

Astrodienst Ephemeris Tables for the year 1859

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

JANUARY 1859 00:00 UT

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Day	Sid.t	0	D	ğ	Ş	♂	4	ħ)∤(卉	Р	S.	v	Ç	ķ	Day
S 1	6 40 28	10ට 5'59	4 ₹ 55	6°R27	14°R28	6 ∺ 45	13°R35	11°R 2	0°R 1	22) 21	5°R40	0°R42	2 ∺ 9	16 궁 14	14≈53	S 1
S 2	6 44 25	11° 7'10	16°55	5ਰ 9	14 × 23	7°31	13 Ⅱ 29	10 Q 58	29859	22°22	5 8 40	0 ₩32	2° 5	16°20	14°57	S 2
M 3	6 48 21	12° 8'22	28°51	3°58	14°20	8°16	13°23	10°54	29°57	22°23	5°40	0°22	2° 2	16°27	15° 1	M 3
T 4	6 52 18	13° 9'33	10 る 43	2°54	14°D20	9° 2	13°16	10°50	29°55	22°24	5°39	0°13	1°59	16°34	15° 5	T 4
W 5	6 56 14	14°10'44	22°32	1°59	14°22	9°47	13°10	10°46	29°54	22°25	5°39	0° 5	1°56	16°40	15° 9	W 5
T 6	7 0 11	15°11'55	4≈21	1°13	14°27	10°32	13° 4	10°42	29°52	22°26	5°39	29≈59	1°53	16°47	15°13	T 6
F 7	7 4 7	16°13'05	16°12	0°38	14°34	11°18	12°59	10°38	29°51	22°28	5°38	29°56	1°50	16°54	15°17	F 7
S 8	7 8 4	17°14'15	28° 7	0°12	14°44	12° 3	12°53	10°33	29°49	22°29	5°38	29°D55	1°46	17° 0	15°21	S 8
S 9	7 12 1	18°15'25	10 ∺ 8	29 х 57	14°55	12°49	12°48	10°29	29°48	22°30	5°38	29°55	1°43	17° 7	15°25	S 9
M10	7 15 57	19°16'34	22°21	29°D50	15° 9	13°34	12°43	10°25	29°46	22°31	5°38	29°57	1°40	17°14	15°29	M10
T 11	7 19 54	20°17'43	4 Υ 49	29°52	15°25	14°20	12°37	10°20	29°45	22°32	5°37	29°59	1°37	17°20	15°33	T 11
W12	7 23 50	21°18'51	17°37	0중 3	15°42	15° 5	12°33	10°16	29°44	22°34	5°37	29°R59	1°34	17°27	15°38	W12
T 13	7 27 47	22°19'58	0 8 48	0°21	16° 2	15°50	12°28	10°11	29°43	22°35	5°37	29°59	1°30	17°34	15°42	T 13
F 14	7 31 43	23°21'05	14°27	0°46	16°24	16°36	12°23	10° 7	29°41	22°36	5°37	29°57	1°27	17°40	15°46	F 14
S 15	7 35 40	24°22'10	28°33	1°17	16°47	17°21	12°19	10° 2	29°40	22°38	5°37	29°54	1°24	17°47	15°50	S 15
S 16	7 39 36	25°23'16	13 II 7	1°54	17°13	18° 6	12°15	9°57	29°39	22°39	5°37	29°49	1°21	17°54	15°55	S 16
M17	7 43 33	26°24'20	28° 4	2°35	17°40	18°51	12°11	9°53	29°38	22°41	5°37	29°44	1°18	18° 0	15°59	M17
T 18	7 47 30	27°25'24	139516	3°22	18° 9	19°37	12° 7	9°48	29°37	22°42	5°37	29°39	1°15	18° 7	16° 3	T 18
W19	7 51 26	28°26'27	28°33	4°12	18°39	20°22	12° 4	9°43	29°36	22°44	5°37	29°35	1°11	18°14	16° 8	W19
T 20	7 55 23	29°27'29	13 N 45	5° 6	19°11	21° 7	12° 0	9°38	29°35	22°45	5°D37	29°33	1° 8	18°21	16°12	T 20
F 21	7 59 19	0≈28'31	28°42	6° 4	19°44	21°52	11°57	9°34	29°34	22°47	5°37	29°D32	1° 5	18°27	16°16	F 21
S 22	8 3 16	1°29'31	13 m 16	7° 5	20°19	22°37	11°54	9°29	29°33	22°48	5°37	29°32	1° 2	18°34	16°21	S 22
S 23	8 7 12	2°30'32	27°24	8° 8	20°55	23°22	11°51	9°24	29°32	22°50	5°37	29°34	0°59	18°41	16°25	S 23
M24	8 11 9	3°31'31	11 º 4	9°14	21°33	24° 8	11°48	9°19	29°32	22°51	5°37	29°36	0°56	18°47	16°30	M24
T 25	8 15 5	4°32'31	24°18	10°22	22°11	24°53	11°46	9°14	29°31	22°53	5°37	29°37	0°52	18°54	16°34	T 25
W26	8 19 2	5°33'29	7 M 8	11°32	22°51	25°38	11°44	9° 9	29°30	22°55	5°37	29°R37	0°49	19° 1	16°38	W26
T 27	8 22 59	6°34'27	19°38	12°44	23°33	26°23	11°42	9° 4	29°30	22°56	5°37	29°36	0°46	19° 7	16°43	T 27
F 28	8 26 55	7°35'25	1 × 752	13°58	24°15	27° 8	11°40	8°59	29°29	22°58	5°37	29°35	0°43	19°14	16°47	F 28
S 29	8 30 52	8°36'22	13°55	15°13	24°58	27°53	11°38	8°55	29°29	23° 0	5°38	29°32	0°40	19°21	16°52	S 29
S 30	8 34 48	9°37'18	25°50	16°30	25°43	28°37	11°37	8°50	29°28	23° 2	5°38	29°29	0°36	19°27	16°56	S 30
M31	8 38 45	10≈38'13	7 궁 40	17 石 49	26 ₹ 28	29 米 22	11 II 36	8 Ω 45	29 8 28	23 米 3	5 8 38	29≈25	0 ∺ 33	19 る 34	17≈ 1	M31

Day	0	D	ğ	ς	2 (3	2	ł	ħ	l)į	β (¥		Р		រា	v	Ç	Š	
	decl	decl lat	decl la	at decl	lat decl	lat	decl	lat	decl	lat	decl	lat	decl l	at	decl lat	t	decl	decl	decl	decl	lat
S 1	23 s 5	26s 8 5s 5	20 s26	2n53 18s 0	4n35 9s53	0 s 5 5	21n54	0 s33	18n11	0n44	20n 1	0s10	4s10	1 s14	2s 9 16	6s28	11 s14	10 s43	26s 9	10s20	6n19
S 2	23 0	27 41 4 54	20 19	3 2 17 53	4 41 9 35	0 54	21 53	0 33	18 12	0 44	20 0	0 10	4 9	1 13	2 8 16	5 28	11 17	10 44	26 7	10 19	6 19
M 3				3 9 17 47	4 47 9 17		21 53			0 44		0 10	4 9	1 13			11 21			10 18	6 19
T 4				3 14 17 42	4 53 8 59		21 52	0 33		0 44				1 13			11 24			10 17	6 18
W 5				3 16 17 37	4 58 8 41		21 52			0 44				1 13			11 27			10 16	6 18
T 6				3 17 17 33	5 2 8 23		21 51	0 32		0 44				1 13			11 29			10 16	6 18
F 7 S 8	-			3 15 17 30	5 6 8 5		21 51	0 32		0 45	19 59 19 59			1 13			11 30			10 15	6 18
S 8	22 21	12 18 0 10	20 16	3 11 17 28	5 9 7 47	0 48	21 50	0 32	18 19	0 45	19 39	0 9	4 7	1 13	2 7 16	3 20	11 31	10 31	25 59	10 14	6 18
S 9	22 13	6 55 On55	20 21	3 6 17 26	5 12 7 29	0 47	21 50	0 32	18 21	0 45	19 58	0 9	4 6	1 13	2 7 16	5 25	11 30	10 52	25 57	10 13	6 17
M10	22 4			3 0 17 25	5 15 7 10		21 49	0 32	18 22	0 45		0 9	4 6	1 13					25 56		6 17
	21 55			2 53 17 25	5 17 6 52		21 49					0 9		1 13					25 54		6 17
	21 46			2 45 17 25	5 18 6 33		21 48			0 45		0 9		1 13					25 53		6 17
T 13	21 36			2 37 17 26	5 19 6 15		21 48		18 26	0 45		0 9		1 13					25 51		6 17
				2 28 17 27	5 20 5 57		21 47		18 27	0 46		0 9		1 13					25 50		6 16
S 15	21 16	24 55 5 12	21 9	2 19 17 29	5 21 5 38	0 41	21 47	0 31	18 29	0 46	19 57	0 9	4 3	1 13	2 5 16	5 23	11 31	10 59	25 48	10 7	6 16
S 16	21 5	27 24 5 3	21 18	2 9 17 31	5 21 5 19	0 40	21 47	0 30	18 30	0 46	19 56	0 9	4 2	1 13	2 5 16	5 23	11 33	11 0	25 46	10 5	6 16
M17	20 53	28 1 4 35	21 27	1 59 17 34	5 21 5 1	0 39	21 46	0 30	18 32	0 46	19 56	0 9	4 2	1 13	2 5 16	5 23	11 35	11 1	25 45	10 4	6 16
T 18	20 42	26 33 3 46	21 36	1 49 17 37	5 20 4 42	0 38	21 46	0 30	18 33	0 46	19 56	0 9	4 1	1 13	2 4 16	5 22	11 36		25 43		6 16
1	20 29	23 6 2 42	21 44	1 39 17 40	5 19 4 24	0 37	21 46	0 30	18 34	0 46	19 56	0 9	4 0	1 13	2 4 16	5 22	11 38		25 42		6 15
T 20	20 17			1 30 17 44	5 18 4 5		21 46		18 36	0 46				1 13			11 38		25 40		6 15
F 21	20 4			1 20 17 48	5 17 3 46		21 45	0 29		0 46				1 13			11 39		25 39		6 15
S 22	19 51	5 26 1s15	22 7	1 10 17 52	5 15 3 28	0 35	21 45	0 29	18 39	0 47	19 55	0 9	3 58	1 13	2 3 16	5 21	11 39	11 7	25 37	9 59	6 15
S 23	19 37	1s13 2 27	22 13	1 0 17 56	5 14 3 9	0 34	21 45	0 29	18 40	0 47	19 55	0 9	3 58	1 13	2 3 16	5 20	11 38	11 8	25 35	9 58	6 15
M24	19 23	7 35 3 29	22 18	0 50 18 0	5 12 2 50	0 33	21 45	0 29	18 41	0 47	19 55	0 9	3 57	1 13	2 2 16	5 20	11 37	11 9	25 34	9 56	6 15
T 25	19 9	13 25 4 17	22 23	0 41 18 5	5 9 2 31	0 32	21 45	0 28	18 43	0 47	19 55	0 9	3 57	1 13	2 2 16	5 20	11 37	11 10	25 32	9 55	6 15
W26	18 54	18 29 4 51	22 26	0 32 18 10	5 7 2 13	0 31	21 45	0 28	18 44	0 47	19 55	0 9	3 56	1 13	2 1 16	5 19	11 37	11 12	25 31	9 54	6 15
T 27	18 39	22 38 5 10	22 29	0 22 18 14	5 4 1 54	0 30	21 45	0 28	18 46	0 47	19 55	0 9	3 55	1 13	2 1 16	5 19	11 37	11 13	25 29	9 53	6 14
F 28				0 13 18 19	5 1 1 35		21 45	0 28		0 47				1 13					25 27	9 52	6 14
S 29	18 8	27 32 5 5	22 31	0 5 18 24	4 58 1 17	0 28	21 45	0 28	18 48	0 47	19 54	0 9	3 54	1 13	2 0 16	5 18	11 39	11 15	25 26	9 50	6 14
S 30	17 51			0s 4 18 28	4 55 0 58	0 27	21 45	0 27	18 50	0 47	19 54	0 9	3 53	1 13					25 24	9 49	6 14
M31	17 s35	27 s22 4s 8	22 s29	0s12 18s33	4n52 0s39	0 s 2 6	21n45	0 s27	18n51	0n48	19n54	0s 9	3 s52	1 s13	1 s 5 9 1 6	5s18	11 s41	11 s17	25 s23	9 s48	6n14

Julian Day Number = 2400045.5, Delta T = 9.20 sec Ecliptic obliquity = 23°27'35, Nutation = 0°00'08, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $22^{\circ}46'17$, Lahiri = $21^{\circ}53'17$

FEBRUARY 1859 00:00 UT

Day	Sid.t	0	D	ğ	φ	♂	4	ħ)∤(并	В	n	U	Ç	, k	Day
T 1	8 42 41	11≈39'07	19 궁 29	19 궁 8	27 × 14	oΥ 7	11°R35	8°R40	29°R28	23 米 5	5 8 38	29°R22	0 ∺ 30	19 ට 41	17≈ 5	T 1
W 2	8 46 38	12°40'00	1≈19	20°29	28° 2	0°52	11 Ⅲ 34	8 Ω 35	29 8 27	23° 7	5°39	29≈20	0°27	19°47	17°10	W 2
T 3	8 50 35	13°40'52	13°12	21°51	28°50	1°37	11°33	8°30	29°27	23° 9	5°39	29°18	0°24	19°54	17°14	T 3
F 4	8 54 31	14°41'43	25° 9	23°14	29°39	2°22	11°33	8°25	29°27	23°11	5°39	29°D17	0°21	20° 1	17°19	F 4
S 5	8 58 28	15°42'33	7) (14	24°39	0 궁 28	3° 6	11°D33	8°20	29°27	23°13	5°40	29°18	0°17	20° 7	17°23	S 5
S 6	9 2 24	16°43'21	19°27	26° 4	1°19	3°51	11°33	8°15	29°27	23°14	5°40	29°18	0°14	20°14	17°28	S 6
M 7	9 6 21	17°44'08	1 Y 50	27°30	2°10	4°36	11°33	8°11	29°D27	23°16	5°40	29°19	0°11	20°21	17°32	M 7
T 8	9 10 17	18°44'53	14°28	28°57	3° 2	5°20	11°33	8° 6	29°27	23°18	5°41	29°20	0° 8	20°27	17°37	T 8
W 9	9 14 14	19°45'37	27°21	0≈25	3°55	6° 5	11°34	8° 1	29°27	23°20	5°41	29°21	0° 5	20°34	17°41	W 9
T 10	9 18 10	20°46'19	10832	1°55	4°48	6°50	11°35	7°56	29°27	23°22	5°42	29°22	0° 2	20°41	17°46	T 10
F 11	9 22 7	21°46'59	24° 4	3°25	5°42	7°34	11°36	7°52	29°27	23°24	5°42	29°R22	29≈58	20°47	17°50	F 11
S 12	9 26 4	22°47'38	7 Ⅱ 58	4°55	6°36	8°19	11°37	7°47	29°28	23°26	5°43	29°22	29°55	20°54	17°55	S 12
S 13	9 30 0	23°48'16	22°14	6°27	7°32	9° 3	11°38	7°42	29°28	23°28	5°43	29°21	29°52	21° 1	17°59	S 13
M14	9 33 57	24°48'51	69549	8° 0	8°27	9°48	11°40	7°38	29°28	23°30	5°44	29°21	29°49	21° 7	18° 4	M14
T 15	9 37 53	25°49'25	21°39	9°33	9°23	10°32	11°42	7°33	29°29	23°32	5°44	29°20	29°46	21°14	18° 8	T 15
W16	9 41 50	26°49'57	6 Ω 39	11° 8	10°20	11°16	11°44	7°29	29°29	23°34	5°45	29°20	29°42	21°21	18°13	W16
T 17	9 45 46	27°50'27	21°38	12°43	11°17	12° 1	11°46	7°24	29°30	23°37	5°45	29°20	29°39	21°28	18°17	T 17
F 18	9 49 43	28°50'56	6 m 30	14°20	12°15	12°45	11°48	7°20	29°30	23°39	5°46	29°20	29°36	21°34	18°22	F 18
S 19	9 53 39	29°51'23	21° 6	15°57	13°13	13°29	11°51	7°15	29°31	23°41	5°47	29°20	29°33	21°41	18°26	S 19
S 20	9 57 36	0) 51'48	5 ≙ 20	17°35	14°12	14°13	11°54	7°11	29°32	23°43	5°47	29°20	29°30	21°48	18°30	S 20
M21	10 1 33	1°52'13	19°10	19°14	15°11	14°58	11°57	7° 7	29°33	23°45	5°48	29°20	29°27	21°54	18°35	M21
T 22	10 5 29	2°52'35	2 M 33	20°54	16°11	15°42	12° 0	7° 3	29°33	23°47	5°49	29°19	29°23	22° 1	18°39	T 22
W23	10 9 26	3°52'57	15°31	22°35	17°11	16°26	12° 3	6°59	29°34	23°49	5°49	29°19	29°20	22° 8	18°44	W23
T 24	10 13 22	4°53'17	28° 6	24°17	18°11	17°10	12° 7	6°55	29°35	23°51	5°50	29°19	29°17	22°14	18°48	T 24
F 25	10 17 19	5°53'35	10 × 23	26° 0	19°12	17°54	12°10	6°51	29°36	23°54	5°51	29°D19	29°14	22°21	18°52	F 25
S 26	10 21 15	6°53'52	22°27	27°44	20°13	18°38	12°14	6°47	29°37	23°56	5°52	29°19	29°11	22°28	18°57	S 26
S 27	10 25 12	7°54'08	4 る 20	29°29	21°14	19°22	12°18	6°43	29°38	23°58	5°52	29°20	29° 8	22°34	19° 1	S 27
M28	10 29 8	8) 54'22	16중 9	1) 15	22 궁 16	20 ° 6	12 II 23	6Ω 39	29 8 39	24) 0	5 8 53	29≈≈20	29≈ 4	22 ~ 41	19≈ 5	M28

