



Astrodienst Ephemeris Tables for the year 1712

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 EPHEMERIS for the year 1712
geocentric

JANUARY 1712

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	6 38 55	9♂47'16	0♂ 3	18♂58	25♂20	23♂45	13♂55	13°R 8	6°R48	29°R43	2°R16	24♂27	25♂18	4♂48	7♂11	F 1	
S 2	6 42 51	10°48'26	13°40	20°36	26° 7	24°32	14° 9	13♂ 4	6♂47	29°Y43	2♂15	24°R27	25°15	4°54	7°16	S 2	
S 3	6 46 48	11°49'37	27°39	22°15	26°55	25°19	14°23	13° 0	6°46	29°42	2°14	24°26	25°12	5° 1	7°20	S 3	
M 4	6 50 45	12°50'48	11♂58	23°54	27°44	26° 6	14°37	12°56	6°45	29°42	2°13	24°25	25° 8	5° 8	7°24	M 4	
T 5	6 54 41	13°51'59	26°35	25°32	28°34	26°53	14°51	12°53	6°44	29°42	2°12	24°24	25° 5	5°14	7°29	T 5	
W 6	6 58 38	14°53'10	11♂25	27°10	29°25	27°40	15° 5	12°49	6°43	29°42	2°12	24°23	25° 2	5°21	7°33	W 6	
T 7	7 2 34	15°54'21	26°21	28°49	0♂16	28°27	15°19	12°44	6°41	29°42	2°11	24°22	24°59	5°28	7°38	T 7	
F 8	7 6 31	16°55'32	11♂16	0♂26	1° 8	29°14	15°33	12°40	6°40	29°42	2°10	24°21	24°56	5°34	7°42	F 8	
S 9	7 10 27	17°56'42	26° 0	2° 3	2° 1	0♂ 1	15°47	12°36	6°39	29°42	2° 9	24°D21	24°53	5°41	7°47	S 9	
S 10	7 14 24	18°57'52	10♂27	3°40	2°55	0°49	16° 1	12°32	6°37	29°42	2° 8	24°21	24°49	5°48	7°51	S 10	
M11	7 18 20	19°59'02	24°32	5°15	3°49	1°36	16°15	12°28	6°36	29°D42	2° 7	24°22	24°46	5°55	7°56	M11	
T 12	7 22 17	21° 0'11	8♂12	6°49	4°44	2°23	16°29	12°23	6°34	29°42	2° 6	24°22	24°43	6° 1	8° 1	T 12	
W13	7 26 14	22° 1'19	21°26	8°21	5°39	3°10	16°44	12°19	6°32	29°42	2° 4	24°22	24°40	6° 8	8° 5	W13	
T 14	7 30 10	23° 2'26	4Y16	9°51	6°35	3°58	16°58	12°14	6°31	29°42	2° 3	24°23	24°37	6°15	8°10	T 14	
F 15	7 34 7	24° 3'32	16°46	11°19	7°32	4°45	17°12	12°10	6°29	29°42	2° 2	24°23	24°33	6°21	8°15	F 15	
S 16	7 38 3	25° 4'38	28°58	12°44	8°29	5°32	17°26	12° 5	6°27	29°42	2° 1	24°23	24°30	6°28	8°19	S 16	
S 17	7 42 0	26° 5'43	10♂59	14° 5	9°27	6°19	17°39	12° 1	6°26	29°42	2° 0	24°23	24°27	6°35	8°24	S 17	
M18	7 45 56	27° 6'46	22°52	15°23	10°25	7° 7	17°53	11°56	6°24	29°42	1°59	24°23	24°24	6°41	8°29	M18	
T 19	7 49 53	28° 7'49	4♂41	16°35	11°23	7°54	18° 7	11°51	6°22	29°43	1°58	24°23	24°21	6°48	8°33	T 19	
W 20	7 53 49	29° 8'51	16°32	17°42	12°22	8°42	18°21	11°47	6°20	29°43	1°56	24°24	24°18	6°55	8°38	W 20	
T 21	7 57 46	0♂9'52	28°28	18°43	13°22	9°29	18°35	11°42	6°18	29°43	1°55	24°24	24°14	7° 1	8°43	T 21	
F 22	8 1 43	1°10'53	10♂31	19°36	14°22	10°16	18°49	11°37	6°16	29°44	1°54	24°25	24°11	7° 8	8°47	F 22	
S 23	8 5 39	2°11'52	22°44	20°21	15°22	11° 4	19° 3	11°32	6°14	29°44	1°53	24°R25	24° 8	7°15	8°52	S 23	
S 24	8 9 36	3°12'50	5♂ 9	20°58	16°23	11°51	19°17	11°28	6°12	29°45	1°51	24°25	24° 5	7°22	8°57	S 24	
M25	8 13 32	4°13'47	17°47	21°25	17°24	12°38	19°31	11°23	6°10	29°45	1°50	24°24	24° 2	7°28	9° 2	M25	
T 26	8 17 29	5°14'43	0♂38	21°41	18°26	13°26	19°44	11°18	6° 8	29°46	1°49	24°23	23°59	7°35	9° 6	T 26	
W27	8 21 25	6°15'39	13°43	21°R47	19°28	14°13	19°58	11°13	6° 6	29°46	1°47	24°22	23°55	7°42	9°11	W27	
T 28	8 25 22	7°16'33	27° 0	21°41	20°30	15° 1	20°12	11° 8	6° 4	29°47	1°46	24°20	23°52	7°48	9°16	T 28	
F 29	8 29 18	8°17'27	10♂31	21°24	21°32	15°48	20°26	11° 3	6° 2	29°47	1°45	24°18	23°49	7°55	9°20	F 29	
S 30	8 33 15	9°18'20	24°15	20°56	22°35	16°36	20°39	10°58	5°59	29°48	1°43	24°17	23°46	8° 2	9°25	S 30	
S 31	8 37 12	10♂19'12	8♂11	20♂18	23♂39	17♂23	20♂53	10♂53	5♂57	29°Y49	1♂42	24°D16	23♂43	8♂ 8	9♂30	S 31	

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	23s 7	4s26	4s49	24s15	2s 8	15s16	3n59	22s27	1s 5	22s53	0s 8	17n45	0n53	9n45	0n47	9n42	1s48
S 2	23 2	10 11	5 11	24 0	2 8	15 25	4 0	22 19	1 5	22 52	0 8	17 46	0 53	9 46	0 47	9 42	1 48
S 3	22 57	15 34	5 16	23 44	2 8	15 36	4 1	22 10	1 5	22 50	0 9	17 47	0 53	9 46	0 47	9 42	1 48
M 4	22 51	20 14	5 2	23 26	2 6	15 46	4 1	22 2	1 5	22 49	0 9	17 48	0 53	9 47	0 47	9 42	1 48
T 5	22 45	23 46	4 28	23 7	2 5	15 56	4 2	21 53	1 5	22 48	0 9	17 49	0 53	9 47	0 47	9 42	1 48
W 6	22 39	25 45	3 36	22 45	2 2	16 7	4 2	21 44	1 5	22 46	0 9	17 51	0 53	9 48	0 47	9 42	1 48
T 7	22 32	25 55	2 29	22 23	2 0	16 17	4 2	21 34	1 5	22 45	0 9	17 52	0 53	9 48	0 48	9 42	1 48
F 8	22 24	24 12	1 12	21 59	1 56	16 28	4 2	21 24	1 5	22 43	0 9	17 53	0 54	9 49	0 48	9 42	1 48
S 9	22 16	20 50	0n 9	21 33	1 52	16 39	4 2	21 14	1 5	22 42	0 9	17 55	0 54	9 49	0 48	9 42	1 48
S 10	22 8	16 14	1 28	21 6	1 47	16 50	4 1	21 4	1 5	22 40	0 9	17 56	0 54	9 50	0 48	9 42	1 48
M 11	21 59	10 51	2 40	20 38	1 41	17 1	4 0	20 54	1 5	22 38	0 9	17 57	0 54	9 51	0 48	9 42	1 48
T 12	21 50	5 6	3 40	20 8	1 35	17 11	4 0	20 43	1 5	22 37	0 9	17 59	0 54	9 51	0 48	9 42	1 48
W 13	21 40	0n41	4 27	19 37	1 28	17 22	3 58	20 32	1 6	22 35	0 10	18 0	0 54	9 52	0 48	9 42	1 48
T 14	21 30	6 16	4 58	19 6	1 20	17 33	3 57	20 21	1 6	22 34	0 10	18 2	0 54	9 52	0 48	9 42	1 47
F 15	21 20	11 26	5 15	18 33	1 11	17 43	3 56	20 10	1 6	22 32	0 10	18 3	0 55	9 53	0 48	9 42	1 47
S 16	21 9	16 3	5 17	18 0	1 1	17 54	3 54	19 59	1 6	22 30	0 10	18 4	0 55	9 54	0 48	9 43	1 47
S 17	20 58	19 58	5 4	17 26	0 51	18 4	3 53	19 47	1 6	22 28	0 10	18 6	0 55	9 55	0 48	9 43	1 47
M 18	20 46	23 1	4 39	16 52	0 39	18 14	3 51	19 35	1 6	22 27	0 10	18 7	0 55	9 55	0 48	9 43	1 47
T 19	20 34	25 5	4 2	16 19	0 27	18 24	3 49	19 23	1 6	22 25	0 10	18 9	0 55	9 56	0 48	9 43	1 47
W 20	20 22	26 2	3 15	15 46	0 13	18 34	3 47	19 10	1 6	22 23	0 10	18 10	0 55	9 57	0 48	9 43	1 47
T 21	20 9	25 47	2 19	15 14	0n 1	18 44	3 44	18 58	1 6	22 21	0 10	18 11	0 55	9 57	0 48	9 43	1 47
F 22	19 56	24 20	1 16	14 43	0 16	18 53	3 42	18 45	1 6	22 20	0 10	18 13	0 56	9 58	0 48	9 44	1 47
S 23	19 42	21 43	0 9	14 13	0 32	19 2	3 39	18 32	1 5	22 18	0 11	18 14	0 56	9 59	0 48	9 44	1 47
S 24	19 28	18 3	0s59	13 46	0 49	19 11	3 37	18 19	1 5	22 16	0 11	18 16	0 56	10 0	0 48	9 44	1 47
M 25	19 14	13 32	2 6	13 21	1 6	19 20	3 34	18 5	1 5	22 14	0 11	18 17	0 56	10 0	0 48	9 44	1 47
T 26	18 59	8 20	3 8	12 59	1 23	19 28	3 31	17 52	1 5	22 12	0 11	18 19	0 56	10 1	0 48	9 44	1 47
W 27	18 44	2 43	4 0	12 41	1 41	19 36	3 28	17 38	1 5	22 10	0 11	18 20	0 56	10 2	0 48	9 45	1 47
T 28	18 29	3s 6	4 41	12 26	1 58	19 44	3 25	17 24	1 5	22 8	0 11	18 22	0 56	10 3	0 48	9 45	1 47
F 29	18 13	8 53	5 2	12 15	2 15	19 51	3 22	17 10	1 5	22 6	0 11	18 23	0 56	10 4	0 48	9 45	1 47
S 30	17 57	14 19	5 16	12 8	2 32	19 58	3 19	16 55	1 5	22 4	0 11	18 25	0 56	10 5	0 48	9 46	1 46
S 31	17s41	19s 6	5s 7	12s 6	2n47	20s 4	3n15	16s41	1s 5	22s 2	0s11	18n26	0n57	10n 5	0n48	9n46	1s46

Julian Day Number = 2346354.5, Delta T = 11.19 sec
Ecliptic obliquity = 23°28'40, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°43'12, Lahiri = 19°50'12Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1712

geocentric

FEBRUARY 1712

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	8 41 8	11°20'03	22°18'18	19°R30	24°42'42	18°10	21°7	10°R48	5°R55	29°49	1°R40	24°17	23°39	8°15	9°35	M 1
T 2	8 45 5	12°20'54	6°13'35	18°34	25°46	18°58	21°20	10°44	5°52	29°50	1°39	24°18	23°36	8°22	9°39	T 2
W 3	8 49 1	13°21'44	20°59	17°31	26°50	19°45	21°34	10°39	5°50	29°51	1°38	24°19	23°33	8°28	9°44	W 3
T 4	8 52 58	14°22'32	5°32'26	16°23	27°54	20°33	21°47	10°34	5°48	29°52	1°36	24°20	23°30	8°35	9°49	T 4
F 5	8 56 54	15°23'20	19°53	15°13	28°59	21°20	22° 1	10°29	5°45	29°53	1°35	24°R21	23°27	8°42	9°54	F 5
S 6	9 0 51	16°24'07	4°15	14° 1	0°3 4	22° 8	22°14	10°24	5°43	29°54	1°33	24°21	23°24	8°48	9°58	S 6
S 7	9 4 48	17°24'52	18°26	12°51	1° 9	22°55	22°28	10°19	5°40	29°55	1°32	24°19	23°20	8°55	10° 3	S 7
M 8	9 8 44	18°25'35	2°11'21	11°43	2°15	23°43	22°41	10°14	5°38	29°55	1°30	24°17	23°17	9° 2	10° 8	M 8
T 9	9 12 41	19°26'17	15°57	10°39	3°20	24°30	22°55	10° 9	5°36	29°56	1°29	24°13	23°14	9° 8	10°12	T 9
W10	9 16 37	20°26'58	29°11	9°41	4°26	25°18	23° 8	10° 5	5°33	29°57	1°27	24° 9	23°11	9°15	10°17	W10
T 11	9 20 34	21°27'37	12°15	8°50	5°32	26° 5	23°21	10° 0	5°31	29°59	1°26	24° 4	23° 8	9°22	10°22	T 11
F 12	9 24 30	22°28'14	24°38	8° 6	6°38	26°53	23°34	9°55	5°28	29°59	1°24	24° 1	23° 5	9°29	10°26	F 12
S 13	9 28 27	23°28'50	6°15'53	7°29	7°44	27°40	23°47	9°50	5°25	0°8 1	1°23	23°58	23° 1	9°35	10°31	S 13
S 14	9 32 23	24°29'24	18°56	7° 0	8°51	28°27	24° 1	9°46	5°23	0° 2	1°21	23°57	22°58	9°42	10°36	S 14
M15	9 36 20	25°29'56	0°11'49	6°39	9°58	29°15	24°14	9°41	5°20	0° 3	1°20	23°D57	22°55	9°49	10°40	M15
T 16	9 40 16	26°30'26	12°39	6°26	11° 5	0°11 2	24°27	9°36	5°18	0° 4	1°18	23°58	22°52	9°55	10°45	T 16
W17	9 44 13	27°30'54	24°30	6°D19	12°12	0°50	24°40	9°32	5°15	0° 5	1°17	23°59	22°49	10° 2	10°50	W17
T 18	9 48 10	28°31'21	6°28'28	6°20	13°19	1°37	24°52	9°27	5°13	0° 7	1°15	24° 1	22°45	10° 9	10°54	T 18
F 19	9 52 6	29°31'46	18°36	6°28	14°27	2°24	25° 5	9°23	5°10	0° 8	1°14	24°R 2	22°42	10°15	10°59	F 19
S 20	9 56 3	0°13'20'09	0°12'57	6°41	15°34	3°12	25°18	9°19	5° 7	0° 9	1°12	24° 2	22°39	10°22	11° 3	S 20
S 21	9 59 59	1°32'30	13°36	7° 1	16°42	3°59	25°31	9°14	5° 5	0°11	1°10	24° 0	22°36	10°29	11° 8	S 21
M22	10 3 56	2°32'49	26°32	7°26	17°50	4°47	25°43	9°10	5° 2	0°12	1° 9	23°57	22°33	10°35	11°12	M22
T 23	10 7 52	3°33'06	9°11'47	7°56	18°58	5°34	25°56	9° 6	4°59	0°13	1° 7	23°51	22°30	10°42	11°17	T 23
W24	10 11 49	4°33'22	23°17	8°30	20° 6	6°21	26° 8	9° 1	4°57	0°15	1° 6	23°45	22°26	10°49	11°21	W24
T 25	10 15 45	5°33'35	7°12 2	9° 9	21°14	7° 8	26°21	8°57	4°54	0°16	1° 4	23°38	22°23	10°55	11°26	T 25
F 26	10 19 42	6°33'48	20°58	9°52	22°23	7°56	26°33	8°53	4°52	0°18	1° 3	23°31	22°20	11° 2	11°30	F 26
S 27	10 23 39	7°33'59	5°11 1	10°39	23°31	8°43	26°46	8°49	4°49	0°19	1° 1	23°25	22°17	11° 9	11°34	S 27
S 28	10 27 35	8°34'08	19° 8	11°29	24°40	9°30	26°58	8°45	4°46	0°21	1° 0	23°22	22°14	11°15	11°39	S 28
M29	10 31 32	9°13'41'6	3°17	12°23	25°34'9	10°17	27°10	8°41	4°44	0°22	0°15	23°20	22°11	11°12	11°43	M29

