°39 | 12°49 | <u>8°42</u> | <u>9°54</u> | 14°19 | 1°31 | W30 |
| T 31 | 16 31 52 | 8 Ⅱ 55'20 | 11 ° 45 | 19529 | 29 Y 49 | 12 II 12 | 1 m 32 | 2 Υ 13 | 3 ₹ 36 | 14∏42 | 12 ≏ 48 | 8 云 39 | 9 ට 51 | 14 \O 26 | 1834 | T 31 |

| Day | 0 | D | ğ | · | ď | 4 | ħ |)f(| ¥ | В | w v | Ç | Š. |
|--|---|---|--|--|--|--|--|---|--|--|--|--|---|
| | decl | decl lat | decl lat | decl lat dec | l lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl decl | decl | decl lat |
| T 1 W 2 | 14n51 15 9 | 6s37 4n 3 0 45 4 41 | 17 32 0 37 | 2 s 4 6 1 s 1 2 1 8 n 1 2 2 3 1 1 6 1 8 3 | 0 0 14 | 12n44 1n16 12 43 1 16 | 2 4 2 6 | 21 0 0 8 | 3 21n 4 1 s25 21 4 1 25 | 10 59 17 39 | | 14 58 11 | 13 0 13 |
| T 3 F 4 S 5 | 15 27 15 45 16 2 | | 18 18 0 48 19 2 0 58 19 44 1 8 | 1 35 1 22 18 5 | 0 15 | 12 43 1 16 12 42 1 15 12 41 1 15 | 2 1 2 6 1 59 2 6 1 57 2 6 | 20 59 0 8 | 3 21 4 1 25 3 21 5 1 25 3 21 5 1 25 | 11 0 17 39 | 23 6 23 0 |) 14 56 11) 14 53 11) 14 51 11 | 16 0 13 |
| S 6 M 7 T 8 W 9 T 10 | 16 37 16 53 | 22 42 3 31 24 24 2 36 24 46 1 34 | 21 36 1 34 | 0 48 1 28 19 1 0 24 1 31 19 2 0n 1 1 34 19 3 0 25 1 36 19 4 0 49 1 39 19 5 | 6 0 17 7 0 17 7 0 18 | 12 41 1 15 12 40 1 15 12 39 1 15 12 38 1 15 12 37 1 14 | 1 48 2 7 | 20 58 0 8 20 57 0 8 20 57 0 8 | 21 5 1 25 21 6 1 25 | 11 1 17 38 11 1 17 38 11 1 17 37 | 23 8 23 0 23 8 23 1 23 9 23 1 | 14 48 11 14 46 11 14 43 11 14 40 11 14 38 11 | 20 0 14 21 0 14 22 0 14 |
| F 11 S 12 | 17 41 | 21 53 0s37 | | 1 14 1 41 20 1 38 1 43 20 1 | 7 0 19 | 12 36 1 14 12 35 1 14 | 1 44 2 7 | 20 56 0 8 | 3 21 7 1 25 3 21 7 1 25 21 7 1 25 | 11 1 17 37 | 23 9 23 2 | 14 35 11 | 25 0 14 |
| S 13 M14 T 15 W16 T 17 F 18 S 19 | 18 27 18 42 18 56 19 10 19 23 | 10 58 3 29 6 15 4 12 1 16 4 44 3 s 51 5 3 8 56 5 9 | 24 32 2 14 24 47 2 17 24 59 2 19 | 2 3 1 45 20 2 2 28 1 47 20 3 2 53 1 49 20 4 3 18 1 51 20 5 3 42 1 53 21 4 7 1 54 21 1 4 32 1 56 21 2 | 6 0 21 6 0 21 5 0 22 4 0 23 2 0 23 | 12 34 1 14 12 32 1 14 12 31 1 14 12 30 1 13 12 28 1 13 12 27 1 13 12 25 1 13 | 1 40 2 7 1 38 2 8 1 36 2 8 1 34 2 8 1 32 2 8 1 30 2 8 1 28 2 9 | 20 55 0 8 20 54 0 8 20 54 0 8 20 53 0 8 20 53 0 8 | 21 7 1 25 21 7 1 25 21 8 1 24 21 8 1 24 21 8 1 24 21 8 1 24 21 9 1 24 21 9 1 24 | 11 2 17 36 11 2 17 35 11 2 17 35 11 2 17 34 11 2 17 34 | 23 9 23 2 23 9 23 3 23 9 23 3 23 9 23 3 23 10 23 3 | 2 14 28 11 3 14 25 11 3 14 22 11 3 14 20 11 | 28 0 14 29 0 14 31 0 14 32 0 14 33 0 15 |
| S 20 M21 T 22 W23 T 24 F 25 S 26 | 20 2 20 15 20 26 20 38 20 49 | 21 35 3 52 23 54 2 56 24 46 1 49 24 0 0 33 21 39 0n45 | 25 24 2 19 25 29 2 18 25 31 2 15 25 32 2 12 25 31 2 8 25 28 2 3 25 24 1 57 | | 7 0 25 5 0 25 3 0 26 0 0 27 8 0 27 | 12 24 | 1 19 2 10 1 17 2 10 | 20 51 0 8 20 51 0 8 20 51 0 8 20 51 0 8 20 50 0 8 | 21 9 1 24 21 9 1 24 21 10 1 24 21 11 1 24 | 11 2 17 33 11 2 17 32 11 2 17 32 11 2 17 31 11 2 17 31 | 23 11 23 4 23 11 23 4 23 11 23 5 23 11 23 5 23 11 23 5 | 14 12 11 14 9 11 14 7 11 5 14 4 11 5 14 2 11 5 13 59 11 5 13 56 11 | 37 0 15 38 0 15 39 0 15 40 0 15 41 0 15 |
| W30 | 21 11 21 21 21 31 21 40 21n49 | 7 43 4 4 1 56 4 44 3n53 5 7 | 25 18 1 50 25 11 1 43 25 3 1 35 24 54 1 25 24n43 1n15 | | 8 0 29 5 0 29 1 0 30 | 12 7 1 11 | 1 12 2 11 1 11 2 11 1 9 2 11 | 20 48 0 7 20 48 0 7 20 47 0 7 | 21 11 1 24 21 11 1 24 21 11 1 24 21 11 1 24 21 12 1 24 21 11 1 s24 | 11 2 17 30 11 2 17 29 11 2 17 29 | 23 11 23 6 | 5 13 49 11 5 13 46 11 | 44 0 15 45 0 15 46 0 16 |

Julian Day Number = 2353414.5, Delta T = 11.41 sec Ecliptic obliquity = 23°28'29, Nutation = 0°00'16, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^\circ59'22$, Lahiri = $20^\circ06'23$ Greg. Calendar

JUNE 1731 00:00 UT

| | , | | | | | | | | | | | | | | | • • • |
|------|----------|------------------|-----------------|----------------|---------------|----------------|-----------------|---------------|---------------|-------|----------------|---------------|---------------|----------------|---------------|-------|
| Day | Sid.t | 0 | D | ğ | φ | ď | 4 | ħ |)ţ(| 并 | Р | n | v | Ç | ę, | Day |
| F 1 | 16 35 49 | 9 Ⅲ 52'47 | 25 Y 21 | 295 9 | 0 8 58 | 12 Ⅱ 53 | 1 m 38 | 2 Υ 17 | 3°R34 | 14∏44 | 12°R47 | 8°R35 | 9 ට 48 | 14 Ω 33 | 1 8 37 | F 1 |
| S 2 | 16 39 45 | 10°50'13 | 8 8 45 | 2°44 | 2° 8 | 13°34 | 1°44 | 2°22 | 3 ∡ 31 | 14°46 | 12 ≏ 46 | 8 국 31 | 9°45 | 14°39 | 1°41 | S 2 |
| S 3 | 16 43 42 | 11°47'39 | 21°55 | 3°15 | 3°17 | 14°15 | 1°50 | 2°26 | 3°29 | 14°48 | 12°46 | 8°27 | 9°42 | 14°46 | 1°44 | S 3 |
| M 4 | 16 47 39 | 12°45'03 | 4 Ⅱ 50 | 3°42 | 4°27 | 14°56 | 1°57 | 2°30 | 3°26 | 14°51 | 12°45 | 8°23 | 9°39 | 14°53 | 1°47 | M 4 |
| T 5 | 16 51 35 | 13°42'27 | 17°30 | 4° 4 | 5°37 | 15°37 | 2° 3 | 2°34 | 3°24 | 14°53 | 12°45 | 8°21 | 9°35 | 14°59 | 1°50 | T 5 |
| W 6 | 16 55 32 | 14°39'51 | 29°57 | 4°21 | 6°46 | 16°18 | 2°10 | 2°38 | 3°21 | 14°55 | 12°44 | 8°19 | 9°32 | 15° 6 | 1°53 | W 6 |
| T 7 | 16 59 28 | 15°37'13 | 129510 | 4°34 | 7°56 | 16°59 | 2°16 | 2°41 | 3°19 | 14°57 | 12°43 | 8°D19 | 9°29 | 15°13 | 1°56 | T 7 |
| F 8 | 17 3 25 | 16°34'34 | 24°13 | 4°43 | 9° 6 | 17°40 | 2°23 | 2°45 | 3°16 | 15° 0 | 12°43 | 8°20 | 9°26 | 15°19 | 1°59 | F 8 |
| S 9 | 17 721 | 17°31'55 | 6 N 8 | 4°R47 | 10°16 | 18°21 | 2°30 | 2°49 | 3°14 | 15° 2 | 12°42 | 8°21 | 9°23 | 15°26 | 2° 2 | S 9 |
| S 10 | 17 11 18 | 18°29'14 | 17°58 | 4°46 | 11°26 | 19° 2 | 2°37 | 2°52 | 3°12 | 15° 4 | 12°42 | 8°23 | 9°20 | 15°33 | 2° 5 | S 10 |
| M11 | 17 15 14 | 19°26'33 | 29°48 | 4°41 | 12°36 | 19°43 | 2°44 | 2°56 | 3° 9 | 15° 6 | 12°42 | 8°24 | 9°16 | 15°39 | 2° 8 | M11 |
| T 12 | 17 19 11 | 20°23'51 | 11 Mp 42 | 4°31 | 13°46 | 20°23 | 2°52 | 2°59 | 3° 7 | 15° 9 | 12°41 | 8°25 | 9°13 | 15°46 | 2°11 | T 12 |
| W13 | 17 23 8 | 21°21'08 | 23°45 | 4°18 | 14°56 | 21° 4 | 2°59 | 3° 2 | 3° 5 | 15°11 | 12°41 | 8°R25 | 9°10 | 15°53 | 2°14 | W13 |
| T 14 | 17 27 4 | 22°18'24 | 6 ♀ 1 | 4° 0 | 16° 6 | 21°45 | 3° 7 | 3° 5 | 3° 2 | 15°13 | 12°40 | 8°25 | 9° 7 | 15°59 | 2°17 | T 14 |
| F 15 | 17 31 1 | 23°15'39 | 18°35 | 3°39 | 17°17 | 22°25 | 3°15 | 3° 9 | 3° 0 | 15°15 | 12°40 | 8°24 | 9° 4 | 16° 6 | 2°20 | F 15 |
| S 16 | 17 34 57 | 24°12'53 | 1 M 31 | 3°14 | 18°27 | 23° 6 | 3°22 | 3°12 | 2°58 | 15°17 | 12°40 | 8°22 | 9° 0 | 16°13 | 2°22 | S 16 |
| S 17 | 17 38 54 | 25°10'07 | 14°50 | 2°46 | 19°37 | 23°46 | 3°30 | 3°15 | 2°56 | 15°20 | 12°40 | 8°20 | 8°57 | 16°19 | 2°25 | S 17 |
| M18 | 17 42 50 | 26° 7'20 | 28°33 | 2°16 | 20°48 | 24°27 | 3°38 | 3°17 | 2°53 | 15°22 | 12°40 | 8°19 | 8°54 | 16°26 | 2°28 | M18 |
| T 19 | 17 46 47 | 27° 4'33 | 12 × 740 | 1°44 | 21°58 | 25° 7 | 3°47 | 3°20 | 2°51 | 15°24 | 12°39 | 8°17 | 8°51 | 16°33 | 2°30 | T 19 |
| W20 | 17 50 44 | 28° 1'46 | 27° 5 | 1°10 | 23° 9 | 25°48 | 3°55 | 3°23 | 2°49 | 15°26 | 12°39 | 8°17 | 8°48 | 16°40 | 2°33 | W20 |
| T 21 | 17 54 40 | 28°58'58 | 11 る 45 | 0°35 | 24°19 | 26°28 | 4° 3 | 3°25 | 2°47 | 15°28 | 12°39 | 8°D17 | 8°45 | 16°46 | 2°35 | T 21 |
| F 22 | 17 58 37 | 29°56'09 | 26°31 | 0° 0 | 25°30 | 27° 9 | 4°12 | 3°28 | 2°45 | 15°31 | 12°39 | 8°17 | 8°41 | 16°53 | 2°38 | F 22 |
| S 23 | 18 2 33 | 0953'21 | 11≈19 | 29∏25 | 26°41 | 27°49 | 4°21 | 3°30 | 2°43 | 15°33 | 12°D39 | 8°17 | 8°38 | 17° 0 | 2°40 | S 23 |
| S 24 | 18 630 | 1°50'32 | 26° 0 | 28°51 | 27°52 | 28°29 | 4°29 | 3°32 | 2°41 | 15°35 | 12°39 | 8°18 | 8°35 | 17° 6 | 2°43 | S 24 |
| M25 | 18 10 26 | 2°47'44 | 10 ∺ 29 | 28°18 | 29° 2 | 29° 9 | 4°38 | 3°35 | 2°39 | 15°37 | 12°39 | 8°19 | 8°32 | 17°13 | 2°45 | M25 |
| T 26 | 18 14 23 | 3°44'55 | 24°43 | 27°47 | 0 Ⅱ 13 | 29°49 | 4°47 | 3°37 | 2°37 | 15°39 | 12°39 | 8°19 | 8°29 | 17°20 | 2°47 | T 26 |
| W27 | 18 18 19 | 4°42'07 | 8 Υ 40 | 27°19 | 1°24 | 0ഇ30 | 4°56 | 3°39 | 2°35 | 15°41 | 12°39 | 8°R19 | 8°26 | 17°26 | 2°50 | W27 |
| T 28 | 18 22 16 | 5°39'18 | 22°18 | 26°54 | 2°35 | 1°10 | 5° 5 | 3°40 | 2°33 | 15°44 | 12°39 | 8°19 | 8°22 | 17°33 | 2°52 | T 28 |
| F 29 | 18 26 13 | 6°36'31 | 5 8 39 | 26°32 | 3°46 | 1°50 | 5°15 | 3°42 | 2°31 | 15°46 | 12°40 | 8°19 | 8°19 | 17°40 | 2°54 | F 29 |
| S 30 | 18 30 9 | 7933'43 | 18842 | 26 Ⅱ 14 | 4 Ⅱ 57 | 2930 | 5 m) 24 | 3 Υ 44 | 2 ~ 29 | 15耳48 | 12 ≏ 40 | 8점18 | 8 궁 16 | 17 Ω 46 | 2 8 56 | S 30 |

