



Astrodienst Ephemeris Tables for the year 1693

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 1693
geocentric

JANUARY 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 45 14	11°25'55	29°53	29°16	29°37	0°6	13°R20	17°22	6°R36	17°25	29°R57	1°R46	2°42	11°Y40	22°R17	T 1
F 2	6 49 10	12°27'06	14°3	0°39	0°48	0°52	13°II14	17°29	6°II34	17°26	29°56	1°44	2°38	11°47	22°II13	F 2
S 3	6 53 7	13°28'17	28° 9	1°58	1°59	1°37	13° 8	17°35	6°32	17°27	29°55	1°42	2°35	11°54	22° 9	S 3
S 4	6 57 3	14°29'28	12°7	3°14	3°11	2°22	13° 2	17°42	6°30	17°28	29°53	1°39	2°32	12° 1	22° 6	S 4
M 5	7 1 0	15°30'39	25°55	4°25	4°22	3° 7	12°56	17°49	6°29	17°30	29°52	1°37	2°29	12° 7	22° 2	M 5
T 6	7 4 57	16°31'49	9°30	5°31	5°34	3°53	12°51	17°55	6°27	17°31	29°51	1°35	2°26	12°14	21°59	T 6
W 7	7 8 53	17°33'00	22°48	6°32	6°45	4°38	12°45	18° 2	6°25	17°32	29°50	1°34	2°23	12°21	21°55	W 7
T 8	7 12 50	18°34'09	5°49	7°26	7°57	5°24	12°40	18° 8	6°23	17°33	29°48	1°D34	2°19	12°27	21°52	T 8
F 9	7 16 46	19°35'19	18°32	8°12	9° 9	6° 9	12°35	18°14	6°22	17°35	29°47	1°35	2°16	12°34	21°49	F 9
S 10	7 20 43	20°36'27	1°0	8°50	10°21	6°55	12°30	18°21	6°20	17°36	29°46	1°36	2°13	12°41	21°45	S 10
S 11	7 24 39	21°37'35	13°12	9°19	11°33	7°40	12°25	18°27	6°18	17°38	29°44	1°37	2°10	12°48	21°42	S 11
M12	7 28 36	22°38'43	25°14	9°38	12°45	8°26	12°20	18°33	6°17	17°39	29°43	1°38	2° 7	12°54	21°39	M12
T 13	7 32 32	23°39'49	7°9	9°R46	13°57	9°11	12°16	18°40	6°15	17°41	29°42	1°39	2° 4	13° 1	21°36	T 13
W14	7 36 29	24°40'55	19° 0	9°42	15° 9	9°57	12°11	18°46	6°14	17°42	29°40	1°39	2° 0	13° 8	21°33	W14
T 15	7 40 26	25°41'59	0°54	9°27	16°22	10°43	12° 7	18°52	6°13	17°44	29°39	1°R39	1°57	13°14	21°30	T 15
F 16	7 44 22	26°43'03	12°55	9° 1	17°34	11°29	12° 3	18°58	6°11	17°45	29°37	1°39	1°54	13°21	21°27	F 16
S 17	7 48 19	27°44'06	25° 7	8°23	18°46	12°14	12° 0	19° 4	6°10	17°47	29°36	1°38	1°51	13°28	21°24	S 17
S 18	7 52 15	28°45'08	7°II34	7°35	19°59	13° 0	11°56	19°10	6° 9	17°49	29°35	1°38	1°48	13°35	21°21	S 18
M19	7 56 12	29°46'09	20°19	6°37	21°11	13°46	11°53	19°16	6° 7	17°50	29°33	1°38	1°44	13°41	21°18	M19
T 20	8 0 8	0°47'09	3°25	5°32	22°24	14°32	11°50	19°22	6° 6	17°52	29°32	1°38	1°41	13°48	21°15	T 20
W21	8 4 5	1°48'08	16°53	4°21	23°36	15°18	11°47	19°28	6° 5	17°54	29°31	1°D37	1°38	13°55	21°13	W21
T 22	8 8 2	2°49'06	0°40	3° 7	24°49	16° 4	11°44	19°34	6° 4	17°55	29°29	1°R38	1°35	14° 1	21°10	T 22
F 23	8 11 58	3°50'03	14°44	1°51	26° 1	16°50	11°41	19°39	6° 3	17°57	29°28	1°37	1°32	14° 8	21° 8	F 23
S 24	8 15 55	4°50'59	29° 2	0°36	27°14	17°36	11°39	19°45	6° 2	17°59	29°27	1°37	1°29	14°15	21° 5	S 24
S 25	8 19 51	5°51'54	13°28	29°25	28°27	18°22	11°37	19°51	6° 1	18° 1	29°25	1°37	1°25	14°22	21° 3	S 25
M26	8 23 48	6°52'49	27°56	28°18	29°40	19° 8	11°35	19°56	6° 0	18° 2	29°24	1°36	1°22	14°28	21° 0	M26
T 27	8 27 44	7°53'42	12°23	27°17	0°52	19°54	11°33	20° 2	5°59	18° 4	29°23	1°36	1°19	14°35	20°58	T 27
W28	8 31 41	8°54'35	26°43	26°23	2° 5	20°40	11°32	20° 7	5°58	18° 6	29°21	1°35	1°16	14°42	20°56	W28
T 29	8 35 37	9°55'27	10°53	25°38	3°18	21°26	11°30	20°13	5°58	18° 8	29°20	1°D35	1°13	14°48	20°54	T 29
F 30	8 39 34	10°56'18	24°52	25° 1	4°31	22°12	11°29	20°18	5°57	18°10	29°19	1°35	1°10	14°55	20°52	F 30
S 31	8 43 31	11°57'09	8°38	24°32	5°44	22°59	11°II28	20°23	5°II56	18°12	29°17	1°36	1° 6	15°Y 2	20°II50	S 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	22s59	16s21	5s15	21s53	1s35	17s49	2n20	24s 8	0s39	21n56	0s31	21s32	1n21	21n24	0s 3	6s 3
F 2	22 54	20 58	5 8	21 28	1 27	18 5	2 19	24 8	0 39	21 55	0 31	21 33	1 21	21 23	0 3	6 2
S 3	22 48	24 22	4 42	21 2	1 19	18 21	2 17	24 8	0 40	21 55	0 30	21 33	1 21	21 23	0 3	6 2
S 4	22 41	26 15	4 0	20 35	1 9	18 37	2 15	24 8	0 41	21 54	0 30	21 34	1 21	21 23	0 3	6 1
M 5	22 35	26 29	3 4	20 8	0 58	18 52	2 13	24 8	0 41	21 54	0 30	21 35	1 21	21 22	0 3	6 1
T 6	22 27	25 7	1 59	19 41	0 47	19 7	2 11	24 7	0 42	21 53	0 30	21 35	1 21	21 22	0 3	6 0
W 7	22 20	22 21	0 48	19 13	0 34	19 21	2 9	24 6	0 42	21 53	0 30	21 36	1 21	21 22	0 3	6 0
T 8	22 11	18 28	0n23	18 46	0 20	19 35	2 7	24 5	0 43	21 52	0 29	21 36	1 21	21 21	0 3	5 59
F 9	22 3	13 50	1 33	18 20	0 6	19 48	2 5	24 3	0 43	21 52	0 29	21 37	1 21	21 21	0 3	5 59
S 10	21 54	8 43	2 36	17 55	0n10	20 1	2 3	24 2	0 44	21 51	0 29	21 37	1 21	21 21	0 3	5 58
S 11	21 44	3 22	3 31	17 32	0 27	20 13	2 0	24 0	0 44	21 51	0 29	21 38	1 21	21 21	0 3	5 58
M12	21 34	2n 1	4 15	17 10	0 44	20 25	1 58	23 57	0 45	21 50	0 29	21 38	1 21	21 20	0 3	5 57
T 13	21 24	7 15	4 49	16 50	1 2	20 36	1 55	23 55	0 45	21 50	0 28	21 39	1 21	21 20	0 3	5 56
W14	21 14	12 13	5 9	16 34	1 20	20 47	1 53	23 52	0 46	21 50	0 28	21 40	1 21	21 20	0 3	5 56
T 15	21 2	16 45	5 17	16 20	1 39	20 57	1 50	23 49	0 46	21 49	0 28	21 40	1 21	21 20	0 3	5 55
F 16	20 51	20 40	5 11	16 9	1 57	21 7	1 48	23 46	0 47	21 49	0 28	21 40	1 21	21 19	0 3	5 54
S 17	20 39	23 47	4 51	16 2	2 15	21 16	1 45	23 42	0 47	21 49	0 28	21 41	1 21	21 19	0 3	5 54
S 18	20 27	25 50	4 17	15 58	2 32	21 24	1 42	23 38	0 48	21 48	0 27	21 41	1 21	21 19	0 3	5 53
M19	20 14	26 37	3 30	15 57	2 47	21 32	1 40	23 34	0 48	21 48	0 27	21 42	1 21	21 19	0 3	5 53
T 20	20 1	25 56	2 30	16 0	3 1	21 39	1 37	23 30	0 49	21 48	0 27	21 42	1 21	21 19	0 3	5 52
W21	19 48	23 45	1 21	16 5	3 13	21 46	1 34	23 25	0 50	21 48	0 27	21 43	1 21	21 18	0 3	5 51
T 22	19 34	20 8	0 5	16 12	3 23	21 52	1 31	23 20	0 50	21 48	0 27	21 43	1 21	21 18	0 3	5 50
F 23	19 20	15 17	1s12	16 22	3 30	21 57	1 28	23 15	0 51	21 47	0 26	21 44	1 21	21 18	0 3	5 50
S 24	19 5	9 33	2 26	16 34	3 35	22 2	1 25	23 10	0 51	21 47	0 26	21 44	1 21	21 18	0 3	5 49
S 25	18 50	3 15	3 32	16 46	3 37	22 6	1 22	23 4	0 51	21 47	0 26	21 44	1 21	21 18	0 3	5 48
M26	18 35	3s13	4 24	17 0	3 37	22 10	1 19	22 58	0 52	21 47	0 26	21 45	1 21	21 18	0 3	5 48
T 27	18 20	9 29	4 59	17 14	3 34	22 13	1 16	22 52	0 52	21 47	0 26	21 45	1 21	21 17	0 3	5 47
W28	18 4	15 13	5 16	17 28	3 30	22 15	1 13	22 46	0 53	21 47	0 25	21 46	1 21	21 17	0 3	5 46
T 29	17 48	20 4	5 13	17 43	3 24	22 17	1 10	22 39	0 53	21 47	0 25	21 46	1 21	21 17	0 3	5 45
F 30	17 31	23 43	4 51	17 57	3 17	22 18	1 7	22 32	0 54	21 47	0 25	21 46	1 21	21 17	0 3	5 45
S 31	17s14	25s57	4s13	18s10	3n 8	22s18	1n 3	22s25	0s54	21n47	0s25	21s47	1n21	21n17	0s 3	5s44

Julian Day Number = 2339416.5, Delta T = 17.05 sec
Ecliptic obliquity = 23°28'50, Nutation = 0°00'15, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°27'18, Lahiri = 19°34'18Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1693

geocentric

FEBRUARY 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 47 27	12°57'58	22°11	24°R12	6°57	23°45	11°R27	20°29	5°R56	18°14	29°R16	1°37	1°3	15°9	20°R48	S 1
M 2	8 51 24	13°58'47	5°32	24°0	8°10	24°31	11°27	20°34	5°55	18°16	29°15	1°38	1°0	15°15	20°46	M 2
T 3	8 55 20	14°59'34	18°39	23°D55	9°23	25°18	11°27	20°39	5°55	18°18	29°13	1°39	0°57	15°22	20°44	T 3
W 4	8 59 17	16°0'20	1°33	23°58	10°37	26°4	11°D26	20°44	5°54	18°19	29°12	1°R39	0°54	15°29	20°43	W 4
T 5	9 3 13	17°1'05	14°15	24°8	11°50	26°50	11°26	20°49	5°54	18°21	29°11	1°39	0°50	15°36	20°41	T 5
F 6	9 7 10	18°1'48	26°45	24°25	13°3	27°37	11°27	20°54	5°54	18°24	29°9	1°38	0°47	15°42	20°40	F 6
S 7	9 11 6	19°2'30	9°4	24°47	14°16	28°23	11°27	20°58	5°53	18°26	29°8	1°35	0°44	15°49	20°38	S 7
S 8	9 15 3	20°3'11	21°12	25°15	15°29	29°10	11°28	21°3	5°53	18°28	29°7	1°33	0°41	15°56	20°37	S 8
M 9	9 19 0	21°3'50	3°12	25°48	16°43	29°56	11°29	21°8	5°53	18°30	29°6	1°29	0°38	16°2	20°35	M 9
T 10	9 22 56	22°4'27	15°6	26°26	17°56	0°43	11°30	21°12	5°53	18°32	29°4	1°26	0°35	16°9	20°34	T 10
W11	9 26 53	23°5'02	26°57	27°8	19°9	1°29	11°31	21°17	5°53	18°34	29°3	1°23	0°31	16°16	20°33	W11
T 12	9 30 49	24°5'36	8°50	27°54	20°23	2°16	11°33	21°21	5°D53	18°36	29°2	1°21	0°28	16°23	20°32	T 12
F 13	9 34 46	25°6'08	20°48	28°44	21°36	3°2	11°34	21°26	5°53	18°38	29°1	1°D20	0°25	16°29	20°31	F 13
S 14	9 38 42	26°6'39	2°57	29°37	22°49	3°49	11°36	21°30	5°53	18°40	29°0	1°20	0°22	16°36	20°30	S 14
S 15	9 42 39	27°7'07	15°20	0°33	24°3	4°35	11°38	21°34	5°53	18°42	28°58	1°21	0°19	16°43	20°30	S 15
M16	9 46 35	28°7'34	28°3	1°32	25°16	5°22	11°41	21°38	5°53	18°44	28°57	1°23	0°16	16°49	20°29	M16
T 17	9 50 32	29°7'58	11°9	2°34	26°30	6°8	11°43	21°42	5°54	18°47	28°56	1°25	0°12	16°56	20°28	T 17
W18	9 54 29	0°8'21	24°40	3°38	27°43	6°55	11°46	21°46	5°54	18°49	28°55	1°R26	0°9	17°3	20°28	W18
T 19	9 58 25	1°8'42	8°38	4°44	28°56	7°42	11°49	21°50	5°54	18°51	28°54	1°26	0°6	17°10	20°27	T 19
F 20	10 2 22	2°9'01	23°0	5°53	0°10	8°28	11°52	21°54	5°55	18°53	28°53	1°24	0°3	17°16	20°27	F 20
S 21	10 6 18	3°9'18	7°41	7°3	1°23	9°15	11°55	21°58	5°55	18°55	28°52	1°21	29°59	17°23	20°27	S 21
S 22	10 10 15	4°9'33	22°34	8°16	2°37	10°2	11°58	22°1	5°56	18°58	28°51	1°17	29°56	17°30	20°27	S 22
M23	10 14 11	5°9'47	7°32	9°30	3°50	10°49	12°2	22°5	5°56	19°0	28°49	1°12	29°53	17°36	20°27	M23
T 24	10 18 8	6°9'59	22°25	10°46	5°4	11°35	12°6	22°9	5°57	19°2	28°48	1°7	29°50	17°43	20°D27	T 24
W25	10 22 4	7°10'10	7°5	12°4	6°17	12°22	12°10	22°12	5°58	19°4	28°47	1°2	29°47	17°50	20°27	W25
T 26	10 26 1	8°10'19	21°28	13°23	7°31	13°9	12°14	22°15	5°58	19°6	28°46	1°0	29°44	17°57	20°27	T 26
F 27	10 29 57	9°10'27	5°29	14°44	8°45	13°56	12°18	22°18	5°59	19°9	28°45	0°D58	29°41	18°3	20°27	F 27
S 28	10 33 54	10°10'33	19°10	16°6	9°58	14°42	12°22	22°22	6°5	19°11	28°44	0°59	29°37	18°10	20°27	S 28

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	16s57	26s36	3s22	18s23	2n58	22s18	1n0	22s17	0s55	21n47	0s25	21s47	1n22	21n17	0s3	S 1
M 2	16 40	25 41	2 20	18 36	2 48	22 17	0 57	22 10	0 55	21 47	0 24	21 47	1 22	21 17	0 3	M 2
T 3	16 22	23 21	1 11	18 47	2 37	22 15	0 54	22 2	0 56	21 48	0 24	21 48	1 22	21 17	0 3	T 3
W 4	16 4	19 51	0 1	18 58	2 25	22 13	0 51	21 53	0 56	21 48	0 24	21 48	1 22	21 17	0 3	W 4
T 5	15 46	15 29	1n 9	19 8	2 14	22 10	0 48	21 45	0 57	21 48	0 24	21 48	1 22	21 17	0 3	T 5
F 6	15 27	10 31	2 14	19 16	2 2	22 6	0 44	21 36	0 57	21 48	0 24	21 48	1 22	21 17	0 3	F 6
S 7	15 8	5 13	3 12	19 24	1 50	22 2	0 41	21 27	0 57	21 49	0 23	21 49	1 22	21 17	0 3	S 7
S 8	14 49	0n11	4 0	19 31	1 38	21 57	0 38	21 18	0 58	21 49	0 23	21 49	1 22	21 17	0 3	S 8
M 9	14 30	5 31	4 37	19 37	1 26	21 52	0 35	21 9	0 58	21 49	0 23	21 49	1 22	21 17	0 3	M 9
T 10	14 11	10 35	5 2	19 41	1 14	21 45	0 31	20 59	0 59	21 49	0 23	21 50	1 22	21 17	0 3	T 10
W11	13 51	15 16	5 13	19 44	1 3	21 39	0 28	20 50	0 59	21 50	0 23	21 50	1 22	21 17	0 3	W11
T 12	13 31	19 23	5 12	19 46	0 52	21 31	0 25	20 39	1 0	21 50	0 22	21 50	1 22	21 17	0 3	T 12
F 13	13 11	22 45	4 57	19 47	0 40	21 23	0 22	20 29	1 0	21 51	0 22	21 50	1 22	21 17	0 3	F 13
S 14	12 50	25 10	4 28	19 47	0 30	21 14	0 19	20 19	1 0	21 51	0 22	21 50	1 22	21 17	0 3	S 14
S 15	12 30	26 25	3 47	19 46	0 19	21 5	0 16	20 8	1 1	21 52	0 22	21 51	1 22	21 17	0 3	S 15
M16	12 9	26 21	2 53	19 43	0 9	20 55	0 12	19 57	1 1	21 52	0 22	21 51	1 22	21 17	0 3	M16
T 17	11 48	24 49	1 49	19 39	0s 1	20 44	0 9	19 46	1 2	21 53	0 21	21 51	1 22	21 17	0 3	T 17
W18	11 27	21 50	0 37	19 33	0 11	20 33	0 6	19 34	1 2	21 53	0 21	21 51	1 22	21 17	0 3	W18
T 19	11 5	17 30	0s39	19 26	0 20	20 21	0 3	19 23	1 2	21 54	0 21	21 51	1 22	21 17	0 3	T 19
F 20	10 44	12 4	1 55	19 19	0 29	20 9	0s 0	19 11	1 3	21 54	0 21	21 52	1 23	21 17	0 3	F 20
S 21	10 22	5 50	3 5	19 9	0 38	19 56	0 3	18 59	1 3	21 55	0 21	21 52	1 23	21 17	0 3	S 21
S 22	10 0	0s46	4 3	18 59	0 46	19 43	0 6	18 47	1 3	21 56	0 20	21 52	1 23	21 17	0 3	S 22
M23	9 38	7 21	4 45	18 47	0 54	19 28	0 9	18 35	1 4	21 56	0 20	21 52	1 23	21 17	0 3	M23
T 24	9 16	13 29	5 8	18 33	1 2	19 14	0 12	18 22	1 4	21 57	0 20	21 52	1 23	21 17	0 3	T 24
W25	8 54	18 46	5 9	18 19	1 9	18 58	0 15	18 9	1 5	21 58	0 20	21 52	1 23	21 18	0 3	W25
T 26	8 31	22 51	4 52	18 3	1 16	18 43	0 18	17 56	1 5	21 58	0 20	21 52	1 23	21 18	0 3	T 26
F 27	8 9	25 28	4 17	17 46	1 23	18 26	0 21	17 43	1 5	21 59	0 20	21 53	1 23	21 18	0 3	F 27
S 28	7s46	26s29	3s28	17s27	1s29	18s 9	0s23	17s30	1s 6	22n 0	0s19	21s53	1n23	21n18	0s 3	S 28

