



# Astrodienst Ephemeris Tables for the year 1707

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 1707  
geocentric

JANUARY 1707

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♊      | ♋      | ♌     | ♍     | ♎      | ♏      | ♐     | ♑      | ♒     | ♓    | ♈     | ♉    | Day  |
|------|---------|----------|-------|--------|--------|-------|-------|--------|--------|-------|--------|-------|------|-------|------|------|
| S 1  | 6 39 43 | 9♌59'55  | 4♊31  | 26°R18 | 15♋36  | 24♌55 | 0°R44 | 27°R31 | 12°R25 | 18♑27 | 22°R46 | 3°R22 | 1♌59 | 11♍13 | 3♈8  | S 1  |
| S 2  | 6 43 40 | 11° 1'06 | 16°38 | 26♌11  | 15°53  | 24°57 | 0♎41  | 27♌28  | 12♑23  | 18°28 | 22♑45  | 3♌15  | 1°56 | 11°19 | 3°14 | S 2  |
| M 3  | 6 47 36 | 12° 2'17 | 28°57 | 25°53  | 16° 7  | 24°59 | 0°38  | 27°25  | 12°21  | 18°28 | 22°44  | 3° 5  | 1°53 | 11°26 | 3°21 | M 3  |
| T 4  | 6 51 33 | 13° 3'29 | 11♌30 | 25°22  | 16°19  | 25° 3 | 0°34  | 27°22  | 12°19  | 18°28 | 22°43  | 2°53  | 1°50 | 11°33 | 3°27 | T 4  |
| W 5  | 6 55 30 | 14° 4'40 | 24°18 | 24°40  | 16°29  | 25° 7 | 0°31  | 27°20  | 12°16  | 18°28 | 22°42  | 2°40  | 1°46 | 11°39 | 3°33 | W 5  |
| T 6  | 6 59 26 | 15° 5'51 | 7♋18  | 23°47  | 16°36  | 25°11 | 0°27  | 27°17  | 12°14  | 18°28 | 22°41  | 2°27  | 1°43 | 11°46 | 3°39 | T 6  |
| F 7  | 7 3 23  | 16° 7'01 | 20°31 | 22°45  | 16°42  | 25°17 | 0°23  | 27°15  | 12°12  | 18°28 | 22°40  | 2°15  | 1°40 | 11°53 | 3°46 | F 7  |
| S 8  | 7 7 19  | 17° 8'11 | 3♋55  | 21°34  | 16°44  | 25°23 | 0°19  | 27°13  | 12°10  | 18°29 | 22°39  | 2° 6  | 1°37 | 11°59 | 3°52 | S 8  |
| S 9  | 7 11 16 | 18° 9'20 | 17°28 | 20°19  | 16°R45 | 25°30 | 0°15  | 27°10  | 12° 7  | 18°29 | 22°38  | 2° 0  | 1°34 | 12° 6 | 3°58 | S 9  |
| M10  | 7 15 12 | 19°10'28 | 1°Y11 | 19° 0  | 16°43  | 25°37 | 0°11  | 27° 8  | 12° 5  | 18°29 | 22°36  | 1°57  | 1°31 | 12°13 | 4° 4 | M10  |
| T 11 | 7 19 9  | 20°11'36 | 15° 2 | 17°41  | 16°38  | 25°46 | 0° 6  | 27° 6  | 12° 3  | 18°30 | 22°35  | 1°56  | 1°27 | 12°19 | 4°10 | T 11 |
| W12  | 7 23 5  | 21°12'43 | 29° 3 | 16°24  | 16°31  | 25°54 | 0° 1  | 27° 5  | 12° 0  | 18°30 | 22°34  | 1°56  | 1°24 | 12°26 | 4°16 | W12  |
| T 13 | 7 27 2  | 22°13'50 | 13♌13 | 15°11  | 16°21  | 26° 4 | 29♑57 | 27° 3  | 11°58  | 18°31 | 22°33  | 1°55  | 1°21 | 12°32 | 4°22 | T 13 |
| F 14 | 7 30 59 | 23°14'55 | 27°30 | 14° 3  | 16° 9  | 26°14 | 29°51 | 27° 1  | 11°55  | 18°31 | 22°32  | 1°53  | 1°18 | 12°39 | 4°28 | F 14 |
| S 15 | 7 34 55 | 24°16'00 | 11♐54 | 13° 3  | 15°54  | 26°25 | 29°46 | 27° 0  | 11°53  | 18°32 | 22°30  | 1°49  | 1°15 | 12°46 | 4°34 | S 15 |
| S 16 | 7 38 52 | 25°17'04 | 26°18 | 12°12  | 15°37  | 26°36 | 29°41 | 26°58  | 11°51  | 18°32 | 22°29  | 1°41  | 1°12 | 12°52 | 4°40 | S 16 |
| M17  | 7 42 48 | 26°18'07 | 10♌39 | 11°29  | 15°17  | 26°48 | 29°35 | 26°57  | 11°48  | 18°33 | 22°28  | 1°31  | 1° 8 | 12°59 | 4°46 | M17  |
| T 18 | 7 46 45 | 27°19'09 | 24°50 | 10°56  | 14°55  | 27° 0 | 29°30 | 26°56  | 11°46  | 18°34 | 22°26  | 1°19  | 1° 5 | 13° 6 | 4°52 | T 18 |
| W19  | 7 50 41 | 28°20'11 | 8♑46  | 10°32  | 14°31  | 27°13 | 29°24 | 26°54  | 11°43  | 18°34 | 22°25  | 1° 6  | 1° 2 | 13°12 | 4°58 | W19  |
| T 20 | 7 54 38 | 29°21'12 | 22°22 | 10°17  | 14° 4  | 27°27 | 29°18 | 26°53  | 11°40  | 18°35 | 22°24  | 0°54  | 0°59 | 13°19 | 5° 4 | T 20 |
| F 21 | 7 58 35 | 0♋22'12  | 5♎35  | 10°D11 | 13°36  | 27°41 | 29°12 | 26°53  | 11°38  | 18°36 | 22°22  | 0°43  | 0°56 | 13°26 | 5°10 | F 21 |
| S 22 | 8 2 31  | 1°23'11  | 18°25 | 10°13  | 13° 6  | 27°55 | 29° 6 | 26°52  | 11°35  | 18°36 | 22°21  | 0°35  | 0°52 | 13°32 | 5°16 | S 22 |
| S 23 | 8 6 28  | 2°24'10  | 0♌53  | 10°23  | 12°34  | 28°10 | 29° 0 | 26°51  | 11°33  | 18°37 | 22°20  | 0°30  | 0°49 | 13°39 | 5°21 | S 23 |
| M24  | 8 10 24 | 3°25'08  | 13° 4 | 10°39  | 12° 0  | 28°26 | 28°53 | 26°51  | 11°30  | 18°38 | 22°18  | 0°27  | 0°46 | 13°46 | 5°27 | M24  |
| T 25 | 8 14 21 | 4°26'05  | 25° 2 | 11° 2  | 11°26  | 28°42 | 28°47 | 26°50  | 11°28  | 18°39 | 22°17  | 0°26  | 0°43 | 13°52 | 5°33 | T 25 |
| W26  | 8 18 17 | 5°27'02  | 6♍52  | 11°31  | 10°50  | 28°58 | 28°40 | 26°50  | 11°25  | 18°40 | 22°16  | 0°26  | 0°40 | 13°59 | 5°39 | W26  |
| T 27 | 8 22 14 | 6°27'58  | 18°39 | 12° 6  | 10°14  | 29°15 | 28°33 | 26°50  | 11°22  | 18°41 | 22°14  | 0°26  | 0°37 | 14° 6 | 5°44 | T 27 |
| F 28 | 8 26 10 | 7°28'54  | 0♊30  | 12°45  | 9°37   | 29°33 | 28°26 | 26°D49 | 11°20  | 18°42 | 22°13  | 0°24  | 0°33 | 14°12 | 5°50 | F 28 |
| S 29 | 8 30 7  | 8°29'48  | 12°29 | 13°29  | 9° 0   | 29°51 | 28°19 | 26°50  | 11°17  | 18°43 | 22°11  | 0°20  | 0°30 | 14°19 | 5°55 | S 29 |
| S 30 | 8 34 3  | 9°30'42  | 24°41 | 14°17  | 8°23   | 0♐9   | 28°12 | 26°50  | 11°15  | 18°44 | 22°10  | 0°13  | 0°27 | 14°25 | 6° 1 | S 30 |
| M31  | 8 38 0  | 10♋31'35 | 7♌9   | 15♌8   | 7♋46   | 0♐27  | 28♑5  | 26♌50  | 11♑12  | 18♑45 | 22♑8   | 0♌3   | 0♌24 | 14♍32 | 6♌6  | 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 | decl | lat |
| S 1  | 23s 6 | 23s39 | 2s37 | 20s31 | 0n25 | 15s12 | 1n 2 | 21n16 | 2n18 | 12n14 | 1n 4 | 17n37 | 2s 4 | 17n46 | 0n41 | 5n40 | 1s43 | 23n41 | 10n20 | 12n40 | 12n11 | 16s 0 | 17s32 | 5n55 |     |      |     |      |     |      |     |      |     |      |     |
| S 2  | 23 1  | 26 16 | 3 28 | 20 15 | 0 43 | 14 55 | 1 15 | 21 16 | 2 19 | 12 15 | 1 4  | 17 37 | 2 4  | 17 47 | 0 41 | 5 40 | 1 43 | 23 41 | 10 20 | 12 37 | 12 10 | 16 3  | 17 31 | 5 55 |     |      |     |      |     |      |     |      |     |      |     |
| M 3  | 22 56 | 27 39 | 4 10 | 20 0  | 1 2  | 14 39 | 1 27 | 21 17 | 2 19 | 12 17 | 1 5  | 17 36 | 2 4  | 17 47 | 0 41 | 5 40 | 1 43 | 23 42 | 10 20 | 12 34 | 12 9  | 16 6  | 17 31 | 5 55 |     |      |     |      |     |      |     |      |     |      |     |
| T 4  | 22 50 | 27 39 | 4 41 | 19 46 | 1 21 | 14 22 | 1 40 | 21 19 | 2 19 | 12 18 | 1 5  | 17 36 | 2 4  | 17 48 | 0 41 | 5 40 | 1 43 | 23 42 | 10 21 | 12 30 | 12 8  | 16 9  | 17 31 | 5 55 |     |      |     |      |     |      |     |      |     |      |     |
| W 5  | 22 44 | 26 11 | 4 58 | 19 35 | 1 40 | 14 7  | 1 54 | 21 20 | 2 20 | 12 20 | 1 5  | 17 36 | 2 3  | 17 48 | 0 41 | 5 40 | 1 43 | 23 43 | 10 21 | 12 25 | 12 7  | 16 12 | 17 30 | 5 56 |     |      |     |      |     |      |     |      |     |      |     |
| T 6  | 22 37 | 23 19 | 5 0  | 19 26 | 1 59 | 13 52 | 2 7  | 21 21 | 2 20 | 12 21 | 1 5  | 17 35 | 2 3  | 17 49 | 0 41 | 5 40 | 1 43 | 23 44 | 10 21 | 12 21 | 12 6  | 16 15 | 17 30 | 5 56 |     |      |     |      |     |      |     |      |     |      |     |
| F 7  | 22 30 | 19 12 | 4 46 | 19 19 | 2 17 | 13 37 | 2 21 | 21 23 | 2 20 | 12 23 | 1 6  | 17 35 | 2 3  | 17 50 | 0 41 | 5 40 | 1 43 | 23 44 | 10 21 | 12 17 | 12 4  | 16 18 | 17 30 | 5 56 |     |      |     |      |     |      |     |      |     |      |     |
| S 8  | 22 23 | 14 4  | 4 17 | 19 13 | 2 33 | 13 22 | 2 35 | 21 24 | 2 20 | 12 24 | 1 6  | 17 35 | 2 3  | 17 50 | 0 41 | 5 40 | 1 43 | 23 45 | 10 22 | 12 13 | 12 3  | 16 20 | 17 29 | 5 56 |     |      |     |      |     |      |     |      |     |      |     |
| S 9  | 22 15 | 8 13  | 3 32 | 19 10 | 2 48 | 13 9  | 2 50 | 21 26 | 2 20 | 12 26 | 1 6  | 17 35 | 2 2  | 17 51 | 0 41 | 5 41 | 1 43 | 23 46 | 10 22 | 12 11 | 12 2  | 16 23 | 17 29 | 5 56 |     |      |     |      |     |      |     |      |     |      |     |
| M10  | 22 6  | 1 54  | 2 35 | 19 9  | 3 1  | 12 55 | 3 4  | 21 28 | 2 20 | 12 28 | 1 6  | 17 34 | 2 2  | 17 52 | 0 42 | 5 41 | 1 42 | 23 46 | 10 22 | 12 10 | 12 1  | 16 26 | 17 29 | 5 56 |     |      |     |      |     |      |     |      |     |      |     |
| T 11 | 21 58 | 4n35  | 1 28 | 19 9  | 3 11 | 12 43 | 3 19 | 21 30 | 2 21 | 12 30 | 1 7  | 17 34 | 2 2  | 17 52 | 0 42 | 5 41 | 1 42 | 23 47 | 10 22 | 12 10 | 12 0  | 16 29 | 17 28 | 5 57 |     |      |     |      |     |      |     |      |     |      |     |
| W12  | 21 48 | 10 55 | 0 15 | 19 11 | 3 19 | 12 30 | 3 34 | 21 32 | 2 21 | 12 32 | 1 7  | 17 34 | 2 1  | 17 53 | 0 42 | 5 41 | 1 42 | 23 48 | 10 23 | 12 10 | 11 59 | 16 32 | 17 28 | 5 57 |     |      |     |      |     |      |     |      |     |      |     |
| T 13 | 21 39 | 16 46 | 0n59 | 19 14 | 3 24 | 12 19 | 3 49 | 21 35 | 2 21 | 12 34 | 1 7  | 17 34 | 2 1  | 17 54 | 0 42 | 5 41 | 1 42 | 23 48 | 10 23 | 12 10 | 11 58 | 16 35 | 17 28 | 5 57 |     |      |     |      |     |      |     |      |     |      |     |
| F 14 | 21 28 | 21 46 | 2 11 | 19 18 | 3 27 | 12 8  | 4 4  | 21 37 | 2 21 | 12 36 | 1 7  | 17 34 | 2 1  | 17 55 | 0 42 | 5 42 | 1 42 | 23 49 | 10 23 | 12 9  | 11 57 | 16 38 | 17 27 | 5 57 |     |      |     |      |     |      |     |      |     |      |     |
| S 15 | 21 18 | 25 28 | 3 14 | 19 24 | 3 28 | 11 58 | 4 19 | 21 40 | 2 21 | 12 38 | 1 8  | 17 34 | 2 1  | 17 55 | 0 42 | 5 42 | 1 42 | 23 49 | 10 23 | 12 7  | 11 56 | 16 41 | 17 27 | 5 58 |     |      |     |      |     |      |     |      |     |      |     |
| S 16 | 21 7  | 27 31 | 4 5  | 19 30 | 3 26 | 11 48 | 4 35 | 21 42 | 2 21 | 12 40 | 1 8  | 17 34 | 2 0  | 17 56 | 0 42 | 5 42 | 1 42 | 23 50 | 10 24 | 12 5  | 11 55 | 16 43 | 17 26 | 5 58 |     |      |     |      |     |      |     |      |     |      |     |
| M17  | 20 56 | 27 43 | 4 41 | 19 37 | 3 22 | 11 40 | 4 50 | 21 45 | 2 21 | 12 42 | 1 8  | 17 34 | 2 0  | 17 57 | 0 42 | 5 42 | 1 42 | 23 51 | 10 24 | 12 1  | 11 53 | 16 46 | 17 26 | 5 58 |     |      |     |      |     |      |     |      |     |      |     |
| T 18 | 20 44 | 26 5  | 4 58 | 19 45 | 3 17 | 11 32 | 5 4  | 21 48 | 2 21 | 12 44 | 1 8  | 17 34 | 2 0  | 17 57 | 0 42 | 5 43 | 1 42 | 23 51 | 10 24 | 11 57 | 11 52 | 16 49 | 17 25 | 5 58 |     |      |     |      |     |      |     |      |     |      |     |
| W19  | 20 32 | 22 53 | 4 57 | 19 54 | 3 11 | 11 25 | 5 19 | 21 51 | 2 20 | 12 46 | 1 8  | 17 34 | 2 0  | 17 58 | 0 42 | 5 43 | 1 42 | 23 52 | 10 24 | 11 53 | 11 51 | 16 52 | 17 25 | 5 59 |     |      |     |      |     |      |     |      |     |      |     |
| T 20 | 20 19 | 18 29 | 4 40 | 20 2  | 3 3  | 11 18 | 5 34 | 21 54 | 2 20 | 12 48 | 1 9  | 17 34 | 1 59 | 17 59 | 0 42 | 5 43 | 1 42 | 23 53 | 10 24 | 11 48 | 11 50 | 16 55 | 17 24 | 5 59 |     |      |     |      |     |      |     |      |     |      |     |
| F 21 | 20 6  | 13 19 | 4 7  | 20 11 | 2 55 | 11 13 | 5 48 | 21 57 | 2 20 | 12 51 | 1 9  | 17 34 | 1 59 | 18 0  | 0 42 | 5 44 | 1 42 | 23 53 | 10 25 | 11 45 | 11 49 | 16 58 | 17 24 | 5 59 |     |      |     |      |     |      |     |      |     |      |     |
| S 22 | 19 53 | 7 42  | 3 23 | 20 20 | 2 45 | 11 8  | 6 1  | 22 0  | 2 20 | 12 53 | 1 9  | 17 34 | 1 59 | 18 0  | 0 42 | 5 44 | 1 42 | 23 54 | 10 25 | 11 42 | 11 48 | 17 0  | 17 23 | 5 59 |     |      |     |      |     |      |     |      |     |      |     |
| S 23 | 19 39 | 1 56  | 2 30 | 20 29 | 2 35 | 11 4  | 6 14 | 22 4  | 2 20 | 12 56 | 1 9  | 17 34 | 1 58 | 18 1  | 0 42 | 5 44 | 1 42 | 23 55 | 10 25 | 11 40 | 11 47 | 17 3  | 17 23 | 6 0  |     |      |     |      |     |      |     |      |     |      |     |
| M24  | 19 25 | 3s47  | 1 31 | 20 38 | 2 25 | 11 1  | 6 27 | 22 7  | 2 20 | 12 58 | 1 10 | 17 34 | 1 58 | 18 2  | 0 42 | 5 45 | 1 42 | 23 55 | 10 25 | 11 39 | 11 46 | 17 6  | 17 22 | 6 0  |     |      |     |      |     |      |     |      |     |      |     |
| T 25 | 19 11 | 9 16  | 0 29 | 20 47 | 2 15 | 10 59 | 6 39 | 22 10 | 2 20 | 13 0  | 1 10 | 17 34 | 1 58 | 18 2  | 0 42 | 5 45 | 1 42 | 23 56 | 10 25 | 11 39 | 11 45 | 17 9  | 17 22 | 6 0  |     |      |     |      |     |      |     |      |     |      |     |
| W26  | 18 56 | 14 22 | 0s34 | 20 55 | 2 4  | 10 57 | 6 51 | 22 14 | 2 19 | 13 3  | 1 10 | 17 34 | 1 58 | 18 3  | 0 42 | 5 46 | 1 42 | 23 56 | 10 25 | 11 39 | 11 43 | 17 12 | 17 21 | 6 1  |     |      |     |      |     |      |     |      |     |      |     |
| T 27 | 18 41 | 18 55 | 1 35 | 21 3  | 1 53 | 10 56 | 7 1  | 22 17 | 2 19 | 13 6  | 1 10 | 17 35 | 1 57 | 18 4  | 0 42 | 5 46 | 1 42 | 23 57 | 10 26 | 11 38 | 11 42 | 17 15 | 17 21 | 6 1  |     |      |     |      |     |      |     |      |     |      |     |
| F 28 | 18 26 | 22 46 | 2 32 | 21 10 | 1 42 | 10 56 | 7 11 | 22 21 | 2 19 | 13 8  | 1 10 | 17 35 | 1 57 | 18 5  | 0 42 | 5 46 | 1 41 | 23 58 | 10 26 | 11 38 | 11 41 | 17 17 | 17 20 | 6 1  |     |      |     |      |     |      |     |      |     |      |     |
| S 29 | 18 10 | 25 41 | 3 23 | 21 17 | 1 31 | 10 57 | 7 20 | 22 24 | 2 19 | 13 11 | 1 10 | 17 35 | 1 57 | 18 5  | 0 42 | 5 47 | 1 41 | 23 58 | 10 26 | 11 36 | 11 40 | 17 20 | 17 20 | 6 2  |     |      |     |      |     |      |     |      |     |      |     |
| S 30 | 17 54 | 27 28 | 4 6  | 21 23 | 1 21 | 10 58 | 7 29 | 22 28 | 2 18 | 13 13 | 1 11 | 17 35 | 1 57 | 18 6  | 0 42 | 5 47 | 1 41 | 23 59 | 10 26 | 11 34 | 11 39 | 17 23 | 17 19 | 6 2  |     |      |     |      |     |      |     |      |     |      |     |
| M31  | 17s38 | 27s54 | 4s37 | 21s28 | 1n10 | 11s 0 | 7n36 | 22n32 | 2n18 | 13n16 | 1n11 | 17n36 | 1s56 | 18n 7 | 0n42 | 5n48 | 1s41 | 24n 0 | 10n26 | 11n30 | 11n38 | 17s26 | 17s18 | 6n 2 |     |      |     |      |     |      |     |      |     |      |     |

# ASTRODIENST EPHEMERIS for the year 1707

## geocentric

FEBRUARY 1707

00:00 UT

| Day  | Sid.t    | ☉           | ☽         | ♀        | ♂       | ♂       | ♂      | ♂        | ♂      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂       | Day  |
|------|----------|-------------|-----------|----------|---------|---------|--------|----------|--------|--------|--------|--------|--------|--------|---------|------|
| T 1  | 8 41 57  | 11°32'27"   | 19°35'56" | 16°38'3  | 7°R10   | 0°II47  | 27°R58 | 26°35'50 | 11°R 9 | 18°V46 | 22°R 7 | 29°R51 | 0°32'1 | 14°M39 | 6°31'2  | T 1  |
| W 2  | 8 45 53  | 12°33'17"   | 3°38'1    | 17° 1    | 6°33'4  | 1° 6    | 27°R50 | 26°51    | 11°R 7 | 18°47  | 22°R 6 | 29°V38 | 0°18   | 14°45  | 6°17    | W 2  |
| T 3  | 8 49 50  | 13°34'07"   | 16°23     | 18° 2    | 5°59    | 1°26    | 27°43  | 26°51    | 11° 4  | 18°48  | 22° 4  | 29°25  | 0°14   | 14°52  | 6°23    | T 3  |
| F 4  | 8 53 46  | 14°34'55"   | 0°38'1    | 19° 5    | 5°26    | 1°46    | 27°35  | 26°52    | 11° 1  | 18°49  | 22° 3  | 29°13  | 0°11   | 14°59  | 6°28    | F 4  |
| S 5  | 8 57 43  | 15°35'42"   | 13°51     | 20°11    | 4°54    | 2° 7    | 27°28  | 26°53    | 10°59  | 18°51  | 22° 1  | 29° 4  | 0° 8   | 15° 5  | 6°33    | S 5  |
| S 6  | 9 1 39   | 16°36'27"   | 27°48     | 21°19    | 4°23    | 2°28    | 27°20  | 26°54    | 10°56  | 18°52  | 22° 0  | 28°57  | 0° 5   | 15°12  | 6°39    | S 6  |
| M 7  | 9 5 36   | 17°37'11"   | 11°V51    | 22°29    | 3°54    | 2°49    | 27°12  | 26°55    | 10°54  | 18°53  | 21°58  | 28°54  | 0° 2   | 15°19  | 6°44    | M 7  |
| T 8  | 9 9 32   | 18°37'53"   | 25°56     | 23°41    | 3°28    | 3°11    | 27° 5  | 26°56    | 10°51  | 18°55  | 21°57  | 28°D53 | 29°V58 | 15°25  | 6°49    | T 8  |
| W 9  | 9 13 29  | 19°38'34"   | 10°38'1   | 24°54    | 3° 3    | 3°33    | 26°57  | 26°57    | 10°48  | 18°56  | 21°55  | 28°53  | 29°55  | 15°32  | 6°54    | W 9  |
| T 10 | 9 17 26  | 20°39'12"   | 24° 7     | 26°10    | 2°40    | 3°55    | 26°49  | 26°59    | 10°46  | 18°57  | 21°54  | 28°R53 | 29°52  | 15°39  | 6°59    | T 10 |
| F 11 | 9 21 22  | 21°39'50"   | 8°II11    | 27°27    | 2°20    | 4°18    | 26°41  | 27° 0    | 10°43  | 18°59  | 21°52  | 28°52  | 29°49  | 15°45  | 7° 4    | F 11 |
| S 12 | 9 25 19  | 22°40'25"   | 22°14     | 28°45    | 2° 2    | 4°41    | 26°33  | 27° 2    | 10°41  | 19° 0  | 21°51  | 28°49  | 29°46  | 15°52  | 7° 9    | S 12 |
| S 13 | 9 29 15  | 23°40'59"   | 6°38'13   | 0°38'5   | 1°46    | 5° 4    | 26°26  | 27° 3    | 10°38  | 19° 1  | 21°49  | 28°43  | 29°43  | 15°59  | 7°14    | S 13 |
| M14  | 9 33 12  | 24°41'30"   | 20° 6     | 1°26     | 1°33    | 5°28    | 26°18  | 27° 5    | 10°36  | 19° 3  | 21°48  | 28°34  | 29°39  | 16° 5  | 7°19    | M14  |
| T 15 | 9 37 8   | 25°42'01"   | 3°38'49   | 2°48     | 1°22    | 5°52    | 26°10  | 27° 7    | 10°33  | 19° 4  | 21°46  | 28°24  | 29°36  | 16°12  | 7°23    | T 15 |
| W16  | 9 41 5   | 26°42'29"   | 17°21     | 4°12     | 1°14    | 6°16    | 26° 2  | 27° 9    | 10°31  | 19° 6  | 21°45  | 28°13  | 29°33  | 16°19  | 7°28    | W16  |
| T 17 | 9 45 2   | 27°42'56"   | 0°M37     | 5°36     | 1° 8    | 6°40    | 25°54  | 27°11    | 10°28  | 19° 7  | 21°43  | 28° 2  | 29°30  | 16°25  | 7°33    | T 17 |
| F 18 | 9 48 58  | 28°43'21"   | 13°35     | 7° 2     | 1° 5    | 7° 5    | 25°46  | 27°13    | 10°26  | 19° 9  | 21°42  | 27°53  | 29°27  | 16°32  | 7°37    | F 18 |
| S 19 | 9 52 55  | 29°43'44"   | 26°17     | 8°29     | 1°D 4   | 7°30    | 25°38  | 27°16    | 10°23  | 19°11  | 21°40  | 27°46  | 29°24  | 16°38  | 7°42    | S 19 |
| S 20 | 9 56 51  | 0°38'44'06" | 8°38'41   | 9°58     | 1° 6    | 7°55    | 25°30  | 27°18    | 10°21  | 19°12  | 21°39  | 27°42  | 29°20  | 16°45  | 7°46    | S 20 |
| M21  | 10 0 48  | 1°44'26"    | 20°50     | 11°27    | 1°10    | 8°21    | 25°22  | 27°21    | 10°18  | 19°14  | 21°37  | 27°40  | 29°17  | 16°52  | 7°51    | M21  |
| T 22 | 10 4 44  | 2°44'45"    | 2°M47     | 12°57    | 1°16    | 8°46    | 25°15  | 27°24    | 10°16  | 19°16  | 21°36  | 27°D40 | 29°14  | 16°58  | 7°55    | T 22 |
| W23  | 10 8 41  | 3°45'03"    | 14°38     | 14°29    | 1°25    | 9°12    | 25° 7  | 27°26    | 10°14  | 19°17  | 21°35  | 27°40  | 29°11  | 17° 5  | 7°59    | W23  |
| T 24 | 10 12 37 | 4°45'19"    | 26°26     | 16° 1    | 1°36    | 9°38    | 24°59  | 27°29    | 10°11  | 19°19  | 21°33  | 27°42  | 29° 8  | 17°12  | 8° 4    | T 24 |
| F 25 | 10 16 34 | 5°45'33"    | 8°38'17   | 17°35    | 1°49    | 10° 5   | 24°51  | 27°32    | 10° 9  | 19°21  | 21°32  | 27°R42 | 29° 4  | 17°18  | 8° 8    | F 25 |
| S 26 | 10 20 30 | 6°45'46"    | 20°17     | 19° 9    | 2° 4    | 10°31   | 24°44  | 27°35    | 10° 7  | 19°23  | 21°30  | 27°41  | 29° 1  | 17°25  | 8°12    | S 26 |
| S 27 | 10 24 27 | 7°45'58"    | 2°38'30   | 20°45    | 2°21    | 10°58   | 24°36  | 27°38    | 10° 4  | 19°24  | 21°29  | 27°38  | 28°58  | 17°32  | 8°16    | S 27 |
| M28  | 10 28 24 | 8°46'08"    | 15°38'1   | 22°38'21 | 2°38'40 | 11°II25 | 24°32  | 27°42    | 10°32  | 19°V26 | 21°32  | 27°V32 | 28°V55 | 17°M38 | 8°38'20 | M28  |

