



Astrodienst Ephemeris Tables for the year 1884

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 1884
geocentric

JANUARY 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|
| T 1 | 6 40 15 | 10° 3' 149 | 8° 58' 28 | 5° 5' 21 | 21° 26' 1 | 1° 59' 1 | 4° 13' 28 | 28° 9' 18 | 18° 30' 29 | 29° 33' 29 | 29° 24' 28 | 28° 37' 13 | 29° 2' 29 | 13° 17' 13 | 29° 2' 29 | T 1 |
| W 2 | 6 44 12 | 11° 3' 00 | 22° 5' 29 | 6° 20' 21 | 18° 18' 1 | 1° 52' 1 | 4° 10' 28 | 28° 9' 18 | 18° 29' 29 | 29° 32' 29 | 29° 13' 28 | 28° 34' 13 | 28° 34' 13 | 28° 34' 13 | 28° 34' 13 | W 2 |
| T 3 | 6 48 8 | 12° 4' 10 | 5° 24' 1 | 18° 10' 21 | 7° 35' 21 | 1° 45' 1 | 4° 7' 28 | 28° 9' 18 | 18° 28' 29 | 29° 32' 29 | 29° 6' 28 | 28° 31' 13 | 28° 31' 13 | 28° 31' 13 | 28° 31' 13 | T 3 |
| F 4 | 6 52 5 | 13° 5' 21 | 18° 54' 2 | 2° 18' 8 | 21° 1' 1 | 1° 37' 1 | 4° 3' 28 | 28° 9' 18 | 18° 27' 29 | 29° 31' 29 | 29° 1' 28 | 28° 28' 13 | 28° 28' 13 | 28° 28' 13 | 28° 28' 13 | F 4 |
| S 5 | 6 56 1 | 14° 6' 31 | 2° 34' 3 | 10° 4' 20 | 51° 1' 30 | 4° 0' 28 | 4° 0' 28 | 28° 9' 18 | 18° 26' 29 | 29° 30' 28 | 28° 59' 28 | 28° 25' 13 | 28° 25' 13 | 28° 25' 13 | 28° 25' 13 | S 5 |
| S 6 | 6 59 58 | 15° 7' 40 | 16° 26' 4 | 11° 18' 20 | 40° 1' 23 | 3° 57' 28 | 3° 57' 28 | 28° 9' 18 | 18° 26' 29 | 29° 29' 28 | 28° 58' 28 | 28° 21' 13 | 28° 21' 13 | 28° 21' 13 | 28° 21' 13 | S 6 |
| M 7 | 7 3 54 | 16° 8' 49 | 0° 29' 5 | 12° 33' 20 | 29° 1' 15 | 3° 54' 28 | 3° 54' 28 | 28° 8' 18 | 18° 25' 29 | 29° 29' 28 | 28° 58' 28 | 28° 18' 13 | 28° 18' 13 | 28° 18' 13 | 28° 18' 13 | M 7 |
| T 8 | 7 7 51 | 17° 9' 58 | 14° 44' 5 | 13° 48' 20 | 16° 1' 7 | 3° 51' 28 | 3° 51' 28 | 28° 8' 18 | 18° 24' 29 | 29° 28' 28 | 28° 57' 28 | 28° 15' 14 | 28° 15' 14 | 28° 15' 14 | 28° 15' 14 | T 8 |
| W 9 | 7 11 48 | 18° 11' 06 | 29° 9' 6 | 28° 15' 2 | 20° 3' 1 | 3° 48' 28 | 3° 48' 28 | 28° 8' 18 | 18° 24' 29 | 29° 27' 28 | 28° 55' 28 | 28° 12' 14 | 28° 12' 14 | 28° 12' 14 | 28° 12' 14 | W 9 |
| T 10 | 7 15 44 | 19° 12' 14 | 13° 41' 6 | 16° 17' 19 | 50° 0' 52 | 3° 46' 28 | 3° 46' 28 | 28° 7' 18 | 18° 23' 29 | 29° 26' 28 | 28° 49' 28 | 28° 9' 14 | 28° 9' 14 | 28° 9' 14 | 28° 9' 14 | T 10 |
| F 11 | 7 19 41 | 20° 13' 21 | 28° 13' 7 | 17° 31' 19 | 35° 0' 44 | 3° 43' 28 | 3° 43' 28 | 28° 7' 18 | 18° 22' 29 | 29° 26' 28 | 28° 41' 28 | 28° 6' 14 | 28° 6' 14 | 28° 6' 14 | 28° 6' 14 | F 11 |
| S 12 | 7 23 37 | 21° 14' 28 | 12° 41' 7 | 18° 46' 19 | 20° 0' 36 | 3° 40' 28 | 3° 40' 28 | 28° 7' 18 | 18° 22' 29 | 29° 25' 28 | 28° 29' 28 | 28° 2' 14 | 28° 2' 14 | 28° 2' 14 | 28° 2' 14 | S 12 |
| S 13 | 7 27 34 | 22° 15' 34 | 26° 57' 7 | 20° 0' 19 | 3° 29' 3 | 3° 38' 28 | 3° 38' 28 | 28° 6' 18 | 18° 21' 29 | 29° 25' 28 | 28° 17' 27 | 27° 59' 14 | 27° 59' 14 | 27° 59' 14 | 27° 59' 14 | S 13 |
| M14 | 7 31 30 | 23° 16' 40 | 10° 55' 6 | 21° 14' 18 | 47° 0' 21 | 3° 36' 28 | 3° 36' 28 | 28° 5' 18 | 18° 21' 29 | 29° 24' 28 | 28° 4' 27 | 27° 56' 14 | 27° 56' 14 | 27° 56' 14 | 27° 56' 14 | M14 |
| T 15 | 7 35 27 | 24° 17' 46 | 24° 30' 6 | 22° 29' 18 | 29° 0' 13 | 3° 34' 28 | 3° 34' 28 | 28° 5' 18 | 18° 20' 29 | 29° 23' 27 | 27° 53' 14 | 27° 53' 14 | 27° 53' 14 | 27° 53' 14 | 27° 53' 14 | T 15 |
| W16 | 7 39 23 | 25° 18' 51 | 7° 41' 5 | 23° 43' 18 | 11° 0' 5 | 3° 31' 28 | 3° 31' 28 | 28° 4' 18 | 18° 20' 29 | 29° 23' 27 | 27° 43' 14 | 27° 50' 14 | 27° 50' 14 | 27° 50' 14 | 27° 50' 14 | W16 |
| T 17 | 7 43 20 | 26° 19' 56 | 20° 28' 4 | 24° 57' 17 | 52° 29 | 3° 29' 28 | 3° 29' 28 | 28° 3' 18 | 18° 19' 29 | 29° 22' 27 | 27° 37' 14 | 15° 4' 28 | 15° 4' 28 | 15° 4' 28 | 15° 4' 28 | T 17 |
| F 18 | 7 47 17 | 27° 21' 00 | 2° 54' 3 | 26° 11' 17 | 33° 29 | 3° 28' 28 | 3° 28' 28 | 28° 3' 18 | 18° 19' 29 | 29° 22' 27 | 27° 33' 14 | 15° 10' 28 | 15° 10' 28 | 15° 10' 28 | 15° 10' 28 | F 18 |
| S 19 | 7 51 13 | 28° 22' 04 | 15° 2' 2 | 27° 26' 17 | 13° 29 | 3° 26' 28 | 3° 26' 28 | 28° 2' 18 | 18° 19' 29 | 29° 21' 27 | 27° 31' 14 | 15° 17' 28 | 15° 17' 28 | 15° 17' 28 | 15° 17' 28 | S 19 |
| S 20 | 7 55 10 | 29° 23' 08 | 26° 57' 1 | 28° 40' 16 | 52° 29 | 3° 24' 28 | 3° 24' 28 | 28° 1' 18 | 18° 18' 29 | 29° 21' 27 | 27° 31' 14 | 15° 23' 28 | 15° 23' 28 | 15° 23' 28 | 15° 23' 28 | S 20 |
| M21 | 7 59 6 | 0° 24' 11 | 8° 46' 29 | 54° 16 | 31° 29 | 3° 22' 28 | 3° 22' 28 | 28° 0' 18 | 18° 18' 29 | 29° 20' 27 | 27° 31' 14 | 15° 30' 28 | 15° 30' 28 | 15° 30' 28 | 15° 30' 28 | M21 |
| T 22 | 8 3 3 | 1° 25' 14 | 20° 34' 28 | 43° 1° 8 | 16° 10' 29 | 3° 21' 27 | 3° 21' 27 | 27° 59' 18 | 18° 18' 29 | 29° 20' 27 | 27° 30' 14 | 15° 37' 28 | 15° 37' 28 | 15° 37' 28 | 15° 37' 28 | T 22 |
| W23 | 8 6 59 | 2° 26' 16 | 2° 27' 2 | 22° 15' 29 | 8° 29 | 3° 20' 27 | 3° 20' 27 | 27° 58' 18 | 18° 17' 29 | 29° 19' 27 | 27° 27' 14 | 15° 43' 28 | 15° 43' 28 | 15° 43' 28 | 15° 43' 28 | W23 |
| T 24 | 8 10 56 | 3° 27' 18 | 14° 26' 2 | 26° 16' 3 | 36° 15 | 25° 25' 29 | 25° 25' 29 | 0' 31 | 18° 17' 29 | 29° 19' 27 | 27° 21' 14 | 15° 50' 28 | 15° 50' 28 | 15° 50' 28 | 15° 50' 28 | T 24 |
| F 25 | 8 14 52 | 4° 28' 20 | 26° 39' 25 | 10° 45' 15 | 3° 28 | 3° 17' 27 | 3° 17' 27 | 27° 55' 18 | 18° 17' 29 | 29° 18' 27 | 27° 12' 14 | 15° 57' 28 | 15° 57' 28 | 15° 57' 28 | 15° 57' 28 | F 25 |
| S 26 | 8 18 49 | 5° 29' 20 | 9° 8' 24 | 11° 6' 4 | 14° 39' 28 | 3° 16' 27 | 3° 16' 27 | 27° 54' 18 | 18° 17' 29 | 29° 18' 27 | 27° 1' 14 | 16° 3' 28 | 16° 3' 28 | 16° 3' 28 | 16° 3' 28 | S 26 |
| S 27 | 8 22 46 | 6° 30' 20 | 21° 55' 23 | 20° 7' 18 | 14° 16' 28 | 3° 15' 27 | 3° 15' 27 | 27° 53' 18 | 18° 17' 29 | 29° 18' 27 | 26° 48' 27 | 16° 10' 14 | 16° 10' 14 | 16° 10' 14 | 16° 10' 14 | S 27 |
| M28 | 8 26 42 | 7° 31' 19 | 4° 58' 22 | 38° 8' 32 | 13° 52' 28 | 3° 14' 27 | 3° 14' 27 | 27° 52' 18 | 18° 17' 29 | 29° 17' 26 | 26° 34' 27 | 16° 17' 14 | 16° 17' 14 | 16° 17' 14 | 16° 17' 14 | M28 |
| T 29 | 8 30 39 | 8° 32' 17 | 18° 17' 22 | 4° 9' 46 | 13° 29' 28 | 3° 14' 27 | 3° 14' 27 | 27° 50' 18 | 18° 17' 29 | 29° 17' 26 | 26° 22' 27 | 16° 23' 28 | 16° 23' 28 | 16° 23' 28 | 16° 23' 28 | T 29 |
| W30 | 8 34 35 | 9° 33' 14 | 1° 50' 21 | 39° 11' 0 | 13° 5' 28 | 3° 13' 27 | 3° 13' 27 | 27° 49' 18 | 18° 17' 29 | 29° 17' 26 | 26° 10' 27 | 16° 30' 28 | 16° 30' 28 | 16° 30' 28 | 16° 30' 28 | W30 |
| T 31 | 8 38 32 | 10° 34' 10 | 15° 33' 21 | 13° 12 | 41° 28 | 3° 11' 27 | 3° 11' 27 | 27° 47' 18 | 18° 17' 29 | 29° 16' 26 | 26° 2' 27 | 16° 37' 28 | 16° 37' 28 | 16° 37' 28 | 16° 37' 28 | T 31 |

