# Astrodienst Ephemeris Tables

## for the year 1580

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 1580
# geocentric

## JANUARY 1580 JC

**00:00 UT**

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F 1 | 7 18 14 | 20♑ 1'57 | 7♋57 | 0♒39 | 24♑50 | 16♐56 | 5♐54 | 5♒36 | 9♒54 | 12°R 5 | 0♈48 | 26°R 6 | 27♒48 | 4♋49 | 29♓ 8 | F 1 |
| S 2 | 7 22 10 | 21° 3'03 | 19°49 | 2°20 | 26° 5 | 17°39 | 6° 6 | 5°43 | 9°58 | 12♋ 4 | 0°48 | 26♒ 0 | 27°44 | 4°56 | 29°10 | S 2 |
| S 3 | 7 26 7 | 22° 4'07 | 1♌43 | 4° 1 | 27°20 | 18°23 | 6°17 | 5°50 | 10° 1 | 12° 2 | 0°49 | 25°56 | 27°41 | 5° 3 | 29°12 | S 3 |
| M 4 | 7 30 3 | 23° 5'12 | 13°42 | 5°42 | 28°36 | 19° 6 | 6°28 | 5°57 | 10° 4 | 12° 0 | 0°50 | 25°53 | 27°38 | 5° 9 | 29°14 | M 4 |
| T 5 | 7 34 0 | 24° 6'15 | 25°47 | 7°22 | 29°51 | 19°49 | 6°39 | 6° 4 | 10° 8 | 11°59 | 0°50 | 25°D52 | 27°35 | 5°16 | 29°16 | T 5 |
| W 6 | 7 37 57 | 25° 7'18 | 8♍ 0 | 9° 1 | 1♒ 6 | 20°33 | 6°50 | 6°11 | 10°11 | 11°57 | 0°51 | 25°53 | 27°32 | 5°23 | 29°18 | W 6 |
| T 7 | 7 41 53 | 26° 8'21 | 20°25 | 10°39 | 2°22 | 21°16 | 7° 1 | 6°18 | 10°15 | 11°55 | 0°52 | 25°54 | 27°29 | 5°29 | 29°20 | T 7 |
| F 8 | 7 45 50 | 27° 9'22 | 3♎ 5 | 12°16 | 3°37 | 22° 0 | 7°12 | 6°25 | 10°18 | 11°54 | 0°52 | 25°56 | 27°25 | 5°36 | 29°22 | F 8 |
| S 9 | 7 49 46 | 28°10'24 | 16° 2 | 13°51 | 4°52 | 22°43 | 7°23 | 6°32 | 10°21 | 11°52 | 0°53 | 25°58 | 27°22 | 5°43 | 29°24 | S 9 |
| S 10 | 7 53 43 | 29°11'25 | 29°21 | 15°25 | 6° 8 | 23°27 | 7°33 | 6°39 | 10°25 | 11°51 | 0°54 | 25°R58 | 27°19 | 5°50 | 29°26 | S 10 |
| M11 | 7 57 39 | 0♒12'25 | 13♏ 3 | 16°56 | 7°23 | 24°10 | 7°44 | 6°46 | 10°28 | 11°49 | 0°55 | 25°58 | 27°16 | 5°56 | 29°28 | M11 |
| T 12 | 8 1 36 | 1°13'25 | 27°10 | 18°24 | 8°38 | 24°54 | 7°54 | 6°54 | 10°32 | 11°47 | 0°56 | 25°56 | 27°13 | 6° 3 | 29°31 | T 12 |
| W13 | 8 5 32 | 2°14'24 | 11♐40 | 19°48 | 9°54 | 25°38 | 8° 5 | 7° 1 | 10°35 | 11°46 | 0°56 | 25°53 | 27°10 | 6°10 | 29°33 | W13 |
| T 14 | 8 9 29 | 3°15'23 | 26°29 | 21° 9 | 11° 9 | 26°21 | 8°15 | 7° 8 | 10°39 | 11°44 | 0°57 | 25°50 | 27° 6 | 6°16 | 29°35 | T 14 |
| F 15 | 8 13 26 | 4°16'21 | 11♑32 | 22°24 | 12°24 | 27° 5 | 8°25 | 7°15 | 10°42 | 11°43 | 0°58 | 25°47 | 27° 3 | 6°23 | 29°38 | F 15 |
| S 16 | 8 17 22 | 5°17'17 | 26°39 | 23°35 | 13°39 | 27°49 | 8°35 | 7°22 | 10°46 | 11°41 | 0°59 | 25°44 | 27° 0 | 6°30 | 29°40 | S 16 |
| S 17 | 8 21 19 | 6°18'13 | 11♒41 | 24°38 | 14°55 | 28°33 | 8°45 | 7°29 | 10°49 | 11°40 | 1° 0 | 25°43 | 26°57 | 6°36 | 29°43 | S 17 |
| M18 | 8 25 15 | 7°19'08 | 26°29 | 25°35 | 16°10 | 29°16 | 8°55 | 7°37 | 10°53 | 11°38 | 1° 1 | 25°D42 | 26°54 | 6°43 | 29°45 | M18 |
| T 19 | 8 29 12 | 8°20'01 | 10♓56 | 26°24 | 17°25 | 0♑ 0 | 9° 5 | 7°44 | 10°56 | 11°37 | 1° 2 | 25°43 | 26°50 | 6°50 | 29°48 | T 19 |
| W20 | 8 33 8 | 9°20'53 | 24°58 | 27° 4 | 18°40 | 0°44 | 9°15 | 7°51 | 11° 0 | 11°35 | 1° 3 | 25°44 | 26°47 | 6°56 | 29°50 | W20 |
| T 21 | 8 37 5 | 10°21'43 | 8♈32 | 27°35 | 19°56 | 1°28 | 9°24 | 7°58 | 11° 3 | 11°34 | 1° 4 | 25°45 | 26°44 | 7° 3 | 29°53 | T 21 |
| F 22 | 8 41 1 | 11°22'32 | 21°41 | 27°55 | 21°11 | 2°12 | 9°34 | 8° 5 | 11° 7 | 11°32 | 1° 5 | 25°46 | 26°41 | 7°10 | 29°55 | F 22 |
| S 23 | 8 44 58 | 12°23'20 | 4♉26 | 28°R 5 | 22°26 | 2°56 | 9°43 | 8°12 | 11°10 | 11°31 | 1° 6 | 25°47 | 26°38 | 7°17 | 29°58 | S 23 |
| S 24 | 8 48 55 | 13°24'06 | 16°51 | 28° 5 | 23°41 | 3°40 | 9°52 | 8°20 | 11°14 | 11°29 | 1° 7 | 25°R47 | 26°35 | 7°23 | 0♈ 1 | S 24 |
| M25 | 8 52 51 | 14°24'50 | 29° 1 | 27°53 | 24°56 | 4°24 | 10° 1 | 8°27 | 11°17 | 11°28 | 1° 8 | 25°47 | 26°31 | 7°30 | 0° 4 | M25 |
| T 26 | 8 56 48 | 15°25'33 | 10♊59 | 27°31 | 26°11 | 5° 8 | 10°10 | 8°34 | 11°21 | 11°27 | 1° 9 | 25°46 | 26°28 | 7°37 | 0° 7 | T 26 |
| W27 | 9 0 44 | 16°26'15 | 22°52 | 26°58 | 27°26 | 5°52 | 10°19 | 8°41 | 11°24 | 11°25 | 1°10 | 25°45 | 26°25 | 7°43 | 0° 9 | W27 |
| T 28 | 9 4 41 | 17°26'54 | 4♋42 | 26°16 | 28°41 | 6°36 | 10°28 | 8°48 | 11°28 | 11°24 | 1°11 | 25°43 | 26°22 | 7°50 | 0°12 | T 28 |
| F 29 | 9 8 37 | 18°27'32 | 16°32 | 25°26 | 29°56 | 7°20 | 10°36 | 8°55 | 11°31 | 11°23 | 1°12 | 25°42 | 26°19 | 7°57 | 0°15 | F 29 |
| S 30 | 9 12 34 | 19°28'09 | 28°27 | 24°29 | 1♓11 | 8° 5 | 10°45 | 9° 2 | 11°35 | 11°22 | 1°14 | 25°41 | 26°16 | 8° 3 | 0°18 | S 30 |
| S 31 | 9 16 30 | 20♒28'44 | 10♌27 | 23♒26 | 2♓26 | 8♑49 | 10♐53 | 9♒ 9 | 11♒38 | 11♋20 | 1♈15 | 25♒41 | 26♒12 | 8♋10 | 0♈21 | 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 | 22s 0 | 27n 6 | 3n51 | 22s 0 | 2s 0 | 22s17 | 1s 5 | 23s 4 | 0s13 | 20s38 | 0n43 | 19s34 | 0s40 | 18s25 | 0s38 | 22n10 | 0s47 | 14s56 | 16s40 | 12s51 | 12s16 | 27n31 | 2n12 | 2n47 |
| S 2 | 21 51 | 25 4 | 3 4 | 21 35 | 1 57 | 22 4 | 1 7 | 23 9 | 0 14 | 20 40 | 0 43 | 19 33 | 0 41 | 18 24 | 0 38 | 22 10 | 0 47 | 14 55 | 16 39 | 12 53 | 12 17 | 27 30 | 2 13 | 2 46 |
| S 3 | 21 41 | 21 54 | 2 8 | 21 8 | 1 53 | 21 51 | 1 8 | 23 13 | 0 14 | 20 42 | 0 43 | 19 31 | 0 41 | 18 23 | 0 38 | 22 10 | 0 47 | 14 55 | 16 39 | 12 54 | 12 18 | 27 29 | 2 13 | 2 46 |
| M 4 | 21 31 | 17 48 | 1 6 | 20 39 | 1 49 | 21 38 | 1 10 | 23 18 | 0 15 | 20 44 | 0 43 | 19 29 | 0 41 | 18 22 | 0 38 | 22 10 | 0 47 | 14 54 | 16 39 | 12 55 | 12 19 | 27 29 | 2 14 | 2 46 |
| T 5 | 21 20 | 12 58 | 0 1 | 20 9 | 1 44 | 21 23 | 1 11 | 23 22 | 0 16 | 20 46 | 0 43 | 19 27 | 0 41 | 18 21 | 0 38 | 22 10 | 0 47 | 14 54 | 16 38 | 12 56 | 12 20 | 27 28 | 2 14 | 2 46 |
| W 6 | 21 10 | 7 34 | 1s 6 | 19 38 | 1 38 | 21 8 | 1 13 | 23 26 | 0 16 | 20 48 | 0 43 | 19 26 | 0 41 | 18 20 | 0 38 | 22 11 | 0 47 | 14 53 | 16 38 | 12 55 | 12 22 | 27 27 | 2 15 | 2 46 |
| T 7 | 20 58 | 1 48 | 2 11 | 19 5 | 1 32 | 20 53 | 1 14 | 23 30 | 0 17 | 20 49 | 0 43 | 19 24 | 0 41 | 18 19 | 0 38 | 22 11 | 0 47 | 14 52 | 16 38 | 12 55 | 12 23 | 27 26 | 2 16 | 2 45 |
| F 8 | 20 47 | 4s 8 | 3 10 | 18 31 | 1 25 | 20 37 | 1 15 | 23 33 | 0 18 | 20 51 | 0 43 | 19 22 | 0 41 | 18 19 | 0 38 | 22 11 | 0 47 | 14 52 | 16 37 | 12 54 | 12 24 | 27 25 | 2 16 | 2 45 |
| S 9 | 20 35 | 10 2 | 4 1 | 17 56 | 1 17 | 20 20 | 1 16 | 23 36 | 0 19 | 20 53 | 0 43 | 19 21 | 0 41 | 18 18 | 0 38 | 22 11 | 0 47 | 14 51 | 16 37 | 12 54 | 12 25 | 27 24 | 2 17 | 2 45 |
| S 10 | 20 22 | 15 39 | 4 41 | 17 20 | 1 8 | 20 2 | 1 18 | 23 39 | 0 19 | 20 55 | 0 43 | 19 19 | 0 41 | 18 17 | 0 38 | 22 11 | 0 47 | 14 51 | 16 37 | 12 54 | 12 26 | 27 24 | 2 18 | 2 45 |
| M11 | 20 9 | 20 39 | 5 6 | 16 44 | 0 58 | 19 44 | 1 19 | 23 42 | 0 20 | 20 56 | 0 43 | 19 17 | 0 41 | 18 16 | 0 38 | 22 11 | 0 47 | 14 50 | 16 36 | 12 54 | 12 27 | 27 23 | 2 18 | 2 45 |
| T 12 | 19 56 | 24 40 | 5 14 | 16 6 | 0 48 | 19 26 | 1 20 | 23 45 | 0 21 | 20 58 | 0 43 | 19 15 | 0 41 | 18 15 | 0 38 | 22 12 | 0 47 | 14 49 | 16 36 | 12 54 | 12 28 | 27 22 | 2 19 | 2 44 |
| W13 | 19 42 | 27 14 | 5 3 | 15 29 | 0 36 | 19 7 | 1 21 | 23 47 | 0 22 | 21 0 | 0 43 | 19 14 | 0 41 | 18 14 | 0 38 | 22 12 | 0 47 | 14 49 | 16 36 | 12 55 | 12 29 | 27 21 | 2 20 | 2 44 |
| T 14 | 19 28 | 27 58 | 4 31 | 14 52 | 0 24 | 18 47 | 1 22 | 23 49 | 0 22 | 21 1 | 0 43 | 19 12 | 0 41 | 18 13 | 0 38 | 22 12 | 0 47 | 14 48 | 16 36 | 12 56 | 12 30 | 27 20 | 2 21 | 2 44 |
| F 15 | 19 14 | 26 39 | 3 40 | 14 15 | 0 11 | 18 27 | 1 23 | 23 51 | 0 23 | 21 3 | 0 43 | 19 10 | 0 41 | 18 12 | 0 38 | 22 12 | 0 47 | 14 48 | 16 35 | 12 57 | 12 31 | 27 19 | 2 21 | 2 44 |
| S 16 | 18 59 | 23 23 | 2 33 | 13 39 | 0n 3 | 18 6 | 1 23 | 23 52 | 0 24 | 21 4 | 0 43 | 19 8 | 0 41 | 18 11 | 0 38 | 22 12 | 0 47 | 14 47 | 16 35 | 12 58 | 12 32 | 27 18 | 2 22 | 2 44 |
| S 17 | 18 44 | 18 33 | 1 17 | 13 4 | 0 17 | 17 45 | 1 24 | 23 54 | 0 24 | 21 6 | 0 43 | 19 7 | 0 41 | 18 10 | 0 38 | 22 12 | 0 47 | 14 46 | 16 35 | 12 59 | 12 34 | 27 17 | 2 23 | 2 43 |
| M18 | 18 29 | 12 39 | 0n 4 | 12 31 | 0 33 | 17 23 | 1 25 | 23 55 | 0 25 | 21 7 | 0 43 | 19 5 | 0 42 | 18 9 | 0 38 | 22 12 | 0 47 | 14 46 | 16 34 | 12 59 | 12 35 | 27 17 | 2 24 | 2 43 |
| T 19 | 18 13 | 6 12 | 1 23 | 11 59 | 0 49 | 17 1 | 1 26 | 23 56 | 0 26 | 21 9 | 0 43 | 19 3 | 0 42 | 18 8 | 0 38 | 22 13 | 0 47 | 14 45 | 16 34 | 12 59 | 12 36 | 27 16 | 2 25 | 2 43 |
| W20 | 17 57 | 0n22 | 2 35 | 11 30 | 1 5 | 16 38 | 1 26 | 23 56 | 0 27 | 21 10 | 0 43 | 19 1 | 0 42 | 18 7 | 0 38 | 22 13 | 0 47 | 14 44 | 16 34 | 12 58 | 12 37 | 27 15 | 2 25 | 2 43 |
| T 21 | 17 41 | 6 41 | 3 35 | 11 4 | 1 22 | 16 15 | 1 27 | 23 57 | 0 27 | 21 12 | 0 43 | 18 59 | 0 42 | 18 6 | 0 38 | 22 13 | 0 47 | 14 44 | 16 34 | 12 58 | 12 38 | 27 14 | 2 26 | 2 43 |
| F 22 | 17 24 | 12 31 | 4 22 | 10 41 | 1 39 | 15 51 | 1 27 | 23 57 | 0 28 | 21 13 | 0 43 | 18 58 | 0 42 | 18 5 | 0 38 | 22 13 | 0 47 | 14 43 | 16 33 | 12 58 | 12 39 | 27 13 | 2 27 | 2 43 |
| S 23 | 17 8 | 17 39 | 4 55 | 10 21 | 1 56 | 15 27 | 1 28 | 23 57 | 0 29 | 21 15 | 0 44 | 18 56 | 0 42 | 18 4 | 0 38 | 22 13 | 0 47 | 14 43 | 16 33 | 12 57 | 12 40 | 27 12 | 2 28 | 2 42 |
| S 24 | 16 50 | 21 54 | 5 13 | 10 6 | 2 13 | 15 2 | 1 28 | 23 56 | 0 30 | 21 16 | 0 44 | 18 54 | 0 42 | 18 3 | 0 38 | 22 13 | 0 47 | 14 42 | 16 33 | 12 57 | 12 41 | 27 11 | 2 29 | 2 42 |
| M25 | 16 33 | 25 7 | 5 16 | 9 55 | 2 29 | 14 37 | 1 28 | 23 56 | 0 30 | 21 17 | 0 44 | 18 52 | 0 42 | 18 2 | 0 38 | 22 14 | 0 47 | 14 41 | 16 32 | 12 57 | 12 42 | 27 10 | 2 30 | 2 42 |
| T 26 | 16 15 | 27 11 | 5 6 | 9 48 | 2 44 | 14 12 | 1 28 | 23 55 | 0 31 | 21 18 | 0 44 | 18 50 | 0 42 | 18 1 | 0 38 | 22 14 | 0 47 | 14 41 | 16 32 | 12 58 | 12 43 | 27 9 | 2 31 | 2 42 |
| W27 | 15 57 | 28 0 | 4 42 | 9 46 | 2 58 | 13 47 | 1 29 | 23 54 | 0 32 | 21 20 | 0 44 | 18 49 | 0 42 | 18 0 | 0 38 | 22 14 | 0 47 | 14 40 | 16 32 | 12 58 | 12 44 | 27 8 | 2 32 | 2 42 |
| T 28 | 15 38 | 27 31 | 4 7 | 9 48 | 3 11 | 13 20 | 1 29 | 23 53 | 0 33 | 21 21 | 0 44 | 18 47 | 0 42 | 17 59 | 0 38 | 22 14 | 0 47 | 14 39 | 16 32 | 12 59 | 12 45 | 27 7 | 2 33 | 2 41 |
| F 29 | 15 20 | 25 47 | 3 20 | 9 54 | 3 22 | 12 54 | 1 29 | 23 51 | 0 34 | 21 22 | 0 44 | 18 45 | 0 42 | 17 59 | 0 38 | 22 14 | 0 47 | 14 39 | 16 31 | 12 59 | 12 47 | 27 6 | 2 34 | 2 41 |
| S 30 | 15 1 | 22 54 | 2 25 | 10 5 | 3 31 | 12 27 | 1 29 | 23 49 | 0 34 | 21 23 | 0 44 | 18 43 | 0 42 | 17 58 | 0 38 | 22 14 | 0 46 | 14 38 | 16 31 | 12 59 | 12 48 | 27 5 | 2 35 | 2 41 |
| S 31 | 14s42 | 19n 0 | 1n23 | 10s19 | 3n38 | 12s 0 | 1s28 | 23s47 | 0s35 | 21s24 | 0n44 | 18s41 | 0s42 | 17s57 | 0s38 | 22n14 | 0s46 | 14s37 | 16s31 | 12s59 | 12s49 | 27n 4 | 2n36 | 2n41 |

Julian Day Number = 2298152.5, Delta T = 120.00 sec
Ecliptic obliquity = 23°29'45, Nutation = 0°00'10, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°52'45, Lahiri = 17°59'46 Julian Calendar 1 Jan. 1580 == Greg. Calendar 11 Jan. 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## FEBRUARY 1580 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M 1 | 9 20 27 | 21♒29'17 | 22♌36 | 22°R20 | 3♓41 | 9♑33 | 11♐ 1 | 9♒16 | 11♒41 | 11°R19 | 1♈16 | 25°D41 | 26♒ 9 | 8♋17 | 0♈24 | M 1 |
| T 2 | 9 24 24 | 22°29'49 | 4♍55 | 21♒12 | 4°56 | 10°17 | 11°10 | 9°23 | 11°45 | 11♋18 | 1°17 | 25♒41 | 26° 6 | 8°23 | 0°27 | T 2 |
| W 3 | 9 28 20 | 23°30'19 | 17°25 | 20° 3 | 6°11 | 11° 2 | 11°18 | 9°30 | 11°48 | 11°17 | 1°18 | 25°41 | 26° 3 | 8°30 | 0°30 | W 3 |
| T 4 | 9 32 17 | 24°30'47 | 0♎ 7 | 18°57 | 7°26 | 11°46 | 11°25 | 9°38 | 11°52 | 11°16 | 1°20 | 25°41 | 26° 0 | 8°37 | 0°33 | T 4 |
| F 5 | 9 36 13 | 25°31'15 | 13° 2 | 17°54 | 8°41 | 12°30 | 11°33 | 9°45 | 11°55 | 11°14 | 1°21 | 25°R41 | 25°56 | 8°44 | 0°37 | F 5 |
| S 6 | 9 40 10 | 26°31'40 | 26°12 | 16°55 | 9°56 | 13°15 | 11°41 | 9°51 | 11°59 | 11°13 | 1°22 | 25°41 | 25°53 | 8°50 | 0°40 | S 6 |
| S 7 | 9 44 6 | 27°32'05 | 9♏37 | 16° 1 | 11°11 | 13°59 | 11°48 | 9°58 | 12° 2 | 11°12 | 1°23 | 25°41 | 25°50 | 8°57 | 0°43 | S 7 |
| M 8 | 9 48 3 | 28°32'28 | 23°19 | 15°14 | 12°26 | 14°44 | 11°55 | 10° 5 | 12° 5 | 11°11 | 1°24 | 25°D41 | 25°47 | 9° 4 | 0°46 | M 8 |
| T 9 | 9 51 59 | 29°32'50 | 7♐16 | 14°34 | 13°40 | 15°28 | 12° 3 | 10°12 | 12° 9 | 11°10 | 1°26 | 25°41 | 25°44 | 9°10 | 0°49 | T 9 |
| W10 | 9 55 56 | 0♓33'10 | 21°30 | 14° 1 | 14°55 | 16°13 | 12°10 | 10°19 | 12°12 | 11° 9 | 1°27 | 25°41 | 25°41 | 9°17 | 0°53 | W10 |
| T 11 | 9 59 53 | 1°33'29 | 5♑56 | 13°35 | 16°10 | 16°57 | 12°16 | 10°26 | 12°15 | 11° 8 | 1°28 | 25°41 | 25°37 | 9°24 | 0°56 | T 11 |
| F 12 | 10 3 49 | 2°33'47 | 20°33 | 13°16 | 17°25 | 17°42 | 12°23 | 10°33 | 12°19 | 11° 7 | 1°30 | 25°42 | 25°34 | 9°30 | 0°59 | F 12 |
| S 13 | 10 7 46 | 3°34'03 | 5♒15 | 13° 5 | 18°39 | 18°26 | 12°30 | 10°40 | 12°22 | 11° 6 | 1°31 | 25°43 | 25°31 | 9°37 | 1° 3 | S 13 |
| S 14 | 10 11 42 | 4°34'17 | 19°55 | 13°D 0 | 19°54 | 19°11 | 12°36 | 10°46 | 12°25 | 11° 5 | 1°32 | 25°R43 | 25°28 | 9°44 | 1° 6 | S 14 |
| M15 | 10 15 39 | 5°34'30 | 4♓27 | 13° 2 | 21° 9 | 19°56 | 12°42 | 10°53 | 12°29 | 11° 5 | 1°34 | 25°43 | 25°25 | 9°50 | 1° 9 | M15 |
| T 16 | 10 19 35 | 6°34'40 | 18°46 | 13°11 | 22°23 | 20°40 | 12°49 | 11° 0 | 12°32 | 11° 4 | 1°35 | 25°42 | 25°22 | 9°57 | 1°13 | T 16 |
| W17 | 10 23 32 | 7°34'49 | 2♈45 | 13°25 | 23°38 | 21°25 | 12°55 | 11° 7 | 12°35 | 11° 3 | 1°36 | 25°41 | 25°18 | 10° 4 | 1°16 | W17 |
| T 18 | 10 27 28 | 8°34'56 | 16°22 | 13°45 | 24°53 | 22°10 | 13° 0 | 11°13 | 12°38 | 11° 2 | 1°38 | 25°39 | 25°15 | 10°10 | 1°20 | T 18 |
| F 19 | 10 31 25 | 9°35'00 | 29°35 | 14° 9 | 26° 7 | 22°55 | 13° 6 | 11°20 | 12°42 | 11° 1 | 1°39 | 25°38 | 25°12 | 10°17 | 1°23 | F 19 |
| S 20 | 10 35 22 | 10°35'03 | 12♉26 | 14°39 | 27°22 | 23°39 | 13°12 | 11°26 | 12°45 | 11° 1 | 1°40 | 25°36 | 25° 9 | 10°24 | 1°27 | S 20 |
| S 21 | 10 39 18 | 11°35'03 | 24°56 | 15°14 | 28°36 | 24°24 | 13°17 | 11°33 | 12°48 | 11° 0 | 1°42 | 25°34 | 25° 6 | 10°30 | 1°30 | S 21 |
| M22 | 10 43 15 | 12°35'02 | 7♊ 9 | 15°52 | 29°51 | 25° 9 | 13°22 | 11°40 | 12°51 | 10°59 | 1°43 | 25°D33 | 25° 2 | 10°37 | 1°34 | M22 |
| T 23 | 10 47 11 | 13°34'58 | 19° 9 | 16°35 | 1♈ 5 | 25°54 | 13°27 | 11°46 | 12°54 | 10°59 | 1°45 | 25°33 | 24°59 | 10°44 | 1°37 | T 23 |
| W24 | 10 51 8 | 14°34'52 | 1♋ 2 | 17°21 | 2°20 | 26°39 | 13°32 | 11°52 | 12°57 | 10°58 | 1°46 | 25°34 | 24°56 | 10°51 | 1°41 | W24 |
| T 25 | 10 55 4 | 15°34'43 | 12°52 | 18°11 | 3°34 | 27°24 | 13°37 | 11°59 | 13° 1 | 10°58 | 1°48 | 25°36 | 24°53 | 10°57 | 1°44 | T 25 |
| F 26 | 10 59 1 | 16°34'33 | 24°43 | 19° 4 | 4°48 | 28° 8 | 13°41 | 12° 5 | 13° 4 | 10°57 | 1°49 | 25°37 | 24°50 | 11° 4 | 1°48 | F 26 |
| S 27 | 11 2 57 | 17°34'20 | 6♌41 | 20° 0 | 6° 3 | 28°53 | 13°45 | 12°11 | 13° 7 | 10°57 | 1°50 | 25°39 | 24°47 | 11°11 | 1°52 | S 27 |
| S 28 | 11 6 54 | 18°34'05 | 18°48 | 20°59 | 7°17 | 29°38 | 13°50 | 12°18 | 13°10 | 10°56 | 1°52 | 25°40 | 24°43 | 11°17 | 1°55 | S 28 |
| M29 | 11 10 51 | 19♓33'48 | 1♍ 7 | 22♒ 1 | 8♈31 | 0♒23 | 13♐54 | 12♒24 | 13♒13 | 10♋56 | 1♈53 | 25°R40 | 24♒40 | 11♋24 | 1♈59 | M29 |

