



Astrodienst Ephemeris Tables for the year 1699

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 1699
geocentric

JANUARY 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	6 43 26	10 ³⁵ 5758	6 ³ 27	22 ³ 46	17 ³ 37	17 ³ 27	15 ³ 13	18 ³ 2	4 ^R 1	0 ^Y 36	9 ^R 8	6 ^R 29	6 ^Δ 40	15 ³ 46	13 ^R 19	T 1
F 2	6 47 22	11 ⁰ 59'10	18°29	24°23	17°56	18°14	15°25	18° 8	3 ³ 58	0°37	9 ^Δ 7	6 ^Δ 14	6°37	15°52	13 ^Δ 19	F 2
S 3	6 51 19	13° 0'21	0 ³ 37	26° 1	18°14	19° 1	15°38	18°15	3°56	0°38	9° 6	6° 0	6°34	15°59	13°18	S 3
S 4	6 55 15	14° 1'32	12°52	27°38	18°29	19°48	15°51	18°21	3°53	0°38	9° 4	5°48	6°31	16° 6	13°17	S 4
M 5	6 59 12	15° 2'43	25°16	29°14	18°42	20°35	16° 4	18°27	3°51	0°39	9° 3	5°40	6°27	16°12	13°16	M 5
T 6	7 3 9	16° 3'53	7 ^Δ 50	0 ³ 50	18°53	21°22	16°16	18°34	3°48	0°40	9° 2	5°34	6°24	16°19	13°15	T 6
W 7	7 7 5	17° 5'03	20°36	2°25	19° 1	22°10	16°29	18°40	3°46	0°41	9° 1	5°31	6°21	16°26	13°14	W 7
T 8	7 11 2	18° 6'12	3 ^Y 38	3°58	19° 7	22°57	16°42	18°47	3°43	0°42	8°59	5°D30	6°18	16°33	13°12	T 8
F 9	7 14 58	19° 7'20	16°58	5°30	19°11	23°44	16°54	18°54	3°41	0°43	8°58	5°R30	6°15	16°39	13°11	F 9
S 10	7 18 55	20° 8'28	0 ^Δ 40	7° 0	19°R13	24°31	17° 6	19° 0	3°38	0°44	8°57	5°30	6°12	16°46	13°10	S 10
S 11	7 22 51	21° 9'35	14°45	8°28	19°11	25°18	17°19	19° 7	3°36	0°45	8°55	5°28	6° 8	16°53	13° 8	S 11
M12	7 26 48	22°10'41	29°12	9°52	19° 8	26° 5	17°31	19°13	3°33	0°46	8°54	5°24	6° 5	16°59	13° 6	M12
T 13	7 30 44	23°11'46	13 ^{II} 59	11°14	19° 2	26°52	17°43	19°20	3°31	0°47	8°53	5°16	6° 2	17° 6	13° 4	T 13
W14	7 34 41	24°12'51	29° 1	12°32	18°53	27°39	17°56	19°27	3°29	0°48	8°51	5° 7	5°59	17°13	13° 2	W14
T 15	7 38 38	25°13'54	14 ^Δ 7	13°45	18°42	28°26	18° 8	19°34	3°26	0°49	8°50	4°56	5°56	17°20	13° 0	T 15
F 16	7 42 34	26°14'58	29° 8	14°52	18°28	29°13	18°20	19°41	3°24	0°51	8°49	4°45	5°52	17°26	12°58	F 16
S 17	7 46 31	27°16'00	13 ^Δ 54	15°54	18°12	0 ^Δ 0	18°32	19°47	3°22	0°52	8°47	4°36	5°49	17°33	12°56	S 17
S 18	7 50 27	28°17'02	28°17	16°49	17°53	0°47	18°44	19°54	3°19	0°53	8°46	4°29	5°46	17°40	12°53	S 18
M19	7 54 24	29°18'03	12 ^Δ 13	17°36	17°32	1°34	18°56	20° 1	3°17	0°54	8°44	4°24	5°43	17°46	12°51	M19
T 20	7 58 20	0 ³ 19'03	25°39	18°14	17° 9	2°21	19° 8	20° 8	3°15	0°56	8°43	4°22	5°40	17°53	12°48	T 20
W21	8 2 17	1°20'03	8 ^Δ 39	18°43	16°43	3° 8	19°19	20°15	3°13	0°57	8°42	4°D22	5°37	18° 0	12°46	W21
T 22	8 6 13	2°21'02	21°15	19° 1	16°16	3°55	19°31	20°22	3°10	0°58	8°40	4°22	5°33	18° 7	12°43	T 22
F 23	8 10 10	3°22'01	3 ^Δ 31	19°R 9	15°46	4°42	19°43	20°29	3° 8	1° 0	8°39	4°R23	5°30	18°13	12°40	F 23
S 24	8 14 7	4°22'59	15°34	19° 5	15°15	5°29	19°54	20°36	3° 6	1° 1	8°38	4°22	5°27	18°20	12°37	S 24
S 25	8 18 3	5°23'56	27°28	18°51	14°42	6°16	20° 6	20°43	3° 4	1° 3	8°36	4°19	5°24	18°27	12°34	S 25
M26	8 22 0	6°24'53	9 ^Δ 18	18°25	14° 9	7° 3	20°17	20°50	3° 2	1° 4	8°35	4°14	5°21	18°33	12°31	M26
T 27	8 25 56	7°25'49	21° 8	17°48	13°33	7°49	20°28	20°57	3° 0	1° 5	8°33	4° 6	5°18	18°40	12°27	T 27
W28	8 29 53	8°26'43	3 ^Δ 3	17° 1	12°57	8°36	20°39	21° 4	2°58	1° 7	8°32	3°57	5°14	18°47	12°24	W28
T 29	8 33 49	9°27'37	15° 5	16° 6	12°21	9°23	20°50	21°12	2°56	1° 9	8°30	3°46	5°11	18°54	12°21	T 29
F 30	8 37 46	10°28'30	27°15	15° 3	11°44	10°10	21° 2	21°19	2°54	1°10	8°29	3°35	5° 8	19° 0	12°17	F 30
S 31	8 41 43	11°29'22	9 ^Δ 35	13°56	11° 7	10°Δ57	21°12	21°26	2°52	1°Y12	8°Δ28	3°Δ25	5°Δ 5	19°Δ 7	12°Δ14	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
T 1	23s 1	18s20	4n59	23s38	2s 7	14s36	1n 2	16s42	1s 8	22s 9	0n31	16s34	1s11	23n43
F 2	22 56	17 22	4 53	23 19	2 5	14 18	1 14	16 28	1 8	22 10	0 31	16 32	1 11	23 43
S 3	22 50	15 37	4 33	22 59	2 2	14 1	1 26	16 12	1 7	22 12	0 31	16 30	1 11	23 43
S 4	22 44	13 8	4 0	22 37	1 59	13 45	1 39	15 57	1 7	22 13	0 30	16 28	1 11	23 43
M 5	22 38	10 3	3 15	22 13	1 55	13 28	1 52	15 42	1 6	22 14	0 30	16 26	1 11	23 43
T 6	22 30	6 28	2 21	21 49	1 51	13 12	2 5	15 26	1 6	22 16	0 30	16 24	1 11	23 44
W 7	22 23	2 32	1 18	21 22	1 46	12 57	2 19	15 10	1 5	22 17	0 30	16 22	1 11	23 44
T 8	22 15	1n36	0 10	20 55	1 40	12 41	2 33	14 54	1 5	22 18	0 30	16 20	1 11	23 44
F 9	22 7	5 45	1s 0	20 26	1 34	12 27	2 47	14 38	1 4	22 20	0 30	16 18	1 11	23 44
S 10	21 58	9 42	2 9	19 56	1 26	12 13	3 1	14 22	1 4	22 21	0 30	16 16	1 11	23 44
S 11	21 49	13 14	3 12	19 26	1 18	11 59	3 16	14 6	1 3	22 22	0 30	16 14	1 11	23 44
M12	21 39	16 2	4 4	18 54	1 9	11 46	3 31	13 49	1 2	22 23	0 30	16 12	1 11	23 44
T 13	21 29	17 51	4 41	18 22	0 59	11 34	3 45	13 33	1 2	22 25	0 30	16 10	1 11	23 44
W14	21 18	18 28	5 0	17 50	0 48	11 23	4 0	13 16	1 1	22 26	0 30	16 8	1 11	23 44
T 15	21 7	17 47	4 58	17 18	0 36	11 12	4 15	12 59	1 1	22 27	0 30	16 5	1 11	23 44
F 16	20 56	15 52	4 53	16 45	0 23	11 2	4 30	12 42	1 0	22 28	0 30	16 3	1 11	23 44
S 17	20 44	12 56	3 54	16 14	0 9	10 52	4 45	12 25	1 0	22 29	0 30	16 1	1 11	23 44
S 18	20 32	9 17	2 59	15 44	0n 6	10 44	5 0	12 8	0 59	22 30	0 30	15 59	1 11	23 44
M19	20 20	5 13	1 55	15 14	0 22	10 36	5 15	11 51	0 59	22 31	0 30	15 57	1 11	23 44
T 20	20 7	1 1	0 46	14 47	0 38	10 29	5 29	11 33	0 58	22 32	0 30	15 55	1 11	23 45
W21	19 54	3s 5	0n23	14 22	0 55	10 23	5 44	11 16	0 57	22 33	0 30	15 53	1 11	23 45
T 22	19 40	6 56	1 29	14 0	1 12	10 18	5 58	10 58	0 57	22 34	0 30	15 50	1 11	23 45
F 23	19 26	10 22	2 29	13 41	1 30	10 13	6 11	10 41	0 56	22 35	0 30	15 48	1 11	23 45
S 24	19 12	13 19	3 22	13 25	1 48	10 10	6 24	10 23	0 56	22 36	0 30	15 46	1 11	23 45
S 25	18 57	15 39	4 5	13 13	2 6	10 7	6 37	10 5	0 55	22 37	0 30	15 44	1 11	23 45
M26	18 42	17 19	4 37	13 4	2 23	10 5	6 49	9 47	0 55	22 38	0 30	15 41	1 11	23 45
T 27	18 26	18 14	4 57	13 0	2 39	10 4	7 0	9 29	0 54	22 38	0 30	15 39	1 11	23 45
W28	18 11	18 22	5 5	13 0	2 54	10 4	7 10	9 11	0 53	22 39	0 30	15 37	1 11	23 45
T 29	17 55	17 40	4 59	13 4	3 7	10 4	7 20	8 53	0 53	22 40	0 30	15 35	1 11	23 45
F 30	17 38	16 10	4 40	13 11	3 18	10 6	7 29	8 34	0 52	22 41	0 29	15 32	1 11	23 45
S 31	17s22	13s55	4n 7	13s21	3n28	10s 8	7n37	8s16	0s52	22s42	0n29	15s30	1s11	23n45

Julian Day Number = 2341607.5, Delta T = 14.64 sec
Ecliptic obliquity = 23°28'32", Nutation = 0°00'03", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°32'19", Lahiri = 19°39'19"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1699
geocentric