| 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 | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat |
| T 1  | 17s21 | 26s53    | 4s56     | 21s32    | 1n 0     | 11s 3    | 7n43     | 22n36    | 2n18     | 13n19    | 1n11     | 17n36    | 1s56     | 18n 8    | 0n42     | 5n48     | 1s41     | 24n 0    | 10n26    | 11n26    | 11n37    | 17s29    | 17s18    | 6n 3     | 6n 3     |
| W 2  | 17 4  | 24 23    | 5 0      | 21 35    | 0 49     | 11 6     | 7 48     | 22 39    | 2 18     | 13 21    | 1 11     | 17 37    | 1 56     | 18 8     | 0 42     | 5 49     | 1 41     | 24 1     | 10 26    | 11 22    | 11 36    | 17 31    | 17 17    | 6 3      | 6 3      |
| T 3  | 16 47 | 20 31    | 4 48     | 21 37    | 0 39     | 11 10    | 7 53     | 22 43    | 2 17     | 13 24    | 1 11     | 17 37    | 1 55     | 18 9     | 0 42     | 5 49     | 1 41     | 24 1     | 10 27    | 11 17    | 11 35    | 17 34    | 17 17    | 6 3      | 6 3      |
| F 4  | 16 29 | 15 31    | 4 19     | 21 38    | 0 29     | 11 14    | 7 57     | 22 47    | 2 17     | 13 27    | 1 11     | 17 37    | 1 55     | 18 10    | 0 42     | 5 50     | 1 41     | 24 2     | 10 27    | 11 13    | 11 33    | 17 37    | 17 16    | 6 4      | 6 4      |
| S 5  | 16 11 | 9 40     | 3 35     | 21 38    | 0 19     | 11 18    | 8 0      | 22 51    | 2 17     | 13 30    | 1 12     | 17 38    | 1 55     | 18 11    | 0 42     | 5 50     | 1 41     | 24 3     | 10 27    | 11 10    | 11 32    | 17 40    | 17 15    | 6 4      | 6 4      |
| S 6  | 15 53 | 3 16     | 2 37     | 21 37    | 0 10     | 11 23    | 8 2      | 22 55    | 2 16     | 13 32    | 1 12     | 17 38    | 1 55     | 18 11    | 0 42     | 5 51     | 1 41     | 24 3     | 10 27    | 11 7     | 11 31    | 17 42    | 17 15    | 6 4      | 6 4      |
| M 7  | 15 35 | 3n19     | 1 29     | 21 35    | 0 1      | 11 29    | 8 3      | 22 59    | 2 16     | 13 35    | 1 12     | 17 39    | 1 54     | 18 12    | 0 42     | 5 51     | 1 41     | 24 4     | 10 27    | 11 6     | 11 30    | 17 45    | 17 14    | 6 5      | 6 5      |
| T 8  | 15 16 | 9 47     | 0 16     | 21 32    | 0s 8     | 11 35    | 8 3      | 23 3     | 2 16     | 13 38    | 1 12     | 17 39    | 1 54     | 18 13    | 0 42     | 5 52     | 1 41     | 24 4     | 10 27    | 11 6     | 11 29    | 17 48    | 17 13    | 6 5      | 6 5      |
| W 9  | 14 57 | 15 47    | 0n59     | 21 28    | 0 17     | 11 41    | 8 2      | 23 7     | 2 15     | 13 41    | 1 12     | 17 40    | 1 54     | 18 13    | 0 42     | 5 52     | 1 41     | 24 5     | 10 27    | 11 6     | 11 28    | 17 51    | 17 13    | 6 6      | 6 6      |
| T 10 | 14 38 | 20 56    | 2 10     | 21 22    | 0 25     | 11 47    | 8 1      | 23 11    | 2 15     | 13 44    | 1 12     | 17 40    | 1 53     | 18 14    | 0 42     | 5 53     | 1 41     | 24 6     | 10 27    | 11 6     | 11 27    | 17 54    | 17 12    | 6 6      | 6 6      |
| F 11 | 14 18 | 24 53    | 3 13     | 21 15    | 0 34     | 11 53    | 7 59     | 23 15    | 2 15     | 13 46    | 1 12     | 17 41    | 1 53     | 18 15    | 0 42     | 5 53     | 1 41     | 24 6     | 10 27    | 11 5     | 11 26    | 17 56    | 17 11    | 6 7      | 6 7      |
| S 12 | 13 59 | 27 19    | 4 4      | 21 7     | 0 42     | 12 0     | 7 56     | 23 19    | 2 14     | 13 49    | 1 12     | 17 42    | 1 53     | 18 15    | 0 42     | 5 54     | 1 41     | 24 7     | 10 27    | 11 4     | 11 24    | 17 59    | 17 11    | 6 7      | 6 7      |
| S 13 | 13 39 | 28 0     | 4 40     | 20 58    | 0 49     | 12 6     | 7 53     | 23 23    | 2 14     | 13 52    | 1 13     | 17 42    | 1 53     | 18 16    | 0 42     | 5 55     | 1 41     | 24 7     | 10 28    | 11 2     | 11 23    | 18 2     | 17 10    | 6 7      | 6 7      |
| M14  | 13 19 | 26 55    | 5 0      | 20 48    | 0 56     | 12 13    | 7 49     | 23 27    | 2 14     | 13 55    | 1 13     | 17 43    | 1 52     | 18 17    | 0 42     | 5 55     | 1 41     | 24 8     | 10 28    | 10 59    | 11 22    | 18 5     | 17 9     | 6 8      | 6 8      |
| T 15 | 12 58 | 24 13    | 5 2      | 20 36    | 1 3      | 12 20    | 7 44     | 23 30    | 2 13     | 13 58    | 1 13     | 17 44    | 1 52     | 18 18    | 0 42     | 5 56     | 1 41     | 24 8     | 10 28    | 10 55    | 11 21    | 18 7     | 17 9     | 6 8      | 6 8      |
| W16  | 12 38 | 20 13    | 4 47     | 20 23    | 1 10     | 12 26    | 7 39     | 23 34    | 2 13     | 14 0     | 1 13     | 17 44    | 1 52     | 18 18    | 0 42     | 5 56     | 1 41     | 24 9     | 10 28    | 10 51    | 11 20    | 18 10    | 17 8     | 6 9      | 6 9      |
| T 17 | 12 17 | 15 16    | 4 16     | 20 8     | 1 16     | 12 33    | 7 34     | 23 38    | 2 13     | 14 3     | 1 13     | 17 45    | 1 52     | 18 19    | 0 42     | 5 57     | 1 41     | 24 10    | 10 28    | 10 48    | 11 19    | 18 13    | 17 7     | 6 9      | 6 9      |
| F 18 | 11 56 | 9 44     | 3 33     | 19 52    | 1 23     | 12 40    | 7 28     | 23 42    | 2 12     | 14 6     | 1 13     | 17 46    | 1 51     | 18 20    | 0 42     | 5 58     | 1 40     | 24 10    | 10 28    | 10 44    | 11 18    | 18 16    | 17 7     | 6 10     | 6 10     |
| S 19 | 11 35 | 3 56     | 2 40     | 19 35    | 1 28     | 12 46    | 7 21     | 23 46    | 2 12     | 14 9     | 1 13     | 17 47    | 1 51     | 18 20    | 0 42     | 5 58     | 1 40     | 24 11    | 10 28    | 10 42    | 11 17    | 18 18    | 17 6     | 6 10     | 6 10     |
| S 20 | 11 14 | 1s55     | 1 40     | 19 17    | 1 34     | 12 52    | 7 15     | 23 50    | 2 11     | 14 11    | 1 13     | 17 48    | 1 51     | 18 21    | 0 42     | 5 59     | 1 40     | 24 11    | 10 28    | 10 40    | 11 15    | 18 21    | 17 5     | 6 11     | 6 11     |
| M21  | 10 52 | 7 35     | 0 37     | 18 57    | 1 39     | 12 58    | 7 8      | 23 53    | 2 11     | 14 14    | 1 13     | 17 48    | 1 50     | 18 22    | 0 42     | 6 0      | 1 40     | 24 12    | 10 28    | 10 40    | 11 14    | 18 24    | 17 4     | 6 11     | 6 11     |
| T 22 | 10 31 | 12 54    | 0s28     | 18 36    | 1 43     | 13 4     | 7 0      | 23 57    | 2 11     | 14 17    | 1 13     | 17 49    | 1 50     | 18 22    | 0 42     | 6 0      | 1 40     | 24 12    | 10 28    | 10 39    | 11 13    | 18 26    | 17 4     | 6 12     | 6 12     |
| W23  | 10 9  | 17 41    | 1 30     | 18 14    | 1 48     | 13 10    | 6 53     | 24 1     | 2 10     | 14 19    | 1 13     | 17 50    | 1 50     | 18 23    | 0 42     | 6 1      | 1 40     | 24 13    | 10 28    | 10 40    | 11 12    | 18 29    | 17 3     | 6 12     | 6 12     |
| T 24 | 9 47  | 21 48    | 2 29     | 17 50    | 1 52     | 13 15    | 6 45     | 24 4     | 2 10     | 14 22    | 1 13     | 17 51    | 1 50     | 18 23    | 0 42     | 6 2      | 1 40     | 24 13    | 10 28    | 10 40    | 11 11    | 18 32    | 17 2     | 6 13     | 6 13     |
| F 25 | 9 25  | 25 2     | 3 21     | 17 25    | 1 55     | 13 20    | 6 37     | 24 8     | 2 9      | 14 25    | 1 13     | 17 52    | 1 49     | 18 24    | 0 42     | 6 2      | 1 40     | 24 14    | 10 28    | 10 40    | 11 10    | 18 35    | 17 1     | 6 13     | 6 13     |
| S 26 | 9 3   | 27 12    | 4 5      | 16 59    | 1 59     | 13 25    | 6 29     | 24 11    | 2 9      | 14 27    | 1 13     | 17 53    | 1 49     | 18 25    | 0 42     | 6 3      | 1 40     | 24 14    | 10 28    | 10 40    | 11 9     | 18 37    | 17 1     | 6 14     | 6 14     |
| S 27 | 8 40  | 28 6     | 4 39     | 16 31    | 2 2      | 13 29    | 6 20     | 24 15    | 2 8      | 14 30    | 1 13     | 17 54    | 1 49     | 18 25    | 0 42     | 6 4      | 1 40     | 24 15    | 10 28    | 10 39    | 11 8     | 18 40    | 17 0     | 6 14     | 6 14     |
| M28  | 8s18  | 27s37    | 5s 1     | 16s 2    | 2s 4     | 13s33    | 6n12     | 24n18    | 2n 8     | 14n32    | 1n14     | 17n55    | 1s49     | 18n26    | 0n42     | 6n 4     | 1s40     | 24n15    | 10n28    | 10n37    | 11n 6    | 18s43    | 16s59    | 6n15     | 6n15     |

Julian Day Number = 2344559.5, Delta T = 12.19 sec

Ecliptic obliquity = 23°28'46", Nutation = - 0°00'07", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°39'05", Lahiri = 19°46'05"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1707  
geocentric

MARCH 1707

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♀      | ♂     | ♂       | ♂      | ♂     | ♂      | ♂      | ♂      | ♂      | ♂      | ♂     | ♂    | Day  |
|------|----------|----------|-------|--------|-------|---------|--------|-------|--------|--------|--------|--------|--------|-------|------|------|
| T 1  | 10 32 20 | 9♌46'16  | 27♌53 | 23♌59  | 3♌1   | 11♌52   | 24°R21 | 27♌45 | 10°R 0 | 19♌28  | 21°R26 | 27°R25 | 28♌52  | 17♌45 | 8♌24 | T 1  |
| W 2  | 10 36 17 | 10°46'23 | 11♌8  | 25°38  | 3°24  | 12°20   | 24♌14  | 27°49 | 9♌58   | 19°30  | 21♌25  | 27°Y17 | 28°49  | 17°52 | 8°28 | W 2  |
| T 3  | 10 40 13 | 11°46'27 | 24°45 | 27°18  | 3°49  | 12°47   | 24° 7  | 27°52 | 9°56   | 19°32  | 21°23  | 27° 9  | 28°45  | 17°58 | 8°31 | T 3  |
| F 4  | 10 44 10 | 12°46'30 | 8♌43  | 28°59  | 4°15  | 13°15   | 24° 0  | 27°56 | 9°54   | 19°34  | 21°22  | 27° 2  | 28°42  | 18° 5 | 8°35 | F 4  |
| S 5  | 10 48 6  | 13°46'31 | 22°56 | 0♌41   | 4°43  | 13°43   | 23°52  | 28° 0 | 9°52   | 19°35  | 21°21  | 26°56  | 28°39  | 18°12 | 8°39 | S 5  |
| S 6  | 10 52 3  | 14°46'31 | 7♌21  | 2°24   | 5°13  | 14°11   | 23°45  | 28° 3 | 9°50   | 19°37  | 21°19  | 26°53  | 28°36  | 18°18 | 8°42 | S 6  |
| M 7  | 10 55 59 | 15°46'28 | 21°50 | 4° 9   | 5°44  | 14°40   | 23°39  | 28° 7 | 9°48   | 19°39  | 21°18  | 26°D51 | 28°33  | 18°25 | 8°46 | M 7  |
| T 8  | 10 59 56 | 16°46'23 | 6♌20  | 5°54   | 6°16  | 15° 8   | 23°32  | 28°11 | 9°46   | 19°41  | 21°17  | 26°51  | 28°30  | 18°32 | 8°49 | T 8  |
| W 9  | 11 3 53  | 17°46'15 | 20°44 | 7°41   | 6°50  | 15°37   | 23°25  | 28°15 | 9°44   | 19°43  | 21°15  | 26°53  | 28°26  | 18°38 | 8°53 | W 9  |
| T 10 | 11 7 49  | 18°46'06 | 5♌0   | 9°29   | 7°25  | 16° 6   | 23°18  | 28°20 | 9°42   | 19°45  | 21°14  | 26°54  | 28°23  | 18°45 | 8°56 | T 10 |
| F 11 | 11 11 46 | 19°45'55 | 19° 6 | 11°18  | 8° 2  | 16°35   | 23°12  | 28°24 | 9°40   | 19°47  | 21°13  | 26°R55 | 28°20  | 18°52 | 8°59 | F 11 |
| S 12 | 11 15 42 | 20°45'41 | 3♌2   | 13° 8  | 8°39  | 17° 4   | 23° 6  | 28°28 | 9°38   | 19°49  | 21°11  | 26°54  | 28°17  | 18°58 | 9° 2 | S 12 |
| S 13 | 11 19 39 | 21°45'25 | 16°45 | 15° 0  | 9°18  | 17°34   | 23° 0  | 28°33 | 9°37   | 19°51  | 21°10  | 26°52  | 28°14  | 19° 5 | 9° 5 | S 13 |
| M14  | 11 23 35 | 22°45'06 | 0♌16  | 16°52  | 9°58  | 18° 3   | 22°53  | 28°37 | 9°35   | 19°53  | 21° 9  | 26°48  | 28°10  | 19°12 | 9° 8 | M14  |
| T 15 | 11 27 32 | 23°44'45 | 13°35 | 18°46  | 10°40 | 18°33   | 22°48  | 28°42 | 9°33   | 19°55  | 21° 8  | 26°43  | 28° 7  | 19°18 | 9°11 | T 15 |
| W16  | 11 31 28 | 24°44'22 | 26°40 | 20°41  | 11°22 | 19° 2   | 22°42  | 28°47 | 9°32   | 19°57  | 21° 6  | 26°37  | 28° 4  | 19°25 | 9°14 | W16  |
| T 17 | 11 35 25 | 25°43'57 | 9♌33  | 22°37  | 12° 5 | 19°32   | 22°36  | 28°52 | 9°30   | 20° 0  | 21° 5  | 26°32  | 28° 1  | 19°31 | 9°17 | T 17 |
| F 18 | 11 39 22 | 26°43'30 | 22°12 | 24°34  | 12°49 | 20° 2   | 22°31  | 28°57 | 9°28   | 20° 2  | 21° 4  | 26°28  | 27°58  | 19°38 | 9°19 | F 18 |
| S 19 | 11 43 18 | 27°43'00 | 4♌37  | 26°32  | 13°34 | 20°33   | 22°25  | 29° 2 | 9°27   | 20° 4  | 21° 3  | 26°24  | 27°55  | 19°45 | 9°22 | S 19 |
| S 20 | 11 47 15 | 28°42'29 | 16°51 | 28°32  | 14°20 | 21° 3   | 22°20  | 29° 7 | 9°25   | 20° 6  | 21° 2  | 26°23  | 27°51  | 19°51 | 9°24 | S 20 |
| M21  | 11 51 11 | 29°41'55 | 28°54 | 0♌32   | 15° 7 | 21°33   | 22°15  | 29°12 | 9°24   | 20° 8  | 21° 1  | 26°D22 | 27°48  | 19°58 | 9°27 | M21  |
| T 22 | 11 55 8  | 0♌41'20  | 10♌49 | 2°33   | 15°55 | 22° 4   | 22°10  | 29°17 | 9°23   | 20°10  | 21° 0  | 26°23  | 27°45  | 20° 5 | 9°29 | T 22 |
| W23  | 11 59 4  | 1°40'43  | 22°39 | 4°34   | 16°44 | 22°35   | 22° 5  | 29°22 | 9°21   | 20°12  | 20°59  | 26°24  | 27°42  | 20°11 | 9°31 | W23  |
| T 24 | 12 3 1   | 2°40'04  | 4♌27  | 6°37   | 17°33 | 23° 5   | 22° 1  | 29°28 | 9°20   | 20°15  | 20°58  | 26°26  | 27°39  | 20°18 | 9°34 | T 24 |
| F 25 | 12 6 57  | 3°39'23  | 16°18 | 8°39   | 18°23 | 23°36   | 21°56  | 29°33 | 9°19   | 20°17  | 20°57  | 26°28  | 27°35  | 20°25 | 9°36 | F 25 |
| S 26 | 12 10 54 | 4°38'41  | 28°18 | 10°42  | 19°14 | 24° 7   | 21°52  | 29°39 | 9°18   | 20°19  | 20°56  | 26°29  | 27°32  | 20°31 | 9°38 | S 26 |
| S 27 | 12 14 51 | 5°37'57  | 10♌29 | 12°45  | 20° 6 | 24°38   | 21°48  | 29°44 | 9°17   | 20°21  | 20°55  | 26°R29 | 27°29  | 20°38 | 9°40 | S 27 |
| M28  | 12 18 47 | 6°37'11  | 22°58 | 14°47  | 20°58 | 25°10   | 21°44  | 29°50 | 9°16   | 20°23  | 20°54  | 26°28  | 27°26  | 20°45 | 9°41 | M28  |
| T 29 | 12 22 44 | 7°36'23  | 5♌49  | 16°48  | 21°51 | 25°41   | 21°40  | 29°56 | 9°14   | 20°26  | 20°53  | 26°26  | 27°23  | 20°51 | 9°43 | T 29 |
| W30  | 12 26 40 | 8°35'33  | 19° 3 | 18°49  | 22°44 | 26°13   | 21°37  | 0♌1   | 9°14   | 20°28  | 20°52  | 26°24  | 27°20  | 20°58 | 9°45 | W30  |
| T 31 | 12 30 37 | 9°Y34'41 | 2♌44  | 20°Y48 | 23°38 | 26°II44 | 21♌33  | 0♌7   | 9♌13   | 20°Y30 | 20♌51  | 26°Y22 | 27°Y16 | 21♌5  | 9♌47 | 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 | decl lat |
| T 1  | 7s55 | 25s39    | 5s 8     | 15s32    | 2s 6     | 13s37    | 6n 3     | 24n22    | 2n 8     | 14n35    | 1n14     | 17n56    | 1s48     | 18n26    | 0n42     | 6n 5     |
| W 2  | 7 32 | 22 15    | 4 59     | 15 0     | 2 8      | 13 41    | 5 54     | 24 25    | 2 7      | 14 37    | 1 14     | 17 57    | 1 48     | 18 27    | 0 42     | 6 6      |
| T 3  | 7 10 | 17 35    | 4 33     | 14 27    | 2 9      | 13 44    | 5 46     | 24 28    | 2 7      | 14 40    | 1 14     | 17 58    | 1 48     | 18 28    | 0 42     | 6 7      |
| F 4  | 6 47 | 11 53    | 3 51     | 13 53    | 2 10     | 13 46    | 5 37     | 24 31    | 2 6      | 14 42    | 1 14     | 17 59    | 1 48     | 18 28    | 0 42     | 6 7      |
| S 5  | 6 23 | 5 27     | 2 53     | 13 17    | 2 11     | 13 48    | 5 28     | 24 34    | 2 6      | 14 45    | 1 14     | 18 0     | 1 47     | 18 29    | 0 42     | 6 8      |
| S 6  | 6 0  | 1n20     | 1 44     | 12 40    | 2 11     | 13 50    | 5 19     | 24 37    | 2 6      | 14 47    | 1 14     | 18 1     | 1 47     | 18 29    | 0 42     | 6 9      |
| M 7  | 5 37 | 8 6      | 0 27     | 12 2     | 2 10     | 13 51    | 5 10     | 24 40    | 2 5      | 14 49    | 1 14     | 18 2     | 1 47     | 18 30    | 0 42     | 6 10     |
| T 8  | 5 14 | 14 28    | 0n51     | 11 22    | 2 9      | 13 52    | 5 1      | 24 43    | 2 5      | 14 51    | 1 14     | 18 4     | 1 47     | 18 30    | 0 42     | 6 10     |
| W 9  | 4 50 | 20 0     | 2 6      | 10 41    | 2 8      | 13 52    | 4 53     | 24 46    | 2 4      | 14 54    | 1 14     | 18 5     | 1 46     | 18 31    | 0 42     | 6 11     |
| T 10 | 4 27 | 24 19    | 3 13     | 9 59     | 2 6      | 13 52    | 4 44     | 24 48    | 2 4      | 14 56    | 1 13     | 18 6     | 1 46     | 18 31    | 0 42     | 6 12     |
| F 11 | 4 4  | 27 8     | 4 7      | 9 15     | 2 4      | 13 52    | 4 35     | 24 51    | 2 3      | 14 58    | 1 13     | 18 7     | 1 46     | 18 32    | 0 42     | 6 13     |
| S 12 | 3 40 | 28 12    | 4 45     | 8 30     | 2 1      | 13 51    | 4 26     | 24 53    | 2 3      | 15 0     | 1 13     | 18 8     | 1 46     | 18 32    | 0 42     | 6 13     |
| S 13 | 3 16 | 27 30    | 5 7      | 7 44     | 1 58     | 13 49    | 4 17     | 24 56    | 2 3      | 15 2     | 1 13     | 18 9     | 1 45     | 18 33    | 0 41     | 6 14     |
| M14  | 2 53 | 25 11    | 5 11     | 6 57     | 1 54     | 13 47    | 4 8      | 24 58    | 2 2      | 15 4     | 1 13     | 18 11    | 1 45     | 18 33    | 0 41     | 6 15     |
| T 15 | 2 29 | 21 32    | 4 58     | 6 8      | 1 50     | 13 45    | 4 0      | 25 0     | 2 2      | 15 6     | 1 13     | 18 12    | 1 45     | 18 33    | 0 41     | 6 16     |
| W16  | 2 6  | 16 52    | 4 30     | 5 18     | 1 45     | 13 42    | 3 51     | 25 2     | 2 1      | 15 8     | 1 13     | 18 13    | 1 45     | 18 34    | 0 41     | 6 17     |
| T 17 | 1 42 | 11 32    | 3 49     | 4 28     | 1 40     | 13 38    | 3 42     | 25 4     | 2 1      | 15 9     | 1 13     | 18 14    | 1 44     | 18 34    | 0 41     | 6 17     |
| F 18 | 1 18 | 5 48     | 2 56     | 3 36     | 1 34     | 13 34    | 3 34     | 25 6     | 2 0      | 15 11    | 1 13     | 18 16    | 1 44     | 18 35    | 0 41     | 6 18     |
| S 19 | 0 55 | 0s 4     | 1 57     | 2 43     | 1 27     | 13 30    | 3 25     | 25 8     | 2 0      | 15 13    | 1 13     | 18 17    | 1 44     | 18 35    | 0 41     | 6 19     |
| S 20 | 0 31 | 5 50     | 0 52     | 1 49     | 1 20     | 13 25    | 3 17     | 25 10    | 1 59     | 15 14    | 1 13     | 18 18    | 1 44     | 18 35    | 0 41     | 6 20     |
| M21  | 0 7  | 11 19    | 0s14     | 0 54     | 1 13     | 13 19    | 3 9      | 25 11    | 1 59     | 15 16    | 1 13     | 18 20    | 1 44     | 18 36    | 0 41     | 6 21     |
| T 22 | 0n16 | 16 20    | 1 19     | 0n 2     | 1 4      | 13 13    | 3 0      | 25 13    | 1 59     | 15 18    | 1 13     | 18 21    | 1 43     | 18 36    | 0 41     | 6 22     |
| W23  | 0 40 | 20 43    | 2 20     | 0 58     | 0 56     | 13 7     | 2 52     | 25 14    | 1 58     | 15 19    | 1 13     | 18 22    | 1 43     | 18 36    | 0 41     | 6 22     |
| T 24 | 1 4  | 24 15    | 3 15     | 1 55     | 0 47     | 13 0     | 2 44     | 25 15    | 1 58     | 15 20    | 1 13     | 18 24    | 1 43     | 18 37    | 0 41     | 6 23     |
| F 25 | 1 27 | 26 47    | 4 2      | 2 52     | 0 37     | 12 52    | 2 36     | 25 17    | 1 57     | 15 22    | 1 13     | 18 25    | 1 43     | 18 37    | 0 41     | 6 24     |
| S 26 | 1 51 | 28 7     | 4 38     | 3 49     | 0 27     | 12 44    | 2 28     | 25 18    | 1 57     | 15 23    | 1 13     | 18 26    | 1 42     | 18 37    | 0 41     | 6 25     |
| S 27 | 2 14 | 28 6     | 5 4      | 4 47     | 0 17     | 12 35    | 2 20     | 25 18    | 1 56     | 15 24    | 1 12     | 18 28    | 1 42     | 18 38    | 0 41     | 6 26     |
| M28  | 2 38 | 26 42    | 5 15     | 5 44     | 0 6      | 12 26    | 2 13     | 25 19    | 1 56     | 15 26    | 1 12     | 18 29    | 1 42     | 18 38    | 0 41     | 6 27     |
| T 29 | 3 1  | 23 53    | 5 11     | 6 41     | 0n 5     | 12 17    | 2 5      | 25 20    | 1 55     | 15 27    | 1 12     | 18 31    | 1 42     | 18 38    | 0 41     | 6 27     |
| W30  | 3 25 | 19 45    | 4 51     | 7 38     | 0 16     | 12 6     | 1 58     | 25 20    | 1 55     | 15 28    | 1 12     | 18 32    | 1 42     | 18 38    | 0 41     | 6 28     |
| T 31 | 3n48 | 14s28    | 4s15     | 8n34     | 0n28     | 11s56    | 1n50     | 25n21    | 1n54     | 15n29    | 1n12     | 18n33    | 1s41     | 18n38    | 0n41     | 6n29     |

Julian Day Number = 2344587.5, Delta T = 12.17 sec  
Ecliptic obliquity = 23°28'47", Nutation = - 0°00'07", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 20°39'09", Lahiri = 19°46'09"Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1707

