# Astrodienst Ephemeris Tables

## for the year 1776

tropical geocentric zodiac

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

Programming
Dieter Koch and Alois Treindl
based on Swiss Ephemeris

Code D5EPX

Astrodienst AG, Dammstr. 23, CH-8702 Zollikon / Zürich, www.astro.com / order@astro.com

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## JANUARY 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M 1 | 6 40 51 | 10♑15'09 | 13♉45 | 28♐13 | 23♏26 | 1♒19 | 13°R41 | 20♎32 | 3°R19 | 24°R55 | 25♑49 | 16°R11 | 17♌26 | 28♌50 | 11♈55 | M 1 |
| T 2 | 6 44 48 | 11°16'18 | 26°55 | 29°45 | 24°26 | 2° 6 | 13♊34 | 20°35 | 3♊17 | 24♍55 | 25°51 | 16♌ 6 | 17°23 | 28°56 | 11°56 | T 2 |
| W 3 | 6 48 44 | 12°17'27 | 9♊51 | 1♑17 | 25°26 | 2°54 | 13°28 | 20°38 | 3°15 | 24°54 | 25°53 | 16° 0 | 17°20 | 29° 3 | 11°56 | W 3 |
| T 4 | 6 52 41 | 13°18'36 | 22°35 | 2°50 | 26°27 | 3°41 | 13°22 | 20°41 | 3°13 | 24°54 | 25°55 | 15°54 | 17°17 | 29°10 | 11°57 | T 4 |
| F 5 | 6 56 37 | 14°19'44 | 5♋ 7 | 4°23 | 27°28 | 4°28 | 13°16 | 20°43 | 3°12 | 24°54 | 25°57 | 15°48 | 17°14 | 29°16 | 11°58 | F 5 |
| S 6 | 7 0 34 | 15°20'53 | 17°27 | 5°56 | 28°30 | 5°15 | 13°10 | 20°46 | 3°10 | 24°54 | 25°59 | 15°44 | 17°10 | 29°23 | 11°59 | S 6 |
| S 7 | 7 4 31 | 16°22'01 | 29°35 | 7°30 | 29°32 | 6° 3 | 13° 4 | 20°48 | 3° 8 | 24°53 | 26° 1 | 15°41 | 17° 7 | 29°30 | 11°59 | S 7 |
| M 8 | 7 8 27 | 17°23'09 | 11♌35 | 9° 4 | 0♐34 | 6°50 | 12°59 | 20°51 | 3° 7 | 24°53 | 26° 3 | 15°D40 | 17° 4 | 29°36 | 12° 0 | M 8 |
| T 9 | 7 12 24 | 18°24'16 | 23°27 | 10°39 | 1°37 | 7°37 | 12°53 | 20°53 | 3° 5 | 24°52 | 26° 4 | 15°40 | 17° 1 | 29°43 | 12° 1 | T 9 |
| W10 | 7 16 20 | 19°25'24 | 5♍15 | 12°14 | 2°40 | 8°25 | 12°48 | 20°55 | 3° 4 | 24°52 | 26° 6 | 15°41 | 16°58 | 29°50 | 12° 2 | W10 |
| T 11 | 7 20 17 | 20°26'31 | 17° 2 | 13°50 | 3°43 | 9°12 | 12°43 | 20°57 | 3° 2 | 24°51 | 26° 8 | 15°43 | 16°54 | 29°56 | 12° 3 | T 11 |
| F 12 | 7 24 13 | 21°27'38 | 28°53 | 15°26 | 4°47 | 9°59 | 12°38 | 20°59 | 3° 1 | 24°51 | 26°10 | 15°45 | 16°51 | 0♍ 3 | 12° 4 | F 12 |
| S 13 | 7 28 10 | 22°28'44 | 10♎51 | 17° 3 | 5°51 | 10°47 | 12°33 | 21° 1 | 2°59 | 24°50 | 26°12 | 15°46 | 16°48 | 0°10 | 12° 5 | S 13 |
| S 14 | 7 32 6 | 23°29'51 | 23° 3 | 18°40 | 6°55 | 11°34 | 12°29 | 21° 3 | 2°58 | 24°50 | 26°14 | 15°R47 | 16°45 | 0°16 | 12° 7 | S 14 |
| M15 | 7 36 3 | 24°30'57 | 5♏32 | 20°17 | 8° 0 | 12°21 | 12°24 | 21° 5 | 2°57 | 24°49 | 26°16 | 15°46 | 16°42 | 0°23 | 12° 8 | M15 |
| T 16 | 7 40 0 | 25°32'03 | 18°23 | 21°56 | 9° 5 | 13° 9 | 12°20 | 21° 6 | 2°55 | 24°49 | 26°18 | 15°45 | 16°39 | 0°30 | 12° 9 | T 16 |
| W17 | 7 43 56 | 26°33'08 | 1♐40 | 23°34 | 10°10 | 13°56 | 12°16 | 21° 8 | 2°54 | 24°48 | 26°20 | 15°43 | 16°35 | 0°36 | 12°11 | W17 |
| T 18 | 7 47 53 | 27°34'14 | 15°23 | 25°14 | 11°15 | 14°44 | 12°12 | 21° 9 | 2°53 | 24°47 | 26°22 | 15°40 | 16°32 | 0°43 | 12°12 | T 18 |
| F 19 | 7 51 49 | 28°35'19 | 29°34 | 26°54 | 12°21 | 15°31 | 12° 9 | 21°10 | 2°52 | 24°46 | 26°24 | 15°38 | 16°29 | 0°49 | 12°13 | F 19 |
| S 20 | 7 55 46 | 29°36'23 | 14♑ 8 | 28°34 | 13°27 | 16°19 | 12° 5 | 21°11 | 2°51 | 24°46 | 26°26 | 15°36 | 16°26 | 0°56 | 12°15 | S 20 |
| S 21 | 7 59 42 | 0♒37'27 | 28°59 | 0♒15 | 14°33 | 17° 6 | 12° 2 | 21°12 | 2°50 | 24°45 | 26°28 | 15°34 | 16°23 | 1° 3 | 12°17 | S 21 |
| M22 | 8 3 39 | 1°38'29 | 14♒ 1 | 1°57 | 15°39 | 17°53 | 11°59 | 21°13 | 2°49 | 24°44 | 26°30 | 15°D34 | 16°20 | 1° 9 | 12°18 | M22 |
| T 23 | 8 7 36 | 2°39'31 | 29° 3 | 3°39 | 16°46 | 18°41 | 11°56 | 21°14 | 2°48 | 24°43 | 26°32 | 15°34 | 16°16 | 1°16 | 12°20 | T 23 |
| W24 | 8 11 32 | 3°40'32 | 13♓59 | 5°22 | 17°53 | 19°28 | 11°54 | 21°15 | 2°47 | 24°42 | 26°34 | 15°35 | 16°13 | 1°23 | 12°22 | W24 |
| T 25 | 8 15 29 | 4°41'32 | 28°40 | 7° 5 | 19° 0 | 20°16 | 11°51 | 21°15 | 2°46 | 24°41 | 26°36 | 15°36 | 16°10 | 1°29 | 12°23 | T 25 |
| F 26 | 8 19 25 | 5°42'30 | 13♈ 1 | 8°50 | 20° 7 | 21° 3 | 11°49 | 21°16 | 2°45 | 24°41 | 26°38 | 15°37 | 16° 7 | 1°36 | 12°25 | F 26 |
| S 27 | 8 23 22 | 6°43'27 | 27° 1 | 10°34 | 21°14 | 21°51 | 11°47 | 21°16 | 2°44 | 24°40 | 26°40 | 15°37 | 16° 4 | 1°43 | 12°27 | S 27 |
| S 28 | 8 27 18 | 7°44'23 | 10♉39 | 12°19 | 22°22 | 22°38 | 11°45 | 21°17 | 2°44 | 24°39 | 26°41 | 15°R37 | 16° 0 | 1°49 | 12°29 | S 28 |
| M29 | 8 31 15 | 8°45'18 | 23°55 | 14° 5 | 23°29 | 23°26 | 11°44 | 21°17 | 2°43 | 24°38 | 26°43 | 15°37 | 15°57 | 1°56 | 12°31 | M29 |
| T 30 | 8 35 11 | 9°46'11 | 6♊53 | 15°51 | 24°37 | 24°13 | 11°42 | 21°R17 | 2°43 | 24°37 | 26°45 | 15°37 | 15°54 | 2° 3 | 12°33 | T 30 |
| W31 | 8 39 8 | 10♒47'03 | 19♊33 | 17♒38 | 25♐45 | 25♒ 1 | 11♊41 | 21♎17 | 2♊42 | 24♍35 | 26♑47 | 15♌36 | 15♌51 | 2♍ 9 | 12♈35 | W31 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| M 1 | 23s 4 | 11n 2 | 5s11 | 24s 7 | 0s40 | 15s18 | 3n27 | 21s 0 | 1s 8 | 21n56 | 0s32 | 5s46 | 2n27 | 20n44 | 0s 7 | 3n10 | 1n15 | 23s39 | 2s41 | 16n 0 | 15n38 | 12n51 | 6n 8 | 1n32 |
| T 2 | 22 59 | 14 31 | 5 6 | 24 14 | 0 46 | 15 33 | 3 27 | 20 49 | 1 8 | 21 56 | 0 32 | 5 47 | 2 27 | 20 44 | 0 7 | 3 10 | 1 15 | 23 38 | 2 41 | 16 2 | 15 38 | 12 49 | 6 8 | 1 32 |
| W 3 | 22 54 | 17 15 | 4 45 | 24 20 | 0 53 | 15 48 | 3 27 | 20 38 | 1 8 | 21 55 | 0 32 | 5 47 | 2 27 | 20 43 | 0 7 | 3 11 | 1 15 | 23 38 | 2 41 | 16 4 | 15 39 | 12 48 | 6 8 | 1 32 |
| T 4 | 22 48 | 19 5 | 4 10 | 24 25 | 0 59 | 16 2 | 3 27 | 20 27 | 1 8 | 21 55 | 0 31 | 5 48 | 2 28 | 20 43 | 0 7 | 3 11 | 1 15 | 23 38 | 2 41 | 16 5 | 15 40 | 12 46 | 6 8 | 1 31 |
| F 5 | 22 42 | 19 58 | 3 24 | 24 28 | 1 4 | 16 16 | 3 26 | 20 16 | 1 8 | 21 54 | 0 31 | 5 49 | 2 28 | 20 43 | 0 6 | 3 11 | 1 15 | 23 37 | 2 41 | 16 7 | 15 41 | 12 45 | 6 8 | 1 31 |
| S 6 | 22 35 | 19 52 | 2 29 | 24 30 | 1 10 | 16 30 | 3 26 | 20 4 | 1 8 | 21 53 | 0 31 | 5 50 | 2 28 | 20 42 | 0 6 | 3 11 | 1 15 | 23 37 | 2 41 | 16 8 | 15 42 | 12 43 | 6 8 | 1 31 |
| S 7 | 22 28 | 18 50 | 1 27 | 24 31 | 1 15 | 16 44 | 3 25 | 19 53 | 1 8 | 21 53 | 0 31 | 5 50 | 2 28 | 20 42 | 0 6 | 3 11 | 1 15 | 23 37 | 2 41 | 16 9 | 15 43 | 12 42 | 6 8 | 1 31 |
| M 8 | 22 20 | 16 58 | 0 22 | 24 30 | 1 21 | 16 58 | 3 24 | 19 41 | 1 8 | 21 52 | 0 31 | 5 51 | 2 29 | 20 42 | 0 6 | 3 11 | 1 15 | 23 36 | 2 42 | 16 9 | 15 44 | 12 40 | 6 9 | 1 31 |
| T 9 | 22 12 | 14 23 | 0n43 | 24 28 | 1 26 | 17 12 | 3 23 | 19 28 | 1 7 | 21 52 | 0 30 | 5 52 | 2 29 | 20 42 | 0 6 | 3 12 | 1 15 | 23 36 | 2 42 | 16 9 | 15 45 | 12 39 | 6 9 | 1 31 |
| W10 | 22 3 | 11 14 | 1 46 | 24 24 | 1 30 | 17 25 | 3 22 | 19 16 | 1 7 | 21 52 | 0 30 | 5 52 | 2 29 | 20 41 | 0 6 | 3 12 | 1 16 | 23 36 | 2 42 | 16 9 | 15 46 | 12 37 | 6 9 | 1 31 |
| T 11 | 21 55 | 7 39 | 2 44 | 24 19 | 1 35 | 17 38 | 3 20 | 19 3 | 1 7 | 21 51 | 0 30 | 5 53 | 2 29 | 20 41 | 0 6 | 3 12 | 1 16 | 23 36 | 2 42 | 16 9 | 15 47 | 12 36 | 6 9 | 1 30 |
| F 12 | 21 45 | 3 45 | 3 36 | 24 13 | 1 39 | 17 51 | 3 19 | 18 50 | 1 7 | 21 51 | 0 30 | 5 53 | 2 30 | 20 41 | 0 6 | 3 12 | 1 16 | 23 35 | 2 42 | 16 8 | 15 48 | 12 34 | 6 10 | 1 30 |
| S 13 | 21 35 | 0s19 | 4 19 | 24 5 | 1 43 | 18 4 | 3 17 | 18 37 | 1 7 | 21 50 | 0 30 | 5 54 | 2 30 | 20 40 | 0 6 | 3 13 | 1 16 | 23 35 | 2 42 | 16 8 | 15 49 | 12 33 | 6 10 | 1 30 |
| S 14 | 21 25 | 4 27 | 4 52 | 23 55 | 1 47 | 18 17 | 3 16 | 18 24 | 1 7 | 21 50 | 0 29 | 5 54 | 2 30 | 20 40 | 0 6 | 3 13 | 1 16 | 23 35 | 2 42 | 16 7 | 15 50 | 12 31 | 6 10 | 1 30 |
| M15 | 21 15 | 8 29 | 5 11 | 23 45 | 1 50 | 18 29 | 3 14 | 18 11 | 1 7 | 21 50 | 0 29 | 5 54 | 2 31 | 20 40 | 0 6 | 3 13 | 1 16 | 23 34 | 2 42 | 16 8 | 15 51 | 12 29 | 6 11 | 1 30 |
| T 16 | 21 3 | 12 16 | 5 16 | 23 32 | 1 53 | 18 41 | 3 12 | 17 57 | 1 6 | 21 49 | 0 29 | 5 55 | 2 31 | 20 40 | 0 6 | 3 13 | 1 16 | 23 34 | 2 42 | 16 8 | 15 52 | 12 28 | 6 11 | 1 30 |
| W17 | 20 52 | 15 33 | 5 4 | 23 18 | 1 56 | 18 52 | 3 10 | 17 43 | 1 6 | 21 49 | 0 29 | 5 55 | 2 31 | 20 40 | 0 6 | 3 14 | 1 16 | 23 34 | 2 42 | 16 9 | 15 53 | 12 26 | 6 11 | 1 29 |
| T 18 | 20 40 | 18 7 | 4 35 | 23 3 | 1 58 | 19 3 | 3 8 | 17 29 | 1 6 | 21 49 | 0 29 | 5 55 | 2 31 | 20 39 | 0 6 | 3 14 | 1 16 | 23 34 | 2 42 | 16 9 | 15 54 | 12 25 | 6 12 | 1 29 |
| F 19 | 20 28 | 19 40 | 3 48 | 22 46 | 2 0 | 19 14 | 3 5 | 17 15 | 1 6 | 21 48 | 0 28 | 5 55 | 2 32 | 20 39 | 0 6 | 3 14 | 1 16 | 23 33 | 2 42 | 16 10 | 15 55 | 12 23 | 6 12 | 1 29 |
| S 20 | 20 15 | 19 58 | 2 46 | 22 28 | 2 2 | 19 25 | 3 3 | 17 1 | 1 6 | 21 48 | 0 28 | 5 56 | 2 32 | 20 39 | 0 6 | 3 15 | 1 16 | 23 33 | 2 43 | 16 11 | 15 56 | 12 22 | 6 13 | 1 29 |
| S 21 | 20 2 | 18 54 | 1 31 | 22 7 | 2 3 | 19 35 | 3 0 | 16 46 | 1 6 | 21 48 | 0 28 | 5 56 | 2 32 | 20 39 | 0 6 | 3 15 | 1 16 | 23 33 | 2 43 | 16 11 | 15 57 | 12 20 | 6 13 | 1 29 |
| M22 | 19 49 | 16 30 | 0 9 | 21 46 | 2 4 | 19 45 | 2 58 | 16 31 | 1 5 | 21 48 | 0 28 | 5 56 | 2 32 | 20 39 | 0 6 | 3 15 | 1 16 | 23 32 | 2 43 | 16 11 | 15 58 | 12 19 | 6 14 | 1 29 |
| T 23 | 19 35 | 12 58 | 1s14 | 21 23 | 2 5 | 19 54 | 2 55 | 16 17 | 1 5 | 21 47 | 0 28 | 5 56 | 2 33 | 20 38 | 0 6 | 3 16 | 1 16 | 23 32 | 2 43 | 16 11 | 15 59 | 12 17 | 6 14 | 1 29 |
| W24 | 19 21 | 8 38 | 2 31 | 20 58 | 2 5 | 20 3 | 2 53 | 16 1 | 1 5 | 21 47 | 0 27 | 5 56 | 2 33 | 20 38 | 0 6 | 3 16 | 1 16 | 23 32 | 2 43 | 16 11 | 16 0 | 12 15 | 6 15 | 1 28 |
| T 25 | 19 7 | 3 51 | 3 37 | 20 32 | 2 5 | 20 11 | 2 50 | 15 46 | 1 5 | 21 47 | 0 27 | 5 56 | 2 33 | 20 38 | 0 6 | 3 17 | 1 16 | 23 31 | 2 43 | 16 11 | 16 1 | 12 14 | 6 15 | 1 28 |
| F 26 | 18 52 | 1n 2 | 4 28 | 20 4 | 2 4 | 20 20 | 2 47 | 15 31 | 1 5 | 21 47 | 0 27 | 5 56 | 2 34 | 20 38 | 0 6 | 3 17 | 1 16 | 23 31 | 2 43 | 16 10 | 16 1 | 12 12 | 6 16 | 1 28 |
| S 27 | 18 37 | 5 44 | 5 1 | 19 34 | 2 3 | 20 27 | 2 44 | 15 15 | 1 4 | 21 47 | 0 27 | 5 56 | 2 34 | 20 38 | 0 6 | 3 17 | 1 16 | 23 31 | 2 43 | 16 10 | 16 2 | 12 11 | 6 16 | 1 28 |
| S 28 | 18 21 | 10 1 | 5 17 | 19 3 | 2 1 | 20 34 | 2 41 | 15 0 | 1 4 | 21 47 | 0 27 | 5 56 | 2 34 | 20 38 | 0 6 | 3 18 | 1 16 | 23 31 | 2 43 | 16 10 | 16 3 | 12 9 | 6 17 | 1 28 |
| M29 | 18 6 | 13 42 | 5 14 | 18 31 | 1 59 | 20 41 | 2 38 | 14 44 | 1 4 | 21 47 | 0 26 | 5 55 | 2 34 | 20 38 | 0 6 | 3 18 | 1 16 | 23 30 | 2 43 | 16 10 | 16 4 | 12 7 | 6 18 | 1 28 |
| T 30 | 17 49 | 16 37 | 4 56 | 17 57 | 1 56 | 20 47 | 2 34 | 14 28 | 1 4 | 21 47 | 0 26 | 5 55 | 2 35 | 20 37 | 0 6 | 3 19 | 1 16 | 23 30 | 2 43 | 16 11 | 16 5 | 12 6 | 6 18 | 1 28 |
| W31 | 17s33 | 18n40 | 4s24 | 17s21 | 1s52 | 20s53 | 2n31 | 14s12 | 1s 3 | 21n47 | 0s26 | 5s55 | 2n35 | 20n37 | 0s 6 | 3n19 | 1n16 | 23s30 | 2s44 | 16n11 | 16n 6 | 12n 4 | 6n19 | 1n27 |

Julian Day Number = 2369730.5, Delta T = 22.00 sec
Ecliptic obliquity = 23°27'59, Nutation = - 0°00'11, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°36'46, Lahiri = 20°43'47Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## FEBRUARY 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T 1 | 8 43 4 | 11♒47'54 | 1♋59 | 19♒25 | 26♐53 | 25♒48 | 11°R40 | 21°R17 | 2°R42 | 24°R34 | 26♑49 | 15°R35 | 15♌48 | 2♍16 | 12♈37 | T 1 |
| F 2 | 8 47 1 | 12°48'43 | 14°14 | 21°12 | 28° 1 | 26°35 | 11♊39 | 21♎17 | 2♊41 | 24♍33 | 26°51 | 15♌35 | 15°45 | 2°23 | 12°39 | F 2 |
| S 3 | 8 50 58 | 13°49'31 | 26°19 | 22°59 | 29°10 | 27°23 | 11°39 | 21°16 | 2°41 | 24°32 | 26°53 | 15°35 | 15°41 | 2°29 | 12°42 | S 3 |
| S 4 | 8 54 54 | 14°50'18 | 8♌16 | 24°47 | 0♑18 | 28°10 | 11°38 | 21°16 | 2°40 | 24°31 | 26°55 | 15°35 | 15°38 | 2°36 | 12°44 | S 4 |
| M 5 | 8 58 51 | 15°51'03 | 20° 9 | 26°34 | 1°27 | 28°58 | 11°D38 | 21°15 | 2°40 | 24°30 | 26°57 | 15°35 | 15°35 | 2°43 | 12°46 | M 5 |
| T 6 | 9 2 47 | 16°51'47 | 1♍58 | 28°20 | 2°36 | 29°45 | 11°38 | 21°14 | 2°40 | 24°28 | 26°58 | 15°35 | 15°32 | 2°49 | 12°48 | T 6 |
| W 7 | 9 6 44 | 17°52'30 | 13°46 | 0♓ 7 | 3°45 | 0♓32 | 11°38 | 21°14 | 2°40 | 24°27 | 27° 0 | 15°34 | 15°29 | 2°56 | 12°51 | W 7 |
| T 8 | 9 10 40 | 18°53'11 | 25°35 | 1°52 | 4°54 | 1°20 | 11°39 | 21°13 | 2°40 | 24°26 | 27° 2 | 15°34 | 15°26 | 3° 3 | 12°53 | T 8 |
| F 9 | 9 14 37 | 19°53'51 | 7♎29 | 3°36 | 6° 3 | 2° 7 | 11°39 | 21°12 | 2°40 | 24°25 | 27° 4 | 15°33 | 15°22 | 3° 9 | 12°56 | F 9 |
| S 10 | 9 18 33 | 20°54'31 | 19°30 | 5°18 | 7°13 | 2°55 | 11°40 | 21°11 | 2°D40 | 24°23 | 27° 6 | 15°33 | 15°19 | 3°16 | 12°58 | S 10 |
| S 11 | 9 22 30 | 21°55'09 | 1♏41 | 6°59 | 8°22 | 3°42 | 11°41 | 21°10 | 2°40 | 24°22 | 27° 8 | 15°32 | 15°16 | 3°22 | 13° 1 | S 11 |
| M12 | 9 26 27 | 22°55'45 | 14° 8 | 8°36 | 9°32 | 4°29 | 11°42 | 21° 8 | 2°40 | 24°21 | 27° 9 | 15°32 | 15°13 | 3°29 | 13° 3 | M12 |
| T 13 | 9 30 23 | 23°56'21 | 26°54 | 10°11 | 10°41 | 5°17 | 11°44 | 21° 7 | 2°40 | 24°19 | 27°11 | 15°D32 | 15°10 | 3°36 | 13° 6 | T 13 |
| W14 | 9 34 20 | 24°56'55 | 10♐ 2 | 11°43 | 11°51 | 6° 4 | 11°45 | 21° 5 | 2°40 | 24°18 | 27°13 | 15°32 | 15° 6 | 3°42 | 13° 9 | W14 |
| T 15 | 9 38 16 | 25°57'29 | 23°36 | 13°10 | 13° 1 | 6°51 | 11°47 | 21° 4 | 2°40 | 24°17 | 27°15 | 15°33 | 15° 3 | 3°49 | 13°11 | T 15 |
| F 16 | 9 42 13 | 26°58'01 | 7♑36 | 14°32 | 14°11 | 7°38 | 11°49 | 21° 2 | 2°41 | 24°15 | 27°17 | 15°34 | 15° 0 | 3°56 | 13°14 | F 16 |
| S 17 | 9 46 9 | 27°58'31 | 22° 3 | 15°49 | 15°21 | 8°26 | 11°51 | 21° 0 | 2°41 | 24°14 | 27°18 | 15°35 | 14°57 | 4° 2 | 13°17 | S 17 |
| S 18 | 9 50 6 | 28°59'00 | 6♒52 | 17° 0 | 16°31 | 9°13 | 11°54 | 20°58 | 2°42 | 24°12 | 27°20 | 15°35 | 14°54 | 4° 9 | 13°20 | S 18 |
| M19 | 9 54 2 | 29°59'28 | 21°58 | 18° 4 | 17°42 | 10° 0 | 11°56 | 20°57 | 2°42 | 24°11 | 27°22 | 15°R35 | 14°51 | 4°16 | 13°22 | M19 |
| T 20 | 9 57 59 | 0♓59'54 | 7♓12 | 19° 1 | 18°52 | 10°47 | 11°59 | 20°54 | 2°43 | 24° 9 | 27°23 | 15°35 | 14°47 | 4°22 | 13°25 | T 20 |
| W21 | 10 1 56 | 2° 0'18 | 22°24 | 19°49 | 20° 3 | 11°35 | 12° 2 | 20°52 | 2°43 | 24° 8 | 27°25 | 15°33 | 14°44 | 4°29 | 13°28 | W21 |
| T 22 | 10 5 52 | 3° 0'41 | 7♈24 | 20°29 | 21°13 | 12°22 | 12° 5 | 20°50 | 2°44 | 24° 6 | 27°27 | 15°31 | 14°41 | 4°36 | 13°31 | T 22 |
| F 23 | 10 9 49 | 4° 1'01 | 22° 5 | 21° 0 | 22°24 | 13° 9 | 12° 9 | 20°48 | 2°44 | 24° 5 | 27°28 | 15°28 | 14°38 | 4°42 | 13°34 | F 23 |
| S 24 | 10 13 45 | 5° 1'20 | 6♉20 | 21°22 | 23°34 | 13°56 | 12°12 | 20°45 | 2°45 | 24° 3 | 27°30 | 15°26 | 14°35 | 4°49 | 13°37 | S 24 |
| S 25 | 10 17 42 | 6° 1'37 | 20° 8 | 21°34 | 24°45 | 14°43 | 12°16 | 20°43 | 2°46 | 24° 2 | 27°32 | 15°24 | 14°32 | 4°56 | 13°40 | S 25 |
| M26 | 10 21 38 | 7° 1'51 | 3♊29 | 21°R36 | 25°56 | 15°30 | 12°20 | 20°40 | 2°47 | 24° 0 | 27°33 | 15°D24 | 14°28 | 5° 2 | 13°43 | M26 |
| T 27 | 10 25 35 | 8° 2'04 | 16°25 | 21°29 | 27° 7 | 16°17 | 12°24 | 20°37 | 2°48 | 23°59 | 27°35 | 15°24 | 14°25 | 5° 9 | 13°46 | T 27 |
| W28 | 10 29 31 | 9° 2'14 | 29° 0 | 21°12 | 28°18 | 17° 4 | 12°28 | 20°34 | 2°49 | 23°57 | 27°36 | 15°25 | 14°22 | 5°16 | 13°50 | W28 |
| T 29 | 10 33 28 | 10♓ 2'23 | 11♋17 | 20♓47 | 29♑29 | 17♓51 | 12♊33 | 20♎32 | 2♊50 | 23♍55 | 27♑38 | 15♌27 | 14♌19 | 5♍22 | 13♈53 | T 29 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat | |
| T 1 | 17s16 | 19n48 | 3s40 | 16s44 | 1s48 | 20s58 | 2n28 | 13s55 | 1s 3 | 21n47 | 0s26 | 5s55 | 2n35 | 20n37 | 0s 6 | 3n20 | 1n16 | 23s30 | 2s44 | 16n11 | 16n 7 | 12n 3 | 6n20 | 1n27 | T 1 |
| F 2 | 16 59 | 19 58 | 2 46 | 16 5 | 1 44 | 21 3 | 2 25 | 13 39 | 1 3 | 21 47 | 0 26 | 5 54 | 2 36 | 20 37 | 0 6 | 3 20 | 1 17 | 23 29 | 2 44 | 16 11 | 16 8 | 12 1 | 6 20 | 1 27 | F 2 |
| S 3 | 16 42 | 19 12 | 1 45 | 15 25 | 1 39 | 21 7 | 2 21 | 13 22 | 1 2 | 21 47 | 0 25 | 5 54 | 2 36 | 20 37 | 0 6 | 3 21 | 1 17 | 23 29 | 2 44 | 16 11 | 16 9 | 11 59 | 6 21 | 1 27 | S 3 |
| S 4 | 16 24 | 17 34 | 0 41 | 14 44 | 1 33 | 21 10 | 2 18 | 13 6 | 1 2 | 21 47 | 0 25 | 5 53 | 2 36 | 20 37 | 0 6 | 3 21 | 1 17 | 23 29 | 2 44 | 16 11 | 16 10 | 11 58 | 6 22 | 1 27 | S 4 |
| M 5 | 16 6 | 15 11 | 0n25 | 14 2 | 1 27 | 21 13 | 2 14 | 12 49 | 1 2 | 21 48 | 0 25 | 5 53 | 2 36 | 20 37 | 0 6 | 3 22 | 1 17 | 23 28 | 2 44 | 16 11 | 16 11 | 11 56 | 6 23 | 1 27 | M 5 |
| T 6 | 15 48 | 12 11 | 1 30 | 13 18 | 1 19 | 21 16 | 2 11 | 12 32 | 1 2 | 21 48 | 0 25 | 5 52 | 2 37 | 20 37 | 0 6 | 3 22 | 1 17 | 23 28 | 2 44 | 16 11 | 16 12 | 11 55 | 6 24 | 1 27 | T 6 |
| W 7 | 15 30 | 8 42 | 2 31 | 12 34 | 1 12 | 21 18 | 2 7 | 12 15 | 1 1 | 21 48 | 0 24 | 5 52 | 2 37 | 20 37 | 0 6 | 3 23 | 1 17 | 23 28 | 2 44 | 16 11 | 16 13 | 11 53 | 6 24 | 1 26 | W 7 |
| T 8 | 15 11 | 4 53 | 3 25 | 11 48 | 1 3 | 21 19 | 2 3 | 11 58 | 1 1 | 21 48 | 0 24 | 5 51 | 2 37 | 20 37 | 0 6 | 3 23 | 1 17 | 23 28 | 2 44 | 16 11 | 16 14 | 11 51 | 6 25 | 1 26 | T 8 |
| F 9 | 14 52 | 0 52 | 4 10 | 11 2 | 0 54 | 21 20 | 2 0 | 11 41 | 1 1 | 21 49 | 0 24 | 5 51 | 2 37 | 20 37 | 0 6 | 3 24 | 1 17 | 23 27 | 2 45 | 16 11 | 16 15 | 11 50 | 6 26 | 1 26 | F 9 |
| S 10 | 14 33 | 3s14 | 4 46 | 10 15 | 0 44 | 21 20 | 1 56 | 11 23 | 1 0 | 21 49 | 0 24 | 5 50 | 2 38 | 20 37 | 0 6 | 3 24 | 1 17 | 23 27 | 2 45 | 16 12 | 16 16 | 11 48 | 6 27 | 1 26 | S 10 |
| S 11 | 14 13 | 7 15 | 5 9 | 9 28 | 0 33 | 21 20 | 1 52 | 11 6 | 1 0 | 21 49 | 0 24 | 5 49 | 2 38 | 20 37 | 0 6 | 3 25 | 1 17 | 23 27 | 2 45 | 16 12 | 16 17 | 11 46 | 6 28 | 1 26 | S 11 |
| M12 | 13 53 | 11 2 | 5 18 | 8 41 | 0 22 | 21 19 | 1 48 | 10 48 | 1 0 | 21 50 | 0 23 | 5 49 | 2 38 | 20 37 | 0 6 | 3 25 | 1 17 | 23 27 | 2 45 | 16 12 | 16 18 | 11 45 | 6 29 | 1 26 | M12 |
| T 13 | 13 33 | 14 26 | 5 12 | 7 54 | 0 9 | 21 18 | 1 45 | 10 30 | 0 59 | 21 50 | 0 23 | 5 48 | 2 38 | 20 37 | 0 6 | 3 26 | 1 17 | 23 27 | 2 45 | 16 12 | 16 18 | 11 43 | 6 29 | 1 26 | T 13 |
| W14 | 13 13 | 17 13 | 4 49 | 7 8 | 0n 3 | 21 16 | 1 41 | 10 13 | 0 59 | 21 50 | 0 23 | 5 47 | 2 39 | 20 37 | 0 6 | 3 27 | 1 17 | 23 26 | 2 45 | 16 12 | 16 19 | 11 42 | 6 30 | 1 25 | W14 |
| T 15 | 12 53 | 19 9 | 4 10 | 6 22 | 0 17 | 21 13 | 1 37 | 9 55 | 0 59 | 21 51 | 0 23 | 5 46 | 2 39 | 20 37 | 0 6 | 3 27 | 1 17 | 23 26 | 2 45 | 16 12 | 16 20 | 11 40 | 6 31 | 1 25 | T 15 |
| F 16 | 12 32 | 19 59 | 3 16 | 5 37 | 0 31 | 21 10 | 1 33 | 9 37 | 0 58 | 21 51 | 0 23 | 5 45 | 2 39 | 20 37 | 0 6 | 3 28 | 1 17 | 23 26 | 2 45 | 16 11 | 16 21 | 11 38 | 6 32 | 1 25 | F 16 |
| S 17 | 12 11 | 19 34 | 2 7 | 4 54 | 0 45 | 21 6 | 1 29 | 9 19 | 0 58 | 21 52 | 0 23 | 5 45 | 2 39 | 20 37 | 0 6 | 3 28 | 1 17 | 23 26 | 2 45 | 16 11 | 16 22 | 11 37 | 6 33 | 1 25 | S 17 |
| S 18 | 11 50 | 17 48 | 0 48 | 4 13 | 1 0 | 21 2 | 1 25 | 9 1 | 0 58 | 21 52 | 0 22 | 5 44 | 2 40 | 20 38 | 0 6 | 3 29 | 1 17 | 23 25 | 2 46 | 16 11 | 16 23 | 11 35 | 6 34 | 1 25 | S 18 |
| M19 | 11 29 | 14 46 | 0s35 | 3 35 | 1 15 | 20 57 | 1 21 | 8 42 | 0 57 | 21 53 | 0 22 | 5 43 | 2 40 | 20 38 | 0 6 | 3 30 | 1 17 | 23 25 | 2 46 | 16 11 | 16 24 | 11 33 | 6 35 | 1 25 | M19 |
| T 20 | 11 8 | 10 41 | 1 57 | 2 58 | 1 30 | 20 52 | 1 17 | 8 24 | 0 57 | 21 53 | 0 22 | 5 42 | 2 40 | 20 38 | 0 6 | 3 30 | 1 17 | 23 25 | 2 46 | 16 11 | 16 25 | 11 32 | 6 36 | 1 25 | T 20 |
| W21 | 10 46 | 5 56 | 3 10 | 2 25 | 1 45 | 20 46 | 1 13 | 8 6 | 0 56 | 21 54 | 0 22 | 5 41 | 2 40 | 20 38 | 0 6 | 3 31 | 1 17 | 23 25 | 2 46 | 16 12 | 16 26 | 11 30 | 6 37 | 1 25 | W21 |
| T 22 | 10 25 | 0 52 | 4 9 | 1 56 | 2 0 | 20 39 | 1 9 | 7 48 | 0 56 | 21 55 | 0 22 | 5 40 | 2 41 | 20 38 | 0 6 | 3 31 | 1 17 | 23 25 | 2 46 | 16 12 | 16 27 | 11 28 | 6 38 | 1 24 | T 22 |
| F 23 | 10 3 | 4n 7 | 4 50 | 1 30 | 2 15 | 20 32 | 1 6 | 7 29 | 0 56 | 21 55 | 0 21 | 5 38 | 2 41 | 20 38 | 0 6 | 3 32 | 1 17 | 23 24 | 2 46 | 16 13 | 16 28 | 11 27 | 6 39 | 1 24 | F 23 |
| S 24 | 9 41 | 8 44 | 5 12 | 1 9 | 2 29 | 20 24 | 1 2 | 7 11 | 0 55 | 21 56 | 0 21 | 5 37 | 2 41 | 20 38 | 0 6 | 3 33 | 1 17 | 23 24 | 2 46 | 16 14 | 16 29 | 11 25 | 6 40 | 1 24 | S 24 |
| S 25 | 9 19 | 12 44 | 5 15 | 0 52 | 2 42 | 20 15 | 0 58 | 6 52 | 0 55 | 21 57 | 0 21 | 5 36 | 2 41 | 20 39 | 0 6 | 3 33 | 1 17 | 23 24 | 2 46 | 16 14 | 16 30 | 11 23 | 6 41 | 1 24 | S 25 |
| M26 | 8 56 | 15 57 | 5 1 | 0 39 | 2 55 | 20 6 | 0 54 | 6 33 | 0 54 | 21 57 | 0 21 | 5 35 | 2 42 | 20 39 | 0 6 | 3 34 | 1 17 | 23 24 | 2 47 | 16 14 | 16 31 | 11 22 | 6 43 | 1 24 | M26 |
| T 27 | 8 34 | 18 17 | 4 31 | 0 32 | 3 6 | 19 57 | 0 50 | 6 15 | 0 54 | 21 58 | 0 21 | 5 34 | 2 42 | 20 39 | 0 6 | 3 35 | 1 17 | 23 24 | 2 47 | 16 14 | 16 31 | 11 20 | 6 44 | 1 24 | T 27 |
| W28 | 8 11 | 19 39 | 3 49 | 0 29 | 3 17 | 19 47 | 0 46 | 5 56 | 0 54 | 21 59 | 0 20 | 5 33 | 2 42 | 20 39 | 0 6 | 3 35 | 1 17 | 23 23 | 2 47 | 16 14 | 16 32 | 11 18 | 6 45 | 1 24 | W28 |
| T 29 | 7s49 | 20n 2 | 2s58 | 0s31 | 3n25 | 19s36 | 0n42 | 5s37 | 0s53 | 21n59 | 0s20 | 5s31 | 2n42 | 20n39 | 0s 6 | 3n36 | 1n17 | 23s23 | 2s47 | 16n13 | 16n33 | 11n17 | 6n46 | 1n24 | T 29 |