| Day | 0 | J |) | ζ | 5 | ç |) | d | 7 | 2 | + | ŧ | 1 |); | ł(| 4 | 7 | E | 2 | n | U | Ç | Ł | S |
|-------------|----------------|----------------|-------|----------------|--------------|---------------|--------------|----------------|-----------|----------------|--------------|--------------|-----------|-----------------|-----|----------------|--------------|---------------|----------------|-------|-------|----------------|----------------|--------------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| F 1 S 2 | 21n58 22 6 | | | 24n32 24 20 | | 9n52 10 16 | | 22n53 22 59 | | 12n 1 11 58 | 1n11 1 11 | 1s 6 1 5 | | 20 s46 20 46 | | 21n12 21 13 | | 11n 1 11 1 | | | | 13n41 13 38 | 11n49 | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| S 3 M 4 | 22 14 22 22 | 21 56 23 59 | 3 48 | 24 7 23 53 | 0 40 0 27 | 10 39 11 3 | 2 6 2 6 | | 0 32 0 32 | 11 56 11 54 | 1 10 1 10 | 1 3 | 2 12 2 12 | 20 46 20 45 | | 21 13 21 13 | 1 24 1 24 | | 17 27 17 26 | | | | 11 51 11 52 | 0 16 0 16 |
| T 5 | 22 22 | | | 23 38 | | 11 26 | 2 5 | | | 11 54 | 1 10 | 1 0 | | 20 45 | | 21 13 | 1 24 | | 17 26 | | | | 11 52 | 0 16 |
| W 6 | 22 35 | - | | 23 23 | | 11 49 | | 23 19 | | 11 49 | 1 10 | 0 59 | | 20 44 | | 21 14 | | | 17 25 | | | 13 28 | | 0 16 |
| T 7 | | 22 34 | 0 s21 | | 0 16 | | | 23 24 | | 11 46 | 1 10 | 0 58 | | 20 44 | | 21 14 | | | 17 25 | | | 13 25 | | 0 16 |
| F 8 | - | 19 53 | | 22 52 | | | | 23 28 | | 11 43 | 1 10 | 0 57 | | 20 43 | | 21 14 | | | 17 24 | | | 13 23 | | 0 16 |
| S 9 | 22 53 | 16 23 | 2 27 | 22 36 | 0 47 | 12 58 | 2 4 | 23 33 | 0 35 | 11 41 | 1 10 | 0 55 | 2 14 | 20 43 | 0 7 | 21 14 | 1 24 | 10 59 | 17 24 | 23 13 | 23 9 | 13 20 | 11 57 | 0 16 |
| S 10 | | | | 22 20 | | 13 20 | 2 3 | | | 11 38 | 1 9 | 0 54 | | 20 42 | | 21 15 | | | | | | 13 17 | | |
| M11 T 12 | 23 3 23 8 | 7 42 2 50 | | 22 3 21 47 | 1 20 | | 2 2 2 2 | | 0 36 | 11 35 11 33 | 1 9 | 0 53 0 52 | | 20 42 20 42 | | 21 15 | | 10 59 | 17 23 17 22 | _ | | | 11 58 11 59 | 0 17 0 17 |
| | 23 12 | | | 21 47 | 1 54 | | 2 2 | | | 11 33 | 1 9 | 0 52 | | 20 42 | | 21 15 | | | 17 22 | | | | 11 39 | 0 17 |
| | 23 15 | _ | | 21 14 | 2 11 | - | 2 0 | | | 11 27 | 1 9 | 0 50 | | 20 41 | | 21 16 | | | 17 21 | | | | 12 1 | 0 17 |
| F 15 | 23 18 | 12 5 | 5 11 | 20 58 | 2 27 | 15 7 | 1 59 | 23 53 | 0 38 | 11 24 | 1 9 | 0 49 | 2 15 | 20 40 | 0 7 | 21 16 | 1 24 | 10 57 | 17 21 | 23 12 | 23 10 | 13 4 | 12 2 | 0 17 |
| S 16 | 23 21 | 16 33 | 4 51 | 20 43 | 2 44 | 15 28 | 1 58 | 23 56 | 0 39 | 11 21 | 1 9 | 0 48 | 2 15 | 20 40 | 0 7 | 21 16 | 1 24 | 10 57 | 17 20 | 23 13 | 23 10 | 13 1 | 12 3 | 0 17 |
| S 17 | 23 23 | 20 22 | 4 15 | 20 28 | 2 59 | 15 48 | 1 56 | 23 59 | 0 39 | 11 18 | 1 8 | 0 47 | 2 16 | 20 39 | 0 7 | 21 16 | 1 24 | 10 56 | 17 20 | 23 13 | 23 10 | 12 59 | 12 4 | 0 17 |
| | 23 25 | - | | 20 13 | | | 1 55 | | | 11 15 | 1 8 | 0 46 | | 20 39 | | 21 17 | | | | | | 12 56 | | 0 17 |
| T 19 W20 | 23 27 23 28 | 24 37 | | 19 59 19 46 | 3 28 3 42 | | 1 54 1 52 | - | 0 40 0 40 | 11 12 11 9 | 1 8 1 8 | 0 45 | | 20 39 20 38 | | 21 17 21 17 | | | | | - | 12 54 12 51 | - | 0 17 0 17 |
| | 23 28 | - | | 19 46 | | 17 5 | 1 51 | - | 0 40 | 11 5 | 1 8 | 0 44 | | 20 38 | | 21 17 | | | | | | 12 48 | | 0 17 |
| | 23 28 | | | 19 24 | | 17 24 | 1 49 | | 0 41 | 11 2 | 1 8 | 0 43 | | 20 37 | | 21 17 | | | | | | 12 46 | | 0 18 |
| S 23 | 23 28 | 14 38 | 2 53 | 19 14 | 4 15 | 17 42 | 1 48 | 24 9 | 0 42 | 10 59 | 1 8 | 0 42 | 2 17 | 20 37 | 0 7 | 21 18 | 1 24 | 10 54 | 17 16 | 23 13 | 23 12 | 12 43 | 12 8 | 0 18 |
| S 24 | 23 28 | 9 11 | 3 55 | 19 5 | 4 23 | 18 0 | 1 46 | 24 10 | 0 42 | 10 56 | 1 8 | 0 42 | 2 17 | 20 37 | 0 7 | 21 18 | 1 24 | 10 53 | 17 16 | 23 13 | 23 12 | 12 40 | 12 9 | 0 18 |
| M25 | 23 27 | 3 19 | 4 41 | 18 58 | 4 30 | 18 17 | 1 44 | 24 11 | 0 43 | 10 52 | 1 7 | 0 41 | 2 18 | 20 36 | 0 7 | 21 18 | 1 24 | | | | | 12 38 | | 0 18 |
| T 26 | 23 25 | 2n37 | 5 9 | | 4 35 | | | 24 12 | 0 43 | 10 49 | 1 7 | 0 40 | | 20 36 | | 21 18 | | | | | | 12 35 | | 0 18 |
| W27 T 28 | 23 23 23 21 | 8 18 13 27 | | 18 48 18 45 | 4 39 4 41 | 18 50 19 6 | 1 40 | 24 12 24 12 | 0 44 0 44 | 10 45 10 42 | 1 7 | 0 40 0 39 | | 20 35 20 35 | | 21 19 21 19 | | | | | | 12 32 12 30 | | 0 18 0 18 |
| | - | - | | 18 43 | | | | 24 12 | 0 44 | | 1 7 | 0 39 | | 20 35 | | 21 19 | | | | | | 12 30 | | 0 18 |
| / | | 21n17 | | 18n44 | | 19n36 | | 24n12 | | 10n35 | 1n 7 | 0s38 | | 20 s34 | | 21n19 | | | | | | 12n24 | _ | |

 $\label{eq:Julian Day Number = 2353445.5, Delta T = 11.43 sec} \\ Ecliptic obliquity = 23°28'28, Nutation = 0°00'16, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 20°59'27, Lahiri = 20°06'27Greg. Calendar$

JULY 1731 00:00 UT

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|------|----------|-----------------|-----------------|----------------|--------------|-------|----------------|---------------|---------------|----------------|----------------|-------|---------------|----------------|---------------|------|
| Day | Sid.t | 0 | D | ğ | φ | ♂ | 4 | ħ |)∤(| ¥ | Р | r | Ω | Ç | ę, | Day |
| S 1 | 18 34 6 | 8930'55 | 1 II 31 | 26°R 1 | 6 I 8 | 39510 | 5 m 33 | 3 Υ46 | 2°R27 | 15 Ⅱ 50 | 12 ≏ 40 | 8°D18 | 8 る 13 | 17 Ω 53 | 2 8 58 | S 1 |
| M 2 | 18 38 2 | 9°28'08 | 14° 6 | 25 Ⅲ 51 | 7°20 | 3°50 | 5°43 | 3°47 | 2 ₹ 25 | 15°52 | 12°40 | 8점18 | 8°10 | 18° 0 | 3° 0 | M 2 |
| T 3 | 18 41 59 | 10°25'21 | 26°28 | 25°D47 | 8°31 | 4°30 | 5°53 | 3°48 | 2°23 | 15°54 | 12°41 | 8°19 | 8° 6 | 18° 6 | 3° 2 | T 3 |
| W 4 | 18 45 55 | 11°22'34 | 89540 | 25°47 | 9°42 | 5°10 | 6° 2 | 3°50 | 2°22 | 15°56 | 12°41 | 8°R19 | 8° 3 | 18°13 | 3° 4 | W 4 |
| T 5 | 18 49 52 | 12°19'47 | 20°43 | 25°52 | 10°54 | 5°49 | 6°12 | 3°51 | 2°20 | 15°58 | 12°41 | 8°19 | 8° 0 | 18°20 | 3° 6 | T 5 |
| F 6 | 18 53 48 | 13°17'00 | 2 Ω 39 | 26° 3 | 12° 5 | 6°29 | 6°22 | 3°52 | 2°18 | 16° 0 | 12°42 | 8°18 | 7°57 | 18°26 | 3°8 | F 6 |
| S 7 | 18 57 45 | 14°14'14 | 14°30 | 26°19 | 13°16 | 7° 9 | 6°32 | 3°53 | 2°17 | 16° 2 | 12°42 | 8°18 | 7°54 | 18°33 | 3°10 | S 7 |
| S 8 | 19 1 42 | 15°11'27 | 26°20 | 26°40 | 14°28 | 7°49 | 6°42 | 3°54 | 2°15 | 16° 4 | 12°43 | 8°17 | 7°51 | 18°40 | 3°12 | S 8 |
| M 9 | 19 5 38 | 16° 8'40 | 8 Mp 10 | 27° 6 | 15°39 | 8°28 | 6°53 | 3°55 | 2°13 | 16° 6 | 12°43 | 8°16 | 7°47 | 18°46 | 3°13 | M 9 |
| T 10 | 19 9 35 | 17° 5'53 | 20° 4 | 27°37 | 16°51 | 9° 8 | 7° 3 | 3°55 | 2°12 | 16° 8 | 12°44 | 8°15 | 7°44 | 18°53 | 3°15 | T 10 |
| W11 | 19 13 31 | 18° 3'07 | 2 <u>₽</u> 6 | 28°14 | 18° 3 | 9°48 | 7°13 | 3°56 | 2°10 | 16°10 | 12°44 | 8°14 | 7°41 | 19° 0 | 3°16 | W11 |
| T 12 | 19 17 28 | 19° 0'20 | 14°21 | 28°56 | 19°14 | 10°27 | 7°24 | 3°56 | 2° 9 | 16°12 | 12°45 | 8°D14 | 7°38 | 19° 6 | 3°18 | T 12 |
| F 13 | 19 21 24 | 19°57'34 | 26°52 | 29°43 | 20°26 | 11° 7 | 7°34 | 3°57 | 2° 7 | 16°14 | 12°46 | 8°14 | 7°35 | 19°13 | 3°20 | F 13 |
| S 14 | 19 25 21 | 20°54'48 | 9 M .44 | 0935 | 21°38 | 11°46 | 7°45 | 3°57 | 2° 6 | 16°16 | 12°46 | 8°14 | 7°32 | 19°20 | 3°21 | S 14 |
| S 15 | 19 29 17 | 21°52'02 | 22°59 | 1°32 | 22°49 | 12°26 | 7°55 | 3°57 | 2° 5 | 16°18 | 12°47 | 8°15 | 7°28 | 19°26 | 3°22 | S 15 |
| M16 | 19 33 14 | 22°49'16 | 6 ₹ 41 | 2°34 | 24° 1 | 13° 5 | 8° 6 | 3°R57 | 2° 4 | 16°20 | 12°48 | 8°16 | 7°25 | 19°33 | 3°24 | M16 |
| T 17 | 19 37 11 | 23°46'30 | 20°49 | 3°41 | 25°13 | 13°45 | 8°17 | 3°57 | 2° 2 | 16°22 | 12°49 | 8°17 | 7°22 | 19°40 | 3°25 | T 17 |
| W18 | 19 41 7 | 24°43'45 | 5 云 22 | 4°53 | 26°25 | 14°24 | 8°28 | 3°57 | 2° 1 | 16°24 | 12°49 | 8°R18 | 7°19 | 19°47 | 3°26 | W18 |
| T 19 | 19 45 4 | 25°41'01 | 20°14 | 6°10 | 27°37 | 15° 4 | 8°39 | 3°57 | 2° 0 | 16°26 | 12°50 | 8°17 | 7°16 | 19°53 | 3°27 | T 19 |
| F 20 | 19 49 0 | 26°38'16 | 5≈19 | 7°31 | 28°49 | 15°43 | 8°50 | 3°57 | 1°59 | 16°27 | 12°51 | 8°16 | 7°12 | 20° 0 | 3°28 | F 20 |
| S 21 | 19 52 57 | 27°35'33 | 20°27 | 8°57 | 0ණ 1 | 16°22 | 9° 1 | 3°56 | 1°58 | 16°29 | 12°52 | 8°14 | 7° 9 | 20° 7 | 3°29 | S 21 |
| S 22 | 19 56 53 | 28°32'50 | 5) 29 | 10°27 | 1°13 | 17° 1 | 9°12 | 3°56 | 1°57 | 16°31 | 12°53 | 8°12 | 7° 6 | 20°13 | 3°30 | S 22 |
| M23 | 20 0 50 | 29°30'08 | 20°18 | 12° 2 | 2°26 | 17°41 | 9°24 | 3°55 | 1°56 | 16°33 | 12°54 | 8° 9 | 7° 3 | 20°20 | 3°31 | M23 |
| T 24 | 20 4 46 | 0Ω 27'27 | 4 Υ45 | 13°40 | 3°38 | 18°20 | 9°35 | 3°54 | 1°55 | 16°34 | 12°55 | 8° 7 | 7° 0 | 20°27 | 3°32 | T 24 |
| W25 | 20 8 43 | 1°24'47 | 18°49 | 15°23 | 4°50 | 18°59 | 9°46 | 3°53 | 1°54 | 16°36 | 12°56 | 8° 6 | 6°57 | 20°33 | 3°33 | W25 |
| T 26 | 20 12 40 | 2°22'08 | 2 8 28 | 17° 8 | 6° 2 | 19°38 | 9°58 | 3°52 | 1°53 | 16°38 | 12°57 | 8°D 5 | 6°53 | 20°40 | 3°34 | T 26 |
| F 27 | 20 16 36 | 3°19'30 | 15°42 | 18°58 | 7°15 | 20°17 | 10° 9 | 3°51 | 1°52 | 16°39 | 12°58 | 8° 6 | 6°50 | 20°47 | 3°35 | F 27 |
| S 28 | 20 20 33 | 4°16'54 | 28°36 | 20°50 | 8°27 | 20°56 | 10°21 | 3°50 | 1°52 | 16°41 | 12°59 | 8° 7 | 6°47 | 20°53 | 3°35 | S 28 |
| S 29 | 20 24 29 | 5°14'18 | 11 I I11 | 22°45 | 9°40 | 21°35 | 10°32 | 3°49 | 1°51 | 16°43 | 13° 0 | 8° 8 | 6°44 | 21° 0 | 3°36 | S 29 |
| M30 | 20 28 26 | 6°11'44 | 23°31 | 24°42 | 10°52 | 22°14 | 10°44 | 3°48 | 1°50 | 16°44 | 13° 2 | 8°10 | 6°41 | 21° 7 | 3°36 | M30 |
| T 31 | 20 32 22 | 7 Ω 9'10 | 5939 | 269541 | 1295 5 | 22953 | 10 M 56 | 3 ℃ 46 | 1 才 50 | 16∏46 | 13 ₾ 3 | 8°R11 | 6 궁 38 | 21 Ω 13 | 3 8 37 | T 31 |