| 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 | 14s22 | 14n17 | 0n17 | 10s36 | 3n42 | 11s33 | 1s28 | 23s45 | 0s36 | 21s26 | 0n44 | 18s40 | 0s43 | 17s56 | 0s38 | 22n14 | 0s46 | 14s37 | 16s31 | 13s 0 | 12s50 | 27n 3 | 2n37 | 2n41 |
| T 2 | 14 3 | 8 56 | 0s51 | 10 55 | 3 44 | 11 5 | 1 28 | 23 42 | 0 37 | 21 27 | 0 44 | 18 38 | 0 43 | 17 55 | 0 38 | 22 15 | 0 46 | 14 36 | 16 31 | 12 59 | 12 51 | 27 2 | 2 38 | 2 41 |
| W 3 | 13 43 | 3 11 | 1 58 | 11 17 | 3 44 | 10 37 | 1 28 | 23 39 | 0 37 | 21 28 | 0 44 | 18 36 | 0 43 | 17 54 | 0 38 | 22 15 | 0 46 | 14 35 | 16 30 | 12 59 | 12 52 | 27 1 | 2 39 | 2 41 |
| T 4 | 13 23 | 2s48 | 3 0 | 11 40 | 3 42 | 10 9 | 1 27 | 23 36 | 0 38 | 21 29 | 0 44 | 18 34 | 0 43 | 17 53 | 0 38 | 22 15 | 0 46 | 14 35 | 16 30 | 12 59 | 12 53 | 27 0 | 2 40 | 2 40 |
| F 5 | 13 3 | 8 45 | 3 54 | 12 3 | 3 38 | 9 40 | 1 27 | 23 33 | 0 39 | 21 30 | 0 44 | 18 32 | 0 43 | 17 52 | 0 38 | 22 15 | 0 46 | 14 34 | 16 30 | 12 59 | 12 54 | 26 59 | 2 41 | 2 40 |
| S 6 | 12 42 | 14 25 | 4 36 | 12 27 | 3 31 | 9 12 | 1 26 | 23 30 | 0 40 | 21 31 | 0 44 | 18 31 | 0 43 | 17 51 | 0 38 | 22 15 | 0 46 | 14 33 | 16 30 | 12 59 | 12 55 | 26 58 | 2 43 | 2 40 |
| S 7 | 12 21 | 19 33 | 5 5 | 12 50 | 3 23 | 8 43 | 1 26 | 23 26 | 0 40 | 21 32 | 0 44 | 18 29 | 0 43 | 17 50 | 0 38 | 22 15 | 0 46 | 14 33 | 16 30 | 12 59 | 12 56 | 26 57 | 2 44 | 2 40 |
| M 8 | 12 1 | 23 45 | 5 17 | 13 13 | 3 14 | 8 13 | 1 25 | 23 22 | 0 41 | 21 33 | 0 44 | 18 27 | 0 43 | 17 49 | 0 38 | 22 15 | 0 46 | 14 32 | 16 29 | 12 59 | 12 57 | 26 56 | 2 45 | 2 40 |
| T 9 | 11 39 | 26 41 | 5 11 | 13 35 | 3 3 | 7 44 | 1 24 | 23 18 | 0 42 | 21 34 | 0 44 | 18 25 | 0 43 | 17 48 | 0 38 | 22 15 | 0 46 | 14 31 | 16 29 | 12 59 | 12 58 | 26 55 | 2 46 | 2 40 |
| W10 | 11 18 | 27 59 | 4 46 | 13 56 | 2 51 | 7 14 | 1 23 | 23 13 | 0 43 | 21 35 | 0 44 | 18 24 | 0 43 | 17 47 | 0 38 | 22 16 | 0 46 | 14 31 | 16 29 | 12 59 | 12 59 | 26 53 | 2 47 | 2 39 |
| T 11 | 10 57 | 27 24 | 4 3 | 14 15 | 2 39 | 6 44 | 1 23 | 23 8 | 0 44 | 21 35 | 0 44 | 18 22 | 0 43 | 17 46 | 0 38 | 22 16 | 0 46 | 14 30 | 16 29 | 12 59 | 13 1 | 26 52 | 2 48 | 2 39 |
| F 12 | 10 35 | 24 56 | 3 3 | 14 32 | 2 26 | 6 14 | 1 22 | 23 3 | 0 44 | 21 36 | 0 44 | 18 20 | 0 44 | 17 45 | 0 38 | 22 16 | 0 46 | 14 29 | 16 29 | 12 59 | 13 2 | 26 51 | 2 50 | 2 39 |
| S 13 | 10 13 | 20 48 | 1 51 | 14 48 | 2 13 | 5 44 | 1 21 | 22 58 | 0 45 | 21 37 | 0 44 | 18 18 | 0 44 | 17 44 | 0 38 | 22 16 | 0 46 | 14 28 | 16 28 | 12 59 | 13 3 | 26 50 | 2 51 | 2 39 |
| S 14 | 9 51 | 15 23 | 0 32 | 15 2 | 2 0 | 5 14 | 1 20 | 22 53 | 0 46 | 21 38 | 0 44 | 18 16 | 0 44 | 17 43 | 0 38 | 22 16 | 0 46 | 14 28 | 16 28 | 12 59 | 13 4 | 26 49 | 2 52 | 2 39 |
| M15 | 9 29 | 9 9 | 0n48 | 15 15 | 1 46 | 4 43 | 1 19 | 22 47 | 0 47 | 21 39 | 0 44 | 18 15 | 0 44 | 17 43 | 0 38 | 22 16 | 0 46 | 14 27 | 16 28 | 12 59 | 13 5 | 26 48 | 2 53 | 2 39 |
| T 16 | 9 7 | 2 33 | 2 4 | 15 25 | 1 33 | 4 13 | 1 17 | 22 41 | 0 47 | 21 39 | 0 44 | 18 13 | 0 44 | 17 42 | 0 38 | 22 16 | 0 46 | 14 26 | 16 28 | 12 59 | 13 6 | 26 47 | 2 55 | 2 39 |
| W17 | 8 45 | 4n 1 | 3 11 | 15 34 | 1 19 | 3 42 | 1 16 | 22 35 | 0 48 | 21 40 | 0 44 | 18 11 | 0 44 | 17 41 | 0 38 | 22 16 | 0 46 | 14 26 | 16 28 | 12 59 | 13 7 | 26 46 | 2 56 | 2 39 |
| T 18 | 8 22 | 10 13 | 4 5 | 15 41 | 1 6 | 3 11 | 1 15 | 22 28 | 0 49 | 21 41 | 0 44 | 18 9 | 0 44 | 17 40 | 0 38 | 22 16 | 0 46 | 14 25 | 16 28 | 13 0 | 13 8 | 26 45 | 2 57 | 2 38 |
| F 19 | 8 0 | 15 47 | 4 44 | 15 46 | 0 53 | 2 40 | 1 14 | 22 22 | 0 50 | 21 41 | 0 44 | 18 8 | 0 44 | 17 39 | 0 38 | 22 17 | 0 46 | 14 24 | 16 28 | 13 1 | 13 9 | 26 43 | 2 58 | 2 38 |
| S 20 | 7 37 | 20 29 | 5 8 | 15 50 | 0 40 | 2 9 | 1 12 | 22 15 | 0 51 | 21 42 | 0 44 | 18 6 | 0 44 | 17 38 | 0 38 | 22 17 | 0 46 | 14 24 | 16 27 | 13 1 | 13 10 | 26 42 | 3 0 | 2 38 |
| S 21 | 7 14 | 24 9 | 5 16 | 15 52 | 0 28 | 1 38 | 1 11 | 22 8 | 0 51 | 21 43 | 0 45 | 18 4 | 0 44 | 17 37 | 0 38 | 22 17 | 0 46 | 14 23 | 16 27 | 13 2 | 13 11 | 26 41 | 3 1 | 2 38 |
| M22 | 6 51 | 26 39 | 5 10 | 15 52 | 0 16 | 1 7 | 1 9 | 22 1 | 0 52 | 21 43 | 0 45 | 18 3 | 0 45 | 17 36 | 0 38 | 22 17 | 0 46 | 14 22 | 16 27 | 13 2 | 13 12 | 26 40 | 3 2 | 2 38 |
| T 23 | 6 28 | 27 52 | 4 50 | 15 50 | 0 4 | 0 36 | 1 8 | 21 53 | 0 53 | 21 44 | 0 45 | 18 1 | 0 45 | 17 35 | 0 38 | 22 17 | 0 46 | 14 22 | 16 27 | 13 2 | 13 13 | 26 39 | 3 4 | 2 38 |
| W24 | 6 5 | 27 47 | 4 18 | 15 47 | 0s 7 | 0 5 | 1 6 | 21 45 | 0 54 | 21 44 | 0 45 | 17 59 | 0 45 | 17 35 | 0 38 | 22 17 | 0 46 | 14 21 | 16 27 | 13 2 | 13 14 | 26 38 | 3 5 | 2 38 |
| T 25 | 5 42 | 26 26 | 3 35 | 15 42 | 0 18 | 0n26 | 1 4 | 21 37 | 0 55 | 21 45 | 0 45 | 17 57 | 0 45 | 17 34 | 0 38 | 22 17 | 0 46 | 14 21 | 16 27 | 13 1 | 13 16 | 26 36 | 3 6 | 2 38 |
| F 26 | 5 19 | 23 54 | 2 43 | 15 35 | 0 28 | 0 58 | 1 2 | 21 29 | 0 55 | 21 45 | 0 45 | 17 56 | 0 45 | 17 33 | 0 38 | 22 17 | 0 46 | 14 20 | 16 27 | 13 1 | 13 17 | 26 35 | 3 7 | 2 38 |
| S 27 | 4 55 | 20 18 | 1 43 | 15 27 | 0 38 | 1 29 | 1 1 | 21 21 | 0 56 | 21 46 | 0 45 | 17 54 | 0 45 | 17 32 | 0 38 | 22 17 | 0 46 | 14 19 | 16 27 | 13 0 | 13 18 | 26 34 | 3 9 | 2 37 |
| S 28 | 4 32 | 15 49 | 0 38 | 15 17 | 0 48 | 2 0 | 0 59 | 21 12 | 0 57 | 21 46 | 0 45 | 17 52 | 0 45 | 17 31 | 0 38 | 22 17 | 0 46 | 14 19 | 16 27 | 13 0 | 13 19 | 26 33 | 3 10 | 2 37 |
| M29 | 4s 8 | 10n38 | 0s30 | 15s 6 | 0s57 | 2n31 | 0s57 | 21s 3 | 0s58 | 21s47 | 0n45 | 17s51 | 0s45 | 17s30 | 0s38 | 22n17 | 0s46 | 14s18 | 16s27 | 13s 0 | 13s20 | 26n31 | 3n12 | 2n37 |

Julian Day Number = 2298183.5, Delta T = 119.85 sec
Ecliptic obliquity = 23°29'46, Nutation = 0°00'11, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°52'50, Lahiri = 17°59'50 Julian Calendar 1 Feb. 1580 == Greg. Calendar 11 Feb. 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## MARCH 1580 JC

**00:00 UT**

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T 1 | 11 14 47 | 20♓33'29 | 13♍41 | 23♒ 5 | 9♈45 | 1♒ 8 | 13♐57 | 12♒30 | 13♒16 | 10°R55 | 1♈55 | 25°R39 | 24♒37 | 11♋31 | 2♈ 2 | T 1 |
| W 2 | 11 18 44 | 21°33'07 | 26°30 | 24°11 | 10°59 | 1°53 | 14° 1 | 12°36 | 13°19 | 10♋55 | 1°56 | 25♒36 | 24°34 | 11°37 | 2° 6 | W 2 |
| T 3 | 11 22 40 | 22°32'44 | 9♎35 | 25°20 | 12°14 | 2°38 | 14° 4 | 12°42 | 13°21 | 10°55 | 1°58 | 25°33 | 24°31 | 11°44 | 2°10 | T 3 |
| F 4 | 11 26 37 | 23°32'19 | 22°55 | 26°31 | 13°28 | 3°23 | 14° 8 | 12°48 | 13°24 | 10°55 | 1°59 | 25°29 | 24°27 | 11°51 | 2°13 | F 4 |
| S 5 | 11 30 33 | 24°31'52 | 6♏28 | 27°43 | 14°42 | 4° 8 | 14°11 | 12°54 | 13°27 | 10°54 | 2° 1 | 25°24 | 24°24 | 11°57 | 2°17 | S 5 |
| S 6 | 11 34 30 | 25°31'23 | 20°12 | 28°58 | 15°56 | 4°53 | 14°14 | 13° 0 | 13°30 | 10°54 | 2° 2 | 25°20 | 24°21 | 12° 4 | 2°21 | S 6 |
| M 7 | 11 38 26 | 26°30'52 | 4♐ 6 | 0♓15 | 17°10 | 5°38 | 14°17 | 13° 6 | 13°33 | 10°54 | 2° 3 | 25°17 | 24°18 | 12°11 | 2°24 | M 7 |
| T 8 | 11 42 23 | 27°30'20 | 18° 7 | 1°34 | 18°24 | 6°24 | 14°19 | 13°12 | 13°35 | 10°54 | 2° 5 | 25°15 | 24°15 | 12°17 | 2°28 | T 8 |
| W 9 | 11 46 20 | 28°29'46 | 2♑15 | 2°54 | 19°38 | 7° 9 | 14°22 | 13°18 | 13°38 | 10°54 | 2° 6 | 25°D15 | 24°12 | 12°24 | 2°32 | W 9 |
| T 10 | 11 50 16 | 29°29'10 | 16°26 | 4°16 | 20°52 | 7°54 | 14°24 | 13°23 | 13°41 | 10°54 | 2° 8 | 25°16 | 24° 8 | 12°31 | 2°35 | T 10 |
| F 11 | 11 54 13 | 0♈28'32 | 0♒41 | 5°40 | 22° 5 | 8°39 | 14°26 | 13°29 | 13°44 | 10°53 | 2° 9 | 25°17 | 24° 5 | 12°37 | 2°39 | F 11 |
| S 12 | 11 58 9 | 1°27'53 | 14°55 | 7° 5 | 23°19 | 9°24 | 14°28 | 13°35 | 13°46 | 10°D53 | 2°11 | 25°18 | 24° 2 | 12°44 | 2°43 | S 12 |
| S 13 | 12 2 6 | 2°27'12 | 29° 7 | 8°32 | 24°33 | 10° 9 | 14°29 | 13°40 | 13°49 | 10°53 | 2°12 | 25°R19 | 23°59 | 12°51 | 2°46 | S 13 |
| M14 | 12 6 2 | 3°26'28 | 13♓13 | 10° 0 | 25°47 | 10°55 | 14°31 | 13°46 | 13°51 | 10°54 | 2°14 | 25°17 | 23°56 | 12°57 | 2°50 | M14 |
| T 15 | 12 9 59 | 4°25'43 | 27°10 | 11°30 | 27° 1 | 11°40 | 14°32 | 13°51 | 13°54 | 10°54 | 2°15 | 25°14 | 23°53 | 13° 4 | 2°54 | T 15 |
| W16 | 12 13 55 | 5°24'56 | 10♈53 | 13° 2 | 28°14 | 12°25 | 14°33 | 13°56 | 13°56 | 10°54 | 2°17 | 25° 9 | 23°49 | 13°11 | 2°58 | W16 |
| T 17 | 12 17 52 | 6°24'07 | 24°19 | 14°35 | 29°28 | 13°10 | 14°34 | 14° 2 | 13°59 | 10°54 | 2°18 | 25° 2 | 23°46 | 13°18 | 3° 1 | T 17 |
| F 18 | 12 21 48 | 7°23'15 | 7♉27 | 16° 9 | 0♉41 | 13°55 | 14°35 | 14° 7 | 14° 1 | 10°54 | 2°20 | 24°55 | 23°43 | 13°24 | 3° 5 | F 18 |
| S 19 | 12 25 45 | 8°22'22 | 20°16 | 17°45 | 1°55 | 14°41 | 14°35 | 14°12 | 14° 4 | 10°54 | 2°21 | 24°47 | 23°40 | 13°31 | 3° 9 | S 19 |
| S 20 | 12 29 42 | 9°21'26 | 2♊46 | 19°22 | 3° 9 | 15°26 | 14°36 | 14°17 | 14° 6 | 10°55 | 2°23 | 24°41 | 23°37 | 13°38 | 3°12 | S 20 |
| M21 | 12 33 38 | 10°20'28 | 15° 0 | 21° 1 | 4°22 | 16°11 | 14°R36 | 14°22 | 14° 8 | 10°55 | 2°24 | 24°36 | 23°33 | 13°44 | 3°16 | M21 |
| T 22 | 12 37 35 | 11°19'27 | 27° 2 | 22°41 | 5°35 | 16°56 | 14°36 | 14°27 | 14°11 | 10°55 | 2°26 | 24°33 | 23°30 | 13°51 | 3°20 | T 22 |
| W23 | 12 41 31 | 12°18'25 | 8♋55 | 24°23 | 6°49 | 17°42 | 14°36 | 14°32 | 14°13 | 10°55 | 2°27 | 24°D31 | 23°27 | 13°58 | 3°23 | W23 |
| T 24 | 12 45 28 | 13°17'20 | 20°45 | 26° 7 | 8° 2 | 18°27 | 14°35 | 14°37 | 14°15 | 10°56 | 2°28 | 24°32 | 23°24 | 14° 4 | 3°27 | T 24 |
| F 25 | 12 49 24 | 14°16'13 | 2♌36 | 27°51 | 9°15 | 19°12 | 14°35 | 14°42 | 14°17 | 10°56 | 2°30 | 24°33 | 23°21 | 14°11 | 3°31 | F 25 |
| S 26 | 12 53 21 | 15°15'03 | 14°35 | 29°38 | 10°29 | 19°57 | 14°34 | 14°46 | 14°19 | 10°57 | 2°31 | 24°34 | 23°18 | 14°18 | 3°34 | S 26 |
| S 27 | 12 57 17 | 16°13'51 | 26°46 | 1♈25 | 11°42 | 20°43 | 14°33 | 14°51 | 14°21 | 10°57 | 2°33 | 24°R34 | 23°14 | 14°24 | 3°38 | S 27 |
| M28 | 13 1 14 | 17°12'37 | 9♍12 | 3°15 | 12°55 | 21°28 | 14°32 | 14°56 | 14°23 | 10°58 | 2°34 | 24°33 | 23°11 | 14°31 | 3°41 | M28 |
| T 29 | 13 5 11 | 18°11'21 | 21°58 | 5° 6 | 14° 8 | 22°13 | 14°31 | 15° 0 | 14°25 | 10°58 | 2°36 | 24°30 | 23° 8 | 14°38 | 3°45 | T 29 |
| W30 | 13 9 7 | 19°10'02 | 5♎ 4 | 6°58 | 15°21 | 22°59 | 14°29 | 15° 4 | 14°27 | 10°59 | 2°37 | 24°24 | 23° 5 | 14°44 | 3°49 | W30 |
| T 31 | 13 13 4 | 20♈ 8'42 | 18♎31 | 8♈52 | 16♉34 | 23♒44 | 14♐27 | 15♒ 9 | 14♒29 | 11♋ 0 | 2♈39 | 24♒17 | 23♒ 2 | 14♋51 | 3♈52 | 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 | 3s45 | 4n56 | 1s37 | 14s53 | 1s 6 | 3n 2 | 0s55 | 20s54 | 0s58 | 21s47 | 0n45 | 17s49 | 0s45 | 17s30 | 0s38 | 22n17 | 0s46 | 14s17 | 16s26 | 13s 0 | 13s21 | 26n30 | 3n13 | 2n37 |
| W 2 | 3 21 | 1s 5 | 2 41 | 14 39 | 1 14 | 3 33 | 0 53 | 20 45 | 0 59 | 21 48 | 0 45 | 17 48 | 0 46 | 17 29 | 0 38 | 22 17 | 0 45 | 14 17 | 16 26 | 13 1 | 13 22 | 26 29 | 3 14 | 2 37 |
| T 3 | 2 58 | 7 9 | 3 38 | 14 23 | 1 22 | 4 4 | 0 51 | 20 35 | 1 0 | 21 48 | 0 45 | 17 46 | 0 46 | 17 28 | 0 38 | 22 17 | 0 45 | 14 16 | 16 26 | 13 2 | 13 23 | 26 28 | 3 16 | 2 37 |
| F 4 | 2 34 | 13 0 | 4 24 | 14 6 | 1 29 | 4 35 | 0 49 | 20 26 | 1 1 | 21 48 | 0 45 | 17 44 | 0 46 | 17 27 | 0 38 | 22 18 | 0 45 | 14 15 | 16 26 | 13 4 | 13 24 | 26 26 | 3 17 | 2 37 |
| S 5 | 2 11 | 18 21 | 4 56 | 13 48 | 1 36 | 5 5 | 0 47 | 20 16 | 1 2 | 21 49 | 0 45 | 17 43 | 0 46 | 17 26 | 0 39 | 22 18 | 0 45 | 14 15 | 16 26 | 13 5 | 13 25 | 26 25 | 3 18 | 2 37 |
| S 6 | 1 47 | 22 50 | 5 11 | 13 27 | 1 42 | 5 36 | 0 44 | 20 6 | 1 2 | 21 49 | 0 45 | 17 41 | 0 46 | 17 26 | 0 39 | 22 18 | 0 45 | 14 14 | 16 26 | 13 6 | 13 26 | 26 24 | 3 20 | 2 37 |
| M 7 | 1 23 | 26 4 | 5 9 | 13 6 | 1 48 | 6 6 | 0 42 | 19 56 | 1 3 | 21 49 | 0 45 | 17 40 | 0 46 | 17 25 | 0 39 | 22 18 | 0 45 | 14 14 | 16 26 | 13 8 | 13 27 | 26 23 | 3 21 | 2 37 |
| T 8 | 1 0 | 27 45 | 4 48 | 12 43 | 1 54 | 6 37 | 0 40 | 19 45 | 1 4 | 21 49 | 0 45 | 17 38 | 0 46 | 17 24 | 0 39 | 22 18 | 0 45 | 14 13 | 16 26 | 13 8 | 13 28 | 26 21 | 3 23 | 2 36 |
| W 9 | 0 36 | 27 39 | 4 10 | 12 19 | 1 59 | 7 7 | 0 38 | 19 34 | 1 5 | 21 50 | 0 45 | 17 37 | 0 46 | 17 23 | 0 39 | 22 18 | 0 45 | 14 12 | 16 26 | 13 8 | 13 29 | 26 20 | 3 24 | 2 36 |
| T 10 | 0 12 | 25 44 | 3 16 | 11 53 | 2 4 | 7 37 | 0 35 | 19 23 | 1 5 | 21 50 | 0 45 | 17 35 | 0 46 | 17 22 | 0 39 | 22 18 | 0 45 | 14 12 | 16 26 | 13 8 | 13 30 | 26 19 | 3 25 | 2 36 |
| F 11 | 0n11 | 22 10 | 2 10 | 11 26 | 2 8 | 8 7 | 0 33 | 19 12 | 1 6 | 21 50 | 0 45 | 17 34 | 0 47 | 17 22 | 0 39 | 22 18 | 0 45 | 14 11 | 16 26 | 13 7 | 13 31 | 26 18 | 3 27 | 2 36 |
| S 12 | 0 35 | 17 18 | 0 56 | 10 58 | 2 12 | 8 37 | 0 30 | 19 1 | 1 7 | 21 50 | 0 45 | 17 32 | 0 47 | 17 21 | 0 39 | 22 18 | 0 45 | 14 11 | 16 26 | 13 7 | 13 32 | 26 16 | 3 28 | 2 36 |
| S 13 | 0 59 | 11 29 | 0n21 | 10 28 | 2 15 | 9 6 | 0 28 | 18 50 | 1 8 | 21 50 | 0 45 | 17 31 | 0 47 | 17 20 | 0 39 | 22 18 | 0 45 | 14 10 | 16 26 | 13 7 | 13 34 | 26 15 | 3 30 | 2 36 |
| M14 | 1 22 | 5 8 | 1 36 | 9 58 | 2 18 | 9 36 | 0 25 | 18 38 | 1 9 | 21 51 | 0 45 | 17 29 | 0 47 | 17 20 | 0 39 | 22 18 | 0 45 | 14 9 | 16 26 | 13 7 | 13 35 | 26 14 | 3 31 | 2 36 |
| T 15 | 1 46 | 1n23 | 2 44 | 9 25 | 2 20 | 10 5 | 0 23 | 18 26 | 1 9 | 21 51 | 0 45 | 17 28 | 0 47 | 17 19 | 0 39 | 22 18 | 0 45 | 14 9 | 16 26 | 13 8 | 13 36 | 26 12 | 3 32 | 2 36 |
| W16 | 2 9 | 7 43 | 3 42 | 8 52 | 2 22 | 10 33 | 0 20 | 18 14 | 1 10 | 21 51 | 0 46 | 17 26 | 0 47 | 17 18 | 0 39 | 22 18 | 0 45 | 14 8 | 16 26 | 13 10 | 13 37 | 26 11 | 3 34 | 2 36 |
| T 17 | 2 33 | 13 34 | 4 26 | 8 17 | 2 23 | 11 2 | 0 18 | 18 2 | 1 11 | 21 51 | 0 46 | 17 25 | 0 47 | 17 17 | 0 39 | 22 18 | 0 45 | 14 8 | 16 26 | 13 12 | 13 38 | 26 10 | 3 35 | 2 36 |
| F 18 | 2 56 | 18 40 | 4 55 | 7 41 | 2 24 | 11 30 | 0 15 | 17 50 | 1 12 | 21 51 | 0 46 | 17 23 | 0 48 | 17 17 | 0 39 | 22 18 | 0 45 | 14 7 | 16 26 | 13 15 | 13 39 | 26 8 | 3 37 | 2 36 |
| S 19 | 3 20 | 22 47 | 5 8 | 7 4 | 2 25 | 11 59 | 0 12 | 17 37 | 1 12 | 21 51 | 0 46 | 17 22 | 0 48 | 17 16 | 0 39 | 22 18 | 0 45 | 14 7 | 16 26 | 13 17 | 13 40 | 26 7 | 3 38 | 2 36 |
| S 20 | 3 43 | 25 45 | 5 6 | 6 26 | 2 25 | 12 26 | 0 10 | 17 25 | 1 13 | 21 51 | 0 46 | 17 21 | 0 48 | 17 15 | 0 39 | 22 18 | 0 45 | 14 6 | 16 26 | 13 20 | 13 41 | 26 5 | 3 39 | 2 36 |
| M21 | 4 6 | 27 27 | 4 50 | 5 46 | 2 24 | 12 54 | 0 7 | 17 12 | 1 14 | 21 51 | 0 46 | 17 19 | 0 48 | 17 15 | 0 39 | 22 18 | 0 45 | 14 6 | 16 26 | 13 21 | 13 42 | 26 4 | 3 41 | 2 36 |
| T 22 | 4 29 | 27 49 | 4 21 | 5 6 | 2 23 | 13 21 | 0 4 | 16 59 | 1 15 | 21 51 | 0 46 | 17 18 | 0 48 | 17 14 | 0 39 | 22 18 | 0 45 | 14 5 | 16 26 | 13 22 | 13 43 | 26 3 | 3 42 | 2 36 |
| W23 | 4 52 | 26 52 | 3 41 | 4 24 | 2 21 | 13 48 | 0 1 | 16 46 | 1 15 | 21 51 | 0 46 | 17 17 | 0 48 | 17 14 | 0 39 | 22 18 | 0 45 | 14 5 | 16 26 | 13 23 | 13 44 | 26 1 | 3 44 | 2 36 |
| T 24 | 5 15 | 24 44 | 2 52 | 3 41 | 2 19 | 14 14 | 0n 1 | 16 32 | 1 16 | 21 51 | 0 46 | 17 15 | 0 48 | 17 13 | 0 39 | 22 18 | 0 45 | 14 4 | 16 27 | 13 23 | 13 45 | 26 0 | 3 45 | 2 36 |
| F 25 | 5 38 | 21 30 | 1 56 | 2 57 | 2 17 | 14 41 | 0 4 | 16 19 | 1 17 | 21 51 | 0 46 | 17 14 | 0 48 | 17 12 | 0 39 | 22 18 | 0 45 | 14 4 | 16 27 | 13 22 | 13 46 | 25 59 | 3 46 | 2 35 |
| S 26 | 6 1 | 17 21 | 0 54 | 2 12 | 2 14 | 15 6 | 0 7 | 16 5 | 1 18 | 21 51 | 0 46 | 17 13 | 0 49 | 17 12 | 0 39 | 22 18 | 0 45 | 14 3 | 16 27 | 13 22 | 13 47 | 25 57 | 3 48 | 2 35 |
| S 27 | 6 24 | 12 26 | 0s12 | 1 25 | 2 10 | 15 32 | 0 10 | 15 52 | 1 18 | 21 50 | 0 46 | 17 12 | 0 49 | 17 11 | 0 39 | 22 18 | 0 45 | 14 3 | 16 27 | 13 22 | 13 48 | 25 56 | 3 49 | 2 35 |
| M28 | 6 46 | 6 56 | 1 18 | 0 38 | 2 6 | 15 57 | 0 12 | 15 38 | 1 19 | 21 50 | 0 46 | 17 10 | 0 49 | 17 11 | 0 39 | 22 18 | 0 45 | 14 2 | 16 27 | 13 22 | 13 49 | 25 54 | 3 51 | 2 35 |
| T 29 | 7 9 | 1 1 | 2 22 | 0n10 | 2 1 | 16 22 | 0 15 | 15 24 | 1 20 | 21 50 | 0 46 | 17 9 | 0 49 | 17 10 | 0 39 | 22 18 | 0 45 | 14 2 | 16 27 | 13 23 | 13 50 | 25 53 | 3 52 | 2 35 |
| W30 | 7 31 | 5s 4 | 3 20 | 1 0 | 1 56 | 16 46 | 0 18 | 15 9 | 1 20 | 21 50 | 0 46 | 17 8 | 0 49 | 17 10 | 0 39 | 22 18 | 0 44 | 14 1 | 16 27 | 13 25 | 13 51 | 25 51 | 3 54 | 2 35 |
| T 31 | 7n54 | 11s 5 | 4s 8 | 1n50 | 1s51 | 17n10 | 0n21 | 14s55 | 1s21 | 21s50 | 0n46 | 17s 7 | 0s49 | 17s 9 | 0s39 | 22n18 | 0s44 | 14s 1 | 16s27 | 13s28 | 13s52 | 25n50 | 3n55 | 2n35 |