Julian Day Number = 2369761.5, Delta T = 22.01 sec
Ecliptic obliquity = 23°28'00, Nutation = - 0°00'11, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°36'51, Lahiri = 20°43'51Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## MARCH 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F 1 | 10 37 25 | 11♓ 2'29 | 23♋22 | 20°R13 | 0♒40 | 18♓38 | 12♊37 | 20°R29 | 2♊51 | 23°R54 | 27♑39 | 15♌28 | 14♌16 | 5♍29 | 13♈56 | F 1 |
| S 2 | 10 41 21 | 12° 2'33 | 5♌17 | 19♓33 | 1°51 | 19°25 | 12°42 | 20♎26 | 2°52 | 23♍52 | 27°41 | 15°30 | 14°12 | 5°36 | 13°59 | S 2 |
| S 3 | 10 45 18 | 13° 2'35 | 17° 7 | 18°46 | 3° 2 | 20°12 | 12°47 | 20°22 | 2°53 | 23°50 | 27°42 | 15°R30 | 14° 9 | 5°42 | 14° 2 | S 3 |
| M 4 | 10 49 14 | 14° 2'35 | 28°55 | 17°53 | 4°13 | 20°59 | 12°52 | 20°19 | 2°54 | 23°49 | 27°44 | 15°29 | 14° 6 | 5°49 | 14° 6 | M 4 |
| T 5 | 10 53 11 | 15° 2'34 | 10♍43 | 16°57 | 5°25 | 21°46 | 12°57 | 20°16 | 2°55 | 23°47 | 27°45 | 15°27 | 14° 3 | 5°55 | 14° 9 | T 5 |
| W 6 | 10 57 7 | 16° 2'30 | 22°34 | 15°59 | 6°36 | 22°33 | 13° 3 | 20°13 | 2°57 | 23°46 | 27°47 | 15°23 | 14° 0 | 6° 2 | 14°12 | W 6 |
| T 7 | 11 1 4 | 17° 2'24 | 4♎29 | 14°59 | 7°47 | 23°20 | 13° 9 | 20° 9 | 2°58 | 23°44 | 27°48 | 15°18 | 13°57 | 6° 9 | 14°16 | T 7 |
| F 8 | 11 5 0 | 18° 2'16 | 16°30 | 14° 0 | 8°59 | 24° 6 | 13°14 | 20° 6 | 2°59 | 23°42 | 27°50 | 15°12 | 13°53 | 6°15 | 14°19 | F 8 |
| S 9 | 11 8 57 | 19° 2'07 | 28°39 | 13° 3 | 10°10 | 24°53 | 13°20 | 20° 2 | 3° 1 | 23°41 | 27°51 | 15° 6 | 13°50 | 6°22 | 14°22 | S 9 |
| S 10 | 11 12 54 | 20° 1'56 | 10♏57 | 12° 8 | 11°22 | 25°40 | 13°26 | 19°59 | 3° 2 | 23°39 | 27°52 | 15° 0 | 13°47 | 6°29 | 14°26 | S 10 |
| M11 | 11 16 50 | 21° 1'43 | 23°28 | 11°17 | 12°33 | 26°26 | 13°33 | 19°55 | 3° 4 | 23°37 | 27°54 | 14°56 | 13°44 | 6°35 | 14°29 | M11 |
| T 12 | 11 20 47 | 22° 1'28 | 6♐15 | 10°30 | 13°45 | 27°13 | 13°39 | 19°51 | 3° 6 | 23°36 | 27°55 | 14°53 | 13°41 | 6°42 | 14°33 | T 12 |
| W13 | 11 24 43 | 23° 1'12 | 19°19 | 9°48 | 14°57 | 28° 0 | 13°46 | 19°47 | 3° 7 | 23°34 | 27°56 | 14°D51 | 13°37 | 6°49 | 14°36 | W13 |
| T 14 | 11 28 40 | 24° 0'54 | 2♑43 | 9°13 | 16° 8 | 28°46 | 13°53 | 19°43 | 3° 9 | 23°32 | 27°57 | 14°52 | 13°34 | 6°55 | 14°39 | T 14 |
| F 15 | 11 32 36 | 25° 0'35 | 16°31 | 8°43 | 17°20 | 29°33 | 13°59 | 19°39 | 3°11 | 23°31 | 27°59 | 14°53 | 13°31 | 7° 2 | 14°43 | F 15 |
| S 16 | 11 36 33 | 26° 0'13 | 0♒42 | 8°19 | 18°32 | 0♈19 | 14° 6 | 19°35 | 3°12 | 23°29 | 28° 0 | 14°54 | 13°28 | 7° 9 | 14°46 | S 16 |
| S 17 | 11 40 29 | 26°59'50 | 15°16 | 8° 1 | 19°44 | 1° 6 | 14°14 | 19°31 | 3°14 | 23°27 | 28° 1 | 14°R55 | 13°25 | 7°15 | 14°50 | S 17 |
| M18 | 11 44 26 | 27°59'25 | 0♓ 9 | 7°50 | 20°56 | 1°52 | 14°21 | 19°27 | 3°16 | 23°26 | 28° 2 | 14°54 | 13°22 | 7°22 | 14°54 | M18 |
| T 19 | 11 48 22 | 28°58'58 | 15°16 | 7°D45 | 22° 8 | 2°39 | 14°29 | 19°23 | 3°18 | 23°24 | 28° 3 | 14°51 | 13°18 | 7°29 | 14°57 | T 19 |
| W20 | 11 52 19 | 29°58'29 | 0♈26 | 7°45 | 23°20 | 3°25 | 14°36 | 19°19 | 3°20 | 23°22 | 28° 4 | 14°46 | 13°15 | 7°35 | 15° 1 | W20 |
| T 21 | 11 56 16 | 0♈57'58 | 15°31 | 7°52 | 24°32 | 4°11 | 14°44 | 19°15 | 3°22 | 23°21 | 28° 6 | 14°39 | 13°12 | 7°42 | 15° 4 | T 21 |
| F 22 | 12 0 12 | 1°57'25 | 0♉20 | 8° 3 | 25°44 | 4°58 | 14°52 | 19°10 | 3°24 | 23°19 | 28° 7 | 14°32 | 13° 9 | 7°49 | 15° 8 | F 22 |
| S 23 | 12 4 9 | 2°56'50 | 14°46 | 8°20 | 26°56 | 5°44 | 15° 0 | 19° 6 | 3°26 | 23°17 | 28° 8 | 14°24 | 13° 6 | 7°55 | 15°11 | S 23 |
| S 24 | 12 8 5 | 3°56'12 | 28°44 | 8°42 | 28° 8 | 6°30 | 15° 8 | 19° 2 | 3°28 | 23°16 | 28° 9 | 14°18 | 13° 3 | 8° 2 | 15°15 | S 24 |
| M25 | 12 12 2 | 4°55'33 | 12♊13 | 9° 9 | 29°20 | 7°16 | 15°16 | 18°57 | 3°30 | 23°14 | 28°10 | 14°14 | 12°59 | 8° 9 | 15°19 | M25 |
| T 26 | 12 15 58 | 5°54'51 | 25°14 | 9°40 | 0♓32 | 8° 2 | 15°25 | 18°53 | 3°33 | 23°13 | 28°11 | 14°11 | 12°56 | 8°15 | 15°22 | T 26 |
| W27 | 12 19 55 | 6°54'06 | 7♋51 | 10°16 | 1°44 | 8°48 | 15°33 | 18°48 | 3°35 | 23°11 | 28°12 | 14°D11 | 12°53 | 8°22 | 15°26 | W27 |
| T 28 | 12 23 51 | 7°53'20 | 20° 7 | 10°55 | 2°56 | 9°34 | 15°42 | 18°44 | 3°37 | 23° 9 | 28°12 | 14°11 | 12°50 | 8°29 | 15°30 | T 28 |
| F 29 | 12 27 48 | 8°52'30 | 2♌ 9 | 11°39 | 4° 9 | 10°20 | 15°51 | 18°39 | 3°39 | 23° 8 | 28°13 | 14°12 | 12°47 | 8°35 | 15°33 | F 29 |
| S 30 | 12 31 45 | 9°51'39 | 14° 2 | 12°25 | 5°21 | 11° 6 | 16° 0 | 18°35 | 3°42 | 23° 6 | 28°14 | 14°R13 | 12°43 | 8°42 | 15°37 | S 30 |
| S 31 | 12 35 41 | 10♈50'45 | 25♌49 | 13♓15 | 6♓33 | 11♈52 | 16♊ 9 | 18♎30 | 3♊44 | 23♍ 5 | 28♑15 | 14♌12 | 12♌40 | 8♍49 | 15♈41 | S 31 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| F 1 | 7s26 | 19n29 | 1s59 | 0s38 | 3n32 | 19s25 | 0n38 | 5s18 | 0s53 | 22n 0 | 0s20 | 5s30 | 2n42 | 20n40 | 0s 6 | 3n37 | 1n17 | 23s23 | 2s47 | 16n13 | 16n34 | 11n15 | 6n47 | 1n24 |
| S 2 | 7 3 | 18 4 | 0 56 | 0 49 | 3 37 | 19 13 | 0 34 | 5 0 | 0 52 | 22 1 | 0 20 | 5 29 | 2 43 | 20 40 | 0 6 | 3 37 | 1 17 | 23 23 | 2 47 | 16 13 | 16 35 | 11 13 | 6 48 | 1 23 |
| S 3 | 6 40 | 15 52 | 0n 9 | 1 4 | 3 40 | 19 0 | 0 31 | 4 41 | 0 52 | 22 2 | 0 20 | 5 27 | 2 43 | 20 40 | 0 6 | 3 38 | 1 17 | 23 23 | 2 47 | 16 12 | 16 36 | 11 11 | 6 49 | 1 23 |
| M 4 | 6 17 | 13 0 | 1 13 | 1 24 | 3 41 | 18 47 | 0 27 | 4 22 | 0 51 | 22 3 | 0 20 | 5 26 | 2 43 | 20 40 | 0 6 | 3 39 | 1 17 | 23 23 | 2 48 | 16 13 | 16 37 | 11 10 | 6 51 | 1 23 |
| T 5 | 5 54 | 9 37 | 2 14 | 1 47 | 3 40 | 18 34 | 0 23 | 4 3 | 0 51 | 22 4 | 0 19 | 5 24 | 2 43 | 20 41 | 0 6 | 3 39 | 1 17 | 23 22 | 2 48 | 16 13 | 16 38 | 11 8 | 6 52 | 1 23 |
| W 6 | 5 31 | 5 51 | 3 9 | 2 12 | 3 37 | 18 20 | 0 19 | 3 44 | 0 50 | 22 4 | 0 19 | 5 23 | 2 43 | 20 41 | 0 6 | 3 40 | 1 17 | 23 22 | 2 48 | 16 15 | 16 39 | 11 6 | 6 53 | 1 23 |
| T 7 | 5 7 | 1 50 | 3 57 | 2 40 | 3 32 | 18 5 | 0 16 | 3 25 | 0 50 | 22 5 | 0 19 | 5 22 | 2 44 | 20 41 | 0 6 | 3 41 | 1 17 | 23 22 | 2 48 | 16 16 | 16 40 | 11 5 | 6 54 | 1 23 |
| F 8 | 4 44 | 2s17 | 4 34 | 3 9 | 3 25 | 17 50 | 0 12 | 3 6 | 0 49 | 22 6 | 0 19 | 5 20 | 2 44 | 20 41 | 0 6 | 3 41 | 1 17 | 23 22 | 2 48 | 16 18 | 16 41 | 11 3 | 6 55 | 1 23 |
| S 9 | 4 21 | 6 21 | 4 59 | 3 39 | 3 16 | 17 35 | 0 8 | 2 47 | 0 49 | 22 7 | 0 19 | 5 19 | 2 44 | 20 42 | 0 6 | 3 42 | 1 17 | 23 22 | 2 48 | 16 20 | 16 42 | 11 1 | 6 57 | 1 23 |
| S 10 | 3 57 | 10 12 | 5 11 | 4 9 | 3 6 | 17 19 | 0 5 | 2 28 | 0 48 | 22 8 | 0 18 | 5 17 | 2 44 | 20 42 | 0 6 | 3 43 | 1 17 | 23 22 | 2 48 | 16 21 | 16 42 | 11 0 | 6 58 | 1 23 |
| M11 | 3 34 | 13 41 | 5 8 | 4 39 | 2 54 | 17 2 | 0 1 | 2 9 | 0 48 | 22 9 | 0 18 | 5 16 | 2 44 | 20 42 | 0 6 | 3 43 | 1 17 | 23 22 | 2 49 | 16 23 | 16 43 | 10 58 | 6 59 | 1 22 |
| T 12 | 3 10 | 16 36 | 4 50 | 5 9 | 2 42 | 16 45 | 0s 2 | 1 50 | 0 48 | 22 10 | 0 18 | 5 14 | 2 44 | 20 43 | 0 6 | 3 44 | 1 18 | 23 21 | 2 49 | 16 23 | 16 44 | 10 56 | 7 0 | 1 22 |
| W13 | 2 46 | 18 46 | 4 17 | 5 37 | 2 28 | 16 28 | 0 6 | 1 31 | 0 47 | 22 11 | 0 18 | 5 12 | 2 45 | 20 43 | 0 6 | 3 45 | 1 18 | 23 21 | 2 49 | 16 24 | 16 45 | 10 54 | 7 1 | 1 22 |
| T 14 | 2 23 | 19 57 | 3 29 | 6 4 | 2 14 | 16 10 | 0 9 | 1 12 | 0 47 | 22 12 | 0 18 | 5 11 | 2 45 | 20 43 | 0 6 | 3 45 | 1 18 | 23 21 | 2 49 | 16 24 | 16 46 | 10 53 | 7 3 | 1 22 |
| F 15 | 1 59 | 19 59 | 2 28 | 6 28 | 1 59 | 15 51 | 0 13 | 0 53 | 0 46 | 22 13 | 0 18 | 5 9 | 2 45 | 20 44 | 0 5 | 3 46 | 1 18 | 23 21 | 2 49 | 16 23 | 16 47 | 10 51 | 7 4 | 1 22 |
| S 16 | 1 35 | 18 47 | 1 17 | 6 51 | 1 44 | 15 33 | 0 16 | 0 34 | 0 46 | 22 14 | 0 17 | 5 8 | 2 45 | 20 44 | 0 5 | 3 47 | 1 18 | 23 21 | 2 49 | 16 23 | 16 48 | 10 49 | 7 5 | 1 22 |
| S 17 | 1 12 | 16 18 | 0s 2 | 7 12 | 1 29 | 15 13 | 0 19 | 0 15 | 0 45 | 22 15 | 0 17 | 5 6 | 2 45 | 20 44 | 0 5 | 3 47 | 1 18 | 23 21 | 2 50 | 16 23 | 16 49 | 10 47 | 7 7 | 1 22 |
| M18 | 0 48 | 12 42 | 1 22 | 7 30 | 1 14 | 14 53 | 0 23 | 0n 4 | 0 45 | 22 16 | 0 17 | 5 4 | 2 45 | 20 45 | 0 5 | 3 48 | 1 18 | 23 21 | 2 50 | 16 23 | 16 50 | 10 46 | 7 8 | 1 22 |
| T 19 | 0 24 | 8 14 | 2 37 | 7 46 | 0 59 | 14 33 | 0 26 | 0 23 | 0 44 | 22 17 | 0 17 | 5 3 | 2 45 | 20 45 | 0 5 | 3 49 | 1 18 | 23 21 | 2 50 | 16 24 | 16 51 | 10 44 | 7 9 | 1 22 |
| W20 | 0 1 | 3 13 | 3 41 | 7 59 | 0 44 | 14 13 | 0 29 | 0 42 | 0 43 | 22 18 | 0 17 | 5 1 | 2 46 | 20 45 | 0 5 | 3 49 | 1 18 | 23 21 | 2 50 | 16 25 | 16 52 | 10 42 | 7 10 | 1 22 |
| T 21 | 0n23 | 1n58 | 4 30 | 8 10 | 0 30 | 13 52 | 0 32 | 1 1 | 0 43 | 22 19 | 0 17 | 4 59 | 2 46 | 20 46 | 0 5 | 3 50 | 1 18 | 23 21 | 2 50 | 16 27 | 16 52 | 10 40 | 7 12 | 1 22 |
| F 22 | 0 47 | 6 56 | 4 59 | 8 19 | 0 16 | 13 30 | 0 35 | 1 19 | 0 42 | 22 20 | 0 17 | 4 57 | 2 46 | 20 46 | 0 5 | 3 51 | 1 18 | 23 21 | 2 50 | 16 30 | 16 53 | 10 39 | 7 13 | 1 21 |
| S 23 | 1 10 | 11 22 | 5 8 | 8 25 | 0 2 | 13 9 | 0 38 | 1 38 | 0 42 | 22 21 | 0 16 | 4 56 | 2 46 | 20 47 | 0 5 | 3 51 | 1 18 | 23 21 | 2 50 | 16 32 | 16 54 | 10 37 | 7 14 | 1 21 |
| S 24 | 1 34 | 15 3 | 4 59 | 8 29 | 0s11 | 12 47 | 0 41 | 1 57 | 0 41 | 22 22 | 0 16 | 4 54 | 2 46 | 20 47 | 0 5 | 3 52 | 1 18 | 23 20 | 2 51 | 16 33 | 16 55 | 10 35 | 7 16 | 1 21 |
| M25 | 1 58 | 17 47 | 4 32 | 8 30 | 0 23 | 12 24 | 0 44 | 2 16 | 0 41 | 22 23 | 0 16 | 4 52 | 2 46 | 20 47 | 0 5 | 3 53 | 1 18 | 23 20 | 2 51 | 16 35 | 16 56 | 10 33 | 7 17 | 1 21 |
| T 26 | 2 21 | 19 30 | 3 53 | 8 30 | 0 35 | 12 1 | 0 47 | 2 35 | 0 40 | 22 24 | 0 16 | 4 50 | 2 46 | 20 48 | 0 5 | 3 53 | 1 18 | 23 20 | 2 51 | 16 35 | 16 57 | 10 32 | 7 18 | 1 21 |
| W27 | 2 45 | 20 11 | 3 3 | 8 27 | 0 47 | 11 38 | 0 49 | 2 53 | 0 40 | 22 25 | 0 16 | 4 49 | 2 46 | 20 48 | 0 5 | 3 54 | 1 18 | 23 20 | 2 51 | 16 36 | 16 58 | 10 30 | 7 20 | 1 21 |
| T 28 | 3 8 | 19 53 | 2 6 | 8 22 | 0 58 | 11 15 | 0 52 | 3 12 | 0 39 | 22 26 | 0 16 | 4 47 | 2 46 | 20 49 | 0 5 | 3 54 | 1 18 | 23 20 | 2 51 | 16 35 | 16 59 | 10 28 | 7 21 | 1 21 |
| F 29 | 3 31 | 18 39 | 1 5 | 8 15 | 1 8 | 10 51 | 0 55 | 3 30 | 0 39 | 22 27 | 0 15 | 4 45 | 2 46 | 20 49 | 0 5 | 3 55 | 1 18 | 23 20 | 2 51 | 16 35 | 17 0 | 10 26 | 7 22 | 1 21 |
| S 30 | 3 55 | 16 37 | 0 1 | 8 7 | 1 18 | 10 27 | 0 57 | 3 49 | 0 38 | 22 29 | 0 15 | 4 43 | 2 46 | 20 50 | 0 5 | 3 56 | 1 18 | 23 20 | 2 52 | 16 35 | 17 1 | 10 25 | 7 24 | 1 21 |
| S 31 | 4n18 | 13n54 | 1n 2 | 7s56 | 1s27 | 10s 2 | 1s 0 | 4n 7 | 0s38 | 22n30 | 0s15 | 4s42 | 2n47 | 20n50 | 0s 5 | 3n56 | 1n18 | 23s20 | 2s52 | 16n35 | 17n 2 | 10n23 | 7n25 | 1n21 |

