

Astrodienst Ephemeris Tables for the year 1642

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 1642 GC 00:00 UT

T 2	Sid.t 6 42 40 6 46 37	0 10 පි 48'05	<u>)</u> 8 ප 46	ğ	φ	♂	4									Day
T 2	6 46 37			0°R 1	11 × 10	2 × ⁷ 29	14≈32	ħ 8 ∺ 13	ን ታ (11 ጤ 9	¥ 28 ™ 46	1°R40	₽ 0°R 9	Ω 29 Ω 7	♀ 6 © 24	ا 8 1°R35	W 1
		11°49'17	24° 7	29 🗸 8	12°24	3°10	14°45	8°18	11°11	28°48	1 II 39	29 £ 58	29° 4	6°31	1 I I33	T 2
F 3	6 50 34	12°50'29	9≈17	28°25	13°39	3°52	14°58	8°23	11°14	28°50	1°38	29°47	29° 1	6°38	1°30	F 3
	6 54 30	13°51'40	24° 6	27°52	14°53	4°33	15°12	8°28	11°16	28°51	1°37	29°38	28°58	6°45	1°28	S 4
S 5	6 58 27	14°52'51	8 ∺ 29	27°29	16° 8	5°15	15°25	8°33	11°18	28°53	1°37	29°31	28°55	6°51	1°26	S 5
	7 2 23	15°54'01	22°21	27°16	17°22	5°57	15°39	8°39	11°20	28°55	1°36	29°26	28°51	6°58	1°23	M 6
	7 6 20	16°55'11	5 Υ 43	27°D11	18°37	6°38	15°52	8°44	11°22	28°57	1°35	29°24	28°48	7° 5	1°21	T 7
	7 10 16	17°56'19	18°38	27°16	19°51	7°20	16° 6	8°49	11°24	28°58	1°34	29°D24	28°45	7°11	1°19	W 8
T 9	7 14 13	18°57'28	1812	27°28	21° 6	8° 2	16°19	8°55	11°26	29° 0	1°33	29°R24	28°42	7°18	1°17	T 9
F 10	7 18 9	19°58'35	13°27	27°48	22°20	8°44	16°33	9° 1	11°28	29° 1	1°33	29°23	28°39	7°25	1°15	F 10
S 11	7 22 6	20°59'42	25°31	28°14	23°35	9°26	16°46	9° 6	11°30	29° 3	1°32	29°21	28°36	7°32	1°13	S 11
S 12	7 26 3	22° 0'48	7 Ⅱ 26	28°46	24°50	10° 7	17° 0	9°12	11°32	29° 5	1°31	29°16	28°32	7°38	1°11	S 12
M13	7 29 59	23° 1'53	19°17	29°24	26° 4	10°49	17°14	9°18	11°34	29° 6	1°31	29° 7	28°29	7°45	1° 9	M13
T 14	7 33 56	24° 2'58	195 8	0중 7	27°19	11°31	17°28	9°24	11°35	29° 8	1°30	28°56	28°26	7°52	1° 8	T 14
	7 37 52	25° 4'01	13° 0	0°54	28°33	12°13	17°42	9°30	11°37	29° 9	1°29	28°42	28°23	7°58	1° 6	W15
-	7 41 49	26° 5'05	24°55	1°45	29°48	12°55	17°55	9°36	11°39	29°10	1°29	28°28	28°20	8° 5	1° 4	T 16
	7 45 45	27° 6'07	6Ω 54	2°40	1る 3	13°37	18° 9	9°42	11°40	29°12	1°28	28°12	28°17	8°12	1° 3	F 17
S 18	7 49 42	28° 7'08	18°58	3°38	2°17	14°19	18°23	9°48	11°42	29°13	1°28	27°58	28°13	8°19	1° 1	S 18
	7 53 38	29° 8'09	1 Mp 8	4°39	3°32	15° 1	18°37	9°54	11°43	29°15	1°27	27°46	28°10	8°25	1° 0	S 19
	7 57 35	0≈ 9'09	13°27	5°43	4°47	15°43	18°51	10° 0	11°45	29°16	1°27	27°37	28° 7	8°32	0°59	M20
	8 1 32	1°10'09	25°55	6°49	6° 1	16°25	19° 5	10° 6	11°46	29°17	1°26	27°32	28° 4	8°39	0°57	T 21
	8 5 28	2°11'08	8 ≏ 37	7°58	7°16	17° 8	19°20	10°13	11°47	29°19	1°26	27°28	28° 1	8°45	0°56	W22
	8 9 25	3°12'06	21°34	9° 8	8°31	17°50	19°34	10°19	11°49	29°20	1°25	27°27	27°57	8°52	0°55	T 23
	8 13 21	4°13'03	4ML51	10°21	9°45	18°32	19°48	10°25	11°50	29°21	1°25	27°27	27°54	8°59	0°54	F 24
S 25	8 17 18	5°14'00	18°30	11°35	11° 0	19°14	20° 2	10°32	11°51	29°22	1°24	27°27	27°51	9° 6	0°53	S 25
	8 21 14	6°14'56	2 7 33	12°50	12°15	19°56	20°16	10°38	11°52	29°23	1°24	27°25	27°48	9°12	0°52	S 26
	8 25 11	7°15'52	17° 1	14° 8	13°29	20°39	20°31	10°45	11°53	29°24	1°23	27°20	27°45	9°19	0°51	M27
	8 29 7	8°16'47	1 궁 51	15°26	14°44	21°21	20°45	10°51	11°54	29°26	1°23	27°13	27°42	9°26	0°51	T 28
	8 33 4	9°17'40	16°56	16°46	15°59	22° 3	20°59	10°58	11°55	29°27	1°23	27° 3	27°38	9°32	0°50	W29
	8 37 1 8 40 57	10°18'33 11≈19'25	2≈ 7 17≈14	18° 7 19 る 29	17°14 18 る 28	22°46 23 × 728	21°13 21 ≈ 28	11° 5 11) (11	11°56 11 M 57	29°28 29 N L29	1°22 1 Ⅲ 22	26°52 26 ♀ 40	27°35 27 Ω 32	9°39 9 © 46	0°49 0 ∏ 49	T 30 F 31

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W 1 T 2	23 s 3 22 57	16 24 5 0	20s14 20 12	3 17 21 8 1 1	2 20 41 0 9	17s16 0s48 17 12 0 48	10 14 1 53	14 s48 0n25 14 49 0 25	18 19 1 39	8 40 12 6	11 s33 11 s1 11 29 11 1	0 18 34	16 5 4 31
F 3 S 4	22 52 22 46		3 20 12 5 20 13					14 50 0 25 14 50 0 25				9 18 34 8 18 33	
S 5 M 6 T 7	22 39 22 32 22 25		20 22 20 28	3 6 21 51 1 2 59 22 0 1		16 56 0 48 16 52 0 48	10 5 1 53 10 3 1 53	14 51 0 25 14 52 0 25 14 52 0 25	18 20 1 40 18 20 1 40	8 40 12 5 8 40 12 5	11 18 11 11 17 11	6 18 32 5 18 32 4 18 31	16 4 4 30 16 4 4 30
W 8 T 9 F 10 S 11	22 17 22 8 22 0 21 50	11 46 0s10 14 44 1 14	20 35 0 20 43 1 20 52 3 21 2	2 44 22 17 0 5 2 36 22 24 0 5			9 59 1 53 9 57 1 53	14 53 0 25 14 54 0 25 14 54 0 25 14 55 0 25	18 21 1 40 18 21 1 40	8 41 12 4 8 41 12 4	11 17 11 11 17 11	3 18 30 2 18 30 1 18 29 0 18 28	16 3 4 30 16 3 4 30
T 14 W15 T 16 F 17	21 31 21 20 21 10 20 58 20 47	19 13 3 51 19 3 4 25 18 4 4 48 16 17 4 59 13 49 4 56	21 21 5 21 31 8 21 41 9 21 50 5 21 59	2 8 22 42 0 4 1 58 22 46 0 4 1 48 22 50 0 3 1 38 22 53 0 3 1 28 22 56 0 3	4 22 5 0 2 1 22 11 0 1 8 22 18 0 0 6 22 24 0s 0 3 22 30 0 1	16 23 0 48 16 19 0 48 16 15 0 48 16 11 0 48	9 50 1 52 9 48 1 52 9 45 1 52 9 43 1 52 9 41 1 52	14 56 0 25 14 56 0 25 14 57 0 25 14 57 0 25 14 58 0 25	18 22 1 40 18 23 1 40 18 23 1 40 18 23 1 40	8 41 12 3 8 41 12 3 8 41 12 3 8 41 12 3 8 41 12 2	11 2 10 5 10 57 10 5 10 51 10 5	7 18 27 6 18 26 5 18 26 4 18 25 3 18 24	16 2 4 29 16 2 4 28
S 18 S 19 M20 T 21 W22 T 23 F 24 S 25	20 22 20 9 19 56 19 43 19 29	3 17 3 30 0s48 2 38 4 55 1 38 8 54 0 31 12 33 0n39	22 16 0 22 23 8 22 29 8 22 35 22 40 0 22 44	1 8 22 59 0 2 0 59 22 59 0 2 0 49 22 59 0 2 0 40 22 58 0 1 0 30 22 56 0 1 0 21 22 54 0 1	0 22 35 0 2 7 22 41 0 3 5 22 46 0 3 2 22 51 0 4 9 22 56 0 5 6 23 1 0 6 4 23 6 0 6 1 23 10 0 7	16 2 0 48 15 58 0 48 15 53 0 48 15 49 0 48 15 44 0 48 15 40 0 48		14 59 0 25 15 0 0 25 15 0 0 25 15 0 0 25 15 1 0 25	18 24 1 40 18 24 1 40 18 24 1 40 18 24 1 40 18 25 1 40 18 25 1 40	8 42 12 2 8 42 12 2 8 42 12 1 8 42 12 1 8 42 12 1 8 43 12 0	10 46 10 5 10 42 10 5 10 39 10 4 10 37 10 4 10 36 10 4 10 35 10 4 10 35 10 4 10 35 10 4	1 18 23 9 18 22 8 18 21 7 18 21 6 18 20 5 18 19	16 1 4 28 16 1 4 28 16 1 4 28 16 1 4 27 16 1 4 27 16 1 4 27
S 26 M27 T 28 W29 T 30 F 31	18 29 18 14 17 58 17 41	19 2 3 50 18 56 4 32 17 31 4 56 14 51 5 0	22 48 22 49 2 22 48 5 22 47 2 22 44 2 22 s40	0s 5 22 43 0 0 13 22 37 0 0 21 22 32 0s 0 29 22 25 0	5 23 18 0 9 3 23 21 0 9 0 23 25 0 10 3 23 28 0 11	15 31 0 48 15 27 0 48 15 22 0 48 15 17 0 48 15 13 0 48 15 8 0 s48	9 19 1 51 9 16 1 51 9 13 1 51 9 11 1 51 9 8 1 51 9s 6 1s51	15 2 0 25 15 2 0 25 15 2 0 25 15 3 0 25	18 25 1 41 18 26 1 41 18 26 1 41	8 43 12 0 8 43 11 59 8 44 11 59 8 44 11 59	10 34 10 4 10 33 10 4 10 30 10 4 10 26 10 3 10 22 10 3 10 s18 10 s3	1 18 17 0 18 16 9 18 16 8 18 15	16 1 4 26 16 1 4 26 16 1 4 26 16 1 4 26

 $\label{eq:Julian Day Number = 2320788.5, Delta T = 48.94 sec} \\ Ecliptic obliquity = 23°29'00, Nutation = 0°00'09, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 19°44'37, Lahiri = 18°51'37Greg. Calendar$

FEBRUARY 1642 GC 00:00 UT

Day	Sid.t	0	D	ğ	φ	♂ [™]	4	ħ)ұ(并	Р	S.	v	Ç	ķ	Day
S 1	8 44 54	12≈20'15	2 ∺ 5	20 ට 53	19 る 43	24 × 11	21≈42	11) 18	11 M 58	29 M 30	1°R22	26°R30	27 ≏ 29	9953	0°R48	S 1
S 2	8 48 50	13°21'04	16°33	22°17	20°58	24°53	21°56	11°25	11°58	29°31	1 П 21	26 ₽ 22	27°26	9°59	0 Ⅱ 48	S 2
M 3	8 52 47	14°21'51	0 Υ 33	23°43	22°13	25°35	22°11	11°32	11°59	29°31	1°21	26°17	27°23	10° 6	0°48	M 3
T 4	8 56 43	15°22'37	14° 4	25° 9	23°27	26°18	22°25	11°39	12° 0	29°32	1°21	26°15	27°19	10°13	0°48	T 4
W 5	9 0 40	16°23'21	27° 6	26°37	24°42	27° 1	22°40	11°46	12° 0	29°33	1°21	26°D14	27°16	10°19	0°47	W 5
T 6	9 4 36	17°24'03	9 8 45	28° 5	25°57	27°43	22°54	11°52	12° 1	29°34	1°21	26°14	27°13	10°26	0°D47	T 6
F 7	9 8 3 3	18°24'44	22° 3	29°34	27°11	28°26	23° 8	11°59	12° 1	29°35	1°20	26°R15	27°10	10°33	0°47	F 7
S 8	9 12 30	19°25'24	4 II 7	1≈ 4	28°26	29° 8	23°23	12° 6	12° 2	29°35	1°20	26°13	27° 7	10°40	0°47	S 8
S 9	9 16 26	20°26'01	16° 3	2°36	29°41	29°51	23°37	12°13	12° 2	29°36	1°20	26°10	27° 3	10°46	0°48	S 9
M10	9 20 23	21°26'37	27°53	4° 8	0≈56	0 궁 33	23°52	12°20	12° 2	29°37	1°20	26° 4	27° 0	10°53	0°48	M10
T 11	9 24 19	22°27'11	99544	5°41	2°10	1°16	24° 6	12°28	12° 3	29°38	1°20	25°56	26°57	11° 0	0°48	T 11
W12	9 28 16	23°27'44	21°37	7°14	3°25	1°59	24°21	12°35	12° 3	29°38	1°20	25°45	26°54	11° 7	0°48	W12
T 13	9 32 12	24°28'14	3 Ω 36	8°49	4°40	2°42	24°35	12°42	12° 3	29°39	1°20	25°33	26°51	11°13	0°49	T 13
F 14	9 36 9	25°28'43	15°43	10°25	5°54	3°24	24°49	12°49	12° 3	29°39	1°D20	25°21	26°48	11°20	0°49	F 14
S 15	9 40 5	26°29'11	27°58	12° 1	7° 9	4° 7	25° 4	12°56	12°R 3	29°40	1°20	25°10	26°44	11°27	0°50	S 15
S 16	9 44 2	27°29'36	10 m 22	13°39	8°24	4°50	25°18	13° 3	12° 3	29°40	1°20	25° 0	26°41	11°33	0°51	S 16
M17	9 47 59	28°30'01	22°56	15°17	9°38	5°33	25°33	13°10	12° 3	29°41	1°20	24°53	26°38	11°40	0°52	M17
T 18	9 51 55	29°30'23	5 ≙ 40	16°57	10°53	6°16	25°47	13°18	12° 3	29°41	1°20	24°49	26°35	11°47	0°52	T 18
W19	9 55 52	0) € 30'44	18°36	18°37	12° 8	6°58	26° 2	13°25	12° 3	29°41	1°20	24°D47	26°32	11°54	0°53	W19
T 20	9 59 48	1°31'04	1 M .44	20°18	13°22	7°41	26°16	13°32	12° 2	29°42	1°20	24°47	26°28	12° 0	0°54	T 20
F 21	10 3 45	2°31'22	15° 6	22° 1	14°37	8°24	26°30	13°40	12° 2	29°42	1°21	24°48	26°25	12° 7	0°55	F 21
S 22	10 741	3°31'38	28°45	23°44	15°52	9° 7	26°45	13°47	12° 2	29°42	1°21	24°R49	26°22	12°14	0°56	S 22
S 23	10 11 38	4°31'54	12 ~ 41	25°29	17° 6	9°50	26°59	13°54	12° 1	29°43	1°21	24°49	26°19	12°20	0°58	S 23
M24	10 15 34	5°32'08	26°54	27°14	18°21	10°33	27°14	14° 1	12° 1	29°43	1°21	24°47	26°16	12°27	0°59	M24
T 25	10 19 31	6°32'20	11 る 23	29° 0	19°36	11°16	27°28	14° 9	12° 0	29°43	1°21	24°43	26°13	12°34	1° 0	T 25
W26	10 23 28	7°32'31	26° 3	0) 48	20°50	11°59	27°42	14°16	12° 0	29°43	1°22	24°37	26° 9	12°41	1° 2	W26
T 27	10 27 24	8°32'40	10≈50	2°37	22° 5	12°42	27°57	14°23	11°59	29°43	1°22	24°30	26° 6	12°47	1° 3	T 27
F 28	10 31 21	9) (32'47	25≈34	4) (26	23≈20	13 る 25	28≈11	14) (31	11 M 58	29 M .43	1∏22	24 <u>Ω</u> 22	26 ♀ 3	129554	1 II 5	F 28

