



Astrodienst Ephemeris Tables for the year 1713

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 1713

geocentric

JANUARY 1713

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 41 54	10°33'34	5°22	29°36	11°12	26°49	10°41	27°R27	11°R39	1°R59	4°R15	6°R 9	5°55	15°25	12°33	S 1
M 2	6 45 51	11°34'45	19°27	0°45	12°26	27° 7	10°55	27°J25	11°J38	1°J58	4°J14	6°J 8	5°52	15°32	12°37	M 2
T 3	6 49 47	12°35'56	3°V 5	1°48	13°40	27°25	11° 8	27°22	11°37	1°58	4°13	6° 8	5°49	15°38	12°41	T 3
W 4	6 53 44	13°37'06	16°18	2°45	14°54	27°43	11°22	27°19	11°36	1°58	4°12	6°D 8	5°46	15°45	12°46	W 4
T 5	6 57 40	14°38'16	29° 8	3°36	16° 8	28° 0	11°35	27°16	11°35	1°57	4°11	6° 8	5°42	15°52	12°50	T 5
F 6	7 1 37	15°39'25	11°J39	4°19	17°22	28°17	11°49	27°13	11°34	1°57	4°10	6° 9	5°39	15°58	12°54	F 6
S 7	7 5 34	16°40'34	23°54	4°54	18°36	28°33	12° 3	27°10	11°33	1°57	4° 9	6°10	5°36	16° 5	12°58	S 7
S 8	7 9 30	17°41'42	5°J58	5°19	19°50	28°49	12°16	27° 7	11°32	1°57	4° 8	6°11	5°33	16°12	13° 2	S 8
M 9	7 13 27	18°42'50	17°53	5°33	21° 3	29° 5	12°30	27° 4	11°30	1°57	4° 8	6°12	5°30	16°18	13° 7	M 9
T 10	7 17 23	19°43'57	29°43	5°R37	22°17	29°20	12°44	27° 1	11°29	1°57	4° 7	6°12	5°27	16°25	13°11	T 10
W11	7 21 20	20°45'03	11°J31	5°29	23°31	29°34	12°58	26°57	11°28	1°57	4° 6	6°R12	5°23	16°32	13°15	W11
T 12	7 25 16	21°46'10	23°19	5°10	24°45	29°48	13°12	26°54	11°26	1°D57	4° 4	6°12	5°20	16°38	13°20	T 12
F 13	7 29 13	22°47'15	5°J 9	4°39	25°58	0°J 2	13°25	26°51	11°25	1°57	4° 3	6°10	5°17	16°45	13°24	F 13
S 14	7 33 10	23°48'20	17° 3	3°56	27°12	0°15	13°39	26°47	11°24	1°57	4° 2	6° 8	5°14	16°51	13°28	S 14
S 15	7 37 6	24°49'25	29° 3	3° 3	28°25	0°27	13°53	26°43	11°22	1°57	4° 1	6° 5	5°11	16°58	13°33	S 15
M16	7 41 3	25°50'29	11°J12	2° 2	29°39	0°39	14° 7	26°39	11°21	1°57	4° 0	6° 1	5° 7	17° 5	13°37	M16
T 17	7 44 59	26°51'32	23°31	0°53	0°J52	0°50	14°21	26°36	11°19	1°57	3°59	5°58	5° 4	17°11	13°41	T 17
W18	7 48 56	27°52'36	6°J 4	2°J40	2° 6	1° 1	14°35	26°32	11°17	1°57	3°58	5°56	5° 1	17°18	13°46	W18
T 19	7 52 52	28°53'38	18°54	28°23	3°19	1°11	14°50	26°28	11°16	1°57	3°57	5°54	4°58	17°25	13°50	T 19
F 20	7 56 49	29°54'40	2°JL 3	27° 6	4°32	1°21	15° 4	26°24	11°14	1°58	3°55	5°D54	4°55	17°31	13°55	F 20
S 21	8 0 45	0°J55'42	15°35	25°51	5°46	1°30	15°18	26°20	11°12	1°58	3°54	5°55	4°52	17°38	13°59	S 21
S 22	8 4 42	1°56'43	29°31	24°40	6°59	1°38	15°32	26°15	11°10	1°58	3°53	5°56	4°48	17°45	14° 4	S 22
M23	8 8 38	2°57'44	13°J51	23°35	8°12	1°46	15°46	26°11	11° 8	1°59	3°52	5°57	4°45	17°51	14° 8	M23
T 24	8 12 35	3°58'44	28°34	22°36	9°25	1°53	16° 0	26° 7	11° 7	1°59	3°50	5°R59	4°42	17°58	14°13	T 24
W25	8 16 32	4°59'44	13°J34	21°46	10°38	2° 0	16°15	26° 3	11° 5	1°59	3°49	5°59	4°39	18° 5	14°17	W25
T 26	8 20 28	6° 0'42	28°44	21° 3	11°51	2° 6	16°29	25°58	11° 3	2° 0	3°48	5°57	4°36	18°11	14°22	T 26
F 27	8 24 25	7° 1'40	13°J55	20°30	13° 4	2°11	16°43	25°54	11° 1	2° 0	3°46	5°54	4°33	18°18	14°26	F 27
S 28	8 28 21	8° 2'36	28°56	20° 5	14°16	2°15	16°58	25°49	10°59	2° 1	3°45	5°50	4°29	18°25	14°31	S 28
S 29	8 32 18	9° 3'31	13°J39	19°49	15°29	2°19	17°12	25°45	10°57	2° 2	3°44	5°44	4°26	18°31	14°35	S 29
M30	8 36 14	10° 4'25	27°58	19°41	16°42	2°22	17°26	25°40	10°54	2° 2	3°42	5°39	4°23	18°38	14°40	M30
T 31	8 40 11	11° 5'17	11°J48	19°D41	17°J54	2°J25	17°J41	25°J36	10°J52	2°J 3	3°J41	5°J35	4°J20	18°J45	14°J44	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	23s 3	5s19	4n33	21s29	1s15	19s 8	1s46	3n46	2n43	18s16	0s43	13n43	1n26	7n56	0n48	S 1
M 2	22 58	0n29	5 5 21	4 1 5	18 47	1 46	3 40	2 45	18 12	0 43	13 44	1 26	7 57	0 48	10 29	M 2
T 3	22 53	6 5	5 18	20 39	0 53	18 26	1 45	3 34	2 46	18 9	0 43	13 45	1 26	7 57	0 48	T 3
W 4	22 47	11 14	5 13	20 14	0 41	18 4	1 45	3 28	2 47	18 5	0 43	13 46	1 26	7 57	0 48	W 4
T 5	22 40	15 45	4 53	19 49	0 27	17 41	1 45	3 22	2 49	18 1	0 43	13 47	1 26	7 58	0 48	T 5
F 6	22 33	19 27	4 19	19 25	0 13	17 18	1 44	3 17	2 50	17 57	0 43	13 49	1 27	7 58	0 48	F 6
S 7	22 26	22 14	3 34	19 1	0n 3	16 55	1 43	3 12	2 51	17 54	0 43	13 50	1 27	7 59	0 48	S 7
S 8	22 18	23 58	2 40	18 39	0 20	16 31	1 43	3 6	2 53	17 50	0 43	13 51	1 27	7 59	0 48	S 8
M 9	22 10	24 35	1 40	18 19	0 37	16 7	1 42	3 2	2 54	17 46	0 43	13 52	1 27	8 0	0 48	M 9
T 10	22 1	24 5	0 36	18 0	0 55	15 42	1 41	2 57	2 55	17 42	0 43	13 54	1 27	8 0	0 48	T 10
W11	21 52	22 29	0s29	17 44	1 14	15 17	1 40	2 52	2 57	17 38	0 43	13 55	1 28	8 1	0 48	W11
T 12	21 43	19 55	1 33	17 31	1 32	14 51	1 39	2 48	2 58	17 34	0 43	13 56	1 28	8 1	0 48	T 12
F 13	21 33	16 31	2 34	17 20	1 51	14 25	1 38	2 44	2 59	17 30	0 43	13 58	1 28	8 2	0 48	F 13
S 14	21 23	12 27	3 27	17 13	2 9	13 59	1 37	2 40	3 1	17 26	0 43	13 59	1 28	8 3	0 48	S 14
S 15	21 12	7 53	4 12	17 8	2 26	13 32	1 35	2 36	3 2	17 22	0 43	14 1	1 28	8 3	0 48	S 15
M16	21 1	2 58	4 46	17 6	2 42	13 5	1 34	2 33	3 4	17 18	0 43	14 2	1 28	8 4	0 48	M16
T 17	20 49	2s 8	5 8	17 7	2 57	12 37	1 32	2 30	3 5	17 14	0 43	14 4	1 29	8 4	0 48	T 17
W18	20 37	7 14	5 15	17 11	3 9	12 10	1 31	2 27	3 7	17 10	0 43	14 5	1 29	8 5	0 48	W18
T 19	20 25	12 9	5 7	17 16	3 19	11 42	1 29	2 24	3 8	17 6	0 43	14 7	1 29	8 6	0 48	T 19
F 20	20 12	16 38	4 43	17 24	3 26	11 13	1 28	2 21	3 9	17 2	0 43	14 8	1 29	8 6	0 48	F 20
S 21	19 59	20 24	4 3	17 33	3 31	10 45	1 26	2 19	3 11	16 58	0 43	14 10	1 29	8 7	0 48	S 21
S 22	19 45	23 8	3 7	17 43	3 34	10 16	1 24	2 17	3 12	16 54	0 43	14 11	1 30	8 8	0 48	S 22
M23	19 32	24 28	1 59	17 54	3 34	9 47	1 22	2 15	3 14	16 49	0 43	14 13	1 30	8 9	0 48	M23
T 24	19 17	24 9	0 41	18 5	3 32	9 17	1 20	2 14	3 15	16 45	0 43	14 14	1 30	8 9	0 48	T 24
W25	19 3	22 6	0n42	18 17	3 28	8 48	1 18	2 13	3 16	16 41	0 44	14 16	1 30	8 10	0 48	W25
T 26	18 48	18 28	2 2	18 29	3 22	8 18	1 16	2 11	3 18	16 37	0 44	14 18	1 30	8 11	0 48	T 26
F 27	18 33	13 36	3 13	18 42	3 15	7 48	1 13	2 11	3 19	16 33	0 44	14 19	1 30	8 12	0 48	F 27
S 28	18 17	7 57	4 10	18 53	3 7	7 17	1 11	2 10	3 21	16 28	0 44	14 21	1 30	8 12	0 48	S 28
S 29	18 1	1 59	4 50	19 5	2 58	6 47	1 9	2 10	3 22	16 24	0 44	14 23	1 31	8 13	0 48	S 29
M30	17 45	3n55	5 9	19 16	2 48	6 16	1 6	2 10	3 24	16 20	0 44	14 24	1 31	8 14	0 49	M30
T 31	17s28	9n26	5n10	19s26	2n37	5s46	1s 4	2n10	3n25	16s15	0s44	14n26	1n31	8n15	0n49	T 31

Julian Day Number = 2346720.5, Delta T = 11.04 sec

Ecliptic obliquity = 23°28'36", Nutation = 0°00'18", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°44'02", Lahiri = 19°51'02"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1713

geocentric

FEBRUARY 1713

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	8 44 8	12° 6'08	25° 9	19° 34'48	19° 34'7	2° 26	17° 55	25° R31	10° R50	2° 3	3° R40	5° R32	4° 17	18° 51	14° 49	W 1
T 2	8 48 4	13° 6'58	8° 4	20° 2	20° 19	2° 27	18° 9	25° 26	10° 48	2° 4	3° 38	5° D30	4° 13	18° 58	14° 53	T 2
F 3	8 52 1	14° 7'46	20° 35	20° 22	21° 32	2° R28	18° 24	25° 22	10° 46	2° 5	3° 37	5° 30	4° 10	19° 4	14° 58	F 3
S 4	8 55 57	15° 8'32	2° 48	20° 48	22° 44	2° 27	18° 38	25° 17	10° 43	2° 6	3° 35	5° 32	4° 7	19° 11	15° 3	S 4
S 5	8 59 54	16° 9'17	14° 47	21° 20	23° 56	2° 26	18° 53	25° 12	10° 41	2° 6	3° 34	5° 33	4° 4	19° 18	15° 7	S 5
M 6	9 3 50	17° 10'01	26° 38	21° 56	25° 8	2° 24	19° 7	25° 7	10° 39	2° 7	3° 32	5° 35	4° 1	19° 24	15° 12	M 6
T 7	9 7 47	18° 10'43	8° 25	22° 37	26° 20	2° 21	19° 21	25° 2	10° 37	2° 8	3° 31	5° R35	3° 58	19° 31	15° 16	T 7
W 8	9 11 43	19° 11'23	20° 11	23° 22	27° 32	2° 18	19° 36	24° 58	10° 34	2° 9	3° 29	5° 34	3° 54	19° 38	15° 21	W 8
T 9	9 15 40	20° 12'02	2° 1	24° 11	28° 44	2° 13	19° 50	24° 53	10° 32	2° 10	3° 28	5° 30	3° 51	19° 44	15° 25	T 9
F 10	9 19 37	21° 12'39	13° 57	25° 3	29° 56	2° 8	20° 5	24° 48	10° 29	2° 11	3° 26	5° 25	3° 48	19° 51	15° 30	F 10
S 11	9 23 33	22° 13'15	26° 0	25° 59	1° 7	2° 2	20° 19	24° 43	10° 27	2° 12	3° 25	5° 17	3° 45	19° 58	15° 34	S 11
S 12	9 27 30	23° 13'49	8° 12	26° 57	2° 19	1° 56	20° 33	24° 38	10° 24	2° 13	3° 23	5° 8	3° 42	20° 4	15° 39	S 12
M13	9 31 26	24° 14'22	20° 34	27° 58	3° 30	1° 48	20° 48	24° 33	10° 22	2° 14	3° 22	4° 59	3° 39	20° 11	15° 43	M13
T 14	9 35 23	25° 14'53	3° 7	29° 2	4° 41	1° 40	21° 2	24° 29	10° 19	2° 15	3° 20	4° 49	3° 35	20° 18	15° 48	T 14
W15	9 39 19	26° 15'23	15° 51	0° 8	5° 52	1° 31	21° 16	24° 24	10° 17	2° 16	3° 19	4° 42	3° 32	20° 24	15° 52	W15
T 16	9 43 16	27° 15'52	28° 49	1° 16	7° 4	1° 21	21° 31	24° 19	10° 14	2° 17	3° 17	4° 36	3° 29	20° 31	15° 57	T 16
F 17	9 47 12	28° 16'19	12° 1	2° 26	8° 15	1° 11	21° 45	24° 14	10° 12	2° 19	3° 16	4° 32	3° 26	20° 38	16° 1	F 17
S 18	9 51 9	29° 16'45	25° 28	3° 39	9° 25	1° 0	22° 0	24° 9	10° 9	2° 20	3° 14	4° D31	3° 23	20° 44	16° 6	S 18
S 19	9 55 5	0° 17'09	9° 17	4° 53	10° 36	0° 47	22° 14	24° 4	10° 7	2° 21	3° 13	4° 31	3° 19	20° 51	16° 10	S 19
M20	9 59 2	1° 17'33	2° 14	6° 8	11° 47	0° 35	22° 28	23° 59	10° 4	2° 22	3° 11	4° 32	3° 16	20° 58	16° 15	M20
T 21	10 2 59	2° 17'55	7° 34	7° 25	12° 57	0° 21	22° 43	23° 55	10° 2	2° 24	3° 10	4° R32	3° 13	21° 4	16° 19	T 21
W22	10 6 55	3° 18'15	22° 18	8° 44	14° 8	0° 7	22° 57	23° 50	9° 59	2° 25	3° 8	4° 31	3° 10	21° 11	16° 23	W22
T 23	10 10 52	4° 18'34	7° 8	10° 4	15° 18	29° 52	23° 11	23° 45	9° 56	2° 26	3° 7	4° 27	3° 7	21° 17	16° 28	T 23
F 24	10 14 48	5° 18'51	22° 3	11° 26	16° 28	29° 36	23° 25	23° 40	9° 54	2° 28	3° 5	4° 21	3° 4	21° 24	16° 32	F 24
S 25	10 18 45	6° 19'07	6° 55	12° 49	17° 38	29° 19	23° 40	23° 36	9° 51	2° 29	3° 3	4° 12	3° 0	21° 31	16° 36	S 25
S 26	10 22 41	7° 19'20	21° 35	14° 14	18° 48	29° 2	23° 54	23° 31	9° 49	2° 31	3° 2	4° 2	2° 57	21° 37	16° 41	S 26
M27	10 26 38	8° 19'32	5° 55	15° 39	19° 57	28° 45	24° 8	23° 26	9° 46	2° 32	3° 0	3° 51	2° 54	21° 44	16° 45	M27
T 28	10 30 34	9° 19'42	19° 49	17° 6	21° 7	28° 26	24° 22	23° 22	9° 43	2° 34	2° 59	3° 42	2° 51	21° 51	16° 49	T 28