Day	0	D	ğ	Q	ď	4	ħ)Å(并	Р	n	Ω	Ç	ķ
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl	decl	decl	decl lat
T 1	17 s18	25 s23 3 s23	22 s26 0 s20	0 18s38 4n48	0 s20 0 s25	21n45 0s27	18n53 0n48	19n54 0s 9	3 s 5 2 1 s 1 3	1s59 16s17	11 s42	11 s18	25 s21	9s47 6n14
W 2	17 1	22 18 2 29	22 22 0 28	8 18 42 4 45	0 2 0 25	21 45 0 27	18 54 0 48	19 54 0 9	3 51 1 13	1 59 16 17	11 43	11 19	25 19	9 45 6 14
T 3	16 44	18 17 1 28	22 16 0 36	6 18 47 4 41	0n17 0 24	21 45 0 27	18 55 0 48	19 54 0 9	3 50 1 13	1 58 16 17	11 44	11 21	25 18	9 44 6 14
F 4	16 26	13 30 0 23	22 10 0 43	3 18 51 4 37		21 45 0 26	18 57 0 48	19 54 0 9	3 49 1 13	1 58 16 16	11 44	11 22	25 16	9 43 6 14
S 5	16 8	8 11 0n44	22 2 0 50	0 18 55 4 33	0 54 0 22	21 45 0 26	18 58 0 48	19 54 0 9	3 49 1 13	1 57 16 16	11 44	11 23	25 14	9 42 6 14
S 6	15 50	2 30 1 49	21 53 0 57	7 18 59 4 29	1 13 0 21	21 45 0 26	18 59 0 48	19 54 0 9	3 48 1 13	1 57 16 15	11 44	11 24	25 13	9 40 6 14
M 7	15 32	3n21 2 51	21 43 1 4	4 19 2 4 24		21 46 0 26	19 1 0 48	19 54 0 9	3 47 1 13	1 56 16 15			-	9 39 6 14
T 8	15 13	9 10 3 45	21 32 1 10	0 19 5 4 20	1 50 0 19	21 46 0 26	19 2 0 48	19 54 0 9	3 46 1 13	1 56 16 15	11 43	11 26	25 9	9 38 6 14
W 9	14 54	-	21 19 1 10			21 46 0 25			3 45 1 13	1 55 16 14				9 36 6 14
T 10			21 5 1 22			21 47 0 25		19 54 0 9	0 .0 1 10	1 55 16 14				9 35 6 14
F 11	-		20 49 1 2			21 47 0 25				1 55 16 14		-	-	9 34 6 14
S 12	13 56	26 49 5 14	20 33 1 32	2 19 16 4 2	3 3 0 16	21 47 0 25	19 7 0 49	19 54 0 9	3 43 1 13	1 54 16 13	11 42	11 31	25 2	9 32 6 14
S 13	13 36	28 6 4 53	20 15 1 3	7 19 18 3 57	3 22 0 15	21 48 0 25	19 9 0 49	19 55 0 9	3 42 1 12	1 54 16 13	11 42	11 32	25 1	9 31 6 14
M14	13 16	27 29 4 12	19 55 1 42	2 19 20 3 52	3 40 0 14	21 48 0 24	19 10 0 49	19 55 0 9	3 41 1 12	1 53 16 13	11 43	11 33	24 59	9 30 6 14
T 15	12 55	24 55 3 14	19 34 1 40	6 19 21 3 47	3 58 0 13	21 49 0 24	19 11 0 49	19 55 0 9	3 41 1 12	1 53 16 12	11 43	11 34	24 57	9 28 6 14
W16	12 35	20 37 2 3	19 12 1 50	0 19 22 3 42	4 16 0 12	21 49 0 24	19 12 0 49	19 55 0 9	3 40 1 12	1 52 16 12	11 43	11 35	24 55	9 27 6 14
T 17	12 14	14 59 0 43	18 49 1 53	3 19 22 3 37	4 34 0 12	21 50 0 24	19 13 0 49	19 55 0 9	3 39 1 12	1 52 16 12	11 43	11 36	24 54	9 26 6 14
F 18	11 53	8 31 0 s40	18 24 1 50	6 19 22 3 32	4 52 0 11	21 50 0 24	19 15 0 49	19 55 0 9	3 38 1 12	1 51 16 11	11 43	11 37	24 52	9 24 6 14
S 19	11 32	1 43 1 58	17 58 1 59	9 19 22 3 27	5 10 0 10	21 51 0 23	19 16 0 49	19 55 0 9	3 37 1 12	1 51 16 11	11 43	11 38	24 50	9 23 6 14
S 20	11 11	4s59 3 7	17 30 2 2	2 19 21 3 22	5 28 0 9	21 51 0 23	19 17 0 49	19 55 0 9	3 36 1 12	1 50 16 11	11 43	11 40	24 48	9 22 6 14
M21	10 49	11 15 4 3	17 1 2 4	4 19 20 3 17	5 46 0 8	21 52 0 23	19 18 0 49	19 56 0 9	3 36 1 12	1 50 16 10	11 43	11 41	24 47	9 20 6 14
T 22	10 27	16 48 4 44	16 31 2 3	5 19 19 3 11	6 4 0 8	21 52 0 23	19 19 0 49	19 56 0 9	3 35 1 12	1 49 16 10	11 43	11 42	24 45	9 19 6 14
W23	10 6	21 25 5 8	16 0 2	7 19 17 3 6	6 22 0 7	21 53 0 23	19 20 0 49	19 56 0 9	3 34 1 12	1 49 16 10	11 43	11 43	24 43	9 18 6 14
T 24	9 44	24 54 5 17	15 27 2 8	8 19 14 3 1	6 39 0 6	21 54 0 22	19 21 0 49	19 56 0 9	3 33 1 12	1 48 16 10	11 43	11 44	24 41	9 16 6 14
F 25	9 21	27 10 5 12	14 52 2 8	8 19 11 2 55	6 57 0 5	21 54 0 22	19 23 0 49	19 56 0 9	3 32 1 12	1 48 16 9	11 43	11 45	24 39	9 15 6 14
S 26	8 59	28 6 4 52	14 16 2 8	8 19 8 2 50	7 14 0 4	21 55 0 22	19 24 0 49	19 57 0 9	3 31 1 12	1 47 16 9	11 43	11 46	24 38	9 13 6 14
S 27	8 37	27 43 4 20	13 39 2 8	8 19 4 2 45	7 32 0 4	21 56 0 22	19 25 0 50	19 57 0 9	3 30 1 12	1 46 16 9	11 43	11 47	24 36	9 12 6 14
M28	8 s 1 4	26s 5 3s38	13 s 1 2 s 7	7 19s 0 2n39	7n49 0s 3	21n56 0s22	19n26 0n50	19n57 0s 9	3 s29 1 s12	1s46 16s 8	11 s43	11 s48	24 s34	9s11 6n14

 $\label{eq:Julian Day Number = 2400076.5, Delta T = 9.17 sec} \begin{tabular}{ll} Ediptic obliquity = 23°27'35, Nutation = 0°00'10, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 22°46'21, Lahiri = 21°53'21 \end{tabular}$

MARCH 1859 00:00 UT

Day	Sid.t	\odot	D	ğ	φ	♂	4	ħ)ਮੂ(¥	Р	r	Ω	Ç	Š,	Day
T 1	10 33 5	9) 54'35	27 る 58	3) € 2	23 궁 18	20 Y 49	12 Ⅲ 27	6°R35	29840	24) 2	5 8 54	29≈22	29≈ 1	22 る 48	19≈ 9	T 1
W 2	10 37 2	10°54'45	9≈50	4°50	24°20	21°33	12°32	6Ω 32	29°42	24° 5	5°55	29°23	28°58	22°54	19°14	W 2
T 3	10 40 58	11°54'54	21°48	6°40	25°23	22°17	12°37	6°28	29°43	24° 7	5°56	29°23	28°55	23° 1	19°18	T 3
F 4	10 44 55	12°55'02	3 ∺ 55	8°30	26°26	23° 1	12°42	6°25	29°44	24° 9	5°57	29°R23	28°52	23° 8	19°22	F 4
S 5	10 48 51	13°55'07	16°12	10°21	27°29	23°44	12°47	6°21	29°45	24°11	5°58	29°23	28°48	23°14	19°26	S 5
S 6	10 52 48	14°55'11	28°42	12°14	28°33	24°28	12°52	6°18	29°47	24°14	5°58	29°21	28°45	23°21	19°30	S 6
M 7	10 56 44	15°55'12	11 Y 25	14° 7	29°37	25°12	12°58	6°15	29°48	24°16	5°59	29°19	28°42	23°28	19°35	M 7
T 8	11 041	16°55'12	24°21	16° 1	0≈41	25°55	13° 3	6°12	29°50	24°18	6° 0	29°16	28°39	23°34	19°39	T 8
W 9	11 437	17°55'10	7 8 31	17°57	1°45	26°39	13° 9	6° 9	29°51	24°20	6° 1	29°14	28°36	23°41	19°43	W 9
T 10	11 8 34	18°55'05	20°55	19°53	2°49	27°22	13°15	6° 6	29°53	24°23	6° 2	29°11	28°33	23°48	19°47	T 10
F 11	11 12 30	19°54'58	4 Ⅱ 32	21°50	3°54	28° 6	13°21	6° 3	29°55	24°25	6° 3	29°10	28°29	23°54	19°51	F 11
S 12	11 16 27	20°54'49	18°23	23°48	4°59	28°49	13°27	6° 0	29°56	24°27	6° 4	29°D 9	28°26	24° 1	19°55	S 12
S 13	11 20 24	21°54'38	29528	25°46	6° 4	29°32	13°34	5°57	29°58	24°30	6° 5	29° 9	28°23	24° 8	19°59	S 13
M14	11 24 20	22°54'25	16°44	27°45	7°10	0816	13°41	5°55	29°59	24°32	6° 6	29°10	28°20	24°14	20° 3	M14
T 15	11 28 17	23°54'09	$1\Omega 10$	29°44	8°15	0°59	13°47	5°52	0 I 2	24°34	6° 7	29°12	28°17	24°21	20° 7	T 15
W16	11 32 13	24°53'51	15°42	1 Υ 44	9°21	1°42	13°54	5°50	0° 3	24°36	6° 8	29°13	28°14	24°28	20°11	W16
T 17	11 36 10	25°53'31	0 m /16	3°43	10°27	2°25	14° 1	5°48	0° 5	24°39	6°10	29°R14	28°10	24°34	20°14	T 17
F 18	11 40 6	26°53'08	14°46	5°42	11°33	3° 8	14° 9	5°46	0° 7	24°41	6°11	29°13	28° 7	24°41	20°18	F 18
S 19	11 44 3	27°52'44	29° 7	7°41	12°39	3°52	14°16	5°44	0° 9	24°43	6°12	29°11	28° 4	24°48	20°22	S 19
S 20	11 47 59	28°52'17	13 ≏ 13	9°38	13°46	4°35	14°23	5°42	0°11	24°45	6°13	29° 7	28° 1	24°54	20°26	S 20
M21	11 51 56	29°51'49	26°59	11°34	14°52	5°18	14°31	5°40	0°13	24°48	6°14	29° 2	27°58	25° 1	20°30	M21
T 22	11 55 53	0 Υ 51'18	10 M 23	13°29	15°59	6° 0	14°39	5°38	0°16	24°50	6°15	28°57	27°54	25° 8	20°33	T 22
W23	11 59 49	1°50'46	23°24	15°21	17° 6	6°43	14°47	5°36	0°18	24°52	6°16	28°52	27°51	25°14	20°37	W23
T 24	12 3 46	2°50'12	6 才 4	17°11	18°13	7°26	14°55	5°35	0°20	24°55	6°17	28°48	27°48	25°21	20°40	T 24
F 25	12 7 42	3°49'36	1 <u>8</u> °24	18°58	19°20	8° 9	15° 3	5°33	0°22	24°57	6°19	28°45	27°45	25°28	20°44	F 25
S 26	12 11 39	4°48'59	0 궁 29	20°41	20°28	8°52	15°11	5°32	0°24	24°59	6°20	28°D44	27°42	25°34	20°48	S 26
S 27	12 15 35	5°48'20	12°24	22°21	21°35	9°35	15°20	5°31	0°27	25° 1	6°21	28°44	27°39	25°41	20°51	S 27
M28	12 19 32	6°47'39	24°14	23°56	22°43	10°17	15°28	5°29	0°29	25° 4	6°22	28°45	27°35	25°48	20°54	M28
T 29	12 23 28	7°46'56	6≈ 3	25°27	23°51	11° 0	15°37	5°28	0°31	25° 6	6°23	28°47	27°32	25°54	20°58	T 29
W30	12 27 25	8°46'11	17°57	26°53	24°59	11°42	15°46	5°27	0°34	25° 8	6°25	28°48	27°29	26° 1	21° 1	W30
T 31	12 31 22	9 Ƴ 45'24	0 ∺ 0	28 Y 14	26≈ 7	12825	15 Ⅱ 55	5 Ω 27	0 I I36	25 米 10	6 8 26	28°R49	27≈26	26중 8	21≈ 5	T 31

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	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl	decl decl	decl lat
T 1 W 2	7 s52 7 29	23 s17 2 s46 19 31 1 46		s 5 18s55 2n34 4 18 50 2 29	8n 6 0s 2 8 23 0 1	21n57 0s21 21 58 0 21		19n57 0s 9 19 58 0 9		1 s45 16 s 8 1 45 16 8		1 s50 24 s32 1 51 24 30	9s 9 6n15 9 8 6 15
T 3 F 4 S 5	7 6 6 43 6 20	14 55 0 42 9 42 0n25 4 2 1 32	10 13 1	1 18 44 2 23 59 18 38 2 18 55 18 31 2 12	8 40 0 0 8 57 0n 0 9 14 0 1	21 59 0 21 22 0 0 21 22 0 0 21	19 29 0 50			1 44 16 7	11 42 11	1 52 24 28 1 53 24 27 1 54 24 25	9 6 6 15 9 5 6 15 9 4 6 15
S 6 M 7 T 8	5 57 5 33 5 10	1n51 2 35 7 46 3 32 13 27 4 19	7 54 1 7 5 1		9 48 0 3 10 4 0 3	22 3 0 20	19 32 0 50 19 33 0 50	20 0 0 8	3 23 1 12 3 22 1 12	1 42 16 6 1 42 16 6	11 43 11 11 44 11	1 55 24 23 1 56 24 21 1 57 24 19	9 2 6 15 9 1 6 15 8 59 6 15
W 9 T 10 F 11 S 12	4 23 4 0		5 24 1 4 32 1		10 37 0 5 10 53 0 5	22 4 0 20 22 5 0 20 22 6 0 20 22 7 0 19	19 34 0 50	20 0 0 8 20 1 0 8		1 41 16 6 1 40 16 5			8 58 6 16 8 57 6 16 8 55 6 16 8 54 6 16
S 13 M14 T 15 W16 T 17 F 18 S 19		25 56 3 33 22 20 2 28 17 19 1 14 11 18 0s 6 4 42 1 24	1 50 1 0 55 0 0n 2 0 0 58 0 1 55 0	53 16 56 1 20 43 16 44 1 14 34 16 31 1 9 23 16 18 1 4	11 42 0 8 11 57 0 8 12 13 0 9 12 29 0 10 12 44 0 10	22 9 0 19 22 10 0 19 22 11 0 19 22 12 0 19 22 13 0 18	19 38 0 50 19 38 0 50 19 39 0 50	20 2 0 8 20 2 0 8 20 3 0 8 20 3 0 8 20 3 0 8	3 18 1 12 3 17 1 12 3 16 1 12 3 15 1 12 3 14 1 12 3 13 1 12 3 12 1 12	1 38 16 5 1 38 16 4 1 37 16 4 1 37 16 4 1 36 16 4	11 10 11	2 4 24 8 2 5 24 6 2 6 24 4 2 7 24 2 2 8 24 0	8 51 6 16 8 50 6 17 8 48 6 17 8 47 6 17 8 46 6 17
S 20 M21 T 22 W23 T 24 F 25 S 26	0 27 0 3 0n20 0 44 1 8 1 31	8 34 3 38 14 31 4 25 19 38 4 56 23 39 5 11	3 48 0 4 44 0n 5 40 0 6 34 0 7 28 0 8 20 0	13 16 5 0 59 1 15 51 0 54 n10 15 36 0 49 22 15 21 0 44 34 15 6 0 40 46 14 50 0 35 58 14 33 0 30 10 14 17 0 25	13 15 0 12 13 30 0 13 13 45 0 13 13 59 0 14 14 14 0 15 14 29 0 15	22 15 0 18 22 16 0 18 22 17 0 18 22 18 0 18 22 19 0 17 22 20 0 17	19 41 0 50	20 4 0 8 20 5 0 8 20 5 0 8 20 6 0 8 20 6 0 8 20 7 0 8	3 12 1 12 3 11 1 12 3 10 1 12 3 9 1 12 3 8 1 12 3 7 1 12	1 35 16 3 1 34 16 3 1 34 16 3 1 33 16 3 1 33 16 2 1 32 16 2	11 47 12 11 49 12 11 51 12 11 53 12 11 54 12 11 55 12	2 10 23 56 2 12 23 54 2 13 23 52 2 14 23 50 2 15 23 48 2 16 23 46 2 17 23 44	8 44 6 17 8 43 6 18 8 42 6 18 8 40 6 18 8 39 6 18 8 38 6 18 8 36 6 19 8 35 6 19
S 27 M28 T 29 W30 T 31	2 42 3 5 3 29	20 43 2 1 16 24 0 59	10 45 1 11 30 1 12 11 1	34 13 42 0 16 46 13 24 0 12	15 11 0 17 15 25 0 18 15 39 0 18	22 23 0 17 22 24 0 17 22 25 0 17	19 43 0 50 19 44 0 50 19 44 0 50 19 44 0 50 19n44 0n50	20 8 0 8 20 9 0 8	3 4 1 13 3 4 1 13 3 3 1 13	1 31 16 2 1 30 16 1	11 55 12 11 54 12 11 54 12	2 18 23 42 2 19 23 40 2 20 23 38 2 21 23 36 2 s22 23 s34	8 34 6 19 8 32 6 19 8 31 6 20 8 30 6 20 8 s28 6n20