Julian Day Number = 2339447.5, Delta T = 17.01 sec
 Ecliptic obliquity = 23°28'50, Nutation = 0°00'16, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°27'22, Lahiri = 19°34'22Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1693

geocentric

MARCH 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 37 51	11♈10'37	2♊31	17♈30	11♈12	15♈29	12♈27	22♈25	6♈1	19♈13	28°R43	1♈0	29♈34	18♈17	20♈28	S 1
M 2	10 41 47	12°10'40	15°33	18°55	12°25	16°16	12°32	22°28	6°2	19°16	28°R43	1°1	29°31	18°24	20°28	M 2
T 3	10 45 44	13°10'42	28°20	20°21	13°39	17°3	12°37	22°30	6°3	19°18	28°42	1°R 2	29°28	18°30	20°29	T 3
W 4	10 49 40	14°10'41	10♈54	21°48	14°53	17°50	12°42	22°33	6°4	19°20	28°41	1°2	29°25	18°37	20°30	W 4
T 5	10 53 37	15°10'39	23°18	23°17	16°6	18°36	12°48	22°36	6°5	19°22	28°40	0°59	29°22	18°44	20°30	T 5
F 6	10 57 33	16°10'35	5♈33	24°47	17°20	19°23	12°53	22°38	6°6	19°25	28°39	0°55	29°18	18°50	20°31	F 6
S 7	11 1 30	17°10'28	17°40	26°19	18°34	20°10	12°59	22°41	6°7	19°27	28°38	0°48	29°15	18°57	20°32	S 7
S 8	11 5 26	18°10'20	29°40	27°51	19°47	20°57	13°5	22°43	6°9	19°29	28°37	0°39	29°12	19°4	20°33	S 8
M 9	11 9 23	19°10'10	11♈36	29°25	21°1	21°44	13°11	22°46	6°10	19°31	28°37	0°29	29°9	19°11	20°34	M 9
T 10	11 13 20	20°9'58	23°29	1♈0	22°15	22°31	13°17	22°48	6°11	19°34	28°36	0°20	29°6	19°17	20°36	T 10
W 11	11 17 16	21°9'44	5♈20	2°36	23°28	23°18	13°23	22°50	6°13	19°36	28°35	0°11	29°2	19°24	20°37	W 11
T 12	11 21 13	22°9'27	17°13	4°14	24°42	24°5	13°30	22°52	6°14	19°38	28°34	0°3	28°59	19°31	20°38	T 12
F 13	11 25 9	23°9'09	29°10	5°53	25°56	24°51	13°36	22°54	6°16	19°41	28°34	29♈58	28°56	19°37	20°40	F 13
S 14	11 29 6	24°8'48	11♈16	7°33	27°9	25°38	13°43	22°56	6°17	19°43	28°33	29°55	28°53	19°44	20°41	S 14
S 15	11 33 2	25°8'25	23°35	9°14	28°23	26°25	13°50	22°57	6°19	19°45	28°32	29°D54	28°50	19°51	20°43	S 15
M 16	11 36 59	26°7'59	6♈12	10°56	29°37	27°12	13°57	22°59	6°20	19°47	28°32	29°54	28°47	19°58	20°44	M 16
T 17	11 40 55	27°7'32	19°12	12°40	0♈50	27°59	14°4	23°1	6°22	19°50	28°31	29°55	28°43	20°4	20°46	T 17
W 18	11 44 52	28°7'01	2♈38	14°25	2°4	28°46	14°12	23°2	6°24	19°52	28°30	29°R55	28°40	20°11	20°48	W 18
T 19	11 48 49	29°6'29	16°33	16°11	3°18	29°33	14°19	23°3	6°26	19°54	28°30	29°54	28°37	20°18	20°50	T 19
F 20	11 52 45	0♈5'54	0♈57	17°59	4°31	0♈19	14°27	23°5	6°27	19°56	28°29	29°51	28°34	20°24	20°52	F 20
S 21	11 56 42	1°5'17	15°46	19°47	5°45	1°6	14°35	23°6	6°29	19°59	28°29	29°45	28°31	20°31	20°54	S 21
S 22	12 0 38	2°4'38	0♈54	21°38	6°59	1°53	14°43	23°7	6°31	20°1	28°28	29°37	28°27	20°38	20°56	S 22
M 23	12 4 35	3°3'57	16°10	23°29	8°12	2°40	14°51	23°8	6°33	20°3	28°28	29°27	28°24	20°45	20°59	M 23
T 24	12 8 31	4°3'14	1♈25	25°22	9°26	3°27	14°59	23°9	6°35	20°5	28°27	29°18	28°21	20°51	21°1	T 24
W 25	12 12 28	5°2'29	16°26	27°16	10°40	4°14	15°7	23°9	6°37	20°8	28°27	29°9	28°18	20°58	21°3	W 25
T 26	12 16 24	6°1'42	1♈6	29°12	11°53	5°0	15°16	23°10	6°39	20°10	28°26	29°3	28°15	21°5	21°6	T 26
F 27	12 20 21	7°0'53	15°20	1♈8	13°7	5°47	15°25	23°11	6°41	20°12	28°26	28°58	28°12	21°12	21°8	F 27
S 28	12 24 18	8°0'03	29°7	3°7	14°21	6°34	15°33	23°11	6°44	20°14	28°26	28°57	28°8	21°18	21°11	S 28
S 29	12 28 14	8°59'11	12♈27	5°6	15°35	7°21	15°42	23°11	6°46	20°16	28°25	28°D56	28°5	21°25	21°14	S 29
M 30	12 32 11	9°58'17	25°24	7°6	16°48	8°8	15°51	23°12	6°48	20°18	28°25	28°R57	28°2	21°32	21°16	M 30
T 31	12 36 7	10♈57'22	8♈2	9♈8	18♈2	8♈54	16♈II 0	23♈12	6♈50	20♈21	28°R25	28♈56	27♈59	21♈38	21♈19	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	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	7s23	25s56	2s29	17s8	1s35	17s52	0s26	17s16	1s6	22n1	0s19	21s53	1n23	21n18	0s3	S 1
M 2	7 0	23 57	1 23	16 46	1 41	17 34	0 29	17 2	1 6	22 1	0 19	21 53	1 23	21 18	0 3	M 2
T 3	6 37	20 46	0 15	16 24	1 46	17 16	0 32	16 49	1 6	22 2	0 19	21 53	1 23	21 19	0 3	T 3
W 4	6 14	16 40	0n53	16 0	1 50	16 57	0 34	16 34	1 7	22 3	0 19	21 53	1 23	21 19	0 3	W 4
T 5	5 51	11 56	1 57	15 35	1 55	16 37	0 37	16 20	1 7	22 4	0 18	21 53	1 23	21 19	0 3	T 5
F 6	5 28	6 47	2 55	15 9	1 59	16 18	0 39	16 6	1 7	22 5	0 18	21 53	1 23	21 19	0 3	F 6
S 7	5 4	1 26	3 45	14 41	2 2	15 57	0 42	15 51	1 8	22 6	0 18	21 53	1 24	21 19	0 3	S 7
S 8	4 41	3n54	4 23	14 12	2 5	15 37	0 44	15 37	1 8	22 7	0 18	21 53	1 24	21 20	0 3	S 8
M 9	4 18	9 2	4 50	13 42	2 8	15 15	0 47	15 22	1 8	22 8	0 18	21 53	1 24	21 20	0 3	M 9
T 10	3 54	13 50	5 4	13 10	2 10	14 54	0 49	15 7	1 8	22 8	0 18	21 53	1 24	21 20	0 3	T 10
W 11	3 31	18 6	5 5	12 37	2 12	14 32	0 52	14 51	1 9	22 9	0 17	21 53	1 24	21 20	0 3	W 11
T 12	3 7	21 40	4 53	12 3	2 14	14 9	0 54	14 36	1 9	22 10	0 17	21 53	1 24	21 21	0 3	T 12
F 13	2 43	24 21	4 28	11 27	2 15	13 47	0 56	14 21	1 9	22 11	0 17	21 53	1 24	21 21	0 3	F 13
S 14	2 20	25 58	3 50	10 51	2 15	13 23	0 58	14 5	1 9	22 12	0 17	21 54	1 24	21 21	0 3	S 14
S 15	1 56	26 21	3 2	10 13	2 15	13 0	1 0	13 49	1 10	22 13	0 17	21 54	1 24	21 21	0 3	S 15
M 16	1 32	25 24	2 4	9 34	2 15	12 36	1 2	13 33	1 10	22 14	0 17	21 54	1 24	21 22	0 3	M 16
T 17	1 9	23 3	0 57	8 53	2 14	12 12	1 4	13 17	1 10	22 15	0 16	21 54	1 24	21 22	0 3	T 17
W 18	0 45	19 22	0s14	8 11	2 13	11 47	1 6	13 1	1 10	22 16	0 16	21 54	1 24	21 22	0 3	W 18
T 19	0 21	14 31	1 28	7 29	2 11	11 22	1 8	12 45	1 10	22 17	0 16	21 54	1 24	21 23	0 3	T 19
F 20	0n 2	8 42	2 38	6 44	2 9	10 57	1 10	12 29	1 11	22 18	0 16	21 54	1 25	21 23	0 3	F 20
S 21	0 26	2 16	3 39	5 59	2 6	10 31	1 11	12 12	1 11	22 20	0 16	21 54	1 25	21 23	0 3	S 21
S 22	0 50	4s26	4 26	5 13	2 3	10 6	1 13	11 56	1 11	22 21	0 16	21 53	1 25	21 24	0 3	S 22
M 23	1 13	10 54	4 55	4 25	1 59	9 40	1 15	11 39	1 11	22 22	0 16	21 53	1 25	21 24	0 3	M 23
T 24	1 37	16 43	5 3	3 36	1 55	9 13	1 16	11 22	1 11	22 23	0 15	21 53	1 25	21 24	0 2	T 24
W 25	2 0	21 24	4 50	2 46	1 50	8 47	1 18	11 5	1 12	22 24	0 15	21 53	1 25	21 25	0 2	W 25
T 26	2 24	24 37	4 17	1 56	1 45	8 20	1 19	10 48	1 12	22 25	0 15	21 53	1 25	21 25	0 2	T 26
F 27	2 47	26 9	3 30	1 4	1 39	7 53	1 20	10 31	1 12	22 26	0 15	21 53	1 25	21 25	0 2	F 27
S 28	3 11	26 0	2 31	0 11	1 33	7 25	1 22	10 14	1 12	22 27	0 15	21 53	1 25	21 26	0 2	S 28
S 29	3 34	24 20	1 26	0n43	1 26	6 58	1 23	9 57	1 12	22 28	0 15	21 53	1 25	21 26	0 2	S 29
M 30	3 57	21 24	0 19	1 37	1 19	6 30	1 24	9 39	1 12	22 29	0 14	21 53	1 25	21 27	0 2	M 30
T 31	4n21	17s31	0n48	2n33	1s11	6s 2	1s25	9s22	1s12	22n30	0s14	21s53	1n25	21n27	0s 2	T 31

Julian Day Number = 2339475.5, Delta T = 16.98 sec
 Ecliptic obliquity = 23°28'50, Nutation = 0°00'16, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°27'26, Lahiri = 19°34'26Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1693

