Astrodienst Ephemeris Tables

for the year 1639

tropical geocentric zodiac

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

Programming
Dieter Koch and Alois Treindl
based on Swiss Ephemeris

Code D5EPX

Astrodienst AG, Dammstr. 23, CH-8702 Zollikon / Zürich, www.astro.com / order@astro.com

ASTRODIENST EPHEMERIS for the year 1639
geocentric

JANUARY 1639 GC

00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	6 41 36	10♑31'52	3♐ 1	12♑24	28♐44	15♓17	27♏ 8	6♒ 0	27♎41	22♏25	28°R46	27♐55	27♐10	4♓19	14°R 5	S 1
S 2	6 45 33	11°33'04	15°55	14° 2	29°59	16° 1	27°19	6° 7	27°43	22°26	28♑45	27°56	27° 7	4°25	14♑ 3	S 2
M 3	6 49 29	12°34'15	28°37	15°41	1♑15	16°45	27°30	6°14	27°44	22°28	28°44	27°R56	27° 3	4°32	14° 2	M 3
T 4	6 53 26	13°35'26	11♑ 7	17°20	2°30	17°29	27°41	6°21	27°46	22°29	28°44	27°56	27° 0	4°39	14° 1	T 4
W 5	6 57 23	14°36'37	23°26	18°59	3°46	18°13	27°52	6°27	27°47	22°31	28°43	27°55	26°57	4°45	13°59	W 5
T 6	7 1 19	15°37'48	5♒36	20°39	5° 1	18°56	28° 3	6°34	27°49	22°32	28°42	27°52	26°54	4°52	13°58	T 6
F 7	7 5 16	16°38'58	17°37	22°19	6°17	19°40	28°14	6°41	27°50	22°34	28°41	27°49	26°51	4°59	13°57	F 7
S 8	7 9 12	17°40'08	29°32	24° 0	7°32	20°24	28°25	6°48	27°52	22°35	28°41	27°46	26°48	5° 6	13°56	S 8
S 9	7 13 9	18°41'17	11♓24	25°41	8°47	21° 8	28°36	6°55	27°53	22°37	28°40	27°42	26°44	5°12	13°55	S 9
M10	7 17 5	19°42'25	23°15	27°22	10° 3	21°51	28°46	7° 2	27°54	22°38	28°39	27°40	26°41	5°19	13°55	M10
T 11	7 21 2	20°43'32	5♈ 9	29° 3	11°18	22°35	28°57	7° 9	27°55	22°40	28°39	27°37	26°38	5°26	13°54	T 11
W12	7 24 58	21°44'39	17°11	0♒45	12°34	23°19	29° 7	7°16	27°57	22°41	28°38	27°D36	26°35	5°32	13°53	W12
T 13	7 28 55	22°45'45	29°26	2°27	13°49	24° 3	29°18	7°23	27°58	22°43	28°37	27°36	26°32	5°39	13°52	T 13
F 14	7 32 52	23°46'50	11♉58	4° 9	15° 4	24°46	29°28	7°30	27°59	22°44	28°37	27°38	26°28	5°46	13°52	F 14
S 15	7 36 48	24°47'54	24°51	5°51	16°20	25°30	29°38	7°37	28° 0	22°45	28°36	27°39	26°25	5°53	13°51	S 15
S 16	7 40 45	25°48'58	8♊ 9	7°32	17°35	26°13	29°48	7°44	28° 1	22°46	28°36	27°41	26°22	5°59	13°51	S 16
M17	7 44 41	26°50'00	21°54	9°13	18°50	26°57	29°58	7°51	28° 2	22°48	28°35	27°R42	26°19	6° 6	13°50	M17
T 18	7 48 38	27°51'02	6♋ 6	10°54	20° 6	27°41	0♐ 8	7°58	28° 2	22°49	28°35	27°42	26°16	6°13	13°50	T 18
W19	7 52 34	28°52'02	20°41	12°34	21°21	28°24	0°18	8° 5	28° 3	22°50	28°34	27°40	26°13	6°19	13°50	W19
T 20	7 56 31	29°53'02	5♌35	14°13	22°36	29° 8	0°27	8°12	28° 4	22°51	28°34	27°37	26° 9	6°26	13°50	T 20
F 21	8 0 27	0♒54'01	20°37	15°51	23°52	29°51	0°37	8°19	28° 5	22°52	28°33	27°32	26° 6	6°33	13°50	F 21
S 22	8 4 24	1°54'59	5♍41	17°28	25° 7	0♈35	0°46	8°27	28° 5	22°53	28°33	27°27	26° 3	6°40	13°D49	S 22
S 23	8 8 21	2°55'56	20°35	19° 2	26°22	1°18	0°56	8°34	28° 6	22°54	28°32	27°22	26° 0	6°46	13°49	S 23
M24	8 12 17	3°56'52	5♎13	20°33	27°38	2° 2	1° 5	8°41	28° 6	22°55	28°32	27°18	25°57	6°53	13°50	M24
T 25	8 16 14	4°57'48	19°30	22° 2	28°53	2°45	1°14	8°48	28° 7	22°56	28°32	27°15	25°54	7° 0	13°50	T 25
W26	8 20 10	5°58'43	3♏23	23°27	0♒ 8	3°28	1°23	8°55	28° 7	22°57	28°31	27°D14	25°50	7° 6	13°50	W26
T 27	8 24 7	6°59'38	16°53	24°48	1°24	4°12	1°32	9° 2	28° 7	22°58	28°31	27°14	25°47	7°13	13°50	T 27
F 28	8 28 3	8° 0'31	0♐ 3	26° 4	2°39	4°55	1°41	9° 9	28° 8	22°59	28°31	27°15	25°44	7°20	13°51	F 28
S 29	8 32 0	9° 1'24	12°54	27°15	3°54	5°38	1°49	9°17	28° 8	23° 0	28°30	27°17	25°41	7°27	13°51	S 29
S 30	8 35 56	10° 2'16	25°29	28°19	5° 9	6°22	1°58	9°24	28° 8	23° 1	28°30	27°R18	25°38	7°33	13°51	S 30
M31	8 39 53	11♒ 3'07	7♑53	29♒16	6♒25	7♈ 5	2♐ 6	9♒31	28♎ 8	23♏ 2	28♑30	27♐17	25♐34	7♓40	13♑52	M31

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	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	23s 4	22s59	2s14	24s50	1s56	23s28	0n 1	6s26	0s41	18s43	0n51	19s30	0s42	10s 9	0n34	16s45	1n43	7n31	12s42	23s28	23s27	5s32	13n40	2s33
S 2	22 59	23 50	1 6	24 43	1 59	23 30	0s 1	6 8	0 39	18 46	0 51	19 28	0 43	10 9	0 34	16 45	1 43	7 31	12 42	23 28	23 27	5 29	13 39	2 33
M 3	22 53	23 25	0n 4	24 34	2 1	23 33	0 4	5 50	0 38	18 48	0 52	19 26	0 43	10 10	0 34	16 46	1 43	7 31	12 41	23 28	23 27	5 26	13 39	2 33
T 4	22 47	21 49	1 12	24 24	2 3	23 34	0 6	5 32	0 37	18 51	0 52	19 25	0 43	10 11	0 34	16 46	1 43	7 31	12 41	23 28	23 27	5 23	13 39	2 33
W 5	22 41	19 12	2 16	24 11	2 4	23 35	0 9	5 13	0 36	18 53	0 52	19 23	0 43	10 11	0 34	16 46	1 43	7 31	12 41	23 28	23 27	5 21	13 38	2 33
T 6	22 34	15 47	3 13	23 58	2 5	23 34	0 11	4 55	0 35	18 56	0 52	19 21	0 43	10 12	0 34	16 47	1 43	7 32	12 41	23 28	23 27	5 18	13 38	2 32
F 7	22 27	11 45	4 1	23 42	2 6	23 34	0 13	4 37	0 34	18 58	0 52	19 20	0 43	10 12	0 34	16 47	1 43	7 32	12 40	23 28	23 27	5 15	13 38	2 32
S 8	22 19	7 19	4 37	23 25	2 6	23 32	0 16	4 19	0 33	19 0	0 52	19 18	0 43	10 13	0 34	16 47	1 43	7 32	12 40	23 28	23 27	5 13	13 38	2 32
S 9	22 11	2 39	5 2	23 7	2 6	23 30	0 18	4 0	0 32	19 3	0 52	19 16	0 43	10 13	0 34	16 48	1 43	7 32	12 40	23 28	23 27	5 10	13 37	2 32
M10	22 2	2n 7	5 14	22 47	2 5	23 27	0 21	3 42	0 30	19 5	0 52	19 15	0 43	10 13	0 34	16 48	1 43	7 32	12 40	23 28	23 27	5 7	13 37	2 32
T 11	21 53	6 49	5 12	22 25	2 4	23 23	0 23	3 24	0 29	19 7	0 52	19 13	0 43	10 14	0 34	16 48	1 44	7 32	12 39	23 28	23 27	5 4	13 37	2 32
W12	21 44	11 19	4 56	22 1	2 3	23 19	0 25	3 6	0 28	19 9	0 52	19 11	0 43	10 14	0 34	16 49	1 44	7 32	12 39	23 28	23 26	5 2	13 37	2 32
T 13	21 34	15 27	4 27	21 36	2 0	23 13	0 28	2 47	0 27	19 12	0 52	19 9	0 43	10 15	0 34	16 49	1 44	7 32	12 39	23 28	23 26	4 59	13 37	2 32
F 14	21 23	19 1	3 45	21 10	1 58	23 8	0 30	2 29	0 26	19 14	0 52	19 8	0 43	10 15	0 34	16 49	1 44	7 32	12 39	23 28	23 26	4 56	13 37	2 32
S 15	21 13	21 46	2 51	20 41	1 54	23 1	0 32	2 11	0 25	19 16	0 52	19 6	0 43	10 15	0 34	16 49	1 44	7 32	12 38	23 28	23 26	4 53	13 37	2 32
S 16	21 1	23 26	1 45	20 12	1 50	22 54	0 34	1 52	0 24	19 18	0 52	19 4	0 43	10 16	0 34	16 50	1 44	7 33	12 38	23 28	23 26	4 51	13 37	2 32
M17	20 50	23 46	0 32	19 41	1 45	22 46	0 36	1 34	0 23	19 20	0 52	19 2	0 43	10 16	0 34	16 50	1 44	7 33	12 38	23 28	23 26	4 48	13 36	2 32
T 18	20 38	22 35	0s46	19 8	1 40	22 37	0 39	1 16	0 22	19 22	0 52	19 1	0 43	10 16	0 34	16 50	1 44	7 33	12 38	23 28	23 26	4 45	13 36	2 32
W19	20 26	19 52	2 2	18 34	1 34	22 28	0 41	0 57	0 21	19 24	0 52	18 59	0 43	10 16	0 34	16 50	1 44	7 33	12 37	23 28	23 26	4 42	13 36	2 32
T 20	20 13	15 48	3 12	17 59	1 27	22 17	0 43	0 39	0 20	19 26	0 52	18 57	0 43	10 17	0 34	16 51	1 44	7 33	12 37	23 28	23 26	4 40	13 36	2 32
F 21	20 0	10 42	4 9	17 23	1 20	22 7	0 45	0 21	0 19	19 28	0 52	18 55	0 44	10 17	0 34	16 51	1 44	7 33	12 37	23 28	23 26	4 37	13 36	2 32
S 22	19 46	4 58	4 49	16 46	1 11	21 55	0 47	0 3	0 18	19 30	0 52	18 53	0 44	10 17	0 34	16 51	1 44	7 34	12 37	23 28	23 26	4 34	13 37	2 31
S 23	19 32	1s 0	5 9	16 8	1 2	21 43	0 49	0n16	0 17	19 32	0 52	18 52	0 44	10 17	0 34	16 51	1 44	7 34	12 36	23 28	23 26	4 32	13 37	2 31
M24	19 18	6 47	5 8	15 29	0 52	21 30	0 51	0 34	0 16	19 34	0 52	18 50	0 44	10 17	0 34	16 52	1 44	7 34	12 36	23 27	23 25	4 29	13 37	2 31
T 25	19 4	12 5	4 48	14 51	0 41	21 17	0 53	0 52	0 15	19 35	0 53	18 48	0 44	10 17	0 34	16 52	1 44	7 34	12 36	23 27	23 25	4 26	13 37	2 31
W26	18 49	16 36	4 12	14 12	0 30	21 3	0 55	1 10	0 14	19 37	0 53	18 46	0 44	10 18	0 34	16 52	1 44	7 34	12 35	23 27	23 25	4 23	13 37	2 31
T 27	18 34	20 8	3 22	13 33	0 17	20 48	0 56	1 28	0 13	19 39	0 53	18 44	0 44	10 18	0 34	16 52	1 44	7 35	12 35	23 27	23 25	4 21	13 37	2 31
F 28	18 18	22 31	2 23	12 55	0 4	20 33	0 58	1 46	0 12	19 41	0 53	18 42	0 44	10 18	0 34	16 52	1 44	7 35	12 35	23 27	23 25	4 18	13 37	2 31
S 29	18 2	23 40	1 17	12 17	0n10	20 17	1 0	2 4	0 11	19 42	0 53	18 41	0 44	10 18	0 34	16 52	1 44	7 35	12 35	23 27	23 25	4 15	13 37	2 31
S 30	17 46	23 34	0 10	11 41	0 25	20 1	1 2	2 22	0 10	19 44	0 53	18 39	0 44	10 18	0 34	16 53	1 45	7 35	12 34	23 27	23 25	4 12	13 38	2 31
M31	17s29	22s18	0n57	11s 7	0n41	19s44	1s 3	2n40	0s 9	19s45	0n53	18s37	0s44	10s18	0n34	16s53	1n45	7n35	12s34	23s27	23s25	4s10	13n38	2s31

Julian Day Number = 2319692.5, Delta T = 51.11 sec
Ecliptic obliquity = 23°29'09, Nutation = 0°00'18, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'06, Lahiri = 18°49'06Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

FEBRUARY 1639 GC — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	8 43 50	12♒ 3'57	20♉ 7	0♓ 5	7♒40	7♈48	2♐14	9♒38	28°R 8	23♏ 3	28°R30	27°R15	25♐31	7♓47	13♉53	T 1
W 2	8 47 46	13° 4'45	2♒13	0°45	8°55	8°31	2°22	9°45	28♎ 8	23° 3	28♉29	27♐10	25°28	7°53	13°53	W 2
T 3	8 51 43	14° 5'33	14°13	1°16	10°11	9°15	2°30	9°52	28° 8	23° 4	28°29	27° 2	25°25	8° 0	13°54	T 3
F 4	8 55 39	15° 6'19	26° 9	1°37	11°26	9°58	2°38	10° 0	28° 8	23° 5	28°29	26°53	25°22	8° 7	13°55	F 4
S 5	8 59 36	16° 7'04	8♓ 2	1°R47	12°41	10°41	2°46	10° 7	28° 8	23° 5	28°29	26°43	25°19	8°14	13°56	S 5
S 6	9 3 32	17° 7'47	19°53	1°47	13°56	11°24	2°53	10°14	28° 7	23° 6	28°29	26°33	25°15	8°20	13°57	S 6
M 7	9 7 29	18° 8'28	1♈45	1°36	15°11	12° 7	3° 1	10°21	28° 7	23° 6	28°29	26°24	25°12	8°27	13°58	M 7
T 8	9 11 25	19° 9'08	13°40	1°15	16°27	12°50	3° 8	10°28	28° 7	23° 7	28°28	26°16	25° 9	8°34	13°59	T 8
W 9	9 15 22	20° 9'47	25°41	0°43	17°42	13°33	3°15	10°35	28° 6	23° 7	28°28	26°10	25° 6	8°40	14° 0	W 9
T 10	9 19 19	21°10'23	7♉53	0° 3	18°57	14°16	3°22	10°42	28° 6	23° 8	28°28	26° 7	25° 3	8°47	14° 1	T 10
F 11	9 23 15	22°10'58	20°19	29♒14	20°12	14°59	3°29	10°49	28° 5	23° 8	28°D28	26°D 6	25° 0	8°54	14° 3	F 11
S 12	9 27 12	23°11'32	3♊ 5	28°18	21°27	15°42	3°36	10°57	28° 5	23° 9	28°28	26° 6	24°56	9° 1	14° 4	S 12
S 13	9 31 8	24°12'03	16°15	27°17	22°42	16°25	3°43	11° 4	28° 4	23° 9	28°28	26° 7	24°53	9° 7	14° 5	S 13
M14	9 35 5	25°12'33	29°52	26°12	23°58	17° 8	3°49	11°11	28° 4	23°10	28°28	26°R 8	24°50	9°14	14° 7	M14
T 15	9 39 1	26°13'00	13♋58	25° 5	25°13	17°51	3°55	11°18	28° 3	23°10	28°29	26° 6	24°47	9°21	14° 8	T 15
W16	9 42 58	27°13'26	28°33	23°57	26°28	18°33	4° 1	11°25	28° 2	23°10	28°29	26° 2	24°44	9°27	14°10	W16
T 17	9 46 54	28°13'50	13♌32	22°52	27°43	19°16	4° 7	11°32	28° 1	23°10	28°29	25°56	24°40	9°34	14°12	T 17
F 18	9 50 51	29°14'12	28°47	21°49	28°58	19°59	4°13	11°39	28° 0	23°10	28°29	25°48	24°37	9°41	14°13	F 18
S 19	9 54 48	0♓14'33	14♍ 8	20°50	0♓13	20°41	4°19	11°46	27°59	23°11	28°29	25°38	24°34	9°48	14°15	S 19
S 20	9 58 44	1°14'52	29°22	19°57	1°28	21°24	4°24	11°52	27°58	23°11	28°29	25°28	24°31	9°54	14°17	S 20
M21	10 2 41	2°15'09	14♎20	19°10	2°43	22° 7	4°30	11°59	27°57	23°11	28°29	25°19	24°28	10° 1	14°19	M21
T 22	10 6 37	3°15'25	28°54	18°29	3°58	22°49	4°35	12° 6	27°56	23°11	28°30	25°13	24°25	10° 8	14°21	T 22
W23	10 10 34	4°15'39	12♏59	17°55	5°13	23°32	4°40	12°13	27°55	23°R11	28°30	25° 8	24°21	10°15	14°23	W23
T 24	10 14 30	5°15'52	26°36	17°29	6°28	24°14	4°45	12°20	27°54	23°11	28°30	25° 6	24°18	10°21	14°25	T 24
F 25	10 18 27	6°16'03	9♐45	17° 9	7°43	24°57	4°49	12°27	27°53	23°11	28°30	25°D 6	24°15	10°28	14°27	F 25
S 26	10 22 23	7°16'13	22°32	16°57	8°58	25°39	4°54	12°33	27°52	23°11	28°31	25°R 6	24°12	10°35	14°29	S 26
S 27	10 26 20	8°16'21	5♉ 0	16°D51	10°13	26°22	4°58	12°40	27°50	23°11	28°31	25° 6	24° 9	10°41	14°31	S 27
M28	10 30 17	9♓16'28	17♉14	16♒52	11♓28	27♈ 4	5♐ 2	12♒47	27♎49	23♏11	28♉31	25♐ 4	24♐ 5	10♓48	14♉34	M28