Julian Day Number = 2400104.5, Delta T = 9.16 sec Ecliptic obliquity = $23^{\circ}27'36$, Nutation = $0^{\circ}00'10$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $22^{\circ}46'25$, Lahiri = $21^{\circ}53'25$

APRIL 1859 00:00 UT

Day	Sid.t	0	D	ğ	φ	ď	4	ħ)ţ(并	В	S.	v	Ç	ę,	Day
F 1	12 35 18	10 ° 44'36	12) 16	29Υ29	27≈15	13 8 8	16 I I 4	5°R26	0 Ц 39	25 米 12	6 8 27	28°R48	27≈23	26 궁 14	21≈ 8	F 1
S 2	12 39 15	11°43'45	24°46	0 8 39	28°24	13°50	16°13	5 Ω 25	0°41	25°15	6°28	28≈45	27°19	26°21	21°11	S 2
S 3	12 43 11	12°42'53	7 Υ 34	1°42	29°32	14°32	16°22	5°25	0°44	25°17	6°30	28°40	27°16	26°28	21°14	S 3
M 4	12 47 8	13°41'58	20°39	2°39	0) (40	15°15	16°32	5°24	0°47	25°19	6°31	28°33	27°13	26°34	21°17	M 4
T 5	12 51 4	14°41'02	3 8 59	3°30	1°49	15°57	16°41	5°24	0°49	25°21	6°32	28°26	27°10	26°41	21°21	T 5
W 6	12 55 1	15°40'03	17°34	4°15	2°58	16°40	16°51	5°24	0°52	25°23	6°33	28°18	27° 7	26°48	21°24	W 6
T 7	12 58 57	16°39'03	1 Ⅱ 20	4°52	4° 7	17°22	17° 1	5°D24	0°55	25°26	6°35	28°10	27° 4	26°54	21°27	T 7
F 8	13 2 54	17°38'00	15°15	5°23	5°16	18° 4	17°11	5°24	0°57	25°28	6°36	28° 4	27° 0	27° 1	21°30	F 8
S 9	13 6 51	18°36'55	29°17	5°48	6°25	18°46	17°21	5°24	1° 0	25°30	6°37	28° 1	26°57	27° 8	21°32	S 9
S 10	13 10 47	19°35'47	139522	6° 5	7°34	19°28	17°31	5°25	1° 3	25°32	6°39	27°D59	26°54	27°14	21°35	S 10
M11	13 14 44	20°34'37	27°31	6°17	8°43	20°10	17°41	5°25	1° 6	25°34	6°40	27°59	26°51	27°21	21°38	M11
T 12	13 18 40	21°33'25	11 Ω 40	6°R21	9°52	20°52	17°51	5°25	1° 9	25°36	6°41	28° 0	26°48	27°28	21°41	T 12
W13	13 22 37	22°32'11	25°49	6°19	11° 1	21°34	18° 2	5°26	1°12	25°38	6°43	28°R 0	26°45	27°34	21°44	W13
T 14	13 26 33	23°30'54	9 m 57	6°12	12°11	22°16	18°12	5°27	1°15	25°40	6°44	28° 0	26°41	27°41	21°46	T 14
F 15	13 30 30	24°29'35	24° 0	5°58	13°20	22°58	18°23	5°28	1°18	25°42	6°45	27°57	26°38	27°48	21°49	F 15
S 16	13 34 26	25°28'14	7 ≏ 55	5°39	14°30	23°40	18°33	5°28	1°20	25°44	6°47	27°52	26°35	27°54	21°51	S 16
S 17	13 38 23	26°26'51	21°40	5°15	15°39	24°22	18°44	5°30	1°23	25°46	6°48	27°44	26°32	28° 1	21°54	S 17
M18	13 42 20	27°25'26	5 M .10	4°47	16°49	25° 4	18°55	5°31	1°27	25°48	6°49	27°35	26°29	28° 8	21°56	M18
T 19	13 46 16	28°23'59	18°24	4°14	17°59	25°45	19° 6	5°32	1°30	25°50	6°51	27°24	26°25	28°14	21°59	T 19
W20	13 50 13	29°22'30	1 √ 19	3°39	19° 9	26°27	19°17	5°33	1°33	25°52	6°52	27°14	26°22	28°21	22° 1	W20
T 21	13 54 9	0821'00	13°56	3° 1	20°19	27° 9	19°28	5°35	1°36	25°54	6°53	27° 5	26°19	28°28	22° 3	T 21
F 22	13 58 6	1°19'28	26°15	2°21	21°29	27°50	19°39	5°36	1°39	25°56	6°55	26°57	26°16	28°34	22° 6	F 22
S 23	14 2 2	2°17'54	8 ට 21	1°41	22°39	28°32	19°50	5°38	1°42	25°58	6°56	26°52	26°13	28°41	22° 8	S 23
S 24	14 5 59	3°16'18	20°16	1° 0	23°49	29°13	20° 2	5°40	1°45	26° 0	6°57	26°49	26°10	28°48	22°10	S 24
M25	14 9 55	4°14'41	2≈ 6	0°19	24°59	29°55	20°13	5°42	1°48	26° 2	6°59	26°D48	26° 6	28°54	22°12	M25
T 26	14 13 52	5°13'03	13°55	29 Y 40	26° 9	0Д36	20°25	5°44	1°52	26° 4	7° 0	26°48	26° 3	29° 1	22°14	T 26
W27	14 17 49	6°11'23	25°50	29° 2	27°20	1°18	20°36	5°46	1°55	26° 6	7° 2	26°R49	26° 0	29° 8	22°16	W27
T 28	14 21 45	7° 9'41	7 ₩ 55	28°28	28°30	1°59	20°48	5°48	1°58	26° 8	7° 3	26°48	25°57	29°14	22°18	T 28
F 29	14 25 42	8° 7'57	20°16	27°56	29°40	2°40	21° 0	5°50	2° 1	26° 9	7° 4	26°46	25°54	29°21	22°20	F 29
S 30	14 29 38	9 8 6'12	2 Υ 56	27 Y 27	oΥ51	3Ⅲ22	21 I I12	5 Ω 53	2 II 5	26) 11	7 8 6	26≈41	25≈51	29중28	22≈21	S 30

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F 1	4n15	5 s 5 1 1 1	n12 13n2	7 2n1	8 12 s27	0s 1	16n 6	0n20	22n28	0s16	19n45	0n50	20n10	0s 8	3 s 1	1 s13	1 s28 16 s 1	11 s54	12 s24	23 s32	8 s27	6n20
S 2	4 39	0n 0 2	16 14	0 2 2	7 12 8	0 6	16 20	0 20	22 29	0 16	19 45	0 50	20 11	0 8	3 0	1 13	1 28 16 1	11 55	12 25	23 30	8 26	6 21
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T 5	5 48 6 10	-,	40 15 2			0 18			22 32	0 16 0 15		0 50			2 58	1 13 1 13				23 24	8 22	6 22 6 22
T 7	6 33				1 10 25	0 22 0 26			22 33 22 34		19 45		20 13 20 14		2 57 2 56	1 13				23 22 23 20	8 21 8 20	6 22
F 8					4 10 3	0 29			22 35				20 14		2 55	1 13				23 18	8 19	6 22
S 9	7 18	27 51 4			6 9 41	0 33			22 36		19 45		20 15		2 54	1 13		12 11			8 17	6 23
S 10	7 40	26 23 3	36 16 3	0 3	7 9 19	0 37	18 1	0 25	22 38	0 15	19 45	0 50	20 15	0 8	2 53	1 13	1 24 16 0	12 11	12 33	23 14	8 16	6 23
M11	8 3	23 14 2	36 16 3	4 3	7 8 56	0 40	18 13	0 26	22 39	0 15	19 45	0 50	20 16	0 8	2 53	1 13	1 23 16 0	12 11	12 34	23 12	8 15	6 23
T 12	8 25				8 33		18 25		22 40	0 15	19 45	0 50			2 52	1 13	1 23 15 59				8 14	6 24
W13			12 16 3	-	2 8 10		18 36		22 41		19 45		20 17		2 51	1 13	1 22 15 59				8 13	6 24
T 14	9 8			2 5			18 48		22 42		19 44		20 18		2 50	1 13		12 11			8 12	6 24
F 15 S 16	9 30 9 51			3 2 52 0 2 4		0 54 1			22 43 22 44		19 44 19 44	0 50	20 18 20 19		2 49 2 49	1 13 1 13	1 21 15 59 1 21 15 59				8 10 8 9	6 25 6 25
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S 17 M18		-		3 2 3:			19 21 19 32		22 45 22 46		19 44 19 43	0 50	20 20 20 20		2 48 2 47	1 13	1 20 15 59 1 20 15 59				8 8	6 25
T 19				2 2 1		-	19 32		22 46		19 43	0 50		0 8	2 47	1 13 1 13		12 19			8 6	6 26
W20					0 5 21	-	19 53		22 48		19 43	0 50	-		2 46	1 13		12 27			8 5	6 26
T 21	11 36	27 18 4	51 14 1		7 4 56	1 12 2	20 3		22 49	0 13	19 42	0 50	20 22	0 8	2 45	1 13	1 18 15 59				8 4	6 27
F 22	11 57	27 50 4	26 13 4	4 1 3	2 4 31	1 14 2	20 13	0 32	22 50	0 13	19 42	0 50	20 23	0 8	2 44	1 13	1 18 15 59	12 32	12 46	22 49	8 3	6 27
S 23	12 17	27 0 3	48 13 1	5 1 10	6 4 6	1 17 2	20 23	0 32	22 51	0 13	19 42	0 50	20 23	0 8	2 43	1 13	1 17 15 59	12 34	12 47	22 46	8 2	6 27
S 24	12 37	24 56 3	2 12 4	6 1	3 40	1 19 2	20 32		22 52	0 13	19 41	0 50	20 24	0 8	2 43	1 13	1 17 15 59	12 35	12 49	22 44	8 1	6 28
M25	12 57		-	6 0 4			20 42		22 53	0 13	19 41		20 25		2 42	1 13	1 16 15 58				8 0	6 28
T 26			8 11 4				20 51		22 54	0 13			20 25		2 41	1 13	1 16 15 58				7 59	6 28
W27	13 36	13 0 0			9 2 23		21 0		22 55		19 40		20 26		2 40	1 13		12 35			7 58	6 29
T 28 F 29	13 55 14 14	7 42 01	n59 10 4			1 28 2			22 56 22 57		19 39 19 39		20 27 20 27	0 8	2 40 2 39	1 13 1 13	1 15 15 58 1 15 15 58	12 35			7 57 7 56	6 29 6 29
S 30	14 14 14n33		n59 9n5			1 s32 2	-		22 37 22n58		19 39 19n38		20 27 20n28			-	1 13 13 38 1 s14 15 s58				7 s55	6n30
S 30	14n33	3n54 21	n59 9n5	5 0s42	2 Is 4	1 s32 2	21n26	0n36	22n58	0s12	19n38	0n50	20n28	0s 8	2 s 3 8	1 s 1 3	1 s 1 4 15 s 5 8	12 s38	12 s55	22 s31	7s55	6n30

 $\label{eq:Julian Day Number = 2400135.5, Delta T = 9.13 sec} \\ Ecliptic obliquity = 23°27'36, Nutation = 0°00'09, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 22°46'29, Lahiri = 21°53'30}$

MAY 1859 00:00 UT

Day	Sid.t	0	D	ğ	φ	ď	4	ħ)Å(卉	Р	ß	v	Ç	ę,	Day
S 1	14 33 35	108 4'26	15 Y 56	27°R 2	2 Υ 1	4 II 3	21 II 23	5 Ω 55	2 II 8	26) 13	7 と 7	26°R34	25≈47	29 궁 34	22≈23	S 1
M 2	14 37 31	11° 2'38	29°19	26 Y 42	3°12	4°44	21°35	5°58	2°11	26°15	7° 8	26≈24	25°44	29°41	22°25	M 2
T 3	14 41 28	12° 0'48	13 8 3	26°26	4°23	5°25	21°47	6° 0	2°15	26°16	7°10	26°13	25°41	29°48	22°26	T 3
W 4	14 45 24	12°58'57	27° 4	26°14	5°33	6° 6	22° 0	6° 3	2°18	26°18	7°11	26° 1	25°38	29°54	22°28	W 4
T 5	14 49 21	13°57'04	11 I I7	26° 7	6°44	6°48	22°12	6° 6	2°21	26°20	7°13	25°50	25°35	0≈ 1	22°29	T 5
F 6	14 53 18	14°55'09	25°37	26°D 5	7°55	7°29	22°24	6° 9	2°25	26°22	7°14	25°42	25°31	0° 7	22°31	F 6
S 7	14 57 14	15°53'12	9959	26° 7	9° 6	8°10	22°36	6°12	2°28	26°23	7°15	25°35	25°28	0°14	22°32	S 7
S 8	15 111	16°51'14	24°18	26°15	10°16	8°51	22°48	6°15	2°32	26°25	7°17	25°32	25°25	0°21	22°33	S 8
M 9	15 5 7	17°49'13	8 Ω 31	26°26	11°27	9°32	23° 1	6°19	2°35	26°26	7°18	25°30	25°22	0°27	22°35	M 9
T 10	15 9 4	18°47'11	22°36	26°43	12°38	10°12	23°13	6°22	2°38	26°28	7°19	25°30	25°19	0°34	22°36	T 10
W11	15 13 0	19°45'06	6 m 34	27° 4	13°49	10°53	23°26	6°25	2°42	26°29	7°21	25°30	25°16	0°41	22°37	W11
T 12	15 16 57	20°43'00	20°22	27°29	15° 0	11°34	23°38	6°29	2°45	26°31	7°22	25°28	25°12	0°47	22°38	T 12
F 13	15 20 53	21°40'52	4 ♀ 2	27°58	16°11	12°15	23°51	6°33	2°49	26°32	7°23	25°25	25° 9	0°54	22°39	F 13
S 14	15 24 50	22°38'42	17°33	28°32	17°22	12°56	24° 4	6°36	2°52	26°34	7°25	25°18	25° 6	1° 1	22°40	S 14
S 15	15 28 47	23°36'31	0 M 54	29° 9	18°33	13°36	24°16	6°40	2°56	26°35	7°26	25° 8	25° 3	1° 7	22°41	S 15
M16	15 32 43	24°34'18	14° 2	29°50	19°44	14°17	24°29	6°44	2°59	26°37	7°27	24°57	25° 0	1°14	22°41	M16
T 17	15 36 40	25°32'04	26°57	0 8 35	20°56	14°57	24°42	6°48	3° 3	26°38	7°29	24°44	24°57	1°21	22°42	T 17
W18	15 40 36	26°29'48	9 ∡ 39	1°24	22° 7	15°38	24°55	6°52	3° 6	26°40	7°30	24°31	24°53	1°27	22°43	W18
T 19	15 44 33	27°27'31	22° 6	2°15	23°18	16°19	25° 8	6°56	3°10	26°41	7°31	24°19	24°50	1°34	22°43	T 19
F 20	15 48 29	28°25'13	4 る 19	3°11	24°29	16°59	25°21	7° 1	3°13	26°42	7°33	24° 9	24°47	1°41	22°44	F 20
S 21	15 52 26	29°22'54	16°21	4° 9	25°41	17°40	25°33	7° 5	3°17	26°43	7°34	24° 2	24°44	1°47	22°44	S 21
S 22	15 56 22	0 Ⅲ 20′33	28°14	5°11	26°52	18°20	25°47	7° 9	3°20	26°45	7°35	23°58	24°41	1°54	22°45	S 22
M23	16 0 19	1°18'12	10≈ 3	6°16	28° 3	19° 0	26° 0	7°14	3°24	26°46	7°36	23°55	24°37	2° 1	22°45	M23
T 24	16 4 16	2°15'49	21°51	7°24	29°15	19°41	26°13	7°18	3°27	26°47	7°38	23°D55	24°34	2° 7	22°45	T 24
W25	16 8 12	3°13'26	3) (46	8°34	0 8 26	20°21	26°26	7°23	3°31	26°48	7°39	23°R55	24°31	2°14	22°46	W25
T 26	16 12 9	4°11'01	15°51	9°48	1°38	21° 1	26°39	7°28	3°34	26°49	7°40	23°55	24°28	2°21	22°46	T 26
F 27	16 16 5	5° 8'36	28°13	11° 4	2°49	21°42	26°52	7°33	3°38	26°51	7°41	23°53	24°25	2°27	22°46	F 27
S 28	16 20 2	6° 6'09	10 Y 55	12°23	4° 1	22°22	27° 5	7°37	3°41	26°52	7°43	23°49	24°22	2°34	22°R46	S 28
S 29	16 23 58	7° 3'42	24° 2	13°45	5°12	23° 2	27°19	7°42	3°45	26°53	7°44	23°42	24°18	2°41	22°46	S 29
M30	16 27 55	8° 1'14	7 8 35	15°10	6°24	23°42	27°32	7°48	3°48	26°54	7°45	23°33	24°15	2°47	22°46	M30
T 31	16 31 51	8 Ⅱ 58'45	21833	16 8 37	7 8 36	24∏22	27 Ⅱ 45	7 Ω 53	3Ⅲ52	26) 55	7 8 46	23≈23	24≈12	2≈54	22≈45	T 31

