Astrodienst Ephemeris Tables

for the year 1781

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 1781
geocentric

JANUARY 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
M 1	6 43 58	11♑ 3'29	21♓ 5	18♐11	4♐13	10♏57	20♏26	14♐23	25°R49	5♎51	4♒ 3	11°R41	10♉41	22♓32	1°R33	M 1
T 2	6 47 54	12° 4'40	2♈54	19° 5	5°26	11°34	20°37	14°29	25♊47	5°52	4° 5	11♉39	10°38	22°38	1♉32	T 2
W 3	6 51 51	13° 5'50	14°45	20° 2	6°39	12°11	20°47	14°36	25°44	5°52	4° 7	11°D38	10°35	22°45	1°32	W 3
T 4	6 55 48	14° 6'59	26°43	21° 3	7°52	12°48	20°57	14°42	25°42	5°52	4° 8	11°39	10°32	22°52	1°31	T 4
F 5	6 59 44	15° 8'09	8♉53	22° 7	9° 6	13°25	21° 8	14°49	25°40	5°52	4°10	11°R40	10°29	22°58	1°31	F 5
S 6	7 3 41	16° 9'17	21°21	23°13	10°19	14° 2	21°18	14°55	25°37	5°R52	4°12	11°39	10°26	23° 5	1°30	S 6
S 7	7 7 37	17°10'26	4♊11	24°22	11°32	14°38	21°28	15° 1	25°35	5°52	4°14	11°37	10°22	23°12	1°30	S 7
M 8	7 11 34	18°11'34	17°25	25°33	12°46	15°15	21°38	15° 8	25°33	5°52	4°16	11°32	10°19	23°18	1°30	M 8
T 9	7 15 30	19°12'41	1♋ 4	26°46	13°59	15°52	21°47	15°14	25°30	5°52	4°17	11°24	10°16	23°25	1°30	T 9
W10	7 19 27	20°13'48	15° 8	28° 1	15°13	16°28	21°57	15°20	25°28	5°52	4°19	11°14	10°13	23°32	1°D30	W10
T 11	7 23 24	21°14'54	29°30	29°17	16°26	17° 5	22° 7	15°27	25°26	5°52	4°21	11° 3	10°10	23°39	1°30	T 11
F 12	7 27 20	22°16'00	14♌ 5	0♑35	17°40	17°42	22°16	15°33	25°24	5°51	4°23	10°52	10° 7	23°45	1°30	F 12
S 13	7 31 17	23°17'06	28°46	1°54	18°53	18°18	22°25	15°39	25°21	5°51	4°25	10°42	10° 3	23°52	1°30	S 13
S 14	7 35 13	24°18'11	13♍24	3°14	20° 7	18°55	22°35	15°45	25°19	5°51	4°27	10°34	10° 0	23°59	1°30	S 14
M15	7 39 10	25°19'16	27°55	4°36	21°21	19°31	22°44	15°51	25°17	5°51	4°29	10°28	9°57	24° 5	1°30	M15
T 16	7 43 6	26°20'20	12♎12	5°58	22°34	20° 8	22°53	15°57	25°15	5°50	4°30	10°26	9°54	24°12	1°31	T 16
W17	7 47 3	27°21'25	26°15	7°22	23°48	20°44	23° 2	16° 3	25°13	5°50	4°32	10°D25	9°51	24°19	1°31	W17
T 18	7 50 59	28°22'29	10♏ 3	8°46	25° 2	21°21	23°11	16° 9	25°11	5°50	4°34	10°R25	9°47	24°25	1°32	T 18
F 19	7 54 56	29°23'32	23°37	10°11	26°16	21°57	23°19	16°15	25° 9	5°49	4°36	10°25	9°44	24°32	1°32	F 19
S 20	7 58 53	0♒24'35	6♐59	11°37	27°29	22°34	23°28	16°20	25° 7	5°49	4°38	10°22	9°41	24°39	1°33	S 20
S 21	8 2 49	1°25'38	20° 9	13° 4	28°43	23°10	23°36	16°26	25° 5	5°48	4°40	10°17	9°38	24°45	1°33	S 21
M22	8 6 46	2°26'40	3♑ 8	14°32	29°57	23°46	23°45	16°32	25° 3	5°48	4°42	10° 9	9°35	24°52	1°34	M22
T 23	8 10 42	3°27'41	15°56	16° 1	1♑11	24°23	23°53	16°37	25° 1	5°47	4°44	9°58	9°32	24°59	1°35	T 23
W24	8 14 39	4°28'41	28°34	17°30	2°25	24°59	24° 1	16°43	24°59	5°47	4°45	9°44	9°28	25° 5	1°36	W24
T 25	8 18 35	5°29'41	11♒ 0	19° 0	3°39	25°35	24° 9	16°48	24°57	5°46	4°47	9°30	9°25	25°12	1°36	T 25
F 26	8 22 32	6°30'39	23°16	20°30	4°53	26°11	24°17	16°54	24°56	5°45	4°49	9°15	9°22	25°19	1°37	F 26
S 27	8 26 28	7°31'36	5♓21	22° 2	6° 7	26°47	24°24	16°59	24°54	5°45	4°51	9° 2	9°19	25°25	1°38	S 27
S 28	8 30 25	8°32'33	17°18	23°34	7°21	27°24	24°32	17° 4	24°52	5°44	4°53	8°51	9°16	25°32	1°39	S 28
M29	8 34 22	9°33'27	29° 9	25° 7	8°35	28° 0	24°39	17°10	24°51	5°43	4°55	8°43	9°13	25°39	1°40	M29
T 30	8 38 18	10°34'21	10♑56	26°40	9°49	28°36	24°46	17°15	24°49	5°43	4°57	8°38	9° 9	25°46	1°42	T 30
W31	8 42 15	11♒35'13	22♑45	28♑15	11♑ 3	29♏11	24♏54	17♐20	24♊48	5♎42	4♒59	8♉36	9♉ 6	25♓52	1♉43	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	23s 1	7s 9	3s56	20s50	2n 7	19s12	1n51	14s11	1n 0	16s56	0n59	21s 5	1n28	23n36	0n12	0s59	1n28	24s15	5s 7	15n22	15n 3	6s30	11n12	0s53
T 2	22 55	1 46	3 12	21 3	1 58	19 27	1 49	14 23	1 0	16 59	0 59	21 6	1 29	23 36	0 12	0 59	1 28	24 14	5 8	15 21	15 2	6 26	11 12	0 53
W 3	22 49	3n41	2 19	21 17	1 49	19 41	1 47	14 34	0 59	17 1	0 59	21 7	1 29	23 36	0 12	0 59	1 28	24 14	5 8	15 21	15 1	6 23	11 11	0 53
T 4	22 43	9 5	1 19	21 30	1 41	19 55	1 45	14 46	0 59	17 4	0 59	21 8	1 29	23 36	0 12	0 59	1 28	24 13	5 8	15 21	15 0	6 20	11 11	0 53
F 5	22 37	14 15	0 15	21 43	1 32	20 9	1 43	14 57	0 58	17 6	0 59	21 8	1 29	23 36	0 12	0 59	1 28	24 13	5 8	15 21	14 59	6 17	11 11	0 53
S 6	22 29	18 57	0n51	21 55	1 23	20 22	1 41	15 9	0 58	17 9	0 59	21 9	1 29	23 35	0 12	0 59	1 28	24 12	5 8	15 21	14 58	6 14	11 11	0 53
S 7	22 22	22 55	1 57	22 7	1 14	20 34	1 38	15 20	0 58	17 12	1 0	21 10	1 29	23 35	0 12	0 59	1 28	24 12	5 8	15 20	14 57	6 10	11 11	0 53
M 8	22 14	25 50	2 58	22 19	1 5	20 46	1 36	15 31	0 57	17 14	1 0	21 10	1 29	23 35	0 12	0 59	1 28	24 12	5 8	15 19	14 56	6 7	11 11	0 53
T 9	22 5	27 19	3 51	22 30	0 56	20 58	1 33	15 42	0 57	17 16	1 0	21 11	1 29	23 35	0 12	0 59	1 28	24 11	5 8	15 16	14 55	6 4	11 11	0 53
W10	21 57	27 6	4 31	22 40	0 47	21 8	1 31	15 53	0 57	17 19	1 0	21 12	1 29	23 35	0 12	0 59	1 28	24 11	5 8	15 13	14 54	6 1	11 11	0 53
T 11	21 47	25 6	4 55	22 50	0 38	21 19	1 29	16 4	0 56	17 21	1 0	21 12	1 29	23 35	0 12	0 59	1 28	24 10	5 8	15 10	14 53	5 58	11 11	0 53
F 12	21 38	21 25	5 1	22 59	0 30	21 28	1 26	16 14	0 56	17 24	1 0	21 13	1 29	23 35	0 12	0 58	1 29	24 10	5 8	15 6	14 52	5 54	11 11	0 53
S 13	21 27	16 24	4 47	23 6	0 21	21 37	1 23	16 25	0 55	17 26	1 0	21 14	1 29	23 35	0 12	0 58	1 29	24 10	5 8	15 3	14 51	5 51	11 11	0 53
S 14	21 17	10 26	4 14	23 13	0 13	21 46	1 21	16 35	0 55	17 28	1 0	21 14	1 29	23 35	0 12	0 58	1 29	24 9	5 8	15 1	14 50	5 48	11 11	0 53
M15	21 6	3 58	3 25	23 19	0 5	21 53	1 18	16 46	0 54	17 30	1 0	21 15	1 29	23 35	0 12	0 58	1 29	24 9	5 8	14 59	14 49	5 45	11 11	0 53
T 16	20 55	2s38	2 23	23 23	0s 3	22 0	1 15	16 56	0 54	17 33	1 0	21 15	1 29	23 35	0 12	0 58	1 29	24 8	5 8	14 58	14 48	5 41	11 11	0 53
W17	20 43	8 59	1 14	23 27	0 11	22 7	1 13	17 6	0 54	17 35	1 0	21 16	1 29	23 35	0 12	0 58	1 29	24 8	5 8	14 58	14 47	5 38	11 11	0 54
T 18	20 31	14 49	0 2	23 30	0 19	22 13	1 10	17 16	0 53	17 37	1 0	21 16	1 29	23 35	0 12	0 57	1 29	24 8	5 8	14 58	14 46	5 35	11 11	0 54
F 19	20 18	19 49	1s 9	23 31	0 26	22 18	1 7	17 26	0 53	17 39	1 1	21 17	1 29	23 35	0 12	0 57	1 29	24 7	5 8	14 58	14 45	5 32	11 11	0 54
S 20	20 5	23 44	2 15	23 31	0 34	22 22	1 4	17 36	0 52	17 41	1 1	21 18	1 29	23 34	0 12	0 57	1 29	24 7	5 8	14 57	14 44	5 29	11 11	0 54
S 21	19 52	26 19	3 13	23 30	0 41	22 26	1 1	17 45	0 52	17 43	1 1	21 18	1 29	23 34	0 12	0 57	1 29	24 6	5 8	14 55	14 43	5 25	11 11	0 54
M22	19 38	27 26	4 0	23 28	0 47	22 30	0 59	17 55	0 51	17 45	1 1	21 19	1 29	23 34	0 12	0 57	1 29	24 6	5 8	14 53	14 42	5 22	11 12	0 54
T 23	19 24	27 3	4 34	23 24	0 54	22 32	0 56	18 4	0 51	17 47	1 1	21 19	1 29	23 34	0 12	0 56	1 29	24 6	5 8	14 49	14 41	5 19	11 12	0 54
W24	19 10	25 16	4 54	23 19	1 0	22 34	0 53	18 14	0 50	17 49	1 1	21 20	1 29	23 34	0 12	0 56	1 29	24 5	5 9	14 45	14 40	5 16	11 12	0 54
T 25	18 55	22 17	4 59	23 13	1 6	22 35	0 50	18 23	0 50	17 51	1 1	21 20	1 29	23 34	0 12	0 56	1 29	24 5	5 9	14 40	14 39	5 12	11 12	0 54
F 26	18 40	18 21	4 51	23 6	1 12	22 36	0 47	18 32	0 49	17 52	1 1	21 21	1 29	23 34	0 12	0 55	1 29	24 4	5 9	14 36	14 38	5 9	11 13	0 54
S 27	18 25	13 43	4 29	22 57	1 18	22 36	0 44	18 41	0 49	17 54	1 1	21 21	1 29	23 34	0 12	0 55	1 29	24 4	5 9	14 32	14 37	5 6	11 13	0 54
S 28	18 9	8 38	3 56	22 47	1 23	22 35	0 41	18 49	0 48	17 56	1 2	21 22	1 29	23 34	0 12	0 55	1 29	24 4	5 9	14 28	14 36	5 3	11 13	0 54
M29	17 53	3 17	3 12	22 35	1 28	22 34	0 38	18 58	0 47	17 58	1 2	21 22	1 29	23 34	0 12	0 54	1 29	24 3	5 9	14 26	14 35	4 59	11 14	0 54
T 30	17 37	2n11	2 21	22 22	1 33	22 31	0 35	19 7	0 47	17 59	1 2	21 22	1 29	23 34	0 12	0 54	1 29	24 3	5 9	14 24	14 34	4 56	11 14	0 54
W31	17s20	7n35	1s23	22s 8	1s37	22s29	0n32	19s15	0n46	18s 1	1n 2	21s23	1n29	23n34	0n12	0s54	1n30	24s 2	5s 9	14n23	14n33	4s53	11n14	0s54

Julian Day Number = 2371557.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'10, Nutation = - 0°00'10, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°40'58, Lahiri = 20°47'58Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

FEBRUARY 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	8 46 11	12♒36'04	4♉40	29♑50	12♑17	29♏47	25♏ 0	17♐25	24°R46	5°R41	5♒ 0	8°R35	9♉ 3	25♓59	1♉44	T 1
F 2	8 50 8	13°36'54	16°47	1♒25	13°31	0♐23	25° 7	17°30	24♊45	5♎40	5° 2	8♉35	9° 0	26° 6	1°45	F 2
S 3	8 54 4	14°37'42	29°11	3° 2	14°45	0°59	25°14	17°35	24°43	5°39	5° 4	8°35	8°57	26°12	1°47	S 3
S 4	8 58 1	15°38'28	11♊58	4°39	15°59	1°35	25°20	17°40	24°42	5°38	5° 6	8°32	8°53	26°19	1°48	S 4
M 5	9 1 57	16°39'13	25°11	6°17	17°13	2°10	25°27	17°44	24°40	5°37	5° 8	8°28	8°50	26°26	1°50	M 5
T 6	9 5 54	17°39'57	8♋54	7°56	18°27	2°46	25°33	17°49	24°39	5°36	5°10	8°20	8°47	26°32	1°51	T 6
W 7	9 9 51	18°40'39	23° 5	9°35	19°41	3°22	25°39	17°54	24°38	5°35	5°12	8°10	8°44	26°39	1°53	W 7
T 8	9 13 47	19°41'19	7♌42	11°16	20°56	3°57	25°45	17°58	24°37	5°34	5°13	7°59	8°41	26°46	1°55	T 8
F 9	9 17 44	20°41'58	22°37	12°57	22°10	4°33	25°51	18° 3	24°36	5°33	5°15	7°47	8°38	26°52	1°56	F 9
S 10	9 21 40	21°42'36	7♍42	14°39	23°24	5° 8	25°56	18° 7	24°35	5°32	5°17	7°37	8°34	26°59	1°58	S 10
S 11	9 25 37	22°43'12	22°45	16°22	24°38	5°44	26° 2	18°11	24°34	5°31	5°19	7°28	8°31	27° 6	2° 0	S 11
M12	9 29 33	23°43'46	7♎39	18° 6	25°52	6°19	26° 7	18°15	24°33	5°30	5°21	7°23	8°28	27°12	2° 2	M12
T 13	9 33 30	24°44'20	22°16	19°51	27° 6	6°54	26°12	18°20	24°32	5°29	5°23	7°20	8°25	27°19	2° 4	T 13
W14	9 37 26	25°44'52	6♏32	21°36	28°20	7°30	26°17	18°24	24°31	5°28	5°24	7°D19	8°22	27°26	2° 6	W14
T 15	9 41 23	26°45'23	20°26	23°23	29°35	8° 5	26°22	18°28	24°30	5°27	5°26	7°R19	8°18	27°32	2° 8	T 15
F 16	9 45 20	27°45'53	3♐59	25°10	0♒49	8°40	26°27	18°32	24°29	5°25	5°28	7°19	8°15	27°39	2°10	F 16
S 17	9 49 16	28°46'21	17°12	26°59	2° 3	9°15	26°31	18°35	24°28	5°24	5°30	7°18	8°12	27°46	2°12	S 17
S 18	9 53 13	29°46'49	0♑ 9	28°48	3°17	9°50	26°36	18°39	24°28	5°23	5°31	7°14	8° 9	27°52	2°14	S 18
M19	9 57 9	0♓47'15	12°52	0♓38	4°31	10°25	26°40	18°43	24°27	5°22	5°33	7° 7	8° 6	27°59	2°17	M19
T 20	10 1 6	1°47'39	25°23	2°29	5°46	11° 0	26°44	18°46	24°26	5°20	5°35	6°58	8° 3	28° 6	2°19	T 20
W21	10 5 2	2°48'02	7♒44	4°21	7° 0	11°35	26°47	18°50	24°26	5°19	5°37	6°47	7°59	28°12	2°21	W21
T 22	10 8 59	3°48'23	19°56	6°13	8°14	12° 9	26°51	18°53	24°25	5°18	5°38	6°34	7°56	28°19	2°24	T 22
F 23	10 12 55	4°48'43	2♓ 0	8° 7	9°28	12°44	26°54	18°57	24°25	5°16	5°40	6°22	7°53	28°26	2°26	F 23
S 24	10 16 52	5°49'00	13°57	10° 1	10°43	13°19	26°58	19° 0	24°25	5°15	5°42	6°11	7°50	28°32	2°29	S 24
S 25	10 20 49	6°49'16	25°49	11°55	11°57	13°53	27° 1	19° 3	24°24	5°14	5°43	6° 2	7°47	28°39	2°31	S 25
M26	10 24 45	7°49'30	7♈38	13°50	13°11	14°28	27° 4	19° 6	24°24	5°12	5°45	5°55	7°44	28°46	2°34	M26
T 27	10 28 42	8°49'42	19°25	15°45	14°25	15° 2	27° 6	19° 9	24°24	5°11	5°47	5°51	7°40	28°53	2°36	T 27
W28	10 32 38	9♓49'52	1♉15	17♓41	15♒40	15♐36	27♏ 9	19♐12	24♊24	5♎ 9	5♒48	5°D49	7♉37	28♓59	2♉39	W28

