

SWISS EPHEMERIS for the year 1687

JANUARY 1687 GC

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| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|---------|----------|----------|---------|-------|---------|-------|--------|--------|------|--------|--------|-------|-------|--------|
| W 1 | 6 43 3 | 10°52'29 | 5°03'39 | 29°30 | 2°36 | 15°28 | 11°35 | 12°22 | 10°R41 | 4°17 | 21°R33 | 0°R20 | 28°46 | 7°02 | 12°R41 |
| T 2 | 6 46 59 | 11°53'39 | 17°30 | 29°58 | 4° 2 | 16° 6 | 11°48 | 12°25 | 10°R40 | 4°19 | 21°R32 | 0°R12 | 28°43 | 7°35 | 12°R40 |
| F 3 | 6 50 56 | 12°54'48 | 29°22 | 0°17 | 5°17 | 16°44 | 12° 0 | 12°27 | 10°40 | 4°20 | 21°31 | 0° 4 | 28°39 | 7°41 | 12°38 |
| S 4 | 6 54 52 | 13°55'57 | 11°17'17 | 0°R26 | 6°33 | 17°23 | 12°13 | 12°28 | 10°39 | 4°22 | 21°29 | 29°R58 | 28°36 | 7°48 | 12°37 |
| S 5 | 6 58 49 | 14°57'05 | 23°18 | 0°23 | 7°48 | 18° 1 | 12°25 | 12°30 | 10°38 | 4°24 | 21°28 | 29°53 | 28°33 | 7°55 | 12°36 |
| M 6 | 7 2 45 | 15°58'14 | 5°03 | 0° 8 | 9° 4 | 18°39 | 12°38 | 12°32 | 10°37 | 4°25 | 21°27 | 29°51 | 28°30 | 8° 1 | 12°35 |
| T 7 | 7 6 42 | 16°59'23 | 17°56 | 29°34 | 10°19 | 19°17 | 12°50 | 12°33 | 10°37 | 4°27 | 21°25 | 29°D50 | 28°27 | 8° 8 | 12°34 |
| W 8 | 7 10 39 | 18° 0'32 | 0°04 | 29° 4 | 11°35 | 19°55 | 13° 2 | 12°35 | 10°36 | 4°29 | 21°24 | 29°51 | 28°23 | 8°15 | 12°33 |
| T 9 | 7 14 35 | 19° 1'41 | 13°52 | 28°15 | 12°50 | 20°33 | 13°14 | 12°36 | 10°36 | 4°30 | 21°23 | 29°52 | 28°20 | 8°22 | 12°33 |
| F 10 | 7 18 32 | 20° 2'49 | 27°29 | 27°16 | 14° 5 | 21°11 | 13°27 | 12°38 | 10°35 | 4°32 | 21°21 | 29°R53 | 28°17 | 8°28 | 12°32 |
| S 11 | 7 22 28 | 21° 3'58 | 11°17'35 | 26°10 | 15°21 | 21°49 | 13°39 | 12°39 | 10°35 | 4°34 | 21°20 | 29°52 | 28°14 | 8°35 | 12°31 |
| S 12 | 7 26 25 | 22° 5'06 | 26° 9 | 24°57 | 16°36 | 22°28 | 13°51 | 12°40 | 10°35 | 4°36 | 21°19 | 29°49 | 28°11 | 8°42 | 12°31 |
| M13 | 7 30 21 | 23° 6'14 | 11°13' 6 | 23°40 | 17°52 | 23° 6 | 14° 3 | 12°41 | 10°34 | 4°37 | 21°17 | 29°44 | 28° 8 | 8°48 | 12°30 |
| T 14 | 7 34 18 | 24° 7'21 | 26°19 | 22°22 | 19° 7 | 23°44 | 14°14 | 12°42 | 10°34 | 4°39 | 21°16 | 29°37 | 28° 4 | 8°55 | 12°30 |
| W15 | 7 38 15 | 25° 8'28 | 11°13'37 | 21° 5 | 20°23 | 24°22 | 14°26 | 12°42 | 10°34 | 4°41 | 21°15 | 29°28 | 28° 1 | 9° 2 | 12°29 |
| T 16 | 7 42 11 | 26° 9'34 | 26°50 | 19°51 | 21°38 | 25° 0 | 14°38 | 12°43 | 10°34 | 4°43 | 21°13 | 29°19 | 27°58 | 9° 9 | 12°29 |
| F 17 | 7 46 8 | 27°10'38 | 11°14'45 | 18°42 | 22°53 | 25°38 | 14°50 | 12°43 | 10°34 | 4°45 | 21°12 | 29°11 | 27°55 | 9°15 | 12°29 |
| S 18 | 7 50 4 | 28°11'42 | 26°17 | 17°40 | 24° 9 | 26°16 | 15° 1 | 12°44 | 10°D34 | 4°47 | 21°11 | 29° 5 | 27°52 | 9°22 | 12°28 |
| S 19 | 7 54 1 | 29°12'45 | 10°17'22 | 16°45 | 25°24 | 26°54 | 15°13 | 12°44 | 10°34 | 4°49 | 21°10 | 29° 1 | 27°49 | 9°29 | 12°28 |
| M20 | 7 57 57 | 0°13'47 | 23°58 | 15°59 | 26°40 | 27°32 | 15°24 | 12°44 | 10°34 | 4°51 | 21° 8 | 28°59 | 27°45 | 9°35 | 12°28 |
| T 21 | 8 1 54 | 1°14'47 | 7° 8 | 15°22 | 27°55 | 28°10 | 15°36 | 12°R44 | 10°34 | 4°52 | 21° 7 | 28°D59 | 27°42 | 9°42 | 12°D28 |
| W22 | 8 5 50 | 2°15'47 | 19°56 | 14°55 | 29°10 | 28°48 | 15°47 | 12°44 | 10°34 | 4°54 | 21° 6 | 29° 0 | 27°39 | 9°49 | 12°28 |
| T 23 | 8 9 47 | 3°16'45 | 2°11'25 | 14°36 | 0°26 | 29°26 | 15°58 | 12°44 | 10°34 | 4°56 | 21° 4 | 29°R 0 | 27°36 | 9°56 | 12°28 |
| F 24 | 8 13 43 | 4°17'42 | 14°41 | 14°25 | 1°41 | 0°17' 3 | 16° 9 | 12°44 | 10°34 | 4°58 | 21° 3 | 28°58 | 27°33 | 10° 2 | 12°28 |
| S 25 | 8 17 40 | 5°18'38 | 26°46 | 14°D23 | 2°56 | 0°41 | 16°20 | 12°44 | 10°35 | 5° 1 | 21° 2 | 28°55 | 27°29 | 10° 9 | 12°29 |
| S 26 | 8 21 37 | 6°19'33 | 8°04'5 | 14°29 | 4°12 | 1°19 | 16°31 | 12°43 | 10°35 | 5° 3 | 21° 1 | 28°48 | 27°26 | 10°16 | 12°29 |
| M27 | 8 25 33 | 7°20'27 | 20°39 | 14°41 | 5°27 | 1°57 | 16°42 | 12°43 | 10°36 | 5° 5 | 20°59 | 28°39 | 27°23 | 10°22 | 12°29 |
| T 28 | 8 29 30 | 8°21'19 | 2°02'32 | 15° 1 | 6°42 | 2°35 | 16°53 | 12°42 | 10°36 | 5° 7 | 20°58 | 28°27 | 27°20 | 10°29 | 12°30 |
| W29 | 8 33 26 | 9°22'11 | 14°24 | 15°26 | 7°58 | 3°13 | 17° 3 | 12°41 | 10°37 | 5° 9 | 20°57 | 28°13 | 27°17 | 10°36 | 12°30 |
| T 30 | 8 37 23 | 10°23'01 | 26°17 | 15°57 | 9°13 | 3°51 | 17°14 | 12°40 | 10°37 | 5°11 | 20°56 | 27°59 | 27°14 | 10°43 | 12°31 |
| F 31 | 8 41 19 | 11°23'50 | 8°13'13 | 16°33'3 | 10°28 | 4°17'29 | 17°24 | 12°39 | 10°R38 | 5°13 | 20°54 | 27°46 | 27°10 | 10°49 | 12°R32 |

| Day | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | | | | | | | | | |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|-------|-------|-------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | | | | | | | | | |
| W 1 | 23s 2 | 23n25 | 4n41 | 20s35 | 0s18 | 23s39 | 0s12 | 15s44 | 0n48 | 21s38 | 0n35 | 2s40 | 2n26 | 14n41 | 0s23 | 10s43 | 0s49 | 23n22 | 1n38 | 20n15 | 19n55 | 23n 4 | 13n24 | 2s23 |
| T 2 | 22 57 | 20 23 | 5 1 | 20 14 | 0 2 | 23 40 | 0 14 | 15 55 | 0 48 | 21 40 | 0 35 | 2 40 | 2 26 | 14 41 | 0 23 | 10 42 | 0 49 | 23 23 | 1 39 | 20 14 | 19 54 | 23 3 | 13 23 | 2 23 |
| F 3 | 22 51 | 16 31 | 5 8 | 19 53 | 0n14 | 23 39 | 0 17 | 16 7 | 0 47 | 21 41 | 0 35 | 2 41 | 2 26 | 14 41 | 0 23 | 10 42 | 0 49 | 23 23 | 1 39 | 20 12 | 19 54 | 23 1 | 13 23 | 2 23 |
| S 4 | 22 45 | 12 0 | 5 2 | 19 34 | 0 32 | 23 38 | 0 19 | 16 18 | 0 47 | 21 43 | 0 35 | 2 41 | 2 27 | 14 41 | 0 23 | 10 41 | 0 49 | 23 23 | 1 39 | 20 11 | 19 53 | 23 0 | 13 23 | 2 23 |
| S 5 | 22 38 | 7 0 | 4 43 | 19 17 | 0 50 | 23 37 | 0 22 | 16 29 | 0 46 | 21 45 | 0 35 | 2 42 | 2 27 | 14 40 | 0 23 | 10 40 | 0 49 | 23 23 | 1 39 | 20 10 | 19 52 | 22 58 | 13 23 | 2 23 |
| M 6 | 22 31 | 1 39 | 4 11 | 19 2 | 1 9 | 23 34 | 0 24 | 16 40 | 0 46 | 21 46 | 0 35 | 2 42 | 2 27 | 14 40 | 0 23 | 10 40 | 0 49 | 23 24 | 1 39 | 20 9 | 19 52 | 22 57 | 13 22 | 2 23 |
| T 7 | 22 24 | 3s52 | 3 26 | 18 49 | 1 28 | 23 31 | 0 26 | 16 51 | 0 45 | 21 48 | 0 35 | 2 42 | 2 27 | 14 40 | 0 23 | 10 39 | 0 49 | 23 24 | 1 39 | 20 9 | 19 51 | 22 55 | 13 22 | 2 23 |
| W 8 | 22 16 | 9 23 | 2 31 | 18 38 | 1 47 | 23 27 | 0 28 | 17 2 | 0 45 | 21 50 | 0 35 | 2 43 | 2 28 | 14 40 | 0 23 | 10 39 | 0 49 | 23 24 | 1 39 | 20 9 | 19 50 | 22 54 | 13 22 | 2 23 |
| T 9 | 22 8 | 14 40 | 1 25 | 18 30 | 2 5 | 23 22 | 0 31 | 17 12 | 0 44 | 21 51 | 0 35 | 2 43 | 2 28 | 14 40 | 0 23 | 10 38 | 0 49 | 23 25 | 1 39 | 20 9 | 19 49 | 22 52 | 13 22 | 2 23 |
| F 10 | 21 59 | 19 25 | 0 13 | 18 24 | 2 23 | 23 17 | 0 33 | 17 23 | 0 44 | 21 53 | 0 35 | 2 43 | 2 28 | 14 40 | 0 23 | 10 37 | 0 49 | 23 25 | 1 39 | 20 10 | 19 49 | 22 51 | 13 22 | 2 23 |
| S 11 | 21 50 | 23 15 | 1s 3 | 18 21 | 2 39 | 23 11 | 0 35 | 17 33 | 0 43 | 21 54 | 0 35 | 2 43 | 2 29 | 14 40 | 0 23 | 10 37 | 0 49 | 23 25 | 1 39 | 20 9 | 19 48 | 22 49 | 13 21 | 2 23 |
| S 12 | 21 40 | 25 42 | 2 16 | 18 20 | 2 53 | 23 4 | 0 37 | 17 44 | 0 43 | 21 56 | 0 35 | 2 44 | 2 29 | 14 40 | 0 23 | 10 36 | 0 49 | 23 25 | 1 39 | 20 9 | 19 47 | 22 48 | 13 21 | 2 23 |
| M13 | 21 30 | 26 23 | 3 22 | 18 21 | 3 6 | 22 56 | 0 39 | 17 54 | 0 42 | 21 57 | 0 35 | 2 44 | 2 29 | 14 39 | 0 23 | 10 35 | 0 49 | 23 26 | 1 39 | 20 8 | 19 47 | 22 46 | 13 21 | 2 23 |
| T 14 | 21 19 | 25 6 | 4 15 | 18 24 | 3 16 | 22 48 | 0 42 | 18 4 | 0 42 | 21 58 | 0 35 | 2 44 | 2 29 | 14 39 | 0 23 | 10 35 | 0 49 | 23 26 | 1 39 | 20 6 | 19 46 | 22 45 | 13 21 | 2 23 |
| W15 | 21 9 | 21 58 | 4 50 | 18 29 | 3 23 | 22 39 | 0 44 | 18 14 | 0 41 | 22 0 | 0 35 | 2 44 | 2 30 | 14 39 | 0 23 | 10 34 | 0 49 | 23 26 | 1 39 | 20 4 | 19 45 | 22 43 | 13 21 | 2 22 |
| T 16 | 20 57 | 17 21 | 5 5 | 18 35 | 3 28 | 22 29 | 0 46 | 18 23 | 0 41 | 22 1 | 0 35 | 2 44 | 2 30 | 14 39 | 0 23 | 10 33 | 0 49 | 23 27 | 1 40 | 20 2 | 19 45 | 22 42 | 13 21 | 2 22 |
| F 17 | 20 46 | 11 45 | 4 58 | 18 42 | 3 31 | 22 19 | 0 48 | 18 33 | 0 40 | 22 3 | 0 35 | 2 44 | 2 30 | 14 39 | 0 23 | 10 33 | 0 49 | 23 27 | 1 40 | 20 1 | 19 44 | 22 40 | 13 21 | 2 22 |
| S 18 | 20 34 | 5 38 | 4 31 | 18 50 | 3 31 | 22 8 | 0 50 | 18 42 | 0 40 | 22 4 | 0 35 | 2 44 | 2 31 | 14 39 | 0 23 | 10 32 | 0 49 | 23 27 | 1 40 | 19 59 | 19 43 | 22 38 | 13 21 | 2 22 |
| S 19 | 20 21 | 0n36 | 3 49 | 18 59 | 3 29 | 21 56 | 0 52 | 18 52 | 0 39 | 22 5 | 0 35 | 2 43 | 2 31 | 14 39 | 0 23 | 10 31 | 0 49 | 23 27 | 1 40 | 19 58 | 19 42 | 22 37 | 13 21 | 2 22 |
| M20 | 20 8 | 6 36 | 2 56 | 19 8 | 3 25 | 21 44 | 0 53 | 19 1 | 0 38 | 22 6 | 0 35 | 2 43 | 2 31 | 14 39 | 0 23 | 10 30 | 0 49 | 23 28 | 1 40 | 19 58 | 19 42 | 22 35 | 13 21 | 2 22 |
| T 21 | 19 55 | 12 7 | 1 54 | 19 18 | 3 19 | 21 31 | 0 55 | 19 10 | 0 38 | 22 8 | 0 35 | 2 43 | 2 31 | 14 40 | 0 23 | 10 30 | 0 49 | 23 28 | 1 40 | 19 58 | 19 41 | 22 34 | 13 21 | 2 22 |
| W22 | 19 41 | 16 59 | 0 48 | 19 27 | 3 12 | 21 17 | 0 57 | 19 19 | 0 37 | 22 9 | 0 35 | 2 43 | 2 32 | 14 40 | 0 23 | 10 29 | 0 49 | 23 28 | 1 40 | 19 58 | 19 40 | 22 32 | 13 21 | 2 22 |
| T 23 | 19 27 | 20 59 | 0n18 | 19 37 | 3 4 | 21 3 | 0 59 | 19 28 | 0 37 | 22 10 | 0 34 | 2 42 | 2 32 | 14 40 | 0 23 | 10 28 | 0 49 | 23 28 | 1 40 | 19 58 | 19 40 | 22 31 | 13 21 | 2 22 |
| F 24 | 19 13 | 23 58 | 1 23 | 19 47 | 2 55 | 20 48 | 1 1 | 19 37 | 0 36 | 22 11 | 0 34 | 2 42 | 2 32 | 14 40 | 0 23 | 10 27 | 0 49 | 23 29 | 1 40 | 19 58 | 19 39 | 22 29 | 13 21 | 2 22 |
| S 25 | 18 58 | 25 48 | 2 22 | 19 57 | 2 46 | 20 33 | 1 2 | 19 45 | 0 35 | 22 12 | 0 34 | 2 42 | 2 33 | 14 40 | 0 22 | 10 27 | 0 49 | 23 29 | 1 40 | 19 57 | 19 38 | 22 27 | 13 21 | 2 22 |
| S 26 | 18 43 | 26 26 | 3 14 | 20 7 | 2 36 | 20 17 | 1 4 | 19 54 | 0 35 | 22 14 | 0 34 | 2 41 | 2 33 | 14 40 | 0 22 | 10 26 | 0 49 | 23 29 | 1 40 | 19 56 | 19 37 | 22 26 | 13 22 | 2 22 |
| M27 | 18 28 | 25 49 | 3 58 | 20 16 | 2 25 | 20 0 | 1 5 | 20 2 | 0 34 | 22 15 | 0 34 | 2 41 | 2 33 | 14 40 | 0 22 | 10 25 | 0 49 | 23 29 | 1 40 | 19 54 | 19 37 | 22 24 | 13 22 | 2 22 |
| T 28 | 18 12 | 24 1 | 4 31 | 20 25 | 2 14 | 19 42 | 1 7 | 20 10 | 0 34 | 22 16 | 0 34 | 2 40 | 2 33 | 14 40 | 0 22 | 10 24 | | | | | | | | |

SWISS EPHEMERIS for the year 1687

FEBRUARY 1687 GC

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| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|----------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|--------------------|--------------------|----------------------|----------------------|-------------------|---------------------|---------------------|
| S 1 | 8 45 16 | 12 ²² 24'38 | 20 ¹⁷ 12 | 17 ³ 14 | 11 ¹⁸ 44 | 5 ²⁷ 6 | 17 ²⁷ 35 | 12 ²⁰ R38 | 10 ⁸ 39 | 5 ¹¹ 15 | 20 ²⁰ R53 | 27 ²⁷ R34 | 27 ⁸ 7 | 10 ¹⁰ 56 | 12 ¹² 32 |
| S 2 | 8 49 13 | 13 ²⁵ 25 | 2 ² 17 | 17 ⁵⁹ | 12 ⁵⁹ | 5 ⁴⁴ | 17 ⁴⁵ | 12 ² 37 | 10 ³⁹ | 5 ¹⁷ | 20 ²⁵ 52 | 27 ²⁵ 25 | 27 ⁴ | 11 ³ | 12 ³³ |
| M 3 | 8 53 9 | 14 ²⁶ 11 | 14 ³⁰ | 18 ⁴⁷ | 14 ¹⁴ | 6 ²² | 17 ⁵⁵ | 12 ³⁶ | 10 ⁴⁰ | 5 ¹⁹ | 20 ⁵¹ | 27 ¹⁸ | 27 ¹ | 11 ¹⁰ | 12 ³⁴ |
| T 4 | 8 57 6 | 15 ²⁶ 55 | 26 ⁵⁶ | 19 ⁴⁰ | 15 ²⁹ | 7 ⁰ | 18 ⁵ | 12 ³⁴ | 10 ⁴¹ | 5 ²² | 20 ⁵⁰ | 27 ¹⁵ | 26 ⁵⁸ | 11 ¹⁶ | 12 ³⁵ |
| W 5 | 9 1 2 | 16 ²⁷ 39 | 9 ¹¹ 38 | 20 ³⁵ | 16 ⁴⁵ | 7 ³⁷ | 18 ¹⁵ | 12 ³³ | 10 ⁴² | 5 ²⁴ | 20 ⁴⁸ | 27 ¹⁴ | 26 ⁵⁵ | 11 ²³ | 12 ³⁶ |
| T 6 | 9 4 59 | 17 ²⁸ 22 | 22 ⁴⁰ | 21 ³⁴ | 18 ⁰ | 8 ¹⁵ | 18 ²⁵ | 12 ³¹ | 10 ⁴³ | 5 ²⁶ | 20 ⁴⁷ | 27 ¹³ | 26 ⁵¹ | 11 ³⁰ | 12 ³⁷ |
| F 7 | 9 8 55 | 18 ²⁹ 03 | 6 ²⁷ 7 | 22 ³⁵ | 19 ¹⁵ | 8 ⁵³ | 18 ³⁵ | 12 ³⁰ | 10 ⁴⁴ | 5 ²⁸ | 20 ⁴⁶ | 27 ¹³ | 26 ⁴⁸ | 11 ³⁶ | 12 ³⁸ |
| S 8 | 9 12 52 | 19 ²⁹ 44 | 20 ¹ | 23 ³⁹ | 20 ³⁰ | 9 ³⁰ | 18 ⁴⁵ | 12 ²⁸ | 10 ⁴⁵ | 5 ³⁰ | 20 ⁴⁵ | 27 ¹² | 26 ⁴⁵ | 11 ⁴³ | 12 ³⁹ |
| S 9 | 9 16 48 | 20 ³⁰ 24 | 4 ²³ 23 | 24 ⁴⁵ | 21 ⁴⁵ | 10 ⁸ | 18 ⁵⁴ | 12 ²⁶ | 10 ⁴⁶ | 5 ³³ | 20 ⁴⁴ | 27 ⁸ | 26 ⁴² | 11 ⁵⁰ | 12 ⁴⁰ |
| M 10 | 9 20 45 | 21 ³¹ 02 | 19 ²¹ | 25 ⁵³ | 23 ¹ | 10 ⁴⁶ | 19 ⁴ | 12 ²⁴ | 10 ⁴⁷ | 5 ³⁵ | 20 ⁴³ | 27 ¹ | 26 ³⁹ | 11 ⁵⁷ | 12 ⁴² |
| T 11 | 9 24 42 | 22 ³¹ 39 | 4 ²² 19 | 27 ⁴ | 24 ¹⁶ | 11 ²³ | 19 ¹³ | 12 ²² | 10 ⁴⁸ | 5 ³⁷ | 20 ⁴² | 26 ⁵² | 26 ³⁵ | 12 ³ | 12 ⁴³ |
| W 12 | 9 28 38 | 23 ³² 15 | 19 ³⁸ | 28 ¹⁶ | 25 ³¹ | 12 ¹ | 19 ²² | 12 ²⁰ | 10 ⁵⁰ | 5 ³⁹ | 20 ⁴¹ | 26 ⁴¹ | 26 ³² | 12 ¹⁰ | 12 ⁴⁴ |
| T 13 | 9 32 35 | 24 ³² 48 | 4 ¹⁷ 57 | 29 ³⁰ | 26 ⁴⁶ | 12 ³⁹ | 19 ³¹ | 12 ¹⁷ | 10 ⁵¹ | 5 ⁴¹ | 20 ³⁹ | 26 ²⁹ | 26 ²⁹ | 12 ¹⁷ | 12 ⁴⁶ |
| F 14 | 9 36 31 | 25 ³³ 21 | 20 ⁴ | 0 ²² 46 | 28 ¹ | 13 ¹⁶ | 19 ⁴⁰ | 12 ¹⁵ | 10 ⁵² | 5 ⁴⁴ | 20 ³⁸ | 26 ¹⁸ | 26 ²⁶ | 12 ²³ | 12 ⁴⁷ |
| S 15 | 9 40 28 | 26 ³³ 51 | 4 ¹⁹ 49 | 2 ³ | 29 ¹⁶ | 13 ⁵⁴ | 19 ⁴⁹ | 12 ¹² | 10 ⁵⁴ | 5 ⁴⁶ | 20 ³⁷ | 26 ⁹ | 26 ²³ | 12 ³⁰ | 12 ⁴⁹ |
| S 16 | 9 44 24 | 27 ³⁴ 20 | 19 ⁶ | 3 ²² | 0 ¹¹ 31 | 14 ³¹ | 19 ⁵⁸ | 12 ¹⁰ | 10 ⁵⁵ | 5 ⁴⁸ | 20 ³⁶ | 26 ³ | 26 ²⁰ | 12 ³⁷ | 12 ⁵¹ |
| M 17 | 9 48 21 | 28 ³⁴ 47 | 2 ¹⁸ 52 | 4 ⁴² | 1 ⁴⁶ | 15 ⁸ | 20 ⁶ | 12 ⁷ | 10 ⁵⁷ | 5 ⁵⁰ | 20 ³⁵ | 25 ⁵⁹ | 26 ¹⁶ | 12 ⁴⁴ | 12 ⁵² |
| T 18 | 9 52 17 | 29 ³⁵ 12 | 16 ¹⁰ | 6 ³ | 3 ² | 15 ⁴⁶ | 20 ¹⁵ | 12 ⁴ | 10 ⁵⁸ | 5 ⁵³ | 20 ³⁴ | 25 ⁵⁸ | 26 ¹³ | 12 ⁵⁰ | 12 ⁵⁴ |
| W 19 | 9 56 14 | 0 ¹¹ 35'35 | 29 ¹ | 7 ²⁶ | 4 ¹⁷ | 16 ²³ | 20 ²³ | 12 ² | 11 ⁰ | 5 ⁵⁵ | 20 ³³ | 25 ⁵⁸ | 26 ¹⁰ | 12 ⁵⁷ | 12 ⁵⁶ |
| T 20 | 10 0 11 | 1 ³⁵ 56 | 11 ¹¹ 30 | 8 ⁵⁰ | 5 ³² | 17 ¹ | 20 ³¹ | 11 ⁵⁹ | 11 ² | 5 ⁵⁷ | 20 ³² | 25 ⁵⁸ | 26 ⁷ | 13 ⁴ | 12 ⁵⁸ |
| F 21 | 10 4 7 | 2 ³⁶ 15 | 23 ⁴³ | 10 ¹⁵ | 6 ⁴⁷ | 17 ³⁸ | 20 ³⁹ | 11 ⁵⁶ | 11 ³ | 6 ⁰ | 20 ³² | 25 ⁵⁶ | 26 ⁴ | 13 ¹⁰ | 13 ⁰ |
| S 22 | 10 8 4 | 3 ³⁶ 32 | 5 ²² 45 | 11 ⁴² | 8 ² | 18 ¹⁵ | 20 ⁴⁷ | 11 ⁵³ | 11 ⁵ | 6 ² | 20 ³¹ | 25 ⁵³ | 26 ¹ | 13 ¹⁷ | 13 ² |
| S 23 | 10 12 0 | 4 ³⁶ 47 | 17 ³⁹ | 13 ¹⁰ | 9 ¹⁷ | 18 ⁵² | 20 ⁵⁵ | 11 ⁵⁰ | 11 ⁷ | 6 ⁴ | 20 ³⁰ | 25 ⁴⁶ | 25 ⁵⁷ | 13 ²⁴ | 13 ⁴ |
| M 24 | 10 15 57 | 5 ³⁷ 00 | 29 ³⁰ | 14 ³⁸ | 10 ³² | 19 ³⁰ | 21 ³ | 11 ⁴⁶ | 11 ⁹ | 6 ⁶ | 20 ²⁹ | 25 ³⁷ | 25 ⁵⁴ | 13 ³¹ | 13 ⁶ |
| T 25 | 10 19 53 | 6 ³⁷ 11 | 11 ¹² 21 | 16 ⁸ | 11 ⁴⁶ | 20 ⁷ | 21 ¹⁰ | 11 ⁴³ | 11 ¹¹ | 6 ⁹ | 20 ²⁸ | 25 ²⁵ | 25 ⁵¹ | 13 ³⁷ | 13 ⁸ |
| W 26 | 10 23 50 | 7 ³⁷ 21 | 23 ¹⁴ | 17 ³⁹ | 13 ¹ | 20 ⁴⁴ | 21 ¹⁸ | 11 ⁴⁰ | 11 ¹² | 6 ¹¹ | 20 ²⁷ | 25 ¹¹ | 25 ⁴⁸ | 13 ⁴⁴ | 13 ¹¹ |
| T 27 | 10 27 46 | 8 ³⁷ 28 | 5 ¹⁷ 11 | 19 ¹² | 14 ¹⁶ | 21 ²¹ | 21 ²⁵ | 11 ³⁶ | 11 ¹⁴ | 6 ¹³ | 20 ²⁶ | 24 ⁵⁷ | 25 ⁴⁵ | 13 ⁵¹ | 13 ¹³ |
| F 28 | 10 31 43 | 9 ³⁷ 33 | 17 ¹³ | 20 ²² 45 | 15 ¹¹ 31 | 21 ²⁷ 58 | 21 ³² | 11 ²³ 33 | 11 ¹⁶ | 6 ¹⁶ | 20 ²⁶ | 24 ⁴³ | 25 ⁴¹ | 13 ⁵⁸ | 13 ¹⁵ |