Delta T = -4.36 sec

FEBRUARY 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|----------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| F 1 | 8 42 28 | 11°35'04 | 29°23'21 | 21°R15 | 13°27'27 | 12°R17 | 27°R58 | 3°R12 | 27°R46 | 18°R17 | 29°R16 | 25°R57 | 26°59 | 16°M43 | 28°R19 | F 1 |
| S 2 | 8 46 25 | 12°35'57 | 13°Y20 | 21°D14 | 14°41 | 11°Ω53 | 27°Ω50 | 3°II12 | 27°M44 | 18°17 | 29°R16 | 25°54 | 26°56 | 16°50 | 28°R19 | S 2 |
| S 3 | 8 50 21 | 13°36'49 | 27°20 | 21°Ω22 | 15°54 | 11°29 | 27°43 | 3°12 | 27°43 | 18°17 | 29°16 | 25°D54 | 26°52 | 16°57 | 28°19 | S 3 |
| M 4 | 8 54 18 | 14°37'39 | 11°Ω23 | 21°36 | 17° 8 | 11° 5 | 27°35 | 3°D12 | 27°41 | 18°18 | 29°16 | 25°R54 | 26°49 | 17° 3 | 28°19 | M 4 |
| T 5 | 8 58 15 | 15°38'28 | 25°29 | 21°56 | 18°21 | 10°41 | 27°28 | 3°12 | 27°39 | 18°18 | 29°15 | 25°54 | 26°46 | 17°10 | 28°D19 | T 5 |
| W 6 | 9 2 11 | 16°39'16 | 9°II36 | 22°22 | 19°35 | 10°17 | 27°21 | 3°12 | 27°38 | 18°18 | 29°15 | 25°52 | 26°43 | 17°17 | 28°D19 | W 6 |
| T 7 | 9 6 8 | 17°40'02 | 23°44 | 22°54 | 20°48 | 9°54 | 27°13 | 3°13 | 27°36 | 18°18 | 29°15 | 25°47 | 26°40 | 17°23 | 28°19 | T 7 |
| F 8 | 9 10 4 | 18°40'46 | 7°Ω49 | 23°31 | 22° 1 | 9°31 | 27° 6 | 3°13 | 27°34 | 18°19 | 29°15 | 25°40 | 26°37 | 17°30 | 28°19 | F 8 |
| S 9 | 9 14 1 | 19°41'29 | 21°48 | 24°12 | 23°14 | 9° 8 | 26°59 | 3°14 | 27°32 | 18°19 | 29°15 | 25°30 | 26°33 | 17°37 | 28°19 | S 9 |
| S 10 | 9 17 57 | 20°42'10 | 5°Ω38 | 24°57 | 24°28 | 8°46 | 26°53 | 3°14 | 27°30 | 18°19 | 29°15 | 25°19 | 26°30 | 17°43 | 28°20 | S 10 |
| M11 | 9 21 54 | 21°42'50 | 19°14 | 25°46 | 25°41 | 8°24 | 26°46 | 3°15 | 27°28 | 18°20 | 29°15 | 25° 8 | 26°27 | 17°50 | 28°20 | M11 |
| T 12 | 9 25 50 | 22°43'28 | 2°M33 | 26°38 | 26°54 | 8° 2 | 26°39 | 3°16 | 27°26 | 18°20 | 29°D15 | 24°58 | 26°24 | 17°57 | 28°20 | T 12 |
| W13 | 9 29 47 | 23°44'06 | 15°33 | 27°34 | 28° 7 | 7°41 | 26°33 | 3°17 | 27°24 | 18°21 | 29°15 | 24°49 | 26°21 | 18° 3 | 28°21 | W13 |
| T 14 | 9 33 44 | 24°44'41 | 28°14 | 28°33 | 29°20 | 7°21 | 26°26 | 3°18 | 27°22 | 18°21 | 29°15 | 24°43 | 26°17 | 18°10 | 28°21 | T 14 |
| F 15 | 9 37 40 | 25°45'16 | 10°Ω37 | 29°34 | 0°Y32 | 7° 1 | 26°20 | 3°19 | 27°20 | 18°22 | 29°15 | 24°40 | 26°14 | 18°16 | 28°22 | F 15 |
| S 16 | 9 41 37 | 26°45'49 | 22°45 | 0°Ω38 | 1°45 | 6°41 | 26°14 | 3°21 | 27°18 | 18°23 | 29°15 | 24°D39 | 26°11 | 18°23 | 28°23 | S 16 |
| S 17 | 9 45 33 | 27°46'20 | 4°M42 | 1°44 | 2°58 | 6°23 | 26° 8 | 3°22 | 27°16 | 18°23 | 29°15 | 24°39 | 26° 8 | 18°30 | 28°24 | S 17 |
| M18 | 9 49 30 | 28°46'51 | 16°32 | 2°52 | 4°10 | 6° 4 | 26° 3 | 3°24 | 27°14 | 18°24 | 29°15 | 24°40 | 26° 5 | 18°36 | 28°25 | M18 |
| T 19 | 9 53 26 | 29°47'20 | 28°20 | 4° 3 | 5°23 | 5°47 | 25°57 | 3°25 | 27°12 | 18°25 | 29°15 | 24°R41 | 26° 2 | 18°43 | 28°25 | T 19 |
| W20 | 9 57 23 | 0°47'48 | 10°X13 | 5°15 | 6°35 | 5°30 | 25°51 | 3°27 | 27°10 | 18°25 | 29°15 | 24°40 | 25°58 | 18°50 | 28°26 | W20 |
| T 21 | 10 1 19 | 1°48'15 | 22°15 | 6°29 | 7°48 | 5°14 | 25°46 | 3°29 | 27° 7 | 18°26 | 29°16 | 24°38 | 25°55 | 18°56 | 28°28 | T 21 |
| F 22 | 10 5 16 | 2°48'40 | 4°Ω31 | 7°45 | 9° 0 | 4°58 | 25°41 | 3°31 | 27° 5 | 18°27 | 29°16 | 24°33 | 25°52 | 19° 3 | 28°29 | F 22 |
| S 23 | 10 9 13 | 3°49'04 | 17° 4 | 9° 2 | 10°12 | 4°43 | 25°36 | 3°33 | 27° 3 | 18°28 | 29°16 | 24°27 | 25°49 | 19°10 | 28°30 | S 23 |
| S 24 | 10 13 9 | 4°49'26 | 29°59 | 10°21 | 11°25 | 4°29 | 25°31 | 3°35 | 27° 0 | 18°29 | 29°16 | 24°19 | 25°46 | 19°16 | 28°31 | S 24 |
| M25 | 10 17 6 | 5°49'47 | 13°Ω15 | 11°41 | 12°37 | 4°16 | 25°26 | 3°38 | 26°58 | 18°30 | 29°16 | 24°10 | 25°43 | 19°23 | 28°33 | M25 |
| T 26 | 10 21 2 | 6°50'06 | 26°52 | 13° 3 | 13°49 | 4° 3 | 25°22 | 3°40 | 26°56 | 18°31 | 29°17 | 24° 1 | 25°39 | 19°30 | 28°34 | T 26 |
| W27 | 10 24 59 | 7°50'23 | 10°X47 | 14°26 | 15° 0 | 3°51 | 25°18 | 3°43 | 26°53 | 18°31 | 29°17 | 23°54 | 25°36 | 19°36 | 28°35 | W27 |
| T 28 | 10 28 55 | 8°50'39 | 24°56 | 15°51 | 16°12 | 3°40 | 25°13 | 3°45 | 26°51 | 18°33 | 29°17 | 23°49 | 25°33 | 19°43 | 28°37 | T 28 |
| F 29 | 10 32 52 | 9°X50'52 | 9°Y14 | 17°Ω16 | 17°Y24 | 3°Ω30 | 25°Ω 9 | 3°II48 | 26°M48 | 18°R34 | 29°R18 | 23°Ω46 | 25°Ω30 | 19°M50 | 28°R39 | F 29 |

ASTRODIENST EPHEMERIS for the year 1884

geocentric

MARCH 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|-----------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| S 1 | 10 36 48 | 10°51'04 | 23°36 | 18°43 | 18°36 | 3°R21 | 25°R 6 | 3°II51 | 26°R46 | 18°R35 | 29°R18 | 23°D45 | 25°D27 | 19°M56 | 28°R40 | S 1 |
| S 2 | 10 40 45 | 11°51'14 | 7°58 | 20°11 | 19°47 | 3°R12 | 25°D 2 | 3°54 | 26°M43 | 18°36 | 29°19 | 23°D46 | 25°23 | 20° 3 | 28°42 | S 2 |
| M 3 | 10 44 42 | 12°51'22 | 22°16 | 21°40 | 20°59 | 3° 4 | 24°59 | 3°57 | 26°41 | 18°37 | 29°19 | 23°47 | 25°20 | 20°10 | 28°44 | M 3 |
| T 4 | 10 48 38 | 13°51'27 | 6°II28 | 23°11 | 22°10 | 2°57 | 24°55 | 4° 0 | 26°38 | 18°38 | 29°19 | 23°48 | 25°17 | 20°16 | 28°46 | T 4 |
| W 5 | 10 52 35 | 14°51'31 | 20°32 | 24°43 | 23°21 | 2°51 | 24°52 | 4° 3 | 26°36 | 18°39 | 29°20 | 23°R48 | 25°14 | 20°23 | 28°48 | W 5 |
| T 6 | 10 56 31 | 15°51'32 | 4°D27 | 26°15 | 24°32 | 2°46 | 24°50 | 4° 6 | 26°33 | 18°40 | 29°20 | 23°47 | 25°11 | 20°30 | 28°50 | T 6 |
| F 7 | 11 0 28 | 16°51'31 | 18°12 | 27°49 | 25°43 | 2°41 | 24°47 | 4°10 | 26°31 | 18°42 | 29°21 | 23°43 | 25° 8 | 20°36 | 28°52 | F 7 |
| S 8 | 11 4 24 | 17°51'28 | 1°D47 | 29°24 | 26°54 | 2°37 | 24°44 | 4°13 | 26°28 | 18°43 | 29°21 | 23°39 | 25° 4 | 20°43 | 28°54 | S 8 |
| S 9 | 11 8 21 | 18°51'22 | 15° 9 | 1°H 1 | 28° 5 | 2°34 | 24°42 | 4°17 | 26°26 | 18°44 | 29°22 | 23°33 | 25° 1 | 20°50 | 28°56 | S 9 |
| M10 | 11 12 17 | 19°51'15 | 28°19 | 2°38 | 29°16 | 2°32 | 24°40 | 4°21 | 26°23 | 18°46 | 29°22 | 23°27 | 24°58 | 20°56 | 28°58 | M10 |
| T 11 | 11 16 14 | 20°51'05 | 11°M15 | 4°16 | 0°D26 | 2°30 | 24°38 | 4°25 | 26°20 | 18°47 | 29°23 | 23°22 | 24°55 | 21° 3 | 29° 1 | T 11 |
| W12 | 11 20 11 | 21°50'54 | 23°57 | 5°56 | 1°36 | 2°30 | 24°36 | 4°29 | 26°18 | 18°48 | 29°24 | 23°17 | 24°52 | 21°10 | 29° 3 | W12 |
| T 13 | 11 24 7 | 22°50'40 | 6°D24 | 7°37 | 2°47 | 2°D30 | 24°35 | 4°33 | 26°15 | 18°50 | 29°24 | 23°15 | 24°49 | 21°16 | 29° 6 | T 13 |
| F 14 | 11 28 4 | 23°50'25 | 18°39 | 9°19 | 3°57 | 2°30 | 24°33 | 4°37 | 26°13 | 18°51 | 29°25 | 23°D13 | 24°45 | 21°23 | 29° 8 | F 14 |
| S 15 | 11 32 0 | 24°50'07 | 0°M42 | 11° 2 | 5° 7 | 2°32 | 24°32 | 4°41 | 26°10 | 18°53 | 29°25 | 23°13 | 24°42 | 21°30 | 29°11 | S 15 |
| S 16 | 11 35 57 | 25°49'48 | 12°37 | 12°47 | 6°17 | 2°34 | 24°31 | 4°45 | 26° 7 | 18°54 | 29°26 | 23°15 | 24°39 | 21°36 | 29°13 | S 16 |
| M17 | 11 39 53 | 26°49'27 | 24°27 | 14°33 | 7°27 | 2°36 | 24°31 | 4°49 | 26° 5 | 18°56 | 29°27 | 23°16 | 24°36 | 21°43 | 29°16 | M17 |
| T 18 | 11 43 50 | 27°49'05 | 6°M16 | 16°20 | 8°36 | 2°40 | 24°30 | 4°54 | 26° 2 | 18°57 | 29°28 | 23°18 | 24°33 | 21°50 | 29°19 | T 18 |
| W19 | 11 47 46 | 28°48'40 | 18° 9 | 18° 8 | 9°46 | 2°44 | 24°30 | 4°58 | 26° 0 | 18°59 | 29°28 | 23°20 | 24°29 | 21°56 | 29°21 | W19 |
| T 20 | 11 51 43 | 29°48'14 | 0°D10 | 19°58 | 10°55 | 2°49 | 24°D30 | 5° 3 | 25°57 | 19° 0 | 29°29 | 23°R20 | 24°26 | 22° 3 | 29°24 | T 20 |
| F 21 | 11 55 39 | 0°Y47'46 | 12°25 | 21°48 | 12° 4 | 2°54 | 24°30 | 5° 8 | 25°54 | 19° 2 | 29°30 | 23°19 | 24°23 | 22° 9 | 29°27 | F 21 |
| S 22 | 11 59 36 | 1°47'16 | 24°57 | 23°40 | 13°13 | 3° 1 | 24°30 | 5°13 | 25°52 | 19° 4 | 29°31 | 23°18 | 24°20 | 22°16 | 29°30 | S 22 |
| S 23 | 12 3 33 | 2°46'45 | 7°M51 | 25°34 | 14°22 | 3° 7 | 24°30 | 5°17 | 25°49 | 19° 5 | 29°31 | 23°16 | 24°17 | 22°23 | 29°33 | S 23 |
| M24 | 12 7 29 | 3°46'12 | 21°10 | 27°28 | 15°31 | 3°15 | 24°31 | 5°22 | 25°47 | 19° 7 | 29°32 | 23°13 | 24°14 | 22°29 | 29°36 | M24 |
| T 25 | 12 11 26 | 4°45'36 | 4°H53 | 29°24 | 16°40 | 3°23 | 24°32 | 5°27 | 25°44 | 19° 9 | 29°33 | 23°10 | 24°10 | 22°36 | 29°39 | T 25 |
| W26 | 12 15 22 | 5°44'59 | 19° 0 | 1°Y21 | 17°48 | 3°31 | 24°33 | 5°33 | 25°41 | 19°10 | 29°34 | 23° 8 | 24° 7 | 22°43 | 29°42 | W26 |
| T 27 | 12 19 19 | 6°44'20 | 3°Y27 | 3°20 | 18°57 | 3°40 | 24°34 | 5°38 | 25°39 | 19°12 | 29°35 | 23° 6 | 24° 4 | 22°49 | 29°46 | T 27 |
| F 28 | 12 23 15 | 7°43'39 | 18° 8 | 5°19 | 20° 5 | 3°50 | 24°35 | 5°43 | 25°36 | 19°14 | 29°36 | 23°D 5 | 24° 1 | 22°56 | 29°49 | F 28 |
| S 29 | 12 27 12 | 8°42'56 | 2°R56 | 7°20 | 21°13 | 4° 1 | 24°37 | 5°48 | 25°34 | 19°16 | 29°37 | 23° 6 | 23°58 | 23° 3 | 29°52 | S 29 |
| S 30 | 12 31 8 | 9°42'10 | 17°45 | 9°21 | 22°21 | 4°12 | 24°38 | 5°54 | 25°31 | 19°17 | 29°37 | 23° 6 | 23°54 | 23° 9 | 29°56 | S 30 |
| M31 | 12 35 5 | 10°Y41'23 | 2°II26 | 11°Y24 | 23°R28 | 4°D23 | 24°D40 | 5°II59 | 25°M29 | 19°R19 | 29°R38 | 23°D 7 | 23°D51 | 23°M16 | 29°R59 | M31 |