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	17s 3	12n46	0s21	21s52	1s42	22s25	0n29	19s23	0n46	18s 2	1n 2	21s23	1n30	23n34	0n12	0s53	1n30	24s 2	5s 9	14n23	14n32	4s50	11n15	0s54
F 2	16 46	17 34	0n43	21 35	1 46	22 21	0 26	19 31	0 45	18 4	1 2	21 24	1 30	23 34	0 12	0 53	1 30	24 2	5 9	14 23	14 31	4 46	11 15	0 54
S 3	16 28	21 44	1 47	21 17	1 49	22 16	0 23	19 39	0 45	18 5	1 2	21 24	1 30	23 34	0 12	0 53	1 30	24 1	5 9	14 23	14 30	4 43	11 16	0 54
S 4	16 10	25 0	2 47	20 57	1 52	22 11	0 20	19 47	0 44	18 7	1 2	21 24	1 30	23 34	0 12	0 52	1 30	24 1	5 9	14 22	14 29	4 40	11 16	0 54
M 5	15 52	27 3	3 40	20 35	1 55	22 4	0 17	19 55	0 43	18 8	1 2	21 25	1 30	23 33	0 12	0 52	1 30	24 1	5 10	14 21	14 28	4 37	11 17	0 54
T 6	15 33	27 32	4 22	20 12	1 58	21 58	0 14	20 3	0 43	18 10	1 3	21 25	1 30	23 33	0 12	0 51	1 30	24 0	5 10	14 18	14 27	4 33	11 17	0 54
W 7	15 15	26 16	4 51	19 48	2 0	21 50	0 11	20 10	0 42	18 11	1 3	21 26	1 30	23 33	0 12	0 51	1 30	24 0	5 10	14 15	14 26	4 30	11 18	0 54
T 8	14 56	23 12	5 1	19 22	2 2	21 42	0 8	20 17	0 41	18 12	1 3	21 26	1 30	23 33	0 12	0 51	1 30	24 0	5 10	14 11	14 25	4 27	11 18	0 54
F 9	14 37	18 34	4 51	18 55	2 4	21 33	0 6	20 25	0 41	18 13	1 3	21 26	1 30	23 33	0 12	0 50	1 30	23 59	5 10	14 8	14 24	4 24	11 19	0 54
S 10	14 17	12 44	4 21	18 27	2 5	21 24	0 3	20 32	0 40	18 15	1 3	21 26	1 30	23 33	0 12	0 50	1 30	23 59	5 10	14 4	14 23	4 20	11 19	0 54
S 11	13 58	6 8	3 33	17 57	2 5	21 14	0s 0	20 39	0 39	18 16	1 3	21 27	1 30	23 33	0 12	0 49	1 30	23 58	5 10	14 1	14 22	4 17	11 20	0 54
M12	13 38	0s44	2 30	17 25	2 6	21 3	0 3	20 45	0 39	18 17	1 3	21 27	1 30	23 33	0 12	0 49	1 30	23 58	5 10	14 0	14 21	4 14	11 21	0 54
T 13	13 18	7 28	1 19	16 52	2 6	20 52	0 6	20 52	0 38	18 18	1 3	21 27	1 30	23 33	0 12	0 48	1 30	23 58	5 10	13 59	14 20	4 11	11 21	0 54
W14	12 57	13 39	0 4	16 17	2 5	20 40	0 9	20 59	0 37	18 19	1 4	21 28	1 30	23 33	0 12	0 48	1 30	23 57	5 11	13 58	14 19	4 7	11 22	0 54
T 15	12 37	18 59	1s 9	15 41	2 4	20 27	0 11	21 5	0 36	18 20	1 4	21 28	1 30	23 33	0 12	0 47	1 30	23 57	5 11	13 58	14 18	4 4	11 23	0 54
F 16	12 16	23 12	2 17	15 4	2 2	20 14	0 14	21 11	0 36	18 21	1 4	21 28	1 31	23 33	0 12	0 47	1 30	23 57	5 11	13 58	14 17	4 1	11 23	0 54
S 17	11 55	26 5	3 15	14 25	2 0	20 0	0 17	21 18	0 35	18 22	1 4	21 28	1 31	23 33	0 12	0 46	1 30	23 56	5 11	13 58	14 16	3 57	11 24	0 54
S 18	11 34	27 30	4 2	13 45	1 58	19 46	0 20	21 24	0 34	18 23	1 4	21 29	1 31	23 33	0 12	0 46	1 30	23 56	5 11	13 57	14 15	3 54	11 25	0 55
M19	11 13	27 26	4 36	13 3	1 55	19 31	0 22	21 29	0 33	18 24	1 4	21 29	1 31	23 33	0 12	0 45	1 30	23 56	5 11	13 54	14 13	3 51	11 26	0 55
T 20	10 51	25 57	4 57	12 20	1 51	19 16	0 25	21 35	0 32	18 24	1 4	21 29	1 31	23 33	0 12	0 44	1 30	23 56	5 11	13 51	14 12	3 48	11 26	0 55
W21	10 29	23 14	5 3	11 36	1 47	18 59	0 28	21 41	0 32	18 25	1 4	21 29	1 31	23 33	0 12	0 44	1 30	23 55	5 12	13 48	14 11	3 44	11 27	0 55
T 22	10 8	19 30	4 55	10 50	1 43	18 43	0 30	21 46	0 31	18 26	1 5	21 30	1 31	23 33	0 12	0 43	1 30	23 55	5 12	13 44	14 10	3 41	11 28	0 55
F 23	9 46	15 2	4 33	10 3	1 37	18 26	0 33	21 52	0 30	18 27	1 5	21 30	1 31	23 33	0 12	0 43	1 30	23 55	5 12	13 40	14 9	3 38	11 29	0 55
S 24	9 23	10 1	4 0	9 14	1 32	18 8	0 35	21 57	0 29	18 27	1 5	21 30	1 31	23 33	0 12	0 42	1 31	23 54	5 12	13 36	14 8	3 34	11 29	0 55
S 25	9 1	4 40	3 17	8 25	1 25	17 50	0 38	22 2	0 28	18 28	1 5	21 30	1 31	23 33	0 12	0 42	1 31	23 54	5 12	13 33	14 7	3 31	11 30	0 55
M26	8 39	0n49	2 25	7 34	1 18	17 31	0 40	22 7	0 27	18 28	1 5	21 30	1 31	23 33	0 12	0 41	1 31	23 54	5 12	13 31	14 6	3 28	11 31	0 55
T 27	8 16	6 16	1 27	6 43	1 11	17 12	0 42	22 12	0 26	18 29	1 5	21 30	1 31	23 33	0 12	0 40	1 31	23 54	5 12	13 29	14 5	3 25	11 32	0 55
W28	7s54	11n32	0s25	5s50	1s 3	16s52	0s45	22s16	0n25	18s29	1n 5	21s31	1n32	23n33	0n12	0s40	1n31	23s53	5s13	13n29	14n 4	3s21	11n33	0s55

Julian Day Number = 2371588.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'11, Nutation = - 0°00'09, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'02, Lahiri = 20°48'02Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

MARCH 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	10 36 35	10♓50'00	13♉10	19♓36	16♒54	16♐10	27♏11	19♐15	24°R24	5°R 8	5♒50	5♉49	7♉34	29♓ 6	2♉42	T 1
F 2	10 40 31	11°50'06	25°16	21°31	18° 8	16°45	27°13	19°17	24°D24	5♎ 6	5°51	5°50	7°31	29°13	2°44	F 2
S 3	10 44 28	12°50'10	7♊37	23°25	19°22	17°19	27°15	19°20	24♊24	5° 5	5°53	5°R51	7°28	29°19	2°47	S 3
S 4	10 48 24	13°50'12	20°19	25°18	20°36	17°53	27°17	19°22	24°24	5° 3	5°55	5°51	7°24	29°26	2°50	S 4
M 5	10 52 21	14°50'12	3♋26	27°10	21°51	18°26	27°19	19°25	24°24	5° 2	5°56	5°49	7°21	29°33	2°53	M 5
T 6	10 56 18	15°50'09	17° 2	29° 1	23° 5	19° 0	27°20	19°27	24°24	5° 0	5°58	5°46	7°18	29°39	2°56	T 6
W 7	11 0 14	16°50'05	1♌ 8	0♈49	24°19	19°34	27°22	19°29	24°24	4°59	5°59	5°40	7°15	29°46	2°59	W 7
T 8	11 4 11	17°49'58	15°41	2°35	25°33	20° 7	27°23	19°31	24°24	4°57	6° 1	5°33	7°12	29°53	3° 2	T 8
F 9	11 8 7	18°49'49	0♍39	4°18	26°48	20°41	27°23	19°33	24°25	4°56	6° 2	5°25	7° 9	29°59	3° 5	F 9
S 10	11 12 4	19°49'37	15°51	5°57	28° 2	21°14	27°24	19°35	24°25	4°54	6° 4	5°18	7° 5	0♈ 6	3° 8	S 10
S 11	11 16 0	20°49'24	1♎ 7	7°32	29°16	21°48	27°25	19°37	24°26	4°53	6° 5	5°13	7° 2	0°13	3°11	S 11
M12	11 19 57	21°49'09	16°18	9° 3	0♓30	22°21	27°25	19°39	24°26	4°51	6° 6	5°10	6°59	0°19	3°14	M12
T 13	11 23 53	22°48'52	1♏14	10°29	1°44	22°54	27°R25	19°41	24°27	4°49	6° 8	5°D 8	6°56	0°26	3°17	T 13
W14	11 27 50	23°48'33	15°47	11°49	2°59	23°27	27°25	19°42	24°27	4°48	6° 9	5° 9	6°53	0°33	3°21	W14
T 15	11 31 47	24°48'13	29°55	13° 3	4°13	24° 0	27°25	19°44	24°28	4°46	6°11	5°10	6°50	0°39	3°24	T 15
F 16	11 35 43	25°47'50	13♐38	14°11	5°27	24°33	27°24	19°45	24°29	4°44	6°12	5°11	6°46	0°46	3°27	F 16
S 17	11 39 40	26°47'27	26°55	15°12	6°41	25° 5	27°24	19°46	24°29	4°43	6°13	5°R12	6°43	0°53	3°30	S 17
S 18	11 43 36	27°47'01	9♑51	16° 7	7°55	25°38	27°23	19°47	24°30	4°41	6°15	5°11	6°40	0°59	3°34	S 18
M19	11 47 33	28°46'34	22°28	16°54	9° 9	26°10	27°22	19°48	24°31	4°40	6°16	5° 9	6°37	1° 6	3°37	M19
T 20	11 51 29	29°46'05	4♒50	17°33	10°24	26°43	27°21	19°49	24°32	4°38	6°17	5° 4	6°34	1°13	3°40	T 20
W21	11 55 26	0♈45'34	17° 0	18° 5	11°38	27°15	27°19	19°50	24°33	4°36	6°18	4°59	6°30	1°19	3°44	W21
T 22	11 59 22	1°45'01	29° 2	18°29	12°52	27°47	27°18	19°51	24°34	4°35	6°20	4°53	6°27	1°26	3°47	T 22
F 23	12 3 19	2°44'26	10♓57	18°46	14° 6	28°19	27°16	19°52	24°35	4°33	6°21	4°47	6°24	1°33	3°51	F 23
S 24	12 7 16	3°43'49	22°48	18°54	15°20	28°51	27°14	19°52	24°36	4°31	6°22	4°41	6°21	1°39	3°54	S 24
S 25	12 11 12	4°43'10	4♈37	18°R56	16°35	29°22	27°12	19°53	24°37	4°30	6°23	4°37	6°18	1°46	3°58	S 25
M26	12 15 9	5°42'29	16°25	18°49	17°49	29°54	27°10	19°53	24°39	4°28	6°24	4°34	6°15	1°53	4° 1	M26
T 27	12 19 5	6°41'46	28°16	18°36	19° 3	0♑25	27° 7	19°53	24°40	4°26	6°25	4°33	6°11	1°59	4° 5	T 27
W28	12 23 2	7°41'01	10♉10	18°16	20°17	0°56	27° 5	19°53	24°41	4°25	6°26	4°D33	6° 8	2° 6	4° 9	W28
T 29	12 26 58	8°40'14	22°11	17°50	21°31	1°27	27° 2	19°R53	24°43	4°23	6°27	4°34	6° 5	2°13	4°12	T 29
F 30	12 30 55	9°39'24	4♊22	17°19	22°45	1°58	26°59	19°53	24°44	4°21	6°29	4°35	6° 2	2°19	4°16	F 30
S 31	12 34 51	10♈38'32	16♊47	16♈43	23♓59	2♑29	26♏56	19♐53	24♊45	4♎20	6♒30	4♉37	5♉59	2♈26	4♉20	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	7s31	16n26	0n39	4s57	0s54	16s32	0s47	22s21	0n24	18s30	1n 5	21s31	1n32	23n33	0n12	0s39	1n31	23s53	5s13	13n29	14n 3	3s18	11n34	0s55
F 2	7 8	20 46	1 43	4 3	0 44	16 12	0 49	22 25	0 24	18 30	1 6	21 31	1 32	23 33	0 12	0 39	1 31	23 53	5 13	13 29	14 2	3 15	11 35	0 55
S 3	6 45	24 17	2 43	3 9	0 34	15 51	0 51	22 29	0 23	18 30	1 6	21 31	1 32	23 33	0 12	0 38	1 31	23 53	5 13	13 29	14 1	3 11	11 36	0 55
S 4	6 22	26 43	3 36	2 14	0 24	15 29	0 53	22 34	0 22	18 31	1 6	21 31	1 32	23 33	0 12	0 37	1 31	23 52	5 13	13 29	14 0	3 8	11 37	0 55
M 5	5 59	27 46	4 20	1 19	0 13	15 7	0 55	22 38	0 21	18 31	1 6	21 31	1 32	23 33	0 12	0 37	1 31	23 52	5 13	13 29	13 59	3 5	11 37	0 55
T 6	5 36	27 12	4 52	0 25	0 1	14 45	0 58	22 41	0 19	18 31	1 6	21 31	1 32	23 33	0 12	0 36	1 31	23 52	5 14	13 27	13 58	3 2	11 38	0 55
W 7	5 12	24 55	5 7	0n30	0n11	14 22	0 59	22 45	0 18	18 31	1 6	21 31	1 32	23 33	0 12	0 36	1 31	23 52	5 14	13 26	13 57	2 58	11 39	0 55
T 8	4 49	20 58	5 3	1 23	0 23	13 59	1 1	22 49	0 17	18 31	1 6	21 31	1 32	23 33	0 12	0 35	1 31	23 51	5 14	13 23	13 56	2 55	11 40	0 55
F 9	4 25	15 36	4 39	2 15	0 36	13 35	1 3	22 52	0 16	18 31	1 7	21 31	1 32	23 33	0 12	0 34	1 31	23 51	5 14	13 21	13 55	2 52	11 41	0 55
S 10	4 2	9 11	3 55	3 7	0 49	13 11	1 5	22 56	0 15	18 31	1 7	21 31	1 32	23 33	0 12	0 34	1 31	23 51	5 14	13 18	13 54	2 48	11 42	0 55
S 11	3 38	2 12	2 53	3 56	1 2	12 47	1 7	22 59	0 14	18 31	1 7	21 32	1 33	23 33	0 12	0 33	1 31	23 51	5 14	13 17	13 53	2 45	11 43	0 55
M12	3 15	4s53	1 40	4 44	1 15	12 23	1 8	23 2	0 13	18 31	1 7	21 32	1 33	23 33	0 12	0 32	1 31	23 51	5 15	13 16	13 52	2 42	11 44	0 55
T 13	2 51	11 35	0 21	5 30	1 28	11 58	1 10	23 5	0 12	18 31	1 7	21 32	1 33	23 33	0 12	0 32	1 31	23 50	5 15	13 15	13 51	2 38	11 45	0 55
W14	2 28	17 30	0s58	6 14	1 41	11 32	1 12	23 8	0 11	18 31	1 7	21 32	1 33	23 33	0 12	0 31	1 31	23 50	5 15	13 15	13 50	2 35	11 47	0 55
T 15	2 4	22 17	2 11	6 54	1 54	11 7	1 13	23 11	0 9	18 31	1 7	21 32	1 33	23 33	0 12	0 30	1 31	23 50	5 15	13 16	13 49	2 32	11 48	0 56
F 16	1 40	25 40	3 14	7 32	2 6	10 41	1 15	23 13	0 8	18 31	1 7	21 32	1 33	23 33	0 12	0 30	1 31	23 50	5 15	13 16	13 48	2 28	11 49	0 56
S 17	1 17	27 31	4 5	8 7	2 18	10 15	1 16	23 16	0 7	18 30	1 8	21 32	1 33	23 33	0 12	0 29	1 31	23 50	5 15	13 16	13 47	2 25	11 50	0 56
S 18	0 53	27 47	4 41	8 38	2 29	9 48	1 17	23 18	0 6	18 30	1 8	21 32	1 33	23 33	0 12	0 28	1 31	23 50	5 16	13 16	13 46	2 22	11 51	0 56
M19	0 29	26 35	5 4	9 6	2 39	9 21	1 18	23 20	0 4	18 30	1 8	21 32	1 33	23 33	0 12	0 28	1 31	23 49	5 16	13 15	13 44	2 19	11 52	0 56
T 20	0 6	24 6	5 11	9 30	2 49	8 55	1 20	23 23	0 3	18 29	1 8	21 32	1 33	23 33	0 12	0 27	1 31	23 49	5 16	13 14	13 43	2 15	11 53	0 56
W21	0n18	20 35	5 4	9 50	2 58	8 27	1 21	23 25	0 2	18 29	1 8	21 32	1 33	23 33	0 12	0 26	1 31	23 49	5 16	13 12	13 42	2 12	11 54	0 56
T 22	0 42	16 16	4 44	10 6	3 5	8 0	1 22	23 27	0 0	18 29	1 8	21 32	1 34	23 33	0 12	0 26	1 31	23 49	5 16	13 10	13 41	2 9	11 55	0 56
F 23	1 5	11 21	4 12	10 19	3 11	7 32	1 23	23 29	0s 1	18 28	1 8	21 32	1 34	23 33	0 12	0 25	1 31	23 49	5 17	13 8	13 40	2 5	11 56	0 56
S 24	1 29	6 3	3 29	10 27	3 17	7 4	1 24	23 30	0 2	18 27	1 8	21 31	1 34	23 33	0 12	0 24	1 31	23 49	5 17	13 6	13 39	2 2	11 58	0 56
S 25	1 53	0 34	2 37	10 30	3 20	6 36	1 25	23 32	0 4	18 27	1 8	21 31	1 34	23 33	0 12	0 24	1 31	23 49	5 17	13 5	13 38	1 59	11 59	0 56
M26	2 16	4n58	1 38	10 30	3 22	6 8	1 25	23 33	0 5	18 26	1 9	21 31	1 34	23 33	0 12	0 23	1 31	23 49	5 17	13 4	13 37	1 55	12 0	0 56
T 27	2 40	10 20	0 34	10 25	3 23	5 40	1 26	23 35	0 7	18 26	1 9	21 31	1 34	23 33	0 12	0 22	1 31	23 49	5 17	13 3	13 36	1 52	12 1	0 56
W28	3 3	15 22	0n31	10 17	3 22	5 11	1 27	23 36	0 8	18 25	1 9	21 31	1 34	23 33	0 12	0 22	1 31	23 48	5 18	13 3	13 35	1 49	12 2	0 56
T 29	3 27	19 53	1 36	10 4	3 19	4 42	1 27	23 37	0 10	18 24	1 9	21 31	1 34	23 34	0 12	0 21	1 31	23 48	5 18	13 3	13 34	1 45	12 3	0 56
F 30	3 50	23 37	2 37	9 48	3 15	4 13	1 28	23 39	0 11	18 23	1 9	21 31	1 34	23 34	0 12	0 20	1 31	23 48	5 18	13 4	13 33	1 42	12 4	0 56
S 31	4n13	26n20	3n32	9n29	3n 9	3s45	1s28	23s40	0s13	18s23	1n 9	21s31	1n34	23n34	0n12	0s20	1n31	23s48	5s18	13n 5	13n32	1s39	12n 6	0s56

Julian Day Number = 2371616.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'12, Nutation = - 0°00'10, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'06, Lahiri = 20°48'06Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