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
W 1	17s12	14n19	4n54	19s36	2n26	5s15	1 s 1	2n11	3n26	16s11	0s44	14n28	1n31	8n16	0n49	10n32	1s47	22n14	12n59	23s22	23s24	20n52	10s24	6n17			
T 2	16 54	18 22	4 24	19 46	2 15	4 44	0 58	2 12	3 28	16 7	0 44	14 29	1 31	8 17	0 49	10 32	1 47	22 15	13 0	23 22	23 25	20 50	10 22	6 17			
F 3	16 37	21 28	3 41	19 54	2 3	4 13	0 55	2 13	3 29	16 2	0 44	14 31	1 31	8 18	0 49	10 33	1 47	22 16	13 0	23 22	23 25	20 48	10 21	6 17			
S 4	16 19	23 31	2 49	20 2	1 52	3 42	0 53	2 14	3 30	15 58	0 44	14 33	1 31	8 18	0 49	10 33	1 47	22 16	13 0	23 22	23 25	20 46	10 20	6 17			
S 5	16 1	24 27	1 51	20 8	1 40	3 10	0 50	2 16	3 32	15 53	0 44	14 35	1 31	8 19	0 49	10 33	1 47	22 17	13 0	23 22	23 25	20 45	10 19	6 17			
M 6	15 43	24 15	0 49	20 14	1 28	2 39	0 47	2 18	3 33	15 49	0 44	14 36	1 32	8 20	0 49	10 34	1 47	22 18	13 0	23 22	23 25	20 43	10 17	6 17			
T 7	15 24	22 57	0s15	20 19	1 17	2 7	0 43	2 20	3 34	15 45	0 44	14 38	1 32	8 21	0 49	10 34	1 47	22 19	13 1	23 22	23 25	20 41	10 16	6 17			
W 8	15 5	20 40	1 18	20 22	1 6	1 36	0 40	2 23	3 35	15 40	0 44	14 40	1 32	8 22	0 49	10 34	1 46	22 19	13 1	23 22	23 25	20 39	10 15	6 17			
T 9	14 46	17 30	2 18	20 25	0 55	1 4	0 37	2 26	3 37	15 36	0 45	14 42	1 32	8 23	0 49	10 35	1 46	22 20	13 1	23 22	23 25	20 38	10 13	6 17			
F 10	14 27	13 36	3 12	20 26	0 44	0 33	0 34	2 29	3 38	15 31	0 45	14 43	1 32	8 24	0 49	10 35	1 46	22 21	13 1	23 22	23 25	20 36	10 12	6 17			
S 11	14 8	9 8	3 58	20 26	0 33	0 1	0 31	2 32	3 39	15 27	0 45	14 45	1 32	8 25	0 49	10 36	1 46	22 21	13 1	23 22	23 25	20 34	10 11	6 17			
S 12	13 48	4 16	4 34	20 26	0 23	0n30	0 27	2 36	3 40	15 22	0 45	14 47	1 32	8 26	0 49	10 36	1 46	22 22	13 1	23 23	23 26	20 32	10 9	6 17			
M13	13 28	0s49	4 57	20 24	0 13	1 2	0 24	2 40	3 41	15 18	0 45	14 48	1 32	8 27	0 49	10 36	1 46	22 23	13 2	23 23	23 26	20 30	10 8	6 17			
T 14	13 8	5 56	5 7	20 20	0 3	1 33	0 20	2 44	3 42	15 13	0 45	14 50	1 32	8 28	0 49	10 37	1 46	22 23	13 2	23 23	23 26	20 28	10 7	6 17			
W15	12 47	10 52	5 1	20 16	0s 7	2 5	0 17	2 49	3 43	15 8	0 45	14 52	1 33	8 29	0 49	10 37	1 46	22 24	13 2	23 24	23 26	20 27	10 6	6 17			
T 16	12 26	15 26	4 40	20 10	0 16	2 36	0 13	2 53	3 44	15 4	0 45	14 54	1 33	8 30	0 49	10 38	1 46	22 25	13 2	23 24	23 26	20 25	10 4	6 17			
F 17	12 6	19 20	4 4	20 3	0 25	3 8	0 9	2 58	3 45	14 59	0 45	14 55	1 33	8 31	0 49	10 38	1 46	22 26	13 2	23 24	23 26	20 23	10 3	6 17			
S 18	11 45	22 18	3 14	19 55	0 33	3 39	0 6	3 4	3 46	14 55	0 45	14 57	1 33	8 32	0 49	10 39	1 46	22 26	13 2	23 24	23 26	20 21	10 2	6 18			
S 19	11 23	24 2	2 12	19 45	0 42	4 10	0 2	3 9	3 47	14 50	0 45	14 59	1 33	8 33	0 49	10 39	1 46	22 27	13 2	23 24	23 26	20 19	10 0	6 18			
M20	11 2	24 18	1 0	19 34	0 50	4 42	0n 2	3 15	3 48	14 46	0 45	15 0	1 33	8 34	0 49	10 40	1 46	22 28	13 2	23 24	23 26	20 17	9 59	6 18			
T 21	10 40	22 59	0n17	19 22	0 57	5 13	0 6	3 21	3 49	14 41	0 45	15 2	1 33	8 35	0 49	10 40	1 46	22 28	13 2	23 24	23 26	20 16	9 57	6 18			
W22	10 19	20 5	1 34	19 9	1 5	5 44	0 10	3 28	3 49	14 36	0 46	15 4	1 33	8 36	0 49	10 41	1 46	22 29	13 3	23 24	23 26	20 14	9 56	6 18			
T 23	9 57	15 51	2 45	18 54	1 12	6 15	0 14	3 34	3 50	14 32	0 46	15 5	1 33	8 36	0 49	10 41	1 46	22 29	13 3	23 24	23 26	20 12	9 55	6 18			
F 24	9 35	10 37	3 46	18 38	1 18	6 45	0 18	3 41	3 50	14 27	0 46	15 7	1 33	8 37	0 49	10 42	1 46	22 30	13 3	23 24	23 26	20 10	9 53	6 18			
S 25	9 12	4 48	4 30	18 21	1 25	7 16	0 22	3 48	3 51	14 23	0 46	15 8	1 33	8 38	0 49	10 42	1 46	22 31	13 3	23 25	23 27	20 8	9 52	6 18			
S 26	8 50	1n12	4 57	18 2	1 31	7 46	0 26	3 55	3 51	14 18	0 46	15 10	1 33	8 39	0 49	10 43	1 45	22 31	13 3	23 25	23 27	20 6	9 51	6 18			
M27	8 28	6 59	5 3	17 42	1 36	8 17	0 30	4 2	3 52	14 13	0 46	15 12	1 33	8 40	0 49	10 43	1 45	22 32	13 3	23 25	23 27	20 4	9 49	6 18			
T 28	8s 5	12n16	4n52	17s21	1s41	8n47	0n34	4n10	3n52	14s 9	0s46	15n13	1n33	8n41	0n49	10n44	1s45	22n33	13n 3	23s26	23s27	20n 3	9s48	6n18			

Julian Day Number = 2346751.5, Delta T = 11.03 sec

ASTRODIENST EPHEMERIS for the year 1713
geocentric

MARCH 1713

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	10 34 31	10♈19°50	3♌16	18♈34	22♉16	28°R 7	24♈36	23°R17	9°R41	2♌35	2°R57	3°R34	2♌48	21♌57	16♈54	W 1
T 2	10 38 28	11°19'55	16°16	20° 4	23°26	27♎48	24°51	23♏13	9♎38	2°37	2♎56	3♌29	2°44	22° 4	16°58	T 2
F 3	10 42 24	12°19'59	28°51	21°34	24°35	27°28	25° 5	23° 8	9°35	2°38	2°54	3°26	2°41	22°11	17° 2	F 3
S 4	10 46 21	13°20'00	11♐ 7	23° 6	25°44	27° 7	25°19	23° 4	9°33	2°40	2°53	3°D25	2°38	22°17	17° 6	S 4
S 5	10 50 17	14°20'00	23° 7	24°39	26°53	26°46	25°33	22°59	9°30	2°41	2°51	3°25	2°35	22°24	17°10	S 5
M 6	10 54 14	15°19'57	4♌58	26°13	28° 1	26°25	25°47	22°55	9°28	2°43	2°50	3°R25	2°32	22°31	17°15	M 6
T 7	10 58 10	16°19'51	16°45	27°48	29°10	26° 3	26° 1	22°51	9°25	2°45	2°48	3°25	2°29	22°37	17°19	T 7
W 8	11 2 7	17°19'44	28°33	29°24	0♌18	25°41	26°15	22°47	9°22	2°46	2°47	3°22	2°25	22°44	17°23	W 8
T 9	11 6 3	18°19'35	10♏26	1♌ 2	1°26	25°18	26°29	22°42	9°20	2°48	2°45	3°16	2°22	22°51	17°27	T 9
F 10	11 10 0	19°19'23	22°28	2°40	2°34	24°55	26°43	22°38	9°17	2°50	2°44	3° 8	2°19	22°57	17°31	F 10
S 11	11 13 57	20°19'09	4♎42	4°20	3°42	24°32	26°56	22°34	9°15	2°52	2°42	2°57	2°16	23° 4	17°35	S 11
S 12	11 17 53	21°18'53	17° 8	6° 1	4°49	24° 9	27°10	22°30	9°12	2°53	2°41	2°45	2°13	23°11	17°39	S 12
M13	11 21 50	22°18'35	29°47	7°44	5°56	23°46	27°24	22°27	9°10	2°55	2°39	2°31	2°10	23°17	17°43	M13
T 14	11 25 46	23°18'15	12♌39	9°27	7° 4	23°22	27°38	22°23	9° 7	2°57	2°38	2°18	2° 6	23°24	17°47	T 14
W15	11 29 43	24°17'53	25°43	11°12	8°11	22°59	27°51	22°19	9° 5	2°59	2°36	2° 7	2° 3	23°31	17°50	W15
T 16	11 33 39	25°17'30	8♎59	12°58	9°17	22°36	28° 5	22°15	9° 2	3° 1	2°35	1°58	2° 0	23°37	17°54	T 16
F 17	11 37 36	26°17'04	22°25	14°45	10°24	22°12	28°18	22°12	9° 0	3° 3	2°34	1°52	1°57	23°44	17°58	F 17
S 18	11 41 32	27°16'37	6♌ 1	16°34	11°30	21°49	28°32	22° 8	8°57	3° 5	2°32	1°48	1°54	23°50	18° 2	S 18
S 19	11 45 29	28°16'08	19°48	18°23	12°36	21°25	28°46	22° 5	8°55	3° 6	2°31	1°47	1°50	23°57	18° 6	S 19
M20	11 49 26	29°15'37	3♌46	20°15	13°42	21° 2	28°59	22° 1	8°52	3° 8	2°30	1°47	1°47	24° 4	18° 9	M20
T 21	11 53 22	0♉15'05	17°54	22° 7	14°47	20°39	29°12	21°58	8°50	3°10	2°28	1°47	1°44	24°10	18°13	T 21
W22	11 57 19	1°14'31	2♈13	24° 1	15°53	20°17	29°26	21°55	8°47	3°12	2°27	1°45	1°41	24°17	18°17	W22
T 23	12 1 15	2°13'55	16°39	25°56	16°58	19°54	29°39	21°52	8°45	3°14	2°26	1°40	1°38	24°24	18°20	T 23
F 24	12 5 12	3°13'17	1♌ 9	27°52	18° 3	19°32	29°52	21°49	8°43	3°16	2°24	1°33	1°35	24°30	18°24	F 24
S 25	12 9 8	4°12'37	15°36	29°49	19° 7	19°10	0♌ 5	21°46	8°40	3°18	2°23	1°22	1°31	24°37	18°27	S 25
S 26	12 13 5	5°11'55	29°56	1°Y48	20°11	18°49	0°18	21°43	8°38	3°20	2°22	1°11	1°28	24°44	18°31	S 26
M27	12 17 1	6°11'11	14°Y 1	3°48	21°15	18°28	0°32	21°40	8°36	3°22	2°20	0°58	1°25	24°50	18°34	M27
T 28	12 20 58	7°10'25	27°46	5°48	22°19	18° 8	0°45	21°37	8°34	3°24	2°19	0°47	1°22	24°57	18°37	T 28
W29	12 24 55	8° 9'37	11♌ 8	7°50	23°23	17°48	0°57	21°35	8°32	3°27	2°18	0°37	1°19	25° 4	18°41	W29
T 30	12 28 51	9° 8'47	24° 7	9°53	24°26	17°29	1°10	21°32	8°29	3°29	2°17	0°30	1°16	25°10	18°44	T 30
F 31	12 32 48	10°Y 7'54	6♐43	11°Y57	25♌28	17♎10	1♌23	21♏30	8♎27	3♌31	2♎16	0♌26	1♌12	25♌17	18♈47	F 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
W 1	7s42	16n46	4n24	16s58	1s46	9n17	0n38	4n18	3n52	14s 4	0s46	15n15	1n33	8n42	0n49	10n44	1s45	22n33	13n 3	23s26	23s27	20n 1	9s47	6n18	
T 2	7 20	20 18	3 44	16 34	1 51	9 46	0 42	4 25	3 52	13 59	0 46	15 16	1 33	8 43	0 49	10 45	1 45	22 34	13 3	23 26	23 27	19 59	9 45	6 19	
F 3	6 57	22 45	2 53	16 9	1 55	10 16	0 47	4 33	3 52	13 55	0 47	15 18	1 33	8 44	0 49	10 46	1 45	22 34	13 3	23 26	23 27	19 57	9 44	6 19	
S 4	6 34	24 3	1 56	15 42	1 59	10 45	0 51	4 42	3 52	13 50	0 47	15 19	1 33	8 45	0 49	10 46	1 45	22 35	13 3	23 26	23 27	19 55	9 42	6 19	
S 5	6 11	24 12	0 55	15 15	2 2	11 14	0 55	4 50	3 52	13 45	0 47	15 21	1 33	8 46	0 49	10 47	1 45	22 36	13 3	23 26	23 27	19 53	9 41	6 19	
M 6	5 47	23 15	0s 8	14 45	2 5	11 43	0 59	4 58	3 51	13 41	0 47	15 22	1 33	8 47	0 49	10 47	1 45	22 36	13 3	23 26	23 27	19 51	9 40	6 19	
T 7	5 24	21 16	1 10	14 15	2 7	12 11	1 4	5 6	3 51	13 36	0 47	15 24	1 33	8 48	0 49	10 48	1 45	22 37	13 3	23 26	23 27	19 49	9 38	6 19	
W 8	5 1	18 22	2 9	13 43	2 10	12 39	1 8	5 15	3 51	13 32	0 47	15 25	1 33	8 49	0 49	10 49	1 45	22 37	13 3	23 26	23 27	19 47	9 37	6 20	
T 9	4 37	14 43	3 3	13 10	2 11	13 7	1 12	5 23	3 50	13 27	0 47	15 26	1 33	8 50	0 49	10 49	1 45	22 38	13 3	23 26	23 27	19 46	9 36	6 20	
F 10	4 14	10 26	3 49	12 36	2 13	13 35	1 17	5 32	3 49	13 22	0 47	15 28	1 33	8 51	0 49	10 50	1 45	22 38	13 3	23 26	23 27	19 44	9 34	6 20	
S 11	3 50	5 41	4 25	12 0	2 13	14 2	1 21	5 40	3 49	13 18	0 47	15 29	1 33	8 52	0 49	10 50	1 45	22 39	13 3	23 27	23 27	19 42	9 33	6 20	
S 12	3 27	0 39	4 50	11 23	2 14	14 29	1 25	5 49	3 48	13 13	0 48	15 30	1 33	8 53	0 49	10 51	1 45	22 39	13 3	23 27	23 28	19 40	9 32	6 20	
M13	3 3	4s30	5 0	10 45	2 14	14 56	1 30	5 57	3 47	13 8	0 48	15 32	1 33	8 54	0 49	10 52	1 45	22 40	13 3	23 27	23 28	19 38	9 30	6 20	
T 14	2 40	9 32	4 56	10 6	2 13	15 22	1 34	6 5	3 46	13 4	0 48	15 33	1 33	8 55	0 49	10 52	1 45	22 40	13 3	23 27	23 28	19 36	9 29	6 21	
W15	2 16	14 14	4 36	9 25	2 12	15 48	1 38	6 14	3 45	12 59	0 48	15 34	1 33	8 56	0 49	10 53	1 45	22 41	13 3	2 23	23 28	19 34	9 28	6 21	
T 16	1 52	18 19	4 1	8 43	2 11	16 14	1 43	6 22	3 44	12 55	0 48	15 35	1 33	8 57	0 49	10 54	1 45	22 41	13 2	23 28	23 28	19 32	9 26	6 21	
F 17	1 29	21 30	3 12	8 0	2 9	16 39	1 47	6 30	3 42	12 50	0 48	15 36	1 33	8 58	0 49	10 54	1 45	22 42	13 2	23 28	23 28	19 30	9 25	6 21	
S 18	1 5	23 30	2 12	7 15	2 7	17 4	1 51	6 38	3 41	12 45	0 48	15 38	1 33	8 59	0 49	10 55	1 45	22 42	13 2	23 28	23 28	19 28	9 24	6 21	
S 19	0 41	24 8	1 3	6 30	2 4	17 29	1 56	6 46	3 39	12 41	0 48	15 39	1 33	9 0	0 49	10 56	1 45	22 42	13 2	23 28	23 28	19 26	9 22	6 22	
M20	0 18	23 15	0n10	5 43	2 0	17 53	2 0	6 54	3 38	12 36	0 49	15 40	1 33	9 1	0 49	10 56	1 45	22 43	13 2	23 28	23 28	19 24	9 21	6 22	
T 21	0n 6	20 53	1 24	4 55	1 56	18 17	2 4	7 1	3 36	12 32	0 49	15 41	1 33	9 1	0 49	10 57	1 45	22 43	13 2	23 28	23 28	19 22	9 20	6 22	
W22	0 30	17 12	2 33	4 6	1 52	18 40	2 9	7 9	3 35	12 27	0 49	15 42	1 33	9 2	0 49	10 58	1 45	22 44	13 2	23 28	23 28	19 20	9 18	6 22	
T 23	0 53	12 29	3 33	3 15	1 47	19 3	2 13	7 16	3 33	12 23	0 49	15 43	1 33	9 3	0 49	10 59	1 44	22 44	13 2	23 28	23 28	19 18	9 17	6 23	
F 24	1 17	7 2	4 20	2 24	1 41	19 25	2 17	7 23	3 31	12 18	0 49	15 44	1 33	9 4	0 49	10 59	1 44	22 44	13 2	23 28	23 28	19 17	9 16	6 23	
S 25	1 41	1 14	4 49	1 32	1 35	19 47	2 21	7 30	3 29	12 14	0 49	15 45	1 33	9 5	0 49	11 0	1 44	22 45	13 1	23 28	23 28	19 15	9 14	6 23	
S 26	2 4	4n34	5 0	0 39	1 29	20 9	2 25	7 36	3 27	12 9	0 49	15 46	1 33	9 6	0 49	11 1	1 44	22 45	13 1	23 28	23 28	19 13	9 13	6 23	
M27	2 28	10 2	4 53	0n16	1 22	20 30	2 29	7 42	3 25	12 5	0 50	15 46	1 33	9 7	0 49	11 1	1 44	22 45	13 1	23 28	23 28	19 11	9 12	6 24	
T 28	2 51	14 52	4 28	1 10	1 14	20 51	2 33	7 48	3 23	12 0	0 50	15 47	1 33	9 7	0 49	11 2	1 44	22 46	13 1	23 28	23 28	19 9	9 11	6 24	
W29	3 15	18 49	3 49	2 6	1 6	21 11	2 37	7 54	3 20	11 56	0 50	15 48	1 33	9 8	0 49	11 3	1 44	22 46	13 1	23 29	23 28	19 7	9 9	6 24	
T 30	3 38	21 44	2 59	3 2	0 58	21 31	2 41	8 0	3 18	11 51	0 50	15 49	1 33	9 9	0 49	11 4	1 44	22 46	13 1	23 29	23 28	19 5	9 8	6 24	
F 31	4n 1	23n28	2n 2	3n59	0s49	21n50	2n45	8n 5	3n16	11s47	0s50	15n50	1n33	9n10	0n49	11n 4	1s44	22n46	13n 0	23s29	23s28	19n 3	9s 7	6n25	