Delta T = -4.38 sec

APRIL 1884

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|-----------|---------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| T 1 | 12 39 2 | 11°Y40'33 | 16°II56 | 13°Y27 | 24°R36 | 4°D35 | 24°D42 | 6°II 5 | 25°R26 | 19°R21 | 29°R39 | 23°D 8 | 23°D48 | 23°M23 | 0°II 2 | T 1 |
| W 2 | 12 42 58 | 12°39'41 | 1°D10 | 15°31 | 25°43 | 4°48 | 24°45 | 6°10 | 25°M24 | 19°23 | 29°40 | 23° 9 | 23°45 | 23°29 | 0° 6 | W 2 |
| T 3 | 12 46 55 | 13°38'46 | 15° 6 | 17°35 | 26°50 | 5° 1 | 24°47 | 6°16 | 25°21 | 19°25 | 29°41 | 23°R 9 | 23°42 | 23°36 | 0°10 | T 3 |
| F 4 | 12 50 51 | 14°37'50 | 28°44 | 19°40 | 27°57 | 5°14 | 24°50 | 6°22 | 25°19 | 19°27 | 29°42 | 23° 9 | 23°39 | 23°43 | 0°13 | F 4 |
| S 5 | 12 54 48 | 15°36'50 | 12°D 4 | 21°44 | 29° 4 | 5°28 | 24°53 | 6°28 | 25°17 | 19°29 | 29°43 | 23° 8 | 23°35 | 23°49 | 0°17 | S 5 |
| S 6 | 12 58 44 | 16°35'49 | 25° 7 | 23°49 | 0°II10 | 5°43 | 24°56 | 6°34 | 25°14 | 19°31 | 29°44 | 23° 7 | 23°32 | 23°56 | 0°20 | S 6 |
| M 7 | 13 2 41 | 17°34'45 | 7°M56 | 25°53 | 1°16 | 5°58 | 24°59 | 6°40 | 25°12 | 19°33 | 29°45 | 23° 7 | 23°29 | 24° 3 | 0°24 | M 7 |
| T 8 | 13 6 37 | 18°33'39 | 20°30 | 27°55 | 2°22 | 6°13 | 25° 2 | 6°46 | 25° 9 | 19°35 | 29°46 | 23° 6 | 23°26 | 24° 9 | 0°28 | T 8 |
| W 9 | 13 10 34 | 19°32'30 | 2°D53 | 29°57 | 3°28 | 6°29 | 25° 6 | 6°52 | 25° 7 | 19°37 | 29°47 | 23° 6 | 23°23 | 24°16 | 0°32 | W 9 |
| T 10 | 13 14 31 | 20°31'20 | 15° 5 | 1°R57 | 4°34 | 6°46 | 25°10 | 6°58 | 25° 5 | 19°39 | 29°49 | 23° 5 | 23°20 | 24°23 | 0°35 | T 10 |
| F 11 | 13 18 27 | 21°30'08 | 27° 9 | 3°56 | 5°39 | 7° 2 | 25°13 | 7° 4 | 25° 3 | 19°41 | 29°50 | 23°D 5 | 23°16 | 24°29 | 0°39 | F 11 |
| S 12 | 13 22 24 | 22°28'54 | 9°M 5 | 5°52 | 6°44 | 7°20 | 25°17 | 7°10 | 25° 0 | 19°43 | 29°51 | 23° 5 | 23°13 | 24°36 | 0°43 | S 12 |
| S 13 | 13 26 20 | 23°27'37 | 20°57 | 7°45 | 7°49 | 7°37 | 25°22 | 7°17 | 24°58 | 19°45 | 29°52 | 23°R 5 | 23°10 | 24°43 | 0°47 | S 13 |
| M14 | 13 30 17 | 24°26'19 | 2°Y46 | 9°36 | 8°54 | 7°55 | 25°26 | 7°23 | 24°56 | 19°47 | 29°53 | 23° 5 | 23° 7 | 24°49 | 0°51 | M14 |
| T 15 | 13 34 13 | 25°25'00 | 14°36 | 11°23 | 9°58 | 8°14 | 25°31 | 7°29 | 24°54 | 19°49 | 29°54 | 23° 5 | 23° 4 | 24°56 | 0°55 | T 15 |
| W16 | 13 38 10 | 26°23'38 | 26°30 | 13° 7 | 11° 2 | 8°32 | 25°35 | 7°36 | 24°52 | 19°51 | 29°55 | 23° 5 | 23° 0 | 25° 3 | 0°59 | W16 |
| T 17 | 13 42 6 | 27°22'15 | 8°D31 | 14°47 | 12° 6 | 8°52 | 25°40 | 7°42 | 24°50 | 19°53 | 29°56 | 23° 4 | 22°57 | 25° 9 | 1° 3 | T 17 |
| F 18 | 13 46 3 | 28°20'50 | 20°45 | 16°23 | 13°10 | 9°11 | 25°45 | 7°49 | 24°48 | 19°55 | 29°58 | 23° 4 | 22°54 | 25°16 | 1° 7 | F 18 |
| S 19 | 13 49 59 | 29°19'23 | 3°M14 | 17°55 | 14°13 | 9°31 | 25°51 | 7°56 | 24°46 | 19°57 | 29°59 | 23°D 4 | 22°51 | 25°23 | 1°12 | S 19 |
| S 20 | 13 53 56 | 0°R17'55 | 16° 4 | 19°23 | 15°16 | 9°51 | 25°56 | 8° 2 | 24°44 | 20° 0 | 29°59 | 23° 4 | 22°48 | 25°29 | 1°16 | S 20 |
| M21 | 13 57 53 | 1°16'25 | 29°17 | 20°46 | 16°18 | 10°12 | 26° 1 | 8° 9 | 24°42 | 20° 2 | 0°II 1 | 23° 5 | 22°45 | 25°36 | 1°20 | M21 |
| T 22 | 14 1 49 | 2°14'54 | 12°H57 | 22° 4 | 17°21 | 10°33 | 26° 7 | 8°16 | 24°40 | 20° 4 | 0° 2 | 23° 6 | 22°41 | 25°43 | 1°24 | T 22 |
| W23 | 14 5 46 | 3°13'20 | 27° 3 | 23°18 | 18°23 | 10°54 | 26°13 | 8°23 | 24°38 | 20° 6 | 0° 4 | 23° 7 | 22°38 | 25°49 | 1°28 | W23 |
| T 24 | 14 9 42 | 4°11'45 | 11°Y33 | 24°27 | 19°24 | 11°16 | 26°19 | 8°30 | 24°36 | 20° 8 | 0° 5 | 23° 7 | 22°35 | 25°56 | 1°33 | T 24 |
| F 25 | 14 13 39 | 5°10'09 | 26°24 | 25°30 | 20°26 | 11°38 | 26°25 | 8°36 | 24°34 | 20°10 | 0° 6 | 23°R 7 | 22°32 | 26° 3 | 1°37 | F 25 |
| S 26 | 14 17 35 | 6° 8'31 | 11°R28 | 26°29 | 21°27 | 12° 0 | 26°31 | 8°43 | 24°32 | 20°13 | 0° 7 | 23° 7 | 22°29 | 26° 9 | 1°41 | S 26 |
| S 27 | 14 21 32 | 7° 6'50 | 26°36 | 27°23 | 22°28 | 12°22 | 26°38 | 8°50 | 24°31 | 20°15 | 0° 9 | 23° 6 | 22°25 | 26°16 | 1°46 | S 27 |
| M28 | 14 25 28 | 8° 5'09 | 11°II40 | 28°11 | 23°28 | 12°45 | 26°44 | 8°58 | 24°29 | 20°17 | 0°10 | 23° 4 | 22°22 | 26°23 | 1°50 | M28 |
| T 29 | 14 29 25 | 9° 3'25 | 26°30 | 28°55 | 24°28 | 13° 8 | 26°51 | 9° 5 | 24°27 | 20°19 | 0°11 | 23° 2 | 22°19 | 26°29 | 1°55 | T 29 |
| W30 | 14 33 22 | 10°R 1'39 | 11°D 0 | 29°R33 | 25°II27 | 13°D32 | 26°D58 | 9°II12 | 24°M26 | 20°R21 | 0°II12 | 23°D 0 | 22°D16 | 26°M36 | 1°II59 | W30 |