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	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	17s13	20s 0	2n 0	10s35	0n57	19s26	1s 5	2n58	0s 8	19s47	0n53	18s35	0s44	10s18	0n34	16s53	1n45	7n36	12s34	23s27	23s25	4s 7	13n38	2s31
W 2	16 55	16 50	2 57	10 5	1 13	19 8	1 6	3 16	0 7	19 49	0 53	18 33	0 44	10 18	0 34	16 53	1 45	7 36	12 33	23 27	23 24	4 4	13 38	2 31
T 3	16 38	13 0	3 46	9 39	1 30	18 49	1 8	3 34	0 7	19 50	0 53	18 31	0 44	10 18	0 34	16 53	1 45	7 36	12 33	23 27	23 24	4 2	13 39	2 31
F 4	16 20	8 41	4 24	9 16	1 46	18 30	1 9	3 52	0 6	19 52	0 53	18 29	0 44	10 18	0 34	16 53	1 45	7 36	12 33	23 27	23 24	3 59	13 39	2 31
S 5	16 2	4 5	4 50	8 57	2 3	18 10	1 11	4 10	0 5	19 53	0 53	18 28	0 45	10 18	0 34	16 53	1 45	7 37	12 33	23 27	23 24	3 56	13 39	2 30
S 6	15 44	0n39	5 4	8 41	2 19	17 49	1 12	4 28	0 4	19 54	0 53	18 26	0 45	10 17	0 34	16 53	1 45	7 37	12 32	23 26	23 24	3 53	13 40	2 30
M 7	15 25	5 21	5 5	8 31	2 35	17 29	1 13	4 45	0 3	19 56	0 53	18 24	0 45	10 17	0 34	16 54	1 45	7 37	12 32	23 26	23 24	3 51	13 40	2 30
T 8	15 7	9 53	4 52	8 25	2 50	17 7	1 14	5 3	0 2	19 57	0 53	18 22	0 45	10 17	0 35	16 54	1 45	7 37	12 32	23 26	23 24	3 48	13 40	2 30
W 9	14 47	14 5	4 27	8 23	3 3	16 45	1 16	5 20	0 1	19 58	0 54	18 20	0 45	10 17	0 35	16 54	1 45	7 38	12 31	23 26	23 24	3 45	13 41	2 30
T 10	14 28	17 46	3 49	8 26	3 15	16 23	1 17	5 38	0 0	20 0	0 54	18 18	0 45	10 17	0 35	16 54	1 45	7 38	12 31	23 26	23 24	3 43	13 41	2 30
F 11	14 9	20 45	3 0	8 34	3 25	16 0	1 18	5 55	0n 0	20 1	0 54	18 16	0 45	10 17	0 35	16 54	1 45	7 38	12 31	23 26	23 23	3 40	13 42	2 30
S 12	13 49	22 47	2 0	8 45	3 33	15 37	1 19	6 13	0 1	20 2	0 54	18 15	0 45	10 16	0 35	16 54	1 45	7 39	12 30	23 26	23 23	3 37	13 42	2 30
S 13	13 29	23 39	0 53	9 0	3 39	15 14	1 20	6 30	0 2	20 3	0 54	18 13	0 45	10 16	0 35	16 54	1 45	7 39	12 30	23 26	23 23	3 34	13 43	2 30
M14	13 9	23 9	0s20	9 19	3 43	14 50	1 21	6 47	0 3	20 4	0 54	18 11	0 45	10 16	0 35	16 54	1 45	7 39	12 30	23 26	23 23	3 32	13 43	2 30
T 15	12 48	21 12	1 34	9 39	3 45	14 25	1 21	7 4	0 4	20 5	0 54	18 9	0 45	10 16	0 35	16 54	1 45	7 40	12 30	23 26	23 23	3 29	13 44	2 30
W16	12 28	17 49	2 44	10 2	3 44	14 0	1 22	7 21	0 5	20 6	0 54	18 7	0 45	10 15	0 35	16 54	1 45	7 40	12 29	23 26	23 23	3 26	13 44	2 30
T 17	12 7	13 12	3 45	10 26	3 41	13 35	1 23	7 38	0 5	20 7	0 54	18 5	0 46	10 15	0 35	16 54	1 46	7 40	12 29	23 25	23 23	3 23	13 45	2 30
F 18	11 46	7 42	4 30	10 51	3 36	13 10	1 23	7 55	0 6	20 8	0 54	18 3	0 46	10 15	0 35	16 54	1 46	7 40	12 29	23 25	23 23	3 21	13 45	2 30
S 19	11 25	1 41	4 57	11 16	3 29	12 44	1 24	8 12	0 7	20 9	0 54	18 2	0 46	10 14	0 35	16 54	1 46	7 41	12 28	23 25	23 22	3 18	13 46	2 29
S 20	11 3	4s22	5 2	11 41	3 20	12 17	1 24	8 29	0 8	20 10	0 54	18 0	0 46	10 14	0 35	16 54	1 46	7 41	12 28	23 24	23 22	3 15	13 47	2 29
M21	10 42	10 4	4 47	12 5	3 10	11 51	1 25	8 46	0 9	20 11	0 55	17 58	0 46	10 14	0 35	16 54	1 46	7 41	12 28	23 24	23 22	3 13	13 47	2 29
T 22	10 20	15 2	4 13	12 28	2 59	11 24	1 25	9 2	0 9	20 12	0 55	17 56	0 46	10 13	0 35	16 54	1 46	7 42	12 27	23 24	23 22	3 10	13 48	2 29
W23	9 58	19 0	3 24	12 50	2 47	10 57	1 26	9 19	0 10	20 13	0 55	17 54	0 46	10 13	0 35	16 54	1 46	7 42	12 27	23 24	23 22	3 7	13 48	2 29
T 24	9 36	21 47	2 25	13 10	2 35	10 29	1 26	9 35	0 11	20 14	0 55	17 52	0 46	10 12	0 35	16 54	1 46	7 42	12 27	23 24	23 22	3 4	13 49	2 29
F 25	9 14	23 17	1 21	13 29	2 21	10 1	1 26	9 52	0 12	20 15	0 55	17 51	0 46	10 12	0 35	16 54	1 46	7 43	12 27	23 24	23 22	3 2	13 50	2 29
S 26	8 51	23 30	0 14	13 45	2 8	9 33	1 26	10 8	0 13	20 15	0 55	17 49	0 46	10 11	0 35	16 54	1 46	7 43	12 26	23 24	23 22	2 59	13 50	2 29
S 27	8 29	22 31	0n52	14 0	1 54	9 5	1 26	10 24	0 13	20 16	0 55	17 47	0 46	10 11	0 35	16 54	1 46	7 44	12 26	23 24	23 21	2 56	13 51	2 29
M28	8s 6	20s29	1n54	14s13	1n40	8s36	1s26	10n40	0n14	20s17	0n55	17s45	0s47	10s10	0n35	16s53	1n46	7n44	12s26	23s24	23s21	2s54	13n52	2s29

Julian Day Number = 2319723.5, Delta T = 51.04 sec
Ecliptic obliquity = 23°29'10, Nutation = 0°00'19, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'10, Lahiri = 18°49'11Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

MARCH 1639 GC — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	10 34 13	10♓16'33	29♉18	16♒59	12♓43	27♈46	5♐ 6	12♒53	27°R48	23°R10	28♉32	24°R59	24♐ 2	10♓55	14♉36	T 1
W 2	10 38 10	11°16'36	11♒15	17°12	13°57	28°29	5°10	13° 0	27♎46	23♏10	28°32	24♐52	23°59	11° 2	14°38	W 2
T 3	10 42 6	12°16'37	23° 8	17°31	15°12	29°11	5°14	13° 7	27°45	23°10	28°33	24°41	23°56	11° 8	14°41	T 3
F 4	10 46 3	13°16'37	5♓ 0	17°54	16°27	29°53	5°17	13°13	27°43	23°10	28°33	24°28	23°53	11°15	14°43	F 4
S 5	10 49 59	14°16'34	16°52	18°23	17°42	0♉35	5°21	13°20	27°41	23° 9	28°34	24°14	23°50	11°22	14°46	S 5
S 6	10 53 56	15°16'30	28°45	18°57	18°57	1°17	5°24	13°26	27°40	23° 9	28°34	23°59	23°46	11°28	14°49	S 6
M 7	10 57 52	16°16'24	10♈40	19°34	20°12	1°59	5°27	13°33	27°38	23° 9	28°35	23°45	23°43	11°35	14°51	M 7
T 8	11 1 49	17°16'15	22°40	20°16	21°26	2°42	5°30	13°39	27°36	23° 8	28°35	23°33	23°40	11°42	14°54	T 8
W 9	11 5 45	18°16'05	4♉46	21° 1	22°41	3°24	5°32	13°45	27°35	23° 8	28°36	23°24	23°37	11°49	14°57	W 9
T 10	11 9 42	19°15'52	17° 0	21°50	23°56	4° 6	5°35	13°52	27°33	23° 7	28°36	23°18	23°34	11°55	15° 0	T 10
F 11	11 13 39	20°15'37	29°27	22°42	25°11	4°48	5°37	13°58	27°31	23° 7	28°37	23°15	23°31	12° 2	15° 3	F 11
S 12	11 17 35	21°15'20	12♊11	23°37	26°25	5°30	5°39	14° 4	27°29	23° 6	28°37	23°14	23°27	12° 9	15° 5	S 12
S 13	11 21 32	22°15'01	25°14	24°35	27°40	6°11	5°41	14°10	27°27	23° 6	28°38	23°14	23°24	12°15	15° 8	S 13
M14	11 25 28	23°14'39	8♋42	25°36	28°55	6°53	5°42	14°16	27°25	23° 5	28°39	23°14	23°21	12°22	15°11	M14
T 15	11 29 25	24°14'15	22°36	26°40	0♈ 9	7°35	5°44	14°23	27°23	23° 5	28°39	23°12	23°18	12°29	15°15	T 15
W16	11 33 21	25°13'49	6♌59	27°45	1°24	8°17	5°45	14°29	27°21	23° 4	28°40	23° 8	23°15	12°36	15°18	W16
T 17	11 37 18	26°13'20	21°47	28°54	2°39	8°59	5°46	14°35	27°19	23° 3	28°41	23° 1	23°11	12°42	15°21	T 17
F 18	11 41 14	27°12'49	6♍55	0♓ 4	3°53	9°40	5°47	14°40	27°17	23° 3	28°41	22°51	23° 8	12°49	15°24	F 18
S 19	11 45 11	28°12'16	22°13	1°16	5° 8	10°22	5°48	14°46	27°15	23° 2	28°42	22°40	23° 5	12°56	15°27	S 19
S 20	11 49 8	29°11'41	7♎31	2°31	6°22	11° 4	5°49	14°52	27°13	23° 1	28°43	22°29	23° 2	13° 3	15°31	S 20
M21	11 53 4	0♈11'04	22°37	3°47	7°37	11°45	5°49	14°58	27°11	23° 0	28°44	22°19	22°59	13° 9	15°34	M21
T 22	11 57 1	1°10'25	7♏21	5° 5	8°51	12°27	5°49	15° 4	27° 9	22°59	28°44	22°11	22°56	13°16	15°37	T 22
W23	12 0 57	2° 9'44	21°37	6°25	10° 6	13° 8	5°R49	15° 9	27° 7	22°59	28°45	22° 5	22°52	13°23	15°41	W23
T 24	12 4 54	3° 9'01	5♐23	7°47	11°20	13°50	5°49	15°15	27° 4	22°58	28°46	22° 2	22°49	13°29	15°44	T 24
F 25	12 8 50	4° 8'16	18°40	9°11	12°35	14°31	5°49	15°20	27° 2	22°57	28°47	22°D 2	22°46	13°36	15°48	F 25
S 26	12 12 47	5° 7'30	1♑31	10°36	13°49	15°13	5°48	15°26	27° 0	22°56	28°48	22°R 2	22°43	13°43	15°51	S 26
S 27	12 16 43	6° 6'42	14° 0	12° 2	15° 3	15°54	5°47	15°31	26°57	22°55	28°49	22° 2	22°40	13°50	15°55	S 27
M28	12 20 40	7° 5'52	26°13	13°31	16°18	16°35	5°46	15°37	26°55	22°54	28°49	22° 0	22°37	13°56	15°58	M28
T 29	12 24 37	8° 5'01	8♒14	15° 1	17°32	17°17	5°45	15°42	26°53	22°53	28°50	21°56	22°33	14° 3	16° 2	T 29
W30	12 28 33	9° 4'07	20° 8	16°32	18°46	17°58	5°44	15°47	26°50	22°52	28°51	21°50	22°30	14°10	16° 6	W30
T 31	12 32 30	10♈ 3'12	1♓59	18♓ 5	20♈ 1	18♉39	5♐43	15♒52	26♎48	22♏51	28♉52	21♐40	22♐27	14♓16	16♉ 9	T 31

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	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	7s44	17s34	2n50	14s24	1n27	8s 8	1s26	10n56	0n15	20s17	0n55	17s43	0s47	10s10	0n35	16s53	1n46	7n44	12s25	23s23	23s21	2s51	13n53	2s29
W 2	7 21	13 56	3 38	14 33	1 13	7 39	1 26	11 12	0 15	20 18	0 55	17 42	0 47	10 9	0 35	16 53	1 46	7 45	12 25	23 23	23 21	2 48	13 53	2 29
T 3	6 58	9 48	4 16	14 40	1 0	7 9	1 26	11 27	0 16	20 18	0 55	17 40	0 47	10 9	0 35	16 53	1 46	7 45	12 25	23 23	23 21	2 45	13 54	2 29
F 4	6 35	5 18	4 43	14 45	0 47	6 40	1 25	11 43	0 17	20 19	0 55	17 38	0 47	10 8	0 35	16 53	1 46	7 45	12 25	23 22	23 21	2 43	13 55	2 29
S 5	6 12	0 38	4 57	14 49	0 34	6 11	1 25	11 59	0 18	20 19	0 56	17 36	0 47	10 8	0 35	16 53	1 46	7 46	12 24	23 22	23 21	2 40	13 56	2 29
S 6	5 49	4n 4	4 59	14 50	0 21	5 41	1 25	12 14	0 18	20 20	0 56	17 34	0 47	10 7	0 35	16 53	1 46	7 46	12 24	23 21	23 20	2 37	13 57	2 29
M 7	5 26	8 38	4 47	14 50	0 9	5 11	1 24	12 29	0 19	20 20	0 56	17 33	0 47	10 6	0 35	16 53	1 47	7 46	12 24	23 20	23 20	2 35	13 57	2 29
T 8	5 2	12 53	4 22	14 48	0s 2	4 41	1 24	12 44	0 20	20 21	0 56	17 31	0 47	10 6	0 35	16 52	1 47	7 47	12 23	23 20	23 20	2 32	13 58	2 29
W 9	4 39	16 41	3 46	14 44	0 14	4 11	1 23	12 59	0 20	20 21	0 56	17 29	0 48	10 5	0 35	16 52	1 47	7 47	12 23	23 19	23 20	2 29	13 59	2 29
T 10	4 15	19 48	2 59	14 38	0 24	3 41	1 23	13 14	0 21	20 21	0 56	17 28	0 48	10 5	0 35	16 52	1 47	7 48	12 23	23 19	23 20	2 27	14 0	2 28
F 11	3 52	22 4	2 2	14 31	0 35	3 10	1 22	13 29	0 22	20 22	0 56	17 26	0 48	10 4	0 35	16 52	1 47	7 48	12 23	23 19	23 20	2 24	14 1	2 28
S 12	3 28	23 15	0 58	14 23	0 45	2 40	1 21	13 44	0 22	20 22	0 56	17 24	0 48	10 3	0 35	16 52	1 47	7 48	12 22	23 19	23 19	2 21	14 2	2 28
S 13	3 5	23 13	0s11	14 12	0 54	2 9	1 20	13 58	0 23	20 22	0 56	17 22	0 48	10 2	0 35	16 52	1 47	7 49	12 22	23 19	23 19	2 18	14 3	2 28
M14	2 41	21 51	1 21	14 0	1 3	1 39	1 19	14 13	0 24	20 23	0 56	17 21	0 48	10 2	0 35	16 51	1 47	7 49	12 22	23 19	23 19	2 16	14 4	2 28
T 15	2 18	19 9	2 28	13 47	1 12	1 8	1 18	14 27	0 24	20 23	0 56	17 19	0 48	10 1	0 35	16 51	1 47	7 50	12 21	23 19	23 19	2 13	14 4	2 28
W16	1 54	15 12	3 29	13 32	1 20	0 37	1 17	14 41	0 25	20 23	0 57	17 17	0 48	10 0	0 35	16 51	1 47	7 50	12 21	23 18	23 19	2 10	14 5	2 28
T 17	1 30	10 13	4 17	13 15	1 28	0 7	1 16	14 55	0 26	20 23	0 57	17 16	0 48	10 0	0 35	16 51	1 47	7 50	12 21	23 18	23 19	2 8	14 6	2 28
F 18	1 7	4 31	4 49	12 57	1 35	0n24	1 15	15 9	0 26	20 23	0 57	17 14	0 49	9 59	0 35	16 50	1 47	7 51	12 21	23 18	23 18	2 5	14 7	2 28
S 19	0 43	1s30	5 0	12 37	1 42	0 55	1 14	15 23	0 27	20 23	0 57	17 13	0 49	9 58	0 35	16 50	1 47	7 51	12 20	23 17	23 18	2 2	14 8	2 28
S 20	0 19	7 26	4 50	12 17	1 48	1 25	1 13	15 37	0 28	20 23	0 57	17 11	0 49	9 57	0 35	16 50	1 47	7 52	12 20	23 16	23 18	2 0	14 9	2 28
M21	0n 4	12 50	4 20	11 54	1 54	1 56	1 11	15 50	0 28	20 23	0 57	17 9	0 49	9 57	0 35	16 50	1 47	7 52	12 20	23 16	23 18	1 57	14 10	2 28
T 22	0 28	17 20	3 33	11 31	1 59	2 27	1 10	16 4	0 29	20 23	0 57	17 8	0 49	9 56	0 35	16 50	1 47	7 52	12 20	23 15	23 18	1 54	14 11	2 28
W23	0 52	20 40	2 33	11 5	2 4	2 57	1 9	16 17	0 29	20 23	0 57	17 6	0 49	9 55	0 35	16 49	1 47	7 53	12 19	23 15	23 18	1 51	14 12	2 28
T 24	1 15	22 40	1 27	10 39	2 8	3 28	1 7	16 30	0 30	20 23	0 57	17 5	0 49	9 54	0 35	16 49	1 47	7 53	12 19	23 15	23 17	1 49	14 13	2 28
F 25	1 39	23 18	0 18	10 11	2 12	3 58	1 6	16 43	0 31	20 23	0 57	17 3	0 49	9 53	0 35	16 49	1 47	7 54	12 19	23 15	23 17	1 46	14 14	2 28
S 26	2 2	22 39	0n50	9 42	2 16	4 29	1 4	16 56	0 31	20 23	0 57	17 2	0 50	9 52	0 35	16 48	1 47	7 54	12 19	23 15	23 17	1 43	14 15	2 28
S 27	2 26	20 52	1 54	9 12	2 19	4 59	1 3	17 8	0 32	20 22	0 57	17 0	0 50	9 52	0 35	16 48	1 48	7 54	12 18	23 15	23 17	1 41	14 16	2 28
M28	2 49	18 9	2 51	8 40	2 21	5 29	1 1	17 21	0 32	20 22	0 57	16 59	0 50	9 51	0 35	16 48	1 48	7 55	12 18	23 15	23 17	1 38	14 17	2 28
T 29	3 13	14 43	3 39	8 7	2 23	5 59	0 59	17 33	0 33	20 22	0 58	16 57	0 50	9 50	0 35	16 48	1 48	7 55	12 18	23 14	23 17	1 35	14 18	2 28
W30	3 36	10 44	4 17	7 33	2 25	6 29	0 57	17 45	0 33	20 22	0 58	16 56	0 50	9 49	0 35	16 47	1 48	7 56	12 18	23 14	23 16	1 33	14 19	2 28
T 31	3n59	6s22	4n44	6s57	2s26	6n59	0s56	17n57	0n34	20s21	0n58	16s54	0s50	9s48	0n35	16s47	1n48	7n56	12s18	23s13	23s16	1s30	14n20	2s28

Julian Day Number = 2319751.5, Delta T = 50.99 sec
Ecliptic obliquity = 23°29'10, Nutation = 0°00'18, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'14, Lahiri = 18°49'14Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

