



Astrodienst Ephemeris Tables for the year 2285

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 D5EPH

ASTRODIENST EPHEMERIS for the year 2285
geocentric

JANUARY 2285

00:00 UT

| Day | Sid.t | ☉ | ☾ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|-------|--------|-------|-------|--------|-------|-------|------|-------|--------|--------|--------|--------|------|
| T 1 | 6 43 44 | 10♌41'47 | 3♍36 | 26♌50 | 10♌7 | 6♍24 | 10°R14 | 24♌21 | 2°R47 | 3♍23 | 23♌12 | 13°R11 | 12°Y52 | 9♌52 | 29°R20 | T 1 |
| F 2 | 6 47 40 | 11°42'56 | 17° 4 | 28°19 | 11°23 | 6°59 | 10♌14 | 24°28 | 2♌45 | 3°24 | 23°14 | 13°Y 8 | 12°49 | 9°59 | 29♌16 | F 2 |
| S 3 | 6 51 37 | 12°44'04 | 0♌22 | 29°48 | 12°38 | 7°34 | 10°13 | 24°35 | 2°42 | 3°25 | 23°15 | 13° 2 | 12°46 | 10° 5 | 29°12 | S 3 |
| S 4 | 6 55 34 | 13°45'13 | 13°28 | 1♌15 | 13°54 | 8° 9 | 10°D13 | 24°42 | 2°40 | 3°26 | 23°16 | 12°52 | 12°42 | 10°12 | 29° 9 | S 4 |
| M 5 | 6 59 30 | 14°46'23 | 26°24 | 2°40 | 15° 9 | 8°44 | 10°13 | 24°49 | 2°37 | 3°27 | 23°18 | 12°40 | 12°39 | 10°19 | 29° 5 | M 5 |
| T 6 | 7 3 27 | 15°47'32 | 9♌8 | 4° 3 | 16°25 | 9°19 | 10°14 | 24°56 | 2°35 | 3°28 | 23°19 | 12°27 | 12°36 | 10°25 | 29° 1 | T 6 |
| W 7 | 7 7 23 | 16°48'42 | 21°41 | 5°23 | 17°40 | 9°53 | 10°14 | 25° 3 | 2°32 | 3°29 | 23°21 | 12°12 | 12°33 | 10°32 | 28°58 | W 7 |
| T 8 | 7 11 20 | 17°49'52 | 4♌1 | 6°40 | 18°56 | 10°28 | 10°15 | 25°10 | 2°30 | 3°30 | 23°22 | 11°58 | 12°30 | 10°39 | 28°54 | T 8 |
| F 9 | 7 15 16 | 18°51'01 | 16°10 | 7°54 | 20°11 | 11° 3 | 10°16 | 25°17 | 2°27 | 3°31 | 23°24 | 11°46 | 12°26 | 10°45 | 28°50 | F 9 |
| S 10 | 7 19 13 | 19°52'11 | 28° 9 | 9° 3 | 21°27 | 11°38 | 10°17 | 25°24 | 2°25 | 3°31 | 23°25 | 11°36 | 12°23 | 10°52 | 28°47 | S 10 |
| S 11 | 7 23 10 | 20°53'20 | 10♌0 | 10° 6 | 22°42 | 12°12 | 10°18 | 25°31 | 2°22 | 3°32 | 23°27 | 11°29 | 12°20 | 10°59 | 28°43 | S 11 |
| M12 | 7 27 6 | 21°54'29 | 21°47 | 11° 4 | 23°58 | 12°47 | 10°20 | 25°39 | 2°20 | 3°33 | 23°28 | 11°25 | 12°17 | 11° 5 | 28°40 | M12 |
| T 13 | 7 31 3 | 22°55'37 | 3°Y35 | 11°56 | 25°13 | 13°21 | 10°22 | 25°46 | 2°18 | 3°34 | 23°30 | 11°24 | 12°14 | 11°12 | 28°37 | T 13 |
| W14 | 7 34 59 | 23°56'45 | 15°27 | 12°40 | 26°29 | 13°56 | 10°24 | 25°53 | 2°15 | 3°34 | 23°32 | 11°D24 | 12°11 | 11°19 | 28°33 | W14 |
| T 15 | 7 38 56 | 24°57'52 | 27°30 | 13°15 | 27°44 | 14°30 | 10°26 | 26° 0 | 2°13 | 3°35 | 23°33 | 11°R24 | 12° 7 | 11°25 | 28°30 | T 15 |
| F 16 | 7 42 52 | 25°58'59 | 9♌50 | 13°41 | 29° 0 | 15° 4 | 10°28 | 26° 7 | 2°11 | 3°36 | 23°35 | 11°23 | 12° 4 | 11°32 | 28°27 | F 16 |
| S 17 | 7 46 49 | 27° 0'06 | 22°31 | 13°57 | 0♌15 | 15°38 | 10°31 | 26°14 | 2° 8 | 3°36 | 23°36 | 11°20 | 12° 1 | 11°39 | 28°23 | S 17 |
| S 18 | 7 50 45 | 28° 1'11 | 5♌38 | 14°R 2 | 1°30 | 16°13 | 10°34 | 26°21 | 2° 6 | 3°37 | 23°38 | 11°15 | 11°58 | 11°45 | 28°20 | S 18 |
| M19 | 7 54 42 | 29° 2'17 | 19°13 | 13°55 | 2°46 | 16°47 | 10°36 | 26°28 | 2° 4 | 3°38 | 23°40 | 11° 7 | 11°55 | 11°52 | 28°17 | M19 |
| T 20 | 7 58 39 | 0♌3'21 | 3♌17 | 13°37 | 4° 1 | 17°21 | 10°40 | 26°35 | 2° 2 | 3°38 | 23°41 | 10°57 | 11°52 | 11°59 | 28°14 | T 20 |
| W21 | 8 2 35 | 1° 4'26 | 17°46 | 13° 7 | 5°17 | 17°55 | 10°43 | 26°43 | 2° 0 | 3°39 | 23°43 | 10°46 | 11°48 | 12° 5 | 28°11 | W21 |
| T 22 | 8 6 32 | 2° 5'29 | 2♌35 | 12°26 | 6°32 | 18°28 | 10°47 | 26°50 | 1°57 | 3°39 | 23°45 | 10°35 | 11°45 | 12°12 | 28° 8 | T 22 |
| F 23 | 8 10 28 | 3° 6'32 | 17°34 | 11°34 | 7°48 | 19° 2 | 10°50 | 26°57 | 1°55 | 3°39 | 23°46 | 10°25 | 11°42 | 12°19 | 28° 5 | F 23 |
| S 24 | 8 14 25 | 4° 7'34 | 2♌35 | 10°33 | 9° 3 | 19°36 | 10°54 | 27° 4 | 1°53 | 3°40 | 23°48 | 10°18 | 11°39 | 12°25 | 28° 2 | S 24 |
| S 25 | 8 18 21 | 5° 8'36 | 17°28 | 9°25 | 10°18 | 20°10 | 10°58 | 27°11 | 1°51 | 3°40 | 23°50 | 10°13 | 11°36 | 12°32 | 27°59 | S 25 |
| M26 | 8 22 18 | 6° 9'38 | 2♌6 | 8°12 | 11°34 | 20°43 | 11° 3 | 27°18 | 1°49 | 3°40 | 23°51 | 10°11 | 11°32 | 12°39 | 27°56 | M26 |
| T 27 | 8 26 14 | 7°10'39 | 16°25 | 6°55 | 12°49 | 21°17 | 11° 7 | 27°25 | 1°47 | 3°41 | 23°53 | 10°D11 | 11°29 | 12°45 | 27°54 | T 27 |
| W28 | 8 30 11 | 8°11'39 | 0♌24 | 5°38 | 14° 4 | 21°50 | 11°12 | 27°32 | 1°45 | 3°41 | 23°55 | 10°12 | 11°26 | 12°52 | 27°51 | W28 |
| T 29 | 8 34 8 | 9°12'40 | 14° 3 | 4°23 | 15°20 | 22°23 | 11°17 | 27°39 | 1°43 | 3°41 | 23°57 | 10°R12 | 11°23 | 12°59 | 27°48 | T 29 |
| F 30 | 8 38 4 | 10°13'40 | 27°23 | 3°11 | 16°35 | 22°57 | 11°22 | 27°46 | 1°42 | 3°41 | 23°58 | 10°10 | 11°20 | 13° 5 | 27°46 | F 30 |
| S 31 | 8 42 1 | 11°14'39 | 10♌27 | 2♌5 | 17°51 | 23°30 | 11°27 | 27°53 | 1°40 | 3♌41 | 24° 0 | 10°Y 7 | 11°Y17 | 13°Y12 | 27°Y44 | S 31 |

Delta T = 271.84 sec

FEBRUARY 2285

00:00 UT

| Day | Sid.t | ☉ | ☾ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|--------|--------|--------|-------|--------|-------|-------|-------|-------|--------|--------|--------|--------|------|
| S 1 | 8 45 57 | 12°15'38 | 23♌16 | 1°R 5 | 19° 6 | 24° 3 | 11°R32 | 28♌0 | 1°R38 | 3♌41 | 24° 2 | 10°R 0 | 11°Y13 | 13°Y19 | 27°R41 | S 1 |
| M 2 | 8 49 54 | 13°16'36 | 5♌54 | 0♌14 | 20°21 | 24°36 | 11°38 | 28° 7 | 1°R36 | 3°42 | 24° 4 | 9°Y51 | 11°10 | 13°25 | 27°Y39 | M 2 |
| T 3 | 8 53 50 | 14°17'33 | 18°20 | 29♌31 | 21°37 | 25° 9 | 11°44 | 28°14 | 1°34 | 3°R42 | 24° 5 | 9°41 | 11° 7 | 13°32 | 27°37 | T 3 |
| W 4 | 8 57 47 | 15°18'30 | 0♌36 | 28°56 | 22°52 | 25°42 | 11°50 | 28°21 | 1°33 | 3°42 | 24° 7 | 9°30 | 11° 4 | 13°39 | 27°34 | W 4 |
| T 5 | 9 1 43 | 16°19'26 | 12°43 | 28°31 | 24° 7 | 26°14 | 11°56 | 28°28 | 1°31 | 3°42 | 24° 9 | 9°19 | 11° 1 | 13°45 | 27°32 | T 5 |
| F 6 | 9 5 40 | 17°20'20 | 24°43 | 28°14 | 25°22 | 26°47 | 12° 2 | 28°35 | 1°30 | 3°41 | 24°11 | 9°10 | 10°58 | 13°52 | 27°30 | F 6 |
| S 7 | 9 9 37 | 18°21'14 | 6♌36 | 28° 5 | 26°38 | 27°19 | 12° 8 | 28°41 | 1°28 | 3°41 | 24°12 | 9° 3 | 10°54 | 13°59 | 27°28 | S 7 |
| S 8 | 9 13 33 | 19°22'06 | 18°25 | 28°D 4 | 27°53 | 27°52 | 12°15 | 28°48 | 1°27 | 3°41 | 24°14 | 8°58 | 10°51 | 14° 5 | 27°26 | S 8 |
| M 9 | 9 17 30 | 20°22'57 | 0°Y11 | 28°11 | 29° 8 | 28°24 | 12°22 | 28°55 | 1°25 | 3°41 | 24°16 | 8°55 | 10°48 | 14°12 | 27°25 | M 9 |
| T 10 | 9 21 26 | 21°23'47 | 11°59 | 28°24 | 0♌23 | 28°56 | 12°29 | 29° 2 | 1°24 | 3°41 | 24°18 | 8°D55 | 10°45 | 14°19 | 27°23 | T 10 |
| W11 | 9 25 23 | 22°24'35 | 23°52 | 28°44 | 1°39 | 29°28 | 12°36 | 29° 9 | 1°22 | 3°41 | 24°19 | 8°56 | 10°42 | 14°25 | 27°21 | W11 |
| T 12 | 9 29 19 | 23°25'22 | 5♌54 | 29° 9 | 2°54 | 0♌0 | 12°43 | 29°15 | 1°21 | 3°40 | 24°21 | 8°57 | 10°38 | 14°32 | 27°20 | T 12 |
| F 13 | 9 33 16 | 24°26'08 | 18°10 | 29°40 | 4° 9 | 0°32 | 12°50 | 29°22 | 1°20 | 3°40 | 24°23 | 8°59 | 10°35 | 14°39 | 27°18 | F 13 |
| S 14 | 9 37 12 | 25°26'52 | 0♌47 | 0♌17 | 5°24 | 1° 4 | 12°58 | 29°29 | 1°19 | 3°40 | 24°25 | 8°R59 | 10°32 | 14°45 | 27°17 | S 14 |
| S 15 | 9 41 9 | 26°27'34 | 13°47 | 0°57 | 6°39 | 1°35 | 13° 6 | 29°35 | 1°17 | 3°39 | 24°27 | 8°57 | 10°29 | 14°52 | 27°15 | S 15 |
| M16 | 9 45 6 | 27°28'15 | 27°16 | 1°42 | 7°54 | 2° 7 | 13°14 | 29°42 | 1°16 | 3°39 | 24°28 | 8°54 | 10°26 | 14°59 | 27°14 | M16 |
| T 17 | 9 49 2 | 28°28'55 | 11°D14 | 2°30 | 9° 9 | 2°38 | 13°22 | 29°48 | 1°15 | 3°38 | 24°30 | 8°49 | 10°23 | 15° 5 | 27°13 | T 17 |
| W18 | 9 52 59 | 29°29'32 | 25°40 | 3°23 | 10°25 | 3° 9 | 13°30 | 29°55 | 1°14 | 3°38 | 24°32 | 8°43 | 10°19 | 15°12 | 27°12 | W18 |
| T 19 | 9 56 55 | 0♌30'09 | 10♌31 | 4°18 | 11°40 | 3°40 | 13°38 | 0♌1 | 1°13 | 3°37 | 24°34 | 8°37 | 10°16 | 15°19 | 27°11 | T 19 |
| F 20 | 10 0 52 | 1°30'43 | 25°38 | 5°16 | 12°55 | 4°11 | 13°46 | 0° 8 | 1°12 | 3°37 | 24°35 | 8°31 | 10°13 | 15°25 | 27°10 | F 20 |
| S 21 | 10 4 48 | 2°31'16 | 10♌53 | 6°17 | 14°10 | 4°42 | 13°55 | 0°14 | 1°11 | 3°36 | 24°37 | 8°27 | 10°10 | 15°32 | 27° 9 | S 21 |
| S 22 | 10 8 45 | 3°31'48 | 26° 4 | 7°21 | 15°25 | 5°13 | 14° 4 | 0°20 | 1°11 | 3°36 | 24°39 | 8°25 | 10° 7 | 15°39 | 27° 8 | S 22 |
| M23 | 10 12 41 | 4°32'18 | 11° 3 | 8°26 | 16°40 | 5°44 | 14°12 | 0°27 | 1°10 | 3°35 | 24°41 | 8°D24 | 10° 4 | 15°45 | 27° 7 | M23 |
| T 24 | 10 16 38 | 5°32'47 | 25°42 | 9°35 | 17°55 | 6°14 | 14°21 | 0°33 | 1° 9 | 3°34 | 24°43 | 8°25 | 10° 0 | 15°52 | 27° 6 | T 24 |
| W25 | 10 20 35 | 6°33'14 | 9♌57 | 10°45 | 19°10 | 6°44 | 14°30 | 0°39 | 1° 8 | 3°34 | 24°44 | 8°27 | 9°57 | 15°59 | 27° 5 | W25 |
| T 26 | 10 24 31 | 7°33'41 | 23°47 | 11°57 | 20°24 | 7°14 | 14°40 | 0°45 | 1° 7 | 3°33 | 24°46 | 8°28 | 9°54 | 16° 5 | 27° 4 | T 26 |
| F 27 | 10 28 28 | 8°34'06 | 7♌12 | 13°11 | 21°39 | 7°44 | 14°49 | 0°52 | 1° 6 | 3°32 | 24°48 | 8°R29 | 9°51 | 16°12 | 27° 3 | F 27 |
| S 28 | 10 32 24 | 9°34'30 | 20♌15 | 14°26 | 22°Y54 | 8°14 | 14°59 | 0°58 | 1° 5 | 3♌31 | 24°50 | 8°Y28 | 9°Y48 | 16°Y19 | 27°Y5 | S 28 |

