

Astrodienst Ephemeris Tables for the year 2062

Positions modulo 16, tropical geocentric zodiac

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

Programming
Dieter Koch and Alois Treindl
based on Swiss Ephemeris
Code D5EPH

JANUARY 2062 mod 16

00:00 UT

| Day | Sid.t | 0 | D | Ϋ́ | φ | ♂ | 4 | ħ |)ұ(| 并 | Р | n | Ω | Ç | , k | Day |
|--------------|--------------------|----------------------|---------------|----------------|----------------|----------------|----------------|----------------|--------------|----------------|----------------|--------------|--------------|----------------|----------------|--------------|
| S 1 M 2 | 6 43 45 6 47 42 | 10°49'45 11°50'53 | 14°46 5°20 | 7°40 8°22 | 3°42 3° 9 | 3°42 4°29 | 14°19 14°12 | 19°34 19°29 | 1°25 1°27 | 13°40 13°38 | 14°45 14°45 | 5°36 5°36 | 5°53 5°50 | 18°36 18°43 | 15°38 15°41 | S 1 M 2 |
| T 3 | 6 51 38 | 11°50'53' | 17°59 | 8°55 | 2°37 | 5°16 | 14 12 14° 5 | 19°24 | 1°30 | 13°37 | 14°46 | 5°36 | 5°46 | 18°49 | 15°44 | T 3 |
| W 4 | 6 55 35 | 13°53'11 | 7°49 | 9°18 | 2° 6 | 6° 3 | 13°59 | 19°20 | 1°32 | 13°35 | 14°47 | 5°35 | 5°43 | 18°56 | 15°47 | W 4 |
| T 5 | 6 59 31 | 14°54'21 | 19°56 | 9°32 | 1°37 | 6°50 | 13°52 | 19°15 | 1°35 | 13°33 | 14°47 | 5°32 | 5°40 | 19° 3 | 15°50 | T 5 |
| F 6 | 7 3 28 | 15°55'31 | 9°23 | 9°35 | 1°10 | 7°38 | 13°44 | 19°11 | 1°37 | 13°32 | 14°48 | 5°26 | 5°37 | 19°10 | 15°53 | F 6 |
| S 7 | 7 7 24 | 16°56'41 | 21°15 | 9°26 | 0°45 | 8°25 | 13°37 | 19° 6 | 1°39 | 13°30 | 14°49 | 5°18 | 5°34 | 19°16 | 15°56 | S 7 |
| S 8 | 7 11 21 | 17°57'51 | 10°36 | 9° 6 | 0°22 | 9°12 | 13°30 | 19° 2 | 1°42 | 13°29 | 14°50 | 5° 6 | 5°31 | 19°23 | 15°59 | S 8 |
| M 9 | 7 15 17 | 18°59'01 | 22°27 | 8°34 | 0° 2 | 9°59 | 13°23 | 18°57 | 1°44 | 13°27 | 14°51 | 4°53 | 5°27 | 19°30 | 16° 3 | M 9 |
| T 10 W11 | 7 19 14 7 23 11 | 20° 0'11 21° 1'21 | 11°51 1°19 | 7°50 6°56 | 22°13 21°57 | 10°46 11°33 | 13°15 13° 8 | 18°53 18°49 | 1°46 1°48 | 13°26 13°25 | 14°51 14°52 | 4°38 4°24 | 5°24 5°21 | 19°36 19°43 | 16° 6 16° 9 | T 10 W11 |
| T 12 | 7 27 7 | 21° 1'21° 22° 2'30° | 13°23 | 5°52 | 21°44 | 11°33 | 13° 0 | 18°45 | 1°50 | 13°23 | 14°53 | 4°11 | 5°18 | 19°43 | 16°13 | T 12 |
| F 13 | 7 31 4 | 0°33'39 | 3° 2 | 4°41 | 21°33 | 13° 7 | 12°52 | 18°40 | 1°52 | 13°22 | 14°54 | 4° 0 | 5°15 | 19°57 | 16°16 | F 13 |
| S 14 | 7 35 0 | 1°34'48 | 15°20 | 3°25 | 21°24 | 13°55 | 12°45 | 18°36 | 1°54 | 13°20 | 14°55 | 3°52 | 5°12 | 20° 3 | 16°19 | S 14 |
| S 15 | 7 38 57 | 2°35'56 | 5°16 | 2° 6 | 21°18 | 14°42 | 12°37 | 18°32 | 1°56 | 13°19 | 14°56 | 3°48 | 5° 8 | 20°10 | 16°23 | S 15 |
| M16 | 7 42 53 | 3°37'03 | 17°55 | 0°47 | 21°15 | 15°29 | 12°29 | 18°28 | 1°58 | 13°18 | 14°57 | 3°46 | 5° 5 | 20°17 | 16°26 | M16 |
| T 17 | 7 46 50 | 4°38'10 | 8°18 | 22° 0 | 21°14 | 16°16 | 12°21 | 18°25 | 2° 0 | 13°16 | 14°58 | 3°45 | 5° 2 | 20°23 | 16°30 | T 17 |
| W18 | 7 50 46 | 5°39'16 | 21°30 | 20°48 | 21°15 | 17° 3 | 12°13 | 18°21 | 2° 2 | 13°15 | 14°59 | 3°46 | 4°59 | 20°30 | 16°33 | W18 |
| T 19 F 20 | 7 54 43 7 58 40 | 6°40'21 7°41'26 | 12°32 3°58 | 19°42 18°43 | 21°19 21°25 | 17°50 18°37 | 12° 5 11°57 | 18°17 18°13 | 2° 4 2° 5 | 13°14 13°13 | 15° 0 15° 1 | 3°46 3°44 | 4°56 4°52 | 20°37 20°44 | 16°37 16°40 | T 19 F 20 |
| S 21 | 8 2 36 | 8°42'29 | 18°18 | 17°52 | 21°33 | 19°24 | 11°49 | 18°10 | 2° 7 | 13°11 | 15° 2 | 3°40 | 4°49 | 20°50 | 16°44 | S 21 |
| S 22 | 8 633 | 9°43'32 | 10°29 | 17°11 | 21°44 | 20°11 | 11°41 | 18° 6 | 2° 9 | 13°10 | 15° 3 | 3°34 | 4°46 | 20°57 | 16°48 | S 22 |
| M23 | 8 10 29 | 10°44'34 | 2°58 | 16°39 | 21°56 | 20°58 | 11°33 | 18° 3 | 2°10 | 13° 10 | 15° 4 | 3°26 | 4°43 | 21° 4 | 16°51 | M23 |
| T 24 | 8 14 26 | 11°45'35 | 18° 4 | 16°17 | 22°11 | 21°45 | 11°25 | 18° 0 | 2°12 | 13° 8 | 15° 5 | 3°16 | 4°40 | 21°11 | 16°55 | T 24 |
| W25 | 8 18 22 | 12°46'35 | 10°40 | 16° 3 | 22°28 | 0° 2 | 11°17 | 17°56 | 2°13 | 13° 7 | 15° 6 | 3° 7 | 4°37 | 21°17 | 16°59 | W25 |
| T 26 | 8 22 19 | 13°47'34 | 3° 3 | 15°58 | 0°17 | 0°49 | 11° 9 | 17°53 | 2°15 | 13° 6 | 15° 7 | 2°59 | 4°33 | 21°24 | 17° 2 | T 26 |
| F 27 | 8 26 15 | 14°48'32 | 17°37 | 16° 1 | 0°38 | 1°36 | 11° 1 | 17°50 | 2°16 | 13° 5 | 15° 8 | 2°53 | 4°30 | 21°31 | 17° 6 | F 27 |
| S 28 | 8 30 12 | 15°49'30 | 9°14 | 16°11 | 1° 1 | 2°23 | 10°53 | 17°47 | 2°17 | 13° 4 | 15°10 | 2°49 | 4°27 | 21°37 | 17°10 | S 28 |
| S 29 | 8 34 9 | 16°50'27 | 0°24 | 16°28 | 1°25 | 3°10 | 10°45 | 17°45 | 2°18 | 13° 3 | 15°11 | 2°48 | 4°24 | 21°44 | 17°14 | S 29 |
| M30 T 31 | 8 38 5 8 42 2 | 17°51'23 18°52'18 | 13°35 3°51 | 16°52 17°22 | 1°52 2°20 | 3°57 4°44 | 10°37 10°29 | 17°42 17°39 | 2°20 2°21 | 13° 2 13° 1 | 15°12 15°13 | 2°48 2°49 | 4°21 4°18 | 21°51 21°58 | 17°18 17°21 | M30 T 31 |
| 1 31 | 0 42 2 | 16 32 18 | 3.21 | 1/22 | 2-20 | 4-44 | 10-29 | 1/-39 | 2-21 | 13. 1 | 13-13 | ∠-49 | 4-18 | 21.38 | 1/21 | 1 31 |

