

SWISS EPHEMERIS for the year 1973

JANUARY 1973

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|--------------------|---------------------|----------------------|---------------------|--------------------|---------------------|
| M 1 | 6 42 1 | 10 ²⁶ 09 | 0 ²⁷ 34 | 24 ²⁷ 37 | 16 ²⁷ 30 | 0 ²⁷ 54 | 17 ²⁷ 49 | 15 ¹⁸ 18 | 22 ²² 45 | 6 ²⁷ 14 | 4 ²² 25 | 16 ¹⁶ 48 | 17 ¹⁷ 35 | 4 ²⁷ 52 | 12 ¹⁷ 53 |
| T 2 | 6 45 57 | 11 ²⁷ 19 | 12 ²³ | 26 ²⁶ 6 | 17 ¹⁷ 45 | 1 ¹³ 35 | 18 ¹⁸ 3 | 15 ¹⁵ 11 | 22 ²² 46 | 6 ¹⁶ 16 | 4 ²² 25 | 16 ¹⁶ 47 | 17 ¹⁷ 12 | 4 ²⁷ 59 | 12 ¹² 53 |
| W 3 | 6 49 54 | 12 ²⁸ 31 | 24 ²⁴ 16 | 27 ²⁷ 35 | 19 ¹⁹ 0 | 2 ²¹ 16 | 18 ¹⁸ 17 | 15 ¹⁵ 10 | 22 ²² 47 | 6 ¹⁸ 18 | 4 ²² 25 | 16 ¹⁶ 47 | 17 ¹⁷ 9 | 5 ⁵ 5 | 12 ¹² 54 |
| T 4 | 6 53 51 | 13 ²⁹ 42 | 6 ²³ 15 | 29 ²⁹ 5 | 20 ²⁰ 15 | 2 ²⁵ 57 | 18 ¹⁸ 31 | 15 ¹⁵ 6 | 22 ²² 49 | 6 ²⁰ 20 | 4 ²² 26 | 16 ¹⁶ 46 | 17 ¹⁷ 6 | 5 ⁵ 12 | 12 ¹² 55 |
| F 5 | 6 57 47 | 14 ³⁰ 53 | 18 ¹⁸ 22 | 0 ²³ 35 | 21 ²¹ 30 | 3 ³ 38 | 18 ¹⁸ 45 | 15 ¹⁵ 2 | 22 ²² 50 | 6 ²² 22 | 4 ²² 26 | 16 ¹⁶ D46 | 17 ¹⁷ 2 | 5 ⁵ 19 | 12 ¹² 55 |
| S 6 | 7 1 44 | 15 ³² 04 | 0 ²³ 38 | 2 ² 6 | 22 ²² 45 | 4 ⁴ 19 | 18 ¹⁸ 59 | 14 ¹⁴ 58 | 22 ²² 51 | 6 ²⁴ 24 | 4 ²² R26 | 16 ¹⁶ 46 | 16 ¹⁶ 59 | 5 ⁵ 25 | 12 ¹² 56 |
| S 7 | 7 5 40 | 16 ³³ 15 | 13 ¹³ 4 | 3 ³ 37 | 24 ²⁴ 0 | 4 ⁴ 59 | 19 ¹⁹ 13 | 14 ¹⁴ 54 | 22 ²² 52 | 6 ²⁵ 25 | 4 ²² 26 | 16 ¹⁶ R47 | 16 ¹⁶ 56 | 5 ⁵ 32 | 12 ¹² 57 |
| M 8 | 7 9 37 | 17 ³⁴ 25 | 25 ²⁵ 43 | 5 ⁵ 8 | 25 ²⁵ 15 | 5 ⁵ 40 | 19 ¹⁹ 27 | 14 ¹⁴ 50 | 22 ²² 53 | 6 ²⁷ 27 | 4 ²² 26 | 16 ¹⁶ 46 | 16 ¹⁶ 53 | 5 ⁵ 39 | 12 ¹² 57 |
| T 9 | 7 13 33 | 18 ³⁵ 35 | 8 ²⁸ 35 | 6 ⁶ 40 | 26 ²⁶ 30 | 6 ⁶ 21 | 19 ¹⁹ 41 | 14 ¹⁴ 46 | 22 ²² 54 | 6 ²⁹ 29 | 4 ²² 25 | 16 ¹⁶ 46 | 16 ¹⁶ 50 | 5 ⁵ 45 | 12 ¹² 58 |
| W10 | 7 17 30 | 19 ³⁶ 45 | 21 ²¹ 42 | 8 ⁸ 12 | 27 ²⁷ 45 | 7 ⁷ 2 | 19 ¹⁹ 55 | 14 ¹⁴ 43 | 22 ²² 55 | 6 ³¹ 31 | 4 ²² 25 | 16 ¹⁶ 46 | 16 ¹⁶ 47 | 5 ⁵ 52 | 12 ¹² 59 |
| T 11 | 7 21 26 | 20 ³⁷ 54 | 5 ⁵ 4 | 9 ⁹ 45 | 29 ²⁹ 0 | 7 ⁷ 44 | 20 ²⁰ 9 | 14 ¹⁴ 39 | 22 ²² 56 | 6 ³³ 33 | 4 ²² 25 | 16 ¹⁶ 46 | 16 ¹⁶ 43 | 5 ⁵ 59 | 13 ¹³ 0 |
| F 12 | 7 25 23 | 21 ³⁹ 03 | 18 ¹⁸ 44 | 11 ¹¹ 18 | 0 ²³ 15 | 8 ⁸ 25 | 20 ²⁰ 23 | 14 ¹⁴ 36 | 22 ²² 57 | 6 ³⁴ 34 | 4 ²² 25 | 16 ¹⁶ D46 | 16 ¹⁶ 40 | 6 ⁶ 5 | 13 ¹³ 1 |
| S 13 | 7 29 20 | 22 ⁴⁰ 10 | 2 ² 42 | 12 ¹² 52 | 1 ¹ 30 | 9 ⁹ 6 | 20 ²⁰ 37 | 14 ¹⁴ 33 | 22 ²² 58 | 6 ³⁶ 36 | 4 ²² 25 | 16 ¹⁶ 46 | 16 ¹⁶ 37 | 6 ⁶ 12 | 13 ¹³ 2 |
| S 14 | 7 33 16 | 23 ⁴¹ 18 | 16 ¹⁶ 56 | 14 ¹⁴ 26 | 2 ² 45 | 9 ⁹ 47 | 20 ²⁰ 51 | 14 ¹⁴ 29 | 22 ²² 59 | 6 ³⁸ 38 | 4 ²² 25 | 16 ¹⁶ 46 | 16 ¹⁶ 34 | 6 ⁶ 19 | 13 ¹³ 3 |
| M15 | 7 37 13 | 24 ⁴² 24 | 1 ¹ 25 | 16 ¹⁶ 1 | 4 ⁴ 0 | 10 ¹⁰ 28 | 21 ²¹ 5 | 14 ¹⁴ 26 | 23 ²³ 0 | 6 ³⁹ 39 | 4 ²² 24 | 16 ¹⁶ 47 | 16 ¹⁶ 31 | 6 ⁶ 26 | 13 ¹³ 4 |
| T 16 | 7 41 9 | 25 ⁴³ 30 | 16 ¹⁶ 4 | 17 ¹⁷ 36 | 5 ⁵ 15 | 11 ¹¹ 9 | 21 ²¹ 19 | 14 ¹⁴ 23 | 23 ²³ 0 | 6 ⁴¹ 41 | 4 ²² 24 | 16 ¹⁶ 47 | 16 ¹⁶ 28 | 6 ⁶ 32 | 13 ¹³ 6 |
| W17 | 7 45 6 | 26 ⁴⁴ 35 | 0 ²³ 50 | 19 ¹⁹ 11 | 6 ⁶ 30 | 11 ¹¹ 50 | 21 ²¹ 33 | 14 ¹⁴ 20 | 23 ²³ 1 | 6 ⁴³ 43 | 4 ²² 24 | 16 ¹⁶ 48 | 16 ¹⁶ 24 | 6 ⁶ 39 | 13 ¹³ 7 |
| T 18 | 7 49 2 | 27 ⁴⁵ 40 | 15 ¹⁵ 35 | 20 ²⁰ 47 | 7 ⁷ 45 | 12 ¹² 32 | 21 ²¹ 47 | 14 ¹⁴ 17 | 23 ²³ 1 | 6 ⁴⁴ 44 | 4 ²² 23 | 16 ¹⁶ R48 | 16 ¹⁶ 21 | 6 ⁶ 46 | 13 ¹³ 8 |
| F 19 | 7 52 59 | 28 ⁴⁶ 44 | 0 ²³ 12 | 22 ²² 24 | 9 ⁹ 0 | 13 ¹³ 13 | 22 ²² 1 | 14 ¹⁴ 14 | 23 ²³ 2 | 6 ⁴⁶ 46 | 4 ²² 23 | 16 ¹⁶ 48 | 16 ¹⁶ 18 | 6 ⁶ 52 | 13 ¹³ 10 |
| S 20 | 7 56 55 | 29 ⁴⁷ 47 | 14 ¹⁴ 35 | 24 ²⁴ 1 | 10 ¹⁰ 15 | 13 ¹³ 54 | 22 ²² 15 | 14 ¹⁴ 12 | 23 ²³ 2 | 6 ⁴⁷ 47 | 4 ²² 22 | 16 ¹⁶ 47 | 16 ¹⁶ 15 | 6 ⁶ 59 | 13 ¹³ 11 |
| S 21 | 8 0 52 | 0 ²³ 48'50 | 28 ²⁸ 37 | 25 ²⁵ 39 | 11 ¹¹ 30 | 14 ¹⁴ 35 | 22 ²² 29 | 14 ¹⁴ 9 | 23 ²³ 3 | 6 ⁴⁹ 49 | 4 ²² 22 | 16 ¹⁶ 46 | 16 ¹⁶ 12 | 7 ⁷ 6 | 13 ¹³ 12 |
| M22 | 8 4 49 | 1 ⁴⁹ 52 | 12 ¹² 17 | 27 ²⁷ 17 | 12 ¹² 45 | 15 ¹⁵ 17 | 22 ²² 43 | 14 ¹⁴ 6 | 23 ²³ 3 | 6 ⁵⁰ 50 | 4 ²² 21 | 16 ¹⁶ 44 | 16 ¹⁶ 8 | 7 ⁷ 12 | 13 ¹³ 14 |
| T 23 | 8 8 45 | 2 ⁵⁰ 53 | 25 ²⁵ 32 | 28 ²⁸ 56 | 14 ¹⁴ 0 | 15 ¹⁵ 58 | 22 ²² 57 | 14 ¹⁴ 4 | 23 ²³ 3 | 6 ⁵² 52 | 4 ²² 21 | 16 ¹⁶ 41 | 16 ¹⁶ 5 | 7 ⁷ 19 | 13 ¹³ 16 |
| W24 | 8 12 42 | 3 ⁵¹ 54 | 8 ²⁸ 23 | 0 ²³ 36 | 15 ¹⁵ 16 | 16 ¹⁶ 39 | 23 ²³ 11 | 14 ¹⁴ 2 | 23 ²³ 3 | 6 ⁵³ 53 | 4 ²² 20 | 16 ¹⁶ 39 | 16 ¹⁶ 2 | 7 ⁷ 26 | 13 ¹³ 17 |
| T 25 | 8 16 38 | 4 ⁵² 54 | 20 ²⁰ 53 | 2 ² 16 | 16 ¹⁶ 31 | 17 ¹⁷ 21 | 23 ²³ 25 | 13 ¹³ 59 | 23 ²³ 4 | 6 ⁵⁵ 55 | 4 ²² 20 | 16 ¹⁶ 38 | 15 ¹⁵ 59 | 7 ⁷ 32 | 13 ¹³ 19 |
| F 26 | 8 20 35 | 5 ⁵³ 54 | 3 ³ 16 | 3 ³ 57 | 17 ¹⁷ 46 | 18 ¹⁸ 2 | 23 ²³ 39 | 13 ¹³ 57 | 23 ²³ 4 | 6 ⁵⁶ 56 | 4 ²² 19 | 16 ¹⁶ D37 | 15 ¹⁵ 56 | 7 ⁷ 39 | 13 ¹³ 21 |
| S 27 | 8 24 31 | 6 ⁵⁴ 54 | 15 ¹⁵ 6 | 5 ⁵ 38 | 19 ¹⁹ 1 | 18 ¹⁸ 44 | 23 ²³ 53 | 13 ¹³ 55 | 23 ²³ R 4 | 6 ⁵⁸ 58 | 4 ²² 18 | 16 ¹⁶ 37 | 15 ¹⁵ 53 | 7 ⁷ 46 | 13 ¹³ 22 |
| S 28 | 8 28 28 | 7 ⁵⁵ 52 | 26 ²⁶ 58 | 7 ⁷ 20 | 20 ²⁰ 16 | 19 ¹⁹ 25 | 24 ²⁴ 7 | 13 ¹³ 53 | 23 ²³ 4 | 6 ⁵⁹ 59 | 4 ²² 18 | 16 ¹⁶ 38 | 15 ¹⁵ 49 | 7 ⁷ 52 | 13 ¹³ 24 |
| M29 | 8 32 24 | 8 ⁵⁶ 50 | 8 ²⁸ 46 | 9 ⁹ 3 | 21 ²¹ 31 | 20 ²⁰ 7 | 24 ²⁴ 20 | 13 ¹³ 52 | 23 ²³ 4 | 7 ⁷ 0 | 4 ²² 17 | 16 ¹⁶ 40 | 15 ¹⁵ 46 | 7 ⁷ 59 | 13 ¹³ 26 |
| T 30 | 8 36 21 | 9 ⁵⁷ 48 | 20 ²⁰ 37 | 10 ¹⁰ 46 | 22 ²² 46 | 20 ²⁰ 48 | 24 ²⁴ 34 | 13 ¹³ 50 | 23 ²³ 4 | 7 ⁷ 1 | 4 ²² 16 | 16 ¹⁶ 42 | 15 ¹⁵ 43 | 8 ⁸ 6 | 13 ¹³ 28 |
| W31 | 8 40 18 | 10 ⁵⁸ 45 | 2 ² 33 | 12 ¹² 30 | 24 ²⁴ 1 | 21 ²¹ 30 | 24 ²⁴ 48 | 13 ¹³ 48 | 23 ²³ 3 | 7 ⁷ 3 | 4 ²² 15 | 16 ¹⁶ 43 | 15 ¹⁵ 40 | 8 ⁸ 12 | 13 ¹³ 30 |

Delta T = 43.37 sec.