Delta T = 271.97 sec

ASTRODIENST EPHEMERIS for the year 2285

geocentric

MARCH 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|------------------------|---------------------|--------------------|--------------------|---------------------|---------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|----------------------|------|
| S 1 | 10 36 21 | 10 ^h 34'52 | 2 ^h 58 | 15 ^h 43 | 24 ^h 9 | 8 ^h 44 | 15 ^h 8 | 1 ^h 4 | 1 ^h R 6 | 3 ^h R31 | 24 ^h 51 | 8 ^h R26 | 9 ^h Y44 | 16 ^h X25 | 27 ^h R 5 | S 1 |
| M 2 | 10 40 17 | 11 ^h 35'13 | 15 ^h 25 | 17 ^h 2 | 25 ^h 24 | 9 ^h 14 | 15 ^h 18 | 1 ^h 10 | 1 ^h 6 | 3 ^h M30 | 24 ^h 53 | 8 ^h Y23 | 9 ^h 41 | 16 ^h 32 | 27 ^h II 5 | M 2 |
| T 3 | 10 44 14 | 12 ^h 35'33 | 27 ^h 40 | 18 ^h 22 | 26 ^h 39 | 9 ^h 43 | 15 ^h 28 | 1 ^h 16 | 1 ^h 5 | 3 ^h 29 | 24 ^h 55 | 8 ^h 19 | 9 ^h 38 | 16 ^h 38 | 27 ^h D 4 | T 3 |
| W 4 | 10 48 10 | 13 ^h 35'51 | 9 ^h 44 | 19 ^h 44 | 27 ^h 54 | 10 ^h 12 | 15 ^h 38 | 1 ^h 22 | 1 ^h 5 | 3 ^h 28 | 24 ^h 56 | 8 ^h 15 | 9 ^h 35 | 16 ^h 45 | 27 ^h 5 | W 4 |
| T 5 | 10 52 7 | 14 ^h 36'07 | 21 ^h 41 | 21 ^h 7 | 29 ^h 8 | 10 ^h 41 | 15 ^h 48 | 1 ^h 27 | 1 ^h 5 | 3 ^h 27 | 24 ^h 58 | 8 ^h 11 | 9 ^h 32 | 16 ^h 52 | 27 ^h 5 | T 5 |
| F 6 | 10 56 4 | 15 ^h 36'22 | 3 ^h X33 | 22 ^h 31 | 0 ^h Y23 | 11 ^h 10 | 15 ^h 58 | 1 ^h 33 | 1 ^h 5 | 3 ^h 26 | 25 ^h 0 | 8 ^h 7 | 9 ^h 29 | 16 ^h 58 | 27 ^h 5 | F 6 |
| S 7 | 11 0 0 | 16 ^h 36'35 | 15 ^h 21 | 23 ^h 56 | 1 ^h 38 | 11 ^h 39 | 16 ^h 8 | 1 ^h 39 | 1 ^h 5 | 3 ^h 25 | 25 ^h 1 | 8 ^h 4 | 9 ^h 25 | 17 ^h 5 | 27 ^h 5 | S 7 |
| S 8 | 11 3 57 | 17 ^h 36'46 | 27 ^h 9 | 25 ^h 23 | 2 ^h 52 | 12 ^h 7 | 16 ^h 19 | 1 ^h 45 | 1 ^h 4 | 3 ^h 24 | 25 ^h 3 | 8 ^h 3 | 9 ^h 22 | 17 ^h 12 | 27 ^h 5 | S 8 |
| M 9 | 11 7 53 | 18 ^h 36'56 | 8 ^h Y57 | 26 ^h 51 | 4 ^h 7 | 12 ^h 35 | 16 ^h 29 | 1 ^h 50 | 1 ^h D 4 | 3 ^h 23 | 25 ^h 5 | 8 ^h D 2 | 9 ^h 19 | 17 ^h 18 | 27 ^h 6 | M 9 |
| T 10 | 11 11 50 | 19 ^h 37'03 | 20 ^h 49 | 28 ^h 20 | 5 ^h 22 | 13 ^h 3 | 16 ^h 40 | 1 ^h 56 | 1 ^h 4 | 3 ^h 22 | 25 ^h 6 | 8 ^h 3 | 9 ^h 16 | 17 ^h 25 | 27 ^h 6 | T 10 |
| W 11 | 11 15 46 | 20 ^h 37'09 | 2 ^h X47 | 29 ^h 51 | 6 ^h 36 | 13 ^h 31 | 16 ^h 50 | 2 ^h 1 | 1 ^h 4 | 3 ^h 21 | 25 ^h 8 | 8 ^h 4 | 9 ^h 13 | 17 ^h 32 | 27 ^h 7 | W 11 |
| T 12 | 11 19 43 | 21 ^h 37'13 | 14 ^h 54 | 1 ^h X22 | 7 ^h 51 | 13 ^h 59 | 17 ^h 1 | 2 ^h 7 | 1 ^h 5 | 3 ^h 20 | 25 ^h 10 | 8 ^h 5 | 9 ^h 9 | 17 ^h 38 | 27 ^h 8 | T 12 |
| F 13 | 11 23 39 | 22 ^h 37'14 | 27 ^h 14 | 2 ^h 55 | 9 ^h 6 | 14 ^h 26 | 17 ^h 12 | 2 ^h 12 | 1 ^h 5 | 3 ^h 19 | 25 ^h 11 | 8 ^h 7 | 9 ^h 6 | 17 ^h 45 | 27 ^h 9 | F 13 |
| S 14 | 11 27 36 | 23 ^h 37'14 | 9 ^h II51 | 4 ^h 29 | 10 ^h 20 | 14 ^h 54 | 17 ^h 23 | 2 ^h 17 | 1 ^h 5 | 3 ^h 18 | 25 ^h 13 | 8 ^h 8 | 9 ^h 3 | 17 ^h 52 | 27 ^h 9 | S 14 |
| S 15 | 11 31 33 | 24 ^h 37'11 | 22 ^h 47 | 6 ^h 4 | 11 ^h 35 | 15 ^h 21 | 17 ^h 34 | 2 ^h 23 | 1 ^h 5 | 3 ^h 16 | 25 ^h 15 | 8 ^h R 8 | 9 ^h 0 | 17 ^h 58 | 27 ^h 10 | S 15 |
| M 16 | 11 35 29 | 25 ^h 37'06 | 6 ^h 8 | 7 ^h 40 | 12 ^h 49 | 15 ^h 47 | 17 ^h 46 | 2 ^h 28 | 1 ^h 6 | 3 ^h 15 | 25 ^h 16 | 8 ^h 8 | 8 ^h 57 | 18 ^h 5 | 27 ^h 11 | M 16 |
| T 17 | 11 39 26 | 26 ^h 36'59 | 19 ^h 54 | 9 ^h 18 | 14 ^h 3 | 16 ^h 14 | 17 ^h 57 | 2 ^h 33 | 1 ^h 6 | 3 ^h 14 | 25 ^h 18 | 8 ^h 7 | 8 ^h 54 | 18 ^h 12 | 27 ^h 13 | T 17 |
| W 18 | 11 43 22 | 27 ^h 36'50 | 4 ^h 9 | 10 ^h 56 | 15 ^h 18 | 16 ^h 40 | 18 ^h 8 | 2 ^h 38 | 1 ^h 6 | 3 ^h 13 | 25 ^h 19 | 8 ^h 6 | 8 ^h 50 | 18 ^h 18 | 27 ^h 14 | W 18 |
| T 19 | 11 47 19 | 28 ^h 36'39 | 18 ^h 44 | 12 ^h 36 | 16 ^h 32 | 17 ^h 7 | 18 ^h 20 | 2 ^h 43 | 1 ^h 7 | 3 ^h 12 | 25 ^h 21 | 8 ^h 5 | 8 ^h 47 | 18 ^h 25 | 27 ^h 15 | T 19 |
| F 20 | 11 51 15 | 29 ^h 36'25 | 3 ^h II41 | 14 ^h 17 | 17 ^h 47 | 17 ^h 32 | 18 ^h 31 | 2 ^h 48 | 1 ^h 8 | 3 ^h 10 | 25 ^h 22 | 8 ^h 4 | 8 ^h 44 | 18 ^h 32 | 27 ^h 16 | F 20 |
| S 21 | 11 55 12 | 0 ^h Y36'09 | 18 ^h 51 | 15 ^h 59 | 19 ^h 1 | 17 ^h 58 | 18 ^h 43 | 2 ^h 53 | 1 ^h 8 | 3 ^h 9 | 25 ^h 24 | 8 ^h 3 | 8 ^h 41 | 18 ^h 38 | 27 ^h 18 | S 21 |
| S 22 | 11 59 8 | 1 ^h 35'51 | 4 ^h 3 | 17 ^h 42 | 20 ^h 15 | 18 ^h 23 | 18 ^h 55 | 2 ^h 58 | 1 ^h 9 | 3 ^h 8 | 25 ^h 25 | 8 ^h D 3 | 8 ^h 38 | 18 ^h 45 | 27 ^h 19 | S 22 |
| M 23 | 12 3 5 | 2 ^h 35'32 | 19 ^h 10 | 19 ^h 27 | 21 ^h 29 | 18 ^h 49 | 19 ^h 7 | 3 ^h 2 | 1 ^h 10 | 3 ^h 6 | 25 ^h 27 | 8 ^h 3 | 8 ^h 35 | 18 ^h 52 | 27 ^h 21 | M 23 |
| T 24 | 12 7 1 | 3 ^h 35'10 | 4 ^h 1 | 21 ^h 12 | 22 ^h 44 | 19 ^h 13 | 19 ^h 19 | 3 ^h 7 | 1 ^h 10 | 3 ^h 5 | 25 ^h 28 | 8 ^h 3 | 8 ^h 31 | 18 ^h 58 | 27 ^h 23 | T 24 |
| W 25 | 12 10 58 | 4 ^h 34'47 | 18 ^h 30 | 22 ^h 59 | 23 ^h 58 | 19 ^h 38 | 19 ^h 31 | 3 ^h 11 | 1 ^h 11 | 3 ^h 3 | 25 ^h 30 | 8 ^h 3 | 8 ^h 28 | 19 ^h 5 | 27 ^h 24 | W 25 |
| T 26 | 12 14 55 | 5 ^h 34'21 | 2 ^h X34 | 24 ^h 48 | 25 ^h 12 | 20 ^h 2 | 19 ^h 43 | 3 ^h 16 | 1 ^h 12 | 3 ^h 2 | 25 ^h 31 | 8 ^h 4 | 8 ^h 25 | 19 ^h 12 | 27 ^h 26 | T 26 |
| F 27 | 12 18 51 | 6 ^h 33'55 | 16 ^h 10 | 26 ^h 37 | 26 ^h 26 | 20 ^h 27 | 19 ^h 55 | 3 ^h 20 | 1 ^h 13 | 3 ^h 1 | 25 ^h 33 | 8 ^h 4 | 8 ^h 22 | 19 ^h 18 | 27 ^h 28 | F 27 |
| S 28 | 12 22 48 | 7 ^h 33'26 | 29 ^h 19 | 28 ^h 28 | 27 ^h 40 | 20 ^h 50 | 20 ^h 7 | 3 ^h 25 | 1 ^h 14 | 2 ^h 59 | 25 ^h 34 | 8 ^h 4 | 8 ^h 19 | 19 ^h 25 | 27 ^h 30 | S 28 |
| S 29 | 12 26 44 | 8 ^h 32'56 | 12 ^h 5 | 0 ^h Y20 | 28 ^h 54 | 21 ^h 14 | 20 ^h 19 | 3 ^h 29 | 1 ^h 15 | 2 ^h 58 | 25 ^h 35 | 8 ^h 4 | 8 ^h 15 | 19 ^h 32 | 27 ^h 32 | S 29 |
| M 30 | 12 30 41 | 9 ^h 32'24 | 24 ^h 31 | 2 ^h 14 | 0 ^h X 8 | 21 ^h 37 | 20 ^h 32 | 3 ^h 33 | 1 ^h 16 | 2 ^h 56 | 25 ^h 37 | 8 ^h 4 | 8 ^h 12 | 19 ^h 38 | 27 ^h 34 | M 30 |
| T 31 | 12 34 37 | 10 ^h Y31'50 | 6 ^h 42 | 4 ^h Y 8 | 1 ^h X22 | 22 ^h X 0 | 20 ^h X44 | 3 ^h 37 | 1 ^h 17 | 2 ^h M55 | 25 ^h 38 | 8 ^h Y 4 | 8 ^h Y 9 | 19 ^h X45 | 27 ^h II36 | T 31 |