APRIL 1639 GC — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
F 1	12 36 26	11♈ 2'14	13♓50	19♓39	21♈15	19♉20	5°R41	15♒58	26°R46	22°R50	28♉53	21°R29	22♐24	14♓23	16♉13	F 1
S 2	12 40 23	12° 1'15	25°43	21°15	22°29	20° 1	5♐39	16° 3	26♎43	22♏49	28°54	21♐16	22°21	14°30	16°17	S 2
S 3	12 44 19	13° 0'14	7♈40	22°53	23°43	20°43	5°37	16° 8	26°41	22°47	28°55	21° 3	22°17	14°37	16°21	S 3
M 4	12 48 16	13°59'10	19°42	24°32	24°58	21°24	5°35	16°12	26°38	22°46	28°56	20°51	22°14	14°43	16°24	M 4
T 5	12 52 12	14°58'05	1♉51	26°13	26°12	22° 5	5°32	16°17	26°36	22°45	28°57	20°40	22°11	14°50	16°28	T 5
W 6	12 56 9	15°56'58	14° 7	27°55	27°26	22°46	5°30	16°22	26°33	22°44	28°58	20°32	22° 8	14°57	16°32	W 6
T 7	13 0 5	16°55'48	26°33	29°38	28°40	23°27	5°27	16°27	26°31	22°43	28°59	20°27	22° 5	15° 3	16°36	T 7
F 8	13 4 2	17°54'37	9♊ 9	1♈23	29°54	24° 8	5°24	16°31	26°28	22°41	29° 0	20°24	22° 2	15°10	16°40	F 8
S 9	13 7 59	18°53'23	21°59	3°10	1♉ 8	24°49	5°21	16°36	26°26	22°40	29° 1	20°D24	21°58	15°17	16°44	S 9
S 10	13 11 55	19°52'07	5♋ 6	4°58	2°22	25°29	5°18	16°40	26°23	22°39	29° 2	20°24	21°55	15°24	16°48	S 10
M11	13 15 52	20°50'49	18°31	6°48	3°36	26°10	5°14	16°45	26°21	22°38	29° 4	20°R25	21°52	15°30	16°52	M11
T 12	13 19 48	21°49'28	2♌19	8°39	4°50	26°51	5°10	16°49	26°18	22°36	29° 5	20°24	21°49	15°37	16°56	T 12
W13	13 23 45	22°48'05	16°28	10°32	6° 4	27°32	5° 7	16°53	26°16	22°35	29° 6	20°22	21°46	15°44	17° 0	W13
T 14	13 27 41	23°46'40	0♍59	12°27	7°18	28°13	5° 3	16°57	26°13	22°34	29° 7	20°18	21°42	15°51	17° 4	T 14
F 15	13 31 38	24°45'13	15°48	14°23	8°32	28°53	4°58	17° 2	26°10	22°32	29° 8	20°11	21°39	15°57	17° 8	F 15
S 16	13 35 34	25°43'43	0♎47	16°20	9°46	29°34	4°54	17° 6	26° 8	22°31	29° 9	20° 3	21°36	16° 4	17°12	S 16
S 17	13 39 31	26°42'12	15°50	18°19	11° 0	0♊14	4°50	17°10	26° 5	22°29	29°10	19°55	21°33	16°11	17°17	S 17
M18	13 43 28	27°40'38	0♏45	20°20	12°14	0°55	4°45	17°13	26° 3	22°28	29°12	19°47	21°30	16°17	17°21	M18
T 19	13 47 24	28°39'03	15°24	22°22	13°28	1°36	4°40	17°17	26° 0	22°26	29°13	19°41	21°27	16°24	17°25	T 19
W20	13 51 21	29°37'26	29°40	24°25	14°41	2°16	4°35	17°21	25°58	22°25	29°14	19°38	21°23	16°31	17°29	W20
T 21	13 55 17	0♉35'47	13♐30	26°30	15°55	2°57	4°30	17°24	25°55	22°24	29°15	19°D36	21°20	16°38	17°33	T 21
F 22	13 59 14	1°34'06	26°52	28°36	17° 9	3°37	4°25	17°28	25°53	22°22	29°16	19°36	21°17	16°44	17°38	F 22
S 23	14 3 10	2°32'25	9♑49	0♉43	18°23	4°17	4°20	17°31	25°50	22°21	29°18	19°37	21°14	16°51	17°42	S 23
S 24	14 7 7	3°30'41	22°23	2°51	19°36	4°58	4°14	17°35	25°47	22°19	29°19	19°38	21°11	16°58	17°46	S 24
M25	14 11 3	4°28'56	4♒39	5° 0	20°50	5°38	4° 9	17°38	25°45	22°18	29°20	19°R39	21° 8	17° 5	17°51	M25
T 26	14 15 0	5°27'09	16°43	7° 9	22° 4	6°18	4° 3	17°41	25°42	22°16	29°21	19°38	21° 4	17°11	17°55	T 26
W27	14 18 57	6°25'21	28°38	9°19	23°17	6°59	3°57	17°44	25°40	22°14	29°23	19°36	21° 1	17°18	17°59	W27
T 28	14 22 53	7°23'31	10♓30	11°28	24°31	7°39	3°51	17°47	25°37	22°13	29°24	19°31	20°58	17°25	18° 3	T 28
F 29	14 26 50	8°21'40	22°21	13°38	25°44	8°19	3°45	17°50	25°35	22°11	29°25	19°25	20°55	17°31	18° 8	F 29
S 30	14 30 46	9♉19'47	4♈17	15♉46	26♉58	8♊59	3♐39	17♒53	25♎33	22♏10	29♉26	19♐18	20♐52	17♓38	18♉12	S 30

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	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	4n23	1s47	4n59	6s21	2s26	7n28	0s54	18n 9	0n35	20s21	0n58	16s53	0s50	9s47	0n35	16s47	1n48	7n57	12s17	23s13	23s16	1s27	14n21	2s28
S 2	4 46	2n53	5 0	5 43	2 26	7 58	0 52	18 21	0 35	20 20	0 58	16 52	0 50	9 46	0 35	16 46	1 48	7 57	12 17	23 12	23 16	1 25	14 23	2 28
S 3	5 9	7 28	4 49	5 4	2 26	8 27	0 50	18 32	0 36	20 20	0 58	16 50	0 51	9 46	0 35	16 46	1 48	7 57	12 17	23 11	23 16	1 22	14 24	2 28
M 4	5 32	11 48	4 25	4 24	2 25	8 56	0 48	18 44	0 36	20 20	0 58	16 49	0 51	9 45	0 35	16 46	1 48	7 58	12 17	23 10	23 15	1 19	14 25	2 28
T 5	5 54	15 42	3 48	3 42	2 24	9 25	0 46	18 55	0 37	20 19	0 58	16 48	0 51	9 44	0 35	16 45	1 48	7 58	12 16	23 9	23 15	1 17	14 26	2 28
W 6	6 17	18 58	3 0	3 0	2 22	9 54	0 44	19 6	0 37	20 19	0 58	16 46	0 51	9 43	0 35	16 45	1 48	7 59	12 16	23 9	23 15	1 14	14 27	2 28
T 7	6 40	21 25	2 3	2 16	2 19	10 22	0 42	19 17	0 38	20 18	0 58	16 45	0 51	9 42	0 35	16 45	1 48	7 59	12 16	23 8	23 15	1 11	14 28	2 28
F 8	7 2	22 51	1 0	1 32	2 16	10 51	0 40	19 27	0 38	20 17	0 58	16 44	0 51	9 41	0 35	16 44	1 48	7 59	12 16	23 8	23 15	1 9	14 29	2 28
S 9	7 25	23 6	0s 9	0 46	2 13	11 18	0 37	19 38	0 39	20 17	0 58	16 43	0 51	9 40	0 35	16 44	1 48	8 0	12 16	23 8	23 15	1 6	14 30	2 28
S 10	7 47	22 6	1 18	0n 0	2 9	11 46	0 35	19 48	0 39	20 16	0 58	16 41	0 52	9 39	0 35	16 44	1 48	8 0	12 15	23 8	23 14	1 3	14 31	2 28
M11	8 9	19 49	2 24	0 48	2 4	12 14	0 33	19 59	0 40	20 16	0 58	16 40	0 52	9 38	0 35	16 43	1 48	8 1	12 15	23 8	23 14	1 0	14 32	2 28
T 12	8 31	16 22	3 25	1 36	2 0	12 41	0 31	20 9	0 40	20 15	0 58	16 39	0 52	9 37	0 35	16 43	1 48	8 1	12 15	23 8	23 14	0 58	14 34	2 28
W13	8 53	11 54	4 14	2 26	1 54	13 7	0 28	20 18	0 41	20 14	0 58	16 38	0 52	9 36	0 35	16 43	1 48	8 2	12 15	23 8	23 14	0 55	14 35	2 28
T 14	9 15	6 39	4 48	3 16	1 48	13 34	0 26	20 28	0 41	20 13	0 58	16 37	0 52	9 36	0 35	16 42	1 48	8 2	12 15	23 8	23 14	0 52	14 36	2 28
F 15	9 36	0 56	5 4	4 7	1 42	14 0	0 24	20 38	0 42	20 13	0 58	16 36	0 52	9 35	0 35	16 42	1 48	8 2	12 14	23 7	23 13	0 50	14 37	2 28
S 16	9 58	4s54	5 0	4 59	1 35	14 26	0 21	20 47	0 42	20 12	0 58	16 35	0 53	9 34	0 35	16 41	1 48	8 3	12 14	23 7	23 13	0 47	14 38	2 28
S 17	10 19	10 28	4 35	5 51	1 27	14 51	0 19	20 56	0 43	20 11	0 59	16 34	0 53	9 33	0 35	16 41	1 48	8 3	12 14	23 6	23 13	0 44	14 39	2 28
M18	10 40	15 22	3 51	6 44	1 19	15 16	0 17	21 5	0 43	20 10	0 59	16 33	0 53	9 32	0 35	16 41	1 48	8 4	12 14	23 6	23 13	0 42	14 40	2 28
T 19	11 1	19 14	2 53	7 38	1 11	15 41	0 14	21 14	0 43	20 9	0 59	16 32	0 53	9 31	0 35	16 40	1 48	8 4	12 14	23 5	23 13	0 39	14 41	2 28
W20	11 22	21 50	1 45	8 31	1 2	16 6	0 12	21 22	0 44	20 8	0 59	16 31	0 53	9 30	0 35	16 40	1 48	8 4	12 14	23 5	23 12	0 36	14 43	2 28
T 21	11 42	23 0	0 33	9 25	0 53	16 29	0 9	21 31	0 44	20 7	0 59	16 30	0 53	9 29	0 35	16 39	1 48	8 5	12 13	23 5	23 12	0 34	14 44	2 28
F 22	12 3	22 48	0n39	10 19	0 43	16 53	0 7	21 39	0 45	20 6	0 59	16 29	0 53	9 28	0 35	16 39	1 48	8 5	12 13	23 5	23 12	0 31	14 45	2 28
S 23	12 23	21 21	1 47	11 13	0 34	17 16	0 4	21 47	0 45	20 5	0 59	16 28	0 54	9 27	0 35	16 39	1 48	8 6	12 13	23 5	23 12	0 28	14 46	2 28
S 24	12 43	18 52	2 48	12 7	0 23	17 39	0 2	21 55	0 46	20 4	0 59	16 27	0 54	9 26	0 35	16 38	1 48	8 6	12 13	23 5	23 12	0 26	14 47	2 29
M25	13 2	15 35	3 39	13 0	0 13	18 1	0n 1	22 3	0 46	20 3	0 59	16 26	0 54	9 25	0 35	16 38	1 48	8 6	12 13	23 5	23 11	0 23	14 48	2 29
T 26	13 22	11 44	4 20	13 53	0 3	18 22	0 3	22 10	0 47	20 2	0 59	16 25	0 54	9 25	0 35	16 37	1 48	8 7	12 13	23 5	23 11	0 20	14 49	2 29
W27	13 41	7 27	4 49	14 45	0n 8	18 44	0 6	22 17	0 47	20 1	0 59	16 24	0 54	9 24	0 35	16 37	1 48	8 7	12 13	23 5	23 11	0 18	14 51	2 29
T 28	14 0	2 56	5 5	15 36	0 19	19 4	0 9	22 24	0 47	20 0	0 59	16 24	0 54	9 23	0 35	16 37	1 48	8 7	12 12	23 4	23 11	0 15	14 52	2 29
F 29	14 19	1n41	5 9	16 26	0 29	19 25	0 11	22 31	0 48	19 59	0 59	16 23	0 55	9 22	0 35	16 36	1 49	8 8	12 12	23 4	23 10	0 13	14 53	2 29
S 30	14n38	6n16	4n59	17n14	0n40	19n44	0n14	22n38	0n48	19s58	0n59	16s22	0s55	9s21	0n35	16s36	1n49	8n 8	12s12	23s 3	23s10	0s10	14n54	2s29

Julian Day Number = 2319782.5, Delta T = 50.93 sec
Ecliptic obliquity = 23°29'10, Nutation = 0°00'17, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'18, Lahiri = 18°49'19Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

MAY 1639 GC

00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	14 34 43	10♉17'53	16♈20	17♉54	28♉12	9♊40	3°R32	17♒56	25°R30	22°R 8	29♉28	19°R11	20♐48	17♓45	18♉16	S 1
M 2	14 38 39	11°15'57	28°30	20° 1	29°25	10°20	3♐26	17°59	25♑28	22♏ 7	29°29	19♐ 4	20°45	17°52	18°21	M 2
T 3	14 42 36	12°14'00	10♉51	22° 7	0♊38	11° 0	3°19	18° 1	25°25	22° 5	29°30	18°58	20°42	17°58	18°25	T 3
W 4	14 46 32	13°12'01	23°22	24°11	1°52	11°40	3°13	18° 4	25°23	22° 3	29°32	18°54	20°39	18° 5	18°30	W 4
T 5	14 50 29	14°10'01	6♊ 5	26°13	3° 5	12°20	3° 6	18° 6	25°20	22° 2	29°33	18°52	20°36	18°12	18°34	T 5
F 6	14 54 26	15° 7'58	18°59	28°12	4°19	13° 0	2°59	18° 8	25°18	22° 0	29°34	18°D51	20°33	18°18	18°38	F 6
S 7	14 58 22	16° 5'55	2♋ 6	0♊10	5°32	13°40	2°52	18°10	25°16	21°59	29°36	18°52	20°29	18°25	18°43	S 7
S 8	15 2 19	17° 3'49	15°27	2° 4	6°45	14°20	2°45	18°13	25°13	21°57	29°37	18°53	20°26	18°32	18°47	S 8
M 9	15 6 15	18° 1'42	29° 2	3°56	7°59	15° 0	2°38	18°15	25°11	21°55	29°38	18°54	20°23	18°39	18°52	M 9
T 10	15 10 12	18°59'32	12♌52	5°45	9°12	15°40	2°31	18°17	25° 9	21°54	29°40	18°R55	20°20	18°45	18°56	T 10
W11	15 14 8	19°57'21	26°56	7°32	10°25	16°19	2°23	18°18	25° 7	21°52	29°41	18°55	20°17	18°52	19° 0	W11
T 12	15 18 5	20°55'08	11♍14	9°15	11°38	16°59	2°16	18°20	25° 4	21°51	29°42	18°54	20°14	18°59	19° 5	T 12
F 13	15 22 1	21°52'54	25°42	10°54	12°52	17°39	2° 9	18°22	25° 2	21°49	29°44	18°52	20°10	19° 6	19° 9	F 13
S 14	15 25 58	22°50'37	10♎18	12°31	14° 5	18°19	2° 1	18°23	25° 0	21°47	29°45	18°48	20° 7	19°12	19°14	S 14
S 15	15 29 55	23°48'20	24°54	14° 4	15°18	18°59	1°54	18°25	24°58	21°46	29°46	18°45	20° 4	19°19	19°18	S 15
M16	15 33 51	24°46'00	9♏25	15°34	16°31	19°38	1°46	18°26	24°56	21°44	29°48	18°42	20° 1	19°26	19°22	M16
T 17	15 37 48	25°43'40	23°44	17° 1	17°44	20°18	1°39	18°27	24°54	21°42	29°49	18°39	19°58	19°32	19°27	T 17
W18	15 41 44	26°41'18	7♐46	18°24	18°57	20°58	1°31	18°28	24°52	21°41	29°50	18°38	19°54	19°39	19°31	W18
T 19	15 45 41	27°38'55	21°28	19°43	20°10	21°37	1°24	18°29	24°50	21°39	29°52	18°D38	19°51	19°46	19°35	T 19
F 20	15 49 37	28°36'30	4♑47	20°59	21°23	22°17	1°16	18°30	24°48	21°38	29°53	18°38	19°48	19°53	19°40	F 20
S 21	15 53 34	29°34'05	17°44	22°12	22°36	22°56	1° 8	18°31	24°46	21°36	29°54	18°39	19°45	19°59	19°44	S 21
S 22	15 57 30	0♊31'39	0♒21	23°21	23°49	23°36	1° 1	18°32	24°44	21°34	29°56	18°41	19°42	20° 6	19°49	S 22
M23	16 1 27	1°29'11	12°40	24°26	25° 2	24°15	0°53	18°33	24°42	21°33	29°57	18°42	19°39	20°13	19°53	M23
T 24	16 5 24	2°26'43	24°47	25°27	26°15	24°55	0°45	18°33	24°40	21°31	29°59	18°43	19°35	20°20	19°57	T 24
W25	16 9 20	3°24'14	6♓44	26°25	27°27	25°34	0°38	18°34	24°38	21°30	29°59	18°R43	19°32	20°26	20° 2	W25
T 26	16 13 17	4°21'44	18°37	27°18	28°40	26°14	0°30	18°34	24°36	21°28	0♊ 1	18°43	19°29	20°33	20° 6	T 26
F 27	16 17 13	5°19'14	0♈31	28° 8	29°53	26°53	0°23	18°34	24°35	21°26	0° 3	18°41	19°26	20°40	20°10	F 27
S 28	16 21 10	6°16'42	12°29	28°54	1♋ 6	27°32	0°15	18°35	24°33	21°25	0° 4	18°40	19°23	20°46	20°14	S 28
S 29	16 25 6	7°14'10	24°36	29°35	2°19	28°12	0° 7	18°R35	24°31	21°23	0° 5	18°38	19°20	20°53	20°19	S 29
M30	16 29 3	8°11'37	6♉54	0♋12	3°31	28°51	29♏59	18°35	24°30	21°22	0° 7	18°37	19°16	21° 0	20°23	M30
T 31	16 32 59	9♊ 9'03	19♉26	0♋45	4♋44	29♊30	29♏52	18♒35	24♑28	21♏20	0♊ 8	18♐36	19♐13	21♓ 7	20♉27	T 31

