



Astrodienst Ephemeris Tables for the year 1624

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

ASTRODIENST EPHEMERIS for the year 1624

geocentric

JANUARY 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|-----|---------|-----------|-----------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| M 1 | 6 40 9 | 10°3'34" | 18°21' | 21°19' | 9°56' | 22°58' | 0°20' | 17°55' | 16°12' | 20°22' | 14°26' | 18°R 4 | 17°18' | 23°55' | 14°1' | M 1 |
| T 2 | 6 44 5 | 11°10'44" | 0°11'14" | 22°43' | 10° 2' | 23°40' | 0°17' | 17°52' | 16°10' | 20°23' | 14°25' | 17°58' | 17°15' | 24° 1' | 14° 3' | T 2 |
| W 3 | 6 48 2 | 12°11'53" | 12° 4' | 24° 9' | 10°10' | 24°22' | 0°14' | 17°48' | 16° 8' | 20°24' | 14°25' | 17°49' | 17°11' | 24° 8' | 14° 5' | W 3 |
| T 4 | 6 51 58 | 13°13'01" | 23°55' | 25°35' | 10°20' | 25° 4' | 0°11' | 17°45' | 16° 6' | 20°24' | 14°24' | 17°37' | 17° 8' | 24°15' | 14° 8' | T 4 |
| F 5 | 6 55 55 | 14°14'10" | 5°48' | 27° 2' | 10°32' | 25°46' | 0° 7' | 17°41' | 16° 4' | 20°25' | 14°24' | 17°22' | 17° 5' | 24°22' | 14°10' | F 5 |
| S 6 | 6 59 52 | 15°15'18" | 17°45' | 28°30' | 10°47' | 26°28' | 0° 3' | 17°38' | 16° 2' | 20°26' | 14°23' | 17° 7' | 17° 2' | 24°28' | 14°12' | S 6 |
| S 7 | 7 3 48 | 16°16'25" | 29°48' | 29°58' | 11° 4' | 27° 9' | 29°59' | 17°34' | 15°59' | 20°26' | 14°23' | 16°52' | 16°59' | 24°35' | 14°14' | S 7 |
| M 8 | 7 7 45 | 17°17'33" | 11°56' | 1°32'27" | 11°22' | 27°51' | 29°55' | 17°30' | 15°57' | 20°27' | 14°22' | 16°39' | 16°55' | 24°42' | 14°17' | M 8 |
| T 9 | 7 11 41 | 18°18'40" | 24°12' | 2°56' | 11°43' | 28°33' | 29°51' | 17°26' | 15°55' | 20°27' | 14°22' | 16°28' | 16°52' | 24°48' | 14°19' | T 9 |
| W10 | 7 15 38 | 19°19'46" | 6°13'37" | 4°26' | 12° 6' | 29°15' | 29°47' | 17°22' | 15°53' | 20°27' | 14°22' | 16°20' | 16°49' | 24°55' | 14°22' | W10 |
| T11 | 7 19 34 | 20°20'53" | 19°12' | 5°57' | 12°30' | 29°57' | 29°42' | 17°18' | 15°51' | 20°28' | 14°21' | 16°15' | 16°46' | 25° 2' | 14°24' | T11 |
| F12 | 7 23 31 | 21°21'59" | 2°42' 2" | 7°28' | 12°56' | 0°39' | 29°37' | 17°14' | 15°48' | 20°28' | 14°21' | 16°13' | 16°43' | 25° 9' | 14°27' | F12 |
| S13 | 7 27 27 | 22°23'05" | 15° 9' | 9° 0' | 13°24' | 1°21' | 29°32' | 17°10' | 15°46' | 20°29' | 14°21' | 16°13' | 16°40' | 25°15' | 14°29' | S13 |
| S14 | 7 31 24 | 23°24'11" | 28°36' | 10°32' | 13°54' | 2° 2' | 29°27' | 17° 6' | 15°44' | 20°29' | 14°20' | 16°13' | 16°36' | 25°22' | 14°32' | S14 |
| M15 | 7 35 21 | 24°25'16" | 12°12'26" | 12° 5' | 14°25' | 2°44' | 29°22' | 17° 1' | 15°41' | 20°29' | 14°20' | 16°12' | 16°33' | 25°29' | 14°35' | M15 |
| T16 | 7 39 17 | 25°26'21" | 26°40' | 13°38' | 14°58' | 3°26' | 29°17' | 16°57' | 15°39' | 20°29' | 14°20' | 16° 9' | 16°30' | 25°35' | 14°37' | T16 |
| W17 | 7 43 14 | 26°27'26" | 11°17'13" | 15°12' | 15°32' | 4° 8' | 29°11' | 16°53' | 15°36' | 20°29' | 14°19' | 16° 3' | 16°27' | 25°42' | 14°40' | W17 |
| T18 | 7 47 10 | 27°28'30" | 26°13' | 16°46' | 16° 7' | 4°50' | 29° 5' | 16°48' | 15°34' | 20°30' | 14°19' | 15°55' | 16°24' | 25°49' | 14°43' | T18 |
| F19 | 7 51 7 | 28°29'33" | 11°32'20" | 18°21' | 16°44' | 5°31' | 28°59' | 16°44' | 15°32' | 20°30' | 14°19' | 15°44' | 16°21' | 25°56' | 14°46' | F19 |
| S20 | 7 55 3 | 29°30'36" | 26°29' | 19°57' | 17°22' | 6°13' | 28°53' | 16°39' | 15°29' | 20°30' | 14°19' | 15°33' | 16°17' | 26° 2' | 14°49' | S20 |
| S21 | 7 59 0 | 0°31'38" | 11°28' | 21°33' | 18° 2' | 6°55' | 28°47' | 16°35' | 15°27' | 20°30' | 14°19' | 15°21' | 16°14' | 26° 9' | 14°51' | S21 |
| M22 | 8 2 57 | 1°32'39" | 26° 9' | 23°10' | 18°42' | 7°37' | 28°41' | 16°30' | 15°24' | 20°30' | 14°18' | 15°12' | 16°11' | 26°16' | 14°54' | M22 |
| T23 | 8 6 53 | 2°33'39" | 10°12'24" | 24°48' | 19°24' | 8°19' | 28°35' | 16°25' | 15°21' | 20°30' | 14°18' | 15° 5' | 16° 8' | 26°22' | 14°57' | T23 |
| W24 | 8 10 50 | 3°34'38" | 24°10' | 26°26' | 20° 6' | 9° 0' | 28°28' | 16°21' | 15°19' | 20°30' | 14°18' | 15° 1' | 16° 5' | 26°29' | 15° 0' | W24 |
| T25 | 8 14 46 | 4°35'36" | 7°12'26" | 28° 5' | 20°50' | 9°42' | 28°22' | 16°16' | 15°16' | 20°30' | 14°18' | 14°59' | 16° 1' | 26°36' | 15° 3' | T25 |
| F26 | 8 18 43 | 5°36'32" | 20°17' | 29°45' | 21°35' | 10°24' | 28°15' | 16°11' | 15°14' | 20°30' | 14°18' | 14°D59 | 15°58' | 26°43' | 15° 7' | F26 |
| S27 | 8 22 39 | 6°37'27" | 2°45' | 1°25' | 22°21' | 11° 6' | 28° 8' | 16° 7' | 15°11' | 20°29' | 14°18' | 14°R59 | 15°55' | 26°49' | 15°10' | S27 |
| S28 | 8 26 36 | 7°38'21" | 14°56' | 3° 6' | 23° 8' | 11°47' | 28° 1' | 16° 2' | 15° 9' | 20°29' | 14°D18 | 14°59' | 15°52' | 26°56' | 15°13' | S28 |
| M29 | 8 30 32 | 8°39'13" | 26°55' | 4°48' | 23°55' | 12°29' | 27°54' | 15°57' | 15° 6' | 20°29' | 14°18' | 14°57' | 15°49' | 27° 3' | 15°16' | M29 |
| T30 | 8 34 29 | 9°40'04" | 8°11'47" | 6°30' | 24°44' | 13°11' | 27°47' | 15°52' | 15° 3' | 20°29' | 14°18' | 14°53' | 15°46' | 27° 9' | 15°19' | T30 |
| W31 | 8 38 25 | 10°40'53" | 20°11'37" | 8°13' | 25°33' | 13°52' | 27°40' | 15°47' | 15° 1' | 20°28' | 14°18' | 14°46' | 15°42' | 27°16' | 15°22' | W31 |

Delta T = 62.96 sec

Greg. Calendar

FEBRUARY 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|-----|----------|-----------|-----------|-----------|--------|--------|-----------|-----------|-----------|--------|--------|---------|--------|-----------|--------|-----|
| T 1 | 8 42 22 | 11°41'42" | 2°28' | 9°57' | 26°23' | 14°34' | 27°R32 | 15°R42 | 14°R58 | 20°R28 | 14°R18 | 14°R37 | 15°39' | 27°11'23" | 15°26' | T 1 |
| F 2 | 8 46 19 | 12°42'28" | 14°25' | 11°42' | 27°14' | 15°16' | 27°12'25" | 15°13'38" | 14°15'56" | 20°28' | 14°18' | 14°26' | 15°36' | 27°30' | 15°29' | F 2 |
| S 3 | 8 50 15 | 13°43'14" | 26°28' | 13°27' | 28° 5' | 15°57' | 27°17' | 15°33' | 14°53' | 20°27' | 14°18' | 14°14' | 15°33' | 27°36' | 15°32' | S 3 |
| S 4 | 8 54 12 | 14°43'58" | 8°40' | 15°14' | 28°57' | 16°39' | 27°10' | 15°28' | 14°50' | 20°27' | 14°18' | 14° 2' | 15°30' | 27°43' | 15°36' | S 4 |
| M 5 | 8 58 8 | 15°44'40" | 21° 1' | 17° 1' | 29°50' | 17°20' | 27° 2' | 15°23' | 14°48' | 20°27' | 14°19' | 13°51' | 15°27' | 27°50' | 15°39' | M 5 |
| T 6 | 9 2 5 | 16°45'21" | 3°13'32" | 18°48' | 0°34' | 18° 2' | 26°55' | 15°18' | 14°45' | 20°26' | 14°19' | 13°42' | 15°23' | 27°57' | 15°42' | T 6 |
| W 7 | 9 6 1 | 17°46'01" | 16°13' | 20°37' | 1°38' | 18°43' | 26°47' | 15°13' | 14°42' | 20°25' | 14°19' | 13°36' | 15°20' | 28° 3' | 15°46' | W 7 |
| T 8 | 9 9 58 | 18°46'40" | 29° 5' | 22°26' | 2°33' | 19°25' | 26°39' | 15° 8' | 14°40' | 20°25' | 14°19' | 13°33' | 15°17' | 28°10' | 15°49' | T 8 |
| F 9 | 9 13 54 | 19°47'17" | 12°48' 8" | 24°15' | 3°28' | 20° 6' | 26°31' | 15° 3' | 14°37' | 20°24' | 14°19' | 13°D32 | 15°14' | 28°17' | 15°53' | F 9 |
| S10 | 9 17 51 | 20°47'53" | 25°25' | 26° 6' | 4°24' | 20°48' | 26°24' | 14°59' | 14°35' | 20°24' | 14°20' | 13°32' | 15°11' | 28°23' | 15°56' | S10 |
| S11 | 9 21 48 | 21°48'28" | 8°15'56" | 27°56' | 5°21' | 21°29' | 26°16' | 14°54' | 14°32' | 20°23' | 14°20' | 13°33' | 15° 7' | 28°30' | 16° 0' | S11 |
| M12 | 9 25 44 | 22°49'02" | 22°43' | 29°47' | 6°18' | 22°11' | 26° 8' | 14°49' | 14°29' | 20°22' | 14°20' | 13°R34 | 15° 4' | 28°37' | 16° 3' | M12 |
| T13 | 9 29 41 | 23°49'34" | 6°46' | 1°39' | 7°16' | 22°52' | 26° 0' | 14°44' | 14°27' | 20°22' | 14°21' | 13°33' | 15° 1' | 28°44' | 16° 7' | T13 |
| W14 | 9 33 37 | 24°50'06" | 21° 5' | 3°30' | 8°14' | 23°33' | 25°52' | 14°39' | 14°24' | 20°21' | 14°21' | 13°30' | 14°58' | 28°50' | 16°10' | W14 |
| T15 | 9 37 34 | 25°50'36" | 5°38' | 5°21' | 9°12' | 24°15' | 25°44' | 14°35' | 14°22' | 20°20' | 14°21' | 13°26' | 14°55' | 28°57' | 16°14' | T15 |
| F16 | 9 41 30 | 26°51'04" | 20°20' | 7°12' | 10°11' | 24°56' | 25°36' | 14°30' | 14°19' | 20°19' | 14°22' | 13°19' | 14°52' | 29° 4' | 16°17' | F16 |
| S17 | 9 45 27 | 27°51'32" | 5°43' | 9° 3' | 11°10' | 25°37' | 25°28' | 14°25' | 14°17' | 20°19' | 14°22' | 13°12' | 14°48' | 29°10' | 16°21' | S17 |
| S18 | 9 49 23 | 28°51'57" | 19°42' | 10°53' | 12°10' | 26°19' | 25°20' | 14°20' | 14°14' | 20°18' | 14°23' | 13° 4' | 14°45' | 29°17' | 16°25' | S18 |
| M19 | 9 53 20 | 29°52'21" | 4°11' 7" | 12°41' | 13°10' | 27° 0' | 25°13' | 14°16' | 14°12' | 20°17' | 14°23' | 12°58' | 14°42' | 29°24' | 16°28' | M19 |
| T20 | 9 57 17 | 0°52'43" | 18°13' | 14°28' | 14°11' | 27°41' | 25° 5' | 14°11' | 14° 9' | 20°16' | 14°24' | 12°54' | 14°39' | 29°31' | 16°32' | T20 |
| W21 | 10 1 13 | 1°53'04" | 1°15'56" | 16°13' | 15°12' | 28°22' | 24°57' | 14° 7' | 14° 7' | 20°15' | 14°24' | 12°51' | 14°36' | 29°37' | 16°36' | W21 |
| T22 | 10 5 10 | 2°53'22" | 15°14' | 17°55' | 16°13' | 29° 4' | 24°49' | 14° 2' | 14° 4' | 20°14' | 14°25' | 12°D51 | 14°33' | 29°44' | 16°39' | T22 |
| F23 | 10 9 6 | 3°53'39" | 28° 8' | 19°35' | 17°14' | 29°45' | 24°41' | 13°58' | 14° 2' | 20°13' | 14°25' | 12°52' | 14°29' | 29°51' | 16°43' | F23 |
| S24 | 10 13 3 | 4°53'53" | 10°41' | 21°11' | 18°16' | 0°26' | 24°34' | 13°53' | 13°59' | 20°12' | 14°26' | 12°53' | 14°26' | 29°57' | 16°47' | S24 |
| S25 | 10 16 59 | 5°54'06" | 22°56' | 22°43' | 19°18' | 1° 7' | 24°26' | 13°49' | 13°57' | 20°11' | 14°26' | 12°55' | 14°23' | 0°34' | 16°50' | S25 |
| M26 | 10 20 56 | 6°54'16" | 4°11'58" | 24°11' | 20°21' | 1°48' | 24°18' | 13°45' | 13°55' | 20°10' | 14°27' | 12°R56 | 14°20' | 0°11' | 16°54' | M26 |
| T27 | 10 24 52 | 7°54'25" | 16°53' | 25°33' | 21°24' | 2°29' | 24°11' | 13°40' | 13°52' | 20° 9' | 14°27' | 12°55' | 14°17' | 0°18' | 16°58' | T27 |
| W28 | 10 28 49 | 8°54'31" | 28°45' | 26°50' | 22°27' | 3°10' | 24° 3' | 13°36' | 13°50' | 20° 8' | 14°28' | 12°53' | 14°13' | 0°24' | 17° 2' | W28 |
| T29 | 10 32 46 | 9°54'35" | 10°28'38" | 28°11' 0" | 23°30' | 3°51' | 23°56' | 13°32' | 13°48' | 20° 7' | 14°29' | 12°45'0 | 14°10' | 0°31' | 17° 5' | T29 |