MARCH 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	10 36 3	10 ^h 43'14	0 ^h 47	13 ^h 41	4 ^h 57	3 ^h 21	25 ^h 44	24 ^h 55	2 ^h R17	2 ^h Y 7	7 ^h R50	2 ^h R18	3 ^h Δ33	22 ^h Δ22	10 ^h R 5	S 1
M 2	10 39 59	11 ^h 43'18	13 ^h 47	14 ^h 48	5 ^h 17	4 ^h 6	25 ^h 52	25 ^h 2	2 ^h Δ17	2 ^h 9	7 ^h Δ48	2 ^h Δ16	3 ^h 29	22 ^h 29	10 ^h Δ 0	M 2
T 3	10 43 56	12 ^h 43'21	27 ^h 1	15 ^h 57	5 ^h 39	4 ^h 52	25 ^h 59	25 ^h 9	2 ^h 16	2 ^h 11	7 ^h 47	2 ^h D15	3 ^h 26	22 ^h 35	9 ^h 56	T 3
W 4	10 47 52	13 ^h 43'22	10 ^h Y29	17 ^h 8	6 ^h 3	5 ^h 38	26 ^h 6	25 ^h 16	2 ^h 16	2 ^h 14	7 ^h 46	2 ^h 15	3 ^h 23	22 ^h 42	9 ^h 51	W 4
T 5	10 51 49	14 ^h 43'20	24 ^h 8	18 ^h 21	6 ^h 28	6 ^h 24	26 ^h 13	25 ^h 23	2 ^h 16	2 ^h 16	7 ^h 45	2 ^h 16	3 ^h 20	22 ^h 49	9 ^h 46	T 5
F 6	10 55 45	15 ^h 43'17	7 ^h Δ58	19 ^h 36	6 ^h 55	7 ^h 9	26 ^h 20	25 ^h 30	2 ^h 15	2 ^h 18	7 ^h 44	2 ^h 17	3 ^h 17	22 ^h 56	9 ^h 41	F 6
S 7	10 59 42	16 ^h 43'11	21 ^h 57	20 ^h 52	7 ^h 24	7 ^h 55	26 ^h 27	25 ^h 36	2 ^h 15	2 ^h 20	7 ^h 43	2 ^h 18	3 ^h 14	23 ^h 2	9 ^h 36	S 7
S 8	11 3 38	17 ^h 43'04	6 ^h Δ2	22 ^h 10	7 ^h 54	8 ^h 40	26 ^h 34	25 ^h 43	2 ^h 15	2 ^h 22	7 ^h 42	2 ^h 19	3 ^h 10	23 ^h 9	9 ^h 32	S 8
M 9	11 7 35	18 ^h 42'54	20 ^h 12	23 ^h 30	8 ^h 26	9 ^h 26	26 ^h 40	25 ^h 50	2 ^h 15	2 ^h 25	7 ^h 41	2 ^h R19	3 ^h 7	23 ^h 16	9 ^h 27	M 9
T 10	11 11 32	19 ^h 42'41	4 ^h Δ26	24 ^h 52	8 ^h 59	10 ^h 11	26 ^h 47	25 ^h 57	2 ^h D15	2 ^h 27	7 ^h 40	2 ^h 19	3 ^h 4	23 ^h 22	9 ^h 22	T 10
W11	11 15 28	20 ^h 42'27	18 ^h 40	26 ^h 15	9 ^h 33	10 ^h 57	26 ^h 53	26 ^h 4	2 ^h 15	2 ^h 29	7 ^h 39	2 ^h 18	3 ^h 1	23 ^h 29	9 ^h 18	W11
T 12	11 19 25	21 ^h 42'10	2 ^h Δ52	27 ^h 39	10 ^h 9	11 ^h 42	26 ^h 59	26 ^h 11	2 ^h 15	2 ^h 31	7 ^h 38	2 ^h 17	2 ^h 58	23 ^h 36	9 ^h 13	T 12
F 13	11 23 21	22 ^h 41'51	16 ^h 58	29 ^h 5	10 ^h 46	12 ^h 28	27 ^h 5	26 ^h 17	2 ^h 15	2 ^h 34	7 ^h 37	2 ^h 16	2 ^h 55	23 ^h 43	9 ^h 8	F 13
S 14	11 27 18	23 ^h 41'29	0 ^h Δ54	0 ^h Δ33	11 ^h 25	13 ^h 13	27 ^h 11	26 ^h 24	2 ^h 15	2 ^h 36	7 ^h 36	2 ^h 14	2 ^h 51	23 ^h 49	9 ^h 4	S 14
S 15	11 31 14	24 ^h 41'06	14 ^h 38	2 ^h 1	12 ^h 4	13 ^h 58	27 ^h 16	26 ^h 31	2 ^h 15	2 ^h 38	7 ^h 35	2 ^h 14	2 ^h 48	23 ^h 56	8 ^h 59	S 15
M16	11 35 11	25 ^h 40'40	28 ^h 7	3 ^h 32	12 ^h 45	14 ^h 43	27 ^h 22	26 ^h 38	2 ^h 16	2 ^h 40	7 ^h 34	2 ^h D13	2 ^h 45	24 ^h 3	8 ^h 55	M16
T 17	11 39 7	26 ^h 40'12	11 ^h Δ18	5 ^h 3	13 ^h 26	15 ^h 28	27 ^h 27	26 ^h 44	2 ^h 16	2 ^h 43	7 ^h 33	2 ^h 14	2 ^h 42	24 ^h 9	8 ^h 50	T 17
W18	11 43 4	27 ^h 39'43	24 ^h 12	6 ^h 36	14 ^h 9	16 ^h 14	27 ^h 32	26 ^h 51	2 ^h 16	2 ^h 45	7 ^h 33	2 ^h 14	2 ^h 39	24 ^h 16	8 ^h 46	W18
T 19	11 47 0	28 ^h 39'11	6 ^h Δ49	8 ^h 10	14 ^h 53	16 ^h 59	27 ^h 37	26 ^h 57	2 ^h 17	2 ^h 47	7 ^h 32	2 ^h 14	2 ^h 35	24 ^h 23	8 ^h 41	T 19
F 20	11 50 57	29 ^h 38'38	19 ^h 10	9 ^h 46	15 ^h 37	17 ^h 44	27 ^h 42	27 ^h 4	2 ^h 17	2 ^h 49	7 ^h 31	2 ^h 15	2 ^h 32	24 ^h 30	8 ^h 37	F 20
S 21	11 54 54	0 ^h Y38'02	1 ^h Δ18	11 ^h 23	16 ^h 23	18 ^h 29	27 ^h 46	27 ^h 10	2 ^h 18	2 ^h 52	7 ^h 30	2 ^h 15	2 ^h 29	24 ^h 36	8 ^h 33	S 21
S 22	11 58 50	1 ^h 37'25	13 ^h 17	13 ^h 1	17 ^h 10	19 ^h 14	27 ^h 51	27 ^h 17	2 ^h 19	2 ^h 54	7 ^h 30	2 ^h 15	2 ^h 26	24 ^h 43	8 ^h 29	S 22
M23	12 2 47	2 ^h 36'47	25 ^h 11	14 ^h 41	17 ^h 57	19 ^h 58	27 ^h 55	27 ^h 23	2 ^h 19	2 ^h 56	7 ^h 29	2 ^h 15	2 ^h 23	24 ^h 50	8 ^h 24	M23
T 24	12 6 43	3 ^h 36'06	7 ^h Δ5	16 ^h 22	18 ^h 45	20 ^h 43	27 ^h 59	27 ^h 29	2 ^h 20	2 ^h 58	7 ^h 28	2 ^h 15	2 ^h 20	24 ^h 56	8 ^h 20	T 24
W25	12 10 40	4 ^h 35'24	19 ^h 2	18 ^h 4	19 ^h 34	21 ^h 28	28 ^h 3	27 ^h 36	2 ^h 21	3 ^h 1	7 ^h 27	2 ^h 15	2 ^h 16	25 ^h 3	8 ^h 16	W25
T 26	12 14 36	5 ^h 34'40	1 ^h Δ8	19 ^h 48	20 ^h 24	22 ^h 13	28 ^h 7	27 ^h 42	2 ^h 21	3 ^h 3	7 ^h 27	2 ^h 15	2 ^h 13	25 ^h 10	8 ^h 12	T 26
F 27	12 18 33	6 ^h 33'54	13 ^h 27	21 ^h 33	21 ^h 14	22 ^h 58	28 ^h 10	27 ^h 48	2 ^h 22	3 ^h 5	7 ^h 26	2 ^h 16	2 ^h 10	25 ^h 17	8 ^h 8	F 27
S 28	12 22 29	7 ^h 33'06	26 ^h 2	23 ^h 19	22 ^h 5	23 ^h 42	28 ^h 14	27 ^h 54	2 ^h 23	3 ^h 8	7 ^h 26	2 ^h 16	2 ^h 7	25 ^h 23	8 ^h 5	S 28
S 29	12 26 26	8 ^h 32'16	8 ^h Δ56	25 ^h 7	22 ^h 57	24 ^h 27	28 ^h 17	28 ^h 0	2 ^h 24	3 ^h 10	7 ^h 25	2 ^h 17	2 ^h 4	25 ^h 30	8 ^h 1	S 29
M30	12 30 23	9 ^h 31'24	2 ^h Δ60	26 ^h 56	23 ^h 50	25 ^h 11	28 ^h 20	28 ^h 6	2 ^h 25	3 ^h 12	7 ^h 24	2 ^h 17	2 ^h 0	25 ^h 37	7 ^h 57	M30
T 31	12 34 19	10 ^h Y30'30	5 ^h Y44	28 ^h Δ47	24 ^h Δ43	25 ^h Y56	28 ^h Δ23	28 ^h Δ12	2 ^h Δ26	3 ^h Y14	7 ^h Δ24	2 ^h R17	1 ^h Δ57	25 ^h Δ44	7 ^h Δ54	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	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl
S 1	7s33	8s39	2n45	17s21	0s38	13s 3	6n11	0n50	0s33	22s56	0n29	14s23	1s13	23n46	0n18	0s27	1s25	24n58	6n52	0s55	1s25	18s13	2n25	5s49										
M 2	7 11	4 51	1 40	17 10	0 47	13 7	6 2	1 9	0 32	22 56	0 29	14 21	1 13	23 46	0 18	0 27	1 25	24 58	6 52	0 54	1 23	18 13	2 27	5 49										
T 3	6 48	0 45	0 29	16 58	0 56	13 10	5 53	1 27	0 31	22 56	0 29	14 19	1 13	23 46	0 18	0 26	1 25	24 58	6 52	0 54	1 22	18 13	2 29	5 48										
W 4	6 25	3n28	0s45	16 44	1 4	13 14	5 44	1 46	0 31	22 56	0 29	14 16	1 13	23 46	0 18	0 25	1 25	24 59	6 52	0 54	1 21	18 14	2 31	5 48										
T 5	6 2	7 33	1 58	16 29	1 11	13 16	5 35	2 5	0 30	22 57	0 29	14 14	1 13	23 46	0 18	0 24	1 25	24 59	6 52	0 54	1 20	18 14	2 33	5 48										
F 6	5 38	11 16	3 5	16 13	1 19	13 18	5 26	2 24	0 29	22 57	0 29	14 12	1 14	23 46	0 18	0 23	1 25	24 59	6 52	0 55	1 18	18 14	2 35	5 47										
S 7	5 15	14 24	4 1	15 55	1 26	13 20	5 17	2 42	0 29	22 57	0 29	14 10	1 14	23 46	0 18	0 22	1 25	24 59	6 52	0 55	1 17	18 14	2 37	5 47										
S 8	4 52	16 41	4 44	15 36	1 32	13 22	5 8	3 1	0 28	22 57	0 29	14 7	1 14	23 46	0 18	0 21	1 25	25 0	6 52	0 55	1 16	18 14	2 39	5 47										
M 9	4 28	17 58	5 9	15 15	1 38	13 23	4 59	3 19	0 27	22 57	0 29	14 5	1 14	23 46	0 18	0 20	1 25	25 0	6 52	0 56	1 15	18 14	2 41	5 46										
T 10	4 5	18 8	5 16	14 53	1 44	13 23	4 49	3 38	0 27	22 58	0 29	14 3	1 14	23 46	0 18	0 19	1 25	25 0	6 52	0 55	1 13	18 15	2 43	5 46										
W11	3 41	17 10	5 4	14 30	1 49	13 23	4 40	3 56	0 26	22 58	0 29	14 1	1 14	23 46	0 18	0 19	1 25	25 0	6 52	0 55	1 12	18 15	2 45	5 46										
T 12	3 18	15 8	4 33	14 6	1 54	13 22	4 31	4 15	0 25	22 58	0 29	13 58	1 14	23 46	0 18	0 18	1 25	25 1	6 52	0 54	1 11	18 15	2 48	5 45										
F 13	2 54	12 12	3 45	13 40	1 59	13 21	4 22	4 33	0 25	22 58	0 29	13 56	1 14	23 46	0 18	0 17	1 25	25 1	6 51	0 54	1 9	18 15	2 50	5 45										
S 14	2 31	8 36	2 45	13 13	2 3	13 20	4 13	4 51	0 24	22 58	0 29	13 54	1 14	23 46	0 18	0 16	1 25	25 1	6 51	0 54	1 8	18 15	2 52	5 44										
S 15	2 7	4 35	1 36	12 44	2 6	13 17	4 4	5 10	0 23	22 58	0 29	13 52	1 15	23 46	0 18	0 15	1 25	25 1	6 51	0 53	1 7	18 15	2 54	5 44										
M16	1 43	0 24	0 23	12 14	2 10	13 15	3 55	5 28	0 23	22 58	0 29	13 50	1 15	23 46	0 18	0 14	1 25	25 1	6 51	0 53	1 6	18 16	2 56	5 43										
T 17	1 20	3s43	0n50	11 43	2 12	13 12	3 47	5 46	0 22	22 59	0 28	13 48	1 15	23 46	0 18	0 13	1 25	25 1	6 51	0 53	1 4	18 16	2 58	5 43										
W18	0 56	7 33	1 59	11 11	2 15	13 8	3 38	6 4	0 21	22 59	0 28	13 45	1 15	23 45	0 18	0 12	1 25	25 2	6 51	0 53	1 3	18 16	3 0	5 43										
T 19	0 32	10 58	3 0	10 38	2 16	13 4	3 29	6 22	0 21	22 59	0 28	13 43	1 15	23 45	0 18	0 11	1 25	25 2	6 51	0 53	1 2	18 16	3 2	5 42										
F 20	0 9	13 49	3 52	10 3	2 18	12 59	3 20	6 40	0 20	22 59	0 28	13 41	1 15	23 45	0 18	0 11	1 25	25 2	6 51	0 54	1 1	18 16	3 4	5 42										
S 21	0n15	16 1	4 32	9 27	2 19	12 54	3 12	6 57	0 19	22 59	0 28	13 39	1 15	23 45	0 18	0 10	1 25	25 2	6 51	0 54	0 59	18 16	3 6	5 41										
S 22	0 39	17 28	5 0	8 50	2 19	12 48	3 3	7 15	0 19	22 59	0 28	13 37	1 15	23 45	0 18	0 9	1 25	25 2	6 51	0 54	0 58	18 17	3 8	5 40										
M23	1 2	18 9	5 15	8 11	2 19	12 42	2 55	7 33	0 18	22 59	0 28	13 35	1 16	23 45	0 18	0 8	1 25	25 2	6 51	0 54	0 57	18 17	3 10	5 40										
T 24	1 26	18 2	5 16	7 31	2 19	12 35	2 47	7 50	0 17	22 59	0 28	13 33	1 16	23 45	0 18	0 7	1 25	25 2	6 51	0 54	0 56	18 17	3 12	5 39										
W25	1 50	17 6	5 4	6 51	2 18	12 28	2 39	8 8	0 17	22 59	0 28	13 31	1 16	23 45	0 18	0 6	1 25	25 2	6 51	0 54	0 54	18 17	3 14	5 39										
T 26	2 13	15 25	4 38	6 9	2 17	12 20	2 31	8 25	0 16	22 59	0 28	13 29	1 16	23 45	0 18	0 5	1 25	25 2	6 50	0 54	0 53	18 17	3 16	5 38										
F 27	2 37	13 0	3 59	5 25	2 15	12 11	2 23	8 42	0 15	23 0	0 28	13 27	1 16	23 45	0 18	0 4	1 25	25 3	6 50	0 54	0 52	18 17	3 18	5 38										
S 28	3 0	9 55	3 8	4 41	2 12	12 3	2 15	8 59	0 15	23 0	0 28	13 25	1 16	23 45	0 18	0 3	1 25	25 3	6 50	0 54	0 51	18 17	3 20	5 37										
S 29	3 23	6 17	2 6	3 55	2 10	11 53	2 7	9 16	0 14	23 0	0 28	13 23	1 16	23 45	0 18	0 2	1 25	25 3	6 50	0 54	0 49	18 17	3 22	5 36										
M30	3 47	2 16	0 56	3 9	2 6	11 43	1 59	9 33	0 13	23 0	0 28	13 21	1 16	23 45	0 18	0 2	1 25	25 3	6 50	0 55	0 48	18 18	3 24	5 36										
T 31	4n10	1n59	0s19	2s21	2s 2	11s33	1n52	9n50	0s13	23s 0	0n28	13s19	1s17	23n45	0n18	0s 1	1s25	25n 3	6n50	0s55	0s47	18s18	3n26	5s35										

ASTRODIENST EPHEMERIS for the year 1699

geocentric

APRIL 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	12 38 16	11°29'35	19°37	0°39	25°36	26°40	28°26	28°18	29°27	3°17	7°R23	2°R17	1°54	25°50	7°R50	W 1
T 2	12 42 12	12°28'37	3°44	2°33	26°31	27°25	28°28	28°24	2°29	3°19	7°R23	2°16	1°51	25°57	7°R47	T 2
F 3	12 46 9	13°27'37	18°3	4°28	27°25	28°9	28°30	28°30	2°30	3°21	7°23	2°15	1°48	26°4	7°43	F 3
S 4	12 50 5	14°26'35	2°12	6°24	28°21	28°53	28°33	28°36	2°31	3°23	7°22	2°13	1°45	26°10	7°40	S 4
S 5	12 54 2	15°25'31	16°52	8°22	29°16	29°38	28°34	28°42	2°33	3°26	7°22	2°12	1°41	26°17	7°37	S 5
M 6	12 57 58	16°24'24	1°14	10°21	0°13	0°22	28°36	28°47	2°34	3°28	7°21	2°11	1°38	26°24	7°34	M 6
T 7	13 1 55	17°23'15	15°28	12°21	1°9	1°6	28°38	28°53	2°35	3°30	7°21	2°D10	1°35	26°31	7°31	T 7
W 8	13 5 52	18°22'04	29°33	14°23	2°7	1°50	28°39	28°58	2°37	3°32	7°21	2°11	1°32	26°37	7°28	W 8
T 9	13 9 48	19°20'51	13°27	16°26	3°4	2°34	28°40	29°4	2°38	3°34	7°20	2°12	1°29	26°44	7°25	T 9
F 10	13 13 45	20°19'35	27°9	18°30	4°2	3°18	28°41	29°9	2°40	3°37	7°20	2°13	1°26	26°51	7°22	F 10
S 11	13 17 41	21°18'17	10°39	20°35	5°1	4°2	28°42	29°15	2°42	3°39	7°20	2°14	1°22	26°58	7°20	S 11
S 12	13 21 38	22°16'56	23°56	22°41	6°0	4°46	28°43	29°20	2°43	3°41	7°20	2°15	1°19	27°4	7°17	S 12
M13	13 25 34	23°15'34	7°0	24°48	6°59	5°30	28°43	29°25	2°45	3°43	7°20	2°R15	1°16	27°11	7°15	M13
T 14	13 29 31	24°14'09	19°52	26°55	7°58	6°14	28°44	29°30	2°47	3°45	7°19	2°14	1°13	27°18	7°12	T 14
W15	13 33 27	25°12'43	2°31	29°2	8°58	6°57	28°R44	29°36	2°48	3°47	7°19	2°12	1°10	27°24	7°10	W15
T 16	13 37 24	26°11'15	14°57	1°10	9°59	7°41	28°44	29°41	2°50	3°50	7°19	2°9	1°6	27°31	7°8	T 16
F 17	13 41 20	27°9'45	27°12	3°17	10°59	8°25	28°43	29°46	2°52	3°52	7°19	2°5	1°3	27°38	7°6	F 17
S 18	13 45 17	28°8'13	9°18	5°24	12°0	9°8	28°43	29°51	2°54	3°54	7°19	2°1	1°0	27°45	7°4	S 18
S 19	13 49 14	29°6'39	21°16	7°30	13°2	9°52	28°42	29°55	2°56	3°56	7°D19	1°56	0°57	27°51	7°2	S 19
M20	13 53 10	0°5'04	3°10	9°35	14°3	10°35	28°41	0°0	2°58	3°58	7°19	1°53	0°54	27°58	7°1	M20
T 21	13 57 7	1°3'27	15°3	11°38	15°5	11°19	28°40	0°5	3°0	4°0	7°19	1°50	0°51	28°5	6°59	T 21
W22	14 1 3	2°1'49	26°59	13°40	16°7	12°2	28°39	0°9	3°2	4°2	7°19	1°D49	0°47	28°11	6°57	W22
T 23	14 5 0	3°0'09	9°3	15°39	17°10	12°46	28°38	0°14	3°5	4°4	7°19	1°49	0°44	28°18	6°56	T 23
F 24	14 8 56	3°58'27	21°20	17°37	18°12	13°29	28°36	0°19	3°7	4°6	7°19	1°50	0°41	28°25	6°55	F 24
S 25	14 12 53	4°56'44	3°54	19°31	19°15	14°12	28°34	0°23	3°9	4°8	7°19	1°52	0°38	28°32	6°54	S 25
S 26	14 16 49	5°55'00	16°50	21°23	20°18	14°55	28°32	0°27	3°11	4°10	7°20	1°53	0°35	28°38	6°53	S 26
M27	14 20 46	6°53'13	0°10	23°12	21°22	15°39	28°30	0°32	3°14	4°12	7°20	1°R54	0°31	28°45	6°52	M27
T 28	14 24 43	7°51'26	13°55	24°57	22°26	16°22	28°28	0°36	3°16	4°14	7°20	1°54	0°28	28°52	6°51	T 28
W29	14 28 39	8°49'36	28°5	26°39	23°29	17°5	28°25	0°40	3°18	4°16	7°20	1°51	0°25	28°59	6°50	W29
T 30	14 32 36	9°47'45	12°35	28°18	24°34	17°48	28°23	0°44	3°21	4°18	7°21	1°47	0°22	29°5	6°50	T 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	4n33	6n13	1s35	1s33	1s58	11s22	1n44	10n 7	0s12	23s 0	0n28	13s17	1s17	23n45	0n18	0n 0
T 2	4 56	10 11	2 46	0 43	1 53	11 11	1 37	10 24	0 11	23 0	0 28	13 15	1 17	23 45	0 18	0 1
F 3	5 19	13 36	3 47	0n 8	1 48	10 59	1 29	10 40	0 11	23 0	0 28	13 13	1 17	23 45	0 18	0 2
S 4	5 42	16 12	4 35	0 59	1 42	10 47	1 22	10 56	0 10	23 0	0 28	13 11	1 17	23 45	0 18	0 3
S 5	6 5	17 46	5 5	1 52	1 35	10 34	1 15	11 13	0 9	23 0	0 28	13 9	1 17	23 45	0 18	0 4
M 6	6 28	18 12	5 16	2 45	1 28	10 21	1 8	11 29	0 9	23 0	0 28	13 7	1 18	23 45	0 18	0 5
T 7	6 50	17 29	5 8	3 39	1 21	10 7	1 2	11 45	0 8	23 0	0 28	13 6	1 18	23 45	0 18	0 5
W 8	7 13	15 42	4 41	4 34	1 13	9 53	0 55	12 1	0 7	23 0	0 28	13 4	1 18	23 45	0 18	0 6
T 9	7 35	13 0	3 58	5 29	1 5	9 39	0 48	12 17	0 7	23 0	0 28	13 2	1 18	23 45	0 18	0 7
F 10	7 57	9 38	3 2	6 24	0 56	9 24	0 42	12 32	0 6	23 0	0 28	13 0	1 18	23 45	0 18	0 8
S 11	8 19	5 47	1 56	7 20	0 46	9 8	0 35	12 48	0 5	23 0	0 28	12 59	1 18	23 45	0 18	0 9
S 12	8 41	1 43	0 46	8 16	0 37	8 52	0 29	13 3	0 5	23 0	0 28	12 57	1 18	23 45	0 18	0 10
M13	9 3	2s23	0n26	9 12	0 27	8 36	0 23	13 19	0 4	23 0	0 28	12 55	1 19	23 45	0 18	0 11
T 14	9 25	6 18	1 35	10 8	0 17	8 20	0 17	13 34	0 3	23 0	0 28	12 53	1 19	23 45	0 18	0 11
W15	9 46	9 53	2 39	11 3	0 6	8 3	0 11	13 49	0 3	23 0	0 28	12 52	1 19	23 45	0 18	0 12
T 16	10 8	12 57	3 33	11 58	0n 5	7 45	0 6	14 4	0 2	23 0	0 28	12 50	1 19	23 45	0 18	0 13
F 17	10 29	15 23	4 17	12 52	0 15	7 28	0s 0	14 19	0 1	23 0	0 28	12 49	1 19	23 45	0 18	0 14
S 18	10 50	17 7	4 49	13 45	0 26	7 9	0 6	14 33	0 1	23 1	0 28	12 47	1 19	23 45	0 18	0 15
S 19	11 11	18 4	5 8	14 37	0 37	6 51	0 11	14 48	0 0	23 1	0 28	12 46	1 20	23 44	0 18	0 16
M20	11 31	18 13	5 13	15 28	0 48	6 32	0 16	15 2	0n 1	23 1	0 28	12 44	1 20	23 44	0 18	0 16
T 21	11 52	17 35	5 5	16 16	0 59	6 13	0 21	15 16	0 1	23 1	0 28	12 42	1 20	23 44	0 18	0 17
W22	12 12	16 9	4 44	17 4	1 9	5 53	0 26	15 30	0 2	23 1	0 28	12 41	1 20	23 44	0 18	0 18
T 23	12 32	14 0	4 10	17 49	1 19	5 34	0 31	15 44	0 2	23 1	0 27	12 40	1 20	23 44	0 18	0 19
F 24	12 52	11 12	3 24	18 31	1 28	5 14	0 36	15 58	0 3	23 1	0 27	12 38	1 21	23 44	0 18	0 20
S 25	13 11	7 48	2 27	19 12	1 38	4 53	0 41	16 11	0 4	23 1	0 27	12 37	1 21	23 44	0 18	0 20
S 26	13 31	3 57	1 21	19 50	1 46	4 32	0 45	16 25	0 4	23 1	0 27	12 35	1 21	23 44	0 18	0 21
M27	13 50	0n13	0 9	20 26	1 54	4 12	0 50	16 38	0 5	23 1	0 27	12 34	1 21	23 44	0 18	0 22
T 28	14 9	4 30	1s 5	21 0	2 1	3 50	0 54	16 51	0 6	23 1	0 27	12 33	1 21	23 44	0 18	0 23
W29	14 28	8 40	2 18	21 31	2 8	3 29	0 58	17 4	0 6	23 1	0 27	12 31	1 21	23 44	0 18	0 23
T 30	14n46	12n25	3s23	21n59	2n14	3s 7	1s 2	17n16	0n 7	23s 1	0n27	12s30	1s22	23n44	0n18	0n24