Delta T = 272.10 sec

APRIL 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|--------|--------|--------|-------|--------|-------|-------|-------|--------|-------|-------|--------|----------|------|
| W 1 | 12 38 34 | 11°31'15 | 18°41 | 6° 4 | 2°36 | 22°22 | 20°57 | 3°41 | 1°18 | 2°R53 | 25°40 | 8° 5 | 8° 6 | 19°51 | 27°39 | W 1 |
| T 2 | 12 42 31 | 12°30'37 | 0°32 | 8° 1 | 3°50 | 22°45 | 21° 9 | 3°45 | 1°20 | 2°M52 | 25°41 | 8° 5 | 8° 3 | 19°58 | 27°41 | T 2 |
| F 3 | 12 46 27 | 13°29'58 | 12°20 | 10° 0 | 5° 4 | 23° 6 | 21°22 | 3°49 | 1°21 | 2°50 | 25°42 | 8° 6 | 8° 0 | 20° 5 | 27°43 | F 3 |
| S 4 | 12 50 24 | 14°29'17 | 24° 7 | 11°59 | 6°17 | 23°28 | 21°35 | 3°53 | 1°22 | 2°49 | 25°43 | 8° 6 | 7°56 | 20°11 | 27°46 | S 4 |
| S 5 | 12 54 20 | 15°28'33 | 5°Y56 | 14° 0 | 7°31 | 23°49 | 21°47 | 3°57 | 1°23 | 2°47 | 25°45 | 8°R 6 | 7°53 | 20°18 | 27°49 | S 5 |
| M 6 | 12 58 17 | 16°27'48 | 17°50 | 16° 2 | 8°45 | 24°10 | 22° 0 | 4° 0 | 1°25 | 2°46 | 25°46 | 8° 6 | 7°50 | 20°25 | 27°51 | M 6 |
| T 7 | 13 2 13 | 17°27'01 | 29°50 | 18° 4 | 9°59 | 24°30 | 22°13 | 4° 4 | 1°26 | 2°44 | 25°47 | 8° 6 | 7°47 | 20°31 | 27°54 | T 7 |
| W 8 | 13 6 10 | 18°26'12 | 11°X59 | 20° 7 | 11°12 | 24°50 | 22°26 | 4° 7 | 1°28 | 2°43 | 25°48 | 8° 4 | 7°44 | 20°38 | 27°57 | W 8 |
| T 9 | 13 10 6 | 19°25'21 | 24°18 | 22°12 | 12°26 | 25°10 | 22°39 | 4°11 | 1°30 | 2°41 | 25°50 | 8° 3 | 7°41 | 20°45 | 28° 0 | T 9 |
| F 10 | 13 14 3 | 20°24'27 | 6°II50 | 24°16 | 13°40 | 25°29 | 22°52 | 4°14 | 1°31 | 2°39 | 25°51 | 8° 1 | 7°37 | 20°51 | 28° 3 | F 10 |
| S 11 | 13 17 59 | 21°23'32 | 19°36 | 26°21 | 14°53 | 25°48 | 23° 5 | 4°17 | 1°33 | 2°38 | 25°52 | 8° 0 | 7°34 | 20°58 | 28° 6 | S 11 |
| S 12 | 13 21 56 | 22°22'34 | 2°57 | 28°26 | 16° 7 | 26° 7 | 23°18 | 4°20 | 1°35 | 2°36 | 25°53 | 7°58 | 7°31 | 21° 5 | 28° 9 | S 12 |
| M 13 | 13 25 53 | 23°21'34 | 15°57 | 0°X30 | 17°20 | 26°25 | 23°32 | 4°23 | 1°36 | 2°35 | 25°54 | 7°57 | 7°28 | 21°11 | 28°12 | M 13 |
| T 14 | 13 29 49 | 24°20'32 | 29°36 | 2°34 | 18°34 | 26°42 | 23°45 | 4°26 | 1°38 | 2°33 | 25°55 | 7°D57 | 7°25 | 21°18 | 28°15 | T 14 |
| W 15 | 13 33 46 | 25°19'27 | 13°936 | 4°37 | 19°47 | 26°59 | 23°58 | 4°29 | 1°40 | 2°31 | 25°56 | 7°58 | 7°21 | 21°25 | 28°18 | W 15 |
| T 16 | 13 37 42 | 26°18'20 | 27°55 | 6°39 | 21° 0 | 27°16 | 24°12 | 4°32 | 1°42 | 2°30 | 25°57 | 7°59 | 7°18 | 21°31 | 28°22 | T 16 |
| F 17 | 13 41 39 | 27°17'10 | 12°931 | 8°40 | 22°14 | 27°32 | 24°25 | 4°35 | 1°44 | 2°28 | 25°58 | 8° 0 | 7°15 | 21°38 | 28°25 | F 17 |
| S 18 | 13 45 35 | 28°15'59 | 27°21 | 10°38 | 23°27 | 27°48 | 24°38 | 4°37 | 1°46 | 2°26 | 25°59 | 8° 1 | 7°12 | 21°45 | 28°28 | S 18 |
| S 19 | 13 49 32 | 29°14'45 | 12°18 | 12°34 | 24°40 | 28° 4 | 24°52 | 4°40 | 1°48 | 2°25 | 26° 0 | 8°R 2 | 7° 9 | 21°51 | 28°32 | S 19 |
| M 20 | 13 53 28 | 0°X13'29 | 27°14 | 14°28 | 25°53 | 28°18 | 25° 5 | 4°42 | 1°50 | 2°23 | 26° 1 | 8° 1 | 7° 6 | 21°58 | 28°36 | M 20 |
| T 21 | 13 57 25 | 1°12'11 | 12°M 1 | 16°19 | 27° 6 | 28°33 | 25°19 | 4°45 | 1°52 | 2°22 | 26° 2 | 7°59 | 7° 2 | 22° 4 | 28°39 | T 21 |
| W 22 | 14 1 22 | 2°10'52 | 26°32 | 18° 7 | 28°19 | 28°47 | 25°33 | 4°47 | 1°54 | 2°20 | 26° 3 | 7°56 | 6°59 | 22°11 | 28°43 | W 22 |
| T 23 | 14 5 18 | 3° 9'31 | 10°X40 | 19°51 | 29°32 | 29° 0 | 25°46 | 4°49 | 1°56 | 2°18 | 26° 4 | 7°52 | 6°56 | 22°18 | 28°47 | T 23 |
| F 24 | 14 9 15 | 4° 8'08 | 24°24 | 21°31 | 0°II45 | 29°13 | 26° 0 | 4°51 | 1°59 | 2°17 | 26° 5 | 7°48 | 6°53 | 22°24 | 28°50 | F 24 |
| S 25 | 14 13 11 | 5° 6'43 | 7°X40 | 23° 8 | 1°58 | 29°25 | 26°14 | 4°53 | 2° 1 | 2°15 | 26° 6 | 7°45 | 6°50 | 22°31 | 28°54 | S 25 |
| S 26 | 14 17 8 | 6° 5'17 | 20°32 | 24°40 | 3°11 | 29°37 | 26°27 | 4°55 | 2° 3 | 2°13 | 26° 6 | 7°43 | 6°46 | 22°38 | 28°58 | S 26 |
| M 27 | 14 21 4 | 7° 3'49 | 3°X 1 | 26° 8 | 4°24 | 29°48 | 26°41 | 4°57 | 2° 6 | 2°12 | 26° 7 | 7°D42 | 6°43 | 22°44 | 29° 2 | M 27 |
| T 28 | 14 25 1 | 8° 2'19 | 15°13 | 27°32 | 5°37 | 29°58 | 26°55 | 4°58 | 2° 8 | 2°10 | 26° 8 | 7°42 | 6°40 | 22°51 | 29° 6 | T 28 |
| W 29 | 14 28 57 | 9° 0'48 | 27°11 | 28°51 | 6°50 | 0°X 8 | 27° 9 | 5° 0 | 2°10 | 2° 8 | 26° 9 | 7°43 | 6°37 | 22°58 | 29°10 | W 29 |
| T 30 | 14 32 54 | 9°X59'15 | 9°X 1 | 0°II 5 | 8°II 2 | 0°X18 | 27°X23 | 5°X 1 | 2°X13 | 2°M 7 | 26°X 9 | 7°Y45 | 6°Y34 | 23°X 4 | 29°II 15 | T 30 |