| Day | 0 | D | ξ | Ş Ç |) | 3 ¹ | 2 | ļ. | ħ | l. |) | ł(| 卉 | | Р | n | ß | Ç | ę, | |
|--|--|--|--|---|--|--|--|---|--|--------------------------------------|---|---------------------------------|---|---|--|---|---|---|---|--|
| | decl | decl lat | decl | lat decl | lat dec | lat | decl | lat | decl | lat | decl | lat | decl lat | de | el lat | decl | decl | decl | decl la | at |
| S 1 M 2 T 3 | 23 8 | 24 41 2 1 | 0 18n46 0 18 49 5 18 54 | 4 35 20 5 | 1 s32 24n12 1 30 24 12 1 28 24 10 | 0 46 | | 1n 7 | 0s38 0 38 0 37 | 2 20 | 20 s34 20 34 20 33 | 0 7 | 21 20 1 | 24 10 4 | 19 17n12 19 17 11 18 17 11 | 23 13 | 23 13 | 12 19 | 12 14 | 0 s19 0 19 0 19 |
| W 4 T 5 F 6 | 22 59 | 23 9 0s 20 45 1 | | 4 24 20 31 4 17 20 44 | 1 26 24 10 1 26 24 9 1 24 24 8 1 21 24 | 0 47 0 48 0 48 | 10 20 10 17 | 1 6 1 6 1 6 | 0 37 0 37 0 37 0 37 | 2 20 2 21 | 20 33 20 33 | 0 7 0 7 | 21 20 1 21 20 1 | 24 10 4 24 10 4 | 17 17 10 17 17 10 | 23 13 | 23 14 23 14 | 12 14 12 11 | 12 16 12 16 | 0 19 0 19 0 19 0 19 |
| S 7 | 22 43 | 13 31 3 | 8 19 25 | 4 0 21 7 | 1 19 24 : | 0 48 | 10 9 | 1 6 | 0 37 | 2 21 | 20 32 | 0 7 | 21 21 1 | 24 10 4 | 15 17 8 | 23 13 | 23 14 | 12 6 | 12 17 | 0 19 |
| | 22 36 22 30 22 23 22 15 22 7 | 4 17 4 3 0s40 5 5 39 5 1 | 6 19 36 4 19 47 1 19 59 5 20 12 5 20 25 | 3 39 21 28 3 28 21 38 3 16 21 47 | 1 17 24 1 1 14 24 1 1 12 23 59 1 9 23 57 1 7 23 54 | 0 50 | 10 1 9 57 9 53 | 1 6 1 6 1 6 1 6 | 0 37 0 37 0 37 0 37 0 37 | 2 22 2 22 2 22 | 20 32 20 31 20 31 20 31 20 31 | 0 7 0 7 0 7 | 21 21 1 21 21 1 21 21 1 | 24 10 4 24 10 4 | 14 17 7 13 17 7 12 17 6 | 23 13 23 13 23 13 23 13 23 13 | 23 15 23 15 23 15 | 12 0 11 58 11 55 | 12 18 12 19 12 19 | 0 19 0 19 0 19 0 20 0 20 |
| S 14 | 21 59 21 51 | 19 1 4 3 | 0 20 38 0 20 51 | 2 37 22 11 | 1 4 23 5 1 1 23 48 | | 9 45 9 41 | 1 6 1 5 | 0 37 0 37 | 2 23 | 20 30 20 30 | 0 7 | 21 22 1 | 24 10 4 | 10 17 5 | 23 13 23 13 | 23 16 | 11 47 | 12 20 | 0 20 0 20 |
| M16 T 17 W18 T 19 F 20 | 21 23 21 13 21 2 20 52 | 24 11 2 4 24 44 1 3 23 38 0 1 20 52 1n 16 39 2 2 | 5 21 5 6 21 17 5 21 30 6 21 42 6 21 53 4 22 3 2 22 11 | 2 9 22 24 1 55 22 30 1 41 22 35 1 27 22 39 1 13 22 43 | 0 59 23 4: 0 56 23 4: 0 54 23 3: 0 51 23 3: 0 48 23 3: 0 45 23 2: 0 43 23 2: | 0 52 0 52 0 53 0 53 0 53 0 54 | 9 37 9 33 9 29 9 25 9 21 9 16 9 12 | 1 5 1 5 1 5 1 5 1 5 1 5 1 5 | 0 37 0 37 0 38 0 38 0 39 0 39 | 2 24 2 24 2 24 2 24 2 25 | | 0 7 0 7 0 7 0 7 0 7 | 21 22 1 21 22 1 21 23 1 21 23 1 21 23 1 | 24 10 3 24 10 3 25 10 3 25 10 3 | 39 17 3 38 17 3 37 17 2 36 17 2 35 17 1 | 23 13 23 13 23 13 23 13 23 13 23 13 23 13 | 23 16 23 16 23 16 23 17 23 17 | 11 42 11 39 11 36 11 33 11 31 | 12 21 12 21 12 22 12 22 12 22 | 0 20 0 20 0 20 0 20 0 20 0 20 0 20 0 21 |
| S 22 M23 T 24 W25 T 26 F 27 S 28 | | 0n45 5 6 42 5 1 12 9 5 16 50 4 4 20 33 4 1 | 25 22 19 0 22 24 4 22 28 9 22 30 7 22 29 0 22 26 1 22 21 | 0 32 22 50 0 18 22 51 0 6 22 52 0n 7 22 51 | 0 40 23 13 0 37 23 13 0 34 23 8 0 32 23 3 0 29 22 53 0 26 22 53 0 23 22 43 | 3 0 55 3 0 55 3 0 56 3 0 56 2 0 56 | 8 59 8 55 8 51 | 1 5 1 5 1 5 1 5 1 5 1 5 1 5 | 0 40 0 40 0 41 0 41 0 42 0 42 0 43 | 2 26 2 26 2 26 2 26 2 27 | 20 28 20 28 20 28 20 28 20 28 20 27 20 27 | 0 7 0 7 0 7 0 7 0 7 | 21 23 1 21 24 1 21 24 1 21 24 1 21 24 1 | 25 10 3 25 10 3 25 10 3 25 10 3 25 10 3 | 34 17 0 33 17 0 32 16 59 31 16 59 30 16 58 29 16 58 28 16 57 | 23 13 23 14 23 14 23 14 23 14 | 23 17 23 17 23 18 23 18 23 18 | 11 23 11 20 11 17 11 15 11 12 | 12 23 12 23 12 23 12 24 12 24 | 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 |
| S 29 M30 T 31 | 18 45 | 24 39 1 2 | 3 22 13 0 22 2 4 21n49 | 0 50 22 44 | 0 21 22 4 0 18 22 33 0s15 22n29 | 0 58 | 8 33 | 1 4 1 4 1n 4 | 0 44 0 45 0 s45 | 2 27 | 20 27 20 27 20 s27 | 0 7 | 21 24 1 | 25 10 2 | 28 16 57 27 16 56 26 16n56 | 23 13 | 23 18 | 11 4 | 12 24 | 0 21 0 22 0 s22 |

Julian Day Number = 2353475.5, Delta T = 11.44 sec Ecliptic obliquity = 23°28'28, Nutation = $0^{\circ}00'17$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^{\circ}59'31$, Lahiri = $20^{\circ}06'31$ Greg. Calendar

AUGUST 1731 00:00 UT

| Audi | JJ: 1/J | _ | | | | | | | | | | | | | 00.0 | 0 0 1 |
|------|----------|------------------|-----------------|---------------|----------------|----------------|-----------------|---------------|----------------|----------------|----------------|---------------|---------------|----------------|---------------|-------|
| Day | Sid.t | 0 | D | ğ | ρ | ð | 4 | ħ |)ф(| 并 | Р | រា | ಬ | Ç | ķ | Day |
| W 1 | 20 36 19 | 8 0 6'38 | 179540 | 289642 | 139917 | 23932 | 11 m) 8 | 3°R45 | 1°R49 | 16 Ⅱ 48 | 13 ♀ 4 | 8°R10 | 6 ප 34 | 21\$\Omega20\$ | 3 8 37 | W 1 |
| T 2 | 20 40 15 | 9° 4'07 | 29°34 | $0\Omega44$ | 14°30 | 24°11 | 11°19 | 3 Y 43 | 1 √ 49 | 16°49 | 13° 5 | 8 동 | 6°31 | 21°27 | 3°38 | T 2 |
| F 3 | 20 44 12 | 10° 1'37 | 11 Ω 25 | 2°48 | 15°43 | 24°50 | 11°31 | 3°41 | 1°48 | 16°51 | 13° 7 | 8° 5 | 6°28 | 21°33 | 3°38 | F 3 |
| S 4 | 20 48 9 | 10°59'08 | 23°14 | 4°51 | 16°56 | 25°29 | 11°43 | 3°39 | 1°48 | 16°52 | 13° 8 | 8° 0 | 6°25 | 21°40 | 3°38 | S 4 |
| S 5 | 20 52 5 | 11°56'39 | 5 m) 4 | 6°55 | 18° 8 | 26° 8 | 11°55 | 3°38 | 1°48 | 16°54 | 13° 9 | 7°54 | 6°22 | 21°47 | 3°39 | S 5 |
| M 6 | 20 56 2 | 12°54'12 | 16°57 | 9° 0 | 19°21 | 26°47 | 12° 7 | 3°36 | 1°47 | 16°55 | 13°11 | 7°48 | 6°18 | 21°53 | 3°39 | M 6 |
| T 7 | 20 59 58 | 13°51'46 | 28°54 | 11° 3 | 20°34 | 27°25 | 12°19 | 3°33 | 1°47 | 16°56 | 13°12 | 7°42 | 6°15 | 22° 0 | 3°39 | T 7 |
| W 8 | 21 3 55 | 14°49'21 | 10 ≏ 58 | 13° 7 | 21°47 | 28° 4 | 12°32 | 3°31 | 1°47 | 16°58 | 13°14 | 7°37 | 6°12 | 22° 7 | 3°R39 | W 8 |
| T 9 | 21 7 51 | 15°46'56 | 23°14 | 15°10 | 23° 0 | 28°43 | 12°44 | 3°29 | 1°47 | 16°59 | 13°15 | 7°33 | 6° 9 | 22°14 | 3°39 | T 9 |
| F 10 | 21 11 48 | 16°44'33 | 5 M .43 | 17°12 | 24°13 | 29°22 | 12°56 | 3°27 | 1°47 | 17° 0 | 13°17 | 7°31 | 6° 6 | 22°20 | 3°39 | F 10 |
| S 11 | 21 15 44 | 17°42'11 | 18°30 | 19°13 | 25°26 | 0Ω 0 | 13° 8 | 3°24 | 1°D47 | 17° 2 | 13°18 | 7°D30 | 6° 3 | 22°27 | 3°39 | S 11 |
| S 12 | 21 19 41 | 18°39'49 | 1 ∡ 739 | 21°13 | 26°39 | 0°39 | 13°21 | 3°22 | 1°47 | 17° 3 | 13°20 | 7°31 | 5°59 | 22°34 | 3°38 | S 12 |
| M13 | 21 23 38 | 19°37'29 | 15°13 | 23°11 | 27°52 | 1°17 | 13°33 | 3°19 | 1°47 | 17° 4 | 13°21 | 7°32 | 5°56 | 22°40 | 3°38 | M13 |
| T 14 | 21 27 34 | 20°35'10 | 29°13 | 25° 9 | 29° 5 | 1°56 | 13°45 | 3°16 | 1°47 | 17° 5 | 13°23 | 7°33 | 5°53 | 22°47 | 3°38 | T 14 |
| W15 | 21 31 31 | 21°32'52 | 13 云 40 | 27° 5 | 0 Ω 19 | 2°35 | 13°58 | 3°13 | 1°47 | 17° 7 | 13°24 | 7°R33 | 5°50 | 22°54 | 3°37 | W15 |
| T 16 | 21 35 27 | 22°30'35 | 28°30 | 29° 0 | 1°32 | 3°13 | 14°10 | 3°10 | 1°47 | 17° 8 | 13°26 | 7°32 | 5°47 | 23° 0 | 3°37 | T 16 |
| F 17 | 21 39 24 | 23°28'19 | 13 ≈ 38 | 0 m 54 | 2°45 | 3°52 | 14°23 | 3° 8 | 1°48 | 17° 9 | 13°28 | 7°28 | 5°44 | 23° 7 | 3°37 | F 17 |
| S 18 | 21 43 20 | 24°26'04 | 28°55 | 2°46 | 3°59 | 4°30 | 14°35 | 3° 4 | 1°48 | 17°10 | 13°30 | 7°22 | 5°40 | 23°14 | 3°36 | S 18 |
| S 19 | 21 47 17 | 25°23'51 | 14) (10 | 4°37 | 5°12 | 5° 8 | 14°48 | 3° 1 | 1°48 | 17°11 | 13°31 | 7°16 | 5°37 | 23°20 | 3°35 | S 19 |
| M20 | 21 51 13 | 26°21'39 | 29°13 | 6°26 | 6°25 | 5°47 | 15° 0 | 2°58 | 1°49 | 17°12 | 13°33 | 7° 8 | 5°34 | 23°27 | 3°35 | M20 |
| T 21 | 21 55 10 | 27°19'29 | 13 Y 54 | 8°15 | 7°39 | 6°25 | 15°13 | 2°55 | 1°49 | 17°13 | 13°35 | 7° 2 | 5°31 | 23°34 | 3°34 | T 21 |
| W22 | 21 59 7 | 28°17'21 | 28° 8 | 10° 1 | 8°52 | 7° 4 | 15°26 | 2°51 | 1°50 | 17°14 | 13°37 | 6°56 | 5°28 | 23°40 | 3°33 | W22 |
| T 23 | 22 3 3 | 29°15'15 | 11 8 53 | 11°47 | 10° 6 | 7°42 | 15°38 | 2°48 | 1°51 | 17°15 | 13°38 | 6°53 | 5°24 | 23°47 | 3°32 | T 23 |
| F 24 | 22 7 0 | 0 Mp 13'10 | 25°10 | 13°31 | 11°20 | 8°20 | 15°51 | 2°45 | 1°51 | 17°16 | 13°40 | 6°D51 | 5°21 | 23°54 | 3°32 | F 24 |
| S 25 | 22 10 56 | 1°11'08 | 8 I 1 | 15°14 | 12°33 | 8°58 | 16° 4 | 2°41 | 1°52 | 17°17 | 13°42 | 6°51 | 5°18 | 24° 1 | 3°31 | S 25 |
| S 26 | 22 14 53 | 2° 9'07 | 20°31 | 16°56 | 13°47 | 9°37 | 16°16 | 2°37 | 1°53 | 17°18 | 13°44 | 6°52 | 5°15 | 24° 7 | 3°30 | S 26 |
| M27 | 22 18 49 | 3° 7'08 | 29544 | 18°36 | 15° 1 | 10°15 | 16°29 | 2°34 | 1°53 | 17°19 | 13°46 | 6°R53 | 5°12 | 24°14 | 3°29 | M27 |
| T 28 | 22 22 46 | 4° 5'11 | 14°45 | 20°15 | 16°15 | 10°53 | 16°42 | 2°30 | 1°54 | 17°19 | 13°48 | 6°53 | 5° 9 | 24°21 | 3°27 | T 28 |
| W29 | 22 26 42 | 5° 3'16 | 26°39 | 21°53 | 17°28 | 11°31 | 16°55 | 2°26 | 1°55 | 17°20 | 13°50 | 6°51 | 5° 5 | 24°27 | 3°26 | W29 |
| T 30 | 22 30 39 | 6° 1'22 | $8\Omega 29$ | 23°29 | 18°42 | 12° 9 | 17° 8 | 2°22 | 1°56 | 17°21 | 13°52 | <u>6°46</u> | <u>5°</u> 2 | 24°34 | 3°25 | T 30 |
| F 31 | 22 34 36 | 6 m 59'31 | $20\Omega 17$ | 25 Mp 4 | 19 Ω 56 | 12 Ω 48 | 17 m 21 | 2 Υ 18 | 1 ∡ 757 | 17 Ⅲ 22 | 13 ≏ 54 | 6 궁 39 | 4 る 59 | 24 Ω 41 | 3 8 24 | F 31 |