Julian Day Number = 2298212.5, Delta T = 119.71 sec
Ecliptic obliquity = 23°29'46, Nutation = 0°00'10, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°52'54, Lahiri = 17°59'54 Julian Calendar 1 March 1580 == Greg. Calendar 11 March 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## APRIL 1580 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F 1 | 13 17 0 | 21♈ 7'20 | 2♏16 | 10♈48 | 17♉47 | 24♒29 | 14°R25 | 15♒13 | 14♒31 | 11♋ 0 | 2♈40 | 24°R 8 | 22♒59 | 14♋58 | 3♈56 | F 1 |
| S 2 | 13 20 57 | 22° 5'55 | 16°17 | 12°45 | 19° 0 | 25°14 | 14♐23 | 15°17 | 14°33 | 11° 1 | 2°41 | 23♒58 | 22°55 | 15° 4 | 3°59 | S 2 |
| S 3 | 13 24 53 | 23° 4'29 | 0♐28 | 14°43 | 20°13 | 26° 0 | 14°21 | 15°21 | 14°35 | 11° 2 | 2°43 | 23°49 | 22°52 | 15°11 | 4° 3 | S 3 |
| M 4 | 13 28 50 | 24° 3'02 | 14°44 | 16°43 | 21°26 | 26°45 | 14°19 | 15°25 | 14°36 | 11° 2 | 2°44 | 23°42 | 22°49 | 15°18 | 4° 6 | M 4 |
| T 5 | 13 32 46 | 25° 1'32 | 29° 1 | 18°45 | 22°39 | 27°30 | 14°16 | 15°29 | 14°38 | 11° 3 | 2°46 | 23°37 | 22°46 | 15°24 | 4°10 | T 5 |
| W 6 | 13 36 43 | 26° 0'01 | 13♑16 | 20°47 | 23°51 | 28°16 | 14°13 | 15°33 | 14°40 | 11° 4 | 2°47 | 23°34 | 22°43 | 15°31 | 4°13 | W 6 |
| T 7 | 13 40 40 | 26°58'29 | 27°26 | 22°52 | 25° 4 | 29° 1 | 14°10 | 15°37 | 14°41 | 11° 5 | 2°48 | 23°D34 | 22°39 | 15°38 | 4°17 | T 7 |
| F 8 | 13 44 36 | 27°56'55 | 11♒29 | 24°57 | 26°17 | 29°46 | 14° 7 | 15°41 | 14°43 | 11° 6 | 2°50 | 23°34 | 22°36 | 15°44 | 4°20 | F 8 |
| S 9 | 13 48 33 | 28°55'19 | 25°25 | 27° 3 | 27°29 | 0♓31 | 14° 4 | 15°44 | 14°44 | 11° 7 | 2°51 | 23°R34 | 22°33 | 15°51 | 4°24 | S 9 |
| S 10 | 13 52 29 | 29°53'41 | 9♓14 | 29°11 | 28°42 | 1°17 | 14° 0 | 15°48 | 14°46 | 11° 7 | 2°52 | 23°33 | 22°30 | 15°58 | 4°27 | S 10 |
| M11 | 13 56 26 | 0♉52'02 | 22°54 | 1♉19 | 29°54 | 2° 2 | 13°57 | 15°51 | 14°47 | 11° 8 | 2°54 | 23°30 | 22°27 | 16° 4 | 4°31 | M11 |
| T 12 | 14 0 22 | 1°50'22 | 6♈25 | 3°28 | 1♊ 7 | 2°47 | 13°53 | 15°54 | 14°49 | 11° 9 | 2°55 | 23°24 | 22°24 | 16°11 | 4°34 | T 12 |
| W13 | 14 4 19 | 2°48'39 | 19°45 | 5°37 | 2°19 | 3°32 | 13°49 | 15°58 | 14°50 | 11°10 | 2°56 | 23°16 | 22°20 | 16°18 | 4°37 | W13 |
| T 14 | 14 8 15 | 3°46'55 | 2♉52 | 7°46 | 3°31 | 4°17 | 13°45 | 16° 1 | 14°51 | 11°11 | 2°58 | 23° 5 | 22°17 | 16°24 | 4°41 | T 14 |
| F 15 | 14 12 12 | 4°45'09 | 15°45 | 9°55 | 4°44 | 5° 3 | 13°40 | 16° 4 | 14°52 | 11°13 | 2°59 | 22°53 | 22°14 | 16°31 | 4°44 | F 15 |
| S 16 | 14 16 9 | 5°43'22 | 28°24 | 12° 4 | 5°56 | 5°48 | 13°36 | 16° 7 | 14°54 | 11°14 | 3° 0 | 22°40 | 22°11 | 16°38 | 4°47 | S 16 |
| S 17 | 14 20 5 | 6°41'32 | 10♊47 | 14°12 | 7° 8 | 6°33 | 13°31 | 16°10 | 14°55 | 11°15 | 3° 1 | 22°29 | 22° 8 | 16°44 | 4°50 | S 17 |
| M18 | 14 24 2 | 7°39'41 | 22°58 | 16°18 | 8°20 | 7°18 | 13°27 | 16°13 | 14°56 | 11°16 | 3° 3 | 22°20 | 22° 4 | 16°51 | 4°54 | M18 |
| T 19 | 14 27 58 | 8°37'48 | 4♋57 | 18°24 | 9°32 | 8° 3 | 13°22 | 16°16 | 14°57 | 11°17 | 3° 4 | 22°13 | 22° 1 | 16°58 | 4°57 | T 19 |
| W20 | 14 31 55 | 9°35'53 | 16°49 | 20°28 | 10°44 | 8°48 | 13°17 | 16°18 | 14°58 | 11°18 | 3° 5 | 22° 8 | 21°58 | 17° 4 | 5° 0 | W20 |
| T 21 | 14 35 51 | 10°33'56 | 28°38 | 22°30 | 11°56 | 9°33 | 13°11 | 16°21 | 14°59 | 11°20 | 3° 6 | 22° 6 | 21°55 | 17°11 | 5° 3 | T 21 |
| F 22 | 14 39 48 | 11°31'57 | 10♌28 | 24°29 | 13° 8 | 10°19 | 13° 6 | 16°23 | 15° 0 | 11°21 | 3° 8 | 22°D 6 | 21°52 | 17°18 | 5° 6 | F 22 |
| S 23 | 14 43 44 | 12°29'56 | 22°27 | 26°27 | 14°20 | 11° 4 | 13° 0 | 16°26 | 15° 1 | 11°22 | 3° 9 | 22°R 6 | 21°49 | 17°24 | 5° 9 | S 23 |
| S 24 | 14 47 41 | 13°27'54 | 4♍38 | 28°22 | 15°32 | 11°49 | 12°55 | 16°28 | 15° 1 | 11°24 | 3°10 | 22° 5 | 21°45 | 17°31 | 5°13 | S 24 |
| M25 | 14 51 38 | 14°25'49 | 17° 6 | 0♊14 | 16°43 | 12°34 | 12°49 | 16°30 | 15° 2 | 11°25 | 3°11 | 22° 3 | 21°42 | 17°38 | 5°16 | M25 |
| T 26 | 14 55 34 | 15°23'43 | 29°57 | 2° 3 | 17°55 | 13°19 | 12°43 | 16°32 | 15° 3 | 11°26 | 3°12 | 21°59 | 21°39 | 17°44 | 5°19 | T 26 |
| W27 | 14 59 31 | 16°21'35 | 13♎13 | 3°49 | 19° 6 | 14° 3 | 12°37 | 16°34 | 15° 3 | 11°28 | 3°13 | 21°52 | 21°36 | 17°51 | 5°22 | W27 |
| T 28 | 15 3 27 | 17°19'25 | 26°54 | 5°32 | 20°18 | 14°48 | 12°31 | 16°36 | 15° 4 | 11°29 | 3°15 | 21°43 | 21°33 | 17°58 | 5°25 | T 28 |
| F 29 | 15 7 24 | 18°17'13 | 10♏59 | 7°11 | 21°29 | 15°33 | 12°25 | 16°38 | 15° 5 | 11°31 | 3°16 | 21°32 | 21°30 | 18° 4 | 5°27 | F 29 |
| S 30 | 15 11 20 | 19♉15'01 | 25♏24 | 8♊48 | 22♊41 | 16♓18 | 12♐18 | 16♒40 | 15♒ 5 | 11♋32 | 3♈17 | 21♒20 | 21♒26 | 18♋11 | 5♈30 | 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 |
| F 1 | 8n16 | 16s43 | 4s43 | 2n41 | 1s45 | 17n33 | 0n24 | 14s41 | 1s22 | 21s49 | 0n46 | 17s 6 | 0s49 | 17s 9 | 0s39 | 22n18 | 0s44 | 14s 0 | 16s27 | 13s31 | 13s53 | 25n48 | 3n56 | 2n35 |
| S 2 | 8 38 | 21 33 | 5 2 | 3 32 | 1 38 | 17 56 | 0 27 | 14 26 | 1 23 | 21 49 | 0 46 | 17 5 | 0 50 | 17 8 | 0 39 | 22 18 | 0 44 | 14 0 | 16 27 | 13 34 | 13 54 | 25 47 | 3 58 | 2 35 |
| S 3 | 8 59 | 25 13 | 5 2 | 4 25 | 1 31 | 18 19 | 0 29 | 14 11 | 1 23 | 21 49 | 0 46 | 17 4 | 0 50 | 17 8 | 0 39 | 22 18 | 0 44 | 13 59 | 16 28 | 13 37 | 13 56 | 25 46 | 3 59 | 2 35 |
| M 4 | 9 21 | 27 20 | 4 44 | 5 18 | 1 23 | 18 41 | 0 32 | 13 56 | 1 24 | 21 49 | 0 46 | 17 3 | 0 50 | 17 7 | 0 39 | 22 18 | 0 44 | 13 59 | 16 28 | 13 39 | 13 57 | 25 44 | 4 0 | 2 35 |
| T 5 | 9 43 | 27 38 | 4 9 | 6 12 | 1 15 | 19 2 | 0 35 | 13 42 | 1 25 | 21 48 | 0 46 | 17 2 | 0 50 | 17 7 | 0 39 | 22 18 | 0 44 | 13 58 | 16 28 | 13 41 | 13 58 | 25 43 | 4 2 | 2 35 |
| W 6 | 10 4 | 26 7 | 3 18 | 7 6 | 1 7 | 19 24 | 0 38 | 13 26 | 1 25 | 21 48 | 0 46 | 17 1 | 0 50 | 17 6 | 0 39 | 22 18 | 0 44 | 13 58 | 16 28 | 13 42 | 13 59 | 25 41 | 4 3 | 2 35 |
| T 7 | 10 25 | 22 55 | 2 15 | 8 1 | 0 58 | 19 44 | 0 41 | 13 11 | 1 26 | 21 48 | 0 46 | 17 0 | 0 50 | 17 6 | 0 40 | 22 18 | 0 44 | 13 58 | 16 28 | 13 42 | 14 0 | 25 40 | 4 5 | 2 35 |
| F 8 | 10 46 | 18 24 | 1 4 | 8 56 | 0 49 | 20 4 | 0 43 | 12 56 | 1 27 | 21 47 | 0 46 | 16 59 | 0 50 | 17 5 | 0 40 | 22 18 | 0 44 | 13 57 | 16 28 | 13 42 | 14 1 | 25 38 | 4 6 | 2 35 |
| S 9 | 11 7 | 12 55 | 0n10 | 9 51 | 0 39 | 20 24 | 0 46 | 12 41 | 1 27 | 21 47 | 0 46 | 16 58 | 0 51 | 17 5 | 0 40 | 22 18 | 0 44 | 13 57 | 16 28 | 13 42 | 14 2 | 25 37 | 4 7 | 2 35 |
| S 10 | 11 28 | 6 51 | 1 22 | 10 45 | 0 29 | 20 43 | 0 49 | 12 25 | 1 28 | 21 46 | 0 46 | 16 57 | 0 51 | 17 5 | 0 40 | 22 18 | 0 44 | 13 56 | 16 29 | 13 42 | 14 3 | 25 35 | 4 9 | 2 35 |
| M11 | 11 48 | 0 32 | 2 29 | 11 40 | 0 19 | 21 1 | 0 52 | 12 9 | 1 29 | 21 46 | 0 46 | 16 56 | 0 51 | 17 4 | 0 40 | 22 18 | 0 44 | 13 56 | 16 29 | 13 43 | 14 4 | 25 34 | 4 10 | 2 35 |
| T 12 | 12 8 | 5n43 | 3 27 | 12 34 | 0 8 | 21 19 | 0 55 | 11 54 | 1 29 | 21 45 | 0 46 | 16 55 | 0 51 | 17 4 | 0 40 | 22 18 | 0 44 | 13 56 | 16 29 | 13 45 | 14 5 | 25 32 | 4 11 | 2 35 |
| W13 | 12 29 | 11 38 | 4 12 | 13 28 | 0n 2 | 21 37 | 0 57 | 11 38 | 1 30 | 21 45 | 0 46 | 16 54 | 0 51 | 17 3 | 0 40 | 22 18 | 0 44 | 13 55 | 16 29 | 13 48 | 14 6 | 25 31 | 4 13 | 2 35 |
| T 14 | 12 48 | 16 55 | 4 43 | 14 20 | 0 13 | 21 53 | 1 0 | 11 22 | 1 31 | 21 45 | 0 46 | 16 53 | 0 51 | 17 3 | 0 40 | 22 18 | 0 44 | 13 55 | 16 29 | 13 51 | 14 7 | 25 29 | 4 14 | 2 35 |
| F 15 | 13 8 | 21 22 | 4 59 | 15 12 | 0 24 | 22 9 | 1 3 | 11 6 | 1 31 | 21 44 | 0 46 | 16 53 | 0 52 | 17 3 | 0 40 | 22 18 | 0 44 | 13 55 | 16 29 | 13 55 | 14 8 | 25 27 | 4 15 | 2 35 |
| S 16 | 13 28 | 24 43 | 5 0 | 16 2 | 0 34 | 22 25 | 1 5 | 10 50 | 1 32 | 21 43 | 0 46 | 16 52 | 0 52 | 17 2 | 0 40 | 22 17 | 0 44 | 13 54 | 16 30 | 13 59 | 14 9 | 25 26 | 4 17 | 2 35 |
| S 17 | 13 47 | 26 50 | 4 46 | 16 51 | 0 45 | 22 40 | 1 8 | 10 34 | 1 33 | 21 43 | 0 46 | 16 51 | 0 52 | 17 2 | 0 40 | 22 17 | 0 44 | 13 54 | 16 30 | 14 3 | 14 10 | 25 24 | 4 18 | 2 35 |
| M18 | 14 6 | 27 38 | 4 20 | 17 38 | 0 55 | 22 54 | 1 10 | 10 17 | 1 33 | 21 42 | 0 46 | 16 51 | 0 52 | 17 2 | 0 40 | 22 17 | 0 44 | 13 54 | 16 30 | 14 6 | 14 11 | 25 23 | 4 19 | 2 35 |
| T 19 | 14 25 | 27 6 | 3 42 | 18 23 | 1 5 | 23 8 | 1 13 | 10 1 | 1 34 | 21 42 | 0 46 | 16 50 | 0 52 | 17 2 | 0 40 | 22 17 | 0 44 | 13 53 | 16 30 | 14 8 | 14 12 | 25 21 | 4 21 | 2 35 |
| W20 | 14 43 | 25 20 | 2 55 | 19 6 | 1 15 | 23 21 | 1 15 | 9 45 | 1 34 | 21 41 | 0 46 | 16 49 | 0 52 | 17 1 | 0 40 | 22 17 | 0 44 | 13 53 | 16 30 | 14 10 | 14 13 | 25 20 | 4 22 | 2 35 |
| T 21 | 15 2 | 22 28 | 2 1 | 19 47 | 1 24 | 23 34 | 1 18 | 9 28 | 1 35 | 21 41 | 0 46 | 16 49 | 0 53 | 17 1 | 0 40 | 22 17 | 0 44 | 13 53 | 16 31 | 14 11 | 14 14 | 25 18 | 4 23 | 2 35 |
| F 22 | 15 20 | 18 38 | 1 1 | 20 26 | 1 33 | 23 45 | 1 20 | 9 12 | 1 36 | 21 40 | 0 46 | 16 48 | 0 53 | 17 1 | 0 40 | 22 17 | 0 44 | 13 53 | 16 31 | 14 11 | 14 15 | 25 16 | 4 24 | 2 35 |
| S 23 | 15 38 | 14 2 | 0s 2 | 21 2 | 1 41 | 23 57 | 1 23 | 8 55 | 1 36 | 21 39 | 0 46 | 16 47 | 0 53 | 17 1 | 0 40 | 22 17 | 0 44 | 13 52 | 16 31 | 14 11 | 14 16 | 25 15 | 4 26 | 2 35 |
| S 24 | 15 55 | 8 49 | 1 6 | 21 36 | 1 49 | 24 7 | 1 25 | 8 38 | 1 37 | 21 39 | 0 46 | 16 47 | 0 53 | 17 0 | 0 40 | 22 17 | 0 44 | 13 52 | 16 31 | 14 11 | 14 17 | 25 13 | 4 27 | 2 35 |
| M25 | 16 12 | 3 8 | 2 8 | 22 8 | 1 55 | 24 17 | 1 27 | 8 22 | 1 37 | 21 38 | 0 46 | 16 46 | 0 53 | 17 0 | 0 40 | 22 17 | 0 44 | 13 52 | 16 32 | 14 11 | 14 18 | 25 12 | 4 28 | 2 35 |
| T 26 | 16 29 | 2s50 | 3 6 | 22 36 | 2 2 | 24 26 | 1 30 | 8 5 | 1 38 | 21 37 | 0 46 | 16 46 | 0 53 | 17 0 | 0 40 | 22 17 | 0 44 | 13 52 | 16 32 | 14 13 | 14 19 | 25 10 | 4 29 | 2 35 |
| W27 | 16 46 | 8 51 | 3 55 | 23 3 | 2 7 | 24 35 | 1 32 | 7 48 | 1 38 | 21 36 | 0 46 | 16 45 | 0 54 | 17 0 | 0 40 | 22 17 | 0 44 | 13 51 | 16 32 | 14 15 | 14 20 | 25 8 | 4 30 | 2 35 |
| T 28 | 17 3 | 14 38 | 4 33 | 23 26 | 2 12 | 24 42 | 1 34 | 7 31 | 1 39 | 21 36 | 0 46 | 16 45 | 0 54 | 17 0 | 0 40 | 22 17 | 0 44 | 13 51 | 16 32 | 14 18 | 14 21 | 25 7 | 4 32 | 2 35 |
| F 29 | 17 19 | 19 50 | 4 55 | 23 48 | 2 16 | 24 49 | 1 36 | 7 14 | 1 40 | 21 35 | 0 46 | 16 45 | 0 54 | 17 0 | 0 40 | 22 16 | 0 43 | 13 51 | 16 33 | 14 22 | 14 22 | 25 5 | 4 33 | 2 35 |
| S 30 | 17n35 | 24s 0 | 5s 0 | 24n 6 | 2n19 | 24n56 | 1n38 | 6s57 | 1s40 | 21s34 | 0n46 | 16s44 | 0s54 | 17s 0 | 0s40 | 22n16 | 0s43 | 13s51 | 16s33 | 14s25 | 14s23 | 25n 3 | 4n34 | 2n35 |

Julian Day Number = 2298243.5, Delta T = 119.56 sec
Ecliptic obliquity = 23°29'46, Nutation = 0°00'09, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°52'58, Lahiri = 17°59'58 Julian Calendar 1 Apr. 1580 == Greg. Calendar 11 Apr. 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## MAY 1580 JC

**00:00 UT**

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S 1 | 15 15 17 | 20♉12'47 | 10♐ 1 | 10♊21 | 23♊52 | 17♓ 3 | 12°R12 | 16♒41 | 15♒ 6 | 11♋34 | 3♈18 | 21°R 9 | 21♒23 | 18♋18 | 5♈33 | S 1 |
| M 2 | 15 19 13 | 21°10'31 | 24°43 | 11°50 | 25° 3 | 17°48 | 12♐ 5 | 16°43 | 15° 6 | 11°35 | 3°19 | 21♒ 0 | 21°20 | 18°24 | 5°36 | M 2 |
| T 3 | 15 23 10 | 22° 8'15 | 9♑23 | 13°16 | 26°14 | 18°33 | 11°58 | 16°44 | 15° 6 | 11°37 | 3°20 | 20°54 | 21°17 | 18°31 | 5°39 | T 3 |
| W 4 | 15 27 7 | 23° 5'57 | 23°55 | 14°39 | 27°25 | 19°17 | 11°52 | 16°46 | 15° 7 | 11°38 | 3°21 | 20°50 | 21°14 | 18°38 | 5°42 | W 4 |
| T 5 | 15 31 3 | 24° 3'38 | 8♒14 | 15°57 | 28°36 | 20° 2 | 11°45 | 16°47 | 15° 7 | 11°40 | 3°22 | 20°48 | 21°10 | 18°44 | 5°44 | T 5 |
| F 6 | 15 35 0 | 25° 1'18 | 22°19 | 17°13 | 29°47 | 20°47 | 11°38 | 16°48 | 15° 7 | 11°42 | 3°23 | 20°48 | 21° 7 | 18°51 | 5°47 | F 6 |
| S 7 | 15 38 56 | 25°58'57 | 6♓ 9 | 18°24 | 0♋58 | 21°31 | 11°31 | 16°49 | 15° 7 | 11°43 | 3°24 | 20°48 | 21° 4 | 18°58 | 5°50 | S 7 |
| S 8 | 15 42 53 | 26°56'35 | 19°45 | 19°32 | 2° 9 | 22°16 | 11°24 | 16°50 | 15° 7 | 11°45 | 3°25 | 20°46 | 21° 1 | 19° 4 | 5°52 | S 8 |
| M 9 | 15 46 49 | 27°54'12 | 3♈ 7 | 20°36 | 3°20 | 23° 1 | 11°17 | 16°51 | 15° 8 | 11°47 | 3°26 | 20°43 | 20°58 | 19°11 | 5°55 | M 9 |
| T 10 | 15 50 46 | 28°51'48 | 16°17 | 21°36 | 4°30 | 23°45 | 11° 9 | 16°52 | 15°R 8 | 11°48 | 3°27 | 20°37 | 20°55 | 19°18 | 5°57 | T 10 |
| W11 | 15 54 42 | 29°49'24 | 29°15 | 22°32 | 5°41 | 24°30 | 11° 2 | 16°52 | 15° 8 | 11°50 | 3°28 | 20°27 | 20°51 | 19°24 | 6° 0 | W11 |
| T 12 | 15 58 39 | 0♊46'58 | 12♉ 2 | 23°24 | 6°52 | 25°14 | 10°55 | 16°53 | 15° 7 | 11°52 | 3°29 | 20°16 | 20°48 | 19°31 | 6° 2 | T 12 |
| F 13 | 16 2 36 | 1°44'31 | 24°37 | 24°12 | 8° 2 | 25°59 | 10°47 | 16°53 | 15° 7 | 11°54 | 3°30 | 20° 3 | 20°45 | 19°38 | 6° 5 | F 13 |
| S 14 | 16 6 32 | 2°42'03 | 7♊ 1 | 24°56 | 9°12 | 26°43 | 10°40 | 16°54 | 15° 7 | 11°55 | 3°30 | 19°50 | 20°42 | 19°44 | 6° 7 | S 14 |
| S 15 | 16 10 29 | 3°39'34 | 19°14 | 25°35 | 10°23 | 27°27 | 10°32 | 16°54 | 15° 7 | 11°57 | 3°31 | 19°38 | 20°39 | 19°51 | 6° 9 | S 15 |
| M16 | 16 14 25 | 4°37'04 | 1♋17 | 26°10 | 11°33 | 28°12 | 10°25 | 16°54 | 15° 7 | 11°59 | 3°32 | 19°28 | 20°36 | 19°58 | 6°12 | M16 |
| T 17 | 16 18 22 | 5°34'33 | 13°12 | 26°41 | 12°43 | 28°56 | 10°17 | 16°R54 | 15° 6 | 12° 1 | 3°33 | 19°20 | 20°32 | 20° 4 | 6°14 | T 17 |
| W18 | 16 22 18 | 6°32'00 | 25° 1 | 27° 8 | 13°53 | 29°40 | 10° 9 | 16°54 | 15° 6 | 12° 3 | 3°34 | 19°15 | 20°29 | 20°11 | 6°16 | W18 |
| T 19 | 16 26 15 | 7°29'27 | 6♌48 | 27°30 | 15° 3 | 0♈24 | 10° 2 | 16°54 | 15° 6 | 12° 5 | 3°34 | 19°13 | 20°26 | 20°18 | 6°18 | T 19 |
| F 20 | 16 30 11 | 8°26'52 | 18°37 | 27°47 | 16°13 | 1° 8 | 9°54 | 16°54 | 15° 5 | 12° 7 | 3°35 | 19°D12 | 20°23 | 20°24 | 6°20 | F 20 |
| S 21 | 16 34 8 | 9°24'16 | 0♍34 | 28° 0 | 17°22 | 1°52 | 9°46 | 16°54 | 15° 5 | 12° 9 | 3°36 | 19°12 | 20°20 | 20°31 | 6°22 | S 21 |
| S 22 | 16 38 5 | 10°21'39 | 12°44 | 28° 8 | 18°32 | 2°36 | 9°39 | 16°53 | 15° 4 | 12°11 | 3°37 | 19°R13 | 20°16 | 20°38 | 6°25 | S 22 |
| M23 | 16 42 1 | 11°19'01 | 25°12 | 28°R11 | 19°42 | 3°20 | 9°31 | 16°53 | 15° 3 | 12°13 | 3°37 | 19°12 | 20°13 | 20°44 | 6°26 | M23 |
| T 24 | 16 45 58 | 12°16'22 | 8♎ 2 | 28°10 | 20°51 | 4° 4 | 9°24 | 16°52 | 15° 3 | 12°14 | 3°38 | 19° 9 | 20°10 | 20°51 | 6°28 | T 24 |
| W25 | 16 49 54 | 13°13'41 | 21°19 | 28° 5 | 22° 0 | 4°48 | 9°16 | 16°51 | 15° 2 | 12°16 | 3°39 | 19° 4 | 20° 7 | 20°58 | 6°30 | W25 |
| T 26 | 16 53 51 | 14°11'00 | 5♏ 4 | 27°55 | 23°10 | 5°31 | 9° 8 | 16°51 | 15° 1 | 12°18 | 3°39 | 18°57 | 20° 4 | 21° 4 | 6°32 | T 26 |
| F 27 | 16 57 47 | 15° 8'18 | 19°17 | 27°41 | 24°19 | 6°15 | 9° 1 | 16°50 | 15° 0 | 12°20 | 3°40 | 18°48 | 20° 1 | 21°11 | 6°34 | F 27 |
| S 28 | 17 1 44 | 16° 5'35 | 3♐54 | 27°23 | 25°28 | 6°58 | 8°53 | 16°49 | 15° 0 | 12°23 | 3°40 | 18°38 | 19°57 | 21°18 | 6°36 | S 28 |
| S 29 | 17 5 41 | 17° 2'51 | 18°48 | 27° 2 | 26°37 | 7°42 | 8°46 | 16°48 | 14°59 | 12°25 | 3°41 | 18°30 | 19°54 | 21°24 | 6°37 | S 29 |
| M30 | 17 9 37 | 18° 0'07 | 3♑51 | 26°37 | 27°46 | 8°25 | 8°38 | 16°46 | 14°58 | 12°27 | 3°42 | 18°22 | 19°51 | 21°31 | 6°39 | M30 |
| T 31 | 17 13 34 | 18♊57'22 | 18♑53 | 26♊ 9 | 28♋54 | 9♈ 9 | 8♐31 | 16♒45 | 14♒57 | 12♋29 | 3♈42 | 18♒17 | 19♒48 | 21♋38 | 6♈41 | T 31 |

