



# Astrodienst Ephemeris Tables for the year 1853

tropical geocentric zodiac

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

Programming  
Dieter Koch and Alois Treindl  
based on Swiss Ephemeris  
Code D5EPX

ASTRODIENST EPHEMERIS for the year 1853  
geocentric

JANUARY 1853

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♂     | ♀     | ♂     | ♂     | ♂      | ♂     | ♂     | ♂      | ♂      | ♂     | ♂     | ♂    | Day  |
|------|---------|----------|-------|-------|-------|-------|-------|--------|-------|-------|--------|--------|-------|-------|------|------|
| S 1  | 6 42 14 | 10♌33'49 | 16♍2  | 20♊38 | 8♋16  | 16♌41 | 11♊52 | 11°R 9 | 4°R32 | 9♋12  | 29°R50 | 28°R41 | 28♏10 | 12♏8  | 6♌7  | S 1  |
| S 2  | 6 46 10 | 11°34'58 | 29°47 | 20°50 | 9°31  | 17°27 | 12° 5 | 11♌8   | 4♌32  | 9°14  | 29°Y50 | 28♏40  | 28° 6 | 12°15 | 6°13 | S 2  |
| M 3  | 6 50 7  | 12°36'08 | 13♌44 | 21°10 | 10°45 | 18°14 | 12°17 | 11° 7  | 4°31  | 9°15  | 29°50  | 28°D40 | 28° 3 | 12°21 | 6°19 | M 3  |
| T 4  | 6 54 3  | 13°37'18 | 27°53 | 21°37 | 11°59 | 19° 0 | 12°30 | 11° 6  | 4°31  | 9°16  | 29°50  | 28°40  | 28° 0 | 12°28 | 6°26 | T 4  |
| W 5  | 6 58 0  | 14°38'29 | 12♏12 | 22°10 | 13°13 | 19°47 | 12°42 | 11° 5  | 4°30  | 9°18  | 29°50  | 28°41  | 27°57 | 12°35 | 6°32 | W 5  |
| T 6  | 7 1 57  | 15°39'39 | 26°38 | 22°49 | 14°27 | 20°34 | 12°55 | 11° 4  | 4°30  | 9°19  | 29°49  | 28°42  | 27°54 | 12°41 | 6°38 | T 6  |
| F 7  | 7 5 53  | 16°40'50 | 11♊8  | 23°34 | 15°41 | 21°20 | 13° 7 | 11° 3  | 4°30  | 9°21  | 29°49  | 28°43  | 27°50 | 12°48 | 6°44 | F 7  |
| S 8  | 7 9 50  | 17°42'00 | 25°37 | 24°23 | 16°56 | 22° 7 | 13°19 | 11° 3  | 4°29  | 9°22  | 29°49  | 28°R44 | 27°47 | 12°55 | 6°50 | S 8  |
| S 9  | 7 13 46 | 18°43'11 | 9♌59  | 25°16 | 18°10 | 22°54 | 13°32 | 11° 2  | 4°29  | 9°24  | 29°49  | 28°44  | 27°44 | 13° 1 | 6°56 | S 9  |
| M10  | 7 17 43 | 19°44'21 | 24° 9 | 26°12 | 19°24 | 23°40 | 13°44 | 11° 2  | 4°29  | 9°26  | 29°49  | 28°42  | 27°41 | 13° 8 | 7° 2 | M10  |
| T 11 | 7 21 39 | 20°45'31 | 8♋3   | 27°12 | 20°39 | 24°27 | 13°56 | 11° 2  | 4°29  | 9°27  | 29°49  | 28°40  | 27°38 | 13°15 | 7° 9 | T 11 |
| W12  | 7 25 36 | 21°46'40 | 21°37 | 28°15 | 21°53 | 25°14 | 14° 8 | 11°D 2 | 4°D29 | 9°29  | 29°49  | 28°36  | 27°35 | 13°21 | 7°15 | W12  |
| T 13 | 7 29 32 | 22°47'49 | 4♋49  | 29°21 | 23° 7 | 26° 1 | 14°20 | 11° 2  | 4°29  | 9°31  | 29°D49 | 28°32  | 27°31 | 13°28 | 7°21 | T 13 |
| F 14 | 7 33 29 | 23°48'56 | 17°39 | 0♌29  | 24°22 | 26°48 | 14°32 | 11° 2  | 4°29  | 9°32  | 29°49  | 28°29  | 27°28 | 13°35 | 7°27 | F 14 |
| S 15 | 7 37 26 | 24°50'04 | 0♏9   | 1°39  | 25°36 | 27°34 | 14°44 | 11° 2  | 4°29  | 9°34  | 29°49  | 28°25  | 27°25 | 13°41 | 7°33 | S 15 |
| S 16 | 7 41 22 | 25°51'10 | 12°22 | 2°51  | 26°50 | 28°21 | 14°55 | 11° 3  | 4°29  | 9°36  | 29°49  | 28°23  | 27°22 | 13°48 | 7°39 | S 16 |
| M17  | 7 45 19 | 26°52'15 | 24°23 | 4° 5  | 28° 5 | 29° 8 | 15° 7 | 11° 3  | 4°29  | 9°38  | 29°49  | 28°D22 | 27°19 | 13°55 | 7°45 | M17  |
| T 18 | 7 49 15 | 27°53'20 | 6♌15  | 5°21  | 29°19 | 29°55 | 15°19 | 11° 4  | 4°30  | 9°39  | 29°49  | 28°23  | 27°16 | 14° 2 | 7°51 | T 18 |
| W19  | 7 53 12 | 28°54'24 | 18° 5 | 6°38  | 0♌34  | 0♋42  | 15°30 | 11° 4  | 4°30  | 9°41  | 29°49  | 28°24  | 27°12 | 14° 8 | 7°56 | W19  |
| T 20 | 7 57 8  | 29°55'27 | 29°57 | 7°56  | 1°48  | 1°29  | 15°42 | 11° 5  | 4°30  | 9°43  | 29°49  | 28°26  | 27° 9 | 14°15 | 8° 2 | T 20 |
| F 21 | 8 1 5   | 0♋56'28  | 11♏55 | 9°16  | 3° 3  | 2°16  | 15°53 | 11° 6  | 4°31  | 9°45  | 29°49  | 28°28  | 27° 6 | 14°22 | 8° 8 | F 21 |
| S 22 | 8 5 1   | 1°57'29  | 24° 5 | 10°37 | 4°17  | 3° 3  | 16° 4 | 11° 7  | 4°31  | 9°47  | 29°50  | 28°R29 | 27° 3 | 14°28 | 8°14 | S 22 |
| S 23 | 8 8 58  | 2°58'30  | 6♌29  | 11°59 | 5°31  | 3°50  | 16°16 | 11° 8  | 4°32  | 9°49  | 29°50  | 28°28  | 27° 0 | 14°35 | 8°20 | S 23 |
| M24  | 8 12 55 | 3°59'29  | 19° 9 | 13°22 | 6°46  | 4°38  | 16°27 | 11°10  | 4°32  | 9°51  | 29°50  | 28°26  | 26°56 | 14°42 | 8°26 | M24  |
| T 25 | 8 16 51 | 5° 0'27  | 2♏7   | 14°46 | 8° 0  | 5°25  | 16°38 | 11°11  | 4°33  | 9°53  | 29°50  | 28°23  | 26°53 | 14°48 | 8°31 | T 25 |
| W26  | 8 20 48 | 6° 1'24  | 15°23 | 16°11 | 9°15  | 6°12  | 16°49 | 11°12  | 4°34  | 9°55  | 29°51  | 28°17  | 26°50 | 14°55 | 8°37 | W26  |
| T 27 | 8 24 44 | 7° 2'20  | 28°54 | 17°37 | 10°29 | 6°59  | 17° 0 | 11°14  | 4°34  | 9°56  | 29°51  | 28°11  | 26°47 | 15° 2 | 8°43 | T 27 |
| F 28 | 8 28 41 | 8° 3'15  | 12♏39 | 19° 4 | 11°44 | 7°46  | 17°10 | 11°16  | 4°35  | 9°58  | 29°51  | 28° 4  | 26°44 | 15° 8 | 8°48 | F 28 |
| S 29 | 8 32 37 | 9° 4'10  | 26°34 | 20°31 | 12°59 | 8°33  | 17°21 | 11°17  | 4°36  | 10° 0 | 29°52  | 27°58  | 26°41 | 15°15 | 8°54 | S 29 |
| S 30 | 8 36 34 | 10° 5'04 | 10♌35 | 22° 0 | 14°13 | 9°20  | 17°32 | 11°19  | 4°37  | 10° 3 | 29°52  | 27°53  | 26°37 | 15°22 | 8°59 | S 30 |
| M31  | 8 40 30 | 11°5'56  | 24♌41 | 23♌29 | 15♌28 | 10♋8  | 17°42 | 11♏21  | 4♌38  | 10♋5  | 29°Y52 | 27♏50  | 26♏34 | 15♏28 | 9♌5  | M31  |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl |
| S 1  | 23s 2 | 10n15 | 5n 9 | 20s13 | 2n55 | 20s14 | 1n30 | 23s23 | 0s58 | 21s38 | 0n36 | 12n53 | 2s25 | 12n36 | 0s28 | 8s57 |
| S 2  | 22 57 | 4 55  | 5 16 | 20 20 | 2 49 | 20 27 | 1 27 | 23 17 | 0 59 | 21 40 | 0 36 | 12 53 | 2 25 | 12 36 | 0 28 | 8 57 |
| M 3  | 22 52 | 0s44  | 5 6  | 20 28 | 2 42 | 20 40 | 1 25 | 23 11 | 0 59 | 21 41 | 0 36 | 12 53 | 2 25 | 12 36 | 0 28 | 8 56 |
| T 4  | 22 46 | 6 25  | 4 36 | 20 37 | 2 34 | 20 53 | 1 23 | 23 5  | 0 59 | 21 43 | 0 36 | 12 53 | 2 24 | 12 36 | 0 28 | 8 56 |
| W 5  | 22 39 | 11 52 | 3 50 | 20 48 | 2 26 | 21 4  | 1 20 | 22 59 | 0 59 | 21 45 | 0 36 | 12 53 | 2 24 | 12 36 | 0 28 | 8 55 |
| T 6  | 22 32 | 16 41 | 2 48 | 20 58 | 2 18 | 21 16 | 1 18 | 22 52 | 1 0  | 21 46 | 0 36 | 12 53 | 2 24 | 12 36 | 0 28 | 8 54 |
| F 7  | 22 25 | 20 33 | 1 36 | 21 9  | 2 9  | 21 26 | 1 16 | 22 45 | 1 0  | 21 48 | 0 36 | 12 53 | 2 24 | 12 36 | 0 28 | 8 54 |
| S 8  | 22 17 | 23 6  | 0 17 | 21 21 | 2 0  | 21 36 | 1 13 | 22 38 | 1 0  | 21 49 | 0 36 | 12 53 | 2 23 | 12 36 | 0 28 | 8 53 |
| S 9  | 22 9  | 24 6  | 1s 2 | 21 32 | 1 51 | 21 46 | 1 11 | 22 30 | 1 0  | 21 51 | 0 36 | 12 53 | 2 23 | 12 35 | 0 28 | 8 53 |
| M10  | 22 0  | 23 31 | 2 16 | 21 43 | 1 41 | 21 54 | 1 8  | 22 23 | 1 1  | 21 52 | 0 36 | 12 53 | 2 23 | 12 35 | 0 28 | 8 52 |
| T 11 | 21 51 | 21 29 | 3 20 | 21 54 | 1 32 | 22 2  | 1 5  | 22 15 | 1 1  | 21 54 | 0 36 | 12 54 | 2 22 | 12 35 | 0 28 | 8 51 |
| W12  | 21 42 | 18 16 | 4 11 | 22 4  | 1 23 | 22 10 | 1 3  | 22 7  | 1 1  | 21 55 | 0 36 | 12 54 | 2 22 | 12 35 | 0 28 | 8 51 |
| T 13 | 21 32 | 14 13 | 4 48 | 22 14 | 1 13 | 22 17 | 1 0  | 21 58 | 1 1  | 21 57 | 0 36 | 12 54 | 2 22 | 12 36 | 0 28 | 8 50 |
| F 14 | 21 21 | 9 37  | 5 8  | 22 23 | 1 4  | 22 23 | 0 58 | 21 49 | 1 2  | 21 58 | 0 36 | 12 54 | 2 21 | 12 36 | 0 28 | 8 49 |
| S 15 | 21 11 | 4 44  | 5 14 | 22 32 | 0 55 | 22 28 | 0 55 | 21 40 | 1 2  | 21 59 | 0 36 | 12 55 | 2 21 | 12 36 | 0 28 | 8 49 |
| S 16 | 21 0  | 0n13  | 5 5  | 22 40 | 0 46 | 22 33 | 0 52 | 21 31 | 1 2  | 22 1  | 0 36 | 12 55 | 2 21 | 12 36 | 0 27 | 8 48 |
| M17  | 20 48 | 5 5   | 4 42 | 22 47 | 0 37 | 22 37 | 0 49 | 21 22 | 1 2  | 22 2  | 0 36 | 12 56 | 2 21 | 12 36 | 0 27 | 8 47 |
| T 18 | 20 36 | 9 43  | 4 8  | 22 53 | 0 28 | 22 41 | 0 47 | 21 12 | 1 2  | 22 3  | 0 36 | 12 56 | 2 20 | 12 36 | 0 27 | 8 47 |
| W19  | 20 24 | 13 58 | 3 23 | 22 58 | 0 19 | 22 44 | 0 44 | 21 2  | 1 3  | 22 5  | 0 36 | 12 57 | 2 20 | 12 36 | 0 27 | 8 46 |
| T 20 | 20 11 | 17 43 | 2 30 | 23 2  | 0 11 | 22 46 | 0 41 | 20 52 | 1 3  | 22 6  | 0 36 | 12 57 | 2 20 | 12 36 | 0 27 | 8 45 |
| F 21 | 19 58 | 20 46 | 1 29 | 23 5  | 0 3  | 22 47 | 0 38 | 20 41 | 1 3  | 22 7  | 0 36 | 12 58 | 2 19 | 12 36 | 0 27 | 8 45 |
| S 22 | 19 44 | 22 56 | 0 24 | 23 8  | 0s 6 | 22 48 | 0 36 | 20 31 | 1 3  | 22 8  | 0 36 | 12 58 | 2 19 | 12 37 | 0 27 | 8 44 |
| S 23 | 19 31 | 24 2  | 0n44 | 23 8  | 0 13 | 22 48 | 0 33 | 20 20 | 1 3  | 22 9  | 0 36 | 12 59 | 2 19 | 12 37 | 0 27 | 8 43 |
| M24  | 19 16 | 23 55 | 1 50 | 23 8  | 0 21 | 22 47 | 0 30 | 20 9  | 1 3  | 22 11 | 0 36 | 13 0  | 2 18 | 12 37 | 0 27 | 8 43 |
| T 25 | 19 2  | 22 31 | 2 53 | 23 7  | 0 29 | 22 46 | 0 27 | 19 58 | 1 4  | 22 12 | 0 36 | 13 0  | 2 18 | 12 37 | 0 27 | 8 42 |
| W26  | 18 47 | 19 51 | 3 47 | 23 4  | 0 36 | 22 44 | 0 24 | 19 46 | 1 4  | 22 13 | 0 36 | 13 1  | 2 18 | 12 38 | 0 27 | 8 41 |
| T 27 | 18 32 | 16 5  | 4 30 | 23 1  | 0 43 | 22 41 | 0 21 | 19 34 | 1 4  | 22 14 | 0 36 | 13 2  | 2 18 | 12 38 | 0 27 | 8 40 |
| F 28 | 18 16 | 11 25 | 4 58 | 22 56 | 0 50 | 22 38 | 0 19 | 19 22 | 1 4  | 22 15 | 0 36 | 13 3  | 2 17 | 12 38 | 0 27 | 8 40 |
| S 29 | 18 0  | 6 6   | 5 9  | 22 49 | 0 57 | 22 34 | 0 16 | 19 10 | 1 4  | 22 16 | 0 36 | 13 3  | 2 17 | 12 38 | 0 27 | 8 39 |
| S 30 | 17 44 | 0 26  | 5 2  | 22 42 | 1 3  | 22 29 | 0 13 | 18 58 | 1 4  | 22 17 | 0 36 | 13 4  | 2 17 | 12 39 | 0 27 | 8 38 |
| M31  | 17s27 | 5s17  | 4n36 | 22s33 | 1s 9 | 22s24 | 0n10 | 18s45 | 1s 4 | 22s18 | 0n36 | 13n 5 | 2s16 | 12n39 | 0s27 | 8s37 |

Julian Day Number = 2397854.5, Delta T = 10.18 sec  
Ecliptic obliquity = 23°27'30, Nutation = - 0°00'17, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 22°41'15, Lahiri = 21°48'16

# ASTRODIENST EPHEMERIS for the year 1853

## geocentric

FEBRUARY 1853

00:00 UT

| Day  | Sid.t    | ☉           | ☽       | ♂       | ♀       | ♂       | ♂       | ♂       | ♂      | ♂       | ♂       | ♂        | ♂        | ♂       | ♂       | Day  |
|------|----------|-------------|---------|---------|---------|---------|---------|---------|--------|---------|---------|----------|----------|---------|---------|------|
| T 1  | 8 44 27  | 12° 6' 49"  | 8° 49'  | 24° 35' | 16° 42' | 10° 55' | 17° 53' | 11° 24' | 4° 39' | 10° 7'  | 29° 53' | 27° D48  | 26° II31 | 15° 35' | 9° 10'  | T 1  |
| W 2  | 8 48 24  | 13° 7' 40"  | 22° 57' | 26° 30' | 17° 57' | 11° 42' | 18° 3'  | 11° 26' | 4° 40' | 10° 9'  | 29° 53' | 27° II49 | 26° 28'  | 15° 42' | 9° 16'  | W 2  |
| T 3  | 8 52 20  | 14° 8' 30"  | 7° 4'   | 28° 1'  | 19° 11' | 12° 29' | 18° 13' | 11° 28' | 4° 41' | 10° 11' | 29° 54' | 27° 50'  | 26° 25'  | 15° 48' | 9° 21'  | T 3  |
| F 4  | 8 56 17  | 15° 9' 20"  | 21° 8'  | 29° 34' | 20° 26' | 13° 17' | 18° 23' | 11° 31' | 4° 42' | 10° 13' | 29° 54' | 27° R51  | 26° 22'  | 15° 55' | 9° 27'  | F 4  |
| S 5  | 9 0 13   | 16° 10' 09" | 5° 3'   | 1° 8'   | 21° 41' | 14° 4'  | 18° 34' | 11° 33' | 4° 43' | 10° 15' | 29° 54' | 27° 51'  | 26° 18'  | 16° 2'  | 9° 32'  | S 5  |
| S 6  | 9 4 10   | 17° 10' 57" | 19° 2'  | 2° 41'  | 22° 55' | 14° 51' | 18° 43' | 11° 36' | 4° 45' | 10° 17' | 29° 55' | 27° 49'  | 26° 15'  | 16° 8'  | 9° 37'  | S 6  |
| M 7  | 9 8 6    | 18° 11' 43" | 2° 47'  | 4° 16'  | 24° 10' | 15° 39' | 18° 53' | 11° 39' | 4° 46' | 10° 19' | 29° 56' | 27° 44'  | 26° 12'  | 16° 15' | 9° 43'  | M 7  |
| T 8  | 9 12 3   | 19° 12' 28" | 16° 20' | 5° 51'  | 25° 24' | 16° 26' | 19° 3'  | 11° 42' | 4° 47' | 10° 21' | 29° 56' | 27° 37'  | 26° 9'   | 16° 22' | 9° 48'  | T 8  |
| W 9  | 9 16 0   | 20° 13' 12" | 29° 39' | 7° 27'  | 26° 39' | 17° 13' | 19° 13' | 11° 44' | 4° 49' | 10° 24' | 29° 57' | 27° 28'  | 26° 6'   | 16° 28' | 9° 53'  | W 9  |
| T 10 | 9 19 56  | 21° 13' 55" | 12° 42' | 9° 5'   | 27° 54' | 18° 1'  | 19° 22' | 11° 48' | 4° 50' | 10° 26' | 29° 57' | 27° 18'  | 26° 2'   | 16° 35' | 9° 58'  | T 10 |
| F 11 | 9 23 53  | 22° 14' 36" | 25° 27' | 10° 43' | 29° 8'  | 18° 48' | 19° 31' | 11° 51' | 4° 52' | 10° 28' | 29° 58' | 27° 8'   | 25° 59'  | 16° 42' | 10° 3'  | F 11 |
| S 12 | 9 27 49  | 23° 15' 15" | 7° 56'  | 12° 21' | 0° 23'  | 19° 35' | 19° 41' | 11° 54' | 4° 53' | 10° 30' | 29° 58' | 26° 59'  | 25° 56'  | 16° 48' | 10° 8'  | S 12 |
| S 13 | 9 31 46  | 24° 15' 52" | 20° 9'  | 14° 1'  | 1° 37'  | 20° 23' | 19° 50' | 11° 57' | 4° 55' | 10° 32' | 29° 59' | 26° 51'  | 25° 53'  | 16° 55' | 10° 13' | S 13 |
| M14  | 9 35 42  | 25° 16' 28" | 2° 10'  | 15° 42' | 2° 52'  | 21° 10' | 19° 59' | 12° 1'  | 4° 56' | 10° 34' | 29° 59' | 26° 46'  | 25° 50'  | 17° 2'  | 10° 18' | M14  |
| T 15 | 9 39 39  | 26° 17' 03" | 14° 2'  | 17° 23' | 4° 7'   | 21° 57' | 20° 8'  | 12° 4'  | 4° 58' | 10° 37' | 0° 0'   | 26° 43'  | 25° 47'  | 17° 9'  | 10° 23' | T 15 |
| W16  | 9 43 35  | 27° 17' 35" | 25° 51' | 19° 5'  | 5° 21'  | 22° 45' | 20° 17' | 12° 8'  | 5° 0'  | 10° 39' | 0° 1'   | 26° D42  | 25° 43'  | 17° 15' | 10° 27' | W16  |
| T 17 | 9 47 32  | 28° 18' 06" | 7° 42'  | 20° 49' | 6° 36'  | 23° 32' | 20° 25' | 12° 12' | 5° 1'  | 10° 41' | 0° 2'   | 26° 42'  | 25° 40'  | 17° 22' | 10° 32' | T 17 |
| F 18 | 9 51 28  | 29° 18' 35" | 19° 40' | 22° 33' | 7° 50'  | 24° 19' | 20° 34' | 12° 16' | 5° 3'  | 10° 43' | 0° 3'   | 26° 43'  | 25° 37'  | 17° 29' | 10° 37' | F 18 |
| S 19 | 9 55 25  | 0° 19' 02"  | 1° 51'  | 24° 18' | 9° 5'   | 25° 7'  | 20° 42' | 12° 20' | 5° 5'  | 10° 46' | 0° 3'   | 26° R43  | 25° 34'  | 17° 35' | 10° 42' | S 19 |
| S 20 | 9 59 22  | 1° 19' 27"  | 14° 19' | 26° 4'  | 10° 20' | 25° 54' | 20° 51' | 12° 24' | 5° 7'  | 10° 48' | 0° 4'   | 26° 42'  | 25° 31'  | 17° 42' | 10° 46' | S 20 |
| M21  | 10 3 18  | 2° 19' 50"  | 27° 8'  | 27° 51' | 11° 34' | 26° 42' | 20° 59' | 12° 28' | 5° 9'  | 10° 50' | 0° 5'   | 26° 38'  | 25° 27'  | 17° 49' | 10° 51' | M21  |
| T 22 | 10 7 15  | 3° 20' 12"  | 10° 20' | 29° 39' | 12° 49' | 27° 29' | 21° 7'  | 12° 32' | 5° 11' | 10° 52' | 0° 6'   | 26° 31'  | 25° 24'  | 17° 55' | 10° 55' | T 22 |
| W23  | 10 11 11 | 4° 20' 31"  | 23° 55' | 1° 28'  | 14° 3'  | 28° 16' | 21° 15' | 12° 36' | 5° 13' | 10° 55' | 0° 7'   | 26° 22'  | 25° 21'  | 18° 2'  | 10° 59' | W23  |
| T 24 | 10 15 8  | 5° 20' 49"  | 7° 11'  | 3° 17'  | 15° 18' | 29° 4'  | 21° 22' | 12° 41' | 5° 15' | 10° 57' | 0° 7'   | 26° 11'  | 25° 18'  | 18° 9'  | 11° 4'  | T 24 |
| F 25 | 10 19 4  | 6° 21' 05"  | 22° 4'  | 5° 8'   | 16° 32' | 29° 51' | 21° 30' | 12° 45' | 5° 17' | 10° 59' | 0° 8'   | 26° 0'   | 25° 15'  | 18° 15' | 11° 8'  | F 25 |
| S 26 | 10 23 1  | 7° 21' 20"  | 6° 28'  | 7° 0'   | 17° 47' | 0° 38'  | 21° 38' | 12° 50' | 5° 19' | 11° 1'  | 0° 9'   | 25° 49'  | 25° 12'  | 18° 22' | 11° 12' | S 26 |
| S 27 | 10 26 57 | 8° 21' 32"  | 20° 56' | 8° 52'  | 19° 2'  | 1° 26'  | 21° 45' | 12° 54' | 5° 21' | 11° 4'  | 0° 10'  | 25° 40'  | 25° 8'   | 18° 29' | 11° 16' | S 27 |
| M28  | 10 30 54 | 9° 21' 43"  | 5° 23'  | 10° 46' | 20° 16' | 2° 13'  | 21° 52' | 12° 59' | 5° 24' | 11° 6'  | 0° 11'  | 25° II34 | 25° II 5 | 18° 35' | 11° 20' | M28  |

| Day  | ☉     | ☽        | ♂        | ♀        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | Day  |
|------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|
|      | decl  | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat |      |
| T 1  | 17s11 | 10s45    | 3n54     | 22s23    | 1s15     | 22s17    | 0n 7     | 18s32    | 1s 4     | 22s19    | 0n36     | 13n 6    | 2s16     | 12n39    | 0s27     | T 1  |
| W 2  | 16 53 | 15 40    | 2 57     | 22 11    | 1 20     | 22 11    | 0 5      | 18 19    | 1 4      | 22 20    | 0 36     | 13 7     | 2 16     | 12 40    | 0 27     | W 2  |
| T 3  | 16 36 | 19 42    | 1 50     | 21 58    | 1 26     | 22 3     | 0 2      | 18 6     | 1 4      | 22 21    | 0 36     | 13 8     | 2 16     | 12 40    | 0 27     | T 3  |
| F 4  | 16 18 | 22 34    | 0 36     | 21 44    | 1 31     | 21 55    | 0s 1     | 17 53    | 1 5      | 22 22    | 0 36     | 13 9     | 2 15     | 12 41    | 0 27     | F 4  |
| S 5  | 16 0  | 24 1     | 0s39     | 21 29    | 1 36     | 21 46    | 0 4      | 17 39    | 1 5      | 22 23    | 0 36     | 13 10    | 2 15     | 12 41    | 0 27     | S 5  |
| S 6  | 15 42 | 23 57    | 1 52     | 21 12    | 1 40     | 21 37    | 0 6      | 17 25    | 1 5      | 22 23    | 0 35     | 13 11    | 2 15     | 12 42    | 0 27     | S 6  |
| M 7  | 15 23 | 22 25    | 2 57     | 20 54    | 1 44     | 21 27    | 0 9      | 17 11    | 1 5      | 22 24    | 0 35     | 13 12    | 2 14     | 12 42    | 0 27     | M 7  |
| T 8  | 15 4  | 19 37    | 3 50     | 20 34    | 1 48     | 21 16    | 0 12     | 16 57    | 1 5      | 22 25    | 0 35     | 13 14    | 2 14     | 12 42    | 0 27     | T 8  |
| W 9  | 14 45 | 15 49    | 4 31     | 20 13    | 1 51     | 21 5     | 0 14     | 16 43    | 1 5      | 22 26    | 0 35     | 13 15    | 2 14     | 12 43    | 0 27     | W 9  |
| T 10 | 14 26 | 11 21    | 4 56     | 19 50    | 1 54     | 20 53    | 0 17     | 16 28    | 1 5      | 22 27    | 0 35     | 13 16    | 2 14     | 12 43    | 0 27     | T 10 |
| F 11 | 14 6  | 6 28     | 5 5      | 19 27    | 1 57     | 20 40    | 0 20     | 16 14    | 1 5      | 22 27    | 0 35     | 13 17    | 2 13     | 12 44    | 0 27     | F 11 |
| S 12 | 13 47 | 1 27     | 5 0      | 19 1     | 2 0      | 20 27    | 0 22     | 15 59    | 1 5      | 22 28    | 0 35     | 13 18    | 2 13     | 12 45    | 0 27     | S 12 |
| S 13 | 13 27 | 3n33     | 4 41     | 18 35    | 2 2      | 20 13    | 0 25     | 15 44    | 1 5      | 22 29    | 0 35     | 13 20    | 2 13     | 12 45    | 0 27     | S 13 |
| M14  | 13 6  | 8 20     | 4 10     | 18 7     | 2 4      | 19 58    | 0 27     | 15 29    | 1 5      | 22 29    | 0 35     | 13 21    | 2 12     | 12 46    | 0 27     | M14  |
| T 15 | 12 46 | 12 45    | 3 28     | 17 37    | 2 5      | 19 43    | 0 30     | 15 14    | 1 5      | 22 30    | 0 35     | 13 22    | 2 12     | 12 46    | 0 27     | T 15 |
| W16  | 12 25 | 16 41    | 2 37     | 17 6     | 2 6      | 19 28    | 0 32     | 14 58    | 1 5      | 22 31    | 0 35     | 13 24    | 2 12     | 12 47    | 0 27     | W16  |
| T 17 | 12 4  | 19 58    | 1 40     | 16 34    | 2 6      | 19 12    | 0 34     | 14 42    | 1 5      | 22 31    | 0 35     | 13 25    | 2 12     | 12 47    | 0 27     | T 17 |
| F 18 | 11 43 | 22 26    | 0 38     | 16 0     | 2 6      | 18 55    | 0 37     | 14 27    | 1 5      | 22 32    | 0 35     | 13 27    | 2 11     | 12 48    | 0 26     | F 18 |
| S 19 | 11 22 | 23 54    | 0n27     | 15 25    | 2 6      | 18 38    | 0 39     | 14 11    | 1 5      | 22 33    | 0 35     | 13 28    | 2 11     | 12 49    | 0 26     | S 19 |
| S 20 | 11 1  | 24 13    | 1 32     | 14 48    | 2 5      | 18 20    | 0 41     | 13 55    | 1 5      | 22 33    | 0 35     | 13 30    | 2 11     | 12 49    | 0 26     | S 20 |
| M21  | 10 39 | 23 17    | 2 35     | 14 10    | 2 4      | 18 2     | 0 44     | 13 38    | 1 5      | 22 34    | 0 36     | 13 31    | 2 11     | 12 50    | 0 26     | M21  |
| T 22 | 10 17 | 21 2     | 3 30     | 13 31    | 2 2      | 17 43    | 0 46     | 13 22    | 1 5      | 22 34    | 0 36     | 13 33    | 2 10     | 12 51    | 0 26     | T 22 |
| W23  | 9 56  | 17 34    | 4 15     | 12 50    | 2 0      | 17 23    | 0 48     | 13 6     | 1 5      | 22 35    | 0 36     | 13 34    | 2 10     | 12 51    | 0 26     | W23  |
| T 24 | 9 33  | 13 4     | 4 47     | 12 8     | 1 57     | 17 4     | 0 50     | 12 49    | 1 5      | 22 35    | 0 36     | 13 36    | 2 10     | 12 52    | 0 26     | T 24 |
| F 25 | 9 11  | 7 46     | 5 1      | 11 24    | 1 54     | 16 43    | 0 52     | 12 32    | 1 5      | 22 36    | 0 36     | 13 37    | 2 10     | 12 53    | 0 26     | F 25 |
| S 26 | 8 49  | 1 58     | 4 57     | 10 40    | 1 50     | 16 22    | 0 54     | 12 16    | 1 4      | 22 36    | 0 36     | 13 39    | 2 9      | 12 54    | 0 26     | S 26 |
| S 27 | 8 27  | 3s57     | 4 33     | 9 53     | 1 46     | 16 1     | 0 56     | 11 59    | 1 4      | 22 37    | 0 36     | 13 41    | 2 9      | 12 54    | 0 26     | S 27 |
| M28  | 8s 4  | 9s40     | 3n53     | 9s 6     | 1s41     | 15s40    | 0s58     | 11s42    | 1s 4     | 22s37    | 0n36     | 13n42    | 2s 9     | 12n55    | 0s26     | M28  |