Delta T = 62.89 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1624

geocentric

MARCH 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|------|
| F 1 | 10 36 42 | 10 ^h 54'37" | 22 ^h 37' | 29 ^h 4' | 24 ^h 33' | 4 ^h 32' | 23 ^h R49 | 13 ^h R28 | 13 ^h R45 | 20 ^h R 5 | 14 ^h 8'29" | 12 ^h R45 | 14 ^h 7' | 0 ^h 38' | 17 ^h 9' | F 1 |
| S 2 | 10 40 39 | 11 ^h 54'37" | 4 ^h 45' | 29 ^h 59' | 25 ^h 38' | 5 ^h 13' | 23 ^h 42' | 13 ^h 42' | 13 ^h 43' | 20 ^h 4' | 14 ^h 30' | 12 ^h 40' | 14 ^h 4' | 0 ^h 44' | 17 ^h 13' | S 2 |
| S 3 | 10 44 35 | 12 ^h 54'35" | 17 ^h 5' | 0 ^h 48' | 26 ^h 42' | 5 ^h 54' | 23 ^h 34' | 13 ^h 20' | 13 ^h 41' | 20 ^h 3' | 14 ^h 31' | 12 ^h 34' | 14 ^h 1' | 0 ^h 51' | 17 ^h 16' | S 3 |
| M 4 | 10 48 32 | 13 ^h 54'30" | 29 ^h 38' | 1 ^h 29' | 27 ^h 46' | 6 ^h 35' | 23 ^h 27' | 13 ^h 16' | 13 ^h 39' | 20 ^h 2' | 14 ^h 32' | 12 ^h 29' | 13 ^h 58' | 0 ^h 58' | 17 ^h 20' | M 4 |
| T 5 | 10 52 28 | 14 ^h 54'24" | 12 ^h 26' | 2 ^h 0' | 28 ^h 51' | 7 ^h 16' | 23 ^h 20' | 13 ^h 12' | 13 ^h 37' | 20 ^h 1' | 14 ^h 32' | 12 ^h 25' | 13 ^h 54' | 1 ^h 5' | 17 ^h 24' | T 5 |
| W 6 | 10 56 25 | 15 ^h 54'16" | 25 ^h 27' | 2 ^h 23' | 29 ^h 56' | 7 ^h 57' | 23 ^h 14' | 13 ^h 9' | 13 ^h 35' | 19 ^h 59' | 14 ^h 33' | 12 ^h 23' | 13 ^h 51' | 1 ^h 11' | 17 ^h 28' | W 6 |
| T 7 | 11 0 21 | 16 ^h 54'06" | 8 ^h 42' | 2 ^h 38' | 1 ^h 8' | 8 ^h 37' | 23 ^h 7' | 13 ^h 5' | 13 ^h 32' | 19 ^h 58' | 14 ^h 34' | 12 ^h D22 | 13 ^h 48' | 1 ^h 18' | 17 ^h 32' | T 7 |
| F 8 | 11 4 18 | 17 ^h 53'53" | 22 ^h 9' | 2 ^h R44 | 2 ^h 6' | 9 ^h 18' | 23 ^h 0' | 13 ^h 2' | 13 ^h 30' | 19 ^h 57' | 14 ^h 35' | 12 ^h 22' | 13 ^h 45' | 1 ^h 25' | 17 ^h 35' | F 8 |
| S 9 | 11 8 15 | 18 ^h 53'40" | 5 ^h 47' | 2 ^h 41' | 3 ^h 11' | 9 ^h 59' | 22 ^h 54' | 12 ^h 58' | 13 ^h 28' | 19 ^h 55' | 14 ^h 35' | 12 ^h 23' | 13 ^h 42' | 1 ^h 31' | 17 ^h 39' | S 9 |
| S 10 | 11 12 11 | 19 ^h 53'24" | 19 ^h 36' | 2 ^h 30' | 4 ^h 17' | 10 ^h 40' | 22 ^h 47' | 12 ^h 55' | 13 ^h 26' | 19 ^h 54' | 14 ^h 36' | 12 ^h 25' | 13 ^h 38' | 1 ^h 38' | 17 ^h 43' | S 10 |
| M 11 | 11 16 8 | 20 ^h 53'07" | 3 ^h 34' | 2 ^h 10' | 5 ^h 23' | 11 ^h 20' | 22 ^h 41' | 12 ^h 51' | 13 ^h 25' | 19 ^h 53' | 14 ^h 37' | 12 ^h 26' | 13 ^h 35' | 1 ^h 45' | 17 ^h 47' | M 11 |
| T 12 | 11 20 4 | 21 ^h 52'48" | 17 ^h 39' | 1 ^h 44' | 6 ^h 29' | 12 ^h 1' | 22 ^h 35' | 12 ^h 48' | 13 ^h 23' | 19 ^h 51' | 14 ^h 38' | 12 ^h R27 | 13 ^h 32' | 1 ^h 52' | 17 ^h 50' | T 12 |
| W 13 | 11 24 1 | 22 ^h 52'27" | 1 ^h 35' | 1 ^h 11' | 7 ^h 35' | 12 ^h 42' | 22 ^h 29' | 12 ^h 45' | 13 ^h 21' | 19 ^h 50' | 14 ^h 39' | 12 ^h 27' | 13 ^h 29' | 1 ^h 58' | 17 ^h 54' | W 13 |
| T 14 | 11 27 57 | 23 ^h 52'05" | 16 ^h 7' | 0 ^h 32' | 8 ^h 42' | 13 ^h 22' | 22 ^h 23' | 12 ^h 42' | 13 ^h 19' | 19 ^h 48' | 14 ^h 40' | 12 ^h 26' | 13 ^h 26' | 2 ^h 5' | 17 ^h 58' | T 14 |
| F 15 | 11 31 54 | 24 ^h 51'41" | 0 ^h 25' | 29 ^h 47' | 9 ^h 48' | 14 ^h 3' | 22 ^h 17' | 12 ^h 39' | 13 ^h 17' | 19 ^h 47' | 14 ^h 41' | 12 ^h 24' | 13 ^h 23' | 2 ^h 12' | 18 ^h 2' | F 15 |
| S 16 | 11 35 50 | 25 ^h 51'15" | 14 ^h 40' | 28 ^h 59' | 10 ^h 55' | 14 ^h 43' | 22 ^h 12' | 12 ^h 36' | 13 ^h 15' | 19 ^h 45' | 14 ^h 42' | 12 ^h 22' | 13 ^h 19' | 2 ^h 19' | 18 ^h 5' | S 16 |
| S 17 | 11 39 47 | 26 ^h 50'47" | 28 ^h 48' | 28 ^h 8' | 12 ^h 2' | 15 ^h 24' | 22 ^h 6' | 12 ^h 33' | 13 ^h 14' | 19 ^h 44' | 14 ^h 43' | 12 ^h 19' | 13 ^h 16' | 2 ^h 25' | 18 ^h 9' | S 17 |
| M 18 | 11 43 43 | 27 ^h 50'17" | 12 ^h 46' | 27 ^h 16' | 13 ^h 9' | 16 ^h 5' | 22 ^h 1' | 12 ^h 30' | 13 ^h 12' | 19 ^h 42' | 14 ^h 44' | 12 ^h 18' | 13 ^h 13' | 2 ^h 32' | 18 ^h 13' | M 18 |
| T 19 | 11 47 40 | 28 ^h 49'45" | 26 ^h 30' | 26 ^h 23' | 14 ^h 16' | 16 ^h 45' | 21 ^h 56' | 12 ^h 28' | 13 ^h 10' | 19 ^h 41' | 14 ^h 45' | 12 ^h 16' | 13 ^h 10' | 2 ^h 39' | 18 ^h 16' | T 19 |
| W 20 | 11 51 37 | 29 ^h 49'11" | 9 ^h 57' | 25 ^h 30' | 15 ^h 24' | 17 ^h 26' | 21 ^h 51' | 12 ^h 25' | 13 ^h 9' | 19 ^h 39' | 14 ^h 45' | 12 ^h D16 | 13 ^h 7' | 2 ^h 45' | 18 ^h 20' | W 20 |
| T 21 | 11 55 33 | 0 ^h 48'35" | 23 ^h 5' | 24 ^h 38' | 16 ^h 31' | 18 ^h 6' | 21 ^h 46' | 12 ^h 23' | 13 ^h 7' | 19 ^h 38' | 14 ^h 47' | 12 ^h 16' | 13 ^h 4' | 2 ^h 52' | 18 ^h 24' | T 21 |
| F 22 | 11 59 30 | 1 ^h 47'57" | 5 ^h 55' | 23 ^h 50' | 17 ^h 39' | 18 ^h 46' | 21 ^h 41' | 12 ^h 21' | 13 ^h 6' | 19 ^h 36' | 14 ^h 48' | 12 ^h 17' | 13 ^h 0' | 2 ^h 59' | 18 ^h 28' | F 22 |
| S 23 | 12 3 26 | 2 ^h 47'17" | 18 ^h 26' | 23 ^h 4' | 18 ^h 46' | 19 ^h 27' | 21 ^h 37' | 12 ^h 18' | 13 ^h 4' | 19 ^h 35' | 14 ^h 49' | 12 ^h 18' | 12 ^h 57' | 3 ^h 6' | 18 ^h 31' | S 23 |
| S 24 | 12 7 23 | 3 ^h 46'34" | 0 ^h 43' | 22 ^h 22' | 19 ^h 54' | 20 ^h 7' | 21 ^h 33' | 12 ^h 16' | 13 ^h 3' | 19 ^h 33' | 14 ^h 50' | 12 ^h 19' | 12 ^h 54' | 3 ^h 12' | 18 ^h 35' | S 24 |
| M 25 | 12 11 19 | 4 ^h 45'50" | 2 ^h 47' | 21 ^h 45' | 21 ^h 2' | 20 ^h 47' | 21 ^h 28' | 12 ^h 14' | 13 ^h 2' | 19 ^h 32' | 14 ^h 51' | 12 ^h 20' | 12 ^h 51' | 3 ^h 19' | 18 ^h 39' | M 25 |
| T 26 | 12 15 16 | 5 ^h 45'03" | 24 ^h 44' | 21 ^h 13' | 22 ^h 10' | 21 ^h 28' | 21 ^h 24' | 12 ^h 12' | 13 ^h 0' | 19 ^h 30' | 14 ^h 52' | 12 ^h 20' | 12 ^h 48' | 3 ^h 26' | 18 ^h 42' | T 26 |
| W 27 | 12 19 12 | 6 ^h 44'13" | 6 ^h 37' | 20 ^h 46' | 23 ^h 19' | 22 ^h 8' | 21 ^h 21' | 12 ^h 10' | 12 ^h 59' | 19 ^h 29' | 14 ^h 53' | 12 ^h R20 | 12 ^h 44' | 3 ^h 32' | 18 ^h 46' | W 27 |
| T 28 | 12 23 9 | 7 ^h 43'21" | 18 ^h 31' | 20 ^h 25' | 24 ^h 27' | 22 ^h 48' | 21 ^h 17' | 12 ^h 9' | 12 ^h 58' | 19 ^h 27' | 14 ^h 54' | 12 ^h 20' | 12 ^h 41' | 3 ^h 39' | 18 ^h 49' | T 28 |
| F 29 | 12 27 6 | 8 ^h 42'27" | 0 ^h 41' | 20 ^h 9' | 25 ^h 35' | 23 ^h 28' | 21 ^h 13' | 12 ^h 7' | 12 ^h 57' | 19 ^h 25' | 14 ^h 55' | 12 ^h 20' | 12 ^h 38' | 3 ^h 46' | 18 ^h 53' | F 29 |
| S 30 | 12 31 2 | 9 ^h 41'32" | 12 ^h 41' | 19 ^h 59' | 26 ^h 44' | 24 ^h 9' | 21 ^h 10' | 12 ^h 6' | 12 ^h 56' | 19 ^h 24' | 14 ^h 56' | 12 ^h 19' | 12 ^h 35' | 3 ^h 53' | 18 ^h 57' | S 30 |
| S 31 | 12 34 59 | 10 ^h 40'32" | 25 ^h 42' | 19 ^h D55 | 27 ^h 55' | 24 ^h 49' | 21 ^h 42' | 12 ^h 42' | 12 ^h 55' | 19 ^h 22' | 14 ^h 57' | 12 ^h 19' | 12 ^h 32' | 3 ^h 59' | 19 ^h 0' | S 31 |