## geocentric

APRIL 1707

00:00 UT

| Day  | Sid.t    | ☉        | ☽      | ♀      | ♂      | ♂      | ♂      | ♂     | ♂     | ♂      | ♂      | ♂      | ♂      | ♂      | ♂      | Day  |
|------|----------|----------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|--------|--------|--------|------|
| F 1  | 12 34 33 | 10°33'48 | 16°49  | 22°46  | 24°32  | 27°16  | 21°R30 | 0°11  | 9°R12 | 20°V32 | 20°R50 | 26°R19 | 27°V13 | 21°M11 | 9°Z48  | F 1  |
| S 2  | 12 38 30 | 11°32'53 | 1°V16  | 24°41  | 25°28  | 27°48  | 21°Q27 | 0°19  | 9°Q11 | 20°35  | 20°Q49 | 26°V18 | 27°10  | 21°18  | 9°49   | S 2  |
| S 3  | 12 42 26 | 12°31'55 | 16° 0  | 26°34  | 26°23  | 28°19  | 21°24  | 0°25  | 9°10  | 20°37  | 20°48  | 26°17  | 27° 7  | 21°25  | 9°51   | S 3  |
| M 4  | 12 46 23 | 13°30'56 | 0°B53  | 28°24  | 27°19  | 28°51  | 21°22  | 0°31  | 9° 9  | 20°39  | 20°47  | 26°D17 | 27° 4  | 21°31  | 9°52   | M 4  |
| T 5  | 12 50 20 | 14°29'54 | 15°47  | 0°B11  | 28°16  | 29°23  | 21°19  | 0°37  | 9° 9  | 20°41  | 20°47  | 26°17  | 27° 1  | 21°38  | 9°53   | T 5  |
| W 6  | 12 54 16 | 15°28'50 | 0°B36  | 1°55   | 29°13  | 29°56  | 21°17  | 0°44  | 9° 8  | 20°44  | 20°46  | 26°18  | 26°57  | 21°45  | 9°54   | W 6  |
| T 7  | 12 58 13 | 16°27'45 | 15°12  | 3°34   | 0°H10  | 0°B28  | 21°15  | 0°50  | 9° 8  | 20°46  | 20°45  | 26°19  | 26°54  | 21°51  | 9°55   | T 7  |
| F 8  | 13 2 9   | 17°26'37 | 29°32  | 5°10   | 1° 8   | 1° 0   | 21°13  | 0°56  | 9° 7  | 20°48  | 20°45  | 26°20  | 26°51  | 21°58  | 9°56   | F 8  |
| S 9  | 13 6 6   | 18°25'26 | 13°B33 | 6°41   | 2° 7   | 1°33   | 21°11  | 1° 3  | 9° 7  | 20°50  | 20°44  | 26°R20 | 26°48  | 22° 5  | 9°57   | S 9  |
| S 10 | 13 10 2  | 19°24'13 | 27°13  | 8° 7   | 3° 5   | 2° 5   | 21° 9  | 1° 9  | 9° 6  | 20°53  | 20°43  | 26°20  | 26°45  | 22°11  | 9°58   | S 10 |
| M 11 | 13 13 59 | 20°22'58 | 10°Q34 | 9°28   | 4° 4   | 2°38   | 21° 8  | 1°16  | 9° 6  | 20°55  | 20°43  | 26°20  | 26°41  | 22°18  | 9°58   | M 11 |
| T 12 | 13 17 55 | 21°21'41 | 23°37  | 10°45  | 5° 4   | 3°10   | 21° 7  | 1°22  | 9° 6  | 20°57  | 20°42  | 26°19  | 26°38  | 22°25  | 9°59   | T 12 |
| W 13 | 13 21 52 | 22°20'21 | 6°B24  | 11°56  | 6° 4   | 3°43   | 21° 6  | 1°29  | 9° 5  | 20°59  | 20°41  | 26°19  | 26°35  | 22°31  | 10° 0  | W 13 |
| T 14 | 13 25 49 | 23°18'59 | 18°57  | 13° 2  | 7° 4   | 4°16   | 21° 5  | 1°36  | 9° 5  | 21° 2  | 20°41  | 26°18  | 26°32  | 22°38  | 10° 0  | T 14 |
| F 15 | 13 29 45 | 24°17'35 | 1°A17  | 14° 2  | 8° 4   | 4°49   | 21° 4  | 1°42  | 9° 5  | 21° 4  | 20°40  | 26°18  | 26°29  | 22°45  | 10° 0  | F 15 |
| S 16 | 13 33 42 | 25°16'09 | 13°27  | 14°57  | 9° 5   | 5°22   | 21° 4  | 1°49  | 9° 5  | 21° 6  | 20°40  | 26°18  | 26°26  | 22°51  | 10° 0  | S 16 |
| S 17 | 13 37 38 | 26°14'41 | 25°29  | 15°46  | 10° 6  | 5°55   | 21° 4  | 1°56  | 9°D 5 | 21° 8  | 20°39  | 26°18  | 26°22  | 22°58  | 10° 1  | S 17 |
| M 18 | 13 41 35 | 27°13'11 | 7°M25  | 16°30  | 11° 8  | 6°28   | 21°D 4 | 2° 3  | 9° 5  | 21°11  | 20°39  | 26°18  | 26°19  | 23° 5  | 10°R 1 | M 18 |
| T 19 | 13 45 31 | 28°11'39 | 19°16  | 17° 7  | 12° 9  | 7° 1   | 21° 4  | 2°10  | 9° 5  | 21°13  | 20°39  | 26°18  | 26°16  | 23°11  | 10° 1  | T 19 |
| W 20 | 13 49 28 | 29°10'06 | 1°A 4  | 17°39  | 13°12  | 7°34   | 21° 4  | 2°17  | 9° 5  | 21°15  | 20°38  | 26°17  | 26°13  | 23°18  | 10° 1  | W 20 |
| T 21 | 13 53 24 | 0°B 8'31 | 12°54  | 18° 5  | 14°14  | 8° 8   | 21° 4  | 2°24  | 9° 5  | 21°17  | 20°38  | 26°17  | 26°10  | 23°24  | 10° 0  | T 21 |
| F 22 | 13 57 21 | 1° 6'54  | 24°47  | 18°25  | 15°16  | 8°41   | 21° 5  | 2°31  | 9° 6  | 21°20  | 20°37  | 26°16  | 26° 7  | 23°31  | 10° 0  | F 22 |
| S 23 | 14 1 18  | 2° 5'15  | 6°B48  | 18°40  | 16°19  | 9°14   | 21° 6  | 2°38  | 9° 6  | 21°22  | 20°37  | 26°16  | 26° 3  | 23°38  | 10° 0  | S 23 |
| S 24 | 14 5 14  | 3° 3'35  | 18°59  | 18°48  | 17°22  | 9°48   | 21° 7  | 2°45  | 9° 6  | 21°24  | 20°37  | 26°15  | 26° 0  | 23°44  | 9°59   | S 24 |
| M 25 | 14 9 11  | 4° 1'54  | 1°A26  | 18°R51 | 18°26  | 10°21  | 21° 8  | 2°52  | 9° 7  | 21°26  | 20°37  | 26°D15 | 25°57  | 23°51  | 9°59   | M 25 |
| T 26 | 14 13 7  | 5° 0'11  | 14°12  | 18°49  | 19°29  | 10°55  | 21°10  | 2°59  | 9° 7  | 21°29  | 20°36  | 26°15  | 25°54  | 23°58  | 9°58   | T 26 |
| W 27 | 14 17 4  | 5°58'26  | 27°21  | 18°41  | 20°33  | 11°29  | 21°11  | 3° 6  | 9° 8  | 21°31  | 20°36  | 26°16  | 25°51  | 24° 4  | 9°57   | W 27 |
| T 28 | 14 21 0  | 6°56'39  | 10°H55 | 18°29  | 21°37  | 12° 2  | 21°13  | 3°14  | 9° 8  | 21°33  | 20°36  | 26°16  | 25°47  | 24°11  | 9°57   | T 28 |
| F 29 | 14 24 57 | 7°54'52  | 24°56  | 18°12  | 22°42  | 12°36  | 21°15  | 3°21  | 9° 9  | 21°35  | 20°36  | 26°17  | 25°44  | 24°18  | 9°56   | F 29 |
| S 30 | 14 28 53 | 8°B53'02 | 9°V22  | 17°B50 | 23°H46 | 13°B10 | 21°Q17 | 3°B28 | 9°Q 9 | 21°V37 | 20°Q36 | 26°V18 | 25°V41 | 24°M24 | 9°Z55  | 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  |
| F 1  | 4n11  | 8s18  | 3s21 | 9n29  | 0n39 | 11s45 | 1n43 | 25n21 | 1n54 | 15n30 | 1n12 | 18n35 | 1s41 | 18n39 | 0n41 | 6n30 | 1s39 | 24n25 | 10n25 | 10n11 | 10n30 | 20s 6 | 16s34 | 6n34 | 6n34 | 6n34 | 6n34 |
| S 2  | 4 34  | 1 33  | 2 14 | 10 22 | 0 51 | 11 33 | 1 36 | 25 21 | 1 54 | 15 31 | 1 12 | 18 36 | 1 41 | 18 39 | 0 41 | 6 31 | 1 39 | 24 25 | 10 25 | 10 10 | 10 29 | 20 9  | 16 34 | 6 34 | 6 34 | 6 34 | 6 34 |
| S 3  | 4 58  | 5n26  | 0 57 | 11 14 | 1 2  | 11 21 | 1 28 | 25 21 | 1 53 | 15 31 | 1 12 | 18 38 | 1 41 | 18 39 | 0 41 | 6 32 | 1 39 | 24 25 | 10 25 | 10 10 | 10 28 | 20 12 | 16 33 | 6 33 | 6 33 | 6 33 | 6 33 |
| M 4  | 5 21  | 12 12 | 0n25 | 12 5  | 1 14 | 11 9  | 1 21 | 25 21 | 1 53 | 15 32 | 1 12 | 18 39 | 1 41 | 18 39 | 0 41 | 6 32 | 1 39 | 24 25 | 10 24 | 10 10 | 10 27 | 20 14 | 16 32 | 6 36 | 6 36 | 6 36 | 6 36 |
| T 5  | 5 43  | 18 17 | 1 46 | 12 53 | 1 25 | 10 56 | 1 15 | 25 21 | 1 52 | 15 33 | 1 11 | 18 41 | 1 40 | 18 39 | 0 41 | 6 33 | 1 39 | 24 25 | 10 24 | 10 10 | 10 25 | 20 17 | 16 32 | 6 36 | 6 36 | 6 36 | 6 36 |
| W 6  | 6 6   | 23 14 | 2 59 | 13 39 | 1 36 | 10 42 | 1 8  | 25 21 | 1 52 | 15 33 | 1 11 | 18 42 | 1 40 | 18 39 | 0 41 | 6 34 | 1 39 | 24 25 | 10 24 | 10 10 | 10 24 | 20 19 | 16 31 | 6 37 | 6 37 | 6 37 | 6 37 |
| T 7  | 6 29  | 26 37 | 3 59 | 14 24 | 1 46 | 10 29 | 1 1  | 25 20 | 1 51 | 15 34 | 1 11 | 18 44 | 1 40 | 18 40 | 0 41 | 6 35 | 1 39 | 24 25 | 10 24 | 10 10 | 10 23 | 20 22 | 16 30 | 6 37 | 6 37 | 6 37 | 6 37 |
| F 8  | 6 52  | 28 12 | 4 43 | 15 5  | 1 56 | 10 14 | 0 55 | 25 19 | 1 51 | 15 35 | 1 11 | 18 45 | 1 40 | 18 40 | 0 41 | 6 36 | 1 39 | 24 25 | 10 24 | 10 11 | 10 22 | 20 24 | 16 29 | 6 38 | 6 38 | 6 38 | 6 38 |
| S 9  | 7 14  | 27 55 | 5 9  | 15 45 | 2 6  | 10 0  | 0 48 | 25 19 | 1 50 | 15 35 | 1 11 | 18 47 | 1 40 | 18 40 | 0 41 | 6 37 | 1 39 | 24 26 | 10 24 | 10 11 | 10 21 | 20 27 | 16 29 | 6 39 | 6 39 | 6 39 | 6 39 |
| S 10 | 7 36  | 25 56 | 5 17 | 16 21 | 2 14 | 9 45  | 0 42 | 25 18 | 1 50 | 15 35 | 1 11 | 18 48 | 1 40 | 18 40 | 0 41 | 6 38 | 1 39 | 24 26 | 10 23 | 10 11 | 10 20 | 20 29 | 16 28 | 6 39 | 6 39 | 6 39 | 6 39 |
| M11  | 7 59  | 22 33 | 5 8  | 16 55 | 2 23 | 9 29  | 0 35 | 25 17 | 1 50 | 15 36 | 1 11 | 18 50 | 1 39 | 18 40 | 0 41 | 6 38 | 1 39 | 24 26 | 10 23 | 10 11 | 10 19 | 20 32 | 16 27 | 6 40 | 6 40 | 6 40 | 6 40 |
| T 12 | 8 21  | 18 6  | 4 42 | 17 27 | 2 30 | 9 13  | 0 29 | 25 16 | 1 49 | 15 36 | 1 11 | 18 51 | 1 39 | 18 40 | 0 41 | 6 39 | 1 39 | 24 26 | 10 23 | 10 10 | 10 17 | 20 34 | 16 27 | 6 41 | 6 41 | 6 41 | 6 41 |
| W13  | 8 43  | 12 56 | 4 3  | 17 55 | 2 36 | 8 57  | 0 23 | 25 14 | 1 49 | 15 36 | 1 11 | 18 53 | 1 39 | 18 40 | 0 41 | 6 40 | 1 39 | 24 26 | 10 23 | 10 10 | 10 16 | 20 37 | 16 26 | 6 41 | 6 41 | 6 41 | 6 41 |
| T 14 | 9 4   | 7 20  | 3 13 | 18 21 | 2 42 | 8 40  | 0 17 | 25 13 | 1 48 | 15 36 | 1 10 | 18 54 | 1 39 | 18 40 | 0 41 | 6 41 | 1 39 | 24 26 | 10 23 | 10 10 | 10 15 | 20 39 | 16 25 | 6 42 | 6 42 | 6 42 | 6 42 |
| F 15 | 9 26  | 1 33  | 2 15 | 18 43 | 2 46 | 8 23  | 0 12 | 25 11 | 1 48 | 15 36 | 1 10 | 18 56 | 1 39 | 18 40 | 0 41 | 6 42 | 1 39 | 24 26 | 10 22 | 10 10 | 10 14 | 20 42 | 16 25 | 6 43 | 6 43 | 6 43 | 6 43 |
| S 16 | 9 48  | 4s14  | 1 11 | 19 3  | 2 50 | 8 5   | 0 6  | 25 9  | 1 47 | 15 36 | 1 10 | 18 57 | 1 39 | 18 40 | 0 41 | 6 43 | 1 39 | 24 26 | 10 22 | 10 10 | 10 13 | 20 44 | 16 24 | 6 43 | 6 43 | 6 43 | 6 43 |
| S 17 | 10 9  | 9 48  | 0 4  | 19 20 | 2 53 | 7 47  | 0 0  | 25 8  | 1 47 | 15 36 | 1 10 | 18 59 | 1 38 | 18 40 | 0 41 | 6 43 | 1 39 | 24 26 | 10 22 | 10 10 | 10 12 | 20 47 | 16 23 | 6 44 | 6 44 | 6 44 | 6 44 |
| M18  | 10 30 | 14 58 | 1s 1 | 19 34 | 2 54 | 7 29  | 0s 5 | 25 6  | 1 46 | 15 36 | 1 10 | 19 0  | 1 38 | 18 40 | 0 40 | 6 44 | 1 39 | 24 26 | 10 22 | 10 10 | 10 11 | 20 49 | 16 23 | 6 45 | 6 45 | 6 45 | 6 45 |
| T 19 | 10 51 | 19 34 | 2 4  | 19 46 | 2 54 | 7 10  | 0 10 | 25 3  | 1 46 | 15 36 | 1 10 | 19 2  | 1 38 | 18 40 | 0 40 | 6 45 | 1 39 | 24 25 | 10 22 | 10 10 | 10 9  | 20 52 | 16 22 | 6 45 | 6 45 | 6 45 | 6 45 |
| W20  | 11 12 | 23 22 | 3 1  | 19 54 | 2 54 | 6 51  | 0 16 | 25 1  | 1 45 | 15 36 | 1 10 | 19 3  | 1 38 | 18 40 | 0 40 | 6 46 | 1 39 | 24 25 | 10 21 | 10 10 | 10 8  | 20 54 | 16 21 | 6 46 | 6 46 | 6 46 | 6 46 |
| T 21 | 11 32 | 26 12 | 3 51 | 19 59 | 2 51 | 6 32  | 0 21 | 24 59 | 1 45 | 15 36 | 1 9  | 19 5  | 1 38 | 18 40 | 0 40 | 6 47 | 1 39 | 24 25 | 10 21 | 10 10 | 10 7  | 20 56 | 16 21 | 6 46 | 6 46 | 6 46 | 6 46 |
| F 22 | 11 53 | 27 53 | 4 31 | 20 2  | 2 48 | 6 12  | 0 26 | 24 56 | 1 45 | 15 35 | 1 9  | 19 6  | 1 38 | 18 40 | 0 40 | 6 48 | 1 39 | 24 25 | 10 21 | 10 9  | 10 6  | 20 59 | 16 20 | 6 47 | 6 47 | 6 47 | 6 47 |
| S 23 | 12 13 | 28 17 | 4 59 | 20 1  | 2 44 | 5 53  | 0 31 | 24 53 | 1 44 | 15 35 | 1 9  | 19 8  | 1 37 | 18 40 | 0 40 | 6 48 | 1 40 | 24 25 | 10 21 | 10 9  | 10 5  | 21 1  | 16 20 | 6 48 | 6 48 | 6 48 | 6 48 |
| S 24 | 12 33 | 27 19 | 5 15 | 19 58 | 2 38 | 5 32  | 0 35 | 24 50 | 1 44 | 15 34 | 1 9  | 19 9  | 1 37 | 18 39 | 0 40 | 6 49 | 1 40 | 24 25 | 10 21 | 10 9  | 10 4  | 21 4  | 16 19 | 6 48 | 6 48 | 6 48 | 6 48 |
| M25  | 12 53 | 25 0  | 5 16 | 19 52 | 2 31 | 5 12  | 0 40 | 24 47 | 1 43 | 15 34 | 1 9  | 19 11 | 1 37 | 18 39 | 0 40 | 6 50 | 1 40 | 24 25 | 10 20 | 10 9  | 10 2  | 21 6  | 16 18 | 6 49 | 6 49 | 6 49 | 6 49 |
| T 26 | 13 13 | 21 24 | 5 2  | 19 44 | 2 22 | 4 51  | 0 44 | 24 44 | 1 43 | 15 33 | 1 9  | 19 12 | 1 37 | 18 39 | 0 40 | 6 51 | 1 40 | 24 25 | 10 20 | 10 9  | 10 1  | 21 9  | 16 18 | 6 50 | 6 50 | 6 50 | 6 50 |
| W27  | 13 32 | 16 40 | 4 32 | 19 32 | 2 12 | 4 30  | 0 49 | 24 41 | 1 42 | 15 33 | 1 9  | 19 14 | 1 37 | 18 39 | 0 40 | 6 52 | 1 40 | 24 25 | 10 20 | 10 9  | 10 0  | 21 11 | 16 17 | 6 50 | 6 50 | 6 50 | 6 50 |
| T 28 | 13 51 | 10 58 | 3 46 | 19 18 | 2 2  | 4 8   | 0 53 | 24 37 | 1 42 | 15 32 | 1 8  | 19 15 | 1 37 | 18 39 | 0 40 | 6 53 | 1 40 | 24 24 | 10 20 | 10 9  | 9 59  | 21 13 | 16 17 | 6 51 | 6 51 | 6 51 | 6 51 |
| F 29 | 14 10 | 4 33  | 2 45 | 19 2  | 1 50 | 3 47  | 0 57 | 24 34 | 1 41 | 15 31 | 1 8  | 19 17 | 1 37 | 18 39 | 0 40 | 6 53 | 1 40 | 24 24 | 10 19 | 10 10 | 9 58  | 21 16 | 16 16 | 6 51 | 6 51 | 6 51 | 6 51 |
| S 30 | 14n29 | 2n18  | 1s33 | 18n43 | 1n36 | 3s25  | 1s 1 | 24n30 | 1n41 | 15n30 | 1n 8 | 19n18 | 1s36 | 18n38 | 0n40 | 6n54 | 1s40 | 24n24 | 10n19 | 10n10 | 9n57  | 21s18 | 16s16 | 6n52 | 6n52 | 6n52 | 6n52 |

# ASTRODIENST EPHEMERIS for the year 1707

## geocentric

MAY 1707

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂      | ♀     | ♂     | ♂     | ♂    | ♂    | ♂     | ♂      | ♂      | ♂     | ♂     | ♂     | ♂    | Day |
|------|----------|----------|-------|--------|-------|-------|-------|------|------|-------|--------|--------|-------|-------|-------|------|-----|
| S 1  | 14 32 50 | 9♂51'11  | 24♀11 | 17°R25 | 24♂51 | 13♂44 | 21♂19 | 3♂36 | 9♂10 | 21♀40 | 20°R36 | 26°R18 | 25♀38 | 24♂31 | 9°R54 | S 1  |     |
| M 2  | 14 36 46 | 10°49'19 | 9♂14  | 16♂56  | 25°55 | 14°18 | 21°22 | 3°43 | 9°11 | 21°42 | 20♂36  | 26♀18  | 25°35 | 24°38 | 9♂53  | M 2  |     |
| T 3  | 14 40 43 | 11°47'25 | 24°25 | 16°25  | 27° 1 | 14°52 | 21°24 | 3°50 | 9°12 | 21°44 | 20°D36 | 26°17  | 25°32 | 24°44 | 9°51  | T 3  |     |
| W 4  | 14 44 40 | 12°45'29 | 9♂33  | 15°51  | 28° 6 | 15°26 | 21°27 | 3°58 | 9°13 | 21°46 | 20°36  | 26°16  | 25°28 | 24°51 | 9°50  | W 4  |     |
| T 5  | 14 48 36 | 13°43'32 | 24°29 | 15°16  | 29°11 | 16° 0 | 21°30 | 4° 5 | 9°14 | 21°48 | 20°36  | 26°13  | 25°25 | 24°58 | 9°49  | T 5  |     |
| F 6  | 14 52 33 | 14°41'32 | 9♂6   | 14°39  | 0♀17  | 16°35 | 21°33 | 4°13 | 9°15 | 21°50 | 20°36  | 26°11  | 25°22 | 25° 4 | 9°47  | F 6  |     |
| S 7  | 14 56 29 | 15°39'31 | 23°18 | 14° 3  | 1°22  | 17° 9 | 21°37 | 4°20 | 9°16 | 21°52 | 20°36  | 26° 9  | 25°19 | 25°11 | 9°46  | S 7  |     |
| S 8  | 15 0 26  | 16°37'28 | 7♂ 5  | 13°27  | 2°28  | 17°43 | 21°40 | 4°28 | 9°17 | 21°55 | 20°36  | 26° 8  | 25°16 | 25°18 | 9°44  | S 8  |     |
| M 9  | 15 4 22  | 17°35'23 | 20°26 | 12°51  | 3°34  | 18°18 | 21°44 | 4°36 | 9°18 | 21°57 | 20°36  | 26°D 8 | 25°13 | 25°24 | 9°43  | M 9  |     |
| T 10 | 15 8 19  | 18°33'16 | 3♂24  | 12°17  | 4°40  | 18°52 | 21°48 | 4°43 | 9°19 | 21°59 | 20°36  | 26° 9  | 25° 9 | 25°31 | 9°41  | T 10 |     |
| W 11 | 15 12 16 | 19°31'08 | 16° 1 | 11°46  | 5°47  | 19°26 | 21°52 | 4°51 | 9°20 | 22° 1 | 20°37  | 26°10  | 25° 6 | 25°38 | 9°39  | W 11 |     |
| T 12 | 15 16 12 | 20°28'57 | 28°22 | 11°17  | 6°53  | 20° 1 | 21°56 | 4°58 | 9°22 | 22° 3 | 20°37  | 26°12  | 25° 3 | 25°44 | 9°37  | T 12 |     |
| F 13 | 15 20 9  | 21°26'45 | 10♂31 | 10°50  | 8° 0  | 20°35 | 22° 0 | 5° 6 | 9°23 | 22° 5 | 20°37  | 26°13  | 25° 0 | 25°51 | 9°35  | F 13 |     |
| S 14 | 15 24 5  | 22°24'31 | 22°30 | 10°28  | 9° 7  | 21°10 | 22° 5 | 5°14 | 9°24 | 22° 7 | 20°37  | 26°R14 | 24°57 | 25°58 | 9°33  | S 14 |     |
| S 15 | 15 28 2  | 23°22'16 | 4♂23  | 10° 9  | 10°13 | 21°45 | 22° 9 | 5°21 | 9°26 | 22° 9 | 20°38  | 26°14  | 24°53 | 26° 4 | 9°31  | S 15 |     |
| M 16 | 15 31 58 | 24°20'00 | 16°13 | 9°54   | 11°20 | 22°19 | 22°14 | 5°29 | 9°27 | 22°11 | 20°38  | 26°12  | 24°50 | 26°11 | 9°29  | M 16 |     |
| T 17 | 15 35 55 | 25°17'42 | 28° 2 | 9°43   | 12°28 | 22°54 | 22°19 | 5°37 | 9°29 | 22°13 | 20°39  | 26° 9  | 24°47 | 26°18 | 9°27  | T 17 |     |
| W 18 | 15 39 51 | 26°15'22 | 9♂52  | 9°37   | 13°35 | 23°29 | 22°24 | 5°45 | 9°30 | 22°15 | 20°39  | 26° 5  | 24°44 | 26°24 | 9°24  | W 18 |     |
| T 19 | 15 43 48 | 27°13'02 | 21°45 | 9°D35  | 14°42 | 24° 4 | 22°30 | 5°52 | 9°32 | 22°17 | 20°39  | 26° 0  | 24°41 | 26°31 | 9°22  | T 19 |     |
| F 20 | 15 47 45 | 28°10'40 | 3♂43  | 9°38   | 15°50 | 24°39 | 22°35 | 6° 0 | 9°34 | 22°19 | 20°40  | 25°54  | 24°38 | 26°38 | 9°20  | F 20 |     |
| S 21 | 15 51 41 | 29° 8'17 | 15°49 | 9°45   | 16°57 | 25°13 | 22°41 | 6° 8 | 9°35 | 22°21 | 20°40  | 25°49  | 24°34 | 26°44 | 9°17  | S 21 |     |
| S 22 | 15 55 38 | 0♂ 5'53  | 28° 5 | 9°57   | 18° 5 | 25°48 | 22°46 | 6°16 | 9°37 | 22°22 | 20°41  | 25°44  | 24°31 | 26°51 | 9°14  | S 22 |     |
| M 23 | 15 59 34 | 1° 3'29  | 10♂33 | 10°13  | 19°13 | 26°23 | 22°52 | 6°23 | 9°39 | 22°24 | 20°42  | 25°41  | 24°28 | 26°58 | 9°12  | M 23 |     |
| T 24 | 16 3 31  | 2° 1'03  | 23°18 | 10°34  | 20°21 | 26°58 | 22°58 | 6°31 | 9°41 | 22°26 | 20°42  | 25°39  | 24°25 | 27° 4 | 9° 9  | T 24 |     |
| W 25 | 16 7 27  | 2°58'36  | 6♂22  | 10°59  | 21°29 | 27°34 | 23° 4 | 6°39 | 9°43 | 22°28 | 20°43  | 25°D39 | 24°22 | 27°11 | 9° 6  | W 25 |     |
| T 26 | 16 11 24 | 3°56'08  | 19°48 | 11°28  | 22°37 | 28° 9 | 23°11 | 6°47 | 9°45 | 22°30 | 20°43  | 25°39  | 24°19 | 27°18 | 9° 4  | T 26 |     |
| F 27 | 16 15 20 | 4°53'40  | 3♀39  | 12° 2  | 23°45 | 28°44 | 23°17 | 6°55 | 9°47 | 22°32 | 20°44  | 25°41  | 24°15 | 27°24 | 9° 1  | F 27 |     |
| S 28 | 16 19 17 | 5°51'11  | 17°55 | 12°39  | 24°54 | 29°19 | 23°24 | 7° 2 | 9°49 | 22°33 | 20°45  | 25°42  | 24°12 | 27°31 | 8°58  | S 28 |     |
| S 29 | 16 23 14 | 6°48'41  | 2♂34  | 13°20  | 26° 2 | 29°54 | 23°30 | 7°10 | 9°51 | 22°35 | 20°45  | 25°R42 | 24° 9 | 27°38 | 8°55  | S 29 |     |
| M 30 | 16 27 10 | 7°46'10  | 17°33 | 14° 6  | 27°11 | 0♂30  | 23°37 | 7°18 | 9°53 | 22°37 | 20°46  | 25°40  | 24° 6 | 27°44 | 8°52  | M 30 |     |
| T 31 | 16 31 7  | 8♂43'38  | 2♂44  | 14♂55  | 28♀19 | 1♂ 5  | 23♂44 | 7♂26 | 9♂55 | 22♀39 | 20♂47  | 25♀37  | 24♀ 3 | 27♂51 | 8♂49  | T 31 |     |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | Day  |
|------|-------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|-------|------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  |
| S 1  | 14n48 | 9n12  | 0s12 | 18n22 | 1n22 | 3s 3 | 1s 5 | 24n26 | 1n40 | 15n30 | 1n 8 | 19n20 | 1s36 | 18n38 | 0n40 | 6n55 | 1s40 |
| M 2  | 15 6  | 15 43 | 1n11 | 18 0  | 1 7  | 2 41 | 1 9  | 24 22 | 1 40 | 15 29 | 1 8  | 19 21 | 1 36 | 18 38 | 0 40 | 6 56 | 1 40 |
| T 3  | 15 24 | 21 19 | 2 29 | 17 36 | 0 51 | 2 18 | 1 13 | 24 18 | 1 40 | 15 28 | 1 8  | 19 23 | 1 36 | 18 38 | 0 40 | 6 57 | 1 40 |
| W 4  | 15 42 | 25 30 | 3 37 | 17 10 | 0 35 | 1 55 | 1 16 | 24 14 | 1 39 | 15 27 | 1 8  | 19 24 | 1 36 | 18 37 | 0 40 | 6 57 | 1 40 |
| T 5  | 15 59 | 27 50 | 4 29 | 16 44 | 0 18 | 1 32 | 1 20 | 24 9  | 1 39 | 15 25 | 1 8  | 19 26 | 1 36 | 18 37 | 0 40 | 6 58 | 1 40 |
| F 6  | 16 16 | 28 11 | 5 2  | 16 16 | 0 1  | 1 9  | 1 23 | 24 4  | 1 38 | 15 24 | 1 7  | 19 27 | 1 36 | 18 37 | 0 40 | 6 59 | 1 40 |
| S 7  | 16 33 | 26 38 | 5 15 | 15 49 | 0s17 | 0 46 | 1 26 | 24 0  | 1 38 | 15 23 | 1 7  | 19 29 | 1 36 | 18 37 | 0 40 | 7 0  | 1 40 |
| S 8  | 16 50 | 23 31 | 5 10 | 15 21 | 0 34 | 0 23 | 1 29 | 23 55 | 1 37 | 15 22 | 1 7  | 19 30 | 1 35 | 18 36 | 0 40 | 7 0  | 1 40 |
| M 9  | 17 6  | 19 15 | 4 48 | 14 54 | 0 51 | 0n 1 | 1 32 | 23 50 | 1 37 | 15 20 | 1 7  | 19 32 | 1 35 | 18 36 | 0 40 | 7 1  | 1 40 |
| T 10 | 17 23 | 14 11 | 4 11 | 14 28 | 1 8  | 0 25 | 1 35 | 23 44 | 1 36 | 15 19 | 1 7  | 19 33 | 1 35 | 18 36 | 0 40 | 7 2  | 1 40 |
| W 11 | 17 38 | 8 39  | 3 24 | 14 3  | 1 25 | 0 48 | 1 38 | 23 39 | 1 36 | 15 18 | 1 7  | 19 35 | 1 35 | 18 35 | 0 40 | 7 3  | 1 40 |
| T 12 | 17 54 | 2 54  | 2 27 | 13 39 | 1 41 | 1 12 | 1 40 | 23 34 | 1 36 | 15 16 | 1 7  | 19 36 | 1 35 | 18 35 | 0 40 | 7 3  | 1 40 |
| F 13 | 18 9  | 2s51  | 1 25 | 13 16 | 1 56 | 1 36 | 1 43 | 23 28 | 1 35 | 15 15 | 1 6  | 19 38 | 1 35 | 18 34 | 0 40 | 7 4  | 1 40 |
| S 14 | 18 24 | 8 27  | 0 21 | 12 56 | 2 10 | 2 0  | 1 45 | 23 22 | 1 35 | 15 13 | 1 6  | 19 39 | 1 35 | 18 34 | 0 40 | 7 5  | 1 40 |
| S 15 | 18 39 | 13 42 | 0s45 | 12 37 | 2 23 | 2 25 | 1 47 | 23 16 | 1 34 | 15 11 | 1 6  | 19 41 | 1 35 | 18 34 | 0 40 | 7 6  | 1 40 |
| M 16 | 18 53 | 18 26 | 1 48 | 12 20 | 2 36 | 2 49 | 1 49 | 23 10 | 1 34 | 15 10 | 1 6  | 19 42 | 1 35 | 18 33 | 0 40 | 7 6  | 1 40 |
| T 17 | 19 7  | 22 26 | 2 46 | 12 6  | 2 47 | 3 13 | 1 51 | 23 4  | 1 33 | 15 8  | 1 6  | 19 44 | 1 35 | 18 33 | 0 40 | 7 7  | 1 40 |
| W 18 | 19 21 | 25 32 | 3 36 | 11 55 | 2 58 | 3 38 | 1 53 | 22 57 | 1 33 | 15 6  | 1 6  | 19 45 | 1 34 | 18 32 | 0 40 | 7 8  | 1 40 |
| T 19 | 19 34 | 27 31 | 4 18 | 11 45 | 3 7  | 4 2  | 1 55 | 22 51 | 1 32 | 15 4  | 1 6  | 19 46 | 1 34 | 18 32 | 0 40 | 7 8  | 1 40 |
| F 20 | 19 47 | 28 14 | 4 49 | 11 38 | 3 15 | 4 27 | 1 57 | 22 44 | 1 32 | 15 2  | 1 5  | 19 48 | 1 34 | 18 31 | 0 40 | 7 9  | 1 40 |
| S 21 | 20 0  | 27 37 | 5 7  | 11 34 | 3 22 | 4 51 | 1 58 | 22 37 | 1 31 | 15 1  | 1 5  | 19 49 | 1 34 | 18 31 | 0 39 | 7 10 | 1 40 |
| S 22 | 20 12 | 25 40 | 5 11 | 11 32 | 3 28 | 5 15 | 2 0  | 22 31 | 1 31 | 14 59 | 1 5  | 19 51 | 1 34 | 18 30 | 0 39 | 7 10 | 1 40 |
| M 23 | 20 24 | 22 27 | 5 1  | 11 32 | 3 33 | 5 40 | 2 1  | 22 23 | 1 31 | 14 56 | 1 5  | 19 52 | 1 34 | 18 30 | 0 39 | 7 11 | 1 40 |
| T 24 | 20 36 | 18 7  | 4 36 | 11 34 | 3 37 | 6 4  | 2 2  | 22 16 | 1 30 | 14 54 | 1 5  | 19 53 | 1 34 | 18 29 | 0 39 | 7 12 | 1 40 |
| W 25 | 20 47 | 12 51 | 3 56 | 11 39 | 3 40 | 6 29 | 2 4  | 22 9  | 1 30 | 14 52 | 1 5  | 19 55 | 1 34 | 18 29 | 0 39 | 7 12 | 1 40 |
| T 26 | 20 58 | 6 51  | 3 3  | 11 46 | 3 43 | 6 53 | 2 5  | 22 1  | 1 29 | 14 50 | 1 5  | 19 56 | 1 34 | 18 28 | 0 39 | 7 13 | 1 40 |
| F 27 | 21 9  | 0 20  | 1 57 | 11 55 | 3 44 | 7 17 | 2 5  | 21 54 | 1 29 | 14 48 | 1 5  | 19 58 | 1 34 | 18 28 | 0 39 | 7 14 | 1 40 |
| S 28 | 21 19 | 6n23  | 0 42 | 12 6  | 3 44 | 7 42 | 2 6  | 21 46 | 1 28 | 14 46 | 1 4  | 19 59 | 1 34 | 18 27 | 0 39 | 7 14 | 1 40 |
| S 29 | 21 29 | 12 58 | 0n37 | 12 19 | 3 43 | 8 6  | 2 7  | 21 38 | 1 28 | 14 43 | 1 4  | 20 0  | 1 34 | 18 27 | 0 39 | 7 15 | 1 40 |
| M 30 | 21 39 | 18 57 | 1 56 | 12 34 | 3 42 | 8 30 | 2 8  | 21 30 | 1 27 | 14 41 | 1 4  | 20 2  | 1 34 | 18 26 | 0 39 | 7 15 | 1 41 |
| T 31 | 21n48 | 23n48 | 3n 7 | 12n50 | 3s39 | 8n54 | 2s 8 | 21n22 | 1n27 | 14n38 | 1n 4 | 20n 3 | 1s33 | 18n25 | 0n39 | 7n16 | 1s41 |