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	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	14n56	10n40	4n35	18n 0	0n50	20n 4	0n16	22n45	0n49	19s57	0n59	16s21	0s55	9s20	0n35	16s35	1n49	8n 9	12s12	23s 3	23s10	0s 7	14n55	2s29
M 2	15 14	14 41	3 59	18 45	1 0	20 22	0 19	22 51	0 49	19 55	0 59	16 21	0 55	9 19	0 35	16 35	1 49	8 9	12 12	23 2	23 10	0 5	14 56	2 29
T 3	15 32	18 9	3 12	19 28	1 10	20 40	0 21	22 57	0 49	19 54	0 59	16 20	0 55	9 18	0 35	16 35	1 49	8 9	12 12	23 2	23 10	0 2	14 57	2 29
W 4	15 50	20 49	2 14	20 8	1 19	20 58	0 24	23 3	0 50	19 53	0 59	16 20	0 55	9 18	0 35	16 34	1 49	8 10	12 12	23 1	23 9	0n 1	14 58	2 29
T 5	16 7	22 30	1 9	20 46	1 28	21 15	0 26	23 9	0 50	19 52	0 58	16 19	0 56	9 17	0 35	16 34	1 49	8 10	12 12	23 1	23 9	0 3	15 0	2 29
F 6	16 24	23 1	0s 1	21 22	1 36	21 31	0 29	23 14	0 50	19 50	0 58	16 18	0 56	9 16	0 35	16 33	1 49	8 10	12 12	23 1	23 9	0 6	15 1	2 29
S 7	16 41	22 16	1 12	21 55	1 44	21 47	0 32	23 20	0 51	19 49	0 58	16 18	0 56	9 15	0 35	16 33	1 49	8 11	12 11	23 1	23 9	0 9	15 2	2 29
S 8	16 58	20 16	2 20	22 26	1 51	22 2	0 34	23 25	0 51	19 48	0 58	16 17	0 56	9 14	0 35	16 32	1 49	8 11	12 11	23 1	23 8	0 11	15 3	2 29
M 9	17 14	17 6	3 22	22 54	1 58	22 17	0 37	23 30	0 52	19 46	0 58	16 17	0 56	9 13	0 35	16 32	1 49	8 12	12 11	23 1	23 8	0 14	15 4	2 30
T 10	17 30	12 56	4 13	23 20	2 3	22 31	0 39	23 34	0 52	19 45	0 58	16 17	0 56	9 13	0 35	16 32	1 49	8 12	12 11	23 1	23 8	0 17	15 5	2 30
W11	17 46	8 0	4 51	23 43	2 8	22 44	0 41	23 39	0 52	19 44	0 58	16 16	0 57	9 12	0 35	16 31	1 49	8 12	12 11	23 1	23 8	0 19	15 6	2 30
T 12	18 1	2 35	5 10	24 4	2 12	22 57	0 44	23 43	0 53	19 42	0 58	16 16	0 57	9 11	0 35	16 31	1 49	8 13	12 11	23 1	23 7	0 22	15 7	2 30
F 13	18 16	3s 3	5 11	24 22	2 16	23 9	0 46	23 47	0 53	19 41	0 58	16 15	0 57	9 10	0 35	16 30	1 49	8 13	12 11	23 1	23 7	0 25	15 8	2 30
S 14	18 31	8 33	4 52	24 37	2 18	23 20	0 49	23 51	0 53	19 40	0 58	16 15	0 57	9 9	0 35	16 30	1 49	8 13	12 11	23 1	23 7	0 27	15 10	2 30
S 15	18 46	13 35	4 13	24 51	2 20	23 31	0 51	23 55	0 54	19 38	0 58	16 15	0 57	9 9	0 35	16 30	1 49	8 14	12 11	23 0	23 7	0 30	15 11	2 30
M16	19 0	17 48	3 19	25 2	2 21	23 41	0 53	23 59	0 54	19 37	0 58	16 15	0 57	9 8	0 35	16 29	1 49	8 14	12 11	23 0	23 7	0 32	15 12	2 30
T 17	19 14	20 53	2 13	25 11	2 21	23 51	0 56	24 2	0 54	19 35	0 58	16 14	0 58	9 7	0 35	16 29	1 49	8 14	12 11	23 0	23 6	0 35	15 13	2 30
W18	19 27	22 37	0 59	25 18	2 20	23 59	0 58	24 5	0 55	19 34	0 58	16 14	0 58	9 6	0 35	16 28	1 49	8 15	12 11	23 0	23 6	0 38	15 14	2 30
T 19	19 40	22 57	0n16	25 23	2 18	24 7	1 0	24 8	0 55	19 32	0 58	16 14	0 58	9 6	0 35	16 28	1 49	8 15	12 11	23 0	23 6	0 40	15 15	2 31
F 20	19 53	21 56	1 28	25 26	2 16	24 15	1 3	24 11	0 55	19 31	0 58	16 14	0 58	9 5	0 35	16 28	1 49	8 15	12 11	23 0	23 6	0 43	15 16	2 31
S 21	20 6	19 46	2 34	25 27	2 12	24 21	1 5	24 13	0 56	19 29	0 57	16 14	0 58	9 4	0 35	16 27	1 49	8 15	12 11	23 0	23 5	0 46	15 17	2 31
S 22	20 18	16 42	3 30	25 27	2 8	24 27	1 7	24 16	0 56	19 28	0 57	16 14	0 58	9 4	0 35	16 27	1 49	8 16	12 10	23 0	23 5	0 48	15 18	2 31
M23	20 30	12 57	4 16	25 25	2 3	24 33	1 9	24 18	0 56	19 27	0 57	16 14	0 59	9 3	0 35	16 26	1 49	8 16	12 10	23 0	23 5	0 51	15 19	2 31
T 24	20 41	8 45	4 49	25 21	1 57	24 37	1 11	24 20	0 56	19 25	0 57	16 14	0 59	9 2	0 35	16 26	1 48	8 16	12 10	23 0	23 5	0 53	15 20	2 31
W25	20 53	4 16	5 9	25 16	1 50	24 41	1 13	24 21	0 57	19 24	0 57	16 14	0 59	9 2	0 35	16 26	1 48	8 17	12 10	23 0	23 4	0 56	15 21	2 31
T 26	21 3	0n20	5 16	25 10	1 42	24 44	1 15	24 23	0 57	19 22	0 57	16 14	0 59	9 1	0 35	16 25	1 48	8 17	12 10	23 0	23 4	0 59	15 22	2 31
F 27	21 14	4 56	5 9	25 2	1 34	24 46	1 17	24 24	0 57	19 21	0 57	16 14	0 59	9 0	0 34	16 25	1 48	8 17	12 10	23 0	23 4	1 1	15 23	2 31
S 28	21 24	9 23	4 49	24 53	1 24	24 48	1 19	24 25	0 58	19 19	0 57	16 14	1 0	9 0	0 34	16 24	1 48	8 17	12 10	23 0	23 4	1 4	15 24	2 32
S 29	21 34	13 31	4 16	24 43	1 14	24 49	1 21	24 26	0 58	19 18	0 56	16 14	1 0	8 59	0 34	16 24	1 48	8 18	12 10	23 0	23 3	1 7	15 25	2 32
M30	21 43	17 9	3 31	24 32	1 3	24 49	1 23	24 27	0 58	19 16	0 56	16 14	1 0	8 59	0 34	16 24	1 48	8 18	12 10	23 0	23 3	1 9	15 26	2 32
T 31	21n52	20n 6	2n34	24n20	0n51	24n48	1n24	24n27	0n58	19s15	0n56	16s14	1s 0	8s58	0n34	16s23	1n48	8n18	12s10	23s 0	23s 3	1n12	15n27	2s32

Julian Day Number = 2319812.5, Delta T = 50.87 sec
Ecliptic obliquity = 23°29'09, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'22, Lahiri = 18°49'23Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

JUNE 1639 GC — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
W 1	16 36 56	10♊ 6'28	2♊12	1♋14	5♋56	0♋10	29°R45	18°R34	24°R27	21°R19	0♊ 9	18°R35	19♐10	21♓13	20♉31	W 1
T 2	16 40 53	11° 3'53	15°14	1°38	7° 9	0°49	29♏38	18♒34	24♎25	21♏17	0°11	18°D34	19° 7	21°20	20°36	T 2
F 3	16 44 49	12° 1'17	28°31	1°58	8°22	1°28	29°30	18°34	24°24	21°16	0°12	18♐35	19° 4	21°27	20°40	F 3
S 4	16 48 46	12°58'40	12♋ 3	2°13	9°34	2° 7	29°23	18°33	24°22	21°14	0°13	18°35	19° 0	21°33	20°44	S 4
S 5	16 52 42	13°56'02	25°47	2°23	10°47	2°47	29°16	18°33	24°21	21°13	0°15	18°35	18°57	21°40	20°48	S 5
M 6	16 56 39	14°53'23	9♌42	2°29	11°59	3°26	29° 9	18°32	24°19	21°11	0°16	18°36	18°54	21°47	20°52	M 6
T 7	17 0 35	15°50'42	23°45	2°R31	13°11	4° 5	29° 2	18°31	24°18	21°10	0°17	18°36	18°51	21°54	20°56	T 7
W 8	17 4 32	16°48'01	7♍55	2°27	14°24	4°44	28°55	18°30	24°17	21° 8	0°19	18°36	18°48	22° 0	21° 1	W 8
T 9	17 8 28	17°45'19	22° 9	2°20	15°36	5°23	28°48	18°29	24°16	21° 7	0°20	18°R36	18°45	22° 7	21° 5	T 9
F 10	17 12 25	18°42'36	6♎25	2° 8	16°49	6° 2	28°41	18°28	24°15	21° 6	0°21	18°D36	18°41	22°14	21° 9	F 10
S 11	17 16 22	19°39'52	20°39	1°52	18° 1	6°41	28°34	18°27	24°14	21° 4	0°23	18°36	18°38	22°21	21°13	S 11
S 12	17 20 18	20°37'07	4♏49	1°33	19°13	7°20	28°27	18°26	24°12	21° 3	0°24	18°36	18°35	22°27	21°17	S 12
M13	17 24 15	21°34'22	18°52	1° 9	20°25	7°59	28°21	18°24	24°11	21° 1	0°25	18°37	18°32	22°34	21°21	M13
T 14	17 28 11	22°31'36	2♐44	0°43	21°37	8°38	28°14	18°23	24°11	21° 0	0°26	18°37	18°29	22°41	21°25	T 14
W15	17 32 8	23°28'49	16°23	0°14	22°49	9°17	28° 8	18°21	24°10	20°59	0°28	18°R37	18°26	22°47	21°29	W15
T 16	17 36 4	24°26'02	29°47	29♊43	24° 1	9°56	28° 2	18°20	24° 9	20°58	0°29	18°37	18°22	22°54	21°32	T 16
F 17	17 40 1	25°23'14	12♑53	29°10	25°13	10°35	27°56	18°18	24° 8	20°56	0°30	18°36	18°19	23° 1	21°36	F 17
S 18	17 43 58	26°20'26	25°43	28°35	26°25	11°14	27°50	18°16	24° 7	20°55	0°32	18°36	18°16	23° 8	21°40	S 18
S 19	17 47 54	27°17'38	8♒16	28° 0	27°37	11°53	27°44	18°14	24° 6	20°54	0°33	18°35	18°13	23°14	21°44	S 19
M20	17 51 51	28°14'50	20°35	27°25	28°49	12°32	27°38	18°12	24° 6	20°53	0°34	18°33	18°10	23°21	21°48	M20
T 21	17 55 47	29°12'01	2♓41	26°51	0♌ 1	13°10	27°33	18°10	24° 5	20°51	0°35	18°32	18° 6	23°28	21°51	T 21
W22	17 59 44	0♋ 9'13	14°40	26°18	1°13	13°49	27°27	18° 8	24° 5	20°50	0°36	18°31	18° 3	23°35	21°55	W22
T 23	18 3 40	1° 6'24	26°34	25°46	2°25	14°28	27°22	18° 6	24° 4	20°49	0°38	18°D31	18° 0	23°41	21°59	T 23
F 24	18 7 37	2° 3'36	8♈28	25°17	3°36	15° 7	27°17	18° 3	24° 4	20°48	0°39	18°31	17°57	23°48	22° 3	F 24
S 25	18 11 33	3° 0'48	20°26	24°50	4°48	15°45	27°12	18° 1	24° 3	20°47	0°40	18°31	17°54	23°55	22° 6	S 25
S 26	18 15 30	3°58'00	2♉35	24°27	6° 0	16°24	27° 7	17°58	24° 3	20°46	0°41	18°33	17°51	24° 1	22°10	S 26
M27	18 19 27	4°55'12	14°56	24° 7	7°11	17° 3	27° 2	17°56	24° 3	20°45	0°42	18°34	17°47	24° 8	22°13	M27
T 28	18 23 23	5°52'24	27°35	23°52	8°23	17°42	26°58	17°53	24° 2	20°44	0°44	18°35	17°44	24°15	22°17	T 28
W29	18 27 20	6°49'36	10♊32	23°41	9°34	18°20	26°53	17°50	24° 2	20°43	0°45	18°36	17°41	24°22	22°20	W29
T 30	18 31 16	7♋46'49	23♊51	23♊34	10♌46	18♋59	26♏49	17♒48	24♎ 2	20♏42	0♊46	18°R36	17♐38	24♓28	22♉24	T 30

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
W 1	22n 0	22n 6	1n29	24n 7	0n38	24n47	1n26	24n28	0n59	19s13	0n56	16s15	1s 0	8s58	0n34	16s23	1n48	8n19	12s10	23s 0	23s 3	1n14	15n28	2s32
T 2	22 9	22 58	0 18	23 54	0 25	24 45	1 28	24 28	0 59	19 12	0 56	16 15	1 0	8 57	0 34	16 22	1 48	8 19	12 10	23 0	23 2	1 17	15 29	2 32
F 3	22 17	22 34	0s55	23 39	0 11	24 42	1 29	24 28	0 59	19 11	0 56	16 15	1 1	8 57	0 34	16 22	1 48	8 19	12 10	23 0	23 2	1 20	15 30	2 32
S 4	22 24	20 50	2 6	23 25	0s 3	24 39	1 31	24 28	0 59	19 9	0 56	16 15	1 1	8 56	0 34	16 22	1 48	8 19	12 10	23 0	23 2	1 22	15 31	2 33
S 5	22 31	17 53	3 12	23 9	0 19	24 35	1 32	24 27	1 0	19 8	0 55	16 16	1 1	8 56	0 34	16 21	1 48	8 20	12 10	23 0	23 2	1 25	15 32	2 33
M 6	22 38	13 53	4 7	22 53	0 34	24 30	1 34	24 26	1 0	19 6	0 55	16 16	1 1	8 55	0 34	16 21	1 48	8 20	12 10	23 0	23 1	1 27	15 33	2 33
T 7	22 44	9 6	4 48	22 37	0 50	24 24	1 35	24 26	1 0	19 5	0 55	16 17	1 1	8 55	0 34	16 21	1 48	8 20	12 10	23 0	23 1	1 30	15 34	2 33
W 8	22 50	3 48	5 11	22 21	1 7	24 18	1 36	24 24	1 0	19 4	0 55	16 17	1 1	8 54	0 34	16 20	1 48	8 20	12 11	23 0	23 1	1 33	15 35	2 33
T 9	22 55	1s44	5 16	22 4	1 24	24 11	1 38	24 23	1 1	19 2	0 55	16 18	1 2	8 54	0 34	16 20	1 48	8 20	12 11	23 0	23 0	1 35	15 36	2 33
F 10	23 0	7 10	5 2	21 48	1 41	24 4	1 39	24 22	1 1	19 1	0 55	16 18	1 2	8 53	0 34	16 20	1 48	8 21	12 11	23 0	23 0	1 38	15 37	2 34
S 11	23 5	12 14	4 29	21 31	1 57	23 55	1 40	24 20	1 1	19 0	0 54	16 19	1 2	8 53	0 34	16 19	1 48	8 21	12 11	23 0	23 0	1 40	15 37	2 34
S 12	23 9	16 36	3 40	21 14	2 14	23 46	1 41	24 18	1 1	18 58	0 54	16 19	1 2	8 53	0 34	16 19	1 48	8 21	12 11	23 0	23 0	1 43	15 38	2 34
M13	23 13	19 59	2 38	20 58	2 31	23 36	1 42	24 16	1 2	18 57	0 54	16 20	1 2	8 52	0 34	16 19	1 48	8 21	12 11	23 0	22 59	1 46	15 39	2 34
T 14	23 16	22 10	1 27	20 42	2 47	23 26	1 43	24 14	1 2	18 56	0 54	16 20	1 2	8 52	0 34	16 18	1 48	8 21	12 11	23 0	22 59	1 48	15 40	2 34
W15	23 19	23 0	0 12	20 27	3 2	23 15	1 43	24 11	1 2	18 55	0 54	16 21	1 3	8 52	0 34	16 18	1 48	8 22	12 11	23 0	22 59	1 51	15 41	2 34
T 16	23 22	22 28	1n 1	20 12	3 17	23 3	1 44	24 9	1 2	18 53	0 54	16 22	1 3	8 51	0 34	16 18	1 48	8 22	12 11	23 0	22 59	1 53	15 42	2 35
F 17	23 24	20 42	2 10	19 58	3 31	22 51	1 45	24 6	1 2	18 52	0 53	16 22	1 3	8 51	0 34	16 17	1 48	8 22	12 11	23 0	22 58	1 56	15 43	2 35
S 18	23 26	17 54	3 11	19 45	3 44	22 38	1 45	24 3	1 3	18 51	0 53	16 23	1 3	8 51	0 34	16 17	1 48	8 22	12 11	23 0	22 58	1 58	15 43	2 35
S 19	23 27	14 21	4 1	19 33	3 56	22 24	1 46	24 0	1 3	18 50	0 53	16 24	1 3	8 51	0 34	16 17	1 48	8 22	12 11	23 0	22 58	2 1	15 44	2 35
M20	23 28	10 14	4 39	19 21	4 6	22 10	1 46	23 56	1 3	18 49	0 53	16 25	1 3	8 50	0 34	16 17	1 48	8 22	12 11	22 59	22 57	2 4	15 45	2 35
T 21	23 29	5 48	5 4	19 11	4 15	21 55	1 47	23 53	1 3	18 48	0 53	16 25	1 4	8 50	0 34	16 16	1 48	8 23	12 11	22 59	22 57	2 6	15 46	2 35
W22	23 29	1 12	5 15	19 3	4 23	21 40	1 47	23 49	1 3	18 47	0 52	16 26	1 4	8 50	0 34	16 16	1 48	8 23	12 11	22 59	22 57	2 9	15 47	2 36
T 23	23 29	3n25	5 13	18 56	4 30	21 24	1 47	23 45	1 4	18 46	0 52	16 27	1 4	8 50	0 34	16 16	1 48	8 23	12 11	22 59	22 57	2 11	15 47	2 36
F 24	23 28	7 55	4 57	18 50	4 34	21 7	1 47	23 41	1 4	18 45	0 52	16 28	1 4	8 50	0 34	16 15	1 48	8 23	12 12	22 59	22 56	2 14	15 48	2 36
S 25	23 27	12 8	4 29	18 45	4 38	20 50	1 47	23 37	1 4	18 44	0 52	16 29	1 4	8 50	0 34	16 15	1 48	8 23	12 12	22 59	22 56	2 17	15 49	2 36
S 26	23 26	15 57	3 48	18 43	4 40	20 33	1 47	23 32	1 4	18 43	0 52	16 30	1 4	8 50	0 33	16 15	1 48	8 23	12 12	22 59	22 56	2 19	15 49	2 36
M27	23 24	19 8	2 55	18 42	4 40	20 14	1 47	23 28	1 4	18 42	0 51	16 31	1 5	8 50	0 33	16 15	1 47	8 23	12 12	23 0	22 55	2 22	15 50	2 37
T 28	23 21	21 30	1 53	18 42	4 39	19 56	1 47	23 23	1 4	18 41	0 51	16 32	1 5	8 49	0 33	16 15	1 47	8 24	12 12	23 0	22 55	2 24	15 51	2 37
W29	23 19	22 48	0 44	18 44	4 36	19 36	1 47	23 18	1 5	18 40	0 51	16 33	1 5	8 49	0 33	16 14	1 47	8 24	12 12	23 0	22 55	2 27	15 52	2 37
T 30	23n15	22n52	0s29	18n48	4s32	19n16	1n46	23n12	1n 5	18s40	0n51	16s34	1s 5	8s49	0n33	16s14	1n47	8n24	12s12	23s 0	22s55	2n29	15n52	2s37

Julian Day Number = 2319843.5, Delta T = 50.81 sec
Ecliptic obliquity = 23°29'08, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'27, Lahiri = 18°49'27Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