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	17s24	22s52	4s39	12s 7	3n 1	20s10	3n12	16s26	1s 5	22s 0	0s11	18n27	0n57	10n 6	0n48	9n46	1s46
T 2	17 7 25 17	3 54	12 13	3 14	20 16	3 9	16 11	1 5	21 58	0 12	18 29	0 57	10 7	0 48	9 46	1 46	22 37
W 3	16 50 26 4	2 54	12 22	3 24	20 21	3 5	15 56	1 5	21 56	0 12	18 30	0 57	10 8	0 48	9 47	1 46	22 37
T 4	16 33 25 4	1 43	12 34	3 32	20 26	3 1	15 41	1 5	21 54	0 12	18 32	0 57	10 9	0 48	9 47	1 46	22 38
F 5	16 15 22 24	0 25	12 49	3 38	20 31	2 58	15 26	1 4	21 52	0 12	18 33	0 57	10 10	0 48	9 47	1 46	22 39
S 6	15 57 18 21	0n54	13 7	3 41	20 35	2 54	15 10	1 4	21 50	0 12	18 35	0 57	10 11	0 48	9 48	1 46	22 40
S 7	15 38 13 17	2 9	13 26	3 42	20 38	2 50	14 54	1 4	21 48	0 12	18 36	0 57	10 12	0 48	9 48	1 46	22 40
M 8	15 20 7 38	3 14	13 46	3 41	20 41	2 46	14 39	1 4	21 46	0 12	18 37	0 57	10 13	0 48	9 49	1 46	22 41
T 9	15 1 1 46	4 7	14 6	3 38	20 44	2 42	14 23	1 4	21 44	0 12	18 39	0 57	10 14	0 48	9 49	1 46	22 42
W10	14 42 4n 2	4 44	14 27	3 32	20 46	2 38	14 7	1 4	21 42	0 12	18 40	0 57	10 14	0 48	9 49	1 46	22 42
T 11	14 22 9 29	5 7	14 47	3 25	20 48	2 34	13 50	1 3	21 40	0 13	18 42	0 58	10 15	0 48	9 50	1 46	22 43
F 12	14 3 14 24	5 13	15 7	3 16	20 49	2 30	13 34	1 3	21 38	0 13	18 43	0 58	10 16	0 48	9 50	1 46	22 44
S 13	13 43 18 38	5 6	15 25	3 6	20 49	2 26	13 17	1 3	21 35	0 13	18 44	0 58	10 17	0 48	9 51	1 46	22 44
S 14	13 23 22 2	4 44	15 43	2 56	20 49	2 22	13 1	1 3	21 33	0 13	18 46	0 58	10 18	0 48	9 51	1 46	22 45
M15	13 2 24 27	4 11	15 59	2 44	20 49	2 18	12 44	1 3	21 31	0 13	18 47	0 58	10 19	0 49	9 52	1 46	22 46
T 16	12 42 25 46	3 27	16 15	2 32	20 48	2 13	12 27	1 3	21 29	0 13	18 48	0 58	10 20	0 49	9 52	1 46	22 46
W17	12 21 25 56	2 34	16 28	2 19	20 46	2 9	12 10	1 2	21 27	0 13	18 50	0 58	10 21	0 49	9 53	1 45	22 47
T 18	12 0 24 54	1 35	16 40	2 7	20 44	2 5	11 53	1 2	21 24	0 13	18 51	0 58	10 22	0 49	9 53	1 45	22 48
F 19	11 39 22 41	0 30	16 51	1 54	20 42	2 1	11 36	1 2	21 22	0 14	18 52	0 58	10 23	0 49	9 54	1 45	22 48
S 20	11 18 19 22	0s38	17 0	1 41	20 39	1 56	11 18	1 2	21 20	0 14	18 53	0 58	10 24	0 49	9 54	1 45	22 49
S 21	10 57 15 6	1 45	17 8	1 28	20 35	1 52	11 1	1 1	21 18	0 14	18 54	0 58	10 25	0 49	9 55	1 45	22 50
M22	10 35 10 4	2 47	17 14	1 15	20 31	1 48	10 43	1 1	21 16	0 14	18 56	0 58	10 26	0 49	9 55	1 45	22 50
T 23	10 13 4 29	3 43	17 18	1 3	20 26	1 43	10 26	1 1	21 13	0 14	18 57	0 58	10 27	0 49	9 56	1 45	22 51
W24	9 51 1s25	4 27	17 21	0 51	20 20	1 39	10 8	1 1	21 11	0 14	18 58	0 58	10 28	0 49	9 56	1 45	22 52
T 25	9 29 7 20	4 56	17 22	0 39	20 14	1 35	9 50	1 0	21 9	0 14	18 59	0 58	10 29	0 49	9 57	1 45	22 52
F 26	9 7 12 57	5 9	17 22	0 27	20 8	1 30	9 32	1 0	21 7	0 14	19 0	0 58	10 30	0 49	9 57	1 45	22 53
S 27	8 45 17 58	5 3	17 21	0 16	20 1	1 26	9 14	1 0	21 5	0 15	19 1	0 58	10 31	0 49	9 58	1 45	22 53
S 28	8 22 22 0	4 38	17 17	0 5	19 53	1 21	8 56	1 0	21 2	0 15	19 2	0 59	10 32	0 49	9 58	1 45	22 54
M29	8s 0 24s43	3s57	17s13	0s 6	19s45	1n17	8s38	0s59	21s 0	0s15	19n 4	0n59	10n33	0n49	9n59	1s45	22n55

Julian Day Number = 2346385.5, Delta T = 11.18 sec
 Ecliptic obliquity = 23°28'40, Nutation = 0°00'17, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°43'16, Lahiri = 19°50'16Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1712
geocentric

MARCH 1712

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	10 35 28	10♈34'22	17♌25	13♎19	26♊58	11♈ 5	27♋22	8°R38	4°R41	0♌24	0°R57	23°D20	22♋ 7	11♐29	11♎47	T 1
W 2	10 39 25	11°34'27	1♋32	14°19	28° 7	11°52	27°34	8♌34	4♎38	0°26	0♎55	23♋21	22° 4	11°35	11°52	W 2
T 3	10 43 21	12°34'30	15°36	15°21	29°16	12°39	27°46	8°30	4°36	0°27	0°54	23°22	22° 1	11°42	11°56	T 3
F 4	10 47 18	13°34'31	29°35	16°25	0♋26	13°26	27°58	8°27	4°33	0°29	0°52	23°R22	21°58	11°49	12° 0	F 4
S 5	10 51 14	14°34'31	13♎28	17°32	1°35	14°13	28°10	8°23	4°31	0°31	0°51	23°20	21°55	11°55	12° 4	S 5
S 6	10 55 11	15°34'29	27°13	18°41	2°44	15° 0	28°21	8°20	4°28	0°32	0°49	23°16	21°51	12° 2	12° 8	S 6
M 7	10 59 8	16°34'25	10♈46	19°52	3°54	15°48	28°33	8°16	4°26	0°34	0°48	23° 9	21°48	12° 9	12°12	M 7
T 8	11 3 4	17°34'19	24° 6	21° 5	5° 4	16°35	28°45	8°13	4°23	0°36	0°46	23° 1	21°45	12°15	12°16	T 8
W 9	11 7 1	18°34'11	7♏10	22°20	6°13	17°22	28°56	8°10	4°20	0°38	0°45	22°50	21°42	12°22	12°20	W 9
T 10	11 10 57	19°34'01	19°57	23°36	7°23	18° 9	29° 7	8° 7	4°18	0°39	0°43	22°40	21°39	12°29	12°25	T 10
F 11	11 14 54	20°33'49	2♊27	24°55	8°33	18°56	29°19	8° 4	4°15	0°41	0°42	22°30	21°36	12°36	12°28	F 11
S 12	11 18 50	21°33'34	14°42	26°15	9°43	19°43	29°30	8° 1	4°13	0°43	0°40	22°22	21°32	12°42	12°32	S 12
S 13	11 22 47	22°33'18	26°44	27°36	10°53	20°30	29°41	7°58	4°11	0°45	0°39	22°17	21°29	12°49	12°36	S 13
M14	11 26 43	23°32'59	8♐38	29° 0	12° 3	21°16	29°52	7°56	4° 8	0°47	0°38	22°13	21°26	12°56	12°40	M14
T 15	11 30 40	24°32'38	20°27	0♈24	13°14	22° 3	0♋ 3	7°53	4° 6	0°49	0°36	22°D12	21°23	13° 2	12°44	T 15
W16	11 34 37	25°32'15	2♌18	1°50	14°24	22°50	0°14	7°50	4° 3	0°50	0°35	22°12	21°20	13° 9	12°48	W16
T 17	11 38 33	26°31'49	14°15	3°18	15°34	23°37	0°24	7°48	4° 1	0°52	0°34	22°13	21°16	13°16	12°51	T 17
F 18	11 42 30	27°31'22	26°24	4°47	16°45	24°24	0°35	7°46	3°59	0°54	0°32	22°R13	21°13	13°22	12°55	F 18
S 19	11 46 26	28°30'51	8♌49	6°18	17°55	25°10	0°46	7°44	3°56	0°56	0°31	22°11	21°10	13°29	12°59	S 19
S 20	11 50 23	29°30'19	21°35	7°49	19° 6	25°57	0°56	7°41	3°54	0°58	0°30	22° 8	21° 7	13°36	13° 2	S 20
M21	11 54 19	0♏29'44	4♎44	9°23	20°16	26°44	1° 6	7°39	3°52	1° 0	0°28	22° 2	21° 4	13°42	13° 6	M21
T 22	11 58 16	1°29'07	18°16	10°57	21°27	27°31	1°16	7°38	3°49	1° 2	0°27	21°53	21° 1	13°49	13°10	T 22
W23	12 2 12	2°28'28	2♌11	12°33	22°38	28°17	1°27	7°36	3°47	1° 4	0°26	21°42	20°57	13°56	13°13	W23
T 24	12 6 9	3°27'47	16°23	14°11	23°48	29° 4	1°36	7°34	3°45	1° 6	0°24	21°31	20°54	14° 2	13°16	T 24
F 25	12 10 6	4°27'04	0♎47	15°49	24°59	29°50	1°46	7°32	3°43	1° 8	0°23	21°20	20°51	14° 9	13°20	F 25
S 26	12 14 2	5°26'19	15°16	17°29	26°10	0♏37	1°56	7°31	3°41	1°10	0°22	21°11	20°48	14°16	13°23	S 26
S 27	12 17 59	6°25'32	29°45	19°11	27°21	1°23	2° 6	7°29	3°39	1°13	0°21	21° 4	20°45	14°22	13°26	S 27
M28	12 21 55	7°24'44	14♌ 9	20°54	28°32	2°10	2°15	7°28	3°37	1°15	0°20	21° 0	20°42	14°29	13°30	M28
T 29	12 25 52	8°23'53	28°23	22°38	29°43	2°56	2°25	7°27	3°35	1°17	0°19	20°58	20°38	14°36	13°33	T 29
W30	12 29 48	9°23'01	12♋27	24°24	0♈54	3°42	2°34	7°26	3°33	1°19	0°17	20°D58	20°35	14°42	13°36	W30
T 31	12 33 45	10♏22'07	26♋19	26♈11	2♊ 5	4♏29	2♋43	7♌25	3♎31	1♌21	0♎16	20°R58	20♋32	14♐49	13♎39	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	decl	decl	decl	lat	decl	decl	decl	decl	lat
T 1	7s37	25s54	3s 2	17s 7	0s16	19s36	1n13	8s20	0s59	20s58	0s15	19n 5	0n59	10n34	0n49	10n 0	1s45	22n55	12n38	21s27	21s39	25n31	11s 3	6n29									
W 2	7 14	25 23	1 55	16 59	0 26	19 27	1 8	8 2	0 59	20 56	0 15	19 6	0 59	10 35	0 49	10 0	1 45	22 56	12 38	21 27	21 40	25 31	11 1	6 29									
T 3	6 51	23 15	0 42	16 50	0 36	19 17	1 4	7 43	0 58	20 53	0 15	19 7	0 59	10 36	0 49	10 1	1 45	22 56	12 38	21 27	21 41	25 32	11 0	6 29									
F 4	6 28	19 44	0n33	16 39	0 45	19 7	1 0	7 25	0 58	20 51	0 15	19 8	0 59	10 37	0 49	10 1	1 45	22 57	12 38	21 27	21 41	25 32	10 59	6 30									
S 5	6 5	15 7	1 46	16 27	0 54	18 56	0 56	7 6	0 58	20 49	0 15	19 8	0 59	10 37	0 49	10 2	1 45	22 57	12 38	21 27	21 42	25 32	10 57	6 30									
S 6	5 42	9 46	2 52	16 14	1 2	18 45	0 51	6 48	0 58	20 47	0 16	19 9	0 59	10 38	0 49	10 3	1 45	22 58	12 38	21 28	21 42	25 32	10 56	6 30									
M 7	5 18	4 3	3 46	15 59	1 10	18 33	0 47	6 29	0 57	20 44	0 16	19 10	0 59	10 39	0 49	10 3	1 45	22 58	12 38	21 29	21 43	25 33	10 55	6 30									
T 8	4 55	1n45	4 27	15 43	1 18	18 20	0 43	6 11	0 57	20 42	0 16	19 11	0 59	10 40	0 49	10 4	1 45	22 59	12 38	21 31	21 43	25 33	10 54	6 30									
W 9	4 32	7 21	4 54	15 26	1 25	18 7	0 39	5 52	0 57	20 40	0 16	19 12	0 59	10 41	0 49	10 5	1 45	22 59	12 38	21 32	21 44	25 33	10 52	6 31									
T 10	4 8	12 30	5 5	15 7	1 31	17 54	0 34	5 33	0 56	20 38	0 16	19 13	0 59	10 42	0 49	10 5	1 44	23 0	12 38	21 34	21 44	25 33	10 51	6 31									
F 11	3 45	17 2	5 0	14 46	1 38	17 40	0 30	5 15	0 56	20 36	0 16	19 14	0 59	10 43	0 48	10 6	1 44	23 0	12 38	21 36	21 45	25 34	10 50	6 31									
S 12	3 21	20 46	4 42	14 25	1 44	17 25	0 26	4 56	0 55	20 33	0 16	19 14	0 59	10 44	0 48	10 7	1 44	23 1	12 38	21 37	21 45	25 34	10 48	6 31									
S 13	2 58	23 32	4 12	14 2	1 49	17 10	0 22	4 37	0 55	20 31	0 16	19 15	0 59	10 45	0 48	10 7	1 44	23 1	12 38	21 38	21 46	25 34	10 47	6 32									
M14	2 34	25 15	3 31	13 37	1 54	16 55	0 18	4 18	0 55	20 29	0 17	19 16	0 59	10 46	0 48	10 8	1 44	23 2	12 38	21 39	21 46	25 34	10 46	6 32									
T 15	2 10	25 49	2 41	13 12	1 59	16 39	0 14	3 59	0 54	20 27	0 17	19 17	0 59	10 47	0 48	10 9	1 44	23 2	12 38	21 39	21 47	25 34	10 44	6 32									
W16	1 47	25 12	1 44	12 45	2 3	16 23	0 10	3 40	0 54	20 25	0 17	19 17	0 59	10 47	0 48	10 9	1 44	23 3	12 37	21 39	21 47	25 34	10 43	6 32									
T 17	1 23	23 25	0 42	12 17	2 7	16 6	0 6	3 22	0 54	20 22	0 17	19 18	0 59	10 48	0 48	10 10	1 44	23 3	12 37	21 39	21 48	25 35	10 42	6 33									
F 18	0 59	20 33	0s22	11 47	2 10	15 48	0 2	3 3	0 53	20 20	0 17	19 18	0 59	10 49	0 48	10 11	1 44	23 3	12 37	21 39	21 48	25 35	10 41	6 33									
S 19	0 36	16 41	1 27	11 16	2 13	15 30	0s 1	2 44	0 53	20 18	0 17	19 19	0 59	10 50	0 48	10 12	1 44	23 4	12 37	21 39	21 49	25 35	10 39	6 33									
S 20	0 12	11 58	2 30	10 44	2 15	15 12	0 5	2 25	0 52	20 16	0 17	19 20	0 59	10 51	0 48	10 12	1 44	23 4	12 37	21 39	21 49	25 35	10 38	6 33									
M21	0n12	6 36	3 26	10 11	2 17	14 53	0 9	2 6	0 52	20 14	0 18	19 20	0 59	10 52	0 48	10 13	1 44	23 4	12 37	21 40	21 50	25 35	10 37	6 34									
T 22	0 35	0 47	4 12	9 37	2 19	14 34	0 12	1 47	0 52	20 12	0 18	19 21	0 59	10 52	0 48	10 14	1 44	23 5	12 37	21 42	21 50	25 35	10 36	6 34									
W23	0 59	5s13	4 45	9 1	2 20	14 15	0 16	1 28	0 51	20 10	0 18	19 21	0 59	10 53	0 48	10 14	1 44	23 5	12 37	21 43	21 50	25 35	10 34	6 34									
T 24	1 23	11 4	5 0	8 24	2 21	13 55	0 20	1 9	0 51	20 8	0 18	19 22	0 59	10 54	0 48	10 15	1 44	23 6	12 37	21 45	21 51	25 35	10 33	6 35									
F 25	1 46	16 24	4 58	7 46	2 21	13 35	0 23	0 50	0 50	20 6	0 18	19 22	0 59	10 55	0 48	10 16	1 44	23 6	12 36	21 47	21 51	25 36	10 32	6 35									
S 26	2 10	20 50	4 36	7 6	2 20	13 14	0 26	0 31	0 50	20 4	0 18	19 22	0 59	10 55	0 48	10 17	1 44	23 6	12 36	21 48	21 52	25 36	10 31	6 35									
S 27	2 33	23 58	3 56	6 26	2 20	12 53	0 30	0 12	0 49	20 2	0 19	19 23	0 59	10 56	0 48	10 17	1 44	23 6	12 36	21 49	21 52	25 36	10 29	6 35									
M28	2 57	25 33	3 2	5 44	2 18	12 31	0 33	0n 7	0 49	20 0	0 19	19 23	0 59	10 57	0 48	10 18	1 44	23 7	12 36	21 50	21 53	25 36	10 28	6 36									
T 29	3 20	25 25	1 57	5 1	2 16	12 9	0 36	0 26	0 49	19 58	0 19	19 23	0 59	10 58	0 48	10 19	1 44	23 7	12 36	21 50	21 53	25 36	10 27	6 36									
W30	3 43	23 38	0 45	4 17	2 14	11 47	0 39	0 44	0 48	19 56	0 19	19 24	0 59	10 58	0 48	10 20	1 44	23 7	12 36	21 50	21 54	25 36	10 26	6 36									
T 31	4n 7	20s28	0n28	3s32	2s11	11s25	0s43	1n 3	0s48	19s54	0s19	19n24	0n59	10n59	0n48	10n20	1s44	23n 8	12n35	21s50	21s54	25n36	10s25	6n37									