| Day | 0 | D | | | φ | | ♂ | 2 | 4 | ŧ | |) | ł(| 4 | | Е |) | n | v | Ç | ď | ; |
|-------------|----------------|-------------------------|----------------------|---------|----------------|----------------------|------------------|--------------|-------|---------------|------|-----------------|-------|----------------|--------------|----------------|--------|-------|----------------|-------|----------------|--------------|
| | decl | decl lat | decl | lat | decl | lat de | el lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| W 1 | 18n16 | | 52 21n33 | - | 22n36 | 0s12 22n2 | | - | | 0s46 | | 20 s27 | | 21n25 | 1 s25 | | | | | | 12n24 | 0 s22 |
| T 2 F 3 | 18 1 17 46 | | 54 21 15 52 20 53 | | 22 32 26 | 0 9 22 1 | 6 0 59 0 0 59 | | 1 4 | 0 47 0 48 | | 20 27 20 27 | | 21 25 21 25 | 1 25 1 25 | 10 24 10 23 | | | | | 12 24 12 24 | 0 22 0 22 |
| S 4 | 17 30 | | 41 20 30 | | 22 20 | 0 4 22 | 3 0 59 | - | 1 4 | 0 49 | | 20 27 | | 21 25 | 1 25 | | | | | | | 0 22 |
| S 5 | 17 14 | 5 36 4 3 | 22 20 4 | 1 33 | 22 13 | 0 1 21 3 | 6 1 0 | 8 5 | 1 4 | 0 50 | 2 29 | 20 27 | 0 7 | 21 25 | 1 25 | 10 21 | 16 53 | 23 14 | 23 19 | 10 47 | 12 24 | 0 22 |
| M 6 | 16 58 | - | 51 19 35 | | 22 6 | - | 9 1 0 | | 1 4 | 0 51 | | 20 27 | | 21 25 | 1 25 | | | | | | | 0 22 |
| T 7 | 16 41 | 4s15 5 | 7 19 5 | | 21 58 | - | 2 1 1 | 7 56 | 1 4 | 0 52 | | 20 27 | | 21 25 | 1 25 | | | | | | 12 24 | 0 22 |
| W 8 T 9 | 16 25 16 8 | | 10 18 33 59 17 59 | _ | 21 49 21 40 | 0 7 21 3 | 4 1 1 | 7 51 7 47 | 1 4 | 0 53 0 54 | | 20 27 20 27 | | 21 25 | 1 25 1 25 | | | | | | | 0 22 0 23 |
| F 10 | | - | 34 17 23 | | 21 40 | 0 9 21 2 | | | 1 4 | 0 56 | | 20 27 | | 21 23 | 1 25 | | | | | | 12 24 | 0 23 |
| S 11 | 15 33 | | 55 16 46 | _ | | 0 15 21 | - | | 1 4 | 0 57 | | 20 27 | | 21 26 | 1 25 | | | | | | 12 24 | 0 23 |
| S 12 | 15 15 | 23 30 3 | 2 16 7 | 1 46 | 21 8 | 0 17 21 | 3 1 2 | 7 32 | 1 4 | 0 58 | 2 31 | 20 27 | 0 6 | 21 26 | 1 25 | 10 14 | 16 50 | 23 16 | 23 20 | 10 28 | 12 23 | 0 23 |
| M13 | 14 57 | 24 37 1 : | 58 15 27 | 1 45 | 20 57 | 0 20 20 3 | 5 1 3 | 7 27 | 1 4 | 0 59 | 2 31 | 20 27 | 0 6 | 21 26 | 1 25 | 10 13 | 16 50 | 23 16 | 23 20 | 10 26 | 12 23 | 0 23 |
| T 14 | 14 39 | 24 13 0 | 45 14 47 | 1 43 | 20 44 | 0 22 20 4 | 7 1 3 | 7 23 | 1 4 | 1 1 | 2 31 | 20 27 | 0 6 | 21 26 | 1 25 | 10 12 | 16 49 | 23 16 | 23 21 | 10 23 | 12 23 | 0 23 |
| W15 | 14 21 | 22 13 0n | | | 20 31 | 0 25 20 3 | - | , | 1 4 | 1 2 | 2 31 | | | 21 26 | 1 25 | 10 11 | | | | 10 20 | | 0 23 |
| T 16 | 14 2 | - | | | 20 18 | 0 27 20 3 | | 7 13 | 1 4 | 1 3 | | 20 27 | | 21 26 | 1 25 | | | | | | 12 22 | 0 23 |
| F 17 | 13 43 | | 2 12 39 | | 20 3 | 0 30 20 2 | | 7 8 | 1 4 | 1 5 | | 20 27 | | 21 26 | 1 25 | | | | 23 21 | 10 15 | | 0 23 0 24 |
| S 18 | 13 24 | | 1 11 56 | | 19 49 | | 2 1 4 | , - | | 1 6 | | 20 27 | | 21 26 | 1 25 | | | | | 10 12 | | |
| S 19 M20 | 13 4 12 45 | 1 53 4 4 4n20 5 | 43 11 12 4 10 27 | | 19 33 19 17 | 0 35 20 0 37 19 3 | 3 1 5 4 1 5 | 6 58 | 1 4 | 1 7 | | 20 27 20 27 | | 21 26 | 1 25 1 26 | | | | 23 21 23 21 | | 12 22 12 21 | 0 24 |
| T 21 | 12 45 12 25 | | 4 10 27 5 9 42 | | 19 17 | | 4 1 5 5 1 5 | 6 49 | 1 4 | 1 10 | 2 32 | 20 27 | | 21 26 | 1 26 | | | | 23 21 | | 12 21 | 0 24 0 24 |
| W22 | 12 25 | | 47 8 57 | | 18 44 | 0 41 19 3 | - | 6 44 | 1 4 | 1 12 | | 20 27 | | 21 26 | 1 26 | | | | 23 22 | | 12 21 | 0 24 |
| T 23 | | 19 25 4 | | | 18 26 | | 6 1 6 | 6 39 | 1 4 | 1 13 | | 20 28 | | 21 27 | 1 26 | | | | 23 22 | | 12 20 | 0 24 |
| F 24 | 11 25 | 22 24 3 2 | 25 7 27 | 1 2 | 18 8 | 0 46 19 | 6 1 6 | 6 34 | 1 3 | 1 15 | 2 33 | 20 28 | 0 6 | 21 27 | 1 26 | 10 2 | 16 45 | 23 18 | 23 22 | 9 56 | 12 20 | 0 24 |
| S 25 | 11 4 | 24 7 2 | 29 6 41 | 0 56 | 17 50 | 0 48 19 | 7 1 7 | 6 29 | 1 3 | 1 17 | 2 33 | 20 28 | 0 6 | 21 27 | 1 26 | 10 1 | 16 45 | 23 18 | 23 22 | 9 53 | 12 19 | 0 24 |
| S 26 | | 24 35 1 1 | | | 17 31 | 0 50 18 3 | | 6 24 | 1 3 | 1 18 | | 20 28 | | 21 27 | 1 26 | | | | 23 22 | | 12 19 | 0 24 |
| M27 | | 23 49 0 | | | 17 11 | 0 52 18 4 | | , | 1 3 | 1 20 | | 20 28 | | 21 27 | 1 26 | | - | | 23 22 | - | 12 18 | 0 25 |
| T 28 | | 21 58 0s4 | | | 16 51 | 0 54 18 3 | | | 1 3 | 1 22 | | 20 28 | | 21 27 | 1 26 | | | | 23 22 | | 12 18 | 0 25 |
| W29 T 30 | 9 40 9 19 | - | | | 16 31 16 9 | 0 56 18 2 0 58 18 | | | 1 3 | 1 23 1 25 | | 20 29 20 29 | | 21 27 21 27 | 1 26 1 26 | | | | 23 23 23 23 | | 12 17 12 17 | 0 25 0 25 |
| F 31 | | 15 35 2 4 11n25 3 si | | | | 1n 0 18n | | | | 1 23 1 s27 | | 20 29 20 s29 | | 21 27 21n27 | 1 s26 | | | | 23 s23 | | 12 17 12n16 | |
| 1 31 | 01137 | 111123 33. | 21111 | 01113 | 131170 | 111 0 1011 | 0 111 9 | 31133 | 111 3 | 1 34/ | 2334 | 20329 | 011 0 | 21112/ | 1 320 | 71100 | 101173 | 23310 | 20020 | 71137 | 121110 | 0 323 |

Julian Day Number = 2353506.5, Delta T = 11.46 sec Ecliptic obliquity = 23°28'28, Nutation = $0^{\circ}00'18$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^{\circ}59'35$, Lahiri = $20^{\circ}06'35$ Greg. Calendar

SEPTEMBER 1731 00:00 UT

| Day | Sid.t | 0 | D | ğ | φ | ď | 4 | ħ |)∤(| ¥ | Р | ស | ಬ | Ç | ę, | Day |
|------|----------|------------------|----------------|----------------|-----------------|----------------|----------------|---------------|----------------|----------------|----------------|---------------|---------------|----------------|---------------|------|
| S 1 | 22 38 32 | 7 m 57'41 | 2 M 8 | 26 My 38 | 21 \O 10 | 13 £ 26 | 17 m 33 | 2°R14 | 1 才 58 | 17 Ⅲ 22 | 13 ≏ 56 | 6°R30 | 4 궁 56 | 24 Ω 47 | 3°R23 | S 1 |
| S 2 | 22 42 29 | 8°55'53 | 14° 1 | 28°11 | 22°24 | 14° 4 | 17°46 | 2 Υ 10 | 1°59 | 17°23 | 13°58 | 6 ප 19 | 4°53 | 24°54 | 3 8 21 | S 2 |
| M 3 | 22 46 25 | 9°54'06 | 26° 0 | 29°43 | 23°38 | 14°42 | 17°59 | 2° 6 | 2° 0 | 17°24 | 14° 0 | 6° 7 | 4°49 | 25° 1 | 3°20 | M 3 |
| T 4 | 22 50 22 | 10°52'22 | 8 ♀ 4 | 1 ≏ 13 | 24°52 | 15°20 | 18°12 | 2° 2 | 2° 2 | 17°24 | 14° 2 | 5°55 | 4°46 | 25° 7 | 3°18 | T 4 |
| W 5 | 22 54 18 | 11°50'39 | 20°16 | 2°42 | 26° 6 | 15°58 | 18°25 | 1°58 | 2° 3 | 17°25 | 14° 4 | 5°44 | 4°43 | 25°14 | 3°17 | W 5 |
| T 6 | 22 58 15 | 12°48'57 | 2 M .38 | 4°10 | 27°20 | 16°36 | 18°38 | 1°53 | 2° 4 | 17°25 | 14° 6 | 5°36 | 4°40 | 25°21 | 3°15 | T 6 |
| F 7 | 23 2 11 | 13°47'17 | 15°11 | 5°37 | 28°35 | 17°14 | 18°51 | 1°49 | 2° 6 | 17°26 | 14° 8 | 5°30 | 4°37 | 25°28 | 3°13 | F 7 |
| S 8 | 23 6 8 | 14°45'39 | 27°59 | 7° 2 | 29°49 | 17°52 | 19° 4 | 1°45 | 2° 7 | 17°26 | 14°10 | 5°26 | 4°34 | 25°34 | 3°12 | S 8 |
| S 9 | 23 10 5 | 15°44'03 | 11 ~ 5 | 8°27 | 1 Mp 3 | 18°30 | 19°17 | 1°40 | 2°8 | 17°27 | 14°12 | 5°D25 | 4°30 | 25°41 | 3°10 | S 9 |
| M10 | 23 14 1 | 16°42'28 | 2 <u>4</u> °30 | 9°49 | 2°17 | 19° 7 | 19°30 | 1°36 | 2°10 | 17°27 | 14°15 | 5°25 | 4°27 | 25°48 | 3° 8 | M10 |
| T 11 | 23 17 58 | 17°40'54 | 8 궁 20 | 11°11 | 3°31 | 19°45 | 19°43 | 1°31 | 2°11 | 17°27 | 14°17 | 5°R25 | 4°24 | 25°54 | 3° 6 | T 11 |
| W12 | 23 21 54 | 18°39'23 | 22°33 | 12°31 | 4°46 | 20°23 | 19°56 | 1°27 | 2°13 | 17°28 | 14°19 | 5°24 | 4°21 | 26° 1 | 3° 5 | W12 |
| T 13 | 23 25 51 | 19°37'52 | 7 ≈ 10 | 13°50 | 6° 0 | 21° 1 | 20° 9 | 1°22 | 2°15 | 17°28 | 14°21 | 5°21 | 4°18 | 26° 8 | 3° 3 | T 13 |
| F 14 | 23 29 47 | 20°36'24 | 22° 6 | 15° 7 | 7°14 | 21°39 | 20°22 | 1°18 | 2°16 | 17°28 | 14°23 | 5°16 | 4°15 | 26°14 | 3° 1 | F 14 |
| S 15 | 23 33 44 | 21°34'57 | 7 ₩ 15 | 16°23 | 8°29 | 22°16 | 20°35 | 1°13 | 2°18 | 17°28 | 14°26 | 5° 7 | 4°11 | 26°21 | 2°59 | S 15 |
| S 16 | 23 37 40 | 22°33'32 | 22°27 | 17°37 | 9°43 | 22°54 | 20°48 | 1° 9 | 2°20 | 17°29 | 14°28 | 4°57 | 4° 8 | 26°28 | 2°57 | S 16 |
| M17 | 23 41 37 | 23°32'09 | 7 Υ 31 | 18°49 | 10°58 | 23°32 | 21° 1 | 1° 4 | 2°22 | 17°29 | 14°30 | 4°46 | 4° 5 | 26°34 | 2°55 | M17 |
| T 18 | 23 45 34 | 24°30'48 | 22°17 | 20° 0 | 12°12 | 24° 9 | 21°14 | 0°59 | 2°24 | 17°29 | 14°32 | 4°36 | 4° 2 | 26°41 | 2°52 | T 18 |
| W19 | 23 49 30 | 25°29'29 | 6837 | 21° 9 | 13°27 | 24°47 | 21°27 | 0°55 | 2°26 | 17°29 | 14°35 | 4°27 | 3°59 | 26°48 | 2°50 | W19 |
| T 20 | 23 53 27 | 26°28'12 | 20°29 | 22°16 | 14°41 | 25°25 | 21°40 | 0°50 | 2°27 | 17°29 | 14°37 | 4°20 | 3°55 | 26°55 | 2°48 | T 20 |
| F 21 | 23 57 23 | 27°26'58 | 3 Ⅱ 51 | 23°21 | 15°56 | 26° 2 | 21°53 | 0°45 | 2°29 | 17°R29 | 14°39 | 4°16 | 3°52 | 27° 1 | 2°46 | F 21 |
| S 22 | 0 1 20 | 28°25'46 | 16°46 | 24°23 | 17°11 | 26°40 | 22° 6 | 0°41 | 2°32 | 17°29 | 14°41 | 4°15 | 3°49 | 27° 8 | 2°43 | S 22 |
| S 23 | 0 5 16 | 29°24'36 | 29°17 | 25°23 | 18°25 | 27°17 | 22°19 | 0°36 | 2°34 | 17°29 | 14°44 | 4°14 | 3°46 | 27°15 | 2°41 | S 23 |
| M24 | 0 9 13 | 0 م 23'29 | 119529 | 26°21 | 19°40 | 27°55 | 22°31 | 0°31 | 2°36 | 17°29 | 14°46 | 4°14 | 3°43 | 27°21 | 2°39 | M24 |
| T 25 | 0 13 9 | 1°22'23 | 23°29 | 27°16 | 20°55 | 28°32 | 22°44 | 0°27 | 2°38 | 17°29 | 14°48 | 4°13 | 3°40 | 27°28 | 2°36 | T 25 |
| W26 | 0 17 6 | 2°21'20 | 5 Ω 21 | 28° 7 | 22° 9 | 29°10 | 22°57 | 0°22 | 2°40 | 17°29 | 14°51 | 4°10 | 3°36 | 27°35 | 2°34 | W26 |
| T 27 | 0 21 3 | 3°20'20 | 17°10 | 28°56 | 23°24 | 29°47 | 23°10 | 0°17 | 2°42 | 17°28 | 14°53 | 4° 5 | 3°33 | 27°41 | 2°31 | T 27 |
| F 28 | 0 24 59 | 4°19'21 | 28°59 | 29°40 | 24°39 | 0 Mp 25 | 23°23 | 0°13 | 2°45 | 17°28 | 14°55 | 3°56 | 3°30 | 27°48 | 2°29 | F 28 |
| S 29 | 0 28 56 | 5°18'25 | 10 m 53 | 0 M .21 | 25°54 | 1° 2 | 23°36 | 0° 8 | 2°47 | 17°28 | 14°58 | 3°45 | 3°27 | 27°55 | 2°26 | S 29 |
| S 30 | 0 32 52 | 6 ₽ 17'30 | 22 m 52 | 0 M .58 | 27 m 9 | 1 m 39 | 23 m 49 | 0 Υ 3 | 2 , 749 | 17 Ⅲ 28 | 15 ♀ 0 | 3 る 32 | 3 る 24 | 28 N 1 | 2 8 24 | S 30 |