Day	0	D	ğ	Q.	♂	4	ħ)∤(卉	Р	ß Ω	Ç	ķ
	decl	decl lat	decl lat	decl lat de	cl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl de	el decl	decl lat
S 1 M 2 T 3 W 4 T 5	15 45 16 2		9 10 1 13 8 50 1 28 8 33 1 42 8 18 1 55	0 11 1 36 21 0n15 1 37 21 0 42 1 39 21 1 8 1 40 22	13 0 37 2 50 0 38 2 58 0 38 2 6 0 39 2	23 0 0 12 23 0 0 12 23 1 0 12 23 2 0 12	19 37 0 50 19 36 0 50 19 35 0 50 19 35 0 50	20n29 0s 8 20 29 0 8 20 30 0 8 20 31 0 8 20 31 0 8	2 s 38	1 12 15 58	12 44 12 5 12 47 12 5 12 51 12 5 12 55 13	7 22 27 8 22 25 9 22 23 0 22 20	7 s 5 4 6 n 3 0 7 5 3 6 3 1 7 5 3 6 3 1 7 5 2 6 3 1 7 5 1 6 3 2
F 6 S 7	16 36	26 40 3 36	7 56 2 19	2 2 1 43 22	20 0 39 2	23 4 0 11	19 33 0 50	20 32 0 8 20 33 0 8	2 34 1 14 2 34 1 14	1 12 15 58 1 11 15 58	13 0 13	1 22 18 2 22 16	
S 8 M 9 T 10 W11 T 12 F 13 S 14	17 9 17 26 17 41 17 57 18 12	14 14 0 15 8 13 0 s 5 8 1 5 2 2 7	7 44 2 39 7 42 2 48 7 42 2 55 7 45 3 2 7 50 3 8	2 55 1 45 22 3 22 1 46 22 3 48 1 47 22 4 15 1 48 22 4 42 1 49 22	34 0 40 2 40 0 41 2 47 0 41 2 53 0 42 2	23 5 0 11 23 6 0 11 23 7 0 11 23 8 0 11 23 8 0 11	19 32 0 50 19 31 0 50 19 30 0 50 19 29 0 50 19 28 0 50	20 34 0 8 20 34 0 8 20 35 0 8 20 36 0 8 20 36 0 8 20 37 0 8 20 38 0 8	2 33 1 14 2 33 1 14 2 32 1 14 2 31 1 14 2 30 1 14 2 30 1 14	1 11 15 58 1 11 15 59 1 10 15 59 1 10 15 59 1 10 15 59 1 9 15 59 1 9 15 59	13 2 13 13 2 13 13 2 13 13 2 13 13 4 13	4 22 14 5 22 11 6 22 9 7 22 7 8 22 5 9 22 2 0 22 0	7 49 6 33 7 48 6 33 7 47 6 34 7 46 6 34 7 46 6 34 7 45 6 35 7 44 6 35
S 15 M16 T 17 W18 T 19 F 20 S 21	19 23 19 37 19 49	24 21 5 0 26 41 4 50 27 39 4 26	8 18 3 20 8 31 3 23 8 46 3 24 9 3 3 25 9 22 3 25	6 1 1 51 23 6 28 1 51 23 6 54 1 51 23 7 20 1 52 23 7 46 1 52 23	15 0 44 2 20 0 44 2 25 0 44 2 30 0 45 2 34 0 45 2	23 10 0 10 23 11 0 10 23 12 0 10 23 12 0 10 23 13 0 10	19 25 0 50 19 24 0 50 19 23 0 50 19 22 0 50 19 21 0 50	20 38 0 8 20 39 0 8 20 40 0 8 20 40 0 8 20 41 0 8 20 42 0 8 20 42 0 8 20 42 0 8	2 29 1 14 2 29 1 14 2 28 1 14 2 28 1 14 2 27 1 14 2 27 1 14 2 26 1 14	1 8 15 59 1 8 15 59 1 7 15 59 1 7 15 59	13 9 13 1 13 13 13 1 13 17 13 1 13 22 13 1 13 26 13 1 13 29 13 1 13 31 13 1	3 21 53 4 21 51 5 21 49 6 21 47	7 44 6 36 7 43 6 36 7 42 6 36 7 42 6 37 7 41 6 37 7 41 6 38 7 40 6 38
T 24 W25 T 26 F 27	20 14 20 26 20 38 20 49 21 0 21 11 21 21	14 24 0 11 9 20 0n52 3 50 1 54 1n54 2 51	10 28 3 21 10 52 3 18 11 18 3 14 11 45 3 10	9 3 1 52 23 9 29 1 51 23 9 54 1 51 23 10 19 1 51 23 10 44 1 50 24	17 0 46 2 50 0 47 2 54 0 47 2	23 14 0 10 23 15 0 10 23 15 0 9 23 16 0 9 23 16 0 9	19 18 0 51 19 16 0 51 19 15 0 51 19 14 0 51 19 13 0 51	20 46 0 7	2 26 1 14 2 25 1 14 2 25 1 14 2 25 1 14 2 24 1 14 2 24 1 14 2 23 1 15	1 6 16 0 1 6 16 0 1 5 16 0 1 5 16 0 1 5 16 0	13 33 13 13 13 13 33 13 34 13 34 13 34 13 34 13 34 13 34 13 35 13 36 13 36 13 3	0 21 40 1 21 37 2 21 35 3 21 33 4 21 30	7 39 6 39 7 39 6 39 7 38 6 40 7 38 6 40
M30	21 30 21 40 21n49	18 37 4 50		11 33 1 49 24 11 57 1 49 24 12n21 1 s48 24n	5 0 49 2 8 0 49 2 10 0n50 2	23 17 0 9	19 9 0 51	20 48 0 7 20 48 0 7 20n49 0s 7	2 23 1 15 2 23 1 15 2 s22 1 s15		13 38 13 2 13 41 13 2 13 s44 13 s2	7 21 23	7 37 6 41 7 36 6 42 7 s 36 6 n 42

Julian Day Number = 2400165.5, Delta T = 9.12 sec Ecliptic obliquity = $23^{\circ}27'35$, Nutation = $0^{\circ}00'08$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $22^{\circ}46'33$, Lahiri = $21^{\circ}53'34$

JUNE 1859 00:00 UT

Day	Sid.t	0	D	ğ	φ	ð	4	ħ)∤(ħ	Р	u	Ω	Ç	, k	Day
W 1	16 35 48	9∏56'16	5 Ⅱ 53	18 8 6	8 8 47	25 I I 2	27 Ⅱ 59	7 Ω 58	3 Ц 55	26) 56	7 8 47	23°R12	24≈ 9	3≈ 1	22°R45	W 1
T 2	16 39 45	10°53'45	20°29	19°39	9°59	25°42	28°12	8° 3	3°59	26°57	7°49	23≈ 1	24° 6	3° 7	22≈45	T 2
F 3	16 43 41	11°51'14	59914	21°14	11°11	26°23	28°25	8° 8	4° 2	26°58	7°50	22°53	24° 3	3°14	22°45	F 3
S 4	16 47 38	12°48'41	19°59	22°51	12°23	27° 3	28°39	8°14	4° 6	26°58	7°51	22°47	23°59	3°21	22°44	S 4
S 5	16 51 34	13°46'07	4 Ω 39	24°31	13°34	27°42	28°52	8°19	4° 9	26°59	7°52	22°44	23°56	3°27	22°44	S 5
M 6	16 55 31	14°43'32	19° 6	26°14	14°46	28°22	29° 6	8°25	4°13	27° 0	7°53	22°D43	23°53	3°34	22°43	M 6
T 7	16 59 27	15°40'56	3 m 20	27°59	15°58	29° 2	29°19	8°30	4°16	27° 1	7°54	22°43	23°50	3°41	22°42	T 7
W 8	17 3 24	16°38'18	17°17	29°47	17°10	29°42	29°33	8°36	4°20	27° 2	7°56	22°R43	23°47	3°47	22°42	W 8
T 9	17 7 20	17°35'40	0 ≙ 59	1 Ⅲ 37	18°22	0ණ22	29°46	8°42	4°23	27° 2	7°57	22°42	23°43	3°54	22°41	T 9
F 10	17 11 17	18°33'00	14°26	3°30	19°34	1° 2	29°59	8°48	4°27	27° 3	7°58	22°40	23°40	4° 0	22°40	F 10
S 11	17 15 14	19°30'19	27°39	5°25	20°46	1°42	09913	8°54	4°30	27° 4	7°59	22°34	23°37	4° 7	22°39	S 11
S 12	17 19 10	20°27'38	10 M .39	7°22	21°58	2°21	0°27	8°59	4°34	27° 4	8° 0	22°27	23°34	4°14	22°38	S 12
M13	17 23 7	21°24'56	23°27	9°21	23°10	3° 1	0°41	9° 5	4°37	27° 5	8° 1	22°18	23°31	4°20	22°37	M13
T 14	17 27 3	22°22'13	6 ≯ 3	11°23	24°22	3°41	0°54	9°11	4°40	27° 5	8° 2	22° 7	23°28	4°27	22°36	T 14
W15	17 31 0	23°19'29	18°28	13°27	25°34	4°20	1° 8	9°18	4°44	27° 6	8° 3	21°57	23°24	4°34	22°35	W15
T 16	17 34 56	24°16'45	0 궁 42	15°32	26°46	5° 0	1°21	9°24	4°47	27° 6	8° 4	21°47	23°21	4°40	22°34	T 16
F 17	17 38 53	25°14'00	12°46	17°39	27°58	5°39	1°35	9°30	4°50	27° 7	8° 5	21°39	23°18	4°47	22°33	F 17
S 18	17 42 50	26°11'15	24°42	19°48	29°10	6°19	1°49	9°36	4°54	27° 7	8° 6	21°33	23°15	4°54	22°32	S 18
S 19	17 46 46	27° 8'29	6≈31	21°57	0П22	6°59	2° 2	9°43	4°57	27° 8	8° 7	21°30	23°12	5° 0	22°30	S 19
M20	17 50 43	28° 5'43	18°19	24° 8	1°34	7°38	2°16	9°49	5° 0	27° 8	8° 8	21°D28	23° 9	5° 7	22°29	M20
T 21	17 54 39	29° 2'57	0 ∺ 7	26°19	2°46	8°17	2°30	9°55	5° 4	27° 8	8° 9	21°29	23° 5	5°14	22°28	T 21
W22	17 58 36	099 0'10	12° 1	28°30	3°59	8°57	2°43	10° 2	5° 7	27° 9	8°10	21°30	23° 2	5°20	22°26	W22
T 23	18 2 32	0°57'24	24° 6	09୍ଦେ42	5°11	9°36	2°57	10° 8	5°10	27° 9	8°11	21°31	22°59	5°27	22°25	T 23
F 24	18 6 29	1°54'37	6 Υ 26	2°53	6°23	10°16	3°11	10°15	5°14	27° 9	8°12	21°R31	22°56	5°34	22°23	F 24
S 25	18 10 25	2°51'51	19° 7	5° 4	7°36	10°55	3°24	10°22	5°17	27° 9	8°12	21°30	22°53	5°40	22°21	S 25
S 26	18 14 22	3°49'04	2 8 13	7°14	8°48	11°34	3°38	10°28	5°20	27°10	8°13	21°26	22°49	5°47	22°20	S 26
M27	18 18 19	4°46'18	15°46	9°23	10° 0	12°14	3°52	10°35	5°23	27°10	8°14	21°21	22°46	5°54	22°18	M27
T 28	18 22 15	5°43'31	29°48	11°31	11°13	12°53	4° 5	10°42	5°26	27°10	8°15	21°15	22°43	6° 0	22°16	T 28
W29	18 26 12	6°40'45	14 Ⅱ 15	13°37	12°25	13°32	4°19	10°48	5°29	27°10	8°16	21° 8	22°40	6° 7	22°14	W29
T 30	18 30 8	7937'59	29耳 3	159542	13 Ⅲ 38	149512	4933	$10\Omega55$	5 Ⅱ 33	27) 10	8 8 17	21≈ 2	22≈37	6≈14	22≈12	T 30

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	decl	decl la	at	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl l	at	decl lat	decl	decl	decl	decl	lat
W 1 T 2 F 3		27 35 27 5	4 28 3 44	14n47 15 19 15 53		13 8 13 32	1 s47 1 46 1 45	24 14 24 15	0 50 0 51	23n18 23 18 23 19	0 9	19 5 19 4	0 51 0 51	20 50 20 51	0 7 0 7		1 s15 1 15 1 15		13 51 13 54	13 30 13 31	21 16 21 14	7 s 3 6 7 3 6 7 3 5	6n42 6 43 6 43
S 4 S 5 M 6 T 7 W 8		20 39 15 25 9 25	1 35 0 19 0s56	16 26 17 0 17 33 18 7 18 40	2 8 1 59 1 49 1 39 1 29	14 17 14 39 15 1	1 41		0 51 0 52 0 52	23 19 23 19 23 19 23 19 23 20	0 8 0 8 0 8 0 8	19 1 18 59 18 58	0 51 0 51 0 51	20 54	0 7 0 7 0 7	2 21 2 21 2 20 2 20 2 20 2 20	1 15 1 15 1 15 1 15 1 15	1 3 16 1 1 3 16 2 1 3 16 2	13 56 13 57 13 57 13 57 13 57	13 33 13 34 13 35	21 9 21 7 21 4	7 35 7 35 7 35 7 35 7 34	6 43 6 44 6 44 6 45 6 45
T 9 F 10 S 11	22 53 22 58 23 3	9 22 14 56	3 59 4 36	19 13 19 46 20 18		16 5 16 26	1 38 1 37 1 35	24 20 24 20	0 53 0 53	23 20 23 20 23 20		18 53 18 52	0 51 0 51	20 55 20 56 20 56	0 7 0 7		1 15 1 15 1 15	1 2 16 2 1 2 16 3		13 38 13 40	20 57 20 55	7 34 7 34 7 34	6 45 6 46 6 46
S 12 M13 T 14 W15 T 16	23 11 23 14 23 17	23 33 26 11 27 29	5 4 4 55	20 49 21 18 21 47 22 14 22 39	0 46 0 34 0 23 0 12 0 1	17 5 17 25 17 44	1 34 1 32 1 31 1 29 1 27	24 20 24 19 24 18	0 54 0 54 0 55	23 20 23 20 23 20 23 20 23 20	0 8 0 7 0 7 0 7 0 7	18 49 18 47 18 46	0 51 0 51 0 51		0 7 0 7 0 7		1 15 1 15 1 15 1 15 1 15	1 2 16 3 1 2 16 3 1 2 16 3	14 6	13 42 13 43 13 44		7 34 7 34 7 34 7 34 7 34	6 46 6 47 6 47 6 47 6 48
F 17 S 18 S 19	-	23 29		23 3 23 24 23 44	0n10 0 20 0 31	18 38	1 25 1 23 1 22	24 14	0 56	23 20 23 20 23 20	0 7 0 7	18 41	0 51	21 1	0 7 0 7 0 7	2 18 2 18 2 18	1 16 1 16 1 16	1 1 16 4	14 18 14 20 14 21	13 47	20 38	7 34 7 34 7 34	6 48 6 49 6 49
M20 T 21 W22 T 23	23 27 23 27 23 28 23 27	10 43 5 23	-	24 14 24 26	0 41 0 50 0 59	19 43	1 20 1 18 1 16 1 13	24 9 24 6	0 57 0 57	23 20 23 20 23 19 23 19	0 7 0 7 0 7 0 6	18 36 18 34	0 51 0 51	21 2 21 3	0 7 0 7	2 10	1 16 1 16 1 16 1 16	1 1 16 5 1 1 16 5		13 50 13 51	20 31 20 28	7 34 7 35 7 35 7 35	6 49 6 50 6 50 6 50
F 24 S 25 S 26	23 27 23 26	5 54 11 31	3 39 4 21 4 52	24 41 24 44	1 15	20 13 20 27	1 11 1 9		0 58 0 58	23 19 23 19 23 18	0 6	18 30 18 29	0 51 0 51	21 4 21 5	0 7 0 7	2 18 2 18 2 18	1 16 1 16 1 16	1 1 16 5 1 1 16 6	14 21 14 21 14 22	13 53 13 54	20 23 20 21	7 35 7 35 7 36	6 50 6 51 6 51
M27 T 28 W29	23 22 23 20 23 17	21 28 25 5 27 14	5 7 5 5 4 44	24 41 24 36	1 34 1 39 1 43	20 54	1 5 1 2	23 52 23 48 23 45	0 58 0 59 0 59	23 18 23 18 23 18 23 17 23n17	0 6	18 25 18 23	0 51 0 51 0 51	21 6 21 7	0 7 0 7 0 7	2 18 2 18 2 18	1 16 1 16 1 16 1 16 1 s16	1 1 16 6 1 1 16 6 1 1 16 7	14 24 14 26 14 28	13 56 13 57 13 58	20 16 20 13 20 11	7 36 7 36 7 36 7 36 7 s37	6 51 6 52 6 52 6 52 6n52