geocentric

APRIL 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	12 40 4	11°56'24	20°25	11°11	19°16	9°41	16°11	23°12	6°53	20°23	28°25	28°54	27°56	21°45	21°22	W 1
T 2	12 44 0	12°55'25	2°36	13°14	20°29	10°28	16°19	23°12	6°55	20°25	28°24	28°50	27°53	21°52	21°25	T 2
F 3	12 47 57	13°54'23	14°39	15°19	21°43	11°15	16°28	23°12	6°57	20°27	28°24	28°43	27°49	21°59	21°28	F 3
S 4	12 51 53	14°53'20	26°37	17°24	22°57	12° 1	16°38	23°11	7° 0	20°29	28°24	28°32	27°46	22° 5	21°31	S 4
S 5	12 55 50	15°52'15	8°32	19°30	24°11	12°48	16°47	23°11	7° 2	20°31	28°24	28°20	27°43	22°12	21°34	S 5
M 6	12 59 47	16°51'08	20°24	21°35	25°24	13°35	16°57	23°11	7° 5	20°33	28°24	28° 6	27°40	22°19	21°38	M 6
T 7	13 3 43	17°49'59	2°16	23°41	26°38	14°22	17° 7	23°10	7° 7	20°35	28°24	27°52	27°37	22°25	21°41	T 7
W 8	13 7 40	18°48'48	14° 9	25°47	27°52	15° 8	17°17	23° 9	7°10	20°38	28°24	27°38	27°33	22°32	21°44	W 8
T 9	13 11 36	19°47'34	26° 4	27°51	29° 5	15°55	17°27	23° 9	7°13	20°40	28°24	27°27	27°30	22°39	21°48	T 9
F 10	13 15 33	20°46'19	8°11	29°55	0°19	16°42	17°37	23° 8	7°15	20°42	28°24	27°18	27°27	22°46	21°51	F 10
S 11	13 19 29	21°45'02	20°12	1°58	1°33	17°28	17°48	23° 7	7°18	20°44	28°24	27°12	27°24	22°52	21°55	S 11
S 12	13 23 26	22°43'42	2°31	3°59	2°46	18°15	17°58	23° 6	7°21	20°46	28°24	27° 9	27°21	22°59	21°59	S 12
M13	13 27 22	23°42'20	15° 6	5°59	4° 0	19° 1	18° 8	23° 5	7°23	20°48	28°24	27° 8	27°18	23° 6	22° 2	M13
T 14	13 31 19	24°40'56	28° 0	7°56	5°14	19°48	18°19	23° 3	7°26	20°50	28°24	27° 8	27°14	23°13	22° 6	T 14
W15	13 35 16	25°39'30	11°19	9°51	6°27	20°34	18°30	23° 2	7°29	20°52	28°24	27° 8	27°11	23°19	22°10	W15
T 16	13 39 12	26°38'01	25° 5	11°42	7°41	21°21	18°41	23° 1	7°32	20°54	28°24	27° 6	27° 8	23°26	22°14	T 16
F 17	13 43 9	27°36'30	9°20	13°31	8°55	22° 7	18°51	22°59	7°35	20°55	28°24	27° 2	27° 5	23°33	22°18	F 17
S 18	13 47 5	28°34'57	24° 3	15°16	10° 8	22°54	19° 2	22°58	7°38	20°57	28°24	26°55	27° 2	23°39	22°22	S 18
S 19	13 51 2	29°33'22	9°11	16°58	11°22	23°40	19°13	22°56	7°41	20°59	28°25	26°46	26°59	23°46	22°26	S 19
M20	13 54 58	0°31'45	24°25	18°36	12°36	24°26	19°24	22°54	7°44	21° 1	28°25	26°36	26°55	23°53	22°30	M20
T 21	13 58 55	1°30'06	9°14	20°10	13°49	25°13	19°36	22°52	7°47	21° 3	28°25	26°25	26°52	24° 0	22°34	T 21
W22	14 2 51	2°28'25	24°57	21°39	15° 3	25°59	19°47	22°50	7°50	21° 5	28°25	26°15	26°49	24° 6	22°39	W22
T 23	14 6 48	3°26'43	9°14	23° 5	16°17	26°45	19°58	22°48	7°53	21° 7	28°26	26° 7	26°46	24°13	22°43	T 23
F 24	14 10 44	4°24'59	24°14	24°26	17°30	27°32	20°10	22°46	7°56	21° 8	28°26	26° 1	26°43	24°20	22°47	F 24
S 25	14 14 41	5°23'14	8°11	25°43	18°44	28°18	20°21	22°44	7°59	21°10	28°26	25°58	26°39	24°27	22°52	S 25
S 26	14 18 38	6°21'27	21°38	26°55	19°57	29° 4	20°33	22°42	8° 2	21°12	28°27	25°D57	26°36	24°33	22°56	S 26
M27	14 22 34	7°19'38	4°38	28° 3	21°11	29°50	20°44	22°39	8° 5	21°14	28°27	25°R57	26°33	24°40	23° 1	M27
T 28	14 26 31	8°17'48	17°16	29° 6	22°25	0°37	20°56	22°37	8° 8	21°15	28°28	25°57	26°30	24°47	23° 5	T 28
W29	14 30 27	9°15'57	29°36	0°11	23°38	1°23	21° 8	22°34	8°11	21°17	28°28	25°56	26°27	24°53	23°10	W29
T 30	14 34 24	10°14'04	11°44	0°11	24°52	2°19	21°20	22°32	8°15	21°19	28°29	25°52	26°24	25°10	23°14	T 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	4n44	12s57	1n51	3n28	1s 2	5s34	1s26	9s 4	1s12	22n31	0s14	21s53	1n25	21n27	0s 2	4s53	1s 9	24n38	4n12	20s25	20s37	13n14	17n19	5s53	1s26
T 2	5 7	7 57	2 48	4 25	0 54	5 6	1 27	8 46	1 13	22 33	0 14	21 53	1 25	21 28	0 2	4 52	1 9	24 38	4 12	20 26	20 37	13 16	17 20	5 53	1s26
F 3	5 30	2 43	3 37	5 22	0 44	4 38	1 28	8 29	1 13	22 34	0 14	21 53	1 26	21 28	0 2	4 51	1 9	24 38	4 12	20 27	20 38	13 19	17 20	5 53	1s26
S 4	5 53	2n33	4 15	6 19	0 35	4 9	1 28	8 11	1 13	22 35	0 14	21 53	1 26	21 29	0 2	4 50	1 9	24 38	4 12	20 29	20 39	13 22	17 21	5 52	1s26
S 5	6 15	7 43	4 42	7 16	0 25	3 41	1 29	7 53	1 13	22 36	0 14	21 53	1 26	21 29	0 2	4 49	1 9	24 38	4 12	20 32	20 39	13 24	17 21	5 52	1s26
M 6	6 38	12 34	4 57	8 13	0 14	3 12	1 30	7 35	1 13	22 37	0 13	21 53	1 26	21 29	0 2	4 48	1 9	24 38	4 12	20 35	20 40	13 27	17 22	5 52	1s26
T 7	7 1	16 57	4 59	9 9	0 4	2 43	1 30	7 17	1 13	22 38	0 13	21 52	1 26	21 30	0 2	4 48	1 9	24 38	4 12	20 38	20 40	13 30	17 23	5 51	1s26
W 8	7 23	20 41	4 48	10 5	0n 7	2 14	1 31	6 59	1 13	22 39	0 13	21 52	1 26	21 30	0 2	4 47	1 9	24 38	4 12	20 40	20 41	13 32	17 23	5 51	1s26
T 9	7 45	23 34	4 24	11 1	0 18	1 46	1 31	6 41	1 13	22 40	0 13	21 52	1 26	21 31	0 2	4 46	1 9	24 38	4 12	20 42	20 42	13 35	17 24	5 51	1s26
F 10	8 7	25 27	3 48	11 55	0 29	1 16	1 32	6 23	1 13	22 41	0 13	21 52	1 26	21 31	0 2	4 45	1 9	24 38	4 12	20 44	20 42	13 37	17 24	5 50	1s26
S 11	8 29	26 8	3 2	12 49	0 40	0 47	1 32	6 5	1 13	22 42	0 13	21 52	1 26	21 32	0 2	4 45	1 9	24 38	4 12	20 45	20 43	13 40	17 25	5 50	1s26
S 12	8 51	25 33	2 6	13 41	0 51	0 18	1 32	5 47	1 13	22 44	0 13	21 52	1 26	21 32	0 2	4 44	1 9	24 38	4 12	20 46	20 44	13 43	17 25	5 50	1s26
M13	9 13	23 40	1 3	14 31	1 2	0n11	1 32	5 28	1 13	22 45	0 12	21 52	1 26	21 33	0 2	4 43	1 9	24 37	4 12	20 46	20 44	13 45	17 26	5 49	1s26
T 14	9 35	20 31	0s 5	15 20	1 13	0 40	1 32	5 10	1 13	22 46	0 12	21 52	1 26	21 33	0 2	4 42	1 9	24 37	4 12	20 46	20 45	13 48	17 26	5 49	1s26
W15	9 56	16 13	1 14	16 6	1 23	1 9	1 32	4 52	1 13	22 47	0 12	21 52	1 26	21 34	0 2	4 41	1 9	24 37	4 12	20 46	20 45	13 50	17 27	5 49	1s26
T 16	10 17	10 57	2 22	16 51	1 33	1 38	1 32	4 33	1 13	22 48	0 12	21 51	1 26	21 34	0 2	4 41	1 9	24 37	4 12	20 47	20 46	13 53	17 27	5 48	1s26
F 17	10 38	4 57	3 23	17 33	1 43	2 8	1 32	4 15	1 13	22 49	0 12	21 51	1 26	21 35	0 2	4 40	1 9	24 37	4 12	20 47	20 47	13 55	17 28	5 48	1s26
S 18	10 59	1s30	4 13	18 13	1 52	2 37	1 32	3 57	1 13	22 50	0 12	21 51	1 27	21 35	0 2	4 39	1 9	24 37	4 12	20 49	20 47	13 58	17 28	5 48	1s26
S 19	11 20	8 0	4 46	18 51	2 0	3 6	1 32	3 38	1 13	22 51	0 12	21 51	1 27	21 35	0 2	4 39	1 10	24 37	4 12	20 50	20 48	14 1	17 29	5 47	1s26
M20	11 41	14 7	5 0	19 26	2 8	3 35	1 31	3 20	1 13	22 52	0 12	21 51	1 27	21 36	0 2	4 38	1 10	24 37	4 11	20 52	20 49	14 3	17 29	5 47	1s26
T 21	12 1	19 23	4 52	19 59	2 15	4 4	1 31	3 1	1 13	22 53	0 11	21 51	1 27	21 36	0 2	4 37	1 10	24 37	4 11	20 54	20 49	14 6	17 30	5 47	1s26
W22	12 21	23 18	4 24	20 29	2 21	4 33	1 31	2 43	1 13	22 54	0 11	21 51	1 27	21 37	0 2	4 36	1 10	24 37	4 11	20 56	20 50	14 8	17 31	5 47	1s26
T 23	12 41	25 33	3 38	20 56	2 27	5 2	1 30	2 24	1 13	22 55	0 11	21 50	1 27	21 37	0 2	4 36	1 10	24 37	4 11	20 58	20 50	14 11	17 31	5 46	1s26
F 24	13 1	26 0	2 39	21 21	2 31	5 30	1 29	2 6	1 13	22 56	0 11	21 50	1 27	21 38	0 2	4 35	1 10	24 37	4 11	20 59	20 51	14 13	17 32	5 46	1s26
S 25	13 20	24 46	1 33	21 44	2 35	5 59	1 29	1 47	1 13	22 57	0 11	21 50	1 27	21 38	0 2	4 34	1 10	24 36	4 11	20 59	20 52	14 16	17 32	5 46	1s26
S 26	13 40	22 7	0 23	22 3	2 38	6 27	1 28	1 29	1 12	22 58	0 11	21 50	1 27	21 39	0 2	4 34	1 10	24 36	4 11	21 0	20 52	14 18	17 32	5 45	1s26
M27	13 59	18 24	0n46	22 21	2 39	6 56	1 27	1 10	1 12	22 59	0 11	21 50	1 27	21 40	0 2	4 33	1 10	24 36	4 11	21 0	20 53	14 21	17 33	5 45	1s26
T 28	14 18	13 56	1 50	22 36	2 40	7 24	1 26	0 52	1 12	23 0	0 11	21 50	1 27	21 40	0 2	4 33	1 10	24 36	4 11	21 0	20 53	14 23	17 33	5 45	1s26
W29	14 36	9 0	2 48	22 48	2 40	7 52	1 26	0 33	1 12	23 1	0 10	21 49	1 27	21 41	0 2	4 32	1 10	24 36	4 11	21 0	20 54	14 26	17 34	5 45	1s26
T 30	14n55	3s50	3n37	22n58	2n39	8n20	1s25	0s15	1s12	23n 1	0s10	21s49	1n27	21n41	0s 2	4s31	1s10	24n36	4n11	21s 1	20s55	14n28	17n34	5s44	1s26

ASTRODIENST EPHEMERIS for the year 1693

geocentric

MAY 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	14 38 20	11♌12'09	23♋42	1♏46	26♊6	2♊55	21♏32	22°R29	8♏18	21♏20	28♏29	25°R45	26♌20	25♊7	23♏19	F 1
S 2	14 42 17	12°10'14	5♊35	2°29	27°19	3°41	21°44	22♌26	8°21	21°22	28°30	25♌36	26°17	25°14	23°24	S 2
S 3	14 46 13	13° 8'16	17°27	3° 8	28°33	4°27	21°56	22°23	8°24	21°23	28°30	25°25	26°14	25°20	23°29	S 3
M 4	14 50 10	14° 6'17	29°18	3°41	29°46	5°13	22° 8	22°21	8°28	21°25	28°31	25°12	26°11	25°27	23°34	M 4
T 5	14 54 7	15° 4'17	11♌12	4° 9	1♏0	5°59	22°20	22°18	8°31	21°27	28°32	24°59	26° 8	25°34	23°38	T 5
W 6	14 58 3	16° 2'15	23° 9	4°33	2°14	6°45	22°22	22°14	8°34	21°28	28°32	24°47	26° 4	25°40	23°43	W 6
T 7	15 2 0	17° 0'12	5♏11	4°51	3°27	7°30	22°45	22°11	8°38	21°30	28°33	24°36	26° 1	25°47	23°48	T 7
F 8	15 5 56	17°58'07	17°19	5° 4	4°41	8°16	22°57	22° 8	8°41	21°31	28°34	24°28	25°58	25°54	23°53	F 8
S 9	15 9 53	18°56'00	29°35	5°12	5°54	9° 2	23°10	22° 5	8°44	21°32	28°34	24°23	25°55	26° 1	23°58	S 9
S 10	15 13 49	19°53'52	12♌2	5°R15	7° 8	9°48	23°22	22° 2	8°48	21°34	28°35	24°20	25°52	26° 7	24° 4	S 10
M 11	15 17 46	20°51'42	24°42	5°13	8°22	10°33	23°35	21°58	8°51	21°35	28°36	24°D19	25°49	26°14	24° 9	M 11
T 12	15 21 43	21°49'30	7♏39	5° 7	9°35	11°19	23°47	21°55	8°55	21°37	28°37	24°20	25°45	26°21	24°14	T 12
W 13	15 25 39	22°47'16	20°55	4°56	10°49	12° 5	24° 0	21°51	8°58	21°38	28°37	24°R20	25°42	26°28	24°19	W 13
T 14	15 29 36	23°45'01	4♏35	4°40	12° 2	12°50	24°13	21°48	9° 1	21°39	28°38	24°20	25°39	26°34	24°24	T 14
F 15	15 33 32	24°42'44	18°39	4°21	13°16	13°36	24°25	21°44	9° 5	21°40	28°39	24°17	25°36	26°41	24°30	F 15
S 16	15 37 29	25°40'25	3♏7	3°58	14°30	14°21	24°38	21°40	9° 8	21°42	28°40	24°13	25°33	26°48	24°35	S 16
S 17	15 41 25	26°38'05	17°56	3°33	15°43	15° 6	24°51	21°36	9°12	21°43	28°41	24° 6	25°30	26°54	24°40	S 17
M 18	15 45 22	27°35'43	3♏0	3° 4	16°57	15°52	25° 4	21°33	9°15	21°44	28°42	23°58	25°26	27° 1	24°46	M 18
T 19	15 49 18	28°33'20	18° 9	2°33	18°10	16°37	25°17	21°29	9°19	21°45	28°43	23°50	25°23	27° 8	24°51	T 19
W 20	15 53 15	29°30'56	3♏13	2° 1	19°24	17°22	25°30	21°25	9°22	21°46	28°44	23°42	25°20	27°15	24°56	W 20
T 21	15 57 12	0♏28'31	18° 2	1°27	20°37	18° 7	25°43	21°21	9°26	21°47	28°45	23°36	25°17	27°21	25° 2	T 21
F 22	16 1 8	1°26'04	2♌30	0°53	21°51	18°53	25°56	21°17	9°29	21°49	28°46	23°32	25°14	27°28	25° 7	F 22
S 23	16 5 5	2°23'37	16°31	0°19	23° 5	19°38	26° 9	21°13	9°33	21°50	28°47	23°31	25°10	27°35	25°13	S 23
S 24	16 9 1	3°21'08	0♏4	29♌46	24°18	20°23	26°22	21° 9	9°36	21°51	28°48	23°D31	25° 7	27°42	25°18	S 24
M 25	16 12 58	4°18'39	13°10	29°14	25°32	21° 8	26°35	21° 5	9°40	21°52	28°49	23°32	25° 4	27°48	25°24	M 25
T 26	16 16 54	5°16'09	25°53	28°44	26°45	21°53	26°48	21° 1	9°43	21°53	28°50	23°33	25° 1	27°55	25°30	T 26
W 27	16 20 51	6°13'38	8♏16	28°16	27°59	22°38	27° 1	20°56	9°47	21°53	28°51	23°R33	24°58	28° 2	25°35	W 27
T 28	16 24 47	7°11'06	20°24	27°51	29°13	23°23	27°15	20°52	9°51	21°54	28°52	23°32	24°55	28° 8	25°41	T 28
F 29	16 28 44	8° 8'33	2♊23	27°29	0♏26	24° 7	27°28	20°48	9°54	21°55	28°53	23°29	24°51	28°15	25°46	F 29
S 30	16 32 41	9° 6'00	14°16	27°11	1°40	24°52	27°41	20°44	9°58	21°56	28°55	23°24	24°48	28°22	25°52	S 30
S 31	16 36 37	10♏3'26	26♊7	26♌56	2♏53	25♊37	27♏55	20♌39	10♏1	21♏57	28♏56	23♌18	24♌45	28♊29	25♏58	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	15n13	1n24	4n16	23n 6	2n37	8n48	1s24	0n 4	1s12	23n 2	0s10	21s49	1n27	21n42	0s 2	4s31	1s10	24n36	4n11	21s 2	20s55	14n31	17n35	5s44			
S 2	15 31	6 33	4 43	23 12	2 33	9 15	1 23	0 22	1 12	23 3	0 10	21 49	1 27	21 42	0 2	4 30	1 10	24 35	4 11	21 3	20 56	14 34	17 35	5 44			
S 3	15 49	11 27	4 58	23 15	2 29	9 43	1 21	0 41	1 11	23 4	0 10	21 49	1 27	21 43	0 2	4 29	1 10	24 35	4 11	21 6	20 56	14 36	17 36	5 44			
M 4	16 6	15 55	5 0	23 16	2 23	10 10	1 20	0 59	1 11	23 5	0 10	21 48	1 27	21 43	0 2	4 29	1 10	24 35	4 11	21 8	20 57	14 39	17 36	5 44			
T 5	16 23	19 47	4 49	23 15	2 17	10 37	1 19	1 17	1 11	23 6	0 10	21 48	1 27	21 44	0 2	4 28	1 10	24 35	4 11	21 10	20 58	14 41	17 37	5 43			
W 6	16 40	22 52	4 25	23 12	2 9	11 3	1 18	1 36	1 11	23 7	0 10	21 48	1 27	21 44	0 2	4 28	1 10	24 35	4 11	21 12	20 58	14 44	17 37	5 43			
T 7	16 57	24 58	3 50	23 6	2 0	11 30	1 16	1 54	1 11	23 7	0 10	21 48	1 27	21 45	0 2	4 27	1 10	24 35	4 11	21 14	20 59	14 46	17 37	5 43			
F 8	17 13	25 55	3 3	22 59	1 50	11 56	1 15	2 12	1 11	23 8	0 9	21 48	1 27	21 45	0 2	4 27	1 10	24 34	4 11	21 16	20 59	14 48	17 38	5 43			
S 9	17 29	25 36	2 8	22 50	1 39	12 22	1 13	2 31	1 10	23 9	0 9	21 47	1 27	21 46	0 2	4 26	1 10	24 34	4 11	21 17	21 0	14 51	17 38	5 43			
S 10	17 45	24 1	1 5	22 39	1 27	12 47	1 12	2 49	1 10	23 10	0 9	21 47	1 27	21 46	0 2	4 26	1 10	24 34	4 11	21 17	21 1	14 53	17 39	5 42			
M 11	18 0	21 11	0s 2	22 25	1 14	13 12	1 10	3 7	1 10	23 10	0 9	21 47	1 27	21 47	0 2	4 25	1 10	24 34	4 11	21 17	21 1	14 56	17 39	5 42			
T 12	18 15	17 15	1 11	22 11	1 0	13 37	1 9	3 25	1 10	23 11	0 9	21 47	1 27	21 47	0 2	4 25	1 10	24 34	4 11	21 17	21 2	14 58	17 39	5 42			
W 13	18 30	12 23	2 17	21 54	0 46	14 2	1 7	3 43	1 9	23 12	0 9	21 47	1 27	21 48	0 2	4 24	1 10	24 33	4 11	21 17	21 2	15 1	17 40	5 42			
T 14	18 45	6 47	3 18	21 36	0 30	14 26	1 5	4 1	1 9	23 12	0 9	21 46	1 27	21 49	0 2	4 24	1 10	24 33	4 11	21 17	21 3	15 3	17 40	5 42			
F 15	18 59	0 41	4 8	21 17	0 14	14 50	1 4	4 19	1 9	23 13	0 9	21 46	1 27	21 49	0 2	4 23	1 10	24 33	4 11	21 18	21 4	15 6	17 41	5 42			
S 16	19 13	5s36	4 45	20 56	0s 3	15 14	1 2	4 37	1 9	23 14	0 8	21 46	1 27	21 50	0 2	4 23	1 11	24 33	4 11	21 18	21 4	15 8	17 41	5 41			
S 17	19 26	11 43	5 3	20 34	0 20	15 37	1 0	4 55	1 8	23 14	0 8	21 46	1 27	21 50	0 2	4 22	1 11	24 33	4 10	21 20	21 5	15 11	17 41	5 41			
M 18	19 39	17 14	5 1	20 12	0 37	16 0	0 58	5 12	1 8	23 15	0 8	21 45	1 27	21 51	0 2	4 22	1 11	24 32	4 10	21 21	21 5	15 13	17 42	5 41			
T 19	19 52	21 43	4 38	19 49	0 55	16 22	0 56	5 30	1 8	23 16	0 8	21 45	1 27	21 51	0 2	4 21	1 11	24 32	4 10	21 22	21 6	15 16	17 42	5 41			
W 20	20 5	24 42	3 56	19 25	1 12	16 44	0 54	5 48	1 8	23 16	0 8	21 45	1 27	21 52	0 2	4 21	1 11	24 32	4 10	21 24	21 6	15 18	17 42	5 41			
T 21	20 17	25 54	2 58	19 1	1 30	17 6	0 52	6 5	1 7	23 17	0 8	21 45	1 27	21 52	0 2	4 21	1 11	24 32	4 10	21 25	21 7	15 20	17 43	5 41			
F 22	20 29	25 18	1 50	18 38	1 47	17 27	0 50	6 22	1 7	23 17	0 8	21 45	1 27	21 53	0 2	4 20	1 11	24 31	4 10	21 25	21 8	15 23	17 43	5 41			
S 23	20 41	23 5	0 38	18 15	2 3	17 48	0 48	6 40	1 7	23 18	0 8	21 44	1 27	21 53	0 2	4 20	1 11	24 31	4 10	21 26	21 8	15 25	17 43	5 41			
S 24	20 52	19 36	0n35	17 52	2 19	18 8	0 46	6 57	1 6	23 18	0 8	21 44	1 27	21 54	0 2	4 20	1 11	24 31	4 10	21 26	21 9	15 28	17 43	5 41			
M 25	21 3	15 14	1 44	17 31	2 34	18 28	0 44	7 14	1 6	23 19	0 8	21 44	1 27	21 54	0 2	4 19	1 11	24 31	4 10	21 26	21 9	15 30	17 44	5 40			
T 26	21 13	10 19	2 45	17 11	2 48	18 47	0 42	7 32	1 6	23 19	0 7	21 44	1 27	21 55	0 2	4 19	1 11	24 30	4 10	21 25	21 10	15 33	17 44	5 40			
W 27	21 23	5 7	3 37	16 52	3 1	19 6	0 40	7 49	1 5	23 19	0 7	21 43	1 27	21 56	0 2	4 19	1 11	24 30	4 10	21 25	21 10	15 35	17 44	5 40			
T 28	21 33	0n 9	4 19	16 35	3 13	19 24	0 38	8 6	1 5	23 20	0 7	21 43	1 27	21 56	0 2	4 18	1 11	24 30	4 10	21 26	21 11	15 37	17 45	5 40			
F 29	21 42	5 21	4 48	16 19	3 14	19 42	0 35	8 22	1 4	23 20	0 7	21 43	1 27	21 57	0 2	4 18	1 11	24 30	4 10	21 26	21 12	15 40	17 45	5 40			
S 30	21 51	10 18	5 4	16 6	3 33	19 59	0 33	8 39	1 4	23 21	0 7	21 43	1 27	21 57	0 2	4 18	1 11	24 29	4 10	21 27	21 12	15 42	17 45	5 40			
S 31	22n 0	14n52	5n 8	15n54	3s42	20n16	0s31	8n56	1s 4	23n21	0s 7	21s42	1n27	21n58	0s 2	4s17	1s11	24n29	4n10	21s28	21s13	15n44	17n45	5s40			

