Astrodienst Ephemeris Tables

for the year 1777

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 1777
geocentric

JANUARY 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
W 1	6 43 50	11♑ 1'06	1♎25	11♑ 9	16♒ 1	6♎57	21°R25	2♏ 1	7°R43	27°R 6	27♑31	27♋21	28♋ 3	9♎35	15♈39	W 1
T 2	6 47 47	12° 2'16	13°17	12°46	17°14	7°21	21♋17	2° 5	7♊41	27♍ 6	27°33	27°R21	28° 0	9°41	15°39	T 2
F 3	6 51 43	13° 3'26	25°11	14°24	18°27	7°45	21° 9	2° 9	7°39	27° 6	27°35	27°21	27°57	9°48	15°40	F 3
S 4	6 55 40	14° 4'36	7♏11	16° 2	19°41	8° 8	21° 1	2°13	7°37	27° 6	27°37	27°20	27°54	9°55	15°40	S 4
S 5	6 59 37	15° 5'47	19°22	17°40	20°54	8°31	20°53	2°17	7°35	27° 6	27°39	27°18	27°51	10° 2	15°41	S 5
M 6	7 3 33	16° 6'57	1♐48	19°19	22° 7	8°54	20°45	2°20	7°34	27° 5	27°41	27°17	27°47	10° 8	15°42	M 6
T 7	7 7 30	17° 8'07	14°31	20°59	23°20	9°17	20°37	2°24	7°32	27° 5	27°43	27°15	27°44	10°15	15°42	T 7
W 8	7 11 26	18° 9'18	27°33	22°39	24°33	9°39	20°29	2°27	7°30	27° 5	27°45	27°14	27°41	10°22	15°43	W 8
T 9	7 15 23	19°10'28	10♑54	24°19	25°46	10° 1	20°21	2°30	7°28	27° 4	27°47	27°13	27°38	10°28	15°44	T 9
F 10	7 19 19	20°11'37	24°33	25°59	26°59	10°23	20°13	2°34	7°27	27° 4	27°48	27°D13	27°35	10°35	15°44	F 10
S 11	7 23 16	21°12'47	8♒27	27°40	28°12	10°45	20° 5	2°37	7°25	27° 3	27°50	27°13	27°32	10°42	15°45	S 11
S 12	7 27 12	22°13'55	22°33	29°22	29°25	11° 6	19°56	2°40	7°23	27° 3	27°52	27°13	27°28	10°49	15°46	S 12
M13	7 31 9	23°15'03	6♓47	1♒ 3	0♓38	11°26	19°48	2°43	7°22	27° 2	27°54	27°14	27°25	10°55	15°47	M13
T 14	7 35 6	24°16'10	21° 5	2°45	1°50	11°47	19°40	2°46	7°20	27° 2	27°56	27°14	27°22	11° 2	15°48	T 14
W15	7 39 2	25°17'17	5♈23	4°27	3° 3	12° 6	19°32	2°48	7°19	27° 1	27°58	27°14	27°19	11° 9	15°49	W15
T 16	7 42 59	26°18'22	19°37	6° 9	4°15	12°26	19°24	2°51	7°17	27° 1	28° 0	27°14	27°16	11°16	15°51	T 16
F 17	7 46 55	27°19'26	3♉47	7°51	5°28	12°45	19°16	2°54	7°16	27° 0	28° 2	27°14	27°13	11°22	15°52	F 17
S 18	7 50 52	28°20'30	17°48	9°34	6°40	13° 4	19° 9	2°56	7°15	26°59	28° 4	27°14	27° 9	11°29	15°53	S 18
S 19	7 54 48	29°21'32	1♊41	11°15	7°52	13°22	19° 1	2°58	7°13	26°59	28° 6	27°14	27° 6	11°36	15°54	S 19
M20	7 58 45	0♒22'34	15°23	12°57	9° 5	13°40	18°53	3° 1	7°12	26°58	28° 8	27°15	27° 3	11°42	15°56	M20
T 21	8 2 41	1°23'35	28°53	14°38	10°17	13°58	18°45	3° 3	7°11	26°57	28°10	27°15	27° 0	11°49	15°57	T 21
W22	8 6 38	2°24'34	12♋11	16°18	11°29	14°15	18°37	3° 5	7°10	26°57	28°12	27°15	26°57	11°56	15°59	W22
T 23	8 10 35	3°25'33	25°15	17°57	12°41	14°32	18°30	3° 7	7° 9	26°56	28°14	27°R16	26°53	12° 3	16° 0	T 23
F 24	8 14 31	4°26'31	8♌ 6	19°34	13°53	14°48	18°22	3° 9	7° 8	26°55	28°16	27°16	26°50	12° 9	16° 2	F 24
S 25	8 18 28	5°27'27	20°43	21°10	15° 4	15° 4	18°15	3°11	7° 7	26°54	28°17	27°15	26°47	12°16	16° 4	S 25
S 26	8 22 24	6°28'23	3♍ 6	22°44	16°16	15°19	18° 8	3°12	7° 6	26°53	28°19	27°14	26°44	12°23	16° 5	S 26
M27	8 26 21	7°29'18	15°18	24°15	17°27	15°34	18° 0	3°14	7° 5	26°52	28°21	27°13	26°41	12°29	16° 7	M27
T 28	8 30 17	8°30'12	27°20	25°42	18°39	15°49	17°53	3°15	7° 4	26°51	28°23	27°11	26°38	12°36	16° 9	T 28
W29	8 34 14	9°31'05	9♎16	27° 6	19°50	16° 3	17°46	3°17	7° 3	26°50	28°25	27° 9	26°34	12°43	16°11	W29
T 30	8 38 10	10°31'58	21° 8	28°25	21° 1	16°16	17°39	3°18	7° 2	26°49	28°27	27° 8	26°31	12°50	16°13	T 30
F 31	8 42 7	11♒32'49	3♏ 1	29♒39	22♓13	16♎29	17♋32	3♏19	7♊ 1	26♍48	28♑29	27♋ 7	26♋28	12♎56	16♈14	F 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
W 1	23 s 1	3n47	4n44	24 s49	1 s50	17 s47	1 s48	0 s36	2n21	22n 4	0n19	9 s56	2n25	21n34	0 s 3	2n21	1n18	23 s49	3 s12	20n43	20n34	0n41	7n10	1n 5
T 2	22 55	0 s32	5 7	24 44	1 53	17 24	1 47	0 45	2 22	22 6	0 19	9 57	2 25	21 34	0 3	2 21	1 18	23 48	3 12	20 43	20 35	0 39	7 10	1 5
F 3	22 50	4 51	5 16	24 36	1 56	17 0	1 47	0 53	2 23	22 7	0 19	9 58	2 25	21 34	0 3	2 21	1 18	23 48	3 12	20 43	20 36	0 37	7 10	1 5
S 4	22 43	9 1	5 12	24 28	1 58	16 36	1 46	1 2	2 24	22 9	0 19	9 59	2 25	21 33	0 3	2 21	1 18	23 48	3 12	20 43	20 36	0 34	7 10	1 5
S 5	22 37	12 53	4 53	24 17	2 1	16 12	1 44	1 10	2 25	22 10	0 20	10 0	2 26	21 33	0 3	2 21	1 18	23 47	3 12	20 43	20 37	0 32	7 10	1 5
M 6	22 30	16 17	4 21	24 6	2 3	15 47	1 43	1 18	2 26	22 11	0 20	10 1	2 26	21 33	0 3	2 21	1 18	23 47	3 12	20 44	20 38	0 29	7 10	1 4
T 7	22 22	19 0	3 35	23 52	2 4	15 22	1 42	1 26	2 26	22 13	0 20	10 2	2 26	21 33	0 3	2 21	1 18	23 47	3 12	20 44	20 38	0 27	7 10	1 4
W 8	22 14	20 50	2 37	23 37	2 5	14 56	1 41	1 34	2 27	22 14	0 20	10 3	2 26	21 32	0 3	2 22	1 18	23 46	3 12	20 44	20 39	0 25	7 11	1 4
T 9	22 6	21 32	1 29	23 21	2 6	14 30	1 39	1 42	2 28	22 15	0 20	10 4	2 26	21 32	0 3	2 22	1 18	23 46	3 12	20 44	20 40	0 22	7 11	1 4
F 10	21 57	21 0	0 15	23 3	2 6	14 4	1 38	1 50	2 29	22 17	0 20	10 5	2 27	21 32	0 3	2 22	1 18	23 46	3 12	20 44	20 40	0 20	7 11	1 4
S 11	21 48	19 10	1 s 2	22 43	2 6	13 37	1 36	1 57	2 30	22 18	0 20	10 6	2 27	21 32	0 3	2 22	1 18	23 45	3 12	20 44	20 41	0 18	7 11	1 4
S 12	21 38	16 9	2 16	22 21	2 6	13 10	1 34	2 5	2 31	22 19	0 21	10 6	2 27	21 31	0 3	2 22	1 18	23 45	3 12	20 44	20 41	0 15	7 11	1 4
M13	21 28	12 10	3 22	21 58	2 5	12 42	1 33	2 12	2 32	22 21	0 21	10 7	2 27	21 31	0 3	2 23	1 19	23 45	3 12	20 44	20 42	0 13	7 12	1 3
T 14	21 17	7 28	4 16	21 34	2 3	12 15	1 31	2 19	2 33	22 22	0 21	10 8	2 28	21 31	0 3	2 23	1 19	23 44	3 12	20 44	20 43	0 10	7 12	1 3
W15	21 6	2 22	4 55	21 8	2 1	11 47	1 29	2 26	2 34	22 23	0 21	10 9	2 28	21 31	0 3	2 23	1 19	23 44	3 13	20 44	20 43	0 8	7 12	1 3
T 16	20 55	2n50	5 14	20 40	1 58	11 18	1 27	2 33	2 34	22 25	0 21	10 9	2 28	21 30	0 3	2 24	1 19	23 44	3 13	20 44	20 44	0 6	7 13	1 3
F 17	20 43	7 51	5 15	20 11	1 55	10 50	1 25	2 39	2 35	22 26	0 21	10 10	2 28	21 30	0 3	2 24	1 19	23 43	3 13	20 44	20 45	0 3	7 13	1 3
S 18	20 31	12 24	4 57	19 40	1 51	10 21	1 22	2 46	2 36	22 27	0 21	10 10	2 29	21 30	0 3	2 24	1 19	23 43	3 13	20 44	20 45	0 1	7 13	1 3
S 19	20 19	16 15	4 22	19 8	1 47	9 52	1 20	2 52	2 37	22 28	0 21	10 11	2 29	21 30	0 3	2 24	1 19	23 43	3 13	20 44	20 46	0 s 2	7 14	1 3
M20	20 6	19 9	3 32	18 34	1 42	9 23	1 18	2 58	2 38	22 29	0 22	10 12	2 29	21 30	0 3	2 25	1 19	23 42	3 13	20 44	20 46	0 4	7 14	1 2
T 21	19 52	20 57	2 31	18 0	1 36	8 53	1 15	3 4	2 39	22 31	0 22	10 12	2 29	21 29	0 3	2 25	1 19	23 42	3 13	20 44	20 47	0 6	7 15	1 2
W22	19 39	21 32	1 23	17 23	1 29	8 23	1 13	3 10	2 40	22 32	0 22	10 13	2 30	21 29	0 3	2 25	1 19	23 42	3 13	20 44	20 48	0 9	7 15	1 2
T 23	19 25	20 56	0 11	16 46	1 22	7 53	1 10	3 16	2 41	22 33	0 22	10 13	2 30	21 29	0 3	2 26	1 19	23 42	3 13	20 44	20 48	0 11	7 16	1 2
F 24	19 10	19 13	1n 0	16 8	1 14	7 23	1 7	3 21	2 42	22 34	0 22	10 13	2 30	21 29	0 3	2 26	1 19	23 41	3 13	20 44	20 49	0 14	7 16	1 2
S 25	18 56	16 36	2 6	15 29	1 5	6 53	1 4	3 26	2 43	22 35	0 22	10 14	2 30	21 29	0 3	2 27	1 19	23 41	3 13	20 44	20 49	0 16	7 17	1 2
S 26	18 41	13 16	3 6	14 50	0 55	6 22	1 1	3 31	2 44	22 36	0 22	10 14	2 31	21 29	0 3	2 27	1 19	23 41	3 13	20 44	20 50	0 18	7 17	1 2
M27	18 25	9 25	3 56	14 10	0 45	5 52	0 59	3 36	2 45	22 37	0 22	10 14	2 31	21 28	0 3	2 27	1 19	23 40	3 14	20 45	20 51	0 21	7 18	1 2
T 28	18 9	5 15	4 34	13 30	0 34	5 21	0 55	3 41	2 46	22 39	0 22	10 15	2 31	21 28	0 3	2 28	1 19	23 40	3 14	20 45	20 51	0 23	7 18	1 1
W29	17 53	0 56	5 1	12 50	0 21	4 50	0 52	3 45	2 47	22 40	0 23	10 15	2 31	21 28	0 3	2 28	1 19	23 40	3 14	20 45	20 52	0 26	7 19	1 1
T 30	17 37	3 s24	5 14	12 10	0 8	4 19	0 49	3 50	2 47	22 41	0 23	10 15	2 32	21 28	0 3	2 29	1 19	23 39	3 14	20 45	20 52	0 28	7 19	1 1
F 31	17 s20	7 s36	5n14	11 s31	0n 5	3 s48	0 s46	3 s54	2n48	22n42	0n23	10 s15	2n32	21n28	0 s 3	2n29	1n19	23 s39	3 s14	20n46	20n53	0 s30	7n20	1n 1

Julian Day Number = 2370096.5, Delta T = 22.10 sec
Ecliptic obliquity = 23°28'01, Nutation = - 0°00'15, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'37, Lahiri = 20°44'37Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

FEBRUARY 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	8 46 4	12♒33'40	14♏59	0♓48	23♓24	16♎42	17°R26	3♏20	7°R 1	26°R47	28♑31	27°D 7	26♋25	13♎ 3	16♈16	S 1
S 2	8 50 0	13°34'30	27° 8	1°49	24°34	16°53	17♋19	3°21	7♊ 0	26♍46	28°33	27♋ 7	26°22	13°10	16°18	S 2
M 3	8 53 57	14°35'18	9♐32	2°43	25°45	17° 5	17°13	3°22	7° 0	26°45	28°35	27° 8	26°18	13°16	16°21	M 3
T 4	8 57 53	15°36'06	22°15	3°29	26°56	17°16	17° 6	3°23	6°59	26°44	28°37	27°10	26°15	13°23	16°23	T 4
W 5	9 1 50	16°36'53	5♑20	4° 6	28° 6	17°26	17° 0	3°23	6°59	26°43	28°38	27°11	26°12	13°30	16°25	W 5
T 6	9 5 46	17°37'39	18°49	4°33	29°17	17°35	16°54	3°24	6°58	26°41	28°40	27°12	26° 9	13°37	16°27	T 6
F 7	9 9 43	18°38'24	2♒43	4°50	0♈27	17°44	16°48	3°24	6°58	26°40	28°42	27°R12	26° 6	13°43	16°29	F 7
S 8	9 13 39	19°39'07	16°58	4°R57	1°37	17°53	16°42	3°25	6°58	26°39	28°44	27°11	26° 3	13°50	16°32	S 8
S 9	9 17 36	20°39'49	1♓31	4°53	2°47	18° 0	16°37	3°25	6°57	26°38	28°46	27° 9	25°59	13°57	16°34	S 9
M10	9 21 33	21°40'29	16°15	4°38	3°57	18° 8	16°31	3°R25	6°57	26°37	28°48	27° 6	25°56	14° 3	16°36	M10
T 11	9 25 29	22°41'08	1♈ 2	4°13	5° 7	18°14	16°26	3°25	6°57	26°35	28°49	27° 2	25°53	14°10	16°39	T 11
W12	9 29 26	23°41'45	15°45	3°39	6°17	18°20	16°21	3°25	6°57	26°34	28°51	26°59	25°50	14°17	16°41	W12
T 13	9 33 22	24°42'20	0♉18	2°55	7°26	18°25	16°16	3°25	6°D57	26°33	28°53	26°56	25°47	14°24	16°44	T 13
F 14	9 37 19	25°42'53	14°35	2° 4	8°35	18°30	16°11	3°24	6°57	26°31	28°55	26°54	25°44	14°30	16°46	F 14
S 15	9 41 15	26°43'25	28°35	1° 6	9°45	18°34	16° 6	3°24	6°57	26°30	28°57	26°D53	25°40	14°37	16°49	S 15
S 16	9 45 12	27°43'55	12♊17	0° 4	10°53	18°37	16° 2	3°23	6°57	26°28	28°58	26°54	25°37	14°44	16°52	S 16
M17	9 49 8	28°44'23	25°41	28♒59	12° 2	18°39	15°58	3°23	6°57	26°27	29° 0	26°56	25°34	14°51	16°54	M17
T 18	9 53 5	29°44'49	8♋50	27°52	13°11	18°41	15°54	3°22	6°58	26°26	29° 2	26°57	25°31	14°57	16°57	T 18
W19	9 57 2	0♓45'13	21°44	26°45	14°19	18°42	15°50	3°21	6°58	26°24	29° 3	26°R58	25°28	15° 4	17° 0	W19
T 20	10 0 58	1°45'36	4♌26	25°41	15°28	18°R42	15°46	3°20	6°58	26°23	29° 5	26°58	25°24	15°11	17° 3	T 20
F 21	10 4 55	2°45'56	16°57	24°40	16°36	18°42	15°42	3°19	6°59	26°21	29° 7	26°56	25°21	15°17	17° 6	F 21
S 22	10 8 51	3°46'15	29°18	23°43	17°43	18°41	15°39	3°18	6°59	26°20	29° 8	26°53	25°18	15°24	17° 8	S 22
S 23	10 12 48	4°46'32	11♍31	22°52	18°51	18°39	15°36	3°17	7° 0	26°18	29°10	26°47	25°15	15°31	17°11	S 23
M24	10 16 44	5°46'47	23°35	22° 7	19°59	18°36	15°33	3°15	7° 0	26°17	29°12	26°40	25°12	15°38	17°14	M24
T 25	10 20 41	6°47'00	5♎34	21°29	21° 6	18°33	15°30	3°14	7° 1	26°15	29°13	26°32	25° 9	15°44	17°17	T 25
W26	10 24 37	7°47'12	17°28	20°58	22°13	18°29	15°27	3°12	7° 1	26°14	29°15	26°25	25° 5	15°51	17°20	W26
T 27	10 28 34	8°47'22	29°20	20°33	23°20	18°24	15°25	3°11	7° 2	26°12	29°17	26°17	25° 2	15°58	17°23	T 27
F 28	10 32 30	9♓47'31	11♏12	20♒16	24♈26	18♎18	15♋23	3♏ 9	7♊ 3	26♍10	29♑18	26♋12	24♋59	16♎ 4	17♈26	F 28