Delta T = 78.29 sec

FEBRUARY 2062 mod 16

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| Day | Sid.t | 0 | D | ğ | φ | ď | 4 | ħ |)Å(| 卉 | В | 'n | v | ţ | ę, | Day |
|------|----------|----------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|------|-------|-------|------|
| W 1 | 8 45 58 | 19°53'13 | 16°17 | 17°57 | 2°50 | 5°31 | 10°21 | 17°37 | 2°22 | 13° 0 | 15°14 | 2°50 | 4°14 | 22° 4 | 17°25 | W 1 |
| T 2 | 8 49 55 | 20°54'08 | 5°56 | 18°37 | 3°21 | 6°18 | 10°13 | 17°34 | 2°23 | 12°59 | 15°16 | 2°50 | 4°11 | 22°11 | 17°29 | T 2 |
| F 3 | 8 53 51 | 21°55'01 | 17°54 | 19°21 | 3°54 | 7° 5 | 10° 6 | 17°32 | 2°24 | 12°58 | 15°17 | 2°48 | 4° 8 | 22°18 | 17°33 | F 3 |
| S 4 | 8 57 48 | 0°25'54 | 7°16 | 20° 9 | 4°28 | 7°52 | 9°58 | 17°29 | 2°25 | 12°57 | 15°18 | 2°44 | 4° 5 | 22°25 | 17°37 | S 4 |
| S 5 | 9 1 44 | 1°26'46 | 19° 7 | 21° 1 | 5° 3 | 8°39 | 9°50 | 17°27 | 2°26 | 12°56 | 15°19 | 2°38 | 4° 2 | 0° 1 | 17°41 | S 5 |
| M 6 | 9 5 41 | 2°27'37 | 8°29 | 21°56 | 5°40 | 9°25 | 9°43 | 17°25 | 2°27 | 12°56 | 15°21 | 2°30 | 3°58 | 0° 8 | 17°45 | M 6 |
| T 7 | 9 9 38 | 3°28'26 | 20°27 | 0°24 | 6°18 | 10°12 | 9°35 | 17°23 | 2°27 | 12°55 | 15°22 | 2°21 | 3°55 | 0°15 | 17°49 | T 7 |
| W 8 | 9 13 34 | 4°29'15 | 10° 2 | 1°26 | 6°58 | 10°59 | 9°28 | 17°21 | 2°28 | 12°54 | 15°23 | 2°12 | 3°52 | 0°21 | 17°53 | W 8 |
| T 9 | 9 17 31 | 5°30'03 | 22°15 | 2°29 | 7°38 | 11°46 | 9°21 | 17°20 | 2°29 | 12°53 | 15°25 | 2° 4 | 3°49 | 0°28 | 17°57 | T 9 |
| F 10 | 9 21 27 | 6°30'49 | 12° 8 | 3°35 | 8°20 | 12°33 | 9°13 | 17°18 | 2°29 | 12°53 | 15°26 | 1°58 | 3°46 | 0°35 | 18° 1 | F 10 |
| S 11 | 9 25 24 | 7°31'34 | 2°11 | 4°43 | 9° 3 | 13°19 | 9° 6 | 17°17 | 2°30 | 12°52 | 15°28 | 1°54 | 3°43 | 0°42 | 18° 5 | S 11 |
| S 12 | 9 29 20 | 8°32'18 | 14°55 | 5°54 | 9°47 | 14° 6 | 8°59 | 17°15 | 2°30 | 12°52 | 15°29 | 1°51 | 3°39 | 0°48 | 18° 9 | S 12 |
| M13 | 9 33 17 | 9°33'00 | 5°21 | 7° 6 | 10°31 | 14°53 | 8°52 | 17°14 | 2°31 | 12°51 | 15°30 | 1°51 | 3°36 | 0°55 | 18°13 | M13 |
| T 14 | 9 37 13 | 10°33'40 | 18°29 | 8°20 | 11°17 | 15°39 | 8°46 | 17°13 | 2°31 | 12°51 | 15°32 | 1°52 | 3°33 | 1° 2 | 18°17 | T 14 |
| W15 | 9 41 10 | 11°34'19 | 9°21 | 9°35 | 12° 4 | 16°26 | 8°39 | 17°12 | 2°31 | 12°50 | 15°33 | 1°54 | 3°30 | 1° 8 | 18°21 | W15 |
| T 16 | 9 45 7 | 12°34'56 | 0°27 | 10°52 | 12°51 | 17°12 | 8°32 | 17°11 | 2°32 | 12°50 | 15°34 | 1°55 | 3°27 | 1°15 | 18°25 | T 16 |
| F 17 | 9 49 3 | 13°35'32 | 14°20 | 12°11 | 13°40 | 17°59 | 8°26 | 17°10 | 2°32 | 12°49 | 15°36 | 1°55 | 3°24 | 1°22 | 18°29 | F 17 |
| S 18 | 9 53 0 | 14°36'05 | 5°58 | 13°31 | 14°29 | 18°45 | 8°20 | 17° 9 | 2°32 | 12°49 | 15°37 | 1°55 | 3°20 | 1°29 | 18°33 | S 18 |
| S 19 | 9 56 56 | 15°36'37 | 20°20 | 14°52 | 15°19 | 19°32 | 8°14 | 17° 8 | 2°32 | 12°48 | 15°39 | 1°52 | 3°17 | 1°35 | 18°37 | S 19 |
| M20 | 10 0 53 | 16°37'08 | 12°23 | 16°14 | 16° 9 | 20°18 | 8° 8 | 17° 8 | 2°32 | 12°48 | 15°40 | 1°49 | 3°14 | 1°42 | 18°41 | M20 |
| T 21 | 10 4 49 | 17°37'36 | 4°32 | 17°38 | 17° 1 | 21° 5 | 8° 2 | 17° 8 | 2°32 | 12°48 | 15°42 | 1°45 | 3°11 | 1°49 | 18°45 | T 21 |
| W22 | 10 8 46 | 18°38'03 | 19°11 | 19° 3 | 17°53 | 21°51 | 7°56 | 17° 7 | 2°32 | 12°48 | 15°43 | 1°40 | 3° 8 | 1°56 | 18°49 | W22 |
| T 23 | 10 12 43 | 19°38'27 | 11°13 | 20°29 | 18°46 | 0° 7 | 7°51 | 17° 7 | 2°32 | 12°47 | 15°45 | 1°37 | 3° 4 | 2° 2 | 18°53 | T 23 |
| F 24 | 10 16 39 | 20°38'50 | 3° 1 | 21°56 | 19°39 | 0°54 | 7°45 | 17° 7 | 2°32 | 12°47 | 15°46 | 1°34 | 3° 1 | 2° 9 | 18°57 | F 24 |
| S 25 | 10 20 36 | 21°39'12 | 17° 0 | 0°55 | 20°33 | 1°40 | 7°40 | 17° 7 | 2°31 | 12°47 | 15°48 | 1°33 | 2°58 | 2°16 | 19° 1 | S 25 |
| S 26 | 10 24 32 | 0° 9'31 | 8° 7 | 2°24 | 21°28 | 2°26 | 7°35 | 17° 7 | 2°31 | 12°47 | 15°49 | 1°33 | 2°55 | 2°22 | 19° 5 | S 26 |
| M27 | 10 28 29 | 1° 9'50 | 21°20 | 3°55 | 22°23 | 3°12 | 7°30 | 17° 7 | 2°31 | 12°47 | 15°51 | 1°34 | 2°52 | 2°29 | 19° 9 | M27 |
| T 28 | 10 32 25 | 2°10'06 | 11°40 | 5°26 | 0°49 | 3°59 | 7°25 | 17° 8 | 2°30 | 12°47 | 15°52 | 1°35 | 2°49 | 2°36 | 19°13 | T 28 |

Delta T = 78.32 sec

MARCH 2062 mod 16

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| W 1 | 10 36 22 | 3°10'22 | 1°40 | 6°59 | 1°45 | 4°45 | 7°21 | 17° 8 | 2°30 | 12°47 | 15°54 | 1°37 | 2°45 | 2°43 | 19°17 | W 1 |
| T 2 | 10 40 18 | 4°10'35 | 13°54 | 8°32 | 2°42 | 5°31 | 7°16 | 17° 9 | 2°29 | 12°47 | 15°55 | 1°38 | 2°42 | 2°49 | 19°21 | T 2 |
| F 3 | 10 44 15 | 5°10'48 | 3°26 | 10° 7 | 3°39 | 6°17 | 7°12 | 17°10 | 2°29 | 12°47 | 15°57 | 1°39 | 2°39 | 2°56 | 19°25 | F 3 |
| S 4 | 10 48 11 | 6°10'59 | 15°21 | 11°43 | 4°37 | 7° 3 | 7° 8 | 17°11 | 2°28 | 12°47 | 15°58 | 1°38 | 2°36 | 3° 3 | 19°29 | S 4 |
| S 5 | 10 52 8 | 7°11'08 | 4°43 | 13°20 | 5°35 | 7°49 | 7° 4 | 17°11 | 2°28 | 12°47 | 16° 0 | 1°37 | 2°33 | 3°10 | 19°33 | S 5 |
| M 6 | 10 56 5 | 8°11'16 | 16°37 | 14°58 | 6°34 | 8°35 | 7° 0 | 17°13 | 2°27 | 12°47 | 16° 1 | 1°35 | 2°30 | 3°16 | 19°37 | M 6 |
| T 7 | 11 0 1 | 9°11'22 | 6° 7 | 16°37 | 7°33 | 9°21 | 6°57 | 17°14 | 2°26 | 12°47 | 16° 3 | 1°33 | 2°26 | 3°23 | 19°41 | T 7 |
| W 8 | 11 3 58 | 10°11'26 | 18°17 | 18°17 | 8°33 | 10° 6 | 6°53 | 17°15 | 2°25 | 12°48 | 16° 4 | 1°31 | 2°23 | 3°30 | 19°45 | W 8 |
| T 9 | 11 7 54 | 11°11'29 | 8° 9 | 19°58 | 9°33 | 10°52 | 6°50 | 17°16 | 2°24 | 12°48 | 16° 6 | 1°29 | 2°20 | 3°36 | 19°49 | T 9 |
| F 10 | 11 11 51 | 12°11'30 | 20°44 | 21°40 | 10°33 | 11°38 | 6°47 | 17°18 | 2°23 | 12°48 | 16° 8 | 1°27 | 2°17 | 3°43 | 19°53 | F 10 |
| S 11 | 11 15 47 | 13°11'29 | 11° 5 | 0°54 | 11°34 | 12°24 | 6°44 | 17°19 | 2°22 | 12°48 | 16° 9 | 1°27 | 2°14 | 3°50 | 19°57 | S 11 |
| S 12 | 11 19 44 | 14°11'26 | 1°40 | 2°38 | 12°35 | 13°10 | 6°42 | 17°21 | 2°21 | 12°49 | 16°11 | 1°26 | 2°10 | 3°57 | 20° 1 | S 12 |
| M13 | 11 23 40 | 15°11'21 | 15° 0 | 4°24 | 13°36 | 13°55 | 6°39 | 17°23 | 2°20 | 12°49 | 16°12 | 1°26 | 2° 7 | 4° 3 | 20° 5 | M13 |
| T 14 | 11 27 37 | 16°11'14 | 6° 3 | 6°11 | 14°38 | 14°41 | 6°37 | 17°25 | 2°19 | 12°50 | 16°14 | 1°27 | 2° 4 | 4°10 | 20° 9 | T 14 |
| W15 | 11 31 34 | 17°11'05 | 19°48 | 7°59 | 15°40 | 15°26 | 6°35 | 17°27 | 2°18 | 12°50 | 16°15 | 1°28 | 2° 1 | 4°17 | 20°12 | W15 |
| T 16 | 11 35 30 | 18°10'54 | 11°12 | 9°48 | 16°42 | 16°12 | 6°33 | 17°29 | 2°17 | 12°51 | 16°17 | 1°28 | 1°58 | 4°23 | 20°16 | T 16 |
| F 17 | 11 39 27 | 19°10'41 | 2°45 | 11°39 | 17°45 | 16°57 | 6°32 | 17°31 | 2°16 | 12°51 | 16°18 | 1°29 | 1°55 | 4°30 | 20°20 | F 17 |
| S 18 | 11 43 23 | 20°10'25 | 16°53 | 13°30 | 18°48 | 17°43 | 6°30 | 17°34 | 2°14 | 12°52 | 16°20 | 1°29 | 1°51 | 4°37 | 20°24 | S 18 |
| S 19 | 11 47 20 | 21°10'08 | 8°36 | 15°23 | 19°51 | 18°28 | 6°29 | 17°36 | 2°13 | 12°52 | 16°22 | 1°29 | 1°48 | 4°44 | 20°28 | S 19 |
| M20 | 11 51 16 | 22° 9'48 | 0°21 | 17°17 | 20°54 | 19°14 | 6°28 | 17°39 | 2°12 | 12°53 | 16°23 | 1°29 | 1°45 | 4°50 | 20°31 | M20 |
| T 21 | 11 55 13 | 0°39'25 | 14°35 | 19°12 | 21°58 | 19°59 | 6°27 | 17°42 | 2°10 | 12°54 | 16°25 | 1°29 | 1°42 | 4°57 | 20°35 | T 21 |
| W22 | 11 59 9 | 1°39'00 | 6°15 | 21° 9 | 0°32 | 20°44 | 6°26 | 17°44 | 2° 9 | 12°54 | 16°26 | 1°29 | 1°39 | 5° 4 | 20°39 | W22 |
| T 23 | 12 3 6 | 2°38'33 | 20°17 | 0°36 | 1°36 | 21°29 | 6°26 | 17°47 | 2° 7 | 12°55 | 16°28 | 1°29 | 1°35 | 5°11 | 20°43 | T 23 |
| F 24 | 12 7 3 | 3°38'04 | 11°38 | 2°35 | 2°40 | 22°15 | 6°26 | 17°50 | 2° 6 | 12°56 | 16°29 | 1°29 | 1°32 | 5°17 | 20°46 | F 24 |
| S 25 | 12 10 59 | 4°37'33 | 2°45 | 4°34 | 3°45 | 0°30 | 6°25 | 17°53 | 2° 4 | 12°57 | 16°31 | 1°29 | 1°29 | 5°24 | 20°50 | S 25 |
| S 26 | 12 14 56 | 5°36'59 | 16° 6 | 6°34 | 4°50 | 1°15 | 6°26 | 17°56 | 2° 2 | 12°57 | 16°32 | 1°29 | 1°26 | 5°31 | 20°54 | S 26 |
| M27 | 12 18 52 | 6°36'24 | 6°40 | 8°36 | 5°55 | 2° 0 | 6°26 | 18° 0 | 2° 1 | 12°58 | 16°34 | 1°28 | 1°23 | 5°37 | 20°57 | M27 |
| T 28 | 12 22 49 | 7°35'47 | 19°26 | 10°37 | 7° 0 | 2°45 | 6°26 | 18° 3 | 1°59 | 12°59 | 16°35 | 1°28 | 1°20 | 5°44 | 21° 1 | T 28 |
| W29 | 12 26 45 | 8°35'08 | 9°26 | 12°40 | 8° 5 | 3°30 | 6°27 | 18° 7 | 1°57 | 13° 0 | 16°37 | 1°27 | 1°16 | 5°51 | 21° 4 | W29 |
| T 30 | 12 30 42 | 9°34'27 | 21°41 | 14°42 | 9°11 | 4°15 | 6°28 | 18°10 | 1°55 | 13° 1 | 16°38 | 1°26 | 1°13 | 5°58 | 21° 8 | T 30 |
| F 31 | 12 34 38 | 10°33'44 | 11°15 | 16°45 | 10°17 | 4°59 | 6°29 | 18°14 | 1°53 | 13° 2 | 16°40 | 1°25 | 1°10 | 6° 4 | 21°11 | F 31 |