ASTRODIENST EPHEMERIS for the year 1713

geocentric

APRIL 1713

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 36 44	11° 7'00	19° 0'	14° 1'	26° 31'	16° 52'	1° 36'	21° 27'	8° 25'	3° 33'	2° 15'	0° 24'	1° 3'	25° 24'	18° 50'	S 1
S 2	12 40 41	12° 6'03	1° 3'	16° 6'	27° 33'	16° 35'	1° 49'	21° 25'	8° 23'	3° 35'	2° 13'	0° 23'	1° 6'	25° 30'	18° 53'	S 2
M 3	12 44 37	13° 5'03	12° 55'	18° 10'	28° 35'	16° 18'	2° 1'	21° 23'	8° 21'	3° 37'	2° 12'	0° 23'	1° 3'	25° 37'	18° 57'	M 3
T 4	12 48 34	14° 4'02	24° 44'	20° 15'	29° 36'	16° 2'	2° 14'	21° 21'	8° 19'	3° 39'	2° 11'	0° 23'	1° 0'	25° 44'	19° 0'	T 4
W 5	12 52 30	15° 2'57	6° 23'	22° 20'	0° 37'	15° 47'	2° 26'	21° 19'	8° 17'	3° 41'	2° 10'	0° 21'	0° 56'	25° 50'	19° 3'	W 5
T 6	12 56 27	16° 1'51	18° 30'	24° 24'	1° 38'	15° 32'	2° 38'	21° 17'	8° 15'	3° 44'	2° 9'	0° 17'	0° 53'	25° 57'	19° 6'	T 6
F 7	13 0 24	17° 0'42	0° 37'	26° 27'	2° 38'	15° 18'	2° 51'	21° 16'	8° 13'	3° 46'	2° 8'	0° 10'	0° 50'	26° 4'	19° 8'	F 7
S 8	13 4 20	17° 59'32	12° 58'	28° 28'	3° 38'	15° 5'	3° 3'	21° 14'	8° 12'	3° 48'	2° 7'	0° 0'	0° 47'	26° 10'	19° 11'	S 8
S 9	13 8 17	18° 58'19	25° 36'	0° 29'	4° 38'	14° 52'	3° 15'	21° 13'	8° 10'	3° 50'	2° 6'	29° 49'	0° 44'	26° 17'	19° 14'	S 9
M10	13 12 13	19° 57'03	8° 31'	2° 27'	5° 37'	14° 41'	3° 27'	21° 11'	8° 8'	3° 52'	2° 5'	29° 37'	0° 41'	26° 24'	19° 17'	M10
T 11	13 16 10	20° 55'46	21° 43'	4° 23'	6° 35'	14° 30'	3° 39'	21° 10'	8° 6'	3° 55'	2° 4'	29° 26'	0° 37'	26° 30'	19° 20'	T 11
W12	13 20 6	21° 54'27	5° 10'	6° 16'	7° 34'	14° 20'	3° 51'	21° 9'	8° 5'	3° 57'	2° 3'	29° 16'	0° 34'	26° 37'	19° 22'	W12
T 13	13 24 3	22° 53'06	18° 50'	8° 7'	8° 31'	14° 10'	4° 3'	21° 8'	8° 3'	3° 59'	2° 3'	29° 8'	0° 31'	26° 44'	19° 25'	T 13
F 14	13 27 59	23° 51'43	2° 40'	9° 54'	9° 28'	14° 2'	4° 15'	21° 7'	8° 1'	4° 1'	2° 2'	29° 2'	0° 28'	26° 50'	19° 27'	F 14
S 15	13 31 56	24° 50'19	16° 36'	11° 38'	10° 25'	13° 54'	4° 26'	21° 6'	8° 0'	4° 3'	2° 1'	29° 0'	0° 25'	26° 57'	19° 30'	S 15
S 16	13 35 52	25° 48'52	0° 38'	13° 18'	11° 21'	13° 47'	4° 38'	21° 5'	7° 58'	4° 6'	2° 0'	28° 59'	0° 21'	27° 4'	19° 32'	S 16
M17	13 39 49	26° 47'24	14° 43'	14° 54'	12° 17'	13° 41'	4° 49'	21° 4'	7° 57'	4° 8'	1° 59'	29° 0'	0° 18'	27° 10'	19° 35'	M17
T 18	13 43 46	27° 45'55	28° 50'	16° 26'	13° 12'	13° 35'	5° 1'	21° 4'	7° 55'	4° 10'	1° 59'	29° 0'	0° 15'	27° 17'	19° 37'	T 18
W19	13 47 42	28° 44'24	12° 59'	17° 53'	14° 7'	13° 31'	5° 12'	21° 3'	7° 54'	4° 12'	1° 58'	28° 59'	0° 12'	27° 24'	19° 39'	W19
T 20	13 51 39	29° 42'51	2° 8'	19° 16'	15° 1'	13° 27'	5° 23'	21° 3'	7° 53'	4° 15'	1° 57'	28° 56'	0° 9'	27° 30'	19° 41'	T 20
F 21	13 55 35	0° 41'16	11° 14'	20° 35'	15° 54'	13° 24'	5° 34'	21° 3'	7° 51'	4° 17'	1° 56'	28° 51'	0° 6'	27° 37'	19° 44'	F 21
S 22	13 59 32	1° 39'40	25° 15'	21° 48'	16° 47'	13° 22'	5° 45'	21° 3'	7° 50'	4° 19'	1° 56'	28° 43'	0° 2'	27° 44'	19° 46'	S 22
S 23	14 3 28	2° 38'03	9° 7'	22° 57'	17° 39'	13° 20'	5° 56'	21° 3'	7° 49'	4° 21'	1° 55'	28° 35'	29° 59'	27° 50'	19° 48'	S 23
M24	14 7 25	3° 36'23	22° 47'	24° 1'	18° 30'	13° 19'	6° 7'	21° 3'	7° 48'	4° 24'	1° 55'	28° 25'	29° 56'	27° 57'	19° 50'	M24
T 25	14 11 21	4° 34'42	6° 12'	25° 1'	19° 21'	13° 19'	6° 18'	21° 3'	7° 47'	4° 26'	1° 54'	28° 16'	29° 53'	28° 4'	19° 52'	T 25
W26	14 15 18	5° 32'59	19° 18'	25° 55'	20° 11'	13° 20'	6° 29'	21° 3'	7° 46'	4° 28'	1° 54'	28° 9'	29° 50'	28° 10'	19° 53'	W26
T 27	14 19 15	6° 31'14	2° 11'	26° 43'	21° 0'	13° 21'	6° 39'	21° 4'	7° 45'	4° 30'	1° 53'	28° 4'	29° 47'	28° 17'	19° 55'	T 27
F 28	14 23 11	7° 29'27	14° 37'	27° 27'	21° 48'	13° 24'	6° 49'	21° 4'	7° 44'	4° 33'	1° 53'	28° 1'	29° 43'	28° 23'	19° 57'	F 28
S 29	14 27 8	8° 27'39	26° 51'	28° 6'	22° 36'	13° 27'	7° 0'	21° 5'	7° 43'	4° 35'	1° 52'	28° 0'	29° 40'	28° 30'	19° 59'	S 29
S 30	14 31 4	9° 25'48	8° 53'	28° 39'	23° 23'	13° 30'	7° 10'	21° 5'	7° 42'	4° 37'	1° 52'	28° 0'	29° 37'	28° 37'	20° 0'	S 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4n24	24n 1	1n 0	4n56	0s39	22n 9	2n49	8n10	3n14	11s42	0s50	15n50	1n33	9n11	0n49	S 1
S 2	4 47	23 25	0s 3	5 53	0 29	22 27	2 53	8 14	3 11	11 38	0 51	15 51	1 33	9 11	0 49	S 2
M 3	5 10	21 45	1 6	6 51	0 19	22 45	2 57	8 19	3 9	11 34	0 51	15 52	1 33	9 12	0 49	M 3
T 4	5 33	19 9	2 5	7 48	0 8	23 2	3 0	8 23	3 6	11 29	0 51	15 52	1 33	9 13	0 48	T 4
W 5	5 56	15 46	3 0	8 44	0n 2	23 19	3 4	8 26	3 4	11 25	0 51	15 53	1 33	9 13	0 48	W 5
T 6	6 19	11 43	3 46	9 41	0 13	23 35	3 8	8 30	3 1	11 21	0 51	15 53	1 33	9 14	0 48	T 6
F 7	6 42	7 10	4 23	10 36	0 25	23 50	3 11	8 33	2 59	11 16	0 51	15 54	1 33	9 15	0 48	F 7
S 8	7 4	2 15	4 49	11 30	0 36	24 6	3 14	8 35	2 56	11 12	0 52	15 54	1 32	9 15	0 48	S 8
S 9	7 26	2s51	5 1	12 23	0 47	24 20	3 18	8 38	2 53	11 8	0 52	15 55	1 32	9 16	0 48	S 9
M10	7 49	7 57	4 58	13 15	0 58	24 34	3 21	8 40	2 51	11 4	0 52	15 55	1 32	9 17	0 48	M10
T 11	8 11	12 48	4 40	14 5	1 9	24 48	3 24	8 42	2 48	10 59	0 52	15 55	1 32	9 17	0 48	T 11
W12	8 33	17 7	4 5	14 53	1 20	25 1	3 27	8 43	2 45	10 55	0 52	15 56	1 32	9 18	0 48	W12
T 13	8 55	20 36	3 17	15 39	1 30	25 13	3 30	8 44	2 43	10 51	0 52	15 56	1 32	9 19	0 48	T 13
F 14	9 16	22 56	2 15	16 23	1 40	25 25	3 33	8 45	2 40	10 47	0 53	15 56	1 32	9 19	0 48	F 14
S 15	9 38	23 53	1 6	17 5	1 50	25 36	3 36	8 46	2 38	10 43	0 53	15 56	1 32	9 20	0 48	S 15
S 16	9 59	23 20	0n 9	17 44	1 59	25 47	3 38	8 46	2 35	10 39	0 53	15 57	1 32	9 20	0 48	S 16
M17	10 21	21 17	1 23	18 21	2 7	25 57	3 41	8 46	2 32	10 35	0 53	15 57	1 32	9 21	0 48	M17
T 18	10 42	17 56	2 32	18 55	2 15	26 7	3 43	8 46	2 30	10 31	0 53	15 57	1 32	9 21	0 48	T 18
W19	11 3	13 33	3 33	19 27	2 21	26 16	3 46	8 45	2 27	10 27	0 54	15 57	1 32	9 22	0 48	W19
T 20	11 23	8 25	4 20	19 56	2 27	26 24	3 48	8 44	2 24	10 23	0 54	15 57	1 32	9 22	0 48	T 20
F 21	11 44	2 53	4 51	20 22	2 33	26 32	3 50	8 43	2 22	10 19	0 54	15 57	1 32	9 23	0 48	F 21
S 22	12 4	2n46	5 4	20 46	2 37	26 40	3 52	8 41	2 19	10 15	0 54	15 57	1 31	9 23	0 48	S 22
S 23	12 24	8 13	5 0	21 7	2 40	26 47	3 54	8 39	2 16	10 11	0 54	15 57	1 31	9 23	0 48	S 23
M24	12 44	13 11	4 38	21 26	2 43	26 53	3 55	8 37	2 14	10 7	0 54	15 57	1 31	9 24	0 48	M24
T 25	13 4	17 24	4 2	21 42	2 44	26 59	3 57	8 35	2 11	10 4	0 55	15 57	1 31	9 24	0 48	T 25
W26	13 24	20 40	3 13	21 56	2 45	27 4	3 58	8 32	2 9	10 0	0 55	15 56	1 31	9 25	0 48	W26
T 27	13 43	22 49	2 15	22 7	2 44	27 9	3 59	8 29	2 6	9 56	0 55	15 56	1 31	9 25	0 48	T 27
F 28	14 2	23 46	1 12	22 15	2 42	27 13	4 0	8 26	2 3	9 53	0 55	15 56	1 31	9 25	0 48	F 28
S 29	14 21	23 33	0 6	22 21	2 39	27 17	4 1	8 23	2 1	9 49	0 56	15 56	1 31	9 26	0 48	S 29
S 30	14n39	22n12	0s59	22n25	2n35	27n20	4n 2	8n19	1n58	9s45	0s56	15n55	1n31	9n26	0n48	S 30

Julian Day Number = 2346810.5, Delta T = 11.01 sec
 Ecliptic obliquity = 23°28'36", Nutation = 0°00'17", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°44'14", Lahiri = 19°51'15"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1713

geocentric

MAY 1713

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	14 35 1	10♈23'56	20♌46	29♋7	24♊9	13♏35	7♎20	21♏6	7°R41	4♌40	1°R51	28♌1	29♌34	28♌43	20♋2	M 1	
T 2	14 38 57	11°22'01	2♌35	29°29	24°54	13°40	7°30	21°7	7♎41	4°42	1♏51	28°3	29°31	28°50	20°3	T 2	
W 3	14 42 54	12°20'05	14°26	29°47	25°38	13°45	7°40	21°8	7°40	4°44	1°51	28°R 3	29°27	28°57	20°5	W 3	
T 4	14 46 50	13°18'07	26°24	29°58	26°21	13°52	7°50	21°9	7°39	4°46	1°50	28°2	29°24	29°3	20°6	T 4	
F 5	14 50 47	14°16'06	8♏33	0♏5	27°3	13°59	7°59	21°11	7°39	4°48	1°50	27°59	29°21	29°10	20°7	F 5	
S 6	14 54 44	15°14'04	20°58	0°R 7	27°44	14°7	8°9	21°12	7°38	4°51	1°50	27°55	29°18	29°17	20°9	S 6	
S 7	14 58 40	16°12'00	3♌41	0°4	28°24	14°15	8°18	21°13	7°38	4°53	1°50	27°49	29°15	29°23	20°10	S 7	
M 8	15 2 37	17°9'54	16°46	29♋55	29°3	14°24	8°27	21°15	7°37	4°55	1°50	27°42	29°12	29°30	20°11	M 8	
T 9	15 6 33	18°7'47	0♏12	29°43	29°40	14°34	8°36	21°17	7°37	4°57	1°49	27°35	29°8	29°37	20°12	T 9	
W10	15 10 30	19°5'38	13°58	29°26	0♏16	14°44	8°45	21°18	7°37	5°0	1°49	27°30	29°5	29°43	20°13	W10	
T 11	15 14 26	20°3'28	28°1	29°5	0°52	14°55	8°54	21°20	7°36	5°2	1°49	27°25	29°2	29°50	20°14	T 11	
F 12	15 18 23	21°1'16	12♌16	28°41	1°25	15°6	9°3	21°22	7°36	5°4	1°49	27°23	28°59	29°57	20°15	F 12	
S 13	15 22 19	21°59'03	26°39	28°13	1°58	15°18	9°12	21°24	7°36	5°6	1°D49	27°D22	28°56	0♏3	20°16	S 13	
S 14	15 26 16	22°56'48	11♌4	27°43	2°28	15°30	9°20	21°27	7°36	5°8	1°49	27°22	28°53	0°10	20°16	S 14	
M15	15 30 13	23°54'33	25°28	27°11	2°58	15°43	9°29	21°29	7°D36	5°11	1°49	27°24	28°49	0°17	20°17	M15	
T 16	15 34 9	24°52'16	9♌47	26°38	3°26	15°57	9°37	21°31	7°36	5°13	1°49	27°25	28°46	0°23	20°18	T 16	
W17	15 38 6	25°49'58	23°58	26°4	3°52	16°11	9°45	21°34	7°36	5°15	1°49	27°R26	28°43	0°30	20°18	W17	
T 18	15 42 2	26°47'39	8♏8	0 25°29	4°17	16°26	9°53	21°36	7°36	5°17	1°49	27°25	28°40	0°37	20°19	T 18	
F 19	15 45 59	27°45'19	21°52	24°55	4°39	16°41	10°1	21°39	7°36	5°19	1°50	27°23	28°37	0°43	20°19	F 19	
S 20	15 49 55	28°42'58	5♏32	24°21	5°1	16°56	10°8	21°42	7°36	5°21	1°50	27°20	28°33	0°50	20°20	S 20	
S 21	15 53 52	29°40'36	19°0	23°50	5°20	17°13	10°16	21°45	7°37	5°23	1°50	27°17	28°30	0°57	20°20	S 21	
M22	15 57 48	0♏38'13	2♌14	23°20	5°37	17°29	10°23	21°47	7°37	5°25	1°50	27°12	28°27	1°3	20°20	M22	
T 23	16 1 45	1°35'49	15°15	22°52	5°53	17°46	10°30	21°51	7°37	5°27	1°50	27°8	28°24	1°10	20°20	T 23	
W24	16 5 42	2°33'24	28°1	22°28	6°7	18°4	10°38	21°54	7°38	5°30	1°51	27°5	28°21	1°17	20°20	W24	
T 25	16 9 38	3°30'58	10♏33	22°7	6°18	18°22	10°44	21°57	7°38	5°32	1°51	27°3	28°18	1°23	20°R20	T 25	
F 26	16 13 35	4°28'31	22°51	21°50	6°27	18°40	10°51	22°0	7°39	5°34	1°51	27°D 2	28°14	1°30	20°20	F 26	
S 27	16 17 31	5°26'02	4♌59	21°36	6°35	18°59	10°58	22°4	7°39	5°36	1°52	27°2	28°11	1°37	20°20	S 27	
S 28	16 21 28	6°23'32	16°56	21°27	6°40	19°18	11°4	22°7	7°40	5°38	1°52	27°3	28°8	1°43	20°20	S 28	
M29	16 25 24	7°21'01	28°48	21°22	6°42	19°38	11°11	22°11	7°41	5°40	1°53	27°5	28°5	1°50	20°20	M29	
T 30	16 29 21	8°18'29	10♏37	21°D21	6°R43	19°58	11°17	22°14	7°41	5°42	1°53	27°6	28°2	1°57	20°20	T 30	
W31	16 33 17	9♏15'56	22♌28	21♌24	6♌41	20♏19	11♌23	22♌18	7♏42	5♌44	1♏54	27♌8	27♌59	2♌3	20♌19	W31	