APRIL 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	12 38 48	11♈37'38	29♊30	16°R 2	25♓13	3♉ 0	26°R52	19°R53	24♊47	4°R18	6♒31	4♉38	5♉56	2♈33	4♉23	S 1
M 2	12 42 44	12°36'42	12♋33	15♈19	26°28	3°30	26♏49	19♐53	24°49	4♎16	6°31	4°R39	5°52	2°39	4°27	M 2
T 3	12 46 41	13°35'43	26° 1	14°33	27°42	4° 0	26°45	19°52	24°50	4°15	6°32	4°38	5°49	2°46	4°31	T 3
W 4	12 50 38	14°34'42	9♌56	13°47	28°56	4°30	26°41	19°52	24°52	4°13	6°33	4°37	5°46	2°53	4°35	W 4
T 5	12 54 34	15°33'39	24°16	12°59	0♈10	5° 0	26°37	19°51	24°53	4°12	6°34	4°35	5°43	2°59	4°38	T 5
F 6	12 58 31	16°32'33	9♍ 0	12°13	1°24	5°30	26°33	19°50	24°55	4°10	6°35	4°32	5°40	3° 6	4°42	F 6
S 7	13 2 27	17°31'25	24° 1	11°27	2°38	6° 0	26°28	19°49	24°57	4° 8	6°36	4°30	5°36	3°13	4°46	S 7
S 8	13 6 24	18°30'15	9♎12	10°44	3°52	6°29	26°24	19°48	24°59	4° 7	6°37	4°28	5°33	3°19	4°50	S 8
M 9	13 10 20	19°29'03	24°24	10° 4	5° 6	6°58	26°19	19°47	25° 1	4° 5	6°38	4°27	5°30	3°26	4°54	M 9
T 10	13 14 17	20°27'48	9♏25	9°27	6°20	7°27	26°14	19°46	25° 3	4° 4	6°38	4°D27	5°27	3°33	4°57	T 10
W11	13 18 13	21°26'32	24° 9	8°54	7°34	7°56	26° 9	19°45	25° 5	4° 2	6°39	4°28	5°24	3°39	5° 1	W11
T 12	13 22 10	22°25'15	8♐29	8°26	8°48	8°24	26° 4	19°44	25° 7	4° 0	6°40	4°29	5°21	3°46	5° 5	T 12
F 13	13 26 7	23°23'55	22°23	8° 2	10° 2	8°53	25°59	19°42	25° 9	3°59	6°40	4°30	5°17	3°53	5° 9	F 13
S 14	13 30 3	24°22'34	5♑50	7°43	11°16	9°21	25°54	19°41	25°11	3°57	6°41	4°31	5°14	3°59	5°13	S 14
S 15	13 34 0	25°21'11	18°52	7°30	12°30	9°49	25°48	19°39	25°13	3°56	6°42	4°31	5°11	4° 6	5°17	S 15
M16	13 37 56	26°19'47	1♒31	7°21	13°44	10°16	25°42	19°38	25°15	3°54	6°42	4°R31	5° 8	4°13	5°21	M16
T 17	13 41 53	27°18'21	13°52	7°D18	14°58	10°44	25°37	19°36	25°17	3°53	6°43	4°31	5° 5	4°19	5°25	T 17
W18	13 45 49	28°16'53	25°59	7°19	16°12	11°11	25°31	19°34	25°20	3°51	6°43	4°30	5° 1	4°26	5°29	W18
T 19	13 49 46	29°15'23	7♓56	7°26	17°26	11°38	25°25	19°32	25°22	3°50	6°44	4°29	4°58	4°33	5°33	T 19
F 20	13 53 42	0♉13'52	19°47	7°38	18°40	12° 5	25°18	19°30	25°24	3°49	6°44	4°29	4°55	4°39	5°37	F 20
S 21	13 57 39	1°12'19	1♈35	7°54	19°54	12°31	25°12	19°28	25°27	3°47	6°45	4°28	4°52	4°46	5°40	S 21
S 22	14 1 36	2°10'44	13°23	8°15	21° 8	12°57	25° 6	19°26	25°29	3°46	6°45	4°28	4°49	4°53	5°44	S 22
M23	14 5 32	3° 9'07	25°14	8°41	22°22	13°23	24°59	19°23	25°32	3°44	6°46	4°28	4°46	4°59	5°48	M23
T 24	14 9 29	4° 7'29	7♉11	9°10	23°36	13°49	24°53	19°21	25°34	3°43	6°46	4°28	4°42	5° 6	5°52	T 24
W25	14 13 25	5° 5'49	19°15	9°44	24°50	14°14	24°46	19°18	25°37	3°41	6°46	4°28	4°39	5°13	5°56	W25
T 26	14 17 22	6° 4'07	1♊27	10°22	26° 4	14°39	24°39	19°16	25°39	3°40	6°47	4°28	4°36	5°19	6° 0	T 26
F 27	14 21 18	7° 2'23	13°51	11° 3	27°17	15° 4	24°32	19°13	25°42	3°39	6°47	4°27	4°33	5°26	6° 4	F 27
S 28	14 25 15	8° 0'37	26°28	11°49	28°31	15°28	24°25	19°11	25°45	3°38	6°47	4°27	4°30	5°33	6° 8	S 28
S 29	14 29 11	8°58'50	9♋20	12°37	29°45	15°52	24°18	19° 8	25°47	3°36	6°48	4°27	4°27	5°39	6°12	S 29
M30	14 33 8	9♉57'00	22♋29	13♈29	0♉59	16♉16	24♏11	19♐ 5	25♊50	3♎35	6♒48	4♉26	4♉23	5♈46	6♉16	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	4n36	27n46	4n18	9n 6	3n 1	3s15	1s29	23s41	0s14	18s22	1n 9	21s31	1n34	23n34	0n12	0s19	1n31	23s48	5s18	13n 5	13n31	1s35	12n 7	0s56
M 2	4 59	27 44	4 52	8 41	2 52	2 46	1 29	23 41	0 16	18 21	1 9	21 31	1 35	23 34	0 12	0 18	1 31	23 48	5 19	13 5	13 30	1 32	12 8	0 57
T 3	5 22	26 4	5 12	8 13	2 41	2 17	1 29	23 42	0 18	18 20	1 9	21 31	1 35	23 34	0 12	0 18	1 31	23 48	5 19	13 5	13 29	1 29	12 9	0 57
W 4	5 45	22 49	5 14	7 44	2 29	1 48	1 30	23 43	0 19	18 19	1 9	21 30	1 35	23 34	0 12	0 17	1 31	23 48	5 19	13 4	13 28	1 25	12 10	0 57
T 5	6 8	18 7	4 57	7 13	2 16	1 18	1 30	23 44	0 21	18 18	1 9	21 30	1 35	23 34	0 12	0 16	1 31	23 48	5 19	13 4	13 27	1 22	12 12	0 57
F 6	6 31	12 14	4 21	6 42	2 2	0 49	1 30	23 44	0 23	18 17	1 10	21 30	1 35	23 34	0 12	0 16	1 31	23 48	5 20	13 3	13 26	1 19	12 13	0 57
S 7	6 53	5 31	3 25	6 10	1 46	0 19	1 30	23 45	0 25	18 16	1 10	21 30	1 35	23 34	0 12	0 15	1 31	23 48	5 20	13 2	13 24	1 15	12 14	0 57
S 8	7 16	1s35	2 15	5 39	1 31	0n10	1 30	23 45	0 26	18 15	1 10	21 30	1 35	23 34	0 12	0 15	1 31	23 48	5 20	13 2	13 23	1 12	12 15	0 57
M 9	7 38	8 36	0 55	5 8	1 14	0 40	1 29	23 45	0 28	18 13	1 10	21 30	1 35	23 34	0 12	0 14	1 31	23 48	5 20	13 1	13 22	1 9	12 17	0 57
T 10	8 0	15 5	0s27	4 38	0 58	1 9	1 29	23 46	0 30	18 12	1 10	21 30	1 35	23 34	0 12	0 13	1 31	23 48	5 20	13 1	13 21	1 5	12 18	0 57
W11	8 22	20 34	1 47	4 10	0 41	1 39	1 29	23 46	0 32	18 11	1 10	21 29	1 35	23 34	0 12	0 13	1 31	23 48	5 21	13 1	13 20	1 2	12 19	0 57
T 12	8 44	24 40	2 58	3 44	0 25	2 8	1 29	23 46	0 34	18 10	1 10	21 29	1 35	23 34	0 12	0 12	1 31	23 48	5 21	13 2	13 19	0 59	12 20	0 57
F 13	9 6	27 10	3 56	3 19	0 9	2 38	1 28	23 46	0 36	18 9	1 10	21 29	1 35	23 35	0 12	0 12	1 31	23 48	5 21	13 2	13 18	0 55	12 21	0 57
S 14	9 28	27 59	4 38	2 57	0s 7	3 7	1 28	23 46	0 38	18 7	1 10	21 29	1 36	23 35	0 12	0 11	1 31	23 48	5 21	13 2	13 17	0 52	12 23	0 57
S 15	9 49	27 11	5 5	2 38	0 23	3 36	1 27	23 46	0 40	18 6	1 10	21 29	1 36	23 35	0 12	0 10	1 31	23 48	5 22	13 3	13 16	0 49	12 24	0 57
M16	10 10	24 59	5 17	2 20	0 38	4 6	1 27	23 46	0 42	18 5	1 10	21 28	1 36	23 35	0 12	0 10	1 31	23 48	5 22	13 3	13 15	0 45	12 25	0 57
T 17	10 32	21 40	5 13	2 6	0 52	4 35	1 26	23 46	0 44	18 3	1 10	21 28	1 36	23 35	0 12	0 9	1 31	23 48	5 22	13 2	13 14	0 42	12 26	0 57
W18	10 53	17 30	4 55	1 54	1 6	5 4	1 25	23 46	0 46	18 2	1 10	21 28	1 36	23 35	0 12	0 9	1 31	23 48	5 22	13 2	13 13	0 39	12 28	0 58
T 19	11 13	12 42	4 25	1 45	1 19	5 33	1 24	23 46	0 48	18 0	1 10	21 28	1 36	23 35	0 12	0 8	1 31	23 49	5 22	13 2	13 12	0 35	12 29	0 58
F 20	11 34	7 29	3 43	1 38	1 31	6 2	1 24	23 45	0 50	17 59	1 10	21 28	1 36	23 35	0 12	0 7	1 31	23 49	5 23	13 2	13 11	0 32	12 30	0 58
S 21	11 54	2 1	2 53	1 34	1 43	6 31	1 23	23 45	0 53	17 57	1 10	21 27	1 36	23 35	0 12	0 7	1 31	23 49	5 23	13 2	13 10	0 29	12 31	0 58
S 22	12 15	3n32	1 54	1 32	1 54	6 59	1 22	23 45	0 55	17 56	1 10	21 27	1 36	23 35	0 12	0 6	1 31	23 49	5 23	13 2	13 9	0 25	12 33	0 58
M23	12 35	8 59	0 51	1 33	2 4	7 28	1 21	23 45	0 57	17 54	1 10	21 27	1 36	23 35	0 12	0 6	1 31	23 49	5 23	13 1	13 7	0 22	12 34	0 58
T 24	12 55	14 10	0n15	1 36	2 13	7 56	1 20	23 44	1 0	17 52	1 10	21 27	1 36	23 35	0 12	0 5	1 31	23 49	5 24	13 1	13 6	0 19	12 35	0 58
W25	13 14	18 52	1 21	1 42	2 21	8 25	1 19	23 44	1 2	17 51	1 10	21 26	1 36	23 36	0 12	0 5	1 31	23 49	5 24	13 1	13 5	0 15	12 36	0 58
T 26	13 34	22 50	2 24	1 49	2 29	8 53	1 17	23 44	1 4	17 49	1 10	21 26	1 36	23 36	0 12	0 4	1 31	23 49	5 24	13 1	13 4	0 12	12 37	0 58
F 27	13 53	25 50	3 22	1 59	2 36	9 20	1 16	23 44	1 7	17 48	1 10	21 26	1 36	23 36	0 12	0 4	1 31	23 49	5 24	13 1	13 3	0 9	12 39	0 58
S 28	14 12	27 36	4 10	2 11	2 42	9 48	1 15	23 43	1 9	17 46	1 10	21 26	1 36	23 36	0 12	0 3	1 31	23 50	5 24	13 1	13 2	0 5	12 40	0 58
S 29	14 31	27 55	4 47	2 25	2 47	10 15	1 13	23 43	1 12	17 44	1 10	21 25	1 36	23 36	0 12	0 3	1 31	23 50	5 25	13 1	13 1	0 2	12 41	0 58
M30	14n49	26n42	5n10	2n41	2s52	10n42	1s12	23s43	1s15	17s42	1n10	21s25	1n36	23n36	0n12	0s 2	1n31	23s50	5s25	13n 1	13n 0	0n 2	12n42	0s59

Julian Day Number = 2371647.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'12, Nutation = - 0°00'10, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'10, Lahiri = 20°48'10Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

MAY 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	14 37 5	10♉55'08	5♌56	14♈25	2♉13	16♊39	24°R 4	19°R 2	25♊53	3°R34	6♒48	4°D26	4♉20	5♈53	6♉20	T 1
W 2	14 41 1	11°53'14	19°43	15°23	3°27	17° 2	23♏56	18♐59	25°56	3♑32	6°48	4♉26	4°17	5°59	6°24	W 2
T 3	14 44 58	12°51'19	3♍50	16°24	4°41	17°25	23°49	18°56	25°58	3°31	6°48	4°26	4°14	6° 6	6°28	T 3
F 4	14 48 54	13°49'21	18°16	17°28	5°55	17°48	23°42	18°53	26° 1	3°30	6°48	4°27	4°11	6°13	6°32	F 4
S 5	14 52 51	14°47'21	2♎57	18°35	7° 8	18°10	23°34	18°50	26° 4	3°29	6°49	4°28	4° 7	6°19	6°36	S 5
S 6	14 56 47	15°45'20	17°48	19°45	8°22	18°31	23°27	18°46	26° 7	3°28	6°49	4°29	4° 4	6°26	6°40	S 6
M 7	15 0 44	16°43'16	2♏43	20°57	9°36	18°52	23°19	18°43	26°10	3°27	6°R49	4°R29	4° 1	6°33	6°44	M 7
T 8	15 4 40	17°41'11	17°34	22°11	10°50	19°13	23°12	18°39	26°13	3°26	6°49	4°29	3°58	6°39	6°48	T 8
W 9	15 8 37	18°39'05	2♐13	23°29	12° 4	19°34	23° 4	18°36	26°16	3°25	6°49	4°28	3°55	6°46	6°52	W 9
T 10	15 12 34	19°36'57	16°34	24°48	13°17	19°54	22°57	18°32	26°19	3°24	6°49	4°26	3°52	6°53	6°55	T 10
F 11	15 16 30	20°34'48	0♑32	26°10	14°31	20°13	22°49	18°29	26°22	3°23	6°48	4°24	3°48	6°59	6°59	F 11
S 12	15 20 27	21°32'38	14° 5	27°35	15°45	20°33	22°41	18°25	26°25	3°22	6°48	4°22	3°45	7° 6	7° 3	S 12
S 13	15 24 23	22°30'26	27°13	29° 1	16°59	20°51	22°34	18°22	26°28	3°21	6°48	4°20	3°42	7°13	7° 7	S 13
M14	15 28 20	23°28'13	9♒57	0♉30	18°13	21°10	22°26	18°18	26°31	3°20	6°48	4°19	3°39	7°19	7°11	M14
T 15	15 32 16	24°25'59	22°21	2° 1	19°26	21°28	22°18	18°14	26°34	3°19	6°48	4°D18	3°36	7°26	7°15	T 15
W16	15 36 13	25°23'44	4♓28	3°35	20°40	21°45	22°11	18°10	26°38	3°18	6°48	4°18	3°33	7°33	7°19	W16
T 17	15 40 9	26°21'27	16°25	5°10	21°54	22° 2	22° 3	18° 6	26°41	3°17	6°47	4°19	3°29	7°39	7°22	T 17
F 18	15 44 6	27°19'10	28°15	6°48	23° 8	22°18	21°56	18° 2	26°44	3°16	6°47	4°21	3°26	7°46	7°26	F 18
S 19	15 48 3	28°16'51	10♈ 3	8°28	24°21	22°34	21°48	17°58	26°47	3°15	6°47	4°22	3°23	7°53	7°30	S 19
S 20	15 51 59	29°14'31	21°53	10°11	25°35	22°49	21°40	17°54	26°50	3°15	6°46	4°24	3°20	7°59	7°34	S 20
M21	15 55 56	0♊12'11	3♉49	11°55	26°49	23° 4	21°33	17°50	26°54	3°14	6°46	4°R24	3°17	8° 6	7°37	M21
T 22	15 59 52	1° 9'49	15°54	13°42	28° 3	23°18	21°25	17°46	26°57	3°13	6°46	4°24	3°13	8°13	7°41	T 22
W23	16 3 49	2° 7'26	28°10	15°31	29°17	23°32	21°18	17°42	27° 0	3°12	6°45	4°22	3°10	8°19	7°45	W23
T 24	16 7 45	3° 5'02	10♊39	17°22	0♊30	23°45	21°11	17°38	27° 4	3°12	6°45	4°19	3° 7	8°26	7°49	T 24
F 25	16 11 42	4° 2'36	23°21	19°16	1°44	23°58	21° 3	17°33	27° 7	3°11	6°45	4°14	3° 4	8°33	7°52	F 25
S 26	16 15 38	5° 0'10	6♋18	21°11	2°58	24°10	20°56	17°29	27°11	3°11	6°44	4°10	3° 1	8°39	7°56	S 26
S 27	16 19 35	5°57'42	19°28	23° 9	4°12	24°21	20°49	17°25	27°14	3°10	6°44	4° 5	2°58	8°46	8° 0	S 27
M28	16 23 32	6°55'13	2♌52	25° 8	5°25	24°32	20°42	17°21	27°17	3° 9	6°43	4° 0	2°54	8°52	8° 3	M28
T 29	16 27 28	7°52'43	16°28	27°10	6°39	24°42	20°35	17°16	27°21	3° 9	6°42	3°57	2°51	8°59	8° 7	T 29
W30	16 31 25	8°50'11	0♍18	29°13	7°53	24°51	20°28	17°12	27°24	3° 8	6°42	3°56	2°48	9° 6	8°10	W30
T 31	16 35 21	9♊47'38	14♍19	1♊18	9♊ 6	25♋ 0	20♏21	17♐ 8	27♊28	3♑ 8	6♒41	3°D55	2♉45	9♈12	8♉14	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	15n 7	23n56	5n17	2n59	2s56	11n 9	1s11	23s42	1s17	17s41	1n10	21s25	1n37	23n36	0n12	0s 2	1n31	23s50	5s25	13n 1	12n59	0n 5	12n44	0s59
W 2	15 25	19 45	5 6	3 19	2 59	11 36	1 9	23 42	1 20	17 39	1 10	21 25	1 37	23 36	0 12	0 1	1 31	23 50	5 25	13 1	12 58	0 8	12 45	0 59
T 3	15 43	14 24	4 37	3 40	3 2	12 2	1 8	23 42	1 23	17 37	1 10	21 24	1 37	23 36	0 12	0 1	1 31	23 50	5 26	13 1	12 57	0 12	12 46	0 59
F 4	16 0	8 10	3 49	4 2	3 3	12 28	1 6	23 42	1 25	17 35	1 10	21 24	1 37	23 36	0 12	0 0	1 31	23 51	5 26	13 1	12 56	0 15	12 47	0 59
S 5	16 18	1 22	2 46	4 27	3 5	12 54	1 4	23 42	1 28	17 34	1 10	21 24	1 37	23 36	0 12	0n 0	1 31	23 51	5 26	13 1	12 55	0 18	12 48	0 59
S 6	16 35	5s35	1 31	4 53	3 5	13 20	1 3	23 42	1 31	17 32	1 10	21 23	1 37	23 36	0 12	0 0	1 31	23 51	5 26	13 2	12 54	0 22	12 50	0 59
M 7	16 51	12 17	0 10	5 20	3 5	13 45	1 1	23 41	1 34	17 30	1 10	21 23	1 37	23 37	0 12	0 1	1 31	23 51	5 27	13 2	12 52	0 25	12 51	0 59
T 8	17 8	18 15	1s12	5 48	3 4	14 9	0 59	23 41	1 37	17 28	1 10	21 23	1 37	23 37	0 12	0 1	1 31	23 52	5 27	13 2	12 51	0 28	12 52	0 59
W 9	17 24	23 3	2 28	6 18	3 3	14 34	0 57	23 41	1 40	17 26	1 10	21 22	1 37	23 37	0 12	0 2	1 31	23 52	5 27	13 1	12 50	0 32	12 53	0 59
T 10	17 40	26 19	3 32	6 49	3 0	14 58	0 55	23 41	1 43	17 24	1 10	21 22	1 37	23 37	0 12	0 2	1 31	23 52	5 27	13 1	12 49	0 35	12 54	0 59
F 11	17 55	27 51	4 23	7 21	2 58	15 22	0 54	23 42	1 46	17 23	1 10	21 22	1 37	23 37	0 12	0 2	1 30	23 52	5 27	13 0	12 48	0 38	12 56	0 59
S 12	18 10	27 38	4 56	7 54	2 55	15 45	0 52	23 42	1 49	17 21	1 10	21 21	1 37	23 37	0 12	0 3	1 30	23 52	5 28	12 59	12 47	0 42	12 57	1 0
S 13	18 25	25 52	5 13	8 29	2 51	16 8	0 50	23 42	1 52	17 19	1 10	21 21	1 37	23 37	0 12	0 3	1 30	23 53	5 28	12 59	12 46	0 45	12 58	1 0
M14	18 40	22 49	5 14	9 4	2 46	16 31	0 48	23 42	1 56	17 17	1 9	21 21	1 37	23 37	0 12	0 3	1 30	23 53	5 28	12 58	12 45	0 48	12 59	1 0
T 15	18 54	18 49	5 0	9 40	2 41	16 53	0 46	23 43	1 59	17 15	1 9	21 20	1 37	23 37	0 12	0 4	1 30	23 53	5 28	12 58	12 44	0 52	13 0	1 0
W16	19 8	14 7	4 33	10 17	2 36	17 15	0 43	23 43	2 2	17 13	1 9	21 20	1 37	23 37	0 12	0 4	1 30	23 54	5 29	12 58	12 43	0 55	13 1	1 0
T 17	19 22	8 58	3 55	10 55	2 30	17 36	0 41	23 44	2 6	17 11	1 9	21 20	1 37	23 37	0 12	0 4	1 30	23 54	5 29	12 59	12 42	0 59	13 3	1 0
F 18	19 35	3 33	3 6	11 33	2 23	17 57	0 39	23 45	2 9	17 10	1 9	21 19	1 37	23 38	0 12	0 5	1 30	23 54	5 29	12 59	12 41	1 2	13 4	1 0
S 19	19 48	1n59	2 10	12 12	2 16	18 17	0 37	23 46	2 13	17 8	1 9	21 19	1 37	23 38	0 12	0 5	1 30	23 54	5 29	13 0	12 40	1 5	13 5	1 0
S 20	20 1	7 29	1 8	12 51	2 9	18 37	0 35	23 46	2 16	17 6	1 9	21 19	1 37	23 38	0 12	0 5	1 30	23 55	5 29	13 0	12 38	1 9	13 6	1 0
M21	20 13	12 45	0 3	13 31	2 1	18 56	0 33	23 48	2 20	17 4	1 9	21 18	1 37	23 38	0 12	0 6	1 30	23 55	5 30	13 0	12 37	1 12	13 7	1 0
T 22	20 25	17 37	1n 3	14 11	1 52	19 15	0 30	23 49	2 24	17 2	1 9	21 18	1 37	23 38	0 12	0 6	1 30	23 55	5 30	13 0	12 36	1 15	13 8	1 1
W23	20 37	21 50	2 7	14 51	1 44	19 34	0 28	23 50	2 27	17 1	1 8	21 18	1 37	23 38	0 12	0 6	1 30	23 56	5 30	13 0	12 35	1 19	13 9	1 1
T 24	20 48	25 8	3 6	15 32	1 34	19 52	0 26	23 51	2 31	16 59	1 8	21 17	1 37	23 38	0 12	0 6	1 30	23 56	5 30	12 58	12 34	1 22	13 10	1 1
F 25	20 59	27 14	3 57	16 12	1 25	20 9	0 24	23 53	2 35	16 57	1 8	21 17	1 37	23 38	0 12	0 7	1 30	23 56	5 31	12 57	12 33	1 25	13 12	1 1
S 26	21 10	27 55	4 36	16 52	1 15	20 26	0 21	23 55	2 39	16 55	1 8	21 17	1 37	23 38	0 12	0 7	1 30	23 57	5 31	12 55	12 32	1 29	13 13	1 1
S 27	21 20	27 2	5 2	17 32	1 5	20 42	0 19	23 56	2 42	16 53	1 8	21 16	1 37	23 38	0 12	0 7	1 30	23 57	5 31	12 54	12 31	1 32	13 14	1 1
M28	21 30	24 36	5 12	18 12	0 54	20 58	0 17	23 58	2 46	16 52	1 8	21 16	1 37	23 38	0 12	0 7	1 30	23 57	5 31	12 52	12 30	1 36	13 15	1 1
T 29	21 39	20 45	5 5	18 50	0 44	21 13	0 14	24 0	2 50	16 50	1 8	21 15	1 37	23 38	0 12	0 7	1 30	23 58	5 31	12 51	12 29	1 39	13 16	1 1
W30	21 48	15 44	4 40	19 28	0 33	21 27	0 12	24 3	2 54	16 48	1 7	21 15	1 36	23 38	0 12	0 7	1 30	23 58	5 32	12 51	12 28	1 42	13 17	1 1
T 31	21n57	9n50	3n58	20n 5	0s22	21n41	0s10	24s 5	2s59	16s47	1n 7	21s15	1n36	23n39	0n12	0n 8	1n30	23s58	5s32	12n51	12n26	1n46	13n18	1s 2