Julian Day Number = 2397885.5, Delta T = 10.20 sec

Ecliptic obliquity = 23°27'31", Nutation = - 0°00'16", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 22°41'20", Lahiri = 21°48'20"

## ASTRODIENST EPHEMERIS for the year 1853

geocentric

MARCH 1853

00:00 UT

| Day  | Sid.t    | ☉                     | ☽                   | ♂                  | ♀                  | ♂                  | ♂                  | ♂                  | ♂                 | ♂                  | ♂                 | ♂                    | ♂                    | ♂                  | ♂                  | Day  |
|------|----------|-----------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|-------------------|----------------------|----------------------|--------------------|--------------------|------|
| T 1  | 10 34 51 | 10 <sup>h</sup> 12'53 | 19 <sup>m</sup> 44  | 12 <sup>h</sup> 40 | 21 <sup>m</sup> 31 | 3 <sup>h</sup> 0   | 21 <sup>m</sup> 59 | 13 <sup>h</sup> 4  | 5 <sup>h</sup> 26 | 11 <sup>h</sup> 8  | 0 <sup>h</sup> 12 | 25 <sup>m</sup> R30  | 25 <sup>m</sup> II 2 | 18 <sup>h</sup> 42 | 11 <sup>h</sup> 25 | T 1  |
| W 2  | 10 38 47 | 11 <sup>h</sup> 22'01 | 3 <sup>m</sup> 56   | 14 <sup>h</sup> 35 | 22 <sup>m</sup> 45 | 3 <sup>h</sup> 48  | 22 <sup>m</sup> 6  | 13 <sup>h</sup> 9  | 5 <sup>h</sup> 28 | 11 <sup>h</sup> 11 | 0 <sup>h</sup> 13 | 25 <sup>m</sup> II28 | 24 <sup>m</sup> 59   | 18 <sup>h</sup> 49 | 11 <sup>h</sup> 28 | W 2  |
| T 3  | 10 42 44 | 12 <sup>h</sup> 22'08 | 17 <sup>m</sup> 57  | 16 <sup>h</sup> 31 | 24 <sup>m</sup> 0  | 4 <sup>h</sup> 35  | 22 <sup>m</sup> 13 | 13 <sup>h</sup> 14 | 5 <sup>h</sup> 31 | 11 <sup>h</sup> 13 | 0 <sup>h</sup> 14 | 25 <sup>m</sup> 28   | 24 <sup>m</sup> 56   | 18 <sup>h</sup> 55 | 11 <sup>h</sup> 32 | T 3  |
| F 4  | 10 46 40 | 13 <sup>h</sup> 22'13 | 1 <sup>m</sup> 38   | 18 <sup>h</sup> 27 | 25 <sup>m</sup> 14 | 5 <sup>h</sup> 22  | 22 <sup>m</sup> 20 | 13 <sup>h</sup> 19 | 5 <sup>h</sup> 33 | 11 <sup>h</sup> 15 | 0 <sup>h</sup> 15 | 25 <sup>m</sup> 28   | 24 <sup>m</sup> 53   | 19 <sup>h</sup> 2  | 11 <sup>h</sup> 36 | F 4  |
| S 5  | 10 50 37 | 14 <sup>h</sup> 22'17 | 15 <sup>m</sup> 28  | 20 <sup>h</sup> 23 | 26 <sup>m</sup> 29 | 6 <sup>h</sup> 10  | 22 <sup>m</sup> 26 | 13 <sup>h</sup> 24 | 5 <sup>h</sup> 35 | 11 <sup>h</sup> 17 | 0 <sup>h</sup> 16 | 25 <sup>m</sup> 27   | 24 <sup>m</sup> 49   | 19 <sup>h</sup> 9  | 11 <sup>h</sup> 40 | S 5  |
| S 6  | 10 54 33 | 15 <sup>h</sup> 22'19 | 28 <sup>m</sup> 57  | 22 <sup>h</sup> 20 | 27 <sup>m</sup> 44 | 6 <sup>h</sup> 57  | 22 <sup>m</sup> 32 | 13 <sup>h</sup> 29 | 5 <sup>h</sup> 38 | 11 <sup>h</sup> 20 | 0 <sup>h</sup> 17 | 25 <sup>m</sup> 23   | 24 <sup>m</sup> 46   | 19 <sup>h</sup> 15 | 11 <sup>h</sup> 44 | S 6  |
| M 7  | 10 58 30 | 16 <sup>h</sup> 22'19 | 12 <sup>m</sup> 17  | 24 <sup>h</sup> 17 | 28 <sup>m</sup> 58 | 7 <sup>h</sup> 44  | 22 <sup>m</sup> 39 | 13 <sup>h</sup> 35 | 5 <sup>h</sup> 40 | 11 <sup>h</sup> 22 | 0 <sup>h</sup> 18 | 25 <sup>m</sup> 17   | 24 <sup>m</sup> 43   | 19 <sup>h</sup> 22 | 11 <sup>h</sup> 47 | M 7  |
| T 8  | 11 2 26  | 17 <sup>h</sup> 22'18 | 25 <sup>m</sup> 26  | 26 <sup>h</sup> 14 | 0 <sup>h</sup> 13  | 8 <sup>h</sup> 32  | 22 <sup>m</sup> 45 | 13 <sup>h</sup> 40 | 5 <sup>h</sup> 43 | 11 <sup>h</sup> 24 | 0 <sup>h</sup> 19 | 25 <sup>m</sup> 7    | 24 <sup>m</sup> 40   | 19 <sup>h</sup> 29 | 11 <sup>h</sup> 51 | T 8  |
| W 9  | 11 6 23  | 18 <sup>h</sup> 22'15 | 8 <sup>m</sup> 24   | 28 <sup>h</sup> 10 | 1 <sup>m</sup> 27  | 9 <sup>h</sup> 19  | 22 <sup>m</sup> 50 | 13 <sup>h</sup> 45 | 5 <sup>h</sup> 45 | 11 <sup>h</sup> 27 | 0 <sup>h</sup> 20 | 24 <sup>m</sup> 55   | 24 <sup>m</sup> 37   | 19 <sup>h</sup> 35 | 11 <sup>h</sup> 54 | W 9  |
| T 10 | 11 10 20 | 19 <sup>h</sup> 22'09 | 21 <sup>m</sup> 10  | 0 <sup>h</sup> 9   | 2 <sup>m</sup> 42  | 10 <sup>h</sup> 6  | 22 <sup>m</sup> 56 | 13 <sup>h</sup> 51 | 5 <sup>h</sup> 48 | 11 <sup>h</sup> 29 | 0 <sup>h</sup> 21 | 24 <sup>m</sup> 41   | 24 <sup>m</sup> 33   | 19 <sup>h</sup> 42 | 11 <sup>h</sup> 58 | T 10 |
| F 11 | 11 14 16 | 20 <sup>h</sup> 22'02 | 3 <sup>m</sup> 43   | 2 <sup>h</sup> 0   | 3 <sup>m</sup> 56  | 10 <sup>h</sup> 53 | 23 <sup>m</sup> 2  | 13 <sup>h</sup> 56 | 5 <sup>h</sup> 51 | 11 <sup>h</sup> 31 | 0 <sup>h</sup> 22 | 24 <sup>m</sup> 27   | 24 <sup>m</sup> 30   | 19 <sup>h</sup> 49 | 12 <sup>h</sup> 1  | F 11 |
| S 12 | 11 18 13 | 21 <sup>h</sup> 21'53 | 16 <sup>m</sup> 2   | 3 <sup>m</sup> 52  | 5 <sup>m</sup> 11  | 11 <sup>h</sup> 40 | 23 <sup>m</sup> 7  | 14 <sup>h</sup> 2  | 5 <sup>h</sup> 53 | 11 <sup>h</sup> 33 | 0 <sup>h</sup> 23 | 24 <sup>m</sup> 14   | 24 <sup>m</sup> 27   | 19 <sup>h</sup> 55 | 12 <sup>h</sup> 4  | S 12 |
| S 13 | 11 22 9  | 22 <sup>h</sup> 21'41 | 28 <sup>m</sup> 10  | 5 <sup>m</sup> 43  | 6 <sup>m</sup> 25  | 12 <sup>h</sup> 28 | 23 <sup>m</sup> 12 | 14 <sup>h</sup> 8  | 5 <sup>h</sup> 56 | 11 <sup>h</sup> 36 | 0 <sup>h</sup> 24 | 24 <sup>m</sup> 3    | 24 <sup>m</sup> 24   | 20 <sup>h</sup> 2  | 12 <sup>h</sup> 8  | S 13 |
| M14  | 11 26 6  | 23 <sup>h</sup> 21'28 | 10 <sup>m</sup> 8   | 7 <sup>m</sup> 32  | 7 <sup>m</sup> 40  | 13 <sup>h</sup> 15 | 23 <sup>m</sup> 17 | 14 <sup>h</sup> 14 | 5 <sup>h</sup> 59 | 11 <sup>h</sup> 38 | 0 <sup>h</sup> 26 | 23 <sup>m</sup> 55   | 24 <sup>m</sup> 21   | 20 <sup>h</sup> 9  | 12 <sup>h</sup> 11 | M14  |
| T 15 | 11 30 2  | 24 <sup>h</sup> 21'12 | 21 <sup>m</sup> 59  | 9 <sup>m</sup> 18  | 8 <sup>m</sup> 54  | 14 <sup>h</sup> 2  | 23 <sup>m</sup> 22 | 14 <sup>h</sup> 19 | 6 <sup>m</sup> 2  | 11 <sup>h</sup> 40 | 0 <sup>h</sup> 27 | 23 <sup>m</sup> 49   | 24 <sup>m</sup> 18   | 20 <sup>h</sup> 15 | 12 <sup>h</sup> 14 | T 15 |
| W16  | 11 33 59 | 25 <sup>h</sup> 20'54 | 3 <sup>m</sup> II46 | 11 <sup>m</sup> 1  | 10 <sup>m</sup> 9  | 14 <sup>h</sup> 49 | 23 <sup>m</sup> 27 | 14 <sup>h</sup> 25 | 6 <sup>m</sup> 4  | 11 <sup>h</sup> 42 | 0 <sup>h</sup> 28 | 23 <sup>m</sup> 46   | 24 <sup>m</sup> 14   | 20 <sup>h</sup> 22 | 12 <sup>h</sup> 17 | W16  |
| T 17 | 11 37 55 | 26 <sup>h</sup> 20'34 | 15 <sup>m</sup> 36  | 12 <sup>h</sup> 40 | 11 <sup>m</sup> 23 | 15 <sup>h</sup> 36 | 23 <sup>m</sup> 32 | 14 <sup>h</sup> 31 | 6 <sup>m</sup> 7  | 11 <sup>h</sup> 44 | 0 <sup>h</sup> 29 | 23 <sup>m</sup> 45   | 24 <sup>m</sup> 11   | 20 <sup>h</sup> 29 | 12 <sup>h</sup> 20 | T 17 |
| F 18 | 11 41 52 | 27 <sup>h</sup> 20'12 | 27 <sup>m</sup> 32  | 14 <sup>m</sup> 15 | 12 <sup>h</sup> 38 | 16 <sup>h</sup> 23 | 23 <sup>m</sup> 36 | 14 <sup>h</sup> 37 | 6 <sup>m</sup> 10 | 11 <sup>h</sup> 47 | 0 <sup>h</sup> 30 | 23 <sup>m</sup> 45   | 24 <sup>m</sup> 8    | 20 <sup>h</sup> 35 | 12 <sup>h</sup> 22 | F 18 |
| S 19 | 11 45 49 | 28 <sup>h</sup> 19'47 | 9 <sup>m</sup> 341  | 15 <sup>m</sup> 45 | 13 <sup>m</sup> 52 | 17 <sup>h</sup> 10 | 23 <sup>m</sup> 40 | 14 <sup>h</sup> 44 | 6 <sup>m</sup> 13 | 11 <sup>h</sup> 49 | 0 <sup>h</sup> 31 | 23 <sup>m</sup> 44   | 24 <sup>m</sup> 5    | 20 <sup>h</sup> 42 | 12 <sup>h</sup> 25 | S 19 |
| S 20 | 11 49 45 | 29 <sup>h</sup> 19'21 | 22 <sup>m</sup> 8   | 17 <sup>m</sup> 10 | 15 <sup>m</sup> 7  | 17 <sup>h</sup> 58 | 23 <sup>m</sup> 44 | 14 <sup>h</sup> 50 | 6 <sup>m</sup> 16 | 11 <sup>h</sup> 51 | 0 <sup>h</sup> 33 | 23 <sup>m</sup> 43   | 24 <sup>m</sup> 2    | 20 <sup>h</sup> 49 | 12 <sup>h</sup> 28 | S 20 |
| M21  | 11 53 42 | 0 <sup>h</sup> 18'51  | 4 <sup>m</sup> 257  | 18 <sup>m</sup> 30 | 16 <sup>m</sup> 21 | 18 <sup>h</sup> 45 | 23 <sup>m</sup> 48 | 14 <sup>h</sup> 56 | 6 <sup>m</sup> 19 | 11 <sup>h</sup> 53 | 0 <sup>h</sup> 34 | 23 <sup>m</sup> 39   | 23 <sup>m</sup> 59   | 20 <sup>h</sup> 55 | 12 <sup>h</sup> 30 | M21  |
| T 22 | 11 57 38 | 1 <sup>h</sup> 18'20  | 18 <sup>m</sup> 13  | 19 <sup>m</sup> 44 | 17 <sup>m</sup> 35 | 19 <sup>h</sup> 32 | 23 <sup>m</sup> 52 | 15 <sup>m</sup> 2  | 6 <sup>m</sup> 22 | 11 <sup>h</sup> 55 | 0 <sup>h</sup> 35 | 23 <sup>m</sup> 33   | 23 <sup>m</sup> 55   | 21 <sup>m</sup> 2  | 12 <sup>h</sup> 33 | T 22 |
| W23  | 12 1 35  | 2 <sup>h</sup> 17'46  | 1 <sup>m</sup> 1057 | 20 <sup>m</sup> 51 | 18 <sup>m</sup> 50 | 20 <sup>h</sup> 19 | 23 <sup>m</sup> 55 | 15 <sup>m</sup> 9  | 6 <sup>m</sup> 25 | 11 <sup>h</sup> 58 | 0 <sup>h</sup> 36 | 23 <sup>m</sup> 24   | 23 <sup>m</sup> 52   | 21 <sup>m</sup> 9  | 12 <sup>h</sup> 35 | W23  |
| T 24 | 12 5 31  | 3 <sup>h</sup> 17'10  | 16 <sup>m</sup> 7   | 21 <sup>m</sup> 52 | 20 <sup>m</sup> 4  | 21 <sup>h</sup> 6  | 23 <sup>m</sup> 59 | 15 <sup>m</sup> 15 | 6 <sup>m</sup> 28 | 12 <sup>m</sup> 0  | 0 <sup>h</sup> 38 | 23 <sup>m</sup> 13   | 23 <sup>m</sup> 49   | 21 <sup>m</sup> 15 | 12 <sup>h</sup> 38 | T 24 |
| F 25 | 12 9 28  | 4 <sup>h</sup> 16'32  | 0 <sup>m</sup> 39   | 22 <sup>m</sup> 47 | 21 <sup>m</sup> 19 | 21 <sup>h</sup> 52 | 24 <sup>m</sup> 2  | 15 <sup>m</sup> 21 | 6 <sup>m</sup> 31 | 12 <sup>m</sup> 2  | 0 <sup>h</sup> 39 | 23 <sup>m</sup> 1    | 23 <sup>m</sup> 46   | 21 <sup>m</sup> 22 | 12 <sup>h</sup> 40 | F 25 |
| S 26 | 12 13 24 | 5 <sup>h</sup> 15'52  | 15 <sup>m</sup> 27  | 23 <sup>m</sup> 34 | 22 <sup>m</sup> 33 | 22 <sup>h</sup> 39 | 24 <sup>m</sup> 5  | 15 <sup>m</sup> 28 | 6 <sup>m</sup> 34 | 12 <sup>m</sup> 4  | 0 <sup>h</sup> 40 | 22 <sup>m</sup> 50   | 23 <sup>m</sup> 43   | 21 <sup>m</sup> 29 | 12 <sup>h</sup> 42 | S 26 |
| S 27 | 12 17 21 | 6 <sup>h</sup> 15'09  | 0 <sup>m</sup> 21   | 24 <sup>m</sup> 14 | 23 <sup>m</sup> 47 | 23 <sup>h</sup> 26 | 24 <sup>m</sup> 8  | 15 <sup>m</sup> 35 | 6 <sup>m</sup> 37 | 12 <sup>m</sup> 6  | 0 <sup>h</sup> 41 | 22 <sup>m</sup> 41   | 23 <sup>m</sup> 39   | 21 <sup>m</sup> 35 | 12 <sup>h</sup> 44 | S 27 |
| M28  | 12 21 17 | 7 <sup>h</sup> 14'25  | 15 <sup>m</sup> 13  | 24 <sup>m</sup> 47 | 25 <sup>m</sup> 2  | 24 <sup>h</sup> 13 | 24 <sup>m</sup> 10 | 15 <sup>m</sup> 41 | 6 <sup>m</sup> 40 | 12 <sup>m</sup> 8  | 0 <sup>h</sup> 43 | 22 <sup>m</sup> 34   | 23 <sup>m</sup> 36   | 21 <sup>m</sup> 42 | 12 <sup>h</sup> 46 | M28  |
| T 29 | 12 25 14 | 8 <sup>h</sup> 13'39  | 29 <sup>m</sup> 56  | 25 <sup>m</sup> 13 | 26 <sup>m</sup> 16 | 25 <sup>h</sup> 0  | 24 <sup>m</sup> 13 | 15 <sup>m</sup> 48 | 6 <sup>m</sup> 43 | 12 <sup>m</sup> 10 | 0 <sup>h</sup> 44 | 22 <sup>m</sup> 30   | 23 <sup>m</sup> 33   | 21 <sup>m</sup> 49 | 12 <sup>h</sup> 48 | T 29 |
| W30  | 12 29 11 | 9 <sup>h</sup> 12'52  | 14 <sup>m</sup> 23  | 25 <sup>m</sup> 31 | 27 <sup>m</sup> 30 | 25 <sup>h</sup> 47 | 24 <sup>m</sup> 15 | 15 <sup>m</sup> 54 | 6 <sup>m</sup> 46 | 12 <sup>m</sup> 13 | 0 <sup>h</sup> 45 | 22 <sup>m</sup> 28   | 23 <sup>m</sup> 30   | 21 <sup>m</sup> 55 | 12 <sup>h</sup> 50 | W30  |
| T 31 | 12 33 7  | 10 <sup>h</sup> 12'02 | 28 <sup>m</sup> 33  | 25 <sup>m</sup> 41 | 28 <sup>m</sup> 45 | 26 <sup>h</sup> 34 | 24 <sup>m</sup> 17 | 16 <sup>m</sup> 8  | 6 <sup>m</sup> 49 | 12 <sup>m</sup> 15 | 0 <sup>h</sup> 46 | 22 <sup>m</sup> D28  | 23 <sup>m</sup> II27 | 22 <sup>m</sup> 8  | 12 <sup>h</sup> 52 | T 31 |

| Day  | ☉    | ☾     |      | ♀     |      | ♀     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂    |      | ♂    |       | ♂     |       | ♂     |       | ♂    |     | ♂    |     |
|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|-------|------|-----|------|-----|
|      | decl | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat   | decl  | lat   | decl  | lat   | decl | lat | decl | lat |
| T 1  | 7s41 | 14s50 | 2n57 | 8s17  | 1s36 | 15s17 | 1s 0 | 11s24 | 1s 4 | 22s37 | 0n36 | 13n44 | 2s 9 | 12n56 | 0s26 | 8s13 | 0s53 | 3s58 | 16s32 | 23n23 | 23n22 | 14n28 | 16s43 | 6n16 |     |      |     |
| W 2  | 7 18 | 19 8  | 1 52 | 7 27  | 1 30 | 14 55 | 1 2  | 11 7  | 1 4  | 22 38 | 0 36 | 13 46 | 2 8  | 12 57 | 0 26 | 8 12 | 0 53 | 3 57 | 16 32 | 23 23 | 23 22 | 14 30 | 16 43 | 6 17 |     |      |     |
| T 3  | 6 56 | 22 15 | 0 40 | 6 36  | 1 23 | 14 32 | 1 4  | 10 50 | 1 4  | 22 38 | 0 36 | 13 47 | 2 8  | 12 58 | 0 26 | 8 11 | 0 53 | 3 57 | 16 32 | 23 23 | 23 22 | 14 33 | 16 42 | 6 17 |     |      |     |
| F 4  | 6 33 | 24 0  | 0s33 | 5 45  | 1 16 | 14 9  | 1 5  | 10 32 | 1 4  | 22 39 | 0 36 | 13 49 | 2 8  | 12 58 | 0 26 | 8 10 | 0 53 | 3 56 | 16 31 | 23 23 | 23 22 | 14 35 | 16 41 | 6 18 |     |      |     |
| S 5  | 6 9  | 24 17 | 1 44 | 4 52  | 1 9  | 13 45 | 1 7  | 10 15 | 1 4  | 22 39 | 0 36 | 13 51 | 2 8  | 12 59 | 0 26 | 8 10 | 0 53 | 3 56 | 16 31 | 23 23 | 23 21 | 14 38 | 16 40 | 6 18 |     |      |     |
| S 6  | 5 46 | 23 7  | 2 47 | 3 58  | 1 0  | 13 21 | 1 8  | 9 57  | 1 4  | 22 39 | 0 36 | 13 52 | 2 7  | 13 0  | 0 26 | 8 9  | 0 53 | 3 55 | 16 31 | 23 23 | 23 21 | 14 40 | 16 39 | 6 19 |     |      |     |
| M 7  | 5 23 | 20 39 | 3 40 | 3 3   | 0 51 | 12 56 | 1 10 | 9 39  | 1 3  | 22 40 | 0 36 | 13 54 | 2 7  | 13 1  | 0 26 | 8 8  | 0 53 | 3 54 | 16 31 | 23 22 | 23 21 | 14 43 | 16 38 | 6 19 |     |      |     |
| T 8  | 5 0  | 17 9  | 4 21 | 2 8   | 0 42 | 12 31 | 1 11 | 9 21  | 1 3  | 22 40 | 0 36 | 13 56 | 2 7  | 13 2  | 0 26 | 8 7  | 0 53 | 3 54 | 16 30 | 23 22 | 23 21 | 14 45 | 16 38 | 6 20 |     |      |     |
| W 9  | 4 36 | 12 52 | 4 48 | 1 13  | 0 32 | 12 6  | 1 13 | 9 4   | 1 3  | 22 40 | 0 36 | 13 58 | 2 7  | 13 3  | 0 26 | 8 6  | 0 53 | 3 53 | 16 30 | 23 22 | 23 21 | 14 48 | 16 37 | 6 20 |     |      |     |
| T 10 | 4 13 | 8 5   | 4 59 | 0 17  | 0 21 | 11 41 | 1 14 | 8 46  | 1 3  | 22 41 | 0 36 | 14 0  | 2 6  | 13 3  | 0 26 | 8 5  | 0 53 | 3 53 | 16 30 | 23 21 | 23 21 | 14 50 | 16 36 | 6 21 |     |      |     |
| F 11 | 3 49 | 3 3   | 4 56 | 0n38  | 0 10 | 11 15 | 1 16 | 8 27  | 1 3  | 22 41 | 0 36 | 14 2  | 2 6  | 13 4  | 0 26 | 8 4  | 0 54 | 3 52 | 16 30 | 23 21 | 23 21 | 14 53 | 16 35 | 6 21 |     |      |     |
| S 12 | 3 26 | 2n 1  | 4 39 | 1 34  | 0n 1 | 10 49 | 1 17 | 8 9   | 1 3  | 22 41 | 0 36 | 14 3  | 2 6  | 13 5  | 0 26 | 8 4  | 0 54 | 3 51 | 16 29 | 23 20 | 23 21 | 14 55 | 16 34 | 6 22 |     |      |     |
| S 13 | 3 2  | 6 57  | 4 9  | 2 29  | 0 13 | 10 22 | 1 18 | 7 51  | 1 2  | 22 41 | 0 36 | 14 5  | 2 6  | 13 6  | 0 26 | 8 3  | 0 54 | 3 51 | 16 29 | 23 20 | 23 20 | 14 58 | 16 33 | 6 23 |     |      |     |
| M14  | 2 38 | 11 34 | 3 29 | 3 23  | 0 25 | 9 55  | 1 19 | 7 33  | 1 2  | 22 42 | 0 36 | 14 7  | 2 6  | 13 7  | 0 26 | 8 2  | 0 54 | 3 50 | 16 29 | 23 19 | 23 20 | 15 0  | 16 32 | 6 23 |     |      |     |
| T 15 | 2 15 | 15 42 | 2 40 | 4 16  | 0 38 | 9 29  | 1 20 | 7 14  | 1 2  | 22 42 | 0 36 | 14 9  | 2 5  | 13 8  | 0 26 | 8 1  | 0 54 | 3 50 | 16 29 | 23 19 | 23 20 | 15 3  | 16 32 | 6 24 |     |      |     |
| W16  | 1 51 | 19 14 | 1 44 | 5 8   | 0 50 | 9 1   | 1 21 | 6 56  | 1 2  | 22 42 | 0 36 | 14 11 | 2 5  | 13 9  | 0 26 | 8 0  | 0 54 | 3 49 | 16 28 | 23 19 | 23 20 | 15 5  | 16 31 | 6 24 |     |      |     |
| T 17 | 1 27 | 21 58 | 0 43 | 5 59  | 1 3  | 8 34  | 1 22 | 6 38  | 1 2  | 22 42 | 0 36 | 14 13 | 2 5  | 13 10 | 0 26 | 7 59 | 0 54 | 3 49 | 16 28 | 23 19 | 23 20 | 15 7  | 16 30 | 6 25 |     |      |     |
| F 18 | 1 4  | 23 46 | 0n20 | 6 47  | 1 16 | 8 6   | 1 23 | 6 19  | 1 1  | 22 43 | 0 36 | 14 15 | 2 5  | 13 11 | 0 26 | 7 59 | 0 54 | 3 48 | 16 28 | 23 19 | 23 20 | 15 10 | 16 29 | 6 25 |     |      |     |
| S 19 | 0 40 | 24 29 | 1 23 | 7 34  | 1 29 | 7 38  | 1 24 | 6 1   | 1 1  | 22 43 | 0 36 | 14 17 | 2 5  | 13 12 | 0 26 | 7 58 | 0 54 | 3 47 | 16 28 | 23 19 | 23 20 | 15 12 | 16 28 | 6 26 |     |      |     |
| S 20 | 0 16 | 24 1  | 2 24 | 8 18  | 1 41 | 7 10  | 1 24 | 5 42  | 1 1  | 22 43 | 0 36 | 14 19 | 2 4  | 13 13 | 0 26 | 7 57 | 0 54 | 3 47 | 16 28 | 23 19 | 23 19 | 15 15 | 16 27 | 6 27 |     |      |     |
| M21  | 0n 8 | 22 16 | 3 20 | 9 0   | 1 53 | 6 42  | 1 25 | 5 23  | 1 1  | 22 43 | 0 36 | 14 21 | 2 4  | 13 14 | 0 26 | 7 56 | 0 54 | 3 46 | 16 27 | 23 18 | 23 19 | 15 17 | 16 27 | 6 27 |     |      |     |
| T 22 | 0 31 | 19 17 | 4 6  | 9 39  | 2 5  | 6 13  | 1 26 | 5 5   | 1 0  | 22 43 | 0 36 | 14 23 | 2 4  | 13 15 | 0 26 | 7 55 | 0 54 | 3 46 | 16 27 | 23 18 | 23 19 | 15 20 | 16 26 | 6 28 |     |      |     |
| W23  | 0 55 | 15 9  | 4 40 | 10 15 | 2 16 | 5 45  | 1 26 | 4 46  | 1 0  | 22 43 | 0 36 | 14 25 | 2 4  | 13 16 | 0 26 | 7 54 | 0 54 | 3 45 | 16 27 | 23 18 | 23 19 | 15 22 | 16 25 | 6 28 |     |      |     |
| T 24 | 1 18 | 10 4  | 4 59 | 10 48 | 2 27 | 5 16  | 1 27 | 4 27  | 1 0  | 22 44 | 0 36 | 14 27 | 2 4  | 13 17 | 0 26 | 7 54 | 0 54 | 3 45 | 16 27 | 23 17 | 23 19 | 15 25 | 16 24 | 6 29 |     |      |     |
| F 25 | 1 42 | 4 18  | 4 58 | 11 17 | 2 37 | 4 47  | 1 27 | 4 8   | 1 0  | 22 44 | 0 36 | 14 29 | 2 3  | 13 18 | 0 26 | 7 53 | 0 54 | 3 44 | 16 27 | 23 16 | 23 19 | 15 27 | 16 23 | 6 30 |     |      |     |
| S 26 | 2 6  | 1s48  | 4 38 | 11 43 | 2 46 | 4 18  | 1 27 | 3 50  | 0 59 | 22 44 | 0 36 | 14 31 | 2 3  | 13 19 | 0 26 | 7 52 | 0 54 | 3 43 | 16 27 | 23 16 | 23 19 | 15 29 | 16 23 | 6 30 |     |      |     |
| S 27 | 2 29 | 7 52  | 3 59 | 12 6  | 2 54 | 3 49  | 1 28 | 3 31  | 0 59 | 22 44 | 0 36 | 14 33 | 2 3  | 13 20 | 0 26 | 7 51 | 0 54 | 3 43 | 16 26 | 23 15 | 23 18 | 15 32 | 16 22 | 6 31 |     |      |     |
| M28  | 2 53 | 13 29 | 3 4  | 12 25 | 3 1  | 3 19  | 1 28 | 3 12  | 0 59 | 22 44 | 0 36 | 14 35 | 2 3  | 13 21 | 0 26 | 7 51 | 0 54 | 3 42 | 16 26 | 23 15 | 23 18 | 15 34 | 16 21 | 6 31 |     |      |     |
| T 29 | 3 16 | 18 15 | 1 57 | 12 39 | 3 7  | 2 50  | 1 28 | 2 53  | 0 59 | 22 44 | 0 36 | 14 37 | 2 3  | 13 22 | 0 26 | 7 50 | 0 54 | 3 42 | 16 26 | 23 15 | 23 18 | 15 37 | 16 20 | 6 32 |     |      |     |
| W30  | 3 39 | 21 50 | 0 43 | 12 51 | 3 11 | 2 20  | 1 28 | 2 34  | 0 58 | 22 44 | 0 36 | 14 39 | 2 3  | 13 23 | 0 26 | 7 49 | 0 54 | 3 41 | 16 26 | 23 15 | 23 18 | 15 39 | 16 19 | 6 33 |     |      |     |
| T 31 | 4n 3 | 23s59 | 0s32 | 12n58 | 3n15 | 1s51  | 1s28 | 2s15  | 0s58 | 22s44 | 0n36 | 14n42 | 2s 2 | 13n24 | 0s26 | 7s48 | 0s54 | 3s41 | 16s26 | 23n15 | 23n18 | 15n42 | 16s19 | 6n33 |     |      |     |