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	17s 3	11s33	5n 1	10s54	0n20	3s17	0s42	3s58	2n49	22n43	0n23	10s15	2n32	21n28	0s 3	2n30	1n19	23s39	3s14	20n46	20n54	0s33	7n21	1n 1	S 1
S 2	16 46	15 6	4 34	10 18	0 35	2 45	0 39	4 1	2 50	22 43	0 23	10 15	2 32	21 28	0 3	2 30	1 19	23 39	3 14	20 46	20 54	0 35	7 21	1 1	S 2
M 3	16 29	18 3	3 54	9 44	0 51	2 14	0 35	4 5	2 51	22 44	0 23	10 15	2 33	21 28	0 3	2 31	1 19	23 38	3 14	20 45	20 55	0 38	7 22	1 1	M 3
T 4	16 11	20 14	3 1	9 12	1 7	1 43	0 32	4 8	2 52	22 45	0 23	10 15	2 33	21 28	0 3	2 31	1 19	23 38	3 14	20 45	20 55	0 40	7 23	1 1	T 4
W 5	15 52	21 24	1 58	8 44	1 23	1 11	0 28	4 11	2 53	22 46	0 23	10 15	2 33	21 27	0 3	2 32	1 20	23 38	3 14	20 45	20 56	0 42	7 23	1 0	W 5
T 6	15 34	21 23	0 46	8 18	1 40	0 40	0 24	4 14	2 54	22 47	0 23	10 15	2 34	21 27	0 3	2 32	1 20	23 37	3 15	20 45	20 57	0 45	7 24	1 0	T 6
F 7	15 15	20 4	0s30	7 57	1 56	0 8	0 21	4 17	2 55	22 48	0 23	10 15	2 34	21 27	0 3	2 33	1 20	23 37	3 15	20 45	20 57	0 47	7 25	1 0	F 7
S 8	14 56	17 28	1 47	7 39	2 13	0n23	0 17	4 19	2 56	22 49	0 24	10 15	2 34	21 27	0 3	2 33	1 20	23 37	3 15	20 45	20 58	0 50	7 26	1 0	S 8
S 9	14 37	13 43	2 58	7 26	2 28	0 55	0 13	4 21	2 56	22 49	0 24	10 15	2 34	21 27	0 3	2 34	1 20	23 37	3 15	20 45	20 58	0 52	7 27	1 0	S 9
M10	14 18	9 5	3 58	7 17	2 43	1 26	0 9	4 23	2 57	22 50	0 24	10 15	2 35	21 27	0 3	2 34	1 20	23 36	3 15	20 46	20 59	0 54	7 27	1 0	M10
T 11	13 58	3 54	4 42	7 13	2 57	1 58	0 5	4 25	2 58	22 51	0 24	10 14	2 35	21 27	0 2	2 35	1 20	23 36	3 15	20 47	21 0	0 57	7 28	1 0	T 11
W12	13 38	1n29	5 7	7 14	3 10	2 29	0 1	4 26	2 59	22 52	0 24	10 14	2 35	21 27	0 2	2 35	1 20	23 36	3 15	20 47	21 0	0 59	7 29	1 0	W12
T 13	13 18	6 42	5 13	7 19	3 21	3 0	0n 3	4 27	3 0	22 52	0 24	10 14	2 35	21 27	0 2	2 36	1 20	23 36	3 15	20 48	21 1	1 2	7 30	0 59	T 13
F 14	12 58	11 28	4 59	7 29	3 30	3 32	0 8	4 28	3 1	22 53	0 24	10 14	2 36	21 27	0 2	2 36	1 20	23 35	3 16	20 48	21 1	1 4	7 31	0 59	F 14
S 15	12 37	15 32	4 27	7 43	3 37	4 3	0 12	4 29	3 2	22 54	0 24	10 13	2 36	21 27	0 2	2 37	1 20	23 35	3 16	20 48	21 2	1 7	7 32	0 59	S 15
S 16	12 17	18 39	3 40	8 0	3 41	4 34	0 16	4 29	3 2	22 54	0 24	10 13	2 36	21 27	0 2	2 38	1 20	23 35	3 16	20 48	21 3	1 9	7 33	0 59	S 16
M17	11 56	20 41	2 43	8 21	3 44	5 5	0 21	4 30	3 3	22 55	0 24	10 12	2 36	21 27	0 2	2 38	1 20	23 35	3 16	20 48	21 3	1 11	7 34	0 59	M17
T 18	11 34	21 33	1 38	8 43	3 44	5 36	0 25	4 30	3 4	22 55	0 24	10 12	2 37	21 27	0 2	2 39	1 20	23 34	3 16	20 47	21 4	1 14	7 34	0 59	T 18
W19	11 13	21 14	0 29	9 8	3 42	6 6	0 30	4 29	3 5	22 56	0 24	10 11	2 37	21 28	0 2	2 39	1 20	23 34	3 16	20 47	21 4	1 16	7 35	0 59	W19
T 20	10 52	19 50	0n41	9 33	3 38	6 37	0 34	4 29	3 5	22 56	0 24	10 11	2 37	21 28	0 2	2 40	1 20	23 34	3 16	20 47	21 5	1 19	7 36	0 59	T 20
F 21	10 30	17 28	1 47	9 59	3 32	7 8	0 39	4 28	3 6	22 57	0 24	10 10	2 37	21 28	0 2	2 41	1 20	23 34	3 16	20 48	21 6	1 21	7 37	0 59	F 21
S 22	10 8	14 20	2 47	10 25	3 24	7 38	0 43	4 27	3 7	22 57	0 25	10 10	2 38	21 28	0 2	2 41	1 20	23 33	3 17	20 48	21 6	1 24	7 38	0 58	S 22
S 23	9 46	10 37	3 38	10 51	3 14	8 8	0 48	4 26	3 7	22 58	0 25	10 9	2 38	21 28	0 2	2 42	1 20	23 33	3 17	20 49	21 7	1 26	7 39	0 58	S 23
M24	9 24	6 31	4 19	11 15	3 4	8 38	0 53	4 24	3 8	22 58	0 25	10 8	2 38	21 28	0 2	2 42	1 20	23 33	3 17	20 51	21 7	1 28	7 40	0 58	M24
T 25	9 2	2 12	4 49	11 39	2 52	9 8	0 57	4 22	3 8	22 58	0 25	10 8	2 38	21 28	0 2	2 43	1 20	23 33	3 17	20 52	21 8	1 31	7 41	0 58	T 25
W26	8 40	2s10	5 5	12 0	2 40	9 37	1 2	4 20	3 9	22 59	0 25	10 7	2 38	21 28	0 2	2 44	1 20	23 33	3 17	20 54	21 8	1 33	7 43	0 58	W26
T 27	8 17	6 26	5 8	12 20	2 26	10 7	1 7	4 18	3 10	22 59	0 25	10 6	2 39	21 28	0 2	2 44	1 20	23 32	3 17	20 55	21 9	1 36	7 44	0 58	T 27
F 28	7s54	10s29	4n58	12s39	2n13	10n36	1n12	4s15	3n10	22n59	0n25	10s 5	2n39	21n28	0s 2	2n45	1n20	23s32	3s17	20n56	21n10	1s38	7n45	0n58	F 28

Julian Day Number = 2370127.5, Delta T = 22.10 sec
Ecliptic obliquity = 23°28'02, Nutation = - 0°00'14, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'41, Lahiri = 20°44'41Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

MARCH 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	10 36 27	10♓47'38	23♏ 9	20°R 6	25♈33	18°R12	15°R21	3°R 7	7♊ 4	26°R 9	29♑20	26°R 8	24♋56	16♎11	17♈29	S 1
S 2	10 40 24	11°47'43	5♐15	20°D 2	26°39	18♎ 4	15♋19	3♏ 5	7° 5	26♍ 7	29°21	26♋ 6	24°53	16°18	17°33	S 2
M 3	10 44 20	12°47'47	17°35	20♒ 5	27°45	17°56	15°17	3° 3	7° 6	26° 6	29°23	26°D 6	24°50	16°25	17°36	M 3
T 4	10 48 17	13°47'49	0♑12	20°14	28°50	17°48	15°16	3° 1	7° 7	26° 4	29°24	26° 7	24°46	16°31	17°39	T 4
W 5	10 52 13	14°47'50	13°13	20°29	29°56	17°38	15°14	2°59	7° 8	26° 2	29°26	26° 8	24°43	16°38	17°42	W 5
T 6	10 56 10	15°47'49	26°39	20°49	1♉ 1	17°28	15°13	2°57	7° 9	26° 1	29°27	26°R 9	24°40	16°45	17°45	T 6
F 7	11 0 6	16°47'46	10♒34	21°14	2° 6	17°16	15°13	2°54	7°10	25°59	29°29	26° 8	24°37	16°52	17°49	F 7
S 8	11 4 3	17°47'42	24°57	21°45	3°10	17° 4	15°12	2°52	7°11	25°58	29°30	26° 5	24°34	16°58	17°52	S 8
S 9	11 7 59	18°47'35	9♓44	22°19	4°15	16°52	15°11	2°49	7°12	25°56	29°31	25°59	24°30	17° 5	17°55	S 9
M10	11 11 56	19°47'27	24°47	22°58	5°19	16°38	15°11	2°47	7°13	25°54	29°33	25°52	24°27	17°12	17°59	M10
T 11	11 15 53	20°47'17	9♈58	23°41	6°22	16°24	15°D11	2°44	7°15	25°53	29°34	25°43	24°24	17°18	18° 2	T 11
W12	11 19 49	21°47'04	25° 6	24°27	7°26	16° 9	15°11	2°41	7°16	25°51	29°35	25°35	24°21	17°25	18° 5	W12
T 13	11 23 46	22°46'50	10♉ 1	25°17	8°29	15°54	15°11	2°38	7°18	25°49	29°37	25°27	24°18	17°32	18° 9	T 13
F 14	11 27 42	23°46'33	24°35	26°10	9°32	15°38	15°12	2°35	7°19	25°48	29°38	25°22	24°15	17°39	18°12	F 14
S 15	11 31 39	24°46'14	8♊45	27° 6	10°34	15°21	15°13	2°32	7°21	25°46	29°39	25°18	24°11	17°45	18°16	S 15
S 16	11 35 35	25°45'53	22°29	28° 5	11°36	15° 3	15°13	2°29	7°22	25°44	29°41	25°D17	24° 8	17°52	18°19	S 16
M17	11 39 32	26°45'29	5♋50	29° 6	12°38	14°45	15°15	2°26	7°24	25°43	29°42	25°17	24° 5	17°59	18°23	M17
T 18	11 43 28	27°45'03	18°48	0♓11	13°39	14°26	15°16	2°22	7°25	25°41	29°43	25°R18	24° 2	18° 5	18°26	T 18
W19	11 47 25	28°44'35	1♌30	1°17	14°40	14° 7	15°17	2°19	7°27	25°39	29°44	25°18	23°59	18°12	18°30	W19
T 20	11 51 22	29°44'04	13°56	2°26	15°41	13°47	15°19	2°16	7°29	25°38	29°45	25°16	23°55	18°19	18°33	T 20
F 21	11 55 18	0♈43'31	26°12	3°37	16°41	13°27	15°21	2°12	7°31	25°36	29°46	25°12	23°52	18°26	18°37	F 21
S 22	11 59 15	1°42'56	8♍20	4°50	17°41	13° 6	15°23	2° 9	7°33	25°34	29°47	25° 5	23°49	18°32	18°40	S 22
S 23	12 3 11	2°42'19	20°22	6° 5	18°40	12°45	15°25	2° 5	7°34	25°33	29°49	24°55	23°46	18°39	18°44	S 23
M24	12 7 8	3°41'40	2♎20	7°22	19°39	12°24	15°27	2° 1	7°36	25°31	29°50	24°44	23°43	18°46	18°47	M24
T 25	12 11 4	4°40'58	14°14	8°41	20°37	12° 2	15°30	1°58	7°38	25°29	29°51	24°30	23°40	18°53	18°51	T 25
W26	12 15 1	5°40'15	26° 7	10° 1	21°35	11°40	15°33	1°54	7°40	25°28	29°52	24°17	23°36	18°59	18°55	W26
T 27	12 18 57	6°39'29	7♏59	11°23	22°33	11°17	15°36	1°50	7°42	25°26	29°53	24° 5	23°33	19° 6	18°58	T 27
F 28	12 22 54	7°38'42	19°54	12°48	23°29	10°55	15°39	1°46	7°45	25°25	29°54	23°54	23°30	19°13	19° 2	F 28
S 29	12 26 51	8°37'53	1♐52	14°13	24°26	10°32	15°42	1°42	7°47	25°23	29°54	23°46	23°27	19°19	19° 6	S 29
S 30	12 30 47	9°37'02	13°58	15°40	25°22	10° 9	15°46	1°38	7°49	25°21	29°55	23°41	23°24	19°26	19° 9	S 30
M31	12 34 44	10♈36'09	26♐16	17♓ 9	26♉17	9♎46	15♋49	1♏34	7♊51	25♍20	29♑56	23♋38	23♋21	19♎33	19♈13	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	7s32	14s 8	4n35	12s55	1n59	11n 5	1n17	4s12	3n10	23n 0	0n25	10s 4	2n39	21n29	0s 2	2n46	1n20	23s32	3s18	20n57	21n10	1s41	7n46	0n58
S 2	7 9	17 16	4 0	13 9	1 45	11 33	1 21	4 9	3 11	23 0	0 25	10 4	2 39	21 29	0 2	2 46	1 20	23 32	3 18	20 57	21 11	1 43	7 47	0 58
M 3	6 46	19 41	3 13	13 21	1 31	12 2	1 26	4 6	3 11	23 0	0 25	10 3	2 40	21 29	0 2	2 47	1 20	23 32	3 18	20 57	21 11	1 45	7 48	0 58
T 4	6 23	21 13	2 15	13 32	1 18	12 30	1 31	4 2	3 11	23 0	0 25	10 2	2 40	21 29	0 2	2 48	1 20	23 31	3 18	20 57	21 12	1 48	7 49	0 57
W 5	6 0	21 40	1 9	13 40	1 4	12 58	1 36	3 58	3 12	23 1	0 25	10 1	2 40	21 29	0 2	2 48	1 20	23 31	3 18	20 57	21 12	1 50	7 50	0 57
T 6	5 36	20 54	0s 3	13 46	0 51	13 25	1 41	3 54	3 12	23 1	0 25	10 0	2 40	21 29	0 2	2 49	1 20	23 31	3 18	20 57	21 13	1 53	7 51	0 57
F 7	5 13	18 50	1 17	13 50	0 38	13 52	1 46	3 50	3 12	23 1	0 25	9 59	2 40	21 30	0 2	2 50	1 20	23 31	3 18	20 57	21 14	1 55	7 53	0 57
S 8	4 50	15 33	2 28	13 53	0 25	14 19	1 51	3 45	3 12	23 1	0 25	9 58	2 41	21 30	0 2	2 50	1 20	23 31	3 19	20 57	21 14	1 58	7 54	0 57
S 9	4 26	11 12	3 32	13 53	0 13	14 46	1 56	3 40	3 12	23 1	0 25	9 57	2 41	21 30	0 2	2 51	1 20	23 31	3 19	20 59	21 15	2 0	7 55	0 57
M10	4 3	6 5	4 22	13 52	0 1	15 12	2 1	3 35	3 12	23 1	0 25	9 56	2 41	21 30	0 2	2 52	1 20	23 31	3 19	21 0	21 15	2 3	7 56	0 57
T 11	3 39	0 33	4 54	13 49	0s11	15 38	2 6	3 30	3 12	23 1	0 25	9 55	2 41	21 31	0 2	2 52	1 20	23 30	3 19	21 1	21 16	2 5	7 57	0 57
W12	3 16	4n59	5 5	13 44	0 22	16 4	2 11	3 24	3 12	23 1	0 25	9 53	2 41	21 31	0 2	2 53	1 20	23 30	3 19	21 3	21 16	2 7	7 58	0 57
T 13	2 52	10 9	4 55	13 37	0 32	16 29	2 16	3 19	3 12	23 1	0 25	9 52	2 42	21 31	0 2	2 54	1 20	23 30	3 19	21 4	21 17	2 10	8 0	0 57
F 14	2 28	14 37	4 27	13 29	0 43	16 54	2 21	3 13	3 12	23 1	0 26	9 51	2 42	21 31	0 2	2 54	1 20	23 30	3 20	21 5	21 17	2 12	8 1	0 56
S 15	2 5	18 8	3 42	13 19	0 52	17 19	2 25	3 7	3 11	23 1	0 26	9 50	2 42	21 32	0 2	2 55	1 20	23 30	3 20	21 6	21 18	2 15	8 2	0 56
S 16	1 41	20 30	2 46	13 7	1 2	17 43	2 30	3 0	3 11	23 1	0 26	9 49	2 42	21 32	0 2	2 56	1 20	23 30	3 20	21 6	21 19	2 17	8 3	0 56
M17	1 17	21 38	1 42	12 54	1 10	18 7	2 35	2 54	3 10	23 1	0 26	9 47	2 42	21 32	0 2	2 56	1 20	23 30	3 20	21 6	21 19	2 20	8 5	0 56
T 18	0 54	21 34	0 35	12 39	1 19	18 30	2 40	2 47	3 10	23 1	0 26	9 46	2 42	21 32	0 2	2 57	1 20	23 30	3 20	21 6	21 20	2 22	8 6	0 56
W19	0 30	20 23	0n33	12 23	1 27	18 53	2 45	2 40	3 9	23 1	0 26	9 45	2 43	21 33	0 2	2 58	1 21	23 30	3 20	21 6	21 20	2 25	8 7	0 56
T 20	0 6	18 13	1 38	12 5	1 34	19 16	2 50	2 33	3 8	23 1	0 26	9 43	2 43	21 33	0 2	2 58	1 21	23 29	3 20	21 6	21 21	2 27	8 8	0 56
F 21	0n17	15 15	2 37	11 46	1 41	19 38	2 55	2 26	3 8	23 1	0 26	9 42	2 43	21 33	0 2	2 59	1 21	23 29	3 21	21 7	21 21	2 30	8 10	0 56
S 22	0 41	11 40	3 28	11 25	1 47	19 59	2 59	2 19	3 7	23 0	0 26	9 41	2 43	21 34	0 2	3 0	1 21	23 29	3 21	21 8	21 22	2 32	8 11	0 56
S 23	1 5	7 38	4 9	11 3	1 53	20 21	3 4	2 12	3 6	23 0	0 26	9 39	2 43	21 34	0 2	3 0	1 21	23 29	3 21	21 10	21 22	2 34	8 12	0 56
M24	1 28	3 20	4 39	10 39	1 59	20 41	3 9	2 4	3 5	23 0	0 26	9 38	2 43	21 34	0 2	3 1	1 21	23 29	3 21	21 12	21 23	2 37	8 14	0 56
T 25	1 52	1s 4	4 56	10 14	2 4	21 2	3 13	1 57	3 4	23 0	0 26	9 37	2 44	21 35	0 2	3 2	1 21	23 29	3 21	21 15	21 24	2 39	8 15	0 55
W26	2 15	5 25	5 1	9 48	2 8	21 22	3 18	1 49	3 2	22 59	0 26	9 35	2 44	21 35	0 2	3 2	1 21	23 29	3 21	21 17	21 24	2 42	8 16	0 55
T 27	2 39	9 34	4 52	9 20	2 12	21 41	3 22	1 42	3 1	22 59	0 26	9 34	2 44	21 35	0 2	3 3	1 21	23 29	3 22	21 19	21 25	2 44	8 17	0 55
F 28	3 2	13 23	4 31	8 52	2 16	22 0	3 27	1 34	3 0	22 59	0 26	9 32	2 44	21 36	0 2	3 3	1 21	23 29	3 22	21 21	21 25	2 47	8 19	0 55
S 29	3 26	16 41	3 58	8 21	2 19	22 19	3 31	1 26	2 58	22 58	0 26	9 31	2 44	21 36	0 2	3 4	1 21	23 29	3 22	21 22	21 26	2 49	8 20	0 55
S 30	3 49	19 18	3 13	7 50	2 22	22 37	3 35	1 19	2 57	22 58	0 26	9 29	2 44	21 36	0 2	3 5	1 21	23 29	3 22	21 23	21 26	2 52	8 21	0 55
M31	4n12	21s 6	2n19	7s17	2s24	22n54	3n40	1s11	2n55	22n58	0n26	9s28	2n44	21n37	0s 2	3n 5	1n21	23s29	3s22	21n24	21n27	2s54	8n23	0n55

Julian Day Number = 2370155.5, Delta T = 22.11 sec
Ecliptic obliquity = 23°28'02, Nutation = - 0°00'15, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'45, Lahiri = 20°44'45Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