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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
S 1	17s 8	6 s 5 6	4n 5	22 s35	0 s44	22 s10	0s 8	23 s34	0s13	15s 4	0 s48	9s 3	1 s 5 1	15 s 3	0n25	18 s 2 6	1n41	8n44	11 s58	10 s15	10 s36	18n13	16n 2	4 s25
S 2	16 51	2 20	3 14	22 28	0 51	22 1	0 11	23 36	0 13	14 59	0 48	9 0	1 51	15 3	0 25	18 26	1 41	8 44	11 58	10 12	10 35	18 13	16 2	4 25
M 3	16 33	2n14	2 12	22 21	0 58	21 52	0 13	23 39	0 14	14 55	0 49	8 58	1 51	15 3	0 25	18 27	1 41	8 45	11 58	10 10	10 33	18 12	16 2	4 25
T 4	16 15	6 33	1 4	22 12	1 4	21 42	0 16	23 41	0 15	14 50	0 49	8 55	1 51	15 4	0 25	18 27	1 41	8 45	11 57	10 9	10 32	18 11	16 2	4 25
W 5	15 57	10 23	0s 5	22 2	1 11	21 32	0 18	23 43	0 16	14 45	0 49	8 52	1 51	15 4	0 25	18 27	1 41	8 45	11 57	10 9	10 31	18 10	16 2	4 24
T 6	15 39	13 38	1 11	21 50	1 17	21 21	0 21	23 44	0 17	14 41	0 49	8 50	1 51	15 4	0 25	18 27	1 41	8 45	11 57	10 9	10 30	18 10	16 3	4 24
F 7	15 20	16 11	2 13	21 37	1 22	21 9	0 24	23 46	0 17	14 36	0 49	8 47	1 51	15 4	0 25	18 27	1 41	8 46	11 57	10 9	10 29	18 9	16 3	4 24
S 8	15 1	17 57	3 7	21 23	1 28	20 56	0 26	23 47	0 18	14 31	0 49	8 44	1 51	15 4	0 25	18 27	1 41	8 46	11 56	10 8	10 28	18 8	16 3	4 24
S 9	14 42	18 54	3 53	21 7	1 33	20 43		23 48	0 19	14 26	0 49	8 42	1 51	-	0 26	18 27	1 41	8 46	11 56	10 7	10 27	18 7	16 3	4 24
M10	14 23	19 0	4 28	20 50	1 38	20 29	0 31	23 49	0 20	14 22	0 49	8 39	1 51	15 4	0 26	18 27	1 41	8 46	11 56	10 5	10 25	18 7	16 4	4 23
T 11	14 3	18 17	4 51	20 32	1 42	20 15	0 33	23 49	0 21	14 17	0 49	8 36	1 51	15 4	0 26	18 27	1 41	8 47	11 55		10 24		16 4	4 23
W12	13 43	16 46	5 2	20 12	1 46	20 0	0 36	23 50	0 22	14 12	0 49	8 33	1 51	15 4	0 26	18 28	1 41	8 47	11 55	9 58	10 23	18 5	16 4	4 23
T 13	13 23	14 31	5 0	19 51	1 50	19 45	0 38	23 50	0 23	14 7	0 49	8 31	1 51	15 4	0 26	18 28	1 41	8 47	11 55	9 54	10 22	18 4	16 4	4 23
F 14	13 3	11 37	4 44	19 29	1 53	19 29	0 40	23 50	0 23	14 3	0 49	8 28	1 51	15 4	0 26	18 28	1 41	8 47	11 55	9 49	10 21	18 3	16 5	4 22
S 15	12 43	8 12	4 16	19 5	1 56	19 12	0 42	23 49	0 24	13 58	0 49	8 25	1 51	15 4	0 26	18 28	1 42	8 48	11 54	9 45	10 20	18 3	16 5	4 22
S 16	12 22	4 23	3 34	18 40	1 59	18 55	0 45	23 49	0 25	13 53	0 49	8 22	1 51	15 4	0 26	18 28	1 42	8 48	11 54	9 42	10 19	18 2	16 5	4 22
M17	12 1	0 20	2 42	18 13	2 2	18 37	0 47	23 48	0 26	13 48	0 49	8 20	1 51	15 4	0 26	18 28	1 42	8 48	11 54	9 39	10 17	18 1	16 6	4 22
T 18	11 40	3 s48	1 41	17 45	2 4	18 19	0 49	23 47	0 27	13 43	0 49	8 17	1 51	15 4	0 26	18 28	1 42	8 49	11 53	9 38	10 16	18 0	16 6	4 22
W19	11 19	7 49	0 33	17 15	2 5	18 0	0 51	23 46	0 28	13 39	0 50	8 14	1 51	15 4	0 26	18 28	1 42	8 49	11 53	9 37	10 15	17 59	16 7	4 21
T 20	10 57	11 31	0n37	16 45	2 6	17 41	0 53	23 44	0 29	13 34	0 50	8 11	1 51	15 4	0 26	18 28	1 42	8 49	11 53	9 37	10 14	17 59	16 7	4 21
F 21	10 36	14 41	1 47	16 12	2 7	17 21	0 55	23 43	0 30	13 29	0 50	8 8	1 51	15 4	0 26	18 28	1 42	8 50	11 53	9 37	10 13	17 58	16 7	4 21
S 22	10 14	17 7	2 52	15 38	2 8	17 1	0 57	23 41	0 30	13 24	0 50	8 6	1 51	15 4	0 26	18 28	1 42	8 50	11 52	9 38	10 12	17 57	16 8	4 21
S 23	9 52	18 35	3 49	15 3	2 8	-		23 38		13 19		8 3	1 51	-	0 26	18 28	1 42		11 52		10 11			4 20
M24	9 30	18 55	4 32	14 27	2 7	16 19	1 0	23 36	0 32	13 14	0 50	8 0	1 51	15 4	0 26	18 28	1 42	8 51	11 52	9 37	10 9	17 55	16 9	4 20
T 25	9 8	18 1	4 59	13 49	2 6	15 57	1 2	23 33	0 33	13 9	0 50	7 57	1 51	15 3	0 26	18 28	1 42	8 51	11 51	9 35	10 8	17 55	16 9	4 20
W26	8 45	15 56	5 7	13 9	2 5	15 35	1 4	23 31	0 34	13 5	0 50	7 54	1 51	15 3	0 26	18 28	1 42	8 51	11 51	9 33	10 7	17 54	16 10	4 20
T 27	8 23	12 49	4 55	12 28	2 3	15 12	1 6	23 27	0 35	13 0	0 50	7 52	1 51	15 3	0 26	18 28	1 42	8 52	11 51	9 31	10 6	17 53	16 10	4 20
F 28	8s 0	8 s53	4n24	11 s46	2s 1	14 s49	1 s 7	23 s24	0s36	12 s 5 5	0 s 5 0	7 s49	1 s 5 1	15 s 3	0n26	18 s 28	1n42	8n52	11s51	9 s28	10s 5	17n52	16n11	4s19

Julian Day Number = 2320819.5, Delta T = 48.88 sec

Ecliptic obliquity = 23°29'01, Nutation = 0°00'10, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 19°44'41, Lahiri = 18°51'41Greg. Calendar

MARCH 1642 GC 00:00 UT

Day	Sid.t	0	D	ğ	φ	ð	4	ħ)∤(¥	Р	n	v	Ç	& &	Day
S 1	10 35 17	10) 32′52	10 ∺ 9	6 ¥ 17	24≈34	14 궁 9	28≈25	14) 38	11°R58	29 M 43	1П23	24°R16	26₽ 0	1399 1	1 I I 6	S 1
S 2	10 39 14	11°32'56	24°26	8° 9	25°49	14°52	28°40	14°46	11 M .57	29°R43	1°23	24 ₽ 11	25°57	13° 7	1° 8	S 2
M 3	10 43 10	12°32'57	8 Υ 22	10° 2	27° 4	15°35	28°54	14°53	11°56	29°43	1°23	24° 7	25°54	13°14	1°10	M 3
T 4	10 47 7	13°32'57	21°53	11°55	28°18	16°18	29° 8	15° 0	11°55	29°43	1°24	24°D 6	25°50	13°21	1°12	T 4
W 5	10 51 3	14°32'54	4 8 59	13°50	29°33	17° 1	29°22	15° 8	11°54	29°43	1°24	24° 7	25°47	13°28	1°14	W 5
T 6	10 55 0	15°32'50	17°42	15°46	0) (47	17°44	29°37	15°15	11°53	29°43	1°24	24° 8	25°44	13°34	1°15	T 6
F 7	10 58 56	16°32'43	0 Ⅱ 5	17°43	2° 2	18°28	29°51	15°22	11°52	29°43	1°25	24°10	25°41	13°41	1°18	F 7
S 8	11 2 53	17°32'34	12°13	19°40	3°17	19°11	0 米 5	15°30	11°51	29°43	1°25	24°R11	25°38	13°48	1°20	S 8
S 9	11 6 50	18°32'22	24°11	21°38	4°31	19°54	0°19	15°37	11°50	29°42	1°26	24°11	25°34	13°54	1°22	S 9
M10	11 10 46	19°32'09	6 9 5 3	23°37	5°46	20°37	0°33	15°45	11°49	29°42	1°26	24° 9	25°31	14° 1	1°24	M10
T 11	11 14 43	20°31'53	17°55	25°36	7° 0	21°21	0°47	15°52	11°47	29°42	1°27	24° 6	25°28	14° 8	1°26	T 11
W12	11 18 39	21°31'35	29°51	27°36	8°15	22° 4	1° 1	15°59	11°46	29°42	1°27	24° 2	25°25	14°15	1°29	W12
T 13	11 22 36	22°31'14	11 Ω 54	29°36	9°29	22°47	1°15	16° 7	11°45	29°41	1°28	23°57	25°22	14°21	1°31	T 13
F 14	11 26 32	23°30'52	24° 7	1 Y 35	10°44	23°31	1°29	16°14	11°44	29°41	1°29	23°51	25°19	14°28	1°34	F 14
S 15	11 30 29	24°30'27	6 m 33	3°34	11°58	24°14	1°43	16°21	11°42	29°40	1°29	23°46	25°15	14°35	1°36	S 15
S 16	11 34 25	25°30'00	19°11	5°33	13°13	24°57	1°57	16°29	11°41	29°40	1°30	23°42	25°12	14°42	1°39	S 16
M17	11 38 22	26°29'31	2 ₾ 3	7°30	14°27	25°41	2°11	16°36	11°39	29°39	1°31	23°39	25° 9	14°48	1°42	M17
T 18	11 42 19	27°29'00	15° 9	9°26	15°42	26°24	2°24	16°43	11°38	29°39	1°31	23°37	25° 6	14°55	1°44	T 18
W19	11 46 15	28°28'27	28°27	11°20	16°56	27° 8	2°38	16°51	11°36	29°38	1°32	23°D37	25° 3	15° 2	1°47	W19
T 20	11 50 12	29°27'52	11 M .58	13°12	18°11	27°51	2°52	16°58	11°34	29°38	1°33	23°38	25° 0	15° 8	1°50	T 20
F 21	11 54 8	0 Υ 27'15	25°39	15° 1	19°25	28°34	3° 5	17° 5	11°33	29°37	1°33	23°39	24°56	15°15	1°53	F 21
S 22	11 58 5	1°26'37	9 ∡ 731	16°47	20°40	29°18	3°19	17°12	11°31	29°37	1°34	23°41	24°53	15°22	1°56	S 22
S 23	12 2 1	2°25'56	23°32	18°30	21°54	0≈ 1	3°33	17°20	11°29	29°36	1°35	23°42	24°50	15°29	1°59	S 23
M24	12 5 58	3°25'14	7 云 42	20° 8	23° 8	0°45	3°46	17°27	11°28	29°35	1°36	23°R42	24°47	15°35	2° 2	M24
T 25	12 9 54	4°24'31	21°57	21°43	24°23	1°28	4° 0	17°34	11°26	29°34	1°36	23°41	24°44	15°42	2° 5	T 25
W26	12 13 51	5°23'45	6≈16	23°13	25°37	2°12	4°13	17°41	11°24	29°34	1°37	23°39	24°40	15°49	2° 8	W26
T 27	12 17 48	6°22'58	20°36	24°37	26°52	2°56	4°26	17°48	11°22	29°33	1°38	23°37	24°37	15°55	2°12	T 27
F 28	12 21 44	7°22'09	4) (51	25°57	28° 6	3°39	4°40	17°55	11°20	29°32	1°39	23°35	24°34	16° 2	2°15	F 28
S 29	12 25 41	8°21'17	18°57	27°11	29°20	4°23	4°53	18° 3	11°18	29°31	1°40	23°33	24°31	16° 9	2°18	S 29
S 30	12 29 37	9°20'24	2 Y 51	28°19	0 Υ 35	5° 6	5° 6	18°10	11°16	29°30	1°41	23°32	24°28	16°16	2°22	S 30
M31	12 33 34	10 Y 19'29	16 Y 29	29 Y 21	1 Υ 49	5≈50	5 ₩ 19	18 米 17	11 M .14	29M29	1∏42	23 ≏ 31	24 ≏ 25	169522	2 II 25	M31

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S 2	7 15	0n 8	2 34	10 18	1 54	14 2	1 10	23 17	0 38	12 45	0 51	7 43	1 51	15 2	0 26	18 28	1 42	8 53 11 50	9 24	10 2	17 50	16 12	4 19
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W 5	6 6		0s59	7 55	1 41	12 49	1 14	-		12 30	0 51	7 35	1 51	-	0 26	18 28	1 43	8 54 11 49		9 59		16 14	4 18
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S 16	1 48	1 34	2 58	2 3	0 10	7 55	1 25	22 1	0 51	11 37	0 52	7 4	1 52	14 57	0 26	18 26	1 43	8 58 11 46	9 13	9 46	17 39	16 21	4 16
M17	1 24	2 s35	1 56	3 0	0n 1	7 26	1 25	21 54	0 52	11 32	0 52	7 1	1 52	14 57	0 26	18 26	1 43	8 58 11 46	9 12	9 45	17 38	16 22	4 16
T 18	1 0	-	0 46	3 57	0 13	6 58		21 47		11 27	0 52	6 58	1 52				1 43	8 58 11 46			17 37	-	4 16
W19			0n27	4 52	0 25	6 29		21 40		11 22	0 52	6 55	1 52				1 43	8 59 11 45			17 36		4 16
T 20			1 39	5 47	0 37	6 1		21 32		11 17	0 52	6 52	1 52				1 43	8 59 11 45			17 35		4 15
F 21 S 22	-		2 47 3 46	6 41 7 33	0 49	5 32 5 3		21 24 21 16	0 56	11 12 11 8	0 53 0 53	6 50 6 47		14 55 14 54	0 26 0 26		1 43 1 43	9 0 11 45 9 0 11 45		9 40	17 34	16 24 16 25	4 15 4 15
S 23			4 33	8 24	1 13	4 33	1 27	-		-	0 53	6 44		14 54	0 26		1 43	9 0 11 44		9 38		16 26	4 15
M24 T 25		-	5 3 5 15	9 12 9 59	1 25 1 37	4 4 3 34	1 27 1 27	-	1 0	10 58 10 53	0 53 0 53	6 41	1 52 1 52		0 26 0 26		1 43	9 1 11 44		9 37	17 31	16 27	4 15 4 14
W26	-		5 8	10 43	1 49	3 5	1 27				0 53	6 36	1 52				1 44 1 44	9 1 11 42	,	9 30		16 28	4 14
T 27	-		-	11 25	2 0	2 35	1 27	-			0 53	6 33		14 51	0 26	-	1 44	9 2 11 43		9 33		16 29	4 14
F 28	2 56			12 4	2 10	2 5	1 27			-	0 54	6 31		14 51	0 26	-	1 44	9 2 11 43			17 28		4 14
S 29	3 19	1 38	3 0	12 40	2 20	1 36	1 27	20 15	1 5	10 34	0 54	6 28	1 53	14 50	0 26	18 24	1 44	9 3 11 43	9 10	9 31	17 27	16 31	4 14
S 30	3 42	2n51	1 52	13 13	2 29	1 6	1 27	20 5	1 6	10 30	0 54	6 25	1 53	14 50	0 26	18 24	1 44	9 3 11 43	9 9	9 30	17 26	16 31	4 14
M31	4n 6	7n 5	0n39	13n43	2n38	0s36	1 s26	19 s56	1 s 7	10 s25	0 s54	6 s 2 3	1 s53	14 s49	0n26	18 s23	1n44	9n 3 11s42	9s 9	9 s 2 9	17n25	16n32	4 s 1 4