ASTRODIENST EPHEMERIS for the year 1853  
geocentric

APRIL 1853

00:00 UT

| Day  | Sid.t    | ☉         | ☽      | ♊      | ♋      | ♌      | ♍      | ♎      | ♏     | ♐      | ♑     | ♒      | ♓      | ♈      | ♉      | Day  |
|------|----------|-----------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--------|------|
| F 1  | 12 37 4  | 11°11'11" | 12°24' | 25°R45 | 29°K59 | 27°K20 | 24°A19 | 16°B 8 | 6°B52 | 12°K17 | 0°B48 | 22°R28 | 23°I24 | 22°B 9 | 12°B54 | F 1  |
| S 2  | 12 41 0  | 12°10'18" | 25°57' | 25°Y42 | 1°Y13  | 28° 7  | 24°21  | 16°15  | 6°56  | 12°19  | 0°49  | 22°I28 | 23°20  | 22°15  | 12°55  | S 2  |
| S 3  | 12 44 57 | 13° 9'24" | 9°A14  | 25°32' | 2°28   | 28°54  | 24°22  | 16°22  | 6°59  | 12°21  | 0°50  | 22°25  | 23°17  | 22°22  | 12°57  | S 3  |
| M 4  | 12 48 53 | 14° 8'27" | 22°17' | 25°15' | 3°42   | 29°40  | 24°24  | 16°29  | 7° 2  | 12°23  | 0°52  | 22°20  | 23°14  | 22°29  | 12°58  | M 4  |
| T 5  | 12 52 50 | 15° 7'29" | 5°K 7  | 24°53' | 4°56   | 0°Y27  | 24°25  | 16°36  | 7° 5  | 12°25  | 0°53  | 22°12  | 23°11  | 22°35  | 12°59  | T 5  |
| W 6  | 12 56 46 | 16° 6'28" | 17°45' | 24°25' | 6°10   | 1°14   | 24°26  | 16°43  | 7° 9  | 12°27  | 0°54  | 22° 1  | 23° 8  | 22°42  | 13° 1  | W 6  |
| T 7  | 13 0 43  | 17° 5'26" | 0°Y13  | 23°53' | 7°25   | 2° 0   | 24°27  | 16°50  | 7°12  | 12°29  | 0°56  | 21°50  | 23° 4  | 22°49  | 13° 2  | T 7  |
| F 8  | 13 4 40  | 18° 4'22" | 12°30' | 23°16' | 8°39   | 2°47   | 24°27  | 16°57  | 7°15  | 12°31  | 0°57  | 21°38  | 23° 1  | 22°55  | 13° 3  | F 8  |
| S 9  | 13 8 36  | 19° 3'16" | 24°38' | 22°36' | 9°53   | 3°33   | 24°28  | 17° 4  | 7°19  | 12°33  | 0°58  | 21°26  | 22°58  | 23° 2  | 13° 4  | S 9  |
| S 10 | 13 12 33 | 20° 2'08" | 6°B38  | 21°54' | 11° 7  | 4°20   | 24°28  | 17°11  | 7°22  | 12°34  | 1° 0  | 21°16  | 22°55  | 23° 9  | 13° 5  | S 10 |
| M11  | 13 16 29 | 21° 0'58" | 18°31' | 21°10' | 12°22  | 5° 6   | 24°R28 | 17°18  | 7°25  | 12°36  | 1° 1  | 21° 9  | 22°52  | 23°15  | 13° 6  | M11  |
| T 12 | 13 20 26 | 21°59'46" | 0°I19  | 20°25' | 13°36  | 5°53   | 24°28  | 17°26  | 7°29  | 12°38  | 1° 2  | 21° 4  | 22°49  | 23°22  | 13° 7  | T 12 |
| W13  | 13 24 22 | 22°58'31" | 12° 6  | 19°40' | 14°50  | 6°39   | 24°28  | 17°33  | 7°32  | 12°40  | 1° 4  | 21° 2  | 22°45  | 23°29  | 13° 7  | W13  |
| T 14 | 13 28 19 | 23°57'15" | 23°55' | 18°56' | 16° 4  | 7°25   | 24°27  | 17°40  | 7°35  | 12°42  | 1° 5  | 21°D 1 | 22°42  | 23°35  | 13° 8  | T 14 |
| F 15 | 13 32 15 | 24°55'56" | 5°B50  | 18°14' | 17°18  | 8°12   | 24°26  | 17°48  | 7°39  | 12°44  | 1° 7  | 21° 2  | 22°39  | 23°42  | 13° 9  | F 15 |
| S 16 | 13 36 12 | 25°54'35" | 17°58' | 17°35' | 18°33  | 8°58   | 24°25  | 17°55  | 7°42  | 12°46  | 1° 8  | 21° 3  | 22°36  | 23°49  | 13° 9  | S 16 |
| S 17 | 13 40 9  | 26°53'12" | 0°J22  | 16°58' | 19°47  | 9°44   | 24°24  | 18° 2  | 7°46  | 12°47  | 1° 9  | 21°R 3 | 22°33  | 23°55  | 13° 9  | S 17 |
| M18  | 13 44 5  | 27°51'47" | 13° 9  | 16°24' | 21° 1  | 10°30  | 24°23  | 18°10  | 7°49  | 12°49  | 1°11  | 21° 2  | 22°30  | 24° 2  | 13°10  | M18  |
| T 19 | 13 48 2  | 28°50'19" | 26°21' | 15°55' | 22°15  | 11°16  | 24°22  | 18°17  | 7°52  | 12°51  | 1°12  | 20°59  | 22°26  | 24° 9  | 13°10  | T 19 |
| W20  | 13 51 58 | 29°48'49" | 10°I 2 | 15°30' | 23°29  | 12° 2  | 24°20  | 18°25  | 7°56  | 12°52  | 1°14  | 20°54  | 22°23  | 24°15  | 13°10  | W20  |
| T 21 | 13 55 55 | 0°B47'17" | 24°13' | 15°10' | 24°43  | 12°48  | 24°18  | 18°32  | 7°59  | 12°54  | 1°15  | 20°47  | 22°20  | 24°22  | 13°R10 | T 21 |
| F 22 | 13 59 51 | 1°45'43"  | 8°A49  | 14°54' | 25°57  | 13°34  | 24°16  | 18°40  | 8° 3  | 12°56  | 1°16  | 20°39  | 22°17  | 24°29  | 13°10  | F 22 |
| S 23 | 14 3 48  | 2°44'07"  | 23°46' | 14°43' | 27°11  | 14°20  | 24°14  | 18°47  | 8° 6  | 12°57  | 1°18  | 20°32  | 22°14  | 24°35  | 13°10  | S 23 |
| S 24 | 14 7 44  | 3°42'29"  | 8°I55  | 14°38' | 28°25  | 15° 6  | 24°12  | 18°55  | 8°10  | 12°59  | 1°19  | 20°26  | 22°10  | 24°42  | 13° 9  | S 24 |
| M25  | 14 11 41 | 4°40'49"  | 24° 5  | 14°D37 | 29°39  | 15°52  | 24° 9  | 19° 2  | 8°13  | 13° 1  | 1°20  | 20°21  | 22° 7  | 24°49  | 13° 9  | M25  |
| T 26 | 14 15 38 | 5°39'08"  | 9°A 8  | 14°41' | 0°B53  | 16°38  | 24° 6  | 19°10  | 8°17  | 13° 2  | 1°22  | 20°19  | 22° 4  | 24°55  | 13° 9  | T 26 |
| W27  | 14 19 34 | 6°37'25"  | 23°54' | 14°50' | 2° 7   | 17°24  | 24° 3  | 19°18  | 8°20  | 13° 4  | 1°23  | 20°D19 | 22° 1  | 25° 2  | 13° 8  | W27  |
| T 28 | 14 23 31 | 7°35'41"  | 8°B19  | 15° 4  | 3°21   | 18°10  | 24° 0  | 19°25  | 8°23  | 13° 5  | 1°25  | 20°19  | 21°58  | 25° 9  | 13° 8  | T 28 |
| F 29 | 14 27 27 | 8°33'55"  | 22°21' | 15°23' | 4°35   | 18°55  | 23°57  | 19°33  | 8°27  | 13° 7  | 1°26  | 20°21  | 21°55  | 25°15  | 13° 7  | F 29 |
| S 30 | 14 31 24 | 9°B32'07" | 5°A59  | 15°Y45 | 5°B49  | 19°Y41 | 23°A54 | 19°B41 | 8°B30 | 13°K 8 | 1°B27 | 20°R22 | 21°I51 | 25°B22 | 13°B 6 | S 30 |

| Day  | ☉     | ☽     |      | ♊     |      | ♋     |      | ♌    |      | ♍     |      | ♎     |      | ♏     |      | ♐    |      | ♑    |       | ♒     | ♓     | ♈     | ♉     | ♊    | ♋   | ♌    | ♍   | ♎    | ♏   | ♐    | ♑   | ♒    | ♓   |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|-------|------|-----|------|-----|------|-----|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat   | decl  | lat   | decl  | lat   | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| F 1  | 4n26  | 24s36 | 1s44 | 13n 1 | 3n17 | 1s21  | 1s28 | 1s56 | 0s58 | 22s44 | 0n36 | 14n44 | 2s 2 | 13n25 | 0s26 | 7s47 | 0s54 | 3s40 | 16s26 | 23n15 | 23n18 | 15n44 | 16s18 | 6n34 |     |      |     |      |     |      |     |      |     |
| S 2  | 4 49  | 23 43 | 2 48 | 13 0  | 3 17 | 0 51  | 1 28 | 1 38 | 0 57 | 22 45 | 0 36 | 14 46 | 2 2  | 13 26 | 0 26 | 7 47 | 0 54 | 3 39 | 16 26 | 23 15 | 23 17 | 15 46 | 16 17 | 6 35 |     |      |     |      |     |      |     |      |     |
| S 3  | 5 12  | 21 31 | 3 42 | 12 55 | 3 16 | 0 22  | 1 28 | 1 19 | 0 57 | 22 45 | 0 36 | 14 48 | 2 2  | 13 27 | 0 26 | 7 46 | 0 54 | 3 39 | 16 26 | 23 14 | 23 17 | 15 49 | 16 16 | 6 35 |     |      |     |      |     |      |     |      |     |
| M 4  | 5 35  | 18 14 | 4 22 | 12 47 | 3 14 | 0n 8  | 1 27 | 1 0  | 0 57 | 22 45 | 0 36 | 14 50 | 2 2  | 13 28 | 0 25 | 7 45 | 0 54 | 3 38 | 16 25 | 23 14 | 23 17 | 15 51 | 16 16 | 6 36 |     |      |     |      |     |      |     |      |     |
| T 5  | 5 58  | 14 8  | 4 49 | 12 35 | 3 10 | 0 38  | 1 27 | 0 41 | 0 56 | 22 45 | 0 36 | 14 52 | 2 2  | 13 29 | 0 25 | 7 44 | 0 54 | 3 38 | 16 25 | 23 14 | 23 17 | 15 54 | 16 15 | 6 36 |     |      |     |      |     |      |     |      |     |
| W 6  | 6 20  | 9 28  | 5 2  | 12 19 | 3 4  | 1 8   | 1 27 | 0 22 | 0 56 | 22 45 | 0 36 | 14 54 | 2 1  | 13 30 | 0 25 | 7 44 | 0 54 | 3 37 | 16 25 | 23 13 | 23 17 | 15 56 | 16 14 | 6 37 |     |      |     |      |     |      |     |      |     |
| T 7  | 6 43  | 4 30  | 4 59 | 12 0  | 2 56 | 1 37  | 1 26 | 0 3  | 0 56 | 22 45 | 0 36 | 14 56 | 2 1  | 13 32 | 0 25 | 7 43 | 0 54 | 3 37 | 16 25 | 23 12 | 23 17 | 15 59 | 16 13 | 6 38 |     |      |     |      |     |      |     |      |     |
| F 8  | 7 6   | 0n36  | 4 43 | 11 38 | 2 47 | 2 7   | 1 26 | 0n16 | 0 55 | 22 45 | 0 36 | 14 58 | 2 1  | 13 33 | 0 25 | 7 42 | 0 54 | 3 36 | 16 25 | 23 12 | 23 16 | 16 1  | 16 13 | 6 38 |     |      |     |      |     |      |     |      |     |
| S 9  | 7 28  | 5 37  | 4 14 | 11 14 | 2 37 | 2 37  | 1 25 | 0 34 | 0 55 | 22 45 | 0 36 | 15 1  | 2 1  | 13 34 | 0 25 | 7 42 | 0 54 | 3 36 | 16 25 | 23 11 | 23 16 | 16 3  | 16 12 | 6 39 |     |      |     |      |     |      |     |      |     |
| S 10 | 7 50  | 10 22 | 3 34 | 10 47 | 2 25 | 3 6   | 1 25 | 0 53 | 0 55 | 22 45 | 0 36 | 15 3  | 2 1  | 13 35 | 0 25 | 7 41 | 0 54 | 3 35 | 16 25 | 23 10 | 23 16 | 16 6  | 16 11 | 6 40 |     |      |     |      |     |      |     |      |     |
| M11  | 8 12  | 14 43 | 2 45 | 10 18 | 2 12 | 3 36  | 1 24 | 1 12 | 0 54 | 22 45 | 0 36 | 15 5  | 2 1  | 13 36 | 0 25 | 7 40 | 0 54 | 3 35 | 16 25 | 23 10 | 23 16 | 16 8  | 16 10 | 6 40 |     |      |     |      |     |      |     |      |     |
| T 12 | 8 34  | 18 28 | 1 49 | 9 49  | 1 58 | 4 6   | 1 23 | 1 31 | 0 54 | 22 45 | 0 36 | 15 7  | 2 1  | 13 37 | 0 25 | 7 39 | 0 54 | 3 34 | 16 25 | 23 9  | 23 16 | 16 11 | 16 10 | 6 41 |     |      |     |      |     |      |     |      |     |
| W13  | 8 56  | 21 28 | 0 48 | 9 18  | 1 43 | 4 35  | 1 22 | 1 50 | 0 53 | 22 45 | 0 36 | 15 9  | 2 1  | 13 38 | 0 25 | 7 39 | 0 54 | 3 34 | 16 25 | 23 9  | 23 16 | 16 13 | 16 9  | 6 41 |     |      |     |      |     |      |     |      |     |
| T 14 | 9 18  | 23 35 | 0n16 | 8 47  | 1 28 | 5 4   | 1 21 | 2 8  | 0 53 | 22 45 | 0 36 | 15 11 | 2 0  | 13 39 | 0 25 | 7 38 | 0 54 | 3 33 | 16 25 | 23 9  | 23 15 | 16 15 | 16 8  | 6 42 |     |      |     |      |     |      |     |      |     |
| F 15 | 9 40  | 24 38 | 1 19 | 8 16  | 1 12 | 5 34  | 1 21 | 2 27 | 0 53 | 22 45 | 0 36 | 15 13 | 2 0  | 13 40 | 0 25 | 7 37 | 0 54 | 3 33 | 16 24 | 23 9  | 23 15 | 16 18 | 16 8  | 6 43 |     |      |     |      |     |      |     |      |     |
| S 16 | 10 1  | 24 33 | 2 20 | 7 45  | 0 55 | 6 3   | 1 20 | 2 45 | 0 52 | 22 45 | 0 36 | 15 16 | 2 0  | 13 41 | 0 25 | 7 37 | 0 54 | 3 32 | 16 24 | 23 9  | 23 15 | 16 20 | 16 7  | 6 43 |     |      |     |      |     |      |     |      |     |
| S 17 | 10 22 | 23 16 | 3 15 | 7 15  | 0 38 | 6 32  | 1 19 | 3 4  | 0 52 | 22 45 | 0 36 | 15 18 | 2 0  | 13 43 | 0 25 | 7 36 | 0 54 | 3 32 | 16 24 | 23 9  | 23 15 | 16 22 | 16 6  | 6 44 |     |      |     |      |     |      |     |      |     |
| M18  | 10 43 | 20 46 | 4 3  | 6 47  | 0 21 | 7 1   | 1 17 | 3 22 | 0 51 | 22 45 | 0 36 | 15 20 | 2 0  | 13 44 | 0 25 | 7 35 | 0 54 | 3 31 | 16 24 | 23 9  | 23 15 | 16 25 | 16 6  | 6 45 |     |      |     |      |     |      |     |      |     |
| T 19 | 11 4  | 17 7  | 4 40 | 6 20  | 0 5  | 7 29  | 1 16 | 3 41 | 0 51 | 22 45 | 0 36 | 15 22 | 2 0  | 13 45 | 0 25 | 7 35 | 0 54 | 3 31 | 16 24 | 23 9  | 23 15 | 16 27 | 16 5  | 6 45 |     |      |     |      |     |      |     |      |     |
| W20  | 11 25 | 12 28 | 5 2  | 5 56  | 0s12 | 7 58  | 1 15 | 3 59 | 0 50 | 22 45 | 0 36 | 15 24 | 2 0  | 13 46 | 0 25 | 7 34 | 0 54 | 3 30 | 16 24 | 23 9  | 23 14 | 16 30 | 16 4  | 6 46 |     |      |     |      |     |      |     |      |     |
| T 21 | 11 45 | 7 0   | 5 7  | 5 33  | 0 28 | 8 26  | 1 14 | 4 18 | 0 50 | 22 45 | 0 36 | 15 26 | 2 0  | 13 47 | 0 25 | 7 34 | 0 54 | 3 30 | 16 24 | 23 8  | 23 14 | 16 32 | 16 4  | 6 47 |     |      |     |      |     |      |     |      |     |
| F 22 | 12 6  | 0 59  | 4 52 | 5 13  | 0 43 | 8 54  | 1 12 | 4 36 | 0 50 | 22 44 | 0 36 | 15 29 | 2 0  | 13 48 | 0 25 | 7 33 | 0 54 | 3 29 | 16 24 | 23 8  | 23 14 | 16 34 | 16 3  | 6 47 |     |      |     |      |     |      |     |      |     |
| S 23 | 12 26 | 5s14  | 4 18 | 4 55  | 0 58 | 9 22  | 1 11 | 4 54 | 0 49 | 22 44 | 0 36 | 15 31 | 1 59 | 13 49 | 0 25 | 7 32 | 0 55 | 3 29 | 16 24 | 23 7  | 23 14 | 16 37 | 16 3  | 6 48 |     |      |     |      |     |      |     |      |     |
| S 24 | 12 46 | 11 15 | 3 25 | 4 40  | 1 12 | 9 50  | 1 10 | 5 12 | 0 49 | 22 44 | 0 36 | 15 33 | 1 59 | 13 50 | 0 25 | 7 32 | 0 55 | 3 28 | 16 24 | 23 7  | 23 14 | 16 39 | 16 2  | 6 48 |     |      |     |      |     |      |     |      |     |
| M25  | 13 6  | 16 36 | 2 17 | 4 27  | 1 26 | 10 18 | 1 8  | 5 30 | 0 48 | 22 44 | 0 36 | 15 35 | 1 59 | 13 52 | 0 25 | 7 31 | 0 55 | 3 28 | 16 24 | 23 6  | 23 13 | 16 41 | 16 1  | 6 49 |     |      |     |      |     |      |     |      |     |
| T 26 | 13 25 | 20 51 | 1 0  | 4 17  | 1 38 | 10 45 | 1 7  | 5 48 | 0 48 | 22 44 | 0 36 | 15 37 | 1 59 | 13 53 | 0 25 | 7 31 | 0 55 | 3 27 | 16 24 | 23 6  | 23 13 | 16 44 | 16 1  | 6 50 |     |      |     |      |     |      |     |      |     |
| W27  | 13 44 | 23 39 | 0s19 | 4 9   | 1 50 | 11 12 | 1 5  | 6 6  | 0 47 | 22 44 | 0 36 | 15 39 | 1 59 | 13 54 | 0 25 | 7 30 | 0 55 | 3 27 | 16 24 | 23 6  | 23 13 | 16 46 | 16 0  | 6 50 |     |      |     |      |     |      |     |      |     |
| T 28 | 14 3  | 24 48 | 1 36 | 4 4   | 2 1  | 11 39 | 1 3  | 6 24 | 0 47 | 22 44 | 0 36 | 15 41 | 1 59 | 13 55 | 0 25 | 7 29 | 0 55 | 3 27 | 16 24 | 23 6  | 23 13 | 16 48 | 16 0  | 6 51 |     |      |     |      |     |      |     |      |     |
| F 29 | 14 22 | 24 19 | 2 45 | 4 2   | 2 12 | 12 5  | 1 2  | 6 42 | 0 46 | 22 44 | 0 36 | 15 44 | 1 59 | 13 56 | 0 25 | 7 29 | 0 55 | 3 26 | 16 24 | 23 6  | 23 13 | 16 51 | 15 59 | 6 51 |     |      |     |      |     |      |     |      |     |
| S 30 | 14n41 | 22s23 | 3s42 | 4n 2  | 2s21 | 12n32 | 1s 0 | 7n 0 | 0s46 | 22s44 | 0n35 | 15n46 | 1s59 | 13n57 | 0s25 | 7s28 | 0s55 | 3s26 | 16s24 | 23n 6 | 23m12 | 16n53 | 15s59 | 6n52 |     |      |     |      |     |      |     |      |     |

# ASTRODIENST EPHEMERIS for the year 1853

## geocentric

MAY 1853

00:00 UT

| Day  | Sid.t    | ☉        | ☽      | ♂      | ♀      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂     | ♂      | ♂      | ♂      | ♂      | Day  |
|------|----------|----------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|------|
| S 1  | 14 35 20 | 10°30'18 | 19°15  | 16°13  | 7°3    | 20°27  | 23°R50 | 19°B48 | 8°B34  | 13°K10 | 1°B29 | 20°R21 | 21°B48 | 25°B29 | 13°R 5 | S 1  |
| M 2  | 14 39 17 | 11°28'28 | 2°K12  | 16°44  | 8°17   | 21°12  | 23°A46 | 19°56  | 8°37   | 13°11  | 1°30  | 20°B19 | 21°45  | 25°35  | 13°B 4 | M 2  |
| T 3  | 14 43 13 | 12°26'36 | 14°51  | 17°20  | 9°31   | 21°58  | 23°42  | 20° 4  | 8°41   | 13°12  | 1°31  | 20°16  | 21°42  | 25°42  | 13° 3  | T 3  |
| W 4  | 14 47 10 | 13°24'42 | 27°17  | 17°59  | 10°45  | 22°43  | 23°38  | 20°11  | 8°44   | 13°14  | 1°33  | 20°11  | 21°39  | 25°49  | 13° 2  | W 4  |
| T 5  | 14 51 7  | 14°22'48 | 9°Y31  | 18°42  | 11°59  | 23°29  | 23°34  | 20°19  | 8°48   | 13°15  | 1°34  | 20° 5  | 21°36  | 25°55  | 13° 1  | T 5  |
| F 6  | 14 55 3  | 15°20'51 | 21°36  | 19°29  | 13°13  | 24°14  | 23°29  | 20°27  | 8°51   | 13°16  | 1°35  | 19°58  | 21°32  | 26° 2  | 13° 0  | F 6  |
| S 7  | 14 59 0  | 16°18'53 | 3°B33  | 20°19  | 14°27  | 24°59  | 23°25  | 20°35  | 8°55   | 13°18  | 1°37  | 19°52  | 21°29  | 26° 9  | 12°59  | S 7  |
| S 8  | 15 2 56  | 17°16'54 | 15°25  | 21°12  | 15°41  | 25°45  | 23°20  | 20°42  | 8°58   | 13°19  | 1°38  | 19°47  | 21°26  | 26°15  | 12°57  | S 8  |
| M 9  | 15 6 53  | 18°14'53 | 27°14  | 22° 9  | 16°55  | 26°30  | 23°15  | 20°50  | 9° 1   | 13°20  | 1°39  | 19°44  | 21°23  | 26°22  | 12°56  | M 9  |
| T 10 | 15 10 49 | 19°12'50 | 9°B 1  | 23° 9  | 18° 9  | 27°15  | 23°10  | 20°58  | 9° 5   | 13°21  | 1°41  | 19°41  | 21°20  | 26°28  | 12°54  | T 10 |
| W11  | 15 14 46 | 20°10'46 | 20°50  | 24°11  | 19°23  | 28° 0  | 23° 5  | 21° 6  | 9° 8   | 13°23  | 1°42  | 19°D41 | 21°16  | 26°35  | 12°53  | W11  |
| T 12 | 15 18 42 | 21° 8'40 | 2°B42  | 25°17  | 20°37  | 28°45  | 23° 0  | 21°13  | 9°12   | 13°24  | 1°43  | 19°42  | 21°13  | 26°42  | 12°51  | T 12 |
| F 13 | 15 22 39 | 22° 6'33 | 14°41  | 26°25  | 21°51  | 29°30  | 22°54  | 21°21  | 9°15   | 13°25  | 1°45  | 19°43  | 21°10  | 26°48  | 12°49  | F 13 |
| S 14 | 15 26 36 | 23° 4'24 | 26°51  | 27°36  | 23° 5  | 0°B15  | 22°49  | 21°29  | 9°18   | 13°26  | 1°46  | 19°45  | 21° 7  | 26°55  | 12°47  | S 14 |
| S 15 | 15 30 32 | 24° 2'13 | 9°B17  | 28°50  | 24°18  | 1° 0   | 22°43  | 21°37  | 9°22   | 13°27  | 1°47  | 19°46  | 21° 4  | 27° 2  | 12°46  | S 15 |
| M16  | 15 34 29 | 25° 0'00 | 22° 1  | 0°B 7  | 25°32  | 1°45   | 22°37  | 21°44  | 9°25   | 13°28  | 1°49  | 19°R47 | 21° 1  | 27° 8  | 12°44  | M16  |
| T 17 | 15 38 25 | 25°57'46 | 5°B 9  | 1°25   | 26°46  | 2°30   | 22°31  | 21°52  | 9°29   | 13°29  | 1°50  | 19°47  | 20°57  | 27°15  | 12°42  | T 17 |
| W18  | 15 42 22 | 26°55'30 | 18°43  | 2°47   | 28° 0  | 3°15   | 22°25  | 22° 0  | 9°32   | 13°30  | 1°51  | 19°45  | 20°54  | 27°22  | 12°39  | W18  |
| T 19 | 15 46 18 | 27°53'12 | 2°B45  | 4°10   | 29°14  | 3°59   | 22°19  | 22° 8  | 9°35   | 13°31  | 1°52  | 19°43  | 20°51  | 27°28  | 12°37  | T 19 |
| F 20 | 15 50 15 | 28°50'53 | 17°13  | 5°37   | 0°B27  | 4°44   | 22°12  | 22°15  | 9°39   | 13°32  | 1°54  | 19°41  | 20°48  | 27°35  | 12°35  | F 20 |
| S 21 | 15 54 11 | 29°48'32 | 2°B 4  | 7° 5   | 1°41   | 5°29   | 22° 6  | 22°23  | 9°42   | 13°33  | 1°55  | 19°38  | 20°45  | 27°42  | 12°33  | S 21 |
| S 22 | 15 58 8  | 0°B46'10 | 17°10  | 8°36   | 2°55   | 6°13   | 21°59  | 22°31  | 9°45   | 13°33  | 1°56  | 19°36  | 20°41  | 27°48  | 12°30  | S 22 |
| M23  | 16 2 5   | 1°43'46  | 2°A42  | 10°10  | 4° 9   | 6°58   | 21°53  | 22°39  | 9°48   | 13°34  | 1°57  | 19°34  | 20°38  | 27°55  | 12°28  | M23  |
| T 24 | 16 6 1   | 2°41'22  | 17°34  | 11°45  | 5°23   | 7°42   | 21°46  | 22°46  | 9°52   | 13°35  | 1°59  | 19°D34 | 20°35  | 28° 2  | 12°25  | T 24 |
| W25  | 16 9 58  | 3°38'56  | 2°B33  | 13°23  | 6°36   | 8°27   | 21°39  | 22°54  | 9°55   | 13°36  | 2° 0  | 19°34  | 20°32  | 28° 8  | 12°23  | W25  |
| T 26 | 16 13 54 | 4°36'29  | 17°12  | 15° 4  | 7°50   | 9°11   | 21°32  | 23° 2  | 9°58   | 13°36  | 2° 1  | 19°35  | 20°29  | 28°15  | 12°20  | T 26 |
| F 27 | 16 17 51 | 5°34'02  | 1°B26  | 16°47  | 9° 4   | 9°55   | 21°25  | 23° 9  | 10° 1  | 13°37  | 2° 2  | 19°36  | 20°26  | 28°22  | 12°18  | F 27 |
| S 28 | 16 21 47 | 6°31'33  | 15°15  | 18°32  | 10°18  | 10°40  | 21°18  | 23°17  | 10° 5  | 13°38  | 2° 3  | 19°37  | 20°22  | 28°28  | 12°15  | S 28 |
| S 29 | 16 25 44 | 7°29'04  | 28°37  | 20°19  | 11°31  | 11°24  | 21°11  | 23°24  | 10° 8  | 13°38  | 2° 5  | 19°38  | 20°19  | 28°35  | 12°12  | S 29 |
| M30  | 16 29 40 | 8°26'33  | 11°B35 | 22° 9  | 12°45  | 12° 8  | 21° 3  | 23°32  | 10°11  | 13°39  | 2° 6  | 19°R38 | 20°16  | 28°42  | 12° 9  | M30  |
| T 31 | 16 33 37 | 9°B24'02 | 24°B13 | 24°B 1 | 13°B59 | 12°B52 | 20°A56 | 23°B40 | 10°B14 | 13°B39 | 2°B 7 | 19°B37 | 20°B13 | 28°B48 | 12°B 6 | T 31 |