APRIL 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	12 38 40	11♈35'14	8♉50	18♓40	27♉11	9°R23	15♋53	1°R30	7♊53	25°R18	29♉57	23°D37	23♋17	19♎40	19♈17	T 1
W 2	12 42 37	12°34'18	21°44	20°12	28° 6	8♎59	15°57	1♏26	7°56	25♍17	29°58	23°R38	23°14	19°46	19°20	W 2
T 3	12 46 33	13°33'20	5♒ 4	21°45	28°59	8°36	16° 1	1°21	7°58	25°15	29°59	23♋37	23°11	19°53	19°24	T 3
F 4	12 50 30	14°32'20	18°51	23°20	29°52	8°13	16° 5	1°17	8° 0	25°14	29°59	23°35	23° 8	20° 0	19°28	F 4
S 5	12 54 26	15°31'19	3♓ 8	24°57	0♊44	7°50	16°10	1°13	8° 3	25°12	0♒ 0	23°31	23° 5	20° 6	19°31	S 5
S 6	12 58 23	16°30'15	17°52	26°35	1°35	7°27	16°15	1° 8	8° 5	25°10	0° 1	23°24	23° 1	20°13	19°35	S 6
M 7	13 2 19	17°29'10	2♈58	28°15	2°26	7° 5	16°20	1° 4	8° 8	25° 9	0° 2	23°15	22°58	20°20	19°39	M 7
T 8	13 6 16	18°28'02	18°17	29°56	3°16	6°42	16°25	1° 0	8°10	25° 7	0° 2	23° 4	22°55	20°27	19°42	T 8
W 9	13 10 13	19°26'53	3♉36	1♈39	4° 5	6°20	16°30	0°55	8°13	25° 6	0° 3	22°53	22°52	20°33	19°46	W 9
T 10	13 14 9	20°25'42	18°46	3°23	4°54	5°59	16°35	0°51	8°16	25° 4	0° 4	22°43	22°49	20°40	19°50	T 10
F 11	13 18 6	21°24'28	3♊35	5° 9	5°41	5°37	16°40	0°46	8°18	25° 3	0° 4	22°35	22°46	20°47	19°54	F 11
S 12	13 22 2	22°23'13	17°58	6°56	6°28	5°17	16°46	0°42	8°21	25° 2	0° 5	22°29	22°42	20°54	19°57	S 12
S 13	13 25 59	23°21'55	1♋52	8°45	7°14	4°56	16°52	0°37	8°24	25° 0	0° 5	22°27	22°39	21° 0	20° 1	S 13
M14	13 29 55	24°20'35	15°17	10°36	7°59	4°36	16°58	0°33	8°26	24°59	0° 6	22°26	22°36	21° 7	20° 5	M14
T 15	13 33 52	25°19'12	28°17	12°28	8°43	4°17	17° 4	0°28	8°29	24°57	0° 6	22°26	22°33	21°14	20° 8	T 15
W16	13 37 48	26°17'48	10♌56	14°22	9°26	3°58	17°10	0°24	8°32	24°56	0° 7	22°25	22°30	21°20	20°12	W16
T 17	13 41 45	27°16'21	23°17	16°17	10° 8	3°40	17°17	0°19	8°35	24°55	0° 7	22°23	22°27	21°27	20°16	T 17
F 18	13 45 42	28°14'52	5♍26	18°14	10°48	3°22	17°23	0°15	8°38	24°53	0° 7	22°19	22°23	21°34	20°19	F 18
S 19	13 49 38	29°13'21	17°27	20°12	11°28	3° 5	17°30	0°10	8°40	24°52	0° 8	22°11	22°20	21°41	20°23	S 19
S 20	13 53 35	0♉11'47	29°22	22°12	12° 7	2°49	17°37	0° 6	8°43	24°51	0° 8	22° 1	22°17	21°47	20°27	S 20
M21	13 57 31	1°10'12	11♎15	24°13	12°44	2°34	17°44	0° 1	8°46	24°49	0° 8	21°49	22°14	21°54	20°30	M21
T 22	14 1 28	2° 8'35	23° 7	26°16	13°20	2°19	17°51	29♎56	8°49	24°48	0° 9	21°35	22°11	22° 1	20°34	T 22
W23	14 5 24	3° 6'56	5♏ 1	28°20	13°55	2° 5	17°58	29°52	8°52	24°47	0° 9	21°22	22° 7	22° 8	20°38	W23
T 24	14 9 21	4° 5'15	16°56	0♉26	14°28	1°51	18° 5	29°47	8°55	24°46	0° 9	21° 9	22° 4	22°14	20°41	T 24
F 25	14 13 17	5° 3'32	28°56	2°32	15° 0	1°38	18°13	29°43	8°58	24°45	0° 9	20°57	22° 1	22°21	20°45	F 25
S 26	14 17 14	6° 1'48	11♐ 1	4°40	15°30	1°26	18°21	29°38	9° 2	24°43	0° 9	20°49	21°58	22°28	20°49	S 26
S 27	14 21 11	7° 0'02	23°13	6°48	15°59	1°15	18°28	29°34	9° 5	24°42	0° 9	20°43	21°55	22°34	20°52	S 27
M28	14 25 7	7°58'14	5♑36	8°58	16°26	1° 5	18°36	29°29	9° 8	24°41	0°10	20°40	21°52	22°41	20°56	M28
T 29	14 29 4	8°56'25	18°13	11° 7	16°52	0°55	18°44	29°25	9°11	24°40	0°10	20°D39	21°48	22°48	20°59	T 29
W30	14 33 0	9♉54'35	1♒ 7	13♉17	17♊16	0♎46	18♋52	29♎20	9♊14	24♍39	0♒10	20♋40	21♋45	22♎55	21♈ 3	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	4n35	21s53	1n17	6s43	2s26	23n11	3n44	1s 4	2n54	22n57	0n26	9s26	2n44	21n37	0s 2	3n 6	1n21	23s29	3s23	21n24	21n27	2s57	8n24	0n55
W 2	4 58	21 33	0 10	6 8	2 27	23 28	3 48	0 56	2 52	22 57	0 26	9 25	2 44	21 37	0 2	3 7	1 21	23 29	3 23	21 24	21 28	2 59	8 25	0 55
T 3	5 21	20 0	1s 0	5 32	2 27	23 44	3 52	0 49	2 50	22 56	0 26	9 23	2 45	21 38	0 2	3 7	1 21	23 29	3 23	21 24	21 28	3 1	8 27	0 55
F 4	5 44	17 14	2 9	4 54	2 28	23 59	3 56	0 41	2 48	22 56	0 26	9 22	2 45	21 38	0 2	3 8	1 20	23 29	3 23	21 24	21 29	3 4	8 28	0 55
S 5	6 7	13 21	3 12	4 16	2 27	24 14	4 0	0 34	2 46	22 55	0 26	9 20	2 45	21 39	0 2	3 8	1 20	23 29	3 23	21 25	21 29	3 6	8 29	0 55
S 6	6 30	8 33	4 5	3 36	2 26	24 28	4 3	0 27	2 44	22 55	0 26	9 19	2 45	21 39	0 2	3 9	1 20	23 29	3 23	21 26	21 30	3 9	8 31	0 54
M 7	6 52	3 8	4 42	2 55	2 25	24 42	4 7	0 20	2 42	22 54	0 26	9 17	2 45	21 39	0 2	3 10	1 20	23 29	3 24	21 28	21 31	3 11	8 32	0 54
T 8	7 15	2n34	4 59	2 13	2 23	24 56	4 11	0 13	2 40	22 54	0 26	9 15	2 45	21 40	0 2	3 10	1 20	23 29	3 24	21 30	21 31	3 14	8 33	0 54
W 9	7 37	8 6	4 55	1 30	2 21	25 9	4 14	0 6	2 38	22 53	0 26	9 14	2 45	21 40	0 2	3 11	1 20	23 29	3 24	21 31	21 32	3 16	8 35	0 54
T 10	7 59	13 6	4 30	0 46	2 18	25 21	4 17	0n 0	2 35	22 52	0 26	9 12	2 45	21 41	0 2	3 11	1 20	23 29	3 24	21 33	21 32	3 19	8 36	0 54
F 11	8 21	17 10	3 47	0 1	2 15	25 33	4 21	0 6	2 33	22 52	0 26	9 11	2 45	21 41	0 2	3 12	1 20	23 29	3 24	21 34	21 33	3 21	8 37	0 54
S 12	8 43	20 5	2 51	0n45	2 11	25 44	4 24	0 12	2 31	22 51	0 26	9 9	2 45	21 42	0 2	3 13	1 20	23 29	3 24	21 35	21 33	3 24	8 39	0 54
S 13	9 5	21 41	1 46	1 32	2 7	25 55	4 26	0 18	2 28	22 50	0 26	9 7	2 45	21 42	0 2	3 13	1 20	23 29	3 25	21 36	21 34	3 26	8 40	0 54
M14	9 27	21 58	0 38	2 20	2 2	26 6	4 29	0 24	2 26	22 50	0 26	9 6	2 45	21 42	0 2	3 14	1 20	23 29	3 25	21 36	21 34	3 29	8 41	0 54
T 15	9 48	21 2	0n31	3 9	1 56	26 15	4 32	0 29	2 23	22 49	0 26	9 4	2 45	21 43	0 2	3 14	1 20	23 29	3 25	21 36	21 35	3 31	8 43	0 54
W16	10 10	19 3	1 36	3 58	1 51	26 24	4 34	0 35	2 21	22 48	0 27	9 3	2 45	21 43	0 2	3 15	1 20	23 29	3 25	21 36	21 35	3 34	8 44	0 54
T 17	10 31	16 13	2 35	4 48	1 44	26 33	4 37	0 39	2 18	22 47	0 27	9 1	2 45	21 44	0 2	3 15	1 20	23 30	3 25	21 36	21 36	3 36	8 45	0 54
F 18	10 52	12 43	3 26	5 39	1 37	26 41	4 39	0 44	2 16	22 46	0 27	9 0	2 45	21 44	0 2	3 16	1 20	23 30	3 26	21 37	21 36	3 39	8 47	0 54
S 19	11 13	8 46	4 7	6 31	1 30	26 49	4 41	0 48	2 13	22 46	0 27	8 58	2 45	21 45	0 2	3 16	1 20	23 30	3 26	21 38	21 37	3 41	8 48	0 54
S 20	11 33	4 29	4 37	7 23	1 22	26 56	4 42	0 52	2 11	22 45	0 27	8 56	2 45	21 45	0 2	3 17	1 20	23 30	3 26	21 40	21 37	3 43	8 49	0 54
M21	11 54	0 4	4 55	8 15	1 14	27 3	4 44	0 56	2 8	22 44	0 27	8 55	2 45	21 46	0 2	3 17	1 20	23 30	3 26	21 42	21 38	3 46	8 51	0 53
T 22	12 14	4s21	5 0	9 8	1 5	27 9	4 45	1 0	2 5	22 43	0 27	8 53	2 45	21 46	0 2	3 18	1 20	23 30	3 26	21 44	21 38	3 48	8 52	0 53
W23	12 34	8 37	4 52	10 1	0 56	27 14	4 46	1 3	2 3	22 42	0 27	8 52	2 45	21 47	0 2	3 18	1 20	23 30	3 27	21 46	21 39	3 51	8 53	0 53
T 24	12 54	12 35	4 31	10 54	0 47	27 19	4 47	1 6	2 0	22 41	0 27	8 50	2 45	21 47	0 2	3 19	1 20	23 30	3 27	21 48	21 39	3 53	8 55	0 53
F 25	13 13	16 5	3 57	11 47	0 37	27 23	4 48	1 8	1 57	22 40	0 27	8 48	2 45	21 48	0 2	3 19	1 20	23 31	3 27	21 50	21 40	3 56	8 56	0 53
S 26	13 33	18 56	3 13	12 40	0 27	27 27	4 48	1 11	1 55	22 39	0 27	8 47	2 45	21 48	0 2	3 20	1 20	23 31	3 27	21 51	21 40	3 58	8 57	0 53
S 27	13 52	20 58	2 20	13 32	0 17	27 31	4 48	1 13	1 52	22 38	0 27	8 45	2 45	21 49	0 2	3 20	1 20	23 31	3 27	21 52	21 41	4 1	8 59	0 53
M28	14 11	22 2	1 19	14 24	0 6	27 33	4 48	1 14	1 49	22 37	0 27	8 44	2 45	21 49	0 2	3 20	1 20	23 31	3 27	21 53	21 41	4 3	9 0	0 53
T 29	14 30	22 1	0 13	15 15	0n 4	27 36	4 48	1 16	1 46	22 36	0 27	8 42	2 45	21 50	0 2	3 21	1 20	23 31	3 28	21 53	21 42	4 6	9 1	0 53
W30	14n48	20s50	0s55	16n 5	0n15	27n37	4n47	1n17	1n44	22n35	0n27	8s41	2n45	21n50	0s 2	3n21	1n20	23s31	3s28	21n53	21n42	4s 8	9n 2	0n53

Julian Day Number = 2370186.5, Delta T = 22.12 sec
Ecliptic obliquity = 23°28'03, Nutation = - 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'49, Lahiri = 20°44'50Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

MAY 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	14 36 57	10♉52'43	14♒22	15♉26	17♊38	0°R38	19♋ 1	29°R16	9♊17	24°R38	0°R10	20°R40	21♋42	23♎ 1	21♈ 6	T 1
F 2	14 40 53	11°50'49	28° 2	17°36	17°59	0♎31	19° 9	29♎11	9°20	24♍37	0♒10	20♋39	21°39	23° 8	21°10	F 2
S 3	14 44 50	12°48'54	12♓ 8	19°44	18°17	0°25	19°18	29° 7	9°24	24°36	0°10	20°36	21°36	23°15	21°13	S 3
S 4	14 48 46	13°46'58	26°39	21°52	18°34	0°19	19°26	29° 3	9°27	24°35	0°10	20°30	21°32	23°21	21°17	S 4
M 5	14 52 43	14°45'01	11♈33	23°58	18°49	0°14	19°35	28°58	9°30	24°34	0° 9	20°23	21°29	23°28	21°20	M 5
T 6	14 56 40	15°43'02	26°41	26° 3	19° 1	0°10	19°44	28°54	9°34	24°33	0° 9	20°13	21°26	23°35	21°24	T 6
W 7	15 0 36	16°41'01	11♉55	28° 6	19°12	0° 7	19°53	28°50	9°37	24°32	0° 9	20° 4	21°23	23°42	21°27	W 7
T 8	15 4 33	17°38'59	27° 3	0♊ 8	19°20	0° 4	20° 2	28°46	9°40	24°31	0° 9	19°55	21°20	23°48	21°31	T 8
F 9	15 8 29	18°36'55	11♊55	2° 6	19°27	0° 2	20°11	28°41	9°44	24°30	0° 9	19°48	21°17	23°55	21°34	F 9
S 10	15 12 26	19°34'50	26°24	4° 3	19°31	0° 2	20°20	28°37	9°47	24°30	0° 9	19°44	21°13	24° 2	21°38	S 10
S 11	15 16 22	20°32'43	10♋25	5°57	19°R32	0°D 1	20°30	28°33	9°50	24°29	0° 8	19°42	21°10	24° 9	21°41	S 11
M12	15 20 19	21°30'35	23°58	7°47	19°31	0° 2	20°39	28°29	9°54	24°28	0° 8	19°D42	21° 7	24°15	21°44	M12
T 13	15 24 15	22°28'24	7♌ 3	9°36	19°28	0° 3	20°49	28°25	9°57	24°27	0° 8	19°42	21° 4	24°22	21°48	T 13
W14	15 28 12	23°26'12	19°45	11°21	19°23	0° 6	20°59	28°21	10° 1	24°27	0° 7	19°R43	21° 1	24°29	21°51	W14
T 15	15 32 9	24°23'58	2♍ 8	13° 2	19°15	0° 9	21° 8	28°17	10° 4	24°26	0° 7	19°43	20°58	24°35	21°54	T 15
F 16	15 36 5	25°21'43	14°17	14°41	19° 4	0°12	21°18	28°14	10° 7	24°25	0° 7	19°41	20°54	24°42	21°57	F 16
S 17	15 40 2	26°19'26	26°16	16°17	18°51	0°17	21°28	28°10	10°11	24°25	0° 6	19°37	20°51	24°49	22° 1	S 17
S 18	15 43 58	27°17'07	8♎ 9	17°49	18°36	0°22	21°39	28° 6	10°14	24°24	0° 6	19°30	20°48	24°56	22° 4	S 18
M19	15 47 55	28°14'47	20° 1	19°18	18°18	0°27	21°49	28° 2	10°18	24°24	0° 5	19°22	20°45	25° 2	22° 7	M19
T 20	15 51 51	29°12'25	1♏54	20°43	17°58	0°34	21°59	27°59	10°21	24°23	0° 5	19°13	20°42	25° 9	22°10	T 20
W21	15 55 48	0♊10'02	13°50	22° 5	17°36	0°41	22° 9	27°55	10°25	24°23	0° 4	19° 4	20°38	25°16	22°13	W21
T 22	15 59 44	1° 7'37	25°52	23°24	17°12	0°49	22°20	27°52	10°28	24°22	0° 4	18°55	20°35	25°22	22°16	T 22
F 23	16 3 41	2° 5'12	8♐ 0	24°39	16°45	0°57	22°30	27°49	10°32	24°22	0° 3	18°48	20°32	25°29	22°19	F 23
S 24	16 7 38	3° 2'45	20°16	25°50	16°17	1° 6	22°41	27°45	10°35	24°22	0° 2	18°42	20°29	25°36	22°22	S 24
S 25	16 11 34	4° 0'17	2♑41	26°58	15°46	1°16	22°52	27°42	10°39	24°21	0° 2	18°39	20°26	25°43	22°25	S 25
M26	16 15 31	4°57'49	15°17	28° 2	15°14	1°27	23° 2	27°39	10°42	24°21	0° 1	18°D38	20°23	25°49	22°28	M26
T 27	16 19 27	5°55'19	28° 5	29° 3	14°41	1°37	23°13	27°36	10°46	24°21	0° 0	18°38	20°19	25°56	22°31	T 27
W28	16 23 24	6°52'48	11♒ 8	29°59	14° 6	1°49	23°24	27°33	10°49	24°20	29♑59	18°39	20°16	26° 3	22°34	W28
T 29	16 27 20	7°50'17	24°28	0♋52	13°31	2° 1	23°35	27°30	10°53	24°20	29°59	18°41	20°13	26°10	22°37	T 29
F 30	16 31 17	8°47'45	8♓ 7	1°41	12°54	2°14	23°46	27°27	10°57	24°20	29°58	18°R41	20°10	26°16	22°40	F 30
S 31	16 35 13	9♊45'12	22♓ 6	2♋25	12♊17	2♎27	23♋58	27♎24	11♊ 0	24♍20	29♑57	18♋41	20♋ 7	26♎23	22♈42	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	15n 6	18s29	2s 2	16n53	0n26	27n38	4n46	1n17	1n41	22n34	0n27	8s39	2n45	21n51	0s 2	3n22	1n20	23s31	3s28	21n53	21n43	4s11	9n 4	0n53
F 2	15 24	15 4	3 5	17 41	0 36	27 39	4 45	1 18	1 38	22 33	0 27	8 38	2 45	21 51	0 2	3 22	1 20	23 32	3 28	21 53	21 43	4 13	9 5	0 53
S 3	15 42	10 41	3 58	18 26	0 46	27 39	4 43	1 18	1 36	22 31	0 27	8 36	2 45	21 52	0 2	3 22	1 20	23 32	3 28	21 53	21 44	4 16	9 6	0 53
S 4	16 0	5 34	4 37	19 10	0 57	27 38	4 41	1 18	1 33	22 30	0 27	8 35	2 44	21 52	0 2	3 23	1 20	23 32	3 29	21 54	21 44	4 18	9 7	0 53
M 5	16 17	0 1	4 59	19 52	1 6	27 37	4 39	1 17	1 30	22 29	0 27	8 34	2 44	21 53	0 2	3 23	1 20	23 32	3 29	21 55	21 45	4 21	9 9	0 53
T 6	16 34	5n37	5 1	20 31	1 16	27 36	4 36	1 17	1 28	22 28	0 27	8 32	2 44	21 53	0 2	3 23	1 20	23 32	3 29	21 57	21 45	4 23	9 10	0 53
W 7	16 51	10 57	4 42	21 8	1 25	27 33	4 32	1 16	1 25	22 26	0 27	8 31	2 44	21 54	0 2	3 24	1 20	23 33	3 29	21 58	21 46	4 26	9 11	0 53
T 8	17 7	15 35	4 2	21 43	1 33	27 30	4 29	1 14	1 23	22 25	0 27	8 29	2 44	21 54	0 2	3 24	1 20	23 33	3 29	21 59	21 46	4 28	9 12	0 52
F 9	17 23	19 9	3 7	22 15	1 41	27 27	4 25	1 13	1 20	22 24	0 27	8 28	2 44	21 55	0 2	3 24	1 20	23 33	3 29	22 0	21 47	4 31	9 14	0 52
S 10	17 39	21 24	2 1	22 45	1 48	27 23	4 20	1 11	1 18	22 22	0 27	8 27	2 44	21 55	0 2	3 25	1 20	23 33	3 30	22 1	21 47	4 33	9 15	0 52
S 11	17 54	22 14	0 49	23 12	1 55	27 18	4 15	1 8	1 15	22 21	0 27	8 25	2 44	21 56	0 2	3 25	1 20	23 34	3 30	22 1	21 48	4 36	9 16	0 52
M12	18 10	21 43	0n23	23 37	2 1	27 12	4 10	1 6	1 13	22 20	0 27	8 24	2 44	21 56	0 2	3 25	1 20	23 34	3 30	22 1	21 48	4 38	9 17	0 52
T 13	18 25	20 0	1 32	23 59	2 6	27 6	4 4	1 3	1 10	22 18	0 27	8 23	2 43	21 57	0 2	3 25	1 20	23 34	3 30	22 1	21 49	4 41	9 19	0 52
W14	18 39	17 20	2 34	24 19	2 10	26 59	3 57	1 0	1 8	22 17	0 27	8 21	2 43	21 57	0 2	3 26	1 20	23 34	3 30	22 1	21 49	4 43	9 20	0 52
T 15	18 54	13 57	3 27	24 36	2 14	26 52	3 50	0 57	1 5	22 15	0 27	8 20	2 43	21 58	0 2	3 26	1 20	23 35	3 31	22 1	21 50	4 45	9 21	0 52
F 16	19 8	10 2	4 10	24 51	2 16	26 43	3 43	0 53	1 3	22 14	0 27	8 19	2 43	21 58	0 1	3 26	1 20	23 35	3 31	22 1	21 50	4 48	9 22	0 52
S 17	19 21	5 47	4 41	25 3	2 18	26 34	3 35	0 49	1 1	22 12	0 27	8 18	2 43	21 59	0 1	3 26	1 20	23 35	3 31	22 2	21 51	4 50	9 23	0 52
S 18	19 35	1 21	5 0	25 13	2 19	26 24	3 26	0 45	0 58	22 11	0 27	8 17	2 43	21 59	0 1	3 27	1 20	23 35	3 31	22 3	21 51	4 53	9 24	0 52
M19	19 48	3s 7	5 6	25 21	2 20	26 14	3 17	0 40	0 56	22 9	0 27	8 15	2 43	22 0	0 1	3 27	1 20	23 36	3 31	22 4	21 52	4 55	9 25	0 52
T 20	20 0	7 28	4 59	25 27	2 19	26 2	3 8	0 36	0 54	22 7	0 28	8 14	2 42	22 0	0 1	3 27	1 20	23 36	3 31	22 5	21 52	4 58	9 27	0 52
W21	20 13	11 35	4 38	25 31	2 17	25 50	2 58	0 31	0 51	22 6	0 28	8 13	2 42	22 1	0 1	3 27	1 19	23 36	3 32	22 7	21 53	5 0	9 28	0 52
T 22	20 25	15 16	4 5	25 33	2 15	25 37	2 47	0 26	0 49	22 4	0 28	8 12	2 42	22 1	0 1	3 27	1 19	23 36	3 32	22 8	21 53	5 3	9 29	0 52
F 23	20 36	18 21	3 21	25 33	2 12	25 24	2 36	0 20	0 47	22 2	0 28	8 11	2 42	22 2	0 1	3 27	1 19	23 37	3 32	22 9	21 54	5 5	9 30	0 52
S 24	20 47	20 40	2 27	25 32	2 8	25 9	2 24	0 15	0 45	22 1	0 28	8 10	2 42	22 2	0 1	3 27	1 19	23 37	3 32	22 10	21 54	5 8	9 31	0 52
S 25	20 58	22 1	1 25	25 29	2 3	24 54	2 12	0 9	0 43	21 59	0 28	8 9	2 42	22 3	0 1	3 28	1 19	23 37	3 32	22 10	21 55	5 10	9 32	0 52
M26	21 9	22 17	0 18	25 24	1 57	24 38	2 0	0 3	0 41	21 57	0 28	8 8	2 41	22 3	0 1	3 28	1 19	23 38	3 32	22 10	21 55	5 13	9 33	0 52
T 27	21 19	21 24	0s51	25 18	1 51	24 22	1 47	0s 3	0 39	21 55	0 28	8 7	2 41	22 4	0 1	3 28	1 19	23 38	3 33	22 10	21 56	5 15	9 34	0 52
W28	21 29	19 21	1 59	25 11	1 43	24 4	1 34	0 10	0 36	21 54	0 28	8 6	2 41	22 4	0 1	3 28	1 19	23 38	3 33	22 10	21 56	5 18	9 35	0 52
T 29	21 39	16 14	3 2	25 3	1 35	23 47	1 20	0 17	0 34	21 52	0 28	8 6	2 41	22 5	0 1	3 28	1 19	23 39	3 33	22 10	21 57	5 20	9 36	0 52
F 30	21 48	12 11	3 56	24 53	1 26	23 28	1 7	0 24	0 32	21 50	0 28	8 5	2 41	22 5	0 1	3 28	1 19	23 39	3 33	22 10	21 57	5 23	9 37	0 51
S 31	21n56	7s23	4s38	24n43	1n16	23n10	0n53	0s31	0n30	21n48	0n28	8s 4	2n40	22n 6	0s 1	3n28	1n19	23s39	3s33	22n10	21n58	5s25	9n38	0n51

