

SWISS EPHEMERIS for the year 1719

JANUARY 1719

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|---------|----------|-------|--------|-------|-------|-------|-------|--------|--------|--------|-------|------|-------|-------|---|
| S 1 | 6 40 6 | 10♁ 5'30 | 3♁39 | 24♁20 | 4♁14 | 18♁24 | 5°R18 | 11♁24 | 10♁17 | 15°R38 | 16°R52 | 8°R49 | 9♁53 | 19♁30 | 9♁ 8 | |
| M 2 | 6 44 2 | 11° 6'39 | 16° 9 | 25°54 | 5°29 | 19° 3 | 5♁15 | 11°29 | 10°18 | 15♁37 | 16♁52 | 8♁43 | 9°50 | 19°37 | 9°11 | |
| T 3 | 6 47 59 | 12° 7'48 | 29° 0 | 27°28 | 6°44 | 19°42 | 5°13 | 11°34 | 10°19 | 15°36 | 16°51 | 8°36 | 9°47 | 19°43 | 9°13 | |
| W 4 | 6 51 55 | 13° 8'57 | 12♁15 | 29° 1 | 8° 0 | 20°21 | 5°11 | 11°38 | 10°19 | 15°35 | 16°51 | 8°27 | 9°44 | 19°50 | 9°16 | |
| T 5 | 6 55 52 | 14°10'05 | 25°54 | 0♁33 | 9°15 | 21° 0 | 5° 8 | 11°43 | 10°20 | 15°35 | 16°50 | 8°17 | 9°41 | 19°57 | 9°18 | |
| F 6 | 6 59 48 | 15°11'13 | 9♁54 | 2° 2 | 10°31 | 21°39 | 5° 5 | 11°47 | 10°20 | 15°34 | 16°50 | 8° 8 | 9°37 | 20° 3 | 9°21 | |
| S 7 | 7 3 45 | 16°12'21 | 24°11 | 3°30 | 11°46 | 22°18 | 5° 2 | 11°52 | 10°21 | 15°33 | 16°49 | 8° 0 | 9°34 | 20°10 | 9°23 | |
| S 8 | 7 7 42 | 17°13'28 | 8♁38 | 4°56 | 13° 2 | 22°56 | 4°59 | 11°56 | 10°21 | 15°33 | 16°48 | 7°54 | 9°31 | 20°16 | 9°26 | |
| M 9 | 7 11 38 | 18°14'35 | 23°11 | 6°18 | 14°17 | 23°35 | 4°55 | 12° 0 | 10°22 | 15°32 | 16°48 | 7°51 | 9°28 | 20°23 | 9°29 | |
| T 10 | 7 15 35 | 19°15'42 | 7♁42 | 7°37 | 15°33 | 24°14 | 4°52 | 12° 5 | 10°22 | 15°32 | 16°47 | 7°D50 | 9°25 | 20°30 | 9°32 | |
| W11 | 7 19 31 | 20°16'49 | 22° 7 | 8°52 | 16°48 | 24°53 | 4°48 | 12° 9 | 10°22 | 15°31 | 16°47 | 7°51 | 9°22 | 20°36 | 9°34 | |
| T 12 | 7 23 28 | 21°17'56 | 6♁23 | 10° 2 | 18° 4 | 25°32 | 4°44 | 12°13 | 10°22 | 15°31 | 16°46 | 7°52 | 9°18 | 20°43 | 9°37 | |
| F 13 | 7 27 24 | 22°19'02 | 20°29 | 11° 7 | 19°19 | 26°11 | 4°40 | 12°17 | 10°23 | 15°30 | 16°45 | 7°R53 | 9°15 | 20°50 | 9°40 | |
| S 14 | 7 31 21 | 23°20'08 | 4♁22 | 12° 6 | 20°34 | 26°50 | 4°36 | 12°20 | 10°23 | 15°30 | 16°44 | 7°52 | 9°12 | 20°56 | 9°43 | |
| S 15 | 7 35 17 | 24°21'14 | 18° 4 | 12°57 | 21°50 | 27°29 | 4°31 | 12°24 | 10°R23 | 15°29 | 16°43 | 7°50 | 9° 9 | 21° 3 | 9°46 | |
| M16 | 7 39 14 | 25°22'20 | 1♁33 | 13°41 | 23° 5 | 28° 7 | 4°26 | 12°28 | 10°23 | 15°29 | 16°43 | 7°45 | 9° 6 | 21°10 | 9°49 | |
| T 17 | 7 43 10 | 26°23'25 | 14°51 | 14°15 | 24°21 | 28°46 | 4°22 | 12°31 | 10°23 | 15°29 | 16°42 | 7°39 | 9° 3 | 21°16 | 9°52 | |
| W18 | 7 47 7 | 27°24'30 | 27°55 | 14°40 | 25°36 | 29°25 | 4°17 | 12°35 | 10°22 | 15°28 | 16°41 | 7°32 | 8°59 | 21°23 | 9°55 | |
| T 19 | 7 51 4 | 28°25'34 | 10♁47 | 14°54 | 26°52 | 0♁ 4 | 4°12 | 12°38 | 10°22 | 15°28 | 16°40 | 7°24 | 8°56 | 21°30 | 9°58 | |
| F 20 | 7 55 0 | 29°26'38 | 23°26 | 14°R58 | 28° 7 | 0°43 | 4° 6 | 12°42 | 10°22 | 15°28 | 16°39 | 7°18 | 8°53 | 21°36 | 10° 1 | |
| S 21 | 7 58 57 | 0♁27'40 | 5♁53 | 14°50 | 29°22 | 1°22 | 4° 1 | 12°45 | 10°22 | 15°28 | 16°38 | 7°12 | 8°50 | 21°43 | 10° 4 | |
| S 22 | 8 2 53 | 1°28'42 | 18° 6 | 14°30 | 0♁38 | 2° 1 | 3°55 | 12°48 | 10°21 | 15°27 | 16°37 | 7° 8 | 8°47 | 21°50 | 10° 8 | |
| M23 | 8 6 50 | 2°29'43 | 0♁ 9 | 14° 0 | 1°53 | 2°40 | 3°49 | 12°51 | 10°21 | 15°27 | 16°36 | 7° 7 | 8°43 | 21°56 | 10°11 | |
| T 24 | 8 10 46 | 3°30'43 | 12° 3 | 13°18 | 3° 9 | 3°19 | 3°44 | 12°54 | 10°20 | 15°27 | 16°35 | 7°D 6 | 8°40 | 22° 3 | 10°14 | |
| W25 | 8 14 43 | 4°31'42 | 23°52 | 12°27 | 4°24 | 3°57 | 3°38 | 12°57 | 10°20 | 15°27 | 16°34 | 7° 8 | 8°37 | 22°10 | 10°17 | |
| T 26 | 8 18 40 | 5°32'40 | 5♁39 | 11°27 | 5°39 | 4°36 | 3°31 | 12°59 | 10°19 | 15°D27 | 16°33 | 7° 9 | 8°34 | 22°16 | 10°21 | |
| F 27 | 8 22 36 | 6°33'36 | 17°28 | 10°21 | 6°55 | 5°15 | 3°25 | 13° 2 | 10°19 | 15°27 | 16°32 | 7°11 | 8°31 | 22°23 | 10°24 | |
| S 28 | 8 26 33 | 7°34'31 | 29°25 | 9°10 | 8°10 | 5°54 | 3°19 | 13° 4 | 10°18 | 15°27 | 16°31 | 7°13 | 8°28 | 22°29 | 10°27 | |
| S 29 | 8 30 29 | 8°35'25 | 11♁34 | 7°56 | 9°25 | 6°33 | 3°12 | 13° 7 | 10°17 | 15°27 | 16°29 | 7°R13 | 8°24 | 22°36 | 10°31 | |
| M30 | 8 34 26 | 9°36'18 | 24° 1 | 6°42 | 10°41 | 7°12 | 3° 6 | 13° 9 | 10°16 | 15°27 | 16°28 | 7°12 | 8°21 | 22°43 | 10°34 | |
| T 31 | 8 38 22 | 10♁37'09 | 6♁49 | 5♁30 | 11♁56 | 7♁51 | 2♁59 | 13♁12 | 10♁16 | 15♁28 | 16♁27 | 7♁10 | 8♁18 | 22♁49 | 10♁38 | |

Delta T = 9.67 sec.

Greg. Calendar

FEBRUARY 1719

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| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|----------|----------|-------|--------|-------|-------|-------|--------|--------|-------|--------|-------|------|-------|-------|---|
| W 1 | 8 42 19 | 11♁37'59 | 20♁ 2 | 4°R21 | 13♁11 | 8♁29 | 2°R52 | 13♁14 | 10°R15 | 15♁28 | 16°R26 | 7°R 6 | 8♁15 | 22♁56 | 10♁41 | |
| T 2 | 8 46 15 | 12°38'47 | 3♁43 | 3♁17 | 14°26 | 9° 8 | 2♁45 | 13°16 | 10♁14 | 15°28 | 16♁24 | 7♁ 3 | 8°12 | 23° 3 | 10°45 | |
| F 3 | 8 50 12 | 13°39'34 | 17°49 | 2°20 | 15°42 | 9°47 | 2°38 | 13°18 | 10°13 | 15°28 | 16°23 | 6°59 | 8° 9 | 23° 9 | 10°48 | |
| S 4 | 8 54 9 | 14°40'19 | 2♁18 | 1°30 | 16°57 | 10°26 | 2°31 | 13°20 | 10°12 | 15°29 | 16°22 | 6°56 | 8° 5 | 23°16 | 10°52 | |
| S 5 | 8 58 5 | 15°41'04 | 17° 5 | 0°47 | 18°12 | 11° 5 | 2°24 | 13°21 | 10°11 | 15°29 | 16°21 | 6°54 | 8° 2 | 23°23 | 10°55 | |
| M 6 | 9 2 2 | 16°41'47 | 2♁ 1 | 0°13 | 19°27 | 11°43 | 2°16 | 13°23 | 10° 9 | 15°29 | 16°19 | 6°D53 | 7°59 | 23°29 | 10°59 | |
| T 7 | 9 5 58 | 17°42'28 | 16°59 | 29♁47 | 20°43 | 12°22 | 2° 9 | 13°24 | 10° 8 | 15°30 | 16°18 | 6°53 | 7°56 | 23°36 | 11° 2 | |
| W 8 | 9 9 55 | 18°43'08 | 1♁50 | 29°29 | 21°58 | 13° 1 | 2° 1 | 13°26 | 10° 7 | 15°30 | 16°17 | 6°54 | 7°53 | 23°43 | 11° 6 | |
| T 9 | 9 13 51 | 19°43'48 | 16°28 | 29°18 | 23°13 | 13°40 | 1°54 | 13°27 | 10° 6 | 15°31 | 16°15 | 6°55 | 7°49 | 23°49 | 11°10 | |
| F 10 | 9 17 48 | 20°44'26 | 0♁49 | 29°D16 | 24°28 | 14°19 | 1°46 | 13°28 | 10° 4 | 15°31 | 16°14 | 6°57 | 7°46 | 23°56 | 11°13 | |
| S 11 | 9 21 44 | 21°45'03 | 14°50 | 29°20 | 25°43 | 14°57 | 1°39 | 13°30 | 10° 3 | 15°32 | 16°12 | 6°57 | 7°43 | 24° 3 | 11°17 | |
| S 12 | 9 25 41 | 22°45'38 | 28°31 | 29°31 | 26°58 | 15°36 | 1°31 | 13°31 | 10° 2 | 15°32 | 16°11 | 6°R57 | 7°40 | 24° 9 | 11°21 | |
| M13 | 9 29 37 | 23°46'13 | 11♁51 | 29°48 | 28°14 | 16°15 | 1°23 | 13°32 | 10° 0 | 15°33 | 16°10 | 6°57 | 7°37 | 24°16 | 11°24 | |
| T 14 | 9 33 34 | 24°46'46 | 24°54 | 0♁12 | 29°29 | 16°54 | 1°15 | 13°32 | 9°58 | 15°33 | 16° 8 | 6°56 | 7°34 | 24°23 | 11°28 | |
| W15 | 9 37 31 | 25°47'19 | 7♁41 | 0°40 | 0♁44 | 17°33 | 1° 8 | 13°33 | 9°57 | 15°34 | 16° 7 | 6°54 | 7°30 | 24°29 | 11°32 | |
| T 16 | 9 41 27 | 26°47'49 | 20°13 | 1°13 | 1°59 | 18°11 | 1° 0 | 13°34 | 9°55 | 15°35 | 16° 5 | 6°52 | 7°27 | 24°36 | 11°36 | |
| F 17 | 9 45 24 | 27°48'19 | 2♁33 | 1°51 | 3°14 | 18°50 | 0°52 | 13°34 | 9°54 | 15°36 | 16° 4 | 6°51 | 7°24 | 24°42 | 11°39 | |
| S 18 | 9 49 20 | 28°48'47 | 14°43 | 2°33 | 4°29 | 19°29 | 0°44 | 13°35 | 9°52 | 15°36 | 16° 2 | 6°50 | 7°21 | 24°49 | 11°43 | |
| S 19 | 9 53 17 | 29°49'13 | 26°45 | 3°19 | 5°44 | 20° 8 | 0°36 | 13°35 | 9°50 | 15°37 | 16° 1 | 6°50 | 7°18 | 24°56 | 11°47 | |
| M20 | 9 57 13 | 0♁49'37 | 8♁40 | 4° 9 | 6°59 | 20°46 | 0°28 | 13°35 | 9°48 | 15°38 | 15°59 | 6°D49 | 7°15 | 25° 2 | 11°51 | |
| T 21 | 10 1 10 | 1°50'00 | 20°30 | 5° 2 | 8°14 | 21°25 | 0°20 | 13°R35 | 9°47 | 15°39 | 15°58 | 6°50 | 7°11 | 25° 9 | 11°55 | |
| W22 | 10 5 6 | 2°50'21 | 2♁17 | 5°58 | 9°29 | 22° 4 | 0°12 | 13°35 | 9°45 | 15°40 | 15°56 | 6°50 | 7° 8 | 25°16 | 11°58 | |
| T 23 | 10 9 3 | 3°50'40 | 14° 5 | 6°57 | 10°44 | 22°42 | 0° 5 | 13°35 | 9°43 | 15°41 | 15°54 | 6°50 | 7° 5 | 25°22 | 12° 2 | |
| F 24 | 10 13 0 | 4°50'57 | 25°56 | 7°58 | 11°59 | 23°21 | 29♁57 | 13°35 | 9°41 | 15°42 | 15°53 | 6°51 | 7° 2 | 25°29 | 12° 6 | |
| S 25 | 10 16 56 | 5°51'12 | 7♁54 | 9° 2 | 13°14 | 24° 0 | 29°49 | 13°35 | 9°39 | 15°43 | 15°51 | 6°51 | 6°59 | 25°36 | 12°10 | |
| S 26 | 10 20 53 | 6°51'26 | 20° 2 | 10° 9 | 14°29 | 24°38 | 29°41 | 13°34 | 9°37 | 15°44 | 15°50 | 6°R51 | 6°55 | 25°42 | 12°14 | |
| M27 | 10 24 49 | 7°51'37 | 2♁26 | 11°17 | 15°44 | 25°17 | 29°33 | 13°34 | 9°35 | 15°45 | 15°48 | 6°D51 | 6°52 | 25°49 | 12°18 | |
| T 28 | 10 28 46 | 8♁51'46 | 15♁ 9 | 12♁28 | 16♁59 | 25♁55 | 29♁26 | 13♁33 | 9♁33 | 15♁46 | 15♁47 | 6♁51 | 6♁49 | 25♁56 | 12♁21 | |