| Day  | ☉     | ☾     |      | ♀     |      | ♀     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂    |      | ♂    |       | ♂     |       | ♂     |       | ♂    |     | ♂    |     | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|-------|------|-----|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat   | decl  | lat   | decl  | lat   | decl | lat | decl | lat | decl | lat |
| S 1  | 14n59 | 19s16 | 4s26 | 4n 5  | 2s30 | 12n58 | 0s58 | 7n17  | 0s45 | 22s43 | 0n35 | 15n48 | 1s59 | 13n58 | 0s25 | 7s28 | 0s55 | 3s25 | 16s24 | 23n 6 | 23n12 | 16n55 | 15s58 | 6n53 |     |      |     |      |     |
| M 2  | 15 17 | 15 17 | 4 55 | 4 9   | 2 38 | 13 23 | 0 57 | 7 35  | 0 45 | 22 43 | 0 35 | 15 50 | 1 59 | 13 59 | 0 25 | 7 27 | 0 55 | 3 25 | 16 24 | 23 6  | 23 12 | 16 58 | 15 58 | 6 53 |     |      |     |      |     |
| T 3  | 15 35 | 10 43 | 5 9  | 4 17  | 2 44 | 13 49 | 0 55 | 7 52  | 0 44 | 22 43 | 0 35 | 15 52 | 1 59 | 14 0  | 0 25 | 7 27 | 0 55 | 3 25 | 16 24 | 23 6  | 23 12 | 17 0  | 15 57 | 6 54 |     |      |     |      |     |
| W 4  | 15 53 | 5 48  | 5 8  | 4 26  | 2 51 | 14 14 | 0 53 | 8 10  | 0 44 | 22 43 | 0 35 | 15 54 | 1 59 | 14 2  | 0 25 | 7 26 | 0 55 | 3 24 | 16 24 | 23 6  | 23 12 | 17 2  | 15 57 | 6 54 |     |      |     |      |     |
| T 5  | 16 10 | 0 43  | 4 53 | 4 37  | 2 56 | 14 38 | 0 51 | 8 27  | 0 43 | 22 43 | 0 35 | 15 56 | 1 58 | 14 3  | 0 25 | 7 26 | 0 55 | 3 24 | 16 25 | 23 5  | 23 12 | 17 5  | 15 56 | 6 55 |     |      |     |      |     |
| F 6  | 16 27 | 4n19  | 4 25 | 4 51  | 3 0  | 15 3  | 0 49 | 8 44  | 0 43 | 22 43 | 0 35 | 15 58 | 1 58 | 14 4  | 0 25 | 7 25 | 0 55 | 3 23 | 16 25 | 23 5  | 23 11 | 17 7  | 15 56 | 6 56 |     |      |     |      |     |
| S 7  | 16 44 | 9 10  | 3 46 | 5 6   | 3 4  | 15 26 | 0 47 | 9 1   | 0 42 | 22 43 | 0 35 | 16 0  | 1 58 | 14 5  | 0 25 | 7 25 | 0 55 | 3 23 | 16 25 | 23 4  | 23 11 | 17 9  | 15 55 | 6 56 |     |      |     |      |     |
| S 8  | 17 0  | 13 39 | 2 56 | 5 23  | 3 7  | 15 50 | 0 45 | 9 18  | 0 42 | 22 42 | 0 35 | 16 3  | 1 58 | 14 6  | 0 25 | 7 25 | 0 55 | 3 23 | 16 25 | 23 4  | 23 11 | 17 12 | 15 55 | 6 57 |     |      |     |      |     |
| M 9  | 17 17 | 17 37 | 2 0  | 5 42  | 3 9  | 16 13 | 0 43 | 9 35  | 0 41 | 22 42 | 0 35 | 16 5  | 1 58 | 14 7  | 0 25 | 7 24 | 0 55 | 3 22 | 16 25 | 23 4  | 23 11 | 17 14 | 15 54 | 6 57 |     |      |     |      |     |
| T 10 | 17 33 | 20 52 | 0 58 | 6 3   | 3 11 | 16 36 | 0 41 | 9 52  | 0 41 | 22 42 | 0 35 | 16 7  | 1 58 | 14 8  | 0 25 | 7 24 | 0 55 | 3 22 | 16 25 | 23 3  | 23 10 | 17 16 | 15 54 | 6 58 |     |      |     |      |     |
| W11  | 17 48 | 23 15 | 0n 6 | 6 25  | 3 12 | 16 58 | 0 39 | 10 9  | 0 40 | 22 42 | 0 35 | 16 9  | 1 58 | 14 9  | 0 25 | 7 23 | 0 55 | 3 22 | 16 25 | 23 3  | 23 10 | 17 19 | 15 53 | 6 58 |     |      |     |      |     |
| T 12 | 18 4  | 24 37 | 1 11 | 6 49  | 3 12 | 17 20 | 0 37 | 10 25 | 0 40 | 22 41 | 0 35 | 16 11 | 1 58 | 14 10 | 0 25 | 7 23 | 0 55 | 3 21 | 16 25 | 23 3  | 23 10 | 17 21 | 15 53 | 6 59 |     |      |     |      |     |
| F 13 | 18 19 | 24 51 | 2 13 | 7 14  | 3 11 | 17 41 | 0 34 | 10 42 | 0 39 | 22 41 | 0 35 | 16 13 | 1 58 | 14 11 | 0 25 | 7 22 | 0 55 | 3 21 | 16 25 | 23 4  | 23 10 | 17 23 | 15 53 | 7 0  |     |      |     |      |     |
| S 14 | 18 33 | 23 55 | 3 10 | 7 40  | 3 10 | 18 2  | 0 32 | 10 58 | 0 39 | 22 41 | 0 35 | 16 15 | 1 58 | 14 13 | 0 25 | 7 22 | 0 55 | 3 21 | 16 25 | 23 4  | 23 10 | 17 26 | 15 52 | 7 0  |     |      |     |      |     |
| S 15 | 18 48 | 21 48 | 4 0  | 8 8   | 3 8  | 18 23 | 0 30 | 11 14 | 0 38 | 22 41 | 0 35 | 16 17 | 1 58 | 14 14 | 0 25 | 7 22 | 0 55 | 3 20 | 16 25 | 23 4  | 23 9  | 17 28 | 15 52 | 7 1  |     |      |     |      |     |
| M16  | 19 2  | 18 35 | 4 39 | 8 37  | 3 6  | 18 43 | 0 28 | 11 30 | 0 37 | 22 40 | 0 35 | 16 19 | 1 58 | 14 15 | 0 25 | 7 21 | 0 55 | 3 20 | 16 25 | 23 4  | 23 9  | 17 30 | 15 52 | 7 1  |     |      |     |      |     |
| T 17 | 19 16 | 14 21 | 5 5  | 9 7   | 3 3  | 19 2  | 0 25 | 11 46 | 0 37 | 22 40 | 0 35 | 16 21 | 1 58 | 14 16 | 0 25 | 7 21 | 0 55 | 3 20 | 16 26 | 23 4  | 23 9  | 17 33 | 15 51 | 7 2  |     |      |     |      |     |
| W18  | 19 29 | 9 18  | 5 15 | 9 38  | 2 59 | 19 21 | 0 23 | 12 2  | 0 36 | 22 40 | 0 35 | 16 23 | 1 58 | 14 17 | 0 25 | 7 21 | 0 55 | 3 19 | 16 26 | 23 4  | 23 9  | 17 35 | 15 51 | 7 2  |     |      |     |      |     |
| T 19 | 19 42 | 3 36  | 5 7  | 10 11 | 2 55 | 19 40 | 0 21 | 12 18 | 0 36 | 22 40 | 0 35 | 16 25 | 1 58 | 14 18 | 0 25 | 7 20 | 0 55 | 3 19 | 16 26 | 23 4  | 23 9  | 17 37 | 15 51 | 7 3  |     |      |     |      |     |
| F 20 | 19 55 | 2s28  | 4 40 | 10 44 | 2 50 | 19 58 | 0 19 | 12 33 | 0 35 | 22 39 | 0 34 | 16 27 | 1 58 | 14 19 | 0 25 | 7 20 | 0 55 | 3 19 | 16 26 | 23 3  | 23 8  | 17 39 | 15 50 | 7 3  |     |      |     |      |     |
| S 21 | 20 8  | 8 33  | 3 53 | 11 18 | 2 45 | 20 15 | 0 16 | 12 49 | 0 35 | 22 39 | 0 34 | 16 29 | 1 58 | 14 20 | 0 25 | 7 20 | 0 56 | 3 18 | 16 26 | 23 3  | 23 8  | 17 42 | 15 50 | 7 4  |     |      |     |      |     |
| S 22 | 20 20 | 14 16 | 2 50 | 11 53 | 2 39 | 20 32 | 0 14 | 13 4  | 0 34 | 22 39 | 0 34 | 16 31 | 1 58 | 14 21 | 0 25 | 7 20 | 0 56 | 3 18 | 16 26 | 23 3  | 23 8  | 17 44 | 15 50 | 7 4  |     |      |     |      |     |
| M23  | 20 31 | 19 8  | 1 34 | 12 28 | 2 32 | 20 48 | 0 12 | 13 19 | 0 33 | 22 38 | 0 34 | 16 33 | 1 58 | 14 22 | 0 25 | 7 19 | 0 56 | 3 18 | 16 26 | 23 3  | 23 8  | 17 46 | 15 50 | 7 5  |     |      |     |      |     |
| T 24 | 20 43 | 22 42 | 0 11 | 13 4  | 2 25 | 21 4  | 0 9  | 13 34 | 0 33 | 22 38 | 0 34 | 16 35 | 1 58 | 14 23 | 0 25 | 7 19 | 0 56 | 3 18 | 16 27 | 23 3  | 23 7  | 17 48 | 15 49 | 7 5  |     |      |     |      |     |
| W25  | 20 54 | 24 37 | 1s11 | 13 41 | 2 18 | 21 19 | 0 7  | 13 49 | 0 32 | 22 38 | 0 34 | 16 37 | 1 58 | 14 24 | 0 25 | 7 19 | 0 56 | 3 17 | 16 27 | 23 3  | 23 7  | 17 51 | 15 49 | 7 6  |     |      |     |      |     |
| T 26 | 21 5  | 24 47 | 2 27 | 14 18 | 2 10 | 21 34 | 0 4  | 14 4  | 0 32 | 22 37 | 0 34 | 16 39 | 1 58 | 14 25 | 0 25 | 7 18 | 0 56 | 3 17 | 16 27 | 23 3  | 23 7  | 17 53 | 15 49 | 7 6  |     |      |     |      |     |
| F 27 | 21 15 | 23 18 | 3 32 | 14 55 | 2 1  | 21 48 | 0 2  | 14 19 | 0 31 | 22 37 | 0 34 | 16 41 | 1 58 | 14 26 | 0 25 | 7 18 | 0 56 | 3 17 | 16 27 | 23 3  | 23 7  | 17 55 | 15 49 | 7 7  |     |      |     |      |     |
| S 28 | 21 25 | 20 27 | 4 22 | 15 33 | 1 53 | 22 1  | 0n 0 | 14 33 | 0 30 | 22 37 | 0 34 | 16 43 | 1 58 | 14 27 | 0 25 | 7 18 | 0 56 | 3 17 | 16 27 | 23 3  | 23 7  | 17 58 | 15 48 | 7 7  |     |      |     |      |     |
| S 29 | 21 35 | 16 35 | 4 56 | 16 11 | 1 43 | 22 14 | 0 3  | 14 47 | 0 30 | 22 36 | 0 34 | 16 44 | 1 58 | 14 28 | 0 25 | 7 18 | 0 56 | 3 17 | 16 27 | 23 3  | 23 6  | 18 0  | 15 48 | 7 7  |     |      |     |      |     |
| M30  | 21 44 | 12 3  | 5 16 | 16 48 | 1 34 | 22 26 | 0 5  | 15 1  | 0 29 | 22 36 | 0 34 | 16 46 | 1 58 | 14 29 | 0 25 | 7 18 | 0 56 | 3 16 | 16 28 | 23 3  | 23 6  | 18 2  | 15 48 | 7 8  |     |      |     |      |     |
| T 31 | 21n53 | 7s 8  | 5s16 | 17n26 | 1s24 | 22n37 | 0n 8 | 15n15 | 0s29 | 22s36 | 0n33 | 16n48 | 1s58 | 14n30 | 0s25 | 7s18 | 0s56 | 3s16 | 16s28 | 23n 3 | 23n 6 | 18n 4 | 15s48 | 7n 8 |     |      |     |      |     |



ASTRODIENST EPHEMERIS for the year 1853  
geocentric

JUNE 1853

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂     | ♀     | ♂     | ♂      | ♂     | ♂     | ♂      | ♂    | ♂      | ♂     | ♂     | ♂      | Day  |
|------|----------|----------|-------|-------|-------|-------|--------|-------|-------|--------|------|--------|-------|-------|--------|------|
| W 1  | 16 37 34 | 10♐21'31 | 6♈33  | 25♈55 | 15♐13 | 13♈36 | 20°R49 | 23♈47 | 10♈17 | 13♈40  | 2♈ 8 | 19°R37 | 20♐10 | 28♈55 | 12°R 3 | W 1  |
| T 2  | 16 41 30 | 11°18'58 | 18°40 | 27°51 | 16°26 | 14°20 | 20♈41  | 23°55 | 10°20 | 13°40  | 2° 9 | 19♐36  | 20° 7 | 29° 2 | 12♈ 0  | T 2  |
| F 3  | 16 45 27 | 12°16'25 | 0♈38  | 29°50 | 17°40 | 15° 4 | 20°34  | 24° 2 | 10°23 | 13°41  | 2°10 | 19°35  | 20° 3 | 29° 8 | 11°57  | F 3  |
| S 4  | 16 49 23 | 13°13'51 | 12°29 | 1♐50  | 18°54 | 15°48 | 20°26  | 24°10 | 10°26 | 13°41  | 2°11 | 19°34  | 20° 0 | 29°15 | 11°54  | S 4  |
| S 5  | 16 53 20 | 14°11'16 | 24°17 | 3°53  | 20° 8 | 16°32 | 20°19  | 24°17 | 10°29 | 13°42  | 2°12 | 19°33  | 19°57 | 29°22 | 11°51  | S 5  |
| M 6  | 16 57 16 | 15° 8'41 | 6♐ 4  | 5°58  | 21°21 | 17°15 | 20°11  | 24°25 | 10°32 | 13°42  | 2°14 | 19°33  | 19°54 | 29°28 | 11°48  | M 6  |
| T 7  | 17 1 13  | 16° 6'04 | 17°54 | 8° 4  | 22°35 | 17°59 | 20° 4  | 24°32 | 10°35 | 13°42  | 2°15 | 19°D32 | 19°51 | 29°35 | 11°44  | T 7  |
| W 8  | 17 5 9   | 17° 3'27 | 29°47 | 10°11 | 23°49 | 18°43 | 19°56  | 24°39 | 10°38 | 13°43  | 2°16 | 19°32  | 19°47 | 29°42 | 11°41  | W 8  |
| T 9  | 17 9 6   | 18° 0'49 | 11♐47 | 12°20 | 25° 2 | 19°26 | 19°48  | 24°47 | 10°41 | 13°43  | 2°17 | 19°33  | 19°44 | 29°48 | 11°38  | T 9  |
| F 10 | 17 13 3  | 18°58'11 | 23°55 | 14°30 | 26°16 | 20°10 | 19°41  | 24°54 | 10°44 | 13°43  | 2°18 | 19°33  | 19°41 | 29°55 | 11°34  | F 10 |
| S 11 | 17 16 59 | 19°55'31 | 6♐15  | 16°41 | 27°30 | 20°53 | 19°33  | 25° 1 | 10°47 | 13°43  | 2°19 | 19°R33 | 19°38 | 0♐ 1  | 11°31  | S 11 |
| S 12 | 17 20 56 | 20°52'51 | 18°48 | 18°53 | 28°43 | 21°36 | 19°25  | 25° 9 | 10°50 | 13°43  | 2°20 | 19°33  | 19°35 | 0° 8  | 11°28  | S 12 |
| M13  | 17 24 52 | 21°50'09 | 1♐37  | 21° 5 | 29°57 | 22°20 | 19°18  | 25°16 | 10°53 | 13°44  | 2°21 | 19°32  | 19°32 | 0°15  | 11°24  | M13  |
| T 14 | 17 28 49 | 22°47'27 | 14°46 | 23°17 | 1♐11  | 23° 3 | 19°10  | 25°23 | 10°55 | 13°44  | 2°22 | 19°32  | 19°28 | 0°21  | 11°21  | T 14 |
| W15  | 17 32 45 | 23°44'44 | 28°15 | 25°29 | 2°24  | 23°46 | 19° 2  | 25°30 | 10°58 | 13°44  | 2°22 | 19°D32 | 19°25 | 0°28  | 11°17  | W15  |
| T 16 | 17 36 42 | 24°42'00 | 12♐ 7 | 27°40 | 3°38  | 24°29 | 18°55  | 25°37 | 11° 1 | 13°R44 | 2°23 | 19°32  | 19°22 | 0°35  | 11°13  | T 16 |
| F 17 | 17 40 38 | 25°39'15 | 26°21 | 29°50 | 4°52  | 25°13 | 18°47  | 25°45 | 11° 4 | 13°44  | 2°24 | 19°33  | 19°19 | 0°41  | 11°10  | F 17 |
| S 18 | 17 44 35 | 26°36'29 | 10♐56 | 2♐ 0  | 6° 5  | 25°56 | 18°40  | 25°52 | 11° 6 | 13°44  | 2°25 | 19°33  | 19°16 | 0°48  | 11° 6  | S 18 |
| S 19 | 17 48 32 | 27°33'43 | 25°47 | 4° 8  | 7°19  | 26°38 | 18°32  | 25°59 | 11° 9 | 13°44  | 2°26 | 19°34  | 19°13 | 0°55  | 11° 2  | S 19 |
| M20  | 17 52 28 | 28°30'56 | 10♐48 | 6°15  | 8°33  | 27°21 | 18°25  | 26° 6 | 11°11 | 13°44  | 2°27 | 19°34  | 19° 9 | 1° 1  | 10°59  | M20  |
| T 21 | 17 56 25 | 29°28'09 | 25°51 | 8°20  | 9°46  | 28° 4 | 18°17  | 26°13 | 11°14 | 13°43  | 2°28 | 19°R35 | 19° 6 | 1° 8  | 10°55  | T 21 |
| W22  | 18 0 21  | 0♐25'21  | 10♐47 | 10°24 | 11° 0 | 28°47 | 18°10  | 26°19 | 11°17 | 13°43  | 2°29 | 19°34  | 19° 3 | 1°15  | 10°51  | W22  |
| T 23 | 18 4 18  | 1°22'33  | 25°29 | 12°26 | 12°13 | 29°30 | 18° 3  | 26°26 | 11°19 | 13°43  | 2°29 | 19°33  | 19° 0 | 1°21  | 10°48  | T 23 |
| F 24 | 18 8 14  | 2°19'45  | 9♐50  | 14°26 | 13°27 | 0♐12  | 17°55  | 26°33 | 11°22 | 13°43  | 2°30 | 19°32  | 18°57 | 1°28  | 10°44  | F 24 |
| S 25 | 18 12 11 | 3°16'56  | 23°46 | 16°24 | 14°41 | 0°55  | 17°48  | 26°40 | 11°24 | 13°43  | 2°31 | 19°30  | 18°54 | 1°35  | 10°40  | S 25 |
| S 26 | 18 16 8  | 4°14'08  | 7♐15  | 18°20 | 15°54 | 1°38  | 17°41  | 26°47 | 11°26 | 13°42  | 2°32 | 19°28  | 18°50 | 1°41  | 10°36  | S 26 |
| M27  | 18 20 4  | 5°11'20  | 20°18 | 20°14 | 17° 8 | 2°20  | 17°34  | 26°53 | 11°29 | 13°42  | 2°32 | 19°27  | 18°47 | 1°48  | 10°33  | M27  |
| T 28 | 18 24 1  | 6° 8'31  | 2♐59  | 22° 6 | 18°21 | 3° 2  | 17°27  | 27° 0 | 11°31 | 13°42  | 2°33 | 19°D27 | 18°44 | 1°55  | 10°29  | T 28 |
| W29  | 18 27 57 | 7° 5'43  | 15°19 | 23°56 | 19°35 | 3°45  | 17°20  | 27° 7 | 11°33 | 13°41  | 2°34 | 19°27  | 18°41 | 2° 1  | 10°25  | W29  |
| T 30 | 18 31 54 | 8♐ 2'55  | 27♐25 | 25♐44 | 20♐49 | 4♐27  | 17♐14  | 27♐13 | 11♐36 | 13♐41  | 2♐35 | 19♐28  | 18♐38 | 2♐ 8  | 10♐21  | T 30 |

| Day  | ☉     | ☾     |      | ♂     |      | ♀     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂    |      | ♂    |       | ♂     |       | ♂     |       | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|-------|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat   | decl  | lat   | decl  | lat   | decl | lat |
| W 1  | 22n 1 | 2s 2  | 5s 3 | 18n 3 | 1s14 | 22n48 | 0n10 | 15n29 | 0s28 | 22s35 | 0n33 | 16n50 | 1s58 | 14n31 | 0s25 | 7s17 | 0s56 | 3s16 | 16s28 | 23n 3 | 23n 6 | 18n 7 | 15s48 | 7n 9 |     |
| T 2  | 22 9  | 3n 3  | 4 37 | 18 40 | 1 3  | 22 58 | 0 12 | 15 43 | 0 27 | 22 35 | 0 33 | 16 52 | 1 58 | 14 32 | 0 25 | 7 17 | 0 56 | 3 16 | 16 28 | 23 3  | 23 5  | 18 9  | 15 48 | 7 9  |     |
| F 3  | 22 17 | 7 58  | 3 59 | 19 16 | 0 53 | 23 8  | 0 15 | 15 57 | 0 27 | 22 34 | 0 33 | 16 54 | 1 58 | 14 33 | 0 25 | 7 17 | 0 56 | 3 16 | 16 28 | 23 3  | 23 5  | 18 11 | 15 47 | 7 9  |     |
| S 4  | 22 24 | 12 33 | 3 12 | 19 52 | 0 42 | 23 17 | 0 17 | 16 10 | 0 26 | 22 34 | 0 33 | 16 55 | 1 58 | 14 34 | 0 25 | 7 17 | 0 56 | 3 15 | 16 29 | 23 3  | 23 5  | 18 13 | 15 47 | 7 10 |     |
| S 5  | 22 31 | 16 40 | 2 16 | 20 26 | 0 31 | 23 25 | 0 19 | 16 23 | 0 25 | 22 33 | 0 33 | 16 57 | 1 58 | 14 35 | 0 25 | 7 17 | 0 56 | 3 15 | 16 29 | 23 3  | 23 5  | 18 15 | 15 47 | 7 10 |     |
| M 6  | 22 38 | 20 7  | 1 14 | 20 59 | 0 20 | 23 32 | 0 22 | 16 36 | 0 25 | 22 33 | 0 33 | 16 59 | 1 58 | 14 36 | 0 25 | 7 17 | 0 56 | 3 15 | 16 29 | 23 3  | 23 4  | 18 18 | 15 47 | 7 11 |     |
| T 7  | 22 44 | 22 45 | 0 9  | 21 31 | 0 9  | 23 39 | 0 24 | 16 49 | 0 24 | 22 33 | 0 33 | 17 1  | 1 58 | 14 37 | 0 25 | 7 17 | 0 56 | 3 15 | 16 29 | 23 3  | 23 4  | 18 20 | 15 47 | 7 11 |     |
| W 8  | 22 50 | 24 24 | 0n57 | 22 1  | 0n 1 | 23 45 | 0 26 | 17 2  | 0 24 | 22 32 | 0 33 | 17 3  | 1 58 | 14 38 | 0 25 | 7 17 | 0 56 | 3 15 | 16 29 | 23 3  | 23 4  | 18 22 | 15 47 | 7 11 |     |
| T 9  | 22 55 | 24 56 | 2 1  | 22 30 | 0 12 | 23 51 | 0 29 | 17 14 | 0 23 | 22 32 | 0 32 | 17 4  | 1 58 | 14 39 | 0 25 | 7 17 | 0 56 | 3 15 | 16 30 | 23 3  | 23 4  | 18 24 | 15 47 | 7 12 |     |
| F 10 | 23 0  | 24 17 | 3 0  | 22 56 | 0 23 | 23 55 | 0 31 | 17 27 | 0 22 | 22 31 | 0 32 | 17 6  | 1 58 | 14 39 | 0 25 | 7 16 | 0 56 | 3 15 | 16 30 | 23 3  | 23 3  | 18 27 | 15 47 | 7 12 |     |
| S 11 | 23 5  | 22 28 | 3 51 | 23 20 | 0 33 | 23 59 | 0 33 | 17 39 | 0 22 | 22 31 | 0 32 | 17 8  | 1 58 | 14 40 | 0 25 | 7 16 | 0 56 | 3 14 | 16 30 | 23 3  | 23 3  | 18 29 | 15 47 | 7 12 |     |
| S 12 | 23 9  | 19 31 | 4 33 | 23 42 | 0 43 | 24 3  | 0 35 | 17 51 | 0 21 | 22 30 | 0 32 | 17 9  | 1 58 | 14 41 | 0 25 | 7 16 | 0 56 | 3 14 | 16 30 | 23 3  | 23 3  | 18 31 | 15 47 | 7 12 |     |
| M13  | 23 12 | 15 36 | 5 2  | 24 1  | 0 52 | 24 5  | 0 38 | 18 2  | 0 20 | 22 30 | 0 32 | 17 11 | 1 58 | 14 42 | 0 25 | 7 16 | 0 56 | 3 14 | 16 31 | 23 3  | 23 3  | 18 33 | 15 47 | 7 13 |     |
| T 14 | 23 16 | 10 52 | 5 17 | 24 18 | 1 1  | 24 7  | 0 40 | 18 14 | 0 20 | 22 29 | 0 32 | 17 13 | 1 58 | 14 43 | 0 25 | 7 16 | 0 56 | 3 14 | 16 31 | 23 3  | 23 2  | 18 35 | 15 47 | 7 13 |     |
| W15  | 23 19 | 5 30  | 5 14 | 24 32 | 1 9  | 24 8  | 0 42 | 18 26 | 0 19 | 22 29 | 0 32 | 17 14 | 1 58 | 14 44 | 0 25 | 7 16 | 0 57 | 3 14 | 16 31 | 23 3  | 23 2  | 18 38 | 15 47 | 7 13 |     |
| T 16 | 23 21 | 0s17  | 4 53 | 24 43 | 1 17 | 24 9  | 0 44 | 18 37 | 0 18 | 22 28 | 0 32 | 17 16 | 1 58 | 14 45 | 0 25 | 7 16 | 0 57 | 3 14 | 16 31 | 23 3  | 23 2  | 18 40 | 15 47 | 7 14 |     |
| F 17 | 23 23 | 6 13  | 4 15 | 24 51 | 1 24 | 24 8  | 0 46 | 18 48 | 0 18 | 22 28 | 0 31 | 17 18 | 1 58 | 14 46 | 0 25 | 7 16 | 0 57 | 3 14 | 16 32 | 23 3  | 23 2  | 18 42 | 15 47 | 7 14 |     |
| S 18 | 23 25 | 11 58 | 3 19 | 24 57 | 1 30 | 24 7  | 0 48 | 18 59 | 0 17 | 22 27 | 0 31 | 17 19 | 1 58 | 14 46 | 0 25 | 7 17 | 0 57 | 3 14 | 16 32 | 23 3  | 23 1  | 18 44 | 15 47 | 7 14 |     |
| S 19 | 23 26 | 17 8  | 2 8  | 25 0  | 1 36 | 24 6  | 0 50 | 19 9  | 0 16 | 22 27 | 0 31 | 17 21 | 1 58 | 14 47 | 0 25 | 7 17 | 0 57 | 3 14 | 16 32 | 23 3  | 23 1  | 18 46 | 15 47 | 7 14 |     |
| M20  | 23 27 | 21 17 | 0 49 | 25 0  | 1 41 | 24 3  | 0 52 | 19 20 | 0 16 | 22 26 | 0 31 | 17 22 | 1 58 | 14 48 | 0 25 | 7 17 | 0 57 | 3 14 | 16 32 | 23 3  | 23 1  | 18 49 | 15 47 | 7 14 |     |
| T 21 | 23 27 | 23 58 | 0s35 | 24 57 | 1 45 | 24 0  | 0 54 | 19 30 | 0 15 | 22 26 | 0 31 | 17 24 | 1 58 | 14 49 | 0 25 | 7 17 | 0 57 | 3 14 | 16 33 | 23 3  | 23 1  | 18 51 | 15 47 | 7 15 |     |
| W22  | 23 27 | 24 56 | 1 55 | 24 52 | 1 49 | 23 56 | 0 56 | 19 40 | 0 14 | 22 25 | 0 31 | 17 26 | 1 59 | 14 49 | 0 25 | 7 17 | 0 57 | 3 14 | 16 33 | 23 3  | 23 0  | 18 53 | 15 47 | 7 15 |     |
| T 23 | 23 27 | 24 7  | 3 6  | 24 44 | 1 52 | 23 52 | 0 58 | 19 50 | 0 13 | 22 25 | 0 31 | 17 27 | 1 59 | 14 50 | 0 25 | 7 17 | 0 57 | 3 14 | 16 33 | 23 3  | 23 0  | 18 55 | 15 48 | 7 15 |     |
| F 24 | 23 26 | 21 43 | 4 4  | 24 34 | 1 54 | 23 47 | 1 0  | 20 0  | 0 13 | 22 24 | 0 30 | 17 29 | 1 59 | 14 51 | 0 25 | 7 17 | 0 57 | 3 14 | 16 33 | 23 3  | 23 0  | 18 57 | 15 48 | 7 15 |     |
| S 25 | 23 25 | 18 6  | 4 45 | 24 21 | 1 55 | 23 41 | 1 2  | 20 10 | 0 12 | 22 24 | 0 30 | 17 30 | 1 59 | 14 52 | 0 25 | 7 17 | 0 57 | 3 14 | 16 34 | 23 3  | 23 0  | 18 59 | 15 48 | 7 15 |     |
| S 26 | 23 23 | 13 38 | 5 9  | 24 7  | 1 55 | 23 34 | 1 4  | 20 19 | 0 11 | 22 23 | 0 30 | 17 32 | 1 59 | 14 53 | 0 25 | 7 17 | 0 57 | 3 14 | 16 34 | 23 2  | 22 59 | 19 2  | 15 48 | 7 15 |     |
| M27  | 23 21 | 8 41  | 5 16 | 23 50 | 1 55 | 23 27 | 1 5  | 20 28 | 0 11 | 22 23 | 0 30 | 17 33 | 1 59 | 14 53 | 0 25 | 7 18 | 0 57 | 3 14 | 16 34 | 23 2  | 22 59 | 19 4  | 15 48 | 7 15 |     |
| T 28 | 23 19 | 3 31  | 5 8  | 23 32 | 1 54 | 23 19 | 1 7  | 20 37 | 0 10 | 22 22 | 0 30 | 17 34 | 1 59 | 14 54 | 0 25 | 7 18 | 0 57 | 3 14 | 16 35 | 23 2  | 22 59 | 19 6  | 15 48 | 7 16 |     |
| W29  | 23 16 | 1n39  | 4 45 | 23 11 | 1 53 | 23 10 | 1 9  | 20 46 | 0 9  | 22 22 | 0 30 | 17 36 | 1 59 | 14 55 | 0 25 | 7 18 | 0 57 | 3 14 | 16 35 | 23 2  | 22 59 | 19 8  | 15 49 | 7 16 |     |
| T 30 | 23n13 | 6n40  | 4s10 | 22n50 | 1n51 | 23n 0 | 1n10 | 20n55 | 0s 9 | 22s21 | 0n29 | 17n37 | 1s59 | 14n55 | 0s25 | 7s18 | 0s57 | 3s14 | 16s35 | 23n 2 | 22n58 | 19n10 | 15s49 | 7n16 |     |