Delta T = -4.39 sec

ASTRODIENST EPHEMERIS for the year 1884

geocentric

MAY 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|--------|-------|-------|-------|-------|--------|-------|------|--------|-------|-------|------|------|
| T 1 | 14 37 18 | 10♌59'51 | 25♎6 | 0♏5 | 26♏26 | 13♏56 | 27♎5 | 9♏19 | 24°R24 | 20♏24 | 0♏14 | 22°R59 | 22♏13 | 26♏43 | 2♏3 | T 1 |
| F 2 | 14 41 15 | 11°58'01 | 8♏47 | 0°32 | 27°25 | 14°19 | 27°12 | 9°26 | 24♏23 | 20°26 | 0°15 | 22°D58 | 22°10 | 26°49 | 2°8 | F 2 |
| S 3 | 14 45 11 | 12°56'09 | 22°4 | 0°54 | 28°23 | 14°44 | 27°19 | 9°33 | 24°21 | 20°28 | 0°16 | 22♏58 | 22°6 | 26°56 | 2°12 | S 3 |
| S 4 | 14 49 8 | 13°54'15 | 4♏59 | 1°11 | 29°21 | 15°8 | 27°27 | 9°41 | 24°20 | 20°30 | 0°18 | 22°59 | 22°3 | 27°3 | 2°17 | S 4 |
| M 5 | 14 53 4 | 14°52'19 | 17°35 | 1°22 | 0♏18 | 15°33 | 27°34 | 9°48 | 24°19 | 20°33 | 0°19 | 23°1 | 22°0 | 27°9 | 2°22 | M 5 |
| T 6 | 14 57 1 | 15°50'21 | 29°56 | 1°28 | 1°15 | 15°58 | 27°42 | 9°55 | 24°17 | 20°35 | 0°20 | 23°2 | 21°57 | 27°16 | 2°26 | T 6 |
| W 7 | 15 0 57 | 16°48'21 | 12♏5 | 1°R29 | 2°12 | 16°23 | 27°50 | 10°3 | 24°16 | 20°37 | 0°22 | 23°4 | 21°54 | 27°23 | 2°31 | W 7 |
| T 8 | 15 4 54 | 17°46'19 | 24°5 | 1°24 | 3°7 | 16°49 | 27°58 | 10°10 | 24°15 | 20°39 | 0°23 | 23°R4 | 21°51 | 27°29 | 2°35 | T 8 |
| F 9 | 15 8 51 | 18°44'16 | 5♏59 | 1°15 | 4°3 | 17°15 | 28°6 | 10°18 | 24°14 | 20°42 | 0°24 | 23°3 | 21°47 | 27°36 | 2°40 | F 9 |
| S 10 | 15 12 47 | 19°42'11 | 17°50 | 1°2 | 4°57 | 17°41 | 28°14 | 10°25 | 24°12 | 20°44 | 0°26 | 23°1 | 21°44 | 27°43 | 2°44 | S 10 |
| S 11 | 15 16 44 | 20°40'05 | 29°40 | 0°44 | 5°52 | 18°7 | 28°22 | 10°32 | 24°11 | 20°46 | 0°27 | 22°58 | 21°41 | 27°49 | 2°49 | S 11 |
| M12 | 15 20 40 | 21°37'57 | 11♏30 | 0°23 | 6°45 | 18°33 | 28°30 | 10°40 | 24°10 | 20°48 | 0°28 | 22°54 | 21°38 | 27°56 | 2°54 | M12 |
| T 13 | 15 24 37 | 22°35'48 | 23°23 | 29♏57 | 7°38 | 19°0 | 28°39 | 10°47 | 24°9 | 20°51 | 0°30 | 22°49 | 21°35 | 28°3 | 2°58 | T 13 |
| W14 | 15 28 33 | 23°33'38 | 5♏20 | 29°29 | 8°30 | 19°27 | 28°48 | 10°55 | 24°8 | 20°53 | 0°31 | 22°43 | 21°31 | 28°9 | 3°3 | W14 |
| T 15 | 15 32 30 | 24°31'26 | 17°26 | 28°59 | 9°22 | 19°54 | 28°56 | 11°3 | 24°7 | 20°55 | 0°32 | 22°39 | 21°28 | 28°16 | 3°8 | T 15 |
| F 16 | 15 36 26 | 25°29'13 | 29°41 | 28°26 | 10°13 | 20°21 | 29°5 | 11°10 | 24°7 | 20°57 | 0°34 | 22°35 | 21°25 | 28°23 | 3°12 | F 16 |
| S 17 | 15 40 23 | 26°26'59 | 12♏11 | 27°52 | 11°3 | 20°49 | 29°14 | 11°18 | 24°6 | 21°0 | 0°35 | 22°32 | 21°22 | 28°30 | 3°17 | S 17 |
| S 18 | 15 44 20 | 27°24'43 | 24°57 | 27°18 | 11°53 | 21°16 | 29°23 | 11°25 | 24°5 | 21°2 | 0°36 | 22°D31 | 21°19 | 28°36 | 3°22 | S 18 |
| M19 | 15 48 16 | 28°22'27 | 8♏4 | 26°43 | 12°42 | 21°44 | 29°32 | 11°33 | 24°4 | 21°4 | 0°38 | 22°32 | 21°16 | 28°43 | 3°27 | M19 |
| T 20 | 15 52 13 | 29°20'09 | 21°35 | 26°9 | 13°30 | 22°12 | 29°42 | 11°41 | 24°4 | 21°6 | 0°39 | 22°33 | 21°12 | 28°50 | 3°31 | T 20 |
| W21 | 15 56 9 | 0♏17'51 | 5°32 | 25°36 | 14°17 | 22°40 | 29°51 | 11°48 | 24°3 | 21°9 | 0°40 | 22°34 | 21°9 | 28°56 | 3°36 | W21 |
| T 22 | 16 0 6 | 1°15'31 | 19°54 | 25°4 | 15°4 | 23°9 | 0♏0 | 11°56 | 24°3 | 21°11 | 0°42 | 22°R35 | 21°6 | 29°3 | 3°41 | T 22 |
| F 23 | 16 4 2 | 2°13'11 | 4♏40 | 24°35 | 15°49 | 23°37 | 0°10 | 12°4 | 24°2 | 21°13 | 0°43 | 22°35 | 21°3 | 29°10 | 3°45 | F 23 |
| S 24 | 16 7 59 | 3°10'49 | 19°44 | 24°8 | 16°34 | 24°6 | 0°20 | 12°12 | 24°2 | 21°15 | 0°44 | 22°32 | 21°0 | 29°16 | 3°50 | S 24 |
| S 25 | 16 11 55 | 4°8'26 | 4♏58 | 23°44 | 17°18 | 24°35 | 0°30 | 12°19 | 24°1 | 21°17 | 0°46 | 22°28 | 20°57 | 29°23 | 3°55 | S 25 |
| M26 | 16 15 52 | 5°6'03 | 20°12 | 23°23 | 18°0 | 25°4 | 0°39 | 12°27 | 24°1 | 21°20 | 0°47 | 22°23 | 20°53 | 29°30 | 4°0 | M26 |
| T 27 | 16 19 49 | 6°3'38 | 5♏15 | 23°7 | 18°42 | 25°34 | 0°49 | 12°35 | 24°1 | 21°22 | 0°49 | 22°16 | 20°50 | 29°36 | 4°4 | T 27 |
| W28 | 16 23 45 | 7°1'11 | 19°58 | 22°54 | 19°23 | 26°3 | 1°0 | 12°43 | 24°1 | 21°24 | 0°50 | 22°10 | 20°47 | 29°43 | 4°9 | W28 |
| T 29 | 16 27 42 | 7°58'44 | 4♏16 | 22°45 | 20°3 | 26°33 | 1°10 | 12°50 | 24°0 | 21°26 | 0°51 | 22°4 | 20°44 | 29°50 | 4°14 | T 29 |
| F 30 | 16 31 38 | 8°56'15 | 18°5 | 22°41 | 20°41 | 27°3 | 1°20 | 12°58 | 24°0 | 21°28 | 0°53 | 22°1 | 20°41 | 29°56 | 4°19 | F 30 |
| S 31 | 16 35 35 | 9♏53'44 | 1♏25 | 22°D41 | 21♏18 | 27♏33 | 1♏30 | 13♏6 | 24♏0 | 21♏31 | 0♏54 | 21♏59 | 20♏37 | 0♏3 | 4♏23 | S 31 |

Delta T = -4.39 sec

JUNE 1884

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|-------|--------|-------|------|-------|-------|-------|------|--------|-------|------|------|------|
| S 1 | 16 39 31 | 10♏51'12 | 14♏20 | 22♏45 | 21♏54 | 28♏3 | 1♏41 | 13♏14 | 24°D0 | 21♏33 | 0♏55 | 21°D58 | 20♏34 | 0♏10 | 4♏28 | S 1 |
| M 2 | 16 43 28 | 11°48'39 | 26°52 | 22°54 | 22°29 | 28°33 | 1°51 | 13°22 | 24♏0 | 21°35 | 0°57 | 21♏59 | 20°31 | 0°16 | 4°33 | M 2 |
| T 3 | 16 47 24 | 12°46'05 | 9♏7 | 23°7 | 23°3 | 29°4 | 2°2 | 13°29 | 24°0 | 21°37 | 0°58 | 22°0 | 20°28 | 0°23 | 4°37 | T 3 |
| W 4 | 16 51 21 | 13°43'30 | 21°9 | 23°25 | 23°35 | 29°34 | 2°13 | 13°37 | 24°1 | 21°39 | 0°59 | 22°R1 | 20°25 | 0°30 | 4°42 | W 4 |
| T 5 | 16 55 18 | 14°40'53 | 3♏3 | 23°48 | 24°6 | 0♏5 | 2°23 | 13°45 | 24°1 | 21°41 | 1°1 | 22°0 | 20°22 | 0°36 | 4°47 | T 5 |
| F 6 | 16 59 14 | 15°38'16 | 14°52 | 24°14 | 24°35 | 0°36 | 2°34 | 13°53 | 24°1 | 21°43 | 1°2 | 21°58 | 20°18 | 0°43 | 4°52 | F 6 |
| S 7 | 17 3 11 | 16°35'37 | 26°41 | 24°45 | 25°2 | 1°7 | 2°45 | 14°1 | 24°1 | 21°45 | 1°3 | 21°53 | 20°15 | 0°50 | 4°56 | S 7 |
| S 8 | 17 7 7 | 17°32'58 | 8♏31 | 25°20 | 25°28 | 1°38 | 2°56 | 14°8 | 24°2 | 21°48 | 1°5 | 21°45 | 20°12 | 0°56 | 5°1 | S 8 |
| M 9 | 17 11 4 | 18°30'18 | 20°25 | 26°0 | 25°53 | 2°9 | 3°7 | 14°16 | 24°2 | 21°50 | 1°6 | 21°36 | 20°9 | 1°3 | 5°6 | M 9 |
| T 10 | 17 15 0 | 19°27'37 | 2♏24 | 26°43 | 26°16 | 2°41 | 3°18 | 14°24 | 24°3 | 21°52 | 1°7 | 21°26 | 20°6 | 1°10 | 5°10 | T 10 |
| W11 | 17 18 57 | 20°24'56 | 14°30 | 27°30 | 26°36 | 3°12 | 3°29 | 14°32 | 24°3 | 21°54 | 1°9 | 21°15 | 20°3 | 1°16 | 5°15 | W11 |
| T 12 | 17 22 53 | 21°22'14 | 26°44 | 28°21 | 26°56 | 3°44 | 3°41 | 14°39 | 24°4 | 21°56 | 1°10 | 21°5 | 19°59 | 1°23 | 5°19 | T 12 |
| F 13 | 17 26 50 | 22°19'31 | 9♏8 | 29°16 | 27°13 | 4°16 | 3°52 | 14°47 | 24°4 | 21°58 | 1°11 | 20°56 | 19°56 | 1°30 | 5°24 | F 13 |
| S 14 | 17 30 47 | 23°16'48 | 21°44 | 0♏15 | 27°28 | 4°48 | 4°3 | 14°55 | 24°5 | 22°0 | 1°12 | 20°50 | 19°53 | 1°36 | 5°29 | S 14 |
| S 15 | 17 34 43 | 24°14'04 | 4♏33 | 1°17 | 27°41 | 5°20 | 4°15 | 15°3 | 24°6 | 22°2 | 1°14 | 20°46 | 19°50 | 1°43 | 5°33 | S 15 |
| M16 | 17 38 40 | 25°11'21 | 17°39 | 2°23 | 27°53 | 5°52 | 4°27 | 15°10 | 24°7 | 22°4 | 1°15 | 20°44 | 19°47 | 1°50 | 5°38 | M16 |
| T 17 | 17 42 36 | 26°8'37 | 1°5 | 3°33 | 28°2 | 6°25 | 4°38 | 15°18 | 24°7 | 22°6 | 1°16 | 20°D44 | 19°43 | 1°56 | 5°42 | T 17 |
| W18 | 17 46 33 | 27°5'53 | 14°52 | 4°46 | 28°9 | 6°57 | 4°50 | 15°26 | 24°8 | 22°8 | 1°17 | 20°R44 | 19°40 | 2°3 | 5°47 | W18 |
| T 19 | 17 50 29 | 28°3'08 | 29°2 | 6°3 | 28°14 | 7°30 | 5°2 | 15°34 | 24°9 | 22°9 | 1°19 | 20°44 | 19°37 | 2°10 | 5°51 | T 19 |
| F 20 | 17 54 26 | 29°0'24 | 13♏34 | 7°22 | 28°16 | 8°2 | 5°13 | 15°41 | 24°10 | 22°11 | 1°20 | 20°42 | 19°34 | 2°17 | 5°56 | F 20 |
| S 21 | 17 58 22 | 29°57'39 | 28°25 | 8°46 | 28°R16 | 8°35 | 5°25 | 15°49 | 24°11 | 22°13 | 1°21 | 20°38 | 19°31 | 2°23 | 6°0 | S 21 |
| S 22 | 18 2 19 | 0♏54'54 | 13♏29 | 10°12 | 28°14 | 9°8 | 5°37 | 15°57 | 24°12 | 22°15 | 1°22 | 20°31 | 19°28 | 2°30 | 6°5 | S 22 |
| M23 | 18 6 16 | 1°52'10 | 28°36 | 11°42 | 28°10 | 9°41 | 5°49 | 16°4 | 24°14 | 22°17 | 1°24 | 20°23 | 19°24 | 2°37 | 6°9 | M23 |
| T 24 | 18 10 12 | 2°49'24 | 13♏37 | 13°16 | 28°3 | 10°14 | 6°1 | 16°12 | 24°15 | 22°19 | 1°25 | 20°12 | 19°21 | 2°43 | 6°14 | T 24 |
| W25 | 18 14 9 | 3°46'39 | 28°23 | 14°52 | 27°54 | 10°48 | 6°13 | 16°19 | 24°16 | 22°21 | 1°26 | 20°2 | 19°18 | 2°50 | 6°18 | W25 |
| T 26 | 18 18 5 | 4°43'53 | 12♏44 | 16°32 | 27°42 | 11°21 | 6°25 | 16°27 | 24°17 | 22°22 | 1°27 | 19°53 | 19°15 | 2°57 | 6°22 | T 26 |
| F 27 | 18 22 2 | 5°41'06 | 26°39 | 18°14 | 27°28 | 11°55 | 6°37 | 16°34 | 24°19 | 22°24 | 1°28 | 19°46 | 19°12 | 3°3 | 6°27 | F 27 |
| S 28 | 18 25 58 | 6°38'19 | 10♏3 | 20°0 | 27°12 | 12°28 | 6°50 | 16°42 | 24°20 | 22°26 | 1°29 | 19°41 | 19°9 | 3°10 | 6°31 | S 28 |
| S 29 | 18 29 55 | 7°35'32 | 23°1 | 21°49 | 26°53 | 13°2 | 7°2 | 16°49 | 24°21 | 22°28 | 1°31 | 19°39 | 19°5 | 3°17 | 6°35 | S 29 |
| M30 | 18 33 51 | 8♏32'44 | 5♏35 | 23♏40 | 26♏32 | 13♏36 | 7♏14 | 16♏57 | 24♏23 | 22♏29 | 1♏32 | 19°D38 | 19♏2 | 3♏23 | 6♏39 | M30 |