Julian Day Number = 2370216.5, Delta T = 22.12 sec
Ecliptic obliquity = 23°28'02, Nutation = - 0°00'17, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'53, Lahiri = 20°44'54Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

JUNE 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	16 39 10	10♊42'39	6♈24	3♋ 6	11°R39	2♎41	24♋ 9	27°R21	11♊ 4	24°R20	29°R57	18°R38	20♋ 4	26♎30	22♈45	S 1
M 2	16 43 7	11°40'05	21° 0	3°42	11♊ 2	2°55	24°20	27♎19	11° 7	24♍19	29♑56	18♋35	20° 0	26°36	22°48	M 2
T 3	16 47 3	12°37'30	5♉48	4°14	10°24	3°10	24°32	27°16	11°11	24°19	29°55	18°30	19°57	26°43	22°51	T 3
W 4	16 51 0	13°34'54	20°41	4°42	9°47	3°26	24°43	27°14	11°14	24°19	29°54	18°25	19°54	26°50	22°53	W 4
T 5	16 54 56	14°32'18	5♊31	5° 5	9°10	3°42	24°55	27°11	11°18	24°D19	29°53	18°20	19°51	26°57	22°56	T 5
F 6	16 58 53	15°29'42	20°11	5°24	8°35	3°58	25° 6	27° 9	11°21	24°19	29°52	18°17	19°48	27° 3	22°58	F 6
S 7	17 2 49	16°27'04	4♋32	5°38	8° 0	4°15	25°18	27° 7	11°25	24°19	29°51	18°14	19°44	27°10	23° 1	S 7
S 8	17 6 46	17°24'26	18°31	5°48	7°27	4°33	25°29	27° 5	11°28	24°20	29°51	18°D14	19°41	27°17	23° 3	S 8
M 9	17 10 42	18°21'46	2♌ 5	5°53	6°54	4°51	25°41	27° 3	11°32	24°20	29°50	18°14	19°38	27°24	23° 6	M 9
T 10	17 14 39	19°19'06	15°14	5°R54	6°24	5°10	25°53	27° 1	11°35	24°20	29°49	18°16	19°35	27°30	23° 8	T 10
W11	17 18 36	20°16'25	28° 0	5°50	5°55	5°28	26° 5	26°59	11°39	24°20	29°48	18°17	19°32	27°37	23°11	W11
T 12	17 22 32	21°13'43	10♍27	5°42	5°28	5°48	26°17	26°57	11°42	24°20	29°47	18°19	19°29	27°44	23°13	T 12
F 13	17 26 29	22°11'00	22°38	5°29	5° 3	6° 8	26°29	26°56	11°46	24°20	29°46	18°R19	19°25	27°50	23°15	F 13
S 14	17 30 25	23° 8'16	4♎39	5°12	4°41	6°28	26°41	26°54	11°49	24°21	29°44	18°18	19°22	27°57	23°17	S 14
S 15	17 34 22	24° 5'31	16°33	4°52	4°20	6°49	26°53	26°53	11°53	24°21	29°43	18°17	19°19	28° 4	23°20	S 15
M16	17 38 18	25° 2'46	28°26	4°28	4° 2	7°10	27° 5	26°51	11°56	24°21	29°42	18°14	19°16	28°11	23°22	M16
T 17	17 42 15	26° 0'00	10♏20	4° 1	3°46	7°31	27°18	26°50	12° 0	24°22	29°41	18°11	19°13	28°17	23°24	T 17
W18	17 46 11	26°57'13	22°20	3°32	3°33	7°53	27°30	26°49	12° 3	24°22	29°40	18° 7	19°10	28°24	23°26	W18
T 19	17 50 8	27°54'26	4♐29	3° 0	3°21	8°16	27°42	26°48	12° 7	24°23	29°39	18° 4	19° 6	28°31	23°28	T 19
F 20	17 54 5	28°51'39	16°47	2°26	3°13	8°39	27°54	26°47	12°10	24°23	29°38	18° 2	19° 3	28°37	23°30	F 20
S 21	17 58 1	29°48'51	29°17	1°52	3° 6	9° 2	28° 7	26°46	12°14	24°24	29°37	18° 0	19° 0	28°44	23°32	S 21
S 22	18 1 58	0♋46'02	11♑59	1°16	3° 2	9°25	28°19	26°45	12°17	24°24	29°35	17°D59	18°57	28°51	23°34	S 22
M23	18 5 54	1°43'14	24°55	0°41	3°D 1	9°49	28°32	26°44	12°20	24°25	29°34	17°59	18°54	28°58	23°36	M23
T 24	18 9 51	2°40'25	8♒ 3	0° 7	3° 1	10°13	28°44	26°44	12°24	24°25	29°33	18° 0	18°50	29° 4	23°37	T 24
W25	18 13 47	3°37'36	21°25	29♊33	3° 5	10°38	28°57	26°43	12°27	24°26	29°32	18° 1	18°47	29°11	23°39	W25
T 26	18 17 44	4°34'48	5♓ 1	29° 2	3°10	11° 3	29°10	26°43	12°31	24°27	29°31	18° 2	18°44	29°18	23°41	T 26
F 27	18 21 41	5°31'59	18°49	28°33	3°17	11°28	29°22	26°42	12°34	24°27	29°29	18° 3	18°41	29°25	23°43	F 27
S 28	18 25 37	6°29'11	2♈49	28° 7	3°27	11°53	29°35	26°42	12°37	24°28	29°28	18°R 3	18°38	29°31	23°44	S 28
S 29	18 29 34	7°26'22	17° 1	27°44	3°39	12°19	29°48	26°42	12°41	24°29	29°27	18° 3	18°35	29°38	23°46	S 29
M30	18 33 30	8♋23'34	1♉21	27♊25	3♊53	12♎45	0♌ 0	26°D42	12♊44	24♍30	29♑25	18♋ 2	18♋31	29♎45	23♈47	M30

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	22n 5	2s 6	5s 4	24n31	1n 5	22n51	0n39	0s38	0n28	21n46	0n28	8s 3	2n40	22n 6	0s 1	3n28	1n19	23s40	3s33	22n10	21n58	5s28	9n39	0n51
M 2	22 13	3n24	5 10	24 19	0 54	22 32	0 24	0 45	0 27	21 44	0 28	8 2	2 40	22 7	0 1	3 28	1 19	23 40	3 34	22 11	21 58	5 30	9 40	0 51
T 3	22 20	8 48	4 57	24 5	0 41	22 12	0 10	0 53	0 25	21 42	0 28	8 2	2 40	22 7	0 1	3 28	1 19	23 40	3 34	22 11	21 59	5 33	9 41	0 51
W 4	22 27	13 43	4 23	23 51	0 28	21 53	0s 4	1 1	0 23	21 40	0 28	8 1	2 39	22 8	0 1	3 28	1 19	23 41	3 34	22 12	21 59	5 35	9 42	0 51
T 5	22 34	17 46	3 32	23 37	0 15	21 33	0 18	1 9	0 21	21 38	0 28	8 0	2 39	22 8	0 1	3 28	1 19	23 41	3 34	22 13	22 0	5 38	9 43	0 51
F 6	22 41	20 39	2 27	23 22	0 0	21 14	0 32	1 17	0 19	21 36	0 28	8 0	2 39	22 9	0 1	3 28	1 19	23 41	3 34	22 13	22 0	5 40	9 44	0 51
S 7	22 47	22 9	1 14	23 6	0s14	20 55	0 46	1 26	0 17	21 34	0 28	7 59	2 39	22 9	0 1	3 28	1 19	23 42	3 34	22 13	22 1	5 43	9 45	0 51
S 8	22 52	22 13	0n 2	22 51	0 30	20 36	0 59	1 34	0 16	21 32	0 28	7 59	2 39	22 10	0 1	3 28	1 19	23 42	3 35	22 13	22 1	5 45	9 46	0 51
M 9	22 57	20 56	1 15	22 34	0 46	20 18	1 12	1 43	0 14	21 30	0 28	7 58	2 38	22 10	0 1	3 28	1 19	23 42	3 35	22 13	22 2	5 48	9 47	0 51
T 10	23 2	18 33	2 23	22 18	1 2	20 0	1 25	1 52	0 12	21 27	0 28	7 58	2 38	22 11	0 1	3 28	1 19	23 43	3 35	22 13	22 2	5 50	9 48	0 51
W11	23 7	15 19	3 21	22 2	1 19	19 43	1 38	2 1	0 10	21 25	0 28	7 57	2 38	22 11	0 1	3 27	1 19	23 43	3 35	22 13	22 3	5 53	9 48	0 51
T 12	23 11	11 29	4 8	21 45	1 35	19 26	1 50	2 10	0 9	21 23	0 28	7 57	2 38	22 12	0 1	3 27	1 19	23 44	3 35	22 13	22 3	5 55	9 49	0 51
F 13	23 14	7 15	4 43	21 29	1 52	19 10	2 2	2 20	0 7	21 21	0 28	7 57	2 37	22 12	0 1	3 27	1 19	23 44	3 35	22 13	22 4	5 58	9 50	0 51
S 14	23 17	2 49	5 5	21 13	2 9	18 55	2 13	2 29	0 5	21 19	0 29	7 56	2 37	22 13	0 1	3 27	1 19	23 44	3 36	22 13	22 4	6 0	9 51	0 51
S 15	23 20	1s41	5 14	20 57	2 26	18 41	2 24	2 39	0 4	21 16	0 29	7 56	2 37	22 13	0 1	3 27	1 19	23 45	3 36	22 13	22 4	6 3	9 52	0 51
M16	23 22	6 7	5 9	20 42	2 42	18 27	2 34	2 49	0 2	21 14	0 29	7 56	2 37	22 14	0 1	3 27	1 19	23 45	3 36	22 13	22 5	6 5	9 52	0 51
T 17	23 24	10 20	4 51	20 27	2 58	18 14	2 44	2 59	0 1	21 12	0 29	7 55	2 36	22 14	0 1	3 27	1 19	23 45	3 36	22 14	22 5	6 8	9 53	0 51
W18	23 26	14 11	4 20	20 12	3 13	18 3	2 54	3 9	0s 1	21 9	0 29	7 55	2 36	22 15	0 1	3 26	1 18	23 46	3 36	22 14	22 6	6 10	9 54	0 51
T 19	23 27	17 30	3 37	19 59	3 27	17 52	3 3	3 19	0 2	21 7	0 29	7 55	2 36	22 15	0 1	3 26	1 18	23 46	3 36	22 15	22 6	6 13	9 55	0 51
F 20	23 28	20 6	2 44	19 46	3 41	17 42	3 11	3 29	0 4	21 4	0 29	7 55	2 36	22 16	0 1	3 26	1 18	23 47	3 36	22 15	22 7	6 15	9 55	0 51
S 21	23 28	21 47	1 41	19 34	3 53	17 33	3 19	3 40	0 5	21 2	0 29	7 55	2 35	22 16	0 1	3 26	1 18	23 47	3 37	22 15	22 7	6 18	9 56	0 51
S 22	23 28	22 23	0 33	19 24	4 4	17 25	3 26	3 51	0 7	21 0	0 29	7 55	2 35	22 16	0 1	3 25	1 18	23 47	3 37	22 15	22 8	6 20	9 57	0 51
M23	23 27	21 48	0s38	19 14	4 14	17 18	3 33	4 1	0 8	20 57	0 29	7 55	2 35	22 17	0 1	3 25	1 18	23 48	3 37	22 15	22 8	6 23	9 57	0 51
T 24	23 26	20 1	1 49	19 6	4 22	17 11	3 40	4 12	0 10	20 55	0 29	7 55	2 35	22 17	0 1	3 25	1 18	23 48	3 37	22 15	22 8	6 25	9 58	0 51
W25	23 25	17 8	2 54	18 58	4 30	17 6	3 46	4 23	0 11	20 52	0 29	7 55	2 34	22 18	0 1	3 25	1 18	23 49	3 37	22 15	22 9	6 28	9 59	0 51
T 26	23 23	13 16	3 52	18 53	4 35	17 2	3 51	4 34	0 13	20 50	0 29	7 55	2 34	22 18	0 1	3 24	1 18	23 49	3 37	22 15	22 9	6 30	9 59	0 51
F 27	23 21	8 40	4 36	18 49	4 39	16 58	3 57	4 45	0 14	20 47	0 29	7 55	2 34	22 19	0 1	3 24	1 18	23 49	3 37	22 15	22 10	6 33	10 0	0 50
S 28	23 18	3 33	5 5	18 46	4 41	16 55	4 1	4 56	0 15	20 44	0 29	7 55	2 34	22 19	0 1	3 24	1 18	23 50	3 37	22 15	22 10	6 35	10 0	0 50
S 29	23 15	1n49	5 16	18 44	4 42	16 53	4 6	5 8	0 17	20 42	0 29	7 56	2 33	22 20	0 1	3 23	1 18	23 50	3 38	22 15	22 11	6 38	10 1	0 50
M30	23n12	7n 9	5s 8	18n45	4s42	16n52	4s10	5s19	0s18	20n39	0n29	7s56	2n33	22n20	0s 1	3n23	1n18	23s51	3s38	22n15	22n11	6s40	10n 1	0n50

Julian Day Number = 2370247.5, Delta T = 22.13 sec
Ecliptic obliquity = 23°28'02, Nutation = - 0°00'17, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°37'57, Lahiri = 20°44'58Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