ASTRODIENST EPHEMERIS for the year 1693

geocentric

JUNE 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 40 34	11 ^{II} 0°51	8 ⁸ 0	26°R45	4 ^{II} 7	26°V21	28 ^{II} 8	20°R35	10 ^{II} 5	21 ^{II} 58	28 ^S 57	23°R11	24 ^S 42	28°V35	26 ^{II} 3	M 1	
T 2	16 44 30	11°58'16	19°57	26 ^B 39	5°21	27° 6	28°21	20 ^A 31	10° 8	21°58	28°58	23 ^S 3	24°39	28°42	26° 9	T 2	
W 3	16 48 27	12°55'40	2 ^{II} 1	26°D37	6°34	27°51	28°35	20°26	10°12	21°59	28°59	22°56	24°36	28°49	26°15	W 3	
T 4	16 52 23	13°53'03	14°13	26°39	7°48	28°35	28°48	20°22	10°15	22° 0	29° 1	22°50	24°32	28°55	26°21	T 4	
F 5	16 56 20	14°50'25	26°33	26°46	9° 1	29°19	29° 2	20°18	10°19	22° 0	29° 2	22°45	24°29	29° 2	26°27	F 5	
S 6	17 0 16	15°47'47	9 ^S 4	26°57	10°15	0 ^B 4	29°15	20°13	10°22	22° 1	29° 3	22°42	24°26	29° 9	26°32	S 6	
S 7	17 4 13	16°45'08	21°46	27°13	11°29	0°48	29°29	20° 9	10°26	22° 2	29° 5	22°D42	24°23	29°16	26°38	S 7	
M 8	17 8 10	17°42'28	4 ^A 14	27°34	12°42	1°32	29°42	20° 4	10°30	22° 2	29° 6	22°42	24°20	29°22	26°44	M 8	
T 9	17 12 6	18°39'46	17°50	27°58	13°56	2°17	29°56	20° 0	10°33	22° 3	29° 7	22°43	24°16	29°29	26°50	T 9	
W10	17 16 3	19°37'04	1 ^B 14	28°28	15°10	3° 1	0 ^S 9	19°55	10°37	22° 3	29° 9	22°45	24°13	29°36	26°56	W10	
T11	17 19 59	20°34'21	14°56	29° 1	16°23	3°45	0°23	19°51	10°40	22° 4	29°10	22°R46	24°10	29°43	27° 2	T11	
F12	17 23 56	21°31'38	28°55	29°39	17°37	4°29	0°36	19°47	10°44	22° 4	29°11	22°46	24° 7	29°49	27° 7	F12	
S13	17 27 52	22°28'53	13 ^A 11	0 ^{II} 21	18°51	5°13	0°50	19°42	10°47	22° 4	29°13	22°44	24° 4	29°56	27°13	S13	
S14	17 31 49	23°26'07	27°41	1° 8	20° 4	5°56	1° 3	19°38	10°51	22° 5	29°14	22°42	24° 1	0 ^B 3	27°19	S14	
M15	17 35 45	24°23'21	12 ^B 23	1°58	21°18	6°40	1°17	19°33	10°54	22° 5	29°16	22°38	23°57	0° 9	27°25	M15	
T16	17 39 42	25°20'34	27° 8	2°52	22°32	7°24	1°31	19°29	10°57	22° 5	29°17	22°35	23°54	0°16	27°31	T16	
W17	17 43 39	26°17'47	11 ^A 51	3°50	23°45	8° 8	1°44	19°25	11° 1	22° 6	29°19	22°31	23°51	0°23	27°37	W17	
T18	17 47 35	27°14'59	26°23	4°52	24°59	8°51	1°58	19°20	11° 4	22° 6	29°20	22°28	23°48	0°30	27°43	T18	
F19	17 51 32	28°12'11	10 ^S 39	5°58	26°13	9°35	2°11	19°16	11° 8	22° 6	29°22	22°27	23°45	0°36	27°49	F19	
S20	17 55 28	29° 9'23	24°34	7° 8	27°26	10°18	2°25	19°12	11°11	22° 6	29°23	22°D26	23°42	0°43	27°54	S20	
S21	17 59 25	0 ^S 6'34	8 ^A 6	8°21	28°40	11° 2	2°39	19° 7	11°15	22° 6	29°25	22°27	23°38	0°50	28° 0	S21	
M22	18 3 21	1° 3'46	21°13	9°38	29°54	11°45	2°52	19° 3	11°18	22° 6	29°26	22°28	23°35	0°57	28° 6	M22	
T23	18 7 18	2° 0'57	3 ^B 59	10°59	1°S 7	12°28	3° 6	18°59	11°21	22° 6	29°28	22°30	23°32	1° 3	28°12	T23	
W24	18 11 14	2°58'08	16°26	12°23	2°21	13°11	3°20	18°54	11°25	22°R 6	29°29	22°31	23°29	1°10	28°18	W24	
T25	18 15 11	3°55'19	28°37	13°51	3°35	13°54	3°33	18°50	11°28	22° 6	29°31	22°R32	23°26	1°17	28°24	T25	
F26	18 19 8	4°52'31	10°V37	15°22	4°48	14°38	3°47	18°46	11°31	22° 6	29°32	22°32	23°22	1°23	28°30	F26	
S27	18 23 4	5°49'43	22°32	16°57	6° 2	15°21	4° 1	18°42	11°35	22° 6	29°34	22°31	23°19	1°30	28°36	S27	
S28	18 27 1	6°46'54	4 ^B 24	18°35	7°16	16° 3	4°14	18°38	11°38	22° 6	29°35	22°30	23°16	1°37	28°42	S28	
M29	18 30 57	7°44'07	16°20	20°17	8°30	16°46	4°28	18°34	11°41	22° 6	29°37	22°28	23°13	1°44	28°48	M29	
T30	18 34 54	8°S41'19	28 ^B 21	22 ^{II} 1	9°S43	17 ^B 29	4°S41	18 ^A 30	11 ^{II} 45	22 ^R 6	29°S39	22°S26	23°S10	1°B50	28°II53	T30	

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	22n 8	18n54	4n58	15n45	3s49	20n32	0s29	9n12	1s 3	23n21	0s 7	21s42	1n27	21n58	0s 2	4s17	1s11
T 2	22 16	22 10	4 35	15 38	3 55	20 48	0 26	9 29	1 3	23 22	0 7	21 42	1 27	21 59	0 2	4 17	1 11
W 3	22 23	24 31	4 0	15 33	4 0	21 3	0 24	9 45	1 2	23 22	0 7	21 41	1 27	21 59	0 2	4 17	1 11
T 4	22 30	25 45	3 14	15 30	4 3	21 17	0 22	10 1	1 2	23 22	0 6	21 41	1 27	22 0	0 2	4 16	1 11
F 5	22 37	25 43	2 17	15 29	4 5	21 31	0 19	10 18	1 2	23 22	0 6	21 41	1 27	22 0	0 2	4 16	1 11
S 6	22 43	24 23	1 13	15 31	4 7	21 45	0 17	10 34	1 1	23 22	0 6	21 41	1 27	22 1	0 2	4 16	1 12
S 7	22 49	21 48	0 5	15 34	4 7	21 57	0 15	10 49	1 1	23 23	0 6	21 40	1 27	22 1	0 2	4 16	1 12
M 8	22 55	18 4	1s 5	15 40	4 6	22 9	0 12	11 5	1 0	23 23	0 6	21 40	1 27	22 2	0 2	4 16	1 12
T 9	23 0	13 24	2 13	15 47	4 4	22 21	0 10	11 21	1 0	23 23	0 6	21 40	1 26	22 2	0 2	4 16	1 12
W10	23 4	8 1	3 15	15 56	4 1	22 32	0 7	11 36	0 59	23 23	0 6	21 40	1 26	22 3	0 2	4 15	1 12
T11	23 9	2 9	4 7	16 7	3 57	22 42	0 5	11 52	0 59	23 23	0 6	21 39	1 26	22 3	0 2	4 15	1 12
F12	23 13	3s56	4 46	16 20	3 52	22 51	0 3	12 7	0 58	23 23	0 6	21 39	1 26	22 4	0 2	4 15	1 12
S13	23 16	9 56	5 8	16 34	3 47	23 0	0 0	12 22	0 58	23 23	0 6	21 39	1 26	22 4	0 2	4 15	1 12
S14	23 19	15 30	5 11	16 49	3 40	23 9	0n 2	12 37	0 57	23 23	0 5	21 39	1 26	22 5	0 2	4 15	1 12
M15	23 22	20 15	4 54	17 6	3 33	23 16	0 4	12 52	0 57	23 23	0 5	21 38	1 26	22 5	0 2	4 15	1 12
T16	23 24	23 44	4 18	17 24	3 26	23 23	0 7	13 7	0 56	23 23	0 5	21 38	1 26	22 6	0 2	4 15	1 12
W17	23 26	25 37	3 24	17 43	3 17	23 29	0 9	13 22	0 56	23 23	0 5	21 38	1 26	22 6	0 2	4 15	1 12
T18	23 27	25 44	2 18	18 3	3 8	23 35	0 12	13 36	0 55	23 23	0 5	21 38	1 26	22 7	0 2	4 15	1 12
F19	23 28	24 7	1 4	18 24	2 59	23 39	0 14	13 50	0 55	23 23	0 5	21 37	1 26	22 7	0 2	4 15	1 12
S20	23 29	21 3	0n12	18 46	2 49	23 44	0 16	14 5	0 54	23 23	0 5	21 37	1 26	22 8	0 2	4 15	1 12
S21	23 29	16 54	1 25	19 8	2 39	23 47	0 19	14 19	0 54	23 22	0 5	21 37	1 25	22 8	0 2	4 15	1 12
M22	23 29	12 3	2 32	19 30	2 28	23 50	0 21	14 33	0 53	23 22	0 5	21 37	1 25	22 9	0 2	4 15	1 12
T23	23 28	6 49	3 29	19 52	2 17	23 52	0 23	14 46	0 53	23 22	0 5	21 36	1 25	22 9	0 2	4 15	1 12
W24	23 27	1 27	4 15	20 15	2 5	23 53	0 25	15 0	0 52	23 22	0 5	21 36	1 25	22 10	0 2	4 15	1 12
T25	23 25	3n51	4 48	20 38	1 53	23 54	0 28	15 13	0 51	23 22	0 4	21 36	1 25	22 10	0 2	4 15	1 12
F26	23 23	8 56	5 9	21 0	1 41	23 53	0 30	15 27	0 51	23 21	0 4	21 36	1 25	22 11	0 2	4 15	1 12
S27	23 21	13 39	5 15	21 22	1 29	23 53	0 32	15 40	0 50	23 21	0 4	21 35	1 25	22 11	0 2	4 15	1 13
S28	23 18	17 51	5 9	21 43	1 17	23 51	0 34	15 53	0 50	23 21	0 4	21 35	1 25	22 12	0 2	4 15	1 13
M29	23 15	21 21	4 49	22 3	1 4	23 49	0 37	16 6	0 49	23 20	0 4	21 35	1 24	22 12	0 2	4 15	1 13
T30	23n12	23n59	4n16	22n22	0s52	23n46	0n39	16n18	0s48	23n20	0s 4	21s35	1n24	22n12	0s 2	4s15	1s13

Julian Day Number = 2339567.5, Delta T = 16.87 sec

Ecliptic obliquity = 23°28'48", Nutation = 0°00'14", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°27'38", Lahiri = 19°34'39"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1693
geocentric