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	14n58	19n54	2s 0	22n26	2n30	27n23	4n 2	8n15	1n56	9s42	0s56	15n55	1n31	9n26	0n48	11n28	1s44
T 2	15 16	16 45	2 56	22 25	2 24	27 25	4 2	8 11	1 54	9 38	0 56	15 55	1 31	9 26	0 48	11 28	1 44
W 3	15 34	12 56	3 45	22 21	2 16	27 27	4 2	8 6	1 51	9 35	0 56	15 54	1 31	9 26	0 47	11 29	1 44
T 4	15 51	8 36	4 24	22 15	2 8	27 28	4 2	8 2	1 49	9 31	0 57	15 54	1 30	9 27	0 47	11 30	1 44
F 5	16 9	3 52	4 52	22 7	1 58	27 28	4 2	7 57	1 46	9 28	0 57	15 53	1 30	9 27	0 47	11 31	1 44
S 6	16 26	1s 7	5 7	21 57	1 47	27 29	4 1	7 52	1 44	9 25	0 57	15 53	1 30	9 27	0 47	11 31	1 44
S 7	16 43	6 11	5 8	21 45	1 35	27 29	4 1	7 46	1 42	9 21	0 57	15 52	1 30	9 27	0 47	11 32	1 44
M 8	16 59	11 6	4 53	21 30	1 22	27 28	3 59	7 41	1 39	9 18	0 58	15 52	1 30	9 27	0 47	11 33	1 44
T 9	17 15	15 38	4 21	21 14	1 8	27 27	3 58	7 35	1 37	9 15	0 58	15 51	1 30	9 27	0 47	11 34	1 44
W10	17 31	19 28	3 34	20 56	0 53	27 25	3 57	7 29	1 35	9 12	0 58	15 50	1 30	9 27	0 47	11 34	1 44
T 11	17 47	22 14	2 33	20 36	0 38	27 23	3 55	7 23	1 33	9 9	0 58	15 50	1 30	9 28	0 47	11 35	1 44
F 12	18 2	23 39	1 21	20 15	0 21	27 21	3 53	7 16	1 30	9 5	0 58	15 49	1 30	9 28	0 47	11 36	1 44
S 13	18 18	23 30	0 4	19 52	0 5	27 18	3 50	7 9	1 28	9 2	0 59	15 48	1 30	9 28	0 47	11 36	1 44
S 14	18 32	21 47	1n14	19 29	0s13	27 15	3 48	7 3	1 26	8 59	0 59	15 47	1 30	9 28	0 47	11 37	1 44
M15	18 47	18 40	2 28	19 4	0 30	27 11	3 45	6 56	1 24	8 57	0 59	15 47	1 30	9 28	0 47	11 38	1 44
T 16	19 1	14 26	3 31	18 40	0 48	27 7	3 42	6 48	1 22	8 54	0 59	15 46	1 29	9 28	0 47	11 39	1 44
W17	19 15	9 26	4 21	18 15	1 5	27 3	3 38	6 41	1 20	8 51	1 0	15 45	1 29	9 27	0 47	11 39	1 44
T 18	19 28	4 1	4 55	17 50	1 22	26 58	3 34	6 33	1 18	8 48	1 0	15 44	1 29	9 27	0 47	11 40	1 44
F 19	19 41	1n33	5 12	17 25	1 39	26 53	3 30	6 26	1 16	8 45	1 0	15 43	1 29	9 27	0 47	11 41	1 44
S 20	19 54	6 56	5 10	17 1	1 55	26 48	3 25	6 18	1 14	8 43	1 0	15 42	1 29	9 27	0 47	11 41	1 44
S 21	20 7	11 56	4 51	16 38	2 11	26 42	3 20	6 9	1 12	8 40	1 1	15 41	1 29	9 27	0 47	11 42	1 44
M22	20 19	16 17	4 17	16 17	2 26	26 36	3 15	6 1	1 10	8 37	1 1	15 40	1 29	9 27	0 47	11 43	1 44
T 23	20 31	19 46	3 30	15 56	2 40	26 30	3 9	5 53	1 8	8 35	1 1	15 39	1 29	9 27	0 47	11 43	1 44
W24	20 42	22 14	2 33	15 38	2 53	26 23	3 3	5 44	1 6	8 33	1 1	15 38	1 29	9 26	0 47	11 44	1 44
T 25	20 53	23 32	1 30	15 21	3 5	26 16	2 57	5 35	1 4	8 30	1 2	15 37	1 29	9 26	0 47	11 45	1 44
F 26	21 4	23 40	0 23	15 6	3 15	26 9	2 50	5 26	1 2	8 28	1 2	15 36	1 29	9 26	0 47	11 45	1 44
S 27	21 15	22 39	0s44	14 54	3 25	26 1	2 42	5 17	1 0	8 26	1 2	15 34	1 29	9 26	0 46	11 46	1 44
S 28	21 25	20 37	1 48	14 43	3 33	25 53	2 34	5 8	0 58	8 23	1 3	15 33	1 28	9 25	0 46	11 47	1 44
M29	21 34	17 43	2 47	14 35	3 40	25 44	2 26	4 58	0 56	8 21	1 3	15 32	1 28	9 25	0 46	11 47	1 45
T 30	21 44	14 6	3 38	14 29	3 46	25 36	2 18	4 49	0 55	8 19	1 3	15 31	1 28	9 25	0 46	11 48	1 45
W31	21n52	9n56	4s20	14n25	3s51	25n27	2n 8	4n39	0n53	8s17	1s 3	15n29	1n28	9n25	0n46	11n48	1s45

Julian Day Number = 2346840.5, Delta T = 10.99 sec

Ecliptic obliquity = 23°28'36", Nutation = 0°00'16", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°44'18", Lahiri = 19°51'19"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1713

geocentric

JUNE 1713

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 37 14	10 ^{II} 13'21	4 ^m 25	21 [♂] 33	6 [♂] R36	20 ^m 40	11 [♂] 29	22 [♂] 22	7 ^m 43	5 [♂] 46	1 ^m 54	27 [♂] 8	27 [♂] 55	2 [♂] 10	20 [♂] R19	T 1
F 2	16 41 11	11°10'45	16°34	21°45	6 [♂] 30	21° 1	11°34	22°26	7°44	5°48	1°55	27°R 8	27°52	2°17	20 [♂] 18	F 2
S 3	16 45 7	12° 8'08	28°58	22° 2	6°20	21°23	11°40	22°30	7°45	5°49	1°55	27° 8	27°49	2°23	20°18	S 3
S 4	16 49 4	13° 5'30	11 [♂] 42	22°24	6° 9	21°45	11°45	22°34	7°46	5°51	1°56	27° 6	27°46	2°30	20°17	S 4
M 5	16 53 0	14° 2'51	24°48	22°50	5°55	22° 7	11°50	22°38	7°47	5°53	1°57	27° 5	27°43	2°37	20°17	M 5
T 6	16 56 57	15° 0'11	8 ^m 19	23°20	5°38	22°30	11°55	22°43	7°48	5°55	1°57	27° 3	27°39	2°44	20°16	T 6
W 7	17 0 53	15°57'30	22°14	23°54	5°19	22°53	12° 0	22°47	7°49	5°57	1°58	27° 2	27°36	2°50	20°15	W 7
T 8	17 4 50	16°54'48	6 [♂] 32	24°33	4°58	23°17	12° 5	22°51	7°51	5°59	1°59	27° 1	27°33	2°57	20°14	T 8
F 9	17 8 46	17°52'05	21° 7	25°16	4°35	23°41	12° 9	22°56	7°52	6° 1	2° 0	27°D 1	27°30	3° 4	20°13	F 9
S 10	17 12 43	18°49'22	5 [♂] 53	26° 2	4° 9	24° 5	12°14	23° 1	7°53	6° 2	2° 0	27° 1	27°27	3°10	20°12	S 10
S 11	17 16 40	19°46'38	20°44	26°53	3°42	24°29	12°18	23° 5	7°55	6° 4	2° 1	27° 1	27°24	3°17	20°11	S 11
M12	17 20 36	20°43'54	5 [♂] 32	27°48	3°13	24°54	12°22	23°10	7°56	6° 6	2° 2	27° 2	27°20	3°24	20°10	M12
T 13	17 24 33	21°41'09	20°10	28°46	2°42	25°19	12°26	23°15	7°57	6° 7	2° 3	27° 2	27°17	3°30	20° 9	T 13
W14	17 28 29	22°38'24	4 [♂] 34	29°48	2° 9	25°44	12°29	23°20	7°59	6° 9	2° 4	27° 2	27°14	3°37	20° 8	W14
T 15	17 32 26	23°35'39	18°41	0 ^{II} 54	1°35	26°10	12°33	23°25	8° 0	6°11	2° 5	27°R 3	27°11	3°44	20° 7	T 15
F 16	17 36 22	24°32'53	2 [♂] 29	2° 3	1° 0	26°36	12°36	23°30	8° 2	6°13	2° 6	27° 3	27° 8	3°50	20° 5	F 16
S 17	17 40 19	25°30'08	15°58	3°16	0°24	27° 2	12°39	23°35	8° 4	6°14	2° 7	27° 2	27° 4	3°57	20° 4	S 17
S 18	17 44 15	26°27'22	29° 9	4°32	29 ^{II} 48	27°29	12°42	23°40	8° 5	6°16	2° 8	27° 2	27° 1	4° 4	20° 3	S 18
M19	17 48 12	27°24'36	12 [♂] 4	5°52	29°10	27°56	12°45	23°45	8° 7	6°17	2° 9	27°D 2	26°58	4°10	20° 1	M19
T 20	17 52 9	28°21'50	24°43	7°15	28°33	28°23	12°47	23°51	8° 9	6°19	2°10	27° 2	26°55	4°17	19°59	T 20
W21	17 56 5	29°19'04	7 ^{II} 10	8°41	27°55	28°50	12°49	23°56	8°11	6°20	2°11	27° 3	26°52	4°24	19°58	W21
T 22	18 0 2	0 [♂] 16'17	19°26	10°11	27°18	29°18	12°51	24° 2	8°13	6°22	2°12	27° 3	26°49	4°30	19°56	T 22
F 23	18 3 58	1°13'31	1 [♂] 32	11°44	26°41	29°46	12°53	24° 7	8°15	6°23	2°13	27°R 3	26°45	4°37	19°55	F 23
S 24	18 7 55	2°10'44	13°30	13°21	26° 5	0 [♂] 14	12°55	24°13	8°17	6°25	2°15	27° 3	26°42	4°44	19°53	S 24
S 25	18 11 51	3° 7'57	25°23	15° 0	25°30	0°42	12°57	24°18	8°19	6°26	2°16	27° 2	26°39	4°50	19°51	S 25
M26	18 15 48	4° 5'10	7 [♂] 13	16°43	24°56	1°11	12°58	24°24	8°21	6°28	2°17	27° 1	26°36	4°57	19°49	M26
T 27	18 19 45	5° 2'22	19° 2	18°29	24°23	1°40	12°59	24°30	8°23	6°29	2°18	27° 0	26°33	5° 4	19°47	T 27
W28	18 23 41	5°59'34	0 ^m 53	20°18	23°51	2° 9	13° 0	24°36	8°25	6°30	2°19	26°59	26°30	5°10	19°45	W28
T 29	18 27 38	6°56'46	12°51	22°10	23°22	2°38	13° 1	24°42	8°27	6°32	2°21	26°58	26°26	5°17	19°43	T 29
F 30	18 31 34	7 [♂] 53'57	24 ^m 59	24 ^{II} 4	22 ^{II} 54	3 [♂] 8	13 [♂] 2	24 [♂] 48	8 ^m 30	6 [♂] 33	2 ^m 22	26 [♂] 57	26 [♂] 23	5 [♂] 24	19 [♂] 41	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
T 1	22n 1	5n22	4s52	14n24	3s55	25n17	1n59	4n29	0n51	8s15	1s 4	15n28	1n28	9n24	0n46	11n49	1s45	22n38	12n43	23s27	23s28	16n53	8s17	6n48	
F 2	22 9	0 32	5 11	14 24	3 58	25 8	1 49	4 19	0 49	8 13	1 4	15 27	1 28	9 24	0 46	11 50	1 45	22 38	12 43	23 27	23 28	16 51	8 17	6 48	
S 3	22 17	4s25	5 16	14 27	3 59	24 58	1 38	4 9	0 48	8 11	1 4	15 25	1 28	9 23	0 46	11 50	1 45	22 37	12 43	23 27	23 27	16 48	8 17	6 48	
S 4	22 24	9 19	5 6	14 32	3 59	24 47	1 28	3 59	0 46	8 10	1 4	15 24	1 28	9 23	0 46	11 51	1 45	22 37	12 42	23 27	23 27	16 46	8 16	6 49	
M 5	22 31	13 58	4 40	14 39	3 59	24 37	1 16	3 48	0 44	8 8	1 5	15 22	1 28	9 23	0 46	11 51	1 45	22 36	12 42	23 27	23 27	16 44	8 16	6 49	
T 6	22 38	18 3	3 58	14 48	3 57	24 26	1 5	3 38	0 43	8 6	1 5	15 21	1 28	9 22	0 46	11 52	1 45	22 36	12 42	23 27	23 27	16 42	8 16	6 50	
W 7	22 44	21 16	3 1	14 59	3 55	24 15	0 52	3 27	0 41	8 5	1 5	15 19	1 28	9 22	0 46	11 53	1 45	22 35	12 41	23 27	23 27	16 40	8 16	6 50	
T 8	22 50	23 16	1 51	15 12	3 52	24 3	0 40	3 17	0 39	8 3	1 6	15 18	1 28	9 21	0 46	11 53	1 45	22 35	12 41	23 27	23 27	16 37	8 16	6 50	
F 9	22 55	23 43	0 33	15 26	3 47	23 51	0 27	3 6	0 38	8 2	1 6	15 16	1 28	9 21	0 46	11 54	1 45	22 34	12 41	23 27	23 27	16 35	8 16	6 51	
S 10	23 0	22 32	0n49	15 41	3 42	23 39	0 14	2 55	0 36	8 0	1 6	15 15	1 28	9 20	0 46	11 54	1 45	22 34	12 40	23 27	23 27	16 33	8 16	6 51	
S 11	23 5	19 46	2 8	15 58	3 37	23 26	0 1	2 43	0 35	7 59	1 6	15 13	1 28	9 20	0 46	11 55	1 45	22 33	12 40	23 27	23 27	16 31	8 16	6 51	
M12	23 9	15 43	3 18	16 17	3 30	23 13	0s13	2 32	0 33	7 58	1 7	15 12	1 27	9 19	0 46	11 55	1 45	22 32	12 40	23 27	23 27	16 29	8 16	6 52	
T 13	23 13	10 46	4 14	16 37	3 23	23 0	0 27	2 21	0 32	7 56	1 7	15 10	1 27	9 18	0 46	11 56	1 45	22 32	12 40	23 27	23 27	16 26	8 16	6 52	
W14	23 16	5 18	4 53	16 57	3 16	22 47	0 41	2 9	0 30	7 55	1 7	15 8	1 27	9 18	0 46	11 56	1 45	22 31	12 39	23 27	23 27	16 24	8 16	6 53	
T 15	23 19	0n20	5 14	17 19	3 7	22 33	0 55	1 58	0 29	7 54	1 8	15 7	1 27	9 17	0 46	11 57	1 45	22 31	12 39	23 27	23 27	16 22	8 16	6 53	
F 16	23 22	5 49	5 16	17 41	2 58	22 19	1 9	1 46	0 27	7 53	1 8	15 5	1 27	9 17	0 46	11 57	1 45	22 30	12 39	23 27	23 27	16 20	8 16	6 53	
S 17	23 24	10 54	5 0	18 4	2 49	22 5	1 23	1 34	0 26	7 52	1 8	15 3	1 27	9 16	0 46	11 58	1 45	22 29	12 38	23 27	23 27	16 17	8 16	6 54	
S 18	23 26	15 23	4 29	18 28	2 39	21 51	1 37	1 23	0 24	7 52	1 9	15 1	1 27	9 15	0 46	11 58	1 45	22 29	12 38	23 27	23 27	16 15	8 16	6 54	
M19	23 27	19 2	3 45	18 52	2 29	21 37	1 51	1 11	0 23	7 51	1 9	15 0	1 27	9 14	0 46	11 59	1 45	22 28	12 38	23 27	23 26	16 13	8 16	6 54	
T 20	23 28	21 44	2 50	19 17	2 18	21 23	2 5	0 58	0 22	7 50	1 9	14 58	1 27	9 14	0 46	11 59	1 45	22 27	12 38	23 27	23 26	16 11	8 16	6 55	
W21	23 28	23 19	1 48	19 41	2 7	21 9	2 19	0 46	0 20	7 49	1 9	14 56	1 27	9 13	0 45	12 0	1 45	22 27	12 37	23 27	23 26	16 8	8 17	6 55	
T 22	23 29	23 45	0 42	20 6	1 56	20 55	2 32	0 34	0 19	7 49	1 10	14 54	1 27	9 12	0 45	12 0	1 45	22 26	12 37	23 27	23 26	16 6	8 17	6 55	
F 23	23 28	23 3	0s25	20 30	1 45	20 41	2 45	0 22	0 17	7 48	1 10	14 52	1 27	9 12	0 45	12 1	1 46	22 25	12 37	23 27	23 26	16 4	8 17	6 56	
S 24	23 27	21 18	1 30	20 54	1 33	20 27	2 58	0 9	0 16	7 48	1 10	14 50	1 27	9 11	0 45	12 1	1 46	22 25	12 36	23 27	23 26	16 2	8 17	6 56	
S 25	23 26	18 37	2 31	21 18	1 21	20 14	3 10	0s 3	0 15	7 48	1 11	14 48	1 27	9 10	0 45	12 1	1 46	22 24	12 36	23 27	23 26	15 59	8 18	6 56	
M26	23 25	15 12	3 25	21 40	1 9	20 1	3 22	0 16	0 13	7 48	1 11	14 46	1 27	9 9	0 45	12 2	1 46	22 23	12 36	23 27	23 26	15 57	8 18	6 57	
T 27	23 23	11 11	4 10	22 2	0 57	19 49	3 33	0 29	0 12	7 47	1 11	14 44	1 27	9 8	0 45	12 2	1 46	22 23	12 36	23 27	23 26	15 55	8 18	6 57	
W28	23 20	6 44	4 45	22 23	0 44	19 36	3 44	0 41	0 11	7 47	1 12	14 42	1 27	9 7	0 45	12 3	1 46	22 22	12 35	23 27	23 26	15 53	8 18	6 57	
T 29	23 18	2 1	5 7	22 42	0 32	19 25	3 54	0 54	0 10	7 47	1 12	14 40	1 27	9 7	0 45	12 3	1 46	22 21	12 35	23 26	23 26	15 50	8 19	6 57	
F 30	23n14	2s51	5s17	23n 0	0s20	19n14	4s 4	1s 7	0n 8	7s47	1s12	14n38	1n27	9n 6	0n45	12n 3	1s46	22n21	12n35	23s26	23s26	15n48	8s19	6n58	