Julian Day Number = 2371677.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'11, Nutation = - 0°00'10, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'14, Lahiri = 20°48'15Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

JUNE 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
F 1	16 39 18	10♊45'04	28♍31	3♊25	10♊20	25♉ 8	20°R14	17°R 3	27♊31	3°R 8	6°R41	3♉56	2♉42	9♈19	8♉17	F 1
S 2	16 43 14	11°42'28	12♎52	5°33	11°34	25°16	20♏ 7	16♐59	27°35	3♎ 7	6♒40	3°58	2°39	9°26	8°21	S 2
S 3	16 47 11	12°39'51	27°19	7°43	12°48	25°22	20° 1	16°54	27°38	3° 7	6°39	3°R59	2°35	9°32	8°24	S 3
M 4	16 51 7	13°37'13	11♏49	9°53	14° 1	25°29	19°54	16°50	27°42	3° 7	6°39	3°59	2°32	9°39	8°28	M 4
T 5	16 55 4	14°34'35	26°18	12° 5	15°15	25°34	19°48	16°46	27°45	3° 6	6°38	3°57	2°29	9°46	8°31	T 5
W 6	16 59 1	15°31'55	10♐39	14°16	16°29	25°39	19°42	16°41	27°49	3° 6	6°37	3°53	2°26	9°52	8°34	W 6
T 7	17 2 57	16°29'15	24°47	16°28	17°42	25°43	19°35	16°37	27°52	3° 6	6°36	3°48	2°23	9°59	8°38	T 7
F 8	17 6 54	17°26'33	8♑37	18°40	18°56	25°46	19°29	16°32	27°56	3° 6	6°36	3°41	2°19	10° 6	8°41	F 8
S 9	17 10 50	18°23'52	22° 7	20°52	20°10	25°49	19°24	16°28	27°59	3° 5	6°35	3°34	2°16	10°12	8°44	S 9
S 10	17 14 47	19°21'09	5♒14	23° 3	21°24	25°51	19°18	16°24	28° 3	3° 5	6°34	3°27	2°13	10°19	8°48	S 10
M11	17 18 43	20°18'27	17°59	25°14	22°37	25°52	19°12	16°19	28° 6	3° 5	6°33	3°21	2°10	10°26	8°51	M11
T 12	17 22 40	21°15'43	0♓24	27°23	23°51	25°R52	19° 6	16°15	28°10	3° 5	6°32	3°17	2° 7	10°32	8°54	T 12
W13	17 26 37	22°13'00	12°33	29°31	25° 5	25°52	19° 1	16°10	28°14	3° 5	6°31	3°15	2° 4	10°39	8°57	W13
T 14	17 30 33	23°10'16	24°30	1♋37	26°18	25°51	18°56	16° 6	28°17	3°D 5	6°31	3°D14	2° 0	10°46	9° 0	T 14
F 15	17 34 30	24° 7'31	6♈21	3°42	27°32	25°49	18°51	16° 2	28°21	3° 5	6°30	3°15	1°57	10°52	9° 3	F 15
S 16	17 38 26	25° 4'47	18° 9	5°46	28°46	25°46	18°46	15°57	28°24	3° 5	6°29	3°16	1°54	10°59	9° 6	S 16
S 17	17 42 23	26° 2'02	0♉ 2	7°47	29°59	25°43	18°41	15°53	28°28	3° 5	6°28	3°R17	1°51	11° 6	9° 9	S 17
M18	17 46 19	26°59'17	12° 2	9°46	1♋13	25°39	18°36	15°49	28°31	3° 5	6°27	3°16	1°48	11°12	9°12	M18
T 19	17 50 16	27°56'32	24°15	11°44	2°27	25°34	18°32	15°44	28°35	3° 6	6°26	3°14	1°45	11°19	9°15	T 19
W20	17 54 12	28°53'46	6♊43	13°39	3°41	25°28	18°27	15°40	28°39	3° 6	6°25	3°10	1°41	11°26	9°18	W20
T 21	17 58 9	29°51'01	19°29	15°32	4°54	25°22	18°23	15°36	28°42	3° 6	6°24	3° 3	1°38	11°32	9°21	T 21
F 22	18 2 6	0♋48'15	2♋32	17°23	6° 8	25°14	18°19	15°32	28°46	3° 6	6°23	2°55	1°35	11°39	9°24	F 22
S 23	18 6 2	1°45'29	15°51	19°12	7°22	25° 7	18°15	15°27	28°49	3° 6	6°22	2°45	1°32	11°46	9°27	S 23
S 24	18 9 59	2°42'43	29°26	20°59	8°36	24°58	18°11	15°23	28°53	3° 7	6°20	2°35	1°29	11°52	9°29	S 24
M25	18 13 55	3°39'56	13♌12	22°43	9°49	24°49	18° 8	15°19	28°57	3° 7	6°19	2°26	1°25	11°59	9°32	M25
T 26	18 17 52	4°37'09	27° 8	24°26	11° 3	24°39	18° 4	15°15	29° 0	3° 8	6°18	2°19	1°22	12° 6	9°35	T 26
W27	18 21 48	5°34'21	11♍10	26° 6	12°17	24°28	18° 1	15°11	29° 4	3° 8	6°17	2°15	1°19	12°12	9°37	W27
T 28	18 25 45	6°31'33	25°16	27°43	13°30	24°17	17°58	15° 7	29° 7	3° 8	6°16	2°12	1°16	12°19	9°40	T 28
F 29	18 29 41	7°28'44	9♎24	29°19	14°44	24° 5	17°55	15° 3	29°11	3° 9	6°15	2°D12	1°13	12°25	9°42	F 29
S 30	18 33 38	8♋25'56	23♎33	0♌53	15♋58	23♉53	17♏52	14♐59	29♊15	3♎ 9	6♒14	2♉12	1♉10	12♈32	9♉45	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	22n 5	3n22	3n 1	20n41	0s12	21n54	0s 7	24s 8	3s 3	16s45	1n 7	21s14	1n36	23n39	0n12	0n 8	1n30	23s59	5s32	12n51	12n25	1n49	13n19	1s 2	
S 2	22 13	3s21	1 53	21 15	0 1	22 7	0 5	24 10	3 7	16 43	1 7	21 14	1 36	23 39	0 12	0 8	1 30	23 59	5 32	12 51	12 24	1 52	13 20	1 2	
S 3	22 21	9 58	0 36	21 47	0n10	22 19	0 3	24 13	3 11	16 42	1 7	21 14	1 36	23 39	0 12	0 8	1 30	23 59	5 32	12 52	12 23	1 56	13 21	1 2	
M 4	22 28	16 5	0s43	22 18	0 20	22 31	0 0	24 16	3 15	16 40	1 6	21 13	1 36	23 39	0 12	0 8	1 30	24 0	5 33	12 52	12 22	1 59	13 22	1 2	
T 5	22 35	21 16	1 58	22 46	0 31	22 41	0n 2	24 19	3 20	16 39	1 6	21 13	1 36	23 39	0 12	0 8	1 30	24 0	5 33	12 51	12 21	2 2	13 23	1 2	
W 6	22 41	25 8	3 6	23 13	0 41	22 51	0 5	24 23	3 24	16 37	1 6	21 13	1 36	23 39	0 12	0 8	1 30	24 1	5 33	12 50	12 20	2 6	13 24	1 2	
T 7	22 47	27 22	4 0	23 37	0 50	23 1	0 7	24 26	3 28	16 36	1 6	21 12	1 36	23 39	0 12	0 8	1 29	24 1	5 33	12 48	12 19	2 9	13 25	1 2	
F 8	22 53	27 51	4 40	23 58	0 59	23 10	0 9	24 30	3 33	16 34	1 6	21 12	1 36	23 39	0 12	0 8	1 29	24 1	5 33	12 46	12 18	2 13	13 26	1 2	
S 9	22 58	26 37	5 2	24 17	1 8	23 18	0 12	24 34	3 37	16 33	1 5	21 11	1 36	23 39	0 12	0 8	1 29	24 2	5 34	12 43	12 17	2 16	13 27	1 3	
S 10	23 3	23 58	5 8	24 33	1 16	23 25	0 14	24 38	3 42	16 32	1 5	21 11	1 36	23 39	0 12	0 8	1 29	24 2	5 34	12 41	12 16	2 19	13 28	1 3	
M11	23 7	20 12	4 59	24 46	1 23	23 32	0 16	24 42	3 46	16 30	1 5	21 11	1 36	23 39	0 12	0 8	1 29	24 3	5 34	12 39	12 14	2 23	13 28	1 3	
T 12	23 11	15 38	4 35	24 56	1 30	23 38	0 19	24 46	3 51	16 29	1 5	21 10	1 36	23 39	0 12	0 8	1 29	24 3	5 34	12 37	12 13	2 26	13 29	1 3	
W13	23 14	10 32	3 59	25 4	1 36	23 44	0 21	24 51	3 55	16 28	1 5	21 10	1 36	23 39	0 12	0 8	1 29	24 3	5 34	12 37	12 12	2 29	13 30	1 3	
T 14	23 18	5 9	3 14	25 9	1 41	23 48	0 23	24 56	4 0	16 26	1 4	21 10	1 35	23 39	0 12	0 8	1 29	24 4	5 35	12 37	12 11	2 33	13 31	1 3	
F 15	23 20	0n23	2 20	25 11	1 46	23 52	0 26	25 0	4 4	16 25	1 4	21 9	1 35	23 39	0 12	0 8	1 29	24 4	5 35	12 37	12 10	2 36	13 32	1 3	
S 16	23 23	5 53	1 21	25 10	1 49	23 56	0 28	25 5	4 9	16 24	1 4	21 9	1 35	23 40	0 12	0 8	1 29	24 5	5 35	12 37	12 9	2 39	13 33	1 3	
S 17	23 25	11 13	0 18	25 7	1 52	23 58	0 30	25 10	4 13	16 23	1 4	21 9	1 35	23 40	0 12	0 8	1 29	24 5	5 35	12 37	12 8	2 43	13 34	1 4	
M18	23 26	16 13	0n47	25 1	1 55	24 0	0 32	25 16	4 18	16 22	1 4	21 8	1 35	23 40	0 12	0 8	1 29	24 5	5 35	12 37	12 7	2 46	13 34	1 4	
T 19	23 27	20 38	1 50	24 53	1 56	24 1	0 35	25 21	4 22	16 21	1 3	21 8	1 35	23 40	0 12	0 8	1 29	24 6	5 36	12 37	12 6	2 50	13 35	1 4	
W20	23 28	24 15	2 49	24 43	1 57	24 2	0 37	25 27	4 27	16 20	1 3	21 8	1 35	23 40	0 12	0 8	1 29	24 6	5 36	12 35	12 5	2 53	13 36	1 4	
T 21	23 28	26 44	3 41	24 30	1 57	24 2	0 39	25 32	4 31	16 19	1 3	21 7	1 35	23 40	0 12	0 8	1 29	24 7	5 36	12 33	12 3	2 56	13 37	1 4	
F 22	23 28	27 50	4 23	24 16	1 57	24 1	0 41	25 38	4 36	16 18	1 3	21 7	1 35	23 40	0 12	0 7	1 29	24 7	5 36	12 30	12 2	3 0	13 38	1 4	
S 23	23 27	27 21	4 51	24 0	1 56	23 59	0 43	25 44	4 40	16 17	1 2	21 7	1 35	23 40	0 12	0 7	1 29	24 8	5 36	12 26	12 1	3 3	13 38	1 4	
S 24	23 27	25 15	5 4	23 42	1 54	23 57	0 45	25 50	4 45	16 16	1 2	21 6	1 34	23 40	0 12	0 7	1 29	24 8	5 36	12 23	12 0	3 6	13 39	1 4	
M25	23 25	21 39	4 59	23 23	1 51	23 54	0 47	25 56	4 49	16 16	1 2	21 6	1 34	23 40	0 12	0 7	1 29	24 9	5 37	12 20	11 59	3 10	13 40	1 5	
T 26	23 23	16 48	4 36	23 2	1 48	23 50	0 49	26 2	4 53	16 15	1 2	21 6	1 34	23 40	0 12	0 7	1 29	24 9	5 37	12 18	11 58	3 13	13 41	1 5	
W27	23 21	11 3	3 57	22 40	1 44	23 45	0 51	26 8	4 58	16 14	1 1	21 5	1 34	23 40	0 12	0 7	1 29	24 9	5 37	12 16	11 57	3 16	13 41	1 5	
T 28	23 19	4 42	3 4	22 16	1 40	23 40	0 53	26 14	5 2	16 14	1 1	21 5	1 34	23 40	0 12	0 6	1 29	24 10	5 37	12 15	11 56	3 20	13 42	1 5	
F 29	23 16	1s55	1 58	21 52	1 35	23 34	0 55	26 20	5 6	16 13	1 1	21 5	1 34	23 40	0 12	0 6	1 29	24 10	5 37	12 15	11 55	3 23	13 43	1 5	
S 30	23n12	8s26	0n46	21n26	1n29	23n27	0n57	26s26	5s10	16s13	1n 1	21s 4	1n34	23n40	0n12	0n 6	1n29	24s11	5s37	12n15	11n54	3n27	13n43	1s 5	

Julian Day Number = 2371708.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'11, Nutation = - 0°00'10, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'18, Lahiri = 20°48'19Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