Delta T = 9.67 sec.

Greg. Calendar

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SWISS EPHEMERIS for the year 1719

MARCH 1719

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| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♈ | ♉ | ♊ | ♋ | ♌ | ♍ | ♎ | ♏ | ♐ | ♑ | ♒ | ♓ |
|------|----------|-----------------------|-----------------------|-----------------------|---------------------|-----------------------|---------------------|---------------------|--------------------|-----------------------|---------------------|----------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---|---|---|---|---|---|
| W 1 | 10 32 42 | 9 ^h 51'53 | 28 ^h 11'15 | 13 ^h 38'40 | 18 ^h 14' | 26 ^h 37'34 | 29 ^h R18 | 13 ^h R32 | 9 ^h R31 | 15 ^h 54'47 | 15 ^h R45 | 6 ^h 51'51 | 6 ^h 43' | 26 ^h 9' | 26 ^h 16' | 26 ^h 22' | 12 ^h 25' | | | | | | |
| T 2 | 10 36 39 | 10 ^h 51'58 | 11 ^h 58'47 | 14 ^h 55' | 19 ^h 28' | 27 ^h 12' | 29 ^h Q10 | 13 ^h 32' | 9 ^h 28' | 15 ^h 48' | 15 ^h 43' | 6 ^h 51' | 6 ^h 43' | 26 ^h 9' | 26 ^h 16' | 26 ^h 22' | 12 ^h 29' | | | | | | |
| F 3 | 10 40 35 | 11 ^h 52'01 | 25 ^h 46' | 16 ^h 11' | 20 ^h 43' | 27 ^h 51' | 29 ^h 3 | 13 ^h 31' | 9 ^h 26' | 15 ^h 49' | 15 ^h 42' | 6 ^h 52' | 6 ^h 40' | 26 ^h 16' | 26 ^h 22' | 12 ^h 33' | | | | | | | |
| S 4 | 10 44 32 | 12 ^h 52'01 | 10 ^h Q11 | 17 ^h 29' | 21 ^h 58' | 28 ^h 29' | 28 ^h 55' | 13 ^h 30' | 9 ^h 24' | 15 ^h 50' | 15 ^h 40' | 6 ^h 52' | 6 ^h 36' | 26 ^h 22' | 12 ^h 37' | | | | | | | | |
| S 5 | 10 48 29 | 13 ^h 52'00 | 24 ^h 59' | 18 ^h 48' | 23 ^h 13' | 29 ^h 8' | 28 ^h 48' | 13 ^h 29' | 9 ^h 22' | 15 ^h 52' | 15 ^h 39' | 6 ^h 53' | 6 ^h 33' | 26 ^h 29' | 12 ^h 41' | | | | | | | | |
| M 6 | 10 52 25 | 14 ^h 51'56 | 10 ^h 47' | 20 ^h 9' | 24 ^h 28' | 29 ^h 46' | 28 ^h 41' | 13 ^h 27' | 9 ^h 20' | 15 ^h 53' | 15 ^h 37' | 6 ^h R53 | 6 ^h 30' | 26 ^h 36' | 12 ^h 45' | | | | | | | | |
| T 7 | 10 56 22 | 15 ^h 51'51 | 25 ^h 17' | 21 ^h 31' | 25 ^h 42' | 0 ^h 32'5 | 28 ^h 33' | 13 ^h 26' | 9 ^h 17' | 15 ^h 54' | 15 ^h 35' | 6 ^h 53' | 6 ^h 27' | 26 ^h 42' | 12 ^h 48' | | | | | | | | |
| W 8 | 11 0 18 | 16 ^h 51'43 | 10 ^h 28' | 22 ^h 55' | 26 ^h 57' | 1 ^h 3' | 28 ^h 26' | 13 ^h 25' | 9 ^h 15' | 15 ^h 56' | 15 ^h 34' | 6 ^h 52' | 6 ^h 24' | 26 ^h 49' | 12 ^h 52' | | | | | | | | |
| T 9 | 11 4 15 | 17 ^h 51'34 | 25 ^h 27' | 24 ^h 20' | 28 ^h 12' | 1 ^h 42' | 28 ^h 19' | 13 ^h 23' | 9 ^h 13' | 15 ^h 57' | 15 ^h 32' | 6 ^h 51' | 6 ^h 20' | 26 ^h 55' | 12 ^h 56' | | | | | | | | |
| F 10 | 11 8 11 | 18 ^h 51'23 | 10 ^h 8' | 25 ^h 47' | 29 ^h 26' | 2 ^h 20' | 28 ^h 12' | 13 ^h 21' | 9 ^h 10' | 15 ^h 58' | 15 ^h 31' | 6 ^h 49' | 6 ^h 17' | 27 ^h 2' | 13 ^h 0' | | | | | | | | |
| S 11 | 11 12 8 | 19 ^h 51'10 | 24 ^h 25' | 27 ^h 15' | 0 ^h 41' | 2 ^h 58' | 28 ^h 5' | 13 ^h 20' | 9 ^h 8' | 16 ^h 0' | 15 ^h 29' | 6 ^h 48' | 6 ^h 14' | 27 ^h 9' | 13 ^h 4' | | | | | | | | |
| S 12 | 11 16 4 | 20 ^h 50'56 | 8 ^h 15' | 28 ^h 44' | 1 ^h 55' | 3 ^h 37' | 27 ^h 58' | 13 ^h 18' | 9 ^h 6' | 16 ^h 1' | 15 ^h 27' | 6 ^h 47' | 6 ^h 11' | 27 ^h 15' | 13 ^h 8' | | | | | | | | |
| M 13 | 11 20 1 | 21 ^h 50'40 | 21 ^h 39' | 0 ^h 15' | 3 ^h 10' | 4 ^h 15' | 27 ^h 52' | 13 ^h 16' | 9 ^h 3' | 16 ^h 3' | 15 ^h 26' | 6 ^h D46 | 6 ^h 8' | 27 ^h 22' | 13 ^h 12' | | | | | | | | |
| T 14 | 11 23 58 | 22 ^h 50'22 | 4 ^h 39' | 1 ^h 47' | 4 ^h 25' | 4 ^h 53' | 27 ^h 45' | 13 ^h 14' | 9 ^h 1' | 16 ^h 4' | 15 ^h 24' | 6 ^h 47' | 6 ^h 5' | 27 ^h 29' | 13 ^h 15' | | | | | | | | |
| W 15 | 11 27 54 | 23 ^h 50'03 | 17 ^h 18' | 3 ^h 20' | 5 ^h 39' | 5 ^h 32' | 27 ^h 38' | 13 ^h 12' | 8 ^h 58' | 16 ^h 6' | 15 ^h 23' | 6 ^h 48' | 6 ^h 1' | 27 ^h 35' | 13 ^h 19' | | | | | | | | |
| T 16 | 11 31 51 | 24 ^h 49'42 | 29 ^h 39' | 4 ^h 55' | 6 ^h 54' | 6 ^h 10' | 27 ^h 32' | 13 ^h 10' | 8 ^h 56' | 16 ^h 7' | 15 ^h 21' | 6 ^h 49' | 5 ^h 58' | 27 ^h 42' | 13 ^h 23' | | | | | | | | |
| F 17 | 11 35 47 | 25 ^h 49'19 | 11 ^h 48' | 6 ^h 31' | 8 ^h 8' | 6 ^h 48' | 27 ^h 26' | 13 ^h 8' | 8 ^h 53' | 16 ^h 9' | 15 ^h 19' | 6 ^h 51' | 5 ^h 55' | 27 ^h 49' | 13 ^h 27' | | | | | | | | |
| S 18 | 11 39 44 | 26 ^h 48'54 | 23 ^h 46' | 8 ^h 8' | 9 ^h 23' | 7 ^h 26' | 27 ^h 20' | 13 ^h 5' | 8 ^h 51' | 16 ^h 10' | 15 ^h 18' | 6 ^h 52' | 5 ^h 52' | 27 ^h 55' | 13 ^h 31' | | | | | | | | |
| S 19 | 11 43 40 | 27 ^h 48'27 | 5 ^h 38' | 9 ^h 46' | 10 ^h 37' | 8 ^h 5' | 27 ^h 14' | 13 ^h 3' | 8 ^h 48' | 16 ^h 12' | 15 ^h 16' | 6 ^h R53 | 5 ^h 49' | 28 ^h 2' | 13 ^h 34' | | | | | | | | |
| M 20 | 11 47 37 | 28 ^h 47'58 | 17 ^h 27' | 11 ^h 26' | 11 ^h 52' | 8 ^h 43' | 27 ^h 8' | 13 ^h 0' | 8 ^h 46' | 16 ^h 14' | 15 ^h 15' | 6 ^h 52' | 5 ^h 46' | 28 ^h 9' | 13 ^h 38' | | | | | | | | |
| T 21 | 11 51 33 | 29 ^h 47'27 | 29 ^h 14' | 13 ^h 7' | 13 ^h 6' | 9 ^h 21' | 27 ^h 2' | 12 ^h 58' | 8 ^h 43' | 16 ^h 15' | 15 ^h 13' | 6 ^h 51' | 5 ^h 42' | 28 ^h 15' | 13 ^h 42' | | | | | | | | |
| W 22 | 11 55 30 | 0 ^h 46'55 | 11 ^h 3' | 14 ^h 49' | 14 ^h 20' | 9 ^h 59' | 26 ^h 57' | 12 ^h 55' | 8 ^h 41' | 16 ^h 17' | 15 ^h 12' | 6 ^h 48' | 5 ^h 39' | 28 ^h 22' | 13 ^h 45' | | | | | | | | |
| T 23 | 11 59 26 | 1 ^h 46'20 | 22 ^h 55' | 16 ^h 33' | 15 ^h 35' | 10 ^h 37' | 26 ^h 51' | 12 ^h 52' | 8 ^h 38' | 16 ^h 19' | 15 ^h 10' | 6 ^h 44' | 5 ^h 36' | 28 ^h 29' | 13 ^h 49' | | | | | | | | |
| F 24 | 12 3 23 | 2 ^h 45'43 | 4 ^h 51' | 18 ^h 18' | 16 ^h 49' | 11 ^h 15' | 26 ^h 46' | 12 ^h 49' | 8 ^h 36' | 16 ^h 20' | 15 ^h 9' | 6 ^h 39' | 5 ^h 33' | 28 ^h 35' | 13 ^h 53' | | | | | | | | |
| S 25 | 12 7 20 | 3 ^h 45'03 | 16 ^h 55' | 20 ^h 4' | 18 ^h 3' | 11 ^h 53' | 26 ^h 41' | 12 ^h 46' | 8 ^h 33' | 16 ^h 22' | 15 ^h 7' | 6 ^h 35' | 5 ^h 30' | 28 ^h 42' | 13 ^h 57' | | | | | | | | |
| S 26 | 12 11 16 | 4 ^h 44'22 | 29 ^h 9' | 21 ^h 52' | 19 ^h 17' | 12 ^h 31' | 26 ^h 36' | 12 ^h 43' | 8 ^h 30' | 16 ^h 24' | 15 ^h 6' | 6 ^h 30' | 5 ^h 26' | 28 ^h 49' | 14 ^h 0' | | | | | | | | |
| M 27 | 12 15 13 | 5 ^h 43'38 | 11 ^h 35' | 23 ^h 41' | 20 ^h 32' | 13 ^h 9' | 26 ^h 31' | 12 ^h 40' | 8 ^h 28' | 16 ^h 26' | 15 ^h 4' | 6 ^h 27' | 5 ^h 23' | 28 ^h 55' | 14 ^h 4' | | | | | | | | |
| T 28 | 12 19 9 | 6 ^h 42'52 | 24 ^h 17' | 25 ^h 31' | 21 ^h 46' | 13 ^h 46' | 26 ^h 27' | 12 ^h 37' | 8 ^h 25' | 16 ^h 27' | 15 ^h 3' | 6 ^h 25' | 5 ^h 20' | 29 ^h 2' | 14 ^h 8' | | | | | | | | |
| W 29 | 12 23 6 | 7 ^h 42'04 | 7 ^h 17' | 27 ^h 23' | 23 ^h 0' | 14 ^h 24' | 26 ^h 22' | 12 ^h 34' | 8 ^h 23' | 16 ^h 29' | 15 ^h 1' | 6 ^h D24 | 5 ^h 17' | 29 ^h 9' | 14 ^h 11' | | | | | | | | |
| T 30 | 12 27 2 | 8 ^h 41'13 | 20 ^h 40' | 29 ^h 16' | 24 ^h 14' | 15 ^h 2' | 26 ^h 18' | 12 ^h 31' | 8 ^h 20' | 16 ^h 31' | 15 ^h 0' | 6 ^h 25' | 5 ^h 14' | 29 ^h 15' | 14 ^h 15' | | | | | | | | |
| F 31 | 12 30 59 | 9 ^h 40'20 | 4 ^h 27' | 1 ^h 10' | 25 ^h 28' | 15 ^h 34' | 26 ^h 14' | 12 ^h 27' | 8 ^h 17' | 16 ^h 33' | 14 ^h 58' | 6 ^h 26' | 5 ^h 11' | 29 ^h 22' | 14 ^h 18' | | | | | | | | |