JULY 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	18 37 27	9♋20'47	15♉47	27°R10	4♊ 8	13♎12	0♌13	26♎42	12♊47	24♍31	29°R24	18°R 2	18♋28	29♎51	23♈49	T 1
W 2	18 41 23	10°17'59	0♊15	26♊59	4°26	13°39	0°26	26°42	12°50	24°31	29♑23	18♋ 1	18°25	29°58	23°50	W 2
T 3	18 45 20	11°15'12	14°39	26°54	4°46	14° 6	0°39	26°43	12°54	24°32	29°21	18° 0	18°22	0♏ 5	23°51	T 3
F 4	18 49 16	12°12'25	28°54	26°D53	5° 7	14°33	0°52	26°43	12°57	24°33	29°20	17°59	18°19	0°12	23°53	F 4
S 5	18 53 13	13° 9'39	12♋57	26°57	5°30	15° 1	1° 5	26°43	13° 0	24°34	29°19	17°D59	18°16	0°18	23°54	S 5
S 6	18 57 10	14° 6'52	26°42	27° 6	5°55	15°29	1°18	26°44	13° 3	24°35	29°17	17°59	18°12	0°25	23°55	S 6
M 7	19 1 6	15° 4'06	10♌ 7	27°20	6°21	15°58	1°31	26°45	13° 6	24°36	29°16	17°59	18° 9	0°32	23°56	M 7
T 8	19 5 3	16° 1'19	23°13	27°39	6°49	16°26	1°44	26°46	13° 9	24°37	29°15	18° 0	18° 6	0°38	23°57	T 8
W 9	19 8 59	16°58'33	5♍58	28° 4	7°18	16°55	1°57	26°46	13°13	24°38	29°13	18° 0	18° 3	0°45	23°59	W 9
T 10	19 12 56	17°55'47	18°26	28°34	7°49	17°24	2°10	26°47	13°16	24°39	29°12	18°R 0	18° 0	0°52	23°59	T 10
F 11	19 16 52	18°53'00	0♎39	29°10	8°21	17°54	2°23	26°48	13°19	24°40	29°11	18° 0	17°56	0°59	24° 0	F 11
S 12	19 20 49	19°50'14	12°41	29°50	8°54	18°23	2°36	26°50	13°22	24°42	29° 9	18° 0	17°53	1° 5	24° 1	S 12
S 13	19 24 45	20°47'28	24°36	0♋36	9°29	18°53	2°49	26°51	13°25	24°43	29° 8	18°D 0	17°50	1°12	24° 2	S 13
M14	19 28 42	21°44'42	6♏29	1°27	10° 5	19°23	3° 2	26°52	13°28	24°44	29° 6	18° 0	17°47	1°19	24° 3	M14
T 15	19 32 39	22°41'56	18°25	2°23	10°42	19°54	3°15	26°54	13°31	24°45	29° 5	18° 0	17°44	1°26	24° 4	T 15
W16	19 36 35	23°39'11	0♐28	3°24	11°20	20°25	3°28	26°55	13°33	24°46	29° 4	18° 1	17°41	1°32	24° 4	W16
T 17	19 40 32	24°36'26	12°41	4°30	12° 0	20°56	3°41	26°57	13°36	24°48	29° 2	18° 1	17°37	1°39	24° 5	T 17
F 18	19 44 28	25°33'41	25° 7	5°41	12°40	21°27	3°55	26°59	13°39	24°49	29° 1	18° 2	17°34	1°46	24° 6	F 18
S 19	19 48 25	26°30'56	7♑50	6°57	13°22	21°58	4° 8	27° 0	13°42	24°50	28°59	18° 2	17°31	1°52	24° 6	S 19
S 20	19 52 21	27°28'13	20°50	8°17	14° 4	22°30	4°21	27° 2	13°45	24°52	28°58	18°R 3	17°28	1°59	24° 6	S 20
M21	19 56 18	28°25'29	4♒ 7	9°42	14°48	23° 2	4°34	27° 4	13°48	24°53	28°57	18° 2	17°25	2° 6	24° 7	M21
T 22	20 0 14	29°22'47	17°41	11°11	15°32	23°34	4°47	27° 7	13°50	24°54	28°55	18° 1	17°22	2°13	24° 7	T 22
W23	20 4 11	0♌20'05	1♓29	12°45	16°17	24° 6	5° 1	27° 9	13°53	24°56	28°54	18° 0	17°18	2°19	24° 8	W23
T 24	20 8 8	1°17'24	15°29	14°22	17° 3	24°38	5°14	27°11	13°56	24°57	28°52	17°58	17°15	2°26	24° 8	T 24
F 25	20 12 4	2°14'43	29°36	16° 4	17°50	25°11	5°27	27°13	13°58	24°59	28°51	17°57	17°12	2°33	24° 8	F 25
S 26	20 16 1	3°12'04	13♈49	17°49	18°38	25°44	5°40	27°16	14° 1	25° 0	28°50	17°56	17° 9	2°39	24° 8	S 26
S 27	20 19 57	4° 9'26	28° 4	19°37	19°27	26°17	5°53	27°19	14° 3	25° 2	28°48	17°D55	17° 6	2°46	24° 8	S 27
M28	20 23 54	5° 6'49	12♉18	21°29	20°16	26°50	6° 7	27°21	14° 6	25° 3	28°47	17°55	17° 2	2°53	24°R 8	M28
T 29	20 27 50	6° 4'14	26°28	23°23	21° 6	27°24	6°20	27°24	14° 9	25° 5	28°45	17°56	16°59	3° 0	24° 8	T 29
W30	20 31 47	7° 1'39	10♊33	25°20	21°56	27°58	6°33	27°27	14°11	25° 7	28°44	17°57	16°56	3° 6	24° 8	W30
T 31	20 35 43	7♌59'06	24♊31	27♋19	22♊48	28♎32	6♌46	27♎30	14♊13	25♍ 8	28♑42	17♋58	16♋53	3♏13	24♈ 8	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	23n 8	12n 7	4s40	18n46	4s40	16n51	4s13	5s31	0s19	20n36	0n29	7s56	2n33	22n20	0s 1	3n23	1n18	23s51	3s38	22n15	22n12	6s43	10n 2	0n50
W 2	23 4	16 24	3 55	18 49	4 37	16 51	4 16	5 42	0 20	20 34	0 29	7 56	2 32	22 21	0 1	3 22	1 18	23 51	3 38	22 15	22 12	6 45	10 2	0 50
T 3	22 59	19 42	2 54	18 54	4 32	16 52	4 19	5 54	0 22	20 31	0 30	7 57	2 32	22 21	0 1	3 22	1 18	23 52	3 38	22 15	22 12	6 48	10 3	0 50
F 4	22 54	21 44	1 44	19 0	4 26	16 53	4 22	6 6	0 23	20 28	0 30	7 57	2 32	22 22	0 1	3 22	1 18	23 52	3 38	22 15	22 13	6 50	10 3	0 50
S 5	22 49	22 22	0 28	19 7	4 19	16 55	4 24	6 18	0 24	20 25	0 30	7 58	2 32	22 22	0 1	3 21	1 18	23 53	3 38	22 15	22 13	6 53	10 4	0 50
S 6	22 43	21 38	0n48	19 15	4 11	16 57	4 26	6 30	0 25	20 23	0 30	7 58	2 31	22 22	0 1	3 21	1 18	23 53	3 38	22 15	22 14	6 55	10 4	0 50
M 7	22 37	19 39	2 0	19 24	4 2	17 0	4 27	6 42	0 27	20 20	0 30	7 58	2 31	22 23	0 1	3 20	1 18	23 53	3 39	22 15	22 14	6 57	10 5	0 50
T 8	22 30	16 41	3 3	19 35	3 52	17 4	4 28	6 54	0 28	20 17	0 30	7 59	2 31	22 23	0 1	3 20	1 18	23 54	3 39	22 15	22 15	7 0	10 5	0 50
W 9	22 23	12 59	3 56	19 46	3 41	17 7	4 29	7 6	0 29	20 14	0 30	8 0	2 31	22 24	0 1	3 19	1 18	23 54	3 39	22 15	22 15	7 2	10 5	0 50
T 10	22 16	8 48	4 36	19 58	3 30	17 12	4 30	7 18	0 30	20 11	0 30	8 0	2 30	22 24	0 1	3 19	1 18	23 55	3 39	22 15	22 15	7 5	10 6	0 50
F 11	22 8	4 22	5 3	20 10	3 18	17 16	4 31	7 30	0 31	20 8	0 30	8 1	2 30	22 24	0 1	3 18	1 18	23 55	3 39	22 15	22 16	7 7	10 6	0 50
S 12	22 0	0s10	5 16	20 23	3 5	17 21	4 31	7 43	0 32	20 5	0 30	8 1	2 30	22 25	0 1	3 18	1 18	23 55	3 39	22 15	22 16	7 10	10 6	0 50
S 13	21 51	4 39	5 15	20 35	2 52	17 26	4 31	7 55	0 33	20 3	0 30	8 2	2 29	22 25	0 1	3 17	1 18	23 56	3 39	22 15	22 17	7 12	10 7	0 50
M14	21 43	8 58	5 1	20 48	2 39	17 32	4 30	8 8	0 34	20 0	0 30	8 3	2 29	22 26	0 1	3 17	1 18	23 56	3 39	22 15	22 17	7 15	10 7	0 50
T 15	21 33	12 57	4 33	21 1	2 25	17 37	4 30	8 20	0 36	19 57	0 30	8 4	2 29	22 26	0 1	3 16	1 18	23 56	3 39	22 15	22 17	7 17	10 7	0 50
W16	21 24	16 27	3 54	21 14	2 11	17 43	4 29	8 33	0 37	19 54	0 30	8 5	2 29	22 26	0 1	3 16	1 18	23 57	3 39	22 15	22 18	7 20	10 7	0 50
T 17	21 14	19 19	3 4	21 26	1 57	17 49	4 28	8 45	0 38	19 51	0 30	8 5	2 28	22 27	0 1	3 15	1 18	23 57	3 40	22 15	22 18	7 22	10 7	0 50
F 18	21 3	21 19	2 4	21 38	1 43	17 56	4 27	8 58	0 39	19 48	0 31	8 6	2 28	22 27	0 1	3 15	1 17	23 58	3 40	22 15	22 19	7 25	10 8	0 50
S 19	20 53	22 18	0 56	21 48	1 29	18 2	4 26	9 11	0 40	19 45	0 31	8 7	2 28	22 27	0 1	3 14	1 17	23 58	3 40	22 15	22 19	7 27	10 8	0 50
S 20	20 41	22 6	0s15	21 58	1 15	18 8	4 24	9 24	0 41	19 41	0 31	8 8	2 28	22 28	0 1	3 14	1 17	23 58	3 40	22 15	22 20	7 30	10 8	0 50
M21	20 30	20 40	1 28	22 6	1 1	18 15	4 23	9 36	0 42	19 38	0 31	8 9	2 27	22 28	0 1	3 13	1 17	23 59	3 40	22 15	22 20	7 32	10 8	0 50
T 22	20 18	18 2	2 37	22 13	0 47	18 21	4 21	9 49	0 43	19 35	0 31	8 10	2 27	22 28	0 1	3 13	1 17	23 59	3 40	22 15	22 20	7 35	10 8	0 50
W23	20 6	14 21	3 38	22 18	0 33	18 28	4 19	10 2	0 44	19 32	0 31	8 11	2 27	22 29	0 1	3 12	1 17	24 0	3 40	22 15	22 21	7 37	10 8	0 50
T 24	19 54	9 49	4 26	22 22	0 20	18 35	4 17	10 15	0 45	19 29	0 31	8 12	2 27	22 29	0 1	3 11	1 17	24 0	3 40	22 16	22 21	7 40	10 8	0 50
F 25	19 41	4 44	5 0	22 23	0 7	18 41	4 14	10 28	0 45	19 26	0 31	8 13	2 26	22 29	0 1	3 11	1 17	24 0	3 40	22 16	22 22	7 42	10 8	0 50
S 26	19 28	0n37	5 15	22 22	0n 5	18 48	4 12	10 41	0 46	19 23	0 31	8 14	2 26	22 30	0 1	3 10	1 17	24 1	3 40	22 16	22 22	7 45	10 8	0 50
S 27	19 14	5 58	5 11	22 19	0 17	18 54	4 10	10 53	0 47	19 20	0 31	8 16	2 26	22 30	0 1	3 9	1 17	24 1	3 40	22 16	22 22	7 47	10 8	0 50
M28	19 1	10 59	4 48	22 13	0 29	19 0	4 7	11 6	0 48	19 16	0 31	8 17	2 26	22 30	0 1	3 9	1 17	24 1	3 40	22 16	22 23	7 50	10 8	0 50
T 29	18 47	15 23	4 7	22 5	0 39	19 7	4 4	11 19	0 49	19 13	0 31	8 18	2 25	22 31	0 1	3 8	1 17	24 2	3 41	22 16	22 23	7 52	10 8	0 50
W30	18 32	18 53	3 12	21 54	0 49	19 13	4 1	11 32	0 50	19 10	0 31	8 19	2 25	22 31	0 1	3 8	1 17	24 2	3 41	22 16	22 24	7 55	10 8	0 50
T 31	18n18	21n16	2s 6	21n40	0n58	19n19	3s58	11s45	0s51	19n 7	0n32	8s20	2n25	22n31	0s 1	3n 7	1n17	24s 3	3s41	22n16	22n24	7s57	10n 8	0n49

Julian Day Number = 2370277.5, Delta T = 22.14 sec
Ecliptic obliquity = 23°28'02, Nutation = - 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°38'02, Lahiri = 20°45'02Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

AUGUST 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
F 1	20 39 40	8♌56'34	8♋19	29♋19	23♊40	29♎ 6	7♌ 0	27♎33	14♊16	25♍10	28°R41	17♋59	16♋50	3♏20	24°R 8	F 1
S 2	20 43 37	9°54'03	21°56	1♌21	24°32	29°40	7°13	27°36	14°18	25°12	28♑40	17°R59	16°47	3°26	24♈ 7	S 2
S 3	20 47 33	10°51'33	5♌20	3°24	25°25	0♏14	7°26	27°39	14°20	25°13	28°38	17°58	16°43	3°33	24° 7	S 3
M 4	20 51 30	11°49'05	18°29	5°28	26°19	0°49	7°39	27°42	14°23	25°15	28°37	17°56	16°40	3°40	24° 7	M 4
T 5	20 55 26	12°46'37	1♍23	7°32	27°13	1°24	7°53	27°46	14°25	25°17	28°36	17°53	16°37	3°47	24° 6	T 5
W 6	20 59 23	13°44'10	14° 1	9°36	28° 8	1°59	8° 6	27°49	14°27	25°19	28°34	17°49	16°34	3°53	24° 6	W 6
T 7	21 3 19	14°41'44	26°25	11°40	29° 3	2°34	8°19	27°53	14°29	25°20	28°33	17°45	16°31	4° 0	24° 5	T 7
F 8	21 7 16	15°39'19	8♎36	13°43	29°59	3°10	8°32	27°56	14°31	25°22	28°32	17°41	16°28	4° 7	24° 5	F 8
S 9	21 11 12	16°36'55	20°37	15°46	0♋55	3°45	8°45	28° 0	14°34	25°24	28°30	17°37	16°24	4°13	24° 4	S 9
S 10	21 15 9	17°34'32	2♏32	17°48	1°52	4°21	8°59	28° 4	14°36	25°26	28°29	17°35	16°21	4°20	24° 3	S 10
M11	21 19 6	18°32'10	14°24	19°49	2°49	4°57	9°12	28° 8	14°38	25°28	28°28	17°D34	16°18	4°27	24° 3	M11
T 12	21 23 2	19°29'49	26°19	21°49	3°47	5°33	9°25	28°12	14°39	25°29	28°26	17°34	16°15	4°34	24° 2	T 12
W13	21 26 59	20°27'29	8♐21	23°48	4°45	6° 9	9°38	28°16	14°41	25°31	28°25	17°35	16°12	4°40	24° 1	W13
T 14	21 30 55	21°25'10	20°35	25°46	5°43	6°46	9°51	28°20	14°43	25°33	28°24	17°37	16° 8	4°47	24° 0	T 14
F 15	21 34 52	22°22'53	3♑ 5	27°43	6°42	7°22	10° 4	28°24	14°45	25°35	28°22	17°38	16° 5	4°54	23°59	F 15
S 16	21 38 48	23°20'36	15°56	29°38	7°42	7°59	10°17	28°28	14°47	25°37	28°21	17°R39	16° 2	5° 0	23°58	S 16
S 17	21 42 45	24°18'21	29° 8	1♍32	8°41	8°36	10°30	28°33	14°49	25°39	28°20	17°38	15°59	5° 7	23°57	S 17
M18	21 46 41	25°16'07	12♒44	3°24	9°41	9°13	10°43	28°37	14°50	25°41	28°19	17°36	15°56	5°14	23°56	M18
T 19	21 50 38	26°13'54	26°41	5°15	10°42	9°50	10°56	28°41	14°52	25°43	28°17	17°32	15°53	5°21	23°55	T 19
W20	21 54 35	27°11'43	10♓56	7° 5	11°42	10°27	11° 9	28°46	14°54	25°45	28°16	17°27	15°49	5°27	23°54	W20
T 21	21 58 31	28° 9'33	25°23	8°53	12°44	11° 5	11°22	28°51	14°55	25°47	28°15	17°21	15°46	5°34	23°52	T 21
F 22	22 2 28	29° 7'24	9♈58	10°40	13°45	11°43	11°35	28°55	14°57	25°49	28°14	17°15	15°43	5°41	23°51	F 22
S 23	22 6 24	0♍ 5'18	24°32	12°26	14°47	12°20	11°48	29° 0	14°58	25°51	28°13	17° 9	15°40	5°47	23°50	S 23
S 24	22 10 21	1° 3'13	9♉ 0	14°10	15°49	12°58	12° 1	29° 5	14°59	25°53	28°12	17° 6	15°37	5°54	23°48	S 24
M25	22 14 17	2° 1'11	23°18	15°53	16°51	13°36	12°14	29°10	15° 1	25°55	28°10	17° 4	15°33	6° 1	23°47	M25
T 26	22 18 14	2°59'10	7♊24	17°35	17°54	14°15	12°26	29°15	15° 2	25°57	28° 9	17°D 4	15°30	6° 8	23°45	T 26
W27	22 22 10	3°57'11	21°15	19°16	18°57	14°53	12°39	29°20	15° 3	25°59	28° 8	17° 4	15°27	6°14	23°44	W27
T 28	22 26 7	4°55'14	4♋54	20°55	20° 0	15°31	12°52	29°25	15° 5	26° 1	28° 7	17° 6	15°24	6°21	23°42	T 28
F 29	22 30 4	5°53'19	18°19	22°33	21° 4	16°10	13° 5	29°30	15° 6	26° 4	28° 6	17°R 6	15°21	6°28	23°41	F 29
S 30	22 34 0	6°51'26	1♌31	24°10	22° 8	16°49	13°17	29°35	15° 7	26° 6	28° 5	17° 5	15°18	6°34	23°39	S 30
S 31	22 37 57	7♍49'35	14♌32	25♍45	23♋12	17♏28	13♌30	29♎41	15♊ 8	26♍ 8	28♑ 4	17♋ 2	15♋14	6♏41	23♈37	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	18n 3	22n19	0s53	21n24	1n 7	19n24	3s55	11s58	0s52	19n 3	0n32	8s22	2n25	22n31	0s 1	3n 6	1n17	24s 3	3s41	22n15	22n24	8s 0	10n 8	0n49
S 2	17 47	22 2	0n22	21 5	1 14	19 30	3 52	12 11	0 52	19 0	0 32	8 23	2 24	22 32	0 1	3 5	1 17	24 3	3 41	22 15	22 25	8 2	10 8	0 49
S 3	17 32	20 29	1 34	20 44	1 21	19 35	3 48	12 24	0 53	18 57	0 32	8 25	2 24	22 32	0 1	3 5	1 17	24 4	3 41	22 16	22 25	8 5	10 8	0 49
M 4	17 16	17 50	2 40	20 20	1 27	19 40	3 45	12 37	0 54	18 53	0 32	8 26	2 24	22 32	0 1	3 4	1 17	24 4	3 41	22 16	22 26	8 7	10 8	0 49
T 5	17 0	14 21	3 36	19 54	1 32	19 45	3 41	12 50	0 55	18 50	0 32	8 27	2 24	22 33	0 1	3 3	1 17	24 4	3 41	22 16	22 26	8 10	10 7	0 49
W 6	16 43	10 18	4 20	19 25	1 36	19 50	3 38	13 3	0 56	18 47	0 32	8 29	2 23	22 33	0 1	3 3	1 17	24 5	3 41	22 17	22 26	8 12	10 7	0 49
T 7	16 27	5 53	4 51	18 54	1 40	19 54	3 34	13 16	0 56	18 43	0 32	8 30	2 23	22 33	0 1	3 2	1 17	24 5	3 41	22 17	22 27	8 15	10 7	0 49
F 8	16 10	1 19	5 9	18 22	1 42	19 58	3 30	13 29	0 57	18 40	0 32	8 32	2 23	22 33	0 1	3 1	1 17	24 5	3 41	22 18	22 27	8 17	10 7	0 49
S 9	15 53	3s14	5 12	17 47	1 44	20 2	3 26	13 42	0 58	18 37	0 32	8 33	2 23	22 34	0 1	3 0	1 17	24 6	3 41	22 18	22 28	8 20	10 7	0 49
S 10	15 35	7 38	5 2	17 11	1 45	20 5	3 22	13 54	0 59	18 33	0 32	8 35	2 22	22 34	0 1	3 0	1 17	24 6	3 41	22 19	22 28	8 22	10 6	0 49
M11	15 17	11 44	4 39	16 34	1 46	20 8	3 18	14 7	0 59	18 30	0 33	8 36	2 22	22 34	0 1	2 59	1 17	24 6	3 41	22 19	22 28	8 25	10 6	0 49
T 12	14 59	15 24	4 4	15 55	1 46	20 11	3 14	14 20	1 0	18 27	0 33	8 38	2 22	22 34	0 1	2 58	1 17	24 7	3 41	22 19	22 29	8 27	10 6	0 49
W13	14 41	18 28	3 18	15 15	1 45	20 13	3 10	14 33	1 1	18 23	0 33	8 40	2 22	22 35	0 1	2 57	1 17	24 7	3 41	22 19	22 29	8 30	10 5	0 49
T 14	14 23	20 46	2 22	14 34	1 43	20 15	3 6	14 45	1 2	18 20	0 33	8 41	2 21	22 35	0 1	2 57	1 17	24 7	3 41	22 18	22 29	8 32	10 5	0 49
F 15	14 4	22 7	1 19	13 52	1 41	20 16	3 2	14 58	1 2	18 16	0 33	8 43	2 21	22 35	0 1	2 56	1 17	24 7	3 42	22 18	22 30	8 34	10 4	0 49
S 16	13 45	22 22	0 9	13 9	1 39	20 17	2 58	15 11	1 3	18 13	0 33	8 45	2 21	22 35	0 1	2 55	1 17	24 8	3 42	22 18	22 30	8 37	10 4	0 49
S 17	13 26	21 22	1s 2	12 26	1 36	20 18	2 53	15 23	1 4	18 9	0 33	8 47	2 21	22 35	0 1	2 54	1 17	24 8	3 42	22 18	22 31	8 39	10 4	0 49
M18	13 7	19 7	2 12	11 42	1 32	20 18	2 49	15 36	1 4	18 6	0 33	8 48	2 21	22 36	0 1	2 54	1 17	24 8	3 42	22 18	22 31	8 42	10 3	0 49
T 19	12 47	15 42	3 16	10 58	1 28	20 18	2 45	15 48	1 5	18 2	0 33	8 50	2 20	22 36	0 1	2 53	1 17	24 9	3 42	22 19	22 31	8 44	10 3	0 49
W20	12 28	11 19	4 9	10 13	1 24	20 18	2 40	16 1	1 6	17 59	0 33	8 52	2 20	22 36	0 1	2 52	1 17	24 9	3 42	22 20	22 32	8 47	10 2	0 49
T 21	12 8	6 13	4 47	9 28	1 19	20 17	2 36	16 13	1 6	17 56	0 34	8 54	2 20	22 36	0 1	2 51	1 17	24 9	3 42	22 20	22 32	8 49	10 2	0 49
F 22	11 48	0 45	5 6	8 43	1 14	20 15	2 31	16 25	1 7	17 52	0 34	8 56	2 20	22 36	0 1	2 50	1 17	24 9	3 42	22 21	22 32	8 52	10 1	0 49
S 23	11 27	4n46	5 6	7 57	1 8	20 13	2 27	16 38	1 7	17 49	0 34	8 57	2 19	22 37	0 1	2 49	1 17	24 10	3 42	22 22	22 33	8 54	10 1	0 49
S 24	11 7	9 59	4 47	7 12	1 2	20 11	2 22	16 50	1 8	17 45	0 34	8 59	2 19	22 37	0 1	2 49	1 17	24 10	3 42	22 22	22 33	8 57	10 0	0 49
M25	10 46	14 35	4 10	6 26	0 56	20 8	2 17	17 2	1 9	17 42	0 34	9 1	2 19	22 37	0 1	2 48	1 17	24 10	3 42	22 23	22 34	8 59	10 0	0 49
T 26	10 25	18 19	3 18	5 41	0 50	20 4	2 13	17 14	1 9	17 38	0 34	9 3	2 19	22 37	0 1	2 47	1 17	24 11	3 42	22 23	22 34	9 2	9 59	0 49
W27	10 4	20 56	2 15	4 55	0 43	20 1	2 8	17 26	1 10	17 35	0 34	9 5	2 19	22 37	0 1	2 46	1 17	24 11	3 42	22 23	22 34	9 4	9 58	0 48
T 28	9 43	22 17	1 5	4 10	0 37	19 56	2 4	17 38	1 10	17 31	0 34	9 7	2 18	22 37	0 1	2 45	1 17	24 11	3 42	22 22	22 35	9 7	9 58	0 48
F 29	9 22	22 19	0n 7	3 25	0 30	19 51	1 59	17 49	1 11	17 28	0 34	9 9	2 18	22 37	0 1	2 44	1 17	24 11	3 42	22 22	22 35	9 9	9 57	0 48
S 30	9 0	21 6	1 17	2 40	0 22	19 46	1 54	18 1	1 11	17 24	0 35	9 11	2 18	22 38	0 1	2 44	1 17	24 11	3 42	22 22	22 35	9 12	9 56	0 48
S 31	8n39	18n45	2n22	1n55	0n15	19n40	1s50	18s13	1s12	17n21	0n35	9s13	2n18	22n38	0s 1	2n43	1n17	24s12	3s42	22n23	22n36	9s14	9n56	0n48