| 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 | |
| S 1 | 17n50 | 26s42 | 4s44 | 24n23 | 2n21 | 25n 1 | 1n40 | 6s40 | 1s41 | 21s33 | 0n46 | 16s44 | 0s54 | 16s59 | 0s40 | 22n16 | 0s43 | 13s51 | 16s33 | 14s29 | 14s24 | 25n 2 | 4n35 | 2n35 | S 1 |
| M 2 | 18 6 | 27 34 | 4 11 | 24 37 | 2 23 | 25 6 | 1 42 | 6 23 | 1 41 | 21 33 | 0 45 | 16 44 | 0 54 | 16 59 | 0 40 | 22 16 | 0 43 | 13 50 | 16 33 | 14 32 | 14 25 | 25 0 | 4 36 | 2 35 | M 2 |
| T 3 | 18 21 | 26 29 | 3 20 | 24 49 | 2 23 | 25 11 | 1 44 | 6 6 | 1 42 | 21 32 | 0 45 | 16 43 | 0 55 | 16 59 | 0 40 | 22 16 | 0 43 | 13 50 | 16 34 | 14 34 | 14 26 | 24 59 | 4 37 | 2 35 | T 3 |
| W 4 | 18 35 | 23 37 | 2 17 | 24 58 | 2 23 | 25 14 | 1 46 | 5 49 | 1 42 | 21 31 | 0 45 | 16 43 | 0 55 | 16 59 | 0 41 | 22 16 | 0 43 | 13 50 | 16 34 | 14 35 | 14 27 | 24 57 | 4 39 | 2 35 | W 4 |
| T 5 | 18 50 | 19 19 | 1 6 | 25 6 | 2 22 | 25 17 | 1 48 | 5 32 | 1 43 | 21 30 | 0 45 | 16 43 | 0 55 | 16 59 | 0 41 | 22 16 | 0 43 | 13 50 | 16 34 | 14 36 | 14 28 | 24 55 | 4 40 | 2 35 | T 5 |
| F 6 | 19 4 | 13 59 | 0n 8 | 25 12 | 2 20 | 25 19 | 1 49 | 5 14 | 1 43 | 21 29 | 0 45 | 16 43 | 0 55 | 16 59 | 0 41 | 22 16 | 0 43 | 13 50 | 16 34 | 14 36 | 14 29 | 24 53 | 4 41 | 2 35 | F 6 |
| S 7 | 19 18 | 8 2 | 1 20 | 25 16 | 2 17 | 25 21 | 1 51 | 4 57 | 1 44 | 21 28 | 0 45 | 16 43 | 0 55 | 16 59 | 0 41 | 22 16 | 0 43 | 13 50 | 16 35 | 14 36 | 14 31 | 24 52 | 4 42 | 2 36 | S 7 |
| S 8 | 19 31 | 1 49 | 2 27 | 25 17 | 2 13 | 25 21 | 1 53 | 4 40 | 1 44 | 21 27 | 0 45 | 16 42 | 0 55 | 16 59 | 0 41 | 22 15 | 0 43 | 13 50 | 16 35 | 14 36 | 14 32 | 24 50 | 4 43 | 2 36 | S 8 |
| M 9 | 19 44 | 4n21 | 3 24 | 25 18 | 2 8 | 25 21 | 1 54 | 4 23 | 1 45 | 21 26 | 0 45 | 16 42 | 0 56 | 16 59 | 0 41 | 22 15 | 0 43 | 13 49 | 16 35 | 14 37 | 14 33 | 24 48 | 4 44 | 2 36 | M 9 |
| T 10 | 19 57 | 10 15 | 4 9 | 25 16 | 2 3 | 25 21 | 1 56 | 4 6 | 1 45 | 21 26 | 0 45 | 16 42 | 0 56 | 16 59 | 0 41 | 22 15 | 0 43 | 13 49 | 16 36 | 14 39 | 14 34 | 24 47 | 4 45 | 2 36 | T 10 |
| W11 | 20 10 | 15 36 | 4 41 | 25 13 | 1 56 | 25 19 | 1 57 | 3 48 | 1 45 | 21 25 | 0 45 | 16 42 | 0 56 | 16 59 | 0 41 | 22 15 | 0 43 | 13 49 | 16 36 | 14 42 | 14 35 | 24 45 | 4 46 | 2 36 | W11 |
| T 12 | 20 22 | 20 12 | 4 57 | 25 9 | 1 49 | 25 17 | 1 58 | 3 31 | 1 46 | 21 24 | 0 45 | 16 42 | 0 56 | 16 59 | 0 41 | 22 15 | 0 43 | 13 49 | 16 36 | 14 46 | 14 36 | 24 43 | 4 47 | 2 36 | T 12 |
| F 13 | 20 34 | 23 48 | 5 0 | 25 3 | 1 41 | 25 14 | 1 59 | 3 14 | 1 46 | 21 23 | 0 45 | 16 42 | 0 56 | 16 59 | 0 41 | 22 15 | 0 43 | 13 49 | 16 36 | 14 50 | 14 37 | 24 42 | 4 48 | 2 36 | F 13 |
| S 14 | 20 45 | 26 15 | 4 47 | 24 55 | 1 32 | 25 11 | 2 1 | 2 56 | 1 47 | 21 22 | 0 45 | 16 42 | 0 56 | 16 59 | 0 41 | 22 15 | 0 43 | 13 49 | 16 37 | 14 54 | 14 38 | 24 40 | 4 49 | 2 36 | S 14 |
| S 15 | 20 56 | 27 25 | 4 22 | 24 47 | 1 22 | 25 7 | 2 2 | 2 39 | 1 47 | 21 21 | 0 44 | 16 42 | 0 57 | 17 0 | 0 41 | 22 15 | 0 43 | 13 49 | 16 37 | 14 58 | 14 39 | 24 38 | 4 50 | 2 36 | S 15 |
| M16 | 21 7 | 27 15 | 3 45 | 24 37 | 1 11 | 25 2 | 2 3 | 2 22 | 1 47 | 21 20 | 0 44 | 16 42 | 0 57 | 17 0 | 0 41 | 22 14 | 0 43 | 13 49 | 16 37 | 15 1 | 14 40 | 24 36 | 4 51 | 2 36 | M16 |
| T 17 | 21 17 | 25 48 | 2 59 | 24 27 | 0 59 | 24 56 | 2 3 | 2 5 | 1 48 | 21 19 | 0 44 | 16 43 | 0 57 | 17 0 | 0 41 | 22 14 | 0 43 | 13 49 | 16 38 | 15 3 | 14 41 | 24 35 | 4 52 | 2 36 | T 17 |
| W18 | 21 27 | 23 14 | 2 5 | 24 15 | 0 47 | 24 50 | 2 4 | 1 47 | 1 48 | 21 18 | 0 44 | 16 43 | 0 57 | 17 0 | 0 41 | 22 14 | 0 43 | 13 49 | 16 38 | 15 5 | 14 42 | 24 33 | 4 53 | 2 36 | W18 |
| T 19 | 21 37 | 19 40 | 1 6 | 24 2 | 0 34 | 24 43 | 2 5 | 1 30 | 1 49 | 21 17 | 0 44 | 16 43 | 0 57 | 17 0 | 0 41 | 22 14 | 0 43 | 13 49 | 16 38 | 15 6 | 14 43 | 24 31 | 4 54 | 2 36 | T 19 |
| F 20 | 21 46 | 15 20 | 0 3 | 23 48 | 0 20 | 24 35 | 2 6 | 1 13 | 1 49 | 21 16 | 0 44 | 16 43 | 0 57 | 17 0 | 0 41 | 22 14 | 0 43 | 13 49 | 16 39 | 15 6 | 14 44 | 24 29 | 4 55 | 2 36 | F 20 |
| S 21 | 21 55 | 10 21 | 1s 0 | 23 34 | 0 5 | 24 27 | 2 6 | 0 56 | 1 49 | 21 15 | 0 44 | 16 43 | 0 58 | 17 0 | 0 41 | 22 14 | 0 43 | 13 49 | 16 39 | 15 6 | 14 45 | 24 27 | 4 56 | 2 36 | S 21 |
| S 22 | 22 3 | 4 55 | 2 2 | 23 19 | 0s10 | 24 18 | 2 7 | 0 38 | 1 50 | 21 14 | 0 44 | 16 44 | 0 58 | 17 1 | 0 41 | 22 13 | 0 43 | 13 49 | 16 39 | 15 6 | 14 46 | 24 26 | 4 56 | 2 36 | S 22 |
| M23 | 22 11 | 0s50 | 2 59 | 23 3 | 0 26 | 24 8 | 2 7 | 0 21 | 1 50 | 21 13 | 0 44 | 16 44 | 0 58 | 17 1 | 0 41 | 22 13 | 0 43 | 13 49 | 16 40 | 15 6 | 14 47 | 24 24 | 4 57 | 2 36 | M23 |
| T 24 | 22 19 | 6 42 | 3 50 | 22 47 | 0 42 | 23 58 | 2 7 | 0 4 | 1 50 | 21 12 | 0 43 | 16 44 | 0 58 | 17 1 | 0 41 | 22 13 | 0 43 | 13 49 | 16 40 | 15 7 | 14 48 | 24 22 | 4 58 | 2 36 | T 24 |
| W25 | 22 26 | 12 29 | 4 29 | 22 31 | 0 58 | 23 47 | 2 7 | 0n13 | 1 51 | 21 11 | 0 43 | 16 45 | 0 58 | 17 1 | 0 41 | 22 13 | 0 43 | 13 49 | 16 40 | 15 9 | 14 49 | 24 20 | 4 59 | 2 36 | W25 |
| T 26 | 22 33 | 17 52 | 4 55 | 22 14 | 1 15 | 23 36 | 2 7 | 0 30 | 1 51 | 21 10 | 0 43 | 16 45 | 0 58 | 17 2 | 0 41 | 22 13 | 0 43 | 13 49 | 16 41 | 15 11 | 14 50 | 24 18 | 5 0 | 2 37 | T 26 |
| F 27 | 22 40 | 22 27 | 5 4 | 21 56 | 1 32 | 23 24 | 2 7 | 0 47 | 1 51 | 21 9 | 0 43 | 16 46 | 0 59 | 17 2 | 0 41 | 22 13 | 0 43 | 13 49 | 16 41 | 15 14 | 14 51 | 24 17 | 5 0 | 2 37 | F 27 |
| S 28 | 22 46 | 25 47 | 4 53 | 21 39 | 1 49 | 23 11 | 2 7 | 1 4 | 1 52 | 21 8 | 0 43 | 16 46 | 0 59 | 17 2 | 0 41 | 22 13 | 0 43 | 13 49 | 16 41 | 15 16 | 14 52 | 24 15 | 5 1 | 2 37 | S 28 |
| S 29 | 22 52 | 27 23 | 4 23 | 21 22 | 2 6 | 22 58 | 2 7 | 1 21 | 1 52 | 21 7 | 0 43 | 16 47 | 0 59 | 17 2 | 0 41 | 22 12 | 0 43 | 13 49 | 16 42 | 15 19 | 14 53 | 24 13 | 5 2 | 2 37 | S 29 |
| M30 | 22 57 | 27 0 | 3 34 | 21 4 | 2 23 | 22 44 | 2 7 | 1 38 | 1 52 | 21 6 | 0 43 | 16 47 | 0 59 | 17 3 | 0 42 | 22 12 | 0 43 | 13 50 | 16 42 | 15 22 | 14 54 | 24 11 | 5 3 | 2 37 | M30 |
| T 31 | 23n 2 | 24s39 | 2s30 | 20n47 | 2s39 | 22n29 | 2n 6 | 1n55 | 1s52 | 21s 5 | 0n42 | 16s48 | 0s59 | 17s 3 | 0s42 | 22n12 | 0s43 | 13s50 | 16s43 | 15s23 | 14s55 | 24n 9 | 5n 3 | 2n37 | T 31 |

Julian Day Number = 2298273.5, Delta T = 119.41 sec
Ecliptic obliquity = 23°29'45, Nutation = 0°00'09, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°53'02, Lahiri = 18°00'02 Julian Calendar 1 May 1580 == Greg. Calendar 11 May 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## JUNE 1580 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W 1 | 17 17 30 | 19♊54'37 | 3♒44 | 25°R39 | 0♌ 3 | 9♈52 | 8°R23 | 16°R44 | 14°R56 | 12♋31 | 3♈43 | 18°R14 | 19♒45 | 21♋44 | 6♈42 | W 1 |
| T 2 | 17 21 27 | 20°51'52 | 18°20 | 25♊ 7 | 1°11 | 10°35 | 8♐16 | 16♒42 | 14♒55 | 12°33 | 3°43 | 18°D13 | 19°42 | 21°51 | 6°44 | T 2 |
| F 3 | 17 25 23 | 21°49'06 | 2♓36 | 24°34 | 2°20 | 11°19 | 8° 9 | 16°41 | 14°54 | 12°35 | 3°44 | 18♒14 | 19°38 | 21°58 | 6°45 | F 3 |
| S 4 | 17 29 20 | 22°46'20 | 16°31 | 23°59 | 3°28 | 12° 2 | 8° 1 | 16°39 | 14°53 | 12°37 | 3°44 | 18°R14 | 19°35 | 22° 4 | 6°47 | S 4 |
| S 5 | 17 33 16 | 23°43'33 | 0♈ 5 | 23°25 | 4°36 | 12°45 | 7°54 | 16°37 | 14°51 | 12°39 | 3°44 | 18°14 | 19°32 | 22°11 | 6°48 | S 5 |
| M 6 | 17 37 13 | 24°40'47 | 13°20 | 22°51 | 5°44 | 13°28 | 7°47 | 16°36 | 14°50 | 12°41 | 3°45 | 18°13 | 19°29 | 22°18 | 6°49 | M 6 |
| T 7 | 17 41 10 | 25°38'01 | 26°18 | 22°17 | 6°52 | 14°11 | 7°40 | 16°34 | 14°49 | 12°43 | 3°45 | 18° 9 | 19°26 | 22°24 | 6°51 | T 7 |
| W 8 | 17 45 6 | 26°35'14 | 9♉ 1 | 21°46 | 7°59 | 14°54 | 7°33 | 16°32 | 14°48 | 12°46 | 3°46 | 18° 3 | 19°22 | 22°31 | 6°52 | W 8 |
| T 9 | 17 49 3 | 27°32'28 | 21°32 | 21°16 | 9° 7 | 15°36 | 7°27 | 16°30 | 14°46 | 12°48 | 3°46 | 17°55 | 19°19 | 22°38 | 6°53 | T 9 |
| F 10 | 17 52 59 | 28°29'41 | 3♊51 | 20°48 | 10°14 | 16°19 | 7°20 | 16°27 | 14°45 | 12°50 | 3°46 | 17°47 | 19°16 | 22°44 | 6°54 | F 10 |
| S 11 | 17 56 56 | 29°26'54 | 16° 1 | 20°24 | 11°22 | 17° 1 | 7°13 | 16°25 | 14°43 | 12°52 | 3°47 | 17°38 | 19°13 | 22°51 | 6°55 | S 11 |
| S 12 | 18 0 52 | 0♋24'07 | 28° 3 | 20° 3 | 12°29 | 17°44 | 7° 7 | 16°23 | 14°42 | 12°54 | 3°47 | 17°29 | 19°10 | 22°58 | 6°56 | S 12 |
| M13 | 18 4 49 | 1°21'20 | 9♋58 | 19°46 | 13°36 | 18°26 | 7° 0 | 16°20 | 14°40 | 12°57 | 3°47 | 17°22 | 19° 7 | 23° 4 | 6°57 | M13 |
| T 14 | 18 8 45 | 2°18'33 | 21°48 | 19°33 | 14°43 | 19° 9 | 6°54 | 16°18 | 14°39 | 12°59 | 3°47 | 17°17 | 19° 3 | 23°11 | 6°58 | T 14 |
| W15 | 18 12 42 | 3°15'46 | 3♌35 | 19°25 | 15°50 | 19°51 | 6°48 | 16°15 | 14°37 | 13° 1 | 3°48 | 17°14 | 19° 0 | 23°18 | 6°59 | W15 |
| T 16 | 18 16 39 | 4°12'58 | 15°22 | 19°D21 | 16°56 | 20°33 | 6°42 | 16°13 | 14°36 | 13° 3 | 3°48 | 17°D13 | 18°57 | 23°24 | 7° 0 | T 16 |
| F 17 | 18 20 35 | 5°10'10 | 27°13 | 19°22 | 18° 3 | 21°15 | 6°36 | 16°10 | 14°34 | 13° 5 | 3°48 | 17°13 | 18°54 | 23°31 | 7° 1 | F 17 |
| S 18 | 18 24 32 | 6° 7'22 | 9♍11 | 19°28 | 19° 9 | 21°57 | 6°30 | 16° 7 | 14°32 | 13° 8 | 3°48 | 17°15 | 18°51 | 23°38 | 7° 1 | S 18 |
| S 19 | 18 28 28 | 7° 4'33 | 21°21 | 19°38 | 20°15 | 22°39 | 6°24 | 16° 4 | 14°31 | 13°10 | 3°48 | 17°16 | 18°48 | 23°44 | 7° 2 | S 19 |
| M20 | 18 32 25 | 8° 1'44 | 3♎47 | 19°54 | 21°21 | 23°20 | 6°19 | 16° 1 | 14°29 | 13°12 | 3°48 | 17°R17 | 18°44 | 23°51 | 7° 2 | M20 |
| T 21 | 18 36 21 | 8°58'55 | 16°35 | 20°15 | 22°26 | 24° 2 | 6°13 | 15°58 | 14°27 | 13°14 | 3°48 | 17°17 | 18°41 | 23°58 | 7° 3 | T 21 |
| W22 | 18 40 18 | 9°56'06 | 29°48 | 20°41 | 23°32 | 24°43 | 6° 8 | 15°55 | 14°25 | 13°16 | 3°48 | 17°15 | 18°38 | 24° 4 | 7° 3 | W22 |
| T 23 | 18 44 14 | 10°53'17 | 13♏28 | 21°12 | 24°37 | 25°25 | 6° 3 | 15°52 | 14°24 | 13°19 | 3°48 | 17°12 | 18°35 | 24°11 | 7° 4 | T 23 |
| F 24 | 18 48 11 | 11°50'28 | 27°38 | 21°48 | 25°42 | 26° 6 | 5°58 | 15°49 | 14°22 | 13°21 | 3°R48 | 17° 8 | 18°32 | 24°18 | 7° 4 | F 24 |
| S 25 | 18 52 8 | 12°47'39 | 12♐14 | 22°29 | 26°47 | 26°47 | 5°53 | 15°45 | 14°20 | 13°23 | 3°48 | 17° 3 | 18°28 | 24°24 | 7° 5 | S 25 |
| S 26 | 18 56 4 | 13°44'50 | 27°11 | 23°15 | 27°52 | 27°28 | 5°48 | 15°42 | 14°18 | 13°25 | 3°48 | 16°58 | 18°25 | 24°31 | 7° 5 | S 26 |
| M27 | 19 0 1 | 14°42'01 | 12♑21 | 24° 7 | 28°56 | 28° 9 | 5°44 | 15°38 | 14°16 | 13°28 | 3°48 | 16°54 | 18°22 | 24°38 | 7° 5 | M27 |
| T 28 | 19 3 57 | 15°39'12 | 27°34 | 25° 2 | 0♍ 1 | 28°50 | 5°39 | 15°35 | 14°14 | 13°30 | 3°48 | 16°52 | 18°19 | 24°44 | 7° 5 | T 28 |
| W29 | 19 7 54 | 16°36'24 | 12♒40 | 26° 3 | 1° 5 | 29°31 | 5°35 | 15°31 | 14°12 | 13°32 | 3°48 | 16°D51 | 18°16 | 24°51 | 7° 5 | W29 |
| T 30 | 19 11 50 | 17♋33'36 | 27♒32 | 27♊ 9 | 2♍ 9 | 0♉11 | 5♐31 | 15♒28 | 14♒10 | 13♋34 | 3♈48 | 16♒51 | 18♒13 | 24♋58 | 7°R 5 | 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 | |
| W 1 | 23n 7 | 20s36 | 1s17 | 20n31 | 2s55 | 22n14 | 2n 6 | 2n12 | 1s52 | 21s 4 | 0n42 | 16s48 | 0s59 | 17s 3 | 0s42 | 22n12 | 0s43 | 13s50 | 16s43 | 15s24 | 14s56 | 24n 8 | 5n 4 | 2n37 | |
| T 2 | 23 11 | 15 21 | 0n 1 | 20 15 | 3 10 | 21 59 | 2 5 | 2 28 | 1 53 | 21 3 | 0 42 | 16 49 | 1 0 | 17 4 | 0 42 | 22 12 | 0 43 | 13 50 | 16 43 | 15 24 | 14 57 | 24 6 | 5 5 | 2 37 | |
| F 3 | 23 15 | 9 23 | 1 16 | 19 59 | 3 24 | 21 42 | 2 4 | 2 45 | 1 53 | 21 2 | 0 42 | 16 49 | 1 0 | 17 4 | 0 42 | 22 11 | 0 43 | 13 50 | 16 44 | 15 24 | 14 58 | 24 4 | 5 5 | 2 37 | |
| S 4 | 23 18 | 3 6 | 2 26 | 19 45 | 3 37 | 21 26 | 2 4 | 3 2 | 1 53 | 21 1 | 0 42 | 16 50 | 1 0 | 17 4 | 0 42 | 22 11 | 0 43 | 13 50 | 16 44 | 15 24 | 14 59 | 24 2 | 5 6 | 2 37 | |
| S 5 | 23 21 | 3n10 | 3 25 | 19 31 | 3 49 | 21 8 | 2 3 | 3 18 | 1 53 | 21 0 | 0 42 | 16 51 | 1 0 | 17 5 | 0 42 | 22 11 | 0 43 | 13 50 | 16 44 | 15 24 | 15 0 | 24 0 | 5 7 | 2 37 | |
| M 6 | 23 23 | 9 8 | 4 12 | 19 19 | 4 0 | 20 51 | 2 2 | 3 35 | 1 53 | 20 59 | 0 42 | 16 51 | 1 0 | 17 5 | 0 42 | 22 11 | 0 43 | 13 51 | 16 45 | 15 24 | 15 1 | 23 58 | 5 7 | 2 37 | |
| T 7 | 23 25 | 14 36 | 4 45 | 19 7 | 4 9 | 20 32 | 2 0 | 3 52 | 1 54 | 20 58 | 0 41 | 16 52 | 1 0 | 17 6 | 0 42 | 22 11 | 0 43 | 13 51 | 16 45 | 15 26 | 15 2 | 23 56 | 5 8 | 2 37 | |
| W 8 | 23 27 | 19 19 | 5 3 | 18 57 | 4 17 | 20 14 | 1 59 | 4 8 | 1 54 | 20 57 | 0 41 | 16 53 | 1 1 | 17 6 | 0 42 | 22 11 | 0 43 | 13 51 | 16 45 | 15 27 | 15 3 | 23 54 | 5 8 | 2 37 | |
| T 9 | 23 28 | 23 6 | 5 6 | 18 49 | 4 24 | 19 55 | 1 58 | 4 24 | 1 54 | 20 56 | 0 41 | 16 54 | 1 1 | 17 6 | 0 42 | 22 10 | 0 43 | 13 51 | 16 46 | 15 30 | 15 4 | 23 53 | 5 9 | 2 37 | |
| F 10 | 23 29 | 25 48 | 4 55 | 18 42 | 4 29 | 19 35 | 1 56 | 4 41 | 1 54 | 20 55 | 0 41 | 16 55 | 1 1 | 17 7 | 0 42 | 22 10 | 0 43 | 13 51 | 16 46 | 15 32 | 15 5 | 23 51 | 5 9 | 2 38 | |
| S 11 | 23 30 | 27 14 | 4 30 | 18 37 | 4 33 | 19 15 | 1 55 | 4 57 | 1 54 | 20 54 | 0 41 | 16 55 | 1 1 | 17 7 | 0 42 | 22 10 | 0 42 | 13 52 | 16 46 | 15 35 | 15 6 | 23 49 | 5 10 | 2 38 | |
| S 12 | 23 30 | 27 23 | 3 54 | 18 33 | 4 35 | 18 54 | 1 53 | 5 13 | 1 54 | 20 53 | 0 40 | 16 56 | 1 1 | 17 8 | 0 42 | 22 10 | 0 42 | 13 52 | 16 47 | 15 38 | 15 7 | 23 47 | 5 10 | 2 38 | |
| M13 | 23 29 | 26 14 | 3 8 | 18 31 | 4 36 | 18 33 | 1 51 | 5 29 | 1 54 | 20 52 | 0 40 | 16 57 | 1 1 | 17 8 | 0 42 | 22 10 | 0 42 | 13 52 | 16 47 | 15 40 | 15 8 | 23 45 | 5 11 | 2 38 | |
| T 14 | 23 29 | 23 55 | 2 13 | 18 30 | 4 35 | 18 12 | 1 49 | 5 45 | 1 54 | 20 51 | 0 40 | 16 58 | 1 2 | 17 9 | 0 42 | 22 9 | 0 42 | 13 52 | 16 48 | 15 41 | 15 9 | 23 43 | 5 11 | 2 38 | |
| W15 | 23 27 | 20 35 | 1 13 | 18 32 | 4 33 | 17 50 | 1 47 | 6 1 | 1 55 | 20 50 | 0 40 | 16 59 | 1 2 | 17 9 | 0 42 | 22 9 | 0 42 | 13 53 | 16 48 | 15 42 | 15 10 | 23 41 | 5 12 | 2 38 | |
| T 16 | 23 26 | 16 25 | 0 10 | 18 35 | 4 30 | 17 28 | 1 45 | 6 16 | 1 55 | 20 50 | 0 40 | 17 0 | 1 2 | 17 10 | 0 42 | 22 9 | 0 42 | 13 53 | 16 48 | 15 43 | 15 11 | 23 39 | 5 12 | 2 38 | |
| F 17 | 23 24 | 11 37 | 0s54 | 18 39 | 4 26 | 17 5 | 1 42 | 6 32 | 1 55 | 20 49 | 0 40 | 17 1 | 1 2 | 17 10 | 0 42 | 22 9 | 0 42 | 13 53 | 16 49 | 15 43 | 15 12 | 23 37 | 5 12 | 2 38 | |
| S 18 | 23 21 | 6 21 | 1 57 | 18 45 | 4 20 | 16 42 | 1 40 | 6 48 | 1 55 | 20 48 | 0 39 | 17 2 | 1 2 | 17 11 | 0 42 | 22 9 | 0 42 | 13 53 | 16 49 | 15 42 | 15 13 | 23 35 | 5 13 | 2 38 | |
| S 19 | 23 18 | 0 46 | 2 55 | 18 53 | 4 13 | 16 19 | 1 37 | 7 3 | 1 55 | 20 47 | 0 39 | 17 3 | 1 2 | 17 11 | 0 42 | 22 8 | 0 42 | 13 54 | 16 49 | 15 42 | 15 14 | 23 33 | 5 13 | 2 38 | |
| M20 | 23 15 | 4s58 | 3 46 | 19 2 | 4 6 | 15 55 | 1 35 | 7 19 | 1 55 | 20 46 | 0 39 | 17 4 | 1 3 | 17 12 | 0 42 | 22 8 | 0 42 | 13 54 | 16 50 | 15 41 | 15 15 | 23 31 | 5 13 | 2 38 | |
| T 21 | 23 11 | 10 39 | 4 28 | 19 12 | 3 57 | 15 31 | 1 32 | 7 34 | 1 55 | 20 46 | 0 39 | 17 5 | 1 3 | 17 12 | 0 42 | 22 8 | 0 42 | 13 54 | 16 50 | 15 41 | 15 16 | 23 29 | 5 14 | 2 38 | |
| W22 | 23 7 | 16 3 | 4 57 | 19 23 | 3 48 | 15 7 | 1 29 | 7 49 | 1 55 | 20 45 | 0 39 | 17 6 | 1 3 | 17 13 | 0 42 | 22 8 | 0 42 | 13 55 | 16 51 | 15 42 | 15 17 | 23 27 | 5 14 | 2 38 | |
| T 23 | 23 3 | 20 51 | 5 11 | 19 35 | 3 37 | 14 42 | 1 26 | 8 4 | 1 55 | 20 44 | 0 38 | 17 7 | 1 3 | 17 14 | 0 42 | 22 8 | 0 42 | 13 55 | 16 51 | 15 43 | 15 18 | 23 25 | 5 14 | 2 39 | |
| F 24 | 22 58 | 24 39 | 5 7 | 19 48 | 3 27 | 14 17 | 1 23 | 8 19 | 1 55 | 20 44 | 0 38 | 17 8 | 1 3 | 17 14 | 0 42 | 22 7 | 0 42 | 13 55 | 16 51 | 15 44 | 15 19 | 23 23 | 5 14 | 2 39 | |
| S 25 | 22 53 | 26 59 | 4 42 | 20 2 | 3 15 | 13 52 | 1 20 | 8 34 | 1 55 | 20 43 | 0 38 | 17 9 | 1 3 | 17 15 | 0 42 | 22 7 | 0 42 | 13 56 | 16 52 | 15 46 | 15 20 | 23 21 | 5 15 | 2 39 | |
| S 26 | 22 47 | 27 27 | 3 59 | 20 17 | 3 3 | 13 26 | 1 16 | 8 49 | 1 54 | 20 42 | 0 38 | 17 11 | 1 3 | 17 15 | 0 42 | 22 7 | 0 42 | 13 56 | 16 52 | 15 47 | 15 21 | 23 19 | 5 15 | 2 39 | |
| M27 | 22 41 | 25 52 | 2 58 | 20 31 | 2 51 | 13 0 | 1 13 | 9 4 | 1 54 | 20 42 | 0 38 | 17 12 | 1 4 | 17 16 | 0 42 | 22 7 | 0 42 | 13 56 | 16 52 | 15 48 | 15 21 | 23 17 | 5 15 | 2 39 | |
| T 28 | 22 34 | 22 24 | 1 44 | 20 47 | 2 38 | 12 34 | 1 9 | 9 18 | 1 54 | 20 41 | 0 37 | 17 13 | 1 4 | 17 16 | 0 42 | 22 6 | 0 42 | 13 57 | 16 53 | 15 49 | 15 22 | 23 15 | 5 15 | 2 39 | |
| W29 | 22 28 | 17 25 | 0 23 | 21 2 | 2 24 | 12 8 | 1 5 | 9 33 | 1 54 | 20 41 | 0 37 | 17 14 | 1 4 | 17 17 | 0 42 | 22 6 | 0 42 | 13 57 | 16 53 | 15 49 | 15 23 | 23 13 | 5 15 | 2 39 | |
| T 30 | 22n20 | 11s27 | 0n58 | 21n17 | 2s11 | 11n42 | 1n 2 | 9n47 | 1s54 | 20s40 | 0n37 | 17s15 | 1s 4 | 17s18 | 0s42 | 22n 6 | 0s42 | 13s57 | 16s54 | 15s49 | 15s24 | 23n11 | 5n15 | 2n39 | |

Julian Day Number = 2298304.5, Delta T = 119.26 sec
Ecliptic obliquity = 23°29'44, Nutation = 0°00'11, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°53'06, Lahiri = 18°00'07 Julian Calendar 1 June 1580 == Greg. Calendar 11 June 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## JULY 1580 JC