Julian Day Number = 2341697.5, Delta T = 14.55 sec

Ecliptic obliquity = 23°28'34", Nutation = 0°00'00", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°32'31", Lahiri = 19°39'32Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1699
geocentric

MAY 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	14 36 32	10 ⁸ 45'52	27 ⁸ 20	29 ⁸ 53	25 ⁸ 38	18 ⁸ 31	28 ⁸ R20	0 ⁸ 48	3 ⁸ 23	4 ⁸ 20	7 ⁸ 21	1 ⁸ R42	0 ⁸ 19	29 ⁸ 12	6 ⁸ R49	F 1
S 2	14 40 29	11 ⁸ 43'58	12 ⁸ 12	1 ⁸ 24	26 ⁸ 42	19 ⁸ 14	28 ⁸ 17	0 ⁸ 52	3 ⁸ 26	4 ⁸ 22	7 ⁸ 21	1 ⁸ 36	0 ⁸ 16	29 ⁸ 19	6 ⁸ 49	S 2
S 3	14 44 25	12 ⁸ 42'02	27 ⁸ 2	2 ⁸ 51	27 ⁸ 47	19 ⁸ 56	28 ⁸ 14	0 ⁸ 55	3 ⁸ 28	4 ⁸ 24	7 ⁸ 22	1 ⁸ 30	0 ⁸ 12	29 ⁸ 25	6 ⁸ 48	S 3
M 4	14 48 22	13 ⁸ 40'04	11 ⁸ 543	4 ⁸ 14	28 ⁸ 52	20 ⁸ 39	28 ⁸ 10	0 ⁸ 59	3 ⁸ 31	4 ⁸ 26	7 ⁸ 22	1 ⁸ 26	0 ⁸ 9	29 ⁸ 32	6 ⁸ 48	M 4
T 5	14 52 18	14 ⁸ 38'04	26 ⁸ 9	5 ⁸ 33	29 ⁸ 57	21 ⁸ 22	28 ⁸ 7	1 ⁸ 3	3 ⁸ 34	4 ⁸ 28	7 ⁸ 22	1 ⁸ 22	0 ⁸ 6	29 ⁸ 39	6 ⁸ D48	T 5
W 6	14 56 15	15 ⁸ 36'02	10 ⁸ 17	6 ⁸ 49	1 ⁸ Y 2	22 ⁸ 5	28 ⁸ 3	1 ⁸ 6	3 ⁸ 36	4 ⁸ 29	7 ⁸ 23	1 ⁸ D21	0 ⁸ 3	29 ⁸ 46	6 ⁸ 48	W 6
T 7	15 0 12	16 ⁸ 33'58	24 ⁸ 5	8 ⁸ 0	2 ⁸ 8	22 ⁸ 47	27 ⁸ 59	1 ⁸ 10	3 ⁸ 39	4 ⁸ 31	7 ⁸ 23	1 ⁸ 21	29 ⁸ 59	29 ⁸ 52	6 ⁸ 49	T 7
F 8	15 4 8	17 ⁸ 31'53	7 ⁸ 35	9 ⁸ 6	3 ⁸ 13	23 ⁸ 30	27 ⁸ 55	1 ⁸ 13	3 ⁸ 42	4 ⁸ 33	7 ⁸ 24	1 ⁸ 22	29 ⁸ 57	29 ⁸ 59	6 ⁸ 49	F 8
S 9	15 8 5	18 ⁸ 29'45	20 ⁸ 47	10 ⁸ 9	4 ⁸ 19	24 ⁸ 13	27 ⁸ 51	1 ⁸ 16	3 ⁸ 44	4 ⁸ 35	7 ⁸ 24	1 ⁸ 23	29 ⁸ 53	0 ⁸ 6	6 ⁸ 49	S 9
S 10	15 12 1	19 ⁸ 27'36	3 ⁸ 44	11 ⁸ 7	5 ⁸ 25	24 ⁸ 55	27 ⁸ 46	1 ⁸ 20	3 ⁸ 47	4 ⁸ 37	7 ⁸ 25	1 ⁸ R24	29 ⁸ 50	0 ⁸ 12	6 ⁸ 50	S 10
M 11	15 15 58	20 ⁸ 25'25	16 ⁸ 28	12 ⁸ 1	6 ⁸ 31	25 ⁸ 37	27 ⁸ 42	1 ⁸ 23	3 ⁸ 50	4 ⁸ 38	7 ⁸ 25	1 ⁸ 22	29 ⁸ 47	0 ⁸ 19	6 ⁸ 51	M 11
T 12	15 19 54	21 ⁸ 23'12	29 ⁸ 0	12 ⁸ 50	7 ⁸ 37	26 ⁸ 20	27 ⁸ 37	1 ⁸ 26	3 ⁸ 53	4 ⁸ 40	7 ⁸ 26	1 ⁸ 19	29 ⁸ 44	0 ⁸ 26	6 ⁸ 51	T 12
W 13	15 23 51	22 ⁸ 20'58	11 ⁸ 23	13 ⁸ 35	8 ⁸ 43	27 ⁸ 2	27 ⁸ 32	1 ⁸ 29	3 ⁸ 56	4 ⁸ 42	7 ⁸ 27	1 ⁸ 14	29 ⁸ 41	0 ⁸ 33	6 ⁸ 52	W 13
T 14	15 27 47	23 ⁸ 18'43	23 ⁸ 37	14 ⁸ 15	9 ⁸ 50	27 ⁸ 45	27 ⁸ 27	1 ⁸ 31	3 ⁸ 59	4 ⁸ 43	7 ⁸ 27	1 ⁸ 6	29 ⁸ 37	0 ⁸ 39	6 ⁸ 53	T 14
F 15	15 31 44	24 ⁸ 16'26	5 ⁸ 43	14 ⁸ 51	10 ⁸ 57	28 ⁸ 27	27 ⁸ 22	1 ⁸ 34	4 ⁸ 2	4 ⁸ 45	7 ⁸ 28	0 ⁸ 57	29 ⁸ 34	0 ⁸ 46	6 ⁸ 54	F 15
S 16	15 35 41	25 ⁸ 14'08	17 ⁸ 43	15 ⁸ 22	12 ⁸ 3	29 ⁸ 9	27 ⁸ 17	1 ⁸ 37	4 ⁸ 5	4 ⁸ 47	7 ⁸ 29	0 ⁸ 46	29 ⁸ 31	0 ⁸ 53	6 ⁸ 56	S 16
S 17	15 39 37	26 ⁸ 11'48	29 ⁸ 38	15 ⁸ 48	13 ⁸ 10	29 ⁸ 51	27 ⁸ 11	1 ⁸ 39	4 ⁸ 8	4 ⁸ 48	7 ⁸ 29	0 ⁸ 36	29 ⁸ 28	1 ⁸ 0	6 ⁸ 57	S 17
M 18	15 43 34	27 ⁸ 9'28	11 ⁸ 31	16 ⁸ 9	14 ⁸ 17	0 ⁸ 33	27 ⁸ 6	1 ⁸ 42	4 ⁸ 11	4 ⁸ 50	7 ⁸ 30	0 ⁸ 27	29 ⁸ 25	1 ⁸ 6	6 ⁸ 58	M 18
T 19	15 47 30	28 ⁸ 7'06	23 ⁸ 23	16 ⁸ 26	15 ⁸ 24	1 ⁸ 15	27 ⁸ 0	1 ⁸ 44	4 ⁸ 14	4 ⁸ 51	7 ⁸ 31	0 ⁸ 20	29 ⁸ 22	1 ⁸ 13	7 ⁸ 0	T 19
W 20	15 51 27	29 ⁸ 4'43	5 ⁸ 18	16 ⁸ 37	16 ⁸ 32	1 ⁸ 57	26 ⁸ 54	1 ⁸ 47	4 ⁸ 17	4 ⁸ 53	7 ⁸ 32	0 ⁸ 15	29 ⁸ 18	1 ⁸ 20	7 ⁸ 2	W 20
T 21	15 55 23	0 ⁸ II 2'40	17 ⁸ 21	16 ⁸ 44	17 ⁸ 39	2 ⁸ 39	26 ⁸ 48	1 ⁸ 49	4 ⁸ 20	4 ⁸ 54	7 ⁸ 33	0 ⁸ 12	29 ⁸ 15	1 ⁸ 26	7 ⁸ 4	T 21
F 22	15 59 20	0 ⁸ 59'55	29 ⁸ 35	16 ⁸ R47	18 ⁸ 47	3 ⁸ 21	26 ⁸ 42	1 ⁸ 51	4 ⁸ 23	4 ⁸ 56	7 ⁸ 33	0 ⁸ D11	29 ⁸ 12	1 ⁸ 33	7 ⁸ 5	F 22
S 23	16 3 16	1 ⁸ 57'29	12 ⁸ 36	16 ⁸ 44	19 ⁸ 54	4 ⁸ 3	26 ⁸ 36	1 ⁸ 53	4 ⁸ 26	4 ⁸ 57	7 ⁸ 34	0 ⁸ 11	29 ⁸ 9	1 ⁸ 40	7 ⁸ 7	S 23
S 24	16 7 13	2 ⁸ 55'03	24 ⁸ 58	16 ⁸ 38	21 ⁸ 2	4 ⁸ 45	26 ⁸ 29	1 ⁸ 55	4 ⁸ 29	4 ⁸ 59	7 ⁸ 35	0 ⁸ R12	29 ⁸ 6	1 ⁸ 47	7 ⁸ 10	S 24
M 25	16 11 10	3 ⁸ 52'35	8 ⁸ Y16	16 ⁸ 27	22 ⁸ 10	5 ⁸ 27	26 ⁸ 23	1 ⁸ 57	4 ⁸ 33	5 ⁸ 0	7 ⁸ 36	0 ⁸ 12	29 ⁸ 3	1 ⁸ 53	7 ⁸ 12	M 25
T 26	16 15 6	4 ⁸ 50'07	22 ⁸ 2	16 ⁸ 11	23 ⁸ 18	6 ⁸ 8	26 ⁸ 16	1 ⁸ 58	4 ⁸ 36	5 ⁸ 1	7 ⁸ 37	0 ⁸ 10	28 ⁸ 59	2 ⁸ 0	7 ⁸ 14	T 26
W 27	16 19 3	5 ⁸ 47'38	6 ⁸ 317	15 ⁸ 53	24 ⁸ 26	6 ⁸ 50	26 ⁸ 10	2 ⁸ 0	4 ⁸ 39	5 ⁸ 3	7 ⁸ 38	0 ⁸ 6	28 ⁸ 56	2 ⁸ 7	7 ⁸ 17	W 27
T 28	16 22 59	6 ⁸ 45'08	20 ⁸ 57	15 ⁸ 30	25 ⁸ 34	7 ⁸ 32	26 ⁸ 3	2 ⁸ 1	4 ⁸ 42	5 ⁸ 4	7 ⁸ 39	29 ⁸ 59	28 ⁸ 53	2 ⁸ 14	7 ⁸ 19	T 28
F 29	16 26 56	7 ⁸ 42'37	5 ⁸ II57	15 ⁸ 5	26 ⁸ 42	8 ⁸ 13	25 ⁸ 56	2 ⁸ 3	4 ⁸ 46	5 ⁸ 5	7 ⁸ 40	29 ⁸ 50	28 ⁸ 50	2 ⁸ 20	7 ⁸ 22	F 29
S 30	16 30 52	8 ⁸ 40'06	21 ⁸ 8	14 ⁸ 37	27 ⁸ 51	8 ⁸ 55	25 ⁸ 49	2 ⁸ 4	4 ⁸ 49	5 ⁸ 6	7 ⁸ 41	29 ⁸ 41	28 ⁸ 47	2 ⁸ 27	7 ⁸ 25	S 30
S 31	16 34 49	9 ⁸ II37'33	6 ⁸ 19	14 ⁸ II 7	28 ⁸ Y59	9 ⁸ II36	25 ⁸ 42	2 ⁸ 36	4 ⁸ 52	5 ⁸ Y 8	7 ⁸ 42	29 ⁸ 31	28 ⁸ 43	2 ⁸ 34	7 ⁸ 28	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
F 1	15n 5	15n26	4s16	22n25	2n19	2s45	1s 6	17n29	0n 8	23s 1	0n27	12s29	1s22	23n44	0n18	0n25	1s26	25n 0	6n47	0s41	0s 7	18s20	4n11	5s12			
S 2	15 23	17 28	4 52	22 48	2 23	2 23	1 10	17 41	0 8	23 1	0 27	12 28	1 22	23 44	0 18	0 26	1 26	25 0	6 46	0 38	0 6	18 20	4 12	5 11			
S 3	15 40	18 18	5 9	23 9	2 27	2 1	1 14	17 54	0 9	23 1	0 27	12 27	1 22	23 44	0 18	0 26	1 26	25 0	6 46	0 36	0 5	18 20	4 13	5 10			
M 4	15 58	17 54	5 5	23 28	2 29	1 38	1 17	18 6	0 9	23 1	0 27	12 25	1 22	23 44	0 18	0 27	1 26	25 0	6 46	0 34	0 4	18 20	4 14	5 9			
T 5	16 15	16 21	4 41	23 44	2 31	1 15	1 21	18 18	0 10	23 1	0 27	12 24	1 23	23 43	0 18	0 28	1 26	24 59	6 46	0 33	0 2	18 20	4 15	5 9			
W 6	16 32	13 49	4 1	23 58	2 31	0 52	1 24	18 29	0 11	23 1	0 27	12 23	1 23	23 43	0 18	0 28	1 26	24 59	6 46	0 32	0 1	18 20	4 15	5 8			
T 7	16 49	10 33	3 8	24 10	2 31	0 29	1 27	18 41	0 11	23 1	0 27	12 22	1 23	23 43	0 18	0 29	1 26	24 59	6 46	0 32	0n 0	18 20	4 16	5 7			
F 8	17 5	6 48	2 5	24 19	2 30	0 6	1 30	18 52	0 12	23 1	0 27	12 21	1 23	23 43	0 18	0 30	1 26	24 59	6 46	0 33	0 1	18 20	4 17	5 6			
S 9	17 21	2 47	0 57	24 27	2 28	0n17	1 33	19 3	0 13	23 1	0 27	12 20	1 23	23 43	0 18	0 30	1 26	24 59	6 46	0 33	0 3	18 20	4 17	5 5			
S 10	17 37	1s18	0n13	24 32	2 25	0 41	1 36	19 14	0 13	23 1	0 27	12 19	1 24	23 43	0 18	0 31	1 26	24 58	6 46	0 33	0 4	18 20	4 18	5 4			
M11	17 53	5 15	1 20	24 36	2 21	1 5	1 39	19 25	0 14	23 1	0 26	12 18	1 24	23 43	0 18	0 32	1 26	24 58	6 45	0 33	0 5	18 20	4 19	5 4			
T 12	18 8	8 54	2 23	24 37	2 16	1 28	1 42	19 36	0 14	23 1	0 26	12 17	1 24	23 43	0 18	0 32	1 26	24 58	6 45	0 32	0 6	18 20	4 19	5 3			
W13	18 23	12 8	3 18	24 37	2 10	1 52	1 44	19 46	0 15	23 1	0 26	12 17	1 24	23 43	0 18	0 33	1 26	24 58	6 45	0 29	0 8	18 20	4 19	5 2			
T 14	18 38	14 47	4 3	24 35	2 3	2 16	1 46	19 56	0 16	23 1	0 26	12 16	1 24	23 43	0 18	0 34	1 26	24 57	6 45	0 26	0 9	18 20	4 20	5 1			
F 15	18 52	16 45	4 36	24 31	1 55	2 40	1 49	20 6	0 16	23 1	0 26	12 15	1 25	23 43	0 18	0 34	1 26	24 57	6 45	0 23	0 10	18 20	4 20	5 0			
S 16	19 6	17 59	4 57	24 25	1 46	3 4	1 51	20 16	0 17	23 1	0 26	12 14	1 25	23 43	0 18	0 35	1 26	24 57	6 45	0 18	0 12	18 20	4 21	4 59			
S 17	19 20	18 24	5 5	24 18	1 36	3 29	1 53	20 26	0 17	23 1	0 26	12 14	1 25	23 42	0 18	0 35	1 26	24 56	6 45	0 14	0 13	18 20	4 21	4 59			
M18	19 33	18 0	4 59	24 9	1 25	3 53	1 55	20 35	0 18	23 1	0 26	12 13	1 25	23 42	0 18	0 36	1 26	24 56	6 45	0 11	0 14	18 20	4 21	4 58			
T 19	19 46	16 50	4 41	23 59	1 13	4 17	1 56	20 45	0 19	23 1	0 26	12 12	1 25	23 42	0 18	0 37	1 26	24 56	6 45	0 8	0 15	18 20	4 21	4 57			
W20	19 59	14 55	4 10	23 48	1 0	4 41	1 58	20 54	0 19	23 1	0 26	12 12	1 26	23 42	0 18	0 37	1 27	24 55	6 45	0 6	0 17	18 20	4 21	4 56			
T 21	20 11	12 21	3 28	23 35	0 46	5 6	2 0	21 3	0 20	23 1	0 26	12 11	1 26	23 42	0 18	0 38	1 27	24 55	6 44	0 5	0 18	18 20	4 22	4 55			
F 22	20 23	9 12	2 36	23 21	0 32	5 30	2 1	21 11	0 20	23 0	0 26	12 10	1 26	23 42	0 18	0 38	1 27	24 55	6 44	0 4	0 19	18 20	4 22	4 54			
S 23	20 35	5 34	1 35	23 6	0 17	5 54	2 3	21 20	0 21	23 0	0 26	12 10	1 26	23 42	0 18	0 39	1 27	24 55	6 44	0 5	0 20	18 20	4 22	4 54			
S 24	20 46	1 34	0 28	22 49	0 1	6 19	2 4	21 28	0 21	23 0	0 25	12 9	1 27	23 42	0 18	0 39	1 27	24 54	6 44	0 5	0 22	18 19	4 22	4 53			
M25	20 57	2n38	0s43	22 32	0s15	6 43	2 5	21 36	0 22	23 0	0 25	12 9	1 27	23 42	0 18	0 40	1 27	24 54	6 44	0 5	0 23	18 19	4 22	4 52			
T 26	21 8	6 50	1 54	22 13	0 32	7 7	2 6	21 44	0 23	23 0	0 25	12 8	1 27	23 42	0 18	0 40	1 27	24 54	6 44	0 4	0 24	18 19	4 21	4 51			
W27	21 18	10 48	3 0	21 54	0 49	7 31	2 7	21 52	0 23	23 0	0 25	12 8	1 27	23 41	0 18	0 41	1 27	24 53	6 44	0 2	0 25	18 19	4 21	4 50			
T 28	21 28	14 14	3 56	21 35	1 7	7 55	2 8	21 59	0 24	23 0	0 25	12 8	1 27	23 41	0 18	0 41	1 27	24 53	6 44	0n 0	0 27	18 19	4 21	4 50			
F 29	21 38	16 47	4 37	21 15	1 24	8 19	2 8	22 7	0 24	23 0	0 25	12 7	1 28	23 41	0 18	0 42	1 27	24 52	6 44	0 4	0 28	18 19	4 21	4 49			
S 30	21 47	18 12	4 59	20 54	1 41	8 43	2 9	22 14	0 25	23 0	0 25	12 7	1 28	23 41	0 18	0 42	1 27	24 52	6 44	0 8	0 29	18 19	4 21	4 48			
S 31	21n56	18n20	5s 0	20n34	1s58	9n 7	2s 9	22n21	0n25	23s 0	0n25	12s 7	1s28	23n41	0n18	0n43	1s27	24n52	6n44	0n12	0n30	18s19	4n20	4s47			