Julian Day Number = 2370308.5, Delta T = 22.14 sec
Ecliptic obliquity = 23°28'03, Nutation = - 0°00'15, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°38'06, Lahiri = 20°45'06Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

SEPTEMBER 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
M 1	22 41 53	8♍47'45	27♌22	27♍19	24♋16	18♏ 7	13♌42	29♎46	15♊ 9	26♍10	28°R 3	16°R56	15♋11	6♏48	23°R35	M 1
T 2	22 45 50	9°45'57	9♍59	28°52	25°21	18°46	13°55	29°51	15°10	26°12	28♑ 2	16♋49	15° 8	6°55	23♈33	T 2
W 3	22 49 46	10°44'11	22°26	0♎24	26°25	19°25	14° 8	29°57	15°11	26°14	28° 1	16°39	15° 5	7° 1	23°32	W 3
T 4	22 53 43	11°42'27	4♎42	1°55	27°31	20° 5	14°20	0♏ 3	15°12	26°16	28° 0	16°29	15° 2	7° 8	23°30	T 4
F 5	22 57 39	12°40'44	16°48	3°24	28°36	20°44	14°32	0° 8	15°13	26°19	27°59	16°18	14°59	7°15	23°28	F 5
S 6	23 1 36	13°39'03	28°45	4°52	29°41	21°24	14°45	0°14	15°13	26°21	27°58	16° 9	14°55	7°21	23°26	S 6
S 7	23 5 32	14°37'23	10♏38	6°19	0♌47	22° 4	14°57	0°19	15°14	26°23	27°58	16° 2	14°52	7°28	23°24	S 7
M 8	23 9 29	15°35'46	22°28	7°45	1°53	22°44	15° 9	0°25	15°15	26°25	27°57	15°57	14°49	7°35	23°22	M 8
T 9	23 13 26	16°34'10	4♐20	9° 9	2°59	23°24	15°21	0°31	15°15	26°27	27°56	15°54	14°46	7°42	23°19	T 9
W10	23 17 22	17°32'35	16°19	10°33	4° 6	24° 4	15°34	0°37	15°16	26°30	27°55	15°D53	14°43	7°48	23°17	W10
T 11	23 21 19	18°31'02	28°30	11°54	5°12	24°44	15°46	0°43	15°16	26°32	27°54	15°53	14°39	7°55	23°15	T 11
F 12	23 25 15	19°29'31	10♑59	13°15	6°19	25°25	15°58	0°49	15°17	26°34	27°53	15°R54	14°36	8° 2	23°13	F 12
S 13	23 29 12	20°28'01	23°49	14°34	7°26	26° 5	16°10	0°55	15°17	26°36	27°53	15°54	14°33	8° 8	23°11	S 13
S 14	23 33 8	21°26'33	7♒ 5	15°52	8°33	26°46	16°22	1° 1	15°18	26°38	27°52	15°52	14°30	8°15	23° 8	S 14
M15	23 37 5	22°25'07	20°49	17° 8	9°41	27°27	16°34	1° 7	15°18	26°41	27°51	15°48	14°27	8°22	23° 6	M15
T 16	23 41 1	23°23'43	5♓ 0	18°22	10°48	28° 7	16°45	1°13	15°18	26°43	27°51	15°41	14°24	8°29	23° 4	T 16
W17	23 44 58	24°22'20	19°35	19°35	11°56	28°48	16°57	1°20	15°18	26°45	27°50	15°32	14°20	8°35	23° 1	W17
T 18	23 48 55	25°20'59	4♈27	20°46	13° 4	29°30	17° 9	1°26	15°19	26°47	27°49	15°22	14°17	8°42	22°59	T 18
F 19	23 52 51	26°19'40	19°27	21°56	14°12	0♐11	17°20	1°32	15°19	26°50	27°49	15°12	14°14	8°49	22°56	F 19
S 20	23 56 48	27°18'23	4♉26	23° 3	15°20	0°52	17°32	1°38	15°R19	26°52	27°48	15° 2	14°11	8°55	22°54	S 20
S 21	0 0 44	28°17'09	19°14	24° 8	16°29	1°33	17°43	1°45	15°19	26°54	27°48	14°55	14° 8	9° 2	22°51	S 21
M22	0 4 41	29°15'57	3♊47	25°11	17°37	2°15	17°55	1°51	15°19	26°56	27°47	14°51	14° 5	9° 9	22°49	M22
T 23	0 8 37	0♎14'47	17°58	26°12	18°46	2°57	18° 6	1°58	15°19	26°59	27°47	14°48	14° 1	9°16	22°46	T 23
W24	0 12 34	1°13'40	1♋49	27°10	19°55	3°38	18°17	2° 4	15°18	27° 1	27°46	14°D48	13°58	9°22	22°44	W24
T 25	0 16 30	2°12'34	15°19	28° 6	21° 4	4°20	18°29	2°11	15°18	27° 3	27°46	14°R48	13°55	9°29	22°41	T 25
F 26	0 20 27	3°11'32	28°30	28°58	22°13	5° 2	18°40	2°17	15°18	27° 5	27°45	14°48	13°52	9°36	22°38	F 26
S 27	0 24 24	4°10'31	11♌26	29°47	23°23	5°44	18°51	2°24	15°18	27° 7	27°45	14°45	13°49	9°42	22°36	S 27
S 28	0 28 20	5° 9'33	24° 9	0♏33	24°32	6°26	19° 2	2°31	15°17	27°10	27°45	14°40	13°45	9°49	22°33	S 28
M29	0 32 17	6° 8'36	6♍41	1°15	25°42	7° 9	19°13	2°37	15°17	27°12	27°44	14°32	13°42	9°56	22°30	M29
T 30	0 36 13	7♎ 7'42	19♍ 3	1♏53	26♌52	7♐51	19♌24	2♏44	15♊16	27♍14	27♑44	14♋21	13♋39	10♏ 3	22♈28	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
M 1	8n17	15n31	3n19	1n11	0n 8	19n34	1s45	18s24	1s12	17n17	0n35	9s15	2n18	22n38	0s 1	2n42	1n17	24s12	3s42	22n24	22n36	9s17	9n55	0n48
T 2	7 55	11 36	4 5	0 27	0 0	19 27	1 40	18 36	1 13	17 14	0 35	9 17	2 18	22 38	0 1	2 41	1 17	24 12	3 42	22 25	22 36	9 19	9 54	0 48
W 3	7 33	7 16	4 38	0s17	0s 8	19 19	1 36	18 47	1 13	17 10	0 35	9 19	2 17	22 38	0 1	2 40	1 17	24 12	3 42	22 26	22 37	9 21	9 54	0 48
T 4	7 11	2 42	4 58	1 0	0 16	19 12	1 31	18 58	1 14	17 7	0 35	9 22	2 17	22 38	0 1	2 39	1 17	24 13	3 42	22 27	22 37	9 24	9 53	0 48
F 5	6 49	1s55	5 5	1 43	0 23	19 3	1 27	19 9	1 14	17 3	0 35	9 24	2 17	22 38	0 1	2 38	1 17	24 13	3 42	22 28	22 38	9 26	9 52	0 48
S 6	6 26	6 25	4 57	2 25	0 31	18 54	1 22	19 20	1 15	17 0	0 35	9 26	2 17	22 38	0 1	2 38	1 17	24 13	3 42	22 29	22 38	9 29	9 51	0 48
S 7	6 4	10 38	4 37	3 7	0 39	18 45	1 17	19 31	1 15	16 56	0 35	9 28	2 17	22 38	0 0	2 37	1 17	24 13	3 42	22 30	22 38	9 31	9 50	0 48
M 8	5 41	14 27	4 5	3 48	0 48	18 35	1 13	19 42	1 16	16 53	0 36	9 30	2 17	22 39	0 0	2 36	1 17	24 13	3 42	22 31	22 39	9 34	9 50	0 48
T 9	5 18	17 43	3 23	4 29	0 56	18 24	1 8	19 52	1 16	16 49	0 36	9 32	2 16	22 39	0 0	2 35	1 17	24 13	3 42	22 31	22 39	9 36	9 49	0 48
W10	4 56	20 16	2 31	5 9	1 4	18 13	1 4	20 3	1 17	16 46	0 36	9 34	2 16	22 39	0 0	2 34	1 17	24 14	3 42	22 31	22 39	9 39	9 48	0 48
T 11	4 33	21 56	1 31	5 49	1 12	18 2	0 59	20 13	1 17	16 42	0 36	9 37	2 16	22 39	0 0	2 33	1 17	24 14	3 42	22 31	22 40	9 41	9 47	0 48
F 12	4 10	22 35	0 26	6 28	1 20	17 50	0 55	20 23	1 17	16 39	0 36	9 39	2 16	22 39	0 0	2 32	1 17	24 14	3 42	22 31	22 40	9 44	9 46	0 48
S 13	3 47	22 3	0s42	7 6	1 28	17 38	0 50	20 33	1 18	16 35	0 36	9 41	2 16	22 39	0 0	2 31	1 17	24 14	3 42	22 31	22 40	9 46	9 45	0 48
S 14	3 24	20 18	1 50	7 44	1 36	17 25	0 46	20 43	1 18	16 32	0 36	9 43	2 16	22 39	0 0	2 31	1 17	24 14	3 42	22 31	22 41	9 49	9 44	0 48
M15	3 1	17 19	2 54	8 20	1 44	17 11	0 41	20 53	1 19	16 28	0 37	9 46	2 15	22 39	0 0	2 30	1 17	24 14	3 42	22 32	22 41	9 51	9 43	0 48
T 16	2 38	13 15	3 50	8 56	1 52	16 57	0 37	21 3	1 19	16 25	0 37	9 48	2 15	22 39	0 0	2 29	1 17	24 15	3 42	22 33	22 41	9 54	9 43	0 47
W17	2 14	8 18	4 32	9 31	2 0	16 43	0 33	21 12	1 19	16 22	0 37	9 50	2 15	22 39	0 0	2 28	1 17	24 15	3 42	22 34	22 42	9 56	9 42	0 47
T 18	1 51	2 46	4 56	10 5	2 8	16 28	0 28	21 22	1 20	16 18	0 37	9 52	2 15	22 39	0 0	2 27	1 17	24 15	3 42	22 35	22 42	9 58	9 41	0 47
F 19	1 28	2n59	5 1	10 38	2 15	16 12	0 24	21 31	1 20	16 15	0 37	9 55	2 15	22 39	0 0	2 26	1 17	24 15	3 42	22 36	22 42	10 1	9 40	0 47
S 20	1 4	8 32	4 45	11 10	2 22	15 56	0 20	21 40	1 20	16 11	0 37	9 57	2 15	22 39	0 0	2 25	1 17	24 15	3 42	22 37	22 43	10 3	9 39	0 47
S 21	0 41	13 33	4 10	11 41	2 30	15 40	0 16	21 49	1 21	16 8	0 37	9 59	2 15	22 39	0 0	2 24	1 17	24 15	3 42	22 38	22 43	10 6	9 38	0 47
M22	0 18	17 40	3 19	12 11	2 37	15 23	0 12	21 57	1 21	16 5	0 38	10 2	2 14	22 39	0 0	2 24	1 17	24 15	3 42	22 38	22 43	10 8	9 37	0 47
T 23	0s 6	20 39	2 17	12 40	2 43	15 6	0 8	22 6	1 21	16 1	0 38	10 4	2 14	22 39	0 0	2 23	1 17	24 15	3 42	22 39	22 44	10 11	9 36	0 47
W24	0 29	22 19	1 8	13 7	2 50	14 48	0 4	22 14	1 22	15 58	0 38	10 6	2 14	22 39	0 0	2 22	1 17	24 15	3 42	22 39	22 44	10 13	9 35	0 47
T 25	0 53	22 38	0n 3	13 33	2 56	14 30	0n 0	22 23	1 22	15 55	0 38	10 9	2 14	22 39	0 0	2 21	1 17	24 15	3 42	22 39	22 44	10 16	9 34	0 47
F 26	1 16	21 39	1 12	13 57	3 2	14 11	0 4	22 31	1 22	15 51	0 38	10 11	2 14	22 39	0 0	2 20	1 17	24 15	3 42	22 39	22 45	10 18	9 33	0 47
S 27	1 40	19 33	2 16	14 20	3 7	13 52	0 8	22 38	1 22	15 48	0 38	10 14	2 14	22 39	0 0	2 19	1 17	24 16	3 42	22 39	22 45	10 21	9 32	0 47
S 28	2 3	16 30	3 12	14 41	3 12	13 33	0 12	22 46	1 23	15 45	0 38	10 16	2 14	22 39	0 0	2 18	1 17	24 16	3 42	22 40	22 45	10 23	9 30	0 47
M29	2 27	12 45	3 58	15 0	3 17	13 13	0 16	22 53	1 23	15 41	0 39	10 18	2 14	22 39	0 0	2 17	1 17	24 16	3 42	22 40	22 46	10 25	9 29	0 47
T 30	2s50	8n30	4n31	15s16	3s21	12n53	0n20	23s 1	1s23	15n38	0n39	10s21	2n14	22n39	0s 0	2n17	1n17	24s16	3s42	22n42	22n46	10s28	9n28	0n47

Julian Day Number = 2370339.5, Delta T = 22.15 sec
Ecliptic obliquity = 23°28'04, Nutation = - 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°38'10, Lahiri = 20°45'11Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