FEBRUARY 1973

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------------------|---------------------|---------------------|---------------------|---------------------|--------------------|-----------------------|----------------------|--------------------|---------------------|----------------------|---------------------|---------------------|---------------------|
| T 1 | 8 44 14 | 11 ⁵⁹ 40 | 14 ²³ 38 | 14 ¹⁴ 15 | 25 ²⁵ 16 | 22 ²² 11 | 25 ²⁵ 2 | 13 ¹³ R47 | 23 ²³ R 3 | 7 ²⁷ 4 | 4 ²² R15 | 16 ¹⁶ R44 | 15 ¹⁵ 37 | 8 ²⁷ 19 | 13 ¹⁷ 32 |
| F 2 | 8 48 11 | 13° 0'35 | 26°56 | 16° 0 | 26°31 | 22°53 | 25°15 | 13 ¹³ II46 | 23 ²³ 3 | 7° 5 | 4 ²² 14 | 16 ¹⁶ 44 | 15°34 | 8°26 | 13°34 |
| S 3 | 8 52 7 | 14° 1'29 | 9 ²⁸ 28 | 17°46 | 27°46 | 23°34 | 25°29 | 13°44 | 23° 2 | 7° 6 | 4°13 | 16°42 | 15°30 | 8°32 | 13°36 |
| S 4 | 8 56 4 | 15° 2'22 | 22°14 | 19°33 | 29° 1 | 24°16 | 25°43 | 13°43 | 23° 2 | 7° 7 | 4°12 | 16°39 | 15°27 | 8°39 | 13°38 |
| M 5 | 9 0 0 | 16° 3'13 | 5 ²⁸ 15 | 21°20 | 0 ²³ 17 | 24°58 | 25°56 | 13°42 | 23° 2 | 7° 8 | 4°11 | 16°34 | 15°24 | 8°46 | 13°40 |
| T 6 | 9 3 57 | 17° 4'03 | 18°13 | 23° 7 | 1°32 | 25°39 | 26°10 | 13°41 | 23° 1 | 7° 9 | 4°10 | 16°29 | 15°21 | 8°52 | 13°42 |
| W 7 | 9 7 53 | 18° 4'52 | 1 ¹⁷ 59 | 24°55 | 2°47 | 26°21 | 26°24 | 13°40 | 23° 1 | 7°11 | 4° 9 | 16°24 | 15°18 | 8°59 | 13°45 |
| T 8 | 9 11 50 | 19° 5'39 | 15°39 | 26°43 | 4° 2 | 27° 3 | 26°37 | 13°40 | 23° 0 | 7°12 | 4° 8 | 16°19 | 15°14 | 9° 6 | 13°47 |
| F 9 | 9 15 47 | 20° 6'25 | 29°29 | 28°32 | 5°17 | 27°45 | 26°51 | 13°39 | 22°59 | 7°12 | 4° 7 | 16°16 | 15°11 | 9°12 | 13°49 |
| S 10 | 9 19 43 | 21° 7'09 | 13 ²⁸ 27 | 0 ²³ 20 | 6°32 | 28°26 | 27° 4 | 13°39 | 22°58 | 7°13 | 4° 6 | 16°14 | 15° 8 | 9°19 | 13°52 |
| S 11 | 9 23 40 | 22° 7'52 | 27°33 | 2° 9 | 7°47 | 29° 8 | 27°18 | 13°38 | 22°58 | 7°14 | 4° 5 | 16°D14 | 15° 5 | 9°26 | 13°54 |
| M12 | 9 27 36 | 23° 8'33 | 11 ²⁸ 44 | 3°57 | 9° 2 | 29°50 | 27°31 | 13°38 | 22°57 | 7°15 | 4° 4 | 16°15 | 15° 2 | 9°32 | 13°57 |
| T 13 | 9 31 33 | 24° 9'12 | 25°59 | 5°45 | 10°17 | 0 ²³ 32 | 27°44 | 13°38 | 22°56 | 7°16 | 4° 2 | 16°17 | 14°59 | 9°39 | 13°59 |
| W14 | 9 35 29 | 25° 9'50 | 10 ²⁸ 17 | 7°32 | 11°32 | 1°13 | 27°58 | 13°D38 | 22°55 | 7°17 | 4° 1 | 16°R18 | 14°55 | 9°46 | 14° 2 |
| T 15 | 9 39 26 | 26°10'26 | 24°33 | 9°17 | 12°47 | 1°55 | 28°11 | 13°38 | 22°54 | 7°18 | 4° 0 | 16°18 | 14°52 | 9°52 | 14° 4 |
| F 16 | 9 43 22 | 27°11'00 | 8 ²⁸ 44 | 11° 2 | 14° 2 | 2°37 | 28°24 | 13°38 | 22°53 | 7°18 | 3°59 | 16°16 | 14°49 | 9°59 | 14° 7 |
| S 17 | 9 47 19 | 28°11'33 | 22°46 | 12°45 | 15°17 | 3°19 | 28°37 | 13°39 | 22°52 | 7°19 | 3°58 | 16°12 | 14°46 | 10° 6 | 14°10 |
| S 18 | 9 51 16 | 29°12'04 | 6 ²⁸ 34 | 14°25 | 16°32 | 4° 1 | 28°50 | 13°39 | 22°51 | 7°20 | 3°56 | 16° 6 | 14°43 | 10°12 | 14°12 |
| M19 | 9 55 12 | 0 ²³ 12'33 | 20° 5 | 16° 3 | 17°47 | 4°43 | 29° 3 | 13°40 | 22°50 | 7°20 | 3°55 | 15°58 | 14°40 | 10°19 | 14°15 |
| T 20 | 9 59 9 | 1°13'01 | 3 ²⁸ 17 | 17°37 | 19° 2 | 5°25 | 29°16 | 13°40 | 22°48 | 7°21 | 3°54 | 15°50 | 14°36 | 10°26 | 14°18 |
| W21 | 10 3 5 | 2°13'28 | 16° 8 | 19° 7 | 20°17 | 6° 7 | 29°29 | 13°41 | 22°47 | 7°22 | 3°52 | 15°42 | 14°33 | 10°32 | 14°20 |
| T 22 | 10 7 2 | 3°13'53 | 28°40 | 20°33 | 21°32 | 6°49 | 29°42 | 13°42 | 22°46 | 7°22 | 3°51 | 15°35 | 14°30 | 10°39 | 14°23 |
| F 23 | 10 10 58 | 4°14'17 | 10 ²⁸ 55 | 21°54 | 22°47 | 7°31 | 29°55 | 13°43 | 22°44 | 7°23 | 3°50 | 15°30 | 14°27 | 10°46 | 14°26 |
| S 24 | 10 14 55 | 5°14'39 | 22°56 | 23° 9 | 24° 2 | 8°13 | 0 ²³ 8 | 13°44 | 22°43 | 7°23 | 3°48 | 15°27 | 14°24 | 10°52 | 14°29 |
| S 25 | 10 18 51 | 6°15'00 | 4 ²⁸ 49 | 24°18 | 25°17 | 8°55 | 0°20 | 13°45 | 22°41 | 7°24 | 3°47 | 15°D26 | 14°20 | 10°59 | 14°32 |
| M26 | 10 22 48 | 7°15'20 | 16°38 | 25°20 | 26°32 | 9°37 | 0°33 | 13°47 | 22°40 | 7°24 | 3°45 | 15°27 | 14°17 | 11° 6 | 14°35 |
| T 27 | 10 26 45 | 8°15'38 | 28°29 | 26°14 | 27°47 | 10°19 | 0°46 | 13°48 | 22°38 | 7°24 | 3°44 | 15°28 | 14°14 | 11°12 | 14°38 |
| W28 | 10 30 41 | 9 ²⁸ 15'55 | 10 ²⁸ 27 | 27 ²⁸ 0 | 29 ²⁹ 1 | 11 ²⁸ 2 | 0 ²³ 58 | 13 ¹³ II50 | 22 ²² 37 | 7 ²⁷ 25 | 3 ²⁸ 43 | 15°R29 | 14 ²⁸ 11 | 11 ²⁷ 19 | 14°Y41 |

SWISS EPHEMERIS for the year 1973

MARCH 1973

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|-------|--------|-------|-------|------|-------|-------|-------|------|--------|-------|-------|-------|
| T 1 | 10 34 38 | 10°16'10 | 22°36 | 27°37 | 0°16 | 11°34 | 1°11 | 13°51 | 22°35 | 7°25 | 3°41 | 15°29 | 14°38 | 11°26 | 14°44 |
| F 2 | 10 38 34 | 11°16'23 | 5°1 | 28°5 | 1°31 | 12°26 | 1°23 | 13°53 | 22°33 | 7°25 | 3°40 | 15°27 | 14°5 | 11°32 | 14°47 |
| S 3 | 10 42 31 | 12°16'35 | 17°45 | 28°25 | 2°46 | 13°8 | 1°35 | 13°55 | 22°32 | 7°26 | 3°38 | 15°22 | 14°1 | 11°39 | 14°50 |
| S 4 | 10 46 27 | 13°16'45 | 0°49 | 28°34 | 4°1 | 13°50 | 1°48 | 13°57 | 22°30 | 7°26 | 3°37 | 15°15 | 13°58 | 11°46 | 14°53 |
| M 5 | 10 50 24 | 14°16'54 | 14°13 | 28°R35 | 5°16 | 14°33 | 2°0 | 13°59 | 22°28 | 7°26 | 3°35 | 15°6 | 13°55 | 11°52 | 14°56 |
| T 6 | 10 54 20 | 15°17'00 | 27°55 | 28°26 | 6°31 | 15°15 | 2°12 | 14°1 | 22°26 | 7°26 | 3°34 | 14°56 | 13°52 | 11°59 | 14°59 |
| W 7 | 10 58 17 | 16°17'05 | 11°51 | 28°8 | 7°46 | 15°57 | 2°24 | 14°4 | 22°24 | 7°26 | 3°32 | 14°46 | 13°49 | 12°6 | 15°3 |
| T 8 | 11 2 13 | 17°17'07 | 25°58 | 27°42 | 9°1 | 16°39 | 2°36 | 14°6 | 22°22 | 7°26 | 3°30 | 14°36 | 13°45 | 12°12 | 15°6 |
| F 9 | 11 6 10 | 18°17'08 | 10°8 | 27°8 | 10°15 | 17°22 | 2°48 | 14°9 | 22°21 | 7°26 | 3°29 | 14°29 | 13°42 | 12°19 | 15°9 |
| S 10 | 11 10 7 | 19°17'06 | 24°22 | 26°28 | 11°30 | 18°4 | 3°0 | 14°11 | 22°19 | 7°R26 | 3°27 | 14°24 | 13°39 | 12°26 | 15°12 |
| S 11 | 11 14 3 | 20°17'02 | 8°34 | 25°41 | 12°45 | 18°46 | 3°11 | 14°14 | 22°17 | 7°26 | 3°26 | 14°21 | 13°36 | 12°32 | 15°15 |
| M 12 | 11 18 0 | 21°16'56 | 22°41 | 24°50 | 14°0 | 19°29 | 3°23 | 14°17 | 22°14 | 7°26 | 3°24 | 14°D21 | 13°33 | 12°39 | 15°19 |
| T 13 | 11 21 56 | 22°16'48 | 6°44 | 23°55 | 15°15 | 20°11 | 3°34 | 14°20 | 22°12 | 7°26 | 3°22 | 14°R21 | 13°30 | 12°46 | 15°22 |
| W 14 | 11 25 53 | 23°16'38 | 20°41 | 22°58 | 16°29 | 20°53 | 3°46 | 14°23 | 22°10 | 7°26 | 3°21 | 14°21 | 13°26 | 12°52 | 15°25 |
| T 15 | 11 29 49 | 24°16'25 | 4°32 | 22°1 | 17°44 | 21°36 | 3°57 | 14°26 | 22°8 | 7°26 | 3°19 | 14°19 | 13°23 | 12°59 | 15°29 |
| F 16 | 11 33 46 | 25°16'10 | 18°16 | 21°3 | 18°59 | 22°18 | 4°9 | 14°29 | 22°6 | 7°26 | 3°18 | 14°15 | 13°20 | 13°6 | 15°32 |
| S 17 | 11 37 43 | 26°15'53 | 1°52 | 20°8 | 20°13 | 23°0 | 4°20 | 14°33 | 22°4 | 7°25 | 3°16 | 14°8 | 13°17 | 13°12 | 15°35 |
| S 18 | 11 41 39 | 27°15'33 | 15°16 | 19°15 | 21°28 | 23°43 | 4°31 | 14°36 | 22°1 | 7°25 | 3°14 | 13°59 | 13°14 | 13°19 | 15°39 |
| M 19 | 11 45 36 | 28°15'12 | 28°29 | 18°25 | 22°43 | 24°25 | 4°42 | 14°40 | 21°59 | 7°25 | 3°13 | 13°47 | 13°11 | 13°26 | 15°42 |
| T 20 | 11 49 32 | 29°14'48 | 11°26 | 17°40 | 23°58 | 25°8 | 4°53 | 14°43 | 21°57 | 7°24 | 3°11 | 13°34 | 13°7 | 13°32 | 15°46 |
| W 21 | 11 53 29 | 0°14'23 | 24°8 | 17°0 | 25°12 | 25°50 | 5°4 | 14°47 | 21°55 | 7°24 | 3°9 | 13°21 | 13°4 | 13°39 | 15°49 |
| T 22 | 11 57 25 | 1°13'55 | 6°34 | 16°26 | 26°27 | 26°33 | 5°14 | 14°51 | 21°52 | 7°24 | 3°8 | 13°10 | 13°1 | 13°46 | 15°52 |
| F 23 | 12 1 22 | 2°13'26 | 18°46 | 15°57 | 27°41 | 27°15 | 5°25 | 14°55 | 21°50 | 7°23 | 3°6 | 13°1 | 12°58 | 13°52 | 15°56 |
| S 24 | 12 5 18 | 3°12'55 | 0°47 | 15°34 | 28°56 | 27°58 | 5°36 | 14°59 | 21°47 | 7°23 | 3°4 | 12°54 | 12°55 | 13°59 | 15°59 |
| S 25 | 12 9 15 | 4°12'22 | 12°39 | 15°17 | 0°11 | 28°40 | 5°46 | 15°3 | 21°45 | 7°22 | 3°3 | 12°50 | 12°51 | 14°6 | 16°3 |
| M 26 | 12 13 11 | 5°11'48 | 24°27 | 15°6 | 1°25 | 29°23 | 5°56 | 15°7 | 21°43 | 7°22 | 3°1 | 12°48 | 12°48 | 14°12 | 16°6 |
| T 27 | 12 17 8 | 6°11'12 | 6°17 | 15°D 1 | 2°40 | 0°5 | 6°7 | 15°11 | 21°40 | 7°21 | 2°59 | 12°48 | 12°45 | 14°19 | 16°10 |
| W 28 | 12 21 5 | 7°10'33 | 18°15 | 15°2 | 3°54 | 0°48 | 6°17 | 15°16 | 21°38 | 7°21 | 2°58 | 12°48 | 12°42 | 14°26 | 16°13 |
| T 29 | 12 25 1 | 8°9'54 | 0°24 | 15°8 | 5°9 | 1°30 | 6°27 | 15°20 | 21°35 | 7°20 | 2°56 | 12°47 | 12°39 | 14°32 | 16°17 |
| F 30 | 12 28 58 | 9°9'12 | 12°52 | 15°20 | 6°23 | 2°13 | 6°37 | 15°25 | 21°33 | 7°19 | 2°55 | 12°45 | 12°36 | 14°39 | 16°20 |
| S 31 | 12 32 54 | 10°9'28 | 25°41 | 15°37 | 7°38 | 2°56 | 6°46 | 15°29 | 21°30 | 7°19 | 2°53 | 12°39 | 12°32 | 14°46 | 16°24 |