ASTRODIENST EPHEMERIS for the year 2285

geocentric

MAY 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|--------|-------|-------|-------|-------|-------|------|------|--------|-------|------|-------|-------|------|
| F 1 | 14 36 51 | 10♌5740 | 20♋48 | 1♊15 | 9♊15 | 0♌26 | 27♋37 | 5♌3 | 2♌15 | 2♌5 | 26♌10 | 7♊47 | 6♊31 | 23♋11 | 29♊19 | F 1 |
| S 2 | 14 40 47 | 11°56'04 | 2♊36 | 2°19 | 10°27 | 0°34 | 27°50 | 5°4 | 2°18 | 2♌4 | 26°11 | 7°R48 | 6°27 | 23°18 | 29°23 | S 2 |
| S 3 | 14 44 44 | 12°54'26 | 14°29 | 3°19 | 11°40 | 0°42 | 28°4 | 5°5 | 2°20 | 2°2 | 26°11 | 7°48 | 6°24 | 23°24 | 29°27 | S 3 |
| M 4 | 14 48 40 | 13°52'47 | 26°31 | 4°13 | 12°53 | 0°49 | 28°18 | 5°6 | 2°23 | 2°0 | 26°12 | 7°46 | 6°21 | 23°31 | 29°32 | M 4 |
| T 5 | 14 52 37 | 14°51'05 | 8♌42 | 5°3 | 14°5 | 0°55 | 28°32 | 5°7 | 2°26 | 1°59 | 26°13 | 7°42 | 6°18 | 23°38 | 29°36 | T 5 |
| W 6 | 14 56 33 | 15°49'23 | 21°6 | 5°47 | 15°17 | 1°0 | 28°46 | 5°8 | 2°28 | 1°57 | 26°13 | 7°37 | 6°15 | 23°44 | 29°40 | W 6 |
| T 7 | 15 0 30 | 16°47'38 | 3♊43 | 6°25 | 16°30 | 1°5 | 29°0 | 5°9 | 2°31 | 1°56 | 26°14 | 7°31 | 6°12 | 23°51 | 29°45 | T 7 |
| F 8 | 15 4 26 | 17°45'52 | 16°34 | 6°59 | 17°42 | 1°9 | 29°14 | 5°9 | 2°34 | 1°54 | 26°14 | 7°24 | 6°8 | 23°57 | 29°50 | F 8 |
| S 9 | 15 8 23 | 18°44'04 | 29°37 | 7°27 | 18°54 | 1°12 | 29°28 | 5°10 | 2°37 | 1°52 | 26°15 | 7°17 | 6°5 | 24°4 | 29°54 | S 9 |
| S 10 | 15 12 20 | 19°42'14 | 12♌54 | 7°50 | 20°6 | 1°15 | 29°43 | 5°11 | 2°40 | 1°51 | 26°15 | 7°11 | 6°2 | 24°11 | 29°59 | S 10 |
| M 11 | 15 16 16 | 20°40'22 | 26°24 | 8°8 | 21°19 | 1°17 | 29°57 | 5°11 | 2°42 | 1°49 | 26°15 | 7°7 | 5°59 | 24°17 | 0♌3 | M 11 |
| T 12 | 15 20 13 | 21°38'28 | 10♌6 | 8°20 | 22°31 | 1°18 | 0♊11 | 5°11 | 2°45 | 1°48 | 26°16 | 7°5 | 5°56 | 24°24 | 0°8 | T 12 |
| W 13 | 15 24 9 | 22°36'32 | 24°1 | 8°27 | 23°43 | 1°R19 | 0°25 | 5°11 | 2°48 | 1°46 | 26°16 | 7°D 4 | 5°52 | 24°31 | 0°13 | W 13 |
| T 14 | 15 28 6 | 23°34'34 | 8♊8 | 8°R29 | 24°55 | 1°19 | 0°39 | 5°R12 | 2°51 | 1°45 | 26°17 | 7°5 | 5°49 | 24°37 | 0°18 | T 14 |
| F 15 | 15 32 2 | 24°32'34 | 22°26 | 8°26 | 26°7 | 1°18 | 0°53 | 5°12 | 2°54 | 1°43 | 26°17 | 7°6 | 5°46 | 24°44 | 0°23 | F 15 |
| S 16 | 15 35 59 | 25°30'33 | 6♌52 | 8°18 | 27°18 | 1°16 | 1°7 | 5°11 | 2°57 | 1°42 | 26°17 | 7°R 6 | 5°43 | 24°51 | 0°27 | S 16 |
| S 17 | 15 39 55 | 26°28'29 | 21°25 | 8°5 | 28°30 | 1°13 | 1°21 | 5°11 | 3°0 | 1°40 | 26°18 | 7°6 | 5°40 | 24°57 | 0°32 | S 17 |
| M 18 | 15 43 52 | 27°26'24 | 5♌58 | 7°49 | 29°42 | 1°10 | 1°35 | 5°11 | 3°3 | 1°39 | 26°18 | 7°3 | 5°37 | 25°4 | 0°37 | M 18 |
| T 19 | 15 47 49 | 28°24'17 | 20°26 | 7°28 | 0♌54 | 1°6 | 1°50 | 5°11 | 3°6 | 1°38 | 26°18 | 6°58 | 5°33 | 25°11 | 0°42 | T 19 |
| W 20 | 15 51 45 | 29°22'09 | 4♌44 | 7°4 | 2°5 | 1°2 | 2°4 | 5°10 | 3°9 | 1°36 | 26°18 | 6°50 | 5°30 | 25°17 | 0°47 | W 20 |
| T 21 | 15 55 42 | 0♊20'00 | 18°44 | 6°36 | 3°17 | 0°56 | 2°18 | 5°9 | 3°13 | 1°35 | 26°18 | 6°42 | 5°27 | 25°24 | 0°52 | T 21 |
| F 22 | 15 59 38 | 1°17'49 | 2♌24 | 6°6 | 4°28 | 0°50 | 2°32 | 5°9 | 3°16 | 1°33 | 26°19 | 6°33 | 5°24 | 25°31 | 0°58 | F 22 |
| S 23 | 16 3 35 | 2°15'37 | 15°40 | 5°34 | 5°39 | 0°43 | 2°46 | 5°8 | 3°19 | 1°32 | 26°19 | 6°25 | 5°21 | 25°37 | 1°3 | S 23 |
| S 24 | 16 7 31 | 3°13'23 | 28°33 | 5°1 | 6°51 | 0°35 | 3°0 | 5°7 | 3°22 | 1°31 | 26°19 | 6°18 | 5°18 | 25°44 | 1°8 | S 24 |
| M 25 | 16 11 28 | 4°11'09 | 11♌4 | 4°26 | 8°2 | 0°27 | 3°15 | 5°6 | 3°25 | 1°29 | 26°19 | 6°13 | 5°14 | 25°51 | 1°13 | M 25 |
| T 26 | 16 15 25 | 5°8'53 | 3°52 | 9°13 | 0°18 | 0°18 | 3°29 | 5°5 | 3°29 | 1°28 | 26°19 | 6°11 | 5°11 | 25°57 | 1°18 | T 26 |
| W 27 | 16 19 21 | 6°6'36 | 5♌16 | 3°17 | 10°24 | 0°8 | 3°43 | 5°4 | 3°32 | 1°27 | 26°R19 | 6°D10 | 5°8 | 26°4 | 1°23 | W 27 |
| T 28 | 16 23 18 | 7°4'18 | 17°8 | 2°44 | 11°35 | 29♌57 | 3°57 | 5°3 | 3°35 | 1°25 | 26°19 | 6°10 | 5°5 | 26°10 | 1°29 | T 28 |
| F 29 | 16 27 14 | 8°1'59 | 28°55 | 2°12 | 12°46 | 29°46 | 4°11 | 5°1 | 3°38 | 1°24 | 26°19 | 6°11 | 5°2 | 26°17 | 1°34 | F 29 |
| S 30 | 16 31 11 | 8°59'39 | 10♊45 | 1°42 | 13°57 | 29°34 | 4°25 | 5°0 | 3°42 | 1°23 | 26°19 | 6°R11 | 4°58 | 26°24 | 1°39 | S 30 |
| S 31 | 16 35 7 | 9♊57'18 | 22°Y43 | 1♊15 | 15♌8 | 29♌21 | 4♊39 | 4♌58 | 3♌45 | 1♌22 | 26♌19 | 6♊9 | 4♊55 | 26♌30 | 1♌45 | S 31 |

Delta T = 272.37 sec

JUNE 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|--------|-------|--------|-------|-------|------|-------|--------|-------|------|-------|------|------|
| M 1 | 16 39 4 | 10♊54'57 | 4♌51 | 0°R50 | 16♌19 | 29°R 7 | 4♊53 | 4°R57 | 3♌48 | 1°R21 | 26°R19 | 6°R 6 | 4♊52 | 26♌37 | 1♌50 | M 1 |
| T 2 | 16 43 4 | 11°52'34 | 17°13 | 0♊29 | 17°30 | 28♌53 | 5°8 | 4♌55 | 3°52 | 1♌19 | 26♌18 | 6°Y 0 | 4°49 | 26°44 | 1°56 | T 2 |
| W 3 | 16 46 57 | 12°50'10 | 29°52 | 0°12 | 18°40 | 28°39 | 5°22 | 4°53 | 3°55 | 1°18 | 26°18 | 5°51 | 4°46 | 26°50 | 2°1 | W 3 |
| T 4 | 16 50 54 | 13°47'45 | 12♊48 | 29♌58 | 19°51 | 28°23 | 5°36 | 4°51 | 3°59 | 1°17 | 26°18 | 5°41 | 4°43 | 26°57 | 2°6 | T 4 |
| F 5 | 16 54 50 | 14°45'19 | 26°1 | 29°48 | 21°1 | 28°8 | 5°50 | 4°49 | 4°2 | 1°16 | 26°18 | 5°30 | 4°39 | 27°4 | 2°12 | F 5 |
| S 6 | 16 58 47 | 15°42'52 | 9♌28 | 29°43 | 22°12 | 27°51 | 6°4 | 4°47 | 4°5 | 1°15 | 26°18 | 5°18 | 4°36 | 27°10 | 2°17 | S 6 |
| S 7 | 17 2 43 | 16°40'24 | 23°8 | 29°D42 | 23°22 | 27°34 | 6°18 | 4°45 | 4°9 | 1°14 | 26°17 | 5°8 | 4°33 | 27°17 | 2°23 | S 7 |
| M 8 | 17 6 40 | 17°37'55 | 29°46 | 24°32 | 27°17 | 6°32 | 4°43 | 4°12 | 4°12 | 1°13 | 26°17 | 5°1 | 4°30 | 27°24 | 2°28 | M 8 |
| T 9 | 17 10 36 | 18°35'24 | 20°54 | 29°54 | 25°42 | 26°59 | 6°46 | 4°41 | 4°16 | 1°12 | 26°17 | 4°56 | 4°27 | 27°30 | 2°34 | T 9 |
| W 10 | 17 14 33 | 19°32'52 | 4♊55 | 0♊6 | 26°52 | 26°41 | 7°0 | 4°38 | 4°19 | 1°11 | 26°16 | 4°53 | 4°24 | 27°37 | 2°40 | W 10 |
| T 11 | 17 18 29 | 20°30'19 | 19°1 | 0°23 | 28°2 | 26°23 | 7°14 | 4°36 | 4°23 | 1°10 | 26°16 | 4°D53 | 4°20 | 27°44 | 2°45 | T 11 |
| F 12 | 17 22 26 | 21°27'45 | 3♌9 | 0°45 | 29°12 | 26°4 | 7°28 | 4°33 | 4°26 | 1°9 | 26°16 | 4°R53 | 4°17 | 27°50 | 2°51 | F 12 |
| S 13 | 17 26 23 | 22°25'09 | 17°18 | 1°10 | 0♊22 | 25°45 | 7°41 | 4°31 | 4°30 | 1°8 | 26°15 | 4°52 | 4°14 | 27°57 | 2°56 | S 13 |
| S 14 | 17 30 19 | 23°22'33 | 1♌29 | 1°40 | 1°32 | 25°26 | 7°55 | 4°28 | 4°33 | 1°7 | 26°15 | 4°50 | 4°11 | 28°3 | 3°2 | S 14 |
| M 15 | 17 34 16 | 24°19'55 | 15°37 | 2°15 | 2°41 | 25°6 | 8°9 | 4°25 | 4°37 | 1°6 | 26°14 | 4°46 | 4°8 | 28°10 | 3°8 | M 15 |
| T 16 | 17 38 12 | 25°17'16 | 29°40 | 2°53 | 3°51 | 24°47 | 8°23 | 4°22 | 4°41 | 1°6 | 26°14 | 4°38 | 4°4 | 28°17 | 3°13 | T 16 |
| W 17 | 17 42 9 | 26°14'37 | 13♌34 | 3°36 | 5°0 | 24°27 | 8°37 | 4°19 | 4°44 | 1°5 | 26°13 | 4°29 | 4°1 | 28°23 | 3°19 | W 17 |
| T 18 | 17 46 5 | 27°11'57 | 27°15 | 4°22 | 6°10 | 24°7 | 8°51 | 4°16 | 4°48 | 1°4 | 26°13 | 4°17 | 3°58 | 28°30 | 3°25 | T 18 |
| F 19 | 17 50 2 | 28°9'16 | 10♌39 | 5°13 | 7°19 | 23°48 | 9°4 | 4°13 | 4°51 | 1°3 | 26°12 | 4°5 | 3°55 | 28°37 | 3°30 | F 19 |
| S 20 | 17 53 58 | 29°6'35 | 23°45 | 6°7 | 8°28 | 23°28 | 9°18 | 4°10 | 4°55 | 1°3 | 26°12 | 3°53 | 3°52 | 28°43 | 3°36 | S 20 |
| S 21 | 17 57 55 | 0♌3'53 | 6♌32 | 7°5 | 9°37 | 23°8 | 9°32 | 4°7 | 4°58 | 1°2 | 26°11 | 3°43 | 3°49 | 28°50 | 3°42 | S 21 |
| M 22 | 18 1 52 | 1°1'10 | 19°0 | 8°7 | 10°46 | 22°49 | 9°45 | 4°4 | 5°2 | 1°1 | 26°10 | 3°36 | 3°45 | 28°57 | 3°47 | M 22 |
| T 23 | 18 5 48 | 1°58'27 | 1♊11 | 9°12 | 11°54 | 22°29 | 9°59 | 4°0 | 5°6 | 1°1 | 26°10 | 3°31 | 3°42 | 29°3 | 3°53 | T 23 |
| W 24 | 18 9 45 | 2°55'44 | 13°10 | 10°21 | 13°3 | 22°10 | 10°12 | 3°57 | 5°9 | 1°0 | 26°9 | 3°28 | 3°39 | 29°10 | 3°59 | W 24 |
| T 25 | 18 13 41 | 3°53'01 | 25°2 | 11°34 | 14°11 | 21°51 | 10°26 | 3°53 | 5°13 | 1°0 | 26°8 | 3°27 | 3°36 | 29°17 | 4°4 | T 25 |
| F 26 | 18 17 38 | 4°50'17 | 6♊50 | 12°50 | 15°20 | 21°33 | 10°39 | 3°50 | 5°16 | 0°59 | 26°8 | 3°27 | 3°33 | 29°23 | 4°10 | F 26 |
| S 27 | 18 21 34 | 5°47'33 | 18°41 | 14°9 | 16°28 | 21°15 | 10°53 | 3°46 | 5°20 | 0°59 | 26°7 | 3°27 | 3°30 | 29°30 | 4°16 | S 27 |
| S 28 | 18 25 31 | 6°44'49 | 0♌40 | 15°32 | 17°36 | 20°57 | 11°6 | 3°43 | 5°24 | 0°58 | 26°6 | 3°25 | 3°26 | 29°36 | 4°21 | S 28 |
| M 29 | 18 29 27 | 7°42'05 | 12°53 | 16°58 | 18°44 | 20°39 | 11°19 | 3°39 | 5°27 | 0°58 | 26°5 | 3°21 | 3°23 | 29°43 | 4°27 | M 29 |
| T 30 | 18 33 24 | 8♌39'21 | 25♌23 | 18♊28 | 19♌52 | 20♌23 | 11♊33 | 3♌35 | 5♌31 | 0♌57 | 26♌5 | 3♊15 | 3♊20 | 29♌50 | 4♌33 | T 30 |