 $\label{eq:Julian Day Number = 2320847.5, Delta T = 48.83 sec} \\ Ecliptic obliquity = 23°29'01, Nutation = 0°00'09, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 19°44'45, Lahiri = 18°51'45Greg. Calendar$

APRIL 1642 GC 00:00 UT

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T 1	12 37 30	11 Y 18'32	29 Y 48	0 8 17	3 Υ 3	6≈33	5) 32	18) 24	11°R12	29°R29	1 Ⅱ 42	23°D31	24 <u>₽</u> 21	169529	2 П 29	T 1
W 2	12 41 27	12°17'32	12847	1° 7	4°18	7°17	5°45	18°31	11 M .10	29 M 28	1°43	23 ≏ 31	24°18	16°36	2°32	W 2
T 3	12 45 23	13°16'31	25°28	1°50	5°32	8° 0	5°58	18°38	11°8	29°27	1°44	23°32	24°15	16°43	2°36	T 3
F 4	12 49 20	14°15'27	7 Ⅱ 52	2°26	6°46	8°44	6°11	18°45	11° 6	29°26	1°45	23°33	24°12	16°49	2°40	F 4
S 5	12 53 16	15°14'21	20° 3	2°56	8° 1	9°28	6°24	18°51	11° 4	29°25	1°46	23°34	24° 9	16°56	2°43	S 5
S 6	12 57 13	16°13'13	295 3	3°19	9°15	10°11	6°37	18°58	11° 1	29°24	1°47	23°35	24° 5	17° 3	2°47	S 6
M 7	13 1 10	17°12'03	13°57	3°36	10°29	10°55	6°49	19° 5	10°59	29°22	1°48	23°R35	24° 2	17° 9	2°51	M 7
T 8	13 5 6	18°10'50	25°50	3°46	11°43	11°38	7° 2	19°12	10°57	29°21	1°49	23°35	23°59	17°16	2°55	T 8
W 9	13 9 3	19° 9'35	7 Ω 47	3°R50	12°58	12°22	7°15	19°19	10°55	29°20	1°50	23°35	23°56	17°23	2°59	W 9
T 10	13 12 59	20° 8'17	19°51	3°47	14°12	13° 6	7°27	19°25	10°52	29°19	1°51	23°34	23°53	17°30	3° 3	T 10
F 11	13 16 56	21° 6'58	2Mp 7	3°39	15°26	13°49	7°39	19°32	10°50	29°18	1°52	23°34	23°50	17°36	3° 7	F 11
S 12	13 20 52	22° 5'36	14°39	3°24	16°40	14°33	7°52	19°39	10°48	29°17	1°53	23°34	23°46	17°43	3°11	S 12
S 13	13 24 49	23° 4'12	27°28	3° 5	17°54	15°16	8° 4	19°45	10°45	29°16	1°55	23°34	23°43	17°50	3°15	S 13
M14	13 28 45	24° 2'46	10 ≏ 36	2°40	19°8	16° 0	8°16	19°52	10°43	29°14	1°56	23°D34	23°40	17°56	3°19	M14
T 15	13 32 42	25° 1'18	24° 2	2°12	20°23	16°44	8°28	19°58	10°41	29°13	1°57	23°R34	23°37	18° 3	3°23	T 15
W16	13 36 39	25°59'48	7 M .45	1°39	21°37	17°27	8°40	20° 5	10°38	29°12	1°58	23°34	23°34	18°10	3°27	W16
T 17	13 40 35	26°58'16	21°43	1° 4	22°51	18°11	8°52	20°11	10°36	29°10	1°59	23°33	23°31	18°17	3°31	T 17
F 18	13 44 32	27°56'43	5 ₹ 52	0°26	24° 5	18°54	9° 4	20°18	10°33	29° 9	2° 0	23°33	23°27	18°23	3°36	F 18
S 19	13 48 28	28°55'08	20° 8	29 Y 46	25°19	19°38	9°16	20°24	10°31	29° 8	2° 1	23°32	23°24	18°30	3°40	S 19
S 20	13 52 25	29°53'31	4 궁 27	29° 5	26°33	20°22	9°28	20°30	10°28	29° 6	2° 3	23°32	23°21	18°37	3°44	S 20
M21	13 56 21	0 8 51'53	18°46	28°25	27°47	21° 5	9°39	20°37	10°26	29° 5	2° 4	23°31	23°18	18°44	3°49	M21
T 22	14 0 18	1°50'13	3≈ 0	27°45	29° 1	21°49	9°51	20°43	10°23	29° 4	2° 5	23°D31	23°15	18°50	3°53	T 22
W23	14 4 14	2°48'31	17° 8	27° 6	0 8 15	22°32	10° 2	20°49	10°21	29° 2	2° 6	23°32	23°11	18°57	3°58	W23
T 24	14 8 11	3°46'48	1 ∀ 8	26°29	1°29	23°16	10°13	20°55	10°18	29° 1	2° 7	23°32	23° 8	19° 4	4° 2	T 24
F 25	14 12 8	4°45'04	14°58	25°54	2°43	23°59	10°25	21° 1	10°16	28°59	2° 9	23°33	23° 5	19°10	4° 7	F 25
S 26	14 16 4	5°43'18	28°36	25°23	3°57	24°43	10°36	21° 7	10°13	28°58	2°10	23°34	23° 2	19°17	4°11	S 26
S 27	14 20 1	6°41'30	12 Y 3	24°55	5°11	25°27	10°47	21°13	10°11	28°57	2°11	23°35	22°59	19°24	4°16	S 27
M28	14 23 57	7°39'40	25°16	24°31	6°25	26°10	10°58	21°19	10° 8	28°55	2°12	23°R35	22°56	19°31	4°20	M28
T 29	14 27 54	8°37'49	8816	24°11	7°39	26°54	11° 9	21°25	10° 6	28°54	2°14	23°35	22°52	19°37	4°25	T 29
W30	14 31 50	9 8 35'57	218 1	23 Y 56	8 8 53	27≈37	11 米 19	21 米 30	10 M 3	28 M 52	2 Ⅱ 15	23 ₾ 33	22 £ 49	199544	4∏29	W30

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F 4 S 5	5 38 6 1		15 11 3 2	1 24 1 24 1	15 1 11	10 6 0 55	6 12 1 53		18 22 1 44	9 5 11 42 9 5 11 41	9 10	9 24	17 21	16 36 4 13 16 36 4 13
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S 19 S 20 M21 T 22 W23 T 24 F 25 S 26		16 57 5 16 14 27 5 12 11 7 4 50	12 20 1 14 11 50 0 58 11 20 0 41 10 50 0 24 10 20 0 7 9 52 0s10	9 13 1 7 1 9 41 1 5 1 10 9 1 4 1 10 37 1 2 1 11 4 1 0 1 11 31 0 59 1	5 54 1 29 5 41 1 30 5 28 1 31 5 14 1 32 5 1 1 33	8 8 55 0 57 8 51 0 58 8 47 0 58 8 43 0 58 8 43 0 58 8 39 0 58 8 35 0 58	5 32 1 56 5 30 1 56 5 28 1 56 5 26 1 56 5 23 1 56 5 21 1 56	14 33 0 26 14 32 0 26 14 32 0 26 14 31 0 26	18 18 1 44 18 17 1 44 18 17 1 45 18 17 1 45 18 16 1 45	9 11 11 39 9 11 11 38 9 12 11 38 9 12 11 38 9 12 11 38 9 13 11 38 9 13 11 38 9 14 11 38	9 9 9 9 9 9 9 9 9 9 9 10 9 10	9 5 9 4 9 3 9 2 9 1	17 6 17 5 17 4 17 4 17 3 17 2	16 48 4 11 16 49 4 11 16 50 4 11 16 51 4 11 16 52 4 11 16 53 4 11 16 54 4 11 16 55 4 11
S 27 M28 T 29 W30	13 46 14 5 14 24 14n43	9 39 0s 9 13 1 1 20	8 36 0 59 8 14 1 15	12 51 0 53 1	1 20 1 37 1 6 1 38	8 23 0 59 8 8 19 0 59	5 14 1 57 5 12 1 57	14 29 0 26 14 28 0 26 14 28 0 26 14 s27 0n26	18 15 1 45	9 14 11 37 9 14 11 37 9 15 11 37 9n15 11s37	9 10 9 10	8 57 8 56 8 55 8 s53	16 59 16 58	16 57 4 11

Julian Day Number = 2320878.5, Delta T = 48.77 sec Ecliptic obliquity = $23^{\circ}29'01$, Nutation = $0^{\circ}00'07$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $19^{\circ}44'49$, Lahiri = $18^{\circ}51'49$ Greg. Calendar

MAY 1642 GC 00:00 UT

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F 2	14 39 43	11°32'06	15°51	23 Y 39	11°21	29° 4	11°41	21°42	9 M .58	28 M .49	2°17	23 ₽ 29	22°43	19°57	4°39	F 2
S 3	14 43 40	12°30'08	27°59	23°D37	12°35	29°47	11°51	21°47	9°56	28°47	2°19	23°26	22°40	20° 4	4°43	S 3
S 4	14 47 37	13°28'09	9959	23°40	13°49	0 ¥ 31	12° 1	21°53	9°53	28°46	2°20	23°23	22°36	20°11	4°48	S 4
M 5	14 51 33	14°26'07	21°53	23°48	15° 3	1°14	12°12	21°58	9°51	28°44	2°21	23°21	22°33	20°18	4°53	M 5
T 6	14 55 30	15°24'04	3Ω45	24° 0	16°17	1°57	12°22	22° 4	9°48	28°43	2°23	23°19	22°30	20°24	4°58	T 6
W 7	14 59 26	16°21'59	15°41	24°17	17°31	2°41	12°32	22° 9	9°46	28°41	2°24	23°D18	22°27	20°31	5° 3	W 7
T 8	15 3 23	17°19'52	27°44	24°38	18°45	3°24	12°41	22°14	9°43	28°40	2°25	23°19	22°24	20°38	5° 7	T 8
F 9	15 7 19	18°17'43	10 m) 0	25° 4	19°59	4° 7	12°51	22°20	9°41	28°38	2°27	23°20	22°21	20°45	5°12	F 9
S 10	15 11 16	19°15'32	22°32	25°34	21°13	4°50	13° 1	22°25	9°38	28°36	2°28	23°22	22°17	20°51	5°17	S 10
S 11	15 15 12	20°13'20	5 Ω 25	26° 8	22°26	5°33	13°10	22°30	9°36	28°35	2°29	23°23	22°14	20°58	5°22	S 11
M12	15 19 9	21°11'06	18°41	26°46	23°40	6°17	13°20	22°35	9°33	28°33	2°31	23°R24	22°11	21° 5	5°27	M12
T 13	15 23 5	22° 8'50	2 M 21	27°27	24°54	7° 0	13°29	22°40	9°31	28°32	2°32	23°24	22° 8	21°11	5°32	T 13
W14	15 27 2	23° 6'33	16°23	28°13	26° 8	7°43	13°38	22°44	9°28	28°30	2°33	23°22	22° 5	21°18	5°37	W14
T 15	15 30 59	24° 4'15	0 ∡ 746	29° 1	27°22	8°26	13°47	22°49	9°26	28°28	2°35	23°19	22° 2	21°25	5°42	T 15
F 16	15 34 55	25° 1'55	15°22	29°54	28°35	9° 9	13°56	22°54	9°23	28°27	2°36	23°15	21°58	21°32	5°47	F 16
S 17	15 38 52	25°59'34	0중 6	0 8 50	29°49	9°52	14° 5	22°59	9°21	28°25	2°37	23°11	21°55	21°38	5°51	S 17
S 18	15 42 48	26°57'12	14°50	1°49	1 I I 3	10°35	14°14	23° 3	9°19	28°24	2°39	23° 6	21°52	21°45	5°56	S 18
M19	15 46 45	27°54'49	29°27	2°51	2°17	11°18	14°22	23° 8	9°16	28°22	2°40	23° 2	21°49	21°52	6° 1	M19
T 20	15 50 41	28°52'25	13 ≈ 51	3°56	3°30	12° 1	14°31	23°12	9°14	28°20	2°41	23° 0	21°46	21°59	6° 6	T 20
W21	15 54 38	29°50'00	28° 0	5° 4	4°44	12°43	14°39	23°16	9°12	28°19	2°43	22°D59	21°42	22° 5	6°11	W21
T 22	15 58 34	0 Ⅱ 47'34	11 米 52	6°15	5°58	13°26	14°47	23°21	9° 9	28°17	2°44	23° 0	21°39	22°12	6°16	T 22
F 23	16 2 31	1°45'07	25°27	7°29	7°12	14° 9	14°55	23°25	9° 7	28°15	2°46	23° 1	21°36	22°19	6°21	F 23
S 24	16 628	2°42'40	8 Ƴ 45	8°46	8°25	14°52	15° 3	23°29	9° 5	28°14	2°47	23° 2	21°33	22°25	6°26	S 24
S 25	16 10 24	3°40'11	21°49	10° 6	9°39	15°34	15°10	23°33	9° 2	28°12	2°48	23°R 3	21°30	22°32	6°31	S 25
M26	16 14 21	4°37'42	4 8 40	11°28	10°53	16°17	15°18	23°37	9° 0	28°11	2°50	23° 2	21°27	22°39	6°36	M26
T 27	16 18 17	5°35'12	17°20	12°53	12° 7	16°59	15°25	23°41	8°58	28° 9	2°51	23° 0	21°23	22°46	6°41	T 27
W28	16 22 14	6°32'40	29°48	14°20	13°20	17°42	15°33	23°45	8°56	28° 7	2°52	22°55	21°20	22°52	6°47	W28
T 29	16 26 10	7°30'08	12 II 7	15°51	14°34	18°24	15°40	23°48	8°54	28° 6	2°54	22°49	21°17	22°59	6°52	T 29
F 30	16 30 7	8°27'35	24°17	17°24	15°48	19° 6	15°47	23°52	8°52	28° 4	2°55	22°41	21°14	23° 6	_6°57	F 30
S 31	16 34 3	9 Ⅱ 25'01	69919	18 8 59	17 I 1	19 米 49	15 米 54	23 米 55	8 M .50	28M 3	2 II 56	22 ₽ 32	21 ≏ 11	239512	7 II 2	S 31