Delta T = 9.67 sec.

Greg. Calendar

APRIL 1719

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♈ | ♉ | ♊ | ♋ | ♌ | ♍ | ♎ | ♏ | ♐ | ♑ | ♒ | ♓ |
|------|----------|--------------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---|---|---|---|---|---|---|---|
| S 1 | 12 34 55 | 10 ^h 49'39'25 | 18 ^h Q39 | 3 ^h 47' 6 | 26 ^h 42' | 16 ^h 31'7 | 26 ^h R10 | 12 ^h R24 | 8 ^h R15 | 16 ^h 35' | 14 ^h R57 | 6 ^h 28' | 5 ^h 7' | 29 ^h 29' | 14 ^h 22' | | | | | | | | |
| S 2 | 12 38 52 | 11 ^h 38'27 | 3 ^h 15' | 5 ^h 3' | 27 ^h 56' | 16 ^h 55' | 26 ^h Q 6 | 12 ^h 20' | 8 ^h 12' | 16 ^h 37' | 14 ^h 56' | 6 ^h R28 | 5 ^h 4' | 29 ^h 35' | 14 ^h 25' | | | | | | | | |
| M 3 | 12 42 49 | 12 ^h 37'27 | 18 ^h 11' | 7 ^h 2' | 29 ^h 10' | 17 ^h 32' | 26 ^h 2 | 12 ^h 17' | 8 ^h 10' | 16 ^h 39' | 14 ^h 54' | 6 ^h 28' | 5 ^h 1' | 29 ^h 42' | 14 ^h 29' | | | | | | | | |
| T 4 | 12 46 45 | 13 ^h 36'25 | 3 ^h 20' | 9 ^h 2' | 0 ^h 24' | 18 ^h 10' | 25 ^h 59' | 12 ^h 13' | 8 ^h 7' | 16 ^h 41' | 14 ^h 53' | 6 ^h 26' | 4 ^h 58' | 29 ^h 49' | 14 ^h 32' | | | | | | | | |
| W 5 | 12 50 42 | 14 ^h 35'21 | 18 ^h 34' | 11 ^h 3' | 1 ^h 38' | 18 ^h 47' | 25 ^h 56' | 12 ^h 9' | 8 ^h 5' | 16 ^h 43' | 14 ^h 51' | 6 ^h 22' | 4 ^h 55' | 29 ^h 55' | 14 ^h 36' | | | | | | | | |
| T 6 | 12 54 38 | 15 ^h 34'14 | 3 ^h 42' | 13 ^h 5' | 2 ^h 52' | 19 ^h 25' | 25 ^h 52' | 12 ^h 6' | 8 ^h 2' | 16 ^h 45' | 14 ^h 50' | 6 ^h 17' | 4 ^h 52' | 0 ^h 2' | 14 ^h 39' | | | | | | | | |
| F 7 | 12 58 35 | 16 ^h 33'06 | 18 ^h 35' | 15 ^h 8' | 4 ^h 6' | 20 ^h 2' | 25 ^h 50' | 12 ^h 2' | 7 ^h 59' | 16 ^h 47' | 14 ^h 49' | 6 ^h 11' | 4 ^h 48' | 0 ^h 9' | 14 ^h 43' | | | | | | | | |
| S 8 | 13 2 31 | 17 ^h 31'56 | 3 ^h 47' 4 | 17 ^h 13' | 5 ^h 20' | 20 ^h 40' | 25 ^h 47' | 11 ^h 58' | 7 ^h 57' | 16 ^h 49' | 14 ^h 47' | 6 ^h 5' | 4 ^h 45' | 0 ^h 15' | 14 ^h 46' | | | | | | | | |
| S 9 | 13 6 28 | 18 ^h 30'44 | 17 ^h 6' | 19 ^h 18' | 6 ^h 34' | 21 ^h 17' | 25 ^h 44' | 11 ^h 54' | 7 ^h 54' | 16 ^h 51' | 14 ^h 46' | 6 ^h 0' | 4 ^h 42' | 0 ^h 22' | 14 ^h 49' | | | | | | | | |
| M 10 | 13 10 24 | 19 ^h 29'31 | 0 ^h 38' | 21 ^h 24' | 7 ^h 48' | 21 ^h 54' | 25 ^h 42' | 11 ^h 50' | 7 ^h 52' | 16 ^h 53' | 14 ^h 45' | 5 ^h 56' | 4 ^h 39' | 0 ^h 28' | 14 ^h 53' | | | | | | | | |
| T 11 | 13 14 21 | 20 ^h 28'16 | 13 ^h 42' | 23 ^h 30' | 9 ^h 1' | 22 ^h 31' | 25 ^h 40' | 11 ^h 46' | 7 ^h 49' | 16 ^h 55' | 14 ^h 44' | 5 ^h 54' | 4 ^h 36' | 0 ^h 35' | 14 ^h 56' | | | | | | | | |
| W 12 | 13 18 18 | 21 ^h 26'59 | 26 ^h 22' | 25 ^h 37' | 10 ^h 15' | 23 ^h 8' | 25 ^h 38' | 11 ^h 42' | 7 ^h 47' | 16 ^h 57' | 14 ^h 42' | 5 ^h D54 | 4 ^h 32' | 0 ^h 42' | 14 ^h 59' | | | | | | | | |
| T 13 | 13 22 14 | 22 ^h 25'40 | 8 ^h 41' | 27 ^h 43' | 11 ^h 29' | 23 ^h 45' | 25 ^h 36' | 11 ^h 38' | 7 ^h 44' | 16 ^h 59' | 14 ^h 41' | 5 ^h 55' | 4 ^h 29' | 0 ^h 48' | 15 ^h 3' | | | | | | | | |
| F 14 | 13 26 11 | 23 ^h 24'20 | 20 ^h 45' | 29 ^h 50' | 12 ^h 43' | 24 ^h 22' | 25 ^h 34' | 11 ^h 34' | 7 ^h 42' | 17 ^h 1' | 14 ^h 40' | 5 ^h 57' | 4 ^h 26' | 0 ^h 55' | 15 ^h 6' | | | | | | | | |
| S 15 | 13 30 7 | 24 ^h 22'58 | 2 ^h 39' | 1 ^h 56' | 13 ^h 56' | 24 ^h 59' | 25 ^h 33' | 11 ^h 30' | 7 ^h 39' | 17 ^h 3' | 14 ^h 39' | 5 ^h R57 | 4 ^h 23' | 1 ^h 2' | 15 ^h 9' | | | | | | | | |
| S 16 | 13 34 4 | 25 ^h 21'34 | 14 ^h 27' | 4 ^h 1' | 15 ^{h</} | | | | | | | | | | | | | | | | | | |