Julian Day Number = 2369790.5, Delta T = 22.02 sec
Ecliptic obliquity = 23°28'00, Nutation = - 0°00'11, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°36'55, Lahiri = 20°43'55Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## APRIL 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M 1 | 12 39 38 | 11♈49'49 | 7♍36 | 14♓ 9 | 7♓45 | 12♈38 | 16♊18 | 18°R26 | 3♊47 | 23°R 3 | 28♑16 | 14°R 9 | 12♌37 | 8♍55 | 15♈44 | M 1 |
| T 2 | 12 43 34 | 12°48'51 | 19°26 | 15° 5 | 8°58 | 13°24 | 16°27 | 18♎21 | 3°49 | 23♍ 1 | 28°17 | 14♌ 4 | 12°34 | 9° 2 | 15°48 | T 2 |
| W 3 | 12 47 31 | 13°47'51 | 1♎21 | 16° 4 | 10°10 | 14°10 | 16°37 | 18°17 | 3°52 | 23° 0 | 28°17 | 13°56 | 12°31 | 9° 9 | 15°51 | W 3 |
| T 4 | 12 51 27 | 14°46'49 | 13°25 | 17° 6 | 11°22 | 14°55 | 16°46 | 18°12 | 3°54 | 22°58 | 28°18 | 13°46 | 12°28 | 9°15 | 15°55 | T 4 |
| F 5 | 12 55 24 | 15°45'44 | 25°37 | 18°11 | 12°35 | 15°41 | 16°56 | 18° 7 | 3°57 | 22°57 | 28°19 | 13°35 | 12°24 | 9°22 | 15°59 | F 5 |
| S 6 | 12 59 20 | 16°44'38 | 7♏59 | 19°18 | 13°47 | 16°27 | 17° 6 | 18° 3 | 3°59 | 22°55 | 28°19 | 13°23 | 12°21 | 9°29 | 16° 2 | S 6 |
| S 7 | 13 3 17 | 17°43'29 | 20°32 | 20°28 | 14°59 | 17°12 | 17°16 | 17°58 | 4° 2 | 22°54 | 28°20 | 13°12 | 12°18 | 9°35 | 16° 6 | S 7 |
| M 8 | 13 7 14 | 18°42'19 | 3♐16 | 21°39 | 16°12 | 17°58 | 17°25 | 17°53 | 4° 5 | 22°52 | 28°21 | 13° 3 | 12°15 | 9°42 | 16°10 | M 8 |
| T 9 | 13 11 10 | 19°41'07 | 16°12 | 22°53 | 17°24 | 18°43 | 17°36 | 17°49 | 4° 7 | 22°51 | 28°21 | 12°56 | 12°12 | 9°49 | 16°14 | T 9 |
| W10 | 13 15 7 | 20°39'54 | 29°22 | 24°10 | 18°37 | 19°29 | 17°46 | 17°44 | 4°10 | 22°50 | 28°22 | 12°52 | 12° 8 | 9°55 | 16°17 | W10 |
| T 11 | 13 19 3 | 21°38'38 | 12♑46 | 25°28 | 19°49 | 20°14 | 17°56 | 17°40 | 4°13 | 22°48 | 28°22 | 12°50 | 12° 5 | 10° 2 | 16°21 | T 11 |
| F 12 | 13 23 0 | 22°37'21 | 26°28 | 26°48 | 21° 2 | 21° 0 | 18° 6 | 17°35 | 4°16 | 22°47 | 28°23 | 12°D49 | 12° 2 | 10° 8 | 16°24 | F 12 |
| S 13 | 13 26 56 | 23°36'03 | 10♒27 | 28°10 | 22°14 | 21°45 | 18°17 | 17°30 | 4°19 | 22°45 | 28°23 | 12°R50 | 11°59 | 10°15 | 16°28 | S 13 |
| S 14 | 13 30 53 | 24°34'42 | 24°44 | 29°34 | 23°27 | 22°30 | 18°27 | 17°26 | 4°21 | 22°44 | 28°24 | 12°49 | 11°56 | 10°22 | 16°32 | S 14 |
| M15 | 13 34 49 | 25°33'20 | 9♓17 | 1♈ 0 | 24°39 | 23°15 | 18°38 | 17°21 | 4°24 | 22°43 | 28°24 | 12°47 | 11°53 | 10°28 | 16°35 | M15 |
| T 16 | 13 38 46 | 26°31'57 | 24° 3 | 2°28 | 25°52 | 24° 1 | 18°49 | 17°17 | 4°27 | 22°41 | 28°24 | 12°42 | 11°49 | 10°35 | 16°39 | T 16 |
| W17 | 13 42 43 | 27°30'31 | 8♈56 | 3°58 | 27° 5 | 24°46 | 19° 0 | 17°12 | 4°30 | 22°40 | 28°25 | 12°35 | 11°46 | 10°42 | 16°43 | W17 |
| T 18 | 13 46 39 | 28°29'03 | 23°47 | 5°29 | 28°17 | 25°31 | 19°10 | 17° 8 | 4°33 | 22°39 | 28°25 | 12°25 | 11°43 | 10°48 | 16°46 | T 18 |
| F 19 | 13 50 36 | 29°27'34 | 8♉28 | 7° 3 | 29°30 | 26°16 | 19°21 | 17° 3 | 4°36 | 22°37 | 28°25 | 12°13 | 11°40 | 10°55 | 16°50 | F 19 |
| S 20 | 13 54 32 | 0♉26'03 | 22°51 | 8°38 | 0♈42 | 27° 1 | 19°33 | 16°59 | 4°39 | 22°36 | 28°26 | 12° 2 | 11°37 | 11° 2 | 16°54 | S 20 |
| S 21 | 13 58 29 | 1°24'30 | 6♊49 | 10°14 | 1°55 | 27°46 | 19°44 | 16°54 | 4°42 | 22°35 | 28°26 | 11°52 | 11°34 | 11° 8 | 16°57 | S 21 |
| M22 | 14 2 25 | 2°22'55 | 20°21 | 11°53 | 3° 8 | 28°31 | 19°55 | 16°50 | 4°45 | 22°34 | 28°26 | 11°44 | 11°30 | 11°15 | 17° 1 | M22 |
| T 23 | 14 6 22 | 3°21'18 | 3♋25 | 13°33 | 4°20 | 29°16 | 20° 6 | 16°46 | 4°49 | 22°33 | 28°26 | 11°39 | 11°27 | 11°22 | 17° 4 | T 23 |
| W24 | 14 10 18 | 4°19'39 | 16° 5 | 15°15 | 5°33 | 0♉ 0 | 20°18 | 16°41 | 4°52 | 22°31 | 28°27 | 11°36 | 11°24 | 11°28 | 17° 8 | W24 |
| T 25 | 14 14 15 | 5°17'57 | 28°24 | 16°59 | 6°46 | 0°45 | 20°29 | 16°37 | 4°55 | 22°30 | 28°27 | 11°35 | 11°21 | 11°35 | 17°11 | T 25 |
| F 26 | 14 18 11 | 6°16'14 | 10♌28 | 18°44 | 7°58 | 1°30 | 20°41 | 16°33 | 4°58 | 22°29 | 28°27 | 11°35 | 11°18 | 11°42 | 17°15 | F 26 |
| S 27 | 14 22 8 | 7°14'28 | 22°21 | 20°32 | 9°11 | 2°14 | 20°52 | 16°29 | 5° 1 | 22°28 | 28°27 | 11°35 | 11°14 | 11°48 | 17°18 | S 27 |
| S 28 | 14 26 5 | 8°12'41 | 4♍ 9 | 22°21 | 10°24 | 2°59 | 21° 4 | 16°24 | 5° 4 | 22°27 | 28°27 | 11°33 | 11°11 | 11°55 | 17°22 | S 28 |
| M29 | 14 30 1 | 9°10'51 | 15°58 | 24°12 | 11°36 | 3°43 | 21°16 | 16°20 | 5° 8 | 22°26 | 28°R27 | 11°30 | 11° 8 | 12° 2 | 17°25 | M29 |
| T 30 | 14 33 58 | 10♉ 9'00 | 27♍51 | 26♈ 4 | 12♈49 | 4♉28 | 21♊28 | 16♎16 | 5♊11 | 22♍25 | 28♑27 | 11♌23 | 11♌ 5 | 12♍ 8 | 17♈29 | T 30 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| M 1 | 4n41 | 10n37 | 2n 2 | 7s43 | 1s36 | 9s38 | 1s 2 | 4n26 | 0s37 | 22n31 | 0s15 | 4s40 | 2n47 | 20n51 | 0s 5 | 3n57 | 1n18 | 23s20 | 2s52 | 16n36 | 17n 2 | 10n21 | 7n26 | 1n21 |
| T 2 | 5 4 | 6 54 | 2 57 | 7 29 | 1 44 | 9 13 | 1 4 | 4 44 | 0 36 | 22 32 | 0 15 | 4 38 | 2 47 | 20 51 | 0 5 | 3 58 | 1 18 | 23 20 | 2 52 | 16 38 | 17 3 | 10 19 | 7 28 | 1 21 |
| W 3 | 5 27 | 2 54 | 3 45 | 7 13 | 1 52 | 8 48 | 1 7 | 5 2 | 0 36 | 22 33 | 0 15 | 4 36 | 2 47 | 20 52 | 0 5 | 3 58 | 1 18 | 23 20 | 2 52 | 16 40 | 17 4 | 10 18 | 7 29 | 1 20 |
| T 4 | 5 50 | 1s16 | 4 22 | 6 55 | 1 59 | 8 22 | 1 9 | 5 21 | 0 35 | 22 34 | 0 15 | 4 35 | 2 47 | 20 52 | 0 5 | 3 59 | 1 18 | 23 20 | 2 52 | 16 43 | 17 5 | 10 16 | 7 30 | 1 20 |
| F 5 | 6 13 | 5 26 | 4 49 | 6 36 | 2 5 | 7 56 | 1 11 | 5 39 | 0 35 | 22 35 | 0 14 | 4 33 | 2 47 | 20 53 | 0 5 | 3 59 | 1 18 | 23 20 | 2 53 | 16 46 | 17 6 | 10 14 | 7 32 | 1 20 |
| S 6 | 6 35 | 9 25 | 5 2 | 6 15 | 2 11 | 7 30 | 1 13 | 5 57 | 0 34 | 22 36 | 0 14 | 4 31 | 2 47 | 20 53 | 0 5 | 4 0 | 1 18 | 23 20 | 2 53 | 16 49 | 17 7 | 10 12 | 7 33 | 1 20 |
| S 7 | 6 58 | 13 4 | 5 1 | 5 52 | 2 16 | 7 4 | 1 15 | 6 15 | 0 34 | 22 37 | 0 14 | 4 29 | 2 47 | 20 54 | 0 5 | 4 0 | 1 17 | 23 20 | 2 53 | 16 52 | 17 8 | 10 10 | 7 34 | 1 20 |
| M 8 | 7 20 | 16 10 | 4 45 | 5 28 | 2 21 | 6 38 | 1 17 | 6 33 | 0 33 | 22 38 | 0 14 | 4 27 | 2 47 | 20 54 | 0 5 | 4 1 | 1 17 | 23 20 | 2 53 | 16 55 | 17 9 | 10 9 | 7 36 | 1 20 |
| T 9 | 7 43 | 18 32 | 4 14 | 5 3 | 2 25 | 6 11 | 1 19 | 6 51 | 0 32 | 22 39 | 0 14 | 4 26 | 2 47 | 20 55 | 0 5 | 4 2 | 1 17 | 23 20 | 2 53 | 16 57 | 17 10 | 10 7 | 7 37 | 1 20 |
| W10 | 8 5 | 19 58 | 3 30 | 4 36 | 2 29 | 5 45 | 1 20 | 7 9 | 0 32 | 22 41 | 0 14 | 4 24 | 2 47 | 20 55 | 0 5 | 4 2 | 1 17 | 23 21 | 2 53 | 16 58 | 17 10 | 10 5 | 7 39 | 1 20 |
| T 11 | 8 27 | 20 19 | 2 33 | 4 8 | 2 32 | 5 18 | 1 22 | 7 26 | 0 31 | 22 42 | 0 14 | 4 22 | 2 47 | 20 56 | 0 5 | 4 3 | 1 17 | 23 21 | 2 54 | 16 59 | 17 11 | 10 3 | 7 40 | 1 20 |
| F 12 | 8 49 | 19 29 | 1 26 | 3 38 | 2 34 | 4 51 | 1 24 | 7 44 | 0 31 | 22 43 | 0 13 | 4 20 | 2 47 | 20 56 | 0 5 | 4 3 | 1 17 | 23 21 | 2 54 | 16 59 | 17 12 | 10 1 | 7 41 | 1 20 |
| S 13 | 9 10 | 17 26 | 0 13 | 3 7 | 2 36 | 4 23 | 1 25 | 8 1 | 0 30 | 22 44 | 0 13 | 4 19 | 2 47 | 20 57 | 0 5 | 4 4 | 1 17 | 23 21 | 2 54 | 16 59 | 17 13 | 10 0 | 7 43 | 1 20 |
| S 14 | 9 32 | 14 17 | 1s 3 | 2 35 | 2 38 | 3 56 | 1 27 | 8 19 | 0 29 | 22 45 | 0 13 | 4 17 | 2 47 | 20 57 | 0 5 | 4 4 | 1 17 | 23 21 | 2 54 | 16 59 | 17 14 | 9 58 | 7 44 | 1 20 |
| M15 | 9 53 | 10 11 | 2 16 | 2 2 | 2 39 | 3 28 | 1 28 | 8 36 | 0 29 | 22 46 | 0 13 | 4 15 | 2 47 | 20 58 | 0 5 | 4 5 | 1 17 | 23 21 | 2 54 | 17 0 | 17 15 | 9 56 | 7 45 | 1 20 |
| T 16 | 10 15 | 5 26 | 3 20 | 1 27 | 2 39 | 3 1 | 1 29 | 8 53 | 0 28 | 22 47 | 0 13 | 4 14 | 2 47 | 20 58 | 0 5 | 4 5 | 1 17 | 23 21 | 2 54 | 17 1 | 17 16 | 9 54 | 7 47 | 1 20 |
| W17 | 10 36 | 0 19 | 4 12 | 0 51 | 2 39 | 2 33 | 1 31 | 9 10 | 0 28 | 22 48 | 0 13 | 4 12 | 2 47 | 20 59 | 0 5 | 4 6 | 1 17 | 23 21 | 2 55 | 17 3 | 17 17 | 9 52 | 7 48 | 1 20 |
| T 18 | 10 57 | 4n49 | 4 46 | 0 14 | 2 38 | 2 5 | 1 32 | 9 27 | 0 27 | 22 49 | 0 13 | 4 10 | 2 47 | 21 0 | 0 5 | 4 6 | 1 17 | 23 21 | 2 55 | 17 6 | 17 18 | 9 50 | 7 49 | 1 19 |
| F 19 | 11 18 | 9 35 | 5 1 | 0n24 | 2 37 | 1 37 | 1 33 | 9 44 | 0 26 | 22 50 | 0 13 | 4 9 | 2 46 | 21 0 | 0 5 | 4 7 | 1 17 | 23 21 | 2 55 | 17 9 | 17 18 | 9 49 | 7 51 | 1 19 |
| S 20 | 11 38 | 13 44 | 4 56 | 1 3 | 2 35 | 1 9 | 1 34 | 10 1 | 0 26 | 22 51 | 0 12 | 4 7 | 2 46 | 21 1 | 0 5 | 4 7 | 1 17 | 23 21 | 2 55 | 17 12 | 17 19 | 9 47 | 7 52 | 1 19 |
| S 21 | 11 59 | 16 59 | 4 34 | 1 43 | 2 33 | 0 41 | 1 35 | 10 18 | 0 25 | 22 52 | 0 12 | 4 5 | 2 46 | 21 1 | 0 5 | 4 8 | 1 17 | 23 22 | 2 55 | 17 15 | 17 20 | 9 45 | 7 53 | 1 19 |
| M22 | 12 19 | 19 11 | 3 56 | 2 24 | 2 30 | 0 13 | 1 36 | 10 35 | 0 25 | 22 53 | 0 12 | 4 4 | 2 46 | 21 2 | 0 5 | 4 8 | 1 17 | 23 22 | 2 55 | 17 17 | 17 21 | 9 43 | 7 55 | 1 19 |
| T 23 | 12 39 | 20 18 | 3 8 | 3 6 | 2 27 | 0n15 | 1 36 | 10 51 | 0 24 | 22 54 | 0 12 | 4 2 | 2 46 | 21 2 | 0 5 | 4 9 | 1 17 | 23 22 | 2 56 | 17 19 | 17 22 | 9 41 | 7 56 | 1 19 |
| W24 | 12 59 | 20 20 | 2 11 | 3 49 | 2 23 | 0 43 | 1 37 | 11 7 | 0 23 | 22 55 | 0 12 | 4 1 | 2 46 | 21 3 | 0 5 | 4 9 | 1 17 | 23 22 | 2 56 | 17 19 | 17 23 | 9 39 | 7 57 | 1 19 |
| T 25 | 13 18 | 19 22 | 1 9 | 4 33 | 2 18 | 1 11 | 1 38 | 11 24 | 0 23 | 22 56 | 0 12 | 3 59 | 2 46 | 21 4 | 0 5 | 4 10 | 1 17 | 23 22 | 2 56 | 17 20 | 17 24 | 9 38 | 7 59 | 1 19 |
| F 26 | 13 38 | 17 32 | 0 6 | 5 17 | 2 14 | 1 40 | 1 38 | 11 40 | 0 22 | 22 57 | 0 12 | 3 57 | 2 46 | 21 4 | 0 5 | 4 10 | 1 17 | 23 22 | 2 56 | 17 20 | 17 25 | 9 36 | 8 0 | 1 19 |
| S 27 | 13 57 | 14 58 | 0n57 | 6 3 | 2 8 | 2 8 | 1 39 | 11 56 | 0 21 | 22 58 | 0 11 | 3 56 | 2 46 | 21 5 | 0 5 | 4 10 | 1 17 | 23 22 | 2 56 | 17 20 | 17 25 | 9 34 | 8 1 | 1 19 |
| S 28 | 14 16 | 11 48 | 1 57 | 6 49 | 2 2 | 2 36 | 1 39 | 12 12 | 0 21 | 22 59 | 0 11 | 3 54 | 2 46 | 21 5 | 0 5 | 4 11 | 1 17 | 23 23 | 2 57 | 17 20 | 17 26 | 9 32 | 8 2 | 1 19 |
| M29 | 14 34 | 8 10 | 2 51 | 7 36 | 1 56 | 3 4 | 1 39 | 12 27 | 0 20 | 22 59 | 0 11 | 3 53 | 2 46 | 21 6 | 0 5 | 4 11 | 1 17 | 23 23 | 2 57 | 17 21 | 17 27 | 9 30 | 8 4 | 1 19 |
| T 30 | 14n53 | 4n12 | 3n39 | 8n23 | 1s49 | 3n32 | 1s40 | 12n43 | 0s20 | 23n 0 | 0s11 | 3s52 | 2n46 | 21n 6 | 0s 5 | 4n12 | 1n17 | 23s23 | 2s57 | 17n23 | 17n28 | 9n28 | 8n 5 | 1n19 |

Julian Day Number = 2369821.5, Delta T = 22.03 sec
Ecliptic obliquity = 23°28'01, Nutation = - 0°00'13, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°36'59, Lahiri = 20°43'59Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## MAY 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W 1 | 14 37 54 | 11♉ 7'06 | 9♎52 | 27♈59 | 14♈ 2 | 5♉12 | 21♊40 | 16°R12 | 5♊14 | 22°R24 | 28°R27 | 11°R14 | 11♌ 2 | 12♍15 | 17♈32 | W 1 |
| T 2 | 14 41 51 | 12° 5'11 | 22° 5 | 29°55 | 15°15 | 5°57 | 21°52 | 16♎ 8 | 5°18 | 22♍23 | 28♑27 | 11♌ 3 | 10°59 | 12°22 | 17°36 | T 2 |
| F 3 | 14 45 47 | 13° 3'14 | 4♏30 | 1♉53 | 16°27 | 6°41 | 22° 4 | 16° 5 | 5°21 | 22°22 | 28°27 | 10°50 | 10°55 | 12°28 | 17°39 | F 3 |
| S 4 | 14 49 44 | 14° 1'15 | 17° 8 | 3°52 | 17°40 | 7°25 | 22°16 | 16° 1 | 5°24 | 22°21 | 28°26 | 10°37 | 10°52 | 12°35 | 17°42 | S 4 |
| S 5 | 14 53 40 | 14°59'15 | 29°59 | 5°54 | 18°53 | 8° 9 | 22°28 | 15°57 | 5°28 | 22°20 | 28°26 | 10°24 | 10°49 | 12°42 | 17°46 | S 5 |
| M 6 | 14 57 37 | 15°57'13 | 13♐ 3 | 7°57 | 20° 6 | 8°54 | 22°40 | 15°53 | 5°31 | 22°20 | 28°26 | 10°14 | 10°46 | 12°48 | 17°49 | M 6 |
| T 7 | 15 1 34 | 16°55'10 | 26°18 | 10° 1 | 21°18 | 9°38 | 22°53 | 15°50 | 5°34 | 22°19 | 28°26 | 10° 5 | 10°43 | 12°55 | 17°52 | T 7 |
| W 8 | 15 5 30 | 17°53'06 | 9♑44 | 12° 7 | 22°31 | 10°22 | 23° 5 | 15°46 | 5°38 | 22°18 | 28°26 | 10° 0 | 10°40 | 13° 2 | 17°56 | W 8 |
| T 9 | 15 9 27 | 18°51'00 | 23°20 | 14°14 | 23°44 | 11° 6 | 23°17 | 15°43 | 5°41 | 22°17 | 28°25 | 9°58 | 10°36 | 13° 8 | 17°59 | T 9 |
| F 10 | 15 13 23 | 19°48'53 | 7♒ 6 | 16°23 | 24°57 | 11°50 | 23°30 | 15°39 | 5°45 | 22°16 | 28°25 | 9°D57 | 10°33 | 13°15 | 18° 2 | F 10 |
| S 11 | 15 17 20 | 20°46'44 | 21° 3 | 18°32 | 26°10 | 12°34 | 23°42 | 15°36 | 5°48 | 22°16 | 28°25 | 9°R57 | 10°30 | 13°22 | 18° 6 | S 11 |
| S 12 | 15 21 16 | 21°44'35 | 5♓11 | 20°43 | 27°23 | 13°17 | 23°55 | 15°32 | 5°51 | 22°15 | 28°24 | 9°56 | 10°27 | 13°28 | 18° 9 | S 12 |
| M13 | 15 25 13 | 22°42'24 | 19°28 | 22°54 | 28°35 | 14° 1 | 24° 8 | 15°29 | 5°55 | 22°14 | 28°24 | 9°54 | 10°24 | 13°35 | 18°12 | M13 |
| T 14 | 15 29 9 | 23°40'12 | 3♈53 | 25° 5 | 29°48 | 14°45 | 24°20 | 15°26 | 5°58 | 22°14 | 28°24 | 9°50 | 10°20 | 13°42 | 18°15 | T 14 |
| W15 | 15 33 6 | 24°37'59 | 18°21 | 27°16 | 1♉ 1 | 15°29 | 24°33 | 15°23 | 6° 2 | 22°13 | 28°23 | 9°42 | 10°17 | 13°48 | 18°18 | W15 |
| T 16 | 15 37 3 | 25°35'45 | 2♉48 | 29°27 | 2°14 | 16°12 | 24°46 | 15°20 | 6° 5 | 22°13 | 28°23 | 9°33 | 10°14 | 13°55 | 18°21 | T 16 |
| F 17 | 15 40 59 | 26°33'29 | 17° 7 | 1♊38 | 3°27 | 16°56 | 24°59 | 15°17 | 6° 9 | 22°12 | 28°22 | 9°22 | 10°11 | 14° 2 | 18°24 | F 17 |
| S 18 | 15 44 56 | 27°31'12 | 1♊11 | 3°48 | 4°40 | 17°39 | 25°11 | 15°14 | 6°12 | 22°12 | 28°22 | 9°11 | 10° 8 | 14° 8 | 18°27 | S 18 |
| S 19 | 15 48 52 | 28°28'54 | 14°57 | 5°57 | 5°53 | 18°23 | 25°24 | 15°12 | 6°16 | 22°11 | 28°21 | 9° 1 | 10° 5 | 14°15 | 18°30 | S 19 |
| M20 | 15 52 49 | 29°26'35 | 28°21 | 8° 5 | 7° 6 | 19° 6 | 25°37 | 15° 9 | 6°19 | 22°11 | 28°21 | 8°53 | 10° 1 | 14°22 | 18°33 | M20 |
| T 21 | 15 56 45 | 0♊24'14 | 11♋22 | 10°11 | 8°19 | 19°50 | 25°50 | 15° 6 | 6°23 | 22°10 | 28°20 | 8°48 | 9°58 | 14°28 | 18°36 | T 21 |
| W22 | 16 0 42 | 1°21'52 | 24° 1 | 12°15 | 9°32 | 20°33 | 26° 3 | 15° 4 | 6°26 | 22°10 | 28°20 | 8°45 | 9°55 | 14°35 | 18°39 | W22 |
| T 23 | 16 4 38 | 2°19'29 | 6♌20 | 14°18 | 10°44 | 21°16 | 26°16 | 15° 1 | 6°30 | 22°10 | 28°19 | 8°D44 | 9°52 | 14°42 | 18°42 | T 23 |
| F 24 | 16 8 35 | 3°17'03 | 18°25 | 16°18 | 11°57 | 22° 0 | 26°30 | 14°59 | 6°33 | 22° 9 | 28°18 | 8°44 | 9°49 | 14°48 | 18°45 | F 24 |
| S 25 | 16 12 32 | 4°14'37 | 0♍20 | 18°16 | 13°10 | 22°43 | 26°43 | 14°57 | 6°37 | 22° 9 | 28°18 | 8°R44 | 9°46 | 14°55 | 18°48 | S 25 |
| S 26 | 16 16 28 | 5°12'09 | 12°10 | 20°12 | 14°23 | 23°26 | 26°56 | 14°55 | 6°40 | 22° 9 | 28°17 | 8°44 | 9°42 | 15° 2 | 18°51 | S 26 |
| M27 | 16 20 25 | 6° 9'40 | 24° 0 | 22° 5 | 15°36 | 24° 9 | 27° 9 | 14°53 | 6°44 | 22° 9 | 28°16 | 8°42 | 9°39 | 15° 8 | 18°53 | M27 |
| T 28 | 16 24 21 | 7° 7'09 | 5♎57 | 23°56 | 16°49 | 24°52 | 27°22 | 14°51 | 6°47 | 22° 8 | 28°15 | 8°38 | 9°36 | 15°15 | 18°56 | T 28 |
| W29 | 16 28 18 | 8° 4'37 | 18° 3 | 25°44 | 18° 2 | 25°35 | 27°36 | 14°49 | 6°51 | 22° 8 | 28°15 | 8°32 | 9°33 | 15°22 | 18°59 | W29 |
| T 30 | 16 32 14 | 9° 2'04 | 0♏22 | 27°29 | 19°15 | 26°18 | 27°49 | 14°47 | 6°55 | 22° 8 | 28°14 | 8°24 | 9°30 | 15°28 | 19° 1 | T 30 |
| F 31 | 16 36 11 | 9♊59'30 | 12♏58 | 29♊12 | 20♉28 | 27♉ 0 | 28♊ 2 | 14♎45 | 6♊58 | 22♍ 8 | 28♑13 | 8♌15 | 9♌26 | 15♍35 | 19♈ 4 | F 31 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| W 1 | 15n11 | 0n 1 | 4n17 | 9n11 | 1s42 | 4n 0 | 1s40 | 12n59 | 0s19 | 23n 1 | 0s11 | 3s50 | 2n45 | 21n 7 | 0s 5 | 4n12 | 1n17 | 23s23 | 2s57 | 17n25 | 17n29 | 9n26 | 8n 6 | 1n19 |
| T 2 | 15 29 | 4s13 | 4 44 | 10 0 | 1 34 | 4 28 | 1 40 | 13 14 | 0 18 | 23 2 | 0 11 | 3 49 | 2 45 | 21 8 | 0 5 | 4 12 | 1 17 | 23 23 | 2 57 | 17 29 | 17 30 | 9 25 | 8 8 | 1 19 |
| F 3 | 15 46 | 8 21 | 4 58 | 10 48 | 1 25 | 4 56 | 1 40 | 13 29 | 0 18 | 23 3 | 0 11 | 3 47 | 2 45 | 21 8 | 0 5 | 4 13 | 1 17 | 23 23 | 2 57 | 17 32 | 17 31 | 9 23 | 8 9 | 1 19 |
| S 4 | 16 4 | 12 12 | 4 58 | 11 37 | 1 17 | 5 24 | 1 40 | 13 44 | 0 17 | 23 4 | 0 11 | 3 46 | 2 45 | 21 9 | 0 5 | 4 13 | 1 17 | 23 24 | 2 58 | 17 36 | 17 32 | 9 21 | 8 10 | 1 19 |
| S 5 | 16 21 | 15 34 | 4 43 | 12 26 | 1 8 | 5 52 | 1 40 | 13 59 | 0 16 | 23 5 | 0 11 | 3 45 | 2 45 | 21 9 | 0 5 | 4 13 | 1 17 | 23 24 | 2 58 | 17 39 | 17 32 | 9 19 | 8 11 | 1 19 |
| M 6 | 16 38 | 18 12 | 4 13 | 13 15 | 0 58 | 6 20 | 1 39 | 14 14 | 0 16 | 23 5 | 0 10 | 3 43 | 2 45 | 21 10 | 0 5 | 4 14 | 1 17 | 23 24 | 2 58 | 17 42 | 17 33 | 9 17 | 8 13 | 1 19 |
| T 7 | 16 55 | 19 56 | 3 29 | 14 4 | 0 49 | 6 47 | 1 39 | 14 28 | 0 15 | 23 6 | 0 10 | 3 42 | 2 45 | 21 11 | 0 5 | 4 14 | 1 17 | 23 24 | 2 58 | 17 44 | 17 34 | 9 15 | 8 14 | 1 19 |
| W 8 | 17 11 | 20 34 | 2 33 | 14 53 | 0 39 | 7 15 | 1 39 | 14 43 | 0 14 | 23 7 | 0 10 | 3 41 | 2 44 | 21 11 | 0 5 | 4 14 | 1 17 | 23 24 | 2 58 | 17 46 | 17 35 | 9 13 | 8 15 | 1 19 |
| T 9 | 17 27 | 20 1 | 1 27 | 15 41 | 0 28 | 7 42 | 1 38 | 14 57 | 0 14 | 23 8 | 0 10 | 3 40 | 2 44 | 21 12 | 0 5 | 4 14 | 1 17 | 23 25 | 2 58 | 17 46 | 17 36 | 9 11 | 8 16 | 1 19 |
| F 10 | 17 43 | 18 16 | 0 15 | 16 28 | 0 18 | 8 9 | 1 38 | 15 11 | 0 13 | 23 8 | 0 10 | 3 39 | 2 44 | 21 13 | 0 5 | 4 15 | 1 17 | 23 25 | 2 59 | 17 47 | 17 37 | 9 10 | 8 18 | 1 18 |
| S 11 | 17 58 | 15 25 | 0s59 | 17 15 | 0 8 | 8 36 | 1 37 | 15 26 | 0 13 | 23 9 | 0 10 | 3 37 | 2 44 | 21 13 | 0 5 | 4 15 | 1 17 | 23 25 | 2 59 | 17 47 | 17 38 | 9 8 | 8 19 | 1 18 |
| S 12 | 18 13 | 11 38 | 2 9 | 18 0 | 0n 3 | 9 3 | 1 37 | 15 39 | 0 12 | 23 10 | 0 10 | 3 36 | 2 44 | 21 14 | 0 5 | 4 15 | 1 17 | 23 25 | 2 59 | 17 47 | 17 38 | 9 6 | 8 20 | 1 18 |
| M13 | 18 28 | 7 8 | 3 13 | 18 44 | 0 14 | 9 29 | 1 36 | 15 53 | 0 11 | 23 11 | 0 10 | 3 35 | 2 44 | 21 14 | 0 5 | 4 15 | 1 17 | 23 26 | 2 59 | 17 47 | 17 39 | 9 4 | 8 21 | 1 18 |
| T 14 | 18 43 | 2 12 | 4 5 | 19 27 | 0 24 | 9 56 | 1 35 | 16 7 | 0 11 | 23 11 | 0 9 | 3 34 | 2 43 | 21 15 | 0 5 | 4 16 | 1 17 | 23 26 | 2 59 | 17 48 | 17 40 | 9 2 | 8 22 | 1 18 |
| W15 | 18 57 | 2n52 | 4 41 | 20 8 | 0 34 | 10 22 | 1 34 | 16 20 | 0 10 | 23 12 | 0 9 | 3 33 | 2 43 | 21 16 | 0 5 | 4 16 | 1 17 | 23 26 | 2 59 | 17 50 | 17 41 | 9 0 | 8 23 | 1 18 |
| T 16 | 19 11 | 7 46 | 5 0 | 20 47 | 0 44 | 10 48 | 1 34 | 16 33 | 0 9 | 23 13 | 0 9 | 3 32 | 2 43 | 21 16 | 0 5 | 4 16 | 1 17 | 23 26 | 3 0 | 17 53 | 17 42 | 8 58 | 8 25 | 1 18 |
| F 17 | 19 24 | 12 11 | 4 59 | 21 24 | 0 54 | 11 14 | 1 33 | 16 46 | 0 9 | 23 13 | 0 9 | 3 31 | 2 43 | 21 17 | 0 5 | 4 16 | 1 17 | 23 27 | 3 0 | 17 56 | 17 43 | 8 56 | 8 26 | 1 18 |
| S 18 | 19 38 | 15 51 | 4 40 | 21 58 | 1 4 | 11 39 | 1 32 | 16 59 | 0 8 | 23 14 | 0 9 | 3 30 | 2 43 | 21 17 | 0 5 | 4 16 | 1 17 | 23 27 | 3 0 | 17 59 | 17 44 | 8 54 | 8 27 | 1 18 |
| S 19 | 19 51 | 18 33 | 4 5 | 22 31 | 1 12 | 12 4 | 1 30 | 17 12 | 0 7 | 23 14 | 0 9 | 3 30 | 2 42 | 21 18 | 0 5 | 4 17 | 1 17 | 23 27 | 3 0 | 18 1 | 17 44 | 8 53 | 8 28 | 1 18 |
| M20 | 20 3 | 20 10 | 3 17 | 23 1 | 1 21 | 12 29 | 1 29 | 17 25 | 0 7 | 23 15 | 0 9 | 3 29 | 2 42 | 21 19 | 0 5 | 4 17 | 1 17 | 23 27 | 3 0 | 18 3 | 17 45 | 8 51 | 8 29 | 1 18 |
| T 21 | 20 16 | 20 39 | 2 20 | 23 28 | 1 29 | 12 54 | 1 28 | 17 37 | 0 6 | 23 15 | 0 9 | 3 28 | 2 42 | 21 19 | 0 5 | 4 17 | 1 16 | 23 28 | 3 0 | 18 5 | 17 46 | 8 49 | 8 30 | 1 18 |
| W22 | 20 27 | 20 3 | 1 18 | 23 53 | 1 36 | 13 19 | 1 27 | 17 49 | 0 5 | 23 16 | 0 9 | 3 27 | 2 42 | 21 20 | 0 5 | 4 17 | 1 16 | 23 28 | 3 1 | 18 6 | 17 47 | 8 47 | 8 31 | 1 18 |
| T 23 | 20 39 | 18 30 | 0 13 | 24 14 | 1 43 | 13 43 | 1 25 | 18 1 | 0 5 | 23 16 | 0 9 | 3 26 | 2 42 | 21 20 | 0 5 | 4 17 | 1 16 | 23 28 | 3 1 | 18 6 | 17 48 | 8 45 | 8 32 | 1 18 |
| F 24 | 20 50 | 16 9 | 0n52 | 24 34 | 1 49 | 14 6 | 1 24 | 18 13 | 0 4 | 23 17 | 0 8 | 3 26 | 2 41 | 21 21 | 0 5 | 4 17 | 1 16 | 23 29 | 3 1 | 18 6 | 17 49 | 8 43 | 8 33 | 1 18 |
| S 25 | 21 1 | 13 8 | 1 53 | 24 50 | 1 54 | 14 30 | 1 23 | 18 25 | 0 4 | 23 17 | 0 8 | 3 25 | 2 41 | 21 22 | 0 5 | 4 17 | 1 16 | 23 29 | 3 1 | 18 6 | 17 50 | 8 41 | 8 34 | 1 18 |
| S 26 | 21 12 | 9 36 | 2 49 | 25 4 | 1 58 | 14 53 | 1 21 | 18 36 | 0 3 | 23 18 | 0 8 | 3 24 | 2 41 | 21 22 | 0 5 | 4 17 | 1 16 | 23 29 | 3 1 | 18 6 | 17 50 | 8 39 | 8 36 | 1 18 |
| M27 | 21 22 | 5 42 | 3 37 | 25 16 | 2 2 | 15 16 | 1 20 | 18 48 | 0 2 | 23 18 | 0 8 | 3 24 | 2 41 | 21 23 | 0 5 | 4 17 | 1 16 | 23 29 | 3 1 | 18 6 | 17 51 | 8 37 | 8 37 | 1 18 |
| T 28 | 21 31 | 1 34 | 4 17 | 25 24 | 2 5 | 15 38 | 1 18 | 18 59 | 0 2 | 23 18 | 0 8 | 3 23 | 2 41 | 21 24 | 0 5 | 4 17 | 1 16 | 23 30 | 3 1 | 18 7 | 17 52 | 8 35 | 8 38 | 1 18 |
| W29 | 21 41 | 2s41 | 4 46 | 25 31 | 2 7 | 16 0 | 1 16 | 19 10 | 0 1 | 23 19 | 0 8 | 3 23 | 2 40 | 21 24 | 0 5 | 4 17 | 1 16 | 23 30 | 3 2 | 18 9 | 17 53 | 8 33 | 8 39 | 1 18 |
| T 30 | 21 50 | 6 54 | 5 2 | 25 35 | 2 9 | 16 22 | 1 15 | 19 20 | 0 0 | 23 19 | 0 8 | 3 22 | 2 40 | 21 25 | 0 5 | 4 17 | 1 16 | 23 30 | 3 2 | 18 11 | 17 54 | 8 31 | 8 40 | 1 18 |
| F 31 | 21n58 | 10s55 | 5n 4 | 25n37 | 2n 9 | 16n43 | 1s13 | 19n31 | 0n 0 | 23n19 | 0s 8 | 3s22 | 2n40 | 21n25 | 0s 5 | 4n17 | 1n16 | 23s31 | 3s 2 | 18n13 | 17n55 | 8n29 | 8n41 | 1n18 |