 $\label{eq:Julian Day Number = 2400196.5, Delta T = 9.10 sec} Ecliptic obliquity = 23°27'34, Nutation = 0°00'09, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 22°46'38, Lahiri = 21°53'38}$

00:00 UT **JULY 1859**

Day	Sid.t	0	D	ğ	φ	♂ [™]	4	ħ)∤(¥	Р	S.	v	Ç	Ŗ	Day
F 1	18 34 5	8935'12	1499 3	179546	14耳50	14951	49546	11 0 2	5 Ⅱ 36	27°R10	8 8 17	20°R57	22≈34	6≈20	22°R10	F 1
S 2	18 38 1	9°32'26	29° 8	19°48	16° 3	15°30	5° 0	11° 9	5°39	27 ∺ 10	8°18	20≈53	22°30	6°27	22≈ 8	S 2
S 3	18 41 58	10°29'39	14 Ω 7	21°48	17°16	16° 9	5°14	11°16	5°42	27°10	8°19	20°D51	22°27	6°33	22° 6	S 3
M 4	18 45 54	11°26'52	28°53	23°46	18°28	16°48	5°27	11°23	5°45	27°10	8°20	20°51	22°24	6°40	22° 4	M 4
T 5	18 49 51	12°24'05	13 m 21	25°43	19°41	17°27	5°41	11°30	5°48	27°10	8°20	20°53	22°21	6°47	22° 2	T 5
W 6	18 53 48	13°21'18	27°28	27°37	20°53	18° 6	5°54	11°37	5°51	27° 9	8°21	20°54	22°18	6°53	22° 0	W 6
T 7	18 57 44	14°18'30	11 ≏ 13	29°30	22° 6	18°45	6° 8	11°44	5°54	27° 9	8°22	20°R55	22°15	7° 0	21°57	T 7
F 8	19 141	15°15'42	24°37	$1\Omega 20$	23°19	19°25	6°22	11°52	5°57	27° 9	8°22	20°54	22°11	7° 7	21°55	F 8
S 9	19 5 37	16°12'54	7 M 42	3° 9	24°32	20° 4	6°35	11°59	5°59	27° 9	8°23	20°52	22° 8	7°13	21°53	S 9
S 10	19 9 34	17°10'06	20°30	4°56	25°44	20°43	6°49	12° 6	6° 2	27° 8	8°23	20°49	22° 5	7°20	21°50	S 10
M11	19 13 30	18° 7'18	3 ∡ 3	6°40	26°57	21°21	7° 2	12°13	6° 5	27° 8	8°24	20°45	22° 2	7°27	21°48	M11
T 12	19 17 27	19° 4'31	15°24	8°23	28°10	22° 0	7°16	12°20	6° 8	27° 8	8°25	20°39	21°59	7°33	21°45	T 12
W13	19 21 23	20° 1'43	27°34	10° 4	29°23	22°39	7°29	12°28	6°11	27° 7	8°25	20°34	21°55	7°40	21°43	W13
T 14	19 25 20	20°58'55	9 궁 36	11°43	0ഇ36	23°18	7°43	12°35	6°13	27° 7	8°26	20°29	21°52	7°47	21°40	T 14
F 15	19 29 17	21°56'08	21°32	13°20	1°49	23°57	7°56	12°42	6°16	27° 7	8°26	20°26	21°49	7°53	21°38	F 15
S 16	19 33 13	22°53'22	3≈22	14°55	3° 1	24°36	8° 9	12°50	6°19	27° 6	8°27	20°23	21°46	8° 0	21°35	S 16
S 17	19 37 10	23°50'35	15°10	16°27	4°14	25°15	8°23	12°57	6°21	27° 6	8°27	20°D22	21°43	8° 7	21°33	S 17
M18	19 41 6	24°47'49	26°58	17°58	5°27	25°54	8°36	13° 5	6°24	27° 5	8°28	20°22	21°40	8°13	21°30	M18
T 19	19 45 3	25°45'04	8) (48	19°27	6°40	26°32	8°49	13°12	6°27	27° 4	8°28	20°23	21°36	8°20	21°27	T 19
W20	19 48 59	26°42'19	20°45	20°54	7°54	27°11	9° 3	13°20	6°29	27° 4	8°29	20°24	21°33	8°27	21°24	W20
T 21	19 52 56	27°39'35	2 Υ 51	22°19	9° 7	27°50	9°16	13°27	6°32	27° 3	8°29	20°26	21°30	8°33	21°22	T 21
F 22	19 56 52	28°36'52	15°12	23°42	10°20	28°29	9°29	13°35	6°34	27° 3	8°29	20°27	21°27	8°40	21°19	F 22
S 23	20 0 49	29°34'10	27°52	25° 3	11°33	29° 7	9°43	13°42	6°37	27° 2	8°30	20°R28	21°24	8°46	21°16	S 23
S 24	20 4 46	0 Ω 31'29	10854	26°21	12°46	29°46	9°56	13°50	6°39	27° 1	8°30	20°27	21°21	8°53	21°13	S 24
M25	20 8 42	1°28'49	24°22	27°38	13°59	$0\Omega_{25}$	10° 9	13°57	6°41	27° 0	8°30	20°26	21°17	9° 0	21°10	M25
T 26	20 12 39	2°26'09	8 Ⅱ 17	28°52	15°13	1° 3	10°22	14° 5	6°44	27° 0	8°31	20°25	21°14	9° 6	21° 7	T 26
W27	20 16 35	3°23'31	22°38	0Mp 4	16°26	1°42	10°35	14°12	6°46	26°59	8°31	20°22	21°11	9°13	21° 4	W27
T 28	20 20 32	4°20'54	79523	1°14	17°39	2°21	10°48	14°20	6°48	26°58	8°31	20°20	21° 8	9°20	21° 1	T 28
F 29	20 24 28	5°18'18	22°25	2°21	18°53	2°59	11° 1	14°28	6°50	26°57	8°31	20°19	21° 5	9°26	20°58	F 29
S 30	20 28 25	6°15'42	7 Ω 36	3°25	20° 6	3°38	11°14	14°35	6°53	26°56	8°32	20°18	21° 1	9°33	20°55	S 30
S 31	20 32 22	7 Ω 13'08	22 N 46	4 Mp 27	219520	4 Ω 16	119527	14 Ω 43	6 Ⅱ 55	26 ¥ 55	8 8 32	20°D18	20≈58	9 ≈ 40	20≈52	S 31

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	decl	decl lat	decl la	at decl	lat decl	lat	decl	lat	decl	lat	decl	lat	decl lat	decl lat	dec	l decl	decl	decl lat
F 1 S 2	23n11 23 7			1n49 21n41 1 51 21 51	0s55 23n37 0 53 23 33		23n17 23 16	0s 6 0 6		0n51 0 51	21n 8 21 9		2s18 1s16 2 18 1 16		7 14 s3 7 14 3		20s 6 20 3	7 s 37 6 n 5 3 7 37 6 5 3
S 3 M 4 T 5 W 6 T 7 F 8	23 3 22 58 22 53 22 47 22 41 22 35	11 11 0s44 4 43 1 59 1s50 3 6 8 7 4 0	23 13 22 52 22 29 22 4	1 52 22 0 1 53 22 9 1 52 22 18 1 52 22 26 1 50 22 33 1 48 22 39	0 51 23 28 0 48 23 24 0 46 23 19 0 43 23 14 0 41 23 9 0 38 23 4	1 0 1 0 1 1 1 1	23 16 23 15 23 15 23 14 23 14 23 13	0 5 0 5 0 5 0 5 0 5 0 5	18 12 18 10 18 8 18 6	0 51	21 10 21 10 21 11 21 11	0 7 0 7 0 7 0 7	2 18 1 16 2 18 1 16 2 18 1 16 2 18 1 16 2 18 1 17 2 18 1 17	5 1 1 16 5 1 1 16 6 1 1 16 7 1 1 16	8 14 3 8 14 3 8 14 3 9 14 3 9 14 3 9 14 3	3 14 3 3 14 4 3 14 6 2 14 7	19 58 19 56 19 53 19 51	7 38 6 53 7 38 6 53 7 39 6 54 7 39 6 54 7 40 6 54 7 40 6 54
S 9 S 10 M11 T 12 W13 T 14 F 15	22 21 22 14 22 6 21 58 21 49 21 40	22 54 5 12 25 46 5 5 27 21 4 44 27 36 4 10 26 31 3 25 24 14 2 32	20 42 20 12 19 41 19 9 18 37 18 4	1 45 22 45 1 42 22 50 1 38 22 55 1 33 22 59 1 28 23 2 1 23 23 5 1 17 23 7	0 36 22 58 0 33 22 53 0 31 22 47 0 28 22 41 0 25 22 35 0 23 22 28 0 20 22 22	1 2 1 2 1 2 1 2 1 3 1 3	23 11 23 10 23 10 23 9	0 5 0 5 0 5 0 5 0 4 0 4	18 0 17 58 17 56 17 54 17 52 17 50	0 52 0 52 0 52 0 52 0 52 0 52	21 14 21 14 21 15 21 15	0 7 0 7 0 7 0 7 0 7 0 7	2 18 1 13 2 19 1 13 2 20 1 13	7 1 1 16 7 1 2 16	10 14 3 10 14 3 11 14 3 11 14 4 11 14 4	4 14 10 5 14 11 7 14 12 9 14 13 0 14 14 2 14 15	19 41 19 38 19 36 19 33 19 31	7 41 6 55 7 41 6 55 7 42 6 55 7 42 6 55 7 43 6 56 7 43 6 56 7 44 6 56
S 16 S 17 M18 T 19 W20 T 21 F 22 S 23	21 21 21 11 21 1 20 50 20 39 20 27	16 45 0 29 11 58 0n36 6 44 1 40 1 13 2 40 4n24 3 33 9 58 4 18	16 56 16 21 15 46 15 11 14 35 14 0	1 11 23 8 1 4 23 8 0 56 23 8 0 49 23 8 0 41 23 6 0 32 23 4 0 23 23 1 0 14 22 58	0 18 22 15 0 15 22 9 0 12 22 2 0 10 21 54 0 7 21 47 0 5 21 40 0 2 21 32 0n 0 21 24	1 3 1 4 1 4 1 4 1 4 1 4	23 7 23 6 23 5 23 4	0 4 0 4 0 4 0 4 0 4 0 4	17 44 17 42 17 40	0 52 0 52 0 52 0 52 0 52 0 52	21 16 21 17 21 17 21 18 21 18	0 7 0 7 0 7 0 7 0 7 0 7	2 20 1 13 2 20 1 13 2 20 1 13 2 21 1 13 2 21 1 13 2 21 1 13 2 21 1 13 2 22 1 1 13	7 1 2 16 7 1 2 16 7 1 3 16 7 1 3 16 7 1 3 16 7 1 3 16	12 14 4 12 14 4 12 14 4 13 14 4 13 14 4 13 14 4	3 14 18 2 14 19 2 14 20 1 14 21 1 14 22	7 19 26 8 19 23 9 19 20 9 19 18 19 15	7 45 6 56 7 45 6 56 7 46 6 56 7 47 6 57 7 47 6 57 7 48 6 57 7 49 6 57 7 50 6 57
S 24 M25 T 26 W27 T 28 F 29 S 30 S 31	19 38 19 25 19 11 18 58 18 43	23 58 5 15 26 39 5 1 27 42 4 27 26 51 3 36 24 2 2 28 19 31 1 10	12 14 11 38 11 4 10 29 9 55 9 22	0 5 22 54 0s 5 22 49 0 15 22 43 0 25 22 37 0 36 22 31 0 47 22 23 0 58 22 15 1s 9 22n 6	0 3 21 16 0 6 21 8 0 8 21 0 0 11 20 52 0 13 20 43 0 16 20 34 0 18 20 25 0n20 20n16	1 5 1 5 1 5 1 5 1 6 1 6	23 2 23 1 23 0 22 59 22 58 22 57 22 56 22n55	0 3	17 29 17 27 17 25		21 20 21 20 21 20 21 21	0 7 0 7 0 7 0 7 0 7 0 7	2 22 1 17 2 22 1 17 2 23 1 17 2 23 1 18 2 24 1 18 2 24 1 18 2 25 1 18	7 1 4 16 7 1 4 16 7 1 4 16 8 1 4 16 8 1 5 16 8 1 5 16	14 14 4 15 14 4 15 14 4 15 14 4 15 14 4 16 14 4		19 5 19 2 19 0 18 57 18 55 18 55 18 52	7 50 6 57 7 51 6 57 7 52 6 58 7 53 6 58 7 54 6 58 7 55 6 58 7 55 6 58 7 55 6 658

Julian Day Number = 2400226.5, Delta T = 9.08 sec

Ecliptic obliquity = $23^{\circ}27'34$, Nutation = $0^{\circ}00'11$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $22^{\circ}46'42$, Lahiri = $21^{\circ}53'42$

AUGUST 1859 00:00 UT

Day	Sid.t	\odot	D	ğ	φ	♂	4	ħ)∤(¥	Р	ß	Ω	Ç	ę,	Day
M 1	20 36 18	8 Ω 10'34	7 m 46	5 Mp 26	22933	4 Ω 55	119540	14 Ω 51	6 Ⅱ 57	26°R55	8 8 32	20≈18	20≈55	9≈46	20°R49	M 1
T 2	20 40 15	9° 8'00	22°29	6°23	23°46	5°34	11°53	14°58	6°59	26) 54	8°32	20°19	20°52	9°53	20≈46	T 2
W 3	20 44 11	10° 5'28	6 ≏ 49	7°16	25° 0	6°12	12° 6	15° 6	7° 1	26°53	8°32	20°20	20°49	10° 0	20°43	W 3
T 4	20 48 8	11° 2'56	20°43	8° 6	26°14	6°51	12°18	15°14	7° 3	26°52	8°32	20°20	20°46	10° 6	20°40	T 4
F 5	20 52 4	12° 0'25	4ML12	8°53	27°27	7°29	12°31	15°21	7° 5	26°50	8°32	20°21	20°42	10°13	20°37	F 5
S 6	20 56 1	12°57'55	17°17	9°36	28°41	8° 8	12°44	15°29	7° 7	26°49	8°32	20°R21	20°39	10°20	20°34	S 6
S 7	20 59 57	13°55'25	0 √ 1	10°16	29°54	8°46	12°56	15°37	7° 9	26°48	8°33	20°21	20°36	10°26	20°31	S 7
M 8	21 3 54	14°52'56	12°27	10°52	1 0 8	9°24	13° 9	15°45	7°10	26°47	8°33	20°20	20°33	10°33	20°28	M 8
T 9	21 7 51	15°50'29	24°39	11°24	2°22	10° 3	13°21	15°52	7°12	26°46	8°R33	20°19	20°30	10°40	20°25	T 9
W10	21 11 47	16°48'02	6 궁 40	11°52	3°35	10°41	13°34	16° 0	7°14	26°45	8°33	20°19	20°27	10°46	20°21	W10
T 11	21 15 44	17°45'36	18°34	12°15	4°49	11°20	13°46	16° 8	7°16	26°44	8°33	20°19	20°23	10°53	20°18	T 11
F 12	21 19 40	18°43'11	0≈24	12°33	6° 3	11°58	13°58	16°15	7°17	26°43	8°32	20°18	20°20	10°59	20°15	F 12
S 13	21 23 37	19°40'47	12°12	12°47	7°17	12°36	14°11	16°23	7°19	26°41	8°32	20°18	20°17	11° 6	20°12	S 13
S 14	21 27 33	20°38'25	24° 0	12°56	8°31	13°15	14°23	16°31	7°20	26°40	8°32	20°18	20°14	11°13	20° 9	S 14
M15	21 31 30	21°36'03	5) 52	12°R59	9°44	13°53	14°35	16°38	7°22	26°39	8°32	20°18	20°11	11°19	20° 6	M15
T 16	21 35 26	22°33'43	17°48	12°57	10°58	14°31	14°47	16°46	7°23	26°38	8°32	20°18	20° 7	11°26	20° 3	T 16
W17	21 39 23	23°31'25	29°52	12°49	12°12	15°10	14°59	16°54	7°25	26°36	8°32	20°18	20° 4	11°33	20° 0	W17
T 18	21 43 19	24°29'07	12 ° 7	12°35	13°26	15°48	15°11	17° 1	7°26	26°35	8°32	20°17	20° 1	11°39	19°56	T 18
F 19	21 47 16	25°26'52	24°34	12°16	14°40	16°26	15°23	17° 9	7°27	26°34	8°31	20°17	19°58	11°46	19°53	F 19
S 20	21 51 13	26°24'38	7 8 16	11°51	15°54	17° 5	15°35	17°17	7°29	26°32	8°31	20°16	19°55	11°53	19°50	S 20
S 21	21 55 9	27°22'26	20°18	11°21	17° 8	17°43	15°46	17°24	7°30	26°31	8°31	20°16	19°52	11°59	19°47	S 21
M22	21 59 6	28°20'16	3 Ⅱ 40	10°45	18°22	18°21	15°58	17°32	7°31	26°29	8°31	20°D16	19°48	12° 6	19°44	M22
T 23	22 3 2	29°18'07	17°26	10° 4	19°36	18°59	16°10	17°39	7°32	26°28	8°30	20°16	19°45	12°13	19°41	T 23
W24	22 6 59	0 m) 16'00	1935	9°19	20°51	19°38	16°21	17°47	7°33	26°27	8°30	20°17	19°42	12°19	19°38	W24
T 25	22 10 55	1°13'55	16° 6	8°30	22° 5	20°16	16°33	17°55	7°34	26°25	8°30	20°18	19°39	12°26	19°35	T 25
F 26	22 14 52	2°11'52	0 Ω 55	7°38	23°19	20°54	16°44	18° 2	7°35	26°24	8°29	20°19	19°36	12°32	19°32	F 26
S 27	22 18 49	3° 9'50	15°57	6°43	24°33	21°32	16°55	18°10	7°36	26°22	8°29	20°R19	19°32	12°39	19°29	S 27
S 28	22 22 45	4° 7'50	1 Mp 3	5°47	25°47	22°11	17° 7	18°17	7°37	26°21	8°29	20°19	19°29	12°46	19°26	S 28
M29	22 26 42	5° 5'52	16° 5	4°52	27° 2	22°49	17°18	18°25	7°38	26°19	8°28	20°18	19°26	12°52	19°23	M29
T 30	22 30 38	6° 3'55	0 ჲ 53	3°57	28°16	23°27	17°29	18°32	7°38	26°18	8°28	20°16	19°23	12°59	19°20	T 30
W31	22 34 35	7Mp 2'00	15 ≏ 22	3 m 5	29€30	24 Ω 5	179540	18 Ω 40	7 Ⅱ 39	26 米 16	8 8 27	20≈14	19≈20	13 ≈ 6	19 ≈ 17	W31