## ASTRODIENST EPHEMERIS for the year 1853

geocentric

JULY 1853

00:00 UT

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

| Day  | ☉     | ☾     |      | ♀     |      | ♀     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂    |      | ♂    |       | ♂     |       | ♂     |       | ♂    |     | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|-------|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat   | decl  | lat   | decl  | lat   | decl | lat | decl | lat |
| F 1  | 23n 9 | 11n23 | 3s24 | 22n27 | 1n48 | 22n50 | 1n12 | 21n 3 | 0s 8 | 22s21 | 0n29 | 17n39 | 1s59 | 14n56 | 0s25 | 7s18 | 0s57 | 3s14 | 16s35 | 23n 3 | 22n58 | 19n12 | 15s49 | 7n16 |     |      |     |
| S 2  | 23 5  | 15 38 | 2 31 | 22 2  | 1 45 | 22 40 | 1 13 | 21 11 | 0 7  | 22 20 | 0 29 | 17 40 | 1 59 | 14 57 | 0 25 | 7 19 | 0 57 | 3 14 | 16 36 | 23 3  | 22 58 | 19 14 | 15 49 | 7 16 |     |      |     |
| S 3  | 23 1  | 19 17 | 1 30 | 21 36 | 1 41 | 22 28 | 1 15 | 21 19 | 0 6  | 22 20 | 0 29 | 17 41 | 1 59 | 14 57 | 0 25 | 7 19 | 0 57 | 3 14 | 16 36 | 23 3  | 22 57 | 19 17 | 15 49 | 7 16 |     |      |     |
| M 4  | 22 56 | 22 9  | 0 26 | 21 10 | 1 36 | 22 16 | 1 16 | 21 27 | 0 6  | 22 20 | 0 29 | 17 43 | 1 59 | 14 58 | 0 25 | 7 19 | 0 57 | 3 14 | 16 36 | 23 3  | 22 57 | 19 19 | 15 50 | 7 16 |     |      |     |
| T 5  | 22 50 | 24 4  | 0n39 | 20 42 | 1 31 | 22 3  | 1 18 | 21 34 | 0 5  | 22 19 | 0 29 | 17 44 | 2 0  | 14 59 | 0 25 | 7 19 | 0 57 | 3 15 | 16 37 | 23 3  | 22 57 | 19 21 | 15 50 | 7 16 |     |      |     |
| W 6  | 22 45 | 24 54 | 1 43 | 20 13 | 1 25 | 21 50 | 1 19 | 21 42 | 0 4  | 22 19 | 0 28 | 17 45 | 2 0  | 14 59 | 0 25 | 7 20 | 0 57 | 3 15 | 16 37 | 23 3  | 22 57 | 19 23 | 15 50 | 7 16 |     |      |     |
| T 7  | 22 39 | 24 32 | 2 44 | 19 44 | 1 19 | 21 36 | 1 20 | 21 49 | 0 4  | 22 18 | 0 28 | 17 47 | 2 0  | 15 0  | 0 25 | 7 20 | 0 57 | 3 15 | 16 37 | 23 3  | 22 56 | 19 25 | 15 50 | 7 16 |     |      |     |
| F 8  | 22 32 | 22 58 | 3 38 | 19 13 | 1 12 | 21 21 | 1 21 | 21 56 | 0 3  | 22 18 | 0 28 | 17 48 | 2 0  | 15 0  | 0 25 | 7 20 | 0 57 | 3 15 | 16 38 | 23 2  | 22 56 | 19 27 | 15 51 | 7 16 |     |      |     |
| S 9  | 22 25 | 20 15 | 4 21 | 18 43 | 1 5  | 21 6  | 1 23 | 22 3  | 0 2  | 22 17 | 0 28 | 17 49 | 2 0  | 15 1  | 0 25 | 7 20 | 0 57 | 3 15 | 16 38 | 23 2  | 22 56 | 19 29 | 15 51 | 7 16 |     |      |     |
| S 10 | 22 18 | 16 31 | 4 53 | 18 11 | 0 57 | 20 51 | 1 24 | 22 9  | 0 1  | 22 17 | 0 28 | 17 50 | 2 0  | 15 2  | 0 25 | 7 21 | 0 58 | 3 15 | 16 38 | 23 2  | 22 56 | 19 31 | 15 51 | 7 16 |     |      |     |
| M 11 | 22 10 | 11 57 | 5 10 | 17 40 | 0 49 | 20 34 | 1 25 | 22 15 | 0 1  | 22 17 | 0 27 | 17 51 | 2 0  | 15 2  | 0 25 | 7 21 | 0 58 | 3 15 | 16 39 | 23 1  | 22 55 | 19 33 | 15 52 | 7 16 |     |      |     |
| T 12 | 22 2  | 6 45  | 5 11 | 17 8  | 0 41 | 20 17 | 1 26 | 22 21 | 0n 0 | 22 16 | 0 27 | 17 53 | 2 0  | 15 3  | 0 25 | 7 21 | 0 58 | 3 15 | 16 39 | 23 1  | 22 55 | 19 36 | 15 52 | 7 16 |     |      |     |
| W 13 | 21 54 | 1 8   | 4 55 | 16 36 | 0 32 | 20 0  | 1 26 | 22 27 | 0 1  | 22 16 | 0 27 | 17 54 | 2 0  | 15 3  | 0 25 | 7 22 | 0 58 | 3 16 | 16 39 | 23 1  | 22 55 | 19 38 | 15 52 | 7 16 |     |      |     |
| T 14 | 21 45 | 4s39  | 4 22 | 16 4  | 0 22 | 19 42 | 1 27 | 22 33 | 0 2  | 22 16 | 0 27 | 17 55 | 2 0  | 15 4  | 0 25 | 7 22 | 0 58 | 3 16 | 16 39 | 23 1  | 22 54 | 19 40 | 15 53 | 7 16 |     |      |     |
| F 15 | 21 36 | 10 19 | 3 33 | 15 31 | 0 13 | 19 23 | 1 28 | 22 39 | 0 2  | 22 15 | 0 27 | 17 56 | 2 1  | 15 4  | 0 26 | 7 22 | 0 58 | 3 16 | 16 40 | 23 1  | 22 54 | 19 42 | 15 53 | 7 16 |     |      |     |
| S 16 | 21 27 | 15 32 | 2 29 | 14 59 | 0 3  | 19 4  | 1 29 | 22 44 | 0 3  | 22 15 | 0 27 | 17 57 | 2 1  | 15 5  | 0 26 | 7 23 | 0 58 | 3 16 | 16 40 | 23 1  | 22 54 | 19 44 | 15 53 | 7 16 |     |      |     |
| S 17 | 21 17 | 19 57 | 1 16 | 14 27 | 0s 8 | 18 44 | 1 29 | 22 49 | 0 4  | 22 15 | 0 26 | 17 58 | 2 1  | 15 5  | 0 26 | 7 23 | 0 58 | 3 16 | 16 40 | 23 1  | 22 54 | 19 46 | 15 54 | 7 15 |     |      |     |
| M 18 | 21 7  | 23 8  | 0s 4 | 13 55 | 0 19 | 18 24 | 1 30 | 22 54 | 0 5  | 22 14 | 0 26 | 17 59 | 2 1  | 15 6  | 0 26 | 7 24 | 0 58 | 3 17 | 16 41 | 23 1  | 22 53 | 19 48 | 15 54 | 7 15 |     |      |     |
| T 19 | 20 56 | 24 46 | 1 23 | 13 23 | 0 30 | 18 3  | 1 30 | 22 58 | 0 5  | 22 14 | 0 26 | 18 0  | 2 1  | 15 6  | 0 26 | 7 24 | 0 58 | 3 17 | 16 41 | 23 1  | 22 53 | 19 50 | 15 54 | 7 15 |     |      |     |
| W 20 | 20 45 | 24 39 | 2 36 | 12 52 | 0 41 | 17 42 | 1 31 | 23 3  | 0 6  | 22 14 | 0 26 | 18 1  | 2 1  | 15 6  | 0 26 | 7 24 | 0 58 | 3 17 | 16 41 | 23 1  | 22 53 | 19 52 | 15 55 | 7 15 |     |      |     |
| T 21 | 20 34 | 22 52 | 3 39 | 12 22 | 0 53 | 17 20 | 1 31 | 23 7  | 0 7  | 22 14 | 0 26 | 18 2  | 2 1  | 15 7  | 0 26 | 7 25 | 0 58 | 3 17 | 16 42 | 23 0  | 22 52 | 19 54 | 15 55 | 7 15 |     |      |     |
| F 22 | 20 22 | 19 40 | 4 26 | 11 51 | 1 4  | 16 58 | 1 31 | 23 11 | 0 8  | 22 13 | 0 25 | 18 3  | 2 1  | 15 7  | 0 26 | 7 25 | 0 58 | 3 17 | 16 42 | 23 0  | 22 52 | 19 56 | 15 55 | 7 15 |     |      |     |
| S 23 | 20 10 | 15 25 | 4 56 | 11 22 | 1 17 | 16 35 | 1 32 | 23 15 | 0 8  | 22 13 | 0 25 | 18 4  | 2 2  | 15 8  | 0 26 | 7 26 | 0 58 | 3 18 | 16 42 | 22 59 | 22 52 | 19 58 | 15 56 | 7 15 |     |      |     |
| S 24 | 19 58 | 10 30 | 5 9  | 10 53 | 1 29 | 16 12 | 1 32 | 23 19 | 0 9  | 22 13 | 0 25 | 18 5  | 2 2  | 15 8  | 0 26 | 7 26 | 0 58 | 3 18 | 16 43 | 22 59 | 22 51 | 20 0  | 15 56 | 7 14 |     |      |     |
| M 25 | 19 45 | 5 16  | 5 5  | 10 26 | 1 41 | 15 49 | 1 32 | 23 22 | 0 10 | 22 13 | 0 25 | 18 6  | 2 2  | 15 8  | 0 26 | 7 27 | 0 58 | 3 18 | 16 43 | 22 58 | 22 51 | 20 2  | 15 57 | 7 14 |     |      |     |
| T 26 | 19 32 | 0n 3  | 4 46 | 9 59  | 1 54 | 15 25 | 1 32 | 23 25 | 0 11 | 22 13 | 0 25 | 18 7  | 2 2  | 15 9  | 0 26 | 7 27 | 0 58 | 3 18 | 16 43 | 22 58 | 22 51 | 20 5  | 15 57 | 7 14 |     |      |     |
| W 27 | 19 19 | 5 14  | 4 14 | 9 33  | 2 6  | 15 1  | 1 32 | 23 28 | 0 11 | 22 12 | 0 25 | 18 8  | 2 2  | 15 9  | 0 26 | 7 28 | 0 58 | 3 19 | 16 44 | 22 58 | 22 51 | 20 7  | 15 58 | 7 14 |     |      |     |
| T 28 | 19 5  | 10 6  | 3 31 | 9 9   | 2 19 | 14 36 | 1 32 | 23 31 | 0 12 | 22 12 | 0 24 | 18 9  | 2 2  | 15 9  | 0 26 | 7 28 | 0 58 | 3 19 | 16 44 | 22 58 | 22 50 | 20 9  | 15 58 | 7 13 |     |      |     |
| F 29 | 18 51 | 14 32 | 2 40 | 8 46  | 2 32 | 14 11 | 1 31 | 23 33 | 0 13 | 22 12 | 0 24 | 18 10 | 2 2  | 15 10 | 0 26 | 7 29 | 0 58 | 3 19 | 16 44 | 22 58 | 22 50 | 20 11 | 15 58 | 7 13 |     |      |     |
| S 30 | 18 37 | 18 23 | 1 42 | 8 24  | 2 44 | 13 45 | 1 31 | 23 36 | 0 14 | 22 12 | 0 24 | 18 10 | 2 3  | 15 10 | 0 26 | 7 29 | 0 58 | 3 19 | 16 45 | 22 58 | 22 50 | 20 13 | 15 59 | 7 13 |     |      |     |
| S 31 | 18n23 | 21n29 | 0s40 | 8n 4  | 2s57 | 13n20 | 1n31 | 23n38 | 0n15 | 22s12 | 0n24 | 18n11 | 2s 3 | 15n10 | 0s26 | 7s30 | 0s58 | 3s20 | 16s45 | 22n58 | 22n49 | 20n15 | 15s59 | 7n13 |     |      |     |



# ASTRODIENST EPHEMERIS for the year 1853

## geocentric

AUGUST 1853

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♀      | ♂     | ♂     | ♂      | ♂    | ♂      | ♂      | ♂     | ♂      | ♂      | ♂    | ♂     | Day  |
|------|----------|----------|-------|--------|-------|-------|--------|------|--------|--------|-------|--------|--------|------|-------|------|
| M 1  | 20 38 4  | 8♌35°28  | 23♊5  | 2♍9    | 0♍0   | 26♊27 | 14°R48 | 0♊10 | 12♌26  | 13°R12 | 2♌46  | 18°R36 | 16♊56  | 5♊41 | 8°R27 | M 1  |
| T 2  | 20 42 0  | 9°32'55  | 5♌5   | 2°23   | 1°14  | 27°7  | 14°R46 | 0°14 | 12°27  | 13°R11 | 2°R46 | 18°R34 | 16°53  | 5°47 | 8°R24 | T 2  |
| W 3  | 20 45 57 | 10°30'23 | 17°17 | 2°32   | 2°27  | 27°47 | 14°44  | 0°18 | 12°28  | 13°R10 | 2°46  | 18°31  | 16°50  | 5°54 | 8°22  | W 3  |
| T 4  | 20 49 53 | 11°27'53 | 29°42 | 2°R36  | 3°40  | 28°27 | 14°43  | 0°22 | 12°28  | 13°8   | 2°46  | 18°25  | 16°46  | 6°1  | 8°19  | T 4  |
| F 5  | 20 53 50 | 12°25'23 | 12♌22 | 2°35   | 4°54  | 29°7  | 14°41  | 0°26 | 12°29  | 13°7   | 2°46  | 18°17  | 16°43  | 6°7  | 8°16  | F 5  |
| S 6  | 20 57 46 | 13°22'54 | 25°18 | 2°28   | 6°7   | 29°47 | 14°40  | 0°30 | 12°30  | 13°6   | 2°46  | 18°8   | 16°40  | 6°14 | 8°13  | S 6  |
| S 7  | 21 1 43  | 14°20'27 | 8♍29  | 2°17   | 7°20  | 0♌27  | 14°39  | 0°34 | 12°30  | 13°4   | 2°46  | 17°58  | 16°37  | 6°21 | 8°10  | S 7  |
| M 8  | 21 5 39  | 15°18'00 | 21°53 | 1°59   | 8°33  | 1°7   | 14°39  | 0°38 | 12°31  | 13°3   | 2°46  | 17°49  | 16°34  | 6°27 | 8°8   | M 8  |
| T 9  | 21 9 36  | 16°15'34 | 5♌28  | 1°37   | 9°47  | 1°47  | 14°38  | 0°42 | 12°31  | 13°2   | 2°46  | 17°42  | 16°31  | 6°34 | 8°5   | T 9  |
| W10  | 21 13 33 | 17°13'09 | 19°13 | 1°9    | 11°0  | 2°26  | 14°38  | 0°45 | 12°32  | 13°0   | 2°45  | 17°36  | 16°27  | 6°41 | 8°3   | W10  |
| T 11 | 21 17 29 | 18°10'45 | 3♍7   | 0°36   | 12°13 | 3°6   | 14°D38 | 0°49 | 12°32  | 12°59  | 2°45  | 17°33  | 16°24  | 6°47 | 8°0   | T 11 |
| F 12 | 21 21 26 | 19°8'22  | 17°8  | 29♌59  | 13°26 | 3°45  | 14°38  | 0°52 | 12°32  | 12°57  | 2°45  | 17°D32 | 16°21  | 6°54 | 7°58  | F 12 |
| S 13 | 21 25 22 | 20°6'00  | 1♌16  | 29°17  | 14°40 | 4°24  | 14°38  | 0°56 | 12°33  | 12°56  | 2°45  | 17°32  | 16°18  | 7°0  | 7°55  | S 13 |
| S 14 | 21 29 19 | 21°3'39  | 15°29 | 28°32  | 15°53 | 5°4   | 14°38  | 0°59 | 12°33  | 12°54  | 2°45  | 17°R33 | 16°15  | 7°7  | 7°53  | S 14 |
| M15  | 21 33 15 | 22°1'19  | 29°46 | 27°44  | 17°6  | 5°43  | 14°39  | 1°2  | 12°33  | 12°53  | 2°44  | 17°32  | 16°11  | 7°14 | 7°51  | M15  |
| T 16 | 21 37 12 | 22°59'00 | 14♌4  | 26°53  | 18°19 | 6°22  | 14°39  | 1°5  | 12°33  | 12°51  | 2°44  | 17°30  | 16°8   | 7°20 | 7°49  | T 16 |
| W17  | 21 41 8  | 23°56'43 | 28°20 | 26°2   | 19°32 | 7°1   | 14°40  | 1°8  | 12°33  | 12°50  | 2°44  | 17°25  | 16°5   | 7°27 | 7°47  | W17  |
| T 18 | 21 45 5  | 24°54'26 | 12♌29 | 25°10  | 20°45 | 7°40  | 14°41  | 1°11 | 12°R33 | 12°48  | 2°43  | 17°17  | 16°2   | 7°34 | 7°45  | T 18 |
| F 19 | 21 49 2  | 25°52'11 | 26°27 | 24°18  | 21°58 | 8°19  | 14°43  | 1°14 | 12°33  | 12°47  | 2°43  | 17°7   | 15°59  | 7°40 | 7°43  | F 19 |
| S 20 | 21 52 58 | 26°49'56 | 10♌8  | 23°29  | 23°11 | 8°58  | 14°44  | 1°16 | 12°33  | 12°45  | 2°43  | 16°56  | 15°56  | 7°47 | 7°41  | S 20 |
| S 21 | 21 56 55 | 27°47'44 | 23°30 | 22°42  | 24°24 | 9°37  | 14°46  | 1°19 | 12°33  | 12°43  | 2°42  | 16°45  | 15°52  | 7°54 | 7°39  | S 21 |
| M22  | 22 0 51  | 28°45'33 | 6♌31  | 22°0   | 25°37 | 10°16 | 14°48  | 1°21 | 12°33  | 12°42  | 2°42  | 16°35  | 15°49  | 8°0  | 7°37  | M22  |
| T 23 | 22 4 48  | 29°43'24 | 19°11 | 21°22  | 26°50 | 10°54 | 14°50  | 1°24 | 12°33  | 12°40  | 2°42  | 16°27  | 15°46  | 8°7  | 7°36  | T 23 |
| W24  | 22 8 44  | 0♍41'16  | 1♌32  | 20°49  | 28°3  | 11°33 | 14°52  | 1°26 | 12°32  | 12°39  | 2°41  | 16°21  | 15°43  | 8°14 | 7°34  | W24  |
| T 25 | 22 12 41 | 1°39'10  | 13°38 | 20°23  | 29°16 | 12°11 | 14°54  | 1°28 | 12°32  | 12°37  | 2°41  | 16°18  | 15°40  | 8°20 | 7°33  | T 25 |
| F 26 | 22 16 37 | 2°37'06  | 25°33 | 20°4   | 0♌29  | 12°50 | 14°57  | 1°30 | 12°32  | 12°35  | 2°40  | 16°16  | 15°37  | 8°27 | 7°31  | F 26 |
| S 27 | 22 20 34 | 3°35'04  | 7♊22  | 19°53  | 1°42  | 13°28 | 15°0   | 1°32 | 12°31  | 12°34  | 2°40  | 16°D16 | 15°33  | 8°33 | 7°30  | S 27 |
| S 28 | 22 24 31 | 4°33'04  | 19°11 | 19°D50 | 2°55  | 14°7  | 15°3   | 1°34 | 12°31  | 12°32  | 2°39  | 16°R16 | 15°30  | 8°40 | 7°29  | S 28 |
| M29  | 22 28 27 | 5°31'06  | 1♌4   | 19°55  | 4°8   | 14°45 | 15°6   | 1°36 | 12°30  | 12°31  | 2°39  | 16°15  | 15°27  | 8°47 | 7°27  | M29  |
| T 30 | 22 32 24 | 6°29'09  | 13°9  | 20°8   | 5°21  | 15°23 | 15°9   | 1°37 | 12°30  | 12°29  | 2°38  | 16°13  | 15°24  | 8°53 | 7°26  | T 30 |
| W31  | 22 36 20 | 7♍27'15  | 25♌27 | 20♌29  | 6♌34  | 16♌1  | 15°12  | 1°39 | 12♌29  | 12°R27 | 2♌38  | 16°R8  | 15°R21 | 9°R0 | 7°R25 | W31  |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | lat  |
| M 1  | 18n 8 | 23n41 | 0n24 | 7n46  | 3s 9 | 12n53 | 1n30 | 23n40 | 0n15 | 22s12 | 0n24 | 18n12 | 2s 3 | 15n10 | 0s26 | 7s30 |
| T 2  | 17 53 | 24 49 | 1 28 | 7 30  | 3 21 | 12 27 | 1 30 | 23 42 | 0 16 | 22 12 | 0 23 | 18 13 | 2 3  | 15 11 | 0 26 | 7 31 |
| W 3  | 17 37 | 24 47 | 2 28 | 7 16  | 3 33 | 12 0  | 1 29 | 23 43 | 0 17 | 22 12 | 0 23 | 18 13 | 2 3  | 15 11 | 0 26 | 7 31 |
| T 4  | 17 21 | 23 32 | 3 22 | 7 4   | 3 44 | 11 33 | 1 29 | 23 45 | 0 18 | 22 12 | 0 23 | 18 14 | 2 3  | 15 11 | 0 26 | 7 32 |
| F 5  | 17 5  | 21 4  | 4 8  | 6 54  | 3 55 | 11 5  | 1 28 | 23 46 | 0 18 | 22 12 | 0 23 | 18 15 | 2 3  | 15 11 | 0 26 | 7 32 |
| S 6  | 16 49 | 17 31 | 4 41 | 6 47  | 4 5  | 10 38 | 1 27 | 23 47 | 0 19 | 22 12 | 0 23 | 18 15 | 2 4  | 15 11 | 0 26 | 7 33 |
| S 7  | 16 33 | 13 3  | 5 1  | 6 43  | 4 15 | 10 10 | 1 26 | 23 47 | 0 20 | 22 12 | 0 22 | 18 16 | 2 4  | 15 12 | 0 26 | 7 33 |
| M 8  | 16 16 | 7 53  | 5 4  | 6 41  | 4 23 | 9 41  | 1 25 | 23 48 | 0 21 | 22 12 | 0 22 | 18 17 | 2 4  | 15 12 | 0 26 | 7 34 |
| T 9  | 15 59 | 2 16  | 4 51 | 6 42  | 4 30 | 9 13  | 1 25 | 23 48 | 0 22 | 22 12 | 0 22 | 18 17 | 2 4  | 15 12 | 0 26 | 7 34 |
| W10  | 15 41 | 3s31  | 4 20 | 6 46  | 4 37 | 8 44  | 1 23 | 23 49 | 0 22 | 22 13 | 0 22 | 18 18 | 2 4  | 15 12 | 0 26 | 7 35 |
| T 11 | 15 24 | 9 12  | 3 34 | 6 52  | 4 42 | 8 15  | 1 22 | 23 49 | 0 23 | 22 13 | 0 22 | 18 18 | 2 4  | 15 12 | 0 26 | 7 36 |
| F 12 | 15 6  | 14 29 | 2 35 | 7 2   | 4 45 | 7 46  | 1 21 | 23 48 | 0 24 | 22 13 | 0 22 | 18 19 | 2 5  | 15 12 | 0 26 | 7 36 |
| S 13 | 14 48 | 19 2  | 1 26 | 7 15  | 4 47 | 7 16  | 1 20 | 23 48 | 0 25 | 22 13 | 0 21 | 18 20 | 2 5  | 15 12 | 0 26 | 7 37 |
| S 14 | 14 29 | 22 29 | 0 11 | 7 30  | 4 47 | 6 47  | 1 19 | 23 47 | 0 26 | 22 13 | 0 21 | 18 20 | 2 5  | 15 12 | 0 26 | 7 37 |
| M15  | 14 11 | 24 32 | 1s 5 | 7 48  | 4 46 | 6 17  | 1 17 | 23 46 | 0 26 | 22 14 | 0 21 | 18 21 | 2 5  | 15 12 | 0 26 | 7 38 |
| T 16 | 13 52 | 24 59 | 2 16 | 8 8   | 4 42 | 5 47  | 1 16 | 23 45 | 0 27 | 22 14 | 0 21 | 18 21 | 2 5  | 15 12 | 0 26 | 7 39 |
| W17  | 13 33 | 23 46 | 3 19 | 8 31  | 4 37 | 5 17  | 1 14 | 23 44 | 0 28 | 22 14 | 0 21 | 18 21 | 2 5  | 15 12 | 0 26 | 7 39 |
| T 18 | 13 14 | 21 3  | 4 9  | 8 55  | 4 29 | 4 47  | 1 12 | 23 43 | 0 29 | 22 14 | 0 20 | 18 22 | 2 6  | 15 12 | 0 26 | 7 40 |
| F 19 | 12 54 | 17 9  | 4 43 | 9 20  | 4 20 | 4 16  | 1 11 | 23 41 | 0 30 | 22 15 | 0 20 | 18 22 | 2 6  | 15 12 | 0 26 | 7 40 |
| S 20 | 12 35 | 12 24 | 5 0  | 9 47  | 4 9  | 3 46  | 1 9  | 23 40 | 0 30 | 22 15 | 0 20 | 18 23 | 2 6  | 15 12 | 0 26 | 7 41 |
| S 21 | 12 15 | 7 11  | 5 0  | 10 13 | 3 57 | 3 15  | 1 7  | 23 38 | 0 31 | 22 15 | 0 20 | 18 23 | 2 6  | 15 12 | 0 26 | 7 42 |
| M22  | 11 55 | 1 46  | 4 44 | 10 40 | 3 43 | 2 44  | 1 5  | 23 36 | 0 32 | 22 16 | 0 20 | 18 23 | 2 6  | 15 12 | 0 26 | 7 42 |
| T 23 | 11 35 | 3n35  | 4 15 | 11 7  | 3 27 | 2 14  | 1 3  | 23 33 | 0 33 | 22 16 | 0 20 | 18 24 | 2 6  | 15 12 | 0 26 | 7 43 |
| W24  | 11 14 | 8 40  | 3 34 | 11 33 | 3 11 | 1 43  | 1 2  | 23 31 | 0 34 | 22 17 | 0 19 | 18 24 | 2 7  | 15 12 | 0 26 | 7 44 |
| T 25 | 10 54 | 13 20 | 2 44 | 11 57 | 2 54 | 1 12  | 0 59 | 23 28 | 0 34 | 22 17 | 0 19 | 18 24 | 2 7  | 15 12 | 0 26 | 7 44 |
| F 26 | 10 33 | 17 25 | 1 48 | 12 20 | 2 36 | 0 41  | 0 57 | 23 26 | 0 35 | 22 18 | 0 19 | 18 24 | 2 7  | 15 12 | 0 26 | 7 45 |
| S 27 | 10 12 | 20 47 | 0 47 | 12 41 | 2 18 | 0 10  | 0 55 | 23 23 | 0 36 | 22 18 | 0 19 | 18 25 | 2 7  | 15 12 | 0 26 | 7 45 |
| S 28 | 9 51  | 23 16 | 0n15 | 13 0  | 1 59 | 0s21  | 0 53 | 23 19 | 0 37 | 22 19 | 0 19 | 18 25 | 2 7  | 15 11 | 0 26 | 7 46 |
| M29  | 9 30  | 24 45 | 1 18 | 13 16 | 1 40 | 0 52  | 0 51 | 23 16 | 0 38 | 22 19 | 0 19 | 18 25 | 2 8  | 15 11 | 0 26 | 7 47 |
| T 30 | 9 8   | 25 5  | 2 17 | 13 29 | 1 22 | 1 23  | 0 48 | 23 13 | 0 39 | 22 20 | 0 18 | 18 25 | 2 8  | 15 11 | 0 26 | 7 47 |
| W31  | 8n47  | 24n12 | 3n12 | 13n40 | 1s 4 | 1s54  | 0n46 | 23n 9 | 0n39 | 22s20 | 0n18 | 18n25 | 2s 8 | 15n11 | 0s26 | 7s48 |

Julian Day Number = 2398066.5, Delta T = 10.29 sec  
 Ecliptic obliquity = 23°27'32, Nutation = - 0°00'16, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 22°41'44, Lahiri = 21°48'45