Julian Day Number = 2369851.5, Delta T = 22.03 sec
Ecliptic obliquity = 23°28'00, Nutation = - 0°00'14, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'03, Lahiri = 20°44'03Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
## geocentric

## JUNE 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S 1 | 16 40 7 | 10♊56'54 | 25♏51 | 0♋52 | 21♉41 | 27♉43 | 28♊16 | 14°R44 | 7♊ 2 | 22°R 8 | 28°R12 | 8°R 5 | 9♌23 | 15♍42 | 19♈ 7 | S 1 |
| S 2 | 16 44 4 | 11°54'18 | 9♐ 0 | 2°29 | 22°54 | 28°26 | 28°29 | 14♎42 | 7° 5 | 22°D 8 | 28♑11 | 7♌55 | 9°20 | 15°49 | 19° 9 | S 2 |
| M 3 | 16 48 1 | 12°51'41 | 22°26 | 4° 3 | 24° 7 | 29° 9 | 28°42 | 14°41 | 7° 9 | 22♍ 8 | 28°10 | 7°47 | 9°17 | 15°55 | 19°12 | M 3 |
| T 4 | 16 51 57 | 13°49'03 | 6♑ 4 | 5°35 | 25°20 | 29°51 | 28°56 | 14°40 | 7°12 | 22° 8 | 28°10 | 7°41 | 9°14 | 16° 2 | 19°14 | T 4 |
| W 5 | 16 55 54 | 14°46'24 | 19°53 | 7° 4 | 26°33 | 0♊34 | 29° 9 | 14°38 | 7°16 | 22° 8 | 28° 9 | 7°38 | 9°11 | 16° 9 | 19°16 | W 5 |
| T 6 | 16 59 50 | 15°43'45 | 3♒51 | 8°29 | 27°47 | 1°16 | 29°23 | 14°37 | 7°19 | 22° 8 | 28° 8 | 7°D37 | 9° 7 | 16°15 | 19°19 | T 6 |
| F 7 | 17 3 47 | 16°41'05 | 17°54 | 9°52 | 29° 0 | 1°59 | 29°36 | 14°36 | 7°23 | 22° 8 | 28° 7 | 7°37 | 9° 4 | 16°22 | 19°21 | F 7 |
| S 8 | 17 7 43 | 17°38'25 | 2♓ 1 | 11°12 | 0♊13 | 2°41 | 29°50 | 14°35 | 7°26 | 22° 9 | 28° 6 | 7°38 | 9° 1 | 16°29 | 19°23 | S 8 |
| S 9 | 17 11 40 | 18°35'44 | 16°10 | 12°29 | 1°26 | 3°23 | 0♋ 3 | 14°35 | 7°30 | 22° 9 | 28° 5 | 7°R39 | 8°58 | 16°35 | 19°26 | S 9 |
| M10 | 17 15 36 | 19°33'03 | 0♈21 | 13°43 | 2°39 | 4° 6 | 0°17 | 14°34 | 7°33 | 22° 9 | 28° 4 | 7°38 | 8°55 | 16°42 | 19°28 | M10 |
| T 11 | 17 19 33 | 20°30'21 | 14°31 | 14°54 | 3°52 | 4°48 | 0°30 | 14°33 | 7°37 | 22° 9 | 28° 3 | 7°36 | 8°52 | 16°49 | 19°30 | T 11 |
| W12 | 17 23 30 | 21°27'39 | 28°37 | 16° 1 | 5° 5 | 5°30 | 0°44 | 14°33 | 7°40 | 22°10 | 28° 2 | 7°32 | 8°48 | 16°55 | 19°32 | W12 |
| T 13 | 17 27 26 | 22°24'57 | 12♉38 | 17° 6 | 6°18 | 6°12 | 0°57 | 14°32 | 7°43 | 22°10 | 28° 0 | 7°26 | 8°45 | 17° 2 | 19°34 | T 13 |
| F 14 | 17 31 23 | 23°22'14 | 26°30 | 18° 7 | 7°32 | 6°54 | 1°11 | 14°32 | 7°47 | 22°10 | 27°59 | 7°19 | 8°42 | 17° 9 | 19°36 | F 14 |
| S 15 | 17 35 19 | 24°19'32 | 10♊ 9 | 19° 5 | 8°45 | 7°36 | 1°25 | 14°32 | 7°50 | 22°11 | 27°58 | 7°12 | 8°39 | 17°15 | 19°38 | S 15 |
| S 16 | 17 39 16 | 25°16'48 | 23°33 | 19°59 | 9°58 | 8°18 | 1°38 | 14°32 | 7°54 | 22°11 | 27°57 | 7° 6 | 8°36 | 17°22 | 19°40 | S 16 |
| M17 | 17 43 12 | 26°14'05 | 6♋40 | 20°50 | 11°11 | 9° 0 | 1°52 | 14°D32 | 7°57 | 22°12 | 27°56 | 7° 1 | 8°32 | 17°29 | 19°42 | M17 |
| T 18 | 17 47 9 | 27°11'20 | 19°29 | 21°37 | 12°25 | 9°42 | 2° 5 | 14°32 | 8° 1 | 22°12 | 27°55 | 6°57 | 8°29 | 17°35 | 19°44 | T 18 |
| W19 | 17 51 6 | 28° 8'35 | 2♌ 0 | 22°21 | 13°38 | 10°24 | 2°19 | 14°32 | 8° 4 | 22°13 | 27°54 | 6°D56 | 8°26 | 17°42 | 19°46 | W19 |
| T 20 | 17 55 2 | 29° 5'50 | 14°16 | 23° 0 | 14°51 | 11° 6 | 2°33 | 14°32 | 8° 7 | 22°13 | 27°52 | 6°56 | 8°23 | 17°49 | 19°48 | T 20 |
| F 21 | 17 58 59 | 0♋ 3'04 | 26°19 | 23°36 | 16° 4 | 11°47 | 2°46 | 14°33 | 8°11 | 22°14 | 27°51 | 6°57 | 8°20 | 17°55 | 19°49 | F 21 |
| S 22 | 18 2 55 | 1° 0'18 | 8♍13 | 24° 7 | 17°18 | 12°29 | 3° 0 | 14°33 | 8°14 | 22°14 | 27°50 | 6°59 | 8°17 | 18° 2 | 19°51 | S 22 |
| S 23 | 18 6 52 | 1°57'31 | 20° 4 | 24°34 | 18°31 | 13°11 | 3°14 | 14°34 | 8°17 | 22°15 | 27°49 | 7° 0 | 8°13 | 18° 9 | 19°53 | S 23 |
| M24 | 18 10 48 | 2°54'43 | 1♎56 | 24°57 | 19°44 | 13°52 | 3°27 | 14°34 | 8°21 | 22°16 | 27°48 | 7°R 1 | 8°10 | 18°15 | 19°54 | M24 |
| T 25 | 18 14 45 | 3°51'55 | 13°53 | 25°15 | 20°58 | 14°34 | 3°41 | 14°35 | 8°24 | 22°16 | 27°46 | 7° 0 | 8° 7 | 18°22 | 19°56 | T 25 |
| W26 | 18 18 41 | 4°49'07 | 26° 1 | 25°29 | 22°11 | 15°15 | 3°55 | 14°36 | 8°27 | 22°17 | 27°45 | 6°58 | 8° 4 | 18°29 | 19°57 | W26 |
| T 27 | 18 22 38 | 5°46'18 | 8♏23 | 25°39 | 23°24 | 15°56 | 4° 8 | 14°37 | 8°30 | 22°18 | 27°44 | 6°55 | 8° 1 | 18°35 | 19°59 | T 27 |
| F 28 | 18 26 35 | 6°43'29 | 21° 4 | 25°43 | 24°38 | 16°38 | 4°22 | 14°38 | 8°34 | 22°19 | 27°42 | 6°51 | 7°57 | 18°42 | 20° 0 | F 28 |
| S 29 | 18 30 31 | 7°40'39 | 4♐ 5 | 25°R43 | 25°51 | 17°19 | 4°35 | 14°39 | 8°37 | 22°20 | 27°41 | 6°47 | 7°54 | 18°49 | 20° 1 | S 29 |
| S 30 | 18 34 28 | 8♋37'50 | 17♐28 | 25♋39 | 27♊ 5 | 18♊ 0 | 4♋49 | 14♎41 | 8♊40 | 22♍20 | 27♑40 | 6♌42 | 7♌51 | 18♍55 | 20♈ 2 | S 30 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| S 1 | 22n 7 | 14s32 | 4n50 | 25n37 | 2n 9 | 17n 4 | 1s11 | 19n41 | 0n 1 | 23n20 | 0s 8 | 3s21 | 2n40 | 21n26 | 0s 5 | 4n17 | 1n16 | 23s31 | 3s 2 | 18n16 | 17n55 | 8n27 | 8n42 | 1n18 |
| S 2 | 22 15 | 17 31 | 4 22 | 25 35 | 2 8 | 17 24 | 1 9 | 19 52 | 0 2 | 23 20 | 0 7 | 3 21 | 2 39 | 21 27 | 0 5 | 4 17 | 1 16 | 23 31 | 3 2 | 18 18 | 17 56 | 8 26 | 8 42 | 1 18 |
| M 3 | 22 22 | 19 37 | 3 38 | 25 31 | 2 6 | 17 44 | 1 7 | 20 2 | 0 2 | 23 20 | 0 7 | 3 21 | 2 39 | 21 27 | 0 5 | 4 17 | 1 16 | 23 32 | 3 2 | 18 21 | 17 57 | 8 24 | 8 43 | 1 18 |
| T 4 | 22 29 | 20 39 | 2 41 | 25 25 | 2 4 | 18 4 | 1 6 | 20 11 | 0 3 | 23 20 | 0 7 | 3 21 | 2 39 | 21 28 | 0 5 | 4 17 | 1 16 | 23 32 | 3 3 | 18 22 | 17 58 | 8 22 | 8 44 | 1 18 |
| W 5 | 22 36 | 20 27 | 1 34 | 25 17 | 2 1 | 18 23 | 1 4 | 20 21 | 0 4 | 23 21 | 0 7 | 3 20 | 2 39 | 21 28 | 0 5 | 4 17 | 1 16 | 23 32 | 3 3 | 18 23 | 17 59 | 8 20 | 8 45 | 1 18 |
| T 6 | 22 42 | 18 59 | 0 20 | 25 8 | 1 57 | 18 41 | 1 2 | 20 30 | 0 4 | 23 21 | 0 7 | 3 20 | 2 38 | 21 29 | 0 5 | 4 17 | 1 16 | 23 33 | 3 3 | 18 23 | 18 0 | 8 18 | 8 46 | 1 18 |
| F 7 | 22 48 | 16 22 | 0s55 | 24 58 | 1 52 | 18 59 | 1 0 | 20 40 | 0 5 | 23 21 | 0 7 | 3 20 | 2 38 | 21 29 | 0 5 | 4 17 | 1 16 | 23 33 | 3 3 | 18 23 | 18 1 | 8 16 | 8 47 | 1 18 |
| S 8 | 22 53 | 12 45 | 2 8 | 24 46 | 1 46 | 19 17 | 0 57 | 20 49 | 0 6 | 23 21 | 0 7 | 3 20 | 2 38 | 21 30 | 0 5 | 4 17 | 1 16 | 23 33 | 3 3 | 18 23 | 18 1 | 8 14 | 8 48 | 1 18 |
| S 9 | 22 59 | 8 25 | 3 13 | 24 33 | 1 40 | 19 34 | 0 55 | 20 57 | 0 6 | 23 21 | 0 7 | 3 20 | 2 38 | 21 31 | 0 5 | 4 17 | 1 16 | 23 34 | 3 3 | 18 23 | 18 2 | 8 12 | 8 49 | 1 18 |
| M10 | 23 3 | 3 37 | 4 6 | 24 19 | 1 33 | 19 51 | 0 53 | 21 6 | 0 7 | 23 21 | 0 7 | 3 20 | 2 37 | 21 31 | 0 5 | 4 17 | 1 16 | 23 34 | 3 3 | 18 23 | 18 3 | 8 10 | 8 50 | 1 18 |
| T 11 | 23 8 | 1n22 | 4 44 | 24 3 | 1 26 | 20 7 | 0 51 | 21 15 | 0 7 | 23 21 | 0 7 | 3 20 | 2 37 | 21 32 | 0 5 | 4 17 | 1 16 | 23 34 | 3 4 | 18 24 | 18 4 | 8 8 | 8 50 | 1 18 |
| W12 | 23 11 | 6 15 | 5 5 | 23 47 | 1 18 | 20 22 | 0 49 | 21 23 | 0 8 | 23 21 | 0 6 | 3 20 | 2 37 | 21 32 | 0 5 | 4 16 | 1 16 | 23 35 | 3 4 | 18 25 | 18 5 | 8 6 | 8 51 | 1 18 |
| T 13 | 23 15 | 10 46 | 5 7 | 23 30 | 1 9 | 20 37 | 0 47 | 21 31 | 0 9 | 23 21 | 0 6 | 3 20 | 2 37 | 21 33 | 0 5 | 4 16 | 1 16 | 23 35 | 3 4 | 18 26 | 18 6 | 8 4 | 8 52 | 1 18 |
| F 14 | 23 18 | 14 40 | 4 51 | 23 13 | 0 59 | 20 52 | 0 44 | 21 39 | 0 9 | 23 21 | 0 6 | 3 20 | 2 36 | 21 33 | 0 5 | 4 16 | 1 16 | 23 35 | 3 4 | 18 28 | 18 6 | 8 2 | 8 53 | 1 18 |
| S 15 | 23 21 | 17 43 | 4 19 | 22 55 | 0 49 | 21 6 | 0 42 | 21 46 | 0 10 | 23 21 | 0 6 | 3 20 | 2 36 | 21 34 | 0 5 | 4 16 | 1 16 | 23 36 | 3 4 | 18 30 | 18 7 | 8 0 | 8 53 | 1 18 |
| S 16 | 23 23 | 19 46 | 3 33 | 22 36 | 0 38 | 21 19 | 0 40 | 21 54 | 0 11 | 23 21 | 0 6 | 3 20 | 2 36 | 21 35 | 0 4 | 4 16 | 1 16 | 23 36 | 3 4 | 18 31 | 18 8 | 7 58 | 8 54 | 1 18 |
| M17 | 23 25 | 20 41 | 2 37 | 22 17 | 0 27 | 21 32 | 0 37 | 22 1 | 0 11 | 23 21 | 0 6 | 3 20 | 2 36 | 21 35 | 0 4 | 4 15 | 1 16 | 23 37 | 3 4 | 18 32 | 18 9 | 7 56 | 8 55 | 1 18 |
| T 18 | 23 26 | 20 31 | 1 33 | 21 58 | 0 15 | 21 44 | 0 35 | 22 8 | 0 12 | 23 21 | 0 6 | 3 21 | 2 35 | 21 36 | 0 4 | 4 15 | 1 16 | 23 37 | 3 5 | 18 33 | 18 10 | 7 54 | 8 56 | 1 18 |
| W19 | 23 27 | 19 18 | 0 27 | 21 39 | 0 2 | 21 55 | 0 33 | 22 15 | 0 13 | 23 21 | 0 6 | 3 21 | 2 35 | 21 36 | 0 4 | 4 15 | 1 16 | 23 37 | 3 5 | 18 34 | 18 11 | 7 52 | 8 56 | 1 18 |
| T 20 | 23 28 | 17 12 | 0n40 | 21 19 | 0s11 | 22 6 | 0 30 | 22 21 | 0 13 | 23 21 | 0 6 | 3 21 | 2 35 | 21 37 | 0 4 | 4 15 | 1 15 | 23 38 | 3 5 | 18 34 | 18 11 | 7 50 | 8 57 | 1 18 |
| F 21 | 23 28 | 14 23 | 1 44 | 21 0 | 0 25 | 22 16 | 0 28 | 22 27 | 0 14 | 23 21 | 0 6 | 3 22 | 2 35 | 21 37 | 0 4 | 4 15 | 1 15 | 23 38 | 3 5 | 18 33 | 18 12 | 7 48 | 8 58 | 1 18 |
| S 22 | 23 28 | 11 0 | 2 42 | 20 41 | 0 39 | 22 26 | 0 26 | 22 34 | 0 15 | 23 20 | 0 5 | 3 22 | 2 34 | 21 38 | 0 4 | 4 14 | 1 15 | 23 38 | 3 5 | 18 33 | 18 13 | 7 46 | 8 58 | 1 18 |
| S 23 | 23 27 | 7 13 | 3 34 | 20 22 | 0 53 | 22 35 | 0 23 | 22 40 | 0 15 | 23 20 | 0 5 | 3 23 | 2 34 | 21 38 | 0 4 | 4 14 | 1 15 | 23 39 | 3 5 | 18 33 | 18 14 | 7 44 | 8 59 | 1 18 |
| M24 | 23 26 | 3 9 | 4 16 | 20 3 | 1 8 | 22 43 | 0 21 | 22 45 | 0 16 | 23 20 | 0 5 | 3 23 | 2 34 | 21 39 | 0 4 | 4 14 | 1 15 | 23 39 | 3 5 | 18 32 | 18 15 | 7 42 | 8 59 | 1 18 |
| T 25 | 23 25 | 1s 4 | 4 48 | 19 45 | 1 23 | 22 51 | 0 18 | 22 51 | 0 17 | 23 20 | 0 5 | 3 24 | 2 34 | 21 39 | 0 4 | 4 13 | 1 15 | 23 40 | 3 5 | 18 33 | 18 15 | 7 40 | 9 0 | 1 18 |
| W26 | 23 23 | 5 17 | 5 7 | 19 27 | 1 39 | 22 58 | 0 16 | 22 56 | 0 17 | 23 19 | 0 5 | 3 24 | 2 33 | 21 40 | 0 4 | 4 13 | 1 15 | 23 40 | 3 6 | 18 33 | 18 16 | 7 38 | 9 0 | 1 18 |
| T 27 | 23 20 | 9 23 | 5 13 | 19 10 | 1 54 | 23 5 | 0 13 | 23 1 | 0 18 | 23 19 | 0 5 | 3 25 | 2 33 | 21 41 | 0 4 | 4 13 | 1 15 | 23 40 | 3 6 | 18 34 | 18 17 | 7 36 | 9 1 | 1 18 |
| F 28 | 23 18 | 13 10 | 5 3 | 18 54 | 2 10 | 23 10 | 0 11 | 23 6 | 0 18 | 23 19 | 0 5 | 3 26 | 2 33 | 21 41 | 0 4 | 4 12 | 1 15 | 23 41 | 3 6 | 18 35 | 18 18 | 7 34 | 9 2 | 1 18 |
| S 29 | 23 15 | 16 26 | 4 38 | 18 38 | 2 26 | 23 16 | 0 9 | 23 11 | 0 19 | 23 18 | 0 5 | 3 26 | 2 33 | 21 42 | 0 4 | 4 12 | 1 15 | 23 41 | 3 6 | 18 36 | 18 19 | 7 32 | 9 2 | 1 18 |
| S 30 | 23n11 | 18s56 | 3n57 | 18n24 | 2s41 | 23n20 | 0s 6 | 23n15 | 0n20 | 23n18 | 0s 5 | 3s27 | 2n32 | 21n42 | 0s 4 | 4n12 | 1n15 | 23s41 | 3s 6 | 18n37 | 18n20 | 7n30 | 9n 3 | 1n18 |

Julian Day Number = 2369882.5, Delta T = 22.04 sec
Ecliptic obliquity = 23°28'00, Nutation = - 0°00'14, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'07, Lahiri = 20°44'08Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
## geocentric