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|---------|--|--|---|--|--|---|--|---|---|--|---|---|--|--|-------|---|----------|---|--------|------|---|---|
| decl | decl lat | t | decl | lat | decl | lat de | cl lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| 8n36 | 6n50 4 | 4s11 | 1n27 | 0n 7 | 15n26 | 1n 1 17n | 55 1n 9 | 5n54 | 1n 3 | 1 s28 | 2 s35 | 20 s29 | 0n 6 | 21n27 | 1 s26 | 9n54 | 16n42 | 23 s19 | 23 s23 | 9n34 | 12n16 | 0 s25 |
| 8 14 | 1 59 4 | 4 40 | 0 43 | 0s 1 | 15 4 | 1 3 17 | 14 1 9 | 5 49 | 1 3 | 1 30 | 2 35 | 20 29 | 0 6 | 21 27 | 1 26 | 9 53 | 16 42 | 23 19 | 23 23 | 9 31 | 12 15 | 0 25 |
| 7 52 | | | 0 s 1 | - | | - | | | 1 3 | 1 32 | | | | | 1 26 | | | | | | - | 0 25 |
| | , | | | - | - | | | | _ | _ | | | | | - | | | | | | | 0 25 |
| | | | | - | | | | | | | | | | | - | | - | - | | | | 0 26 0 26 |
| - | | | | | | | | | | | | | | | - | | | | | | _ | 0 26 |
| - | | - | 3 32 | | | - | - | 5 18 | 1 4 | 1 41 | | | | | 1 26 | | | | | | | 0 26 |
| 5 38 | 24 12 2 | 2 5 | 4 13 | 0 57 | 12 16 | 1 14 16 | 26 1 11 | 5 13 | 1 4 | 1 43 | 2 36 | 20 31 | 0 6 | 21 27 | 1 26 | 9 45 | 16 40 | 23 22 | 23 24 | 9 12 | 12 11 | 0 26 |
| 5 15 | 24 19 0 | 58 | 4 53 | 1 5 | 11 50 | 1 15 16 | 15 1 12 | 5 8 | 1 4 | 1 45 | 2 36 | 20 32 | 0 6 | 21 27 | 1 26 | 9 44 | 16 40 | 23 22 | 23 24 | 9 9 | 12 10 | 0 26 |
| | | | 5 33 | - | - | 1 16 16 | - | | 1 4 | 1 47 | | | | | 1 26 | | | | | | / | 0 26 |
| | | | | | | | | | | - | | | | | 1 26 | | | | | | | 0 26 |
| | | - | | | | | | | | | | | | | | - | | | | | | 0 26 0 27 |
| 3 21 | | | 8 4 | 1 45 | 9 39 | | - | | 1 4 | 1 54 | | | | | 1 27 | | | - | - | | | 0 27 |
| 2 57 | 1n30 4 | 4 54 | 8 40 | 1 53 | 9 11 | 1 21 15 | 3 1 13 | 4 38 | 1 4 | 1 56 | 2 36 | 20 34 | 0 6 | 21 27 | 1 27 | 9 38 | 16 39 | 23 23 | 23 25 | 8 53 | 12 6 | 0 27 |
| 2 34 | 7 35 5 | | 9 15 | 2 1 | 8 44 | | | | 1 4 | 1 58 | | | | 21 27 | 1 27 | | | | | | - | 0 27 |
| | - | | 9 49 | 2 8 | | | | | 1 4 | 2 0 | | | | | 1 27 | | | | | | | 0 27 |
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| | | | | 2 38 | 6 23 | | | | 1 4 | 2 7 | | | | | 1 27 | | | | | | | 0 27 |
| 0 14 | 23 55 0 | 26 | 12 23 | 2 44 | 5 54 | 1 26 13 | 36 1 15 | 4 2 | 1 4 | 2 9 | 2 37 | 20 36 | 0 6 | 21 27 | 1 27 | 9 31 | 16 38 | 23 24 | 23 25 | 8 33 | 12 0 | 0 27 |
| 0s 9 | 22 20 0 | 0s38 | 12 50 | 2 51 | 5 25 | 1 26 13 | 24 1 15 | 3 57 | 1 4 | 2 11 | 2 37 | 20 37 | 0 6 | 21 26 | 1 27 | 9 30 | 16 37 | 23 24 | 23 25 | 8 31 | 11 59 | 0 28 |
| | -, ., | | - | 2 57 | 4 56 | | | | 1 4 | 2 13 | | | | | 1 27 | | | | | | | 0 28 |
| | | | | 3 3 | 4 26 | - | - | | 1 4 | - | | | | - | 1 27 | | | | | | | 0 28 |
| - | | - | | | | - | - | | | | | | | - | | | | | | | | 0 28 0 28 |
| - | | - | - | | | - | - | | | | | | | - | | | | | | | | 0 28 |
| 2 s30 | | | | | | | | | | | | | | | 1 s27 | | | | | | | |
| | decl 8n36 8 14 7 52 7 30 6 6 46 6 23 6 1 5 38 5 15 4 53 4 30 4 7 3 444 3 21 2 57 2 344 1 1 1 0 38 0 14 40s 9 0 33 0 56 1 20 1 43 2 7 | decl decl la 8n36 6n50 4 8 14 1 59 4 7 52 2s58 4 7 30 7 50 7 6 46 16 38 4 6 23 20 8 6 1 22 45 5 5 38 24 12 5 15 24 19 4 53 22 57 4 30 20 7 4 7 15 56 3 44 10 41 3 21 4 44 2 57 1n30 4 2 31 13 7 1 48 17 46 1 24 21 16 1 1 23 28 0 38 24 20 0 14 23 55 0 s9 22 20 0 33 19 47 0 56 16 26 | decl decl lat 8n36 6n50 4 s11 8 14 1 59 4 40 7 52 2s58 4 58 7 30 7 50 5 2 7 8 12 27 4 53 6 46 16 38 4 30 6 23 20 8 3 54 6 1 22 45 3 5 5 5 38 24 12 2 5 5 15 24 19 0 58 4 53 22 57 0n15 4 30 20 7 1 30 4 7 15 56 2 40 3 44 10 41 3 40 3 21 4 44 4 27 2 57 1n30 4 54 2 34 7 35 5 1 2 11 13 7 4 47 1 48 17 46 4 15 1 48 17 46 4 15 1 23 28 2 33 0 38 24 20 1 31 0 14 23 55 0 26 0 s 9 22 20 0 s 38 0 33 19 47 1 40 0 56 16 26 2 37 1 20 12 27 3 26 1 43 7 59 4 7 2 7 3 14 4 36 | decl decl lat decl 8n36 6n50 4s11 1n27 8 14 1 59 4 40 0 43 7 52 2s58 4 58 0s 1 7 30 7 50 5 2 0 44 7 8 12 27 4 53 1 27 6 46 16 38 4 30 2 9 6 23 20 8 3 54 2 51 6 1 22 45 3 5 3 32 5 38 24 12 2 5 413 5 33 4 53 22 57 0n15 5 33 4 30 20 7 1 30 6 12 4 7 15 56 2 40 6 50 3 44 10 41 3 40 7 27 3 21 4 44 4 27 8 4 2 57 1n30 4 54 8 40 2 37 21 13 7 4 47 9 49 1 48 17 46 4 15 10 22 1 24 21 16 3 29 10 54 1 1 23 28 2 33 11 55 0 38 24 20 1 31 11 54 0 14 23 55 0 26 12 | decl decl lat decl lat 8n36 6n50 4s11 1n27 0n 7 8 14 1 59 4 40 0 43 0s 1 7 52 2s58 4 58 0s 1 0 8 7 30 7 50 5 2 0 44 0 16 7 8 12 27 4 53 1 27 0 24 6 46 16 38 4 30 2 9 0 32 6 23 20 8 3 54 2 51 0 40 6 1 22 45 3 5 3 32 0 48 5 38 24 12 2 5 4 13 0 57 5 15 24 19 0 58 4 53 1 5 4 53 22 57 0n15 5 33 1 13 4 30 20 7 1 30 6 12 1 21 4 7 15 56 2 40 6 50 1 29 3 44 10 41 3 40 7 27 1 37 3 24 7 35 5 1 9 15 2 1 2 11 13 7 4 47 9 49 2 8 1 48 17 46 4 15 10 22 2 16 <td>decl decl lat decl lat decl 8n36 6n50 4s11 1n27 0n 7 15n26 8 14 1 59 4 40 0 43 0s 1 15 4 7 52 2s58 4 58 0s 1 0 8 14 41 7 30 7 50 5 2 0 44 0 16 14 18 7 8 12 27 4 53 1 27 0 24 13 54 6 6 46 16 38 4 30 2 9 0 32 13 30 6 6 23 20 8 3 54 2 51 0 40 13 6 6 1 22 45 3 5 3 32 0 48 12 41 15 5 38 24 12 2 5 4 13 0 57 12 16 15 5 15 24 19 0 58 4 53 1 5 11 50 4 53 4 7 30 20 7 1 30 6 12 1 21 10 59 4 7 15 56 2 40 6 50 1 29 10 32 3 4 10 41 3 40 7 27 1 37 10 6 3 21 4 44 4 27 8 4 1 45 9 39 2 57 1n30 4 54 8 40 1 53 9 91 2 18 84 2 11 13 7 4 47 9 49 2 8 8 16 4 6 415 10 22 2 16 7 48 1 48 17 46 4 15 10 22 2</td> <td>decl decl lat lat</td> <td>decl decl lat 8 14 1 59 4 40 0 43 0s 1 1 5 4 1 3 17 44 1 9 7 52 2 588 4 58 0s 1 0 8 14 41 1 5 17 33 1 9 7 30 7 50 5 2 0 44 0 16 14 18 1 6 17 22 1 10 6 46 16 38 4 30 2 9 0 32 13 30 1 10 17 0 1 10 6 623 20 8 3 54 2 51 0 40 13 6 1 11 16 49 1 11 6 623 20 8 3 54 2 51 0 40 13 6 1 11 16 49 1 11 6 1 22 45 3 5 3 32 0 48 12 41 1 12 16 38 1 11 5 38 24 12 2 5 4 13 0 57 12 16 1 14 16 26 1 11 1 6 26 1 11 5 15 24 19 0 58 4 53 1 5 11 50 1 15 16 15 1 12 4 7 30 20 7 1 30 6 12 1 2 10 59 1 17 15 51 1 12 4 7 31 56 2 240 6 50 1 29 10 32</td> <td>decl decl lat decl 8 14 1 59 4 40 0 43 0s 1 15 4 1 3 17 44 1 9 5 49 7 52 2 558 4 58 0s 1 0 8 14 41 1 5 17 33 1 9 5 49 7 30 7 50 5 2 0 44 0 16 14 18 1 6 17 22 1 10 5 39 7 8 12 27 4 53 1 27 0 24 13 54 1 8 17 11 1 10 5 34 6 46 16 38 4 30 2 9 0 32 13 30 1 10 17 0 1 10 5 29 6 23 20 8 3 54 2 51 0 40 13 6 1 11 16 49 1 11 5 24 6 1 22 45 3 5 3 32 0 48 12 41 1 12 16 38 1 11 5 18 5 38 24 12 2 5 4 13 0 57 12 16 1 14 16 26 1 11 5 18 5 18 5 24 1 9 0 58 4 53 1 5 1 5 11 50 1 15 16 15 1 12 5 8 4 30 20 7 1 30 6 12 1 21 10 59 1 17 15 16 15 1 12 5 8 4 30 20 7 1 30 6 12 1 21 10 59 1 17 15 51 1 12 4 58 4 7 15 56 2 40 6 50 1 29 10 32 1 18 15 39 1 12 4 53 3 4 4 10 41 3 40 7 27 1 37 10 6 1 19 15 28 1 13 4 48 4 8 40 1 53 9 11 1 21 15 3 1 13 4 48 2 57 1 130 4 54 8 40 1 53 9 11 1 21 15 3 1 13 4 48 2 37 1 130 4 54 8 40 1 53 9 11 1 21 15 3 1 1 3 4 38 2 11 13 7 4 47 9 49 2 8 8 16 1 22 1 21 14 14 1 1 1 1 1 1 1 1 4 4 28 1 4 44 4 27 8 4 1 1 45 9 39 1 1 20 15 15 1 1 1 1 4 4 28 1 4 43 3 3 1 3 1 1 3 1 1 5 4 2 3 8 6 23 1 1 25 1 4 2 1 1 1</td> <td>decl decl lat decl lat decl lat decl lat decl lat decl lat 8n36 6n50 4s11 1n27 0n 7 15n26 1n 1 17n55 1n 9 5n54 1n 3 8 14 1 59 4 40 0 43 0s 1 15 4 1 3 17 44 1 9 5 49 1 3 7 52 2s58 4 58 0s 1 0 8 14 41 1 5 17 33 1 9 5 44 1 3 7 30 7 50 5 2 0 44 0 16 14 18 1 6 17 22 1 10 5 39 1 3 6 46 16 38 4 30 2 9 0 32 1 3 6 1 10 7 0 1 10 5 29 1 4 6 23 20 8 3 54 2 51 0 40 13 6 1 11 16 49 1 11 5 24 1 4 6 1 22 45 3 5 3 32 0 48 12 41 1 12 1 6 38 1 11 5 18 1 4 5</td> <td>decl decl lat lat</td> <td>decl decl lat lat de</td> <td> Rec dec lat l</td> <td> Rec dec lat lat</td> <td> Rec</td> <td> Record Sect Sect</td> <td> Rec</td> <td> Record Secondary Record Record</td> <td> Rec</td> <td> Rec</td> <td>$\begin{array}{ c c c c c c c c c c c c c c c c c c c$</td> <td>$\begin{array}{ c c c c c c c c c c c c c c c c c c c$</td> | decl decl lat decl lat decl 8n36 6n50 4s11 1n27 0n 7 15n26 8 14 1 59 4 40 0 43 0s 1 15 4 7 52 2s58 4 58 0s 1 0 8 14 41 7 30 7 50 5 2 0 44 0 16 14 18 7 8 12 27 4 53 1 27 0 24 13 54 6 6 46 16 38 4 30 2 9 0 32 13 30 6 6 23 20 8 3 54 2 51 0 40 13 6 6 1 22 45 3 5 3 32 0 48 12 41 15 5 38 24 12 2 5 4 13 0 57 12 16 15 5 15 24 19 0 58 4 53 1 5 11 50 4 53 4 7 30 20 7 1 30 6 12 1 21 10 59 4 7 15 56 2 40 6 50 1 29 10 32 3 4 10 41 3 40 7 27 1 37 10 6 3 21 4 44 4 27 8 4 1 45 9 39 2 57 1n30 4 54 8 40 1 53 9 91 2 18 84 2 11 13 7 4 47 9 49 2 8 8 16 4 6 415 10 22 2 16 7 48 1 48 17 46 4 15 10 22 2 | decl decl lat lat | decl decl lat 8 14 1 59 4 40 0 43 0s 1 1 5 4 1 3 17 44 1 9 7 52 2 588 4 58 0s 1 0 8 14 41 1 5 17 33 1 9 7 30 7 50 5 2 0 44 0 16 14 18 1 6 17 22 1 10 6 46 16 38 4 30 2 9 0 32 13 30 1 10 17 0 1 10 6 623 20 8 3 54 2 51 0 40 13 6 1 11 16 49 1 11 6 623 20 8 3 54 2 51 0 40 13 6 1 11 16 49 1 11 6 1 22 45 3 5 3 32 0 48 12 41 1 12 16 38 1 11 5 38 24 12 2 5 4 13 0 57 12 16 1 14 16 26 1 11 1 6 26 1 11 5 15 24 19 0 58 4 53 1 5 11 50 1 15 16 15 1 12 4 7 30 20 7 1 30 6 12 1 2 10 59 1 17 15 51 1 12 4 7 31 56 2 240 6 50 1 29 10 32 | decl decl lat decl 8 14 1 59 4 40 0 43 0s 1 15 4 1 3 17 44 1 9 5 49 7 52 2 558 4 58 0s 1 0 8 14 41 1 5 17 33 1 9 5 49 7 30 7 50 5 2 0 44 0 16 14 18 1 6 17 22 1 10 5 39 7 8 12 27 4 53 1 27 0 24 13 54 1 8 17 11 1 10 5 34 6 46 16 38 4 30 2 9 0 32 13 30 1 10 17 0 1 10 5 29 6 23 20 8 3 54 2 51 0 40 13 6 1 11 16 49 1 11 5 24 6 1 22 45 3 5 3 32 0 48 12 41 1 12 16 38 1 11 5 18 5 38 24 12 2 5 4 13 0 57 12 16 1 14 16 26 1 11 5 18 5 18 5 24 1 9 0 58 4 53 1 5 1 5 11 50 1 15 16 15 1 12 5 8 4 30 20 7 1 30 6 12 1 21 10 59 1 17 15 16 15 1 12 5 8 4 30 20 7 1 30 6 12 1 21 10 59 1 17 15 51 1 12 4 58 4 7 15 56 2 40 6 50 1 29 10 32 1 18 15 39 1 12 4 53 3 4 4 10 41 3 40 7 27 1 37 10 6 1 19 15 28 1 13 4 48 4 8 40 1 53 9 11 1 21 15 3 1 13 4 48 2 57 1 130 4 54 8 40 1 53 9 11 1 21 15 3 1 13 4 48 2 37 1 130 4 54 8 40 1 53 9 11 1 21 15 3 1 1 3 4 38 2 11 13 7 4 47 9 49 2 8 8 16 1 22 1 21 14 14 1 1 1 1 1 1 1 1 4 4 28 1 4 44 4 27 8 4 1 1 45 9 39 1 1 20 15 15 1 1 1 1 4 4 28 1 4 43 3 3 1 3 1 1 3 1 1 5 4 2 3 8 6 23 1 1 25 1 4 2 1 1 1 | decl decl lat decl lat decl lat decl lat decl lat decl lat 8n36 6n50 4s11 1n27 0n 7 15n26 1n 1 17n55 1n 9 5n54 1n 3 8 14 1 59 4 40 0 43 0s 1 15 4 1 3 17 44 1 9 5 49 1 3 7 52 2s58 4 58 0s 1 0 8 14 41 1 5 17 33 1 9 5 44 1 3 7 30 7 50 5 2 0 44 0 16 14 18 1 6 17 22 1 10 5 39 1 3 6 46 16 38 4 30 2 9 0 32 1 3 6 1 10 7 0 1 10 5 29 1 4 6 23 20 8 3 54 2 51 0 40 13 6 1 11 16 49 1 11 5 24 1 4 6 1 22 45 3 5 3 32 0 48 12 41 1 12 1 6 38 1 11 5 18 1 4 5 | decl decl lat lat | decl decl lat lat de | Rec dec lat l | Rec dec lat lat | Rec | Record Sect Sect | Rec | Record Secondary Record Record | Rec | Rec | $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ |

Julian Day Number = 2353537.5, Delta T = 11.47 sec Ecliptic obliquity = 23°28'28, Nutation = $0^\circ00'18$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^\circ59'39$, Lahiri = $20^\circ06'40$ Greg. Calendar

OCTOBER 1731 00:00 UT

| Day | Sid.t | 0 | D | ğ | φ | ď | 4 | ħ |)ţ(| 并 | Р | n | ດ | Ç | ķ | Day |
|--------------|--------------------|----------------------|--------------------------|----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|----------------|---------------|---------------|---------------|---------------|--------------|
| M 1 | 0 36 49 | 7 ₽ 16'38 | 5₾ 0 | 1 M .30 | 28 m)24 | 2 m) 17 | 24 m) 2 | 29°R59 | 2× 7 52 | 17°R27 | 15 ♀ 2 | 3°R18 | 3 ට 20 | 28 Ω 8 | 2°R21 | M 1 |
| T 2 | 0 40 45 | 8°15'48 | 17°16 | 1°57 | 29°38 | 2°54 | 24°14 | 29 \ 54 | 2°54 | 17 II 27 | 15° 5 | 3 당 4 | 3°17 | 28°15 | 2 8 19 | T 2 |
| W 3 | 0 44 42 | 9°15'00 | 29°42 | 2°19 | 0 <u>₽</u> 53 | 3°31 | 24°27 | 29°49 | 2°57 | 17°27 | 15° 7 | 2°51 | 3°14 | 28°22 | 2°16 | W 3 |
| T 4 | 0 48 38 | 10°14'14 | 12 M .18 | 2°34 | 2° 8 | 4° 9 | 24°40 | 29°45 | 2°59 | 17°26 | 15°10 | 2°41 | 3°11 | 28°28 | 2°13 | T 4 |
| F 5 | 0 52 35 | 11°13'30 | 25° 4 | 2°44 | 3°23 | 4°46 | 24°53 | 29°40 | 3° 2 | 17°26 | 15°12 | 2°33 | 3° 8 | 28°35 | 2°10 | F 5 |
| S 6 | 0 56 31 | 12°12'47 | 8 × 1 | 2°R46 | 4°38 | 5°23 | 25° 5 | 29°36 | 3° 5 | 17°25 | 15°14 | 2°29 | 3° 5 | 28°42 | 2° 8 | S 6 |
| S 7 | 1 0 28 | 13°12'07 | 21°12 | 2°41 | 5°53 | 6° 0 | 25°18 | 29°31 | 3° 7 | 17°25 | 15°17 | 2°27 | 3° 1 | 28°48 | 2° 5 | S 7 |
| M 8 | 1 4 25 | 14°11'28 | 4 る 38 | 2°28 | 7° 8 | 6°37 | 25°31 | 29°27 | 3°10 | 17°24 | 15°19 | 2°D27 | 2°58 | 28°55 | 2° 2 | M 8 |
| T 9 | 1 8 21 | 15°10'52 | 18°22 | 2° 7 | 8°23 | 7°14 | 25°43 | 29°22 | 3°13 | 17°24 | 15°22 | 2°R27 | 2°55 | 29° 2 | 1°59 | T 9 |
| W10 | 1 12 18 | 16°10'16 | 2≈23 | 1°38 | 9°38 | 7°51 | 25°56 | 29°18 | 3°16 | 17°23 | 15°24 | 2°26 | 2°52 | 29° 8 | 1°56 | W10 |
| T 11 | 1 16 14 | 17° 9'43 | 16°43 | 1° 1 | 10°53 | 8°29 | 26° 9 | 29°14 | 3°18 | 17°22 | 15°26 | 2°23 | 2°49 | 29°15 | 1°54 | T 11 |
| F 12 | 1 20 11 | 18° 9'11 | 1) 19 | 0°15 | 12° 8 | 9° 6 | 26°21 | 29° 9 | 3°21 | 17°22 | 15°29 | 2°18 | 2°46 | 29°22 | 1°51 | F 12 |
| S 13 | 1 24 7 | 19° 8'41 | 16° 7 | 29 ≏ 21 | 13°23 | 9°43 | 26°34 | 29° 5 | 3°24 | 17°21 | 15°31 | 2°10 | 2°42 | 29°29 | 1°48 | S 13 |
| S 14 | 1 28 4 | 20° 8'13 | 0 Ƴ 59 | 28°21 | 14°38 | 10°20 | 26°46 | 29° 1 | 3°27 | 17°20 | 15°33 | 2° 0 | 2°39 | 29°35 | 1°45 | S 14 |
| M15 | 1 32 0 | 21° 7'47 | 15°47 | 27°14 | 15°54 | 10°57 | 26°58 | 28°57 | 3°30 | 17°19 | 15°36 | 1°49 | 2°36 | 29°42 | 1°42 | M15 |
| T 16 | 1 35 57 | 22° 7'23 | 0823 | 26° 3 | 17° 9 | 11°33 | 27°11 | 28°53 | 3°33 | 17°19 | 15°38 | 1°38 | 2°33 | 29°49 | 1°39 | T 16 |
| W17 | 1 39 54 | 23° 7'00 | 14°38 | 24°49 | 18°24 | 12°10 | 27°23 | 28°48 | 3°36 | 17°18 | 15°41 | 1°29 | 2°30 | 29°55 | 1°36 | W17 |
| T 18 F 19 | 1 43 50 1 47 47 | 24° 6'41 25° 6'23 | 28°29 11 II 53 | 23°34 22°20 | 19°39 20°54 | 12°47 13°24 | 27°35 27°48 | 28°44 28°40 | 3°39 3°42 | 17°17 17°16 | 15°43 15°45 | 1°23 1°18 | 2°26 2°23 | 0 m 2 0° 9 | 1°33 1°30 | T 18 F 19 |
| S 20 | 1 51 43 | 26° 6'07 | 24°51 | 21°11 | 20° 34 | 13 24 14° 1 | 28° 0 | 28°37 | 3°45 | 17°15 | 15°48 | 1°17 | 2°20 | 0°15 | 1°27 | S 20 |
| | | | | | | | | | | | | | | | | |
| S 21 M22 | 1 55 40 1 59 36 | 27° 5'54 28° 5'43 | 7 © 25 19°41 | 20° 7 19°11 | 23°24 24°40 | 14°38 15°14 | 28°12 28°24 | 28°33 28°29 | 3°48 3°51 | 17°14 17°13 | 15°50 15°52 | 1°D17 1°17 | 2°17 2°14 | 0°22 0°29 | 1°24 1°21 | S 21 M22 |
| T 23 | 2 3 33 | 28° 5'34 29° 5'34 | 19°41 1 Ω 43 | 19°11 18°24 | 25°55 | 15°14 15°51 | 28°24 28°36 | 28°25 | 3°54 | 17°13 | 15°52 15°55 | 1°R18 | 2°14 2°11 | 0°29 0°36 | 1°18 | T 23 |
| W24 | 2 7 29 | 0M 5'28 | 13°36 | 17°47 | 27°10 | 16°28 | 28°48 | 28°22 | 3°58 | 17°11 | 15°57 | 1°16 | 2° 7 | 0°42 | 1°15 | W24 |
| T 25 | 2 11 26 | 1° 5'23 | 25°26 | 17°22 | 28°25 | 17° 5 | 29° 0 | 28°18 | 4° 1 | 17°10 | 15°59 | 1°13 | 2° 4 | 0°49 | 1°12 | T 25 |
| F 26 | 2 15 23 | 2° 5'21 | 7 mp 17 | 17° 8 | 29°41 | 17°41 | 29°12 | 28°15 | 4° 4 | 17° 9 | 16° 2 | 1° 8 | 2° 1 | 0°56 | 1° 9 | F 26 |
| S 27 | 2 19 19 | 3° 5'21 | 19°14 | 17°D 6 | 0 M .56 | 18°18 | 29°24 | 28°11 | 4° 7 | 17° 8 | 16° 4 | 1° 0 | 1°58 | 1° 2 | 1° 6 | S 27 |
| S 28 | 2 23 16 | 4° 5'22 | 1 ≏ 20 | 17°15 | 2°11 | 18°54 | 29°36 | 28° 8 | 4°11 | 17° 7 | 16° 6 | 0°50 | 1°55 | 1° 9 | 1° 3 | S 28 |
| M29 | 2 27 12 | 5° 5'26 | 13°37 | 17°34 | 3°26 | 19°31 | 29°47 | 28° 5 | 4°14 | 17° 6 | 16° 9 | 0°39 | 1°52 | 1°16 | 1° 0 | M29 |
| T 30 | 2 31 9 | 6° 5'32 | 26° 6 | 18° 3 | 4°42 | 20° 8 | 29°59 | 28° 1 | 4°17 | 17° 5 | 16°11 | 0°29 | 1°48 | 1°22 | 0°57 | T 30 |
| W31 | 2 35 5 | 7 M 5'40 | 8 M 49 | 18 ≏ 41 | 5 M .57 | 20 m 44 | 0 ჲ 11 | 27 米 58 | 4 ~ 121 | 17 II 3 | 16 ₾ 13 | 0 궁 19 | 1 る 45 | 1 m 29 | 0 8 54 | W31 |

| Day | 0 | D | ğ | Q | ♂ | 4 | ħ |)Å(| ¥ | Р | w v | Ç | ķ |
|--|---|--|---|--|--|--|--|--|--|--|--|--|--|
| | decl | decl lat | decl lat | decl lat dec | lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl decl | decl | decl lat |
| M 1 T 2 W 3 | | 11 16 4 51 | 15 s13 3 s25 15 24 3 27 | 1n58 1n27 11n5 1 28 1 26 11 4 | 1 17 | 3n22 1n 4 3 17 1 5 | 2 26 2 37 | 20 41 0 6 | 21n26 1 s27 21 26 1 27 | 9 23 16 37 | 23 s26 23 s26 23 26 23 26 | 8n11 11 8 8 11 | 51 0 28 |
| T 4 F 5 S 6 | | | | 0s 2 1 25 10 5 | 3 1 18 9 1 18 | 3 12 1 5 3 7 1 5 3 2 1 5 2 57 1 5 | 2 30 2 37 2 32 2 37 | 20 42 0 6 20 42 0 6 | 21 26 1 27 21 26 1 27 21 26 1 27 21 26 1 27 | 9 21 16 37 9 20 16 37 | 23 27 23 26 23 27 23 26 23 27 23 26 23 27 23 26 | 8 6 11 8 3 11 8 0 11 7 57 11 | 49 0 29 48 0 29 |
| S 7 M 8 T 9 W10 T 11 F 12 | 5 13 5 36 5 59 6 22 6 45 7 8 | 24 10 0 59 23 12 0n12 20 50 1 23 17 12 2 31 12 29 3 32 6 59 4 19 | 15 38 3 25 15 30 3 21 15 17 3 16 15 1 3 9 14 39 3 0 14 13 2 49 | 1 3 1 25 10 3 1 33 1 24 10 1 2 3 1 23 10 2 33 1 23 9 5 3 4 1 22 9 3 3 34 1 21 9 2 | 2 1 19 9 1 19 5 1 19 2 1 19 8 1 20 4 1 20 | 2 52 1 5 2 47 1 5 2 42 1 5 2 37 1 5 2 32 1 5 2 27 1 5 | 2 35 2 37 2 37 2 37 2 39 2 37 2 40 2 37 2 42 2 36 2 44 2 36 | 20 43 0 6 20 44 0 6 20 44 0 6 20 45 0 6 20 45 0 6 20 46 0 6 | 21 26 1 27 21 25 1 28 21 25 1 28 | 9 18 16 37 9 17 16 36 9 16 16 37 9 15 16 37 9 14 16 37 9 14 16 37 | 23 27 23 26 23 27 23 26 23 27 23 27 23 27 23 27 23 27 23 27 23 27 23 27 23 27 23 27 | 7 55 11 7 52 11 7 49 11 7 46 11 7 44 11 7 41 11 | 46 0 29 45 0 29 44 0 29 43 0 29 41 0 29 40 0 29 |
| S 13 S 14 M15 T 16 W17 T 18 F 19 S 20 | 9 0 9 22 9 44 | 5n 0 5 2 10 43 4 53 15 45 4 25 19 46 3 41 22 32 2 45 | 12 28 2 6 11 46 1 49 11 1 1 30 10 15 1 10 9 28 0 49 | | 7 1 20 8 1 20 9 1 21 5 1 21 1 21 7 1 21 | 2 22 1 5 2 17 1 6 2 12 1 6 2 8 1 6 2 3 1 6 1 58 1 6 1 53 1 6 1 48 1 6 | 2 47 2 36 2 48 2 36 2 50 2 36 2 52 2 36 2 53 2 36 2 55 2 36 | 20 47 0 6 20 48 0 6 20 48 0 6 20 49 0 5 20 49 0 5 20 50 0 5 | 21 25 1 28 21 24 1 28 21 24 1 28 21 24 1 28 | 9 12 16 37 9 11 16 37 9 10 16 37 9 9 16 37 9 9 16 37 9 8 16 37 | 23 27 23 27 23 28 23 27 | 7 38 11 7 35 11 7 33 11 7 30 11 7 27 11 7 24 11 7 21 11 7 19 11 | 38 0 30 37 0 30 36 0 30 35 0 30 34 0 30 33 0 30 |
| S 21 M22 T 23 W24 T 25 F 26 S 27 | 10 27 10 49 11 10 | 22 43 0s33 20 26 1 37 17 17 2 35 13 29 3 26 9 10 4 8 4 32 4 39 0s18 4 58 | 8 0 0 8 7 20 0n12 6 45 0 30 6 15 0 48 5 51 1 4 5 32 1 18 | 8 0 1 11 7 1 8 29 1 10 7 8 58 1 8 6 5 9 26 1 7 6 3 9 55 1 5 6 2 10 23 1 4 6 | 0 1 22 5 1 22 1 22 7 1 22 8 1 23 0 1 23 | 1 48 1 6 1 44 1 6 1 39 1 6 1 34 1 6 1 30 1 7 1 25 1 7 1 20 1 7 1 16 1 7 | 2 57 2 36 2 59 2 35 3 0 2 35 3 2 2 35 3 3 2 35 3 4 2 35 | 20 51 0 5 20 52 0 5 20 52 0 5 20 53 0 5 20 54 0 5 20 54 0 5 | 21 24 1 28 21 23 1 28 21 23 1 28 | 9 6 16 37 9 5 16 37 9 5 16 37 9 4 16 38 9 3 16 38 9 2 16 38 | 23 28 23 27 23 28 23 28 23 28 23 28 23 28 23 28 | 7 16 11 7 13 11 7 10 11 7 8 11 7 5 11 7 2 11 6 59 11 | 30 0 30 29 0 30 28 0 30 27 0 31 26 0 31 25 0 31 |
| | 12 54 13 14 13 34 13 s54 | | 5 12 1 51 5 16 1 58 | 11 46 0 59 5 2 12 13 0 57 5 1 | 1 23 2 1 24 | 1 11 1 7 1 7 1 7 1 2 1 7 0n58 1n 7 | 3 8 2 35 3 9 2 34 | 20 56 0 5 20 57 0 5 | 21 23 1 28 21 23 1 28 21 23 1 28 21 23 1 s28 | 9 0 16 38 9 0 16 39 | 23 28 23 28 23 28 23 28 23 28 23 28 23 28 23 28 23 s28 23 s28 | 6 57 11 6 54 11 6 51 11 6n48 11 | 21 0 31 20 0 31 |

Julian Day Number = 2353567.5, Delta T = 11.48 sec Ecliptic obliquity = $23^{\circ}28'28$, Nutation = $0^{\circ}00'17$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^{\circ}59'43$, Lahiri = $20^{\circ}06'44$ Greg. Calendar