ASTRODIENST EPHEMERIS for the year 1712

geocentric

APRIL 1712

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	12 37 41	11°21'12	10°00	27°59	3°17	5°15	2°52	7°24	3°29	1°23	0°15	20°57	20°29	14°56	13°42	F 1
S 2	12 41 38	12°20'14	23°31	29°49	4°28	6°1	3°1	7°23	3°27	1°25	0°14	20°54	20°26	15°2	13°45	S 2
S 3	12 45 35	13°19'15	6°51	1°41	5°39	6°48	3°10	7°23	3°25	1°27	0°13	20°48	20°22	15°9	13°48	S 3
M 4	12 49 31	14°18'14	20°1	3°34	6°50	7°34	3°19	7°22	3°23	1°30	0°12	20°39	20°19	15°16	13°51	M 4
T 5	12 53 28	15°17'11	2°59	5°28	8°2	8°20	3°27	7°22	3°21	1°32	0°11	20°27	20°16	15°22	13°54	T 5
W 6	12 57 24	16°16'06	15°45	7°24	9°13	9°6	3°36	7°21	3°20	1°34	0°10	20°14	20°13	15°29	13°57	W 6
T 7	13 1 21	17°14'58	28°18	9°21	10°25	9°52	3°44	7°21	3°18	1°36	0°9	20°0	20°10	15°36	13°59	T 7
F 8	13 5 17	18°13'49	10°39	11°20	11°36	10°38	3°52	7°21	3°16	1°38	0°8	19°47	20°7	15°42	14°2	F 8
S 9	13 9 14	19°12'38	22°48	13°20	12°48	11°24	4°0	7°21	3°15	1°41	0°7	19°36	20°3	15°49	14°5	S 9
S 10	13 13 10	20°11'25	4°46	15°21	13°59	12°10	4°8	7°21	3°13	1°43	0°6	19°27	20°0	15°56	14°7	S 10
M 11	13 17 7	21°10'09	16°38	17°24	15°11	12°56	4°16	7°21	3°12	1°45	0°5	19°21	19°57	16°2	14°10	M 11
T 12	13 21 3	22°8'52	28°25	19°27	16°22	13°42	4°23	7°22	3°10	1°47	0°5	19°18	19°54	16°9	14°12	T 12
W 13	13 25 0	23°7'32	10°15	21°32	17°34	14°27	4°31	7°22	3°9	1°50	0°4	19°17	19°51	16°16	14°15	W 13
T 14	13 28 57	24°6'10	22°10	23°38	18°46	15°13	4°38	7°23	3°8	1°52	0°3	19°17	19°48	16°22	14°17	T 14
F 15	13 32 53	25°4'45	4°18	25°45	19°57	15°59	4°45	7°23	3°6	1°54	0°2	19°17	19°44	16°29	14°19	F 15
S 16	13 36 50	26°3'19	16°42	27°52	21°9	16°44	4°52	7°24	3°5	1°56	0°2	19°15	19°41	16°36	14°21	S 16
S 17	13 40 46	27°1'50	29°29	29°59	22°21	17°30	4°59	7°25	3°4	1°59	0°1	19°12	19°38	16°42	14°24	S 17
M 18	13 44 43	28°0'19	12°42	2°8	23°33	18°16	5°6	7°26	3°3	2°1	0°0	19°6	19°35	16°49	14°26	M 18
T 19	13 48 39	28°58'46	26°22	4°16	24°44	19°1	5°12	7°27	3°1	2°3	29°59	18°58	19°32	16°56	14°28	T 19
W 20	13 52 36	29°57'10	10°29	6°23	25°56	19°47	5°19	7°28	3°0	2°5	29°59	18°47	19°28	17°2	14°30	W 20
T 21	13 56 32	0°55'33	24°59	8°30	27°8	20°32	5°25	7°30	2°59	2°8	29°58	18°36	19°25	17°9	14°32	T 21
F 22	14 0 29	1°53'54	9°45	10°36	28°20	21°17	5°31	7°31	2°58	2°10	29°58	18°25	19°22	17°16	14°33	F 22
S 23	14 4 26	2°52'13	24°40	12°41	29°32	22°3	5°37	7°33	2°57	2°12	29°57	18°16	19°19	17°22	14°35	S 23
S 24	14 8 22	3°50'31	9°33	14°44	0°44	22°48	5°43	7°34	2°57	2°14	29°57	18°9	19°16	17°29	14°37	S 24
M 25	14 12 19	4°48'47	24°18	16°45	1°56	23°33	5°49	7°36	2°56	2°17	29°56	18°5	19°13	17°36	14°39	M 25
T 26	14 16 15	5°47'02	8°38	18°44	3°8	24°18	5°54	7°38	2°55	2°19	29°56	18°3	19°9	17°42	14°40	T 26
W 27	14 20 12	6°45'15	23°1	20°41	4°20	25°3	5°59	7°40	2°54	2°21	29°55	18°D 3	19°6	17°49	14°42	W 27
T 28	14 24 8	7°43'26	6°55	22°35	5°32	25°49	6°4	7°42	2°53	2°23	29°55	18°R 3	19°3	17°56	14°43	T 28
F 29	14 28 5	8°41'36	20°31	24°26	6°44	26°34	6°9	7°44	2°53	2°26	29°54	18°3	19°0	18°2	14°45	F 29
S 30	14 32 1	9°39'44	3°50	26°14	7°56	27°19	6°14	7°46	2°52	2°28	29°54	18°3 0	18°57	18°II 9	14°46	S 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	4n30	16s11	1n39	2s46	2s 8	11s 2	0s46	1n22	0s47	19s52	0s19	19n24	0n59	11n 0	0n48	F 1
S 2	4 53	11 8	2 43	1 58	2 4	10 39	0 49	1 41	0 47	19 50	0 19	19 24	0 59	11 0	0 48	S 2
S 3	5 16	5 39	3 37	1 10	2 0	10 15	0 51	2 0	0 46	19 48	0 20	19 24	0 59	11 1	0 48	S 3
M 4	5 39	0n 0	4 19	0 21	1 55	9 51	0 54	2 18	0 46	19 46	0 20	19 25	0 59	11 2	0 48	M 4
T 5	6 2	5 34	4 46	0n30	1 50	9 27	0 57	2 37	0 45	19 44	0 20	19 25	0 59	11 2	0 48	T 5
W 6	6 24	10 48	4 59	1 21	1 44	9 3	1 0	2 56	0 45	19 42	0 20	19 25	0 59	11 3	0 48	W 6
T 7	6 47	15 30	4 57	2 13	1 38	8 38	1 2	3 14	0 44	19 41	0 20	19 25	0 59	11 3	0 48	T 7
F 8	7 10	19 29	4 41	3 6	1 31	8 13	1 5	3 33	0 44	19 39	0 20	19 25	0 59	11 4	0 48	F 8
S 9	7 32	22 33	4 12	3 59	1 24	7 48	1 7	3 51	0 43	19 37	0 21	19 25	0 59	11 4	0 48	S 9
S 10	7 54	24 36	3 32	4 53	1 16	7 23	1 10	4 10	0 43	19 35	0 21	19 25	0 59	11 5	0 48	S 10
M 11	8 16	25 31	2 44	5 48	1 7	6 57	1 12	4 28	0 42	19 34	0 21	19 25	0 59	11 6	0 48	M 11
T 12	8 38	25 16	1 48	6 43	0 59	6 31	1 14	4 46	0 42	19 32	0 21	19 25	0 59	11 6	0 48	T 12
W 13	9 0	23 52	0 48	7 39	0 50	6 5	1 16	5 5	0 41	19 31	0 21	19 24	0 59	11 6	0 48	W 13
T 14	9 22	21 24	0s15	8 34	0 40	5 39	1 18	5 23	0 41	19 29	0 21	19 24	0 59	11 7	0 48	T 14
F 15	9 43	17 57	1 19	9 30	0 30	5 13	1 20	5 41	0 40	19 27	0 22	19 24	0 59	11 7	0 48	F 15
S 16	10 5	13 38	2 20	10 25	0 20	4 46	1 22	5 59	0 40	19 26	0 22	19 24	0 59	11 8	0 48	S 16
S 17	10 26	8 37	3 16	11 20	0 10	4 20	1 24	6 17	0 39	19 24	0 22	19 24	0 59	11 8	0 48	S 17
M 18	10 47	3 4	4 3	12 15	0n 1	3 53	1 26	6 35	0 39	19 23	0 22	19 23	0 59	11 9	0 48	M 18
T 19	11 8	2s49	4 38	13 9	0 12	3 26	1 28	6 52	0 38	19 22	0 22	19 23	0 59	11 9	0 48	T 19
W 20	11 28	8 43	4 58	14 2	0 23	2 59	1 29	7 10	0 37	19 20	0 23	19 23	0 59	11 9	0 47	W 20
T 21	11 49	14 19	4 59	14 53	0 33	2 32	1 31	7 28	0 37	19 19	0 23	19 22	0 59	11 10	0 47	T 21
F 22	12 9	19 12	4 41	15 43	0 44	2 4	1 32	7 45	0 36	19 17	0 23	19 22	0 59	11 10	0 47	F 22
S 23	12 29	22 54	4 3	16 32	0 55	1 37	1 33	8 3	0 36	19 16	0 23	19 22	0 59	11 10	0 47	S 23
S 24	12 49	25 2	3 9	17 19	1 5	1 9	1 35	8 20	0 35	19 15	0 23	19 21	0 59	11 11	0 47	S 24
M 25	13 9	25 24	2 2	18 4	1 15	0 42	1 36	8 37	0 35	19 14	0 23	19 21	0 59	11 11	0 47	M 25
T 26	13 28	24 0	0 49	18 47	1 25	0 14	1 37	8 55	0 34	19 13	0 24	19 20	0 59	11 11	0 47	T 26
W 27	13 47	21 5	0n26	19 28	1 34	0n13	1 38	9 12	0 34	19 11	0 24	19 20	0 59	11 11	0 47	W 27
T 28	14 7	16 59	1 39	20 6	1 42	0 41	1 39	9 29	0 33	19 10	0 24	19 19	0 59	11 12	0 47	T 28
F 29	14 25	12 5	2 43	20 42	1 50	1 9	1 40	9 45	0 32	19 9	0 24	19 19	0 59	11 12	0 47	F 29
S 30	14n44	6s44	3n38	21n15	1n58	1n37	1s41	10n 2	0s32	19s 8	0s24	19n18	0n59	11n12	0n47	S 30

Julian Day Number = 2346445.5, Delta T = 11.15 sec

Ecliptic obliquity = 23°28'40, Nutation = 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°43'24, Lahiri = 19°50'24Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1712

geocentric

MAY 1712

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	14 35 58	10♂3751	16♂54	27♂59	9♀ 8	28♀ 4	6♂19	7♂49	2°R52	2♂30	29°R54	17°R55	18♂53	18♂16	14♂47	S 1
M 2	14 39 55	11°35'57	29°45	29°41	10°20	28°48	6°23	7°51	2♂51	2°32	29♂54	17♂48	18°50	18°22	14°48	M 2
T 3	14 43 51	12°34'01	12♀24	1♂19	11°32	29°33	6°28	7°54	2°51	2°35	29°53	17°38	18°47	18°29	14°50	T 3
W 4	14 47 48	13°32'04	24°52	2°53	12°44	0♂18	6°32	7°56	2°50	2°37	29°53	17°27	18°44	18°36	14°51	W 4
T 5	14 51 44	14°30'05	7♂10	4°24	13°57	1° 3	6°36	7°59	2°50	2°39	29°53	17°15	18°41	18°42	14°52	T 5
F 6	14 55 41	15°28'04	19°19	5°50	15° 9	1°47	6°39	8° 2	2°50	2°41	29°53	17° 4	18°38	18°49	14°53	F 6
S 7	14 59 37	16°26'02	1♂19	7°13	16°21	2°32	6°43	8° 5	2°50	2°44	29°53	16°55	18°34	18°56	14°54	S 7
S 8	15 3 34	17°23'58	13°12	8°32	17°33	3°17	6°46	8° 8	2°50	2°46	29°52	16°47	18°31	19° 2	14°54	S 8
M 9	15 7 30	18°21'53	25° 0	9°48	18°45	4° 1	6°50	8°11	2°49	2°48	29°52	16°42	18°28	19° 9	14°55	M 9
T 10	15 11 27	19°19'46	6♂47	10°59	19°58	4°46	6°53	8°14	2°D49	2°50	29°52	16°40	18°25	19°16	14°56	T 10
W11	15 15 24	20°17'38	18°36	12° 6	21°10	5°30	6°56	8°17	2°49	2°52	29°D52	16°D39	18°22	19°22	14°56	W11
T 12	15 19 20	21°15'27	0♂11	13° 8	22°22	6°14	6°58	8°21	2°49	2°54	29°52	16°40	18°19	19°29	14°57	T 12
F 13	15 23 17	22°13'15	12°38	14° 7	23°35	6°59	7° 1	8°24	2°50	2°57	29°52	16°41	18°15	19°36	14°57	F 13
S 14	15 27 13	23°11'01	25° 1	15° 1	24°47	7°43	7° 3	8°28	2°50	2°59	29°52	16°R41	18°12	19°42	14°58	S 14
S 15	15 31 10	24° 8'46	7♂45	15°51	25°59	8°27	7° 5	8°32	2°50	3° 1	29°52	16°40	18° 9	19°49	14°58	S 15
M16	15 35 6	25° 6'28	20°55	16°37	27°12	9°11	7° 7	8°35	2°50	3° 3	29°53	16°37	18° 6	19°56	14°59	M16
T 17	15 39 3	26° 4'10	4♂33	17°18	28°24	9°55	7° 9	8°39	2°51	3° 5	29°53	16°33	18° 3	20° 2	14°59	T 17
W18	15 42 59	27° 1'49	18°40	17°54	29°36	10°39	7°10	8°43	2°51	3° 7	29°53	16°26	17°59	20° 9	14°59	W18
T 19	15 46 56	27°59'27	3♂14	18°26	0♂49	11°23	7°12	8°47	2°51	3° 9	29°53	16°19	17°56	20°16	14°59	T 19
F 20	15 50 53	28°57'04	18° 9	18°53	2° 1	12° 7	7°13	8°51	2°52	3°11	29°53	16°12	17°53	20°22	14°R59	F 20
S 21	15 54 49	29°54'40	3♂17	19°16	3°13	12°51	7°14	8°56	2°52	3°14	29°54	16° 6	17°50	20°29	14°59	S 21
S 22	15 58 46	0♂52'14	18°27	19°33	4°26	13°35	7°15	9° 0	2°53	3°16	29°54	16° 1	17°47	20°36	14°59	S 22
M23	16 2 42	1°49'48	3♂31	19°46	5°38	14°19	7°15	9° 4	2°54	3°18	29°54	15°59	17°44	20°42	14°59	M23
T 24	16 6 39	2°47'20	18°19	19°55	6°51	15° 2	7°16	9° 9	2°54	3°20	29°55	15°D58	17°40	20°49	14°58	T 24
W25	16 10 35	3°44'51	2♂47	19°R58	8° 3	15°46	7°16	9°13	2°55	3°22	29°55	15°59	17°37	20°56	14°58	W25
T 26	16 14 32	4°42'22	16°52	19°57	9°16	16°30	7°R16	9°18	2°56	3°24	29°56	16° 0	17°34	21° 2	14°58	T 26
F 27	16 18 28	5°39'52	0♂33	19°52	10°28	17°13	7°16	9°22	2°57	3°26	29°56	16°R 1	17°31	21° 9	14°57	F 27
S 28	16 22 25	6°37'20	13°51	19°42	11°41	17°57	7°16	9°27	2°58	3°28	29°56	16° 1	17°28	21°16	14°57	S 28
S 29	16 26 22	7°34'48	26°49	19°28	12°54	18°40	7°15	9°32	2°59	3°30	29°57	15°59	17°25	21°22	14°56	S 29
M30	16 30 18	8°32'16	9♀31	19°10	14° 6	19°24	7°15	9°37	3° 0	3°32	29°58	15°56	17°21	21°29	14°56	M30
T 31	16 34 15	9♂29'42	21♀57	18♂49	15♂19	20♂ 7	7♂14	9♂42	3♂ 1	3♂33	29♂58	15♂51	17♂18	21♂36	14♂55	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	15n 2	1s11	4n20	21n46	2n 5	2n 4	1s41	10n19	0s31	19s 7	0s25	19n17	0n59	11n12	0n47	10n44
M 2	15 20	4n18	4 48	22 14	2 11	2 32	1 42	10 35	0 31	19 6	0 25	19 17	0 59	11 12	0 47	10 45
T 3	15 38	9 32	5 2	22 40	2 16	3 0	1 42	10 52	0 30	19 5	0 25	19 16	0 59	11 12	0 47	10 46
W 4	15 56	14 18	5 0	23 4	2 20	3 28	1 43	11 8	0 29	19 5	0 25	19 15	0 58	11 12	0 47	10 47
T 5	16 13	18 25	4 45	23 25	2 24	3 55	1 43	11 24	0 29	19 4	0 25	19 15	0 58	11 12	0 47	10 47
F 6	16 30	21 42	4 17	23 43	2 26	4 23	1 44	11 40	0 28	19 3	0 26	19 14	0 58	11 13	0 47	10 48
S 7	16 47	24 0	3 38	23 59	2 28	4 51	1 44	11 56	0 28	19 2	0 26	19 13	0 58	11 13	0 47	10 49
S 8	17 3	25 13	2 49	24 13	2 29	5 18	1 44	12 12	0 27	19 2	0 26	19 12	0 58	11 13	0 47	10 50
M 9	17 19	25 16	1 53	24 25	2 29	5 45	1 44	12 28	0 26	19 1	0 26	19 11	0 58	11 13	0 47	10 50
T 10	17 35	24 11	0 53	24 34	2 28	6 13	1 44	12 43	0 26	19 1	0 26	19 11	0 58	11 13	0 47	10 51
W11	17 51	22 1	0s10	24 42	2 27	6 40	1 44	12 59	0 25	19 0	0 27	19 10	0 58	11 13	0 47	10 52
T 12	18 6	18 52	1 14	24 47	2 24	7 7	1 44	13 14	0 25	19 0	0 27	19 9	0 58	11 12	0 47	10 52
F 13	18 21	14 53	2 15	24 51	2 20	7 34	1 43	13 29	0 24	18 59	0 27	19 8	0 58	11 12	0 47	10 53
S 14	18 36	10 12	3 11	24 53	2 15	8 1	1 43	13 44	0 23	18 59	0 27	19 7	0 58	11 12	0 47	10 54
S 15	18 50	4 58	4 0	24 52	2 10	8 27	1 43	13 59	0 23	18 58	0 27	19 6	0 58	11 12	0 46	10 55
M16	19 4	0s39	4 38	24 51	2 3	8 54	1 42	14 14	0 22	18 58	0 28	19 5	0 58	11 12	0 46	10 55
T 17	19 18	6 25	5 1	24 47	1 55	9 20	1 42	14 28	0 22	18 58	0 28	19 4	0 58	11 12	0 46	10 56
W18	19 32	12 4	5 7	24 42	1 47	9 46	1 41	14 43	0 21	18 58	0 28	19 3	0 58	11 12	0 46	10 57
T 19	19 45	17 13	4 55	24 35	1 37	10 12	1 40	14 57	0 20	18 57	0 28	19 2	0 58	11 12	0 46	10 57
F 20	19 57	21 27	4 22	24 28	1 27	10 38	1 40	15 11	0 20	18 57	0 28	19 1	0 58	11 11	0 46	10 58
S 21	20 10	24 17	3 30	24 18	1 16	11 4	1 39	15 25	0 19	18 57	0 29	18 59	0 58	11 11	0 46	10 59
S 22	20 22	25 21	2 23	24 7	1 3	11 29	1 38	15 39	0 18	18 57	0 29	18 58	0 58	11 11	0 46	10 59
M23	20 34	24 33	1 7	23 55	0 50	11 54	1 37	15 53	0 18	18 57	0 29	18 57	0 58	11 11	0 46	11 0
T 24	20 45	22 1	0n13	23 42	0 36	12 19	1 36	16 6	0 17	18 57	0 29	18 56	0 58	11 10	0 46	11 1
W25	20 56	18 6	1 30	23 27	0 22	12 43	1 35	16 19	0 16	18 58	0 30	18 55	0 58	11 10	0 46	11 1
T 26	21 7	13 16	2 40	23 12	0 6	13 7	1 34	16 33	0 16	18 58	0 30	18 54	0 58	11 10	0 46	11 2
F 27	21 17	7 54	3 38	22 56	0s10	13 31	1 33	16 46	0 15	18 58	0 30	18 52	0 58	11 9	0 46	11 3
S 28	21 27	2 18	4 23	22 38	0 26	13 55	1 31	16 58	0 14	18 58	0 30	18 51	0 58	11 9	0 46	11 3
S 29	21 37	3n14	4 54	22 21	0 43	14 18	1 30	17 11	0 14	18 59	0 30	18 50	0 58	11 8	0 46	11 4
M30	21 46	8 30	5 9	22 2	1 0	14 41	1 29	17 24	0 13	18 59	0 31	18 48	0 58	11 8	0 46	11 5
T 31	21n55	13n20	5n 9	21n43	1s18	15n 4	1s27	17n36	0s13	19s 0	0s31	18n47	0n58	11n 8	0n46	11n 5

