



Astrodienst Ephemeris Tables for the year 1677

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 1677
geocentric

JANUARY 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	6 44 44	11 ³ 18'56	2 ² 18	26 ² 27	28 ² 40	3 ⁰ R17	29 ² 16	19 ⁰ R13	0 ⁰ Y20	12 ² 47	8 ⁰ R49	13 ² 28	12 ² 10	20 ² 40	1 ⁰ Y45	F 1
S 2	6 48 41	12 ⁰ 20'08	17 ⁰ 14	27 ⁰ 57	29 ⁰ 51	2 ⁰ 55	29 ⁰ 30	19 ⁰ 11	0 ⁰ 21	12 ² 49	8 ⁰ 48	13 ⁰ R28	12 ⁰ 6	20 ⁰ 47	1 ⁰ 46	S 2
S 3	6 52 38	13 ⁰ 21'20	2 ² 21	29 ⁰ 28	1 ² 2	2 ⁰ 33	29 ⁰ 44	19 ⁰ 9	0 ⁰ 23	12 ² 51	8 ⁰ 46	13 ⁰ 27	12 ⁰ 3	20 ⁰ 53	1 ⁰ 48	S 3
M 4	6 56 34	14 ⁰ 22'31	17 ⁰ 30	0 ⁰ 59	2 ⁰ 13	2 ⁰ 11	29 ⁰ 58	19 ⁰ 7	0 ⁰ 24	12 ² 53	8 ⁰ 45	13 ⁰ 25	12 ⁰ 0	21 ⁰ 0	1 ⁰ 49	M 4
T 5	7 0 31	15 ⁰ 23'43	2 ² 30	2 ⁰ 30	3 ⁰ 24	1 ⁰ 50	0 ⁰ 12	19 ⁰ 6	0 ⁰ 25	12 ² 55	8 ⁰ 44	13 ⁰ 20	11 ⁰ 57	21 ⁰ 6	1 ⁰ 50	T 5
W 6	7 4 27	16 ⁰ 24'53	17 ⁰ 14	4 ⁰ 2	4 ⁰ 35	1 ⁰ 29	0 ⁰ 26	19 ⁰ 4	0 ⁰ 27	12 ² 57	8 ⁰ 43	13 ⁰ 15	11 ⁰ 54	21 ⁰ 13	1 ⁰ 52	W 6
T 7	7 8 24	17 ⁰ 26'04	1 ² 33	5 ⁰ 34	5 ⁰ 46	1 ⁰ 9	0 ⁰ 40	19 ⁰ 3	0 ⁰ 28	12 ² 59	8 ⁰ 41	13 ⁰ 10	11 ⁰ 50	21 ⁰ 20	1 ⁰ 53	T 7
F 8	7 12 20	18 ⁰ 27'13	15 ⁰ 25	7 ⁰ 7	6 ⁰ 58	0 ⁰ 49	0 ⁰ 54	19 ⁰ 1	0 ⁰ 30	13 ⁰ 1	8 ⁰ 40	13 ⁰ 5	11 ⁰ 47	21 ⁰ 26	1 ⁰ 54	F 8
S 9	7 16 17	19 ⁰ 28'22	28 ⁰ 47	8 ⁰ 40	8 ⁰ 9	0 ⁰ 31	1 ⁰ 8	19 ⁰ 0	0 ⁰ 31	13 ⁰ 3	8 ⁰ 39	13 ⁰ 2	11 ⁰ 44	21 ⁰ 33	1 ⁰ 56	S 9
S 10	7 20 13	20 ⁰ 29'30	11 ⁰ Y43	10 ⁰ 14	9 ⁰ 20	0 ⁰ 12	1 ⁰ 22	18 ⁰ 59	0 ⁰ 33	13 ⁰ 6	8 ⁰ 38	13 ⁰ 0	11 ⁰ 41	21 ⁰ 40	1 ⁰ 58	S 10
M 11	7 24 10	21 ⁰ 30'38	24 ⁰ 15	11 ⁰ 48	10 ⁰ 32	29 ⁰ II55	1 ⁰ 37	18 ⁰ 58	0 ⁰ 34	13 ⁰ 8	8 ⁰ 37	12 ⁰ D59	11 ⁰ 38	21 ⁰ 46	1 ⁰ 59	M 11
T 12	7 28 7	22 ⁰ 31'44	6 ⁰ 29	13 ⁰ 22	11 ⁰ 44	29 ⁰ 38	1 ⁰ 51	18 ⁰ 57	0 ⁰ 36	13 ⁰ 10	8 ⁰ 35	13 ⁰ 0	11 ⁰ 35	21 ⁰ 53	2 ⁰ 1	T 12
W 13	7 32 3	23 ⁰ 32'50	18 ⁰ 28	14 ⁰ 58	12 ⁰ 55	29 ⁰ 22	2 ⁰ 5	18 ⁰ 56	0 ⁰ 38	13 ⁰ 12	8 ⁰ 34	13 ⁰ 2	11 ⁰ 31	22 ⁰ 0	2 ⁰ 3	W 13
T 14	7 36 0	24 ⁰ 33'55	0 ⁰ II19	16 ⁰ 33	14 ⁰ 7	29 ⁰ 6	2 ⁰ 19	18 ⁰ 56	0 ⁰ 40	13 ⁰ 14	8 ⁰ 33	13 ⁰ 3	11 ⁰ 28	22 ⁰ 6	2 ⁰ 4	T 14
F 15	7 39 56	25 ⁰ 34'59	12 ⁰ 5	18 ⁰ 10	15 ⁰ 19	28 ⁰ 51	2 ⁰ 33	18 ⁰ 55	0 ⁰ 42	13 ⁰ 16	8 ⁰ 32	13 ⁰ R 4	11 ⁰ 25	22 ⁰ 13	2 ⁰ 6	F 15
S 16	7 43 53	26 ⁰ 36'03	23 ⁰ 52	19 ⁰ 46	16 ⁰ 31	28 ⁰ 37	2 ⁰ 47	18 ⁰ 55	0 ⁰ 43	13 ⁰ 19	8 ⁰ 31	13 ⁰ 3	11 ⁰ 22	22 ⁰ 20	2 ⁰ 8	S 16
S 17	7 47 49	27 ⁰ 37'05	5 ⁰ 42	21 ⁰ 24	17 ⁰ 43	28 ⁰ 24	3 ⁰ 2	18 ⁰ 55	0 ⁰ 45	13 ⁰ 21	8 ⁰ 29	13 ⁰ 1	11 ⁰ 19	22 ⁰ 26	2 ⁰ 10	S 17
M 18	7 51 46	28 ⁰ 38'07	17 ⁰ 39	23 ⁰ 2	18 ⁰ 55	28 ⁰ 12	3 ⁰ 16	18 ⁰ 54	0 ⁰ 47	13 ⁰ 23	8 ⁰ 28	12 ⁰ 56	11 ⁰ 16	22 ⁰ 33	2 ⁰ 12	M 18
T 19	7 55 42	29 ⁰ 39'08	29 ⁰ 44	24 ⁰ 40	20 ⁰ 7	28 ⁰ 0	3 ⁰ 30	18 ⁰ D54	0 ⁰ 49	13 ⁰ 25	8 ⁰ 27	12 ⁰ 49	11 ⁰ 12	22 ⁰ 40	2 ⁰ 14	T 19
W 20	7 59 39	0 ⁰ 40'08	11 ⁰ Q58	26 ⁰ 20	21 ⁰ 19	27 ⁰ 49	3 ⁰ 44	18 ⁰ 54	0 ⁰ 51	13 ⁰ 27	8 ⁰ 26	12 ⁰ 40	11 ⁰ 9	22 ⁰ 46	2 ⁰ 16	W 20
T 21	8 3 36	1 ⁰ 41'07	24 ⁰ 23	27 ⁰ 59	22 ⁰ 31	27 ⁰ 39	3 ⁰ 59	18 ⁰ 54	0 ⁰ 53	13 ⁰ 30	8 ⁰ 25	12 ⁰ 30	11 ⁰ 6	22 ⁰ 53	2 ⁰ 18	T 21
F 22	8 7 32	2 ⁰ 42'05	6 ⁰ II59	29 ⁰ 40	23 ⁰ 44	27 ⁰ 30	4 ⁰ 13	18 ⁰ 55	0 ⁰ 56	13 ⁰ 32	8 ⁰ 24	12 ⁰ 21	11 ⁰ 3	23 ⁰ 0	2 ⁰ 21	F 22
S 23	8 11 29	3 ⁰ 43'03	19 ⁰ 47	1 ⁰ 21	24 ⁰ 56	27 ⁰ 22	4 ⁰ 27	18 ⁰ 55	0 ⁰ 58	13 ⁰ 34	8 ⁰ 23	12 ⁰ 13	11 ⁰ 0	23 ⁰ 6	2 ⁰ 23	S 23