Delta T = 62.82 sec

Greg. Calendar

APRIL 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|-------|-------|-------|--------|--------|--------|--------|-------|--------|-------|------|-------|------|
| M 1 | 12 38 55 | 11°39'31 | 7°45 | 19°55 | 29°1 | 25°29 | 21°R 4 | 12°R 3 | 12°R54 | 19°R21 | 14°58 | 12°R19 | 12°29 | 4°6 | 19°4 | M 1 |
| T 2 | 12 42 52 | 12°38'28 | 20°45 | 20° 2 | 0°10 | 26° 9 | 21°1 | 12°2 | 12°53 | 19°19 | 15° 0 | 12°D19 | 12°25 | 4°13 | 19° 7 | T 2 |
| W 3 | 12 46 48 | 13°37'23 | 4° 3 | 20°13 | 1°19 | 26°49 | 20°59 | 12° 1 | 12°52 | 19°17 | 15° 1 | 12°19 | 12°22 | 4°20 | 19°11 | W 3 |
| T 4 | 12 50 45 | 14°36'15 | 17°40 | 20°30 | 2°28 | 27°29 | 20°56 | 12° 0 | 12°51 | 19°16 | 15° 2 | 12°R19 | 12°19 | 4°26 | 19°14 | T 4 |
| F 5 | 12 54 41 | 15°35'06 | 1°43 | 20°51 | 3°37 | 28° 9 | 20°54 | 11°59 | 12°50 | 19°14 | 15° 3 | 12°19 | 12°16 | 4°33 | 19°18 | F 5 |
| S 6 | 12 58 38 | 16°33'54 | 15°41 | 21°17 | 4°46 | 28°49 | 20°52 | 11°58 | 12°49 | 19°12 | 15° 4 | 12°19 | 12°13 | 4°40 | 19°21 | S 6 |
| S 7 | 13 2 35 | 17°32'41 | 29°57 | 21°47 | 5°56 | 29°29 | 20°50 | 11°57 | 12°49 | 19°11 | 15° 6 | 12°18 | 12° 9 | 4°46 | 19°25 | S 7 |
| M 8 | 13 6 31 | 18°31'26 | 14°17 | 22°21 | 7° 5 | 0°11 | 20°49 | 11°57 | 12°48 | 19° 9 | 15° 7 | 12°17 | 12° 6 | 4°53 | 19°28 | M 8 |
| T 9 | 13 10 28 | 19°30'10 | 28°38 | 23° 0 | 8°15 | 0°49 | 20°47 | 11°56 | 12°48 | 19° 7 | 15° 8 | 12°17 | 12° 3 | 5° 0 | 19°31 | T 9 |
| W10 | 13 14 24 | 20°28'52 | 12°35 | 23°42 | 9°24 | 1°29 | 20°46 | 11°56 | 12°47 | 19° 6 | 15° 9 | 12°16 | 12° 0 | 5° 7 | 19°35 | W10 |
| T 11 | 13 18 21 | 21°27'32 | 27° 7 | 24°28 | 10°34 | 2° 9 | 20°45 | 11°56 | 12°46 | 19° 4 | 15°11 | 12°D16 | 11°57 | 5°13 | 19°38 | T 11 |
| F 12 | 13 22 17 | 22°26'10 | 11°40 | 25°17 | 11°43 | 2°48 | 20°44 | 11°55 | 12°46 | 19° 2 | 15°12 | 12°17 | 11°54 | 5°20 | 19°41 | F 12 |
| S 13 | 13 26 14 | 23°24'47 | 25° 4 | 26° 9 | 12°53 | 3°28 | 20°43 | 11°D55 | 12°46 | 19° 1 | 15°13 | 12°18 | 11°50 | 5°27 | 19°45 | S 13 |
| S 14 | 13 30 10 | 24°23'21 | 8°46 | 27° 5 | 14° 3 | 4° 8 | 20°43 | 11°55 | 12°45 | 18°59 | 15°14 | 12°19 | 11°47 | 5°33 | 19°48 | S 14 |
| M15 | 13 34 7 | 25°21'55 | 22°16 | 28° 4 | 15°13 | 4°48 | 20°42 | 11°56 | 12°45 | 18°58 | 15°16 | 12°20 | 11°44 | 5°40 | 19°51 | M15 |
| T 16 | 13 38 3 | 26°20'26 | 5°33 | 29° 5 | 16°23 | 5°27 | 20°D42 | 11°56 | 12°45 | 18°56 | 15°17 | 12°20 | 11°41 | 5°47 | 19°54 | T 16 |
| W17 | 13 42 0 | 27°18'56 | 18°37 | 0°39 | 17°33 | 6° 7 | 20°42 | 11°56 | 12°45 | 18°54 | 15°18 | 12°R20 | 11°38 | 5°54 | 19°57 | W17 |
| T 18 | 13 45 57 | 28°17'23 | 1°28 | 1°16 | 18°43 | 6°47 | 20°42 | 11°57 | 12°45 | 18°53 | 15°20 | 12°19 | 11°35 | 6° 0 | 20° 0 | T 18 |
| F 19 | 13 49 53 | 29°15'49 | 14° 5 | 2°25 | 19°53 | 7°27 | 20°43 | 11°57 | 12°44 | 18°51 | 15°21 | 12°18 | 11°31 | 6° 7 | 20° 4 | F 19 |
| S 20 | 13 53 50 | 0°14'13 | 26°29 | 3°37 | 21° 3 | 8° 6 | 20°43 | 11°58 | 12°D44 | 18°49 | 15°22 | 12°15 | 11°28 | 6°14 | 20° 7 | S 20 |
| S 21 | 13 57 46 | 1°12'35 | 8°11 | 4°51 | 22°14 | 8°46 | 20°44 | 11°59 | 12°45 | 18°48 | 15°23 | 12°12 | 11°25 | 6°21 | 20°10 | S 21 |
| M22 | 14 1 43 | 2°10'55 | 20°44 | 6° 8 | 23°24 | 9°25 | 20°45 | 12° 0 | 12°45 | 18°46 | 15°25 | 12° 9 | 11°22 | 6°27 | 20°13 | M22 |
| T23 | 14 5 39 | 3° 9'13 | 2°40 | 7°26 | 24°34 | 10° 5 | 20°46 | 12° 1 | 12°45 | 18°45 | 15°26 | 12° 7 | 11°19 | 6°34 | 20°16 | T 23 |
| W24 | 14 9 36 | 4° 7'29 | 14°33 | 8°47 | 25°45 | 10°44 | 20°47 | 12° 2 | 12°45 | 18°43 | 15°27 | 12° 4 | 11°15 | 6°41 | 20°19 | W24 |
| T 25 | 14 13 32 | 5° 5'43 | 26°26 | 10°10 | 26°55 | 11°24 | 20°49 | 12° 3 | 12°45 | 18°42 | 15°29 | 12° 3 | 11°12 | 6°47 | 20°22 | T 25 |
| F 26 | 14 17 29 | 6° 3'55 | 8°12 | 11°35 | 28° 6 | 12° 3 | 20°50 | 12° 5 | 12°46 | 18°40 | 15°30 | 12°D 3 | 11° 9 | 6°54 | 20°24 | F 26 |
| S 27 | 14 21 26 | 7° 2'05 | 20°33 | 13° 2 | 29°16 | 12°43 | 20°52 | 12° 6 | 12°46 | 18°38 | 15°31 | 12° 3 | 11° 6 | 7° 1 | 20°27 | S 27 |
| S 28 | 14 25 22 | 8° 0'13 | 2°45 | 14°31 | 0°37 | 13°22 | 20°54 | 12° 8 | 12°46 | 18°37 | 15°33 | 12° 5 | 11° 3 | 7° 8 | 20°30 | S 28 |
| M29 | 14 29 19 | 8°58'19 | 15°38 | 16° 3 | 1°38 | 14° 2 | 20°57 | 12°10 | 12°47 | 18°35 | 15°34 | 12° 6 | 11° 0 | 7°14 | 20°33 | M29 |
| T 30 | 14 33 15 | 9°56'23 | 28°42 | 17°36 | 2°48 | 14°11 | 20°59 | 12°11 | 12°47 | 18°34 | 15°35 | 12° 8 | 10°56 | 7°21 | 20°36 | T 30 |