Julian Day Number = 2346475.5, Delta T = 11.14 sec
 Ecliptic obliquity = 23°28'39", Nutation = 0°00'15", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°43'28", Lahiri = 19°50'29"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1712
geocentric

JUNE 1712

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	16 38 11	10II2708	4812	18°R25	16831	20850	7°R13	9847	3m 2	3835	29859	15°R45	17815	21II42	14°R54	W 1
T 2	16 42 8	11°24'34	16°18	17II57	17°44	21°33	7811	9°52	3° 3	3°37	29°59	15839	17°12	21°49	14853	T 2
F 3	16 46 4	12°21'58	28°16	17°28	18°57	22°17	7°10	9°57	3° 4	3°39	29°59	15°33	17° 9	21°56	14°52	F 3
S 4	16 50 1	13°19'22	10II 8	16°56	20° 9	23° 0	7° 8	10° 3	3° 6	3°41	0m 1	15°28	17° 5	22° 2	14°51	S 4
S 5	16 53 57	14°16'45	21°57	16°23	21°22	23°43	7° 6	10° 8	3° 7	3°43	0° 1	15°25	17° 2	22° 9	14°50	S 5
M 6	16 57 54	15°14'07	3845	15°50	22°35	24°26	7° 4	10°13	3° 8	3°45	0° 2	15°23	16°59	22°16	14°49	M 6
T 7	17 1 51	16°11'28	15°33	15°16	23°47	25° 9	7° 2	10°19	3°10	3°46	0° 3	15°D22	16°56	22°22	14°48	T 7
W 8	17 5 47	17° 8'49	27°24	14°43	25° 0	25°52	7° 0	10°25	3°11	3°48	0° 4	15°23	16°53	22°29	14°47	W 8
T 9	17 9 44	18° 6'08	9823	14°11	26°13	26°34	6°57	10°30	3°13	3°50	0° 5	15°24	16°50	22°36	14°46	T 9
F 10	17 13 40	19° 3'27	21°32	13°40	27°26	27°17	6°54	10°36	3°14	3°52	0° 5	15°26	16°46	22°42	14°44	F 10
S 11	17 17 37	20° 0'44	3m 57	13°12	28°38	28° 0	6°51	10°42	3°16	3°53	0° 6	15°27	16°43	22°49	14°43	S 11
S 12	17 21 33	20°58'01	16°40	12°45	29°51	28°42	6°48	10°47	3°18	3°55	0° 7	15°R28	16°40	22°55	14°41	S 12
M13	17 25 30	21°55'17	29°46	12°22	1II 4	29°25	6°45	10°53	3°19	3°57	0° 8	15°28	16°37	23° 2	14°40	M13
T 14	17 29 27	22°52'32	13818	12° 3	2°17	0II 8	6°41	10°59	3°21	3°58	0° 9	15°27	16°34	23° 9	14°38	T 14
W15	17 33 23	23°49'47	27°17	11°46	3°30	0°50	6°38	11° 5	3°23	4° 0	0°10	15°25	16°31	23°15	14°37	W15
T 16	17 37 20	24°47'00	11m 43	11°34	4°43	1°32	6°34	11°11	3°25	4° 2	0°11	15°22	16°27	23°22	14°35	T 16
F 17	17 41 16	25°44'13	26°31	11°26	5°55	2°15	6°30	11°17	3°27	4° 3	0°12	15°20	16°24	23°29	14°33	F 17
S 18	17 45 13	26°41'26	11836	11°D23	7° 8	2°57	6°26	11°24	3°29	4° 5	0°13	15°17	16°21	23°35	14°32	S 18
S 19	17 49 9	27°38'38	26°49	11°24	8°21	3°39	6°21	11°30	3°31	4° 6	0°14	15°16	16°18	23°42	14°30	S 19
M20	17 53 6	28°35'50	1280	0 11°30	9°34	4°22	6°17	11°36	3°33	4° 8	0°15	15°D15	16°15	23°49	14°28	M20
T 21	17 57 2	29°33'01	27° 0	11°40	10°47	5° 4	6°12	11°42	3°35	4° 9	0°17	15°16	16°11	23°55	14°26	T 21
W22	18 0 59	0830'12	11840	11°56	12° 0	5°46	6° 7	11°49	3°37	4°11	0°18	15°16	16° 8	24° 2	14°24	W22
T 23	18 4 56	1°27'23	25°57	12°16	13°13	6°28	6° 2	11°55	3°39	4°12	0°19	15°17	16° 5	24° 9	14°22	T 23
F 24	18 8 52	2°24'35	9848	12°41	14°26	7°10	5°57	12° 2	3°41	4°13	0°20	15°18	16° 2	24°15	14°20	F 24
S 25	18 12 49	3°21'46	23°12	13°10	15°39	7°52	5°52	12° 8	3°43	4°15	0°21	15°19	15°59	24°22	14°17	S 25
S 26	18 16 45	4°18'57	6813	13°45	16°52	8°34	5°46	12°15	3°46	4°16	0°23	15°R19	15°56	24°29	14°15	S 26
M27	18 20 42	5°16'09	18°52	14°24	18° 5	9°15	5°41	12°22	3°48	4°17	0°24	15°19	15°52	24°35	14°13	M27
T 28	18 24 38	6°13'20	1814	15° 7	19°18	9°57	5°35	12°28	3°50	4°19	0°25	15°18	15°49	24°42	14°11	T 28
W29	18 28 35	7°10'32	13°22	15°55	20°32	10°39	5°29	12°35	3°53	4°20	0°27	15°17	15°46	24°49	14° 8	W29
T 30	18 32 31	88744	25820	16II48	21II45	11II20	5823	12842	3m 55	4821	0m 28	15816	15843	24II55	1486	T 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	22n 3	17n34	4n55	21n24	1s35	15n26	1s26	17n48	0s12	19s 0	0s31	18n46	0n58	11n 7	0n46	11n 6	1s44	22n58	12n19	22s33	22s22	25n26	9s39	7n 2	
T 2	22 11	21 1	4 28	21 4	1 52	15 48	1 24	18 0	0 11	19 1	0 31	18 44	0 58	11 7	0 46	11 6	1 44	22 58	12 18	22 33	22 22	25 26	9 39	7 3	
F 3	22 19	23 32	3 49	20 45	2 9	16 10	1 22	18 12	0 11	19 1	0 32	18 43	0 58	11 6	0 46	11 7	1 44	22 57	12 18	22 34	22 23	25 25	9 39	7 3	
S 4	22 26	24 59	3 1	20 25	2 25	16 31	1 21	18 23	0 10	19 2	0 32	18 41	0 58	11 6	0 46	11 8	1 44	22 57	12 18	22 35	22 23	25 25	9 39	7 4	
S 5	22 33	25 19	2 5	20 6	2 41	16 52	1 19	18 35	0 9	19 2	0 32	18 40	0 58	11 5	0 46	11 8	1 44	22 56	12 18	22 35	22 23	25 25	9 38	7 4	
M 6	22 39	24 29	1 3	19 48	2 56	17 12	1 17	18 46	0 9	19 3	0 32	18 39	0 58	11 5	0 46	11 9	1 45	22 56	12 17	22 35	22 24	25 24	9 38	7 4	
T 7	22 46	22 33	0s 1	19 30	3 11	17 32	1 16	18 57	0 8	19 4	0 32	18 37	0 58	11 4	0 46	11 9	1 45	22 55	12 17	22 35	22 24	25 24	9 38	7 5	
W 8	22 51	19 38	1 6	19 13	3 24	17 51	1 14	19 8	0 7	19 5	0 33	18 36	0 58	11 4	0 46	11 10	1 45	22 55	12 17	22 35	22 25	25 23	9 38	7 5	
T 9	22 57	15 52	2 8	18 58	3 36	18 10	1 12	19 19	0 7	19 6	0 33	18 34	0 58	11 3	0 45	11 10	1 45	22 54	12 16	22 35	22 25	25 23	9 38	7 6	
F 10	23 2	11 24	3 6	18 43	3 47	18 29	1 10	19 29	0 6	19 7	0 33	18 32	0 58	11 2	0 45	11 11	1 45	22 54	12 16	22 35	22 25	25 23	9 38	7 6	
S 11	23 6	6 24	3 56	18 30	3 57	18 47	1 8	19 40	0 5	19 8	0 33	18 31	0 58	11 2	0 45	11 12	1 45	22 53	12 16	22 35	22 26	25 22	9 38	7 6	
S 12	23 10	1 2	4 36	18 19	4 5	19 5	1 6	19 50	0 5	19 9	0 33	18 29	0 58	11 1	0 45	11 12	1 45	22 52	12 16	22 35	22 26	25 22	9 38	7 7	
M13	23 14	4s33	5 4	18 9	4 12	19 22	1 4	20 0	0 4	19 10	0 34	18 28	0 58	11 0	0 45	11 13	1 45	22 52	12 15	22 35	22 27	25 21	9 38	7 7	
T 14	23 17	10 5	5 15	18 1	4 17	19 39	1 2	20 9	0 3	19 11	0 34	18 26	0 58	11 0	0 45	11 13	1 45	22 51	12 15	22 35	22 27	25 21	9 39	7 8	
W15	23 20	15 19	5 9	17 55	4 21	19 55	1 0	20 19	0 3	19 12	0 34	18 24	0 58	10 59	0 45	11 14	1 45	22 51	12 15	22 35	22 27	25 20	9 39	7 8	
T 16	23 22	19 51	4 43	17 51	4 24	20 10	0 57	20 28	0 2	19 13	0 34	18 23	0 58	10 58	0 45	11 14	1 45	22 50	12 15	22 35	22 28	25 20	9 39	7 8	
F 17	23 24	23 15	3 58	17 48	4 26	20 25	0 55	20 37	0 1	19 14	0 35	18 21	0 58	10 58	0 45	11 15	1 45	22 49	12 14	22 36	22 28	25 19	9 39	7 9	
S 18	23 26	25 6	2 55	17 48	4 26	20 40	0 53	20 46	0 1	19 15	0 35	18 19	0 58	10 57	0 45	11 15	1 45	22 49	12 14	22 36	22 28	25 19	9 39	7 9	
S 19	23 27	25 7	1 40	17 49	4 25	20 54	0 51	20 55	0n 0	19 17	0 35	18 18	0 58	10 56	0 45	11 15	1 45	22 48	12 14	22 36	22 29	25 18	9 39	7 9	
M20	23 28	23 14	0 18	17 52	4 22	21 7	0 48	21 4	0 1	19 18	0 35	18 16	0 58	10 55	0 45	11 16	1 45	22 48	12 13	22 36	22 29	25 18	9 40	7 10	
T 21	23 29	19 44	1n 5	17 57	4 19	21 20	0 46	21 12	0 1	19 19	0 35	18 14	0 58	10 55	0 45	11 16	1 45	22 47	12 13	22 36	22 30	25 17	9 40	7 10	
W22	23 29	15 3	2 21	18 3	4 14	21 33	0 44	21 20	0 2	19 21	0 36	18 12	0 58	10 54	0 45	11 17	1 45	22 46	12 13	22 36	22 30	25 17	9 40	7 10	
T 23	23 28	9 38	3 27	18 11	4 9	21 44	0 41	21 28	0 3	19 22	0 36	18 11	0 58	10 53	0 45	11 17	1 45	22 46	12 13	22 36	22 30	25 16	9 40	7 11	
F 24	23 27	3 55	4 18	18 21	4 2	21 55	0 39	21 36	0 4	19 24	0 36	18 9	0 58	10 52	0 45	11 18	1 45	22 45	12 13	22 36	22 31	25 16	9 41	7 11	
S 25	23 26	1n48	4 54	18 32	3 55	22 6	0 37	21 43	0 4	19 25	0 36	18 7	0 58	10 51	0 45	11 18	1 45	22 44	12 12	22 36	22 31	25 15	9 41	7 11	
S 26	23 24	7 16	5 13	18 44	3 47	22 16	0 34	21 51	0 5	19 27	0 36	18 5	0 58	10 50	0 45	11 18	1 45	22 44	12 12	22 36	22 32	25 15	9 41	7 12	
M27	23 22	12 17	5 16	18 57	3 38	22 25	0 32	21 58	0 6	19 28	0 37	18 3	0 58	10 50	0 45	11 19	1 45	22 43	12 12	22 36	22 32	25 14	9 42	7 12	
T 28	23 20	16 41	5 5	19 12	3 28	22 34	0 29	22 5	0 6	19 30	0 37	18 1	0 58	10 49	0 45	11 19	1 46	22 42	12 12	22 36	22 32	25 14	9 42	7 12	
W29	23 17	20 19	4 40	19 27	3 18	22 41	0 27	22 12	0 7	19 32	0 37	18 0	0 58	10 48	0 45	11 20	1 46	22 41	12 11	22 36	22 33	25 13	9 42	7 12	
T 30	23n14	23n 3	4n 3	19n43	3s 7	22n49	0s24	22n18	0n 8	19s33	0s37	17n58	0n58	10n47	0n45	11n20	1s46	22n41	12n11	22s36	22s33	25n13	9s43	7n13	

