



# Astrodienst Ephemeris Tables for the year 2059

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 D5EPX

ASTRODIENST EPHEMERIS for the year 2059  
geocentric

JANUARY 2059

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♀     | ♂     | ♂      | ♂     | ♂      | ♂    | ♂      | ♂     | ♂     | ♂    | ♂     | ♂     | Day  |
|------|---------|----------|-------|-------|-------|--------|-------|--------|------|--------|-------|-------|------|-------|-------|------|
| W 1  | 6 42 39 | 10°32'58 | 4°26  | 29°47 | 23°51 | 16°25  | 15°11 | 12°R51 | 2°58 | 14°R15 | 18°41 | 5°R27 | 3°55 | 24°0  | 16°40 | W 1  |
| T 2  | 6 46 36 | 11°34'06 | 16°23 | 1°319 | 24°55 | 16°37  | 15°15 | 12°849 | 3° 0 | 14°113 | 18°42 | 5°120 | 3°52 | 24° 7 | 16°44 | T 2  |
| F 3  | 6 50 33 | 12°35'14 | 28°16 | 2°52  | 25°59 | 16°47  | 15°20 | 12°48  | 3° 2 | 14°12  | 18°43 | 5°13  | 3°48 | 24°13 | 16°48 | F 3  |
| S 4  | 6 54 29 | 13°36'23 | 10°7  | 4°25  | 27° 4 | 16°57  | 15°25 | 12°47  | 3° 4 | 14°10  | 18°43 | 5° 7  | 3°45 | 24°20 | 16°52 | S 4  |
| S 5  | 6 58 26 | 14°37'31 | 22° 0 | 5°58  | 28° 9 | 17° 7  | 15°31 | 12°46  | 3° 6 | 14° 9  | 18°44 | 5° 2  | 3°42 | 24°27 | 16°56 | S 5  |
| M 6  | 7 2 22  | 15°38'40 | 3°59  | 7°32  | 29°14 | 17°16  | 15°36 | 12°45  | 3° 8 | 14° 8  | 18°45 | 5° 0  | 3°39 | 24°33 | 17° 0 | M 6  |
| T 7  | 7 6 19  | 16°39'49 | 16° 8 | 9° 6  | 0°19  | 17°24  | 15°42 | 12°44  | 3° 9 | 14° 6  | 18°46 | 4°D59 | 3°36 | 24°40 | 17° 4 | T 7  |
| W 8  | 7 10 15 | 17°40'58 | 28°33 | 10°40 | 1°24  | 17°31  | 15°47 | 12°43  | 3°11 | 14° 5  | 18°47 | 4°59  | 3°33 | 24°47 | 17° 8 | W 8  |
| T 9  | 7 14 12 | 18°42'07 | 11°17 | 12°15 | 2°30  | 17°38  | 15°53 | 12°43  | 3°12 | 14° 3  | 18°48 | 5° 1  | 3°29 | 24°54 | 17°12 | T 9  |
| F 10 | 7 18 8  | 19°43'16 | 24°26 | 13°50 | 3°36  | 17°45  | 15°59 | 12°42  | 3°14 | 14° 2  | 18°49 | 5° 2  | 3°26 | 25° 0 | 17°16 | F 10 |
| S 11 | 7 22 5  | 20°44'26 | 8°2   | 15°26 | 4°42  | 17°50  | 16° 6 | 12°42  | 3°16 | 14° 1  | 18°49 | 5°R 3 | 3°23 | 25° 7 | 17°20 | S 11 |
| S 12 | 7 26 2  | 21°45'36 | 22° 6 | 17° 2 | 5°49  | 17°55  | 16°12 | 12°41  | 3°17 | 14° 0  | 18°50 | 5° 1  | 3°20 | 25°14 | 17°25 | S 12 |
| M13  | 7 29 58 | 22°46'45 | 6°37  | 18°39 | 6°56  | 17°59  | 16°19 | 12°41  | 3°18 | 13°58  | 18°51 | 4°58  | 3°17 | 25°20 | 17°29 | M13  |
| T 14 | 7 33 55 | 23°47'54 | 21°29 | 20°16 | 8° 3  | 18° 3  | 16°26 | 12°D41 | 3°20 | 13°57  | 18°52 | 4°52  | 3°14 | 25°27 | 17°33 | T 14 |
| W15  | 7 37 51 | 24°49'03 | 6°35  | 21°53 | 9°10  | 18° 6  | 16°33 | 12°41  | 3°21 | 13°56  | 18°53 | 4°44  | 3°10 | 25°34 | 17°37 | W15  |
| T 16 | 7 41 48 | 25°50'11 | 21°45 | 23°31 | 10°17 | 18° 8  | 16°40 | 12°41  | 3°22 | 13°55  | 18°54 | 4°36  | 3° 7 | 25°41 | 17°41 | T 16 |
| F 17 | 7 45 44 | 26°51'19 | 6°47  | 25°10 | 11°25 | 18° 9  | 16°47 | 12°42  | 3°23 | 13°54  | 18°55 | 4°28  | 3° 4 | 25°47 | 17°46 | F 17 |
| S 18 | 7 49 41 | 27°52'26 | 21°34 | 26°49 | 12°32 | 18°R10 | 16°54 | 12°42  | 3°24 | 13°52  | 18°56 | 4°22  | 3° 1 | 25°54 | 17°50 | S 18 |
| S 19 | 7 53 37 | 28°53'32 | 5°59  | 28°28 | 13°40 | 18° 9  | 17° 2 | 12°43  | 3°26 | 13°51  | 18°58 | 4°17  | 2°58 | 26° 1 | 17°54 | S 19 |
| M20  | 7 57 34 | 29°54'37 | 20° 0 | 0°8   | 14°48 | 18° 8  | 17°10 | 12°43  | 3°27 | 13°50  | 18°59 | 4°15  | 2°54 | 26° 8 | 17°59 | M20  |
| T 21 | 8 1 31  | 0°55'42  | 3°36  | 1°49  | 15°56 | 18° 7  | 17°18 | 12°44  | 3°27 | 13°49  | 19° 0 | 4°D14 | 2°51 | 26°14 | 18° 3 | T 21 |
| W22  | 8 5 27  | 1°56'45  | 16°49 | 3°30  | 17° 5 | 18° 4  | 17°26 | 12°45  | 3°28 | 13°48  | 19° 1 | 4°15  | 2°48 | 26°21 | 18° 7 | W22  |
| T 23 | 8 9 24  | 2°57'48  | 29°42 | 5°12  | 18°13 | 18° 1  | 17°34 | 12°46  | 3°29 | 13°47  | 19° 2 | 4°R16 | 2°45 | 26°28 | 18°12 | T 23 |
| F 24 | 8 13 20 | 3°58'49  | 12°19 | 6°54  | 19°22 | 17°57  | 17°42 | 12°47  | 3°30 | 13°46  | 19° 3 | 4°15  | 2°42 | 26°34 | 18°16 | F 24 |
| S 25 | 8 17 17 | 4°59'50  | 24°44 | 8°37  | 20°31 | 17°52  | 17°51 | 12°48  | 3°31 | 13°45  | 19° 4 | 4°13  | 2°39 | 26°41 | 18°20 | S 25 |
| S 26 | 8 21 13 | 6° 0'50  | 6°58  | 10°20 | 21°40 | 17°47  | 17°59 | 12°50  | 3°31 | 13°44  | 19° 6 | 4° 8  | 2°35 | 26°48 | 18°25 | S 26 |
| M27  | 8 25 10 | 7° 1'49  | 19° 5 | 12° 4 | 22°49 | 17°40  | 18° 8 | 12°51  | 3°32 | 13°43  | 19° 7 | 4° 1  | 2°32 | 26°55 | 18°29 | M27  |
| T 28 | 8 29 7  | 8° 2'47  | 1°1   | 13°48 | 23°58 | 17°33  | 18°17 | 12°52  | 3°33 | 13°43  | 19° 8 | 3°50  | 2°29 | 27° 1 | 18°34 | T 28 |
| W29  | 8 33 3  | 9° 3'44  | 13° 4 | 15°33 | 25° 8 | 17°25  | 18°26 | 12°54  | 3°33 | 13°42  | 19° 9 | 3°38  | 2°26 | 27° 8 | 18°38 | W29  |
| T 30 | 8 37 0  | 10° 4'40 | 24°58 | 17°18 | 26°17 | 17°16  | 18°35 | 12°56  | 3°34 | 13°41  | 19°11 | 3°25  | 2°23 | 27°15 | 18°43 | T 30 |
| F 31 | 8 40 56 | 11°5'35  | 6°51  | 19°3  | 27°27 | 17°7   | 18°45 | 12°58  | 3°34 | 13°40  | 19°12 | 3°11  | 2°11 | 27°21 | 18°47 | F 31 |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     |
|------|-------|-------|------|-------|------|-------|------|------|------|------|------|-------|------|-------|------|-------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat  | decl  | lat  | decl  | lat  | lat   |
| W 1  | 23s 1 | 23n27 | 4n26 | 24s 8 | 0s42 | 15s40 | 3n10 | 8n12 | 3n 5 | 4n47 | 1s18 | 13n23 | 2s25 | 12s 0 | 0n32 | 20n59 |
| T 2  | 22 56 | 20 35 | 4 53 | 24 14 | 0 48 | 15 55 | 3 10 | 8 9  | 3 7  | 4 49 | 1 18 | 13 23 | 2 25 | 12 1  | 0 32 | 20 59 |
| F 3  | 22 50 | 16 53 | 5 8  | 24 19 | 0 55 | 16 11 | 3 9  | 8 7  | 3 9  | 4 51 | 1 17 | 13 23 | 2 25 | 12 1  | 0 32 | 20 59 |
| S 4  | 22 44 | 12 32 | 5 9  | 24 22 | 1 0  | 16 26 | 3 9  | 8 4  | 3 10 | 4 53 | 1 17 | 13 23 | 2 24 | 12 2  | 0 32 | 20 59 |
| S 5  | 22 38 | 7 43  | 4 57 | 24 24 | 1 6  | 16 41 | 3 8  | 8 2  | 3 12 | 4 55 | 1 17 | 13 23 | 2 24 | 12 3  | 0 32 | 20 58 |
| M 6  | 22 31 | 2 34  | 4 31 | 24 25 | 1 12 | 16 55 | 3 8  | 8 1  | 3 14 | 4 58 | 1 17 | 13 23 | 2 24 | 12 3  | 0 32 | 20 58 |
| T 7  | 22 24 | 2s45  | 3 54 | 24 24 | 1 17 | 17 10 | 3 7  | 7 59 | 3 16 | 5 0  | 1 16 | 13 23 | 2 23 | 12 4  | 0 32 | 20 58 |
| W 8  | 22 16 | 8 5   | 3 5  | 24 22 | 1 22 | 17 24 | 3 6  | 7 58 | 3 18 | 5 3  | 1 16 | 13 23 | 2 23 | 12 4  | 0 32 | 20 58 |
| T 9  | 22 8  | 13 14 | 2 5  | 24 19 | 1 27 | 17 38 | 3 5  | 7 57 | 3 20 | 5 5  | 1 16 | 13 23 | 2 23 | 12 5  | 0 32 | 20 58 |
| F 10 | 21 59 | 17 57 | 0 57 | 24 14 | 1 32 | 17 52 | 3 3  | 7 56 | 3 22 | 5 8  | 1 15 | 13 23 | 2 23 | 12 5  | 0 32 | 20 58 |
| S 11 | 21 50 | 21 54 | 0s16 | 24 8  | 1 36 | 18 5  | 3 2  | 7 56 | 3 24 | 5 10 | 1 15 | 13 23 | 2 22 | 12 6  | 0 32 | 20 58 |
| S 12 | 21 40 | 24 42 | 1 31 | 24 0  | 1 40 | 18 18 | 3 1  | 7 56 | 3 26 | 5 13 | 1 15 | 13 23 | 2 22 | 12 6  | 0 32 | 20 58 |
| M13  | 21 31 | 25 58 | 2 42 | 23 51 | 1 44 | 18 31 | 2 59 | 7 56 | 3 27 | 5 16 | 1 15 | 13 23 | 2 22 | 12 7  | 0 32 | 20 57 |
| T 14 | 21 20 | 25 24 | 3 43 | 23 41 | 1 48 | 18 44 | 2 57 | 7 56 | 3 29 | 5 19 | 1 14 | 13 24 | 2 21 | 12 7  | 0 32 | 20 57 |
| W15  | 21 9  | 22 59 | 4 30 | 23 29 | 1 51 | 18 56 | 2 55 | 7 57 | 3 31 | 5 22 | 1 14 | 13 24 | 2 21 | 12 8  | 0 32 | 20 57 |
| T 16 | 20 58 | 18 57 | 4 58 | 23 15 | 1 54 | 19 7  | 2 54 | 7 58 | 3 33 | 5 25 | 1 14 | 13 24 | 2 21 | 12 8  | 0 32 | 20 57 |
| F 17 | 20 47 | 13 45 | 5 6  | 23 1  | 1 57 | 19 19 | 2 52 | 7 59 | 3 35 | 5 28 | 1 14 | 13 25 | 2 20 | 12 8  | 0 32 | 20 57 |
| S 18 | 20 35 | 7 49  | 4 53 | 22 44 | 1 59 | 19 30 | 2 49 | 8 0  | 3 37 | 5 31 | 1 13 | 13 25 | 2 20 | 12 9  | 0 32 | 20 57 |
| S 19 | 20 23 | 1 37  | 4 21 | 22 26 | 2 1  | 19 40 | 2 47 | 8 2  | 3 39 | 5 34 | 1 13 | 13 26 | 2 20 | 12 9  | 0 32 | 20 57 |
| M20  | 20 10 | 4n31  | 3 34 | 22 7  | 2 3  | 19 50 | 2 45 | 8 4  | 3 41 | 5 37 | 1 13 | 13 26 | 2 20 | 12 9  | 0 32 | 20 57 |
| T 21 | 19 57 | 10 15 | 2 37 | 21 46 | 2 4  | 20 0  | 2 43 | 8 7  | 3 43 | 5 40 | 1 13 | 13 27 | 2 19 | 12 10 | 0 32 | 20 57 |
| W22  | 19 43 | 15 23 | 1 32 | 21 23 | 2 5  | 20 9  | 2 40 | 8 9  | 3 45 | 5 44 | 1 12 | 13 27 | 2 19 | 12 10 | 0 32 | 20 57 |
| T 23 | 19 29 | 19 41 | 0 24 | 20 59 | 2 5  | 20 18 | 2 38 | 8 12 | 3 46 | 5 47 | 1 12 | 13 28 | 2 19 | 12 10 | 0 32 | 20 57 |
| F 24 | 19 15 | 22 58 | 0n43 | 20 34 | 2 5  | 20 26 | 2 35 | 8 16 | 3 48 | 5 50 | 1 12 | 13 28 | 2 18 | 12 10 | 0 32 | 20 56 |
| S 25 | 19 1  | 25 7  | 1 47 | 20 7  | 2 5  | 20 34 | 2 32 | 8 19 | 3 50 | 5 54 | 1 11 | 13 29 | 2 18 | 12 11 | 0 32 | 20 56 |
| S 26 | 18 46 | 26 0  | 2 45 | 19 38 | 2 4  | 20 41 | 2 29 | 8 23 | 3 52 | 5 57 | 1 11 | 13 30 | 2 18 | 12 11 | 0 32 | 20 56 |
| M27  | 18 31 | 25 37 | 3 35 | 19 8  | 2 3  | 20 48 | 2 27 | 8 27 | 3 54 | 6 1  | 1 11 | 13 30 | 2 18 | 12 11 | 0 32 | 20 56 |
| T 28 | 18 15 | 24 2  | 4 15 | 18 37 | 2 1  | 20 54 | 2 24 | 8 32 | 3 55 | 6 5  | 1 11 | 13 31 | 2 17 | 12 11 | 0 32 | 20 56 |
| W29  | 17 59 | 21 24 | 4 43 | 18 4  | 1 59 | 21 0  | 2 21 | 8 36 | 3 57 | 6 8  | 1 11 | 13 32 | 2 17 | 12 11 | 0 32 | 20 56 |
| T 30 | 17 43 | 17 52 | 4 58 | 17 29 | 1 56 | 21 5  | 2 18 | 8 41 | 3 59 | 6 12 | 1 10 | 13 33 | 2 17 | 12 12 | 0 32 | 20 56 |
| F 31 | 17s26 | 13n39 | 5n 1 | 16s53 | 1s52 | 21s10 | 2n14 | 8n47 | 4n 0 | 6n16 | 1s10 | 13n33 | 2s16 | 12s12 | 0n32 | 20n56 |

Julian Day Number = 2473094.5, Delta T = 77.32 sec  
Ecliptic obliquity = 23°25'57, Nutation = - 0°00'15, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 25°33'52, Lahiri = 24°40'53

# ASTRODIENST EPHEMERIS for the year 2059

## geocentric

FEBRUARY 2059

00:00 UT

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

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | Day  |
|------|-------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  |
| S 1  | 17s10 | 8n55  | 4n50 | 16s16 | 1s48 | 21s14 | 2n11 | 8n52  | 4n 2 | 6n19 | 1s10 | 13n34 | 2s16 | 12s12 | 0n32 | 20n56 | 1s31 |
| S 2  | 16 52 | 3 50  | 4 27 | 15 37 | 1 44 | 21 18 | 2 8  | 8 58  | 4 3  | 6 23 | 1 10 | 13 35 | 2 16 | 12 12 | 0 32 | 20 56 | 1 31 |
| M 3  | 16 35 | 1s25  | 3 52 | 14 57 | 1 39 | 21 21 | 2 5  | 9 4   | 4 5  | 6 27 | 1 9  | 13 36 | 2 15 | 12 12 | 0 32 | 20 56 | 1 30 |
| T 4  | 16 17 | 6 41  | 3 6  | 14 16 | 1 33 | 21 23 | 2 2  | 9 10  | 4 6  | 6 31 | 1 9  | 13 37 | 2 15 | 12 12 | 0 32 | 20 56 | 1 30 |
| W 5  | 15 59 | 11 49 | 2 11 | 13 34 | 1 26 | 21 25 | 1 58 | 9 17  | 4 8  | 6 35 | 1 9  | 13 38 | 2 15 | 12 12 | 0 32 | 20 56 | 1 30 |
| T 6  | 15 41 | 16 34 | 1 8  | 12 50 | 1 19 | 21 27 | 1 55 | 9 24  | 4 9  | 6 39 | 1 9  | 13 39 | 2 15 | 12 12 | 0 32 | 20 56 | 1 30 |
| F 7  | 15 22 | 20 43 | 0s 1 | 12 6  | 1 11 | 21 28 | 1 51 | 9 31  | 4 11 | 6 43 | 1 8  | 13 40 | 2 14 | 12 12 | 0 32 | 20 56 | 1 30 |
| S 8  | 15 4  | 23 54 | 1 11 | 11 21 | 1 2  | 21 28 | 1 48 | 9 38  | 4 12 | 6 47 | 1 8  | 13 41 | 2 14 | 12 12 | 0 32 | 20 56 | 1 30 |
| S 9  | 14 44 | 25 46 | 2 20 | 10 35 | 0 53 | 21 27 | 1 44 | 9 45  | 4 13 | 6 51 | 1 8  | 13 42 | 2 14 | 12 12 | 0 33 | 20 56 | 1 30 |
| M10  | 14 25 | 25 59 | 3 22 | 9 49  | 0 42 | 21 26 | 1 41 | 9 53  | 4 14 | 6 55 | 1 8  | 13 43 | 2 13 | 12 12 | 0 33 | 20 56 | 1 30 |
| T 11 | 14 6  | 24 23 | 4 13 | 9 3   | 0 31 | 21 25 | 1 37 | 10 1  | 4 15 | 7 0  | 1 8  | 13 45 | 2 13 | 12 12 | 0 33 | 20 56 | 1 30 |
| W12  | 13 46 | 21 0  | 4 46 | 8 17  | 0 20 | 21 23 | 1 34 | 10 9  | 4 16 | 7 4  | 1 7  | 13 46 | 2 13 | 12 12 | 0 33 | 20 56 | 1 30 |
| T 13 | 13 26 | 16 9  | 5 0  | 7 31  | 0 7  | 21 20 | 1 30 | 10 17 | 4 17 | 7 8  | 1 7  | 13 47 | 2 13 | 12 11 | 0 33 | 20 56 | 1 30 |
| F 14 | 13 5  | 10 17 | 4 52 | 6 46  | 0n 6 | 21 17 | 1 26 | 10 25 | 4 18 | 7 12 | 1 7  | 13 48 | 2 12 | 12 11 | 0 33 | 20 56 | 1 30 |
| S 15 | 12 45 | 3 53  | 4 24 | 6 2   | 0 20 | 21 13 | 1 23 | 10 34 | 4 18 | 7 17 | 1 7  | 13 50 | 2 12 | 12 11 | 0 33 | 20 56 | 1 30 |
| S 16 | 12 24 | 2n35  | 3 38 | 5 19  | 0 34 | 21 8  | 1 19 | 10 42 | 4 19 | 7 21 | 1 7  | 13 51 | 2 12 | 12 11 | 0 33 | 20 56 | 1 30 |
| M17  | 12 3  | 8 44  | 2 40 | 4 38  | 0 48 | 21 3  | 1 15 | 10 51 | 4 19 | 7 25 | 1 6  | 13 52 | 2 12 | 12 11 | 0 33 | 20 56 | 1 30 |
| T 18 | 11 42 | 14 15 | 1 35 | 3 59  | 1 4  | 20 57 | 1 12 | 11 0  | 4 20 | 7 30 | 1 6  | 13 54 | 2 11 | 12 10 | 0 33 | 20 56 | 1 30 |
| W19  | 11 21 | 18 54 | 0 26 | 3 23  | 1 19 | 20 51 | 1 8  | 11 8  | 4 20 | 7 34 | 1 6  | 13 55 | 2 11 | 12 10 | 0 33 | 20 56 | 1 30 |
| T 20 | 11 0  | 22 31 | 0n41 | 2 50  | 1 34 | 20 44 | 1 4  | 11 17 | 4 20 | 7 39 | 1 6  | 13 56 | 2 11 | 12 10 | 0 33 | 20 56 | 1 30 |
| F 21 | 10 38 | 24 56 | 1 46 | 2 20  | 1 50 | 20 37 | 1 1  | 11 26 | 4 21 | 7 43 | 1 6  | 13 58 | 2 10 | 12 10 | 0 33 | 20 56 | 1 29 |
| S 22 | 10 16 | 26 5  | 2 43 | 1 54  | 2 5  | 20 28 | 0 57 | 11 35 | 4 21 | 7 48 | 1 5  | 13 59 | 2 10 | 12 9  | 0 33 | 20 56 | 1 29 |
| S 23 | 9 54  | 25 58 | 3 33 | 1 32  | 2 20 | 20 20 | 0 53 | 11 44 | 4 21 | 7 52 | 1 5  | 14 1  | 2 10 | 12 9  | 0 33 | 20 56 | 1 29 |
| M24  | 9 32  | 24 38 | 4 12 | 1 14  | 2 34 | 20 10 | 0 49 | 11 52 | 4 20 | 7 57 | 1 5  | 14 2  | 2 10 | 12 9  | 0 33 | 20 56 | 1 29 |
| T 25 | 9 10  | 22 13 | 4 40 | 1 2   | 2 48 | 20 1  | 0 46 | 12 1  | 4 20 | 8 1  | 1 5  | 14 4  | 2 9  | 12 8  | 0 33 | 20 56 | 1 29 |
| W26  | 8 48  | 18 51 | 4 56 | 0 54  | 3 0  | 19 50 | 0 42 | 12 10 | 4 20 | 8 6  | 1 5  | 14 5  | 2 9  | 12 8  | 0 33 | 20 57 | 1 29 |
| T 27 | 8 25  | 14 45 | 4 59 | 0 50  | 3 12 | 19 39 | 0 38 | 12 18 | 4 19 | 8 11 | 1 5  | 14 7  | 2 9  | 12 8  | 0 33 | 20 57 | 1 29 |
| F 28 | 8s 3  | 10n 4 | 4n49 | 0s52  | 3n21 | 19s28 | 0n35 | 12n27 | 4n19 | 8n15 | 1s 4 | 14n 8 | 2s 9 | 12s 7 | 0n33 | 20n57 | 1s29 |

Julian Day Number = 2473125.5, Delta T = 77.35 sec

Ecliptic obliquity = 23°25'58, Nutation = - 0°00'14, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°33'57, Lahiri = 24°40'57