| Day | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | | | | | | | | | |
|------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | | | | | | | | | |
| S 1 | 17s 7 | 8n 9 | 4n38 | 20s53 | 1n29 | 18s28 | 1s12 | 20s41 | 0n31 | 22s20 | 0n34 | 2s38 | 2n34 | 14n41 | 0s22 | 10s21 | 0s49 | 23n31 | 1n40 | 19n39 | 19n33 | 22n16 | 13n23 | 2s21 |
| S 2 | 16 49 | 2 53 | 4 7 | 20 59 | 1 18 | 18 8 | 1 14 | 20 48 | 0 30 | 22 21 | 0 34 | 2 37 | 2 35 | 14 42 | 0 22 | 10 21 | 0 49 | 23 31 | 1 41 | 19 37 | 19 32 | 22 14 | 13 23 | 2 21 |
| M 3 | 16 32 | 2s34 | 3 25 | 21 3 | 1 7 | 17 47 | 1 15 | 20 56 | 0 29 | 22 22 | 0 34 | 2 36 | 2 35 | 14 42 | 0 22 | 10 20 | 0 49 | 23 31 | 1 41 | 19 36 | 19 32 | 22 13 | 13 23 | 2 21 |
| T 4 | 16 14 | 8 1 | 2 33 | 21 6 | 0 57 | 17 26 | 1 16 | 21 3 | 0 29 | 22 23 | 0 34 | 2 36 | 2 35 | 14 42 | 0 22 | 10 19 | 0 49 | 23 31 | 1 41 | 19 35 | 19 31 | 22 11 | 13 24 | 2 21 |
| W 5 | 15 56 | 13 16 | 1 32 | 21 9 | 0 46 | 17 4 | 1 17 | 21 10 | 0 28 | 22 23 | 0 34 | 2 35 | 2 36 | 14 43 | 0 22 | 10 18 | 0 49 | 23 32 | 1 41 | 19 34 | 19 30 | 22 9 | 13 24 | 2 21 |
| T 6 | 15 37 | 18 5 | 0 24 | 21 10 | 0 36 | 16 42 | 1 18 | 21 16 | 0 27 | 22 24 | 0 34 | 2 34 | 2 36 | 14 43 | 0 22 | 10 17 | 0 49 | 23 32 | 1 41 | 19 34 | 19 29 | 22 8 | 13 25 | 2 21 |
| F 7 | 15 19 | 22 8 | 0s47 | 21 10 | 0 26 | 16 20 | 1 19 | 21 23 | 0 26 | 22 25 | 0 34 | 2 33 | 2 36 | 14 43 | 0 22 | 10 17 | 0 49 | 23 32 | 1 41 | 19 34 | 19 29 | 22 6 | 13 25 | 2 21 |
| S 8 | 15 0 25 | 3 1 | 57 21 | 9 0 | 16 15 | 57 1 | 20 21 | 30 0 | 26 22 | 26 0 | 34 2 | 32 2 | 36 14 | 44 0 | 22 10 | 16 0 | 49 23 | 32 1 | 41 19 | 34 19 | 28 22 | 4 13 | 25 2 | 21 |
| S 9 | 14 41 | 26 27 | 3 3 | 21 7 | 0 6 | 15 33 | 1 21 | 21 36 | 0 25 | 22 27 | 0 34 | 2 31 | 2 37 | 14 44 | 0 22 | 10 15 | 0 49 | 23 32 | 1 41 | 19 33 | 19 27 | 22 3 | 13 26 | 2 21 |
| M 10 | 14 21 | 26 2 | 3 58 | 21 4 | 0s 3 | 15 10 | 1 22 | 21 42 | 0 24 | 22 28 | 0 34 | 2 30 | 2 37 | 14 44 | 0 22 | 10 14 | 0 49 | 23 33 | 1 41 | 19 32 | 19 26 | 22 1 | 13 26 | 2 21 |
| T 11 | 14 2 23 | 42 4 | 37 20 | 59 0 | 12 12 | 14 45 | 1 23 | 21 48 | 0 23 | 22 28 | 0 34 | 2 29 | 2 37 | 14 45 | 0 22 | 10 13 | 0 49 | 23 33 | 1 41 | 19 29 | 19 26 | 21 59 | 13 27 | 2 21 |
| W 12 | 13 42 | 19 39 | 4 58 | 20 53 | 0 21 | 14 21 | 1 23 | 21 54 | 0 23 | 22 29 | 0 34 | 2 28 | 2 37 | 14 45 | 0 22 | 10 12 | 0 49 | 23 33 | 1 41 | 19 27 | 19 25 | 21 57 | 13 27 | 2 21 |
| T 13 | 13 22 | 14 18 | 4 57 | 20 47 | 0 30 | 13 56 | 1 24 | 22 0 | 0 22 | 22 30 | 0 34 | 2 27 | 2 38 | 14 46 | 0 22 | 10 12 | 0 49 | 23 33 | 1 41 | 19 24 | 19 24 | 21 56 | 13 28 | 2 21 |
| F 14 | 13 1 8 | 9 4 | 35 20 | 38 0 | 38 13 | 30 1 | 24 22 | 5 0 | 21 22 | 31 0 | 34 2 | 26 2 | 38 14 | 46 0 | 22 10 | 11 0 | 49 23 | 33 1 | 41 19 | 22 19 | 23 21 | 54 13 | 28 2 | 21 |
| S 15 | 12 41 | 1 41 | 3 55 | 20 29 | 0 46 | 13 4 | 1 25 | 22 11 | 0 20 | 22 31 | 0 34 | 2 24 | 2 38 | 14 46 | 0 22 | 10 10 | 0 49 | 23 34 | 1 41 | 19 20 | 19 23 | 21 52 | 13 29 | 2 21 |
| S 16 | 12 20 | 4n42 | 3 1 | 20 18 | 0 53 | 12 38 | 1 25 | 22 16 | 0 19 | 22 32 | 0 34 | 2 23 | 2 38 | 14 47 | 0 22 | 10 9 | 0 49 | 23 34 | 1 41 | 19 18 | 19 22 | 21 51 | 13 29 | 2 21 |
| M 17 | 11 59 | 10 38 | 1 59 | 20 6 | 1 1 | 12 12 | 1 26 | 22 21 | 0 18 | 22 33 | 0 34 | 2 22 | 2 38 | 14 47 | 0 22 | 10 8 | 0 49 | 23 34 | 1 41 | 19 17 | 19 21 | 21 49 | 13 30 | 2 21 |
| T 18 | 11 38 | 15 53 | 0 52 | 19 53 | 1 8 | 11 45 | 1 26 | 22 26 | 0 17 | 22 33 | 0 34 | 2 21 | 2 39 | 14 48 | 0 22 | 10 8 | 0 49 | 23 34 | 1 41 | 19 17 | 19 20 | 21 47 | 13 30 | 2 20 |
| W 19 | 11 17 | 20 14 | 0n16 | 19 39 | 1 14 | 11 18 | 1 26 | 22 31 | 0 17 | 22 34 | 0 34 | 2 19 | 2 39 | 14 48 | 0 22 | 10 7 | 0 49 | 23 34 | 1 41 | 19 17 | 19 20 | 21 45 | 13 31 | 2 20 |
| T 20 | 10 55 | 23 33 | 1 21 | 19 23 | 1 21 | 10 50 | 1 26 | 22 35 | 0 16 | 22 34 | 0 34 | 2 18 | 2 39 | 14 49 | 0 22 | 10 6 | 0 49 | 23 35 | 1 41 | 19 17 | 19 21 | 21 43 | 13 32 | 2 20 |
| F 21 | 10 34 | 25 41 | 2 21 | 19 6 | 1 27 | 10 23 | 1 26 | 22 40 | 0 15 | 22 35 | 0 34 | 2 17 | 2 39 | 14 50 | 0 22 | 10 5 | 0 49 | 23 35 | 1 41 | 19 16 | 19 18 | 21 42 | 13 32 | 2 20 |
| S 22 | 10 12 | 26 35 | 3 13 | 18 47 | 1 32 | 9 55 | 1 27 | 22 44 | 0 14 | 22 35 | 0 34 | 2 15 | 2 40 | 14 50 | 0 22 | 10 4 | 0 49 | 23 35 | 1 41 | 19 16 | 19 17 | 21 40 | 13 33 | 2 20 |
| S 23 | 9 50 | 26 14 | 3 57 | 18 27 | 1 38 | 9 26 | 1 26 | 22 48 | 0 13 | 22 36 | 0 34 | 2 14 | 2 40 | 14 51 | 0 22 | 10 3 | 0 49 | 23 35 | 1 41 | 19 14 | 19 17 | 21 38 | 13 34 | 2 20 |
| M 24 | 9 28 | | | | | | | | | | | | | | | | | | | | | | | |

SWISS EPHEMERIS for the year 1687

MARCH 1687 GC

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-------------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|--------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|
| S 1 | 10 35 39 | 10 ^h 37'37" | 29 ^m 20" | 22 ^s 19" | 16 ^h 46' | 22 ^m 35" | 21 ^s 39" | 11 ^h R29 | 11 ^h 8'18" | 6 ^h 18' | 20 ^m R25 | 24 ^m R31 | 25 ^h 38' | 14 ^h Ω 4 | 13 ^h 8'18" |
| S 2 | 10 39 36 | 11 ^h 37'38" | 11 ^m 35" | 23 ^s 55" | 18° 1' | 23°12' | 21°46' | 11 ^h 25' | 11°21' | 6°20' | 20 ^m 24" | 24 ^m 21" | 25°35' | 14°11' | 13°20' |
| M 3 | 10 43 33 | 12 ^h 37'38" | 23 ^m 59" | 25°32' | 19°16' | 23°49' | 21°53' | 11°22' | 11°23' | 6°22' | 20°23' | 24°15' | 25°32' | 14°18' | 13°23' |
| T 4 | 10 47 29 | 13 ^h 37'37" | 6 ^m 33" | 27° 9' | 20°31' | 24°26' | 21°59' | 11°18' | 11°25' | 6°25' | 20°23' | 24°11' | 25°29' | 14°24' | 13°25' |
| W 5 | 10 51 26 | 14 ^h 37'33" | 19 ^m 21" | 28°48' | 21°45' | 25° 3' | 22° 6' | 11°14' | 11°27' | 6°27' | 20°22' | 24°D10 | 25°26' | 14°31' | 13°28' |
| T 6 | 10 55 22 | 15 ^h 37'28" | 2 ^m 24" | 0 ^h 28' | 23° 0' | 25°40' | 22°12' | 11°10' | 11°29' | 6°29' | 20°21' | 24°10' | 25°22' | 14°38' | 13°31' |
| F 7 | 10 59 19 | 16 ^h 37'22" | 15 ^m 47" | 2° 9' | 24°15' | 26°17' | 22°18' | 11° 6' | 11°32' | 6°31' | 20°20' | 24°R10 | 25°19' | 14°45' | 13°33' |
| S 8 | 11 3 15 | 17 ^h 37'13" | 29 ^m 32" | 3°52' | 25°30' | 26°54' | 22°24' | 11° 2' | 11°34' | 6°34' | 20°20' | 24° 9' | 25°16' | 14°51' | 13°36' |
| S 9 | 11 7 12 | 18 ^h 37'04" | 13 ^m 30" | 5°35' | 26°44' | 27°30' | 22°30' | 10°58' | 11°36' | 6°36' | 20°19' | 24° 7' | 25°13' | 14°58' | 13°39' |
| M10 | 11 11 8 | 19 ^h 36'52" | 28 ^m 11" | 7°20' | 27°59' | 28° 7' | 22°35' | 10°54' | 11°39' | 6°38' | 20°19' | 24° 2' | 25°10' | 15° 5' | 13°42' |
| T 11 | 11 15 5 | 20 ^h 36'39" | 13 ^m 30" | 9° 6' | 29°14' | 28°44' | 22°41' | 10°50' | 11°41' | 6°40' | 20°18' | 23°55' | 25° 7' | 15°11' | 13°45' |
| W12 | 11 19 2 | 21 ^h 36'24" | 28° 2' | 10°53' | 0 ^h Y28 | 29°20' | 22°46' | 10°45' | 11°44' | 6°43' | 20°18' | 23°46' | 25° 3' | 15°18' | 13°48' |
| T 13 | 11 22 58 | 22 ^h 36'06" | 13 ^m 31" | 12°41' | 1°43' | 29°57" | 22°51" | 10°41' | 11°46' | 6°45' | 20°17' | 23°36' | 25° 0' | 15°25' | 13°51' |
| F 14 | 11 26 55 | 23 ^h 35'47" | 28° 6' | 14°31' | 2°58' | 0 ^h 33' | 22°56' | 10°37' | 11°49' | 6°47' | 20°17' | 23°27' | 24°57' | 15°32' | 13°54' |
| S 15 | 11 30 51 | 24 ^h 35'26" | 12 ^m Y48 | 16°22' | 4°12' | 1°10' | 23° 1' | 10°32' | 11°51' | 6°49' | 20°16' | 23°19' | 24°54' | 15°38' | 13°57' |
| S 16 | 11 34 48 | 25°35'03" | 27° 7' | 18°14' | 5°27' | 1°46' | 23° 6' | 10°28' | 11°54' | 6°51' | 20°16' | 23°14' | 24°51' | 15°45' | 14° 0' |
| M17 | 11 38 44 | 26°34'37" | 10 ^h 35'9" | 20° 7' | 6°41' | 2°23' | 23°10' | 10°24' | 11°56' | 6°54' | 20°15' | 23°11' | 24°47' | 15°52' | 14° 3' |
| T 18 | 11 42 41 | 27°34'10" | 24°23" | 22° 1' | 7°56' | 2°59' | 23°15' | 10°19' | 11°59' | 6°56' | 20°15' | 23°D11 | 24°44' | 15°58' | 14° 6' |
| W19 | 11 46 37 | 28°33'40" | 7 ^m 11" | 23°57' | 9°10' | 3°35' | 23°19' | 10°15' | 12° 2' | 6°58' | 20°14' | 23°11' | 24°41' | 16° 5' | 14°10' |
| T 20 | 11 50 34 | 29°33'07" | 19°56' | 25°54' | 10°25' | 4°11' | 23°23' | 10°10' | 12° 5' | 7° 0' | 20°14' | 23°12' | 24°38' | 16°12' | 14°13' |
| F 21 | 11 54 31 | 0 ^h Y32'33" | 2 ^m 21" | 27°52' | 11°39' | 4°47' | 23°26' | 10° 6' | 12° 7' | 7° 2' | 20°14' | 23°R13 | 24°35' | 16°19' | 14°16' |
| S 22 | 11 58 27 | 1°31'56" | 14°15' | 29°51' | 12°54' | 5°23' | 23°30' | 10° 1' | 12°10' | 7° 4' | 20°13' | 23°12' | 24°32' | 16°25' | 14°20' |
| S 23 | 12 2 24 | 2°31'17" | 26°10' | 1 ^h Y51 | 14° 8' | 5°59' | 23°33' | 9°56' | 12°13' | 7° 6' | 20°13' | 23° 9' | 24°28' | 16°32' | 14°23' |
| M24 | 12 6 20 | 3°30'35" | 8 ^h Ω 1 | 3°52' | 15°22' | 6°35' | 23°37' | 9°52' | 12°16' | 7° 8' | 20°13' | 23° 4' | 24°25' | 16°39' | 14°27' |
| T 25 | 12 10 17 | 4°29'52" | 19°53' | 5°54' | 16°37' | 7°11' | 23°40' | 9°47' | 12°19' | 7°11' | 20°13' | 22°57' | 24°22' | 16°46' | 14°30' |
| W26 | 12 14 13 | 5°29'05" | 1 ^h 49' | 7°57' | 17°51' | 7°47' | 23°43' | 9°43' | 12°22' | 7°13' | 20°12' | 22°48' | 24°19' | 16°52' | 14°34' |
| T 27 | 12 18 10 | 6°28'17" | 13°50' | 10° 0' | 19° 5' | 8°22' | 23°45' | 9°38' | 12°25' | 7°15' | 20°12' | 22°39' | 24°16' | 16°59' | 14°37' |
| F 28 | 12 22 6 | 7°27'27" | 26° 0' | 12° 4' | 20°19' | 8°58' | 23°48' | 9°33' | 12°28' | 7°17' | 20°12' | 22°30' | 24°12' | 17° 6' | 14°41' |
| S 29 | 12 26 3 | 8°26'34" | 8 ^h 20' | 14° 7' | 21°34' | 9°33' | 23°50' | 9°29' | 12°31' | 7°19' | 20°12' | 22°23' | 24° 9' | 17°12' | 14°44' |
| S 30 | 12 30 0 | 9°25'39" | 20°49' | 16°11' | 22°48' | 10° 9' | 23°52' | 9°24' | 12°34' | 7°21' | 20°12' | 22°17' | 24° 6' | 17°19' | 14°48' |
| MB1 | 12 33 56 | 10 ^h Y24'43" | 3 ^m 30" | 18 ^h Y14 | 24 ^h Y 2 | 10 ^h 344 | 23 ^h 54 | 9 ^h 219 | 12 ^h 337 | 7 ^h 23 | 20 ^m 212 | 22 ^m 313 | 24 ^h 3 3 | 17 ^h Ω26 | 14 ^h 352 |

| Day | ☉ | | ☽ | | ♀ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | | | | |
|------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|------|-------|-------|-------|-------|------|
| | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | | | | |
| S 1 | 7s36 | 4n 2 | 4n 7 | 16s 1 | 2s 2 | 6s32 | 1s25 | 23s 9 | 0n 7 | 22s39 | 0n34 | 2s 5 | 2n41 | 14n54 | 0s22 | 9s58 | 0s49 | 23n36 | 1n42 | 18n56 | 19n12 | 21n27 | 13n38 | 2s20 |
| S 2 | 7 13 | 1s27 | 3 25 | 15 32 | 2 4 | 6 3 | 1 25 | 23 12 | 0 6 | 22 39 | 0 34 | 2 3 | 2 41 | 14 55 | 0 22 | 9 58 | 0 49 | 23 36 | 1 42 | 18 54 | 19 11 | 21 25 | 13 39 | 2 20 |
| M 3 | 6 50 | 6 57 | 2 33 | 15 1 | 2 7 | 5 33 | 1 24 | 23 15 | 0 5 | 22 40 | 0 34 | 2 2 | 2 41 | 14 56 | 0 22 | 9 57 | 0 49 | 23 36 | 1 42 | 18 52 | 19 11 | 21 24 | 13 40 | 2 20 |
| T 4 | 6 27 | 12 17 | 1 32 | 14 30 | 2 9 | 5 3 | 1 23 | 23 18 | 0 4 | 22 40 | 0 34 | 2 0 | 2 42 | 14 56 | 0 22 | 9 56 | 0 49 | 23 37 | 1 42 | 18 51 | 19 10 | 21 22 | 13 40 | 2 20 |
| W 5 | 6 4 | 17 11 | 0 26 | 13 57 | 2 10 | 4 33 | 1 23 | 23 21 | 0 3 | 22 41 | 0 34 | 1 58 | 2 42 | 14 57 | 0 21 | 9 55 | 0 49 | 23 37 | 1 42 | 18 51 | 19 9 | 21 20 | 13 41 | 2 20 |
| T 6 | 5 41 | 21 24 | 0 64 | 13 22 | 2 11 | 4 2 | 1 22 | 23 23 | 0 2 | 22 41 | 0 34 | 1 57 | 2 42 | 14 58 | 0 21 | 9 54 | 0 49 | 23 37 | 1 42 | 18 51 | 19 8 | 21 18 | 13 42 | 2 20 |
| F 7 | 5 17 | 24 35 | 1 52 | 12 47 | 2 12 | 3 32 | 1 21 | 23 25 | 0 1 | 22 41 | 0 34 | 1 55 | 2 42 | 14 59 | 0 21 | 9 53 | 0 49 | 23 37 | 1 42 | 18 51 | 19 8 | 21 16 | 13 43 | 2 20 |
| S 8 | 4 54 | 26 25 | 2 56 | 12 10 | 2 12 | 3 1 | 1 20 | 23 27 | 0s 1 | 22 42 | 0 34 | 1 53 | 2 42 | 14 59 | 0 21 | 9 53 | 0 49 | 23 37 | 1 42 | 18 51 | 19 7 | 21 14 | 13 44 | 2 20 |
| S 9 | 4 31 | 26 37 | 3 51 | 11 31 | 2 12 | 2 31 | 1 20 | 23 29 | 0 2 | 22 42 | 0 34 | 1 51 | 2 42 | 15 0 | 0 21 | 9 52 | 0 49 | 23 37 | 1 42 | 18 50 | 19 6 | 21 13 | 13 45 | 2 20 |
| M10 | 4 7 | 25 1 | 4 33 | 10 52 | 2 11 | 2 0 | 1 19 | 23 31 | 0 3 | 22 42 | 0 34 | 1 50 | 2 42 | 15 1 | 0 21 | 9 51 | 0 49 | 23 37 | 1 42 | 18 49 | 19 5 | 21 11 | 13 45 | 2 20 |
| T 11 | 3 44 | 21 42 | 4 58 | 10 11 | 2 10 | 1 30 | 1 18 | 23 33 | 0 4 | 22 43 | 0 34 | 1 48 | 2 43 | 15 2 | 0 21 | 9 50 | 0 49 | 23 37 | 1 42 | 18 47 | 19 5 | 21 9 | 13 46 | 2 20 |
| W12 | 3 20 | 16 54 | 5 2 | 9 29 | 2 8 | 0 59 | 1 16 | 23 34 | 0 5 | 22 43 | 0 34 | 1 46 | 2 43 | 15 2 | 0 21 | 9 49 | 0 49 | 23 38 | 1 42 | 18 45 | 19 4 | 21 7 | 13 47 | 2 20 |
| T 13 | 2 56 | 11 3 | 4 46 | 8 45 | 2 6 | 0 28 | 1 15 | 23 35 | 0 6 | 22 43 | 0 34 | 1 44 | 2 43 | 15 3 | 0 21 | 9 49 | 0 49 | 23 38 | 1 42 | 18 42 | 19 3 | 21 5 | 13 48 | 2 20 |
| F 14 | 2 33 | 4 35 | 4 10 | 8 0 | 2 4 | 0n 3 | 1 14 | 23 36 | 0 8 | 22 43 | 0 34 | 1 43 | 2 43 | 15 4 | 0 21 | 9 48 | 0 49 | 23 38 | 1 42 | 18 40 | 19 2 | 21 3 | 13 49 | 2 20 |
| S 15 | 2 9 | 2n 1 | 3 18 | 7 15 | 2 0 | 0 34 | 1 13 | 23 37 | 0 9 | 22 44 | 0 34 | 1 41 | 2 43 | 15 5 | 0 21 | 9 47 | 0 49 | 23 38 | 1 42 | 18 38 | 19 2 | 21 1 | 13 50 | 2 19 |
| S 16 | 1 45 | 8 22 | 2 15 | 6 27 | 1 57 | 1 4 | 1 11 | 23 38 | 0 10 | 22 44 | 0 34 | 1 39 | 2 43 | 15 6 | 0 21 | 9 46 | 0 49 | 23 38 | 1 42 | 18 37 | 19 1 | 20 59 | 13 51 | 2 19 |
| M17 | 1 22 | 14 7 | 1 5 | 5 39 | 1 53 | 1 35 | 1 10 | 23 39 | 0 11 | 22 44 | 0 34 | 1 37 | 2 43 | 15 7 | 0 21 | 9 45 | 0 49 | 23 38 | 1 42 | 18 36 | 19 0 | 20 57 | 13 52 | 2 19 |
| T 18 | 0 58 | 19 0 | 0n 6 | 4 49 | 1 48 | 2 6 | 1 9 | 23 40 | 0 13 | 22 44 | 0 34 | 1 35 | 2 43 | 15 7 | 0 21 | 9 45 | 0 49 | 23 38 | 1 42 | 18 36 | 18 59 | 20 55 | 13 53 | 2 19 |
| W19 | 0 34 | 22 49 | 1 15 | 3 59 | 1 43 | 2 37 | 1 7 | 23 40 | 0 14 | 22 44 | 0 34 | 1 33 | 2 43 | 15 8 | 0 21 | 9 44 | 0 49 | 23 38 | 1 42 | 18 36 | 18 58 | 20 54 | 13 54 | 2 19 |
| T 20 | 0 11 | 25 24 | 2 18 | 3 7 | 1 37 | 3 7 | 1 6 | 23 40 | 0 15 | 22 45 | 0 34 | 1 32 | 2 44 | 15 9 | 0 21 | 9 43 | 0 49 | 23 38 | 1 42 | 18 36 | 18 58 | 20 52 | 13 55 | 2 19 |
| F 21 | 0n13 | 26 41 | 3 14 | 2 14 | 1 31 | 3 38 | 1 4 | 23 40 | 0 17 | 22 45 | 0 34 | 1 30 | 2 44 | 15 10 | 0 21 | 9 42 | 0 49 | 23 38 | 1 42 | 18 37 | 18 57 | 20 50 | 13 56 | 2 19 |
| S 22 | 0 37 | 26 41 | 3 59 | 1 21 | 1 24 | 4 9 | 1 2 | 23 40 | 0 18 | 22 45 | 0 34 | 1 28 | 2 44 | 15 11 | 0 21 | | | | | | | | | |