Delta T = 43.56 sec.

APRIL 1973

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|-------|-------|-------|-------|-------|-------|--------|-------|-------|--------|--------|-------|-------|
| S 1 | 12 36 51 | 11°7'43 | 8°55 | 15°59 | 8°53 | 3°38 | 6°56 | 15°34 | 21°R28 | 7°R18 | 2°R51 | 12°R31 | 12°329 | 14°52 | 16°27 |
| M 2 | 12 40 47 | 12°6'55 | 22°34 | 16°26 | 10°7 | 4°21 | 7°5 | 15°39 | 21°25 | 7°17 | 2°50 | 12°31 | 12°26 | 14°59 | 16°31 |
| T 3 | 12 44 44 | 13°6'06 | 6°36 | 16°57 | 11°22 | 5°3 | 7°15 | 15°44 | 21°23 | 7°17 | 2°48 | 12°9 | 12°23 | 15°6 | 16°34 |
| W 4 | 12 48 40 | 14°5'15 | 20°56 | 17°32 | 12°36 | 5°46 | 7°24 | 15°49 | 21°20 | 7°16 | 2°46 | 11°57 | 12°20 | 15°12 | 16°38 |
| T 5 | 12 52 37 | 15°4'21 | 5°30 | 18°12 | 13°50 | 6°29 | 7°33 | 15°54 | 21°18 | 7°15 | 2°45 | 11°46 | 12°17 | 15°19 | 16°42 |
| F 6 | 12 56 34 | 16°3'26 | 20°8 | 18°55 | 15°5 | 7°11 | 7°42 | 15°59 | 21°15 | 7°14 | 2°43 | 11°37 | 12°13 | 15°26 | 16°45 |
| S 7 | 13 0 30 | 17°2'28 | 4°44 | 19°41 | 16°19 | 7°54 | 7°51 | 16°4 | 21°12 | 7°13 | 2°42 | 11°31 | 12°10 | 15°32 | 16°49 |
| S 8 | 13 4 27 | 18°1'28 | 19°13 | 20°31 | 17°34 | 8°36 | 8°0 | 16°9 | 21°10 | 7°12 | 2°40 | 11°27 | 12°7 | 15°39 | 16°52 |
| M 9 | 13 8 23 | 19°0'26 | 3°31 | 21°24 | 18°48 | 9°19 | 8°9 | 16°15 | 21°7 | 7°11 | 2°38 | 11°26 | 12°4 | 15°46 | 16°56 |
| T 10 | 13 12 20 | 19°59'22 | 17°35 | 22°21 | 20°2 | 10°2 | 8°17 | 16°20 | 21°5 | 7°11 | 2°37 | 11°26 | 12°1 | 15°52 | 16°59 |
| W 11 | 13 16 16 | 20°58'15 | 1°25 | 23°20 | 21°17 | 10°44 | 8°26 | 16°26 | 21°2 | 7°10 | 2°35 | 11°26 | 11°57 | 15°59 | 17°3 |
| T 12 | 13 20 13 | 21°57'06 | 15°3 | 24°22 | 22°31 | 11°27 | 8°34 | 16°31 | 21°0 | 7°9 | 2°34 | 11°24 | 11°54 | 16°6 | 17°6 |
| F 13 | 13 24 9 | 22°55'54 | 28°28 | 25°26 | 23°45 | 12°10 | 8°42 | 16°37 | 20°57 | 7°8 | 2°32 | 11°20 | 11°51 | 16°12 | 17°10 |
| S 14 | 13 28 6 | 23°54'40 | 11°41 | 26°33 | 25°0 | 12°52 | 8°50 | 16°42 | 20°54 | 7°6 | 2°31 | 11°13 | 11°48 | 16°19 | 17°13 |
| S 15 | 13 32 3 | 24°53'24 | 24°43 | 27°43 | 26°14 | 13°35 | 8°58 | 16°48 | 20°52 | 7°5 | 2°29 | 11°3 | 11°45 | 16°26 | 17°17 |
| M 16 | 13 35 59 | 25°52'06 | 7°34 | 28°54 | 27°28 | 14°17 | 9°6 | 16°54 | 20°49 | 7°4 | 2°28 | 10°52 | 11°42 | 16°32 | 17°20 |
| T 17 | 13 39 56 | 26°50'46 | 20°12 | 0°8 | 28°42 | 15°0 | 9°14 | 17°0 | 20°47 | 7°3 | 2°26 | 10°39 | 11°38 | 16°39 | 17°24 |
| W 18 | 13 43 52 | 27°49'24 | 2°39 | 1°25 | 29°57 | 15°43 | 9°21 | 17°6 | 20°44 | 7°2 | 2°25 | 10°26 | 11°35 | 16°46 | 17°27 |
| T 19 | 13 47 49 | 28°48'00 | 14°55 | 2°43 | 1°11 | 16°25 | 9°28 | 17°12 | 20°42 | 7°1 | 2°23 | 10°15 | 11°32 | 16°52 | 17°31 |
| F 20 | 13 51 45 | 29°46'34 | 26°59 | 4°4 | 2°25 | 17°8 | 9°36 | 17°18 | 20°39 | 7°0 | 2°22 | 10°5 | 11°29 | 16°59 | 17°34 |
| S 21 | 13 55 42 | 0°45'06 | 8°55 | 5°26 | 3°39 | 17°50 | 9°43 | 17°24 | 20°37 | 6°58 | 2°20 | 9°59 | 11°26 | 17°6 | 17°38 |
| S 22 | 13 59 38 | 1°43'37 | 20°45 | 6°50 | 4°53 | 18°33 | 9°50 | 17°30 | 20°34 | 6°57 | 2°19 | 9°54 | 11°22 | 17°12 | 17°41 |
| M 23 | 14 3 35 | 2°42'06 | 2°33 | 8°17 | 6°7 | 19°16 | 9°56 | 17°37 | 20°31 | 6°56 | 2°18 | 9°53 | 11°19 | 17°19 | 17°45 |
| T 24 | 14 7 32 | 3°40'33 | 14°22 | 9°45 | 7°22 | 19°58 | 10°3 | 17°43 | 20°29 | 6°55 | 2°16 | 9°D52 | 11°16 | 17°26 | 17°48 |
| W 25 | 14 11 28 | 4°38'59 | 26°19 | 11°15 | 8°36 | 20°41 | 10°9 | 17°49 | 20°27 | 6°53 | 2°15 | 9°53 | 11°13 | 17°32 | 17°52 |
| T 26 | 14 15 25 | 5°37'23 | 8°27 | 12°47 | 9°50 | 21°23 | 10°16 | 17°56 | 20°24 | 6°52 | 2°14 | 9°R53 | 11°10 | 17°39 | 17°55 |
| F 27 | 14 19 21 | 6°35'46 | 14°21 | 11°4 | 11°4 | 22°6 | 10°22 | 18°2 | 20°22 | 6°51 | 2°12 | 9°52 | 11°7 | 17°45 | 17°58 |
| S 28 | 14 23 18 | 7°34'06 | 3°42 | 15°56 | 12°18 | 22°48 | 10°28 | 18°9 | 20°19 | 6°49 | 2°11 | 9°49 | 11°3 | 17°52 | 18°2 |
| S 29 | 14 27 14 | 8°32'26 | 16°56 | 17°34 | 13°32 | 23°31 | 10°34 | 18°15 | 20°17 | 6°48 | 2°10 | 9°44 | 11°0 | 17°59 | 18°5 |
| M 30 | 14 31 11 | 9°30'43 | 0°39 | 19°13 | 14°46 | 24°13 | 10°39 | 18°22 | 20°14 | 6°47 | 2°8 | 9°37 | 10°57 | 18°7 | 18°8 |

Delta T = 43.65 sec.

created from Swiss Ephemeris, Copyright Astrodiens AG [11.2.2014]