ASTRODIENST EPHEMERIS for the year 1713

geocentric

JULY 1713

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	18 35 31	8 ⁵¹ 08	7 ²⁰ 20	26 ^{II} 1	22 ^R 28	3 ² 38	13 ¹ 13	24 ² 54	8 ³ 32	6 ⁸ 34	2 ² 23	26 ^D 57	26 ² 20	5 ² 30	19 ^R 39	S 1
S 2	18 39 27	9 ⁴⁸ 19	20° 0	28° 1	22 ^{II} 4	4° 8	13° 2	25° 0	8°34	6°36	2°25	26 ² 57	26°17	5°37	19 ² 37	S 2
M 3	18 43 24	10 ⁴⁵ 30	3 ³ 3	0 ² 2	21°42	4°38	13 ^R 2	25° 6	8°37	6°37	2°26	26°58	26°14	5°44	19°35	M 3
T 4	18 47 20	11°42'41	16°30	2° 6	21°23	5° 9	13° 2	25°12	8°39	6°38	2°28	26°59	26°10	5°50	19°32	T 4
W 5	18 51 17	12°39'51	0 ² 24	4°11	21° 5	5°40	13° 2	25°18	8°41	6°39	2°29	27° 0	26° 7	5°57	19°30	W 5
T 6	18 55 14	13°37'02	14°44	6°17	20°50	6°11	13° 1	25°24	8°44	6°40	2°30	27° 1	26° 4	6° 4	19°28	T 6
F 7	18 59 10	14°34'13	29°26	8°25	20°38	6°42	13° 0	25°31	8°46	6°41	2°32	27°R 1	26° 1	6°10	19°25	F 7
S 8	19 3 7	15°31'23	14 ² 26	10°34	20°28	7°13	12°59	25°37	8°49	6°42	2°33	27° 1	25°58	6°17	19°23	S 8
S 9	19 7 3	16°28'34	29°35	12°43	20°20	7°45	12°58	25°44	8°52	6°44	2°35	26°59	25°55	6°24	19°20	S 9
M10	19 11 0	17°25'46	14 ² 43	14°52	20°15	8°16	12°57	25°50	8°54	6°45	2°36	26°57	25°51	6°30	19°18	M10
T 11	19 14 56	18°22'57	29°42	17° 1	20°12	8°48	12°55	25°57	8°57	6°46	2°38	26°54	25°48	6°37	19°15	T 11
W12	19 18 53	19°20'10	14 ² 23	19°10	20°D11	9°20	12°54	26° 3	9° 0	6°47	2°40	26°52	25°45	6°44	19°13	W12
T 13	19 22 49	20°17'22	28°41	21°18	20°13	9°53	12°52	26°10	9° 2	6°47	2°41	26°49	25°42	6°51	19°10	T 13
F 14	19 26 46	21°14'36	12 ² 34	23°25	20°17	10°25	12°50	26°17	9° 5	6°48	2°43	26°48	25°39	6°57	19° 7	F 14
S 15	19 30 43	22°11'50	26° 1	25°31	20°23	10°58	12°47	26°23	9° 8	6°49	2°44	26°D48	25°36	7° 4	19° 5	S 15
S 16	19 34 39	23° 9'05	9 ² 6	27°37	20°31	11°31	12°45	26°30	9°11	6°50	2°46	26°49	25°32	7°11	19° 2	S 16
M17	19 38 36	24° 6'21	21°49	29°41	20°42	12° 4	12°42	26°37	9°14	6°51	2°48	26°50	25°29	7°17	18°59	M17
T 18	19 42 32	25° 3'38	4 ² 16	1 ² 43	20°55	12°37	12°39	26°44	9°17	6°52	2°49	26°52	25°26	7°24	18°56	T 18
W19	19 46 29	26° 0'56	16°29	3°45	21° 9	13°10	12°36	26°51	9°20	6°52	2°51	26°53	25°23	7°31	18°54	W19
T 20	19 50 25	26°58'14	28°32	5°44	21°26	13°44	12°33	26°58	9°23	6°53	2°53	26°R54	25°20	7°37	18°51	T 20
F 21	19 54 22	27°55'34	10 ² 28	7°42	21°44	14°18	12°29	27° 5	9°26	6°54	2°55	26°53	25°16	7°44	18°48	F 21
S 22	19 58 18	28°52'53	22°20	9°39	22° 4	14°52	12°26	27°12	9°29	6°54	2°56	26°50	25°13	7°51	18°45	S 22
S 23	20 2 15	29°50'14	4 ² 9	11°33	22°27	15°26	12°22	27°19	9°32	6°55	2°58	26°46	25°10	7°57	18°42	S 23
M24	20 6 12	0 ² 47'35	15°59	13°26	22°50	16° 0	12°18	27°26	9°35	6°56	3° 0	26°41	25° 7	8° 4	18°39	M24
T 25	20 10 8	1°44'57	27°50	15°18	23°16	16°34	12°14	27°33	9°38	6°56	3° 2	26°35	25° 4	8°11	18°36	T 25
W26	20 14 5	2°42'20	9 ² 44	17° 8	23°43	17° 9	12°10	27°40	9°41	6°57	3° 3	26°28	25° 1	8°17	18°33	W26
T 27	20 18 1	3°39'43	21°46	18°56	24°11	17°44	12° 5	27°47	9°45	6°57	3° 5	26°22	24°57	8°24	18°30	T 27
F 28	20 21 58	4°37'07	3 ² 55	20°42	24°41	18°19	12° 0	27°54	9°48	6°58	3° 7	26°17	24°54	8°31	18°27	F 28
S 29	20 25 54	5°34'32	16°18	22°27	25°12	18°54	11°56	28° 1	9°51	6°58	3° 9	26°14	24°51	8°37	18°24	S 29
S 30	20 29 51	6°31'57	28°55	24°10	25°45	19°29	11°51	28° 9	9°54	6°58	3°11	26°12	24°48	8°44	18°21	S 30
M31	20 33 47	7 ² 29'23	11 ² 52	25 ² 51	26 ^{II} 19	20 ² 4	11 ² 45	28 ² 16	9 ² 58	6 ² 59	3 ² 13	26°D12	24 ² 45	8 ² 51	18 ² 18	M31

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
S 1	23n11	7s41	5s12	23n16	0s 9	19n 4	4s13	1s20	0n 7	7s47	1s12	14n36	1n27	9n 5	0n45	12n 4	1s46	22n20	12n35	23s26	23s26	15n46	8s20	6n58	
S 2	23 7	12 20	4 52	23 30	0n 3	18 54	4 21	1 33	0 6	7 48	1 13	14 34	1 27	9 4	0 45	12 4	1 46	22 19	12 35	23 26	23 25	15 44	8 20	6 58	
M 3	23 2	16 33	4 16	23 43	0 14	18 45	4 29	1 47	0 5	7 48	1 13	14 32	1 26	9 3	0 45	12 5	1 46	22 18	12 34	23 26	23 25	15 41	8 20	6 58	
T 4	22 58	20 5	3 26	23 52	0 25	18 36	4 36	2 0	0 3	7 48	1 13	14 30	1 26	9 2	0 45	12 5	1 46	22 18	12 34	23 27	23 25	15 39	8 21	6 59	
W 5	22 52	22 35	2 22	24 0	0 35	18 28	4 43	2 13	0 2	7 49	1 14	14 28	1 26	9 1	0 45	12 5	1 46	22 17	12 34	23 27	23 25	15 37	8 21	6 59	
T 6	22 47	23 43	1 7	24 4	0 45	18 21	4 49	2 26	0 1	7 49	1 14	14 26	1 26	9 0	0 45	12 6	1 46	22 16	12 34	23 27	23 25	15 34	8 22	6 59	
F 7	22 41	23 15	0n13	24 6	0 54	18 15	4 55	2 40	0s 0	7 50	1 14	14 23	1 26	8 59	0 45	12 6	1 46	22 15	12 33	23 27	23 25	15 32	8 22	6 59	
S 8	22 34	21 7	1 35	24 6	1 2	18 9	5 0	2 53	0 1	7 50	1 15	14 21	1 26	8 58	0 45	12 6	1 46	22 15	12 33	23 27	23 25	15 30	8 23	7 0	
S 9	22 28	17 30	2 50	24 2	1 10	18 4	5 4	3 7	0 2	7 51	1 15	14 19	1 26	8 57	0 45	12 6	1 46	22 14	12 33	23 27	23 25	15 28	8 23	7 0	
M10	22 20	12 43	3 54	23 56	1 18	18 0	5 8	3 20	0 4	7 52	1 15	14 17	1 26	8 56	0 45	12 7	1 46	22 13	12 33	23 26	23 25	15 25	8 24	7 0	
T 11	22 13	7 13	4 40	23 47	1 24	17 56	5 11	3 34	0 5	7 53	1 15	14 15	1 26	8 55	0 45	12 7	1 46	22 12	12 33	23 26	23 25	15 23	8 24	7 0	
W12	22 5	1 26	5 7	23 35	1 30	17 53	5 14	3 48	0 6	7 54	1 16	14 12	1 26	8 54	0 45	12 7	1 47	22 12	12 32	23 26	23 24	15 21	8 25	7 1	
T 13	21 56	4n17	5 15	23 21	1 35	17 51	5 17	4 1	0 7	7 55	1 16	14 10	1 26	8 53	0 45	12 7	1 47	22 11	12 32	23 26	23 24	15 18	8 26	7 1	
F 14	21 48	9 37	5 3	23 4	1 39	17 49	5 19	4 15	0 8	7 56	1 16	14 8	1 26	8 52	0 45	12 8	1 47	22 10	12 32	23 26	23 24	15 16	8 26	7 1	
S 15	21 39	14 20	4 35	22 44	1 42	17 48	5 21	4 29	0 9	7 57	1 17	14 5	1 26	8 51	0 45	12 8	1 47	22 9	12 32	23 26	23 24	15 14	8 27	7 1	
S 16	21 29	18 14	3 53	22 23	1 45	17 47	5 22	4 43	0 10	7 58	1 17	14 3	1 26	8 50	0 45	12 8	1 47	22 9	12 32	23 26	23 24	15 12	8 28	7 1	
M17	21 19	21 10	3 1	21 59	1 47	17 47	5 23	4 57	0 11	8 0	1 17	14 1	1 26	8 49	0 45	12 8	1 47	22 8	12 32	23 26	23 24	15 9	8 28	7 1	
T 18	21 9	23 1	2 1	21 34	1 48	17 47	5 23	5 11	0 12	8 1	1 18	13 58	1 26	8 47	0 45	12 9	1 47	22 7	12 31	23 26	23 24	15 7	8 29	7 2	
W19	20 59	23 44	0 57	21 6	1 48	17 48	5 23	5 25	0 13	8 2	1 18	13 56	1 26	8 46	0 45	12 9	1 47	22 6	12 31	23 26	23 24	15 5	8 30	7 2	
T 20	20 48	23 19	0s 9	20 37	1 48	17 49	5 23	5 39	0 14	8 4	1 18	13 54	1 26	8 45	0 45	12 9	1 47	22 5	12 31	23 26	23 24	15 2	8 30	7 2	
F 21	20 37	21 50	1 14	20 6	1 47	17 51	5 23	5 53	0 15	8 5	1 18	13 51	1 26	8 44	0 45	12 9	1 47	22 5	12 31	23 26	23 24	15 0	8 31	7 2	
S 22	20 25	19 24	2 15	19 34	1 46	17 53	5 22	6 7	0 16	8 7	1 19	13 49	1 26	8 43	0 44	12 9	1 47	22 4	12 31	23 26	23 23	14 58	8 32	7 2	
S 23	20 13	16 11	3 10	19 0	1 44	17 55	5 21	6 21	0 17	8 9	1 19	13 46	1 26	8 42	0 44	12 9	1 47	22 3	12 31	23 26	23 23	14 55	8 33	7 2	
M24	20 1	12 19	3 56	18 26	1 41	17 58	5 19	6 35	0 18	8 11	1 19	13 44	1 26	8 40	0 44	12 10	1 47	22 2	12 30	23 26	23 23	14 53	8 33	7 2	
T 25	19 48	7 59	4 33	17 50	1 38	18 1	5 18	6 49	0 19	8 12	1 19	13 42	1 26	8 39	0 44	12 10	1 47	22 1	12 30	23 26	23 23	14 51	8 34	7 2	
W26	19 35	3 20	4 57	17 13	1 34	18 4	5 16	7 3	0 20	8 14	1 20	13 39	1 26	8 38	0 44	12 10	1 47	22 1	12 30	23 26	23 23	14 48	8 35	7 3	
T 27	19 22	1s28	5 9	16 36	1 30	18 7	5 14	7 18	0 21	8 16	1 20	13 37	1 26	8 37	0 44	12 10	1 47	22 0	12 30	23 26	23 23	14 46	8 36	7 3	
F 28	19 8	6 16	5 8	15 58	1 26	18 11	5 12	7 32	0 22	8 18	1 20	13 34	1 26	8 36	0 44	12 10	1 47	21 59	12 30	23 25	23 23	14 44	8 37	7 3	
S 29	18 54	10 54	4 52	15 19	1 20	18 14	5 9	7 46	0 23	8 20	1 21	13 32	1 26	8 34	0 44	12 10	1 48	21 58	12 30	23 25	23 23	14 41	8 38	7 3	
S 30	18 40	15 11	4 22	14 40	1 15	18 18	5 6	8 0	0 24	8 23	1 21	13 29	1 26	8 33	0 44	12 10	1 48	21 58	12 30	23 25	23 22	14 39	8 38	7 3	
M31	18n26	18s52	3s37	14n 0	1n 9	18n22	5s 3	8s14	0s25	8s25	1s21	13n27	1n26	8n32	0n44	12n10	1s48	21n57	12n30	23s25	23s22	14n37	8s39	7n	