Delta T = -4.40 sec

ASTRODIENST EPHEMERIS for the year 1884
geocentric

JULY 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|-----------------------|----------------------|---------------------|----------------------|----------------------|--------------------|----------------------|----------------------|----------------------|--------------------|---------------------|---------------------|---------------------|--------------------|------|
| T 1 | 18 37 48 | 9 ⁵² 29'56 | 17 ⁴⁹ 17 | 25 ³⁵ II | 26 ^R 9 | 14 ¹⁰ III | 7 ²⁷ II | 17 ⁴ II | 24 ²⁵ III | 22 ³¹ III | 1 ³³ II | 19 ^R 38 | 18 ⁵⁹ II | 3 ³⁰ III | 6 ⁴⁴ II | T 1 |
| W 2 | 18 41 45 | 10 ²⁷ 08 | 29 ⁵⁰ | 27 ³² | 25 ⁴⁴ III | 14 ⁴⁴ | 7 ³⁹ | 17 ¹² | 24 ²⁶ | 22 ³³ | 1 ³⁴ | 19 ³⁸ II | 18 ⁵⁶ | 3 ³⁷ | 6 ⁴⁸ | W 2 |
| T 3 | 18 45 41 | 11 ²⁴ 19 | 11 ⁴³ III | 29 ³¹ | 25 ¹⁷ | 15 ¹⁸ | 7 ⁵¹ | 17 ¹⁹ | 24 ²⁸ | 22 ³⁴ | 1 ³⁵ | 19 ³⁶ | 18 ⁵³ | 3 ⁴³ | 6 ⁵² | T 3 |
| F 4 | 18 49 38 | 12 ²¹ 30 | 23 ³² | 1 ³² III | 24 ⁴⁷ | 15 ⁵² | 8 ⁴ | 17 ²⁶ | 24 ³⁰ | 22 ³⁶ | 1 ³⁶ | 19 ³² | 18 ⁴⁹ | 3 ⁵⁰ | 6 ⁵⁶ | F 4 |
| S 5 | 18 53 34 | 13 ¹⁸ 41 | 5 ²¹ III | 3 ³⁶ | 24 ¹⁶ | 16 ²⁷ | 8 ¹⁶ | 17 ³⁴ | 24 ³¹ | 22 ³⁷ | 1 ³⁷ | 19 ²⁶ | 18 ⁴⁶ | 3 ⁵⁷ | 7 ⁰ | S 5 |
| S 6 | 18 57 31 | 14 ¹⁵ 52 | 17 ¹⁵ | 5 ⁴¹ | 23 ⁴⁴ | 17 ¹ | 8 ²⁹ | 17 ⁴¹ | 24 ³³ | 22 ³⁹ | 1 ³⁸ | 19 ¹⁷ | 18 ⁴³ | 4 ³ | 7 ⁴ | S 6 |
| M 7 | 19 1 27 | 15 ¹³ 03 | 29 ¹⁵ | 7 ⁴⁸ | 23 ¹⁰ | 17 ³⁶ | 8 ⁴² | 17 ⁴⁸ | 24 ³⁵ | 22 ⁴⁰ | 1 ³⁹ | 19 ⁵ | 18 ⁴⁰ | 4 ¹⁰ | 7 ⁸ | M 7 |
| T 8 | 19 5 24 | 16 ¹⁰ 14 | 11 ²³ III | 9 ⁵⁵ | 22 ³⁵ | 18 ¹⁰ | 8 ⁵⁴ | 17 ⁵⁵ | 24 ³⁷ | 22 ⁴² | 1 ⁴⁰ | 18 ⁵² | 18 ³⁷ | 4 ¹⁷ | 7 ¹² | T 8 |
| W 9 | 19 9 21 | 17 ⁷ 26 | 23 ⁴¹ | 12 ⁴ | 21 ⁵⁹ | 18 ⁴⁵ | 9 ⁷ | 18 ³ | 24 ³⁹ | 22 ⁴³ | 1 ⁴¹ | 18 ³⁹ | 18 ³⁴ | 4 ²⁴ | 7 ¹⁶ | W 9 |
| T 10 | 19 13 17 | 18 ⁴ 37 | 6 ⁹ III | 14 ¹³ | 21 ²² | 19 ²⁰ | 9 ²⁰ | 18 ¹⁰ | 24 ⁴¹ | 22 ⁴⁵ | 1 ⁴² | 18 ²⁶ | 18 ³⁰ | 4 ³⁰ | 7 ²⁰ | T 10 |
| F 11 | 19 17 14 | 19 ¹ 49 | 18 ⁴⁷ | 16 ²² | 20 ⁴⁵ | 19 ⁵⁵ | 9 ³² | 18 ¹⁷ | 24 ⁴³ | 22 ⁴⁶ | 1 ⁴³ | 18 ¹⁵ | 18 ²⁷ | 4 ³⁷ | 7 ²⁴ | F 11 |
| S 12 | 19 21 10 | 19 ⁵⁹ 01 | 1 ³⁷ III | 18 ³¹ | 20 ⁸ | 20 ³⁰ | 9 ⁴⁵ | 18 ²⁴ | 24 ⁴⁵ | 22 ⁴⁸ | 1 ⁴⁴ | 18 ⁷ | 18 ²⁴ | 4 ⁴⁴ | 7 ²⁸ | S 12 |
| S 13 | 19 25 7 | 20 ⁵⁶ 14 | 14 ³⁸ | 20 ⁴⁰ | 19 ³⁰ | 21 ⁵ | 9 ⁵⁸ | 18 ³¹ | 24 ⁴⁷ | 22 ⁴⁹ | 1 ⁴⁵ | 18 ¹ | 18 ²¹ | 4 ⁵⁰ | 7 ³² | S 13 |
| M14 | 19 29 3 | 21 ⁵³ 27 | 27 ⁵² | 22 ⁴⁹ | 18 ⁵³ | 21 ⁴⁰ | 10 ¹¹ | 18 ³⁸ | 24 ⁴⁹ | 22 ⁵¹ | 1 ⁴⁶ | 17 ⁵⁸ | 18 ¹⁸ | 4 ⁵⁷ | 7 ³⁶ | M14 |
| T 15 | 19 33 0 | 22 ⁵⁰ 41 | 11 ²⁰ III | 24 ⁵⁷ | 18 ¹⁶ | 22 ¹⁶ | 10 ²⁴ | 18 ⁴⁵ | 24 ⁵¹ | 22 ⁵² | 1 ⁴⁷ | 17 ⁵⁷ | 18 ¹⁵ | 5 ⁴ | 7 ³⁹ | T 15 |
| W16 | 19 36 56 | 23 ⁴⁷ 55 | 25 ⁴ | 27 ³ | 17 ⁴⁰ | 22 ⁵¹ | 10 ³⁶ | 18 ⁵² | 24 ⁵³ | 22 ⁵³ | 1 ⁴⁸ | 17 ⁵⁷ | 18 ¹¹ | 5 ¹⁰ | 7 ⁴³ | W16 |
| T 17 | 19 40 53 | 24 ⁴⁵ 10 | 9 ⁵ III | 29 ⁹ | 17 ⁵ | 23 ²⁶ | 10 ⁴⁹ | 18 ⁵⁹ | 24 ⁵⁶ | 22 ⁵⁴ | 1 ⁴⁹ | 17 ⁵⁷ | 18 ⁸ | 5 ¹⁷ | 7 ⁴⁷ | T 17 |
| F 18 | 19 44 49 | 25 ⁴² 26 | 23 ²² | 1 ¹³ III | 16 ³⁰ | 24 ² | 11 ² | 19 ⁵ | 24 ⁵⁸ | 22 ⁵⁶ | 1 ⁵⁰ | 17 ⁵⁵ | 18 ⁵ | 5 ²⁴ | 7 ⁵⁰ | F 18 |
| S 19 | 19 48 46 | 26 ³⁹ 43 | 7 ⁵⁵ III | 3 ¹⁶ | 15 ⁵⁸ | 24 ³⁸ | 11 ¹⁵ | 19 ¹² | 25 ⁰ | 22 ⁵⁷ | 1 ⁵¹ | 17 ⁵¹ | 18 ² | 5 ³⁰ | 7 ⁵⁴ | S 19 |
| S 20 | 19 52 43 | 27 ³⁷ 01 | 22 ³⁹ | 5 ¹⁸ | 15 ²⁶ | 25 ¹⁴ | 11 ²⁸ | 19 ¹⁹ | 25 ³ | 22 ⁵⁸ | 1 ⁵¹ | 17 ⁴⁴ | 17 ⁵⁹ | 5 ³⁷ | 7 ⁵⁷ | S 20 |
| M21 | 19 56 39 | 28 ³⁴ 20 | 7 ²⁷ III | 7 ¹⁸ | 14 ⁵⁷ | 25 ⁴⁹ | 11 ⁴¹ | 19 ²⁶ | 25 ⁵ | 22 ⁵⁹ | 1 ⁵² | 17 ³⁴ | 17 ⁵⁵ | 5 ⁴⁴ | 8 ¹ | M21 |
| T 22 | 20 0 36 | 29 ³¹ 39 | 22 ¹¹ | 9 ¹⁶ | 14 ²⁹ | 26 ²⁵ | 11 ⁵⁴ | 19 ³² | 25 ⁸ | 23 ⁰ | 1 ⁵³ | 17 ²⁴ | 17 ⁵² | 5 ⁵⁰ | 8 ⁴ | T 22 |
| W23 | 20 4 32 | 0 ²⁸ 59 | 6 ⁴⁴ III | 11 ¹³ | 14 ³ | 27 ¹ | 12 ⁷ | 19 ³⁹ | 25 ¹⁰ | 23 ² | 1 ⁵⁴ | 17 ¹³ | 17 ⁴⁹ | 5 ⁵⁷ | 8 ⁸ | W23 |
| T 24 | 20 8 29 | 1 ²⁶ 19 | 20 ⁵⁸ | 13 ⁸ | 13 ³⁹ | 27 ³⁸ | 12 ²⁰ | 19 ⁴⁵ | 25 ¹³ | 23 ³ | 1 ⁵⁵ | 17 ³ | 17 ⁴⁶ | 6 ⁴ | 8 ¹¹ | T 24 |
| F 25 | 20 12 25 | 2 ²³ 40 | 4 ⁴⁸ III | 15 ¹ | 13 ¹⁸ | 28 ¹⁴ | 12 ³³ | 19 ⁵² | 25 ¹⁵ | 23 ⁴ | 1 ⁵⁵ | 16 ⁵⁵ | 17 ⁴³ | 6 ¹¹ | 8 ¹⁴ | F 25 |
| S 26 | 20 16 22 | 3 ²¹ 01 | 18 ¹² | 16 ⁵³ | 12 ⁵⁸ | 28 ⁵⁰ | 12 ⁴⁷ | 19 ⁵⁸ | 25 ¹⁸ | 23 ⁵ | 1 ⁵⁶ | 16 ⁴⁹ | 17 ⁴⁰ | 6 ¹⁷ | 8 ¹⁸ | S 26 |
| S 27 | 20 20 19 | 4 ¹⁸ 23 | 1 ¹¹ III | 18 ⁴³ | 12 ⁴¹ | 29 ²⁷ | 13 ⁰ | 20 ⁵ | 25 ²¹ | 23 ⁶ | 1 ⁵⁷ | 16 ⁴⁶ | 17 ³⁶ | 6 ²⁴ | 8 ²¹ | S 27 |
| M28 | 20 24 15 | 5 ¹⁵ 46 | 13 ⁴⁶ | 20 ³¹ | 12 ²⁶ | 0 ³ III | 13 ¹³ | 20 ¹¹ | 25 ²⁴ | 23 ⁷ | 1 ⁵⁸ | 16 ^D 46 | 17 ³³ | 6 ³¹ | 8 ²⁴ | M28 |
| T 29 | 20 28 12 | 6 ¹³ 09 | 26 ³ | 22 ¹⁸ | 12 ¹⁴ | 0 ⁴⁰ | 13 ²⁶ | 20 ¹⁷ | 25 ²⁶ | 23 ⁸ | 1 ⁵⁸ | 16 ⁴⁶ | 17 ³⁰ | 6 ³⁷ | 8 ²⁷ | T 29 |
| W30 | 20 32 8 | 7 ¹⁰ 33 | 8 ¹¹ III | 24 ³ | 12 ⁴ | 1 ¹⁶ | 13 ³⁹ | 20 ²³ | 25 ²⁹ | 23 ⁹ | 1 ⁵⁹ | 16 ^R 46 | 17 ²⁷ | 6 ⁴⁴ | 8 ³⁰ | W30 |
| T 31 | 20 36 5 | 8 ¹ 57 | 19 ⁵⁹ III | 25 ⁴⁶ | 11 ⁵⁶ | 1 ⁵³ III | 13 ⁵² | 20 ²⁹ III | 25 ³² III | 23 ⁹ III | 2 ^{II} 0 | 16 ⁴⁵ II | 17 ²⁴ II | 6 ⁵¹ III | 8 ³³ II | T 31 |