**00:00 UT**

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F 1 | 19 15 47 | 18♋30'49 | 12♓ 2 | 28♊19 | 3♍12 | 0♉52 | 5°R27 | 15°R24 | 14°R 8 | 13♋37 | 3°R48 | 16♒52 | 18♒ 9 | 25♋ 4 | 7°R 5 | F 1 |
| S 2 | 19 19 44 | 19°28'02 | 26° 8 | 29°34 | 4°16 | 1°32 | 5♐23 | 15♒20 | 14♒ 6 | 13°39 | 3♈48 | 16°54 | 18° 6 | 25°11 | 7♈ 5 | S 2 |
| S 3 | 19 23 40 | 20°25'16 | 9♈49 | 0♋53 | 5°19 | 2°12 | 5°20 | 15°17 | 14° 4 | 13°41 | 3°47 | 16°55 | 18° 3 | 25°18 | 7° 5 | S 3 |
| M 4 | 19 27 37 | 21°22'31 | 23° 5 | 2°17 | 6°21 | 2°52 | 5°16 | 15°13 | 14° 1 | 13°43 | 3°47 | 16°R55 | 18° 0 | 25°24 | 7° 5 | M 4 |
| T 5 | 19 31 33 | 22°19'47 | 6♉ 0 | 3°45 | 7°24 | 3°32 | 5°13 | 15° 9 | 13°59 | 13°45 | 3°47 | 16°54 | 17°57 | 25°31 | 7° 5 | T 5 |
| W 6 | 19 35 30 | 23°17'03 | 18°37 | 5°18 | 8°26 | 4°12 | 5°10 | 15° 5 | 13°57 | 13°48 | 3°47 | 16°53 | 17°54 | 25°38 | 7° 5 | W 6 |
| T 7 | 19 39 26 | 24°14'21 | 0♊58 | 6°54 | 9°28 | 4°52 | 5° 7 | 15° 1 | 13°55 | 13°50 | 3°47 | 16°50 | 17°50 | 25°44 | 7° 4 | T 7 |
| F 8 | 19 43 23 | 25°11'39 | 13° 7 | 8°34 | 10°30 | 5°31 | 5° 4 | 14°57 | 13°53 | 13°52 | 3°46 | 16°47 | 17°47 | 25°51 | 7° 4 | F 8 |
| S 9 | 19 47 19 | 26° 8'58 | 25° 7 | 10°18 | 11°32 | 6°10 | 5° 2 | 14°53 | 13°50 | 13°54 | 3°46 | 16°43 | 17°44 | 25°57 | 7° 3 | S 9 |
| S 10 | 19 51 16 | 27° 6'19 | 7♋ 1 | 12° 5 | 12°33 | 6°50 | 4°59 | 14°49 | 13°48 | 13°56 | 3°46 | 16°40 | 17°41 | 26° 4 | 7° 3 | S 10 |
| M11 | 19 55 13 | 28° 3'39 | 18°50 | 13°56 | 13°34 | 7°29 | 4°57 | 14°44 | 13°46 | 13°59 | 3°45 | 16°38 | 17°38 | 26°11 | 7° 2 | M11 |
| T 12 | 19 59 9 | 29° 1'01 | 0♌38 | 15°49 | 14°34 | 8° 8 | 4°55 | 14°40 | 13°44 | 14° 1 | 3°45 | 16°36 | 17°34 | 26°17 | 7° 2 | T 12 |
| W13 | 20 3 6 | 29°58'23 | 12°26 | 17°45 | 15°35 | 8°46 | 4°53 | 14°36 | 13°41 | 14° 3 | 3°44 | 16°D35 | 17°31 | 26°24 | 7° 1 | W13 |
| T 14 | 20 7 2 | 0♌55'46 | 24°16 | 19°44 | 16°35 | 9°25 | 4°52 | 14°32 | 13°39 | 14° 5 | 3°44 | 16°35 | 17°28 | 26°31 | 7° 0 | T 14 |
| F 15 | 20 10 59 | 1°53'10 | 6♍12 | 21°44 | 17°34 | 10° 4 | 4°50 | 14°27 | 13°37 | 14° 7 | 3°44 | 16°36 | 17°25 | 26°37 | 7° 0 | F 15 |
| S 16 | 20 14 55 | 2°50'34 | 18°16 | 23°46 | 18°33 | 10°42 | 4°49 | 14°23 | 13°34 | 14° 9 | 3°43 | 16°37 | 17°22 | 26°44 | 6°59 | S 16 |
| S 17 | 20 18 52 | 3°47'59 | 0♎31 | 25°49 | 19°32 | 11°20 | 4°48 | 14°19 | 13°32 | 14°11 | 3°43 | 16°39 | 17°19 | 26°51 | 6°58 | S 17 |
| M18 | 20 22 48 | 4°45'25 | 13° 0 | 27°53 | 20°31 | 11°58 | 4°47 | 14°14 | 13°30 | 14°14 | 3°42 | 16°40 | 17°15 | 26°57 | 6°57 | M18 |
| T 19 | 20 26 45 | 5°42'52 | 25°48 | 29°57 | 21°29 | 12°36 | 4°46 | 14°10 | 13°27 | 14°16 | 3°42 | 16°40 | 17°12 | 27° 4 | 6°56 | T 19 |
| W20 | 20 30 42 | 6°40'19 | 8♏58 | 2♌ 2 | 22°26 | 13°13 | 4°46 | 14° 5 | 13°25 | 14°18 | 3°41 | 16°R40 | 17° 9 | 27°11 | 6°55 | W20 |
| T 21 | 20 34 38 | 7°37'47 | 22°32 | 4° 7 | 23°24 | 13°51 | 4°45 | 14° 1 | 13°23 | 14°20 | 3°40 | 16°40 | 17° 6 | 27°17 | 6°54 | T 21 |
| F 22 | 20 38 35 | 8°35'16 | 6♐31 | 6°12 | 24°20 | 14°28 | 4°D45 | 13°57 | 13°20 | 14°22 | 3°40 | 16°39 | 17° 3 | 27°24 | 6°53 | F 22 |
| S 23 | 20 42 31 | 9°32'45 | 20°55 | 8°16 | 25°17 | 15° 5 | 4°45 | 13°52 | 13°18 | 14°24 | 3°39 | 16°39 | 17° 0 | 27°31 | 6°52 | S 23 |
| S 24 | 20 46 28 | 10°30'16 | 5♑41 | 10°19 | 26°13 | 15°42 | 4°45 | 13°48 | 13°16 | 14°26 | 3°39 | 16°38 | 16°56 | 27°37 | 6°51 | S 24 |
| M25 | 20 50 24 | 11°27'47 | 20°42 | 12°22 | 27° 8 | 16°18 | 4°46 | 13°43 | 13°13 | 14°28 | 3°38 | 16°37 | 16°53 | 27°44 | 6°49 | M25 |
| T 26 | 20 54 21 | 12°25'20 | 5♒52 | 14°23 | 28° 3 | 16°55 | 4°46 | 13°39 | 13°11 | 14°30 | 3°37 | 16°37 | 16°50 | 27°51 | 6°48 | T 26 |
| W27 | 20 58 17 | 13°22'53 | 21° 0 | 16°24 | 28°57 | 17°31 | 4°47 | 13°34 | 13° 8 | 14°32 | 3°37 | 16°D37 | 16°47 | 27°57 | 6°47 | W27 |
| T 28 | 21 2 14 | 14°20'28 | 5♓58 | 18°23 | 29°51 | 18° 7 | 4°48 | 13°30 | 13° 6 | 14°34 | 3°36 | 16°37 | 16°44 | 28° 4 | 6°45 | T 28 |
| F 29 | 21 6 11 | 15°18'04 | 20°38 | 20°21 | 0♎44 | 18°43 | 4°49 | 13°25 | 13° 4 | 14°36 | 3°35 | 16°37 | 16°40 | 28°11 | 6°44 | F 29 |
| S 30 | 21 10 7 | 16°15'41 | 4♈55 | 22°18 | 1°37 | 19°19 | 4°51 | 13°21 | 13° 1 | 14°38 | 3°35 | 16°R37 | 16°37 | 28°17 | 6°42 | S 30 |
| S 31 | 21 14 4 | 17♌13'20 | 18♈45 | 24♌13 | 2♎29 | 19♉54 | 4♐52 | 13♒16 | 12♒59 | 14♋40 | 3♈34 | 16♒37 | 16♒34 | 28♋24 | 6♈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 | 22n13 | 5s 0 | 2n14 | 21n32 | 1s57 | 11n15 | 0n58 | 10n 1 | 1s54 | 20s40 | 0n37 | 17s17 | 1s 4 | 17s18 | 0s42 | 22n 6 | 0s42 | 13s58 | 16s54 | 15s49 | 15s25 | 23n 9 | 5n15 | 2n39 |
| S 2 | 22 5 | 1n30 | 3 19 | 21 46 | 1 44 | 10 48 | 0 54 | 10 15 | 1 54 | 20 39 | 0 37 | 17 18 | 1 4 | 17 19 | 0 42 | 22 6 | 0 42 | 13 58 | 16 54 | 15 49 | 15 26 | 23 7 | 5 15 | 2 39 |
| S 3 | 21 56 | 7 44 | 4 11 | 22 0 | 1 30 | 10 21 | 0 49 | 10 29 | 1 54 | 20 39 | 0 36 | 17 19 | 1 4 | 17 20 | 0 42 | 22 5 | 0 42 | 13 59 | 16 55 | 15 48 | 15 27 | 23 5 | 5 15 | 2 39 |
| M 4 | 21 48 | 13 27 | 4 48 | 22 13 | 1 16 | 9 54 | 0 45 | 10 43 | 1 53 | 20 38 | 0 36 | 17 20 | 1 4 | 17 20 | 0 42 | 22 5 | 0 42 | 13 59 | 16 55 | 15 48 | 15 28 | 23 3 | 5 15 | 2 39 |
| T 5 | 21 38 | 18 24 | 5 9 | 22 24 | 1 2 | 9 26 | 0 41 | 10 57 | 1 53 | 20 38 | 0 36 | 17 22 | 1 5 | 17 21 | 0 42 | 22 5 | 0 42 | 13 59 | 16 55 | 15 48 | 15 29 | 23 1 | 5 15 | 2 39 |
| W 6 | 21 29 | 22 26 | 5 14 | 22 35 | 0 49 | 8 59 | 0 36 | 11 10 | 1 53 | 20 38 | 0 36 | 17 23 | 1 5 | 17 21 | 0 43 | 22 5 | 0 42 | 14 0 | 16 56 | 15 49 | 15 30 | 22 59 | 5 15 | 2 40 |
| T 7 | 21 19 | 25 22 | 5 5 | 22 44 | 0 35 | 8 31 | 0 31 | 11 24 | 1 53 | 20 37 | 0 36 | 17 24 | 1 5 | 17 22 | 0 43 | 22 5 | 0 42 | 14 0 | 16 56 | 15 50 | 15 31 | 22 57 | 5 15 | 2 40 |
| F 8 | 21 9 | 27 5 | 4 42 | 22 51 | 0 22 | 8 3 | 0 26 | 11 37 | 1 53 | 20 37 | 0 35 | 17 26 | 1 5 | 17 23 | 0 43 | 22 4 | 0 42 | 14 1 | 16 56 | 15 51 | 15 32 | 22 55 | 5 15 | 2 40 |
| S 9 | 20 58 | 27 31 | 4 7 | 22 56 | 0 9 | 7 35 | 0 21 | 11 51 | 1 52 | 20 37 | 0 35 | 17 27 | 1 5 | 17 23 | 0 43 | 22 4 | 0 42 | 14 1 | 16 57 | 15 52 | 15 33 | 22 53 | 5 15 | 2 40 |
| S 10 | 20 47 | 26 40 | 3 21 | 23 0 | 0n 3 | 7 7 | 0 16 | 12 4 | 1 52 | 20 36 | 0 35 | 17 28 | 1 5 | 17 24 | 0 43 | 22 4 | 0 42 | 14 2 | 16 57 | 15 53 | 15 34 | 22 51 | 5 15 | 2 40 |
| M11 | 20 36 | 24 36 | 2 27 | 23 1 | 0 15 | 6 39 | 0 11 | 12 17 | 1 52 | 20 36 | 0 35 | 17 30 | 1 5 | 17 25 | 0 43 | 22 4 | 0 42 | 14 2 | 16 57 | 15 53 | 15 35 | 22 49 | 5 15 | 2 40 |
| T 12 | 20 24 | 21 29 | 1 27 | 22 59 | 0 26 | 6 11 | 0 6 | 12 29 | 1 52 | 20 36 | 0 34 | 17 31 | 1 5 | 17 25 | 0 43 | 22 3 | 0 42 | 14 3 | 16 58 | 15 54 | 15 36 | 22 47 | 5 15 | 2 40 |
| W13 | 20 12 | 17 29 | 0 23 | 22 55 | 0 37 | 5 42 | 0 0 | 12 42 | 1 51 | 20 36 | 0 34 | 17 32 | 1 6 | 17 26 | 0 43 | 22 3 | 0 42 | 14 3 | 16 58 | 15 54 | 15 37 | 22 45 | 5 14 | 2 40 |
| T 14 | 20 0 | 12 48 | 0s42 | 22 49 | 0 47 | 5 14 | 0s 5 | 12 55 | 1 51 | 20 36 | 0 34 | 17 34 | 1 6 | 17 27 | 0 43 | 22 3 | 0 42 | 14 3 | 16 58 | 15 54 | 15 38 | 22 43 | 5 14 | 2 40 |
| F 15 | 19 47 | 7 36 | 1 47 | 22 40 | 0 56 | 4 45 | 0 11 | 13 7 | 1 51 | 20 36 | 0 34 | 17 35 | 1 6 | 17 27 | 0 43 | 22 3 | 0 42 | 14 4 | 16 59 | 15 54 | 15 39 | 22 41 | 5 14 | 2 40 |
| S 16 | 19 34 | 2 6 | 2 47 | 22 28 | 1 5 | 4 17 | 0 17 | 13 19 | 1 50 | 20 36 | 0 34 | 17 36 | 1 6 | 17 28 | 0 43 | 22 3 | 0 42 | 14 4 | 16 59 | 15 53 | 15 40 | 22 38 | 5 14 | 2 40 |
| S 17 | 19 21 | 3s34 | 3 40 | 22 13 | 1 12 | 3 48 | 0 22 | 13 31 | 1 50 | 20 36 | 0 33 | 17 38 | 1 6 | 17 29 | 0 43 | 22 2 | 0 42 | 14 5 | 16 59 | 15 53 | 15 41 | 22 36 | 5 13 | 2 40 |
| M18 | 19 7 | 9 12 | 4 24 | 21 56 | 1 19 | 3 20 | 0 28 | 13 43 | 1 50 | 20 36 | 0 33 | 17 39 | 1 6 | 17 30 | 0 43 | 22 2 | 0 42 | 14 5 | 17 0 | 15 53 | 15 42 | 22 34 | 5 13 | 2 40 |
| T 19 | 18 53 | 14 36 | 4 57 | 21 36 | 1 25 | 2 51 | 0 35 | 13 55 | 1 49 | 20 36 | 0 33 | 17 40 | 1 6 | 17 30 | 0 43 | 22 2 | 0 42 | 14 6 | 17 0 | 15 53 | 15 43 | 22 32 | 5 13 | 2 40 |
| W20 | 18 39 | 19 29 | 5 14 | 21 14 | 1 31 | 2 23 | 0 41 | 14 7 | 1 49 | 20 36 | 0 33 | 17 42 | 1 6 | 17 31 | 0 43 | 22 2 | 0 42 | 14 6 | 17 0 | 15 53 | 15 44 | 22 30 | 5 12 | 2 41 |
| T 21 | 18 24 | 23 32 | 5 16 | 20 49 | 1 35 | 1 54 | 0 47 | 14 18 | 1 48 | 20 36 | 0 33 | 17 43 | 1 6 | 17 32 | 0 43 | 22 1 | 0 42 | 14 7 | 17 1 | 15 53 | 15 45 | 22 28 | 5 12 | 2 41 |
| F 22 | 18 9 | 26 21 | 4 59 | 20 22 | 1 39 | 1 26 | 0 54 | 14 30 | 1 48 | 20 36 | 0 32 | 17 45 | 1 7 | 17 32 | 0 43 | 22 1 | 0 42 | 14 7 | 17 1 | 15 53 | 15 46 | 22 26 | 5 12 | 2 41 |
| S 23 | 17 54 | 27 33 | 4 22 | 19 53 | 1 42 | 0 58 | 1 0 | 14 41 | 1 47 | 20 37 | 0 32 | 17 46 | 1 7 | 17 33 | 0 43 | 22 1 | 0 42 | 14 8 | 17 1 | 15 53 | 15 47 | 22 24 | 5 11 | 2 41 |
| S 24 | 17 39 | 26 51 | 3 28 | 19 22 | 1 44 | 0 29 | 1 7 | 14 52 | 1 47 | 20 37 | 0 32 | 17 47 | 1 7 | 17 34 | 0 43 | 22 1 | 0 42 | 14 9 | 17 2 | 15 53 | 15 48 | 22 21 | 5 11 | 2 41 |
| M25 | 17 23 | 24 11 | 2 19 | 18 49 | 1 45 | 0 1 | 1 14 | 15 3 | 1 47 | 20 37 | 0 32 | 17 49 | 1 7 | 17 34 | 0 43 | 22 1 | 0 42 | 14 9 | 17 2 | 15 53 | 15 49 | 22 19 | 5 10 | 2 41 |
| T 26 | 17 7 | 19 49 | 0 59 | 18 15 | 1 46 | 0s27 | 1 21 | 15 14 | 1 46 | 20 37 | 0 32 | 17 50 | 1 7 | 17 35 | 0 43 | 22 0 | 0 42 | 14 10 | 17 2 | 15 54 | 15 50 | 22 17 | 5 10 | 2 41 |
| W27 | 16 51 | 14 9 | 0n24 | 17 39 | 1 46 | 0 55 | 1 28 | 15 25 | 1 45 | 20 38 | 0 31 | 17 51 | 1 7 | 17 36 | 0 43 | 22 0 | 0 42 | 14 10 | 17 3 | 15 54 | 15 51 | 22 15 | 5 9 | 2 41 |
| T 28 | 16 34 | 7 42 | 1 46 | 17 2 | 1 45 | 1 23 | 1 35 | 15 35 | 1 45 | 20 38 | 0 31 | 17 53 | 1 7 | 17 36 | 0 43 | 22 0 | 0 42 | 14 11 | 17 3 | 15 54 | 15 52 | 22 13 | 5 9 | 2 41 |
| F 29 | 16 17 | 0 59 | 2 58 | 16 23 | 1 44 | 1 51 | 1 42 | 15 46 | 1 44 | 20 39 | 0 31 | 17 54 | 1 7 | 17 37 | 0 43 | 22 0 | 0 42 | 14 11 | 17 3 | 15 53 | 15 53 | 22 11 | 5 8 | 2 41 |
| S 30 | 16 0 | 5n35 | 3 57 | 15 44 | 1 42 | 2 19 | 1 49 | 15 56 | 1 44 | 20 39 | 0 31 | 17 56 | 1 7 | 17 38 | 0 43 | 21 59 | 0 42 | 14 12 | 17 3 | 15 53 | 15 53 | 22 8 | 5 8 | 2 41 |
| S 31 | 15n43 | 11n41 | 4n41 | 15n 3 | 1n40 | 2s47 | 1s57 | 16n 6 | 1s43 | 20s39 | 0n31 | 17s57 | 1s 7 | 17s38 | 0s43 | 21n59 | 0s42 | 14s12 | 17s 4 | 15s53 | 15s54 | 22n 6 | 5n 7 | 2n41 |

Julian Day Number = 2298334.5, Delta T = 119.12 sec
Ecliptic obliquity = 23°29'44, Nutation = 0°00'12, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°53'10, Lahiri = 18°00'11 Julian Calendar 1 July 1580 == Greg. Calendar 11 July 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## AUGUST 1580 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M 1 | 21 18 0 | 18♌11'01 | 2♉ 8 | 26♌ 7 | 3♎20 | 20♉29 | 4♐54 | 13°R12 | 12°R56 | 14♋42 | 3°R33 | 16°R37 | 16♒31 | 28♋31 | 6°R39 | M 1 |
| T 2 | 21 21 57 | 19° 8'43 | 15° 6 | 27°59 | 4°11 | 21° 4 | 4°56 | 13♒ 7 | 12♒54 | 14°44 | 3♈32 | 16°D37 | 16°28 | 28°37 | 6♈37 | T 2 |
| W 3 | 21 25 53 | 20° 6'27 | 27°42 | 29°51 | 5° 1 | 21°39 | 4°58 | 13° 3 | 12°52 | 14°46 | 3°32 | 16♒37 | 16°25 | 28°44 | 6°36 | W 3 |
| T 4 | 21 29 50 | 21° 4'13 | 10♊ 1 | 1♍40 | 5°50 | 22°14 | 5° 0 | 12°59 | 12°49 | 14°48 | 3°31 | 16°37 | 16°21 | 28°50 | 6°34 | T 4 |
| F 5 | 21 33 46 | 22° 2'00 | 22° 5 | 3°29 | 6°39 | 22°48 | 5° 2 | 12°54 | 12°47 | 14°50 | 3°30 | 16°38 | 16°18 | 28°57 | 6°32 | F 5 |
| S 6 | 21 37 43 | 22°59'49 | 4♋ 0 | 5°16 | 7°27 | 23°22 | 5° 5 | 12°50 | 12°45 | 14°51 | 3°29 | 16°39 | 16°15 | 29° 4 | 6°30 | S 6 |
| S 7 | 21 41 40 | 23°57'40 | 15°49 | 7° 1 | 8°14 | 23°56 | 5° 8 | 12°45 | 12°42 | 14°53 | 3°28 | 16°39 | 16°12 | 29°10 | 6°29 | S 7 |
| M 8 | 21 45 36 | 24°55'32 | 27°37 | 8°46 | 9° 1 | 24°30 | 5°11 | 12°41 | 12°40 | 14°55 | 3°27 | 16°40 | 16° 9 | 29°17 | 6°27 | M 8 |
| T 9 | 21 49 33 | 25°53'26 | 9♌25 | 10°29 | 9°46 | 25° 3 | 5°14 | 12°37 | 12°38 | 14°57 | 3°27 | 16°40 | 16° 6 | 29°24 | 6°25 | T 9 |
| W10 | 21 53 29 | 26°51'21 | 21°17 | 12°10 | 10°31 | 25°36 | 5°17 | 12°32 | 12°35 | 14°59 | 3°26 | 16°R40 | 16° 2 | 29°30 | 6°23 | W10 |
| T 11 | 21 57 26 | 27°49'18 | 3♍15 | 13°50 | 11°15 | 26° 9 | 5°20 | 12°28 | 12°33 | 15° 0 | 3°25 | 16°40 | 15°59 | 29°37 | 6°21 | T 11 |
| F 12 | 22 1 22 | 28°47'16 | 15°21 | 15°29 | 11°58 | 26°41 | 5°24 | 12°24 | 12°31 | 15° 2 | 3°24 | 16°39 | 15°56 | 29°44 | 6°19 | F 12 |
| S 13 | 22 5 19 | 29°45'16 | 27°37 | 17° 7 | 12°39 | 27°14 | 5°28 | 12°20 | 12°28 | 15° 4 | 3°23 | 16°37 | 15°53 | 29°50 | 6°17 | S 13 |
| S 14 | 22 9 15 | 0♍43'18 | 10♎ 5 | 18°43 | 13°20 | 27°45 | 5°32 | 12°16 | 12°26 | 15° 5 | 3°22 | 16°35 | 15°50 | 29°57 | 6°14 | S 14 |
| M15 | 22 13 12 | 1°41'21 | 22°45 | 20°18 | 14° 0 | 28°17 | 5°36 | 12°11 | 12°24 | 15° 7 | 3°21 | 16°33 | 15°46 | 0♌ 4 | 6°12 | M15 |
| T 16 | 22 17 9 | 2°39'25 | 5♏41 | 21°52 | 14°39 | 28°48 | 5°40 | 12° 7 | 12°22 | 15° 9 | 3°20 | 16°31 | 15°43 | 0°10 | 6°10 | T 16 |
| W17 | 22 21 5 | 3°37'31 | 18°53 | 23°25 | 15°17 | 29°19 | 5°45 | 12° 3 | 12°20 | 15°10 | 3°19 | 16°30 | 15°40 | 0°17 | 6° 8 | W17 |
| T 18 | 22 25 2 | 4°35'38 | 2♐24 | 24°56 | 15°53 | 29°50 | 5°49 | 11°59 | 12°17 | 15°12 | 3°18 | 16°D30 | 15°37 | 0°24 | 6° 5 | T 18 |
| F 19 | 22 28 58 | 5°33'47 | 16°14 | 26°26 | 16°28 | 0♏21 | 5°54 | 11°55 | 12°15 | 15°14 | 3°17 | 16°30 | 15°34 | 0°30 | 6° 3 | F 19 |
| S 20 | 22 32 55 | 6°31'57 | 0♑23 | 27°55 | 17° 2 | 0°51 | 5°59 | 11°52 | 12°13 | 15°15 | 3°16 | 16°31 | 15°31 | 0°37 | 6° 1 | S 20 |
| S 21 | 22 36 51 | 7°30'09 | 14°51 | 29°22 | 17°35 | 1°21 | 6° 4 | 11°48 | 12°11 | 15°17 | 3°15 | 16°32 | 15°27 | 0°44 | 5°58 | S 21 |
| M22 | 22 40 48 | 8°28'22 | 29°33 | 0♎48 | 18° 6 | 1°50 | 6°10 | 11°44 | 12° 9 | 15°18 | 3°14 | 16°33 | 15°24 | 0°50 | 5°56 | M22 |
| T 23 | 22 44 44 | 9°26'37 | 14♒25 | 2°13 | 18°36 | 2°19 | 6°15 | 11°40 | 12° 7 | 15°20 | 3°13 | 16°R34 | 15°21 | 0°57 | 5°54 | T 23 |
| W24 | 22 48 41 | 10°24'53 | 29°20 | 3°36 | 19° 4 | 2°48 | 6°21 | 11°37 | 12° 5 | 15°21 | 3°12 | 16°34 | 15°18 | 1° 4 | 5°51 | W24 |
| T 25 | 22 52 38 | 11°23'11 | 14♓10 | 4°58 | 19°30 | 3°16 | 6°26 | 11°33 | 12° 3 | 15°23 | 3°11 | 16°32 | 15°15 | 1°10 | 5°49 | T 25 |
| F 26 | 22 56 34 | 12°21'31 | 28°47 | 6°19 | 19°55 | 3°45 | 6°32 | 11°30 | 12° 1 | 15°24 | 3°10 | 16°29 | 15°12 | 1°17 | 5°46 | F 26 |
| S 27 | 23 0 31 | 13°19'53 | 13♈ 5 | 7°38 | 20°19 | 4°12 | 6°38 | 11°26 | 11°59 | 15°25 | 3° 8 | 16°25 | 15° 8 | 1°23 | 5°44 | S 27 |
| S 28 | 23 4 27 | 14°18'17 | 27° 0 | 8°56 | 20°40 | 4°40 | 6°45 | 11°23 | 11°57 | 15°27 | 3° 7 | 16°21 | 15° 5 | 1°30 | 5°41 | S 28 |
| M29 | 23 8 24 | 15°16'42 | 10♉29 | 10°12 | 21° 0 | 5° 7 | 6°51 | 11°19 | 11°55 | 15°28 | 3° 6 | 16°17 | 15° 2 | 1°37 | 5°39 | M29 |
| T 30 | 23 12 20 | 16°15'11 | 23°31 | 11°27 | 21°18 | 5°33 | 6°58 | 11°16 | 11°53 | 15°29 | 3° 5 | 16°14 | 14°59 | 1°43 | 5°36 | T 30 |
| W31 | 23 16 17 | 17♍13'41 | 6♊11 | 12♎40 | 21♎34 | 5♊59 | 7♐ 4 | 11♒13 | 11♒52 | 15♋31 | 3♈ 4 | 16♒12 | 14♒56 | 1♌50 | 5♈33 | 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 | 15n25 | 17n 3 | 5n 8 | 14n22 | 1n37 | 3s14 | 2s 5 | 16n16 | 1s43 | 20s40 | 0n30 | 17s58 | 1s 7 | 17s39 | 0s43 | 21n59 | 0s42 | 14s13 | 17s 4 | 15s53 | 15s55 | 22n 4 | 5n 7 | 2n41 |
| T 2 | 15 7 | 21 27 | 5 18 | 13 40 | 1 34 | 3 41 | 2 12 | 16 26 | 1 42 | 20 41 | 0 30 | 18 0 | 1 7 | 17 40 | 0 43 | 21 59 | 0 42 | 14 13 | 17 4 | 15 54 | 15 56 | 22 2 | 5 6 | 2 41 |
| W 3 | 14 49 | 24 45 | 5 12 | 12 57 | 1 30 | 4 8 | 2 20 | 16 35 | 1 41 | 20 41 | 0 30 | 18 1 | 1 7 | 17 40 | 0 43 | 21 59 | 0 42 | 14 14 | 17 5 | 15 54 | 15 57 | 22 0 | 5 5 | 2 41 |
| T 4 | 14 30 | 26 49 | 4 52 | 12 14 | 1 26 | 4 35 | 2 28 | 16 45 | 1 41 | 20 42 | 0 30 | 18 2 | 1 8 | 17 41 | 0 43 | 21 58 | 0 42 | 14 14 | 17 5 | 15 53 | 15 58 | 21 58 | 5 5 | 2 41 |
| F 5 | 14 12 | 27 34 | 4 19 | 11 31 | 1 21 | 5 2 | 2 36 | 16 54 | 1 40 | 20 42 | 0 29 | 18 4 | 1 8 | 17 42 | 0 43 | 21 58 | 0 42 | 14 15 | 17 5 | 15 53 | 15 59 | 21 55 | 5 4 | 2 41 |
| S 6 | 13 53 | 27 1 | 3 35 | 10 47 | 1 16 | 5 28 | 2 44 | 17 3 | 1 39 | 20 43 | 0 29 | 18 5 | 1 8 | 17 43 | 0 43 | 21 58 | 0 42 | 14 16 | 17 5 | 15 53 | 16 0 | 21 53 | 5 3 | 2 41 |
| S 7 | 13 34 | 25 15 | 2 43 | 10 3 | 1 11 | 5 54 | 2 52 | 17 12 | 1 39 | 20 44 | 0 29 | 18 6 | 1 8 | 17 43 | 0 43 | 21 58 | 0 42 | 14 16 | 17 6 | 15 53 | 16 1 | 21 51 | 5 3 | 2 41 |
| M 8 | 13 15 | 22 23 | 1 44 | 9 18 | 1 5 | 6 20 | 3 0 | 17 21 | 1 38 | 20 44 | 0 29 | 18 8 | 1 8 | 17 44 | 0 43 | 21 58 | 0 42 | 14 17 | 17 6 | 15 53 | 16 2 | 21 49 | 5 2 | 2 41 |
| T 9 | 12 55 | 18 35 | 0 40 | 8 34 | 0 59 | 6 46 | 3 9 | 17 30 | 1 37 | 20 45 | 0 29 | 18 9 | 1 8 | 17 44 | 0 43 | 21 57 | 0 42 | 14 17 | 17 6 | 15 53 | 16 3 | 21 46 | 5 1 | 2 41 |
| W10 | 12 35 | 14 2 | 0s26 | 7 49 | 0 53 | 7 11 | 3 17 | 17 38 | 1 37 | 20 46 | 0 28 | 18 10 | 1 8 | 17 45 | 0 43 | 21 57 | 0 42 | 14 18 | 17 6 | 15 53 | 16 4 | 21 44 | 5 1 | 2 41 |
| T 11 | 12 15 | 8 56 | 1 31 | 7 5 | 0 46 | 7 36 | 3 25 | 17 47 | 1 36 | 20 47 | 0 28 | 18 11 | 1 8 | 17 46 | 0 43 | 21 57 | 0 42 | 14 18 | 17 7 | 15 53 | 16 5 | 21 42 | 5 0 | 2 41 |
| F 12 | 11 55 | 3 27 | 2 32 | 6 20 | 0 39 | 8 1 | 3 34 | 17 55 | 1 35 | 20 48 | 0 28 | 18 13 | 1 8 | 17 46 | 0 43 | 21 57 | 0 42 | 14 19 | 17 7 | 15 53 | 16 6 | 21 40 | 4 59 | 2 42 |
| S 13 | 11 35 | 2s14 | 3 28 | 5 36 | 0 32 | 8 26 | 3 43 | 18 3 | 1 34 | 20 48 | 0 28 | 18 14 | 1 8 | 17 47 | 0 43 | 21 57 | 0 42 | 14 20 | 17 7 | 15 53 | 16 7 | 21 38 | 4 58 | 2 42 |
| S 14 | 11 15 | 7 54 | 4 14 | 4 51 | 0 25 | 8 50 | 3 51 | 18 11 | 1 33 | 20 49 | 0 28 | 18 15 | 1 8 | 17 48 | 0 43 | 21 56 | 0 42 | 14 20 | 17 7 | 15 54 | 16 8 | 21 35 | 4 57 | 2 42 |
| M15 | 10 54 | 13 20 | 4 49 | 4 7 | 0 18 | 9 13 | 4 0 | 18 19 | 1 33 | 20 50 | 0 28 | 18 16 | 1 8 | 17 48 | 0 43 | 21 56 | 0 42 | 14 21 | 17 7 | 15 55 | 16 9 | 21 33 | 4 56 | 2 42 |
| T 16 | 10 33 | 18 19 | 5 10 | 3 23 | 0 10 | 9 37 | 4 9 | 18 27 | 1 32 | 20 51 | 0 27 | 18 17 | 1 8 | 17 49 | 0 43 | 21 56 | 0 42 | 14 21 | 17 8 | 15 55 | 16 10 | 21 31 | 4 56 | 2 42 |
| W17 | 10 12 | 22 32 | 5 16 | 2 40 | 0 3 | 9 59 | 4 18 | 18 34 | 1 31 | 20 52 | 0 27 | 18 19 | 1 8 | 17 49 | 0 43 | 21 56 | 0 42 | 14 22 | 17 8 | 15 56 | 16 11 | 21 28 | 4 55 | 2 42 |
| T 18 | 9 51 | 25 39 | 5 4 | 1 56 | 0s 5 | 10 22 | 4 27 | 18 42 | 1 30 | 20 53 | 0 27 | 18 20 | 1 8 | 17 50 | 0 43 | 21 56 | 0 42 | 14 22 | 17 8 | 15 56 | 16 12 | 21 26 | 4 54 | 2 42 |
| F 19 | 9 30 | 27 20 | 4 35 | 1 13 | 0 13 | 10 44 | 4 36 | 18 49 | 1 29 | 20 54 | 0 27 | 18 21 | 1 8 | 17 51 | 0 43 | 21 55 | 0 42 | 14 23 | 17 8 | 15 56 | 16 12 | 21 24 | 4 53 | 2 42 |
| S 20 | 9 8 | 27 18 | 3 48 | 0 31 | 0 21 | 11 5 | 4 45 | 18 56 | 1 28 | 20 55 | 0 27 | 18 22 | 1 8 | 17 51 | 0 43 | 21 55 | 0 42 | 14 24 | 17 8 | 15 55 | 16 13 | 21 22 | 4 52 | 2 42 |
| S 21 | 8 46 | 25 25 | 2 46 | 0s12 | 0 29 | 11 26 | 4 54 | 19 3 | 1 27 | 20 56 | 0 26 | 18 23 | 1 8 | 17 52 | 0 43 | 21 55 | 0 42 | 14 24 | 17 8 | 15 55 | 16 14 | 21 19 | 4 51 | 2 42 |
| M22 | 8 25 | 21 48 | 1 33 | 0 54 | 0 38 | 11 46 | 5 3 | 19 10 | 1 26 | 20 57 | 0 26 | 18 24 | 1 8 | 17 52 | 0 43 | 21 55 | 0 42 | 14 25 | 17 9 | 15 55 | 16 15 | 21 17 | 4 50 | 2 42 |
| T 23 | 8 3 | 16 44 | 0 12 | 1 35 | 0 46 | 12 6 | 5 12 | 19 17 | 1 25 | 20 59 | 0 26 | 18 25 | 1 8 | 17 53 | 0 43 | 21 55 | 0 42 | 14 25 | 17 9 | 15 55 | 16 16 | 21 15 | 4 49 | 2 42 |
| W24 | 7 41 | 10 39 | 1n10 | 2 16 | 0 54 | 12 25 | 5 21 | 19 24 | 1 24 | 21 0 | 0 26 | 18 26 | 1 8 | 17 54 | 0 43 | 21 55 | 0 42 | 14 26 | 17 9 | 15 55 | 16 17 | 21 12 | 4 48 | 2 42 |
| T 25 | 7 19 | 4 0 | 2 26 | 2 56 | 1 2 | 12 44 | 5 30 | 19 30 | 1 23 | 21 1 | 0 26 | 18 27 | 1 8 | 17 54 | 0 43 | 21 54 | 0 42 | 14 26 | 17 9 | 15 55 | 16 18 | 21 10 | 4 47 | 2 42 |
| F 26 | 6 56 | 2n45 | 3 32 | 3 36 | 1 11 | 13 2 | 5 39 | 19 36 | 1 22 | 21 2 | 0 25 | 18 28 | 1 8 | 17 55 | 0 43 | 21 54 | 0 42 | 14 27 | 17 9 | 15 56 | 16 19 | 21 8 | 4 46 | 2 42 |
| S 27 | 6 34 | 9 12 | 4 22 | 4 15 | 1 19 | 13 19 | 5 48 | 19 43 | 1 21 | 21 3 | 0 25 | 18 29 | 1 8 | 17 55 | 0 43 | 21 54 | 0 42 | 14 27 | 17 9 | 15 57 | 16 20 | 21 6 | 4 45 | 2 42 |
| S 28 | 6 12 | 15 1 | 4 56 | 4 53 | 1 27 | 13 36 | 5 57 | 19 49 | 1 20 | 21 4 | 0 25 | 18 30 | 1 8 | 17 56 | 0 43 | 21 54 | 0 42 | 14 28 | 17 10 | 15 58 | 16 21 | 21 3 | 4 44 | 2 42 |
| M29 | 5 49 | 19 56 | 5 12 | 5 31 | 1 36 | 13 51 | 6 6 | 19 55 | 1 19 | 21 6 | 0 25 | 18 31 | 1 8 | 17 56 | 0 43 | 21 54 | 0 42 | 14 29 | 17 10 | 15 59 | 16 22 | 21 1 | 4 43 | 2 42 |
| T 30 | 5 26 | 23 43 | 5 11 | 6 8 | 1 44 | 14 6 | 6 14 | 20 1 | 1 17 | 21 7 | 0 25 | 18 32 | 1 8 | 17 57 | 0 42 | 21 54 | 0 42 | 14 29 | 17 10 | 16 0 | 16 23 | 20 59 | 4 42 | 2 42 |
| W31 | 5n 3 | 26n14 | 4n55 | 6s44 | 1s52 | 14s20 | 6s23 | 20n 6 | 1s16 | 21s 8 | 0n25 | 18s33 | 1s 8 | 17s57 | 0s42 | 21n53 | 0s42 | 14s30 | 17s10 | 16s 1 | 16s24 | 20n56 | 4n41 | 2n41 |