ASTRODIENST EPHEMERIS for the year 2059  
geocentric

MARCH 2059

00:00 UT

| Day  | Sid.t    | ☉                     | ☽                  | ♀                  | ♂                 | ♂                  | ♂                 | ♂                  | ♂                 | ♂                  | ♂                  | ♂                  | ♂                  | ♂                 | ♂                  | Day  |
|------|----------|-----------------------|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|------|
| S 1  | 10 35 16 | 10 <sup>h</sup> 32'49 | 27 <sup>m</sup> 38 | 19°R24             | 1 <sup>m</sup> 45 | 7°R55              | 24 <sup>m</sup> 3 | 14 <sup>m</sup> 36 | 3°R21             | 13 <sup>m</sup> 32 | 19 <sup>m</sup> 54 | 29°R56             | 0 <sup>m</sup> 47  | 0 <sup>m</sup> 36 | 20 <sup>m</sup> 56 | S 1  |
| S 2  | 10 39 13 | 11°24'02              | 9 <sup>m</sup> 38  | 18 <sup>m</sup> 41 | 2°57              | 7 <sup>m</sup> 31  | 24°16             | 14°40              | 3 <sup>m</sup> 20 | 13°33              | 19°56              | 29 <sup>m</sup> 45 | 0°44               | 0°43              | 21° 0              | S 2  |
| M 3  | 10 43 9  | 12°24'14              | 21°43              | 17°51              | 4° 9              | 7° 8               | 24°28             | 14°45              | 3°19              | 13°33              | 19°57              | 29°37              | 0°41               | 0°50              | 21° 4              | M 3  |
| T 4  | 10 47 6  | 13°24'24              | 3 <sup>m</sup> 56  | 16°56              | 5°21              | 6°44               | 24°41             | 14°50              | 3°18              | 13°33              | 19°59              | 29°31              | 0°38               | 0°57              | 21° 8              | T 4  |
| W 5  | 10 51 2  | 14°24'33              | 16°20              | 15°57              | 6°33              | 6°21               | 24°53             | 14°55              | 3°16              | 13°34              | 20° 0              | 29°29              | 0°35               | 1° 3              | 21°12              | W 5  |
| T 6  | 10 54 59 | 15°24'40              | 28°59              | 14°56              | 7°45              | 5°58               | 25° 6             | 15° 0              | 3°15              | 13°34              | 20° 2              | 29°D28             | 0°32               | 1°10              | 21°17              | T 6  |
| F 7  | 10 58 56 | 16°24'46              | 11 <sup>m</sup> 57 | 13°54              | 8°57              | 5°35               | 25°19             | 15° 5              | 3°13              | 13°34              | 20° 3              | 29°R28             | 0°28               | 1°17              | 21°21              | F 7  |
| S 8  | 11 2 52  | 17°24'50              | 25°16              | 12°53              | 10° 9             | 5°13               | 25°32             | 15°11              | 3°12              | 13°35              | 20° 5              | 29°28              | 0°25               | 1°24              | 21°25              | S 8  |
| S 9  | 11 6 49  | 18°24'53              | 9 <sup>m</sup> 3   | 11°54              | 11°22             | 4°50               | 25°45             | 15°16              | 3°10              | 13°35              | 20° 6              | 29°26              | 0°22               | 1°30              | 21°29              | S 9  |
| M10  | 11 10 45 | 19°24'54              | 23°14              | 10°58              | 12°34             | 4°29               | 25°58             | 15°21              | 3° 9              | 13°36              | 20° 8              | 29°22              | 0°19               | 1°37              | 21°33              | M10  |
| T 11 | 11 14 42 | 20°24'53              | 7 <sup>m</sup> 53  | 10° 6              | 13°46             | 4° 7               | 26°11             | 15°27              | 3° 7              | 13°36              | 20°10              | 29°16              | 0°16               | 1°44              | 21°37              | T 11 |
| W12  | 11 18 38 | 21°24'51              | 22°53              | 9°19               | 14°59             | 3°47               | 26°24             | 15°32              | 3° 6              | 13°37              | 20°11              | 29° 7              | 0°12               | 1°50              | 21°41              | W12  |
| T 13 | 11 22 35 | 22°24'47              | 8 <sup>m</sup> 5   | 8°38               | 16°11             | 3°26               | 26°37             | 15°38              | 3° 4              | 13°38              | 20°13              | 28°57              | 0° 9               | 1°57              | 21°45              | T 13 |
| F 14 | 11 26 31 | 23°24'41              | 23°21              | 8° 3               | 17°23             | 3° 7               | 26°50             | 15°44              | 3° 2              | 13°38              | 20°14              | 28°47              | 0° 6               | 2° 4              | 21°49              | F 14 |
| S 15 | 11 30 28 | 24°24'33              | 8 <sup>m</sup> 28  | 7°34               | 18°36             | 2°47               | 27° 3             | 15°49              | 3° 0              | 13°39              | 20°16              | 28°38              | 0° 3               | 2°11              | 21°53              | S 15 |
| S 16 | 11 34 25 | 25°24'23              | 23°17              | 7°12               | 19°48             | 2°29               | 27°17             | 15°55              | 2°58              | 13°40              | 20°18              | 28°31              | 29 <sup>m</sup> 59 | 2°17              | 21°57              | S 16 |
| M17  | 11 38 21 | 26°24'10              | 7 <sup>m</sup> 41  | 6°56               | 21° 1             | 2°11               | 27°30             | 16° 1              | 2°57              | 13°40              | 20°19              | 28°27              | 29°57              | 2°24              | 22° 1              | M17  |
| T 18 | 11 42 18 | 27°23'56              | 21°36              | 6°46               | 22°13             | 1°54               | 27°43             | 16° 7              | 2°55              | 13°41              | 20°21              | 28°25              | 29°53              | 2°31              | 22° 5              | T 18 |
| W19  | 11 46 14 | 28°23'40              | 5 <sup>m</sup> 2   | 6°D43              | 23°26             | 1°37               | 27°57             | 16°13              | 2°53              | 13°42              | 20°22              | 28°D25             | 29°50              | 2°38              | 22° 9              | W19  |
| T 20 | 11 50 11 | 29°23'21              | 18° 1              | 6°45               | 24°38             | 1°21               | 28°10             | 16°19              | 2°51              | 13°43              | 20°24              | 28°26              | 29°47              | 2°44              | 22°12              | T 20 |
| F 21 | 11 54 7  | 0 <sup>m</sup> 23'00  | 0 <sup>m</sup> 37  | 6°53               | 25°51             | 1° 6               | 28°24             | 16°25              | 2°49              | 13°44              | 20°25              | 28°R26             | 29°44              | 2°51              | 22°16              | F 21 |
| S 22 | 11 58 4  | 1°22'37               | 12°56              | 7° 7               | 27° 3             | 0°51               | 28°38             | 16°31              | 2°47              | 13°45              | 20°27              | 28°26              | 29°41              | 2°58              | 22°20              | S 22 |
| S 23 | 12 2 0   | 2°22'12               | 25° 1              | 7°26               | 28°16             | 0°37               | 28°51             | 16°38              | 2°45              | 13°46              | 20°28              | 28°23              | 29°37              | 3° 4              | 22°24              | S 23 |
| M24  | 12 5 57  | 3°21'44               | 6 <sup>m</sup> 27  | 7°50               | 29°29             | 0°24               | 29° 5             | 16°44              | 2°43              | 13°46              | 20°30              | 28°18              | 29°34              | 3°11              | 22°27              | M24  |
| T 25 | 12 9 54  | 4°21'14               | 18°50              | 8°19               | 0 <sup>m</sup> 41 | 0°12               | 29°19             | 16°50              | 2°41              | 13°48              | 20°32              | 28°10              | 29°31              | 3°18              | 22°31              | T 25 |
| W26  | 12 13 50 | 5°20'41               | 0 <sup>m</sup> 41  | 8°52               | 1°54              | 0° 1               | 29°32             | 16°57              | 2°38              | 13°49              | 20°33              | 28° 1              | 29°28              | 3°25              | 22°34              | W26  |
| T 27 | 12 17 47 | 6°20'07               | 12°34              | 9°30               | 3° 7              | 29 <sup>m</sup> 50 | 29°46             | 17° 3              | 2°36              | 13°50              | 20°35              | 27°51              | 29°25              | 3°31              | 22°38              | T 27 |
| F 28 | 12 21 43 | 7°19'30               | 24°31              | 10°11              | 4°19              | 29°40              | 0 <sup>m</sup> 0  | 17°10              | 2°34              | 13°51              | 20°36              | 27°41              | 29°22              | 3°38              | 22°41              | F 28 |
| S 29 | 12 25 40 | 8°18'51               | 6 <sup>m</sup> 33  | 10°56              | 5°32              | 29°31              | 0°14              | 17°16              | 2°32              | 13°52              | 20°38              | 27°32              | 29°18              | 3°45              | 22°45              | S 29 |
| S 30 | 12 29 36 | 9°18'11               | 18°42              | 11°44              | 6°45              | 29°23              | 0°28              | 17°23              | 2°29              | 13°53              | 20°39              | 27°25              | 29°15              | 3°51              | 22°48              | S 30 |
| M31  | 12 33 33 | 10 <sup>m</sup> 17'28 | 0 <sup>m</sup> 59  | 12 <sup>m</sup> 36 | 7 <sup>m</sup> 58 | 29 <sup>m</sup> 15 | 0 <sup>m</sup> 42 | 17 <sup>m</sup> 29 | 2 <sup>m</sup> 27 | 13 <sup>m</sup> 54 | 20 <sup>m</sup> 41 | 27 <sup>m</sup> 19 | 29 <sup>m</sup> 12 | 3 <sup>m</sup> 58 | 22 <sup>m</sup> 52 | M31  |

| Day  | ☉    | ☽     | ♀    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂     | ♂     | ♂    | ♂     | ♂    | ♂     |
|------|------|-------|------|------|------|-------|------|-------|------|-------|-------|-------|------|-------|------|-------|
|      | decl | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat  | decl  | lat  | decl  |
| S 1  | 7s40 | 5n 0  | 4n26 | 0s59 | 3n29 | 19s16 | 0n31 | 12n35 | 4n18 | 8n20  | 1 s 4 | 14n10 | 2s 8 | 12s 7 | 0n33 | 20n57 |
| S 2  | 7 17 | 0s16  | 3 51 | 1 10 | 3 35 | 19 3  | 0 28 | 12 43 | 4 17 | 8 25  | 1 4   | 14 12 | 2 8  | 12 6  | 0 33 | 20 57 |
| M 3  | 6 54 | 5 36  | 3 5  | 1 26 | 3 39 | 18 50 | 0 24 | 12 51 | 4 16 | 8 29  | 1 4   | 14 13 | 2 8  | 12 6  | 0 33 | 20 57 |
| T 4  | 6 31 | 10 47 | 2 11 | 1 46 | 3 41 | 18 36 | 0 20 | 12 59 | 4 15 | 8 34  | 1 4   | 14 15 | 2 8  | 12 6  | 0 33 | 20 57 |
| W 5  | 6 8  | 15 37 | 1 9  | 2 8  | 3 41 | 18 22 | 0 17 | 13 7  | 4 14 | 8 39  | 1 4   | 14 17 | 2 7  | 12 5  | 0 33 | 20 57 |
| T 6  | 5 45 | 19 53 | 0 3  | 2 34 | 3 39 | 18 7  | 0 13 | 13 14 | 4 13 | 8 44  | 1 3   | 14 18 | 2 7  | 12 5  | 0 33 | 20 57 |
| F 7  | 5 22 | 23 18 | 1s 6 | 3 2  | 3 35 | 17 51 | 0 10 | 13 21 | 4 12 | 8 48  | 1 3   | 14 20 | 2 7  | 12 4  | 0 33 | 20 57 |
| S 8  | 4 58 | 25 33 | 2 12 | 3 31 | 3 28 | 17 36 | 0 6  | 13 29 | 4 10 | 8 53  | 1 3   | 14 22 | 2 7  | 12 4  | 0 33 | 20 57 |
| S 9  | 4 35 | 26 21 | 3 13 | 4 1  | 3 20 | 17 19 | 0 3  | 13 35 | 4 9  | 8 58  | 1 3   | 14 23 | 2 7  | 12 3  | 0 33 | 20 58 |
| M10  | 4 11 | 25 27 | 4 5  | 4 31 | 3 10 | 17 2  | 0s 1 | 13 42 | 4 7  | 9 3   | 1 3   | 14 25 | 2 6  | 12 2  | 0 33 | 20 58 |
| T 11 | 3 48 | 22 50 | 4 42 | 5 1  | 2 59 | 16 45 | 0 4  | 13 48 | 4 6  | 9 8   | 1 3   | 14 27 | 2 6  | 12 2  | 0 33 | 20 58 |
| W12  | 3 24 | 18 37 | 5 0  | 5 29 | 2 47 | 16 27 | 0 7  | 13 54 | 4 4  | 9 13  | 1 3   | 14 29 | 2 6  | 12 1  | 0 33 | 20 58 |
| T 13 | 3 1  | 13 9  | 4 58 | 5 57 | 2 34 | 16 9  | 0 11 | 14 0  | 4 2  | 9 17  | 1 2   | 14 31 | 2 6  | 12 1  | 0 33 | 20 58 |
| F 14 | 2 37 | 6 51  | 4 35 | 6 23 | 2 20 | 15 50 | 0 14 | 14 6  | 4 0  | 9 22  | 1 2   | 14 32 | 2 5  | 12 0  | 0 33 | 20 58 |
| S 15 | 2 13 | 0 13  | 3 53 | 6 47 | 2 6  | 15 31 | 0 17 | 14 11 | 3 58 | 9 27  | 1 2   | 14 34 | 2 5  | 11 59 | 0 33 | 20 58 |
| S 16 | 1 50 | 6n20  | 2 56 | 7 9  | 1 51 | 15 11 | 0 20 | 14 16 | 3 56 | 9 32  | 1 2   | 14 36 | 2 5  | 11 59 | 0 33 | 20 59 |
| M17  | 1 26 | 12 22 | 1 48 | 7 29 | 1 36 | 14 51 | 0 23 | 14 20 | 3 54 | 9 37  | 1 2   | 14 38 | 2 5  | 11 58 | 0 33 | 20 59 |
| T 18 | 1 2  | 17 34 | 0 36 | 7 46 | 1 21 | 14 31 | 0 26 | 14 25 | 3 52 | 9 42  | 1 2   | 14 40 | 2 5  | 11 58 | 0 33 | 20 59 |
| W19  | 0 38 | 21 43 | 0n35 | 8 1  | 1 7  | 14 10 | 0 29 | 14 29 | 3 50 | 9 47  | 1 2   | 14 42 | 2 4  | 11 57 | 0 33 | 20 59 |
| T 20 | 0 15 | 24 36 | 1 43 | 8 13 | 0 52 | 13 49 | 0 32 | 14 32 | 3 48 | 9 52  | 1 2   | 14 44 | 2 4  | 11 56 | 0 33 | 20 59 |
| F 21 | 0n 9 | 26 9  | 2 43 | 8 23 | 0 38 | 13 27 | 0 35 | 14 36 | 3 45 | 9 57  | 1 1   | 14 46 | 2 4  | 11 56 | 0 33 | 20 59 |
| S 22 | 0 33 | 26 22 | 3 35 | 8 31 | 0 24 | 13 5  | 0 38 | 14 39 | 3 43 | 10 2  | 1 1   | 14 48 | 2 4  | 11 55 | 0 33 | 20 59 |
| S 23 | 0 57 | 25 19 | 4 15 | 8 37 | 0 11 | 12 43 | 0 41 | 14 41 | 3 41 | 10 7  | 1 1   | 14 50 | 2 4  | 11 54 | 0 33 | 21 0  |
| M24  | 1 20 | 23 7  | 4 45 | 8 40 | 0s 2 | 12 20 | 0 44 | 14 44 | 3 38 | 10 12 | 1 1   | 14 51 | 2 3  | 11 53 | 0 33 | 21 0  |
| T 25 | 1 44 | 19 57 | 5 1  | 8 41 | 0 15 | 11 57 | 0 46 | 14 46 | 3 36 | 10 17 | 1 1   | 14 53 | 2 3  | 11 53 | 0 33 | 21 0  |
| W26  | 2 7  | 15 58 | 5 5  | 8 39 | 0 27 | 11 33 | 0 49 | 14 48 | 3 34 | 10 22 | 1 1   | 14 55 | 2 3  | 11 52 | 0 33 | 21 0  |
| T 27 | 2 31 | 11 23 | 4 55 | 8 36 | 0 38 | 11 10 | 0 52 | 14 49 | 3 31 | 10 26 | 1 1   | 14 57 | 2 3  | 11 51 | 0 33 | 21 0  |
| F 28 | 2 54 | 6 21  | 4 33 | 8 31 | 0 50 | 10 46 | 0 54 | 14 50 | 3 29 | 10 31 | 1 1   | 14 59 | 2 3  | 11 50 | 0 33 | 21 0  |
| S 29 | 3 18 | 1 3   | 3 58 | 8 23 | 1 0  | 10 21 | 0 57 | 14 51 | 3 26 | 10 36 | 1 1   | 15 1  | 2 3  | 11 50 | 0 33 | 21 1  |
| S 30 | 3 41 | 4s22  | 3 12 | 8 14 | 1 10 | 9 57  | 0 59 | 14 52 | 3 24 | 10 41 | 1 0   | 15 3  | 2 2  | 11 49 | 0 33 | 21 1  |
| M31  | 4n 4 | 9s41  | 2n17 | 8s 3 | 1s19 | 9s32  | 1s 1 | 14n52 | 3n21 | 10n46 | 1s 0  | 15n 5 | 2s 2 | 11s48 | 0n33 | 21n 1 |

Julian Day Number = 2473153.5, Delta T = 77.37 sec  
Ecliptic obliquity = 23°25'59, Nutation = - 0°00'14, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 25°34'01, Lahiri = 24°41'01

ASTRODIENST EPHEMERIS for the year 2059  
geocentric

APRIL 2059

00:00 UT

| Day  | Sid.t    | ☉        | ☽        | ♂        | ♀        | ♂      | ♂     | ♂        | ♂       | ♂        | ♂        | ♂      | ♂      | ♂       | ♂        | Day  |
|------|----------|----------|----------|----------|----------|--------|-------|----------|---------|----------|----------|--------|--------|---------|----------|------|
| T 1  | 12 37 29 | 11°16'43 | 13°16'25 | 13°31'31 | 9°10'10  | 29°R 8 | 08°56 | 17°36'36 | 2°R25   | 13°11'55 | 20°42'42 | 27°R16 | 29°8 9 | 4°11'5  | 22°55'55 | T 1  |
| W 2  | 12 41 26 | 12°15'56 | 26° 2    | 14°29    | 10°23    | 29°2 2 | 1°10  | 17°43    | 2°11'22 | 13°57    | 20°44    | 27°D15 | 29° 6  | 4°12    | 22°58    | W 2  |
| T 3  | 12 45 23 | 13°15'08 | 8°15'52  | 15°29    | 11°36    | 28°57  | 1°24  | 17°50    | 2°20    | 13°58    | 20°45    | 27°15  | 29° 3  | 4°18    | 23° 1    | T 3  |
| F 4  | 12 49 19 | 14°14'18 | 21°56    | 16°33    | 12°49    | 28°53  | 1°38  | 17°57    | 2°18    | 13°59    | 20°47    | 27°17  | 28°59  | 4°25    | 23° 5    | F 4  |
| S 5  | 12 53 16 | 15°13'26 | 5°31'19  | 17°38    | 14° 2    | 28°49  | 1°52  | 18° 4    | 2°15    | 14° 0    | 20°48    | 27°18  | 28°56  | 4°32    | 23° 8    | S 5  |
| S 6  | 12 57 12 | 16°12'33 | 19° 0    | 18°46    | 15°15    | 28°46  | 2° 6  | 18°10    | 2°13    | 14° 2    | 20°50    | 27°R18 | 28°53  | 4°39    | 23°11    | S 6  |
| M 7  | 13 1 9   | 17°11'37 | 3°22'2   | 19°57    | 16°28    | 28°44  | 2°20  | 18°17    | 2°10    | 14° 3    | 20°51    | 27°17  | 28°50  | 4°45    | 23°14    | M 7  |
| T 8  | 13 5 5   | 18°10'40 | 17°25    | 21°10    | 17°41    | 28°42  | 2°35  | 18°24    | 2° 8    | 14° 5    | 20°52    | 27°14  | 28°47  | 4°52    | 23°17    | T 8  |
| W 9  | 13 9 2   | 19° 9'41 | 2°16'4   | 22°24    | 18°53    | 28°D42 | 2°49  | 18°32    | 2° 6    | 14° 6    | 20°54    | 27°10  | 28°43  | 4°59    | 23°20    | W 9  |
| T 10 | 13 12 58 | 20° 8'41 | 16°54    | 23°41    | 20° 6    | 28°42  | 3° 3  | 18°39    | 2° 3    | 14° 8    | 20°55    | 27° 5  | 28°40  | 5° 5    | 23°23    | T 10 |
| F 11 | 13 16 55 | 21° 7'38 | 1°15'50  | 25° 0    | 21°19    | 28°43  | 3°17  | 18°46    | 2° 1    | 14° 9    | 20°57    | 26°59  | 28°37  | 5°12    | 23°26    | F 11 |
| S 12 | 13 20 51 | 22° 6'34 | 16°41    | 26°21    | 22°32    | 28°44  | 3°32  | 18°53    | 1°58    | 14°10    | 20°58    | 26°54  | 28°34  | 5°19    | 23°28    | S 12 |
| S 13 | 13 24 48 | 23° 5'27 | 1°18'19  | 27°44    | 23°45    | 28°46  | 3°46  | 19° 0    | 1°56    | 14°12    | 20°59    | 26°51  | 28°31  | 5°26    | 23°31    | S 13 |
| M14  | 13 28 45 | 24° 4'19 | 15°38    | 29° 8    | 24°58    | 28°49  | 4° 0  | 19° 7    | 1°53    | 14°14    | 21° 1    | 26°49  | 28°28  | 5°32    | 23°34    | M14  |
| T 15 | 13 32 41 | 25° 3'08 | 29°34    | 0°13'34  | 26°11    | 28°53  | 4°14  | 19°15    | 1°50    | 14°15    | 21° 2    | 26°D48 | 28°24  | 5°39    | 23°37    | T 15 |
| W16  | 13 36 38 | 26° 1'56 | 13°11'4  | 2° 2     | 27°24    | 28°57  | 4°29  | 19°22    | 1°48    | 14°17    | 21° 3    | 26°49  | 28°21  | 5°46    | 23°39    | W16  |
| T 17 | 13 40 34 | 27° 0'41 | 26° 8    | 3°32     | 28°37    | 29° 2  | 4°43  | 19°29    | 1°45    | 14°18    | 21° 5    | 26°51  | 28°18  | 5°52    | 23°42    | T 17 |
| F 18 | 13 44 31 | 27°59'24 | 8°56'50  | 5° 4     | 29°50    | 29° 8  | 4°58  | 19°37    | 1°43    | 14°20    | 21° 6    | 26°52  | 28°15  | 5°59    | 23°44    | F 18 |
| S 19 | 13 48 27 | 28°58'05 | 21°13    | 6°37     | 1°13'3   | 29°14  | 5°12  | 19°44    | 1°40    | 14°22    | 21° 7    | 26°53  | 28°12  | 6° 6    | 23°47    | S 19 |
| S 20 | 13 52 24 | 29°56'43 | 3°12'21  | 8°12     | 2°16     | 29°21  | 5°26  | 19°52    | 1°38    | 14°23    | 21° 9    | 26°R54 | 28° 9  | 6°13    | 23°49    | S 20 |
| M21  | 13 56 21 | 0°55'20  | 15°19    | 9°48     | 3°29     | 29°29  | 5°41  | 19°59    | 1°35    | 14°25    | 21°10    | 26°53  | 28° 5  | 6°19    | 23°51    | M21  |
| T 22 | 14 0 17  | 1°53'54  | 27°13    | 11°27    | 4°42     | 29°37  | 5°55  | 20° 6    | 1°33    | 14°27    | 21°11    | 26°51  | 28° 2  | 6°26    | 23°54    | T 22 |
| W23  | 14 4 14  | 2°52'26  | 9°11'5   | 13° 7    | 5°55     | 29°46  | 6° 9  | 20°14    | 1°30    | 14°29    | 21°13    | 26°47  | 27°59  | 6°33    | 23°56    | W23  |
| T 24 | 14 8 10  | 3°50'55  | 21° 0    | 14°48    | 7° 8     | 29°56  | 6°24  | 20°22    | 1°27    | 14°30    | 21°14    | 26°44  | 27°56  | 6°40    | 23°58    | T 24 |
| F 25 | 14 12 7  | 4°49'23  | 3°11'1   | 16°31    | 8°21     | 0°11'6 | 6°38  | 20°29    | 1°25    | 14°32    | 21°15    | 26°40  | 27°53  | 6°46    | 24° 0    | F 25 |
| S 26 | 14 16 3  | 5°47'49  | 15°10    | 18°16    | 9°34     | 0°16   | 6°53  | 20°37    | 1°22    | 14°34    | 21°16    | 26°37  | 27°49  | 6°53    | 24° 2    | S 26 |
| S 27 | 14 20 0  | 6°46'13  | 27°30    | 20° 3    | 10°47    | 0°27   | 7° 7  | 20°44    | 1°20    | 14°36    | 21°17    | 26°34  | 27°46  | 7° 0    | 24° 4    | S 27 |
| M28  | 14 23 56 | 7°44'34  | 10°11'1  | 21°51    | 12° 0    | 0°39   | 7°21  | 20°52    | 1°17    | 14°38    | 21°18    | 26°32  | 27°43  | 7° 6    | 24° 6    | M28  |
| T 29 | 14 27 53 | 8°42'55  | 22°45    | 23°42    | 13°13    | 0°51   | 7°36  | 20°59    | 1°15    | 14°40    | 21°20    | 26°D32 | 27°40  | 7°13    | 24° 8    | T 29 |
| W30  | 14 31 49 | 9°41'13  | 5°17'42  | 25°13'33 | 14°17'26 | 1°11'4 | 7°50  | 21°8 7   | 1°11'12 | 14°42    | 21°21    | 26°B32 | 27°37  | 7°11'20 | 24°10    | W30  |