NOVEMBER 1731 00:00 UT

| Day | Sid.t | 0 | D | ğ | φ | ð | 4 | ħ |) / (| ¥ | Р | S. | v | Ç | & & | Day |
|------|---------|--------------------|------------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|-----------------|---------------|-----------------|----------------|------|
| T 1 | 2 39 2 | 8M 5'50 | 21 M 44 | 19 ≏ 28 | 7 ™ 12 | 21 m 21 | 0 ჲ 22 | 27°R55 | 4 ₹ 24 | 17°R 2 | 16 ₽ 15 | 0°R11 | 1 る 42 | 1 m) 36 | 0°R51 | T 1 |
| F 2 | 2 42 58 | 9° 6'01 | 4 ₹ 50 | 20°21 | 8°28 | 21°57 | 0°34 | 27 米 52 | 4°27 | 17 I 1 | 16°18 | 0 පි 6 | 1°39 | 1°43 | 0 8 48 | F 2 |
| S 3 | 2 46 55 | 10° 6'14 | 18° 8 | 21°21 | 9°43 | 22°33 | 0°45 | 27°49 | 4°31 | 17° 0 | 16°20 | 0° 3 | 1°36 | 1°49 | 0°45 | S 3 |
| S 4 | 2 50 52 | 11° 6'29 | 1 ප 37 | 22°27 | 10°58 | 23°10 | 0°56 | 27°47 | 4°34 | 16°58 | 16°22 | 0°D 2 | 1°32 | 1°56 | 0°43 | S 4 |
| M 5 | 2 54 48 | 12° 6'46 | 15°16 | 23°38 | 12°14 | 23°46 | 1°8 | 27°44 | 4°38 | 16°57 | 16°24 | 0° 3 | 1°29 | 2° 3 | 0°40 | M 5 |
| T 6 | 2 58 45 | 13° 7'04 | 29° 5 | 24°52 | 13°29 | 24°22 | 1°19 | 27°41 | 4°41 | 16°56 | 16°27 | 0° 4 | 1°26 | 2° 9 | 0°37 | T 6 |
| W 7 | 3 2 41 | 14° 7'23 | 13 ≈ 4 | 26°11 | 14°44 | 24°59 | 1°30 | 27°39 | 4°45 | 16°54 | 16°29 | 0°R 5 | 1°23 | 2°16 | 0°34 | W 7 |
| T 8 | 3 6 38 | 15° 7'43 | 27°14 | 27°32 | 16° 0 | 25°35 | 1°41 | 27°36 | 4°48 | 16°53 | 16°31 | 0° 4 | 1°20 | 2°23 | 0°31 | T 8 |
| F 9 | 3 10 34 | 16° 8'05 | 11) (31 | 28°56 | 17°15 | 26°11 | 1°52 | 27°34 | 4°52 | 16°52 | 16°33 | 0° 2 | 1°17 | 2°30 | 0°28 | F 9 |
| S 10 | 3 14 31 | 17° 8'29 | 25°54 | 0 m 22 | 18°30 | 26°47 | 2° 3 | 27°32 | 4°55 | 16°50 | 16°35 | 29 × 757 | 1°13 | 2°36 | 0°25 | S 10 |
| S 11 | 3 18 27 | 18° 8'53 | 10 Y 19 | 1°49 | 19°46 | 27°23 | 2°14 | 27°30 | 4°59 | 16°49 | 16°37 | 29°51 | 1°10 | 2°43 | 0°22 | S 11 |
| M12 | 3 22 24 | 19° 9'19 | 24°40 | 3°18 | 21° 1 | 27°59 | 2°25 | 27°28 | 5° 2 | 16°47 | 16°39 | 29°45 | 1° 7 | 2°50 | 0°20 | M12 |
| T 13 | 3 26 21 | 20° 9'47 | 8 8 51 | 4°49 | 22°16 | 28°35 | 2°35 | 27°26 | 5° 6 | 16°46 | 16°41 | 29°38 | 1° 4 | 2°56 | 0°17 | T 13 |
| W14 | 3 30 17 | 21°10'16 | 22°47 | 6°20 | 23°32 | 29°11 | 2°46 | 27°24 | 5°10 | 16°44 | 16°44 | 29°33 | 1° 1 | 3° 3 | 0°14 | W14 |
| T 15 | 3 34 14 | 22°10'47 | 6 Ⅱ 25 | 7°52 | 24°47 | 29°47 | 2°56 | 27°22 | 5°13 | 16°43 | 16°46 | 29°29 | 0°58 | 3°10 | 0°11 | T 15 |
| F 16 | 3 38 10 | 23°11'19 | 19°41 | 9°25 | 26° 3 | ე <u>ჲ</u> 23 | 3° 7 | 27°21 | 5°17 | 16°41 | 16°48 | 29°26 | 0°54 | 3°16 | 0° 9 | F 16 |
| S 17 | 3 42 7 | 24°11'54 | 2936 | 10°58 | 27°18 | 0°59 | 3°17 | 27°19 | 5°21 | 16°40 | 16°50 | 29°D26 | 0°51 | 3°23 | 0° 6 | S 17 |
| S 18 | 3 46 3 | 25°12'29 | 15°11 | 12°32 | 28°33 | 1°35 | 3°27 | 27°18 | 5°24 | 16°38 | 16°52 | 29°27 | 0°48 | 3°30 | 0° 3 | S 18 |
| M19 | 3 50 0 | 26°13'07 | 27°28 | 14° 6 | 29°49 | 2°11 | 3°37 | 27°16 | 5°28 | 16°37 | 16°54 | 29°29 | 0°45 | 3°37 | 0° 1 | M19 |
| T 20 | 3 53 56 | 27°13'46 | 9 Ω 33 | 15°40 | 1 √ 4 | 2°46 | 3°47 | 27°15 | 5°31 | 16°35 | 16°56 | 29°31 | 0°42 | 3°43 | 29 Y 58 | T 20 |
| W21 | 3 57 53 | 28°14'26 | 21°28 | 17°14 | 2°19 | 3°22 | 3°57 | 27°14 | 5°35 | 16°34 | 16°57 | 29°32 | 0°38 | 3°50 | 29°56 | W21 |
| T 22 | 4 1 50 | 29°15'09 | 3 m 19 | 18°48 | 3°35 | 3°58 | 4° 7 | 27°13 | 5°39 | 16°32 | 16°59 | 29°R32 | 0°35 | 3°57 | 29°53 | T 22 |
| F 23 | 4 5 46 | 0 ₮ 15'52 | 15°12 | 20°23 | 4°50 | 4°33 | 4°17 | 27°12 | 5°42 | 16°30 | 17° 1 | 29°31 | 0°32 | 4° 3 | 29°50 | F 23 |
| S 24 | 4 9 43 | 1°16'38 | 27°10 | 21°57 | 6° 6 | 5° 9 | 4°27 | 27°11 | 5°46 | 16°29 | 17° 3 | 29°28 | 0°29 | 4°10 | 29°48 | S 24 |
| S 25 | 4 13 39 | 2°17'25 | 9 ₾ 19 | 23°31 | 7°21 | 5°45 | 4°36 | 27°11 | 5°50 | 16°27 | 17° 5 | 29°25 | 0°26 | 4°17 | 29°46 | S 25 |
| M26 | 4 17 36 | 3°18'13 | 21°41 | 25° 6 | 8°36 | 6°20 | 4°45 | 27°10 | 5°53 | 16°25 | 17° 7 | 29°20 | 0°23 | 4°24 | 29°43 | M26 |
| T 27 | 4 21 32 | 4°19'03 | 4ML20 | 26°40 | 9°52 | 6°56 | 4°55 | 27°10 | 5°57 | 16°24 | 17° 9 | 29°16 | 0°19 | 4°30 | 29°41 | T 27 |
| W28 | 4 25 29 | 5°19'54 | 17°16 | 28°14 | 11° 7 | 7°31 | 5° 4 | 27° 9 | 6° 1 | 16°22 | 17°10 | 29°12 | 0°16 | 4°37 | 29°39 | W28 |
| T 29 | 4 29 25 | 6°20'47 | 0 ₹ 29 | 29°49 | 12°23 | 8° 6 | 5°13 | 27° 9 | 6° 5 | 16°20 | 17°12 | 29° 9 | 0°13 | 4°44 | 29°36 | T 29 |
| F 30 | 4 33 22 | 7 .₹ 121'41 | 13 × 759 | 1 ₹ 23 | 13 ₹ 38 | 8 ≏ 42 | 5 ≏ 22 | 27 ∺ 9 | 6 才 8 | 16 Ⅱ 19 | 17 ≏ 14 | 29 ×7 7 | 0 궁 10 | 4 m 50 | 29 Y 34 | F 30 |

| Day | 0 | D | ğ | φ | ď | 4 | ħ |)f(| ¥ | Р | w v | Ç | ķ |
|--|--|---|---|---|--|---|---|---|---|--|--|--|--|
| | decl | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl decl | decl | decl lat |
| T 1 F 2 S 3 | | 21 s17 3 s11 23 17 2 11 24 0 1 4 | 5 56 2 1 | 9 13 s 6 0n53 12 13 32 0 51 13 13 58 0 49 | 4n43 1n24 4 29 1 24 4 15 1 24 | 0n53 1n 7 0 49 1 8 0 44 1 8 | 3 12 2 34 | 20 59 0 5 | 21n23 1 s28 21 22 1 28 21 22 1 28 | 8 58 16 39 | 23 s28 23 s28 23 28 23 28 23 28 23 28 | 6 43 | 11n18 0s31 11 17 0 31 11 16 0 31 |
| S 4 M 5 T 6 W 7 T 8 | 15 11 15 30 15 48 16 6 16 24 | - | 7 7 2 1 7 35 2 1 8 6 2 1 | 14 14 48 0 45 12 15 13 0 43 | 4 1 1 25 3 47 1 25 3 32 1 25 3 18 1 25 3 4 1 25 | 0 40 1 8 0 35 1 8 0 31 1 8 0 27 1 8 0 23 1 8 | 3 14 2 34 3 15 2 33 3 16 2 33 3 17 2 33 3 17 2 33 | 21 1 0 5 21 1 0 5 21 2 0 5 | 21 22 1 28 21 22 1 28 | 8 56 16 40 8 55 16 40 8 55 16 40 | 23 28 23 28 23 28 23 28 | 6 34 6 32 6 29 | 11 15 0 31 11 14 0 32 11 13 0 32 11 11 0 32 11 10 0 32 |
| F 9 S 10 | 16 41 16 59 | 2 44 4 53 3n 5 5 8 | 9 10 2 | 4 16 25 0 37 0 16 48 0 35 | 2 50 1 25 2 35 1 26 | 0 18 1 9 0 14 1 9 | 3 18 2 33 3 19 2 32 | 21 3 0 5 | 21 21 1 28 21 21 1 29 | 8 54 16 41 | 23 28 23 28 23 28 23 28 23 28 23 28 | 6 23 6 20 | 11 9 0 32 |
| S 11 M12 T 13 W14 T 15 F 16 S 17 | 18 20 18 36 | 13 55 4 41 18 15 4 0 21 29 3 6 23 25 2 2 23 57 0 53 | | 51 17 33 0 30 45 17 55 0 28 40 18 16 0 26 34 18 37 0 24 28 18 57 0 21 | 2 21 1 26 2 7 1 26 1 53 1 26 1 39 1 26 1 24 1 27 1 10 1 27 0 56 1 27 | 0 10 1 9 0 6 1 9 0 2 1 9 0s 2 1 9 0 6 1 10 0 10 1 10 0 14 1 10 | 3 19 2 32 3 20 2 32 3 21 2 32 3 21 2 32 3 22 2 31 3 22 2 31 3 23 2 31 | 21 5 0 5 21 6 0 5 21 6 0 5 21 7 0 5 21 8 0 5 | 21 21 1 29 21 21 1 29 21 21 1 29 21 21 1 29 21 20 1 29 21 20 1 29 21 20 1 29 | 8 52 16 42 8 52 16 42 8 51 16 42 8 51 16 43 8 50 16 43 | 23 28 23 28 23 28 23 28 | 6 18 6 15 6 12 6 9 6 7 6 4 6 1 | 11 6 0 32 11 5 0 32 11 4 0 32 11 3 0 32 11 2 0 32 |
| S 18 M19 T 20 W21 T 22 F 23 S 24 | 19 20 | 18 17 2 27 14 39 3 22 10 28 4 7 5 56 4 41 1 10 5 4 | 15 0 1 15 34 1 16 8 0 5 16 41 0 4 17 13 0 4 | 15 19 36 0 17 8 19 54 0 14 2 20 12 0 12 55 20 30 0 10 48 20 47 0 7 41 21 3 0 5 34 21 19 0 2 | 0 42 1 27 0 28 1 27 0 14 1 27 0 s 0 1 27 0 14 1 28 0 28 1 28 0 42 1 28 | 0 18 1 10 0 22 1 10 0 26 1 10 0 30 1 11 0 33 1 11 0 37 1 11 0 41 1 11 | 3 24 2 30 3 24 2 30 3 24 2 30 | 21 10 0 5 21 10 0 5 21 11 0 5 21 12 0 5 21 12 0 5 | 21 20 1 29 21 20 1 29 21 20 1 29 21 19 1 29 21 19 1 29 21 19 1 29 21 19 1 29 | 8 49 16 44 8 49 16 45 8 48 16 45 8 48 16 45 8 48 16 46 | 23 28 23 28 23 28 23 28 | 5 44 | 10 59 0 33 10 58 0 33 |
| T 29 | 21 2 21 13 | 12 56 4 50 17 0 4 17 20 22 3 30 22 45 2 31 | 18 45 0 2 19 14 0 1 19 42 0 20 9 0s | 6 22 16 0 7 | 0 56 1 28 1 10 1 28 1 24 1 28 1 38 1 28 1 52 1 29 2 s 6 1n29 | 0 44 1 11 0 48 1 11 0 52 1 12 0 55 1 12 0 58 1 12 1s 2 1n12 | 3 24 2 29 3 24 2 29 3 24 2 29 3 24 2 28 | 21 14 0 5 21 15 0 5 21 16 0 5 21 16 0 5 | 21 19 1 29 21 19 1 29 21 18 1 529 | 8 47 16 47 8 46 16 47 8 46 16 48 8 46 16 48 | 23 28 23 28 23 s28 23 s28 | | 10 52 0 33 10 51 0 33 |

Julian Day Number = 2353598.5, Delta T = 11.50 sec Ecliptic obliquity = $23^{\circ}28'27$, Nutation = $0^{\circ}00'15$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $20^{\circ}59'48$, Lahiri = $20^{\circ}06'48$ Greg. Calendar