S 24	8 15 25	4 ⁰ 43'59	2 ⁰ 47	3 ⁰ 3	26 ⁰ 8	27 ⁰ 14	4 ⁰ 41	18 ⁰ 56	1 ⁰ 0	13 ⁰ 36	8 ⁰ 21	12 ⁰ 6	10 ⁰ 56	23 ⁰ 13	2 ⁰ 25	S 24
M 25	8 19 22	5 ⁰ 44'55	16 ⁰ 1	4 ⁰ 45	27 ⁰ 21	27 ⁰ 7	4 ⁰ 56	18 ⁰ 56	1 ⁰ 2	13 ⁰ 39	8 ⁰ 20	12 ⁰ 2	10 ⁰ 53	23 ⁰ 19	2 ⁰ 27	M 25
T 26	8 23 18	6 ⁰ 45'51	29 ⁰ 30	6 ⁰ 29	28 ⁰ 33	27 ⁰ 1	5 ⁰ 10	18 ⁰ 57	1 ⁰ 4	13 ⁰ 41	8 ⁰ 19	12 ⁰ 0	10 ⁰ 50	23 ⁰ 26	2 ⁰ 30	T 26
W 27	8 27 15	7 ⁰ 46'45	13 ⁰ II15	8 ⁰ 12	29 ⁰ 46	26 ⁰ 56	5 ⁰ 24	18 ⁰ 58	1 ⁰ 7	13 ⁰ 43	8 ⁰ 18	12 ⁰ D 0	10 ⁰ 47	23 ⁰ 33	2 ⁰ 32	W 27
T 28	8 31 11	8 ⁰ 47'39	27 ⁰ 16	9 ⁰ 57	0 ⁰ 59	26 ⁰ 52	5 ⁰ 38	18 ⁰ 59	1 ⁰ 9	13 ⁰ 46	8 ⁰ 17	12 ⁰ 0	10 ⁰ 44	23 ⁰ 39	2 ⁰ 34	T 28
F 29	8 35 8	9 ⁰ 48'32	11 ⁰ Y35	11 ⁰ 42	2 ⁰ 11	26 ⁰ 48	5 ⁰ 53	19 ⁰ 0	1 ⁰ 12	13 ⁰ 48	8 ⁰ 16	12 ⁰ R 1	10 ⁰ 41	23 ⁰ 46	2 ⁰ 37	F 29
S 30	8 39 5	10 ⁰ 49'25	26 ⁰ 8	13 ⁰ 28	3 ⁰ 24	26 ⁰ 45	6 ⁰ 7	19 ⁰ 1	1 ⁰ 14	13 ⁰ 50	8 ⁰ 15	12 ⁰ 0	10 ⁰ 37	23 ⁰ 53	2 ⁰ 39	S 30
S 31	8 43 1	11 ⁰ 50'16	10 ⁰ 53	15 ⁰ 15	4 ⁰ 37	26 ⁰ II43	6 ⁰ 21	19 ⁰ 2	1 ⁰ Y16	13 ⁰ 52	8 ⁰ 14	11 ⁰ Y57	10 ⁰ Y34	23 ⁰ II59	2 ⁰ Y42	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	23s 0	21s39	1 s 1	23s48	0s22	17s31	2n26	27n 9	3n42	20s49	0s29	15n23	2s15	0s31	0s43	17s10	0s10	20n58	2s14
S 2	22 54	22 31	0n21	23 57	0 29	17 48	2 25	27 10	3 43	20 46	0 29	15 23	2 15	0 31	0 43	17 9	0 10	20 58	2 14
S 3	22 49	21 46	1 42	24 4	0 36	18 4	2 23	27 11	3 44	20 43	0 29	15 23	2 15	0 30	0 43	17 9	0 10	20 58	2 14
M 4	22 42	19 26	2 56	24 11	0 42	18 20	2 21	27 12	3 44	20 40	0 29	15 23	2 14	0 30	0 43	17 8	0 10	20 58	2 14
T 5	22 35	15 47	3 57	24 16	0 49	18 35	2 20	27 13	3 45	20 37	0 29	15 23	2 14	0 29	0 43	17 8	0 10	20 58	2 14
W 6	22 28	11 14	4 41	24 20	0 55	18 50	2 18	27 13	3 45	20 34	0 29	15 22	2 14	0 29	0 43	17 7	0 10	20 58	2 14
T 7	22 21	6 10	5 6	24 23	1 1	19 5	2 16	27 14	3 45	20 31	0 29	15 22	2 13	0 28	0 43	17 6	0 10	20 58	2 14
F 8	22 12	0 58	5 12	24 24	1 7	19 19	2 14	27 14	3 46	20 28	0 29	15 22	2 13	0 27	0 43	17 6	0 10	20 59	2 13
S 9	22 4	4n 7	5 1	24 24	1 12	19 32	2 11	27 14	3 46	20 25	0 29	15 22	2 13	0 27	0 43	17 5	0 10	20 59	2 13
S 10	21 55	8 51	4 34	24 22	1 18	19 46	2 9	27 14	3 46	20 22	0 30	15 22	2 13	0 26	0 43	17 5	0 10	20 59	2 13
M11	21 45	13 4	3 55	24 20	1 23	19 58	2 7	27 14	3 46	20 19	0 30	15 22	2 12	0 25	0 43	17 4	0 10	20 59	2 13
T 12	21 36	16 38	3 6	24 16	1 28	20 10	2 5	27 14	3 45	20 16	0 30	15 22	2 12	0 25	0 43	17 4	0 10	20 59	2 13
W13	21 25	19 26	2 10	24 10	1 32	20 22	2 2	27 14	3 45	20 13	0 30	15 22	2 12	0 24	0 42	17 3	0 10	20 59	2 13
T 14	21 15	21 22	1 9	24 3	1 37	20 33	2 0	27 14	3 45	20 10	0 30	15 22	2 11	0 23	0 42	17 2	0 10	20 59	2 13
F 15	21 4	22 22	0 5	23 55	1 41	20 44	1 57	27 13	3 44	20 7	0 30	15 22	2 11	0 22	0 42	17 2	0 10	21 0	2 13
S 16	20 52	22 22	0s58	23 45	1 44	20 54	1 55	27 12	3 44	20 3	0 30	15 23	2 11	0 22	0 42	17 1	0 10	21 0	2 13
S 17	20 40	21 22	2 0	23 33	1 48	21 3	1 52	27 12	3 44	20 0	0 30	15 23	2 11	0 21	0 42	17 0	0 10	21 0	2 13
M18	20 28	19 24	2 56	23 20	1 51	21 12	1 49	27 11	3 43	19 57	0 30	15 23	2 10	0 20	0 42	17 0	0 10	21 0	2 13
T 19	20 16	16 34	3 45	23 6	1 54	21 21	1 46	27 10	3 42	19 54	0 30	15 23	2 10	0 19	0 42	16 59	0 10	21 0	2 13