# ASTRODIENST EPHEMERIS for the year 1853

## geocentric

SEPTEMBER 1853

00:00 UT

| Day  | Sid.t    | ☉                      | ☽                   | ♂                   | ♀                   | ♂                   | ♂                   | ♂                  | ♂                   | ♂                   | ♂                  | ♂                    | ♂                    | ♂                    | ♂                  | Day  |
|------|----------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|----------------------|----------------------|----------------------|--------------------|------|
| T 1  | 22 40 17 | 8 <sup>h</sup> 25'22"  | 8 <sup>h</sup> 03'  | 21 <sup>h</sup> 00' | 7 <sup>h</sup> 47'  | 16 <sup>h</sup> 39' | 15 <sup>h</sup> 16' | 1 <sup>h</sup> 40' | 12 <sup>h</sup> R28 | 12 <sup>h</sup> R26 | 2 <sup>h</sup> R37 | 16 <sup>h</sup> R 0  | 15 <sup>h</sup> II17 | 9 <sup>h</sup> II 7  | 7 <sup>h</sup> R24 | T 1  |
| F 2  | 22 44 13 | 9 <sup>h</sup> 23'31"  | 20 <sup>h</sup> 59' | 21 <sup>h</sup> 38' | 9 <sup>h</sup> 0'   | 17 <sup>h</sup> 17' | 15 <sup>h</sup> 20' | 1 <sup>h</sup> 42' | 12 <sup>h</sup> 828 | 12 <sup>h</sup> 824 | 2 <sup>h</sup> 836 | 15 <sup>h</sup> II50 | 15 <sup>h</sup> 14'  | 9 <sup>h</sup> 13'   | 7 <sup>h</sup> 823 | F 2  |
| S 3  | 22 48 10 | 10 <sup>h</sup> 21'42" | 4 <sup>h</sup> 15'  | 22 <sup>h</sup> 24' | 10 <sup>h</sup> 12' | 17 <sup>h</sup> 55' | 15 <sup>h</sup> 24' | 1 <sup>h</sup> 43' | 12 <sup>h</sup> 27' | 12 <sup>h</sup> 22' | 2 <sup>h</sup> 36' | 15 <sup>h</sup> 38'  | 15 <sup>h</sup> 11'  | 9 <sup>h</sup> 20'   | 7 <sup>h</sup> 23' | S 3  |
| S 4  | 22 52 6  | 11 <sup>h</sup> 19'54" | 17 <sup>h</sup> 49' | 23 <sup>h</sup> 18' | 11 <sup>h</sup> 25' | 18 <sup>h</sup> 32' | 15 <sup>h</sup> 28' | 1 <sup>h</sup> 44' | 12 <sup>h</sup> 26' | 12 <sup>h</sup> 21' | 2 <sup>h</sup> 35' | 15 <sup>h</sup> 25'  | 15 <sup>h</sup> 8'   | 9 <sup>h</sup> 27'   | 7 <sup>h</sup> 22' | S 4  |
| M 5  | 22 56 3  | 12 <sup>h</sup> 18'09" | 1 <sup>h</sup> 43'  | 24 <sup>h</sup> 19' | 12 <sup>h</sup> 38' | 19 <sup>h</sup> 10' | 15 <sup>h</sup> 32' | 1 <sup>h</sup> 45' | 12 <sup>h</sup> 25' | 12 <sup>h</sup> 19' | 2 <sup>h</sup> 35' | 15 <sup>h</sup> 14'  | 15 <sup>h</sup> 5'   | 9 <sup>h</sup> 33'   | 7 <sup>h</sup> 21' | M 5  |
| T 6  | 23 0 0   | 13 <sup>h</sup> 16'24" | 15 <sup>h</sup> 39' | 25 <sup>h</sup> 27' | 13 <sup>h</sup> 51' | 19 <sup>h</sup> 48' | 15 <sup>h</sup> 37' | 1 <sup>h</sup> 46' | 12 <sup>h</sup> 24' | 12 <sup>h</sup> 17' | 2 <sup>h</sup> 34' | 15 <sup>h</sup> 4'   | 15 <sup>h</sup> 2'   | 9 <sup>h</sup> 40'   | 7 <sup>h</sup> 21' | T 6  |
| W 7  | 23 3 56  | 14 <sup>h</sup> 14'42" | 29 <sup>h</sup> 46' | 26 <sup>h</sup> 42' | 15 <sup>h</sup> 3'  | 20 <sup>h</sup> 25' | 15 <sup>h</sup> 41' | 1 <sup>h</sup> 47' | 12 <sup>h</sup> 23' | 12 <sup>h</sup> 16' | 2 <sup>h</sup> 33' | 14 <sup>h</sup> 56'  | 14 <sup>h</sup> 58'  | 9 <sup>h</sup> 47'   | 7 <sup>h</sup> 20' | W 7  |
| T 8  | 23 7 53  | 15 <sup>h</sup> 13'01" | 13 <sup>h</sup> 15' | 28 <sup>h</sup> 2'  | 16 <sup>h</sup> 16' | 21 <sup>h</sup> 3'  | 15 <sup>h</sup> 46' | 1 <sup>h</sup> 47' | 12 <sup>h</sup> 22' | 12 <sup>h</sup> 14' | 2 <sup>h</sup> 32' | 14 <sup>h</sup> 51'  | 14 <sup>h</sup> 55'  | 9 <sup>h</sup> 53'   | 7 <sup>h</sup> 20' | T 8  |
| F 9  | 23 11 49 | 16 <sup>h</sup> 11'22" | 28 <sup>h</sup> 7'  | 29 <sup>h</sup> 28' | 17 <sup>h</sup> 29' | 21 <sup>h</sup> 40' | 15 <sup>h</sup> 51' | 1 <sup>h</sup> 48' | 12 <sup>h</sup> 21' | 12 <sup>h</sup> 12' | 2 <sup>h</sup> 32' | 14 <sup>h</sup> 49'  | 14 <sup>h</sup> 52'  | 10 <sup>h</sup> 0'   | 7 <sup>h</sup> 19' | F 9  |
| S 10 | 23 15 46 | 17 <sup>h</sup> 9'44"  | 12 <sup>h</sup> 15' | 0 <sup>h</sup> 15'  | 18 <sup>h</sup> 41' | 22 <sup>h</sup> 17' | 15 <sup>h</sup> 56' | 1 <sup>h</sup> 48' | 12 <sup>h</sup> 20' | 12 <sup>h</sup> 11' | 2 <sup>h</sup> 31' | 14 <sup>h</sup> 49'  | 14 <sup>h</sup> 49'  | 10 <sup>h</sup> 7'   | 7 <sup>h</sup> 19' | S 10 |
| S 11 | 23 19 42 | 18 <sup>h</sup> 8'08"  | 26 <sup>h</sup> 21' | 2 <sup>h</sup> 33'  | 19 <sup>h</sup> 54' | 22 <sup>h</sup> 54' | 16 <sup>h</sup> 2'  | 1 <sup>h</sup> 49' | 12 <sup>h</sup> 19' | 12 <sup>h</sup> 9'  | 2 <sup>h</sup> 30' | 14 <sup>h</sup> 49'  | 14 <sup>h</sup> 46'  | 10 <sup>h</sup> 13'  | 7 <sup>h</sup> 19' | S 11 |
| M12  | 23 23 39 | 19 <sup>h</sup> 6'34"  | 10 <sup>h</sup> 23' | 4 <sup>h</sup> 12'  | 21 <sup>h</sup> 7'  | 23 <sup>h</sup> 31' | 16 <sup>h</sup> 7'  | 1 <sup>h</sup> 49' | 12 <sup>h</sup> 18' | 12 <sup>h</sup> 8'  | 2 <sup>h</sup> 30' | 14 <sup>h</sup> 48'  | 14 <sup>h</sup> 43'  | 10 <sup>h</sup> 20'  | 7 <sup>h</sup> D19 | M12  |
| T 13 | 23 27 35 | 20 <sup>h</sup> 5'01"  | 24 <sup>h</sup> 20' | 5 <sup>h</sup> 53'  | 22 <sup>h</sup> 19' | 24 <sup>h</sup> 8'  | 16 <sup>h</sup> 13' | 1 <sup>h</sup> 49' | 12 <sup>h</sup> 17' | 12 <sup>h</sup> 6'  | 2 <sup>h</sup> 29' | 14 <sup>h</sup> 45'  | 14 <sup>h</sup> 39'  | 10 <sup>h</sup> 26'  | 7 <sup>h</sup> 19' | T 13 |
| W14  | 23 31 32 | 21 <sup>h</sup> 3'29"  | 8 <sup>h</sup> 11'  | 7 <sup>h</sup> 37'  | 23 <sup>h</sup> 32' | 24 <sup>h</sup> 45' | 16 <sup>h</sup> 19' | 1 <sup>h</sup> R49 | 12 <sup>h</sup> 16' | 12 <sup>h</sup> 4'  | 2 <sup>h</sup> 28' | 14 <sup>h</sup> 39'  | 14 <sup>h</sup> 36'  | 10 <sup>h</sup> 33'  | 7 <sup>h</sup> 19' | W14  |
| T 15 | 23 35 29 | 22 <sup>h</sup> 2'00"  | 21 <sup>h</sup> 55' | 9 <sup>h</sup> 23'  | 24 <sup>h</sup> 44' | 25 <sup>h</sup> 22' | 16 <sup>h</sup> 25' | 1 <sup>h</sup> 49' | 12 <sup>h</sup> 14' | 12 <sup>h</sup> 3'  | 2 <sup>h</sup> 27' | 14 <sup>h</sup> 30'  | 14 <sup>h</sup> 33'  | 10 <sup>h</sup> 40'  | 7 <sup>h</sup> 19' | T 15 |
| F 16 | 23 39 25 | 23 <sup>h</sup> 0'32"  | 5 <sup>h</sup> 8'   | 11 <sup>h</sup> 11' | 25 <sup>h</sup> 57' | 25 <sup>h</sup> 59' | 16 <sup>h</sup> 31' | 1 <sup>h</sup> 49' | 12 <sup>h</sup> 13' | 12 <sup>h</sup> 1'  | 2 <sup>h</sup> 26' | 14 <sup>h</sup> 19'  | 14 <sup>h</sup> 30'  | 10 <sup>h</sup> 46'  | 7 <sup>h</sup> 19' | F 16 |
| S 17 | 23 43 22 | 23 <sup>h</sup> 59'06" | 18 <sup>h</sup> 48' | 13 <sup>h</sup> 1'  | 27 <sup>h</sup> 9'  | 26 <sup>h</sup> 35' | 16 <sup>h</sup> 37' | 1 <sup>h</sup> 49' | 12 <sup>h</sup> 12' | 11 <sup>h</sup> 59' | 2 <sup>h</sup> 25' | 14 <sup>h</sup> 7'   | 14 <sup>h</sup> 27'  | 10 <sup>h</sup> 53'  | 7 <sup>h</sup> 20' | S 17 |
| S 18 | 23 47 18 | 24 <sup>h</sup> 57'41" | 1 <sup>h</sup> 53'  | 14 <sup>h</sup> 51' | 28 <sup>h</sup> 21' | 27 <sup>h</sup> 12' | 16 <sup>h</sup> 43' | 1 <sup>h</sup> 48' | 12 <sup>h</sup> 10' | 11 <sup>h</sup> 58' | 2 <sup>h</sup> 25' | 13 <sup>h</sup> 54'  | 14 <sup>h</sup> 23'  | 11 <sup>h</sup> 0'   | 7 <sup>h</sup> 20' | S 18 |
| M19  | 23 51 15 | 25 <sup>h</sup> 56'19" | 14 <sup>h</sup> 42' | 16 <sup>h</sup> 41' | 29 <sup>h</sup> 34' | 27 <sup>h</sup> 48' | 16 <sup>h</sup> 50' | 1 <sup>h</sup> 48' | 12 <sup>h</sup> 9'  | 11 <sup>h</sup> 56' | 2 <sup>h</sup> 24' | 13 <sup>h</sup> 43'  | 14 <sup>h</sup> 20'  | 11 <sup>h</sup> 6'   | 7 <sup>h</sup> 21' | M19  |
| T 20 | 23 55 11 | 26 <sup>h</sup> 54'59" | 27 <sup>h</sup> 13' | 18 <sup>h</sup> 32' | 0 <sup>h</sup> 14'  | 28 <sup>h</sup> 25' | 16 <sup>h</sup> 57' | 1 <sup>h</sup> 47' | 12 <sup>h</sup> 7'  | 11 <sup>h</sup> 55' | 2 <sup>h</sup> 23' | 13 <sup>h</sup> 33'  | 14 <sup>h</sup> 17'  | 11 <sup>h</sup> 13'  | 7 <sup>h</sup> 21' | T 20 |
| W21  | 23 59 8  | 27 <sup>h</sup> 53'41" | 9 <sup>h</sup> 30'  | 20 <sup>h</sup> 24' | 1 <sup>h</sup> 58'  | 29 <sup>h</sup> 1'  | 17 <sup>h</sup> 3'  | 1 <sup>h</sup> 46' | 12 <sup>h</sup> 6'  | 11 <sup>h</sup> 53' | 2 <sup>h</sup> 22' | 13 <sup>h</sup> 26'  | 14 <sup>h</sup> 14'  | 11 <sup>h</sup> 20'  | 7 <sup>h</sup> 22' | W21  |
| T 22 | 0 3 4    | 28 <sup>h</sup> 52'25" | 21 <sup>h</sup> 32' | 22 <sup>h</sup> 15' | 3 <sup>h</sup> 11'  | 29 <sup>h</sup> 37' | 17 <sup>h</sup> 10' | 1 <sup>h</sup> 46' | 12 <sup>h</sup> 4'  | 11 <sup>h</sup> 51' | 2 <sup>h</sup> 21' | 13 <sup>h</sup> 21'  | 14 <sup>h</sup> 11'  | 11 <sup>h</sup> 26'  | 7 <sup>h</sup> 23' | T 22 |
| F 23 | 0 7 1    | 29 <sup>h</sup> 51'11" | 3 <sup>h</sup> II26 | 24 <sup>h</sup> 6'  | 4 <sup>h</sup> 23'  | 0 <sup>h</sup> 13'  | 17 <sup>h</sup> 18' | 1 <sup>h</sup> 45' | 12 <sup>h</sup> 2'  | 11 <sup>h</sup> 50' | 2 <sup>h</sup> 20' | 13 <sup>h</sup> 19'  | 14 <sup>h</sup> 8'   | 11 <sup>h</sup> 33'  | 7 <sup>h</sup> 24' | F 23 |
| S 24 | 0 10 57  | 0 <sup>h</sup> 50'00"  | 15 <sup>h</sup> 14' | 25 <sup>h</sup> 56' | 5 <sup>h</sup> 35'  | 0 <sup>h</sup> 49'  | 17 <sup>h</sup> 25' | 1 <sup>h</sup> 44' | 12 <sup>h</sup> 1'  | 11 <sup>h</sup> 48' | 2 <sup>h</sup> 19' | 13 <sup>h</sup> D19  | 14 <sup>h</sup> 4'   | 11 <sup>h</sup> 40'  | 7 <sup>h</sup> 24' | S 24 |
| S 25 | 0 14 54  | 1 <sup>h</sup> 48'50"  | 27 <sup>h</sup> 2'  | 27 <sup>h</sup> 46' | 6 <sup>h</sup> 47'  | 1 <sup>h</sup> 25'  | 17 <sup>h</sup> 32' | 1 <sup>h</sup> 42' | 11 <sup>h</sup> 59' | 11 <sup>h</sup> 47' | 2 <sup>h</sup> 18' | 13 <sup>h</sup> R19  | 14 <sup>h</sup> 1'   | 11 <sup>h</sup> 46'  | 7 <sup>h</sup> 25' | S 25 |
| M26  | 0 18 51  | 2 <sup>h</sup> 47'44"  | 8 <sup>h</sup> 56'  | 29 <sup>h</sup> 35' | 7 <sup>h</sup> 59'  | 2 <sup>h</sup> 1'   | 17 <sup>h</sup> 40' | 1 <sup>h</sup> 41' | 11 <sup>h</sup> 57' | 11 <sup>h</sup> 45' | 2 <sup>h</sup> 17' | 13 <sup>h</sup> 19'  | 13 <sup>h</sup> 58'  | 11 <sup>h</sup> 53'  | 7 <sup>h</sup> 26' | M26  |
| T 27 | 0 22 47  | 3 <sup>h</sup> 46'39"  | 21 <sup>h</sup> 0'  | 1 <sup>h</sup> 24'  | 9 <sup>h</sup> 12'  | 2 <sup>h</sup> 36'  | 17 <sup>h</sup> 47' | 1 <sup>h</sup> 40' | 11 <sup>h</sup> 56' | 11 <sup>h</sup> 44' | 2 <sup>h</sup> 16' | 13 <sup>h</sup> 18'  | 13 <sup>h</sup> 55'  | 11 <sup>h</sup> 59'  | 7 <sup>h</sup> 28' | T 27 |
| W28  | 0 26 44  | 4 <sup>h</sup> 45'37"  | 3 <sup>h</sup> 12'  | 3 <sup>h</sup> 12'  | 10 <sup>h</sup> 24' | 3 <sup>h</sup> 12'  | 17 <sup>h</sup> 55' | 1 <sup>h</sup> 38' | 11 <sup>h</sup> 54' | 11 <sup>h</sup> 42' | 2 <sup>h</sup> 15' | 13 <sup>h</sup> 14'  | 13 <sup>h</sup> 52'  | 12 <sup>h</sup> 6'   | 7 <sup>h</sup> 29' | W28  |
| T 29 | 0 30 40  | 5 <sup>h</sup> 44'37"  | 16 <sup>h</sup> 2'  | 4 <sup>h</sup> 59'  | 11 <sup>h</sup> 36' | 3 <sup>h</sup> 47'  | 18 <sup>h</sup> 3'  | 1 <sup>h</sup> 37' | 11 <sup>h</sup> 52' | 11 <sup>h</sup> 41' | 2 <sup>h</sup> 14' | 13 <sup>h</sup> 8'   | 13 <sup>h</sup> 48'  | 12 <sup>h</sup> 13'  | 7 <sup>h</sup> 30' | T 29 |
| F 30 | 0 34 37  | 6 <sup>h</sup> 43'39"  | 29 <sup>h</sup> 12' | 6 <sup>h</sup> 46'  | 12 <sup>h</sup> 14' | 4 <sup>h</sup> 12'  | 18 <sup>h</sup> 11' | 1 <sup>h</sup> 35' | 11 <sup>h</sup> 50' | 11 <sup>h</sup> 39' | 2 <sup>h</sup> 13' | 13 <sup>h</sup> II 0 | 13 <sup>h</sup> II45 | 12 <sup>h</sup> II19 | 7 <sup>h</sup> 32' | F 30 |

| Day  | ☉    | ☾     |      | ♀     |      | ♀     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂    |      | ♂    |       | ♂     |       | ♂     |       | ♂    |     | ♂    |     | ♂    |     |
|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|-------|------|-----|------|-----|------|-----|
|      | decl | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat   | decl  | lat   | decl  | lat   | decl | lat | decl | lat | decl | lat |
| T 1  | 8n25 | 22n 6 | 3n58 | 13n47 | 0s46 | 2s25  | 0n43 | 23n 5 | 0n40 | 22s21 | 0n18 | 18n25 | 2s 8 | 15n11 | 0s26 | 7s49 | 0s59 | 3s32 | 16s55 | 22n43 | 22n39 | 21n17 | 16s16 | 7n 0 |     |      |     |      |     |
| F 2  | 8 3  | 18 49 | 4 33 | 13 51 | 0 29 | 2 56  | 0 41 | 23 1  | 0 41 | 22 21 | 0 18 | 18 25 | 2 8  | 15 10 | 0 26 | 7 49 | 0 59 | 3 32 | 16 55 | 22 42 | 22 38 | 21 19 | 16 16 | 7 0  |     |      |     |      |     |
| S 3  | 7 41 | 14 32 | 4 55 | 13 51 | 0 13 | 3 27  | 0 38 | 22 57 | 0 42 | 22 22 | 0 18 | 18 25 | 2 8  | 15 10 | 0 26 | 7 50 | 0 59 | 3 33 | 16 55 | 22 41 | 22 38 | 21 21 | 16 17 | 6 59 |     |      |     |      |     |
| S 4  | 7 19 | 9 25  | 5 0  | 13 48 | 0n 3 | 3 58  | 0 36 | 22 53 | 0 43 | 22 23 | 0 18 | 18 25 | 2 9  | 15 10 | 0 26 | 7 51 | 0 59 | 3 33 | 16 56 | 22 40 | 22 38 | 21 23 | 16 17 | 6 59 |     |      |     |      |     |
| M 5  | 6 57 | 3 45  | 4 48 | 13 42 | 0 17 | 4 29  | 0 33 | 22 49 | 0 44 | 22 23 | 0 17 | 18 26 | 2 9  | 15 10 | 0 26 | 7 51 | 0 59 | 3 34 | 16 56 | 22 38 | 22 37 | 21 25 | 16 18 | 6 58 |     |      |     |      |     |
| T 6  | 6 35 | 2s10  | 4 19 | 13 32 | 0 31 | 5 0   | 0 30 | 22 44 | 0 45 | 22 24 | 0 17 | 18 26 | 2 9  | 15 9  | 0 26 | 7 52 | 0 59 | 3 34 | 16 56 | 22 37 | 22 37 | 21 27 | 16 18 | 6 58 |     |      |     |      |     |
| W 7  | 6 12 | 8 3   | 3 34 | 13 18 | 0 43 | 5 31  | 0 28 | 22 39 | 0 45 | 22 24 | 0 17 | 18 25 | 2 9  | 15 9  | 0 26 | 7 52 | 0 59 | 3 35 | 16 57 | 22 36 | 22 37 | 21 28 | 16 19 | 6 57 |     |      |     |      |     |
| T 8  | 5 50 | 13 34 | 2 35 | 13 1  | 0 55 | 6 1   | 0 25 | 22 34 | 0 46 | 22 25 | 0 17 | 18 25 | 2 9  | 15 9  | 0 26 | 7 53 | 0 59 | 3 35 | 16 57 | 22 36 | 22 36 | 21 30 | 16 19 | 6 57 |     |      |     |      |     |
| F 9  | 5 27 | 18 20 | 1 27 | 12 41 | 1 5  | 6 32  | 0 22 | 22 29 | 0 47 | 22 26 | 0 17 | 18 25 | 2 10 | 15 8  | 0 26 | 7 54 | 0 59 | 3 36 | 16 57 | 22 36 | 22 36 | 21 32 | 16 20 | 6 56 |     |      |     |      |     |
| S 10 | 5 4  | 22 3  | 0 14 | 12 17 | 1 14 | 7 2   | 0 19 | 22 24 | 0 48 | 22 27 | 0 17 | 18 25 | 2 10 | 15 8  | 0 26 | 7 54 | 0 59 | 3 36 | 16 57 | 22 36 | 22 36 | 21 34 | 16 20 | 6 56 |     |      |     |      |     |
| S 11 | 4 42 | 24 25 | 1s 1 | 11 51 | 1 22 | 7 32  | 0 16 | 22 19 | 0 49 | 22 27 | 0 16 | 18 25 | 2 10 | 15 8  | 0 26 | 7 55 | 0 59 | 3 37 | 16 58 | 22 36 | 22 35 | 21 36 | 16 21 | 6 55 |     |      |     |      |     |
| M12  | 4 19 | 25 14 | 2 11 | 11 22 | 1 29 | 8 2   | 0 13 | 22 13 | 0 50 | 22 28 | 0 16 | 18 25 | 2 10 | 15 7  | 0 26 | 7 56 | 0 59 | 3 37 | 16 58 | 22 36 | 22 35 | 21 38 | 16 21 | 6 55 |     |      |     |      |     |
| T 13 | 3 56 | 24 26 | 3 13 | 10 50 | 1 35 | 8 32  | 0 10 | 22 8  | 0 51 | 22 29 | 0 16 | 18 25 | 2 10 | 15 7  | 0 26 | 7 56 | 0 59 | 3 37 | 16 58 | 22 35 | 22 35 | 21 39 | 16 22 | 6 54 |     |      |     |      |     |
| W14  | 3 33 | 22 8  | 4 3  | 10 16 | 1 40 | 9 2   | 0 7  | 22 2  | 0 51 | 22 29 | 0 16 | 18 25 | 2 10 | 15 7  | 0 26 | 7 57 | 0 59 | 3 38 | 16 58 | 22 34 | 22 34 | 21 41 | 16 22 | 6 54 |     |      |     |      |     |
| T 15 | 3 10 | 18 36 | 4 38 | 9 39  | 1 44 | 9 31  | 0 4  | 21 56 | 0 52 | 22 30 | 0 16 | 18 25 | 2 11 | 15 6  | 0 26 | 7 58 | 0 59 | 3 38 | 16 58 | 22 33 | 22 34 | 21 43 | 16 23 | 6 53 |     |      |     |      |     |
| F 16 | 2 47 | 14 7  | 4 57 | 9 1   | 1 47 | 10 1  | 0 1  | 21 50 | 0 53 | 22 31 | 0 16 | 18 24 | 2 11 | 15 6  | 0 26 | 7 58 | 0 59 | 3 39 | 16 59 | 22 32 | 22 33 | 21 45 | 16 23 | 6 53 |     |      |     |      |     |
| S 17 | 2 23 | 9 1   | 5 0  | 8 21  | 1 49 | 10 30 | 0s 2 | 21 44 | 0 54 | 22 32 | 0 15 | 18 24 | 2 11 | 15 5  | 0 26 | 7 59 | 0 59 | 3 39 | 16 59 | 22 31 | 22 33 | 21 47 | 16 24 | 6 52 |     |      |     |      |     |
| S 18 | 2 0  | 3 37  | 4 46 | 7 40  | 1 50 | 10 59 | 0 5  | 21 38 | 0 55 | 22 33 | 0 15 | 18 24 | 2 11 | 15 5  | 0 26 | 7 59 | 0 59 | 3 40 | 16 59 | 22 29 | 22 33 | 21 48 | 16 24 | 6 52 |     |      |     |      |     |
| M19  | 1 37 | 1n49  | 4 18 | 6 57  | 1 50 | 11 27 | 0 8  | 21 32 | 0 56 | 22 33 | 0 15 | 18 24 | 2 11 | 15 4  | 0 26 | 8 0  | 0 59 | 3 40 | 16 59 | 22 28 | 22 32 | 21 50 | 16 25 | 6 51 |     |      |     |      |     |
| T 20 | 1 14 | 7 5   | 3 39 | 6 13  | 1 50 | 11 56 | 0 11 | 21 25 | 0 57 | 22 34 | 0 15 | 18 23 | 2 11 | 15 4  | 0 26 | 8 1  | 0 59 | 3 41 | 16 59 | 22 27 | 22 32 | 21 52 | 16 25 | 6 50 |     |      |     |      |     |
| W21  | 0 50 | 11 59 | 2 49 | 5 29  | 1 49 | 12 24 | 0 15 | 21 19 | 0 58 | 22 35 | 0 15 | 18 23 | 2 12 | 15 4  | 0 26 | 8 1  | 0 59 | 3 41 | 17 0  | 22 26 | 22 32 | 21 54 | 16 26 | 6 50 |     |      |     |      |     |
| T 22 | 0 27 | 16 21 | 1 53 | 4 43  | 1 47 | 12 52 | 0 18 | 21 12 | 0 59 | 22 36 | 0 15 | 18 23 | 2 12 | 15 3  | 0 26 | 8 2  | 0 59 | 3 42 | 17 0  | 22 25 | 22 31 | 21 56 | 16 26 | 6 49 |     |      |     |      |     |
| F 23 | 0 4  | 20 0  | 0 52 | 3 57  | 1 45 | 13 19 | 0 21 | 21 5  | 0 59 | 22 37 | 0 15 | 18 22 | 2 12 | 15 3  | 0 26 | 8 2  | 0 59 | 3 42 | 17 0  | 22 25 | 22 31 | 21 57 | 16 27 | 6 49 |     |      |     |      |     |
| S 24 | 0s20 | 22 49 | 0n10 | 3 11  | 1 42 | 13 47 | 0 24 | 20 58 | 1 0  | 22 37 | 0 14 | 18 22 | 2 12 | 15 2  | 0 26 | 8 3  | 0 59 | 3 43 | 17 0  | 22 25 | 22 30 | 21 59 | 16 27 | 6 48 |     |      |     |      |     |
| S 25 | 0 43 | 24 38 | 1 12 | 2 24  | 1 39 | 14 14 | 0 28 | 20 51 | 1 1  | 22 38 | 0 14 | 18 22 | 2 12 | 15 2  | 0 26 | 8 4  | 0 59 | 3 43 | 17 0  | 22 25 | 22 30 | 22 1  | 16 28 | 6 48 |     |      |     |      |     |
| M26  | 1 7  | 25 21 | 2 12 | 1 37  | 1 35 | 14 40 | 0 31 | 20 44 | 1 2  | 22 39 | 0 14 | 18 21 | 2 12 | 15 1  | 0 26 | 8 4  | 0 59 | 3 44 | 17 0  | 22 25 | 22 30 | 22 3  | 16 28 | 6 47 |     |      |     |      |     |
| T 27 | 1 30 | 24 53 | 3 7  | 0 50  | 1 31 | 15 7  | 0 34 | 20 37 | 1 3  | 22 40 | 0 14 | 18 21 | 2 13 | 15 0  | 0 26 | 8 5  | 0 59 | 3 44 | 17 1  | 22 25 | 22 29 | 22 4  | 16 29 | 6 47 |     |      |     |      |     |
| W28  | 1 54 | 23 13 | 3 54 | 0 3   | 1 27 | 15 33 | 0 37 | 20 30 | 1 4  | 22 41 | 0 14 | 18 20 | 2 13 | 15 0  | 0 26 | 8 5  | 0 59 | 3 45 | 17 1  | 22 24 | 22 29 | 22 6  | 16 29 | 6 46 |     |      |     |      |     |
| T 29 | 2 17 | 20 21 | 4 31 | 0s44  | 1 22 | 15 58 | 0 41 | 20 22 | 1 5  | 22 42 | 0 14 | 18 20 | 2 13 | 14 59 | 0 26 | 8 6  | 0 59 | 3 45 | 17 1  | 22 24 | 22 29 | 22 8  | 16 30 | 6 46 |     |      |     |      |     |
| F 30 | 2s40 | 16n24 | 4n55 | 1s31  | 1n17 | 16s23 | 0s44 | 20n15 | 1n 6 | 22s43 | 0n14 | 18n19 | 2s13 | 14n59 | 0s26 | 8s 6 | 0s59 | 3s45 | 17s 1 | 22n23 | 22n28 | 22n10 | 16s30 | 6n45 |     |      |     |      |     |