SWISS EPHEMERIS for the year 1719

MAY 1719

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| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♈ | ♉ | ♊ | ♋ | ♌ | ♍ |
|------|----------|----------|-------|--------|-------|--------|-------|--------|-------|-------|--------|-------|------|------|-------|---|---|
| M 1 | 14 33 12 | 9♁56'49 | 27♎5 | 0♈23 | 3♁30 | 4♁39 | 25♁35 | 10°R19 | 7°R 3 | 17♁38 | 14°R24 | 4°R43 | 3♎32 | 2♎48 | 15♁55 | | |
| T 2 | 14 37 9 | 10°54'53 | 11♁57 | 1°40 | 4°43 | 5°14 | 25°36 | 10♎14 | 7♁ 1 | 17°40 | 14♎23 | 4♎39 | 3°29 | 2°55 | 15°58 | | |
| W 3 | 14 41 5 | 11°52'57 | 26°57 | 2°52 | 5°56 | 5°50 | 25°38 | 10°10 | 6°59 | 17°42 | 14°22 | 4°32 | 3°26 | 3° 2 | 16° 0 | | |
| T 4 | 14 45 2 | 12°50'58 | 11♎56 | 3°59 | 7° 9 | 6°25 | 25°40 | 10° 5 | 6°57 | 17°45 | 14°21 | 4°23 | 3°23 | 3° 8 | 16° 3 | | |
| F 5 | 14 48 58 | 13°48'58 | 26°44 | 5° 3 | 8°22 | 7° 0 | 25°42 | 10° 1 | 6°55 | 17°47 | 14°21 | 4°13 | 3°19 | 3°15 | 16° 5 | | |
| S 6 | 14 52 55 | 14°46'56 | 11♁14 | 6° 1 | 9°35 | 7°35 | 25°45 | 9°56 | 6°54 | 17°49 | 14°20 | 4° 3 | 3°16 | 3°22 | 16° 7 | | |
| S 7 | 14 56 51 | 15°44'53 | 25°19 | 6°55 | 10°48 | 8°10 | 25°47 | 9°52 | 6°52 | 17°51 | 14°20 | 3°53 | 3°13 | 3°28 | 16°10 | | |
| M 8 | 15 0 48 | 16°42'48 | 8♁56 | 7°45 | 12° 0 | 8°45 | 25°50 | 9°47 | 6°50 | 17°54 | 14°19 | 3°46 | 3°10 | 3°35 | 16°12 | | |
| T 9 | 15 4 44 | 17°40'42 | 22° 5 | 8°29 | 13°13 | 9°19 | 25°53 | 9°43 | 6°48 | 17°56 | 14°18 | 3°41 | 3° 7 | 3°42 | 16°14 | | |
| W10 | 15 8 41 | 18°38'35 | 4♁48 | 9° 9 | 14°26 | 9°54 | 25°56 | 9°38 | 6°46 | 17°58 | 14°18 | 3°39 | 3° 3 | 3°48 | 16°17 | | |
| T 11 | 15 12 38 | 19°36'27 | 17° 9 | 9°44 | 15°39 | 10°28 | 25°59 | 9°34 | 6°45 | 18° 0 | 14°18 | 3°D38 | 3° 0 | 3°55 | 16°19 | | |
| F 12 | 15 16 34 | 20°34'17 | 29°14 | 10°14 | 16°51 | 11° 2 | 26° 3 | 9°30 | 6°43 | 18° 3 | 14°17 | 3°R38 | 2°57 | 4° 2 | 16°21 | | |
| S 13 | 15 20 31 | 21°32'06 | 11♁ 8 | 10°40 | 18° 4 | 11°36 | 26° 6 | 9°25 | 6°41 | 18° 5 | 14°17 | 3°38 | 2°54 | 4° 8 | 16°23 | | |
| S 14 | 15 24 27 | 22°29'54 | 22°56 | 11° 0 | 19°17 | 12°10 | 26°10 | 9°21 | 6°40 | 18° 7 | 14°16 | 3°37 | 2°51 | 4°15 | 16°25 | | |
| M15 | 15 28 24 | 23°27'41 | 4♎44 | 11°16 | 20°29 | 12°44 | 26°14 | 9°17 | 6°38 | 18° 9 | 14°16 | 3°33 | 2°48 | 4°22 | 16°27 | | |
| T 16 | 15 32 20 | 24°25'26 | 16°35 | 11°26 | 21°42 | 13°18 | 26°18 | 9°12 | 6°37 | 18°12 | 14°16 | 3°27 | 2°44 | 4°28 | 16°29 | | |
| W17 | 15 36 17 | 25°23'11 | 28°33 | 11°32 | 22°54 | 13°51 | 26°22 | 9° 8 | 6°35 | 18°14 | 14°15 | 3°18 | 2°41 | 4°35 | 16°31 | | |
| T 18 | 15 40 13 | 26°20'54 | 10♁40 | 11°R33 | 24° 6 | 14°25 | 26°27 | 9° 4 | 6°34 | 18°16 | 14°15 | 3° 7 | 2°38 | 4°42 | 16°33 | | |
| F 19 | 15 44 10 | 27°18'36 | 22°58 | 11°29 | 25°19 | 14°58 | 26°31 | 9° 0 | 6°33 | 18°18 | 14°15 | 2°54 | 2°35 | 4°48 | 16°34 | | |
| S 20 | 15 48 7 | 28°16'16 | 5♁29 | 11°21 | 26°31 | 15°31 | 26°36 | 8°55 | 6°31 | 18°21 | 14°15 | 2°40 | 2°32 | 4°55 | 16°36 | | |
| S 21 | 15 52 3 | 29°13'56 | 18°11 | 11° 9 | 27°44 | 16° 3 | 26°41 | 8°51 | 6°30 | 18°23 | 14°14 | 2°28 | 2°29 | 5° 2 | 16°38 | | |
| M22 | 15 56 0 | 0♈11'34 | 1♁ 5 | 10°52 | 28°56 | 16°36 | 26°46 | 8°47 | 6°29 | 18°25 | 14°14 | 2°17 | 2°25 | 5° 8 | 16°39 | | |
| T 23 | 15 59 56 | 1° 9'11 | 14°10 | 10°32 | 0♁ 8 | 17° 8 | 26°51 | 8°43 | 6°28 | 18°27 | 14°14 | 2° 8 | 2°22 | 5°15 | 16°41 | | |
| W24 | 16 3 53 | 2° 6'46 | 27°27 | 10° 8 | 1°20 | 17°40 | 26°56 | 8°39 | 6°27 | 18°29 | 14°14 | 2° 3 | 2°19 | 5°22 | 16°42 | | |
| T 25 | 16 7 49 | 3° 4'20 | 10♁56 | 9°42 | 2°32 | 18°12 | 27° 2 | 8°35 | 6°26 | 18°32 | 14°14 | 2° 0 | 2°16 | 5°28 | 16°44 | | |
| F 26 | 16 11 46 | 4° 1'52 | 24°37 | 9°13 | 3°44 | 18°44 | 27° 8 | 8°31 | 6°25 | 18°34 | 14°D14 | 1°59 | 2°13 | 5°35 | 16°45 | | |
| S 27 | 16 15 42 | 4°59'23 | 8♎32 | 8°42 | 4°56 | 19°16 | 27°13 | 8°28 | 6°24 | 18°36 | 14°14 | 1°59 | 2° 9 | 5°42 | 16°47 | | |
| S 28 | 16 19 39 | 5°56'53 | 22°40 | 8° 9 | 6° 8 | 19°47 | 27°19 | 8°24 | 6°23 | 18°38 | 14°14 | 1°59 | 2° 6 | 5°48 | 16°48 | | |
| M29 | 16 23 36 | 6°54'21 | 7♁ 1 | 7°36 | 7°20 | 20°18 | 27°25 | 8°20 | 6°22 | 18°40 | 14°14 | 1°56 | 2° 3 | 5°55 | 16°49 | | |
| T 30 | 16 27 32 | 7°51'48 | 21°32 | 7° 2 | 8°32 | 20°49 | 27°31 | 8°17 | 6°21 | 18°43 | 14°14 | 1°52 | 2° 0 | 6° 2 | 16°51 | | |
| W31 | 16 31 29 | 8♁49'14 | 6♎ 9 | 6♁29 | 9♁44 | 21°≈20 | 27♁38 | 8♎13 | 6♁20 | 18♁45 | 14♎14 | 1♎44 | 1♎57 | 6♎ 8 | 16♁52 | | |

Delta T = 9.67 sec.

Greg. Calendar

JUNE 1719

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| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♈ | ♉ | ♊ | ♋ | ♌ | ♍ |
|------|----------|----------|-------|-------|-------|--------|-------|-------|-------|-------|-------|--------|------|------|--------|---|---|
| T 1 | 16 35 25 | 9♁46'39 | 20♎46 | 5°R56 | 10♁56 | 21°≈50 | 27♁44 | 8°R10 | 6°R20 | 18♁47 | 14♎15 | 1°R35 | 1♎54 | 6♎15 | 16♁53 | | |
| F 2 | 16 39 22 | 10°44'03 | 5♁15 | 5♁25 | 12° 8 | 22°20 | 27°51 | 8♎ 6 | 6♁19 | 18°49 | 14°15 | 1°R24 | 1°50 | 6°22 | 16°54 | | |
| S 3 | 16 43 18 | 11°41'25 | 19°31 | 4°56 | 13°19 | 22°50 | 27°58 | 8° 3 | 6°18 | 18°51 | 14°15 | 1°13 | 1°47 | 6°28 | 16°55 | | |
| S 4 | 16 47 15 | 12°38'47 | 3♁26 | 4°29 | 14°31 | 23°20 | 28° 5 | 7°59 | 6°18 | 18°53 | 14°15 | 1° 2 | 1°44 | 6°35 | 16°56 | | |
| M 5 | 16 51 11 | 13°36'09 | 16°58 | 4° 5 | 15°42 | 23°49 | 28°12 | 7°56 | 6°17 | 18°55 | 14°16 | 0°54 | 1°41 | 6°42 | 16°57 | | |
| T 6 | 16 55 8 | 14°33'29 | 0♁ 5 | 3°45 | 16°54 | 24°18 | 28°19 | 7°53 | 6°17 | 18°57 | 14°16 | 0°48 | 1°38 | 6°48 | 16°58 | | |
| W 7 | 16 59 5 | 15°30'49 | 12°48 | 3°27 | 18° 5 | 24°47 | 28°26 | 7°50 | 6°16 | 18°59 | 14°16 | 0°45 | 1°35 | 6°55 | 16°58 | | |
| T 8 | 17 3 1 | 16°28'09 | 25°11 | 3°14 | 19°17 | 25°16 | 28°33 | 7°47 | 6°16 | 19° 2 | 14°17 | 0°44 | 1°31 | 7° 2 | 16°59 | | |
| F 9 | 17 6 58 | 17°25'28 | 7♁18 | 3° 5 | 20°28 | 25°44 | 28°41 | 7°44 | 6°16 | 19° 4 | 14°17 | 0°D44 | 1°28 | 7° 8 | 17° 0 | | |
| S 10 | 17 10 54 | 18°22'46 | 19°14 | 3° 0 | 21°39 | 26°12 | 28°49 | 7°41 | 6°15 | 19° 6 | 14°18 | 0°R44 | 1°25 | 7°15 | 17° 0 | | |
| S 11 | 17 14 51 | 19°20'04 | 1♎ 4 | 3°D 0 | 22°51 | 26°40 | 28°56 | 7°38 | 6°15 | 19° 8 | 14°18 | 0°43 | 1°22 | 7°22 | 17° 1 | | |
| M12 | 17 18 47 | 20°17'22 | 12°53 | 3° 4 | 24° 2 | 27° 7 | 29° 4 | 7°35 | 6°15 | 19°10 | 14°19 | 0°41 | 1°19 | 7°28 | 17° 1 | | |
| T 13 | 17 22 44 | 21°14'39 | 24°48 | 3°13 | 25°13 | 27°34 | 29°12 | 7°33 | 6°15 | 19°12 | 14°19 | 0°36 | 1°15 | 7°35 | 17° 2 | | |
| W14 | 17 26 40 | 22°11'56 | 6♁51 | 3°26 | 26°24 | 28° 1 | 29°20 | 7°30 | 6°D15 | 19°14 | 14°20 | 0°29 | 1°12 | 7°42 | 17° 2 | | |
| T 15 | 17 30 37 | 23° 9'13 | 19° 6 | 3°44 | 27°35 | 28°27 | 29°29 | 7°28 | 6°15 | 19°15 | 14°20 | 0°20 | 1° 9 | 7°48 | 17° 3 | | |
| F 16 | 17 34 34 | 24° 6'29 | 1♁36 | 4° 6 | 28°46 | 28°53 | 29°37 | 7°25 | 6°15 | 19°17 | 14°21 | 0° 9 | 1° 6 | 7°55 | 17° 3 | | |
| S 17 | 17 38 30 | 25° 3'46 | 14°21 | 4°33 | 29°57 | 29°18 | 29°46 | 7°23 | 6°15 | 19°19 | 14°22 | 29♁58 | 1° 3 | 8° 2 | 17° 3 | | |
| S 18 | 17 42 27 | 26° 1'01 | 27°21 | 5° 5 | 1♁ 8 | 29°43 | 29°54 | 7°21 | 6°15 | 19°21 | 14°22 | 29°47 | 1° 0 | 8° 8 | 17° 3 | | |
| M19 | 17 46 23 | 26°58'17 | 10♁36 | 5°41 | 2°18 | 0♁ 8 | 0♎ 3 | 7°19 | 6°16 | 19°23 | 14°23 | 29°38 | 0°56 | 8°15 | 17° 3 | | |
| T 20 | 17 50 20 | 27°55'32 | 24° 4 | 6°21 | 3°29 | 0°32 | 0°12 | 7°17 | 6°16 | 19°25 | 14°24 | 29°31 | 0°53 | 8°22 | 17° 3 | | |
| W21 | 17 54 16 | 28°52'46 | 7♁42 | 7° 6 | 4°40 | 0°56 | 0°21 | 7°15 | 6°16 | 19°27 | 14°25 | 29°27 | 0°50 | 8°28 | 17°R 3 | | |
| T 22 | 17 58 13 | 29°50'00 | 21°30 | 7°55 | 5°50 | 1°20 | 0°30 | 7°13 | 6°17 | 19°29 | 14°25 | 29°25 | 0°47 | 8°35 | 17° 3 | | |
| F 23 | 18 2 9 | 0♁47'13 | 5♎24 | 8°48 | 7° 1 | 1°43 | 0°39 | 7°11 | 6°17 | 19°30 | 14°26 | 29°D25 | 0°44 | 8°42 | 17° 3 | | |
| S 24 | 18 6 6 | 1°44'26 | 19°26 | 9°45 | 8°11 | 2° 6 | 0°48 | 7° 9 | 6°17 | 19°32 | 14°27 | 29°25 | 0°40 | 8°49 | 17° 3 | | |
| S 25 | 18 10 3 | 2°41'38 | 3♁33 | 10°47 | 9°21 | 2°28 | 0°57 | 7° 8 | 6°18 | 19°34 | 14°28 | 29°R26 | 0°37 | 8°55 | 17° 3 | | |
| M26 | 18 13 59 | 3°38'50 | 17°45 | 11°52 | 10°32 | 2°49 | 1° 7 | 7° 6 | 6°19 | 19°36 | 14°29 | 29°25 | 0°34 | 9° 2 | 17° 3 | | |
| T 27 | 18 17 56 | 4°36'01 | 1♎59 | 13° 1 | 11°42 | 3°11 | 1°16 | 7° 5 | 6°19 | 19°37 | 14°30 | 29°22 | 0°31 | 9° 9 | 17° 2 | | |
| W28 | 18 21 52 | 5°33'12 | 16°13 | 14°15 | 12°52 | 3°31 | 1°26 | 7° 3 | 6°20 | 19°39 | 14°31 | 29°17 | 0°28 | 9°15 | 17° 2 | | |
| T 29 | 18 25 49 | 6°30'22 | 0♁24 | 15°32 | 14° 2 | 3°52 | 1°36 | 7° 2 | 6°21 | 19°41 | 14°32 | 29°10 | 0°25 | 9°22 | 17° 1 | | |
| F 30 | 18 29 45 | 7♁27'33 | 14♁28 | 16♁53 | 15♁12 | 4♁11 | 1♎45 | 7♎ 1 | 6♁21 | 19♁43 | 14♎33 | 29♁ 2 | 0♎21 | 9♎29 | 17♁ 1 | | |

Delta T = 9.67 sec.