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APRIL 2062 mod 16

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| S 1 | 12 38 35 | 11°33'00 | 0°41 | 18°48 | 11°23 | 5°44 | 6°30 | 18°18 | 1°52 | 13° 3 | 16°41 | 1°24 | 1° 7 | 6°11 | 21°15 | S 1 |
| S 2 | 12 42 32 | 12°32'14 | 12°34 | 20°50 | 12°29 | 6°29 | 6°32 | 18°21 | 1°50 | 13° 4 | 16°43 | 1°24 | 1° 4 | 6°18 | 21°18 | S 2 |
| M 3 | 12 46 28 | 13°31'26 | 1°59 | 0°22 | 13°35 | 7°14 | 6°33 | 18°25 | 1°48 | 13° 5 | 16°44 | 1°24 | 1° 1 | 6°25 | 21°22 | M 3 |
| T 4 W 5 | 12 50 25 12 54 21 | 14°30'36 15°29'44 | 13°59 3°41 | 2°22 4°21 | 14°42 15°49 | 7°58 8°43 | 6°35 6°37 | 18°29 18°34 | 1°46 1°44 | 13° 6 13° 7 | 16°46 16°47 | 1°25 1°26 | 0°57 0°54 | 6°31 6°38 | 21°25 21°28 | T 4 W 5 |
| T 6 | 12 54 21 | 16°28'51 | 16° 6 | 6°19 | 16°55 | 9°27 | 6°39 | 18°34 18°38 | 1°44 | 13° / | 16°47 16°49 | 1°26 | 0°54 0°51 | 6°45 | 21°28 21°32 | W 5 |
| F 7 | 13 2 14 | 17°27'56 | 6°20 | 8°14 | 18° 2 | 10°12 | 6°41 | 18°42 | 1°40 | 13°10 | 16°50 | 1°29 | 0°48 | 6°51 | 21°35 | F 7 |
| S 8 | 13 611 | 18°26'58 | 19°23 | 10° 6 | 19°10 | 10°56 | 6°44 | 18°46 | 1°37 | 13°11 | 16°52 | 1°29 | 0°45 | 6°58 | 21°38 | S 8 |
| S 9 | 13 10 7 | 19°25'59 | 10°17 | 11°56 | 20°17 | 11°41 | 6°47 | 18°51 | 1°35 | 13°12 | 16°53 | 1°29 | 0°41 | 7° 5 | 21°41 | S 9 |
| M10 | 13 14 4 | 20°24'58 | 1°31 | 13°43 | 21°24 | 12°25 | 6°50 | 18°55 | 1°33 | 13°13 | 16°55 | 1°28 | 0°38 | 7°12 | 21°44 | M10 |
| T 11 | 13 18 0 | 21°23'55 | 15°31 | 15°26 | 0° 2 | 13° 9 | 6°53 | 19° 0 | 1°31 | 13°15 | 16°56 | 1°26 | 0°35 | 7°18 | 21°48 | T 11 |
| W12 T 13 | 13 21 57 13 25 54 | 22°22'50 0°51'43 | 7°14 21°36 | 17° 5 18°40 | 1° 9 2°17 | 13°54 14°38 | 6°56 6°59 | 19° 5 19°10 | 1°29 1°27 | 13°16 13°17 | 16°57 16°59 | 1°23 1°20 | 0°32 0°29 | 7°25 7°32 | 21°51 21°54 | W12 T 13 |
| F 14 | 13 25 54 | 1°50'33 | 13°30 | 20°10 | 3°25 | 14°38 15°22 | 7° 3 | 19°10 19°15 | 1°27 | 13°17 13°19 | 16°39 | 1°20 | 0°29 | 7°32 7°38 | 21°54 21°57 | F 14 |
| S 15 | 13 33 47 | 2°49'22 | 5°23 | 21°36 | 4°33 | 16° 6 | 7° 7 | 19°20 | 1°22 | 13°20 | 17° 2 | 1°15 | 0°22 | 7°45 | 22° 0 | S 15 |
| S 16 | 13 37 43 | 3°48'08 | 19°40 | 0°27 | 5°41 | 16°50 | 7°11 | 19°25 | 1°20 | 13°22 | 17° 3 | 1°14 | 0°19 | 7°52 | 22° 3 | S 16 |
| M17 | 13 41 40 | 4°46'52 | 11°19 | 1°43 | 6°49 | 17°34 | 7°15 | 19°30 | 1°17 | 13°23 | 17° 4 | 1°14 | 0°16 | 7°59 | 22° 6 | M17 |
| T 18 | 13 45 36 | 5°45'33 | 2°47 | 2°53 | 7°58 | 18°18 | 7°19 | 19°35 | 1°15 | 13°25 | 17° 6 | 1°15 | 0°13 | 8° 5 | 22° 8 | T 18 |
| W19 | 13 49 33 | 6°44'12 | 16°35 | 3°59 | 9° 6 | 19° 2 | 7°24 | 19°40 | 1°13 | 13°26 | 17° 7 | 1°17 | 0°10 | 8°12 | 22°11 | W19 |
| T 20 F 21 | 13 53 30 13 57 26 | 7°42'49 8°41'24 | 7°40 21° 5 | 4°59 5°53 | 10°15 11°23 | 19°46 20°30 | 7°28 7°33 | 19°46 19°51 | 1°10 1°8 | 13°28 13°29 | 17° 8 17°10 | 1°18 1°19 | 0° 7 0° 3 | 8°19 8°26 | 22°14 22°17 | T 20 F 21 |
| S 22 | 14 1 23 | 9°39'56 | 11°47 | 6°41 | 11°23 | 20°30 21°14 | 7°38 | 19°56 | 1° 5 | 13°31 | 17°11 | 1°18 | 0° 0 | 8°32 | 22°19 | S 22 |
| S 23 | 14 5 19 | 10°38'27 | 2°16 | 7°24 | 13°41 | 21°57 | 7°43 | 20° 2 | 1° 3 | 13°32 | 17°12 | 1°16 | 22°27 | 8°39 | 22°22 | S 23 |
| M24 | 14 9 16 | 11°36'56 | 15° 3 | 8° 2 | 14°50 | 0°11 | 7°48 | 20° 8 | 1° 0 | 13°34 | 17°13 | 1°13 | 22°24 | 8°46 | 22°25 | M24 |
| T 25 | 14 13 12 | 12°35'23 | 5° 8 | 8°33 | 15°59 | 0°55 | 7°54 | 20°13 | 0°58 | 13°36 | 17°15 | 1° 8 | 22°21 | 8°52 | 22°27 | T 25 |
| W26 | 14 17 9 | 13°33'48 | 17°30 | 8°58 | 17° 8 | 1°38 | 7°59 | 20°19 | 0°56 | 13°37 | 17°16 | 1° 2 | 22°17 | 8°59 | 22°30 | W26 |
| T 27 F 28 | 14 21 5 14 25 2 | 14°32'12 15°30'33 | 7°11 19°14 | 9°18 9°32 | 18°17 19°26 | 2°22 3° 5 | 8° 5 8°11 | 20°25 20°31 | 0°53 0°51 | 13°39 13°41 | 17°17 17°18 | 0°55 0°49 | 22°14 22°11 | 9° 6 9°13 | 0° 2 0° 5 | T 27 F 28 |
| S 29 | 14 25 2 | 16°28'54 | 8°39 | 9°32 9°40 | 20°36 | 3°48 | 8°17 | 20°37 | 0°48 | 13°41 13°43 | 17°18 17°19 | 0°44 | 22° 8 | 9°13 | 0° 7 | S 29 |
| S 30 | 14 32 55 | 17°27'12 | 20°32 | 9°43 | 21°45 | 4°32 | 8°23 | 20°43 | 0°46 | 13°44 | 17°21 | 0°41 | 22° 5 | 9°26 | 0° 9 | S 30 |