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M 1 T 2	18n14 17 59	7n11 1s3			21n57 2 21 47		20n 7 19 58		22n54 22 53	0s 3 0 3		0n53 0 53	21n22 21 23		2 s 2 5 2 2 6	1 s18 1 18	1s 5 16s16	14 s44 14 44			7 s 5 7 7 5 8	6n58 6 58
W 3	17 44	6s14 3 5			21 47		19 49	1 7		0 3					2 26	1 18		14 43		-	7 59	6 58
T 4	17 28	12 21 4 3	6 6 46	1 55	21 25	0 30	19 39	1 7	22 51	0 2	17 8	0 53	21 23	0 7	2 26	1 18	1 6 16 17	14 43	14 35	18 39	8 0	6 58
F 5	-,		5 6 17		_		19 29	1 7		0 2		0 53			2 27	1 18		14 43			8 1	6 58
S 6	16 56	22 4 5 1	7 5 50	2 19	21 0	0 34	19 20	1 7	22 49	0 2	17 3	0 53	21 24	0 7	2 27	1 18	1 7 16 18	14 43	14 37	18 33	8 2	6 58
S 7	16 40	25 16 5 1	3 5 24		20 47	0 37	19 10	1 7	22 48	0 2	17 1		21 24	0 7		1 18	1 7 16 18	14 43	14 38	18 31	8 3	6 58
M 8	16 23						19 0	1 7	,	0 2			_		2 20	1 18		14 43			8 4	6 58
T 9		27 43 4 2				-	18 50		22 45	0 2			21 25			1 18		14 43			8 5	6 58 6 58
W10 T 11	15 49 15 31						18 39 18 29	1 8	22 44 22 43	0 2 0 2					2 29 2 30	1 18 1 18		14 44			8 6 8 7	6 58
F 12		21 51 1 4					18 18	1 8		0 2					2 30	1 18		14 44			8 7	6 58
S 13	14 56	17 52 0 4	3 25	3 37	19 16	0 49		1 8		0 2			21 26		2 31	1 18	1 9 16 20	14 44	14 44	18 15	8 8	6 58
S 14	14 37	13 13 0n2					17 57	1 8		0 1	16 45	0 54			2 31	1 18		14 44		-	8 10	6 58
M15	14 19	8 3 1 2	-				17 46	1 8		0 1		0 54	-		2 32	1 18		14 44			8 11	6 58
T 16	14 0	2 34 2 2					17 35	1 8		0 1		0 54		0 7	2 32	1 18	-	14 44			8 12	6 58
W17 T 18	13 41 13 22	3n 3 3 2 8 37 4 1					17 24 17 12	1 9		0 1 0 1		0 54 0 54			2 33 2 33	1 18 1 18		14 44 2 14 44			8 13 8 14	6 58 6 58
F 19	_		6 2 51				17 12		22 33	0 1		0 54			2 33	1 18		14 44			8 15	6 58
S 20	12 43		9 2 56			-	16 49		22 32	0 1			21 28		2 35	1 18	1 11 16 22				8 16	6 58
S 21	12 24	22 56 5 1	7 3 4	4 35	16 43	1 4	16 38	1 9	22 31	0 1	16 30	0 55	21 28	0 7	2 35	1 18	1 12 16 23	14 45	14 52	17 53	8 17	6 58
M22	12 4	25 57 5	9 3 16	4 37	16 22	1 5	16 26	1 9	22 30	0 1	16 28	0 55	21 28	0 7	2 36	1 18	1 12 16 23	14 45	14 53	17 51	8 18	6 57
T 23	11 44		3 30				16 14		22 28	0 1	16 25	0 55	_		2 36	1 18		14 44			8 19	6 57
W24	11 23		3 48			-	16 2		22 27	0 (0 55			2 37	1 18		14 44			8 20	6 57
T 25 F 26	11 3 10 42	25 27 2 5					15 50 15 38		22 26 22 24	0 0		0 55 0 55	-		2 38 2 38	1 19 1 19	1 13 16 24 1 13 16 24	14 44			8 21 8 22	6 57 6 57
S 27	10 42		-				15 38		22 24 22 23	0 0			21 29		2 38	1 19	1 13 16 24				8 22	6 57
S 28	10 0	10 11 0s5	5 28	4 13	14 5	1 13	15 14	1 10	22 22	0 0	16 14	0 55	21 29	0 7	2 39	1 19	1 14 16 25	14 44	14 59	17 34	8 24	6 57
M29	9 39	3 23 2 1	8 5 58	4 3	13 41	1 15	15 1	1 10	22 20	0n (16 12	0 55	21 29	0 7	2 40	1 19	1 15 16 25	14 44	15 0	17 32	8 25	6 56
T 30	9 18	3 s30 3 2					14 49		22 19	0 0					2 41	1 19	1 15 16 25			17 29	8 26	6 56
W31	8n56	10s 2 4s2	20 7n 1	3 s 3 6	12n51	1n17	14n36	1n10	22n18	0n (16n 7	0n56	21n29	0s 7	2 s41	1 s19	1s15 16s26	14 s45	15 s 2	17 s26	8 s27	6n56

Julian Day Number = 2400257.5, Delta T = 9.06 sec Ecliptic obliquity = $23^{\circ}27'34$, Nutation = $0^{\circ}00'12$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $22^{\circ}46'46$, Lahiri = $21^{\circ}53'46$

SEPTEMBER 1859 00:00 UT

Day	Sid.t	0	D	ğ	Q	ď	4	ħ)∤(并	Р	v	v	Ç	ę,	Day
T 1	22 38 31	8m) 0'06	29 Ω 25	2°R16	0 m 45	24₽43	17951	18 Ω 47	7 Ⅱ 40	26°R14	8°R27	20°R12	19≈17	13≈12	19°R14	T 1
F 2	22 42 28	8°58'13	13 M 1	1 m 31	1°59	25°21	18° 1	18°55	7°40	26) 13	8 8 27	20≈10	19°13	13°19	19≈11	F 2
S 3	22 46 24	9°56'23	26°11	0°53	3°13	26° 0	18°12	19° 2	7°41	26°11	8°26	20° 9	19°10	13°26	19° 8	S 3
S 4	22 50 21	10°54'33	8 × 756	0°21	4°28	26°38	18°23	19° 9	7°41	26°10	8°25	20°D 8	19° 7	13°32	19° 5	S 4
M 5	22 54 17	11°52'45	21°21	29 N 56	5°42	27°16	18°33	19°17	7°42	26° 8	8°25	20° 8	19° 4	13°39	19° 2	M 5
T 6	22 58 14	12°50'59	3 ට 30	29°40	6°57	27°54	18°44	19°24	7°42	26° 7	8°24	20° 9	19° 1	13°46	19° 0	T 6
W 7	23 2 11	13°49'14	15°27	29°D32	8°11	28°32	18°54	19°31	7°43	26° 5	8°24	20°11	18°58	13°52	18°57	W 7
T 8	23 6 7	14°47'30	27°17	29°33	9°26	29°10	19° 4	19°38	7°43	26° 3	8°23	20°13	18°54	13°59	18°54	T 8
F 9	23 10 4	15°45'48	9≈ 5	29°43	10°40	29°48	19°14	19°46	7°43	26° 2	8°23	20°14	18°51	14° 6	18°52	F 9
S 10	23 14 0	16°44'08	20°53	0MD 2	11°55	0 m 26	19°24	19°53	7°43	26° 0	8°22	20°R15	18°48	14°12	18°49	S 10
S 11	23 17 57	17°42'29	2) (45	0°30	13° 9	1° 4	19°34	20° 0	7°44	25°58	8°21	20°14	18°45	14°19	18°46	S 11
M12	23 21 53	18°40'53	14°44	1° 6	14°24	1°42	19°44	20° 7	7°44	25°57	8°21	20°12	18°42	14°25	18°44	M12
T 13	23 25 50	19°39'18	26°52	1°51	15°38	2°20	19°54	20°14	7°R44	25°55	8°20	20° 8	18°38	14°32	18°41	T 13
W14	23 29 46	20°37'44	9Υ9	2°45	16°53	2°58	20° 4	20°21	7°44	25°54	8°19	20° 4	18°35	14°39	18°39	W14
T 15	23 33 43	21°36'13	21°38	3°45	18° 8	3°36	20°13	20°28	7°44	25°52	8°19	19°58	18°32	14°45	18°36	T 15
F 16	23 37 40	22°34'44	4819	4°53	19°22	4°14	20°22	20°35	7°44	25°50	8°18	19°53	18°29	14°52	18°34	F 16
S 17	23 41 36	23°33'17	17°13	6° 7	20°37	4°52	20°32	20°42	7°43	25°49	8°17	19°48	18°26	14°59	18°31	S 17
S 18	23 45 33	24°31'53	0Д21	7°27	21°52	5°30	20°41	20°49	7°43	25°47	8°16	19°44	18°23	15° 5	18°29	S 18
M19	23 49 29	25°30'30	13°45	8°52	23° 6	6° 8	20°50	20°56	7°43	25°45	8°16	19°42	18°19	15°12	18°27	M19
T 20	23 53 26	26°29'10	27°26	10°22	24°21	6°46	20°59	21° 2	7°43	25°44	8°15	19°D42	18°16	15°19	18°25	T 20
W21	23 57 22	27°27'52	119523	11°56	25°36	7°24	21° 8	21° 9	7°42	25°42	8°14	19°42	18°13	15°25	18°22	W21
T 22	0 1 19	28°26'37	25°37	13°33	26°51	8° 2	21°16	21°16	7°42	25°40	8°13	19°44	18°10	15°32	18°20	T 22
F 23	0 5 15	29°25'23	10 N 6	15°13	28° 5	8°40	21°25	21°22	7°42	25°39	8°12	19°45	18° 7	15°39	18°18	F 23
S 24	0 9 12	0 ჲ 24'12	24°47	16°55	29°20	9°18	21°33	21°29	7°41	25°37	8°12	19°R45	18° 4	15°45	18°16	S 24
S 25	0 13 9	1°23'03	9 m /35	18°40	0 ჲ 35	9°56	21°42	21°36	7°40	25°35	8°11	19°43	18° 0	15°52	18°14	S 25
M26	0 17 5	2°21'56	24°23	20°25	1°50	10°34	21°50	21°42	7°40	25°34	8°10	19°40	17°57	15°58	18°12	M26
T 27	0 21 2	3°20'51	9 º 4	22°12	3° 5	11°12	21°58	21°49	7°39	25°32	8° 9	19°35	17°54	16° 5	18°10	T 27
W28	0 24 58	4°19'48	23°29	23°59	4°20	11°50	22° 6	21°55	7°38	25°30	8° 8	19°28	17°51	16°12	18° 8	W28
T 29	0 28 55	5°18'47	7 M 33	25°47	5°35	12°28	22°14	22° 1	7°38	25°29	8° 7	19°20	17°48	16°18	18° 6	T 29
F 30	0 32 51	6 ₽ 17'48	21 M 12	27 m 36	6 ₽ 49	13 Mp 6	229521	22 N 7	7 Ⅲ 37	25) 27	8 8 6	19≈13	17≈44	16≈25	18≈ 5	F 30

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	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl dec	decl	decl lat
T 1 F 2 S 3	8n35 8 13 7 51		8 5 3	4 12 0 1 19	14 11 1 10	22n16	16 3 0 56	21n30 0s 7 21 30 0 7 21 30 0 7	2 43 1 19	1s16 16s26 1 16 16 26 1 17 16 26	-	3 17 s23 4 17 21 5 17 18	8 s 2 8 6 n 5 6 8 3 0 6 5 6 8 3 1 6 5 5
S 4 M 5 T 6 W 7 T 8	7 29 7 7 6 44 6 22 6 0	27 40 4 30 27 15 3 50 25 33 3 0 22 44 2 3	9 30 2 9 53 1 5 10 14 1 3 10 32 1 1	9 10 41 1 21 0 10 14 1 22 0 9 47 1 22 1 9 19 1 23	13 32 1 10 13 19 1 11 13 6 1 11 12 53 1 11	22 11 0 1 22 10 0 1 22 8 0 1 22 7 0 1	15 56 0 56 15 54 0 56 15 52 0 56 15 50 0 56	21 30 0 7 21 30 0 7 21 30 0 7	2 45 1 19 2 45 1 19 2 46 1 19 2 46 1 19	1 18 16 28 1 19 16 28	14 47 15 14 47 15 14 46 15 16 15 16		8 33 6 55 8 34 6 55 8 35 6 55 8 36 6 54
F 9 S 10		14 29 On 4	10 46 0 5 10 56 0 3	5 8 24 1 24	12 26 1 11	22 5 0 1	15 46 0 57	21 30 0 7	2 47 1 19 2 48 1 19	1 20 16 28	14 45 15 1 14 45 15 12	16 59	8 37 6 54 8 38 6 54
S 11 M12 T 13 W14 T 15 F 16 S 17	4 52 4 29 4 6 3 43 3 20 2 57 2 34	4 1 2 10 1n37 3 7 7 15 3 56 12 41 4 35 17 41 5 0	11 3 0n1 10 57 0 2 10 48 0 4 10 34 0 5	1 7 27 1 25 4 6 58 1 25 9 6 29 1 25 2 6 0 1 25 4 5 31 1 25	11 32 1 11 11 18 1 11 11 4 1 11	22 2 0 1	15 41 0 57 15 39 0 57 15 37 0 57 15 35 0 57 15 33 0 57	21 30 0 7 21 30 0 7 21 30 0 7	2 ./ 1 ./	1 20 16 29 1 21 16 29 1 21 16 29 1 22 16 30 1 22 16 30	14 45 15 12 14 46 15 14 14 47 15 12 14 48 15 16 14 50 15 12 14 52 15 13 14 53 15 19	1 16 53 5 16 50 6 16 48 7 16 45 8 16 42	8 39 6 53 8 40 6 53 8 41 6 53 8 42 6 53 8 43 6 52 8 44 6 52 8 45 6 52
S 18 M19 T 20 W21 T 22 F 23 S 24	0 37	27 11 4 45 27 33 4 7 26 11 3 14 23 8 2 8 18 34 0 52	9 32 1 2 9 5 1 3 8 35 1 3 8 2 1 4 7 27 1 4	3 4 2 1 25 1 3 32 1 25 7 3 2 1 24 2 2 32 1 24 6 2 2 1 24	10 22 1 11 10 8 1 11 9 54 1 11 9 40 1 11 9 26 1 11		15 27 0 58 15 25 0 58 15 23 0 58 15 21 0 58 15 19 0 58	21 30 0 7 21 30 0 7 21 30 0 7	2 53 1 19 2 54 1 19 2 54 1 19 2 55 1 19 2 56 1 19 2 56 1 19 2 57 1 19	1 23 16 30 1 24 16 31 1 24 16 31 1 25 16 31 1 25 16 31	14 55 15 20 14 54 15 20 14 54 15 20	1 16 34 2 16 31 3 16 28 4 16 25 5 16 22	8 46 6 51 8 47 6 51 8 48 6 51 8 49 6 50 8 50 6 50 8 51 6 50 8 52 6 49
S 25 M26 T 27 W28 T 29 F 30	0 33 0 56 1 20 1 43 2 7 2 s30	0s28 2 57 7 12 3 55 13 25 4 38 18 48 5 2	5 31 1 5 4 49 1 5 4 6 1 5 3 22 1 5	2 0 31 1 22 3 0 1 1 21 2 0s29 1 21 1 1 0 1 20	8 43 1 11 8 28 1 11 8 14 1 12 7 59 1 12	21 42 0 3 21 41 0 3	15 13 0 59 15 11 0 59 15 9 0 59 15 7 0 59	21 29 0 7 21 29 0 7	3 0 1 19	1 27 16 32 1 27 16 32 1 27 16 32 1 28 16 32		3 16 14 9 16 11 0 16 8 1 16 5	8 53 6 49 8 54 6 49 8 55 6 48 8 56 6 48 8 57 6 48 8 58 6n47