Greg. Calendar

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SWISS EPHEMERIS for the year 1719

JULY 1719

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|
| S 1 | 18 33 42 | 8 ^h 24'43 | 28 ^h 19 | 18 ^h 17 | 16 ^h 22 | 4 ^h 31 | 1 ^h 55 | 7 ^h R 0 | 6 ^h 22 | 19 ^h 44 | 14 ^h 34 | 28 ^h R54 | 0 ^h 18 | 9 ^h 35 | 17 ^h R 0 |
| S 2 | 18 37 39 | 9 ^h 21'53 | 11 ^h 35 | 19 ^h 46 | 17 ^h 32 | 4 ^h 49 | 2 ^h 5 | 6 ^h 59 | 6 ^h 23 | 19 ^h 46 | 14 ^h 35 | 28 ^h 47 | 0 ^h 15 | 9 ^h 42 | 17 ^h R 0 |
| M 3 | 18 41 35 | 10 ^h 19'04 | 25 ^h 10 | 21 ^h 18 | 18 ^h 41 | 5 ^h 8 | 2 ^h 15 | 6 ^h 58 | 6 ^h 24 | 19 ^h 47 | 14 ^h 36 | 28 ^h 41 | 0 ^h 12 | 9 ^h 49 | 16 ^h 59 |
| T 4 | 18 45 32 | 11 ^h 16'14 | 8 ^h 7 | 22 ^h 54 | 19 ^h 51 | 5 ^h 25 | 2 ^h 25 | 6 ^h 57 | 6 ^h 25 | 19 ^h 49 | 14 ^h 38 | 28 ^h 37 | 0 ^h 9 | 9 ^h 55 | 16 ^h 58 |
| W 5 | 18 49 28 | 12 ^h 13'25 | 20 ^h 45 | 24 ^h 33 | 21 ^h 0 | 5 ^h 42 | 2 ^h 36 | 6 ^h 57 | 6 ^h 26 | 19 ^h 50 | 14 ^h 39 | 28 ^h 35 | 0 ^h 6 | 10 ^h 2 | 16 ^h 58 |
| T 6 | 18 53 25 | 13 ^h 10'36 | 3 ^h 5 | 26 ^h 15 | 22 ^h 10 | 5 ^h 59 | 2 ^h 46 | 6 ^h 56 | 6 ^h 27 | 19 ^h 52 | 14 ^h 40 | 28 ^h D35 | 0 ^h 2 | 10 ^h 9 | 16 ^h 57 |
| F 7 | 18 57 21 | 14 ^h 7'47 | 15 ^h 11 | 28 ^h 1 | 23 ^h 19 | 6 ^h 15 | 2 ^h 56 | 6 ^h 56 | 6 ^h 29 | 19 ^h 53 | 14 ^h 41 | 28 ^h 36 | 29 ^h 59 | 10 ^h 15 | 16 ^h 56 |
| S 8 | 19 1 18 | 15 ^h 4'59 | 27 ^h 8 | 29 ^h 50 | 24 ^h 28 | 6 ^h 30 | 3 ^h 7 | 6 ^h 55 | 6 ^h 30 | 19 ^h 55 | 14 ^h 42 | 28 ^h 37 | 29 ^h 56 | 10 ^h 22 | 16 ^h 55 |
| S 9 | 19 5 14 | 16 ^h 2'11 | 8 ^h 59 | 1 ^h 42 | 25 ^h 37 | 6 ^h 45 | 3 ^h 17 | 6 ^h 55 | 6 ^h 31 | 19 ^h 56 | 14 ^h 44 | 28 ^h 38 | 29 ^h 53 | 10 ^h 29 | 16 ^h 54 |
| M10 | 19 9 11 | 16 ^h 59'24 | 20 ^h 50 | 3 ^h 37 | 26 ^h 46 | 6 ^h 59 | 3 ^h 28 | 6 ^h 55 | 6 ^h 32 | 19 ^h 58 | 14 ^h 45 | 28 ^h R38 | 29 ^h 50 | 10 ^h 35 | 16 ^h 53 |
| T 11 | 19 13 7 | 17 ^h 56'37 | 2 ^h 46 | 5 ^h 35 | 27 ^h 55 | 7 ^h 12 | 3 ^h 39 | 6 ^h D55 | 6 ^h 34 | 19 ^h 59 | 14 ^h 46 | 28 ^h 37 | 29 ^h 46 | 10 ^h 42 | 16 ^h 52 |
| W12 | 19 17 4 | 18 ^h 53'51 | 14 ^h 52 | 7 ^h 34 | 29 ^h 4 | 7 ^h 25 | 3 ^h 50 | 6 ^h 55 | 6 ^h 35 | 20 ^h 1 | 14 ^h 48 | 28 ^h 34 | 29 ^h 43 | 10 ^h 49 | 16 ^h 51 |
| T 13 | 19 21 1 | 19 ^h 51'06 | 27 ^h 11 | 9 ^h 36 | 0 ^h 13 | 7 ^h 37 | 4 ^h 0 | 6 ^h 55 | 6 ^h 37 | 20 ^h 2 | 14 ^h 49 | 28 ^h 30 | 29 ^h 40 | 10 ^h 55 | 16 ^h 50 |
| F 14 | 19 24 57 | 20 ^h 48'21 | 9 ^h 48 | 11 ^h 40 | 1 ^h 21 | 7 ^h 48 | 4 ^h 11 | 6 ^h 55 | 6 ^h 38 | 20 ^h 3 | 14 ^h 51 | 28 ^h 24 | 29 ^h 37 | 11 ^h 2 | 16 ^h 48 |
| S 15 | 19 28 54 | 21 ^h 45'37 | 22 ^h 43 | 13 ^h 45 | 2 ^h 30 | 7 ^h 59 | 4 ^h 22 | 6 ^h 55 | 6 ^h 40 | 20 ^h 4 | 14 ^h 52 | 28 ^h 18 | 29 ^h 34 | 11 ^h 9 | 16 ^h 47 |
| S 16 | 19 32 50 | 22 ^h 42'53 | 5 ^h 59 | 15 ^h 51 | 3 ^h 38 | 8 ^h 8 | 4 ^h 34 | 6 ^h 56 | 6 ^h 41 | 20 ^h 6 | 14 ^h 54 | 28 ^h 12 | 29 ^h 31 | 11 ^h 15 | 16 ^h 46 |
| M17 | 19 36 47 | 23 ^h 40'10 | 19 ^h 33 | 17 ^h 58 | 4 ^h 47 | 8 ^h 18 | 4 ^h 45 | 6 ^h 56 | 6 ^h 43 | 20 ^h 7 | 14 ^h 55 | 28 ^h 8 | 29 ^h 27 | 11 ^h 22 | 16 ^h 44 |
| T 18 | 19 40 43 | 24 ^h 37'28 | 3 ^h 52 | 20 ^h 5 | 5 ^h 55 | 8 ^h 26 | 4 ^h 56 | 6 ^h 57 | 6 ^h 45 | 20 ^h 8 | 14 ^h 57 | 28 ^h 4 | 29 ^h 24 | 11 ^h 29 | 16 ^h 43 |
| W19 | 19 44 40 | 25 ^h 34'46 | 17 ^h 27 | 22 ^h 13 | 7 ^h 3 | 8 ^h 34 | 5 ^h 7 | 6 ^h 58 | 6 ^h 46 | 20 ^h 9 | 14 ^h 58 | 28 ^h 2 | 29 ^h 21 | 11 ^h 35 | 16 ^h 41 |
| T 20 | 19 48 37 | 26 ^h 32'04 | 1 ^h 39 | 24 ^h 21 | 8 ^h 11 | 8 ^h 41 | 5 ^h 19 | 6 ^h 58 | 6 ^h 48 | 20 ^h 10 | 15 ^h 0 | 28 ^h D 2 | 29 ^h 18 | 11 ^h 42 | 16 ^h 40 |
| F 21 | 19 52 33 | 27 ^h 29'23 | 15 ^h 57 | 26 ^h 28 | 9 ^h 19 | 8 ^h 47 | 5 ^h 30 | 6 ^h 59 | 6 ^h 50 | 20 ^h 12 | 15 ^h 1 | 28 ^h 3 | 29 ^h 15 | 11 ^h 49 | 16 ^h 38 |
| S 22 | 19 56 30 | 28 ^h 26'43 | 0 ^h 16 | 28 ^h 35 | 10 ^h 27 | 8 ^h 52 | 5 ^h 41 | 7 ^h 0 | 6 ^h 52 | 20 ^h 13 | 15 ^h 3 | 28 ^h 4 | 29 ^h 12 | 11 ^h 56 | 16 ^h 37 |
| S 23 | 20 0 26 | 29 ^h 24'02 | 14 ^h 33 | 0 ^h 41 | 11 ^h 34 | 8 ^h 57 | 5 ^h 53 | 7 ^h 1 | 6 ^h 54 | 20 ^h 14 | 15 ^h 4 | 28 ^h 5 | 29 ^h 8 | 12 ^h 2 | 16 ^h 35 |
| M24 | 20 4 23 | 0 ^h 21'22 | 28 ^h 47 | 2 ^h 46 | 12 ^h 42 | 9 ^h 1 | 6 ^h 5 | 7 ^h 3 | 6 ^h 56 | 20 ^h 15 | 15 ^h 6 | 28 ^h R 6 | 29 ^h 5 | 12 ^h 9 | 16 ^h 33 |
| T 25 | 20 8 19 | 1 ^h 18'43 | 12 ^h 53 | 4 ^h 50 | 13 ^h 49 | 9 ^h 4 | 6 ^h 16 | 7 ^h 4 | 6 ^h 58 | 20 ^h 16 | 15 ^h 8 | 28 ^h 5 | 29 ^h 2 | 12 ^h 16 | 16 ^h 32 |
| W26 | 20 12 16 | 2 ^h 16'04 | 26 ^h 52 | 6 ^h 53 | 14 ^h 56 | 9 ^h 6 | 6 ^h 28 | 7 ^h 5 | 7 ^h 0 | 20 ^h 17 | 15 ^h 9 | 28 ^h 4 | 28 ^h 59 | 12 ^h 22 | 16 ^h 30 |
| T 27 | 20 16 12 | 3 ^h 13'26 | 10 ^h 41 | 8 ^h 55 | 16 ^h 3 | 9 ^h 7 | 6 ^h 40 | 7 ^h 7 | 7 ^h 2 | 20 ^h 18 | 15 ^h 11 | 28 ^h 1 | 28 ^h 56 | 12 ^h 29 | 16 ^h 28 |
| F 28 | 20 20 9 | 4 ^h 10'48 | 24 ^h 19 | 10 ^h 55 | 17 ^h 10 | 9 ^h R 8 | 6 ^h 52 | 7 ^h 8 | 7 ^h 4 | 20 ^h 19 | 15 ^h 13 | 27 ^h 58 | 28 ^h 52 | 12 ^h 36 | 16 ^h 26 |
| S 29 | 20 24 6 | 5 ^h 8'11 | 7 ^h 34 | 12 ^h 54 | 18 ^h 17 | 9 ^h 8 | 7 ^h 3 | 7 ^h 10 | 7 ^h 6 | 20 ^h 19 | 15 ^h 15 | 27 ^h 55 | 28 ^h 49 | 12 ^h 42 | 16 ^h 24 |
| S 30 | 20 28 2 | 6 ^h 5'35 | 20 ^h 54 | 14 ^h 51 | 19 ^h 23 | 9 ^h 7 | 7 ^h 15 | 7 ^h 12 | 7 ^h 9 | 20 ^h 20 | 15 ^h 16 | 27 ^h 51 | 28 ^h 46 | 12 ^h 49 | 16 ^h 22 |
| M31 | 20 31 59 | 7 ^h 5 2'59 | 3 ^h 49 | 16 ^h 47 | 20 ^h 30 | 9 ^h R 5 | 7 ^h 27 | 7 ^h 14 | 7 ^h 11 | 20 ^h 21 | 15 ^h 18 | 27 ^h 49 | 28 ^h 43 | 12 ^h 56 | 16 ^h 20 |

Delta T = 9.68 sec.