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T 1 F 2 S 3	15n 1 15 19 15 37	17n35 3s23 18 36 4 10 18 44 4 44	7 23 1		13 s38 1 s40 13 24 1 41 13 9 1 42	8s11 1s 0 8 7 1 0 8 3 1 0	5 6 1 58	14 s26	18 14 1 45	9n15 11s37 9 16 11 37 9 16 11 37	9 8	8 s52 16n56 8 51 16 55 8 50 16 54	
S 4 M 5 T 6 W 7 T 8	15 55 16 12 16 29 16 46 17 2	16 32 5 15 14 20 5 9 11 32 4 51	6 55 2 6 51 2 6 49 2	30 15 45 0 39 40 16 9 0 37 48 16 32 0 35	12 55 1 43 12 41 1 44 12 26 1 45 12 11 1 46 11 57 1 47	7 59 1 0 7 56 1 0 7 52 1 1 7 48 1 1 7 45 1 1	5 0 1 58 4 58 1 58 4 56 1 59	14 24 0 26 14 23 0 26 14 22 0 26 14 21 0 26 14 21 0 26	18 13 1 45 18 12 1 45 18 12 1 45	9 16 11 37 9 17 11 36 9 17 11 36 9 17 11 36 9 18 11 36	9 5 9 4 9 4	8 49 16 53 8 48 16 52 8 46 16 51 8 45 16 50 8 44 16 49	17 2 4 11 17 3 4 11 17 4 4 11
F 9 S 10 S 11	17 18 17 34 17 50		6 59 3	8 17 38 0 28 13 18 0 0 26	11 42 1 48 11 27 1 49 11 12 1 50		4 51 1 59 4 49 1 59	14 20 0 26 14 19 0 26 14 18 0 26	18 11 1 45 18 11 1 45	9 18 11 36 9 18 11 36 9 19 11 36	9 5 9 6	8 43 16 48 8 42 16 47 8 40 16 46	17 7 4 11 17 7 4 11
M12 T 13 W14 T 15 F 16 S 17	18 5 18 20 18 35 18 49 19 4	14 49 2 3	7 28 3 7 42 3 7 58 3 8 16 3	20 18 41 0 22 22 19 1 0 19	10 57 1 52 10 42 1 53 10 27 1 54 10 12 1 55 9 56 1 56 9 41 1 57	7 31 1 2 7 28 1 2 7 24 1 2 7 21 1 3 7 18 1 3 7 15 1 3	4 42 2 0 4 40 2 1	14 17 0 26 14 16 0 26	18 10 1 45 18 10 1 45 18 9 1 45 18 9 1 45	9 19 11 36 9 19 11 36 9 20 11 36 9 20 11 35 9 20 11 35 9 21 11 35	9 6 9 6 9 5 9 3	8 39 16 45 8 38 16 44 8 37 16 43 8 36 16 42 8 34 16 40 8 33 16 39	17 9 4 11 17 10 4 11 17 11 4 11 17 11 4 11
S 18 M19 T 20 W21 T 22 F 23	19 31	17 33 5 8 15 15 5 10	8 56 3 9 19 3 9 43 3 10 9 3 10 35 3	24 20 15 0 10 22 20 32 0 7 20 20 49 0 5 17 21 5 0 3 13 21 20 0 0 9 21 35 0n 2	9 26 1 58 9 10 1 59 8 55 2 0 8 39 2 1 8 24 2 2 8 8 2 3	7 12 1 3 7 8 1 4 7 5 1 4 7 3 1 4 7 0 1 4 6 57 1 5	4 37 2 1 4 35 2 1 4 34 2 1 4 32 2 2	14 13 0 26 14 12 0 26 14 11 0 26 14 11 0 26 14 10 0 26	18 8 1 45 18 8 1 45 18 7 1 45 18 7 1 45 18 7 1 45	9 21 11 35 9 21 11 35 9 22 11 35 9 22 11 35 9 22 11 35 9 22 11 35 9 23 11 35	9 0 8 58 8 57 8 57 8 57	8 32 16 38 8 31 16 37 8 30 16 36	17 13 4 11 17 14 4 11 17 15 4 11 17 15 4 11 17 16 4 11
S 24 S 25 M26 T 27 W28 T 29	20 44 20 55 21 6 21 17 21 27 21 36	4 39 1 17 8 37 0 7 12 7 1s 3 15 0 2 8 17 7 3 6 18 25 3 54	11 32 3 12 2 2 12 34 2 13 6 2 13 38 2 14 12 2	4 21 49 0 4 59 22 3 0 7 53 22 16 0 9 46 22 29 0 12 39 22 40 0 14 32 22 52 0 16	7 53 2 4 7 37 2 5 7 21 2 6 7 6 2 7 6 50 2 8 6 34 2 9	6 54 1 5 6 51 1 5 6 49 1 5 6 46 1 6 6 43 1 6 6 41 1 6	4 28 2 2 4 26 2 3 4 25 2 3 4 24 2 3 4 23 2 3 4 21 2 4	14 9 0 26 14 8 0 26 14 7 0 26 14 6 0 26 14 6 0 26 14 5 0 26	18 6 1 45 18 6 1 45 18 5 1 45 18 5 1 45 18 5 1 45 18 4 1 45	9 23 11 35 9 23 11 35 9 23 11 35 9 24 11 35 9 24 11 35 9 24 11 35	8 58 8 59 8 58 8 57 8 56 8 53	8 25 16 32 8 24 16 31 8 23 16 30 8 21 16 29 8 20 16 28 8 19 16 27	17 18 4 11 17 19 4 11 17 19 4 11 17 20 4 11 17 21 4 12 17 22 4 12
	21 45 21n54			23 23 2 0 19 s15 23n12 0n21	6 18 2 10 6s 3 2s11	6 38 1 6 6s36 1s 7	-		18 4 1 45 18s 4 1n45	9 24 11 35 9n25 11s35		8 18 16 26 8 s17 16n25	

Julian Day Number = 2320908.5, Delta T = 48.71 sec Ecliptic obliquity = 23°29'00, Nutation = 0°00'05, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = 19°44'53, Lahiri = 18°51'54Greg. Calendar

JUNE 1642 GC 00:00 UT

Day	Sid.t	0	D	ğ	φ	♂	4	ħ)∤(朴	Р	ß	Ω	ţ	ę,	Day
S 1	16 38 0	10П22'26	189915	20837	18 II 15	20) (31	16) 0	23 米 59	8°R48	28°R 1	2Д58	22°R23	21 <u>₽</u> 8	239519	7 I 7	S 1
M 2	16 41 57	11°19'50	0Ω 7	22°18	19°29	21°13	16° 7	24° 2	8 M .46	27 M 59	2°59	22 16	21° 4	23°26	7°12	M 2
T 3	16 45 53	12°17'13	11°59	24° 1	20°43	21°55	16°13	24° 5	8°44	27°58	3° 1	22°10	21° 1	23°33	7°17	T 3
W 4	16 49 50	13°14'34	23°53	25°47	21°56	22°37	16°19	24° 9	8°42	27°56	3° 2	22° 6	20°58	23°39	7°22	W 4
T 5	16 53 46	14°11'55	5 m 54	27°35	23°10	23°19	16°25	24°12	8°40	27°55	3° 3	22° 4	20°55	23°46	7°27	T 5
F 6	16 57 43	15° 9'14	18° 7	29°26	24°23	24° 1	16°31	24°15	8°38	27°53	3° 5	22°D 3	20°52	23°53	7°32	F 6
S 7	17 1 39	16° 6'33	0 ჲ 36	1 II 19	25°37	24°42	16°37	24°18	8°36	27°52	3° 6	22° 4	20°48	24° 0	7°37	S 7
S 8	17 5 36	17° 3'51	13°27	3°15	26°51	25°24	16°42	24°20	8°34	27°50	3° 7	22° 5	20°45	24° 6	7°42	S 8
M 9	17 9 32	18° 1'07	26°43	5°13	28° 4	26° 6	16°48	24°23	8°32	27°49	3° 9	22°R 5	20°42	24°13	7°47	M 9
T 10	17 13 29	18°58'23	10ML26	7°13	29°18	26°47	16°53	24°26	8°31	27°47	3°10	22° 4	20°39	24°20	7°52	T 10
W11	17 17 26	19°55'38	24°37	9°15	0932	27°28	16°58	24°28	8°29	27°46	3°11	22° 0	20°36	24°26	7°57	W11
T 12	17 21 22	20°52'53	9 ₹ 14	11°19	1°45	28°10	17° 3	24°31	8°27	27°44	3°13	21°54	20°33	24°33	8° 2	T 12
F 13	17 25 19	21°50'07	24° 9	13°25	2°59	28°51	17° 8	24°33	8°26	27°43	3°14	21°46	20°29	24°40	8° 7	F 13
S 14	17 29 15	22°47'20	9 궁 16	15°32	4°12	29°32	17°12	24°35	8°24	27°41	3°15	21°38	20°26	24°47	8°12	S 14
S 15	17 33 12	23°44'33	24°23	17°41	5°26	0 Υ 13	17°16	24°37	8°23	27°40	3°16	21°29	20°23	24°53	8°16	S 15
M16	17 37 8	24°41'46	9≈20	19°51	6°39	0°54	17°21	24°40	8°21	27°39	3°18	21°21	20°20	25° 0	8°21	M16
T 17	17 41 5	25°38'58	24° 1	22° 2	7°53	1°35	17°25	24°42	8°20	27°37	3°19	21°15	20°17	25° 7	8°26	T 17
W18	17 45 2	26°36'11	8) 19	24°13	9° 7	2°16	17°28	24°43	8°18	27°36	3°20	21°12	20°14	25°14	8°31	W18
T 19	17 48 58	27°33'23	22°13	26°24	10°20	2°56	17°32	24°45	8°17	27°34	3°22	21°D11	20°10	25°20	8°36	T 19
F 20	17 52 55	28°30'35	5 Ƴ 44	28°35	11°34	3°37	17°36	24°47	8°16	27°33	3°23	21°11	20° 7	25°27	8°41	F 20
S 21	17 56 51	29°27'47	18°53	09346	12°47	4°17	17°39	24°48	8°14	27°32	3°24	21°R11	20° 4	25°34	8°46	S 21
S 22	18 0 48	09525'00	1844	2°57	14° 1	4°58	17°42	24°50	8°13	27°30	3°25	21°11	20° 1	25°40	8°50	S 22
M23	18 4 44	1°22'12	14°20	5° 7	15°14	5°38	17°45	24°51	8°12	27°29	3°27	21° 9	19°58	25°47	8°55	M23
T 24	18 8 41	2°19'24	26°44	7°15	16°28	6°18	17°48	24°53	8°11	27°28	3°28	21° 4	19°54	25°54	9° 0	T 24
W25	18 12 37	3°16'37	8耳59	9°23	17°41	6°58	17°50	24°54	8°10	27°27	3°29	20°56	19°51	26° 1	9° 5	W25
T 26	18 16 34	4°13'49	21° 5	11°29	18°55	7°38	17°52	24°55	8° 9	27°25	3°30	20°46	19°48	26° 7	9°10	T 26
F 27	18 20 31	5°11'02	3 95 6	13°33	20° 8	8°17	17°55	24°56	8° 8	27°24	3°31	20°34	19°45	26°14	9°14	F 27
S 28	18 24 27	6° 8'14	15° 3	15°36	21°22	8°57	17°57	24°57	8° 7	27°23	3°33	20°21	19°42	26°21	9°19	S 28
S 29	18 28 24	7° 5'26	26°56	17°38	22°35	9°36	17°58	24°58	8° 6	27°22	3°34	20° 8	19°39	26°27	9°24	S 29
M30	18 32 20	89 2'38	$8\Omega47$	19937	239549	10 Υ 15	18 ∺ 0	24) 58	8M 5	27 M 21	3 Ⅱ 35	19 ≏ 56	19 ≏ 35	26934	9∏28	M30

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S 1 M 2		15 12 5	s 6 15n55 4 16 30	1 57 23 30	0n24 5 s 0 26 5	31 2 13	6 31	1 7	4s18 4 17		14s 3 14 3	0 26	18 3 1	45 9	n25 11 s35 25 11 35	8 s44 8 41	8 14	16n24 16 23	17 24 4	4 s12 4 12
T 3 W 4	22 18 22 26		49 17 5 21 17 40		0 28 5 0 30 5	15 2 14 0 2 15	6 29 6 27	1 8 1 8	4 16 4 15	2 5 2 5	14 2 14 1	0 25 0 25			25 11 35 26 11 35	8 39 8 37		16 22 16 20		4 12 4 12
T 5 F 6	22 33 22 39		42 18 15 52 18 50			14 2 16 28 2 16		1 8 1 8	4 14 4 13	2 5 2 6		0 25 0 25		-	26 11 35 26 11 35	8 36 8 36	-	16 19 16 18		4 12 4 13
S 7 S 8	22 45 22 51		53 19 24 46 19 58		0 37 4 0 39 3			1 9	4 12	2 6					26 11 35	8 37		16 17 16 16		4 13
M 9	22 57	9 56 On	125 20 31	0 43 24 10	0 42 3	41 2 19	6 17	1 9	4 10	2 6	13 59 13 59	0 25	18 1 1	45 9	27 11 35 27 11 35	8 37 8 37	8 6	16 15	17 29	4 13 4 13
T 10 W11	23 6	16 18 2	37 21 2 45 21 33	0 20 24 15	0 44 3 0 46 3	10 2 21	6 14	1 10	4 9 4 8	2 7	13 58 13 58	0 25	18 0 1	44 9	27 11 35 27 11 35	8 36 8 35	8 3	16 14 16 13	17 30	4 13 4 13
_	23 10 23 14	18 52 4	44 22 2 30 22 29	0n 2 24 17	0 48 2 0 50 2	38 2 23	6 10		4 8 4 7	2 7		0 25	17 59 1	44 9	27 11 35 28 11 35	8 33 8 30	-	16 11	17 32	4 13 4 14
S 14 S 15			57 22 54 3 23 18		0 52 2 0 54 2	23 2 24 7 2 24			4 6		13 56 13 56				28 11 35 28 11 35	8 27 8 23		16 10 16 9		4 14 4 14
M16 T 17	23 23 23 25		49 23 39 16 23 57	0 33 24 15 0 43 24 13		52 2 25 36 2 26			4 5 4 5	2 8 2 8					28 11 35 28 11 35	8 21 8 18	7 57 7 56			4 14 4 14
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F 20 S 21	23 28 23 29	3n32 1	21 24 38 12 24 46	1 9 24 2	1 4 0 1 6 0	50 2 29	6 1	1 12	4 3 4 3	2 9	13 53	0 25	17 57 1	44 9	29 11 35 29 11 35	8 17 8 17	7 53 7 51	16 3	17 36	4 15 4 15
S 22 M23	23 29 23 29		s56 24 51 0 24 53	1 24 23 52 1 30 23 45	1 7 0 1 9 0	19 2 30 4 2 31	5 59 5 59	1 13 1 13	4 2 4 2		13 53 13 52				29 11 36 29 11 36	8 17 8 16	7 50 7 49			4 15 4 15
T 24 W25	23 28 23 27		57 24 52 45 24 49	1 35 23 38 1 40 23 30	1 11 0n 1 12 0			1 14 1 14	4 2 4 2	2 10 2 11	13 52 13 52				29 11 36 30 11 36	8 14 8 11		15 59 15 57		4 16 4 16
T 26 F 27	23 25 23 23		22 24 43 47 24 34	1 44 23 22 1 47 23 13	1 14 0 1 15 0				4 1 4 1	2 11 2 11		0 25 0 25			30 11 36 30 11 36	8 7 8 3		15 56 15 55		4 16 4 16
	23 20		59 24 23		1 17 1				4 1		13 51				30 11 36		7 43	15 54	17 40	4 16
			58 24 10 s45 23n54		1 18 1 1n19 1n						13 50 13 s50				30 11 36 n30 11 s36				17 40 4 17n41 4	4 17 4s17

Julian Day Number = 2320939.5, Delta T = 48.65 sec Ecliptic obliquity = $23^{\circ}29'00$, Nutation = $0^{\circ}00'06$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $19^{\circ}44'57$, Lahiri = $18^{\circ}51'58$ Greg. Calendar

JULY 1642 GC 00:00 UT

Day	Sid.t	0	D	ğ	φ	♂ ¹	4	ħ)∤(¥	Р	R	Ω	Ç	ķ	Day
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T 1	18 36 17	8959'51	20 Ω 38	21935	2595 2	10 Y 55	18 ℋ 1	24) 59	8°R 4	27°R20	3 Ⅱ 36	19°R46	19 ₽ 32	269541	9 ∏ 33	T 1
W 2	18 40 13	9°57'02	2 m 33	23°31	26°16	11°34	18° 2	24°59	8M 3	27 M 18	3°37	19 ₾ 38	19°29	26°48	9°37	W 2
T 3	18 44 10	10°54'14	14°34	25°24	27°29	12°12	18° 3	25° 0	8° 3	27°17	3°38	19°33	19°26	26°54	9°42	T 3
F 4	18 48 6	11°51'26	26°45	27°16	28°43	12°51	18° 4	25° 0	8° 2	27°16	3°39	19°31	19°23	27° 1	9°46	F 4
S 5	18 52 3	12°48'38	9 ≏ 12	29° 6	29°56	13°29	18° 5	25° 0	8° 1	27°15	3°41	19°30	19°20	27° 8	9°51	S 5
S 6	18 56 0	13°45'49	21°58	$0\Omega 54$	1 Q 10	14° 8	18° 5	25°R 0	8° 1	27°14	3°42	19°30	19°16	27°15	9°55	S 6
M 7	18 59 56	14°43'01	5 M 9	2°40	2°23	14°46	18° 6	25° 0	8° 0	27°13	3°43	19°30	19°13	27°21	10° 0	M 7
T 8	19 3 53	15°40'12	18°48	4°25	3°36	15°24	18°R 6	25° 0	8° 0	27°12	3°44	19°28	19°10	27°28	10° 4	T 8
W 9	19 7 49	16°37'24	2 ₹ 56	6° 7	4°50	16° 2	18° 5	25° 0	7°59	27°11	3°45	19°23	19° 7	27°35	10° 8	W 9
T 10	19 11 46	17°34'36	17°33	7°47	6° 3	16°39	18° 5	25° 0	7°59	27°11	3°46	19°16	19° 4	27°41	10°13	T 10
F 11	19 15 42	18°31'48	2 る 34	9°25	7°17	17°17	18° 4	24°59	7°59	27°10	3°47	19° 7	19° 0	27°48	10°17	F 11
S 12	19 19 39	19°29'00	17°49	11° 2	8°30	17°54	18° 4	24°59	7°58	27° 9	3°48	18°56	18°57	27°55	10°21	S 12
S 13	19 23 35	20°26'13	3≈ 9	12°36	9°43	18°31	18° 3	24°58	7°58	27° 8	3°49	18°46	18°54	28° 2	10°26	S 13
M14	19 27 32	21°23'26	18°21	14° 8	10°57	19° 8	18° 2	24°57	7°58	27° 7	3°50	18°36	18°51	28° 8	10°30	M14
T 15	19 31 29	22°20'40	3) (16	15°39	12°10	19°45	18° 0	24°56	7°58	27° 6	3°51	18°29	18°48	28°15	10°34	T 15
W16	19 35 25	23°17'55	17°47	17° 7	13°23	20°21	17°59	24°55	7°58	27° 6	3°52	18°24	18°45	28°22	10°38	W16
T 17	19 39 22	24°15'10	1 Y 50	18°34	14°37	20°57	17°57	24°54	7°D58	27° 5	3°53	18°22	18°41	28°28	10°42	T 17
F 18	19 43 18	25°12'26	15°25	19°58	15°50	21°34	17°55	24°53	7°58	27° 4	3°54	18°D21	18°38	28°35	10°46	F 18
S 19	19 47 15	26° 9'43	28°34	21°21	17° 3	22° 9	17°53	24°52	7°58	27° 4	3°55	18°R21	18°35	28°42	10°50	S 19
S 20	19 51 11	27° 7'01	11821	22°41	18°17	22°45	17°51	24°51	7°58	27° 3	3°56	18°21	18°32	28°49	10°54	S 20
M21	19 55 8	28° 4'20	23°51	23°59	19°30	23°20	17°48	24°49	7°58	27° 2	3°56	18°19	18°29	28°55	10°58	M21
T 22	19 59 4	29° 1'41	6 I 7	25°15	20°43	23°56	17°46	24°48	7°58	27° 2	3°57	18°14	18°26	29° 2	11° 2	T 22
W23	20 3 1	29°59'02	18°12	26°29	21°56	24°31	17°43	24°46	7°59	27° 1	3°58	18° 7	18°22	29° 9	11° 6	W23
T 24	20 6 58	0 Ω 56'24	09୍ତୀ 1	27°40	23°10	25° 5	17°40	24°45	7°59	27° 1	3°59	17°56	18°19	29°16	11° 9	T 24
F 25	20 10 54	1°53'47	12° 6	28°49	24°23	25°40	17°36	24°43	8° 0	27° 0	4° 0	17°44	18°16	29°22	11°13	F 25
S 26	20 14 51	2°51'10	23°59	29°56	25°36	26°14	17°33	24°41	8° 0	27° 0	4° 1	17°31	18°13	29°29	11°17	S 26
S 27	20 18 47	3°48'35	5 Ω 50	1 Mp 0	26°49	26°48	17°29	24°39	8° 1	27° 0	4° 1	17°18	18°10	29°36	11°20	S 27
M28	20 22 44	4°46'01	17°43	2° 1	28° 2	27°21	17°26	24°37	8° 1	26°59	4° 2	17° 6	18° 6	29°42	11°24	M28
T 29	20 26 40	5°43'27	29°37	3° 0	29°16	27°55	17°22	24°35	8° 2	26°59	4° 3	16°56	18° 3	29°49	11°27	T 29
W30	20 30 37	6°40'55	11 m /36	3°56	0 m 29	28°28	17°17	24°33	8° 2	26°58	4° 4	16°48	18° 0	29°56	11°31	W30
T 31	20 34 33	7 Ω 38'23	23 m 42	4 m 49	1 m 42	29 Y 0	17) 13	24) (30	8 M . 3	26M58	4 I I 4	16 ≏ 43	17 ≏ 57	0Ω 3	11 Ⅱ 34	T 31