Delta T = -4.40 sec

AUGUST 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|-------|--------|-------|-------|-------|-------|--------|------|--------|-------|-------|------|------|
| F 1 | 20 40 1 | 9♌ 5'22 | 1♌49 | 27♌28 | 11°R51 | 2♌30 | 14♌ 5 | 20♌35 | 25♌35 | 23♌10 | 2♌ 0 | 16°R43 | 17♌20 | 6♌57 | 8♌36 | F 1 |
| S 2 | 20 43 58 | 10° 2'47 | 13°40 | 29° 8 | 11♌48 | 3° 7 | 14°18 | 20°41 | 25°38 | 23°11 | 2° 1 | 16♌38 | 17°17 | 7° 4 | 8°39 | S 2 |
| S 3 | 20 47 54 | 11° 0'14 | 25°38 | 0♌46 | 11°D47 | 3°44 | 14°32 | 20°47 | 25°41 | 23°12 | 2° 1 | 16°31 | 17°14 | 7°11 | 8°42 | S 3 |
| M 4 | 20 51 51 | 11°57'41 | 7♌44 | 2°23 | 11°49 | 4°21 | 14°45 | 20°53 | 25°44 | 23°13 | 2° 2 | 16°22 | 17°11 | 7°17 | 8°45 | M 4 |
| T 5 | 20 55 48 | 12°55'09 | 20° 2 | 3°58 | 11°53 | 4°58 | 14°58 | 20°59 | 25°47 | 23°13 | 2° 3 | 16°11 | 17° 8 | 7°24 | 8°47 | T 5 |
| W 6 | 20 59 44 | 13°52'38 | 2♌32 | 5°31 | 11°59 | 5°35 | 15°11 | 21° 5 | 25°50 | 23°14 | 2° 3 | 16° 0 | 17° 5 | 7°31 | 8°50 | W 6 |
| T 7 | 21 3 41 | 14°50'08 | 15°17 | 7° 3 | 12° 7 | 6°12 | 15°24 | 21°11 | 25°53 | 23°15 | 2° 4 | 15°49 | 17° 1 | 7°38 | 8°53 | T 7 |
| F 8 | 21 7 37 | 15°47'39 | 28°14 | 8°33 | 12°18 | 6°50 | 15°38 | 21°16 | 25°56 | 23°15 | 2° 4 | 15°40 | 16°58 | 7°44 | 8°55 | F 8 |
| S 9 | 21 11 34 | 16°45'11 | 11♌23 | 10° 2 | 12°30 | 7°27 | 15°51 | 21°22 | 25°59 | 23°16 | 2° 5 | 15°34 | 16°55 | 7°51 | 8°58 | S 9 |
| S 10 | 21 15 30 | 17°42'45 | 24°44 | 11°29 | 12°45 | 8° 5 | 16° 4 | 21°27 | 26° 2 | 23°16 | 2° 5 | 15°29 | 16°52 | 7°58 | 9° 0 | S 10 |
| M11 | 21 19 27 | 18°40'19 | 8♌16 | 12°54 | 13° 1 | 8°42 | 16°17 | 21°33 | 26° 5 | 23°17 | 2° 5 | 15°27 | 16°49 | 8° 4 | 9° 2 | M11 |
| T 12 | 21 23 23 | 19°37'56 | 21°58 | 14°17 | 13°20 | 9°20 | 16°30 | 21°38 | 26° 8 | 23°17 | 2° 6 | 15°D27 | 16°46 | 8°11 | 9° 5 | T 12 |
| W13 | 21 27 20 | 20°35'33 | 5♌49 | 15°39 | 13°40 | 9°58 | 16°43 | 21°43 | 26°12 | 23°18 | 2° 6 | 15°28 | 16°42 | 8°18 | 9° 7 | W13 |
| T 14 | 21 31 16 | 21°33'13 | 19°50 | 16°59 | 14° 2 | 10°36 | 16°57 | 21°48 | 26°15 | 23°18 | 2° 7 | 15°R29 | 16°39 | 8°24 | 9° 9 | T 14 |
| F 15 | 21 35 13 | 22°30'54 | 4♌ 0 | 18°17 | 14°26 | 11°14 | 17°10 | 21°54 | 26°18 | 23°19 | 2° 7 | 15°28 | 16°36 | 8°31 | 9°12 | F 15 |
| S 16 | 21 39 10 | 23°28'36 | 18°18 | 19°33 | 14°52 | 11°52 | 17°23 | 21°59 | 26°21 | 23°19 | 2° 7 | 15°26 | 16°33 | 8°38 | 9°14 | S 16 |
| S 17 | 21 43 6 | 24°26'21 | 2♌40 | 20°47 | 15°19 | 12°30 | 17°36 | 22° 4 | 26°25 | 23°19 | 2° 8 | 15°21 | 16°30 | 8°44 | 9°16 | S 17 |
| M18 | 21 47 3 | 25°24'07 | 17° 3 | 22° 0 | 15°48 | 13° 8 | 17°49 | 22° 8 | 26°28 | 23°20 | 2° 8 | 15°15 | 16°26 | 8°51 | 9°18 | M18 |
| T 19 | 21 50 59 | 26°21'54 | 1♌22 | 23°10 | 16°18 | 13°46 | 18° 2 | 22°13 | 26°31 | 23°20 | 2° 8 | 15° 7 | 16°23 | 8°58 | 9°20 | T 19 |
| W20 | 21 54 56 | 27°19'43 | 15°31 | 24°18 | 16°49 | 14°25 | 18°15 | 22°18 | 26°35 | 23°20 | 2° 9 | 15° 0 | 16°20 | 9° 5 | 9°21 | W20 |
| T 21 | 21 58 52 | 28°17'33 | 29°25 | 25°24 | 17°22 | 15° 3 | 18°28 | 22°23 | 26°38 | 23°20 | 2° 9 | 14°53 | 16°17 | 9°11 | 9°23 | T 21 |
| F 22 | 22 2 49 | 29°15'25 | 13♌ 0 | 26°27 | 17°57 | 15°42 | 18°41 | 22°27 | 26°42 | 23°21 | 2° 9 | 14°47 | 16°14 | 9°18 | 9°25 | F 22 |
| S 23 | 22 6 45 | 0♌13'18 | 26°15 | 27°28 | 18°32 | 16°20 | 18°54 | 22°32 | 26°45 | 23°21 | 2° 9 | 14°44 | 16°11 | 9°25 | 9°27 | S 23 |
| S 24 | 22 10 42 | 1°11'13 | 9♌ 8 | 28°27 | 19° 9 | 16°59 | 19° 8 | 22°36 | 26°49 | 23°21 | 2° 9 | 14°D42 | 16° 7 | 9°31 | 9°28 | S 24 |
| M25 | 22 14 39 | 2° 9'09 | 21°41 | 29°23 | 19°47 | 17°38 | 19°21 | 22°40 | 26°52 | 23°21 | 2°10 | 14°42 | 16° 4 | 9°38 | 9°30 | M25 |
| T 26 | 22 18 35 | 3° 7'06 | 3♌57 | 0♌15 | 20°26 | 18°16 | 19°34 | 22°45 | 26°56 | 23°R21 | 2°10 | 14°43 | 16° 1 | 9°45 | 9°31 | T 26 |
| W27 | 22 22 32 | 4° 5'05 | 16° 1 | 1° 5 | 21° 6 | 18°55 | 19°46 | 22°49 | 26°59 | 23°21 | 2°10 | 14°45 | 15°58 | 9°51 | 9°33 | W27 |
| T 28 | 22 26 28 | 5° 3'05 | 27°56 | 1°52 | 21°48 | 19°34 | 19°59 | 22°53 | 27° 3 | 23°21 | 2°10 | 14°46 | 15°55 | 9°58 | 9°34 | T 28 |
| F 29 | 22 30 25 | 6° 1'06 | 9♌47 | 2°34 | 22°30 | 20°13 | 20°12 | 22°57 | 27° 6 | 23°21 | 2°10 | 14°R46 | 15°52 | 10° 5 | 9°35 | F 29 |
| S 30 | 22 34 21 | 6°59'09 | 21°40 | 3°14 | 23°13 | 20°52 | 20°25 | 23° 1 | 27°10 | 23°21 | 2°10 | 14°45 | 15°48 | 10°11 | 9°36 | S 30 |
| S 31 | 22 38 18 | 7♌57'13 | 3♌39 | 3♌49 | 23°58 | 21♌32 | 20♌38 | 23♌ 5 | 27♌14 | 23♌21 | 2♌10 | 14♌42 | 15♌45 | 10♌18 | 9♌38 | S 31 |

ASTRODIENST EPHEMERIS for the year 1884

geocentric

SEPTEMBER 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|------------------------|-----------------------|------|
| M 1 | 22 42 14 | 8 ^h 55'19" | 15 ^h 34'49" | 4 ^h 20'20" | 24 ^h 56'43" | 22 ^h 21'11" | 20 ^h 52'51" | 23 ^h 11'08" | 27 ^h 17'17" | 23 ^h 20'20" | 2 ^h 10'10" | 14 ^h 03'38" | 15 ^h 42'42" | 10 ^h 27'25" | 9 ^h 11'39" | M 1 |
| T 2 | 22 46 11 | 9 ^h 53'26" | 28 ^h 01'13" | 4 ^h 47'25" | 25 ^h 29'22" | 22 ^h 50'21" | 21 ^h 04'23" | 23 ^h 12'27" | 27 ^h 21'23" | 23 ^h 20'20" | 2 ^h 10'10" | 14 ^h 03'38" | 15 ^h 39'10" | 10 ^h 32'32" | 9 ^h 40'40" | T 2 |
| W 3 | 22 50 08 | 10 ^h 51'34" | 10 ^h 53'53" | 5 ^h 09'26" | 26 ^h 16'23" | 23 ^h 30'21" | 21 ^h 17'23" | 23 ^h 15'27" | 27 ^h 25'23" | 23 ^h 20'20" | 2 ^h 10'10" | 14 ^h 27'15" | 15 ^h 36'10" | 10 ^h 38'38" | 9 ^h 41'41" | W 3 |
| T 4 | 22 54 04 | 11 ^h 49'44" | 23 ^h 05'51" | 5 ^h 25'27" | 27 ^h 04'24" | 24 ^h 09'21" | 21 ^h 29'23" | 23 ^h 19'27" | 27 ^h 28'23" | 23 ^h 20'20" | 2 ^h 10'10" | 14 ^h 21'15" | 15 ^h 32'10" | 10 ^h 45'45" | 9 ^h 41'41" | T 4 |
| F 5 | 22 58 01 | 12 ^h 47'56" | 7 ^h 37'07" | 5 ^h 37'27" | 27 ^h 52'24" | 24 ^h 49'21" | 21 ^h 42'23" | 23 ^h 22'27" | 27 ^h 32'23" | 23 ^h 19'20" | 2 ^h 10'10" | 14 ^h 17'15" | 15 ^h 29'10" | 10 ^h 52'42" | 9 ^h 42'42" | F 5 |
| S 6 | 23 01 57 | 13 ^h 46'09" | 20 ^h 38'50" | 5 ^h 42'28" | 28 ^h 42'25" | 25 ^h 28'21" | 21 ^h 55'23" | 23 ^h 25'27" | 27 ^h 36'23" | 23 ^h 19'20" | 2 ^h 10'10" | 14 ^h 13'15" | 15 ^h 26'10" | 10 ^h 58'43" | 9 ^h 43'43" | S 6 |
| S 7 | 23 05 54 | 14 ^h 44'25" | 4 ^h 47'24" | 5 ^h 42'29" | 29 ^h 32'26" | 26 ^h 08'22" | 22 ^h 07'23" | 23 ^h 28'27" | 27 ^h 39'23" | 23 ^h 19'20" | 2 ^h 10'10" | 14 ^h 12'15" | 15 ^h 23'11" | 11 ^h 05'09" | 9 ^h 44'44" | S 7 |
| M 8 | 23 09 50 | 15 ^h 42'42" | 18 ^h 21'50" | 5 ^h 36'00" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 15 ^h 20'11" | 11 ^h 12'09" | 9 ^h 44'44" | M 8 |
| T 9 | 23 13 47 | 16 ^h 41'01" | 2 ^h 26'52" | 5 ^h 23'11" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 15 ^h 17'11" | 11 ^h 18'09" | 9 ^h 45'45" | T 9 |
| W 10 | 23 17 43 | 17 ^h 39'22" | 16 ^h 37'50" | 5 ^h 03'20" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 15 ^h 13'11" | 11 ^h 25'09" | 9 ^h 45'45" | W 10 |
| T 11 | 23 21 40 | 18 ^h 37'45" | 0 ^h 11'49" | 4 ^h 37'29" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 15 ^h 10'11" | 11 ^h 32'09" | 9 ^h 45'45" | T 11 |
| F 12 | 23 25 37 | 19 ^h 36'11" | 15 ^h 03'40" | 4 ^h 04'35" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 15 ^h 07'11" | 11 ^h 39'09" | 9 ^h 46'46" | F 12 |
| S 13 | 23 29 33 | 20 ^h 34'39" | 29 ^h 14'30" | 3 ^h 24'47" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 15 ^h 04'11" | 11 ^h 45'09" | 9 ^h 46'46" | S 13 |
| S 14 | 23 33 30 | 21 ^h 33'09" | 13 ^h 52'21" | 2 ^h 39'14" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 15 ^h 01'11" | 11 ^h 52'09" | 9 ^h 46'46" | S 14 |
| M 15 | 23 37 26 | 22 ^h 31'41" | 27 ^h 22'10" | 1 ^h 47'6" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 57'11" | 11 ^h 59'09" | 9 ^h 46'46" | M 15 |
| T 16 | 23 41 23 | 23 ^h 30'15" | 11 ^h 14'00" | 0 ^h 51'7" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 54'12" | 12 ^h 05'09" | 9 ^h 46'46" | T 16 |
| W 17 | 23 45 19 | 24 ^h 28'51" | 24 ^h 55'29" | 29 ^h 22'26" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 51'12" | 12 ^h 12'09" | 9 ^h 46'46" | W 17 |
| T 18 | 23 49 16 | 25 ^h 27'30" | 8 ^h 22'48" | 29 ^h 22'26" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 48'12" | 12 ^h 19'09" | 9 ^h 46'46" | T 18 |
| F 19 | 23 53 12 | 26 ^h 26'10" | 21 ^h 36'27" | 29 ^h 22'26" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 45'12" | 12 ^h 25'09" | 9 ^h 46'46" | F 19 |
| S 20 | 23 57 09 | 27 ^h 24'53" | 4 ^h 23'40" | 26 ^h 39'11" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 42'12" | 12 ^h 32'09" | 9 ^h 46'46" | S 20 |
| S 21 | 0 01 05 | 28 ^h 23'37" | 17 ^h 15'25" | 25 ^h 36'12" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 38'12" | 12 ^h 39'09" | 9 ^h 45'45" | S 21 |
| M 22 | 0 05 02 | 29 ^h 22'23" | 29 ^h 41'24" | 24 ^h 37'13" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 35'12" | 12 ^h 46'09" | 9 ^h 45'45" | M 22 |
| T 23 | 0 08 59 | 0 ^h 21'11" | 11 ^h 14'53" | 23 ^h 42'14" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 32'12" | 12 ^h 52'09" | 9 ^h 44'44" | T 23 |
| W 24 | 0 12 55 | 1 ^h 20'01" | 23 ^h 55'22" | 22 ^h 54'15" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 29'12" | 12 ^h 59'09" | 9 ^h 44'44" | W 24 |
| T 25 | 0 16 52 | 2 ^h 18'53" | 5 ^h 24'49" | 22 ^h 13'16" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 26'13" | 13 ^h 06'09" | 9 ^h 43'43" | T 25 |
| F 26 | 0 20 48 | 3 ^h 17'46" | 17 ^h 41'21" | 21 ^h 41'17" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 23'13" | 13 ^h 12'09" | 9 ^h 42'42" | F 26 |
| S 27 | 0 24 45 | 4 ^h 16'42" | 29 ^h 33'21" | 18 ^h 18'18" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 19'13" | 13 ^h 19'09" | 9 ^h 42'42" | S 27 |
| S 28 | 0 28 41 | 5 ^h 15'39" | 11 ^h 32'21" | 21 ^h 05'19" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 16'13" | 13 ^h 26'09" | 9 ^h 41'41" | S 28 |
| M 29 | 0 32 38 | 6 ^h 14'38" | 23 ^h 41'21" | 21 ^h 03'20" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 13'13" | 13 ^h 32'09" | 9 ^h 40'40" | M 29 |
| T 30 | 0 36 34 | 7 ^h 13'38" | 6 ^h 55'21" | 21 ^h 01'21" | 29 ^h 22'26" | 26 ^h 48'22" | 22 ^h 20'23" | 23 ^h 31'27" | 27 ^h 43'23" | 23 ^h 18'20" | 2 ^h 09'14" | 14 ^h 01'15" | 14 ^h 10'13" | 13 ^h 39'09" | 9 ^h 41'41" | T 30 |