 $\label{eq:Julian Day Number = 2400288.5, Delta T = 9.05 sec} \\ Ecliptic obliquity = 23°27'35, Nutation = 0°00'12, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 22°46'50, Lahiri = 21°53'51} \\$

OCTOBER 1859 00:00 UT

0010	DEN IC	,,,													00.0	0 0 1
Day	Sid.t	0	D	ğ	φ	♂	4	ħ)ţ(卉	Р	S.	Ω	Ç	ķ	Day
S 1	0 36 48	7 ≏ 16'51	4 ₹ 26	29 m 24	8 요 4	13 m 44	22529	22 \O 14	7°R36	25°R25	8°R 5	19°R 7	17≈41	16≈32	18°R 3	S 1
S 2	0 40 44	8°15'55	17°14	1 ≏ 12	9°19	14°22	22°36	22°20	7 Ⅱ 35	25) 24	8 8 4	19 ≈ 3	17°38	16°38	18 ≈ 1	S 2
M 3	0 44 41	9°15'02	29°41	3° 0	10°34	15° 0	22°43	22°26	7°34	25°22	8° 3	19° 0	17°35	16°45	18° 0	M 3
T 4	0 48 38	10°14'10	11 궁 50	4°48	11°49	15°38	22°50	22°32	7°33	25°21	8° 2	19°D 0	17°32	16°52	17°58	T 4
W 5	0 52 34	11°13'20	23°46	6°35	13° 4	16°16	22°57	22°38	7°32	25°19	8° 1	19° 0	17°29	16°58	17°57	W 5
T 6	0 56 31	12°12'31	5 ≈ 36	8°21	14°19	16°53	23° 4	22°44	7°31	25°17	8° 0	19° 2	17°25	17° 5	17°55	T 6
F 7	1 0 27	13°11'45	17°23	10° 7	15°34	17°31	23°11	22°50	7°30	25°16	7°59	19°R 2	17°22	17°12	17°54	F 7
S 8	1 4 24	14°11'00	29°14	11°53	16°49	18° 9	23°17	22°55	7°29	25°14	7°58	19° 2	17°19	17°18	17°53	S 8
S 9	1 8 20	15°10'17	11) (11	13°37	18° 4	18°47	23°24	23° 1	7°27	25°13	7°57	18°59	17°16	17°25	17°51	S 9
M10	1 12 17	16° 9'36	23°18	15°21	19°19	19°25	23°30	23° 7	7°26	25°11	7°56	18°54	17°13	17°31	17°50	M10
T 11	1 16 13	17° 8'57	5 Υ 38	17° 4	20°34	20° 3	23°36	23°12	7°25	25°10	7°55	18°47	17° 9	17°38	17°49	T 11
W12 T 13	1 20 10 1 24 6	18° 8'20 19° 7'45	18°12 1 8 1	18°47 20°29	21°49 23° 4	20°41 21°18	23°42 23°47	23°18 23°23	7°24 7°22	25° 8 25° 7	7°54 7°53	18°37 18°26	17° 6 17° 3	17°45 17°51	17°48 17°47	W12 T 13
F 14	1 24 6	19 / 43 20° 7'12	14° 2	20°29 22°10	23 4 24°19	21°56	23°53	23°29	7°21	25° 5	7°52	18°15	17° 0	17°58	17°46	F 14
S 15	1 32 0	21° 6'41	27°17	23°51	25°34	22°34	23°58	23°34	7°19	25° 4	7°51	18° 5	16°57	18° 5	17°45	S 15
S 16	1 35 56	22° 6'13	10 Ⅱ 43	25°31	26°49	23°12	24° 3	23°39	7°18	25° 2	7°50	17°57	16°54	18°11	17°44	S 16
M17	1 35 56	23° 5'47	24°19	25°31 27°10	28° 4	23°50	24° 3	23°44	7°18	25° 2	7°49	17°51	16°50	18°18	17°44 17°44	M17
T 18	1 43 49	24° 5'23	89 4	28°48	29°19	24°28	24°13	23°49	7°14	25° 0	7°48	17°48	16°47	18°25	17°43	T 18
W19	1 47 46	25° 5'01	21°59	0ML26	0M.34	25° 6	24°18	23°54	7°13	24°58	7°47	17°D47	16°44	18°31	17°42	W19
T 20	1 51 42	26° 4'42	6Ω 2	2° 4	1°49	25°43	24°23	23°59	7°11	24°57	7°46	17°47	16°41	18°38	17°42	T 20
F 21	1 55 39	27° 4'25	20°14	3°40	3° 4	26°21	24°27	24° 4	7° 9	24°55	7°45	17°R47	16°38	18°45	17°41	F 21
S 22	1 59 36	28° 4'10	4 Mp 32	5°16	4°19	26°59	24°31	24° 9	7° 8	24°54	7°43	17°46	16°35	18°51	17°41	S 22
S 23	2 3 32	29° 3'58	18°55	6°52	5°34	27°37	24°35	24°14	7° 6	24°53	7°42	17°43	16°31	18°58	17°40	S 23
M24	2 7 29	OM 3'47	3 ≏ 19	8°27	6°49	28°15	24°39	24°18	7° 4	24°52	7°41	17°37	16°28	19° 5	17°40	M24
T 25	2 11 25	1° 3'39	17°37	10° 1	8° 5	28°52	24°43	24°23	7° 2	24°50	7°40	17°28	16°25	19°11	17°40	T 25
W26	2 15 22	2° 3'33	1 M .46	11°35	9°20	29°30	24°46	24°27	7° 0	24°49	7°39	17°17	16°22	19°18	17°40	W26
T 27	2 19 18	3° 3'29	15°38	13° 9	10°35	0요 8	24°49	24°31	6°58	24°48	7°38	17° 4	16°19	19°24	17°40	T 27
F 28	2 23 15	4° 3'26	29°10	14°42	11°50	0°46	24°53	24°36	6°56	24°47	7°37	16°52	16°15	19°31	17°D40	F 28
S 29	2 27 11	5° 3'26	12 × 21	16°14	13° 5	1°24	24°55	24°40	6°54	24°45	7°36	16°42	16°12	19°38	17°40	S 29
S 30	2 31 8	6° 3'27	25° 8	17°46	14°20	2° 1	24°58	24°44	6°52	24°44	7°34	16°33	16° 9	19°44	17°40	S 30
M31	2 35 5	7 M 3'30	7 云 35	19 M _18	15 M 35	2 ॒ 39	2599 1	24 Ω 48	6 耳 50	24) (43	7 8 33	16≈27	16≈ 6	19≈51	17≈40	M31

Day	0	D	Ş	Į	φ		ď	7	2	+	1	ħ);	β (4	7	Р	រា	Ω	Ç	ď	
	decl	decl lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl lat	decl	decl	decl	decl	lat
S 1	2 s54	25 s55 4 s	58 1n53	1n47	2 s 1	1n18	7n30	1n12	21n39	0n 4	15n 3	1n 0	21n29	0s 7	3 s 2	1 s 1 9	1 s29 16 s33	15 s 6	15 s33	16s 0	8 s 5 8	6n47
S 2	3 17	27 22 4	32 1 7	1 44	2 31	1 17	7 16	1 12	21 38	0 4	15 1	1 0	21 29	0 7	3 2	1 19	1 29 16 33	15 8	15 34	15 57	8 59	6 46
M 3	3 40		54 0 21	1 41	3 1	1 16	7 1		21 36	0 4			21 29			1 19	1 30 16 33			15 54	9 0	6 46
T 4 W 5	4 3		7 0s25		3 32	1 15	6 46		21 35 21 34	0 4			21 29		٠.	1 19	1 30 16 33			15 51	9 1 9 2	6 46
T 6	4 27 4 50			1 33 1 29	4 2 4 32	1 14 1 13	6 31 6 17		21 34	0 4	14 56		21 28 21 28			1 19 1 19	1 30 16 33 1 31 16 33			15 48 15 45	9 2	6 45
F 7		15 47 0			5 2	1 11	6 2		21 32	-	14 52		21 28			1 19	1 31 16 34			15 43	9 3	6 44
S 8	5 36	10 54 0n	55 3 30	1 18	5 32	1 10	5 47	1 12	21 31	0 5	14 50	1 1	21 28	0 7	3 6	1 19	1 32 16 34	1 15 8	15 39	15 40	9 4	6 44
S 9	5 59	5 35 1	56 4 15	1 13	6 2	1 9	5 32	1 12	21 30	0 5	14 49	1 1	21 28	0 7	3 7	1 19	1 32 16 34	1 15 9	15 40	15 37	9 5	6 43
M10	6 22	0 1 2	53 5 1	1 7	6 32	1 7	5 17	1 11	21 30	0 5	14 47	1 1	21 27	0 7	3 7	1 19	1 33 16 34	15 10	15 41	15 34	9 6	6 43
T 11	6 44				7 1	1 6	5 2	1 11		0 5			21 27	0 7	3 8	1 19		15 13			9 6	6 43
W12	7 7			0 55	7 31	1 4	4 48	1 11		0 5			21 27	0 7	3 8	1 19		1 15 15			9 7	6 42
T 13 F 14	7 30	16 21 4 20 53 5	50 7 15 3 7 59	0 49 0 43	8 0 8 29	1 3	4 33 4 18		21 27 21 26	0 5			21 27 21 27	0 7	,	1 19 1 19	1 34 16 34 1 34 16 34				9 8	6 42 6 41
S 15		24 26 5	0 8 42		8 58	0 59	4 3		21 25		14 39		21 26		3 10		1 35 16 34				9 9	6 41
S 16	8 37	26 42 4	40 9 24	0 30	9 27	0 58	3 48	1 11	21 24	0 6	14 37	1 2	21 26	0 7	3 11	1 19	1 35 16 34	1 15 28	15 47	15 17	9 10	6 40
M17	8 59		5 10 7		9 55	0 56	3 33			0 6	14 36	1 2	-	0 7	3 11	1 19	1 35 16 35			-	9 11	6 40
T 18	-		15 10 48		10 24	0 54	3 18		21 23	0 6	_		-		3 12	1 19	1 36 16 35			-	9 11	6 40
W19 T 20	9 43		13 11 29 2 12 9		10 52 11 20	0 52 0 50	3 2 2 47		21 22 21 22	0 6					3 12 3 13	1 19 1 19	1 36 16 35 1 37 16 35				9 12 9 12	6 39
F 21	10 3		13 12 49		11 47	0 48	2 32		21 22	0 6			21 25		3 13	1 19	1 37 16 35				9 12	6 38
S 22	10 48		28 13 27			0 46	2 17		21 20	0 6			21 24		3 14	-	1 37 16 35				9 14	6 38
S 23	11 9	1 59 2	37 14 5	0 17	12 42	0 44	2 2	1 11	21 20	0 7	14 27	1 3	21 24	0 7	3 14	1 19	1 38 16 35	15 32	15 54	14 57	9 14	6 37
M24	11 30	4s38 3	37 14 43	0 24	13 8	0 42	1 47	1 11	21 19	0 7	14 26	1 3	21 24	0 7	3 15	1 19	1 38 16 35	5 15 34	15 55	14 54	9 15	6 37
T 25	11 51	10 57 4			13 35	0 40	1 32		21 19	0 7					3 15	1 19		5 15 37		-	9 15	6 36
W26	12 12		50 15 55			0 38	1 17		21 18	0 7	_		_		3 16	1 19		15 40			9 16	6 36
T 27 F 28		21 20 5 24 47 4	1 16 30 54 17 4		14 26 14 52	0 36 0 34	1 2 0 47		21 18 21 17	0 7			21 23 21 23		3 16 3 17	1 19 1 19	1 39 16 35 1 40 16 35	15 44			9 16 9 17	6 35
S 29			32 17 37			0 34	0 32		21 17				21 23		3 17	1 19	1 40 16 35				9 17	6 34
S 30	13 33	27 18 3	56 18 10	1 4	15 41	0 29	0 16	1 11	21 17	0 8	14 18	1 5	21 22	0 7	3 18	1 19	1 40 16 35	15 53	16 1	14 36	9 17	6 34
M31	13 s53	26 s24 3 s	10 18 s41	1 s 1 0	16s 5	0n27	0n 1	1n10	21n16	0n 8	14n17	1n 5	21n22	0s 7	3 s 1 8	1 s19	1 s41 16 s35	15 s55	16s 1	14 s33	9s18	6n34

Julian Day Number = 2400318.5, Delta T = 9.03 sec Ecliptic obliquity = $23^{\circ}27'34$, Nutation = $0^{\circ}00'11$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $22^{\circ}46'54$, Lahiri = $21^{\circ}53'55$

NOVEMBER 1859 00:00 UT

Day	Sid.t	0	D	ğ	φ	ð	4	ħ)∤(朴	Р	₽.	Ω	Ç	, k	Day
T 1	2 39 1	8M 3'35	19 궁 45	20 11 49	16 M .50	3 ≙ 17	2595 3	24 Ω 52	6°R48	24°R42	7°R32	16°R24	16≈ 3	19≈58	17≈40	T 1
W 2	2 42 58	9° 3'41	1≈42	22°19	18° 5	3°55	25° 5	24°56	6 Ⅱ 46	24) (41	7 8 31	16≈23	16° 0	20° 4	17°40	W 2
T 3	2 46 54	10° 3'48	13°31	23°50	19°21	4°32	25° 7	24°59	6°44	24°40	7°30	16°23	15°56	20°11	17°41	T 3
F 4	2 50 51	11° 3'58	25°19	25°19	20°36	5°10	25° 9	25° 3	6°42	24°39	7°29	16°23	15°53	20°18	17°41	F 4
S 5	2 54 47	12° 4'08	7 ∺ 10	26°49	21°51	5°48	25°10	25° 6	6°39	24°38	7°28	16°21	15°50	20°24	17°42	S 5
S 6	2 58 44	13° 4'21	19°11	28°17	23° 6	6°26	25°12	25°10	6°37	24°37	7°27	16°18	15°47	20°31	17°42	S 6
M 7	3 2 40	14° 4'34	1 Υ 24	29°46	24°21	7° 3	25°13	25°13	6°35	24°36	7°25	16°12	15°44	20°38	17°43	M 7
T 8	3 6 3 7	15° 4'50	13°54	1 √ 14	25°36	7°41	25°14	25°16	6°32	24°35	7°24	16° 3	15°41	20°44	17°43	T 8
W 9	3 10 33	16° 5'07	26°43	2°41	26°51	8°19	25°15	25°19	6°30	24°34	7°23	15°51	15°37	20°51	17°44	W 9
T 10	3 14 30	17° 5'25	9850	4° 8	28° 6	8°56	25°15	25°23	6°28	24°33	7°22	15°39	15°34	20°57	17°45	T 10
F 11	3 18 27	18° 5'46	23°15	5°34	29°21	9°34	25°16	25°25	6°26	24°32	7°21	15°25	15°31	21° 4	17°46	F 11
S 12	3 22 23	19° 6'08	6 Ⅱ 55	6°59	0 ∡ 37	10°12	25°16	25°28	6°23	24°32	7°20	15°13	15°28	21°11	17°47	S 12
S 13	3 26 20	20° 6'32	20°46	8°24	1°52	10°50	25°R16	25°31	6°21	24°31	7°19	15° 3	15°25	21°17	17°48	S 13
M14	3 30 16	21° 6'58	49645	9°48	3° 7	11°27	25°16	25°34	6°18	24°30	7°18	14°55	15°21	21°24	17°49	M14
T 15	3 34 13	22° 7'25	18°49	11°11	4°22	12° 5	25°15	25°36	6°16	24°29	7°17	14°51	15°18	21°31	17°50	T 15
W16	3 38 9	23° 7'55	2 Ω 54	12°34	5°37	12°43	25°15	25°39	6°14	24°29	7°16	14°49	15°15	21°37	17°51	W16
T 17	3 42 6	24° 8'26	17° 0	13°55	6°52	13°20	25°14	25°41	6°11	24°28	7°14	14°48	15°12	21°44	17°52	T 17
F 18	3 46 3	25° 8'59	1 m/ 5	15°15	8° 7	13°58	25°13	25°43	6° 9	24°27	7°13	14°48	15° 9	21°51	17°54	F 18
S 19	3 49 59	26° 9'33	15° 8	16°34	9°22	14°36	25°12	25°45	6° 6	24°27	7°12	14°47	15° 6	21°57	17°55	S 19
S 20	3 53 56	27°10'10	29°10	17°51	10°38	15°13	25°10	25°47	6° 4	24°26	7°11	14°44	15° 2	22° 4	17°57	S 20
M21	3 57 52	28°10'48	13 ♀ 7	19° 7	11°53	15°51	25° 9	25°49	6° 1	24°26	7°10	14°38	14°59	22°11	17°58	M21
T 22	4 1 49	29°11'28	26°59	20°20	13° 8	16°29	25° 7	25°51	5°59	24°25	7° 9	14°29	14°56	22°17	18° 0	T 22
W23	4 5 45	0 ₹ 12'10	10 M .41	21°32	14°23	17° 6	25° 5	25°52	5°56	24°25	7° 8	14°17	14°53	22°24	18° 1	W23
T 24	4 9 42	1°12'53	24°11	22°41	15°38	17°44	25° 3	25°54	5°54	24°24	7° 7	14° 5	14°50	22°31	18° 3	T 24
F 25	4 13 38	2°13'37	7 ₹ 26	23°47	16°53	18°21	25° 0	25°56	5°51	24°24	7° 6	13°52	14°47	22°37	18° 5	F 25
S 26	4 17 35	3°14'23	20°23	24°50	18° 8	18°59	24°58	25°57	5°49	24°23	7° 5	13°41	14°43	22°44	18° 7	S 26
S 27	4 21 32	4°15'10	3 궁 3	25°49	19°23	19°37	24°55	25°58	5°46	24°23	7° 4	13°32	14°40	22°50	18° 8	S 27
M28	4 25 28	5°15'59	15°25	26°44	20°39	20°14	24°52	25°59	5°43	24°23	7° 3	13°26	14°37	22°57	18°10	M28
T 29	4 29 25	6°16'48	27°33	27°35	21°54	20°52	24°49	26° 0	5°41	24°23	7° 2	13°22	14°34	23° 4	18°12	T 29
W30	4 33 21	7 .7 17'38	9≈29	28 × 19	23 ×7 9	21 ≏ 29	249546	26 Ω 1	5 Ⅱ 38	24) 22	7 8 1	13°D21	14 ≈ 31	23≈10	18 ≈ 14	W30