JULY 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	18 38 50	9 ⁵³ 38'32	10 ¹¹ 31	23 ¹¹ 49	10 ⁵⁵ 57	18 ⁸ 12	4 ⁵⁵ 55	18 ⁸ R26	11 ¹¹ 48	22 ² R 6	29 ⁵³ 40	22 ² R24	23 ³ 7	1 ⁸ 57	28 ¹¹ 59	W 1
T 2	18 42 47	10 ⁵³ 44	22 ⁵³	25 ⁴⁰	12 ¹¹	18 ⁵⁴	5 ⁹	18 ⁷ 22	11 ⁵¹	22 ¹¹ 5	29 ⁴²	22 ³ 22	23 ³ 3	2 ⁴	29 ⁵	T 2
F 3	18 46 43	11 ³² 57	5 ⁵⁸ 28	27 ³³	13 ²⁵	19 ³⁷	5 ²²	18 ¹⁸	11 ⁵⁴	22 ⁵	29 ⁴³	22 ²¹	23 ⁰	2 ¹⁰	29 ¹¹	F 3
S 4	18 50 40	12 ³⁰ 11	18 ¹⁷	29 ³⁰	14 ³⁹	20 ¹⁹	5 ³⁶	18 ¹⁴	11 ⁵⁷	22 ⁵	29 ⁴⁵	22 ² D21	22 ⁵⁷	2 ¹⁷	29 ¹⁷	S 4
S 5	18 54 37	13 ²⁷ 24	1 ¹⁰ 20	1 ⁵⁸ 28	15 ⁵²	21 ²	5 ⁴⁹	18 ¹⁰	12 ¹	22 ⁵	29 ⁴⁷	22 ²¹	22 ⁵⁴	2 ²⁴	29 ²³	S 5
M 6	18 58 33	14 ²⁴ 37	14 ³⁷	3 ²⁹	17 ⁶	21 ⁴⁴	6 ³	18 ⁶	12 ⁴	22 ⁴	29 ⁴⁸	22 ²¹	22 ⁵¹	2 ³¹	29 ²⁸	M 6
T 7	19 2 30	15 ²¹ 51	28 ⁷	5 ³²	18 ²⁰	22 ²⁶	6 ¹⁷	18 ³	12 ⁷	22 ⁴	29 ⁵⁰	22 ²²	22 ⁴⁸	2 ³⁷	29 ³⁴	T 7
W 8	19 6 26	16 ¹⁹ 04	11 ¹⁰ 50	7 ³⁷	19 ³⁴	23 ⁸	6 ³⁰	17 ⁵⁹	12 ¹⁰	22 ³	29 ⁵²	22 ²³	22 ⁴⁴	2 ⁴⁴	29 ⁴⁰	W 8
T 9	19 10 23	17 ¹⁶ 17	25 ⁴⁴	9 ⁴³	20 ⁴⁸	23 ⁵⁰	6 ⁴⁴	17 ⁵⁶	12 ¹³	22 ³	29 ⁵³	22 ²³	22 ⁴¹	2 ⁵¹	29 ⁴⁶	T 9
F 10	19 14 19	18 ¹³ 31	9 ⁴⁷	11 ⁵⁰	22 ²	24 ³²	6 ⁵⁷	17 ⁵²	12 ¹⁶	22 ²	29 ⁵⁵	22 ²³	22 ³⁸	2 ⁵⁸	29 ⁵¹	F 10
S 11	19 18 16	19 ¹⁰ 44	23 ⁵⁹	13 ⁵⁸	23 ¹⁵	25 ¹⁴	7 ¹¹	17 ⁴⁹	12 ¹⁹	22 ²	29 ⁵⁷	22 ² R23	22 ³⁵	3 ⁴	29 ⁵⁷	S 11
S 12	19 22 12	20 ⁷ 58	8 ¹¹ 17	16 ⁶	24 ²⁹	25 ⁵⁶	7 ²⁴	17 ⁴⁵	12 ²²	22 ¹	29 ⁵⁸	22 ²³	22 ³²	3 ¹¹	0 ⁵ 3	S 12
M13	19 26 9	21 ⁵ 12	22 ³⁷	18 ¹⁵	25 ⁴³	26 ³⁸	7 ³⁷	17 ⁴²	12 ²⁵	22 ¹	0 ¹⁰ 0	22 ²³	22 ²⁸	3 ¹⁸	0 ⁸	M13
T 14	19 30 6	22 ² 26	6 ¹⁷ 57	20 ²³	26 ⁵⁷	27 ²⁰	7 ⁵¹	17 ³⁹	12 ²⁸	22 ⁰	0 ²	22 ² D23	22 ²⁵	3 ²⁴	0 ¹⁴	T 14
W15	19 34 2	22 ⁵⁹ 40	21 ¹²	22 ³¹	28 ¹¹	28 ¹	8 ⁴	17 ³⁵	12 ³¹	22 ⁰	0 ⁴	22 ²³	22 ²²	3 ³¹	0 ²⁰	W15
T 16	19 37 59	23 ⁵⁶ 55	5 ³ 18	24 ³⁹	29 ²⁵	28 ⁴³	8 ¹⁸	17 ³²	12 ³⁴	21 ⁵⁹	0 ⁵	22 ²³	22 ¹⁹	3 ³⁸	0 ²⁵	T 16
F 17	19 41 55	24 ⁵⁴ 10	19 ¹²	26 ⁴⁵	0 ¹⁰ 39	29 ²⁴	8 ³¹	17 ²⁹	12 ³⁷	21 ⁵⁸	0 ⁷	22 ² R23	22 ¹⁶	3 ⁴⁵	0 ³¹	F 17
S 18	19 45 52	25 ⁵¹ 26	2 ¹⁰ 50	28 ⁵¹	1 ⁵³	0 ¹¹ 5	8 ⁴⁴	17 ²⁶	12 ³⁹	21 ⁵⁷	0 ⁹	22 ²³	22 ¹³	3 ⁵¹	0 ³⁷	S 18
S 19	19 49 48	26 ⁴⁸ 42	16 ¹⁰	0 ¹⁰ 56	3 ⁶	0 ⁴⁷	8 ⁵⁷	17 ²³	12 ⁴²	21 ⁵⁷	0 ¹⁰	22 ²³	22 ⁹	3 ⁵⁸	0 ⁴²	S 19
M20	19 53 45	27 ⁴⁵ 59	29 ¹²	2 ⁵⁹	4 ²⁰	1 ²⁸	9 ¹¹	17 ²⁰	12 ⁴⁵	21 ⁵⁶	0 ¹²	22 ²²	22 ⁶	4 ⁵	0 ⁴⁸	M20
T 21	19 57 42	28 ⁴³ 17	11 ¹¹ 55	5 ¹	5 ³⁴	2 ⁹	9 ²⁴	17 ¹⁸	12 ⁴⁸	21 ⁵⁵	0 ¹⁴	22 ²²	22 ³	4 ¹¹	0 ⁵³	T 21
W22	20 1 38	29 ⁴⁰ 35	24 ²¹	7 ¹	6 ⁴⁸	2 ⁵⁰	9 ³⁷	17 ¹⁵	12 ⁵⁰	21 ⁵⁴	0 ¹⁵	22 ²¹	22 ⁰	4 ¹⁸	0 ⁵⁹	W22
T 23	20 5 35	0 ¹⁰ 37'55	6 ¹⁰ 34	9 ¹	8 ²	3 ³¹	9 ⁵⁰	17 ¹²	12 ⁵³	21 ⁵³	0 ¹⁷	22 ²⁰	21 ⁵⁷	4 ²⁵	1 ⁴	T 23
F 24	20 9 31	1 ³⁵ 15	18 ³⁵	10 ⁵⁸	9 ¹⁶	4 ¹¹	10 ³	17 ¹⁰	12 ⁵⁶	21 ⁵²	0 ¹⁹	22 ¹⁹	21 ⁵⁴	4 ³²	1 ⁹	F 24
S 25	20 13 28	2 ³² 37	0 ⁸ 30	12 ⁵⁴	10 ³⁰	4 ⁵²	10 ¹⁶	17 ⁷	12 ⁵⁸	21 ⁵²	0 ²¹	22 ² D19	21 ⁵⁰	4 ³⁸	1 ¹⁵	S 25
S 26	20 17 24	3 ³⁰ 00	12 ²⁴	14 ⁴⁸	11 ⁴⁴	5 ³³	10 ³⁰	17 ⁵	13 ¹	21 ⁵¹	0 ²²	22 ¹⁹	21 ⁴⁷	4 ⁴⁵	1 ²⁰	S 26
M27	20 21 21	4 ²⁷ 23	24 ¹⁹	16 ⁴¹	12 ⁵⁸	6 ¹³	10 ⁴³	17 ³	13 ³	21 ⁵⁰	0 ²⁴	22 ²⁰	21 ⁴⁴	4 ⁵²	1 ²⁵	M27
T 28	20 25 17	5 ²⁴ 48	6 ¹¹ 22	18 ³²	14 ¹²	6 ⁵⁴	10 ⁵⁵	17 ¹	13 ⁶	21 ⁴⁹	0 ²⁶	22 ²¹	21 ⁴¹	4 ⁵⁹	1 ³¹	T 28
W29	20 29 14	6 ²² 15	18 ³⁷	20 ²²	15 ²⁶	7 ³⁴	11 ⁸	16 ⁵⁸	13 ⁸	21 ⁴⁸	0 ²⁷	22 ²²	21 ³⁸	5 ⁵	1 ³⁶	W29
T 30	20 33 11	7 ¹⁹ 42	1 ⁵⁸ 6	22 ⁹	16 ⁴⁰	8 ¹⁴	11 ²¹	16 ⁵⁶	13 ¹¹	21 ⁴⁷	0 ²⁹	22 ²³	21 ³⁴	5 ¹²	1 ⁴¹	T 30
F 31	20 37 7	8 ¹⁰ 17'11	13 ⁵⁸ 53	23 ¹⁰ 56	17 ¹⁰ 54	8 ¹¹ 54	11 ²³ 4	16 ¹⁷ 54	13 ¹¹ 13	21 ¹¹ 46	0 ¹⁰ 31	22 ²³ 24	21 ³ 31	5 ¹⁸ 19	1 ⁵⁸ 46	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	23n 8	25n33	3n31	22n41	0s40	23n42	0n41	16n31	0s48	23n19	0s 4	21s35	1n24	22n13	0s 2	4s15	1s13	24n20	4n10	21s37	21s30	16n56	17n47	5s42	
T 2	23 3	25 53	2 36	22 57	0 27	23 38	0 43	16 43	0 47	23 19	0 4	21 34	1 24	22 13	0 2	4 15	1 13	24 20	4 10	21 37	21 30	16 58	17 47	5 42	
F 3	22 59	24 54	1 32	23 12	0 15	23 33	0 45	16 55	0 46	23 19	0 4	21 34	1 24	22 14	0 2	4 16	1 13	24 19	4 10	21 37	21 31	17 1	17 47	5 42	
S 4	22 53	22 36	0 22	23 25	0 4	23 27	0 47	17 7	0 46	23 18	0 4	21 34	1 24	22 14	0 2	4 16	1 13	24 19	4 11	21 37	21 31	17 3	17 47	5 42	
S 5	22 48	19 6	0s50	23 36	0n 8	23 21	0 49	17 19	0 45	23 18	0 3	21 34	1 24	22 15	0 2	4 16	1 13	24 19	4 11	21 37	21 32	17 5	17 46	5 42	
M 6	22 42	14 34	2 0	23 45	0 19	23 13	0 51	17 31	0 44	23 17	0 3	21 34	1 24	22 15	0 2	4 16	1 13	24 18	4 11	21 37	21 32	17 7	17 46	5 43	
T 7	22 36	9 15	3 5	23 51	0 30	23 6	0 53	17 42	0 44	23 17	0 3	21 33	1 23	22 15	0 1	4 16	1 13	24 18	4 11	21 37	21 33	17 10	17 46	5 43	
W 8	22 29	3 25	4 1	23 55	0 40	22 57	0 55	17 54	0 43	23 16	0 3	21 33	1 23	22 16	0 1	4 17	1 13	24 18	4 11	21 37	21 34	17 12	17 46	5 43	
T 9	22 22	2s38	4 43	23 56	0 49	22 48	0 56	18 5	0 42	23 15	0 3	21 33	1 23	22 16	0 1	4 17	1 13	24 17	4 11	21 37	21 34	17 14	17 46	5 43	
F 10	22 14	8 37	5 9	23 55	0 58	22 38	0 58	18 16	0 42	23 15	0 3	21 33	1 23	22 17	0 1	4 17	1 13	24 17	4 11	21 37	21 35	17 16	17 45	5 43	
S 11	22 6	14 13	5 17	23 51	1 6	22 27	1 0	18 27	0 41	23 14	0 3	21 33	1 23	22 17	0 1	4 17	1 13	24 17	4 11	21 37	21 35	17 18	17 45	5 44	
S 12	21 58	19 5	5 5	23 44	1 14	22 16	1 2	18 37	0 40	23 14	0 3	21 33	1 23	22 18	0 1	4 17	1 13	24 16	4 11	21 37	21 36	17 20	17 45	5 44	
M13	21 49	22 52	4 34	23 34	1 21	22 4	1 3	18 48	0 40	23 13	0 3	21 32	1 23	22 18	0 1	4 18	1 13	24 16	4 11	21 37	21 36	17 23	17 45	5 44	
T 14	21 40	25 13	3 46	23 22	1 27	21 52	1 5	18 58	0 39	23 12	0 3	21 32	1 22	22 18	0 1	4 18	1 13	24 16	4 11	21 37	21 37	17 25	17 45	5 44	
W15	21 31	25 55	2 44	23 6	1 32	21 39	1 6	19 8	0 38	23 12	0 2	21 32	1 22	22 19	0 1	4 18	1 13	24 15	4 11	21 37	21 37	17 27	17 44	5 44	
T 16	21 21	24 56	1 33	22 49	1 36	21 25	1 8	19 18	0 37	23 11	0 2	21 32	1 22	22 19	0 1	4 19	1 13	24 15	4 11	21 37	21 38	17 29	17 44	5 45	
F 17	21 11	22 24	0 18	22 29	1 40	21 11	1 9	19 28	0 37	23 10	0 2	21 32	1 22	22 19	0 1	4 19	1 13	24 15	4 11	21 37	21 38	17 31	17 44	5 45	
S 18	21 1	18 37	0n58	22 6	1 43	20 56	1 11	19 37	0 36	23 9	0 2	21 32	1 22	22 20	0 1	4 19	1 14	24 15	4 11	21 37	21 39	17 34	17 43	5 45	
S 19	20 50	13 59	2 8	21 42	1 45	20 40	1 12	19 46	0 35	23 9	0 2	21 32	1 22	22 20	0 1	4 20	1 14	24 14	4 11	21 37	21 39	17 36	17 43	5 46	
M20	20 39	8 48	3 10	21 15	1 47	20 24	1 14	19 56	0 34	23 8	0 2	21 32	1 21	22 21	0 1	4 20	1 14	24 14	4 11	21 37	21 40	17 38	17 43	5 46	
T 21	20 27	3 23	4 1	20 47	1 48	20 7	1 15	20 5	0 34	23 7	0 2	21 31	1 21	22 21	0 1	4 20	1 14	24 14	4 11	21 37	21 40	17 40	17 43	5 46	
W22	20 15	2n 2	4 40	20 17	1 48	19 50	1 16	20 13	0 33	23 6	0 2	21 31	1 21	22 21	0 1	4 21	1 14	24 13	4 11	21 37	21 41	17 42	17 42	5 46	
T 23	20 3	7 16	5 5	19 45	1 47	19 32	1 17	20 22	0 32	23 5	0 2	21 31	1 21	22 22	0 1	4 21	1 14	24 13	4 12	21 38	21 41	17 44	17 42	5 47	
F 24	19 50	12 9	5 16	19 12	1 46	19 13	1 18	20 30	0 31	23 4	0 2	21 31	1 21	22 22	0 1	4 21	1 14	24 13	4 12	21 38	21 42	17 46	17 42	5 47	
S 25	19 38	16 33	5 13	18 38	1 44	18 54	1 19	20 39	0 31	23 3	0 2	21 31	1 21	22 22	0 1	4 22	1 14	24 12	4 12	21 38	21 42	17 48	17 41	5 47	
S 26	19 24	20 18	4 57	18 3	1 42	18 35	1 20	20 47	0 30	23 2	0 1	21 31	1 20	22 23	0 1	4 22	1 14	24 12	4 12	21 38	21 43	17 51	17 41	5 48	
M27	19 11	23 13	4 28	17 26	1 39	18 15	1 21	20 55	0 29	23 2	0 1	21 31	1 20	22 23	0 1	4 23	1 14	24 12	4 12	21 38	21 43	17 53	17 40	5 48	
T 28	18 57	25 9	3 48	16 49	1 35	17 54	1 22	21 2	0 28	23 1	0 1	21 31	1 20	22 23	0 1	4 23	1 14	24 11	4 12	21 37	21 44	17 55	17 40	5 48	
W29	18 43	25 55	2 56	16 10	1 32	17 33	1 23	21 10	0 27	23 0	0 1	21 31	1 20	22 24	0 1	4 24	1 14	24 11	4 12	21 37	21 44	17 57	17 40	5 49	
T 30	18 28	25 23	1 55	15 31	1 27	17 12	1 23	21 17	0 26	22 59	0 1	21 31	1 20	22 24	0 1	4 24	1 14	24 11	4 12	21 37	21 45	17 59	17 39	5 49	
F 31	18n13	23n32	0n47	14n52	1n22	16n50	1n24	21n24	0s26	22n58	0s 1	21s31	1n19	22n24	0s 1	4s24	1s14	24n11	4n12	21s37	21s45	18n 1	17n39	5s49	

ASTRODIENST EPHEMERIS for the year 1693
geocentric

AUGUST 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 41 4	9♏14'40	26♌58	25♏40	19♏8	9♏34	11♌47	16°R53	13♏15	21°R44	0♏32	22°R24	21♌28	5♌25	1♌51	S 1
S 2	20 45 0	10°12'11	10♏23	27°23	20°22	10°14	12° 0	16♌51	13°18	21♏43	0°34	22♌23	21°25	5°32	1°56	S 2
M 3	20 48 57	11° 9'43	24° 5	29° 5	21°36	10°54	12°12	16°49	13°20	21°42	0°36	22°22	21°22	5°39	2° 1	M 3
T 4	20 52 53	12° 7'15	8♏2	0♏45	22°50	11°34	12°25	16°47	13°22	21°41	0°38	22°19	21°19	5°46	2° 7	T 4
W 5	20 56 50	13° 4'49	22°11	2°23	24° 4	12°14	12°38	16°46	13°24	21°40	0°39	22°17	21°15	5°52	2°11	W 5
T 6	21 0 46	14° 2'23	6♌27	4° 0	25°18	12°53	12°50	16°45	13°26	21°39	0°41	22°14	21°12	5°59	2°16	T 6
F 7	21 4 43	14°59'59	20°46	5°35	26°32	13°33	13° 3	16°43	13°28	21°37	0°43	22°12	21° 9	6° 6	2°21	F 7
S 8	21 8 40	15°57'35	5♏4	7° 9	27°46	14°12	13°15	16°42	13°31	21°36	0°44	22°10	21° 6	6°12	2°26	S 8
S 9	21 12 36	16°55'13	19°18	8°41	29° 0	14°51	13°28	16°41	13°33	21°35	0°46	22°D10	21° 3	6°19	2°31	S 9
M10	21 16 33	17°52'51	3♌25	10°11	0♏14	15°30	13°40	16°40	13°35	21°34	0°47	22°11	21° 0	6°26	2°36	M10
T 11	21 20 29	18°50'31	17°25	11°40	1°28	16° 9	13°52	16°39	13°36	21°32	0°49	22°12	20°56	6°33	2°40	T 11
W12	21 24 26	19°48'11	1♌14	13° 8	2°42	16°48	14° 4	16°38	13°38	21°31	0°51	22°13	20°53	6°39	2°45	W12
T 13	21 28 22	20°45'53	14°54	14°34	3°56	17°27	14°17	16°37	13°40	21°30	0°52	22°14	20°50	6°46	2°50	T 13
F 14	21 32 19	21°43'35	28°22	15°58	5°10	18° 6	14°29	16°37	13°42	21°28	0°54	22°R14	20°47	6°53	2°54	F 14
S 15	21 36 15	22°41'19	11♌38	17°20	6°24	18°44	14°41	16°36	13°44	21°27	0°56	22°13	20°44	6°59	2°59	S 15
S 16	21 40 12	23°39'04	24°40	18°41	7°38	19°23	14°53	16°36	13°45	21°25	0°57	22°10	20°40	7° 6	3° 3	S 16
M17	21 44 9	24°36'51	7♌28	20° 0	8°52	20° 1	15° 5	16°35	13°47	21°24	0°59	22° 6	20°37	7°13	3° 8	M17
T 18	21 48 5	25°34'39	20° 3	21°18	10° 6	20°39	15°16	16°35	13°49	21°22	1° 0	22° 0	20°34	7°20	3°12	T 18
W19	21 52 2	26°32'28	2♏24	22°33	11°20	21°17	15°28	16°35	13°50	21°21	1° 2	21°54	20°31	7°26	3°16	W19
T 20	21 55 58	27°30'20	14°33	23°47	12°34	21°55	15°40	16°D35	13°52	21°20	1° 4	21°49	20°28	7°33	3°20	T 20
F 21	21 59 55	28°28'13	26°33	24°59	13°48	22°33	15°52	16°35	13°53	21°18	1° 5	21°44	20°25	7°40	3°25	F 21
S 22	22 3 51	29°26'08	8♌27	26° 8	15° 2	23°11	16° 3	16°35	13°55	21°17	1° 7	21°40	20°21	7°46	3°29	S 22
S 23	22 7 48	0♏24'04	20°19	27°16	16°16	23°49	16°15	16°35	13°56	21°15	1° 8	21°38	20°18	7°53	3°33	S 23
M24	22 11 44	1°22'03	2♏14	28°21	17°30	24°26	16°26	16°35	13°58	21°14	1°10	21°D37	20°15	8° 0	3°37	M24
T 25	22 15 41	2°20'03	14°15	29°24	18°44	25° 4	16°37	16°36	13°59	21°12	1°11	21°38	20°12	8° 7	3°41	T 25
W26	22 19 38	3°18'05	26°30	0♏25	19°58	25°41	16°49	16°36	14° 0	21°10	1°13	21°39	20° 9	8°13	3°45	W26
T 27	22 23 34	4°16'10	9♌0	1°23	21°12	26°18	17° 0	16°37	14° 1	21° 9	1°14	21°41	20° 6	8°20	3°48	T 27
F 28	22 27 31	5°14'16	21°52	2°18	22°26	26°55	17°11	16°37	14° 2	21° 7	1°16	21°R41	20° 2	8°27	3°52	F 28
S 29	22 31 27	6°12'24	5♏8	3°11	23°40	27°32	17°22	16°38	14° 4	21° 6	1°17	21°40	19°59	8°34	3°56	S 29
S 30	22 35 24	7°10'34	18°48	4° 0	24°54	28° 9	17°33	16°39	14° 5	21° 4	1°19	21°37	19°56	8°40	4° 0	S 30
M31	22 39 20	8♏8'45	2♏52	4♌46	26♏8	28♏45	17♌44	16♌40	14♏6	21♏3	1♏20	21♌33	19♌53	8♌47	4♌3	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	decl	lat
S 1	17n58	20n23	0s25	14n12	1n17	16n27	1n25	21n31	0s25	22n57	0s 1	21s31	1n19	22n24	0s 1	4s25	1s14	24n10	4n12	21s37	21s46	18n 3	17n38	5s50			
S 2	17 43	16 6	1 38	13 31	1 11	16 4	1 25	21 38	0 24	22 56	0 1	21 31	1 19	22 25	0 1	4 25	1 14	24 10	4 12	21 37	21 46	18 5	17 38	5 50			
M 3	17 27	10 55	2 46	12 50	1 5	15 41	1 26	21 44	0 23	22 54	0 1	21 31	1 19	22 25	0 1	4 26	1 14	24 10	4 12	21 37	21 47	18 7	17 38	5 50			
T 4	17 11	5 5	3 45	12 9	0 59	15 17	1 26	21 51	0 22	22 53	0 1	21 31	1 19	22 25	0 1	4 26	1 14	24 9	4 12	21 38	21 47	18 9	17 37	5 51			
W 5	16 55	1s 4	4 32	11 28	0 52	14 53	1 26	21 57	0 21	22 52	0 0	21 31	1 19	22 26	0 1	4 27	1 14	24 9	4 13	21 38	21 48	18 12	17 37	5 51			
T 6	16 39	7 11	5 2	10 46	0 46	14 28	1 27	22 3	0 20	22 51	0 0	21 31	1 18	22 26	0 1	4 27	1 14	24 9	4 13	21 39	21 48	18 14	17 36	5 52			
F 7	16 22	12 58	5 14	10 4	0 38	14 3	1 27	22 8	0 20	22 50	0 0	21 31	1 18	22 26	0 1	4 28	1 14	24 9	4 13	21 39	21 49	18 16	17 36	5 52			
S 8	16 5	18 2	5 6	9 23	0 31	13 38	1 27	22 14	0 19	22 49	0 0	21 31	1 18	22 26	0 1	4 28	1 14	24 8	4 13	21 39	21 49	18 18	17 35	5 52			
S 9	15 47	22 4	4 40	8 41	0 23	13 12	1 27	22 19	0 18	22 48	0 0	21 31	1 18	22 27	0 1	4 29	1 14	24 8	4 13	21 39	21 50	18 20	17 35	5 53			
M10	15 30	24 44	3 56	7 59	0 15	12 46	1 27	22 25	0 17	22 47	0n 0	21 31	1 18	22 27	0 1	4 30	1 14	24 8	4 13	21 39	21 50	18 22	17 34	5 53			
T 11	15 12	25 52	2 59	7 18	0 7	12 20	1 27	22 30	0 16	22 46	0 0	21 32	1 17	22 27	0 1	4 30	1 14	24 7	4 13	21 39	21 51	18 24	17 34	5 54			
W12	14 54	25 21	1 53	6 37	0s 2	11 53	1 27	22 35	0 15	22 44	0 0	21 32	1 17	22 27	0 1	4 31	1 14	24 7	4 13	21 39	21 51	18 26	17 33	5 54			
T 13	14 36	23 19	0 40	5 56	0 10	11 26	1 27	22 39	0 14	22 43	0 0	21 32	1 17	22 28	0 1	4 31	1 14	24 7	4 13	21 38	21 52	18 28	17 33	5 54			
F 14	14 17	19 59	0n33	5 15	0 19	10 59	1 27	22 44	0 13	22 42	0 0	21 32	1 17	22 28	0 1	4 32	1 15	24 7	4 13	21 38	21 52	18 30	17 32	5 55			
S 15	13 59	15 40	1 44	4 35	0 28	10 31	1 26	22 48	0 12	22 41	0 1	21 32	1 17	22 28	0 1	4 32	1 15	24 6	4 14	21 39	21 53	18 32	17 32	5 55			
S 16	13 40	10 41	2 48	3 55	0 37	10 3	1 26	22 52	0 11	22 40	0 1	21 32	1 16	22 28	0 1	4 33	1 15	24 6	4 14	21 39	21 53	18 34	17 31	5 56			
M17	13 20	5 21	3 42	3 16	0 46	9 35	1 25	22 56	0 10	22 38	0 1	21 32	1 16	22 28	0 1	4 34	1 15	24 6	4 14	21 40	21 54	18 36	17 31	5 56			
T 18	13 1	0n 6	4 24	2 37	0 55	9 6	1 25	23 0	0 9	22 37	0 1	21 32	1 16	22 29	0 1	4 34	1 15	24 6	4 14	21 41	21 54	18 38	17 30	5 57			
W19	12 41	5 26	4 53	1 58	1 5	8 38	1 24	23 3	0 8	22 36	0 1	21 33	1 16	22 29	0 1	4 35	1 15	24 5	4 14	21 42	21 55	18 40	17 29	5 57			
T 20	12 22	10 28	5 8	1 20	1 14	8 9	1 24	23 7	0 7	22 35	0 1	21 33	1 16	22 29	0 1	4 35	1 15	24 5	4 14	21 43	21 55	18 42	17 29	5 58			
F 21	12 2	15 4	5 9	0 43	1 24	7 39	1 23	23 10	0 6	22 33	0 1	21 33	1 15	22 29	0 1	4 36	1 15	24 5	4 14	21 43	21 56	18 44	17 28	5 58			
S 22	11 41	19 2	4 57	0 7	1 33	7 10	1 22	23 13	0 5	22 32	0 1	21 33	1 15	22 29	0 1	4 37	1 15	24 5	4 14	21 44	21 56	18 46	17 28	5 59			
S 23	11 21	22 14	4 33	0s29	1 43	6 40	1 21	23 16	0 4	22 31	0 1	21 33	1 15	22 30	0 1	4 37	1 15	24 5	4 14	21 44	21 57	18 48	17 27	5 59			
M24	11 0	24 30	3 56	1 3	1 52	6 11	1 20	23 18	0 3	22 30	0 2	21 34	1 15	22 30	0 1	4 38	1 15	24 4	4 15	21 44	21 57	18 50	17 26	5 59			
T 25	10 40	25 41	3 9	1 37	2 1	5 41	1 19	23 21	0 2	22 28	0 2	21 34	1 15	22 30	0 1	4 38	1 15	24 4	4 15	21 44	21 57	18 52	17 26	6 0			
W26	10 19	25 38	2 12	2 10	2 11	5 11	1 18	23 23	0 1	22 27	0 2	21 34	1 15	22 30	0 1	4 39	1 15	24 4	4 15	21 44	21 58	18 54	17 25	6 0			
T 27	9 58	24 18	1 8	2 42	2 20	4 41	1 17	23 25	0 0	22 26	0 2	21 34	1 14	22 30	0 1	4 40	1 15	24 4	4 15	21 44	21 58	18 56	17 25	6 1			
F 28	9 36	21 41	0s 1	3 12	2 29	4 10	1 16	23 27	0n 1	22 24	0 2	21 35	1 14	22 30	0 1	4 40	1 15	24 3	4 15	21 44	21 59	18 58	17 24	6 2			
S 29	9 15	17 51	1 12	3 41	2 39	3 40	1 15	23 29	0 2	22 23	0 2	21 35	1 14	22 31	0 1	4 41	1 15	24 3	4 15	21 44	21 59	19 0	17 23	6 2			
S 30	8 53	12 59	2 21	4 9	2 48	3 9	1 13	23 31	0 3	22 22	0 2	21 35	1 14	22 31	0 1	4 42	1 15	24 3	4 15	21 44	22 0	19 2	17 23	6 3			
M31	8n32	7n19	3s23	4s36	2s56	2n38	1n12	23n32	0n 4	22n20	0n 2	21s35	1n14	22n31	0s 1	4s42	1s15	24n 3	4n16	21s45	22s 0	19n 3	17n22	6s 3			