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T 1 W 2 T 3	23n11 23 7 23 2	7 9 3 4 3 25 2 5	4 22 55	1 53 22 17 1 52 22 3	1 22 2 1 23 2	n55 2s37 2 10 2 38 2 24 2 39		1 s16 1 16 1 16	4s 1 4 1 4 1	2 12 2 13	13 s50 13 50 13 50	0 25 0 25	17 s 55 1 n 4 17 55 1 4 17 54 1 4	4 9 30 11 36 4 9 30 11 37	7 42 7 40		15 49 15 48	17 41 4 17 17 42 4 18
F 4 S 5 S 6	22 57 22 52 22 46		4 22 8	1 50 21 50 1 48 21 35	1 25 2	2 38 2 39 2 53 2 40 3 7 2 41		1 17 1 17	4 1 4 2	2 13	13 49 13 49 13 49	0 25		4 9 31 11 37			15 46	17 43 4 18
M 7 T 8	22 40 22 34	11 59 1 2 15 4 2 2			1 28 3	3 21 2 41 3 35 2 42 3 49 2 42	5 54 5 55 5 55	1 17 1 18 1 18 1 18	4 2 4 2 4 2 4 3	2 14 2 14	13 49	0 25 0 25	17 54 1 4 17 54 1 4 17 54 1 4 17 53 1 4	9 31 11 37 9 31 11 37	7 39 7 39 7 38 7 36	7 32	15 45 15 44 15 43 15 41	17 43 4 19
		18 39 4 4	6 19 46 8 19 15 0 18 43	1 28 20 14 1 22 19 56 1 16 19 38		3 2 43 1 17 2 44 1 30 2 44	5 55 5 56 5 57	1 19 1 19 1 19	4 3 4 4 4 4	2 15	13 49 13 48 13 48	0 24	17 53 1 4 17 53 1 4 17 53 1 4	9 31 11 38		7 29 7 27 7 26	15 39	17 45 4 20
M14 T 15 W16 T 17 F 18	21 56 21 47 21 38 21 28 21 18 21 8 20 57	11 12 4 2 7 0 3 3 3 2 28 2 3 2n 3 1 2 6 19 0 1	4 17 3 4 16 29 6 15 55	1 10 19 19 1 3 18 59 0 55 18 39 0 48 18 19 0 40 17 57 0 31 17 36 0 22 17 14	1 32 4 1 32 5 1 32 5		5 58 5 59	1 20 1 20 1 20 1 20 1 21 1 21 1 21	4 4 4 5 4 6 4 6 4 7 4 8 4 8	2 16 2 16 2 16 2 16 2 16 2 17	13 48 13 48 13 48	0 24 0 24 0 24 0 24 0 24	17 52 1 4 17 52 1 4	3 9 31 11 38 3 9 31 11 39	7 18 7 15 7 14 7 13 7 13	7 24 7 23 7 21 7 20 7 19	15 33	17 46 4 21 17 46 4 21 17 46 4 21 17 47 4 21 17 47 4 22
S 20 M21 T 22 W23 T 24 F 25 S 26	20 35 20 23 20 11 19 59 19 46	15 56 2 5 17 41 3 4 18 37 4 2 18 42 4 4 17 58 4 5	4 13 2 1 12 27	0s 6 16 5 0 16 15 41	1 33 6 1 33 6 1 33 6 1 33 7 1 32 7	5 15 2 48 5 28 2 49 5 41 2 49 5 53 2 50 7 5 2 50 7 17 2 51 7 29 2 51	6 6 6 8	1 22 1 22 1 22 1 22 1 23 1 23 1 23	4 9 4 10 4 11 4 11 4 12 4 13 4 14	2 17 2 18 2 18 2 18 2 18	13 49 13 49 13 49 13 49 13 49 13 49 13 49	0 24 0 24 0 24 0 24 0 24		3 9 31 11 39 3 9 31 11 39 3 9 31 11 39 3 9 31 11 40 3 9 31 11 40	7 11 7 10 7 7 7 3 6 58	7 15 7 14 7 13 7 12	15 24 15 23	17 48 4 23 17 48 4 23 17 48 4 23 17 48 4 24 17 48 4 24
S 27 M28 T 29 W30 T 31	19 6 18 52	11 26 4 2	2 9 9 5 8 39	1 10 13 36 1 21 13 10	1 31 3 1 30 8 1 30 8	7 41 2 51 7 53 2 52 8 4 2 52 8 16 2 52 8 n27 2 s53	6 14 6 16 6 18 6 20 6 s21	1 24 1 24 1 24 1 24 1 s25	4 15 4 16 4 17 4 19 4s20	2 19 2 19 2 20	13 50 13 50 13 50 13 50 13 s50	0 24 0 24 0 24	17 52 1 4 17 52 1 4 17 52 1 4 17 52 1 4 17 51 1n4	2 9 31 11 40 2 9 31 11 40 2 9 31 11 41	6 44 6 40 6 37		15 19	17 49 4 25 17 49 4 25 17 49 4 26

Julian Day Number = 2320969.5, Delta T = 48.59 sec Ecliptic obliquity = 23°28'59, Nutation = $0^\circ00'06$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $19^\circ45'01$, Lahiri = $18^\circ52'02$ Greg. Calendar

AUGUST 1642 GC 00:00 UT

Day	Sid.t	0)	ğ	φ	ď	4	ħ)∤(并	В	S.	v	Ç	ķ	Day
F 1	20 38 30	8 Ω 35'52	5 ≙ 57	5 m 38	2 m/ 55	29Υ33	17°R 9	24°R28	8M 4	26°R58	4 I 5	16°R41	17 ⊆ 54	0Ω9	11 II 38	F 1
S 2	20 42 27	9°33'21	18°25	6°24	4° 8	0 ප 5	17 ∺ 4	24) 25	8° 5	26 M 58	4° 6	16°D40	17°51	0°16	11°41	S 2
S 3	20 46 23	10°30'52	1 M .11	7° 7	5°21	0°37	16°59	24°23	8° 6	26°57	4° 6	16 ≏ 41	17°47	0°23	11°44	S 3
M 4	20 50 20	11°28'23	14°18	7°46	6°34	1° 8	16°54	24°20	8° 6	26°57	4° 7	16°R41	17°44	0°29	11°48	M 4
T 5	20 54 16	12°25'56	27°51	8°22	7°47	1°40	16°49	24°17	8° 7	26°57	4° 8	16°40	17°41	0°36	11°51	T 5
W 6	20 58 13	13°23'29	11 .7 51	8°53	9° 1	2°11	16°44	24°14	8° 8	26°57	4° 8	16°37	17°38	0°43	11°54	W 6
T 7	21 2 9	14°21'03	26°17	9°20	10°14	2°41	16°38	24°11	8°10	26°57	4° 9	16°32	17°35	0°50	11°57	T 7
F 8	21 6 6	15°18'38	11중 8	9°42	11°27	3°11	16°33	24° 8	8°11	26°57	4° 9	16°24	17°31	0°56	12° 0	F 8
S 9	21 10 2	16°16'14	26°17	10° 0	12°40	3°41	16°27	24° 5	8°12	26°D57	4°10	16°16	17°28	1° 3	12° 3	S 9
S 10	21 13 59	17°13'51	11 ≈ 33	10°12	13°52	4°11	16°21	24° 2	8°13	26°57	4°10	16° 7	17°25	1°10	12° 6	S 10
M11	21 17 56	18°11'30	26°46	10°20	15° 5	4°40	16°15	23°59	8°14	26°57	4°11	15°59	17°22	1°17	12° 8	M11
T 12	21 21 52	19° 9'10	11) (46	10°R22	16°18	5° 9	16° 9	23°56	8°16	26°57	4°11	15°53	17°19	1°23	12°11	T 12
W13	21 25 49	20° 6'51	26°24	10°19	17°31	5°37	16° 2	23°52	8°17	26°57	4°12	15°50	17°16	1°30	12°14	W13
T 14	21 29 45	21° 4'33	10 Y 35	10°10	18°44	6° 5	15°56	23°49	8°19	26°57	4°12	15°D48	17°12	1°37	12°17	T 14
F 15	21 33 42	22° 2'18	24°17	9°56	19°57	6°33	15°49	23°45	8°20	26°58	4°13	15°48	17° 9	1°43	12°19	F 15
S 16	21 37 38	23° 0'04	7 8 32	9°35	21°10	7° 0	15°43	23°42	8°22	26°58	4°13	15°49	17° 6	1°50	12°22	S 16
S 17	21 41 35	23°57'52	20°22	9° 9	22°23	7°27	15°36	23°38	8°23	26°58	4°13	15°R50	17° 3	1°57	12°24	S 17
M18	21 45 31	24°55'41	2 ∏ 52	8°37	23°35	7°53	15°29	23°34	8°25	26°58	4°14	15°50	17° 0	2° 4	12°27	M18
T 19	21 49 28	25°53'33	15° 7	8° 0	24°48	8°19	15°22	23°31	8°26	26°59	4°14	15°48	16°57	2°10	12°29	T 19
W20	21 53 25	26°51'26	27°10	7°18	26° 1	8°44	15°15	23°27	8°28	26°59	4°14	15°44	16°53	2°17	12°31	W20
T 21	21 57 21	27°49'21	995 5	6°32	27°14	9° 9	15° 8	23°23	8°30	26°59	4°15	15°38	16°50	2°24	12°33	T 21
F 22	22 1 18	28°47'18	20°58	5°42	28°26	9°34	15° 0	23°19	8°32	27° 0	4°15	15°30	16°47	2°30	12°36	F 22
S 23	22 5 14	29°45'16	2 Ω 49	4°49	29°39	9°58	14°53	23°15	8°34	27° 0	4°15	15°21	16°44	2°37	12°38	S 23
S 24	22 9 11	0 M 43'16	14°42	3°54	0 ჲ 52	10°21	14°46	23°11	8°35	27° 1	4°15	15°13	16°41	2°44	12°40	S 24
M25	22 13 7	1°41'18	26°39	2°58	2° 4	10°44	14°38	23° 7	8°37	27° 1	4°16	15° 5	16°37	2°51	12°42	M25
T 26	22 17 4	2°39'21	8 m) 40	2° 2	3°17	11° 7	14°30	23° 3	8°39	27° 2	4°16	14°58	16°34	2°57	12°43	T 26
W27	22 21 0	3°37'26	20°49	1° 7	4°30	11°29	14°23	22°58	8°41	27° 2	4°16	14°54	16°31	3° 4	12°45	W27
T 28	22 24 57	4°35'32	3 ₾ 5	0°15	5°42	11°50	14°15	22°54	8°43	27° 3	4°16	14°51	16°28	3°11	12°47	T 28
F 29	22 28 53	5°33'41	15°31	29 Ω 27	6°55	12°11	14° 7	22°50	8°46	27° 4	4°16	14°D50	16°25	3°17	12°49	F 29
S 30	22 32 50	6°31'50	28°10	28°43	8° 7	12°31	13°59	22°45	8°48	27° 4	4°16	14°51	16°22	3°24	12°50	S 30
S 31	22 36 47	7 m 30'01	11 M 3	28 N 6	9 ჲ 20	12851	13 ∺ 51	22) (41	8 M .50	27 M 5	4 Ⅱ 16	14 ≏ 53	16 ≏ 18	3 Ω 31	12 Ⅱ 52	S 31