Greg. Calendar

AUGUST 1719

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------|--------------------|---------------------|--------------------|---------------------|---------------------|
| T 1 | 20 35 55 | 8 ^h 02'25 | 16 ^h 30 | 18 ^h 41 | 21 ^h 36 | 9 ^h R 3 | 7 ^h 39 | 7 ^h 15 | 7 ^h 13 | 20 ^h 22 | 15 ^h 20 | 27 ^h R48 | 28 ^h 40 | 13 ^h Y 2 | 16 ^h R18 |
| W 2 | 20 39 52 | 8 ^h 57'51 | 28 ^h 56 | 20 ^h 33 | 22 ^h 42 | 9 ^h R 0 | 7 ^h 51 | 7 ^h 17 | 7 ^h 16 | 20 ^h 23 | 15 ^h 22 | 27 ^h D47 | 28 ^h 37 | 13 ^h 9 | 16 ^h R16 |
| T 3 | 20 43 48 | 9 ^h 55'19 | 11 ^h 10 | 22 ^h 24 | 23 ^h 48 | 8 ^h 56 | 8 ^h 3 | 7 ^h 20 | 7 ^h 18 | 20 ^h 23 | 15 ^h 24 | 27 ^h 48 | 28 ^h 33 | 13 ^h 16 | 16 ^h 14 |
| F 4 | 20 47 45 | 10 ^h 52'47 | 23 ^h 12 | 24 ^h 14 | 24 ^h 54 | 8 ^h 51 | 8 ^h 16 | 7 ^h 22 | 7 ^h 20 | 20 ^h 24 | 15 ^h 25 | 27 ^h 49 | 28 ^h 30 | 13 ^h 22 | 16 ^h 12 |
| S 5 | 20 51 41 | 11 ^h 50'17 | 5 ^h Y 7 | 26 ^h 1 | 25 ^h 59 | 8 ^h 45 | 8 ^h 28 | 7 ^h 24 | 7 ^h 23 | 20 ^h 25 | 15 ^h 27 | 27 ^h 50 | 28 ^h 27 | 13 ^h 29 | 16 ^h 9 |
| S 6 | 20 55 38 | 12 ^h 47'49 | 16 ^h 58 | 27 ^h 48 | 27 ^h 5 | 8 ^h 39 | 8 ^h 40 | 7 ^h 27 | 7 ^h 25 | 20 ^h 25 | 15 ^h 29 | 27 ^h 52 | 28 ^h 24 | 13 ^h 36 | 16 ^h 7 |
| M 7 | 20 59 35 | 13 ^h 45'21 | 28 ^h 49 | 29 ^h 32 | 28 ^h 10 | 8 ^h 32 | 8 ^h 52 | 7 ^h 29 | 7 ^h 28 | 20 ^h 26 | 15 ^h 31 | 27 ^h 53 | 28 ^h 21 | 13 ^h 42 | 16 ^h 5 |
| T 8 | 21 3 31 | 14 ^h 42'55 | 10 ^h 45 | 1 ^h 16 | 29 ^h 15 | 8 ^h 24 | 9 ^h 5 | 7 ^h 32 | 7 ^h 31 | 20 ^h 27 | 15 ^h 33 | 27 ^h R53 | 28 ^h 18 | 13 ^h 49 | 16 ^h 3 |
| W 9 | 21 7 28 | 15 ^h 40'31 | 22 ^h 50 | 2 ^h 57 | 0 ^h 20 | 8 ^h 15 | 9 ^h 17 | 7 ^h 34 | 7 ^h 33 | 20 ^h 27 | 15 ^h 35 | 27 ^h 53 | 28 ^h 14 | 13 ^h 56 | 16 ^h 0 |
| T 10 | 21 11 24 | 16 ^h 38'08 | 5 ^h II 10 | 4 ^h 37 | 1 ^h 24 | 8 ^h 6 | 9 ^h 29 | 7 ^h 37 | 7 ^h 36 | 20 ^h 28 | 15 ^h 37 | 27 ^h 53 | 28 ^h 11 | 14 ^h 2 | 15 ^h 58 |
| F 11 | 21 15 21 | 17 ^h 35'46 | 17 ^h 47 | 6 ^h 16 | 2 ^h 29 | 7 ^h 56 | 9 ^h 42 | 7 ^h 40 | 7 ^h 39 | 20 ^h 28 | 15 ^h 39 | 27 ^h 52 | 28 ^h 8 | 14 ^h 9 | 15 ^h 55 |
| S 12 | 21 19 17 | 18 ^h 33'26 | 0 ^h 45 | 7 ^h 53 | 3 ^h 33 | 7 ^h 45 | 9 ^h 54 | 7 ^h 43 | 7 ^h 41 | 20 ^h 28 | 15 ^h 41 | 27 ^h 50 | 28 ^h 5 | 14 ^h 16 | 15 ^h 53 |
| S 13 | 21 23 14 | 19 ^h 31'08 | 14 ^h 7 | 9 ^h 29 | 4 ^h 37 | 7 ^h 34 | 10 ^h 7 | 7 ^h 46 | 7 ^h 44 | 20 ^h 29 | 15 ^h 43 | 27 ^h 49 | 28 ^h 2 | 14 ^h 23 | 15 ^h 50 |
| M14 | 21 27 10 | 20 ^h 28'51 | 27 ^h 52 | 11 ^h 3 | 5 ^h 41 | 7 ^h 22 | 10 ^h 19 | 7 ^h 49 | 7 ^h 47 | 20 ^h 29 | 15 ^h 45 | 27 ^h 48 | 27 ^h 58 | 14 ^h 29 | 15 ^h 48 |
| T 15 | 21 31 7 | 21 ^h 26'35 | 12 ^h 5 0 | 12 ^h 36 | 6 ^h 44 | 7 ^h 10 | 10 ^h 32 | 7 ^h 52 | 7 ^h 50 | 20 ^h 30 | 15 ^h 47 | 27 ^h 48 | 27 ^h 55 | 14 ^h 36 | 15 ^h 45 |
| W16 | 21 35 4 | 22 ^h 24'21 | 26 ^h 25 | 14 ^h 7 | 7 ^h 48 | 6 ^h 57 | 10 ^h 45 | 7 ^h 56 | 7 ^h 53 | 20 ^h 30 | 15 ^h 49 | 27 ^h D48 | 27 ^h 52 | 14 ^h 43 | 15 ^h 43 |
| T 17 | 21 39 0 | 23 ^h 22'08 | 11 ^h 11 | 15 ^h 37 | 8 ^h 51 | 6 ^h 43 | 10 | | | | | | | | |

SWISS EPHEMERIS for the year 1719

SEPTEMBER 1719

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| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|----------|----------|-------|--------|-------|--------|-------|-------|-------|--------|-------|--------|-------|-------|--------|---|
| F 1 | 22 38 8 | 7♎51'31 | 1♏33 | 4♌46 | 24♌ 3 | 2°R51 | 14♎10 | 8♍59 | 8♌43 | 20°R30 | 16♎22 | 27°R49 | 27♏ 1 | 16♏30 | 14°R59 | |
| S 2 | 22 42 5 | 8°49'41 | 13°25 | 5°47 | 25° 1 | 2♋36 | 14°22 | 9° 4 | 8°47 | 20♌30 | 16°25 | 27♏47 | 26°58 | 16°36 | 14♋56 | |
| S 3 | 22 46 1 | 9°47'53 | 25°16 | 6°45 | 25°58 | 2°21 | 14°35 | 9° 8 | 8°50 | 20°30 | 16°27 | 27°46 | 26°55 | 16°43 | 14°53 | |
| M 4 | 22 49 58 | 10°46'06 | 7♋ 7 | 7°40 | 26°56 | 2° 6 | 14°48 | 9°13 | 8°54 | 20°29 | 16°29 | 27°44 | 26°52 | 16°50 | 14°51 | |
| T 5 | 22 53 55 | 11°44'22 | 19° 2 | 8°33 | 27°52 | 1°51 | 15° 1 | 9°18 | 8°57 | 20°29 | 16°31 | 27°42 | 26°49 | 16°56 | 14°48 | |
| W 6 | 22 57 51 | 12°42'40 | 1♐ 6 | 9°22 | 28°49 | 1°37 | 15°14 | 9°23 | 9° 0 | 20°29 | 16°33 | 27°41 | 26°45 | 17° 3 | 14°45 | |
| T 7 | 23 1 48 | 13°40'59 | 13°22 | 10° 8 | 29°44 | 1°23 | 15°27 | 9°28 | 9° 4 | 20°28 | 16°36 | 27°D41 | 26°42 | 17°10 | 14°42 | |
| F 8 | 23 5 44 | 14°39'21 | 25°56 | 10°51 | 0♍40 | 1°10 | 15°40 | 9°33 | 9° 7 | 20°28 | 16°38 | 27°41 | 26°39 | 17°16 | 14°39 | |
| S 9 | 23 9 41 | 15°37'45 | 8♌50 | 11°30 | 1°35 | 0°57 | 15°53 | 9°38 | 9°11 | 20°27 | 16°40 | 27°42 | 26°36 | 17°23 | 14°36 | |
| S 10 | 23 13 37 | 16°36'12 | 22° 9 | 12° 4 | 2°29 | 0°45 | 16° 6 | 9°43 | 9°15 | 20°27 | 16°42 | 27°44 | 26°33 | 17°30 | 14°33 | |
| M11 | 23 17 34 | 17°34'40 | 5♌54 | 12°35 | 3°23 | 0°33 | 16°19 | 9°48 | 9°18 | 20°26 | 16°44 | 27°45 | 26°29 | 17°37 | 14°31 | |
| T 12 | 23 21 30 | 18°33'10 | 20° 6 | 13° 0 | 4°16 | 0°22 | 16°32 | 9°54 | 9°22 | 20°25 | 16°46 | 27°46 | 26°26 | 17°43 | 14°28 | |
| W13 | 23 25 27 | 19°31'43 | 4♎42 | 13°21 | 5° 9 | 0°12 | 16°45 | 9°59 | 9°25 | 20°25 | 16°49 | 27°R46 | 26°23 | 17°50 | 14°25 | |
| T 14 | 23 29 24 | 20°30'17 | 19°36 | 13°36 | 6° 1 | 0° 2 | 16°58 | 10° 5 | 9°29 | 20°24 | 16°51 | 27°45 | 26°20 | 17°57 | 14°22 | |
| F 15 | 23 33 20 | 21°28'53 | 4♌41 | 13°46 | 6°52 | 29♌52 | 17°11 | 10°10 | 9°33 | 20°24 | 16°53 | 27°42 | 26°17 | 18° 3 | 14°19 | |
| S 16 | 23 37 17 | 22°27'31 | 19°48 | 13°R49 | 7°43 | 29°44 | 17°24 | 10°16 | 9°36 | 20°23 | 16°55 | 27°39 | 26°14 | 18°10 | 14°16 | |
| S 17 | 23 41 13 | 23°26'11 | 4♍47 | 13°46 | 8°33 | 29°36 | 17°37 | 10°21 | 9°40 | 20°22 | 16°57 | 27°36 | 26°10 | 18°17 | 14°13 | |
| M18 | 23 45 10 | 24°24'53 | 19°30 | 13°36 | 9°22 | 29°29 | 17°50 | 10°27 | 9°44 | 20°21 | 16°59 | 27°33 | 26° 7 | 18°23 | 14°11 | |
| T 19 | 23 49 6 | 25°23'37 | 3♌52 | 13°19 | 10°11 | 29°23 | 18° 3 | 10°32 | 9°47 | 20°21 | 17° 2 | 27°30 | 26° 4 | 18°30 | 14° 8 | |
| W20 | 23 53 3 | 26°22'22 | 17°50 | 12°55 | 10°59 | 29°18 | 18°16 | 10°38 | 9°51 | 20°20 | 17° 4 | 27°28 | 26° 1 | 18°37 | 14° 5 | |
| T 21 | 23 56 59 | 27°21'09 | 1♌23 | 12°23 | 11°46 | 29°13 | 18°29 | 10°44 | 9°55 | 20°19 | 17° 6 | 27°D28 | 25°58 | 18°43 | 14° 2 | |
| F 22 | 0 0 56 | 28°19'57 | 14°33 | 11°45 | 12°32 | 29° 9 | 18°42 | 10°50 | 9°58 | 20°18 | 17° 8 | 27°29 | 25°55 | 18°50 | 13°59 | |
| S 23 | 0 4 53 | 29°18'48 | 27°23 | 10°59 | 13°18 | 29° 6 | 18°55 | 10°56 | 10° 2 | 20°17 | 17°10 | 27°31 | 25°51 | 18°57 | 13°57 | |
| S 24 | 0 8 49 | 0♌17'40 | 9♌56 | 10° 7 | 14° 2 | 29° 4 | 19° 8 | 11° 2 | 10° 6 | 20°16 | 17°12 | 27°32 | 25°48 | 19° 4 | 13°54 | |
| M25 | 0 12 46 | 1°16'33 | 22°16 | 9° 9 | 14°46 | 29° 2 | 19°20 | 11° 8 | 10°10 | 20°15 | 17°15 | 27°R33 | 25°45 | 19°10 | 13°51 | |
| T 26 | 0 16 42 | 2°15'29 | 4♋24 | 8° 6 | 15°28 | 29°D 1 | 19°33 | 11°14 | 10°13 | 20°14 | 17°17 | 27°33 | 25°42 | 19°17 | 13°49 | |
| W27 | 0 20 39 | 3°14'27 | 16°26 | 7° 0 | 16°10 | 29° 1 | 19°46 | 11°20 | 10°17 | 20°13 | 17°19 | 27°32 | 25°39 | 19°24 | 13°46 | |
| T 28 | 0 24 35 | 4°13'26 | 28°22 | 5°52 | 16°50 | 29° 2 | 19°59 | 11°26 | 10°21 | 20°12 | 17°21 | 27°28 | 25°35 | 19°30 | 13°43 | |
| F 29 | 0 28 32 | 5°12'27 | 10♏14 | 4°43 | 17°30 | 29° 4 | 20°12 | 11°32 | 10°25 | 20°11 | 17°23 | 27°23 | 25°32 | 19°37 | 13°41 | |
| S 30 | 0 32 28 | 6♌11'31 | 22♏ 5 | 3♌36 | 18♌ 8 | 29♌ 7 | 20♎24 | 11♍39 | 10♌28 | 20♌10 | 17♎25 | 27♏16 | 25♏29 | 19♏44 | 13♋38 | |

Delta T = 9.68 sec.