ASTRODIENST EPHEMERIS for the year 1624
geocentric

MAY 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|------|
| W 1 | 14 37 12 | 10♌54'25 | 12♏10 | 19♍11 | 3♍59 | 15♏20 | 21♏2 | 12♏13 | 12♏48 | 18♏32 | 15♏37 | 12♏R 8 | 10♏53 | 7♏28 | 20♏38 | W 1 |
| T 2 | 14 41 8 | 11°52'25 | 26° 2 | 20°48 | 5°10 | 16° 0 | 21° 4 | 12°15 | 12°49 | 18♏31 | 15°38 | 12♏8 | 10°50 | 7°34 | 20°41 | T 2 |
| F 3 | 14 45 5 | 12°50'24 | 10♏17 | 22°27 | 6°21 | 16°39 | 21° 7 | 12°17 | 12°49 | 18°29 | 15°40 | 12° 6 | 10°47 | 7°41 | 20°43 | F 3 |
| S 4 | 14 49 1 | 13°48'21 | 24°49 | 24° 8 | 7°32 | 17°18 | 21°10 | 12°19 | 12°50 | 18°28 | 15°41 | 12° 2 | 10°44 | 7°48 | 20°46 | S 4 |
| S 5 | 14 52 58 | 14°46'17 | 9♏33 | 25°51 | 8°42 | 17°57 | 21°13 | 12°22 | 12°51 | 18°27 | 15°42 | 11°58 | 10°41 | 7°55 | 20°49 | S 5 |
| M 6 | 14 56 55 | 15°44'11 | 24°20 | 27°36 | 9°53 | 18°37 | 21°17 | 12°24 | 12°52 | 18°25 | 15°44 | 11°53 | 10°37 | 8° 1 | 20°51 | M 6 |
| T 7 | 15 0 51 | 16°42'04 | 9♏4 | 29°23 | 11° 4 | 19°16 | 21°20 | 12°27 | 12°53 | 18°24 | 15°45 | 11°48 | 10°34 | 8° 8 | 20°54 | T 7 |
| W 8 | 15 4 48 | 17°39'55 | 23°38 | 1♏12 | 12°15 | 19°55 | 21°24 | 12°29 | 12°54 | 18°22 | 15°46 | 11°45 | 10°31 | 8°15 | 20°56 | W 8 |
| T 9 | 15 8 44 | 18°37'45 | 7♏57 | 3° 3 | 13°27 | 20°34 | 21°28 | 12°32 | 12°55 | 18°21 | 15°48 | 11°43 | 10°28 | 8°22 | 20°58 | T 9 |
| F 10 | 15 12 41 | 19°35'35 | 21°58 | 4°56 | 14°38 | 21°13 | 21°32 | 12°35 | 12°56 | 18°20 | 15°49 | 11°D43 | 10°25 | 8°28 | 21° 1 | F 10 |
| S 11 | 15 16 37 | 20°33'22 | 5♏41 | 6°50 | 15°49 | 21°52 | 21°36 | 12°38 | 12°57 | 18°18 | 15°50 | 11°43 | 10°21 | 8°35 | 21° 3 | S 11 |
| S 12 | 15 20 34 | 21°31'09 | 19° 7 | 8°47 | 17° 0 | 22°31 | 21°41 | 12°41 | 12°58 | 18°17 | 15°52 | 11°45 | 10°18 | 8°42 | 21° 5 | S 12 |
| M13 | 15 24 30 | 22°28'55 | 2♍16 | 10°46 | 18°11 | 23°11 | 21°45 | 12°44 | 12°59 | 18°16 | 15°53 | 11°46 | 10°15 | 8°48 | 21° 7 | M13 |
| T 14 | 15 28 27 | 23°26'39 | 15°12 | 12°46 | 19°23 | 23°50 | 21°50 | 12°47 | 13° 0 | 18°14 | 15°54 | 11°R46 | 10°12 | 8°55 | 21°10 | T 14 |
| W15 | 15 32 24 | 24°24'22 | 27°54 | 14°49 | 20°34 | 24°29 | 21°55 | 12°50 | 13° 2 | 18°13 | 15°56 | 11°45 | 10° 9 | 9° 2 | 21°12 | W15 |
| T 16 | 15 36 20 | 25°22'04 | 10♏26 | 16°53 | 21°45 | 25° 8 | 22° 0 | 12°53 | 13° 3 | 18°12 | 15°57 | 11°42 | 10° 6 | 9° 9 | 21°14 | T 16 |
| F 17 | 15 40 17 | 26°19'45 | 22°48 | 18°58 | 22°57 | 25°47 | 22° 5 | 12°57 | 13° 4 | 18°11 | 15°58 | 11°36 | 10° 2 | 9°15 | 21°16 | F 17 |
| S 18 | 15 44 13 | 27°17'25 | 5♏1 | 21° 5 | 24° 8 | 26°26 | 22°11 | 13° 0 | 13° 6 | 18° 9 | 16° 0 | 11°29 | 9°59 | 9°22 | 21°18 | S 18 |
| S 19 | 15 48 10 | 28°15'03 | 17° 6 | 23°14 | 25°19 | 27° 5 | 22°16 | 13° 4 | 13° 7 | 18° 8 | 16° 1 | 11°21 | 9°56 | 9°29 | 21°20 | S 19 |
| M20 | 15 52 6 | 29°12'40 | 29° 4 | 25°23 | 26°31 | 27°43 | 22°22 | 13° 8 | 13° 9 | 18° 7 | 16° 2 | 11°12 | 9°53 | 9°36 | 21°22 | M20 |
| T 21 | 15 56 3 | 0♏10'16 | 10♏58 | 27°34 | 27°42 | 28°22 | 22°27 | 13°12 | 13°11 | 18° 6 | 16° 4 | 11° 3 | 9°50 | 9°42 | 21°23 | T 21 |
| W22 | 15 59 59 | 1° 7'50 | 22°49 | 29°45 | 28°54 | 29° 1 | 22°33 | 13°15 | 13°12 | 18° 5 | 16° 5 | 10°56 | 9°46 | 9°49 | 21°25 | W22 |
| T 23 | 16 3 56 | 2° 5'24 | 4♏42 | 1♏57 | 0♏6 | 29°40 | 22°39 | 13°19 | 13°14 | 18° 4 | 16° 6 | 10°50 | 9°43 | 9°56 | 21°27 | T 23 |
| F 24 | 16 7 53 | 3° 2'55 | 16°39 | 4° 9 | 1°17 | 0♏19 | 22°46 | 13°23 | 13°16 | 18° 3 | 16° 8 | 10°46 | 9°40 | 10° 2 | 21°29 | F 24 |
| S 25 | 16 11 49 | 4° 0'25 | 28°45 | 6°21 | 2°29 | 0°58 | 22°52 | 13°28 | 13°18 | 18° 2 | 16° 9 | 10°D45 | 9°37 | 10° 9 | 21°30 | S 25 |
| S 26 | 16 15 46 | 4°57'54 | 11♏4 | 8°32 | 3°40 | 1°37 | 22°59 | 13°32 | 13°19 | 18° 1 | 16°10 | 10°45 | 9°34 | 10°16 | 21°32 | S 26 |
| M27 | 16 19 42 | 5°55'22 | 23°43 | 10°43 | 4°52 | 2°15 | 23° 5 | 13°36 | 13°21 | 18° 0 | 16°12 | 10°46 | 9°31 | 10°23 | 21°33 | M27 |
| T 28 | 16 23 39 | 6°52'48 | 6♏44 | 12°53 | 6° 4 | 2°54 | 23°12 | 13°41 | 13°23 | 17°59 | 16°13 | 10°R46 | 9°27 | 10°29 | 21°35 | T 28 |
| W29 | 16 27 35 | 7°50'13 | 20°12 | 15° 2 | 7°15 | 3°33 | 23°19 | 13°45 | 13°25 | 17°58 | 16°14 | 10°46 | 9°24 | 10°36 | 21°36 | W29 |
| T 30 | 16 31 32 | 8°47'37 | 4♏9 | 17°10 | 8°27 | 4°12 | 23°26 | 13°50 | 13°27 | 17°57 | 16°15 | 10°44 | 9°21 | 10°43 | 21°38 | T 30 |
| F 31 | 16 35 28 | 9♏45'00 | 18♏33 | 19♏16 | 9♏39 | 4♏50 | 23♏33 | 13♏54 | 13♏29 | 17♏56 | 16♏17 | 10♏40 | 9♏18 | 10♏49 | 21♏39 | F 31 |

Delta T = 62.67 sec

Greg. Calendar

JUNE 1624 GC

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|--------|-------|--------|------|-------|--------|------|
| S 1 | 16 39 25 | 10♏42'22 | 3♏20 | 21♏20 | 10♏51 | 5♏29 | 23♏40 | 13♏59 | 13♏31 | 17°R55 | 16♏18 | 10°R33 | 9♏15 | 10♏56 | 21♏40 | S 1 |
| S 2 | 16 43 22 | 11°39'43 | 18°23 | 23°23 | 12° 3 | 6° 8 | 23°48 | 14° 4 | 13°34 | 17♏54 | 16°19 | 10♏25 | 9°12 | 11° 3 | 21°42 | S 2 |
| M 3 | 16 47 18 | 12°37'04 | 3♏33 | 25°23 | 13°14 | 6°46 | 23°55 | 14° 9 | 13°36 | 17°54 | 16°20 | 10°16 | 9° 8 | 11°10 | 21°43 | M 3 |
| T 4 | 16 51 15 | 13°34'23 | 18°40 | 27°22 | 14°26 | 7°25 | 24° 3 | 14°13 | 13°38 | 17°53 | 16°22 | 10° 7 | 9° 5 | 11°16 | 21°44 | T 4 |
| W 5 | 16 55 11 | 14°31'42 | 3♏32 | 29°18 | 15°38 | 8° 4 | 24°11 | 14°18 | 13°40 | 17°52 | 16°23 | 10° 0 | 9° 2 | 11°23 | 21°45 | W 5 |
| T 6 | 16 59 8 | 15°29'01 | 18° 5 | 1♏12 | 16°50 | 8°42 | 24°19 | 14°24 | 13°43 | 17°51 | 16°24 | 9°55 | 8°59 | 11°30 | 21°46 | T 6 |
| F 7 | 17 3 4 | 16°26'19 | 2♏14 | 3° 3 | 18° 2 | 9°21 | 24°27 | 14°29 | 13°45 | 17°51 | 16°25 | 9°52 | 8°56 | 11°37 | 21°47 | F 7 |
| S 8 | 17 7 1 | 17°23'36 | 15°57 | 4°52 | 19°14 | 9°59 | 24°35 | 14°34 | 13°47 | 17°50 | 16°27 | 9°D51 | 8°52 | 11°43 | 21°48 | S 8 |
| S 9 | 17 10 57 | 18°20'54 | 29°17 | 6°39 | 20°26 | 10°38 | 24°43 | 14°39 | 13°50 | 17°49 | 16°28 | 9°52 | 8°49 | 11°50 | 21°49 | S 9 |
| M10 | 17 14 54 | 19°18'10 | 12♏17 | 8°23 | 21°38 | 11°17 | 24°51 | 14°45 | 13°52 | 17°49 | 16°29 | 9°R52 | 8°46 | 11°57 | 21°50 | M10 |
| T 11 | 17 18 51 | 20°15'27 | 24°59 | 10° 5 | 22°50 | 11°55 | 25° 0 | 14°50 | 13°55 | 17°48 | 16°30 | 9°51 | 8°43 | 12° 3 | 21°50 | T 11 |
| W12 | 17 22 47 | 21°12'43 | 7♏27 | 11°44 | 24° 3 | 12°34 | 25° 9 | 14°56 | 13°57 | 17°48 | 16°31 | 9°48 | 8°40 | 12°10 | 21°51 | W12 |
| T 13 | 17 26 44 | 22° 9'59 | 19°45 | 13°21 | 25°15 | 13°12 | 25°17 | 15° 1 | 14° 0 | 17°47 | 16°32 | 9°42 | 8°37 | 12°17 | 21°52 | T 13 |
| F 14 | 17 30 40 | 23° 7'15 | 1♏54 | 14°56 | 26°27 | 13°51 | 25°26 | 15° 7 | 14° 3 | 17°47 | 16°33 | 9°34 | 8°33 | 12°24 | 21°52 | F 14 |
| S 15 | 17 34 37 | 24° 4'31 | 13°56 | 16°28 | 27°39 | 14°29 | 25°35 | 15°12 | 14° 5 | 17°46 | 16°35 | 9°23 | 8°30 | 12°30 | 21°53 | S 15 |
| S 16 | 17 38 33 | 25° 1'46 | 25°54 | 17°57 | 28°51 | 15° 8 | 25°44 | 15°18 | 14° 8 | 17°46 | 16°36 | 9°10 | 8°27 | 12°37 | 21°53 | S 16 |
| M17 | 17 42 30 | 25°59'00 | 7♏48 | 19°24 | 0♏4 | 15°46 | 25°53 | 15°24 | 14°11 | 17°45 | 16°37 | 8°57 | 8°24 | 12°44 | 21°54 | M17 |
| T 18 | 17 46 26 | 26°56'14 | 19°40 | 20°48 | 1°16 | 16°25 | 26° 2 | 15°30 | 14°13 | 17°45 | 16°38 | 8°44 | 8°21 | 12°51 | 21°54 | T 18 |
| W19 | 17 50 23 | 27°53'28 | 1♏31 | 22°10 | 2°28 | 17° 3 | 26°12 | 15°36 | 14°16 | 17°45 | 16°39 | 8°32 | 8°18 | 12°57 | 21°54 | W19 |
| T 20 | 17 54 20 | 28°50'41 | 13°24 | 23°29 | 3°41 | 17°41 | 26°21 | 15°42 | 14°19 | 17°44 | 16°40 | 8°23 | 8°14 | 13° 4 | 21°55 | T 20 |
| F 21 | 17 58 16 | 29°47'54 | 25°22 | 24°45 | 4°53 | 18°20 | 26°31 | 15°48 | 14°22 | 17°44 | 16°41 | 8°16 | 8°11 | 13°11 | 21°55 | F 21 |
| S 22 | 18 2 13 | 0♏45'07 | 7♏28 | 25°59 | 6° 5 | 18°58 | 26°40 | 15°54 | 14°25 | 17°44 | 16°42 | 8°12 | 8° 8 | 13°17 | 21°55 | S 22 |
| S 23 | 18 6 9 | 1°42'19 | 19°46 | 27°10 | 7°18 | 19°37 | 26°50 | 16° 0 | 14°28 | 17°44 | 16°43 | 8°10 | 8° 5 | 13°24 | 21°55 | S 23 |
| M24 | 18 10 6 | 2°39'30 | 2♏21 | 28°18 | 8°30 | 20°15 | 27° 0 | 16° 6 | 14°31 | 17°44 | 16°44 | 8°10 | 8° 2 | 13°31 | 21°R55 | M24 |
| T 25 | 18 14 2 | 3°36'41 | 15°18 | 29°23 | 9°43 | 20°53 | 27°10 | 16°13 | 14°34 | 17°43 | 16°45 | 8°10 | 7°58 | 13°38 | 21°55 | T 25 |
| W26 | 18 17 59 | 4°33'52 | 28°41 | 0♏25 | 10°55 | 21°32 | 27°20 | 16°19 | 14°37 | 17°43 | 16°46 | 8° 9 | 7°55 | 13°44 | 21°55 | W26 |
| T 27 | 18 21 55 | 5°31'02 | 12♏32 | 1°24 | 12° 8 | 22°10 | 27°30 | 16°25 | 14°40 | 17°43 | 16°47 | 8° 6 | 7°52 | 13°51 | 21°55 | T 27 |
| F 28 | 18 25 52 | 6°28'12 | 26°53 | 2°19 | 13°20 | 22°48 | 27°40 | 16°32 | 14°43 | 17°43 | 16°48 | 8° 1 | 7°49 | 13°58 | 21°55 | F 28 |
| S 29 | 18 29 49 | 7°25'22 | 11♏41 | 3°11 | 14°33 | 23°27 | 27°50 | 16°38 | 14°46 | 17°D43 | 16°49 | 7°53 | 7°46 | 14° 4 | 21°55 | S 29 |
| S 30 | 18 33 45 | 8♏22'32 | 26♏49 | 4♏0 | 15♏45 | 24♏5 | 28♏1 | 16♏45 | 14♏49 | 17♏43 | 16♏50 | 7♏43 | 7♏43 | 14♏11 | 21♏54 | S 30 |