SWISS EPHEMERIS for the year 1973

MAY 1973

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| T 1 | 14 35 7 | 10 ⁸ 28'59 | 14 ⁹ 49 | 20 ⁷ 54 | 16 ⁸ 0 | 24 ⁸ 56 | 10 ⁸ 45 | 18 ¹¹ 29 | 20 ⁸ R12 | 6 ⁸ R45 | 2 ⁸ R 7 | 9 ⁸ R28 | 10 ⁸ 54 | 18 ⁸ 12 | 18 ⁸ 12 |
| W 2 | 14 39 4 | 11 ⁸ 27'14 | 29 ⁸ 22 | 22 ⁸ 37 | 17 ⁸ 14 | 25 ⁸ 38 | 10 ⁸ 50 | 18 ⁸ 35 | 20 ⁸ 10 | 6 ⁸ 44 | 2 ⁸ 6 | 9 ⁸ 19 | 10 ⁸ 51 | 18 ⁸ 19 | 18 ⁸ 15 |
| T 3 | 14 43 0 | 12 ⁸ 25'27 | 14 ⁸ 13 | 24 ⁸ 21 | 18 ⁸ 28 | 26 ⁸ 21 | 10 ⁸ 55 | 18 ⁸ 42 | 20 ⁸ 7 | 6 ⁸ 42 | 2 ⁸ 5 | 9 ⁸ 10 | 10 ⁸ 48 | 18 ⁸ 25 | 18 ⁸ 18 |
| F 4 | 14 46 57 | 13 ⁸ 23'38 | 29 ⁸ 13 | 26 ⁸ 8 | 19 ⁸ 42 | 27 ⁸ 3 | 11 ⁸ 0 | 18 ⁸ 49 | 20 ⁸ 5 | 6 ⁸ 41 | 2 ⁸ 4 | 9 ⁸ 3 | 10 ⁸ 44 | 18 ⁸ 32 | 18 ⁸ 22 |
| S 5 | 14 50 54 | 14 ⁸ 21'48 | 14 ⁸ 12 | 27 ⁸ 56 | 20 ⁸ 56 | 27 ⁸ 46 | 11 ⁸ 5 | 18 ⁸ 56 | 20 ⁸ 3 | 6 ⁸ 40 | 2 ⁸ 3 | 8 ⁸ 59 | 10 ⁸ 41 | 18 ⁸ 39 | 18 ⁸ 25 |
| S 6 | 14 54 50 | 15 ⁸ 19'55 | 29 ⁸ 2 | 29 ⁸ 47 | 22 ⁸ 10 | 28 ⁸ 28 | 11 ⁸ 10 | 19 ⁸ 3 | 20 ⁸ 0 | 6 ⁸ 38 | 2 ⁸ 1 | 8 ⁸ 56 | 10 ⁸ 38 | 18 ⁸ 45 | 18 ⁸ 28 |
| M 7 | 14 58 47 | 16 ⁸ 18'01 | 13 ⁸ 37 | 1 ⁸ 39 | 23 ⁸ 24 | 29 ⁸ 10 | 11 ⁸ 14 | 19 ⁸ 10 | 19 ⁸ 58 | 6 ⁸ 37 | 2 ⁸ 0 | 8 ⁸ D56 | 10 ⁸ 35 | 18 ⁸ 52 | 18 ⁸ 31 |
| T 8 | 15 2 43 | 17 ⁸ 16'05 | 27 ⁸ 53 | 3 ⁸ 32 | 24 ⁸ 38 | 29 ⁸ 53 | 11 ⁸ 19 | 19 ⁸ 17 | 19 ⁸ 56 | 6 ⁸ 35 | 1 ⁸ 59 | 8 ⁸ 57 | 10 ⁸ 32 | 18 ⁸ 59 | 18 ⁸ 35 |
| W 9 | 15 6 40 | 18 ⁸ 14'07 | 11 ⁸ 49 | 5 ⁸ 28 | 25 ⁸ 52 | 0 ⁸ 35 | 11 ⁸ 23 | 19 ⁸ 24 | 19 ⁸ 54 | 6 ⁸ 34 | 1 ⁸ 58 | 8 ⁸ R58 | 10 ⁸ 28 | 19 ⁸ 5 | 18 ⁸ 38 |
| T 10 | 15 10 36 | 19 ⁸ 12'07 | 25 ⁸ 25 | 7 ⁸ 25 | 27 ⁸ 6 | 1 ⁸ 17 | 11 ⁸ 27 | 19 ⁸ 31 | 19 ⁸ 52 | 6 ⁸ 32 | 1 ⁸ 57 | 8 ⁸ 58 | 10 ⁸ 25 | 19 ⁸ 12 | 18 ⁸ 41 |
| F 11 | 15 14 33 | 20 ⁸ 10'05 | 8 ⁸ 43 | 9 ⁸ 25 | 28 ⁸ 19 | 1 ⁸ 59 | 11 ⁸ 30 | 19 ⁸ 38 | 19 ⁸ 50 | 6 ⁸ 30 | 1 ⁸ 56 | 8 ⁸ 56 | 10 ⁸ 22 | 19 ⁸ 19 | 18 ⁸ 44 |
| S 12 | 15 18 30 | 21 ⁸ 8'01 | 21 ⁸ 43 | 11 ⁸ 26 | 29 ⁸ 33 | 2 ⁸ 42 | 11 ⁸ 34 | 19 ⁸ 45 | 19 ⁸ 47 | 6 ⁸ 29 | 1 ⁸ 55 | 8 ⁸ 52 | 10 ⁸ 19 | 19 ⁸ 25 | 18 ⁸ 47 |
| S 13 | 15 22 26 | 22 ⁸ 5'55 | 4 ⁸ 29 | 13 ⁸ 28 | 0 ⁸ 47 | 3 ⁸ 24 | 11 ⁸ 37 | 19 ⁸ 53 | 19 ⁸ 45 | 6 ⁸ 27 | 1 ⁸ 54 | 8 ⁸ 47 | 10 ⁸ 16 | 19 ⁸ 32 | 18 ⁸ 50 |
| M14 | 15 26 23 | 23 ⁸ 3'47 | 17 ⁸ 3 | 15 ⁸ 33 | 2 ⁸ 1 | 4 ⁸ 6 | 11 ⁸ 41 | 20 ⁸ 0 | 19 ⁸ 43 | 6 ⁸ 26 | 1 ⁸ 54 | 8 ⁸ 39 | 10 ⁸ 13 | 19 ⁸ 39 | 18 ⁸ 53 |
| T 15 | 15 30 19 | 24 ⁸ 1'38 | 29 ⁸ 25 | 17 ⁸ 38 | 3 ⁸ 15 | 4 ⁸ 48 | 11 ⁸ 44 | 20 ⁸ 7 | 19 ⁸ 41 | 6 ⁸ 24 | 1 ⁸ 53 | 8 ⁸ 31 | 10 ⁸ 9 | 19 ⁸ 45 | 18 ⁸ 56 |
| W16 | 15 34 16 | 24 ⁸ 59'28 | 11 ⁸ 37 | 19 ⁸ 45 | 4 ⁸ 28 | 5 ⁸ 30 | 11 ⁸ 47 | 20 ⁸ 14 | 19 ⁸ 39 | 6 ⁸ 23 | 1 ⁸ 52 | 8 ⁸ 23 | 10 ⁸ 6 | 19 ⁸ 52 | 18 ⁸ 59 |
| T 17 | 15 38 12 | 25 ⁸ 57'16 | 23 ⁸ 40 | 21 ⁸ 54 | 5 ⁸ 42 | 6 ⁸ 12 | 11 ⁸ 49 | 20 ⁸ 22 | 19 ⁸ 38 | 6 ⁸ 21 | 1 ⁸ 51 | 8 ⁸ 16 | 10 ⁸ 3 | 19 ⁸ 59 | 19 ⁸ 2 |
| F 18 | 15 42 9 | 26 ⁸ 55'02 | 5 ⁸ 37 | 24 ⁸ 3 | 6 ⁸ 56 | 6 ⁸ 54 | 11 ⁸ 52 | 20 ⁸ 29 | 19 ⁸ 36 | 6 ⁸ 20 | 1 ⁸ 50 | 8 ⁸ 10 | 10 ⁸ 0 | 20 ⁸ 5 | 19 ⁸ 5 |
| S 19 | 15 46 5 | 27 ⁸ 52'47 | 17 ⁸ 28 | 26 ⁸ 14 | 8 ⁸ 10 | 7 ⁸ 36 | 11 ⁸ 54 | 20 ⁸ 37 | 19 ⁸ 34 | 6 ⁸ 18 | 1 ⁸ 49 | 8 ⁸ 6 | 9 ⁸ 57 | 20 ⁸ 12 | 19 ⁸ 8 |
| S 20 | 15 50 2 | 28 ⁸ 50'31 | 29 ⁸ 16 | 28 ⁸ 25 | 9 ⁸ 23 | 8 ⁸ 18 | 11 ⁸ 56 | 20 ⁸ 44 | 19 ⁸ 32 | 6 ⁸ 16 | 1 ⁸ 49 | 8 ⁸ 4 | 9 ⁸ 54 | 20 ⁸ 19 | 19 ⁸ 11 |
| M21 | 15 53 59 | 29 ⁸ 48'14 | 11 ⁸ 3 | 0 ⁸ 36 | 10 ⁸ 37 | 9 ⁸ 0 | 11 ⁸ 58 | 20 ⁸ 51 | 19 ⁸ 30 | 6 ⁸ 15 | 1 ⁸ 48 | 8 ⁸ D 4 | 9 ⁸ 50 | 20 ⁸ 25 | 19 ⁸ 14 |
| T 22 | 15 57 55 | 0 ⁸ 45'55 | 22 ⁸ 54 | 2 ⁸ 48 | 11 ⁸ 51 | 9 ⁸ 42 | 12 ⁸ 0 | 20 ⁸ 59 | 19 ⁸ 28 | 6 ⁸ 13 | 1 ⁸ 47 | 8 ⁸ 5 | 9 ⁸ 47 | 20 ⁸ 32 | 19 ⁸ 17 |
| W23 | 16 1 52 | 1 ⁸ 43'35 | 4 ⁸ 52 | 4 ⁸ 59 | 13 ⁸ 4 | 10 ⁸ 24 | 12 ⁸ 2 | 21 ⁸ 6 | 19 ⁸ 27 | 6 ⁸ 11 | 1 ⁸ 47 | 8 ⁸ 6 | 9 ⁸ 44 | 20 ⁸ 39 | 19 ⁸ 20 |
| T 24 | 16 5 48 | 2 ⁸ 41'15 | 7 ⁸ 1 | 7 ⁸ 10 | 14 ⁸ 18 | 11 ⁸ 5 | 12 ⁸ 3 | 21 ⁸ 14 | 19 ⁸ 25 | 6 ⁸ 10 | 1 ⁸ 46 | 8 ⁸ 8 | 9 ⁸ 41 | 20 ⁸ 45 | 19 ⁸ 23 |
| F 25 | 16 9 45 | 3 ⁸ 38'53 | 29 ⁸ 26 | 9 ⁸ 21 | 15 ⁸ 32 | 11 ⁸ 47 | 12 ⁸ 4 | 21 ⁸ 22 | 19 ⁸ 23 | 6 ⁸ 8 | 1 ⁸ 46 | 8 ⁸ R 9 | 9 ⁸ 38 | 20 ⁸ 52 | 19 ⁸ 25 |
| S 26 | 16 13 41 | 4 ⁸ 36'30 | 12 ⁸ 12 | 11 ⁸ 30 | 16 ⁸ 45 | 12 ⁸ 29 | 12 ⁸ 5 | 21 ⁸ 29 | 19 ⁸ 22 | 6 ⁸ 7 | 1 ⁸ 45 | 8 ⁸ 9 | 9 ⁸ 34 | 20 ⁸ 58 | 19 ⁸ 28 |
| S 27 | 16 17 38 | 5 ⁸ 34'06 | 25 ⁸ 22 | 13 ⁸ 39 | 17 ⁸ 59 | 13 ⁸ 10 | 12 ⁸ 6 | 21 ⁸ 37 | 19 ⁸ 20 | 6 ⁸ 5 | 1 ⁸ 44 | 8 ⁸ 7 | 9 ⁸ 31 | 21 ⁸ 5 | 19 ⁸ 31 |
| M28 | 16 21 34 | 6 ⁸ 31'42 | 9 ⁸ 0 | 15 ⁸ 46 | 19 ⁸ 12 | 13 ⁸ 52 | 12 ⁸ 7 | 21 ⁸ 44 | 19 ⁸ 19 | 6 ⁸ 3 | 1 ⁸ 44 | 8 ⁸ 4 | 9 ⁸ 28 | 21 ⁸ 12 | 19 ⁸ 33 |
| T 29 | 16 25 31 | 7 ⁸ 29'16 | 23 ⁸ 6 | 17 ⁸ 51 | 20 ⁸ 26 | 14 ⁸ 33 | 12 ⁸ 7 | 21 ⁸ 52 | 19 ⁸ 17 | 6 ⁸ 2 | 1 ⁸ 44 | 8 ⁸ 0 | 9 ⁸ 25 | 21 ⁸ 18 | 19 ⁸ 36 |
| W30 | 16 29 28 | 8 ⁸ 26'50 | 7 ⁸ 39 | 19 ⁸ 54 | 21 ⁸ 40 | 15 ⁸ 15 | 12 ⁸ 8 | 22 ⁸ 0 | 19 ⁸ 16 | 6 ⁸ 0 | 1 ⁸ 43 | 7 ⁸ 56 | 9 ⁸ 22 | 21 ⁸ 25 | 19 ⁸ 39 |
| T 31 | 16 33 24 | 9 ⁸ 24'23 | 22 ⁸ 32 | 21 ⁸ 56 | 22 ⁸ 53 | 15 ⁸ 56 | 12 ⁸ R 8 | 22 ⁸ 7 | 19 ⁸ 15 | 5 ⁸ 59 | 1 ⁸ 43 | 7 ⁸ 52 | 9 ⁸ 19 | 21 ⁸ 32 | 19 ⁸ 41 |

Delta T = 43.75 sec.