Julian Day Number = 2298365.5, Delta T = 118.97 sec
Ecliptic obliquity = 23°29'44, Nutation = 0°00'13, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°53'15, Lahiri = 18°00'15 Julian Calendar 1 Aug. 1580 == Greg. Calendar 11 Aug. 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## SEPTEMBER 1580 JC — 00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T 1 | 23 20 13 | 18♍12'14 | 18♊30 | 13♎51 | 21♎49 | 6♊25 | 7♐11 | 11°R10 | 11°R50 | 15♋32 | 3°R 3 | 16°D12 | 14♒52 | 1♌57 | 5°R31 | T 1 |
| F 2 | 23 24 10 | 19°10'48 | 0♋34 | 15° 0 | 22° 1 | 6°51 | 7°18 | 11♒ 7 | 11♒48 | 15°33 | 3♈ 2 | 16♒12 | 14°49 | 2° 3 | 5♈28 | F 2 |
| S 3 | 23 28 7 | 20° 9'25 | 12°28 | 16° 8 | 22°11 | 7°15 | 7°25 | 11° 4 | 11°46 | 15°34 | 3° 1 | 16°14 | 14°46 | 2°10 | 5°25 | S 3 |
| S 4 | 23 32 3 | 21° 8'05 | 24°16 | 17°13 | 22°19 | 7°40 | 7°32 | 11° 1 | 11°45 | 15°35 | 2°59 | 16°16 | 14°43 | 2°17 | 5°23 | S 4 |
| M 5 | 23 36 0 | 22° 6'46 | 6♌ 4 | 18°16 | 22°24 | 8° 4 | 7°40 | 10°58 | 11°43 | 15°36 | 2°58 | 16°17 | 14°40 | 2°23 | 5°20 | M 5 |
| T 6 | 23 39 56 | 23° 5'29 | 17°55 | 19°17 | 22°28 | 8°28 | 7°47 | 10°55 | 11°41 | 15°38 | 2°57 | 16°R18 | 14°37 | 2°30 | 5°17 | T 6 |
| W 7 | 23 43 53 | 24° 4'15 | 29°53 | 20°15 | 22°R29 | 8°51 | 7°55 | 10°53 | 11°40 | 15°39 | 2°56 | 16°17 | 14°33 | 2°37 | 5°14 | W 7 |
| T 8 | 23 47 49 | 25° 3'03 | 12♍ 1 | 21°11 | 22°28 | 9°13 | 8° 3 | 10°50 | 11°38 | 15°40 | 2°55 | 16°14 | 14°30 | 2°43 | 5°12 | T 8 |
| F 9 | 23 51 46 | 26° 1'52 | 24°21 | 22° 3 | 22°25 | 9°36 | 8°11 | 10°48 | 11°37 | 15°41 | 2°54 | 16° 9 | 14°27 | 2°50 | 5° 9 | F 9 |
| S 10 | 23 55 42 | 27° 0'44 | 6♎54 | 22°52 | 22°19 | 9°57 | 8°19 | 10°45 | 11°35 | 15°42 | 2°53 | 16° 3 | 14°24 | 2°57 | 5° 6 | S 10 |
| S 11 | 23 59 39 | 27°59'38 | 19°41 | 23°38 | 22°11 | 10°18 | 8°27 | 10°43 | 11°34 | 15°43 | 2°51 | 15°55 | 14°21 | 3° 3 | 5° 3 | S 11 |
| M12 | 0 3 35 | 28°58'33 | 2♏40 | 24°20 | 22° 0 | 10°39 | 8°35 | 10°41 | 11°33 | 15°43 | 2°50 | 15°48 | 14°17 | 3°10 | 5° 0 | M12 |
| T 13 | 0 7 32 | 29°57'31 | 15°53 | 24°58 | 21°47 | 10°59 | 8°44 | 10°38 | 11°31 | 15°44 | 2°49 | 15°41 | 14°14 | 3°16 | 4°58 | T 13 |
| W14 | 0 11 29 | 0♎56'30 | 29°18 | 25°32 | 21°32 | 11°18 | 8°52 | 10°36 | 11°30 | 15°45 | 2°48 | 15°35 | 14°11 | 3°23 | 4°55 | W14 |
| T 15 | 0 15 25 | 1°55'32 | 12♐56 | 26° 1 | 21°14 | 11°37 | 9° 1 | 10°34 | 11°29 | 15°46 | 2°47 | 15°32 | 14° 8 | 3°30 | 4°52 | T 15 |
| F 16 | 0 19 22 | 2°54'35 | 26°45 | 26°24 | 20°54 | 11°56 | 9°10 | 10°32 | 11°27 | 15°47 | 2°45 | 15°D30 | 14° 5 | 3°36 | 4°49 | F 16 |
| S 17 | 0 23 18 | 3°53'40 | 10♑45 | 26°42 | 20°32 | 12°14 | 9°19 | 10°31 | 11°26 | 15°48 | 2°44 | 15°30 | 14° 2 | 3°43 | 4°46 | S 17 |
| S 18 | 0 27 15 | 4°52'46 | 24°56 | 26°54 | 20° 8 | 12°31 | 9°28 | 10°29 | 11°25 | 15°48 | 2°43 | 15°31 | 13°58 | 3°50 | 4°44 | S 18 |
| M19 | 0 31 11 | 5°51'55 | 9♒16 | 26°R59 | 19°41 | 12°48 | 9°37 | 10°27 | 11°24 | 15°49 | 2°42 | 15°R32 | 13°55 | 3°56 | 4°41 | M19 |
| T 20 | 0 35 8 | 6°51'05 | 23°44 | 26°58 | 19°13 | 13° 4 | 9°46 | 10°26 | 11°23 | 15°50 | 2°41 | 15°32 | 13°52 | 4° 3 | 4°38 | T 20 |
| W21 | 0 39 4 | 7°50'17 | 8♓14 | 26°49 | 18°43 | 13°19 | 9°56 | 10°24 | 11°22 | 15°50 | 2°40 | 15°30 | 13°49 | 4°10 | 4°35 | W21 |
| T 22 | 0 43 1 | 8°49'30 | 22°43 | 26°32 | 18°11 | 13°34 | 10° 5 | 10°23 | 11°21 | 15°51 | 2°38 | 15°25 | 13°46 | 4°16 | 4°32 | T 22 |
| F 23 | 0 46 58 | 9°48'46 | 7♈ 4 | 26° 7 | 17°38 | 13°48 | 10°15 | 10°22 | 11°20 | 15°51 | 2°37 | 15°19 | 13°43 | 4°23 | 4°29 | F 23 |
| S 24 | 0 50 54 | 10°48'04 | 21°11 | 25°34 | 17° 4 | 14° 2 | 10°25 | 10°21 | 11°19 | 15°52 | 2°36 | 15°10 | 13°39 | 4°30 | 4°27 | S 24 |
| S 25 | 0 54 51 | 11°47'23 | 5♉ 0 | 24°53 | 16°29 | 14°15 | 10°34 | 10°20 | 11°18 | 15°52 | 2°35 | 15° 0 | 13°36 | 4°36 | 4°24 | S 25 |
| M26 | 0 58 47 | 12°46'46 | 18°26 | 24° 4 | 15°53 | 14°27 | 10°44 | 10°19 | 11°18 | 15°53 | 2°34 | 14°51 | 13°33 | 4°43 | 4°21 | M26 |
| T 27 | 1 2 44 | 13°46'10 | 1♊29 | 23° 7 | 15°16 | 14°38 | 10°54 | 10°18 | 11°17 | 15°53 | 2°33 | 14°42 | 13°30 | 4°50 | 4°18 | T 27 |
| W28 | 1 6 40 | 14°45'37 | 14°10 | 22° 4 | 14°40 | 14°49 | 11° 5 | 10°17 | 11°16 | 15°54 | 2°31 | 14°36 | 13°27 | 4°56 | 4°16 | W28 |
| T 29 | 1 10 37 | 15°45'06 | 26°31 | 20°56 | 14° 3 | 14°59 | 11°15 | 10°17 | 11°16 | 15°54 | 2°30 | 14°32 | 13°23 | 5° 3 | 4°13 | T 29 |
| F 30 | 1 14 33 | 16♎44'37 | 8♋36 | 19♎45 | 13♎26 | 15♊ 8 | 11♐25 | 10♒16 | 11♒15 | 15♋54 | 2♈29 | 14♒30 | 13♒20 | 5♌ 9 | 4♈10 | F 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 |
| T 1 | 4n41 | 27n24 | 4n25 | 7s19 | 2s 0 | 14s34 | 6s32 | 20n12 | 1s15 | 21s10 | 0n24 | 18s34 | 1s 8 | 17s58 | 0s42 | 21n53 | 0s42 | 14s30 | 17s10 | 16s 1 | 16s25 | 20n54 | 4n40 | 2n41 |
| F 2 | 4 18 | 27 14 | 3 44 | 7 53 | 2 8 | 14 46 | 6 40 | 20 17 | 1 14 | 21 11 | 0 24 | 18 35 | 1 8 | 17 58 | 0 42 | 21 53 | 0 42 | 14 31 | 17 10 | 16 1 | 16 26 | 20 52 | 4 39 | 2 41 |
| S 3 | 3 54 | 25 48 | 2 54 | 8 27 | 2 16 | 14 57 | 6 48 | 20 23 | 1 13 | 21 12 | 0 24 | 18 35 | 1 8 | 17 59 | 0 42 | 21 53 | 0 42 | 14 31 | 17 10 | 16 1 | 16 27 | 20 49 | 4 38 | 2 41 |
| S 4 | 3 31 | 23 14 | 1 58 | 8 59 | 2 23 | 15 8 | 6 56 | 20 28 | 1 11 | 21 14 | 0 24 | 18 36 | 1 8 | 17 59 | 0 42 | 21 53 | 0 42 | 14 32 | 17 10 | 16 0 | 16 27 | 20 47 | 4 37 | 2 41 |
| M 5 | 3 8 | 19 42 | 0 56 | 9 30 | 2 31 | 15 17 | 7 4 | 20 33 | 1 10 | 21 15 | 0 24 | 18 37 | 1 8 | 17 59 | 0 42 | 21 53 | 0 42 | 14 32 | 17 10 | 16 0 | 16 28 | 20 44 | 4 35 | 2 41 |
| T 6 | 2 45 | 15 22 | 0s 9 | 10 0 | 2 38 | 15 25 | 7 12 | 20 38 | 1 9 | 21 16 | 0 24 | 18 38 | 1 8 | 18 0 | 0 42 | 21 53 | 0 42 | 14 33 | 17 10 | 15 59 | 16 29 | 20 42 | 4 34 | 2 41 |
| W 7 | 2 22 | 10 24 | 1 13 | 10 29 | 2 45 | 15 33 | 7 19 | 20 43 | 1 7 | 21 18 | 0 23 | 18 39 | 1 8 | 18 0 | 0 42 | 21 52 | 0 42 | 14 33 | 17 11 | 16 0 | 16 30 | 20 40 | 4 33 | 2 41 |
| T 8 | 1 58 | 4 59 | 2 15 | 10 56 | 2 52 | 15 39 | 7 26 | 20 48 | 1 6 | 21 19 | 0 23 | 18 39 | 1 8 | 18 1 | 0 42 | 21 52 | 0 42 | 14 34 | 17 11 | 16 1 | 16 31 | 20 37 | 4 32 | 2 41 |
| F 9 | 1 35 | 0s41 | 3 12 | 11 22 | 2 59 | 15 43 | 7 32 | 20 53 | 1 4 | 21 21 | 0 23 | 18 40 | 1 8 | 18 1 | 0 42 | 21 52 | 0 42 | 14 34 | 17 11 | 16 2 | 16 32 | 20 35 | 4 31 | 2 41 |
| S 10 | 1 11 | 6 25 | 4 0 | 11 46 | 3 5 | 15 47 | 7 38 | 20 57 | 1 3 | 21 22 | 0 23 | 18 41 | 1 8 | 18 2 | 0 42 | 21 52 | 0 43 | 14 35 | 17 11 | 16 4 | 16 33 | 20 33 | 4 30 | 2 41 |
| S 11 | 0 48 | 11 59 | 4 37 | 12 9 | 3 11 | 15 49 | 7 44 | 21 2 | 1 2 | 21 24 | 0 23 | 18 41 | 1 8 | 18 2 | 0 42 | 21 52 | 0 43 | 14 35 | 17 11 | 16 6 | 16 34 | 20 30 | 4 29 | 2 41 |
| M12 | 0 24 | 17 8 | 5 1 | 12 29 | 3 16 | 15 50 | 7 49 | 21 6 | 1 0 | 21 25 | 0 23 | 18 42 | 1 8 | 18 2 | 0 42 | 21 52 | 0 43 | 14 36 | 17 11 | 16 8 | 16 35 | 20 28 | 4 27 | 2 41 |
| T 13 | 0 1 | 21 33 | 5 9 | 12 48 | 3 21 | 15 49 | 7 54 | 21 11 | 0 59 | 21 26 | 0 22 | 18 42 | 1 8 | 18 3 | 0 42 | 21 52 | 0 43 | 14 36 | 17 11 | 16 10 | 16 36 | 20 25 | 4 26 | 2 41 |
| W14 | 0s23 | 24 56 | 5 0 | 13 4 | 3 25 | 15 47 | 7 58 | 21 15 | 0 57 | 21 28 | 0 22 | 18 43 | 1 8 | 18 3 | 0 42 | 21 52 | 0 43 | 14 37 | 17 11 | 16 12 | 16 37 | 20 23 | 4 25 | 2 41 |
| T 15 | 0 46 | 26 56 | 4 34 | 13 18 | 3 28 | 15 44 | 8 2 | 21 19 | 0 55 | 21 29 | 0 22 | 18 43 | 1 8 | 18 3 | 0 42 | 21 51 | 0 43 | 14 37 | 17 11 | 16 13 | 16 38 | 20 21 | 4 24 | 2 41 |
| F 16 | 1 10 | 27 20 | 3 53 | 13 29 | 3 31 | 15 39 | 8 4 | 21 23 | 0 54 | 21 31 | 0 22 | 18 44 | 1 8 | 18 4 | 0 42 | 21 51 | 0 43 | 14 38 | 17 11 | 16 14 | 16 39 | 20 18 | 4 23 | 2 41 |
| S 17 | 1 33 | 25 59 | 2 56 | 13 38 | 3 33 | 15 32 | 8 7 | 21 27 | 0 52 | 21 32 | 0 22 | 18 44 | 1 8 | 18 4 | 0 42 | 21 51 | 0 43 | 14 38 | 17 11 | 16 14 | 16 39 | 20 16 | 4 21 | 2 41 |
| S 18 | 1 57 | 22 59 | 1 49 | 13 43 | 3 34 | 15 24 | 8 8 | 21 31 | 0 50 | 21 34 | 0 22 | 18 45 | 1 8 | 18 4 | 0 42 | 21 51 | 0 43 | 14 39 | 17 11 | 16 13 | 16 40 | 20 13 | 4 20 | 2 41 |
| M19 | 2 20 | 18 31 | 0 34 | 13 45 | 3 34 | 15 15 | 8 9 | 21 35 | 0 49 | 21 36 | 0 21 | 18 45 | 1 8 | 18 4 | 0 42 | 21 51 | 0 43 | 14 39 | 17 11 | 16 13 | 16 41 | 20 11 | 4 19 | 2 41 |
| T 20 | 2 44 | 12 57 | 0n44 | 13 44 | 3 33 | 15 4 | 8 9 | 21 39 | 0 47 | 21 37 | 0 21 | 18 46 | 1 8 | 18 5 | 0 42 | 21 51 | 0 43 | 14 40 | 17 11 | 16 13 | 16 42 | 20 9 | 4 18 | 2 40 |
| W21 | 3 7 | 6 40 | 1 59 | 13 38 | 3 31 | 14 51 | 8 8 | 21 42 | 0 45 | 21 39 | 0 21 | 18 46 | 1 8 | 18 5 | 0 42 | 21 51 | 0 43 | 14 40 | 17 11 | 16 14 | 16 43 | 20 6 | 4 17 | 2 40 |
| T 22 | 3 30 | 0 3 | 3 6 | 13 28 | 3 27 | 14 37 | 8 6 | 21 46 | 0 43 | 21 40 | 0 21 | 18 46 | 1 8 | 18 5 | 0 42 | 21 51 | 0 43 | 14 40 | 17 11 | 16 15 | 16 44 | 20 4 | 4 15 | 2 40 |
| F 23 | 3 54 | 6n29 | 4 0 | 13 14 | 3 22 | 14 22 | 8 3 | 21 49 | 0 41 | 21 42 | 0 21 | 18 47 | 1 8 | 18 5 | 0 42 | 21 51 | 0 43 | 14 41 | 17 11 | 16 17 | 16 45 | 20 1 | 4 14 | 2 40 |
| S 24 | 4 17 | 12 36 | 4 39 | 12 56 | 3 15 | 14 5 | 8 0 | 21 53 | 0 40 | 21 43 | 0 21 | 18 47 | 1 8 | 18 6 | 0 42 | 21 51 | 0 43 | 14 41 | 17 11 | 16 20 | 16 46 | 19 59 | 4 13 | 2 40 |
| S 25 | 4 40 | 17 56 | 5 1 | 12 32 | 3 6 | 13 47 | 7 55 | 21 56 | 0 38 | 21 45 | 0 21 | 18 47 | 1 8 | 18 6 | 0 42 | 21 51 | 0 43 | 14 42 | 17 11 | 16 22 | 16 47 | 19 56 | 4 12 | 2 40 |
| M26 | 5 4 | 22 14 | 5 5 | 12 4 | 2 55 | 13 28 | 7 50 | 22 0 | 0 36 | 21 46 | 0 20 | 18 47 | 1 8 | 18 6 | 0 42 | 21 50 | 0 43 | 14 42 | 17 11 | 16 25 | 16 48 | 19 54 | 4 11 | 2 40 |
| T 27 | 5 27 | 25 16 | 4 52 | 11 31 | 2 43 | 13 8 | 7 43 | 22 3 | 0 34 | 21 48 | 0 20 | 18 48 | 1 8 | 18 6 | 0 42 | 21 50 | 0 43 | 14 42 | 17 10 | 16 28 | 16 49 | 19 51 | 4 9 | 2 40 |
| W28 | 5 50 | 26 57 | 4 26 | 10 55 | 2 29 | 12 47 | 7 36 | 22 6 | 0 32 | 21 49 | 0 20 | 18 48 | 1 8 | 18 6 | 0 42 | 21 50 | 0 43 | 14 43 | 17 10 | 16 30 | 16 50 | 19 49 | 4 8 | 2 40 |
| T 29 | 6 13 | 27 14 | 3 48 | 10 14 | 2 12 | 12 25 | 7 28 | 22 9 | 0 30 | 21 51 | 0 20 | 18 48 | 1 8 | 18 7 | 0 42 | 21 50 | 0 43 | 14 43 | 17 10 | 16 31 | 16 50 | 19 47 | 4 7 | 2 40 |
| F 30 | 6s36 | 26n12 | 3n 0 | 9s31 | 1s55 | 12s 3 | 7s19 | 22n13 | 0s28 | 21s53 | 0n20 | 18s48 | 1s 8 | 18s 7 | 0s42 | 21n50 | 0s43 | 14s44 | 17s10 | 16s31 | 16s51 | 19n44 | 4n 6 | 2n39 |