| Day  | ☉     | ☾     |      | ♂    |      | ♀    |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |       | ♂     |       | ♂     |      | ♂    |     |
|------|-------|-------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|-------|-------|------|------|-----|
|      | decl  | decl  | lat  | decl | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat   | decl  | lat  | decl | lat |
| T 1  | 4n28  | 14s41 | 1n14 | 7s50 | 1s28 | 9s 7 | 1s 4 | 14n52 | 3n19 | 10n51 | 1s 0 | 15n 7 | 2s 2 | 11s47 | 0n33 | 21n 1 | 1s27 | 16s59 | 14s31 | 19n33 | 19n58 | 14n47 | 7s58 | 6n15 |     |
| W 2  | 4 51  | 19 9  | 0 7  | 7 36 | 1 36 | 8 41 | 1 6  | 14 52 | 3 16 | 10 56 | 1 0  | 15 9  | 2 2  | 11 46 | 0 33 | 21 1  | 1 27 | 16 59 | 14 31 | 19 32 | 19 57 | 14 44 | 7 56 | 6 15 |     |
| T 3  | 5 14  | 22 48 | 1s 2 | 7 19 | 1 44 | 8 15 | 1 8  | 14 52 | 3 14 | 11 1  | 1 0  | 15 12 | 2 2  | 11 46 | 0 33 | 21 2  | 1 27 | 16 58 | 14 31 | 19 32 | 19 56 | 14 42 | 7 55 | 6 16 |     |
| F 4  | 5 37  | 25 21 | 2 10 | 7 1  | 1 51 | 7 49 | 1 10 | 14 51 | 3 11 | 11 6  | 1 0  | 15 14 | 2 2  | 11 45 | 0 33 | 21 2  | 1 27 | 16 58 | 14 31 | 19 33 | 19 56 | 14 39 | 7 54 | 6 16 |     |
| S 5  | 6 0   | 26 31 | 3 11 | 6 42 | 1 58 | 7 23 | 1 12 | 14 50 | 3 9  | 11 11 | 1 0  | 15 16 | 2 1  | 11 44 | 0 33 | 21 2  | 1 27 | 16 57 | 14 31 | 19 33 | 19 55 | 14 37 | 7 52 | 6 16 |     |
| S 6  | 6 22  | 26 6  | 4 4  | 6 21 | 2 4  | 6 57 | 1 14 | 14 48 | 3 6  | 11 16 | 1 0  | 15 18 | 2 1  | 11 43 | 0 33 | 21 2  | 1 27 | 16 57 | 14 32 | 19 33 | 19 54 | 14 34 | 7 51 | 6 16 |     |
| M 7  | 6 45  | 24 4  | 4 43 | 5 58 | 2 10 | 6 30 | 1 16 | 14 47 | 3 3  | 11 21 | 1 0  | 15 20 | 2 1  | 11 42 | 0 33 | 21 2  | 1 27 | 16 56 | 14 32 | 19 33 | 19 54 | 14 31 | 7 50 | 6 17 |     |
| T 8  | 7 8   | 20 27 | 5 6  | 5 34 | 2 15 | 6 3  | 1 17 | 14 45 | 3 1  | 11 26 | 1 0  | 15 22 | 2 1  | 11 41 | 0 33 | 21 3  | 1 27 | 16 56 | 14 32 | 19 32 | 19 53 | 14 29 | 7 49 | 6 17 |     |
| W 9  | 7 30  | 15 32 | 5 9  | 5 9  | 2 19 | 5 36 | 1 19 | 14 43 | 2 58 | 11 31 | 0 59 | 15 24 | 2 1  | 11 41 | 0 33 | 21 3  | 1 27 | 16 56 | 14 32 | 19 31 | 19 52 | 14 26 | 7 47 | 6 17 |     |
| T 10 | 7 52  | 9 39  | 4 52 | 4 42 | 2 23 | 5 9  | 1 21 | 14 40 | 2 56 | 11 36 | 0 59 | 15 26 | 2 1  | 11 40 | 0 33 | 21 3  | 1 27 | 16 55 | 14 32 | 19 30 | 19 52 | 14 24 | 7 46 | 6 18 |     |
| F 11 | 8 14  | 3 10  | 4 15 | 4 14 | 2 27 | 4 42 | 1 22 | 14 38 | 2 53 | 11 41 | 0 59 | 15 28 | 2 1  | 11 39 | 0 33 | 21 3  | 1 27 | 16 55 | 14 32 | 19 29 | 19 51 | 14 21 | 7 45 | 6 18 |     |
| S 12 | 8 36  | 3n27  | 3 21 | 3 45 | 2 30 | 4 15 | 1 24 | 14 35 | 2 51 | 11 46 | 0 59 | 15 30 | 2 0  | 11 38 | 0 33 | 21 4  | 1 27 | 16 54 | 14 33 | 19 28 | 19 50 | 14 19 | 7 44 | 6 18 |     |
| S 13 | 8 58  | 9 50  | 2 14 | 3 14 | 2 32 | 3 47 | 1 25 | 14 32 | 2 48 | 11 50 | 0 59 | 15 32 | 2 0  | 11 37 | 0 33 | 21 4  | 1 27 | 16 54 | 14 33 | 19 27 | 19 49 | 14 16 | 7 43 | 6 18 |     |
| M14  | 9 20  | 15 33 | 1 1  | 2 42 | 2 34 | 3 19 | 1 27 | 14 28 | 2 46 | 11 55 | 0 59 | 15 34 | 2 0  | 11 36 | 0 33 | 21 4  | 1 27 | 16 54 | 14 33 | 19 26 | 19 49 | 14 13 | 7 42 | 6 19 |     |
| T 15 | 9 42  | 20 18 | 0n15 | 2 9  | 2 35 | 2 51 | 1 28 | 14 25 | 2 44 | 12 0  | 0 59 | 15 36 | 2 0  | 11 35 | 0 33 | 21 4  | 1 27 | 16 53 | 14 33 | 19 26 | 19 48 | 14 11 | 7 40 | 6 19 |     |
| W16  | 10 3  | 23 49 | 1 28 | 1 35 | 2 36 | 2 24 | 1 29 | 14 21 | 2 41 | 12 5  | 0 59 | 15 38 | 2 0  | 11 35 | 0 33 | 21 4  | 1 27 | 16 53 | 14 33 | 19 26 | 19 47 | 14 8  | 7 39 | 6 19 |     |
| T 17 | 10 24 | 25 56 | 2 34 | 0 59 | 2 37 | 1 56 | 1 30 | 14 17 | 2 39 | 12 10 | 0 59 | 15 41 | 2 0  | 11 34 | 0 33 | 21 5  | 1 27 | 16 53 | 14 34 | 19 27 | 19 47 | 14 6  | 7 38 | 6 20 |     |
| F 18 | 10 45 | 26 38 | 3 30 | 0 23 | 2 36 | 1 28 | 1 31 | 14 13 | 2 36 | 12 15 | 0 59 | 15 43 | 2 0  | 11 33 | 0 33 | 21 5  | 1 27 | 16 52 | 14 34 | 19 27 | 19 46 | 14 3  | 7 37 | 6 20 |     |
| S 19 | 11 6  | 25 57 | 4 15 | 0n15 | 2 36 | 0 59 | 1 32 | 14 8  | 2 34 | 12 20 | 0 59 | 15 45 | 2 0  | 11 32 | 0 33 | 21 5  | 1 26 | 16 52 | 14 34 | 19 27 | 19 45 | 14 0  | 7 36 | 6 20 |     |
| S 20 | 11 27 | 24 4  | 4 48 | 0 53 | 2 34 | 0 31 | 1 33 | 14 4  | 2 32 | 12 25 | 0 59 | 15 47 | 1 59 | 11 31 | 0 33 | 21 5  | 1 26 | 16 52 | 14 34 | 19 27 | 19 44 | 13 58 | 7 35 | 6 21 |     |
| M21  | 11 48 | 21 7  | 5 7  | 1 33 | 2 33 | 0 3  | 1 34 | 13 59 | 2 29 | 12 29 | 0 59 | 15 49 | 1 59 | 11 30 | 0 33 | 21 6  | 1 26 | 16 52 | 14 35 | 19 27 | 19 44 | 13 55 | 7 34 | 6 21 |     |
| T 22 | 12 8  | 17 20 | 5 13 | 2 13 | 2 30 | 0n25 | 1 35 | 13 54 | 2 27 | 12 34 | 0 59 | 15 51 | 1 59 | 11 29 | 0 33 | 21 6  | 1 26 | 16 51 | 14 35 | 19 27 | 19 43 | 13 52 | 7 33 | 6 21 |     |
| W23  | 12 28 | 12 53 | 5 6  | 2 55 | 2 27 | 0 54 | 1 35 | 13 48 | 2 25 | 12 39 | 0 59 | 15 53 | 1 59 | 11 28 | 0 33 | 21 6  | 1 26 | 16 51 | 14 35 | 19 26 | 19 42 | 13 50 | 7 32 | 6 22 |     |
| T 24 | 12 48 | 7 57  | 4 46 | 3 37 | 2 24 | 1 22 | 1 36 | 13 43 | 2 22 | 12 44 | 0 58 | 15 55 | 1 59 | 11 27 | 0 33 | 21 6  | 1 26 | 16 51 | 14 35 | 19 25 | 19 42 | 13 47 | 7 31 | 6 22 |     |
| F 25 | 13 8  | 2 40  | 4 13 | 4 20 | 2 20 | 1 50 | 1 36 | 13 37 | 2 20 | 12 48 | 0 58 | 15 57 | 1 59 | 11 27 | 0 33 | 21 7  | 1 26 | 16 50 | 14 36 | 19 24 | 19 41 | 13 44 | 7 30 | 6 22 |     |
| S 26 | 13 27 | 2s46  | 3 28 | 5 4  | 2 16 | 2 19 | 1 37 | 13 31 | 2 18 | 12 53 | 0 58 | 15 59 | 1 59 | 11 26 | 0 33 | 21 7  | 1 26 | 16 50 | 14 36 | 19 24 | 19 40 | 13 42 | 7 29 | 6 23 |     |
| S 27 | 13 46 | 8 12  | 2 33 | 5 49 | 2 11 | 2 47 | 1 37 | 13 25 | 2 16 | 12 58 | 0 58 | 16 1  | 1 59 | 11 25 | 0 33 | 21 7  | 1 26 | 16 50 | 14 36 | 19 23 | 19 39 | 13 39 | 7 28 | 6 23 |     |
| M28  | 14 5  | 13 24 | 1 30 | 6 34 | 2 6  | 3 15 | 1 37 | 13 19 | 2 14 | 13 3  | 0 58 | 16 3  | 1 59 | 11 24 | 0 33 | 21 7  | 1 26 | 16 50 | 14 36 | 19 23 | 19 39 | 13 37 | 7 27 | 6 23 |     |
| T 29 | 14 24 | 18 7  | 0 21 | 7 20 | 2 0  | 3 43 | 1 38 | 13 13 | 2 11 | 13 7  | 0 58 | 16 5  | 1 59 | 11 23 | 0 33 | 21 8  | 1 26 | 16 50 | 14 37 | 19 22 | 19 38 | 13 34 | 7 26 | 6 24 |     |
| W30  | 14n43 | 22s 5 | 0s50 | 8n 7 | 1s53 | 4n11 | 1s38 | 13n 6 | 2n 9 | 13n12 | 0s58 | 16n 8 | 1s59 | 11s22 | 0n33 | 21n 8 | 1s26 | 16s49 | 14s37 | 19n22 | 19n37 | 13n31 | 7s25 | 6n24 |     |

ASTRODIENST EPHEMERIS for the year 2059  
geocentric

MAY 2059

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♊     | ♋     | ♌     | ♍     | ♎     | ♏     | ♐     | ♑     | ♒      | ♓     | ♈     | ♉      | Day  |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|--------|------|
| T 1  | 14 35 46 | 10♈39'30 | 18♌52 | 27♏27 | 15♏40 | 1♏17  | 8♌4   | 21♌15 | 1♏R10 | 14♏43 | 21♏22 | 26♌33  | 27♌34 | 7♏27  | 24♌12  | T 1  |
| F 2  | 14 39 43 | 11°37'45 | 2♌15  | 29°22 | 16°53 | 1°31  | 8°19  | 21°22 | 1♏7   | 14°45 | 21°23 | 26°34  | 27°30 | 7°33  | 24°14  | F 2  |
| S 3  | 14 43 39 | 12°35'59 | 15°52 | 1♌19  | 18°6  | 1°46  | 8°33  | 21°30 | 1°5   | 14°47 | 21°24 | 26°35  | 27°27 | 7°40  | 24°15  | S 3  |
| S 4  | 14 47 36 | 13°34'11 | 29°41 | 3°18  | 19°19 | 2°0   | 8°47  | 21°38 | 1°2   | 14°49 | 21°25 | 26°36  | 27°24 | 7°47  | 24°17  | S 4  |
| M 5  | 14 51 32 | 14°32'22 | 13♌43 | 5°18  | 20°32 | 2°16  | 9°2   | 21°45 | 1°0   | 14°51 | 21°26 | 26°R36 | 27°21 | 7°53  | 24°18  | M 5  |
| T 6  | 14 55 29 | 15°30'31 | 27°56 | 7°20  | 21°45 | 2°31  | 9°16  | 21°53 | 0°57  | 14°53 | 21°27 | 26°36  | 27°18 | 8°0   | 24°20  | T 6  |
| W 7  | 14 59 25 | 16°28'39 | 12♌17 | 9°24  | 22°58 | 2°47  | 9°31  | 22°1  | 0°55  | 14°55 | 21°28 | 26°35  | 27°14 | 8°7   | 24°21  | W 7  |
| T 8  | 15 3 22  | 17°26'45 | 26°44 | 11°29 | 24°11 | 3°4   | 9°45  | 22°9  | 0°52  | 14°57 | 21°29 | 26°34  | 27°11 | 8°14  | 24°23  | T 8  |
| F 9  | 15 7 18  | 18°24'50 | 11♏13 | 13°35 | 25°24 | 3°21  | 9°59  | 22°16 | 0°50  | 14°59 | 21°30 | 26°33  | 27°8  | 8°20  | 24°24  | F 9  |
| S 10 | 15 11 15 | 19°22'54 | 25°37 | 15°43 | 26°38 | 3°39  | 10°13 | 22°24 | 0°47  | 15°1  | 21°31 | 26°32  | 27°5  | 8°27  | 24°25  | S 10 |
| S 11 | 15 15 12 | 20°20'56 | 9♌51  | 17°51 | 27°51 | 3°57  | 10°28 | 22°32 | 0°45  | 15°3  | 21°32 | 26°32  | 27°2  | 8°34  | 24°26  | S 11 |
| M12  | 15 19 8  | 21°18'57 | 23°52 | 20°1  | 29°4  | 4°15  | 10°42 | 22°39 | 0°43  | 15°6  | 21°33 | 26°D32 | 26°59 | 8°41  | 24°27  | M12  |
| T 13 | 15 23 5  | 22°16'56 | 7♏35  | 22°11 | 0♌17  | 4°34  | 10°56 | 22°47 | 0°40  | 15°8  | 21°34 | 26°32  | 26°55 | 8°47  | 24°29  | T 13 |
| W14  | 15 27 1  | 23°14'53 | 20°59 | 24°22 | 1°30  | 4°53  | 11°10 | 22°55 | 0°38  | 15°10 | 21°35 | 26°32  | 26°52 | 8°54  | 24°30  | W14  |
| T 15 | 15 30 58 | 24°12'49 | 4♌1   | 26°33 | 2°43  | 5°13  | 11°25 | 23°3  | 0°36  | 15°12 | 21°36 | 26°32  | 26°49 | 9°1   | 24°30  | T 15 |
| F 16 | 15 34 54 | 25°10'43 | 16°44 | 28°44 | 3°56  | 5°32  | 11°39 | 23°10 | 0°34  | 15°14 | 21°37 | 26°32  | 26°46 | 9°7   | 24°31  | F 16 |
| S 17 | 15 38 51 | 26°8'36  | 29°9  | 0♏54  | 5°10  | 5°53  | 11°53 | 23°18 | 0°31  | 15°16 | 21°37 | 26°R33 | 26°43 | 9°14  | 24°32  | S 17 |
| S 18 | 15 42 48 | 27°6'27  | 11♏19 | 3°4   | 6°23  | 6°14  | 12°7  | 23°26 | 0°29  | 15°18 | 21°38 | 26°33  | 26°40 | 9°21  | 24°33  | S 18 |
| M19  | 15 46 44 | 28°4'15  | 23°20 | 5°14  | 7°36  | 6°35  | 12°21 | 23°34 | 0°27  | 15°20 | 21°39 | 26°D32 | 26°36 | 9°28  | 24°34  | M19  |
| T 20 | 15 50 41 | 29°2'03  | 5♏14  | 7°22  | 8°49  | 6°56  | 12°35 | 23°41 | 0°25  | 15°23 | 21°40 | 26°33  | 26°33 | 9°34  | 24°34  | T 20 |
| W21  | 15 54 37 | 29°59'48 | 17°7  | 9°28  | 10°2  | 7°18  | 12°49 | 23°49 | 0°23  | 15°25 | 21°40 | 26°33  | 26°30 | 9°41  | 24°35  | W21  |
| T 22 | 15 58 34 | 0♏57'32  | 29°4  | 11°33 | 11°15 | 7°40  | 13°3  | 23°57 | 0°21  | 15°27 | 21°41 | 26°33  | 26°27 | 9°48  | 24°35  | T 22 |
| F 23 | 16 2 30  | 1°55'15  | 11♌7  | 13°36 | 12°28 | 8°2   | 13°17 | 24°4  | 0°18  | 15°29 | 21°42 | 26°33  | 26°24 | 9°54  | 24°36  | F 23 |
| S 24 | 16 6 27  | 2°52'55  | 23°22 | 15°37 | 13°42 | 8°25  | 13°31 | 24°12 | 0°16  | 15°31 | 21°42 | 26°34  | 26°20 | 10°1  | 24°36  | S 24 |
| S 25 | 16 10 23 | 3°50'35  | 5♏15  | 17°36 | 14°55 | 8°48  | 13°45 | 24°20 | 0°14  | 15°34 | 21°43 | 26°35  | 26°17 | 10°8  | 24°36  | S 25 |
| M26  | 16 14 20 | 4°48'13  | 18°36 | 19°32 | 16°8  | 9°11  | 13°59 | 24°27 | 0°12  | 15°36 | 21°44 | 26°35  | 26°14 | 10°15 | 24°36  | M26  |
| T 27 | 16 18 16 | 5°45'50  | 1♌38  | 21°26 | 17°21 | 9°35  | 14°13 | 24°35 | 0°11  | 15°38 | 21°44 | 26°R35 | 26°11 | 10°21 | 24°37  | T 27 |
| W28  | 16 22 13 | 6°43'25  | 14°58 | 23°17 | 18°34 | 9°59  | 14°27 | 24°43 | 0°9   | 15°40 | 21°45 | 26°35  | 26°8  | 10°28 | 24°37  | W28  |
| T 29 | 16 26 10 | 7°41'00  | 28°33 | 25°6  | 19°48 | 10°23 | 14°40 | 24°50 | 0°7   | 15°42 | 21°46 | 26°34  | 26°5  | 10°35 | 24°R37 | T 29 |
| F 30 | 16 30 6  | 8°38'33  | 12♌22 | 26°51 | 21°1  | 10°48 | 14°54 | 24°58 | 0°5   | 15°45 | 21°46 | 26°32  | 26°1  | 10°41 | 24°37  | F 30 |
| S 31 | 16 34 3  | 9♏36'05  | 26♌23 | 28♏34 | 22♌14 | 11♏13 | 15♌8  | 25♌6  | 0♏3   | 15♏47 | 21♏47 | 26♌31  | 25♌58 | 10♏48 | 24♌37  | S 31 |

| Day  | ☉     | ☽        | ♊        | ♋        | ♌        | ♍        | ♎        | ♏        | ♐        | ♑        | ♒        | ♓        | ♈        | ♉        |
|------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|      | decl  | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat |
| T 1  | 15n 1 | 24s58    | 2s 0     | 8n54     | 1s46     | 4n39     | 1s38     | 13n 0    | 2n 7     | 13n17    | 0s58     | 16n10    | 1s58     | 11s21    |
| F 2  | 15 19 | 26 30    | 3 5      | 9 42     | 1 39     | 5 7      | 1 38     | 12 53    | 2 5      | 13 21    | 0 58     | 16 12    | 1 58     | 11 21    |
| S 3  | 15 37 | 26 28    | 4 0      | 10 30    | 1 31     | 5 35     | 1 38     | 12 46    | 2 3      | 13 26    | 0 58     | 16 14    | 1 58     | 11 20    |
| S 4  | 15 54 | 24 48    | 4 42     | 11 18    | 1 23     | 6 3      | 1 38     | 12 38    | 2 1      | 13 31    | 0 58     | 16 16    | 1 58     | 11 19    |
| M 5  | 16 12 | 21 37    | 5 8      | 12 7     | 1 15     | 6 31     | 1 37     | 12 31    | 1 59     | 13 35    | 0 58     | 16 18    | 1 58     | 11 18    |
| T 6  | 16 29 | 17 8     | 5 16     | 12 55    | 1 6      | 6 58     | 1 37     | 12 23    | 1 57     | 13 40    | 0 58     | 16 20    | 1 58     | 11 17    |
| W 7  | 16 46 | 11 38    | 5 4      | 13 44    | 0 56     | 7 26     | 1 37     | 12 16    | 1 55     | 13 44    | 0 58     | 16 22    | 1 58     | 11 16    |
| T 8  | 17 2  | 5 29     | 4 34     | 14 32    | 0 47     | 7 53     | 1 36     | 12 8     | 1 53     | 13 49    | 0 58     | 16 24    | 1 58     | 11 15    |
| F 9  | 17 18 | 0n59     | 3 45     | 15 20    | 0 37     | 8 20     | 1 36     | 12 0     | 1 51     | 13 53    | 0 58     | 16 26    | 1 58     | 11 15    |
| S 10 | 17 34 | 7 22     | 2 43     | 16 7     | 0 26     | 8 47     | 1 35     | 11 52    | 1 49     | 13 58    | 0 58     | 16 28    | 1 58     | 11 14    |
| S 11 | 17 50 | 13 19    | 1 31     | 16 53    | 0 16     | 9 14     | 1 35     | 11 43    | 1 47     | 14 2     | 0 58     | 16 30    | 1 58     | 11 13    |
| M12  | 18 5  | 18 30    | 0 15     | 17 39    | 0 6      | 9 40     | 1 34     | 11 35    | 1 45     | 14 7     | 0 58     | 16 32    | 1 58     | 11 12    |
| T 13 | 18 20 | 22 34    | 1n 1     | 18 23    | 0n 5     | 10 7     | 1 33     | 11 26    | 1 43     | 14 11    | 0 58     | 16 34    | 1 58     | 11 11    |
| W14  | 18 35 | 25 19    | 2 11     | 19 6     | 0 15     | 10 33    | 1 32     | 11 18    | 1 42     | 14 16    | 0 58     | 16 36    | 1 58     | 11 11    |
| T 15 | 18 49 | 26 35    | 3 13     | 19 48    | 0 26     | 10 59    | 1 31     | 11 9     | 1 40     | 14 20    | 0 58     | 16 38    | 1 58     | 11 10    |
| F 16 | 19 3  | 26 25    | 4 4      | 20 28    | 0 36     | 11 25    | 1 30     | 10 4     | 1 38     | 14 24    | 0 58     | 16 40    | 1 58     | 11 9     |
| S 17 | 19 17 | 24 55    | 4 41     | 21 5     | 0 46     | 11 50    | 1 29     | 10 50    | 1 36     | 14 29    | 0 58     | 16 42    | 1 58     | 11 8     |
| S 18 | 19 30 | 22 16    | 5 6      | 21 41    | 0 56     | 12 15    | 1 28     | 10 41    | 1 34     | 14 33    | 0 58     | 16 44    | 1 58     | 11 8     |
| M19  | 19 44 | 18 43    | 5 16     | 22 14    | 1 6      | 12 40    | 1 27     | 10 32    | 1 33     | 14 37    | 0 58     | 16 46    | 1 57     | 11 7     |
| T 20 | 19 56 | 14 26    | 5 13     | 22 45    | 1 15     | 13 5     | 1 26     | 10 22    | 1 31     | 14 42    | 0 58     | 16 48    | 1 57     | 11 6     |
| W21  | 20 9  | 9 38     | 4 57     | 23 14    | 1 23     | 13 29    | 1 25     | 10 12    | 1 29     | 14 46    | 0 58     | 16 50    | 1 57     | 11 5     |
| T 22 | 20 21 | 4 28     | 4 27     | 23 40    | 1 31     | 13 53    | 1 23     | 10 3     | 1 27     | 14 50    | 0 58     | 16 51    | 1 57     | 11 5     |
| F 23 | 20 32 | 0s56     | 3 46     | 24 3     | 1 38     | 14 16    | 1 22     | 9 53     | 1 26     | 14 54    | 0 58     | 16 53    | 1 57     | 11 4     |
| S 24 | 20 44 | 6 23     | 2 54     | 24 24    | 1 45     | 14 40    | 1 21     | 9 43     | 1 24     | 14 59    | 0 58     | 16 55    | 1 57     | 11 3     |
| S 25 | 20 55 | 11 42    | 1 52     | 24 42    | 1 51     | 15 3     | 1 19     | 9 33     | 1 22     | 15 3     | 0 58     | 16 57    | 1 57     | 11 3     |
| M26  | 21 5  | 16 39    | 0 44     | 24 57    | 1 56     | 15 25    | 1 18     | 9 22     | 1 21     | 15 7     | 0 58     | 16 59    | 1 57     | 11 2     |
| T 27 | 21 16 | 20 56    | 0s28     | 25 10    | 2 0      | 15 47    | 1 16     | 9 12     | 1 19     | 15 11    | 0 58     | 17 1     | 1 57     | 11 1     |
| W28  | 21 26 | 24 14    | 1 40     | 25 20    | 2 4      | 16 9     | 1 14     | 9 1      | 1 18     | 15 15    | 0 58     | 17 3     | 1 57     | 11 1     |
| T 29 | 21 35 | 26 13    | 2 48     | 25 28    | 2 7      | 16 31    | 1 13     | 8 51     | 1 16     | 15 19    | 0 58     | 17 4     | 1 57     | 11 0     |
| F 30 | 21 44 | 26 37    | 3 47     | 25 33    | 2 9      | 16 52    | 1 11     | 8 40     | 1 15     | 15 23    | 0 58     | 17 6     | 1 57     | 10 59    |
| S 31 | 21n53 | 25s20    | 4s33     | 25n36    | 2n11     | 17n12    | 1s 9     | 8n29     | 1n13     | 15n27    | 0s58     | 17n 8    | 1s57     | 10s59    |

Julian Day Number = 2473214.5, Delta T = 77.43 sec  
Ecliptic obliquity = 23°25'59, Nutation = - 0°00'16, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 25°34'09, Lahiri = 24°41'09