SWISS EPHEMERIS for the year 1687

APRIL 1687 GC

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------|-------|--------|-------|-------|--------|-------|-------|------|--------|--------|-------|-------|-------|---|
| T 1 | 12 37 53 | 11°Y23'44 | 16M21 | 20Y17 | 25Y16 | 11Z20 | 23Z56 | 9°R15 | 12R40 | 7X25 | 20°R12 | 22°D12 | 24R 0 | 17R33 | 14R56 | |
| W 2 | 12 41 49 | 12°22'44 | 29°25 | 22°19 | 26°30 | 11°55 | 23°58 | 9°10 | 12°43 | 7°27 | 20°E12 | 22°R12 | 23°57 | 17°39 | 14°59 | |
| T 3 | 12 45 46 | 13°21'42 | 12Z42 | 24°19 | 27°44 | 12°30 | 23°59 | 9° 5 | 12°46 | 7°29 | 20°D12 | 22°13 | 23°53 | 17°46 | 15° 3 | |
| F 4 | 12 49 42 | 14°20'38 | 26°13 | 26°18 | 28°58 | 13° 5 | 24° 1 | 9° 1 | 12°49 | 7°31 | 20°12 | 22°14 | 23°50 | 17°53 | 15° 7 | |
| S 5 | 12 53 39 | 15°19'32 | 9Z59 | 28°14 | 0R12 | 13°40 | 24° 2 | 8°56 | 12°52 | 7°32 | 20°12 | 22°R15 | 23°47 | 17°59 | 15°11 | |
| S 6 | 12 57 35 | 16°18'25 | 24° 1 | 0R 9 | 1°27 | 14°15 | 24° 3 | 8°52 | 12°55 | 7°34 | 20°12 | 22°15 | 23°44 | 18° 6 | 15°15 | |
| M 7 | 13 1 32 | 17°17'16 | 8R18 | 2° 0 | 2°41 | 14°50 | 24° 3 | 8°47 | 12°59 | 7°36 | 20°12 | 22°14 | 23°41 | 18°13 | 15°19 | |
| T 8 | 13 5 29 | 18°16'05 | 22°47 | 3°48 | 3°54 | 15°25 | 24° 4 | 8°42 | 13° 2 | 7°38 | 20°12 | 22°11 | 23°38 | 18°20 | 15°23 | |
| W 9 | 13 9 25 | 19°14'52 | 7X24 | 5°33 | 5° 8 | 15°59 | 24° 4 | 8°38 | 13° 5 | 7°40 | 20°12 | 22° 6 | 23°34 | 18°26 | 15°27 | |
| T 10 | 13 13 22 | 20°13'38 | 22° 3 | 7°15 | 6°22 | 16°34 | 24°R 4 | 8°33 | 13° 8 | 7°42 | 20°12 | 22° 2 | 23°31 | 18°33 | 15°30 | |
| F 11 | 13 17 18 | 21°12'21 | 6Y38 | 8°52 | 7°36 | 17° 8 | 24° 4 | 8°29 | 13°12 | 7°43 | 20°13 | 21°57 | 23°28 | 18°40 | 15°34 | |
| S 12 | 13 21 15 | 22°11'03 | 21° 2 | 10°25 | 8°50 | 17°43 | 24° 4 | 8°24 | 13°15 | 7°45 | 20°13 | 21°53 | 23°25 | 18°47 | 15°39 | |
| S 13 | 13 25 11 | 23° 9'43 | 5R 8 | 11°54 | 10° 4 | 18°17 | 24° 3 | 8°20 | 13°18 | 7°47 | 20°13 | 21°51 | 23°22 | 18°53 | 15°43 | |
| M14 | 13 29 8 | 24° 8'21 | 18°53 | 13°18 | 11°18 | 18°51 | 24° 3 | 8°16 | 13°22 | 7°49 | 20°13 | 21°D50 | 23°18 | 19° 0 | 15°47 | |
| T 15 | 13 33 4 | 25° 6'57 | 2II15 | 14°37 | 12°31 | 19°25 | 24° 2 | 8°11 | 13°25 | 7°50 | 20°14 | 21°50 | 23°15 | 19° 7 | 15°51 | |
| W16 | 13 37 1 | 26° 5'31 | 15°14 | 15°52 | 13°45 | 19°59 | 24° 1 | 8° 7 | 13°28 | 7°52 | 20°14 | 21°51 | 23°12 | 19°13 | 15°55 | |
| T 17 | 13 40 58 | 27° 4'02 | 27°52 | 17° 1 | 14°59 | 20°32 | 24° 0 | 8° 3 | 13°32 | 7°54 | 20°14 | 21°53 | 23° 9 | 19°20 | 15°59 | |
| F 18 | 13 44 54 | 28° 2'32 | 10R12 | 18° 5 | 16°13 | 21° 6 | 23°58 | 7°58 | 13°35 | 7°55 | 20°15 | 21°55 | 23° 6 | 19°27 | 16° 3 | |
| S 19 | 13 48 51 | 29° 0'59 | 22°19 | 19° 4 | 17°26 | 21°39 | 23°57 | 7°54 | 13°38 | 7°57 | 20°15 | 21°56 | 23° 3 | 19°34 | 16° 7 | |
| S 20 | 13 52 47 | 29°59'25 | 4R16 | 19°58 | 18°40 | 22°13 | 23°55 | 7°50 | 13°42 | 7°59 | 20°16 | 21°R56 | 22°59 | 19°40 | 16°12 | |
| M21 | 13 56 44 | 0R57'48 | 16° 9 | 20°46 | 19°53 | 22°46 | 23°53 | 7°46 | 13°45 | 8° 0 | 20°16 | 21°55 | 22°56 | 19°47 | 16°16 | |
| T 22 | 14 0 40 | 1°56'09 | 28° 3 | 21°29 | 21° 7 | 23°19 | 23°51 | 7°42 | 13°49 | 8° 2 | 20°16 | 21°53 | 22°53 | 19°54 | 16°20 | |
| W23 | 14 4 37 | 2°54'28 | 10R 0 | 22° 6 | 22°20 | 23°52 | 23°49 | 7°38 | 13°52 | 8° 3 | 20°17 | 21°51 | 22°50 | 20° 1 | 16°24 | |
| T 24 | 14 8 33 | 3°52'44 | 22° 6 | 22°38 | 23°34 | 24°25 | 23°46 | 7°34 | 13°55 | 8° 5 | 20°17 | 21°48 | 22°47 | 20° 7 | 16°28 | |
| F 25 | 14 12 30 | 4°50'59 | 4R23 | 23° 4 | 24°47 | 24°57 | 23°44 | 7°30 | 13°59 | 8° 6 | 20°18 | 21°45 | 22°44 | 20°14 | 16°33 | |
| S 26 | 14 16 26 | 5°49'12 | 16°53 | 23°24 | 26° 1 | 25°30 | 23°41 | 7°26 | 14° 2 | 8° 7 | 20°19 | 21°43 | 22°40 | 20°21 | 16°37 | |
| S 27 | 14 20 23 | 6°47'23 | 29°38 | 23°39 | 27°14 | 26° 2 | 23°38 | 7°22 | 14° 6 | 8° 9 | 20°19 | 21°41 | 22°37 | 20°27 | 16°41 | |
| M28 | 14 24 20 | 7°45'32 | 12R37 | 23°49 | 28°28 | 26°34 | 23°35 | 7°19 | 14° 9 | 8°10 | 20°20 | 21°40 | 22°34 | 20°34 | 16°45 | |
| T 29 | 14 28 16 | 8°43'40 | 25°51 | 23°R53 | 29°41 | 27° 6 | 23°31 | 7°15 | 14°13 | 8°12 | 20°20 | 21°D40 | 22°31 | 20°41 | 16°50 | |
| W30 | 14 32 13 | 9R41'46 | 9R19 | 23R52 | 0II54 | 27R38 | 23R28 | 7R12 | 14R16 | 8R13 | 20R21 | 21R41 | 22R28 | 20R48 | 16R54 | |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | | | | | | | | |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|------|-------|-------|-------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | | | | | | | | |
| T 1 | 4n31 | 16s15 | 0n32 | 8n 5 | 0n10 | 9n 7 | 0s43 | 23s32 | 0s33 | 22s46 | 0n34 | 1s 9 | 2n44 | 15n20 | 0s21 | 9s34 | 0s49 | 23n39 | 1n42 | 18n21 | 18n48 | 20n28 | 14n 7 | 2s19 |
| W 2 | 4 54 | 20 42 | 0s39 | 9 2 | 0 21 | 9 36 | 0 41 | 23 31 | 0 34 | 22 46 | 0 34 | 1 7 | 2 44 | 15 21 | 0 21 | 9 33 | 0 49 | 23 39 | 1 42 | 18 21 | 18 47 | 20 26 | 14 8 | 2 19 |
| T 3 | 5 17 | 24 10 | 1 49 | 9 57 | 0 33 | 10 5 | 0 39 | 23 29 | 0 36 | 22 46 | 0 34 | 1 6 | 2 44 | 15 22 | 0 21 | 9 33 | 0 49 | 23 39 | 1 43 | 18 21 | 18 47 | 20 24 | 14 9 | 2 19 |
| F 4 | 5 40 | 26 20 | 2 54 | 10 51 | 0 44 | 10 33 | 0 37 | 23 28 | 0 37 | 22 46 | 0 34 | 1 4 | 2 44 | 15 23 | 0 21 | 9 32 | 0 49 | 23 39 | 1 43 | 18 22 | 18 46 | 20 22 | 14 11 | 2 19 |
| S 5 | 6 3 | 26 56 | 3 51 | 11 44 | 0 55 | 11 1 | 0 35 | 23 26 | 0 39 | 22 47 | 0 34 | 1 2 | 2 44 | 15 24 | 0 21 | 9 31 | 0 49 | 23 39 | 1 43 | 18 22 | 18 45 | 20 20 | 14 12 | 2 19 |
| S 6 | 6 25 | 25 51 | 4 34 | 12 35 | 1 7 | 11 29 | 0 32 | 23 24 | 0 41 | 22 47 | 0 34 | 1 0 | 2 44 | 15 25 | 0 21 | 9 31 | 0 49 | 23 39 | 1 43 | 18 22 | 18 44 | 20 18 | 14 13 | 2 19 |
| M 7 | 6 48 | 23 5 | 5 2 | 13 24 | 1 18 | 11 57 | 0 30 | 23 22 | 0 42 | 22 47 | 0 34 | 0 58 | 2 44 | 15 26 | 0 21 | 9 30 | 0 50 | 23 39 | 1 43 | 18 21 | 18 44 | 20 16 | 14 14 | 2 19 |
| T 8 | 7 10 | 18 50 | 5 11 | 14 12 | 1 28 | 12 25 | 0 28 | 23 19 | 0 44 | 22 47 | 0 34 | 0 57 | 2 44 | 15 27 | 0 21 | 9 29 | 0 50 | 23 39 | 1 43 | 18 21 | 18 43 | 20 14 | 14 15 | 2 19 |
| W 9 | 7 33 | 13 27 | 5 0 | 14 57 | 1 39 | 12 52 | 0 25 | 23 17 | 0 46 | 22 47 | 0 34 | 0 55 | 2 44 | 15 28 | 0 21 | 9 29 | 0 50 | 23 39 | 1 43 | 18 20 | 18 42 | 20 12 | 14 16 | 2 19 |
| T 10 | 7 55 | 7 17 | 4 30 | 15 40 | 1 49 | 13 18 | 0 23 | 23 15 | 0 48 | 22 47 | 0 34 | 0 53 | 2 44 | 15 29 | 0 21 | 9 28 | 0 50 | 23 39 | 1 43 | 18 18 | 18 41 | 20 10 | 14 17 | 2 20 |
| F 11 | 8 17 | 0 46 | 3 42 | 16 21 | 1 58 | 13 45 | 0 21 | 23 12 | 0 49 | 22 47 | 0 34 | 0 51 | 2 44 | 15 30 | 0 21 | 9 27 | 0 50 | 23 39 | 1 43 | 18 17 | 18 40 | 20 8 | 14 18 | 2 20 |
| S 12 | 8 39 | 5n44 | 2 40 | 16 59 | 2 7 | 14 11 | 0 18 | 23 9 | 0 51 | 22 47 | 0 34 | 0 50 | 2 44 | 15 31 | 0 21 | 9 27 | 0 50 | 23 39 | 1 43 | 18 16 | 18 40 | 20 5 | 14 20 | 2 20 |
| S 13 | 9 1 | 11 50 | 1 30 | 17 35 | 2 15 | 14 37 | 0 16 | 23 7 | 0 53 | 22 47 | 0 34 | 0 48 | 2 44 | 15 32 | 0 21 | 9 26 | 0 50 | 23 39 | 1 43 | 18 16 | 18 39 | 20 3 | 14 21 | 2 20 |
| M14 | 9 23 | 17 13 | 0 16 | 18 7 | 2 23 | 15 2 | 0 13 | 23 4 | 0 55 | 22 47 | 0 34 | 0 46 | 2 44 | 15 33 | 0 21 | 9 25 | 0 50 | 23 39 | 1 43 | 18 15 | 18 38 | 20 1 | 14 22 | 2 20 |
| T 15 | 9 44 | 21 35 | 0n57 | 18 38 | 2 29 | 15 27 | 0 11 | 23 1 | 0 57 | 22 47 | 0 34 | 0 45 | 2 44 | 15 34 | 0 21 | 9 25 | 0 50 | 23 39 | 1 43 | 18 15 | 18 37 | 19 59 | 14 23 | 2 20 |
| W16 | 10 6 | 24 44 | 2 5 | 19 5 | 2 35 | 15 52 | 0 8 | 22 58 | 0 59 | 22 47 | 0 34 | 0 43 | 2 44 | 15 35 | 0 21 | 9 24 | 0 50 | 23 39 | 1 43 | 18 16 | 18 36 | 19 57 | 14 24 | 2 20 |
| T 17 | 10 27 | 26 33 | 3 5 | 19 30 | 2 40 | 16 16 | 0 6 | 22 55 | 1 1 | 22 47 | 0 34 | 0 41 | 2 44 | 15 36 | 0 21 | 9 24 | 0 50 | 23 39 | 1 43 | 18 16 | 18 36 | 19 55 | 14 25 | 2 20 |
| F 18 | 10 48 | 27 0 | 3 55 | 19 52 | 2 44 | 16 40 | 0 3 | 22 51 | 1 3 | 22 47 | 0 34 | 0 40 | 2 44 | 15 37 | 0 21 | 9 23 | 0 50 | 23 39 | 1 43 | 18 17 | 18 35 | 19 53 | 14 26 | 2 20 |
| S 19 | 11 9 | 26 8 | 4 34 | 20 12 | 2 47 | 17 4 | 0 0 | 22 48 | 1 5 | 22 47 | 0 34 | 0 38 | 2 43 | 15 38 | 0 21 | 9 22 | 0 50 | 23 39 | 1 43 | 18 17 | 18 34 | 19 51 | 14 28 | 2 20 |
| S 20 | 11 29 | 24 4 | 5 0 | 20 28 | 2 49 | 17 27 | 0n 2 | 22 45 | 1 7 | 22 46 | 0 34 | 0 37 | 2 43 | 15 39 | 0 21 | 9 22 | 0 50 | 23 39 | 1 43 | 18 17 | 18 33 | 19 49 | 14 29 | 2 20 |
| M21 | 11 50 | 21 0 | 5 13 | 20 42 | 2 50 | 17 49 | 0 5 | 22 41 | 1 9 | 22 46 | 0 34 | 0 35 | 2 43 | 15 40 | 0 21 | 9 21 | 0 50 | 23 39 | 1 43 | 18 17 | 18 32 | 19 47 | 14 30 | 2 20 |
| T 22 | 12 10 | 17 3 | 5 13 | 20 53 | 2 49 | 18 11 | 0 7 | 22 38 | 1 11 | 22 46 | 0 34 | 0 34 | 2 43 | 15 41 | 0 21 | 9 21 | 0 50 | 23 39 | 1 43 | 18 16 | 18 32 | 19 45 | 14 31 | 2 20 |
| W23 | 12 30 | 12 26 | 4 59 | 21 2 | 2 48 | 18 33 | 0 10 | 22 34 | 1 13 | 22 46 | 0 34 | 0 32 | 2 43 | 15 42 | 0 21 | 9 20 | 0 50 | 23 39 | 1 43 | 18 16 | 18 31 | 19 42 | 14 32 | 2 20 |
| T 24 | 12 50 | 7 18 | 4 32 | 21 8 | 2 46 | 18 54 | 0 13 | 22 30 | 1 15 | 22 46 | 0 34 | 0 31 | 2 43 | 15 43 | 0 21 | 9 20 | 0 50 | 23 39 | 1 43 | 18 15 | 18 30 | 19 40 | 14 33 | 2 20 |
| F 25 | 13 10 | 1 48 | 3 52 | 21 11 | 2 42 | 19 15 | 0 15 | 22 26 | 1 17 | 22 46 | 0 34 | 0 29 | 2 43 | 15 44 | 0 21 | 9 19 | 0 50 | 23 38 | 1 43 | 18 14 | 18 29 | 19 38 | 14 34 | 2 20 |
| S 26 | 13 29 | 3s52 | 3 0 | 21 11 | 2 37 | 19 35 | 0 18 | 22 23 | 1 19 | 22 46 | 0 34 | 0 28 | 2 43 | 15 45 | 0 21 | 9 19 | 0 50 | 23 38 | 1 43 | 18 14 | 18 28 | 19 36 | 14 36 | 2 20 |
| S 27 | 13 48 | 9 31 | 1 59 | 21 9 | 2 31 | 19 55 | 0 20 | 22 19 | 1 22 | 22 46 | 0 34 | 0 27 | 2 43 | 15 46 | 0 21 | 9 18 | 0 50 | 23 38 | 1 43 | 18 13 | 18 28 | 19 34 | 14 37 | 2 20 |
| M28 | 14 7 | 14 52 | 0 50 | 21 4 | 2 23 | 20 14 | 0 23 | 22 15 | 1 24 | 22 46 | 0 34 | 0 25 | 2 42 | 15 47 | 0 21 | 9 18 | 0 50 | 23 38 | 1 43 | 18 13 | 18 27 | 19 32 | 14 38 | 2 20 |