Greg. Calendar

OCTOBER 1719

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|------|---------|----------|-------|--------|--------|-------|-------|-------|-------|--------|-------|--------|-------|-------|--------|---|
| S 1 | 0 36 25 | 7♌10'37 | 3♌56 | 2°R32 | 18♍45 | 29♌10 | 20♎37 | 11♍45 | 10♌32 | 20°R 9 | 17♎27 | 27°R 8 | 25♏26 | 19♏50 | 13°R36 | |
| M 2 | 0 40 21 | 8° 9'45 | 15°49 | 1♌34 | 19°21 | 29°14 | 20°50 | 11°51 | 10°36 | 20♌ 8 | 17°29 | 27♏ 1 | 25°23 | 19°57 | 13♋33 | |
| T 3 | 0 44 18 | 9° 8'55 | 27°47 | 0°42 | 19°55 | 29°19 | 21° 2 | 11°58 | 10°40 | 20° 7 | 17°31 | 26°54 | 25°20 | 20° 4 | 13°31 | |
| W 4 | 0 48 15 | 10° 8'07 | 9♐52 | 29♎58 | 20°29 | 29°24 | 21°15 | 12° 4 | 10°44 | 20° 5 | 17°33 | 26°48 | 25°16 | 20°10 | 13°28 | |
| T 5 | 0 52 11 | 11° 7'22 | 22° 8 | 29°23 | 21° 1 | 29°30 | 21°28 | 12°10 | 10°47 | 20° 4 | 17°35 | 26°44 | 25°13 | 20°17 | 13°26 | |
| F 6 | 0 56 8 | 12° 6'39 | 4♌37 | 28°59 | 21°31 | 29°38 | 21°40 | 12°17 | 10°51 | 20° 3 | 17°37 | 26°42 | 25°10 | 20°24 | 13°23 | |
| S 7 | 1 0 4 | 13° 5'58 | 17°26 | 28°45 | 22° 0 | 29°45 | 21°53 | 12°23 | 10°55 | 20° 2 | 17°39 | 26°D42 | 25° 7 | 20°31 | 13°21 | |
| S 8 | 1 4 1 | 14° 5'20 | 0♌37 | 28°D42 | 22°27 | 29°54 | 22° 5 | 12°30 | 10°59 | 20° 0 | 17°41 | 26°43 | 25° 4 | 20°37 | 13°18 | |
| M 9 | 1 7 57 | 15° 4'44 | 14°13 | 28°50 | 22°53 | 0♋ 3 | 22°18 | 12°37 | 11° 2 | 19°59 | 17°43 | 26°44 | 25° 0 | 20°44 | 13°16 | |
| T 10 | 1 11 54 | 16° 4'10 | 28°17 | 29° 8 | 23°17 | 0°13 | 22°30 | 12°43 | 11° 6 | 19°58 | 17°45 | 26°R45 | 24°57 | 20°51 | 13°14 | |
| W11 | 1 15 50 | 17° 3'39 | 12♎48 | 29°37 | 23°40 | 0°24 | 22°43 | 12°50 | 11°10 | 19°56 | 17°47 | 26°43 | 24°54 | 20°57 | 13°12 | |
| T 12 | 1 19 47 | 18° 3'09 | 27°43 | 0♌15 | 24° 0 | 0°35 | 22°55 | 12°57 | 11°14 | 19°55 | 17°49 | 26°40 | 24°51 | 21° 4 | 13° 9 | |
| F 13 | 1 23 44 | 19° 2'42 | 12♌55 | 1° 1 | 24°19 | 0°47 | 23° 7 | 13° 3 | 11°18 | 19°54 | 17°51 | 26°35 | 24°48 | 21°11 | 13° 7 | |
| S 14 | 1 27 40 | 20° 2'17 | 28°13 | 1°56 | 24°36 | 1° 0 | 23°20 | 13°10 | 11°21 | 19°52 | 17°53 | 26°27 | 24°45 | 21°17 | 13° 5 | |
| S 15 | 1 31 37 | 21° 1'54 | 13♍28 | 2°58 | 24°51 | 1°13 | 23°32 | 13°17 | 11°25 | 19°51 | 17°55 | 26°19 | 24°41 | 21°24 | 13° 3 | |
| M16 | 1 35 33 | 22° 1'33 | 28°28 | 4° 5 | 25° 4 | 1°27 | 23°44 | 13°24 | 11°29 | 19°49 | 17°57 | 26°10 | 24°38 | 21°31 | 13° 1 | |
| T 17 | 1 39 30 | 23° 1'14 | 13♌ 5 | 5°19 | 25°14 | 1°42 | 23°56 | 13°31 | 11°33 | 19°48 | 17°59 | 26° 3 | 24°35 | 21°38 | 12°59 | |
| W18 | 1 43 26 | 24° 0'56 | 27°13 | 6°37 | 25°23 | 1°57 | 24° 8 | 13°37 | 11°36 | 19°46 | 18° 1 | 25°58 | 24°32 | 21°44 | 12°57 | |
| T 19 | 1 47 23 | 25° 0'41 | 10♌52 | 7°59 | 25°29 | 2°13 | 24°20 | 13°44 | 11°40 | 19°45 | 18° 3 | 25°55 | 24°29 | 21°51 | 12°55 | |
| F 20 | 1 51 19 | 26° 0'27 | 24° 4 | 9°25 | 25°33 | 2°30 | 24°32 | 13°51 | 11°44 | 19°43 | 18° 4 | 25°D54 | 24°26 | 21°58 | 12°53 | |
| S 21 | 1 55 16 | 27° 0'14 | 6♌50 | 10°53 | 25°R35 | 2°47 | 24°44 | 13°58 | 11°47 | 19°42 | 18° 6 | 25°54 | 24°22 | 22° 4 | 12°51 | |
| S 22 | 1 59 13 | 28° 0'04 | 19°17 | 12°24 | 25°35 | 3° 4 | 24°56 | 14° 5 | 11°51 | 19°40 | 18° 8 | 25°55 | 24°19 | 22°11 | 12°49 | |
| M23 | 2 3 9 | 28°59'55 | 1♋28 | 13°57 | 25°31 | 3°23 | 25° 8 | 14°12 | 11°55 | 19°39 | 18°10 | 25°R55 | 24°16 | 22°18 | 12°48 | |
| T 24 | 2 7 6 | 29°59'47 | 13°29 | 15°32 | 25°26 | 3°41 | 25°20 | 14°19 | 11°58 | 19°37 | 18°12 | 25°53 | 24°13 | 22°24 | 12°46 | |
| W25 | 2 11 2 | 0♍59'42 | 25°23 | 17° 8 | 25°18 | 4° 1 | 25°31 | 14°26 | 12° 2 | 19°36 | 18°13 | 25°49 | 24°10 | 22°31 | 12°44 | |
| T 26 | 2 14 59 | 1°59'38 | 7♏14 | 18°45 | 25° 8 | 4°21 | 25°43 | 14°33 | 12° 6 | 19°34 | 18°15 | 25°42 | 24° 6 | 22°38 | 12°43 | |
| F 27 | 2 18 55 | 2°59'36 | 19° 4 | 20°22 | 24°55 | 4°41 | 25°55 | 14°40 | 12° 9 | 19°32 | 18°17 | 25°33 | 24° 3 | 22°45 | 12°41 | |
| S 28 | 2 22 52 | 3°59'36 | 0♌56 | 22° 0 | 24°40 | 5° 2 | 26° 6 | 14°47 | 12°13 | 19°31 | 18°18 | 25°21 | 24° 0 | 22°51 | 12°40 | |
| S 29 | 2 26 48 | 4°59'37 | 12°51 | 23°39 | 24°22 | 5°23 | 26°18 | 14°55 | 12°16 | 19°29 | 18°20 | 25° 8 | 23°57 | 22°58 | 12°38 | |
| M30 | 2 30 45 | 5°59'41 | 24°50 | 25°17 | 24° 2 | 5°45 | 26°29 | 15° 2 | 12°20 | 19°28 | 18°22 | 24°54 | 23°54 | 23° 5 | 12°37 | |
| T 31 | 2 34 41 | 6♍59'46 | 6♐55 | 26♌56 | 23♍40 | 6♋ 7 | 26♎40 | 15♍ 9 | 12♌23 | 19♌26 | 18♎23 | 24♏41 | 23♏51 | 23♏11 | 12♋35 | |

Delta T = 9.68 sec.