Delta T = 272.50 sec

ASTRODIENST EPHEMERIS for the year 2285
geocentric

JULY 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|-------|-------|--------|-------|-------|------|-------|--------|-------|-------|--------|------|------|
| W 1 | 18 37 21 | 9♂36'37 | 8♂12 | 20♂ 1 | 21♂ 0 | 20°R 6 | 11♂46 | 3°R31 | 5♂34 | 0°R57 | 26°R 4 | 3°R 6 | 3°Y17 | 29°X56 | 4♂39 | W 1 |
| T 2 | 18 41 17 | 10°33'53 | 21°24 | 21°37 | 22° 8 | 19°X50 | 11°59 | 3°X27 | 5°38 | 0♂57 | 26°X 3 | 2°Y56 | 3°14 | 0°Y 3 | 4°44 | T 2 |
| F 3 | 18 45 14 | 11°31'08 | 4♂56 | 23°16 | 23°15 | 19°35 | 12°12 | 3°23 | 5°42 | 0°56 | 26° 2 | 2°44 | 3°10 | 0°10 | 4°50 | F 3 |
| S 4 | 18 49 10 | 12°28'24 | 18°46 | 24°59 | 24°23 | 19°20 | 12°26 | 3°20 | 5°45 | 0°56 | 26° 1 | 2°32 | 3° 7 | 0°16 | 4°56 | S 4 |
| S 5 | 18 53 7 | 13°25'39 | 2♂51 | 26°44 | 25°30 | 19° 6 | 12°39 | 3°16 | 5°49 | 0°56 | 26° 0 | 2°22 | 3° 4 | 0°23 | 5° 1 | S 5 |
| M 6 | 18 57 3 | 14°22'54 | 17° 6 | 28°33 | 26°37 | 18°53 | 12°52 | 3°11 | 5°52 | 0°55 | 25°59 | 2°13 | 3° 1 | 0°30 | 5° 7 | M 6 |
| T 7 | 19 1 0 | 15°20'08 | 1♂24 | 0♂24 | 27°44 | 18°40 | 13° 5 | 3° 7 | 5°56 | 0°55 | 25°59 | 2° 8 | 2°58 | 0°36 | 5°13 | T 7 |
| W 8 | 19 4 57 | 16°17'22 | 15°43 | 2°19 | 28°51 | 18°28 | 13°18 | 3° 3 | 5°59 | 0°55 | 25°58 | 2° 5 | 2°55 | 0°43 | 5°18 | W 8 |
| T 9 | 19 8 53 | 17°14'36 | 29°58 | 4°15 | 29°57 | 18°17 | 13°30 | 2°59 | 6° 3 | 0°55 | 25°57 | 2°D 4 | 2°51 | 0°50 | 5°24 | T 9 |
| F 10 | 19 12 50 | 18°11'49 | 14♂ 8 | 6°15 | 1♂ 4 | 18° 7 | 13°43 | 2°55 | 6° 6 | 0°55 | 25°56 | 2°R 5 | 2°48 | 0°56 | 5°30 | F 10 |
| S 11 | 19 16 46 | 19° 9'02 | 28°12 | 8°16 | 2°10 | 17°57 | 13°56 | 2°51 | 6°10 | 0°55 | 25°55 | 2° 4 | 2°45 | 1° 3 | 5°35 | S 11 |
| S 12 | 19 20 43 | 20° 6'15 | 12♂ 8 | 10°19 | 3°16 | 17°48 | 14° 9 | 2°46 | 6°14 | 0°D55 | 25°54 | 2° 3 | 2°42 | 1°10 | 5°41 | S 12 |
| M13 | 19 24 39 | 21° 3'28 | 25°57 | 12°24 | 4°22 | 17°40 | 14°21 | 2°42 | 6°17 | 0°55 | 25°53 | 1°59 | 2°39 | 1°16 | 5°46 | M13 |
| T 14 | 19 28 36 | 22° 0'41 | 9°X36 | 14°31 | 5°28 | 17°33 | 14°34 | 2°38 | 6°21 | 0°55 | 25°52 | 1°52 | 2°36 | 1°23 | 5°52 | T 14 |
| W15 | 19 32 32 | 22°57'54 | 23° 5 | 16°39 | 6°33 | 17°27 | 14°46 | 2°33 | 6°24 | 0°55 | 25°50 | 1°43 | 2°32 | 1°29 | 5°58 | W15 |
| T 16 | 19 36 29 | 23°55'06 | 6♂23 | 18°47 | 7°39 | 17°21 | 14°59 | 2°29 | 6°28 | 0°55 | 25°49 | 1°33 | 2°29 | 1°36 | 6° 3 | T 16 |
| F 17 | 19 40 26 | 24°52'19 | 19°26 | 20°56 | 8°44 | 17°16 | 15°11 | 2°25 | 6°31 | 0°55 | 25°48 | 1°21 | 2°26 | 1°43 | 6° 9 | F 17 |
| S 18 | 19 44 22 | 25°49'32 | 2°X15 | 23° 5 | 9°49 | 17°13 | 15°23 | 2°20 | 6°34 | 0°55 | 25°47 | 1°11 | 2°23 | 1°49 | 6°14 | S 18 |
| S 19 | 19 48 19 | 26°46'45 | 14°49 | 25°15 | 10°54 | 17°10 | 15°36 | 2°16 | 6°38 | 0°56 | 25°46 | 1° 2 | 2°20 | 1°56 | 6°20 | S 19 |
| M20 | 19 52 15 | 27°43'59 | 27° 8 | 27°24 | 11°58 | 17° 7 | 15°48 | 2°12 | 6°41 | 0°56 | 25°45 | 0°54 | 2°16 | 2° 3 | 6°25 | M20 |
| T 21 | 19 56 12 | 28°41'13 | 9♂14 | 29°32 | 13° 3 | 17° 6 | 16° 0 | 2° 7 | 6°45 | 0°56 | 25°44 | 0°50 | 2°13 | 2° 9 | 6°31 | T 21 |
| W22 | 20 0 8 | 29°38'27 | 21°10 | 1♂40 | 14° 7 | 17°D 5 | 16°12 | 2° 3 | 6°48 | 0°56 | 25°43 | 0°47 | 2°10 | 2°16 | 6°36 | W22 |
| T 23 | 20 4 5 | 0♂35'42 | 3°Y 0 | 3°46 | 15°11 | 17° 6 | 16°24 | 1°58 | 6°51 | 0°57 | 25°41 | 0°D47 | 2° 7 | 2°23 | 6°41 | T 23 |
| F 24 | 20 8 1 | 1°32'58 | 14°48 | 5°52 | 16°14 | 17° 7 | 16°36 | 1°54 | 6°55 | 0°57 | 25°40 | 0°48 | 2° 4 | 2°29 | 6°47 | F 24 |
| S 25 | 20 11 58 | 2°30'14 | 26°39 | 7°56 | 17°18 | 17° 9 | 16°47 | 1°49 | 6°58 | 0°57 | 25°39 | 0°48 | 2° 1 | 2°36 | 6°52 | S 25 |
| S 26 | 20 15 55 | 3°27'31 | 8♂38 | 9°59 | 18°21 | 17°12 | 16°59 | 1°45 | 7° 1 | 0°58 | 25°38 | 0°R48 | 1°57 | 2°43 | 6°58 | S 26 |
| M27 | 20 19 51 | 4°24'49 | 20°51 | 12° 1 | 19°24 | 17°15 | 17°11 | 1°40 | 7° 5 | 0°58 | 25°37 | 0°47 | 1°54 | 2°49 | 7° 3 | M27 |
| T 28 | 20 23 48 | 5°22'08 | 3♂23 | 14° 1 | 20°27 | 17°20 | 17°22 | 1°36 | 7° 8 | 0°59 | 25°35 | 0°43 | 1°51 | 2°56 | 7° 8 | T 28 |
| W29 | 20 27 44 | 6°19'28 | 16°17 | 15°59 | 21°29 | 17°25 | 17°34 | 1°32 | 7°11 | 0°59 | 25°34 | 0°38 | 1°48 | 3° 2 | 7°13 | W29 |
| T 30 | 20 31 41 | 7°16'48 | 29°35 | 17°56 | 22°31 | 17°31 | 17°45 | 1°27 | 7°15 | 1° 0 | 25°33 | 0°31 | 1°45 | 3° 9 | 7°19 | T 30 |
| F 31 | 20 35 37 | 8♂14'10 | 13♂19 | 19♂51 | 23♂33 | 17°X38 | 17♂56 | 1°X23 | 7♂18 | 1♂ 0 | 25°X32 | 0°Y23 | 1°Y42 | 3°Y16 | 7♂24 | F 31 |