SWISS EPHEMERIS for the year 1687

MAY 1687 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|--------|--------|-------|-------|--------|-------|-------|------|-------|--------|-------|-------|-------|---|
| T 1 | 14 36 9 | 10♈39'51 | 22♌59 | 23°R46 | 2II 7 | 28♉10 | 23°R24 | 7°R 8 | 14♈20 | 8♌14 | 20♉22 | 21♈42 | 22♉24 | 20♌54 | 16♈58 | |
| F 2 | 14 40 6 | 11°37'54 | 6♈51 | 23♈35 | 3°21 | 28°42 | 23♌20 | 7♌5 | 14°23 | 8°15 | 20°22 | 21°42 | 22°21 | 21° 1 | 17° 3 | |
| S 3 | 14 44 2 | 12°35'56 | 20°51 | 23°19 | 4°34 | 29°13 | 23°16 | 7° 1 | 14°27 | 8°17 | 20°23 | 21°43 | 22°18 | 21° 8 | 17° 7 | |
| S 4 | 14 47 59 | 13°33'56 | 4♌59 | 22°59 | 5°47 | 29°44 | 23°12 | 6°58 | 14°30 | 8°18 | 20°24 | 21°44 | 22°15 | 21°14 | 17°11 | |
| M 5 | 14 51 56 | 14°31'55 | 19°12 | 22°36 | 7° 0 | 0♌15 | 23° 8 | 6°55 | 14°34 | 8°19 | 20°25 | 21°R44 | 22°12 | 21°21 | 17°16 | |
| T 6 | 14 55 52 | 15°29'53 | 3♌27 | 22° 9 | 8°13 | 0°46 | 23° 3 | 6°52 | 14°37 | 8°20 | 20°25 | 21°43 | 22° 9 | 21°28 | 17°20 | |
| W 7 | 14 59 49 | 16°27'49 | 17°43 | 21°39 | 9°26 | 1°16 | 22°58 | 6°49 | 14°41 | 8°21 | 20°26 | 21°43 | 22° 5 | 21°35 | 17°24 | |
| T 8 | 15 3 45 | 17°25'44 | 1°V56 | 21° 7 | 10°39 | 1°47 | 22°54 | 6°46 | 14°44 | 8°22 | 20°27 | 21°42 | 22° 2 | 21°41 | 17°29 | |
| F 9 | 15 7 42 | 18°23'38 | 16° 2 | 20°33 | 11°52 | 2°17 | 22°49 | 6°43 | 14°47 | 8°24 | 20°28 | 21°42 | 21°59 | 21°48 | 17°33 | |
| S 10 | 15 11 38 | 19°21'30 | 29°58 | 19°58 | 13° 5 | 2°47 | 22°44 | 6°40 | 14°51 | 8°25 | 20°29 | 21°42 | 21°56 | 21°55 | 17°37 | |
| S 11 | 15 15 35 | 20°19'22 | 13♌41 | 19°23 | 14°18 | 3°17 | 22°38 | 6°37 | 14°54 | 8°26 | 20°30 | 21°42 | 21°53 | 22° 2 | 17°42 | |
| M12 | 15 19 31 | 21°17'11 | 27° 8 | 18°47 | 15°31 | 3°46 | 22°33 | 6°35 | 14°58 | 8°27 | 20°31 | 21°42 | 21°49 | 22° 8 | 17°46 | |
| T 13 | 15 23 28 | 22°15'00 | 10II18 | 18°13 | 16°44 | 4°15 | 22°27 | 6°32 | 15° 1 | 8°27 | 20°32 | 21°42 | 21°46 | 22°15 | 17°50 | |
| W14 | 15 27 25 | 23°12'46 | 23°10 | 17°39 | 17°57 | 4°44 | 22°22 | 6°30 | 15° 5 | 8°28 | 20°33 | 21°42 | 21°43 | 22°22 | 17°55 | |
| T 15 | 15 31 21 | 24°10'32 | 5♉45 | 17° 8 | 19°10 | 5°13 | 22°16 | 6°27 | 15° 8 | 8°29 | 20°34 | 21°41 | 21°40 | 22°28 | 17°59 | |
| F 16 | 15 35 18 | 25° 8'16 | 18° 4 | 16°39 | 20°22 | 5°42 | 22°10 | 6°25 | 15°12 | 8°30 | 20°35 | 21°41 | 21°37 | 22°35 | 18° 3 | |
| S 17 | 15 39 14 | 26° 5'58 | 0♌12 | 16°13 | 21°35 | 6°10 | 22° 4 | 6°23 | 15°15 | 8°31 | 20°36 | 21°41 | 21°34 | 22°42 | 18° 8 | |
| S 18 | 15 43 11 | 27° 3'38 | 12°10 | 15°50 | 22°48 | 6°38 | 21°58 | 6°21 | 15°19 | 8°32 | 20°37 | 21°40 | 21°30 | 22°49 | 18°12 | |
| M19 | 15 47 7 | 28° 1'18 | 24° 4 | 15°30 | 24° 1 | 7° 5 | 21°51 | 6°19 | 15°22 | 8°32 | 20°38 | 21°D40 | 21°27 | 22°55 | 18°16 | |
| T 20 | 15 51 4 | 28°58'55 | 5♌58 | 15°15 | 25°13 | 7°33 | 21°45 | 6°17 | 15°25 | 8°33 | 20°39 | 21°40 | 21°24 | 23° 2 | 18°20 | |
| W21 | 15 55 0 | 29°56'31 | 17°56 | 15° 3 | 26°26 | 8° 0 | 21°38 | 6°15 | 15°29 | 8°34 | 20°40 | 21°40 | 21°21 | 23° 9 | 18°25 | |
| T 22 | 15 58 57 | 0II54'06 | 0♌4 | 14°56 | 27°38 | 8°27 | 21°32 | 6°13 | 15°32 | 8°35 | 20°41 | 21°41 | 21°18 | 23°16 | 18°29 | |
| F 23 | 16 2 54 | 1°51'39 | 12°24 | 14°D53 | 28°51 | 8°53 | 21°25 | 6°11 | 15°36 | 8°35 | 20°42 | 21°42 | 21°15 | 23°22 | 18°33 | |
| S 24 | 16 6 50 | 2°49'10 | 25° 1 | 14°55 | 0♉3 | 9°19 | 21°18 | 6°10 | 15°39 | 8°36 | 20°43 | 21°43 | 21°11 | 23°29 | 18°37 | |
| S 25 | 16 10 47 | 3°46'41 | 7♌56 | 15° 1 | 1°16 | 9°45 | 21°11 | 6° 8 | 15°42 | 8°36 | 20°44 | 21°44 | 21° 8 | 23°36 | 18°42 | |
| M26 | 16 14 43 | 4°44'10 | 21°12 | 15°12 | 2°28 | 10°11 | 21° 4 | 6° 7 | 15°46 | 8°37 | 20°46 | 21°R44 | 21° 5 | 23°42 | 18°46 | |
| T 27 | 16 18 40 | 5°41'38 | 4♌47 | 15°27 | 3°40 | 10°36 | 20°57 | 6° 6 | 15°49 | 8°37 | 20°47 | 21°44 | 21° 2 | 23°49 | 18°50 | |
| W28 | 16 22 36 | 6°39'06 | 18°41 | 15°46 | 4°53 | 11° 1 | 20°50 | 6° 5 | 15°52 | 8°38 | 20°48 | 21°43 | 20°59 | 23°56 | 18°54 | |
| T 29 | 16 26 33 | 7°36'32 | 2♉49 | 16°10 | 6° 5 | 11°26 | 20°43 | 6° 4 | 15°56 | 8°38 | 20°49 | 21°41 | 20°55 | 24° 3 | 18°59 | |
| F 30 | 16 30 29 | 8°33'58 | 17° 7 | 16°38 | 7°17 | 11°50 | 20°36 | 6° 3 | 15°59 | 8°39 | 20°50 | 21°39 | 20°52 | 24° 9 | 19° 3 | |
| S 31 | 16 34 26 | 9II31'22 | 1♌31 | 17♌11 | 8♉29 | 12♌14 | 20♌28 | 6♌2 | 16♌2 | 8♌39 | 20♉52 | 21♌37 | 20♌49 | 24♌16 | 19♌7 | |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl |
| T 1 | 15n 3 | 26s 2 | 2s45 | 20n35 | 1n54 | 21n 8 | 0n31 | 22s 3 | 1s31 | 22s45 | 0n34 | 0s21 | 2n42 | 15n50 | 0s21 | 9s16 |
| F 2 | 15 21 27 | 3 45 | 20 21 | 1 42 | 21 25 | 0 33 | 21 59 | 1 33 | 22 45 | 0 34 | 0 20 | 2 42 | 15 51 | 0 21 | 9 16 | 0 50 |
| S 3 | 15 39 26 | 20 4 | 3 22 | 20 4 | 1 29 | 21 41 | 0 36 | 21 54 | 1 35 | 22 45 | 0 34 | 0 19 | 2 42 | 15 52 | 0 21 | 9 15 |
| S 4 | 15 56 23 | 5 3 | 19 45 | 1 15 | 21 56 | 0 39 | 21 50 | 1 38 | 22 45 | 0 34 | 0 18 | 2 42 | 15 53 | 0 21 | 9 15 | 0 50 |
| M 5 | 16 14 20 | 6 5 | 10 19 | 2 5 | 22 12 | 0 41 | 21 46 | 1 40 | 22 45 | 0 34 | 0 17 | 2 41 | 15 54 | 0 21 | 9 15 | 0 50 |
| T 6 | 16 31 15 | 4 5 | 16 19 | 3 0 | 44 22 | 0 44 | 21 42 | 1 43 | 22 44 | 0 34 | 0 16 | 2 41 | 15 56 | 0 21 | 9 14 | 0 50 |
| W 7 | 16 47 9 | 13 4 | 4 45 | 18 39 | 0 27 | 22 40 | 0 46 | 21 37 | 1 45 | 22 44 | 0 33 | 0 15 | 2 41 | 15 57 | 0 20 | 9 14 |
| T 8 | 17 4 2 56 | 4 2 | 18 14 | 0 10 | 22 53 | 0 49 | 21 33 | 1 48 | 22 44 | 0 33 | 0 14 | 2 41 | 15 58 | 0 20 | 9 13 | 0 50 |
| F 9 | 17 20 3n28 | 3 5 | 17 49 | 0s 7 | 23 6 | 0 51 | 21 29 | 1 50 | 22 44 | 0 33 | 0 13 | 2 41 | 15 59 | 0 20 | 9 13 | 0 51 |
| S 10 | 17 36 9 39 | 1 57 | 17 22 | 0 24 | 23 18 | 0 54 | 21 24 | 1 53 | 22 44 | 0 33 | 0 12 | 2 40 | 16 0 | 0 20 | 9 13 | 0 51 |
| S 11 | 17 52 15 16 | 0 44 | 16 56 | 0 42 | 23 29 | 0 56 | 21 20 | 1 56 | 22 43 | 0 33 | 0 11 | 2 40 | 16 1 | 0 20 | 9 12 | 0 51 |
| M12 | 18 7 20 3 | 0n30 | 16 30 | 0 59 | 23 40 | 0 58 | 21 16 | 1 58 | 22 43 | 0 33 | 0 10 | 2 40 | 16 2 | 0 20 | 9 12 | 0 51 |
| T 13 | 18 22 23 42 | 1 41 | 16 4 | 1 16 | 23 50 | 1 1 | 21 11 | 2 1 | 22 43 | 0 33 | 0 9 | 2 40 | 16 3 | 0 20 | 9 12 | 0 51 |
| W14 | 18 37 26 4 | 2 46 | 15 39 | 1 33 | 23 59 | 1 3 | 21 7 | 2 4 | 22 43 | 0 33 | 0 8 | 2 40 | 16 4 | 0 20 | 9 11 | 0 51 |
| T 15 | 18 51 27 2 | 3 40 | 15 14 | 1 49 | 24 7 | 1 5 | 21 3 | 2 7 | 22 42 | 0 33 | 0 8 | 2 40 | 16 5 | 0 20 | 9 11 | 0 51 |
| F 16 | 19 5 26 37 | 4 24 | 14 52 | 2 4 | 24 15 | 1 8 | 20 58 | 2 9 | 22 42 | 0 33 | 0 7 | 2 39 | 16 6 | 0 20 | 9 11 | 0 51 |
| S 17 | 19 19 24 56 | 4 55 | 14 30 | 2 19 | 24 22 | 1 10 | 20 54 | 2 12 | 22 42 | 0 33 | 0 6 | 2 39 | 16 7 | 0 20 | 9 11 | 0 51 |
| S 18 | 19 32 22 10 | 5 12 | 14 11 | 2 32 | 24 29 | 1 12 | 20 50 | 2 15 | 22 42 | 0 33 | 0 5 | 2 39 | 16 8 | 0 20 | 9 10 | 0 51 |
| M19 | 19 45 18 29 | 5 16 | 13 53 | 2 45 | 24 35 | 1 14 | 20 46 | 2 18 | 22 41 | 0 33 | 0 5 | 2 39 | 16 9 | 0 20 | 9 10 | 0 51 |
| T 20 | 19 58 14 5 | 5 7 | 13 38 | 2 56 | 24 40 | 1 16 | 20 41 | 2 21 | 22 41 | 0 33 | 0 4 | 2 39 | 16 10 | 0 20 | 9 10 | 0 51 |
| W21 | 20 10 9 8 | 4 44 | 13 24 | 3 7 | 24 44 | 1 18 | 20 37 | 2 24 | 22 41 | 0 33 | 0 4 | 2 38 | 16 11 | 0 20 | 9 10 | 0 51 |
| T 22 | 20 23 3 46 | 4 8 | 13 13 | 3 16 | 24 48 | 1 20 | 20 33 | 2 27 | 22 40 | 0 32 | 0 3 | 2 38 | 16 12 | 0 20 | 9 9 | 0 51 |
| F 23 | 20 34 1s50 | 3 21 | 13 5 | 3 24 | 24 51 | 1 22 | 20 29 | 2 30 | 22 40 | 0 32 | 0 3 | 2 38 | 16 13 | 0 20 | 9 9 | 0 51 |
| S 24 | 20 46 7 29 | 2 22 | 12 58 | 3 31 | 24 53 | 1 24 | 20 25 | 2 33 | 22 40 | 0 32 | 0 2 | 2 38 | 16 14 | 0 20 | 9 9 | 0 51 |
| S 25 | 20 57 12 59 | 1 16 | 12 54 | 3 37 | 24 54 | 1 26 | 20 21 | 2 37 | 22 39 | 0 32 | 0 2 | 2 37 | 16 15 | 0 20 | 9 9 | 0 51 |
| M26 | 21 7 18 3 0 | 3 12 | 12 53 | 3 42 | 24 55 | 1 28 | 20 17 | 2 40 | 22 39 | 0 32 | 0 2 | 2 37 | 16 16 | 0 20 | 9 9 | 0 51 |
| T 27 | 21 18 22 18 | 1s12 | 12 53 | 3 46 | 24 55 | 1 30 | 20 13 | 2 43 | 22 38 | 0 32 | 0 1 | 2 37 | 16 17 | 0 20 | 9 9 | 0 51 |
| W28 | 21 27 25 23 | 2 23 | 12 56 | 3 49 | 24 55 | 1 31 | 20 10 | 2 46 | 22 38 | 0 32 | 0 1 | 2 37 | 16 18 | 0 20 | 9 8 | 0 51 |
| T 29 | 21 37 26 55 | 3 28 | 13 2 | 3 50 | 24 53 | 1 33 | 20 6 | 2 50 | 22 38 | 0 32 | 0 1 | 2 37 | 16 19 | 0 20 | 9 8 | 0 51 |
| F 30 | 21 46 26 41 | 4 20 | 13 9 | 3 51 | 24 51 | 1 34 | 20 2 | 2 53 | 22 37 | 0 32 | 0 1 | 2 36 | 16 20 | 0 20 | 9 8 | 0 51 |
| S 31 | 21n55 | 24s40 | 4s56 | 13n18 | 3s51 | 24n48 | 1n36 | 19s59 | 2s56 | 22s37 | 0n32 | 0s 1 | 2n36 | 16n20 | 0s20 | 9s 8 |

Julian Day Number = 2337344.5, Delta T = 9.68 sec
 Ecliptic obliquity = 23°28'53, Nutation = - 0°00'15
 Ayanamsha: Fagan/Bradley = 20°22'33, Lahiri = 19°29'33Greg. Calendar

SWISS EPHEMERIS for the year 1687

JUNE 1687 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | |
|------|----------|-----------|-------|-------|-------|-------|--------|-------|-------|-------|-------|--------|-------|-------|-------|
| S 1 | 16 38 23 | 10II28'46 | 15☾55 | 17♃47 | 9♁41 | 12♁37 | 20°R21 | 6°R 1 | 16♃ 5 | 8♁39 | 20♁53 | 21°R35 | 20♃46 | 24♂23 | 19♃11 |
| M 2 | 16 42 19 | 11°26'10 | 0♁16 | 18°28 | 10°53 | 13° 0 | 20♁13 | 6♁ 0 | 16° 9 | 8°40 | 20°54 | 21♃34 | 20°43 | 24°29 | 19°15 |
| T 3 | 16 46 16 | 12°23'32 | 14°29 | 19°13 | 12° 5 | 13°23 | 20° 6 | 6° 0 | 16°12 | 8°40 | 20°56 | 21°D34 | 20°40 | 24°36 | 19°19 |
| W 4 | 16 50 12 | 13°20'55 | 28°34 | 20° 1 | 13°17 | 13°45 | 19°58 | 5°59 | 16°15 | 8°40 | 20°57 | 21°34 | 20°36 | 24°43 | 19°23 |
| T 5 | 16 54 9 | 14°18'16 | 12♀27 | 20°53 | 14°29 | 14° 7 | 19°51 | 5°59 | 16°18 | 8°40 | 20°58 | 21°35 | 20°33 | 24°50 | 19°27 |
| F 6 | 16 58 5 | 15°15'37 | 26° 9 | 21°49 | 15°41 | 14°28 | 19°43 | 5°59 | 16°21 | 8°41 | 21° 0 | 21°37 | 20°30 | 24°56 | 19°31 |
| S 7 | 17 2 2 | 16°12'58 | 9♃39 | 22°48 | 16°53 | 14°49 | 19°36 | 5°58 | 16°25 | 8°41 | 21° 1 | 21°38 | 20°27 | 25° 3 | 19°35 |
| S 8 | 17 5 58 | 17°10'18 | 22°56 | 23°51 | 18° 5 | 15° 9 | 19°28 | 5°D58 | 16°28 | 8°41 | 21° 2 | 21°R38 | 20°24 | 25°10 | 19°39 |
| M 9 | 17 9 55 | 18° 7'38 | 6II 0 | 24°58 | 19°17 | 15°29 | 19°20 | 5°58 | 16°31 | 8°41 | 21° 4 | 21°38 | 20°21 | 25°17 | 19°43 |
| T 10 | 17 13 52 | 19° 4'57 | 18°52 | 26° 7 | 20°28 | 15°49 | 19°13 | 5°59 | 16°34 | 8°41 | 21° 5 | 21°35 | 20°17 | 25°23 | 19°47 |
| W 11 | 17 17 48 | 20° 2'16 | 1♁30 | 27°21 | 21°40 | 16° 8 | 19° 5 | 5°59 | 16°37 | 8°R41 | 21° 7 | 21°32 | 20°14 | 25°30 | 19°51 |
| T 12 | 17 21 45 | 20°59'34 | 13°56 | 28°37 | 22°52 | 16°26 | 18°57 | 5°59 | 16°40 | 8°41 | 21° 8 | 21°28 | 20°11 | 25°37 | 19°55 |
| F 13 | 17 25 41 | 21°56'51 | 26°10 | 29°57 | 24° 3 | 16°44 | 18°50 | 6° 0 | 16°43 | 8°41 | 21° 9 | 21°22 | 20° 8 | 25°43 | 19°59 |
| S 14 | 17 29 38 | 22°54'07 | 8♂14 | 1II20 | 25°15 | 17° 2 | 18°42 | 6° 0 | 16°46 | 8°41 | 21°11 | 21°17 | 20° 5 | 25°50 | 20° 3 |
| S 15 | 17 33 34 | 23°51'23 | 20°11 | 2°46 | 26°26 | 17°19 | 18°34 | 6° 1 | 16°49 | 8°41 | 21°12 | 21°13 | 20° 1 | 25°57 | 20° 7 |
| M 16 | 17 37 31 | 24°48'38 | 2♁ 4 | 4°15 | 27°38 | 17°35 | 18°27 | 6° 1 | 16°52 | 8°41 | 21°14 | 21° 9 | 19°58 | 26° 4 | 20°10 |
| T 17 | 17 41 27 | 25°45'52 | 13°57 | 5°48 | 28°49 | 17°51 | 18°19 | 6° 2 | 16°55 | 8°40 | 21°15 | 21° 7 | 19°55 | 26°10 | 20°14 |
| W 18 | 17 45 24 | 26°43'06 | 25°54 | 7°23 | 0♂ 1 | 18° 6 | 18°12 | 6° 3 | 16°57 | 8°40 | 21°17 | 21°D 6 | 19°52 | 26°17 | 20°18 |
| T 19 | 17 49 21 | 27°40'19 | 8♁ 0 | 9° 2 | 1°12 | 18°21 | 18° 4 | 6° 4 | 17° 0 | 8°40 | 21°18 | 21° 7 | 19°49 | 26°24 | 20°22 |
| F 20 | 17 53 17 | 28°37'32 | 20°19 | 10°44 | 2°23 | 18°35 | 17°57 | 6° 5 | 17° 3 | 8°40 | 21°20 | 21° 8 | 19°46 | 26°31 | 20°25 |
| S 21 | 17 57 14 | 29°34'44 | 2♁57 | 12°29 | 3°34 | 18°48 | 17°49 | 6° 7 | 17° 6 | 8°39 | 21°21 | 21° 9 | 19°42 | 26°37 | 20°29 |
| S 22 | 18 1 10 | 0♁31'55 | 15°57 | 14°16 | 4°45 | 19° 1 | 17°42 | 6° 8 | 17° 9 | 8°39 | 21°23 | 21°R10 | 19°39 | 26°44 | 20°32 |
| M 23 | 18 5 7 | 1°29'06 | 29°21 | 16° 7 | 5°56 | 19°13 | 17°35 | 6° 9 | 17°11 | 8°39 | 21°24 | 21°10 | 19°36 | 26°51 | 20°36 |
| T 24 | 18 9 3 | 2°26'17 | 13♁10 | 18° 0 | 7° 7 | 19°25 | 17°28 | 6°11 | 17°14 | 8°38 | 21°26 | 21° 8 | 19°33 | 26°57 | 20°40 |
| W 25 | 18 13 0 | 3°23'27 | 27°23 | 19°55 | 8°18 | 19°36 | 17°20 | 6°13 | 17°17 | 8°38 | 21°28 | 21° 5 | 19°30 | 27° 4 | 20°43 |
| T 26 | 18 16 56 | 4°20'38 | 11♁56 | 21°54 | 9°29 | 19°46 | 17°13 | 6°14 | 17°19 | 8°37 | 21°29 | 20°59 | 19°27 | 27°11 | 20°46 |
| F 27 | 18 20 53 | 5°17'48 | 26°41 | 23°54 | 10°40 | 19°56 | 17° 6 | 6°16 | 17°22 | 8°37 | 21°31 | 20°53 | 19°23 | 27°18 | 20°50 |
| S 28 | 18 24 50 | 6°14'58 | 11♁31 | 25°57 | 11°50 | 20° 5 | 17° 0 | 6°18 | 17°25 | 8°36 | 21°32 | 20°46 | 19°20 | 27°24 | 20°53 |
| S 29 | 18 28 46 | 7°12'09 | 26°18 | 28° 1 | 13° 1 | 20°13 | 16°53 | 6°20 | 17°27 | 8°36 | 21°34 | 20°40 | 19°17 | 27°31 | 20°57 |
| M 30 | 18 32 43 | 8°09'19 | 10♁55 | 0♁ 7 | 14♂12 | 20♁20 | 16♁46 | 6♁22 | 17♃30 | 8♁35 | 21♁35 | 20♃36 | 19♃14 | 27♂38 | 21♃ 0 |

| Day | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | | | | | | | | | | | |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | | | | | | | |
| S 1 | 22n 3 | 21s 4 | 5s13 | 13n29 | 3s50 | 24n45 | 1n37 | 19s55 | 3s 0 | 22s36 | 0n31 | 0s 1 | 2n36 | 16n21 | 0s20 | 9s 8 | 0s51 | 23n34 | 1n44 | 18n11 | 17n59 | 18n15 | 15n15 | 2s24 |
| M 2 | 22 12 | 16 15 | 5 11 | 13 42 | 3 48 | 24 41 | 1 39 | 19 52 | 3 3 | 22 36 | 0 31 | 0 1 | 2 36 | 16 22 | 0 20 | 9 8 | 0 51 | 23 34 | 1 44 | 18 11 | 17 58 | 18 13 | 15 16 | 2 24 |
| T 3 | 22 19 | 10 34 | 4 50 | 13 57 | 3 45 | 24 36 | 1 40 | 19 49 | 3 7 | 22 36 | 0 31 | 0 1 | 2 35 | 16 23 | 0 20 | 9 8 | 0 51 | 23 34 | 1 44 | 18 11 | 17 57 | 18 11 | 15 17 | 2 24 |
| W 4 | 22 26 | 4 25 | 4 12 | 14 13 | 3 41 | 24 30 | 1 41 | 19 46 | 3 10 | 22 35 | 0 31 | 0 1 | 2 35 | 16 24 | 0 20 | 9 8 | 0 52 | 23 34 | 1 44 | 18 11 | 17 56 | 18 8 | 15 18 | 2 24 |
| T 5 | 22 33 | 1n53 | 3 19 | 14 31 | 3 37 | 24 24 | 1 43 | 19 43 | 3 14 | 22 35 | 0 31 | 0 1 | 2 35 | 16 25 | 0 20 | 9 8 | 0 52 | 23 34 | 1 44 | 18 12 | 17 55 | 18 6 | 15 18 | 2 24 |
| F 6 | 22 40 | 8 1 | 2 15 | 14 51 | 3 32 | 24 16 | 1 44 | 19 40 | 3 17 | 22 34 | 0 31 | 0 1 | 2 35 | 16 26 | 0 20 | 9 8 | 0 52 | 23 33 | 1 44 | 18 12 | 17 54 | 18 3 | 15 19 | 2 25 |
| S 7 | 22 46 | 13 42 | 1 5 | 15 11 | 3 26 | 24 9 | 1 45 | 19 37 | 3 21 | 22 34 | 0 31 | 0 1 | 2 34 | 16 27 | 0 20 | 9 8 | 0 52 | 23 33 | 1 44 | 18 12 | 17 54 | 18 1 | 15 20 | 2 25 |
| S 8 | 22 52 | 18 39 | 0n 7 | 15 33 | 3 19 | 24 0 | 1 46 | 19 35 | 3 25 | 22 33 | 0 31 | 0 1 | 2 34 | 16 28 | 0 20 | 9 8 | 0 52 | 23 33 | 1 44 | 18 12 | 17 53 | 17 59 | 15 21 | 2 25 |
| M 9 | 22 57 | 22 38 | 1 18 | 15 56 | 3 12 | 23 51 | 1 47 | 19 32 | 3 29 | 22 33 | 0 31 | 0 1 | 2 34 | 16 29 | 0 20 | 9 8 | 0 52 | 23 33 | 1 44 | 18 12 | 17 52 | 17 56 | 15 22 | 2 25 |
| T 10 | 23 2 25 | 24 16 | 2 24 | 16 20 | 3 4 | 23 41 | 1 48 | 19 30 | 3 32 | 22 32 | 0 30 | 0 2 | 2 34 | 16 30 | 0 20 | 9 8 | 0 52 | 23 33 | 1 44 | 18 12 | 17 51 | 17 54 | 15 23 | 2 25 |
| W 11 | 23 6 26 | 49 3 | 2 16 | 16 44 | 2 56 | 23 31 | 1 48 | 19 28 | 3 36 | 22 32 | 0 30 | 0 2 | 2 33 | 16 30 | 0 20 | 9 8 | 0 52 | 23 32 | 1 44 | 18 11 | 17 50 | 17 52 | 15 24 | 2 25 |
| T 12 | 23 10 26 | 51 4 | 8 17 | 10 2 | 4 27 | 23 20 | 1 49 | 19 26 | 3 40 | 22 31 | 0 30 | 0 2 | 2 33 | 16 31 | 0 20 | 9 8 | 0 52 | 23 32 | 1 44 | 18 10 | 17 49 | 17 49 | 15 25 | 2 26 |
| F 13 | 23 14 25 | 34 4 | 4 22 | 17 36 | 2 38 | 23 8 | 1 50 | 19 24 | 3 44 | 22 31 | 0 30 | 0 3 | 2 33 | 16 32 | 0 20 | 9 8 | 0 52 | 23 32 | 1 45 | 18 8 | 17 48 | 17 47 | 15 26 | 2 26 |
| S 14 | 23 17 23 | 7 5 | 3 18 | 2 2 | 2 29 | 22 56 | 1 50 | 19 22 | 3 48 | 22 30 | 0 30 | 0 3 | 2 33 | 16 33 | 0 20 | 9 8 | 0 52 | 23 32 | 1 45 | 18 7 | 17 48 | 17 44 | 15 27 | 2 26 |
| S 15 | 23 20 19 | 42 5 | 11 18 | 29 2 | 18 22 | 22 43 | 1 51 | 19 21 | 3 52 | 22 30 | 0 30 | 0 4 | 2 32 | 16 34 | 0 20 | 9 8 | 0 52 | 23 32 | 1 45 | 18 6 | 17 47 | 17 42 | 15 27 | 2 26 |
| M 16 | 23 23 15 | 30 5 | 6 18 | 56 2 | 8 22 | 29 1 | 1 51 | 19 20 | 3 56 | 22 29 | 0 30 | 0 4 | 2 32 | 16 35 | 0 20 | 9 8 | 0 52 | 23 32 | 1 45 | 18 5 | 17 46 | 17 40 | 15 28 | 2 26 |
| T 17 | 23 25 10 | 44 4 | 4 47 | 19 23 | 1 57 | 22 15 | 1 51 | 19 19 | 4 0 | 22 29 | 0 29 | 0 5 | 2 32 | 16 35 | 0 20 | 9 8 | 0 52 | 23 31 | 1 45 | 18 4 | 17 45 | 17 37 | 15 29 | 2 26 |
| W 18 | 23 26 5 33 | 4 16 | 19 50 | 1 46 | 22 0 | 1 52 | 19 18 | 4 4 | 22 28 | 0 29 | 0 5 | 2 32 | 16 36 | 0 20 | 9 8 | 0 52 | 23 31 | 1 45 | 18 4 | 17 44 | 17 35 | 15 30 | 2 27 | |
| T 19 | 23 28 0 5 | 3 33 | 20 17 | 1 35 | 21 45 | 1 52 | 19 17 | 4 8 | 22 28 | 0 29 | 0 6 | 2 31 | 16 37 | 0 20 | 9 8 | 0 52 | 23 31 | 1 45 | 18 4 | 17 43 | 17 32 | 15 31 | 2 27 | |
| F 20 | 23 28 5s29 | 2 40 | 20 43 | 1 23 | 21 29 | 1 52 | 19 16 | 4 12 | 22 27 | 0 29 | 0 7 | 2 31 | 16 38 | 0 20 | 9 9 | 0 52 | 23 31 | 1 45 | 18 4 | 17 42 | 17 30 | 15 31 | 2 27 | |
| S 21 | 23 29 10 59 | 1 37 | 21 9 | 1 11 | 21 12 | 1 52 | 19 16 | 4 16 | 22 27 | 0 29 | 0 7 | 2 31 | 16 39 | 0 20 | 9 9 | 0 52 | 23 31 | 1 45 | 18 5 | 17 42 | 17 28 | 15 32 | 2 27 | |
| S 22 | 23 29 16 11 | 0 28 | 21 34 | 1 0 | 20 55 | 1 52 | 19 16 | 4 20 | 22 26 | 0 29 | 0 8 | 2 31 | 16 39 | 0 20 | 9 9 | 0 52 | 23 30 | 1 45 | 18 5 | 17 41 | 17 25 | 15 33 | 2 27 | |
| M 23 | 23 28 20 46 | 0s44 | 21 58 | 0 48 | 20 37 | 1 51 | 19 16 | 4 24 | 22 26 | 0 29 | 0 9 | 2 30 | 16 40 | 0 20 | 9 9 | 0 52 | 23 30 | 1 45 | 18 5 | 17 40 | 17 23 | 15 34 | 2 27 | |
| T 24 | 23 28 24 21 | 1 56 | 22 21 | 0 36 | 20 19 | 1 51 | 19 16 | 4 29 | 22 25 | 0 28 | 0 10 | 2 30 | 16 41 | 0 20 | 9 9 | 0 52 | 23 30 | 1 45 | 18 5 | 17 39 | 17 20 | 15 34 | 2 28 | |
| W 25 | 23 26 26 30 | 3 3 | 22 42 | 0 24 | 20 0 | 1 51 | 19 17 | 4 33 | 22 25 | 0 28 | 0 11 | 2 30 | 16 42 | 0 20 | 9 9 | 0 52 | 23 30 | 1 45 | 18 4 | 17 38 | 17 18 | 15 35 | 2 28 | |
| T 26 | 23 25 26 55 | 4 0 | 23 2 | 0 12 | 19 41 | 1 50 | 19 17 | 4 37 | 22 24 | 0 28 | 0 11 | 2 30 | 16 42 | 0 20 | 9 10 | 0 52 | 23 30 | 1 45 | 18 2 | 17 37 | 17 15 | 15 36 | 2 28 | |
| F 27 | 23 23 25 27 | 4 41 | 23 20 | 0 1 | 19 21 | 1 50 | 19 18 | 4 41 | 22 24 | 0 28 | 0 12 | 2 29 | 16 43 | 0 20 | 9 10 | 0 52 | 23 29 | 1 45 | 18 0 | 17 36 | 17 13 | 15 37 | 2 28 | |
| S 28 | 23 20 22 13 | 5 4 | 23 35 | 0n10 | 19 1 | 1 49 | 19 19 | 4 46 | 22 23 | 0 28 | 0 13 | 2 29 | 16 44 | 0 20 | 9 10 | 0 52 | 23 29 | 1 45 | 17 59 | 17 36 | 17 10 | 15 37 | 2 28 | |
| S 29 | 23 17 17 34 | 5 6 | 23 49 | 0 21 | 18 40 | 1 48 | 19 21 | 4 50 | 22 23 | 0 28 | 0 14 | 2 29 | 16 45 | 0 20 | 9 10 | | | | | | | | | |