Greg. Calendar

SWISS EPHEMERIS for the year 1719

NOVEMBER 1719

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| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|---------|----------|-------|-------|--------|-------|-------|-------|-------|--------|-------|--------|-------|-------|--------|
| W 1 | 2 38 38 | 7♍59'54 | 19♏ 7 | 28♌35 | 23°R16 | 6♁30 | 26♏52 | 15♍16 | 12♌27 | 19°R24 | 18♏25 | 24°R31 | 23♏47 | 23♏18 | 12°R34 |
| T 2 | 2 42 35 | 9° 0'04 | 19♏28 | 0♍14 | 22♍50 | 6°53 | 27° 3 | 15°23 | 12°31 | 19♏23 | 18°26 | 24♏22 | 23°44 | 23°25 | 12°R33 |
| F 3 | 2 46 31 | 10° 0'15 | 14° 0 | 1°52 | 22°21 | 7°16 | 27°14 | 15°30 | 12°34 | 19°21 | 18°28 | 24°17 | 23°41 | 23°32 | 12°32 |
| S 4 | 2 50 28 | 11° 0'29 | 26°48 | 3°31 | 21°52 | 7°40 | 27°25 | 15°37 | 12°37 | 19°19 | 18°29 | 24°14 | 23°38 | 23°38 | 12°30 |
| S 5 | 2 54 24 | 12° 0'45 | 9♎53 | 5° 9 | 21°20 | 8° 5 | 27°36 | 15°44 | 12°41 | 19°18 | 18°31 | 24°D14 | 23°35 | 23°45 | 12°29 |
| M 6 | 2 58 21 | 13° 1'03 | 23°20 | 6°47 | 20°47 | 8°29 | 27°47 | 15°52 | 12°44 | 19°16 | 18°32 | 24°R14 | 23°32 | 23°52 | 12°28 |
| T 7 | 3 2 17 | 14° 1'22 | 7♏11 | 8°24 | 20°13 | 8°54 | 27°57 | 15°59 | 12°48 | 19°14 | 18°34 | 24°13 | 23°28 | 23°58 | 12°27 |
| W 8 | 3 6 14 | 15° 1'44 | 21°28 | 10° 2 | 19°38 | 9°20 | 28° 8 | 16° 6 | 12°51 | 19°13 | 18°35 | 24°11 | 23°25 | 24° 5 | 12°26 |
| T 9 | 3 10 10 | 16° 2'08 | 6♌ 8 | 11°39 | 19° 3 | 9°46 | 28°19 | 16°13 | 12°54 | 19°11 | 18°36 | 24° 6 | 23°22 | 24°12 | 12°25 |
| F 10 | 3 14 7 | 17° 2'33 | 21° 9 | 13°16 | 18°27 | 10°12 | 28°29 | 16°20 | 12°58 | 19° 9 | 18°38 | 23°59 | 23°19 | 24°18 | 12°25 |
| S 11 | 3 18 4 | 18° 3'01 | 6♍21 | 14°53 | 17°50 | 10°39 | 28°40 | 16°27 | 13° 1 | 19° 7 | 18°39 | 23°49 | 23°16 | 24°25 | 12°24 |
| S 12 | 3 22 0 | 19° 3'30 | 21°34 | 16°29 | 17°14 | 11° 5 | 28°50 | 16°35 | 13° 4 | 19° 6 | 18°40 | 23°37 | 23°12 | 24°32 | 12°23 |
| M13 | 3 25 57 | 20° 4'00 | 6♁37 | 18° 5 | 16°38 | 11°33 | 29° 1 | 16°42 | 13° 7 | 19° 4 | 18°42 | 23°25 | 23° 9 | 24°39 | 12°22 |
| T 14 | 3 29 53 | 21° 4'33 | 21°21 | 19°41 | 16° 2 | 12° 0 | 29°11 | 16°49 | 13°11 | 19° 2 | 18°43 | 23°15 | 23° 6 | 24°45 | 12°22 |
| W15 | 3 33 50 | 22° 5'06 | 5♄39 | 21°16 | 15°27 | 12°28 | 29°21 | 16°56 | 13°14 | 19° 1 | 18°44 | 23° 7 | 23° 3 | 24°52 | 12°21 |
| T 16 | 3 37 46 | 23° 5'41 | 19°26 | 22°51 | 14°53 | 12°56 | 29°31 | 17° 3 | 13°17 | 18°59 | 18°45 | 23° 1 | 23° 0 | 24°59 | 12°21 |
| F 17 | 3 41 43 | 24° 6'18 | 2♌44 | 24°26 | 14°21 | 13°25 | 29°41 | 17°10 | 13°20 | 18°57 | 18°46 | 22°58 | 22°57 | 25° 5 | 12°20 |
| S 18 | 3 45 39 | 25° 6'55 | 15°35 | 26° 1 | 13°49 | 13°54 | 29°51 | 17°17 | 13°23 | 18°56 | 18°48 | 22°57 | 22°53 | 25°12 | 12°20 |
| S 19 | 3 49 36 | 26° 7'34 | 28° 3 | 27°36 | 13°20 | 14°23 | 0♌ 0 | 17°25 | 13°26 | 18°54 | 18°49 | 22°57 | 22°50 | 25°19 | 12°20 |
| M20 | 3 53 33 | 27° 8'13 | 10♁14 | 29°10 | 12°52 | 14°52 | 0°10 | 17°32 | 13°29 | 18°52 | 18°50 | 22°57 | 22°47 | 25°26 | 12°20 |
| T 21 | 3 57 29 | 28° 8'54 | 22°13 | 0♁45 | 12°26 | 15°22 | 0°19 | 17°39 | 13°32 | 18°51 | 18°51 | 22°55 | 22°44 | 25°32 | 12°19 |
| W22 | 4 1 26 | 29° 9'36 | 4♏ 5 | 2°19 | 12° 1 | 15°52 | 0°29 | 17°46 | 13°35 | 18°49 | 18°52 | 22°50 | 22°41 | 25°39 | 12°19 |
| T 23 | 4 5 22 | 0♁10'19 | 15°54 | 3°53 | 11°40 | 16°22 | 0°38 | 17°53 | 13°38 | 18°47 | 18°53 | 22°43 | 22°37 | 25°46 | 12°19 |
| F 24 | 4 9 19 | 1°11'03 | 27°45 | 5°26 | 11°20 | 16°52 | 0°47 | 18° 0 | 13°41 | 18°46 | 18°54 | 22°33 | 22°34 | 25°52 | 12°D19 |
| S 25 | 4 13 15 | 2°11'48 | 9♄40 | 7° 0 | 11° 3 | 17°23 | 0°56 | 18° 7 | 13°44 | 18°44 | 18°55 | 22°21 | 22°31 | 25°59 | 12°19 |
| S 26 | 4 17 12 | 3°12'35 | 21°41 | 8°34 | 10°48 | 17°54 | 1° 5 | 18°14 | 13°47 | 18°42 | 18°55 | 22° 6 | 22°28 | 26° 6 | 12°19 |
| M27 | 4 21 8 | 4°13'22 | 3♏49 | 10° 7 | 10°35 | 18°25 | 1°14 | 18°21 | 13°49 | 18°41 | 18°56 | 21°52 | 22°25 | 26°12 | 12°19 |
| T 28 | 4 25 5 | 5°14'11 | 16° 6 | 11°41 | 10°26 | 18°56 | 1°23 | 18°28 | 13°52 | 18°39 | 18°57 | 21°38 | 22°22 | 26°19 | 12°20 |
| W29 | 4 29 2 | 6°15'01 | 28°31 | 13°14 | 10°18 | 19°28 | 1°32 | 18°35 | 13°55 | 18°37 | 18°58 | 21°27 | 22°18 | 26°26 | 12°20 |
| T 30 | 4 32 58 | 7°15'53 | 11♌ 6 | 14♁48 | 10♍13 | 20♁ 0 | 1°40 | 18♍42 | 13°57 | 18♄36 | 18♏59 | 21♏18 | 22♏15 | 26♏33 | 12♁20 |

Delta T = 9.68 sec.

Greg. Calendar

DECEMBER 1719

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|---------|----------|-------|-------|-------|-------|------|-------|-------|--------|--------|--------|-------|-------|-------|
| F 1 | 4 36 55 | 8♁16'45 | 23♄51 | 16♁21 | 10♍11 | 20♁32 | 1°48 | 18♍49 | 14° 0 | 18°R34 | 18♏59 | 21°R12 | 22♏12 | 26♏39 | 12♁21 |
| S 2 | 4 40 51 | 9°17'39 | 6♎47 | 17°55 | 10°11 | 21° 4 | 1°57 | 18°56 | 14° 2 | 18♄33 | 19° 0 | 21♏ 9 | 22° 9 | 26°46 | 12°21 |
| S 3 | 4 44 48 | 10°18'34 | 19°58 | 19°28 | 10°13 | 21°36 | 2° 5 | 19° 3 | 14° 5 | 18°31 | 19° 1 | 21°D 8 | 22° 6 | 26°53 | 12°22 |
| M 4 | 4 48 44 | 11°19'31 | 3♏24 | 21° 1 | 10°18 | 22° 9 | 2°13 | 19° 9 | 14° 7 | 18°30 | 19° 1 | 21° 8 | 22° 3 | 26°59 | 12°22 |
| T 5 | 4 52 41 | 12°20'28 | 17° 7 | 22°34 | 10°26 | 22°41 | 2°21 | 19°16 | 14°10 | 18°28 | 19° 2 | 21°R 9 | 21°59 | 27° 6 | 12°23 |
| W 6 | 4 56 37 | 13°21'27 | 1♌10 | 24° 7 | 10°35 | 23°14 | 2°28 | 19°23 | 14°12 | 18°27 | 19° 3 | 21° 7 | 21°56 | 27°13 | 12°24 |
| T 7 | 5 0 34 | 14°22'27 | 15°32 | 25°41 | 10°47 | 23°47 | 2°36 | 19°30 | 14°15 | 18°25 | 19° 3 | 21° 4 | 21°53 | 27°20 | 12°24 |
| F 8 | 5 4 31 | 15°23'28 | 0♍10 | 27°14 | 11° 1 | 24°20 | 2°44 | 19°36 | 14°17 | 18°24 | 19° 4 | 20°57 | 21°50 | 27°26 | 12°25 |
| S 9 | 5 8 27 | 16°24'31 | 15° 0 | 28°46 | 11°17 | 24°54 | 2°51 | 19°43 | 14°19 | 18°22 | 19° 4 | 20°49 | 21°47 | 27°33 | 12°26 |
| S 10 | 5 12 24 | 17°25'34 | 29°53 | 0♄19 | 11°35 | 25°27 | 2°58 | 19°50 | 14°21 | 18°21 | 19° 4 | 20°39 | 21°43 | 27°40 | 12°27 |
| M11 | 5 16 20 | 18°26'38 | 14♁42 | 1°52 | 11°55 | 26° 1 | 3° 5 | 19°56 | 14°24 | 18°19 | 19° 5 | 20°29 | 21°40 | 27°46 | 12°28 |
| T 12 | 5 20 17 | 19°27'43 | 29°16 | 3°24 | 12°17 | 26°35 | 3°12 | 20° 3 | 14°26 | 18°18 | 19° 5 | 20°19 | 21°37 | 27°53 | 12°29 |
| W13 | 5 24 13 | 20°28'49 | 13♄30 | 4°56 | 12°41 | 27° 9 | 3°19 | 20° 9 | 14°28 | 18°17 | 19° 6 | 20°12 | 21°34 | 28° 0 | 12°30 |
| T 14 | 5 28 10 | 21°29'55 | 27°19 | 6°27 | 13° 7 | 27°43 | 3°26 | 20°16 | 14°30 | 18°15 | 19° 6 | 20° 7 | 21°31 | 28° 7 | 12°31 |
| F 15 | 5 32 7 | 22°31'02 | 10♌40 | 7°58 | 13°34 | 28°18 | 3°32 | 20°22 | 14°32 | 18°14 | 19° 6 | 20° 4 | 21°28 | 28°13 | 12°32 |
| S 16 | 5 36 3 | 23°32'09 | 23°36 | 9°29 | 14° 3 | 28°52 | 3°38 | 20°29 | 14°34 | 18°12 | 19° 6 | 20°D 4 | 21°24 | 28°20 | 12°34 |
| S 17 | 5 40 0 | 24°33'16 | 6♁ 9 | 10°58 | 14°34 | 29°27 | 3°45 | 20°35 | 14°36 | 18°11 | 19° 7 | 20° 5 | 21°21 | 28°27 | 12°35 |
| M18 | 5 43 56 | 25°34'23 | 18°24 | 12°27 | 15° 6 | 0♏ 1 | 3°51 | 20°41 | 14°37 | 18°10 | 19° 7 | 20° 6 | 21°18 | 28°33 | 12°36 |
| T 19 | 5 47 53 | 26°35'31 | 0♏25 | 13°55 | 15°40 | 0°36 | 3°56 | 20°48 | 14°39 | 18° 9 | 19° 7 | 20°R 6 | 21°15 | 28°40 | 12°38 |
| W20 | 5 51 49 | 27°36'39 | 22°18 | 15°21 | 16°15 | 1°11 | 4° 2 | 20°54 | 14°41 | 18° 7 | 19° 7 | 20° 4 | 21°12 | 28°47 | 12°39 |
| T 21 | 5 55 46 | 28°37'46 | 24° 9 | 16°45 | 16°51 | 1°46 | 4° 8 | 21° 0 | 14°43 | 18° 6 | 19° 7 | 20° 1 | 21° 9 | 28°54 | 12°41 |
| F 22 | 5 59 42 | 29°38'54 | 6♄ 1 | 18° 8 | 17°29 | 2°21 | 4°13 | 21° 6 | 14°44 | 18° 5 | 19°R 7 | 19°55 | 21° 5 | 29° 0 | 12°42 |
| S 23 | 6 3 39 | 0♄40'03 | 17°59 | 19°28 | 18° 8 | 2°57 | 4°18 | 21°12 | 14°46 | 18° 4 | 19° 7 | 19°47 | 21° 2 | 29° 7 | 12°44 |
| S 24 | 6 7 36 | 1°41'11 | 0♏ 6 | 20°46 | 18°48 | 3°32 | 4°24 | 21°18 | 14°47 | 18° 3 | 19° 7 | 19°38 | 20°59 | 29°14 | 12°46 |
| M25 | 6 11 32 | 2°42'19 | 12°23 | 22° 0 | 19°30 | 4° 8 | 4°28 | 21°24 | 14°49 | 18° 2 | 19° 7 | 19°29 | 20°56 | 29°20 | 12°48 |
| T 26 | 6 15 29 | 3°43'28 | 24°53 | 23°11 | 20°12 | 4°43 | 4°33 | 21°30 | 14°50 | 18° 1 | 19° 7 | 19°20 | 20°53 | 29°27 | 12°49 |
| W27 | 6 19 25 | 4°44'36 | 7♄35 | 24°17 | 20°56 | 5°19 | 4°38 | 21°36 | 14°52 | 17°59 | 19° 7 | 19°13 | 20°49 | 29°34 | 12°51 |
| T 28 | 6 23 22 | 5°45'45 | 20°29 | 25°18 | 21°41 | 5°55 | 4°42 | 21°42 | 14°53 | 17°58 | 19° 7 | 19° 7 | 20°46 | 29°41 | 12°53 |
| F 29 | 6 27 18 | 6°46'54 | 3♏35 | 26°13 | 22°27 | 6°31 | 4°47 | 21°48 | 14°54 | 17°57 | 19° 6 | 19° 4 | 20°43 | 29°47 | 12°55 |
| S 30 | 6 31 15 | 7°48'03 | 16°53 | 27° 1 | 23°13 | 7° 6 | 4°51 | 21°54 | 14°55 | 17°56 | 19° 6 | 19°D 2 | 20°40 | 29°54 | 12°57 |
| S 31 | 6 35 11 | 8♄49'13 | 0♏21 | 27♄42 | 24♍ 1 | 7♏43 | 4°55 | 21♍59 | 14°56 | 17♄56 | 19♏ 6 | 19♏ 3 | 20♏37 | 0♄ 1 | 12♁59 |

Delta T = 9.68 sec.

Greg. Calendar

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