JUNE 1973

00:00 UT

| Day | Sid.t | ☉ | ☾ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------|---------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| F 1 | 16 37 21 | 10 ⁸ 21'55 | 7 ⁸ 39 | 23 ⁸ 55 | 24 ⁸ 7 | 16 ⁸ 37 | 12 ⁸ R 8 | 22 ⁸ 15 | 19 ⁸ R13 | 5 ⁸ R57 | 1 ⁸ R42 | 7 ⁸ R49 | 9 ⁸ 15 | 21 ⁸ 38 | 19 ⁸ 44 |
| S 2 | 16 41 17 | 11 ⁸ 19'26 | 22 ⁸ 51 | 25 ⁸ 52 | 25 ⁸ 20 | 17 ⁸ 19 | 12 ⁸ 7 | 22 ⁸ 23 | 19 ⁸ 12 | 5 ⁸ 55 | 1 ⁸ 42 | 7 ⁸ 47 | 9 ⁸ 12 | 21 ⁸ 45 | 19 ⁸ 46 |
| S 3 | 16 45 14 | 12 ⁸ 16'55 | 7 ⁸ 36 | 27 ⁸ 46 | 26 ⁸ 34 | 18 ⁸ 0 | 12 ⁸ 7 | 22 ⁸ 31 | 19 ⁸ 11 | 5 ⁸ 54 | 1 ⁸ 42 | 7 ⁸ D47 | 9 ⁸ 9 | 21 ⁸ 52 | 19 ⁸ 49 |
| M 4 | 16 49 10 | 13 ⁸ 14'24 | 22 ⁸ 48 | 29 ⁸ 38 | 27 ⁸ 47 | 18 ⁸ 41 | 12 ⁸ 6 | 22 ⁸ 38 | 19 ⁸ 10 | 5 ⁸ 52 | 1 ⁸ 41 | 7 ⁸ 47 | 9 ⁸ 6 | 21 ⁸ 58 | 19 ⁸ 51 |
| T 5 | 16 53 7 | 14 ⁸ 11'52 | 7 ⁸ 20 | 1 ⁸ 28 | 29 ⁸ 1 | 19 ⁸ 22 | 12 ⁸ 5 | 22 ⁸ 46 | 19 ⁸ 9 | 5 ⁸ 50 | 1 ⁸ 41 | 7 ⁸ 48 | 9 ⁸ 3 | 22 ⁸ 5 | 19 ⁸ 53 |
| W 6 | 16 57 3 | 15 ⁸ 9'18 | 21 ⁸ 28 | 3 ⁸ 15 | 0 ⁸ 14 | 20 ⁸ 3 | 12 ⁸ 4 | 22 ⁸ 54 | 19 ⁸ 7 | 5 ⁸ 49 | 1 ⁸ 41 | 7 ⁸ 50 | 9 ⁸ 0 | 22 ⁸ 12 | 19 ⁸ 56 |
| T 7 | 17 1 0 | 16 ⁸ 6'43 | 5 ⁸ 11 | 4 ⁸ 59 | 1 ⁸ 28 | 20 ⁸ 43 | 12 ⁸ 3 | 23 ⁸ 2 | 19 ⁸ 6 | 5 ⁸ 47 | 1 ⁸ 41 | 7 ⁸ 51 | 8 ⁸ 56 | 22 ⁸ 18 | 19 ⁸ 58 |
| F 8 | 17 4 57 | 17 ⁸ 4'07 | 18 ⁸ 30 | 6 ⁸ 41 | 2 ⁸ 41 | 21 ⁸ 24 | 12 ⁸ 2 | 23 ⁸ 9 | 19 ⁸ 5 | 5 ⁸ 46 | 1 ⁸ 41 | 7 ⁸ R51 | 8 ⁸ 53 | 22 ⁸ 25 | 20 ⁸ 0 |
| S 9 | 17 8 53 | 18 ⁸ 1'29 | 1 ⁸ 28 | 8 ⁸ 20 | 3 ⁸ 55 | 22 ⁸ 5 | 12 ⁸ 0 | 23 ⁸ 17 | 19 ⁸ 4 | 5 ⁸ 44 | 1 ⁸ 41 | 7 ⁸ 51 | 8 ⁸ 50 | 22 ⁸ 32 | 20 ⁸ 2 |
| S 10 | 17 12 50 | 18 ⁸ 58'51 | 14 ⁸ 7 | 9 ⁸ 56 | 5 ⁸ 8 | 22 ⁸ 45 | 11 ⁸ 58 | 23 ⁸ 25 | 19 ⁸ 4 | 5 ⁸ 43 | 1 ⁸ 40 | 7 ⁸ 49 | 8 ⁸ 47 | 22 ⁸ 38 | 20 ⁸ 5 |
| M11 | 17 16 46 | 19 ⁸ 56'12 | 26 ⁸ 30 | 11 ⁸ 30 | 6 ⁸ 21 | 23 ⁸ 26 | 11 ⁸ 56 | 23 ⁸ 33 | 19 ⁸ 3 | 5 ⁸ 41 | 1 ⁸ 40 | 7 ⁸ 47 | 8 ⁸ 44 | 22 ⁸ 45 | 20 ⁸ 7 |
| T 12 | 17 20 43 | 20 ⁸ 53'31 | 8 ⁸ 41 | 13 ⁸ 1 | 7 ⁸ 35 | 24 ⁸ 6 | 11 ⁸ 54 | 23 ⁸ 41 | 19 ⁸ 2 | 5 ⁸ 39 | 1 ⁸ D40 | 7 ⁸ 44 | 8 ⁸ 40 | 22 ⁸ 52 | 20 ⁸ 9 |
| W13 | 17 24 39 | 21 ⁸ 50'50 | 20 ⁸ 42 | 14 ⁸ 29 | 8 ⁸ 48 | 24 ⁸ 46 | 11 ⁸ 51 | 23 ⁸ 48 | 19 ⁸ 1 | 5 ⁸ 38 | 1 ⁸ 40 | 7 ⁸ 42 | 8 ⁸ 37 | 22 ⁸ 58 | 20 ⁸ 11 |
| T 14 | 17 28 36 | 22 ⁸ 48'08 | 2 ⁸ 37 | 15 ⁸ 55 | 10 ⁸ 1 | 25 ⁸ 27 | 11 ⁸ 49 | 23 ⁸ 56 | 19 ⁸ 1 | 5 ⁸ 36 | 1 ⁸ 40 | 7 ⁸ 40 | 8 ⁸ 34 | 23 ⁸ 5 | 20 ⁸ 13 |
| F 15 | 17 32 32 | 23 ⁸ 45'26 | 14 ⁸ 27 | 17 ⁸ 17 | 11 ⁸ 15 | 26 ⁸ 7 | 11 ⁸ 46 | 24 ⁸ 4 | 19 ⁸ 0 | 5 ⁸ 35 | 1 ⁸ 41 | 7 ⁸ 38 | 8 ⁸ 31 | 23 ⁸ 12 | 20 ⁸ 15 |
| S 16 | 17 36 29 | 24 ⁸ 42'42 | 26 ⁸ 16 | 18 ⁸ 37 | 12 ⁸ 28 | 26 ⁸ 47 | 11 ⁸ 43 | 24 ⁸ 12 | 18 ⁸ 59 | 5 ⁸ 33 | 1 ⁸ 41 | 7 ⁸ 37 | 8 ⁸ 28 | 23 ⁸ 18 | 20 ⁸ 17 |
| S 17 | 17 40 26 | 25 ⁸ 39'58 | 8 ⁸ 4 | 19 ⁸ 54 | 13 ⁸ 41 | 27 ⁸ 27 | 11 ⁸ 40 | 24 ⁸ 20 | 18 ⁸ 59 | 5 ⁸ 32 | 1 ⁸ 41 | 7 ⁸ D37 | 8 ⁸ 25 | 23 ⁸ 25 | 20 ⁸ 19 |
| M18 | 17 44 22 | 26 ⁸ 37'14 | 19 ⁸ 55 | 21 ⁸ 7 | 14 ⁸ 55 | 28 ⁸ 6 | 11 ⁸ 37 | 24 ⁸ 27 | 18 ⁸ 58 | 5 ⁸ 30 | 1 ⁸ 41 | 7 ⁸ 37 | 8 ⁸ 21 | 23 ⁸ 31 | 20 ⁸ 20 |
| T 19 | 17 48 19 | 27 ⁸ 34'29 | 1 ⁸ 50 | 22 ⁸ 18 | 16 ⁸ 8 | 28 ⁸ 46 | 11 ⁸ 33 | 24 ⁸ 35 | 18 ⁸ 58 | 5 ⁸ 29 | 1 ⁸ 41 | 7 ⁸ 38 | 8 ⁸ 18 | 23 ⁸ 38 | 20 ⁸ 22 |
| W20 | 17 52 15 | 28 ⁸ 31'44 | 13 ⁸ 54 | 23 ⁸ 26 | 17 ⁸ 21 | 29 ⁸ 26 | 11 ⁸ 30 | 24 ⁸ 43 | 18 ⁸ 57 | 5 ⁸ 27 | 1 ⁸ 42 | 7 ⁸ 39 | 8 ⁸ 15 | 23 ⁸ 45 | 20 ⁸ 24 |
| T 21 | 17 56 12 | 29 ⁸ 28'58 | 26 ⁸ 8 | 24 ⁸ 31 | 18 ⁸ 34 | 0 ⁸ 15 | 11 ⁸ 26 | 24 ⁸ 51 | 18 ⁸ 57 | 5 ⁸ 26 | 1 ⁸ 42 | 7 ⁸ 40 | 8 ⁸ 12 | 23 ⁸ 51 | 20 ⁸ 26 |
| F 22 | 18 0 8 | 0 ⁸ 26'13 | 8 ⁸ 37 | 25 ⁸ 32 | 19 ⁸ 48 | 0 ⁸ 44 | 11 ⁸ 22 | 24 ⁸ 59 | 18 ⁸ 57 | 5 ⁸ 24 | 1 ⁸ 42 | 7 ⁸ 40 | 8 ⁸ 9 | 23 ⁸ 58 | 20 ⁸ 27 |
| S 23 | 18 4 5 | 1 ⁸ 23'27 | 21 ⁸ 24 | 26 ⁸ 30 | 21 ⁸ 1 | 1 ⁸ 24 | 11 ⁸ 18 | 25 ⁸ 6 | 18 ⁸ 57 | 5 ⁸ 23 | 1 ⁸ 42 | 7 ⁸ 41 | 8 ⁸ 6 | 24 ⁸ 5 | 20 ⁸ 29 |
| S 24 | 18 8 1 | 2 ⁸ 20'41 | 4 ⁸ 32 | 27 ⁸ 25 | 22 ⁸ 14 | 2 ⁸ 3 | 11 ⁸ 13 | 25 ⁸ 14 | 18 ⁸ 56 | 5 ⁸ 22 | 1 ⁸ 43 | 7 ⁸ R41 | 8 ⁸ 2 | 24 ⁸ 11 | 20 ⁸ 31 |
| M25 | 18 11 58 | 3 ⁸ 17'54 | 18 ⁸ 3 | 28 ⁸ 17 | 23 ⁸ 27 | 2 ⁸ 42 | 11 ⁸ 9 | 25 ⁸ 22 | 18 ⁸ 56 | 5 ⁸ 20 | 1 ⁸ 43 | 7 ⁸ 41 | 7 ⁸ 59 | 24 ⁸ 18 | 20 ⁸ 32 |
| T 26 | 18 15 55 | 4 ⁸ 15'08 | 1 ⁸ 59 | 29 ⁸ 4 | 24 ⁸ 40 | 3 ⁸ 21 | 11 ⁸ 4 | 25 ⁸ 30 | 18 ⁸ 56 | 5 ⁸ 19 | 1 ⁸ 44 | 7 ⁸ 40 | 7 ⁸ 56 | 24 ⁸ 25 | 20 ⁸ 34 |
| W27 | 18 19 51 | 5 ⁸ 12'22 | 16 ⁸ 20 | 29 ⁸ 48 | 25 ⁸ 53 | 3 ⁸ 59 | 11 ⁸ 0 | 25 ⁸ 38 | 18 ⁸ D56 | 5 ⁸ 17 | 1 ⁸ 44 | 7 ⁸ 40 | 7 ⁸ 53 | 24 ⁸ 31 | 20 ⁸ 35 |
| T 28 | 18 23 48 | 6 ⁸ 9'36 | 1 ⁸ 3 | 0 ⁸ 29 | 27 ⁸ 7 | 4 ⁸ 38 | 10 ⁸ 55 | 25 ⁸ 45 | 18 ⁸ 56 | 5 ⁸ 16 | 1 ⁸ 45 | 7 ⁸ 40 | 7 ⁸ 50 | 24 ⁸ 38 | 20 ⁸ 36 |
| F 29 | 18 27 44 | 7 ⁸ 6'51 | 16 ⁸ 3 | 1 ⁸ 5 | 28 ⁸ 20 | 5 ⁸ 16 | 10 ⁸ 49 | 25 ⁸ 53 | 18 ⁸ 56 | 5 ⁸ 15 | 1 ⁸ 45 | 7 ⁸ 40 | 7 ⁸ 46 | 24 ⁸ 45 | 20 ⁸ 38 |
| S 30 | 18 31 41 | 8 ⁸ 4'05 | 1 ⁸ 11 | 1 ⁸ 37 | 29 ⁸ 33 | 5 ⁸ 15 | 10 ⁸ 44 | 26 ⁸ 1 | 18 ⁸ 56 | 5 ⁸ 13 | 1 ⁸ 46 | 7 ⁸ 40 | 7 ⁸ 43 | 24 ⁸ 51 | 20 ⁸ 39 |

SWISS EPHEMERIS for the year 1973

JULY 1973

00:00 UT

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

Delta T = 43.94 sec.