OCTOBER 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
W 1	0 40 10	8♎ 6'50	1♎16	2♏26	28♌ 2	8♐33	19♌34	2♏51	15°R16	27♍16	27°R44	14°R 8	13♋36	10♏ 9	22°R25	W 1
T 2	0 44 6	9° 6'00	13°22	2°54	29°12	9°16	19°45	2°58	15♊15	27°18	27♑43	13♋54	13°33	10°16	22♈22	T 2
F 3	0 48 3	10° 5'13	25°21	3°17	0♍22	9°59	19°55	3° 5	15°15	27°21	27°43	13°39	13°30	10°23	22°19	F 3
S 4	0 51 59	11° 4'27	7♏15	3°34	1°32	10°41	20° 6	3°11	15°14	27°23	27°43	13°26	13°26	10°29	22°17	S 4
S 5	0 55 56	12° 3'43	19° 5	3°45	2°43	11°24	20°16	3°18	15°13	27°25	27°43	13°15	13°23	10°36	22°14	S 5
M 6	0 59 52	13° 3'01	0♐54	3°R49	3°54	12° 7	20°27	3°25	15°13	27°27	27°43	13° 7	13°20	10°43	22°11	M 6
T 7	1 3 49	14° 2'21	12°45	3°45	5° 4	12°50	20°37	3°32	15°12	27°29	27°43	13° 2	13°17	10°49	22° 8	T 7
W 8	1 7 46	15° 1'43	24°42	3°34	6°15	13°33	20°47	3°39	15°11	27°32	27°42	12°59	13°14	10°56	22° 5	W 8
T 9	1 11 42	16° 1'06	6♑50	3°15	7°26	14°17	20°57	3°46	15°10	27°34	27°42	12°58	13°10	11° 3	22° 3	T 9
F 10	1 15 39	17° 0'32	19°14	2°48	8°37	15° 0	21° 7	3°53	15° 9	27°36	27°D42	12°58	13° 7	11°10	22° 0	F 10
S 11	1 19 35	17°59'59	1♒59	2°12	9°48	15°43	21°16	4° 0	15° 8	27°38	27°42	12°58	13° 4	11°16	21°57	S 11
S 12	1 23 32	18°59'28	15°11	1°28	11° 0	16°27	21°26	4° 7	15° 7	27°40	27°42	12°56	13° 1	11°23	21°54	S 12
M13	1 27 28	19°58'58	28°51	0°36	12°11	17°10	21°36	4°14	15° 6	27°42	27°42	12°51	12°58	11°30	21°51	M13
T 14	1 31 25	20°58'31	13♓ 3	29♎37	13°23	17°54	21°45	4°21	15° 5	27°44	27°43	12°44	12°55	11°36	21°48	T 14
W15	1 35 21	21°58'05	27°42	28°31	14°34	18°38	21°55	4°28	15° 3	27°46	27°43	12°35	12°51	11°43	21°45	W15
T 16	1 39 18	22°57'41	12♈44	27°21	15°46	19°21	22° 4	4°36	15° 2	27°48	27°43	12°24	12°48	11°50	21°43	T 16
F 17	1 43 15	23°57'19	27°59	26° 7	16°58	20° 5	22°13	4°43	15° 1	27°50	27°43	12°13	12°45	11°57	21°40	F 17
S 18	1 47 11	24°56'59	13♉17	24°52	18°10	20°49	22°22	4°50	14°59	27°52	27°43	12° 3	12°42	12° 3	21°37	S 18
S 19	1 51 8	25°56'41	28°25	23°38	19°22	21°33	22°31	4°57	14°58	27°55	27°43	11°55	12°39	12°10	21°34	S 19
M20	1 55 4	26°56'26	13♊15	22°27	20°34	22°17	22°40	5° 4	14°57	27°57	27°44	11°50	12°36	12°17	21°31	M20
T 21	1 59 1	27°56'12	27°41	21°22	21°46	23° 1	22°48	5°11	14°55	27°59	27°44	11°47	12°32	12°23	21°28	T 21
W22	2 2 57	28°56'01	11♋41	20°24	22°59	23°46	22°57	5°19	14°54	28° 1	27°44	11°D46	12°29	12°30	21°25	W22
T 23	2 6 54	29°55'52	25°14	19°35	24°11	24°30	23° 5	5°26	14°52	28° 2	27°45	11°R47	12°26	12°37	21°23	T 23
F 24	2 10 50	0♏55'46	8♌24	18°56	25°24	25°14	23°14	5°33	14°51	28° 4	27°45	11°47	12°23	12°43	21°20	F 24
S 25	2 14 47	1°55'41	21°14	18°29	26°36	25°59	23°22	5°40	14°49	28° 6	27°45	11°45	12°20	12°50	21°17	S 25
S 26	2 18 44	2°55'39	3♍47	18°12	27°49	26°44	23°30	5°47	14°47	28° 8	27°46	11°41	12°16	12°57	21°14	S 26
M27	2 22 40	3°55'39	16° 7	18°D 8	29° 2	27°28	23°38	5°55	14°46	28°10	27°46	11°34	12°13	13° 4	21°11	M27
T 28	2 26 37	4°55'41	28°17	18°14	0♎15	28°13	23°46	6° 2	14°44	28°12	27°47	11°24	12°10	13°10	21° 9	T 28
W29	2 30 33	5°55'45	10♎20	18°31	1°27	28°58	23°53	6° 9	14°42	28°14	27°47	11°13	12° 7	13°17	21° 6	W29
T 30	2 34 30	6°55'51	22°18	18°58	2°40	29°42	24° 1	6°16	14°40	28°16	27°48	11° 0	12° 4	13°24	21° 3	T 30
F 31	2 38 26	7♏55'59	4♏11	19♎35	3♎54	0♑27	24♌ 8	6♏23	14♊38	28♍18	27♑48	10♋48	12♋ 1	13♏30	21♈ 0	F 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
W 1	3s13	3n58	4n52	15s31	3s24	12n32	0n23	23s 8	1s23	15n35	0n39	10s23	2n13	22n39	0s 0	2n16	1n17	24s16	3s42	22n43	22n46	10s30	9n27	0n47
T 2	3 37	0s41	4 59	15 43	3 26	12 11	0 27	23 15	1 24	15 32	0 39	10 25	2 13	22 39	0 0	2 15	1 17	24 16	3 42	22 45	22 47	10 33	9 26	0 46
F 3	4 0	5 16	4 53	15 53	3 28	11 50	0 30	23 21	1 24	15 29	0 39	10 28	2 13	22 39	0 0	2 14	1 17	24 16	3 42	22 46	22 47	10 35	9 25	0 46
S 4	4 23	9 37	4 34	16 0	3 29	11 28	0 34	23 28	1 24	15 25	0 39	10 30	2 13	22 39	0 0	2 13	1 17	24 16	3 42	22 47	22 47	10 38	9 24	0 46
S 5	4 46	13 36	4 4	16 3	3 29	11 6	0 37	23 34	1 24	15 22	0 40	10 33	2 13	22 39	0 0	2 12	1 17	24 16	3 42	22 48	22 48	10 40	9 23	0 46
M 6	5 10	17 3	3 23	16 3	3 28	10 43	0 40	23 40	1 24	15 19	0 40	10 35	2 13	22 39	0 0	2 11	1 17	24 16	3 42	22 49	22 48	10 43	9 22	0 46
T 7	5 33	19 50	2 32	16 0	3 25	10 20	0 44	23 46	1 25	15 16	0 40	10 38	2 13	22 38	0 0	2 11	1 17	24 16	3 42	22 50	22 48	10 45	9 21	0 46
W 8	5 56	21 47	1 35	15 53	3 22	9 57	0 47	23 51	1 25	15 13	0 40	10 40	2 13	22 38	0 0	2 10	1 17	24 16	3 42	22 50	22 49	10 47	9 19	0 46
T 9	6 19	22 45	0 32	15 41	3 16	9 34	0 50	23 57	1 25	15 10	0 40	10 42	2 13	22 38	0 0	2 9	1 17	24 16	3 42	22 50	22 49	10 50	9 18	0 46
F 10	6 41	22 38	0s33	15 25	3 9	9 10	0 53	24 2	1 25	15 7	0 40	10 45	2 13	22 38	0 0	2 8	1 17	24 16	3 42	22 50	22 49	10 52	9 17	0 46
S 11	7 4	21 21	1 39	15 5	3 1	8 46	0 56	24 7	1 25	15 4	0 41	10 47	2 13	22 38	0 0	2 7	1 17	24 16	3 42	22 50	22 50	10 55	9 16	0 46
S 12	7 27	18 52	2 41	14 40	2 50	8 21	0 59	24 11	1 25	15 1	0 41	10 50	2 12	22 38	0 0	2 6	1 17	24 16	3 42	22 50	22 50	10 57	9 15	0 46
M13	7 49	15 17	3 37	14 10	2 38	7 57	1 1	24 16	1 25	14 58	0 41	10 52	2 12	22 38	0 0	2 6	1 17	24 16	3 42	22 51	22 50	11 0	9 14	0 46
T 14	8 12	10 42	4 22	13 36	2 24	7 32	1 4	24 20	1 26	14 55	0 41	10 55	2 12	22 38	0 0	2 5	1 17	24 16	3 42	22 51	22 50	11 2	9 13	0 46
W15	8 34	5 22	4 51	12 57	2 8	7 6	1 7	24 24	1 26	14 52	0 41	10 57	2 12	22 38	0 0	2 4	1 17	24 16	3 42	22 52	22 51	11 4	9 11	0 45
T 16	8 56	0n25	5 1	12 16	1 51	6 41	1 9	24 28	1 26	14 50	0 42	10 59	2 12	22 37	0 0	2 3	1 17	24 16	3 41	22 53	22 51	11 7	9 10	0 45
F 17	9 18	6 16	4 50	11 32	1 32	6 15	1 12	24 31	1 26	14 47	0 42	11 2	2 12	22 37	0 0	2 2	1 17	24 16	3 41	22 54	22 51	11 9	9 9	0 45
S 18	9 40	11 45	4 18	10 46	1 12	5 49	1 14	24 35	1 26	14 44	0 42	11 4	2 12	22 37	0 0	2 2	1 17	24 15	3 41	22 55	22 52	11 12	9 8	0 45
S 19	10 2	16 27	3 28	9 59	0 52	5 23	1 17	24 38	1 26	14 41	0 42	11 7	2 12	22 37	0 0	2 1	1 17	24 15	3 41	22 56	22 52	11 14	9 7	0 45
M20	10 24	20 1	2 25	9 14	0 31	4 57	1 19	24 40	1 26	14 39	0 42	11 9	2 12	22 37	0 0	2 0	1 17	24 15	3 41	22 56	22 52	11 17	9 6	0 45
T 21	10 45	22 13	1 14	8 30	0 11	4 30	1 21	24 43	1 26	14 36	0 42	11 12	2 12	22 37	0 0	1 59	1 17	24 15	3 41	22 57	22 53	11 19	9 5	0 45
W22	11 6	22 57	0 1	7 50	0n 9	4 4	1 23	24 45	1 26	14 33	0 43	11 14	2 12	22 37	0 0	1 59	1 17	24 15	3 41	22 57	22 53	11 21	9 3	0 45
T 23	11 28	22 16	1n11	7 14	0 28	3 37	1 25	24 47	1 26	14 31	0 43	11 16	2 12	22 36	0 0	1 58	1 17	24 15	3 41	22 57	22 53	11 24	9 2	0 45
F 24	11 49	20 23	2 16	6 43	0 46	3 10	1 27	24 49	1 26	14 28	0 43	11 19	2 12	22 36	0 0	1 57	1 17	24 15	3 41	22 57	22 53	11 26	9 1	0 45
S 25	12 9	17 29	3 13	6 17	1 2	2 42	1 29	24 50	1 26	14 26	0 43	11 21	2 12	22 36	0 0	1 56	1 17	24 15	3 41	22 57	22 54	11 29	9 0	0 45
S 26	12 30	13 51	3 59	5 58	1 17	2 15	1 30	24 52	1 26	14 23	0 43	11 24	2 12	22 36	0 0	1 56	1 17	24 15	3 41	22 57	22 54	11 31	8 59	0 45
M27	12 51	9 41	4 33	5 44	1 30	1 48	1 32	24 53	1 26	14 21	0 44	11 26	2 12	22 36	0 0	1 55	1 17	24 15	3 41	22 58	22 54	11 34	8 58	0 44
T 28	13 11	5 11	4 55	5 36	1 41	1 20	1 34	24 53	1 26	14 18	0 44	11 28	2 12	22 36	0 0	1 54	1 18	24 14	3 41	22 59	22 55	11 36	8 57	0 44
W29	13 31	0 32	5 2	5 34	1 50	0 52	1 35	24 54	1 26	14 16	0 44	11 31	2 12	22 35	0n 0	1 53	1 18	24 14	3 41	23 0	22 55	11 38	8 55	0 44
T 30	13 51	4s 6	4 57	5 37	1 58	0 25	1 36	24 54	1 26	14 14	0 44	11 33	2 12	22 35	0 0	1 53	1 18	24 14	3 41	23 1	22 55	11 41	8 54	0 44
F 31	14s10	8s34	4n38	5s45	2n 4	0s 3	1n38	24s54	1s26	14n11	0n44	11s36	2n12	22n35	0n 0	1n52	1n18	24s14	3s41	23n 2	22n55	11s43	8n53	0n44

Julian Day Number = 2370369.5, Delta T = 22.16 sec
Ecliptic obliquity = 23°28'04, Nutation = - 0°00'17, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°38'14, Lahiri = 20°45'15Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

NOVEMBER 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	2 42 23	8♏56'09	16♏ 2	20♎19	5♎ 7	1♑12	24♌16	6♏31	14°R36	28♍19	27♑49	10°R36	11♋57	13♏37	20°R58	S 1
S 2	2 46 19	9°56'20	27°52	21°12	6°20	1°57	24°23	6°38	14♊34	28°21	27°50	10♋26	11°54	13°44	20♈55	S 2
M 3	2 50 16	10°56'34	9♐43	22°10	7°33	2°43	24°30	6°45	14°32	28°23	27°50	10°19	11°51	13°50	20°52	M 3
T 4	2 54 13	11°56'49	21°37	23°15	8°47	3°28	24°37	6°52	14°30	28°25	27°51	10°14	11°48	13°57	20°50	T 4
W 5	2 58 9	12°57'06	3♑37	24°24	10° 0	4°13	24°43	7° 0	14°28	28°26	27°52	10°12	11°45	14° 4	20°47	W 5
T 6	3 2 6	13°57'24	15°46	25°38	11°14	4°58	24°50	7° 7	14°26	28°28	27°53	10°D12	11°42	14°11	20°45	T 6
F 7	3 6 2	14°57'44	28° 9	26°56	12°27	5°44	24°56	7°14	14°24	28°30	27°53	10°13	11°38	14°17	20°42	F 7
S 8	3 9 59	15°58'05	10♒51	28°16	13°41	6°29	25° 2	7°21	14°22	28°31	27°54	10°R14	11°35	14°24	20°39	S 8
S 9	3 13 55	16°58'27	23°56	29°39	14°54	7°15	25° 9	7°28	14°20	28°33	27°55	10°14	11°32	14°31	20°37	S 9
M10	3 17 52	17°58'51	7♓28	1♏ 5	16° 8	8° 0	25°14	7°35	14°18	28°35	27°56	10°12	11°29	14°37	20°34	M10
T 11	3 21 48	18°59'16	21°28	2°32	17°22	8°46	25°20	7°43	14°16	28°36	27°57	10° 8	11°26	14°44	20°32	T 11
W12	3 25 45	19°59'43	5♈57	4° 1	18°36	9°31	25°26	7°50	14°13	28°38	27°58	10° 2	11°22	14°51	20°30	W12
T 13	3 29 42	21° 0'11	20°51	5°31	19°50	10°17	25°31	7°57	14°11	28°39	27°59	9°55	11°19	14°57	20°27	T 13
F 14	3 33 38	22° 0'40	6♉ 2	7° 2	21° 3	11° 3	25°37	8° 4	14° 9	28°41	28° 0	9°47	11°16	15° 4	20°25	F 14
S 15	3 37 35	23° 1'11	21°21	8°34	22°17	11°48	25°42	8°11	14° 6	28°42	28° 0	9°40	11°13	15°11	20°23	S 15
S 16	3 41 31	24° 1'43	6♊37	10° 6	23°31	12°34	25°47	8°18	14° 4	28°44	28° 1	9°35	11°10	15°18	20°20	S 16
M17	3 45 28	25° 2'17	21°39	11°39	24°46	13°20	25°52	8°25	14° 2	28°45	28° 3	9°31	11° 7	15°24	20°18	M17
T 18	3 49 24	26° 2'53	6♋18	13°13	26° 0	14° 6	25°56	8°32	13°59	28°47	28° 4	9°D30	11° 3	15°31	20°16	T 18
W19	3 53 21	27° 3'30	20°31	14°47	27°14	14°52	26° 1	8°39	13°57	28°48	28° 5	9°30	11° 0	15°38	20°14	W19
T 20	3 57 17	28° 4'09	4♌15	16°21	28°28	15°38	26° 5	8°46	13°55	28°49	28° 6	9°32	10°57	15°44	20°12	T 20
F 21	4 1 14	29° 4'50	17°33	17°55	29°42	16°24	26° 9	8°53	13°52	28°51	28° 7	9°33	10°54	15°51	20°10	F 21
S 22	4 5 11	0♐ 5'32	0♍26	19°29	0♏57	17°10	26°13	9° 0	13°50	28°52	28° 8	9°R34	10°51	15°58	20° 7	S 22
S 23	4 9 7	1° 6'16	12°59	21° 3	2°11	17°56	26°17	9° 7	13°47	28°53	28° 9	9°33	10°48	16° 4	20° 5	S 23
M24	4 13 4	2° 7'01	25°16	22°37	3°26	18°43	26°20	9°14	13°45	28°54	28°10	9°30	10°44	16°11	20° 4	M24
T 25	4 17 0	3° 7'48	7♎21	24°12	4°40	19°29	26°24	9°21	13°42	28°56	28°12	9°26	10°41	16°18	20° 2	T 25
W26	4 20 57	4° 8'36	19°18	25°46	5°54	20°15	26°27	9°27	13°40	28°57	28°13	9°20	10°38	16°25	20° 0	W26
T 27	4 24 53	5° 9'26	1♏10	27°20	7° 9	21° 2	26°30	9°34	13°37	28°58	28°14	9°14	10°35	16°31	19°58	T 27
F 28	4 28 50	6°10'17	13° 1	28°55	8°24	21°48	26°33	9°41	13°35	28°59	28°16	9° 7	10°32	16°38	19°56	F 28
S 29	4 32 46	7°11'10	24°51	0♐29	9°38	22°34	26°36	9°48	13°32	29° 0	28°17	9° 1	10°28	16°45	19°54	S 29
S 30	4 36 43	8♐12'04	6♐44	2♐ 3	10♏53	23♑21	26♌38	9♏54	13♊30	29♍ 1	28♑18	8♋56	10♋25	16♏51	19♈53	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
S 1	14s30	12s43	4n 7	5s58	2n 9	0s31	1n39	24s54	1s26	14n 9	0n45	11s38	2n12	22n35	0n 0	1n51	1n18	24s14	3s41	23n 3	22n56	11s46	8n52	0n44
S 2	14 49	16 22	3 26	6 15	2 12	0 59	1 40	24 53	1 26	14 7	0 45	11 40	2 12	22 35	0 0	1 51	1 18	24 14	3 41	23 3	22 56	11 48	8 51	0 44
M 3	15 8	19 22	2 35	6 35	2 14	1 27	1 41	24 52	1 26	14 5	0 45	11 43	2 12	22 34	0 0	1 50	1 18	24 14	3 41	23 4	22 56	11 50	8 50	0 44
T 4	15 26	21 34	1 38	6 58	2 14	1 55	1 42	24 51	1 26	14 3	0 45	11 45	2 12	22 34	0 0	1 49	1 18	24 13	3 41	23 4	22 57	11 53	8 49	0 44
W 5	15 45	22 50	0 35	7 24	2 14	2 23	1 43	24 50	1 26	14 1	0 46	11 47	2 12	22 34	0 0	1 49	1 18	24 13	3 41	23 4	22 57	11 55	8 48	0 44
T 6	16 3	23 2	0s30	7 51	2 13	2 51	1 44	24 48	1 26	13 59	0 46	11 50	2 12	22 34	0 0	1 48	1 18	24 13	3 41	23 4	22 57	11 58	8 47	0 43
F 7	16 21	22 6	1 35	8 21	2 11	3 19	1 44	24 46	1 26	13 57	0 46	11 52	2 12	22 33	0 0	1 47	1 18	24 13	3 41	23 4	22 57	12 0	8 46	0 43
S 8	16 38	20 3	2 37	8 53	2 8	3 48	1 45	24 44	1 25	13 55	0 46	11 54	2 12	22 33	0 0	1 47	1 18	24 13	3 41	23 4	22 58	12 2	8 45	0 43
S 9	16 56	16 54	3 33	9 25	2 5	4 16	1 45	24 41	1 25	13 53	0 46	11 57	2 12	22 33	0 0	1 46	1 18	24 13	3 41	23 4	22 58	12 5	8 44	0 43
M10	17 13	12 47	4 19	9 59	2 1	4 44	1 46	24 39	1 25	13 51	0 47	11 59	2 12	22 33	0 0	1 46	1 18	24 12	3 41	23 5	22 58	12 7	8 43	0 43
T 11	17 29	7 51	4 51	10 33	1 56	5 11	1 46	24 36	1 25	13 50	0 47	12 1	2 12	22 32	0 0	1 45	1 18	24 12	3 41	23 5	22 59	12 10	8 42	0 43
W12	17 46	2 19	5 7	11 7	1 51	5 39	1 46	24 32	1 25	13 48	0 47	12 3	2 12	22 32	0 0	1 44	1 18	24 12	3 41	23 5	22 59	12 12	8 41	0 43
T 13	18 2	3n29	5 2	11 42	1 46	6 7	1 47	24 29	1 25	13 46	0 47	12 6	2 12	22 32	0 0	1 44	1 18	24 12	3 41	23 6	22 59	12 14	8 40	0 43
F 14	18 18	9 12	4 36	12 18	1 40	6 35	1 47	24 25	1 25	13 45	0 48	12 8	2 12	22 32	0 0	1 43	1 18	24 12	3 41	23 6	22 59	12 17	8 39	0 43
S 15	18 33	14 25	3 50	12 53	1 35	7 2	1 47	24 21	1 24	13 43	0 48	12 10	2 12	22 31	0 0	1 43	1 18	24 11	3 41	23 7	23 0	12 19	8 38	0 43
S 16	18 48	18 41	2 48	13 28	1 28	7 30	1 47	24 16	1 24	13 42	0 48	12 12	2 12	22 31	0 0	1 42	1 18	24 11	3 41	23 7	23 0	12 22	8 37	0 42
M17	19 3	21 37	1 35	14 3	1 22	7 57	1 46	24 12	1 24	13 40	0 48	12 15	2 12	22 31	0 0	1 42	1 18	24 11	3 41	23 8	23 0	12 24	8 36	0 42
T 18	19 17	23 2	0 17	14 37	1 16	8 24	1 46	24 7	1 24	13 39	0 49	12 17	2 12	22 31	0 0	1 41	1 18	24 11	3 41	23 8	23 0	12 26	8 35	0 42
W19	19 31	22 53	0n59	15 11	1 9	8 51	1 46	24 1	1 24	13 38	0 49	12 19	2 12	22 30	0 0	1 41	1 18	24 10	3 41	23 8	23 1	12 29	8 34	0 42
T 20	19 45	21 20	2 10	15 45	1 2	9 18	1 46	23 56	1 23	13 36	0 49	12 21	2 12	22 30	0 0	1 40	1 18	24 10	3 41	23 7	23 1	12 31	8 33	0 42
F 21	19 59	18 38	3 12	16 18	0 55	9 45	1 45	23 50	1 23	13 35	0 49	12 23	2 12	22 30	0 0	1 40	1 18	24 10	3 41	23 7	23 1	12 34	8 32	0 42
S 22	20 12	15 6	4 2	16 51	0 48	10 11	1 45	23 44	1 23	13 34	0 49	12 25	2 12	22 29	0 0	1 39	1 19	24 10	3 41	23 7	23 1	12 36	8 31	0 42
S 23	20 24	10 58	4 38	17 22	0 42	10 37	1 44	23 38	1 23	13 33	0 50	12 28	2 12	22 29	0 0	1 39	1 19	24 9	3 41	23 7	23 2	12 38	8 30	0 42
M24	20 37	6 30	5 1	17 54	0 35	11 3	1 43	23 31	1 23	13 32	0 50	12 30	2 12	22 29	0 0	1 38	1 19	24 9	3 41	23 8	23 2	12 41	8 30	0 42
T 25	20 48	1 50	5 11	18 24	0 28	11 29	1 42	23 24	1 22	13 31	0 50	12 32	2 12	22 29	0 0	1 38	1 19	24 9	3 41	23 8	23 2	12 43	8 29	0 41
W26	21 0	2s50	5 6	18 53	0 21	11 54	1 42	23 17	1 22	13 30	0 50	12 34	2 13	22 28	0 0	1 37	1 19	24 9	3 41	23 8	23 2	12 45	8 28	0 41
T 27	21 11	7 23	4 49	19 22	0 14	12 20	1 41	23 10	1 22	13 29	0 51	12 36	2 13	22 28	0 0	1 37	1 19	24 8	3 41	23 9	23 3	12 48	8 27	0 41
F 28	21 22	11 39	4 19	19 50	0 7	12 45	1 40	23 2	1 21	13 29	0 51	12 38	2 13	22 28	0 0	1 37	1 19	24 8	3 41	23 9	23 3	12 50	8 26	0 41
S 29	21 32	15 29	3 38	20 17	0s 0	13 9	1 39	22 55	1 21	13 28	0 51	12 40	2 13	22 27	0 0	1 36	1 19	24 8	3 41	23 10	23 3	12 53	8 26	0 41
S 30	21s42	18s43	2n47	20s43	0s 7	13s34	1n38	22s46	1s21	13n27	0n51	12s42	2n13	22n27	0n 0	1n36	1n19	24s 8	3s41	23n10	23n 3	12s55	8n25	0n41