W20	20 3	13 0	4 24	22 50	1 57	21 28	1 44	27 9	3 42	19 50	0 30	15 24	2 10	0 18	0 42	16 59	0 10	21 0	2 13
T 21	19 49	8 50	4 52	22 32	1 59	21 35	1 41	27 8	3 41	19 47	0 30	15 24	2 9	0 17	0 42	16 58	0 10	21 1	2 12
F 22	19 35	4 14	5 5	22 13	2 1	21 42	1 38	27 7	3 40	19 44	0 31	15 24	2 9	0 17	0 42	16 57	0 10	21 1	2 12
S 23	19 21	0s37	5 4	21 53	2 2	21 48	1 35	27 6	3 39	19 41	0 31	15 25	2 9	0 16	0 42	16 57	0 10	21 1	2 12
S 24	19 7	5 30	4 47	21 31	2 3	21 53	1 32	27 5	3 38	19 37	0 31	15 25	2 9	0 15	0 42	16 56	0 10	21 1	2 12
M25	18 52	10 14	4 15	21 7	2 4	21 58	1 29	27 4	3 37	19 34	0 31	15 26	2 8	0 14	0 42	16 55	0 10	21 1	2 12
T 26	18 37	14 33	3 28	20 42	2 5	22 2	1 26	27 3	3 37	19 31	0 31	15 26	2 8	0 13	0 42	16 55	0 10	21 1	2 12
W27	18 21	18 12	2 28	20 15	2 4	22 6	1 23	27 2	3 36	19 27	0 31	15 27	2 8	0 12	0 42	16 54	0 10	21 1	2 12
T 28	18 6	20 51	1 18	19 46	2 4	22 9	1 20	27 1	3 35	19 24	0 31	15 27	2 7	0 11	0 42	16 53	0 10	21 2	2 12
F 29	17 49	22 15	0 2	19 16	2 3	22 11	1 17	27 0	3 33	19 20	0 31	15 28	2 7	0 10	0 42	16 53	0 10	21 2	2 12
S 30	17 33	22 11	1n15	18 45	2 1	22 13	1 13	26 59	3 32	19 17	0 31	15 28	2 7	0 9	0 42	16 52	0 10	21 2	2 12
S 31	17s16	20s34	2n28	18s12	1s59	22s14	1n10	26n58	3n31	19s13	0s31	15n29	2s 6	0s 8	0s42	16s51	0s10	21n 2	2s12

ASTRODIENST EPHEMERIS for the year 1677

geocentric

MARCH 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	10 37 21	11° 3' 47"	4° 57'	26° 34'	9° 58'	0° 38'	13° 55'	20° 25'	2° 41'	14° 57'	7° 52'	9° 1'	9° 2'	27° 12'	4° 11'	M 1
T 2	10 41 18	12° 3' 50"	19° 18'	26° 36'	11° 12'	0° 54'	13° 18'	20° 29'	2° 44'	14° 59'	7° 51'	8° 59'	8° 59'	27° 19'	4° 14'	T 2
W 3	10 45 14	13° 3' 52"	3° 32'	26° 30'	12° 25'	1° 11'	13° 32'	20° 34'	2° 47'	15° 1'	7° 51'	8° 39'	8° 56'	27° 26'	4° 17'	W 3
T 4	10 49 11	14° 3' 52"	17° 33'	26° 15'	13° 39'	1° 28'	13° 45'	20° 38'	2° 51'	15° 3'	7° 51'	8° 26'	8° 53'	27° 32'	4° 21'	T 4
F 5	10 53 7	15° 3' 50"	1° 16'	25° 52'	14° 52'	1° 46'	13° 58'	20° 43'	2° 54'	15° 5'	7° 50'	8° 14'	8° 49'	27° 39'	4° 24'	F 5
S 6	10 57 4	16° 3' 45"	14° 37'	25° 20'	16° 6'	2° 4'	14° 12'	20° 48'	2° 57'	15° 7'	7° 50'	8° 4'	8° 46'	27° 45'	4° 28'	S 6
S 7	11 1 1	17° 3' 39"	27° 35'	24° 42'	17° 19'	2° 22'	14° 25'	20° 52'	3° 1'	15° 9'	7° 49'	7° 55'	8° 43'	27° 52'	4° 31'	S 7
M 8	11 4 57	18° 3' 31"	10° 12'	23° 58'	18° 33'	2° 41'	14° 38'	20° 57'	3° 4'	15° 11'	7° 49'	7° 50'	8° 40'	27° 59'	4° 35'	M 8
T 9	11 8 54	19° 3' 20"	22° 29'	23° 10'	19° 46'	3° 0'	14° 51'	21° 2'	3° 7'	15° 13'	7° 49'	7° 47'	8° 37'	28° 5'	4° 39'	T 9
W10	11 12 50	20° 3' 07"	4° 32'	22° 17'	21° 0'	3° 20'	15° 4'	21° 7'	3° 11'	15° 15'	7° 49'	7° 46'	8° 33'	28° 12'	4° 42'	W10
T 11	11 16 47	21° 2' 52"	16° 25'	21° 22'	22° 14'	3° 40'	15° 17'	21° 12'	3° 14'	15° 17'	7° 48'	7° 46'	8° 30'	28° 19'	4° 46'	T 11
F 12	11 20 43	22° 2' 35"	28° 13'	20° 26'	23° 27'	4° 0'	15° 30'	21° 17'	3° 17'	15° 19'	7° 48'	7° 46'	8° 27'	28° 25'	4° 49'	F 12
S 13	11 24 40	23° 2' 16"	10° 3'	19° 29'	24° 41'	4° 21'	15° 42'	21° 23'	3° 21'	15° 21'	7° 48'	7° 45'	8° 24'	28° 32'	4° 53'	S 13
S 14	11 28 36	24° 1' 54"	21° 58'	18° 34'	25° 54'	4° 42'	15° 55'	21° 28'	3° 24'	15° 23'	7° 48'	7° 42'	8° 21'	28° 39'	4° 57'	S 14