AUGUST 1973

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|-------|--------|
| W 1 | 20 37 51 | 8♂36'26 | 8♂34 | 22☾55 | 8♂20 | 24♂30 | 7°R 1 | 29♂54 | 19♂28 | 4°R44 | 2♂20 | 7°R21 | 6♂ 2 | 28♂24 | 20°R53 |
| T 2 | 20 41 47 | 9°33'51 | 22°31 | 23° 5 | 9°33 | 25° 0 | 6♂53 | 0☾ 0 | 19°30 | 4♂43 | 2°22 | 7♂16 | 5°58 | 28°31 | 20♂53 |
| F 3 | 20 45 44 | 10°31'17 | 6♂ 1 | 23°22 | 10°45 | 25°30 | 6°45 | 0° 7 | 19°32 | 4°43 | 2°23 | 7°12 | 5°55 | 28°37 | 20°52 |
| S 4 | 20 49 40 | 11°28'44 | 19° 6 | 23°44 | 11°57 | 26° 0 | 6°38 | 0°14 | 19°34 | 4°43 | 2°25 | 7° 8 | 5°52 | 28°44 | 20°52 |
| S 5 | 20 53 37 | 12°26'12 | 1♂47 | 24°14 | 13° 9 | 26°29 | 6°30 | 0°20 | 19°36 | 4°42 | 2°27 | 7° 6 | 5°49 | 28°51 | 20°51 |
| M 6 | 20 57 33 | 13°23'40 | 14° 7 | 24°49 | 14°22 | 26°58 | 6°22 | 0°27 | 19°38 | 4°42 | 2°28 | 7°D 6 | 5°46 | 28°57 | 20°50 |
| T 7 | 21 1 30 | 14°21'09 | 26°12 | 25°32 | 15°34 | 27°27 | 6°14 | 0°33 | 19°40 | 4°42 | 2°30 | 7° 6 | 5°43 | 29° 4 | 20°50 |
| W 8 | 21 5 27 | 15°18'39 | 8♂ 7 | 26°20 | 16°46 | 27°55 | 6° 7 | 0°39 | 19°42 | 4°41 | 2°32 | 7° 8 | 5°39 | 29°11 | 20°49 |
| T 9 | 21 9 23 | 16°16'10 | 19°56 | 27°15 | 17°58 | 28°23 | 5°59 | 0°46 | 19°44 | 4°41 | 2°33 | 7° 9 | 5°36 | 29°17 | 20°48 |
| F 10 | 21 13 20 | 17°13'42 | 1♂44 | 28°16 | 19°10 | 28°50 | 5°52 | 0°52 | 19°46 | 4°41 | 2°35 | 7°R10 | 5°33 | 29°24 | 20°47 |
| S 11 | 21 17 16 | 18°11'15 | 13°35 | 29°23 | 20°22 | 29°17 | 5°44 | 0°58 | 19°48 | 4°41 | 2°37 | 7°10 | 5°30 | 29°30 | 20°46 |
| S 12 | 21 21 13 | 19° 8'48 | 25°32 | 0♂36 | 21°34 | 29°44 | 5°37 | 1° 4 | 19°51 | 4°40 | 2°38 | 7° 9 | 5°27 | 29°37 | 20°46 |
| M13 | 21 25 9 | 20° 6'23 | 7♂40 | 1°54 | 22°46 | 0♂10 | 5°30 | 1°10 | 19°53 | 4°40 | 2°40 | 7° 5 | 5°24 | 29°44 | 20°45 |
| T 14 | 21 29 6 | 21° 3'58 | 19°59 | 3°18 | 23°58 | 0°35 | 5°22 | 1°16 | 19°55 | 4°40 | 2°42 | 6°59 | 5°20 | 29°50 | 20°44 |
| W15 | 21 33 2 | 22° 1'35 | 2♂30 | 4°47 | 25°10 | 1° 1 | 5°15 | 1°22 | 19°58 | 4°40 | 2°44 | 6°52 | 5°17 | 29°57 | 20°42 |
| T 16 | 21 36 59 | 22°59'13 | 15°15 | 6°20 | 26°21 | 1°25 | 5° 8 | 1°28 | 20° 0 | 4°40 | 2°46 | 6°44 | 5°14 | 0♂ 4 | 20°41 |
| F 17 | 21 40 56 | 23°56'53 | 28°13 | 7°58 | 27°33 | 1°50 | 5° 1 | 1°34 | 20° 3 | 4°D40 | 2°48 | 6°36 | 5°11 | 0°10 | 20°40 |
| S 18 | 21 44 52 | 24°54'34 | 11♂24 | 9°39 | 28°45 | 2°13 | 4°54 | 1°39 | 20° 5 | 4°40 | 2°50 | 6°29 | 5° 8 | 0°17 | 20°39 |
| S 19 | 21 48 49 | 25°52'16 | 24°48 | 11°25 | 29°57 | 2°37 | 4°47 | 1°45 | 20° 8 | 4°40 | 2°51 | 6°24 | 5° 4 | 0°24 | 20°38 |
| M20 | 21 52 45 | 26°50'01 | 8♂24 | 13°13 | 1♂ 8 | 2°59 | 4°41 | 1°51 | 20°10 | 4°40 | 2°53 | 6°20 | 5° 1 | 0°30 | 20°36 |
| T 21 | 21 56 42 | 27°47'46 | 22°11 | 15° 4 | 2°20 | 3°22 | 4°34 | 1°56 | 20°13 | 4°40 | 2°55 | 6°D18 | 4°58 | 0°37 | 20°35 |
| W22 | 22 0 38 | 28°45'34 | 6♂11 | 16°57 | 3°31 | 3°43 | 4°28 | 2° 2 | 20°16 | 4°41 | 2°57 | 6°19 | 4°55 | 0°44 | 20°34 |
| T 23 | 22 4 35 | 29°43'24 | 20°22 | 18°53 | 4°43 | 4° 4 | 4°21 | 2° 7 | 20°18 | 4°41 | 2°59 | 6°19 | 4°52 | 0°50 | 20°32 |
| F 24 | 22 8 31 | 0♂41'15 | 4☾44 | 20°49 | 5°54 | 4°25 | 4°15 | 2°12 | 20°21 | 4°41 | 3° 1 | 6°R20 | 4°49 | 0°57 | 20°31 |
| S 25 | 22 12 28 | 1°39'08 | 19°12 | 22°47 | 7° 6 | 4°45 | 4° 9 | 2°18 | 20°24 | 4°41 | 3° 3 | 6°19 | 4°45 | 1° 3 | 20°29 |
| S 26 | 22 16 25 | 2°37'02 | 3♂45 | 24°46 | 8°17 | 5° 4 | 4° 3 | 2°23 | 20°27 | 4°41 | 3° 5 | 6°17 | 4°42 | 1°10 | 20°27 |
| M27 | 22 20 21 | 3°34'58 | 18°16 | 26°45 | 9°28 | 5°23 | 3°57 | 2°28 | 20°29 | 4°42 | 3° 7 | 6°11 | 4°39 | 1°17 | 20°26 |
| T 28 | 22 24 18 | 4°32'56 | 2♂39 | 28°44 | 10°40 | 5°41 | 3°51 | 2°33 | 20°32 | 4°42 | 3° 9 | 6° 4 | 4°36 | 1°23 | 20°24 |
| W29 | 22 28 14 | 5°30'55 | 16°48 | 0♂43 | 11°51 | 5°58 | 3°46 | 2°38 | 20°35 | 4°43 | 3°11 | 5°55 | 4°33 | 1°30 | 20°22 |
| T 30 | 22 32 11 | 6°28'56 | 0♂39 | 2°41 | 13° 2 | 6°15 | 3°40 | 2°43 | 20°38 | 4°43 | 3°14 | 5°45 | 4°29 | 1°37 | 20°21 |
| F 31 | 22 36 7 | 7♂26'59 | 14♂ 6 | 4♂40 | 14♂13 | 6♂31 | 3♂35 | 2☾47 | 20♂41 | 4♂43 | 3♂16 | 5♂35 | 4♂26 | 1♂43 | 20♂19 |

SWISS EPHEMERIS for the year 1973

SEPTEMBER 1973

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| S 1 | 22 40 4 | 8 ^h 25'02 | 27 ^h 10 | 6 ^h 37 | 15 ^h 25 | 6 ^h 47 | 3 ^h 30 | 2 ^h 52 | 20 ^h 44 | 4 ^h 44 | 3 ^h 18 | 5 ^h 27 | 4 ^h 23 | 1 ^h 50 | 20 ^h 17 |
| S 2 | 22 44 0 | 9 ^h 23'07 | 9 ^h 52 | 8 ^h 34 | 16 ^h 36 | 7 ^h 1 | 3 ^h 25 | 2 ^h 57 | 20 ^h 47 | 4 ^h 44 | 3 ^h 20 | 5 ^h 21 | 4 ^h 20 | 1 ^h 57 | 20 ^h 15 |
| M 3 | 22 47 57 | 10 ^h 21'14 | 22 ^h 13 | 10 ^h 30 | 17 ^h 47 | 7 ^h 15 | 3 ^h 20 | 3 ^h 1 | 20 ^h 50 | 4 ^h 45 | 3 ^h 22 | 5 ^h 17 | 4 ^h 17 | 2 ^h 3 | 20 ^h 13 |
| T 4 | 22 51 54 | 11 ^h 19'22 | 4 ^h 18 | 12 ^h 25 | 18 ^h 58 | 7 ^h 29 | 3 ^h 15 | 3 ^h 6 | 20 ^h 53 | 4 ^h 46 | 3 ^h 24 | 5 ^h 16 | 4 ^h 14 | 2 ^h 10 | 20 ^h 11 |
| W 5 | 22 55 50 | 12 ^h 17'32 | 16 ^h 13 | 14 ^h 19 | 20 ^h 8 | 7 ^h 41 | 3 ^h 11 | 3 ^h 10 | 20 ^h 56 | 4 ^h 46 | 3 ^h 26 | 5 ^h 15 | 4 ^h 10 | 2 ^h 17 | 20 ^h 9 |
| T 6 | 22 59 47 | 13 ^h 15'43 | 28 ^h 2 | 16 ^h 11 | 21 ^h 19 | 7 ^h 53 | 3 ^h 6 | 3 ^h 14 | 21 ^h 0 | 4 ^h 47 | 3 ^h 28 | 5 ^h 16 | 4 ^h 7 | 2 ^h 23 | 20 ^h 7 |
| F 7 | 23 3 43 | 14 ^h 13'56 | 9 ^h 50 | 18 ^h 3 | 22 ^h 30 | 8 ^h 4 | 3 ^h 2 | 3 ^h 19 | 21 ^h 3 | 4 ^h 47 | 3 ^h 31 | 5 ^h 16 | 4 ^h 4 | 2 ^h 30 | 20 ^h 5 |
| S 8 | 23 7 40 | 15 ^h 12'10 | 21 ^h 44 | 19 ^h 54 | 23 ^h 41 | 8 ^h 15 | 2 ^h 58 | 3 ^h 23 | 21 ^h 6 | 4 ^h 48 | 3 ^h 33 | 5 ^h 15 | 4 ^h 1 | 2 ^h 36 | 20 ^h 3 |
| S 9 | 23 11 36 | 16 ^h 10'25 | 3 ^h 47 | 21 ^h 43 | 24 ^h 51 | 8 ^h 24 | 2 ^h 54 | 3 ^h 27 | 21 ^h 9 | 4 ^h 49 | 3 ^h 35 | 5 ^h 11 | 3 ^h 58 | 2 ^h 43 | 20 ^h 1 |
| M10 | 23 15 33 | 17 ^h 8'42 | 16 ^h 3 | 23 ^h 31 | 26 ^h 2 | 8 ^h 33 | 2 ^h 51 | 3 ^h 31 | 21 ^h 13 | 4 ^h 50 | 3 ^h 37 | 5 ^h 5 | 3 ^h 55 | 2 ^h 50 | 19 ^h 59 |
| T 11 | 23 19 29 | 18 ^h 7'01 | 28 ^h 35 | 25 ^h 19 | 27 ^h 13 | 8 ^h 41 | 2 ^h 47 | 3 ^h 34 | 21 ^h 16 | 4 ^h 50 | 3 ^h 40 | 4 ^h 57 | 3 ^h 51 | 2 ^h 56 | 19 ^h 57 |
| W12 | 23 23 26 | 19 ^h 5'21 | 11 ^h 24 | 27 ^h 5 | 28 ^h 23 | 8 ^h 49 | 2 ^h 44 | 3 ^h 38 | 21 ^h 19 | 4 ^h 51 | 3 ^h 42 | 4 ^h 46 | 3 ^h 48 | 3 ^h 3 | 19 ^h 54 |
| T 13 | 23 27 22 | 20 ^h 3'44 | 24 ^h 30 | 28 ^h 50 | 29 ^h 33 | 8 ^h 55 | 2 ^h 41 | 3 ^h 42 | 21 ^h 22 | 4 ^h 52 | 3 ^h 44 | 4 ^h 34 | 3 ^h 45 | 3 ^h 10 | 19 ^h 52 |
| F 14 | 23 31 19 | 21 ^h 2'08 | 7 ^h 52 | 0 ^h 33 | 0 ^h 44 | 9 ^h 1 | 2 ^h 38 | 3 ^h 45 | 21 ^h 26 | 4 ^h 53 | 3 ^h 46 | 4 ^h 22 | 3 ^h 42 | 3 ^h 16 | 19 ^h 50 |
| S 15 | 23 35 16 | 22 ^h 0'34 | 21 ^h 26 | 2 ^h 16 | 1 ^h 54 | 9 ^h 5 | 2 ^h 35 | 3 ^h 49 | 21 ^h 29 | 4 ^h 54 | 3 ^h 48 | 4 ^h 11 | 3 ^h 39 | 3 ^h 23 | 19 ^h 48 |
| S 16 | 23 39 12 | 22 ^h 59'02 | 5 ^h 11 | 3 ^h 58 | 3 ^h 4 | 9 ^h 9 | 2 ^h 33 | 3 ^h 52 | 21 ^h 33 | 4 ^h 55 | 3 ^h 51 | 4 ^h 2 | 3 ^h 35 | 3 ^h 30 | 19 ^h 45 |
| M17 | 23 43 9 | 23 ^h 57'32 | 19 ^h 4 | 5 ^h 38 | 4 ^h 14 | 9 ^h 12 | 2 ^h 30 | 3 ^h 55 | 21 ^h 36 | 4 ^h 56 | 3 ^h 53 | 3 ^h 55 | 3 ^h 32 | 3 ^h 36 | 19 ^h 43 |
| T 18 | 23 47 5 | 24 ^h 56'05 | 3 ^h 11 | 7 ^h 18 | 5 ^h 24 | 9 ^h 15 | 2 ^h 28 | 3 ^h 59 | 21 ^h 40 | 4 ^h 57 | 3 ^h 55 | 3 ^h 52 | 3 ^h 29 | 3 ^h 43 | 19 ^h 40 |
| W19 | 23 51 2 | 25 ^h 54'39 | 17 ^h 5 | 8 ^h 56 | 6 ^h 34 | 9 ^h 16 | 2 ^h 26 | 4 ^h 2 | 21 ^h 43 | 4 ^h 58 | 3 ^h 58 | 3 ^h 50 | 3 ^h 26 | 3 ^h 50 | 19 ^h 38 |
| T 20 | 23 54 58 | 26 ^h 53'17 | 1 ^h 10 | 10 ^h 34 | 7 ^h 44 | 9 ^h 16 | 2 ^h 25 | 4 ^h 5 | 21 ^h 47 | 4 ^h 59 | 4 ^h 0 | 3 ^h 50 | 3 ^h 23 | 3 ^h 56 | 19 ^h 36 |
| F 21 | 23 58 55 | 27 ^h 51'56 | 15 ^h 18 | 12 ^h 10 | 8 ^h 54 | 9 ^h 16 | 2 ^h 23 | 4 ^h 8 | 21 ^h 50 | 5 ^h 0 | 4 ^h 2 | 3 ^h 50 | 3 ^h 20 | 4 ^h 3 | 19 ^h 33 |
| S 22 | 0 2 51 | 28 ^h 50'37 | 29 ^h 27 | 13 ^h 46 | 10 ^h 4 | 9 ^h 14 | 2 ^h 22 | 4 ^h 10 | 21 ^h 54 | 5 ^h 1 | 4 ^h 4 | 3 ^h 48 | 3 ^h 16 | 4 ^h 10 | 19 ^h 31 |
| S 23 | 0 6 48 | 29 ^h 49'21 | 13 ^h 35 | 15 ^h 20 | 11 ^h 14 | 9 ^h 12 | 2 ^h 20 | 4 ^h 13 | 21 ^h 57 | 5 ^h 2 | 4 ^h 7 | 3 ^h 44 | 3 ^h 13 | 4 ^h 16 | 19 ^h 28 |
| M24 | 0 10 45 | 0 ^h 48'07 | 27 ^h 41 | 16 ^h 54 | 12 ^h 23 | 9 ^h 9 | 2 ^h 19 | 4 ^h 16 | 22 ^h 1 | 5 ^h 4 | 4 ^h 9 | 3 ^h 37 | 3 ^h 10 | 4 ^h 23 | 19 ^h 25 |
| T 25 | 0 14 41 | 1 ^h 46'55 | 11 ^h 39 | 18 ^h 26 | 13 ^h 33 | 9 ^h 5 | 2 ^h 19 | 4 ^h 18 | 22 ^h 4 | 5 ^h 5 | 4 ^h 11 | 3 ^h 28 | 3 ^h 7 | 4 ^h 29 | 19 ^h 23 |
| W26 | 0 18 38 | 2 ^h 45'44 | 25 ^h 27 | 19 ^h 58 | 14 ^h 42 | 9 ^h 0 | 2 ^h 18 | 4 ^h 20 | 22 ^h 8 | 5 ^h 6 | 4 ^h 14 | 3 ^h 16 | 3 ^h 4 | 4 ^h 36 | 19 ^h 20 |
| T 27 | 0 22 34 | 3 ^h 44'36 | 9 ^h 0 | 21 ^h 29 | 15 ^h 52 | 8 ^h 54 | 2 ^h 18 | 4 ^h 23 | 22 ^h 12 | 5 ^h 7 | 4 ^h 16 | 3 ^h 3 | 3 ^h 1 | 4 ^h 43 | 19 ^h 18 |
| F 28 | 0 26 31 | 4 ^h 43'30 | 22 ^h 15 | 22 ^h 59 | 17 ^h 1 | 8 ^h 47 | 2 ^h 17 | 4 ^h 25 | 22 ^h 15 | 5 ^h 9 | 4 ^h 18 | 2 ^h 51 | 2 ^h 57 | 4 ^h 49 | 19 ^h 15 |
| S 29 | 0 30 27 | 5 ^h 42'26 | 5 ^h 11 | 24 ^h 27 | 18 ^h 10 | 8 ^h 40 | 2 ^h 17 | 4 ^h 27 | 22 ^h 19 | 5 ^h 10 | 4 ^h 20 | 2 ^h 39 | 2 ^h 54 | 4 ^h 56 | 19 ^h 12 |
| S 30 | 0 34 24 | 6 ^h 41'24 | 17 ^h 48 | 25 ^h 55 | 19 ^h 19 | 8 ^h 31 | 2 ^h 18 | 4 ^h 29 | 22 ^h 23 | 5 ^h 11 | 4 ^h 23 | 2 ^h 31 | 2 ^h 51 | 5 ^h 3 | 19 ^h 10 |