Delta T = 62.60 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1624

geocentric

JULY 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|------|-------|--------|------|
| M 1 | 18 37 42 | 9°19'42 | 12°39 | 4°16 | 16°11 | 24°43 | 28°11 | 16°51 | 14°53 | 17°43 | 16°51 | 7°R33 | 7°39 | 14°18 | 21°R54 | M 1 |
| T 2 | 18 41 38 | 10°16'52 | 27°27 | 5°27 | 18°11 | 25°22 | 28°22 | 16°58 | 14°56 | 17°43 | 16°52 | 7°22 | 7°36 | 14°25 | 21°R54 | T 2 |
| W 3 | 18 45 35 | 11°14'02 | 12°34 | 6° 5 | 19°23 | 26° 0 | 28°32 | 17° 5 | 14°59 | 17°44 | 16°52 | 7°13 | 7°33 | 14°31 | 21°53 | W 3 |
| T 4 | 18 49 31 | 12°11'13 | 27°20 | 6°39 | 20°36 | 26°38 | 28°43 | 17°11 | 15° 2 | 17°44 | 16°53 | 7° 7 | 7°30 | 14°38 | 21°53 | T 4 |
| F 5 | 18 53 28 | 13° 8'23 | 11°39 | 7° 9 | 21°49 | 27°16 | 28°54 | 17°18 | 15° 6 | 17°44 | 16°54 | 7° 3 | 7°27 | 14°45 | 21°52 | F 5 |
| S 6 | 18 57 24 | 14° 5'35 | 25°30 | 7°34 | 23° 2 | 27°55 | 29° 4 | 17°25 | 15° 9 | 17°44 | 16°55 | 7° 1 | 7°24 | 14°52 | 21°52 | S 6 |
| S 7 | 19 1 21 | 15° 2'47 | 8°53 | 7°55 | 24°15 | 28°33 | 29°15 | 17°32 | 15°12 | 17°44 | 16°56 | 7° 1 | 7°20 | 14°58 | 21°51 | S 7 |
| M 8 | 19 5 18 | 15°59'59 | 21°52 | 8°12 | 25°27 | 29°11 | 29°26 | 17°39 | 15°16 | 17°45 | 16°57 | 7° 1 | 7°17 | 15° 5 | 21°50 | M 8 |
| T 9 | 19 9 14 | 16°57'12 | 4°30 | 8°24 | 26°40 | 29°49 | 29°37 | 17°46 | 15°19 | 17°45 | 16°57 | 7° 0 | 7°14 | 15°12 | 21°49 | T 9 |
| W10 | 19 13 11 | 17°54'26 | 16°52 | 8°32 | 27°53 | 0°128 | 29°48 | 17°53 | 15°22 | 17°45 | 16°58 | 6°57 | 7°11 | 15°18 | 21°49 | W10 |
| T 11 | 19 17 7 | 18°51'40 | 29° 2 | 8°R34 | 29° 6 | 1° 6 | 29°59 | 18° 0 | 15°26 | 17°46 | 16°59 | 6°52 | 7° 8 | 15°25 | 21°48 | T 11 |
| F 12 | 19 21 4 | 19°48'55 | 11°11 | 8°32 | 0°519 | 1°44 | 0°11 | 18° 7 | 15°29 | 17°46 | 17° 0 | 6°44 | 7° 4 | 15°32 | 21°47 | F 12 |
| S 13 | 19 25 0 | 20°46'11 | 22°59 | 8°25 | 1°32 | 2°22 | 0°22 | 18°14 | 15°33 | 17°46 | 17° 0 | 6°33 | 7° 1 | 15°39 | 21°46 | S 13 |
| S 14 | 19 28 57 | 21°43'27 | 4°52 | 8°13 | 2°45 | 3° 0 | 0°33 | 18°21 | 15°36 | 17°47 | 17° 1 | 6°20 | 6°58 | 15°45 | 21°45 | S 14 |
| M15 | 19 32 53 | 22°40'44 | 16°44 | 7°56 | 3°58 | 3°39 | 0°45 | 18°28 | 15°40 | 17°47 | 17° 2 | 6° 7 | 6°55 | 15°52 | 21°44 | M15 |
| T 16 | 19 36 50 | 23°38'01 | 28°36 | 7°34 | 5°12 | 4°17 | 0°56 | 18°35 | 15°43 | 17°48 | 17° 2 | 5°54 | 6°52 | 15°59 | 21°43 | T 16 |
| W17 | 19 40 47 | 24°35'19 | 10°130 | 7° 9 | 6°25 | 4°55 | 1° 8 | 18°42 | 15°47 | 17°49 | 17° 3 | 5°43 | 6°49 | 16° 5 | 21°41 | W17 |
| T 18 | 19 44 43 | 25°32'38 | 22°27 | 6°39 | 7°38 | 5°33 | 1°20 | 18°50 | 15°50 | 17°49 | 17° 3 | 5°34 | 6°45 | 16°12 | 21°40 | T 18 |
| F 19 | 19 48 40 | 26°29'57 | 4°130 | 6° 5 | 8°51 | 6°11 | 1°31 | 18°57 | 15°54 | 17°50 | 17° 4 | 5°27 | 6°42 | 16°19 | 21°39 | F 19 |
| S 20 | 19 52 36 | 27°27'16 | 16°41 | 5°28 | 10° 4 | 6°50 | 1°43 | 19° 4 | 15°57 | 17°50 | 17° 5 | 5°23 | 6°39 | 16°26 | 21°38 | S 20 |
| S 21 | 19 56 33 | 28°24'36 | 29° 3 | 4°48 | 11°18 | 7°28 | 1°55 | 19°12 | 16° 1 | 17°51 | 17° 5 | 5°21 | 6°36 | 16°32 | 21°36 | S 21 |
| M22 | 20 0 29 | 29°21'56 | 11°40 | 4° 6 | 12°31 | 8° 6 | 2° 7 | 19°19 | 16° 5 | 17°52 | 17° 6 | 5°D21 | 6°33 | 16°39 | 21°35 | M22 |
| T 23 | 20 4 26 | 0°19'17 | 24°36 | 3°22 | 13°44 | 8°44 | 2°18 | 19°26 | 16° 8 | 17°53 | 17° 6 | 5°R22 | 6°30 | 16°46 | 21°33 | T 23 |
| W24 | 20 8 22 | 1°16'39 | 7°134 | 2°38 | 14°57 | 9°22 | 2°30 | 19°34 | 16°12 | 17°53 | 17° 7 | 5°22 | 6°26 | 16°53 | 21°32 | W24 |
| T 25 | 20 12 19 | 2°14'01 | 21°38 | 1°54 | 16°11 | 10° 0 | 2°42 | 19°41 | 16°15 | 17°54 | 17° 7 | 5°20 | 6°23 | 16°59 | 21°30 | T 25 |
| F 26 | 20 16 16 | 3°11'23 | 5°149 | 1°10 | 17°24 | 10°39 | 2°54 | 19°48 | 16°19 | 17°55 | 17° 8 | 5°17 | 6°20 | 17° 6 | 21°29 | F 26 |
| S 27 | 20 20 12 | 4° 8'47 | 20°26 | 0°28 | 18°38 | 11°17 | 3° 6 | 19°56 | 16°23 | 17°56 | 17° 8 | 5°11 | 6°17 | 17°13 | 21°27 | S 27 |
| S 28 | 20 24 9 | 5° 6'11 | 5°24 | 29°49 | 19°51 | 11°55 | 3°19 | 20° 3 | 16°26 | 17°57 | 17° 8 | 5° 3 | 6°14 | 17°19 | 21°25 | S 28 |
| M29 | 20 28 5 | 6° 3'35 | 20°36 | 29°13 | 21° 5 | 12°33 | 3°31 | 20°11 | 16°30 | 17°58 | 17° 9 | 4°54 | 6°10 | 17°26 | 21°24 | M29 |
| T 30 | 20 32 2 | 7° 1'01 | 5°51 | 28°40 | 22°18 | 13°11 | 3°43 | 20°18 | 16°34 | 17°59 | 17° 9 | 4°46 | 6° 7 | 17°33 | 21°22 | T 30 |
| W31 | 20 35 58 | 7°15'827 | 20°59 | 28°13 | 23°32 | 13°149 | 3°13 | 20°18 | 16°34 | 17°59 | 17° 9 | 4°46 | 6° 7 | 17°33 | 21°22 | W31 |