Julian Day Number = 2344648.5, Delta T = 12.13 sec  
 Ecliptic obliquity = 23°28'47", Nutation = - 0°00'09", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 20°39'17", Lahiri = 19°46'17"Greg. Calendar



ASTRODIENST EPHEMERIS for the year 1707  
geocentric

JUNE 1707

00:00 UT

| Day  | Sid.t    | ☉        | ☽      | ♊     | ♋      | ♌     | ♍     | ♎      | ♏     | ♐      | ♑     | ♒      | ♓      | ♈     | ♉     | Day  |
|------|----------|----------|--------|-------|--------|-------|-------|--------|-------|--------|-------|--------|--------|-------|-------|------|
| W 1  | 16 35 3  | 9II41'06 | 17II57 | 15♈47 | 29VY28 | 1♌40  | 23♎51 | 7II34  | 9♏57  | 22VY40 | 20♌48 | 25°R31 | 23VY59 | 27♍58 | 8°R46 | W 1  |
| T 2  | 16 39 0  | 10°38'33 | 3☾ 3   | 16°43 | 0♈37   | 2°16  | 23°58 | 7°41   | 10° 0 | 22°42  | 20°49 | 25VY25 | 23°56  | 28° 4 | 8☾42  | T 2  |
| F 3  | 16 42 56 | 11°35'58 | 17°50  | 17°43 | 1°46   | 2°51  | 24° 6 | 7°49   | 10° 2 | 22°44  | 20°49 | 25°18  | 23°53  | 28°11 | 8°39  | F 3  |
| S 4  | 16 46 53 | 12°33'23 | 2♌14   | 18°46 | 2°55   | 3°27  | 24°13 | 7°57   | 10° 4 | 22°45  | 20°50 | 25°12  | 23°50  | 28°18 | 8°36  | S 4  |
| S 5  | 16 50 49 | 13°30'46 | 16° 9  | 19°52 | 4° 4   | 4° 2  | 24°21 | 8° 5   | 10° 7 | 22°47  | 20°51 | 25° 7  | 23°47  | 28°24 | 8°33  | S 5  |
| M 6  | 16 54 46 | 14°28'08 | 29°36  | 21° 2 | 5°13   | 4°38  | 24°29 | 8°13   | 10° 9 | 22°48  | 20°52 | 25° 4  | 23°44  | 28°31 | 8°29  | M 6  |
| T 7  | 16 58 43 | 15°25'29 | 12♍35  | 22°14 | 6°22   | 5°13  | 24°37 | 8°20   | 10°12 | 22°50  | 20°53 | 25°D 3 | 23°40  | 28°38 | 8°26  | T 7  |
| W 8  | 17 2 39  | 16°22'49 | 25°11  | 23°30 | 7°31   | 5°49  | 24°45 | 8°28   | 10°14 | 22°52  | 20°54 | 25° 3  | 23°37  | 28°44 | 8°22  | W 8  |
| T 9  | 17 6 36  | 17°20'08 | 7♌28   | 24°49 | 8°41   | 6°25  | 24°53 | 8°36   | 10°17 | 22°53  | 20°55 | 25° 4  | 23°34  | 28°51 | 8°19  | T 9  |
| F 10 | 17 10 32 | 18°17'27 | 19°31  | 26°12 | 9°50   | 7° 1  | 25° 1 | 8°44   | 10°19 | 22°54  | 20°56 | 25°R 5 | 23°31  | 28°58 | 8°15  | F 10 |
| S 11 | 17 14 29 | 19°14'44 | 1♍25   | 27°37 | 10°59  | 7°36  | 25° 9 | 8°51   | 10°22 | 22°56  | 20°57 | 25° 5  | 23°28  | 29° 4 | 8°12  | S 11 |
| S 12 | 17 18 25 | 20°12'00 | 13°14  | 29° 5 | 12° 9  | 8°12  | 25°18 | 8°59   | 10°25 | 22°57  | 20°58 | 25° 3  | 23°25  | 29°11 | 8° 8  | S 12 |
| M13  | 17 22 22 | 21° 9'16 | 25° 2  | 0II36 | 13°19  | 8°48  | 25°26 | 9° 7   | 10°27 | 22°59  | 20°59 | 24°59  | 23°21  | 29°18 | 8° 5  | M13  |
| T 14 | 17 26 18 | 22° 6'31 | 6♌52   | 2°11  | 14°28  | 9°24  | 25°35 | 9°15   | 10°30 | 23° 0  | 21° 0 | 24°53  | 23°18  | 29°25 | 8° 1  | T 14 |
| W15  | 17 30 15 | 23° 3'46 | 18°46  | 3°48  | 15°38  | 10° 0 | 25°44 | 9°22   | 10°33 | 23° 1  | 21° 2 | 24°44  | 23°15  | 29°31 | 7°57  | W15  |
| T 16 | 17 34 12 | 24° 1'00 | 0☾46   | 5°28  | 16°48  | 10°36 | 25°52 | 9°30   | 10°36 | 23° 3  | 21° 3 | 24°34  | 23°12  | 29°38 | 7°54  | T 16 |
| F 17 | 17 38 8  | 24°58'13 | 12°53  | 7°11  | 17°58  | 11°12 | 26° 1 | 9°38   | 10°38 | 23° 4  | 21° 4 | 24°23  | 23° 9  | 29°45 | 7°50  | F 17 |
| S 18 | 17 42 5  | 25°55'27 | 25°10  | 8°57  | 19° 8  | 11°48 | 26°11 | 9°45   | 10°41 | 23° 5  | 21° 5 | 24°12  | 23° 5  | 29°51 | 7°46  | S 18 |
| S 19 | 17 46 1  | 26°52'40 | 7♌36   | 10°45 | 20°18  | 12°24 | 26°20 | 9°53   | 10°44 | 23° 7  | 21° 6 | 24° 3  | 23° 2  | 29°58 | 7°43  | S 19 |
| M20  | 17 49 58 | 27°49'52 | 20°13  | 12°37 | 21°28  | 13° 0 | 26°29 | 10° 0  | 10°47 | 23° 8  | 21° 8 | 23°55  | 22°59  | 0♌ 5  | 7°39  | M20  |
| T 21 | 17 53 54 | 28°47'05 | 3♈ 3   | 14°31 | 22°38  | 13°36 | 26°38 | 10° 8  | 10°50 | 23° 9  | 21° 9 | 23°50  | 22°56  | 0°11  | 7°35  | T 21 |
| W22  | 17 57 51 | 29°44'17 | 16° 9  | 16°27 | 23°48  | 14°12 | 26°48 | 10°15  | 10°53 | 23°10  | 21°10 | 23°47  | 22°53  | 0°18  | 7°31  | W22  |
| T 23 | 18 1 48  | 0☾41'30  | 29°32  | 18°26 | 24°58  | 14°48 | 26°57 | 10°23  | 10°56 | 23°11  | 21°12 | 23°D46 | 22°50  | 0°25  | 7°27  | T 23 |
| F 24 | 18 5 44  | 1°38'42  | 13VY15 | 20°27 | 26° 9  | 15°24 | 27° 7 | 10°30  | 10°59 | 23°12  | 21°13 | 23°47  | 22°46  | 0°31  | 7°24  | F 24 |
| S 25 | 18 9 41  | 2°35'55  | 27°19  | 22°30 | 27°19  | 16° 1 | 27°17 | 10°38  | 11° 2 | 23°13  | 21°14 | 23°R47 | 22°43  | 0°38  | 7°20  | S 25 |
| S 26 | 18 13 37 | 3°33'08  | 11♈43  | 24°35 | 28°30  | 16°37 | 27°27 | 10°45  | 11° 5 | 23°14  | 21°16 | 23°46  | 22°40  | 0°45  | 7°16  | S 26 |
| M27  | 18 17 34 | 4°30'21  | 26°27  | 26°42 | 29°40  | 17°13 | 27°37 | 10°53  | 11° 9 | 23°15  | 21°17 | 23°42  | 22°37  | 0°51  | 7°12  | M27  |
| T 28 | 18 21 30 | 5°27'34  | 11II24 | 28°50 | 0II51  | 17°50 | 27°47 | 11° 0  | 11°12 | 23°16  | 21°19 | 23°37  | 22°34  | 0°58  | 7° 8  | T 28 |
| W29  | 18 25 27 | 6°24'47  | 26°26  | 0☾59  | 2° 2   | 18°26 | 27°57 | 11° 7  | 11°15 | 23°17  | 21°20 | 23°28  | 22°31  | 1° 5  | 7° 4  | W29  |
| T 30 | 18 29 23 | 7☾22'00  | 11☾25  | 3☾ 8  | 3II12  | 19♌ 2 | 28♌ 7 | 11II15 | 11♌18 | 23VY18 | 21♌21 | 23VY18 | 22VY27 | 1♌11  | 7☾ 0  | T 30 |

| Day  | ☉     | ☽     |      | ♊     |      | ♋     |      | ♌     |      | ♍     |      | ♎     |      | ♏     |      | ♐    |      | ♑     |       | ♒    | ♓    | ♈     | ♉     | ♊    | ♋    | ♌    | ♍    | ♎    | ♏    | ♐    | ♑    | ♒    | ♓    |     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|-------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat   | decl | decl | decl  | decl  | decl | decl | decl | decl | decl | decl | decl | decl | decl | decl | lat |
| W 1  | 21n56 | 27n 0 | 4n 5 | 13n 8 | 3s36 | 9n18  | 2s 9 | 21n13 | 1n26 | 14n36 | 1n 4 | 20n 4 | 1s33 | 18n25 | 0n39 | 7n17 | 1s41 | 24n13 | 10n12 | 9n53 | 9n19 | 22s33 | 16s 4 | 7n 8 |      |      |      |      |      |      |      |      |      |     |
| T 2  | 22 5  | 28 12 | 4 45 | 13 28 | 3 32 | 9 42  | 2 9  | 21 5  | 1 26 | 14 33 | 1 4  | 20 6  | 1 33 | 18 24 | 0 39 | 7 17 | 1 41 | 24 13 | 10 12 | 9 51 | 9 18 | 22 35 | 16 4  | 7 9  |      |      |      |      |      |      |      |      |      |     |
| F 3  | 22 13 | 27 20 | 5 6  | 13 49 | 3 28 | 10 5  | 2 9  | 20 56 | 1 25 | 14 31 | 1 4  | 20 7  | 1 33 | 18 23 | 0 39 | 7 18 | 1 41 | 24 13 | 10 12 | 9 48 | 9 17 | 22 37 | 16 4  | 7 9  |      |      |      |      |      |      |      |      |      |     |
| S 4  | 22 20 | 24 40 | 5 6  | 14 11 | 3 23 | 10 29 | 2 9  | 20 48 | 1 25 | 14 28 | 1 4  | 20 8  | 1 33 | 18 23 | 0 39 | 7 18 | 1 41 | 24 12 | 10 12 | 9 46 | 9 16 | 22 39 | 16 3  | 7 10 |      |      |      |      |      |      |      |      |      |     |
| S 5  | 22 28 | 20 36 | 4 48 | 14 35 | 3 17 | 10 52 | 2 9  | 20 39 | 1 25 | 14 26 | 1 4  | 20 10 | 1 33 | 18 22 | 0 39 | 7 19 | 1 41 | 24 12 | 10 11 | 9 44 | 9 15 | 22 42 | 16 3  | 7 10 |      |      |      |      |      |      |      |      |      |     |
| M 6  | 22 34 | 15 36 | 4 14 | 14 59 | 3 10 | 11 15 | 2 9  | 20 30 | 1 24 | 14 23 | 1 3  | 20 11 | 1 33 | 18 21 | 0 39 | 7 19 | 1 41 | 24 11 | 10 11 | 9 43 | 9 13 | 22 44 | 16 3  | 7 10 |      |      |      |      |      |      |      |      |      |     |
| T 7  | 22 41 | 10 4  | 3 29 | 15 25 | 3 3  | 11 38 | 2 9  | 20 21 | 1 24 | 14 20 | 1 3  | 20 12 | 1 33 | 18 21 | 0 39 | 7 20 | 1 41 | 24 11 | 10 11 | 9 43 | 9 12 | 22 46 | 16 3  | 7 11 |      |      |      |      |      |      |      |      |      |     |
| W 8  | 22 47 | 4 16  | 2 34 | 15 51 | 2 55 | 12 1  | 2 9  | 20 12 | 1 23 | 14 17 | 1 3  | 20 13 | 1 33 | 18 20 | 0 39 | 7 20 | 1 41 | 24 10 | 10 11 | 9 43 | 9 11 | 22 48 | 16 3  | 7 11 |      |      |      |      |      |      |      |      |      |     |
| T 9  | 22 53 | 1s32  | 1 34 | 16 18 | 2 47 | 12 24 | 2 8  | 20 2  | 1 23 | 14 15 | 1 3  | 20 15 | 1 33 | 18 19 | 0 39 | 7 21 | 1 41 | 24 10 | 10 11 | 9 43 | 9 10 | 22 50 | 16 3  | 7 11 |      |      |      |      |      |      |      |      |      |     |
| F 10 | 22 58 | 7 11  | 0 30 | 16 46 | 2 39 | 12 46 | 2 8  | 19 53 | 1 22 | 14 12 | 1 3  | 20 16 | 1 33 | 18 19 | 0 39 | 7 21 | 1 41 | 24 9  | 10 10 | 9 43 | 9 9  | 22 53 | 16 3  | 7 11 |      |      |      |      |      |      |      |      |      |     |
| S 11 | 23 3  | 12 31 | 0s34 | 17 14 | 2 29 | 13 8  | 2 7  | 19 43 | 1 22 | 14 9  | 1 3  | 20 17 | 1 33 | 18 18 | 0 39 | 7 22 | 1 41 | 24 8  | 10 10 | 9 43 | 9 8  | 22 55 | 16 3  | 7 12 |      |      |      |      |      |      |      |      |      |     |
| S 12 | 23 7  | 17 22 | 1 36 | 17 43 | 2 20 | 13 30 | 2 7  | 19 33 | 1 21 | 14 6  | 1 3  | 20 18 | 1 33 | 18 17 | 0 39 | 7 22 | 1 41 | 24 8  | 10 10 | 9 43 | 9 6  | 22 57 | 16 3  | 7 12 |      |      |      |      |      |      |      |      |      |     |
| M13  | 23 11 | 21 32 | 2 33 | 18 12 | 2 10 | 13 52 | 2 6  | 19 23 | 1 21 | 14 3  | 1 3  | 20 19 | 1 33 | 18 16 | 0 39 | 7 23 | 1 41 | 24 7  | 10 10 | 9 41 | 9 5  | 22 59 | 16 2  | 7 12 |      |      |      |      |      |      |      |      |      |     |
| T 14 | 23 15 | 24 51 | 3 24 | 18 41 | 2 0  | 14 13 | 2 5  | 19 13 | 1 20 | 14 0  | 1 3  | 20 21 | 1 33 | 18 16 | 0 39 | 7 23 | 1 41 | 24 7  | 10 10 | 9 39 | 9 4  | 23 1  | 16 2  | 7 13 |      |      |      |      |      |      |      |      |      |     |
| W15  | 23 18 | 27 6  | 4 7  | 19 10 | 1 49 | 14 34 | 2 4  | 19 3  | 1 20 | 13 57 | 1 3  | 20 22 | 1 33 | 18 15 | 0 39 | 7 24 | 1 41 | 24 6  | 10 9  | 9 36 | 9 3  | 23 3  | 16 2  | 7 13 |      |      |      |      |      |      |      |      |      |     |
| T 16 | 23 21 | 28 7  | 4 38 | 19 39 | 1 38 | 14 55 | 2 3  | 18 53 | 1 20 | 13 54 | 1 2  | 20 23 | 1 33 | 18 14 | 0 39 | 7 24 | 1 41 | 24 6  | 10 9  | 9 32 | 9 2  | 23 6  | 16 2  | 7 13 |      |      |      |      |      |      |      |      |      |     |
| F 17 | 23 23 | 27 47 | 4 58 | 20 7  | 1 27 | 15 15 | 2 2  | 18 43 | 1 19 | 13 51 | 1 2  | 20 24 | 1 33 | 18 13 | 0 39 | 7 25 | 1 41 | 24 5  | 10 9  | 9 28 | 9 1  | 23 8  | 16 2  | 7 13 |      |      |      |      |      |      |      |      |      |     |
| S 18 | 23 25 | 26 7  | 5 3  | 20 35 | 1 15 | 15 36 | 2 1  | 18 32 | 1 19 | 13 47 | 1 2  | 20 25 | 1 33 | 18 12 | 0 39 | 7 25 | 1 41 | 24 5  | 10 9  | 9 24 | 8 59 | 23 10 | 16 2  | 7 13 |      |      |      |      |      |      |      |      |      |     |
| S 19 | 23 27 | 23 9  | 4 55 | 21 3  | 1 4  | 15 55 | 2 0  | 18 22 | 1 18 | 13 44 | 1 2  | 20 26 | 1 33 | 18 12 | 0 39 | 7 26 | 1 42 | 24 4  | 10 9  | 9 21 | 8 58 | 23 12 | 16 2  | 7 14 |      |      |      |      |      |      |      |      |      |     |
| M20  | 23 28 | 19 4  | 4 33 | 21 29 | 0 52 | 16 15 | 1 59 | 18 11 | 1 18 | 13 41 | 1 2  | 20 28 | 1 33 | 18 11 | 0 39 | 7 26 | 1 42 | 24 3  | 10 9  | 9 18 | 8 57 | 23 14 | 16 2  | 7 14 |      |      |      |      |      |      |      |      |      |     |
| T 21 | 23 28 | 14 4  | 3 56 | 21 54 | 0 41 | 16 34 | 1 57 | 18 0  | 1 17 | 13 38 | 1 2  | 20 29 | 1 33 | 18 10 | 0 39 | 7 26 | 1 42 | 24 3  | 10 8  | 9 16 | 8 56 | 23 16 | 16 2  | 7 14 |      |      |      |      |      |      |      |      |      |     |
| W22  | 23 29 | 8 20  | 3 6  | 22 19 | 0 29 | 16 53 | 1 56 | 17 49 | 1 17 | 13 34 | 1 2  | 20 30 | 1 33 | 18 9  | 0 39 | 7 27 | 1 42 | 24 2  | 10 8  | 9 15 | 8 55 | 23 18 | 16 2  | 7 14 |      |      |      |      |      |      |      |      |      |     |
| T 23 | 23 29 | 2 6   | 2 5  | 22 41 | 0 17 | 17 12 | 1 54 | 17 38 | 1 16 | 13 31 | 1 2  | 20 31 | 1 33 | 18 8  | 0 39 | 7 27 | 1 42 | 24 2  | 10 8  | 9 15 | 8 53 | 23 21 | 16 3  | 7 14 |      |      |      |      |      |      |      |      |      |     |
| F 24 | 23 28 | 4n23  | 0 56 | 23 2  | 0 6  | 17 30 | 1 53 | 17 27 | 1 16 | 13 27 | 1 2  | 20 32 | 1 33 | 18 7  | 0 39 | 7 27 | 1 42 | 24 1  | 10 8  | 9 15 | 8 52 | 23 23 | 16 3  | 7 14 |      |      |      |      |      |      |      |      |      |     |
| S 25 | 23 27 | 10 49 | 0n19 | 23 21 | 0n 5 | 17 47 | 1 51 | 17 16 | 1 15 | 13 24 | 1 2  | 20 33 | 1 33 | 18 7  | 0 39 | 7 28 | 1 42 | 24 1  | 10 8  | 9 15 | 8 51 | 23 25 | 16 3  | 7 15 |      |      |      |      |      |      |      |      |      |     |
| S 26 | 23 26 | 16 52 | 1 34 | 23 38 | 0 16 | 18 5  | 1 49 | 17 4  | 1 15 | 13 21 | 1 2  | 20 34 | 1 33 | 18 6  | 0 39 | 7 28 | 1 42 | 24 0  | 10 8  | 9 14 | 8 50 | 23 27 | 16 3  | 7 15 |      |      |      |      |      |      |      |      |      |     |
| M27  | 23 24 | 22 3  | 2 44 | 23 53 | 0 27 | 18 22 | 1 48 | 16 53 | 1 14 | 13 17 | 1 1  | 20 35 | 1 33 | 18 5  | 0 39 | 7 28 | 1 42 | 23 59 | 10 8  | 9 13 | 8 49 | 23 29 | 16 3  | 7 15 |      |      |      |      |      |      |      |      |      |     |
| T 28 | 23 22 | 25 53 | 3 44 | 24 5  | 0 37 | 18 38 | 1 46 | 16 41 | 1 14 | 13 14 | 1 1  | 20 36 | 1 33 | 18 4  | 0 39 | 7 29 | 1 42 | 23 59 | 10 7  | 9 11 | 8 48 | 23 31 | 16 3  | 7 15 |      |      |      |      |      |      |      |      |      |     |
| W29  | 23 19 | 27 55 | 4 29 | 24 15 | 0 46 | 18 54 | 1 44 | 16 30 | 1 13 | 13 10 | 1 1  | 20 37 | 1 33 | 18 3  | 0 39 | 7 29 | 1 42 | 23 58 | 10 7  | 9 8  | 8 46 | 23 33 | 16 3  | 7 15 |      |      |      |      |      |      |      |      |      |     |
| T 30 | 23n16 | 27n53 | 4n55 | 24n22 | 0m55 | 19n10 | 1s42 | 16n18 | 1n13 | 13n 6 | 1n 1 | 20n38 | 1s33 | 18n 2 | 0n39 | 7n29 | 1s42 | 23n58 | 10n 7 | 9n 4 | 8n45 | 23s35 | 16s 3 | 7n15 |      |      |      |      |      |      |      |      |      |     |