M15	11 32 33	25° 1' 30"	4° 5'	17° 41'	27° 8'	5° 3'	16° 8'	21° 33'	3° 28'	15° 25'	7° 47'	7° 36'	8° 18'	28° 45'	5° 0'	M15
T 16	11 36 30	26° 1' 03"	16° 27'	16° 51'	28° 21'	5° 25'	16° 20'	21° 39'	3° 31'	15° 26'	7° 47'	7° 27'	8° 14'	28° 52'	5° 4'	T 16
W17	11 40 26	27° 0' 35"	29° 6'	16° 6'	29° 35'	5° 46'	16° 33'	21° 44'	3° 34'	15° 28'	7° 47'	7° 17'	8° 11'	28° 59'	5° 7'	W17
T 18	11 44 23	28° 0' 04"	12° 17'	15° 24'	0° 48'	6° 9'	16° 45'	21° 50'	3° 38'	15° 30'	7° 47'	7° 5'	8° 8'	29° 5'	5° 11'	T 18
F 19	11 48 19	28° 59' 31"	25° 20'	14° 48'	2° 2'	6° 31'	16° 58'	21° 56'	3° 41'	15° 32'	7° 47'	6° 53'	8° 5'	29° 12'	5° 15'	F 19
S 20	11 52 16	29° 58' 55"	8° 53'	14° 18'	3° 16'	6° 54'	17° 10'	22° 1'	3° 45'	15° 34'	7° 47'	6° 42'	8° 2'	29° 19'	5° 18'	S 20
S 21	11 56 12	0° 58' 18"	22° 38'	13° 53'	4° 29'	7° 17'	17° 22'	22° 7'	3° 48'	15° 35'	7° 47'	6° 34'	7° 59'	29° 25'	5° 22'	S 21
M22	12 0 9	1° 57' 39"	6° 34'	13° 35'	5° 43'	7° 41'	17° 34'	22° 13'	3° 52'	15° 37'	7° 47'	6° 28'	7° 55'	29° 32'	5° 26'	M22
T 23	12 4 5	2° 56' 58"	20° 36'	13° 22'	6° 56'	8° 4'	17° 47'	22° 19'	3° 55'	15° 39'	7° 47'	6° 24'	7° 52'	29° 39'	5° 29'	T 23
W24	12 8 2	3° 56' 16"	4° 42'	13° 15'	8° 10'	8° 28'	17° 59'	22° 25'	3° 58'	15° 41'	7° 47'	6° 23'	7° 49'	29° 45'	5° 33'	W24
T 25	12 11 58	4° 55' 31"	18° 50'	13° 14'	9° 23'	8° 52'	18° 11'	22° 31'	4° 2'	15° 42'	7° 47'	6° 24'	7° 46'	29° 52'	5° 37'	T 25
F 26	12 15 55	5° 54' 45"	2° 58'	13° 18'	10° 37'	9° 17'	18° 22'	22° 37'	4° 5'	15° 44'	7° 47'	6° 24'	7° 43'	29° 59'	5° 40'	F 26
S 27	12 19 52	6° 53' 57"	17° 5'	13° 28'	11° 51'	9° 41'	18° 34'	22° 43'	4° 9'	15° 45'	7° 47'	6° 24'	7° 39'	0° 5'	5° 44'	S 27
S 28	12 23 48	7° 53' 08"	1° 9'	13° 43'	13° 4'	10° 6'	18° 46'	22° 50'	4° 12'	15° 47'	7° 48'	6° 22'	7° 36'	0° 12'	5° 48'	S 28
M29	12 27 45	8° 52' 16"	15° 11'	14° 3'	14° 18'	10° 32'	18° 57'	22° 56'	4° 16'	15° 49'	7° 48'	6° 17'	7° 33'	0° 19'	5° 51'	M29
T 30	12 31 41	9° 51' 23"	29° 6'	14° 27'	15° 32'	10° 57'	19° 9'	23° 2'	4° 19'	15° 50'	7° 48'	6° 10'	7° 30'	0° 25'	5° 55'	T 30
W31	12 35 38	10° 50' 28"	12° 52'	14° 57'	16° 45'	11° 23'	19° 20'	23° 9'	4° 22'	15° 52'	7° 48'	6° 1'	7° 27'	0° 32'	5° 59'	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	7s26	15s 1	4n10	1n17	2n54	18s 7	0s21	26n23	2n55	17s28	0s35	15n59	1s58	0n26	0s41	16s33	0s11
T 2	7 3	10 34	4 43	1 28	3 5	17 50	0 24	26 22	2 53	17 25	0 35	16 0	1 58	0 28	0 41	16 32	0 11
W 3	6 40	5 34	4 59	1 35	3 14	17 32	0 27	26 21	2 52	17 21	0 35	16 2	1 58	0 29	0 41	16 32	0 11
T 4	6 17	0 22	4 57	1 36	3 23	17 14	0 30	26 19	2 51	17 17	0 35	16 3	1 58	0 30	0 41	16 31	0 11
F 5	5 54	4n44	4 37	1 33	3 29	16 55	0 32	26 18	2 50	17 13	0 35	16 4	1 57	0 32	0 41	16 31	0 11
S 6	5 30	9 29	4 2	1 25	3 34	16 36	0 35	26 16	2 48	17 10	0 35	16 6	1 57	0 33	0 41	16 30	0 11
S 7	5 7	13 40	3 16	1 13	3 37	16 16	0 38	26 15	2 47	17 6	0 35	16 7	1 57	0 34	0 41	16 30	0 11
M 8	4 44	17 8	2 21	0 57	3 39	15 56	0 40	26 13	2 46	17 2	0 36	16 9	1 57	0 36	0 41	16 29	0 11
T 9	4 20	19 43	1 20	0 37	3 38	15 35	0 43	26 12	2 45	16 59	0 36	16 10	1 57	0 37	0 41	16 28	0 11