ASTRODIENST EPHEMERIS for the year 1713
geocentric

AUGUST 1713

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 37 44	8♌26°49	25♍12	27♎31	26♏54	20♐40	11♑R40	28♒23	10♓ 1	6♉59	3♊15	26♋13	24♌42	8♍57	18♎R15	T 1
W 2	20 41 41	9°24'17	8♌♌57	29° 9	27°31	21°15	11♑K35	28°31	10° 4	6°59	3°17	26°14	24°38	9° 4	18♎≈12	W 2
T 3	20 45 37	10°21'45	23° 9	0♐46	28° 9	21°51	11°29	28°38	10° 8	7° 0	3°18	26°R15	24°35	9°11	18° 8	T 3
F 4	20 49 34	11°19'14	7♌46	2°21	28°47	22°27	11°23	28°45	10°11	7° 0	3°20	26°14	24°32	9°18	18° 5	F 4
S 5	20 53 30	12°16'44	22°44	3°54	29°27	23° 3	11°17	28°53	10°14	7° 0	3°22	26°12	24°29	9°24	18° 2	S 5
S 6	20 57 27	13°14'15	7♌≈57	5°26	0♏8	23°39	11°11	29° 0	10°18	7° 0	3°24	26° 8	24°26	9°31	17°59	S 6
M 7	21 1 23	14°11'47	23°14	6°56	0°50	24°16	11° 5	29° 8	10°21	7° 0	3°26	26° 2	24°22	9°38	17°56	M 7
T 8	21 5 20	15° 9'20	8♌K25	8°24	1°33	24°52	10°59	29°15	10°25	7° 0	3°28	25°55	24°19	9°44	17°53	T 8
W 9	21 9 16	16° 6'55	23°19	9°51	2°17	25°29	10°53	29°22	10°28	7° 0	3°30	25°47	24°16	9°51	17°50	W 9
T 10	21 13 13	17° 4'30	7♌P49	11°16	3° 2	26° 6	10°46	29°30	10°32	7°R 1	3°32	25°41	24°13	9°58	17°46	T 10
F 11	21 17 10	18° 2'08	21°51	12°40	3°48	26°43	10°39	29°37	10°35	7° 1	3°34	25°36	24°10	10° 4	17°43	F 11
S 12	21 21 6	18°59'47	5♌23	14° 1	4°35	27°20	10°33	29°45	10°39	7° 0	3°36	25°33	24° 7	10°11	17°40	S 12
S 13	21 25 3	19°57'27	18°28	15°21	5°22	27°57	10°26	29°53	10°43	7° 0	3°38	25°D32	24° 3	10°18	17°37	S 13
M14	21 28 59	20°55'09	1♏11	16°39	6°10	28°34	10°19	0♐ 0	10°46	7° 0	3°40	25°33	24° 0	10°24	17°34	M14
T 15	21 32 56	21°52'53	13°30	17°55	6°59	29°11	10°12	0° 8	10°50	7° 0	3°42	25°34	23°57	10°31	17°31	T 15
W16	21 36 52	22°50'39	25°37	19°10	7°49	29°49	10° 4	0°15	10°53	7° 0	3°44	25°R34	23°54	10°38	17°27	W16
T 17	21 40 49	23°48'26	7♌33	20°22	8°40	0♐27	9°57	0°23	10°57	7° 0	3°46	25°33	23°51	10°44	17°24	T 17
F 18	21 44 45	24°46'15	19°24	21°33	9°31	1° 5	9°50	0°30	11° 1	7° 0	3°48	25°30	23°48	10°51	17°21	F 18
S 19	21 48 42	25°44'05	1♏13	22°41	10°23	1°42	9°42	0°38	11° 4	6°59	3°50	25°25	23°44	10°58	17°18	S 19
S 20	21 52 39	26°41'57	13° 2	23°47	11°15	2°21	9°35	0°46	11° 8	6°59	3°52	25°17	23°41	11° 4	17°15	S 20
M21	21 56 35	27°39'50	24°54	24°50	12° 8	2°59	9°27	0°53	11°12	6°59	3°54	25° 7	23°38	11°11	17°12	M21
T 22	22 0 32	28°37'45	6♐50	25°51	13° 2	3°37	9°20	1° 1	11°15	6°58	3°56	24°56	23°35	11°18	17° 9	T 22
W23	22 4 28	29°35'41	18°52	26°50	13°56	4°16	9°12	1° 8	11°19	6°58	3°58	24°44	23°32	11°25	17° 6	W23
T 24	22 8 25	0♐33'39	1♏ 2	27°46	14°51	4°54	9° 4	1°16	11°23	6°57	4° 0	24°32	23°28	11°31	17° 3	T 24
F 25	22 12 21	1°31'38	13°20	28°39	15°46	5°33	8°56	1°24	11°27	6°57	4° 3	24°22	23°25	11°38	17° 0	F 25
S 26	22 16 18	2°29'39	25°48	29°29	16°42	6°12	8°48	1°31	11°30	6°56	4° 5	24°14	23°22	11°45	16°57	S 26
S 27	22 20 14	3°27'41	8♐29	0♏15	17°38	6°51	8°41	1°39	11°34	6°56	4° 7	24° 9	23°19	11°51	16°54	S 27
M28	22 24 11	4°25'45	21°26	0°59	18°35	7°30	8°33	1°46	11°38	6°55	4° 9	24° 7	23°16	11°58	16°51	M28
T 29	22 28 8	5°23'50	4♌41	1°38	19°32	8° 9	8°25	1°54	11°42	6°55	4°11	24°D 6	23°13	12° 5	16°48	T 29
W30	22 32 4	6°21'56	18°18	2°14	20°30	8°48	8°17	2° 2	11°45	6°54	4°13	24°R 6	23° 9	12°11	16°45	W30
T 31	22 36 1	7♐20'04	2♌17	2♏45	21♏28	9♐27	8♌ 9	2♐ 9	11♐49	6♉54	4♊15	24♋ 6	23♌ 6	12♏18	16≈42	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	18n11	21s41	2s40	13n20	1n 3	18n26	5s 0	8s29	0s26	8s27	1s21	13n24	1n26	8n30	0n44	12n10	1s48
W 2	17 56	23 21	1 32	12 40	0 56	18 30	4 57	8 43	0 27	8 29	1 22	13 22	1 26	8 29	0 44	12 10	1 48
T 3	17 40	23 35	0 17	11 59	0 49	18 34	4 54	8 57	0 28	8 32	1 22	13 19	1 26	8 28	0 44	12 10	1 48
F 4	17 25	22 13	1n 2	11 19	0 42	18 38	4 50	9 11	0 28	8 34	1 22	13 16	1 26	8 27	0 44	12 10	1 48
S 5	17 9	19 17	2 18	10 38	0 35	18 42	4 47	9 26	0 29	8 37	1 22	13 14	1 26	8 25	0 44	12 10	1 48
S 6	16 52	15 0	3 26	9 57	0 27	18 46	4 43	9 40	0 30	8 39	1 22	13 11	1 26	8 24	0 44	12 10	1 48
M 7	16 36	9 43	4 19	9 16	0 19	18 50	4 39	9 54	0 31	8 42	1 23	13 9	1 26	8 23	0 44	12 10	1 48
T 8	16 19	3 54	4 53	8 36	0 11	18 53	4 35	10 8	0 32	8 44	1 23	13 6	1 26	8 21	0 44	12 10	1 48
W 9	16 2	2n 2	5 7	7 55	0 2	18 57	4 31	10 22	0 33	8 47	1 23	13 4	1 27	8 20	0 44	12 10	1 48
T 10	15 45	7 42	5 0	7 15	0s 7	19 0	4 26	10 37	0 33	8 49	1 23	13 1	1 27	8 19	0 44	12 10	1 48
F 11	15 27	12 47	4 36	6 35	0 16	19 3	4 22	10 51	0 34	8 52	1 23	12 58	1 27	8 17	0 44	12 10	1 48
S 12	15 9	17 3	3 56	5 55	0 25	19 7	4 17	11 5	0 35	8 55	1 24	12 56	1 27	8 16	0 44	12 10	1 48
S 13	14 51	20 19	3 6	5 16	0 34	19 9	4 13	11 19	0 36	8 58	1 24	12 53	1 27	8 14	0 44	12 10	1 48
M14	14 33	22 30	2 7	4 37	0 43	19 12	4 8	11 33	0 37	9 1	1 24	12 50	1 27	8 13	0 44	12 10	1 49
T 15	14 14	23 31	1 4	3 58	0 53	19 14	4 4	11 47	0 37	9 3	1 24	12 48	1 27	8 12	0 44	12 10	1 49
W16	13 55	23 24	0s 0	3 20	1 2	19 16	3 59	12 1	0 38	9 6	1 24	12 45	1 27	8 10	0 44	12 10	1 49
T 17	13 36	22 12	1 4	2 43	1 12	19 18	3 54	12 15	0 39	9 9	1 25	12 43	1 27	8 9	0 44	12 9	1 49
F 18	13 17	20 1	2 4	2 7	1 22	19 20	3 49	12 29	0 40	9 12	1 25	12 40	1 27	8 8	0 44	12 9	1 49
S 19	12 58	17 1	2 58	1 31	1 31	19 21	3 44	12 43	0 40	9 15	1 25	12 37	1 27	8 6	0 44	12 9	1 49
S 20	12 38	13 20	3 45	0 56	1 41	19 22	3 39	12 57	0 41	9 18	1 25	12 35	1 27	8 5	0 44	12 9	1 49
M21	12 18	9 7	4 22	0 21	1 51	19 22	3 34	13 11	0 42	9 21	1 25	12 32	1 27	8 3	0 44	12 9	1 49
T 22	11 58	4 33	4 48	0s12	2 1	19 22	3 29	13 25	0 43	9 24	1 25	12 29	1 27	8 2	0 44	12 9	1 49
W23	11 38	0s12	5 1	0 44	2 11	19 22	3 24	13 38	0 43	9 27	1 25	12 27	1 27	8 0	0 44	12 9	1 49
T 24	11 17	5 0	5 1	1 15	2 20	19 21	3 19	13 52	0 44	9 30	1 26	12 24	1 27	7 59	0 44	12 8	1 49
F 25	10 57	9 40	4 46	1 45	2 30	19 20	3 13	14 6	0 45	9 33	1 26	12 21	1 27	7 58	0 44	12 8	1 49
S 26	10 36	14 0	4 18	2 14	2 40	19 19	3 8	14 19	0 45	9 36	1 26	12 19	1 27	7 56	0 44	12 8	1 49
S 27	10 15	17 47	3 37	2 41	2 49	19 17	3 3	14 33	0 46	9 39	1 26	12 16	1 27	7 55	0 44	12 8	1 49
M28	9 54	20 47	2 44	3 7	2 58	19 15	2 58	14 46	0 47	9 42	1 26	12 13	1 28	7 53	0 44	12 7	1 49
T 29	9 33	22 46	1 41	3 31	3 7	19 12	2 52	15 0	0 47	9 46	1 26	12 11	1 28	7 52	0 44	12 7	1 49
W30	9 11	23 28	0 31	3 53	3 16	19 9	2 47	15 13	0 48	9 49	1 26	12 8	1 28	7 50	0 44	12 7	1 49
T 31	8n50	22s44	0n43	4s13	3s24	19n 6	2s42	15s26	0s49	9s52	1s26	12n 5	1n28	7n49	0n44	12n 7	1s50

Julian Day Number = 2346932.5, Delta T = 10.96 sec
Ecliptic obliquity = 23°28'35", Nutation = 0°00'18", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°44'31", Lahiri = 19°51'31"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1713

geocentric

SEPTEMBER 1713

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	22 39 57	8♍18'13	16♌41	3♊12	22♌27	10♍7	8♍1	2♍17	11♍53	6♍53	4♍17	24♍4	23♌3	12♌25	16♍39	F 1
S 2	22 43 54	9°16'24	1♌25	3°34	23°26	10°47	7♌53	2°24	11°57	6♌52	4°19	24♌1	23°0	12°31	16♌36	S 2
S 3	22 47 50	10°14'37	16°26	3°51	24°25	11°26	7°45	2°32	12°0	6°51	4°21	23°54	22°57	12°38	16°33	S 3
M 4	22 51 47	11°12'50	1♌35	4°3	25°25	12°6	7°37	2°40	12°4	6°51	4°23	23°45	22°54	12°45	16°31	M 4
T 5	22 55 43	12°11'06	16°43	4°R 8	26°25	12°46	7°29	2°47	12°8	6°50	4°25	23°34	22°50	12°52	16°28	T 5
W 6	22 59 40	13°9'23	1♌38	4°8	27°26	13°26	7°21	2°55	12°12	6°49	4°27	23°23	22°47	12°58	16°25	W 6
T 7	23 3 37	14°7'42	16°12	4°2	28°27	14°6	7°14	3°2	12°15	6°48	4°29	23°13	22°44	13°5	16°23	T 7
F 8	23 7 33	15°6'04	0♌20	3°49	29°28	14°46	7°6	3°10	12°19	6°47	4°31	23°5	22°41	13°12	16°20	F 8
S 9	23 11 30	16°4'27	13°58	3°29	0♌30	15°27	6°58	3°17	12°23	6°46	4°33	23°0	22°38	13°18	16°17	S 9
S 10	23 15 26	17°2'53	27°7	3°3	1°32	16°7	6°50	3°25	12°27	6°45	4°35	22°57	22°34	13°25	16°15	S 10
M 11	23 19 23	18°1'21	9♌50	2°30	2°34	16°48	6°43	3°32	12°31	6°45	4°37	22°55	22°31	13°32	16°12	M 11
T 12	23 23 19	18°59'51	22°12	1°50	3°37	17°28	6°35	3°40	12°34	6°44	4°39	22°55	22°28	13°38	16°10	T 12
W 13	23 27 16	19°58'23	4♌18	1°5	4°40	18°9	6°27	3°47	12°38	6°43	4°41	22°55	22°25	13°45	16°7	W 13
T 14	23 31 12	20°56'57	16°14	0°13	5°43	18°50	6°20	3°54	12°42	6°41	4°43	22°54	22°22	13°52	16°5	T 14
F 15	23 35 9	21°55'34	28°3	29♍16	6°47	19°31	6°13	4°2	12°46	6°40	4°45	22°50	22°19	13°58	16°3	F 15
S 16	23 39 6	22°54'12	9♌52	28°16	7°51	20°12	6°5	4°9	12°49	6°39	4°47	22°44	22°15	14°5	16°0	S 16
S 17	23 43 2	23°52'53	21°43	27°13	8°55	20°53	5°58	4°16	12°53	6°38	4°49	22°34	22°12	14°12	15°58	S 17
M 18	23 46 59	24°51'36	3♍40	26°8	10°0	21°34	5°51	4°24	12°57	6°37	4°51	22°23	22°9	14°19	15°56	M 18
T 19	23 50 55	25°50'21	15°44	25°3	11°4	22°16	5°44	4°31	13°0	6°36	4°53	22°9	22°6	14°25	15°54	T 19
W 20	23 54 52	26°49'08	27°57	24°0	12°9	22°57	5°37	4°38	13°4	6°35	4°55	21°55	22°3	14°32	15°51	W 20
T 21	23 58 48	27°47'57	10♌20	23°0	13°15	23°39	5°30	4°46	13°8	6°33	4°57	21°41	21°59	14°39	15°49	T 21
F 22	0 2 45	28°46'47	22°52	22°5	14°20	24°20	5°23	4°53	13°12	6°32	4°59	21°30	21°56	14°45	15°47	F 22
S 23	0 6 41	29°45'40	5♍35	21°16	15°26	25°2	5°17	5°0	13°15	6°31	5°1	21°20	21°53	14°52	15°45	S 23
S 24	0 10 38	0♌44'35	18°29	20°35	16°32	25°44	5°10	5°7	13°19	6°30	5°3	21°14	21°50	14°59	15°43	S 24
M 25	0 14 34	1°43'31	1♌35	20°3	17°38	26°26	5°4	5°14	13°23	6°28	5°5	21°11	21°47	15°5	15°41	M 25
T 26	0 18 31	2°42'30	14°54	19°41	18°44	27°8	4°58	5°21	13°26	6°27	5°7	21°9	21°44	15°12	15°40	T 26
W 27	0 22 28	3°41'30	28°29	19°28	19°51	27°50	4°52	5°28	13°30	6°26	5°8	21°9	21°40	15°19	15°38	W 27
T 28	0 26 24	4°40'32	12♌21	19°D26	20°58	28°32	4°46	5°35	13°33	6°24	5°10	21°9	21°37	15°25	15°36	T 28
F 29	0 30 21	5°39'35	26°31	19°34	22°5	29°15	4°40	5°42	13°37	6°23	5°12	21°8	21°34	15°32	15°35	F 29
S 30	0 34 17	6♌38'41	10♌57	19♍52	23♌12	29♍57	4♌35	5♍49	13♍40	6♌22	5♍14	21♌4	21♌31	15♌39	15♌33	S 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
F 1	8n28	20s30	1n57	4s31	3s32	19n 2	2s36	15s39	0s49	9s55	1s26	12n 3	1n28	7n48	0n44	12n 6	1s50	21n33	12n30	23s21	23s18	13n21	9s11	7n 0	
S 2	8 6	16 53	3 4	4 46	3 39	18 57	2 31	15 52	0 50	9 58	1 26	12 0	1 28	7 46	0 44	12 6	1 50	21 32	12 30	23 20	23 17	13 19	9 12	7 0	
S 3	7 44	12 7	4 0	4 59	3 46	18 53	2 26	16 5	0 51	10 1	1 27	11 57	1 28	7 45	0 44	12 6	1 50	21 31	12 30	23 20	23 17	13 16	9 13	7 0	
M 4	7 22	6 35	4 39	5 9	3 52	18 47	2 20	16 18	0 51	10 4	1 27	11 55	1 28	7 43	0 44	12 6	1 50	21 31	12 30	23 20	23 17	13 14	9 14	6 59	
T 5	7 0	0 40	4 59	5 17	3 57	18 41	2 15	16 31	0 52	10 7	1 27	11 52	1 28	7 42	0 44	12 5	1 50	21 30	12 30	23 19	23 17	13 11	9 15	6 59	
W 6	6 38	5n12	4 58	5 21	4 2	18 35	2 10	16 44	0 53	10 10	1 27	11 49	1 28	7 40	0 44	12 5	1 50	21 29	12 30	23 19	23 17	13 9	9 16	6 59	
T 7	6 15	10 39	4 37	5 22	4 6	18 28	2 4	16 56	0 53	10 13	1 27	11 47	1 28	7 39	0 44	12 5	1 50	21 29	12 30	23 18	23 17	13 7	9 17	6 58	
F 8	5 53	15 21	4 0	5 19	4 8	18 21	1 59	17 9	0 54	10 16	1 27	11 44	1 28	7 37	0 44	12 4	1 50	21 28	12 30	23 18	23 16	13 4	9 18	6 58	
S 9	5 30	19 5	3 11	5 12	4 9	18 13	1 54	17 21	0 54	10 19	1 27	11 41	1 29	7 36	0 44	12 4	1 50	21 27	12 31	23 17	23 16	13 2	9 19	6 58	
S 10	5 7	21 41	2 12	5 1	4 9	18 5	1 48	17 34	0 55	10 21	1 27	11 39	1 29	7 35	0 44	12 4	1 50	21 27	12 31	23 17	23 16	12 59	9 20	6 58	
M11	4 45	23 6	1 9	4 47	4 7	17 56	1 43	17 46	0 55	10 24	1 27	11 36	1 29	7 33	0 44	12 3	1 50	21 26	12 31	23 17	23 16	12 57	9 21	6 57	
T 12	4 22	23 19	0 4	4 28	4 4	17 47	1 38	17 58	0 56	10 27	1 27	11 34	1 29	7 32	0 44	12 3	1 50	21 25	12 31	23 17	23 16	12 55	9 22	6 57	
W13	3 59	22 25	1s 0	4 5	3 59	17 38	1 33	18 10	0 57	10 30	1 27	11 31	1 29	7 30	0 44	12 2	1 50	21 25	12 31	23 17	23 16	12 52	9 23	6 57	
T 14	3 36	20 30	2 0	3 38	3 52	17 27	1 27	18 22	0 57	10 33	1 27	11 28	1 29	7 29	0 44	12 2	1 50	21 24	12 31	23 17	23 15	12 50	9 24	6 56	
F 15	3 12	17 44	2 54	3 7	3 43	17 17	1 22	18 34	0 58	10 35	1 27	11 26	1 29	7 27	0 44	12 2	1 50	21 24	12 31	23 17	23 15	12 47	9 25	6 56	
S 16	2 49	14 15	3 41	2 33	3 32	17 6	1 17	18 45	0 58	10 38	1 27	11 23	1 29	7 26	0 44	12 1	1 50	21 23	12 32	23 17	23 15	12 45	9 26	6 56	
S 17	2 26	10 13	4 18	1 56	3 19	16 54	1 12	18 57	0 59	10 41	1 27	11 21	1 29	7 25	0 44	12 1	1 50	21 22	12 32	23 16	23 15	12 42	9 27	6 55	
M18	2 3	5 46	4 44	1 17	3 4	16 42	1 7	19 8	0 59	10 43	1 27	11 18	1 29	7 23	0 44	12 0	1 50	21 22	12 32	23 15	23 15	12 40	9 28	6 55	
T 19	1 39	1 3	4 58	0 36	2 48	16 29	1 2	19 19	1 0	10 46	1 27	11 16	1 30	7 22	0 44	12 0	1 50	21 21	12 32	23 15	23 14	12 38	9 29	6 55	
W20	1 16	3s44	4 58	0n 5	2 30	16 16	0 57	19 31	1 0	10 48	1 27	11 13	1 30	7 20	0 44	12 0	1 50	21 21	12 32	23 14	23 14	12 35	9 30	6 54	
T 21	0 53	8 27	4 44	0 46	2 12	16 2	0 52	19 42	1 1	10 51	1 26	11 10	1 30	7 19	0 44	11 59	1 51	21 20	12 33	23 13	23 14	12 33	9 31	6 54	
F 22	0 29	12 52	4 17	1 26	1 52	15 48	0 47	19 52	1 1	10 53	1 26	11 8	1 30	7 18	0 44	11 59	1 51	21 20	12 33	23 12	23 14	12 30	9 32	6 54	
S 23	0 6	16 48	3 36	2 3	1 32	15 34	0 42	20 3	1 2	10 56	1 26	11 5	1 30	7 16	0 44	11 58	1 51	21 19	12 33	23 12	23 14	12 28	9 33	6 53	
S 24	0s18	19 58	2 44	2 38	1 12	15 19	0 37	20 14	1 2	10 58	1 26	11 3	1 30	7 15	0 44	11 58	1 51	21 19	12 33	23 11	23 13	12 25	9 34	6 53	
M25	0 41	22 10	1 42	3 9	0 52	15 3	0 33	20 24	1 3	11 0	1 26	11 0	1 30	7 13	0 44	11 57	1 51	21 18	12 33	23 11	23 13	12 23	9 35	6 53	
T 26	1 5	23 10	0 33	3 36	0 32	14 47	0 28	20 34	1 3	11 2	1 26	10 58	1 31	7 12	0 44	11 57	1 51	21 18	12 34	23 11	23 13	12 21	9 36	6 52	
W27	1 28	22 49	0n39	3 59	0 13	14 31	0 23	20 44	1 3	11 5	1 26	10 55	1 31	7 11	0 44	11 56	1 51	21 17	12 34	23 11	23 13	12 18	9 37	6 52	
T 28	1 52	21 5	1 50	4 16	0n 5	14 14	0 19	20 54	1 4	11 7	1 26	10 53	1 31	7 9	0 44	11 56	1 51	21 17	12 34	23 11	23 13	12 16	9 38	6 51	
F 29	2 15	18 1	2 56	4 28	0 22	13 57	0 14	21 4	1 4	11 9	1 26	10 51	1 31	7 8	0 44	11 55	1 51	21 16	12 34	23 11	23 12	12 13	9 38	6 51	
S 30	2s39	13s48	3n52	4n35	0n37	13n39	0s10	21s14	1s 5	11s11	1s26	10n48	1n31	7n 6	0n44	11n55	1s51	21n16	12n35	23s10	23s12	12n11	9s39	6n51	