Day	0	D	ğ	Q	♂	4	ħ)Å(卉	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
F 1 S 2	18n 9 17 54	3 s14 0 s57 7 5 0n 9	7n40 1s56 7 12 2 8	5 11n49 1n28 3 11 22 1 27	8n38 2s53 8 49 2 53	6s23 1s25 6 26 1 25		13 s51 0n24 13 51 0 24		9n31 11s41 9 31 11 41	6 s 3 4 6 3 4		5n14 1 5 13 1	
S 3 M 4 T 5 W 6 T 7	17 22 17 6 16 50	10 43 1 17 13 54 2 22 16 27 3 21 18 7 4 10 18 40 4 46	6 45 2 19 6 20 2 33 5 56 2 43 5 34 2 54 5 13 3 6	1 10 26 1 25 3 9 58 1 24 4 9 29 1 23	9 0 2 53 9 11 2 54 9 21 2 54 9 32 2 54 9 42 2 54	6 28 1 25 6 30 1 26 6 32 1 26 6 34 1 26 6 37 1 26	4 23 2 21 4 25 2 21 4 26 2 21 4 27 2 21 4 29 2 22	13 52 0 24 13 52 0 24	17 52 1 42 17 52 1 42 17 52 1 42	9 31 11 41 9 31 11 42 9 30 11 42 9 30 11 42 9 30 11 42	6 34 6 34 6 34 6 33 6 31		5 8 1	
F 8 S 9		17 59 5 3 16 2 5 0			9 52 2 54 10 2 2 55	6 39 1 27 6 42 1 27			17 52 1 42 17 52 1 42	9 30 11 42 9 30 11 42	6 28 6 24	6 53 1 6 52 1		17 49 4 29 17 49 4 30
S 10 M11 T 12 W13 T 14 F 15 S 16	15 42 15 24 15 6 14 48 14 30 14 11 13 53	12 56 4 35 8 59 3 51 4 31 2 52 0n 8 1 42 4 37 0 28 8 44 0s45 12 15 1 54	3 50 4 2	3 7 3 1 16 7 6 33 1 14 6 6 3 1 13 4 5 33 1 11 5 3 1 9	10 21 2 55 10 31 2 55 10 40 2 55 10 49 2 55 10 58 2 55	6 44 1 27 6 47 1 27 6 49 1 28 6 52 1 28 6 55 1 28 6 57 1 28 7 0 1 28	4 34 2 22 4 36 2 23 4 37 2 23 4 39 2 23 4 40 2 23	13 55 0 24	17 52 1 42 17 52 1 42 17 52 1 41 17 52 1 41 17 52 1 41	9 30 11 43 9 30 11 43 9 30 11 43 9 30 11 43 9 29 11 44 9 29 11 44 9 29 11 44	6 21 6 18 6 16 6 14 6 14 6 14	6 51 1 6 50 1 6 49 1 6 47 1 6 46 1 6 45 1 6 44 1	5 2 1 5 1 1 5 0 1 4 58 1 4 57 1	7 49 4 32
S 17 M18 T 19 W20 T 21 F 22 S 23	13 14 12 55 12 35 12 15 11 55	18 36 4 52 18 6 5 5	4 6 4 35 4 18 4 36 4 34 4 37 4 52 4 35 5 13 4 32	5 3 31 1 3 5 3 0 1 1 7 2 29 0 59 5 1 58 0 57 2 1 27 0 55	11 49 2 55 11 57 2 54	7 3 1 29 7 6 1 29 7 9 1 29 7 12 1 29 7 15 1 29 7 18 1 30 7 21 1 30	4 44 2 24 4 45 2 24 4 47 2 24 4 49 2 24 4 50 2 24 4 52 2 24 4 54 2 25	13 59 0 23 13 59 0 23 14 0 0 23 14 0 0 23	17 53 1 41 17 53 1 41 17 53 1 41 17 53 1 41 17 53 1 41	9 29 11 44 9 29 11 45 9 29 11 45 9 29 11 45 9 28 11 45 9 28 11 45 9 28 11 45	6 14 6 14 6 14 6 12 6 10 6 7 6 3	6 43 1- 6 41 1- 6 40 1- 6 39 1- 6 38 1- 6 36 1- 6 35 1-	4 54 1 4 52 1 4 51 1 4 50 1 4 49 1	7 49 4 33 7 49 4 34 7 49 4 34 7 48 4 34 7 48 4 35
S 24 M25 T 26 W27 T 28 F 29 S 30 S 31	10 54 10 33 10 12 9 51 9 29 9 8	12 11 4 28 9 2 3 51 5 30 3 3 1 43 2 7 2 s12 1 3 6 4 0n 4 9 43 1 12 12 s59 2 n18	7 34 3 46 8 6 3 32 8 37 3 16 9 8 2 59	0 0s 6 0 48 0 0 37 0 45 5 1 8 0 43 2 1 39 0 40 5 2 11 0 37 9 2 42 0 35	12 19 2 54 12 26 2 54 12 33 2 53 12 40 2 53 12 47 2 53 12 53 2 52	7 24 1 30 7 27 1 30 7 30 1 30 7 33 1 30 7 36 1 30 7 39 1 30 7 42 1 31 7 s45 1 s31	4 56 2 25 4 57 2 25 4 59 2 25 5 1 2 25 5 3 2 25 5 4 2 25 5 6 2 25 5 8 2 \$26	14 2 0 23 14 3 0 23 14 4 0 23 14 4 0 23 14 5 0 23 14 6 0 23	17 54 1 41 17 54 1 41 17 54 1 41 17 54 1 41 17 54 1 40	9 28 11 46 9 28 11 46 9 28 11 46 9 27 11 46 9 27 11 47 9 27 11 47 9n27 11s47	5 57 5 55 5 53 5 52 5 51 5 52	6 34 1-6 33 1-6 30 1-6 29 1-6 28 1-6 27 1-6 s25 1-7	4 45 1 4 44 1 4 42 1 4 41 1 4 40 1 4 38 1	17 48 4 36 17 48 4 37 17 47 4 37 17 47 4 37 17 47 4 38 17 47 4 38

Julian Day Number = 2321000.5, Delta T = 48.53 sec

Ecliptic obliquity = $23^{\circ}29'00$, Nutation = $0^{\circ}00'06$, out-of-bounds declination in red

SEPTEMBER 1642 GC 00:00 UT

Day	Sid.t	0	D	ğ	φ	♂	4	ħ)Å(¥	Р	ß	Ω	Ç	ę,	Day
M 1	22 40 43	8 Mp 28'14	24 M .14	27°R35	10 ≏ 32	13810	13°R44	22°R37	8M.52	27 M 6	4 Ⅱ 17	14 Ω 54	16 ♀ 15	3 Ω 38	12 II 53	M 1
T 2	22 44 40	9°26'29	7 √ 144	27 Ω 12	11°45	13°28	13) 36	22) 32	8°55	27° 7	4°17	14°R55	16°12	3°44	12°55	T 2
W 3	22 48 36	10°24'44	21°36	26°58	12°57	13°46	13°28	22°28	8°57	27° 7	4°17	14°54	16° 9	3°51	12°56	W 3
T 4	22 52 33	11°23'02	5 云 50	26°D52	14° 9	14° 3	13°20	22°23	8°59	27° 8	4°R17	14°52	16° 6	3°58	12°57	T 4
F 5	22 56 29	12°21'20	20°24	26°55	15°22	14°20	13°12	22°19	9° 2	27° 9	4°17	14°49	16° 3	4° 4	12°58	F 5
S 6	23 0 26	13°19'41	5≈13	27° 7	16°34	14°36	13° 4	22°14	9° 4	27°10	4°17	14°45	15°59	4°11	12°59	S 6
S 7	23 4 22	14°18'03	20°10	27°28	17°46	14°51	12°56	22°10	9° 7	27°11	4°17	14°40	15°56	4°18	13° 0	S 7
M 8	23 8 19	15°16'26	5 米 8	27°58	18°58	15° 6	12°48	22° 5	9° 9	27°12	4°16	14°36	15°53	4°25	13° 1	M 8
T 9	23 12 16	16°14'52	19°58	28°36	20°11	15°20	12°40	22° 1	9°12	27°13	4°16	14°34	15°50	4°31	13° 2	T 9
W10	23 16 12	17°13'19	4 Υ 31	29°24	21°23	15°33	12°32	21°56	9°14	27°14	4°16	14°32	15°47	4°38	13° 3	W10
T 11	23 20 9	18°11'49	18°42	0 m 19	22°35	15°45	12°24	21°51	9°17	27°15	4°16	14°D32	15°43	4°45	13° 4	T 11
F 12	23 24 5	19°10'20	2 8 27	1°21	23°47	15°57	12°16	21°47	9°20	27°16	4°16	14°33	15°40	4°51	13° 5	F 12
S 13	23 28 2	20° 8'54	15°47	2°31	24°59	16° 8	12° 8	21°42	9°22	27°17	4°16	14°34	15°37	4°58	13° 5	S 13
S 14	23 31 58	21° 7'30	28°43	3°46	26°11	16°19	12° 1	21°37	9°25	27°18	4°15	14°36	15°34	5° 5	13° 6	S 14
M15	23 35 55	22° 6'08	11 I I17	5° 8	27°23	16°28	11°53	21°33	9°28	27°19	4°15	14°37	15°31	5°12	13° 6	M15
T 16	23 39 51	23° 4'48	23°34	6°34	28°35	16°37	11°45	21°28	9°31	27°21	4°15	14°R37	15°28	5°18	13° 6	T 16
W17	23 43 48	24° 3'31	5938	8° 5	29°47	16°45	11°38	21°23	9°34	27°22	4°15	14°37	15°24	5°25	13° 7	W17
T 18	23 47 45	25° 2'16	17°34	9°39	0 M .59	16°52	11°30	21°19	9°37	27°23	4°14	14°35	15°21	5°32	13° 7	T 18
F 19	23 51 41	26° 1'03	29°26	11°17	2°11	16°58	11°22	21°14	9°39	27°24	4°14	14°33	15°18	5°38	13° 7	F 19
S 20	23 55 38	26°59'52	11 Ω 18	12°58	3°23	17° 3	11°15	21°10	9°42	27°26	4°14	14°30	15°15	5°45	13°R 7	S 20
S 21	23 59 34	27°58'43	23°14	14°40	4°34	17° 8	11° 8	21° 5	9°45	27°27	4°13	14°28	15°12	5°52	13° 7	S 21
M22	0 3 31	28°57'37	5 m 16	16°25	5°46	17°12	11° 0	21° 0	9°48	27°28	4°13	14°25	15° 8	5°59	13° 7	M22
T 23	0 7 27	29°56'32	17°27	18°10	6°58	17°15	10°53	20°56	9°51	27°30	4°13	14°23	15° 5	6° 5	13° 7	T 23
W24	0 11 24	0 ≏ 55'30	29°48	19°57	8° 9	17°17	10°46	20°51	9°55	27°31	4°12	14°22	15° 2	6°12	13° 7	W24
T 25	0 15 20	1°54'30	12 ≏ 20	21°45	9°21	17°18	10°39	20°47	9°58	27°33	4°12	14°D22	14°59	6°19	13° 6	T 25
F 26	0 19 17	2°53'32	25° 5	23°33	10°33	17°R18	10°33	20°42	10° 1	27°34	4°11	14°22	14°56	6°25	13° 6	F 26
S 27	0 23 13	3°52'36	8 M 3	25°21	11°44	17°17	10°26	20°38	10° 4	27°36	4°11	14°22	14°53	6°32	13° 5	S 27
S 28	0 27 10	4°51'41	21°14	27° 9	12°56	17°16	10°19	20°33	10° 7	27°37	4°10	14°23	14°49	6°39	13° 5	S 28
M29	0 31 7	5°50'49	4 ₹ 39	28°57	14° 7	17°13	10°13	20°29	10°10	27°39	4°10	14°24	14°46	6°46	13° 4	M29
T 30	0 35 3	6 ₽ 49'58	18 18	0 ჲ 44	15 M 19	17810	10 米 6	20) 25	10 M .14	27 M 40	4 II 9	14 ≏ 25	14 ≏ 43	6Ω 52	13 II 4	T 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	decl d	ecl decl lat
M 1 T 2	8n25 8 3		10n 6 2s2 10 31 2	3 3 s44 0n29 4 4 15 0 26		7 s 48 1 s 31 7 52 1 31	5s10 2s26 5 12 2 26		17 s55 1n40 17 55 1 40	9n26 11s47 9 26 11 48	5 s53 5 53		36 17n46 4s39 35 17 46 4 40
W 3 T 4		18 27 4 47				7 55 1 31	5 14 2 26			9 26 11 48	5 53		33 17 46 4 40
F 5	7 19 6 56		-	5 5 17 0 21 6 5 47 0 18	13 23 2 50 13 28 2 49	7 58 1 31 8 1 1 31	5 16 2 26 5 17 2 26			9 26 11 48 9 26 11 48	5 52 5 51	-	32 17 45 4 41 31 17 45 4 41
S 6	6 34	14 16 4 53	11 45 0 4	8 6 18 0 15	13 34 2 49	8 4 1 31	5 19 2 26	14 11 0 23	17 56 1 40	9 25 11 48	5 49	6 18 14	30 17 45 4 41
S 7 M 8 T 9	6 11 5 49 5 26	10 45 4 15 6 33 3 19 1 59 2 11		3 7 19 0 8	-	8 7 1 31 8 10 1 31 8 13 1 31	5 23 2 26	14 12 0 23 14 13 0 23 14 14 0 23	17 57 1 40	9 25 11 49 9 25 11 49 9 25 11 49	5 48 5 46 5 45	6 16 14	28 17 44 4 42 27 17 44 4 42 26 17 44 4 43
W10 T 11	5 3 4 41	2n38 0 55	11 59 0 1 11 53 0 3	8 8 19 0 2	-	8 16 1 31 8 20 1 31	5 27 2 27	14 14 0 23 14 15 0 23	17 57 1 40	9 25 11 49 9 24 11 49	5 44 5 44	6 13 14	24 17 43 4 43 23 17 43 4 44
F 12 S 13	4 18 3 55	10 50 1 37	11 43 0 4 11 29 0 5	5 9 19 0 4	14 2 2 44	8 23 1 31 8 26 1 31	5 31 2 27	14 16 0 23 14 17 0 23	17 58 1 40	9 24 11 50 9 24 11 50	5 45 5 45	6 11 14	22 17 43 4 44 21 17 42 4 45
S 14 M15	3 31 3 8	17 49 4 24	10 51 1 1	,	14 13 2 41	8 29 1 31 8 32 1 31	5 36 2 27		17 59 1 40	9 24 11 50 9 23 11 50	5 46 5 46	6 7 14	19 17 42 4 45 18 17 41 4 46
T 16 W17 T 18	2 45 2 22 1 59	18 11 5 11	9 59 1 3	2 11 44 0 21		8 34 1 31 8 37 1 31 8 40 1 31	5 40 2 27	14 20 0 23 14 21 0 23 14 22 0 23	18 0 1 39	9 23 11 50 9 23 11 51 9 23 11 51	5 46 5 46 5 46	6 5 14	17 17 41 4 46 15 17 40 4 47 14 17 40 4 47
F 19 S 20	1 35 1 12	15 20 5 5	8 56 1 4	3 12 41 0 27	14 26 2 37 14 29 2 35	8 43 1 31 8 46 1 31	5 44 2 27	14 23 0 23 14 24 0 23	18 0 1 39	9 22 11 51 9 22 11 51	5 45 5 44	6 2 14	13 17 40 4 47 11 17 39 4 48
S 21 M22	0 48 0 25	9 55 4 6 6 30 3 20	7 5 1 5	1 14 4 0 38	-	8 49 1 31 8 51 1 31	5 49 2 27	14 25 0 22 14 26 0 22	18 1 1 39	9 22 11 51 9 22 11 52	5 43 5 42	5 58 14	10 17 39 4 48 9 17 38 4 49
T 23 W24	0 1 0 s22	2 46 2 23 1s 8 1 20	5 43 1 5	3 14 57 0 44	14 38 2 30	8 54 1 31 8 57 1 31	5 53 2 27		18 2 1 39	9 21 11 52 9 21 11 52	5 41 5 40	5 57 14 5 56 14	8 17 38 4 49 6 17 37 4 50
T 25 F 26 S 27	0 46 1 9 1 33	8 49 0n59		1 15 49 0 51		8 59 1 31 9 2 1 31 9 4 1 31		14 28 0 22 14 30 0 22 14 31 0 22	18 3 1 39	9 21 11 52 9 21 11 52 9 20 11 53	5 40 5 40 5 41	5 55 14 5 54 14 5 52 14	5 17 37 4 50 4 17 36 4 51 2 17 36 4 51
S 28 M29 T 30	1 56 2 20 2 s43	-	2 1 1 4	4 17 5 1 2	14 44 2 23 14 45 2 21 14n46 2s19	9 7 1 31 9 9 1 31 9s11 1s30	6 2 2 27	14 32 0 22 14 33 0 22 14 s34 0n22	18 4 1 39	9 20 11 53 9 20 11 53 9n19 11s53	5 41	5 50 14	1 17 35 4 52 0 17 35 4 52 58 17n34 4 s53

Julian Day Number = 2321031.5, Delta T = 48.47 sec Ecliptic obliquity = $23^{\circ}29'00$, Nutation = $0^{\circ}00'05$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $19^{\circ}45'10$, Lahiri = $18^{\circ}52'10$ Greg. Calendar