Delta T = 62.53 sec

Greg. Calendar

AUGUST 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|--------|--------|-------|--------|--------|--------|--------|-------|--------|-------|------|-------|--------|------|
| T 1 | 20 39 55 | 8°15'55 | 5°49 | 27°R50 | 24°45 | 14°128 | 4°130 | 20°133 | 16°141 | 18°1 | 17°10 | 4°R34 | 6°1 | 17°46 | 21°R18 | T 1 |
| F 2 | 20 43 51 | 9°53'24 | 20°15 | 27°33 | 25°59 | 15° 6 | 4°20 | 20°41 | 16°45 | 18° 2 | 17°10 | 4°31 | 5°58 | 17°53 | 21°R16 | F 2 |
| S 3 | 20 47 48 | 10°50'54 | 4°13 | 27°22 | 27°13 | 15°44 | 4°32 | 20°49 | 16°49 | 18° 3 | 17°11 | 4°D30 | 5°55 | 18° 0 | 21°14 | S 3 |
| S 4 | 20 51 45 | 11°48'25 | 17°43 | 27°D18 | 28°26 | 16°22 | 4°45 | 20°56 | 16°52 | 18° 4 | 17°11 | 4°31 | 5°51 | 18° 6 | 21°12 | S 4 |
| M 5 | 20 55 41 | 12°45'58 | 0°46 | 27°20 | 29°40 | 17° 0 | 4°57 | 21° 4 | 16°56 | 18° 5 | 17°11 | 4°32 | 5°48 | 18°13 | 21°10 | M 5 |
| T 6 | 20 59 38 | 13°43'32 | 13°27 | 27°30 | 0°154 | 17°38 | 5°10 | 21°11 | 17° 0 | 18° 6 | 17°11 | 4°R32 | 5°45 | 18°20 | 21° 8 | T 6 |
| W 7 | 21 3 34 | 14°41'08 | 25°49 | 27°46 | 2° 8 | 18°16 | 5°22 | 21°19 | 17° 3 | 18° 8 | 17°11 | 4°31 | 5°42 | 18°27 | 21° 6 | W 7 |
| T 8 | 21 7 31 | 15°38'45 | 7°11 | 28°10 | 3°21 | 18°55 | 5°35 | 21°27 | 17° 7 | 18° 9 | 17°12 | 4°29 | 5°39 | 18°33 | 21° 4 | T 8 |
| F 9 | 21 11 27 | 16°36'24 | 19°56 | 28°40 | 4°35 | 19°33 | 5°47 | 21°34 | 17°11 | 18°10 | 17°12 | 4°24 | 5°36 | 18°40 | 21° 2 | F 9 |
| S 10 | 21 15 24 | 17°34'05 | 1°50 | 29°18 | 5°49 | 20°11 | 6° 0 | 21°42 | 17°15 | 18°11 | 17°12 | 4°18 | 5°32 | 18°47 | 20°59 | S 10 |
| S 11 | 21 19 20 | 18°31'46 | 13°41 | 0°13 | 7° 3 | 20°49 | 6°13 | 21°50 | 17°18 | 18°13 | 17°12 | 4°10 | 5°29 | 18°54 | 20°57 | S 11 |
| M12 | 21 23 17 | 19°29'30 | 25°33 | 0°55 | 8°17 | 21°27 | 6°25 | 21°57 | 17°22 | 18°14 | 17°12 | 4° 2 | 5°26 | 19° 0 | 20°55 | M12 |
| T 13 | 21 27 14 | 20°27'14 | 7°128 | 1°53 | 9°31 | 22° 5 | 6°38 | 22° 5 | 17°26 | 18°15 | 17°12 | 3°53 | 5°23 | 19° 7 | 20°53 | T 13 |
| W14 | 21 31 10 | 21°25'00 | 19°28 | 2°58 | 10°45 | 22°44 | 6°51 | 22°12 | 17°30 | 18°17 | 17°12 | 3°46 | 5°20 | 19°14 | 20°50 | W14 |
| T 15 | 21 35 7 | 22°22'48 | 1°134 | 4° 9 | 11°59 | 23°22 | 7° 3 | 22°20 | 17°33 | 18°18 | 17°12 | 3°40 | 5°16 | 19°20 | 20°48 | T 15 |
| F 16 | 21 39 3 | 23°20'37 | 13°48 | 5°26 | 13°13 | 24° 0 | 7°16 | 22°28 | 17°37 | 18°20 | 17°12 | 3°36 | 5°13 | 19°27 | 20°45 | F 16 |
| S 17 | 21 43 0 | 24°18'27 | 26°11 | 6°48 | 14°27 | 24°38 | 7°29 | 22°35 | 17°41 | 18°21 | 17°R12 | 3°35 | 5°10 | 19°34 | 20°43 | S 17 |
| S 18 | 21 46 56 | 25°16'19 | 8°15 | 8°16 | 15°41 | 25°16 | 7°42 | 22°43 | 17°45 | 18°23 | 17°12 | 3°D34 | 5° 7 | 19°41 | 20°41 | S 18 |
| M19 | 21 50 53 | 26°14'11 | 21°32 | 9°48 | 16°55 | 25°54 | 7°55 | 22°51 | 17°48 | 18°24 | 17°12 | 3°35 | 5° 4 | 19°47 | 20°38 | M19 |
| T 20 | 21 54 49 | 27°12'06 | 4°134 | 11°25 | 18°10 | 26°33 | 8° 8 | 22°58 | 17°52 | 18°26 | 17°12 | 3°37 | 5° 1 | 19°54 | 20°36 | T 20 |
| W21 | 21 58 46 | 28°10'01 | 17°55 | 13° 6 | 19°24 | 27°11 | 8°20 | 23° 6 | 17°56 | 18°27 | 17°12 | 3°38 | 4°57 | 20° 1 | 20°33 | W21 |
| T 22 | 22 2 43 | 29° 7'58 | 1°136 | 14°50 | 20°38 | 27°49 | 8°33 | 23°14 | 17°59 | 18°29 | 17°12 | 3°R39 | 4°54 | 20° 7 | 20°30 | T 22 |
| F 23 | 22 6 39 | 0°13 | 5°56 | 16°38 | 21°52 | 28°27 | 8°46 | 23°21 | 18° 3 | 18°30 | 17°12 | 3°38 | 4°51 | 20°14 | 20°28 | F 23 |
| S 24 | 22 10 36 | 1° 3'55 | 29°59 | 18°27 | 23° 7 | 29° 5 | 8°59 | 23°29 | 18° 7 | 18°32 | 17°12 | 3°35 | 4°48 | 20°21 | 20°25 | S 24 |
| S 25 | 22 14 32 | 2° 1'56 | 14°39 | 20°19 | 24°21 | 29°44 | 9°12 | 23°36 | 18°10 | 18°34 | 17°12 | 3°32 | 4°45 | 20°28 | 20°23 | S 25 |
| M26 | 22 18 29 | 2°59'58 | 29°30 | 22°13 | 25°35 | 0°122 | 9°25 | 23°44 | 18°14 | 18°35 | 17°12 | 3°27 | 4°41 | 20°34 | 20°20 | M26 |
| T 27 | 22 22 25 | 3°58'02 | 14°27 | 24° 7 | 26°49 | 1° 0 | 9°38 | 23°52 | 18°18 | 18°37 | 17°11 | 3°23 | 4°38 | 20°41 | 20°17 | T 27 |
| W28 | 22 26 22 | 4°56'07 | 29°19 | 26° 3 | 28° 4 | 1°38 | 9°51 | 23°59 | 18°21 | 18°39 | 17°11 | 3°20 | 4°35 | 20°48 | 20°15 | W28 |
| T 29 | 22 30 18 | 5°54'14 | 14°11 | 27°59 | 29°18 | 2°16 | 10° 4 | 24° 7 | 18°25 | 18°40 | 17°11 | 3°17 | 4°32 | 20°54 | 20°12 | T 29 |
| F 30 | 22 34 15 | 6°52'22 | 28°22 | 29°56 | 0°133 | 2°55 | 10°17 | 24°14 | 18°28 | 18°42 | 17°11 | 3°D16 | 4°29 | 21° 1 | 20° 9 | F 30 |
| S 31 | 22 38 12 | 7°15'033 | 12°120 | 1°152 | 1°147 | 3°133 | 10°130 | 24°122 | 18°132 | 18°44 | 17°10 | 3°16 | 4°26 | 21° 8 | 20°11 | S 31 |

Delta T = 62.46 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1624

geocentric

SEPTEMBER 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|------|-------|--------|------|
| S 1 | 22 42 8 | 8♂48'45 | 25♂53 | 3♂49 | 3♂1 | 4♂11 | 10♂43 | 24♂29 | 18♂36 | 18♂46 | 17♂R10 | 3♂18 | 4♂22 | 21♂15 | 20♂R 4 | S 1 |
| M 2 | 22 46 5 | 9°46'59 | 9♂1 | 5°45 | 4°16 | 4°49 | 10°56 | 24°37 | 18°39 | 18°48 | 17♂10 | 3°19 | 4°19 | 21°21 | 20♂R 1 | M 2 |
| T 3 | 22 50 1 | 10°45'16 | 21°46 | 7°40 | 5°30 | 5°28 | 11° 9 | 24°44 | 18°43 | 18°49 | 17° 9 | 3°20 | 4°16 | 21°28 | 19°58 | T 3 |
| W 4 | 22 53 58 | 11°43'34 | 4♂12 | 9°35 | 6°45 | 6° 6 | 11°22 | 24°52 | 18°46 | 18°51 | 17° 9 | 3°21 | 4°13 | 21°35 | 19°55 | W 4 |
| T 5 | 22 57 54 | 12°41'55 | 16°22 | 11°29 | 8° 0 | 6°44 | 11°35 | 24°59 | 18°50 | 18°53 | 17° 9 | 3°R22 | 4°10 | 21°41 | 19°52 | T 5 |
| F 6 | 23 1 51 | 13°40'18 | 28°22 | 13°22 | 9°14 | 7°22 | 11°48 | 25° 7 | 18°53 | 18°55 | 17° 8 | 3°21 | 4° 7 | 21°48 | 19°50 | F 6 |
| S 7 | 23 5 47 | 14°38'43 | 10♂16 | 15°15 | 10°29 | 8° 1 | 12° 1 | 25°14 | 18°57 | 18°57 | 17° 8 | 3°19 | 4° 3 | 21°55 | 19°47 | S 7 |
| S 8 | 23 9 44 | 15°37'10 | 22° 7 | 17° 6 | 11°43 | 8°39 | 12°14 | 25°21 | 19° 0 | 18°59 | 17° 7 | 3°17 | 4° 0 | 22° 2 | 19°44 | S 8 |
| M 9 | 23 13 41 | 16°35'39 | 4♂1 | 18°56 | 12°58 | 9°17 | 12°27 | 25°29 | 19° 4 | 19° 1 | 17° 7 | 3°14 | 3°57 | 22° 8 | 19°41 | M 9 |
| T 10 | 23 17 37 | 17°34'10 | 16° 0 | 20°46 | 14°13 | 9°56 | 12°40 | 25°36 | 19° 7 | 19° 3 | 17° 6 | 3°12 | 3°54 | 22°15 | 19°38 | T 10 |
| W11 | 23 21 34 | 18°32'43 | 28° 7 | 22°34 | 15°27 | 10°34 | 12°53 | 25°43 | 19°10 | 19° 5 | 17° 6 | 3°10 | 3°51 | 22°22 | 19°36 | W11 |
| T 12 | 23 25 30 | 19°31'18 | 10♂14 | 24°21 | 16°42 | 11°12 | 13° 6 | 25°51 | 19°14 | 19° 7 | 17° 5 | 3° 8 | 3°47 | 22°28 | 19°33 | T 12 |
| F 13 | 23 29 27 | 20°29'55 | 22°53 | 26° 8 | 17°57 | 11°51 | 13°19 | 25°58 | 19°17 | 19° 9 | 17° 5 | 3° 7 | 3°44 | 22°35 | 19°30 | F 13 |
| S 14 | 23 33 23 | 21°28'34 | 5♂33 | 27°53 | 19°12 | 12°29 | 13°32 | 26° 5 | 19°20 | 19°11 | 17° 4 | 3°D 7 | 3°41 | 22°42 | 19°27 | S 14 |
| S 15 | 23 37 20 | 22°27'15 | 18°27 | 29°37 | 20°26 | 13° 7 | 13°45 | 26°12 | 19°24 | 19°13 | 17° 4 | 3° 7 | 3°38 | 22°49 | 19°24 | S 15 |
| M16 | 23 41 16 | 23°25'58 | 1♂33 | 1♂20 | 21°41 | 13°46 | 13°58 | 26°19 | 19°27 | 19°15 | 17° 3 | 3° 8 | 3°35 | 22°55 | 19°21 | M16 |
| T 17 | 23 45 13 | 24°24'43 | 14°53 | 3° 2 | 22°56 | 14°24 | 14°11 | 26°26 | 19°30 | 19°17 | 17° 2 | 3° 9 | 3°32 | 23° 2 | 19°19 | T 17 |
| W18 | 23 49 9 | 25°23'29 | 28°27 | 4°44 | 24°11 | 15° 3 | 14°23 | 26°33 | 19°33 | 19°19 | 17° 2 | 3°10 | 3°28 | 23° 9 | 19°16 | W18 |
| T 19 | 23 53 6 | 26°22'18 | 12♂14 | 6°24 | 25°25 | 15°41 | 14°36 | 26°40 | 19°37 | 19°21 | 17° 1 | 3°10 | 3°25 | 23°15 | 19°13 | T 19 |
| F 20 | 23 57 3 | 27°21'08 | 26°14 | 8° 3 | 26°40 | 16°19 | 14°49 | 26°47 | 19°40 | 19°23 | 17° 1 | 3°R10 | 3°22 | 23°22 | 19°10 | F 20 |
| S 21 | 0 0 59 | 28°19'59 | 10♂26 | 9°41 | 27°55 | 16°58 | 15° 2 | 26°54 | 19°43 | 19°25 | 17° 0 | 3°10 | 3°19 | 23°29 | 19° 7 | S 21 |
| S 22 | 0 4 56 | 29°18'53 | 24°46 | 11°19 | 29°10 | 17°36 | 15°15 | 27° 1 | 19°46 | 19°28 | 16°59 | 3°10 | 3°16 | 23°36 | 19° 5 | S 22 |
| M23 | 0 8 52 | 0♂17'48 | 9♂14 | 12°56 | 0♂25 | 18°15 | 15°28 | 27° 8 | 19°49 | 19°30 | 16°58 | 3°10 | 3°12 | 23°42 | 19° 2 | M23 |
| T 24 | 0 12 49 | 1°16'45 | 23°43 | 14°31 | 1°40 | 18°53 | 15°40 | 27°15 | 19°52 | 19°32 | 16°58 | 3° 9 | 3° 9 | 23°49 | 18°59 | T 24 |
| W25 | 0 16 45 | 2°15'43 | 8♂9 | 16° 6 | 2°55 | 19°32 | 15°53 | 27°22 | 19°55 | 19°34 | 16°57 | 3° 9 | 3° 6 | 23°56 | 18°56 | W25 |
| T 26 | 0 20 42 | 3°14'44 | 22°27 | 17°40 | 4° 9 | 20°10 | 16° 6 | 27°28 | 19°58 | 19°36 | 16°56 | 3°D 9 | 3° 3 | 24° 2 | 18°54 | T 26 |
| F 27 | 0 24 38 | 4°13'46 | 6♂32 | 19°13 | 5°24 | 20°49 | 16°18 | 27°35 | 20° 1 | 19°38 | 16°55 | 3°R 9 | 3° 0 | 24° 9 | 18°51 | F 27 |
| S 28 | 0 28 35 | 5°12'51 | 20°20 | 20°45 | 6°39 | 21°27 | 16°31 | 27°42 | 20° 4 | 19°40 | 16°55 | 3° 9 | 2°57 | 24°16 | 18°48 | S 28 |
| S 29 | 0 32 32 | 6°11'57 | 3♂47 | 22°17 | 7°54 | 22° 6 | 16°44 | 27°48 | 20° 7 | 19°43 | 16°54 | 3° 9 | 2°53 | 24°23 | 18°46 | S 29 |
| M30 | 0 36 28 | 7♂11'06 | 16♂54 | 23♂48 | 9♂9 | 22♂44 | 16♂56 | 27♂55 | 20♂10 | 19♂45 | 16♂53 | 3♂9 | 2♂50 | 24♂29 | 18♂43 | M30 |