SWISS EPHEMERIS for the year 1687

JULY 1687 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|---|
| T 1 | 18 36 39 | 9°56'30" | 25°17'17" | 2°51'15" | 15°16'22" | 20°27'27" | 16°R39 | 6°52'24" | 17°32'32" | 8°R35 | 21°37'37" | 20°R33 | 19°8'11" | 27°14'44" | 21°8'3" | |
| W 2 | 18 40 36 | 10° 3'41" | 9°12'20" | 4°23'00" | 16°32'10" | 20°33'00" | 16°27'33" | 6°27'00" | 17°34'00" | 8°34'00" | 21°39'00" | 20°D32 | 19° 7'00" | 27°51'00" | 21° 6'00" | |
| T 3 | 18 44 32 | 11° 0'52" | 23° 5'00" | 6°32'00" | 17°43'00" | 20°39'00" | 16°27'00" | 6°29'00" | 17°37'00" | 8°33'00" | 21°40'00" | 20°B33 | 19° 4'00" | 27°58'00" | 21°10'00" | |
| F 4 | 18 48 29 | 11°58'04" | 6°32'32" | 8°42'00" | 18°53'00" | 20°43'00" | 16°20'00" | 6°32'00" | 17°39'00" | 8°33'00" | 21°42'00" | 20°34'00" | 19° 1'00" | 28° 5'00" | 21°13'00" | |
| S 5 | 18 52 26 | 12°55'17" | 19°43'00" | 10°52'00" | 20° 3'00" | 20°47'00" | 16°14'00" | 6°34'00" | 17°42'00" | 8°32'00" | 21°43'00" | 20°R35 | 18°58'00" | 28°11'00" | 21°16'00" | |
| S 6 | 18 56 22 | 13°52'30" | 2°11'40" | 13° 2'00" | 21°14'00" | 20°50'00" | 16° 8'00" | 6°37'00" | 17°44'00" | 8°31'00" | 21°45'00" | 20°34'00" | 18°55'00" | 28°18'00" | 21°19'00" | |
| M 7 | 19 0 19 | 14°49'43" | 15°24'00" | 15°11'00" | 22°24'00" | 20°52'00" | 16° 2'00" | 6°40'00" | 17°46'00" | 8°30'00" | 21°47'00" | 20°31'00" | 18°52'00" | 28°25'00" | 21°22'00" | |
| T 8 | 19 4 15 | 15°46'57" | 27°57'00" | 17°20'00" | 23°34'00" | 20°54'00" | 15°56'00" | 6°42'00" | 17°48'00" | 8°30'00" | 21°48'00" | 20°26'00" | 18°48'00" | 28°32'00" | 21°25'00" | |
| W 9 | 19 8 12 | 16°44'11" | 10°20'00" | 19°28'00" | 24°44'00" | 20°R54 | 15°51'00" | 6°45'00" | 17°50'00" | 8°29'00" | 21°50'00" | 20°18'00" | 18°45'00" | 28°38'00" | 21°28'00" | |
| T 10 | 19 12 8 | 17°41'25" | 22°34'00" | 21°34'00" | 25°53'00" | 20°54'00" | 15°45'00" | 6°48'00" | 17°53'00" | 8°28'00" | 21°52'00" | 20° 9'00" | 18°42'00" | 28°45'00" | 21°31'00" | |
| F 11 | 19 16 5 | 18°38'40" | 4°14'00" | 23°40'00" | 27° 3'00" | 20°53'00" | 15°40'00" | 6°52'00" | 17°55'00" | 8°27'00" | 21°53'00" | 19°58'00" | 18°39'00" | 28°52'00" | 21°34'00" | |
| S 12 | 19 20 1 | 19°35'55" | 16°39'00" | 25°45'00" | 28°13'00" | 20°52'00" | 15°34'00" | 6°55'00" | 17°57'00" | 8°26'00" | 21°55'00" | 19°47'00" | 18°36'00" | 28°58'00" | 21°36'00" | |
| S 13 | 19 23 58 | 20°33'10" | 28°33'00" | 27°48'00" | 29°23'00" | 20°49'00" | 15°29'00" | 6°58'00" | 17°59'00" | 8°25'00" | 21°56'00" | 19°37'00" | 18°33'00" | 29° 5'00" | 21°39'00" | |
| M14 | 19 27 55 | 21°30'26" | 10°17'20" | 29°49'00" | 0°17'32" | 20°46'00" | 15°24'00" | 7° 1'00" | 18° 1'00" | 8°24'00" | 21°58'00" | 19°28'00" | 18°29'00" | 29°12'00" | 21°42'00" | |
| T 15 | 19 31 51 | 22°27'41" | 22°15'00" | 1°14'00" | 1°41'00" | 20°42'00" | 15°20'00" | 7° 5'00" | 18° 3'00" | 8°23'00" | 22° 0'00" | 19°22'00" | 18°26'00" | 29°19'00" | 21°44'00" | |
| W16 | 19 35 48 | 23°24'57" | 4°10'00" | 3°47'00" | 2°51'00" | 20°37'00" | 15°15'00" | 7° 8'00" | 18° 5'00" | 8°22'00" | 22° 1'00" | 19°18'00" | 18°23'00" | 29°25'00" | 21°47'00" | |
| T 17 | 19 39 44 | 24°22'13" | 16°14'00" | 5°44'00" | 4° 0'00" | 20°32'00" | 15°10'00" | 7°12'00" | 18° 6'00" | 8°21'00" | 22° 3'00" | 19°16'00" | 18°20'00" | 29°32'00" | 21°50'00" | |
| F 18 | 19 43 41 | 25°19'30" | 28°30'00" | 7°38'00" | 5° 9'00" | 20°26'00" | 15° 6'00" | 7°16'00" | 18° 8'00" | 8°20'00" | 22° 5'00" | 19°D16 | 18°17'00" | 29°39'00" | 21°52'00" | |
| S 19 | 19 47 37 | 26°16'47" | 11°11'00" | 9°32'00" | 6°18'00" | 20°19'00" | 15° 2'00" | 7°20'00" | 18°10'00" | 8°19'00" | 22° 6'00" | 19°16'00" | 18°13'00" | 29°45'00" | 21°54'00" | |
| S 20 | 19 51 34 | 27°14'04" | 24° 2'00" | 11°23'00" | 7°27'00" | 20°11'00" | 14°58'00" | 7°23'00" | 18°12'00" | 8°18'00" | 22° 8'00" | 19°R16 | 18°10'00" | 29°52'00" | 21°57'00" | |
| M21 | 19 55 30 | 28°11'22" | 7°17'26" | 13°13'00" | 8°36'00" | 20° 3'00" | 14°54'00" | 7°27'00" | 18°13'00" | 8°17'00" | 22° 9'00" | 19°15'00" | 18° 7'00" | 29°59'00" | 21°59'00" | |
| T 22 | 19 59 27 | 29° 8'40" | 21°19'00" | 15° 0'00" | 9°45'00" | 19°54'00" | 14°50'00" | 7°32'00" | 18°15'00" | 8°15'00" | 22°11'00" | 19°11'00" | 18° 4'00" | 0°17'00" | 22° 1'00" | |
| W23 | 20 3 24 | 0°15'59" | 5°34'10" | 16°47'00" | 10°54'00" | 19°45'00" | 14°47'00" | 7°36'00" | 18°17'00" | 8°14'00" | 22°13'00" | 19° 5'00" | 18° 1'00" | 0°12'00" | 22° 4'00" | |
| T 24 | 20 7 20 | 1° 3'19" | 20°26'00" | 18°31'00" | 12° 2'00" | 19°34'00" | 14°43'00" | 7°40'00" | 18°18'00" | 8°13'00" | 22°14'00" | 18°57'00" | 17°58'00" | 0°19'00" | 22° 6'00" | |
| F 25 | 20 11 17 | 2° 0'39" | 5°33'30" | 20°14'00" | 13°11'00" | 19°24'00" | 14°40'00" | 7°44'00" | 18°20'00" | 8°12'00" | 22°16'00" | 18°47'00" | 17°54'00" | 0°26'00" | 22° 8'00" | |
| S 26 | 20 15 13 | 2°58'00" | 20°41'00" | 21°55'00" | 14°19'00" | 19°12'00" | 14°37'00" | 7°48'00" | 18°21'00" | 8°10'00" | 22°18'00" | 18°37'00" | 17°51'00" | 0°33'00" | 22°10'00" | |
| S 27 | 20 19 10 | 3°55'21" | 5°17'50" | 23°34'00" | 15°27'00" | 19° 0'00" | 14°34'00" | 7°53'00" | 18°22'00" | 8° 9'00" | 22°19'00" | 18°28'00" | 17°48'00" | 0°39'00" | 22°12'00" | |
| M28 | 20 23 6 | 4°52'44" | 20°45'00" | 25°12'00" | 16°35'00" | 18°48'00" | 14°32'00" | 7°57'00" | 18°24'00" | 8° 8'00" | 22°21'00" | 18°20'00" | 17°45'00" | 0°46'00" | 22°14'00" | |
| T 29 | 20 27 3 | 5°50'08" | 5°17'21" | 26°48'00" | 17°43'00" | 18°35'00" | 14°29'00" | 8° 2'00" | 18°25'00" | 8° 7'00" | 22°22'00" | 18°15'00" | 17°42'00" | 0°53'00" | 22°16'00" | |
| W30 | 20 30 59 | 6°47'33" | 19°33'00" | 28°22'00" | 18°51'00" | 18°21'00" | 14°27'00" | 8° 7'00" | 18°26'00" | 8° 5'00" | 22°24'00" | 18°12'00" | 17°39'00" | 0°59'00" | 22°18'00" | |
| T 31 | 20 34 56 | 7°45'00" | 3°18'20" | 29°15'55" | 19°17'59" | 18° 7'00" | 14°25'00" | 8°11'00" | 18°28'00" | 8° 4'00" | 22°26'00" | 18°D11 | 17°35'00" | 1°17'00" | 22°20'00" | |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl |
| T 1 | 23n10 | 5s45 | 4s13 | 24n 9 | 0n41 | 17n57 | 1n46 | 19s24 | 4s58 | 22s22 | 0n27 | 0s17 | 2n29 | 16n46 | 0s20 | 9s11 |
| W 2 | 23 6 | 0n36 | 3 23 | 24 15 | 0 51 | 17 35 | 1 45 | 19 26 | 5 3 | 22 21 | 0 27 | 0 18 | 2 28 | 16 47 | 0 20 | 9 11 |
| T 3 | 23 1 | 6 47 | 2 22 | 24 19 | 1 0 | 17 12 | 1 44 | 19 29 | 5 7 | 22 21 | 0 27 | 0 19 | 2 28 | 16 47 | 0 20 | 9 11 |
| F 4 | 22 56 | 12 33 | 1 15 | 24 19 | 1 8 | 16 49 | 1 43 | 19 31 | 5 11 | 22 20 | 0 27 | 0 20 | 2 28 | 16 48 | 0 20 | 9 12 |
| S 5 | 22 51 | 17 37 | 0 5 | 24 17 | 1 15 | 16 26 | 1 42 | 19 34 | 5 15 | 22 20 | 0 27 | 0 21 | 2 28 | 16 49 | 0 20 | 9 12 |
| S 6 | 22 45 | 21 47 | 1n 4 | 24 12 | 1 22 | 16 2 | 1 40 | 19 37 | 5 20 | 22 19 | 0 26 | 0 23 | 2 27 | 16 49 | 0 20 | 9 12 |
| M 7 | 22 39 | 24 49 | 2 9 | 24 4 | 1 28 | 15 38 | 1 39 | 19 40 | 5 24 | 22 19 | 0 26 | 0 24 | 2 27 | 16 50 | 0 20 | 9 13 |
| T 8 | 22 33 | 26 34 | 3 6 | 23 54 | 1 33 | 15 13 | 1 37 | 19 44 | 5 28 | 22 18 | 0 26 | 0 25 | 2 27 | 16 50 | 0 21 | 9 13 |
| W 9 | 22 26 | 26 58 | 3 54 | 23 41 | 1 38 | 14 48 | 1 36 | 19 47 | 5 32 | 22 18 | 0 26 | 0 27 | 2 27 | 16 51 | 0 21 | 9 13 |
| T 10 | 22 19 | 26 1 | 4 30 | 23 25 | 1 41 | 14 23 | 1 34 | 19 51 | 5 36 | 22 18 | 0 26 | 0 28 | 2 26 | 16 52 | 0 21 | 9 14 |
| F 11 | 22 11 | 23 52 | 4 53 | 23 7 | 1 44 | 13 57 | 1 32 | 19 56 | 5 40 | 22 17 | 0 26 | 0 29 | 2 26 | 16 52 | 0 21 | 9 14 |
| S 12 | 22 3 | 20 41 | 5 3 | 22 47 | 1 47 | 13 31 | 1 30 | 20 0 | 5 44 | 22 17 | 0 25 | 0 31 | 2 26 | 16 53 | 0 21 | 9 14 |
| S 13 | 21 54 | 16 41 | 5 0 | 22 24 | 1 48 | 13 5 | 1 28 | 20 4 | 5 48 | 22 16 | 0 25 | 0 32 | 2 26 | 16 53 | 0 21 | 9 15 |
| M14 | 21 46 | 12 3 | 4 44 | 22 0 | 1 49 | 12 38 | 1 26 | 20 9 | 5 52 | 22 16 | 0 25 | 0 34 | 2 26 | 16 54 | 0 21 | 9 15 |
| T 15 | 21 36 | 6 59 | 4 15 | 21 34 | 1 49 | 12 12 | 1 24 | 20 14 | 5 56 | 22 16 | 0 25 | 0 35 | 2 25 | 16 54 | 0 21 | 9 16 |
| W16 | 21 27 | 1 38 | 3 36 | 21 6 | 1 49 | 11 44 | 1 21 | 20 19 | 6 0 | 22 15 | 0 25 | 0 37 | 2 25 | 16 55 | 0 21 | 9 16 |
| T 17 | 21 17 | 3s50 | 2 46 | 20 36 | 1 47 | 11 17 | 1 19 | 20 24 | 6 4 | 22 15 | 0 24 | 0 39 | 2 25 | 16 55 | 0 21 | 9 16 |
| F 18 | 21 7 | 9 17 | 1 48 | 20 6 | 1 46 | 10 49 | 1 16 | 20 30 | 6 7 | 22 15 | 0 24 | 0 40 | 2 25 | 16 56 | 0 21 | 9 17 |
| S 19 | 20 56 | 14 29 | 0 43 | 19 33 | 1 43 | 10 21 | 1 14 | 20 35 | 6 11 | 22 14 | 0 24 | 0 42 | 2 24 | 16 56 | 0 21 | 9 17 |
| S 20 | 20 45 | 19 13 | 0s25 | 19 0 | 1 40 | 9 53 | 1 11 | 20 41 | 6 14 | 22 14 | 0 24 | 0 44 | 2 24 | 16 57 | 0 21 | 9 18 |
| M21 | 20 34 | 23 9 | 1 35 | 18 26 | 1 37 | 9 25 | 1 8 | 20 47 | 6 18 | 22 14 | 0 24 | 0 46 | 2 24 | 16 57 | 0 21 | 9 18 |
| T 22 | 20 22 | 25 53 | 2 41 | 17 51 | 1 33 | 8 56 | 1 5 | 20 53 | 6 21 | 22 14 | 0 24 | 0 47 | 2 24 | 16 58 | 0 21 | 9 19 |
| W23 | 20 10 | 27 1 | 3 40 | 17 14 | 1 28 | 8 27 | 1 2 | 20 59 | 6 24 | 22 13 | 0 23 | 0 49 | 2 24 | 16 58 | 0 21 | 9 19 |
| T 24 | 19 58 | 26 17 | 4 25 | 16 38 | 1 24 | 7 58 | 0 59 | 21 5 | 6 27 | 22 13 | 0 23 | 0 51 | 2 23 | 16 59 | 0 21 | 9 20 |
| F 25 | 19 45 | 23 40 | 4 53 | 16 0 | 1 18 | 7 29 | 0 56 | 21 11 | 6 30 | 22 13 | 0 23 | 0 53 | 2 23 | 16 59 | 0 21 | 9 20 |
| S 26 | 19 32 | 19 22 | 5 1 | 15 22 | 1 12 | 7 0 | 0 53 | 21 17 | 6 32 | 22 13 | 0 23 | 0 55 | 2 23 | 16 59 | 0 21 | 9 21 |
| S 27 | 19 18 | 13 51 | 4 48 | 14 44 | 1 6 | 6 30 | 0 49 | 21 24 | 6 35 | 22 13 | 0 23 | 0 57 | 2 23 | 17 0 | 0 21 | 9 21 |
| M28 | 19 5 | 7 34 | 4 15 | 14 5 | 1 0 | 6 1 | 0 46 | 21 30 | 6 37 | 22 13 | 0 22 | 0 59 | 2 23 | 17 0 | 0 21 | 9 22 |
| T 29 | 18 51 | 1 1 | 3 26 | 13 26 | 0 53 | 5 31 | 0 43 | 21 36 | 6 39 | 22 13 | 0 22 | 1 1 | 2 22 | 17 1 | 0 21 | 9 22 |
| W30 | 18 36 | 5n25 | 2 25 | 12 47 | 0 46 | 5 1 | 0 39 | 21 42 | 6 42 | 22 13 | 0 22 | 1 3 | 2 22 | 17 1 | 0 21 | 9 23 |
| T 31 | 18n22 | 11n26 | 1s18 | 12n 7 | 0n38 | 4n31 | 0n35 | 21s49 | 6s43 | 22s12 | 0n22 | 1s 5 | 2n22 | 17n 1 | 0s21 | 9s23 |

Julian Day Number = 2337405.5, Delta T = 9.70 sec
 Ecliptic obliquity = 23°28'53", Nutation = - 0°00'12"
 Ayanamsha: Fagan/Bradley = 20°22'41", Lahiri = 19°29'41"Greg. Calendar

SWISS EPHEMERIS for the year 1687

AUGUST 1687 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|----------|----------|--------|--------|--------|--------|--------|-------|--------|-------|-------|--------|--------|------|--------|
| F 1 | 20 38 53 | 8♎42'27 | 16♉43 | 1♉26 | 21♉6 | 17♎R53 | 14♎R23 | 8♎16 | 18♉29 | 8♎R 3 | 22♉27 | 18♎R11 | 17♉32 | 1♉13 | 22♉21 |
| S 2 | 20 42 49 | 9♎39'56 | 29♎45 | 2♎55 | 22♎14 | 17♎≈38 | 14♎≈21 | 8♎21 | 18♉30 | 8♎ 1 | 22♎29 | 18♉11 | 17♎29 | 1♎20 | 22♎23 |
| S 3 | 20 46 46 | 10♎37'27 | 12♈29 | 4♎22 | 23♎21 | 17♎23 | 14♎20 | 8♎26 | 18♉31 | 8♎ 0 | 22♎30 | 18♎ 9 | 17♎26 | 1♎26 | 22♎25 |
| M 4 | 20 50 42 | 11♎34'59 | 24♎59 | 5♎48 | 24♎28 | 17♎ 8 | 14♎18 | 8♎31 | 18♉32 | 7♎58 | 22♎32 | 18♎ 5 | 17♎23 | 1♎33 | 22♎26 |
| T 5 | 20 54 39 | 12♎32'32 | 7♉19 | 7♎12 | 25♎35 | 16♎53 | 14♎17 | 8♎36 | 18♉33 | 7♎57 | 22♎33 | 17♎58 | 17♎19 | 1♎40 | 22♎28 |
| W 6 | 20 58 35 | 13♎30'06 | 19♎29 | 8♎34 | 26♎42 | 16♎37 | 14♎16 | 8♎41 | 18♉34 | 7♎55 | 22♎35 | 17♎48 | 17♎16 | 1♎46 | 22♎29 |
| T 7 | 21 2 32 | 14♎27'41 | 1♉33 | 9♎54 | 27♎49 | 16♎21 | 14♎15 | 8♎46 | 18♉35 | 7♎54 | 22♎36 | 17♎36 | 17♎13 | 1♎53 | 22♎31 |
| F 8 | 21 6 28 | 15♎25'18 | 13♎31 | 11♎13 | 28♎56 | 16♎ 5 | 14♎14 | 8♎52 | 18♉36 | 7♎52 | 22♎38 | 17♎22 | 17♎10 | 2♎ 0 | 22♎32 |
| S 9 | 21 10 25 | 16♎22'56 | 25♎25 | 12♎29 | 0♎ 2 | 15♎49 | 14♎14 | 8♎57 | 18♉36 | 7♎51 | 22♎40 | 17♎ 8 | 17♎ 7 | 2♎ 7 | 22♎33 |
| S 10 | 21 14 22 | 17♎20'35 | 7♉17 | 13♎44 | 1♎ 9 | 15♎33 | 14♎14 | 9♎ 2 | 18♉37 | 7♎49 | 22♎41 | 16♎55 | 17♎ 4 | 2♎13 | 22♎34 |
| M 11 | 21 18 18 | 18♎18'16 | 19♎ 7 | 14♎57 | 2♎15 | 15♎17 | 14♎D14 | 9♎ 8 | 18♉38 | 7♎48 | 22♎43 | 16♎43 | 17♎ 0 | 2♎20 | 22♎36 |
| T 12 | 21 22 15 | 19♎15'57 | 0♎59 | 16♎ 7 | 3♎21 | 15♎ 2 | 14♎14 | 9♎13 | 18♉39 | 7♎46 | 22♎44 | 16♎34 | 16♎57 | 2♎27 | 22♎37 |
| W 13 | 21 26 11 | 20♎13'39 | 12♎55 | 17♎15 | 4♎27 | 14♎46 | 14♎14 | 9♎19 | 18♉39 | 7♎45 | 22♎46 | 16♎28 | 16♎54 | 2♎33 | 22♎38 |
| T 14 | 21 30 8 | 21♎11'23 | 24♎58 | 18♎21 | 5♎32 | 14♎31 | 14♎15 | 9♎25 | 18♉40 | 7♎43 | 22♎47 | 16♎25 | 16♎51 | 2♎40 | 22♎39 |
| F 15 | 21 34 4 | 22♎ 9'08 | 7♉13 | 19♎25 | 6♎38 | 14♎15 | 14♎15 | 9♎30 | 18♉40 | 7♎42 | 22♎48 | 16♎23 | 16♎48 | 2♎47 | 22♎39 |
| S 16 | 21 38 1 | 23♎ 6'54 | 19♎45 | 20♎26 | 7♎43 | 14♎ 1 | 14♎16 | 9♎36 | 18♉41 | 7♎40 | 22♎50 | 16♎23 | 16♎45 | 2♎54 | 22♎40 |
| S 17 | 21 41 57 | 24♎ 4'41 | 2♉38 | 21♎24 | 8♎48 | 13♎46 | 14♎17 | 9♎42 | 18♉41 | 7♎39 | 22♎51 | 16♎23 | 16♎41 | 3♎ 0 | 22♎41 |
| M 18 | 21 45 54 | 25♎ 2'30 | 15♎56 | 22♎20 | 9♎53 | 13♎32 | 14♎18 | 9♎48 | 18♉41 | 7♎37 | 22♎53 | 16♎22 | 16♎38 | 3♎ 7 | 22♎42 |
| T 19 | 21 49 51 | 26♎ 0'19 | 29♎44 | 23♎13 | 10♎58 | 13♎18 | 14♎20 | 9♎54 | 18♉42 | 7♎35 | 22♎54 | 16♎19 | 16♎35 | 3♎14 | 22♎42 |
| W 20 | 21 53 47 | 26♎58'10 | 14♉ 1 | 24♎ 3 | 12♎ 3 | 13♎ 5 | 14♎21 | 10♎ 0 | 18♉42 | 7♎34 | 22♎56 | 16♎13 | 16♎32 | 3♎21 | 22♎43 |
| T 21 | 21 57 44 | 27♎56'02 | 28♎46 | 24♎49 | 13♎ 7 | 12♎52 | 14♎23 | 10♎ 6 | 18♉42 | 7♎32 | 22♎57 | 16♎ 5 | 16♎29 | 3♎27 | 22♎43 |
| F 22 | 22 1 40 | 28♎53'56 | 13♎≈52 | 25♎32 | 14♎11 | 12♎40 | 14♎25 | 10♎12 | 18♉42 | 7♎31 | 22♎58 | 15♎55 | 16♎25 | 3♎34 | 22♎44 |
| S 23 | 22 5 37 | 29♎51'50 | 29♎11 | 26♎11 | 15♎15 | 12♎28 | 14♎27 | 10♎18 | 18♉42 | 7♎29 | 23♎ 0 | 15♎44 | 16♎22 | 3♎41 | 22♎44 |
| S 24 | 22 9 33 | 0♉49'47 | 14♉30 | 26♎47 | 16♎19 | 12♎17 | 14♎30 | 10♎24 | 18♉R42 | 7♎27 | 23♎ 1 | 15♎34 | 16♎19 | 3♎47 | 22♎45 |
| M 25 | 22 13 30 | 1♎47'45 | 29♎39 | 27♎18 | 17♎22 | 12♎ 7 | 14♎32 | 10♎30 | 18♉42 | 7♎26 | 23♎ 2 | 15♎26 | 16♎16 | 3♎54 | 22♎45 |
| T 26 | 22 17 26 | 2♎45'44 | 14♉≈29 | 27♎44 | 18♎25 | 11♎57 | 14♎35 | 10♎37 | 18♉42 | 7♎24 | 23♎ 4 | 15♎21 | 16♎13 | 4♎ 1 | 22♎45 |
| W 27 | 22 21 23 | 3♎43'46 | 28♎52 | 28♎ 6 | 19♎28 | 11♎48 | 14♎38 | 10♎43 | 18♉42 | 7♎22 | 23♎ 5 | 15♎18 | 16♎10 | 4♎ 8 | 22♎45 |
| T 28 | 22 25 20 | 4♎41'50 | 12♉47 | 28♎24 | 20♎31 | 11♎39 | 14♎41 | 10♎49 | 18♉42 | 7♎21 | 23♎ 6 | 15♎D17 | 16♎ 6 | 4♎14 | 22♎R45 |
| F 29 | 22 29 16 | 5♎39'55 | 26♎15 | 28♎35 | 21♎33 | 11♎31 | 14♎44 | 10♎56 | 18♉42 | 7♎19 | 23♎ 8 | 15♎17 | 16♎ 3 | 4♎21 | 22♎45 |
| S 30 | 22 33 13 | 6♎38'03 | 9♈17 | 28♎42 | 22♎36 | 11♎24 | 14♎47 | 11♎ 2 | 18♉42 | 7♎17 | 23♎ 9 | 15♎R17 | 16♎ 0 | 4♎28 | 22♎45 |
| S 31 | 22 37 9 | 7♉36'13 | 21♈59 | 28♎R42 | 23♎≈37 | 11♎≈18 | 14♎≈51 | 11♎ 9 | 18♉41 | 7♉16 | 23♎10 | 15♎≈16 | 15♎≈57 | 4♉34 | 22♎≈45 |