ASTRODIENST EPHEMERIS for the year 1699
geocentric

JUNE 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 38 45	10 ^{II} 34'59	21 [☾] 20	13°R35	08 8	10 ^{II} 18	25°R35	2 [♂] 7	4 [☾] 56	5 [♂] 9	7 [♂] 43	29°R22	28 [♂] 40	2 [☾] 40	7 [♂] 31	M 1
T 2	16 42 42	11°32'24	6 [♂] 2	13 ^{II} 2	1°16	10°59	25 [♂] 28	2°8	4°59	5°10	7°44	29 [♂] 16	28°37	2°47	7°34	T 2
W 3	16 46 39	12°29'48	20°21	12°28	2°25	11°41	25°21	2°9	5°3	5°11	7°45	29°12	28°34	2°54	7°37	W 3
T 4	16 50 35	13°27'11	4 [♂] 13	11°55	3°34	12°22	25°13	2°9	5°6	5°12	7°46	29°11	28°31	3°1	7°40	T 4
F 5	16 54 32	14°24'32	17°41	11°22	4°43	13°3	25°6	2°10	5°9	5°13	7°48	29°D10	28°28	3°7	7°44	F 5
S 6	16 58 28	15°21'53	0 [♂] 47	10°50	5°52	13°44	24°59	2°11	5°13	5°14	7°49	29°R10	28°24	3°14	7°47	S 6
S 7	17 2 25	16°19'12	13°33	10°20	7°1	14°26	24°51	2°11	5°16	5°15	7°50	29°10	28°21	3°21	7°51	S 7
M 8	17 6 21	17°16'31	26°4	9°53	8°10	15°7	24°44	2°12	5°20	5°16	7°51	29°7	28°18	3°27	7°55	M 8
T 9	17 10 18	18°13'48	8 [♂] 24	9°27	9°19	15°48	24°36	2°12	5°23	5°17	7°52	29°2	28°15	3°34	7°58	T 9
W10	17 14 14	19°11'05	20°34	9°5	10°28	16°29	24°28	2°12	5°27	5°18	7°54	28°54	28°12	3°41	8°2	W10
T 11	17 18 11	20°8'21	2 [♂] 37	8°47	11°38	17°10	24°21	2°13	5°30	5°19	7°55	28°44	28°9	3°48	8°6	T 11
F 12	17 22 8	21°5'37	14°36	8°32	12°47	17°51	24°13	2°R13	5°34	5°20	7°56	28°31	28°5	3°54	8°10	F 12
S 13	17 26 4	22°2'52	26°31	8°21	13°57	18°32	24°6	2°13	5°37	5°21	7°58	28°17	28°2	4°1	8°15	S 13
S 14	17 30 1	23°0'06	8 [☾] 24	8°15	15°6	19°13	23°58	2°13	5°41	5°22	7°59	28°4	27°59	4°8	8°19	S 14
M15	17 33 57	23°57'20	20°16	8°D13	16°16	19°53	23°50	2°12	5°44	5°23	8°0	27°51	27°56	4°15	8°23	M15
T 16	17 37 54	24°54'33	2 [♂] 10	8°16	17°26	20°34	23°43	2°12	5°48	5°23	8°2	27°41	27°53	4°21	8°28	T 16
W17	17 41 50	25°51'47	14°7	8°23	18°35	21°15	23°35	2°12	5°52	5°24	8°3	27°33	27°49	4°28	8°33	W17
T 18	17 45 47	26°49'00	26°10	8°35	19°45	21°56	23°27	2°11	5°55	5°25	8°4	27°28	27°46	4°35	8°37	T 18
F 19	17 49 43	27°46'13	8 [♂] 25	8°51	20°55	22°36	23°20	2°10	5°59	5°25	8°6	27°26	27°43	4°41	8°42	F 19
S 20	17 53 40	28°43'25	20°54	9°13	22°5	23°17	23°12	2°10	6°2	5°26	8°7	27°25	27°40	4°48	8°47	S 20
S 21	17 57 37	29°40'38	3 [♂] 43	9°39	23°15	23°57	23°4	2°9	6°6	5°27	8°9	27°25	27°37	4°55	8°52	S 21
M22	18 1 33	0 [☾] 37'51	16°56	10°9	24°25	24°38	22°57	2°8	6°10	5°27	8°10	27°25	27°34	5°2	8°57	M22
T 23	18 5 30	1°35'04	0 [♂] 36	10°45	25°36	25°19	22°49	2°7	6°13	5°28	8°12	27°22	27°30	5°8	9°2	T 23
W24	18 9 26	2°32'16	14°45	11°24	26°46	25°59	22°42	2°6	6°17	5°28	8°13	27°18	27°27	5°15	9°7	W24
T 25	18 13 23	3°29'29	29°22	12°9	27°56	26°39	22°34	2°5	6°20	5°29	8°15	27°11	27°24	5°22	9°13	T 25
F 26	18 17 19	4°26'42	14 ^{II} 22	12°58	29°7	27°20	22°27	2°3	6°24	5°29	8°16	27°2	27°21	5°29	9°18	F 26
S 27	18 21 16	5°23'56	29°38	13°51	0 ^{II} 17	28°0	22°20	2°2	6°28	5°29	8°18	26°51	27°18	5°35	9°23	S 27
S 28	18 25 12	6°21'09	14 [☾] 57	14°48	1°28	28°40	22°12	2°0	6°31	5°30	8°19	26°41	27°15	5°42	9°29	S 28
M29	18 29 9	7°18'22	0 [♂] 8	15°50	2°38	29°21	22°5	1°59	6°35	5°30	8°21	26°32	27°11	5°49	9°35	M29
T 30	18 33 6	8 [☾] 15'34	15 [♂] 2	16 ^{II} 56	3 ^{II} 49	0 [☾] 1	21 [♂] 58	1 [♂] 57	6 [☾] 39	5 [♂] 30	8 [♂] 22	26 [♂] 24	27 [♂] 8	5 [☾] 55	9 [♂] 40	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
M 1	22n 4	17n10	4s41	20n14	2s15	9n31	2s10	22n27	0n26	23s 0	0n25	12s 7	1s28	23n41	0n18	0n43	1s27	24n51	6n43	0n15	0n32	18s19	4n20	4s46	
T 2	22 12	14 52	4 3	19 54	2 31	9 54	2 10	22 34	0 27	22 59	0 24	12 7	1 28	23 41	0 18	0 43	1 27	24 51	6 43	0 17	0 33	18 19	4 19	4 46	
W 3	22 20	11 43	3 10	19 34	2 47	10 18	2 10	22 40	0 27	22 59	0 24	12 6	1 29	23 41	0 18	0 44	1 27	24 51	6 43	0 19	0 34	18 19	4 19	4 45	
T 4	22 27	7 59	2 8	19 15	3 1	10 41	2 10	22 46	0 28	22 59	0 24	12 6	1 29	23 40	0 18	0 44	1 27	24 50	6 43	0 20	0 36	18 19	4 19	4 44	
F 5	22 34	3 57	1 1	18 58	3 15	11 4	2 10	22 52	0 28	22 59	0 24	12 6	1 29	23 40	0 18	0 45	1 27	24 50	6 43	0 20	0 37	18 19	4 18	4 43	
S 6	22 40	0s11	0n 9	18 41	3 27	11 27	2 10	22 58	0 29	22 59	0 24	12 6	1 29	23 40	0 18	0 45	1 27	24 49	6 43	0 20	0 38	18 19	4 17	4 42	
S 7	22 46	4 12	1 15	18 26	3 39	11 50	2 10	23 3	0 29	22 59	0 24	12 6	1 30	23 40	0 18	0 45	1 27	24 49	6 43	0 20	0 39	18 19	4 17	4 42	
M 8	22 52	7 57	2 17	18 12	3 49	12 12	2 10	23 8	0 30	22 58	0 24	12 6	1 30	23 40	0 18	0 46	1 27	24 49	6 43	0 21	0 41	18 18	4 16	4 41	
T 9	22 57	11 18	3 12	17 59	3 58	12 35	2 9	23 13	0 30	22 58	0 24	12 6	1 30	23 40	0 18	0 46	1 27	24 48	6 43	0 23	0 42	18 18	4 15	4 40	
W10	23 2	14 7	3 56	17 49	4 5	12 57	2 9	23 18	0 31	22 58	0 24	12 6	1 30	23 40	0 18	0 46	1 28	24 48	6 43	0 26	0 43	18 18	4 15	4 39	
T 11	23 7	16 18	4 30	17 40	4 11	13 19	2 8	23 23	0 31	22 58	0 23	12 7	1 30	23 39	0 18	0 47	1 28	24 47	6 43	0 30	0 44	18 18	4 14	4 39	
F 12	23 11	17 46	4 51	17 33	4 16	13 40	2 8	23 27	0 32	22 58	0 23	12 7	1 31	23 39	0 18	0 47	1 28	24 47	6 43	0 35	0 46	18 18	4 13	4 38	
S 13	23 14	18 26	5 0	17 28	4 19	14 2	2 7	23 31	0 33	22 57	0 23	12 7	1 31	23 39	0 18	0 47	1 28	24 47	6 43	0 41	0 47	18 18	4 12	4 37	
S 14	23 17	18 18	4 55	17 25	4 21	14 23	2 6	23 35	0 33	22 57	0 23	12 7	1 31	23 39	0 18	0 47	1 28	24 46	6 43	0 46	0 48	18 18	4 11	4 36	
M15	23 20	17 22	4 38	17 24	4 22	14 44	2 5	23 39	0 34	22 57	0 23	12 8	1 31	23 39	0 18	0 48	1 28	24 46	6 42	0 51	0 49	18 18	4 10	4 36	
T 16	23 23	15 41	4 8	17 25	4 21	15 4	2 4	23 42	0 34	22 57	0 23	12 8	1 32	23 39	0 18	0 48	1 28	24 45	6 42	0 55	0 51	18 18	4 9	4 35	
W17	23 25	13 19	3 27	17 27	4 20	15 25	2 3	23 46	0 35	22 57	0 23	12 8	1 32	23 39	0 18	0 48	1 28	24 45	6 42	0 58	0 52	18 18	4 8	4 34	
T 18	23 26	10 21	2 37	17 32	4 17	15 45	2 2	23 49	0 35	22 56	0 22	12 9	1 32	23 38	0 18	0 48	1 28	24 45	6 42	1 0	0 53	18 17	4 7	4 33	
F 19	23 27	6 54	1 39	17 38	4 13	16 4	2 1	23 52	0 36	22 56	0 22	12 9	1 32	23 38	0 18	0 49	1 28	24 44	6 42	1 1	0 55	18 17	4 6	4 33	
S 20	23 28	3 5	0 34	17 46	4 8	16 24	1 59	23 54	0 36	22 56	0 22	12 9	1 32	23 38	0 18	0 49	1 28	24 44	6 42	1 2	0 56	18 17	4 5	4 32	
S 21	23 29	0n58	0s33	17 56	4 3	16 43	1 58	23 57	0 37	22 56	0 22	12 10	1 33	23 38	0 18	0 49	1 28	24 43	6 42	1 2	0 57	18 17	4 4	4 31	
M22	23 28	5 6	1 41	18 7	3 56	17 1	1 57	23 59	0 37	22 55	0 22	12 11	1 33	23 38	0 18	0 49	1 28	24 43	6 42	1 2	0 58	18 17	4 3	4 31	
T 23	23 28	9 7	2 46	18 19	3 49	17 20	1 55	24 1	0 38	22 55	0 22	12 11	1 33	23 38	0 18	0 49	1 28	24 42	6 42	1 3	1 0	18 17	4 1	4 30	
W24	23 27	12 45	3 42	18 33	3 40	17 37	1 53	24 3	0 38	22 55	0 22	12 12	1 33	23 37	0 18	0 49	1 28	24 42	6 42	1 4	1 1	18 17	4 0	4 29	
T 25	23 26	15 42	4 26	18 47	3 31	17 55	1 52	24 5	0 39	22 55	0 21	12 12	1 33	23 37	0 18	0 50	1 28	24 42	6 42	1 7	1 2	18 16	3 59	4 28	
F 26	23 24	17 42	4 54	19 3	3 22	18 12	1 50	24 6	0 39	22 54	0 21	12 13	1 34	23 37	0 18	0 50	1 28	24 41	6 42	1 11	1 3	18 16	3 58	4 28	
S 27	23 22	18 28	5 0	19 20	3 12	18 29	1 48	24 7	0 40	22 54	0 21	12 14	1 34	23 37	0 18	0 50	1 28	24 41	6 42	1 15	1 5	18 16	3 56	4 27	
S 28	23 19	17 54	4 46	19 37	3 1	18 45	1 46	24 8	0 40	22 54	0 21	12 14	1 34	23 37	0 18	0 50	1 29	24 40	6 42	1 19	1 6	18 16	3 55	4 26	
M29	23 16	16 4	4 11	19 54	2 50	19 1	1 44	24 9	0 41	22 54	0 21	12 15	1 34	23 37	0 18	0 50	1 29	24 40	6 42	1 23	1 7	18 16	3 53	4 26	
T 30	23n13	13n10	3s20	20n13	2s38	19n16	1s43	24n10	0n41	22s53	0n21	12s16	1s35	23n36	0n18	0n50	1s29	24n39	6n42	1n26	1n 8	18s16	3n52	4s25	