## JULY 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M 1 | 18 38 24 | 9♋35'00 | 1♉11 | 25°R30 | 28♊18 | 18♊41 | 5♋ 3 | 14♌42 | 8♊43 | 22♍21 | 27°R38 | 6°R39 | 7♌48 | 19♍ 2 | 20♈ 4 | M 1 |
| T 2 | 18 42 21 | 10°32'11 | 15°11 | 25♋16 | 29°31 | 19°23 | 5°16 | 14°43 | 8°46 | 22°22 | 27♉37 | 6♌36 | 7°45 | 19° 9 | 20° 5 | T 2 |
| W 3 | 18 46 17 | 11°29'21 | 29°25 | 24°58 | 0♋45 | 20° 4 | 5°30 | 14°45 | 8°49 | 22°23 | 27°36 | 6°35 | 7°42 | 19°15 | 20° 6 | W 3 |
| T 4 | 18 50 14 | 12°26'32 | 13♒49 | 24°36 | 1°58 | 20°45 | 5°43 | 14°47 | 8°52 | 22°24 | 27°34 | 6°D35 | 7°38 | 19°22 | 20° 7 | T 4 |
| F 5 | 18 54 10 | 13°23'42 | 28°16 | 24°10 | 3°12 | 21°26 | 5°57 | 14°48 | 8°56 | 22°25 | 27°33 | 6°36 | 7°35 | 19°29 | 20° 8 | F 5 |
| S 6 | 18 58 7 | 14°20'54 | 12♓43 | 23°40 | 4°25 | 22° 7 | 6°11 | 14°50 | 8°59 | 22°26 | 27°32 | 6°37 | 7°32 | 19°36 | 20° 9 | S 6 |
| S 7 | 19 2 4 | 15°18'05 | 27° 6 | 23° 8 | 5°39 | 22°47 | 6°24 | 14°52 | 9° 2 | 22°27 | 27°30 | 6°38 | 7°29 | 19°42 | 20°10 | S 7 |
| M 8 | 19 6 0 | 16°15'17 | 11♈21 | 22°33 | 6°52 | 23°28 | 6°38 | 14°54 | 9° 5 | 22°28 | 27°29 | 6°R39 | 7°26 | 19°49 | 20°11 | M 8 |
| T 9 | 19 9 57 | 17°12'30 | 25°26 | 21°55 | 8° 6 | 24° 9 | 6°51 | 14°56 | 9° 8 | 22°30 | 27°28 | 6°39 | 7°23 | 19°56 | 20°12 | T 9 |
| W10 | 19 13 53 | 18° 9'43 | 9♉20 | 21°17 | 9°20 | 24°50 | 7° 5 | 14°59 | 9°10 | 22°31 | 27°26 | 6°38 | 7°19 | 20° 2 | 20°12 | W10 |
| T 11 | 19 17 50 | 19° 6'57 | 23° 1 | 20°37 | 10°33 | 25°30 | 7°18 | 15° 1 | 9°13 | 22°32 | 27°25 | 6°36 | 7°16 | 20° 9 | 20°13 | T 11 |
| F 12 | 19 21 46 | 20° 4'11 | 6♊29 | 19°58 | 11°47 | 26°11 | 7°32 | 15° 3 | 9°16 | 22°33 | 27°23 | 6°34 | 7°13 | 20°16 | 20°14 | F 12 |
| S 13 | 19 25 43 | 21° 1'26 | 19°43 | 19°19 | 13° 1 | 26°52 | 7°45 | 15° 6 | 9°19 | 22°34 | 27°22 | 6°32 | 7°10 | 20°22 | 20°14 | S 13 |
| S 14 | 19 29 39 | 21°58'42 | 2♋42 | 18°41 | 14°14 | 27°32 | 7°58 | 15° 9 | 9°22 | 22°36 | 27°20 | 6°30 | 7° 7 | 20°29 | 20°15 | S 14 |
| M15 | 19 33 36 | 22°55'58 | 15°28 | 18° 5 | 15°28 | 28°13 | 8°12 | 15°11 | 9°25 | 22°37 | 27°19 | 6°29 | 7° 3 | 20°36 | 20°15 | M15 |
| T 16 | 19 37 33 | 23°53'14 | 28° 0 | 17°31 | 16°42 | 28°53 | 8°25 | 15°14 | 9°28 | 22°38 | 27°18 | 6°28 | 7° 0 | 20°42 | 20°16 | T 16 |
| W17 | 19 41 29 | 24°50'31 | 10♌19 | 17° 1 | 17°55 | 29°33 | 8°39 | 15°17 | 9°30 | 22°40 | 27°16 | 6°D28 | 6°57 | 20°49 | 20°16 | W17 |
| T 18 | 19 45 26 | 25°47'49 | 22°27 | 16°35 | 19° 9 | 0♋14 | 8°52 | 15°20 | 9°33 | 22°41 | 27°15 | 6°28 | 6°54 | 20°56 | 20°17 | T 18 |
| F 19 | 19 49 22 | 26°45'07 | 4♍26 | 16°12 | 20°23 | 0°54 | 9° 5 | 15°23 | 9°36 | 22°42 | 27°13 | 6°29 | 6°51 | 21° 2 | 20°17 | F 19 |
| S 20 | 19 53 19 | 27°42'25 | 16°19 | 15°55 | 21°37 | 1°34 | 9°18 | 15°26 | 9°38 | 22°44 | 27°12 | 6°30 | 6°48 | 21° 9 | 20°17 | S 20 |
| S 21 | 19 57 15 | 28°39'44 | 28° 9 | 15°42 | 22°51 | 2°14 | 9°32 | 15°29 | 9°41 | 22°45 | 27°11 | 6°31 | 6°44 | 21°16 | 20°17 | S 21 |
| M22 | 20 1 12 | 29°37'03 | 10♎ 0 | 15°35 | 24° 4 | 2°54 | 9°45 | 15°33 | 9°43 | 22°47 | 27° 9 | 6°31 | 6°41 | 21°22 | 20°17 | M22 |
| T 23 | 20 5 8 | 0♌34'22 | 21°57 | 15°D34 | 25°18 | 3°34 | 9°58 | 15°36 | 9°46 | 22°48 | 27° 8 | 6°32 | 6°38 | 21°29 | 20°R17 | T 23 |
| W24 | 20 9 5 | 1°31'42 | 4♏ 3 | 15°39 | 26°32 | 4°14 | 10°11 | 15°40 | 9°48 | 22°50 | 27° 6 | 6°R32 | 6°35 | 21°36 | 20°17 | W24 |
| T 25 | 20 13 2 | 2°29'03 | 16°24 | 15°49 | 27°46 | 4°54 | 10°24 | 15°43 | 9°51 | 22°51 | 27° 5 | 6°32 | 6°32 | 21°43 | 20°17 | T 25 |
| F 26 | 20 16 58 | 3°26'24 | 29° 4 | 16° 6 | 29° 0 | 5°34 | 10°37 | 15°47 | 9°53 | 22°53 | 27° 3 | 6°31 | 6°29 | 21°49 | 20°17 | F 26 |
| S 27 | 20 20 55 | 4°23'46 | 12♐ 6 | 16°29 | 0♌14 | 6°14 | 10°50 | 15°51 | 9°56 | 22°54 | 27° 2 | 6°31 | 6°25 | 21°56 | 20°17 | S 27 |
| S 28 | 20 24 51 | 5°21'08 | 25°33 | 16°58 | 1°28 | 6°54 | 11° 3 | 15°54 | 9°58 | 22°56 | 27° 1 | 6°31 | 6°22 | 22° 3 | 20°17 | S 28 |
| M29 | 20 28 48 | 6°18'31 | 9♑24 | 17°34 | 2°42 | 7°34 | 11°16 | 15°58 | 10° 0 | 22°58 | 26°59 | 6°D31 | 6°19 | 22° 9 | 20°17 | M29 |
| T 30 | 20 32 44 | 7°15'55 | 23°38 | 18°16 | 3°56 | 8°13 | 11°29 | 16° 2 | 10° 3 | 22°59 | 26°58 | 6°31 | 6°16 | 22°16 | 20°16 | T 30 |
| W31 | 20 36 41 | 8♌13'19 | 8♒11 | 19♋ 3 | 5♌10 | 8♋53 | 11♋42 | 16♌ 6 | 10♊ 5 | 23♍ 1 | 26♑56 | 6°R31 | 6♌13 | 22♍23 | 20♈16 | W31 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| M 1 | 23n 7 | 20s25 | 3n 2 | 18n10 | 2s57 | 23n24 | 0s 4 | 23n19 | 0n20 | 23n18 | 0s 5 | 3s28 | 2n32 | 21n43 | 0s 4 | 4n11 | 1n15 | 23s42 | 3s 6 | 18n38 | 18n20 | 7n28 | 9n 3 | 1n18 |
| T 2 | 23 3 | 20 42 | 1 55 | 17 58 | 3 12 | 23 27 | 0 1 | 23 23 | 0 21 | 23 17 | 0 4 | 3 29 | 2 32 | 21 43 | 0 4 | 4 11 | 1 15 | 23 42 | 3 6 | 18 39 | 18 21 | 7 26 | 9 3 | 1 18 |
| W 3 | 22 58 | 19 39 | 0 39 | 17 47 | 3 26 | 23 29 | 0n 1 | 23 27 | 0 22 | 23 17 | 0 4 | 3 29 | 2 32 | 21 44 | 0 4 | 4 10 | 1 15 | 23 43 | 3 6 | 18 39 | 18 22 | 7 24 | 9 4 | 1 18 |
| T 4 | 22 53 | 17 20 | 0s40 | 17 37 | 3 40 | 23 31 | 0 4 | 23 31 | 0 22 | 23 16 | 0 4 | 3 30 | 2 31 | 21 44 | 0 4 | 4 10 | 1 15 | 23 43 | 3 7 | 18 39 | 18 23 | 7 22 | 9 4 | 1 18 |
| F 5 | 22 47 | 13 55 | 1 57 | 17 29 | 3 53 | 23 32 | 0 6 | 23 34 | 0 23 | 23 16 | 0 4 | 3 31 | 2 31 | 21 44 | 0 4 | 4 10 | 1 15 | 23 43 | 3 7 | 18 39 | 18 24 | 7 20 | 9 5 | 1 18 |
| S 6 | 22 42 | 9 39 | 3 6 | 17 22 | 4 5 | 23 32 | 0 9 | 23 37 | 0 24 | 23 15 | 0 4 | 3 32 | 2 31 | 21 45 | 0 4 | 4 9 | 1 15 | 23 44 | 3 7 | 18 38 | 18 24 | 7 18 | 9 5 | 1 18 |
| S 7 | 22 35 | 4 53 | 4 3 | 17 16 | 4 17 | 23 32 | 0 11 | 23 40 | 0 24 | 23 15 | 0 4 | 3 33 | 2 31 | 21 45 | 0 4 | 4 9 | 1 15 | 23 44 | 3 7 | 18 38 | 18 25 | 7 16 | 9 5 | 1 18 |
| M 8 | 22 29 | 0n 7 | 4 45 | 17 12 | 4 26 | 23 31 | 0 13 | 23 43 | 0 25 | 23 14 | 0 4 | 3 34 | 2 30 | 21 46 | 0 4 | 4 8 | 1 15 | 23 45 | 3 7 | 18 38 | 18 26 | 7 14 | 9 6 | 1 18 |
| T 9 | 22 21 | 5 2 | 5 9 | 17 9 | 4 35 | 23 29 | 0 16 | 23 46 | 0 25 | 23 14 | 0 4 | 3 35 | 2 30 | 21 46 | 0 4 | 4 8 | 1 15 | 23 45 | 3 7 | 18 38 | 18 27 | 7 12 | 9 6 | 1 18 |
| W10 | 22 14 | 9 38 | 5 15 | 17 8 | 4 42 | 23 26 | 0 18 | 23 48 | 0 26 | 23 13 | 0 4 | 3 36 | 2 30 | 21 47 | 0 4 | 4 7 | 1 15 | 23 45 | 3 7 | 18 38 | 18 28 | 7 10 | 9 6 | 1 18 |
| T 11 | 22 6 | 13 40 | 5 3 | 17 8 | 4 48 | 23 23 | 0 20 | 23 50 | 0 27 | 23 12 | 0 4 | 3 37 | 2 30 | 21 47 | 0 4 | 4 7 | 1 15 | 23 46 | 3 7 | 18 39 | 18 29 | 7 8 | 9 7 | 1 18 |
| F 12 | 21 58 | 16 55 | 4 34 | 17 10 | 4 52 | 23 19 | 0 23 | 23 52 | 0 27 | 23 12 | 0 4 | 3 39 | 2 29 | 21 48 | 0 4 | 4 6 | 1 15 | 23 46 | 3 7 | 18 39 | 18 29 | 7 6 | 9 7 | 1 18 |
| S 13 | 21 49 | 19 14 | 3 51 | 17 13 | 4 54 | 23 15 | 0 25 | 23 54 | 0 28 | 23 11 | 0 3 | 3 40 | 2 29 | 21 48 | 0 4 | 4 6 | 1 15 | 23 46 | 3 7 | 18 40 | 18 30 | 7 4 | 9 7 | 1 18 |
| S 14 | 21 40 | 20 30 | 2 56 | 17 17 | 4 55 | 23 9 | 0 27 | 23 55 | 0 29 | 23 10 | 0 3 | 3 41 | 2 29 | 21 49 | 0 4 | 4 5 | 1 15 | 23 47 | 3 8 | 18 40 | 18 31 | 7 2 | 9 7 | 1 18 |
| M15 | 21 31 | 20 41 | 1 54 | 17 23 | 4 54 | 23 3 | 0 30 | 23 57 | 0 29 | 23 10 | 0 3 | 3 42 | 2 29 | 21 49 | 0 4 | 4 5 | 1 15 | 23 47 | 3 8 | 18 41 | 18 32 | 7 0 | 9 7 | 1 18 |
| T 16 | 21 21 | 19 49 | 0 47 | 17 30 | 4 51 | 22 57 | 0 32 | 23 58 | 0 30 | 23 9 | 0 3 | 3 44 | 2 28 | 21 49 | 0 4 | 4 4 | 1 15 | 23 48 | 3 8 | 18 41 | 18 33 | 6 57 | 9 8 | 1 18 |
| W17 | 21 11 | 18 1 | 0n21 | 17 38 | 4 47 | 22 50 | 0 34 | 23 58 | 0 31 | 23 8 | 0 3 | 3 45 | 2 28 | 21 50 | 0 4 | 4 4 | 1 15 | 23 48 | 3 8 | 18 41 | 18 33 | 6 55 | 9 8 | 1 18 |
| T 18 | 21 1 | 15 25 | 1 28 | 17 47 | 4 41 | 22 42 | 0 36 | 23 59 | 0 31 | 23 7 | 0 3 | 3 46 | 2 28 | 21 50 | 0 4 | 4 3 | 1 15 | 23 48 | 3 8 | 18 41 | 18 34 | 6 53 | 9 8 | 1 18 |
| F 19 | 20 50 | 12 12 | 2 29 | 17 57 | 4 34 | 22 33 | 0 38 | 24 0 | 0 32 | 23 6 | 0 3 | 3 48 | 2 28 | 21 51 | 0 4 | 4 2 | 1 15 | 23 49 | 3 8 | 18 40 | 18 35 | 6 51 | 9 8 | 1 18 |
| S 20 | 20 39 | 8 32 | 3 23 | 18 8 | 4 25 | 22 24 | 0 40 | 24 0 | 0 32 | 23 6 | 0 3 | 3 49 | 2 27 | 21 51 | 0 4 | 4 2 | 1 15 | 23 49 | 3 8 | 18 40 | 18 36 | 6 49 | 9 8 | 1 18 |
| S 21 | 20 27 | 4 33 | 4 9 | 18 19 | 4 15 | 22 14 | 0 42 | 24 0 | 0 33 | 23 5 | 0 3 | 3 51 | 2 27 | 21 51 | 0 4 | 4 1 | 1 15 | 23 49 | 3 8 | 18 40 | 18 37 | 6 47 | 9 8 | 1 18 |
| M22 | 20 15 | 0 23 | 4 44 | 18 31 | 4 4 | 22 3 | 0 44 | 24 0 | 0 34 | 23 4 | 0 3 | 3 52 | 2 27 | 21 52 | 0 4 | 4 1 | 1 15 | 23 50 | 3 8 | 18 40 | 18 37 | 6 45 | 9 8 | 1 18 |
| T 23 | 20 3 | 3s48 | 5 7 | 18 43 | 3 52 | 21 52 | 0 46 | 23 59 | 0 34 | 23 3 | 0 2 | 3 54 | 2 27 | 21 52 | 0 4 | 4 0 | 1 15 | 23 50 | 3 8 | 18 40 | 18 38 | 6 43 | 9 8 | 1 18 |
| W24 | 19 51 | 7 54 | 5 17 | 18 55 | 3 39 | 21 40 | 0 48 | 23 59 | 0 35 | 23 2 | 0 2 | 3 55 | 2 26 | 21 53 | 0 4 | 3 59 | 1 14 | 23 51 | 3 8 | 18 40 | 18 39 | 6 41 | 9 8 | 1 18 |
| T 25 | 19 38 | 11 46 | 5 13 | 19 7 | 3 26 | 21 27 | 0 50 | 23 58 | 0 36 | 23 1 | 0 2 | 3 57 | 2 26 | 21 53 | 0 4 | 3 59 | 1 14 | 23 51 | 3 9 | 18 40 | 18 40 | 6 39 | 9 8 | 1 18 |
| F 26 | 19 24 | 15 12 | 4 53 | 19 20 | 3 11 | 21 14 | 0 52 | 23 57 | 0 36 | 23 0 | 0 2 | 3 58 | 2 26 | 21 53 | 0 4 | 3 58 | 1 14 | 23 51 | 3 9 | 18 40 | 18 41 | 6 37 | 9 8 | 1 18 |
| S 27 | 19 11 | 18 0 | 4 18 | 19 32 | 2 57 | 21 0 | 0 54 | 23 56 | 0 37 | 22 59 | 0 2 | 4 0 | 2 26 | 21 54 | 0 4 | 3 57 | 1 14 | 23 52 | 3 9 | 18 40 | 18 41 | 6 35 | 9 8 | 1 18 |
| S 28 | 18 57 | 19 55 | 3 28 | 19 43 | 2 41 | 20 46 | 0 56 | 23 55 | 0 37 | 22 58 | 0 2 | 4 2 | 2 25 | 21 54 | 0 4 | 3 57 | 1 14 | 23 52 | 3 9 | 18 40 | 18 42 | 6 33 | 9 8 | 1 18 |
| M29 | 18 43 | 20 43 | 2 25 | 19 54 | 2 26 | 20 31 | 0 58 | 23 53 | 0 38 | 22 57 | 0 2 | 4 3 | 2 25 | 21 54 | 0 4 | 3 56 | 1 14 | 23 52 | 3 9 | 18 40 | 18 43 | 6 31 | 9 8 | 1 18 |
| T 30 | 18 29 | 20 14 | 1 11 | 20 4 | 2 10 | 20 15 | 0 59 | 23 51 | 0 39 | 22 56 | 0 2 | 4 5 | 2 25 | 21 55 | 0 4 | 3 55 | 1 14 | 23 53 | 3 9 | 18 40 | 18 44 | 6 29 | 9 8 | 1 18 |
| W31 | 18n14 | 18s23 | 0s 9 | 20n13 | 1s54 | 19n59 | 1n 1 | 23n49 | 0n39 | 22n55 | 0s 2 | 4s 7 | 2n25 | 21n55 | 0s 4 | 3n55 | 1n14 | 23s53 | 3s 9 | 18n40 | 18n44 | 6n26 | 9n 7 | 1n18 |

Julian Day Number = 2369912.5, Delta T = 22.05 sec
Ecliptic obliquity = 23°28'00, Nutation = - 0°00'13, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'11, Lahiri = 20°44'12Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## AUGUST 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T 1 | 20 40 37 | 9♌10'45 | 22♒58 | 19♋57 | 6♌24 | 9♋33 | 11♋55 | 16♎10 | 10♊ 7 | 23♍ 3 | 26°R55 | 6°R31 | 6♌ 9 | 22♍29 | 20°R15 | T 1 |
| F 2 | 20 44 34 | 10° 8'11 | 7♓51 | 20°57 | 7°38 | 10°12 | 12° 8 | 16°15 | 10° 9 | 23° 5 | 26♑54 | 6♌31 | 6° 6 | 22°36 | 20♈15 | F 2 |
| S 3 | 20 48 31 | 11° 5'39 | 22°43 | 22° 3 | 8°52 | 10°52 | 12°20 | 16°19 | 10°11 | 23° 6 | 26°52 | 6°30 | 6° 3 | 22°43 | 20°14 | S 3 |
| S 4 | 20 52 27 | 12° 3'08 | 7♈26 | 23°14 | 10° 6 | 11°31 | 12°33 | 16°23 | 10°13 | 23° 8 | 26°51 | 6°30 | 6° 0 | 22°49 | 20°14 | S 4 |
| M 5 | 20 56 24 | 13° 0'38 | 21°54 | 24°31 | 11°20 | 12°10 | 12°46 | 16°28 | 10°15 | 23°10 | 26°50 | 6°29 | 5°57 | 22°56 | 20°13 | M 5 |
| T 6 | 21 0 20 | 13°58'09 | 6♉ 5 | 25°53 | 12°34 | 12°50 | 12°58 | 16°32 | 10°17 | 23°12 | 26°48 | 6°29 | 5°54 | 23° 3 | 20°12 | T 6 |
| W 7 | 21 4 17 | 14°55'43 | 19°56 | 27°21 | 13°48 | 13°29 | 13°11 | 16°37 | 10°19 | 23°13 | 26°47 | 6°D29 | 5°50 | 23° 9 | 20°12 | W 7 |
| T 8 | 21 8 13 | 15°53'17 | 3♊27 | 28°52 | 15° 2 | 14° 8 | 13°23 | 16°42 | 10°21 | 23°15 | 26°46 | 6°29 | 5°47 | 23°16 | 20°11 | T 8 |
| F 9 | 21 12 10 | 16°50'53 | 16°39 | 0♌29 | 16°16 | 14°48 | 13°35 | 16°46 | 10°23 | 23°17 | 26°44 | 6°30 | 5°44 | 23°23 | 20°10 | F 9 |
| S 10 | 21 16 6 | 17°48'31 | 29°34 | 2° 9 | 17°30 | 15°27 | 13°48 | 16°51 | 10°25 | 23°19 | 26°43 | 6°31 | 5°41 | 23°29 | 20° 9 | S 10 |
| S 11 | 21 20 3 | 18°46'10 | 12♋13 | 3°53 | 18°45 | 16° 6 | 14° 0 | 16°56 | 10°27 | 23°21 | 26°42 | 6°32 | 5°38 | 23°36 | 20° 8 | S 11 |
| M12 | 21 24 0 | 19°43'50 | 24°40 | 5°41 | 19°59 | 16°45 | 14°12 | 17° 1 | 10°29 | 23°23 | 26°40 | 6°33 | 5°35 | 23°43 | 20° 7 | M12 |
| T 13 | 21 27 56 | 20°41'32 | 6♌56 | 7°31 | 21°13 | 17°24 | 14°25 | 17° 6 | 10°30 | 23°25 | 26°39 | 6°R33 | 5°31 | 23°50 | 20° 6 | T 13 |
| W14 | 21 31 53 | 21°39'15 | 19° 2 | 9°24 | 22°27 | 18° 3 | 14°37 | 17°11 | 10°32 | 23°27 | 26°38 | 6°33 | 5°28 | 23°56 | 20° 5 | W14 |
| T 15 | 21 35 49 | 22°36'59 | 1♍ 2 | 11°19 | 23°42 | 18°42 | 14°49 | 17°16 | 10°33 | 23°29 | 26°37 | 6°31 | 5°25 | 24° 3 | 20° 4 | T 15 |
| F 16 | 21 39 46 | 23°34'45 | 12°55 | 13°16 | 24°56 | 19°21 | 15° 1 | 17°21 | 10°35 | 23°31 | 26°35 | 6°29 | 5°22 | 24°10 | 20° 3 | F 16 |
| S 17 | 21 43 42 | 24°32'32 | 24°46 | 15°14 | 26°10 | 19°59 | 15°13 | 17°27 | 10°37 | 23°33 | 26°34 | 6°27 | 5°19 | 24°16 | 20° 1 | S 17 |
| S 18 | 21 47 39 | 25°30'20 | 6♎36 | 17°13 | 27°24 | 20°38 | 15°25 | 17°32 | 10°38 | 23°35 | 26°33 | 6°24 | 5°15 | 24°23 | 20° 0 | S 18 |
| M19 | 21 51 35 | 26°28'09 | 18°27 | 19°13 | 28°39 | 21°17 | 15°36 | 17°37 | 10°39 | 23°37 | 26°32 | 6°21 | 5°12 | 24°30 | 19°59 | M19 |
| T 20 | 21 55 32 | 27°26'00 | 0♏23 | 21°13 | 29°53 | 21°55 | 15°48 | 17°43 | 10°41 | 23°39 | 26°30 | 6°18 | 5° 9 | 24°36 | 19°57 | T 20 |
| W21 | 21 59 29 | 28°23'52 | 12°29 | 23°13 | 1♍ 7 | 22°34 | 16° 0 | 17°48 | 10°42 | 23°41 | 26°29 | 6°16 | 5° 6 | 24°43 | 19°56 | W21 |
| T 22 | 22 3 25 | 29°21'45 | 24°47 | 25°13 | 2°22 | 23°13 | 16°11 | 17°54 | 10°43 | 23°43 | 26°28 | 6°D15 | 5° 3 | 24°50 | 19°54 | T 22 |
| F 23 | 22 7 22 | 0♍19'40 | 7♐23 | 27°13 | 3°36 | 23°51 | 16°23 | 18° 0 | 10°45 | 23°45 | 26°27 | 6°15 | 5° 0 | 24°56 | 19°53 | F 23 |
| S 24 | 22 11 18 | 1°17'36 | 20°20 | 29°11 | 4°50 | 24°30 | 16°34 | 18° 5 | 10°46 | 23°47 | 26°26 | 6°16 | 4°56 | 25° 3 | 19°51 | S 24 |
| S 25 | 22 15 15 | 2°15'33 | 3♑41 | 1♍10 | 6° 5 | 25° 8 | 16°46 | 18°11 | 10°47 | 23°49 | 26°25 | 6°18 | 4°53 | 25°10 | 19°49 | S 25 |
| M26 | 22 19 11 | 3°13'32 | 17°30 | 3° 7 | 7°19 | 25°46 | 16°57 | 18°17 | 10°48 | 23°51 | 26°24 | 6°19 | 4°50 | 25°17 | 19°48 | M26 |
| T 27 | 22 23 8 | 4°11'31 | 1♒45 | 5° 3 | 8°34 | 26°25 | 17° 8 | 18°23 | 10°49 | 23°53 | 26°23 | 6°R20 | 4°47 | 25°23 | 19°46 | T 27 |
| W28 | 22 27 4 | 5° 9'33 | 16°25 | 6°59 | 9°48 | 27° 3 | 17°19 | 18°29 | 10°50 | 23°55 | 26°22 | 6°20 | 4°44 | 25°30 | 19°44 | W28 |
| T 29 | 22 31 1 | 6° 7'36 | 1♓24 | 8°53 | 11° 2 | 27°41 | 17°30 | 18°35 | 10°51 | 23°58 | 26°21 | 6°18 | 4°41 | 25°37 | 19°42 | T 29 |
| F 30 | 22 34 58 | 7° 5'40 | 16°35 | 10°46 | 12°17 | 28°19 | 17°41 | 18°41 | 10°52 | 24° 0 | 26°20 | 6°15 | 4°37 | 25°43 | 19°41 | F 30 |
| S 31 | 22 38 54 | 8♍ 3'46 | 1♈47 | 12♍38 | 13♍31 | 28♋57 | 17♋52 | 18♎47 | 10♊53 | 24♍ 2 | 26♑19 | 6♌11 | 4♌34 | 25♍50 | 19♈39 | S 31 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| T 1 | 17n59 | 15s18 | 1s30 | 20n21 | 1s39 | 19n42 | 1n 3 | 23n47 | 0n40 | 22n54 | 0s 2 | 4s 9 | 2n25 | 21n55 | 0s 4 | 3n54 | 1n14 | 23s53 | 3s 9 | 18n40 | 18n45 | 6n24 | 9n 7 | 1n18 |
| F 2 | 17 43 | 11 11 | 2 45 | 20 28 | 1 23 | 19 25 | 1 4 | 23 45 | 0 41 | 22 53 | 0 2 | 4 10 | 2 24 | 21 56 | 0 4 | 3 53 | 1 14 | 23 54 | 3 9 | 18 40 | 18 46 | 6 22 | 9 7 | 1 18 |
| S 3 | 17 28 | 6 24 | 3 49 | 20 33 | 1 7 | 19 7 | 1 6 | 23 42 | 0 41 | 22 52 | 0 1 | 4 12 | 2 24 | 21 56 | 0 4 | 3 53 | 1 14 | 23 54 | 3 9 | 18 40 | 18 47 | 6 20 | 9 7 | 1 18 |
| S 4 | 17 12 | 1 18 | 4 37 | 20 36 | 0 52 | 18 49 | 1 7 | 23 40 | 0 42 | 22 51 | 0 1 | 4 14 | 2 24 | 21 56 | 0 4 | 3 52 | 1 14 | 23 54 | 3 9 | 18 40 | 18 48 | 6 18 | 9 7 | 1 18 |
| M 5 | 16 56 | 3n48 | 5 7 | 20 38 | 0 37 | 18 30 | 1 9 | 23 37 | 0 42 | 22 50 | 0 1 | 4 16 | 2 24 | 21 57 | 0 4 | 3 51 | 1 14 | 23 55 | 3 9 | 18 40 | 18 48 | 6 16 | 9 6 | 1 18 |
| T 6 | 16 39 | 8 34 | 5 17 | 20 37 | 0 23 | 18 10 | 1 10 | 23 34 | 0 43 | 22 49 | 0 1 | 4 18 | 2 24 | 21 57 | 0 4 | 3 50 | 1 14 | 23 55 | 3 9 | 18 40 | 18 49 | 6 14 | 9 6 | 1 18 |
| W 7 | 16 23 | 12 47 | 5 9 | 20 34 | 0 9 | 17 50 | 1 11 | 23 30 | 0 44 | 22 48 | 0 1 | 4 20 | 2 23 | 21 57 | 0 4 | 3 50 | 1 14 | 23 55 | 3 9 | 18 40 | 18 50 | 6 12 | 9 6 | 1 18 |
| T 8 | 16 6 | 16 14 | 4 43 | 20 29 | 0n 4 | 17 30 | 1 13 | 23 27 | 0 44 | 22 47 | 0 1 | 4 22 | 2 23 | 21 58 | 0 4 | 3 49 | 1 14 | 23 56 | 3 9 | 18 40 | 18 51 | 6 10 | 9 6 | 1 18 |
| F 9 | 15 48 | 18 46 | 4 3 | 20 21 | 0 17 | 17 9 | 1 14 | 23 23 | 0 45 | 22 45 | 0 1 | 4 24 | 2 23 | 21 58 | 0 4 | 3 48 | 1 14 | 23 56 | 3 10 | 18 40 | 18 52 | 6 8 | 9 5 | 1 18 |
| S 10 | 15 31 | 20 17 | 3 11 | 20 10 | 0 29 | 16 48 | 1 15 | 23 19 | 0 45 | 22 44 | 0 1 | 4 26 | 2 23 | 21 58 | 0 4 | 3 47 | 1 14 | 23 56 | 3 10 | 18 40 | 18 52 | 6 5 | 9 5 | 1 18 |
| S 11 | 15 13 | 20 44 | 2 11 | 19 57 | 0 40 | 16 26 | 1 16 | 23 15 | 0 46 | 22 43 | 0 1 | 4 28 | 2 23 | 21 58 | 0 4 | 3 47 | 1 14 | 23 57 | 3 10 | 18 40 | 18 53 | 6 3 | 9 5 | 1 17 |
| M12 | 14 55 | 20 9 | 1 5 | 19 41 | 0 50 | 16 3 | 1 17 | 23 11 | 0 47 | 22 42 | 0 1 | 4 30 | 2 22 | 21 59 | 0 4 | 3 46 | 1 14 | 23 57 | 3 10 | 18 40 | 18 54 | 6 1 | 9 4 | 1 17 |
| T 13 | 14 37 | 18 36 | 0n 2 | 19 22 | 1 0 | 15 40 | 1 18 | 23 7 | 0 47 | 22 41 | 0 0 | 4 32 | 2 22 | 21 59 | 0 4 | 3 45 | 1 14 | 23 57 | 3 10 | 18 39 | 18 55 | 5 59 | 9 4 | 1 17 |
| W14 | 14 18 | 16 13 | 1 9 | 19 1 | 1 8 | 15 17 | 1 19 | 23 2 | 0 48 | 22 40 | 0 0 | 4 34 | 2 22 | 21 59 | 0 4 | 3 44 | 1 14 | 23 57 | 3 10 | 18 40 | 18 55 | 5 57 | 9 3 | 1 17 |
| T 15 | 13 59 | 13 10 | 2 11 | 18 37 | 1 16 | 14 54 | 1 20 | 22 58 | 0 49 | 22 38 | 0 0 | 4 36 | 2 22 | 21 59 | 0 4 | 3 44 | 1 14 | 23 58 | 3 10 | 18 40 | 18 56 | 5 55 | 9 3 | 1 17 |
| F 16 | 13 41 | 9 36 | 3 8 | 18 11 | 1 23 | 14 29 | 1 21 | 22 53 | 0 49 | 22 37 | 0 0 | 4 38 | 2 22 | 22 0 | 0 4 | 3 43 | 1 14 | 23 58 | 3 10 | 18 40 | 18 57 | 5 53 | 9 2 | 1 17 |
| S 17 | 13 21 | 5 41 | 3 56 | 17 42 | 1 29 | 14 5 | 1 21 | 22 48 | 0 50 | 22 36 | 0 0 | 4 41 | 2 21 | 22 0 | 0 4 | 3 42 | 1 14 | 23 58 | 3 10 | 18 41 | 18 58 | 5 51 | 9 2 | 1 17 |
| S 18 | 13 2 | 1 34 | 4 33 | 17 11 | 1 34 | 13 40 | 1 22 | 22 43 | 0 50 | 22 35 | 0n 0 | 4 43 | 2 21 | 22 0 | 0 4 | 3 41 | 1 14 | 23 59 | 3 10 | 18 42 | 18 59 | 5 48 | 9 1 | 1 17 |
| M19 | 12 42 | 2s37 | 5 0 | 16 37 | 1 38 | 13 15 | 1 23 | 22 37 | 0 51 | 22 33 | 0 0 | 4 45 | 2 21 | 22 0 | 0 4 | 3 40 | 1 14 | 23 59 | 3 10 | 18 42 | 18 59 | 5 46 | 9 1 | 1 17 |
| T 20 | 12 23 | 6 44 | 5 13 | 16 2 | 1 41 | 12 49 | 1 23 | 22 32 | 0 52 | 22 32 | 0 0 | 4 47 | 2 21 | 22 0 | 0 4 | 3 40 | 1 14 | 23 59 | 3 10 | 18 43 | 19 0 | 5 44 | 9 0 | 1 17 |
| W21 | 12 3 | 10 38 | 5 13 | 15 25 | 1 43 | 12 23 | 1 24 | 22 26 | 0 52 | 22 31 | 0 0 | 4 50 | 2 21 | 22 1 | 0 4 | 3 39 | 1 14 | 23 59 | 3 10 | 18 44 | 19 1 | 5 42 | 9 0 | 1 17 |
| T 22 | 11 43 | 14 9 | 4 59 | 14 47 | 1 45 | 11 57 | 1 24 | 22 20 | 0 53 | 22 30 | 0 0 | 4 52 | 2 21 | 22 1 | 0 4 | 3 38 | 1 14 | 24 0 | 3 10 | 18 44 | 19 2 | 5 40 | 8 59 | 1 17 |
| F 23 | 11 22 | 17 8 | 4 30 | 14 7 | 1 46 | 11 30 | 1 24 | 22 14 | 0 53 | 22 28 | 0 1 | 4 54 | 2 20 | 22 1 | 0 4 | 3 37 | 1 14 | 24 0 | 3 10 | 18 44 | 19 2 | 5 38 | 8 58 | 1 17 |
| S 24 | 11 2 | 19 21 | 3 46 | 13 26 | 1 46 | 11 4 | 1 25 | 22 8 | 0 54 | 22 27 | 0 1 | 4 56 | 2 20 | 22 1 | 0 4 | 3 36 | 1 14 | 24 0 | 3 10 | 18 44 | 19 3 | 5 36 | 8 58 | 1 17 |
| S 25 | 10 41 | 20 35 | 2 50 | 12 43 | 1 46 | 10 36 | 1 25 | 22 2 | 0 55 | 22 26 | 0 1 | 4 59 | 2 20 | 22 1 | 0 4 | 3 35 | 1 14 | 24 0 | 3 10 | 18 43 | 19 4 | 5 34 | 8 57 | 1 17 |
| M26 | 10 20 | 20 38 | 1 42 | 12 0 | 1 45 | 10 9 | 1 25 | 21 55 | 0 55 | 22 24 | 0 1 | 5 1 | 2 20 | 22 1 | 0 4 | 3 35 | 1 14 | 24 1 | 3 10 | 18 43 | 19 5 | 5 31 | 8 57 | 1 17 |
| T 27 | 9 59 | 19 23 | 0 25 | 11 16 | 1 43 | 9 41 | 1 25 | 21 49 | 0 56 | 22 23 | 0 1 | 5 4 | 2 20 | 22 2 | 0 4 | 3 34 | 1 14 | 24 1 | 3 10 | 18 43 | 19 5 | 5 29 | 8 56 | 1 17 |
| W28 | 9 38 | 16 49 | 0s55 | 10 31 | 1 41 | 9 13 | 1 25 | 21 42 | 0 56 | 22 22 | 0 1 | 5 6 | 2 20 | 22 2 | 0 4 | 3 33 | 1 14 | 24 1 | 3 10 | 18 43 | 19 6 | 5 27 | 8 55 | 1 17 |
| T 29 | 9 16 | 13 4 | 2 13 | 9 46 | 1 38 | 8 45 | 1 25 | 21 35 | 0 57 | 22 20 | 0 1 | 5 8 | 2 19 | 22 2 | 0 4 | 3 32 | 1 14 | 24 1 | 3 10 | 18 43 | 19 7 | 5 25 | 8 54 | 1 17 |
| F 30 | 8 55 | 8 25 | 3 23 | 9 0 | 1 35 | 8 16 | 1 25 | 21 28 | 0 58 | 22 19 | 0 1 | 5 11 | 2 19 | 22 2 | 0 4 | 3 31 | 1 14 | 24 2 | 3 10 | 18 44 | 19 8 | 5 23 | 8 54 | 1 17 |
| S 31 | 8n33 | 3s14 | 4s18 | 8n14 | 1n31 | 7n47 | 1n25 | 21n21 | 0n58 | 22n18 | 0n 1 | 5s13 | 2n19 | 22n 2 | 0s 4 | 3n30 | 1n14 | 24s 2 | 3s10 | 18n45 | 19n 9 | 5n21 | 8n53 | 1n17 |