Julian Day Number = 2298396.5, Delta T = 118.82 sec
Ecliptic obliquity = 23°29'45, Nutation = 0°00'12, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°53'19, Lahiri = 18°00'19 Julian Calendar 1 Sept. 1580 == Greg. Calendar 11 Sept. 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## OCTOBER 1580 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S 1 | 1 18 30 | 17♎44'11 | 20♋29 | 18°R31 | 12°R50 | 15♊17 | 11♐36 | 10°R16 | 11°R15 | 15♋55 | 2°R28 | 14°D29 | 13♒17 | 5♌16 | 4°R 7 | S 1 |
| S 2 | 1 22 27 | 18°43'47 | 2♌18 | 17♎18 | 12♎15 | 15°25 | 11°46 | 10♒15 | 11♒14 | 15°55 | 2♈27 | 14♒30 | 13°14 | 5°23 | 4♈ 5 | S 2 |
| M 3 | 1 26 23 | 19°43'25 | 14° 6 | 16° 7 | 11°41 | 15°32 | 11°57 | 10°15 | 11°14 | 15°55 | 2°26 | 14°R30 | 13°11 | 5°29 | 4° 2 | M 3 |
| T 4 | 1 30 20 | 20°43'05 | 26° 0 | 15° 0 | 11° 7 | 15°38 | 12° 8 | 10°15 | 11°13 | 15°55 | 2°25 | 14°29 | 13° 8 | 5°36 | 3°59 | T 4 |
| W 5 | 1 34 16 | 21°42'48 | 8♍ 3 | 14° 0 | 10°35 | 15°43 | 12°18 | 10°D15 | 11°13 | 15°55 | 2°24 | 14°27 | 13° 4 | 5°43 | 3°57 | W 5 |
| T 6 | 1 38 13 | 22°42'33 | 20°20 | 13° 8 | 10° 5 | 15°48 | 12°29 | 10°15 | 11°13 | 15°56 | 2°22 | 14°22 | 13° 1 | 5°49 | 3°54 | T 6 |
| F 7 | 1 42 9 | 23°42'19 | 2♎53 | 12°26 | 9°37 | 15°52 | 12°40 | 10°15 | 11°12 | 15°56 | 2°21 | 14°14 | 12°58 | 5°56 | 3°51 | F 7 |
| S 8 | 1 46 6 | 24°42'09 | 15°43 | 11°54 | 9°10 | 15°55 | 12°52 | 10°16 | 11°12 | 15°56 | 2°20 | 14° 3 | 12°55 | 6° 3 | 3°49 | S 8 |
| S 9 | 1 50 2 | 25°42'00 | 28°52 | 11°34 | 8°45 | 15°57 | 13° 3 | 10°16 | 11°12 | 15°R56 | 2°19 | 13°51 | 12°52 | 6° 9 | 3°46 | S 9 |
| M10 | 1 53 59 | 26°41'53 | 12♏16 | 11°D25 | 8°23 | 15°58 | 13°14 | 10°16 | 11°12 | 15°56 | 2°18 | 13°39 | 12°49 | 6°16 | 3°44 | M10 |
| T 11 | 1 57 56 | 27°41'48 | 25°53 | 11°27 | 8° 2 | 15°R58 | 13°25 | 10°17 | 11°D12 | 15°56 | 2°17 | 13°27 | 12°45 | 6°23 | 3°41 | T 11 |
| W12 | 2 1 52 | 28°41'45 | 9♐41 | 11°40 | 7°44 | 15°58 | 13°37 | 10°18 | 11°12 | 15°56 | 2°16 | 13°18 | 12°42 | 6°29 | 3°39 | W12 |
| T 13 | 2 5 49 | 29°41'44 | 23°37 | 12° 4 | 7°29 | 15°56 | 13°48 | 10°19 | 11°12 | 15°55 | 2°15 | 13°11 | 12°39 | 6°36 | 3°36 | T 13 |
| F 14 | 2 9 45 | 0♏41'44 | 7♑37 | 12°37 | 7°15 | 15°54 | 14° 0 | 10°19 | 11°12 | 15°55 | 2°14 | 13° 6 | 12°36 | 6°42 | 3°34 | F 14 |
| S 15 | 2 13 42 | 1°41'46 | 21°40 | 13°19 | 7° 4 | 15°51 | 14°12 | 10°20 | 11°12 | 15°55 | 2°13 | 13° 5 | 12°33 | 6°49 | 3°31 | S 15 |
| S 16 | 2 17 38 | 2°41'50 | 5♒45 | 14° 8 | 6°56 | 15°47 | 14°24 | 10°22 | 11°13 | 15°55 | 2°12 | 13° 4 | 12°29 | 6°56 | 3°29 | S 16 |
| M17 | 2 21 35 | 3°41'55 | 19°51 | 15° 5 | 6°50 | 15°42 | 14°35 | 10°23 | 11°13 | 15°55 | 2°11 | 13° 4 | 12°26 | 7° 2 | 3°26 | M17 |
| T 18 | 2 25 31 | 4°42'01 | 3♓57 | 16° 8 | 6°46 | 15°36 | 14°47 | 10°24 | 11°13 | 15°54 | 2°10 | 13° 3 | 12°23 | 7° 9 | 3°24 | T 18 |
| W19 | 2 29 28 | 5°42'09 | 18° 3 | 17°17 | 6°D45 | 15°29 | 14°59 | 10°25 | 11°14 | 15°54 | 2° 9 | 13° 0 | 12°20 | 7°16 | 3°22 | W19 |
| T 20 | 2 33 25 | 6°42'19 | 2♈ 4 | 18°30 | 6°47 | 15°22 | 15°11 | 10°27 | 11°14 | 15°54 | 2° 8 | 12°53 | 12°17 | 7°22 | 3°20 | T 20 |
| F 21 | 2 37 21 | 7°42'30 | 16° 0 | 19°47 | 6°50 | 15°13 | 15°23 | 10°29 | 11°15 | 15°53 | 2° 7 | 12°44 | 12°14 | 7°29 | 3°17 | F 21 |
| S 22 | 2 41 18 | 8°42'43 | 29°45 | 21° 7 | 6°57 | 15° 4 | 15°36 | 10°30 | 11°15 | 15°53 | 2° 6 | 12°32 | 12°10 | 7°36 | 3°15 | S 22 |
| S 23 | 2 45 14 | 9°42'58 | 13♉16 | 22°30 | 7° 5 | 14°54 | 15°48 | 10°32 | 11°16 | 15°52 | 2° 5 | 12°19 | 12° 7 | 7°42 | 3°13 | S 23 |
| M24 | 2 49 11 | 10°43'15 | 26°30 | 23°56 | 7°15 | 14°43 | 16° 0 | 10°34 | 11°16 | 15°52 | 2° 5 | 12° 6 | 12° 4 | 7°49 | 3°11 | M24 |
| T 25 | 2 53 7 | 11°43'34 | 9♊25 | 25°24 | 7°28 | 14°31 | 16°13 | 10°36 | 11°17 | 15°51 | 2° 4 | 11°54 | 12° 1 | 7°56 | 3° 9 | T 25 |
| W26 | 2 57 4 | 12°43'54 | 22° 1 | 26°53 | 7°43 | 14°19 | 16°25 | 10°38 | 11°18 | 15°51 | 2° 3 | 11°44 | 11°58 | 8° 2 | 3° 7 | W26 |
| T 27 | 3 1 0 | 13°44'16 | 4♋20 | 28°24 | 8° 0 | 14° 5 | 16°38 | 10°40 | 11°19 | 15°50 | 2° 2 | 11°37 | 11°54 | 8° 9 | 3° 5 | T 27 |
| F 28 | 3 4 57 | 14°44'41 | 16°24 | 29°56 | 8°19 | 13°51 | 16°50 | 10°43 | 11°19 | 15°50 | 2° 1 | 11°33 | 11°51 | 8°16 | 3° 3 | F 28 |
| S 29 | 3 8 54 | 15°45'07 | 28°17 | 1♏29 | 8°40 | 13°36 | 17° 3 | 10°45 | 11°20 | 15°49 | 2° 0 | 11°31 | 11°48 | 8°22 | 3° 1 | S 29 |
| S 30 | 3 12 50 | 16°45'35 | 10♌ 6 | 3° 2 | 9° 3 | 13°20 | 17°15 | 10°47 | 11°21 | 15°48 | 2° 0 | 11°30 | 11°45 | 8°29 | 2°59 | S 30 |
| M31 | 3 16 47 | 17♏46'04 | 21♌54 | 4♏36 | 9♎28 | 13♊ 3 | 17♐28 | 10♒50 | 11♒22 | 15♋48 | 1♈59 | 11♒30 | 11♒42 | 8♌35 | 2♈57 | M31 |

| 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 | |
| S 1 | 6s59 | 23n59 | 2n 5 | 8s45 | 1s36 | 11s40 | 7s10 | 22n16 | 0s25 | 21s54 | 0n20 | 18s48 | 1s 8 | 18s 7 | 0s42 | 21n50 | 0s43 | 14s44 | 17s10 | 16s31 | 16s52 | 19n42 | 4n 5 | 2n39 | S 1 |
| S 2 | 7 21 | 20 45 | 1 5 | 7 59 | 1 16 | 11 17 | 6 59 | 22 19 | 0 23 | 21 56 | 0 20 | 18 48 | 1 8 | 18 7 | 0 42 | 21 50 | 0 43 | 14 44 | 17 10 | 16 31 | 16 53 | 19 39 | 4 4 | 2 39 | S 2 |
| M 3 | 7 44 | 16 40 | 0 2 | 7 12 | 0 55 | 10 53 | 6 48 | 22 22 | 0 21 | 21 57 | 0 19 | 18 48 | 1 8 | 18 7 | 0 42 | 21 50 | 0 43 | 14 45 | 17 10 | 16 31 | 16 54 | 19 37 | 4 2 | 2 39 | M 3 |
| T 4 | 8 6 | 11 56 | 1s 1 | 6 27 | 0 35 | 10 29 | 6 37 | 22 25 | 0 19 | 21 59 | 0 19 | 18 48 | 1 8 | 18 7 | 0 42 | 21 50 | 0 43 | 14 45 | 17 10 | 16 31 | 16 55 | 19 34 | 4 1 | 2 39 | T 4 |
| W 5 | 8 29 | 6 41 | 2 2 | 5 45 | 0 14 | 10 5 | 6 24 | 22 27 | 0 16 | 22 0 | 0 19 | 18 48 | 1 8 | 18 7 | 0 42 | 21 50 | 0 43 | 14 45 | 17 10 | 16 32 | 16 56 | 19 32 | 4 0 | 2 39 | W 5 |
| T 6 | 8 51 | 1 6 | 2 58 | 5 7 | 0n 6 | 9 41 | 6 12 | 22 30 | 0 14 | 22 2 | 0 19 | 18 48 | 1 8 | 18 7 | 0 42 | 21 50 | 0 43 | 14 46 | 17 10 | 16 34 | 16 57 | 19 29 | 3 59 | 2 39 | T 6 |
| F 7 | 9 13 | 4s37 | 3 47 | 4 33 | 0 24 | 9 18 | 5 58 | 22 33 | 0 12 | 22 4 | 0 19 | 18 48 | 1 8 | 18 7 | 0 42 | 21 50 | 0 43 | 14 46 | 17 9 | 16 36 | 16 58 | 19 27 | 3 58 | 2 39 | F 7 |
| S 8 | 9 35 | 10 17 | 4 26 | 4 4 | 0 42 | 8 55 | 5 45 | 22 36 | 0 9 | 22 5 | 0 19 | 18 48 | 1 8 | 18 7 | 0 42 | 21 50 | 0 43 | 14 46 | 17 9 | 16 39 | 16 59 | 19 24 | 3 56 | 2 38 | S 8 |
| S 9 | 9 57 | 15 38 | 4 51 | 3 41 | 0 58 | 8 32 | 5 31 | 22 38 | 0 7 | 22 7 | 0 19 | 18 48 | 1 8 | 18 7 | 0 41 | 21 50 | 0 43 | 14 47 | 17 9 | 16 42 | 16 59 | 19 22 | 3 55 | 2 38 | S 9 |
| M10 | 10 19 | 20 20 | 5 1 | 3 24 | 1 13 | 8 10 | 5 17 | 22 41 | 0 4 | 22 8 | 0 18 | 18 48 | 1 8 | 18 7 | 0 41 | 21 50 | 0 43 | 14 47 | 17 9 | 16 46 | 17 0 | 19 19 | 3 54 | 2 38 | M10 |
| T 11 | 10 41 | 24 2 | 4 54 | 3 14 | 1 26 | 7 49 | 5 2 | 22 43 | 0 2 | 22 10 | 0 18 | 18 47 | 1 8 | 18 7 | 0 41 | 21 50 | 0 43 | 14 47 | 17 9 | 16 49 | 17 1 | 19 17 | 3 53 | 2 38 | T 11 |
| W12 | 11 2 | 26 25 | 4 30 | 3 8 | 1 37 | 7 29 | 4 48 | 22 46 | 0n 1 | 22 11 | 0 18 | 18 47 | 1 8 | 18 7 | 0 41 | 21 50 | 0 43 | 14 47 | 17 9 | 16 52 | 17 2 | 19 14 | 3 52 | 2 38 | W12 |
| T 13 | 11 23 | 27 10 | 3 50 | 3 9 | 1 46 | 7 9 | 4 33 | 22 48 | 0 3 | 22 13 | 0 18 | 18 47 | 1 7 | 18 7 | 0 41 | 21 50 | 0 43 | 14 48 | 17 9 | 16 54 | 17 3 | 19 12 | 3 51 | 2 38 | T 13 |
| F 14 | 11 45 | 26 12 | 2 56 | 3 15 | 1 54 | 6 50 | 4 18 | 22 51 | 0 6 | 22 14 | 0 18 | 18 47 | 1 7 | 18 7 | 0 41 | 21 50 | 0 43 | 14 48 | 17 8 | 16 55 | 17 4 | 19 9 | 3 50 | 2 38 | F 14 |
| S 15 | 12 5 | 23 34 | 1 51 | 3 25 | 2 0 | 6 32 | 4 4 | 22 53 | 0 9 | 22 16 | 0 18 | 18 46 | 1 7 | 18 7 | 0 41 | 21 50 | 0 43 | 14 48 | 17 8 | 16 56 | 17 5 | 19 7 | 3 49 | 2 38 | S 15 |
| S 16 | 12 26 | 19 30 | 0 39 | 3 40 | 2 5 | 6 16 | 3 49 | 22 55 | 0 11 | 22 17 | 0 18 | 18 46 | 1 7 | 18 7 | 0 41 | 21 50 | 0 43 | 14 48 | 17 8 | 16 56 | 17 6 | 19 4 | 3 48 | 2 37 | S 16 |
| M17 | 12 47 | 14 20 | 0n36 | 3 59 | 2 8 | 6 0 | 3 34 | 22 58 | 0 14 | 22 19 | 0 18 | 18 46 | 1 7 | 18 7 | 0 41 | 21 50 | 0 43 | 14 49 | 17 8 | 16 56 | 17 7 | 19 2 | 3 46 | 2 37 | M17 |
| T 18 | 13 7 | 8 24 | 1 48 | 4 21 | 2 11 | 5 45 | 3 20 | 23 0 | 0 17 | 22 20 | 0 17 | 18 45 | 1 7 | 18 7 | 0 41 | 21 50 | 0 43 | 14 49 | 17 8 | 16 56 | 17 8 | 18 59 | 3 45 | 2 37 | T 18 |
| W19 | 13 27 | 2 5 | 2 54 | 4 46 | 2 12 | 5 32 | 3 6 | 23 2 | 0 20 | 22 22 | 0 17 | 18 45 | 1 7 | 18 6 | 0 41 | 21 50 | 0 43 | 14 49 | 17 7 | 16 57 | 17 8 | 18 56 | 3 44 | 2 37 | W19 |
| T 20 | 13 47 | 4n19 | 3 48 | 5 14 | 2 12 | 5 19 | 2 52 | 23 4 | 0 22 | 22 23 | 0 17 | 18 44 | 1 7 | 18 6 | 0 41 | 21 50 | 0 43 | 14 49 | 17 7 | 16 59 | 17 9 | 18 54 | 3 43 | 2 37 | T 20 |
| F 21 | 14 7 | 10 26 | 4 29 | 5 44 | 2 11 | 5 8 | 2 38 | 23 6 | 0 25 | 22 25 | 0 17 | 18 44 | 1 7 | 18 6 | 0 41 | 21 50 | 0 43 | 14 49 | 17 7 | 17 2 | 17 10 | 18 51 | 3 42 | 2 37 | F 21 |
| S 22 | 14 26 | 15 58 | 4 53 | 6 16 | 2 9 | 4 58 | 2 24 | 23 7 | 0 28 | 22 26 | 0 17 | 18 43 | 1 7 | 18 6 | 0 41 | 21 50 | 0 43 | 14 49 | 17 7 | 17 5 | 17 11 | 18 49 | 3 41 | 2 36 | S 22 |
| S 23 | 14 46 | 20 37 | 5 0 | 6 49 | 2 7 | 4 49 | 2 11 | 23 9 | 0 31 | 22 28 | 0 17 | 18 43 | 1 7 | 18 6 | 0 41 | 21 50 | 0 43 | 14 50 | 17 7 | 17 9 | 17 12 | 18 46 | 3 40 | 2 36 | S 23 |
| M24 | 15 4 | 24 8 | 4 51 | 7 24 | 2 4 | 4 41 | 1 57 | 23 11 | 0 34 | 22 29 | 0 17 | 18 42 | 1 7 | 18 6 | 0 41 | 21 50 | 0 43 | 14 50 | 17 6 | 17 12 | 17 13 | 18 44 | 3 39 | 2 36 | M24 |
| T 25 | 15 23 | 26 18 | 4 27 | 7 59 | 2 0 | 4 34 | 1 45 | 23 12 | 0 37 | 22 30 | 0 17 | 18 42 | 1 7 | 18 5 | 0 41 | 21 50 | 0 43 | 14 50 | 17 6 | 17 16 | 17 14 | 18 41 | 3 38 | 2 36 | T 25 |
| W26 | 15 42 | 27 5 | 3 50 | 8 35 | 1 56 | 4 29 | 1 32 | 23 14 | 0 40 | 22 32 | 0 16 | 18 41 | 1 7 | 18 5 | 0 41 | 21 50 | 0 43 | 14 50 | 17 6 | 17 18 | 17 15 | 18 38 | 3 37 | 2 36 | W26 |
| T 27 | 16 0 | 26 29 | 3 3 | 9 12 | 1 51 | 4 24 | 1 20 | 23 15 | 0 43 | 22 33 | 0 16 | 18 40 | 1 7 | 18 5 | 0 41 | 21 50 | 0 43 | 14 50 | 17 6 | 17 20 | 17 16 | 18 36 | 3 36 | 2 36 | T 27 |
| F 28 | 16 18 | 24 37 | 2 9 | 9 49 | 1 46 | 4 21 | 1 8 | 23 17 | 0 46 | 22 34 | 0 16 | 18 40 | 1 7 | 18 5 | 0 41 | 21 50 | 0 43 | 14 50 | 17 5 | 17 22 | 17 16 | 18 33 | 3 35 | 2 35 | F 28 |
| S 29 | 16 36 | 21 41 | 1 9 | 10 26 | 1 41 | 4 18 | 0 56 | 23 18 | 0 49 | 22 36 | 0 16 | 18 39 | 1 7 | 18 4 | 0 41 | 21 50 | 0 43 | 14 50 | 17 5 | 17 22 | 17 17 | 18 31 | 3 35 | 2 35 | S 29 |
| S 30 | 16 53 | 17 53 | 0 8 | 11 4 | 1 35 | 4 17 | 0 45 | 23 19 | 0 52 | 22 37 | 0 16 | 18 38 | 1 7 | 18 4 | 0 41 | 21 51 | 0 43 | 14 50 | 17 5 | 17 22 | 17 18 | 18 28 | 3 34 | 2 35 | S 30 |
| M31 | 17s10 | 13n23 | 0s55 | 11s41 | 1n29 | 4s16 | 0s34 | 23n20 | 0n55 | 22s38 | 0n16 | 18s38 | 1s 7 | 18s 4 | 0s41 | 21n51 | 0s43 | 14s50 | 17s 5 | 17s22 | 17s19 | 18n26 | 3n33 | 2n35 | M31 |

Julian Day Number = 2298426.5, Delta T = 118.68 sec
Ecliptic obliquity = 23°29'44, Nutation = 0°00'12, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°53'23, Lahiri = 18°00'23 Julian Calendar 1 Oct. 1580 == Greg. Calendar 11 Oct. 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## NOVEMBER 1580 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T 1 | 3 20 43 | 18♏46'36 | 3♍47 | 6♏10 | 9♎54 | 12°R46 | 17♐41 | 10♒53 | 11♒23 | 15°R47 | 1°R58 | 11°R30 | 11♒39 | 8♌42 | 2°R56 | T 1 |
| W 2 | 3 24 40 | 19°47'09 | 15°52 | 7°45 | 10°23 | 12♊28 | 17°54 | 10°56 | 11°24 | 15♋46 | 1♈57 | 11♒27 | 11°35 | 8°49 | 2♈54 | W 2 |
| T 3 | 3 28 36 | 20°47'45 | 28°12 | 9°20 | 10°52 | 12° 9 | 18° 7 | 10°58 | 11°25 | 15°45 | 1°57 | 11°22 | 11°32 | 8°55 | 2°52 | T 3 |
| F 4 | 3 32 33 | 21°48'21 | 10♎52 | 10°55 | 11°24 | 11°50 | 18°20 | 11° 1 | 11°27 | 15°44 | 1°56 | 11°14 | 11°29 | 9° 2 | 2°51 | F 4 |
| S 5 | 3 36 29 | 22°49'00 | 23°55 | 12°30 | 11°57 | 11°30 | 18°33 | 11° 4 | 11°28 | 15°44 | 1°55 | 11° 4 | 11°26 | 9° 9 | 2°49 | S 5 |
| S 6 | 3 40 26 | 23°49'40 | 7♏20 | 14° 5 | 12°31 | 11°10 | 18°46 | 11° 8 | 11°29 | 15°43 | 1°54 | 10°52 | 11°23 | 9°15 | 2°48 | S 6 |
| M 7 | 3 44 23 | 24°50'22 | 21° 6 | 15°40 | 13° 7 | 10°49 | 18°59 | 11°11 | 11°30 | 15°42 | 1°54 | 10°40 | 11°20 | 9°22 | 2°46 | M 7 |
| T 8 | 3 48 19 | 25°51'06 | 5♐ 9 | 17°15 | 13°44 | 10°28 | 19°12 | 11°14 | 11°32 | 15°41 | 1°53 | 10°28 | 11°16 | 9°29 | 2°45 | T 8 |
| W 9 | 3 52 16 | 26°51'50 | 19°24 | 18°50 | 14°22 | 10° 6 | 19°25 | 11°18 | 11°33 | 15°40 | 1°53 | 10°18 | 11°13 | 9°35 | 2°43 | W 9 |
| T 10 | 3 56 12 | 27°52'36 | 3♑46 | 20°25 | 15° 2 | 9°44 | 19°38 | 11°21 | 11°35 | 15°39 | 1°52 | 10°10 | 11°10 | 9°42 | 2°42 | T 10 |
| F 11 | 4 0 9 | 28°53'23 | 18° 9 | 22° 0 | 15°43 | 9°22 | 19°52 | 11°25 | 11°36 | 15°38 | 1°51 | 10° 6 | 11° 7 | 9°49 | 2°41 | F 11 |
| S 12 | 4 4 5 | 29°54'12 | 2♒29 | 23°34 | 16°25 | 8°59 | 20° 5 | 11°28 | 11°38 | 15°37 | 1°51 | 10° 4 | 11° 4 | 9°55 | 2°39 | S 12 |
| S 13 | 4 8 2 | 0♐55'01 | 16°42 | 25° 9 | 17° 8 | 8°36 | 20°18 | 11°32 | 11°40 | 15°36 | 1°50 | 10°D 4 | 11° 0 | 10° 2 | 2°38 | S 13 |
| M14 | 4 11 58 | 1°55'51 | 0♓48 | 26°44 | 17°52 | 8°13 | 20°32 | 11°36 | 11°41 | 15°35 | 1°50 | 10°R 4 | 10°57 | 10° 8 | 2°37 | M14 |
| T 15 | 4 15 55 | 2°56'41 | 14°45 | 28°18 | 18°37 | 7°50 | 20°45 | 11°40 | 11°43 | 15°33 | 1°49 | 10° 4 | 10°54 | 10°15 | 2°36 | T 15 |
| W16 | 4 19 52 | 3°57'33 | 28°33 | 29°52 | 19°24 | 7°27 | 20°58 | 11°44 | 11°45 | 15°32 | 1°49 | 10° 1 | 10°51 | 10°22 | 2°35 | W16 |
| T 17 | 4 23 48 | 4°58'25 | 12♈13 | 1♐27 | 20°11 | 7° 4 | 21°12 | 11°48 | 11°46 | 15°31 | 1°48 | 9°56 | 10°48 | 10°28 | 2°34 | T 17 |
| F 18 | 4 27 45 | 5°59'19 | 25°42 | 3° 1 | 20°59 | 6°41 | 21°25 | 11°52 | 11°48 | 15°30 | 1°48 | 9°48 | 10°45 | 10°35 | 2°33 | F 18 |
| S 19 | 4 31 41 | 7° 0'13 | 9♉ 2 | 4°35 | 21°48 | 6°18 | 21°39 | 11°56 | 11°50 | 15°29 | 1°48 | 9°38 | 10°41 | 10°42 | 2°32 | S 19 |
| S 20 | 4 35 38 | 8° 1'08 | 22° 9 | 6°10 | 22°38 | 5°55 | 21°52 | 12° 1 | 11°52 | 15°27 | 1°47 | 9°27 | 10°38 | 10°48 | 2°32 | S 20 |
| M21 | 4 39 34 | 9° 2'04 | 5♊ 2 | 7°44 | 23°28 | 5°32 | 22° 6 | 12° 5 | 11°54 | 15°26 | 1°47 | 9°16 | 10°35 | 10°55 | 2°31 | M21 |
| T 22 | 4 43 31 | 10° 3'01 | 17°42 | 9°18 | 24°20 | 5°10 | 22°19 | 12°10 | 11°56 | 15°25 | 1°47 | 9° 5 | 10°32 | 11° 2 | 2°30 | T 22 |
| W23 | 4 47 27 | 11° 4'00 | 0♋ 7 | 10°52 | 25°12 | 4°48 | 22°33 | 12°14 | 11°58 | 15°24 | 1°46 | 8°57 | 10°29 | 11° 8 | 2°29 | W23 |
| T 24 | 4 51 24 | 12° 4'59 | 12°19 | 12°27 | 26° 5 | 4°26 | 22°47 | 12°19 | 12° 0 | 15°22 | 1°46 | 8°50 | 10°26 | 11°15 | 2°29 | T 24 |
| F 25 | 4 55 21 | 13° 5'59 | 24°20 | 14° 1 | 26°58 | 4° 5 | 23° 0 | 12°24 | 12° 2 | 15°21 | 1°46 | 8°47 | 10°22 | 11°22 | 2°28 | F 25 |
| S 26 | 4 59 17 | 14° 7'00 | 6♌11 | 15°35 | 27°53 | 3°44 | 23°14 | 12°29 | 12° 5 | 15°19 | 1°46 | 8°D46 | 10°19 | 11°28 | 2°28 | S 26 |
| S 27 | 5 3 14 | 15° 8'02 | 17°59 | 17°10 | 28°48 | 3°23 | 23°28 | 12°33 | 12° 7 | 15°18 | 1°45 | 8°46 | 10°16 | 11°35 | 2°28 | S 27 |
| M28 | 5 7 10 | 16° 9'05 | 29°46 | 18°44 | 29°43 | 3° 3 | 23°41 | 12°38 | 12° 9 | 15°17 | 1°45 | 8°47 | 10°13 | 11°42 | 2°27 | M28 |
| T 29 | 5 11 7 | 17°10'09 | 11♍38 | 20°19 | 0♏40 | 2°44 | 23°55 | 12°43 | 12°11 | 15°15 | 1°45 | 8°R48 | 10°10 | 11°48 | 2°27 | T 29 |
| W30 | 5 15 3 | 18♐11'14 | 23♍41 | 21♐54 | 1♏36 | 2♊25 | 24♐ 9 | 12♒48 | 12♒14 | 15♋14 | 1♈45 | 8♒48 | 10♒ 6 | 11♌55 | 2♈27 | W30 |