W10	3 57	21 22	0 17	0 14	3 35	15 14	0 45	26 10	2 44	16 55	0 36	16 12	1 56	0 38	0 41	16 28	0 11
T 11	3 33	22 2	0s46	0s12	3 30	14 53	0 48	26 8	2 42	16 51	0 36	16 13	1 56	0 40	0 41	16 27	0 11
F 12	3 10	21 42	1 46	0 41	3 24	14 31	0 50	26 6	2 41	16 48	0 36	16 15	1 56	0 41	0 41	16 27	0 11
S 13	2 46	20 24	2 43	1 10	3 15	14 9	0 52	26 4	2 40	16 44	0 36	16 17	1 56	0 42	0 41	16 26	0 11
S 14	2 22	18 12	3 32	1 41	3 5	13 46	0 55	26 3	2 39	16 40	0 36	16 18	1 55	0 44	0 41	16 26	0 11
M15	1 59	15 10	4 13	2 12	2 54	13 23	0 57	26 1	2 38	16 37	0 37	16 20	1 55	0 45	0 41	16 25	0 11
T 16	1 35	11 26	4 42	2 43	2 41	12 59	0 59	25 59	2 37	16 33	0 37	16 21	1 55	0 46	0 41	16 25	0 11
W17	1 11	7 8	4 59	3 13	2 28	12 36	1 1	25 56	2 35	16 29	0 37	16 23	1 55	0 48	0 41	16 24	0 11
T 18	0 48	2 24	5 1	3 42	2 14	12 11	1 3	25 54	2 34	16 26	0 37	16 25	1 54	0 49	0 41	16 23	0 11
F 19	0 24	2s32	4 47	4 10	1 59	11 47	1 5	25 52	2 33	16 22	0 37	16 26	1 54	0 50	0 41	16 23	0 11
S 20	0 0	7 27	4 17	4 36	1 44	11 22	1 7	25 50	2 32	16 19	0 37	16 28	1 54	0 52	0 41	16 22	0 11
S 21	0n23	12 5	3 31	4 59	1 28	10 57	1 9	25 47	2 31	16 15	0 37	16 30	1 54	0 53	0 41	16 22	0 11
M22	0 47	16 7	2 32	5 21	1 13	10 32	1 11	25 45	2 30	16 11	0 38	16 31	1 54	0 55	0 41	16 21	0 11
T 23	1 10	19 16	1 23	5 40	0 57	10 6	1 12	25 42	2 29	16 8	0 38	16 33	1 53	0 56	0 41	16 21	0 11
W24	1 34	21 16	0 9	5 57	0 42	9 40	1 14	25 40	2 28	16 4	0 38	16 35	1 53	0 57	0 41	16 20	0 11
T 25	1 58	21 55	1n 6	6 11	0 27	9 14	1 16	25 37	2 26	16 1	0 38	16 37	1 53	0 59	0 41	16 20	0 11
F 26	2 21	21 10	2 17	6 23	0 13	8 47	1 17	25 34	2 25	15 57	0 38	16 38	1 53	1 0	0 41	16 20	0 11
S 27	2 45	19 5	3 20	6 32	0s 1	8 20	1 19	25 31	2 24	15 54	0 38	16 40	1 53	1 1	0 41	16 19	0 11
S 28	3 8	15 52	4 10	6 39	0 15	7 53	1 20	25 29	2 23	15 50	0 39	16 42	1 52	1 3	0 41	16 19	0 11
M29	3 31	11 46	4 45	6 43	0 28	7 26	1 21	25 26	2 22	15 47	0 39	16 44	1 52	1 4	0 41	16 18	0 11
T 30	3 55	7 4	5 3	6 45	0 40	6 59	1 22	25 22	2 21	15 43	0 39	16 45	1 52	1 6	0 41	16 18	0 11
W31	4n18	2s 4	5n 3	6s45	0s52	6s31	1s24	25n19	2n20	15s40	0s39	16n47	1s52	1n 7	0s41	16s17	0s11

Julian Day Number = 2333631.5, Delta T = 25.31 sec

Ecliptic obliquity = 23°28'50", Nutation = 0°00'17", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°14'02", Lahiri = 19°21'03"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1677

geocentric

APRIL 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	12 39 34	11°49'30	26°27	15°30	17°59	11°48	19°32	23°15	4°26	15°53	7°48	5°R52	7°24	0°38	6°V 2	T 1
F 2	12 43 31	12°48'31	9°47	16° 8	19°12	12°15	19°43	23°22	4°29	15°55	7°49	5°R43	7°20	0°45	6° 6	F 2
S 3	12 47 27	13°47'30	22°51	16°49	20°26	12°41	19°54	23°28	4°33	15°56	7°49	5°35	7°17	0°52	6°10	S 3
S 4	12 51 24	14°46'27	5°37	17°34	21°40	13° 7	20° 5	23°35	4°36	15°57	7°49	5°29	7°14	0°58	6°13	S 4
M 5	12 55 21	15°45'21	18° 6	18°23	22°53	13°34	20°16	23°42	4°39	15°59	7°50	5°25	7°11	1° 5	6°17	M 5
T 6	12 59 17	16°44'14	0°11	19°15	24° 7	14° 1	20°27	23°48	4°43	16° 0	7°50	5°D23	7° 8	1°12	6°20	T 6
W 7	13 3 14	17°43'04	12°21	20° 9	25°20	14°28	20°38	23°55	4°46	16° 1	7°50	5°23	7° 4	1°18	6°24	W 7