Julian Day Number = 2369943.5, Delta T = 22.06 sec
Ecliptic obliquity = 23°28'01, Nutation = - 0°00'13, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'16, Lahiri = 20°44'16Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## SEPTEMBER 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S 1 | 22 42 51 | 9♍ 1'54 | 16♈50 | 14♍29 | 14♍46 | 29♋35 | 18♋ 3 | 18♎53 | 10♊53 | 24♍ 4 | 26°R18 | 6°R 7 | 4♌31 | 25♍57 | 19°R37 | S 1 |
| M 2 | 22 46 47 | 10° 0'04 | 1♉37 | 16°19 | 16° 0 | 0♌13 | 18°13 | 18°59 | 10°54 | 24° 6 | 26♑17 | 6♌ 2 | 4°28 | 26° 3 | 19♈35 | M 2 |
| T 3 | 22 50 44 | 10°58'16 | 16° 0 | 18° 7 | 17°15 | 0°51 | 18°24 | 19° 5 | 10°55 | 24° 8 | 26°16 | 5°59 | 4°25 | 26°10 | 19°33 | T 3 |
| W 4 | 22 54 40 | 11°56'30 | 29°57 | 19°55 | 18°29 | 1°29 | 18°34 | 19°11 | 10°56 | 24°11 | 26°15 | 5°57 | 4°21 | 26°17 | 19°31 | W 4 |
| T 5 | 22 58 37 | 12°54'46 | 13♊28 | 21°41 | 19°44 | 2° 7 | 18°45 | 19°18 | 10°56 | 24°13 | 26°14 | 5°D56 | 4°18 | 26°23 | 19°29 | T 5 |
| F 6 | 23 2 33 | 13°53'05 | 26°34 | 23°26 | 20°58 | 2°45 | 18°55 | 19°24 | 10°57 | 24°15 | 26°13 | 5°56 | 4°15 | 26°30 | 19°26 | F 6 |
| S 7 | 23 6 30 | 14°51'25 | 9♋19 | 25°10 | 22°13 | 3°22 | 19° 5 | 19°31 | 10°57 | 24°17 | 26°12 | 5°58 | 4°12 | 26°37 | 19°24 | S 7 |
| S 8 | 23 10 26 | 15°49'47 | 21°46 | 26°53 | 23°27 | 4° 0 | 19°15 | 19°37 | 10°58 | 24°19 | 26°12 | 5°59 | 4° 9 | 26°44 | 19°22 | S 8 |
| M 9 | 23 14 23 | 16°48'12 | 4♌ 0 | 28°34 | 24°42 | 4°38 | 19°25 | 19°43 | 10°58 | 24°22 | 26°11 | 6°R 0 | 4° 6 | 26°50 | 19°20 | M 9 |
| T 10 | 23 18 20 | 17°46'38 | 16° 3 | 0♎15 | 25°56 | 5°15 | 19°35 | 19°50 | 10°58 | 24°24 | 26°10 | 6° 0 | 4° 2 | 26°57 | 19°18 | T 10 |
| W11 | 23 22 16 | 18°45'07 | 28° 0 | 1°54 | 27°11 | 5°53 | 19°45 | 19°57 | 10°59 | 24°26 | 26° 9 | 5°57 | 3°59 | 27° 4 | 19°15 | W11 |
| T 12 | 23 26 13 | 19°43'37 | 9♍52 | 3°33 | 28°25 | 6°30 | 19°55 | 20° 3 | 10°59 | 24°28 | 26° 8 | 5°53 | 3°56 | 27°10 | 19°13 | T 12 |
| F 13 | 23 30 9 | 20°42'10 | 21°43 | 5°10 | 29°40 | 7° 7 | 20° 4 | 20°10 | 10°59 | 24°30 | 26° 8 | 5°46 | 3°53 | 27°17 | 19°10 | F 13 |
| S 14 | 23 34 6 | 21°40'44 | 3♎33 | 6°46 | 0♎54 | 7°45 | 20°14 | 20°17 | 10°59 | 24°33 | 26° 7 | 5°38 | 3°50 | 27°24 | 19° 8 | S 14 |
| S 15 | 23 38 2 | 22°39'20 | 15°24 | 8°21 | 2° 9 | 8°22 | 20°23 | 20°23 | 10°59 | 24°35 | 26° 6 | 5°29 | 3°46 | 27°30 | 19° 6 | S 15 |
| M16 | 23 41 59 | 23°37'58 | 27°19 | 9°56 | 3°24 | 8°59 | 20°33 | 20°30 | 10°R59 | 24°37 | 26° 6 | 5°20 | 3°43 | 27°37 | 19° 3 | M16 |
| T 17 | 23 45 55 | 24°36'38 | 9♏19 | 11°29 | 4°38 | 9°37 | 20°42 | 20°37 | 10°59 | 24°39 | 26° 5 | 5°11 | 3°40 | 27°44 | 19° 1 | T 17 |
| W18 | 23 49 52 | 25°35'20 | 21°27 | 13° 1 | 5°53 | 10°14 | 20°51 | 20°44 | 10°59 | 24°42 | 26° 5 | 5° 5 | 3°37 | 27°50 | 18°58 | W18 |
| T 19 | 23 53 49 | 26°34'03 | 3♐46 | 14°32 | 7° 7 | 10°51 | 21° 0 | 20°50 | 10°59 | 24°44 | 26° 4 | 5° 0 | 3°34 | 27°57 | 18°56 | T 19 |
| F 20 | 23 57 45 | 27°32'48 | 16°19 | 16° 3 | 8°22 | 11°28 | 21° 8 | 20°57 | 10°59 | 24°46 | 26° 4 | 4°57 | 3°31 | 28° 4 | 18°53 | F 20 |
| S 21 | 0 1 42 | 28°31'35 | 29°10 | 17°32 | 9°37 | 12° 5 | 21°17 | 21° 4 | 10°58 | 24°48 | 26° 3 | 4°D56 | 3°27 | 28°11 | 18°50 | S 21 |
| S 22 | 0 5 38 | 29°30'24 | 12♑23 | 19° 0 | 10°51 | 12°41 | 21°26 | 21°11 | 10°58 | 24°50 | 26° 3 | 4°57 | 3°24 | 28°17 | 18°48 | S 22 |
| M23 | 0 9 35 | 0♎29'14 | 26° 2 | 20°27 | 12° 6 | 13°18 | 21°34 | 21°18 | 10°58 | 24°53 | 26° 2 | 4°58 | 3°21 | 28°24 | 18°45 | M23 |
| T 24 | 0 13 31 | 1°28'06 | 10♒ 7 | 21°53 | 13°20 | 13°55 | 21°42 | 21°25 | 10°57 | 24°55 | 26° 2 | 4°R58 | 3°18 | 28°31 | 18°42 | T 24 |
| W25 | 0 17 28 | 2°27'00 | 24°40 | 23°19 | 14°35 | 14°32 | 21°50 | 21°32 | 10°57 | 24°57 | 26° 1 | 4°57 | 3°15 | 28°37 | 18°40 | W25 |
| T 26 | 0 21 24 | 3°25'56 | 9♓36 | 24°43 | 15°50 | 15° 8 | 21°58 | 21°39 | 10°56 | 24°59 | 26° 1 | 4°53 | 3°12 | 28°44 | 18°37 | T 26 |
| F 27 | 0 25 21 | 4°24'53 | 24°48 | 26° 6 | 17° 4 | 15°45 | 22° 6 | 21°46 | 10°56 | 25° 2 | 26° 1 | 4°46 | 3° 8 | 28°51 | 18°34 | F 27 |
| S 28 | 0 29 18 | 5°23'52 | 10♈ 7 | 27°28 | 18°19 | 16°22 | 22°14 | 21°53 | 10°55 | 25° 4 | 26° 0 | 4°38 | 3° 5 | 28°57 | 18°32 | S 28 |
| S 29 | 0 33 14 | 6°22'54 | 25°22 | 28°49 | 19°33 | 16°58 | 22°22 | 22° 0 | 10°55 | 25° 6 | 26° 0 | 4°29 | 3° 2 | 29° 4 | 18°29 | S 29 |
| M30 | 0 37 11 | 7♎21'57 | 10♉22 | 0♏ 8 | 20♎48 | 17♌34 | 22♋29 | 22♎ 7 | 10♊54 | 25♍ 8 | 26♑ 0 | 4♌20 | 2♌59 | 29♍11 | 18♈26 | M30 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| S 1 | 8n12 | 2n 5 | 4s55 | 7n27 | 1n27 | 7n18 | 1n25 | 21n13 | 0n59 | 22n16 | 0n 2 | 5s16 | 2n19 | 22n 2 | 0s 4 | 3n29 | 1n14 | 24s 2 | 3s10 | 18n46 | 19n 9 | 5n18 | 8n52 | 1n17 |
| M 2 | 7 50 | 7 11 | 5 11 | 6 40 | 1 22 | 6 49 | 1 24 | 21 6 | 0 59 | 22 15 | 0 2 | 5 18 | 2 19 | 22 2 | 0 4 | 3 29 | 1 14 | 24 2 | 3 10 | 18 47 | 19 10 | 5 16 | 8 51 | 1 17 |
| T 3 | 7 28 | 11 44 | 5 7 | 5 53 | 1 18 | 6 20 | 1 24 | 20 58 | 1 0 | 22 14 | 0 2 | 5 21 | 2 19 | 22 2 | 0 4 | 3 28 | 1 14 | 24 2 | 3 10 | 18 48 | 19 11 | 5 14 | 8 51 | 1 17 |
| W 4 | 7 5 | 15 31 | 4 45 | 5 7 | 1 12 | 5 50 | 1 23 | 20 50 | 1 1 | 22 12 | 0 2 | 5 23 | 2 19 | 22 3 | 0 4 | 3 27 | 1 14 | 24 3 | 3 10 | 18 49 | 19 12 | 5 12 | 8 50 | 1 17 |
| T 5 | 6 43 | 18 21 | 4 8 | 4 20 | 1 7 | 5 21 | 1 23 | 20 42 | 1 1 | 22 11 | 0 2 | 5 26 | 2 18 | 22 3 | 0 4 | 3 26 | 1 14 | 24 3 | 3 10 | 18 49 | 19 12 | 5 10 | 8 49 | 1 17 |
| F 6 | 6 21 | 20 7 | 3 18 | 3 33 | 1 1 | 4 51 | 1 22 | 20 34 | 1 2 | 22 10 | 0 2 | 5 28 | 2 18 | 22 3 | 0 4 | 3 25 | 1 14 | 24 3 | 3 11 | 18 49 | 19 13 | 5 8 | 8 48 | 1 17 |
| S 7 | 5 58 | 20 49 | 2 20 | 2 46 | 0 55 | 4 21 | 1 22 | 20 26 | 1 2 | 22 8 | 0 2 | 5 31 | 2 18 | 22 3 | 0 4 | 3 24 | 1 14 | 24 3 | 3 11 | 18 48 | 19 14 | 5 6 | 8 47 | 1 17 |
| S 8 | 5 36 | 20 27 | 1 17 | 2 0 | 0 49 | 3 51 | 1 21 | 20 18 | 1 3 | 22 7 | 0 2 | 5 33 | 2 18 | 22 3 | 0 4 | 3 23 | 1 14 | 24 3 | 3 11 | 18 48 | 19 15 | 5 3 | 8 46 | 1 17 |
| M 9 | 5 13 | 19 6 | 0 11 | 1 13 | 0 43 | 3 20 | 1 20 | 20 9 | 1 4 | 22 6 | 0 2 | 5 36 | 2 18 | 22 3 | 0 4 | 3 22 | 1 14 | 24 3 | 3 11 | 18 48 | 19 15 | 5 1 | 8 46 | 1 17 |
| T 10 | 4 50 | 16 54 | 0n54 | 0 27 | 0 36 | 2 50 | 1 20 | 20 1 | 1 4 | 22 5 | 0 2 | 5 38 | 2 18 | 22 3 | 0 4 | 3 22 | 1 14 | 24 4 | 3 11 | 18 48 | 19 16 | 4 59 | 8 45 | 1 17 |
| W11 | 4 27 | 14 0 | 1 56 | 0s19 | 0 29 | 2 20 | 1 19 | 19 52 | 1 5 | 22 3 | 0 3 | 5 41 | 2 18 | 22 3 | 0 4 | 3 21 | 1 14 | 24 4 | 3 11 | 18 48 | 19 17 | 4 57 | 8 44 | 1 17 |
| T 12 | 4 4 | 10 33 | 2 53 | 1 4 | 0 22 | 1 49 | 1 18 | 19 44 | 1 5 | 22 2 | 0 3 | 5 43 | 2 18 | 22 3 | 0 4 | 3 20 | 1 14 | 24 4 | 3 11 | 18 49 | 19 18 | 4 55 | 8 43 | 1 17 |
| F 13 | 3 41 | 6 41 | 3 42 | 1 49 | 0 15 | 1 18 | 1 17 | 19 35 | 1 6 | 22 1 | 0 3 | 5 46 | 2 18 | 22 3 | 0 4 | 3 19 | 1 14 | 24 4 | 3 11 | 18 51 | 19 18 | 4 52 | 8 42 | 1 17 |
| S 14 | 3 18 | 2 34 | 4 21 | 2 34 | 0 8 | 0 48 | 1 16 | 19 26 | 1 7 | 21 59 | 0 3 | 5 49 | 2 17 | 22 3 | 0 4 | 3 18 | 1 14 | 24 4 | 3 11 | 18 53 | 19 19 | 4 50 | 8 41 | 1 17 |
| S 15 | 2 55 | 1s38 | 4 48 | 3 18 | 0 1 | 0 17 | 1 15 | 19 17 | 1 7 | 21 58 | 0 3 | 5 51 | 2 17 | 22 3 | 0 4 | 3 17 | 1 14 | 24 4 | 3 11 | 18 55 | 19 20 | 4 48 | 8 40 | 1 17 |
| M16 | 2 32 | 5 48 | 5 4 | 4 2 | 0s 6 | 0s14 | 1 13 | 19 7 | 1 8 | 21 57 | 0 3 | 5 54 | 2 17 | 22 3 | 0 4 | 3 16 | 1 14 | 24 4 | 3 11 | 18 58 | 19 21 | 4 46 | 8 39 | 1 17 |
| T 17 | 2 9 | 9 47 | 5 6 | 4 45 | 0 14 | 0 44 | 1 12 | 18 58 | 1 8 | 21 56 | 0 3 | 5 56 | 2 17 | 22 3 | 0 4 | 3 15 | 1 14 | 24 5 | 3 11 | 19 0 | 19 21 | 4 44 | 8 38 | 1 16 |
| W18 | 1 45 | 13 24 | 4 55 | 5 28 | 0 21 | 1 15 | 1 11 | 18 49 | 1 9 | 21 54 | 0 3 | 5 59 | 2 17 | 22 3 | 0 4 | 3 15 | 1 14 | 24 5 | 3 11 | 19 1 | 19 22 | 4 42 | 8 37 | 1 16 |
| T 19 | 1 22 | 16 31 | 4 29 | 6 11 | 0 29 | 1 46 | 1 9 | 18 39 | 1 10 | 21 53 | 0 4 | 6 2 | 2 17 | 22 3 | 0 4 | 3 14 | 1 14 | 24 5 | 3 11 | 19 2 | 19 23 | 4 39 | 8 36 | 1 16 |
| F 20 | 0 59 | 18 56 | 3 51 | 6 53 | 0 36 | 2 17 | 1 8 | 18 29 | 1 10 | 21 52 | 0 4 | 6 4 | 2 17 | 22 3 | 0 4 | 3 13 | 1 14 | 24 5 | 3 11 | 19 3 | 19 24 | 4 37 | 8 35 | 1 16 |
| S 21 | 0 35 | 20 28 | 3 0 | 7 34 | 0 44 | 2 47 | 1 7 | 18 20 | 1 11 | 21 51 | 0 4 | 6 7 | 2 17 | 22 3 | 0 4 | 3 12 | 1 14 | 24 5 | 3 11 | 19 3 | 19 24 | 4 35 | 8 34 | 1 16 |
| S 22 | 0 12 | 20 56 | 1 58 | 8 14 | 0 51 | 3 18 | 1 5 | 18 10 | 1 11 | 21 49 | 0 4 | 6 10 | 2 17 | 22 3 | 0 4 | 3 11 | 1 14 | 24 5 | 3 11 | 19 3 | 19 25 | 4 33 | 8 33 | 1 16 |
| M23 | 0s12 | 20 11 | 0 48 | 8 54 | 0 59 | 3 49 | 1 4 | 18 0 | 1 12 | 21 48 | 0 4 | 6 12 | 2 17 | 22 3 | 0 4 | 3 10 | 1 14 | 24 5 | 3 11 | 19 3 | 19 26 | 4 31 | 8 32 | 1 16 |
| T 24 | 0 35 | 18 10 | 0s28 | 9 34 | 1 6 | 4 19 | 1 2 | 17 50 | 1 13 | 21 47 | 0 4 | 6 15 | 2 17 | 22 3 | 0 4 | 3 9 | 1 14 | 24 5 | 3 11 | 19 3 | 19 26 | 4 28 | 8 31 | 1 16 |
| W25 | 0 59 | 14 56 | 1 43 | 10 12 | 1 14 | 4 50 | 1 0 | 17 40 | 1 13 | 21 46 | 0 4 | 6 18 | 2 17 | 22 3 | 0 4 | 3 8 | 1 14 | 24 5 | 3 11 | 19 3 | 19 27 | 4 26 | 8 30 | 1 16 |
| T 26 | 1 22 | 10 40 | 2 54 | 10 50 | 1 21 | 5 20 | 0 59 | 17 29 | 1 14 | 21 45 | 0 4 | 6 20 | 2 16 | 22 3 | 0 4 | 3 8 | 1 14 | 24 5 | 3 11 | 19 4 | 19 28 | 4 24 | 8 29 | 1 16 |
| F 27 | 1 45 | 5 38 | 3 54 | 11 28 | 1 28 | 5 50 | 0 57 | 17 19 | 1 15 | 21 43 | 0 4 | 6 23 | 2 16 | 22 3 | 0 4 | 3 7 | 1 14 | 24 5 | 3 11 | 19 6 | 19 29 | 4 22 | 8 27 | 1 16 |
| S 28 | 2 9 | 0 14 | 4 37 | 12 4 | 1 36 | 6 20 | 0 55 | 17 9 | 1 15 | 21 42 | 0 5 | 6 26 | 2 16 | 22 3 | 0 4 | 3 6 | 1 14 | 24 5 | 3 11 | 19 8 | 19 29 | 4 19 | 8 26 | 1 16 |
| S 29 | 2 32 | 5n10 | 5 0 | 12 40 | 1 43 | 6 50 | 0 53 | 16 58 | 1 16 | 21 41 | 0 5 | 6 28 | 2 16 | 22 3 | 0 4 | 3 5 | 1 14 | 24 6 | 3 11 | 19 10 | 19 30 | 4 17 | 8 25 | 1 16 |
| M30 | 2s56 | 10n10 | 5s 2 | 13s15 | 1s50 | 7s20 | 0n51 | 16n48 | 1n16 | 21n40 | 0n 5 | 6s31 | 2n16 | 22n 2 | 0s 4 | 3n 4 | 1n14 | 24s 6 | 3s11 | 19n12 | 19n31 | 4n15 | 8n24 | 1n16 |