JULY 1639 GC — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
F 1	18 35 13	8♋44'02	7♋30	23°D32	11♌57	19♋38	26°R45	17°R45	24°R 2	20°R41	0♊47	18°R35	17♐35	24♓35	22♉27	F 1
S 2	18 39 9	9°41'14	21°27	23♊35	13° 9	20°16	26♏41	17♒42	24°D 2	20♏40	0°48	18♐33	17°32	24°42	22°30	S 2
S 3	18 43 6	10°38'27	5♌39	23°43	14°20	20°55	26°37	17°39	24♎ 2	20°39	0°49	18°31	17°28	24°48	22°34	S 3
M 4	18 47 2	11°35'40	20° 0	23°57	15°31	21°34	26°33	17°36	24° 2	20°38	0°50	18°28	17°25	24°55	22°37	M 4
T 5	18 50 59	12°32'53	4♍27	24°15	16°42	22°12	26°30	17°32	24° 2	20°37	0°51	18°25	17°22	25° 2	22°40	T 5
W 6	18 54 56	13°30'05	18°52	24°39	17°54	22°51	26°27	17°29	24° 2	20°36	0°52	18°22	17°19	25° 9	22°43	W 6
T 7	18 58 52	14°27'18	3♎13	25° 8	19° 5	23°29	26°24	17°26	24° 2	20°35	0°53	18°21	17°16	25°15	22°47	T 7
F 8	19 2 49	15°24'30	17°26	25°42	20°16	24° 8	26°21	17°22	24° 3	20°35	0°54	18°D20	17°12	25°22	22°50	F 8
S 9	19 6 45	16°21'42	1♏28	26°21	21°27	24°47	26°18	17°19	24° 3	20°34	0°55	18°21	17° 9	25°29	22°53	S 9
S 10	19 10 42	17°18'55	15°19	27° 6	22°38	25°25	26°15	17°15	24° 3	20°33	0°56	18°22	17° 6	25°36	22°56	S 10
M11	19 14 38	18°16'08	28°58	27°55	23°48	26° 4	26°13	17°12	24° 4	20°32	0°57	18°24	17° 3	25°42	22°59	M11
T 12	19 18 35	19°13'21	12♐24	28°50	24°59	26°42	26°11	17° 8	24° 4	20°32	0°58	18°R25	17° 0	25°49	23° 2	T 12
W13	19 22 31	20°10'34	25°38	29°49	26°10	27°21	26° 9	17° 4	24° 5	20°31	0°59	18°25	16°57	25°56	23° 5	W13
T 14	19 26 28	21° 7'47	8♑40	0♋54	27°21	27°59	26° 7	17° 1	24° 5	20°31	1° 0	18°23	16°53	26° 2	23° 7	T 14
F 15	19 30 25	22° 5'01	21°29	2° 3	28°31	28°37	26° 5	16°57	24° 6	20°30	1° 1	18°20	16°50	26° 9	23°10	F 15
S 16	19 34 21	23° 2'15	4♒ 5	3°17	29°42	29°16	26° 3	16°53	24° 7	20°29	1° 2	18°15	16°47	26°16	23°13	S 16
S 17	19 38 18	23°59'30	16°29	4°36	0♍52	29°54	26° 2	16°49	24° 7	20°29	1° 3	18° 9	16°44	26°23	23°16	S 17
M18	19 42 14	24°56'46	28°42	5°59	2° 2	0♌33	26° 1	16°45	24° 8	20°28	1° 4	18° 3	16°41	26°29	23°18	M18
T 19	19 46 11	25°54'02	10♓46	7°27	3°13	1°11	26° 0	16°41	24° 9	20°28	1° 5	17°57	16°37	26°36	23°21	T 19
W20	19 50 7	26°51'19	22°43	8°59	4°23	1°50	25°59	16°37	24°10	20°28	1° 6	17°51	16°34	26°43	23°23	W20
T 21	19 54 4	27°48'37	4♈35	10°35	5°33	2°28	25°59	16°33	24°11	20°27	1° 6	17°47	16°31	26°49	23°26	T 21
F 22	19 58 0	28°45'56	16°28	12°15	6°43	3° 6	25°58	16°29	24°12	20°27	1° 7	17°45	16°28	26°56	23°28	F 22
S 23	20 1 57	29°43'16	28°25	13°59	7°53	3°45	25°58	16°25	24°13	20°26	1° 8	17°D44	16°25	27° 3	23°31	S 23
S 24	20 5 54	0♌40'37	10♉32	15°47	9° 3	4°23	25°D58	16°21	24°14	20°26	1° 9	17°44	16°22	27°10	23°33	S 24
M25	20 9 50	1°37'59	22°52	17°37	10°13	5° 1	25°58	16°16	24°15	20°26	1°10	17°45	16°18	27°16	23°35	M25
T 26	20 13 47	2°35'22	5♊32	19°30	11°23	5°40	25°58	16°12	24°16	20°26	1°10	17°47	16°15	27°23	23°38	T 26
W27	20 17 43	3°32'47	18°34	21°26	12°33	6°18	25°59	16° 8	24°18	20°25	1°11	17°R47	16°12	27°30	23°40	W27
T 28	20 21 40	4°30'12	2♋ 1	23°25	13°42	6°56	26° 0	16° 3	24°19	20°25	1°12	17°46	16° 9	27°37	23°42	T 28
F 29	20 25 36	5°27'39	15°54	25°25	14°52	7°35	26° 0	15°59	24°20	20°25	1°12	17°43	16° 6	27°43	23°44	F 29
S 30	20 29 33	6°25'07	0♌11	27°26	16° 2	8°13	26° 1	15°55	24°22	20°25	1°13	17°38	16° 3	27°50	23°46	S 30
S 31	20 33 29	7♌22'35	14♌47	29♋29	17♍11	8♌51	26♏ 3	15♒50	24♎23	20♏25	1♊14	17♐32	15♐59	27♓57	23♉48	S 31

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	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	23n12	21n34	1s42	18n53	4s27	18n56	1n46	23n 7	1n 5	18s39	0n50	16s35	1s 5	8s49	0n33	16s14	1n47	8n24	12s12	23s 0	22s54	2n32	15n53	2s37
S 2	23 8	18 57	2 51	18 59	4 21	18 35	1 45	23 2	1 5	18 38	0 50	16 36	1 5	8 49	0 33	16 14	1 47	8 24	12 12	22 59	22 54	2 34	15 53	2 38
S 3	23 3	15 10	3 50	19 7	4 14	18 14	1 45	22 56	1 5	18 38	0 50	16 37	1 6	8 49	0 33	16 14	1 47	8 24	12 13	22 59	22 54	2 37	15 54	2 38
M 4	22 59	10 28	4 36	19 16	4 6	17 52	1 44	22 50	1 5	18 37	0 50	16 38	1 6	8 50	0 33	16 13	1 47	8 24	12 13	22 59	22 53	2 40	15 55	2 38
T 5	22 54	5 10	5 4	19 26	3 56	17 30	1 43	22 44	1 6	18 36	0 49	16 39	1 6	8 50	0 33	16 13	1 47	8 24	12 13	22 59	22 53	2 42	15 55	2 38
W 6	22 48	0s24	5 14	19 37	3 46	17 7	1 42	22 38	1 6	18 36	0 49	16 40	1 6	8 50	0 33	16 13	1 47	8 24	12 13	22 59	22 53	2 45	15 56	2 39
T 7	22 42	5 55	5 3	19 48	3 35	16 44	1 41	22 31	1 6	18 35	0 49	16 41	1 6	8 50	0 33	16 13	1 47	8 24	12 13	22 58	22 52	2 47	15 56	2 39
F 8	22 36	11 5	4 34	20 1	3 24	16 21	1 40	22 25	1 6	18 35	0 49	16 43	1 6	8 50	0 33	16 13	1 47	8 24	12 13	22 58	22 52	2 50	15 57	2 39
S 9	22 29	15 35	3 49	20 14	3 12	15 57	1 39	22 18	1 6	18 34	0 49	16 44	1 6	8 50	0 33	16 13	1 47	8 24	12 13	22 58	22 52	2 52	15 58	2 39
S 10	22 22	19 11	2 51	20 28	2 59	15 32	1 38	22 11	1 6	18 34	0 48	16 45	1 7	8 50	0 33	16 12	1 47	8 24	12 14	22 59	22 52	2 55	15 58	2 39
M11	22 14	21 40	1 44	20 42	2 46	15 8	1 36	22 4	1 6	18 34	0 48	16 46	1 7	8 50	0 33	16 12	1 47	8 24	12 14	22 59	22 51	2 57	15 59	2 40
T 12	22 6	22 52	0 33	20 56	2 33	14 43	1 35	21 57	1 7	18 33	0 48	16 47	1 7	8 51	0 33	16 12	1 47	8 25	12 14	22 59	22 51	3 0	15 59	2 40
W13	21 58	22 45	0n39	21 10	2 19	14 17	1 34	21 49	1 7	18 33	0 48	16 49	1 7	8 51	0 33	16 12	1 47	8 25	12 14	22 59	22 51	3 3	16 0	2 40
T 14	21 49	21 24	1 48	21 23	2 6	13 51	1 32	21 42	1 7	18 33	0 47	16 50	1 7	8 51	0 33	16 12	1 47	8 25	12 14	22 59	22 50	3 5	16 0	2 40
F 15	21 40	18 58	2 50	21 37	1 52	13 25	1 30	21 34	1 7	18 33	0 47	16 51	1 7	8 51	0 33	16 12	1 47	8 25	12 14	22 58	22 50	3 8	16 1	2 41
S 16	21 31	15 39	3 43	21 49	1 37	12 59	1 28	21 26	1 7	18 33	0 47	16 53	1 7	8 52	0 33	16 12	1 46	8 25	12 15	22 58	22 50	3 10	16 1	2 41
S 17	21 21	11 43	4 24	22 1	1 23	12 32	1 27	21 18	1 7	18 33	0 47	16 54	1 8	8 52	0 33	16 12	1 46	8 25	12 15	22 57	22 49	3 13	16 1	2 41
M18	21 11	7 22	4 53	22 12	1 9	12 5	1 25	21 10	1 7	18 33	0 46	16 55	1 8	8 52	0 33	16 12	1 46	8 25	12 15	22 57	22 49	3 15	16 2	2 41
T 19	21 0	2 48	5 7	22 21	0 55	11 38	1 23	21 2	1 7	18 33	0 46	16 57	1 8	8 53	0 33	16 11	1 46	8 25	12 15	22 56	22 49	3 18	16 2	2 42
W20	20 50	1n50	5 9	22 29	0 42	11 10	1 20	20 53	1 7	18 33	0 46	16 58	1 8	8 53	0 33	16 11	1 46	8 25	12 15	22 56	22 48	3 20	16 3	2 42
T 21	20 38	6 22	4 57	22 36	0 28	10 42	1 18	20 45	1 8	18 33	0 46	16 59	1 8	8 53	0 33	16 11	1 46	8 25	12 15	22 55	22 48	3 23	16 3	2 42
F 22	20 27	10 40	4 32	22 40	0 15	10 14	1 16	20 36	1 8	18 33	0 46	17 1	1 8	8 54	0 33	16 11	1 46	8 25	12 16	22 55	22 48	3 25	16 3	2 42
S 23	20 15	14 36	3 55	22 42	0 3	9 46	1 14	20 27	1 8	18 33	0 45	17 2	1 8	8 54	0 33	16 11	1 46	8 25	12 16	22 55	22 47	3 28	16 4	2 43
S 24	20 3	17 59	3 8	22 43	0n10	9 17	1 11	20 18	1 8	18 33	0 45	17 3	1 8	8 55	0 32	16 11	1 46	8 25	12 16	22 55	22 47	3 30	16 4	2 43
M25	19 50	20 38	2 11	22 40	0 21	8 48	1 9	20 9	1 8	18 34	0 45	17 5	1 9	8 55	0 32	16 11	1 46	8 24	12 16	22 55	22 47	3 33	16 4	2 43
T 26	19 37	22 21	1 6	22 36	0 32	8 19	1 6	19 59	1 8	18 34	0 45	17 6	1 9	8 56	0 32	16 11	1 46	8 24	12 16	22 55	22 46	3 35	16 5	2 43
W27	19 24	22 55	0s 4	22 29	0 43	7 50	1 3	19 50	1 8	18 34	0 44	17 8	1 9	8 56	0 32	16 11	1 46	8 24	12 17	22 55	22 46	3 38	16 5	2 44
T 28	19 10	22 12	1 16	22 19	0 52	7 21	1 0	19 40	1 8	18 35	0 44	17 9	1 9	8 57	0 32	16 11	1 46	8 24	12 17	22 55	22 46	3 40	16 5	2 44
F 29	18 56	20 8	2 26	22 6	1 1	6 51	0 57	19 31	1 8	18 35	0 44	17 10	1 9	8 57	0 32	16 11	1 46	8 24	12 17	22 55	22 45	3 43	16 5	2 44
S 30	18 42	16 46	3 28	21 51	1 9	6 22	0 54	19 21	1 8	18 35	0 44	17 12	1 9	8 58	0 32	16 11	1 46	8 24	12 17	22 55	22 45	3 45	16 6	2 44
S 31	18n28	12n19	4s18	21n33	1n17	5n52	0n51	19n11	1n 8	18s36	0n43	17s13	1s 9	8s58	0n32	16s11	1n46	8n24	12s17	22s54	22s45	3n48	16n 6	2s45

Julian Day Number = 2319873.5, Delta T = 50.75 sec
Ecliptic obliquity = 23°29'08, Nutation = 0°00'17, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'31, Lahiri = 18°49'31Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

AUGUST 1639 GC — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
M 1	20 37 26	8♌20'05	29♌35	1♌32	18♍20	9♌30	26♏ 4	15°R46	24♎25	20°R25	1♊14	17°R24	15♐56	28♓ 3	23♉50	M 1
T 2	20 41 23	9°17'35	14♍27	3°37	19°30	10° 8	26° 6	15♒41	24°26	20°D25	1°15	17♐17	15°53	28°10	23°52	T 2
W 3	20 45 19	10°15'06	29°15	5°41	20°39	10°46	26° 7	15°37	24°28	20♏25	1°16	17°10	15°50	28°17	23°53	W 3
T 4	20 49 16	11°12'38	13♎51	7°45	21°48	11°25	26° 9	15°32	24°29	20°25	1°16	17° 5	15°47	28°24	23°55	T 4
F 5	20 53 12	12°10'11	28°11	9°49	22°57	12° 3	26°12	15°28	24°31	20°25	1°17	17° 2	15°43	28°30	23°57	F 5
S 6	20 57 9	13° 7'45	12♏12	11°52	24° 6	12°41	26°14	15°23	24°33	20°25	1°17	17°D 1	15°40	28°37	23°58	S 6
S 7	21 1 5	14° 5'19	25°54	13°55	25°14	13°19	26°16	15°19	24°35	20°25	1°18	17° 2	15°37	28°44	24° 0	S 7
M 8	21 5 2	15° 2'55	9♐18	15°57	26°23	13°58	26°19	15°14	24°36	20°25	1°18	17° 3	15°34	28°50	24° 1	M 8
T 9	21 8 58	16° 0'32	22°26	17°57	27°32	14°36	26°22	15°10	24°38	20°26	1°19	17°R 3	15°31	28°57	24° 3	T 9
W10	21 12 55	16°58'09	5♑20	19°57	28°40	15°14	26°25	15° 6	24°40	20°26	1°19	17° 1	15°28	29° 4	24° 4	W10
T 11	21 16 52	17°55'48	18° 2	21°56	29°48	15°52	26°28	15° 1	24°42	20°26	1°20	16°57	15°24	29°11	24° 5	T 11
F 12	21 20 48	18°53'28	0♒33	23°53	0♎57	16°30	26°31	14°57	24°44	20°26	1°20	16°51	15°21	29°17	24° 7	F 12
S 13	21 24 45	19°51'09	12°55	25°49	2° 5	17° 9	26°35	14°52	24°46	20°27	1°21	16°42	15°18	29°24	24° 8	S 13
S 14	21 28 41	20°48'51	25° 8	27°43	3°13	17°47	26°39	14°48	24°48	20°27	1°21	16°31	15°15	29°31	24° 9	S 14
M15	21 32 38	21°46'35	7♓13	29°37	4°20	18°25	26°43	14°43	24°50	20°27	1°21	16°19	15°12	29°38	24°10	M15
T 16	21 36 34	22°44'20	19°12	1♍28	5°28	19° 3	26°47	14°39	24°53	20°28	1°22	16° 7	15° 9	29°44	24°11	T 16
W17	21 40 31	23°42'07	1♈ 5	3°19	6°36	19°42	26°51	14°34	24°55	20°28	1°22	15°56	15° 5	29°51	24°12	W17
T 18	21 44 27	24°39'55	12°56	5° 8	7°43	20°20	26°55	14°30	24°57	20°29	1°22	15°47	15° 2	29°58	24°13	T 18
F 19	21 48 24	25°37'45	24°48	6°56	8°51	20°58	27° 0	14°26	24°59	20°29	1°23	15°40	14°59	0♈ 4	24°13	F 19
S 20	21 52 21	26°35'37	6♉43	8°42	9°58	21°36	27° 4	14°21	25° 2	20°30	1°23	15°36	14°56	0°11	24°14	S 20
S 21	21 56 17	27°33'30	18°47	10°27	11° 5	22°14	27° 9	14°17	25° 4	20°31	1°23	15°35	14°53	0°18	24°15	S 21
M22	22 0 14	28°31'26	1♊ 4	12°11	12°12	22°52	27°14	14°13	25° 7	20°31	1°23	15°D34	14°49	0°25	24°15	M22
T 23	22 4 10	29°29'23	13°40	13°54	13°19	23°31	27°19	14° 8	25° 9	20°32	1°23	15°R34	14°46	0°31	24°16	T 23
W24	22 8 7	0♍27'22	26°40	15°35	14°25	24° 9	27°25	14° 4	25°12	20°33	1°24	15°34	14°43	0°38	24°16	W24
T 25	22 12 3	1°25'23	10♋ 6	17°14	15°32	24°47	27°30	14° 0	25°14	20°33	1°24	15°32	14°40	0°45	24°17	T 25
F 26	22 16 0	2°23'26	24° 2	18°53	16°38	25°25	27°36	13°56	25°17	20°34	1°24	15°28	14°37	0°51	24°17	F 26
S 27	22 19 56	3°21'31	8♌26	20°30	17°45	26° 3	27°42	13°52	25°19	20°35	1°24	15°21	14°34	0°58	24°17	S 27
S 28	22 23 53	4°19'38	23°15	22° 6	18°51	26°42	27°48	13°48	25°22	20°36	1°24	15°11	14°30	1° 5	24°18	S 28
M29	22 27 50	5°17'46	8♍21	23°41	19°57	27°20	27°54	13°44	25°25	20°36	1°24	15° 1	14°27	1°12	24°18	M29
T 30	22 31 46	6°15'56	23°33	25°15	21° 2	27°58	28° 0	13°40	25°28	20°37	1°24	14°50	14°24	1°18	24°18	T 30
W31	22 35 43	7♍14'07	8♎42	26♍47	22♎ 8	28♌36	28♏ 6	13♒36	25♎30	20♏38	1♊24	14♐40	14♐21	1♈25	24°R18	W31