OCTOBER 1642 GC 00:00 UT

Day	Sid.t	0	D	ğ	Ω	ð	4	ħ)મું(¥	Р	R	Ω	Ç	ķ	Day
W 1	0 39 0	7 ₽ 49'10	2 ට 11	2 <u>₽</u> 32	16ML30	17°R 6	10°R 0	20°R20	10 M .17	27 M 42	4°R 9	14°R25	14 Ω 40	6 Ω 59	13°R 3	W 1
T 2	0 42 56	8°48'23	16°16	4°18	17°41	178 0	9) 54	20 H26	10°20	27°43	4II 8	14 <u>Ω</u> 25	14°37	7° 6	13 II 2	T 2
F 3	0 46 53	9°47'37	0≈34	6° 5	18°52	16°54	9°48	20°12	10°24	27°45	4° 8	14°25	14°34	7°12	13° 1	F 3
S 4	0 50 49	10°46'54	15° 0	7°50	20° 4	16°47	9°42	20° 8	10°27	27°47	4° 7	14°24	14°30	7°19	13° 0	S 4
S 5	0 54 46	11°46'12	29°31	9°35	21°15	16°40	9°37	20° 3	10°30	27°48	4° 6	14°24	14°27	7°26	12°59	S 5
M 6	0 58 42	12°45'32	14) 3	11°20	22°26	16°31	9°31	19°59	10°34	27°50	4° 6	14°24	14°24	7°33	12°58	M 6
T 7	1 2 39	13°44'54	28°28	13° 3	23°37	16°21	9°26	19°55	10°37	27°52	4° 5	14°24	14°21	7°39	12°57	T 7
W 8	1 6 36	14°44'17	12 Y 43	14°46	24°48	16°11	9°21	19°51	10°41	27°54	4° 4	14°24	14°18	7°46	12°55	W 8
T 9	1 10 32	15°43'43	26°42	16°29	25°59	16° 0	9°16	19°47	10°44	27°55	4° 4	14°24	14°14	7°53	12°54	T 9
F 10	1 14 29	16°43'11	10821	18°10	27°10	15°48	9°11	19°43	10°48	27°57	4° 3	14°24	14°11	7°59	12°53	F 10
S 11	1 18 25	17°42'41	23°40	19°51	28°20	15°35	9° 7	19°40	10°51	27°59	4° 2	14°23	14° 8	8° 6	12°51	S 11
S 12	1 22 22	18°42'14	6 II 36	21°31	29°31	15°22	9° 2	19°36	10°55	28° 1	4° 2	14°23	14° 5	8°13	12°50	S 12
M13	1 26 18	19°41'49	19°13	23°11	0 ∡ 742	15° 7	8°58	19°32	10°58	28° 3	4° 1	14°22	14° 2	8°20	12°48	M13
T 14	1 30 15	20°41'26	19533	24°50	1°52	14°52	8°54	19°29	11° 2	28° 4	4° 0	14°22	13°59	8°26	12°46	T 14
W15	1 34 11	21°41'05	13°39	26°28	3° 3	14°37	8°50	19°25	11° 5	28° 6	3°59	14°21	13°55	8°33	12°45	W15
T 16	1 38 8	22°40'46	25°36	28° 6	4°13	14°20	8°46	19°22	11° 9	28° 8	3°58	14°D21	13°52	8°40	12°43	T 16
F 17	1 42 5	23°40'30	$7\Omega_{28}$	29°43	5°24	14° 3	8°42	19°18	11°12	28°10	3°58	14°22	13°49	8°46	12°41	F 17
S 18	1 46 1	24°40'16	19°21	1 M .19	6°34	13°45	8°39	19°15	11°16	28°12	3°57	14°22	13°46	8°53	12°39	S 18
S 19	1 49 58	25°40'04	1 m) 18	2°55	7°44	13°27	8°36	19°11	11°20	28°14	3°56	14°23	13°43	9° 0	12°37	S 19
M20	1 53 54	26°39'55	13°24	4°31	8°55	13° 8	8°33	19°8	11°23	28°16	3°55	14°25	13°40	9° 6	12°35	M20
T 21	1 57 51	27°39'47	25°42	6° 6	10° 5	12°49	8°30	19° 5	11°27	28°18	3°54	14°26	13°36	9°13	12°33	T 21
W22	2 1 47	28°39'42	8 ≏ 15	7°40	11°15	12°29	8°27	19° 2	11°31	28°20	3°53	14°R26	13°33	9°20	12°30	W22
T 23	2 5 44	29°39'39	21° 5	9°14	12°25	12° 9	8°25	18°59	11°34	28°22	3°52	14°26	13°30	9°27	12°28	T 23
F 24	2 9 40	0 M .39'37	4 M .11	10°47	13°34	11°49	8°23	18°56	11°38	28°24	3°51	14°25	13°27	9°33	12°26	F 24
S 25	2 13 37	1°39'38	17°34	12°20	14°44	11°28	8°21	18°54	11°42	28°26	3°50	14°24	13°24	9°40	12°23	S 25
S 26	2 17 33	2°39'40	1 √ 12	13°52	15°54	11° 7	8°19	18°51	11°45	28°28	3°50	14°21	13°20	9°47	12°21	S 26
M27	2 21 30	3°39'45	15° 1	15°24	17° 4	10°46	8°18	18°48	11°49	28°30	3°49	14°19	13°17	9°53	12°18	M27
T 28	2 25 27	4°39'51	29° 1	16°56	18°13	10°25	8°16	18°46	11°53	28°32	3°48	14°16	13°14	10° 0	12°16	T 28
W29	2 29 23	5°39'58	13 る 6	18°27	19°22	10° 3	8°15	18°43	11°57	28°34	3°47	14°14	13°11	10° 7	12°13	W29
T 30	2 33 20	6°40'07	27°16	19°57	20°32	9°42	8°14	18°41	12° 0	28°37	3°46	14°12	13° 8	10°14	12°10	T 30
F 31	2 37 16	7 M .40'18	11≈27	21 M 27	21 ~ 41	9820	8) 13	18 米 39	12 M 4	28 M 39	3 Ⅱ 45	14°D12	13 ♀ 5	10 Ω 20	12 II 8	F 31

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W 1 T 2 F 3 S 4	3 s 6 3 30 3 53 4 16	18 s 18 5 n 10 17 15 5 17 15 6 5 5 12 0 4 33	0s18 1 1 1 4 1 1	32 18 17 1 12 1 28 18 40 1 15	4 47 2 16 4 47 2 13	9 16 1 30	6 7 2 27 6 8 2 27	14 s35	18 5 1 39 18 6 1 39	9n19 11 s53 9 19 11 54 9 19 11 54 9 18 11 54	5 s42 5 42 5 42 5 41	5 46 5 45	13 56 13 54	17n34 4s53 17 33 4 53 17 33 4 54 17 32 4 54
S 5 M 6 T 7 W 8	4 40 5 3 5 26 5 49	8 10 3 44 3 49 2 41 0n44 1 27 5 11 0 9	2 37 1 3 23 1 4 8 1	18 19 25 1 22 1 12 19 47 1 25 1 7 20 8 1 28 1	4 47 2 9 4 47 2 7 4 46 2 5 4 46 2 2	9 22 1 30 9 24 1 30 9 26 1 30		14 39 0 22 14 40 0 22 14 41 0 22	18 6 1 39 18 7 1 39 18 7 1 38	9 18 11 54 9 18 11 54 9 18 11 54 9 17 11 55	5 41 5 41 5 41 5 41	5 42 5 41 5 40	13 52 13 50 13 49	17 31 4 55 17 31 4 55 17 30 4 56 17 30 4 56
T 9 F 10 S 11 S 12	6 12 6 35 6 58 7 21	9 16 1s 8 12 45 2 19 15 28 3 21 17 20 4 11	6 23 0 4 7 8 0 4	55 20 49 1 35 1 48 21 9 1 38 1 42 21 28 1 41 1 36 21 47 1 45 1	4 44 1 57 4 43 1 55	9 31 1 29 9 33 1 29	6 19 2 26 6 20 2 26	14 43 0 22 14 44 0 22 14 45 0 22 14 47 0 22	18 9 1 38 18 9 1 38	9 17 11 55 9 17 11 55 9 16 11 55 9 16 11 55	5 41 5 41 5 41 5 41	5 36 5 35	13 45 13 44	17 29 4 56 17 28 4 57 17 28 4 57 17 27 4 58
M13 T 14 W15 T 16 F 17 S 18		18 19 5 9 17 31 5 17 15 58 5 11	9 17 0 2 9 59 0 10 41 0 11 21 0	22 22 23 1 51 1 16 22 40 1 54 1 9 22 56 1 57 1 2 23 12 2 0	4 40 1 49 4 38 1 46 4 36 1 44 4 34 1 41 4 32 1 38 4 29 1 35	9 37 1 28 9 38 1 28 9 40 1 28 9 41 1 28		14 49 0 22 14 50 0 22 14 51 0 22 14 52 0 22	18 10 1 38 18 11 1 38 18 11 1 38	9 16 11 55 9 16 11 55 9 15 11 56 9 15 11 56 9 15 11 56 9 15 11 56	5 41 5 40 5 40 5 40 5 40 5 41	5 31 5 30 5 29 5 28	13 40 13 38 13 37 13 36	17 27 4 58 17 26 4 59 17 25 4 59 17 25 4 59 17 24 5 0 17 23 5 0
S 19 M20 T 21 W22 T 23 F 24 S 25	9 56 10 18 10 40 11 1 11 22	7 39 3 37 4 1 2 44 0 9 1 42 3 s48 0 34 7 40 0n37 11 16 1 47	12 41 0 13 20 0 13 58 0 1 14 35 0 1 15 12 0 1 15 48 0 4	11 23 42 2 5 1 18 23 56 2 8 1 25 24 9 2 11 1 31 24 22 2 13 1	4 27 1 32 4 24 1 29 4 22 1 25 4 19 1 22 4 16 1 19 4 13 1 16	9 43 1 28 9 44 1 27 9 45 1 27 9 45 1 27 9 46 1 27 9 47 1 27	6 31 2 25 6 32 2 25 6 33 2 25 6 34 2 25	14 54 0 22 14 56 0 22 14 57 0 22 14 58 0 22 14 59 0 22 15 0 0 22	18 13 1 38 18 13 1 38 18 14 1 38 18 14 1 38 18 15 1 38 18 15 1 38	9 14 11 56 9 14 11 56 9 14 11 56 9 13 11 56 9 13 11 57 9 13 11 57 9 13 11 57	5 41 5 41 5 42 5 42 5 42 5 42 5 42 5 42	5 25 5 24 5 23 5 21 5 20 5 19	13 33 13 31 13 30 13 29 13 27 13 26	17 23 5 1 17 22 5 1 17 21 5 1 17 21 5 2
S 26 M27 T 28 W29 T 30 F 31	12 46 13 6 13 26	18 5 4 35 18 25 5 4 17 37 5 15 15 44 5 7	17 30 1 18 3 1 18 34 1 19 5 1 2	10 25 25 2 28 1	4 3 1 5 3 59 1 2 3 56 0 59 3 52 0 55	9 48 1 26 9 49 1 26 9 49 1 26 9 49 1 25	6 38 2 24 6 39 2 24 6 40 2 24 6 40 2 24 6 41 2 24 6 842 2 823	15 4 0 22 15 5 0 22 15 6 0 22	18 16 1 38 18 17 1 38 18 17 1 38 18 18 1 38	9 12 11 57 9 11 11 57 9n11 11 s57	5 40 5 39 5 38 5 37 5 37 5 s37	5 15 5 14 5 13 5 12	13 22 13 21 13 19 13 18	17 18 5 3 17 17 5 4 17 17 5 4 17 16 5 4 17 15 5 5 17n15 5s 5

Julian Day Number = 2321061.5, Delta T = 48.41 sec Ecliptic obliquity = 23°29'00, Nutation = $0^{\circ}00'04$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $19^{\circ}45'14$, Lahiri = $18^{\circ}52'15$ Greg. Calendar

NOVEMBER 1642 GC 00:00 UT

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S 1	2 41 13	8M40'30	25≈38	22 M 57	22 × 750	8°R59	8°R13	18°R37	12 M 8	28 M 41	3°R44	14 ₽ 13	13 ₾ 1	10 £ 27	12°R 5	S 1
S 2	2 45 9	9°40'44	9) 45	24°26	23°59	8 8 38	8) 12	18) 34	12°11	28°43	3 Ⅱ 43	14°14	12°58	10°34	12 II 2	S 2
M 3	2 49 6	10°40'59	23°49	25°55	25° 8	8°17	8°D12	18°33	12°15	28°45	3°42	14°16	12°55	10°40	11°59	M 3
T 4	2 53 2	11°41'15	7 Y 45	27°23	26°17	7°56	8°12	18°31	12°19	28°47	3°41	14°R17	12°52	10°47	11°56	T 4
W 5	2 56 59	12°41'33	21°33	28°51	27°25	7°36	8°13	18°29	12°23	28°50	3°40	14°17	12°49	10°54	11°53	W 5
T 6	3 0 56	13°41'53	5 8 9	0 ∡ 18	28°34	7°16	8°13	18°27	12°26	28°52	3°38	14°15	12°45	11° 1	11°50	T 6
F 7	3 4 52	14°42'14	18°31	1°45	29°42	6°56	8°14	18°26	12°30	28°54	3°37	14°12	12°42	11° 7	11°47	F 7
S 8	3 8 49	15°42'37	1 Ⅱ 38	3°11	0 궁 50	6°37	8°15	18°24	12°34	28°56	3°36	14° 8	12°39	11°14	11°44	S 8
S 9	3 12 45	16°43'02	14°29	4°37	1°58	6°18	8°16	18°23	12°38	28°58	3°35	14° 2	12°36	11°21	11°41	S 9
M10	3 16 42	17°43'29	27° 3	6° 1	3° 6	5°59	8°17	18°22	12°41	29° 1	3°34	13°56	12°33	11°27	11°38	M10
T 11	3 20 38	18°43'57	9922	7°25	4°14	5°41	8°18	18°20	12°45	29° 3	3°33	13°50	12°30	11°34	11°34	T 11
W12	3 24 35	19°44'28	21°28	8°49	5°21	5°24	8°20	18°19	12°49	29° 5	3°32	13°46	12°26	11°41	11°31	W12
T 13	3 28 31	20°45'00	3 Ω 25	10°11	6°29	5° 7	8°22	18°18	12°53	29° 7	3°31	13°42	12°23	11°47	11°28	T 13
F 14	3 32 28	21°45'33	15°17	11°32	7°36	4°51	8°24	18°18	12°56	29°10	3°30	13°41	12°20	11°54	11°24	F 14
S 15	3 36 25	22°46'09	27° 8	12°52	8°43	4°35	8°26	18°17	13° 0	29°12	3°29	13°D40	12°17	12° 1	11°21	S 15
S 16	3 40 21	23°46'46	9Mp 4	14°11	9°50	4°20	8°29	18°16	13° 4	29°14	3°28	13°41	12°14	12° 8	11°18	S 16
M17	3 44 18	24°47'25	21°10	15°28	10°57	4° 6	8°32	18°16	13° 7	29°16	3°26	13°43	12°11	12°14	11°14	M17
T 18	3 48 14	25°48'06	3 ≏ 31	16°43	12° 3	3°53	8°35	18°15	13°11	29°19	3°25	13°44	12° 7	12°21	11°11	T 18
W19	3 52 11	26°48'48	16°10	17°57	13°10	3°40	8°38	18°15	13°15	29°21	3°24	13°R45	12° 4	12°28	11° 7	W19
T 20	3 56 7	27°49'32	29°10	19° 8	14°16	3°28	8°41	18°15	13°18	29°23	3°23	13°44	12° 1	12°34	11° 4	T 20
F 21	4 0 4	28°50'17	12 M .34	20°16	15°22	3°17	8°44	18°D15	13°22	29°25	3°22	13°40	11°58	12°41	11° 0	F 21
S 22	4 4 0	29°51'04	26°19	21°22	16°28	3° 7	8°48	18°15	13°26	29°28	3°21	13°35	11°55	12°48	10°57	S 22
S 23	4 7 57	0 ₹ 51'52	10 × ⁷ 24	22°24	17°33	2°57	8°52	18°15	13°29	29°30	3°20	13°28	11°51	12°54	10°53	S 23
M24	4 11 54	1°52'41	24°44	23°23	18°39	2°48	8°56	18°15	13°33	29°32	3°18	13°20	11°48	13° 1	10°49	M24
T 25	4 15 50	2°53'32	9 ට 12	24°17	19°44	2°40	9° 0	18°15	13°36	29°34	3°17	13°11	11°45	13° 8	10°46	T 25
W26	4 19 47	3°54'23	23°42	25° 6	20°48	2°33	9° 5	18°16	13°40	29°37	3°16	13° 4	11°42	13°15	10°42	W26
T 27	4 23 43	4°55'16	8≈ 9	25°49	21°53	2°27	9° 9	18°16	13°44	29°39	3°15	12°59	11°39	13°21	10°38	T 27
F 28	4 27 40	5°56'09	22°28	26°27	22°57	2°22	9°14	18°17	13°47	29°41	3°14	12°56	11°36	13°28	10°35	F 28
S 29	4 31 36	6°57'03	6 ∺ 35	26°57	24° 1	2°17	9°19	18°18	13°51	29°43	3°13	12°D55	11°32	13°35	10°31	S 29
S 30	4 35 33	7 . ₹57'58	20 ∺ 31	27 × 18	25중 5	2 8 13	9 ∺ 24	18 ∺ 19	13 M .54	29 M 46	3Ⅲ12	12 ≏ 56	11 ≏ 29	13 £ 41	10 Ⅲ 27	S 30