ASTRODIENST EPHEMERIS for the year 1707  
geocentric

JULY 1707

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♊     | ♋     | ♌     | ♍     | ♎     | ♏     | ♐      | ♑     | ♒      | ♓     | ♈    | ♉     | Day  |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|------|-------|------|
| F 1  | 18 33 20 | 8♌19°13  | 26♌11 | 5♌19  | 4♏23  | 19♏39 | 28♏17 | 11♏22 | 11♏21 | 23♏19  | 21♏23 | 23°R 8 | 22♏24 | 1♌18 | 6°R57 | F 1  |
| S 2  | 18 37 17 | 9°16'26  | 10♏36 | 7°29  | 5°34  | 20°15 | 28°28 | 11°29 | 11°25 | 23°20  | 21°24 | 22♏58  | 22°21 | 1°25 | 6♌53  | S 2  |
| S 3  | 18 41 13 | 10°13'39 | 24°34 | 9°39  | 6°45  | 20°52 | 28°38 | 11°36 | 11°28 | 23°21  | 21°26 | 22°49  | 22°18 | 1°31 | 6°49  | S 3  |
| M 4  | 18 45 10 | 11°10'52 | 8♏7   | 11°49 | 7°56  | 21°29 | 28°49 | 11°44 | 11°31 | 23°22  | 21°28 | 22°43  | 22°15 | 1°38 | 6°45  | M 4  |
| T 5  | 18 49 6  | 12° 8'04 | 21° 7 | 13°58 | 9° 7  | 22° 5 | 28°59 | 11°51 | 11°35 | 23°22  | 21°29 | 22°40  | 22°11 | 1°45 | 6°41  | T 5  |
| W 6  | 18 53 3  | 13° 5'16 | 3♏45  | 16° 7 | 10°18 | 22°42 | 29°10 | 11°58 | 11°38 | 23°23  | 21°31 | 22°38  | 22° 8 | 1°51 | 6°37  | W 6  |
| T 7  | 18 56 59 | 14° 2'29 | 16° 2 | 18°14 | 11°29 | 23°19 | 29°21 | 12° 5 | 11°41 | 23°24  | 21°32 | 22°38  | 22° 5 | 1°58 | 6°34  | T 7  |
| F 8  | 19 0 56  | 14°59'41 | 28° 5 | 20°20 | 12°40 | 23°55 | 29°32 | 12°12 | 11°45 | 23°24  | 21°34 | 22°38  | 22° 2 | 2° 5 | 6°30  | F 8  |
| S 9  | 19 4 52  | 15°56'53 | 9♏58  | 22°25 | 13°51 | 24°32 | 29°43 | 12°19 | 11°48 | 23°25  | 21°35 | 22°37  | 21°59 | 2°11 | 6°26  | S 9  |
| S 10 | 19 8 49  | 16°54'05 | 21°47 | 24°29 | 15° 2 | 25° 9 | 29°54 | 12°26 | 11°52 | 23°26  | 21°37 | 22°34  | 21°56 | 2°18 | 6°22  | S 10 |
| M 11 | 19 12 46 | 17°51'18 | 3♏36  | 26°31 | 16°14 | 25°46 | 0♏5   | 12°33 | 11°55 | 23°26  | 21°39 | 22°29  | 21°52 | 2°25 | 6°19  | M 11 |
| T 12 | 19 16 42 | 18°48'30 | 15°29 | 28°31 | 17°25 | 26°23 | 0°16  | 12°40 | 11°59 | 23°27  | 21°40 | 22°21  | 21°49 | 2°31 | 6°15  | T 12 |
| W 13 | 19 20 39 | 19°45'43 | 27°30 | 0♏30  | 18°36 | 26°59 | 0°27  | 12°46 | 12° 2 | 23°27  | 21°42 | 22°11  | 21°46 | 2°38 | 6°11  | W 13 |
| T 14 | 19 24 35 | 20°42'56 | 9♏39  | 2°26  | 19°48 | 27°36 | 0°38  | 12°53 | 12° 6 | 23°28  | 21°44 | 21°58  | 21°43 | 2°45 | 6° 8  | T 14 |
| F 15 | 19 28 32 | 21°40'10 | 21°59 | 4°22  | 20°59 | 28°13 | 0°50  | 13° 0 | 12° 9 | 23°28  | 21°45 | 21°45  | 21°40 | 2°51 | 6° 4  | F 15 |
| S 16 | 19 32 28 | 22°37'24 | 4♏30  | 6°15  | 22°11 | 28°50 | 1° 1  | 13° 6 | 12°13 | 23°29  | 21°47 | 21°32  | 21°37 | 2°58 | 6° 0  | S 16 |
| S 17 | 19 36 25 | 23°34'38 | 17°12 | 8° 7  | 23°22 | 29°27 | 1°13  | 13°13 | 12°16 | 23°29  | 21°49 | 21°21  | 21°33 | 3° 5 | 5°57  | S 17 |
| M 18 | 19 40 21 | 24°31'53 | 0♏5   | 9°56  | 24°34 | 0♏4   | 1°24  | 13°20 | 12°20 | 23°29  | 21°51 | 21°11  | 21°30 | 3°12 | 5°53  | M 18 |
| T 19 | 19 44 18 | 25°29'09 | 13°10 | 11°44 | 25°46 | 0°42  | 1°36  | 13°26 | 12°23 | 23°30  | 21°52 | 21° 4  | 21°27 | 3°18 | 5°50  | T 19 |
| W 20 | 19 48 15 | 26°26'26 | 26°26 | 13°30 | 26°57 | 1°19  | 1°47  | 13°33 | 12°27 | 23°30  | 21°54 | 21° 1  | 21°24 | 3°25 | 5°46  | W 20 |
| T 21 | 19 52 11 | 27°23'43 | 9♏55  | 15°15 | 28° 9 | 1°56  | 1°59  | 13°39 | 12°31 | 23°30  | 21°56 | 20°59  | 21°21 | 3°32 | 5°43  | T 21 |
| F 22 | 19 56 8  | 28°21'01 | 23°38 | 16°58 | 29°21 | 2°33  | 2°11  | 13°45 | 12°34 | 23°30  | 21°58 | 20°59  | 21°17 | 3°38 | 5°39  | F 22 |
| S 23 | 20 0 4   | 29°18'21 | 7♏36  | 18°39 | 0♏33  | 3°10  | 2°23  | 13°52 | 12°38 | 23°31  | 22° 0 | 20°59  | 21°14 | 3°45 | 5°36  | S 23 |
| S 24 | 20 4 1   | 0♏15'41  | 21°48 | 20°18 | 1°45  | 3°48  | 2°34  | 13°58 | 12°42 | 23°31  | 22° 1 | 20°57  | 21°11 | 3°52 | 5°33  | S 24 |
| M 25 | 20 7 57  | 1°13'03  | 6♏14  | 21°55 | 2°57  | 4°25  | 2°46  | 14° 4 | 12°45 | 23°31  | 22° 3 | 20°54  | 21° 8 | 3°58 | 5°29  | M 25 |
| T 26 | 20 11 54 | 2°10'25  | 20°50 | 23°31 | 4° 9  | 5° 2  | 2°58  | 14°10 | 12°49 | 23°31  | 22° 5 | 20°48  | 21° 5 | 4° 5 | 5°26  | T 26 |
| W 27 | 20 15 50 | 3° 7'49  | 5♏30  | 25° 5 | 5°21  | 5°40  | 3°10  | 14°16 | 12°53 | 23°31  | 22° 7 | 20°40  | 21° 2 | 4°12 | 5°23  | W 27 |
| T 28 | 20 19 47 | 4° 5'14  | 20°10 | 26°37 | 6°34  | 6°17  | 3°22  | 14°22 | 12°56 | 23°R31 | 22° 9 | 20°29  | 20°58 | 4°18 | 5°20  | T 28 |
| F 29 | 20 23 44 | 5° 2'39  | 4♏39  | 28° 7 | 7°46  | 6°55  | 3°34  | 14°28 | 13° 0 | 23°31  | 22°11 | 20°18  | 20°55 | 4°25 | 5°17  | F 29 |
| S 30 | 20 27 40 | 6° 0'06  | 18°52 | 29°36 | 8°58  | 7°32  | 3°47  | 14°34 | 13° 4 | 23°31  | 22°12 | 20° 8  | 20°52 | 4°32 | 5°14  | S 30 |
| S 31 | 20 31 37 | 6♏57'33  | 2♏43  | 1♏2   | 10♏10 | 8♏10  | 3♏59  | 14♏40 | 13♏7  | 23♏31  | 22♏14 | 19♏59  | 20♏49 | 4♏38 | 5♏11  | 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 |
| F 1  | 23n13 | 25n52 | 5n 1 | 24n26 | 1n 4 | 19n25 | 1s40 | 16n 6 | 1n13 | 13n 3 | 1n 1 | 20n39 | 1s33 | 18n 1 | 0n39 | 7n30 | 1s42 | 23n57 | 10n 7 | 9n 0 | 8n44 | 23s37 | 16s 3 | 7n15 |     |
| S 2  | 23 9  | 22 13 | 4 48 | 24 28 | 1 12 | 19 40 | 1 38 | 15 54 | 1 12 | 12 59 | 1 1  | 20 40 | 1 33 | 18 0  | 0 39 | 7 30 | 1 42 | 23 56 | 10 7  | 8 56 | 8 43 | 23 39 | 16 4  | 7 15 |     |
| S 3  | 23 5  | 17 23 | 4 17 | 24 26 | 1 19 | 19 54 | 1 36 | 15 42 | 1 12 | 12 55 | 1 1  | 20 41 | 1 33 | 17 59 | 0 39 | 7 30 | 1 42 | 23 56 | 10 7  | 8 53 | 8 42 | 23 41 | 16 4  | 7 15 |     |
| M 4  | 23 0  | 11 51 | 3 33 | 24 22 | 1 25 | 20 8  | 1 34 | 15 29 | 1 11 | 12 52 | 1 1  | 20 42 | 1 33 | 17 58 | 0 39 | 7 30 | 1 42 | 23 55 | 10 7  | 8 51 | 8 40 | 23 43 | 16 4  | 7 15 |     |
| T 5  | 22 55 | 5 58  | 2 39 | 24 15 | 1 31 | 20 21 | 1 31 | 15 17 | 1 11 | 12 48 | 1 1  | 20 43 | 1 33 | 17 57 | 0 39 | 7 31 | 1 42 | 23 54 | 10 7  | 8 50 | 8 39 | 23 46 | 16 4  | 7 15 |     |
| W 6  | 22 50 | 0 1   | 1 38 | 24 6  | 1 36 | 20 33 | 1 29 | 15 5  | 1 10 | 12 44 | 1 1  | 20 44 | 1 33 | 17 57 | 0 39 | 7 31 | 1 42 | 23 54 | 10 6  | 8 49 | 8 38 | 23 48 | 16 4  | 7 15 |     |
| T 7  | 22 44 | 5s47  | 0 35 | 23 53 | 1 40 | 20 46 | 1 27 | 14 52 | 1 10 | 12 40 | 1 1  | 20 45 | 1 33 | 17 56 | 0 39 | 7 31 | 1 43 | 23 53 | 10 6  | 8 49 | 8 37 | 23 50 | 16 4  | 7 15 |     |
| F 8  | 22 38 | 11 16 | 0s29 | 23 39 | 1 44 | 20 57 | 1 25 | 14 39 | 1 9  | 12 36 | 1 1  | 20 46 | 1 33 | 17 55 | 0 39 | 7 31 | 1 43 | 23 52 | 10 6  | 8 49 | 8 36 | 23 52 | 16 5  | 7 15 |     |
| S 9  | 22 32 | 16 16 | 1 30 | 23 21 | 1 46 | 21 8  | 1 22 | 14 27 | 1 9  | 12 32 | 1 1  | 20 47 | 1 33 | 17 54 | 0 39 | 7 31 | 1 43 | 23 52 | 10 6  | 8 49 | 8 35 | 23 54 | 16 5  | 7 15 |     |
| S 10 | 22 25 | 20 37 | 2 28 | 23 2  | 1 48 | 21 19 | 1 20 | 14 14 | 1 8  | 12 28 | 1 1  | 20 47 | 1 33 | 17 53 | 0 38 | 7 31 | 1 43 | 23 51 | 10 6  | 8 48 | 8 33 | 23 56 | 16 5  | 7 15 |     |
| M11  | 22 17 | 24 9  | 3 19 | 22 41 | 1 49 | 21 29 | 1 17 | 14 1  | 1 8  | 12 24 | 1 1  | 20 48 | 1 33 | 17 52 | 0 38 | 7 32 | 1 43 | 23 51 | 10 6  | 8 46 | 8 32 | 23 58 | 16 5  | 7 15 |     |
| T 12 | 22 9  | 26 41 | 4 1  | 22 17 | 1 50 | 21 38 | 1 15 | 13 48 | 1 7  | 12 20 | 1 0  | 20 49 | 1 33 | 17 51 | 0 38 | 7 32 | 1 43 | 23 50 | 10 6  | 8 43 | 8 31 | 24 0  | 16 6  | 7 15 |     |
| W13  | 22 1  | 28 0  | 4 33 | 21 52 | 1 50 | 21 47 | 1 12 | 13 35 | 1 7  | 12 16 | 1 0  | 20 50 | 1 33 | 17 50 | 0 38 | 7 32 | 1 43 | 23 49 | 10 6  | 8 39 | 8 30 | 24 2  | 16 6  | 7 15 |     |
| T 14 | 21 53 | 28 0  | 4 53 | 21 25 | 1 49 | 21 56 | 1 10 | 13 22 | 1 6  | 12 12 | 1 0  | 20 51 | 1 33 | 17 49 | 0 38 | 7 32 | 1 43 | 23 49 | 10 6  | 8 34 | 8 29 | 24 4  | 16 6  | 7 15 |     |
| F 15 | 21 44 | 26 37 | 5 0  | 20 57 | 1 48 | 22 3  | 1 7  | 13 9  | 1 6  | 12 8  | 1 0  | 20 52 | 1 33 | 17 48 | 0 38 | 7 32 | 1 43 | 23 48 | 10 6  | 8 29 | 8 27 | 24 6  | 16 6  | 7 14 |     |
| S 16 | 21 35 | 23 54 | 4 52 | 20 27 | 1 46 | 22 11 | 1 4  | 12 55 | 1 5  | 12 4  | 1 0  | 20 52 | 1 33 | 17 47 | 0 38 | 7 32 | 1 43 | 23 47 | 10 6  | 8 25 | 8 26 | 24 8  | 16 7  | 7 14 |     |
| S 17 | 21 25 | 20 0  | 4 30 | 19 56 | 1 43 | 22 17 | 1 2  | 12 42 | 1 5  | 12 0  | 1 0  | 20 53 | 1 33 | 17 46 | 0 38 | 7 32 | 1 43 | 23 47 | 10 5  | 8 20 | 8 25 | 24 10 | 16 7  | 7 14 |     |
| M18  | 21 15 | 15 7  | 3 54 | 19 23 | 1 40 | 22 23 | 0 59 | 12 28 | 1 4  | 11 56 | 1 0  | 20 54 | 1 33 | 17 45 | 0 38 | 7 32 | 1 43 | 23 46 | 10 5  | 8 17 | 8 24 | 24 12 | 16 7  | 7 14 |     |
| T 19 | 21 5  | 9 29  | 3 5  | 18 50 | 1 36 | 22 28 | 0 56 | 12 15 | 1 4  | 11 52 | 1 0  | 20 55 | 1 33 | 17 44 | 0 38 | 7 32 | 1 43 | 23 45 | 10 5  | 8 14 | 8 23 | 24 13 | 16 8  | 7 14 |     |
| W20  | 20 54 | 3 21  | 2 6  | 18 16 | 1 32 | 22 33 | 0 54 | 12 1  | 1 4  | 11 47 | 1 0  | 20 56 | 1 33 | 17 43 | 0 38 | 7 32 | 1 43 | 23 45 | 10 5  | 8 13 | 8 21 | 24 15 | 16 8  | 7 14 |     |
| T 21 | 20 43 | 3n 3  | 0 58 | 17 41 | 1 27 | 22 37 | 0 51 | 11 47 | 1 3  | 11 43 | 1 0  | 20 56 | 1 33 | 17 42 | 0 38 | 7 32 | 1 43 | 23 44 | 10 5  | 8 12 | 8 20 | 24 17 | 16 8  | 7 14 |     |
| F 22 | 20 32 | 9 24  | 0n14 | 17 5  | 1 22 | 22 40 | 0 48 | 11 33 | 1 3  | 11 39 | 1 0  | 20 57 | 1 33 | 17 41 | 0 38 | 7 33 | 1 43 | 23 43 | 10 5  | 8 12 | 8 19 | 24 19 | 16 9  | 7 13 |     |
| S 23 | 20 20 | 15 26 | 1 27 | 16 28 | 1 16 | 22 43 | 0 45 | 11 19 | 1 2  | 11 35 | 1 0  | 20 58 | 1 33 | 17 40 | 0 38 | 7 33 | 1 44 | 23 43 | 10 5  | 8 12 | 8 18 | 24 21 | 16 9  | 7 13 |     |
| S 24 | 20 8  | 20 45 | 2 35 | 15 51 | 1 10 | 22 45 | 0 43 | 11 5  | 1 2  | 11 30 | 1 0  | 20 58 | 1 33 | 17 39 | 0 38 | 7 33 | 1 44 | 23 42 | 10 5  | 8 12 | 8 17 | 24 23 | 16 9  | 7 13 |     |
| M25  | 19 55 | 24 55 | 3 35 | 15 14 | 1 4  | 22 47 | 0 40 | 10 51 | 1 1  | 11 26 | 1 0  | 20 59 | 1 33 | 17 37 | 0 38 | 7 32 | 1 44 | 23 42 | 10 5  | 8 10 | 8 16 | 24 25 | 16 10 | 7 13 |     |
| T 26 | 19 43 | 27 30 | 4 21 | 14 36 | 0 57 | 22 48 | 0 37 | 10 37 | 1 1  | 11 22 | 1 0  | 21 0  | 1 33 | 17 36 | 0 38 | 7 32 | 1 44 | 23 41 | 10 5  | 8 8  | 8 14 | 24 27 | 16 10 | 7 12 |     |
| W27  | 19 29 | 28 12 | 4 51 | 13 58 | 0 50 | 22 48 | 0 34 | 10 23 | 1 0  | 11 17 | 1 0  | 21 0  | 1 33 | 17 35 | 0 38 | 7 32 | 1 44 | 23 40 | 10 5  | 8 5  | 8 13 | 24 29 | 16 10 | 7 12 |     |
| T 28 | 19 16 | 26 55 | 5 1  | 13 20 | 0 42 | 22 48 | 0 31 | 10 9  | 1 0  | 11 13 | 1 0  | 21 1  | 1 33 | 17 34 | 0 38 | 7 32 | 1 44 | 23 40 | 10 5  | 8 1  | 8 12 | 24 31 | 16 11 | 7 12 |     |
| F 29 | 19 2  | 23 51 | 4 52 | 12 41 | 0 34 | 22 47 | 0 29 | 9 54  | 0 59 | 11 9  | 1 0  | 21 2  | 1 33 | 17 33 | 0 38 | 7 32 | 1 44 | 23 39 | 10 5  | 7 57 | 8 11 | 24 33 | 16 11 | 7 12 |     |
| S 30 | 18 48 | 19 23 | 4 25 | 12 3  | 0 26 | 22 45 | 0 26 | 9 40  | 0 59 | 11 4  | 1 0  | 21 2  | 1 33 | 17 32 | 0 38 | 7 32 | 1 44 | 23 38 | 10 5  | 7 53 | 8 10 | 24 35 | 16 11 | 7 11 |     |
| S 31 | 18n34 | 13n58 | 3n42 | 11n24 | 0n18 | 22n42 | 0s23 | 9n25  | 0n58 | 11n 0 | 1n 0 | 21n 3 | 1s34 | 17n31 | 0n38 | 7n32 | 1s44 | 23n38 | 10n 5 | 7n50 | 8n 8 | 24s36 | 16s12 | 7n11 |     |



# ASTRODIENST EPHEMERIS for the year 1707

## geocentric

AUGUST 1707

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂      | ♀     | ♂     | ♂     | ♂     | ♂     | ♂      | ♂     | ♂      | ♂      | ♂    | ♂     | Day  |
|------|----------|----------|-------|--------|-------|-------|-------|-------|-------|--------|-------|--------|--------|------|-------|------|
| M 1  | 20 35 33 | 7♏55°01  | 16♏10 | 2♏27   | 11♏23 | 8♏47  | 4♏11  | 14♏45 | 13♏11 | 23°R31 | 22♏16 | 19°R52 | 20°Y46 | 4♏45 | 5°R 8 | M 1  |
| T 2  | 20 39 30 | 8°52°30  | 29°11 | 3°51   | 12°35 | 9°25  | 4°23  | 14°51 | 13°15 | 23°Y31 | 22°18 | 19°Y48 | 20°43  | 4°52 | 5°5   | T 2  |
| W 3  | 20 43 26 | 9°49°59  | 11♏50 | 5°12   | 13°48 | 10°2  | 4°36  | 14°57 | 13°19 | 23°30  | 22°20 | 19°47  | 20°39  | 4°58 | 5°2   | W 3  |
| T 4  | 20 47 23 | 10°47°29 | 24°9  | 6°31   | 15°0  | 10°40 | 4°48  | 15°2  | 13°22 | 23°30  | 22°22 | 19°D47 | 20°36  | 5°5  | 4°59  | T 4  |
| F 5  | 20 51 19 | 11°45°01 | 6♏13  | 7°48   | 16°13 | 11°18 | 5°0   | 15°8  | 13°26 | 23°30  | 22°24 | 19°R47 | 20°33  | 5°12 | 4°57  | F 5  |
| S 6  | 20 55 16 | 12°42°33 | 18°8  | 9°4    | 17°25 | 11°56 | 5°13  | 15°13 | 13°30 | 23°30  | 22°26 | 19°47  | 20°30  | 5°18 | 4°54  | S 6  |
| S 7  | 20 59 13 | 13°40°06 | 29°58 | 10°17  | 18°38 | 12°33 | 5°25  | 15°18 | 13°33 | 23°29  | 22°28 | 19°45  | 20°27  | 5°25 | 4°51  | S 7  |
| M 8  | 21 3 9   | 14°37°39 | 11♏49 | 11°28  | 19°51 | 13°11 | 5°38  | 15°24 | 13°37 | 23°29  | 22°30 | 19°42  | 20°23  | 5°32 | 4°49  | M 8  |
| T 9  | 21 7 6   | 15°35°14 | 23°46 | 12°37  | 21°4  | 13°49 | 5°50  | 15°29 | 13°41 | 23°29  | 22°32 | 19°36  | 20°20  | 5°39 | 4°46  | T 9  |
| W10  | 21 11 2  | 16°32°50 | 5♏51  | 13°43  | 22°16 | 14°27 | 6°3   | 15°34 | 13°45 | 23°28  | 22°33 | 19°28  | 20°17  | 5°45 | 4°44  | W10  |
| T 11 | 21 14 59 | 17°30°27 | 18°9  | 14°48  | 23°29 | 15°5  | 6°16  | 15°39 | 13°48 | 23°28  | 22°35 | 19°18  | 20°14  | 5°52 | 4°42  | T 11 |
| F 12 | 21 18 55 | 18°28°05 | 0♏41  | 15°49  | 24°42 | 15°43 | 6°28  | 15°44 | 13°52 | 23°27  | 22°37 | 19°8   | 20°11  | 5°59 | 4°40  | F 12 |
| S 13 | 21 22 52 | 19°25°44 | 13°28 | 16°48  | 25°55 | 16°21 | 6°41  | 15°49 | 13°56 | 23°27  | 22°39 | 18°57  | 20°8   | 6°5  | 4°37  | S 13 |
| S 14 | 21 26 49 | 20°23°25 | 26°29 | 17°44  | 27°8  | 16°59 | 6°54  | 15°54 | 14°0  | 23°26  | 22°41 | 18°48  | 20°4   | 6°12 | 4°35  | S 14 |
| M15  | 21 30 45 | 21°21°06 | 9♏43  | 18°38  | 28°21 | 17°37 | 7°6   | 15°58 | 14°3  | 23°26  | 22°43 | 18°40  | 20°1   | 6°19 | 4°33  | M15  |
| T 16 | 21 34 42 | 22°18°50 | 23°10 | 19°28  | 29°34 | 18°15 | 7°19  | 16°3  | 14°7  | 23°25  | 22°45 | 18°35  | 19°58  | 6°25 | 4°31  | T 16 |
| W17  | 21 38 38 | 23°16°34 | 6°Y46 | 20°15  | 0♏47  | 18°54 | 7°32  | 16°7  | 14°11 | 23°25  | 22°47 | 18°33  | 19°55  | 6°32 | 4°29  | W17  |
| T 18 | 21 42 35 | 24°14°20 | 20°32 | 20°58  | 2°0   | 19°32 | 7°45  | 16°12 | 14°14 | 23°24  | 22°49 | 18°D32 | 19°52  | 6°39 | 4°27  | T 18 |
| F 19 | 21 46 31 | 25°12°08 | 4♏26  | 21°38  | 3°14  | 20°10 | 7°57  | 16°16 | 14°18 | 23°23  | 22°51 | 18°33  | 19°48  | 6°45 | 4°26  | F 19 |
| S 20 | 21 50 28 | 26°9°58  | 18°28 | 22°14  | 4°27  | 20°48 | 8°10  | 16°21 | 14°22 | 23°23  | 22°53 | 18°34  | 19°45  | 6°52 | 4°24  | S 20 |
| S 21 | 21 54 24 | 27°7°50  | 2♏36  | 22°46  | 5°40  | 21°27 | 8°23  | 16°25 | 14°25 | 23°22  | 22°55 | 18°R34 | 19°42  | 6°59 | 4°22  | S 21 |
| M22  | 21 58 21 | 28°5°44  | 16°49 | 23°14  | 6°54  | 22°5  | 8°36  | 16°29 | 14°29 | 23°21  | 22°57 | 18°32  | 19°39  | 7°5  | 4°21  | M22  |
| T 23 | 22 2 18  | 29°3°39  | 1♏6   | 23°37  | 8°7   | 22°43 | 8°49  | 16°33 | 14°33 | 23°20  | 22°59 | 18°29  | 19°36  | 7°12 | 4°19  | T 23 |
| W24  | 22 6 14  | 0♏1°36   | 15°22 | 23°56  | 9°21  | 23°22 | 9°2   | 16°37 | 14°36 | 23°19  | 23°1  | 18°23  | 19°33  | 7°19 | 4°18  | W24  |
| T 25 | 22 10 11 | 0°59°33  | 29°35 | 24°9   | 10°34 | 24°0  | 9°15  | 16°41 | 14°40 | 23°19  | 23°2  | 18°16  | 19°29  | 7°26 | 4°17  | T 25 |
| F 26 | 22 14 7  | 1°57°36  | 13♏39 | 24°17  | 11°48 | 24°39 | 9°28  | 16°45 | 14°43 | 23°18  | 23°4  | 18°9   | 19°26  | 7°32 | 4°15  | F 26 |
| S 27 | 22 18 4  | 2°55°38  | 27°29 | 24°R19 | 13°1  | 25°18 | 9°40  | 16°48 | 14°47 | 23°17  | 23°6  | 18°1   | 19°23  | 7°39 | 4°14  | S 27 |
| S 28 | 22 22 0  | 3°53°42  | 11♏3  | 24°15  | 14°15 | 25°56 | 9°53  | 16°52 | 14°51 | 23°16  | 23°8  | 17°55  | 19°20  | 7°46 | 4°13  | S 28 |
| M29  | 22 25 57 | 4°51°47  | 24°16 | 24°5   | 15°29 | 26°35 | 10°6  | 16°55 | 14°54 | 23°15  | 23°10 | 17°51  | 19°17  | 7°52 | 4°12  | M29  |
| T 30 | 22 29 53 | 5°49°55  | 7♏10  | 23°49  | 16°42 | 27°14 | 10°19 | 16°59 | 14°58 | 23°14  | 23°12 | 17°49  | 19°14  | 7°59 | 4°11  | T 30 |
| W31  | 22 33 50 | 6♏48°03  | 19♏45 | 23♏27  | 17♏56 | 27♏52 | 10♏32 | 17♏2  | 15♏1  | 23°Y13 | 23♏14 | 17°D48 | 19°Y10 | 8♏6  | 4♏10  | W31  |