Julian Day Number = 2370400.5, Delta T = 22.16 sec
Ecliptic obliquity = 23°28'04, Nutation = - 0°00'19, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°38'18, Lahiri = 20°45'19Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1777
geocentric

DECEMBER 1777 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
M 1	4 40 40	9♐12'58	18♐41	3♐37	12♏ 7	24♑ 7	26♌40	10♏ 1	13°R27	29♍ 2	28♑20	8°R53	10♋22	16♏58	19°R51	M 1
T 2	4 44 36	10°13'54	0♑43	5°11	13°22	24°54	26°43	10° 7	13♊25	29° 3	28°21	8♋51	10°19	17° 5	19♈49	T 2
W 3	4 48 33	11°14'51	12°53	6°46	14°37	25°40	26°44	10°14	13°22	29° 4	28°22	8°D51	10°16	17°11	19°48	W 3
T 4	4 52 29	12°15'49	25°12	8°20	15°51	26°27	26°46	10°21	13°19	29° 5	28°24	8°52	10°13	17°18	19°46	T 4
F 5	4 56 26	13°16'47	7♒44	9°54	17° 6	27°14	26°48	10°27	13°17	29° 6	28°25	8°53	10° 9	17°25	19°45	F 5
S 6	5 0 22	14°17'46	20°30	11°28	18°21	28° 0	26°49	10°33	13°14	29° 7	28°27	8°55	10° 6	17°32	19°44	S 6
S 7	5 4 19	15°18'46	3♓35	13° 2	19°36	28°47	26°50	10°40	13°12	29° 8	28°28	8°56	10° 3	17°38	19°42	S 7
M 8	5 8 15	16°19'46	17° 2	14°36	20°51	29°34	26°51	10°46	13° 9	29° 9	28°30	8°R57	10° 0	17°45	19°41	M 8
T 9	5 12 12	17°20'47	0♈50	16°11	22° 5	0♒20	26°52	10°52	13° 7	29° 9	28°31	8°56	9°57	17°52	19°40	T 9
W10	5 16 9	18°21'48	15° 3	17°45	23°20	1° 7	26°53	10°59	13° 4	29°10	28°33	8°55	9°53	17°58	19°39	W10
T 11	5 20 5	19°22'50	29°36	19°19	24°35	1°54	26°53	11° 5	13° 2	29°11	28°34	8°52	9°50	18° 5	19°37	T 11
F 12	5 24 2	20°23'52	14♉27	20°54	25°50	2°41	26°R53	11°11	12°59	29°11	28°36	8°50	9°47	18°12	19°36	F 12
S 13	5 27 58	21°24'55	29°29	22°29	27° 5	3°28	26°53	11°17	12°57	29°12	28°37	8°48	9°44	18°18	19°35	S 13
S 14	5 31 55	22°25'58	14♊32	24° 3	28°20	4°14	26°53	11°23	12°54	29°13	28°39	8°46	9°41	18°25	19°34	S 14
M15	5 35 51	23°27'02	29°28	25°38	29°35	5° 1	26°53	11°29	12°52	29°13	28°41	8°45	9°38	18°32	19°34	M15
T 16	5 39 48	24°28'07	14♋ 9	27°13	0♐50	5°48	26°52	11°35	12°49	29°14	28°42	8°D45	9°34	18°38	19°33	T 16
W17	5 43 45	25°29'12	28°28	28°49	2° 5	6°35	26°51	11°41	12°47	29°14	28°44	8°45	9°31	18°45	19°32	W17
T 18	5 47 41	26°30'18	12♌22	0♑24	3°20	7°22	26°50	11°47	12°44	29°15	28°46	8°46	9°28	18°52	19°31	T 18
F 19	5 51 38	27°31'24	25°49	2° 0	4°35	8° 9	26°49	11°53	12°42	29°15	28°47	8°47	9°25	18°59	19°30	F 19
S 20	5 55 34	28°32'31	8♍50	3°36	5°50	8°56	26°48	11°58	12°39	29°16	28°49	8°48	9°22	19° 5	19°30	S 20
S 21	5 59 31	29°33'39	21°29	5°12	7° 5	9°43	26°46	12° 4	12°37	29°16	28°51	8°49	9°19	19°12	19°29	S 21
M22	6 3 27	0♑34'48	3♎49	6°48	8°20	10°30	26°44	12°10	12°34	29°16	28°53	8°R49	9°15	19°19	19°29	M22
T 23	6 7 24	1°35'56	15°55	8°24	9°35	11°17	26°42	12°15	12°32	29°17	28°54	8°49	9°12	19°25	19°28	T 23
W24	6 11 20	2°37'06	27°51	10° 1	10°50	12° 4	26°40	12°21	12°30	29°17	28°56	8°48	9° 9	19°32	19°28	W24
T 25	6 15 17	3°38'16	9♏41	11°38	12° 5	12°51	26°38	12°26	12°27	29°17	28°58	8°47	9° 6	19°39	19°28	T 25
F 26	6 19 14	4°39'26	21°31	13°15	13°20	13°38	26°35	12°31	12°25	29°17	29° 0	8°47	9° 3	19°45	19°27	F 26
S 27	6 23 10	5°40'37	3♐23	14°52	14°36	14°25	26°33	12°37	12°23	29°17	29° 1	8°46	8°59	19°52	19°27	S 27
S 28	6 27 7	6°41'49	15°20	16°30	15°51	15°12	26°30	12°42	12°21	29°18	29° 3	8°46	8°56	19°59	19°27	S 28
M29	6 31 3	7°43'00	27°25	18° 7	17° 6	15°59	26°27	12°47	12°18	29°18	29° 5	8°46	8°53	20° 5	19°27	M29
T 30	6 35 0	8°44'11	9♑39	19°44	18°21	16°46	26°23	12°52	12°16	29°18	29° 7	8°46	8°50	20°12	19°D27	T 30
W31	6 38 56	9♑45'23	22♑ 5	21♑22	19♐36	17♒33	26♌20	12♏57	12♊14	29°R18	29♑ 9	8♋46	8♋47	20♏19	19♈27	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	21s52	21s11	1n48	21s 8	0s14	13s58	1n36	22s38	1s21	13n27	0n52	12s44	2n13	22n27	0n 0	1n35	1n19	24s 7	3s41	23n10	23n 4	12s57	8n24	0n41
T 2	22 1	22 43	0 45	21 31	0 20	14 21	1 35	22 29	1 20	13 26	0 52	12 46	2 13	22 27	0 0	1 35	1 19	24 7	3 41	23 10	23 4	13 0	8 23	0 41
W 3	22 9	23 13	0s22	21 54	0 27	14 45	1 34	22 21	1 20	13 26	0 52	12 48	2 13	22 26	0 0	1 35	1 19	24 7	3 41	23 10	23 4	13 2	8 23	0 41
T 4	22 17	22 34	1 29	22 16	0 33	15 8	1 32	22 12	1 20	13 26	0 52	12 50	2 13	22 26	0 0	1 34	1 19	24 6	3 41	23 10	23 4	13 4	8 22	0 40
F 5	22 25	20 49	2 32	22 37	0 40	15 30	1 31	22 2	1 19	13 25	0 53	12 52	2 13	22 26	0 0	1 34	1 19	24 6	3 41	23 10	23 5	13 7	8 21	0 40
S 6	22 33	17 59	3 30	22 57	0 46	15 53	1 29	21 53	1 19	13 25	0 53	12 54	2 13	22 25	0 0	1 34	1 19	24 6	3 41	23 10	23 5	13 9	8 21	0 40
S 7	22 39	14 12	4 17	23 15	0 52	16 15	1 28	21 43	1 19	13 25	0 53	12 56	2 13	22 25	0 0	1 33	1 19	24 6	3 41	23 10	23 5	13 12	8 20	0 40
M 8	22 46	9 37	4 53	23 32	0 58	16 36	1 26	21 33	1 18	13 25	0 53	12 57	2 14	22 25	0 0	1 33	1 19	24 5	3 41	23 10	23 5	13 14	8 20	0 40
T 9	22 52	4 26	5 12	23 48	1 4	16 57	1 25	21 22	1 18	13 25	0 54	12 59	2 14	22 24	0 0	1 33	1 19	24 5	3 41	23 10	23 6	13 16	8 19	0 40
W10	22 57	1n 7	5 14	24 3	1 9	17 18	1 23	21 12	1 18	13 25	0 54	13 1	2 14	22 24	0 0	1 33	1 19	24 5	3 41	23 10	23 6	13 19	8 18	0 40
T 11	23 3	6 44	4 55	24 17	1 15	17 38	1 21	21 1	1 17	13 25	0 54	13 3	2 14	22 24	0 0	1 32	1 19	24 4	3 41	23 10	23 6	13 21	8 18	0 40
F 12	23 7	12 6	4 17	24 29	1 20	17 57	1 19	20 50	1 17	13 25	0 54	13 5	2 14	22 23	0 0	1 32	1 20	24 4	3 41	23 10	23 6	13 23	8 17	0 40
S 13	23 11	16 48	3 20	24 40	1 25	18 17	1 17	20 39	1 17	13 25	0 55	13 6	2 14	22 23	0 0	1 32	1 20	24 4	3 41	23 11	23 7	13 26	8 17	0 39
S 14	23 15	20 25	2 10	24 50	1 30	18 35	1 15	20 27	1 16	13 26	0 55	13 8	2 14	22 23	0 0	1 32	1 20	24 3	3 41	23 11	23 7	13 28	8 16	0 39
M15	23 18	22 37	0 51	24 58	1 35	18 53	1 13	20 15	1 16	13 26	0 55	13 10	2 14	22 23	0 0	1 32	1 20	24 3	3 41	23 11	23 7	13 30	8 16	0 39
T 16	23 21	23 13	0n30	25 5	1 39	19 11	1 11	20 4	1 15	13 27	0 56	13 12	2 14	22 22	0 0	1 32	1 20	24 3	3 41	23 11	23 7	13 33	8 16	0 39
W17	23 23	22 14	1 47	25 11	1 43	19 28	1 9	19 51	1 15	13 27	0 56	13 13	2 15	22 22	0 0	1 31	1 20	24 2	3 41	23 11	23 8	13 35	8 15	0 39
T 18	23 25	19 55	2 56	25 15	1 47	19 45	1 7	19 39	1 15	13 28	0 56	13 15	2 15	22 22	0 1	1 31	1 20	24 2	3 41	23 11	23 8	13 37	8 15	0 39
F 19	23 27	16 34	3 52	25 18	1 51	20 1	1 5	19 27	1 14	13 28	0 56	13 17	2 15	22 21	0 1	1 31	1 20	24 2	3 41	23 11	23 8	13 40	8 14	0 39
S 20	23 28	12 31	4 35	25 19	1 54	20 16	1 3	19 14	1 14	13 29	0 57	13 18	2 15	22 21	0 1	1 31	1 20	24 1	3 41	23 10	23 8	13 42	8 14	0 39
S 21	23 28	8 1	5 3	25 19	1 57	20 31	1 1	19 1	1 13	13 30	0 57	13 20	2 15	22 21	0 1	1 31	1 20	24 1	3 41	23 10	23 8	13 44	8 14	0 39
M22	23 28	3 19	5 16	25 17	2 0	20 46	0 58	18 48	1 13	13 31	0 57	13 21	2 15	22 20	0 1	1 31	1 20	24 1	3 41	23 10	23 9	13 47	8 13	0 38
T 23	23 27	1s25	5 15	25 14	2 3	20 59	0 56	18 34	1 12	13 31	0 57	13 23	2 15	22 20	0 1	1 31	1 20	24 0	3 41	23 10	23 9	13 49	8 13	0 38
W24	23 26	6 3	5 0	25 10	2 5	21 13	0 54	18 21	1 12	13 32	0 58	13 24	2 16	22 20	0 1	1 31	1 20	24 0	3 41	23 11	23 9	13 51	8 13	0 38
T 25	23 25	10 25	4 32	25 3	2 6	21 25	0 51	18 7	1 11	13 33	0 58	13 26	2 16	22 20	0 1	1 31	1 20	24 0	3 41	23 11	23 9	13 54	8 13	0 38
F 26	23 23	14 24	3 53	24 56	2 8	21 37	0 49	17 53	1 11	13 35	0 58	13 27	2 16	22 19	0 1	1 31	1 20	23 59	3 41	23 11	23 10	13 56	8 12	0 38
S 27	23 21	17 51	3 4	24 46	2 9	21 48	0 47	17 39	1 11	13 36	0 58	13 29	2 16	22 19	0 1	1 31	1 20	23 59	3 41	23 11	23 10	13 58	8 12	0 38
S 28	23 18	20 34	2 7	24 35	2 9	21 59	0 44	17 25	1 10	13 37	0 59	13 30	2 16	22 19	0 1	1 31	1 20	23 59	3 41	23 11	23 10	14 1	8 12	0 38
M29	23 15	22 24	1 3	24 23	2 9	22 9	0 42	17 10	1 10	13 38	0 59	13 32	2 16	22 18	0 1	1 31	1 20	23 58	3 41	23 11	23 10	14 3	8 12	0 38
T 30	23 11	23 12	0s 5	24 9	2 9	22 18	0 39	16 56	1 9	13 40	0 59	13 33	2 17	22 18	0 1	1 31	1 20	23 58	3 41	23 11	23 10	14 5	8 12	0 38
W31	23s 7	22s52	1s13	23s53	2s 8	22s27	0n37	16s41	1s 9	13n41	0n59	13s34	2n17	22n18	0n 1	1n31	1n21	23s58	3s41	23n11	23n11	14s 8	8n12	0n37

Julian Day Number = 2370430.5, Delta T = 22.17 sec
Ecliptic obliquity = 23°28'03, Nutation = - 0°00'18, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°38'23, Lahiri = 20°45'23Greg. Calendar