| Day | ☉ | | ☽ | | ♀ | | ♁ | | ♂ | | ♃ | | ♅ | | ♁ | | ♁ | | ♁ | | | | | |
|------|------------|---------|---------|-------|------|------|-------|-------|-------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|------|
| | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | | | | |
| F 1 | 18n 7 | 16n44 | 0s 8 | 11n27 | 0n30 | 4n 1 | 0n32 | 21s55 | 6s45 | 22s12 | 0n22 | 1s 7 | 2n22 | 17n 2 | 0s21 | 9s24 | 0s54 | 23n22 | 1n47 | 17n17 | 17n 6 | 15n44 | 15n52 | 2s36 |
| S 2 | 17 52 21 | 7 1n 1 | 10 48 | 0 22 | 3 31 | 0 28 | 21 7 | 6 47 | 22 12 | 0 21 | 1 9 | 2 22 | 17 2 | 0 21 | 9 24 | 0 54 | 23 22 | 1 48 | 17 17 | 17 5 | 15 41 | 15 52 | 2 37 | |
| S 3 | 17 36 24 | 23 2 | 5 10 | 8 0 | 14 3 | 1 0 | 24 22 | 7 6 | 48 22 | 12 0 | 21 11 | 2 21 | 17 2 | 0 21 | 9 25 | 0 54 | 23 22 | 1 48 | 17 16 | 17 4 | 15 38 | 15 53 | 2 37 | |
| M 4 | 17 20 26 | 24 3 | 1 9 | 29 0 | 5 2 | 30 0 | 20 22 | 13 6 | 49 22 | 12 0 | 21 13 | 2 21 | 17 2 | 0 21 | 9 25 | 0 54 | 23 22 | 1 48 | 17 15 | 17 3 | 15 36 | 15 53 | 2 37 | |
| T 5 | 17 4 27 | 5 3 | 48 8 | 50 0 | s 4 | 2 0 | 16 22 | 19 6 | 50 22 | 12 0 | 21 15 | 2 21 | 17 3 | 0 21 | 9 26 | 0 54 | 23 22 | 1 48 | 17 13 | 17 2 | 15 33 | 15 53 | 2 37 | |
| W 6 | 16 48 26 | 25 4 | 24 8 | 10 0 | 13 1 | 29 0 | 12 22 | 24 6 | 51 22 | 13 0 | 21 17 | 2 21 | 17 3 | 0 21 | 9 27 | 0 54 | 23 22 | 1 48 | 17 10 | 17 1 | 15 31 | 15 53 | 2 38 | |
| T 7 | 16 31 24 | 32 4 | 48 7 | 32 0 | 22 0 | 59 0 | 7 22 | 30 6 | 51 22 | 13 0 | 21 12 | 2 21 | 17 3 | 0 21 | 9 27 | 0 54 | 23 21 | 1 48 | 17 7 | 17 0 | 15 28 | 15 53 | 2 38 | |
| F 8 | 16 14 21 | 33 4 | 59 6 | 53 0 | 31 0 | 28 0 | 3 22 | 35 6 | 52 22 | 13 0 | 20 12 | 2 21 | 17 3 | 0 21 | 9 28 | 0 54 | 23 21 | 1 48 | 17 3 | 16 59 | 15 25 | 15 53 | 2 38 | |
| S 9 | 15 57 17 | 43 4 | 56 6 | 15 0 | 41 0 | s 2 | 0s 1 | 22 40 | 6 52 | 22 13 | 0 20 | 1 24 | 2 20 | 17 4 | 0 21 | 9 28 | 0 54 | 23 21 | 1 48 | 16 59 | 16 58 | 15 23 | 15 53 | 2 38 |
| S 10 | 15 40 13 | 12 4 | 41 5 | 38 0 | 51 0 | 33 0 | 6 22 | 45 6 | 52 22 | 13 0 | 0 20 | 1 26 | 2 20 | 17 4 | 0 21 | 9 29 | 0 54 | 23 21 | 1 48 | 16 55 | 16 58 | 15 20 | 15 53 | 2 39 |
| M 11 | 15 22 8 | 12 4 | 14 5 | 1 1 | 1 1 | 1 3 | 0 10 | 22 49 | 6 52 | 22 13 | 0 20 | 1 29 | 2 20 | 17 4 | 0 21 | 9 29 | 0 54 | 23 21 | 1 48 | 16 52 | 16 57 | 15 17 | 15 53 | 2 39 |
| T 12 | 15 4 2 | 5 4 | 35 3 | 4 24 | 1 11 | 1 34 | 0 15 | 22 54 | 6 51 | 22 13 | 0 20 | 1 31 | 2 20 | 17 4 | 0 21 | 9 30 | 0 54 | 23 21 | 1 48 | 16 49 | 16 56 | 15 15 | 15 53 | 2 39 |
| W 13 | 14 46 2s33 | 2 47 | 3 38 | 1 21 | 2 4 | 0 20 | 22 58 | 6 51 | 22 14 | 0 19 | 1 33 | 2 20 | 17 4 | 0 21 | 9 31 | 0 54 | 23 20 | 1 48 | 16 47 | 16 55 | 15 12 | 15 53 | 2 40 | |
| T 14 | 14 28 7 | 58 1 | 51 3 | 13 1 | 31 2 | 35 0 | 24 23 | 2 6 | 50 22 | 14 0 | 19 1 | 36 2 | 20 17 | 4 0 | 21 9 | 31 0 | 54 23 | 20 1 | 49 16 | 46 16 | 54 15 | 9 15 | 53 2 | 40 |
| F 15 | 14 9 13 | 11 0 | 48 2 | 39 1 | 41 3 | 5 0 | 29 23 | 5 6 | 49 22 | 14 0 | 19 1 | 38 2 | 19 17 | 5 0 | 21 9 | 32 0 | 54 23 | 20 1 | 49 16 | 46 16 | 53 15 | 7 15 | 53 2 | 40 |
| S 16 | 13 50 17 | 59 0s18 | 2 6 | 1 51 | 3 35 | 0 34 | 23 9 | 6 48 | 22 14 | 0 19 | 1 41 | 2 19 | 17 5 | 0 21 | 9 32 | 0 54 | 23 20 | 1 49 | 16 46 | 16 52 | 15 4 | 15 53 | 2 40 | |
| S 17 | 13 31 22 | 6 1 | 25 1 | 33 2 | 1 4 | 6 0 | 39 23 | 12 6 | 46 22 | 15 0 | 19 1 | 43 2 | 19 17 | 5 0 | 21 9 | 33 0 | 54 23 | 20 1 | 49 16 | 46 16 | 51 15 | 1 15 | 53 2 | 41 |
| M 18 | 13 12 25 | 13 3 | 29 1 | 2 12 | 4 36 | 0 44 | 23 14 | 6 45 | 22 15 | 0 19 | 1 45 | 2 19 | 17 5 | 0 21 | 9 34 | 0 54 | 23 20 | 1 49 | 16 46 | 16 50 | 14 59 | 15 53 | 2 41 | |
| T 19 | 12 52 26 | 57 3 | 28 0 | 32 2 | 22 5 | 6 0 | 49 23 | 17 6 | 43 22 | 15 0 | 18 1 | 48 2 | 19 17 | 5 0 | 21 9 | 34 0 | 54 23 | 19 1 | 49 16 | 45 16 | 49 14 | 56 15 | 53 2 | 41 |
| W 20 | 12 33 26 | 58 4 | 15 0 | 3 2 | 32 5 | 36 0 | 54 23 | 19 6 | 41 22 | 16 0 | 18 1 | 50 2 | 19 17 | 5 0 | 21 9 | 35 0 | 54 23 | 19 1 | 49 16 | 43 16 | 49 14 | 53 15 | 53 2 | 41 |
| T 21 | 12 13 25 | 8 4 | 48 0s25 | 2 42 | 6 6 | 0 59 | 23 20 | 6 39 | 22 16 | 0 18 | 1 53 | 2 19 | 17 5 | 0 21 | 9 35 | 0 54 | 23 19 | 1 49 | 16 41 | 16 48 | 14 50 | 15 53 | 2 42 | |
| F 22 | 11 53 21 | 9 5 | 1 0 | 51 2 | 52 6 | 36 1 | 4 23 | 22 6 | 36 22 | 16 0 | 18 1 | 55 2 | 18 17 | 5 0 | 21 9 | 36 0 | 5 | | | | | | | |

SWISS EPHEMERIS for the year 1687

SEPTEMBER 1687 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|----------|----------|-------|--------|-------|--------|-------|-------|--------|-------|-------|--------|-------|------|--------|
| M 1 | 22 41 6 | 8♐34'24 | 4♌24 | 28°R36 | 24♋39 | 11°R12 | 14♌55 | 11♋15 | 18°R41 | 7°R14 | 23♌11 | 15°R13 | 15♌54 | 4♐41 | 22°R45 |
| T 2 | 22 45 2 | 9°32'38 | 16°35 | 28♐24 | 25°40 | 11♋7 | 14°59 | 11°22 | 18♋40 | 7♐12 | 23°12 | 15♌8 | 15°51 | 4°48 | 22♋45 |
| W 3 | 22 48 59 | 10°30'54 | 28°38 | 28°6 | 26°41 | 11°3 | 15°3 | 11°28 | 18°40 | 7°11 | 23°14 | 15°0 | 15°47 | 4°55 | 22°44 |
| T 4 | 22 52 55 | 11°29'11 | 10♌35 | 27°41 | 27°42 | 11°0 | 15°7 | 11°35 | 18°39 | 7°9 | 23°15 | 14°49 | 15°44 | 5°1 | 22°44 |
| F 5 | 22 56 52 | 12°27'31 | 22°28 | 27°10 | 28°43 | 10°57 | 15°11 | 11°42 | 18°39 | 7°8 | 23°16 | 14°38 | 15°41 | 5°8 | 22°43 |
| S 6 | 23 0 49 | 13°25'52 | 4♐20 | 26°32 | 29°43 | 10°55 | 15°16 | 11°48 | 18°38 | 7°6 | 23°17 | 14°26 | 15°38 | 5°15 | 22°43 |
| S 7 | 23 4 45 | 14°24'15 | 16°12 | 25°48 | 0♐42 | 10°54 | 15°21 | 11°55 | 18°38 | 7°4 | 23°18 | 14°15 | 15°35 | 5°21 | 22°42 |
| M 8 | 23 8 42 | 15°22'40 | 28°5 | 24°59 | 1°42 | 10°D54 | 15°26 | 12°2 | 18°37 | 7°3 | 23°19 | 14°5 | 15°31 | 5°28 | 22°42 |
| T 9 | 23 12 38 | 16°21'07 | 10♋1 | 24°5 | 2°41 | 10°55 | 15°31 | 12°9 | 18°36 | 7°1 | 23°20 | 13°57 | 15°28 | 5°35 | 22°41 |
| W10 | 23 16 35 | 17°19'35 | 22°2 | 23°7 | 3°40 | 10°56 | 15°36 | 12°16 | 18°35 | 6°59 | 23°22 | 13°52 | 15°25 | 5°42 | 22°40 |
| T 11 | 23 20 31 | 18°18'06 | 4♐11 | 22°6 | 4°38 | 10°59 | 15°41 | 12°23 | 18°35 | 6°58 | 23°23 | 13°50 | 15°22 | 5°48 | 22°39 |
| F 12 | 23 24 28 | 19°16'38 | 16°31 | 21°3 | 5°36 | 11°2 | 15°47 | 12°29 | 18°34 | 6°56 | 23°24 | 13°D50 | 15°19 | 5°55 | 22°38 |
| S 13 | 23 28 24 | 20°15'12 | 29°5 | 20°0 | 6°33 | 11°6 | 15°53 | 12°36 | 18°33 | 6°55 | 23°25 | 13°50 | 15°16 | 6°2 | 22°37 |
| S 14 | 23 32 21 | 21°13'47 | 11♌57 | 18°58 | 7°30 | 11°11 | 15°59 | 12°43 | 18°32 | 6°53 | 23°26 | 13°51 | 15°12 | 6°8 | 22°36 |
| M15 | 23 36 18 | 22°12'25 | 25°12 | 17°59 | 8°27 | 11°16 | 16°5 | 12°50 | 18°31 | 6°51 | 23°27 | 13°R52 | 15°9 | 6°15 | 22°35 |
| T 16 | 23 40 14 | 23°11'04 | 8♌51 | 17°4 | 9°23 | 11°23 | 16°11 | 12°57 | 18°30 | 6°50 | 23°27 | 13°50 | 15°6 | 6°22 | 22°34 |
| W17 | 23 44 11 | 24°9'44 | 22°57 | 16°15 | 10°18 | 11°30 | 16°17 | 13°5 | 18°28 | 6°48 | 23°28 | 13°47 | 15°3 | 6°29 | 22°33 |
| T 18 | 23 48 7 | 25°8'27 | 7♋29 | 15°33 | 11°13 | 11°38 | 16°24 | 13°12 | 18°27 | 6°47 | 23°29 | 13°42 | 15°0 | 6°35 | 22°32 |
| F 19 | 23 52 4 | 26°7'11 | 22°23 | 14°59 | 12°8 | 11°46 | 16°30 | 13°19 | 18°26 | 6°45 | 23°30 | 13°36 | 14°56 | 6°42 | 22°30 |
| S 20 | 23 56 0 | 27°5'56 | 7♐32 | 14°34 | 13°2 | 11°56 | 16°37 | 13°26 | 18°25 | 6°44 | 23°31 | 13°29 | 14°53 | 6°49 | 22°29 |
| S 21 | 23 59 57 | 28°4'44 | 22°45 | 14°18 | 13°55 | 12°6 | 16°44 | 13°33 | 18°23 | 6°42 | 23°32 | 13°22 | 14°50 | 6°55 | 22°27 |
| M22 | 0 3 53 | 29°3'33 | 7♐54 | 14°D13 | 14°48 | 12°17 | 16°51 | 13°40 | 18°22 | 6°41 | 23°33 | 13°16 | 14°47 | 7°2 | 22°26 |
| T 23 | 0 7 50 | 0♌25 | 22°47 | 14°17 | 15°40 | 12°28 | 16°58 | 13°47 | 18°21 | 6°39 | 23°33 | 13°13 | 14°44 | 7°9 | 22°24 |
| W24 | 0 11 46 | 1°1'19 | 7♋18 | 14°32 | 16°32 | 12°40 | 17°6 | 13°54 | 18°19 | 6°38 | 23°34 | 13°D11 | 14°41 | 7°16 | 22°23 |
| T 25 | 0 15 43 | 2°0'15 | 21°21 | 14°57 | 17°23 | 12°53 | 17°13 | 14°2 | 18°18 | 6°36 | 23°35 | 13°11 | 14°37 | 7°22 | 22°21 |
| F 26 | 0 19 40 | 2°59'13 | 4♐57 | 15°31 | 18°13 | 13°7 | 17°21 | 14°9 | 18°16 | 6°35 | 23°36 | 13°12 | 14°34 | 7°29 | 22°19 |
| S 27 | 0 23 36 | 3°58'14 | 18°6 | 16°14 | 19°3 | 13°21 | 17°29 | 14°16 | 18°15 | 6°33 | 23°36 | 13°14 | 14°31 | 7°36 | 22°17 |
| S 28 | 0 27 33 | 4°57'17 | 0♌51 | 17°6 | 19°51 | 13°36 | 17°37 | 14°23 | 18°13 | 6°32 | 23°37 | 13°R15 | 14°28 | 7°42 | 22°16 |
| M29 | 0 31 29 | 5°56'22 | 13°17 | 18°5 | 20°40 | 13°51 | 17°45 | 14°31 | 18°12 | 6°31 | 23°38 | 13°15 | 14°25 | 7°49 | 22°14 |
| T 30 | 0 35 26 | 6°55'30 | 25♌28 | 19°11 | 21♐27 | 14°7 | 17°53 | 14°38 | 18°10 | 6°29 | 23°38 | 13°13 | 14°22 | 7°56 | 22°12 |

| Day | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|------|-------|------|------|------|-------|------|-------|------|-------|------|------|------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| M 1 | 8n22 | 27n14 | 3n50 | 3s14 | 4s8 | 11s24 | 1s59 | 23s18 | 6s6 | 22s21 | 0n16 | 2s21 | 2n17 | 17n5 | 0s21 |
| T 2 | 8 0 | 26 51 | 4 26 | 3 13 | 4 12 | 11 52 | 2 4 | 23 16 | 6 2 | 22 22 | 0 16 | 2 24 | 2 17 | 17 4 | 0 21 |
| W 3 | 7 38 | 25 13 | 4 51 | 3 8 | 4 15 | 12 20 | 2 10 | 23 14 | 5 59 | 22 23 | 0 16 | 2 27 | 2 17 | 17 4 | 0 21 |
| T 4 | 7 16 | 22 27 | 5 2 | 2 59 | 4 16 | 12 47 | 2 16 | 23 11 | 5 55 | 22 23 | 0 16 | 2 29 | 2 17 | 17 4 | 0 21 |
| F 5 | 6 54 | 18 46 | 5 0 | 2 47 | 4 16 | 13 14 | 2 21 | 23 8 | 5 51 | 22 24 | 0 16 | 2 32 | 2 17 | 17 4 | 0 21 |
| S 6 | 6 31 | 14 21 | 4 45 | 2 30 | 4 14 | 13 41 | 2 27 | 23 4 | 5 47 | 22 25 | 0 15 | 2 35 | 2 17 | 17 4 | 0 21 |
| S 7 | 6 9 | 9 25 | 4 18 | 2 9 | 4 10 | 14 8 | 2 33 | 23 1 | 5 43 | 22 25 | 0 15 | 2 37 | 2 17 | 17 4 | 0 21 |
| M 8 | 5 46 | 4 7 | 3 39 | 1 45 | 4 5 | 14 34 | 2 39 | 22 57 | 5 39 | 22 26 | 0 15 | 2 40 | 2 17 | 17 3 | 0 21 |
| T 9 | 5 24 | 1s22 | 2 51 | 1 17 | 3 58 | 15 0 | 2 44 | 22 53 | 5 35 | 22 27 | 0 15 | 2 43 | 2 17 | 17 3 | 0 21 |
| W10 | 5 1 | 6 50 | 1 54 | 0 45 | 3 48 | 15 25 | 2 50 | 22 48 | 5 31 | 22 27 | 0 15 | 2 46 | 2 16 | 17 3 | 0 21 |
| T 11 | 4 38 | 12 8 | 0 51 | 0 11 | 3 37 | 15 51 | 2 56 | 22 44 | 5 26 | 22 28 | 0 15 | 2 48 | 2 16 | 17 3 | 0 21 |
| F 12 | 4 15 | 17 2 | 0s14 | 0n26 | 3 24 | 16 16 | 3 2 | 22 39 | 5 22 | 22 29 | 0 14 | 2 51 | 2 16 | 17 3 | 0 21 |
| S 13 | 3 52 | 21 19 | 1 21 | 1 4 | 3 9 | 16 40 | 3 7 | 22 34 | 5 18 | 22 30 | 0 14 | 2 54 | 2 16 | 17 2 | 0 21 |
| S 14 | 3 29 | 24 40 | 2 25 | 1 43 | 2 53 | 17 5 | 3 13 | 22 28 | 5 14 | 22 30 | 0 14 | 2 57 | 2 16 | 17 2 | 0 21 |
| M15 | 3 6 | 26 47 | 3 24 | 2 23 | 2 35 | 17 29 | 3 19 | 22 23 | 5 9 | 22 31 | 0 14 | 2 59 | 2 16 | 17 2 | 0 21 |
| T 16 | 2 43 | 27 23 | 4 12 | 3 1 | 2 16 | 17 52 | 3 25 | 22 17 | 5 5 | 22 32 | 0 14 | 3 2 | 2 16 | 17 1 | 0 21 |
| W17 | 2 19 | 26 15 | 4 48 | 3 38 | 1 57 | 18 16 | 3 30 | 22 10 | 5 1 | 22 33 | 0 14 | 3 5 | 2 16 | 17 1 | 0 21 |
| T 18 | 1 56 | 23 21 | 5 6 | 4 13 | 1 37 | 18 38 | 3 36 | 22 4 | 4 56 | 22 34 | 0 14 | 3 8 | 2 16 | 17 1 | 0 21 |
| F 19 | 1 33 | 18 52 | 5 4 | 4 45 | 1 17 | 19 1 | 3 41 | 21 58 | 4 52 | 22 34 | 0 13 | 3 11 | 2 16 | 17 0 | 0 21 |
| S 20 | 1 9 | 13 6 | 4 41 | 5 13 | 0 57 | 19 23 | 3 47 | 21 51 | 4 48 | 22 35 | 0 13 | 3 13 | 2 16 | 17 0 | 0 21 |
| S 21 | 0 46 | 6 32 | 3 58 | 5 37 | 0 37 | 19 45 | 3 53 | 21 44 | 4 43 | 22 36 | 0 13 | 3 16 | 2 16 | 17 0 | 0 21 |
| M22 | 0 22 | 0n24 | 2 59 | 5 56 | 0 19 | 20 6 | 3 58 | 21 36 | 4 39 | 22 37 | 0 13 | 3 19 | 2 16 | 16 59 | 0 21 |
| T 23 | 0s1 | 7 12 | 1 48 | 6 11 | 0 1 | 20 27 | 4 4 | 21 29 | 4 35 | 22 38 | 0 13 | 3 22 | 2 16 | 16 59 | 0 21 |
| W24 | 0 24 | 13 28 | 0 32 | 6 21 | 0n16 | 20 47 | 4 9 | 21 21 | 4 31 | 22 39 | 0 13 | 3 25 | 2 16 | 16 58 | 0 21 |
| T 25 | 0 48 | 18 51 | 0n44 | 6 26 | 0 32 | 21 7 | 4 14 | 21 14 | 4 26 | 22 40 | 0 13 | 3 28 | 2 16 | 16 58 | 0 21 |
| F 26 | 1 11 | 23 3 | 1 55 | 6 25 | 0 46 | 21 26 | 4 20 | 21 6 | 4 22 | 22 40 | 0 12 | 3 30 | 2 16 | 16 58 | 0 21 |
| S 27 | 1 35 | 25 54 | 2 58 | 6 21 | 0 59 | 21 45 | 4 25 | 20 58 | 4 18 | 22 41 | 0 12 | 3 33 | 2 16 | 16 57 | 0 21 |
| S 28 | 1 58 | 27 19 | 3 50 | 6 11 | 1 10 | 22 4 | 4 30 | 20 49 | 4 14 | 22 42 | 0 12 | 3 36 | 2 16 | 16 57 | 0 21 |
| M29 | 2 22 | 27 17 | 4 30 | 5 57 | 1 21 | 22 22 | 4 35 | 20 41 | 4 10 | 22 43 | 0 12 | 3 39 | 2 16 | 16 56 | 0 21 |
| T 30 | 2s45 | 25n56 | 4n56 | 5n40 | 1n29 | 22s40 | 4s40 | 20s32 | 4s5 | 22s44 | 0n12 | 3s42 | 2n16 | 16n56 | 0s21 |

Julian Day Number = 2337467.5, Delta T = 9.71 sec
 Ecliptic obliquity = 23°28'54, Nutation = - 0°00'11
 Ayanamsha: Fagan/Bradley = 20°22'50, Lahiri = 19°29'50Greg. Calendar