## ASTRODIENST EPHEMERIS for the year 2059

geocentric

JUNE 2059

00:00 UT

| Day  | Sid.t    | ☉                      | ☽                    | ♀                  | ♂                   | ♂                    | ♂                   | ♂                   | ♂                   | ♂                   | ♂                   | ♂                    | ♂                   | ♂                    | ♂                    | Day  |
|------|----------|------------------------|----------------------|--------------------|---------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|----------------------|----------------------|------|
| S 1  | 16 37 59 | 10 <sup>II</sup> 33'37 | 10 <sup>III</sup> 31 | 0 <sup>II</sup> 14 | 23 <sup>II</sup> 27 | 11 <sup>III</sup> 38 | 15 <sup>II</sup> 21 | 25 <sup>II</sup> 13 | 0 <sup>II</sup> R 1 | 15 <sup>II</sup> 49 | 21 <sup>II</sup> 47 | 26 <sup>II</sup> R29 | 25 <sup>II</sup> 55 | 10 <sup>III</sup> 55 | 24 <sup>II</sup> R37 | S 1  |
| M 2  | 16 41 56 | 11°31'08               | 24°44                | 1°51               | 24°40               | 12° 3                | 15°35               | 25°21               | 29 <sup>II</sup> 59 | 15°51               | 21°48               | 26 <sup>II</sup> 28  | 25°52               | 11° 2                | 24 <sup>II</sup> 36  | M 2  |
| T 3  | 16 45 52 | 12°28'38               | 8 <sup>II</sup> 58   | 3°26               | 25°54               | 12°29                | 15°49               | 25°28               | 29°58               | 15°54               | 21°48               | 26°D28               | 25°49               | 11° 8                | 24°36                | T 3  |
| W 4  | 16 49 49 | 13°26'07               | 23°12                | 4°57               | 27° 7               | 12°55                | 16° 2               | 25°36               | 29°56               | 15°56               | 21°48               | 26°28                | 25°46               | 11°15                | 24°36                | W 4  |
| T 5  | 16 53 46 | 14°23'35               | 7 <sup>II</sup> 22   | 6°25               | 28°20               | 13°21                | 16°16               | 25°43               | 29°55               | 15°58               | 21°49               | 26°29                | 25°42               | 11°22                | 24°35                | T 5  |
| F 6  | 16 57 42 | 15°21'03               | 21°26                | 7°50               | 29°33               | 13°47                | 16°29               | 25°51               | 29°53               | 16° 0               | 21°49               | 26°30                | 25°39               | 11°29                | 24°35                | F 6  |
| S 7  | 17 1 39  | 16°18'30               | 5 <sup>II</sup> 23   | 9°12               | 0 <sup>II</sup> 47  | 14°14                | 16°42               | 25°58               | 29°52               | 16° 3               | 21°50               | 26°31                | 25°36               | 11°35                | 24°34                | S 7  |
| S 8  | 17 5 35  | 17°15'56               | 19°10                | 10°31              | 2° 0                | 14°41                | 16°56               | 26° 6               | 29°50               | 16° 5               | 21°50               | 26°32                | 25°33               | 11°42                | 24°34                | S 8  |
| M 9  | 17 9 32  | 18°13'22               | 2 <sup>II</sup> 46   | 11°47              | 3°13                | 15° 8                | 17° 9               | 26°13               | 29°49               | 16° 7               | 21°50               | 26°R32               | 25°30               | 11°49                | 24°33                | M 9  |
| T 10 | 17 13 28 | 19°10'47               | 16° 8                | 13° 0              | 4°27                | 15°35                | 17°22               | 26°20               | 29°47               | 16° 9               | 21°50               | 26°31                | 25°26               | 11°55                | 24°32                | T 10 |
| W11  | 17 17 25 | 20° 8'11               | 29°16                | 14°10              | 5°40                | 16° 3                | 17°35               | 26°28               | 29°46               | 16°12               | 21°51               | 26°29                | 25°23               | 12° 2                | 24°32                | W11  |
| T 12 | 17 21 21 | 21° 5'35               | 12 <sup>II</sup> 28  | 15°16              | 6°53                | 16°31                | 17°49               | 26°35               | 29°45               | 16°14               | 21°51               | 26°25                | 25°20               | 12° 9                | 24°31                | T 12 |
| F 13 | 17 25 18 | 22° 2'57               | 24°44                | 16°19              | 8° 7                | 16°59                | 18° 2               | 26°42               | 29°43               | 16°16               | 21°51               | 26°22                | 25°17               | 12°16                | 24°30                | F 13 |
| S 14 | 17 29 15 | 23° 0'19               | 7 <sup>II</sup> 26   | 17°18              | 9°20                | 17°27                | 18°15               | 26°49               | 29°42               | 16°18               | 21°51               | 26°17                | 25°14               | 12°22                | 24°29                | S 14 |
| S 15 | 17 33 11 | 23°57'39               | 19°15                | 18°14              | 10°33               | 17°55                | 18°28               | 26°57               | 29°41               | 16°20               | 21°52               | 26°13                | 25°11               | 12°29                | 24°28                | S 15 |
| M16  | 17 37 8  | 24°54'59               | 1 <sup>III</sup> 15  | 19° 6              | 11°47               | 18°24                | 18°40               | 27° 4               | 29°40               | 16°23               | 21°52               | 26°10                | 25° 7               | 12°36                | 24°27                | M16  |
| T 17 | 17 41 4  | 25°52'18               | 13° 9                | 19°55              | 13° 0               | 18°53                | 18°53               | 27°11               | 29°39               | 16°25               | 21°52               | 26° 8                | 25° 4               | 12°42                | 24°26                | T 17 |
| W18  | 17 45 1  | 26°49'36               | 25° 2                | 20°39              | 14°13               | 19°22                | 19° 6               | 27°18               | 29°38               | 16°27               | 21°52               | 26°D 7               | 25° 1               | 12°49                | 24°25                | W18  |
| T 19 | 17 48 57 | 27°46'53               | 6 <sup>II</sup> 58   | 21°20              | 15°27               | 19°52                | 19°19               | 27°25               | 29°37               | 16°29               | 21°52               | 26° 8                | 24°58               | 12°56                | 24°23                | T 19 |
| F 20 | 17 52 54 | 28°44'09               | 19° 1                | 21°57              | 16°40               | 20°21                | 19°31               | 27°32               | 29°36               | 16°32               | 21°52               | 26° 9                | 24°55               | 13° 3                | 24°22                | F 20 |
| S 21 | 17 56 50 | 29°41'25               | 1 <sup>III</sup> 18  | 22°29              | 17°54               | 20°51                | 19°44               | 27°39               | 29°35               | 16°34               | 21°52               | 26°11                | 24°52               | 13° 9                | 24°21                | S 21 |
| S 22 | 18 0 47  | 0 <sup>II</sup> 38'39  | 13°51                | 22°58              | 19° 7               | 21°21                | 19°56               | 27°46               | 29°34               | 16°36               | 21°R52              | 26°12                | 24°48               | 13°16                | 24°19                | S 22 |
| M23  | 18 4 44  | 1°35'54                | 26°44                | 23°22              | 20°20               | 21°51                | 20° 9               | 27°53               | 29°34               | 16°38               | 21°52               | 26°R13               | 24°45               | 13°23                | 24°18                | M23  |
| T 24 | 18 8 40  | 2°33'07                | 10 <sup>II</sup> 4   | 23°42              | 21°34               | 22°21                | 20°21               | 28° 0               | 29°33               | 16°40               | 21°52               | 26°12                | 24°42               | 13°29                | 24°16                | T 24 |
| W25  | 18 12 37 | 3°30'21                | 23°38                | 23°57              | 22°47               | 22°51                | 20°34               | 28° 7               | 29°32               | 16°42               | 21°52               | 26° 9                | 24°39               | 13°36                | 24°15                | W25  |
| T 26 | 18 16 33 | 4°27'33                | 7 <sup>II</sup> 38   | 24° 7              | 24° 1               | 23°22                | 20°46               | 28°13               | 29°32               | 16°45               | 21°52               | 26° 5                | 24°36               | 13°43                | 24°13                | T 26 |
| F 27 | 18 20 30 | 5°24'46                | 21°54                | 24°13              | 25°14               | 23°53                | 20°58               | 28°20               | 29°31               | 16°47               | 21°52               | 26° 0                | 24°32               | 13°50                | 24°11                | F 27 |
| S 28 | 18 24 26 | 6°21'58                | 6 <sup>II</sup> 23   | 24°R15             | 26°28               | 24°24                | 21°10               | 28°27               | 29°30               | 16°49               | 21°52               | 25°54                | 24°29               | 13°56                | 24°10                | S 28 |
| S 29 | 18 28 23 | 7°19'11                | 20°56                | 24°12              | 27°41               | 24°55                | 21°22               | 28°34               | 29°30               | 16°51               | 21°52               | 25°48                | 24°26               | 14° 3                | 24° 8                | S 29 |
| M30  | 18 32 20 | 8°26'23                | 5 <sup>II</sup> 29   | 24°28              | 28°II55             | 25°II26              | 21°II34             | 28°II40             | 29°II30             | 16°II53             | 21°II51             | 25°II43              | 24°II23             | 14°II10              | 24°II 6              | M30  |

| Day  | ☉     | ☾     |      | ♀     |      | ♀     |      | ♂    |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |       | ♂     |       | ♂     |      | ♂    |     | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|-------|-------|------|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat   | decl  | lat  | decl | lat | decl | lat |
| S 1  | 22n 1 | 22s28 | 5s 3 | 25n37 | 2n11 | 17n33 | 1s 7 | 8n18 | 1n11 | 15n31 | 0s58 | 17n10 | 1s57 | 10s58 | 0n33 | 21n16 | 1s25 | 16s48 | 14s47 | 19n22 | 19n14 | 12n 4 | 7s 5 | 6n36 |     |      |     |
| M 2  | 22 9  | 18 13 | 5 15 | 25 36 | 2 11 | 17 52 | 1 6  | 8 7  | 1 10 | 15 35 | 0 58 | 17 12 | 1 57 | 10 58 | 0 32 | 21 16 | 1 25 | 16 48 | 14 48 | 19 22 | 19 13 | 12 1  | 7 4  | 6 37 |     |      |     |
| T 3  | 22 17 | 12 58 | 5 8  | 25 33 | 2 10 | 18 12 | 1 4  | 7 56 | 1 8  | 15 39 | 0 58 | 17 13 | 1 57 | 10 57 | 0 32 | 21 16 | 1 25 | 16 49 | 14 48 | 19 21 | 19 12 | 11 58 | 7 4  | 6 37 |     |      |     |
| W 4  | 22 24 | 7 1   | 4 42 | 25 28 | 2 8  | 18 30 | 1 2  | 7 45 | 1 7  | 15 43 | 0 58 | 17 15 | 1 57 | 10 56 | 0 32 | 21 17 | 1 25 | 16 49 | 14 48 | 19 22 | 19 12 | 11 56 | 7 4  | 6 38 |     |      |     |
| T 5  | 22 31 | 0 44  | 3 59 | 25 22 | 2 5  | 18 49 | 1 0  | 7 33 | 1 6  | 15 46 | 0 58 | 17 17 | 1 57 | 10 56 | 0 32 | 21 17 | 1 25 | 16 49 | 14 49 | 19 22 | 19 11 | 11 53 | 7 4  | 6 38 |     |      |     |
| F 6  | 22 38 | 5n33  | 3 2  | 25 14 | 2 2  | 19 7  | 0 58 | 7 22 | 1 4  | 15 50 | 0 58 | 17 19 | 1 57 | 10 55 | 0 32 | 21 17 | 1 25 | 16 49 | 14 49 | 19 22 | 19 10 | 11 50 | 7 3  | 6 38 |     |      |     |
| S 7  | 22 44 | 11 31 | 1 54 | 25 4  | 1 58 | 19 24 | 0 56 | 7 10 | 1 3  | 15 54 | 0 58 | 17 20 | 1 57 | 10 55 | 0 32 | 21 17 | 1 25 | 16 49 | 14 49 | 19 22 | 19 9  | 11 47 | 7 3  | 6 39 |     |      |     |
| S 8  | 22 49 | 16 52 | 0 40 | 24 53 | 1 53 | 19 41 | 0 54 | 6 58 | 1 1  | 15 58 | 0 58 | 17 22 | 1 57 | 10 54 | 0 32 | 21 17 | 1 25 | 16 50 | 14 50 | 19 22 | 19 9  | 11 44 | 7 3  | 6 39 |     |      |     |
| M 9  | 22 55 | 21 16 | 0n34 | 24 41 | 1 47 | 19 57 | 0 52 | 6 47 | 1 0  | 16 2  | 0 58 | 17 24 | 1 57 | 10 54 | 0 32 | 21 18 | 1 25 | 16 50 | 14 50 | 19 22 | 19 8  | 11 42 | 7 3  | 6 39 |     |      |     |
| T 10 | 23 0  | 24 28 | 1 46 | 24 28 | 1 40 | 20 13 | 0 49 | 6 35 | 0 58 | 16 5  | 0 58 | 17 25 | 1 57 | 10 54 | 0 32 | 21 18 | 1 25 | 16 50 | 14 51 | 19 22 | 19 7  | 11 39 | 7 3  | 6 40 |     |      |     |
| W11  | 23 4  | 26 16 | 2 50 | 24 14 | 1 33 | 20 28 | 0 47 | 6 23 | 0 57 | 16 9  | 0 58 | 17 27 | 1 58 | 10 53 | 0 32 | 21 18 | 1 25 | 16 50 | 14 51 | 19 22 | 19 6  | 11 36 | 7 3  | 6 40 |     |      |     |
| T 12 | 23 8  | 26 36 | 3 45 | 23 58 | 1 25 | 20 43 | 0 45 | 6 11 | 0 56 | 16 13 | 0 58 | 17 29 | 1 58 | 10 53 | 0 32 | 21 18 | 1 25 | 16 50 | 14 51 | 19 21 | 19 6  | 11 33 | 7 3  | 6 40 |     |      |     |
| F 13 | 23 12 | 25 33 | 4 27 | 23 42 | 1 17 | 20 57 | 0 43 | 5 59 | 0 54 | 16 16 | 0 58 | 17 30 | 1 58 | 10 52 | 0 32 | 21 19 | 1 25 | 16 51 | 14 52 | 19 20 | 19 5  | 11 30 | 7 3  | 6 41 |     |      |     |
| S 14 | 23 15 | 23 15 | 4 56 | 23 26 | 1 7  | 21 11 | 0 40 | 5 46 | 0 53 | 16 20 | 0 58 | 17 32 | 1 58 | 10 52 | 0 32 | 21 19 | 1 25 | 16 51 | 14 52 | 19 19 | 19 4  | 11 27 | 7 3  | 6 41 |     |      |     |
| S 15 | 23 18 | 19 57 | 5 10 | 23 8  | 0 57 | 21 24 | 0 38 | 5 34 | 0 52 | 16 23 | 0 58 | 17 34 | 1 58 | 10 51 | 0 32 | 21 19 | 1 25 | 16 51 | 14 52 | 19 18 | 19 3  | 11 25 | 7 3  | 6 42 |     |      |     |
| M16  | 23 20 | 15 52 | 5 12 | 22 50 | 0 46 | 21 36 | 0 36 | 5 22 | 0 50 | 16 27 | 0 58 | 17 35 | 1 58 | 10 51 | 0 32 | 21 19 | 1 25 | 16 52 | 14 53 | 19 17 | 19 2  | 11 22 | 7 3  | 6 42 |     |      |     |
| T 17 | 23 22 | 11 13 | 4 59 | 22 32 | 0 35 | 21 48 | 0 34 | 5 9  | 0 49 | 16 30 | 0 58 | 17 37 | 1 58 | 10 51 | 0 32 | 21 20 | 1 25 | 16 52 | 14 53 | 19 17 | 19 2  | 11 19 | 7 3  | 6 42 |     |      |     |
| W18  | 23 24 | 6 10  | 4 34 | 22 13 | 0 23 | 21 59 | 0 31 | 4 56 | 0 48 | 16 34 | 0 58 | 17 38 | 1 58 | 10 50 | 0 32 | 21 20 | 1 25 | 16 52 | 14 53 | 19 17 | 19 1  | 11 16 | 7 3  | 6 43 |     |      |     |
| T 19 | 23 25 | 0 52  | 3 57 | 21 55 | 0 10 | 22 10 | 0 29 | 4 44 | 0 47 | 16 37 | 0 58 | 17 40 | 1 58 | 10 50 | 0 32 | 21 20 | 1 25 | 16 52 | 14 54 | 19 17 | 19 0  | 11 13 | 7 3  | 6 43 |     |      |     |
| F 20 | 23 26 | 4s32  | 3 9  | 21 36 | 0s 3 | 22 20 | 0 27 | 4 31 | 0 45 | 16 40 | 0 58 | 17 41 | 1 58 | 10 50 | 0 32 | 21 20 | 1 25 | 16 53 | 14 54 | 19 17 | 18 59 | 11 10 | 7 3  | 6 43 |     |      |     |
| S 21 | 23 26 | 9 52  | 2 12 | 21 17 | 0 17 | 22 29 | 0 24 | 4 18 | 0 44 | 16 44 | 0 58 | 17 43 | 1 58 | 10 50 | 0 32 | 21 20 | 1 25 | 16 53 | 14 55 | 19 17 | 18 59 | 11 8  | 7 3  | 6 44 |     |      |     |
| S 22 | 23 26 | 14 56 | 1 7  | 20 58 | 0 31 | 22 38 | 0 22 | 4 5  | 0 43 | 16 47 | 0 58 | 17 44 | 1 58 | 10 49 | 0 32 | 21 21 | 1 25 | 16 53 | 14 55 | 19 18 | 18 58 | 11 5  | 7 3  | 6 44 |     |      |     |
| M23  | 23 25 | 19 28 | 0s 3 | 20 40 | 0 46 | 22 46 | 0 19 | 3 52 | 0 42 | 16 50 | 0 58 | 17 46 | 1 58 | 10 49 | 0 32 | 21 21 | 1 25 | 16 54 | 14 55 | 19 18 | 18 57 | 11 2  | 7 3  | 6 44 |     |      |     |
| T 24 | 23 24 | 23 10 | 1 14 | 20 21 | 1 1  | 22 53 | 0 17 | 3 39 | 0 40 | 16 54 | 0 58 | 17 47 | 1 58 | 10 49 | 0 32 | 21 21 | 1 25 | 16 54 | 14 56 | 19 18 | 18 56 | 10 59 | 7 4  | 6 45 |     |      |     |
| W25  | 23 23 | 25 40 | 2 24 | 20 4  | 1 16 | 23 0  | 0 15 | 3 26 | 0 39 | 16 57 | 0 58 | 17 49 | 1 58 | 10 49 | 0 32 | 21 21 | 1 25 | 16 54 | 14 56 | 19 17 | 18 56 | 10 56 | 7 4  | 6 45 |     |      |     |
| T 26 | 23 21 | 26 38 | 3 26 | 19 46 | 1 32 | 23 6  | 0 12 | 3 13 | 0 38 | 17 0  | 0 58 | 17 50 | 1 58 | 10 48 | 0 32 | 21 21 | 1 25 | 16 55 | 14 56 | 19 16 | 18 55 | 10 53 | 7 4  | 6 45 |     |      |     |
| F 27 | 23 19 | 25 52 | 4 16 | 19 29 | 1 48 | 23 11 | 0 10 | 2 59 | 0 37 | 17 3  | 0 59 | 17 52 | 1 58 | 10 48 | 0 32 | 21 22 | 1 25 | 16 55 | 14 57 | 19 15 | 18 54 | 10 50 | 7 4  | 6 45 |     |      |     |
| S 28 | 23 17 | 23 22 | 4 51 | 19 13 | 2 4  | 23 16 | 0 7  | 2 46 | 0 36 | 17 6  | 0 59 | 17 53 | 1 58 | 10 48 | 0 32 | 21 22 | 1 25 | 16 56 | 14 57 | 19 14 | 18 53 | 10 48 | 7 5  | 6 46 |     |      |     |
| S 29 | 23 14 | 19 22 | 5 8  | 18 58 | 2 20 | 23 20 | 0 5  | 2 33 | 0 34 | 17 9  | 0 59 | 17 54 | 1 59 | 10 48 | 0 32 | 21 22 | 1 25 | 16 56 | 14 58 | 19 12 | 18 52 | 10 45 | 7 5  | 6 46 |     |      |     |
| M30  | 23n10 | 14s13 | 5s 5 | 18n44 | 2s36 | 23n23 | 0s 2 | 2n19 | 0n33 | 17n12 | 0s59 | 17n56 | 1s59 | 10s48 | 0n32 | 21n22 | 1s25 | 16s56 | 14s58 | 19n11 | 18n52 | 10n42 | 7s 5 | 6n46 |     |      |     |