T 8	13 7 10	18°41'52	24°14	21° 7	26°34	14°55	20°49	24° 2	4°50	16° 3	7°51	5°24	7° 1	1°25	6°28	T 8
F 9	13 11 7	19°40'38	6°3	22° 8	27°48	15°23	20°59	24° 9	4°53	16° 4	7°51	5°26	6°58	1°32	6°31	F 9
S 10	13 15 3	20°39'22	17°53	23°12	29° 1	15°51	21°10	24°16	4°56	16° 5	7°52	5°R27	6°55	1°38	6°35	S 10
S 11	13 19 0	21°38'03	29°50	24°18	0°V15	16°18	21°20	24°23	5° 0	16° 6	7°52	5°26	6°52	1°45	6°38	S 11
M12	13 22 56	22°36'42	11°58	25°26	1°28	16°46	21°30	24°30	5° 3	16° 8	7°53	5°24	6°49	1°52	6°42	M12
T 13	13 26 53	23°35'19	24°22	26°37	2°42	17°15	21°40	24°37	5° 6	16° 9	7°53	5°20	6°45	1°58	6°46	T 13
W14	13 30 50	24°33'54	7°11	27°50	3°56	17°43	21°50	24°44	5° 9	16°10	7°54	5°15	6°42	2° 5	6°49	W14
T 15	13 34 46	25°32'26	20°10	29° 6	5° 9	18°12	22° 0	24°51	5°13	16°11	7°54	5° 9	6°39	2°12	6°53	T 15
F 16	13 38 43	26°30'56	3°48	0°V23	6°23	18°40	22°10	24°58	5°16	16°12	7°55	5° 3	6°36	2°18	6°56	F 16
S 17	13 42 39	27°29'25	17°28	1°43	7°36	19° 9	22°20	25° 5	5°19	16°13	7°56	4°57	6°33	2°25	7° 0	S 17
S 18	13 46 36	28°27'51	1°35	3° 5	8°50	19°38	22°29	25°13	5°22	16°14	7°56	4°52	6°30	2°32	7° 3	S 18
M19	13 50 32	29°26'16	15°56	4°29	10° 3	20° 7	22°39	25°20	5°26	16°15	7°57	4°49	6°26	2°38	7° 6	M19
T 20	13 54 29	0°24'39	0°25	5°54	11°17	20°37	22°48	25°27	5°29	16°16	7°58	4°D48	6°23	2°45	7°10	T 20
W21	13 58 25	1°23'00	14°56	7°22	12°31	21° 6	22°57	25°35	5°32	16°17	7°58	4°48	6°20	2°52	7°13	W21
T 22	14 2 22	2°21'19	29°25	8°52	13°44	21°36	23° 6	25°42	5°35	16°18	7°59	4°49	6°17	2°58	7°17	T 22
F 23	14 6 19	3°19'37	13°48	10°23	14°58	22° 5	23°15	25°49	5°38	16°19	8° 0	4°51	6°14	3° 5	7°20	F 23
S 24	14 10 15	4°17'54	28° 1	11°57	16°11	22°35	23°24	25°57	5°41	16°19	8° 0	4°R51	6°10	3°12	7°23	S 24
S 25	14 14 12	5°16'09	12°22	13°32	17°25	23° 5	23°33	26° 4	5°45	16°20	8° 1	4°51	6° 7	3°18	7°27	S 25
M26	14 18 8	6°14'22	25°52	15° 9	18°38	23°35	23°41	26°12	5°48	16°21	8° 2	4°50	6° 4	3°25	7°30	M26
T 27	14 22 5	7°12'34	9°29	16°48	19°52	24° 5	23°50	26°19	5°51	16°22	8° 3	4°48	6° 1	3°32	7°33	T 27
W28	14 26 1	8°10'44	22°52	18°29	21° 6	24°36	23°58	26°27	5°54	16°22	8° 4	4°44	5°58	3°38	7°37	W28
T 29	14 29 58	9° 8'53	6°V 2	20°12	22°19	25° 6	24° 6	26°34	5°57	16°23	8° 5	4°40	5°55	3°45	7°40	T 29
F 30	14 33 54	10° 7'00	18°V58	21°V56	23°V33	25°37	24°14	26°42	6°V 0	16°24	8° 5	4°R36	5°51	3°52	7°43	F 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4n41	2n58	4n46	6s42	1s 4	6s 4	1s25	25n16	2n19	15s37	0s39	16n49	1s52	1n 8	0s41	T 1
F 2	5 4	7 46	4 14	6 37	1 14	5 36	1 26	25 12	2 18	15 33	0 40	16 51	1 52	1 10	0 41	F 2
S 3	5 12	7 7	3 28	6 30	1 24	5 8	1 27	25 9	2 17	15 30	0 40	16 53	1 51	1 11	0 41	S 3
S 4	5 50	15 50	2 33	6 22	1 34	4 39	1 28	25 5	2 16	15 27	0 40	16 54	1 51	1 12	0 41	S 4
M 5	6 13	18 43	1 32	6 11	1 43	4 11	1 28	25 2	2 15	15 23	0 40	16 56	1 51	1 14	0 41	M 5
T 6	6 35	20 42	0 27	5 58	1 51	3 42	1 29	24 58	2 14	15 20	0 40	16 58	1 51	1 15	0 41	T 6
W 7	6 58	21 42	0s38	5 43	1 59	3 14	1 30	24 54	2 13	15 17	0 40	17 0	1 51	1 16	0 41	W 7
T 8	7 20	21 41	1 40	5 27	2 6	2 45	1 31	24 50	2 12	15 13	0 41	17 2	1 50	1 18	0 41	T 8
F 9	7 43	20 42	2 38	5 9	2 12	2 16	1 31	24 46	2 11	15 10	0 41	17 4	1 50	1 19	0 41	F 9