Delta T = 78.37 sec

MAY 2062 mod 16 00:00 UT

| Day | Sid.t | 0 | D | ğ | φ | ♂ | 4 | ħ |)Å(| 卉 | Р | ß | Ω | Ç | ç | Day |
|--------------|----------------------|-----------------------|---------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|
| M 1 | 14 36 52 | 18°25'29 | 9°55 | 9°40 | 0°24 | 5°15 | 8°29 | 20°49 | 0°43 | 13°46 | 17°22 | 0°39 | 22° 2 | 9°33 | 0°12 | M 1 |
| T 2 | 14 40 48 | 19°23'45 | 21°54 | 9°32 | 1°34 | 5°58 | 8°36 | 20°55 | 0°40 | 13°48 | 17°23 | 0°38 | 21°58 | 9°39 | 0°14 | T 2 |
| W 3 | 14 44 45 | 20°21'59 | 11°34 | 9°20 | 2°44 | 6°42 | 8°42 | 21° 1 | 0°38 | 13°50 | 17°24 | 0°39 | 21°55 | 9°46 | 0°16 | W 3 |
| T 4 | 14 48 41 | 21°20'11 | 1°29 | 9° 2 | 3°53 | 7°25 | 8°49 | 21° 7 | 0°35 | 13°52 | 17°25 | 0°40 | 21°52 | 9°53 | 0°18 | T 4 |
| F 5 | 14 52 38 | 22°18'22 | 14°13 | 8°40 | 5° 3 | 8° 8 | 8°56 | 21°14 | 0°33 | 13°53 | 17°26 | 0°42 | 21°49 | 10° 0 | 0°20 | F 5 |
| S 6 | 14 56 34 | 0°46'32 | 4°52 | 8°15 | 6°13 | 8°51 | 9° 3 | 21°20 | 0°30 | 13°55 | 17°27 | 0°42 | 21°46 | 10° 6 | 0°22 | S 6 |
| S 7 | 15 0 31 | 1°44'40 | 18°25 | 7°46 | 7°23 | 9°34 | 9°10 | 21°27 | 0°28 | 13°57 | 17°28 | 0°40 | 21°42 | 10°13 | 0°24 | S 7 |
| M 8 | 15 4 27 | 2°42'47 | 9°54 | 7°14 | 8°33 | 10°17 | 9°18 | 21°33 | 0°25 | 13°59 | 17°29 | 0°37 | 21°39 | 10°20 | 0°26 | M 8 |
| T 9 | 15 8 24 | 3°40'52 | 1°46 | 6°41 | 9°43 | 11° 0 | 9°25 | 21°40 | 0°23 | 14° 1 | 17°30 | 0°32 | 21°36 | 10°26 | 0°28 | T 9 |
| W10 | 15 12 21 | 4°38'55 | 16°25 | 6° 5 | 10°53 | 11°43 | 9°33 | 21°46 | 0°20 | 14° 3 | 17°31 | 0°25 | 21°33 | 10°33 | 0°30 | W10 |
| T 11 F 12 | 15 16 17 15 20 14 | 5°36'57 6°34'57 | 8°44 1° 4 | 5°29 4°53 | 12° 3 13°13 | 12°25 13° 8 | 9°40 9°48 | 21°53 22° 0 | 0°18 0°15 | 14° 5 14° 7 | 17°32 17°33 | 0°17 0° 9 | 21°30 21°27 | 10°40 10°47 | 0°32 0°33 | T 11 F 12 |
| S 13 | 15 24 10 | 7°32'56 | 1 4 15°48 | 4°17 | 13 13 14°24 | 13°51 | 9°56 | 22° 6 | 0°13 | 14 / 14° 9 | 17°34 | 0° 3 | 21°23 | 10°47 10°53 | 0°35 | S 13 |
| | | | | | | | | | | - | | | | | | l I |
| S 14 | 15 28 7 | 8°30'52 | 7°50 | 3°41 | 15°34 | 14°34 | 10° 4 | 22°13 | 0°10 | 14°11 | 17°35 | 22°29 | 21°20 | 11° 0 | 0°37 | S 14 |
| M15 | 15 32 3 | 9°28'47 | 22° 4 | 3° 8 | 16°44 | 15°16 | 10°12 | 22°20 | 0° 8 | 14°13 | 17°36 | 22°27 | 21°17 | 11° 7 | 0°38 | M15 |
| T 16 | 15 36 0 | 10°26'40 | 13°30 | 2°36 | 17°55 | 15°59 | 10°21 | 22°27 | 0° 5 | 14°15 | 17°37 | 22°26 | 21°14 | 11°14 | 0°40 | T 16 |
| W17 | 15 39 57 | 11°24'31 | 4°37 | 2° 8 | 19° 5 | 16°41 17°24 | 10°29 | 0° 4 | 0° 3 0° 0 | 14°17 | 17°38 | 22°27 | 21°11 | 11°20 | 0°41 | W17 |
| T 18 F 19 | 15 43 53 15 47 50 | 12°22'20 13°20'07 | 17°57 8°31 | 1°42 1°19 | 20°16 21°26 | 17°24 18° 6 | 10°38 10°46 | 0°11 0°18 | 22°28 | 14°19 14°21 | 17°39 17°40 | 22°28 22°28 | 21° 8 21° 4 | 11°27 11°34 | 0°43 0°44 | T 18 F 19 |
| S 20 | 15 47 30 | 13 20 07 14°17'53 | 21°23 | 1 19 1° 1 | 0° 7 | 18°48 | 10°46 10°55 | 0°25 | 22°25 | 14°23 | 17 40 17°41 | 22°25 | 21° 1 | 11°40 | 0°45 | S 20 |
| | | | | | | | | | | | | | | _ | | l I |
| S 21 | 15 55 43 | 15°15'38 | 11°32 | 0°46 | 1°17 | 19°31 | 11° 4 | 0°32 | 22°23 | 14°26 | 17°41 | 22°21 | 20°58 | 11°47 | 0°47 | S 21 |
| M22 | 15 59 39 | 16°13'21 | 1°32 | 0°36 | 2°28 | 20°13 | 11°13 | 0°39 | 22°20 | 14°28 | 17°42 | 22°14 | 20°55 | 11°54 | 0°48 | M22 |
| T 23 | 16 3 36 | 17°11'02 | 13°52 | 0°30 0°29 | 3°39 | 20°55 | 11°22 | 0°46 | 22°18 | 14°30 | 17°43 | 22° 4 | 20°52 | 12° 1 | 0°49 | T 23 |
| W24 T 25 | 16 7 32 16 11 29 | 18° 8'43 19° 6'22 | 3°34 15°38 | 0°29 0°32 | 4°49 6° 0 | 21°37 22°19 | 11°31 11°41 | 0°53 1° 1 | 22°16 22°13 | 14°32 14°34 | 17°44 17°44 | 21°53 21°41 | 20°48 20°45 | 12° 7 12°14 | 0°50 0°51 | W24 T 25 |
| F 26 | 16 11 29 | 20° 4'00 | 5° 6 | 0°32 0°39 | 7°11 | 0°31 | 11°41 11°50 | 1° 8 | 22°13 22°11 | 14°34 14°36 | 17°44 17°45 | 21°41 21°30 | 20°43 20°42 | 12°14 12°21 | 0°52 | F 26 |
| S 27 | 16 19 22 | 20° 4'00° 21° 1'37 | 16°59 | 0°51 | 8°22 | 1°13 | 11°59 | 1°15 | 22° 9 | 14°38 | 17°46 | 21°20 | 20°39 | 12°27 | 0°53 | S 27 |
| | | | | | - | _ | | | | | | | | | | |
| S 28 | 16 23 19 | 21°59'12 | 6°20 | 1° 8 | 9°33 | 1°55 | 12° 9 | 1°23 | 22° 6 | 14°41 | 17°46 | 21°11 | 20°36 | 12°34 | 0°54 | S 28 |
| M29 | 16 27 15 | 0°26'47 | 18°13 | 1°29 | 10°44 | 2°37 | 12°19 | 1°30 | 22° 4 | 14°43 | 17°47 | 21° 6 | 20°33 | 12°41 | 0°55 | M29 |
| T 30 | 16 31 12 16 35 8 | 1°24'21 2°21'54 | 7°40 19°48 | 1°54 2°24 | 11°55 13° 6 | 3°19 4° 1 | 12°29 12°39 | 1°37 1°45 | 22° 2 22° 0 | 14°45 14°47 | 17°48 17°48 | 21° 2 21° 1 | 20°29 20°26 | 12°48 12°54 | 0°55 0°56 | T 30 W31 |
| W31 | 10 33 8 | 2-21-54 | 19-48 | 2-24 | 13. 0 | 4° 1 | 12-39 | 1-45 | 22 0 | 14-4/ | 1/-48 | 21 · 1 | 20-26 | 12-54 | 0.36 | W31 |

Delta T = 78.40 sec

JUNE 2062 mod 16 00:00 UT

| Day | Sid.t | 0 | D | ğ | φ | ♂ | 4 | ħ |)Å(| 卉 | Р | ß | v | Ç | ę, | Day |
|------|----------|----------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|------|------|
| T 1 | 16 39 5 | 3°19'26 | 9°40 | 2°57 | 14°17 | 4°43 | 12°49 | 1°52 | 21°58 | 14°49 | 17°49 | 21° 1 | 20°23 | 13° 1 | 0°57 | T 1 |
| F 2 | 16 43 1 | 4°16'57 | 22°22 | 3°35 | 15°28 | 5°24 | 12°59 | 2° 0 | 21°55 | 14°51 | 17°49 | 21° 1 | 20°20 | 13° 8 | 0°57 | F 2 |
| S 3 | 16 46 58 | 5°14'28 | 12°58 | 4°17 | 16°39 | 6° 6 | 13° 9 | 2° 7 | 21°53 | 14°54 | 17°50 | 21° 0 | 20°17 | 13°15 | 0°58 | S 3 |
| S 4 | 16 50 55 | 6°11'57 | 4° 2 | 5° 2 | 17°51 | 6°48 | 13°19 | 2°15 | 21°51 | 14°56 | 17°50 | 20°58 | 20°14 | 13°21 | 0°58 | S 4 |
| M 5 | 16 54 51 | 7° 9'26 | 18° 5 | 5°51 | 19° 2 | 7°29 | 13°29 | 2°22 | 21°49 | 14°58 | 17°51 | 20°53 | 20°10 | 13°28 | 0°58 | M 5 |
| T 6 | 16 58 48 | 8° 6'55 | 10° 6 | 6°44 | 20°13 | 8°11 | 13°40 | 2°30 | 21°47 | 15° 0 | 17°51 | 20°45 | 20° 7 | 13°35 | 0°59 | T 6 |
| W 7 | 17 2 44 | 9° 4'22 | 2°29 | 7°41 | 21°25 | 8°52 | 13°50 | 2°37 | 21°45 | 15° 3 | 17°52 | 20°36 | 20° 4 | 13°41 | 0°59 | W 7 |
| T 8 | 17 641 | 10° 1'49 | 17°36 | 8°41 | 0° 6 | 9°34 | 14° 1 | 2°45 | 21°43 | 15° 5 | 17°52 | 20°25 | 20° 1 | 13°48 | 0°59 | T 8 |
| F 9 | 17 10 37 | 10°59'15 | 10°17 | 9°44 | 1°17 | 10°15 | 14°12 | 2°53 | 21°41 | 15° 7 | 17°52 | 20°14 | 19°58 | 13°55 | 0°59 | F 9 |
| S 10 | 17 14 34 | 11°56'40 | 2°51 | 10°50 | 2°29 | 10°57 | 14°23 | 3° 0 | 21°39 | 15° 9 | 17°53 | 20° 5 | 19°55 | 14° 2 | 0°59 | S 10 |
| S 11 | 17 18 30 | 12°54'04 | 17°40 | 12° 0 | 3°40 | 11°38 | 14°33 | 3° 8 | 21°37 | 15°12 | 17°53 | 19°59 | 19°51 | 14° 8 | 1° 0 | S 11 |
| M12 | 17 22 27 | 13°51'26 | 9°37 | 13°13 | 4°52 | 12°19 | 14°44 | 3°16 | 21°35 | 15°14 | 17°53 | 19°55 | 19°48 | 14°15 | 0°59 | M12 |
| T 13 | 17 26 24 | 14°48'48 | 1° 9 | 14°30 | 6° 3 | 13° 1 | 14°55 | 3°23 | 21°34 | 15°16 | 17°54 | 19°53 | 19°45 | 14°22 | 0°59 | T 13 |
| W14 | 17 30 20 | 15°46'09 | 14°47 | 15°49 | 7°15 | 13°42 | 15° 6 | 3°31 | 21°32 | 15°18 | 17°54 | 19°53 | 19°42 | 14°28 | 0°59 | W14 |
| T 15 | 17 34 17 | 16°43'28 | 5°32 | 17°12 | 8°26 | 14°23 | 15°18 | 3°39 | 21°30 | 15°20 | 17°54 | 19°52 | 19°39 | 14°35 | 0°59 | T 15 |
| F 16 | 17 38 13 | 17°40'47 | 18°28 | 18°37 | 9°38 | 15° 4 | 15°29 | 3°47 | 21°28 | 15°23 | 17°54 | 19°51 | 19°35 | 14°42 | 0°59 | F 16 |
| S 17 | 17 42 10 | 18°38'05 | 8°37 | 20° 6 | 10°50 | 15°45 | 15°40 | 3°54 | 21°27 | 15°25 | 17°55 | 19°48 | 19°32 | 14°49 | 0°58 | S 17 |
| S 18 | 17 46 6 | 19°35'22 | 21° 3 | 21°37 | 12° 1 | 16°26 | 15°51 | 4° 2 | 21°25 | 15°27 | 17°55 | 19°43 | 19°29 | 14°55 | 0°58 | S 18 |
| M19 | 17 50 3 | 20°32'38 | 10°49 | 0°42 | 13°13 | 17° 7 | 16° 3 | 4°10 | 21°23 | 15°29 | 17°55 | 19°34 | 19°26 | 15° 2 | 0°58 | M19 |
| T 20 | 17 53 59 | 21°29'54 | 0°27 | 2°19 | 14°25 | 17°48 | 16°14 | 4°18 | 21°22 | 15°32 | 17°55 | 19°23 | 19°23 | 15° 9 | 0°57 | T 20 |
| W21 | 17 57 56 | 22°27'09 | 12°29 | 4° 0 | 15°37 | 18°29 | 16°26 | 4°26 | 21°20 | 15°34 | 17°55 | 19°10 | 19°20 | 15°15 | 0°57 | W21 |
| T 22 | 18 1 53 | 0°54'23 | 1°57 | 5°43 | 16°48 | 19° 9 | 16°38 | 4°33 | 21°19 | 15°36 | 17°55 | 18°57 | 19°16 | 15°22 | 0°56 | T 22 |
| F 23 | 18 5 49 | 1°51'38 | 13°50 | 7°29 | 18° 0 | 19°50 | 16°49 | 4°41 | 21°17 | 15°38 | 17°55 | 18°43 | 19°13 | 15°29 | 0°55 | F 23 |
| S 24 | 18 9 46 | 2°48'51 | 3°12 | 9°18 | 19°12 | 20°31 | 17° 1 | 4°49 | 21°16 | 15°41 | 17°55 | 18°31 | 19°10 | 15°36 | 0°55 | S 24 |
| S 25 | 18 13 42 | 3°46'05 | 15° 4 | 11°10 | 20°24 | 21°12 | 17°13 | 4°57 | 21°15 | 15°43 | 17°55 | 18°21 | 19° 7 | 15°42 | 0°54 | S 25 |
| M26 | 18 17 39 | 4°43'18 | 4°27 | 13° 4 | 21°36 | 21°52 | 17°25 | 5° 5 | 21°13 | 15°45 | 17°55 | 18°14 | 19° 4 | 15°49 | 0°53 | M26 |
| T 27 | 18 21 35 | 5°40'31 | 16°26 | 15° 1 | 0°18 | 0° 3 | 17°37 | 5°12 | 21°12 | 15°47 | 17°55 | 18°10 | 19° 1 | 15°56 | 0°52 | T 27 |
| W28 | 18 25 32 | 6°37'44 | 6° 4 | 17° 1 | 1°30 | 0°43 | 17°49 | 5°20 | 21°11 | 15°49 | 17°55 | 18° 8 | 18°57 | 16° 2 | 0°51 | W28 |
| T 29 | 18 29 29 | 7°34'57 | 18°25 | 19° 2 | 2°42 | 1°24 | 18° 1 | 5°28 | 21°10 | 15°52 | 17°55 | 18° 7 | 18°54 | 16° 9 | 0°50 | T 29 |
| F 30 | 18 33 25 | 8°32'10 | 8°35 | 21° 5 | 3°54 | 2° 4 | 18°13 | 5°36 | 21° 9 | 15°54 | 17°55 | 18° 7 | 18°51 | 16°16 | 0°49 | F 30 |