Delta T = 62.38 sec

Greg. Calendar

OCTOBER 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|------|-------|--------|------|
| T 1 | 0 40 25 | 8♂10'18 | 29♂41 | 25♂17 | 10♂24 | 23♂23 | 17♂9 | 28♂1 | 20♂12 | 19♂47 | 16°R52 | 3°R 8 | 2♂47 | 24♂36 | 18°R40 | T 1 |
| W 2 | 0 44 21 | 9° 9'31 | 12♂1 | 26°46 | 11°39 | 24° 1 | 17°21 | 28° 8 | 20°15 | 19°49 | 16♂51 | 3♂7 | 2°44 | 24°43 | 18♂R38 | W 2 |
| T 3 | 0 48 18 | 10° 8'47 | 24°21 | 28°15 | 12°54 | 24°40 | 17°34 | 28°14 | 20°18 | 19°51 | 16°50 | 3° 7 | 2°41 | 24°49 | 18°35 | T 3 |
| F 4 | 0 52 14 | 11° 8'05 | 6♂22 | 29°42 | 14° 9 | 25°18 | 17°46 | 28°20 | 20°21 | 19°54 | 16°50 | 3°D 6 | 2°38 | 24°56 | 18°33 | F 4 |
| S 5 | 0 56 11 | 12° 7'26 | 18°17 | 1♂18 | 15°24 | 25°57 | 17°59 | 28°26 | 20°23 | 19°56 | 16°49 | 3° 6 | 2°34 | 25° 3 | 18°30 | S 5 |
| S 6 | 1 0 7 | 13° 6'49 | 0♂9 | 2°34 | 16°39 | 26°36 | 18°11 | 28°33 | 20°26 | 19°58 | 16°48 | 3° 7 | 2°31 | 25°10 | 18°27 | S 6 |
| M 7 | 1 4 4 | 14° 6'14 | 12° 3 | 3°59 | 17°54 | 27°14 | 18°24 | 28°39 | 20°28 | 20° 0 | 16°47 | 3° 8 | 2°28 | 25°16 | 18°25 | M 7 |
| T 8 | 1 8 1 | 15° 5'41 | 24° 5 | 5°23 | 19° 9 | 27°53 | 18°36 | 28°45 | 20°31 | 20° 3 | 16°46 | 3° 9 | 2°25 | 25°23 | 18°23 | T 8 |
| W 9 | 1 11 57 | 16° 5'11 | 6♂17 | 6°46 | 20°24 | 28°31 | 18°48 | 28°51 | 20°33 | 20° 5 | 16°45 | 3°10 | 2°22 | 25°30 | 18°20 | W 9 |
| T 10 | 1 15 54 | 17° 4'42 | 18°43 | 8° 8 | 21°39 | 29°10 | 19° 0 | 28°57 | 20°36 | 20° 7 | 16°44 | 3°11 | 2°18 | 25°36 | 18°18 | T 10 |
| F 11 | 1 19 50 | 18° 4'16 | 1♂25 | 9°29 | 22°54 | 29°49 | 19°12 | 29° 3 | 20°38 | 20° 9 | 16°43 | 3°R12 | 2°15 | 25°43 | 18°15 | F 11 |
| S 12 | 1 23 47 | 19° 3'52 | 14°25 | 10°49 | 24° 9 | 0♂27 | 19°25 | 29° 9 | 20°41 | 20°12 | 16°42 | 3°11 | 2°12 | 25°50 | 18°13 | S 12 |
| S 13 | 1 27 43 | 20° 3'31 | 27°42 | 12° 8 | 25°24 | 1° 6 | 19°37 | 29°14 | 20°43 | 20°14 | 16°41 | 3°10 | 2° 9 | 25°57 | 18°11 | S 13 |
| M14 | 1 31 40 | 21° 3'11 | 11♂14 | 13°25 | 26°40 | 1°45 | 19°49 | 29°20 | 20°45 | 20°16 | 16°40 | 3° 8 | 2° 6 | 26° 3 | 18° 8 | M14 |
| T 15 | 1 35 36 | 22° 2'53 | 25° 1 | 14°41 | 27°55 | 2°24 | 20° 1 | 29°26 | 20°48 | 20°18 | 16°39 | 3° 6 | 2° 3 | 26°10 | 18° 6 | T 15 |
| W16 | 1 39 33 | 23° 2'37 | 8♂58 | 15°56 | 29°10 | 3° 2 | 20°13 | 29°31 | 20°50 | 20°20 | 16°38 | 3° 3 | 1°59 | 26°17 | 18° 4 | W16 |
| T 17 | 1 43 29 | 24° 2'23 | 23° 4 | 17° 9 | 0♂15 | 3°41 | 20°24 | 29°37 | 20°52 | 20°23 | 16°37 | 3° 0 | 1°56 | 26°23 | 18° 2 | T 17 |
| F 18 | 1 47 26 | 25° 2'10 | 7♂14 | 18°21 | 1°40 | 4°20 | 20°36 | 29°42 | 20°54 | 20°25 | 16°36 | 2°58 | 1°53 | 26°30 | 18° 0 | F 18 |
| S 19 | 1 51 23 | 26° 2'00 | 21°26 | 19°31 | 2°55 | 4°59 | 20°48 | 29°48 | 20°56 | 20°27 | 16°35 | 2°D57 | 1°50 | 26°37 | 17°58 | S 19 |
| S 20 | 1 55 19 | 27° 1'50 | 5♂37 | 20°39 | 4°10 | 5°37 | 21° 0 | 29°53 | 20°58 | 20°29 | 16°34 | 2°58 | 1°47 | 26°44 | 17°56 | S 20 |
| M21 | 1 59 16 | 28° 1'43 | 19°45 | 21°44 | 5°25 | 6°16 | 21°11 | 29°58 | 21° 0 | 20°32 | 16°33 | 2°59 | 1°44 | 26°50 | 17°54 | M21 |
| T 22 | 2 3 12 | 29° 1'37 | 3♂50 | 22°48 | 6°40 | 6°55 | 21°23 | 0♂13 | 21° 2 | 20°34 | 16°32 | 3° 0 | 1°40 | 26°57 | 17°52 | T 22 |
| W23 | 2 7 9 | 0♂13 | 17°48 | 23°48 | 7°55 | 7°34 | 21°34 | 0° 8 | 21° 4 | 20°36 | 16°31 | 3° 1 | 1°37 | 27° 4 | 17°50 | W23 |
| T 24 | 2 11 5 | 1° 1'30 | 1♂37 | 24°46 | 9°10 | 8°13 | 21°46 | 0°13 | 21° 6 | 20°38 | 16°30 | 3°R 2 | 1°34 | 27°10 | 17°48 | T 24 |
| F 25 | 2 15 2 | 2° 1'29 | 15°16 | 25°40 | 10°26 | 8°52 | 21°57 | 0°18 | 21° 8 | 20°41 | 16°29 | 3° 2 | 1°31 | 27°17 | 17°46 | F 25 |
| S 26 | 2 18 58 | 3° 1'30 | 28°43 | 26°30 | 11°41 | 9°30 | 22° 8 | 0°23 | 21° 9 | 20°43 | 16°28 | 3° 0 | 1°28 | 27°24 | 17°44 | S 26 |
| S 27 | 2 22 55 | 4° 1'33 | 11♂56 | 27°17 | 12°56 | 10° 9 | 22°19 | 0°28 | 21°11 | 20°45 | 16°26 | 2°56 | 1°24 | 27°30 | 17°43 | S 27 |
| M28 | 2 26 52 | 5° 1'38 | 24°53 | 27°58 | 14°11 | 10°48 | 22°31 | 0°33 | 21°13 | 20°47 | 16°25 | 2°51 | 1°21 | 27°37 | 17°41 | M28 |
| T 29 | 2 30 48 | 6° 1'45 | 7♂34 | 28°35 | 15°26 | 11°27 | 22°42 | 0°37 | 21°14 | 20°49 | 16°24 | 2°45 | 1°18 | 27°44 | 17°39 | T 29 |
| W30 | 2 34 45 | 7° 1'54 | 20° 0 | 29° 6 | 16°41 | 12° 6 | 22°53 | 0°42 | 21°16 | 20°51 | 16°23 | 2°39 | 1°15 | 27°51 | 17°38 | W30 |
| T 31 | 2 38 41 | 8♂12'05 | 2♂12 | 29♂31 | 17♂56 | 12♂45 | 23♂14 | 0♂46 | 21♂17 | 20♂54 | 16♂22 | 2♂34 | 1♂12 | 27♂57 | 17♂36 | T 31 |

Delta T = 62.31 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1624
geocentric