ASTRODIENST EPHEMERIS for the year 1699

geocentric

JULY 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	18 37 2	9 ⁵² 12'47	29 ⁰² 32	18 ¹¹ 6	4 ¹¹ 59	0 ⁵⁴ 1	21°R51	1°R55	6 ⁵⁴ 2	5 ¹⁷ 31	8 ⁰² 24	26°R20	27 ¹⁷ 5	6 ⁵² 2	9 ¹⁷ 46	W 1
T 2	18 40 59	10° 9'59	13 ¹⁷ 33	19°20	6°10	1°21	21 ¹⁷ 44	1 ¹⁸ 54	6°46	5°31	8°26	26 ¹⁷ 18	27° 2	6° 9	9°52	T 2
F 3	18 44 55	11° 7'11	27° 7	20°39	7°21	2° 1	21°37	1°52	6°49	5°31	8°27	26°D17	26°59	6°16	9°58	F 3
S 4	18 48 52	12° 4'23	10 ¹⁴ 14	22° 1	8°32	2°41	21°30	1°50	6°53	5°31	8°29	26°R17	26°55	6°22	10° 4	S 4
S 5	18 52 48	13° 1'35	22°59	23°27	9°43	3°21	21°24	1°47	6°57	5°31	8°31	26°17	26°52	6°29	10°10	S 5
M 6	18 56 45	13°58'46	5 ¹¹ 26	24°57	10°54	4° 1	21°17	1°45	7° 0	5°31	8°32	26°15	26°49	6°36	10°16	M 6
T 7	19 0 41	14°55'58	17°39	26°31	12° 5	4°41	21°11	1°43	7° 4	5°32	8°34	26°11	26°46	6°42	10°23	T 7
W 8	19 4 38	15°53'10	29°43	28° 9	13°16	5°21	21° 4	1°41	7° 7	5°32	8°36	26° 4	26°43	6°49	10°29	W 8
T 9	19 8 35	16°50'21	11 ¹⁷ 40	29°50	14°27	6° 1	20°58	1°38	7°11	5°R32	8°37	25°55	26°40	6°56	10°35	T 9
F 10	19 12 31	17°47'33	22°34	1 ⁵³ 34	15°38	6°41	20°52	1°36	7°15	5°32	8°39	25°44	26°36	7° 3	10°42	F 10
S 11	19 16 28	18°44'46	5 ³² 26	3°22	16°49	7°20	20°46	1°33	7°18	5°31	8°41	25°32	26°33	7° 9	10°48	S 11
S 12	19 20 24	19°41'58	17°19	5°13	18° 0	8° 0	20°40	1°30	7°22	5°31	8°42	25°20	26°30	7°16	10°55	S 12
M13	19 24 21	20°39'11	29°14	7° 7	19°12	8°40	20°34	1°27	7°25	5°31	8°44	25° 9	26°27	7°23	11° 2	M13
T 14	19 28 17	21°36'24	11 ¹⁸ 12	9° 3	20°23	9°20	20°29	1°25	7°29	5°31	8°46	24°59	26°24	7°30	11° 8	T 14
W15	19 32 14	22°33'38	23°16	11° 2	21°35	9°59	20°23	1°22	7°32	5°31	8°47	24°53	26°21	7°36	11°15	W15
T 16	19 36 10	23°30'53	5 ¹⁸ 26	13° 3	22°46	10°39	20°18	1°19	7°36	5°31	8°49	24°48	26°17	7°43	11°22	T 16
F 17	19 40 7	24°28'08	17°47	15° 6	23°58	11°18	20°12	1°16	7°39	5°30	8°51	24°47	26°14	7°50	11°29	F 17
S 18	19 44 4	25°25'24	0 ¹⁷ 21	17°10	25° 9	11°58	20° 7	1°12	7°43	5°30	8°53	24°D46	26°11	7°56	11°36	S 18
S 19	19 48 0	26°22'40	13°11	19°16	26°21	12°37	20° 2	1° 9	7°46	5°30	8°54	24°47	26° 8	8° 3	11°43	S 19
M20	19 51 57	27°19'58	26°22	21°22	27°33	13°17	19°58	1° 6	7°50	5°29	8°56	24°R48	26° 5	8°10	11°50	M20
T 21	19 55 53	28°17'17	9 ⁵⁷ 57	23°29	28°44	13°56	19°53	1° 2	7°53	5°29	8°58	24°47	26° 1	8°17	11°57	T 21
W22	19 59 50	29°14'36	23°57	25°36	29°56	14°36	19°49	0°59	7°57	5°29	9° 0	24°45	25°58	8°23	12° 5	W22
T 23	20 3 46	0 ¹¹ 57	8 ¹¹ 22	27°43	1 ⁵⁸ 8	15°15	19°44	0°56	8° 0	5°28	9° 1	24°40	25°55	8°30	12°12	T 23
F 24	20 7 43	1° 9'19	23°10	29°49	2°20	15°54	19°40	0°52	8° 4	5°28	9° 3	24°34	25°52	8°37	12°19	F 24
S 25	20 11 39	2° 6'42	8 ⁵⁸ 14	1 ⁰² 55	3°32	16°33	19°36	0°48	8° 7	5°27	9° 5	24°26	25°49	8°43	12°27	S 25
S 26	20 15 36	3° 4'05	23°24	4° 1	4°44	17°13	19°32	0°45	8°10	5°27	9° 7	24°19	25°46	8°50	12°34	S 26
M27	20 19 33	4° 1'30	8 ⁰² 32	6° 5	5°56	17°52	19°29	0°41	8°14	5°26	9° 9	24°12	25°42	8°57	12°42	M27
T 28	20 23 29	4°58'55	23°26	8° 8	7° 8	18°31	19°25	0°37	8°17	5°25	9°10	24° 7	25°39	9° 4	12°49	T 28
W29	20 27 26	5°56'21	7 ¹⁷ 59	10°10	8°21	19°10	19°22	0°33	8°20	5°25	9°12	24° 4	25°36	9°10	12°57	W29
T 30	20 31 22	6°53'48	22° 7	12°11	9°33	19°49	19°19	0°29	8°24	5°24	9°14	24°D 2	25°33	9°17	13° 4	T 30
F 31	20 35 19	7 ⁰² 51'15	5 ¹⁴ 46	14 ⁰¹ 11	10 ⁵⁴ 5	20 ⁵⁸ 28	19 ¹⁷ 16	0 ¹⁸ 25	8 ⁵² 27	5 ¹⁷ 23	9 ⁰² 16	24 ¹⁷ 3	25 ¹⁷ 30	9 ⁵² 24	13 ¹⁷ 12	F 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
W 1	23n 9	9n31	2s17	20n31	2s26	19n31	1s41	24n10	0n42	22s53	0n21	12s17	1s35	23n36	0n18	0n50	1s29	24n39	6n42	1n28	1n10	18s16	3n50	4s24
T 2	23 5	5 27	1 7	20 49	2 14	19 45	1 38	24 10	0 42	22 53	0 20	12 18	1 35	23 36	0 18	0 50	1 29	24 38	6 42	1 28	1 11	18 15	3 49	4 24
F 3	23 1	1 13	0n 4	21 8	2 1	19 59	1 36	24 10	0 43	22 52	0 20	12 19	1 35	23 36	0 18	0 50	1 29	24 38	6 42	1 29	1 12	18 15	3 47	4 23
S 4	22 56	2s56	1 13	21 26	1 49	20 13	1 34	24 10	0 43	22 52	0 20	12 19	1 35	23 36	0 18	0 50	1 29	24 38	6 42	1 29	1 13	18 15	3 45	4 22
S 5	22 50	6 50	2 17	21 43	1 36	20 26	1 32	24 10	0 44	22 52	0 20	12 20	1 36	23 36	0 18	0 50	1 29	24 37	6 42	1 29	1 15	18 15	3 44	4 22
M 6	22 44	10 20	3 12	22 0	1 23	20 38	1 30	24 9	0 44	22 52	0 20	12 21	1 36	23 35	0 18	0 50	1 29	24 37	6 42	1 30	1 16	18 15	3 42	4 21
T 7	22 38	13 20	3 57	22 16	1 10	20 50	1 27	24 8	0 45	22 51	0 20	12 22	1 36	23 35	0 18	0 50	1 29	24 36	6 42	1 31	1 17	18 15	3 40	4 20
W 8	22 32	15 42	4 31	22 31	0 57	21 1	1 25	24 7	0 45	22 51	0 19	12 23	1 36	23 35	0 18	0 50	1 29	24 36	6 42	1 34	1 19	18 14	3 38	4 20
T 9	22 25	17 23	4 53	22 45	0 44	21 12	1 22	24 6	0 46	22 51	0 19	12 25	1 36	23 35	0 18	0 50	1 29	24 35	6 42	1 38	1 20	18 14	3 36	4 19
F 10	22 17	18 18	5 2	22 57	0 31	21 22	1 20	24 4	0 46	22 51	0 19	12 26	1 37	23 35	0 18	0 50	1 29	24 35	6 42	1 42	1 21	18 14	3 35	4 19
S 11	22 10	18 25	4 58	23 7	0 19	21 32	1 18	24 3	0 47	22 50	0 19	12 27	1 37	23 34	0 18	0 50	1 29	24 34	6 42	1 47	1 22	18 14	3 33	4 18
S 12	22 2	17 43	4 40	23 16	0 6	21 41	1 15	24 1	0 47	22 50	0 19	12 28	1 37	23 34	0 18	0 50	1 29	24 34	6 42	1 52	1 24	18 14	3 31	4 17
M13	21 53	16 15	4 11	23 22	0n 5	21 50	1 12	23 59	0 48	22 50	0 19	12 29	1 37	23 34	0 18	0 50	1 29	24 33	6 42	1 56	1 25	18 13	3 29	4 17
T 14	21 44	14 4	3 30	23 27	0 17	21 58	1 10	23 57	0 48	22 50	0 18	12 30	1 37	23 34	0 18	0 50	1 29	24 33	6 42	2 0	1 26	18 13	3 27	4 16
W15	21 35	11 16	2 40	23 29	0 28	22 5	1 7	23 54	0 48	22 49	0 18	12 31	1 37	23 34	0 18	0 49	1 29	24 33	6 42	2 2	1 27	18 13	3 25	4 16
T 16	21 25	7 58	1 41	23 28	0 38	22 12	1 5	23 52	0 49	22 49	0 18	12 33	1 38	23 34	0 18	0 49	1 30	24 32	6 42	2 4	1 29	18 13	3 23	4 15
F 17	21 16	4 16	0 37	23 25	0 48	22 18	1 2	23 49	0 49	22 49	0 18	12 34	1 38	23 33	0 18	0 49	1 30	24 32	6 42	2 5	1 30	18 13	3 21	4 14
S 18	21 5	0 19	0s30	23 19	0 57	22 24	0 59	23 46	0 50	22 49	0 18	12 35	1 38	23 33	0 18	0 49	1 30	24 31	6 42	2 5	1 31	18 12	3 19	4 14
S 19	20 55	3n43	1 37	23 10	1 5	22 29	0 57	23 43	0 50	22 49	0 18	12 37	1 38	23 33	0 18	0 49	1 30	24 31	6 42	2 4	1 32	18 12	3 16	4 13
M20	20 44	7 41	2 41	22 59	1 13	22 33	0 54	23 39	0 51	22 48	0 17	12 38	1 38	23 33	0 18	0 49	1 30	24 30	6 42	2 4	1 34	18 12	3 14	4 13
T 21	20 32	11 22	3 38	22 44	1 20	22 37	0 51	23 36	0 51	22 48	0 17	12 39	1 39	23 33	0 18	0 48	1 30	24 30	6 42	2 4	1 35	18 12	3 12	4 12
W22	20 20	14 32	4 23	22 28	1 26	22 40	0 48	23 32	0 52	22 48	0 17	12 41	1 39	23 32	0 18	0 48	1 30	24 29	6 42	2 5	1 36	18 12	3 10	4 12
T 23	20 8	16 54	4 54	22 8	1 31	22 43	0 45	23 28	0 52	22 48	0 17	12 42	1 39	23 32	0 18	0 48	1 30	24 29	6 42	2 7	1 37	18 11	3 8	4 11
F 24	19 56	18 12	5 6	21 47	1 36	22 45	0 43	23 24	0 52	22 48	0 17	12 44	1 39	23 32	0 18	0 48	1 30	24 28	6 42	2 10	1 39	18 11	3 5	4 11
S 25	19 43	18 16	4 57	21 23	1 39	22 46	0 40	23 19	0 53	22 48	0 17	12 45	1 39	23 32	0 18	0 48	1 30	24 28	6 42	2 13	1 40	18 11	3 3	4 10
S 26	19 30	17 2	4 28	20 56	1 42	22 46	0 37	23 15	0 53	22 47	0 16	12 46	1 39	23 32	0 18	0 47	1 30	24 28	6 42	2 16	1 41	18 11	3 1	4 10
M27	19 17	14 37	3 40	20 28	1 44	22 46	0 34	23 10	0 54	22 47	0 16	12 48	1 40	23 31	0 18	0 47	1 30	24 27	6 42	2 19	1 43	18 10	2 58	4 9
T 28	19 3	11 15	2 37	19 58	1 46	22 46	0 31	23 5	0 54	22 47	0 16	12 49	1 40	23 31	0 18	0 47	1 30	24 27	6 42	2 21	1 44	18 10	2 56	4 9
W29	18 49	7 16	1 26	19 26	1 47	22 44	0 29	23 0	0 55	22 47	0 16	12 51	1 40	23 31	0 18	0 46	1 30	24 26	6 42	2 22	1 45	18 10	2 53	4 8
T 30	18 35	2 58	0 10	18 52	1 47	22 42	0 26	22 55	0 55	22 47	0 16	12 52	1 40	23 31	0 18	0 46	1 30	24 26	6 43	2 22	1 46	18 10	2 51	4 8
F 31	18n20	1s20	1n 3	18n17	1n46	22n40	0s23	22n50	0n55	22s47	0n16	12s54	1s40	23n31	0n18	0n46	1s30	24n25	6n43	2n22	1n48	18s10	2n48	4s 7