Delta T = 78.43 sec

JULY 2062 mod 16 00:00 UT

| Day | Sid.t | 0 | D | ğ | φ | ♂ | 4 | ħ |)∤(| ħ | В | u | Ω | Ç | ç | Day |
|------|----------|----------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|
| S 1 | 18 37 22 | 9°29'23 | 21°37 | 0°41 | 5° 6 | 2°45 | 18°25 | 5°44 | 21° 8 | 15°56 | 17°55 | 18° 7 | 18°48 | 16°23 | 0°48 | S 1 |
| S 2 | 18 41 18 | 10°26'36 | 12°36 | 2°47 | 6°19 | 3°25 | 18°37 | 5°51 | 21° 7 | 15°58 | 17°55 | 18° 5 | 18°45 | 16°29 | 0°47 | S 2 |
| M 3 | 18 45 15 | 11°23'50 | 4° 4 | 4°56 | 7°31 | 4° 6 | 18°49 | 5°59 | 21° 6 | 16° 0 | 17°55 | 18° 0 | 18°41 | 16°36 | 0°46 | M 3 |
| T 4 | 18 49 11 | 12°21'04 | 18°31 | 7° 5 | 8°43 | 4°46 | 19° 1 | 6° 7 | 21° 5 | 16° 2 | 17°54 | 17°54 | 18°38 | 16°43 | 0°45 | T 4 |
| W 5 | 18 53 8 | 13°18'18 | 10°54 | 9°14 | 9°55 | 5°26 | 19°14 | 6°15 | 21° 4 | 16° 5 | 17°54 | 17°45 | 18°35 | 16°49 | 0°43 | W 5 |
| T 6 | 18 57 4 | 14°15'32 | 3°34 | 11°25 | 11°8 | 6° 7 | 19°26 | 6°22 | 21° 3 | 16° 7 | 17°54 | 17°35 | 18°32 | 16°56 | 0°42 | T 6 |
| F 7 | 19 1 1 | 15°12'46 | 18°52 | 13°35 | 12°20 | 6°47 | 19°39 | 6°30 | 21° 2 | 16° 9 | 17°54 | 17°25 | 18°29 | 17° 3 | 0°41 | F 7 |
| S 8 | 19 4 58 | 16°10'00 | 11°37 | 15°45 | 13°32 | 7°27 | 19°51 | 6°38 | 21° 2 | 16°11 | 17°53 | 17°17 | 18°26 | 17°10 | 0°39 | S 8 |
| S 9 | 19 8 54 | 17° 7'14 | 4° 8 | 17°55 | 14°45 | 8° 7 | 20° 3 | 6°46 | 21° 1 | 16°13 | 17°53 | 17°10 | 18°22 | 17°16 | 0°38 | S 9 |
| M10 | 19 12 51 | 18° 4'28 | 18°47 | 20° 4 | 15°57 | 8°47 | 20°16 | 6°53 | 21° 0 | 16°15 | 17°53 | 17° 6 | 18°19 | 17°23 | 0°36 | M10 |
| T 11 | 19 16 47 | 19° 1'42 | 10°29 | 22°13 | 17°10 | 9°27 | 20°29 | 7° 1 | 21° 0 | 16°17 | 17°52 | 17° 5 | 18°16 | 17°30 | 0°34 | T 11 |
| W12 | 19 20 44 | 19°58'55 | 1°44 | 1°50 | 18°22 | 10° 7 | 20°41 | 7° 9 | 20°59 | 16°19 | 17°52 | 17° 5 | 18°13 | 17°36 | 0°33 | W12 |
| T 13 | 19 24 40 | 20°56'09 | 15° 3 | 3°56 | 19°35 | 10°47 | 20°54 | 7°16 | 20°59 | 16°21 | 17°52 | 17° 5 | 18°10 | 17°43 | 0°31 | T 13 |
| F 14 | 19 28 37 | 21°53'22 | 5°28 | 6° 1 | 20°47 | 11°27 | 21° 6 | 7°24 | 20°58 | 16°23 | 17°51 | 17° 5 | 18° 7 | 17°50 | 0°29 | F 14 |
| S 15 | 19 32 33 | 0°20'36 | 18° 3 | 8° 4 | 22° 0 | 12° 7 | 21°19 | 7°32 | 20°58 | 16°25 | 17°51 | 17° 4 | 18° 3 | 17°57 | 0°28 | S 15 |
| S 16 | 19 36 30 | 1°17'50 | 7°54 | 10° 6 | 0°42 | 12°47 | 21°32 | 7°39 | 20°57 | 16°27 | 17°50 | 17° 0 | 18° 0 | 18° 3 | 0°26 | S 16 |
| M17 | 19 40 27 | 2°15'03 | 20° 3 | 12° 6 | 1°55 | 13°27 | 21°45 | 7°47 | 20°57 | 16°29 | 17°50 | 16°54 | 17°57 | 18°10 | 0°24 | M17 |
| T 18 | 19 44 23 | 3°12'17 | 9°34 | 14° 4 | 3° 8 | 14° 6 | 21°57 | 7°55 | 20°57 | 16°31 | 17°49 | 16°46 | 17°54 | 18°17 | 0°22 | T 18 |
| W19 | 19 48 20 | 4° 9'31 | 21°30 | 16° 1 | 4°20 | 14°46 | 22°10 | 8° 2 | 20°57 | 16°33 | 17°49 | 16°36 | 17°51 | 18°23 | 0°20 | W19 |
| T 20 | 19 52 16 | 5° 6'46 | 10°53 | 17°55 | 5°33 | 15°26 | 22°23 | 8°10 | 20°57 | 16°35 | 17°48 | 16°25 | 17°47 | 18°30 | 0°18 | T 20 |
| F 21 | 19 56 13 | 6° 4'01 | 0°15 | 19°48 | 6°46 | 16° 5 | 0° 6 | 8°17 | 20°57 | 16°37 | 17°48 | 16°15 | 17°44 | 18°37 | 0°16 | F 21 |
| S 22 | 20 0 9 | 7° 1'16 | 12° 7 | 21°40 | 7°59 | 16°45 | 0°19 | 8°25 | 20°57 | 16°39 | 17°47 | 16° 6 | 17°41 | 18°44 | 0°14 | S 22 |
| S 23 | 20 4 6 | 7°58'32 | 1°32 | 0°59 | 9°12 | 17°25 | 0°32 | 8°32 | 20°57 | 16°41 | 17°47 | 15°58 | 17°38 | 18°50 | 0°12 | S 23 |
| M24 | 20 8 2 | 8°55'48 | 13°31 | 2°47 | 10°25 | 18° 4 | 0°45 | 8°39 | 20°57 | 16°43 | 17°46 | 15°53 | 17°35 | 18°57 | 0° 9 | M24 |
| T 25 | 20 11 59 | 9°53'05 | 3° 6 | 4°33 | 11°37 | 18°44 | 0°58 | 8°47 | 20°57 | 16°45 | 17°45 | 15°50 | 17°32 | 19° 4 | 0° 7 | T 25 |
| W26 | 20 15 56 | 10°50'23 | 15°21 | 6°17 | 12°50 | 19°23 | 1°11 | 8°54 | 20°57 | 16°47 | 17°45 | 15°49 | 17°28 | 19°10 | 0° 5 | W26 |
| T 27 | 20 19 52 | 11°47'42 | 5°17 | 8° 0 | 14° 3 | 20° 2 | 1°24 | 9° 2 | 20°57 | 16°48 | 17°44 | 15°50 | 17°25 | 19°17 | 0° 3 | T 27 |
| F 28 | 20 23 49 | 12°45'01 | 18° 0 | 9°40 | 15°16 | 20°42 | 1°37 | 9° 9 | 20°58 | 16°50 | 17°43 | 15°51 | 17°22 | 19°24 | 0° 0 | F 28 |
| S 29 | 20 27 45 | 13°42'22 | 8°32 | 11°19 | 16°29 | 21°21 | 1°50 | 9°16 | 20°58 | 16°52 | 17°43 | 15°52 | 17°19 | 19°31 | 22°28 | S 29 |
| S 30 | 20 31 42 | 14°39'43 | 21°56 | 12°56 | 17°43 | 22° 1 | 2° 3 | 9°23 | 20°58 | 16°54 | 17°42 | 15°52 | 17°16 | 19°37 | 22°26 | S 30 |
| M31 | 20 35 38 | 15°37'06 | 13°17 | 14°32 | 18°56 | 0°10 | 2°16 | 9°31 | 20°59 | 16°55 | 17°41 | 15°50 | 17°12 | 19°44 | 22°23 | M31 |
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Delta T = 78.45 sec