SWISS EPHEMERIS for the year 1687

OCTOBER 1687 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|---------|----------|-------|-------|-------|-------|-------|-------|--------|-------|--------|--------|-------|-------|--------|
| W 1 | 0 39 22 | 7♁54'40 | 7♁28 | 20♁24 | 22♁13 | 14♁24 | 18♁7 | 14♁45 | 18°R 8 | 6°R28 | 23♁39 | 13°R10 | 14♁18 | 8♁3 | 22°R10 |
| T 2 | 0 43 19 | 8°53'52 | 19°22 | 21°42 | 22°59 | 14°42 | 18°10 | 14°53 | 18♁6 | 6♁26 | 23°40 | 13♁5 | 14°15 | 8°9 | 22♁8 |
| F 3 | 0 47 16 | 9°53'07 | 1♁14 | 23°4 | 23°44 | 14°59 | 18°18 | 15°0 | 18°5 | 6°25 | 23°40 | 12°59 | 14°12 | 8°16 | 22°5 |
| S 4 | 0 51 12 | 10°52'23 | 1♁5 | 24°31 | 24°27 | 15°18 | 18°27 | 15°7 | 18°3 | 6°24 | 23°41 | 12°53 | 14°9 | 8°23 | 22°3 |
| S 5 | 0 55 9 | 11°51'42 | 24°59 | 26°2 | 25°10 | 15°37 | 18°36 | 15°15 | 18°1 | 6°23 | 23°41 | 12°47 | 14°6 | 8°29 | 22°1 |
| M 6 | 0 59 5 | 12°51'03 | 6♁58 | 27°35 | 25°52 | 15°57 | 18°45 | 15°22 | 17°59 | 6°21 | 23°42 | 12°42 | 14°2 | 8°36 | 21°59 |
| T 7 | 1 3 2 | 13°50'26 | 19°3 | 29°11 | 26°33 | 16°17 | 18°54 | 15°29 | 17°57 | 6°20 | 23°42 | 12°39 | 13°59 | 8°43 | 21°56 |
| W 8 | 1 6 58 | 14°49'51 | 1♁16 | 0♁49 | 27°13 | 16°37 | 19°3 | 15°37 | 17°55 | 6°19 | 23°43 | 12°37 | 13°56 | 8°49 | 21°54 |
| T 9 | 1 10 55 | 15°49'18 | 13°38 | 2°29 | 27°51 | 16°59 | 19°12 | 15°44 | 17°53 | 6°18 | 23°43 | 12°36 | 13°53 | 8°56 | 21°52 |
| F 10 | 1 14 51 | 16°48'47 | 26°11 | 4°9 | 28°28 | 17°20 | 19°22 | 15°51 | 17°51 | 6°17 | 23°43 | 12°37 | 13°50 | 9°3 | 21°49 |
| S 11 | 1 18 48 | 17°48'18 | 8♁57 | 5°51 | 29°5 | 17°43 | 19°31 | 15°59 | 17°49 | 6°15 | 23°44 | 12°38 | 13°47 | 9°10 | 21°47 |
| S 12 | 1 22 44 | 18°47'51 | 21°58 | 7°33 | 29°39 | 18°5 | 19°41 | 16°6 | 17°47 | 6°14 | 23°44 | 12°40 | 13°43 | 9°16 | 21°44 |
| M13 | 1 26 41 | 19°47'26 | 5♁15 | 9°16 | 0♁13 | 18°29 | 19°51 | 16°13 | 17°45 | 6°13 | 23°44 | 12°41 | 13°40 | 9°23 | 21°42 |
| T 14 | 1 30 38 | 20°47'02 | 18°52 | 10°59 | 0°45 | 18°52 | 20°1 | 16°21 | 17°43 | 6°12 | 23°45 | 12°R42 | 13°37 | 9°30 | 21°39 |
| W15 | 1 34 34 | 21°46'40 | 2♁49 | 12°41 | 1°16 | 19°16 | 20°11 | 16°28 | 17°41 | 6°11 | 23°45 | 12°41 | 13°34 | 9°36 | 21°36 |
| T 16 | 1 38 31 | 22°46'20 | 17°5 | 14°24 | 1°45 | 19°41 | 20°21 | 16°35 | 17°39 | 6°10 | 23°45 | 12°40 | 13°31 | 9°43 | 21°33 |
| F 17 | 1 42 27 | 23°46'02 | 1♁38 | 16°7 | 2°13 | 20°6 | 20°31 | 16°42 | 17°36 | 6°9 | 23°45 | 12°38 | 13°28 | 9°50 | 21°31 |
| S 18 | 1 46 24 | 24°45'45 | 16°24 | 17°50 | 2°39 | 20°31 | 20°41 | 16°50 | 17°34 | 6°8 | 23°46 | 12°36 | 13°24 | 9°57 | 21°28 |
| S 19 | 1 50 20 | 25°45'30 | 1♁16 | 19°32 | 3°3 | 20°57 | 20°52 | 16°57 | 17°32 | 6°7 | 23°46 | 12°34 | 13°21 | 10°3 | 21°25 |
| M20 | 1 54 17 | 26°45'16 | 16°7 | 21°13 | 3°25 | 21°23 | 21°2 | 17°4 | 17°30 | 6°6 | 23°46 | 12°32 | 13°18 | 10°10 | 21°22 |
| T 21 | 1 58 13 | 27°45'05 | 0♁49 | 22°55 | 3°46 | 21°50 | 21°13 | 17°12 | 17°27 | 6°5 | 23°46 | 12°31 | 13°15 | 10°17 | 21°19 |
| W22 | 2 2 10 | 28°44'56 | 15°14 | 24°36 | 4°5 | 22°17 | 21°24 | 17°19 | 17°25 | 6°5 | 23°46 | 12°D30 | 13°12 | 10°23 | 21°16 |
| T 23 | 2 6 7 | 29°44'48 | 29°18 | 26°16 | 4°22 | 22°44 | 21°34 | 17°26 | 17°23 | 6°4 | 23°46 | 12°31 | 13°8 | 10°30 | 21°13 |
| F 24 | 2 10 3 | 0♁44'43 | 12♁57 | 27°56 | 4°36 | 23°12 | 21°45 | 17°33 | 17°20 | 6°3 | 23°46 | 12°32 | 13°5 | 10°37 | 21°10 |
| S 25 | 2 14 0 | 1°44'40 | 26°12 | 29°36 | 4°49 | 23°40 | 21°56 | 17°40 | 17°18 | 6°2 | 23°R46 | 12°33 | 13°2 | 10°44 | 21°7 |
| S 26 | 2 17 56 | 2°44'40 | 9♁3 | 1♁15 | 5°0 | 24°8 | 22°7 | 17°48 | 17°15 | 6°1 | 23°46 | 12°34 | 12°59 | 10°50 | 21°4 |
| M27 | 2 21 53 | 3°44'41 | 21°33 | 2°54 | 5°8 | 24°37 | 22°18 | 17°55 | 17°13 | 6°1 | 23°46 | 12°34 | 12°56 | 10°57 | 21°1 |
| T 28 | 2 25 49 | 4°44'45 | 3♁47 | 4°32 | 5°15 | 25°6 | 22°30 | 18°2 | 17°11 | 6°0 | 23°46 | 12°R35 | 12°53 | 11°4 | 20°58 |
| W29 | 2 29 46 | 5°44'50 | 15°48 | 6°10 | 5°19 | 25°35 | 22°41 | 18°9 | 17°8 | 5°59 | 23°46 | 12°35 | 12°49 | 11°10 | 20°55 |
| T 30 | 2 33 42 | 6°44'58 | 27°43 | 7°47 | 5°R20 | 26°5 | 22°52 | 18°16 | 17°6 | 5°59 | 23°46 | 12°34 | 12°46 | 11°17 | 20°52 |
| F 31 | 2 37 39 | 7♁45'08 | 9♁34 | 9♁24 | 5♁20 | 26°35 | 23♁4 | 18♁23 | 17♁3 | 5♁58 | 23♁46 | 12♁34 | 12♁43 | 11♁24 | 20♁49 |

| Day | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | |
| W 1 | 3s 9 | 23n25 | 5n 9 | 5n18 | 1n37 | 22s57 | 4s45 | 20s23 | 4s 1 | 22s45 | 0n12 | 3s45 | 2n15 | 16n55 | 0s21 | 10s 0 |
| T 2 | 3 32 | 19 55 | 5 9 | 4 53 | 1 43 | 23 13 | 4 50 | 20 14 | 3 57 | 22 46 | 0 12 | 3 47 | 2 15 | 16 55 | 0 21 | 10 0 |
| F 3 | 3 55 | 15 39 | 4 56 | 4 25 | 1 48 | 23 29 | 4 55 | 20 5 | 3 53 | 22 47 | 0 11 | 3 50 | 2 15 | 16 54 | 0 21 | 10 1 |
| S 4 | 4 19 | 10 48 | 4 29 | 3 54 | 1 52 | 23 45 | 4 59 | 19 55 | 3 49 | 22 48 | 0 11 | 3 53 | 2 15 | 16 54 | 0 21 | 10 1 |
| S 5 | 4 42 | 5 32 | 3 51 | 3 20 | 1 55 | 24 0 | 5 4 | 19 46 | 3 45 | 22 48 | 0 11 | 3 56 | 2 15 | 16 53 | 0 21 | 10 1 |
| M 6 | 5 5 0 | 2 3 | 3 2 | 2 45 | 1 57 | 24 15 | 5 8 | 19 36 | 3 41 | 22 49 | 0 11 | 3 59 | 2 15 | 16 53 | 0 21 | 10 2 |
| T 7 | 5 28 | 5s32 | 2 6 | 2 8 | 1 58 | 24 29 | 5 12 | 19 26 | 3 37 | 22 50 | 0 11 | 4 1 | 2 15 | 16 52 | 0 21 | 10 2 |
| W 8 | 5 51 | 10 58 | 1 2 | 1 29 | 1 58 | 24 42 | 5 17 | 19 16 | 3 33 | 22 51 | 0 11 | 4 4 | 2 15 | 16 52 | 0 21 | 10 3 |
| T 9 | 6 14 | 16 3 | 0s 6 | 0 48 | 1 57 | 24 55 | 5 20 | 19 6 | 3 30 | 22 52 | 0 11 | 4 7 | 2 15 | 16 51 | 0 21 | 10 3 |
| F 10 | 6 37 | 20 32 | 1 14 | 0 7 | 1 56 | 25 7 | 5 24 | 18 56 | 3 26 | 22 53 | 0 10 | 4 10 | 2 15 | 16 51 | 0 21 | 10 4 |
| S 11 | 7 0 | 24 8 | 2 20 | 0s35 | 1 54 | 25 19 | 5 28 | 18 45 | 3 22 | 22 54 | 0 10 | 4 13 | 2 16 | 16 50 | 0 21 | 10 4 |
| S 12 | 7 23 | 26 34 | 3 20 | 1 18 | 1 51 | 25 30 | 5 31 | 18 35 | 3 18 | 22 55 | 0 10 | 4 15 | 2 16 | 16 49 | 0 21 | 10 4 |
| M13 | 7 45 | 27 33 | 4 10 | 2 2 | 1 48 | 25 41 | 5 34 | 18 24 | 3 15 | 22 56 | 0 10 | 4 18 | 2 16 | 16 49 | 0 21 | 10 5 |
| T 14 | 8 8 | 26 55 | 4 48 | 2 45 | 1 44 | 25 51 | 5 38 | 18 13 | 3 11 | 22 56 | 0 10 | 4 21 | 2 16 | 16 48 | 0 21 | 10 5 |
| W15 | 8 30 | 24 36 | 5 10 | 3 29 | 1 40 | 26 0 | 5 40 | 18 2 | 3 7 | 22 57 | 0 10 | 4 24 | 2 16 | 16 48 | 0 21 | 10 6 |
| T 16 | 8 52 | 20 44 | 5 14 | 4 13 | 1 36 | 26 8 | 5 43 | 17 51 | 3 4 | 22 58 | 0 10 | 4 27 | 2 16 | 16 47 | 0 21 | 10 6 |
| F 17 | 9 14 | 15 33 | 4 58 | 4 57 | 1 31 | 26 16 | 5 45 | 17 39 | 3 0 | 22 59 | 0 10 | 4 29 | 2 16 | 16 46 | 0 21 | 10 6 |
| S 18 | 9 36 | 9 24 | 4 22 | 5 41 | 1 26 | 26 24 | 5 47 | 17 28 | 2 57 | 23 0 | 0 9 | 4 32 | 2 16 | 16 46 | 0 21 | 10 7 |
| S 19 | 9 58 | 2 41 | 3 28 | 6 25 | 1 20 | 26 30 | 5 49 | 17 16 | 2 53 | 23 1 | 0 9 | 4 35 | 2 16 | 16 45 | 0 21 | 10 7 |
| M20 | 10 20 | 4n11 | 2 21 | 7 9 | 1 14 | 26 36 | 5 50 | 17 4 | 2 50 | 23 2 | 0 9 | 4 38 | 2 16 | 16 45 | 0 21 | 10 7 |
| T 21 | 10 42 | 10 46 | 1 4 | 7 52 | 1 9 | 26 42 | 5 52 | 16 52 | 2 46 | 23 2 | 0 9 | 4 40 | 2 16 | 16 44 | 0 21 | 10 8 |
| W22 | 11 3 | 16 40 | 0n15 | 8 35 | 1 3 | 26 46 | 5 52 | 16 40 | 2 43 | 23 3 | 0 9 | 4 43 | 2 16 | 16 43 | 0 21 | 10 8 |
| T 23 | 11 24 | 21 31 | 1 32 | 9 17 | 0 56 | 26 50 | 5 53 | 16 28 | 2 40 | 23 4 | 0 9 | 4 46 | 2 16 | 16 43 | 0 21 | 10 8 |
| F 24 | 11 45 | 25 3 | 2 41 | 9 59 | 0 50 | 26 53 | 5 53 | 16 16 | 2 36 | 23 5 | 0 9 | 4 48 | 2 16 | 16 42 | 0 21 | 10 9 |
| S 25 | 12 6 | 27 4 | 3 39 | 10 40 | 0 44 | 26 55 | 5 53 | 16 4 | 2 33 | 23 6 | 0 9 | 4 51 | 2 16 | 16 41 | 0 21 | 10 9 |
| S 26 | 12 27 | 27 34 | 4 24 | 11 21 | 0 37 | 26 56 | 5 52 | 15 51 | 2 30 | 23 6 | 0 8 | 4 54 | 2 16 | 16 41 | 0 21 | 10 9 |
| M27 | 12 47 | 26 37 | 4 56 | 12 1 | 0 30 | 26 57 | 5 51 | 15 38 | 2 27 | 23 7 | 0 8 | 4 56 | 2 16 | 16 40 | 0 21 | 10 9 |
| T 28 | 13 8 | 24 25 | 5 13 | 12 41 | 0 24 | 26 56 | 5 49 | 15 26 | 2 23 | 23 8 | 0 8 | 4 59 | 2 16 | 16 39 | 0 21 | 10 10 |
| W29 | 13 28 | 21 9 | 5 16 | 13 20 | 0 17 | 26 55 | 5 47 | 15 13 | 2 20 | 23 9 | 0 8 | 5 2 | 2 16 | 16 39 | 0 21 | 10 10 |
| T 30 | 13 48 | 17 4 | 5 6 | 13 58 | 0 10 | 26 53 | 5 45 | 15 0 | 2 17 | 23 9 | 0 8 | 5 4 | 2 16 | 16 38 | 0 21 | 10 10 |
| F 31 | 14s 7 | 12n21 | 4n43 | 14s35 | 0n 4 | 26s49 | 5s41 | 14s47 | 2s14 | 23s10 | 0n 8 | 5s 7 | 2n16 | 16n37 | 0s21 | 10s10 |

Julian Day Number = 2337497.5, Delta T = 9.72 sec
 Ecliptic obliquity = 23°28'55, Nutation = - 0°00'12
 Ayanamsha: Fagan/Bradley = 20°22'54, Lahiri = 19°29'54Greg. Calendar

SWISS EPHEMERIS for the year 1687

NOVEMBER 1687 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|---------|----------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|--------|--------|
| S 1 | 2 41 36 | 8♁45'20 | 21♁26 | 11♁ 0 | 5°R17 | 27° 5 | 23°16 | 18°30 | 17°R 1 | 5°R58 | 23°R46 | 12°R33 | 12°R40 | 11°R30 | 20°R46 |
| S 2 | 2 45 32 | 9°45'33 | 3♁23 | 12°36 | 5°11 | 27°35 | 23°27 | 18°37 | 16°R58 | 5°R57 | 23°R45 | 12°R33 | 12°37 | 11°37 | 20°R42 |
| M 3 | 2 49 29 | 10°45'49 | 15°28 | 14°12 | 5° 3 | 28° 6 | 23°39 | 18°44 | 16°56 | 5°57 | 23°45 | 12°32 | 12°33 | 11°44 | 20°39 |
| T 4 | 2 53 25 | 11°46'07 | 27°43 | 15°47 | 4°53 | 28°37 | 23°51 | 18°51 | 16°53 | 5°56 | 23°45 | 12°32 | 12°30 | 11°51 | 20°36 |
| W 5 | 2 57 22 | 12°46'26 | 10♁11 | 17°22 | 4°40 | 29° 8 | 24° 3 | 18°58 | 16°51 | 5°56 | 23°45 | 12°32 | 12°27 | 11°57 | 20°33 |
| T 6 | 3 1 18 | 13°46'48 | 22°51 | 18°57 | 4°25 | 29°40 | 24°15 | 19° 5 | 16°48 | 5°55 | 23°44 | 12°32 | 12°24 | 12° 4 | 20°30 |
| F 7 | 3 5 15 | 14°47'11 | 5°145 | 20°31 | 4° 7 | 0°11 | 24°27 | 19°12 | 16°46 | 5°55 | 23°44 | 12°32 | 12°21 | 12°11 | 20°26 |
| S 8 | 3 9 11 | 15°47'35 | 18°53 | 22° 5 | 3°47 | 0°44 | 24°39 | 19°19 | 16°43 | 5°55 | 23°44 | 12°32 | 12°18 | 12°17 | 20°23 |
| S 9 | 3 13 8 | 16°48'02 | 2°13 | 23°38 | 3°25 | 1°16 | 24°51 | 19°26 | 16°41 | 5°54 | 23°43 | 12°31 | 12°14 | 12°24 | 20°20 |
| M10 | 3 17 5 | 17°48'29 | 15°47 | 25°12 | 3° 1 | 1°48 | 25° 3 | 19°32 | 16°38 | 5°54 | 23°43 | 12°31 | 12°11 | 12°31 | 20°16 |
| T 11 | 3 21 1 | 18°48'58 | 29°33 | 26°45 | 2°35 | 2°21 | 25°16 | 19°39 | 16°36 | 5°54 | 23°42 | 12°30 | 12° 8 | 12°38 | 20°13 |
| W12 | 3 24 58 | 19°49'28 | 13°30 | 28°18 | 2° 7 | 2°54 | 25°28 | 19°46 | 16°33 | 5°54 | 23°42 | 12°D30 | 12° 5 | 12°44 | 20°10 |
| T 13 | 3 28 54 | 20°50'00 | 27°37 | 29°50 | 1°37 | 3°27 | 25°41 | 19°52 | 16°31 | 5°54 | 23°42 | 12°30 | 12° 2 | 12°51 | 20° 7 |
| F 14 | 3 32 51 | 21°50'33 | 11°152 | 1°123 | 1° 5 | 4° 1 | 25°53 | 19°59 | 16°28 | 5°53 | 23°41 | 12°30 | 11°59 | 12°58 | 20° 3 |
| S 15 | 3 36 47 | 22°51'06 | 26°14 | 2°55 | 0°32 | 4°34 | 26° 6 | 20° 6 | 16°26 | 5°53 | 23°41 | 12°31 | 11°55 | 13° 4 | 20° 0 |
| S 16 | 3 40 44 | 23°51'42 | 10°138 | 4°27 | 29°158 | 5° 8 | 26°18 | 20°12 | 16°23 | 5°53 | 23°40 | 12°32 | 11°52 | 13°11 | 19°57 |
| M17 | 3 44 40 | 24°52'18 | 25° 0 | 5°58 | 29°23 | 5°42 | 26°31 | 20°19 | 16°21 | 5°D53 | 23°39 | 12°33 | 11°49 | 13°18 | 19°53 |
| T 18 | 3 48 37 | 25°52'56 | 9°16 | 7°30 | 28°47 | 6°16 | 26°44 | 20°25 | 16°19 | 5°53 | 23°39 | 12°R33 | 11°46 | 13°24 | 19°50 |
| W19 | 3 52 34 | 26°53'35 | 23°22 | 9° 1 | 28°11 | 6°50 | 26°57 | 20°32 | 16°16 | 5°53 | 23°38 | 12°33 | 11°43 | 13°31 | 19°47 |
| T 20 | 3 56 30 | 27°54'15 | 7°113 | 10°32 | 27°34 | 7°25 | 27° 9 | 20°38 | 16°14 | 5°53 | 23°38 | 12°32 | 11°39 | 13°38 | 19°44 |
| F 21 | 4 0 27 | 28°54'57 | 20°45 | 12° 3 | 26°58 | 7°59 | 27°22 | 20°44 | 16°11 | 5°54 | 23°37 | 12°30 | 11°36 | 13°45 | 19°40 |
| S 22 | 4 4 23 | 29°55'41 | 3°58 | 13°33 | 26°22 | 8°34 | 27°35 | 20°50 | 16° 9 | 5°54 | 23°36 | 12°28 | 11°33 | 13°51 | 19°37 |
| S 23 | 4 8 20 | 0°156'25 | 16°50 | 15° 3 | 25°46 | 9° 9 | 27°48 | 20°57 | 16° 6 | 5°54 | 23°36 | 12°25 | 11°30 | 13°58 | 19°34 |
| M24 | 4 12 16 | 1°57'12 | 29°23 | 16°33 | 25°11 | 9°44 | 28° 1 | 21° 3 | 16° 4 | 5°54 | 23°35 | 12°22 | 11°27 | 14° 5 | 19°31 |
| T 25 | 4 16 13 | 2°58'00 | 11°139 | 18° 2 | 24°37 | 10°19 | 28°14 | 21° 9 | 16° 2 | 5°54 | 23°34 | 12°20 | 11°24 | 14°11 | 19°28 |
| W26 | 4 20 10 | 3°58'49 | 23°43 | 19°32 | 24° 5 | 10°55 | 28°28 | 21°15 | 15°59 | 5°55 | 23°33 | 12°18 | 11°20 | 14°18 | 19°24 |
| T 27 | 4 24 6 | 4°59'39 | 5°138 | 21° 0 | 23°34 | 11°30 | 28°41 | 21°21 | 15°57 | 5°55 | 23°33 | 12°D18 | 11°17 | 14°25 | 19°21 |
| F 28 | 4 28 3 | 6° 0'31 | 17°29 | 22°28 | 23° 4 | 12° 6 | 28°54 | 21°27 | 15°55 | 5°55 | 23°32 | 12°18 | 11°14 | 14°31 | 19°18 |
| S 29 | 4 31 59 | 7° 1'25 | 29°21 | 23°56 | 22°37 | 12°42 | 29° 7 | 21°33 | 15°52 | 5°56 | 23°31 | 12°20 | 11°11 | 14°38 | 19°15 |
| S 30 | 4 35 56 | 8°1'20 | 11°119 | 25°122 | 22°11 | 13°17 | 29°121 | 21°139 | 15°50 | 5°R56 | 23°R30 | 12°R22 | 11°R 8 | 14°R45 | 19°R12 |