NOVEMBER 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|--------|--------|-------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|------|
| F 1 | 2 42 38 | 9♉ 2'18 | 14♊13 | 29♉48 | 19♉11 | 13♊24 | 23♉14 | 0♉50 | 21♉19 | 20♊56 | 16°R21 | 2°R29 | 1♊ 9 | 28♊ 4 | 17°R35 | F 1 |
| S 2 | 2 46 34 | 10° 2'33 | 26° 6 | 29°58 | 20°26 | 14° 3 | 23°25 | 0°55 | 21°20 | 20°58 | 16♊20 | 2♊26 | 1° 5 | 28°11 | 17♊33 | S 2 |
| S 3 | 2 50 31 | 11° 2'50 | 7♊58 | 0°R 0 | 21°42 | 14°42 | 23°36 | 0°59 | 21°21 | 21° 0 | 16°19 | 2°D25 | 1° 2 | 28°17 | 17°32 | S 3 |
| M 4 | 2 54 27 | 12° 3'09 | 19°51 | 29°53 | 22°57 | 15°21 | 23°46 | 1° 3 | 21°23 | 21° 2 | 16°18 | 2°25 | 0°59 | 28°24 | 17°30 | M 4 |
| T 5 | 2 58 24 | 13° 3'29 | 1♉51 | 29°36 | 24°12 | 16° 0 | 23°57 | 1° 7 | 21°24 | 21° 4 | 16°16 | 2°27 | 0°56 | 28°31 | 17°29 | T 5 |
| W 6 | 3 2 21 | 14° 3'52 | 14° 4 | 29° 9 | 25°27 | 16°39 | 24° 7 | 1°11 | 21°25 | 21° 6 | 16°15 | 2°28 | 0°53 | 28°38 | 17°28 | W 6 |
| T 7 | 3 6 17 | 15° 4'17 | 26°33 | 28°32 | 26°42 | 17°18 | 24°18 | 1°15 | 21°26 | 21° 9 | 16°14 | 2°R29 | 0°49 | 28°44 | 17°27 | T 7 |
| F 8 | 3 10 14 | 16° 4'43 | 9♊23 | 27°46 | 27°57 | 17°57 | 24°28 | 1°18 | 21°27 | 21°11 | 16°13 | 2°29 | 0°46 | 28°51 | 17°26 | F 8 |
| S 9 | 3 14 10 | 17° 5'12 | 22°35 | 26°49 | 29°12 | 18°36 | 24°38 | 1°22 | 21°28 | 21°13 | 16°12 | 2°27 | 0°43 | 28°58 | 17°24 | S 9 |
| S 10 | 3 18 7 | 18° 5'42 | 6♉11 | 25°44 | 0♊28 | 19°15 | 24°48 | 1°25 | 21°29 | 21°15 | 16°11 | 2°23 | 0°40 | 29° 4 | 17°23 | S 10 |
| M 11 | 3 22 3 | 19° 6'14 | 20° 9 | 24°31 | 1°43 | 19°55 | 24°58 | 1°29 | 21°30 | 21°17 | 16°10 | 2°17 | 0°37 | 29°11 | 17°22 | M 11 |
| T 12 | 3 26 0 | 20° 6'47 | 4♊24 | 23°14 | 2°58 | 20°34 | 25° 8 | 1°32 | 21°31 | 21°19 | 16° 9 | 2°10 | 0°34 | 29°18 | 17°21 | T 12 |
| W 13 | 3 29 56 | 21° 7'22 | 18°52 | 21°53 | 4°13 | 21°13 | 25°18 | 1°35 | 21°32 | 21°21 | 16° 7 | 2° 1 | 0°30 | 29°25 | 17°21 | W 13 |
| T 14 | 3 33 53 | 22° 7'59 | 3♊24 | 20°32 | 5°28 | 21°52 | 25°27 | 1°39 | 21°32 | 21°23 | 16° 6 | 1°54 | 0°27 | 29°31 | 17°20 | T 14 |
| F 15 | 3 37 50 | 23° 8'37 | 17°56 | 19°13 | 6°43 | 22°31 | 25°37 | 1°42 | 21°33 | 21°25 | 16° 5 | 1°47 | 0°24 | 29°38 | 17°19 | F 15 |
| S 16 | 3 41 46 | 24° 9'15 | 2♊21 | 17°59 | 7°58 | 23°11 | 25°46 | 1°45 | 21°34 | 21°27 | 16° 4 | 1°43 | 0°21 | 29°45 | 17°18 | S 16 |
| S 17 | 3 45 43 | 25° 9'55 | 16°36 | 16°52 | 9°14 | 23°50 | 25°56 | 1°47 | 21°34 | 21°29 | 16° 3 | 1°41 | 0°18 | 29°51 | 17°18 | S 17 |
| M 18 | 3 49 39 | 26°10'36 | 0♊39 | 15°54 | 10°29 | 24°29 | 26° 5 | 1°50 | 21°35 | 21°31 | 16° 2 | 1°D41 | 0°15 | 29°58 | 17°17 | M 18 |
| T 19 | 3 53 36 | 27°11'18 | 14°29 | 15° 7 | 11°44 | 25° 8 | 26°14 | 1°53 | 21°35 | 21°33 | 16° 1 | 1°41 | 0°11 | 0° 5 | 17°17 | T 19 |
| W 20 | 3 57 32 | 28°12'01 | 28° 6 | 14°31 | 12°59 | 25°48 | 26°23 | 1°55 | 21°36 | 21°35 | 16° 0 | 1°R42 | 0° 8 | 0°11 | 17°16 | W 20 |
| T 21 | 4 1 29 | 29°12'46 | 11°R31 | 14° 7 | 14°14 | 26°27 | 26°32 | 1°58 | 21°36 | 21°36 | 15°59 | 1°42 | 0° 5 | 0°18 | 17°16 | T 21 |
| F 22 | 4 5 25 | 0♊13'31 | 24°45 | 13°54 | 15°29 | 27° 6 | 26°41 | 2° 0 | 21°36 | 21°38 | 15°57 | 1°39 | 0° 2 | 0°25 | 17°15 | F 22 |
| S 23 | 4 9 22 | 1°14'17 | 7♊48 | 13°D52 | 16°44 | 27°45 | 26°49 | 2° 2 | 21°36 | 21°40 | 15°56 | 1°34 | 29°R59 | 0°32 | 17°15 | S 23 |
| S 24 | 4 13 19 | 2°15'05 | 20°40 | 14° 1 | 17°59 | 28°25 | 26°58 | 2° 4 | 21°37 | 21°42 | 15°55 | 1°26 | 29°55 | 0°38 | 17°15 | S 24 |
| M 25 | 4 17 15 | 3°15'53 | 3♊20 | 14°20 | 19°14 | 29° 4 | 27° 6 | 2° 6 | 21°37 | 21°44 | 15°54 | 1°16 | 29°52 | 0°45 | 17°15 | M 25 |
| T 26 | 4 21 12 | 4°16'43 | 15°50 | 14°47 | 20°30 | 29°43 | 27°15 | 2° 8 | 21°37 | 21°45 | 15°53 | 1° 4 | 29°49 | 0°52 | 17°14 | T 26 |
| W 27 | 4 25 8 | 5°17'34 | 28° 8 | 15°23 | 21°45 | 0♉23 | 27°23 | 2°10 | 21°R37 | 21°47 | 15°52 | 0°52 | 29°46 | 0°58 | 17°14 | W 27 |
| T 28 | 4 29 5 | 6°18'27 | 10♊15 | 16° 5 | 23° 0 | 1° 2 | 27°31 | 2°12 | 21°37 | 21°49 | 15°51 | 0°40 | 29°43 | 1° 5 | 17°D14 | T 28 |
| F 29 | 4 33 1 | 7°19'20 | 22°14 | 16°54 | 24°15 | 1°42 | 27°39 | 2°13 | 21°37 | 21°51 | 15°50 | 0°29 | 29°40 | 1°12 | 17°14 | F 29 |
| S 30 | 4 36 58 | 8♊20'15 | 4♊ 6 | 17♉48 | 25♊30 | 2♉21 | 27°R47 | 2°R15 | 21♉36 | 21♊52 | 15♊49 | 0♊21 | 29°R36 | 1♊18 | 17♊14 | S 30 |

Delta T = 62.24 sec

Greg. Calendar

DECEMBER 1624 GC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|--------|-------|-------|-------|--------|-------|--------|-------|--------|--------|--------|------|-------|------|
| S 1 | 4 40 54 | 9♊21'11 | 15♊55 | 18♉47 | 26♊45 | 3♉ 1 | 27°R54 | 2°R16 | 21°R36 | 21♊54 | 15°R48 | 0°R16 | 29°R33 | 1♊25 | 17♊15 | S 1 |
| M 2 | 4 44 51 | 10°22'08 | 27°46 | 19°51 | 28° 0 | 3°40 | 28° 2 | 2°17 | 21♉36 | 21°56 | 15♊47 | 0♊13 | 29°30 | 1°32 | 17°15 | M 2 |
| T 3 | 4 48 48 | 11°23'07 | 9♉43 | 20°58 | 29°15 | 4°19 | 28° 9 | 2°18 | 21°36 | 21°57 | 15°46 | 0°D12 | 29°27 | 1°39 | 17°15 | T 3 |
| W 4 | 4 52 44 | 12°24'06 | 21°52 | 22° 8 | 0♊30 | 4°59 | 28°16 | 2°19 | 21°35 | 21°59 | 15°45 | 0°13 | 29°24 | 1°45 | 17°15 | W 4 |
| T 5 | 4 56 41 | 13°25'07 | 4♊18 | 23°21 | 1°45 | 5°38 | 28°24 | 2°20 | 21°35 | 22° 0 | 15°44 | 0°R13 | 29°21 | 1°52 | 17°16 | T 5 |
| F 6 | 5 0 37 | 14°26'09 | 17° 7 | 24°37 | 3° 0 | 6°18 | 28°31 | 2°21 | 21°34 | 22° 2 | 15°43 | 0°11 | 29°17 | 1°59 | 17°16 | F 6 |
| S 7 | 5 4 34 | 15°27'11 | 0♉22 | 25°55 | 4°15 | 6°58 | 28°37 | 2°22 | 21°34 | 22° 4 | 15°42 | 0° 8 | 29°14 | 2° 5 | 17°17 | S 7 |
| S 8 | 5 8 30 | 16°28'15 | 14° 5 | 27°14 | 5°30 | 7°37 | 28°44 | 2°22 | 21°33 | 22° 5 | 15°41 | 0° 2 | 29°11 | 2°12 | 17°17 | S 8 |
| M 9 | 5 12 27 | 17°29'20 | 28°16 | 28°35 | 6°45 | 8°17 | 28°51 | 2°23 | 21°32 | 22° 6 | 15°40 | 29°R53 | 29° 8 | 2°19 | 17°18 | M 9 |
| T 10 | 5 16 23 | 18°30'26 | 12♊51 | 29°57 | 8° 0 | 8°56 | 28°57 | 2°23 | 21°32 | 22° 8 | 15°39 | 29°42 | 29° 5 | 2°26 | 17°19 | T 10 |
| W 11 | 5 20 20 | 19°31'33 | 27°43 | 1♊21 | 9°15 | 9°36 | 29° 3 | 2°23 | 21°31 | 22° 9 | 15°38 | 29°30 | 29° 1 | 2°32 | 17°19 | W 11 |
| T 12 | 5 24 17 | 20°32'40 | 12♊43 | 2°45 | 10°30 | 10°16 | 29° 9 | 2°24 | 21°30 | 22°11 | 15°37 | 29°19 | 28°58 | 2°39 | 17°20 | T 12 |
| F 13 | 5 28 13 | 21°33'47 | 27°41 | 4°11 | 11°45 | 10°55 | 29°15 | 2°R24 | 21°29 | 22°12 | 15°36 | 29° 9 | 28°55 | 2°46 | 17°21 | F 13 |
| S 14 | 5 32 10 | 22°34'55 | 12♊29 | 5°37 | 13° 0 | 11°35 | 29°21 | 2°24 | 21°28 | 22°13 | 15°36 | 29° 2 | 28°52 | 2°52 | 17°22 | S 14 |
| S 15 | 5 36 6 | 23°36'03 | 27° 0 | 7° 4 | 14°15 | 12°15 | 29°27 | 2°23 | 21°27 | 22°15 | 15°35 | 28°57 | 28°49 | 2°59 | 17°23 | S 15 |
| M 16 | 5 40 3 | 24°37'11 | 11♊11 | 8°32 | 15°30 | 12°54 | 29°32 | 2°23 | 21°26 | 22°16 | 15°34 | 28°55 | 28°46 | 3° 6 | 17°24 | M 16 |
| T 17 | 5 43 59 | 25°38'20 | 25° 1 | 10° 0 | 16°45 | 13°34 | 29°38 | 2°23 | 21°25 | 22°17 | 15°33 | 28°55 | 28°42 | 3°12 | 17°25 | T 17 |
| W 18 | 5 47 56 | 26°39'28 | 8°R31 | 11°28 | 18° 0 | 14°14 | 29°43 | 2°22 | 21°24 | 22°18 | 15°32 | 28°55 | 28°39 | 3°19 | 17°26 | W 18 |
| T 19 | 5 51 52 | 27°40'36 | 21°43 | 12°58 | 19°15 | 14°53 | 29°48 | 2°21 | 21°23 | 22°20 | 15°31 | 28°54 | 28°36 | 3°26 | 17°27 | T 19 |
| F 20 | 5 55 49 | 28°41'45 | 4♊40 | 14°27 | 20°30 | 15°33 | 29°52 | 2°21 | 21°22 | 22°21 | 15°31 | 28°50 | 28°33 | 3°32 | 17°29 | F 20 |
| S 21 | 5 59 46 | 29°42'54 | 17°24 | 15°57 | 21°45 | 16°13 | 29°57 | 2°20 | 21°20 | 22°22 | 15°30 | 28°44 | 28°30 | 3°39 | 17°30 | S 21 |
| S 22 | 6 3 42 | 0♊44'03 | 29°57 | 17°27 | 23° 0 | 16°53 | 0♊ 2 | 2°19 | 21°19 | 22°23 | 15°29 | 28°34 | 28°27 | 3°46 | 17°31 | S 22 |
| M 23 | 6 7 39 | 1°45'11 | 12♊20 | 18°58 | 24°15 | 17°32 | 0° 6 | 2°18 | 21°18 | 22°24 | 15°28 | 28°22 | 28°23 | 3°53 | 17°33 | M 23 |
| T 24 | 6 11 35 | 2°46'20 | 24°36 | 20°29 | 25°30 | 18°12 | 0°10 | 2°16 | 21°16 | 22°25 | 15°28 | 28° 7 | 28°20 | 3°59 | 17°34 | T 24 |
| W 25 | 6 15 32 | 3°47'29 | 6♊43 | 22° 1 | 26°45 | 18°52 | 0°14 | 2°15 | 21°15 | 22°26 | 15°27 | 27°52 | 28°17 | 4° 6 | 17°36 | W 25 |
| T 26 | 6 19 28 | 4°48'39 | 18°44 | 23°32 | 27°59 | 19°32 | 0°18 | 2°14 | 21°13 | 22°27 | 15°26 | 27°38 | 28°14 | 4°13 | 17°37 | T 26 |
| F 27 | 6 23 25 | 5°49'48 | 0♉38 | 25° 5 | 29°14 | 20°12 | 0°21 | 2°12 | 21°12 | 22°28 | 15°26 | 27°25 | 28°11 | 4°19 | 17°39 | F 27 |
| S 28 | 6 27 21 | 6°50'57 | 12°28 | 26°37 | 0♊29 | 20°52 | 0°25 | 2°11 | 21°10 | 22°29 | 15°25 | 27°15 | 28° 7 | 4°26 | 17°40 | S 28 |
| S 29 | 6 31 18 | 7°52'07 | 24°17 | 28°10 | 1°44 | 21°32 | 0°28 | 2° 9 | 21° 9 | 22°30 | 15°24 | 27° 8 | 28° 4 | 4°33 | 17°42 | S 29 |
| M 30 | 6 35 15 | 8°53'17 | 6♉ 7 | 29°43 | 2°58 | 22°11 | 0°31 | 2° 7 | 21° 7 | 22°31 | 15°24 | 27° 4 | 28° 1 | 4°39 | 17°44 | M 30 |
| T 31 | 6 39 11 | 9♊54'26 | 18°R 2 | 1♊17 | 4♊13 | 22♉51 | 0♊34 | 2°R 5 | 21♉ 5 | 22♊31 | 15♊23 | 27°R 2 | 27°R58 | 4♊46 | 17♊46 | T 31 |

Delta T = 62.17 sec

Greg. Calendar