AUGUST 2062 mod 16

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| Day | Sid.t | 0 | D | ğ | φ | ď | 4 | ħ |)Å(| 卉 | Р | ß | ß | Ç | o k | Day |
|------|----------|----------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|--------|------|
| T 1 | 20 39 35 | 16°34'30 | 5° 3 | 16° 5 | 20° 9 | 0°49 | 2°29 | 9°38 | 20°59 | 16°57 | 17°40 | 15°46 | 17° 9 | 19°51 | 22°21 | T 1 |
| W 2 | 20 43 31 | 17°31'55 | 19°43 | 17°37 | 21°22 | 1°28 | 2°42 | 9°45 | 21° 0 | 16°59 | 17°40 | 15°41 | 17° 6 | 19°57 | 22°18 | W 2 |
| T 3 | 20 47 28 | 18°29'21 | 12°11 | 19° 7 | 0° 5 | 2° 8 | 2°55 | 9°52 | 21° 0 | 17° 1 | 17°39 | 15°35 | 17° 3 | 20° 4 | 22°16 | T 3 |
| F 4 | 20 51 25 | 19°26'48 | 4°50 | 20°36 | 1°19 | 2°47 | 3° 8 | 9°59 | 21° 1 | 17° 2 | 17°38 | 15°29 | 17° 0 | 20°11 | 22°13 | F 4 |
| S 5 | 20 55 21 | 20°24'16 | 20° 0 | 22° 2 | 2°32 | 3°26 | 3°22 | 10° 6 | 21° 2 | 17° 4 | 17°37 | 15°24 | 16°57 | 20°18 | 22°11 | S 5 |
| S 6 | 20 59 18 | 21°21'45 | 12°31 | 0°57 | 3°45 | 4° 5 | 3°35 | 10°13 | 21° 3 | 17° 5 | 17°36 | 15°20 | 16°53 | 20°24 | 22° 8 | S 6 |
| M 7 | 21 3 14 | 22°19'15 | 4°43 | 2°20 | 4°59 | 4°44 | 3°48 | 10°20 | 21° 3 | 17° 7 | 17°36 | 15°18 | 16°50 | 20°31 | 22° 5 | M 7 |
| T 8 | 21 7 11 | 0°46'45 | 19°2 | 3°41 | 6°12 | 5°23 | 4° 1 | 10°27 | 21° 4 | 17° 9 | 17°35 | 15°18 | 16°47 | 20°38 | 22° 3 | T 8 |
| W 9 | 21 11 7 | 1°44'17 | 10°24 | 5° 0 | 7°26 | 6° 2 | 4°14 | 10°34 | 21° 5 | 17°10 | 17°34 | 15°19 | 16°44 | 20°44 | 22° 0 | W 9 |
| T 10 | 21 15 4 | 2°41'49 | 1°19 | 6°17 | 8°39 | 6°41 | 4°27 | 10°40 | 21° 6 | 17°12 | 17°33 | 15°20 | 16°41 | 20°51 | 21°57 | T 10 |
| F 11 | 21 19 0 | 3°39'22 | 14°19 | 7°32 | 9°53 | 7°20 | 4°41 | 10°47 | 21° 7 | 17°13 | 17°32 | 15°21 | 16°38 | 20°58 | 21°55 | F 11 |
| S 12 | 21 22 57 | 4°36'56 | 4°27 | 8°45 | 11° 6 | 7°59 | 4°54 | 10°54 | 21° 8 | 17°15 | 17°31 | 15°22 | 16°34 | 21° 4 | 21°52 | S 12 |
| S 13 | 21 26 54 | 5°34'31 | 16°47 | 9°56 | 12°20 | 8°38 | 5° 7 | 11° 1 | 21° 9 | 17°16 | 17°30 | 15°21 | 16°31 | 21°11 | 21°49 | S 13 |
| M14 | 21 30 50 | 6°32'06 | 6°25 | 11° 4 | 13°33 | 9°16 | 5°20 | 11° 7 | 21°11 | 17°17 | 17°29 | 15°19 | 16°28 | 21°18 | 21°46 | M14 |
| T 15 | 21 34 47 | 7°29'43 | 18°23 | 12°11 | 14°47 | 9°55 | 5°33 | 11°14 | 21°12 | 17°19 | 17°28 | 15°16 | 16°25 | 21°25 | 21°44 | T 15 |
| W16 | 21 38 43 | 8°27'21 | 7°46 | 13°15 | 16° 1 | 10°34 | 5°46 | 11°20 | 21°13 | 17°20 | 17°27 | 15°12 | 16°22 | 21°31 | 21°41 | W16 |
| T 17 | 21 42 40 | 9°24'59 | 19°38 | 14°16 | 17°14 | 11°13 | 6° 0 | 11°27 | 21°14 | 17°22 | 17°26 | 15° 7 | 16°18 | 21°38 | 21°38 | T 17 |
| F 18 | 21 46 36 | 10°22'39 | 9° 1 | 15°15 | 18°28 | 11°51 | 6°13 | 11°33 | 21°16 | 17°23 | 17°25 | 15° 2 | 16°15 | 21°45 | 21°35 | F 18 |
| S 19 | 21 50 33 | 11°20'20 | 20°57 | 16°11 | 19°42 | 12°30 | 6°26 | 11°39 | 21°17 | 17°24 | 17°24 | 14°58 | 16°12 | 21°51 | 21°32 | S 19 |
| S 20 | 21 54 30 | 12°18'03 | 10°29 | 17° 4 | 20°56 | 13° 9 | 6°39 | 11°46 | 21°19 | 17°25 | 17°23 | 14°55 | 16° 9 | 21°58 | 21°29 | S 20 |
| M21 | 21 58 26 | 13°15'46 | 0° 7 | 17°54 | 22° 9 | 13°47 | 6°52 | 11°52 | 21°20 | 17°27 | 17°22 | 14°52 | 16° 6 | 22° 5 | 21°26 | M21 |
| T 22 | 22 2 23 | 14°13'31 | 12°25 | 18°40 | 0°53 | 14°26 | 7° 5 | 11°58 | 21°22 | 17°28 | 17°21 | 14°52 | 16° 3 | 22°12 | 21°24 | T 22 |
| W23 | 22 6 19 | 15°11'17 | 2°22 | 19°24 | 2° 7 | 15° 4 | 7°18 | 12° 4 | 21°23 | 17°29 | 17°20 | 14°52 | 15°59 | 22°18 | 21°21 | W23 |
| T 24 | 22 10 16 | 16° 9'05 | 15° 2 | 20° 3 | 3°21 | 15°43 | 7°31 | 12°10 | 21°25 | 17°30 | 17°19 | 14°53 | 15°56 | 22°25 | 21°18 | T 24 |
| F 25 | 22 14 12 | 17° 6'55 | 5°26 | 20°39 | 4°35 | 16°21 | 7°45 | 12°16 | 21°27 | 17°31 | 17°18 | 14°54 | 15°53 | 0° 2 | 21°15 | F 25 |
| S 26 | 22 18 9 | 18° 4'46 | 18°36 | 21°10 | 5°49 | 17° 0 | 7°58 | 12°22 | 21°28 | 17°32 | 17°16 | 14°56 | 15°50 | 0° 8 | 21°12 | S 26 |
| S 27 | 22 22 5 | 19° 2'39 | 9°34 | 21°38 | 7° 3 | 17°38 | 8°11 | 12°28 | 21°30 | 17°33 | 17°15 | 14°57 | 15°47 | 0°15 | 21° 9 | S 27 |
| M28 | 22 26 2 | 20° 0'34 | 0°50 | 22° 0 | 8°17 | 18°16 | 8°24 | 12°34 | 21°32 | 17°34 | 17°14 | 14°57 | 15°44 | 0°22 | 21° 6 | M28 |
| T 29 | 22 29 58 | 20°58'31 | 14°56 | 22°18 | 9°31 | 18°55 | 8°37 | 12°39 | 21°34 | 17°35 | 17°13 | 14°56 | 15°40 | 0°28 | 21° 3 | T 29 |
| W30 | 22 33 55 | 21°56'30 | 6°50 | 0° 1 | 10°45 | 19°33 | 8°50 | 12°45 | 21°36 | 17°36 | 17°12 | 14°55 | 15°37 | 0°35 | 21° 0 | W30 |
| T 31 | 22 37 52 | 0°24'31 | 21°28 | 0° 8 | 12° 0 | 20°11 | 9° 3 | 12°51 | 21°38 | 17°37 | 17°11 | 14°53 | 15°34 | 0°42 | 20°57 | T 31 |

Delta T = 78.48 sec

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|--------------|---------------------|----------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|----------------|--------------|
| F 1 | 22 41 48 | 1°22'33 | 13°46 | 0°10 | 13°14 | 20°50 | 9°16 | 12°56 | 21°40 | 17°38 | 17°10 | 14°52 | 15°31 | 0°49 | 20°54 | F 1 |
| S 2 | 22 45 45 | 2°20'37 | 6° 6 | 0° 5 | 14°28 | 21°28 | 9°29 | 13° 2 | 21°42 | 17°39 | 17° 8 | 14°50 | 15°28 | 0°55 | 20°51 | S 2 |
| S 3 | 22 49 41 | 3°18'43 | 20°51 | 22°25 | 15°42 | 22° 6 | 9°41 | 13° 7 | 21°44 | 17°40 | 17° 7 | 14°49 | 15°24 | 1° 2 | 20°49 | S 3 |
| M 4 | 22 53 38 | 4°16'50 | 12°54 | 22° 8 | 16°57 | 0°14 | 9°54 10° 7 | 13°12 | 21°46 | 17°41 | 17° 6 17° 5 | 14°49 14°49 | 15°21 | 1° 9 | 20°46 | M 4 |
| T 5 W 6 | 22 57 34 23 1 31 | 5°14'59 6°13'10 | 4°38 18°31 | 21°46 21°16 | 18°11 19°25 | 0°52 1°30 | 10° / 10°20 | 13°17 13°23 | 21°48 21°51 | 17°41 17°42 | 17° 5 17° 4 | 14°49 14°50 | 15°18 15°15 | 1°15 1°22 | 20°43 20°40 | T 5 W 6 |
| T 7 | 23 5 27 | 7°11'22 | 9°28 | 20°41 | 20°39 | 2° 8 | 10°23 | 13°28 | 21°53 | 17°43 | 17° 2 | 14°50 | 15°12 | 1°29 | 20°37 | T 7 |
| F 8 | 23 9 24 | 8° 9'36 | 0° 2 | 20° 0 | 21°54 | 2°47 | 10°45 | 13°33 | 21°55 | 17°44 | 17° 1 | 14°51 | 15° 9 | 1°36 | 20°34 | F 8 |
| S 9 | 23 13 21 | 9° 7'51 | 12°44 | 19°13 | 0°38 | 3°25 | 10°58 | 13°38 | 21°58 | 17°44 | 17° 0 | 14°52 | 15° 5 | 1°42 | 20°31 | S 9 |
| S 10 | 23 17 17 | 10° 6'08 | 2°38 | 18°22 | 1°53 | 4° 2 | 11°11 | 13°42 | 22° 0 | 17°45 | 16°59 | 14°52 | 15° 2 | 1°49 | 20°28 | S 10 |
| M11 | 23 21 14 | 11° 4'26 | 14°46 | 17°26 | 3° 7 | 4°40 | 11°24 | 13°47 | 22° 3 | 17°45 | 16°58 | 14°52 | 14°59 | 1°56 | 20°26 | M11 |
| T 12 | 23 25 10 | 12° 2'46 | 4°15 | 16°27 | 4°22 | 5°18 | 11°36 | 13°52 | 22° 5 | 17°46 | 16°56 | 14°52 | 14°56 | 2° 2 2° 9 | 20°23 | T 12 |
| W13 T 14 | 23 29 7 23 33 3 | 13° 1'08 13°59'31 | 16° 8 5°30 | 15°26 14°25 | 5°36 6°51 | 5°56 6°34 | 11°49 12° 1 | 13°56 14° 1 | 22° 8 22°10 | 17°47 17°47 | 16°55 16°54 | 14°52 14°52 | 14°53 14°50 | 2° 9 2°16 | 20°20 20°17 | W13 T 14 |
| F 15 | 23 37 0 | 14°57'55 | 17°24 | 13°24 | 8° 5 | 7°12 | 12°14 | 14° 5 | 22°13 | 17°47 | 16°53 | 14°51 | 14°46 | 2°22 | 20°14 | F 15 |
| S 16 | 23 40 56 | 15°56'22 | 6°55 | 12°26 | 9°20 | 7°50 | 12°26 | 14°10 | 22°15 | 17°48 | 16°52 | 14°52 | 14°43 | 2°29 | 20°12 | S 16 |
| S 17 | 23 44 53 | 16°54'50 | 19° 5 | 11°31 | 10°34 | 8°27 | 12°39 | 14°14 | 22°18 | 17°48 | 16°50 | 14°52 | 14°40 | 2°36 | 20° 9 | S 17 |
| M18 | 23 48 50 | 17°53'19 | 8°55 | 10°41 | 11°49 | 9° 5 | 12°51 | 14°18 | 22°21 | 17°49 | 16°49 | 14°52 | 14°37 | 2°43 | 20° 6 | M18 |
| T 19 | 23 52 46 | 18°51'51 | 21°29 | 9°57 | 13° 3 | 9°43 | 13° 3 | 14°22 | 22°24 | 17°49 | 16°48 | 14°52 | 14°34 | 2°49 | 20° 4 | T 19 |
| W20 T 21 | 23 56 43 0 0 39 | 19°50'24 20°49'00 | 11°46 2°17 | 9°21 8°53 | 14°18 15°33 | 10°20 10°58 | 13°16 13°28 | 14°26 14°30 | 22°26 22°29 | 17°49 17°49 | 16°47 16°46 | 14°52 14°51 | 14°30 14°27 | 2°56 3° 3 | 20° 1 19°58 | W20 T 21 |
| F 22 | 0 4 36 | 20 49 00 21°47'37 | 15°32 | 8°34 | 16°47 | 10°36 | 13°40 | 14°34 | 0° 2 | 17°50 | 16°44 | 14°50 | 14°24 | 3° 9 | 19°56 | F 22 |
| S 23 | 0 8 32 | 0°16'17 | 6°30 | 8°24 | 18° 2 | 12°13 | 13°52 | 14°38 | 0° 5 | 17°50 | 16°43 | 14°49 | 14°21 | 3°16 | 19°53 | S 23 |
| S 24 | 0 12 29 | 1°14'59 | 20°11 | 8°25 | 19°17 | 12°51 | 14° 4 | 14°41 | 0° 8 | 17°50 | 16°42 | 14°48 | 14°18 | 3°23 | 19°51 | S 24 |
| M25 | 0 16 25 | 2°13'43 | 11°33 | 8°35 | 20°32 | 13°28 | 14°16 | 14°45 | 0°11 | 17°50 | 16°41 | 14°48 | 14°15 | 3°29 | 19°48 | M25 |
| T 26 | 0 20 22 | 3°12'30 | 3° 6 | 8°56 | 21°46 | 14° 6 | 14°28 | 14°48 | 0°14 | 17°50 | 16°39 | 14°48 | 14°11 | 3°36 | 19°46 | T 26 |
| W27 | 0 24 19 | 4°11'19 | 17°18 | 9°25 | 0°31 | 14°43 | 14°40 | 14°51 | 0°17 | 17°50 | 16°38 | 14°48 | 14° 8 | 3°43 | 19°43 | W27 |
| T 28 F 29 | 0 28 15 0 32 12 | 5°10'10 6° 9'03 | 9° 7 1° 0 | 10° 4 10°52 | 1°46 3° 1 | 15°21 15°58 | 14°52 15° 4 | 14°55 14°58 | 0°20 0°23 | 17°50 17°50 | 16°37 16°36 | 14°49 14°50 | 14° 5 14° 2 | 3°50 3°56 | 19°41 19°39 | T 28 F 29 |
| S 30 | 0 36 8 | 7° 7'59 | 15°23 | 10°32 | 4°16 | 16°35 | 15°16 | 15° 1 | 0°26 | 17°50 | 16°35 | 14°51 | 13°59 | 4° 3 | 19°36 | S 30 |