| 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 | 17s27 | 8n21 | 1s55 | 12s18 | 1n23 | 4s17 | 0s23 | 23n20 | 0n58 | 22s40 | 0n16 | 18s37 | 1s 7 | 18s 3 | 0s41 | 21n51 | 0s43 | 14s50 | 17s 4 | 17s22 | 17s20 | 18n23 | 3n32 | 2n35 |
| W 2 | 17 43 | 2 57 | 2 51 | 12 55 | 1 17 | 4 18 | 0 12 | 23 21 | 1 1 | 22 41 | 0 16 | 18 36 | 1 7 | 18 3 | 0 41 | 21 51 | 0 43 | 14 51 | 17 4 | 17 23 | 17 21 | 18 20 | 3 31 | 2 34 |
| T 3 | 18 0 | 2s39 | 3 41 | 13 32 | 1 10 | 4 21 | 0 2 | 23 22 | 1 4 | 22 42 | 0 15 | 18 35 | 1 7 | 18 3 | 0 41 | 21 51 | 0 43 | 14 51 | 17 4 | 17 25 | 17 22 | 18 18 | 3 30 | 2 34 |
| F 4 | 18 16 | 8 18 | 4 20 | 14 8 | 1 4 | 4 24 | 0n 8 | 23 22 | 1 7 | 22 44 | 0 15 | 18 34 | 1 7 | 18 2 | 0 41 | 21 51 | 0 43 | 14 51 | 17 3 | 17 27 | 17 23 | 18 15 | 3 29 | 2 34 |
| S 5 | 18 31 | 13 45 | 4 48 | 14 43 | 0 57 | 4 28 | 0 17 | 23 22 | 1 10 | 22 45 | 0 15 | 18 33 | 1 7 | 18 2 | 0 41 | 21 51 | 0 43 | 14 51 | 17 3 | 17 30 | 17 24 | 18 13 | 3 29 | 2 34 |
| S 6 | 18 46 | 18 43 | 5 1 | 15 18 | 0 50 | 4 33 | 0 26 | 23 22 | 1 13 | 22 46 | 0 15 | 18 32 | 1 7 | 18 2 | 0 41 | 21 51 | 0 43 | 14 51 | 17 3 | 17 33 | 17 24 | 18 10 | 3 28 | 2 34 |
| M 7 | 19 1 | 22 50 | 4 56 | 15 53 | 0 43 | 4 39 | 0 35 | 23 22 | 1 16 | 22 47 | 0 15 | 18 32 | 1 6 | 18 1 | 0 41 | 21 51 | 0 43 | 14 51 | 17 3 | 17 36 | 17 25 | 18 7 | 3 27 | 2 34 |
| T 8 | 19 16 | 25 42 | 4 34 | 16 26 | 0 36 | 4 46 | 0 44 | 23 22 | 1 19 | 22 48 | 0 15 | 18 31 | 1 6 | 18 1 | 0 41 | 21 51 | 0 43 | 14 51 | 17 2 | 17 39 | 17 26 | 18 5 | 3 26 | 2 33 |
| W 9 | 19 30 | 26 58 | 3 55 | 16 59 | 0 30 | 4 53 | 0 52 | 23 22 | 1 22 | 22 50 | 0 15 | 18 30 | 1 6 | 18 0 | 0 41 | 21 51 | 0 43 | 14 51 | 17 2 | 17 42 | 17 27 | 18 2 | 3 26 | 2 33 |
| T 10 | 19 44 | 26 26 | 3 0 | 17 32 | 0 23 | 5 1 | 1 0 | 23 22 | 1 25 | 22 51 | 0 15 | 18 29 | 1 6 | 18 0 | 0 40 | 21 52 | 0 43 | 14 50 | 17 2 | 17 44 | 17 28 | 17 59 | 3 25 | 2 33 |
| F 11 | 19 57 | 24 8 | 1 54 | 18 3 | 0 16 | 5 10 | 1 8 | 23 21 | 1 28 | 22 52 | 0 15 | 18 28 | 1 6 | 17 59 | 0 40 | 21 52 | 0 43 | 14 50 | 17 1 | 17 45 | 17 29 | 17 57 | 3 24 | 2 33 |
| S 12 | 20 11 | 20 18 | 0 40 | 18 34 | 0 9 | 5 19 | 1 15 | 23 20 | 1 30 | 22 53 | 0 15 | 18 27 | 1 6 | 17 59 | 0 40 | 21 52 | 0 43 | 14 50 | 17 1 | 17 46 | 17 30 | 17 54 | 3 23 | 2 33 |
| S 13 | 20 23 | 15 18 | 0n35 | 19 4 | 0 2 | 5 29 | 1 22 | 23 19 | 1 33 | 22 54 | 0 14 | 18 25 | 1 6 | 17 59 | 0 40 | 21 52 | 0 43 | 14 50 | 17 1 | 17 46 | 17 31 | 17 52 | 3 23 | 2 32 |
| M14 | 20 36 | 9 32 | 1 48 | 19 33 | 0s 5 | 5 39 | 1 29 | 23 18 | 1 36 | 22 55 | 0 14 | 18 24 | 1 6 | 17 58 | 0 40 | 21 52 | 0 43 | 14 50 | 17 0 | 17 46 | 17 31 | 17 49 | 3 22 | 2 32 |
| T 15 | 20 48 | 3 21 | 2 53 | 20 1 | 0 11 | 5 50 | 1 36 | 23 17 | 1 39 | 22 56 | 0 14 | 18 23 | 1 6 | 17 58 | 0 40 | 21 52 | 0 43 | 14 50 | 17 0 | 17 46 | 17 32 | 17 46 | 3 22 | 2 32 |
| W16 | 20 59 | 2n55 | 3 48 | 20 28 | 0 18 | 6 2 | 1 42 | 23 16 | 1 41 | 22 57 | 0 14 | 18 22 | 1 6 | 17 57 | 0 40 | 21 52 | 0 43 | 14 50 | 17 0 | 17 47 | 17 33 | 17 44 | 3 21 | 2 32 |
| T 17 | 21 11 | 8 58 | 4 29 | 20 54 | 0 25 | 6 14 | 1 48 | 23 15 | 1 44 | 22 58 | 0 14 | 18 21 | 1 6 | 17 57 | 0 40 | 21 52 | 0 43 | 14 50 | 16 59 | 17 48 | 17 34 | 17 41 | 3 20 | 2 32 |
| F 18 | 21 21 | 14 31 | 4 54 | 21 19 | 0 31 | 6 27 | 1 54 | 23 13 | 1 46 | 22 59 | 0 14 | 18 20 | 1 6 | 17 56 | 0 40 | 21 53 | 0 43 | 14 50 | 16 59 | 17 50 | 17 35 | 17 38 | 3 20 | 2 31 |
| S 19 | 21 32 | 19 19 | 5 3 | 21 43 | 0 38 | 6 40 | 1 59 | 23 12 | 1 49 | 23 0 | 0 14 | 18 18 | 1 6 | 17 55 | 0 40 | 21 53 | 0 43 | 14 50 | 16 59 | 17 53 | 17 36 | 17 36 | 3 19 | 2 31 |
| S 20 | 21 42 | 23 7 | 4 56 | 22 6 | 0 44 | 6 54 | 2 5 | 23 10 | 1 51 | 23 1 | 0 14 | 18 17 | 1 6 | 17 55 | 0 40 | 21 53 | 0 43 | 14 49 | 16 58 | 17 56 | 17 37 | 17 33 | 3 19 | 2 31 |
| M21 | 21 51 | 25 40 | 4 34 | 22 28 | 0 50 | 7 8 | 2 10 | 23 8 | 1 53 | 23 2 | 0 14 | 18 16 | 1 6 | 17 54 | 0 40 | 21 53 | 0 43 | 14 49 | 16 58 | 17 59 | 17 37 | 17 30 | 3 18 | 2 31 |
| T 22 | 22 1 | 26 53 | 3 58 | 22 49 | 0 56 | 7 22 | 2 14 | 23 6 | 1 56 | 23 3 | 0 13 | 18 15 | 1 6 | 17 54 | 0 40 | 21 53 | 0 43 | 14 49 | 16 58 | 18 2 | 17 38 | 17 28 | 3 18 | 2 30 |
| W23 | 22 9 | 26 41 | 3 12 | 23 9 | 1 2 | 7 37 | 2 19 | 23 5 | 1 58 | 23 4 | 0 13 | 18 13 | 1 6 | 17 53 | 0 40 | 21 53 | 0 43 | 14 49 | 16 57 | 18 4 | 17 39 | 17 25 | 3 17 | 2 30 |
| T 24 | 22 18 | 25 12 | 2 17 | 23 27 | 1 7 | 7 52 | 2 23 | 23 3 | 2 0 | 23 5 | 0 13 | 18 12 | 1 6 | 17 52 | 0 40 | 21 53 | 0 43 | 14 49 | 16 57 | 18 5 | 17 40 | 17 22 | 3 17 | 2 30 |
| F 25 | 22 25 | 22 34 | 1 17 | 23 45 | 1 13 | 8 8 | 2 27 | 23 1 | 2 2 | 23 5 | 0 13 | 18 11 | 1 6 | 17 52 | 0 40 | 21 54 | 0 43 | 14 48 | 16 57 | 18 6 | 17 41 | 17 20 | 3 17 | 2 30 |
| S 26 | 22 33 | 19 0 | 0 14 | 24 1 | 1 18 | 8 23 | 2 31 | 22 59 | 2 4 | 23 6 | 0 13 | 18 9 | 1 6 | 17 51 | 0 40 | 21 54 | 0 43 | 14 48 | 16 56 | 18 7 | 17 42 | 17 17 | 3 16 | 2 30 |
| S 27 | 22 40 | 14 42 | 0s49 | 24 16 | 1 23 | 8 39 | 2 35 | 22 56 | 2 6 | 23 7 | 0 13 | 18 8 | 1 6 | 17 51 | 0 40 | 21 54 | 0 43 | 14 48 | 16 56 | 18 7 | 17 43 | 17 14 | 3 16 | 2 29 |
| M28 | 22 46 | 9 51 | 1 51 | 24 29 | 1 28 | 8 56 | 2 38 | 22 54 | 2 8 | 23 8 | 0 13 | 18 6 | 1 6 | 17 50 | 0 40 | 21 54 | 0 43 | 14 48 | 16 56 | 18 6 | 17 43 | 17 12 | 3 16 | 2 29 |
| T 29 | 22 52 | 4 38 | 2 48 | 24 41 | 1 33 | 9 12 | 2 42 | 22 52 | 2 9 | 23 9 | 0 13 | 18 5 | 1 6 | 17 49 | 0 40 | 21 54 | 0 43 | 14 47 | 16 55 | 18 6 | 17 44 | 17 9 | 3 15 | 2 29 |
| W30 | 22s58 | 0s50 | 3s38 | 24s52 | 1s38 | 9s29 | 2n45 | 22n50 | 2n11 | 23s 9 | 0n13 | 18s 4 | 1s 6 | 17s49 | 0s40 | 21n54 | 0s43 | 14s47 | 16s55 | 18s 6 | 17s45 | 17n 6 | 3n15 | 2n29 |

Julian Day Number = 2298457.5, Delta T = 118.53 sec
Ecliptic obliquity = 23°29'44, Nutation = 0°00'11, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°53'27, Lahiri = 18°00'28 Julian Calendar 1 Nov. 1580 == Greg. Calendar 11 Nov. 1580

# ASTRODIENST EPHEMERIS for the year 1580
# geocentric

## DECEMBER 1580 JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ☿ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ☊ | ☊ | ⚸ | ⚷ | Day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T 1 | 5 19 0 | 19♐12'20 | 6♎ 0 | 23♐29 | 2♏34 | 2°R 6 | 24♐23 | 12♒54 | 12♒16 | 15°R12 | 1°R45 | 8°R46 | 10♒ 3 | 12♌ 1 | 2°R27 | T 1 |
| F 2 | 5 22 56 | 20°13'27 | 18°39 | 25° 4 | 3°32 | 1♊49 | 24°36 | 12°59 | 12°19 | 15♋11 | 1♈45 | 8♒43 | 10° 0 | 12° 8 | 2♈26 | F 2 |
| S 3 | 5 26 53 | 21°14'34 | 1♏43 | 26°39 | 4°30 | 1°32 | 24°50 | 13° 4 | 12°21 | 15° 9 | 1°44 | 8°37 | 9°57 | 12°15 | 2°D26 | S 3 |
| S 4 | 5 30 50 | 22°15'43 | 15°13 | 28°15 | 5°29 | 1°15 | 25° 4 | 13° 9 | 12°24 | 15° 8 | 1°44 | 8°30 | 9°54 | 12°21 | 2°26 | S 4 |
| M 5 | 5 34 46 | 23°16'52 | 29° 9 | 29°50 | 6°28 | 1° 0 | 25°18 | 13°15 | 12°26 | 15° 6 | 1°44 | 8°22 | 9°51 | 12°28 | 2°26 | M 5 |
| T 6 | 5 38 43 | 24°18'02 | 13♐28 | 1♑26 | 7°28 | 0°45 | 25°31 | 13°20 | 12°29 | 15° 5 | 1°D44 | 8°14 | 9°47 | 12°35 | 2°27 | T 6 |
| W 7 | 5 42 39 | 25°19'12 | 28° 5 | 3° 2 | 8°29 | 0°31 | 25°45 | 13°26 | 12°31 | 15° 3 | 1°44 | 8° 8 | 9°44 | 12°41 | 2°27 | W 7 |
| T 8 | 5 46 36 | 26°20'23 | 12♑53 | 4°38 | 9°29 | 0°17 | 25°59 | 13°32 | 12°34 | 15° 1 | 1°44 | 8° 3 | 9°41 | 12°48 | 2°27 | T 8 |
| F 9 | 5 50 32 | 27°21'34 | 27°42 | 6°14 | 10°31 | 0° 5 | 26°13 | 13°37 | 12°37 | 15° 0 | 1°44 | 8° 1 | 9°38 | 12°55 | 2°27 | F 9 |
| S 10 | 5 54 29 | 28°22'45 | 12♒28 | 7°51 | 11°32 | 29♑53 | 26°27 | 13°43 | 12°39 | 14°58 | 1°45 | 8°D 1 | 9°35 | 13° 1 | 2°28 | S 10 |
| S 11 | 5 58 26 | 29°23'56 | 27° 2 | 9°27 | 12°34 | 29°42 | 26°40 | 13°49 | 12°42 | 14°57 | 1°45 | 8° 2 | 9°32 | 13° 8 | 2°28 | S 11 |
| M12 | 6 2 22 | 0♑25'07 | 11♓21 | 11° 3 | 13°36 | 29°32 | 26°54 | 13°55 | 12°45 | 14°55 | 1°45 | 8° 3 | 9°28 | 13°15 | 2°28 | M12 |
| T 13 | 6 6 19 | 1°26'18 | 25°24 | 12°40 | 14°39 | 29°23 | 27° 8 | 14° 1 | 12°48 | 14°53 | 1°45 | 8°R 4 | 9°25 | 13°21 | 2°29 | T 13 |
| W14 | 6 10 15 | 2°27'29 | 9♈10 | 14°16 | 15°42 | 29°14 | 27°22 | 14° 6 | 12°50 | 14°52 | 1°45 | 8° 4 | 9°22 | 13°28 | 2°30 | W14 |
| T 15 | 6 14 12 | 3°28'39 | 22°38 | 15°52 | 16°45 | 29° 6 | 27°36 | 14°13 | 12°53 | 14°50 | 1°45 | 8° 3 | 9°19 | 13°34 | 2°30 | T 15 |
| F 16 | 6 18 8 | 4°29'50 | 5♉51 | 17°28 | 17°49 | 29° 0 | 27°49 | 14°19 | 12°56 | 14°48 | 1°46 | 7°59 | 9°16 | 13°41 | 2°31 | F 16 |
| S 17 | 6 22 5 | 5°31'00 | 18°50 | 19° 4 | 18°53 | 28°54 | 28° 3 | 14°25 | 12°59 | 14°47 | 1°46 | 7°55 | 9°12 | 13°48 | 2°32 | S 17 |
| S 18 | 6 26 1 | 6°32'10 | 1♊35 | 20°39 | 19°57 | 28°49 | 28°17 | 14°31 | 13° 2 | 14°45 | 1°46 | 7°49 | 9° 9 | 13°54 | 2°32 | S 18 |
| M19 | 6 29 58 | 7°33'20 | 14° 8 | 22°14 | 21° 2 | 28°44 | 28°31 | 14°37 | 13° 5 | 14°43 | 1°46 | 7°44 | 9° 6 | 14° 1 | 2°33 | M19 |
| T 20 | 6 33 55 | 8°34'30 | 26°30 | 23°48 | 22° 7 | 28°41 | 28°44 | 14°43 | 13° 8 | 14°42 | 1°47 | 7°39 | 9° 3 | 14° 8 | 2°34 | T 20 |
| W21 | 6 37 51 | 9°35'39 | 8♋41 | 25°21 | 23°12 | 28°38 | 28°58 | 14°50 | 13°11 | 14°40 | 1°47 | 7°35 | 9° 0 | 14°14 | 2°35 | W21 |
| T 22 | 6 41 48 | 10°36'49 | 20°43 | 26°53 | 24°17 | 28°36 | 29°12 | 14°56 | 13°14 | 14°38 | 1°47 | 7°32 | 8°57 | 14°21 | 2°36 | T 22 |
| F 23 | 6 45 44 | 11°37'58 | 2♌37 | 28°23 | 25°23 | 28°35 | 29°25 | 15° 2 | 13°17 | 14°37 | 1°48 | 7°D31 | 8°53 | 14°28 | 2°37 | F 23 |
| S 24 | 6 49 41 | 12°39'07 | 14°27 | 29°51 | 26°29 | 28°D35 | 29°39 | 15° 9 | 13°20 | 14°35 | 1°48 | 7°31 | 8°50 | 14°34 | 2°38 | S 24 |
| S 25 | 6 53 37 | 13°40'16 | 26°14 | 1♒17 | 27°35 | 28°35 | 29°53 | 15°15 | 13°23 | 14°33 | 1°49 | 7°32 | 8°47 | 14°41 | 2°40 | S 25 |
| M26 | 6 57 34 | 14°41'25 | 8♍ 1 | 2°41 | 28°41 | 28°36 | 0♑ 6 | 15°22 | 13°26 | 14°32 | 1°49 | 7°33 | 8°44 | 14°48 | 2°41 | M26 |
| T 27 | 7 1 30 | 15°42'34 | 19°54 | 4° 1 | 29°48 | 28°38 | 0°20 | 15°28 | 13°30 | 14°30 | 1°50 | 7°35 | 8°41 | 14°54 | 2°42 | T 27 |
| W28 | 7 5 27 | 16°43'42 | 1♎56 | 5°17 | 0♐55 | 28°41 | 0°33 | 15°35 | 13°33 | 14°28 | 1°50 | 7°37 | 8°38 | 15° 1 | 2°44 | W28 |
| T 29 | 7 9 24 | 17°44'50 | 14°12 | 6°29 | 2° 2 | 28°44 | 0°47 | 15°42 | 13°36 | 14°26 | 1°51 | 7°R37 | 8°34 | 15° 8 | 2°45 | T 29 |
| F 30 | 7 13 20 | 18°45'59 | 26°46 | 7°36 | 3° 9 | 28°48 | 1° 0 | 15°48 | 13°39 | 14°25 | 1°51 | 7°37 | 8°31 | 15°14 | 2°46 | F 30 |
| S 31 | 7 17 17 | 19♑47'07 | 9♏44 | 8♒37 | 4♐17 | 28♑53 | 1♑14 | 15♒55 | 13♒42 | 14♋23 | 1♈52 | 7♒36 | 8♒28 | 15♌21 | 2♈48 | 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 | 23s 3 | 6s22 | 4s20 | 25s 2 | 1s42 | 9s46 | 2n47 | 22n48 | 2n13 | 23s10 | 0n13 | 18s 2 | 1s 6 | 17s48 | 0s40 | 21n54 | 0s43 | 14s47 | 16s55 | 18s 7 | 17s46 | 17n 3 | 3n15 | 2n29 |
| F 2 | 23 8 | 11 47 | 4 50 | 25 10 | 1 46 | 10 3 | 2 50 | 22 46 | 2 14 | 23 11 | 0 12 | 18 1 | 1 6 | 17 47 | 0 40 | 21 55 | 0 43 | 14 47 | 16 54 | 18 8 | 17 47 | 17 1 | 3 14 | 2 28 |
| S 3 | 23 12 | 16 53 | 5 6 | 25 17 | 1 50 | 10 21 | 2 52 | 22 44 | 2 16 | 23 11 | 0 12 | 17 59 | 1 6 | 17 46 | 0 40 | 21 55 | 0 43 | 14 46 | 16 54 | 18 9 | 17 48 | 16 58 | 3 14 | 2 28 |
| S 4 | 23 16 | 21 19 | 5 6 | 25 22 | 1 53 | 10 38 | 2 55 | 22 42 | 2 17 | 23 12 | 0 12 | 17 57 | 1 6 | 17 46 | 0 40 | 21 55 | 0 43 | 14 46 | 16 54 | 18 11 | 17 49 | 16 55 | 3 14 | 2 28 |
| M 5 | 23 19 | 24 42 | 4 49 | 25 26 | 1 57 | 10 56 | 2 57 | 22 40 | 2 18 | 23 12 | 0 12 | 17 56 | 1 6 | 17 45 | 0 40 | 21 55 | 0 43 | 14 46 | 16 53 | 18 13 | 17 49 | 16 53 | 3 14 | 2 28 |
| T 6 | 23 22 | 26 39 | 4 13 | 25 29 | 2 0 | 11 13 | 2 58 | 22 38 | 2 20 | 23 13 | 0 12 | 17 54 | 1 6 | 17 44 | 0 40 | 21 55 | 0 43 | 14 45 | 16 53 | 18 15 | 17 50 | 16 50 | 3 14 | 2 28 |
| W 7 | 23 25 | 26 48 | 3 19 | 25 30 | 2 2 | 11 31 | 3 0 | 22 36 | 2 21 | 23 14 | 0 12 | 17 53 | 1 6 | 17 43 | 0 40 | 21 56 | 0 43 | 14 45 | 16 52 | 18 17 | 17 51 | 16 47 | 3 14 | 2 27 |
| T 8 | 23 27 | 25 4 | 2 12 | 25 29 | 2 5 | 11 49 | 3 1 | 22 34 | 2 22 | 23 14 | 0 12 | 17 51 | 1 6 | 17 43 | 0 40 | 21 56 | 0 43 | 14 45 | 16 52 | 18 18 | 17 52 | 16 44 | 3 13 | 2 27 |
| F 9 | 23 28 | 21 35 | 0 56 | 25 27 | 2 6 | 12 7 | 3 3 | 22 32 | 2 23 | 23 15 | 0 12 | 17 49 | 1 6 | 17 42 | 0 40 | 21 56 | 0 43 | 14 44 | 16 52 | 18 18 | 17 53 | 16 42 | 3 13 | 2 27 |
| S 10 | 23 29 | 16 43 | 0n24 | 25 24 | 2 8 | 12 25 | 3 4 | 22 31 | 2 24 | 23 15 | 0 12 | 17 48 | 1 6 | 17 41 | 0 40 | 21 56 | 0 43 | 14 44 | 16 51 | 18 18 | 17 54 | 16 39 | 3 13 | 2 27 |
| S 11 | 23 30 | 10 56 | 1 42 | 25 18 | 2 9 | 12 43 | 3 5 | 22 29 | 2 25 | 23 16 | 0 12 | 17 46 | 1 6 | 17 40 | 0 40 | 21 56 | 0 43 | 14 44 | 16 51 | 18 18 | 17 55 | 16 36 | 3 13 | 2 26 |
| M12 | 23 30 | 4 40 | 2 52 | 25 12 | 2 10 | 13 0 | 3 6 | 22 28 | 2 26 | 23 16 | 0 12 | 17 44 | 1 6 | 17 40 | 0 40 | 21 56 | 0 43 | 14 43 | 16 51 | 18 18 | 17 55 | 16 33 | 3 13 | 2 26 |
| T 13 | 23 29 | 1n41 | 3 50 | 25 3 | 2 10 | 13 18 | 3 6 | 22 27 | 2 26 | 23 16 | 0 11 | 17 43 | 1 6 | 17 39 | 0 40 | 21 57 | 0 43 | 14 43 | 16 50 | 18 17 | 17 56 | 16 31 | 3 13 | 2 26 |
| W14 | 23 28 | 7 50 | 4 33 | 24 53 | 2 10 | 13 36 | 3 7 | 22 26 | 2 27 | 23 17 | 0 11 | 17 41 | 1 6 | 17 38 | 0 40 | 21 57 | 0 43 | 14 42 | 16 50 | 18 17 | 17 57 | 16 28 | 3 13 | 2 26 |
| T 15 | 23 27 | 13 29 | 5 1 | 24 42 | 2 10 | 13 54 | 3 7 | 22 24 | 2 28 | 23 17 | 0 11 | 17 39 | 1 6 | 17 37 | 0 40 | 21 57 | 0 43 | 14 42 | 16 50 | 18 18 | 17 58 | 16 25 | 3 13 | 2 26 |
| F 16 | 23 25 | 18 24 | 5 12 | 24 28 | 2 8 | 14 11 | 3 7 | 22 24 | 2 28 | 23 17 | 0 11 | 17 37 | 1 6 | 17 36 | 0 40 | 21 57 | 0 43 | 14 42 | 16 49 | 18 19 | 17 59 | 16 22 | 3 14 | 2 25 |
| S 17 | 23 23 | 22 22 | 5 7 | 24 13 | 2 7 | 14 29 | 3 7 | 22 23 | 2 29 | 23 18 | 0 11 | 17 36 | 1 6 | 17 35 | 0 40 | 21 57 | 0 43 | 14 41 | 16 49 | 18 20 | 18 0 | 16 20 | 3 14 | 2 25 |
| S 18 | 23 20 | 25 11 | 4 46 | 23 57 | 2 4 | 14 46 | 3 7 | 22 22 | 2 29 | 23 18 | 0 11 | 17 34 | 1 6 | 17 35 | 0 40 | 21 58 | 0 43 | 14 41 | 16 48 | 18 21 | 18 0 | 16 17 | 3 14 | 2 25 |
| M19 | 23 17 | 26 43 | 4 12 | 23 39 | 2 1 | 15 3 | 3 7 | 22 22 | 2 30 | 23 18 | 0 11 | 17 32 | 1 6 | 17 34 | 0 40 | 21 58 | 0 43 | 14 40 | 16 48 | 18 23 | 18 1 | 16 14 | 3 14 | 2 25 |
| T 20 | 23 13 | 26 53 | 3 26 | 23 20 | 1 58 | 15 20 | 3 6 | 22 21 | 2 30 | 23 19 | 0 11 | 17 30 | 1 6 | 17 33 | 0 40 | 21 58 | 0 43 | 14 40 | 16 48 | 18 24 | 18 2 | 16 11 | 3 14 | 2 25 |
| W21 | 23 9 | 25 44 | 2 32 | 22 59 | 1 54 | 15 37 | 3 6 | 22 21 | 2 31 | 23 19 | 0 11 | 17 28 | 1 6 | 17 32 | 0 40 | 21 58 | 0 43 | 14 39 | 16 47 | 18 25 | 18 3 | 16 9 | 3 14 | 2 24 |
| T 22 | 23 4 | 23 24 | 1 31 | 22 36 | 1 49 | 15 54 | 3 5 | 22 21 | 2 31 | 23 19 | 0 11 | 17 26 | 1 6 | 17 31 | 0 40 | 21 58 | 0 43 | 14 39 | 16 47 | 18 26 | 18 4 | 16 6 | 3 15 | 2 24 |
| F 23 | 22 59 | 20 3 | 0 27 | 22 13 | 1 43 | 16 10 | 3 4 | 22 21 | 2 31 | 23 19 | 0 11 | 17 25 | 1 6 | 17 30 | 0 40 | 21 59 | 0 43 | 14 38 | 16 47 | 18 26 | 18 5 | 16 3 | 3 15 | 2 24 |
| S 24 | 22 54 | 15 56 | 0s38 | 21 48 | 1 36 | 16 27 | 3 3 | 22 21 | 2 31 | 23 19 | 0 10 | 17 23 | 1 6 | 17 29 | 0 40 | 21 59 | 0 43 | 14 38 | 16 46 | 18 26 | 18 5 | 16 0 | 3 15 | 2 24 |
| S 25 | 22 47 | 11 13 | 1 41 | 21 22 | 1 29 | 16 43 | 3 2 | 22 21 | 2 32 | 23 19 | 0 10 | 17 21 | 1 6 | 17 28 | 0 40 | 21 59 | 0 43 | 14 37 | 16 46 | 18 26 | 18 6 | 15 58 | 3 15 | 2 24 |
| M26 | 22 41 | 6 6 | 2 41 | 20 55 | 1 20 | 16 58 | 3 1 | 22 22 | 2 32 | 23 19 | 0 10 | 17 19 | 1 6 | 17 27 | 0 39 | 21 59 | 0 43 | 14 37 | 16 46 | 18 25 | 18 7 | 15 55 | 3 16 | 2 23 |
| T 27 | 22 34 | 0 45 | 3 33 | 20 27 | 1 11 | 17 14 | 2 59 | 22 22 | 2 32 | 23 20 | 0 10 | 17 17 | 1 6 | 17 26 | 0 39 | 21 59 | 0 43 | 14 36 | 16 45 | 18 25 | 18 8 | 15 52 | 3 16 | 2 23 |
| W28 | 22 27 | 4s42 | 4 17 | 19 59 | 1 1 | 17 29 | 2 58 | 22 23 | 2 32 | 23 20 | 0 10 | 17 15 | 1 6 | 17 26 | 0 39 | 21 59 | 0 43 | 14 36 | 16 45 | 18 25 | 18 9 | 15 49 | 3 16 | 2 23 |
| T 29 | 22 19 | 10 4 | 4 50 | 19 30 | 0 50 | 17 44 | 2 56 | 22 24 | 2 32 | 23 20 | 0 10 | 17 13 | 1 6 | 17 25 | 0 39 | 22 0 | 0 43 | 14 35 | 16 45 | 18 24 | 18 10 | 15 46 | 3 17 | 2 23 |
| F 30 | 22 11 | 15 10 | 5 11 | 19 1 | 0 38 | 17 59 | 2 55 | 22 24 | 2 32 | 23 20 | 0 10 | 17 11 | 1 6 | 17 24 | 0 39 | 22 0 | 0 43 | 14 35 | 16 44 | 18 24 | 18 10 | 15 44 | 3 17 | 2 23 |
| S 31 | 22s 2 | 19s45 | 5s16 | 18s33 | 0s24 | 18s13 | 2n53 | 22n25 | 2n32 | 23s20 | 0n10 | 17s 9 | 1s 6 | 17s23 | 0s39 | 22n 0 | 0s43 | 14s34 | 16s44 | 18s25 | 18s11 | 15n41 | 3n18 | 2n22 |

Julian Day Number = 2298487.5, Delta T = 118.38 sec
Ecliptic obliquity = 23°29'43, Nutation = 0°00'12, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°53'31, Lahiri = 18°00'32 Julian Calendar 1 Dec. 1580 == Greg. Calendar 11 Dec. 1580