| Day | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | | | | | | | | | |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|--------|-------|------|-------|-------|-------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | | | | | | | | | |
| S 1 | 14s27 | 7n11 | 4n 7 | 15s12 | 0s 3 | 26s45 | 5s38 | 14s34 | 2s11 | 23s11 | 0n 8 | 5s10 | 2n17 | 16n37 | 0s21 | 10s10 | 0s54 | 23n18 | 1n57 | 15n38 | 15n40 | 11n26 | 15n 6 | 2s59 |
| S 2 | 14 46 | 1 43 | 3 21 | 15 48 | 0 10 | 26 40 | 5 34 | 14 20 | 2 8 | 23 12 | 0 8 | 5 12 | 2 17 | 16 36 | 0 21 | 10 11 | 0 54 | 23 19 | 1 57 | 15 38 | 15 39 | 11 23 | 15 5 | 2 59 |
| M 3 | 15 5 | 3s53 | 2 25 | 16 23 | 0 16 | 26 34 | 5 29 | 14 7 | 2 5 | 23 12 | 0 8 | 5 15 | 2 17 | 16 35 | 0 21 | 10 11 | 0 54 | 23 19 | 1 57 | 15 38 | 15 38 | 11 20 | 15 4 | 2 59 |
| T 4 | 15 24 | 9 25 | 1 21 | 16 58 | 0 23 | 26 27 | 5 23 | 13 53 | 2 2 | 23 13 | 0 7 | 5 17 | 2 17 | 16 34 | 0 21 | 10 11 | 0 54 | 23 19 | 1 57 | 15 38 | 15 37 | 11 17 | 15 3 | 2 59 |
| W 5 | 15 42 | 14 41 | 0 13 | 17 31 | 0 30 | 26 18 | 5 17 | 13 40 | 2 0 | 23 14 | 0 7 | 5 20 | 2 17 | 16 34 | 0 21 | 10 11 | 0 54 | 23 19 | 1 57 | 15 38 | 15 36 | 11 14 | 15 2 | 2 59 |
| T 6 | 16 0 | 19 26 | 0s57 | 18 4 | 0 36 | 26 9 | 5 11 | 13 26 | 1 57 | 23 14 | 0 7 | 5 22 | 2 17 | 16 33 | 0 21 | 10 11 | 0 54 | 23 19 | 1 58 | 15 38 | 15 35 | 11 11 | 15 1 | 2 59 |
| F 7 | 16 18 | 23 21 | 2 5 | 18 36 | 0 42 | 25 58 | 5 3 | 13 12 | 1 54 | 23 15 | 0 7 | 5 25 | 2 17 | 16 32 | 0 21 | 10 11 | 0 54 | 23 19 | 1 58 | 15 38 | 15 34 | 11 8 | 15 0 | 3 0 |
| S 8 | 16 36 | 26 8 | 3 8 | 19 6 | 0 49 | 25 46 | 4 55 | 12 58 | 1 51 | 23 15 | 0 7 | 5 27 | 2 17 | 16 32 | 0 21 | 10 11 | 0 54 | 23 20 | 1 58 | 15 37 | 15 33 | 11 5 | 14 59 | 3 0 |
| S 9 | 16 53 | 27 30 | 4 2 | 19 36 | 0 55 | 25 34 | 4 47 | 12 44 | 1 49 | 23 16 | 0 7 | 5 30 | 2 17 | 16 31 | 0 21 | 10 11 | 0 54 | 23 20 | 1 58 | 15 37 | 15 32 | 11 2 | 14 58 | 3 0 |
| M10 | 17 10 | 27 14 | 4 43 | 20 5 | 1 1 | 25 20 | 4 37 | 12 30 | 1 46 | 23 17 | 0 7 | 5 32 | 2 17 | 16 30 | 0 21 | 10 12 | 0 54 | 23 20 | 1 58 | 15 37 | 15 31 | 10 59 | 14 57 | 3 0 |
| T 11 | 17 27 | 25 19 | 5 9 | 20 33 | 1 7 | 25 5 | 4 27 | 12 16 | 1 43 | 23 17 | 0 7 | 5 35 | 2 18 | 16 29 | 0 21 | 10 12 | 0 53 | 23 20 | 1 58 | 15 37 | 15 30 | 10 56 | 14 56 | 3 0 |
| W12 | 17 44 | 21 51 | 5 17 | 21 0 | 1 13 | 24 48 | 4 17 | 12 1 | 1 41 | 23 18 | 0 7 | 5 37 | 2 18 | 16 29 | 0 21 | 10 12 | 0 53 | 23 20 | 1 58 | 15 37 | 15 29 | 10 53 | 14 55 | 3 0 |
| T 13 | 18 0 | 17 6 | 5 6 | 21 26 | 1 19 | 24 31 | 4 5 | 11 47 | 1 38 | 23 18 | 0 6 | 5 39 | 2 18 | 16 28 | 0 21 | 10 12 | 0 53 | 23 21 | 1 58 | 15 37 | 15 28 | 10 50 | 14 54 | 3 0 |
| F 14 | 18 16 | 11 22 | 4 36 | 21 51 | 1 24 | 24 13 | 3 53 | 11 32 | 1 36 | 23 19 | 0 6 | 5 42 | 2 18 | 16 27 | 0 21 | 10 12 | 0 53 | 23 21 | 1 58 | 15 37 | 15 27 | 10 47 | 14 53 | 3 0 |
| S 15 | 18 31 | 5 0 | 3 49 | 22 15 | 1 30 | 23 54 | 3 41 | 11 18 | 1 33 | 23 19 | 0 6 | 5 44 | 2 18 | 16 27 | 0 21 | 10 12 | 0 53 | 23 21 | 1 59 | 15 37 | 15 26 | 10 44 | 14 52 | 3 0 |
| S 16 | 18 46 | 1n39 | 2 48 | 22 38 | 1 35 | 23 34 | 3 28 | 11 3 | 1 31 | 23 20 | 0 6 | 5 47 | 2 18 | 16 26 | 0 21 | 10 12 | 0 53 | 23 21 | 1 59 | 15 38 | 15 25 | 10 41 | 14 51 | 3 1 |
| M17 | 19 1 | 8 13 | 1 36 | 22 59 | 1 40 | 23 13 | 3 14 | 10 48 | 1 28 | 23 20 | 0 6 | 5 49 | 2 18 | 16 25 | 0 21 | 10 12 | 0 53 | 23 21 | 1 59 | 15 38 | 15 24 | 10 38 | 14 51 | 3 1 |
| T 18 | 19 16 | 14 19 | 0 18 | 23 20 | 1 45 | 22 51 | 3 0 | 10 33 | 1 26 | 23 21 | 0 6 | 5 51 | 2 18 | 16 25 | 0 21 | 10 12 | 0 53 | 23 22 | 1 59 | 15 38 | 15 23 | 10 35 | 14 50 | 3 1 |
| W19 | 19 30 | 19 36 | 0n59 | 23 39 | 1 50 | 22 29 | 2 46 | 10 18 | 1 23 | 23 21 | 0 6 | 5 53 | 2 19 | 16 24 | 0 21 | 10 12 | 0 53 | 23 22 | 1 59 | 15 38 | 15 22 | 10 32 | 14 49 | 3 1 |
| T 20 | 19 44 | 23 43 | 2 12 | 23 57 | 1 54 | 22 6 | 2 31 | 10 3 | 1 21 | 23 21 | 0 6 | 5 56 | 2 19 | 16 23 | 0 21 | 10 12 | 0 53 | 23 22 | 1 59 | 15 38 | 15 21 | 10 29 | 14 48 | 3 1 |
| F 21 | 19 57 | 26 25 | 3 16 | 24 14 | 1 58 | 21 43 | 2 16 | 9 48 | 1 19 | 23 22 | 0 6 | 5 58 | 2 19 | 16 23 | 0 21 | 10 12 | 0 53 | 23 22 | 1 59 | 15 37 | 15 20 | 10 26 | 14 47 | 3 1 |
| S 22 | 20 10 | 27 32 | 4 7 | 24 29 | 2 2 | 21 20 | 2 1 | 9 33 | 1 16 | 23 22 | 0 5 | 6 0 | 2 19 | 16 22 | 0 21 | 10 11 | 0 53 | 23 22 | 1 59 | 15 36 | 15 20 | 10 23 | 14 46 | 3 1 |
| S 23 | 20 23 | 27 7 | 4 44 | 24 43 | 2 6 | 20 56 | 1 45 | 9 18 | 1 14 | 23 22 | 0 5 | 6 2 | 2 19 | 16 21 | 0 21 | 10 11 | 0 53 | 23 23 | 1 59 | 15 35 | 15 19 | 10 19 | 14 45 | 3 1 |
| M24 | 20 35 | 25 19 | 5 7 | 24 56 | 2 9 | 20 33 | 1 30 | 9 2 | 1 12 | 23 23 | 0 5 | 6 4 | 2 19 | 16 20 | 0 21 | 10 11 | 0 53 | 23 23 | 2 0 | 15 35 | 15 18 | 10 16 | 14 44 | 3 1 |
| T 25 | 20 47 | 22 21 | 5 15 | 25 8 | 2 12 | 20 9 | 1 14 | 8 47 | 1 10 | 23 23 | 0 5 | 6 7 | 2 19 | 16 20 | 0 21 | 10 11 | 0 53 | 23 23 | 2 0 | 15 34 | 15 17 | 10 13 | 14 43 | 3 1 |
| W26 | 20 59 | 18 29 | 5 9 | 25 18 | 2 15 | 19 46 | 0 58 | 8 32 | 1 7 | 23 23 | 0 5 | 6 9 | 2 20 | 16 19 | 0 21 | 10 11 | 0 53 | 23 23 | 2 0 | 15 33 | 15 16 | 10 10 | 14 42 | 3 1 |
| T 27 | 21 10 | 13 57 | 4 49 | 25 27 | 2 17 | 19 23 | 0 43 | 8 16 | 1 5 | 23 24 | 0 5 | 6 11 | 2 20 | 16 18 | 0 21 | 10 11 | 0 53 | 23 24 | 2 0 | 15 33 | 15 15 | 10 7 | 14 41 | 3 1 |
| F 28 | 21 21 | 8 54 | 4 18 | 25 34 | 2 19 | 19 1 | 0 28 | 8 1 | 1 3 | 23 24 | 0 5 | 6 13 | 2 20 | 16 18 | 0 21 | 10 11 | 0 53 | 23 24 | 2 0 | 15 33 | 15 14 | 10 4 | 14 40 | 3 1 |
| S 29 | 21 31 | 3 33 | 3 35 | 25 41 | 2 20 | 18 39 | 0 12 | 7 45 | 1 1 | 23 24 | 0 5 | 6 15 | 2 20 | 16 17 | 0 21 | 10 11 | 0 53</ | | | | | | | |

SWISS EPHEMERIS for the year 1687

DECEMBER 1687 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|---------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|
| M 1 | 4 39 52 | 9° 3' 16" | 23° 28' 28" | 26° 47' 48" | 21° R47 | 13° 48' 53" | 29° 34' 34" | 21° 28' 44" | 15° R48 | 5° 57' 57" | 23° R29 | 12° 23' 23" | 11° 8' 5" | 14° 52' 52" | 19° R 9 |
| T 2 | 4 43 49 | 10° 4' 13" | 5° 11' 50" | 28° 13' 26" | 21° M26 | 14° 30' 14" | 29° 47' 47" | 21° 50' 50" | 15° R46 | 5° 57' 57" | 23° 28' 28" | 12° 24' 24" | 11° 1' 1" | 14° 58' 58" | 19° R 6 |
| W 3 | 4 47 45 | 11° 5' 11" | 18° 30' 30" | 29° 37' 37" | 21° 7' 7" | 15° 6' 6" | 0° 3' 1" | 21° 56' 56" | 15° 43' 43" | 5° 58' 58" | 23° 27' 27" | 12° R25 | 10° 58' 58" | 15° 5' 5" | 19° 3' 3" |
| T 4 | 4 51 42 | 12° 6' 11" | 1° 28' 28" | 1° 30' 0" | 20° 50' 50" | 15° 42' 42" | 0° 14' 14" | 22° 1' 1" | 15° 41' 41" | 5° 58' 58" | 23° 27' 27" | 12° 23' 23" | 10° 55' 55" | 15° 12' 12" | 19° 0' 0" |
| F 5 | 4 55 38 | 13° 7' 12" | 14° 45' 45" | 2° 21' 21" | 20° 36' 36" | 16° 19' 19" | 0° 28' 28" | 22° 7' 7" | 15° 39' 39" | 5° 59' 59" | 23° 26' 26" | 12° 20' 20" | 10° 52' 52" | 15° 18' 18" | 18° 57' 57" |
| S 6 | 4 59 35 | 14° 8' 13" | 28° 19' 19" | 3° 40' 40" | 20° 24' 24" | 16° 55' 55" | 0° 41' 41" | 22° 12' 12" | 15° 37' 37" | 6° 0' 0" | 23° 25' 25" | 12° 16' 16" | 10° 49' 49" | 15° 25' 25" | 18° 54' 54" |
| S 7 | 5 3 32 | 15° 9' 16" | 12° 8' 8" | 4° 57' 57" | 20° 15' 15" | 17° 32' 32" | 0° 55' 55" | 22° 18' 18" | 15° 35' 35" | 6° 0' 0" | 23° 24' 24" | 12° 10' 10" | 10° 45' 45" | 15° 32' 32" | 18° 51' 51" |
| M 8 | 5 7 28 | 16° 10' 19" | 26° 8' 8" | 6° 11' 11" | 20° 8' 8" | 18° 9' 9" | 1° 9' 9" | 22° 23' 23" | 15° 33' 33" | 6° 1' 1" | 23° 23' 23" | 12° 5' 5" | 10° 42' 42" | 15° 38' 38" | 18° 48' 48" |
| T 9 | 5 11 25 | 17° 11' 23" | 10° 16' 16" | 7° 23' 23" | 20° 3' 3" | 18° 46' 46" | 1° 22' 22" | 22° 28' 28" | 15° 31' 31" | 6° 2' 2" | 23° 22' 22" | 12° 0' 0" | 10° 39' 39" | 15° 45' 45" | 18° 46' 46" |
| W10 | 5 15 21 | 18° 12' 27" | 24° 27' 27" | 8° 31' 31" | 20° D 1 | 19° 23' 23" | 1° 36' 36" | 22° 33' 33" | 15° 29' 29" | 6° 2' 2" | 23° 21' 21" | 11° 56' 56" | 10° 36' 36" | 15° 52' 52" | 18° 43' 43" |
| T 11 | 5 19 18 | 19° 13' 31" | 8° 39' 39" | 9° 36' 36" | 20° 2' 2" | 20° 0' 0" | 1° 50' 50" | 22° 38' 38" | 15° 27' 27" | 6° 3' 3" | 23° 20' 20" | 11° 54' 54" | 10° 33' 33" | 15° 59' 59" | 18° 40' 40" |
| F 12 | 5 23 14 | 20° 14' 36" | 22° 49' 49" | 10° 36' 36" | 20° 5' 5" | 20° 38' 38" | 2° 3' 3" | 22° 43' 43" | 15° 25' 25" | 6° 4' 4" | 23° 19' 19" | 11° D53 | 10° 30' 30" | 16° 5' 5" | 18° 37' 37" |
| S 13 | 5 27 11 | 21° 15' 41" | 6° 54' 54" | 11° 31' 31" | 20° 10' 10" | 21° 15' 15" | 2° 17' 17" | 22° 48' 48" | 15° 23' 23" | 6° 5' 5" | 23° 17' 17" | 11° 54' 54" | 10° 26' 26" | 16° 12' 12" | 18° 35' 35" |
| S 14 | 5 31 8 | 22° 16' 46" | 20° 55' 55" | 12° 20' 20" | 20° 18' 18" | 21° 52' 52" | 2° 31' 31" | 22° 53' 53" | 15° 21' 21" | 6° 6' 6" | 23° 16' 16" | 11° 56' 56" | 10° 23' 23" | 16° 19' 19" | 18° 32' 32" |
| M15 | 5 35 4 | 23° 17' 52" | 4° 50' 50" | 13° 3' 3" | 20° 27' 27" | 22° 30' 30" | 2° 45' 45" | 22° 58' 58" | 15° 19' 19" | 6° 7' 7" | 23° 15' 15" | 11° R57 | 10° 20' 20" | 16° 25' 25" | 18° 30' 30" |
| T 16 | 5 39 1 | 24° 18' 58" | 18° 37' 37" | 13° 38' 38" | 20° 39' 39" | 23° 7' 7" | 2° 58' 58" | 23° 3' 3" | 15° 18' 18" | 6° 8' 8" | 23° 14' 14" | 11° 57' 57" | 10° 17' 17" | 16° 32' 32" | 18° 27' 27" |
| W17 | 5 42 57 | 25° 20' 05" | 2° 11' 11" | 14° 4' 4" | 20° 54' 54" | 23° 45' 45" | 3° 12' 12" | 23° 7' 7" | 15° 16' 16" | 6° 9' 9" | 23° 13' 13" | 11° 55' 55" | 10° 14' 14" | 16° 39' 39" | 18° 25' 25" |
| T 18 | 5 46 54 | 26° 21' 12" | 15° 43' 43" | 14° 22' 22" | 21° 10' 10" | 24° 23' 23" | 3° 26' 26" | 23° 12' 12" | 15° 14' 14" | 6° 10' 10" | 23° 12' 12" | 11° 51' 51" | 10° 11' 11" | 16° 45' 45" | 18° 22' 22" |
| F 19 | 5 50 50 | 27° 22' 19" | 28° 57' 57" | 14° R29 | 21° 28' 28" | 25° 1' 1" | 3° 40' 40" | 23° 17' 17" | 15° 12' 12" | 6° 11' 11" | 23° 11' 11" | 11° 45' 45" | 10° 7' 7" | 16° 52' 52" | 18° 20' 20" |
| S 20 | 5 54 47 | 28° 23' 27" | 11° 58' 58" | 14° 25' 25" | 21° 49' 49" | 25° 38' 38" | 3° 54' 54" | 23° 21' 21" | 15° 11' 11" | 6° 12' 12" | 23° 10' 10" | 11° 36' 36" | 10° 4' 4" | 16° 59' 59" | 18° 18' 18" |
| S 21 | 5 58 43 | 29° 24' 35" | 24° 43' 43" | 14° 10' 10" | 22° 11' 11" | 26° 16' 16" | 4° 7' 7" | 23° 25' 25" | 15° 9' 9" | 6° 13' 13" | 23° 8' 8" | 11° 27' 27" | 10° 1' 1" | 17° 6' 6" | 18° 15' 15" |
| M22 | 6 2 40 | 0° 25' 43" | 7° 12' 12" | 13° 43' 43" | 22° 35' 35" | 26° 54' 54" | 4° 21' 21" | 23° 30' 30" | 15° 8' 8" | 6° 14' 14" | 23° 7' 7" | 11° 18' 18" | 9° 58' 58" | 17° 12' 12" | 18° 13' 13" |
| T 23 | 6 6 37 | 1° 26' 52" | 19° 27' 27" | 13° 4' 4" | 23° 1' 1" | 27° 32' 32" | 4° 35' 35" | 23° 34' 34" | 15° 6' 6" | 6° 15' 15" | 23° 6' 6" | 11° 10' 10" | 9° 55' 55" | 17° 19' 19" | 18° 11' 11" |
| W24 | 6 10 33 | 2° 28' 01" | 1° 30' 30" | 12° 14' 14" | 23° 29' 29" | 28° 10' 10" | 4° 49' 49" | 23° 38' 38" | 15° 5' 5" | 6° 17' 17" | 23° 5' 5" | 11° 3' 3" | 9° 51' 51" | 17° 26' 26" | 18° 9' 9" |
| T 25 | 6 14 30 | 3° 29' 11" | 13° 25' 25" | 11° 13' 13" | 23° 58' 58" | 28° 49' 49" | 5° 3' 3" | 23° 42' 42" | 15° 3' 3" | 6° 18' 18" | 23° 4' 4" | 10° 58' 58" | 9° 48' 48" | 17° 32' 32" | 18° 7' 7" |
| F 26 | 6 18 26 | 4° 30' 21" | 25° 15' 15" | 10° 4' 4" | 24° 29' 29" | 29° 27' 27" | 5° 17' 17" | 23° 46' 46" | 15° 2' 2" | 6° 19' 19" | 23° 2' 2" | 10° 56' 56" | 9° 45' 45" | 17° 39' 39" | 18° 5' 5" |
| S 27 | 6 22 23 | 5° 31' 31" | 7° 6' 6" | 8° 49' 49" | 25° 2' 2" | 0° 5' 5" | 5° 31' 31" | 23° 49' 49" | 15° 0' 0" | 6° 20' 20" | 23° 1' 1" | 10° D55 | 9° 42' 42" | 17° 46' 46" | 18° 3' 3" |
| S 28 | 6 26 19 | 6° 32' 42" | 19° 2' 2" | 7° 29' 29" | 25° 36' 36" | 0° 43' 43" | 5° 45' 45" | 23° 53' 53" | 14° 59' 59" | 6° 22' 22" | 23° 0' 0" | 10° 56' 56" | 9° 39' 39" | 17° 52' 52" | 18° 1' 1" |
| M29 | 6 30 16 | 7° 33' 53" | 1° 10' 10" | 6° 7' 7" | 26° 11' 11" | 1° 22' 22" | 5° 58' 58" | 23° 57' 57" | 14° 58' 58" | 6° 23' 23" | 22° 59' 59" | 10° 57' 57" | 9° 36' 36" | 17° 59' 59" | 17° 59' 59" |
| T 30 | 6 34 12 | 8° 35' 04" | 13° 34' 34" | 4° 47' 47" | 26° 48' 48" | 2° 0' 0" | 6° 12' 12" | 24° 0' 0" | 14° 57' 57" | 6° 24' 24" | 22° 57' 57" | 10° R57 | 9° 32' 32" | 18° 6' 6" | 17° 57' 57" |
| W31 | 6 38 9 | 9° 36' 16" | 26° 18' 18" | 3° 30' 30" | 27° 26' 26" | 2° 39' 39" | 6° 26' 26" | 24° 4' 4" | 14° 55' 55" | 6° 26' 26" | 22° 56' 56" | 10° 56' 56" | 9° 29' 29" | 18° 12' 12" | 17° 55' 55" |

| Day | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ | ♁ | | | | | | | | | |
|------|-------------|------------|------------|-----------|------------|----------|------------|------------|------------|-----------|------------|-----------|------|-------|------|-------|------|-------|------|-------|-------|------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | | | | | | | | | |
| M 1 | 21s51 | 7s33 | 1n42 | 25s48 | 2s22 | 17s58 | 0n17 | 7s13 | 0s57 | 23s24 | 0n 5 | 6s19 | 2n20 | 16n16 | 0s21 | 10s10 | 0s53 | 23n25 | 2n 0 | 15n35 | 15n11 | 9n55 | 14n38 | 3s 1 |
| T 2 | 22 0 12 56 | 0 36 25 50 | 2 22 17 39 | 0 31 6 58 | 0 55 23 24 | 0 4 6 21 | 2 21 16 15 | 0 21 10 10 | 0 53 23 25 | 2 0 15 35 | 15 10 9 52 | 14 37 3 1 | | | | | | | | | | | | |
| W 3 | 22 9 17 54 | 0s33 25 50 | 2 21 17 21 | 0 45 6 42 | 0 53 23 25 | 0 4 6 23 | 2 21 16 15 | 0 21 10 10 | 0 53 23 25 | 2 0 15 35 | 15 9 9 49 | 14 36 3 1 | | | | | | | | | | | | |
| T 4 | 22 17 22 10 | 1 42 25 49 | 2 20 17 3 | 0 59 6 26 | 0 51 23 25 | 0 4 6 25 | 2 21 16 14 | 0 21 10 10 | 0 53 23 25 | 2 1 15 35 | 15 8 9 46 | 14 35 3 1 | | | | | | | | | | | | |
| F 5 | 22 25 25 23 | 2 48 25 46 | 2 18 16 47 | 1 12 6 10 | 0 49 23 25 | 0 4 6 27 | 2 21 16 13 | 0 21 10 9 | 0 53 23 26 | 2 1 15 34 | 15 7 9 43 | 14 35 3 1 | | | | | | | | | | | | |
| S 6 | 22 32 27 13 | 3 45 25 42 | 2 16 16 32 | 1 24 5 54 | 0 47 23 25 | 0 4 6 28 | 2 21 16 13 | 0 21 10 9 | 0 53 23 26 | 2 1 15 33 | 15 6 9 40 | 14 34 3 2 | | | | | | | | | | | | |
| S 7 | 22 39 27 24 | 4 30 25 36 | 2 13 16 17 | 1 36 5 38 | 0 45 23 25 | 0 4 6 30 | 2 22 16 12 | 0 21 10 9 | 0 53 23 26 | 2 1 15 31 | 15 5 9 37 | 14 33 3 2 | | | | | | | | | | | | |
| M 8 | 22 46 25 51 | 4 59 25 29 | 2 9 16 4 | 1 48 5 22 | 0 43 23 25 | 0 4 6 32 | 2 22 16 12 | 0 21 10 8 | 0 53 23 26 | 2 1 15 29 | 15 4 9 34 | 14 32 3 2 | | | | | | | | | | | | |
| T 9 | 22 52 22 41 | 5 11 25 20 | 2 4 15 52 | 1 59 5 5 | 0 42 23 25 | 0 4 6 34 | 2 22 16 11 | 0 21 10 8 | 0 53 23 27 | 2 1 15 28 | 15 3 9 30 | 14 31 3 2 | | | | | | | | | | | | |
| W10 | 22 57 18 9 | 5 4 25 10 | 1 58 15 42 | 2 10 4 49 | 0 40 23 25 | 0 4 6 35 | 2 22 16 11 | 0 21 10 8 | 0 53 23 27 | 2 1 15 27 | 15 2 9 27 | 14 31 3 2 | | | | | | | | | | | | |
| T 11 | 23 3 12 38 | 4 38 24 59 | 1 52 15 32 | 2 20 4 33 | 0 38 23 25 | 0 4 6 37 | 2 22 16 10 | 0 21 10 8 | 0 53 23 27 | 2 1 15 26 | 15 1 9 24 | 14 30 3 2 | | | | | | | | | | | | |
| F 12 | 23 7 6 28 | 3 55 24 47 | 1 44 15 23 | 2 30 4 17 | 0 36 23 24 | 0 3 6 39 | 2 23 16 9 | 0 21 10 7 | 0 53 23 28 | 2 1 15 26 | 15 0 9 21 | 14 29 3 2 | | | | | | | | | | | | |
| S 13 | 23 12 0n 1 | 2 59 24 34 | 1 35 15 16 | 2 39 4 0 | 0 35 23 24 | 0 3 6 40 | 2 23 16 9 | 0 21 10 7 | 0 53 23 28 | 2 1 15 26 | 14 59 9 18 | 14 29 3 1 | | | | | | | | | | | | |
| S 14 | 23 15 6 27 | 1 52 24 19 | 1 25 15 9 | 2 48 3 44 | 0 33 23 24 | 0 3 6 42 | 2 23 16 8 | 0 21 10 7 | 0 53 23 28 | 2 2 15 26 | 14 58 9 15 | 14 28 3 1 | | | | | | | | | | | | |
| M15 | 23 19 12 33 | 0 39 24 4 | 1 14 15 4 | 2 56 3 28 | 0 31 23 24 | 0 3 6 44 | 2 23 16 8 | 0 21 10 6 | 0 53 23 28 | 2 2 15 27 | 14 57 9 12 | 14 27 3 1 | | | | | | | | | | | | |
| T 16 | 23 22 17 58 | 0n36 23 49 | 1 2 15 0 | 3 4 3 11 | 0 29 23 24 | 0 3 6 45 | 2 23 16 7 | 0 21 10 6 | 0 53 23 29 | 2 2 15 27 | 14 56 9 9 | 14 27 3 1 | | | | | | | | | | | | |
| W17 | 23 24 22 24 | 1 48 23 32 | 0 48 14 56 | 3 11 2 55 | 0 28 23 24 | 0 3 6 47 | 2 24 16 7 | 0 21 10 5 | 0 53 23 29 | 2 2 15 26 | 14 55 9 6 | 14 26 3 1 | | | | | | | | | | | | |
| T 18 | 23 26 25 34 | 2 52 23 16 | 0 34 14 54 | 3 18 2 38 | 0 26 23 23 | 0 3 6 48 | 2 24 16 6 | 0 21 10 5 | 0 53 23 29 | 2 2 15 25 | 14 54 9 3 | 14 25 3 1 | | | | | | | | | | | | |
| F 19 | 23 27 27 15 | 3 46 22 59 | 0 17 14 52 | 3 25 2 22 | 0 25 23 23 | 0 3 6 50 | 2 24 16 6 | 0 20 10 5 | 0 53 23 30 | 2 2 15 23 | 14 53 9 0 | 14 25 3 1 | | | | | | | | | | | | |
| S 20 | 23 28 27 23 | 4 27 22 42 | 0 0 14 52 | 3 31 2 5 | 0 23 23 23 | 0 3 6 51 | 2 24 16 5 | 0 20 10 4 | 0 53 23 30 | 2 2 15 21 | 14 52 8 56 | 14 24 3 1 | | | | | | | | | | | | |
| S 21 | 23 29 26 2 | 4 54 22 26 | 0n18 14 52 | 3 36 1 49 | 0 21 23 22 | 0 3 6 52 | 2 25 16 5 | 0 20 10 4 | 0 53 23 30 | 2 2 15 18 | 14 51 8 53 | 14 23 3 1 | | | | | | | | | | | | |
| M22 | 23 29 23 26 | 5 6 22 10 | 0 37 14 53 | 3 41 1 32 | 0 20 23 22 | 0 2 6 54 | 2 25 16 5 | 0 20 10 3 | 0 53 23 30 | 2 2 15 15 | 14 50 8 50 | 14 23 3 1 | | | | | | | | | | | | |
| T 23 | 23 28 19 49 | 5 3 21 54 | 0 57 14 55 | 3 46 1 16 | 0 18 23 22 | 0 2 6 55 | 2 25 16 4 | 0 20 10 3 | 0 53 23 31 | 2 2 15 12 | 14 49 8 47 | 14 22 3 1 | | | | | | | | | | | | |
| W24 | 23 28 15 26 | 4 48 21 39 | 1 16 14 57 | 3 51 0 59 | 0 17 23 21 | 0 2 6 56 | 2 25 16 4 | 0 20 10 2 | 0 53 23 31 | 2 2 15 10 | 14 48 8 44 | 14 22 3 1 | | | | | | | | | | | | |
| T 25 | 23 26 10 31 | 4 19 21 25 | 1 36 15 0 | 3 55 0 43 | 0 15 23 21 | 0 2 6 58 | 2 25 16 3 | 0 20 10 2 | 0 53 23 31 | 2 3 15 9 | 14 47 8 41 | 14 21 3 1 | | | | | | | | | | | | |
| F 26 | 23 24 5 15 | 3 40 21 12 | 1 55 15 4 | 3 58 0 26 | 0 14 23 20 | 0 2 6 59 | 2 26 16 3 | 0 20 10 1 | 0 53 23 32 | 2 3 15 | | | | | | | | | | | | | | |