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| S 1 | 0 40 5 | 8° 6'57 | 7°12 | 12°51 | 5°30 | 17°13 | 15°27 | 15° 4 | 0°29 | 17°50 | 16°34 | 14°51 | 13°56 | 4°10 | 19°34 | S 1 |
| M 2 | 0 44 1 | 9° 5'56 | 21°23 | 14° 0 | 6°45 | 17°50 | 15°39 | 15° 7 | 0°32 | 17°50 | 16°32 | 14°51 | 13°52 | 4°16 | 19°32 | M 2 |
| T 3 | 0 47 58 | 10° 4'58 | 12°51 | 15°16 | 8° 0 | 18°27 | 15°50 | 15° 9 | 0°36 | 17°50 | 16°31 | 14°50 | 13°49 | 4°23 | 19°29 | T 3 |
| W 4 | 0 51 54 | 11° 4'02 | 4° 3 | 16°37 | 9°15 | 19° 5 | 16° 2 | 15°12 | 0°39 | 17°50 | 16°30 | 14°49 | 13°46 | 4°30 | 19°27 | W 4 |
| T 5 | 0 55 51 | 12° 3'08 | 17°25 | 18° 3 | 10°30 | 19°42 | 16°13 | 15°15 | 0°42 | 17°50 | 16°29 | 14°46 | 13°43 | 4°36 | 19°25 | T 5 |
| F 6 | 0 59 48 | 13° 2'16 | 7°58 | 19°32 | 11°45 | 20°19 | 16°25 | 15°17 | 0°45 | 17°49 | 16°28 | 14°43 | 13°40 | 4°43 | 19°23 | F 6 |
| S 7 | 1 3 44 | 14° 1'26 | 20°40 | 21° 5 | 13° 0 | 20°56 | 16°36 | 15°19 | 0°49 | 17°49 | 16°27 | 14°40 | 13°36 | 4°50 | 19°21 | S 7 |
| S 8 | 1 741 | 15° 0'37 | 10°35 | 0°11 | 14°15 | 21°33 | 16°47 | 15°22 | 0°52 | 17°49 | 16°25 | 14°37 | 13°33 | 4°56 | 19°19 | S 8 |
| M 9 | 1 11 37 | 15°59'51 | 0°15 | 1°49 | 15°30 | 22°10 | 16°58 | 15°24 | 0°55 | 17°48 | 16°24 | 14°35 | 13°30 | 5° 3 | 19°17 | M 9 |
| T 10 | 1 15 34 | 16°59'06 | 12°14 | 3°28 | 16°45 | 0°17 | 17° 9 | 15°26 | 0°59 | 17°48 | 16°23 | 14°34 | 13°27 | 5°10 | 19°15 | T 10 |
| W11 | 1 19 30 | 17°58'23 | 1°37 | 5°10 | 18° 0 | 0°54 | 17°20 | 15°28 | 1° 2 | 17°48 | 16°22 | 14°34 | 13°24 | 5°17 | 19°13 | W11 |
| T 12 | 1 23 27 | 18°57'41 | 13°28 | 6°52 | 19°15 | 1°31 | 17°31 | 15°29 | 1° 6 | 17°47 | 16°21 | 14°35 | 13°21 | 5°23 | 19°11 | T 12 |
| F 13 | 1 27 23 | 19°57'02 | 2°53 | 8°35 | 20°30 | 2° 8 | 17°42 | 15°31 | 1° 9 | 17°47 | 16°20 | 14°36 | 13°17 | 5°30 | 19°10 | F 13 |
| S 14 | 1 31 20 | 20°56'24 | 14°56 | 10°19 | 21°45 | 2°45 | 17°52 | 15°33 | 1°12 | 17°46 | 16°19 | 14°38 | 13°14 | 5°37 | 19° 8 | S 14 |
| S 15 | 1 35 17 | 21°55'48 | 4°41 | 12° 3 | 0°30 | 3°22 | 18° 3 | 15°34 | 1°16 | 17°46 | 16°18 | 14°40 | 13°11 | 5°43 | 19° 6 | S 15 |
| M16 | 1 39 13 | 0°25'13 | 17°12 | 13°47 | 1°45 | 3°59 | 18°14 | 15°36 | 1°19 | 17°45 | 16°17 | 14°40 | 13° 8 | 5°50 | 19° 4 | M16 |
| T 17 | 1 43 10 | 1°24'41 | 7°31 | 15°31 | 3° 0 | 4°36 | 18°24 | 15°37 | 1°23 | 17°44 | 16°16 | 14°39 | 13° 5 | 5°57 | 19° 3 | T 17 |
| W18 | 1 47 6 | 2°24'11 | 20°38 | 17°15 | 4°15 | 5°13 | 18°34 | 15°38 | 1°27 | 17°44 | 16°15 | 14°36 | 13° 1 | 6° 3 | 19° 1 | W18 |
| T 19 | 151 3 | 3°23'42 | 11°33 | 18°59 | 5°30 | 5°49 | 18°45 | 15°39 | 1°30 | 17°43 | 16°14 | 14°32 | 12°58 | 6°10 | 19° 0 | T 19 |
| F 20 | 1 54 59 | 4°23'16 | 2°45 | 20°42 | 6°45 | 6°26 | 18°55 | 15°40 | 1°34 | 17°42 | 16°13 | 14°27 | 12°55 | 6°17 | 18°58 | F 20 |
| S 21 | 1 58 56 | 5°22'52 | 16°40 | 22°25 | 8° 0 | 7° 3 | 19° 5 | 15°41 | 1°37 | 17°42 | 16°12 | 14°21 | 12°52 | 6°24 | 18°57 | S 21 |
| S 22 | 2 2 52 | 6°22'30 | 8°15 | 1°38 | 9°15 | 7°39 | 19°15 | 15°41 | 1°41 | 17°41 | 16°11 | 14°16 | 12°49 | 6°30 | 18°56 | S 22 |
| M23 | 2 6 49 | 7°22'11 | 22°25 | 3°20 | 10°30 | 8°16 | 19°25 | 15°42 | 1°44 | 17°40 | 16°10 | 14°11 | 12°46 | 6°37 | 18°54 | M23 |
| T 24 | 2 10 46 | 8°21'53 | 14° 7 | 5° 2 | 11°45 | 8°53 | 19°35 | 15°43 | 1°48 | 17°39 | 16° 9 | 14° 8 | 12°42 | 6°44 | 18°53 | T 24 |
| W25 | 2 14 42 | 9°21'38 | 5°48 | 6°43 | 13° 1 | 9°29 | 19°44 | 15°43 | 1°52 | 17°38 | 16° 8 | 14° 7 | 12°39 | 6°50 | 18°52 | W25 |
| T 26 | 2 18 39 | 10°21'25 | 19°57 | 8°24 | 14°16 | 10° 6 | 19°54 | 15°43 | 1°55 | 17°38 | 16° 7 | 14° 7 | 12°36 | 6°57 | 18°51 | T 26 |
| F 27 | 2 22 35 | 11°21'15 | 11°31 | 10° 4 | 15°31 | 10°42 | 20° 3 | 15°43 | 1°59 | 17°37 | 16° 6 | 14° 8 | 12°33 | 7° 4 | 18°50 | F 27 |
| S 28 | 2 26 32 | 12°21'06 | 3° 0 | 11°44 | 16°46 | 11°18 | 20°13 | 15°43 | 2° 3 | 17°36 | 16° 5 | 14°10 | 12°30 | 7°10 | 18°49 | S 28 |
| S 29 | 2 30 28 | 13°21'00 | 16°52 | 13°23 | 18° 1 | 11°55 | 20°22 | 15°43 | 2° 6 | 17°35 | 16° 4 | 14°10 | 12°27 | 7°17 | 18°48 | S 29 |
| M30 | 2 34 25 | 14°20'56 | 8° 5 | 15° 1 | 19°16 | 12°31 | 20°31 | 15°43 | 2°10 | 17°34 | 16° 4 | 14° 9 | 12°23 | 7°24 | 18°47 | M30 |
| T 31 | 2 38 21 | 15°20'53 | 21°39 | 16°39 | 20°31 | 13° 8 | 20°40 | 15°43 | 2°14 | 17°33 | 16° 3 | 14° 5 | 12°20 | 7°30 | 18°46 | T 31 |