JULY 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	18 37 35	9♋23'06	7♏41	2♌24	17♋12	23°R40	17°R50	14°R55	29♊18	3♎10	6°R12	2°R12	1♉ 6	12♈39	9♉47	S 1
M 2	18 41 31	10°20'17	21°48	3°53	18°25	23♋26	17♏48	14♐52	29°22	3°10	6♒11	2♉11	1° 3	12°45	9°50	M 2
T 3	18 45 28	11°17'27	5♐51	5°19	19°39	23°12	17°45	14°48	29°25	3°11	6°10	2° 7	1° 0	12°52	9°52	T 3
W 4	18 49 24	12°14'38	19°47	6°44	20°53	22°58	17°43	14°44	29°29	3°12	6° 9	2° 1	0°57	12°59	9°54	W 4
T 5	18 53 21	13°11'48	3♋33	8° 6	22° 7	22°43	17°42	14°41	29°32	3°12	6° 8	1°52	0°54	13° 5	9°57	T 5
F 6	18 57 17	14° 8'59	17° 6	9°25	23°20	22°28	17°40	14°37	29°36	3°13	6° 6	1°41	0°51	13°12	9°59	F 6
S 7	19 1 14	15° 6'09	0♒22	10°42	24°34	22°12	17°38	14°34	29°39	3°14	6° 5	1°30	0°47	13°19	10° 1	S 7
S 8	19 5 11	16° 3'20	13°20	11°57	25°48	21°56	17°37	14°30	29°43	3°15	6° 4	1°18	0°44	13°25	10° 3	S 8
M 9	19 9 7	17° 0'31	25°59	13° 9	27° 1	21°40	17°36	14°27	29°46	3°15	6° 2	1° 8	0°41	13°32	10° 5	M 9
T 10	19 13 4	17°57'43	8♓21	14°19	28°15	21°24	17°35	14°23	29°50	3°16	6° 1	1° 0	0°38	13°39	10° 7	T 10
W11	19 17 0	18°54'55	20°29	15°26	29°29	21° 7	17°34	14°20	29°53	3°17	6° 0	0°55	0°35	13°45	10° 9	W11
T 12	19 20 57	19°52'08	2♈25	16°30	0♌43	20°50	17°34	14°17	29°57	3°18	5°59	0°52	0°31	13°52	10°11	T 12
F 13	19 24 53	20°49'21	14°15	17°31	1°56	20°33	17°33	14°14	0♋ 0	3°19	5°57	0°51	0°28	13°59	10°13	F 13
S 14	19 28 50	21°46'35	26° 4	18°30	3°10	20°16	17°33	14°11	0° 3	3°20	5°56	0°51	0°25	14° 5	10°15	S 14
S 15	19 32 46	22°43'49	7♉57	19°25	4°24	19°59	17°D33	14° 8	0° 7	3°21	5°55	0°51	0°22	14°12	10°16	S 15
M16	19 36 43	23°41'05	20° 0	20°17	5°38	19°42	17°33	14° 5	0°10	3°22	5°53	0°50	0°19	14°19	10°18	M16
T 17	19 40 40	24°38'21	2♊18	21° 6	6°51	19°25	17°34	14° 2	0°14	3°23	5°52	0°46	0°16	14°25	10°20	T 17
W18	19 44 36	25°35'38	14°54	21°51	8° 5	19° 9	17°34	13°59	0°17	3°24	5°51	0°41	0°12	14°32	10°21	W18
T 19	19 48 33	26°32'55	27°51	22°33	9°19	18°52	17°35	13°57	0°20	3°25	5°49	0°33	0° 9	14°39	10°23	T 19
F 20	19 52 29	27°30'14	11♋11	23°11	10°33	18°35	17°36	13°54	0°24	3°26	5°48	0°22	0° 6	14°45	10°25	F 20
S 21	19 56 26	28°27'33	24°52	23°45	11°46	18°19	17°37	13°52	0°27	3°27	5°46	0°11	0° 3	14°52	10°26	S 21
S 22	20 0 22	29°24'53	8♌51	24°15	13° 0	18° 3	17°38	13°49	0°30	3°28	5°45	29♈59	29♈59	14°58	10°27	S 22
M23	20 4 19	0♌22'13	23° 3	24°41	14°14	17°48	17°40	13°47	0°33	3°30	5°44	29°48	29°57	15° 5	10°29	M23
T 24	20 8 15	1°19'34	7♍24	25° 3	15°28	17°33	17°41	13°45	0°37	3°31	5°42	29°39	29°53	15°12	10°30	T 24
W25	20 12 12	2°16'55	21°47	25°19	16°41	17°18	17°43	13°42	0°40	3°32	5°41	29°33	29°50	15°18	10°31	W25
T 26	20 16 9	3°14'17	6♎ 7	25°32	17°55	17° 4	17°45	13°40	0°43	3°33	5°40	29°30	29°47	15°25	10°32	T 26
F 27	20 20 5	4°11'40	20°23	25°39	19° 9	16°50	17°47	13°38	0°46	3°35	5°38	29°29	29°44	15°32	10°33	F 27
S 28	20 24 2	5° 9'02	4♏31	25°R41	20°22	16°37	17°49	13°36	0°49	3°36	5°37	29°29	29°41	15°38	10°35	S 28
S 29	20 27 58	6° 6'26	18°30	25°38	21°36	16°25	17°52	13°34	0°52	3°37	5°35	29°28	29°37	15°45	10°36	S 29
M30	20 31 55	7° 3'50	2♐21	25°30	22°50	16°13	17°55	13°33	0°55	3°39	5°34	29°26	29°34	15°52	10°36	M30
T 31	20 35 51	8♌ 1'15	16♐ 4	25♌16	24♌ 4	16♑ 1	17♏57	13♐31	0♋58	3♎40	5♒33	29♈22	29♈31	15♈58	10♉37	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	23n 8	14s33	0s29	21n 0	1n23	23n20	0n59	26s33	5s14	16s12	1n 0	21s 4	1n33	23n40	0n12	0n 6	1n28	24s11	5s38	12n15	11n52	3n30	13n44	1s 5
M 2	23 4	19 53	1 42	20 32	1 16	23 12	1 1	26 39	5 18	16 12	1 0	21 4	1 33	23 40	0 12	0 5	1 28	24 12	5 38	12 15	11 51	3 33	13 45	1 6
T 3	22 59	24 5	2 49	20 5	1 9	23 3	1 2	26 45	5 21	16 11	1 0	21 4	1 33	23 40	0 12	0 5	1 28	24 12	5 38	12 14	11 50	3 37	13 45	1 6
W 4	22 54	26 48	3 44	19 36	1 1	22 54	1 4	26 51	5 25	16 11	1 0	21 3	1 33	23 40	0 12	0 5	1 28	24 13	5 38	12 11	11 49	3 40	13 46	1 6
T 5	22 49	27 51	4 26	19 7	0 53	22 44	1 6	26 57	5 29	16 11	0 59	21 3	1 33	23 40	0 12	0 4	1 28	24 13	5 38	12 8	11 48	3 43	13 46	1 6
F 6	22 43	27 12	4 52	18 38	0 44	22 33	1 7	27 3	5 32	16 10	0 59	21 3	1 33	23 40	0 12	0 4	1 28	24 14	5 38	12 5	11 47	3 47	13 47	1 6
S 7	22 37	25 0	5 2	18 8	0 35	22 22	1 9	27 9	5 35	16 10	0 59	21 3	1 33	23 40	0 12	0 4	1 28	24 14	5 38	12 1	11 46	3 50	13 47	1 6
S 8	22 30	21 33	4 55	17 38	0 26	22 10	1 10	27 15	5 39	16 10	0 59	21 2	1 32	23 40	0 12	0 3	1 28	24 14	5 39	11 57	11 45	3 53	13 48	1 6
M 9	22 23	17 10	4 34	17 9	0 16	21 57	1 12	27 21	5 42	16 10	0 58	21 2	1 32	23 40	0 12	0 3	1 28	24 15	5 39	11 53	11 44	3 57	13 48	1 7
T 10	22 16	12 10	4 1	16 39	0 5	21 44	1 13	27 26	5 45	16 10	0 58	21 2	1 32	23 40	0 12	0 3	1 28	24 15	5 39	11 50	11 42	4 0	13 49	1 7
W11	22 8	6 47	3 17	16 9	0s 5	21 30	1 15	27 31	5 47	16 10	0 58	21 2	1 32	23 40	0 12	0 2	1 28	24 16	5 39	11 48	11 41	4 3	13 49	1 7
T 12	22 0	1 15	2 25	15 39	0 16	21 16	1 16	27 37	5 50	16 10	0 58	21 1	1 32	23 40	0 12	0 2	1 28	24 16	5 39	11 47	11 40	4 7	13 50	1 7
F 13	21 51	4n17	1 27	15 10	0 28	21 0	1 17	27 42	5 52	16 10	0 57	21 1	1 32	23 40	0 12	0 2	1 28	24 17	5 39	11 47	11 39	4 10	13 50	1 7
S 14	21 42	9 41	0 25	14 41	0 40	20 45	1 18	27 47	5 55	16 11	0 57	21 1	1 31	23 40	0 12	0 1	1 28	24 17	5 39	11 47	11 38	4 14	13 51	1 7
S 15	21 33	14 46	0n38	14 12	0 52	20 28	1 20	27 52	5 57	16 11	0 57	21 1	1 31	23 40	0 12	0 1	1 28	24 18	5 39	11 47	11 37	4 17	13 51	1 7
M16	21 23	19 22	1 40	13 44	1 4	20 11	1 21	27 56	5 59	16 11	0 57	21 1	1 31	23 40	0 12	0 0	1 28	24 18	5 40	11 47	11 36	4 20	13 52	1 8
T 17	21 13	23 14	2 38	13 17	1 16	19 54	1 22	28 0	6 1	16 11	0 56	21 1	1 31	23 40	0 12	0s 0	1 28	24 19	5 40	11 45	11 35	4 24	13 52	1 8
W18	21 3	26 6	3 31	12 50	1 29	19 36	1 23	28 4	6 2	16 12	0 56	21 0	1 31	23 40	0 12	0 1	1 28	24 19	5 40	11 44	11 34	4 27	13 52	1 8
T 19	20 52	27 41	4 14	12 24	1 42	19 17	1 24	28 8	6 4	16 12	0 56	21 0	1 31	23 40	0 12	0 1	1 28	24 19	5 40	11 41	11 32	4 30	13 53	1 8
F 20	20 41	27 43	4 44	12 0	1 55	18 58	1 24	28 12	6 5	16 13	0 56	21 0	1 30	23 40	0 12	0 2	1 28	24 20	5 40	11 37	11 31	4 34	13 53	1 8
S 21	20 30	26 5	4 59	11 36	2 8	18 39	1 25	28 15	6 6	16 13	0 55	21 0	1 30	23 40	0 12	0 2	1 28	24 20	5 40	11 33	11 30	4 37	13 53	1 8
S 22	20 18	22 50	4 57	11 14	2 22	18 18	1 26	28 19	6 7	16 14	0 55	21 0	1 30	23 40	0 12	0 3	1 28	24 21	5 40	11 29	11 29	4 40	13 54	1 8
M23	20 6	18 12	4 36	10 53	2 35	17 58	1 27	28 21	6 8	16 15	0 55	21 0	1 30	23 40	0 12	0 3	1 28	24 21	5 40	11 25	11 28	4 44	13 54	1 9
T 24	19 53	12 29	3 58	10 33	2 48	17 36	1 27	28 24	6 8	16 15	0 55	21 0	1 30	23 40	0 12	0 4	1 28	24 22	5 40	11 22	11 27	4 47	13 54	1 9
W25	19 41	6 6	3 5	10 15	3 1	17 15	1 28	28 27	6 9	16 16	0 54	21 0	1 29	23 40	0 12	0 4	1 28	24 22	5 40	11 20	11 26	4 50	13 54	1 9
T 26	19 27	0s36	2 0	9 59	3 14	16 53	1 28	28 29	6 9	16 17	0 54	21 0	1 29	23 40	0 12	0 5	1 27	24 23	5 41	11 19	11 25	4 54	13 55	1 9
F 27	19 14	7 14	0 48	9 45	3 26	16 30	1 28	28 31	6 9	16 18	0 54	21 0	1 29	23 40	0 12	0 5	1 27	24 23	5 41	11 18	11 23	4 57	13 55	1 9
S 28	19 0	13 27	0s27	9 33	3 38	16 7	1 29	28 32	6 9	16 19	0 54	20 59	1 29	23 40	0 12	0 6	1 27	24 23	5 41	11 18	11 22	5 1	13 55	1 9
S 29	18 46	18 56	1 39	9 23	3 50	15 44	1 29	28 34	6 9	16 19	0 53	20 59	1 29	23 40	0 12	0 6	1 27	24 24	5 41	11 18	11 21	5 4	13 55	1 10
M30	18 32	23 21	2 45	9 15	4 1	15 20	1 29	28 35	6 9	16 20	0 53	20 59	1 29	23 40	0 12	0 7	1 27	24 24	5 41	11 17	11 20	5 7	13 55	1 10
T 31	18n17	26s23	3s40	9n10	4s11	14n55	1n29	28s36	6s 8	16s21	0n53	20s59	1n28	23n40	0n12	0s 8	1n27	24s25	5s41	11n16	11n19	5n11	13n55	1s10

Julian Day Number = 2371738.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'11, Nutation = - 0°00'09, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'23, Lahiri = 20°48'23Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

AUGUST 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
W 1	20 39 48	8♌58'41	29♐36	24°R58	25♌17	15°R51	18♏ 0	13°R29	1♋ 1	3♎42	5°R31	29°R16	29♈28	16♈ 5	10♉38	W 1
T 2	20 43 44	9°56'07	12♑58	24♌34	26°31	15♑41	18° 4	13♐28	1° 4	3°43	5♒30	29♈ 6	29°25	16°12	10°39	T 2
F 3	20 47 41	10°53'34	26° 8	24° 6	27°45	15°32	18° 7	13°27	1° 7	3°45	5°28	28°55	29°22	16°18	10°40	F 3
S 4	20 51 38	11°51'03	9♒ 5	23°32	28°58	15°23	18°11	13°25	1°10	3°46	5°27	28°42	29°18	16°25	10°40	S 4
S 5	20 55 34	12°48'32	21°48	22°55	0♍12	15°15	18°14	13°24	1°13	3°48	5°26	28°30	29°15	16°32	10°41	S 5
M 6	20 59 31	13°46'02	4♓16	22°14	1°26	15° 8	18°18	13°23	1°16	3°49	5°24	28°19	29°12	16°38	10°42	M 6
T 7	21 3 27	14°43'33	16°30	21°29	2°39	15° 2	18°22	13°22	1°19	3°51	5°23	28°11	29° 9	16°45	10°42	T 7
W 8	21 7 24	15°41'06	28°32	20°42	3°53	14°57	18°26	13°21	1°22	3°52	5°22	28° 5	29° 6	16°52	10°42	W 8
T 9	21 11 20	16°38'40	10♈26	19°53	5° 7	14°52	18°31	13°20	1°25	3°54	5°20	28° 1	29° 3	16°58	10°43	T 9
F 10	21 15 17	17°36'16	22°14	19° 4	6°20	14°48	18°35	13°19	1°27	3°56	5°19	28° 0	28°59	17° 5	10°43	F 10
S 11	21 19 13	18°33'53	4♉ 2	18°14	7°34	14°45	18°40	13°19	1°30	3°57	5°18	27°D59	28°56	17°11	10°43	S 11
S 12	21 23 10	19°31'31	15°55	17°26	8°48	14°43	18°45	13°18	1°33	3°59	5°16	28°R 0	28°53	17°18	10°44	S 12
M13	21 27 7	20°29'11	27°57	16°39	10° 1	14°42	18°50	13°18	1°35	4° 1	5°15	28° 0	28°50	17°25	10°44	M13
T 14	21 31 3	21°26'53	10♊15	15°55	11°15	14°D41	18°55	13°17	1°38	4° 2	5°14	27°58	28°47	17°31	10°44	T 14
W15	21 35 0	22°24'36	22°53	15°15	12°29	14°41	19° 0	13°17	1°41	4° 4	5°12	27°54	28°43	17°38	10°R44	W15
T 16	21 38 56	23°22'21	5♋55	14°40	13°42	14°42	19° 6	13°17	1°43	4° 6	5°11	27°48	28°40	17°45	10°44	T 16
F 17	21 42 53	24°20'08	19°23	14°11	14°56	14°44	19°11	13°D17	1°46	4° 8	5°10	27°40	28°37	17°51	10°44	F 17
S 18	21 46 49	25°17'56	3♌17	13°47	16°10	14°47	19°17	13°17	1°48	4°10	5° 8	27°30	28°34	17°58	10°43	S 18
S 19	21 50 46	26°15'46	17°33	13°31	17°23	14°51	19°23	13°17	1°51	4°11	5° 7	27°21	28°31	18° 5	10°43	S 19
M20	21 54 42	27°13'37	2♍ 7	13°21	18°37	14°55	19°29	13°17	1°53	4°13	5° 6	27°12	28°28	18°11	10°43	M20
T 21	21 58 39	28°11'29	16°52	13°D19	19°50	15° 0	19°35	13°17	1°55	4°15	5° 5	27° 5	28°24	18°18	10°43	T 21
W22	22 2 36	29° 9'23	1♎39	13°25	21° 4	15° 6	19°42	13°18	1°58	4°17	5° 3	27° 0	28°21	18°25	10°42	W22
T 23	22 6 32	0♍ 7'18	16°21	13°39	22°18	15°13	19°48	13°18	2° 0	4°19	5° 2	26°57	28°18	18°31	10°42	T 23
F 24	22 10 29	1° 5'15	0♏53	14° 1	23°31	15°21	19°55	13°19	2° 2	4°21	5° 1	26°D57	28°15	18°38	10°41	F 24
S 25	22 14 25	2° 3'13	15°11	14°31	24°45	15°29	20° 1	13°20	2° 4	4°23	5° 0	26°58	28°12	18°45	10°41	S 25
S 26	22 18 22	3° 1'12	29°14	15° 9	25°58	15°38	20° 8	13°20	2° 7	4°25	4°59	26°R58	28° 9	18°51	10°40	S 26
M27	22 22 18	3°59'12	13♐ 0	15°55	27°12	15°48	20°15	13°21	2° 9	4°27	4°57	26°58	28° 5	18°58	10°39	M27
T 28	22 26 15	4°57'14	26°30	16°48	28°25	15°59	20°23	13°22	2°11	4°29	4°56	26°56	28° 2	19° 4	10°39	T 28
W29	22 30 11	5°55'18	9♑46	17°48	29°39	16°10	20°30	13°23	2°13	4°31	4°55	26°52	27°59	19°11	10°38	W29
T 30	22 34 8	6°53'22	22°49	18°55	0♎52	16°23	20°37	13°25	2°15	4°33	4°54	26°45	27°56	19°18	10°37	T 30
F 31	22 38 5	7♍51'29	5♒38	20♌ 9	2♎ 6	16♑36	20♏45	13♐26	2♋17	4♎35	4♒53	26♈38	27♈53	19♈24	10♉36	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	18n 2	27s50	4s22	9n 7	4s21	14n31	1n29	28s36	6s 7	16s23	0n53	20s59	1n28	23n40	0n12	0s 8	1n27	24s25	5s41	11n13	11n18	5n14	13n55	1s10
T 2	17 47	27 38	4 49	9 7	4 29	14 6	1 29	28 37	6 7	16 24	0 52	20 59	1 28	23 40	0 13	0 9	1 27	24 25	5 41	11 10	11 17	5 17	13 56	1 10
F 3	17 31	25 52	5 1	9 10	4 36	13 40	1 29	28 37	6 6	16 25	0 52	20 59	1 28	23 40	0 13	0 9	1 27	24 26	5 41	11 6	11 16	5 21	13 56	1 10
S 4	17 15	22 46	4 56	9 15	4 42	13 14	1 29	28 37	6 4	16 26	0 52	20 59	1 28	23 40	0 13	0 10	1 27	24 26	5 41	11 2	11 14	5 24	13 56	1 10
S 5	16 59	18 37	4 37	9 22	4 47	12 48	1 29	28 37	6 3	16 27	0 52	21 0	1 27	23 40	0 13	0 11	1 27	24 27	5 41	10 57	11 13	5 27	13 56	1 11
M 6	16 43	13 45	4 5	9 33	4 50	12 22	1 29	28 36	6 2	16 29	0 51	21 0	1 27	23 40	0 13	0 11	1 27	24 27	5 41	10 54	11 12	5 31	13 56	1 11
T 7	16 26	8 26	3 21	9 46	4 51	11 55	1 28	28 35	6 0	16 30	0 51	21 0	1 27	23 40	0 13	0 12	1 27	24 28	5 41	10 50	11 11	5 34	13 56	1 11
W 8	16 9	2 52	2 30	10 1	4 51	11 28	1 28	28 34	5 59	16 31	0 51	21 0	1 27	23 40	0 13	0 13	1 27	24 28	5 41	10 48	11 10	5 37	13 56	1 11
T 9	15 52	2n43	1 32	10 18	4 48	11 0	1 27	28 33	5 57	16 33	0 51	21 0	1 27	23 40	0 13	0 13	1 27	24 28	5 41	10 47	11 9	5 41	13 56	1 11
F 10	15 35	8 12	0 31	10 38	4 44	10 32	1 27	28 32	5 55	16 34	0 50	21 0	1 26	23 40	0 13	0 14	1 27	24 29	5 41	10 46	11 8	5 44	13 56	1 11
S 11	15 17	13 23	0n32	10 58	4 38	10 4	1 26	28 30	5 54	16 36	0 50	21 0	1 26	23 40	0 13	0 15	1 27	24 29	5 42	10 46	11 7	5 47	13 56	1 12
S 12	14 59	18 7	1 34	11 20	4 30	9 36	1 25	28 29	5 52	16 37	0 50	21 0	1 26	23 40	0 13	0 15	1 27	24 29	5 42	10 47	11 5	5 51	13 55	1 12
M13	14 41	22 12	2 33	11 44	4 20	9 8	1 25	28 27	5 49	16 39	0 50	21 0	1 26	23 40	0 13	0 16	1 27	24 30	5 42	10 46	11 4	5 54	13 55	1 12
T 14	14 22	25 24	3 25	12 7	4 9	8 39	1 24	28 25	5 47	16 40	0 50	21 1	1 26	23 40	0 13	0 17	1 27	24 30	5 42	10 46	11 3	5 57	13 55	1 12
W15	14 4	27 26	4 10	12 31	3 56	8 10	1 23	28 22	5 45	16 42	0 49	21 1	1 25	23 40	0 13	0 17	1 27	24 31	5 42	10 44	11 2	6 1	13 55	1 12
T 16	13 45	28 2	4 42	12 55	3 42	7 41	1 22	28 20	5 43	16 44	0 49	21 1	1 25	23 40	0 13	0 18	1 27	24 31	5 42	10 42	11 1	6 4	13 55	1 12
F 17	13 26	27 2	5 1	13 18	3 27	7 11	1 21	28 17	5 40	16 46	0 49	21 1	1 25	23 40	0 13	0 19	1 27	24 31	5 42	10 39	11 0	6 7	13 55	1 13
S 18	13 6	24 21	5 3	13 40	3 10	6 42	1 20	28 15	5 38	16 47	0 49	21 1	1 25	23 40	0 13	0 20	1 27	24 32	5 42	10 36	10 59	6 11	13 55	1 13
S 19	12 47	20 7	4 46	14 1	2 53	6 12	1 19	28 12	5 35	16 49	0 48	21 2	1 24	23 40	0 13	0 20	1 27	24 32	5 42	10 32	10 58	6 14	13 54	1 13
M20	12 27	14 37	4 10	14 21	2 36	5 42	1 17	28 9	5 33	16 51	0 48	21 2	1 24	23 40	0 13	0 21	1 27	24 32	5 42	10 29	10 56	6 17	13 54	1 13
T 21	12 7	8 13	3 17	14 39	2 18	5 12	1 16	28 6	5 30	16 53	0 48	21 2	1 24	23 40	0 13	0 22	1 27	24 33	5 42	10 27	10 55	6 21	13 54	1 13
W22	11 47	1 21	2 11	14 54	1 59	4 41	1 15	28 2	5 28	16 55	0 48	21 2	1 24	23 40	0 13	0 23	1 27	24 33	5 42	10 25	10 54	6 24	13 54	1 13
T 23	11 27	5s34	0 57	15 8	1 41	4 11	1 13	27 59	5 25	16 57	0 48	21 3	1 24	23 40	0 13	0 23	1 27	24 33	5 42	10 24	10 53	6 27	13 53	1 14
F 24	11 6	12 8	0s21	15 19	1 23	3 40	1 12	27 55	5 22	16 59	0 47	21 3	1 23	23 40	0 13	0 24	1 27	24 34	5 42	10 24	10 52	6 31	13 53	1 14
S 25	10 45	17 57	1 36	15 27	1 6	3 10	1 10	27 51	5 19	17 1	0 47	21 3	1 23	23 40	0 13	0 25	1 27	24 34	5 42	10 24	10 51	6 34	13 53	1 14
S 26	10 25	22 41	2 44	15 32	0 48	2 39	1 9	27 47	5 17	17 3	0 47	21 3	1 23	23 40	0 13	0 26	1 27	24 34	5 42	10 24	10 50	6 37	13 52	1 14
M27	10 4	26 3	3 42	15 35	0 32	2 8	1 7	27 43	5 14	17 5	0 47	21 4	1 23	23 40	0 13	0 27	1 27	24 34	5 42	10 24	10 48	6 41	13 52	1 14
T 28	9 42	27 51	4 25	15 34	0 16	1 37	1 5	27 39	5 11	17 7	0 46	21 4	1 23	23 40	0 13	0 27	1 27	24 35	5 42	10 24	10 47	6 44	13 51	1 14
W29	9 21	27 59	4 54	15 30	0 1	1 6	1 3	27 35	5 8	17 9	0 46	21 4	1 22	23 40	0 13	0 28	1 27	24 35	5 42	10 22	10 46	6 47	13 51	1 14
T 30	9 0	26 34	5 6	15 23	0n14	0 36	1 1	27 30	5 5	17 11	0 46	21 5	1 22	23 40	0 13	0 29	1 27	24 35	5 42	10 20	10 45	6 51	13 51	1 15
F 31	8n38	23s47	5s 3	15n13	0n27	0n 4	1n 0	27s26	5s 2	17s14	0n46	21s 5	1n22	23n40	0n13	0s30	1n27	24s36	5s42	10n17	10n44	6n54	13n50	1s15