ASTRODIENST EPHEMERIS for the year 1712
geocentric

JULY 1712

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	18 36 28	9 ⁵⁵ 4'57	7 ¹¹ 12	17 ¹¹ 45	22 ¹¹ 58	12 ¹¹ 2	5°R17	12 ¹¹ 48	3 ¹¹ 58	4 ¹¹ 22	0 ¹¹ 29	15°R15	15 ¹¹ 40	25 ¹¹ 2	14°R 4	F 1
S 2	18 40 25	10° 2'09	19° 0	18° 47	24° 11	12° 43	5 ¹¹ 11	12° 55	4° 0	4° 24	0° 31	15 ¹¹ 15	15° 37	25° 9	14 ¹¹ 1	S 2
S 3	18 44 21	10°59'22	0 ¹¹ 48	19°53	25°24	13°25	5° 5	13° 2	4° 3	4° 25	0° 32	15°14	15°33	25°15	13°59	S 3
M 4	18 48 18	11°56'35	12°37	21° 3	26°38	14° 6	4°58	13° 9	4° 6	4° 26	0° 34	15°D14	15°30	25°22	13°56	M 4
T 5	18 52 14	12°53'48	24°30	22°17	27°51	14°48	4°52	13°16	4° 8	4° 27	0° 35	15°14	15°27	25°29	13°53	T 5
W 6	18 56 11	13°51'01	6 ¹¹ 30	23°36	29° 4	15°29	4°45	13°23	4°11	4° 28	0° 36	15°14	15°24	25°35	13°51	W 6
T 7	19 0 7	14°48'14	18°37	24°58	0 ¹¹ 17	16°10	4°38	13°30	4°14	4° 29	0° 38	15°R14	15°21	25°42	13°48	T 7
F 8	19 4 4	15°45'27	0 ¹¹ 56	26°25	1°31	16°51	4°31	13°37	4°16	4° 30	0° 39	15°14	15°17	25°49	13°45	F 8
S 9	19 8 0	16°42'40	13°28	27°56	2°44	17°33	4°24	13°44	4°19	4° 31	0° 41	15°14	15°14	25°55	13°43	S 9
S 10	19 11 57	17°39'53	26°16	29°30	3°57	18°14	4°17	13°52	4°22	4° 32	0° 43	15°14	15°11	26° 2	13°40	S 10
M 11	19 15 54	18°37'06	9 ¹¹ 23	1 ¹¹ 8	5°11	18°55	4°10	13°59	4°25	4° 33	0° 44	15°14	15° 8	26° 9	13°37	M 11
T 12	19 19 50	19°34'20	22°51	2°50	6°24	19°36	4° 3	14° 6	4° 28	4° 34	0° 46	15°D14	15° 5	26°15	13°34	T 12
W 13	19 23 47	20°31'33	6 ¹¹ 41	4°35	7°38	20°16	3°55	14°13	4°31	4° 35	0° 47	15°14	15° 2	26°22	13°31	W 13
T 14	19 27 43	21°28'47	20°53	6°24	8°51	20°57	3°48	14°21	4°34	4° 35	0° 49	15°14	14°58	26°28	13°28	T 14
F 15	19 31 40	22°26'01	5 ¹¹ 26	8°15	10° 5	21°38	3°41	14°28	4°37	4° 36	0° 51	15°15	14°55	26°35	13°25	F 15
S 16	19 35 36	23°23'15	20°16	10° 9	11°18	22°19	3°33	14°35	4°40	4° 37	0° 52	15°16	14°52	26°42	13°22	S 16
S 17	19 39 33	24°20'30	5 ¹¹ 16	12° 6	12°32	22°59	3°25	14°43	4°43	4° 38	0° 54	15°16	14°49	26°48	13°19	S 17
M 18	19 43 30	25°17'45	20°19	14° 6	13°45	23°40	3°18	14°50	4°46	4° 38	0° 56	15°R16	14°46	26°55	13°16	M 18
T 19	19 47 26	26°15'00	5 ¹¹ 16	16° 7	14°59	24°20	3°10	14°57	4°49	4° 39	0° 57	15°16	14°43	27° 2	13°13	T 19
W 20	19 51 23	27°12'16	19°59	18°10	16°12	25° 1	3° 3	15° 5	4°52	4° 40	0° 59	15°15	14°39	27° 8	13°10	W 20
T 21	19 55 19	28° 9'33	4 ¹¹ 21	20°14	17°26	25°41	2°55	15°12	4°55	4° 40	1° 1	15°13	14°36	27°15	13° 7	T 21
F 22	19 59 16	29° 6'51	18°19	22°20	18°40	26°22	2°47	15°20	4°59	4° 41	1° 3	15°12	14°33	27°22	13° 4	F 22
S 23	20 3 12	0 ¹¹ 4'09	1° 51	24°26	19°53	27° 2	2°39	15°27	5° 2	4° 41	1° 4	15°10	14°30	27°28	13° 1	S 23
S 24	20 7 9	1° 1'29	14°56	26°32	21° 7	27°42	2°32	15°35	5° 5	4° 42	1° 6	15° 9	14°27	27°35	12°58	S 24
M 25	20 11 5	1°58'50	2 ¹¹ 8	28°39	22°21	28°22	2°24	15°42	5° 8	4° 42	1° 8	15°D 8	14°23	27°42	12°55	M 25
T 26	20 15 2	2°56'11	10 ¹¹ 0	0 ¹¹ 45	23°34	29° 3	2°16	15°50	5°12	4° 43	1°10	15° 8	14°20	27°48	12°51	T 26
W 27	20 18 58	3°53'34	22° 6	2°51	24°48	29°43	2° 8	15°57	5°15	4° 43	1°12	15° 9	14°17	27°55	12°48	W 27
T 28	20 22 55	4°50'58	4 ¹¹ 2	4°56	26° 2	0 ¹¹ 23	2° 0	16° 5	5°18	4° 44	1°14	15°10	14°14	28° 2	12°45	T 28
F 29	20 26 52	5°48'23	15°51	7° 1	27°16	1° 3	1°53	16°13	5°22	4° 44	1°15	15°12	14°11	28° 8	12°42	F 29
S 30	20 30 48	6°45'50	27°39	9° 4	28°30	1°43	1°45	16°20	5°25	4° 44	1°17	15°13	14° 8	28°15	12°39	S 30
S 31	20 34 45	7 ¹¹ 43'17	9 ¹¹ 28	11 ¹¹ 7	29 ¹¹ 44	2 ¹¹ 23	1 ¹¹ 37	16 ¹¹ 28	5 ¹¹ 29	4 ¹¹ 44	1 ¹¹ 19	15°R14	14 ¹¹ 4	28 ¹¹ 22	12 ¹¹ 35	S 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	23n10	24n46	3n16	19n59	2s56	22n56	0s22	22n24	0n 8	19s35	0s37	17n56	0n58	10n46	0n45	11n20	1s46	22n40	12n11	22s36	22s33	25n12	9s43	7n13					
S 2	23 6	25 21	2 21	20 16	2 44	23 2	0 19	22 30	0 9	19 37	0 38	17 54	0 59	10 45	0 45	11 21	1 46	22 39	12 11	22 36	22 34	25 11	9 44	7 13					
S 3	23 1	24 48	1 19	20 34	2 32	23 7	0 17	22 36	0 10	19 38	0 38	17 52	0 59	10 44	0 45	11 21	1 46	22 39	12 11	22 36	22 34	25 11	9 44	7 13					
M 4	22 56	23 7	0 15	20 51	2 20	23 12	0 14	22 42	0 10	19 40	0 38	17 50	0 59	10 43	0 45	11 21	1 46	22 38	12 10	22 36	22 34	25 10	9 45	7 14					
T 5	22 51	20 25	0s51	21 8	2 7	23 16	0 12	22 47	0 11	19 42	0 38	17 48	0 59	10 42	0 45	11 22	1 46	22 37	12 10	22 36	22 35	25 10	9 45	7 14					
W 6	22 45	16 49	1 55	21 25	1 54	23 19	0 9	22 53	0 12	19 44	0 38	17 46	0 59	10 41	0 45	11 22	1 46	22 36	12 10	22 36	22 35	25 9	9 46	7 14					
T 7	22 39	12 29	2 55	21 42	1 41	23 22	0 7	22 58	0 12	19 46	0 39	17 44	0 59	10 40	0 45	11 22	1 46	22 36	12 10	22 36	22 36	25 8	9 46	7 14					
F 8	22 33	7 37	3 48	21 58	1 28	23 24	0 4	23 3	0 13	19 47	0 39	17 42	0 59	10 39	0 45	11 23	1 46	22 35	12 10	22 36	22 36	25 8	9 47	7 15					
S 9	22 26	2 21	4 30	22 13	1 15	23 25	0 2	23 7	0 14	19 49	0 39	17 40	0 59	10 38	0 44	11 23	1 46	22 34	12 9	22 36	22 36	25 7	9 47	7 15					
S 10	22 19	3s 7	5 0	22 27	1 2	23 26	0n 0	23 12	0 14	19 51	0 39	17 38	0 59	10 37	0 44	11 23	1 46	22 34	12 9	22 36	22 37	25 7	9 48	7 15					
M11	22 11	8 34	5 16	22 40	0 49	23 26	0 3	23 16	0 15	19 53	0 39	17 36	0 59	10 36	0 44	11 23	1 46	22 33	12 9	22 36	22 37	25 6	9 48	7 15					
T 12	22 3	13 46	5 15	22 51	0 36	23 25	0 5	23 20	0 16	19 55	0 39	17 34	0 59	10 35	0 44	11 24	1 46	22 32	12 9	22 36	22 37	25 5	9 49	7 15					
W13	21 54	18 25	4 56	23 1	0 23	23 23	0 8	23 24	0 17	19 57	0 40	17 32	0 59	10 34	0 44	11 24	1 46	22 31	12 9	22 36	22 38	25 5	9 50	7 15					
T 14	21 46	22 9	4 18	23 9	0 11	23 21	0 10	23 27	0 17	19 59	0 40	17 30	0 59	10 32	0 44	11 24	1 46	22 31	12 8	22 36	22 38	25 4	9 50	7 16					
F 15	21 36	24 35	3 24	23 15	0n 1	23 18	0 13	23 31	0 18	20 1	0 40	17 28	0 59	10 31	0 44	11 24	1 46	22 30	12 8	22 36	22 38	25 3	9 51	7 16					
S 16	21 27	25 21	2 14	23 18	0 13	23 15	0 15	23 34	0 19	20 2	0 40	17 25	0 59	10 30	0 44	11 24	1 47	22 29	12 8	22 36	22 39	25 3	9 52	7 16					
S 17	21 17	24 18	0 55	23 20	0 24	23 11	0 18	23 37	0 19	20 4	0 40	17 23	0 59	10 29	0 44	11 25	1 47	22 28	12 8	22 36	22 39	25 2	9 52	7 16					
M18	21 7	21 29	0n28	23 18	0 35	23 6	0 20	23 40	0 20	20 6	0 40	17 21	0 59	10 28	0 44	11 25	1 47	22 27	12 8	22 36	22 39	25 1	9 53	7 16					
T 19	20 56	17 14	1 49	23 15	0 45	23 0	0 22	23 42	0 21	20 8	0 41	17 19	0 59	10 27	0 44	11 25	1 47	22 27	12 8	22 36	22 40	25 1	9 54	7 16					
W20	20 45	11 59	3 1	23 8	0 54	22 54	0 25	23 44	0 21	20 10	0 41	17 17	0 59	10 26	0 44	11 25	1 47	22 26	12 8	22 36	22 40	25 0	9 55	7 16					
T 21	20 34	6 12	4 0	22 59	1 3	22 47	0 27	23 47	0 22	20 12	0 41	17 15	0 59	10 24	0 44	11 25	1 47	22 25	12 7	22 36	22 41	24 59	9 55	7 17					
F 22	20 22	0 17	4 43	22 47	1 11	22 39	0 29	23 48	0 23	20 14	0 41	17 13	0 59	10 23	0 44	11 25	1 47	22 24	12 7	22 37	22 41	24 58	9 56	7 17					
S 23	20 10	5n27	5 8	22 33	1 18	22 31	0 31	23 50	0 24	20 16	0 41	17 10	0 59	10 22	0 44	11 25	1 47	22 24	12 7	22 37	22 41	24 58	9 57	7 17					
S 24	19 58	10 45	5 16	22 15	1 24	22 22	0 34	23 52	0 24	20 18	0 41	17 8	0 59	10 21	0 44	11 26	1 47	22 23	12 7	22 37	22 42	24 57	9 58	7 17					
M25	19 45	15 27	5 9	21 56	1 30	22 13	0 36	23 53	0 25	20 20	0 41	17 6	0 59	10 20	0 44	11 26	1 47	22 22	12 7	22 37	22 42	24 56	9 58	7 17					
T 26	19 32	19 22	4 47	21 33	1 34	22 2	0 38	23 54	0 26	20 22	0 42	17 4	1 0	10 18	0 44	11 26	1 47	22 21	12 7	22 37	22 42	24 56	9 59	7 17					
W27	19 19	22 24	4 13	21 9	1 38	21 52	0 40	23 55	0 26	20 24	0 42	17 2	1 0	10 17	0 44	11 26	1 47	22 21	12 7	22 37	22 43	24 55	10 0	7 17					
T 28	19 5	24 24	3 28	20 42	1 41	21 40	0 42	23 56	0 27	20 25	0 42	16 59	1 0	10 16	0 44	11 26	1 47	22 20	12 7	22 37	22 43	24 54	10 1	7 17					
F 29	18 51	25 18	2 35	20 13	1 44	21 28	0 44	23 56	0 28	20 27	0 42	16 57	1 0	10 15	0 44	11 26	1 47	22 19	12 7	22 37	22 43	24 53	10 2	7 17					
S 30	18 37	25 3	1 36	19 43	1 45	21 15	0 46	23 56	0 28	20 29	0 42	16 55	1 0	10 13	0 44	11 26	1 47	22 18	12 7	22 36	22 44	24 53	10 3	7 17					
S 31	18n22	23n40	0n32	19n10	1n46	21n 2	0n48	23n56	0n29	20s31	0s42	16n53	1n 0	10n12	0n44	11n26	1s47	22n18	12n 6	22s36	22s44	24n52	10s 3	7n17					

ASTRODIENST EPHEMERIS for the year 1712

geocentric

AUGUST 1712

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	20 38 41	8♂40'45	21♂22	13♂ 8	0♂57	3♂ 2	1°R29	16♂35	5♂32	4♂45	1♂21	15°R14	14♂ 1	28♂28	12°R32	M 1
T 2	20 42 38	9°38'15	3♂23	15° 8	2°11	3°42	1♂22	16°43	5°35	4°45	1°23	15♂13	13°58	28°35	12°29	T 2
W 3	20 46 34	10°35'45	15°35	17° 6	3°25	4°22	1°14	16°51	5°39	4°45	1°25	15°11	13°55	28°42	12°26	W 3
T 4	20 50 31	11°33'17	27°57	19° 3	4°39	5° 1	1° 7	16°58	5°42	4°45	1°27	15° 7	13°52	28°48	12°22	T 4
F 5	20 54 28	12°30'49	10♂32	20°59	5°53	5°41	0°59	17° 6	5°46	4°45	1°29	15° 3	13°49	28°55	12°19	F 5
S 6	20 58 24	13°28'23	23°19	22°53	7° 7	6°20	0°52	17°14	5°49	4°45	1°31	14°58	13°45	29° 1	12°16	S 6
S 7	21 2 21	14°25'57	6♂21	24°46	8°21	7° 0	0°44	17°21	5°53	4°45	1°33	14°54	13°42	29° 8	12°13	S 7
M 8	21 6 17	15°23'33	19°37	26°37	9°35	7°39	0°37	17°29	5°57	4°R45	1°35	14°51	13°39	29°15	12° 9	M 8
T 9	21 10 14	16°21'09	3♂ 8	28°27	10°49	8°19	0°30	17°37	6° 0	4°45	1°37	14°49	13°36	29°21	12° 6	T 9
W10	21 14 10	17°18'46	16°54	0♂15	12° 3	8°58	0°23	17°44	6° 4	4°45	1°39	14°D48	13°33	29°28	12° 3	W10
T11	21 18 7	18°16'24	0♂56	2° 2	13°18	9°37	0°15	17°52	6° 7	4°45	1°41	14°49	13°29	29°35	12° 0	T11
F12	21 22 3	19°14'04	15°12	3°47	14°32	10°16	0° 8	18° 0	6°11	4°45	1°43	14°50	13°26	29°41	11°56	F12
S13	21 26 0	20°11'44	29°41	5°31	15°46	10°55	0° 2	18° 8	6°15	4°45	1°45	14°51	13°23	29°48	11°53	S13
S14	21 29 57	21° 9'26	14♂19	7°13	17° 0	11°34	29♂55	18°15	6°18	4°45	1°47	14°R52	13°20	29°55	11°50	S14
M15	21 33 53	22° 7'08	29° 2	8°54	18°14	12°13	29°48	18°23	6°22	4°45	1°49	14°51	13°17	0♂ 1	11°47	M15
T16	21 37 50	23° 4'52	13♂42	10°34	19°28	12°52	29°42	18°31	6°26	4°44	1°51	14°49	13°14	0° 8	11°44	T16
W17	21 41 46	24° 2'37	28°14	12°12	20°43	13°31	29°35	18°38	6°29	4°44	1°53	14°44	13°10	0°15	11°41	W17
T18	21 45 43	25° 0'23	12♂31	13°49	21°57	14°10	29°29	18°46	6°33	4°44	1°55	14°39	13° 7	0°21	11°37	T18
F19	21 49 39	25°58'11	26°27	15°24	23°11	14°48	29°22	18°54	6°37	4°43	1°57	14°32	13° 4	0°28	11°34	F19
S20	21 53 36	26°56'01	9♂59	16°58	24°25	15°27	29°16	19° 1	6°41	4°43	1°59	14°26	13° 1	0°35	11°31	S20
S21	21 57 32	27°53'52	23° 7	18°30	25°40	16° 6	29°10	19° 9	6°44	4°43	2° 1	14°20	12°58	0°41	11°28	S21
M22	22 1 29	28°51'45	5♂51	20° 2	26°54	16°44	29° 5	19°16	6°48	4°42	2° 3	14°16	12°55	0°48	11°25	M22
T23	22 5 25	29°49'40	18°14	21°31	28° 8	17°23	28°59	19°24	6°52	4°42	2° 5	14°13	12°51	0°54	11°22	T23
W24	22 9 22	0♂47'37	0♂22	23° 0	29°23	18° 1	28°53	19°32	6°56	4°41	2° 7	14°D12	12°48	1° 1	11°19	W24
T25	22 13 19	1°45'36	12°17	24°27	0♂37	18°40	28°48	19°39	6°59	4°41	2° 9	14°13	12°45	1° 8	11°16	T25
F26	22 17 15	2°43'36	24° 6	25°52	1°52	19°18	28°43	19°47	7° 3	4°40	2°11	14°14	12°42	1°14	11°13	F26
S27	22 21 12	3°41'39	5♂54	27°16	3° 6	19°56	28°37	19°54	7° 7	4°39	2°13	14°15	12°39	1°21	11°10	S27
S28	22 25 8	4°39'43	17°46	28°39	4°20	20°34	28°33	20° 2	7°11	4°39	2°15	14°R16	12°35	1°28	11° 7	S28
M29	22 29 5	5°37'49	29°45	0♂ 0	5°35	21°12	28°28	20° 9	7°14	4°38	2°17	14°14	12°32	1°34	11° 5	M29
T30	22 33 1	6°35'57	11♂56	1°20	6°49	21°50	28°23	20°17	7°18	4°37	2°19	14°11	12°29	1°41	11° 2	T30
W31	22 36 58	7♂34'07	24♂21	2♂38	8♂ 4	22♂28	28♂19	20♂24	7♂22	4♂37	2♂21	14♂ 5	12♂26	1♂48	10♂59	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	18n 7	21n13	0s34	18n36	1n46	20n48	0n50	23n56	0n30	20s33	0s42	16n50	1n 0	10n11	0n44	11n26
T 2	17 52	17 50	1 38	18 1	1 46	20 33	0 52	23 56	0 30	20 35	0 42	16 48	1 0	10 9	0 44	11 26
W 3	17 36	13 39	2 39	17 24	1 45	20 18	0 54	23 55	0 31	20 36	0 43	16 46	1 0	10 8	0 44	11 26
T 4	17 21	8 52	3 33	16 46	1 43	20 2	0 56	23 55	0 32	20 38	0 43	16 44	1 0	10 7	0 44	11 26
F 5	17 5	3 39	4 18	16 7	1 41	19 46	0 58	23 54	0 33	20 40	0 43	16 41	1 0	10 6	0 44	11 26
S 6	16 48	1s48	4 51	15 27	1 38	19 29	0 59	23 53	0 33	20 42	0 43	16 39	1 0	10 4	0 44	11 26
S 7	16 32	7 15	5 9	14 47	1 35	19 11	1 1	23 51	0 34	20 43	0 43	16 37	1 0	10 3	0 44	11 26
M 8	16 15	12 29	5 12	14 6	1 31	18 53	1 3	23 50	0 35	20 45	0 43	16 35	1 0	10 2	0 44	11 26
T 9	15 58	17 13	4 57	13 24	1 27	18 34	1 4	23 48	0 35	20 47	0 43	16 32	1 0	10 0	0 44	11 26
W10	15 40	21 9	4 25	12 41	1 23	18 15	1 6	23 46	0 36	20 48	0 43	16 30	1 1	9 59	0 44	11 26
T11	15 23	23 55	3 37	11 58	1 18	17 56	1 7	23 44	0 37	20 50	0 43	16 28	1 1	9 57	0 44	11 26
F12	15 5	25 13	2 35	11 15	1 12	17 35	1 8	23 42	0 38	20 52	0 43	16 25	1 1	9 56	0 44	11 26
S13	14 47	24 51	1 22	10 32	1 6	17 15	1 10	23 40	0 38	20 53	0 43	16 23	1 1	9 55	0 44	11 25
S14	14 28	22 45	0 3	9 48	1 0	16 54	1 11	23 37	0 39	20 55	0 44	16 21	1 1	9 53	0 44	11 25
M15	14 10	19 8	1n16	9 5	0 54	16 32	1 12	23 34	0 40	20 56	0 44	16 18	1 1	9 52	0 44	11 25
T16	13 51	14 20	2 31	8 21	0 47	16 10	1 14	23 31	0 40	20 58	0 44	16 16	1 1	9 51	0 44	11 25
W17	13 32	8 46	3 34	7 37	0 41	15 48	1 15	23 28	0 41	20 59	0 44	16 14	1 1	9 49	0 44	11 25
T18	13 12	2 50	4 23	6 53	0 33	15 25	1 16	23 25	0 42	21 0	0 44	16 12	1 1	9 48	0 44	11 25
F19	12 53	3n 5	4 54	6 10	0 26	15 1	1 17	23 21	0 42	21 2	0 44	16 9	1 1	9 47	0 44	11 25
S20	12 33	8 41	5 9	5 26	0 19	14 37	1 18	23 18	0 43	21 3	0 44	16 7	1 1	9 45	0 44	11 24
S21	12 13	13 44	5 6	4 43	0 11	14 13	1 19	23 14	0 44	21 4	0 44	16 5	1 1	9 44	0 44	11 24
M22	11 53	18 1	4 48	4 0	0 3	13 49	1 20	23 10	0 45	21 6	0 44	16 2	1 2	9 42	0 44	11 24
T23	11 33	21 24	4 17	3 17	0s 5	13 24	1 20	23 6	0 45	21 7	0 44	16 0	1 2	9 41	0 44	11 24
W24	11 13	23 46	3 35	2 35	0 13	12 58	1 21	23 1	0 46	21 8	0 44	15 58	1 2	9 40	0 44	11 24
T25	10 52	25 1	2 44	1 53	0 22	12 33	1 22	22 57	0 47	21 9	0 44	15 55	1 2	9 38	0 44	11 23
F26	10 31	25 7	1 47	1 11	0 30	12 7	1 22	22 52	0 47	21 10	0 44	15 53	1 2	9 37	0 44	11 23
S27	10 10	24 6	0 45	0 30	0 39	11 40	1 23	22 47	0 48	21 11	0 44	15 51	1 2	9 35	0 44	11 23
S28	9 49	21 59	0s19	0s11	0 47	11 14	1 23	22 42	0 49	21 12	0 44	15 49	1 2	9 34	0 44	11 23
M29	9 28	18 53	1 23	0 51	0 56	10 47	1 24	22 37	0 50	21 13	0 44	15 46	1 2	9 33	0 44	11 22
T30	9 6	14 57	2 23	1 31	1 5	10 19	1 24	22 32	0 50	21 14	0 44	15 44	1 2	9 31	0 44	11 22
W31	8n45	10n19	3s18	2s10	1s13	9n52	1n24	22n26	0n51	21s15	0s44	15n42	1n 2	9n30	0n44	11n22