Julian Day Number = 2369974.5, Delta T = 22.07 sec
Ecliptic obliquity = 23°28'01, Nutation = - 0°00'14, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'20, Lahiri = 20°44'20Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## OCTOBER 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T 1 | 0 41 7 | 8♎21'03 | 24♉58 | 1♏27 | 22♎ 3 | 18♌11 | 22♋36 | 22♎15 | 10°R53 | 25♍10 | 26°R 0 | 4°R12 | 2♌56 | 29♍18 | 18°R23 | T 1 |
| W 2 | 0 45 4 | 9°20'12 | 9♊ 5 | 2°44 | 23°17 | 18°47 | 22°44 | 22°22 | 10♊52 | 25°13 | 25♑59 | 4♌ 6 | 2°52 | 29°24 | 18♈21 | W 2 |
| T 3 | 0 49 0 | 10°19'22 | 22°42 | 3°59 | 24°32 | 19°23 | 22°51 | 22°29 | 10°51 | 25°15 | 25°59 | 4° 2 | 2°49 | 29°31 | 18°18 | T 3 |
| F 4 | 0 52 57 | 11°18'35 | 5♋51 | 5°14 | 25°46 | 19°59 | 22°58 | 22°36 | 10°51 | 25°17 | 25°59 | 4° 1 | 2°46 | 29°38 | 18°15 | F 4 |
| S 5 | 0 56 53 | 12°17'50 | 18°34 | 6°26 | 27° 1 | 20°36 | 23° 4 | 22°43 | 10°50 | 25°19 | 25°59 | 4°D 1 | 2°43 | 29°44 | 18°12 | S 5 |
| S 6 | 1 0 50 | 13°17'08 | 0♌58 | 7°37 | 28°16 | 21°12 | 23°11 | 22°51 | 10°49 | 25°21 | 25°59 | 4°R 1 | 2°40 | 29°51 | 18° 9 | S 6 |
| M 7 | 1 4 47 | 14°16'28 | 13° 6 | 8°46 | 29°30 | 21°48 | 23°17 | 22°58 | 10°48 | 25°23 | 25°59 | 4° 1 | 2°37 | 29°58 | 18° 7 | M 7 |
| T 8 | 1 8 43 | 15°15'50 | 25° 3 | 9°54 | 0♍45 | 22°23 | 23°24 | 23° 5 | 10°47 | 25°25 | 25°D59 | 3°59 | 2°33 | 0♎ 4 | 18° 4 | T 8 |
| W 9 | 1 12 40 | 16°15'14 | 6♍55 | 10°59 | 1°59 | 22°59 | 23°30 | 23°12 | 10°45 | 25°28 | 25°59 | 3°54 | 2°30 | 0°11 | 18° 1 | W 9 |
| T 10 | 1 16 36 | 17°14'41 | 18°44 | 12° 2 | 3°14 | 23°35 | 23°36 | 23°20 | 10°44 | 25°30 | 25°59 | 3°47 | 2°27 | 0°18 | 17°58 | T 10 |
| F 11 | 1 20 33 | 18°14'10 | 0♎34 | 13° 2 | 4°29 | 24°11 | 23°42 | 23°27 | 10°43 | 25°32 | 25°59 | 3°36 | 2°24 | 0°25 | 17°55 | F 11 |
| S 12 | 1 24 29 | 19°13'40 | 12°26 | 13°59 | 5°43 | 24°46 | 23°47 | 23°34 | 10°42 | 25°34 | 25°59 | 3°24 | 2°21 | 0°31 | 17°52 | S 12 |
| S 13 | 1 28 26 | 20°13'13 | 24°23 | 14°54 | 6°58 | 25°22 | 23°53 | 23°41 | 10°40 | 25°36 | 25°59 | 3°10 | 2°17 | 0°38 | 17°50 | S 13 |
| M14 | 1 32 22 | 21°12'48 | 6♎25 | 15°45 | 8°13 | 25°57 | 23°58 | 23°49 | 10°39 | 25°38 | 25°59 | 2°56 | 2°14 | 0°45 | 17°47 | M14 |
| T 15 | 1 36 19 | 22°12'25 | 18°34 | 16°33 | 9°27 | 26°33 | 24° 3 | 23°56 | 10°38 | 25°40 | 25°59 | 2°43 | 2°11 | 0°51 | 17°44 | T 15 |
| W16 | 1 40 15 | 23°12'04 | 0♐50 | 17°17 | 10°42 | 27° 8 | 24° 8 | 24° 3 | 10°36 | 25°42 | 26° 0 | 2°31 | 2° 8 | 0°58 | 17°41 | W16 |
| T 17 | 1 44 12 | 24°11'45 | 13°16 | 17°56 | 11°57 | 27°43 | 24°13 | 24°11 | 10°35 | 25°44 | 26° 0 | 2°23 | 2° 5 | 1° 5 | 17°38 | T 17 |
| F 18 | 1 48 9 | 25°11'28 | 25°54 | 18°30 | 13°11 | 28°19 | 24°18 | 24°18 | 10°33 | 25°46 | 26° 0 | 2°18 | 2° 2 | 1°11 | 17°35 | F 18 |
| S 19 | 1 52 5 | 26°11'12 | 8♑46 | 18°59 | 14°26 | 28°54 | 24°22 | 24°25 | 10°32 | 25°48 | 26° 1 | 2°15 | 1°58 | 1°18 | 17°33 | S 19 |
| S 20 | 1 56 2 | 27°10'58 | 21°55 | 19°22 | 15°40 | 29°29 | 24°27 | 24°32 | 10°30 | 25°50 | 26° 1 | 2°14 | 1°55 | 1°25 | 17°30 | S 20 |
| M21 | 1 59 58 | 28°10'46 | 5♒25 | 19°38 | 16°55 | 0♍ 4 | 24°31 | 24°40 | 10°28 | 25°52 | 26° 1 | 2°14 | 1°52 | 1°32 | 17°27 | M21 |
| T 22 | 2 3 55 | 29°10'35 | 19°18 | 19°48 | 18°10 | 0°39 | 24°35 | 24°47 | 10°27 | 25°54 | 26° 2 | 2°13 | 1°49 | 1°38 | 17°24 | T 22 |
| W23 | 2 7 51 | 0♏10'26 | 3♓35 | 19°R49 | 19°24 | 1°13 | 24°39 | 24°54 | 10°25 | 25°56 | 26° 2 | 2°11 | 1°46 | 1°45 | 17°22 | W23 |
| T 24 | 2 11 48 | 1°10'19 | 18°15 | 19°43 | 20°39 | 1°48 | 24°42 | 25° 2 | 10°23 | 25°58 | 26° 2 | 2° 6 | 1°43 | 1°52 | 17°19 | T 24 |
| F 25 | 2 15 44 | 2°10'13 | 3♈13 | 19°27 | 21°53 | 2°23 | 24°46 | 25° 9 | 10°21 | 26° 0 | 26° 3 | 1°58 | 1°39 | 1°58 | 17°16 | F 25 |
| S 26 | 2 19 41 | 3°10'09 | 18°21 | 19° 3 | 23° 8 | 2°57 | 24°49 | 25°16 | 10°19 | 26° 2 | 26° 3 | 1°48 | 1°36 | 2° 5 | 17°13 | S 26 |
| S 27 | 2 23 38 | 4°10'07 | 3♉30 | 18°29 | 24°23 | 3°32 | 24°52 | 25°23 | 10°18 | 26° 3 | 26° 4 | 1°37 | 1°33 | 2°12 | 17°11 | S 27 |
| M28 | 2 27 34 | 5°10'07 | 18°28 | 17°46 | 25°37 | 4° 6 | 24°55 | 25°30 | 10°16 | 26° 5 | 26° 4 | 1°25 | 1°30 | 2°18 | 17° 8 | M28 |
| T 29 | 2 31 31 | 6°10'09 | 3♊ 7 | 16°54 | 26°52 | 4°41 | 24°57 | 25°38 | 10°14 | 26° 7 | 26° 5 | 1°15 | 1°27 | 2°25 | 17° 5 | T 29 |
| W30 | 2 35 27 | 7°10'13 | 17°21 | 15°53 | 28° 6 | 5°15 | 25° 0 | 25°45 | 10°12 | 26° 9 | 26° 6 | 1° 7 | 1°23 | 2°32 | 17° 3 | W30 |
| T 31 | 2 39 24 | 8♏10'19 | 1♋ 4 | 14♏45 | 29♏21 | 5♍49 | 25♋ 2 | 25♎52 | 10♊10 | 26♍11 | 26♌ 6 | 1♌ 2 | 1♌20 | 2♎39 | 17♈ 0 | T 31 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| T 1 | 3s19 | 14n26 | 4s44 | 13s49 | 1s57 | 7s50 | 0n49 | 16n37 | 1n17 | 21n39 | 0n 5 | 6s34 | 2n16 | 22n 2 | 0s 4 | 3n 3 | 1n14 | 24s 6 | 3s11 | 19n14 | 19n32 | 4n13 | 8n23 | 1n16 |
| W 2 | 3 42 | 17 44 | 4 9 | 14 22 | 2 3 | 8 20 | 0 47 | 16 26 | 1 18 | 21 38 | 0 5 | 6 36 | 2 16 | 22 2 | 0 4 | 3 2 | 1 14 | 24 6 | 3 11 | 19 15 | 19 32 | 4 11 | 8 22 | 1 16 |
| T 3 | 4 6 | 19 55 | 3 21 | 14 54 | 2 10 | 8 49 | 0 45 | 16 16 | 1 18 | 21 37 | 0 5 | 6 39 | 2 16 | 22 2 | 0 4 | 3 2 | 1 14 | 24 6 | 3 11 | 19 16 | 19 33 | 4 8 | 8 21 | 1 16 |
| F 4 | 4 29 | 20 56 | 2 24 | 15 25 | 2 16 | 9 18 | 0 43 | 16 5 | 1 19 | 21 36 | 0 5 | 6 42 | 2 16 | 22 2 | 0 4 | 3 1 | 1 14 | 24 6 | 3 11 | 19 16 | 19 34 | 4 6 | 8 20 | 1 15 |
| S 5 | 4 52 | 20 50 | 1 21 | 15 55 | 2 22 | 9 47 | 0 41 | 15 54 | 1 19 | 21 35 | 0 5 | 6 45 | 2 16 | 22 2 | 0 4 | 3 0 | 1 14 | 24 6 | 3 11 | 19 16 | 19 35 | 4 4 | 8 18 | 1 15 |
| S 6 | 5 15 | 19 42 | 0 16 | 16 24 | 2 28 | 10 16 | 0 39 | 15 43 | 1 20 | 21 34 | 0 6 | 6 47 | 2 16 | 22 2 | 0 4 | 2 59 | 1 14 | 24 6 | 3 11 | 19 16 | 19 35 | 4 2 | 8 17 | 1 15 |
| M 7 | 5 38 | 17 40 | 0n48 | 16 52 | 2 34 | 10 44 | 0 37 | 15 32 | 1 21 | 21 33 | 0 6 | 6 50 | 2 16 | 22 2 | 0 4 | 2 58 | 1 14 | 24 6 | 3 11 | 19 16 | 19 36 | 3 59 | 8 16 | 1 15 |
| T 8 | 6 1 | 14 54 | 1 49 | 17 19 | 2 39 | 11 13 | 0 34 | 15 21 | 1 21 | 21 32 | 0 6 | 6 53 | 2 16 | 22 1 | 0 4 | 2 57 | 1 14 | 24 6 | 3 11 | 19 17 | 19 37 | 3 57 | 8 15 | 1 15 |
| W 9 | 6 24 | 11 32 | 2 45 | 17 45 | 2 45 | 11 41 | 0 32 | 15 10 | 1 22 | 21 31 | 0 6 | 6 55 | 2 16 | 22 1 | 0 4 | 2 57 | 1 14 | 24 6 | 3 11 | 19 18 | 19 37 | 3 55 | 8 14 | 1 15 |
| T 10 | 6 47 | 7 44 | 3 33 | 18 9 | 2 49 | 12 8 | 0 30 | 14 58 | 1 22 | 21 30 | 0 6 | 6 58 | 2 16 | 22 1 | 0 4 | 2 56 | 1 14 | 24 6 | 3 11 | 19 20 | 19 38 | 3 53 | 8 13 | 1 15 |
| F 11 | 7 10 | 3 38 | 4 13 | 18 31 | 2 54 | 12 36 | 0 27 | 14 47 | 1 23 | 21 29 | 0 6 | 7 1 | 2 16 | 22 1 | 0 4 | 2 55 | 1 14 | 24 6 | 3 11 | 19 22 | 19 39 | 3 51 | 8 12 | 1 15 |
| S 12 | 7 32 | 0s37 | 4 41 | 18 53 | 2 57 | 13 3 | 0 25 | 14 36 | 1 24 | 21 28 | 0 6 | 7 3 | 2 16 | 22 1 | 0 4 | 2 54 | 1 14 | 24 6 | 3 11 | 19 25 | 19 40 | 3 48 | 8 10 | 1 15 |
| S 13 | 7 55 | 4 52 | 4 57 | 19 12 | 3 1 | 13 30 | 0 23 | 14 24 | 1 24 | 21 28 | 0 7 | 7 6 | 2 16 | 22 1 | 0 4 | 2 53 | 1 14 | 24 6 | 3 11 | 19 28 | 19 40 | 3 46 | 8 9 | 1 15 |
| M14 | 8 17 | 8 57 | 5 0 | 19 30 | 3 4 | 13 56 | 0 20 | 14 13 | 1 25 | 21 27 | 0 7 | 7 9 | 2 16 | 22 0 | 0 4 | 2 53 | 1 14 | 24 6 | 3 11 | 19 32 | 19 41 | 3 44 | 8 8 | 1 15 |
| T 15 | 8 39 | 12 44 | 4 49 | 19 46 | 3 6 | 14 23 | 0 18 | 14 1 | 1 26 | 21 26 | 0 7 | 7 12 | 2 16 | 22 0 | 0 4 | 2 52 | 1 14 | 24 6 | 3 11 | 19 35 | 19 42 | 3 42 | 8 7 | 1 15 |
| W16 | 9 2 | 16 2 | 4 25 | 20 0 | 3 8 | 14 48 | 0 15 | 13 50 | 1 26 | 21 25 | 0 7 | 7 14 | 2 16 | 22 0 | 0 4 | 2 51 | 1 14 | 24 6 | 3 11 | 19 37 | 19 42 | 3 39 | 8 6 | 1 15 |
| T 17 | 9 24 | 18 39 | 3 48 | 20 13 | 3 9 | 15 14 | 0 13 | 13 38 | 1 27 | 21 25 | 0 7 | 7 17 | 2 16 | 22 0 | 0 4 | 2 50 | 1 15 | 24 5 | 3 11 | 19 39 | 19 43 | 3 37 | 8 5 | 1 14 |
| F 18 | 9 46 | 20 25 | 2 59 | 20 22 | 3 9 | 15 39 | 0 10 | 13 26 | 1 27 | 21 24 | 0 7 | 7 20 | 2 16 | 22 0 | 0 4 | 2 49 | 1 15 | 24 5 | 3 11 | 19 40 | 19 44 | 3 35 | 8 3 | 1 14 |
| S 19 | 10 7 | 21 10 | 2 1 | 20 30 | 3 8 | 16 4 | 0 8 | 13 15 | 1 28 | 21 23 | 0 7 | 7 22 | 2 16 | 21 59 | 0 4 | 2 49 | 1 15 | 24 5 | 3 11 | 19 41 | 19 45 | 3 33 | 8 2 | 1 14 |
| S 20 | 10 29 | 20 47 | 0 54 | 20 34 | 3 6 | 16 28 | 0 5 | 13 3 | 1 29 | 21 23 | 0 7 | 7 25 | 2 16 | 21 59 | 0 4 | 2 48 | 1 15 | 24 5 | 3 10 | 19 41 | 19 45 | 3 30 | 8 1 | 1 14 |
| M21 | 10 50 | 19 12 | 0s17 | 20 36 | 3 3 | 16 52 | 0 3 | 12 51 | 1 29 | 21 22 | 0 8 | 7 27 | 2 16 | 21 59 | 0 4 | 2 47 | 1 15 | 24 5 | 3 10 | 19 41 | 19 46 | 3 28 | 8 0 | 1 14 |
| T 22 | 11 12 | 16 27 | 1 29 | 20 35 | 2 59 | 17 15 | 0 0 | 12 40 | 1 30 | 21 22 | 0 8 | 7 30 | 2 16 | 21 59 | 0 4 | 2 46 | 1 15 | 24 5 | 3 10 | 19 41 | 19 47 | 3 26 | 7 59 | 1 14 |
| W23 | 11 33 | 12 39 | 2 37 | 20 30 | 2 54 | 17 38 | 0s 2 | 12 28 | 1 31 | 21 21 | 0 8 | 7 33 | 2 16 | 21 59 | 0 4 | 2 46 | 1 15 | 24 5 | 3 10 | 19 42 | 19 47 | 3 24 | 7 58 | 1 14 |
| T 24 | 11 54 | 7 59 | 3 37 | 20 22 | 2 47 | 18 1 | 0 5 | 12 16 | 1 31 | 21 21 | 0 8 | 7 35 | 2 16 | 21 58 | 0 4 | 2 45 | 1 15 | 24 5 | 3 10 | 19 43 | 19 48 | 3 21 | 7 57 | 1 14 |
| F 25 | 12 14 | 2 45 | 4 24 | 20 10 | 2 39 | 18 23 | 0 8 | 12 4 | 1 32 | 21 20 | 0 8 | 7 38 | 2 16 | 21 58 | 0 4 | 2 44 | 1 15 | 24 5 | 3 10 | 19 45 | 19 49 | 3 19 | 7 55 | 1 14 |
| S 26 | 12 35 | 2n42 | 4 52 | 19 53 | 2 29 | 18 45 | 0 10 | 11 52 | 1 32 | 21 20 | 0 8 | 7 41 | 2 16 | 21 58 | 0 4 | 2 44 | 1 15 | 24 5 | 3 10 | 19 47 | 19 50 | 3 17 | 7 54 | 1 14 |
| S 27 | 12 55 | 7 59 | 5 0 | 19 33 | 2 17 | 19 6 | 0 13 | 11 40 | 1 33 | 21 19 | 0 8 | 7 43 | 2 16 | 21 57 | 0 4 | 2 43 | 1 15 | 24 5 | 3 10 | 19 49 | 19 50 | 3 15 | 7 53 | 1 13 |
| M28 | 13 16 | 12 44 | 4 47 | 19 8 | 2 4 | 19 26 | 0 16 | 11 28 | 1 34 | 21 19 | 0 9 | 7 46 | 2 16 | 21 57 | 0 4 | 2 42 | 1 15 | 24 4 | 3 10 | 19 52 | 19 51 | 3 12 | 7 52 | 1 13 |
| T 29 | 13 36 | 16 38 | 4 16 | 18 38 | 1 49 | 19 46 | 0 18 | 11 16 | 1 34 | 21 18 | 0 9 | 7 48 | 2 16 | 21 57 | 0 4 | 2 41 | 1 15 | 24 4 | 3 10 | 19 54 | 19 52 | 3 10 | 7 51 | 1 13 |
| W30 | 13 55 | 19 24 | 3 29 | 18 5 | 1 32 | 20 6 | 0 21 | 11 4 | 1 35 | 21 18 | 0 9 | 7 51 | 2 16 | 21 57 | 0 4 | 2 41 | 1 15 | 24 4 | 3 10 | 19 56 | 19 52 | 3 8 | 7 50 | 1 13 |
| T 31 | 14s15 | 20n57 | 2s31 | 17s27 | 1s14 | 20s25 | 0s23 | 10n52 | 1n36 | 21n18 | 0n 9 | 7s54 | 2n16 | 21n56 | 0s 4 | 2n40 | 1n15 | 24s 4 | 3s10 | 19n57 | 19n53 | 3n 5 | 7n49 | 1n13 |

Julian Day Number = 2370004.5, Delta T = 22.07 sec
Ecliptic obliquity = 23°28'02, Nutation = - 0°00'15, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'24, Lahiri = 20°44'24Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## NOVEMBER 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F 1 | 2 43 20 | 9♏10'27 | 14♋19 | 13°R31 | 0♐35 | 6♍23 | 25♋ 4 | 25♎59 | 10°R 8 | 26♍12 | 26♑ 7 | 0°R59 | 1♌17 | 2♎45 | 16°R58 | F 1 |
| S 2 | 2 47 17 | 10°10'37 | 27° 7 | 12♏14 | 1°50 | 6°57 | 25° 6 | 26° 6 | 10♊ 6 | 26°14 | 26° 8 | 0°D58 | 1°14 | 2°52 | 16♈55 | S 2 |
| S 3 | 2 51 13 | 11°10'50 | 9♌33 | 10°55 | 3° 4 | 7°31 | 25° 8 | 26°14 | 10° 3 | 26°16 | 26° 8 | 0°R58 | 1°11 | 2°59 | 16°53 | S 3 |
| M 4 | 2 55 10 | 12°11'04 | 21°42 | 9°37 | 4°19 | 8° 5 | 25°10 | 26°21 | 10° 1 | 26°18 | 26° 9 | 0♌58 | 1° 8 | 3° 5 | 16°50 | M 4 |
| T 5 | 2 59 7 | 13°11'20 | 3♍39 | 8°22 | 5°34 | 8°38 | 25°11 | 26°28 | 9°59 | 26°19 | 26°10 | 0°56 | 1° 4 | 3°12 | 16°48 | T 5 |
| W 6 | 3 3 3 | 14°11'39 | 15°30 | 7°13 | 6°48 | 9°12 | 25°12 | 26°35 | 9°57 | 26°21 | 26°11 | 0°52 | 1° 1 | 3°19 | 16°45 | W 6 |
| T 7 | 3 7 0 | 15°11'59 | 27°19 | 6°13 | 8° 3 | 9°46 | 25°13 | 26°42 | 9°55 | 26°22 | 26°12 | 0°45 | 0°58 | 3°26 | 16°43 | T 7 |
| F 8 | 3 10 56 | 16°12'21 | 9♎10 | 5°22 | 9°17 | 10°19 | 25°14 | 26°49 | 9°52 | 26°24 | 26°12 | 0°35 | 0°55 | 3°32 | 16°40 | F 8 |
| S 9 | 3 14 53 | 17°12'45 | 21° 7 | 4°41 | 10°32 | 10°52 | 25°14 | 26°56 | 9°50 | 26°26 | 26°13 | 0°23 | 0°52 | 3°39 | 16°38 | S 9 |
| S 10 | 3 18 49 | 18°13'11 | 3♏10 | 4°13 | 11°46 | 11°26 | 25°15 | 27° 3 | 9°48 | 26°27 | 26°14 | 0°10 | 0°49 | 3°46 | 16°36 | S 10 |
| M11 | 3 22 46 | 19°13'38 | 15°23 | 3°56 | 13° 1 | 11°59 | 25°R15 | 27°10 | 9°46 | 26°29 | 26°15 | 29♋56 | 0°45 | 3°52 | 16°33 | M11 |
| T 12 | 3 26 42 | 20°14'07 | 27°45 | 3°D50 | 14°15 | 12°32 | 25°15 | 27°17 | 9°43 | 26°30 | 26°16 | 29°44 | 0°42 | 3°59 | 16°31 | T 12 |
| W13 | 3 30 39 | 21°14'38 | 10♐16 | 3°56 | 15°30 | 13° 5 | 25°15 | 27°24 | 9°41 | 26°32 | 26°17 | 29°33 | 0°39 | 4° 6 | 16°29 | W13 |
| T 14 | 3 34 36 | 22°15'10 | 22°58 | 4°12 | 16°44 | 13°37 | 25°14 | 27°31 | 9°39 | 26°33 | 26°18 | 29°25 | 0°36 | 4°13 | 16°27 | T 14 |
| F 15 | 3 38 32 | 23°15'44 | 5♑50 | 4°38 | 17°59 | 14°10 | 25°14 | 27°37 | 9°36 | 26°35 | 26°19 | 29°19 | 0°33 | 4°19 | 16°25 | F 15 |
| S 16 | 3 42 29 | 24°16'19 | 18°54 | 5°12 | 19°13 | 14°43 | 25°13 | 27°44 | 9°34 | 26°36 | 26°20 | 29°17 | 0°29 | 4°26 | 16°22 | S 16 |
| S 17 | 3 46 25 | 25°16'56 | 2♒11 | 5°54 | 20°28 | 15°15 | 25°12 | 27°51 | 9°31 | 26°37 | 26°21 | 29°D17 | 0°26 | 4°33 | 16°20 | S 17 |
| M18 | 3 50 22 | 26°17'33 | 15°42 | 6°44 | 21°42 | 15°47 | 25°10 | 27°58 | 9°29 | 26°39 | 26°22 | 29°17 | 0°23 | 4°39 | 16°18 | M18 |
| T 19 | 3 54 18 | 27°18'12 | 29°30 | 7°39 | 22°57 | 16°20 | 25° 9 | 28° 4 | 9°26 | 26°40 | 26°24 | 29°R17 | 0°20 | 4°46 | 16°16 | T 19 |
| W20 | 3 58 15 | 28°18'52 | 13♓34 | 8°40 | 24°11 | 16°52 | 25° 7 | 28°11 | 9°24 | 26°41 | 26°25 | 29°16 | 0°17 | 4°53 | 16°14 | W20 |
| T 21 | 4 2 11 | 29°19'32 | 27°55 | 9°45 | 25°26 | 17°24 | 25° 5 | 28°18 | 9°21 | 26°42 | 26°26 | 29°13 | 0°14 | 4°59 | 16°13 | T 21 |
| F 22 | 4 6 8 | 0♐20'14 | 12♈29 | 10°55 | 26°40 | 17°55 | 25° 3 | 28°24 | 9°19 | 26°44 | 26°27 | 29° 7 | 0°10 | 5° 6 | 16°11 | F 22 |
| S 23 | 4 10 5 | 1°20'57 | 27°13 | 12° 7 | 27°54 | 18°27 | 25° 1 | 28°31 | 9°16 | 26°45 | 26°28 | 29° 0 | 0° 7 | 5°13 | 16° 9 | S 23 |
| S 24 | 4 14 1 | 2°21'41 | 11♉59 | 13°23 | 29° 9 | 18°59 | 24°59 | 28°37 | 9°14 | 26°46 | 26°30 | 28°51 | 0° 4 | 5°20 | 16° 7 | S 24 |
| M25 | 4 17 58 | 3°22'26 | 26°39 | 14°42 | 0♑23 | 19°30 | 24°56 | 28°44 | 9°11 | 26°47 | 26°31 | 28°41 | 0° 1 | 5°26 | 16° 5 | M25 |
| T 26 | 4 21 54 | 4°23'13 | 11♊ 5 | 16° 2 | 1°37 | 20° 2 | 24°53 | 28°50 | 9° 9 | 26°48 | 26°32 | 28°33 | 29♋58 | 5°33 | 16° 4 | T 26 |
| W27 | 4 25 51 | 5°24'01 | 25°11 | 17°25 | 2°52 | 20°33 | 24°50 | 28°56 | 9° 6 | 26°49 | 26°34 | 28°26 | 29°55 | 5°40 | 16° 2 | W27 |
| T 28 | 4 29 47 | 6°24'50 | 8♋53 | 18°49 | 4° 6 | 21° 4 | 24°47 | 29° 3 | 9° 4 | 26°50 | 26°35 | 28°22 | 29°51 | 5°46 | 16° 1 | T 28 |
| F 29 | 4 33 44 | 7°25'41 | 22°10 | 20°14 | 5°20 | 21°35 | 24°44 | 29° 9 | 9° 1 | 26°51 | 26°36 | 28°D20 | 29°48 | 5°53 | 15°59 | F 29 |
| S 30 | 4 37 40 | 8♐26'32 | 5♌ 2 | 21♏40 | 6♑35 | 22♍ 6 | 24♋40 | 29♎15 | 8♊59 | 26♍52 | 26♑38 | 28♋20 | 29♋45 | 6♎ 0 | 15♈58 | S 30 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat | |
| F 1 | 14s34 | 21n15 | 1s27 | 16s47 | 0s54 | 20s43 | 0s26 | 10n40 | 1n36 | 21n18 | 0n 9 | 7s56 | 2n16 | 21n56 | 0s 4 | 2n39 | 1n15 | 24s 4 | 3s10 | 19n58 | 19n54 | 3n 3 | 7n48 | 1n13 | F 1 |
| S 2 | 14 53 | 20 26 | 0 20 | 16 4 | 0 34 | 21 1 | 0 29 | 10 28 | 1 37 | 21 17 | 0 9 | 7 59 | 2 16 | 21 56 | 0 4 | 2 39 | 1 15 | 24 4 | 3 10 | 19 58 | 19 54 | 3 1 | 7 47 | 1 13 | S 2 |
| S 3 | 15 12 | 18 37 | 0n45 | 15 20 | 0 13 | 21 18 | 0 31 | 10 16 | 1 38 | 21 17 | 0 10 | 8 1 | 2 16 | 21 55 | 0 4 | 2 38 | 1 15 | 24 4 | 3 10 | 19 58 | 19 55 | 2 59 | 7 45 | 1 13 | S 3 |
| M 4 | 15 31 | 15 59 | 1 47 | 14 36 | 0n 7 | 21 35 | 0 34 | 10 4 | 1 38 | 21 17 | 0 10 | 8 4 | 2 16 | 21 55 | 0 4 | 2 37 | 1 15 | 24 4 | 3 10 | 19 58 | 19 56 | 2 56 | 7 44 | 1 13 | M 4 |
| T 5 | 15 49 | 12 43 | 2 44 | 13 53 | 0 27 | 21 51 | 0 36 | 9 52 | 1 39 | 21 17 | 0 10 | 8 6 | 2 16 | 21 55 | 0 4 | 2 37 | 1 15 | 24 3 | 3 10 | 19 58 | 19 57 | 2 54 | 7 43 | 1 13 | T 5 |
| W 6 | 16 7 | 8 59 | 3 33 | 13 12 | 0 47 | 22 6 | 0 39 | 9 40 | 1 40 | 21 17 | 0 10 | 8 9 | 2 16 | 21 55 | 0 4 | 2 36 | 1 15 | 24 3 | 3 10 | 19 59 | 19 57 | 2 52 | 7 42 | 1 12 | W 6 |
| T 7 | 16 25 | 4 55 | 4 12 | 12 35 | 1 5 | 22 21 | 0 41 | 9 28 | 1 40 | 21 17 | 0 10 | 8 11 | 2 16 | 21 54 | 0 4 | 2 36 | 1 15 | 24 3 | 3 10 | 20 1 | 19 58 | 2 49 | 7 41 | 1 12 | T 7 |
| F 8 | 16 42 | 0 40 | 4 41 | 12 3 | 1 21 | 22 35 | 0 44 | 9 16 | 1 41 | 21 17 | 0 10 | 8 14 | 2 17 | 21 54 | 0 4 | 2 35 | 1 15 | 24 3 | 3 10 | 20 3 | 19 59 | 2 47 | 7 40 | 1 12 | F 8 |
| S 9 | 17 0 | 3s39 | 4 57 | 11 36 | 1 35 | 22 49 | 0 46 | 9 4 | 1 42 | 21 17 | 0 10 | 8 16 | 2 17 | 21 54 | 0 4 | 2 34 | 1 15 | 24 3 | 3 10 | 20 5 | 19 59 | 2 45 | 7 39 | 1 12 | S 9 |
| S 10 | 17 16 | 7 52 | 5 0 | 11 15 | 1 48 | 23 2 | 0 49 | 8 52 | 1 42 | 21 17 | 0 11 | 8 18 | 2 17 | 21 53 | 0 4 | 2 34 | 1 15 | 24 3 | 3 10 | 20 8 | 20 0 | 2 43 | 7 38 | 1 12 | S 10 |
| M11 | 17 33 | 11 50 | 4 50 | 10 59 | 1 59 | 23 14 | 0 51 | 8 40 | 1 43 | 21 17 | 0 11 | 8 21 | 2 17 | 21 53 | 0 4 | 2 33 | 1 15 | 24 2 | 3 10 | 20 11 | 20 1 | 2 40 | 7 37 | 1 12 | M11 |
| T 12 | 17 49 | 15 21 | 4 26 | 10 49 | 2 7 | 23 26 | 0 54 | 8 28 | 1 44 | 21 17 | 0 11 | 8 23 | 2 17 | 21 53 | 0 3 | 2 33 | 1 15 | 24 2 | 3 10 | 20 14 | 20 1 | 2 38 | 7 36 | 1 12 | T 12 |
| W13 | 18 5 | 18 14 | 3 49 | 10 44 | 2 14 | 23 36 | 0 56 | 8 16 | 1 44 | 21 18 | 0 11 | 8 26 | 2 17 | 21 52 | 0 3 | 2 32 | 1 15 | 24 2 | 3 10 | 20 16 | 20 2 | 2 36 | 7 35 | 1 12 | W13 |
| T 14 | 18 21 | 20 17 | 3 0 | 10 45 | 2 19 | 23 47 | 0 59 | 8 4 | 1 45 | 21 18 | 0 11 | 8 28 | 2 17 | 21 52 | 0 3 | 2 32 | 1 16 | 24 2 | 3 10 | 20 18 | 20 3 | 2 33 | 7 34 | 1 11 | T 14 |
| F 15 | 18 37 | 21 19 | 2 1 | 10 50 | 2 23 | 23 56 | 1 1 | 7 52 | 1 46 | 21 18 | 0 11 | 8 30 | 2 17 | 21 52 | 0 3 | 2 31 | 1 16 | 24 2 | 3 10 | 20 19 | 20 3 | 2 31 | 7 33 | 1 11 | F 15 |
| S 16 | 18 52 | 21 13 | 0 55 | 11 0 | 2 25 | 24 5 | 1 3 | 7 40 | 1 46 | 21 18 | 0 12 | 8 33 | 2 17 | 21 51 | 0 3 | 2 31 | 1 16 | 24 1 | 3 10 | 20 19 | 20 4 | 2 29 | 7 32 | 1 11 | S 16 |
| S 17 | 19 6 | 19 57 | 0s16 | 11 13 | 2 26 | 24 13 | 1 5 | 7 28 | 1 47 | 21 19 | 0 12 | 8 35 | 2 17 | 21 51 | 0 3 | 2 30 | 1 16 | 24 1 | 3 10 | 20 20 | 20 5 | 2 27 | 7 32 | 1 11 | S 17 |
| M18 | 19 21 | 17 31 | 1 26 | 11 29 | 2 25 | 24 20 | 1 8 | 7 16 | 1 48 | 21 19 | 0 12 | 8 37 | 2 17 | 21 50 | 0 3 | 2 30 | 1 16 | 24 1 | 3 10 | 20 19 | 20 5 | 2 24 | 7 31 | 1 11 | M18 |
| T 19 | 19 35 | 14 4 | 2 34 | 11 49 | 2 24 | 24 27 | 1 10 | 7 4 | 1 48 | 21 20 | 0 12 | 8 40 | 2 18 | 21 50 | 0 3 | 2 29 | 1 16 | 24 1 | 3 10 | 20 19 | 20 6 | 2 22 | 7 30 | 1 11 | T 19 |
| W20 | 19 48 | 9 45 | 3 33 | 12 10 | 2 21 | 24 32 | 1 12 | 6 52 | 1 49 | 21 20 | 0 12 | 8 42 | 2 18 | 21 50 | 0 3 | 2 29 | 1 16 | 24 1 | 3 10 | 20 20 | 20 7 | 2 20 | 7 29 | 1 11 | W20 |
| T 21 | 20 2 | 4 49 | 4 21 | 12 34 | 2 18 | 24 37 | 1 14 | 6 40 | 1 50 | 21 21 | 0 12 | 8 44 | 2 18 | 21 49 | 0 3 | 2 28 | 1 16 | 24 0 | 3 10 | 20 20 | 20 8 | 2 17 | 7 28 | 1 11 | T 21 |
| F 22 | 20 15 | 0n27 | 4 52 | 12 59 | 2 14 | 24 42 | 1 16 | 6 28 | 1 50 | 21 21 | 0 13 | 8 46 | 2 18 | 21 49 | 0 3 | 2 28 | 1 16 | 24 0 | 3 10 | 20 21 | 20 8 | 2 15 | 7 27 | 1 10 | F 22 |
| S 23 | 20 27 | 5 45 | 5 5 | 13 26 | 2 10 | 24 45 | 1 18 | 6 17 | 1 51 | 21 22 | 0 13 | 8 49 | 2 18 | 21 49 | 0 3 | 2 27 | 1 16 | 24 0 | 3 10 | 20 23 | 20 9 | 2 13 | 7 26 | 1 10 | S 23 |
| S 24 | 20 39 | 10 44 | 4 57 | 13 54 | 2 5 | 24 48 | 1 20 | 6 5 | 1 52 | 21 22 | 0 13 | 8 51 | 2 18 | 21 48 | 0 3 | 2 27 | 1 16 | 24 0 | 3 10 | 20 25 | 20 10 | 2 10 | 7 26 | 1 10 | S 24 |
| M25 | 20 51 | 15 3 | 4 30 | 14 22 | 1 59 | 24 50 | 1 22 | 5 53 | 1 52 | 21 23 | 0 13 | 8 53 | 2 18 | 21 48 | 0 3 | 2 26 | 1 16 | 23 59 | 3 10 | 20 27 | 20 10 | 2 8 | 7 25 | 1 10 | M25 |
| T 26 | 21 3 | 18 25 | 3 45 | 14 51 | 1 53 | 24 52 | 1 24 | 5 41 | 1 53 | 21 24 | 0 13 | 8 55 | 2 18 | 21 48 | 0 3 | 2 26 | 1 16 | 23 59 | 3 10 | 20 28 | 20 11 | 2 6 | 7 24 | 1 10 | T 26 |
| W27 | 21 14 | 20 35 | 2 48 | 15 20 | 1 47 | 24 52 | 1 26 | 5 30 | 1 54 | 21 24 | 0 13 | 8 57 | 2 18 | 21 47 | 0 3 | 2 26 | 1 16 | 23 59 | 3 10 | 20 30 | 20 12 | 2 3 | 7 23 | 1 10 | W27 |
| T 28 | 21 24 | 21 28 | 1 43 | 15 49 | 1 41 | 24 52 | 1 28 | 5 18 | 1 55 | 21 25 | 0 14 | 8 59 | 2 19 | 21 47 | 0 3 | 2 25 | 1 16 | 23 59 | 3 10 | 20 31 | 20 12 | 2 1 | 7 23 | 1 10 | T 28 |
| F 29 | 21 34 | 21 6 | 0 33 | 16 19 | 1 34 | 24 51 | 1 30 | 5 7 | 1 55 | 21 26 | 0 14 | 9 1 | 2 19 | 21 46 | 0 3 | 2 25 | 1 16 | 23 58 | 3 10 | 20 31 | 20 13 | 1 59 | 7 22 | 1 10 | F 29 |
| S 30 | 21s44 | 19n37 | 0n36 | 16s48 | 1n27 | 24s49 | 1s31 | 4n55 | 1n56 | 21n27 | 0n14 | 9s 3 | 2n19 | 21n46 | 0s 3 | 2n25 | 1n16 | 23s58 | 3s10 | 20n31 | 20n14 | 1n56 | 7n21 | 1n 9 | S 30 |