Delta T = -4.41 sec

OCTOBER 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day | |
|------|---------|----------|--------|-------|-------|-------|-------|--------|-------|-------|-------|--------|--------|-------|-------|-------|-----|
| W 1 | 0 40 31 | 8♌12'41 | 18♋48 | 21♏29 | 22♏25 | 12♌23 | 26♌56 | 24♏13 | 29♏10 | 23♏1 | 2°R 1 | 2°R 1 | 14°R 4 | 14♌7 | 13♌46 | 9°R38 | W 1 |
| T 2 | 0 44 28 | 9♏11'45 | 1♌52 | 21♏57 | 23°28 | 13°4 | 27°8 | 24°13 | 29°14 | 23♏0 | 2♏0 | 14♌4 | 14°3 | 13°53 | 9♏37 | T 2 | |
| F 3 | 0 48 24 | 10♏10'51 | 15°19 | 22°34 | 24°31 | 13°46 | 27°19 | 24°14 | 29°17 | 22°59 | 2°0 | 14°3 | 14°0 | 13°59 | 9°36 | F 3 | |
| S 4 | 0 52 21 | 11°9'58 | 29°7 | 23°20 | 25°34 | 14°27 | 27°30 | 24°14 | 29°21 | 22°57 | 1°59 | 14°3 | 13°57 | 14°6 | 9°34 | S 4 | |
| S 5 | 0 56 17 | 12°9'08 | 13♏16 | 24°14 | 26°38 | 15°9 | 27°41 | 24°14 | 29°25 | 22°56 | 1°58 | 14°D 3 | 13°54 | 14°13 | 9°33 | S 5 | |
| M 6 | 1 0 14 | 13°8'20 | 27°39 | 25°16 | 27°41 | 15°51 | 27°52 | 24°R14 | 29°29 | 22°55 | 1°58 | 14°3 | 13°51 | 14°19 | 9°32 | M 6 | |
| T 7 | 1 4 10 | 14°7'34 | 12♌12 | 26°24 | 28°46 | 16°33 | 28°3 | 24°14 | 29°32 | 22°54 | 1°57 | 14°R 3 | 13°48 | 14°26 | 9°30 | T 7 | |
| W 8 | 1 8 7 | 15°6'51 | 26°50 | 27°39 | 29°50 | 17°15 | 28°14 | 24°14 | 29°36 | 22°53 | 1°56 | 14°3 | 13°44 | 14°33 | 9°29 | W 8 | |
| T 9 | 1 12 3 | 16°6'09 | 11♏25 | 28°58 | 0♏55 | 17°57 | 28°25 | 24°14 | 29°40 | 22°51 | 1°55 | 14°3 | 13°41 | 14°39 | 9°27 | T 9 | |
| F 10 | 1 16 0 | 17°5'30 | 25°53 | 0♌22 | 2°0 | 18°39 | 28°35 | 24°13 | 29°43 | 22°50 | 1°55 | 14°2 | 13°38 | 14°46 | 9°26 | F 10 | |
| S 11 | 1 19 57 | 18°4'53 | 10♌510 | 1°49 | 3°5 | 19°21 | 28°46 | 24°13 | 29°47 | 22°49 | 1°54 | 14°2 | 13°35 | 14°53 | 9°24 | S 11 | |
| S 12 | 1 23 53 | 19°4'19 | 24°13 | 3°20 | 4°11 | 20°3 | 28°56 | 24°12 | 29°51 | 22°47 | 1°53 | 14°D 2 | 13°32 | 15°0 | 9°22 | S 12 | |
| M13 | 1 27 50 | 20°3'47 | 8♌1 | 4°54 | 5°17 | 20°45 | 29°7 | 24°12 | 29°54 | 22°46 | 1°52 | 14°2 | 13°29 | 15°6 | 9°20 | M13 | |
| T 14 | 1 31 46 | 21°3'17 | 21°34 | 6°29 | 6°23 | 21°28 | 29°17 | 24°11 | 29°58 | 22°45 | 1°51 | 14°3 | 13°25 | 15°13 | 9°18 | T 14 | |
| W15 | 1 35 43 | 22°2'50 | 4♏51 | 8°7 | 7°29 | 22°10 | 29°27 | 24°10 | 0♌1 | 22°43 | 1°51 | 14°4 | 13°22 | 15°20 | 9°17 | W15 | |
| T 16 | 1 39 39 | 23°2'24 | 17°54 | 9°46 | 8°36 | 22°52 | 29°38 | 24°9 | 0°5 | 22°42 | 1°50 | 14°4 | 13°19 | 15°26 | 9°14 | T 16 | |
| F 17 | 1 43 36 | 24°2'01 | 0♌44 | 11°26 | 9°43 | 23°35 | 29°48 | 24°8 | 0°9 | 22°40 | 1°49 | 14°5 | 13°16 | 15°33 | 9°12 | F 17 | |
| S 18 | 1 47 32 | 25°1'40 | 13°21 | 13°6 | 10°50 | 24°18 | 29°58 | 24°6 | 0°12 | 22°39 | 1°48 | 14°R 5 | 13°13 | 15°40 | 9°10 | S 18 | |
| S 19 | 1 51 29 | 26°1'21 | 25°47 | 14°48 | 11°57 | 25°0 | 0♏7 | 24°5 | 0°16 | 22°37 | 1°47 | 14°5 | 13°9 | 15°47 | 9°8 | S 19 | |
| M20 | 1 55 25 | 27°1'05 | 8♌1 | 16°29 | 13°5 | 25°43 | 0°17 | 24°4 | 0°19 | 22°36 | 1°46 | 14°4 | 13°6 | 15°53 | 9°6 | M20 | |
| T 21 | 1 59 22 | 28°0'50 | 20°7 | 18°11 | 14°12 | 26°26 | 0°27 | 24°2 | 0°23 | 22°35 | 1°45 | 14°3 | 13°3 | 16°0 | 9°4 | T 21 | |
| W22 | 2 3 19 | 29°0'37 | 2♌5 | 19°53 | 15°20 | 27°9 | 0°36 | 24°0 | 0°26 | 22°33 | 1°45 | 14°0 | 13°0 | 16°7 | 9°1 | W22 | |
| T 23 | 2 7 15 | 0♏0'26 | 13°58 | 21°34 | 16°28 | 27°52 | 0°46 | 23°59 | 0°29 | 22°31 | 1°44 | 13°58 | 12°57 | 16°13 | 8°59 | T 23 | |
| F 24 | 2 11 12 | 1°0'16 | 25°48 | 23°16 | 17°37 | 28°35 | 0°55 | 23°57 | 0°33 | 22°30 | 1°43 | 13°55 | 12°54 | 16°20 | 8°56 | F 24 | |
| S 25 | 2 15 8 | 2°0'09 | 7♌40 | 24°57 | 18°45 | 29°18 | 1°4 | 23°55 | 0°36 | 22°28 | 1°42 | 13°53 | 12°50 | 16°27 | 8°54 | S 25 | |
| S 26 | 2 19 5 | 3°0'03 | 19°36 | 26°38 | 19°54 | 0♌1 | 1°13 | 23°53 | 0°40 | 22°27 | 1°41 | 13°52 | 12°47 | 16°33 | 8°51 | S 26 | |
| M27 | 2 23 1 | 3°59'58 | 1♌42 | 28°19 | 21°2 | 0°44 | 1°22 | 23°50 | 0°43 | 22°25 | 1°40 | 13°D51 | 12°44 | 16°40 | 8°49 | M27 | |
| T 28 | 2 26 58 | 4°59'56 | 14°2 | 29°59 | 22°11 | 1°27 | 1°31 | 23°48 | 0°46 | 22°24 | 1°39 | 13°51 | 12°41 | 16°47 | 8°46 | T 28 | |
| W29 | 2 30 54 | 5°59'55 | 26°41 | 1♏39 | 23°21 | 2°11 | 1°40 | 23°46 | 0°50 | 22°22 | 1°38 | 13°52 | 12°38 | 16°54 | 8°43 | W29 | |
| T 30 | 2 34 51 | 6°59'55 | 9♌42 | 3°19 | 24°30 | 2°54 | 1°49 | 23°43 | 0°53 | 22°20 | 1°37 | 13°54 | 12°34 | 17°0 | 8°40 | T 30 | |
| F 31 | 2 38 48 | 7♏59'58 | 23♌8 | 4♏58 | 25♏39 | 3♌38 | 1♏57 | 23♏40 | 0♌56 | 22♏19 | 1♏36 | 13♏55 | 12♏31 | 17♌7 | 8♏38 | F 31 | |