ASTRODIENST EPHEMERIS for the year 1699
geocentric

AUGUST 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 39 15	8♂48'44	18♂59	16♂9	11♂57	21♂7	19♂R13	0°R21	8♂30	5°R23	9♂18	24♂4	25♂26	9♂30	13♂20	S 1
S 2	20 43 12	9°46'13	1♂47	18° 5	13°10	21°46	19♂10	0♂17	8°34	5°V22	9°19	24° 5	25°23	9°37	13°28	S 2
M 3	20 47 8	10°43'42	14°16	20° 0	14°22	22°25	19° 8	0°13	8°37	5°21	9°21	24°R 5	25°20	9°44	13°36	M 3
T 4	20 51 5	11°41'13	26°29	21°54	15°35	23° 4	19° 6	0° 9	8°40	5°20	9°23	24° 4	25°17	9°51	13°43	T 4
W 5	20 55 2	12°38'44	8♂31	23°46	16°47	23°43	19° 4	0° 5	8°43	5°20	9°25	24° 1	25°14	9°57	13°51	W 5
T 6	20 58 58	13°36'17	20°26	25°37	18° 0	24°22	19° 2	0° 1	8°46	5°19	9°27	23°56	25°11	10° 4	13°59	T 6
F 7	21 2 55	14°33'50	2♂19	27°26	19°12	25° 1	19° 0	29♂56	8°49	5°18	9°28	23°50	25° 7	10°11	14° 7	F 7
S 8	21 6 51	15°31'24	14°11	29°13	20°25	25°40	18°59	29°52	8°52	5°17	9°30	23°44	25° 4	10°18	14°15	S 8
S 9	21 10 48	16°29'00	26° 6	0♂59	21°38	26°18	18°57	29°48	8°55	5°16	9°32	23°37	25° 1	10°24	14°24	S 9
M10	21 14 44	17°26'36	8♂7	2°44	22°51	26°57	18°56	29°43	8°59	5°15	9°34	23°30	24°58	10°31	14°32	M10
T 11	21 18 41	18°24'14	20°13	4°27	24° 3	27°36	18°55	29°39	9° 2	5°14	9°36	23°25	24°55	10°38	14°40	T 11
W12	21 22 37	19°21'53	2♂28	6° 9	25°16	28°14	18°55	29°35	9° 4	5°13	9°37	23°22	24°52	10°44	14°48	W12
T 13	21 26 34	20°19'33	14°51	7°49	26°29	28°53	18°54	29°30	9° 7	5°12	9°39	23°20	24°48	10°51	14°56	T 13
F 14	21 30 31	21°17'15	27°26	9°27	27°42	29°32	18°54	29°26	9°10	5°11	9°41	23°D20	24°45	10°58	15° 5	F 14
S 15	21 34 27	22°14'58	10°V12	11° 5	28°55	0♂10	18°53	29°21	9°13	5°10	9°43	23°21	24°42	11° 5	15°13	S 15
S 16	21 38 24	23°12'43	23°13	12°40	0♂8	0°49	18°D53	29°17	9°16	5° 9	9°44	23°22	24°39	11°11	15°21	S 16
M17	21 42 20	24°10'29	6♂31	14°15	1°21	1°27	18°54	29°12	9°19	5° 8	9°46	23°24	24°36	11°18	15°30	M17
T 18	21 46 17	25° 8'18	20° 6	15°48	2°35	2° 6	18°54	29° 8	9°22	5° 6	9°48	23°R25	24°32	11°25	15°38	T 18
W19	21 50 13	26° 6'08	4♂1	17°19	3°48	2°44	18°55	29° 3	9°24	5° 5	9°50	23°25	24°29	11°31	15°46	W19
T 20	21 54 10	27° 4'00	18°14	18°50	5° 1	3°23	18°55	28°59	9°27	5° 4	9°51	23°23	24°26	11°38	15°55	T 20
F 21	21 58 6	28° 1'53	2♂44	20°18	6°14	4° 1	18°56	28°54	9°30	5° 3	9°53	23°21	24°23	11°45	16° 3	F 21
S 22	22 2 3	28°59'49	17°27	21°46	7°28	4°39	18°57	28°50	9°33	5° 1	9°55	23°18	24°20	11°52	16°12	S 22
S 23	22 6 0	29°57'46	2♂16	23°11	8°41	5°18	18°59	28°45	9°35	5° 0	9°56	23°15	24°17	11°58	16°20	S 23
M24	22 9 56	0♂55'45	17° 4	24°36	9°55	5°56	19° 0	28°40	9°38	4°59	9°58	23°12	24°13	12° 5	16°29	M24
T 25	22 13 53	1°53'46	1♂44	25°59	11° 8	6°34	19° 2	28°36	9°40	4°58	10° 0	23°10	24°10	12°12	16°37	T 25
W26	22 17 49	2°51'48	16° 9	27°20	12°22	7°13	19° 4	28°31	9°43	4°56	10° 2	23° 9	24° 7	12°18	16°46	W26
T 27	22 21 46	3°49'52	0♂12	28°40	13°35	7°51	19° 6	28°27	9°45	4°55	10° 3	23°D 9	24° 4	12°25	16°55	T 27
F 28	22 25 42	4°47'57	13°52	29°58	14°49	8°29	19° 8	28°22	9°48	4°54	10° 5	23° 9	24° 1	12°32	17° 3	F 28
S 29	22 29 39	5°46'03	27° 8	1♂14	16° 3	9° 7	19°10	28°18	9°50	4°52	10° 7	23°11	23°58	12°39	17°12	S 29
S 30	22 33 35	6°44'12	10♂0	2°29	17°16	9°45	19°13	28°13	9°52	4°51	10° 8	23°12	23°54	12°45	17°21	S 30
M31	22 37 32	7♂42'21	22♂32	3♂42	18♂30	10♂23	19♂16	28♂9	9♂55	4°V49	10♂10	23♂13	23♂51	12♂52	17♂29	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	18n 5	5s26	2n11	17n41	1n45	22n36	0s20	22n44	0n56	22s47	0n15	12s56	1s40	23n30	0n18	0n45
S 2	17 50	9 9	3 10	17 4	1 43	22 32	0 17	22 38	0 56	22 47	0 15	12 57	1 40	23 30	0 18	0 45
M 3	17 34	12 21	3 58	16 26	1 41	22 28	0 14	22 32	0 57	22 47	0 15	12 59	1 41	23 30	0 18	0 45
T 4	17 18	14 57	4 35	15 46	1 38	22 22	0 11	22 26	0 57	22 47	0 15	13 0	1 41	23 30	0 18	0 44
W 5	17 2	16 51	4 58	15 6	1 34	22 17	0 9	22 20	0 58	22 47	0 15	13 2	1 41	23 30	0 18	0 44
T 6	16 46	18 0	5 9	14 25	1 31	22 10	0 6	22 14	0 58	22 47	0 15	13 4	1 41	23 30	0 18	0 44
F 7	16 29	18 21	5 6	13 44	1 26	22 3	0 3	22 7	0 58	22 47	0 14	13 5	1 41	23 29	0 18	0 43
S 8	16 12	17 54	4 50	13 2	1 21	21 55	0 0	22 0	0 59	22 47	0 14	13 7	1 41	23 29	0 19	0 43
S 9	15 55	16 40	4 22	12 20	1 16	21 46	0n 2	21 54	0 59	22 47	0 14	13 8	1 41	23 29	0 19	0 42
M10	15 38	14 42	3 41	11 37	1 11	21 37	0 5	21 46	0 0	22 47	0 14	13 10	1 41	23 29	0 19	0 42
T 11	15 20	12 4	2 51	10 54	1 5	21 28	0 8	21 39	1 0	22 47	0 14	13 12	1 41	23 29	0 19	0 42
W12	15 2	8 53	1 51	10 11	0 59	21 17	0 11	21 32	1 0	22 47	0 14	13 13	1 42	23 28	0 19	0 41
T 13	14 44	5 16	0 46	9 28	0 52	21 6	0 13	21 24	1 1	22 47	0 13	13 15	1 42	23 28	0 19	0 41
F 14	14 26	1 22	0s22	8 44	0 46	20 55	0 16	21 17	1 1	22 47	0 13	13 17	1 42	23 28	0 19	0 40
S 15	14 7	2n39	1 31	8 1	0 39	20 42	0 18	21 9	1 2	22 48	0 13	13 18	1 42	23 28	0 19	0 40
S 16	13 48	6 37	2 36	7 18	0 31	20 30	0 21	21 1	1 2	22 48	0 13	13 20	1 42	23 28	0 19	0 39
M17	13 29	10 20	3 35	6 35	0 24	20 16	0 24	20 53	1 2	22 48	0 13	13 22	1 42	23 28	0 19	0 39
T 18	13 10	13 35	4 23	5 51	0 16	20 2	0 26	20 45	1 3	22 48	0 13	13 23	1 42	23 27	0 19	0 38
W19	12 50	16 8	4 56	5 9	0 8	19 48	0 29	20 36	1 3	22 48	0 12	13 25	1 42	23 27	0 19	0 38
T 20	12 30	17 46	5 13	4 26	0 0	19 33	0 31	20 28	1 4	22 49	0 12	13 27	1 42	23 27	0 19	0 37
F 21	12 11	18 17	5 10	3 44	0s 8	19 17	0 34	20 19	1 4	22 49	0 12	13 28	1 42	23 27	0 19	0 37
S 22	11 50	17 36	4 47	3 1	0 16	19 1	0 36	20 10	1 4	22 49	0 12	13 30	1 42	23 27	0 19	0 36
S 23	11 30	15 43	4 4	2 20	0 25	18 44	0 38	20 1	1 5	22 49	0 12	13 32	1 43	23 26	0 19	0 36
M24	11 10	12 47	3 6	1 38	0 33	18 27	0 41	19 52	1 5	22 50	0 12	13 33	1 43	23 26	0 19	0 35
T 25	10 49	9 5	1 55	0 58	0 42	18 9	0 43	19 43	1 5	22 50	0 11	13 35	1 43	23 26	0 19	0 35
W26	10 28	4 53	0 39	0 17	0 51	17 50	0 45	19 34	1 6	22 50	0 11	13 37	1 43	23 26	0 19	0 34
T 27	10 7	0 31	0n39	0s23	0 59	17 31	0 47	19 24	1 6	22 51	0 11	13 38	1 43	23 26	0 19	0 33
F 28	9 46	3s46	1 52	1 2	1 8	17 12	0 49	19 14	1 7	22 51	0 11	13 40	1 43	23 26	0 19	0 33
S 29	9 25	7 43	2 57	1 40	1 17	16 52	0 51	19 5	1 7	22 51	0 11	13 41	1 43	23 26	0 19	0 32
S 30	9 3	11 11	3 51	2 18	1 26	16 32	0 53	18 55	1 7	22 52	0 11	13 43	1 43	23 25	0 19	0 32
M31	8n42	14s 3	4n32	2s56	1s35	16n11	0n55	18n45	1n 8	22s52	0n11	13s45	1s43	23n25	0n19	0n31

Julian Day Number = 2341819.5, Delta T = 14.43 sec
Ecliptic obliquity = 23°28'33, Nutation = - 0°00'00, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°32'48, Lahiri = 19°39'48Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1699
geocentric

SEPTEMBER 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 41 29	8♐40'33	4♌48	4♌53	19♏44	11♏1	19♌19	28°R 5	9♎57	4°R48	10♏11	23°R14	23♐48	12♎59	17♐38	T 1
W 2	22 45 25	9°38'45	16°51	6° 3	20°58	11°39	19°22	28° 0	9°59	4°Y46	10°13	23°14	23°45	13° 5	17°47	W 2
T 3	22 49 22	10°36'59	28°47	7°10	22°12	12°17	19°25	27°56	10° 1	4°45	10°15	23°13	23°42	13°12	17°55	T 3
F 4	22 53 18	11°35'15	10♎39	8°15	23°26	12°55	19°29	27°51	10° 4	4°43	10°16	23°12	23°38	13°19	18° 4	F 4
S 5	22 57 15	12°33'33	22°33	9°17	24°40	13°33	19°32	27°47	10° 6	4°42	10°18	23°10	23°35	13°26	18°13	S 5
S 6	23 1 11	13°31'51	4♋31	10°18	25°54	14°11	19°36	27°43	10° 8	4°40	10°19	23° 9	23°32	13°32	18°22	S 6
M 7	23 5 8	14°30'12	16°37	11°15	27° 8	14°49	19°40	27°39	10°10	4°39	10°21	23° 8	23°29	13°39	18°30	M 7
T 8	23 9 4	15°28'34	28°53	12°10	28°22	15°27	19°44	27°34	10°12	4°37	10°22	23° 7	23°26	13°46	18°39	T 8
W 9	23 13 1	16°26'58	11♋21	13° 2	29°36	16° 5	19°49	27°30	10°14	4°36	10°24	23° 6	23°23	13°52	18°48	W 9
T 10	23 16 57	17°25'24	24° 2	13°51	0♐50	16°42	19°53	27°26	10°16	4°34	10°25	23°D 6	23°19	13°59	18°57	T 10
F 11	23 20 54	18°23'52	6°Y57	14°36	2° 4	17°20	19°58	27°22	10°17	4°33	10°27	23° 6	23°16	14° 6	19° 5	F 11
S 12	23 24 51	19°22'22	20° 5	15°18	3°18	17°58	20° 3	27°18	10°19	4°31	10°28	23° 6	23°13	14°13	19°14	S 12
S 13	23 28 47	20°20'53	3♎27	15°56	4°32	18°35	20° 8	27°14	10°21	4°29	10°30	23° 7	23°10	14°19	19°23	S 13
M14	23 32 44	21°19'27	17° 1	16°30	5°47	19°13	20°13	27°10	10°23	4°28	10°31	23° 7	23° 7	14°26	19°32	M14
T 15	23 36 40	22°18'04	0♐48	16°59	7° 1	19°51	20°18	27° 6	10°24	4°26	10°33	23° 7	23° 3	14°33	19°41	T 15
W16	23 40 37	23°16'42	14°46	17°23	8°15	20°28	20°24	27° 2	10°26	4°25	10°34	23° 7	23° 0	14°39	19°49	W16
T 17	23 44 33	24°15'23	28°54	17°42	9°30	21° 6	20°29	26°58	10°28	4°23	10°36	23° 7	22°57	14°46	19°58	T 17
F 18	23 48 30	25°14'06	13♎10	17°55	10°44	21°43	20°35	26°55	10°29	4°21	10°37	23° 7	22°54	14°53	20° 7	F 18
S 19	23 52 26	26°12'52	27°31	18° 2	11°59	22°21	20°41	26°51	10°31	4°20	10°38	23° 7	22°51	15° 0	20°16	S 19
S 20	23 56 23	27°11'39	11♏54	18°R 3	13°13	22°58	20°47	26°47	10°32	4°18	10°40	23° 8	22°48	15° 6	20°24	S 20
M21	0 0 20	28°10'29	26°15	17°57	14°28	23°36	20°54	26°44	10°33	4°16	10°41	23° 8	22°44	15°13	20°33	M21
T 22	0 4 16	29° 9'21	10♐30	17°44	15°42	24°13	21° 0	26°40	10°35	4°15	10°42	23° 9	22°41	15°20	20°42	T 22
W23	0 8 13	0♐48	8°15	24°33	17°24	16°57	24°51	21° 7	26°37	4°13	10°43	23°R 9	22°38	15°26	20°51	W23
T 24	0 12 9	1° 7'11	8♎21	16°56	18°12	25°28	21°13	26°34	10°37	4°11	10°45	23° 8	22°35	15°33	20°59	T 24
F 25	0 16 6	2° 6'09	21°52	16°21	19°26	26° 5	21°20	26°30	10°38	4°10	10°46	23° 8	22°32	15°40	21° 8	F 25
S 26	0 20 2	3° 5'09	5♎3	15°38	20°41	26°43	21°27	26°27	10°39	4° 8	10°47	23° 7	22°29	15°47	21°17	S 26
S 27	0 23 59	4° 4'11	17°54	14°49	21°56	27°20	21°35	26°24	10°40	4° 6	10°48	23° 5	22°25	15°53	21°25	S 27
M28	0 27 55	5° 3'15	0♎27	13°52	23°10	27°57	21°42	26°21	10°42	4° 5	10°50	23° 4	22°22	16° 0	21°34	M28
T 29	0 31 52	6° 2'21	12°44	12°51	24°25	28°34	21°49	26°18	10°42	4° 3	10°51	23° 2	22°19	16° 7	21°43	T 29
W30	0 35 49	7♎1'28	24♎48	11♎45	25♐40	29♏12	21♎57	26° 15	10°43	4°Y 1	10°52	23° 1	22°16	16° 13	21°51	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	decl	lat
T 1	8n20	16s12	5n 0	3s32	1s44	15n50	0n57	18n35	1n 8	22s52	0n10	13s46	1s43	23n25	0n19	0n30	1s32	24n13	6n46	2n42	2n28	18s 0	1n18	3s54			
W 2	7 58	17 37	5 14	4 8	1 53	15 28	0 59	18 25	1 8	22 53	0 10	13 48	1 43	23 25	0 19	0 30	1 32	24 13	6 46	2 42	2 29	18 0	1 15	3 54			
T 3	7 36	18 13	5 15	4 42	2 1	15 6	1 1	18 14	1 9	22 53	0 10	13 49	1 43	23 25	0 19	0 29	1 32	24 13	6 47	2 42	2 30	17 59	1 12	3 54			
F 4	7 14	18 2	5 2	5 16	2 10	14 43	1 3	18 4	1 9	22 54	0 10	13 51	1 43	23 25	0 19	0 29	1 32	24 13	6 47	2 42	2 32	17 59	1 8	3 54			
S 5	6 51	17 3	4 36	5 49	2 19	14 20	1 5	17 53	1 9	22 54	0 10	13 52	1 43	23 25	0 19	0 28	1 32	24 12	6 47	2 43	2 33	17 59	1 5	3 53			
S 6	6 29	15 19	3 58	6 20	2 27	13 57	1 6	17 43	1 10	22 54	0 10	13 54	1 43	23 24	0 19	0 27	1 32	24 12	6 47	2 43	2 34	17 58	1 2	3 53			
M 7	6 7	12 53	3 9	6 51	2 35	13 33	1 8	17 32	1 10	22 55	0 9	13 55	1 43	23 24	0 19	0 27	1 32	24 12	6 47	2 44	2 36	17 58	0 59	3 53			
T 8	5 44	9 51	2 10	7 20	2 44	13 9	1 9	17 21	1 11	22 55	0 9	13 57	1 43	23 24	0 19	0 26	1 32	24 11	6 47	2 44	2 37	17 58	0 56	3 52			
W 9	5 21	6 19	1 5	7 47	2 51	12 44	1 11	17 10	1 11	22 56	0 9	13 58	1 43	23 24	0 19	0 25	1 32	24 11	6 48	2 45	2 38	17 57	0 53	3 52			
T 10	4 59	2 27	0s 5	8 13	2 59	12 19	1 12	16 59	1 11	22 56	0 9	14 0	1 43	23 24	0 19	0 25	1 32	24 11	6 48	2 45	2 39	17 57	0 49	3 52			
F 11	4 36	1n36	1 16	8 38	3 6	11 54	1 14	16 48	1 12	22 57	0 9	14 1	1 43	23 24	0 19	0 24	1 32	24 11	6 48	2 45	2 41	17 57	0 46	3 52			
S 12	4 13	5 38	2 24	9 0	3 13	11 28	1 15	16 37	1 12	22 57	0 9	14 3	1 43	23 24	0 19	0 23	1 32	24 11	6 48	2 44	2 42	17 56	0 43	3 51			
S 13	3 50	9 27	3 26	9 21	3 20	11 2	1 16	16 25	1 12	22 58	0 9	14 4	1 43	23 24	0 19	0 23	1 32	24 10	6 48	2 44	2 43	17 56	0 40	3 51			
M14	3 27	12 50	4 17	9 40	3 26	10 36	1 17	16 14	1 13	22 58	0 8	14 5	1 43	23 23	0 19	0 22	1 32	24 10	6 48	2 44	2 44	17 55	0 37	3 51			
T 15	3 4	15 34	4 54	9 56	3 32	10 10	1 18	16 2	1 13	22 59	0 8	14 7	1 43	23 23	0 19	0 22	1 32	24 10	6 49	2 44	2 46	17 55	0 33	3 51			
W16	2 40	17 24	5 14	10 10	3 37	9 43	1 19	15 51	1 13	22 59	0 8	14 8	1 43	23 23	0 19	0 21	1 32	24 10	6 49	2 44	2 47	17 55	0 30	3 51			
T 17	2 17	18 13	5 16	10 21	3 41	9 16	1 20	15 39	1 14	23 0	0 8	14 9	1 43	23 23	0 19	0 20	1 32	24 9	6 49	2 44	2 48	17 54	0 27	3 50			
F 18	1 54	17 53	4 58	10 30	3 45	8 48	1 21	15 27	1 14	23 1	0 8	14 10	1 43	23 23	0 19	0 20	1 32	24 9	6 49	2 44	2 49	17 54	0 24	3 50			
S 19	1 30	16 24	4 22	10 35	3 47	8 21	1 22	15 15	1 14	23 1	0 8	14 12	1 43	23 23	0 19	0 19	1 32	24 9	6 49	2 44	2 51	17 54	0 20	3 50			
S 20	1 7	13 54	3 29	10 37	3 49	7 53	1 23	15 3	1 15	23 2	0 8	14 13	1 43	23 23	0 19	0 18	1 32	24 9	6 50	2 44	2 52	17 53	0 17	3 50			
M21	0 44	10 32	2 24	10 35	3 49	7 25	1 24	14 51	1 15	23 2	0 8	14 14	1 43	23 23	0 19	0 18	1 32	24 9	6 50	2 44	2 53	17 53	0 14	3 49			
T 22	0 20	6 34	1 10	10 30	3 49	6 56	1 24	14 39	1 15	23 3	0 7	14 15	1 43	23 23	0 20	0 17	1 32	24 9	6 50	2 44	2 54	17 52	0 11	3 49			
W23	0s 3	2 17	0n 8	10 20	3 47	6 28	1 25	14 27	1 16	23 3	0 7	14 16	1 43	23 23	0 20	0 16	1 32	24 8	6 50	2 44	2 56	17 52	0 7	3 49			
T 24	0 27	2s 3	1 23	10 6	3 43	5 59	1 26	14 14	1 16	23 4	0 7	14 18	1 43	23 23	0 20	0 16	1 32	24 8	6 51	2 44	2 57	17 52	0 4	3 49			
F 25	0 50	6 10	2 33	9 47	3 38	5 30	1 26	14 2	1 16	23 5	0 7	14 19	1 43	23 22	0 20	0 15	1 32	24 8	6 51	2 44	2 58	17 51	0 1	3 49			
S 26	1 14	9 54	3 32	9 24	3 31	5 1	1 26	13 50	1 17	23 5	0 7	14 20	1 43	23 22	0 20	0 14	1 32	24 8	6 51	2 44	2 59	17 51	0s 2	3 49			
S 27	1 37	13 3	4 19	8 57	3 22	4 32	1 27	13 37	1 17	23 6	0 7	14 21	1 43	23 22	0 20	0 14	1 32	24 8	6 51	2 45	3 1	17 50	0 6	3 48			
M28	2 1	15 31	4 52	8 25	3 11	4 3	1 27	13 25	1 17	23 6	0 7	14 22	1 43	23 22	0 20	0 13	1 32	24 8	6 51	2 46	3 2	17 50	0 9	3 48			
T 29	2 24	17 13	5 11	7 49	2 58	3 33	1 27	13 12	1 18	23 7	0 6	14 23	1 43	23 22	0 20	0 12	1 32	24 8	6 52	2 46	3 3	17 49	0 12	3 48			
W30	2s48	18s 7	5n16	7s10	2s44	3n 4	1n27	12n59	1n18	23s 8	0n 6	14s24	1s43	23n22	0n20	0n12	1s32	24n 7	6n52	2n46	3n 4	17s49	0s15	3s48			