ASTRODIENST EPHEMERIS for the year 1713
geocentric

OCTOBER 1713

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 38 14	7♂37'48	25♂37	20♂21	24♂19	0♂40	4°R29	5♂56	13♂44	6°R20	5♂16	20°R58	21♂28	15♂46	15°R31	S 1
M 2	0 42 10	8°36'57	10♂24	20°58	25°27	1°22	4♂24	6° 3	13°48	6♂19	5°17	20♂49	21°25	15°52	15°♂30	M 2
T 3	0 46 7	9°36'07	25°13	21°45	26°35	2° 5	4°19	6°10	13°51	6°17	5°19	20°39	21°21	15°59	15°28	T 3
W 4	0 50 3	10°35'20	9°Y54	22°40	27°43	2°48	4°14	6°16	13°55	6°16	5°21	20°28	21°18	16° 6	15°27	W 4
T 5	0 54 0	11°34'35	24°18	23°41	28°51	3°30	4° 9	6°23	13°58	6°14	5°23	20°18	21°15	16°12	15°26	T 5
F 6	0 57 57	12°33'51	8♂21	24°50	29°59	4°13	4° 4	6°30	14° 1	6°13	5°24	20°10	21°12	16°19	15°25	F 6
S 7	1 1 53	13°33'11	21°58	26° 4	1♂ 8	4°56	4° 0	6°36	14° 5	6°11	5°26	20° 4	21° 9	16°26	15°23	S 7
S 8	1 5 50	14°32'32	5♂ 9	27°24	2°17	5°39	3°56	6°43	14° 8	6°10	5°28	20° 1	21° 5	16°32	15°22	S 8
M 9	1 9 46	15°31'56	17°55	28°48	3°26	6°22	3°51	6°49	14°12	6° 8	5°30	20°D 0	21° 2	16°39	15°21	M 9
T 10	1 13 43	16°31'22	0♂20	0♂15	4°35	7° 6	3°47	6°56	14°15	6° 7	5°31	20° 0	20°59	16°46	15°20	T 10
W11	1 17 39	17°30'50	12°28	1°46	5°44	7°49	3°44	7° 2	14°18	6° 5	5°33	20°R 1	20°56	16°53	15°19	W11
T 12	1 21 36	18°30'21	24°25	3°19	6°54	8°32	3°40	7° 9	14°22	6° 4	5°34	20° 1	20°53	16°59	15°18	T 12
F 13	1 25 32	19°29'54	6♂16	4°55	8° 3	9°16	3°37	7°15	14°25	6° 2	5°36	19°59	20°50	17° 6	15°17	F 13
S 14	1 29 29	20°29'29	18° 7	6°32	9°13	9°59	3°34	7°21	14°28	6° 0	5°38	19°55	20°46	17°13	15°17	S 14
S 15	1 33 26	21°29'06	0♂ 0	8°11	10°23	10°43	3°31	7°28	14°31	5°59	5°39	19°49	20°43	17°19	15°16	S 15
M16	1 37 22	22°28'46	12° 2	9°50	11°33	11°27	3°28	7°34	14°35	5°57	5°41	19°40	20°40	17°26	15°15	M16
T 17	1 41 19	23°28'27	24°14	11°31	12°43	12°11	3°25	7°40	14°38	5°55	5°42	19°30	20°37	17°33	15°15	T 17
W18	1 45 15	24°28'11	6♂38	13°11	13°54	12°55	3°23	7°46	14°41	5°54	5°44	19°20	20°34	17°39	15°14	W18
T 19	1 49 12	25°27'57	19°15	14°53	15° 4	13°38	3°21	7°52	14°44	5°52	5°45	19°10	20°31	17°46	15°14	T 19
F 20	1 53 8	26°27'45	2♂ 6	16°34	16°15	14°23	3°19	7°58	14°47	5°50	5°47	19° 1	20°27	17°53	15°13	F 20
S 21	1 57 5	27°27'35	15° 9	18°16	17°25	15° 7	3°17	8° 4	14°50	5°49	5°48	18°54	20°24	18° 0	15°13	S 21
S 22	2 1 1	28°27'27	28°24	19°57	18°36	15°51	3°15	8° 9	14°53	5°47	5°50	18°50	20°21	18° 6	15°13	S 22
M23	2 4 58	29°27'21	11♂50	21°38	19°47	16°35	3°14	8°15	14°56	5°45	5°51	18°48	20°18	18°13	15°13	M23
T 24	2 8 55	0♂27'17	25°26	23°19	20°58	17°19	3°12	8°21	14°59	5°44	5°52	18°D47	20°15	18°20	15°13	T 24
W25	2 12 51	1°27'14	9♂12	25° 0	22° 9	18° 4	3°11	8°26	15° 2	5°42	5°54	18°49	20°11	18°26	15°D13	W25
T 26	2 16 48	2°27'13	23° 8	26°41	23°21	18°48	3°11	8°32	15° 5	5°40	5°55	18°50	20° 8	18°33	15°13	T 26
F 27	2 20 44	3°27'13	7♂12	28°21	24°32	19°33	3°10	8°37	15° 8	5°39	5°56	18°R50	20° 5	18°40	15°13	F 27
S 28	2 24 41	4°27'15	21°25	0♂ 0	25°44	20°17	3°10	8°43	15°10	5°37	5°57	18°49	20° 2	18°46	15°13	S 28
S 29	2 28 37	5°27'19	5♂44	1°40	26°55	21° 2	3°D10	8°48	15°13	5°35	5°59	18°45	19°59	18°53	15°13	S 29
M30	2 32 34	6°27'24	20° 6	3°19	28° 7	21°47	3°10	8°53	15°16	5°34	6° 0	18°40	19°56	19° 0	15°13	M30
T 31	2 36 30	7♂27'30	4°Y26	4♂57	29♂19	22♂32	3♂10	8♂58	15♂18	5♂32	6♂ 1	18♂34	19♂52	19♂ 7	15♂14	T 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
S 1	3s 2	8s43	4n33	4n37	0n52	13n21	0s 5	21s23	1s 5	11s12	1s26	10n46	1n31	7n 5	0n44	11n54	1s51	21n15	12n35	23s10	23s12	12n 8	9s40	6n50					
M 2	3 25	3 6	4 57	4 34	1 4	13 3	0 1	21 32	1 6	11 14	1 25	10 43	1 31	7 4	0 44	11 54	1 51	21 15	12 35	23 9	23 12	12 6	9 41	6 50					
T 3	3 49	2n42	5 1	4 26	1 16	12 44	0n 3	21 41	1 6	11 16	1 25	10 41	1 31	7 2	0 44	11 53	1 51	21 14	12 36	23 9	23 12	12 4	9 42	6 49					
W 4	4 12	8 17	4 45	4 14	1 26	12 24	0 8	21 50	1 6	11 18	1 25	10 39	1 32	7 1	0 44	11 53	1 51	21 14	12 36	23 8	23 11	12 1	9 43	6 49					
T 5	4 35	13 19	4 11	3 57	1 34	12 5	0 12	21 59	1 7	11 19	1 25	10 36	1 32	7 0	0 44	11 52	1 51	21 14	12 36	23 7	23 11	11 59	9 43	6 48					
F 6	4 58	17 30	3 22	3 36	1 41	11 44	0 16	22 7	1 7	11 21	1 25	10 34	1 32	6 58	0 44	11 52	1 51	21 13	12 36	23 7	23 11	11 56	9 44	6 48					
S 7	5 21	20 36	2 23	3 12	1 47	11 24	0 20	22 16	1 7	11 23	1 25	10 32	1 32	6 57	0 44	11 51	1 51	21 13	12 37	23 6	23 11	11 54	9 45	6 48					
S 8	5 44	22 28	1 18	2 45	1 52	11 3	0 24	22 24	1 8	11 24	1 25	10 29	1 32	6 56	0 44	11 51	1 51	21 13	12 37	23 6	23 11	11 51	9 46	6 47					
M 9	6 7	23 7	0 11	2 15	1 55	10 42	0 28	22 32	1 8	11 25	1 25	10 27	1 32	6 55	0 44	11 50	1 51	21 12	12 37	23 6	23 10	11 49	9 46	6 47					
T 10	6 30	22 34	0s55	1 42	1 58	10 20	0 32	22 39	1 9	11 27	1 24	10 25	1 33	6 53	0 44	11 50	1 51	21 12	12 38	23 6	23 10	11 46	9 47	6 46					
W11	6 53	20 57	1 57	1 7	1 59	9 58	0 35	22 47	1 9	11 28	1 24	10 22	1 33	6 52	0 44	11 49	1 51	21 12	12 38	23 6	23 10	11 44	9 48	6 46					
T 12	7 16	18 26	2 53	0 31	2 0	9 36	0 39	22 54	1 9	11 29	1 24	10 20	1 33	6 51	0 44	11 49	1 51	21 11	12 38	23 6	23 10	11 41	9 48	6 45					
F 13	7 38	15 10	3 41	0s 8	2 0	9 13	0 43	23 1	1 9	11 30	1 24	10 18	1 33	6 50	0 44	11 48	1 51	21 11	12 39	23 6	23 9	11 39	9 49	6 45					
S 14	8 1	11 18	4 20	0 47	1 58	8 50	0 46	23 8	1 10	11 31	1 24	10 16	1 33	6 48	0 44	11 48	1 51	21 11	12 39	23 6	23 9	11 37	9 50	6 44					
S 15	8 23	7 0	4 47	1 28	1 57	8 27	0 49	23 15	1 10	11 32	1 24	10 14	1 33	6 47	0 44	11 47	1 51	21 10	12 39	23 5	23 9	11 34	9 50	6 44					
M16	8 46	2 24	5 2	2 9	1 54	8 3	0 53	23 21	1 10	11 33	1 23	10 12	1 34	6 46	0 44	11 47	1 51	21 10	12 40	23 4	23 9	11 32	9 51	6 44					
T 17	9 8	2s21	5 4	2 51	1 51	7 39	0 56	23 27	1 11	11 34	1 23	10 9	1 34	6 45	0 44	11 46	1 51	21 10	12 40	23 4	23 9	11 29	9 52	6 43					
W18	9 30	7 5	4 51	3 34	1 48	7 15	0 59	23 33	1 11	11 34	1 23	10 7	1 34	6 44	0 44	11 45	1 51	21 10	12 40	23 3	23 8	11 27	9 52	6 43					
T 19	9 52	11 37	4 24	4 17	1 44	6 51	1 2	23 39	1 11	11 35	1 23	10 5	1 34	6 42	0 45	11 45	1 51	21 9	12 41	23 2	23 8	11 24	9 53	6 42					
F 20	10 14	15 43	3 44	5 0	1 39	6 26	1 5	23 45	1 12	11 36	1 23	10 3	1 34	6 41	0 45	11 44	1 51	21 9	12 41	23 1	23 8	11 22	9 53	6 42					
S 21	10 35	19 7	2 51	5 43	1 35	6 1	1 8	23 50	1 12	11 36	1 23	10 1	1 35	6 40	0 45	11 44	1 51	21 9	12 41	23 1	23 8	11 19	9 54	6 41					
S 22	10 57	21 35	1 48	6 26	1 30	5 36	1 11	23 55	1 12	11 36	1 22	9 59	1 35	6 39	0 45	11 43	1 51	21 9	12 42	23 0	23 7	11 17	9 54	6 41					
M23	11 18	22 52	0 37	7 9	1 24	5 11	1 14	24 0	1 12	11 37	1 22	9 57	1 35	6 38	0 45	11 43	1 51	21 8	12 42	23 0	23 7	11 14	9 55	6 40					
T 24	11 39	22 48	0n36	7 51	1 19	4 45	1 16	24 4	1 12	11 37	1 22	9 55	1 35	6 37	0 45	11 42	1 51	21 8	12 42	23 0	23 7	11 12	9 55	6 40					
W25	12 0	21 22	1 48	8 34	1 13	4 19	1 19	24 9	1 13	11 37	1 22	9 53	1 35	6 36	0 45	11 42	1 51	21 8	12 43	23 0	23 7	11 9	9 56	6 39					
T 26	12 21	18 37	2 55	9 16	1 7	3 53	1 21	24 13	1 13	11 37	1 22	9 52	1 35	6 35	0 45	11 41	1 51	21 8	12 43	23 0	23 7	11 7	9 56	6 39					
F 27	12 41	14 46	3 51	9 57	1 1	3 27	1 24	24 17	1 13	11 37	1 21	9 50	1 36	6 33	0 45	11 40	1 51	21 8	12 44	23 0	23 6	11 4	9 57	6 38					
S 28	13 1	10 3	4 35	10 39	0 54	3 1	1 26	24 20	1 13	11 37	1 21	9 48	1 36	6 32	0 45	11 40	1 51	21 8	12 44	23 0	23 6	11 2	9 57	6 38					
S 29	13 22	4 45	5 1	11 19	0 48	2 34	1 28	24 24	1 14	11 37	1 21	9 46	1 36	6 31	0 45	11 39	1 51	21 8	12 44	23 0	23 6	10 59	9 57	6 37					
M30	13 42	0n49	5 9	11 59	0 42	2 8	1 30	24 27	1 14	11 37	1 21	9 44	1 36	6 30	0 45	11 39	1 51	21 8	12 45	23 0	23 6	10 57	9 58	6 37					
T 31	14s 1	6n19	4n57	12s39	0n35	1n41	1n32	24s30	1s14	11s37	1s21	9n43	1n36	6n29	0n45	11n38	1s51	21n 7	12n45	22s59	23s 5	10n55	9s58	6n37					

Julian Day Number = 2346993.5, Delta T = 10.94 sec
Ecliptic obliquity = 23°28'35", Nutation = 0°00'17", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°44'39", Lahiri = 19°51'40"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1713