Delta T = 44.13 sec.

OCTOBER 1973

00:00 UT

| Day | Sid.t | ☉ | ☾ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|----------------------|--------------------|--------------------|--------------------|---------------------|-------------------|-------------------|--------------------|-------------------|-------------------|--------------------|-------------------|-------------------|---------------------|
| M 1 | 0 38 20 | 7 ^h 40'24 | 0 ^h 6 | 27 ^h 22 | 20 ^h 28 | 8°R22 | 2 ^h 18 | 4 ^h 31 | 22 ^h 26 | 5 ^h 13 | 4 ^h 25 | 2°R25 | 2 ^h 48 | 5 ^h 9 | 19°R 7 |
| T 2 | 0 42 17 | 8°39'25 | 12°11 | 28°48 | 21°37 | 8 ^h 12 | 2°19 | 4°32 | 22°30 | 5°14 | 4°27 | 2 ^h 21 | 2°45 | 5°16 | 19 ^h 4 |
| W 3 | 0 46 14 | 9°38'29 | 24° 4 | 0 ^h 13 | 22°46 | 8° 1 | 2°19 | 4°34 | 22°34 | 5°16 | 4°30 | 2°20 | 2°41 | 5°23 | 19° 2 |
| T 4 | 0 50 10 | 10°37'34 | 5 ^h 53 | 1°37 | 23°55 | 7°49 | 2°20 | 4°36 | 22°37 | 5°17 | 4°32 | 2°20 | 2°38 | 5°29 | 18°59 |
| F 5 | 0 54 7 | 11°36'41 | 17°41 | 3° 0 | 25° 4 | 7°36 | 2°21 | 4°37 | 22°41 | 5°19 | 4°34 | 2°20 | 2°35 | 5°36 | 18°56 |
| S 6 | 0 58 3 | 12°35'50 | 29°36 | 4°22 | 26°12 | 7°23 | 2°23 | 4°38 | 22°45 | 5°20 | 4°36 | 2°19 | 2°32 | 5°43 | 18°54 |
| S 7 | 1 2 0 | 13°35'00 | 11 ^h 41 | 5°43 | 27°20 | 7° 9 | 2°24 | 4°39 | 22°49 | 5°22 | 4°39 | 2°16 | 2°29 | 5°49 | 18°51 |
| M 8 | 1 5 56 | 14°34'12 | 24° 2 | 7° 3 | 28°29 | 6°55 | 2°26 | 4°40 | 22°52 | 5°23 | 4°41 | 2°10 | 2°26 | 5°56 | 18°48 |
| T 9 | 1 9 53 | 15°33'26 | 6 ^h 42 | 8°21 | 29°37 | 6°39 | 2°28 | 4°41 | 22°56 | 5°25 | 4°43 | 2° 2 | 2°22 | 6° 2 | 18°45 |
| W10 | 1 13 49 | 16°32'42 | 19°43 | 9°38 | 0 ^h 45 | 6°23 | 2°30 | 4°42 | 23° 0 | 5°26 | 4°46 | 1°52 | 2°19 | 6° 9 | 18°43 |
| T 11 | 1 17 46 | 17°32'00 | 3 ^h 7 | 10°54 | 1°53 | 6° 7 | 2°33 | 4°43 | 23° 4 | 5°28 | 4°48 | 1°40 | 2°16 | 6°16 | 18°40 |
| F 12 | 1 21 43 | 18°31'19 | 16°50 | 12° 8 | 3° 1 | 5°50 | 2°35 | 4°44 | 23° 7 | 5°30 | 4°50 | 1°28 | 2°13 | 6°22 | 18°37 |
| S 13 | 1 25 39 | 19°30'41 | 0 ^h 49 | 13°21 | 4° 8 | 5°32 | 2°38 | 4°44 | 23°11 | 5°31 | 4°52 | 1°17 | 2°10 | 6°29 | 18°34 |
| S 14 | 1 29 36 | 20°30'05 | 15° 1 | 14°32 | 5°16 | 5°14 | 2°41 | 4°45 | 23°15 | 5°33 | 4°55 | 1° 8 | 2° 6 | 6°36 | 18°32 |
| M15 | 1 33 32 | 21°29'31 | 29°19 | 15°42 | 6°23 | 4°56 | 2°44 | 4°45 | 23°19 | 5°35 | 4°57 | 1° 2 | 2° 3 | 6°42 | 18°29 |
| T 16 | 1 37 29 | 22°29'00 | 13 ^h 11 | 16°49 | 7°31 | 4°37 | 2°47 | 4°45 | 23°22 | 5°37 | 4°59 | 0°59 | 2° 0 | 6°49 | 18°26 |
| W17 | 1 41 25 | 23°28'30 | 27°56 | 17°54 | 8°38 | 4°18 | 2°51 | 4°R45 | 23°26 | 5°38 | 5° 1 | 0°D58 | 1°57 | 6°56 | 18°24 |
| T 18 | 1 45 22 | 24°28'03 | 12 ^h 9 | 18°57 | 9°45 | 3°58 | 2°54 | 4°45 | 23°30 | 5°40 | 5° 3 | 0°58 | 1°54 | 7° 2 | 18°21 |
| F 19 | 1 49 18 | 25°27'39 | 26°15 | 19°58 | 10°51 | 3°39 | 2°58 | 4°45 | 23°34 | 5°42 | 5° 6 | 0°R58 | 1°51 | 7° 9 | 18°18 |
| S 20 | 1 53 15 | 26°27'16 | 10 ^h 14 | 20°55 | 11°58 | 3°19 | 3° 2 | 4°45 | 23°38 | 5°44 | 5° 8 | 0°57 | 1°47 | 7°16 | 18°15 |
| S 21 | 1 57 12 | 27°26'56 | 24° 5 | 21°50 | 13° 5 | 2°58 | 3° 6 | 4°44 | 23°41 | 5°46 | 5°10 | 0°54 | 1°44 | 7°22 | 18°13 |
| M22 | 2 1 8 | 28°26'38 | 7 ^h 48 | 22°41 | 14°11 | 2°38 | 3°11 | 4°44 | 23°45 | 5°48 | 5°12 | 0°49 | 1°41 | 7°29 | 18°10 |
| T 23 | 2 5 5 | 29°26'23 | 21°22 | 23°28 | 15°17 | 2°18 | 3°15 | 4°43 | 23°49 | 5°49 | 5°14 | 0°41 | 1°38 | 7°35 | 18° 7 |
| W24 | 2 9 1 | 0 ^h 26'09 | 4 ^h 44 | 24°11 | 16°23 | 1°58 | 3°20 | 4°43 | 23°53 | 5°51 | 5°16 | 0°31 | 1°35 | 7°42 | 18° 5 |
| T 25 | 2 12 58 | 1°25'58 | 17°54 | 24°50 | 17°29 | 1°37 | 3°25 | 4°42 | 23°56 | 5°53 | 5°19 | 0°20 | 1°32 | 7°49 | 18° 2 |
| F 26 | 2 16 54 | 2°25'48 | 0 ^h 49 | 25°23 | 18°35 | 1°17 | 3°30 | 4°41 | 24° 0 | 5°55 | 5°21 | 0°10 | 1°28 | 7°55 | 17°59 |
| S 27 | 2 20 51 | 3°25'41 | 13°30 | 25°51 | 19°40 | 0°57 | 3°35 | 4°40 | 24° 4 | 5°57 | 5°23 | 0° 0 | 1°25 | 8° 2 | 17°57 |
| S 28 | 2 24 47 | 4°25'35 | 25°56 | 26°13 | 20°45 | 0°38 | 3°41 | 4°39 | 24° 8 | 5°59 | 5°25 | 29 ^h 53 | 1°22 | 8° 9 | 17°54 |
| M29 | 2 28 44 | 5°25'32 | 8 ^h 8 | 26°28 | 21°50 | 0°18 | 3°46 | 4°37 | 24°11 | 6° 1 | 5°27 | 29°48 | 1°19 | 8°15 | 17°52 |
| T 30 | 2 32 40 | 6°25'30 | 20° 8 | 26°R35 | 22°55 | 29° ^h 59 | 3°52 | 4°36 | 24°15 | 6° 3 | 5°29 | 29°45 | 1°16 | 8°22 | 17°49 |
| W31 | 2 36 37 | 7 ^h 25'30 | 2 ^h 0 | 26 ^h 35 | 24 ^h 0 | 29° ^h 40 | 3 ^h 58 | 4 ^h 35 | 24 ^h 19 | 6 ^h 5 | 5 ^h 31 | 29°D45 | 1 ^h 12 | 8 ^h 29 | 17° ^h 46 |