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F 4 S 5	15 10 15 28	12 21 0n47	20 38 1 3	4 17 38 0 18	0 59 1 10	21 15 0 8 21 15 0 8 21 15 0 8	14 13 1 5	21 20 0 7 21 20 0 7 21 20 0 7	3 20 1 18 3 20 1 18		15 56 16 5	14 21	9 19 6 32 9 20 6 31
S 6 M 7 T 8	15 47 16 5 16 22	3n50 3 34	21 30 1 4 21 54 1 5 22 18 1 5	0 18 42 0 11	1 44 1 10	21 15 0 9 21 15 0 9 21 15 0 9	14 10 1 6	,	3 20 1 18 3 21 1 18 3 21 1 18	1 42 16 35 1 43 16 35 1 43 16 35	16 0 16 8		9 20 6 30
W 9 T 10 F 11 S 12		19 29 4 59 23 24 4 57	23 1 2 23 21 2	0 19 23 0 6 4 19 42 0 3 9 20 1 0 1 3 20 19 0s 1	2 29 1 10 2 44 1 9	21 15 0 9 21 15 0 9 21 15 0 9 21 15 0 9	14 7 1 7 14 6 1 7	21 18 0 7 21 18 0 7 21 17 0 7 21 17 0 7	3 22 1 18 3 22 1 18 3 22 1 18 3 22 1 18	1 43 16 34 1 44 16 34	16 6 16 10 16 10 16 11 16 14 16 12 16 17 16 13	14 4 14 1	9 21 6 29 9 21 6 29 9 21 6 28 9 21 6 28
S 13 M14 T 15 W16 T 17 F 18 S 19	17 47 18 3 18 19	27 12 4 4 26 37 3 15 24 20 2 13 20 32 1 3 15 34 0s12 9 46 1 25	23 58 2 1 24 14 2 2 24 29 2 2 24 43 2 2 24 56 2 2	6 20 37 0 4 0 20 54 0 6 3 21 11 0 9 5 21 27 0 11 8 21 42 0 14 9 21 57 0 16	3 14 1 9 3 28 1 9 3 43 1 9 3 58 1 9 4 13 1 9 4 28 1 9	21 16 0 10 21 17 0 10 21 17 0 11	14 5 1 7 14 4 1 8 14 4 1 8 14 3 1 8 14 2 1 8 14 2 1 8	21 17 0 7 21 16 0 7 21 16 0 7	3 23 1 18 3 23 1 18 3 23 1 18 3 23 1 18 3 24 1 18 3 24 1 18 3 24 1 18	1 44 16 34 1 44 16 34 1 45 16 34 1 45 16 34 1 45 16 34 1 45 16 34	16 20 16 14 16 22 16 15 16 24 16 16 16 24 16 17 16 24 16 18 16 25 16 19	13 55 13 52 13 49 13 46 13 43 13 40	
S 20 M21 T 22 W23 T 24 F 25 S 26	-	9 8 4 17 14 52 4 48 19 48 5 1 23 37 4 57 26 7 4 37	25 32 2 3 25 38 2 3 25 42 2 3 25 44 2 2 25 46 2 2		5 12 1 8 5 26 1 8 5 41 1 8 5 55 1 8 6 10 1 7		14 0 1 9 14 0 1 9 14 0 1 9 13 59 1 10 13 59 1 10	21 13 0 7 21 12 0 7 21 12 0 7	3 25 1 18	1 46 16 33 1 46 16 33 1 46 16 33 1 46 16 33 1 47 16 33	16 26 16 20 16 27 16 21 16 30 16 22 16 33 16 23 16 37 16 24 16 41 16 25 16 44 16 26	13 31 13 28 13 25 13 22 13 19	9 22 6 24 9 22 6 24 9 22 6 23 9 22 6 23 9 21 6 23 9 21 6 22 9 21 6 22
T 29	21 12 21 22	24 56 2 23 22 2 1 23	25 35 2	0 23 40 0 38 5 23 48 0 40 9 23 55 0 43 2 24s 2 0s45	6 53 1 7 7 7 1 7	21 22 0 12 21 23 0 12	13 58 1 10 13 58 1 11	21 11 0 6 21 10 0 6 21 10 0 6 21 10 0 6 21n 9 0s 6	3 25 1 18 3 25 1 18	1 47 16 32 1 47 16 32	16 47 16 27 16 48 16 28 16 49 16 29 16 s50 16 s30	13 10 13 7	9 21 6 21 9 21 6 21 9 21 6 20 9 s21 6 n20

Julian Day Number = 2400349.5, Delta T = 9.02 sec Ecliptic obliquity = $23^{\circ}27'34$, Nutation = $0^{\circ}00'11$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $22^{\circ}46'59$, Lahiri = $21^{\circ}53'59$

DECEMBER 1859 00:00 UT

Day	Sid.t	0	D	ğ	φ	♂ [™]	24	ħ)∤(并	Р	R	ດ	Ç	ķ	Day
T 1	4 37 18	8 × 18'29	21≈18	28 × 758	24 × ⁷ 24	22 º 7	24°R42	26 Q 2	5°R36	24°R22	7°R 0	13≈21	14≈27	23≈17	18≈16	T 1
F 2	4 41 14	9°19'21	3) 5	29°30	25°39	22°44	249538	26° 3	5 Ⅱ 33	24) 22	6 8 59	13°21	14°24	23°24	18°19	F 2
S 3	4 45 11	10°20'14	14°56	29°54	26°54	23°22	24°34	26° 3	5°31	24°22	6°58	13°R21	14°21	23°30	18°21	S 3
S 4	4 49 7	11°21'07	26°56	0중 9	28° 9	23°59	24°30	26° 4	5°28	24°22	6°57	13°20	14°18	23°37	18°23	S 4
M 5	4 53 4	12°22'02	9 Υ 11	0°R15	29°24	24°37	24°26	26° 4	5°26	24°22	6°57	13°16	14°15	23°44	18°25	M 5
T 6	4 57 1	13°22'57	21°44	0°10	0중39	25°14	24°22	26° 4	5°23	24°D22	6°56	13°10	14°12	23°50	18°28	T 6
W 7	5 0 57	14°23'53	4839	29 × 755	1°55	25°52	24°17	26°R 4	5°21	24°22	6°55	13° 2	14° 8	23°57	18°30	W 7
T 8	5 4 54	15°24'50	17°58	29°28	3°10	26°29	24°12	26° 4	5°18	24°22	6°54	12°52	14° 5	24° 4	18°33	T 8
F 9	5 8 50	16°25'47	1耳39	28°50	4°25	27° 7	24° 7	26° 4	5°16	24°22	6°53	12°42	14° 2	24°10	18°35	F 9
S 10	5 12 47	17°26'46	15°41	28° 1	5°40	27°44	24° 2	26° 4	5°13	24°22	6°52	12°33	13°59	24°17	18°38	S 10
S 11	5 16 43	18°27'45	29°58	27° 2	6°55	28°22	23°57	26° 4	5°11	24°22	6°52	12°25	13°56	24°24	18°40	S 11
M12	5 20 40	19°28'45	149525	25°53	8°10	28°59	23°51	26° 3	5° 9	24°22	6°51	12°19	13°53	24°30	18°43	M12
T 13	5 24 36	20°29'46	28°55	24°37	9°25	29°37	23°46	26° 3	5° 6	24°23	6°50	12°16	13°49	24°37	18°46	T 13
W14	5 28 33	21°30'48	13 Ω 24	23°16	10°40	0 M .14	23°40	26° 2	5° 4	24°23	6°49	12°D16	13°46	24°43	18°49	W14
T 15	5 32 30	22°31'51	27°46	21°53	11°55	0°51	23°34	26° 1	5° 1	24°23	6°48	12°16	13°43	24°50	18°52	T 15
F 16	5 36 26	23°32'55	11 m 59	20°31	13°10	1°29	23°28	26° 0	4°59	24°23	6°48	12°18	13°40	24°57	18°54	F 16
S 17	5 40 23	24°33'59	26° 2	19°12	14°25	2° 6	23°22	25°59	4°57	24°24	6°47	12°R18	13°37	25° 3	18°57	S 17
S 18	5 44 19	25°35'05	9 ≙ 54	17°59	15°40	2°43	23°16	25°58	4°54	24°24	6°46	12°17	13°33	25°10	19° 0	S 18
M19	5 48 16	26°36'11	23°35	16°54	16°55	3°21	23° 9	25°57	4°52	24°25	6°46	12°14	13°30	25°17	19° 3	M19
T 20	5 52 12	27°37'19	7 M 4	15°58	18°10	3°58	23° 2	25°55	4°50	24°25	6°45	12° 9	13°27	25°23	19° 6	T 20
W21	5 56 9	28°38'27	20°21	15°12	19°25	4°35	22°56	25°54	4°47	24°25	6°44	12° 2	13°24	25°30	19°10	W21
T 22	6 0 5	29°39'35	3×725	14°37	20°40	5°13	22°49	25°52	4°45	24°26	6°44	11°54	13°21	25°37	19°13	T 22
F 23	6 4 2	0 궁 40'45	16°17	14°13 14° 0	21°55 23°10	5°50	22°42	25°51	4°43 4°41	24°27	6°43	11°46	13°18	25°43	19°16 19°19	F 23 S 24
S 24	6 7 59	1°41'54	28°56	-		6°27	22°35	25°49		24°27	6°42	11°39	13°14	25°50		
S 25	6 11 55	2°43'04	11 る 21	13°D56	24°25	7° 5	22°28	25°47	4°39	24°28	6°42	11°34	13°11	25°57	19°23	S 25
M26	6 15 52	3°44'15	23°34	14° 2	25°40	7°42	22°20	25°45	4°36	24°28	6°41	11°30	13° 8	26° 3	19°26	M26
T 27	6 19 48	4°45'25	5 ≈ 35	14°17	26°55	8°19	22°13	25°43	4°34	24°29	6°41	11°28	13° 5	26°10	19°29	T 27
W28	6 23 45	5°46'36	17°29	14°39	28° 9	8°56	22° 6	25°41	4°32	24°30	6°40	11°D28	13° 2	26°17	19°33	W28
T 29 F 30	6 27 41 6 31 38	6°47'46 7°48'57	29°17 11) 3	15° 9 15°45	29°24 0≈39	9°33 10°11	21°58 21°50	25°39 25°36	4°30 4°28	24°31 24°32	6°40 6°39	11°29 11°31	12°59 12°55	26°23 26°30	19°36 19°40	T 29 F 30
S 31	6 35 35	7 ⁻⁴⁸⁻³ 7 8 云 50'07	22) 53	15°45 16 × 727	1≈54	10°11 10 M .48	219543	$25^{\circ}36$ $25\Omega34$	4 ¹ 28 4 Ⅱ 26	24*32 24) (32	6 8 39	11≈33	12°53 12 ≈ 52	26°30 26 ≈ 37	19°40 19 ≈ 43	S 31
1001	0 55 55	00001	221(33	107 2/	1~54	10110-10	21-3-73	200604	71120	27/(32	0039	11~55	12~32	20~37	1,7~~73	3 31

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	22 40	7 31 4 13 12 52 4 44 17 49 5 2 22 3 5 4	24 21 0 5 24 4 0 3 23 47 0 1	8 24 23 0 56 63 24 25 0 58 67 24 27 1 0 9 24 27 1 2	8 32 1 6 8 46 1 5 8 59 1 5 9 13 1 5	21 28 0 13 21 29 0 13 21 30 0 13 21 31 0 14	13 58 1 12 13 58 1 12 13 58 1 12 13 58 1 12 13 59 1 13 13 59 1 13	21 7 0 6 21 7 0 6 21 6 0 6 21 6 0 6	3 26 1 17 3 26 1 17 3 26 1 17 3 26 1 17	1 48 16 31 1 48 16 31 1 48 16 30 1 48 16 30 1 48 16 30 1 48 16 30	16 51 16 3 16 53 16 3 16 55 16 3 16 58 16 3	4 12 49 5 12 46 6 12 43 7 12 40	9 19 6 18 9 19 6 17
S 10 S 11 M12 T 13	22 52 22 57 23 3 23 7	26 56 4 16 26 55 3 27 25 4 2 24 21 33 1 11	23 8 0n1 22 46 0 3 22 24 0 5 22 2 1 1	9 24 26 1 6 9 24 25 1 8 9 24 22 1 10 1 9 24 19 1 12 1	9 40 1 5 9 54 1 4 0 7 1 4 0 21 1 4	21 33 0 14 21 34 0 14 21 35 0 14 21 36 0 14	13 59 1 13 13 59 1 13 14 0 1 14 14 0 1 14	21 5 0 6 21 5 0 6 21 4 0 6 21 4 0 6	3 25 1 17 3 25 1 17 3 25 1 17 3 25 1 17	1 48 16 30 1 48 16 29 1 48 16 29 1 48 16 29	17 3 16 3 17 5 16 4 17 7 16 4 17 8 16 4	9 12 34 0 12 31 1 12 28 1 12 25	9 17 6 16 9 17 6 16 9 16 6 15 9 16 6 15
T 15 F 16 S 17	23 15 23 18 23 21	10 58 1 23 4 42 2 33 1 s42 3 34		66 24 10 1 15 1 1 2 24 5 1 17 1 26 23 59 1 19 1	0 48 1 3 1 1 1 3 1 14 1 3	21 37 0 15 21 39 0 15 21 40 0 15 21 41 0 15	14 1 1 14 14 2 1 14 14 2 1 15	21 3 0 6 21 3 0 6 21 2 0 6	3 24 1 17	1 48 16 29 1 48 16 28 1 48 16 28 1 48 16 28	17 8 16 4 17 8 16 4 17 7 16 4	2 12 22 3 12 19 4 12 16 5 12 13	9 16 6 14 9 15 6 14 9 14 6 14 9 14 6 13
M19 T 20 W21 T 22 F 23	23 27	13 41 4 53 18 43 5 8 22 45 5 6 25 33 4 47 26 59 4 15	20 3 2 4 19 50 2 5 19 41 2 5 19 35 3 19 31 3	34 23 36 1 23 1 58 23 27 1 25 1 1 23 17 1 26 1	1 40 1 2 1 53 1 2 2 6 1 2 2 18 1 1 2 31 1 1	21 42 0 15 21 43 0 15 21 45 0 16 21 46 0 16 21 47 0 16 21 49 0 16 21 50 0 16	14 3 1 15 14 4 1 15 14 5 1 15 14 5 1 16 14 6 1 16	21 1 0 6 21 1 0 6 21 1 0 6 21 0 0 6	3 24 1 17 3 24 1 17 3 24 1 17 3 23 1 17 3 23 1 17	1 48 16 27 1 48 16 27 1 48 16 27 1 48 16 27 1 48 16 26 1 47 16 26 1 47 16 26	17 9 16 4 17 10 16 4 17 12 16 4 17 14 16 5 17 16 16 5	8 12 4 9 12 1 0 11 58 1 11 55	9 13 6 13 9 13 6 13 9 12 6 12 9 12 6 12 9 11 6 12 9 10 6 11 9 10 6 11
S 25 M26 T 27 W28 T 29 F 30	23 26 23 24 23 22 23 20	25 34 2 37 22 59 1 36 19 24 0 32 15 5 0n33 10 14 1 36 5 2 2 35	19 33 2 5 19 38 2 5 19 44 2 4 19 53 2 4 20 3 2 3 20 14 2 2	58 22 43 1 30 1	2 56 1 0 3 8 1 0 3 21 1 0 3 33 1 0 3 45 0 59 3 57 0 59	21 51 0 16 21 53 0 17 21 54 0 17 21 55 0 17 21 57 0 17 21 58 0 17	14 8 1 16 14 9 1 16 14 10 1 17 14 11 1 17 14 12 1 17 14 13 1 17	20 59 0 6 20 59 0 6 20 58 0 6 20 58 0 6 20 58 0 6 20 57 0 6 20 57 0 6	3 23 1 17 3 22 1 17 3 22 1 17 3 22 1 17 3 21 1 17 3 21 1 17	1 47 16 25 1 47 16 25	17 20 16 5 17 21 16 5 17 21 16 5 17 21 16 5 17 21 16 5 17 20 16 5	2 11 49 3 11 46 4 11 42 5 11 39 6 11 36 7 11 33	9 9 6 11 9 8 6 10 9 7 6 10 9 7 6 10 9 6 6 9 9 5 6 9

Julian Day Number = 2400379.5, Delta T = 9.01 sec Ecliptic obliquity = $23^{\circ}27'33$, Nutation = $0^{\circ}00'11$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $22^{\circ}47'03$, Lahiri = $21^{\circ}54'03$