| 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 |
| M 1  | 18n19 | 8n 3  | 2n48 | 10n45 | 0n 9 | 22n39 | 0s20 | 9n11 | 0n58 | 10n55 | 1n 0 | 21n 3 | 1s34 | 17n30 | 0n38 | 7n32 | 1s44 | 23n37 | 10n 5 | 7n47 | 8n 7 | 24s38 | 16s12 | 7n11 |     |      |     |      |     |
| T 2  | 18 4  | 1 58  | 1 47 | 10 7  | 0 0  | 22 36 | 0 17 | 8 56 | 0 57 | 10 51 | 1 0  | 21 4  | 1 34 | 17 29 | 0 38 | 7 32 | 1 44 | 23 36 | 10 5  | 7 46 | 8 6  | 24 40 | 16 13 | 7 11 |     |      |     |      |     |
| W 3  | 17 49 | 4s 2  | 0 42 | 9 29  | 0s 9 | 22 31 | 0 14 | 8 41 | 0 57 | 10 46 | 1 0  | 21 5  | 1 34 | 17 28 | 0 38 | 7 32 | 1 44 | 23 36 | 10 5  | 7 45 | 8 5  | 24 42 | 16 13 | 7 10 |     |      |     |      |     |
| T 4  | 17 33 | 9 44  | 0s23 | 8 51  | 0 18 | 22 26 | 0 12 | 8 27 | 0 56 | 10 42 | 1 0  | 21 5  | 1 34 | 17 27 | 0 38 | 7 32 | 1 44 | 23 35 | 10 5  | 7 45 | 8 4  | 24 44 | 16 14 | 7 10 |     |      |     |      |     |
| F 5  | 17 18 | 14 58 | 1 26 | 8 13  | 0 28 | 22 21 | 0 9  | 8 12 | 0 56 | 10 37 | 1 0  | 21 6  | 1 34 | 17 26 | 0 38 | 7 32 | 1 44 | 23 34 | 10 5  | 7 45 | 8 2  | 24 46 | 16 14 | 7 10 |     |      |     |      |     |
| S 6  | 17 1  | 19 35 | 2 25 | 7 36  | 0 38 | 22 15 | 0 6  | 7 57 | 0 55 | 10 32 | 1 0  | 21 6  | 1 34 | 17 25 | 0 38 | 7 31 | 1 44 | 23 34 | 10 5  | 7 45 | 8 1  | 24 48 | 16 14 | 7 9  |     |      |     |      |     |
| S 7  | 16 45 | 23 23 | 3 17 | 6 59  | 0 48 | 22 8  | 0 3  | 7 42 | 0 55 | 10 28 | 1 0  | 21 7  | 1 34 | 17 24 | 0 38 | 7 31 | 1 44 | 23 33 | 10 5  | 7 44 | 8 0  | 24 49 | 16 15 | 7 9  |     |      |     |      |     |
| M 8  | 16 28 | 26 13 | 4 0  | 6 23  | 0 58 | 22 0  | 0 1  | 7 27 | 0 54 | 10 23 | 1 0  | 21 7  | 1 34 | 17 23 | 0 38 | 7 31 | 1 44 | 23 33 | 10 5  | 7 43 | 7 59 | 24 51 | 16 15 | 7 9  |     |      |     |      |     |
| T 9  | 16 11 | 27 53 | 4 34 | 5 47  | 1 8  | 21 52 | 0n 2 | 7 12 | 0 54 | 10 19 | 1 0  | 21 8  | 1 34 | 17 22 | 0 38 | 7 31 | 1 45 | 23 32 | 10 5  | 7 41 | 7 58 | 24 53 | 16 16 | 7 8  |     |      |     |      |     |
| W10  | 15 54 | 28 16 | 4 55 | 5 12  | 1 19 | 21 43 | 0 5  | 6 57 | 0 53 | 10 14 | 1 0  | 21 8  | 1 34 | 17 21 | 0 38 | 7 31 | 1 45 | 23 31 | 10 5  | 7 38 | 7 56 | 24 55 | 16 16 | 7 8  |     |      |     |      |     |
| T 11 | 15 37 | 27 15 | 5 3  | 4 38  | 1 29 | 21 33 | 0 8  | 6 42 | 0 53 | 10 9  | 1 0  | 21 9  | 1 34 | 17 19 | 0 38 | 7 30 | 1 45 | 23 31 | 10 5  | 7 34 | 7 55 | 24 57 | 16 17 | 7 7  |     |      |     |      |     |
| F 12 | 15 19 | 24 52 | 4 58 | 4 4   | 1 40 | 21 23 | 0 10 | 6 27 | 0 52 | 10 5  | 1 0  | 21 9  | 1 34 | 17 18 | 0 38 | 7 30 | 1 45 | 23 30 | 10 5  | 7 30 | 7 54 | 24 59 | 16 17 | 7 7  |     |      |     |      |     |
| S 13 | 15 1  | 21 13 | 4 37 | 3 32  | 1 50 | 21 13 | 0 13 | 6 11 | 0 52 | 10 0  | 1 0  | 21 9  | 1 34 | 17 17 | 0 38 | 7 30 | 1 45 | 23 30 | 10 5  | 7 26 | 7 53 | 25 0  | 16 18 | 7 7  |     |      |     |      |     |
| S 14 | 14 43 | 16 29 | 4 1  | 3 0   | 2 1  | 21 1  | 0 16 | 5 56 | 0 51 | 9 55  | 1 0  | 21 10 | 1 34 | 17 16 | 0 38 | 7 30 | 1 45 | 23 29 | 10 5  | 7 23 | 7 52 | 25 2  | 16 18 | 7 6  |     |      |     |      |     |
| M15  | 14 24 | 10 54 | 3 12 | 2 30  | 2 11 | 20 49 | 0 18 | 5 41 | 0 51 | 9 50  | 1 0  | 21 10 | 1 35 | 17 15 | 0 38 | 7 29 | 1 45 | 23 28 | 10 5  | 7 20 | 7 50 | 25 4  | 16 18 | 7 6  |     |      |     |      |     |
| T 16 | 14 6  | 4 44  | 2 12 | 2 0   | 2 22 | 20 37 | 0 21 | 5 25 | 0 50 | 9 46  | 1 0  | 21 11 | 1 35 | 17 14 | 0 39 | 7 29 | 1 45 | 23 28 | 10 5  | 7 18 | 7 49 | 25 6  | 16 19 | 7 5  |     |      |     |      |     |
| W17  | 13 47 | 1n44  | 1 3  | 1 32  | 2 32 | 20 24 | 0 23 | 5 10 | 0 50 | 9 41  | 1 0  | 21 11 | 1 35 | 17 13 | 0 39 | 7 29 | 1 45 | 23 27 | 10 6  | 7 17 | 7 48 | 25 7  | 16 19 | 7 5  |     |      |     |      |     |
| T 18 | 13 28 | 8 12  | 0n11 | 1 5   | 2 43 | 20 10 | 0 26 | 4 54 | 0 49 | 9 36  | 1 0  | 21 11 | 1 35 | 17 12 | 0 39 | 7 29 | 1 45 | 23 27 | 10 6  | 7 17 | 7 47 | 25 9  | 16 20 | 7 5  |     |      |     |      |     |
| F 19 | 13 9  | 14 21 | 1 24 | 0 40  | 2 53 | 19 56 | 0 28 | 4 39 | 0 49 | 9 31  | 1 0  | 21 12 | 1 35 | 17 11 | 0 39 | 7 28 | 1 45 | 23 26 | 10 6  | 7 17 | 7 46 | 25 11 | 16 20 | 7 4  |     |      |     |      |     |
| S 20 | 12 49 | 19 49 | 2 34 | 0 17  | 3 3  | 19 41 | 0 31 | 4 23 | 0 48 | 9 27  | 1 0  | 21 12 | 1 35 | 17 10 | 0 39 | 7 28 | 1 45 | 23 25 | 10 6  | 7 17 | 7 44 | 25 13 | 16 21 | 7 4  |     |      |     |      |     |
| S 21 | 12 29 | 24 13 | 3 34 | 0s 5  | 3 13 | 19 25 | 0 33 | 4 8  | 0 48 | 9 22  | 1 0  | 21 13 | 1 35 | 17 9  | 0 39 | 7 28 | 1 45 | 23 25 | 10 6  | 7 17 | 7 43 | 25 15 | 16 21 | 7 3  |     |      |     |      |     |
| M22  | 12 9  | 27 10 | 4 22 | 0 24  | 3 22 | 19 9  | 0 36 | 3 52 | 0 47 | 9 17  | 1 0  | 21 13 | 1 35 | 17 8  | 0 39 | 7 27 | 1 45 | 23 24 | 10 6  | 7 17 | 7 42 | 25 16 | 16 22 | 7 3  |     |      |     |      |     |
| T 23 | 11 49 | 28 22 | 4 53 | 0 42  | 3 31 | 18 53 | 0 38 | 3 36 | 0 47 | 9 12  | 1 0  | 21 13 | 1 35 | 17 7  | 0 39 | 7 27 | 1 45 | 23 24 | 10 6  | 7 15 | 7 41 | 25 18 | 16 22 | 7 2  |     |      |     |      |     |
| W24  | 11 29 | 27 40 | 5 7  | 0 57  | 3 40 | 18 36 | 0 40 | 3 21 | 0 46 | 9 7   | 1 0  | 21 13 | 1 35 | 17 6  | 0 39 | 7 27 | 1 45 | 23 23 | 10 6  | 7 13 | 7 40 | 25 20 | 16 23 | 7 2  |     |      |     |      |     |
| T 25 | 11 8  | 25 11 | 5 1  | 1 10  | 3 48 | 18 18 | 0 42 | 3 5  | 0 46 | 9 2   | 1 0  | 21 14 | 1 35 | 17 5  | 0 39 | 7 26 | 1 45 | 23 23 | 10 6  | 7 11 | 7 38 | 25 21 | 16 23 | 7 1  |     |      |     |      |     |
| F 26 | 10 48 | 21 11 | 4 38 | 1 20  | 3 56 | 18 0  | 0 45 | 2 49 | 0 45 | 8 58  | 1 0  | 21 14 | 1 36 | 17 4  | 0 39 | 7 26 | 1 45 | 23 22 | 10 6  | 7 8  | 7 37 | 25 23 | 16 24 | 7 1  |     |      |     |      |     |
| S 27 | 10 27 | 16 5  | 3 58 | 1 27  | 4 3  | 17 41 | 0 47 | 2 33 | 0 45 | 8 53  | 1 0  | 21 14 | 1 36 | 17 3  | 0 39 | 7 26 | 1 46 | 23 21 | 10 6  | 7 5  | 7 36 | 25 25 | 16 24 | 7 0  |     |      |     |      |     |
| S 28 | 10 6  | 10 18 | 3 5  | 1 31  | 4 9  | 17 22 | 0 49 | 2 18 | 0 44 | 8 48  | 1 0  | 21 15 | 1 36 | 17 2  | 0 39 | 7 25 | 1 46 | 23 21 | 10 7  | 7 3  | 7 35 | 25 27 | 16 25 | 7 0  |     |      |     |      |     |
| M29  | 9 45  | 4 10  | 2 4  | 1 32  | 4 14 | 17 2  | 0 51 | 2 2  | 0 44 | 8 43  | 1 0  | 21 15 | 1 36 | 17 0  | 0 39 | 7 25 | 1 46 | 23 20 | 10 7  | 7 1  | 7 34 | 25 28 | 16 25 | 7 0  |     |      |     |      |     |
| T 30 | 9 23  | 1s58  | 0 57 | 1 29  | 4 18 | 16 42 | 0 53 | 1 46 | 0 43 | 8 48  | 1 0  | 21 15 | 1 36 | 16 59 | 0 39 | 7 24 | 1 46 | 23 20 | 10 7  | 7 0  | 7 32 | 25 30 | 16 26 | 6 59 |     |      |     |      |     |
| W31  | 9n 2  | 7s54  | 0s11 | 1s23  | 4s21 | 16n21 | 0n55 | 1n30 | 0n43 | 8n33  | 1n 0 | 21n15 | 1s36 | 16n58 | 0n39 | 7n24 | 1s46 | 23n19 | 10n 7 | 7n 0 | 7n31 | 25s32 | 16s26 | 6n59 |     |      |     |      |     |

# ASTRODIENST EPHEMERIS for the year 1707

## geocentric

SEPTEMBER 1707

00:00 UT

| Day  | Sid.t    | ☉                    | ☽                  | ♂                  | ♀                  | ♂                  | ♂                  | ♂                  | ♂                  | ♂      | ♂                  | ♂      | ♂      | ♂                  | ♂                 | Day  |
|------|----------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------|--------------------|--------|--------|--------------------|-------------------|------|
| T 1  | 22 37 46 | 7 <sup>h</sup> 46'13 | 2 <sup>m</sup> 2   | 22°R59             | 19 <sup>h</sup> 10 | 28 <sup>m</sup> 31 | 10 <sup>m</sup> 45 | 17 <sup>h</sup> 11 | 15 <sup>h</sup> 5  | 23°R12 | 23 <sup>h</sup> 16 | 17°Y49 | 19°Y 7 | 8 <sup>h</sup> 12  | 4°R10             | T 1  |
| F 2  | 22 41 43 | 8°44'25              | 14° 6              | 22 <sup>m</sup> 24 | 20°24              | 29°10              | 10°58              | 17° 8              | 15° 8              | 23°Y11 | 23°18              | 17°50  | 19° 4  | 8°19               | 4° 9              | F 2  |
| S 3  | 22 45 40 | 9°42'38              | 26° 2              | 21°43              | 21°38              | 29°49              | 11°11              | 17°11              | 15°12              | 23°10  | 23°20              | 17°52  | 19° 1  | 8°26               | 4° 8              | S 3  |
| S 4  | 22 49 36 | 10°40'53             | 7 <sup>h</sup> 53  | 20°57              | 22°52              | 0 <sup>h</sup> 28  | 11°24              | 17°14              | 15°15              | 23° 9  | 23°21              | 17°R53 | 18°58  | 8°32               | 4° 8              | S 4  |
| M 5  | 22 53 33 | 11°39'09             | 19°45              | 20° 6              | 24° 6              | 1° 7               | 11°37              | 17°17              | 15°19              | 23° 7  | 23°23              | 17°52  | 18°54  | 8°39               | 4° 7              | M 5  |
| T 6  | 22 57 29 | 12°37'27             | 1 <sup>h</sup> 34  | 19°11              | 25°20              | 1°46               | 11°50              | 17°20              | 15°22              | 23° 6  | 23°25              | 17°51  | 18°51  | 8°46               | 4° 7              | T 6  |
| W 7  | 23 1 26  | 13°35'47             | 13°51              | 18°13              | 26°34              | 2°25               | 12° 3              | 17°22              | 15°26              | 23° 5  | 23°27              | 17°47  | 18°48  | 8°52               | 4° 7              | W 7  |
| T 8  | 23 5 22  | 14°34'08             | 26°14              | 17°12              | 27°48              | 3° 4               | 12°16              | 17°25              | 15°29              | 23° 4  | 23°29              | 17°43  | 18°45  | 8°59               | 4° 7              | T 8  |
| F 9  | 23 9 19  | 15°32'30             | 8 <sup>h</sup> 53  | 16°11              | 29° 2              | 3°43               | 12°29              | 17°27              | 15°32              | 23° 3  | 23°31              | 17°38  | 18°42  | 9° 6               | 4° 7              | F 9  |
| S 10 | 23 13 15 | 16°30'55             | 21°52              | 15°10              | 0 <sup>h</sup> 16  | 4°22               | 12°42              | 17°30              | 15°36              | 23° 1  | 23°33              | 17°32  | 18°39  | 9°13               | 4°D 7             | S 10 |
| S 11 | 23 17 12 | 17°29'21             | 5 <sup>h</sup> 9   | 14°11              | 1°30               | 5° 1               | 12°55              | 17°32              | 15°39              | 23° 0  | 23°34              | 17°28  | 18°35  | 9°19               | 4° 7              | S 11 |
| M12  | 23 21 9  | 18°27'49             | 18°44              | 13°16              | 2°44               | 5°40               | 13° 8              | 17°34              | 15°42              | 22°59  | 23°36              | 17°24  | 18°32  | 9°26               | 4° 7              | M12  |
| T 13 | 23 25 5  | 19°26'18             | 2°Y35              | 12°25              | 3°59               | 6°20               | 13°21              | 17°36              | 15°46              | 22°57  | 23°38              | 17°22  | 18°29  | 9°33               | 4° 7              | T 13 |
| W14  | 23 29 2  | 20°24'50             | 16°38              | 11°41              | 5°13               | 6°59               | 13°34              | 17°38              | 15°49              | 22°56  | 23°40              | 17°D21 | 18°26  | 9°39               | 4° 7              | W14  |
| T 15 | 23 32 58 | 21°23'24             | 0 <sup>h</sup> 49  | 11° 4              | 6°27               | 7°38               | 13°47              | 17°40              | 15°52              | 22°55  | 23°41              | 17°22  | 18°23  | 9°46               | 4° 8              | T 15 |
| F 16 | 23 36 55 | 22°22'00             | 15° 5              | 10°35              | 7°42               | 8°18               | 14° 0              | 17°41              | 15°55              | 22°53  | 23°43              | 17°23  | 18°20  | 9°53               | 4° 8              | F 16 |
| S 17 | 23 40 51 | 23°20'38             | 29°22              | 10°15              | 8°56               | 8°57               | 14°13              | 17°43              | 15°58              | 22°52  | 23°45              | 17°24  | 18°16  | 9°59               | 4° 9              | S 17 |
| S 18 | 23 44 48 | 24°19'18             | 13 <sup>h</sup> 38 | 10° 5              | 10°10              | 9°37               | 14°26              | 17°44              | 16° 1              | 22°51  | 23°47              | 17°26  | 18°13  | 10° 6              | 4° 9              | S 18 |
| M19  | 23 48 44 | 25°18'01             | 27°50              | 10°D 4             | 11°25              | 10°16              | 14°39              | 17°46              | 16° 5              | 22°49  | 23°48              | 17°R26 | 18°10  | 10°13              | 4°10              | M19  |
| T 20 | 23 52 41 | 26°16'46             | 11 <sup>h</sup> 55 | 10°13              | 12°39              | 10°56              | 14°52              | 17°47              | 16° 8              | 22°48  | 23°50              | 17°25  | 18° 7  | 10°19              | 4°11              | T 20 |
| W21  | 23 56 38 | 27°15'34             | 25°53              | 10°32              | 13°54              | 11°36              | 15° 4              | 17°48              | 16°11              | 22°46  | 23°52              | 17°24  | 18° 4  | 10°26              | 4°12              | W21  |
| T 22 | 0 0 34   | 28°14'23             | 9 <sup>h</sup> 41  | 11° 1              | 15° 8              | 12°15              | 15°17              | 17°49              | 16°14              | 22°45  | 23°53              | 17°21  | 18° 0  | 10°33              | 4°13              | T 22 |
| F 23 | 0 4 31   | 29°13'15             | 23°17              | 11°39              | 16°23              | 12°55              | 15°30              | 17°50              | 16°17              | 22°43  | 23°55              | 17°19  | 17°57  | 10°40              | 4°14              | F 23 |
| S 24 | 0 8 27   | 0 <sup>h</sup> 12'09 | 6 <sup>m</sup> 41  | 12°26              | 17°38              | 13°35              | 15°43              | 17°51              | 16°20              | 22°42  | 23°57              | 17°16  | 17°54  | 10°46              | 4°15              | S 24 |
| S 25 | 0 12 24  | 1°11'05              | 19°50              | 13°20              | 18°52              | 14°15              | 15°56              | 17°51              | 16°23              | 22°40  | 23°58              | 17°14  | 17°51  | 10°53              | 4°16              | S 25 |
| M26  | 0 16 20  | 2°10'03              | 2 <sup>h</sup> 45  | 14°22              | 20° 7              | 14°54              | 16° 8              | 17°52              | 16°25              | 22°39  | 24° 0              | 17°13  | 17°48  | 11° 0              | 4°18              | M26  |
| T 27 | 0 20 17  | 3° 9'03              | 15°24              | 15°31              | 21°22              | 15°34              | 16°21              | 17°52              | 16°28              | 22°37  | 24° 2              | 17°D12 | 17°45  | 11° 6              | 4°19              | T 27 |
| W28  | 0 24 13  | 4° 8'05              | 27°49              | 16°46              | 22°36              | 16°14              | 16°34              | 17°53              | 16°31              | 22°35  | 24° 3              | 17°13  | 17°41  | 11°13              | 4°21              | W28  |
| T 29 | 0 28 10  | 5° 7'09              | 10 <sup>m</sup> 2  | 18° 7              | 23°51              | 16°54              | 16°46              | 17°53              | 16°34              | 22°34  | 24° 5              | 17°13  | 17°38  | 11°20              | 4°22              | T 29 |
| F 30 | 0 32 7   | 6 <sup>h</sup> 6'15  | 22 <sup>m</sup> 3  | 19 <sup>h</sup> 32 | 25 <sup>m</sup> 6  | 17 <sup>h</sup> 34 | 16 <sup>m</sup> 59 | 17 <sup>h</sup> 53 | 16 <sup>h</sup> 37 | 22°Y32 | 24 <sup>h</sup> 6  | 17°Y14 | 17°Y35 | 11 <sup>h</sup> 26 | 4 <sup>h</sup> 24 | F 30 |

| Day  | ☉    | ☾     |      | ♂    | ♀    |       | ♂    | ♂    | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂     | ♂    | ♂    | ♂     | ♂     | ♂    |
|------|------|-------|------|------|------|-------|------|------|------|------|------|-------|------|-------|------|------|------|-------|-------|------|------|-------|-------|------|
|      | decl | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat   | decl | decl | decl  | decl  | lat  |
| T 1  | 8n40 | 13s24 | 1s17 | 1s13 | 4s22 | 16n 0 | 0n57 | 1n14 | 0n42 | 8n28 | 1n 0 | 21n15 | 1s36 | 16n57 | 0n39 | 7n23 | 1s46 | 23n19 | 10n 7 | 7n 0 | 7n30 | 25s33 | 16s27 | 6n58 |
| F 2  | 8 18 | 18 18 | 2 18 | 0 59 | 4 22 | 15 39 | 0 59 | 0 58 | 0 42 | 8 23 | 1 0  | 21 16 | 1 36 | 16 56 | 0 39 | 7 23 | 1 46 | 23 18 | 10 7  | 7 1  | 7 29 | 25 35 | 16 28 | 6 58 |
| S 3  | 7 56 | 22 25 | 3 13 | 0 42 | 4 20 | 15 17 | 1 1  | 0 42 | 0 41 | 8 18 | 1 0  | 21 16 | 1 36 | 16 55 | 0 39 | 7 23 | 1 46 | 23 18 | 10 7  | 7 1  | 7 28 | 25 37 | 16 28 | 6 57 |
| S 4  | 7 34 | 25 36 | 3 59 | 0 20 | 4 17 | 14 54 | 1 2  | 0 26 | 0 41 | 8 13 | 1 0  | 21 16 | 1 36 | 16 54 | 0 39 | 7 22 | 1 46 | 23 17 | 10 8  | 7 2  | 7 26 | 25 38 | 16 29 | 6 57 |
| M 5  | 7 12 | 27 39 | 4 35 | 0n 5 | 4 11 | 14 31 | 1 4  | 0 10 | 0 40 | 8 9  | 1 0  | 21 16 | 1 36 | 16 53 | 0 39 | 7 22 | 1 46 | 23 17 | 10 8  | 7 1  | 7 25 | 25 40 | 16 29 | 6 56 |
| T 6  | 6 50 | 28 28 | 4 59 | 0 33 | 4 4  | 14 8  | 1 6  | 0s 6 | 0 39 | 8 4  | 1 0  | 21 16 | 1 37 | 16 52 | 0 39 | 7 21 | 1 46 | 23 16 | 10 8  | 7 1  | 7 24 | 25 41 | 16 30 | 6 56 |
| W 7  | 6 28 | 27 55 | 5 11 | 1 4  | 3 55 | 13 44 | 1 7  | 0 22 | 0 39 | 7 59 | 1 0  | 21 17 | 1 37 | 16 51 | 0 39 | 7 21 | 1 46 | 23 16 | 10 8  | 6 59 | 7 23 | 25 43 | 16 30 | 6 55 |
| T 8  | 6 5  | 25 59 | 5 8  | 1 38 | 3 43 | 13 20 | 1 9  | 0 38 | 0 38 | 7 54 | 1 0  | 21 17 | 1 37 | 16 50 | 0 39 | 7 20 | 1 46 | 23 15 | 10 8  | 6 58 | 7 21 | 25 45 | 16 31 | 6 55 |
| F 9  | 5 43 | 22 44 | 4 51 | 2 14 | 3 30 | 12 56 | 1 10 | 0 54 | 0 38 | 7 49 | 1 0  | 21 17 | 1 37 | 16 49 | 0 39 | 7 20 | 1 46 | 23 15 | 10 8  | 6 56 | 7 20 | 25 46 | 16 31 | 6 54 |
| S 10 | 5 20 | 18 18 | 4 18 | 2 51 | 3 16 | 12 31 | 1 12 | 1 10 | 0 37 | 7 44 | 1 0  | 21 17 | 1 37 | 16 48 | 0 39 | 7 19 | 1 46 | 23 14 | 10 9  | 6 54 | 7 19 | 25 48 | 16 32 | 6 54 |
| S 11 | 4 57 | 12 54 | 3 31 | 3 28 | 2 59 | 12 6  | 1 13 | 1 26 | 0 37 | 7 39 | 1 0  | 21 17 | 1 37 | 16 47 | 0 39 | 7 19 | 1 46 | 23 14 | 10 9  | 6 52 | 7 18 | 25 50 | 16 32 | 6 53 |
| M12  | 4 34 | 6 46  | 2 30 | 4 6  | 2 42 | 11 40 | 1 15 | 1 42 | 0 36 | 7 34 | 1 0  | 21 17 | 1 37 | 16 47 | 0 39 | 7 18 | 1 46 | 23 14 | 10 9  | 6 51 | 7 17 | 25 51 | 16 33 | 6 52 |
| T 13 | 4 11 | 0 12  | 1 20 | 4 42 | 2 23 | 11 15 | 1 16 | 1 58 | 0 36 | 7 29 | 1 0  | 21 17 | 1 37 | 16 46 | 0 39 | 7 18 | 1 46 | 23 13 | 10 9  | 6 50 | 7 15 | 25 53 | 16 33 | 6 52 |
| W14  | 3 48 | 6n29  | 0 4  | 5 17 | 2 4  | 10 49 | 1 17 | 2 14 | 0 35 | 7 24 | 1 1  | 21 17 | 1 37 | 16 45 | 0 39 | 7 17 | 1 46 | 23 13 | 10 9  | 6 50 | 7 14 | 25 54 | 16 34 | 6 51 |
| T 15 | 3 25 | 12 55 | 1n13 | 5 49 | 1 44 | 10 22 | 1 18 | 2 30 | 0 35 | 7 19 | 1 1  | 21 17 | 1 37 | 16 44 | 0 39 | 7 17 | 1 46 | 23 12 | 10 10 | 6 50 | 7 13 | 25 56 | 16 34 | 6 51 |
| F 16 | 3 2  | 18 43 | 2 27 | 6 19 | 1 24 | 9 55  | 1 19 | 2 46 | 0 34 | 7 14 | 1 1  | 21 17 | 1 38 | 16 43 | 0 39 | 7 16 | 1 46 | 23 12 | 10 10 | 6 50 | 7 12 | 25 57 | 16 35 | 6 50 |
| S 17 | 2 39 | 23 29 | 3 31 | 6 45 | 1 4  | 9 28  | 1 20 | 3 2  | 0 34 | 7 9  | 1 1  | 21 17 | 1 38 | 16 42 | 0 39 | 7 16 | 1 46 | 23 11 | 10 10 | 6 51 | 7 11 | 25 59 | 16 35 | 6 50 |
| S 18 | 2 16 | 26 48 | 4 22 | 7 7  | 0 45 | 9 1   | 1 21 | 3 18 | 0 33 | 7 4  | 1 1  | 21 17 | 1 38 | 16 41 | 0 39 | 7 15 | 1 46 | 23 11 | 10 10 | 6 51 | 7 9  | 26 1  | 16 36 | 6 49 |
| M19  | 1 52 | 28 24 | 4 57 | 7 24 | 0 26 | 8 34  | 1 22 | 3 35 | 0 33 | 6 59 | 1 1  | 21 17 | 1 38 | 16 40 | 0 39 | 7 14 | 1 46 | 23 11 | 10 10 | 6 51 | 7 8  | 26 2  | 16 36 | 6 49 |
| T 20 | 1 29 | 28 9  | 5 13 | 7 37 | 0 8  | 8 6   | 1 23 | 3 51 | 0 32 | 6 55 | 1 1  | 21 17 | 1 38 | 16 39 | 0 39 | 7 14 | 1 47 | 23 10 | 10 11 | 6 51 | 7 7  | 26 4  | 16 37 | 6 48 |
| W21  | 1 6  | 26 6  | 5 11 | 7 46 | 0n 8 | 7 38  | 1 24 | 4 7  | 0 31 | 6 50 | 1 1  | 21 17 | 1 38 | 16 38 | 0 39 | 7 13 | 1 47 | 23 10 | 10 11 | 6 50 | 7 6  | 26 5  | 16 37 | 6 48 |
| T 22 | 0 42 | 22 32 | 4 51 | 7 49 | 0 24 | 7 9   | 1 24 | 4 23 | 0 31 | 6 45 | 1 1  | 21 17 | 1 38 | 16 37 | 0 39 | 7 13 | 1 47 | 23 10 | 10 11 | 6 49 | 7 5  | 26 7  | 16 38 | 6 47 |
| F 23 | 0 19 | 17 47 | 4 15 | 7 48 | 0 39 | 6 41  | 1 25 | 4 39 | 0 30 | 6 40 | 1 1  | 21 17 | 1 38 | 16 37 | 0 39 | 7 12 | 1 47 | 23 9  | 10 11 | 6 48 | 7 3  | 26 8  | 16 38 | 6 47 |
| S 24 | 0s 5 | 12 15 | 3 25 | 7 43 | 0 52 | 6 12  | 1 25 | 4 55 | 0 30 | 6 35 | 1 1  | 21 17 | 1 38 | 16 36 | 0 39 | 7 12 | 1 47 | 23 9  | 10 12 | 6 48 | 7 2  | 26 10 | 16 39 | 6 46 |
| S 25 | 0 28 | 6 16  | 2 25 | 7 33 | 1 4  | 5 44  | 1 26 | 5 11 | 0 29 | 6 30 | 1 1  | 21 17 | 1 39 | 16 35 | 0 39 | 7 11 | 1 47 | 23 9  | 10 12 | 6 47 | 7 1  | 26 11 | 16 39 | 6 46 |
| M26  | 0 52 | 0 7   | 1 19 | 7 19 | 1 15 | 5 14  | 1 26 | 5 26 | 0 29 | 6 25 | 1 1  | 21 17 | 1 39 | 16 34 | 0 39 | 7 10 | 1 47 | 23 8  | 10 12 | 6 46 | 7 0  | 26 13 | 16 40 | 6 45 |
| T 27 | 1 15 | 5s55  | 0 10 | 7 0  | 1 24 | 4 45  | 1 27 | 5 42 | 0 28 | 6 20 | 1 1  | 21 17 | 1 39 | 16 33 | 0 39 | 7 10 | 1 47 | 23 8  | 10 12 | 6 46 | 6 58 | 26 14 | 16 40 | 6 45 |
| W28  | 1 39 | 11 38 | 0s58 | 6 39 | 1 32 | 4 16  | 1 27 | 5 58 | 0 28 | 6 15 | 1 2  | 21 17 | 1 39 | 16 32 | 0 39 | 7 9  | 1 47 | 23 8  | 10 13 | 6 46 | 6 57 | 26 16 | 16 41 | 6 44 |
| T 29 | 2 2  | 16 47 | 2 3  | 6 13 | 1 39 | 3 47  | 1 27 | 6 14 | 0 27 | 6 11 | 1 2  | 21 17 | 1 39 | 16 32 | 0 39 | 7 9  | 1 47 | 23 7  | 10 13 | 6 46 | 6 56 | 26 17 | 16 41 | 6 44 |
| F 30 | 2s26 | 21s14 | 3s 1 | 5n45 | 1n44 | 3n17  | 1n27 | 6s30 | 0n27 | 6n 6 | 1n 2 | 21n17 | 1s39 | 16n31 | 0n39 | 7n 8 | 1s47 | 23n 7 | 10n13 | 6n47 | 6n55 | 26s19 | 16s42 | 6n43 |