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	decl	decl lat	decl	lat decl	lat dec	lat	decl	lat	decl	lat	decl	lat	decl lat	dec	l lat	decl	decl	decl	decl	lat
S 1	14 s25	9 s 17 3 n	56 20s 4	1 s34 25 s53	2s36 13n4	6 0s48	9 s 4 9	1 s25	6 s 4 3	2 s23	15 s 9	0n22	18s19 1n	38 9n1	1 11 s57	5 s37	5s 9	13n15	17n14	5 s 5
S 2	14 44	-	58 20 32	1 40 25 58	2 38 13 4		9 49	1 25	6 43	-	15 11	0 22			1 11 57	5 38	5 8	-	17 13	5 6
M 3	15 3		50 20 58	1 45 26 3	2 39 13 3	-	9 49	1 24	6 44	2 23			18 20 1		0 11 58	5 38			17 13	5 6
T 4	15 22		36 21 24	1 50 26 7	2 41 13 3		9 49	1 24	6 45		15 13				0 11 58	5 38				5 6
W 5	15 41		40 21 49	1 55 26 10	2 43 13 3		9 48	1 24	6 45	-	15 14	-	18 21 1		0 11 58	5 38	5 4		17 11	5 7
T 6			52 22 12	2 0 26 13	2 44 13 2		9 48	1 24	6 46			-	18 21 1		0 11 58	5 38	5 3	13 8		5 7
F 7			56 22 35 50 22 56	2 5 26 14 2 9 26 15	2 45 13 2 2 47 13 2		9 47 9 47	1 24 1 23	6 46 6 46		15 16 15 17	-			9 11 58 9 11 58	5 37 5 35	5 2 5 0	13 7 13 5	17 10 17 9	5 7 5 8
3 0	10 34	10 40 3	30 22 36	2 9 20 13	2 4/ 13 2	0 24	9 4/	1 23	0 40	2 22	13 17	0 22	16 22 1	36 9	9 11 36	3 33	3 0	15 5	1/ 9	3 8
S 9	16 52		31 23 16	2 13 26 16	2 48 13 1		9 46	1 23	6 47		15 19		18 23 1		9 11 58	5 33	4 59	-	17 8	5 8
M10	-, ,		58 23 35	2 16 26 15	2 49 13 1		9 46	1 23	6 47			-			9 11 58	5 30	4 58	-	17 8	5 8
T 11			10 23 53	2 20 26 14	2 50 13 1		9 45	1 23	6 47			0 22	18 24 1		9 11 58	5 28	4 57		17 7	5 9
W12		16 41 5	8 24 10	2 23 26 13	2 50 13 1		9 44	1 22	6 48	2 21	15 22		18 24 1		8 11 58	5 26				5 9
T 13			53 24 25	2 25 26 10	2 51 13	0 7	9 43	1 22	6 48		15 23		18 25 1		8 11 58	5 25		12 58		5 9
F 14 S 15	18 14 18 30	-	25 24 39	2 27 26 7 2 29 26 3		0 4	9 42 9 41	1 22 1 22	6 48 6 48		15 24 15 25	0 22	18 25 1 18 26 1		8 11 58 8 11 58	5 24		12 57 12 55		5 9 5 10
	18 30	8 30 3	46 24 51	2 29 26 3	2 32 13	0 1	9 41	1 22	0 48	2 21	15 25	0 22	18 20 1	3/ 9	8 11 38	5 24	4 32	12 33	17 4	5 10
S 16	18 45		57 25 2	2 31 25 59	2 52 13	0n 2	9 40	1 21	6 48	2 21	15 27	0 22			7 11 58	5 25	4 50	12 54		5 10
M17	19 0			2 31 25 54	2 52 12 5			1 21	6 48		15 28	-	18 27 1		7 11 58	5 25	4 49			5 10
T 18	19 15		55 25 20	2 32 25 48	2 52 12 5		9 37	1 21	6 48		15 29	-	18 27 1		7 11 58	5 26	-	12 51		5 10
W19	19 29		13 25 27	2 31 25 41	2 52 12 5		9 36	1 21	6 48		15 30	0 22			7 11 58	5 26		12 50		5 10
T 20	19 43		23 25 32	2 30 25 34	2 52 12 5		9 34	1 21	6 48		15 31	0 22			7 11 58	5 26	4 46		17 1	5 11
F 21 S 22			29 25 36	2 28 25 26	2 52 12 5		9 33 9 31	1 20 1 20	6 48 6 48		15 32 15 33				6 11 58 6 11 58	5 24		12 47 12 46		5 11
	20 9	15 58 5	29 25 38	2 26 25 18	2 51 12 5	0 20	9 31	1 20	0 48	2 19	15 33	0 22	18 29 1	3/ 9	0 11 38	5 22	4 43	12 40	10 39	5 11
S 23	20 22		18 25 38	2 23 25 9	2 50 12 5		9 30	1 20	6 47		15 34	-			6 11 58	5 19		12 44		5 11
M24	20 35		51 25 37	2 18 24 59	2 50 12 5	-	9 28	1 20	6 47			-	18 30 1		6 11 58	5 16		12 43		5 11
T 25		18 4 5	6 25 35	2 13 24 49	2 49 12 5		9 26	1 19	6 47				18 31 1		6 11 58	5 13			16 57	5 12
W26	20 58		2 25 31	2 7 24 38	2 48 12 5			1 19	6 46		15 37	0 22	18 31 1		6 11 58	5 10				5 12
T 27	-		38 25 25	2 0 24 26	2 46 12 5		9 22	1 19	6 46	-	15 39	-	18 32 1		5 11 58	5 8		12 38		5 12
-			57 25 17	1 51 24 14	2 45 12 5		9 20	1 19	6 46	-	15 40	-	18 32 1		5 11 58 5 11 58	5 7		12 37		5 12
	21 31	6 17 3	2 25 9	1 42 24 2	2 43 12 5	0 37	9 18	1 18	6 45	2 18	15 41	0 22	18 33 1	37 9	5 11 58	5 7	4 34	12 36	10 33	5 12
S 30	21 s41	1 s58 1n	57 24 s 58	1 s31 23 s48	2 s42 12n5	0n40	9s16	1 s18	6 s 4 5	2s18	15 s42	0n22	18 s 3 3 1 n	37 9n	5 11 s58	5 s 7	4 s33	12n34	16n54	5 s12

Julian Day Number = 2321092.5, Delta T = 48.35 sec Ecliptic obliquity = 23°29'00, Nutation = $0^{\circ}00'03$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $19^{\circ}45'18$, Lahiri = $18^{\circ}52'19$ Greg. Calendar

DECEMBER 1642 GC 00:00 UT

Day	Sid.t	0	D	ğ	φ	ð	4	ħ)∤(¥	Р	S.	v	Ç	ķ	Day
M 1	4 39 29	8 ∡ 758'53	4 Υ15	27 × 731	26 궁 8	2°R10	9) (30	18) (20	13 M .58	29 M 48	3°R10	12 ≏ 57	11 ≏ 26	13 Ω 48	10°R24	M 1
T 2	4 43 26	9°59'49	17°48	27°R35	27°11	2 8 8	9°35	18°21	14° 1	29°50	3 I 9	12°R57	11°23	13°55	10Ⅱ20	T 2
W 3	4 47 23	11° 0'46	18 9	27°28	28°14	2° 7	9°41	18°22	14° 5	29°52	3° 8	12°55	11°20	14° 2	10°16	W 3
T 4	4 51 19	12° 1'44	14°20	27°10	29°17	2°D 6	9°47	18°23	14° 8	29°55	3° 7	12°51	11°17	14° 8	10°13	T 4
F 5	4 55 16	13° 2'42	27°20	26°40	0≈19	2° 7	9°53	18°24	14°11	29°57	3° 6	12°44	11°13	14°15	10° 9	F 5
S 6	4 59 12	14° 3'41	10 I 9	25°59	1°20	2° 8	9°59	18°26	14°15	29°59	3° 5	12°35	11°10	14°22	10° 5	S 6
S 7	5 3 9	15° 4'41	22°46	25° 7	2°22	2°10	10° 6	18°28	14°18	0 水 1	3° 4	12°23	11° 7	14°28	10° 2	S 7
M 8	5 7 5	16° 5'42	59911	24° 5	3°23	2°12	10°12	18°29	14°21	0° 3	3° 3	12°11	11° 4	14°35	9°58	M 8
T 9	5 11 2	17° 6'44	17°25	22°55	4°23	2°16	10°19	18°31	14°25	0° 6	3° 1	11°59	11° 1	14°42	9°54	T 9
W10	5 14 59	18° 7'47	29°28	21°37	5°23	2°20	10°26	18°33	14°28	0° 8	3° 0	11°48	10°57	14°48	9°51	W10
T 11	5 18 55	19° 8'50	11223	20°16	6°23	2°25	10°33	18°35	14°31	0°10	2°59	11°39	10°54	14°55	9°47	T 11
F 12	5 22 52	20° 9'54	23°13	18°53	7°22	2°30	10°40	18°37	14°35	0°12	2°58	11°33	10°51	15° 2	9°44	F 12
S 13	5 26 48	21°11'00	5 m 2	17°31	8°21	2°36	10°48	18°39	14°38	0°14	2°57	11°29	10°48	15° 9	9°40	S 13
S 14	5 30 45	22°12'05	16°55	16°13	9°19	2°43	10°55	18°42	14°41	0°16	2°56	11°28	10°45	15°15	9°36	S 14
M15	5 34 41	23°13'12	28°58	15° 2	10°17	2°51	11° 3	18°44	14°44	0°18	2°55	11°D28	10°42	15°22	9°33	M15
T 16	5 38 38	24°14'20	11 ≏ 15	13°59	11°14	2°59	11°11	18°47	14°47	0°21	2°54	11°R28	10°38	15°29	9°29	T 16
W17	5 42 34	25°15'28	23°53	13° 6	12°11	3° 8	11°19	18°49	14°50	0°23	2°53	11°27	10°35	15°35	9°26	W17
T 18	5 46 31	26°16'37	6M54	12°23	13° 7	3°18	11°27	18°52	14°53	0°25	2°52	11°25	10°32	15°42	9°22	T 18
F 19	5 50 28	27°17'47	20°23	11°51	14° 2	3°28	11°35	18°55	14°56	0°27	2°51	11°20	10°29	15°49	9°19	F 19
S 20	5 54 24	28°18'57	4 ₹ 21	11°30	14°57	3°39	11°44	18°58	14°59	0°29	2°50	11°12	10°26	15°55	9°15	S 20
S 21	5 58 21	29°20'08	1 <u>8°</u> 44	11°19	15°52	3°51	11°52	19° 1	15° 2	0°31	2°49	11° 1	10°23	16° 2	9°12	S 21
M22	6 2 17	0 ට 21'19	3 ਰ 27	11°D18	16°45	4° 3	12° 1	19° 4	15° 5	0°33	2°48	10°50	10°19	16° 9	9° 9	M22
T 23	6 6 14	1°22'30	18°22	11°26	17°38	4°16	12°10	19° 7	15° 8	0°35	2°47	10°38	10°16	16°16	9° 5	T 23
W24	6 10 10	2°23'42	3≈20	11°42	18°31	4°29	12°19	19°11	15°11	0°37	2°46	10°27	10°13	16°22	9° 2	W24
T 25	6 14 7	3°24'53	18°11	12° 6	19°22	4°43	12°28	19°14	15°14	0°39	2°45	10°19	10°10	16°29	8°59	T 25
F 26	6 18 3	4°26'04	2){ 49	12°38 13°15	20°13 21° 3	4°57	12°38	19°18	15°17	0°41	2°44 2°43	10°13	10° 7 10° 3	16°36	8°55	F 26 S 27
S 27	6 22 0	5°27'15			_	5°12	12°47	19°21	15°19	0°43		10°10		16°42	8°52	
S 28	6 25 57	6°28'26	1 Υ 8	13°58	21°52	5°28	12°57	19°25	15°22	0°45	2°42	10°10	10° 0	16°49	8°49	S 28
M29	6 29 53	7°29'36	14°47	14°46	22°40	5°44	13° 6	19°29	15°25	0°47	2°41	10° 9	9°57	16°56	8°46	M29
T 30	6 33 50	8°30'47	28° 8	15°38	23°28	6° 0	13°16	19°32	15°27	0°49	2°40	10° 9	9°54	17° 2	8°43	T 30
W31	6 37 46	9 ප 31'56	11 8 13	16 ∡ ³35	24≈14	6 8 17	13 ∺ 26	19) 36	15 M 30	0 ₹ 50	2 Ⅱ 39	10☎ 6	9 ≏ 51	17 Ω 9	8 Ⅱ 40	W31

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	decl	decl lat	decl lat	t decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl	decl	decl decl	lat
M 1 T 2	21 s50 21 59	6 36 0s26	24 32 1	1 s18 23 s35 2 s4 1 4 23 20 2 3	8 12 56 0 44	9 11 1 18	6 43 2 17	15 s43 0n22 15 44 0 22	18 34 1 37	9n 5 11s58 9 5 11 58	5 s 7 5 7	4 31 12	2n33 16n54 2 31 16 53	5 13
W 3 T 4 F 5	22 24	13 38 2 40 16 8 3 34	24 0 0 23 41 0	0 32 22 50 2 3 0 15 22 34 2 3	1 13 1 0 50	9 7 1 17 9 4 1 17	6 42 2 17 6 41 2 17	15 45 0 22 15 46 0 22 15 47 0 22	18 35 1 37 18 35 1 37	9 5 11 57 9 4 11 57 9 4 11 57	5 7 5 5 5 2	4 28 12 4 27 12	2 30 16 52 2 28 16 52 2 27 16 51	5 13 1 5 13
S 6 S 7 M 8	22 39	18 32 4 45	23 0 0	0n 4 22 18 2 2 0 24 22 1 2 2 0 44 21 44 2 2		8 59 1 17			18 36 1 37	9 4 11 57 9 4 11 57 9 4 11 57	4 59 4 54 4 49	4 24 12	2 26 16 50 2 24 16 50 2 23 16 49	5 13
T 11	_	15 36 4 49 13 10 4 23	21 49 1 21 25 1	1 43 20 50 2 1	5 13 14 1 0 2 13 17 1 1	8 51 1 16 8 48 1 16	6 37 2 16 6 36 2 16	15 53 0 22	18 38 1 37 18 38 1 37	9 4 11 57 9 4 11 57 9 4 11 57	4 45 4 40 4 37	4 21 12 4 19 12	2 21 16 49 2 20 16 48 2 18 16 48	8 5 13 8 5 13
F 12 S 13 S 14	23 7 23 11 23 15		20 38 2		8 13 21 1 3 4 13 24 1 4 9 13 28 1 6	8 42 1 16	6 34 2 15		18 38 1 38 18 39 1 38 18 39 1 38	9 4 11 57 9 3 11 57 9 3 11 56	4 34 4 33 4 32	4 17 12	2 17 16 47 2 15 16 47 2 14 16 46	7 5 13
M15 T 16 W17 T 18	23 19 23 21 23 24 23 26	0 s 3 6 1 6 4 2 9 0 1 8 1 6 1 n 5 1 1 4 7 2 1 1	19 43 2 19 31 2	2 40 19 33 1 5 2 49 19 12 1 5 2 55 18 52 1 4 3 0 18 31 1 4	0 13 37 1 9 6 13 41 1 10	8 32 1 15 8 29 1 15	6 32 2 15 6 31 2 15 6 29 2 14 6 28 2 14	15 57 0 22	18 40 1 38 18 41 1 38	9 3 11 56 9 3 11 56 9 3 11 56 9 3 11 56	4 32 4 33 4 32 4 31	4 13 12	2 12 16 45 2 11 16 45 2 10 16 44 2 8 16 44	5 5 13 4 5 13
F 19 S 20 S 21	23 27 23 28 23 29	17 6 4 1		3 2 17 49 1 3		8 19 1 14	6 27 2 14 6 25 2 14 6 24 2 14	16 1 0 22	18 42 1 38	9 3 11 56 9 3 11 56 9 3 11 55	4 29 4 26 4 22	4 9 12 4 8 12 4 7 12	2 5 16 43	5 13
M22 T 23 W24		18 28 4 58 17 18 4 58	19 15 2 19 20 2	2 57 17 5 1 1 2 53 16 43 1 1	8 14 6 1 17	8 12 1 14 8 9 1 14	6 23 2 13 6 21 2 13 6 20 2 13	16 3 0 22 16 3 0 22	18 43 1 38 18 43 1 38	9 3 11 55 9 3 11 55 9 3 11 55	4 18 4 13 4 9	4 6 12 4 4 12	2 2 16 42	2 5 13 2 5 13
T 25 F 26 S 27	23 26 23 25 23 22	7 38 3 4	19 47 2	2 35 15 36 0 5	9 14 22 1 20 3 14 28 1 21 6 14 34 1 22	8 1 1 13 7 57 1 13 7 54 1 13	6 18 2 13 6 17 2 13 6 15 2 12	16 6 0 22	18 44 1 38	9 3 11 55 9 3 11 55 9 3 11 54	4 5 4 3 4 2	4 1 1	58 16 41 56 16 40 55 16 40	5 13
	23 19 23 16 23 13 23 s 8	5 28 0s24 9 22 1 33	20 26 20 40 2	2 12 14 28 0 3 2 3 14 5 0 2	8 14 40 1 23 1 14 46 1 24 3 14 53 1 25 5 14n59 1n26	7 46 1 12 7 42 1 12	6 13 2 12 6 12 2 12 6 10 2 12 6s 8 2s12	16 8 0 22 16 9 0 22	18 45 1 38	9 3 11 54 9 3 11 54 9 3 11 54 9n 3 11 s54	4 2	3 57 1 3 56 1	53 16 40 52 16 39 50 16 39 16n38	9 5 13 9 5 13

Julian Day Number = 2321122.5, Delta T = 48.29 sec Ecliptic obliquity = 23°28'59, Nutation = $0^{\circ}00'03$, out-of-bounds declination in red Ayanamsha: Fagan/Bradley = $19^{\circ}45'22$, Lahiri = $18^{\circ}52'23$ Greg. Calendar