ASTRODIENST EPHEMERIS for the year 1853  
geocentric

OCTOBER 1853

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♊     | ♋     | ♌     | ♍     | ♎     | ♏      | ♐      | ♑     | ♒      | ♓     | ♈     | ♉    | Day  |
|------|---------|----------|-------|-------|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|------|------|
| S 1  | 0 38 33 | 7♌42'43  | 12♏34 | 8♊32  | 14♍0  | 4♌58  | 18♊20 | 1°R33 | 11°R48 | 11°R38 | 2°R12 | 12°R50 | 13♐42 | 12♐26 | 7♊33 | S 1  |
| S 2  | 0 42 30 | 8°41'50  | 26°26 | 10°16 | 15°12 | 5°33  | 18°28 | 1♐31  | 11♋46  | 11♋36  | 2♋11  | 12♐39  | 13°39 | 12°33 | 7°35 | S 2  |
| M 3  | 0 46 26 | 9°40'58  | 10♊37 | 12°0  | 16°24 | 6°8   | 18°36 | 1°29  | 11°44  | 11°35  | 2°10  | 12°29  | 13°36 | 12°39 | 7°36 | M 3  |
| T 4  | 0 50 23 | 10°40'09 | 25°3  | 13°44 | 17°35 | 6°43  | 18°45 | 1°27  | 11°42  | 11°34  | 2°9   | 12°20  | 13°33 | 12°46 | 7°38 | T 4  |
| W 5  | 0 54 20 | 11°39'22 | 9♍36  | 15°26 | 18°47 | 7°18  | 18°54 | 1°25  | 11°40  | 11°32  | 2°8   | 12°14  | 13°29 | 12°53 | 7°40 | W 5  |
| T 6  | 0 58 16 | 12°38'36 | 24°11 | 17°8  | 19°59 | 7°53  | 19°3  | 1°23  | 11°38  | 11°31  | 2°7   | 12°10  | 13°26 | 12°59 | 7°42 | T 6  |
| F 7  | 1 2 13  | 13°37'53 | 8♊41  | 18°48 | 21°11 | 8°27  | 19°12 | 1°20  | 11°36  | 11°30  | 2°6   | 12°D 9 | 13°23 | 13°6  | 7°44 | F 7  |
| S 8  | 1 6 9   | 14°37'11 | 23°3  | 20°29 | 22°23 | 9°2   | 19°21 | 1°18  | 11°34  | 11°28  | 2°5   | 12°9   | 13°20 | 13°13 | 7°46 | S 8  |
| S 9  | 1 10 6  | 15°36'32 | 7♊31  | 22°8  | 23°34 | 9°36  | 19°30 | 1°15  | 11°32  | 11°27  | 2°4   | 12°10  | 13°17 | 13°19 | 7°48 | S 9  |
| M10  | 1 14 2  | 16°35'53 | 21°13 | 23°46 | 24°46 | 10°10 | 19°39 | 1°12  | 11°30  | 11°26  | 2°3   | 12°R10 | 13°14 | 13°26 | 7°50 | M10  |
| T 11 | 1 17 59 | 17°35'17 | 4♊59  | 25°24 | 25°58 | 10°44 | 19°49 | 1°10  | 11°27  | 11°24  | 2°2   | 12°9   | 13°10 | 13°32 | 7°52 | T 11 |
| W12  | 1 21 55 | 18°34'42 | 18°33 | 27°1  | 27°9  | 11°18 | 19°58 | 1°7   | 11°25  | 11°23  | 2°1   | 12°5   | 13°7  | 13°39 | 7°55 | W12  |
| T 13 | 1 25 52 | 19°34'09 | 1♋55  | 28°38 | 28°21 | 11°52 | 20°8  | 1°4   | 11°23  | 11°22  | 2°0   | 11°59  | 13°4  | 13°46 | 7°57 | T 13 |
| F 14 | 1 29 49 | 20°33'38 | 15°4  | 0♍13  | 29°32 | 12°26 | 20°18 | 1°1   | 11°21  | 11°21  | 1°59  | 11°51  | 13°1  | 13°52 | 7°59 | F 14 |
| S 15 | 1 33 45 | 21°33'09 | 28°1  | 1°48  | 0♊44  | 13°0  | 20°28 | 0°58  | 11°19  | 11°20  | 1°57  | 11°42  | 12°58 | 13°59 | 8°2  | S 15 |
| S 16 | 1 37 42 | 22°32'42 | 10♐46 | 3°23  | 1°55  | 13°33 | 20°38 | 0°54  | 11°16  | 11°18  | 1°56  | 11°33  | 12°54 | 14°6  | 8°5  | S 16 |
| M17  | 1 41 38 | 23°32'16 | 23°17 | 4°57  | 3°6   | 14°7  | 20°48 | 0°51  | 11°14  | 11°17  | 1°55  | 11°25  | 12°51 | 14°12 | 8°7  | M17  |
| T 18 | 1 45 35 | 24°31'53 | 5♋36  | 6°30  | 4°17  | 14°40 | 20°58 | 0°48  | 11°12  | 11°16  | 1°54  | 11°18  | 12°48 | 14°19 | 8°10 | T 18 |
| W19  | 1 49 31 | 25°31'31 | 17°43 | 8°2   | 5°29  | 15°13 | 21°8  | 0°44  | 11°9   | 11°15  | 1°53  | 11°13  | 12°45 | 14°26 | 8°13 | W19  |
| T 20 | 1 53 28 | 26°31'12 | 29°41 | 9°34  | 6°40  | 15°46 | 21°19 | 0°41  | 11°7   | 11°14  | 1°52  | 11°10  | 12°42 | 14°32 | 8°16 | T 20 |
| F 21 | 1 57 24 | 27°30'55 | 11♐31 | 11°6  | 7°51  | 16°19 | 21°29 | 0°37  | 11°4   | 11°13  | 1°51  | 11°D 9 | 12°39 | 14°39 | 8°19 | F 21 |
| S 22 | 2 1 21  | 28°30'41 | 23°18 | 12°37 | 9°2   | 16°51 | 21°40 | 0°33  | 11°2   | 11°12  | 1°50  | 11°10  | 12°35 | 14°46 | 8°22 | S 22 |
| S 23 | 2 5 18  | 29°30'28 | 5♊6   | 14°7  | 10°13 | 17°24 | 21°51 | 0°30  | 11°0   | 11°11  | 1°48  | 11°11  | 12°32 | 14°52 | 8°25 | S 23 |
| M24  | 2 9 14  | 0♍30'18  | 16°58 | 15°36 | 11°24 | 17°56 | 22°1  | 0°26  | 10°57  | 11°10  | 1°47  | 11°13  | 12°29 | 14°59 | 8°28 | M24  |
| T 25 | 2 13 11 | 1°30'10  | 29°1  | 17°6  | 12°35 | 18°29 | 22°12 | 0°22  | 10°55  | 11°9   | 1°46  | 11°R14 | 12°26 | 15°6  | 8°32 | T 25 |
| W26  | 2 17 7  | 2°30'04  | 11♌19 | 18°34 | 13°45 | 19°1  | 22°23 | 0°18  | 10°52  | 11°8   | 1°45  | 11°13  | 12°23 | 15°12 | 8°35 | W26  |
| T 27 | 2 21 4  | 3°30'00  | 23°58 | 20°2  | 14°56 | 19°33 | 22°34 | 0°14  | 10°50  | 11°7   | 1°44  | 11°11  | 12°20 | 15°19 | 8°38 | T 27 |
| F 28 | 2 25 0  | 4°29'58  | 7♏1   | 21°29 | 16°7  | 20°5  | 22°46 | 0°10  | 10°47  | 11°7   | 1°43  | 11°8   | 12°16 | 15°25 | 8°42 | F 28 |
| S 29 | 2 28 57 | 5°29'59  | 20°30 | 22°56 | 17°17 | 20°36 | 22°57 | 0°5   | 10°45  | 11°6   | 1°42  | 11°3   | 12°13 | 15°32 | 8°45 | S 29 |
| S 30 | 2 32 53 | 6°30'02  | 4♊27  | 24°22 | 18°28 | 21°8  | 23°8  | 0°1   | 10°43  | 11°5   | 1°40  | 10°57  | 12°10 | 15°39 | 8°49 | S 30 |
| M31  | 2 36 50 | 7♍30'06  | 18♊49 | 25♍48 | 19♊38 | 21♌39 | 23♊20 | 29♋57 | 10♌40  | 11♋4   | 1♋39  | 10♐52  | 12♐7  | 15♐45 | 8♊53 | M31  |

| Day  | ☉     | ☽     |      | ♊     |      | ♋     |      | ♌     |      | ♍     |      | ♎     |      | ♏     |      | ♐    |      | ♑    |       | ♒     | ♓     | ♈     | ♉     | ♊    | ♋   | ♌    | ♍   | ♎    | ♏   | ♐    | ♑   | ♒    | ♓   |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|-------|------|-----|------|-----|------|-----|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat   | decl  | lat   | decl  | lat   | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| S 1  | 3s 4  | 11n31 | 5n 3 | 2s17  | 1n12 | 16s48 | 0s47 | 20n 7 | 1n 7 | 22s43 | 0n13 | 18n19 | 2s13 | 14n58 | 0s26 | 8s 7 | 0s59 | 3s46 | 17s 1 | 22n21 | 22n28 | 22n11 | 16s30 | 6n45 |     |      |     |      |     |      |     |      |     |
| S 2  | 3 27  | 5 56  | 4 55 | 3 4   | 1 6  | 17 13 | 0 51 | 20 0  | 1 8  | 22 44 | 0 13 | 18 18 | 2 13 | 14 58 | 0 26 | 8 7  | 0 59 | 3 46 | 17 1  | 22 20 | 22 27 | 22 13 | 16 31 | 6 44 |     |      |     |      |     |      |     |      |     |
| M 3  | 3 50  | 0s 6  | 4 28 | 3 50  | 1 0  | 17 37 | 0 54 | 19 52 | 1 9  | 22 45 | 0 13 | 18 18 | 2 14 | 14 57 | 0 26 | 8 8  | 0 59 | 3 47 | 17 1  | 22 19 | 22 27 | 22 15 | 16 31 | 6 44 |     |      |     |      |     |      |     |      |     |
| T 4  | 4 14  | 6 14  | 3 44 | 4 35  | 0 54 | 18 1  | 0 57 | 19 44 | 1 10 | 22 46 | 0 13 | 18 17 | 2 14 | 14 56 | 0 26 | 8 9  | 0 59 | 3 47 | 17 2  | 22 18 | 22 27 | 22 17 | 16 32 | 6 43 |     |      |     |      |     |      |     |      |     |
| W 5  | 4 37  | 12 6  | 2 45 | 5 21  | 0 48 | 18 24 | 1 1  | 19 36 | 1 11 | 22 47 | 0 13 | 18 17 | 2 14 | 14 56 | 0 26 | 8 9  | 0 59 | 3 48 | 17 2  | 22 17 | 22 26 | 22 18 | 16 32 | 6 43 |     |      |     |      |     |      |     |      |     |
| T 6  | 5 0   | 17 18 | 1 35 | 6 6   | 0 42 | 18 47 | 1 4  | 19 28 | 1 12 | 22 48 | 0 13 | 18 16 | 2 14 | 14 55 | 0 26 | 8 10 | 0 59 | 3 48 | 17 2  | 22 16 | 22 26 | 22 20 | 16 33 | 6 42 |     |      |     |      |     |      |     |      |     |
| F 7  | 5 23  | 21 28 | 0 19 | 6 50  | 0 35 | 19 9  | 1 7  | 19 20 | 1 13 | 22 49 | 0 13 | 18 15 | 2 14 | 14 54 | 0 26 | 8 10 | 0 59 | 3 49 | 17 2  | 22 16 | 22 25 | 22 22 | 16 33 | 6 42 |     |      |     |      |     |      |     |      |     |
| S 8  | 5 46  | 24 15 | 0s58 | 7 34  | 0 29 | 19 31 | 1 10 | 19 12 | 1 14 | 22 50 | 0 12 | 18 15 | 2 14 | 14 54 | 0 26 | 8 11 | 0 59 | 3 49 | 17 2  | 22 16 | 22 25 | 22 24 | 16 33 | 6 41 |     |      |     |      |     |      |     |      |     |
| S 9  | 6 9   | 25 26 | 2 10 | 8 17  | 0 22 | 19 52 | 1 14 | 19 4  | 1 14 | 22 50 | 0 12 | 18 14 | 2 14 | 14 53 | 0 26 | 8 11 | 0 59 | 3 49 | 17 2  | 22 16 | 22 25 | 22 25 | 16 34 | 6 41 |     |      |     |      |     |      |     |      |     |
| M10  | 6 32  | 24 58 | 3 14 | 9 0   | 0 15 | 20 13 | 1 17 | 18 55 | 1 15 | 22 51 | 0 12 | 18 13 | 2 14 | 14 52 | 0 26 | 8 12 | 0 59 | 3 50 | 17 2  | 22 16 | 22 24 | 22 27 | 16 34 | 6 40 |     |      |     |      |     |      |     |      |     |
| T 11 | 6 55  | 23 0  | 4 5  | 9 42  | 0 8  | 20 33 | 1 20 | 18 47 | 1 16 | 22 52 | 0 12 | 18 13 | 2 15 | 14 52 | 0 26 | 8 12 | 0 59 | 3 50 | 17 2  | 22 16 | 22 24 | 22 29 | 16 34 | 6 40 |     |      |     |      |     |      |     |      |     |
| W12  | 7 17  | 19 44 | 4 41 | 10 24 | 0 2  | 20 53 | 1 23 | 18 38 | 1 17 | 22 53 | 0 12 | 18 12 | 2 15 | 14 51 | 0 26 | 8 12 | 0 59 | 3 51 | 17 2  | 22 16 | 22 24 | 22 30 | 16 35 | 6 39 |     |      |     |      |     |      |     |      |     |
| T 13 | 7 40  | 15 30 | 5 2  | 11 5  | 0s 5 | 21 13 | 1 26 | 18 30 | 1 18 | 22 54 | 0 12 | 18 11 | 2 15 | 14 50 | 0 26 | 8 13 | 0 59 | 3 51 | 17 2  | 22 15 | 22 23 | 22 32 | 16 35 | 6 39 |     |      |     |      |     |      |     |      |     |
| F 14 | 8 2   | 10 35 | 5 6  | 11 45 | 0 12 | 21 31 | 1 30 | 18 21 | 1 19 | 22 55 | 0 12 | 18 11 | 2 15 | 14 50 | 0 26 | 8 13 | 0 59 | 3 51 | 17 2  | 22 14 | 22 23 | 22 34 | 16 36 | 6 38 |     |      |     |      |     |      |     |      |     |
| S 15 | 8 25  | 5 17  | 4 54 | 12 25 | 0 19 | 21 50 | 1 33 | 18 13 | 1 20 | 22 56 | 0 11 | 18 10 | 2 15 | 14 49 | 0 26 | 8 14 | 0 59 | 3 52 | 17 3  | 22 12 | 22 22 | 22 35 | 16 36 | 6 38 |     |      |     |      |     |      |     |      |     |
| S 16 | 8 47  | 0n 9  | 4 28 | 13 4  | 0 26 | 22 7  | 1 36 | 18 4  | 1 21 | 22 56 | 0 11 | 18 9  | 2 15 | 14 48 | 0 26 | 8 14 | 0 59 | 3 52 | 17 3  | 22 11 | 22 22 | 22 37 | 16 36 | 6 37 |     |      |     |      |     |      |     |      |     |
| M17  | 9 9   | 5 30  | 3 49 | 13 42 | 0 33 | 22 25 | 1 39 | 17 55 | 1 22 | 22 57 | 0 11 | 18 8  | 2 15 | 14 48 | 0 26 | 8 15 | 0 59 | 3 53 | 17 3  | 22 10 | 22 22 | 22 39 | 16 37 | 6 37 |     |      |     |      |     |      |     |      |     |
| T 18 | 9 31  | 10 34 | 3 0  | 14 19 | 0 40 | 22 41 | 1 42 | 17 47 | 1 23 | 22 58 | 0 11 | 18 8  | 2 15 | 14 47 | 0 26 | 8 15 | 0 59 | 3 53 | 17 3  | 22 9  | 22 21 | 22 40 | 16 37 | 6 36 |     |      |     |      |     |      |     |      |     |
| W19  | 9 53  | 15 9  | 2 3  | 14 56 | 0 46 | 22 57 | 1 45 | 17 38 | 1 24 | 22 59 | 0 11 | 18 7  | 2 15 | 14 46 | 0 26 | 8 15 | 0 59 | 3 53 | 17 3  | 22 8  | 22 21 | 22 42 | 16 37 | 6 36 |     |      |     |      |     |      |     |      |     |
| T 20 | 10 14 | 19 6  | 1 2  | 15 32 | 0 53 | 23 12 | 1 48 | 17 29 | 1 25 | 23 0  | 0 11 | 18 6  | 2 16 | 14 45 | 0 26 | 8 16 | 0 59 | 3 54 | 17 3  | 22 8  | 22 20 | 22 44 | 16 37 | 6 35 |     |      |     |      |     |      |     |      |     |
| F 21 | 10 36 | 22 13 | 0n 2 | 16 7  | 1 0  | 23 27 | 1 50 | 17 20 | 1 27 | 23 0  | 0 11 | 18 5  | 2 16 | 14 45 | 0 26 | 8 16 | 0 59 | 3 54 | 17 3  | 22 8  | 22 20 | 22 45 | 16 38 | 6 35 |     |      |     |      |     |      |     |      |     |
| S 22 | 10 57 | 24 23 | 1 6  | 16 41 | 1 6  | 23 41 | 1 53 | 17 11 | 1 28 | 23 1  | 0 11 | 18 4  | 2 16 | 14 44 | 0 26 | 8 17 | 0 59 | 3 55 | 17 3  | 22 8  | 22 19 | 22 47 | 16 38 | 6 34 |     |      |     |      |     |      |     |      |     |
| S 23 | 11 18 | 25 28 | 2 7  | 17 15 | 1 13 | 23 55 | 1 56 | 17 2  | 1 29 | 23 2  | 0 10 | 18 3  | 2 16 | 14 43 | 0 26 | 8 17 | 0 59 | 3 55 | 17 3  | 22 8  | 22 19 | 22 49 | 16 38 | 6 34 |     |      |     |      |     |      |     |      |     |
| M24  | 11 40 | 25 24 | 3 3  | 17 47 | 1 19 | 24 7  | 1 59 | 16 53 | 1 30 | 23 3  | 0 10 | 18 3  | 2 16 | 14 42 | 0 26 | 8 17 | 0 59 | 3 55 | 17 3  | 22 8  | 22 19 | 22 50 | 16 38 | 6 34 |     |      |     |      |     |      |     |      |     |
| T 25 | 12 0  | 24 9  | 3 51 | 18 19 | 1 25 | 24 20 | 2 1  | 16 44 | 1 31 | 23 4  | 0 10 | 18 2  | 2 16 | 14 42 | 0 26 | 8 18 | 0 59 | 3 56 | 17 3  | 22 9  | 22 18 | 22 52 | 16 39 | 6 33 |     |      |     |      |     |      |     |      |     |
| W26  | 12 21 | 21 44 | 4 31 | 18 50 | 1 31 | 24 31 | 2 4  | 16 35 | 1 32 | 23 4  | 0 10 | 18 1  | 2 16 | 14 41 | 0 26 | 8 18 | 0 59 | 3 56 | 17 3  | 22 9  | 22 18 | 22 53 | 16 39 | 6 33 |     |      |     |      |     |      |     |      |     |
| T 27 | 12 42 | 18 13 | 4 58 | 19 20 | 1 37 | 24 42 | 2 6  | 16 26 | 1 33 | 23 5  | 0 10 | 18 0  | 2 16 | 14 40 | 0 26 | 8 18 | 0 59 | 3 56 | 17 3  | 22 8  | 22 17 | 22 55 | 16 39 | 6 32 |     |      |     |      |     |      |     |      |     |
| F 28 | 13 2  | 13 45 | 5 11 | 19 49 | 1 43 | 24 52 | 2 9  | 16 17 | 1 34 | 23 6  | 0 10 | 17 59 | 2 16 | 14 39 | 0 26 | 8 19 | 0 59 | 3 57 | 17 3  | 22 8  | 22 17 | 22 57 | 16 39 | 6 32 |     |      |     |      |     |      |     |      |     |
| S 29 | 13 22 | 8 29  | 5 8  | 20 17 | 1 49 | 25 2  | 2 11 | 16 8  | 1 35 | 23 7  | 0 10 | 17 58 | 2 16 | 14 39 | 0 26 | 8 19 | 0 59 | 3 57 | 17 3  | 22 7  | 22 17 | 22 58 | 16 40 | 6 31 |     |      |     |      |     |      |     |      |     |
| S 30 | 13 42 | 2 37  | 4 46 | 20 43 | 1 54 | 25 11 | 2 14 | 15 59 | 1 36 | 23 7  | 0 10 | 17 57 | 2 16 | 14 38 | 0 26 | 8 19 | 0 59 | 3 57 | 17 3  | 22 6  | 22 16 | 23 0  | 16 40 | 6 31 |     |      |     |      |     |      |     |      |     |
| M31  | 14s 2 | 3s34  | 4n 7 | 21s 9 | 1s59 | 25s19 | 2s16 | 15n50 | 1n37 | 23s 8 | 0n 9 | 17n56 | 2s16 | 14n37 | 0s26 | 8s19 | 0s59 | 3s58 | 17s 3 | 22n 6 | 22n16 | 23n 1 | 16s40 | 6n31 |     |      |     |      |     |      |     |      |     |

ASTRODIENST EPHEMERIS for the year 1853  
geocentric

NOVEMBER 1853

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♂      | ♀     | ♂     | ♂     | ♂      | ♂      | ♂      | ♂     | ♂      | ♂     | ♂     | ♂     | Day  |
|------|---------|----------|-------|--------|-------|-------|-------|--------|--------|--------|-------|--------|-------|-------|-------|------|
| T 1  | 2 40 47 | 8♉30°13  | 3♉30  | 27♉12  | 20♉49 | 22♉10 | 23♉31 | 29°R53 | 10°R38 | 11°R 4 | 1°R38 | 10°R48 | 12♉ 4 | 15♉52 | 8♉56  | T 1  |
| W 2  | 2 44 43 | 9°30'22  | 18°25 | 28°36  | 21°59 | 22°41 | 23°43 | 29♉48  | 10♉35  | 11♉ 3  | 1♉37  | 10♉44  | 12° 0 | 15°59 | 9° 0  | W 2  |
| T 3  | 2 48 40 | 10°30'32 | 3♉23  | 29°59  | 23° 9 | 23°12 | 23°54 | 29°44  | 10°33  | 11° 2  | 1°36  | 10°43  | 11°57 | 16° 5 | 9° 4  | T 3  |
| F 4  | 2 52 36 | 11°30'45 | 18°18 | 1♉21   | 24°19 | 23°43 | 24° 6 | 29°39  | 10°30  | 11° 2  | 1°35  | 10°D43 | 11°54 | 16°12 | 9° 8  | F 4  |
| S 5  | 2 56 33 | 12°30'58 | 3♉ 2  | 2°43   | 25°29 | 24°13 | 24°18 | 29°35  | 10°28  | 11° 1  | 1°34  | 10°44  | 11°51 | 16°19 | 9°12  | S 5  |
| S 6  | 3 0 29  | 13°31'14 | 17°29 | 4° 3   | 26°39 | 24°44 | 24°30 | 29°30  | 10°25  | 11° 0  | 1°33  | 10°45  | 11°48 | 16°25 | 9°16  | S 6  |
| M 7  | 3 4 26  | 14°31'31 | 1♉38  | 5°22   | 27°49 | 25°14 | 24°42 | 29°25  | 10°23  | 11° 0  | 1°32  | 10°47  | 11°45 | 16°32 | 9°20  | M 7  |
| T 8  | 3 8 22  | 15°31'49 | 15°25 | 6°40   | 28°59 | 25°44 | 24°54 | 29°21  | 10°20  | 10°59  | 1°30  | 10°R47 | 11°41 | 16°39 | 9°24  | T 8  |
| W 9  | 3 12 19 | 16°32'09 | 28°54 | 7°56   | 0♉ 9  | 26°13 | 25° 6 | 29°16  | 10°18  | 10°59  | 1°29  | 10°47  | 11°38 | 16°45 | 9°28  | W 9  |
| T 10 | 3 16 16 | 17°32'30 | 12♉ 3 | 9°11   | 1°18  | 26°43 | 25°18 | 29°11  | 10°15  | 10°59  | 1°28  | 10°45  | 11°35 | 16°52 | 9°33  | T 10 |
| F 11 | 3 20 12 | 18°32'52 | 24°56 | 10°24  | 2°28  | 27°12 | 25°31 | 29° 6  | 10°13  | 10°58  | 1°27  | 10°42  | 11°32 | 16°58 | 9°37  | F 11 |
| S 12 | 3 24 9  | 19°33'16 | 7♉35  | 11°35  | 3°37  | 27°41 | 25°43 | 29° 2  | 10°10  | 10°58  | 1°26  | 10°39  | 11°29 | 17° 5 | 9°41  | S 12 |
| S 13 | 3 28 5  | 20°33'41 | 20° 1 | 12°44  | 4°46  | 28°10 | 25°55 | 28°57  | 10° 8  | 10°57  | 1°25  | 10°36  | 11°25 | 17°12 | 9°46  | S 13 |
| M14  | 3 32 2  | 21°34'08 | 2♉15  | 13°50  | 5°55  | 28°39 | 26° 8 | 28°52  | 10° 6  | 10°57  | 1°24  | 10°32  | 11°22 | 17°18 | 9°50  | M14  |
| T 15 | 3 35 58 | 22°34'36 | 14°21 | 14°54  | 7° 4  | 29° 8 | 26°20 | 28°47  | 10° 3  | 10°57  | 1°23  | 10°30  | 11°19 | 17°25 | 9°55  | T 15 |
| W16  | 3 39 55 | 23°35'06 | 26°19 | 15°54  | 8°13  | 29°36 | 26°33 | 28°42  | 10° 1  | 10°57  | 1°22  | 10°28  | 11°16 | 17°32 | 9°59  | W16  |
| T 17 | 3 43 51 | 24°35'38 | 8♉10  | 16°50  | 9°22  | 0♉ 4  | 26°46 | 28°37  | 9°58   | 10°56  | 1°21  | 10°D28 | 11°13 | 17°38 | 10° 4 | T 17 |
| F 18 | 3 47 48 | 25°36'11 | 19°59 | 17°43  | 10°31 | 0°32  | 26°58 | 28°32  | 9°56   | 10°56  | 1°20  | 10°28  | 11°10 | 17°45 | 10° 9 | F 18 |
| S 19 | 3 51 45 | 26°36'46 | 1♉46  | 18°31  | 11°39 | 1° 0  | 27°11 | 28°28  | 9°54   | 10°56  | 1°19  | 10°29  | 11° 6 | 17°52 | 10°13 | S 19 |
| S 20 | 3 55 41 | 27°37'22 | 13°34 | 19°13  | 12°47 | 1°27  | 27°24 | 28°23  | 9°51   | 10°56  | 1°18  | 10°30  | 11° 3 | 17°58 | 10°18 | S 20 |
| M21  | 3 59 38 | 28°38'00 | 25°28 | 19°50  | 13°56 | 1°54  | 27°37 | 28°18  | 9°49   | 10°56  | 1°17  | 10°31  | 11° 0 | 18° 5 | 10°23 | M21  |
| T 22 | 4 3 34  | 29°38'40 | 7♉31  | 20°20  | 15° 4 | 2°21  | 27°50 | 28°13  | 9°47   | 10°D56 | 1°16  | 10°33  | 10°57 | 18°12 | 10°28 | T 22 |
| W23  | 4 7 31  | 0♉39°21  | 19°47 | 20°43  | 16°11 | 2°48  | 28° 3 | 28° 8  | 9°44   | 10°56  | 1°15  | 10°33  | 10°54 | 18°18 | 10°33 | W23  |
| T 24 | 4 11 27 | 1°40'04  | 2♉21  | 20°57  | 17°19 | 3°14  | 28°16 | 28° 3  | 9°42   | 10°56  | 1°14  | 10°R33 | 10°51 | 18°25 | 10°38 | T 24 |
| F 25 | 4 15 24 | 2°40'48  | 15°18 | 21°R 3 | 18°27 | 3°41  | 28°29 | 27°58  | 9°40   | 10°56  | 1°13  | 10°33  | 10°47 | 18°32 | 10°43 | F 25 |
| S 26 | 4 19 20 | 3°41'34  | 28°39 | 20°59  | 19°34 | 4° 6  | 28°42 | 27°53  | 9°38   | 10°56  | 1°12  | 10°33  | 10°44 | 18°38 | 10°48 | S 26 |
| S 27 | 4 23 17 | 4°42'21  | 12♉28 | 20°44  | 20°41 | 4°32  | 28°55 | 27°48  | 9°36   | 10°56  | 1°11  | 10°32  | 10°41 | 18°45 | 10°53 | S 27 |
| M28  | 4 27 14 | 5°43'11  | 26°44 | 20°19  | 21°48 | 4°57  | 29° 8 | 27°43  | 9°33   | 10°57  | 1°10  | 10°31  | 10°38 | 18°51 | 10°58 | M28  |
| T 29 | 4 31 10 | 6°44'01  | 11♉25 | 19°42  | 22°55 | 5°23  | 29°21 | 27°39  | 9°31   | 10°57  | 1° 9  | 10°31  | 10°35 | 18°58 | 11° 3 | T 29 |
| W30  | 4 35 7  | 7♉44'53  | 26♉24 | 18♉55  | 24♉ 2 | 5♉47  | 29♉35 | 27♉34  | 9♉29   | 10♉57  | 1♉ 8  | 10♉31  | 10♉31 | 19♉ 5 | 11♉ 8 | W30  |