## ASTRODIENST EPHEMERIS for the year 2059

geocentric

JULY 2059

00:00 UT

| Day  | Sid.t    | ☉        | ☽       | ♀      | ♂      | ♂     | ♂      | ♂      | ♂      | ♂       | ♂      | ♂      | ♂      | ♂     | ♂      | Day  |
|------|----------|----------|---------|--------|--------|-------|--------|--------|--------|---------|--------|--------|--------|-------|--------|------|
| T 1  | 18 36 16 | 9°13'35  | 19°56   | 23°R52 | 0°58 8 | 25°58 | 21°846 | 28°847 | 29°R29 | 16°II55 | 21°R51 | 25°R40 | 24°820 | 14°16 | 24°R 4 | T 1  |
| W 2  | 18 40 13 | 10°10'47 | 4°Y12   | 23°36  | 1°22   | 26°29 | 21°57  | 28°53  | 29°29  | 16°57   | 21°51  | 25°D38 | 24°17  | 14°23 | 24°2   | W 2  |
| T 3  | 18 44 9  | 11° 7'59 | 18°16   | 23°15  | 2°35   | 27° 1 | 22° 9  | 29° 0  | 29°29  | 16°59   | 21°51  | 25°38  | 24°13  | 14°30 | 24° 0  | T 3  |
| F 4  | 18 48 6  | 12° 5'12 | 2° 6    | 22°51  | 3°49   | 27°33 | 22°21  | 29° 6  | 29°28  | 17° 2   | 21°50  | 25°39  | 24°10  | 14°37 | 23°58  | F 4  |
| S 5  | 18 52 2  | 13° 2'25 | 15°43   | 22°24  | 5° 2   | 28° 5 | 22°32  | 29°12  | 29°28  | 17° 4   | 21°50  | 25°40  | 24° 7  | 14°43 | 23°56  | S 5  |
| S 6  | 18 55 59 | 13°59'38 | 29° 7   | 21°53  | 6°16   | 28°38 | 22°44  | 29°19  | 29°28  | 17° 6   | 21°50  | 25°R41 | 24° 4  | 14°50 | 23°54  | S 6  |
| M 7  | 18 59 55 | 14°56'51 | 12°II19 | 21°20  | 7°30   | 29°10 | 22°55  | 29°25  | 29°28  | 17° 8   | 21°50  | 25°39  | 24° 1  | 14°57 | 23°52  | M 7  |
| T 8  | 19 3 52  | 15°54'05 | 25°18   | 20°44  | 8°43   | 29°43 | 23° 6  | 29°31  | 29°D28 | 17°10   | 21°49  | 25°36  | 23°58  | 15° 3 | 23°49  | T 8  |
| W 9  | 19 7 49  | 16°51'19 | 8°6     | 20° 7  | 9°57   | 0°15  | 23°17  | 29°37  | 29°28  | 17°12   | 21°49  | 25°30  | 23°54  | 15°10 | 23°47  | W 9  |
| T 10 | 19 11 45 | 17°48'33 | 20°43   | 19°30  | 11°10  | 0°48  | 23°28  | 29°43  | 29°28  | 17°14   | 21°48  | 25°22  | 23°51  | 15°17 | 23°45  | T 10 |
| F 11 | 19 15 42 | 18°45'47 | 3°8     | 18°52  | 12°24  | 1°21  | 23°39  | 29°49  | 29°28  | 17°16   | 21°48  | 25°13  | 23°48  | 15°24 | 23°42  | F 11 |
| S 12 | 19 19 38 | 19°43'01 | 15°22   | 18°14  | 13°38  | 1°54  | 23°50  | 29°55  | 29°28  | 17°18   | 21°48  | 25° 3  | 23°45  | 15°30 | 23°40  | S 12 |
| S 13 | 19 23 35 | 20°40'15 | 27°27   | 17°37  | 14°52  | 2°28  | 24° 1  | 0°II 1 | 29°29  | 17°20   | 21°47  | 24°53  | 23°42  | 15°37 | 23°38  | S 13 |
| M14  | 19 27 31 | 21°37'29 | 9°12    | 17° 2  | 16° 5  | 3° 1  | 24°12  | 0° 7   | 29°29  | 17°22   | 21°47  | 24°45  | 23°38  | 15°44 | 23°35  | M14  |
| T 15 | 19 31 28 | 22°34'43 | 21°16   | 16°29  | 17°19  | 3°35  | 24°22  | 0°13   | 29°29  | 17°24   | 21°46  | 24°38  | 23°35  | 15°50 | 23°33  | T 15 |
| W16  | 19 35 24 | 23°31'57 | 3°6     | 16° 0  | 18°33  | 4° 9  | 24°33  | 0°18   | 29°30  | 17°25   | 21°46  | 24°34  | 23°32  | 15°57 | 23°30  | W16  |
| T 17 | 19 39 21 | 24°29'11 | 15° 0   | 15°33  | 19°46  | 4°43  | 24°43  | 0°24   | 29°30  | 17°27   | 21°45  | 24°32  | 23°29  | 16° 4 | 23°28  | T 17 |
| F 18 | 19 43 18 | 25°26'26 | 27° 2   | 15°11  | 21° 0  | 5°17  | 24°53  | 0°29   | 29°31  | 17°29   | 21°44  | 24°D31 | 23°26  | 16°11 | 23°25  | F 18 |
| S 19 | 19 47 14 | 26°23'40 | 9°16    | 14°53  | 22°14  | 5°51  | 25° 3  | 0°35   | 29°31  | 17°31   | 21°44  | 24°32  | 23°23  | 16°17 | 23°22  | S 19 |
| S 20 | 19 51 11 | 27°20'55 | 21°48   | 14°39  | 23°28  | 6°25  | 25°13  | 0°40   | 29°32  | 17°33   | 21°43  | 24°R32 | 23°19  | 16°24 | 23°20  | S 20 |
| M21  | 19 55 7  | 28°18'10 | 4°43    | 14°31  | 24°42  | 6°59  | 25°23  | 0°46   | 29°33  | 17°35   | 21°43  | 24°32  | 23°16  | 16°31 | 23°17  | M21  |
| T 22 | 19 59 4  | 29°15'25 | 18° 4   | 14°D28 | 25°55  | 7°34  | 25°33  | 0°51   | 29°33  | 17°36   | 21°42  | 24°30  | 23°13  | 16°37 | 23°14  | T 22 |
| W23  | 20 3 0   | 0°12'41  | 1°35    | 14°31  | 27° 9  | 8° 9  | 25°43  | 0°56   | 29°34  | 17°38   | 21°41  | 24°25  | 23°10  | 16°44 | 23°11  | W23  |
| T 24 | 20 6 57  | 1° 9'57  | 16° 7   | 14°39  | 28°23  | 8°43  | 25°52  | 1° 1   | 29°35  | 17°40   | 21°41  | 24°18  | 23° 7  | 16°51 | 23° 8  | T 24 |
| F 25 | 20 10 53 | 2° 7'13  | 0°44    | 14°53  | 29°37  | 9°18  | 26° 2  | 1° 6   | 29°36  | 17°42   | 21°40  | 24° 9  | 23° 4  | 16°58 | 23° 6  | F 25 |
| S 26 | 20 14 50 | 3° 4'30  | 15°37   | 15°13  | 0°51   | 9°53  | 26°11  | 1°11   | 29°37  | 17°43   | 21°39  | 23°59  | 23° 0  | 17° 4 | 23° 3  | S 26 |
| S 27 | 20 18 47 | 4° 1'48  | 0°35    | 15°39  | 2° 5   | 10°29 | 26°20  | 1°16   | 29°38  | 17°45   | 21°38  | 23°50  | 22°57  | 17°11 | 23° 0  | S 27 |
| M28  | 20 22 43 | 4°59'06  | 15°31   | 16°11  | 3°19   | 11° 4 | 26°29  | 1°21   | 29°39  | 17°47   | 21°38  | 23°41  | 22°54  | 17°18 | 22°57  | M28  |
| T 29 | 20 26 40 | 5°56'25  | 0°Y17   | 16°49  | 4°32   | 11°39 | 26°38  | 1°26   | 29°40  | 17°48   | 21°37  | 23°35  | 22°51  | 17°24 | 22°54  | T 29 |
| W30  | 20 30 36 | 6°53'45  | 14°45   | 17°33  | 5°46   | 12°15 | 26°47  | 1°30   | 29°41  | 17°50   | 21°36  | 23°31  | 22°48  | 17°31 | 22°51  | W30  |
| T 31 | 20 34 33 | 7°51'07  | 28°Y53  | 18°22  | 7°8    | 12°50 | 26°56  | 1°35   | 29°42  | 17°52   | 21°35  | 23°29  | 22°44  | 17°38 | 22°48  | T 31 |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|-------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | lat   |
| T 1  | 23n 7 | 8s18  | 4s42 | 18n30 | 2s52 | 23n26 | 0n 0 | 2n 6 | 0n32 | 17n15 | 0s59 | 17n57 | 1s59 | 10s48 | 0n32 | 21n22 |
| W 2  | 23 3  | 2 2   | 4 2  | 18 18 | 3 7  | 23 28 | 0 2  | 1 52 | 0 31 | 17 18 | 0 59 | 17 58 | 1 59 | 10 48 | 0 32 | 21 23 |
| T 3  | 22 58 | 4n16  | 3 8  | 18 7  | 3 22 | 23 29 | 0 5  | 1 38 | 0 30 | 17 21 | 0 59 | 18 0  | 1 59 | 10 48 | 0 31 | 21 23 |
| F 4  | 22 53 | 10 16 | 2 4  | 17 56 | 3 36 | 23 30 | 0 7  | 1 25 | 0 29 | 17 24 | 0 59 | 18 1  | 1 59 | 10 48 | 0 31 | 21 23 |
| S 5  | 22 48 | 15 41 | 0 54 | 17 48 | 3 50 | 23 30 | 0 10 | 1 11 | 0 28 | 17 27 | 0 59 | 18 2  | 1 59 | 10 48 | 0 31 | 21 23 |
| S 6  | 22 42 | 20 15 | 0n19 | 17 40 | 4 2  | 23 29 | 0 12 | 0 57 | 0 26 | 17 30 | 0 59 | 18 4  | 1 59 | 10 48 | 0 31 | 21 23 |
| M 7  | 22 36 | 23 43 | 1 28 | 17 34 | 4 14 | 23 28 | 0 14 | 0 43 | 0 25 | 17 33 | 0 59 | 18 5  | 1 59 | 10 48 | 0 31 | 21 24 |
| T 8  | 22 29 | 25 53 | 2 32 | 17 29 | 4 24 | 23 26 | 0 17 | 0 29 | 0 24 | 17 35 | 0 59 | 18 6  | 1 59 | 10 48 | 0 31 | 21 24 |
| W 9  | 22 22 | 26 38 | 3 28 | 17 25 | 4 33 | 23 23 | 0 19 | 0 15 | 0 23 | 17 38 | 0 59 | 18 7  | 1 59 | 10 48 | 0 31 | 21 24 |
| T 10 | 22 15 | 25 59 | 4 12 | 17 23 | 4 41 | 23 19 | 0 21 | 0 1  | 0 22 | 17 41 | 0 59 | 18 8  | 1 59 | 10 48 | 0 31 | 21 24 |
| F 11 | 22 7  | 24 2  | 4 43 | 17 23 | 4 47 | 23 15 | 0 24 | 0s13 | 0 21 | 17 43 | 0 59 | 18 10 | 2 0  | 10 48 | 0 31 | 21 24 |
| S 12 | 21 59 | 21 0  | 5 1  | 17 23 | 4 51 | 23 10 | 0 26 | 0 27 | 0 20 | 17 46 | 1 0  | 18 11 | 2 0  | 10 48 | 0 31 | 21 24 |
| S 13 | 21 51 | 17 7  | 5 4  | 17 25 | 4 54 | 23 4  | 0 28 | 0 41 | 0 19 | 17 49 | 1 0  | 18 12 | 2 0  | 10 48 | 0 31 | 21 25 |
| M14  | 21 42 | 12 36 | 4 55 | 17 28 | 4 55 | 22 58 | 0 31 | 0 56 | 0 18 | 17 51 | 1 0  | 18 13 | 2 0  | 10 48 | 0 31 | 21 25 |
| T 15 | 21 33 | 7 38  | 4 33 | 17 33 | 4 54 | 22 51 | 0 33 | 1 10 | 0 17 | 17 54 | 1 0  | 18 14 | 2 0  | 10 48 | 0 31 | 21 25 |
| W16  | 21 23 | 2 25  | 3 59 | 17 38 | 4 52 | 22 44 | 0 35 | 1 24 | 0 16 | 17 56 | 1 0  | 18 15 | 2 0  | 10 48 | 0 31 | 21 25 |
| T 17 | 21 13 | 2s55  | 3 15 | 17 45 | 4 48 | 22 35 | 0 37 | 1 39 | 0 15 | 17 58 | 1 0  | 18 16 | 2 0  | 10 49 | 0 31 | 21 25 |
| F 18 | 21 3  | 8 13  | 2 21 | 17 53 | 4 43 | 22 26 | 0 39 | 1 53 | 0 14 | 18 1  | 1 0  | 18 17 | 2 0  | 10 49 | 0 31 | 21 25 |
| S 19 | 20 52 | 13 18 | 1 21 | 18 1  | 4 36 | 22 17 | 0 41 | 2 7  | 0 13 | 18 3  | 1 0  | 18 18 | 2 1  | 10 49 | 0 31 | 21 26 |
| S 20 | 20 41 | 17 59 | 0 15 | 18 11 | 4 28 | 22 6  | 0 43 | 2 22 | 0 12 | 18 5  | 1 0  | 18 19 | 2 1  | 10 49 | 0 31 | 21 26 |
| M21  | 20 30 | 21 58 | 0s54 | 18 21 | 4 19 | 21 55 | 0 45 | 2 36 | 0 11 | 18 8  | 1 0  | 18 20 | 2 1  | 10 50 | 0 31 | 21 26 |
| T 22 | 20 18 | 24 55 | 2 4  | 18 31 | 4 9  | 21 44 | 0 47 | 2 51 | 0 10 | 18 10 | 1 0  | 18 21 | 2 1  | 10 50 | 0 31 | 21 26 |
| W23  | 20 6  | 26 30 | 3 5  | 18 42 | 3 58 | 21 32 | 0 49 | 3 5  | 0 9  | 18 12 | 1 0  | 18 22 | 2 1  | 10 50 | 0 31 | 21 26 |
| T 24 | 19 54 | 26 24 | 3 58 | 18 54 | 3 45 | 21 19 | 0 51 | 3 20 | 0 8  | 18 14 | 1 1  | 18 23 | 2 1  | 10 51 | 0 31 | 21 26 |
| F 25 | 19 41 | 24 30 | 4 37 | 19 5  | 3 32 | 21 5  | 0 53 | 3 35 | 0 7  | 18 16 | 1 1  | 18 24 | 2 1  | 10 51 | 0 31 | 21 26 |
| S 26 | 19 28 | 20 54 | 4 59 | 19 16 | 3 19 | 20 51 | 0 55 | 3 49 | 0 6  | 18 19 | 1 1  | 18 25 | 2 1  | 10 51 | 0 31 | 21 26 |
| S 27 | 19 15 | 15 56 | 5 0  | 19 28 | 3 5  | 20 37 | 0 57 | 4 4  | 0 5  | 18 21 | 1 1  | 18 26 | 2 2  | 10 52 | 0 31 | 21 27 |
| M28  | 19 1  | 10 1  | 4 41 | 19 38 | 2 50 | 20 21 | 0 58 | 4 19 | 0 4  | 18 23 | 1 1  | 18 26 | 2 2  | 10 52 | 0 31 | 21 27 |
| T 29 | 18 47 | 3 36  | 4 3  | 19 49 | 2 35 | 20 6  | 1 0  | 4 33 | 0 3  | 18 25 | 1 1  | 18 27 | 2 2  | 10 52 | 0 31 | 21 27 |
| W30  | 18 33 | 2n53  | 3 10 | 19 58 | 2 20 | 19 49 | 1 2  | 4 48 | 0 3  | 18 27 | 1 1  | 18 28 | 2 2  | 10 53 | 0 31 | 21 27 |
| T 31 | 18n18 | 9n 6  | 2s 6 | 20n 7 | 2s 4 | 19n32 | 1n 3 | 5s 3 | 0n 2 | 18n28 | 1s 1 | 18n29 | 2s 2 | 10s53 | 0n30 | 21n27 |

Julian Day Number = 2473275.5, Delta T = 77.48 sec

Ecliptic obliquity = 23°25'59, Nutation = - 0°00'13, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°34'17, Lahiri = 24°41'18



## ASTRODIENST EPHEMERIS for the year 2059

geocentric

AUGUST 2059

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♀     | ♂     | ♂     | ♂     | ♂    | ♂     | ♂     | ♂      | ♂      | ♂     | ♂     | ♂      | Day  |
|------|----------|----------|-------|-------|-------|-------|-------|------|-------|-------|--------|--------|-------|-------|--------|------|
| F 1  | 20 38 29 | 8♌48'29  | 12♋40 | 19♊18 | 8♌14  | 13♏26 | 27♈ 5 | 1♏39 | 29♏44 | 17♏53 | 21°R34 | 23°D29 | 22♋41 | 17♏45 | 22°R45 | F 1  |
| S 2  | 20 42 26 | 9°45'53  | 26° 7 | 20°19 | 9°28  | 14° 2 | 27°13 | 1°44 | 29°45 | 17°55 | 21°K34 | 23°R29 | 22°38 | 17°51 | 22°K42 | S 2  |
| S 3  | 20 46 22 | 10°43'17 | 9♏17  | 21°25 | 10°42 | 14°38 | 27°21 | 1°48 | 29°46 | 17°56 | 21°33  | 23♋29  | 22°35 | 17°58 | 22°39  | S 3  |
| M 4  | 20 50 19 | 11°40'43 | 22°11 | 22°37 | 11°56 | 15°14 | 27°30 | 1°52 | 29°48 | 17°58 | 21°32  | 23°26  | 22°32 | 18° 5 | 22°36  | M 4  |
| T 5  | 20 54 16 | 12°38'10 | 4♊53  | 23°54 | 13°10 | 15°50 | 27°38 | 1°57 | 29°49 | 17°59 | 21°31  | 23°20  | 22°29 | 18°11 | 22°33  | T 5  |
| W 6  | 20 58 12 | 13°35'38 | 17°24 | 25°17 | 14°24 | 16°27 | 27°46 | 2° 1 | 29°50 | 18° 1 | 21°30  | 23°12  | 22°25 | 18°18 | 22°30  | W 6  |
| T 7  | 21 2 9   | 14°33'08 | 29°45 | 26°44 | 15°39 | 17° 3 | 27°53 | 2° 5 | 29°52 | 18° 2 | 21°29  | 23° 1  | 22°22 | 18°25 | 22°27  | T 7  |
| F 8  | 21 6 5   | 15°30'38 | 11♌58 | 28°16 | 16°53 | 17°40 | 28° 1 | 2° 9 | 29°54 | 18° 3 | 21°28  | 22°48  | 22°19 | 18°32 | 22°24  | F 8  |
| S 9  | 21 10 2  | 16°28'09 | 24° 2 | 29°52 | 18° 7 | 18°17 | 28° 8 | 2°12 | 29°55 | 18° 5 | 21°27  | 22°34  | 22°16 | 18°38 | 22°21  | S 9  |
| S 10 | 21 13 58 | 17°25'41 | 6♏1   | 1♌32  | 19°21 | 18°53 | 28°16 | 2°16 | 29°57 | 18° 6 | 21°26  | 22°21  | 22°13 | 18°45 | 22°18  | S 10 |
| M 11 | 21 17 55 | 18°23'14 | 17°54 | 3°16  | 20°35 | 19°30 | 28°23 | 2°20 | 29°59 | 18° 7 | 21°25  | 22° 9  | 22°10 | 18°52 | 22°14  | M 11 |
| T 12 | 21 21 51 | 19°20'48 | 29°44 | 5° 4  | 21°49 | 20° 7 | 28°30 | 2°23 | 0♏ 0  | 18° 9 | 21°24  | 21°59  | 22° 6 | 18°58 | 22°11  | T 12 |
| W 13 | 21 25 48 | 20°18'23 | 11♏33 | 6°54  | 23° 3 | 20°44 | 28°37 | 2°27 | 0° 2  | 18°10 | 21°23  | 21°52  | 22° 3 | 19° 5 | 22° 8  | W 13 |
| T 14 | 21 29 45 | 21°15'59 | 23°26 | 8°47  | 24°17 | 21°22 | 28°44 | 2°30 | 0° 4  | 18°11 | 21°22  | 21°47  | 22° 0 | 19°12 | 22° 5  | T 14 |
| F 15 | 21 33 41 | 22°13'36 | 5♏25  | 10°43 | 25°32 | 21°59 | 28°50 | 2°34 | 0° 6  | 18°12 | 21°21  | 21°45  | 21°57 | 19°18 | 22° 2  | F 15 |
| S 16 | 21 37 38 | 23°11'14 | 17°37 | 12°40 | 26°46 | 22°36 | 28°57 | 2°37 | 0° 8  | 18°14 | 21°20  | 21°45  | 21°54 | 19°25 | 21°59  | S 16 |
| S 17 | 21 41 34 | 24° 8'53 | 0♏ 6  | 14°39 | 28° 0 | 23°14 | 29° 3 | 2°40 | 0°10  | 18°15 | 21°19  | 21°45  | 21°50 | 19°32 | 21°56  | S 17 |
| M 18 | 21 45 31 | 25° 6'33 | 12°58 | 16°39 | 29°14 | 23°52 | 29° 9 | 2°43 | 0°12  | 18°16 | 21°18  | 21°44  | 21°47 | 19°39 | 21°53  | M 18 |
| T 19 | 21 49 27 | 26° 4'14 | 26°16 | 18°40 | 0♏28  | 24°29 | 29°15 | 2°46 | 0°14  | 18°17 | 21°17  | 21°42  | 21°44 | 19°45 | 21°50  | T 19 |
| W 20 | 21 53 24 | 27° 1'57 | 10♋3  | 20°41 | 1°43  | 25° 7 | 29°21 | 2°48 | 0°16  | 18°18 | 21°16  | 21°37  | 21°41 | 19°52 | 21°46  | W 20 |
| T 21 | 21 57 20 | 27°59'40 | 24°21 | 22°42 | 2°57  | 25°45 | 29°26 | 2°51 | 0°18  | 18°19 | 21°15  | 21°29  | 21°38 | 19°59 | 21°43  | T 21 |
| F 22 | 22 1 17  | 28°57'24 | 9♏ 5  | 24°43 | 4°11  | 26°23 | 29°32 | 2°54 | 0°21  | 18°20 | 21°14  | 21°20  | 21°35 | 20° 5 | 21°40  | F 22 |
| S 23 | 22 5 14  | 29°55'10 | 24° 9 | 26°44 | 5°25  | 27° 1 | 29°37 | 2°56 | 0°23  | 18°21 | 21°13  | 21° 9  | 21°31 | 20°12 | 21°37  | S 23 |
| S 24 | 22 9 10  | 0♏52'57  | 9♏24  | 28°45 | 6°39  | 27°40 | 29°42 | 2°59 | 0°25  | 18°22 | 21°11  | 20°59  | 21°28 | 20°19 | 21°34  | S 24 |
| M 25 | 22 13 7  | 1°50'45  | 24°38 | 0♏44  | 7°54  | 28°18 | 29°47 | 3° 1 | 0°28  | 18°23 | 21°10  | 20°49  | 21°25 | 20°26 | 21°31  | M 25 |
| T 26 | 22 17 3  | 2°48'35  | 9♏41  | 2°43  | 9° 8  | 28°56 | 29°52 | 3° 3 | 0°30  | 18°24 | 21° 9  | 20°42  | 21°22 | 20°32 | 21°28  | T 26 |
| W 27 | 22 21 0  | 3°46'27  | 24°25 | 4°41  | 10°22 | 29°35 | 29°56 | 3° 5 | 0°32  | 18°25 | 21° 8  | 20°38  | 21°19 | 20°39 | 21°25  | W 27 |
| T 28 | 22 24 56 | 4°44'20  | 8♋45  | 6°38  | 11°37 | 0♏13  | 0♏ 1  | 3° 7 | 0°35  | 18°26 | 21° 7  | 20°36  | 21°16 | 20°46 | 21°22  | T 28 |
| F 29 | 22 28 53 | 5°42'16  | 22°38 | 8°34  | 12°51 | 0°52  | 0° 5  | 3° 9 | 0°37  | 18°26 | 21° 6  | 20°D35 | 21°12 | 20°52 | 21°19  | F 29 |
| S 30 | 22 32 49 | 6°40'13  | 6♏ 6  | 10°29 | 14° 5 | 1°31  | 0° 9  | 3°11 | 0°40  | 18°27 | 21° 4  | 20°R35 | 21° 9 | 20°59 | 21°16  | S 30 |
| S 31 | 22 36 46 | 7♏38'12  | 19♏12 | 12♏22 | 15♏19 | 2♏10  | 0♏13  | 3♏13 | 0♏43  | 18♏28 | 21°K 3 | 20♋35  | 21♋ 6 | 21♏ 6 | 21°K13 | S 31 |

| Day  | ☉     | ☾     |      | ♀     |      | ♀     |      | ♂     |      | ♂     |       | ♂     |      | ♂     |      | ♂     |      | ♂     |       | ♂     |       | ♂    |      | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|------|-------|------|-------|------|-------|-------|-------|-------|------|------|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat   | decl | lat  | decl | lat |
| F 1  | 18n 3 | 14n44 | 0s57 | 20n15 | 1s49 | 19n15 | 1n 5 | 5s17  | 0n 1 | 18n30 | 1 s 1 | 18n29 | 2s 2 | 10s54 | 0n30 | 21n27 | 1s26 | 17s12 | 15s 8 | 18n38 | 18n26 | 9n 8 | 7s25 | 6n52 |     |
| S 2  | 17 48 | 19 30 | 0n14 | 20 21 | 1 34 | 18 57 | 1 6  | 5 32  | 0s 0 | 18 32 | 1 1   | 18 30 | 2 2  | 10 54 | 0 30 | 21 27 | 1 26 | 17 13 | 15 8  | 18 38 | 18 26 | 9 5  | 7 26 | 6 52 |     |
| S 3  | 17 32 | 23 12 | 1 23 | 20 26 | 1 18 | 18 38 | 1 8  | 5 47  | 0 1  | 18 34 | 1 2   | 18 31 | 2 3  | 10 55 | 0 30 | 21 27 | 1 26 | 17 14 | 15 9  | 18 38 | 18 25 | 9 2  | 7 27 | 6 52 |     |
| M 4  | 17 17 | 25 37 | 2 26 | 20 30 | 1 3  | 18 19 | 1 9  | 6 2   | 0 2  | 18 36 | 1 2   | 18 32 | 2 3  | 10 55 | 0 30 | 21 28 | 1 26 | 17 14 | 15 9  | 18 38 | 18 24 | 8 59 | 7 28 | 6 52 |     |
| T 5  | 17 1  | 26 40 | 3 20 | 20 31 | 0 49 | 17 59 | 1 11 | 6 17  | 0 3  | 18 37 | 1 2   | 18 32 | 2 3  | 10 56 | 0 30 | 21 28 | 1 26 | 17 15 | 15 9  | 18 36 | 18 23 | 8 56 | 7 29 | 6 52 |     |
| W 6  | 16 44 | 26 20 | 4 4  | 20 31 | 0 34 | 17 39 | 1 12 | 6 31  | 0 4  | 18 39 | 1 2   | 18 33 | 2 3  | 10 56 | 0 30 | 21 28 | 1 26 | 17 15 | 15 10 | 18 34 | 18 22 | 8 53 | 7 30 | 6 52 |     |
| T 7  | 16 28 | 24 41 | 4 36 | 20 29 | 0 20 | 17 18 | 1 13 | 6 46  | 0 5  | 18 41 | 1 2   | 18 34 | 2 3  | 10 57 | 0 30 | 21 28 | 1 26 | 17 16 | 15 10 | 18 31 | 18 21 | 8 50 | 7 31 | 6 53 |     |
| F 8  | 16 11 | 21 54 | 4 54 | 20 24 | 0 7  | 16 57 | 1 14 | 7 1   | 0 5  | 18 42 | 1 2   | 18 34 | 2 3  | 10 58 | 0 30 | 21 28 | 1 26 | 17 17 | 15 10 | 18 28 | 18 21 | 8 47 | 7 32 | 6 53 |     |
| S 9  | 15 54 | 18 12 | 4 59 | 20 17 | 0n 6 | 16 36 | 1 15 | 7 16  | 0 6  | 18 44 | 1 2   | 18 35 | 2 3  | 10 58 | 0 30 | 21 28 | 1 26 | 17 17 | 15 10 | 18 25 | 18 20 | 8 44 | 7 33 | 6 53 |     |
| S 10 | 15 36 | 13 49 | 4 51 | 20 7  | 0 19 | 16 14 | 1 17 | 7 30  | 0 7  | 18 45 | 1 2   | 18 35 | 2 4  | 10 59 | 0 30 | 21 28 | 1 26 | 17 18 | 15 10 | 18 21 | 18 19 | 8 41 | 7 34 | 6 53 |     |
| M11  | 15 19 | 8 56  | 4 30 | 19 55 | 0 30 | 15 51 | 1 18 | 7 45  | 0 8  | 18 47 | 1 2   | 18 36 | 2 4  | 10 59 | 0 30 | 21 28 | 1 26 | 17 18 | 15 11 | 18 18 | 18 18 | 8 38 | 7 35 | 6 53 |     |
| T 12 | 15 1  | 3 45  | 3 58 | 19 40 | 0 41 | 15 28 | 1 19 | 8 0   | 0 9  | 18 48 | 1 3   | 18 36 | 2 4  | 11 0  | 0 30 | 21 28 | 1 26 | 17 19 | 15 11 | 18 15 | 18 17 | 8 35 | 7 36 | 6 53 |     |
| W13  | 14 43 | 1s34  | 3 15 | 19 22 | 0 51 | 15 5  | 1 19 | 8 15  | 0 10 | 18 50 | 1 3   | 18 37 | 2 4  | 11 1  | 0 30 | 21 28 | 1 26 | 17 20 | 15 11 | 18 14 | 18 17 | 8 32 | 7 37 | 6 52 |     |
| T 14 | 14 24 | 6 52  | 2 24 | 19 2  | 1 1  | 14 41 | 1 20 | 8 29  | 0 10 | 18 51 | 1 3   | 18 37 | 2 4  | 11 1  | 0 30 | 21 28 | 1 26 | 17 20 | 15 11 | 18 13 | 18 16 | 8 29 | 7 38 | 6 52 |     |
| F 15 | 14 6  | 11 59 | 1 25 | 18 39 | 1 9  | 14 17 | 1 21 | 8 44  | 0 11 | 18 52 | 1 3   | 18 38 | 2 4  | 11 2  | 0 30 | 21 28 | 1 27 | 17 21 | 15 12 | 18 12 | 18 15 | 8 26 | 7 39 | 6 52 |     |
| S 16 | 13 47 | 16 44 | 0 22 | 18 14 | 1 17 | 13 52 | 1 22 | 8 59  | 0 12 | 18 54 | 1 3   | 18 38 | 2 5  | 11 3  | 0 30 | 21 29 | 1 27 | 17 21 | 15 12 | 18 12 | 18 14 | 8 23 | 7 40 | 6 52 |     |
| S 17 | 13 28 | 20 53 | 0s44 | 17 46 | 1 23 | 13 27 | 1 22 | 9 13  | 0 13 | 18 55 | 1 3   | 18 39 | 2 5  | 11 4  | 0 30 | 21 29 | 1 27 | 17 22 | 15 12 | 18 12 | 18 13 | 8 20 | 7 41 | 6 52 |     |
| M18  | 13 9  | 24 10 | 1 50 | 17 15 | 1 29 | 13 2  | 1 23 | 9 28  | 0 14 | 18 56 | 1 3   | 18 39 | 2 5  | 11 4  | 0 30 | 21 29 | 1 27 | 17 23 | 15 12 | 18 12 | 18 12 | 8 17 | 7 42 | 6 52 |     |
| T 19 | 12 49 | 26 14 | 2 52 | 16 43 | 1 34 | 12 36 | 1 24 | 9 43  | 0 14 | 18 57 | 1 3   | 18 40 | 2 5  | 11 5  | 0 30 | 21 29 | 1 27 | 17 23 | 15 12 | 18 11 | 18 12 | 8 14 | 7 43 | 6 52 |     |
| W20  | 12 30 | 26 48 | 3 46 | 16 8  | 1 38 | 12 10 | 1 24 | 9 57  | 0 15 | 18 58 | 1 4   | 18 40 | 2 5  | 11 6  | 0 30 | 21 29 | 1 27 | 17 24 | 15 12 | 18 10 | 18 11 | 8 11 | 7 44 | 6 52 |     |
| T 21 | 12 10 | 25 38 | 4 28 | 15 32 | 1 41 | 11 44 | 1 24 | 10 12 | 0 16 | 18 59 | 1 4   | 18 40 | 2 5  | 11 7  | 0 30 | 21 29 | 1 27 | 17 24 | 15 13 | 18 8  | 18 10 | 8 8  | 7 45 | 6 52 |     |
| F 22 | 11 50 | 22 42 | 4 54 | 14 54 | 1 43 | 11 17 | 1 25 | 10 26 | 0 17 | 19 0  | 1 4   | 18 41 | 2 6  | 11 8  | 0 30 | 21 29 | 1 27 | 17 25 | 15 13 | 18 5  | 18 9  | 8 5  | 7 46 | 6 52 |     |
| S 23 | 11 30 | 18 11 | 5 0  | 14 14 | 1 45 | 10 50 | 1 25 | 10 41 | 0 18 | 19 1  | 1 4   | 18 41 | 2 6  | 11 8  | 0 30 | 21 29 | 1 27 | 17 26 | 15 13 | 18 3  | 18 8  | 8 2  | 7 47 | 6 52 |     |
| S 24 | 11 9  | 12 27 | 4 45 | 13 34 | 1 46 | 10 23 | 1 25 | 10 55 | 0 18 | 19 2  | 1 4   | 18 41 | 2 6  | 11 9  | 0 30 | 21 29 | 1 27 | 17 26 | 15 13 | 18 0  | 18 8  | 7 59 | 7 48 | 6 52 |     |
| M25  | 10 49 | 5 58  | 4 10 | 12 51 | 1 46 | 9 56  | 1 25 | 11 10 | 0 19 | 19 3  | 1 4   | 18 42 | 2 6  | 11 10 | 0 30 | 21 29 | 1 27 | 17 27 | 15 13 | 17 57 | 18 7  | 7 56 | 7 49 | 6 51 |     |
| T 26 | 10 28 | 0n48  | 3 18 | 12 8  | 1 45 | 9 28  | 1 25 | 11 24 | 0 20 | 19 4  | 1 4   | 18 42 | 2 6  | 11 11 | 0 30 | 21 29 | 1 27 | 17 27 | 15 13 | 17 55 | 18 6  | 7 53 | 7 50 | 6 51 |     |
| W27  | 10 7  | 7 23  | 2 14 | 11 24 | 1 44 | 9 0   | 1 25 | 11 38 | 0 21 | 19 5  | 1 4   | 18 42 | 2 7  | 11 12 | 0 30 | 21 29 | 1 27 | 17 28 | 15 14 | 17 54 | 18 5  | 7 50 | 7 52 | 6 51 |     |
| F 28 | 9 46  | 13 26 | 1 2  | 10 39 | 1 42 | 8 31  | 1 25 | 11 53 | 0 21 | 19 6  | 1 5   | 18 42 | 2 7  | 11 13 | 0 30 | 21 29 | 1 27 | 17 28 | 15 14 | 17 54 | 18 4  | 7 47 | 7 53 | 6 51 |     |
| T 29 | 9 25  | 18 36 | 0n11 | 9 54  | 1 40 | 8 3   | 1 25 | 12 7  | 0 22 | 19 7  | 1 5   | 18 42 | 2 7  | 11 14 | 0 30 | 21 29 | 1 27 | 17 29 | 15 14 | 17 54 | 18 3  | 7 44 | 7 54 | 6 51 |     |
| S 30 | 9 4   | 22 39 | 1 21 | 9 8   | 1 37 | 7 34  | 1 25 | 12 21 | 0 23 | 19 7  | 1 5   | 18 43 | 2 7  | 11 14 | 0 30 | 21 29 | 1 27 | 17 30 | 15 14 | 17 54 | 18 3  | 7 41 | 7 55 | 6 51 |     |
| S 31 | 8n42  | 25n25 | 2n26 | 8n22  | 1n34 | 7n 5  | 1n25 | 12s35 | 0s23 | 19n 8 | 1 s 5 | 18n43 | 2s 7 | 11s15 | 0n30 | 21n29 | 1s27 | 17s30 | 15s14 | 17n54 | 18n 2 | 7n38 | 7s56 | 6n51 |     |