SWISS EPHEMERIS for the year 1973

NOVEMBER 1973

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|----------|-------|--------|-------|--------|------|-------|-------|------|------|--------|--------|--------|--------|
| T 1 | 2 40 34 | 8♈25°32 | 13♈47 | 26°R26 | 25♈4 | 29°R22 | 4♈4 | 4°R33 | 24♈23 | 6♈7 | 5♈33 | 29♈46 | 1♈9 | 8♈35 | 17°R44 |
| F 2 | 2 44 30 | 9°25'35 | 25°34 | 26♈7 | 26°8 | 29°R4 | 4°11 | 4♈31 | 24°26 | 6°9 | 5°35 | 29°47 | 1°6 | 8°42 | 17°R41 |
| S 3 | 2 48 27 | 10°25'40 | 7♈27 | 25°40 | 27°12 | 28°47 | 4°17 | 4°30 | 24°30 | 6°11 | 5°37 | 29°R48 | 1°3 | 8°49 | 17°39 |
| S 4 | 2 52 23 | 11°25'46 | 19°31 | 25°2 | 28°16 | 28°30 | 4°24 | 4°28 | 24°34 | 6°13 | 5°39 | 29°48 | 1°0 | 8°55 | 17°36 |
| M 5 | 2 56 20 | 12°25'54 | 1♈51 | 24°15 | 29°19 | 28°14 | 4°30 | 4°26 | 24°37 | 6°16 | 5°41 | 29°45 | 0°57 | 9°2 | 17°34 |
| T 6 | 3 0 16 | 13°26'03 | 14°32 | 23°19 | 0♈22 | 27°58 | 4°37 | 4°24 | 24°41 | 6°18 | 5°43 | 29°41 | 0°53 | 9°9 | 17°32 |
| W 7 | 3 4 13 | 14°26'14 | 27°36 | 22°15 | 1°25 | 27°43 | 4°45 | 4°21 | 24°44 | 6°20 | 5°45 | 29°36 | 0°50 | 9°15 | 17°29 |
| T 8 | 3 8 9 | 15°26'27 | 11°R6 | 21°4 | 2°27 | 27°28 | 4°52 | 4°19 | 24°48 | 6°22 | 5°47 | 29°28 | 0°47 | 9°22 | 17°27 |
| F 9 | 3 12 6 | 16°26'41 | 25°1 | 19°48 | 3°29 | 27°15 | 4°59 | 4°17 | 24°52 | 6°24 | 5°48 | 29°21 | 0°44 | 9°28 | 17°25 |
| S 10 | 3 16 3 | 17°26'57 | 9♈19 | 18°28 | 4°31 | 27°2 | 5°7 | 4°14 | 24°55 | 6°26 | 5°50 | 29°14 | 0°41 | 9°35 | 17°22 |
| S 11 | 3 19 59 | 18°27'14 | 23°53 | 17°9 | 5°32 | 26°49 | 5°14 | 4°11 | 24°59 | 6°28 | 5°52 | 29°9 | 0°38 | 9°42 | 17°20 |
| M 12 | 3 23 56 | 19°27'33 | 8♈37 | 15°51 | 6°34 | 26°38 | 5°22 | 4°9 | 25°2 | 6°31 | 5°54 | 29°5 | 0°34 | 9°48 | 17°18 |
| T 13 | 3 27 52 | 20°27'55 | 23°23 | 14°38 | 7°34 | 26°27 | 5°30 | 4°6 | 25°6 | 6°33 | 5°56 | 29°D4 | 0°31 | 9°55 | 17°16 |
| W 14 | 3 31 49 | 21°28'18 | 8♈5 | 13°32 | 8°35 | 26°17 | 5°38 | 4°3 | 25°9 | 6°35 | 5°57 | 29°4 | 0°28 | 10°2 | 17°13 |
| T 15 | 3 35 45 | 22°28'42 | 22°37 | 12°35 | 9°35 | 26°8 | 5°47 | 4°0 | 25°13 | 6°37 | 5°59 | 29°5 | 0°25 | 10°8 | 17°11 |
| F 16 | 3 39 42 | 23°29'09 | 6♈56 | 11°48 | 10°34 | 25°59 | 5°55 | 3°57 | 25°16 | 6°39 | 6°1 | 29°7 | 0°22 | 10°15 | 17°9 |
| S 17 | 3 43 39 | 24°29'38 | 20°58 | 11°12 | 11°33 | 25°51 | 6°4 | 3°54 | 25°20 | 6°42 | 6°3 | 29°R7 | 0°18 | 10°22 | 17°7 |
| S 18 | 3 47 35 | 25°30'08 | 4♈45 | 10°48 | 12°32 | 25°44 | 6°12 | 3°51 | 25°23 | 6°44 | 6°4 | 29°7 | 0°15 | 10°28 | 17°5 |
| M 19 | 3 51 32 | 26°30'40 | 18°15 | 10°35 | 13°30 | 25°38 | 6°21 | 3°47 | 25°27 | 6°46 | 6°6 | 29°5 | 0°12 | 10°35 | 17°3 |
| T 20 | 3 55 28 | 27°31'14 | 1♈30 | 10°D34 | 14°28 | 25°33 | 6°30 | 3°44 | 25°30 | 6°48 | 6°8 | 29°2 | 0°9 | 10°42 | 17°1 |
| W 21 | 3 59 25 | 28°31'50 | 14°31 | 10°44 | 15°26 | 25°28 | 6°39 | 3°40 | 25°33 | 6°50 | 6°9 | 28°57 | 0°6 | 10°48 | 16°59 |
| T 22 | 4 3 21 | 29°32'27 | 27°18 | 11°4 | 16°22 | 25°25 | 6°48 | 3°37 | 25°37 | 6°53 | 6°11 | 28°52 | 0°3 | 10°55 | 16°57 |
| F 23 | 4 7 18 | 0♈33'06 | 9♈53 | 11°33 | 17°19 | 25°22 | 6°58 | 3°33 | 25°40 | 6°55 | 6°12 | 28°47 | 29°R56 | 11°2 | 16°56 |
| S 24 | 4 11 14 | 1°33'47 | 22°16 | 12°10 | 18°15 | 25°20 | 7°7 | 3°29 | 25°43 | 6°57 | 6°14 | 28°43 | 29°56 | 11°8 | 16°54 |
| S 25 | 4 15 11 | 2°34'29 | 4♈28 | 12°54 | 19°10 | 25°19 | 7°17 | 3°25 | 25°46 | 6°59 | 6°15 | 28°39 | 29°53 | 11°15 | 16°52 |
| M 26 | 4 19 7 | 3°35'13 | 16°30 | 13°45 | 20°4 | 25°D18 | 7°27 | 3°21 | 25°50 | 7°2 | 6°17 | 28°37 | 29°50 | 11°21 | 16°50 |
| T 27 | 4 23 4 | 4°35'57 | 28°25 | 14°42 | 20°58 | 25°19 | 7°36 | 3°18 | 25°53 | 7°4 | 6°18 | 28°D37 | 29°47 | 11°28 | 16°49 |
| W 28 | 4 27 1 | 5°36'43 | 10♈14 | 15°44 | 21°52 | 25°20 | 7°46 | 3°13 | 25°56 | 7°6 | 6°20 | 28°37 | 29°44 | 11°35 | 16°47 |
| T 29 | 4 30 57 | 6°37'30 | 22°0 | 16°50 | 22°45 | 25°22 | 7°57 | 3°9 | 25°59 | 7°8 | 6°21 | 28°38 | 29°40 | 11°41 | 16°46 |
| F 30 | 4 34 54 | 7°38'19 | 3♈48 | 17°R59 | 23♈37 | 25°R25 | 8°8 | 3°5 | 26°2 | 7°11 | 6°22 | 28°R40 | 29°R37 | 11°R48 | 16°R44 |

Delta T = 44.31 sec.

DECEMBER 1973

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|----------|-------|-------|--------|--------|--------|------|-------|------|------|--------|--------|--------|--------|
| S 1 | 4 38 50 | 8♈39'08 | 15♈40 | 19♈12 | 24♈28 | 25°R28 | 8♈17 | 3°R1 | 26°2 | 7°13 | 6°24 | 28°R42 | 29°R34 | 11°R55 | 16°R43 |
| S 2 | 4 42 47 | 9°39'58 | 27°42 | 20°28 | 25°19 | 25°33 | 8°28 | 2°57 | 26°8 | 7°15 | 6°25 | 28°43 | 29°31 | 12°1 | 16°R41 |
| M 3 | 4 46 43 | 10°40'48 | 9♈59 | 21°46 | 26°8 | 25°38 | 8°38 | 2°52 | 26°11 | 7°18 | 6°26 | 28°R44 | 29°28 | 12°8 | 16°40 |
| T 4 | 4 50 40 | 11°41'40 | 22°34 | 23°6 | 26°57 | 25°43 | 8°49 | 2°48 | 26°14 | 7°20 | 6°27 | 28°43 | 29°24 | 12°15 | 16°39 |
| W 5 | 4 54 37 | 12°42'33 | 5°R33 | 24°28 | 27°46 | 25°50 | 8°59 | 2°43 | 26°17 | 7°22 | 6°29 | 28°42 | 29°21 | 12°21 | 16°37 |
| T 6 | 4 58 33 | 13°43'26 | 18°58 | 25°52 | 28°33 | 25°57 | 9°10 | 2°39 | 26°20 | 7°24 | 6°30 | 28°40 | 29°18 | 12°28 | 16°36 |
| F 7 | 5 2 30 | 14°44'20 | 2♈51 | 27°17 | 29°19 | 26°5 | 9°21 | 2°34 | 26°23 | 7°27 | 6°31 | 28°38 | 29°15 | 12°35 | 16°35 |
| S 8 | 5 6 26 | 15°45'15 | 17°10 | 28°42 | 0♈4 | 26°14 | 9°32 | 2°30 | 26°25 | 7°29 | 6°32 | 28°37 | 29°12 | 12°41 | 16°34 |
| S 9 | 5 10 23 | 16°46'11 | 1♈53 | 0♈9 | 0°49 | 26°23 | 9°44 | 2°25 | 26°28 | 7°31 | 6°33 | 28°35 | 29°9 | 12°48 | 16°33 |
| M 10 | 5 14 19 | 17°47'07 | 16°52 | 1°37 | 1°32 | 26°33 | 9°55 | 2°20 | 26°31 | 7°33 | 6°34 | 28°34 | 29°5 | 12°55 | 16°32 |
| T 11 | 5 18 16 | 18°48'05 | 1♈59 | 3°5 | 2°14 | 26°44 | 10°6 | 2°16 | 26°34 | 7°35 | 6°35 | 28°D34 | 29°2 | 13°1 | 16°31 |
| W 12 | 5 22 12 | 19°49'04 | 17°5 | 4°34 | 2°55 | 26°55 | 10°18 | 2°11 | 26°36 | 7°38 | 6°36 | 28°35 | 28°59 | 13°8 | 16°30 |
| T 13 | 5 26 9 | 20°50'03 | 2♈1 | 6°3 | 3°35 | 27°7 | 10°29 | 2°6 | 26°39 | 7°40 | 6°37 | 28°35 | 28°56 | 13°14 | 16°29 |
| F 14 | 5 30 6 | 21°51'03 | 16°41 | 7°33 | 4°14 | 27°19 | 10°41 | 2°1 | 26°41 | 7°42 | 6°38 | 28°36 | 28°53 | 13°21 | 16°28 |
| S 15 | 5 34 2 | 22°52'05 | 0♈59 | 9°3 | 4°51 | 27°32 | 10°53 | 1°56 | 26°44 | 7°44 | 6°39 | 28°37 | 28°50 | 13°28 | 16°28 |
| S 16 | 5 37 59 | 23°53'07 | 14°53 | 10°34 | 5°27 | 27°46 | 11°4 | 1°51 | 26°46 | 7°47 | 6°40 | 28°37 | 28°46 | 13°34 | 16°27 |
| M 17 | 5 41 55 | 24°54'10 | 28°24 | 12°4 | 6°2 | 28°0 | 11°16 | 1°47 | 26°49 | 7°49 | 6°40 | 28°R37 | 28°43 | 13°41 | 16°26 |
| T 18 | 5 45 52 | 25°55'15 | 11♈33 | 13°36 | 6°35 | 28°15 | 11°28 | 1°42 | 26°51 | 7°51 | 6°41 | 28°37 | 28°40 | 13°48 | 16°26 |
| W 19 | 5 49 48 | 26°56'20 | 24°22 | 15°7 | 7°7 | 28°30 | 11°41 | 1°37 | 26°54 | 7°53 | 6°42 | 28°37 | 28°37 | 13°54 | 16°25 |
| T 20 | 5 53 45 | 27°57'26 | 6♈54 | 16°39 | 7°37 | 28°46 | 11°53 | 1°32 | 26°56 | 7°55 | 6°43 | 28°36 | 28°34 | 14°1 | 16°25 |
| F 21 | 5 57 41 | 28°58'33 | 19°13 | 18°11 | 8°6 | 29°2 | 12°5 | 1°27 | 26°58 | 7°57 | 6°43 | 28°D36 | 28°30 | 14°8 | 16°24 |
| S 22 | 6 1 38 | 29°59'40 | 1♈21 | 19°43 | 8°33 | 29°19 | 12°17 | 1°22 | 27°0 | 8°0 | 6°44 | 28°37 | 28°27 | 14°14 | 16°24 |
| S 23 | 6 5 35 | 1♈049 | 13°20 | 21°15 | 8°58 | 29°36 | 12°30 | 1°17 | 27°3 | 8°2 | 6°45 | 28°37 | 28°24 | 14°21 | 16°24 |
| M 24 | 6 9 31 | 2°1'57 | 25°13 | 22°48 | 9°21 | 29°54 | 12°42 | 1°12 | 27°5 | 8°4 | 6°45 | 28°R37 | 28°21 | 14°28 | 16°23 |
| T 25 | 6 13 28 | 3°3'06 | 7♈3 | 24°20 | 9°43 | 0♈12 | 12°55 | 1°7 | 27°7 | 8°6 | 6°46 | 28°37 | 28°18 | 14°34 | 16°23 |
| W 26 | 6 17 24 | 4°4'16 | 18°50 | 25°54 | 10°3 | 0°31 | 13°7 | 1°2 | 27°9 | 8°8 | 6°46 | 28°36 | 28°15 | 14°41 | 16°23 |
| T 27 | 6 21 21 | 5°5'26 | 0♈38 | 27°27 | 10°20 | 0°50 | 13°20 | 0°57 | 27°11 | 8°10 | 6°47 | 28°36 | 28°11 | 14°48 | 16°23 |
| F 28 | 6 25 17 | 6°6'35 | 12°29 | 29°0 | 10°36 | 1°10 | 13°33 | 0°52 | 27°13 | 8°12 | 6°47 | 28°35 | 28°8 | 14°54 | 16°D23 |
| S 29 | 6 29 14 | 7°7'45 | 24°24 | 0♈34 | 10°49 | 1°30 | 13°46 | 0°47 | 27°15 | 8°14 | 6°48 | 28°34 | 28°5 | 15°1 | 16°23 |
| S 30 | 6 33 10 | 8°8'55 | 6♈29 | 2°8 | 11°1 | 1°50 | 13°59 | 0°42 | 27°16 | 8°16 | 6°48 | 28°32 | 28°2 | 15°8 | 16°23 |
| M 31 | 6 37 7 | 9♈10'05 | 18♈45 | 3♈43 | 11°R10 | 2♈11 | 14°R12 | 0°37 | 27°18 | 8°18 | 6°48 | 28°R31 | 27°R59 | 15°R14 | 16°R23 |

Delta T = 44.40 sec.

created from Swiss Ephemeris, Copyright Astrodienst AG [11.2.2014]