Julian Day Number = 2346567.5, Delta T = 11.10 sec
 Ecliptic obliquity = 23°28'38", Nutation = 0°00'18", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°43'41", Lahiri = 19°50'41"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1712
geocentric

SEPTEMBER 1712

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 40 54	8 ^h 32'18"	7 ^h 0	3 ^h 54	9 ^h 18	23 ^h 6	28 ^h R14	20 ^h 32	7 ^h 26	4 ^h R36	2 ^h 23	13 ^h R57	12 ^h 323	1 ^h 554	10 ^h R56	T 1
F 2	22 44 51	9°30'31"	19°56	5° 9	10°33	23°44	28 ^h 10	20°39	7°29	4 ^h 35	2°25	13 ^h 48	12°20	2° 1	10 ^h 54	F 2
S 3	22 48 48	10°28'46"	3 ^h 5	6°22	11°47	24°22	28° 6	20°47	7°33	4°34	2°27	13°38	12°16	2° 8	10°51	S 3
S 4	22 52 44	11°27'03"	16°29	7°33	13° 2	25° 0	28° 2	20°54	7°37	4°34	2°29	13°28	12°13	2°14	10°48	S 4
M 5	22 56 41	12°25'21"	0 ^h 3	8°42	14°17	25°37	27°59	21° 1	7°41	4°33	2°31	13°20	12°10	2°21	10°46	M 5
T 6	23 0 37	13°23'41"	13°48	9°49	15°31	26°15	27°55	21° 9	7°44	4°32	2°33	13°15	12° 7	2°28	10°43	T 6
W 7	23 4 34	14°22'02"	27°41	10°54	16°46	26°53	27°52	21°16	7°48	4°31	2°35	13°11	12° 4	2°34	10°41	W 7
T 8	23 8 30	15°20'25"	11 ^h 41	11°57	18° 0	27°30	27°49	21°23	7°52	4°30	2°37	13°D10	12° 0	2°41	10°38	T 8
F 9	23 12 27	16°18'50"	25°47	12°58	19°15	28° 7	27°46	21°30	7°56	4°29	2°39	13°10	11°57	2°47	10°36	F 9
S 10	23 16 23	17°17'16"	9 ^h 59	13°55	20°30	28°45	27°43	21°38	7°59	4°28	2°41	13°R11	11°54	2°54	10°33	S 10
S 11	23 20 20	18°15'44"	24°15	14°50	21°44	29°22	27°41	21°45	8° 3	4°27	2°43	13°10	11°51	3° 1	10°31	S 11
M12	23 24 17	19°14'14"	8 ^h 32	15°42	22°59	29°59	27°39	21°52	8° 7	4°26	2°45	13° 8	11°48	3° 7	10°29	M12
T 13	23 28 13	20°12'45"	22°48	16°31	24°14	0 ^h 36	27°37	21°59	8°11	4°25	2°47	13° 3	11°45	3°14	10°27	T 13
W14	23 32 10	21°11'17"	6 ^h 57	17°17	25°28	1°13	27°35	22° 6	8°14	4°24	2°49	12°55	11°41	3°21	10°24	W14
T 15	23 36 6	22° 9'52"	20°55	17°59	26°43	1°50	27°33	22°13	8°18	4°22	2°51	12°45	11°38	3°27	10°22	T 15
F 16	23 40 3	23° 8'28"	4 ^h 38	18°36	27°58	2°27	27°31	22°20	8°22	4°21	2°53	12°34	11°35	3°34	10°20	F 16
S 17	23 43 59	24° 7'07"	18° 2	19°10	29°12	3° 4	27°30	22°27	8°25	4°20	2°55	12°23	11°32	3°41	10°18	S 17
S 18	23 47 56	25° 5'48"	1 ^h 8	19°39	0 ^h 27	3°41	27°29	22°34	8°29	4°19	2°57	12°12	11°29	3°47	10°16	S 18
M19	23 51 52	26° 4'30"	13°47	20° 3	1°42	4°18	27°28	22°41	8°33	4°18	2°59	12° 3	11°26	3°54	10°14	M19
T 20	23 55 49	27° 3'15"	26°10	20°22	2°56	4°54	27°27	22°48	8°36	4°16	3° 1	11°57	11°22	4° 1	10°12	T 20
W21	23 59 46	28° 2'03"	8 ^h 17	20°35	4°11	5°31	27°26	22°55	8°40	4°15	3° 3	11°53	11°19	4° 7	10°11	W21
T 22	0 3 42	29° 0'52"	20°12	20°42	5°26	6° 7	27°26	23° 1	8°44	4°14	3° 4	11°52	11°16	4°14	10° 9	T 22
F 23	0 7 39	29°59'44"	2 ^h 1	20°R42	6°41	6°44	27°D26	23° 8	8°47	4°13	3° 6	11°D51	11°13	4°21	10° 7	F 23
S 24	0 11 35	0 ^h 58'39"	13°50	20°35	7°55	7°20	27°26	23°15	8°51	4°11	3° 8	11°R51	11°10	4°27	10° 6	S 24
S 25	0 15 32	1°57'35"	25°43	20°21	9°10	7°56	27°26	23°21	8°54	4°10	3°10	11°51	11° 6	4°34	10° 4	S 25
M26	0 19 28	2°56'34"	7 ^h 45	20° 0	10°25	8°33	27°27	23°28	8°58	4° 9	3°12	11°48	11° 3	4°40	10° 2	M26
T 27	0 23 25	3°55'35"	20° 2	19°31	11°40	9° 9	27°27	23°34	9° 1	4° 7	3°14	11°43	11° 0	4°47	10° 1	T 27
W28	0 27 21	4°54'38"	2 ^h 37	18°55	12°55	9°45	27°28	23°41	9° 5	4° 6	3°15	11°36	10°57	4°54	10° 0	W28
T 29	0 31 18	5°53'43"	15°32	18°11	14° 9	10°21	27°29	23°47	9° 8	4° 4	3°17	11°26	10°54	5° 0	9°58	T 29
F 30	0 35 15	6 ^h 52'50"	28 ^h 47	17 ^h 19	15 ^h 24	10 ^h 57	27 ^h 30	23 ^h 53	9 ^h 12	4 ^h 3	3 ^h 19	11 ^h 34	10 ^h 51	5 ^h 7	9 ^h 57	F 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	8n23	5n10	4s 5	2s49	1s22	9n24	1n25	22n21	0n52	21s16	0s44	15n39	1n 3	9n28	0n44	11n21	1s49	21n54	12n 7	22s45	22s54	24n24	10s34	7n13			
F 2	8 1	0s17	4 39	3 26	1 31	8 56	1 25	22 15	0 52	21 17	0 44	15 37	1 3	9 27	0 44	11 21	1 49	21 54	12 7	22 46	22 54	24 23	10 35	7 12			
S 3	7 39	5 49	5 0	4 3	1 40	8 27	1 25	22 9	0 53	21 18	0 44	15 35	1 3	9 26	0 44	11 21	1 49	21 53	12 7	22 47	22 55	24 22	10 36	7 12			
S 4	7 17	11 10	5 4	4 39	1 48	7 59	1 25	22 3	0 54	21 19	0 44	15 33	1 3	9 24	0 44	11 20	1 50	21 52	12 7	22 48	22 55	24 21	10 37	7 12			
M 5	6 55	16 4	4 52	5 15	1 57	7 30	1 25	21 57	0 55	21 19	0 44	15 30	1 3	9 23	0 44	11 20	1 50	21 52	12 7	22 48	22 55	24 20	10 38	7 11			
T 6	6 32	20 11	4 23	5 49	2 5	7 1	1 25	21 50	0 55	21 20	0 44	15 28	1 3	9 21	0 44	11 20	1 50	21 51	12 7	22 49	22 55	24 19	10 39	7 11			
W 7	6 10	23 13	3 38	6 23	2 14	6 32	1 24	21 44	0 56	21 21	0 44	15 26	1 3	9 20	0 44	11 19	1 50	21 50	12 8	22 49	22 56	24 18	10 40	7 11			
T 8	5 47	24 52	2 40	6 55	2 22	6 2	1 24	21 37	0 57	21 21	0 44	15 24	1 3	9 19	0 44	11 19	1 50	21 50	12 8	22 49	22 56	24 17	10 41	7 10			
F 9	5 25	24 56	1 31	7 26	2 30	5 33	1 24	21 31	0 58	21 22	0 44	15 21	1 3	9 17	0 44	11 19	1 50	21 49	12 8	22 49	22 56	24 16	10 42	7 10			
S 10	5 2	23 23	0 17	7 56	2 38	5 3	1 24	21 24	0 58	21 23	0 44	15 19	1 4	9 16	0 44	11 18	1 50	21 49	12 8	22 49	22 57	24 15	10 43	7 10			
S 11	4 39	20 20	0n59	8 25	2 46	4 33	1 23	21 17	0 59	21 23	0 44	15 17	1 4	9 14	0 44	11 18	1 50	21 48	12 8	22 49	22 57	24 14	10 44	7 9			
M12	4 16	16 3	2 11	8 52	2 54	4 3	1 23	21 9	1 0	21 23	0 44	15 15	1 4	9 13	0 44	11 18	1 50	21 47	12 8	22 50	22 57	24 13	10 45	7 9			
T 13	3 53	10 53	3 14	9 17	3 1	3 33	1 22	21 2	1 0	21 24	0 44	15 13	1 4	9 12	0 44	11 17	1 50	21 47	12 9	22 50	22 57	24 12	10 46	7 9			
W14	3 30	5 10	4 5	9 41	3 8	3 3	1 21	20 55	1 1	21 24	0 44	15 10	1 4	9 10	0 44	11 17	1 50	21 46	12 9	22 51	22 58	24 11	10 47	7 8			
T 15	3 7	0n42	4 41	10 4	3 15	2 33	1 21	20 47	1 2	21 25	0 44	15 8	1 4	9 9	0 44	11 16	1 50	21 46	12 9	22 52	22 58	24 10	10 48	7 8			
F 16	2 44	6 25	4 59	10 24	3 21	2 2	1 20	20 40	1 3	21 25	0 44	15 6	1 4	9 7	0 44	11 16	1 50	21 45	12 9	22 53	22 58	24 9	10 49	7 8			
S 17	2 20	11 43	5 1	10 42	3 27	1 32	1 19	20 32	1 3	21 25	0 44	15 4	1 4	9 6	0 44	11 15	1 50	21 45	12 9	22 54	22 59	24 8	10 49	7 7			
S 18	1 57	16 20	4 46	10 58	3 32	1 1	1 18	20 24	1 4	21 25	0 44	15 2	1 5	9 5	0 44	11 15	1 50	21 44	12 10	22 55	22 59	24 7	10 50	7 7			
M19	1 34	20 6	4 18	11 11	3 36	0 30	1 17	20 16	1 5	21 26	0 44	15 0	1 5	9 3	0 44	11 15	1 50	21 44	12 10	22 56	22 59	24 6	10 51	7 6			
T 20	1 10	22 51	3 38	11 22	3 40	0s 0	1 16	20 8	1 6	21 26	0 44	14 58	1 5	9 2	0 44	11 14	1 50	21 43	12 10	22 56	22 59	24 5	10 52	7 6			
W21	0 47	24 29	2 48	11 29	3 43	0 31	1 15	20 0	1 6	21 26	0 44	14 56	1 5	9 1	0 44	11 14	1 50	21 43	12 10	22 57	23 0	24 4	10 53	7 6			
T 22	0 24	24 59	1 52	11 34	3 45	1 2	1 14	19 51	1 7	21 26	0 44	14 53	1 5	8 59	0 44	11 13	1 50	21 42	12 10	22 57	23 0	24 2	10 54	7 5			
F 23	0 0	24 20	0 52	11 35	3 46	1 32	1 13	19 43	1 8	21 26	0 44	14 51	1 5	8 58	0 44	11 13	1 50	21 42	12 11	22 57	23 0	24 1	10 55	7 5			
S 24	0s23	22 35	0s10	11 32	3 46	2 3	1 12	19 34	1 9	21 26	0 44	14 49	1 5	8 57	0 44	11 12	1 50	21 41	12 11	22 57	23 0	24 0	10 55	7 4			
S 25	0 47	19 51	1 13	11 26	3 44	2 34	1 11	19 26	1 9	21 26	0 44	14 47	1 6	8 55	0 44	11 12	1 50	21 41	12 11	22 57	23 1	23 59	10 56	7 4			
M26	1 10	16 13	2 13	11 15	3 41	3 4	1 9	19 17	1 10	21 26	0 44	14 45	1 6	8 54	0 44	11 11	1 50	21 40	12 11	22 57	23 1	23 58	10 57	7 4			
T 27	1 34	11 51	3 8	11 0	3 37	3 35	1 8	19 8	1 11	21 26	0 44	14 43	1 6	8 53	0 44	11 11	1 51	21 40	12 12	22 58	23 1	23 57	10 58	7 3			
W28	1 57	6 54	3 55	10 40	3 31	4 5	1 6	18 59	1 12	21 25	0 44	14 41	1 6	8 51	0 44	11 10	1 51	21 39	12 12	22 58	23 2	23 56	10 59	7 3			
T 29	2 21	1 33	4 31	10 16	3 23	4 36	1 5	18 50	1 12	21 25	0 44	14 39	1 6	8 50	0 44	11 10	1 51	21 39	12 12	22 59	23 2	23 55	10 59	7 2			
F 30	2s44	4s 0	4s53	9s47	3s13	5s 6	1n 3	18n41	1n13	21s25	0s44	14n37	1n 6	8n49	0n44	11n 9	1s51	21n38	12n12	23s 0	23s 2	23n54	11s 0	7n 2			