ASTRODIENST EPHEMERIS for the year 1693
geocentric

SEPTEMBER 1693 GC

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Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 43 17	9 ^h 6'59	17 ^h 15	5 ^h 29	27 ^h 22	29 ^h 22	17 ^h 54	16 ^h 41	14 ^h 7	21 ^h 1	1 ^h 21	21 ^h 26	19 ^h 50	8 ^h 54	4 ^h 7	T 1
W 2	22 47 13	10 ^h 5'14	1 ^h 51	6 ^h 7	28 ^h 36	29 ^h 58	18 ^h 5	16 ^h 42	14 ^h 7	20 ^h 59	1 ^h 23	21 ^h 31	19 ^h 46	9 ^h 0	4 ^h 10	W 2
T 3	22 51 10	11 ^h 3'30	16 ^h 35	6 ^h 42	29 ^h 50	0 ^h 34	18 ^h 16	16 ^h 43	14 ^h 8	20 ^h 58	1 ^h 24	21 ^h 11	19 ^h 43	9 ^h 7	4 ^h 14	T 3
F 4	22 55 6	12 ^h 1'49	1 ^h 16	7 ^h 12	1 ^h 4	1 ^h 11	18 ^h 26	16 ^h 45	14 ^h 9	20 ^h 56	1 ^h 26	21 ^h 4	19 ^h 40	9 ^h 14	4 ^h 17	F 4
S 5	22 59 3	13 ^h 0'09	15 ^h 50	7 ^h 38	2 ^h 18	1 ^h 46	18 ^h 36	16 ^h 46	14 ^h 10	20 ^h 54	1 ^h 27	21 ^h 0	19 ^h 37	9 ^h 21	4 ^h 20	S 5
S 6	23 3 0	13 ^h 58'30	0 ^h 11	7 ^h 59	3 ^h 32	2 ^h 22	18 ^h 47	16 ^h 48	14 ^h 11	20 ^h 53	1 ^h 28	20 ^h 57	19 ^h 34	9 ^h 27	4 ^h 23	S 6
M 7	23 6 56	14 ^h 56'53	14 ^h 17	8 ^h 15	4 ^h 46	2 ^h 58	18 ^h 57	16 ^h 49	14 ^h 11	20 ^h 51	1 ^h 30	20 ^h 56	19 ^h 31	9 ^h 34	4 ^h 26	M 7
T 8	23 10 53	15 ^h 55'18	28 ^h 6	8 ^h 24	6 ^h 0	3 ^h 33	19 ^h 7	16 ^h 51	14 ^h 12	20 ^h 49	1 ^h 31	20 ^h 56	19 ^h 27	9 ^h 41	4 ^h 29	T 8
W 9	23 14 49	16 ^h 53'44	11 ^h 30	8 ^h 28	7 ^h 14	4 ^h 9	19 ^h 17	16 ^h 53	14 ^h 12	20 ^h 48	1 ^h 32	20 ^h 57	19 ^h 24	9 ^h 47	4 ^h 32	W 9
T 10	23 18 46	17 ^h 52'12	24 ^h 59	8 ^h 26	8 ^h 28	4 ^h 44	19 ^h 27	16 ^h 55	14 ^h 13	20 ^h 46	1 ^h 33	20 ^h 57	19 ^h 21	9 ^h 54	4 ^h 35	T 10
F 11	23 22 42	18 ^h 50'42	8 ^h 4	8 ^h 17	9 ^h 42	5 ^h 19	19 ^h 36	16 ^h 57	14 ^h 13	20 ^h 44	1 ^h 35	20 ^h 56	19 ^h 18	10 ^h 1	4 ^h 38	F 11
S 12	23 26 39	19 ^h 49'13	20 ^h 58	8 ^h 2	10 ^h 56	5 ^h 54	19 ^h 46	16 ^h 59	14 ^h 14	20 ^h 43	1 ^h 36	20 ^h 52	19 ^h 15	10 ^h 8	4 ^h 41	S 12
S 13	23 30 36	20 ^h 47'46	3 ^h 41	7 ^h 39	12 ^h 10	6 ^h 28	19 ^h 56	17 ^h 1	14 ^h 14	20 ^h 41	1 ^h 37	20 ^h 46	19 ^h 12	10 ^h 14	4 ^h 44	S 13
M14	23 34 32	21 ^h 46'20	16 ^h 13	7 ^h 10	13 ^h 24	7 ^h 3	20 ^h 5	17 ^h 4	14 ^h 14	20 ^h 40	1 ^h 38	20 ^h 37	19 ^h 8	10 ^h 21	4 ^h 46	M14
T 15	23 38 29	22 ^h 44'57	28 ^h 35	6 ^h 33	14 ^h 38	7 ^h 37	20 ^h 14	17 ^h 6	14 ^h 15	20 ^h 38	1 ^h 39	20 ^h 26	19 ^h 5	10 ^h 28	4 ^h 49	T 15
W16	23 42 25	23 ^h 43'36	10 ^h 47	5 ^h 50	15 ^h 52	8 ^h 11	20 ^h 24	17 ^h 9	14 ^h 15	20 ^h 36	1 ^h 41	20 ^h 15	19 ^h 2	10 ^h 34	4 ^h 51	W16
T 17	23 46 22	24 ^h 42'16	22 ^h 51	5 ^h 1	17 ^h 6	8 ^h 46	20 ^h 33	17 ^h 11	14 ^h 15	20 ^h 35	1 ^h 42	20 ^h 3	18 ^h 59	10 ^h 41	4 ^h 53	T 17
F 18	23 50 18	25 ^h 40'59	4 ^h 8	4 ^h 5	18 ^h 20	9 ^h 19	20 ^h 42	17 ^h 14	14 ^h 15	20 ^h 33	1 ^h 43	19 ^h 52	18 ^h 56	10 ^h 48	4 ^h 56	F 18
S 19	23 54 15	26 ^h 39'44	16 ^h 39	3 ^h 5	19 ^h 34	9 ^h 53	20 ^h 51	17 ^h 17	14 ^h 15	20 ^h 31	1 ^h 44	19 ^h 43	18 ^h 52	10 ^h 54	4 ^h 58	S 19
S 20	23 58 11	27 ^h 38'31	28 ^h 29	2 ^h 2	20 ^h 47	10 ^h 27	20 ^h 59	17 ^h 19	14 ^h 15	20 ^h 30	1 ^h 45	19 ^h 37	18 ^h 49	11 ^h 1	5 ^h 0	S 20
M21	0 2 8	28 ^h 37'21	10 ^h 21	0 ^h 56	22 ^h 1	11 ^h 0	21 ^h 8	17 ^h 22	14 ^h 15	20 ^h 28	1 ^h 46	19 ^h 33	18 ^h 46	11 ^h 8	5 ^h 2	M21
T 22	0 6 4	29 ^h 36'13	22 ^h 20	29 ^h 49	23 ^h 15	11 ^h 33	21 ^h 16	17 ^h 25	14 ^h 15	20 ^h 26	1 ^h 47	19 ^h 31	18 ^h 43	11 ^h 15	5 ^h 4	T 22
W23	0 10 1	0 ^h 35'07	4 ^h 31	28 ^h 43	24 ^h 29	12 ^h 6	21 ^h 25	17 ^h 28	14 ^h 15	20 ^h 25	1 ^h 48	19 ^h 31	18 ^h 40	11 ^h 21	5 ^h 6	W23
T 24	0 13 58	1 ^h 34'03	16 ^h 59	27 ^h 40	25 ^h 43	12 ^h 39	21 ^h 33	17 ^h 32	14 ^h 14	20 ^h 23	1 ^h 49	19 ^h 31	18 ^h 37	11 ^h 28	5 ^h 8	T 24
F 25	0 17 54	2 ^h 33'02	29 ^h 49	26 ^h 40	26 ^h 57	13 ^h 12	21 ^h 41	17 ^h 35	14 ^h 14	20 ^h 21	1 ^h 50	19 ^h 31	18 ^h 33	11 ^h 35	5 ^h 10	F 25
S 26	0 21 51	3 ^h 32'03	13 ^h 5	25 ^h 47	28 ^h 11	13 ^h 44	21 ^h 49	17 ^h 38	14 ^h 14	20 ^h 20	1 ^h 51	19 ^h 29	18 ^h 30	11 ^h 41	5 ^h 11	S 26
S 27	0 25 47	4 ^h 31'06	26 ^h 49	25 ^h 2	29 ^h 25	14 ^h 16	21 ^h 57	17 ^h 42	14 ^h 13	20 ^h 18	1 ^h 52	19 ^h 24	18 ^h 27	11 ^h 48	5 ^h 13	S 27
M28	0 29 44	5 ^h 30'11	11 ^h 3	24 ^h 25	0 ^h 38	14 ^h 48	22 ^h 5	17 ^h 45	14 ^h 13	20 ^h 17	1 ^h 53	19 ^h 17	18 ^h 24	11 ^h 55	5 ^h 14	M28
T 29	0 33 40	6 ^h 29'19	25 ^h 41	23 ^h 57	1 ^h 52	15 ^h 20	22 ^h 12	17 ^h 49	14 ^h 12	20 ^h 15	1 ^h 54	19 ^h 8	18 ^h 21	12 ^h 2	5 ^h 16	T 29
W30	0 37 37	7 ^h 28'28	10 ^h 38	23 ^h 40	3 ^h 6	15 ^h 52	22 ^h 20	17 ^h 53	14 ^h 12	20 ^h 13	1 ^h 55	18 ^h 57	18 ^h 17	12 ^h 8	5 ^h 17	W30

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	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
T 1	8n10	1n 9	4s14	5s 0	3s 5	2n 8	1n11	23n34	0n 5	22n19	0n 2	21s36	1n13	22n31	0s 1	4s43	1s15	24n 3	4n16	21s46	22s 1	19n 5	17n22	6s 4					
W 2	7 48	5s10	4 49	5 23	3 13	1 37	1 9	23 35	0 6	22 18	0 2	21 36	1 13	22 31	0 1	4 44	1 15	24 2	4 16	21 47	22 1	19 7	17 21	6 4					
T 3	7 26	11 13	5 6	5 44	3 21	1 6	1 8	23 36	0 7	22 17	0 3	21 36	1 13	22 31	0 1	4 44	1 15	24 2	4 16	21 49	22 2	19 9	17 20	6 5					
F 4	7 4	16 39	5 2	6 3	3 28	0 35	1 6	23 37	0 8	22 15	0 3	21 37	1 13	22 31	0 1	4 45	1 15	24 2	4 16	21 50	22 2	19 11	17 20	6 5					
S 5	6 41	21 3	4 38	6 20	3 35	0 4	1 4	23 38	0 9	22 14	0 3	21 37	1 13	22 31	0 1	4 46	1 15	24 2	4 16	21 50	22 3	19 13	17 19	6 6					
S 6	6 19	24 6	3 58	6 34	3 42	0s27	1 3	23 38	0 11	22 13	0 3	21 37	1 12	22 31	0 1	4 46	1 15	24 2	4 16	21 51	22 3	19 15	17 18	6 6					
M 7	5 56	25 35	3 4	6 45	3 47	0 58	1 1	23 38	0 12	22 11	0 3	21 38	1 12	22 32	0 1	4 47	1 15	24 2	4 16	21 51	22 4	19 17	17 18	6 7					
T 8	5 34	25 27	1 59	6 54	3 52	1 29	0 59	23 39	0 13	22 10	0 3	21 38	1 12	22 32	0 1	4 48	1 15	24 1	4 17	21 51	22 4	19 19	17 17	6 7					
W 9	5 11	23 47	0 50	6 59	3 56	2 0	0 57	23 39	0 14	22 9	0 3	21 38	1 12	22 32	0 1	4 48	1 15	24 1	4 17	21 51	22 4	19 21	17 16	6 8					
T 10	4 48	20 49	0n22	7 1	4 0	2 31	0 55	23 39	0 15	22 7	0 3	21 39	1 12	22 32	0 1	4 49	1 15	24 1	4 17	21 51	22 5	19 22	17 16	6 8					
F 11	4 25	16 50	1 30	7 0	4 2	3 2	0 53	23 39	0 16	22 6	0 3	21 39	1 11	22 32	0 1	4 50	1 15	24 1	4 17	21 51	22 5	19 24	17 15	6 9					
S 12	4 2	12 7	2 33	6 54	4 3	3 33	0 51	23 38	0 17	22 5	0 4	21 40	1 11	22 32	0 1	4 50	1 15	24 1	4 17	21 51	22 6	19 26	17 14	6 10					
S 13	3 39	6 57	3 27	6 45	4 2	4 4	0 49	23 38	0 19	22 4	0 4	21 40	1 11	22 32	0 1	4 51	1 15	24 1	4 17	21 52	22 6	19 28	17 14	6 10					
M14	3 16	1 36	4 10	6 32	4 1	4 35	0 47	23 37	0 20	22 2	0 4	21 40	1 11	22 32	0 1	4 52	1 15	24 1	4 18	21 54	22 7	19 30	17 13	6 11					
T 15	2 53	3n44	4 41	6 14	3 57	5 5	0 45	23 37	0 21	22 1	0 4	21 41	1 11	22 32	0 1	4 52	1 15	24 1	4 18	21 55	22 7	19 32	17 12	6 12					
W16	2 30	8 51	4 58	5 52	3 52	5 36	0 43	23 36	0 22	22 0	0 4	21 41	1 11	22 32	0 1	4 53	1 15	24 0	4 18	21 57	22 8	19 34	17 12	6 12					
T 17	2 6	13 34	5 2	5 26	3 45	6 6	0 40	23 35	0 24	21 58	0 4	21 42	1 10	22 32	0 1	4 53	1 15	24 0	4 18	21 59	22 8	19 35	17 11	6 13					
F 18	1 43	17 43	4 52	4 56	3 36	6 37	0 38	23 34	0 25	21 57	0 4	21 42	1 10	22 32	0 1	4 54	1 15	24 0	4 18	22 0	22 8	19 37	17 10	6 13					
S 19	1 20	21 9	4 30	4 22	3 25	7 7	0 36	23 33	0 26	21 56	0 4	21 43	1 10	22 32	0 1	4 55	1 15	24 0	4 18	22 2	22 9	19 39	17 10	6 14					
S 20	0 56	23 42	3 56	3 44	3 12	7 37	0 33	23 31	0 27	21 55	0 5	21 43	1 10	22 32	0 1	4 55	1 15	24 0	4 19	22 3	22 9	19 41	17 9	6 15					
M21	0 33	25 12	3 12	3 5	2 57	8 7	0 31	23 30	0 29	21 54	0 5	21 43	1 10	22 32	0 1	4 56	1 15	24 0	4 19	22 3	22 10	19 43	17 8	6 15					
T 22	0 9	25 34	2 19	2 23	2 41	8 37	0 28	23 28	0 30	21 52	0 5	21 44	1 9	22 32	0 1	4 57	1 15	24 0	4 19	22 3	22 10	19 45	17 7	6 16					
W23	0s14	24 43	1 19	1 40	2 23	9 6	0 26	23 27	0 31	21 51	0 5	21 44	1 9	22 32	0 1	4 57	1 15	24 0	4 19	22 3	22 11	19 46	17 7	6 16					
T 24	0 37	22 37	0 13	0 58	2 4	9 36	0 23	23 25	0 32	21 50	0 5	21 45	1 9	22 32	0 1	4 58	1 15	24 0	4 19	22 3	22 11	19 48	17 6	6 17					
F 25	1 1	19 20	0s54	0 16	1 44	10 5	0 21	23 23	0 34	21 49	0 5	21 45	1 9	22 32	0 1	4 59	1 15	24 0	4 19	22 3	22 12	19 50	17 5	6 18					
S 26	1 24	14 59	2 1	0n23	1 24	10 34	0 18	23 21	0 35	21 48	0 5	21 46	1 9	22 32	0 1	4 59	1 15	24 0	4 19	22 4	22 12	19 52	17 5	6 18					
S 27	1 48	9 43	3 4	1 0	1 4	11 2	0 15	23 19	0 36	21 47	0 5	21 46	1 9	22 32	0 1	5 0	1 15	24 0	4 20	22 4	22 12	19 54	17 4	6 19					
M28	2 11	3 47	3 57	1 33	0 44	11 31	0 13	23 17	0 38	21 45	0 6	21 47	1 8	22 32	0 1	5 1	1 15	24 0	4 20	22 5	22 13	19 55	17 3	6 20					
T 29	2 35	2s30	4 36	2 2	0 24	11 59	0 10	23 15	0 39	21 44	0 6	21 47	1 8	22 32	0 1	5 1	1 15	24 0	4 20	22 7	22 13	19 57	17 3	6 20					
W30	2s58	8s46	4s57	2n27	0s 5	12s27	0n 7	23n12	0n40	21n43	0n 6	21s48	1n 8	22n32	0s 1	5s 2	1s15	23n59	4n20	22s 8	22s14	19n59	17n 2	6s21					