ASTRODIENST EPHEMERIS for the year 2059  
geocentric

SEPTEMBER 2059

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂     | ♀     | ♂     | ♂     | ♂     | ♂    | ♂      | ♂      | ♂      | ♂     | ♂     | ♂      | Day  |
|------|----------|----------|-------|-------|-------|-------|-------|-------|------|--------|--------|--------|-------|-------|--------|------|
| M 1  | 22 40 43 | 8♍36°13  | 1♌59  | 14♍14 | 16♍34 | 2♍49  | 0♍17  | 3♍14  | 0♍45 | 18♍28  | 21°R 2 | 20°R33 | 21♌3  | 21♍12 | 21°R10 | M 1  |
| T 2  | 22 44 39 | 9°34'16  | 14°30 | 16° 6 | 17°48 | 3°28  | 0°20  | 3°16  | 0°48 | 18°29  | 21♌1   | 20♌28  | 21° 0 | 21°19 | 21°≈ 7 | T 2  |
| W 3  | 22 48 36 | 10°32'21 | 26°49 | 17°55 | 19° 3 | 4° 7  | 0°24  | 3°17  | 0°51 | 18°30  | 21° 0  | 20°21  | 20°56 | 21°26 | 21° 4  | W 3  |
| T 4  | 22 52 32 | 11°30'27 | 8♌59  | 19°44 | 20°17 | 4°47  | 0°27  | 3°18  | 0°53 | 18°30  | 20°58  | 20°11  | 20°53 | 21°33 | 21° 2  | T 4  |
| F 5  | 22 56 29 | 12°28'35 | 21° 1 | 21°31 | 21°31 | 5°26  | 0°30  | 3°20  | 0°56 | 18°31  | 20°57  | 19°59  | 20°50 | 21°39 | 20°59  | F 5  |
| S 6  | 23 0 25  | 13°26'45 | 2♍59  | 23°17 | 22°46 | 6° 5  | 0°33  | 3°21  | 0°59 | 18°31  | 20°56  | 19°47  | 20°47 | 21°46 | 20°56  | S 6  |
| S 7  | 23 4 22  | 14°24'57 | 14°52 | 25° 2 | 24° 0 | 6°45  | 0°35  | 3°22  | 1° 2 | 18°32  | 20°55  | 19°34  | 20°44 | 21°53 | 20°53  | S 7  |
| M 8  | 23 8 18  | 15°23'11 | 26°42 | 26°46 | 25°14 | 7°25  | 0°37  | 3°22  | 1° 5 | 18°32  | 20°54  | 19°23  | 20°41 | 21°59 | 20°50  | M 8  |
| T 9  | 23 12 15 | 16°21'26 | 8♌32  | 28°29 | 26°29 | 8° 4  | 0°40  | 3°23  | 1° 7 | 18°33  | 20°52  | 19°14  | 20°37 | 22° 6 | 20°48  | T 9  |
| W10  | 23 16 12 | 17°19'43 | 20°23 | 0♌10  | 27°43 | 8°44  | 0°42  | 3°24  | 1°10 | 18°33  | 20°51  | 19° 8  | 20°34 | 22°13 | 20°45  | W10  |
| T 11 | 23 20 8  | 18°18'01 | 2♍18  | 1°50  | 28°58 | 9°24  | 0°43  | 3°24  | 1°13 | 18°34  | 20°50  | 19° 4  | 20°31 | 22°19 | 20°42  | T 11 |
| F 12 | 23 24 5  | 19°16'21 | 14°20 | 3°29  | 0♌12  | 10° 4 | 0°45  | 3°25  | 1°16 | 18°34  | 20°49  | 19°D 2 | 20°28 | 22°26 | 20°40  | F 12 |
| S 13 | 23 28 1  | 20°14'43 | 26°33 | 5° 7  | 1°26  | 10°44 | 0°46  | 3°25  | 1°19 | 18°34  | 20°47  | 19° 3  | 20°25 | 22°33 | 20°37  | S 13 |
| S 14 | 23 31 58 | 21°13'06 | 9♌1   | 6°44  | 2°41  | 11°25 | 0°48  | 3°25  | 1°23 | 18°35  | 20°46  | 19° 3  | 20°21 | 22°40 | 20°35  | S 14 |
| M15  | 23 35 54 | 22°11'31 | 21°49 | 8°20  | 3°55  | 12° 5 | 0°49  | 3°R25 | 1°26 | 18°35  | 20°45  | 19°R 4 | 20°18 | 22°46 | 20°32  | M15  |
| T 16 | 23 39 51 | 23° 9'58 | 5♌2   | 9°55  | 5°10  | 12°45 | 0°50  | 3°25  | 1°29 | 18°35  | 20°44  | 19° 3  | 20°15 | 22°53 | 20°30  | T 16 |
| W17  | 23 43 47 | 24° 8'26 | 18°42 | 11°28 | 6°24  | 13°26 | 0°50  | 3°25  | 1°32 | 18°35  | 20°43  | 19° 1  | 20°12 | 23° 0 | 20°27  | W17  |
| T 18 | 23 47 44 | 25° 6'56 | 2♌51  | 13° 1 | 7°38  | 14° 6 | 0°51  | 3°25  | 1°35 | 18°35  | 20°41  | 18°56  | 20° 9 | 23° 6 | 20°25  | T 18 |
| F 19 | 23 51 41 | 26° 5'28 | 17°28 | 14°32 | 8°53  | 14°47 | 0°51  | 3°25  | 1°38 | 18°35  | 20°40  | 18°49  | 20° 6 | 23°13 | 20°23  | F 19 |
| S 20 | 23 55 37 | 27° 4'01 | 2♌28  | 16° 3 | 10° 7 | 15°28 | 0°R51 | 3°24  | 1°42 | 18°35  | 20°39  | 18°42  | 20° 2 | 23°20 | 20°20  | S 20 |
| S 21 | 23 59 34 | 28° 2'35 | 17°42 | 17°32 | 11°22 | 16° 9 | 0°51  | 3°24  | 1°45 | 18°R35 | 20°38  | 18°34  | 19°59 | 23°27 | 20°18  | S 21 |
| M22  | 0 3 30   | 29° 1'12 | 3♌0   | 19° 0 | 12°36 | 16°50 | 0°50  | 3°23  | 1°48 | 18°35  | 20°36  | 18°27  | 19°56 | 23°33 | 20°16  | M22  |
| T 23 | 0 7 27   | 29°59'51 | 18°12 | 20°27 | 13°50 | 17°31 | 0°50  | 3°22  | 1°51 | 18°35  | 20°35  | 18°22  | 19°53 | 23°40 | 20°14  | T 23 |
| W24  | 0 11 23  | 0♌58'31  | 3♌7   | 21°54 | 15° 5 | 18°12 | 0°49  | 3°21  | 1°55 | 18°35  | 20°34  | 18°19  | 19°50 | 23°47 | 20°12  | W24  |
| T 25 | 0 15 20  | 1°57'14  | 17°39 | 23°19 | 16°19 | 18°53 | 0°48  | 3°20  | 1°58 | 18°35  | 20°33  | 18°D18 | 19°47 | 23°53 | 20°10  | T 25 |
| F 26 | 0 19 16  | 2°55'59  | 1♍43  | 24°43 | 17°34 | 19°34 | 0°47  | 3°19  | 2° 2 | 18°35  | 20°32  | 18°19  | 19°43 | 24° 0 | 20° 8  | F 26 |
| S 27 | 0 23 13  | 3°54'47  | 15°19 | 26° 5 | 18°48 | 20°15 | 0°45  | 3°18  | 2° 5 | 18°35  | 20°30  | 18°20  | 19°40 | 24° 7 | 20° 6  | S 27 |
| S 28 | 0 27 9   | 4°53'36  | 28°30 | 27°27 | 20° 3 | 20°57 | 0°44  | 3°17  | 2° 8 | 18°35  | 20°29  | 18°21  | 19°37 | 24°13 | 20° 4  | S 28 |
| M29  | 0 31 6   | 5°52'28  | 11♌17 | 28°47 | 21°17 | 21°38 | 0°42  | 3°15  | 2°12 | 18°35  | 20°28  | 18°R21 | 19°34 | 24°20 | 20° 2  | M29  |
| T 30 | 0 35 3   | 6♌51'23  | 23♌46 | 0♍7   | 22♌31 | 22♍20 | 0♍40  | 3♍14  | 2♍15 | 18♍34  | 20♌27  | 18♌20  | 19♌31 | 24♍27 | 20≈ 0  | T 30 |

| Day  | ☉    | ☾     |      | ♂     |      | ♀    |      | ♂     |      | ♂     |       | ♂     |      | ♂     |      | ♂     |      | ♂     |       | ♂     |       | ♂    |      | ♂    |     |
|------|------|-------|------|-------|------|------|------|-------|------|-------|-------|-------|------|-------|------|-------|------|-------|-------|-------|-------|------|------|------|-----|
|      | decl | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat   | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat   | decl | lat  | decl | lat |
| M 1  | 8n21 | 26n46 | 3n21 | 7n35  | 1n30 | 6n36 | 1n25 | 12s49 | 0s24 | 19n 9 | 1 s 5 | 18n43 | 2s 7 | 11s16 | 0n29 | 21n29 | 1s27 | 17s31 | 15s14 | 17n53 | 18n 1 | 7n34 | 7s57 | 6n50 |     |
| T 2  | 7 59 | 26 42 | 4 5  | 6 48  | 1 26 | 6 7  | 1 24 | 13 3  | 0 25 | 19 9  | 1 5   | 18 43 | 2 8  | 11 17 | 0 29 | 21 29 | 1 27 | 17 31 | 15 14 | 17 52 | 18 0  | 7 31 | 7 58 | 6 50 |     |
| W 3  | 7 37 | 25 19 | 4 37 | 6 1   | 1 21 | 5 37 | 1 24 | 13 17 | 0 26 | 19 10 | 1 5   | 18 43 | 2 8  | 11 18 | 0 29 | 21 29 | 1 27 | 17 32 | 15 14 | 17 50 | 17 59 | 7 28 | 7 59 | 6 50 |     |
| T 4  | 6 15 | 22 46 | 4 56 | 5 14  | 1 16 | 5 7  | 1 23 | 13 31 | 0 26 | 19 10 | 1 5   | 18 43 | 2 8  | 11 19 | 0 29 | 21 29 | 1 27 | 17 32 | 15 14 | 17 47 | 17 58 | 7 25 | 8 0  | 6 50 |     |
| F 5  | 6 53 | 19 15 | 5 2  | 4 27  | 1 11 | 4 38 | 1 23 | 13 45 | 0 27 | 19 11 | 1 6   | 18 43 | 2 8  | 11 20 | 0 29 | 21 29 | 1 27 | 17 33 | 15 14 | 17 44 | 17 58 | 7 22 | 8 1  | 6 50 |     |
| S 6  | 6 30 | 14 59 | 4 54 | 3 40  | 1 5  | 4 8  | 1 22 | 13 59 | 0 28 | 19 11 | 1 6   | 18 43 | 2 8  | 11 21 | 0 29 | 21 29 | 1 27 | 17 34 | 15 15 | 17 41 | 17 57 | 7 19 | 8 2  | 6 49 |     |
| S 7  | 6 8  | 10 10 | 4 33 | 2 53  | 1 0  | 3 38 | 1 21 | 14 13 | 0 28 | 19 12 | 1 6   | 18 43 | 2 8  | 11 22 | 0 29 | 21 29 | 1 27 | 17 34 | 15 15 | 17 37 | 17 56 | 7 16 | 8 3  | 6 49 |     |
| M 8  | 5 46 | 5 0   | 4 1  | 2 6   | 0 54 | 3 7  | 1 20 | 14 26 | 0 29 | 19 12 | 1 6   | 18 43 | 2 9  | 11 23 | 0 29 | 21 29 | 1 27 | 17 35 | 15 15 | 17 34 | 17 55 | 7 13 | 8 5  | 6 49 |     |
| T 9  | 5 23 | 0s21  | 3 18 | 1 20  | 0 47 | 2 37 | 1 20 | 14 40 | 0 30 | 19 12 | 1 6   | 18 43 | 2 9  | 11 24 | 0 29 | 21 29 | 1 28 | 17 35 | 15 15 | 17 32 | 17 54 | 7 10 | 8 6  | 6 49 |     |
| W10  | 5 0  | 5 42  | 2 27 | 0 33  | 0 41 | 2 7  | 1 19 | 14 53 | 0 30 | 19 13 | 1 6   | 18 43 | 2 9  | 11 25 | 0 29 | 21 29 | 1 28 | 17 36 | 15 15 | 17 30 | 17 53 | 7 7  | 8 7  | 6 48 |     |
| T 11 | 4 38 | 10 53 | 1 28 | 0s13  | 0 34 | 1 36 | 1 18 | 15 7  | 0 31 | 19 13 | 1 6   | 18 43 | 2 9  | 11 26 | 0 29 | 21 29 | 1 28 | 17 36 | 15 15 | 17 29 | 17 52 | 7 4  | 8 8  | 6 48 |     |
| F 12 | 4 15 | 15 44 | 0 25 | 0 58  | 0 27 | 1 6  | 1 17 | 15 20 | 0 32 | 19 13 | 1 6   | 18 43 | 2 9  | 11 27 | 0 29 | 21 29 | 1 28 | 17 37 | 15 15 | 17 29 | 17 52 | 7 1  | 8 9  | 6 48 |     |
| S 13 | 3 52 | 20 2  | 0s40 | 1 44  | 0 20 | 0 35 | 1 16 | 15 33 | 0 32 | 19 13 | 1 7   | 18 43 | 2 10 | 11 29 | 0 29 | 21 29 | 1 28 | 17 37 | 15 15 | 17 29 | 17 51 | 6 58 | 8 10 | 6 48 |     |
| S 14 | 3 29 | 23 31 | 1 45 | 2 29  | 0 13 | 0 5  | 1 15 | 15 46 | 0 33 | 19 13 | 1 7   | 18 43 | 2 10 | 11 30 | 0 29 | 21 29 | 1 28 | 17 38 | 15 15 | 17 29 | 17 50 | 6 55 | 8 11 | 6 47 |     |
| M15  | 3 6  | 25 57 | 2 46 | 3 13  | 0 6  | 0s26 | 1 13 | 15 59 | 0 34 | 19 13 | 1 7   | 18 42 | 2 10 | 11 31 | 0 29 | 21 29 | 1 28 | 17 38 | 15 15 | 17 29 | 17 49 | 6 51 | 8 12 | 6 47 |     |
| T 16 | 2 43 | 27 1  | 3 41 | 3 57  | 0s 2 | 0 57 | 1 12 | 16 12 | 0 34 | 19 14 | 1 7   | 18 42 | 2 10 | 11 32 | 0 29 | 21 29 | 1 28 | 17 39 | 15 15 | 17 29 | 17 48 | 6 48 | 8 13 | 6 47 |     |
| W17  | 2 20 | 26 30 | 4 25 | 4 41  | 0 9  | 1 27 | 1 11 | 16 25 | 0 35 | 19 14 | 1 7   | 18 42 | 2 10 | 11 33 | 0 29 | 21 29 | 1 28 | 17 39 | 15 15 | 17 28 | 17 47 | 6 45 | 8 14 | 6 46 |     |
| T 18 | 1 56 | 24 17 | 4 55 | 5 24  | 0 17 | 1 58 | 1 9  | 16 38 | 0 36 | 19 13 | 1 7   | 18 42 | 2 10 | 11 34 | 0 29 | 21 29 | 1 28 | 17 40 | 15 15 | 17 27 | 17 47 | 6 42 | 8 15 | 6 46 |     |
| F 19 | 1 33 | 20 27 | 5 6  | 6 6   | 0 24 | 2 29 | 1 8  | 16 51 | 0 36 | 19 13 | 1 7   | 18 42 | 2 11 | 11 35 | 0 29 | 21 29 | 1 28 | 17 40 | 15 15 | 17 25 | 17 46 | 6 39 | 8 16 | 6 46 |     |
| S 20 | 1 10 | 15 13 | 4 58 | 6 48  | 0 32 | 2 59 | 1 6  | 17 3  | 0 37 | 19 13 | 1 8   | 18 41 | 2 11 | 11 36 | 0 29 | 21 29 | 1 28 | 17 41 | 15 15 | 17 23 | 17 45 | 6 36 | 8 17 | 6 46 |     |
| S 21 | 0 47 | 8 58  | 4 28 | 7 30  | 0 40 | 3 30 | 1 5  | 17 16 | 0 37 | 19 13 | 1 8   | 18 41 | 2 11 | 11 38 | 0 29 | 21 29 | 1 28 | 17 41 | 15 15 | 17 21 | 17 44 | 6 33 | 8 18 | 6 45 |     |
| M22  | 0 23 | 2 9   | 3 39 | 8 10  | 0 47 | 4 0  | 1 3  | 17 28 | 0 38 | 19 13 | 1 8   | 18 41 | 2 11 | 11 39 | 0 29 | 21 29 | 1 28 | 17 42 | 15 15 | 17 19 | 17 43 | 6 30 | 8 19 | 6 45 |     |
| T 23 | 0 0  | 4n45  | 2 35 | 8 50  | 0 55 | 4 31 | 1 2  | 17 40 | 0 39 | 19 13 | 1 8   | 18 41 | 2 11 | 11 40 | 0 29 | 21 29 | 1 28 | 17 42 | 15 15 | 17 18 | 17 42 | 6 27 | 8 20 | 6 45 |     |
| W24  | 0s23 | 11 17 | 1 21 | 9 30  | 1 3  | 5 1  | 1 0  | 17 52 | 0 39 | 19 12 | 1 8   | 18 40 | 2 11 | 11 41 | 0 29 | 21 29 | 1 28 | 17 43 | 15 15 | 17 17 | 17 41 | 6 24 | 8 21 | 6 44 |     |
| T 25 | 0 47 | 17 2  | 0 4  | 10 9  | 1 10 | 5 31 | 0 58 | 18 4  | 0 40 | 19 12 | 1 8   | 18 40 | 2 12 | 11 42 | 0 29 | 21 29 | 1 28 | 17 43 | 15 15 | 17 16 | 17 41 | 6 20 | 8 22 | 6 44 |     |
| F 26 | 1 10 | 21 40 | 1n12 | 10 47 | 1 18 | 6 1  | 0 56 | 18 16 | 0 40 | 19 12 | 1 8   | 18 39 | 2 12 | 11 43 | 0 29 | 21 29 | 1 28 | 17 43 | 15 15 | 17 17 | 17 40 | 6 17 | 8 23 | 6 43 |     |
| S 27 | 1 33 | 24 58 | 2 21 | 11 24 | 1 25 | 6 31 | 0 55 | 18 28 | 0 41 | 19 11 | 1 8   | 18 39 | 2 12 | 11 45 | 0 29 | 21 29 | 1 28 | 17 44 | 15 15 | 17 17 | 17 39 | 6 14 | 8 24 | 6 43 |     |
| S 28 | 1 57 | 26 46 | 3 20 | 12 0  | 1 33 | 7 1  | 0 53 | 18 39 | 0 41 | 19 11 | 1 8   | 18 39 | 2 12 | 11 46 | 0 29 | 21 29 | 1 28 | 17 44 | 15 15 | 17 17 | 17 38 | 6 11 | 8 25 | 6 43 |     |
| M29  | 2 20 | 27 4  | 4 8  | 12 36 | 1 40 | 7 31 | 0 51 | 18 51 | 0 42 | 19 10 | 1 9   | 18 38 | 2 12 | 11 47 | 0 29 | 21 28 | 1 28 | 17 45 | 15 15 | 17 17 | 17 37 | 6 8  | 8 26 | 6 42 |     |
| T 30 | 2s43 | 25n58 | 4n42 | 13s11 | 1s48 | 8s 0 | 0n49 | 19s 2 | 0s43 | 19n10 | 1 s 9 | 18n38 | 2s12 | 11s48 | 0n29 | 21n28 | 1s28 | 17s45 | 15s14 | 17n17 | 17n36 | 6n 5 | 8s27 | 6n42 |     |