Delta T = 272.64 sec

AUGUST 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|--------|-------|-------|--------|-------|--------|------|------|--------|--------|-------|-------|------|------|
| S 1 | 20 39 34 | 9♂11'32 | 27♂26 | 21♂44 | 24♂35 | 17°X45 | 18♂ 8 | 1°R18 | 7♂21 | 1♂ 1 | 25°R30 | 0°R14 | 1°Y38 | 3°Y22 | 7♂29 | S 1 |
| S 2 | 20 43 30 | 10° 8'55 | 11♂51 | 23°36 | 25°36 | 17°54 | 18°19 | 1°X14 | 7°24 | 1° 2 | 25°X29 | 0°Y 7 | 1°35 | 3°29 | 7°34 | S 2 |
| M 3 | 20 47 27 | 11° 6'19 | 26°29 | 25°26 | 26°37 | 18° 3 | 18°30 | 1°10 | 7°27 | 1° 2 | 25°28 | 0° 1 | 1°32 | 3°36 | 7°39 | M 3 |
| T 4 | 20 51 24 | 12° 3'43 | 11♂12 | 27°14 | 27°38 | 18°13 | 18°41 | 1° 5 | 7°30 | 1° 3 | 25°27 | 29°X58 | 1°29 | 3°42 | 7°44 | T 4 |
| W 5 | 20 55 20 | 13° 1'07 | 25°53 | 29° 1 | 28°38 | 18°24 | 18°52 | 1° 1 | 7°33 | 1° 4 | 25°25 | 29°D56 | 1°26 | 3°49 | 7°49 | W 5 |
| T 6 | 20 59 17 | 13°58'33 | 10♂27 | 0♂46 | 29°38 | 18°35 | 19° 2 | 0°57 | 7°37 | 1° 5 | 25°24 | 29°57 | 1°22 | 3°56 | 7°54 | T 6 |
| F 7 | 21 3 13 | 14°55'59 | 24°49 | 2°29 | 0♂38 | 18°47 | 19°13 | 0°53 | 7°40 | 1° 5 | 25°23 | 29°58 | 1°19 | 4° 2 | 7°59 | F 7 |
| S 8 | 21 7 10 | 15°53'25 | 8♂58 | 4°11 | 1°37 | 19° 0 | 19°23 | 0°48 | 7°43 | 1° 6 | 25°21 | 29°59 | 1°16 | 4° 9 | 8° 4 | S 8 |
| S 9 | 21 11 6 | 16°50'53 | 22°51 | 5°51 | 2°36 | 19°14 | 19°34 | 0°44 | 7°46 | 1° 7 | 25°20 | 29°R59 | 1°13 | 4°16 | 8° 9 | S 9 |
| M10 | 21 15 3 | 17°48'20 | 6♂30 | 7°29 | 3°35 | 19°28 | 19°44 | 0°40 | 7°49 | 1° 8 | 25°19 | 29°57 | 1°10 | 4°22 | 8°14 | M10 |
| T 11 | 21 18 59 | 18°45'49 | 19°53 | 9° 6 | 4°33 | 19°43 | 19°55 | 0°36 | 7°51 | 1° 9 | 25°17 | 29°54 | 1° 7 | 4°29 | 8°19 | T 11 |
| W12 | 21 22 56 | 19°43'18 | 3♂ 3 | 10°41 | 5°31 | 19°58 | 20° 5 | 0°32 | 7°54 | 1°10 | 25°16 | 29°49 | 1° 3 | 4°36 | 8°23 | W12 |
| T 13 | 21 26 53 | 20°40'49 | 15°59 | 12°15 | 6°28 | 20°15 | 20°15 | 0°28 | 7°57 | 1°11 | 25°15 | 29°43 | 1° 0 | 4°42 | 8°28 | T 13 |
| F 14 | 21 30 49 | 21°38'20 | 28°42 | 13°47 | 7°25 | 20°32 | 20°25 | 0°24 | 8° 0 | 1°12 | 25°14 | 29°36 | 0°57 | 4°49 | 8°33 | F 14 |
| S 15 | 21 34 46 | 22°35'52 | 11°X12 | 15°17 | 8°22 | 20°49 | 20°34 | 0°20 | 8° 3 | 1°13 | 25°12 | 29°30 | 0°54 | 4°55 | 8°38 | S 15 |
| S 16 | 21 38 42 | 23°33'25 | 23°30 | 16°46 | 9°18 | 21° 7 | 20°44 | 0°16 | 8° 6 | 1°14 | 25°11 | 29°25 | 0°51 | 5° 2 | 8°42 | S 16 |
| M17 | 21 42 39 | 24°30'59 | 5♂38 | 18°13 | 10°13 | 21°26 | 20°54 | 0°12 | 8° 8 | 1°15 | 25°10 | 29°21 | 0°48 | 5° 9 | 8°47 | M17 |
| T 18 | 21 46 35 | 25°28'34 | 17°37 | 19°38 | 11° 8 | 21°45 | 21° 3 | 0° 8 | 8°11 | 1°16 | 25° 8 | 29°18 | 0°44 | 5°15 | 8°51 | T 18 |
| W19 | 21 50 32 | 26°26'10 | 29°28 | 21° 1 | 12° 3 | 22° 5 | 21°13 | 0° 4 | 8°14 | 1°17 | 25° 7 | 29°D18 | 0°41 | 5°22 | 8°56 | W19 |
| T 20 | 21 54 28 | 27°23'48 | 11°Y16 | 22°23 | 12°56 | 22°25 | 21°22 | 0° 1 | 8°16 | 1°19 | 25° 6 | 29°18 | 0°38 | 5°29 | 9° 0 | T 20 |
| F 21 | 21 58 25 | 28°21'27 | 23° 3 | 23°43 | 13°50 | 22°46 | 21°31 | 29°X57 | 8°19 | 1°20 | 25° 4 | 29°20 | 0°35 | 5°35 | 9° 4 | F 21 |
| S 22 | 22 2 22 | 29°19'08 | 4♂54 | 25° 2 | 14°43 | 23° 8 | 21°40 | 29°54 | 8°22 | 1°21 | 25° 3 | 29°22 | 0°32 | 5°42 | 9° 9 | S 22 |
| S 23 | 22 6 18 | 0♂16'50 | 16°53 | 26°18 | 15°35 | 23°30 | 21°49 | 29°50 | 8°24 | 1°22 | 25° 2 | 29°23 | 0°28 | 5°49 | 9°13 | S 23 |
| M24 | 22 10 15 | 1°14'34 | 29° 5 | 27°32 | 16°27 | 23°52 | 21°58 | 29°47 | 8°27 | 1°24 | 25° 0 | 29°R24 | 0°25 | 5°55 | 9°17 | M24 |
| T 25 | 22 14 11 | 2°12'20 | 11♂35 | 28°45 | 17°18 | 24°15 | 22° 6 | 29°43 | 8°29 | 1°25 | 24°59 | 29°23 | 0°22 | 6° 2 | 9°21 | T 25 |
| W26 | 22 18 8 | 3°10'07 | 24°27 | 29°55 | 18° 8 | 24°39 | 22°15 | 29°40 | 8°32 | 1°26 | 24°58 | 29°22 | 0°19 | 6° 9 | 9°25 | W26 |
| T 27 | 22 22 4 | 4° 7'56 | 7♂44 | 1♂ 4 | 18°58 | 25° 3 | 22°23 | 29°37 | 8°34 | 1°28 | 24°56 | 29°19 | 0°16 | 6°15 | 9°29 | T 27 |
| F 28 | 22 26 1 | 5° 5'47 | 21°28 | 2°10 | 19°47 | 25°28 | 22°31 | 29°33 | 8°36 | 1°29 | 24°55 | 29°16 | 0°13 | 6°22 | 9°33 | F 28 |
| S 29 | 22 29 57 | 6° 3'39 | 5♂39 | 3°14 | 20°35 | 25°53 | 22°39 | 29°30 | 8°39 | 1°30 | 24°54 | 29°13 | 0° 9 | 6°28 | 9°37 | S 29 |
| S 30 | 22 33 54 | 7° 1'33 | 20°13 | 4°15 | 21°23 | 26°18 | 22°47 | 29°27 | 8°41 | 1°32 | 24°52 | 29°10 | 0° 6 | 6°35 | 9°41 | S 30 |
| M31 | 22 37 51 | 7♂59'28 | 5♂ 4 | 5♂14 | 22♂ 9 | 26°X44 | 22♂55 | 29°X24 | 8♂43 | 1♂33 | 24°X51 | 29°X 8 | 0°Y 3 | 6°Y42 | 9♂45 | M31 |

Delta T = 272.77 sec

ASTRODIENST EPHEMERIS for the year 2285

geocentric

SEPTEMBER 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|--------|-------|-------|-------|--------|------|------|--------|--------|-------|------|-------|------|
| T 1 | 22 41 47 | 8♎57'25 | 20♎5 | 6♏10 | 22♏55 | 27♏10 | 23♏11 | 29°R21 | 8♏45 | 1♎35 | 24°R50 | 29°R 7 | 29♏59 | 6♎48 | 9♏49 | T 1 |
| W 2 | 22 45 44 | 9°55'23 | 5♏8 | 7°3 | 23°40 | 27°37 | 23°10 | 29♏18 | 8°47 | 1°36 | 24°R48 | 29°D 6 | 29°57 | 6°55 | 9°53 | W 2 |
| T 3 | 22 49 40 | 10°53'23 | 20°3 | 7°54 | 24°24 | 28°5 | 23°18 | 29°16 | 8°50 | 1°38 | 24°47 | 29♏7 | 29°54 | 7°2 | 9°56 | T 3 |
| F 4 | 22 53 37 | 11°51'24 | 4♎44 | 8°40 | 25°8 | 28°32 | 23°25 | 29°13 | 8°52 | 1°40 | 24°46 | 29°8 | 29°50 | 7°8 | 10°0 | F 4 |
| S 5 | 22 57 33 | 12°49'26 | 19°6 | 9°24 | 25°50 | 29°0 | 23°32 | 29°10 | 8°54 | 1°41 | 24°45 | 29°9 | 29°47 | 7°15 | 10°3 | S 5 |
| S 6 | 23 1 30 | 13°47'30 | 3♏7 | 10°4 | 26°31 | 29°29 | 23°39 | 29°8 | 8°56 | 1°43 | 24°43 | 29°10 | 29°44 | 7°22 | 10°7 | S 6 |
| M 7 | 23 5 26 | 14°45'35 | 16°45 | 10°40 | 27°12 | 29°58 | 23°46 | 29°5 | 8°58 | 1°44 | 24°42 | 29°R11 | 29°41 | 7°28 | 10°10 | M 7 |
| T 8 | 23 9 23 | 15°43'42 | 0♏3 | 11°11 | 27°51 | 0♏27 | 23°53 | 29°3 | 8°59 | 1°46 | 24°41 | 29°10 | 29°38 | 7°35 | 10°14 | T 8 |
| W 9 | 23 13 20 | 16°41'49 | 13°1 | 11°39 | 28°29 | 0°57 | 23°59 | 29°1 | 9°1 | 1°48 | 24°40 | 29°9 | 29°34 | 7°42 | 10°17 | W 9 |
| T 10 | 23 17 16 | 17°39'59 | 25°42 | 12°1 | 29°6 | 1°27 | 24°5 | 28°59 | 9°3 | 1°49 | 24°39 | 29°8 | 29°31 | 7°48 | 10°20 | T 10 |
| F 11 | 23 21 13 | 18°38'09 | 8♏9 | 12°19 | 29°41 | 1°57 | 24°12 | 28°56 | 9°5 | 1°51 | 24°37 | 29°6 | 29°28 | 7°55 | 10°23 | F 11 |
| S 12 | 23 25 9 | 19°36'22 | 20°23 | 12°31 | 0♎16 | 2°28 | 24°18 | 28°54 | 9°7 | 1°53 | 24°36 | 29°5 | 29°25 | 8°2 | 10°26 | S 12 |
| S 13 | 23 29 6 | 20°34'35 | 2♏28 | 12°37 | 0°49 | 2°59 | 24°24 | 28°53 | 9°8 | 1°55 | 24°35 | 29°4 | 29°22 | 8°8 | 10°29 | S 13 |
| M14 | 23 33 2 | 21°32'51 | 14°25 | 12°R38 | 1°20 | 3°30 | 24°29 | 28°51 | 9°10 | 1°56 | 24°34 | 29°3 | 29°19 | 8°15 | 10°32 | M14 |
| T 15 | 23 36 59 | 22°31'08 | 26°17 | 12°32 | 1°51 | 4°2 | 24°35 | 28°49 | 9°11 | 1°58 | 24°33 | 29°D 3 | 29°15 | 8°21 | 10°35 | T 15 |
| W16 | 23 40 55 | 23°29'27 | 8♎6 | 12°20 | 2°19 | 4°34 | 24°40 | 28°47 | 9°13 | 2°0 | 24°32 | 29°3 | 29°12 | 8°28 | 10°38 | W16 |
| T 17 | 23 44 52 | 24°27'48 | 19°53 | 12°1 | 2°47 | 5°6 | 24°45 | 28°46 | 9°14 | 2°2 | 24°30 | 29°3 | 29°9 | 8°35 | 10°41 | T 17 |
| F 18 | 23 48 49 | 25°26'11 | 1♏42 | 11°36 | 3°12 | 5°39 | 24°50 | 28°44 | 9°16 | 2°4 | 24°29 | 29°4 | 29°6 | 8°41 | 10°43 | F 18 |
| S 19 | 23 52 45 | 26°24'35 | 13°36 | 11°4 | 3°36 | 6°12 | 24°55 | 28°43 | 9°17 | 2°6 | 24°28 | 29°4 | 29°3 | 8°48 | 10°46 | S 19 |
| S 20 | 23 56 42 | 27°23'02 | 25°37 | 10°25 | 3°58 | 6°45 | 25°0 | 28°42 | 9°19 | 2°8 | 24°27 | 29°4 | 28°59 | 8°55 | 10°48 | S 20 |
| M21 | 0 0 38 | 28°21'31 | 7♎50 | 9°40 | 4°19 | 7°19 | 25°5 | 28°40 | 9°20 | 2°10 | 24°26 | 29°4 | 28°56 | 9°1 | 10°51 | M21 |
| T 22 | 0 4 35 | 29°20'02 | 20°19 | 8°49 | 4°38 | 7°53 | 25°9 | 28°39 | 9°21 | 2°11 | 24°25 | 29°R 4 | 28°53 | 9°8 | 10°53 | T 22 |
| W23 | 0 8 31 | 0♏18'36 | 3♏6 | 7°53 | 4°55 | 8°27 | 25°13 | 28°38 | 9°22 | 2°13 | 24°24 | 29°D 4 | 28°50 | 9°15 | 10°55 | W23 |
| T 24 | 0 12 28 | 1°17'11 | 16°17 | 6°53 | 5°9 | 9°1 | 25°17 | 28°37 | 9°23 | 2°15 | 24°23 | 29°4 | 28°47 | 9°21 | 10°58 | T 24 |
| F 25 | 0 16 24 | 2°15'49 | 29°53 | 5°50 | 5°22 | 9°36 | 25°21 | 28°37 | 9°25 | 2°17 | 24°22 | 29°5 | 28°44 | 9°28 | 11°0 | F 25 |
| S 26 | 0 20 21 | 3°14'29 | 13♏56 | 4°45 | 5°33 | 10°11 | 25°24 | 28°36 | 9°26 | 2°19 | 24°21 | 29°5 | 28°40 | 9°35 | 11°2 | S 26 |
| S 27 | 0 24 18 | 4°13'11 | 28°24 | 3°41 | 5°42 | 10°46 | 25°28 | 28°35 | 9°27 | 2°21 | 24°20 | 29°5 | 28°37 | 9°41 | 11°4 | S 27 |
| M28 | 0 28 14 | 5°11'55 | 13♎15 | 2°37 | 5°49 | 11°21 | 25°31 | 28°35 | 9°27 | 2°23 | 24°19 | 29°6 | 28°34 | 9°48 | 11°6 | M28 |
| T 29 | 0 32 11 | 6°10'41 | 28°20 | 1°37 | 5°53 | 11°57 | 25°34 | 28°34 | 9°28 | 2°25 | 24°18 | 29°R 6 | 28°31 | 9°54 | 11°8 | T 29 |
| W30 | 0 36 7 | 7♏9'30 | 13♏33 | 0♏42 | 5°R55 | 12♏33 | 25♎37 | 28♏34 | 9♏29 | 2♎27 | 24♏17 | 29♏6 | 28♏28 | 10♎1 | 11♏9 | W30 |