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| W 1 T 2 F 3 S 4 | 2 42 18 2 46 15 2 50 11 2 54 8 | 16°20'53 17°20'55 18°20'59 19°21'04 | 12°30 3° 8 16° 0 6° 7 | 18°17 19°54 21°31 0°37 | 21°47 0°32 1°47 3° 2 | 13°44 14°20 14°56 15°32 | 20°49 20°58 21° 7 21°15 | 15°42 15°42 15°41 15°40 | 2°18 2°21 2°25 2°29 | 17°32 17°31 17°30 17°28 | 16° 2 16° 1 16° 0 16° 0 | 14° 0 13°52 13°43 13°33 | 12°17 12°14 12°11 12° 7 | 7°37 7°44 7°51 7°57 | 18°45 18°45 18°44 18°43 | W 1 T 2 F 3 S 4 |
| S 5 M 6 T 7 W 8 T 9 F 10 S 11 | 2 58 4 3 2 1 3 5 57 3 9 54 3 13 50 3 17 47 3 21 44 | 20°21'12 21°21'21 22°21'31 0°51'43 1°51'57 2°52'12 3°52'28 | 18°29 8° 7 20° 5 9°26 21°16 10°39 0°11 | 2°13 3°48 5°23 6°57 8°32 10° 5 11°39 | 4°17 5°32 6°48 8° 3 9°18 10°33 11°48 | 16° 9 16°45 17°21 17°57 18°33 19° 8 19°44 | 21°24 21°32 21°40 21°48 21°56 22° 4 22°12 | 15°40 15°39 15°37 15°36 15°35 15°34 15°32 | 2°32 2°36 2°40 2°44 2°47 2°51 2°55 | 17°27 17°26 17°25 17°24 17°22 17°21 17°20 | 15°59 15°58 15°58 15°57 15°56 15°56 | 13°24 13°17 13°11 13° 8 13° 6 13° 7 13° 8 | 12° 4 12° 1 11°58 11°55 11°52 11°48 11°45 | 8° 4 8°11 8°17 8°24 8°31 8°37 8°44 | 18°43 18°42 18°42 18°42 18°41 18°41 | S 5 M 6 T 7 W 8 T 9 F 10 S 11 |
| S 12 M13 T 14 W15 T 16 F 17 S 18 | 3 25 40 3 29 37 3 33 33 3 37 30 3 41 26 3 45 23 3 49 19 | 4°52'46 5°53'05 6°53'26 7°53'48 8°54'12 9°54'37 10°55'04 | 12°27 2°31 15°28 6°19 20° 4 11°40 3°34 | 13°12 14°45 16°17 17°49 19°21 20°53 22°24 | 13° 4 14°19 15°34 16°49 18° 4 19°20 20°35 | 20°20 20°56 21°32 22° 7 0°13 0°48 1°24 | 22°19 22°27 0° 4 0°11 0°18 0°25 0°32 | 15°30 15°29 15°27 15°25 15°23 15°21 15°18 | 2°59 3° 2 3° 6 3°10 3°14 3°17 3°21 | 17°19 17°17 17°16 17°15 17°13 17°12 17°10 | 15°54 15°54 15°53 15°53 15°52 15°52 15°51 | 13° 8 13° 7 13° 5 12°59 12°51 12°42 12°31 | 11°42 11°39 11°36 11°33 11°29 11°26 11°23 | 8°51 8°57 9° 4 9°11 9°17 9°24 9°31 | 18°41 18°41 18°41 18°41 18°41 18°41 | S 12 M13 T 14 W15 T 16 F 17 S 18 |
| S 19 M20 T 21 W22 T 23 F 24 S 25 | 3 53 16 3 57 13 4 1 9 4 5 6 4 9 2 4 12 59 4 16 55 | 11°55'33 12°56'03 13°56'36 14°57'10 15°57'45 16°58'22 17°59'01 | 18° 8 10°14 2°17 16°41 8°23 22°22 13°36 | 1°25 2°56 4°27 5°57 7°27 8°56 10°26 | 21°50 0°35 1°50 3° 6 4°21 5°36 6°51 | 2° 0 2°35 3°10 3°46 4°21 4°56 5°31 | 0°38 0°45 0°51 0°57 1° 3 1° 9 | 15°16 15°14 15°11 15° 8 15° 6 15° 3 15° 0 | 3°25 3°29 3°32 3°36 3°40 3°43 3°47 | 17° 9 17° 7 17° 6 17° 4 17° 3 17° 1 17° 0 | 15°51 15°51 15°50 15°50 15°49 15°49 15°49 | 12°20 12°11 12° 5 12° 1 11°59 11°59 11°59 | 11°20 11°17 11°13 11°10 11° 7 11° 4 11° 1 | 9°38 9°44 9°51 9°58 10° 4 10°11 | 18°42 18°42 18°42 18°43 18°43 18°44 18°45 | S 19 M20 T 21 W22 T 23 F 24 S 25 |
| S 26 M27 T 28 W29 T 30 | 4 20 52 4 24 48 4 28 45 4 32 42 4 36 38 | 18°59'42 20° 0'24 21° 1'08 22° 1'54 0°32'41 | 4°39 17°59 8°39 21°37 11°55 | 11°55 13°23 14°51 16°18 17°45 | 8° 6 9°22 10°37 11°52 13° 7 | 6° 7 6°42 7°17 7°52 8°27 | 1°20 1°25 1°31 1°36 1°40 | 14°57 14°54 14°50 14°47 14°44 | 3°51 3°54 3°58 4° 2 4° 5 | 16°58 16°57 16°55 16°53 16°52 | 15°49 15°48 15°48 15°48 15°48 | 11°58 11°55 11°49 11°40 11°29 | 10°58 10°54 10°51 10°48 10°45 | 10°24 10°31 10°38 10°44 10°51 | 18°45 18°46 18°47 18°48 18°49 | S 26 M27 T 28 W29 T 30 |

Delta T = 78.56 sec

DECEMBER 2062 mod 16

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| Day | Sid.t | 0 | D | φ | φ | ð | 4 | ħ |)∤(| ¥ | Р | ¥ | C° | Ç | %٥ | Day |
|--------------|--------------------|----------------------|----------------|----------------|----------------|----------------|--------------|----------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|
| F 1 | 4 40 35 | 1°33'29 | 2° 2 | 19°11 | 14°22 | 9° 1 | 1°45 | 14°40 | 4° 9 | 16°50 | 15°47 | 11°15 | 10°42 | 10°58 | 18°50 | F 1 |
| S 2 | 4 44 31 | 2°34'18 | 14°27 | 20°36 | 15°38 | 9°36 | 1°50 | 14°37 | 4°12 | 16°49 | 15°47 | 11° 1 | 10°39 | 11° 4 | 18°51 | S 2 |
| S 3 | 4 48 28 | 3°35'09 | 4°10 | 22° 0 | 16°53 | 10°11 | 1°54 | 14°33 | 4°16 | 16°47 | 15°47 | 10°47 | 10°35 | 11°11 | 18°52 | S 3 |
| M 4 | 4 52 24 | 4°36'00 | 16°14 | 0°54 | 18° 8 | 10°46 | 1°58 | 14°29 | 4°19 | 16°45 | 15°47 | 10°34 | 10°32 | 11°18 | 18°53 | M 4 |
| T 5 W 6 | 4 56 21 5 0 17 | 5°36'53 6°37'46 | 5°39 17°28 | 2°16 3°36 | 19°23 20°38 | 11°20 11°55 | 2° 2 2° 6 | 14°26 14°22 | 4°23 4°26 | 16°44 16°42 | 15°47 15°47 | 10°25 10°18 | 10°29 10°26 | 11°25 11°31 | 18°54 18°56 | T 5 W 6 |
| T 7 | 5 4 14 | 7°38'41 | 6°45 | 4°55 | 20°54 | 12°29 | 2° 9 | 14°18 | 4°30 | 16°40 | 15°47 | 10°14 | 10°23 | 11°38 | 18°57 | T 7 |
| F 8 | 5 8 11 | 8°39'36 | 18°36 | 6°12 | 0°39 | 13° 4 | 2°13 | 14°14 | 4°33 | 16°39 | 15°47 | 10°12 | 10°19 | 11°45 | 18°59 | F 8 |
| S 9 | 5 12 7 | 9°40'31 | 8° 4 | 7°26 | 1°54 | 13°38 | 2°16 | 14°10 | 4°37 | 16°37 | 15°47 | 10°12 | 10°16 | 11°51 | 19° 0 | S 9 |
| S 10 | 5 16 4 | 10°41'28 | 20°16 | 8°38 | 3° 9 | 14°12 | 2°19 | 14° 6 | 4°40 | 16°35 | 15°47 | 10°12 | 10°13 | 11°58 | 19° 2 | S 10 |
| M11 | 5 20 0 | 11°42'25 | 10°17 | 9°47 | 4°24 | 14°47 | 2°22 | 14° 1 | 4°44 | 16°34 | 15°47 | 10°11 | 10°10 | 12° 5 | 19° 3 | M11 |
| T 12 | 5 23 57 | 12°43'22 | 0°43 | 10°52 | 5°40 | 15°21 | 2°25 | 13°57 | 4°47 | 16°32 | 15°47 | 10° 8 | 10° 7 | 12°11 | 19° 5 | T 12 |
| W13 T 14 | 5 27 53 5 31 50 | 13°44'21 14°45'20 | 14° 6 5°27 | 11°53 12°50 | 6°55 8°10 | 15°55 16°29 | 2°27 2°30 | 13°53 13°48 | 4°50 4°54 | 16°30 16°29 | 15°47 15°48 | 10° 2 9°53 | 10° 4 10° 0 | 12°18 12°25 | 19° 6 19° 8 | W13 T 14 |
| F 15 | 5 35 46 | 14 43 20 15°46'19 | 19°47 | 12 30 13°41 | 9°25 | 10 29 17° 3 | 2°32 | 13°44 | 4°57 | 16°27 | 15°48 | 9°33 | 9°57 | 12°23 | 19 8 19°10 | F 15 |
| S 16 | 5 39 43 | 16°47'20 | 11°59 | 14°26 | 10°40 | 17°37 | 2°34 | 13°40 | 5° 0 | 16°25 | 15°48 | 9°30 | 9°54 | 12°38 | 19°12 | S 16 |
| S 17 | 5 43 40 | 17°48'21 | 4°27 | 15° 4 | 11°55 | 18°10 | 2°36 | 13°35 | 5° 4 | 16°23 | 15°48 | 9°19 | 9°51 | 12°45 | 19°14 | S 17 |
| M18 | 5 47 36 | 18°49'23 | 19°30 | 15°34 | 13°10 | 18°44 | 2°37 | 13°30 | 5° 7 | 16°22 | 15°48 | 9°8 | 9°48 | 12°51 | 19°16 | M18 |
| T 19 | 5 51 33 | 19°50'25 | 11°58 | 15°56 | 14°26 | 19°18 | 2°39 | 13°26 | 5°10 | 16°20 | 15°49 | 9° 0 | 9°45 | 12°58 | 19°18 | T 19 |
| W20 | 5 55 29 | 20°51'29 | 4°14 | 16° 8 | 15°41 | 19°51 | 2°40 | 13°21 | 5°13 | 16°18 | 15°49 | 8°55 | 9°41 | 13° 5 | 19°20 | W20 |
| T 21 F 22 | 5 59 26 6 3 22 | 21°52'33 0°23'37 | 18°42 10°19 | 16°10 16° 1 | 16°56 18°11 | 20°25 20°58 | 2°41 2°42 | 13°16 13°12 | 5°16 5°19 | 16°17 16°15 | 15°49 15°50 | 8°53 8°53 | 9°38 9°35 | 13°11 13°18 | 19°22 19°24 | T 21 F 22 |
| S 23 | 6 7 19 | 1°24'43 | 1°35 | 15°40 | 19°26 | 20°38 21°32 | 2°42 | 13° 7 | 5°22 | 16°13 | 15°50 | 8°53 | 9°32 | 13°25 | 19°26 | S 23 |
| S 24 | 6 11 16 | 2°25'50 | 15° 1 | 15° 7 | 20°41 | 22° 5 | 2°43 | 13° 2 | 5°25 | 16°12 | 15°51 | 8°52 | 9°29 | 13°31 | 19°29 | S 24 |
| M25 | 6 15 12 | 3°26'57 | 5°39 | 14°23 | 21°56 | 0° 8 | 2°43 | 12°57 | 5°28 | 16°10 | 15°51 | 8°50 | 9°25 | 13°38 | 19°31 | M25 |
| T 26 | 6 19 9 | 4°28'05 | 18°32 | 13°28 | 0°41 | 0°41 | 2°43 | 12°52 | 5°31 | 16° 8 | 15°51 | 8°45 | 9°22 | 13°45 | 19°33 | T 26 |
| W27 | 6 23 5 | 5°29'13 | 8°43 | 12°23 | 1°56 | 1°14 | 2°43 | 12°48 | 5°34 | 16° 7 | 15°52 | 8°36 | 9°19 | 13°51 | 19°36 | W27 |
| T 28 | 6 27 2 | 6°30'22 | 21°13 11° 3 | 11°10 9°52 | 3°11 4°27 | 1°47 | 2°43 2°42 | 12°43 | 5°37 | 16° 5 16° 3 | 15°52 | 8°26 | 9°16 | 13°58 14° 5 | 19°38 19°41 | T 28 |
| F 29 S 30 | 6 30 58 6 34 55 | 7°31'32 8°32'42 | 0°44 | 9°52 8°30 | 5°42 | 2°20 2°52 | 2°42 2°41 | 12°38 12°33 | 5°40 5°43 | 16° 3 | 15°53 15°53 | 8°13 8° 0 | 9°13 9°10 | 14° 5 14°12 | 19°41 19°43 | F 29 S 30 |
| S 31 | 6 38 51 | 9°33'52 | 12°47 | 7° 8 | 6°57 | 3°25 | 2°40 | 12°28 | 5°46 | 16° 0 | 15°54 | 7°47 | 9° 6 | 14°18 | 19°46 | S 31 |
| 331 | 0 38 31 | 9 33 32 | 12 4/ | / 8 | 0 3/ | 3 23 | ∠ 40 | 12 20 | J 40 | 10 0 | 15 54 | / 4/ | 9 0 | 14 18 | 17 40 | 331 |

Delta T = 78.59 sec