ASTRODIENST EPHEMERIS for the year 1693
geocentric

OCTOBER 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 41 33	8♂2740	25♂45	23°D33	4♂20	16♂23	22♂27	17♂56	14°R11	20°R12	1♂56	18°R46	18♂14	12♂15	5♂18	T 1
F 2	0 45 30	9°26'54	10♂51	23♂37	5°34	16°54	22°34	18° 0	14♂11	20°R10	1°56	18♂36	18°11	12°22	5°19	F 2
S 3	0 49 27	10°26'09	25°46	23°51	6°47	17°25	22°41	18° 4	14°10	20° 9	1°57	18°28	18° 8	12°28	5°20	S 3
S 4	0 53 23	11°25'27	10♂73	24°16	8° 1	17°56	22°48	18° 8	14° 9	20° 7	1°58	18°22	18° 5	12°35	5°21	S 4
M 5	0 57 20	12°24'46	24°38	24°50	9°15	18°26	22°55	18°12	14° 8	20° 6	1°59	18°20	18° 2	12°42	5°22	M 5
T 6	1 1 16	13°24'08	8♂29	25°33	10°29	18°56	23° 1	18°16	14° 8	20° 4	1°59	18°19	17°58	12°49	5°23	T 6
W 7	1 5 13	14°23'30	21°58	26°24	11°42	19°26	23° 8	18°21	14° 7	20° 3	2° 0	18°19	17°55	12°55	5°24	W 7
T 8	1 9 9	15°22'55	5♂7	27°23	12°56	19°56	23°14	18°25	14° 6	20° 1	2° 1	18°18	17°52	13° 2	5°24	T 8
F 9	1 13 6	16°22'21	17°58	28°29	14°10	20°26	23°20	18°29	14° 5	20° 0	2° 1	18°16	17°49	13° 9	5°25	F 9
S 10	1 17 2	17°21'49	0♂36	29°41	15°24	20°55	23°26	18°34	14° 4	19°58	2° 2	18°11	17°46	13°15	5°25	S 10
S 11	1 20 59	18°21'19	13° 3	0♂58	16°37	21°24	23°32	18°38	14° 3	19°57	2° 3	18° 3	17°43	13°22	5°26	S 11
M12	1 24 56	19°20'51	25°20	2°19	17°51	21°53	23°37	18°43	14° 1	19°56	2° 3	17°52	17°39	13°29	5°26	M12
T 13	1 28 52	20°20'24	7°Y30	3°45	19° 5	22°21	23°43	18°48	14° 0	19°54	2° 4	17°39	17°36	13°36	5°26	T 13
W14	1 32 49	21°20'00	19°33	5°13	20°18	22°49	23°48	18°53	13°59	19°53	2° 4	17°25	17°33	13°42	5°26	W14
T 15	1 36 45	22°19'38	1♂30	6°45	21°32	23°17	23°53	18°57	13°58	19°52	2° 5	17°10	17°30	13°49	5°R26	T 15
F 16	1 40 42	23°19'18	13°23	8°18	22°45	23°45	23°58	19° 2	13°56	19°50	2° 5	16°57	17°27	13°56	5°26	F 16
S 17	1 44 38	24°18'59	25°14	9°53	23°59	24°12	24° 3	19° 7	13°55	19°49	2° 6	16°46	17°23	14° 2	5°26	S 17
S 18	1 48 35	25°18'43	7♂4	11°30	25°13	24°39	24° 8	19°12	13°54	19°48	2° 6	16°37	17°20	14° 9	5°26	S 18
M19	1 52 31	26°18'30	18°56	13° 8	26°26	25° 6	24°12	19°17	13°52	19°46	2° 6	16°31	17°17	14°16	5°26	M19
T 20	1 56 28	27°18'18	0♂54	14°47	27°40	25°33	24°16	19°22	13°51	19°45	2° 7	16°29	17°14	14°23	5°25	T 20
W21	2 0 25	28°18'09	13° 3	16°26	28°53	25°59	24°20	19°28	13°49	19°44	2° 7	16°D28	17°11	14°29	5°25	W21
T 22	2 4 21	29°18'02	25°27	18° 6	0♂7	26°25	24°24	19°33	13°48	19°43	2° 7	16°R28	17° 8	14°36	5°24	T 22
F 23	2 8 18	0♂17'57	8♂11	19°46	1°20	26°50	24°28	19°38	13°46	19°42	2° 8	16°28	17° 4	14°43	5°23	F 23
S 24	2 12 14	1°17'54	21°21	21°26	2°34	27°16	24°32	19°44	13°44	19°40	2° 8	16°26	17° 1	14°49	5°23	S 24
S 25	2 16 11	2°17'54	5♂0	23° 6	3°47	27°41	24°35	19°49	13°43	19°39	2° 8	16°22	16°58	14°56	5°22	S 25
M26	2 20 7	3°17'55	19° 9	24°46	5° 1	28° 5	24°38	19°55	13°41	19°38	2° 8	16°16	16°55	15° 3	5°21	M26
T 27	2 24 4	4°17'59	3♂46	26°26	6°14	28°29	24°41	20° 0	13°39	19°37	2° 9	16° 7	16°52	15° 9	5°20	T 27
W28	2 28 0	5°18'05	18°48	28° 6	7°27	28°53	24°44	20° 6	13°37	19°36	2° 9	15°57	16°48	15°16	5°19	W28
T 29	2 31 57	6°18'12	4♂4	29°46	8°41	29°17	24°47	20°12	13°36	19°35	2° 9	15°46	16°45	15°23	5°17	T 29
F 30	2 35 53	7°18'22	19°23	1♂25	9°54	29°40	24°49	20°17	13°34	19°34	2° 9	15°37	16°42	15°30	5°16	F 30
S 31	2 39 50	8♂18'34	4♂35	3♂4	11♂8	0♂2	24♂51	20♂23	13♂32	19♂33	2♂9	15♂29	16♂39	15♂36	5♂15	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
T 1	3s22	14s36	4s58	2n46	0n13	12s55	0n 5	23n10	0n42	21n42	0n 6	21s48	1n 8	22n32	0s 1	5s 2
F 2	3 45	19 31	4 39	2 59	0 29	13 22	0 2	23 7	0 43	21 41	0 6	21 49	1 8	22 32	0 1	5 3
S 3	4 8	23 7	4 0	3 8	0 45	13 49	0s 1	23 5	0 45	21 40	0 6	21 49	1 8	22 32	0 1	5 4
S 4	4 32	25 7	3 6	3 11	0 59	14 16	0 4	23 2	0 46	21 39	0 6	21 50	1 7	22 32	0 1	5 4
M 5	4 55	25 24	2 2	3 9	1 11	14 42	0 6	23 0	0 47	21 38	0 6	21 50	1 7	22 31	0 1	5 5
T 6	5 18	24 4	0 52	3 2	1 22	15 8	0 9	22 57	0 49	21 37	0 7	21 51	1 7	22 31	0 1	5 5
W 7	5 41	21 22	0n19	2 50	1 32	15 34	0 12	22 54	0 50	21 36	0 7	21 51	1 7	22 31	0 1	5 6
T 8	6 4	17 36	1 27	2 34	1 40	15 59	0 15	22 51	0 52	21 35	0 7	21 52	1 7	22 31	0 1	5 7
F 9	6 27	13 6	2 30	2 14	1 46	16 24	0 18	22 48	0 53	21 34	0 7	21 52	1 7	22 31	0 1	5 7
S 10	6 50	8 6	3 23	1 50	1 52	16 49	0 21	22 45	0 55	21 34	0 7	21 53	1 6	22 31	0 1	5 8
S 11	7 12	2 53	4 6	1 53	1 56	17 13	0 24	22 42	0 56	21 33	0 7	21 54	1 6	22 31	0 1	5 8
M12	7 35	2n23	4 37	0 23	1 59	17 36	0 26	22 39	0 58	21 32	0 7	21 54	1 6	22 31	0 1	5 9
T 13	7 58	7 29	4 55	0 21	2 1	17 59	0 29	22 36	0 59	21 31	0 7	21 55	1 6	22 31	0 1	5 9
W14	8 20	12 16	4 59	0s13	2 2	18 22	0 32	22 33	1 1	21 30	0 8	21 55	1 6	22 30	0 1	5 10
T 15	8 42	16 33	4 50	0 49	2 2	18 44	0 35	22 30	1 3	21 30	0 8	21 56	1 6	22 30	0 1	5 10
F 16	9 5	20 9	4 29	1 27	2 1	19 6	0 38	22 27	1 4	21 29	0 8	21 56	1 5	22 30	0 1	5 11
S 17	9 27	22 55	3 56	2 6	1 59	19 28	0 41	22 23	1 6	21 28	0 8	21 57	1 5	22 30	0 1	5 11
S 18	9 48	24 41	3 12	2 46	1 57	19 48	0 44	22 20	1 7	21 27	0 8	21 57	1 5	22 30	0 1	5 12
M19	10 10	25 21	2 20	3 26	1 54	20 9	0 46	22 17	1 9	21 27	0 8	21 58	1 5	22 30	0 1	5 12
T 20	10 32	24 8	1 21	4 8	1 51	20 28	0 49	22 14	1 11	21 26	0 8	21 59	1 5	22 29	0 1	5 13
W21	10 53	23 50	0 18	4 49	1 47	20 48	0 52	22 10	1 12	21 26	0 9	21 59	1 5	22 29	0 1	5 13
T 22	11 15	20 19	0s47	5 31	1 43	21 6	0 55	22 7	1 14	21 25	0 9	22 0	1 5	22 29	0 1	5 14
F 23	11 36	16 26	1 53	6 14	1 38	21 24	0 58	22 4	1 16	21 25	0 9	22 0	1 4	22 29	0 1	5 14
S 24	11 57	11 40	2 54	6 56	1 33	21 42	1 0	22 1	1 18	21 24	0 9	22 1	1 4	22 29	0 1	5 15
S 25	12 18	6 10	3 47	7 38	1 28	21 59	1 3	21 57	1 19	21 24	0 9	22 1	1 4	22 29	0 1	5 15
M26	12 38	0 11	4 29	8 20	1 23	22 15	1 6	21 54	1 21	21 23	0 9	22 2	1 4	22 28	0 1	5 15
T 27	12 58	6s 1	4 55	9 2	1 17	22 31	1 9	21 51	1 23	21 23	0 10	22 2	1 4	22 28	0 1	5 16
W28	13 19	12 1	5 2	9 43	1 11	22 46	1 11	21 48	1 25	21 22	0 10	22 3	1 4	22 28	0 1	5 16
T 29	13 39	17 23	4 47	10 24	1 5	23 0	1 14	21 45	1 27	21 22	0 10	22 4	1 4	22 28	0 0	5 17
F 30	13 58	21 38	4 12	11 4	0 58	23 14	1 16	21 42	1 28	21 22	0 10	22 4	1 4	22 27	0 0	5 17
S 31	14s18	24s21	3s19	11s44	0n52	23s27	1s19	21n39	1n30	21n22	0n10	22s 5	1n 3	22n27	0s 0	5s17

Julian Day Number = 2339689.5, Delta T = 16.72 sec
Ecliptic obliquity = 23°28'48", Nutation = 0°00'15", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°27'55", Lahiri = 19°34'56Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1693