ASTRODIENST EPHEMERIS for the year 1712
geocentric

OCTOBER 1712

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 39 11	7♂52°00	12♂20	16°R22	16♂39	11♂32	27♂32	24♂0 0	9♂15	4°R 1	3♂21	11°R 1	10♂47	5♂14	9°R56	S 1
S 2	0 43 8	8°51'12	26° 9	15♂19	17°54	12° 8	27°33	24° 6	9°19	4♂ 0	3°22	10♂48	10°44	5°20	9♂55	S 2
M 3	0 47 4	9°50'25	10♂ 9	14°11	19° 9	12°44	27°35	24°12	9°22	3°58	3°24	10°38	10°41	5°27	9°53	M 3
T 4	0 51 1	10°49'41	24°17	13° 1	20°23	13°19	27°37	24°18	9°25	3°57	3°26	10°30	10°38	5°34	9°52	T 4
W 5	0 54 57	11°48'58	8♂28	11°50	21°38	13°55	27°39	24°24	9°29	3°55	3°28	10°25	10°35	5°40	9°52	W 5
T 6	0 58 54	12°48'18	22°38	10°40	22°53	14°30	27°41	24°30	9°32	3°54	3°29	10°23	10°32	5°47	9°51	T 6
F 7	1 2 50	13°47'39	6♂47	9°33	24° 8	15° 5	27°44	24°36	9°35	3°52	3°31	10°22	10°28	5°54	9°50	F 7
S 8	1 6 47	14°47'01	20°52	8°31	25°23	15°41	27°47	24°42	9°39	3°51	3°33	10°22	10°25	6° 0	9°49	S 8
S 9	1 10 44	15°46'26	4♂53	7°35	26°38	16°16	27°50	24°48	9°42	3°49	3°34	10°21	10°22	6° 7	9°48	S 9
M10	1 14 40	16°45'52	18°50	6°48	27°53	16°51	27°53	24°53	9°45	3°48	3°36	10°18	10°19	6°13	9°48	M10
T 11	1 18 37	17°45'20	2♂41	6°10	29° 7	17°26	27°56	24°59	9°48	3°46	3°37	10°13	10°16	6°20	9°47	T 11
W12	1 22 33	18°44'50	16°24	5°43	0♂22	18° 0	28° 0	25° 5	9°51	3°44	3°39	10° 4	10°12	6°27	9°47	W12
T 13	1 26 30	19°44'21	29°57	5°27	1°37	18°35	28° 3	25°10	9°54	3°43	3°40	9°53	10° 9	6°33	9°46	T 13
F 14	1 30 26	20°43'55	13°V18	5°D21	2°52	19°10	28° 7	25°16	9°58	3°41	3°42	9°41	10° 6	6°40	9°46	F 14
S 15	1 34 23	21°43'30	26°24	5°27	4° 7	19°44	28°11	25°21	10° 1	3°39	3°43	9°28	10° 3	6°47	9°46	S 15
S 16	1 38 19	22°43'08	9♂14	5°44	5°22	20°19	28°16	25°26	10° 4	3°38	3°45	9°16	10° 0	6°53	9°45	S 16
M17	1 42 16	23°42'48	21°48	6°11	6°36	20°53	28°20	25°32	10° 7	3°36	3°46	9° 5	9°57	7° 0	9°45	M17
T 18	1 46 12	24°42'30	4♂ 5	6°47	7°51	21°27	28°25	25°37	10°10	3°35	3°48	8°58	9°53	7° 7	9°45	T 18
W19	1 50 9	25°42'14	16° 9	7°32	9° 6	22° 2	28°29	25°42	10°13	3°33	3°49	8°53	9°50	7°13	9°D45	W19
T 20	1 54 6	26°42'00	28° 3	8°25	10°21	22°36	28°34	25°47	10°15	3°31	3°51	8°51	9°47	7°20	9°45	T 20
F 21	1 58 2	27°41'49	9♂52	9°24	11°36	23°10	28°39	25°52	10°18	3°30	3°52	8°D50	9°44	7°27	9°45	F 21
S 22	2 1 59	28°41'39	21°39	10°30	12°51	23°44	28°45	25°57	10°21	3°28	3°53	8°51	9°41	7°33	9°45	S 22
S 23	2 5 55	29°41'32	3♂31	11°42	14° 5	24°17	28°50	26° 1	10°24	3°26	3°55	8°R51	9°37	7°40	9°46	S 23
M24	2 9 52	0♂41'27	15°34	12°58	15°20	24°51	28°56	26° 6	10°27	3°24	3°56	8°49	9°34	7°46	9°46	M24
T 25	2 13 48	1°41'25	27°52	14°18	16°35	25°25	29° 2	26°11	10°29	3°23	3°57	8°46	9°31	7°53	9°46	T 25
W26	2 17 45	2°41'24	10♂30	15°42	17°50	25°58	29° 8	26°15	10°32	3°21	3°58	8°41	9°28	8° 0	9°47	W26
T 27	2 21 41	3°41'26	23°32	17° 8	19° 5	26°31	29°14	26°20	10°35	3°19	4° 0	8°33	9°25	8° 6	9°47	T 27
F 28	2 25 38	4°41'29	6♂58	18°37	20°20	27° 5	29°20	26°24	10°37	3°18	4° 1	8°23	9°22	8°13	9°48	F 28
S 29	2 29 35	5°41'35	20°48	20° 8	21°35	27°38	29°27	26°28	10°40	3°16	4° 2	8°12	9°18	8°20	9°48	S 29
S 30	2 33 31	6°41'43	4♂58	21°40	22°50	28°11	29°33	26°32	10°42	3°14	4° 3	8° 2	9°15	8°26	9°49	S 30
M31	2 37 28	7♂41'52	19♂24	23♂14	24♂ 4	28♂44	29♂40	26♂36	10♂45	3♂13	4♂ 4	7♂53	9♂12	8♂33	9♂50	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	3s 8	9s29	5s 0	9s14	3s 2	5s36	1n 2	18n32	1n14	21s25	0s44	14n35	1n 7	8n48	0n44	11n 9	1s51
S 2	3 31	14 36	4 50	8 37	2 48	6 6	1 0	18 23	1 15	21 24	0 44	14 33	1 7	8 46	0 44	11 8	1 51
M 3	3 34	19 1	4 22	7 57	2 33	6 37	0 58	18 13	1 15	21 24	0 44	14 32	1 7	8 45	0 44	11 8	1 51
T 4	4 18	22 23	3 38	7 14	2 16	7 6	0 57	18 4	1 16	21 23	0 44	14 30	1 7	8 44	0 44	11 7	1 51
W 5	4 41	24 23	2 40	6 29	1 57	7 36	0 55	17 54	1 17	21 23	0 44	14 28	1 7	8 43	0 44	11 7	1 51
T 6	5 4	24 49	1 32	5 44	1 38	8 6	0 53	17 45	1 18	21 22	0 44	14 26	1 7	8 41	0 44	11 6	1 51
F 7	5 27	23 37	0 19	4 59	1 18	8 35	0 51	17 35	1 19	21 22	0 44	14 24	1 7	8 40	0 44	11 5	1 51
S 8	5 50	20 57	0n55	4 15	0 37	9 4	0 49	17 25	1 19	21 21	0 44	14 22	1 8	8 39	0 44	11 5	1 51
S 9	6 13	17 2	2 6	3 35	0 37	9 33	0 47	17 16	1 20	21 21	0 44	14 21	1 8	8 38	0 44	11 4	1 51
M10	6 36	12 13	3 8	2 57	0 16	10 2	0 45	17 6	1 21	21 20	0 44	14 19	1 8	8 37	0 44	11 4	1 51
T 11	6 59	6 49	3 59	2 25	0n 3	10 31	0 43	16 56	1 22	21 19	0 44	14 17	1 8	8 35	0 44	11 3	1 51
W12	7 21	1 8	4 36	1 57	0 21	10 59	0 41	16 46	1 22	21 19	0 44	14 15	1 8	8 34	0 44	11 3	1 51
T 13	7 44	4n31	4 56	1 35	0 38	11 27	0 39	16 36	1 23	21 18	0 44	14 14	1 8	8 33	0 44	11 2	1 51
F 14	8 6	9 52	5 0	1 15	0 54	11 55	0 37	16 26	1 24	21 17	0 44	14 12	1 9	8 32	0 44	11 2	1 51
S 15	8 29	14 40	4 48	1 8	1 8	12 22	0 34	16 16	1 25	21 16	0 44	14 10	1 9	8 31	0 44	11 1	1 51
S 16	8 51	18 43	4 21	1 3	1 21	12 49	0 32	16 5	1 26	21 15	0 44	14 9	1 9	8 30	0 44	11 0	1 51
M17	9 13	21 49	3 42	1 3	1 32	13 16	0 30	15 55	1 26	21 14	0 44	14 7	1 9	8 29	0 44	11 0	1 51
T 18	9 35	23 50	2 53	1 9	1 41	13 43	0 28	15 45	1 27	21 13	0 44	14 5	1 9	8 27	0 44	10 59	1 51
W19	9 57	24 42	1 58	1 20	1 49	14 9	0 25	15 35	1 28	21 12	0 44	14 4	1 10	8 26	0 45	10 59	1 51
T 20	10 19	24 25	0 57	1 35	1 55	14 35	0 23	15 24	1 29	21 11	0 44	14 2	1 10	8 25	0 45	10 58	1 51
F 21	10 40	23 1	0s 5	1 54	2 0	15 1	0 21	15 14	1 30	21 10	0 43	14 1	1 10	8 24	0 45	10 58	1 51
S 22	11 2	20 37	1 8	2 17	2 3	15 26	0 18	15 3	1 30	21 9	0 43	13 59	1 10	8 23	0 45	10 57	1 51
S 23	11 23	17 20	2 8	2 42	2 6	15 51	0 16	14 53	1 31	21 8	0 43	13 58	1 10	8 22	0 45	10 56	1 51
M24	11 44	13 17	3 3	3 11	2 7	16 15	0 13	14 42	1 32	21 7	0 43	13 57	1 11	8 21	0 45	10 56	1 51
T 25	12 5	8 38	3 50	3 42	2 7	16 39	0 11	14 32	1 33	21 6	0 43	13 55	1 11	8 20	0 45	10 55	1 51
W26	12 26	3 30	4 28	4 14	2 7	17 2	0 8	14 21	1 34	21 4	0 43	13 54	1 11	8 19	0 45	10 55	1 51
T 27	12 46	1s55	4 54	4 49	2 5	17 26	0 6	14 11	1 35	21 3	0 43	13 53	1 11	8 18	0 45	10 54	1 51
F 28	13 6	7 25	5 4	5 24	2 3	17 48	0 3	14 0	1 35	21 2	0 43	13 51	1 11	8 17	0 45	10 54	1 51
S 29	13 26	12 42	4 57	6 1	2 0	18 10	0 1	13 49	1 36	21 0	0 43	13 50	1 11	8 16	0 45	10 53	1 51
S 30	13 46	17 27	4 31	6 39	1 57	18 32	0s 2	13 39	1 37	20 59	0 43	13 49	1 12	8 15	0 45	10 52	1 51
M31	14s 6	21s16	3s48	7s17	1n53	18s53	0s 4	13n28	1n38	20s57	0s43	13n47	1n12	8n14	0n45	10n52	1s51

Julian Day Number = 2346628.5, Delta T = 11.08 sec
Ecliptic obliquity = 23°28'38", Nutation = 0°00'16", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°43'49", Lahiri = 19°50'50"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1712
geocentric

NOVEMBER 1712

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	2 41 24	8♉42°04'	3♊59	24♊48	25♉19	29♉16	29♊47	26♉40	10♉47	3°R11	4♉5	7°R46	9♊9	8♊40	9♊51	T 1
W 2	2 45 21	9°42'17"	18°35'	26°24'	26°34'	29°49'	29°54'	26°44'	10°50'	3♊9	4°6'	7♊42	9°6'	8°46'	9°52'	W 2
T 3	2 49 17	10°42'32"	3♊7	28°0'	27°49'	0♉21	0♉1	26°48'	10°52'	3°8'	4°7'	7°D41	9°3'	8°53'	9°53'	T 3
F 4	2 53 14	11°42'48"	17°31'	29°36'	29°4'	0°54'	0°9'	26°52'	10°54'	3°6'	4°8'	7°41	8°59'	9°0'	9°54'	F 4
S 5	2 57 10	12°43'06"	1♉44	1♉13	0♊19	1°26'	0°16'	26°55'	10°56'	3°4'	4°9'	7°42	8°56'	9°6'	9°55'	S 5
S 6	3 1 7	13°43'25"	15°43'	2°50'	1°34'	1°58'	0°24'	26°59'	10°59'	3°3'	4°10'	7°R42	8°53'	9°13'	9°56'	S 6
M 7	3 5 4	14°43'45"	29°30'	4°27'	2°48'	2°30'	0°32'	27°2'	11°1'	3°1'	4°11'	7°41	8°50'	9°20'	9°57'	M 7
T 8	3 9 0	15°44'07"	13♉5	6°4'	4°3'	3°2'	0°40'	27°6'	11°3'	2°59'	4°12'	7°38	8°47'	9°26'	9°59'	T 8
W 9	3 12 57	16°44'30"	26°27'	7°40'	5°18'	3°34'	0°48'	27°9'	11°5'	2°58'	4°13'	7°32	8°43'	9°33'	10°0'	W 9
T 10	3 16 53	17°44'55"	9♉36	9°17'	6°33'	4°5'	0°56'	27°12'	11°7'	2°56'	4°14'	7°25	8°40'	9°39'	10°1'	T 10
F 11	3 20 50	18°45'21"	22°34'	10°54'	7°48'	4°37'	1°5'	27°15'	11°9'	2°54'	4°15'	7°16	8°37'	9°46'	10°3'	F 11
S 12	3 24 46	19°45'49"	5♉18	12°31'	9°2'	5°8'	1°13'	27°18'	11°11'	2°53'	4°15'	7°7	8°34'	9°53'	10°5'	S 12
S 13	3 28 43	20°46'18"	17°51'	14°7'	10°17'	5°39'	1°22'	27°21'	11°13'	2°51'	4°16'	6°58	8°31'	9°59'	10°6'	S 13
M14	3 32 39	21°46'49"	0♉19	15°43'	11°32'	6°10'	1°31'	27°24'	11°15'	2°50'	4°17'	6°51	8°28'	10°6'	10°8'	M14
T 15	3 36 36	22°47'21"	12°19'	17°19'	12°47'	6°41'	1°40'	27°26'	11°16'	2°48'	4°17'	6°46	8°24'	10°13'	10°10'	T 15
W16	3 40 33	23°47'55"	24°17'	18°55'	14°2'	7°12'	1°49'	27°29'	11°18'	2°47'	4°18'	6°43	8°21'	10°19'	10°11'	W16
T 17	3 44 29	24°48'31"	6♉8	20°31'	15°16'	7°42'	1°58'	27°31'	11°20'	2°45'	4°19'	6°D42	8°18'	10°26'	10°13'	T 17
F 18	3 48 26	25°49'08"	17°55'	22°6'	16°31'	8°12'	2°8'	27°34'	11°21'	2°44'	4°19'	6°43	8°15'	10°33'	10°15'	F 18
S 19	3 52 22	26°49'47"	29°42'	23°41'	17°46'	8°43'	2°17'	27°36'	11°23'	2°42'	4°20'	6°44	8°12'	10°39'	10°17'	S 19
S 20	3 56 19	27°50'28"	11♉34	25°16'	19°1'	9°13'	2°27'	27°38'	11°24'	2°41'	4°20'	6°46	8°9'	10°46'	10°19'	S 20
M21	4 0 15	28°51'10"	23°34'	26°51'	20°16'	9°43'	2°37'	27°40'	11°26'	2°39'	4°21'	6°R47	8°5'	10°53'	10°22'	M21
T 22	4 4 12	29°51'54"	5♉50	28°26'	21°30'	10°12'	2°46'	27°42'	11°27'	2°38'	4°21'	6°47	8°2'	10°59'	10°24'	T 22
W23	4 8 8	0♊52°39'	18°25'	0♊1	22°45'	10°42'	2°56'	27°44'	11°29'	2°36'	4°22'	6°46	7°59'	11°6'	10°26'	W23
T 24	4 12 5	1°53'26"	1♉24	1°35'	24°0'	11°11'	3°7'	27°45'	11°30'	2°35'	4°22'	6°43	7°56'	11°12'	10°28'	T 24
F 25	4 16 2	2°54'14"	14°49'	3°10'	25°15'	11°40'	3°17'	27°47'	11°31'	2°33'	4°23'	6°38	7°53'	11°19'	10°31'	F 25
S 26	4 19 58	3°55'04"	28°42'	4°44'	26°29'	12°9'	3°27'	27°48'	11°33'	2°32'	4°23'	6°33	7°49'	11°26'	10°33'	S 26
S 27	4 23 55	4°55'56"	13♉1	6°18'	27°44'	12°38'	3°38'	27°50'	11°34'	2°31'	4°23'	6°28	7°46'	11°32'	10°36'	S 27
M28	4 27 51	5°56'48"	27°41'	7°52'	28°59'	13°7'	3°48'	27°51'	11°35'	2°29'	4°24'	6°23	7°43'	11°39'	10°38'	M28
T 29	4 31 48	6°57'42"	12♊35	9°26'	0♉14	13°35'	3°59'	27°52'	11°36'	2°28'	4°24'	6°20	7°40'	11°46'	10°41'	T 29
W30	4 35 44	7♊58°37'	27♊36	11♊1	1♉28	14♉3	4♉10	27♉53	11♉37	2♉27	4♉24	6♉19	7♉37	11♉52	10♉43	W30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	14s25	23s46	2s50	7s56	1n49	19s14	0s7	13n17	1n39	20s56	0s43	13n46	1n12	8n14	0n45	10n51	1s51	21n31	12n23	23s15	23s10	23n14	11s17	6n46	
W 2	14 45	24 39	1 40	8 35	1 44	19 34	0 9	13 7	1 40	20 54	0 43	13 45	1 12	8 13	0 45	10 51	1 51	21 31	12 24	23 15	23 10	23 13	11 17	6 46	
T 3	15 4	23 51	0 24	9 14	1 39	19 54	0 12	12 56	1 41	20 53	0 43	13 44	1 12	8 12	0 45	10 50	1 51	21 31	12 24	23 15	23 10	23 12	11 17	6 45	
F 4	15 22	21 27	0n53	9 53	1 33	20 13	0 14	12 45	1 42	20 51	0 43	13 43	1 13	8 11	0 45	10 50	1 51	21 31	12 24	23 15	23 10	23 10	11 17	6 45	
S 5	15 41	17 46	2 6	10 33	1 28	20 31	0 17	12 35	1 42	20 49	0 43	13 42	1 13	8 10	0 45	10 49	1 51	21 31	12 25	23 15	23 11	23 9	11 18	6 44	
S 6	15 59	13 8	3 10	11 11	1 22	20 49	0 19	12 24	1 43	20 48	0 43	13 41	1 13	8 9	0 45	10 48	1 51	21 31	12 25	23 15	23 11	23 8	11 18	6 44	
M 7	16 17	7 53	4 2	11 50	1 16	21 7	0 22	12 13	1 44	20 46	0 43	13 40	1 13	8 9	0 45	10 48	1 51	21 31	12 26	23 15	23 11	23 6	11 18	6 43	
T 8	16 35	2 21	4 40	12 28	1 9	21 23	0 24	12 2	1 45	20 44	0 43	13 39	1 14	8 8	0 45	10 47	1 51	21 31	12 26	23 15	23 11	23 5	11 18	6 43	
W 9	16 52	3n12	5 1	13 6	1 3	21 40	0 27	11 52	1 46	20 42	0 43	13 38	1 14	8 7	0 45	10 47	1 51	21 31	12 27	23 16	23 11	23 4	11 18	6 42	
T 10	17 9	8 31	5 7	13 43	0 56	21 55	0 29	11 41	1 47	20 41	0 43	13 37	1 14	8 6	0 45	10 46	1 51	21 31	12 27	23 16	23 12	23 2	11 18	6 42	
F 11	17 26	13 22	4 56	14 20	0 50	22 10	0 32	11 30	1 48	20 39	0 43	13 36	1 14	8 6	0 45	10 46	1 51	21 31	12 27	23 17	23 12	23 1	11 18	6 41	
S 12	17 42	17 34	4 31	14 56	0 43	22 24	0 34	11 20	1 49	20 37	0 43	13 35	1 14	8 5	0 45	10 45	1 51	21 32	12 28	23 17	23 12	22 59	11 18	6 41	
S 13	17 58	20 54	3 53	15 31	0 36	22 38	0 37	11 9	1 50	20 35	0 43	13 35	1 15	8 4	0 45	10 45	1 51	21 32	12 28	23 18	23 12	22 58	11 18	6 40	
M14	18 14	23 14	3 5	16 6	0 29	22 51	0 39	10 58	1 51	20 33	0 43	13 34	1 15	8 4	0 45	10 44	1 51	21 32	12 29	23 18	23 12	22 57	11 18	6 40	
T 15	18 30	24 26	2 8	16 40	0 23	23 3	0 42	10 48	1 51	20 31	0 43	13 33	1 15	8 3	0 45	10 44	1 51	21 32	12 29	23 18	23 13	22 55	11 18	6 40	
W16	18 45	24 28	1 7	17 13	0 16	23 15	0 44	10 37	1 52	20 29	0 43	13 33	1 15	8 2	0 46	10 43	1 51	21 32	12 30	23 18	23 13	22 54	11 18	6 39	
T 17	19 0	23 23	0 3	17 46	0 9	23 26	0 47	10 27	1 53	20 27	0 43	13 32	1 15	8 2	0 46	10 43	1 51	21 32	12 30	23 18	23 13	22 52	11 18	6 39	
F 18	19 15	21 16	1s1	18 17	0 2	23 36	0 49	10 16	1 54	20 25	0 43	13 31	1 16	8 1	0 46	10 42	1 51	21 32	12 30	23 18	23 13	22 51	11 18	6 38	
S 19	19 29	18 15	2 2	18 48	0s4	23 46	0 51	10 6	1 55	20 22	0 43	13 31	1 16	8 1	0 46	10 42	1 51	21 33	12 31	23 18	23 13	22 50	11 18	6 38	
S 20	19 43	14 29	2 59	19 18	0 11	23 55	0 54	9 55	1 56	20 20	0 43	13 30	1 16	8 0	0 46	10 41	1 51	21 33	12 31	23 18	23 14	22 48	11 18	6 37	
M21	19 56	10 6	3 48	19 46	0 18	24 3	0 56	9 45	1 57	20 18	0 43	13 30	1 16	8 0	0 46	10 41	1 51	21 33	12 32	23 18	23 14	22 47	11 18	6 37	
T 22	20 9	5 14	4 28	20 14	0 24	24 10	0 58	9 35	1 58	20 16	0 43	13 29	1 17	7 59	0 46	10 40	1 51	21 33	12 32	23 18	23 14	22 45	11 18	6 36	
W23	20 22	0 2	4 57	20 41	0 31	24 17	1 0	9 24	1 59	20 13	0 43	13 29	1 17	7 59	0 46	10 40	1 51	21 34	12 33	23 18	23 14	22 44	11 18	6 36	
T 24	20 34	5s19	5 11	21 7	0 37	24 23	1 3	9 14	2 0	20 11	0 43	13 29	1 17	7 58	0 46	10 39	1 51	21 34	12 33	23 18	23 14	22 43	11 17	6 35	
F 25	20 46	10 36	5 9	21 32	0 44	24 28	1 5	9 4	2 1	20 9	0 43	13 28	1 17	7 58	0 46	10 39	1 51	21 34	12 34	23 19	23 15	22 41	11 17	6 35	
S 26	20 58	15 32	4 50	21 56	0 50	24 33	1 7	8 54	2 2	20 6	0 43	13 28	1 17	7 57	0 46	10 38	1 51	21 34	12 34	23 19	23 15	22 40	11 17	6 35	
S 27	21 9	19 46	4 12	22 19	0 56	24 36	1 9	8 43	2 3	20 4	0 43	13 28	1 18	7 57	0 46	10 38	1 50	21 35	12 34	23 19	23 15	22 38	11 17	6 34	
M28	21 20	22 51	3 16	22 40	1 2	24 39	1 11	8 33	2 4	20 1	0 42	13 27	1 18	7 56	0 46	10 38	1 50	21 35	12 35	23 19	23 15	22 37	11 16	6 34	
T 29	21 30	24 26	2 7	23 1	1 7	24 42	1 13	8 23	2 5	19 59	0 42	13 27	1 18	7 56	0 46	10 37	1 50	21 35	12 35	23 19	23 15	22 35	11 16	6 33	
W30	21s40	24s15	0s48	23s20	1s13	24s43	1s15	8n13	2n6	19s56	0s42	13n27	1n18	7n56	0n46	10n37	1s50	21n36	12n36	23s20	23s15	22n34	11s16	6n33	