ASTRODIENST EPHEMERIS for the year 1699
geocentric

OCTOBER 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 39 45	8♌ 0'37	6♌45	10°R36	26♍55	29♌49	22♌5	26°R12	10♌44	4°R 0	10♌53	23°D 1	22♍13	16♌20	22♍0	T 1
F 2	0 43 42	8°59'49	18°37	9♌26	28°10	0♍26	22°13	26♌10	10°45	3°Y58	10°54	23♍1	22° 9	16°27	22° 9	F 2
S 3	0 47 38	9°59'01	0♌31	8°16	29°25	1° 3	22°21	26° 7	10°46	3°56	10°55	23° 2	22° 6	16°33	22°17	S 3
S 4	0 51 35	10°58'16	12°30	7° 9	0♌39	1°40	22°29	26° 5	10°47	3°55	10°56	23° 3	22° 3	16°40	22°26	S 4
M 5	0 55 31	11°57'33	24°39	6° 6	1°54	2°17	22°37	26° 2	10°47	3°53	10°57	23° 5	22° 0	16°47	22°34	M 5
T 6	0 59 28	12°56'51	7♌ 2	5°10	3° 9	2°54	22°46	26° 0	10°48	3°51	10°58	23° 6	21°57	16°54	22°43	T 6
W 7	1 3 24	13°56'11	19°42	4°22	4°24	3°31	22°54	25°57	10°48	3°50	10°59	23°R 7	21°54	17° 0	22°51	W 7
T 8	1 7 21	14°55'33	2°Y39	3°42	5°39	4° 8	23° 3	25°55	10°49	3°48	11° 0	23° 7	21°50	17° 7	23° 0	T 8
F 9	1 11 17	15°54'57	15°56	3°13	6°54	4°45	23°12	25°53	10°49	3°46	11° 1	23° 5	21°47	17°14	23° 8	F 9
S 10	1 15 14	16°54'23	29°30	2°55	8° 9	5°21	23°21	25°51	10°50	3°45	11° 2	23° 3	21°44	17°20	23°16	S 10
S 11	1 19 11	17°53'52	13♌19	2°D47	9°24	5°58	23°30	25°49	10°50	3°43	11° 3	22°59	21°41	17°27	23°25	S 11
M12	1 23 7	18°53'22	27°20	2°51	10°39	6°35	23°39	25°47	10°50	3°42	11° 4	22°56	21°38	17°34	23°33	M12
T 13	1 27 4	19°52'55	11♌29	3° 5	11°54	7°12	23°48	25°46	10°50	3°40	11° 5	22°52	21°34	17°41	23°41	T 13
W14	1 31 0	20°52'30	25°42	3°30	13° 9	7°49	23°57	25°44	10°51	3°38	11° 5	22°49	21°31	17°47	23°50	W14
T 15	1 34 57	21°52'08	9♌57	4° 4	14°24	8°25	24° 7	25°42	10°51	3°37	11° 6	22°47	21°28	17°54	23°58	T 15
F 16	1 38 53	22°51'47	24° 9	4°48	15°40	9° 2	24°17	25°41	10°51	3°35	11° 7	22°D46	21°25	18° 1	24° 6	F 16
S 17	1 42 50	23°51'30	8♌16	5°39	16°55	9°38	24°26	25°40	10°R51	3°34	11° 8	22°47	21°22	18° 7	24°14	S 17
S 18	1 46 46	24°51'14	22°18	6°38	18°10	10°15	24°36	25°38	10°51	3°32	11° 8	22°49	21°19	18°14	24°22	S 18
M19	1 50 43	25°51'00	6♍13	7°43	19°25	10°52	24°46	25°37	10°51	3°31	11° 9	22°50	21°15	18°21	24°30	M19
T 20	1 54 40	26°50'49	20° 0	8°54	20°40	11°28	24°56	25°36	10°50	3°29	11°10	22°R51	21°12	18°28	24°38	T 20
W21	1 58 36	27°50'40	3♌36	10° 9	21°55	12° 5	25° 7	25°35	10°50	3°28	11°10	22°50	21° 9	18°34	24°46	W21
T 22	2 2 33	28°50'33	17° 2	11°29	23°11	12°41	25°17	25°34	10°50	3°26	11°11	22°48	21° 6	18°41	24°54	T 22
F 23	2 6 29	29°50'28	0♍14	12°53	24°26	13°17	25°27	25°34	10°50	3°25	11°11	22°44	21° 3	18°48	25° 2	F 23
S 24	2 10 26	0♍50'25	13°12	14°19	25°41	13°54	25°38	25°33	10°49	3°23	11°12	22°38	21° 0	18°54	25°10	S 24
S 25	2 14 22	1°50'24	25°55	15°48	26°56	14°30	25°48	25°32	10°49	3°22	11°12	22°31	20°56	19° 1	25°18	S 25
M26	2 18 19	2°50'25	8♌23	17°19	28°12	15° 6	25°59	25°32	10°48	3°21	11°13	22°24	20°53	19° 8	25°26	M26
T 27	2 22 15	3°50'27	20°38	18°52	29°27	15°43	26°10	25°32	10°48	3°19	11°13	22°17	20°50	19°14	25°33	T 27
W28	2 26 12	4°50'32	2♌41	20°26	0♍42	16°19	26°21	25°31	10°47	3°18	11°14	22°11	20°47	19°21	25°41	W28
T 29	2 30 9	5°50'38	14°36	22° 1	1°58	16°55	26°32	25°31	10°47	3°16	11°14	22° 6	20°44	19°28	25°48	T 29
F 30	2 34 5	6°50'45	26°27	23°37	3°13	17°31	26°43	25°D31	10°46	3°15	11°15	22° 4	20°40	19°35	25°56	F 30
S 31	2 38 2	7♍50'54	8♌19	25♌14	4♍28	18♍7	26♌54	25♌31	10♌45	3°Y14	11♌15	22°D 3	20♍37	19♌41	26♍3	S 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	3s11	18s11	5n 7	6s28	2s27	2n34	1n27	12n46	1n18	23s 8	0n 6	14s24	1s43	23n22	0n20	0n11
F 2	3 34	17 28	4 45	5 44	2 10	2 4	1 27	12 34	1 18	23 9	0 6	14 25	1 43	23 22	0 20	0 10
S 3	3 58	15 59	4 11	4 59	1 51	1 34	1 27	12 21	1 19	23 9	0 6	14 26	1 42	23 22	0 20	0 10
S 4	4 21	13 47	3 26	4 14	1 31	1 4	1 27	12 8	1 19	23 10	0 6	14 27	1 42	23 22	0 20	0 9
M 5	4 44	10 57	2 31	3 30	1 10	0 34	1 27	11 55	1 19	23 10	0 6	14 28	1 42	23 22	0 20	0 8
T 6	5 7	7 35	1 28	2 49	0 50	0 4	1 27	11 42	1 20	23 11	0 6	14 29	1 42	23 22	0 20	0 8
W 7	5 30	3 48	0 19	2 11	0 29	0s26	1 26	11 29	1 20	23 12	0 5	14 29	1 42	23 22	0 20	0 7
T 8	5 53	0n15	0s52	1 37	0 10	0 56	1 26	11 15	1 20	23 12	0 5	14 30	1 42	23 22	0 20	0 6
F 9	6 16	4 24	2 2	1 8	0n 9	1 26	1 25	11 2	1 21	23 13	0 5	14 31	1 42	23 22	0 20	0 6
S 10	6 39	8 24	3 7	0 45	0 27	1 56	1 25	10 49	1 21	23 13	0 5	14 31	1 42	23 22	0 20	0 5
S 11	7 2	12 1	4 2	0 27	0 43	2 26	1 24	10 36	1 21	23 14	0 5	14 32	1 42	23 22	0 20	0 4
M12	7 25	15 0	4 43	0 15	0 58	2 57	1 24	10 22	1 21	23 15	0 5	14 32	1 42	23 22	0 20	0 4
T 13	7 47	17 7	5 7	0 8	1 12	3 27	1 23	10 9	1 22	23 15	0 5	14 33	1 42	23 22	0 20	0 3
W14	8 10	18 12	5 13	0 7	1 24	3 57	1 22	9 55	1 22	23 16	0 5	14 33	1 42	23 22	0 20	0 2
T 15	8 32	18 8	4 59	0 11	1 34	4 26	1 21	9 42	1 22	23 16	0 5	14 34	1 42	23 22	0 20	0 2
F 16	8 54	16 55	4 28	0 21	1 42	4 56	1 20	9 28	1 23	23 17	0 4	14 34	1 41	23 22	0 20	0 1
S 17	9 16	14 41	3 40	0 34	1 50	5 26	1 19	9 15	1 23	23 17	0 4	14 35	1 41	23 22	0 20	0 1
S 18	9 38	11 35	2 39	0 52	1 55	5 56	1 18	9 1	1 23	23 18	0 4	14 35	1 41	23 22	0 20	0 0
M19	10 0	7 51	1 30	1 14	2 0	6 25	1 17	8 48	1 24	23 18	0 4	14 35	1 41	23 22	0 20	0s 1
T 20	10 22	3 44	0 16	1 39	2 3	6 55	1 16	8 34	1 24	23 19	0 4	14 35	1 41	23 22	0 20	0 1
W21	10 43	0s33	0n58	1 7	2 5	7 24	1 15	8 20	1 24	23 19	0 4	14 36	1 41	23 22	0 20	0 2
T 22	11 5	4 44	2 8	2 37	2 6	7 53	1 14	8 7	1 24	23 20	0 4	14 36	1 41	23 22	0 20	0 2
F 23	11 26	8 37	3 9	3 10	2 6	8 22	1 12	7 53	1 25	23 20	0 4	14 36	1 41	23 22	0 20	0 3
S 24	11 47	12 1	4 0	3 44	2 5	8 51	1 11	7 39	1 25	23 21	0 3	14 36	1 41	23 22	0 20	0 3
S 25	12 8	14 47	4 37	4 20	2 4	9 19	1 9	7 25	1 25	23 21	0 3	14 36	1 41	23 22	0 20	0 4
M26	12 29	16 48	5 0	4 57	2 1	9 47	1 8	7 11	1 26	23 22	0 3	14 36	1 41	23 22	0 20	0 4
T 27	12 49	18 0	5 9	5 35	1 58	10 15	1 7	6 58	1 26	23 22	0 3	14 36	1 40	23 23	0 20	0 5
W28	13 9	18 23	5 4	6 13	1 55	10 43	1 5	6 44	1 26	23 22	0 3	14 36	1 40	23 23	0 20	0 6
T 29	13 29	17 56	4 46	6 52	1 51	11 11	1 3	6 30	1 26	23 23	0 3	14 36	1 40	23 23	0 21	0 6
F 30	13 49	16 43	4 16	7 32	1 47	11 38	1 2	6 16	1 27	23 23	0 3	14 36	1 40	23 23	0 21	0 7
S 31	14s 9	14s46	3n34	8s12	1n42	12s 5	1n 0	6n 2	1n27	23s24	0n 3	14s36	1s40	23n23	0n21	0s 7

Julian Day Number = 2341880.5, Delta T = 14.37 sec
Ecliptic obliquity = 23°28'33", Nutation = - 0°00'03", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°32'56", Lahiri = 19°39'57"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1699

geocentric

NOVEMBER 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 41 58	8♈51'05	20♈16	26♈51	5♈44	18♈43	27♈5	25♈31	10♈R44	3♈R13	11♈15	22♈4	20♈34	19♈48	26♈11	S 1
M 2	2 45 55	9°51'17	2♈24	28°28	6°59	19°19	27°17	25°32	10♈44	3♈Y11	11°16	22°5	20°31	19°55	26°18	M 2
T 3	2 49 51	10°51'30	14°48	0♈6	8°14	19°55	27°28	25°32	10°43	3°10	11°16	22°6	20°28	20°1	26°26	T 3
W 4	2 53 48	11°51'46	27°32	1°43	9°30	20°31	27°40	25°33	10°42	3°9	11°16	22°R 6	20°25	20°8	26°33	W 4
T 5	2 57 44	12°52'02	10♈39	3°21	10°45	21°7	27°51	25°33	10°41	3°8	11°16	22°5	20°21	20°15	26°40	T 5
F 6	3 1 41	13°52'21	24°11	4°58	12°0	21°43	28°3	25°34	10°40	3°6	11°17	22°1	20°18	20°22	26°47	F 6
S 7	3 5 38	14°52'41	8♈6	6°36	13°16	22°18	28°15	25°35	10°39	3°5	11°17	21°54	20°15	20°28	26°54	S 7
S 8	3 9 34	15°53'02	22°22	8°13	14°31	22°54	28°26	25°36	10°37	3°4	11°17	21°46	20°12	20°35	27°1	S 8
M 9	3 13 31	16°53'26	6♈53	9°50	15°46	23°30	28°38	25°37	10°36	3°3	11°17	21°37	20°9	20°42	27°8	M 9
T 10	3 17 27	17°53'51	21°31	11°27	17°2	24°6	28°50	25°38	10°35	3°2	11°17	21°28	20°6	20°48	27°15	T 10
W 11	3 21 24	18°54'18	6♈10	13°4	18°17	24°41	29°2	25°39	10°34	3°1	11°17	21°20	20°2	20°55	27°22	W 11
T 12	3 25 20	19°54'47	20°42	14°40	19°32	25°17	29°15	25°40	10°32	3°0	11°R17	21°15	19°59	21°2	27°28	T 12
F 13	3 29 17	20°55'17	5♈4	16°16	20°48	25°52	29°27	25°42	10°31	2°59	11°17	21°11	19°56	21°8	27°35	F 13
S 14	3 33 13	21°55'50	19°11	17°52	22°3	26°28	29°39	25°43	10°30	2°58	11°17	21°D10	19°53	21°15	27°42	S 14
S 15	3 37 10	22°56'24	3♈4	19°28	23°19	27°3	29°51	25°45	10°28	2°57	11°17	21°10	19°50	21°22	27°48	S 15
M 16	3 41 7	23°57'00	16°43	21°4	24°34	27°38	0♈4	25°47	10°27	2°56	11°17	21°R11	19°46	21°29	27°54	M 16
T 17	3 45 3	24°57'38	0♈8	22°39	25°50	28°14	0°16	25°48	10°25	2°55	11°17	21°11	19°43	21°35	28°1	T 17
W 18	3 49 0	25°58'18	13°20	24°14	27°5	28°49	0°29	25°50	10°23	2°54	11°17	21°9	19°40	21°42	28°7	W 18
T 19	3 52 56	26°58'59	26°22	25°49	28°20	29°24	0°41	25°52	10°22	2°53	11°16	21°4	19°37	21°49	28°13	T 19
F 20	3 56 53	27°59'41	9♈13	27°24	29°36	29°59	0°54	25°55	10°20	2°53	11°16	20°56	19°34	21°55	28°19	F 20
S 21	4 0 49	29°0'26	21°53	28°59	0♈51	0♈34	1°7	25°57	10°18	2°52	11°16	20°45	19°31	22°2	28°25	S 21
S 22	4 4 46	0♈1'11	4♈22	0♈33	2°7	1°9	1°20	25°59	10°17	2°51	11°16	20°33	19°27	22°9	28°31	S 22
M 23	4 8 42	1°1'58	16°40	2°8	3°22	1°44	1°33	26°2	10°15	2°50	11°15	20°19	19°24	22°15	28°37	M 23
T 24	4 12 39	2°2'47	28°49	3°42	4°38	2°19	1°45	26°4	10°13	2°50	11°15	20°6	19°21	22°22	28°43	T 24
W 25	4 16 36	3°3'36	10♈48	5°16	5°53	2°54	1°58	26°7	10°11	2°49	11°15	19°54	19°18	22°29	28°49	W 25
T 26	4 20 32	4°4'26	22°41	6°50	7°9	3°29	2°11	26°9	10°9	2°49	11°14	19°44	19°15	22°36	28°54	T 26
F 27	4 24 29	5°5'18	4♈30	8°24	8°24	4°4	2°24	26°12	10°7	2°48	11°14	19°38	19°12	22°42	29°0	F 27
S 28	4 28 25	6°6'10	16°19	9°58	9°39	4°38	2°38	26°15	10°5	2°47	11°13	19°33	19°8	22°49	29°5	S 28
S 29	4 32 22	7°7'03	28°13	11°32	10°55	5°13	2°51	26°18	10°3	2°47	11°13	19°32	19°5	22°56	29°10	S 29
M 30	4 36 18	8♈7'57	10♈17	13♈6	12♈10	5♈48	3♈4	26♈21	10♈1	2♈46	11♈13	19°D31	19♈2	23♈2	29♈16	M 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	14s28	12s10	2n43	8s52	1n37	12s32	0n58	5n48	1n27	23s24	0n3	14s36	1s40	23n23	0n21	S 1
M 2	14 47 9	1 44 9	32	1 31 12	59	0 56 5	34	1 27 23	24	0 2 14	36	1 40 23	23	0 21 0	8	M 2
T 3	15 6 5 23	0 39 10	11	1 25 13	25	0 55 5	21	1 28 23	25	0 2 14	35	1 40 23	23	0 21 0	8	T 3
W 4	15 25 1 26	0s29	10 51	1 19 13	51	0 53 5	7	1 28 23	25	0 2 14	35	1 40 23	23	0 21 0	9	W 4
T 5	15 43 2n43	1 38 11	30	1 13 14	16	0 51 4	53	1 28 23	25	0 2 14	35	1 39 23	23	0 21 0	9	T 5
F 6	16 2 6 51	2 44 12	9	1 7 14	41	0 49 4	39	1 28 23	26	0 2 14	35	1 39 23	23	0 21 0	10	F 6
S 7	16 20 10 44	3 41 12	47	1 1 15	6	0 47 4	25	1 29 23	26	0 2 14	34	1 39 23	24	0 21 0	10	S 7
S 8	16 37 14 6	4 26 13	25	0 54 15	30	0 45 4	11	1 29 23	26	0 2 14	34	1 39 23	24	0 21 0	11	S 8
M 9	16 54 16 38	4 55 14	2	0 47 15	54	0 43 3	57	1 29 23	26	0 2 14	33	1 39 23	24	0 21 0	11	M 9
T 10	17 11 18 8	5 5 14	39	0 41 16	18	0 41 3	43	1 30 23	27	0 2 14	33	1 39 23	24	0 21 0	12	T 10
W 11	17 28 18 25	4 55 15	15	0 34 16	41	0 38 3	29	1 30 23	27	0 2 14	32	1 39 23	24	0 21 0	12	W 11
T 12	17 45 17 30	4 26 15	50	0 27 17	4	0 36 3	15	1 30 23	27	0 1 14	32	1 39 23	24	0 21 0	12	T 12
F 13	18 1 15 28	3 40 16	24	0 20 17	26	0 34 3	1	1 30 23	27	0 1 14	31	1 39 23	24	0 21 0	13	F 13
S 14	18 17 12 31	2 42 16	58	0 14 17	48	0 32 2	48	1 31 23	27	0 1 14	31	1 39 23	24	0 21 0	13	S 14
S 15	18 32 8 55	1 35 17	31	0 7 18	9	0 30 2	34	1 31 23	27	0 1 14	30	1 38 23	25	0 21 0	13	S 15
M 16	18 47 4 53	0 24 18	3	0 0 18	30	0 27 2	20	1 31 23	28	0 1 14	29	1 38 23	25	0 21 0	14	M 16
T 17	19 2 0 41	0n48	18 34	0s7	18 50	0 25 2	6	1 31 23	28	0 1 14	29	1 38 23	25	0 21 0	14	T 17
W 18	19 17 3s30	1 55 19	5	0 13 19	10	0 23 1	52	1 32 23	28	0 1 14	28	1 38 23	25	0 21 0	14	W 18
T 19	19 31 7 28	2 56 19	34	0 20 19	29	0 21 1	38	1 32 23	28	0 1 14	27	1 38 23	25	0 21 0	15	T 19
F 20	19 45 11 1	3 46 20	2	0 26 19	48	0 18 1	25	1 32 23	28	0 1 14	26	1 38 23	25	0 21 0	15	F 20
S 21	19 58 14 0	4 24 20	30	0 33 20	6	0 16 1	11	1 32 23	28	0 1 14	25	1 38 23	25	0 21 0	15	S 21
S 22	20 11 16 18	4 50 20	56	0 39 20	24	0 14 0	57	1 33 23	28	0 0 14	24	1 38 23	26	0 21 0	15	S 22
M 23	20 24 17 49	5 1 21	22	0 46 20	41	0 11 0	43	1 33 23	28	0 0 14	23	1 38 23	26	0 21 0	16	M 23
T 24	20 36 18 30	4 58 21	46	0 52 20	57	0 9 0	30	1 33 23	28	0 0 14	23	1 37 23	26	0 21 0	16	T 24
W 25	20 48 18 21	4 42 22	9	0 58 21	13	0 6 0	16	1 33 23	28	0 0 14	22	1 37 23	26	0 21 0	16	W 25
T 26	21 0 17 24	4 14 22	32	1 4 21	28	0 4 0	2	1 33 23	27	0 0 14	21	1 37 23	26	0 21 0	16	T 26
F 27	21 11 15 41	3 35 22	53	1 9 21	43	0 2 0s11	1	1 34 23	27	0s0	14 19	1 37 23	26	0 21 0	17	F 27
S 28	21 22 13 19	2 46 23	13	1 15 21	57	0s1	0 25	1 34 23	27	0 0 14	18	1 37 23	27	0 21 0	17	S 28
S 29	21 32 10 23	1 50 23	32	1 20 22	10	0 3 0	38	1 34 23	27	0 0 14	17	1 37 23	27	0 21 0	17	S 29
M 30	21s42	6s58	0n49	23s49	1s25	22s23	0s6	0s52	1n34	23s27	0s0	14s16	1s37	23n27	0n21	M 30