geocentric

NOVEMBER 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 43 47	9♐18'47	19♊29	4♈42	12♋21	0♉25	24♌53	20♍29	13°R30	19°R32	2♈ 9	15°R24	16♌36	15♈43	5°R13	S 1
M 2	2 47 43	10°19'02	3♈59	6°20	13°34	0°47	24°55	20°35	13♈28	19°R31	2°R 9	15♌21	16°33	15°50	5♈12	M 2
T 3	2 51 40	11°19'18	18° 1	7°58	14°48	1° 8	24°57	20°41	13°26	19°30	2° 9	15°D21	16°29	15°56	5°10	T 3
W 4	2 55 36	12°19'36	1♈36	9°36	16° 1	1°29	24°58	20°47	13°24	19°29	2° 9	15°21	16°26	16° 3	5° 8	W 4
T 5	2 59 33	13°19'55	14°47	11°13	17°14	1°50	25° 0	20°53	13°22	19°29	2° 9	15°R22	16°23	16°10	5° 7	T 5
F 6	3 3 29	14°20'16	27°35	12°49	18°28	2°10	25° 1	20°59	13°20	19°28	2° 9	15°21	16°20	16°17	5° 5	F 6
S 7	3 7 26	15°20'38	10♈ 7	14°26	19°41	2°30	25° 2	21° 5	13°17	19°27	2° 9	15°18	16°17	16°23	5° 3	S 7
S 8	3 11 23	16°21'01	22°24	16° 2	20°54	2°49	25° 2	21°11	13°15	19°26	2° 9	15°12	16°14	16°30	5° 1	S 8
M 9	3 15 19	17°21'26	4♈32	17°38	22° 7	3° 8	25° 3	21°18	13°13	19°26	2° 8	15° 4	16°10	16°37	4°59	M 9
T 10	3 19 16	18°21'52	16°33	19°13	23°20	3°27	25° 3	21°24	13°11	19°25	2° 8	14°54	16° 7	16°43	4°57	T 10
W11	3 23 12	19°22'20	28°28	20°48	24°33	3°44	25°R 3	21°30	13° 9	19°24	2° 8	14°43	16° 4	16°50	4°54	W11
T 12	3 27 9	20°22'49	10♋21	22°23	25°46	4° 2	25° 3	21°37	13° 6	19°24	2° 8	14°32	16° 1	16°57	4°52	T 12
F 13	3 31 5	21°23'20	22°12	23°58	26°59	4°19	25° 3	21°43	13° 4	19°23	2° 7	14°21	15°58	17° 3	4°50	F 13
S 14	3 35 2	22°23'52	4♈ 4	25°33	28°12	4°35	25° 2	21°49	13° 2	19°23	2° 7	14°13	15°54	17°10	4°47	S 14
S 15	3 38 58	23°24'26	15°57	27° 7	29°25	4°51	25° 1	21°56	12°59	19°22	2° 7	14° 6	15°51	17°17	4°45	S 15
M16	3 42 55	24°25'02	27°55	28°41	0♋38	5° 7	25° 1	22° 2	12°57	19°22	2° 6	14° 3	15°48	17°24	4°42	M16
T 17	3 46 52	25°25'39	9♋58	0♈15	1°51	5°22	24°59	22° 9	12°55	19°21	2° 6	14°D 1	15°45	17°30	4°39	T 17
W18	3 50 48	26°26'18	22°11	1°48	3° 4	5°36	24°58	22°15	12°52	19°21	2° 6	14° 1	15°42	17°37	4°37	W18
T 19	3 54 45	27°26'58	4♈37	3°22	4°17	5°50	24°57	22°22	12°50	19°20	2° 5	14° 2	15°39	17°44	4°34	T 19
F 20	3 58 41	28°27'41	17°21	4°55	5°30	6° 3	24°55	22°29	12°47	19°20	2° 5	14° 4	15°35	17°50	4°31	F 20
S 21	4 2 38	29°28'24	0♈25	6°28	6°42	6°16	24°53	22°35	12°45	19°20	2° 4	14°R 4	15°32	17°57	4°28	S 21
S 22	4 6 34	0♈29'09	13°55	8° 2	7°55	6°28	24°51	22°42	12°42	19°19	2° 4	14° 3	15°29	18° 4	4°25	S 22
M23	4 10 31	1°29'56	27°52	9°35	9° 8	6°39	24°49	22°49	12°40	19°19	2° 3	14° 1	15°26	18°10	4°22	M23
T 24	4 14 27	2°30'45	12♈16	11° 8	10°20	6°50	24°46	22°56	12°37	19°19	2° 3	13°56	15°23	18°17	4°19	T 24
W25	4 18 24	3°31'35	27° 3	12°40	11°33	7° 0	24°44	23° 2	12°35	19°19	2° 2	13°50	15°20	18°24	4°15	W25
T 26	4 22 21	4°32'26	12♈ 9	14°13	12°46	7° 9	24°41	23° 9	12°32	19°19	2° 1	13°44	15°16	18°31	4°12	T 26
F 27	4 26 17	5°33'19	27°24	15°46	13°58	7°18	24°38	23°16	12°30	19°18	2° 1	13°38	15°13	18°37	4° 9	F 27
S 28	4 30 14	6°34'13	12♈36	17°18	15°11	7°26	24°34	23°23	12°27	19°18	2° 0	13°34	15°10	18°44	4° 5	S 28
S 29	4 34 10	7°35'08	27°37	18°51	16°23	7°34	24°31	23°30	12°25	19°18	2° 0	13°31	15° 7	18°51	4° 2	S 29
M30	4 38 7	8♈36'04	12♋17	20♈23	17♋35	7♈40	24♌27	23♍37	12♈22	19°D18	1♈59	13°D30	15♋ 4	18♋57	3♋59	M30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	14s37	25s16	2s13	12s24	0n45	23s39	1s21	21n36	1n32	21n21	0n10	22s 5	1n 3	22n27	0s 0	S 1
M 2	14 56	24 25	1 0	13 3	0 39	23 51	1 24	21 33	1 34	21 21	0 10	22 6	1 3	22 27	0 0	M 2
T 3	15 15	22 2	0n14	13 41	0 32	24 2	1 26	21 30	1 36	21 21	0 11	22 6	1 3	22 27	0 0	T 3
W 4	15 34	18 27	1 26	14 18	0 25	24 13	1 29	21 27	1 38	21 21	0 11	22 7	1 3	22 26	0 0	W 4
T 5	15 52	14 2	2 30	14 55	0 19	24 23	1 31	21 25	1 40	21 21	0 11	22 7	1 3	22 26	0 0	T 5
F 6	16 10	9 7	3 25	15 31	0 12	24 32	1 33	21 22	1 42	21 21	0 11	22 8	1 3	22 26	0 0	F 6
S 7	16 28	3 56	4 9	16 7	0 5	24 40	1 36	21 19	1 44	21 21	0 11	22 8	1 3	22 26	0 0	S 7
S 8	16 45	1n17	4 41	16 41	0s 1	24 47	1 38	21 17	1 46	21 21	0 11	22 9	1 2	22 25	0 0	S 8
M 9	17 3	6 23	4 59	17 15	0 8	24 54	1 40	21 14	1 48	21 21	0 12	22 9	1 2	22 25	0 0	M 9
T 10	17 19	11 11	5 4	17 48	0 15	25 1	1 42	21 12	1 50	21 21	0 12	22 10	1 2	22 25	0 0	T 10
W11	17 36	15 33	4 56	18 20	0 21	25 6	1 44	21 10	1 52	21 21	0 12	22 11	1 2	22 25	0 0	W11
T 12	17 52	19 17	4 35	18 51	0 28	25 11	1 46	21 8	1 54	21 21	0 12	22 11	1 2	22 24	0 0	T 12
F 13	18 8	22 14	4 1	19 21	0 34	25 15	1 48	21 6	1 57	21 22	0 12	22 12	1 2	22 24	0 0	F 13
S 14	18 24	24 14	3 18	19 50	0 41	25 18	1 50	21 4	1 59	21 22	0 12	22 12	1 2	22 24	0 0	S 14
S 15	18 39	25 9	2 25	20 19	0 47	25 20	1 51	21 2	2 1	21 22	0 12	22 13	1 2	22 23	0 0	S 15
M16	18 54	24 54	1 26	20 46	0 53	25 22	1 53	21 1	2 3	21 22	0 13	22 13	1 1	22 23	0 0	M16
T 17	19 9	23 28	0 22	21 12	0 59	25 23	1 55	20 59	2 5	21 23	0 13	22 14	1 1	22 23	0 0	T 17
W18	19 23	20 56	0s44	21 37	1 5	25 23	1 56	20 58	2 8	21 23	0 13	22 14	1 1	22 23	0 0	W18
T 19	19 37	17 22	1 49	22 2	1 11	25 22	1 58	20 57	2 10	21 24	0 13	22 15	1 1	22 22	0 0	T 19
F 20	19 51	12 57	2 50	22 25	1 17	25 21	1 59	20 56	2 12	21 24	0 13	22 15	1 1	22 22	0 0	F 20
S 21	20 4	7 50	3 45	22 47	1 22	25 19	2 1	20 55	2 15	21 25	0 13	22 15	1 1	22 22	0 0	S 21
S 22	20 17	2 13	4 28	23 7	1 27	25 16	2 2	20 54	2 17	21 25	0 14	22 16	1 1	22 21	0 0	S 22
M23	20 30	3s42	4 58	23 27	1 33	25 13	2 3	20 53	2 19	21 26	0 14	22 16	1 1	22 21	0 0	M23
T 24	20 42	9 36	5 10	23 45	1 38	25 8	2 4	20 53	2 22	21 26	0 14	22 17	1 1	22 21	0 0	T 24
W25	20 54	15 7	5 2	24 3	1 42	25 3	2 5	20 53	2 24	21 27	0 14	22 17	1 1	22 20	0 0	W25
T 26	21 5	19 50	4 33	24 19	1 47	24 58	2 6	20 53	2 27	21 28	0 14	22 18	1 0	22 20	0 0	T 26
F 27	21 16	23 15	3 45	24 33	1 51	24 51	2 7	20 53	2 29	21 28	0 14	22 18	1 0	22 20	0 0	F 27
S 28	21 27	25 0	2 40	24 47	1 55	24 44	2 8	20 53	2 32	21 29	0 15	22 19	1 0	22 19	0 0	S 28
S 29	21 37	24 53	1 26	24 59	1 59	24 36	2 9	20 54	2 34	21 30	0 15	22 19	1 0	22 19	0 0	S 29
M30	21s46	23s 1	0s 7	25s10	2s 2	24s27	2s 9	20n54	2n37	21n31	0n15	22s19	1n 0	22n19	0s 0	M30

Julian Day Number = 2339720.5, Delta T = 16.69 sec
 Ecliptic obliquity = 23°28'47, Nutation = 0°00'15, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°27'59, Lahiri = 19°35'00Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1693
geocentric

DECEMBER 1693 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	4 42 3	9♌73'01	26♋31	21♊55	18♋48	7♌46	24°R23	23♊44	12°R20	19♋18	1°R58	13♋30	15♋0	19♋4	3°R55	T 1
W 2	4 46 0	10°37'59	10♋18	23°27	20°0	7°52	24♋19	23°51	12♋17	19°18	1♌57	13°32	14°57	19°11	3♌52	W 2
T 3	4 49 56	11°38'57	23°37	24°59	21°12	7°56	24°15	23°58	12°15	19°18	1°57	13°34	14°54	19°17	3°48	T 3
F 4	4 53 53	12°39'56	6♋31	26°30	22°24	8°0	24°11	24°4	12°12	19°19	1°56	13°35	14°51	19°24	3°44	F 4
S 5	4 57 50	13°40'55	19°4	28°1	23°36	8°3	24°6	24°11	12°9	19°19	1°55	13°R35	14°48	19°31	3°41	S 5
S 6	5 1 46	14°41'55	1♌21	29°32	24°48	8°6	24°2	24°18	12°7	19°19	1°54	13°33	14°45	19°38	3°37	S 6
M 7	5 5 43	15°42'56	13°26	1♋3	26°0	8°7	23°57	24°25	12°4	19°19	1°53	13°31	14°41	19°44	3°33	M 7
T 8	5 9 39	16°43'57	25°22	2°33	27°12	8°8	23°52	24°32	12°2	19°19	1°52	13°27	14°38	19°51	3°29	T 8
W 9	5 13 36	17°44'59	7♋14	4°2	28°24	8°R8	23°46	24°40	11°59	19°20	1°52	13°22	14°35	19°58	3°25	W 9
T 10	5 17 32	18°46'02	19°4	5°30	29°36	8°7	23°41	24°47	11°57	19°20	1°51	13°18	14°32	20°4	3°22	T 10
F 11	5 21 29	19°47'05	0♋56	6°58	0♋47	8°6	23°36	24°54	11°54	19°20	1°50	13°14	14°29	20°11	3°18	F 11
S 12	5 25 25	20°48'09	12°52	8°24	1°59	8°3	23°30	25°1	11°52	19°21	1°49	13°10	14°26	20°18	3°14	S 12
S 13	5 29 22	21°49'13	24°52	9°50	3°10	8°0	23°24	25°8	11°49	19°21	1°48	13°8	14°22	20°24	3°10	S 13
M14	5 33 19	22°50'18	7♋0	11°13	4°22	7°56	23°18	25°15	11°47	19°22	1°47	13°7	14°19	20°31	3°6	M14
T 15	5 37 15	23°51'23	19°16	12°35	5°33	7°51	23°12	25°22	11°44	19°22	1°46	13°D7	14°16	20°38	3°2	T 15
W16	5 41 12	24°52'30	1♌42	13°55	6°44	7°46	23°6	25°29	11°42	19°23	1°45	13°8	14°13	20°45	2°58	W16
T 17	5 45 8	25°53'36	14°20	15°12	7°55	7°39	22°59	25°36	11°39	19°23	1°44	13°9	14°10	20°51	2°54	T 17
F 18	5 49 5	26°54'44	27°13	16°27	9°6	7°32	22°53	25°43	11°37	19°24	1°43	13°10	14°6	20°58	2°50	F 18
S 19	5 53 1	27°55'52	10♌22	17°38	10°17	7°24	22°46	25°50	11°34	19°25	1°42	13°11	14°3	21°5	2°46	S 19
S 20	5 56 58	28°57'00	23°49	18°44	11°28	7°15	22°39	25°57	11°32	19°25	1°40	13°R12	14°0	21°11	2°42	S 20
M21	6 0 54	29°58'09	7♋37	19°47	12°39	7°5	22°32	26°4	11°30	19°26	1°39	13°12	13°57	21°18	2°37	M21
T 22	6 4 51	0♋59'19	21°45	20°43	13°49	6°54	22°25	26°11	11°27	19°27	1°38	13°11	13°54	21°25	2°33	T 22
W23	6 8 48	2°0'30	6♌12	21°34	15°0	6°43	22°18	26°18	11°25	19°27	1°37	13°10	13°51	21°31	2°29	W23
T 24	6 12 44	3°1'41	20°54	22°18	16°10	6°30	22°11	26°25	11°23	19°28	1°36	13°9	13°47	21°38	2°25	T 24
F 25	6 16 41	4°2'52	5♋46	22°53	17°20	6°17	22°4	26°32	11°20	19°29	1°35	13°8	13°44	21°45	2°21	F 25
S 26	6 20 37	5°4'04	20°40	23°20	18°31	6°3	21°56	26°40	11°18	19°30	1°34	13°7	13°41	21°51	2°17	S 26
S 27	6 24 34	6°5'16	5♋29	23°38	19°41	5°49	21°49	26°47	11°16	19°31	1°32	13°6	13°38	21°58	2°13	S 27
M28	6 28 30	7°6'28	20°4	23°R44	20°51	5°33	21°41	26°54	11°14	19°32	1°31	13°D6	13°35	22°5	2°9	M28
T 29	6 32 27	8°7'40	4♋20	23°40	22°0	5°17	21°34	27°1	11°11	19°33	1°30	13°7	13°32	22°12	2°5	T 29
W30	6 36 24	9°8'52	18°12	23°23	23°10	5°0	21°26	27°8	11°9	19°34	1°29	13°7	13°28	22°18	2°1	W30
T 31	6 40 20	10♋10'03	1♋39	22♋55	24♋19	4♌43	21♋18	27♊14	11♋7	19♋35	1♌27	13♋8	13♋25	22♋25	1♋57	T 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
T 1	21s56	19s44	1n11	25s19	2s 5	24s18	2s10	20n55	2n39	21n32	0n15	22s20	1n 0	22n18	0s 0	5s22	1s14	24n10	4n32	22s48	22s38	21n37	16n30	6s56
W 2	22 5	15 25	2 21	25 27	2 8	24 8	2 10	20 56	2 42	21 32	0 15	22 20	1 0	22 18	0 0	5 22	1 14	24 10	4 32	22 47	22 38	21 38	16 29	6 56
T 3	22 13	10 30	3 22	25 34	2 11	23 57	2 10	20 58	2 44	21 33	0 15	22 21	1 0	22 18	0 0	5 22	1 14	24 10	4 32	22 47	22 39	21 40	16 29	6 56
F 4	22 21	5 15	4 10	25 39	2 13	23 46	2 11	20 59	2 47	21 34	0 16	22 21	1 0	22 17	0 0	5 22	1 14	24 11	4 32	22 47	22 39	21 41	16 29	6 57
S 5	22 29	0n 3	4 45	25 42	2 15	23 34	2 11	21 1	2 50	21 35	0 16	22 21	1 0	22 17	0 0	5 22	1 14	24 11	4 32	22 47	22 39	21 43	16 29	6 57
S 6	22 36	5 13	5 6	25 45	2 16	23 21	2 11	21 3	2 52	21 36	0 16	22 22	1 0	22 17	0 0	5 22	1 14	24 11	4 32	22 47	22 40	21 44	16 28	6 57
M 7	22 43	10 7	5 13	25 45	2 17	23 7	2 11	21 5	2 55	21 37	0 16	22 22	1 0	22 16	0 0	5 22	1 13	24 12	4 33	22 48	22 40	21 45	16 28	6 58
T 8	22 49	14 35	5 7	25 45	2 17	22 53	2 11	21 7	2 58	21 38	0 16	22 23	0 59	22 16	0 0	5 22	1 13	24 12	4 33	22 48	22 40	21 47	16 28	6 58
W 9	22 55	18 28	4 47	25 42	2 17	22 39	2 10	21 10	3 0	21 39	0 17	22 23	0 59	22 16	0 0	5 21	1 13	24 12	4 33	22 48	22 41	21 48	16 28	6 58
T 10	23 0	21 36	4 15	25 39	2 17	22 23	2 10	21 13	3 3	21 40	0 17	22 23	0 59	22 16	0 0	5 21	1 13	24 13	4 33	22 49	22 41	21 49	16 28	6 59
F 11	23 5	23 50	3 32	25 33	2 16	22 7	2 10	21 16	3 6	21 41	0 17	22 24	0 59	22 15	0 0	5 21	1 13	24 13	4 33	22 49	22 41	21 51	16 28	6 59
S 12	23 10	25 0	2 39	25 26	2 14	21 51	2 9	21 19	3 8	21 43	0 17	22 24	0 59	22 15	0 0	5 21	1 13	24 14	4 33	22 50	22 42	21 52	16 27	6 59
S 13	23 14	25 2	1 39	25 18	2 12	21 34	2 8	21 22	3 11	21 44	0 17	22 24	0 59	22 15	0 0	5 21	1 13	24 14	4 33	22 50	22 42	21 53	16 27	6 59
M14	23 17	23 51	0 34	25 8	2 8	21 16	2 8	21 26	3 14	21 45	0 17	22 25	0 59	22 14	0 0	5 20	1 13	24 14	4 34	22 50	22 43	21 55	16 27	7 0
T 15	23 20	21 32	0s34	24 57	2 5	20 58	2 7	21 30	3 16	21 46	0 18	22 25	0 59	22 14	0 0	5 20	1 13	24 15	4 34	22 50	22 43	21 56	16 27	7 0
W16	23 23	18 11	1 41	24 44	2 0	20 39	2 6	21 34	3 19	21 47	0 18	22 25	0 59	22 14	0 0	5 20	1 13	24 15	4 34	22 50	22 43	21 57	16 27	7 0
T 17	23 25	13 56	2 44	24 31	1 55	20 19	2 5	21 38	3 22	21 49	0 18	22 26	0 59	22 13	0 0	5 20	1 13	24 15	4 34	22 50	22 44	21 59	16 27	7 0
F 18	23 27	9 0	3 40	24 16	1 48	19 59	2 3	21 43	3 24	21 50	0 18	22 26	0 59	22 13	0 0	5 19	1 13	24 16	4 34	22 50	22 44	22 0	16 27	7 0
S 19	23 28	3 35	4 26	23 59	1 41	19 39	2 2	21 47	3 27	21 51	0 18	22 26	0 59	22 13	0n 0	5 19	1 13	24 16	4 34	22 49	22 44	22 1	16 27	7 0
S 20	23 29	2s 7	4 59	23 42	1 33	19 18	2 1	21 52	3 30	21 52	0 18	22 26	0 59	22 12	0 0	5 19	1 13	24 17	4 34	22 49	22 45	22 3	16 27	7 1
M21	23 29	7 51	5 15	23 24	1 24	18 57	1 59	21 57	3 32	21 54	0 18	22 27	0 59	22 12	0 0	5 19	1 13	24 17	4 35	22 49	22 45	22 4	16 27	7 1
T 22	23 29	13 20	5 13	23 5	1 13	18 35	1 57	22 2	3 35	21 55	0 19	22 27	0 59	22 12	0 0	5 18	1 13	24 17	4 35	22 49	22 45	22 5	16 27	7 1
W23	23 28	18 11	4 52	22 46	1 2	18 12	1 56	22 8	3 37	21 56	0 19	22 27	0 58	22 11	0 0	5 18	1 13	24 18	4 35	22 50	22 46	22 6	16 27	7 1
T 24	23 27	22 2	4 11	22 26	0 49	17 49	1 54	22 13	3 40	21 58	0 19	22 27	0 58	22 11	0 0	5 18	1 13	24 18	4 35	22 50	22 46	22 8	16 27	7 1
F 25	23 25	24 28	3 13	22 7	0 35	17 26	1 52	22 19	3 42	21 59	0 19	22 28	0 58	22 11	0 0	5 17	1 13	24 19	4 35	22 50	22 46	22 9	16 26	7 1
S 26	23 23	25 10	2 1	21 47	0 20	17 2	1 50	22 25	3 45	22 0	0 19	22 28	0 58	22 10	0 0	5 17	1 13	24 19	4 35	22 50	22 46	22 10	16 26	7 1
S 27	23 20	24 4	0 42	21 29	0 4	16 38	1 47	22 31	3 47	22 2	0 19	22 28	0 58	22 10	0 0	5 16	1 13	24 19	4 35	22 50	22 47	22 11	16 27	7 1
M28	23 17	21 20	0n39	21 11	0n13	16 14	1 45	22 37	3 50	22 3	0 20	22 28	0 58	22 10	0 0	5 16	1 13	24 20	4 36	22 50	22 47	22 13	16 27	7 1
T 29	23 14	17 21	1 55	20 54	0 31	15 49	1 43	22 44	3 52	22 4	0 20	22 29	0 58	22 10	0 0	5 16	1 13	24 20	4 36	22 50	22 47	22 14	16 27	7 1
W30	23 10	12 30	3 3	20 38	0 50	15 24	1 40	22 50	3 54	22 6	0 20	22 29	0 58	22 9	0 0	5 15	1 13	24 21	4 36	22 50	22 48	22 15	16 27	7 1
T 31	23s 5	7s12	3n58	20s23	1n 9	14s58	1s37	22n57	3n57	22n 7	0n20	22s29	0n58	22n 9	0n 0	5s15	1s13	24n21	4n36	22s50	22s48	22n16	16n27	7s