geocentric

NOVEMBER 1713

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	2 40 27	8♉27°39	18♊40	6♉35	0♉31	23♊17	3♊10	9♉3	15♉21	5°R30	6♉2	18°R27	19♊49	19♉13	15♊14	W 1
T 2	2 44 23	9°27'49	2♉42	8°13	1°43	24° 1	3°11	9° 8	15°24	5♉29	6° 3	18♊21	19°46	19°20	15°15	T 2
F 3	2 48 20	10°28'01	16°27	9°50	2°55	24°46	3°12	9°13	15°26	5°27	6° 4	18°16	19°43	19°27	15°15	F 3
S 4	2 52 17	11°28'14	29°53	11°27	4° 7	25°32	3°13	9°18	15°29	5°25	6° 6	18°13	19°40	19°33	15°16	S 4
S 5	2 56 13	12°28'30	12♉57	13° 3	5°20	26°17	3°14	9°23	15°31	5°24	6° 7	18°D11	19°36	19°40	15°16	S 5
M 6	3 0 10	13°28'48	25°41	14°39	6°32	27° 2	3°15	9°28	15°34	5°22	6° 8	18°11	19°33	19°47	15°17	M 6
T 7	3 4 6	14°29'07	8♉7	16°15	7°45	27°47	3°17	9°32	15°36	5°20	6° 9	18°13	19°30	19°53	15°18	T 7
W 8	3 8 3	15°29'29	20°17	17°51	8°57	28°32	3°19	9°37	15°38	5°19	6°10	18°14	19°27	20° 0	15°19	W 8
T 9	3 11 59	16°29'52	2♉16	19°26	10°10	29°18	3°21	9°41	15°41	5°17	6°10	18°16	19°24	20° 7	15°20	T 9
F 10	3 15 56	17°30'17	14° 9	21° 1	11°23	0♉3	3°23	9°45	15°43	5°15	6°11	18°R17	19°21	20°14	15°21	F 10
S 11	3 19 53	18°30'44	26° 0	22°35	12°36	0°49	3°26	9°50	15°45	5°14	6°12	18°17	19°17	20°20	15°22	S 11
S 12	3 23 49	19°31'13	7♉55	24° 9	13°49	1°34	3°28	9°54	15°47	5°12	6°13	18°15	19°14	20°27	15°23	S 12
M13	3 27 46	20°31'44	19°58	25°43	15° 2	2°20	3°31	9°58	15°49	5°10	6°14	18°12	19°11	20°34	15°24	M13
T 14	3 31 42	21°32'16	2♉13	27°17	16°15	3° 5	3°34	10° 2	15°51	5° 9	6°15	18° 9	19° 8	20°40	15°25	T 14
W15	3 35 39	22°32'50	14°44	28°51	17°28	3°51	3°38	10° 6	15°53	5° 7	6°15	18° 4	19° 5	20°47	15°27	W15
T 16	3 39 35	23°33'26	27°32	0♉24	18°41	4°37	3°41	10°10	15°55	5° 6	6°16	18° 0	19° 2	20°54	15°28	T 16
F 17	3 43 32	24°34'04	10♉38	1°57	19°54	5°23	3°45	10°13	15°57	5° 4	6°17	17°56	18°58	21° 1	15°30	F 17
S 18	3 47 28	25°34'43	24° 2	3°30	21° 8	6° 9	3°48	10°17	15°59	5° 2	6°18	17°54	18°55	21° 7	15°31	S 18
S 19	3 51 25	26°35'24	7♉42	5° 3	22°21	6°55	3°52	10°21	16° 1	5° 1	6°18	17°52	18°52	21°14	15°33	S 19
M20	3 55 21	27°36'06	21°35	6°36	23°35	7°40	3°57	10°24	16° 3	4°59	6°19	17°D52	18°49	21°21	15°34	M20
T 21	3 59 18	28°36'49	5♉38	8° 8	24°48	8°27	4° 1	10°27	16° 5	4°58	6°19	17°53	18°46	21°27	15°36	T 21
W22	4 3 15	29°37'34	19°48	9°40	26° 2	9°13	4° 6	10°31	16° 6	4°56	6°20	17°54	18°42	21°34	15°38	W22
T 23	4 7 11	0♉38'19	4♉1	11°12	27°16	9°59	4°10	10°34	16° 8	4°55	6°20	17°55	18°39	21°41	15°40	T 23
F 24	4 11 8	1°39'06	18°14	12°44	28°29	10°45	4°15	10°37	16°10	4°53	6°21	17°56	18°36	21°47	15°42	F 24
S 25	4 15 4	2°39'53	2♉26	14°16	29°43	11°31	4°21	10°40	16°11	4°52	6°21	17°R57	18°33	21°54	15°43	S 25
S 26	4 19 1	3°40'42	16°34	15°48	0♉57	12°17	4°26	10°43	16°12	4°51	6°22	17°56	18°30	22° 1	15°45	S 26
M27	4 22 57	4°41'31	0♉36	17°19	2°11	13° 4	4°31	10°45	16°14	4°49	6°22	17°55	18°27	22° 8	15°48	M27
T 28	4 26 54	5°42'21	14°30	18°50	3°25	13°50	4°37	10°48	16°15	4°48	6°23	17°54	18°23	22°14	15°50	T 28
W29	4 30 51	6°43'12	28°15	20°21	4°39	14°36	4°43	10°51	16°17	4°46	6°23	17°52	18°20	22°21	15°52	W29
T 30	4 34 47	7♉44'04	11♉48	21♉52	5♉53	15♉23	4♉49	10♉53	16♉18	4♉45	6♉23	17♉51	18♉17	22♉28	15♉54	T 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	14s21	11n27	4n28	13s17	0n28	1n14	1n34	24s32	1s14	11s36	1s20	9n41	1n37	6n28	0n45	11n38
T 2	14 40	15 54	3 42	13 56	0 22	0 47	1 36	24 35	1 14	11 36	1 20	9 39	1 37	6 27	0 45	11 37
F 3	14 59	19 24	2 44	14 33	0 15	0 20	1 38	24 37	1 14	11 35	1 20	9 37	1 37	6 26	0 45	11 37
S 4	15 18	21 45	1 38	15 10	0 8	0s 7	1 39	24 38	1 15	11 35	1 20	9 36	1 37	6 25	0 45	11 36
S 5	15 36	22 52	0 28	15 46	0 1	0 35	1 41	24 40	1 15	11 34	1 20	9 34	1 38	6 25	0 45	11 35
M 6	15 55	22 43	0s41	16 21	0s 5	1 2	1 42	24 41	1 15	11 34	1 19	9 33	1 38	6 24	0 45	11 35
T 7	16 13	21 27	1 47	16 55	0 12	1 30	1 43	24 42	1 15	11 33	1 19	9 31	1 38	6 23	0 45	11 34
W 8	16 30	19 12	2 46	17 28	0 19	1 57	1 45	24 43	1 15	11 32	1 19	9 30	1 38	6 22	0 45	11 34
T 9	16 48	16 9	3 38	18 1	0 25	2 25	1 46	24 44	1 15	11 31	1 19	9 28	1 38	6 21	0 45	11 33
F 10	17 5	12 28	4 20	18 33	0 32	2 52	1 47	24 44	1 15	11 30	1 19	9 27	1 39	6 20	0 45	11 33
S 11	17 22	8 19	4 50	19 4	0 38	3 20	1 48	24 44	1 15	11 29	1 18	9 25	1 39	6 19	0 45	11 32
S 12	17 38	3 51	5 8	19 34	0 45	3 47	1 49	24 43	1 15	11 28	1 18	9 24	1 39	6 19	0 45	11 32
M13	17 55	0s49	5 13	20 2	0 51	4 15	1 50	24 43	1 15	11 26	1 18	9 23	1 39	6 18	0 45	11 31
T 14	18 11	5 32	5 4	20 30	0 57	4 42	1 50	24 42	1 16	11 25	1 18	9 21	1 40	6 17	0 45	11 31
W15	18 26	10 7	4 40	20 57	1 3	5 10	1 51	24 41	1 16	11 24	1 18	9 20	1 40	6 16	0 45	11 30
T 16	18 41	14 23	4 2	21 23	1 9	5 37	1 51	24 39	1 16	11 22	1 17	9 19	1 40	6 15	0 45	11 30
F 17	18 56	18 3	3 11	21 48	1 15	6 4	1 52	24 38	1 16	11 21	1 17	9 18	1 40	6 15	0 45	11 29
S 18	19 11	20 52	2 8	22 12	1 20	6 32	1 52	24 36	1 16	11 19	1 17	9 16	1 40	6 14	0 46	11 29
S 19	19 25	22 33	0 56	22 35	1 26	6 59	1 52	24 33	1 16	11 18	1 17	9 15	1 41	6 13	0 46	11 28
M20	19 39	22 52	0n21	22 56	1 31	7 26	1 52	24 31	1 16	11 16	1 16	9 14	1 41	6 13	0 46	11 28
T 21	19 53	21 45	1 37	23 17	1 36	7 53	1 53	24 28	1 16	11 14	1 16	9 13	1 41	6 12	0 46	11 27
W22	20 6	19 15	2 47	23 36	1 41	8 19	1 53	24 25	1 16	11 12	1 16	9 12	1 41	6 11	0 46	11 27
T 23	20 19	15 35	3 48	23 54	1 46	8 46	1 52	24 22	1 16	11 10	1 16	9 11	1 42	6 11	0 46	11 26
F 24	20 31	11 1	4 35	24 11	1 50	9 12	1 52	24 18	1 16	11 8	1 16	9 10	1 42	6 10	0 46	11 26
S 25	20 43	5 53	5 5	24 26	1 54	9 39	1 52	24 14	1 16	11 6	1 15	9 9	1 42	6 10	0 46	11 25
S 26	20 55	0 27	5 16	24 41	1 58	10 5	1 52	24 10	1 16	11 4	1 15	9 8	1 42	6 9	0 46	11 25
M27	21 6	4n57	5 9	24 54	2 2	10 31	1 51	24 5	1 16	11 2	1 15	9 8	1 43	6 9	0 46	11 24
T 28	21 17	10 4	4 43	25 5	2 5	10 56	1 51	24 1	1 16	11 0	1 15	9 7	1 43	6 8	0 46	11 24
W29	21 28	14 37	4 1	25 16	2 8	11 22	1 50	23 56	1 16	10 57	1 15	9 6	1 43	6 8	0 46	11 24
T 30	21s38	18n21	3n 7	25s24	2s11	11s47	1n49	23s50	1s15	10s55	1s14	9n 5	1n43	6n 7	0n46	11n23

Julian Day Number = 2347024.5, Delta T = 10.93 sec
 Ecliptic obliquity = 23°28'34", Nutation = 0°00'15", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°44'44", Lahiri = 19°51'44"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1713
geocentric

DECEMBER 1713

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	4 38 44	8♌44'57	25♏ 7	23♌22	7♏ 7	16♏ 9	4♏55	10♏55	16♏19	4♏R44	6♏23	17♏R50	18♌14	22♏234	15♏56	F 1
S 2	4 42 40	9°45'51	8♏12	24°52	8°21	16°56	5° 1	10°58	16°20	4♏42	6°24	17♌49	18°11	22°41	15°59	S 2
S 3	4 46 37	10°46'46	21° 2	26°22	9°35	17°42	5° 8	11° 0	16°21	4°41	6°24	17°D49	18° 8	22°48	16° 1	S 3
M 4	4 50 33	11°47'42	3♏37	27°51	10°49	18°29	5°15	11° 2	16°22	4°40	6°24	17°49	18° 4	22°55	16° 4	M 4
T 5	4 54 30	12°48'39	15°57	29°19	12° 3	19°15	5°22	11° 4	16°23	4°38	6°24	17°50	18° 1	23° 1	16° 6	T 5
W 6	4 58 26	13°49'38	28° 5	0♏47	13°18	20° 2	5°29	11° 6	16°24	4°37	6°24	17°50	17°58	23° 8	16° 9	W 6
T 7	5 2 23	14°50'37	10♏ 4	2°14	14°32	20°49	5°36	11° 7	16°25	4°36	6°24	17°51	17°55	23°15	16°11	T 7
F 8	5 6 20	15°51'37	21°58	3°40	15°46	21°35	5°43	11° 9	16°26	4°35	6°24	17°51	17°52	23°21	16°14	F 8
S 9	5 10 16	16°52'38	3♏49	5° 5	17° 1	22°22	5°51	11°10	16°27	4°34	6°R24	17°51	17°48	23°28	16°17	S 9
S 10	5 14 13	17°53'41	15°43	6°28	18°15	23° 9	5°58	11°12	16°27	4°33	6°24	17°51	17°45	23°35	16°19	S 10
M 11	5 18 9	18°54'44	27°45	7°50	19°30	23°56	6° 6	11°13	16°28	4°31	6°24	17°51	17°42	23°42	16°22	M 11
T 12	5 22 6	19°55'48	9♏58	9° 9	20°44	24°43	6°14	11°14	16°29	4°30	6°24	17°51	17°39	23°48	16°25	T 12
W 13	5 26 2	20°56'53	22°29	10°27	21°59	25°30	6°22	11°15	16°29	4°29	6°24	17°52	17°36	23°55	16°28	W 13
T 14	5 29 59	21°58'00	5♏19	11°42	23°13	26°16	6°30	11°16	16°30	4°28	6°24	17°52	17°33	24° 2	16°31	T 14
F 15	5 33 55	22°59'07	18°31	12°54	24°28	27° 3	6°39	11°17	16°30	4°27	6°24	17°53	17°29	24° 8	16°34	F 15
S 16	5 37 52	24° 0'14	2♌ 7	14° 2	25°42	27°50	6°47	11°18	16°31	4°26	6°23	17°53	17°26	24°15	16°37	S 16
S 17	5 41 49	25° 1'23	16° 6	15° 6	26°57	28°37	6°56	11°18	16°31	4°25	6°23	17°R53	17°23	24°22	16°40	S 17
M 18	5 45 45	26° 2'32	0♏23	16° 5	28°12	29°24	7° 5	11°19	16°31	4°24	6°23	17°53	17°20	24°29	16°43	M 18
T 19	5 49 42	27° 3'41	14°55	16°59	29°26	0♏11	7°14	11°19	16°31	4°24	6°23	17°52	17°17	24°35	16°47	T 19
W 20	5 53 38	28° 4'51	29°35	17°46	0♏41	0°58	7°23	11°19	16°31	4°23	6°22	17°51	17°14	24°42	16°50	W 20
T 21	5 57 35	29° 6'01	14♏16	18°26	1°56	1°46	7°32	11°20	16°32	4°22	6°22	17°50	17°10	24°49	16°53	T 21
F 22	6 1 31	0♏ 7'11	28°51	18°59	3°10	2°33	7°42	11°R20	16°R32	4°21	6°22	17°49	17° 7	24°55	16°56	F 22
S 23	6 5 28	1° 8'21	13♏16	19°22	4°25	3°20	7°51	11°20	16°32	4°20	6°21	17°47	17° 4	25° 2	17° 0	S 23
S 24	6 9 24	2° 9'30	27°28	19°35	5°40	4° 7	8° 1	11°19	16°31	4°20	6°21	17°D47	17° 1	25° 9	17° 3	S 24
M 25	6 13 21	3°10'40	11♏23	19°R38	6°55	4°54	8°11	11°19	16°31	4°19	6°20	17°47	16°58	25°16	17° 7	M 25
T 26	6 17 18	4°11'50	25° 2	19°29	8° 9	5°41	8°21	11°19	16°31	4°18	6°20	17°48	16°54	25°22	17°10	T 26
W 27	6 21 14	5°12'59	8♏25	19° 8	9°24	6°28	8°31	11°18	16°31	4°18	6°19	17°49	16°51	25°29	17°14	W 27
T 28	6 25 11	6°14'09	21°33	18°36	10°39	7°16	8°41	11°18	16°31	4°17	6°18	17°50	16°48	25°36	17°17	T 28
F 29	6 29 7	7°15'18	4♏28	17°52	11°54	8° 3	8°51	11°17	16°30	4°16	6°18	17°52	16°45	25°42	17°21	F 29
S 30	6 33 4	8°16'27	17°10	16°57	13° 9	8°50	9° 1	11°16	16°30	4°16	6°17	17°R52	16°42	25°49	17°24	S 30
S 31	6 37 0	9♏17'36	29♏41	15♏53	14♏24	9♏37	9♏12	11♏15	16♏29	4♏15	6♏17	17♏52	16♏39	25♏56	17♏28	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
F 1	21s48	21n 3	2n 3	25s32	2s14	12s12	1n49	23s45	1s15	10s52	1s14	9n 5	1n44	6n 7	0n46	11n23
S 2	21 57	22 35	0 53	25 38	2 16	12 37	1 48	23 39	1 15	10 50	1 14	9 4	1 44	6 6	0 46	11 22
S 3	22 6	22 53	0s18	25 43	2 17	13 1	1 47	23 33	1 15	10 47	1 14	9 4	1 44	6 6	0 46	11 22
M 4	22 14	21 59	1 27	25 46	2 18	13 25	1 46	23 26	1 15	10 45	1 14	9 3	1 44	6 6	0 46	11 21
T 5	22 22	20 2	2 30	25 48	2 19	13 49	1 45	23 20	1 15	10 42	1 14	9 3	1 45	6 5	0 46	11 21
W 6	22 30	17 13	3 25	25 48	2 19	14 12	1 44	23 13	1 15	10 39	1 13	9 2	1 45	6 5	0 46	11 21
T 7	22 37	13 43	4 11	25 47	2 19	14 36	1 42	23 6	1 15	10 36	1 13	9 2	1 45	6 5	0 46	11 20
F 8	22 43	9 42	4 46	25 44	2 18	14 58	1 41	22 58	1 15	10 34	1 13	9 1	1 46	6 4	0 46	11 20
S 9	22 50	5 20	5 8	25 40	2 17	15 21	1 40	22 51	1 15	10 31	1 13	9 1	1 46	6 4	0 46	11 20
S 10	22 55	0 46	5 17	25 34	2 15	15 43	1 38	22 43	1 14	10 28	1 13	9 1	1 46	6 4	0 46	11 19
M 11	23 1	3s53	5 13	25 27	2 12	16 5	1 37	22 34	1 14	10 25	1 12	9 0	1 46	6 4	0 46	11 19
T 12	23 6	8 28	4 54	25 18	2 9	16 26	1 35	22 26	1 14	10 21	1 12	9 0	1 47	6 4	0 47	11 19
W 13	23 10	12 48	4 21	25 8	2 5	16 47	1 34	22 17	1 14	10 18	1 12	9 0	1 47	6 3	0 47	11 18
T 14	23 14	16 41	3 35	24 57	2 0	17 7	1 32	22 8	1 14	10 15	1 12	9 0	1 47	6 3	0 47	11 18
F 15	23 17	19 52	2 36	24 44	1 54	17 27	1 30	21 59	1 14	10 12	1 12	9 0	1 47	6 3	0 47	11 18
S 16	23 20	22 2	1 26	24 30	1 47	17 47	1 29	21 50	1 13	10 8	1 12	9 0	1 48	6 3	0 47	11 18
S 17	23 23	22 55	0 10	24 15	1 39	18 6	1 27	21 40	1 13	10 5	1 11	9 0	1 48	6 3	0 47	11 17
M 18	23 25	22 20	1n 9	24 0	1 30	18 24	1 25	21 30	1 13	10 2	1 11	9 0	1 48	6 3	0 47	11 17
T 19	23 27	20 15	2 24	23 43	1 20	18 43	1 23	21 20	1 13	9 58	1 11	9 0	1 48	6 3	0 47	11 17
W 20	23 28	16 50	3 31	23 26	1 9	19 0	1 21	21 9	1 13	9 54	1 11	9 0	1 49	6 3	0 47	11 16
T 21	23 28	12 22	4 24	23 8	0 56	19 17	1 19	20 59	1 12	9 51	1 11	9 0	1 49	6 3	0 47	11 16
F 22	23 29	7 13	4 59	22 50	0 43	19 34	1 17	20 48	1 12	9 47	1 11	9 1	1 49	6 3	0 47	11 16
S 23	23 28	1 44	5 15	22 32	0 28	19 50	1 15	20 36	1 12	9 44	1 10	9 1	1 49	6 3	0 47	11 16
S 24	23 27	3n45	5 12	22 14	0 12	20 5	1 13	20 25	1 12	9 40	1 10	9 1	1 50	6 3	0 47	11 16
M 25	23 26	8 57	4 50	21 57	0n 5	20 20	1 10	20 14	1 11	9 36	1 10	9 2	1 50	6 3	0 47	11 15
T 26	23 25	13 37	4 12	21 40	0 24	20 35	1 8	20 2	1 11	9 32	1 10	9 2	1 50	6 3	0 47	11 15
W 27	23 22	17 30	3 21	21 24	0 42	20 49	1 6	19 50	1 11	9 28	1 10	9 2	1 51	6 3	0 47	11 15
T 28	23 20	20 26	2 20	21 10	1 2	21 2	1 4	19 37	1 11	9 24	1 10	9 3	1 51	6 3	0 47	11 15
F 29	23 17	22 16	1 13	20 56	1 21	21 14	1 1	19 25	1 10	9 20	1 10	9 3	1 51	6 4	0 47	11 15
S 30	23 13	22 55	0 4	20 44	1 41	21 26	0 59	19 12	1 10	9 16	1 9	9 4	1 51	6 4	0 47	11 15
S 31	23s 9	22n24	1s 5	20s33	1n59	21s38	0n56	18s59	1s10	9s12	1s 9	9n 5	1n52	6n 4	0n47	11n15

Julian Day Number = 2347054.5, Delta T = 10.92 sec
Ecliptic obliquity = 23°28'33, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°44'48, Lahiri = 19°51'48Greg. Calendar