ASTRODIENST EPHEMERIS for the year 2059  
geocentric

OCTOBER 2059

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♀      | ♂     | ♂     | ♂     | ♂     | ♂    | ♂      | ♂      | ♂      | ♂     | ♂     | ♂      | Day  |
|------|---------|----------|-------|--------|-------|-------|-------|-------|------|--------|--------|--------|-------|-------|--------|------|
| W 1  | 0 38 59 | 7♂50'19  | 6♂1   | 1♂24   | 23♂46 | 23♂1  | 0°R38 | 3°R12 | 2♂19 | 18°R34 | 20°R26 | 18°R16 | 19♂27 | 24♂33 | 19°R58 | W 1  |
| T 2  | 0 42 56 | 8°49'18  | 18° 4 | 2°41   | 25° 0 | 23°43 | 0♂35  | 3♂10  | 2°22 | 18♂34  | 20♂25  | 18♂11  | 19°24 | 24°40 | 19°57  | T 2  |
| F 3  | 0 46 52 | 9°48'19  | 0♂1   | 3°56   | 26°15 | 24°25 | 0°33  | 3° 8  | 2°26 | 18°33  | 20°23  | 18° 5  | 19°21 | 24°47 | 19°55  | F 3  |
| S 4  | 0 50 49 | 10°47'22 | 11°53 | 5° 9   | 27°29 | 25° 7 | 0°30  | 3° 6  | 2°30 | 18°33  | 20°22  | 17°58  | 19°18 | 24°54 | 19°53  | S 4  |
| S 5  | 0 54 45 | 11°46'27 | 23°44 | 6°21   | 28°44 | 25°49 | 0°27  | 3° 4  | 2°33 | 18°32  | 20°21  | 17°51  | 19°15 | 25° 0 | 19°52  | S 5  |
| M 6  | 0 58 42 | 12°45'35 | 5♂34  | 7°31   | 29°58 | 26°31 | 0°24  | 3° 2  | 2°37 | 18°32  | 20°20  | 17°44  | 19°12 | 25° 7 | 19°50  | M 6  |
| T 7  | 1 2 38  | 13°44'44 | 17°27 | 8°40   | 1♂12  | 27°13 | 0°20  | 3° 0  | 2°40 | 18°32  | 20°19  | 17°39  | 19° 8 | 25°14 | 19°49  | T 7  |
| W 8  | 1 6 35  | 14°43'55 | 29°24 | 9°46   | 2°27  | 27°55 | 0°17  | 2°58  | 2°44 | 18°31  | 20°18  | 17°36  | 19° 5 | 25°20 | 19°48  | W 8  |
| T 9  | 1 10 32 | 15°43'09 | 11♂27 | 10°50  | 3°41  | 28°38 | 0°13  | 2°55  | 2°48 | 18°30  | 20°17  | 17°35  | 19° 2 | 25°27 | 19°46  | T 9  |
| F 10 | 1 14 28 | 16°42'24 | 23°38 | 11°52  | 4°56  | 29°20 | 0° 9  | 2°53  | 2°51 | 18°30  | 20°16  | 17°D35 | 18°59 | 25°34 | 19°45  | F 10 |
| S 11 | 1 18 25 | 17°41'42 | 5♂59  | 12°51  | 6°10  | 0♂3   | 0° 5  | 2°50  | 2°55 | 18°29  | 20°15  | 17°36  | 18°56 | 25°40 | 19°44  | S 11 |
| S 12 | 1 22 21 | 18°41'01 | 18°34 | 13°47  | 7°25  | 0°45  | 0° 1  | 2°47  | 2°59 | 18°29  | 20°14  | 17°37  | 18°53 | 25°47 | 19°43  | S 12 |
| M13  | 1 26 18 | 19°40'22 | 1♂25  | 14°41  | 8°39  | 1°28  | 29♂56 | 2°45  | 3° 2 | 18°28  | 20°12  | 17°39  | 18°49 | 25°54 | 19°42  | M13  |
| T 14 | 1 30 14 | 20°39'45 | 14°37 | 15°31  | 9°53  | 2°11  | 29°52 | 2°42  | 3° 6 | 18°27  | 20°11  | 17°R40 | 18°46 | 26° 1 | 19°41  | T 14 |
| W15  | 1 34 11 | 21°39'10 | 28°10 | 16°17  | 11° 8 | 2°53  | 29°47 | 2°39  | 3°10 | 18°26  | 20°10  | 17°40  | 18°43 | 26° 7 | 19°40  | W15  |
| T 16 | 1 38 7  | 22°38'36 | 12♂8  | 17° 0  | 12°22 | 3°36  | 29°42 | 2°36  | 3°13 | 18°26  | 20° 9  | 17°39  | 18°40 | 26°14 | 19°39  | T 16 |
| F 17 | 1 42 4  | 23°38'04 | 26°29 | 17°37  | 13°37 | 4°19  | 29°36 | 2°32  | 3°17 | 18°25  | 20° 8  | 17°36  | 18°37 | 26°21 | 19°38  | F 17 |
| S 18 | 1 46 1  | 24°37'34 | 11♂11 | 18°11  | 14°51 | 5° 2  | 29°31 | 2°29  | 3°21 | 18°24  | 20° 7  | 17°34  | 18°33 | 26°27 | 19°37  | S 18 |
| S 19 | 1 49 57 | 25°37'05 | 26° 8 | 18°38  | 16° 5 | 5°45  | 29°26 | 2°26  | 3°25 | 18°23  | 20° 6  | 17°31  | 18°30 | 26°34 | 19°36  | S 19 |
| M20  | 1 53 54 | 26°36'38 | 11♂19 | 19° 0  | 17°20 | 6°28  | 29°20 | 2°22  | 3°28 | 18°22  | 20° 6  | 17°28  | 18°27 | 26°41 | 19°36  | M20  |
| T 21 | 1 57 50 | 27°36'13 | 26°17 | 19°16  | 18°34 | 7°11  | 29°14 | 2°19  | 3°32 | 18°21  | 20° 5  | 17°26  | 18°24 | 26°47 | 19°35  | T 21 |
| W22  | 2 1 47  | 28°35'51 | 11♂10 | 19°25  | 19°49 | 7°55  | 29° 8 | 2°15  | 3°36 | 18°20  | 20° 4  | 17°D25 | 18°21 | 26°54 | 19°35  | W22  |
| T 23 | 2 5 43  | 29°35'30 | 25°45 | 19°R26 | 21° 3 | 8°38  | 29° 2 | 2°12  | 3°40 | 18°19  | 20° 3  | 17°25  | 18°18 | 27° 1 | 19°34  | T 23 |
| F 24 | 2 9 40  | 0♂35'12  | 9♂56  | 19°19  | 22°17 | 9°22  | 28°56 | 2° 8  | 3°43 | 18°18  | 20° 2  | 17°26  | 18°14 | 27° 7 | 19°34  | F 24 |
| S 25 | 2 13 36 | 1°34'55  | 23°41 | 19° 4  | 23°32 | 10° 5 | 28°49 | 2° 4  | 3°47 | 18°17  | 20° 1  | 17°27  | 18°11 | 27°14 | 19°34  | S 25 |
| S 26 | 2 17 33 | 2°34'42  | 6♂59  | 18°39  | 24°46 | 10°49 | 28°43 | 2° 0  | 3°51 | 18°16  | 20° 0  | 17°28  | 18° 8 | 27°21 | 19°33  | S 26 |
| M27  | 2 21 30 | 3°34'30  | 19°53 | 18° 6  | 26° 0 | 11°32 | 28°36 | 1°56  | 3°55 | 18°15  | 19°59  | 17°29  | 18° 5 | 27°28 | 19°33  | M27  |
| T 28 | 2 25 26 | 4°34'20  | 2♂26  | 17°24  | 27°15 | 12°16 | 28°29 | 1°52  | 3°58 | 18°14  | 19°58  | 17°R30 | 18° 2 | 27°34 | 19°33  | T 28 |
| W29  | 2 29 23 | 5°34'13  | 14°41 | 16°33  | 28°29 | 13° 0 | 28°23 | 1°48  | 4° 2 | 18°13  | 19°58  | 17°30  | 17°59 | 27°41 | 19°D33 | W29  |
| T 30 | 2 33 19 | 6°34'08  | 26°44 | 15°34  | 29°43 | 13°44 | 28°16 | 1°44  | 4° 6 | 18°12  | 19°57  | 17°29  | 17°55 | 27°48 | 19°33  | T 30 |
| F 31 | 2 37 16 | 7♂34'05  | 8♂38  | 14♂27  | 0♂58  | 14♂28 | 28♂8  | 1♂40  | 4♂10 | 18♂11  | 19♂56  | 17♂28  | 17♂52 | 27♂54 | 19°33  | F 31 |

| Day  | ☉     | ☽        | ♀        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        |
|------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|      | decl  | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat |
| W 1  | 3s 7  | 23n39    | 5n 3     | 13s45    | 1s55     | 8s30     | 0n47     | 19s13    | 0s43     | 19n 9    | 1s 9     | 18n37    | 2s13     | 11s49    | 0n29     | 21n28    |
| T 2  | 3 30  | 20 19    | 5 10     | 14 18    | 2 2      | 8 59     | 0 45     | 19 24    | 0 44     | 19 9     | 1 9      | 18 37    | 2 13     | 11 51    | 0 29     | 21 28    |
| F 3  | 3 53  | 16 11    | 5 3      | 14 50    | 2 9      | 9 28     | 0 42     | 19 35    | 0 44     | 19 8     | 1 9      | 18 36    | 2 13     | 11 52    | 0 29     | 21 28    |
| S 4  | 4 16  | 11 28    | 4 43     | 15 22    | 2 15     | 9 57     | 0 40     | 19 46    | 0 45     | 19 7     | 1 9      | 18 36    | 2 13     | 11 53    | 0 29     | 21 28    |
| S 5  | 4 39  | 6 20     | 4 12     | 15 52    | 2 22     | 10 26    | 0 38     | 19 56    | 0 45     | 19 7     | 1 9      | 18 35    | 2 13     | 11 54    | 0 29     | 21 28    |
| M 6  | 5 2   | 0 59     | 3 29     | 16 21    | 2 28     | 10 54    | 0 36     | 20 7     | 0 46     | 19 6     | 1 9      | 18 35    | 2 13     | 11 56    | 0 29     | 21 28    |
| T 7  | 5 25  | 4s26     | 2 37     | 16 49    | 2 34     | 11 22    | 0 34     | 20 17    | 0 46     | 19 5     | 1 9      | 18 34    | 2 13     | 11 57    | 0 29     | 21 28    |
| W 8  | 5 48  | 9 44     | 1 38     | 17 16    | 2 40     | 11 50    | 0 31     | 20 27    | 0 47     | 19 4     | 1 9      | 18 34    | 2 14     | 11 58    | 0 29     | 21 28    |
| T 9  | 6 11  | 14 44    | 0 33     | 17 41    | 2 45     | 12 17    | 0 29     | 20 37    | 0 47     | 19 4     | 1 9      | 18 33    | 2 14     | 11 59    | 0 29     | 21 28    |
| F 10 | 6 34  | 19 13    | 0s33     | 18 6     | 2 50     | 12 45    | 0 27     | 20 47    | 0 48     | 19 3     | 1 10     | 18 32    | 2 14     | 12 1     | 0 29     | 21 28    |
| S 11 | 6 57  | 22 56    | 1 39     | 18 28    | 2 55     | 13 12    | 0 24     | 20 57    | 0 48     | 19 2     | 1 10     | 18 32    | 2 14     | 12 2     | 0 29     | 21 28    |
| S 12 | 7 19  | 25 38    | 2 42     | 18 50    | 3 0      | 13 38    | 0 22     | 21 6     | 0 49     | 19 1     | 1 10     | 18 31    | 2 14     | 12 3     | 0 29     | 21 27    |
| M13  | 7 42  | 27 3     | 3 38     | 19 9     | 3 4      | 14 5     | 0 19     | 21 15    | 0 49     | 19 0     | 1 10     | 18 31    | 2 14     | 12 4     | 0 29     | 21 27    |
| T 14 | 8 4   | 27 0     | 4 24     | 19 28    | 3 7      | 14 31    | 0 17     | 21 24    | 0 50     | 18 59    | 1 10     | 18 30    | 2 14     | 12 6     | 0 29     | 21 27    |
| W15  | 8 26  | 25 22    | 4 56     | 19 44    | 3 10     | 14 56    | 0 14     | 21 33    | 0 50     | 18 58    | 1 10     | 18 29    | 2 14     | 12 7     | 0 29     | 21 27    |
| T 16 | 8 48  | 22 9     | 5 13     | 19 58    | 3 12     | 15 22    | 0 12     | 21 42    | 0 51     | 18 56    | 1 10     | 18 28    | 2 15     | 12 8     | 0 29     | 21 27    |
| F 17 | 9 10  | 17 33    | 5 11     | 20 11    | 3 13     | 15 46    | 0 9      | 21 51    | 0 51     | 18 55    | 1 10     | 18 28    | 2 15     | 12 10    | 0 29     | 21 27    |
| S 18 | 9 32  | 11 49    | 4 48     | 20 21    | 3 14     | 16 11    | 0 7      | 21 59    | 0 52     | 18 54    | 1 10     | 18 27    | 2 15     | 12 11    | 0 29     | 21 27    |
| S 19 | 9 54  | 5 18     | 4 6      | 20 28    | 3 14     | 16 35    | 0 4      | 22 7     | 0 52     | 18 53    | 1 10     | 18 26    | 2 15     | 12 12    | 0 29     | 21 27    |
| M20  | 10 16 | 1n35     | 3 6      | 20 34    | 3 13     | 16 59    | 0 1      | 22 15    | 0 53     | 18 52    | 1 10     | 18 25    | 2 15     | 12 13    | 0 29     | 21 27    |
| T 21 | 10 37 | 8 22     | 1 54     | 20 36    | 3 11     | 17 22    | 0s 1     | 22 23    | 0 53     | 18 50    | 1 10     | 18 25    | 2 15     | 12 15    | 0 29     | 21 26    |
| W22  | 10 58 | 14 38    | 0 34     | 20 35    | 3 8      | 17 45    | 0 4      | 22 30    | 0 54     | 18 49    | 1 10     | 18 24    | 2 15     | 12 16    | 0 29     | 21 26    |
| T 23 | 11 20 | 19 56    | 0n46     | 20 31    | 3 3      | 18 7     | 0 7      | 22 38    | 0 54     | 18 48    | 1 10     | 18 23    | 2 15     | 12 17    | 0 29     | 21 26    |
| F 24 | 11 40 | 23 56    | 2 1      | 20 23    | 2 57     | 18 29    | 0 9      | 22 45    | 0 54     | 18 46    | 1 10     | 18 22    | 2 15     | 12 18    | 0 28     | 21 26    |
| S 25 | 12 1  | 26 24    | 3 7      | 20 12    | 2 50     | 18 50    | 0 12     | 22 52    | 0 55     | 18 45    | 1 10     | 18 22    | 2 15     | 12 20    | 0 28     | 21 26    |
| S 26 | 12 22 | 27 16    | 4 1      | 19 56    | 2 40     | 19 11    | 0 14     | 22 58    | 0 55     | 18 43    | 1 10     | 18 21    | 2 15     | 12 21    | 0 28     | 21 26    |
| M27  | 12 42 | 26 35    | 4 41     | 19 37    | 2 30     | 19 32    | 0 17     | 23 5     | 0 56     | 18 42    | 1 10     | 18 20    | 2 16     | 12 22    | 0 28     | 21 26    |
| T 28 | 13 2  | 24 34    | 5 6      | 19 13    | 2 17     | 19 52    | 0 20     | 23 11    | 0 56     | 18 41    | 1 10     | 18 19    | 2 16     | 12 24    | 0 28     | 21 26    |
| W29  | 13 23 | 21 28    | 5 16     | 18 44    | 2 3      | 20 11    | 0 22     | 23 17    | 0 56     | 18 39    | 1 10     | 18 18    | 2 16     | 12 25    | 0 28     | 21 26    |
| T 30 | 13 42 | 17 29    | 5 12     | 18 12    | 1 47     | 20 30    | 0 25     | 23 23    | 0 57     | 18 37    | 1 10     | 18 17    | 2 16     | 12 26    | 0 28     | 21 25    |
| F 31 | 14s 2 | 12n53    | 4n55     | 17s36    | 1s29     | 20s48    | 0s28     | 23s29    | 0s57     | 18n36    | 1s10     | 18n16    | 2s16     | 12s27    | 0n28     | 21n25    |

Julian Day Number = 2473367.5, Delta T = 77.56 sec  
Ecliptic obliquity = 23°26'00, Nutation = - 0°00'13, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 25°34'30, Lahiri = 24°41'30

# ASTRODIENST EPHEMERIS for the year 2059

## geocentric

NOVEMBER 2059

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♀      | ♂     | ♂     | ♂      | ♂     | ♂    | ♂      | ♂      | ♂      | ♂     | ♂     | ♂     | Day  |
|------|---------|----------|-------|--------|-------|-------|--------|-------|------|--------|--------|--------|-------|-------|-------|------|
| S 1  | 2 41 12 | 8♈34'04  | 20♏29 | 13°R15 | 2♈12  | 15♈12 | 28°R 1 | 1°R36 | 4♈14 | 18°R 9 | 19°R55 | 17°R26 | 17♏49 | 28♏1  | 19♏33 | S 1  |
| S 2  | 2 45 9  | 9°34'05  | 2♏19  | 11♈59  | 3°26  | 15°56 | 27♏54  | 1♈31  | 4°17 | 18♈8   | 19♏55  | 17♏25  | 17°46 | 28°8  | 19°33 | S 2  |
| M 3  | 2 49 5  | 10°34'08 | 14°12 | 10°41  | 4°41  | 16°40 | 27°46  | 1°27  | 4°21 | 18°7   | 19°54  | 17°24  | 17°43 | 28°14 | 19°34 | M 3  |
| T 4  | 2 53 2  | 11°34'13 | 26°10 | 9°24   | 5°55  | 17°24 | 27°39  | 1°23  | 4°25 | 18°6   | 19°53  | 17°23  | 17°39 | 28°21 | 19°34 | T 4  |
| W 5  | 2 56 59 | 12°34'20 | 8♈17  | 8°10   | 7°9   | 18°8  | 27°31  | 1°18  | 4°29 | 18°4   | 19°53  | 17°23  | 17°36 | 28°28 | 19°34 | W 5  |
| T 6  | 3 0 55  | 13°34'29 | 20°32 | 7°1    | 8°24  | 18°53 | 27°23  | 1°14  | 4°32 | 18°3   | 19°52  | 17°D23 | 17°33 | 28°34 | 19°35 | T 6  |
| F 7  | 3 4 52  | 14°34'40 | 2♈59  | 6°0    | 9°38  | 19°37 | 27°16  | 1°9   | 4°36 | 18°2   | 19°51  | 17°23  | 17°30 | 28°41 | 19°35 | F 7  |
| S 8  | 3 8 48  | 15°34'53 | 15°37 | 5°8    | 10°52 | 20°22 | 27°8   | 1°4   | 4°40 | 18°0   | 19°51  | 17°23  | 17°27 | 28°48 | 19°36 | S 8  |
| S 9  | 3 12 45 | 16°35'07 | 28°28 | 4°27   | 12°6  | 21°6  | 27°0   | 1°0   | 4°43 | 17°59  | 19°50  | 17°23  | 17°24 | 28°55 | 19°36 | S 9  |
| M10  | 3 16 41 | 17°35'23 | 11♏34 | 3°57   | 13°21 | 21°51 | 26°52  | 0°55  | 4°47 | 17°58  | 19°50  | 17°R23 | 17°20 | 29°1  | 19°37 | M10  |
| T 11 | 3 20 38 | 18°35'40 | 24°54 | 3°38   | 14°35 | 22°35 | 26°44  | 0°50  | 4°51 | 17°56  | 19°49  | 17°23  | 17°17 | 29°8  | 19°38 | T 11 |
| W12  | 3 24 34 | 19°35'59 | 8♏30  | 3°D32  | 15°49 | 23°20 | 26°36  | 0°46  | 4°55 | 17°55  | 19°49  | 17°23  | 17°14 | 29°15 | 19°39 | W12  |
| T 13 | 3 28 31 | 20°36'19 | 22°21 | 3°36   | 17°4  | 24°5  | 26°28  | 0°41  | 4°58 | 17°53  | 19°48  | 17°D23 | 17°11 | 29°21 | 19°40 | T 13 |
| F 14 | 3 32 28 | 21°36'41 | 6♈29  | 3°51   | 18°18 | 24°50 | 26°20  | 0°36  | 5°2  | 17°52  | 19°48  | 17°23  | 17°8  | 29°28 | 19°41 | F 14 |
| S 15 | 3 36 24 | 22°37'03 | 20°50 | 4°16   | 19°32 | 25°35 | 26°11  | 0°31  | 5°6  | 17°50  | 19°47  | 17°24  | 17°4  | 29°35 | 19°42 | S 15 |
| S 16 | 3 40 21 | 23°37'27 | 5♈23  | 4°50   | 20°46 | 26°20 | 26°3   | 0°26  | 5°9  | 17°49  | 19°47  | 17°24  | 17°1  | 29°41 | 19°43 | S 16 |
| M17  | 3 44 17 | 24°37'53 | 20°2  | 5°33   | 22°0  | 27°5  | 25°55  | 0°22  | 5°13 | 17°47  | 19°46  | 17°25  | 16°58 | 29°48 | 19°44 | M17  |
| T 18 | 3 48 14 | 25°38'20 | 4♈42  | 6°22   | 23°15 | 27°50 | 25°47  | 0°17  | 5°16 | 17°46  | 19°46  | 17°25  | 16°55 | 29°55 | 19°45 | T 18 |
| W19  | 3 52 10 | 26°38'48 | 19°17 | 7°18   | 24°29 | 28°35 | 25°39  | 0°12  | 5°20 | 17°44  | 19°45  | 17°R26 | 16°52 | 0♏1   | 19°47 | W19  |
| T 20 | 3 56 7  | 27°39'18 | 3♈40  | 8°19   | 25°43 | 29°20 | 25°31  | 0°7   | 5°24 | 17°43  | 19°45  | 17°25  | 16°49 | 0°8   | 19°48 | T 20 |
| F 21 | 4 0 3   | 28°39'50 | 17°46 | 9°25   | 26°57 | 0♏5   | 25°22  | 0°2   | 5°27 | 17°41  | 19°45  | 17°24  | 16°45 | 0°15  | 19°49 | F 21 |
| S 22 | 4 4 0   | 29°40'23 | 1♏31  | 10°35  | 28°11 | 0°51  | 25°14  | 29♏57 | 5°31 | 17°40  | 19°45  | 17°23  | 16°42 | 0°21  | 19°51 | S 22 |
| S 23 | 4 7 57  | 0♏40'58  | 14°52 | 11°49  | 29°25 | 1°36  | 25°6   | 29°52 | 5°34 | 17°38  | 19°44  | 17°21  | 16°39 | 0°28  | 19°52 | S 23 |
| M24  | 4 11 53 | 1°41'35  | 27°51 | 13°6   | 0♏39  | 2°21  | 24°58  | 29°47 | 5°38 | 17°36  | 19°44  | 17°19  | 16°36 | 0°35  | 19°54 | M24  |
| T 25 | 4 15 50 | 2°42'13  | 10♏28 | 14°25  | 1°54  | 3°7   | 24°50  | 29°43 | 5°41 | 17°35  | 19°44  | 17°17  | 16°33 | 0°42  | 19°56 | T 25 |
| W26  | 4 19 46 | 3°42'53  | 22°47 | 15°47  | 3°8   | 3°52  | 24°42  | 29°38 | 5°45 | 17°33  | 19°44  | 17°16  | 16°30 | 0°48  | 19°57 | W26  |
| T 27 | 4 23 43 | 4°43'34  | 4♈52  | 17°11  | 4°22  | 4°38  | 24°34  | 29°33 | 5°48 | 17°31  | 19°43  | 17°D16 | 16°26 | 0°55  | 19°59 | T 27 |
| F 28 | 4 27 39 | 5°44'17  | 16°47 | 18°36  | 5°36  | 5°24  | 24°26  | 29°28 | 5°51 | 17°30  | 19°43  | 17°16  | 16°23 | 1°2   | 20°1  | F 28 |
| S 29 | 4 31 36 | 6°45'01  | 28°37 | 20°3   | 6°50  | 6°9   | 24°18  | 29°23 | 5°55 | 17°28  | 19°43  | 17°17  | 16°20 | 1°8   | 20°3  | S 29 |
| S 30 | 4 35 32 | 7♈45'47  | 10♏27 | 21♈30  | 8♏4   | 6♏55  | 24♏11  | 29♏18 | 5♈58 | 17♈26  | 19♏43  | 17♏19  | 16♏17 | 1♏15  | 20♏5  | S 30 |