ASTRODIENST EPHEMERIS for the year 1884

geocentric

NOVEMBER 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|--------|-------|-------|-------|------|--------|------|--------|-------|--------|-------|-------|-------|------|
| S 1 | 2 42 44 | 9♈ 0'01 | 7♏ 1 | 6♊36 | 26♐49 | 4♌21 | 2♈ 6 | 23°R38 | 0♈59 | 22°R17 | 1°R35 | 13°R56 | 12♈28 | 17♌14 | 8°R35 | S 1 |
| S 2 | 2 46 41 | 10° 0'07 | 21°20 | 8°15 | 27°59 | 5° 5 | 2°14 | 23II35 | 1° 2 | 22♌16 | 1II34 | 13♈56 | 12°25 | 17°20 | 8II32 | S 2 |
| M 3 | 2 50 37 | 11° 0'14 | 6♌ 1 | 9°52 | 29° 9 | 5°48 | 2°22 | 23°32 | 1° 6 | 22°14 | 1°33 | 13°55 | 12°22 | 17°27 | 8°29 | M 3 |
| T 4 | 2 54 34 | 12° 0'23 | 20°58 | 11°30 | 0♈19 | 6°32 | 2°30 | 23°29 | 1° 9 | 22°12 | 1°32 | 13°52 | 12°19 | 17°34 | 8°26 | T 4 |
| W 5 | 2 58 30 | 13° 0'34 | 6II 2 | 13° 7 | 1°29 | 7°16 | 2°38 | 23°26 | 1°12 | 22°11 | 1°31 | 13°48 | 12°15 | 17°41 | 8°23 | W 5 |
| T 6 | 3 2 27 | 14° 0'47 | 21° 4 | 14°43 | 2°40 | 8° 0 | 2°46 | 23°23 | 1°15 | 22° 9 | 1°29 | 13°44 | 12°12 | 17°47 | 8°20 | T 6 |
| F 7 | 3 6 23 | 15° 1'02 | 5♌55 | 16°20 | 3°50 | 8°44 | 2°53 | 23°20 | 1°18 | 22° 7 | 1°28 | 13°40 | 12° 9 | 17°54 | 8°17 | F 7 |
| S 8 | 3 10 20 | 16° 1'19 | 20°28 | 17°56 | 5° 1 | 9°28 | 3° 1 | 23°16 | 1°21 | 22° 6 | 1°27 | 13°36 | 12° 6 | 18° 1 | 8°14 | S 8 |
| S 9 | 3 14 17 | 17° 1'38 | 4♏39 | 19°31 | 6°12 | 10°12 | 3° 8 | 23°13 | 1°24 | 22° 4 | 1°26 | 13°34 | 12° 3 | 18° 7 | 8°11 | S 9 |
| M10 | 3 18 13 | 18° 1'59 | 18°27 | 21° 6 | 7°23 | 10°56 | 3°15 | 23° 9 | 1°27 | 22° 2 | 1°25 | 13°D33 | 12° 0 | 18°14 | 8° 7 | M10 |
| T 11 | 3 22 10 | 19° 2'22 | 1II52 | 22°41 | 8°34 | 11°40 | 3°22 | 23° 6 | 1°29 | 22° 0 | 1°24 | 13°34 | 11°56 | 18°21 | 8° 4 | T 11 |
| W12 | 3 26 6 | 20° 2'46 | 14°56 | 24°16 | 9°45 | 12°24 | 3°29 | 23° 2 | 1°32 | 21°59 | 1°23 | 13°36 | 11°53 | 18°28 | 8° 1 | W12 |
| T 13 | 3 30 3 | 21° 3'13 | 27°42 | 25°50 | 10°56 | 13° 8 | 3°36 | 22°58 | 1°35 | 21°57 | 1°22 | 13°37 | 11°50 | 18°34 | 7°58 | T 13 |
| F 14 | 3 33 59 | 22° 3'41 | 10♈13 | 27°24 | 12° 8 | 13°53 | 3°43 | 22°55 | 1°38 | 21°55 | 1°21 | 13°R38 | 11°47 | 18°41 | 7°54 | F 14 |
| S 15 | 3 37 56 | 23° 4'12 | 22°33 | 28°58 | 13°19 | 14°37 | 3°49 | 22°51 | 1°41 | 21°54 | 1°20 | 13°38 | 11°44 | 18°48 | 7°51 | S 15 |
| S 16 | 3 41 52 | 24° 4'44 | 4♊43 | 0♌31 | 14°31 | 15°21 | 3°56 | 22°47 | 1°43 | 21°52 | 1°18 | 13°36 | 11°40 | 18°54 | 7°48 | S 16 |
| M17 | 3 45 49 | 25° 5'17 | 16°47 | 2° 5 | 15°43 | 16° 6 | 4° 2 | 22°43 | 1°46 | 21°50 | 1°17 | 13°31 | 11°37 | 19° 1 | 7°44 | M17 |
| T 18 | 3 49 46 | 26° 5'52 | 28°44 | 3°38 | 16°54 | 16°51 | 4° 8 | 22°39 | 1°48 | 21°49 | 1°16 | 13°25 | 11°34 | 19° 8 | 7°41 | T 18 |
| W19 | 3 53 42 | 27° 6'29 | 10♌38 | 5°11 | 18° 6 | 17°35 | 4°14 | 22°34 | 1°51 | 21°47 | 1°15 | 13°17 | 11°31 | 19°15 | 7°37 | W19 |
| T 20 | 3 57 39 | 28° 7'07 | 22°30 | 6°43 | 19°18 | 18°20 | 4°20 | 22°30 | 1°54 | 21°45 | 1°14 | 13° 8 | 11°28 | 19°21 | 7°34 | T 20 |
| F 21 | 4 1 35 | 29° 7'47 | 4♌21 | 8°16 | 20°31 | 19° 5 | 4°25 | 22°26 | 1°56 | 21°44 | 1°13 | 12°58 | 11°25 | 19°28 | 7°30 | F 21 |
| S 22 | 4 5 32 | 0♌ 8'28 | 16°13 | 9°48 | 21°43 | 19°49 | 4°30 | 22°22 | 1°58 | 21°42 | 1°12 | 12°50 | 11°21 | 19°35 | 7°27 | S 22 |
| S 23 | 4 9 28 | 1° 9'10 | 28°10 | 11°20 | 22°55 | 20°34 | 4°36 | 22°17 | 2° 1 | 21°40 | 1°11 | 12°43 | 11°18 | 19°41 | 7°24 | S 23 |
| M24 | 4 13 25 | 2° 9'53 | 10♈14 | 12°52 | 24° 7 | 21°19 | 4°41 | 22°13 | 2° 3 | 21°39 | 1° 9 | 12°38 | 11°15 | 19°48 | 7°20 | M24 |
| T 25 | 4 17 21 | 3°10'37 | 22°30 | 14°24 | 25°20 | 22° 4 | 4°46 | 22° 8 | 2° 6 | 21°37 | 1° 8 | 12°35 | 11°12 | 19°55 | 7°17 | T 25 |
| W26 | 4 21 18 | 4°11'22 | 5♌ 2 | 15°56 | 26°33 | 22°49 | 4°50 | 22° 4 | 2° 8 | 21°35 | 1° 7 | 12°D35 | 11° 9 | 20° 2 | 7°13 | W26 |
| T 27 | 4 25 15 | 5°12'08 | 17°55 | 17°27 | 27°45 | 23°34 | 4°55 | 21°59 | 2°10 | 21°34 | 1° 6 | 12°35 | 11° 6 | 20° 8 | 7°10 | T 27 |
| F 28 | 4 29 11 | 6°12'55 | 1°Y12 | 18°59 | 28°58 | 24°19 | 4°59 | 21°54 | 2°12 | 21°32 | 1° 5 | 12°36 | 11° 2 | 20°15 | 7° 6 | F 28 |
| S 29 | 4 33 8 | 7°13'43 | 14°58 | 20°30 | 0♊11 | 25° 5 | 5° 4 | 21°50 | 2°14 | 21°30 | 1° 4 | 12°R37 | 10°59 | 20°22 | 7° 3 | S 29 |
| S 30 | 4 37 4 | 8♌14'32 | 29°Y12 | 22♌ 0 | 1♊24 | 25♌50 | 5♈ 8 | 21II45 | 2♈16 | 21♌29 | 1II 3 | 12♈36 | 10♈56 | 20♌28 | 6II59 | S 30 |

Delta T = -4.41 sec

DECEMBER 1884

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|--------|--------|-------|-------|-------|--------|------|--------|-------|--------|-------|-------|-------|------|
| M 1 | 4 41 1 | 9♌15'22 | 13♌54 | 23♌31 | 2♊37 | 26♌35 | 5♈12 | 21°R40 | 2♈18 | 21°R27 | 1°R 2 | 12°R32 | 10♈53 | 20♌35 | 6°R52 | M 1 |
| T 2 | 4 44 57 | 10°16'13 | 28°59 | 25° 1 | 3°50 | 27°20 | 5°15 | 21II35 | 2°20 | 21♌26 | 1II 0 | 12♈26 | 10°50 | 20°42 | 6II55 | T 2 |
| W 3 | 4 48 54 | 11°17'05 | 14II16 | 26°31 | 5° 3 | 28° 6 | 5°19 | 21°31 | 2°22 | 21°24 | 0°59 | 12°18 | 10°46 | 20°49 | 6°48 | W 3 |
| T 4 | 4 52 50 | 12°17'58 | 29°37 | 28° 0 | 6°16 | 28°51 | 5°22 | 21°26 | 2°24 | 21°22 | 0°58 | 12° 9 | 10°43 | 20°55 | 6°45 | T 4 |
| F 5 | 4 56 47 | 13°18'52 | 14♌48 | 29°29 | 7°29 | 29°37 | 5°25 | 21°21 | 2°26 | 21°21 | 0°57 | 11°59 | 10°40 | 21° 2 | 6°41 | F 5 |
| S 6 | 5 0 44 | 14°19'47 | 29°41 | 0♌57 | 8°42 | 0♌22 | 5°28 | 21°16 | 2°28 | 21°19 | 0°56 | 11°51 | 10°37 | 21° 9 | 6°38 | S 6 |
| S 7 | 5 4 40 | 15°20'44 | 14♏ 7 | 2°24 | 9°56 | 1° 8 | 5°31 | 21°11 | 2°29 | 21°18 | 0°55 | 11°45 | 10°34 | 21°15 | 6°35 | S 7 |
| M 8 | 5 8 37 | 16°21'42 | 28° 5 | 3°51 | 11° 9 | 1°53 | 5°34 | 21° 6 | 2°31 | 21°16 | 0°54 | 11°41 | 10°31 | 21°22 | 6°31 | M 8 |
| T 9 | 5 12 33 | 17°22'40 | 11II34 | 5°17 | 12°23 | 2°39 | 5°36 | 21° 1 | 2°33 | 21°15 | 0°53 | 11°39 | 10°27 | 21°29 | 6°28 | T 9 |
| W10 | 5 16 30 | 18°23'40 | 24°36 | 6°41 | 13°36 | 3°25 | 5°39 | 20°56 | 2°34 | 21°13 | 0°52 | 11°D39 | 10°24 | 21°36 | 6°24 | W10 |
| T 11 | 5 20 26 | 19°24'41 | 7♈16 | 8° 4 | 14°50 | 4°11 | 5°41 | 20°51 | 2°36 | 21°12 | 0°51 | 11°R40 | 10°21 | 21°42 | 6°21 | T 11 |
| F 12 | 5 24 23 | 20°25'44 | 19°39 | 9°26 | 16° 3 | 4°56 | 5°43 | 20°47 | 2°37 | 21°10 | 0°50 | 11°39 | 10°18 | 21°49 | 6°17 | F 12 |
| S 13 | 5 28 19 | 21°26'47 | 1♊49 | 10°45 | 17°17 | 5°42 | 5°44 | 20°42 | 2°39 | 21° 9 | 0°48 | 11°37 | 10°15 | 21°56 | 6°14 | S 13 |
| S 14 | 5 32 16 | 22°27'51 | 13°49 | 12° 2 | 18°31 | 6°28 | 5°46 | 20°37 | 2°40 | 21° 8 | 0°47 | 11°33 | 10°12 | 22° 2 | 6°11 | S 14 |
| M15 | 5 36 13 | 23°28'56 | 25°44 | 13°17 | 19°44 | 7°14 | 5°47 | 20°32 | 2°41 | 21° 6 | 0°46 | 11°25 | 10° 8 | 22° 9 | 6° 7 | M15 |
| T 16 | 5 40 9 | 24°30'01 | 7♌36 | 14°29 | 20°58 | 8° 0 | 5°48 | 20°27 | 2°43 | 21° 5 | 0°45 | 11°15 | 10° 5 | 22°16 | 6° 4 | T 16 |
| W17 | 5 44 6 | 25°31'08 | 19°28 | 15°37 | 22°12 | 8°46 | 5°49 | 20°22 | 2°44 | 21° 4 | 0°44 | 11° 2 | 10° 2 | 22°23 | 6° 1 | W17 |
| T 18 | 5 48 2 | 26°32'15 | 1♌20 | 16°41 | 23°26 | 9°32 | 5°50 | 20°17 | 2°45 | 21° 2 | 0°43 | 10°47 | 9°59 | 22°29 | 5°57 | T 18 |
| F 19 | 5 51 59 | 27°33'23 | 13°13 | 17°40 | 24°40 | 10°19 | 5°50 | 20°12 | 2°46 | 21° 1 | 0°42 | 10°33 | 9°56 | 22°36 | 5°54 | F 19 |
| S 20 | 5 55 55 | 28°34'31 | 25°10 | 18°33 | 25°54 | 11° 5 | 5°51 | 20° 7 | 2°47 | 21° 0 | 0°41 | 10°19 | 9°52 | 22°43 | 5°51 | S 20 |
| S 21 | 5 59 52 | 29°35'39 | 7♈12 | 19°21 | 27° 8 | 11°51 | 5°R51 | 20° 2 | 2°48 | 20°58 | 0°40 | 10° 7 | 9°49 | 22°49 | 5°48 | S 21 |
| M22 | 6 3 48 | 0♌36'47 | 19°21 | 20° 1 | 28°22 | 12°37 | 5°51 | 19°57 | 2°49 | 20°57 | 0°39 | 9°58 | 9°46 | 22°56 | 5°45 | M22 |
| T 23 | 6 7 45 | 1°37'56 | 1♌39 | 20°34 | 29°36 | 13°24 | 5°51 | 19°53 | 2°50 | 20°56 | 0°38 | 9°52 | 9°43 | 23° 3 | 5°42 | T 23 |
| W24 | 6 11 42 | 2°39'05 | 14°10 | 20°57 | 0♌50 | 14°10 | 5°50 | 19°48 | 2°51 | 20°55 | 0°37 | 9°48 | 9°40 | 23°10 | 5°39 | W24 |
| T 25 | 6 15 38 | 3°40'14 | 26°58 | 21°11 | 2° 4 | 14°56 | 5°49 | 19°43 | 2°51 | 20°54 | 0°37 | 9°47 | 9°37 | 23°16 | 5°36 | T 25 |
| F 26 | 6 19 35 | 4°41'22 | 10°Y 7 | 21°R14 | 3°19 | 15°43 | 5°49 | 19°38 | 2°52 | 20°52 | 0°36 | 9°47 | 9°33 | 23°23 | 5°33 | F 26 |
| S 27 | 6 23 31 | 5°42'31 | 23°41 | 21° 6 | 4°33 | 16°29 | 5°48 | 19°34 | 2°53 | 20°51 | 0°35 | 9°47 | 9°30 | 23°30 | 5°30 | S 27 |
| S 28 | 6 27 28 | 6°43'40 | 7♈42 | 20°46 | 5°47 | 17°16 | 5°46 | 19°29 | 2°53 | 20°50 | 0°34 | 9°45 | 9°27 | 23°36 | 5°27 | S 28 |
| M29 | 6 31 24 | 7°44'48 | 22°10 | 20°14 | 7° 1 | 18° 2 | 5°45 | 19°25 | 2°54 | 20°49 | 0°33 | 9°40 | 9°24 | 23°43 | 5°24 | M29 |
| T 30 | 6 35 21 | 8°45'57 | 7II 3 | 19°30 | 8°16 | 18°49 | 5°43 | 19°20 | 2°54 | 20°48 | 0°32 | 9°33 | 9°21 | 23°50 | 5°21 | T 30 |
| W31 | 6 39 17 | 9♌47'05 | 22II14 | 18♌36 | 9♌30 | 19♌35 | 5♈42 | 19II16 | 2♈55 | 20♌47 | 0II31 | 9♈23 | 9♈18 | 23♌57 | 5II19 | W31 |

Delta T = -4.41 sec