Julian Day Number = 2371769.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'11, Nutation = - 0°00'07, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'27, Lahiri = 20°48'27Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

SEPTEMBER 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	22 42 1	8♍49'36	18♒15	21♌29	3♎19	16♑49	20♏53	13♐27	2♋19	4♎37	4°R52	26°R29	27♈49	19♈31	10°R35	S 1
S 2	22 45 58	9°47'46	0♓40	22°54	4°33	17° 4	21° 1	13°29	2°20	4°39	4♒51	26♈20	27°46	19°38	10♉34	S 2
M 3	22 49 54	10°45'57	12°55	24°23	5°46	17°18	21° 9	13°30	2°22	4°41	4°50	26°13	27°43	19°44	10°33	M 3
T 4	22 53 51	11°44'09	24°59	25°58	7° 0	17°34	21°17	13°32	2°24	4°43	4°48	26° 7	27°40	19°51	10°32	T 4
W 5	22 57 47	12°42'24	6♈55	27°36	8°13	17°50	21°25	13°34	2°26	4°45	4°47	26° 3	27°37	19°58	10°31	W 5
T 6	23 1 44	13°40'40	18°45	29°18	9°26	18° 7	21°33	13°36	2°27	4°47	4°46	26° 1	27°34	20° 4	10°29	T 6
F 7	23 5 40	14°38'59	0♉32	1♍ 2	10°40	18°25	21°42	13°38	2°29	4°49	4°45	26°D 1	27°30	20°11	10°28	F 7
S 8	23 9 37	15°37'19	12°19	2°49	11°53	18°43	21°50	13°40	2°31	4°51	4°44	26° 2	27°27	20°18	10°27	S 8
S 9	23 13 34	16°35'42	24°11	4°38	13° 6	19° 2	21°59	13°42	2°32	4°54	4°43	26° 3	27°24	20°24	10°25	S 9
M10	23 17 30	17°34'07	6♊13	6°28	14°20	19°21	22° 8	13°44	2°34	4°56	4°43	26° 5	27°21	20°31	10°24	M10
T 11	23 21 27	18°32'34	18°29	8°19	15°33	19°41	22°17	13°46	2°35	4°58	4°42	26°R 6	27°18	20°37	10°22	T 11
W12	23 25 23	19°31'03	1♋ 4	10°12	16°46	20° 2	22°26	13°49	2°37	5° 0	4°41	26° 5	27°14	20°44	10°21	W12
T 13	23 29 20	20°29'34	14° 4	12° 4	18° 0	20°23	22°35	13°51	2°38	5° 2	4°40	26° 3	27°11	20°51	10°19	T 13
F 14	23 33 16	21°28'07	27°30	13°57	19°13	20°44	22°44	13°54	2°39	5° 4	4°39	25°59	27° 8	20°57	10°17	F 14
S 15	23 37 13	22°26'43	11♌24	15°50	20°26	21° 6	22°54	13°56	2°40	5° 7	4°38	25°54	27° 5	21° 4	10°16	S 15
S 16	23 41 9	23°25'21	25°45	17°42	21°40	21°29	23° 3	13°59	2°42	5° 9	4°37	25°49	27° 2	21°11	10°14	S 16
M17	23 45 6	24°24'01	10♍28	19°35	22°53	21°52	23°13	14° 2	2°43	5°11	4°37	25°45	26°59	21°17	10°12	M17
T 18	23 49 3	25°22'42	25°27	21°26	24° 6	22°16	23°23	14° 5	2°44	5°13	4°36	25°41	26°55	21°24	10°10	T 18
W19	23 52 59	26°21'26	10♎32	23°17	25°19	22°40	23°32	14° 8	2°45	5°15	4°35	25°39	26°52	21°31	10° 8	W19
T 20	23 56 56	27°20'12	25°36	25° 8	26°33	23° 5	23°42	14°11	2°46	5°18	4°34	25°D38	26°49	21°37	10° 6	T 20
F 21	0 0 52	28°18'59	10♏28	26°57	27°46	23°30	23°52	14°14	2°47	5°20	4°34	25°39	26°46	21°44	10° 4	F 21
S 22	0 4 49	29°17'49	25° 4	28°46	28°59	23°55	24° 3	14°18	2°48	5°22	4°33	25°40	26°43	21°51	10° 2	S 22
S 23	0 8 45	0♎16'40	9♐18	0♎34	0♏12	24°21	24°13	14°21	2°49	5°24	4°32	25°42	26°40	21°57	10° 0	S 23
M24	0 12 42	1°15'33	23°11	2°22	1°25	24°48	24°23	14°24	2°49	5°27	4°32	25°43	26°36	22° 4	9°58	M24
T 25	0 16 38	2°14'28	6♑40	4° 8	2°38	25°15	24°33	14°28	2°50	5°29	4°31	25°R43	26°33	22°11	9°56	T 25
W26	0 20 35	3°13'24	19°50	5°53	3°51	25°42	24°44	14°32	2°51	5°31	4°30	25°42	26°30	22°17	9°53	W26
T 27	0 24 32	4°12'22	2♒40	7°38	5° 4	26°10	24°55	14°35	2°51	5°33	4°30	25°40	26°27	22°24	9°51	T 27
F 28	0 28 28	5°11'22	15°15	9°22	6°17	26°38	25° 5	14°39	2°52	5°35	4°29	25°37	26°24	22°30	9°49	F 28
S 29	0 32 25	6°10'24	27°37	11° 4	7°30	27° 7	25°16	14°43	2°52	5°38	4°29	25°34	26°20	22°37	9°46	S 29
S 30	0 36 21	7♎ 9'27	9♓48	12♎46	8♏43	27♑36	25♏27	14♐47	2♋53	5♎40	4♒28	25♈31	26♈17	22♈44	9♉44	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	8n16	19s54	4s46	14n59	0n40	0s27	0n58	27s21	4s59	17s16	0n46	21s 5	1n22	23n40	0n13	0s31	1n27	24s36	5s42	10n14	10n43	6n57	13n50	1s15
S 2	7 54	15 13	4 14	14 42	0 51	0 58	0 55	27 16	4 56	17 18	0 45	21 6	1 22	23 40	0 13	0 32	1 27	24 36	5 42	10 11	10 42	7 1	13 49	1 15
M 3	7 32	9 59	3 32	14 22	1 1	1 29	0 53	27 11	4 53	17 20	0 45	21 6	1 21	23 40	0 13	0 32	1 27	24 36	5 42	10 8	10 41	7 4	13 49	1 15
T 4	7 10	4 27	2 40	13 59	1 11	2 0	0 51	27 6	4 50	17 23	0 45	21 7	1 21	23 40	0 13	0 33	1 26	24 37	5 42	10 6	10 39	7 7	13 48	1 15
W 5	6 48	1n11	1 42	13 33	1 19	2 31	0 49	27 1	4 47	17 25	0 45	21 7	1 21	23 40	0 13	0 34	1 26	24 37	5 42	10 4	10 38	7 11	13 48	1 16
T 6	6 26	6 45	0 39	13 5	1 26	3 2	0 47	26 56	4 44	17 27	0 45	21 7	1 21	23 40	0 13	0 35	1 26	24 37	5 42	10 4	10 37	7 14	13 47	1 16
F 7	6 3	12 3	0n25	12 33	1 32	3 33	0 44	26 50	4 41	17 30	0 44	21 8	1 21	23 40	0 13	0 36	1 26	24 37	5 42	10 4	10 36	7 17	13 47	1 16
S 8	5 41	16 57	1 28	12 0	1 37	4 4	0 42	26 45	4 38	17 32	0 44	21 8	1 20	23 40	0 13	0 37	1 26	24 37	5 42	10 4	10 35	7 21	13 46	1 16
S 9	5 18	21 13	2 27	11 24	1 42	4 34	0 40	26 39	4 35	17 35	0 44	21 9	1 20	23 40	0 13	0 37	1 26	24 38	5 42	10 5	10 34	7 24	13 46	1 16
M10	4 55	24 41	3 22	10 46	1 45	5 5	0 37	26 33	4 32	17 37	0 44	21 9	1 20	23 40	0 13	0 38	1 26	24 38	5 42	10 5	10 33	7 27	13 45	1 16
T 11	4 32	27 5	4 8	10 7	1 47	5 36	0 35	26 27	4 29	17 40	0 44	21 10	1 20	23 40	0 13	0 39	1 26	24 38	5 42	10 5	10 31	7 31	13 44	1 17
W12	4 9	28 11	4 43	9 26	1 49	6 6	0 32	26 21	4 26	17 42	0 43	21 10	1 20	23 40	0 13	0 40	1 26	24 38	5 41	10 5	10 30	7 34	13 44	1 17
T 13	3 46	27 47	5 5	8 44	1 49	6 37	0 30	26 15	4 23	17 45	0 43	21 11	1 19	23 40	0 13	0 41	1 26	24 38	5 41	10 4	10 29	7 37	13 43	1 17
F 14	3 23	25 47	5 12	8 0	1 49	7 7	0 27	26 9	4 20	17 47	0 43	21 11	1 19	23 40	0 13	0 42	1 26	24 39	5 41	10 3	10 28	7 41	13 42	1 17
S 15	3 0	22 12	5 1	7 16	1 48	7 37	0 24	26 2	4 17	17 50	0 43	21 12	1 19	23 40	0 13	0 43	1 26	24 39	5 41	10 1	10 27	7 44	13 42	1 17
S 16	2 37	17 12	4 31	6 30	1 47	8 7	0 22	25 56	4 14	17 52	0 43	21 12	1 19	23 40	0 13	0 44	1 26	24 39	5 41	9 59	10 26	7 47	13 41	1 17
M17	2 14	11 5	3 43	5 45	1 45	8 37	0 19	25 49	4 11	17 55	0 43	21 13	1 19	23 40	0 13	0 44	1 26	24 39	5 41	9 58	10 25	7 50	13 40	1 17
T 18	1 50	4 14	2 38	4 58	1 43	9 7	0 16	25 42	4 8	17 57	0 42	21 13	1 18	23 40	0 13	0 45	1 26	24 39	5 41	9 56	10 23	7 54	13 40	1 18
W19	1 27	2s55	1 22	4 11	1 40	9 36	0 13	25 35	4 5	18 0	0 42	21 14	1 18	23 40	0 13	0 46	1 26	24 39	5 41	9 56	10 22	7 57	13 39	1 18
T 20	1 4	9 54	0 0	3 24	1 36	10 5	0 11	25 28	4 2	18 3	0 42	21 14	1 18	23 40	0 13	0 47	1 26	24 39	5 41	9 55	10 21	8 0	13 38	1 18
F 21	0 40	16 15	1s21	2 37	1 32	10 34	0 8	25 21	3 59	18 5	0 42	21 15	1 18	23 40	0 13	0 48	1 26	24 40	5 41	9 56	10 20	8 4	13 37	1 18
S 22	0 17	21 34	2 35	1 50	1 28	11 3	0 5	25 13	3 56	18 8	0 42	21 15	1 18	23 40	0 13	0 49	1 26	24 40	5 41	9 56	10 19	8 7	13 36	1 18
S 23	0s 7	25 28	3 38	1 3	1 23	11 32	0 2	25 6	3 53	18 11	0 41	21 16	1 18	23 40	0 13	0 50	1 26	24 40	5 41	9 57	10 18	8 10	13 36	1 18
M24	0 30	27 43	4 26	0 15	1 18	12 0	0s 1	24 58	3 50	18 13	0 41	21 17	1 17	23 40	0 14	0 51	1 26	24 40	5 41	9 57	10 16	8 14	13 35	1 18
T 25	0 54	28 16	4 58	0s32	1 13	12 28	0 4	24 50	3 47	18 16	0 41	21 17	1 17	23 40	0 14	0 51	1 26	24 40	5 41	9 57	10 15	8 17	13 34	1 19
W26	1 17	27 10	5 13	1 19	1 7	12 56	0 7	24 42	3 44	18 19	0 41	21 18	1 17	23 40	0 14	0 52	1 26	24 40	5 41	9 57	10 14	8 20	13 33	1 19
T 27	1 40	24 39	5 13	2 5	1 2	13 23	0 10	24 34	3 41	18 22	0 41	21 18	1 17	23 40	0 14	0 53	1 26	24 40	5 41	9 56	10 13	8 23	13 32	1 19
F 28	2 4	21 0	4 57	2 52	0 56	13 50	0 13	24 26	3 38	18 24	0 41	21 19	1 17	23 40	0 14	0 54	1 26	24 40	5 41	9 55	10 12	8 27	13 31	1 19
S 29	2 27	16 30	4 27	3 38	0 50	14 17	0 16	24 17	3 36	18 27	0 40	21 20	1 16	23 40	0 14	0 55	1 26	24 40	5 41	9 54	10 11	8 30	13 31	1 19
S 30	2s51	11s24	3s46	4s23	0n43	14s44	0s19	24s 9	3s33	18s30	0n40	21s20	1n16	23n40	0n14	0s56	1n26	24s40	5s40	9n53	10n10	8n33	13n30	1s19

Julian Day Number = 2371800.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'12, Nutation = - 0°00'07, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'31, Lahiri = 20°48'32Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