Julian Day Number = 2341911.5, Delta T = 14.35 sec
 Ecliptic obliquity = 23°28'33", Nutation = - 0°00'04", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°33'01", Lahiri = 19°40'01Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1699

geocentric

DECEMBER 1699 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4 40 15	9° 8' 52"	22° 37'	14° 40'	13° 26'	6° 22'	3° 17'	26° 24'	9° 59'	2° 46'	11° 12'	19° 32'	18° 59'	23° 9'	29° 21'	T 1
W 2	4 44 11	10° 9' 47"	5° 18'	16° 14'	14° 41'	6° 57'	3° 30'	26° 28'	9° 57'	2° 45'	11° 11'	19° 31'	18° 56'	23° 16'	29° 26'	W 2
T 3	4 48 8	11° 10' 43"	18° 24'	17° 48'	15° 57'	7° 31'	3° 44'	26° 31'	9° 55'	2° 45'	11° 11'	19° 28'	18° 52'	23° 22'	29° 31'	T 3
F 4	4 52 5	12° 11' 40"	18° 59'	19° 21'	17° 12'	8° 5'	3° 57'	26° 35'	9° 52'	2° 45'	11° 10'	19° 23'	18° 49'	23° 29'	29° 36'	F 4
S 5	4 56 1	13° 12' 38"	16° 3'	20° 55'	18° 28'	8° 39'	4° 11'	26° 38'	9° 50'	2° 44'	11° 10'	19° 15'	18° 46'	23° 36'	29° 40'	S 5
S 6	4 59 58	14° 13' 37"	0° 33'	22° 29'	19° 43'	9° 14'	4° 24'	26° 42'	9° 48'	2° 44'	11° 9'	19° 4'	18° 43'	23° 43'	29° 45'	S 6
M 7	5 3 54	15° 14' 36"	15° 25'	24° 3'	20° 58'	9° 48'	4° 38'	26° 46'	9° 46'	2° 44'	11° 8'	18° 52'	18° 40'	23° 49'	29° 50'	M 7
T 8	5 7 51	16° 15' 36"	0° 33'	25° 37'	22° 14'	10° 22'	4° 51'	26° 49'	9° 43'	2° 44'	11° 8'	18° 40'	18° 37'	23° 56'	29° 54'	T 8
W 9	5 11 47	17° 16' 37"	15° 33'	27° 11'	23° 29'	10° 56'	5° 5'	26° 53'	9° 41'	2° 44'	11° 7'	18° 30'	18° 33'	24° 3'	29° 58'	W 9
T 10	5 15 44	18° 17' 39"	0° 30'	28° 45'	24° 45'	11° 30'	5° 18'	26° 57'	9° 39'	2° 43'	11° 6'	18° 21'	18° 30'	24° 9'	0° 3'	T 10
F 11	5 19 40	19° 18' 42"	15° 12'	0° 31'	26° 0'	12° 3'	5° 32'	27° 1'	9° 36'	2° 43'	11° 6'	18° 16'	18° 27'	24° 16'	0° 7'	F 11
S 12	5 23 37	20° 19' 46"	29° 32'	1° 53'	27° 16'	12° 37'	5° 45'	27° 5'	9° 34'	2° 43'	11° 5'	18° 14'	18° 24'	24° 23'	0° 11'	S 12
S 13	5 27 34	21° 20' 51"	13° 37'	3° 27'	28° 31'	13° 11'	5° 59'	27° 10'	9° 32'	2° 43'	11° 4'	18° 13'	18° 21'	24° 29'	0° 15'	S 13
M14	5 31 30	22° 21' 56"	27° 7'	5° 0'	29° 46'	13° 44'	6° 13'	27° 14'	9° 29'	2° 43'	11° 3'	18° 13'	18° 18'	24° 36'	0° 19'	M14
T 15	5 35 27	23° 23' 03"	10° 23'	6° 34'	1° 3'	14° 18'	6° 27'	27° 18'	9° 27'	2° 43'	11° 2'	18° 12'	18° 14'	24° 43'	0° 22'	T 15
W16	5 39 23	24° 24' 10"	23° 22'	8° 7'	2° 17'	14° 51'	6° 40'	27° 23'	9° 24'	2° 43'	11° 1'	18° 9'	18° 11'	24° 50'	0° 26'	W16
T 17	5 43 20	25° 25' 18"	6° 7'	9° 40'	3° 33'	15° 25'	6° 54'	27° 27'	9° 22'	2° 43'	11° 1'	18° 4'	18° 8'	24° 56'	0° 29'	T 17
F 18	5 47 16	26° 26' 27"	18° 40'	11° 12'	4° 48'	15° 58'	7° 8'	27° 32'	9° 19'	2° 43'	11° 0'	17° 55'	18° 5'	25° 3'	0° 33'	F 18
S 19	5 51 13	27° 27' 36"	1° 3'	12° 44'	6° 3'	16° 31'	7° 22'	27° 37'	9° 17'	2° 44'	10° 59'	17° 44'	18° 2'	25° 10'	0° 36'	S 19
S 20	5 55 9	28° 28' 46"	13° 18'	14° 16'	7° 19'	17° 4'	7° 36'	27° 42'	9° 14'	2° 44'	10° 58'	17° 30'	17° 58'	25° 16'	0° 39'	S 20
M21	5 59 6	29° 29' 57"	25° 25'	15° 46'	8° 34'	17° 37'	7° 49'	27° 47'	9° 12'	2° 44'	10° 57'	17° 16'	17° 55'	25° 23'	0° 42'	M21
T 22	6 3 3	0° 31' 07"	7° 325'	17° 16'	9° 50'	18° 10'	8° 3'	27° 51'	9° 9'	2° 44'	10° 56'	17° 1'	17° 52'	25° 30'	0° 45'	T 22
W23	6 6 59	1° 32' 18"	19° 19'	18° 44'	11° 5'	18° 43'	8° 17'	27° 56'	9° 7'	2° 45'	10° 55'	16° 48'	17° 49'	25° 36'	0° 48'	W23
T 24	6 10 56	2° 33' 30"	1° 10'	20° 10'	12° 21'	19° 16'	8° 31'	28° 2'	9° 4'	2° 45'	10° 54'	16° 37'	17° 46'	25° 43'	0° 51'	T 24
F 25	6 14 52	3° 34' 41"	12° 58'	21° 35'	13° 36'	19° 48'	8° 45'	28° 7'	9° 1'	2° 45'	10° 53'	16° 29'	17° 43'	25° 50'	0° 53'	F 25
S 26	6 18 49	4° 35' 52"	24° 47'	22° 58'	14° 51'	20° 21'	8° 59'	28° 12'	8° 59'	2° 46'	10° 52'	16° 24'	17° 39'	25° 56'	0° 56'	S 26
S 27	6 22 45	5° 37' 03"	6° 40'	24° 18'	16° 7'	20° 53'	9° 13'	28° 17'	8° 56'	2° 46'	10° 50'	16° 22'	17° 36'	26° 3'	0° 58'	S 27
M28	6 26 42	6° 38' 14"	18° 42'	25° 35'	17° 22'	21° 25'	9° 27'	28° 23'	8° 54'	2° 47'	10° 49'	16° 22'	17° 33'	26° 10'	1° 0'	M28
T 29	6 30 38	7° 39' 24"	0° 15'	26° 48'	18° 37'	21° 58'	9° 41'	28° 28'	8° 51'	2° 47'	10° 48'	16° 22'	17° 30'	26° 17'	1° 2'	T 29
W30	6 34 35	8° 40' 35"	13° 33'	27° 57'	19° 53'	22° 30'	9° 55'	28° 34'	8° 48'	2° 48'	10° 47'	16° 22'	17° 27'	26° 23'	1° 4'	W30
T 31	6 38 32	9° 41' 45"	26° 33'	29° 3'	21° 3'	23° 2'	10° 3'	28° 39'	8° 46'	2° 48'	10° 46'	16° 21'	17° 23'	26° 30'	1° 6'	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	21s51	3s11	0s16	24s 5	1s31	22s35	0s 8	1s 5	1n35	23s27	0s 0	14s15	1s37	23n27	0n21	0s17
W 2	22 0	0n51	1 23	24 21	1 35	22 46	0 10	1 19	1 35	23 26	0 1	14 14	1 37	23 27	0 21	0 17
T 3	22 9	4 58	2 26	24 34	1 40	22 57	0 13	1 32	1 35	23 26	0 1	14 12	1 37	23 28	0 21	0 17
F 4	22 17	8 59	3 24	24 47	1 44	23 7	0 15	1 45	1 35	23 26	0 1	14 11	1 36	23 28	0 21	0 17
S 5	22 25	12 39	4 12	24 58	1 49	23 16	0 18	1 59	1 35	23 25	0 1	14 10	1 36	23 28	0 21	0 18
S 6	22 33	15 39	4 45	25 8	1 52	23 24	0 20	2 12	1 36	23 25	0 1	14 9	1 36	23 28	0 21	0 18
M 7	22 39	17 43	5 0	25 16	1 56	23 32	0 22	2 25	1 36	23 25	0 1	14 7	1 36	23 28	0 21	0 18
T 8	22 46	18 35	4 54	25 24	1 59	23 39	0 25	2 38	1 36	23 24	0 1	14 6	1 36	23 28	0 21	0 18
W 9	22 52	18 8	4 28	25 29	2 2	23 46	0 27	2 51	1 36	23 24	0 1	14 4	1 36	23 29	0 21	0 18
T 10	22 58	16 26	3 43	25 33	2 5	23 51	0 29	3 4	1 37	23 23	0 1	14 3	1 36	23 29	0 21	0 18
F 11	23 3	13 41	2 45	25 36	2 8	23 56	0 31	3 17	1 37	23 23	0 1	14 1	1 36	23 29	0 21	0 18
S 12	23 7	10 8	1 37	25 37	2 10	24 1	0 34	3 30	1 37	23 23	0 2	14 0	1 36	23 29	0 21	0 18
S 13	23 12	6 7	0 25	25 37	2 11	24 4	0 36	3 43	1 37	23 22	0 2	13 58	1 36	23 29	0 21	0 18
M14	23 15	1 52	0n47	25 35	2 13	24 7	0 38	3 56	1 37	23 21	0 2	13 57	1 36	23 30	0 22	0 18
T 15	23 19	2s22	1 54	25 32	2 13	24 9	0 40	4 9	1 38	23 21	0 2	13 55	1 35	23 30	0 22	0 18
W16	23 21	6 24	2 54	25 27	2 14	24 10	0 43	4 22	1 38	23 20	0 2	13 54	1 35	23 30	0 22	0 18
T 17	23 24	10 3	3 44	25 21	2 14	24 10	0 45	4 34	1 38	23 20	0 2	13 52	1 35	23 30	0 22	0 18
F 18	23 26	13 12	4 22	25 13	2 13	24 10	0 47	4 47	1 38	23 19	0 2	13 50	1 35	23 30	0 22	0 17
S 19	23 27	15 42	4 48	25 3	2 12	24 9	0 49	4 59	1 38	23 18	0 2	13 48	1 35	23 31	0 22	0 17
S 20	23 28	17 29	4 59	24 52	2 10	24 7	0 51	5 12	1 39	23 18	0 2	13 47	1 35	23 31	0 22	0 17
M21	23 28	18 27	4 57	24 39	2 8	24 5	0 53	5 24	1 39	23 17	0 2	13 45	1 35	23 31	0 22	0 17
T 22	23 28	18 35	4 42	24 25	2 5	24 1	0 55	5 37	1 39	23 16	0 2	13 43	1 35	23 31	0 22	0 17
W23	23 28	17 53	4 14	24 10	2 1	23 57	0 57	5 49	1 39	23 16	0 3	13 41	1 35	23 31	0 22	0 17
T 24	23 27	16 26	3 35	23 53	1 57	23 53	0 59	6 1	1 39	23 15	0 3	13 40	1 35	23 32	0 22	0 17
F 25	23 26	14 16	2 47	23 35	1 52	23 47	1 1	6 13	1 39	23 14	0 3	13 38	1 35	23 32	0 22	0 16
S 26	23 24	11 31	1 52	23 15	1 46	23 41	1 2	6 25	1 40	23 13	0 3	13 36	1 35	23 32	0 22	0 16
S 27	23 21	8 17	0 51	22 55	1 39	23 34	1 4	6 37	1 40	23 12	0 3	13 34	1 35	23 32	0 22	0 16
M28	23 19	4 40	0s12	22 33	1 31	23 26	1 6	6 49	1 40	23 11	0 3	13 32	1 35	23 32	0 22	0 16
T 29	23 15	0 48	1 17	22 10	1 22	23 18	1 8	7 1	1 40	23 10	0 3	13 30	1 34	23 32	0 22	0 15
W30	23 11	3n13	2 20	21 47	1 12	23 9	1 9	7 13	1 40	23 10	0 3	13 28	1 34	23 33	0 22	0 15
T 31	23s 7	7n12	3s17	21s24	1s 2	22s59	1s11	7s25	1n40	23s 9	0s 3	13s26	1s34	23n33	0n22	0s15

Julian Day Number = 2341941.5, Delta T = 14.32 sec
 Ecliptic obliquity = 23°28'32", Nutation = - 0°00'04", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°33'05", Lahiri = 19°40'05"Greg. Calendar