| Day  | ☉     | ☾     |      | ♂     |      | ♀     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂    |      | ♂    |       | ♂     |       | ♂     |       | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|-------|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat   | decl  | lat   | decl  | lat   | decl | lat |
| T 1  | 14s21 | 9s43  | 3n10 | 21s34 | 2s 4 | 25s26 | 2s18 | 15n41 | 1n38 | 23s 9 | 0n 9 | 17n55 | 2s16 | 14n36 | 0s26 | 8s20 | 0s59 | 3s58 | 17s 2 | 22n 5 | 22n15 | 23n 3 | 16s40 | 6n30 |     |
| W 2  | 14 40 | 15 25 | 1 59 | 21 58 | 2 9  | 25 33 | 2 20 | 15 32 | 1 39 | 23 9  | 0 9  | 17 54 | 2 16 | 14 36 | 0 26 | 8 20 | 0 59 | 3 58 | 17 2  | 22 4  | 22 15 | 23 5  | 16 40 | 6 30 |     |
| T 3  | 14 59 | 20 12 | 0 40 | 22 20 | 2 14 | 25 39 | 2 22 | 15 23 | 1 41 | 23 10 | 0 9  | 17 53 | 2 16 | 14 35 | 0 26 | 8 20 | 0 59 | 3 59 | 17 2  | 22 4  | 22 14 | 23 6  | 16 40 | 6 29 |     |
| F 4  | 15 18 | 23 38 | 0s42 | 22 42 | 2 18 | 25 44 | 2 24 | 15 14 | 1 42 | 23 11 | 0 9  | 17 52 | 2 16 | 14 34 | 0 26 | 8 20 | 0 59 | 3 59 | 17 2  | 22 4  | 22 14 | 23 8  | 16 41 | 6 29 |     |
| S 5  | 15 36 | 25 25 | 2 0  | 23 2  | 2 22 | 25 49 | 2 26 | 15 4  | 1 43 | 23 11 | 0 9  | 17 51 | 2 16 | 14 33 | 0 26 | 8 21 | 0 58 | 3 59 | 17 2  | 22 4  | 22 14 | 23 9  | 16 41 | 6 29 |     |
| S 6  | 15 55 | 25 26 | 3 9  | 23 21 | 2 25 | 25 53 | 2 28 | 14 55 | 1 44 | 23 12 | 0 9  | 17 50 | 2 16 | 14 32 | 0 26 | 8 21 | 0 58 | 4 0  | 17 2  | 22 5  | 22 13 | 23 11 | 16 41 | 6 28 |     |
| M 7  | 16 13 | 23 47 | 4 4  | 23 39 | 2 29 | 25 56 | 2 30 | 14 46 | 1 45 | 23 12 | 0 9  | 17 49 | 2 16 | 14 32 | 0 26 | 8 21 | 0 58 | 4 0  | 17 2  | 22 5  | 22 13 | 23 12 | 16 41 | 6 28 |     |
| T 8  | 16 30 | 20 45 | 4 45 | 23 56 | 2 32 | 25 59 | 2 31 | 14 37 | 1 46 | 23 13 | 0 9  | 17 48 | 2 16 | 14 31 | 0 26 | 8 21 | 0 58 | 4 0  | 17 2  | 22 5  | 22 12 | 23 14 | 16 41 | 6 27 |     |
| W 9  | 16 48 | 16 41 | 5 8  | 24 11 | 2 34 | 26 0  | 2 33 | 14 28 | 1 48 | 23 14 | 0 8  | 17 47 | 2 16 | 14 30 | 0 26 | 8 21 | 0 58 | 4 0  | 17 2  | 22 5  | 22 12 | 23 15 | 16 41 | 6 27 |     |
| T 10 | 17 5  | 11 53 | 5 15 | 24 25 | 2 36 | 26 1  | 2 34 | 14 19 | 1 49 | 23 14 | 0 8  | 17 46 | 2 16 | 14 29 | 0 26 | 8 21 | 0 58 | 4 1  | 17 2  | 22 5  | 22 12 | 23 17 | 16 41 | 6 27 |     |
| F 11 | 17 22 | 6 41  | 5 5  | 24 37 | 2 37 | 26 2  | 2 36 | 14 10 | 1 50 | 23 15 | 0 8  | 17 45 | 2 16 | 14 29 | 0 26 | 8 21 | 0 58 | 4 1  | 17 2  | 22 4  | 22 11 | 23 18 | 16 41 | 6 26 |     |
| S 12 | 17 38 | 1 18  | 4 41 | 24 48 | 2 38 | 26 1  | 2 37 | 14 1  | 1 51 | 23 15 | 0 8  | 17 44 | 2 16 | 14 28 | 0 26 | 8 22 | 0 58 | 4 1  | 17 1  | 22 4  | 22 11 | 23 20 | 16 41 | 6 26 |     |
| S 13 | 17 54 | 4n 4  | 4 4  | 24 58 | 2 39 | 26 0  | 2 38 | 13 52 | 1 52 | 23 16 | 0 8  | 17 43 | 2 16 | 14 27 | 0 26 | 8 22 | 0 58 | 4 1  | 17 1  | 22 3  | 22 10 | 23 22 | 16 41 | 6 26 |     |
| M14  | 18 10 | 9 12  | 3 16 | 25 6  | 2 39 | 25 58 | 2 39 | 13 44 | 1 54 | 23 16 | 0 8  | 17 42 | 2 16 | 14 26 | 0 26 | 8 22 | 0 58 | 4 1  | 17 1  | 22 3  | 22 10 | 23 23 | 16 41 | 6 25 |     |
| T 15 | 18 26 | 13 56 | 2 20 | 25 13 | 2 38 | 25 56 | 2 40 | 13 35 | 1 55 | 23 17 | 0 8  | 17 41 | 2 16 | 14 26 | 0 26 | 8 22 | 0 58 | 4 2  | 17 1  | 22 2  | 22 9  | 23 25 | 16 41 | 6 25 |     |
| W16  | 18 41 | 18 5  | 1 18 | 25 18 | 2 36 | 25 53 | 2 41 | 13 26 | 1 56 | 23 17 | 0 8  | 17 40 | 2 16 | 14 25 | 0 26 | 8 22 | 0 58 | 4 2  | 17 1  | 22 2  | 22 9  | 23 26 | 16 41 | 6 25 |     |
| T 17 | 18 56 | 21 29 | 0 13 | 25 21 | 2 34 | 25 49 | 2 42 | 13 17 | 1 57 | 23 18 | 0 8  | 17 39 | 2 16 | 14 24 | 0 26 | 8 22 | 0 58 | 4 2  | 17 1  | 22 2  | 22 8  | 23 28 | 16 41 | 6 24 |     |
| F 18 | 19 11 | 23 57 | 0n53 | 25 23 | 2 30 | 25 44 | 2 42 | 13 8  | 1 58 | 23 18 | 0 7  | 17 38 | 2 16 | 14 23 | 0 26 | 8 22 | 0 58 | 4 2  | 17 1  | 22 2  | 22 8  | 23 29 | 16 41 | 6 24 |     |
| S 19 | 19 25 | 25 22 | 1 55 | 25 23 | 2 26 | 25 39 | 2 43 | 13 0  | 2 0  | 23 18 | 0 7  | 17 37 | 2 16 | 14 23 | 0 26 | 8 22 | 0 58 | 4 2  | 17 0  | 22 2  | 22 8  | 23 31 | 16 41 | 6 24 |     |
| S 20 | 19 39 | 25 39 | 2 54 | 25 21 | 2 21 | 25 33 | 2 43 | 12 51 | 2 1  | 23 19 | 0 7  | 17 36 | 2 16 | 14 22 | 0 26 | 8 22 | 0 58 | 4 3  | 17 0  | 22 2  | 22 7  | 23 32 | 16 41 | 6 23 |     |
| M21  | 19 52 | 24 45 | 3 45 | 25 18 | 2 14 | 25 26 | 2 43 | 12 43 | 2 2  | 23 19 | 0 7  | 17 35 | 2 16 | 14 21 | 0 26 | 8 22 | 0 58 | 4 3  | 17 0  | 22 3  | 22 7  | 23 33 | 16 41 | 6 23 |     |
| T 22 | 20 5  | 22 42 | 4 27 | 25 13 | 2 7  | 25 19 | 2 43 | 12 34 | 2 4  | 23 19 | 0 7  | 17 34 | 2 16 | 14 21 | 0 26 | 8 22 | 0 58 | 4 3  | 17 0  | 22 3  | 22 6  | 23 35 | 16 41 | 6 23 |     |
| W23  | 20 18 | 19 35 | 4 57 | 25 5  | 1 58 | 25 11 | 2 43 | 12 26 | 2 5  | 23 20 | 0 7  | 17 33 | 2 16 | 14 20 | 0 26 | 8 22 | 0 58 | 4 3  | 17 0  | 22 3  | 22 6  | 23 36 | 16 41 | 6 23 |     |
| T 24 | 20 31 | 15 32 | 5 15 | 24 56 | 1 47 | 25 2  | 2 43 | 12 17 | 2 6  | 23 20 | 0 7  | 17 32 | 2 16 | 14 19 | 0 26 | 8 22 | 0 58 | 4 3  | 17 0  | 22 3  | 22 5  | 23 38 | 16 41 | 6 22 |     |
| F 25 | 20 43 | 10 40 | 5 17 | 24 45 | 1 36 | 24 53 | 2 43 | 12 9  | 2 8  | 23 20 | 0 7  | 17 31 | 2 16 | 14 18 | 0 26 | 8 22 | 0 58 | 4 3  | 16 59 | 22 3  | 22 5  | 23 39 | 16 41 | 6 22 |     |
| S 26 | 20 54 | 5 9   | 5 2  | 24 31 | 1 22 | 24 43 | 2 43 | 12 1  | 2 9  | 23 21 | 0 7  | 17 30 | 2 16 | 14 18 | 0 26 | 8 22 | 0 58 | 4 3  | 16 59 | 22 3  | 22 4  | 23 41 | 16 41 | 6 22 |     |
| S 27 | 21 6  | 0s47  | 4 30 | 24 16 | 1 8  | 24 32 | 2 42 | 11 53 | 2 10 | 23 21 | 0 7  | 17 29 | 2 16 | 14 17 | 0 26 | 8 22 | 0 58 | 4 4  | 16 59 | 22 3  | 22 4  | 23 42 | 16 40 | 6 22 |     |
| M28  | 21 17 | 6 53  | 3 40 | 23 58 | 0 52 | 24 21 | 2 42 | 11 45 | 2 12 | 23 21 | 0 6  | 17 28 | 2 15 | 14 16 | 0 26 | 8 22 | 0 58 | 4 4  | 16 59 | 22 3  | 22 4  | 23 44 | 16 40 | 6 21 |     |
| T 29 | 21 27 | 12 49 | 2 35 | 23 38 | 0 34 | 24 9  | 2 41 | 11 37 | 2 13 | 23 21 | 0 6  | 17 27 | 2 15 | 14 16 | 0 26 | 8 22 | 0 58 | 4 4  | 16 58 | 22 3  | 22 3  | 23 45 | 16 40 | 6 21 |     |
| W30  | 21s37 | 18s 6 | 1n18 | 23s15 | 0s16 | 23s57 | 2s40 | 11n29 | 2n14 | 23s21 | 0n 6 | 17n26 | 2s15 | 14n15 | 0s26 | 8s22 | 0s58 | 4s 4 | 16s58 | 22n 3 | 22n 3 | 23n46 | 16s40 | 6n21 |     |

ASTRODIENST EPHEMERIS for the year 1853  
geocentric

DECEMBER 1853

00:00 UT

| Day  | Sid.t   | ☉                    | ☽                  | ♊                  | ♋                 | ♌                  | ♍                  | ♎                  | ♏                 | ♐                  | ♑                 | ♒                  | ♓                  | ♈                  | ♉                  | Day  |
|------|---------|----------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|------|
| T 1  | 4 39 3  | 8 <sup>h</sup> 45'46 | 11 <sup>h</sup> 35 | 17°R57             | 25 <sup>h</sup> 8 | 6 <sup>h</sup> 12  | 29 <sup>h</sup> 48 | 27°R29             | 9°R27             | 10 <sup>h</sup> 57 | 1°R 8             | 10°D31             | 10 <sup>h</sup> 28 | 19 <sup>h</sup> 11 | 11 <sup>h</sup> 13 | T 1  |
| F 2  | 4 43 0  | 9°46'41              | 26°48              | 16 <sup>h</sup> 50 | 26°15             | 6°36               | 0 <sup>h</sup> 1   | 27 <sup>h</sup> 24 | 9 <sup>h</sup> 25 | 10°58              | 1 <sup>h</sup> 7  | 10 <sup>h</sup> 31 | 10°25              | 19°18              | 11°19              | F 2  |
| S 3  | 4 46 56 | 10°47'36             | 11 <sup>h</sup> 52 | 15°36              | 27°21             | 7° 0               | 0°15               | 27°20              | 9°23              | 10°58              | 1° 6              | 10°R31             | 10°22              | 19°25              | 11°24              | S 3  |
| S 4  | 4 50 53 | 11°48'32             | 26°40              | 14°16              | 28°27             | 7°24               | 0°28               | 27°15              | 9°21              | 10°58              | 1° 5              | 10°31              | 10°19              | 19°31              | 11°29              | S 4  |
| M 5  | 4 54 49 | 12°49'29             | 11 <sup>h</sup> 5  | 12°53              | 29°32             | 7°47               | 0°42               | 27°10              | 9°19              | 10°59              | 1° 4              | 10°30              | 10°16              | 19°38              | 11°34              | M 5  |
| T 6  | 4 58 46 | 13°50'27             | 25° 5              | 11°31              | 0 <sup>h</sup> 38 | 8°10               | 0°55               | 27° 6              | 9°17              | 10°59              | 1° 3              | 10°30              | 10°12              | 19°45              | 11°40              | T 6  |
| W 7  | 5 2 43  | 14°51'25             | 8 <sup>h</sup> 39  | 10°11              | 1°43              | 8°32               | 1° 9               | 27° 1              | 9°15              | 11° 0              | 1° 3              | 10°D30             | 10° 9              | 19°51              | 11°45              | W 7  |
| T 8  | 5 6 39  | 15°52'24             | 21°48              | 8°56               | 2°47              | 8°55               | 1°22               | 26°56              | 9°13              | 11° 0              | 1° 2              | 10°30              | 10° 6              | 19°58              | 11°51              | T 8  |
| F 9  | 5 10 36 | 16°53'23             | 4 <sup>h</sup> 35  | 7°50               | 3°52              | 9°17               | 1°36               | 26°52              | 9°12              | 11° 1              | 1° 1              | 10°30              | 10° 3              | 20° 5              | 11°56              | F 9  |
| S 10 | 5 14 32 | 17°54'23             | 17° 4              | 6°52               | 4°56              | 9°38               | 1°49               | 26°48              | 9°10              | 11° 1              | 1° 0              | 10°31              | 10° 0              | 20°11              | 12° 2              | S 10 |
| S 11 | 5 18 29 | 18°55'24             | 29°18              | 6° 5               | 6° 0              | 9°59               | 2° 3               | 26°43              | 9° 8              | 11° 2              | 1° 0              | 10°32              | 9°57               | 20°18              | 12° 7              | S 11 |
| M12  | 5 22 25 | 19°56'25             | 11 <sup>h</sup> 21 | 5°29               | 7° 4              | 10°20              | 2°17               | 26°39              | 9° 6              | 11° 3              | 0°59              | 10°33              | 9°53               | 20°25              | 12°13              | M12  |
| T 13 | 5 26 22 | 20°57'27             | 23°16              | 5° 4               | 8° 7              | 10°41              | 2°30               | 26°35              | 9° 5              | 11° 3              | 0°58              | 10°34              | 9°50               | 20°31              | 12°18              | T 13 |
| W14  | 5 30 18 | 21°58'29             | 5 <sup>h</sup> 16  | 4°50               | 9°10              | 11° 1              | 2°44               | 26°30              | 9° 3              | 11° 4              | 0°58              | 10°R34             | 9°47               | 20°38              | 12°24              | W14  |
| T 15 | 5 34 15 | 22°59'32             | 16°54              | 4°D46              | 10°13             | 11°21              | 2°58               | 26°26              | 9° 1              | 11° 5              | 0°57              | 10°34              | 9°44               | 20°44              | 12°29              | T 15 |
| F 16 | 5 38 12 | 24° 0'36             | 28°42              | 4°53               | 11°16             | 11°40              | 3°12               | 26°22              | 9° 0              | 11° 6              | 0°56              | 10°33              | 9°41               | 20°51              | 12°35              | F 16 |
| S 17 | 5 42 8  | 25° 1'40             | 10 <sup>h</sup> 32 | 5° 8               | 12°18             | 11°59              | 3°25               | 26°18              | 8°58              | 11° 6              | 0°56              | 10°32              | 9°37               | 20°58              | 12°41              | S 17 |
| S 18 | 5 46 5  | 26° 2'45             | 22°26              | 5°32               | 13°19             | 12°17              | 3°39               | 26°14              | 8°57              | 11° 7              | 0°55              | 10°30              | 9°34               | 21° 4              | 12°46              | S 18 |
| M19  | 5 50 1  | 27° 3'51             | 4 <sup>h</sup> 27  | 6° 3               | 14°20             | 12°35              | 3°53               | 26°10              | 8°55              | 11° 8              | 0°55              | 10°27              | 9°31               | 21°11              | 12°52              | M19  |
| T 20 | 5 53 58 | 28° 4'57             | 16°36              | 6°41               | 15°21             | 12°53              | 4° 7               | 26° 7              | 8°54              | 11° 9              | 0°54              | 10°24              | 9°28               | 21°18              | 12°58              | T 20 |
| W21  | 5 57 54 | 29° 6'04             | 28°56              | 7°25               | 16°22             | 13°10              | 4°20               | 26° 3              | 8°53              | 11°10              | 0°53              | 10°22              | 9°25               | 21°24              | 13° 3              | W21  |
| T 22 | 6 1 51  | 0 <sup>h</sup> 7'12  | 11 <sup>h</sup> 31 | 8°14               | 17°22             | 13°27              | 4°34               | 25°59              | 8°51              | 11°11              | 0°53              | 10°20              | 9°22               | 21°31              | 13° 9              | T 22 |
| F 23 | 6 5 48  | 1° 8'20              | 24°23              | 9° 8               | 18°21             | 13°43              | 4°48               | 25°56              | 8°50              | 11°12              | 0°52              | 10°19              | 9°18               | 21°38              | 13°15              | F 23 |
| S 24 | 6 9 44  | 2° 9'28              | 7 <sup>h</sup> 36  | 10° 6              | 19°20             | 13°59              | 5° 2               | 25°52              | 8°49              | 11°13              | 0°52              | 10°D18             | 9°15               | 21°44              | 13°21              | S 24 |
| S 25 | 6 13 41 | 3°10'38              | 21°12              | 11° 8              | 20°19             | 14°14              | 5°16               | 25°49              | 8°48              | 11°14              | 0°52              | 10°19              | 9°12               | 21°51              | 13°26              | S 25 |
| M26  | 6 17 37 | 4°11'48              | 5 <sup>h</sup> 13  | 12°13              | 21°17             | 14°29              | 5°30               | 25°46              | 8°47              | 11°15              | 0°51              | 10°21              | 9° 9               | 21°58              | 13°32              | M26  |
| T 27 | 6 21 34 | 5°12'58              | 19°38              | 13°21              | 22°15             | 14°43              | 5°44               | 25°42              | 8°45              | 11°17              | 0°51              | 10°22              | 9° 6               | 22° 4              | 13°38              | T 27 |
| W28  | 6 25 30 | 6°14'09              | 4 <sup>h</sup> 25  | 14°31              | 23°12             | 14°57              | 5°57               | 25°39              | 8°44              | 11°18              | 0°50              | 10°R23             | 9° 3               | 22°11              | 13°44              | W28  |
| T 29 | 6 29 27 | 7°15'21              | 19°28              | 15°43              | 24° 8             | 15°10              | 6°11               | 25°36              | 8°43              | 11°19              | 0°50              | 10°23              | 8°59               | 22°18              | 13°50              | T 29 |
| F 30 | 6 33 23 | 8°16'32              | 4 <sup>h</sup> 40  | 16°58              | 25° 4             | 15°23              | 6°25               | 25°33              | 8°43              | 11°20              | 0°50              | 10°21              | 8°56               | 22°24              | 13°55              | F 30 |
| S 31 | 6 37 20 | 9 <sup>h</sup> 17'44 | 19 <sup>h</sup> 51 | 18 <sup>h</sup> 14 | 26 <sup>h</sup> 0 | 15 <sup>h</sup> 35 | 6 <sup>h</sup> 39  | 25 <sup>h</sup> 30 | 8 <sup>h</sup> 42 | 11 <sup>h</sup> 21 | 0 <sup>h</sup> 49 | 10 <sup>h</sup> 18 | 8 <sup>h</sup> 53  | 22 <sup>h</sup> 31 | 14 <sup>h</sup> 1  | S 31 |

| Day  | ☉      | ☽     |      | ♊     |      | ♋     |      | ♌     |      | ♍     |      | ♎     |      | ♏     |      | ♐    |      | ♑    |       | ♒     | ♓     | ♈     | ♉     |      |
|------|--------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|-------|------|
|      | decl   | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat   | decl  | decl  | decl  | decl  | lat  |
| T 1  | 21s47  | 22s17 | 0s 6 | 22s51 | 0n 4 | 23s44 | 2s39 | 11n21 | 2n16 | 23s21 | 0n 6 | 17n25 | 2s15 | 14n14 | 0s26 | 8s21 | 0s58 | 4s 4 | 16s58 | 22n 3 | 22n 2 | 23n48 | 16s40 | 6n21 |
| F 2  | 21 56  | 24 55 | 1 29 | 22 24 | 0 24 | 23 30 | 2 38 | 11 13 | 2 17 | 23 22 | 0 6  | 17 24 | 2 15 | 14 14 | 0 26 | 8 21 | 0 58 | 4 4  | 16 58 | 22 3  | 22 2  | 23 49 | 16 40 | 6 20 |
| S 3  | 22 5   | 25 41 | 2 46 | 21 56 | 0 45 | 23 16 | 2 36 | 11 6  | 2 19 | 23 22 | 0 6  | 17 23 | 2 15 | 14 13 | 0 26 | 8 21 | 0 58 | 4 4  | 16 58 | 22 3  | 22 1  | 23 51 | 16 39 | 6 20 |
| S 4  | 22 13  | 24 36 | 3 50 | 21 28 | 1 5  | 23 1  | 2 35 | 10 58 | 2 20 | 23 22 | 0 6  | 17 22 | 2 15 | 14 13 | 0 26 | 8 21 | 0 58 | 4 4  | 16 57 | 22 2  | 22 1  | 23 52 | 16 39 | 6 20 |
| M 5  | 22 21  | 21 54 | 4 37 | 20 58 | 1 24 | 22 46 | 2 33 | 10 51 | 2 22 | 23 22 | 0 6  | 17 22 | 2 15 | 14 12 | 0 26 | 8 21 | 0 58 | 4 4  | 16 57 | 22 2  | 22 0  | 23 53 | 16 39 | 6 20 |
| T 6  | 22 29  | 17 59 | 5 7  | 20 30 | 1 42 | 22 30 | 2 32 | 10 44 | 2 23 | 23 22 | 0 6  | 17 21 | 2 14 | 14 11 | 0 26 | 8 21 | 0 58 | 4 4  | 16 57 | 22 2  | 22 0  | 23 55 | 16 39 | 6 20 |
| W 7  | 22 36  | 13 14 | 5 18 | 20 2  | 1 59 | 22 14 | 2 30 | 10 36 | 2 25 | 23 22 | 0 6  | 17 20 | 2 14 | 14 11 | 0 26 | 8 20 | 0 58 | 4 4  | 16 57 | 22 2  | 21 59 | 23 56 | 16 38 | 6 19 |
| T 8  | 22 43  | 8 2   | 5 12 | 19 37 | 2 13 | 21 57 | 2 28 | 10 29 | 2 26 | 23 22 | 0 5  | 17 19 | 2 14 | 14 10 | 0 26 | 8 20 | 0 58 | 4 4  | 16 56 | 22 2  | 21 59 | 23 58 | 16 38 | 6 19 |
| F 9  | 22 49  | 2 37  | 4 50 | 19 15 | 2 25 | 21 39 | 2 25 | 10 22 | 2 28 | 23 22 | 0 5  | 17 18 | 2 14 | 14 10 | 0 26 | 8 20 | 0 58 | 4 4  | 16 56 | 22 2  | 21 58 | 23 59 | 16 38 | 6 19 |
| S 10 | 22 55  | 2n46  | 4 16 | 18 56 | 2 35 | 21 22 | 2 23 | 10 16 | 2 29 | 23 22 | 0 5  | 17 17 | 2 14 | 14 9  | 0 26 | 8 20 | 0 58 | 4 4  | 16 56 | 22 3  | 21 58 | 24 0  | 16 37 | 6 19 |
| S 11 | 23 0   | 7 58  | 3 30 | 18 40 | 2 42 | 21 3  | 2 21 | 10 9  | 2 31 | 23 21 | 0 5  | 17 16 | 2 14 | 14 9  | 0 26 | 8 19 | 0 58 | 4 4  | 16 55 | 22 3  | 21 58 | 24 2  | 16 37 | 6 19 |
| M12  | 23 5   | 12 47 | 2 35 | 18 29 | 2 48 | 20 45 | 2 18 | 10 3  | 2 32 | 23 21 | 0 5  | 17 15 | 2 13 | 14 8  | 0 26 | 8 19 | 0 58 | 4 4  | 16 55 | 22 3  | 21 57 | 24 3  | 16 37 | 6 19 |
| T 13 | 23 9   | 17 5  | 1 35 | 18 21 | 2 51 | 20 25 | 2 15 | 9 56  | 2 34 | 23 21 | 0 5  | 17 15 | 2 13 | 14 8  | 0 26 | 8 19 | 0 58 | 4 4  | 16 55 | 22 3  | 21 57 | 24 4  | 16 36 | 6 18 |
| W14  | 23 13  | 20 40 | 0 30 | 18 17 | 2 52 | 20 6  | 2 12 | 9 50  | 2 35 | 23 21 | 0 5  | 17 14 | 2 13 | 14 7  | 0 26 | 8 19 | 0 58 | 4 4  | 16 55 | 22 3  | 21 56 | 24 6  | 16 36 | 6 18 |
| T 15 | 23 16  | 23 24 | 0n35 | 18 17 | 2 52 | 19 46 | 2 9  | 9 44  | 2 37 | 23 21 | 0 5  | 17 13 | 2 13 | 14 7  | 0 26 | 8 18 | 0 58 | 4 4  | 16 54 | 22 3  | 21 56 | 24 7  | 16 36 | 6 18 |
| F 16 | 23 19  | 22 6  | 1 39 | 18 20 | 2 50 | 19 25 | 2 5  | 9 38  | 2 38 | 23 21 | 0 5  | 17 12 | 2 13 | 14 6  | 0 26 | 8 18 | 0 58 | 4 4  | 16 54 | 22 3  | 21 55 | 24 8  | 16 35 | 6 18 |
| S 17 | 23 22  | 25 41 | 2 39 | 18 26 | 2 47 | 19 4  | 2 2  | 9 32  | 2 40 | 23 20 | 0 5  | 17 12 | 2 13 | 14 6  | 0 26 | 8 18 | 0 58 | 4 4  | 16 54 | 22 3  | 21 55 | 24 10 | 16 35 | 6 18 |
| S 18 | 23 24  | 25 4  | 3 32 | 18 34 | 2 43 | 18 43 | 1 58 | 9 27  | 2 42 | 23 20 | 0 4  | 17 11 | 2 12 | 14 5  | 0 26 | 8 17 | 0 58 | 4 4  | 16 53 | 22 2  | 21 54 | 24 11 | 16 34 | 6 18 |
| M19  | 23 26  | 23 18 | 4 16 | 18 44 | 2 38 | 18 22 | 1 54 | 9 21  | 2 43 | 23 20 | 0 4  | 17 10 | 2 12 | 14 5  | 0 26 | 8 17 | 0 57 | 4 3  | 16 53 | 22 2  | 21 54 | 24 12 | 16 34 | 6 18 |
| T 20 | 23 27  | 20 28 | 4 49 | 18 56 | 2 33 | 18 0  | 1 50 | 9 16  | 2 45 | 23 19 | 0 4  | 17 10 | 2 12 | 14 4  | 0 26 | 8 16 | 0 57 | 4 3  | 16 53 | 22 2  | 21 53 | 24 14 | 16 34 | 6 18 |
| W21  | 23 27  | 16 41 | 5 9  | 19 10 | 2 26 | 17 38 | 1 46 | 9 11  | 2 47 | 23 19 | 0 4  | 17 9  | 2 12 | 14 4  | 0 26 | 8 16 | 0 57 | 4 3  | 16 52 | 22 1  | 21 53 | 24 15 | 16 33 | 6 18 |
| T 22 | 23 28  | 12 7  | 5 16 | 19 24 | 2 19 | 17 15 | 1 41 | 9 6   | 2 48 | 23 19 | 0 4  | 17 8  | 2 12 | 14 4  | 0 26 | 8 16 | 0 57 | 4 3  | 16 52 | 22 1  | 21 52 | 24 16 | 16 33 | 6 18 |
| F 23 | 23 27  | 6 55  | 5 6  | 19 40 | 2 12 | 16 52 | 1 37 | 9 1   | 2 50 | 23 18 | 0 4  | 17 8  | 2 11 | 14 3  | 0 26 | 8 15 | 0 57 | 4 3  | 16 52 | 22 1  | 21 52 | 24 18 | 16 32 | 6 18 |
| S 24 | 23 26  | 1 17  | 4 41 | 19 56 | 2 5  | 16 29 | 1 32 | 8 57  | 2 52 | 23 18 | 0 4  | 17 7  | 2 11 | 14 3  | 0 25 | 8 15 | 0 57 | 4 3  | 16 52 | 22 1  | 21 51 | 24 19 | 16 32 | 6 17 |
| S 25 | 23 25  | 4s35  | 3 59 | 20 12 | 1 57 | 16 6  | 1 27 | 8 52  | 2 53 | 23 17 | 0 4  | 17 6  | 2 11 | 14 2  | 0 25 | 8 14 | 0 57 | 4 3  | 16 51 | 22 1  | 21 51 | 24 20 | 16 31 | 6 17 |
| M26  | 23 24  | 10 25 | 3 2  | 20 29 | 1 49 | 15 43 | 1 22 | 8 48  | 2 55 | 23 17 | 0 4  | 17 6  | 2 11 | 14 2  | 0 25 | 8 14 | 0 57 | 4 3  | 16 51 | 22 1  | 21 50 | 24 21 | 16 31 | 6 17 |
| T 27 | 23 21  | 15 52 | 1 52 | 20 46 | 1 40 | 15 19 | 1 16 | 8 44  | 2 57 | 23 17 | 0 4  | 17 5  | 2 10 | 14 2  | 0 25 | 8 14 | 0 57 | 4 2  | 16 51 | 22 1  | 21 50 | 24 23 | 16 30 | 6 17 |
| W28  | 23 19  | 20 30 | 0 33 | 21 2  | 1 32 | 14 55 | 1 11 | 8 41  | 2 59 | 23 16 | 0 3  | 17 5  | 2 10 | 14 2  | 0 25 | 8 13 | 0 57 | 4 2  | 16 50 | 22 1  | 21 49 | 24 24 | 16 30 | 6 17 |
| T 29 | 23 16  | 23 52 | 0s50 | 21 19 | 1 24 | 14 31 | 1 5  | 8 37  | 3 0  | 23 15 | 0 3  | 17 4  | 2 10 | 14 1  | 0 25 | 8 13 | 0 57 | 4 2  | 16 50 | 22 1  | 21 49 | 24 25 | 16 29 | 6 17 |
| F 30 | 23 12  | 22 32 | 2 10 | 21 34 | 1 15 | 14 6  | 0 59 | 8 34  | 3 2  | 23 15 | 0 3  | 17 4  | 2 10 | 14 1  | 0 25 | 8 12 | 0 57 | 4 2  | 16 50 | 22 1  | 21 48 | 24 26 | 16 29 | 6 17 |
| S 31 | 23 s 8 | 25s17 | 3s20 | 21s50 | 1n 7 | 13s42 | 0s53 | 8n31  | 3n 4 | 23s14 | 0n 3 | 17n 3 | 2s 9 | 14n 1 | 0s25 | 8s12 | 0s57 | 4s 2 | 16s49 | 22n 1 | 21n48 | 24n28 | 16s28 | 6n17 |