OCTOBER 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
M 1	0 40 18	8♎ 8'33	21♓50	14♎27	9♏56	28♑ 5	25♏38	14♐51	2♋53	5♎42	4°R28	25°R28	26♈14	22♈50	9°R42	M 1
T 2	0 44 14	9° 7'40	3♈45	16° 8	11° 9	28°34	25°49	14°55	2°54	5°44	4♒27	25♈27	26°11	22°57	9♉39	T 2
W 3	0 48 11	10° 6'50	15°35	17°47	12°22	29° 4	26° 0	14°59	2°54	5°47	4°27	25°25	26° 8	23° 4	9°37	W 3
T 4	0 52 7	11° 6'01	27°23	19°26	13°35	29°35	26°11	15° 4	2°54	5°49	4°27	25°D25	26° 5	23°10	9°34	T 4
F 5	0 56 4	12° 5'15	9♉10	21° 4	14°48	0♒ 5	26°22	15° 8	2°55	5°51	4°26	25°26	26° 1	23°17	9°31	F 5
S 6	1 0 0	13° 4'31	21° 0	22°41	16° 1	0°36	26°34	15°12	2°55	5°53	4°26	25°27	25°58	23°24	9°29	S 6
S 7	1 3 57	14° 3'49	2♊55	24°17	17°14	1° 7	26°45	15°17	2°55	5°55	4°26	25°28	25°55	23°30	9°26	S 7
M 8	1 7 54	15° 3'09	14°59	25°53	18°27	1°39	26°56	15°21	2°R55	5°58	4°25	25°29	25°52	23°37	9°23	M 8
T 9	1 11 50	16° 2'32	27°16	27°28	19°39	2°11	27° 8	15°26	2°55	6° 0	4°25	25°30	25°49	23°44	9°21	T 9
W10	1 15 47	17° 1'57	9♋49	29° 2	20°52	2°43	27°20	15°31	2°55	6° 2	4°25	25°30	25°46	23°50	9°18	W10
T 11	1 19 43	18° 1'25	22°44	0♏35	22° 5	3°15	27°31	15°35	2°55	6° 4	4°25	25°R30	25°42	23°57	9°15	T 11
F 12	1 23 40	19° 0'55	6♌ 2	2° 8	23°18	3°48	27°43	15°40	2°54	6° 7	4°25	25°30	25°39	24° 3	9°13	F 12
S 13	1 27 36	20° 0'27	19°47	3°40	24°30	4°21	27°55	15°45	2°54	6° 9	4°24	25°29	25°36	24°10	9°10	S 13
S 14	1 31 33	21° 0'01	3♍59	5°12	25°43	4°54	28° 7	15°50	2°54	6°11	4°24	25°29	25°33	24°17	9° 7	S 14
M15	1 35 29	21°59'38	18°36	6°43	26°56	5°28	28°19	15°55	2°54	6°13	4°24	25°28	25°30	24°23	9° 4	M15
T 16	1 39 26	22°59'16	3♎32	8°13	28° 8	6° 1	28°31	16° 0	2°53	6°15	4°24	25°28	25°26	24°30	9° 1	T 16
W17	1 43 23	23°58'57	18°42	9°43	29°21	6°35	28°43	16° 5	2°53	6°17	4°D24	25°28	25°23	24°37	8°58	W17
T 18	1 47 19	24°58'40	3♏55	11°12	0♐33	7° 9	28°55	16°11	2°52	6°20	4°24	25°28	25°20	24°43	8°55	T 18
F 19	1 51 16	25°58'25	19° 2	12°40	1°46	7°44	29° 7	16°16	2°52	6°22	4°24	25°28	25°17	24°50	8°52	F 19
S 20	1 55 12	26°58'12	3♐54	14° 8	2°58	8°19	29°20	16°21	2°51	6°24	4°24	25°28	25°14	24°57	8°49	S 20
S 21	1 59 9	27°58'01	18°24	15°35	4°11	8°54	29°32	16°27	2°51	6°26	4°24	25°28	25°11	25° 3	8°46	S 21
M22	2 3 5	28°57'51	2♑29	17° 1	5°23	9°29	29°44	16°32	2°50	6°28	4°25	25°27	25° 7	25°10	8°43	M22
T 23	2 7 2	29°57'44	16° 7	18°27	6°36	10° 4	29°57	16°38	2°49	6°30	4°25	25°27	25° 4	25°17	8°40	T 23
W24	2 10 58	0♏57'37	29°19	19°51	7°48	10°40	0♐ 9	16°43	2°48	6°32	4°25	25°D27	25° 1	25°23	8°37	W24
T 25	2 14 55	1°57'33	12♒ 7	21°15	9° 1	11°15	0°22	16°49	2°48	6°34	4°25	25°27	24°58	25°30	8°34	T 25
F 26	2 18 52	2°57'30	24°36	22°39	10°13	11°51	0°35	16°55	2°47	6°36	4°25	25°27	24°55	25°37	8°31	F 26
S 27	2 22 48	3°57'29	6♓50	24° 1	11°25	12°27	0°47	17° 0	2°46	6°38	4°26	25°28	24°51	25°43	8°28	S 27
S 28	2 26 45	4°57'29	18°51	25°22	12°37	13° 4	1° 0	17° 6	2°45	6°40	4°26	25°29	24°48	25°50	8°25	S 28
M29	2 30 41	5°57'31	0♈45	26°43	13°50	13°40	1°13	17°12	2°44	6°42	4°26	25°30	24°45	25°56	8°22	M29
T 30	2 34 38	6°57'35	12°34	28° 2	15° 2	14°17	1°25	17°18	2°43	6°44	4°26	25°31	24°42	26° 3	8°19	T 30
W31	2 38 34	7♏57'40	24♈22	29♏20	16♐14	14♒54	1♐38	17♐24	2♋41	6♎46	4♒27	25°R31	24♈39	26♈10	8♉16	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	3s14	5s56	2s55	5s 8	0n37	15s10	0s22	24s 0	3s30	18s32	0n40	21s21	1n16	23n40	0n14	0s57	1n26	24s40	5s40	9n52	10n 8	8n37	13n29	1s19
T 2	3 37	0 18	1 57	5 53	0 30	15 36	0 25	23 51	3 27	18 35	0 40	21 22	1 16	23 40	0 14	0 58	1 26	24 40	5 40	9 51	10 7	8 40	13 28	1 20
W 3	4 1	5n19	0 54	6 37	0 24	16 1	0 28	23 42	3 24	18 38	0 40	21 22	1 16	23 40	0 14	0 58	1 26	24 40	5 40	9 51	10 6	8 43	13 27	1 20
T 4	4 24	10 43	0n11	7 21	0 17	16 26	0 31	23 33	3 21	18 41	0 40	21 23	1 16	23 40	0 14	0 59	1 26	24 40	5 40	9 51	10 5	8 46	13 26	1 20
F 5	4 47	15 46	1 16	8 4	0 10	16 51	0 35	23 23	3 19	18 44	0 40	21 23	1 15	23 40	0 14	1 0	1 26	24 40	5 40	9 51	10 4	8 50	13 25	1 20
S 6	5 10	20 14	2 17	8 47	0 3	17 15	0 38	23 14	3 16	18 46	0 39	21 24	1 15	23 40	0 14	1 1	1 26	24 40	5 40	9 51	10 3	8 53	13 24	1 20
S 7	5 33	23 56	3 13	9 29	0s 4	17 39	0 41	23 4	3 13	18 49	0 39	21 25	1 15	23 40	0 14	1 2	1 27	24 40	5 40	9 52	10 1	8 56	13 23	1 20
M 8	5 56	26 38	4 2	10 10	0 11	18 2	0 44	22 55	3 10	18 52	0 39	21 25	1 15	23 40	0 14	1 3	1 27	24 40	5 40	9 52	10 0	9 0	13 22	1 20
T 9	6 19	28 7	4 40	10 51	0 17	18 25	0 47	22 45	3 8	18 55	0 39	21 26	1 15	23 40	0 14	1 4	1 27	24 40	5 40	9 52	9 59	9 3	13 21	1 20
W10	6 42	28 11	5 6	11 31	0 24	18 48	0 50	22 35	3 5	18 57	0 39	21 27	1 15	23 40	0 14	1 5	1 27	24 40	5 40	9 52	9 58	9 6	13 20	1 21
T 11	7 5	26 46	5 17	12 11	0 31	19 10	0 53	22 25	3 2	19 0	0 39	21 27	1 14	23 40	0 14	1 5	1 27	24 40	5 40	9 52	9 57	9 9	13 19	1 21
F 12	7 27	23 50	5 12	12 50	0 38	19 31	0 56	22 14	3 0	19 3	0 39	21 28	1 14	23 40	0 14	1 6	1 27	24 40	5 40	9 52	9 56	9 13	13 18	1 21
S 13	7 50	19 29	4 50	13 28	0 45	19 52	0 59	22 4	2 57	19 6	0 38	21 29	1 14	23 40	0 14	1 7	1 27	24 40	5 40	9 52	9 55	9 16	13 17	1 21
S 14	8 12	13 55	4 9	14 5	0 52	20 13	1 2	21 53	2 54	19 9	0 38	21 29	1 14	23 40	0 14	1 8	1 27	24 40	5 39	9 52	9 53	9 19	13 16	1 21
M15	8 35	7 27	3 11	14 42	0 59	20 33	1 5	21 42	2 52	19 11	0 38	21 30	1 14	23 40	0 14	1 9	1 27	24 40	5 39	9 52	9 52	9 22	13 15	1 21
T 16	8 57	0 25	1 59	15 18	1 5	20 53	1 8	21 31	2 49	19 14	0 38	21 31	1 14	23 40	0 14	1 10	1 27	24 40	5 39	9 52	9 51	9 26	13 14	1 21
W17	9 19	6s45	0 38	15 53	1 12	21 12	1 11	21 20	2 47	19 17	0 38	21 31	1 13	23 40	0 14	1 10	1 27	24 40	5 39	9 52	9 50	9 29	13 13	1 21
T 18	9 41	13 35	0s47	16 27	1 19	21 30	1 14	21 9	2 44	19 20	0 38	21 32	1 13	23 40	0 14	1 11	1 27	24 40	5 39	9 52	9 49	9 32	13 12	1 22
F 19	10 3	19 33	2 7	17 1	1 25	21 48	1 17	20 58	2 42	19 23	0 38	21 33	1 13	23 40	0 14	1 12	1 27	24 40	5 39	9 52	9 48	9 35	13 11	1 22
S 20	10 24	24 12	3 18	17 33	1 31	22 5	1 20	20 46	2 39	19 25	0 37	21 34	1 13	23 40	0 14	1 13	1 27	24 40	5 39	9 52	9 46	9 39	13 10	1 22
S 21	10 46	27 11	4 14	18 5	1 37	22 22	1 23	20 35	2 37	19 28	0 37	21 34	1 13	23 40	0 14	1 14	1 27	24 40	5 39	9 52	9 45	9 42	13 9	1 22
M22	11 7	28 19	4 53	18 35	1 43	22 38	1 25	20 23	2 34	19 31	0 37	21 35	1 13	23 40	0 14	1 15	1 27	24 40	5 39	9 51	9 44	9 45	13 8	1 22
T 23	11 28	27 41	5 14	19 5	1 49	22 53	1 28	20 11	2 32	19 34	0 37	21 36	1 13	23 41	0 14	1 15	1 27	24 39	5 39	9 51	9 43	9 48	13 7	1 22
W24	11 49	25 29	5 17	19 34	1 55	23 8	1 31	19 59	2 29	19 36	0 37	21 36	1 12	23 41	0 14	1 16	1 27	24 39	5 39	9 51	9 42	9 52	13 6	1 22
T 25	12 10	22 3	5 5	20 2	2 0	23 22	1 34	19 46	2 27	19 39	0 37	21 37	1 12	23 41	0 14	1 17	1 27	24 39	5 39	9 51	9 41	9 55	13 5	1 22
F 26	12 31	17 42	4 38	20 29	2 6	23 36	1 36	19 34	2 24	19 42	0 37	21 38	1 12	23 41	0 14	1 18	1 27	24 39	5 38	9 51	9 39	9 58	13 4	1 22
S 27	12 51	12 43	3 59	20 54	2 11	23 49	1 39	19 22	2 22	19 45	0 37	21 38	1 12	23 41	0 14	1 19	1 27	24 39	5 38	9 52	9 38	10 1	13 3	1 22
S 28	13 11	7 20	3 10	21 19	2 15	24 1	1 41	19 9	2 20	19 47	0 36	21 39	1 12	23 41	0 14	1 19	1 27	24 39	5 38	9 52	9 37	10 5	13 2	1 23
M29	13 31	1 44	2 13	21 43	2 20	24 13	1 44	18 56	2 17	19 50	0 36	21 40	1 12	23 41	0 14	1 20	1 27	24 39	5 38	9 52	9 36	10 8	13 1	1 23
T 30	13 51	3n53	1 11	22 5	2 24	24 23	1 46	18 43	2 15	19 53	0 36	21 40	1 12	23 41	0 14	1 21	1 27	24 38	5 38	9 53	9 35	10 11	12 59	1 23
W31	14s11	9n21	0s 6	22s26	2s28	24s34	1s49	18s30	2s13	19s56	0n36	21s41	1n11	23n41	0n14	1s22	1n27	24s38	5s38	9n53	9n34	10n14	12n58	1s23

Julian Day Number = 2371830.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'12, Nutation = - 0°00'08, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'35, Lahiri = 20°48'36Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

NOVEMBER 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
T 1	2 42 31	8♏57'48	6♉10	0♐37	17♐26	15♒31	1♐51	17♐30	2°R40	6♎48	4♒27	25°R31	24♈36	26♈16	8°R13	T 1
F 2	2 46 27	9°57'57	18° 1	1°52	18°38	16° 8	2° 4	17°36	2♋39	6°50	4°28	25♈30	24°32	26°23	8♉10	F 2
S 3	2 50 24	10°58'08	29°58	3° 6	19°50	16°45	2°17	17°42	2°38	6°52	4°28	25°28	24°29	26°30	8° 7	S 3
S 4	2 54 21	11°58'21	12♊ 2	4°18	21° 2	17°23	2°30	17°48	2°36	6°54	4°29	25°26	24°26	26°36	8° 4	S 4
M 5	2 58 17	12°58'36	24°14	5°28	22°14	18° 0	2°43	17°54	2°35	6°56	4°29	25°23	24°23	26°43	8° 1	M 5
T 6	3 2 14	13°58'53	6♋38	6°36	23°25	18°38	2°56	18° 1	2°34	6°58	4°30	25°20	24°20	26°50	7°58	T 6
W 7	3 6 10	14°59'11	19°16	7°41	24°37	19°16	3° 9	18° 7	2°32	7° 0	4°30	25°18	24°17	26°56	7°55	W 7
T 8	3 10 7	15°59'32	2♌11	8°44	25°49	19°54	3°22	18°13	2°31	7° 2	4°31	25°16	24°13	27° 3	7°52	T 8
F 9	3 14 3	16°59'55	15°24	9°43	27° 1	20°32	3°35	18°19	2°29	7° 3	4°31	25°D16	24°10	27°10	7°49	F 9
S 10	3 18 0	18° 0'20	28°58	10°39	28°12	21°10	3°49	18°26	2°27	7° 5	4°32	25°16	24° 7	27°16	7°46	S 10
S 11	3 21 56	19° 0'46	12♍55	11°31	29°24	21°48	4° 2	18°32	2°26	7° 7	4°33	25°17	24° 4	27°23	7°43	S 11
M12	3 25 53	20° 1'15	27°15	12°18	0♑35	22°27	4°15	18°39	2°24	7° 9	4°33	25°19	24° 1	27°29	7°40	M12
T 13	3 29 50	21° 1'45	11♎55	13° 1	1°47	23° 6	4°28	18°45	2°22	7°11	4°34	25°20	23°57	27°36	7°37	T 13
W14	3 33 46	22° 2'17	26°51	13°37	2°58	23°44	4°42	18°52	2°21	7°12	4°35	25°R20	23°54	27°43	7°34	W14
T 15	3 37 43	23° 2'51	11♏56	14° 8	4° 9	24°23	4°55	18°58	2°19	7°14	4°36	25°20	23°51	27°49	7°31	T 15
F 16	3 41 39	24° 3'27	27° 1	14°31	5°21	25° 2	5° 8	19° 5	2°17	7°16	4°37	25°17	23°48	27°56	7°28	F 16
S 17	3 45 36	25° 4'04	11♐58	14°46	6°32	25°41	5°22	19°12	2°15	7°17	4°37	25°14	23°45	28° 3	7°25	S 17
S 18	3 49 32	26° 4'42	26°36	14°R53	7°43	26°20	5°35	19°18	2°13	7°19	4°38	25° 9	23°42	28° 9	7°22	S 18
M19	3 53 29	27° 5'22	10♑52	14°51	8°54	27° 0	5°49	19°25	2°11	7°21	4°39	25° 4	23°38	28°16	7°20	M19
T 20	3 57 25	28° 6'03	24°39	14°38	10° 5	27°39	6° 2	19°32	2° 9	7°22	4°40	24°59	23°35	28°23	7°17	T 20
W21	4 1 22	29° 6'45	7♒59	14°16	11°16	28°18	6°15	19°39	2° 7	7°24	4°41	24°56	23°32	28°29	7°14	W21
T 22	4 5 19	0♐ 7'29	20°52	13°42	12°27	28°58	6°29	19°45	2° 5	7°25	4°42	24°54	23°29	28°36	7°11	T 22
F 23	4 9 15	1° 8'13	3♓22	12°57	13°38	29°38	6°42	19°52	2° 3	7°27	4°43	24°D54	23°26	28°43	7° 9	F 23
S 24	4 13 12	2° 8'58	15°34	12° 2	14°48	0♓17	6°56	19°59	2° 1	7°28	4°44	24°54	23°23	28°49	7° 6	S 24
S 25	4 17 8	3° 9'44	27°32	10°58	15°59	0°57	7° 9	20° 6	1°59	7°30	4°45	24°56	23°19	28°56	7° 3	S 25
M26	4 21 5	4°10'32	9♈22	9°46	17° 9	1°37	7°23	20°13	1°57	7°31	4°46	24°58	23°16	29° 2	7° 1	M26
T 27	4 25 1	5°11'20	21° 9	8°28	18°20	2°17	7°36	20°20	1°55	7°32	4°47	24°R59	23°13	29° 9	6°58	T 27
W28	4 28 58	6°12'09	2♉56	7° 6	19°30	2°57	7°50	20°27	1°52	7°34	4°48	24°59	23°10	29°16	6°55	W28
T 29	4 32 54	7°12'59	14°48	5°43	20°40	3°37	8° 3	20°34	1°50	7°35	4°49	24°56	23° 7	29°22	6°53	T 29
F 30	4 36 51	8♐13'51	26♉46	4♐22	21♑50	4♓17	8♐17	20♐40	1♋48	7♎36	4♒51	24♈52	23♈ 3	29♈29	6♉50	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	14 s30	14n31	0n59	22 s46	2 s31	24 s43	1 s51	18 s17	2 s10	19 s58	0n36	21 s42	1n11	23n41	0n14	1 s22	1n27	24 s38	5 s38	9n53	9n32	10n18	12n57	1 s23
F 2	14 49	19 10	2 1	23 5	2 34	24 52	1 54	18 4	2 8	20 1	0 36	21 43	1 11	23 41	0 14	1 23	1 27	24 38	5 38	9 52	9 31	10 21	12 56	1 23
S 3	15 8	23 5	2 59	23 22	2 37	25 0	1 56	17 50	2 6	20 4	0 36	21 43	1 11	23 41	0 14	1 24	1 27	24 38	5 38	9 52	9 30	10 24	12 55	1 23
S 4	15 27	26 3	3 50	23 38	2 39	25 8	1 58	17 37	2 4	20 6	0 36	21 44	1 11	23 41	0 14	1 25	1 27	24 38	5 38	9 51	9 29	10 27	12 54	1 23
M 5	15 45	27 51	4 30	23 53	2 41	25 14	2 0	17 23	2 1	20 9	0 36	21 45	1 11	23 41	0 14	1 25	1 27	24 37	5 38	9 50	9 28	10 31	12 53	1 23
T 6	16 3	28 17	4 59	24 6	2 42	25 20	2 2	17 9	1 59	20 12	0 35	21 45	1 11	23 41	0 14	1 26	1 27	24 37	5 38	9 49	9 27	10 34	12 52	1 23
W 7	16 21	27 15	5 14	24 18	2 43	25 26	2 4	16 55	1 57	20 14	0 35	21 46	1 11	23 41	0 14	1 27	1 27	24 37	5 37	9 48	9 25	10 37	12 51	1 23
T 8	16 39	24 47	5 13	24 28	2 43	25 30	2 6	16 41	1 55	20 17	0 35	21 47	1 10	23 41	0 14	1 27	1 27	24 37	5 37	9 47	9 24	10 40	12 50	1 24
F 9	16 56	20 57	4 56	24 37	2 42	25 34	2 8	16 27	1 53	20 19	0 35	21 47	1 10	23 41	0 14	1 28	1 27	24 36	5 37	9 47	9 23	10 44	12 49	1 24
S 10	17 13	15 57	4 23	24 43	2 41	25 37	2 10	16 12	1 51	20 22	0 35	21 48	1 10	23 41	0 14	1 29	1 27	24 36	5 37	9 47	9 22	10 47	12 48	1 24
S 11	17 30	10 0	3 33	24 49	2 39	25 39	2 11	15 58	1 48	20 25	0 35	21 49	1 10	23 41	0 15	1 29	1 27	24 36	5 37	9 48	9 21	10 50	12 47	1 24
M12	17 46	3 22	2 29	24 52	2 35	25 41	2 13	15 43	1 46	20 27	0 35	21 49	1 10	23 41	0 15	1 30	1 27	24 36	5 37	9 48	9 20	10 53	12 46	1 24
T 13	18 2	3 s35	1 13	24 53	2 31	25 42	2 14	15 29	1 44	20 30	0 35	21 50	1 10	23 41	0 15	1 31	1 28	24 35	5 37	9 49	9 18	10 56	12 45	1 24
W14	18 18	10 29	0 s 8	24 53	2 26	25 42	2 16	15 14	1 42	20 32	0 35	21 51	1 10	23 42	0 15	1 31	1 28	24 35	5 37	9 49	9 17	11 0	12 44	1 24
T 15	18 34	16 52	1 30	24 50	2 20	25 41	2 17	14 59	1 40	20 35	0 35	21 51	1 10	23 42	0 15	1 32	1 28	24 35	5 37	9 49	9 16	11 3	12 43	1 24
F 16	18 49	22 12	2 45	24 46	2 12	25 40	2 19	14 44	1 38	20 37	0 34	21 52	1 10	23 42	0 15	1 33	1 28	24 35	5 37	9 48	9 15	11 6	12 42	1 24
S 17	19 3	26 1	3 48	24 38	2 3	25 38	2 20	14 29	1 36	20 40	0 34	21 53	1 9	23 42	0 15	1 33	1 28	24 34	5 37	9 46	9 14	11 9	12 41	1 24
S 18	19 18	28 0	4 35	24 29	1 53	25 35	2 21	14 14	1 34	20 42	0 34	21 53	1 9	23 42	0 15	1 34	1 28	24 34	5 37	9 45	9 13	11 12	12 40	1 24
M19	19 32	28 4	5 3	24 17	1 41	25 32	2 22	13 58	1 32	20 45	0 34	21 54	1 9	23 42	0 15	1 34	1 28	24 34	5 37	9 43	9 11	11 16	12 39	1 24
T 20	19 46	26 21	5 13	24 2	1 28	25 28	2 23	13 43	1 30	20 47	0 34	21 54	1 9	23 42	0 15	1 35	1 28	24 34	5 36	9 41	9 10	11 19	12 38	1 24
W21	19 59	23 12	5 5	23 45	1 13	25 23	2 24	13 28	1 28	20 49	0 34	21 55	1 9	23 42	0 15	1 36	1 28	24 33	5 36	9 40	9 9	11 22	12 37	1 24
T 22	20 12	19 0	4 41	23 25	0 57	25 17	2 24	13 12	1 26	20 52	0 34	21 56	1 9	23 42	0 15	1 36	1 28	24 33	5 36	9 39	9 8	11 25	12 36	1 25
F 23	20 25	14 5	4 5	23 1	0 39	25 10	2 25	12 56	1 25	20 54	0 34	21 56	1 9	23 42	0 15	1 37	1 28	24 33	5 36	9 39	9 7	11 28	12 35	1 25
S 24	20 37	8 45	3 19	22 36	0 20	25 3	2 25	12 40	1 23	20 56	0 34	21 57	1 9	23 42	0 15	1 37	1 28	24 32	5 36	9 39	9 6	11 32	12 34	1 25
S 25	20 49	3 11	2 24	22 7	0 0	24 56	2 26	12 24	1 21	20 59	0 34	21 58	1 9	23 42	0 15	1 38	1 28	24 32	5 36	9 40	9 4	11 35	12 33	1 25
M26	21 0	2n26	1 24	21 37	0n20	24 47	2 26	12 9	1 19	21 1	0 34	21 58	1 9	23 42	0 15	1 38	1 28	24 32	5 36	9 41	9 3	11 38	12 32	1 25
T 27	21 12	7 56	0 21	21 4	0 41	24 38	2 26	11 52	1 17	21 3	0 33	21 59	1 8	23 42	0 15	1 39	1 28	24 31	5 36	9 41	9 2	11 41	12 31	1 25
W28	21 22	13 11	0n43	20 31	1 1	24 28	2 26	11 36	1 15	21 6	0 33	21 59	1 8	23 42	0 15	1 39	1 28	24 31	5 36	9 41	9 1	11 44	12 30	1 25
T 29	21 33	17 59	1 46	19 58	1 20	24 17	2 26	11 20	1 13	21 8	0 33	22 0	1 8	23 42	0 15	1 40	1 28	24 31	5 36	9 40	9 0	11 47	12 30	1 25
F 30	21 s42	22n 7	2n44	19 s26	1n38	24 s 6	2 s26	11 s 4	1 s12	21 s10	0n33	22 s 0	1n 8	23n42	0n15	1 s40	1n28	24 s30	5 s36	9n39	8n58	11n51	12n29	1 s25