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
M 1	18n13	7n 5	4s52	21n12	1n23	5n22	0n48	19n 1	1n 8	18s37	0n43	17s15	1s 9	8s59	0n32	16s11	1n46	8n24	12s18	22s53	22s44	3n50	16n 6	2s45
T 2	17 58	1 26	5 6	20 49	1 29	4 52	0 45	18 50	1 9	18 37	0 43	17 16	1 9	8 59	0 32	16 11	1 45	8 24	12 18	22 53	22 44	3 53	16 6	2 45
W 3	17 42	4s17	4 59	20 24	1 34	4 21	0 42	18 40	1 9	18 38	0 43	17 17	1 9	9 0	0 32	16 12	1 45	8 24	12 18	22 52	22 44	3 55	16 6	2 45
T 4	17 27	9 40	4 34	19 56	1 38	3 51	0 38	18 29	1 9	18 38	0 42	17 19	1 10	9 1	0 32	16 12	1 45	8 24	12 18	22 51	22 43	3 58	16 7	2 46
F 5	17 11	14 26	3 51	19 27	1 41	3 20	0 35	18 19	1 9	18 39	0 42	17 20	1 10	9 1	0 32	16 12	1 45	8 24	12 18	22 51	22 43	4 0	16 7	2 46
S 6	16 55	18 18	2 55	18 55	1 43	2 50	0 31	18 8	1 9	18 40	0 42	17 22	1 10	9 2	0 32	16 12	1 45	8 24	12 19	22 51	22 43	4 3	16 7	2 46
S 7	16 38	21 4	1 51	18 21	1 45	2 19	0 28	17 57	1 9	18 41	0 42	17 23	1 10	9 3	0 32	16 12	1 45	8 23	12 19	22 51	22 42	4 5	16 7	2 47
M 8	16 21	22 34	0 41	17 46	1 46	1 49	0 24	17 46	1 9	18 42	0 42	17 25	1 10	9 3	0 32	16 12	1 45	8 23	12 19	22 51	22 42	4 8	16 7	2 47
T 9	16 4	22 47	0n29	17 10	1 46	1 18	0 20	17 35	1 9	18 42	0 41	17 26	1 10	9 4	0 32	16 12	1 45	8 23	12 19	22 51	22 42	4 10	16 7	2 47
W10	15 47	21 47	1 36	16 32	1 46	0 47	0 17	17 24	1 9	18 43	0 41	17 27	1 10	9 5	0 32	16 12	1 45	8 23	12 19	22 51	22 41	4 13	16 7	2 47
T 11	15 29	19 40	2 37	15 52	1 45	0 16	0 13	17 12	1 9	18 44	0 41	17 29	1 10	9 6	0 32	16 12	1 45	8 23	12 20	22 51	22 41	4 15	16 7	2 48
F 12	15 11	16 39	3 30	15 12	1 43	0s14	0 9	17 1	1 9	18 45	0 41	17 30	1 10	9 6	0 32	16 12	1 45	8 23	12 20	22 50	22 41	4 18	16 7	2 48
S 13	14 53	12 56	4 12	14 31	1 41	0 45	0 5	16 49	1 9	18 46	0 40	17 32	1 10	9 7	0 32	16 13	1 45	8 23	12 20	22 49	22 40	4 20	16 7	2 48
S 14	14 35	8 45	4 42	13 49	1 38	1 16	0 1	16 38	1 9	18 47	0 40	17 33	1 10	9 8	0 32	16 13	1 45	8 23	12 20	22 48	22 40	4 23	16 7	2 49
M15	14 17	4 15	4 58	13 7	1 35	1 47	0s 3	16 26	1 9	18 49	0 40	17 34	1 10	9 9	0 32	16 13	1 45	8 22	12 20	22 47	22 40	4 25	16 7	2 49
T 16	13 58	0n20	5 2	12 23	1 31	2 18	0 8	16 14	1 9	18 50	0 40	17 36	1 10	9 10	0 32	16 13	1 45	8 22	12 21	22 46	22 39	4 28	16 7	2 49
W17	13 39	4 54	4 52	11 40	1 27	2 48	0 12	16 2	1 9	18 51	0 40	17 37	1 11	9 10	0 32	16 13	1 45	8 22	12 21	22 44	22 39	4 30	16 7	2 49
T 18	13 20	9 15	4 29	10 56	1 23	3 19	0 16	15 50	1 9	18 52	0 39	17 38	1 11	9 11	0 32	16 13	1 45	8 22	12 21	22 44	22 39	4 33	16 7	2 50
F 19	13 0	13 16	3 55	10 11	1 18	3 50	0 21	15 38	1 9	18 53	0 39	17 40	1 11	9 12	0 32	16 14	1 44	8 22	12 21	22 43	22 38	4 35	16 7	2 50
S 20	12 40	16 47	3 11	9 26	1 12	4 20	0 25	15 25	1 9	18 55	0 39	17 41	1 11	9 13	0 32	16 14	1 44	8 22	12 22	22 42	22 38	4 38	16 7	2 50
S 21	12 21	19 38	2 17	8 42	1 7	4 51	0 29	15 13	1 9	18 56	0 39	17 42	1 11	9 14	0 32	16 14	1 44	8 21	12 22	22 42	22 38	4 40	16 7	2 51
M22	12 1	21 39	1 16	7 57	1 1	5 21	0 34	15 0	1 9	18 57	0 38	17 44	1 11	9 15	0 31	16 14	1 44	8 21	12 22	22 42	22 37	4 43	16 7	2 51
T 23	11 40	22 39	0 10	7 11	0 55	5 51	0 39	14 48	1 9	18 59	0 38	17 45	1 11	9 16	0 31	16 15	1 44	8 21	12 22	22 42	22 37	4 45	16 7	2 51
W24	11 20	22 28	0s58	6 26	0 48	6 22	0 43	14 35	1 9	19 0	0 38	17 46	1 11	9 17	0 31	16 15	1 44	8 21	12 23	22 42	22 36	4 47	16 6	2 51
T 25	10 59	21 0	2 6	5 41	0 42	6 52	0 48	14 22	1 9	19 2	0 38	17 47	1 11	9 18	0 31	16 15	1 44	8 21	12 23	22 42	22 36	4 50	16 6	2 52
F 26	10 39	18 15	3 9	4 57	0 35	7 22	0 53	14 10	1 9	19 3	0 38	17 49	1 11	9 19	0 31	16 15	1 44	8 20	12 23	22 41	22 36	4 52	16 6	2 52
S 27	10 18	14 18	4 1	4 12	0 28	7 51	0 57	13 57	1 9	19 5	0 37	17 50	1 11	9 20	0 31	16 16	1 44	8 20	12 23	22 41	22 35	4 55	16 6	2 52
S 28	9 57	9 24	4 39	3 27	0 21	8 21	1 2	13 44	1 9	19 6	0 37	17 51	1 11	9 21	0 31	16 16	1 44	8 20	12 23	22 40	22 35	4 57	16 6	2 53
M29	9 35	3 50	4 59	2 43	0 13	8 51	1 7	13 30	1 9	19 8	0 37	17 52	1 11	9 22	0 31	16 16	1 44	8 20	12 24	22 38	22 35	5 0	16 5	2 53
T 30	9 14	1s59	4 57	1 59	0 6	9 20	1 12	13 17	1 9	19 9	0 37	17 53	1 11	9 23	0 31	16 16	1 44	8 20	12 24	22 37	22 34	5 2	16 5	2 53
W31	8n52	7s40	4s35	1n15	0s 2	9s49	1s17	13n 4	1n 9	19s11	0n37	17s55	1s11	9s24	0n31	16s17	1n44	8n19	12s24	22s36	22s34	5n 5	16n 5	2s53

Julian Day Number = 2319904.5, Delta T = 50.68 sec
Ecliptic obliquity = 23°29'08, Nutation = 0°00'18, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'35, Lahiri = 18°49'36Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

SEPTEMBER 1639 GC — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	22 39 39	8♍12'20	23♎37	28♍18	23♎13	29♌14	28♏13	13°R32	25♎33	20♏39	1°R24	14°R32	14♐18	1♈32	24°R18	T 1
F 2	22 43 36	9°10'35	8♏11	29°48	24°18	29°53	28°20	13♒28	25°36	20°40	1♊24	14♐27	14°15	1°38	24♉18	F 2
S 3	22 47 32	10° 8'51	22°20	1♎17	25°23	0♍31	28°26	13°24	25°39	20°41	1°24	14°25	14°11	1°45	24°17	S 3
S 4	22 51 29	11° 7'09	6♐ 4	2°44	26°28	1° 9	28°33	13°21	25°42	20°42	1°24	14°24	14° 8	1°52	24°17	S 4
M 5	22 55 25	12° 5'28	19°24	4°10	27°33	1°47	28°40	13°17	25°45	20°43	1°24	14°24	14° 5	1°59	24°17	M 5
T 6	22 59 22	13° 3'49	2♑24	5°35	28°37	2°25	28°48	13°13	25°48	20°44	1°24	14°24	14° 2	2° 5	24°16	T 6
W 7	23 3 19	14° 2'12	15° 6	6°59	29°42	3° 3	28°55	13°10	25°51	20°45	1°24	14°21	13°59	2°12	24°16	W 7
T 8	23 7 15	15° 0'36	27°35	8°21	0♏46	3°42	29° 3	13° 6	25°54	20°47	1°24	14°16	13°55	2°19	24°15	T 8
F 9	23 11 12	15°59'01	9♒53	9°42	1°49	4°20	29°10	13° 3	25°57	20°48	1°24	14° 8	13°52	2°25	24°15	F 9
S 10	23 15 8	16°57'29	22° 2	11° 2	2°53	4°58	29°18	13° 0	26° 0	20°49	1°23	13°58	13°49	2°32	24°14	S 10
S 11	23 19 5	17°55'58	4♓ 5	12°20	3°56	5°36	29°26	12°56	26° 3	20°50	1°23	13°45	13°46	2°39	24°14	S 11
M12	23 23 1	18°54'29	16° 3	13°36	4°59	6°14	29°34	12°53	26° 6	20°51	1°23	13°31	13°43	2°46	24°13	M12
T 13	23 26 58	19°53'01	27°57	14°51	6° 2	6°52	29°42	12°50	26° 9	20°53	1°23	13°17	13°40	2°52	24°12	T 13
W14	23 30 54	20°51'36	9♈49	16° 5	7° 4	7°31	29°51	12°47	26°13	20°54	1°22	13° 4	13°36	2°59	24°11	W14
T 15	23 34 51	21°50'13	21°40	17°16	8° 7	8° 9	29°59	12°44	26°16	20°55	1°22	12°53	13°33	3° 6	24°10	T 15
F 16	23 38 47	22°48'52	3♉32	18°26	9° 9	8°47	0♐ 7	12°41	26°19	20°57	1°22	12°44	13°30	3°12	24° 9	F 16
S 17	23 42 44	23°47'33	15°29	19°34	10°10	9°25	0°16	12°38	26°22	20°58	1°21	12°39	13°27	3°19	24° 8	S 17
S 18	23 46 41	24°46'17	27°33	20°40	11°12	10° 3	0°25	12°35	26°26	21° 0	1°21	12°36	13°24	3°26	24° 7	S 18
M19	23 50 37	25°45'03	9♊50	21°44	12°13	10°42	0°34	12°33	26°29	21° 1	1°21	12°D35	13°20	3°33	24° 5	M19
T 20	23 54 34	26°43'51	22°23	22°45	13°13	11°20	0°43	12°30	26°33	21° 2	1°20	12°R36	13°17	3°39	24° 4	T 20
W21	23 58 30	27°42'41	5♋17	23°44	14°14	11°58	0°52	12°28	26°36	21° 4	1°20	12°35	13°14	3°46	24° 3	W21
T 22	0 2 27	28°41'33	18°37	24°40	15°14	12°36	1° 1	12°25	26°39	21° 5	1°20	12°34	13°11	3°53	24° 1	T 22
F 23	0 6 23	29°40'28	2♌26	25°33	16°14	13°14	1°11	12°23	26°43	21° 7	1°19	12°30	13° 8	3°59	24° 0	F 23
S 24	0 10 20	0♎39'26	16°45	26°23	17°13	13°53	1°20	12°21	26°46	21° 9	1°19	12°24	13° 5	4° 6	23°58	S 24
S 25	0 14 16	1°38'25	1♍31	27°10	18°12	14°31	1°30	12°19	26°50	21°10	1°18	12°16	13° 1	4°13	23°57	S 25
M26	0 18 13	2°37'26	16°38	27°53	19°11	15° 9	1°39	12°16	26°53	21°12	1°18	12° 6	12°58	4°20	23°55	M26
T 27	0 22 10	3°36'30	1♎56	28°32	20° 9	15°47	1°49	12°14	26°57	21°13	1°17	11°55	12°55	4°26	23°53	T 27
W28	0 26 6	4°35'36	17°15	29° 7	21° 7	16°26	1°59	12°13	27° 0	21°15	1°17	11°46	12°52	4°33	23°52	W28
T 29	0 30 3	5°34'44	2♏22	29°37	22° 4	17° 4	2° 9	12°11	27° 4	21°17	1°16	11°39	12°49	4°40	23°50	T 29
F 30	0 33 59	6♎33'53	17♏10	0♏ 1	23♏ 1	17♍42	2♐19	12♒ 9	27♎ 7	21♏19	1♊15	11♐34	12♐46	4♈46	23♉48	F 30

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	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	8n31	12s48	3s54	0n32	0s10	10s18	1s22	12n50	1n 9	19s13	0n36	17s56	1s11	9s25	0n31	16s17	1n44	8n19	12s24	22s35	22s34	5n 7	16n 4	2s54
F 2	8 9	17 5	2 59	0s12	0 18	10 47	1 27	12 37	1 9	19 14	0 36	17 57	1 11	9 26	0 31	16 17	1 44	8 19	12 25	22 35	22 33	5 9	16 4	2 54
S 3	7 47	20 13	1 54	0 54	0 26	11 16	1 32	12 23	1 9	19 16	0 36	17 58	1 11	9 27	0 31	16 18	1 44	8 19	12 25	22 34	22 33	5 12	16 4	2 54
S 4	7 25	22 5	0 44	1 36	0 34	11 44	1 37	12 10	1 9	19 18	0 36	17 59	1 11	9 28	0 31	16 18	1 44	8 19	12 25	22 34	22 32	5 14	16 3	2 55
M 5	7 2	22 37	0n26	2 18	0 42	12 12	1 42	11 56	1 9	19 19	0 36	18 0	1 11	9 29	0 31	16 18	1 43	8 18	12 25	22 34	22 32	5 17	16 3	2 55
T 6	6 40	21 54	1 34	2 59	0 50	12 40	1 47	11 42	1 9	19 21	0 35	18 1	1 11	9 30	0 31	16 19	1 43	8 18	12 25	22 34	22 32	5 19	16 3	2 55
W 7	6 18	20 4	2 34	3 40	0 58	13 8	1 52	11 29	1 9	19 23	0 35	18 2	1 11	9 31	0 31	16 19	1 43	8 18	12 26	22 34	22 31	5 22	16 2	2 55
T 8	5 55	17 18	3 27	4 20	1 6	13 35	1 57	11 15	1 9	19 25	0 35	18 3	1 11	9 32	0 31	16 19	1 43	8 18	12 26	22 33	22 31	5 24	16 2	2 56
F 9	5 32	13 49	4 8	5 0	1 15	14 2	2 2	11 1	1 9	19 27	0 35	18 4	1 11	9 34	0 31	16 20	1 43	8 17	12 26	22 32	22 31	5 26	16 2	2 56
S 10	5 10	9 48	4 38	5 38	1 23	14 29	2 7	10 47	1 9	19 29	0 35	18 5	1 11	9 35	0 31	16 20	1 43	8 17	12 26	22 31	22 30	5 29	16 1	2 56
S 11	4 47	5 27	4 55	6 16	1 31	14 55	2 12	10 33	1 9	19 30	0 35	18 6	1 11	9 36	0 31	16 20	1 43	8 17	12 27	22 30	22 30	5 31	16 1	2 57
M12	4 24	0 55	4 59	6 54	1 39	15 22	2 17	10 18	1 9	19 32	0 34	18 7	1 11	9 37	0 31	16 21	1 43	8 17	12 27	22 28	22 29	5 34	16 0	2 57
T 13	4 1	3n37	4 50	7 30	1 47	15 47	2 22	10 4	1 9	19 34	0 34	18 8	1 11	9 38	0 31	16 21	1 43	8 16	12 27	22 26	22 29	5 36	16 0	2 57
W14	3 38	8 0	4 28	8 6	1 55	16 13	2 27	9 50	1 9	19 36	0 34	18 9	1 11	9 39	0 31	16 22	1 43	8 16	12 27	22 25	22 29	5 38	15 59	2 57
T 15	3 15	12 5	3 55	8 41	2 3	16 38	2 32	9 36	1 9	19 38	0 34	18 10	1 11	9 41	0 31	16 22	1 43	8 16	12 27	22 23	22 28	5 41	15 59	2 58
F 16	2 51	15 42	3 11	9 15	2 10	17 3	2 37	9 21	1 9	19 40	0 34	18 10	1 11	9 42	0 31	16 22	1 43	8 15	12 28	22 22	22 28	5 43	15 58	2 58
S 17	2 28	18 43	2 18	9 48	2 18	17 28	2 42	9 7	1 9	19 42	0 33	18 11	1 11	9 43	0 31	16 23	1 43	8 15	12 28	22 21	22 27	5 46	15 58	2 58
S 18	2 5	20 56	1 19	10 20	2 25	17 52	2 47	8 52	1 8	19 44	0 33	18 12	1 11	9 44	0 31	16 23	1 43	8 15	12 28	22 21	22 27	5 48	15 57	2 59
M19	1 42	22 13	0 15	10 50	2 33	18 16	2 52	8 38	1 8	19 46	0 33	18 13	1 11	9 46	0 31	16 24	1 43	8 15	12 28	22 21	22 27	5 50	15 56	2 59
T 20	1 18	22 24	0s52	11 20	2 40	18 39	2 57	8 23	1 8	19 48	0 33	18 14	1 11	9 47	0 31	16 24	1 43	8 14	12 28	22 21	22 26	5 53	15 56	2 59
W21	0 55	21 26	1 57	11 48	2 46	19 2	3 2	8 8	1 8	19 50	0 33	18 14	1 11	9 48	0 31	16 25	1 43	8 14	12 29	22 21	22 26	5 55	15 55	2 59
T 22	0 31	19 14	2 59	12 15	2 53	19 25	3 7	7 54	1 8	19 52	0 33	18 15	1 11	9 49	0 31	16 25	1 43	8 14	12 29	22 21	22 26	5 58	15 55	3 0
F 23	0 8	15 53	3 52	12 40	2 59	19 47	3 12	7 39	1 8	19 54	0 32	18 16	1 11	9 51	0 31	16 25	1 43	8 14	12 29	22 20	22 25	6 0	15 54	3 0
S 24	0s16	11 30	4 33	13 4	3 5	20 9	3 17	7 24	1 8	19 57	0 32	18 16	1 11	9 52	0 31	16 26	1 42	8 13	12 29	22 20	22 25	6 2	15 53	3 0
S 25	0 39	6 20	4 57	13 26	3 10	20 31	3 22	7 9	1 8	19 59	0 32	18 17	1 11	9 53	0 31	16 26	1 42	8 13	12 29	22 18	22 24	6 5	15 53	3 0
M26	1 3	0 40	5 1	13 46	3 15	20 52	3 27	6 54	1 8	20 1	0 32	18 17	1 11	9 54	0 31	16 27	1 42	8 13	12 30	22 17	22 24	6 7	15 52	3 1
T 27	1 26	5s 7	4 44	14 5	3 19	21 12	3 31	6 39	1 8	20 3	0 32	18 18	1 11	9 56	0 31	16 27	1 42	8 12	12 30	22 16	22 24	6 10	15 51	3 1
W28	1 50	10 35	4 7	14 21	3 23	21 32	3 36	6 24	1 8	20 5	0 32	18 18	1 11	9 57	0 31	16 28	1 42	8 12	12 30	22 14	22 23	6 12	15 51	3 1
T 29	2 13	15 20	3 12	14 34	3 26	21 52	3 40	6 9	1 8	20 7	0 31	18 19	1 11	9 58	0 31	16 28	1 42	8 12	12 30	22 14	22 23	6 14	15 50	3 2
F 30	2s37	19s 0	2s 6	14s45	3s29	22s11	3s45	5n54	1n 8	20s 9	0n31	18s19	1s11	10s 0	0n31	16s29	1n42	8n12	12s30	22s13	22s22	6n17	15n49	3s 2

Julian Day Number = 2319935.5, Delta T = 50.62 sec
Ecliptic obliquity = 23°29'08, Nutation = 0°00'17, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'39, Lahiri = 18°49'40Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