S 10	8 5	18 49	3 30	4 49	2 18	1 47	1 32	24 41	2 10	15 7	0 41	17 5	1 50	1 20	0 41	S 10
S 11	8 27	16 6	4 13	4 28	2 23	1 18	1 32	24 37	2 9	15 4	0 41	17 7	1 50	1 22	0 41	S 11
M12	8 49	12 40	4 45	4 5	2 28	0 49	1 32	24 33	2 8	15 1	0 41	17 9	1 50	1 23	0 41	M12
T 13	9 10	8 38	5 4	3 40	2 32	0 20	1 33	24 28	2 7	14 58	0 42	17 11	1 50	1 24	0 41	T 13
W14	9 32	4 8	5 10	3 14	2 35	0n 9	1 33	24 23	2 6	14 55	0 42	17 13	1 50	1 26	0 41	W14
T 15	9 53	0s42	5 0	2 47	2 38	0 38	1 33	24 19	2 5	14 52	0 42	17 15	1 49	1 27	0 41	T 15
F 16	10 15	5 37	4 33	2 18	2 41	1 7	1 33	24 14	2 4	14 49	0 42	17 16	1 49	1 28	0 41	F 16
S 17	10 36	10 24	3 49	1 48	2 42	1 36	1 33	24 9	2 3	14 46	0 42	17 18	1 49	1 29	0 41	S 17
S 18	10 57	14 43	2 51	1 16	2 43	2 5	1 33	24 4	2 3	14 43	0 43	17 20	1 49	1 31	0 41	S 18
M19	11 18	18 15	1 41	0 44	2 44	2 34	1 33	23 58	2 2	14 40	0 43	17 22	1 49	1 32	0 41	M19
T 20	11 38	20 40	0 24	0 10	2 44	3 3	1 33	23 53	2 1	14 37	0 43	17 24	1 49	1 33	0 41	T 20
W21	11 59	21 43	0n55	0n26	2 44	3 32	1 32	23 48	2 0	14 34	0 43	17 26	1 49	1 34	0 41	W21
T 22	12 19	21 18	2 11	1 2	2 42	4 1	1 32	23 42	1 59	14 31	0 43	17 28	1 48	1 36	0 41	T 22
F 23	12 39	19 30	3 17	1 39	2 41	4 30	1 32	23 36	1 58	14 29	0 44	17 29	1 48	1 37	0 41	F 23
S 24	12 58	16 30	4 11	2 18	2 39	4 59	1 31	23 31	1 57	14 26	0 44	17 31	1 48	1 38	0 41	S 24
S 25	13 18	12 35	4 49	2 57	2 36	5 27	1 30	23 25	1 56	14 23	0 44	17 33	1 48	1 39	0 41	S 25
M26	13 37	8 3	5 10	3 38	2 33	5 56	1 30	23 19	1 55	14 21	0 44	17 35	1 48	1 41	0 41	M26
T 27	13 57	3 12	5 12	4 19	2 29	6 24	1 29	23 12	1 54	14 18	0 44	17 37	1 48	1 42	0 41	T 27
W28	14 15	1n44	4 58	5 2	2 25	6 53	1 28	23 6	1 54	14 15	0 45	17 39	1 48	1 43	0 41	W28
T 29	14 34	6 30	4 28	5 45	2 20	7 21	1 28	23 0	1 53	14 13	0 45	17 41	1 48	1 44	0 41	T 29
F 30	14n53	10n54	3n45	6n29	2s14	7n49	1s27	22n53	1n52	14s10	0s45	17n42	1s48	1n45	0s41	F 30

Julian Day Number = 2333662.5, Delta T = 25.26 sec

Ecliptic obliquity = 23°28'50, Nutation = 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°14'06, Lahiri = 19°21'07Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1677
geocentric

MAY 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	14 37 51	11♌ 5'06	1♌40	23♋43	24♋46	26♌ 8	24♌22	26♌50	6♋ 3	16♌24	8♌ 6	4♌R33	5♌48	3♌58	7♋46	S 1
S 2	14 41 47	12° 3'10	14° 9	25°31	26° 0	26°39	24°30	26°57	6° 6	16°25	8° 7	4♌730	5°45	4° 5	7°50	S 2
M 3	14 45 44	13° 1'13	26°26	27°21	27°13	27°10	24°38	27° 5	6° 9	16°25	8° 8	4°29	5°42	4°12	7°53	M 3
T 4	14 49 41	13°59'14	8♌22	29°13	28°27	27°41	24°45	27°13	6°11	16°26	8° 9	4°D29	5°39	4°18	7°56	T 4
W 5	14 53 37	14°57'13	20°28	1♌ 7	29°41	28°12	24°53	27°20	6°14	16°26	8°10	4°30	5°36	4°25	7°59	W 5
T 6	14 57 34	15°55'10	2♌19	3° 3	0♌54	28°43	25° 0	27°28	6°17	16°27	8°11	4°31	5°32	4°32	8° 2	T 6
F 7	15 1 30	16°53'06	14° 8	5° 1	2° 8	29°15	25° 7	27°36	6°20	16°27	8°12	4°33	5°29	4°38	8° 5	F 7
S 8	15 5 27	17°51'00	25°58	7° 0	3°21	29°46	25°14	27°43	6°23	16°27	8°13	4°34	5°26	4°45	8° 8	S 8
S 9	15 9 23	18°48'52	7♌54	9° 1	4°35	0♌18	25°20	27°51	6°25	16°28	8°14	4°35	5°23	4°52	8°11	S 9
M10	15 13 20	19°46'42	20° 1	11° 4	5°48	0°50	25°27	27°59	6°28	16°28	8°15	4°R35	5°20	4°58	8°14	M10