ASTRODIENST EPHEMERIS for the year 1712
geocentric

DECEMBER 1712

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	4 39 41	8°59'34	12°33	12°35	2°43	14°31	4°21	27°54	11°38	2°R25	4°24	6°D18	7°34	11°59	10°46	T 1
F 2	4 43 38	10° 0'30	27°21	14° 9	3°58	14°59	4°32	27°55	11°39	2°R24	4°24	6°R19	7°30	12° 6	10°49	F 2
S 3	4 47 34	11° 1'28	11°52	15°43	5°13	15°26	4°43	27°56	11°39	2°23	4°24	6°21	7°27	12°12	10°52	S 3
S 4	4 51 31	12° 2'26	26° 4	17°17	6°27	15°54	4°54	27°56	11°40	2°22	4°25	6°22	7°24	12°19	10°55	S 4
M 5	4 55 27	13° 3'25	9°55	18°51	7°42	16°21	5° 5	27°57	11°41	2°20	4°25	6°R23	7°21	12°26	10°57	M 5
T 6	4 59 24	14° 4'25	23°25	20°25	8°57	16°48	5°17	27°57	11°42	2°19	4°R25	6°23	7°18	12°32	11° 0	T 6
W 7	5 3 20	15° 5'25	6°37	21°59	10°11	17°14	5°28	27°57	11°42	2°18	4°25	6°21	7°15	12°39	11° 3	W 7
T 8	5 7 17	16° 6'25	19°31	23°34	11°26	17°41	5°40	27°57	11°43	2°17	4°25	6°19	7°11	12°46	11° 7	T 8
F 9	5 11 13	17° 7'26	2°10	25° 8	12°41	18° 7	5°51	27°R57	11°43	2°16	4°25	6°16	7° 8	12°52	11°10	F 9
S 10	5 15 10	18° 8'28	14°36	26°42	13°55	18°33	6° 3	27°57	11°44	2°15	4°24	6°13	7° 5	12°59	11°13	S 10
S 11	5 19 7	19° 9'31	26°51	28°17	15°10	18°58	6°15	27°57	11°44	2°14	4°24	6°10	7° 2	13° 5	11°16	S 11
M12	5 23 3	20°10'34	8°57	29°51	16°24	19°24	6°27	27°57	11°44	2°13	4°24	6° 8	6°59	13°12	11°19	M12
T 13	5 27 0	21°11'37	20°55	1°325	17°39	19°49	6°39	27°56	11°45	2°12	4°24	6° 7	6°55	13°19	11°23	T 13
W14	5 30 56	22°12'42	2°47	3° 0	18°53	20°14	6°51	27°56	11°45	2°11	4°24	6°D 6	6°52	13°25	11°26	W14
T 15	5 34 53	23°13'47	14°36	4°34	20° 8	20°38	7° 3	27°55	11°45	2°10	4°23	6° 6	6°49	13°32	11°29	T 15
F 16	5 38 49	24°14'52	26°23	6° 9	21°22	21° 3	7°15	27°54	11°45	2° 9	4°23	6° 7	6°46	13°39	11°33	F 16
S 17	5 42 46	25°15'59	8°12	7°43	22°37	21°27	7°28	27°53	11°R45	2° 8	4°23	6° 8	6°43	13°45	11°36	S 17
S 18	5 46 42	26°17'05	20° 5	9°17	23°51	21°51	7°40	27°52	11°45	2° 7	4°22	6° 9	6°40	13°52	11°40	S 18
M19	5 50 39	27°18'13	2°11	10°51	25° 6	22°14	7°53	27°51	11°45	2° 6	4°22	6°10	6°36	13°59	11°43	M19
T 20	5 54 36	28°19'21	14°20	12°24	26°20	22°37	8° 5	27°50	11°45	2° 6	4°22	6°11	6°33	14° 5	11°47	T 20
W21	5 58 32	29°20'30	26°51	13°57	27°35	23° 0	8°18	27°49	11°45	2° 5	4°21	6°R11	6°30	14°12	11°51	W21
T 22	6 2 29	0°32'139	9°43	15°30	28°49	23°23	8°31	27°47	11°44	2° 4	4°21	6°11	6°27	14°19	11°54	T 22
F 23	6 6 25	1°22'49	23° 0	17° 2	0°33	23°45	8°43	27°46	11°44	2° 3	4°20	6°11	6°24	14°25	11°58	F 23
S 24	6 10 22	2°24'00	6°14	18°33	1°18	24° 7	8°56	27°44	11°44	2° 3	4°20	6°10	6°21	14°32	12° 2	S 24
S 25	6 14 18	3°25'11	20°55	20° 3	2°32	24°28	9° 9	27°42	11°43	2° 2	4°19	6°10	6°17	14°39	12° 6	S 25
M26	6 18 15	4°26'22	5°31	21°31	3°46	24°49	9°22	27°41	11°43	2° 2	4°19	6°10	6°14	14°45	12°10	M26
T 27	6 22 11	5°27'34	20°28	22°58	5° 1	25°10	9°35	27°39	11°42	2° 1	4°18	6° 9	6°11	14°52	12°13	T 27
W28	6 26 8	6°28'46	5°38	24°23	6°15	25°31	9°48	27°37	11°42	2° 0	4°17	6° 9	6° 8	14°58	12°17	W28
T 29	6 30 5	7°29'59	20°52	25°46	7°29	25°51	10° 2	27°34	11°41	2° 0	4°17	6° 9	6° 5	15° 5	12°21	T 29
F 30	6 34 1	8°31'11	5°59	27° 6	8°43	26°10	10°15	27°32	11°40	1°59	4°16	6° 9	6° 1	15°12	12°25	F 30
S 31	6 37 58	9°32'22	20°51	28°23	9°57	26°30	10°28	27°30	11°40	1°59	4°15	6° 9	5°58	15°18	12°29	S 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
T 1	21s50	22s19	0n34	23s38	1s18	24s44	1s17	8n 4	2n 7	19s53	0s42	13n27	1n19	7n55	0n46	10n36	1s50	21n36	12n36	23s20	23s16	22n32	11s16	6n32
F 2	21 59	18 52	1 53	23 55	1 24	24 44	1 19	7 54	2 8	19 51	0 42	13 27	1 19	7 55	0 46	10 36	1 50	21 36	12 37	23 20	23 16	22 31	11 15	6 32
S 3	22 8	14 19	3 3	24 11	1 29	24 43	1 21	7 44	2 9	19 48	0 42	13 27	1 19	7 55	0 46	10 36	1 50	21 37	12 37	23 19	23 16	22 29	11 15	6 32
S 4	22 16	9 4	4 1	24 25	1 34	24 41	1 22	7 34	2 10	19 45	0 42	13 27	1 19	7 55	0 46	10 35	1 50	21 37	12 38	23 19	23 16	22 28	11 15	6 31
M 5	22 24	3 30	4 43	24 38	1 38	24 39	1 24	7 25	2 11	19 43	0 42	13 27	1 20	7 54	0 46	10 35	1 50	21 38	12 38	23 19	23 16	22 26	11 14	6 31
T 6	22 31	2n 5	5 7	24 50	1 43	24 36	1 26	7 15	2 12	19 40	0 42	13 27	1 20	7 54	0 46	10 34	1 50	21 38	12 39	23 19	23 17	22 25	11 14	6 30
W 7	22 38	7 27	5 15	25 1	1 47	24 32	1 27	7 6	2 14	19 37	0 42	13 27	1 20	7 54	0 46	10 34	1 50	21 38	12 39	23 19	23 17	22 23	11 13	6 30
T 8	22 45	12 23	5 7	25 10	1 51	24 28	1 29	6 57	2 15	19 34	0 42	13 27	1 20	7 54	0 46	10 34	1 50	21 39	12 39	23 20	23 17	22 22	11 13	6 30
F 9	22 51	16 41	4 44	25 18	1 54	24 22	1 30	6 47	2 16	19 31	0 42	13 28	1 20	7 54	0 47	10 33	1 50	21 39	12 40	23 20	23 17	22 20	11 12	6 29
S 10	22 57	20 11	4 8	25 24	1 58	24 16	1 32	6 38	2 17	19 28	0 42	13 28	1 21	7 54	0 47	10 33	1 50	21 40	12 40	23 20	23 17	22 19	11 12	6 29
S 11	23 2	22 44	3 21	25 29	2 1	24 9	1 33	6 29	2 18	19 25	0 42	13 28	1 21	7 53	0 47	10 33	1 50	21 40	12 41	23 20	23 17	22 17	11 11	6 29
M12	23 7	24 13	2 25	25 32	2 4	24 2	1 34	6 20	2 19	19 22	0 42	13 28	1 21	7 53	0 47	10 32	1 50	21 41	12 41	23 20	23 18	22 16	11 11	6 28
T 13	23 11	24 33	1 23	25 34	2 6	23 53	1 36	6 11	2 20	19 19	0 42	13 29	1 21	7 53	0 47	10 32	1 50	21 41	12 42	23 20	23 18	22 14	11 10	6 28
W14	23 15	23 45	0 18	25 35	2 8	23 44	1 37	6 2	2 21	19 16	0 42	13 29	1 22	7 53	0 47	10 32	1 50	21 42	12 42	23 20	23 18	22 13	11 10	6 28
T 15	23 18	21 54	0s47	25 34	2 10	23 35	1 38	5 54	2 22	19 13	0 42	13 30	1 22	7 53	0 47	10 32	1 50	21 42	12 43	23 20	23 18	22 11	11 9	6 27
F 16	23 21	19 6	1 50	25 31	2 11	23 24	1 39	5 45	2 24	19 10	0 42	13 30	1 22	7 53	0 47	10 31	1 50	21 43	12 43	23 20	23 18	22 10	11 9	6 27
S 17	23 24	15 31	2 49	25 27	2 12	23 13	1 40	5 37	2 25	19 7	0 42	13 31	1 22	7 53	0 47	10 31	1 50	21 43	12 43	23 20	23 18	22 8	11 8	6 27
S 18	23 25	11 19	3 41	25 22	2 13	23 1	1 41	5 28	2 26	19 4	0 42	13 31	1 22	7 53	0 47	10 31	1 50	21 44	12 44	23 20	23 19	22 7	11 7	6 26
M19	23 27	6 38	4 24	25 14	2 13	22 49	1 42	5 20	2 27	19 1	0 42	13 32	1 23	7 53	0 47	10 31	1 49	21 44	12 44	23 20	23 19	22 5	11 7	6 26
T 20	23 28	1 38	4 55	25 6	2 12	22 36	1 42	5 12	2 28	18 57	0 42	13 32	1 23	7 54	0 47	10 30	1 49	21 45	12 45	23 20	23 19	22 3	11 6	6 26
W21	23 29	3s33	5 14	24 55	2 11	22 22	1 43	5 4	2 29	18 54	0 42	13 33	1 23	7 54	0 47	10 30	1 49	21 45	12 45	23 20	23 19	22 2	11 5	6 25
T 22	23 29	8 43	5 17	24 44	2 10	22 7	1 44	4 56	2 31	18 51	0 42	13 34	1 23	7 54	0 47	10 30	1 49	21 46	12 46	23 20	23 19	22 0	11 5	6 25
F 23	23 28	13 40	5 5	24 30	2 8	21 52	1 44	4 49	2 32	18 47	0 42	13 35	1 24	7 54	0 47	10 30	1 49	21 46	12 46	23 20	23 19	21 59	11 4	6 25
S 24	23 27	18 5	4 34	24 15	2 5	21 36	1 45	4 41	2 33	18 44	0 42	13 35	1 24	7 54	0 47	10 30	1 49	21 47	12 46	23 20	23 19	21 57	11 3	6 24
S 25	23 26	21 39	3 46	23 59	2 1	21 20	1 45	4 34	2 34	18 41	0 42	13 36	1 24	7 54	0 47	10 29	1 49	21 48	12 47	23 20	23 20	21 56	11 2	6 24
M26	23 24	23 55	2 42	23 41	1 57	21 3	1 46	4 26	2 36	18 37	0 43	13 37	1 24	7 55	0 47	10 29	1 49	21 48	12 47	23 20	23 20	21 54	11 2	6 24
T 27	23 22	24 34	1 26	23 22	1 52	20 45	1 46	4 19	2 37	18 34	0 43	13 38	1 24	7 55	0 47	10 29	1 49	21 49	12 48	23 20	23 20	21 52	11 1	6 23
W28	23 19	23 24	0 3	23 1	1 47	20 27	1 46	4 12	2 38	18 30	0 43	13 39	1 25	7 55	0 47	10 29	1 49	21 49	12 48	23 20	23 20	21 51	11 0	6 23
T 29	23 16	20 31	1n21	22 40	1 40	20 8	1 46	4 5	2 39	18 27	0 43	13 40	1 25	7 55	0 47	10 29	1 49	21 50	12 48	23 20	23 20	21 49	10 59	6 23
F 30	23 12	16 15	2 39	22 17	1 33	19 49	1 46	3 59	2 41	18 23	0 43	13 41	1 25	7 56	0 47	10 29	1 49	21 51	12 49	23 20	23 20	21 48	10 58	6 23
S 31	23s 8	11s 1	3n44	21s54	1s24	19s29	1s46	3n52	2n42	18s20	0s43	13n42	1n25	7n56	0n47	10n29	1s49	21n51	12n49	23s20	23s21	21n46	10s58	6n22