ASTRODIENST EPHEMERIS for the year 1707  
geocentric

OCTOBER 1707

00:00 UT

| Day  | Sid.t   | ☉        | ☽       | ♂      | ♀      | ♂      | ♂      | ♂       | ♂        | ♂      | ♂        | ♂      | ♂      | ♂      | ♂     | Day  |
|------|---------|----------|---------|--------|--------|--------|--------|---------|----------|--------|----------|--------|--------|--------|-------|------|
| S 1  | 0 36 3  | 7♌ 5'23  | 3♊ 5'57 | 21♏ 1  | 26♏ 21 | 18♌ 14 | 17♏ 12 | 17°R53  | 16♏ 39   | 22°R31 | 24♏ 8    | 17°Y15 | 17°Y32 | 11♏ 33 | 4♌ 25 | S 1  |
| S 2  | 0 40 0  | 8° 4'33  | 15°48   | 22°34  | 27°36  | 18°55  | 17°24  | 17°II53 | 16°42    | 22°Y29 | 24° 9    | 17°16  | 17°29  | 11°40  | 4°27  | S 2  |
| M 3  | 0 43 56 | 9° 3'45  | 27°40   | 24° 9  | 28°51  | 19°35  | 17°37  | 17°53   | 16°45    | 22°27  | 24°11    | 17°17  | 17°26  | 11°47  | 4°29  | M 3  |
| T 4  | 0 47 53 | 10° 2'58 | 9♌ 3'47 | 25°47  | 0♌ 5   | 20°15  | 17°49  | 17°53   | 16°47    | 22°26  | 24°12    | 17°R17 | 17°22  | 11°53  | 4°31  | T 4  |
| W 5  | 0 51 49 | 11° 2'13 | 21°43   | 27°27  | 1°20   | 20°55  | 18° 2  | 17°52   | 16°50    | 22°24  | 24°14    | 17°17  | 17°19  | 12° 0  | 4°33  | W 5  |
| T 6  | 0 55 46 | 12° 1'30 | 4♌ 5    | 29° 8  | 2°35   | 21°36  | 18°14  | 17°52   | 16°52    | 22°23  | 24°15    | 17°17  | 17°16  | 12° 7  | 4°35  | T 6  |
| F 7  | 0 59 42 | 13° 0'49 | 16°45   | 0♌ 50  | 3°50   | 22°16  | 18°27  | 17°51   | 16°55    | 22°21  | 24°16    | 17°16  | 17°13  | 12°13  | 4°37  | F 7  |
| S 8  | 1 3 39  | 14° 0'09 | 29°46   | 2°33   | 5° 5   | 22°56  | 18°39  | 17°50   | 16°57    | 22°19  | 24°18    | 17°16  | 17°10  | 12°20  | 4°40  | S 8  |
| S 9  | 1 7 36  | 14°59'32 | 13♏ 11  | 4°17   | 6°20   | 23°37  | 18°51  | 17°50   | 16°59    | 22°18  | 24°19    | 17°15  | 17° 6  | 12°27  | 4°42  | S 9  |
| M10  | 1 11 32 | 15°58'56 | 27° 0   | 6° 1   | 7°35   | 24°17  | 19° 4  | 17°49   | 17° 2    | 22°16  | 24°20    | 17°15  | 17° 3  | 12°33  | 4°44  | M10  |
| T 11 | 1 15 29 | 16°58'22 | 11°Y10  | 7°45   | 8°50   | 24°58  | 19°16  | 17°48   | 17° 4    | 22°14  | 24°22    | 17°15  | 17° 0  | 12°40  | 4°47  | T 11 |
| W12  | 1 19 25 | 17°57'50 | 25°37   | 9°30   | 10° 5  | 25°38  | 19°28  | 17°46   | 17° 6    | 22°13  | 24°23    | 17°15  | 16°57  | 12°47  | 4°50  | W12  |
| T 13 | 1 23 22 | 18°57'20 | 10♏ 16  | 11°14  | 11°20  | 26°19  | 19°40  | 17°45   | 17° 9    | 22°11  | 24°24    | 17°15  | 16°54  | 12°54  | 4°52  | T 13 |
| F 14 | 1 27 18 | 19°56'52 | 25° 0   | 12°58  | 12°35  | 27° 0  | 19°52  | 17°44   | 17°11    | 22° 9  | 24°26    | 17°15  | 16°51  | 13° 0  | 4°55  | F 14 |
| S 15 | 1 31 15 | 20°56'27 | 9♏ 42   | 14°41  | 13°50  | 27°41  | 20° 4  | 17°42   | 17°13    | 22° 8  | 24°27    | 17°15  | 16°47  | 13° 7  | 4°58  | S 15 |
| S 16 | 1 35 11 | 21°56'04 | 24°17   | 16°25  | 15° 5  | 28°21  | 20°16  | 17°41   | 17°15    | 22° 6  | 24°28    | 17°14  | 16°44  | 13°14  | 5° 1  | S 16 |
| M17  | 1 39 8  | 22°55'44 | 8♏ 39   | 18° 8  | 16°21  | 29° 2  | 20°28  | 17°39   | 17°17    | 22° 4  | 24°29    | 17°14  | 16°41  | 13°20  | 5° 4  | M17  |
| T 18 | 1 43 5  | 23°55'25 | 22°45   | 19°50  | 17°36  | 29°43  | 20°40  | 17°37   | 17°19    | 22° 3  | 24°30    | 17°D14 | 16°38  | 13°27  | 5° 7  | T 18 |
| W19  | 1 47 1  | 24°55'09 | 6♏ 24   | 21°32  | 18°51  | 0♏ 24  | 20°52  | 17°35   | 17°21    | 22° 1  | 24°32    | 17°14  | 16°35  | 13°34  | 5°10  | W19  |
| T 20 | 1 50 58 | 25°54'55 | 20° 7   | 23°13  | 20° 6  | 1° 5   | 21° 4  | 17°33   | 17°23    | 21°59  | 24°33    | 17°14  | 16°31  | 13°40  | 5°13  | T 20 |
| F 21 | 1 54 54 | 26°54'44 | 3♏ 22   | 24°54  | 21°21  | 1°46   | 21°15  | 17°31   | 17°25    | 21°57  | 24°34    | 17°15  | 16°28  | 13°47  | 5°16  | F 21 |
| S 22 | 1 58 51 | 27°54'34 | 16°23   | 26°34  | 22°36  | 2°27   | 21°27  | 17°29   | 17°27    | 21°56  | 24°35    | 17°16  | 16°25  | 13°54  | 5°19  | S 22 |
| S 23 | 2 2 47  | 28°54'27 | 29° 9   | 28°14  | 23°52  | 3° 8   | 21°38  | 17°26   | 17°28    | 21°54  | 24°36    | 17°17  | 16°22  | 14° 1  | 5°23  | S 23 |
| M24  | 2 6 44  | 29°54'21 | 11♏ 43  | 29°53  | 25° 7  | 3°49   | 21°50  | 17°24   | 17°30    | 21°52  | 24°37    | 17°R17 | 16°19  | 14° 7  | 5°26  | M24  |
| T 25 | 2 10 40 | 0♏ 54'18 | 24° 5   | 1♏ 32  | 26°22  | 4°30   | 22° 1  | 17°21   | 17°32    | 21°51  | 24°38    | 17°17  | 16°16  | 14°14  | 5°30  | T 25 |
| W26  | 2 14 37 | 1°54'17  | 6♏ 18   | 3°10   | 27°37  | 5°12   | 22°13  | 17°19   | 17°33    | 21°49  | 24°39    | 17°17  | 16°12  | 14°21  | 5°33  | W26  |
| T 27 | 2 18 34 | 2°54'17  | 18°22   | 4°48   | 28°53  | 5°53   | 22°24  | 17°16   | 17°35    | 21°48  | 24°40    | 17°15  | 16° 9  | 14°27  | 5°37  | T 27 |
| F 28 | 2 22 30 | 3°54'20  | 0♏ 19   | 6°25   | 0♏ 8   | 6°34   | 22°35  | 17°13   | 17°36    | 21°46  | 24°41    | 17°13  | 16° 6  | 14°34  | 5°40  | F 28 |
| S 29 | 2 26 27 | 4°54'24  | 12°11   | 8° 2   | 1°23   | 7°16   | 22°47  | 17°10   | 17°38    | 21°44  | 24°41    | 17°10  | 16° 3  | 14°41  | 5°44  | S 29 |
| S 30 | 2 30 23 | 5°54'30  | 24° 1   | 9°38   | 2°39   | 7°57   | 22°58  | 17° 7   | 17°39    | 21°43  | 24°42    | 17° 7  | 16° 0  | 14°47  | 5°48  | S 30 |
| M31  | 2 34 20 | 6♏ 54'38 | 5♏ 52   | 11♏ 14 | 3♏ 54  | 8♏ 39  | 23° 9  | 17°II 4 | 17°II 40 | 21°Y41 | 24°II 43 | 17°Y 4 | 15°Y57 | 14°Y54 | 5♏ 52 | M31  |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl | lat  |
| S 1  | 2s49  | 24s45 | 3s51 | 5n14  | 1n49 | 2n47  | 1n27 | 6s46  | 0n26 | 6n 1 | 1n 2 | 21n17 | 1s39 | 16n30 | 0n39 | 7n 7 | 1s47 |
| S 2  | 3 13  | 27 12 | 4 31 | 4 40  | 1 52 | 2 17  | 1 27 | 7 2   | 0 25 | 5 56 | 1 2  | 21 17 | 1 39 | 16 29 | 0 40 | 7 7  | 1 47 |
| M 3  | 3 36  | 28 26 | 4 59 | 4 5   | 1 55 | 1 48  | 1 27 | 7 17  | 0 25 | 5 51 | 1 2  | 21 17 | 1 39 | 16 28 | 0 40 | 7 6  | 1 47 |
| T 4  | 3 59  | 28 21 | 5 14 | 3 27  | 1 56 | 1 18  | 1 27 | 7 33  | 0 24 | 5 46 | 1 2  | 21 17 | 1 39 | 16 28 | 0 40 | 7 5  | 1 47 |
| W 5  | 4 22  | 26 55 | 5 16 | 2 48  | 1 56 | 0 48  | 1 27 | 7 49  | 0 24 | 5 42 | 1 2  | 21 16 | 1 40 | 16 27 | 0 40 | 7 5  | 1 47 |
| T 6  | 4 46  | 24 11 | 5 4  | 2 7   | 1 56 | 0 18  | 1 26 | 8 4   | 0 23 | 5 37 | 1 2  | 21 16 | 1 40 | 16 26 | 0 40 | 7 4  | 1 47 |
| F 7  | 5 9   | 20 14 | 4 36 | 1 26  | 1 55 | 0s13  | 1 26 | 8 20  | 0 23 | 5 32 | 1 2  | 21 16 | 1 40 | 16 25 | 0 40 | 7 4  | 1 47 |
| S 8  | 5 32  | 15 13 | 3 54 | 0 43  | 1 53 | 0 43  | 1 26 | 8 35  | 0 22 | 5 27 | 1 3  | 21 16 | 1 40 | 16 25 | 0 40 | 7 3  | 1 47 |
| S 9  | 5 55  | 9 21  | 2 58 | 0s 0  | 1 51 | 1 13  | 1 25 | 8 51  | 0 22 | 5 23 | 1 3  | 21 16 | 1 40 | 16 24 | 0 40 | 7 2  | 1 47 |
| M10  | 6 18  | 2 53  | 1 50 | 0 44  | 1 48 | 1 43  | 1 25 | 9 6   | 0 21 | 5 18 | 1 3  | 21 16 | 1 40 | 16 23 | 0 40 | 7 2  | 1 47 |
| T 11 | 6 41  | 3n54  | 0 34 | 1 29  | 1 45 | 2 13  | 1 24 | 9 22  | 0 20 | 5 13 | 1 3  | 21 15 | 1 40 | 16 23 | 0 40 | 7 1  | 1 47 |
| W12  | 7 4   | 10 38 | 0n46 | 2 13  | 1 41 | 2 43  | 1 24 | 9 37  | 0 20 | 5 9  | 1 3  | 21 15 | 1 40 | 16 22 | 0 40 | 7 0  | 1 47 |
| T 13 | 7 26  | 16 53 | 2 4  | 2 58  | 1 37 | 3 13  | 1 23 | 9 52  | 0 19 | 5 4  | 1 3  | 21 15 | 1 40 | 16 21 | 0 40 | 7 0  | 1 47 |
| F 14 | 7 49  | 22 12 | 3 14 | 3 43  | 1 32 | 3 43  | 1 22 | 10 8  | 0 19 | 4 59 | 1 3  | 21 15 | 1 40 | 16 21 | 0 40 | 6 59 | 1 47 |
| S 15 | 8 11  | 26 5  | 4 12 | 4 27  | 1 27 | 4 13  | 1 21 | 10 23 | 0 18 | 4 55 | 1 3  | 21 15 | 1 40 | 16 20 | 0 40 | 6 59 | 1 47 |
| S 16 | 8 34  | 28 13 | 4 52 | 5 12  | 1 22 | 4 43  | 1 20 | 10 38 | 0 18 | 4 50 | 1 3  | 21 14 | 1 40 | 16 20 | 0 40 | 6 58 | 1 47 |
| M17  | 8 56  | 28 25 | 5 14 | 5 56  | 1 17 | 5 13  | 1 19 | 10 53 | 0 17 | 4 45 | 1 4  | 21 14 | 1 41 | 16 19 | 0 40 | 6 57 | 1 47 |
| T 18 | 9 18  | 26 44 | 5 16 | 6 41  | 1 11 | 5 43  | 1 18 | 11 8  | 0 16 | 4 41 | 1 4  | 21 14 | 1 41 | 16 18 | 0 40 | 6 57 | 1 47 |
| W19  | 9 40  | 23 29 | 4 59 | 7 24  | 1 5  | 6 12  | 1 17 | 11 23 | 0 16 | 4 36 | 1 4  | 21 14 | 1 41 | 16 18 | 0 40 | 6 56 | 1 47 |
| T 20 | 10 2  | 19 1  | 4 26 | 8 8   | 0 59 | 6 42  | 1 16 | 11 38 | 0 15 | 4 32 | 1 4  | 21 13 | 1 41 | 16 17 | 0 40 | 6 55 | 1 47 |
| F 21 | 10 23 | 13 42 | 3 40 | 8 50  | 0 53 | 7 11  | 1 15 | 11 53 | 0 15 | 4 27 | 1 4  | 21 13 | 1 41 | 16 17 | 0 40 | 6 55 | 1 47 |
| S 22 | 10 45 | 7 53  | 2 43 | 9 33  | 0 46 | 7 40  | 1 14 | 12 7  | 0 14 | 4 23 | 1 4  | 21 13 | 1 41 | 16 16 | 0 40 | 6 54 | 1 47 |
| S 23 | 11 6  | 1 51  | 1 39 | 10 15 | 0 40 | 8 9   | 1 12 | 12 22 | 0 14 | 4 18 | 1 4  | 21 13 | 1 41 | 16 16 | 0 40 | 6 54 | 1 47 |
| M24  | 11 27 | 4s10  | 0 31 | 10 56 | 0 33 | 8 38  | 1 11 | 12 37 | 0 13 | 4 14 | 1 4  | 21 12 | 1 41 | 16 15 | 0 40 | 6 53 | 1 47 |
| T 25 | 11 48 | 9 56  | 0s38 | 11 37 | 0 27 | 9 7   | 1 10 | 12 51 | 0 12 | 4 10 | 1 5  | 21 12 | 1 41 | 16 15 | 0 40 | 6 52 | 1 47 |
| W26  | 12 9  | 15 16 | 1 43 | 12 17 | 0 20 | 9 35  | 1 8  | 13 5  | 0 12 | 4 5  | 1 5  | 21 12 | 1 41 | 16 14 | 0 40 | 6 52 | 1 47 |
| T 27 | 12 30 | 19 56 | 2 43 | 12 56 | 0 13 | 10 3  | 1 7  | 13 20 | 0 11 | 4 1  | 1 5  | 21 11 | 1 41 | 16 14 | 0 40 | 6 51 | 1 47 |
| F 28 | 12 50 | 23 46 | 3 36 | 13 35 | 0 7  | 10 31 | 1 5  | 13 34 | 0 11 | 3 56 | 1 5  | 21 11 | 1 41 | 16 14 | 0 40 | 6 51 | 1 47 |
| S 29 | 13 11 | 26 34 | 4 18 | 14 13 | 0s 0 | 10 59 | 1 3  | 13 48 | 0 10 | 3 52 | 1 5  | 21 11 | 1 41 | 16 13 | 0 41 | 6 50 | 1 47 |
| S 30 | 13 31 | 28 10 | 4 50 | 14 50 | 0 7  | 11 27 | 1 2  | 14 2  | 0 10 | 3 48 | 1 5  | 21 10 | 1 41 | 16 13 | 0 41 | 6 49 | 1 47 |
| M31  | 13s51 | 28s29 | 5s 9 | 15s26 | 0s14 | 11s54 | 1n 0 | 14s16 | 0n 9 | 3n44 | 1n 6 | 21n10 | 1s41 | 16n12 | 0n41 | 6n49 | 1s47 |

Julian Day Number = 2344801.5, Delta T = 12.03 sec  
Ecliptic obliquity = 23°28'47, Nutation = - 0°00'06, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 20°39'38, Lahiri = 19°46'38Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1707  
geocentric