OCTOBER 1639 GC

00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	0 37 56	7♎33'05	1♐31	0♏20	23♏58	18♍20	2♐29	12°R 8	27♎11	21♏20	1°R15	11°R32	12♐42	4♈53	23°R46	S 1
S 2	0 41 52	8°32'18	15°24	0°33	24°54	18°59	2°40	12♒ 6	27°15	21°22	1♊14	11°D32	12°39	5° 0	23♉44	S 2
M 3	0 45 49	9°31'34	28°50	0°R39	25°49	19°37	2°50	12° 5	27°18	21°24	1°14	11♐32	12°36	5° 7	23°42	M 3
T 4	0 49 45	10°30'51	11♉51	0°38	26°44	20°15	3° 1	12° 3	27°22	21°26	1°13	11°R32	12°33	5°13	23°40	T 4
W 5	0 53 42	11°30'09	24°31	0°30	27°39	20°53	3°11	12° 2	27°25	21°27	1°12	11°32	12°30	5°20	23°38	W 5
T 6	0 57 39	12°29'30	6♒55	0°14	28°32	21°32	3°22	12° 1	27°29	21°29	1°12	11°29	12°26	5°27	23°36	T 6
F 7	1 1 35	13°28'52	19° 6	29♎49	29°26	22°10	3°33	12° 0	27°33	21°31	1°11	11°23	12°23	5°33	23°33	F 7
S 8	1 5 32	14°28'16	1♓ 8	29°17	0♐18	22°48	3°44	11°59	27°37	21°33	1°10	11°15	12°20	5°40	23°31	S 8
S 9	1 9 28	15°27'42	13° 4	28°35	1°11	23°27	3°55	11°58	27°40	21°35	1° 9	11° 6	12°17	5°47	23°29	S 9
M10	1 13 25	16°27'10	24°57	27°46	2° 2	24° 5	4° 6	11°57	27°44	21°37	1° 9	10°55	12°14	5°54	23°26	M10
T 11	1 17 21	17°26'40	6♈49	26°50	2°53	24°43	4°17	11°57	27°48	21°39	1° 8	10°44	12°11	6° 0	23°24	T 11
W12	1 21 18	18°26'12	18°42	25°47	3°43	25°21	4°28	11°56	27°51	21°41	1° 7	10°34	12° 7	6° 7	23°21	W12
T 13	1 25 14	19°25'46	0♉36	24°38	4°32	26° 0	4°39	11°56	27°55	21°43	1° 6	10°26	12° 4	6°14	23°19	T 13
F 14	1 29 11	20°25'22	12°34	23°25	5°20	26°38	4°51	11°56	27°59	21°45	1° 6	10°20	12° 1	6°20	23°16	F 14
S 15	1 33 8	21°25'00	24°38	22°11	6° 8	27°16	5° 2	11°55	28° 3	21°47	1° 5	10°17	11°58	6°27	23°14	S 15
S 16	1 37 4	22°24'40	6♊49	20°57	6°55	27°55	5°14	11°55	28° 6	21°49	1° 4	10°D15	11°55	6°34	23°11	S 16
M17	1 41 1	23°24'23	19°11	19°45	7°41	28°33	5°25	11°D55	28°10	21°51	1° 3	10°15	11°52	6°41	23° 8	M17
T 18	1 44 57	24°24'07	1♋47	18°37	8°26	29°11	5°37	11°55	28°14	21°53	1° 2	10°17	11°48	6°47	23° 5	T 18
W19	1 48 54	25°23'55	14°41	17°37	9°10	29°50	5°49	11°55	28°18	21°55	1° 1	10°18	11°45	6°54	23° 3	W19
T 20	1 52 50	26°23'44	27°57	16°44	9°53	0♎28	6° 0	11°56	28°21	21°57	1° 0	10°R18	11°42	7° 1	23° 0	T 20
F 21	1 56 47	27°23'35	11♌37	16° 2	10°36	1° 6	6°12	11°56	28°25	21°59	0°59	10°17	11°39	7° 7	22°57	F 21
S 22	2 0 43	28°23'29	25°43	15°30	11°17	1°45	6°24	11°57	28°29	22° 1	0°59	10°15	11°36	7°14	22°54	S 22
S 23	2 4 40	29°23'25	10♍14	15° 9	11°57	2°23	6°36	11°57	28°33	22° 3	0°58	10°10	11°32	7°21	22°51	S 23
M24	2 8 36	0♏23'23	25° 6	15°D 0	12°36	3° 2	6°48	11°58	28°36	22° 5	0°57	10° 4	11°29	7°27	22°48	M24
T 25	2 12 33	1°23'24	10♎12	15° 3	13°13	3°40	7° 0	11°59	28°40	22° 7	0°56	9°58	11°26	7°34	22°45	T 25
W26	2 16 30	2°23'26	25°23	15°16	13°50	4°18	7°13	12° 0	28°44	22° 9	0°55	9°53	11°23	7°41	22°42	W26
T 27	2 20 26	3°23'30	10♏28	15°39	14°25	4°57	7°25	12° 1	28°48	22°12	0°54	9°49	11°20	7°48	22°39	T 27
F 28	2 24 23	4°23'37	25°19	16°12	14°59	5°35	7°37	12° 2	28°51	22°14	0°53	9°46	11°17	7°54	22°36	F 28
S 29	2 28 19	5°23'45	9♐47	16°54	15°32	6°14	7°50	12° 3	28°55	22°16	0°52	9°D45	11°13	8° 1	22°33	S 29
S 30	2 32 16	6°23'54	23°49	17°44	16° 3	6°52	8° 2	12° 4	28°59	22°18	0°51	9°46	11°10	8° 8	22°30	S 30
M31	2 36 12	7♏24'06	7♑24	18♎40	16♐32	7♎30	8♐15	12♒ 6	29♎ 3	22♏20	0♊50	9♐47	11♐ 7	8♈14	22♉27	M31

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷		Day
	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	3s 0	21s22	0s53	14s53	3s30	22s30	3s49	5n39	1n 7	20s11	0n31	18s20	1s11	10s 1	0n31	16s29	1n42	8n11	12s31	22s13	22s22	6n19	15n49	3s 2	S 1
S 2	3 24	22 20	0n21	14 58	3 31	22 48	3 54	5 24	1 7	20 14	0 31	18 20	1 11	10 2	0 31	16 30	1 42	8 11	12 31	22 13	22 21	6 21	15 48	3 2	S 2
M 3	3 47	21 58	1 31	15 0	3 30	23 6	3 58	5 9	1 7	20 16	0 31	18 20	1 11	10 3	0 31	16 30	1 42	8 11	12 31	22 13	22 21	6 24	15 47	3 3	M 3
T 4	4 10	20 23	2 35	14 58	3 29	23 23	4 2	4 54	1 7	20 18	0 31	18 21	1 11	10 5	0 31	16 31	1 42	8 10	12 31	22 13	22 21	6 26	15 46	3 3	T 4
W 5	4 33	17 50	3 29	14 52	3 26	23 40	4 7	4 39	1 7	20 20	0 30	18 21	1 11	10 6	0 31	16 31	1 42	8 10	12 31	22 13	22 20	6 28	15 46	3 3	W 5
T 6	4 57	14 31	4 12	14 43	3 21	23 57	4 11	4 23	1 7	20 22	0 30	18 21	1 11	10 7	0 30	16 32	1 42	8 10	12 31	22 12	22 20	6 31	15 45	3 3	T 6
F 7	5 20	10 39	4 42	14 28	3 15	24 12	4 15	4 8	1 7	20 25	0 30	18 22	1 11	10 9	0 30	16 32	1 42	8 9	12 32	22 11	22 19	6 33	15 44	3 4	F 7
S 8	5 43	6 25	5 0	14 10	3 8	24 28	4 18	3 53	1 7	20 27	0 30	18 22	1 11	10 10	0 30	16 33	1 42	8 9	12 32	22 10	22 19	6 36	15 43	3 4	S 8
S 9	6 6	1 59	5 5	13 46	2 58	24 43	4 22	3 38	1 7	20 29	0 30	18 22	1 11	10 11	0 30	16 33	1 42	8 9	12 32	22 9	22 19	6 38	15 42	3 4	S 9
M10	6 29	2n31	4 56	13 18	2 47	24 57	4 26	3 22	1 6	20 31	0 30	18 22	1 11	10 13	0 30	16 34	1 42	8 9	12 32	22 7	22 18	6 40	15 42	3 4	M10
T 11	6 52	6 55	4 34	12 45	2 34	25 11	4 29	3 7	1 6	20 33	0 30	18 22	1 11	10 14	0 30	16 34	1 42	8 8	12 32	22 6	22 18	6 43	15 41	3 4	T 11
W12	7 14	11 3	4 1	12 8	2 19	25 24	4 33	2 52	1 6	20 36	0 29	18 22	1 11	10 15	0 30	16 35	1 42	8 8	12 32	22 5	22 17	6 45	15 40	3 5	W12
T 13	7 37	14 46	3 17	11 28	2 3	25 37	4 36	2 36	1 6	20 38	0 29	18 23	1 11	10 17	0 30	16 35	1 42	8 8	12 33	22 3	22 17	6 47	15 39	3 5	T 13
F 14	8 0	17 55	2 23	10 44	1 45	25 49	4 39	2 21	1 6	20 40	0 29	18 23	1 11	10 18	0 30	16 36	1 42	8 7	12 33	22 2	22 16	6 50	15 38	3 5	F 14
S 15	8 22	20 19	1 23	9 58	1 25	26 0	4 42	2 5	1 6	20 42	0 29	18 23	1 11	10 20	0 30	16 36	1 42	8 7	12 33	22 2	22 16	6 52	15 37	3 5	S 15
S 16	8 44	21 48	0 19	9 12	1 5	26 11	4 45	1 50	1 6	20 44	0 29	18 23	1 11	10 21	0 30	16 37	1 42	8 7	12 33	22 2	22 16	6 54	15 37	3 6	S 16
M17	9 7	22 15	0s48	8 25	0 44	26 22	4 48	1 35	1 5	20 47	0 29	18 23	1 10	10 22	0 30	16 38	1 42	8 7	12 33	22 2	22 15	6 57	15 36	3 6	M17
T 18	9 29	21 35	1 54	7 41	0 24	26 32	4 50	1 19	1 5	20 49	0 29	18 23	1 10	10 24	0 30	16 38	1 42	8 6	12 33	22 2	22 15	6 59	15 35	3 6	T 18
W19	9 51	19 46	2 55	6 59	0 3	26 41	4 53	1 4	1 5	20 51	0 28	18 22	1 10	10 25	0 30	16 39	1 42	8 6	12 33	22 2	22 14	7 1	15 34	3 6	W19
T 20	10 12	16 52	3 49	6 21	0n16	26 50	4 55	0 48	1 5	20 53	0 28	18 22	1 10	10 26	0 30	16 39	1 42	8 6	12 34	22 2	22 14	7 4	15 33	3 6	T 20
F 21	10 34	12 58	4 32	5 47	0 35	26 59	4 57	0 33	1 5	20 55	0 28	18 22	1 10	10 28	0 30	16 40	1 41	8 5	12 34	22 2	22 13	7 6	15 32	3 7	F 21
S 22	10 55	8 16	5 0	5 19	0 52	27 6	4 59	0 18	1 5	20 58	0 28	18 22	1 10	10 29	0 30	16 40	1 41	8 5	12 34	22 2	22 13	7 8	15 31	3 7	S 22
S 23	11 17	2 58	5 10	4 57	1 7	27 13	5 0	0 2	1 4	21 0	0 28	18 22	1 10	10 30	0 30	16 41	1 41	8 5	12 34	22 1	22 13	7 10	15 30	3 7	S 23
M24	11 38	2s38	4 59	4 41	1 21	27 20	5 2	0s13	1 4	21 2	0 28	18 22	1 10	10 32	0 30	16 41	1 41	8 5	12 34	22 0	22 12	7 13	15 29	3 7	M24
T 25	11 59	8 9	4 28	4 30	1 33	27 26	5 3	0 29	1 4	21 4	0 28	18 21	1 10	10 33	0 30	16 42	1 41	8 4	12 34	21 59	22 12	7 15	15 28	3 7	T 25
W26	12 20	13 13	3 38	4 26	1 44	27 32	5 4	0 44	1 4	21 6	0 27	18 21	1 10	10 34	0 30	16 43	1 41	8 4	12 34	21 58	22 11	7 17	15 27	3 8	W26
T 27	12 40	17 24	2 33	4 27	1 52	27 37	5 4	1 0	1 4	21 8	0 27	18 21	1 10	10 36	0 30	16 43	1 41	8 4	12 34	21 58	22 11	7 20	15 27	3 8	T 27
F 28	13 1	20 23	1 18	4 33	1 59	27 41	5 5	1 15	1 4	21 11	0 27	18 20	1 10	10 37	0 30	16 44	1 41	8 3	12 34	21 57	22 10	7 22	15 26	3 8	F 28
S 29	13 21	21 57	0n 0	4 44	2 5	27 45	5 5	1 30	1 3	21 13	0 27	18 20	1 10	10 38	0 30	16 44	1 41	8 3	12 34	21 57	22 10	7 24	15 25	3 8	S 29
S 30	13 41	22 4	1 16	4 59	2 9	27 48	5 5	1 46	1 3	21 15	0 27	18 20	1 10	10 40	0 30	16 45	1 41	8 3	12 34	21 57	22 10	7 27	15 24	3 8	S 30
M31	14s 0	20s52	2n25	5s18	2n12	27s51	5s 4	2s 1	1n 3	21s17	0n27	18s19	1s10	10s41	0n30	16s45	1n41	8n 3	12s35	21s58	22s 9	7n29	15n23	3s 8	M31

Julian Day Number = 2319965.5, Delta T = 50.56 sec
Ecliptic obliquity = 23°29'08, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'43, Lahiri = 18°49'44Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

NOVEMBER 1639 GC — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	2 40 9	8♏24'19	20♉32	19♎43	17♐ 0	8♎ 9	8♐27	12♒ 7	29♎ 6	22♏22	0°R49	9♐49	11♐ 4	8♈21	22°R23	T 1
W 2	2 44 6	9°24'33	3♒16	20°51	17°26	8°47	8°40	12° 9	29°10	22°25	0♊48	9°50	11° 1	8°28	22♉20	W 2
T 3	2 48 2	10°24'49	15°42	22° 3	17°51	9°26	8°53	12°11	29°14	22°27	0°47	9°R50	10°57	8°35	22°17	T 3
F 4	2 51 59	11°25'06	27°52	23°20	18°14	10° 4	9° 5	12°12	29°18	22°29	0°45	9°49	10°54	8°41	22°14	F 4
S 5	2 55 55	12°25'25	9♓52	24°39	18°35	10°43	9°18	12°14	29°21	22°31	0°44	9°46	10°51	8°48	22°10	S 5
S 6	2 59 52	13°25'45	21°46	26° 2	18°54	11°21	9°31	12°16	29°25	22°34	0°43	9°43	10°48	8°55	22° 7	S 6
M 7	3 3 48	14°26'07	3♈37	27°27	19°11	11°59	9°44	12°18	29°29	22°36	0°42	9°38	10°45	9° 1	22° 4	M 7
T 8	3 7 45	15°26'30	15°29	28°54	19°26	12°38	9°57	12°21	29°32	22°38	0°41	9°34	10°42	9° 8	22° 1	T 8
W 9	3 11 41	16°26'55	27°24	0♏22	19°39	13°16	10°10	12°23	29°36	22°40	0°40	9°30	10°38	9°15	21°57	W 9
T 10	3 15 38	17°27'21	9♉25	1°52	19°50	13°55	10°23	12°25	29°40	22°43	0°39	9°26	10°35	9°21	21°54	T 10
F 11	3 19 34	18°27'49	21°32	3°23	19°58	14°33	10°36	12°28	29°43	22°45	0°38	9°24	10°32	9°28	21°51	F 11
S 12	3 23 31	19°28'19	3♊48	4°55	20° 5	15°12	10°49	12°30	29°47	22°47	0°37	9°D23	10°29	9°35	21°47	S 12
S 13	3 27 28	20°28'50	16°14	6°28	20° 9	15°50	11° 2	12°33	29°50	22°49	0°36	9°23	10°26	9°42	21°44	S 13
M14	3 31 24	21°29'23	28°51	8° 1	20°R10	16°29	11°15	12°36	29°54	22°52	0°35	9°24	10°23	9°48	21°41	M14
T 15	3 35 21	22°29'58	11♋41	9°35	20°10	17° 7	11°28	12°39	29°58	22°54	0°33	9°25	10°19	9°55	21°37	T 15
W16	3 39 17	23°30'34	24°46	11° 9	20° 7	17°46	11°42	12°42	0♏ 1	22°56	0°32	9°27	10°16	10° 2	21°34	W16
T 17	3 43 14	24°31'12	8♌ 6	12°43	20° 1	18°25	11°55	12°45	0° 5	22°58	0°31	9°28	10°13	10° 8	21°31	T 17
F 18	3 47 10	25°31'52	21°45	14°17	19°53	19° 3	12° 8	12°48	0° 8	23° 1	0°30	9°R28	10°10	10°15	21°27	F 18
S 19	3 51 7	26°32'33	5♍41	15°51	19°42	19°42	12°21	12°51	0°12	23° 3	0°29	9°28	10° 7	10°22	21°24	S 19
S 20	3 55 3	27°33'16	19°55	17°26	19°29	20°20	12°35	12°54	0°15	23° 5	0°28	9°28	10° 3	10°29	21°21	S 20
M21	3 59 0	28°34'01	4♎25	19° 0	19°14	20°59	12°48	12°58	0°19	23° 7	0°27	9°26	10° 0	10°35	21°18	M21
T 22	4 2 57	29°34'47	19° 6	20°35	18°56	21°37	13° 2	13° 1	0°22	23°10	0°25	9°25	9°57	10°42	21°14	T 22
W23	4 6 53	0♐35'35	3♏53	22° 9	18°36	22°16	13°15	13° 5	0°25	23°12	0°24	9°24	9°54	10°49	21°11	W23
T 24	4 10 50	1°36'24	18°39	23°44	18°14	22°55	13°29	13° 9	0°29	23°14	0°23	9°23	9°51	10°55	21° 8	T 24
F 25	4 14 46	2°37'15	3♐16	25°18	17°50	23°33	13°42	13°12	0°32	23°16	0°22	9°D23	9°48	11° 2	21° 4	F 25
S 26	4 18 43	3°38'07	17°37	26°53	17°23	24°12	13°56	13°16	0°35	23°19	0°21	9°23	9°44	11° 9	21° 1	S 26
S 27	4 22 39	4°39'00	1♑39	28°27	16°55	24°50	14° 9	13°20	0°39	23°21	0°20	9°23	9°41	11°15	20°58	S 27
M28	4 26 36	5°39'54	15°17	0♐ 1	16°25	25°29	14°23	13°24	0°42	23°23	0°19	9°24	9°38	11°22	20°55	M28
T 29	4 30 33	6°40'49	28°30	1°36	15°53	26° 8	14°36	13°28	0°45	23°25	0°18	9°24	9°35	11°29	20°52	T 29
W30	4 34 29	7♐41'45	11♒21	3♐10	15♐20	26♎46	14♐50	13♒33	0♏48	23♏27	0♊16	9♐24	9♐32	11♈36	20♉48	W30