DECEMBER 1731 00:00 UT

| Day | Sid.t | 0 | D | ğ | · | ď | 4 | ħ |)Å(| ¥ | В | n | ß | Ç | ķ | Day |
|------|---------|-------------------|-----------------|-----------------|-----------------|----------------|---------------|----------------|---------------|-----------------|----------------|----------------|-----------------|---------------|----------------|------|
| S 1 | 4 37 19 | 8 × 122'35 | 27 × 743 | 2 ₹ 57 | 14 ×7 54 | 9 ≙ 17 | 5 ₽ 31 | 27°D 9 | 6 ₹ 12 | 16°R17 | 17 ≙ 15 | 29°D 6 | 0중 7 | 4 Mp 57 | 29°R32 | S 1 |
| S 2 | 4 41 15 | 9°23'31 | 11 る 39 | 4°31 | 16° 9 | 9°52 | 5°40 | 27) 9 | 6°16 | 16 II 15 | 17°17 | 29 ×7 7 | 0° 4 | 5° 4 | 29 Y 30 | S 2 |
| M 3 | 4 45 12 | 10°24'28 | 25°43 | 6° 5 | 17°24 | 10°27 | 5°48 | 27° 9 | 6°19 | 16°14 | 17°19 | 29° 8 | 0° 0 | 5°11 | 29°28 | M 3 |
| T 4 | 4 49 8 | 11°25'25 | 9≈52 | 7°40 | 18°40 | 11° 2 | 5°57 | 27° 9 | 6°23 | 16°12 | 17°20 | 29° 9 | 29 × 757 | 5°17 | 29°26 | T 4 |
| W 5 | 4 53 5 | 12°26'23 | 24° 4 | 9°14 | 19°55 | 11°37 | 6° 5 | 27°10 | 6°27 | 16°10 | 17°22 | 29°10 | 29°54 | 5°24 | 29°24 | W 5 |
| T 6 | 4 57 1 | 13°27'22 | 8) 16 | 10°48 | 21°11 | 12°12 | 6°14 | 27°10 | 6°30 | 16° 9 | 17°24 | 29°R11 | 29°51 | 5°31 | 29°22 | T 6 |
| F 7 | 5 0 58 | 14°28'21 | 22°26 | 12°22 | 22°26 | 12°47 | 6°22 | 27°11 | 6°34 | 16° 7 | 17°25 | 29°11 | 29°48 | 5°37 | 29°20 | F 7 |
| S 8 | 5 4 54 | 15°29'21 | 6 Ƴ 32 | 13°56 | 23°41 | 13°22 | 6°30 | 27°12 | 6°38 | 16° 5 | 17°27 | 29°10 | 29°44 | 5°44 | 29°18 | S 8 |
| S 9 | 5 8 5 1 | 16°30'21 | 20°32 | 15°30 | 24°57 | 13°57 | 6°38 | 27°13 | 6°41 | 16° 4 | 17°28 | 29° 9 | 29°41 | 5°51 | 29°16 | S 9 |
| M10 | 5 12 48 | 17°31'22 | 4824 | 17° 5 | 26°12 | 14°32 | 6°46 | 27°14 | 6°45 | 16° 2 | 17°29 | 29° 7 | 29°38 | 5°58 | 29°14 | M10 |
| T 11 | 5 16 44 | 18°32'24 | 18° 5 | 18°39 | 27°27 | 15° 7 | 6°53 | 27°15 | 6°49 | 16° 0 | 17°31 | 29° 6 | 29°35 | 6° 4 | 29°13 | T 11 |
| W12 | 5 20 41 | 19°33'26 | 1 Ⅲ 34 | 20°14 | 28°43 | 15°41 | 7° 1 | 27°16 | 6°52 | 15°58 | 17°32 | 29° 4 | 29°32 | 6°11 | 29°11 | W12 |
| T 13 | 5 24 37 | 20°34'28 | 14°49 | 21°48 | 29°58 | 16°16 | 7° 8 | 27°17 | 6°56 | 15°57 | 17°34 | 29° 4 | 29°29 | 6°18 | 29° 9 | T 13 |
| F 14 | 5 28 34 | 21°35'32 | 27°48 | 23°23 | 1る14 | 16°50 | 7°15 | 27°18 | 6°59 | 15°55 | 17°35 | 29°D 3 | 29°25 | 6°24 | 29° 8 | F 14 |
| S 15 | 5 32 30 | 22°36'36 | 10532 | 24°58 | 2°29 | 17°25 | 7°22 | 27°20 | 7° 3 | 15°53 | 17°36 | 29° 4 | 29°22 | 6°31 | 29° 6 | S 15 |
| S 16 | 5 36 27 | 23°37'40 | 23° 0 | 26°33 | 3°44 | 17°59 | 7°29 | 27°21 | 7° 7 | 15°52 | 17°38 | 29° 4 | 29°19 | 6°38 | 29° 5 | S 16 |
| M17 | 5 40 23 | 24°38'46 | 5 Ω 15 | 28° 9 | 5° 0 | 18°34 | 7°36 | 27°23 | 7°10 | 15°50 | 17°39 | 29° 5 | 29°16 | 6°45 | 29° 3 | M17 |
| T 18 | 5 44 20 | 25°39'52 | 17°19 | 29°44 | 6°15 | 19° 8 | 7°43 | 27°25 | 7°14 | 15°48 | 17°40 | 29° 5 | 29°13 | 6°51 | 29° 2 | T 18 |
| W19 | 5 48 17 | 26°40'58 | 29°15 | 1 る 20 | 7°30 | 19°42 | 7°49 | 27°27 | 7°17 | 15°47 | 17°41 | 29° 5 | 29°10 | 6°58 | 29° 1 | W19 |
| T 20 | 5 52 13 | 27°42'06 | 11 Mp 7 | 2°56 | 8°46 | 20°16 | 7°56 | 27°29 | 7°21 | 15°45 | 17°42 | 29° 6 | 29° 6 | 7° 5 | 29° 0 | T 20 |
| F 21 | 5 56 10 | 28°43'13 | 23° 0 | 4°32 | 10° 1 | 20°50 | 8° 2 | 27°31 | 7°24 | 15°43 | 17°43 | 29° 6 | 29° 3 | 7°11 | 28°58 | F 21 |
| S 22 | 6 0 6 | 29°44'22 | 4 ≙ 57 | 6° 8 | 11°16 | 21°24 | 8° 8 | 27°33 | 7°28 | 15°42 | 17°44 | 29° 6 | 29° 0 | 7°18 | 28°57 | S 22 |
| S 23 | 6 4 3 | 0 ප් 45'31 | 17° 4 | 7°44 | 12°32 | 21°58 | 8°14 | 27°36 | 7°31 | 15°40 | 17°45 | 29° 6 | 28°57 | 7°25 | 28°56 | S 23 |
| M24 | 6 7 59 | 1°46'41 | 29°26 | 9°21 | 13°47 | 22°32 | 8°20 | 27°38 | 7°35 | 15°38 | 17°46 | 29° 6 | 28°54 | 7°32 | 28°55 | M24 |
| T 25 | 6 11 56 | 2°47'51 | 12 M 5 | 10°58 | 15° 2 | 23° 6 | 8°25 | 27°40 | 7°38 | 15°37 | 17°47 | 29° 6 | 28°50 | 7°38 | 28°54 | T 25 |
| W26 | 6 15 52 | 3°49'02 | 25° 6 | 12°35 | 16°18 | 23°40 | 8°31 | 27°43 | 7°42 | 15°35 | 17°48 | 29° 7 | 28°47 | 7°45 | 28°54 | W26 |
| T 27 | 6 19 49 | 4°50'13 | 8 ∡ ³30 | 14°12 | 17°33 | 24°13 | 8°36 | 27°46 | 7°45 | 15°34 | 17°49 | 29° 7 | 28°44 | 7°52 | 28°53 | T 27 |
| F 28 | 6 23 46 | 5°51'24 | 22°16 | 15°49 | 18°48 | 24°47 | 8°41 | 27°49 | 7°48 | 15°32 | 17°50 | 29°R 8 | 28°41 | 7°58 | 28°52 | F 28 |
| S 29 | 6 27 42 | 6°52'36 | 6 ප 23 | 17°27 | 20° 4 | 25°21 | 8°46 | 27°52 | 7°52 | 15°30 | 17°51 | 29° 8 | 28°38 | 8° 5 | 28°51 | S 29 |
| S 30 | 6 31 39 | 7°53'47 | 20°46 | 19° 4 | 21°19 | 25°54 | 8°51 | 27°55 | 7°55 | 15°29 | 17°52 | 29° 7 | 28°35 | 8°12 | 28°51 | S 30 |
| M31 | 6 35 35 | 8 궁 54'59 | 5≈20 | 20 පි 41 | 22 궁 34 | 26 ≏ 27 | 8 ₾ 56 | 27 米 58 | 7 ₹ 58 | 15 Ⅲ 27 | 17 ≏ 53 | 29 ∡ 6 | 28 ∡ 31 | 8 m 19 | 28 Y 50 | M31 |

| Day | 0 | J |) | ζ | 5 | Q | 1 | d | 7 | 2 | ł | ħ | <u> </u> |)į | j (| 4 | | Р | | n | Ω | Ç | ķ | |
|-------------|----------------|----------------|-------|------------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|----------------|----------------|----------------|--------------|------------------|-------|---------------------------------------|------------------|------|----------------|-----------------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl la | at | decl | decl | decl | decl | lat |
| S 1 | 21 s44 | 23 s35 | 0 s 8 | 21s 1 | 0s14 | 22 s51 | 0s14 | 2 s 1 9 | 1n29 | 1 s 5 | 1n12 | 3 s24 | 2 s28 | 21 s18 | 0n 5 | 21n18 | 1 s29 | 8n45 | 16n49 | 23 s28 | 23 s28 | 5n22 | 10n48 | 0 s34 |
| S 2 | 21 53 | 21 49 | 1n 9 | 21 25 | 0 21 | 23 2 | 0 17 | 2 33 | 1 29 | 1 8 | 1 13 | 3 24 | 2 28 | 21 18 | 0 5 | 21 18 | 1 29 | 8 45 1 | 16 49 | 23 28 | 23 28 | 5 19 | 10 47 | 0 34 |
| M 3 | 22 2 | | | 21 48 | | 23 12 | 0 19 | 2 47 | 1 29 | 1 12 | 1 13 | 3 23 | | 21 19 | | 21 17 | 1 29 | 8 45 1 | | | | | 10 46 | 0 34 |
| T 4 | 22 11 22 19 | 14 29 9 27 | | 22 11 22 32 | | 23 21 23 29 | 0 21 0 24 | 3 0 3 14 | 1 29 1 29 | 1 15 1 18 | 1 13 1 13 | 3 23 3 23 | | 21 19 21 20 | | 21 17 21 17 | 1 29 1 29 | | | | 23 28 23 28 | | 10 46 10 45 | 0 34 |
| T 6 | 22 19 | 3 55 | | 22 52 | | 23 29 | 0 24 | 3 28 | 1 29 | 1 21 | 1 13 | 3 22 | | 21 20 | | 21 17 | 1 29 | | | | 23 28 | | 10 43 | 0 34 |
| F 7 | 22 34 | | | 23 11 | | 23 44 | 0 29 | 3 41 | 1 30 | | 1 14 | 3 22 | | 21 21 | | 21 17 | 1 29 | | | | 23 28 | | 10 43 | 0 34 |
| S 8 | 22 41 | 7 24 | 5 14 | 23 28 | 0 58 | 23 50 | 0 31 | 3 54 | 1 30 | 1 27 | 1 14 | 3 21 | 2 26 | 21 22 | 0 5 | 21 17 | 1 29 | 8 44 1 | 16 52 | 23 28 | 23 28 | 5 3 | 10 43 | 0 34 |
| S 9 | 22 47 | 12 34 | 4 55 | 23 45 | 1 4 | 23 56 | 0 33 | 4 8 | 1 30 | 1 30 | 1 14 | 3 21 | 2 26 | 21 23 | 0 5 | 21 16 | 1 29 | 8 44 1 | 16 53 | 23 28 | 23 28 | 5 0 | 10 42 | 0 34 |
| M10 | 22 53 | | 4 18 | | 1 10 | | 0 35 | 4 21 | 1 30 | 1 33 | 1 14 | 3 20 | | 21 23 | | 21 16 | 1 29 | 8 44 1 | | | | | 10 41 | 0 34 |
| T 11 W12 | | 20 34 | | 24 14 | 1 15 | | 0 38 | 4 35 | 1 30 | | 1 15 | 3 19 | | 21 24 | | 21 16 | 1 29 | 8 44 1 | | | | | 10 41 | 0 34 |
| T 13 | 23 4 23 8 | 22 54 23 54 | | 24 27 24 39 | 1 20 | 24 8 24 10 | 0 40 0 42 | 4 48 5 1 | 1 30 1 30 | 1 39 1 41 | 1 15 1 15 | 3 19 3 18 | | 21 24 21 25 | | 21 16 21 16 | 1 29 1 29 | 8 44 1 8 44 1 | | | | | 10 40 10 39 | 0 34 |
| | | 23 34 | | 24 49 | | 24 12 | 0 44 | 5 14 | | 1 44 | 1 15 | 3 17 | | 21 26 | | 21 16 | 1 29 | 8 44 1 | | | | | 10 39 | 0 34 |
| S 15 | 23 16 | 22 0 | 1 s 3 | 24 58 | 1 35 | 24 13 | 0 46 | 5 27 | 1 30 | 1 46 | 1 15 | 3 16 | 2 25 | 21 26 | 0 5 | 21 15 | 1 29 | 8 44 1 | 16 56 | 23 28 | 23 28 | 4 43 | 10 38 | 0 34 |
| S 16 | 23 19 | 19 23 | 2 9 | 25 5 | 1 39 | 24 14 | 0 48 | 5 40 | 1 30 | 1 49 | 1 16 | 3 16 | 2 24 | 21 27 | 0 5 | 21 15 | 1 29 | 8 44 1 | 16 56 | 23 28 | 23 28 | 4 41 | 10 38 | 0 34 |
| M17 | 23 22 | | | 25 11 | 1 44 | - | 0 51 | 5 53 | 1 31 | 1 52 | 1 16 | 3 15 | | 21 27 | | 21 15 | 1 29 | 8 44 1 | | | | | 10 37 | 0 35 |
| T 18 W19 | 23 24 23 26 | 11 54 7 27 | | 25 16 25 19 | 1 47 1 51 | | 0 53 | 6 6 | 1 31 1 31 | 1 54 1 56 | 1 16 | 3 14 | | 21 28 | | 21 15 | 1 29 | 8 44 1 8 44 1 | | | | | 10 37 10 36 | 0 35 |
| T 20 | 23 26 | 2 45 | | 25 19 | 1 51 | | 0 55 0 57 | 6 19 6 32 | 1 31 | 1 50 | 1 16 1 17 | 3 13 3 12 | | 21 29 21 29 | | 21 15 21 15 | 1 29 1 29 | 8 44 1 | | | | | 10 36 | 0 35 |
| F 21 | 23 28 | | | 25 21 | 1 58 | | 0 59 | 6 45 | 1 31 | 2 1 | 1 17 | 3 11 | | 21 30 | | 21 14 | 1 29 | 8 44 1 | | | | | 10 35 | 0 35 |
| S 22 | 23 28 | 6 48 | 5 16 | 25 20 | 2 0 | 24 0 | 1 0 | 6 57 | 1 31 | 2 3 | 1 17 | 3 10 | 2 23 | 21 30 | 0 5 | 21 14 | 1 28 | 8 44 1 | 16 59 | 23 28 | 23 28 | 4 24 | 10 35 | 0 35 |
| S 23 | 23 28 | 11 21 | 5 2 | 25 17 | 2 3 | 23 55 | 1 2 | 7 10 | 1 31 | 2 5 | 1 17 | 3 9 | 2 23 | 21 31 | 0 5 | 21 14 | 1 28 | 8 45 | 17 0 | 23 28 | 23 28 | 4 21 | 10 34 | 0 35 |
| M24 | - | 15 33 | | 25 13 | 2 5 | | 1 4 | 7 22 | 1 31 | 2 7 | 1 18 | 3 7 | | 21 32 | | 21 14 | 1 28 | 8 45 1 | | 23 28 | | | 10 34 | 0 35 |
| T 25 | | 19 10 | | 25 7 | 2 7 | | 1 6 | 7 35 | 1 31 | 2 9 | 1 18 | 3 6 | | | | 21 14 | | 8 45 1 | | 23 28 | | | 10 33 | 0 35 |
| W26 T 27 | | 21 57 23 36 | | 25 0 24 51 | 2 8 2 9 | | 1 8 1 9 | 7 47 8 0 | 1 31 1 31 | 2 11 2 13 | 1 18 1 18 | 3 5 3 4 | | 21 33 21 33 | | 21 14 21 14 | | 8 45 1 8 45 1 | | 23 2823 28 | | | 10 33 10 33 | 0 35 |
| F 28 | | 23 53 | | 24 41 | | 23 19 | 1 11 | 8 12 | | 2 15 | 1 19 | 3 2 | | 21 34 | | 21 13 | 1 28 | 8 45 1 | | 23 28 | | | 10 33 | 0 35 |
| S 29 | 23 18 | 22 39 | 0n40 | 24 28 | 2 9 | 23 10 | 1 12 | 8 24 | 1 31 | 2 16 | 1 19 | 3 1 | | 21 34 | | 21 13 | 1 28 | 8 46 1 | 17 3 | 23 28 | 23 28 | 4 5 | 10 32 | 0 35 |
| S 30 | 23 14 | 19 56 | 1 57 | 24 15 | 2 9 | 23 0 | 1 14 | 8 36 | 1 31 | 2 18 | 1 19 | 3 0 | 2 21 | 21 35 | 0 5 | 21 13 | 1 28 | 8 46 | 17 4 | 23 28 | 23 28 | 4 2 | 10 32 | 0 35 |
| M31 | 23 s10 | 15 s56 | 3n 7 | $23\mathrm{s}59$ | 2 s 8 | $22\mathrm{s}49$ | 1 s 1 5 | 8 s48 | 1n31 | 2 s20 | 1n19 | 2 s 5 8 | 2 s21 | 21 s35 | 0n 5 | 21n13 | 1 s28 | 8n46 | 17n 4 | 23 s28 | $23\mathrm{s}28$ | 3n59 | 10n32 | $0\mathrm{s}35$ |

 $\label{eq:Julian Day Number = 2353628.5, Delta T = 11.51 sec} \\ Ecliptic obliquity = 23°28'27, Nutation = 0°00'16, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 20°59'52, Lahiri = 20°06'52Greg. Calendar$