NOVEMBER 1707

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♂     | ♀     | ♂     | ♂     | ♂      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂     | ♂    | Day  |
|------|---------|----------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|------|------|
| T 1  | 2 38 16 | 7♈54'48  | 17♌48 | 12♈50 | 5♈ 9  | 9♈20  | 23♈20 | 17°R 1 | 17♈42  | 21°R39 | 24♈44  | 17°R 2 | 15♈53  | 15♈ 1 | 5♌56 | T 1  |
| W 2  | 2 42 13 | 8°54'58  | 29°52 | 14°25 | 6°25  | 10° 2 | 23°30 | 16♈58  | 17°43  | 21°Y38 | 24°45  | 17°Y 0 | 15°50  | 15° 8 | 6° 0 | W 2  |
| T 3  | 2 46 9  | 9°55'11  | 12♈ 9 | 15°59 | 7°40  | 10°44 | 23°41 | 16°54  | 17°44  | 21°36  | 24°45  | 17°D 0 | 15°47  | 15°14 | 6° 4 | T 3  |
| F 4  | 2 50 6  | 10°55'25 | 24°43 | 17°34 | 8°55  | 11°25 | 23°52 | 16°51  | 17°45  | 21°35  | 24°46  | 17° 1  | 15°44  | 15°21 | 6° 8 | F 4  |
| S 5  | 2 54 3  | 11°55'40 | 7♈39  | 19° 7 | 10°11 | 12° 7 | 24° 3 | 16°47  | 17°46  | 21°33  | 24°47  | 17° 2  | 15°41  | 15°28 | 6°12 | S 5  |
| S 6  | 2 57 59 | 12°55'57 | 21° 1 | 20°41 | 11°26 | 12°49 | 24°13 | 16°44  | 17°47  | 21°32  | 24°47  | 17° 4  | 15°37  | 15°34 | 6°16 | S 6  |
| M 7  | 3 1 56  | 13°56'15 | 4♈49  | 22°14 | 12°41 | 13°31 | 24°24 | 16°40  | 17°48  | 21°30  | 24°48  | 17° 5  | 15°34  | 15°41 | 6°21 | M 7  |
| T 8  | 3 5 52  | 14°56'35 | 19° 5 | 23°47 | 13°57 | 14°13 | 24°34 | 16°36  | 17°49  | 21°28  | 24°49  | 17°R 5 | 15°31  | 15°48 | 6°25 | T 8  |
| W 9  | 3 9 49  | 15°56'56 | 3♈45  | 25°20 | 15°12 | 14°54 | 24°44 | 16°32  | 17°50  | 21°27  | 24°49  | 17° 5  | 15°28  | 15°54 | 6°29 | W 9  |
| T 10 | 3 13 45 | 16°57'19 | 18°43 | 26°52 | 16°27 | 15°36 | 24°54 | 16°29  | 17°51  | 21°26  | 24°50  | 17° 2  | 15°25  | 16° 1 | 6°34 | T 10 |
| F 11 | 3 17 42 | 17°57'44 | 3♈51  | 28°24 | 17°43 | 16°18 | 25° 4 | 16°25  | 17°52  | 21°24  | 24°50  | 16°58  | 15°22  | 16° 8 | 6°38 | F 11 |
| S 12 | 3 21 38 | 18°58'10 | 18°59 | 29°55 | 18°58 | 17° 1 | 25°14 | 16°21  | 17°52  | 21°23  | 24°51  | 16°54  | 15°18  | 16°15 | 6°43 | S 12 |
| S 13 | 3 25 35 | 19°58'39 | 3♈58  | 1♈27  | 20°13 | 17°43 | 25°24 | 16°16  | 17°53  | 21°21  | 24°51  | 16°49  | 15°15  | 16°21 | 6°48 | S 13 |
| M14  | 3 29 32 | 20°59'09 | 18°39 | 2°58  | 21°29 | 18°25 | 25°34 | 16°12  | 17°54  | 21°20  | 24°52  | 16°45  | 15°12  | 16°28 | 6°52 | M14  |
| T 15 | 3 33 28 | 21°59'41 | 2♈57  | 4°29  | 22°44 | 19° 7 | 25°44 | 16° 8  | 17°54  | 21°18  | 24°52  | 16°42  | 15° 9  | 16°35 | 6°57 | T 15 |
| W16  | 3 37 25 | 23° 0'14 | 16°51 | 5°59  | 24° 0 | 19°49 | 25°53 | 16° 4  | 17°55  | 21°17  | 24°52  | 16°40  | 15° 6  | 16°41 | 7° 2 | W16  |
| T 17 | 3 41 21 | 24° 0'50 | 0♈20  | 7°30  | 25°15 | 20°32 | 26° 3 | 15°59  | 17°55  | 21°16  | 24°53  | 16°D40 | 15° 3  | 16°48 | 7° 7 | T 17 |
| F 18 | 3 45 18 | 25° 1'27 | 13°26 | 8°59  | 26°31 | 21°14 | 26°12 | 15°55  | 17°55  | 21°14  | 24°53  | 16°41  | 14°59  | 16°55 | 7°11 | F 18 |
| S 19 | 3 49 14 | 26° 2'06 | 26°12 | 10°29 | 27°46 | 21°56 | 26°22 | 15°51  | 17°56  | 21°13  | 24°53  | 16°43  | 14°56  | 17° 2 | 7°16 | S 19 |
| S 20 | 3 53 11 | 27° 2'46 | 8♈42  | 11°58 | 29° 1 | 22°39 | 26°31 | 15°46  | 17°56  | 21°12  | 24°53  | 16°44  | 14°53  | 17° 8 | 7°21 | S 20 |
| M21  | 3 57 7  | 28° 3'28 | 21° 0 | 13°27 | 0♈17  | 23°21 | 26°40 | 15°41  | 17°56  | 21°10  | 24°54  | 16°R44 | 14°50  | 17°15 | 7°26 | M21  |
| T 22 | 4 1 4   | 29° 4'12 | 3♈ 8  | 14°56 | 1°32  | 24° 4 | 26°49 | 15°37  | 17°56  | 21° 9  | 24°54  | 16°43  | 14°47  | 17°22 | 7°31 | T 22 |
| W23  | 4 5 1   | 0♈47     | 15° 9 | 16°24 | 2°48  | 24°47 | 26°58 | 15°32  | 17°56  | 21° 8  | 24°54  | 16°39  | 14°43  | 17°28 | 7°36 | W23  |
| T 24 | 4 8 57  | 1° 5'44  | 27° 5 | 17°51 | 4° 3  | 25°29 | 27° 6 | 15°27  | 17°R56 | 21° 7  | 24°54  | 16°33  | 14°40  | 17°35 | 7°41 | T 24 |
| F 25 | 4 12 54 | 2° 6'32  | 8♈58  | 19°18 | 5°19  | 26°12 | 27°15 | 15°23  | 17°56  | 21° 5  | 24°54  | 16°25  | 14°37  | 17°42 | 7°47 | F 25 |
| S 26 | 4 16 50 | 3° 7'21  | 20°49 | 20°44 | 6°34  | 26°55 | 27°23 | 15°18  | 17°56  | 21° 4  | 24°54  | 16°16  | 14°34  | 17°48 | 7°52 | S 26 |
| S 27 | 4 20 47 | 4° 8'11  | 2♈40  | 22° 9 | 7°49  | 27°38 | 27°32 | 15°13  | 17°56  | 21° 3  | 24°R54 | 16° 6  | 14°31  | 17°55 | 7°57 | S 27 |
| M28  | 4 24 43 | 5° 9'02  | 14°33 | 23°33 | 9° 5  | 28°20 | 27°40 | 15° 8  | 17°56  | 21° 2  | 24°54  | 15°57  | 14°28  | 18° 2 | 8° 2 | M28  |
| T 29 | 4 28 40 | 6° 9'55  | 26°30 | 24°57 | 10°20 | 29° 3 | 27°48 | 15° 4  | 17°56  | 21° 1  | 24°54  | 15°48  | 14°24  | 18° 9 | 8° 8 | T 29 |
| W30  | 4 32 36 | 7♈10'48  | 8♈33  | 26♈19 | 11♈36 | 29♈46 | 27♈56 | 14♈59  | 17♈55  | 21°Y 0 | 24♈54  | 15°Y42 | 14°Y21 | 18♈15 | 8♌13 | 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  | 14s10 | 27s29 | 5s15 | 16s 2 | 0s20 | 12s21 | 0n58 | 14s30 | 0n 8 | 3n40 | 1n 6 | 21n10 | 1s42 | 16n12 | 0n41 | 6n48 | 1s47 | 23n 4 | 10n23 | 6n42 | 6n16 | 27s 2 | 16s53 | 6n28 |     |
| W 2  | 14 30 | 25 13 | 5 7  | 16 37 | 0 27 | 12 47 | 0 56 | 14 44 | 0 8  | 3 35 | 1 6  | 21 9  | 1 42 | 16 12 | 0 41 | 6 48 | 1 47 | 23 4  | 10 24 | 6 41 | 6 15 | 27 3  | 16 53 | 6 28 |     |
| T 3  | 14 49 | 21 44 | 4 45 | 17 11 | 0 33 | 13 14 | 0 55 | 14 57 | 0 7  | 3 31 | 1 6  | 21 9  | 1 42 | 16 11 | 0 41 | 6 47 | 1 47 | 23 4  | 10 24 | 6 41 | 6 13 | 27 4  | 16 53 | 6 28 |     |
| F 4  | 15 8  | 17 13 | 4 9  | 17 44 | 0 40 | 13 40 | 0 53 | 15 11 | 0 7  | 3 27 | 1 6  | 21 9  | 1 42 | 16 11 | 0 41 | 6 46 | 1 47 | 23 4  | 10 24 | 6 42 | 6 12 | 27 5  | 16 53 | 6 27 |     |
| S 5  | 15 26 | 11 48 | 3 20 | 18 17 | 0 46 | 14 5  | 0 51 | 15 24 | 0 6  | 3 23 | 1 6  | 21 8  | 1 42 | 16 11 | 0 41 | 6 46 | 1 47 | 23 4  | 10 25 | 6 42 | 6 11 | 27 6  | 16 54 | 6 27 |     |
| S 6  | 15 45 | 5 41  | 2 18 | 18 48 | 0 53 | 14 31 | 0 49 | 15 37 | 0 5  | 3 19 | 1 6  | 21 8  | 1 42 | 16 10 | 0 41 | 6 45 | 1 47 | 23 4  | 10 25 | 6 43 | 6 10 | 27 8  | 16 54 | 6 26 |     |
| M 7  | 16 3  | 0n54  | 1 7  | 19 18 | 0 59 | 14 56 | 0 47 | 15 51 | 0 5  | 3 15 | 1 7  | 21 7  | 1 42 | 16 10 | 0 41 | 6 45 | 1 47 | 23 4  | 10 26 | 6 43 | 6 8  | 27 9  | 16 54 | 6 26 |     |
| T 8  | 16 21 | 7 39  | 0n11 | 19 48 | 1 5  | 15 20 | 0 45 | 16 4  | 0 4  | 3 11 | 1 7  | 21 7  | 1 42 | 16 10 | 0 41 | 6 44 | 1 47 | 23 4  | 10 26 | 6 43 | 6 7  | 27 10 | 16 54 | 6 26 |     |
| W 9  | 16 38 | 14 12 | 1 30 | 20 17 | 1 11 | 15 44 | 0 43 | 16 17 | 0 4  | 3 7  | 1 7  | 21 7  | 1 42 | 16 10 | 0 41 | 6 44 | 1 47 | 23 5  | 10 26 | 6 43 | 6 6  | 27 11 | 16 54 | 6 25 |     |
| T 10 | 16 56 | 20 3  | 2 44 | 20 44 | 1 17 | 16 8  | 0 41 | 16 30 | 0 3  | 3 3  | 1 7  | 21 6  | 1 42 | 16 10 | 0 41 | 6 43 | 1 47 | 23 5  | 10 27 | 6 42 | 6 5  | 27 12 | 16 54 | 6 25 |     |
| F 11 | 17 13 | 24 41 | 3 48 | 21 11 | 1 23 | 16 31 | 0 39 | 16 42 | 0 2  | 2 59 | 1 7  | 21 6  | 1 42 | 16 9  | 0 41 | 6 43 | 1 47 | 23 5  | 10 27 | 6 41 | 6 3  | 27 13 | 16 55 | 6 25 |     |
| S 12 | 17 29 | 27 36 | 4 36 | 21 36 | 1 28 | 16 54 | 0 37 | 16 55 | 0 2  | 2 56 | 1 8  | 21 5  | 1 42 | 16 9  | 0 41 | 6 42 | 1 47 | 23 5  | 10 27 | 6 39 | 6 2  | 27 15 | 16 55 | 6 24 |     |
| S 13 | 17 46 | 28 29 | 5 4  | 22 1  | 1 34 | 17 17 | 0 34 | 17 7  | 0 1  | 2 52 | 1 8  | 21 5  | 1 42 | 16 9  | 0 41 | 6 42 | 1 47 | 23 5  | 10 28 | 6 37 | 6 1  | 27 16 | 16 55 | 6 24 |     |
| M14  | 18 2  | 27 19 | 5 11 | 22 24 | 1 39 | 17 39 | 0 32 | 17 20 | 0 1  | 2 48 | 1 8  | 21 5  | 1 42 | 16 9  | 0 41 | 6 41 | 1 47 | 23 5  | 10 28 | 6 35 | 6 0  | 27 17 | 16 55 | 6 24 |     |
| T 15 | 18 18 | 24 23 | 4 59 | 22 46 | 1 44 | 18 0  | 0 30 | 17 32 | 0 0  | 2 44 | 1 8  | 21 4  | 1 42 | 16 9  | 0 41 | 6 41 | 1 47 | 23 6  | 10 29 | 6 34 | 5 59 | 27 18 | 16 55 | 6 23 |     |
| W16  | 18 33 | 20 6  | 4 30 | 23 8  | 1 49 | 18 21 | 0 28 | 17 44 | 0s 1 | 2 41 | 1 8  | 21 4  | 1 42 | 16 9  | 0 41 | 6 40 | 1 47 | 23 6  | 10 29 | 6 34 | 5 57 | 27 19 | 16 55 | 6 23 |     |
| T 17 | 18 48 | 14 54 | 3 46 | 23 28 | 1 53 | 18 42 | 0 25 | 17 56 | 0 1  | 2 37 | 1 8  | 21 3  | 1 42 | 16 9  | 0 41 | 6 40 | 1 46 | 23 6  | 10 29 | 6 34 | 5 56 | 27 20 | 16 55 | 6 23 |     |
| F 18 | 19 3  | 9 10  | 2 51 | 23 46 | 1 58 | 19 2  | 0 23 | 18 8  | 0 2  | 2 34 | 1 9  | 21 3  | 1 42 | 16 8  | 0 41 | 6 39 | 1 46 | 23 6  | 10 30 | 6 34 | 5 55 | 27 21 | 16 55 | 6 23 |     |
| S 19 | 19 18 | 3 11  | 1 49 | 24 4  | 2 2  | 19 21 | 0 21 | 18 19 | 0 2  | 2 30 | 1 9  | 21 2  | 1 42 | 16 8  | 0 41 | 6 39 | 1 46 | 23 7  | 10 30 | 6 35 | 5 54 | 27 22 | 16 55 | 6 22 |     |
| S 20 | 19 32 | 2s47  | 0 44 | 24 20 | 2 6  | 19 40 | 0 18 | 18 31 | 0 3  | 2 27 | 1 9  | 21 2  | 1 42 | 16 8  | 0 41 | 6 38 | 1 46 | 23 7  | 10 30 | 6 35 | 5 52 | 27 23 | 16 55 | 6 22 |     |
| M21  | 19 46 | 8 34  | 0s23 | 24 35 | 2 9  | 19 59 | 0 16 | 18 42 | 0 4  | 2 23 | 1 9  | 21 1  | 1 42 | 16 8  | 0 42 | 6 38 | 1 46 | 23 7  | 10 31 | 6 35 | 5 51 | 27 25 | 16 55 | 6 22 |     |
| T 22 | 19 59 | 13 57 | 1 28 | 24 49 | 2 12 | 20 17 | 0 14 | 18 53 | 0 4  | 2 20 | 1 9  | 21 1  | 1 42 | 16 8  | 0 42 | 6 37 | 1 46 | 23 8  | 10 31 | 6 35 | 5 50 | 27 26 | 16 55 | 6 21 |     |
| W23  | 20 12 | 18 45 | 2 28 | 25 1  | 2 15 | 20 34 | 0 11 | 19 4  | 0 5  | 2 17 | 1 10 | 21 1  | 1 42 | 16 8  | 0 42 | 6 37 | 1 46 | 23 8  | 10 32 | 6 33 | 5 49 | 27 27 | 16 55 | 6 21 |     |
| T 24 | 20 25 | 22 47 | 3 20 | 25 13 | 2 18 | 20 51 | 0 9  | 19 15 | 0 5  | 2 13 | 1 10 | 21 0  | 1 42 | 16 8  | 0 42 | 6 37 | 1 46 | 23 8  | 10 32 | 6 31 | 5 47 | 27 28 | 16 55 | 6 21 |     |
| F 25 | 20 37 | 25 51 | 4 4  | 25 22 | 2 20 | 21 7  | 0 7  | 19 26 | 0 6  | 2 10 | 1 10 | 21 0  | 1 42 | 16 8  | 0 42 | 6 36 | 1 46 | 23 8  | 10 32 | 6 28 | 5 46 | 27 29 | 16 55 | 6 21 |     |
| S 26 | 20 49 | 27 46 | 4 37 | 25 31 | 2 22 | 21 22 | 0 4  | 19 37 | 0 7  | 2 7  | 1 10 | 20 59 | 1 42 | 16 9  | 0 42 | 6 36 | 1 46 | 23 9  | 10 33 | 6 24 | 5 45 | 27 30 | 16 55 | 6 20 |     |
| S 27 | 21 1  | 28 25 | 4 58 | 25 37 | 2 23 | 21 37 | 0 2  | 19 47 | 0 7  | 2 4  | 1 11 | 20 59 | 1 42 | 16 9  | 0 42 | 6 35 | 1 46 | 23 9  | 10 33 | 6 21 | 5 44 | 27 31 | 16 55 | 6 20 |     |
| M28  | 21 12 | 27 45 | 5 6  | 25 43 | 2 24 | 21 52 | 0s 1 | 19 57 | 0 8  | 2 1  | 1 11 | 20 58 | 1 41 | 16 9  | 0 42 | 6 35 | 1 46 | 23 9  | 10 34 | 6 17 | 5 43 | 27 32 | 16 55 | 6 20 |     |
| T 29 | 21 22 | 25 49 | 5 1  | 25 47 | 2 24 | 22 5  | 0 3  | 20 7  | 0 8  | 1 58 | 1 11 | 20 58 | 1 41 | 16 9  | 0 42 | 6 35 | 1 46 | 23 10 | 10 34 | 6 14 | 5 41 | 27 33 | 16 55 | 6 20 |     |
| W30  | 21s33 | 22s42 | 4s43 | 25s50 | 2s24 | 22s18 | 0s 5 | 20s17 | 0s 9 | 1n55 | 1n11 | 20n57 | 1s41 | 16n 9 | 0n42 | 6n34 | 1s46 | 23n10 | 10n34 | 6n11 | 5n40 | 27s34 | 16s55 | 6n20 |     |

# ASTRODIENST EPHEMERIS for the year 1707

## geocentric

DECEMBER 1707

00:00 UT

| Day  | Sid.t   | ☉        | ☽      | ♂      | ♀     | ♂     | ♂     | ♂       | ♂      | ♂      | ♂      | ♂      | ♂      | ♂     | ♂     | Day  |
|------|---------|----------|--------|--------|-------|-------|-------|---------|--------|--------|--------|--------|--------|-------|-------|------|
| T 1  | 4 36 33 | 8♂11'42  | 20♂48  | 27♂39  | 12♂51 | 0♂29  | 28♂4  | 14°R54  | 17°R55 | 20°R59 | 24°R54 | 15°R38 | 14°Y18 | 18♂22 | 8♂18  | T 1  |
| F 2  | 4 40 30 | 9°12'37  | 3♂17   | 28°58  | 14° 7 | 1°12  | 28°12 | 14°II49 | 17°Ω55 | 20°Y58 | 24°Ω54 | 15°Y36 | 14°15  | 18°29 | 8°24  | F 2  |
| S 3  | 4 44 26 | 10°13'32 | 16° 5  | 0♂15   | 15°22 | 1°55  | 28°19 | 14°44   | 17°54  | 20°57  | 24°54  | 15°D36 | 14°12  | 18°35 | 8°29  | S 3  |
| S 4  | 4 48 23 | 11°14'29 | 29°17  | 1°30   | 16°37 | 2°39  | 28°27 | 14°39   | 17°54  | 20°56  | 24°54  | 15°37  | 14° 9  | 18°42 | 8°35  | S 4  |
| M 5  | 4 52 19 | 12°15'26 | 12°Y55 | 2°42   | 17°53 | 3°22  | 28°34 | 14°34   | 17°53  | 20°55  | 24°53  | 15°R38 | 14° 5  | 18°49 | 8°40  | M 5  |
| T 6  | 4 56 16 | 13°16'23 | 27° 2  | 3°51   | 19° 8 | 4° 5  | 28°41 | 14°29   | 17°52  | 20°54  | 24°53  | 15°37  | 14° 2  | 18°56 | 8°45  | T 6  |
| W 7  | 5 0 12  | 14°17'21 | 11♂37  | 4°57   | 20°24 | 4°48  | 28°48 | 14°24   | 17°52  | 20°53  | 24°53  | 15°35  | 13°59  | 19° 2 | 8°51  | W 7  |
| T 8  | 5 4 9   | 15°18'20 | 26°37  | 5°59   | 21°39 | 5°32  | 28°55 | 14°19   | 17°51  | 20°53  | 24°52  | 15°29  | 13°56  | 19° 9 | 8°57  | T 8  |
| F 9  | 5 8 5   | 16°19'20 | 11♂53  | 6°56   | 22°55 | 6°15  | 29° 2 | 14°14   | 17°50  | 20°52  | 24°52  | 15°22  | 13°53  | 19°16 | 9° 2  | F 9  |
| S 10 | 5 12 2  | 17°20'21 | 27°15  | 7°48   | 24°10 | 6°58  | 29° 9 | 14° 9   | 17°49  | 20°51  | 24°52  | 15°12  | 13°49  | 19°22 | 9° 8  | S 10 |
| S 11 | 5 15 59 | 18°21'22 | 12♂31  | 8°33   | 25°25 | 7°42  | 29°15 | 14° 4   | 17°49  | 20°50  | 24°51  | 15° 3  | 13°46  | 19°29 | 9°13  | S 11 |
| M12  | 5 19 55 | 19°22'25 | 27°31  | 9°12   | 26°41 | 8°25  | 29°21 | 13°59   | 17°48  | 20°50  | 24°51  | 14°53  | 13°43  | 19°36 | 9°19  | M12  |
| T 13 | 5 23 52 | 20°23'28 | 12♂6   | 9°44   | 27°56 | 9° 9  | 29°27 | 13°55   | 17°47  | 20°49  | 24°51  | 14°46  | 13°40  | 19°43 | 9°25  | T 13 |
| W14  | 5 27 48 | 21°24'32 | 26°11  | 10° 7  | 29°12 | 9°53  | 29°33 | 13°50   | 17°46  | 20°48  | 24°50  | 14°41  | 13°37  | 19°49 | 9°31  | W14  |
| T 15 | 5 31 45 | 22°25'36 | 9♂47   | 10°20  | 0♂27  | 10°36 | 29°39 | 13°45   | 17°44  | 20°48  | 24°50  | 14°38  | 13°34  | 19°56 | 9°36  | T 15 |
| F 16 | 5 35 41 | 23°26'42 | 22°55  | 10°R23 | 1°42  | 11°20 | 29°45 | 13°40   | 17°43  | 20°47  | 24°49  | 14°D37 | 13°30  | 20° 3 | 9°42  | F 16 |
| S 17 | 5 39 38 | 24°27'48 | 5♂39   | 10°15  | 2°58  | 12° 4 | 29°51 | 13°35   | 17°42  | 20°46  | 24°48  | 14°37  | 13°27  | 20° 9 | 9°48  | S 17 |
| S 18 | 5 43 35 | 25°28'56 | 18° 4  | 9°56   | 4°13  | 12°47 | 29°56 | 13°30   | 17°41  | 20°46  | 24°48  | 14°R38 | 13°24  | 20°16 | 9°54  | S 18 |
| M19  | 5 47 31 | 26°30'04 | 0♂13   | 9°25   | 5°29  | 13°31 | 0♂ 1  | 13°26   | 17°39  | 20°45  | 24°47  | 14°36  | 13°21  | 20°23 | 9°59  | M19  |
| T 20 | 5 51 28 | 27°31'12 | 12°13  | 8°42   | 6°44  | 14°15 | 0° 6  | 13°21   | 17°38  | 20°45  | 24°47  | 14°33  | 13°18  | 20°30 | 10° 5 | T 20 |
| W21  | 5 55 24 | 28°32'22 | 24° 7  | 7°49   | 7°59  | 14°59 | 0°11  | 13°16   | 17°37  | 20°45  | 24°46  | 14°27  | 13°15  | 20°36 | 10°11 | W21  |
| T 22 | 5 59 21 | 29°33'31 | 5♂58   | 6°45   | 9°15  | 15°43 | 0°16  | 13°11   | 17°35  | 20°44  | 24°45  | 14°17  | 13°11  | 20°43 | 10°17 | T 22 |
| F 23 | 6 3 17  | 0♂34'42  | 17°48  | 5°33   | 10°30 | 16°27 | 0°20  | 13° 7   | 17°34  | 20°44  | 24°44  | 14° 5  | 13° 8  | 20°50 | 10°23 | F 23 |
| S 24 | 6 7 14  | 1°35'52  | 29°40  | 4°16   | 11°46 | 17°11 | 0°25  | 13° 2   | 17°32  | 20°44  | 24°44  | 13°51  | 13° 5  | 20°56 | 10°28 | S 24 |
| S 25 | 6 11 10 | 2°37'03  | 11♂34  | 2°54   | 13° 1 | 17°55 | 0°29  | 12°58   | 17°31  | 20°43  | 24°43  | 13°36  | 13° 2  | 21° 3 | 10°34 | S 25 |
| M26  | 6 15 7  | 3°38'14  | 23°33  | 1°32   | 14°16 | 18°40 | 0°33  | 12°53   | 17°29  | 20°43  | 24°42  | 13°21  | 12°59  | 21°10 | 10°40 | M26  |
| T 27 | 6 19 4  | 4°39'25  | 5♂37   | 0°12   | 15°32 | 19°24 | 0°37  | 12°49   | 17°27  | 20°43  | 24°41  | 13° 8  | 12°55  | 21°17 | 10°46 | T 27 |
| W28  | 6 23 0  | 5°40'36  | 17°47  | 28♂57  | 16°47 | 20° 8 | 0°41  | 12°44   | 17°26  | 20°43  | 24°40  | 12°58  | 12°52  | 21°23 | 10°52 | W28  |
| T 29 | 6 26 57 | 6°41'47  | 0♂6    | 27°48  | 18° 2 | 20°52 | 0°44  | 12°40   | 17°24  | 20°42  | 24°40  | 12°50  | 12°49  | 21°30 | 10°58 | T 29 |
| F 30 | 6 30 53 | 7°42'58  | 12° 6  | 26°47  | 19°18 | 21°37 | 0°48  | 12°36   | 17°22  | 20°42  | 24°39  | 12°46  | 12°46  | 21°37 | 11° 4 | F 30 |
| S 31 | 6 34 50 | 8♂44'08  | 25♂24  | 25♂55  | 20♂33 | 22♂21 | 0♂51  | 12°II32 | 17°Ω20 | 20°Y42 | 24°Ω38 | 12°Y44 | 12°Y43 | 21♂43 | 11♂10 | S 31 |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | Day  |
|------|-------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  |      |
| T 1  | 21s43 | 18s33 | 4s11 | 25s51 | 2s23 | 22s30 | 0s 8 | 20s27 | 0s10 | 1n52 | 1n11 | 20n57 | 1s41 | 16n 9 | 0n42 | T 1  |
| F 2  | 21 52 | 13 32 | 3 27 | 25 50 | 2 22 | 22 42 | 0 10 | 20 36 | 0 10 | 1 49 | 1 12 | 20 56 | 1 41 | 16 9  | 0 42 | F 2  |
| S 3  | 22 1  | 7 49  | 2 31 | 25 48 | 2 20 | 22 53 | 0 13 | 20 46 | 0 11 | 1 46 | 1 12 | 20 56 | 1 41 | 16 9  | 0 42 | S 3  |
| S 4  | 22 10 | 1 36  | 1 26 | 25 45 | 2 17 | 23 3  | 0 15 | 20 55 | 0 12 | 1 43 | 1 12 | 20 55 | 1 41 | 16 10 | 0 42 | S 4  |
| M 5  | 22 18 | 4n53  | 0 15 | 25 40 | 2 13 | 23 13 | 0 17 | 21 4  | 0 12 | 1 41 | 1 12 | 20 55 | 1 41 | 16 10 | 0 42 | M 5  |
| T 6  | 22 26 | 11 23 | 1n 1 | 25 34 | 2 9  | 23 22 | 0 20 | 21 13 | 0 13 | 1 38 | 1 13 | 20 54 | 1 41 | 16 10 | 0 42 | T 6  |
| W 7  | 22 33 | 17 28 | 2 14 | 25 27 | 2 4  | 23 30 | 0 22 | 21 21 | 0 13 | 1 35 | 1 13 | 20 54 | 1 41 | 16 10 | 0 42 | W 7  |
| T 8  | 22 40 | 22 41 | 3 20 | 25 18 | 1 57 | 23 37 | 0 24 | 21 29 | 0 14 | 1 33 | 1 13 | 20 53 | 1 41 | 16 11 | 0 42 | T 8  |
| F 9  | 22 47 | 26 26 | 4 14 | 25 8  | 1 50 | 23 44 | 0 27 | 21 38 | 0 15 | 1 30 | 1 13 | 20 53 | 1 41 | 16 11 | 0 42 | F 9  |
| S 10 | 22 53 | 28 16 | 4 49 | 24 56 | 1 42 | 23 50 | 0 29 | 21 46 | 0 15 | 1 28 | 1 13 | 20 52 | 1 41 | 16 11 | 0 42 | S 10 |
| S 11 | 22 58 | 27 55 | 5 3  | 24 44 | 1 32 | 23 55 | 0 31 | 21 53 | 0 16 | 1 26 | 1 14 | 20 52 | 1 40 | 16 12 | 0 42 | S 11 |
| M12  | 23 3  | 25 32 | 4 56 | 24 31 | 1 21 | 24 0  | 0 34 | 22 1  | 0 16 | 1 23 | 1 14 | 20 51 | 1 40 | 16 12 | 0 42 | M12  |
| T 13 | 23 8  | 21 31 | 4 30 | 24 16 | 1 9  | 24 4  | 0 36 | 22 8  | 0 17 | 1 21 | 1 14 | 20 51 | 1 40 | 16 12 | 0 42 | T 13 |
| W14  | 23 12 | 16 23 | 3 48 | 24 1  | 0 56 | 24 7  | 0 38 | 22 16 | 0 18 | 1 19 | 1 14 | 20 51 | 1 40 | 16 13 | 0 42 | W14  |
| T 15 | 23 16 | 10 36 | 2 54 | 23 46 | 0 41 | 24 9  | 0 40 | 22 23 | 0 18 | 1 17 | 1 15 | 20 50 | 1 40 | 16 13 | 0 43 | T 15 |
| F 16 | 23 19 | 4 32  | 1 53 | 23 30 | 0 25 | 24 11 | 0 42 | 22 29 | 0 19 | 1 15 | 1 15 | 20 50 | 1 40 | 16 13 | 0 43 | F 16 |
| S 17 | 23 22 | 1s31  | 0 48 | 23 13 | 0 8  | 24 11 | 0 45 | 22 36 | 0 20 | 1 13 | 1 15 | 20 49 | 1 40 | 16 14 | 0 43 | S 17 |
| S 18 | 23 24 | 7 23  | 0s18 | 22 57 | 0n10 | 24 11 | 0 47 | 22 42 | 0 20 | 1 11 | 1 15 | 20 49 | 1 40 | 16 14 | 0 43 | S 18 |
| M19  | 23 26 | 12 51 | 1 22 | 22 40 | 0 29 | 24 11 | 0 49 | 22 48 | 0 21 | 1 9  | 1 16 | 20 48 | 1 39 | 16 15 | 0 43 | M19  |
| T 20 | 23 27 | 17 46 | 2 21 | 22 23 | 0 49 | 24 9  | 0 51 | 22 54 | 0 21 | 1 7  | 1 16 | 20 48 | 1 39 | 16 15 | 0 43 | T 20 |
| W21  | 23 28 | 21 57 | 3 13 | 22 7  | 1 9  | 24 7  | 0 53 | 23 0  | 0 22 | 1 5  | 1 16 | 20 47 | 1 39 | 16 16 | 0 43 | W21  |
| T 22 | 23 29 | 25 13 | 3 56 | 21 50 | 1 28 | 24 4  | 0 55 | 23 5  | 0 23 | 1 4  | 1 17 | 20 47 | 1 39 | 16 16 | 0 43 | T 22 |
| F 23 | 23 29 | 27 23 | 4 29 | 21 34 | 1 47 | 24 0  | 0 57 | 23 11 | 0 23 | 1 2  | 1 17 | 20 47 | 1 39 | 16 17 | 0 43 | F 23 |
| S 24 | 23 28 | 28 19 | 4 51 | 21 19 | 2 5  | 23 56 | 0 59 | 23 15 | 0 24 | 1 1  | 1 17 | 20 46 | 1 39 | 16 17 | 0 43 | S 24 |
| S 25 | 23 27 | 27 57 | 4 59 | 21 5  | 2 22 | 23 51 | 1 1  | 23 20 | 0 25 | 0 59 | 1 17 | 20 46 | 1 39 | 16 18 | 0 43 | S 25 |
| M26  | 23 26 | 26 16 | 4 55 | 20 52 | 2 36 | 23 45 | 1 2  | 23 25 | 0 25 | 0 58 | 1 18 | 20 45 | 1 38 | 16 18 | 0 43 | M26  |
| T 27 | 23 24 | 23 22 | 4 37 | 20 40 | 2 48 | 23 38 | 1 4  | 23 29 | 0 26 | 0 57 | 1 18 | 20 45 | 1 38 | 16 19 | 0 43 | T 27 |
| W28  | 23 21 | 19 26 | 4 7  | 20 30 | 2 58 | 23 31 | 1 6  | 23 33 | 0 26 | 0 55 | 1 18 | 20 45 | 1 38 | 16 19 | 0 43 | W28  |
| T 29 | 23 19 | 14 38 | 3 24 | 20 22 | 3 6  | 23 23 | 1 8  | 23 37 | 0 27 | 0 54 | 1 18 | 20 44 | 1 38 | 16 20 | 0 43 | T 29 |
| F 30 | 23 15 | 9 10  | 2 32 | 20 16 | 3 10 | 23 14 | 1 9  | 23 40 | 0 28 | 0 53 | 1 19 | 20 44 | 1 38 | 16 20 | 0 43 | F 30 |
| S 31 | 23s11 | 3s13  | 1s30 | 20s12 | 3n13 | 23s 4 | 1s11 | 23s44 | 0s28 | 0n52 | 1n19 | 20n43 | 1s38 | 16n21 | 0n43 | S 31 |

Julian Day Number = 2344862.5, Delta T = 11.99 sec  
 Ecliptic obliquity = 23°28'47", Nutation = - 0°00'05", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 20°39'46", Lahiri = 19°46'47"Greg. Calendar