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	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	14s20	18s32	3n25	5s40	2n13	27s53	5s 3	2s17	1n 3	21s19	0n27	18s19	1s10	10s42	0n30	16s46	1n41	8n 2	12s35	21s58	22s 9	7n31	15n22	3s 9
W 2	14 39	15 22	4 12	6 5	2 14	27 54	5 2	2 32	1 3	21 21	0 27	18 18	1 10	10 44	0 30	16 47	1 41	8 2	12 35	21 58	22 8	7 33	15 21	3 9
T 3	14 58	11 36	4 46	6 33	2 13	27 55	5 1	2 47	1 2	21 23	0 26	18 18	1 10	10 45	0 30	16 47	1 41	8 2	12 35	21 58	22 8	7 36	15 20	3 9
F 4	15 17	7 26	5 7	7 2	2 12	27 56	4 59	3 3	1 2	21 25	0 26	18 17	1 10	10 46	0 30	16 48	1 41	8 2	12 35	21 58	22 7	7 38	15 19	3 9
S 5	15 36	3 3	5 13	7 34	2 9	27 55	4 57	3 18	1 2	21 27	0 26	18 16	1 10	10 48	0 30	16 48	1 41	8 1	12 35	21 57	22 7	7 40	15 18	3 9
S 6	15 54	1n25	5 7	8 7	2 6	27 54	4 54	3 33	1 2	21 29	0 26	18 16	1 10	10 49	0 30	16 49	1 41	8 1	12 35	21 57	22 6	7 43	15 17	3 9
M 7	16 12	5 49	4 47	8 40	2 3	27 53	4 51	3 48	1 2	21 31	0 26	18 15	1 10	10 50	0 30	16 49	1 41	8 1	12 35	21 56	22 6	7 45	15 16	3 9
T 8	16 30	10 1	4 14	9 15	1 59	27 51	4 48	4 4	1 1	21 33	0 26	18 15	1 9	10 52	0 30	16 50	1 41	8 1	12 35	21 56	22 6	7 47	15 15	3 10
W 9	16 47	13 51	3 31	9 50	1 54	27 48	4 44	4 19	1 1	21 35	0 26	18 14	1 9	10 53	0 30	16 51	1 41	8 0	12 35	21 55	22 5	7 49	15 14	3 10
T 10	17 4	17 9	2 38	10 26	1 49	27 44	4 40	4 34	1 1	21 37	0 26	18 13	1 9	10 54	0 30	16 51	1 41	8 0	12 35	21 55	22 5	7 52	15 13	3 10
F 11	17 21	19 44	1 37	11 2	1 44	27 40	4 35	4 49	1 1	21 39	0 26	18 12	1 9	10 55	0 30	16 52	1 41	8 0	12 35	21 54	22 4	7 54	15 12	3 10
S 12	17 38	21 27	0 31	11 39	1 38	27 36	4 30	5 4	1 0	21 41	0 25	18 12	1 9	10 57	0 30	16 52	1 41	8 0	12 35	21 54	22 4	7 56	15 11	3 10
S 13	17 54	22 9	0s38	12 15	1 32	27 30	4 24	5 19	1 0	21 43	0 25	18 11	1 9	10 58	0 30	16 53	1 41	7 59	12 35	21 54	22 3	7 58	15 10	3 10
M14	18 10	21 43	1 46	12 51	1 26	27 24	4 18	5 34	1 0	21 45	0 25	18 10	1 9	10 59	0 30	16 53	1 41	7 59	12 35	21 54	22 3	8 1	15 9	3 10
T 15	18 26	20 10	2 49	13 27	1 20	27 17	4 11	5 49	1 0	21 47	0 25	18 9	1 9	11 0	0 30	16 54	1 41	7 59	12 35	21 54	22 2	8 3	15 8	3 10
W16	18 41	17 31	3 45	14 2	1 13	27 10	4 3	6 4	0 59	21 49	0 25	18 8	1 9	11 2	0 30	16 55	1 41	7 59	12 35	21 55	22 2	8 5	15 7	3 11
T 17	18 56	13 55	4 31	14 37	1 7	27 1	3 55	6 19	0 59	21 51	0 25	18 7	1 9	11 3	0 30	16 55	1 41	7 58	12 35	21 55	22 1	8 7	15 6	3 11
F 18	19 11	9 31	5 2	15 12	1 0	26 52	3 47	6 34	0 59	21 53	0 25	18 6	1 9	11 4	0 30	16 56	1 41	7 58	12 35	21 55	22 1	8 10	15 6	3 11
S 19	19 25	4 33	5 16	15 46	0 53	26 42	3 38	6 49	0 59	21 55	0 25	18 5	1 9	11 5	0 30	16 56	1 41	7 58	12 35	21 55	22 1	8 12	15 5	3 11
S 20	19 39	0s46	5 11	16 19	0 46	26 31	3 28	7 4	0 58	21 57	0 25	18 4	1 9	11 7	0 30	16 57	1 41	7 58	12 35	21 55	22 0	8 14	15 4	3 11
M21	19 53	6 9	4 47	16 52	0 40	26 20	3 18	7 18	0 58	21 58	0 24	18 3	1 9	11 8	0 30	16 57	1 41	7 58	12 35	21 55	22 0	8 16	15 3	3 11
T 22	20 6	11 15	4 4	17 24	0 33	26 8	3 7	7 33	0 58	22 0	0 24	18 2	1 9	11 9	0 30	16 58	1 41	7 57	12 35	21 54	21 59	8 19	15 2	3 11
W23	20 19	15 44	3 4	17 56	0 26	25 55	2 56	7 48	0 58	22 2	0 24	18 1	1 9	11 10	0 30	16 59	1 41	7 57	12 35	21 54	21 59	8 21	15 1	3 11
T 24	20 31	19 13	1 53	18 26	0 19	25 41	2 44	8 2	0 57	22 4	0 24	18 0	1 9	11 11	0 30	16 59	1 41	7 57	12 35	21 54	21 58	8 23	15 0	3 11
F 25	20 43	21 24	0 34	18 56	0 12	25 26	2 31	8 17	0 57	22 5	0 24	17 59	1 9	11 12	0 30	17 0	1 41	7 57	12 35	21 54	21 58	8 25	14 59	3 11
S 26	20 55	22 9	0n46	19 25	0 5	25 11	2 18	8 31	0 57	22 7	0 24	17 58	1 9	11 14	0 30	17 0	1 41	7 57	12 35	21 54	21 57	8 28	14 58	3 11
S 27	21 7	21 28	2 1	19 53	0s 2	24 55	2 5	8 46	0 56	22 9	0 24	17 57	1 9	11 15	0 30	17 1	1 41	7 57	12 35	21 54	21 57	8 30	14 57	3 11
M28	21 17	19 31	3 6	20 20	0 9	24 38	1 51	9 0	0 56	22 11	0 24	17 56	1 9	11 16	0 30	17 1	1 41	7 56	12 35	21 54	21 56	8 32	14 56	3 11
T 29	21 28	16 35	4 0	20 46	0 15	24 20	1 36	9 14	0 56	22 12	0 24	17 54	1 9	11 17	0 30	17 2	1 41	7 56	12 35	21 54	21 56	8 34	14 56	3 11
W30	21s38	12s55	4n40	21s11	0s22	24s 2	1s22	9s29	0n55	22s14	0n24	17s53	1s 9	11s18	0n30	17s 2	1n41	7n56	12s35	21s54	21s55	8n36	14n55	3s11

Julian Day Number = 2319996.5, Delta T = 50.50 sec
Ecliptic obliquity = 23°29'07, Nutation = 0°00'15, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'48, Lahiri = 18°49'48Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1639
geocentric

DECEMBER 1639 GC

00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	4 38 26	8♐42'41	23♒51	4♐44	14°R46	27♎25	15♐ 3	13♒37	0♏52	23♏30	0°R15	9♐24	9♐29	11♈42	20°R45	T 1
F 2	4 42 22	9°43'38	6♓ 4	6°18	14♐11	28° 3	15°17	13°41	0°55	23°32	0♊14	9°24	9°25	11°49	20♉42	F 2
S 3	4 46 19	10°44'36	18° 6	7°52	13°35	28°42	15°31	13°46	0°58	23°34	0°13	9°24	9°22	11°56	20°39	S 3
S 4	4 50 15	11°45'35	29°59	9°27	12°59	29°21	15°44	13°50	1° 1	23°36	0°12	9°25	9°19	12° 2	20°36	S 4
M 5	4 54 12	12°46'34	11♈50	11° 1	12°23	29°59	15°58	13°55	1° 4	23°38	0°11	9°25	9°16	12° 9	20°33	M 5
T 6	4 58 8	13°47'34	23°43	12°35	11°46	0♏38	16°11	13°59	1° 7	23°41	0°10	9°25	9°13	12°16	20°30	T 6
W 7	5 2 5	14°48'34	5♉41	14° 9	11°10	1°17	16°25	14° 4	1°10	23°43	0° 9	9°26	9° 9	12°22	20°27	W 7
T 8	5 6 1	15°49'35	17°47	15°44	10°34	1°55	16°39	14° 9	1°13	23°45	0° 8	9°26	9° 6	12°29	20°24	T 8
F 9	5 9 58	16°50'37	0♊ 5	17°18	10° 0	2°34	16°52	14°14	1°16	23°47	0° 6	9°27	9° 3	12°36	20°21	F 9
S 10	5 13 55	17°51'40	12°36	18°53	9°26	3°13	17° 6	14°19	1°19	23°49	0° 5	9°R27	9° 0	12°43	20°18	S 10
S 11	5 17 51	18°52'43	25°21	20°27	8°53	3°51	17°20	14°24	1°22	23°51	0° 4	9°27	8°57	12°49	20°16	S 11
M12	5 21 48	19°53'47	8♋21	22° 2	8°22	4°30	17°33	14°29	1°24	23°53	0° 3	9°26	8°54	12°56	20°13	M12
T 13	5 25 44	20°54'52	21°34	23°37	7°53	5° 9	17°47	14°34	1°27	23°55	0° 2	9°24	8°50	13° 3	20°10	T 13
W14	5 29 41	21°55'57	5♌ 1	25°12	7°25	5°47	18° 1	14°39	1°30	23°57	0° 1	9°23	8°47	13° 9	20° 7	W14
T 15	5 33 37	22°57'03	18°39	26°47	7° 0	6°26	18°14	14°45	1°33	23°59	0° 0	9°21	8°44	13°16	20° 5	T 15
F 16	5 37 34	23°58'10	2♍29	28°23	6°37	7° 5	18°28	14°50	1°35	24° 1	29♉59	9°19	8°41	13°23	20° 2	F 16
S 17	5 41 31	24°59'18	16°28	29°59	6°16	7°43	18°41	14°55	1°38	24° 3	29°58	9°19	8°38	13°29	19°59	S 17
S 18	5 45 27	26° 0'26	0♎34	1♍34	5°57	8°22	18°55	15° 1	1°41	24° 5	29°57	9°D18	8°35	13°36	19°57	S 18
M19	5 49 24	27° 1'35	14°47	3°10	5°40	9° 1	19° 9	15° 6	1°43	24° 7	29°56	9°19	8°31	13°43	19°54	M19
T 20	5 53 20	28° 2'45	29° 4	4°47	5°26	9°39	19°22	15°12	1°46	24° 9	29°55	9°20	8°28	13°50	19°52	T 20
W21	5 57 17	29° 3'55	13♏22	6°23	5°15	10°18	19°36	15°18	1°48	24°11	29°54	9°22	8°25	13°56	19°50	W21
T 22	6 1 13	0♍ 5'06	27°38	8° 0	5° 6	10°57	19°49	15°23	1°51	24°13	29°53	9°23	8°22	14° 3	19°47	T 22
F 23	6 5 10	1° 6'17	11♐48	9°36	5° 0	11°36	20° 3	15°29	1°53	24°15	29°52	9°R23	8°19	14°10	19°45	F 23
S 24	6 9 6	2° 7'29	25°49	11°13	4°56	12°14	20°17	15°35	1°55	24°17	29°51	9°22	8°15	14°16	19°43	S 24
S 25	6 13 3	3° 8'41	9♍35	12°50	4°D54	12°53	20°30	15°41	1°58	24°19	29°50	9°20	8°12	14°23	19°41	S 25
M26	6 17 0	4° 9'53	23° 5	14°28	4°55	13°32	20°44	15°47	2° 0	24°21	29°49	9°17	8° 9	14°30	19°38	M26
T 27	6 20 56	5°11'05	6♒15	16° 5	4°58	14°11	20°57	15°53	2° 2	24°23	29°48	9°13	8° 6	14°36	19°36	T 27
W28	6 24 53	6°12'17	19° 6	17°42	5° 4	14°49	21°11	15°59	2° 4	24°24	29°47	9° 8	8° 3	14°43	19°34	W28
T 29	6 28 49	7°13'29	1♓38	19°19	5°12	15°28	21°24	16° 5	2° 6	24°26	29°47	9° 4	8° 0	14°50	19°32	T 29
F 30	6 32 46	8°14'40	13°53	20°56	5°22	16° 7	21°37	16°11	2° 8	24°28	29°46	9° 0	7°56	14°57	19°31	F 30
S 31	6 36 42	9♍15'51	25♓56	22♍32	5♐35	16♏46	21♐51	16♒18	2♏10	24♏30	29♉45	8♐58	7♐53	15♈ 3	19♉29	S 31

Day	☉	☽		☿		♀		♂		♃		♄		♅		♆		♇		☊	☊	⚸	⚷	
	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	21s48	8s47	5n 6	21s36	0s29	23s43	1s 7	9s43	0n55	22s15	0n23	17s52	1s 9	11s19	0n30	17s 3	1n41	7n56	12s35	21s54	21s55	8n39	14n54	3s11
F 2	21 57	4 23	5 17	21 59	0 35	23 24	0 52	9 57	0 55	22 17	0 23	17 51	1 9	11 20	0 30	17 3	1 41	7 56	12 35	21 54	21 54	8 41	14 53	3 11
S 3	22 6	0n 6	5 14	22 21	0 41	23 4	0 36	10 11	0 54	22 19	0 23	17 49	1 8	11 21	0 30	17 4	1 41	7 56	12 34	21 54	21 54	8 43	14 52	3 12
S 4	22 14	4 32	4 57	22 41	0 47	22 44	0 21	10 25	0 54	22 20	0 23	17 48	1 8	11 22	0 30	17 4	1 41	7 55	12 34	21 54	21 53	8 45	14 51	3 12
M 5	22 22	8 48	4 28	23 1	0 53	22 24	0 5	10 39	0 54	22 22	0 23	17 47	1 8	11 24	0 30	17 5	1 41	7 55	12 34	21 54	21 53	8 47	14 51	3 12
T 6	22 30	12 45	3 48	23 20	0 59	22 4	0n11	10 53	0 53	22 23	0 23	17 45	1 8	11 25	0 30	17 6	1 41	7 55	12 34	21 54	21 52	8 50	14 50	3 12
W 7	22 37	16 13	2 57	23 37	1 5	21 44	0 26	11 7	0 53	22 25	0 23	17 44	1 8	11 26	0 30	17 6	1 41	7 55	12 34	21 54	21 52	8 52	14 49	3 12
T 8	22 44	19 3	1 57	23 53	1 11	21 23	0 42	11 20	0 53	22 26	0 23	17 42	1 8	11 27	0 30	17 7	1 41	7 55	12 34	21 55	21 51	8 54	14 48	3 12
F 9	22 50	21 3	0 52	24 8	1 16	21 3	0 57	11 34	0 52	22 28	0 23	17 41	1 8	11 28	0 30	17 7	1 41	7 55	12 34	21 55	21 51	8 56	14 47	3 12
S 10	22 56	22 4	0s17	24 22	1 21	20 43	1 12	11 47	0 52	22 29	0 23	17 39	1 8	11 29	0 31	17 8	1 41	7 55	12 34	21 55	21 50	8 58	14 47	3 12
S 11	23 1	21 57	1 27	24 35	1 26	20 24	1 27	12 1	0 52	22 30	0 23	17 38	1 8	11 30	0 31	17 8	1 41	7 55	12 34	21 55	21 50	9 0	14 46	3 12
M12	23 6	20 40	2 33	24 46	1 31	20 5	1 41	12 14	0 51	22 32	0 22	17 36	1 8	11 31	0 31	17 9	1 41	7 55	12 33	21 54	21 50	9 3	14 45	3 12
T 13	23 10	18 15	3 33	24 55	1 36	19 47	1 55	12 28	0 51	22 33	0 22	17 35	1 8	11 31	0 31	17 9	1 41	7 55	12 33	21 54	21 49	9 5	14 45	3 12
W14	23 14	14 49	4 21	25 4	1 40	19 29	2 8	12 41	0 51	22 34	0 22	17 33	1 8	11 32	0 31	17 10	1 41	7 54	12 33	21 54	21 49	9 7	14 44	3 12
T 15	23 18	10 34	4 56	25 11	1 44	19 12	2 21	12 54	0 50	22 36	0 22	17 32	1 8	11 33	0 31	17 10	1 41	7 54	12 33	21 54	21 48	9 9	14 43	3 12
F 16	23 21	5 43	5 14	25 17	1 48	18 56	2 34	13 7	0 50	22 37	0 22	17 30	1 8	11 34	0 31	17 10	1 42	7 54	12 33	21 53	21 48	9 11	14 42	3 11
S 17	23 23	0 32	5 14	25 21	1 52	18 40	2 46	13 20	0 49	22 38	0 22	17 29	1 8	11 35	0 31	17 11	1 42	7 54	12 33	21 53	21 47	9 13	14 42	3 11
S 18	23 25	4s44	4 55	25 24	1 55	18 26	2 57	13 33	0 49	22 39	0 22	17 27	1 8	11 36	0 31	17 11	1 42	7 54	12 33	21 53	21 47	9 16	14 41	3 11
M19	23 27	9 48	4 18	25 25	1 58	18 12	3 8	13 46	0 49	22 41	0 22	17 25	1 8	11 37	0 31	17 12	1 42	7 54	12 33	21 53	21 46	9 18	14 41	3 11
T 20	23 28	14 21	3 25	25 25	2 1	18 0	3 18	13 58	0 48	22 42	0 22	17 24	1 8	11 38	0 31	17 12	1 42	7 54	12 32	21 54	21 46	9 20	14 40	3 11
W21	23 29	18 5	2 19	25 23	2 3	17 48	3 28	14 11	0 48	22 43	0 22	17 22	1 8	11 39	0 31	17 13	1 42	7 54	12 32	21 54	21 45	9 22	14 39	3 11
T 22	23 29	20 43	1 4	25 20	2 5	17 37	3 37	14 23	0 47	22 44	0 22	17 20	1 8	11 39	0 31	17 13	1 42	7 54	12 32	21 54	21 45	9 24	14 39	3 11
F 23	23 29	22 2	0n13	25 15	2 7	17 28	3 46	14 36	0 47	22 45	0 22	17 18	1 8	11 40	0 31	17 14	1 42	7 54	12 32	21 54	21 44	9 26	14 38	3 11
S 24	23 28	21 56	1 29	25 8	2 8	17 19	3 54	14 48	0 46	22 46	0 21	17 17	1 8	11 41	0 31	17 14	1 42	7 54	12 32	21 54	21 44	9 28	14 38	3 11
S 25	23 27	20 30	2 39	25 0	2 9	17 12	4 2	15 0	0 46	22 47	0 21	17 15	1 8	11 42	0 31	17 14	1 42	7 54	12 31	21 54	21 43	9 31	14 37	3 11
M26	23 25	17 56	3 38	24 51	2 10	17 5	4 9	15 12	0 46	22 48	0 21	17 13	1 8	11 43	0 31	17 15	1 42	7 54	12 31	21 53	21 43	9 33	14 37	3 11
T 27	23 23	14 30	4 23	24 39	2 10	16 59	4 15	15 24	0 45	22 49	0 21	17 11	1 8	11 43	0 31	17 15	1 42	7 54	12 31	21 52	21 42	9 35	14 36	3 11
W28	23 20	10 28	4 54	24 27	2 9	16 54	4 21	15 36	0 45	22 50	0 21	17 9	1 8	11 44	0 31	17 16	1 42	7 54	12 31	21 52	21 41	9 37	14 36	3 11
T 29	23 17	6 5	5 11	24 12	2 8	16 50	4 26	15 48	0 44	22 51	0 21	17 8	1 8	11 45	0 31	17 16	1 42	7 54	12 31	21 51	21 41	9 39	14 35	3 11
F 30	23 14	1 33	5 12	23 56	2 7	16 47	4 31	16 0	0 44	22 52	0 21	17 6	1 8	11 45	0 31	17 16	1 42	7 54	12 31	21 51	21 40	9 41	14 35	3 11
S 31	23s10	2n58	5n 0	23s39	2s 5	16s45	4n36	16s11	0n43	22s53	0n21	17s 4	1s 8	11s46	0n31	17s17	1n42	7n54	12s30	21s50	21s40	9n43	14n34	3s11

Julian Day Number = 2320026.5, Delta T = 50.44 sec
Ecliptic obliquity = 23°29'06, Nutation = 0°00'15, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°42'52, Lahiri = 18°49'52Greg. Calendar