| Day  | ☉     | ☾     |      | ♀     |      | ♀     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |       | ♂     |       | ♂    |      | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|-------|------|------|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat   | decl | lat  | decl | lat |
| S 1  | 14s21 | 7n50  | 4n26 | 16s56 | 1s11 | 21s 6 | 0s30 | 23s34 | 0s58 | 18n34 | 1s10 | 18n15 | 2s16 | 12s29 | 0n28 | 21n25 | 1s30 | 17s53 | 15s 9 | 17n 2 | 17n 8 | 4n24 | 8s48 | 6n28 |     |
| S 2  | 14 40 | 2 31  | 3 45 | 16 14 | 0 51 | 21 23 | 0 33 | 23 39 | 0 58 | 18 33 | 1 10 | 18 15 | 2 16 | 12 30 | 0 28 | 21 25 | 1 30 | 17 53 | 15 9  | 17 2  | 17 7  | 4 21 | 8 48 | 6 28 |     |
| M 3  | 14 59 | 2s56  | 2 54 | 15 30 | 0 30 | 21 39 | 0 36 | 23 44 | 0 58 | 18 31 | 1 10 | 18 14 | 2 16 | 12 31 | 0 28 | 21 25 | 1 30 | 17 53 | 15 9  | 17 1  | 17 7  | 4 18 | 8 49 | 6 27 |     |
| T 4  | 15 18 | 8 19  | 1 55 | 14 46 | 0 10 | 21 55 | 0 38 | 23 49 | 0 59 | 18 29 | 1 10 | 18 13 | 2 16 | 12 33 | 0 28 | 21 25 | 1 30 | 17 53 | 15 8  | 17 1  | 17 6  | 4 14 | 8 49 | 6 27 |     |
| W 5  | 15 36 | 13 28 | 0 50 | 14 3  | 0n11 | 22 10 | 0 41 | 23 53 | 0 59 | 18 28 | 1 10 | 18 12 | 2 16 | 12 34 | 0 28 | 21 25 | 1 30 | 17 53 | 15 8  | 17 1  | 17 5  | 4 11 | 8 49 | 6 27 |     |
| T 6  | 15 55 | 18 10 | 0s18 | 13 22 | 0 31 | 22 25 | 0 44 | 23 57 | 0 59 | 18 26 | 1 10 | 18 11 | 2 16 | 12 35 | 0 28 | 21 24 | 1 30 | 17 53 | 15 8  | 17 1  | 17 4  | 4 8  | 8 49 | 6 26 |     |
| F 7  | 16 12 | 22 9  | 1 26 | 12 44 | 0 49 | 22 39 | 0 46 | 24 1  | 1 0  | 18 24 | 1 10 | 18 10 | 2 16 | 12 36 | 0 28 | 21 24 | 1 30 | 17 53 | 15 8  | 17 1  | 17 3  | 4 5  | 8 50 | 6 26 |     |
| S 8  | 16 30 | 25 9  | 2 30 | 12 11 | 1 7  | 22 52 | 0 49 | 24 5  | 1 0  | 18 23 | 1 10 | 18 9  | 2 16 | 12 38 | 0 28 | 21 24 | 1 30 | 17 53 | 15 7  | 17 1  | 17 2  | 4 2  | 8 50 | 6 25 |     |
| S 9  | 16 47 | 26 54 | 3 29 | 11 42 | 1 22 | 23 5  | 0 51 | 24 8  | 1 0  | 18 21 | 1 10 | 18 8  | 2 16 | 12 39 | 0 28 | 21 24 | 1 30 | 17 53 | 15 7  | 17 1  | 17 1  | 3 58 | 8 50 | 6 25 |     |
| M10  | 17 4  | 27 12 | 4 18 | 11 19 | 1 36 | 23 17 | 0 54 | 24 12 | 1 1  | 18 19 | 1 10 | 18 7  | 2 16 | 12 40 | 0 28 | 21 24 | 1 30 | 17 53 | 15 7  | 17 1  | 17 0  | 3 55 | 8 50 | 6 24 |     |
| T 11 | 17 21 | 25 57 | 4 53 | 11 2  | 1 48 | 23 28 | 0 56 | 24 14 | 1 1  | 18 17 | 1 10 | 18 6  | 2 16 | 12 41 | 0 28 | 21 24 | 1 30 | 17 53 | 15 6  | 17 1  | 16 59 | 3 52 | 8 51 | 6 24 |     |
| W12  | 17 38 | 23 10 | 5 14 | 10 50 | 1 58 | 23 39 | 0 59 | 24 17 | 1 1  | 18 15 | 1 10 | 18 5  | 2 16 | 12 43 | 0 28 | 21 24 | 1 30 | 17 53 | 15 6  | 17 1  | 16 58 | 3 49 | 8 51 | 6 23 |     |
| T 13 | 17 54 | 19 2  | 5 16 | 10 44 | 2 6  | 23 49 | 1 1  | 24 20 | 1 2  | 18 14 | 1 10 | 18 4  | 2 16 | 12 44 | 0 28 | 21 23 | 1 30 | 17 53 | 15 6  | 17 1  | 16 58 | 3 46 | 8 51 | 6 23 |     |
| F 14 | 18 10 | 13 46 | 5 0  | 10 43 | 2 12 | 23 58 | 1 4  | 24 22 | 1 2  | 18 12 | 1 10 | 18 3  | 2 16 | 12 45 | 0 28 | 21 23 | 1 30 | 17 53 | 15 6  | 17 1  | 16 57 | 3 42 | 8 51 | 6 22 |     |
| S 15 | 18 25 | 7 41  | 4 25 | 10 47 | 2 17 | 24 7  | 1 6  | 24 24 | 1 2  | 18 10 | 1 10 | 18 2  | 2 16 | 12 46 | 0 28 | 21 23 | 1 30 | 17 53 | 15 5  | 17 1  | 16 56 | 3 39 | 8 51 | 6 22 |     |
| S 16 | 18 40 | 1 7   | 3 33 | 10 56 | 2 20 | 24 15 | 1 8  | 24 25 | 1 3  | 18 8  | 1 9  | 18 1  | 2 16 | 12 47 | 0 28 | 21 23 | 1 30 | 17 52 | 15 5  | 17 1  | 16 55 | 3 36 | 8 51 | 6 22 |     |
| M17  | 18 55 | 5n34  | 2 26 | 11 8  | 2 22 | 24 22 | 1 11 | 24 27 | 1 3  | 18 6  | 1 9  | 18 0  | 2 16 | 12 49 | 0 28 | 21 23 | 1 30 | 17 52 | 15 5  | 17 2  | 16 54 | 3 33 | 8 51 | 6 21 |     |
| T 18 | 19 10 | 11 59 | 1 10 | 11 24 | 2 22 | 24 28 | 1 13 | 24 28 | 1 3  | 18 5  | 1 9  | 17 59 | 2 16 | 12 50 | 0 28 | 21 23 | 1 30 | 17 52 | 15 4  | 17 2  | 16 53 | 3 30 | 8 51 | 6 21 |     |
| W19  | 19 24 | 17 42 | 0n10 | 11 42 | 2 22 | 24 34 | 1 15 | 24 29 | 1 3  | 18 3  | 1 9  | 17 58 | 2 16 | 12 51 | 0 28 | 21 23 | 1 30 | 17 52 | 15 4  | 17 2  | 16 52 | 3 26 | 8 51 | 6 20 |     |
| T 20 | 19 38 | 22 20 | 1 29 | 12 4  | 2 20 | 24 39 | 1 17 | 24 29 | 1 4  | 18 1  | 1 9  | 17 57 | 2 16 | 12 52 | 0 28 | 21 22 | 1 30 | 17 52 | 15 4  | 17 2  | 16 51 | 3 23 | 8 51 | 6 20 |     |
| F 21 | 19 51 | 25 32 | 2 40 | 12 27 | 2 18 | 24 43 | 1 19 | 24 30 | 1 4  | 17 59 | 1 9  | 17 57 | 2 16 | 12 53 | 0 28 | 21 22 | 1 30 | 17 52 | 15 4  | 17 1  | 16 50 | 3 20 | 8 51 | 6 19 |     |
| S 22 | 20 5  | 27 6  | 3 41 | 12 52 | 2 14 | 24 47 | 1 22 | 24 30 | 1 4  | 17 57 | 1 9  | 17 56 | 2 16 | 12 55 | 0 28 | 21 22 | 1 30 | 17 52 | 15 3  | 17 1  | 16 49 | 3 17 | 8 51 | 6 19 |     |
| S 23 | 20 17 | 27 2  | 4 27 | 13 18 | 2 10 | 24 49 | 1 24 | 24 30 | 1 4  | 17 56 | 1 9  | 17 55 | 2 16 | 12 56 | 0 28 | 21 22 | 1 30 | 17 51 | 15 3  | 17 0  | 16 49 | 3 13 | 8 51 | 6 18 |     |
| M24  | 20 30 | 25 27 | 4 58 | 13 46 | 2 6  | 24 51 | 1 26 | 24 29 | 1 5  | 17 54 | 1 8  | 17 54 | 2 15 | 12 57 | 0 28 | 21 22 | 1 30 | 17 51 | 15 3  | 17 0  | 16 48 | 3 10 | 8 51 | 6 18 |     |
| T 25 | 20 42 | 22 38 | 5 14 | 14 14 | 2 1  | 24 53 | 1 28 | 24 29 | 1 5  | 17 52 | 1 8  | 17 53 | 2 15 | 12 58 | 0 28 | 21 22 | 1 30 | 17 51 | 15 2  | 16 59 | 16 47 | 3 7  | 8 51 | 6 18 |     |
| W26  | 20 53 | 18 52 | 5 15 | 14 43 | 1 56 | 24 53 | 1 29 | 24 28 | 1 5  | 17 50 | 1 8  | 17 52 | 2 15 | 12 59 | 0 28 | 21 21 | 1 30 | 17 51 | 15 2  | 16 59 | 16 46 | 3 4  | 8 51 | 6 17 |     |
| T 27 | 21 5  | 14 24 | 5 1  | 15 12 | 1 50 | 24 53 | 1 31 | 24 26 | 1 5  | 17 48 | 1 8  | 17 51 | 2 15 | 13 0  | 0 28 | 21 21 | 1 30 | 17 51 | 15 2  | 16 59 | 16 45 | 3 1  | 8 51 | 6 17 |     |
| F 28 | 21 15 | 9 27  | 4 35 | 15 42 | 1 44 | 24 52 | 1 33 | 24 25 | 1 5  | 17 47 | 1 8  | 17 50 | 2 15 | 13 1  | 0 28 | 21 21 | 1 30 | 17 50 | 15 1  | 16 59 | 16 44 | 2 57 | 8 51 | 6 16 |     |
| S 29 | 21 26 | 4 11  | 3 58 | 16 11 | 1 37 | 24 50 | 1 35 | 24 23 | 1 6  | 17 45 | 1 8  | 17 49 | 2 15 | 13 3  | 0 28 | 21 21 | 1 30 | 17 50 | 15 1  | 16 59 | 16 43 | 2 54 | 8 51 | 6 16 |     |
| S 30 | 21s36 | 1s14  | 3n10 | 16s41 | 1n31 | 24s48 | 1s36 | 24s21 | 1s 6 | 17n43 | 1s 8 | 17n48 | 2s15 | 13s 4 | 0n28 | 21n21 | 1s30 | 17s50 | 15s 1 | 17n 0 | 16n42 | 2n51 | 8s50 | 6n15 |     |

## ASTRODIENST EPHEMERIS for the year 2059

geocentric

DECEMBER 2059

00:00 UT

| Day  | Sid.t   | ☉        | ☽        | ♀      | ♂       | ♂      | ♂      | ♂      | ♂     | ♂       | ♂      | ♂      | ♂      | ♂     | ♂      | ♂  | Day  |
|------|---------|----------|----------|--------|---------|--------|--------|--------|-------|---------|--------|--------|--------|-------|--------|----|------|
| M 1  | 4 39 29 | 8°46'35  | 22°22'   | 22°59' | 9°38'   | 7°34'  | 24°R 3 | 29°R13 | 6°11' | 17°R25  | 19°R43 | 17°21' | 16°14' | 1°22' | 20°28' | 7  | M 1  |
| T 2  | 4 43 26 | 9°47'24  | 4°11'26  | 24°28' | 10°32'  | 8°27'  | 23°55' | 29°8 9 | 6°5'  | 17°II23 | 19°43' | 17°22' | 16°10' | 1°28' | 20°9'  | 9  | T 2  |
| W 3  | 4 47 22 | 10°48'14 | 16°41'   | 25°58' | 11°46'  | 9°13'  | 23°48' | 29°4'  | 6°8'  | 17°21'  | 19°43' | 17°R23 | 16°7'  | 1°35' | 20°11' | 11 | W 3  |
| T 4  | 4 51 19 | 11°49'06 | 29°11'   | 27°29' | 13°0'   | 9°59'  | 23°40' | 28°59' | 6°11' | 17°20'  | 19°D43 | 17°22' | 16°4'  | 1°42' | 20°13' | 13 | T 4  |
| F 5  | 4 55 15 | 12°49'59 | 11°56'   | 29°0'  | 14°14'  | 10°45' | 23°33' | 28°54' | 6°15' | 17°18'  | 19°43' | 17°20' | 16°1'  | 1°48' | 20°15' | 15 | F 5  |
| S 6  | 4 59 12 | 13°50'53 | 24°56'   | 0°31'  | 15°28'  | 11°31' | 23°26' | 28°50' | 6°18' | 17°16'  | 19°43' | 17°17' | 15°58' | 1°55' | 20°18' | 18 | S 6  |
| S 7  | 5 3 8   | 14°51'48 | 8°31'2   | 2°3'   | 16°42'  | 12°17' | 23°19' | 28°45' | 6°21' | 17°15'  | 19°43' | 17°13' | 15°55' | 2°2'  | 20°20' | 20 | S 7  |
| M 8  | 5 7 5   | 15°52'44 | 21°42'   | 3°35'  | 17°55'  | 13°3'  | 23°12' | 28°41' | 6°24' | 17°13'  | 19°43' | 17°8'  | 15°51' | 2°8'  | 20°22' | 22 | M 8  |
| T 9  | 5 11 2  | 16°53'40 | 5°23'3   | 5°7'   | 19°9'   | 13°49' | 23°5'  | 28°36' | 6°27' | 17°11'  | 19°43' | 17°4'  | 15°48' | 2°15' | 20°25' | 25 | T 9  |
| W10  | 5 14 58 | 17°54'38 | 19°14'   | 6°39'  | 20°23'  | 14°35' | 22°58' | 28°32' | 6°30' | 17°10'  | 19°43' | 17°0'  | 15°45' | 2°22' | 20°27' | 27 | W10  |
| T 11 | 5 18 55 | 18°55'36 | 3°11'3   | 8°12'  | 21°37'  | 15°22' | 22°52' | 28°27' | 6°33' | 17°8'   | 19°44' | 16°57' | 15°42' | 2°28' | 20°30' | 30 | T 11 |
| F 12 | 5 22 51 | 19°56'35 | 17°18'   | 9°44'  | 22°51'  | 16°8'  | 22°45' | 28°23' | 6°36' | 17°6'   | 19°44' | 16°D56 | 15°39' | 2°35' | 20°33' | 33 | F 12 |
| S 13 | 5 26 48 | 20°57'34 | 1°17'27  | 11°17' | 24°4'   | 16°54' | 22°39' | 28°18' | 6°39' | 17°4'   | 19°44' | 16°57' | 15°36' | 2°42' | 20°35' | 35 | S 13 |
| S 14 | 5 30 44 | 21°58'33 | 15°38'   | 12°50' | 25°18'  | 17°41' | 22°33' | 28°14' | 6°42' | 17°3'   | 19°44' | 16°58' | 15°32' | 2°49' | 20°38' | 38 | S 14 |
| M15  | 5 34 41 | 22°59'34 | 29°51'   | 14°23' | 26°32'  | 18°27' | 22°27' | 28°10' | 6°45' | 17°1'   | 19°44' | 16°59' | 15°29' | 2°55' | 20°41' | 41 | M15  |
| T 16 | 5 38 37 | 24°0'34  | 14°8'2   | 15°56' | 27°46'  | 19°14' | 22°21' | 28°6'  | 6°48' | 16°59'  | 19°45' | 17°R0  | 15°26' | 3°2'  | 20°44' | 44 | T 16 |
| W17  | 5 42 34 | 25°1'36  | 28°8'    | 17°29' | 28°59'  | 20°0'  | 22°15' | 28°2'  | 6°51' | 16°58'  | 19°45' | 17°0'  | 15°23' | 3°9'  | 20°46' | 46 | W17  |
| T 18 | 5 46 31 | 26°2'38  | 12°11'2  | 19°2'  | 0°13'3  | 20°47' | 22°9'  | 27°58' | 6°54' | 16°56'  | 19°45' | 16°58' | 15°20' | 3°15' | 20°49' | 49 | T 18 |
| F 19 | 5 50 27 | 27°3'40  | 25°54'   | 20°36' | 1°26'   | 21°33' | 22°4'  | 27°54' | 6°56' | 16°54'  | 19°46' | 16°53' | 15°16' | 3°22' | 20°52' | 52 | F 19 |
| S 20 | 5 54 24 | 28°4'43  | 9°26'26  | 22°10' | 2°40'   | 22°20' | 21°59' | 27°50' | 6°59' | 16°53'  | 19°46' | 16°47' | 15°13' | 3°29' | 20°55' | 55 | S 20 |
| S 21 | 5 58 20 | 29°5'47  | 22°41'   | 23°43' | 3°53'   | 23°7'  | 21°54' | 27°46' | 7°2'  | 16°51'  | 19°47' | 16°39' | 15°10' | 3°35' | 20°58' | 58 | S 21 |
| M22  | 6 2 17  | 0°3'52   | 5°23'7   | 25°17' | 5°7'    | 23°53' | 21°49' | 27°42' | 7°4'  | 16°49'  | 19°47' | 16°31' | 15°7'  | 3°42' | 21°1'  | 60 | M22  |
| T 23 | 6 6 13  | 1°7'57   | 18°14'   | 26°51' | 6°20'   | 24°40' | 21°44' | 27°39' | 7°7'  | 16°48'  | 19°47' | 16°24' | 15°4'  | 3°49' | 21°5'  | 62 | T 23 |
| W24  | 6 10 10 | 2°9'02   | 0°11'34  | 28°26' | 7°33'   | 25°27' | 21°40' | 27°35' | 7°10' | 16°46'  | 19°48' | 16°17' | 15°1'  | 3°55' | 21°8'  | 64 | W24  |
| T 25 | 6 14 6  | 3°10'09  | 12°40'   | 0°3'0  | 8°47'   | 26°14' | 21°35' | 27°31' | 7°12' | 16°45'  | 19°48' | 16°13' | 14°57' | 4°2'  | 21°11' | 66 | T 25 |
| F 26 | 6 18 3  | 4°11'15  | 24°35'   | 1°35'  | 10°0'   | 27°1'  | 21°31' | 27°28' | 7°15' | 16°43'  | 19°49' | 16°10' | 14°54' | 4°9'  | 21°14' | 68 | F 26 |
| S 27 | 6 22 0  | 5°12'23  | 6°25'25  | 3°10'  | 11°13'  | 27°48' | 21°27' | 27°25' | 7°17' | 16°41'  | 19°50' | 16°D10 | 14°51' | 4°15' | 21°17' | 70 | S 27 |
| S 28 | 6 25 56 | 6°13'31  | 18°15'   | 4°45'  | 12°26'  | 28°34' | 21°23' | 27°21' | 7°19' | 16°40'  | 19°50' | 16°11' | 14°48' | 4°22' | 21°21' | 72 | S 28 |
| M29  | 6 29 53 | 7°14'40  | 0°11'10  | 6°20'  | 13°39'  | 29°21' | 21°20' | 27°18' | 7°22' | 16°38'  | 19°51' | 16°12' | 14°45' | 4°29' | 21°24' | 74 | M29  |
| T 30 | 6 33 49 | 8°15'49  | 12°15'   | 7°56'  | 14°52'  | 0°8'   | 21°16' | 27°15' | 7°24' | 16°37'  | 19°51' | 16°R13 | 14°42' | 4°35' | 21°28' | 76 | T 30 |
| W31  | 6 37 46 | 9°16'59  | 24°11'35 | 9°33'2 | 16°28'5 | 0°55'5 | 21°13' | 27°12' | 7°26' | 16°35'  | 19°52' | 16°B12 | 14°38' | 4°42' | 21°31' | 78 | W31  |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂   | ♂     | ♂   | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     |
|------|-------|-------|------|-------|------|-------|------|-------|-----|-------|-----|-------|------|-------|------|-------|------|-------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat | decl  | lat | decl  | lat  | decl  | lat  | decl  | lat  | lat   |
| M 1  | 21s46 | 6s38  | 2n14 | 17s10 | 1n24 | 24s44 | 1s38 | 24s18 | 1s6 | 17n42 | 1s7 | 17n47 | 2s15 | 13s5  | 0n28 | 21n21 | 1s30 | 17s50 |
| T 2  | 21s55 | 11s53 | 1n11 | 17s38 | 1n17 | 24s40 | 1s40 | 24s16 | 1s6 | 17s40 | 1s7 | 17s46 | 2s15 | 13s6  | 0s28 | 21s20 | 1s30 | 17s49 |
| W 3  | 22s4  | 16s46 | 0s4  | 18s7  | 1s10 | 24s36 | 1s41 | 24s13 | 1s6 | 17s38 | 1s7 | 17s45 | 2s15 | 13s7  | 0s28 | 21s20 | 1s30 | 17s49 |
| T 4  | 22s12 | 21s21 | 1s4  | 18s34 | 1s3  | 24s30 | 1s43 | 24s10 | 1s6 | 17s37 | 1s7 | 17s44 | 2s14 | 13s8  | 0s28 | 21s20 | 1s30 | 17s49 |
| F 5  | 22s20 | 24s22 | 2s11 | 19s2  | 0s55 | 24s24 | 1s44 | 24s6  | 1s7 | 17s35 | 1s7 | 17s43 | 2s14 | 13s9  | 0s28 | 21s20 | 1s30 | 17s48 |
| S 6  | 22s27 | 26s32 | 3s12 | 19s28 | 0s48 | 24s17 | 1s45 | 24s3  | 1s7 | 17s33 | 1s6 | 17s43 | 2s14 | 13s10 | 0s28 | 21s20 | 1s30 | 17s48 |
| S 7  | 22s34 | 27s14 | 4s3  | 19s54 | 0s41 | 24s9  | 1s46 | 23s59 | 1s7 | 17s32 | 1s6 | 17s42 | 2s14 | 13s11 | 0s29 | 21s20 | 1s30 | 17s48 |
| M 8  | 22s41 | 28s20 | 4s42 | 20s19 | 0s34 | 24s1  | 1s48 | 23s54 | 1s7 | 17s30 | 1s6 | 17s41 | 2s14 | 13s12 | 0s29 | 21s20 | 1s30 | 17s48 |
| T 9  | 22s47 | 29s52 | 5s6  | 20s43 | 0s27 | 23s52 | 1s49 | 23s50 | 1s7 | 17s29 | 1s6 | 17s40 | 2s14 | 13s13 | 0s29 | 21s19 | 1s30 | 17s47 |
| W10  | 22s53 | 19s59 | 5s12 | 21s6  | 0s19 | 23s42 | 1s50 | 23s45 | 1s7 | 17s27 | 1s6 | 17s39 | 2s14 | 13s14 | 0s29 | 21s19 | 1s30 | 17s47 |
| T 11 | 22s58 | 14s59 | 5s0  | 21s28 | 0s12 | 23s31 | 1s51 | 23s40 | 1s7 | 17s26 | 1s5 | 17s38 | 2s13 | 13s15 | 0s29 | 21s19 | 1s30 | 17s46 |
| F 12 | 23s3  | 9s9   | 4s30 | 21s49 | 0s5  | 23s20 | 1s52 | 23s35 | 1s8 | 17s24 | 1s5 | 17s38 | 2s13 | 13s16 | 0s29 | 21s19 | 1s30 | 17s46 |
| S 13 | 23s8  | 2s50  | 3s43 | 22s9  | 0s2  | 23s8  | 1s52 | 23s29 | 1s8 | 17s23 | 1s5 | 17s37 | 2s13 | 13s17 | 0s29 | 21s19 | 1s30 | 17s46 |
| S 14 | 23s11 | 3n39  | 2s43 | 22s29 | 0s9  | 22s55 | 1s53 | 23s23 | 1s8 | 17s22 | 1s5 | 17s36 | 2s13 | 13s18 | 0s29 | 21s19 | 1s30 | 17s45 |
| M15  | 23s15 | 9s59  | 1s32 | 22s47 | 0s16 | 22s42 | 1s54 | 23s17 | 1s8 | 17s20 | 1s4 | 17s35 | 2s13 | 13s19 | 0s29 | 21s18 | 1s30 | 17s45 |
| T 16 | 23s18 | 20s43 | 0n6  | 23s4  | 0s22 | 22s28 | 1s54 | 23s10 | 1s8 | 17s19 | 1s4 | 17s35 | 2s13 | 13s20 | 0s29 | 21s18 | 1s30 | 17s44 |
| W17  | 23s20 | 15s47 | 1s0  | 23s20 | 0s29 | 22s14 | 1s55 | 23s4  | 1s8 | 17s18 | 1s4 | 17s34 | 2s12 | 13s21 | 0s29 | 21s18 | 1s30 | 17s44 |
| T 18 | 23s22 | 24s25 | 2s12 | 23s34 | 0s35 | 21s58 | 1s55 | 22s57 | 1s8 | 17s17 | 1s4 | 17s33 | 2s12 | 13s22 | 0s29 | 21s18 | 1s30 | 17s44 |
| F 19 | 23s24 | 26s37 | 3s15 | 23s48 | 0s42 | 21s43 | 1s55 | 22s50 | 1s8 | 17s15 | 1s3 | 17s32 | 2s12 | 13s23 | 0s29 | 21s18 | 1s30 | 17s43 |
| S 20 | 23s25 | 27s11 | 4s6  | 24s0  | 0s48 | 21s26 | 1s56 | 22s42 | 1s8 | 17s14 | 1s3 | 17s32 | 2s12 | 13s23 | 0s29 | 21s18 | 1s30 | 17s43 |
| S 21 | 23s26 | 28s10 | 4s42 | 24s11 | 0s54 | 21s9  | 1s56 | 22s34 | 1s8 | 17s13 | 1s3 | 17s31 | 2s12 | 13s24 | 0s29 | 21s18 | 1s30 | 17s42 |
| M22  | 23s26 | 23s45 | 5s3  | 24s21 | 1s0  | 20s51 | 1s56 | 22s26 | 1s8 | 17s12 | 1s3 | 17s31 | 2s11 | 13s25 | 0s29 | 21s17 | 1s30 | 17s42 |
| T 23 | 23s26 | 20s15 | 5s8  | 24s29 | 1s6  | 20s33 | 1s56 | 22s18 | 1s8 | 17s11 | 1s2 | 17s30 | 2s11 | 13s26 | 0s29 | 21s17 | 1s30 | 17s41 |
| W24  | 23s25 | 15s56 | 4s59 | 24s37 | 1s11 | 20s14 | 1s56 | 22s10 | 1s8 | 17s10 | 1s2 | 17s29 | 2s11 | 13s27 | 0s29 | 21s17 | 1s30 | 17s41 |
| T 25 | 23s24 | 11s4  | 4s37 | 24s43 | 1s17 | 19s55 | 1s55 | 22s1  | 1s8 | 17s10 | 1s2 | 17s29 | 2s11 | 13s28 | 0s29 | 21s17 | 1s30 | 17s40 |
| F 26 | 23s22 | 5s51  | 4s2  | 24s47 | 1s22 | 19s35 | 1s55 | 21s52 | 1s8 | 17s9  | 1s2 | 17s28 | 2s11 | 13s28 | 0s29 | 21s17 | 1s30 | 17s40 |
| S 27 | 23s20 | 0s29  | 3s18 | 24s50 | 1s27 | 19s15 | 1s55 | 21s43 | 1s8 | 17s8  | 1s1 | 17s28 | 2s10 | 13s29 | 0s29 | 21s17 | 1s30 | 17s39 |
| S 28 | 23s17 | 4s55  | 2s25 | 24s52 | 1s31 | 18s54 | 1s54 | 21s33 | 1s8 | 17s7  | 1s1 | 17s27 | 2s10 | 13s30 | 0s29 | 21s17 | 1s30 | 17s39 |
| M29  | 23s14 | 10s12 | 1s25 | 24s53 | 1s36 | 18s32 | 1s54 | 21s24 | 1s8 | 17s7  | 1s1 | 17s27 | 2s10 | 13s31 | 0s29 | 21s17 | 1s30 | 17s38 |
| T 30 | 23s11 | 15s10 | 0s21 | 24s52 | 1s40 | 18s10 | 1s53 | 21s14 | 1s8 | 17s6  | 1s1 | 17s26 | 2s10 | 13s31 | 0s29 | 21s16 | 1s30 | 17s38 |
| W31  | 23s6  | 19s38 | 0s45 | 24s49 | 1s44 | 17s48 | 1s52 | 21s3  | 1s8 | 17s5  | 1s0 | 17n26 | 2s9  | 13s32 | 0n29 | 21n16 | 1s30 | 17s37 |

Julian Day Number = 2473428.5, Delta T = 77.61 sec

Ecliptic obliquity = 23°25'59", Nutation = - 0°00'13", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°34'38", Lahiri = 24°41'39"