Julian Day Number = 2371861.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'12, Nutation = - 0°00'09, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'39, Lahiri = 20°48'40Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1781
geocentric

DECEMBER 1781 — 00:00 UT

Day	Sid.t	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	☊	⚸	⚷	Day
S 1	4 40 48	9♐14'43	8♊53	3°R 6	23♑ 0	4♓57	8♐30	20♐47	1°R45	7♎38	4♒52	24°R46	23♈ 0	29♈36	6°R48	S 1
S 2	4 44 44	10°15'37	21°11	1♐57	24°10	5°38	8°44	20°54	1♋43	7°39	4°53	24♈38	22°57	29°42	6♉45	S 2
M 3	4 48 41	11°16'32	3♋39	0°57	25°19	6°18	8°57	21° 1	1°41	7°40	4°54	24°29	22°54	29°49	6°43	M 3
T 4	4 52 37	12°17'28	16°19	0° 7	26°29	6°58	9°11	21° 8	1°38	7°41	4°55	24°20	22°51	29°56	6°41	T 4
W 5	4 56 34	13°18'24	29°11	29♏28	27°38	7°39	9°24	21°15	1°36	7°43	4°57	24°12	22°48	0♉ 2	6°38	W 5
T 6	5 0 30	14°19'22	12♌16	29° 0	28°48	8°19	9°38	21°23	1°34	7°44	4°58	24° 5	22°44	0° 9	6°36	T 6
F 7	5 4 27	15°20'22	25°34	28°44	29°57	9° 0	9°51	21°30	1°31	7°45	4°59	24° 1	22°41	0°16	6°34	F 7
S 8	5 8 24	16°21'22	9♍ 6	28°D38	1♒ 6	9°40	10° 5	21°37	1°29	7°46	5° 1	23°59	22°38	0°22	6°32	S 8
S 9	5 12 20	17°22'23	22°53	28°43	2°15	10°21	10°18	21°44	1°26	7°47	5° 2	23°D59	22°35	0°29	6°30	S 9
M10	5 16 17	18°23'26	6♎56	28°57	3°24	11° 2	10°32	21°51	1°24	7°48	5° 3	24° 0	22°32	0°36	6°28	M10
T 11	5 20 13	19°24'29	21°15	29°20	4°32	11°42	10°45	21°58	1°21	7°49	5° 5	24°R 1	22°29	0°42	6°25	T 11
W12	5 24 10	20°25'34	5♏47	29°51	5°41	12°23	10°59	22° 5	1°19	7°50	5° 6	24° 0	22°25	0°49	6°23	W12
T 13	5 28 6	21°26'39	20°30	0♐29	6°49	13° 4	11°12	22°12	1°16	7°51	5° 8	23°57	22°22	0°55	6°22	T 13
F 14	5 32 3	22°27'46	5♐16	1°13	7°57	13°45	11°26	22°19	1°14	7°52	5° 9	23°52	22°19	1° 2	6°20	F 14
S 15	5 35 59	23°28'53	19°59	2° 2	9° 5	14°26	11°39	22°26	1°11	7°53	5°10	23°44	22°16	1° 9	6°18	S 15
S 16	5 39 56	24°30'01	4♑31	2°56	10°13	15° 7	11°52	22°33	1° 8	7°53	5°12	23°34	22°13	1°15	6°16	S 16
M17	5 43 53	25°31'09	18°44	3°55	11°21	15°48	12° 6	22°40	1° 6	7°54	5°13	23°23	22° 9	1°22	6°14	M17
T 18	5 47 49	26°32'18	2♒34	4°57	12°28	16°29	12°19	22°47	1° 3	7°55	5°15	23°13	22° 6	1°29	6°13	T 18
W19	5 51 46	27°33'27	15°57	6° 3	13°35	17°10	12°32	22°54	1° 1	7°56	5°17	23° 4	22° 3	1°35	6°11	W19
T 20	5 55 42	28°34'36	28°55	7°12	14°43	17°51	12°46	23° 1	0°58	7°56	5°18	22°58	22° 0	1°42	6° 9	T 20
F 21	5 59 39	29°35'45	11♓28	8°23	15°49	18°32	12°59	23° 9	0°56	7°57	5°20	22°54	21°57	1°49	6° 8	F 21
S 22	6 3 35	0♑36'54	23°43	9°36	16°56	19°13	13°12	23°16	0°53	7°58	5°21	22°52	21°54	1°55	6° 6	S 22
S 23	6 7 32	1°38'03	5♈42	10°52	18° 2	19°54	13°26	23°23	0°50	7°58	5°23	22°D52	21°50	2° 2	6° 5	S 23
M24	6 11 28	2°39'13	17°32	12° 9	19° 8	20°35	13°39	23°30	0°48	7°59	5°24	22°R52	21°47	2° 9	6° 4	M24
T 25	6 15 25	3°40'22	29°19	13°27	20°14	21°17	13°52	23°37	0°45	7°59	5°26	22°52	21°44	2°15	6° 2	T 25
W26	6 19 22	4°41'31	11♉ 8	14°47	21°20	21°58	14° 5	23°44	0°43	8° 0	5°28	22°51	21°41	2°22	6° 1	W26
T 27	6 23 18	5°42'40	23° 3	16° 9	22°25	22°39	14°18	23°51	0°40	8° 0	5°29	22°47	21°38	2°29	6° 0	T 27
F 28	6 27 15	6°43'50	5♊ 8	17°31	23°30	23°20	14°31	23°58	0°37	8° 1	5°31	22°40	21°35	2°35	5°59	F 28
S 29	6 31 11	7°44'59	17°26	18°54	24°35	24° 2	14°44	24° 5	0°35	8° 1	5°33	22°30	21°31	2°42	5°58	S 29
S 30	6 35 8	8°46'08	29°58	20°19	25°40	24°43	14°57	24°11	0°32	8° 1	5°34	22°18	21°28	2°49	5°57	S 30
M31	6 39 4	9♑47'17	12♋45	21♐44	26♒44	25♓24	15♐10	24♐18	0♋30	8♎ 2	5♒36	22♈ 5	21♈25	2♉55	5♉56	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	21s52	25n21	3n35	18s56	1n54	23s54	2s26	10s47	1s10	21s12	0n33	22s 1	1n 8	23n42	0n15	1s41	1n28	24s30	5s36	9n36	8n57	11n54	12n28	1s25
S 2	22 1	27 27	4 17	18 29	2 8	23 42	2 26	10 31	1 8	21 14	0 33	22 2	1 8	23 42	0 15	1 41	1 28	24 30	5 36	9 33	8 56	11 57	12 27	1 25
M 3	22 10	28 12	4 47	18 5	2 20	23 29	2 25	10 14	1 6	21 17	0 33	22 2	1 8	23 42	0 15	1 42	1 28	24 29	5 36	9 30	8 55	12 0	12 26	1 25
T 4	22 18	27 30	5 4	17 46	2 30	23 15	2 25	9 58	1 5	21 19	0 33	22 3	1 8	23 42	0 15	1 42	1 28	24 29	5 36	9 27	8 54	12 3	12 25	1 25
W 5	22 26	25 20	5 6	17 30	2 37	23 1	2 24	9 41	1 3	21 21	0 33	22 3	1 8	23 43	0 15	1 42	1 29	24 29	5 36	9 24	8 53	12 7	12 25	1 25
T 6	22 33	21 48	4 52	17 19	2 43	22 46	2 23	9 24	1 1	21 23	0 33	22 4	1 8	23 43	0 15	1 43	1 29	24 28	5 36	9 21	8 51	12 10	12 24	1 25
F 7	22 40	17 8	4 22	17 12	2 46	22 30	2 22	9 8	1 0	21 25	0 33	22 4	1 8	23 43	0 15	1 43	1 29	24 28	5 35	9 20	8 50	12 13	12 23	1 25
S 8	22 46	11 31	3 37	17 10	2 47	22 14	2 21	8 51	0 58	21 27	0 33	22 5	1 8	23 43	0 15	1 44	1 29	24 27	5 35	9 19	8 49	12 16	12 22	1 25
S 9	22 52	5 16	2 39	17 11	2 47	21 57	2 20	8 34	0 56	21 29	0 33	22 5	1 8	23 43	0 15	1 44	1 29	24 27	5 35	9 19	8 48	12 19	12 22	1 25
M10	22 58	1s22	1 30	17 15	2 46	21 40	2 19	8 17	0 55	21 31	0 32	22 6	1 7	23 43	0 15	1 44	1 29	24 27	5 35	9 19	8 47	12 22	12 21	1 25
T 11	23 3	8 4	0 15	17 23	2 43	21 22	2 17	8 0	0 53	21 33	0 32	22 6	1 7	23 43	0 15	1 45	1 29	24 26	5 35	9 20	8 45	12 25	12 20	1 25
W12	23 7	14 27	1s 3	17 33	2 39	21 4	2 16	7 43	0 51	21 35	0 32	22 7	1 7	23 43	0 15	1 45	1 29	24 26	5 35	9 19	8 44	12 29	12 19	1 25
T 13	23 12	20 6	2 17	17 45	2 35	20 45	2 14	7 26	0 50	21 37	0 32	22 7	1 7	23 43	0 15	1 45	1 29	24 25	5 35	9 18	8 43	12 32	12 19	1 25
F 14	23 15	24 31	3 22	17 59	2 29	20 26	2 12	7 9	0 48	21 39	0 32	22 8	1 7	23 43	0 15	1 46	1 29	24 25	5 35	9 16	8 42	12 35	12 18	1 25
S 15	23 19	27 18	4 13	18 15	2 23	20 6	2 10	6 51	0 47	21 41	0 32	22 8	1 7	23 43	0 15	1 46	1 29	24 25	5 35	9 13	8 41	12 38	12 18	1 25
S 16	23 21	28 11	4 47	18 32	2 17	19 45	2 8	6 34	0 45	21 43	0 32	22 9	1 7	23 43	0 15	1 46	1 29	24 24	5 35	9 10	8 40	12 41	12 17	1 25
M17	23 24	27 9	5 3	18 50	2 10	19 25	2 6	6 17	0 44	21 45	0 32	22 9	1 7	23 43	0 15	1 46	1 29	24 24	5 35	9 6	8 38	12 44	12 16	1 25
T 18	23 25	24 29	5 0	19 8	2 3	19 3	2 3	6 0	0 42	21 46	0 32	22 10	1 7	23 43	0 15	1 47	1 29	24 23	5 35	9 2	8 37	12 47	12 16	1 25
W19	23 27	20 32	4 40	19 27	1 55	18 42	2 1	5 42	0 41	21 48	0 32	22 10	1 7	23 43	0 15	1 47	1 29	24 23	5 35	8 59	8 36	12 51	12 15	1 25
T 20	23 28	15 43	4 7	19 46	1 48	18 19	1 58	5 25	0 39	21 50	0 32	22 10	1 7	23 43	0 15	1 47	1 29	24 23	5 35	8 56	8 35	12 54	12 15	1 25
F 21	23 28	10 23	3 22	20 5	1 40	17 57	1 55	5 7	0 38	21 52	0 32	22 11	1 7	23 43	0 15	1 47	1 29	24 22	5 35	8 55	8 34	12 57	12 14	1 26
S 22	23 28	4 47	2 29	20 25	1 32	17 34	1 52	4 50	0 36	21 53	0 32	22 11	1 7	23 43	0 15	1 48	1 29	24 22	5 35	8 54	8 32	13 0	12 14	1 26
S 23	23 28	0n53	1 30	20 43	1 23	17 11	1 49	4 32	0 35	21 55	0 32	22 12	1 7	23 43	0 15	1 48	1 30	24 21	5 35	8 54	8 31	13 3	12 13	1 26
M24	23 27	6 27	0 28	21 2	1 15	16 47	1 46	4 15	0 33	21 57	0 32	22 12	1 7	23 43	0 15	1 48	1 30	24 21	5 35	8 54	8 30	13 6	12 13	1 26
T 25	23 25	11 47	0n34	21 20	1 7	16 23	1 43	3 57	0 32	21 58	0 32	22 12	1 7	23 43	0 15	1 48	1 30	24 21	5 35	8 54	8 29	13 9	12 12	1 26
W26	23 23	16 42	1 35	21 37	0 59	15 59	1 39	3 40	0 31	22 0	0 31	22 13	1 7	23 43	0 15	1 48	1 30	24 20	5 35	8 54	8 28	13 12	12 12	1 26
T 27	23 21	21 1	2 33	21 54	0 51	15 34	1 36	3 22	0 29	22 1	0 31	22 13	1 7	23 43	0 15	1 48	1 30	24 20	5 35	8 52	8 26	13 16	12 11	1 26
F 28	23 18	24 32	3 24	22 10	0 43	15 9	1 32	3 5	0 28	22 3	0 31	22 13	1 6	23 43	0 15	1 48	1 30	24 19	5 35	8 50	8 25	13 19	12 11	1 26
S 29	23 15	26 58	4 7	22 26	0 35	14 43	1 28	2 47	0 27	22 5	0 31	22 14	1 6	23 43	0 15	1 49	1 30	24 19	5 35	8 46	8 24	13 22	12 11	1 26
S 30	23 11	28 6	4 38	22 40	0 27	14 18	1 24	2 29	0 25	22 6	0 31	22 14	1 6	23 43	0 15	1 49	1 30	24 18	5 35	8 42	8 23	13 25	12 10	1 26
M31	23s 6	27n46	4n56	22s54	0n19	13s52	1s20	2s12	0s24	22s 8	0n31	22s15	1n 6	23n43	0n15	1s49	1n30	24s18	5s35	8n37	8n22	13n28	12n10	1s26

Julian Day Number = 2371891.5, Delta T = 22.31 sec
Ecliptic obliquity = 23°28'11, Nutation = - 0°00'08, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°41'44, Lahiri = 20°48'44Greg. Calendar