Julian Day Number = 2370035.5, Delta T = 22.08 sec
Ecliptic obliquity = 23°28'01, Nutation = - 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'28, Lahiri = 20°44'29Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1776
# geocentric

## DECEMBER 1776 — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S 1 | 4 41 37 | 9♐27'25 | 17♌32 | 23♏ 8 | 7♑49 | 22♍36 | 24°R36 | 29♎21 | 8°R56 | 26♍53 | 26♑39 | 28♋22 | 29♋42 | 6♎ 7 | 15°R56 | S 1 |
| M 2 | 4 45 34 | 10°28'20 | 29°44 | 24°36 | 9° 3 | 23° 7 | 24♋33 | 29°28 | 8♊54 | 26°54 | 26°41 | 28°23 | 29°39 | 6°13 | 15♈55 | M 2 |
| T 3 | 4 49 30 | 11°29'15 | 11♍44 | 26° 5 | 10°18 | 23°37 | 24°28 | 29°34 | 8°51 | 26°55 | 26°42 | 28°R23 | 29°35 | 6°20 | 15°53 | T 3 |
| W 4 | 4 53 27 | 12°30'12 | 23°37 | 27°34 | 11°32 | 24° 7 | 24°24 | 29°40 | 8°49 | 26°56 | 26°44 | 28°23 | 29°32 | 6°27 | 15°52 | W 4 |
| T 5 | 4 57 23 | 13°31'10 | 5♎28 | 29° 4 | 12°46 | 24°37 | 24°20 | 29°46 | 8°46 | 26°57 | 26°45 | 28°20 | 29°29 | 6°33 | 15°51 | T 5 |
| F 6 | 5 1 20 | 14°32'10 | 17°21 | 0♐35 | 14° 0 | 25° 7 | 24°15 | 29°51 | 8°43 | 26°58 | 26°47 | 28°15 | 29°26 | 6°40 | 15°50 | F 6 |
| S 7 | 5 5 16 | 15°33'10 | 29°21 | 2° 5 | 15°15 | 25°37 | 24°10 | 29°57 | 8°41 | 26°58 | 26°48 | 28° 9 | 29°23 | 6°47 | 15°49 | S 7 |
| S 8 | 5 9 13 | 16°34'12 | 11♑30 | 3°36 | 16°29 | 26° 7 | 24° 5 | 0♑ 3 | 8°38 | 26°59 | 26°50 | 28° 1 | 29°20 | 6°54 | 15°48 | S 8 |
| M 9 | 5 13 9 | 17°35'14 | 23°52 | 5° 8 | 17°43 | 26°36 | 24° 0 | 0° 9 | 8°36 | 27° 0 | 26°51 | 27°53 | 29°16 | 7° 0 | 15°47 | M 9 |
| T 10 | 5 17 6 | 18°36'18 | 6♐27 | 6°39 | 18°57 | 27° 5 | 23°55 | 0°14 | 8°33 | 27° 0 | 26°53 | 27°46 | 29°13 | 7° 7 | 15°46 | T 10 |
| W11 | 5 21 3 | 19°37'22 | 19°16 | 8°11 | 20°11 | 27°34 | 23°49 | 0°20 | 8°31 | 27° 1 | 26°54 | 27°39 | 29°10 | 7°14 | 15°45 | W11 |
| T 12 | 5 24 59 | 20°38'27 | 2♑19 | 9°43 | 21°25 | 28° 3 | 23°44 | 0°26 | 8°28 | 27° 2 | 26°56 | 27°35 | 29° 7 | 7°20 | 15°44 | T 12 |
| F 13 | 5 28 56 | 21°39'33 | 15°34 | 11°16 | 22°39 | 28°32 | 23°38 | 0°31 | 8°26 | 27° 2 | 26°58 | 27°32 | 29° 4 | 7°27 | 15°43 | F 13 |
| S 14 | 5 32 52 | 22°40'39 | 29° 0 | 12°48 | 23°53 | 29° 0 | 23°32 | 0°36 | 8°24 | 27° 3 | 26°59 | 27°D32 | 29° 1 | 7°34 | 15°42 | S 14 |
| S 15 | 5 36 49 | 23°41'46 | 12♒37 | 14°21 | 25° 7 | 29°29 | 23°26 | 0°42 | 8°21 | 27° 3 | 27° 1 | 27°33 | 28°57 | 7°41 | 15°42 | S 15 |
| M16 | 5 40 45 | 24°42'53 | 26°24 | 15°53 | 26°22 | 29°57 | 23°20 | 0°47 | 8°19 | 27° 4 | 27° 3 | 27°34 | 28°54 | 7°47 | 15°41 | M16 |
| T 17 | 5 44 42 | 25°44'00 | 10♓20 | 17°26 | 27°35 | 0♎25 | 23°13 | 0°52 | 8°16 | 27° 4 | 27° 4 | 27°36 | 28°51 | 7°54 | 15°41 | T 17 |
| W18 | 5 48 38 | 26°45'07 | 24°23 | 18°59 | 28°49 | 0°52 | 23° 7 | 0°57 | 8°14 | 27° 4 | 27° 6 | 27°R36 | 28°48 | 8° 1 | 15°40 | W18 |
| T 19 | 5 52 35 | 27°46'14 | 8♈34 | 20°33 | 0♒ 3 | 1°20 | 23° 0 | 1° 2 | 8°12 | 27° 5 | 27° 8 | 27°36 | 28°45 | 8° 7 | 15°40 | T 19 |
| F 20 | 5 56 32 | 28°47'22 | 22°49 | 22° 6 | 1°17 | 1°47 | 22°53 | 1° 7 | 8° 9 | 27° 5 | 27°10 | 27°34 | 28°41 | 8°14 | 15°39 | F 20 |
| S 21 | 6 0 28 | 29°48'30 | 7♉ 7 | 23°40 | 2°31 | 2°14 | 22°46 | 1°12 | 8° 7 | 27° 5 | 27°11 | 27°31 | 28°38 | 8°21 | 15°39 | S 21 |
| S 22 | 6 4 25 | 0♑49'37 | 21°23 | 25°14 | 3°45 | 2°41 | 22°40 | 1°17 | 8° 5 | 27° 6 | 27°13 | 27°27 | 28°35 | 8°28 | 15°39 | S 22 |
| M23 | 6 8 21 | 1°50'45 | 5♊34 | 26°48 | 4°59 | 3° 8 | 22°32 | 1°22 | 8° 2 | 27° 6 | 27°15 | 27°23 | 28°32 | 8°34 | 15°38 | M23 |
| T 24 | 6 12 18 | 2°51'54 | 19°33 | 28°22 | 6°12 | 3°34 | 22°25 | 1°27 | 8° 0 | 27° 6 | 27°17 | 27°19 | 28°29 | 8°41 | 15°38 | T 24 |
| W25 | 6 16 14 | 3°53'02 | 3♋19 | 29°57 | 7°26 | 4° 0 | 22°18 | 1°31 | 7°58 | 27° 6 | 27°18 | 27°17 | 28°26 | 8°48 | 15°38 | W25 |
| T 26 | 6 20 11 | 4°54'10 | 16°46 | 1♑32 | 8°40 | 4°26 | 22°11 | 1°36 | 7°56 | 27° 6 | 27°20 | 27°15 | 28°22 | 8°54 | 15°D38 | T 26 |
| F 27 | 6 24 8 | 5°55'19 | 29°54 | 3° 7 | 9°53 | 4°52 | 22° 3 | 1°40 | 7°54 | 27° 6 | 27°22 | 27°D15 | 28°19 | 9° 1 | 15°38 | F 27 |
| S 28 | 6 28 4 | 6°56'28 | 12♌43 | 4°43 | 11° 7 | 5°17 | 21°56 | 1°45 | 7°51 | 27° 6 | 27°24 | 27°16 | 28°16 | 9° 8 | 15°38 | S 28 |
| S 29 | 6 32 1 | 7°57'37 | 25°13 | 6°19 | 12°20 | 5°42 | 21°48 | 1°49 | 7°49 | 27°R 6 | 27°26 | 27°17 | 28°13 | 9°15 | 15°38 | S 29 |
| M30 | 6 35 57 | 8°58'47 | 7♍28 | 7°55 | 13°34 | 6° 7 | 21°40 | 1°53 | 7°47 | 27° 6 | 27°28 | 27°19 | 28°10 | 9°21 | 15°39 | M30 |
| T 31 | 6 39 54 | 9♑59'56 | 19♍30 | 9♑32 | 14♒47 | 6♎32 | 21♋33 | 1♑57 | 7♊45 | 27♍ 6 | 27♑29 | 27♋20 | 28♋ 7 | 9♎28 | 15♈39 | T 31 |

| Day | ☉ | ☽ | | ☿ | | ♀ | | ♂ | | ♃ | | ♄ | | ♅ | | ♆ | | ♇ | | ☊ | ☊ | ⚸ | ⚷ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| S 1 | 21s54 | 17n13 | 1n42 | 17s17 | 1n20 | 24s47 | 1s33 | 4n44 | 1n57 | 21n27 | 0n14 | 9s 5 | 2n19 | 21n46 | 0s 3 | 2n24 | 1n16 | 23s58 | 3s10 | 20n31 | 20n14 | 1n54 | 7n21 | 1n 9 |
| M 2 | 22 3 | 14 5 | 2 41 | 17 46 | 1 13 | 24 44 | 1 34 | 4 32 | 1 58 | 21 28 | 0 14 | 9 7 | 2 19 | 21 45 | 0 3 | 2 24 | 1 16 | 23 58 | 3 11 | 20 31 | 20 15 | 1 52 | 7 20 | 1 9 |
| T 3 | 22 11 | 10 26 | 3 32 | 18 14 | 1 6 | 24 40 | 1 36 | 4 21 | 1 58 | 21 29 | 0 14 | 9 9 | 2 19 | 21 45 | 0 3 | 2 24 | 1 16 | 23 57 | 3 11 | 20 30 | 20 16 | 1 50 | 7 19 | 1 9 |
| W 4 | 22 19 | 6 25 | 4 14 | 18 41 | 0 59 | 24 35 | 1 37 | 4 9 | 1 59 | 21 30 | 0 15 | 9 11 | 2 19 | 21 44 | 0 3 | 2 23 | 1 16 | 23 57 | 3 11 | 20 31 | 20 16 | 1 47 | 7 19 | 1 9 |
| T 5 | 22 27 | 2 11 | 4 45 | 19 8 | 0 51 | 24 30 | 1 39 | 3 58 | 2 0 | 21 31 | 0 15 | 9 13 | 2 20 | 21 44 | 0 3 | 2 23 | 1 17 | 23 57 | 3 11 | 20 31 | 20 17 | 1 45 | 7 18 | 1 9 |
| F 6 | 22 34 | 2s 9 | 5 3 | 19 35 | 0 44 | 24 23 | 1 40 | 3 47 | 2 0 | 21 32 | 0 15 | 9 15 | 2 20 | 21 44 | 0 3 | 2 23 | 1 17 | 23 56 | 3 11 | 20 32 | 20 18 | 1 43 | 7 18 | 1 9 |
| S 7 | 22 41 | 6 26 | 5 9 | 20 0 | 0 37 | 24 16 | 1 41 | 3 36 | 2 1 | 21 33 | 0 15 | 9 17 | 2 20 | 21 43 | 0 3 | 2 23 | 1 17 | 23 56 | 3 11 | 20 33 | 20 18 | 1 40 | 7 17 | 1 9 |
| S 8 | 22 47 | 10 32 | 5 0 | 20 25 | 0 29 | 24 9 | 1 43 | 3 25 | 2 2 | 21 34 | 0 15 | 9 19 | 2 20 | 21 43 | 0 3 | 2 22 | 1 17 | 23 56 | 3 11 | 20 35 | 20 19 | 1 38 | 7 16 | 1 8 |
| M 9 | 22 53 | 14 16 | 4 38 | 20 49 | 0 22 | 24 0 | 1 44 | 3 14 | 2 3 | 21 35 | 0 15 | 9 21 | 2 20 | 21 43 | 0 3 | 2 22 | 1 17 | 23 56 | 3 11 | 20 36 | 20 20 | 1 36 | 7 16 | 1 8 |
| T 10 | 22 59 | 17 26 | 4 2 | 21 12 | 0 15 | 23 51 | 1 45 | 3 3 | 2 3 | 21 36 | 0 16 | 9 23 | 2 20 | 21 42 | 0 3 | 2 22 | 1 17 | 23 55 | 3 11 | 20 38 | 20 20 | 1 33 | 7 15 | 1 8 |
| W11 | 23 4 | 19 50 | 3 13 | 21 34 | 0 8 | 23 41 | 1 46 | 2 52 | 2 4 | 21 37 | 0 16 | 9 24 | 2 21 | 21 42 | 0 3 | 2 22 | 1 17 | 23 55 | 3 11 | 20 39 | 20 21 | 1 31 | 7 15 | 1 8 |
| T 12 | 23 8 | 21 14 | 2 13 | 21 55 | 0 1 | 23 31 | 1 47 | 2 41 | 2 5 | 21 38 | 0 16 | 9 26 | 2 21 | 21 41 | 0 3 | 2 22 | 1 17 | 23 55 | 3 11 | 20 40 | 20 22 | 1 28 | 7 14 | 1 8 |
| F 13 | 23 12 | 21 29 | 1 5 | 22 16 | 0s 6 | 23 20 | 1 48 | 2 31 | 2 6 | 21 40 | 0 16 | 9 28 | 2 21 | 21 41 | 0 3 | 2 21 | 1 17 | 23 54 | 3 11 | 20 41 | 20 22 | 1 26 | 7 14 | 1 8 |
| S 14 | 23 16 | 20 31 | 0s 8 | 22 35 | 0 13 | 23 8 | 1 48 | 2 20 | 2 7 | 21 41 | 0 16 | 9 30 | 2 21 | 21 41 | 0 3 | 2 21 | 1 17 | 23 54 | 3 11 | 20 41 | 20 23 | 1 24 | 7 14 | 1 8 |
| S 15 | 23 19 | 18 21 | 1 22 | 22 53 | 0 20 | 22 55 | 1 49 | 2 9 | 2 7 | 21 42 | 0 16 | 9 31 | 2 21 | 21 40 | 0 3 | 2 21 | 1 17 | 23 54 | 3 11 | 20 41 | 20 24 | 1 21 | 7 13 | 1 7 |
| M16 | 23 22 | 15 6 | 2 31 | 23 10 | 0 27 | 22 42 | 1 50 | 1 59 | 2 8 | 21 43 | 0 17 | 9 33 | 2 21 | 21 40 | 0 3 | 2 21 | 1 17 | 23 54 | 3 11 | 20 40 | 20 24 | 1 19 | 7 13 | 1 7 |
| T 17 | 23 24 | 10 59 | 3 33 | 23 25 | 0 33 | 22 28 | 1 50 | 1 48 | 2 9 | 21 44 | 0 17 | 9 35 | 2 22 | 21 40 | 0 3 | 2 21 | 1 17 | 23 53 | 3 11 | 20 40 | 20 25 | 1 17 | 7 13 | 1 7 |
| W18 | 23 26 | 6 14 | 4 22 | 23 40 | 0 40 | 22 13 | 1 51 | 1 38 | 2 10 | 21 46 | 0 17 | 9 36 | 2 22 | 21 39 | 0 3 | 2 21 | 1 17 | 23 53 | 3 11 | 20 40 | 20 25 | 1 14 | 7 12 | 1 7 |
| T 19 | 23 27 | 1 8 | 4 56 | 23 54 | 0 46 | 21 58 | 1 51 | 1 28 | 2 10 | 21 47 | 0 17 | 9 38 | 2 22 | 21 39 | 0 3 | 2 21 | 1 17 | 23 53 | 3 11 | 20 40 | 20 26 | 1 12 | 7 12 | 1 7 |
| F 20 | 23 28 | 4n 3 | 5 12 | 24 6 | 0 52 | 21 42 | 1 51 | 1 18 | 2 11 | 21 48 | 0 17 | 9 39 | 2 22 | 21 38 | 0 3 | 2 21 | 1 17 | 23 52 | 3 11 | 20 40 | 20 27 | 1 10 | 7 12 | 1 7 |
| S 21 | 23 28 | 9 2 | 5 9 | 24 17 | 0 58 | 21 26 | 1 51 | 1 8 | 2 12 | 21 50 | 0 17 | 9 41 | 2 22 | 21 38 | 0 3 | 2 20 | 1 17 | 23 52 | 3 11 | 20 41 | 20 27 | 1 7 | 7 11 | 1 7 |
| S 22 | 23 28 | 13 31 | 4 46 | 24 26 | 1 4 | 21 9 | 1 52 | 0 58 | 2 13 | 21 51 | 0 17 | 9 42 | 2 23 | 21 38 | 0 3 | 2 20 | 1 17 | 23 52 | 3 11 | 20 42 | 20 28 | 1 5 | 7 11 | 1 6 |
| M23 | 23 27 | 17 13 | 4 7 | 24 35 | 1 9 | 20 51 | 1 52 | 0 48 | 2 14 | 21 52 | 0 18 | 9 44 | 2 23 | 21 37 | 0 3 | 2 20 | 1 17 | 23 51 | 3 11 | 20 42 | 20 29 | 1 3 | 7 11 | 1 6 |
| T 24 | 23 26 | 19 51 | 3 12 | 24 42 | 1 15 | 20 33 | 1 52 | 0 38 | 2 15 | 21 54 | 0 18 | 9 45 | 2 23 | 21 37 | 0 3 | 2 20 | 1 17 | 23 51 | 3 11 | 20 43 | 20 29 | 1 0 | 7 11 | 1 6 |
| W25 | 23 25 | 21 18 | 2 8 | 24 48 | 1 20 | 20 14 | 1 51 | 0 29 | 2 15 | 21 55 | 0 18 | 9 47 | 2 23 | 21 37 | 0 3 | 2 20 | 1 18 | 23 51 | 3 11 | 20 44 | 20 30 | 0 58 | 7 11 | 1 6 |
| T 26 | 23 23 | 21 28 | 0 57 | 24 52 | 1 25 | 19 54 | 1 51 | 0 19 | 2 16 | 21 56 | 0 18 | 9 48 | 2 23 | 21 36 | 0 3 | 2 20 | 1 18 | 23 50 | 3 11 | 20 44 | 20 31 | 0 56 | 7 10 | 1 6 |
| F 27 | 23 20 | 20 26 | 0n15 | 24 55 | 1 30 | 19 34 | 1 51 | 0 10 | 2 17 | 21 58 | 0 18 | 9 49 | 2 24 | 21 36 | 0 3 | 2 20 | 1 18 | 23 50 | 3 11 | 20 44 | 20 31 | 0 53 | 7 10 | 1 6 |
| S 28 | 23 17 | 18 22 | 1 24 | 24 57 | 1 34 | 19 14 | 1 51 | 0 0 | 2 18 | 21 59 | 0 18 | 9 51 | 2 24 | 21 36 | 0 3 | 2 20 | 1 18 | 23 50 | 3 11 | 20 44 | 20 32 | 0 51 | 7 10 | 1 6 |
| S 29 | 23 14 | 15 27 | 2 28 | 24 57 | 1 38 | 18 53 | 1 50 | 0s 9 | 2 19 | 22 0 | 0 19 | 9 52 | 2 24 | 21 35 | 0 3 | 2 20 | 1 18 | 23 50 | 3 11 | 20 44 | 20 33 | 0 48 | 7 10 | 1 5 |
| M30 | 23 10 | 11 56 | 3 24 | 24 56 | 1 42 | 18 31 | 1 50 | 0 18 | 2 20 | 22 2 | 0 19 | 9 53 | 2 24 | 21 35 | 0 3 | 2 20 | 1 18 | 23 49 | 3 11 | 20 43 | 20 33 | 0 46 | 7 10 | 1 5 |
| T 31 | 23s 5 | 7n59 | 4n10 | 24s53 | 1s46 | 18s 9 | 1s49 | 0s27 | 2n20 | 22n 3 | 0n19 | 9s54 | 2n24 | 21n35 | 0s 3 | 2n21 | 1n18 | 23s49 | 3s12 | 20n43 | 20n34 | 0n44 | 7n10 | 1n 5 |

Julian Day Number = 2370065.5, Delta T = 22.09 sec
Ecliptic obliquity = 23°28'01, Nutation = - 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'32, Lahiri = 20°44'33Greg. Calendar