Delta T = 272.91 sec

OCTOBER 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|-------|--------|-------|-------|--------|--------|-------|------|--------|--------|-------|-------|--------|------|
| T 1 | 0 40 4 | 8♏8'20 | 28♏42 | 29°R52 | 5°R55 | 13♏9 | 25♎40 | 28°R34 | 9♏30 | 2♎30 | 24°R16 | 29°R 5 | 28♏25 | 10♎8 | 11♏11 | T 1 |
| F 2 | 0 44 0 | 9°7'12 | 13♎40 | 29♎11 | 5♎52 | 13°45 | 25°42 | 28♏34 | 9°31 | 2°32 | 24°R15 | 29♏4 | 28°21 | 10°14 | 11°13 | F 2 |
| S 3 | 0 47 57 | 10°6'06 | 28°18 | 28°37 | 5°47 | 14°22 | 25°45 | 28°D34 | 9°31 | 2°34 | 24°15 | 29°3 | 28°18 | 10°21 | 11°14 | S 3 |
| S 4 | 0 51 53 | 11°5'01 | 12♏31 | 28°14 | 5°40 | 14°58 | 25°47 | 28°34 | 9°32 | 2°36 | 24°14 | 29°2 | 28°15 | 10°28 | 11°15 | S 4 |
| M 5 | 0 55 50 | 12°3'59 | 26°18 | 28°0 | 5°30 | 15°35 | 25°49 | 28°34 | 9°33 | 2°38 | 24°13 | 29°1 | 28°12 | 10°34 | 11°17 | M 5 |
| T 6 | 0 59 47 | 13°2'58 | 9♏38 | 27°D56 | 5°18 | 16°13 | 25°50 | 28°34 | 9°33 | 2°40 | 24°12 | 29°D 0 | 28°9 | 10°41 | 11°18 | T 6 |
| W 7 | 1 3 43 | 14°1'59 | 22°34 | 28°3 | 5°4 | 16°50 | 25°52 | 28°35 | 9°34 | 2°42 | 24°11 | 29°0 | 28°5 | 10°48 | 11°19 | W 7 |
| T 8 | 1 7 40 | 15°1'01 | 5♏8 | 28°20 | 4°47 | 17°28 | 25°53 | 28°35 | 9°34 | 2°44 | 24°11 | 29°1 | 28°2 | 10°54 | 11°20 | T 8 |
| F 9 | 1 11 36 | 16°0'06 | 17°26 | 28°48 | 4°27 | 18°5 | 25°54 | 28°36 | 9°34 | 2°47 | 24°10 | 29°2 | 27°59 | 11°1 | 11°21 | F 9 |
| S 10 | 1 15 33 | 16°59'12 | 29°31 | 29°24 | 4°6 | 18°43 | 25°55 | 28°36 | 9°35 | 2°49 | 24°9 | 29°4 | 27°56 | 11°8 | 11°22 | S 10 |
| S 11 | 1 19 29 | 17°58'20 | 11♏27 | 0♏9 | 3°42 | 19°22 | 25°56 | 28°37 | 9°35 | 2°51 | 24°9 | 29°5 | 27°53 | 11°14 | 11°23 | S 11 |
| M12 | 1 23 26 | 18°57'29 | 23°17 | 1°3 | 3°16 | 20°0 | 25°57 | 28°38 | 9°35 | 2°53 | 24°8 | 29°R 6 | 27°50 | 11°21 | 11°24 | M12 |
| T 13 | 1 27 22 | 19°56'41 | 5♎5 | 2°4 | 2°49 | 20°39 | 25°57 | 28°39 | 9°35 | 2°55 | 24°7 | 29°6 | 27°46 | 11°28 | 11°25 | T 13 |
| W14 | 1 31 19 | 20°55'54 | 16°53 | 3°12 | 2°19 | 21°17 | 25°R57 | 28°D30 | 9°35 | 2°57 | 24°7 | 29°5 | 27°43 | 11°34 | 11°25 | W14 |
| T 15 | 1 35 15 | 21°55'10 | 28°44 | 4°25 | 1°48 | 21°56 | 25°57 | 28°41 | 9°R35 | 3°0 | 24°6 | 29°3 | 27°40 | 11°41 | 11°26 | T 15 |
| F 16 | 1 39 12 | 22°54'28 | 10♏38 | 5°44 | 1°16 | 22°35 | 25°57 | 28°42 | 9°35 | 3°2 | 24°5 | 28°59 | 27°37 | 11°48 | 11°26 | F 16 |
| S 17 | 1 43 9 | 23°53'47 | 22°39 | 7°7 | 0°42 | 23°14 | 25°56 | 28°44 | 9°35 | 3°4 | 24°5 | 28°55 | 27°34 | 11°54 | 11°27 | S 17 |
| S 18 | 1 47 5 | 24°53'09 | 4♎49 | 8°35 | 0°7 | 23°54 | 25°56 | 28°45 | 9°35 | 3°6 | 24°4 | 28°51 | 27°31 | 12°1 | 11°27 | S 18 |
| M19 | 1 51 2 | 25°52'34 | 17°8 | 10°5 | 29♏31 | 24°33 | 25°55 | 28°47 | 9°35 | 3°8 | 24°4 | 28°47 | 27°27 | 12°7 | 11°27 | M19 |
| T 20 | 1 54 58 | 26°52'00 | 29°41 | 11°38 | 28°55 | 25°13 | 25°54 | 28°49 | 9°35 | 3°11 | 24°3 | 28°43 | 27°24 | 12°14 | 11°27 | T 20 |
| W21 | 1 58 55 | 27°51'29 | 12♏29 | 13°13 | 28°18 | 25°53 | 25°52 | 28°50 | 9°34 | 3°13 | 24°3 | 28°41 | 27°21 | 12°21 | 11°R27 | W21 |
| T 22 | 2 2 51 | 28°51'00 | 25°36 | 14°50 | 27°41 | 26°33 | 25°51 | 28°52 | 9°34 | 3°15 | 24°3 | 28°D40 | 27°18 | 12°27 | 11°27 | T 22 |
| F 23 | 2 6 48 | 29°50'33 | 9♏3 | 16°29 | 27°5 | 27°13 | 25°49 | 28°54 | 9°34 | 3°17 | 24°2 | 28°40 | 27°15 | 12°34 | 11°27 | F 23 |
| S 24 | 2 10 44 | 0♎50'09 | 22°53 | 18°8 | 26°29 | 27°53 | 25°47 | 28°56 | 9°33 | 3°20 | 24°2 | 28°41 | 27°11 | 12°41 | 11°27 | S 24 |
| S 25 | 2 14 41 | 1°49'47 | 7♎6 | 19°49 | 25°53 | 28°33 | 25°45 | 28°58 | 9°33 | 3°22 | 24°1 | 28°43 | 27°8 | 12°47 | 11°26 | S 25 |
| M26 | 2 18 38 | 2°49'27 | 21°41 | 21°30 | 25°18 | 29°14 | 25°43 | 29°1 | 9°32 | 3°24 | 24°1 | 28°R44 | 27°5 | 12°54 | 11°26 | M26 |
| T 27 | 2 22 34 | 3°49'09 | 6♏35 | 23°11 | 24°45 | 29°54 | 25°41 | 29°3 | 9°32 | 3°26 | 24°1 | 28°44 | 27°2 | 13°1 | 11°25 | T 27 |
| W28 | 2 26 31 | 4°48'53 | 21°40 | 24°53 | 24°12 | 0♏35 | 25°38 | 29°5 | 9°31 | 3°29 | 24°1 | 28°42 | 26°59 | 13°7 | 11°25 | W28 |
| T 29 | 2 30 27 | 5°48'40 | 6♎49 | 26°34 | 23°41 | 1°16 | 25°35 | 29°8 | 9°30 | 3°31 | 24°0 | 28°38 | 26°56 | 13°14 | 11°24 | T 29 |
| F 30 | 2 34 24 | 6°48'28 | 21°51 | 28°16 | 23°12 | 1°57 | 25°32 | 29°10 | 9°30 | 3°33 | 24°0 | 28°33 | 26°52 | 13°21 | 11°23 | F 30 |
| S 31 | 2 38 20 | 7♎48'19 | 6♏38 | 29♏57 | 22♏45 | 2♏38 | 25♎29 | 29♏13 | 9♏29 | 3♎35 | 24♏0 | 28♏27 | 26♏49 | 13♎27 | 11♏23 | S 31 |

Delta T = 273.05 sec

ASTRODIENST EPHEMERIS for the year 2285

geocentric

NOVEMBER 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|-------|-------|--------|-------|--------|-------|-------|------|--------|--------|-------|-------|--------|------|
| S 1 | 2 42 17 | 8♉48°11 | 21♊1 | 1♉38 | 22°R20 | 3♉19 | 25°R25 | 29♊16 | 9°R28 | 3♉38 | 24°R 0 | 28°R21 | 26♉46 | 13♊34 | 11°R22 | S 1 |
| M 2 | 2 46 13 | 9°48'05 | 4♊57 | 3°19 | 21♉56 | 4° 1 | 25♊22 | 29°19 | 9♊27 | 3°40 | 24♉0 | 28♉15 | 26°43 | 13°41 | 11♊21 | M 2 |
| T 3 | 2 50 10 | 10°48'01 | 18°24 | 4°59 | 21°35 | 4°42 | 25°18 | 29°22 | 9°26 | 3°42 | 23°59 | 28°11 | 26°40 | 13°47 | 11°19 | T 3 |
| W 4 | 2 54 7 | 11°47'58 | 1♉24 | 6°40 | 21°16 | 5°24 | 25°14 | 29°25 | 9°25 | 3°44 | 23°59 | 28° 9 | 26°37 | 13°54 | 11°18 | W 4 |
| T 5 | 2 58 3 | 12°47'57 | 14° 0 | 8°19 | 21° 0 | 6° 6 | 25°10 | 29°28 | 9°24 | 3°46 | 23°59 | 28°D 8 | 26°33 | 14° 1 | 11°17 | T 5 |
| F 6 | 3 2 0 | 13°47'57 | 26°16 | 9°59 | 20°46 | 6°47 | 25° 5 | 29°31 | 9°23 | 3°49 | 23°59 | 28° 9 | 26°30 | 14° 7 | 11°16 | F 6 |
| S 7 | 3 5 56 | 14°47'59 | 8♉17 | 11°38 | 20°34 | 7°29 | 25° 1 | 29°35 | 9°22 | 3°51 | 23°D59 | 28°10 | 26°27 | 14°14 | 11°14 | S 7 |
| S 8 | 3 9 53 | 15°48'03 | 20° 9 | 13°16 | 20°25 | 8°11 | 24°56 | 29°38 | 9°21 | 3°53 | 23°59 | 28°12 | 26°24 | 14°20 | 11°13 | S 8 |
| M 9 | 3 13 49 | 16°48'08 | 1♊57 | 14°54 | 20°18 | 8°53 | 24°51 | 29°42 | 9°19 | 3°55 | 23°59 | 28°R12 | 26°21 | 14°27 | 11°11 | M 9 |
| T 10 | 3 17 46 | 17°48'15 | 13°44 | 16°32 | 20°13 | 9°35 | 24°46 | 29°45 | 9°18 | 3°58 | 23°59 | 28°10 | 26°17 | 14°34 | 11°10 | T 10 |
| W11 | 3 21 42 | 18°48'23 | 25°34 | 18° 9 | 20°D12 | 10°18 | 24°41 | 29°49 | 9°17 | 4° 0 | 24° 0 | 28° 7 | 26°14 | 14°40 | 11° 8 | W11 |
| T 12 | 3 25 39 | 19°48'33 | 7♉30 | 19°46 | 20°12 | 11° 0 | 24°35 | 29°53 | 9°15 | 4° 2 | 24° 0 | 28° 1 | 26°11 | 14°47 | 11° 6 | T 12 |
| F 13 | 3 29 36 | 20°48'45 | 19°34 | 21°23 | 20°15 | 11°42 | 24°30 | 29°57 | 9°14 | 4° 4 | 24° 0 | 27°52 | 26° 8 | 14°54 | 11° 4 | F 13 |
| S 14 | 3 33 32 | 21°48'59 | 1♊47 | 22°59 | 20°20 | 12°25 | 24°24 | 0♉0 | 9°12 | 4° 6 | 24° 0 | 27°42 | 26° 5 | 15° 0 | 11° 2 | S 14 |
| S 15 | 3 37 29 | 22°49'14 | 14°11 | 24°35 | 20°28 | 13° 7 | 24°18 | 0° 4 | 9°11 | 4° 8 | 24° 0 | 27°32 | 26° 2 | 15° 7 | 11° 0 | S 15 |
| M16 | 3 41 25 | 23°49'32 | 26°45 | 26°10 | 20°38 | 13°50 | 24°12 | 0° 9 | 9° 9 | 4°10 | 24° 0 | 27°21 | 25°58 | 15°14 | 10°58 | M16 |
| T 17 | 3 45 22 | 24°49'51 | 9♊31 | 27°45 | 20°50 | 14°33 | 24° 6 | 0°13 | 9° 8 | 4°13 | 24° 1 | 27°12 | 25°55 | 15°20 | 10°56 | T 17 |
| W18 | 3 49 18 | 25°50'12 | 22°29 | 29°20 | 21° 4 | 15°15 | 24° 0 | 0°17 | 9° 6 | 4°15 | 24° 1 | 27° 5 | 25°52 | 15°27 | 10°54 | W18 |
| T 19 | 3 53 15 | 26°50'35 | 5♉40 | 0♉55 | 21°21 | 15°58 | 23°53 | 0°21 | 9° 5 | 4°17 | 24° 1 | 27° 1 | 25°49 | 15°34 | 10°51 | T 19 |
| F 20 | 3 57 12 | 27°51'00 | 19° 5 | 2°29 | 21°39 | 16°41 | 23°47 | 0°26 | 9° 3 | 4°19 | 24° 2 | 26°58 | 25°46 | 15°40 | 10°49 | F 20 |
| S 21 | 4 1 8 | 28°51'26 | 2♊47 | 4° 3 | 22° 0 | 17°24 | 23°40 | 0°30 | 9° 1 | 4°21 | 24° 2 | 26°D58 | 25°43 | 15°47 | 10°46 | S 21 |
| S 22 | 4 5 5 | 29°51'55 | 16°46 | 5°37 | 22°22 | 18° 7 | 23°33 | 0°35 | 8°59 | 4°23 | 24° 2 | 26°59 | 25°39 | 15°54 | 10°44 | S 22 |
| M23 | 4 9 1 | 0♉52'25 | 1♊2 | 7°10 | 22°46 | 18°50 | 23°26 | 0°39 | 8°57 | 4°25 | 24° 3 | 26°R59 | 25°36 | 16° 0 | 10°41 | M23 |
| T 24 | 4 12 58 | 1°52'57 | 15°34 | 8°44 | 23°12 | 19°33 | 23°19 | 0°44 | 8°56 | 4°27 | 24° 3 | 26°58 | 25°33 | 16° 7 | 10°39 | T 24 |
| W25 | 4 16 54 | 2°53'31 | 0♉18 | 10°17 | 23°40 | 20°17 | 23°12 | 0°49 | 8°54 | 4°29 | 24° 4 | 26°54 | 25°30 | 16°14 | 10°36 | W25 |
| T 26 | 4 20 51 | 3°54'07 | 15° 9 | 11°50 | 24° 9 | 21° 0 | 23° 5 | 0°54 | 8°52 | 4°31 | 24° 4 | 26°47 | 25°27 | 16°20 | 10°33 | T 26 |
| F 27 | 4 24 47 | 4°54'44 | 29°58 | 13°22 | 24°40 | 21°43 | 22°57 | 0°59 | 8°50 | 4°33 | 24° 5 | 26°38 | 25°23 | 16°27 | 10°30 | F 27 |
| S 28 | 4 28 44 | 5°55'23 | 14♊38 | 14°55 | 25°13 | 22°26 | 22°50 | 1° 4 | 8°48 | 4°35 | 24° 5 | 26°27 | 25°20 | 16°34 | 10°27 | S 28 |
| S 29 | 4 32 41 | 6°56'03 | 28°59 | 16°27 | 25°46 | 23°10 | 22°42 | 1° 9 | 8°46 | 4°37 | 24° 6 | 26°16 | 25°17 | 16°40 | 10°24 | S 29 |
| M30 | 4 36 37 | 7♊56'45 | 12♊57 | 18♊0 | 26♉22 | 23♉53 | 22♊35 | 1♉14 | 8♊44 | 4♉39 | 24♉7 | 26♉5 | 25♉14 | 16♊47 | 10♊21 | M30 |

Delta T = 273.18 sec

DECEMBER 2285

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|-------|-------|-------|-------|--------|------|-------|------|-------|--------|-------|-------|--------|------|
| T 1 | 4 40 34 | 8♊57'27 | 26♊28 | 19♊32 | 26♉58 | 24♉37 | 22°R27 | 1♉19 | 8°R41 | 4♉41 | 24♉7 | 25°R56 | 25♉11 | 16♊54 | 10°R18 | T 1 |
| W 2 | 4 44 30 | 9°58'11 | 9♉32 | 21° 4 | 27°36 | 25°20 | 22♊19 | 1°24 | 8♊39 | 4°43 | 24° 8 | 25♉50 | 25° 8 | 17° 0 | 10♊15 | W 2 |
| T 3 | 4 48 27 | 10°58'56 | 22°11 | 22°35 | 28°16 | 26° 4 | 22°11 | 1°30 | 8°37 | 4°45 | 24° 9 | 25°46 | 25° 4 | 17° 7 | 10°12 | T 3 |
| F 4 | 4 52 23 | 11°59'41 | 4♉29 | 24° 7 | 28°56 | 26°48 | 22° 3 | 1°35 | 8°35 | 4°47 | 24° 9 | 25°45 | 25° 1 | 17°13 | 10° 8 | F 4 |
| S 5 | 4 56 20 | 13° 0'28 | 16°32 | 25°38 | 29°38 | 27°31 | 21°55 | 1°40 | 8°33 | 4°49 | 24°10 | 25°D44 | 24°58 | 17°20 | 10° 5 | S 5 |
| S 6 | 5 0 16 | 14° 1'16 | 28°24 | 27° 9 | 0♉20 | 28°15 | 21°47 | 1°46 | 8°30 | 4°51 | 24°11 | 25°R44 | 24°55 | 17°27 | 10° 2 | S 6 |
| M 7 | 5 4 13 | 15° 2'04 | 10♊11 | 28°40 | 1° 4 | 28°59 | 21°39 | 1°52 | 8°28 | 4°52 | 24°12 | 25°44 | 24°52 | 17°33 | 9°58 | M 7 |
| T 8 | 5 8 10 | 16° 2'53 | 21°59 | 0♉11 | 1°49 | 29°43 | 21°31 | 1°57 | 8°26 | 4°54 | 24°12 | 25°41 | 24°49 | 17°40 | 9°55 | T 8 |
| W 9 | 5 12 6 | 17° 3'44 | 3♉53 | 1°41 | 2°35 | 0♉26 | 21°23 | 2° 3 | 8°23 | 4°56 | 24°13 | 25°36 | 24°45 | 17°47 | 9°51 | W 9 |
| T 10 | 5 16 3 | 18° 4'35 | 15°55 | 3°11 | 3°22 | 1°10 | 21°15 | 2° 9 | 8°21 | 4°58 | 24°14 | 25°27 | 24°42 | 17°53 | 9°48 | T 10 |
| F 11 | 5 19 59 | 19° 5'27 | 28° 9 | 4°40 | 4°10 | 1°54 | 21° 7 | 2°14 | 8°19 | 4°59 | 24°15 | 25°16 | 24°39 | 18° 0 | 9°44 | F 11 |
| S 12 | 5 23 56 | 20° 6'20 | 10♊36 | 6° 9 | 4°58 | 2°38 | 20°58 | 2°20 | 8°16 | 5° 1 | 24°16 | 25° 3 | 24°36 | 18° 7 | 9°40 | S 12 |
| S 13 | 5 27 52 | 21° 7'14 | 23°17 | 7°38 | 5°48 | 3°22 | 20°50 | 2°26 | 8°14 | 5° 3 | 24°17 | 24°49 | 24°33 | 18°13 | 9°37 | S 13 |
| M14 | 5 31 49 | 22° 8'09 | 6♊11 | 9° 5 | 6°38 | 4° 6 | 20°42 | 2°32 | 8°12 | 5° 5 | 24°18 | 24°35 | 24°29 | 18°20 | 9°33 | M14 |
| T 15 | 5 35 45 | 23° 9'05 | 19°18 | 10°32 | 7°29 | 4°50 | 20°34 | 2°38 | 8° 9 | 5° 6 | 24°19 | 24°23 | 24°26 | 18°27 | 9°29 | T 15 |
| W16 | 5 39 42 | 24°10'02 | 2♉36 | 11°58 | 8°21 | 5°34 | 20°26 | 2°44 | 8° 7 | 5° 8 | 24°20 | 24°13 | 24°23 | 18°33 | 9°26 | W16 |
| T 17 | 5 43 39 | 25°11'01 | 16° 3 | 13°23 | 9°14 | 6°18 | 20°18 | 2°50 | 8° 4 | 5° 9 | 24°21 | 24° 6 | 24°20 | 18°40 | 9°22 | T 17 |
| F 18 | 5 47 35 | 26°12'00 | 29°40 | 14°46 | 10° 7 | 7° 2 | 20°10 | 2°56 | 8° 2 | 5°11 | 24°22 | 24° 3 | 24°17 | 18°47 | 9°18 | F 18 |
| S 19 | 5 51 32 | 27°13'00 | 13♊26 | 16° 8 | 11° 1 | 7°46 | 20° 1 | 3° 3 | 7°59 | 5°13 | 24°23 | 24° 1 | 24°14 | 18°53 | 9°14 | S 19 |
| S 20 | 5 55 28 | 28°14'01 | 27°21 | 17°28 | 11°56 | 8°30 | 19°53 | 3° 9 | 7°57 | 5°14 | 24°24 | 24° 1 | 24°10 | 19° 0 | 9°10 | S 20 |
| M21 | 5 59 25 | 29°15'03 | 11♉26 | 18°45 | 12°52 | 9°14 | 19°45 | 3°15 | 7°54 | 5°16 | 24°25 | 24° 1 | 24° 7 | 19° 7 | 9° 6 | M21 |
| T 22 | 6 3 21 | 0♉16'06 | 25°39 | 20° 0 | 13°48 | 9°58 | 19°38 | 3°21 | 7°51 | 5°17 | 24°26 | 23°59 | 24° 4 | 19°13 | 9° 2 | T 22 |
| W23 | 6 7 18 | 1°17'10 | 9♉59 | 21°12 | 14°44 | 10°42 | 19°30 | 3°28 | 7°49 | 5°19 | 24°28 | 23°55 | 24° 1 | 19°20 | 8°58 | W23 |
| T 24 | 6 11 14 | 2°18'15 | 24°23 | 22°21 | 15°41 | 11°26 | 19°22 | 3°34 | 7°46 | 5°20 | 24°29 | 23°47 | 23°58 | 19°27 | 8°54 | T 24 |
| F 25 | 6 15 11 | 3°19'21 | 8♊46 | 23°25 | 16°39 | 12°10 | 19°14 | 3°41 | 7°44 | 5°21 | 24°30 | 23°37 | 23°55 | 19°33 | 8°50 | F 25 |
| S 26 | 6 19 8 | 4°20'28 | 23° 3 | 24°25 | 17°37 | 12°54 | 19° 7 | 3°47 | 7°41 | 5°23 | 24°31 | 23°26 | 23°51 | 19°40 | 8°47 | S 26 |
| S 27 | 6 23 4 | 5°21'35 | 7♉6 | 25°19 | 18°36 | 13°39 | 18°59 | 3°54 | 7°39 | 5°24 | 24°32 | 23°13 | 23°48 | 19°47 | 8°43 | S 27 |
| M28 | 6 27 1 | 6°22'43 | 20°52 | 26° 7 | 19°35 | 14°23 | 18°51 | 4° 0 | 7°36 | 5°25 | 24°34 | 23° 1 | 23°45 | 19°53 | 8°39 | M28 |
| T 29 | 6 30 57 | 7°23'50 | 4♉17 | 26°48 | 20°35 | 15° 7 | 18°44 | 4° 7 | 7°33 | 5°27 | 24°35 | 22°51 | 23°42 | 20° 0 | 8°35 | T 29 |
| W30 | 6 34 54 | 8°24'59 | 17°18 | 27°21 | 21°35 | 15°51 | 18°37 | 4°14 | 7°31 | 5°28 | 24°36 | 22°43 | 23°39 | 20° 7 | 8°30 | W30 |
| T 31 | 6 38 50 | 9♉26'07 | 29♉57 | 27♉45 | 22♉35 | 16♉35 | 18♊30 | 4♉20 | 7♉28 | 5♉29 | 24♉38 | 22♉38 | 23♉35 | 20♊13 | 8♊26 | T 31 |

Delta T = 273.32 sec