T 11	15 17 17	20°44'31	2♌24	13° 9	7° 2	1°22	25°33	28° 7	6°31	16°28	8°16	4°35	5°16	5° 5	8°17	T 11
W12	15 21 13	21°42'18	15° 6	15°15	8°15	1°54	25°40	28°14	6°34	16°29	8°18	4°34	5°13	5°12	8°20	W12
T 13	15 25 10	22°40'03	28°11	17°22	9°29	2°26	25°46	28°22	6°36	16°29	8°19	4°33	5°10	5°18	8°23	T 13
F 14	15 29 6	23°37'46	11♌41	19°31	10°42	2°58	25°52	28°30	6°39	16°29	8°20	4°31	5° 7	5°25	8°25	F 14
S 15	15 33 3	24°35'28	25°36	21°40	11°56	3°30	25°58	28°38	6°41	16°29	8°21	4°30	5° 4	5°32	8°28	S 15
S 16	15 36 59	25°33'08	9♌55	23°51	13° 9	4° 3	26° 3	28°45	6°44	16°29	8°22	4°29	5° 1	5°38	8°31	S 16
M17	15 40 56	26°30'48	24°33	26° 2	14°23	4°35	26° 9	28°53	6°46	16°29	8°23	4°29	4°57	5°45	8°34	M17
T 18	15 44 52	27°28'25	9♌23	28°14	15°37	5° 8	26°14	29° 1	6°49	16°29	8°24	4°D29	4°54	5°52	8°36	T 18
W19	15 48 49	28°26'02	24°19	0♌25	16°50	5°40	26°19	29° 9	6°51	16°R29	8°26	4°29	4°51	5°58	8°39	W19
T 20	15 52 46	29°23'38	9♌31	2°37	18° 4	6°13	26°24	29°17	6°54	16°29	8°27	4°29	4°48	6° 5	8°42	T 20
F 21	15 56 42	0♌21'12	23°56	4°48	19°17	6°46	26°29	29°14	6°56	16°29	8°28	4°30	4°45	6°12	8°44	F 21
S 22	16 0 39	1°18'46	8♌24	6°58	20°31	7°19	26°34	29°32	6°58	16°29	8°29	4°30	4°42	6°18	8°47	S 22
S 23	16 4 35	2°16'19	22°34	9° 8	21°44	7°52	26°38	29°40	7° 1	16°29	8°31	4°30	4°38	6°25	8°49	S 23
M24	16 8 32	3°13'50	6♌23	11°16	22°58	8°25	26°42	29°48	7° 3	16°29	8°32	4°R30	4°35	6°32	8°52	M24
T 25	16 12 28	4°11'21	19°52	13°23	24°11	8°58	26°46	29°56	7° 5	16°29	8°33	4°D30	4°32	6°38	8°54	T 25
W26	16 16 25	5° 8'51	3♋ 2	15°28	25°25	9°31	26°50	0♌ 3	7° 7	16°28	8°34	4°30	4°29	6°45	8°56	W26
T 27	16 20 21	6° 6'21	15°54	17°31	26°38	10° 4	26°54	0°11	7° 9	16°28	8°36	4°30	4°26	6°52	8°59	T 27
F 28	16 24 18	7° 3'49	28°31	19°33	27°52	10°38	26°58	0°19	7°12	16°28	8°37	4°30	4°22	6°58	9° 1	F 28
S 29	16 28 14	8° 1'17	10♌55	21°32	29° 5	11°11	27° 1	0°27	7°14	16°27	8°38	4°31	4°19	7° 5	9° 3	S 29
S 30	16 32 11	8°58'44	23° 8	23°29	0♌19	11°45	27° 4	0°35	7°16	16°27	8°40	4°31	4°16	7°12	9° 6	S 30
M31	16 36 8	9♌56'10	5♌11	25♌23	1♌33	12♌18	27° 7	0♌42	7°18	16°27	8°41	4°R31	4♌13	7°18	9° 8	M31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat	decl	decl	decl	decl	lat	decl	decl	decl	lat
S 1	15n11	14n45	2n51	7n14	2s 9	8n17	1s26	22n47	1n51	14s 8	0s45	17n44	1s47	1n46	0s41	16s 8	0s12	21n12	2s 2	21s 5	21s19	20n59	5n16	2n22									
S 2	15 29	17 52	1 50	7 59	2 2	8 44	1 25	22 40	1 50	14 6	0 46	17 46	1 47	1 48	0 41	16 8	0 12	21 12	2 2	21 5	21 18	20 58	5 17	2 22									
M 3	15 46	20 6	0 44	8 45	1 55	9 12	1 24	22 33	1 49	14 3	0 46	17 48	1 47	1 49	0 41	16 8	0 12	21 12	2 2	21 4	21 18	20 57	5 19	2 22									
T 4	16 4	21 24	0s22	9 32	1 48	9 39	1 23	22 26	1 48	14 1	0 46	17 50	1 47	1 50	0 41	16 8	0 12	21 12	2 2	21 4	21 17	20 56	5 20	2 22									
W 5	16 21	21 41	1 27	10 19	1 40	10 6	1 22	22 19	1 48	13 59	0 46	17 52	1 47	1 51	0 41	16 7	0 12	21 12	2 2	21 5	21 16	20 55	5 21	2 22									
T 6	16 38	21 0	2 28	11 6	1 32	10 33	1 20	22 12	1 47	13 57	0 47	17 53	1 47	1 52	0 41	16 7	0 12	21 12	2 2	21 5	21 16	20 54	5 22	2 22									
F 7	16 55	19 23	3 22	11 54	1 24	11 0	1 19	22 4	1 46	13 54	0 47	17 55	1 47	1 53	0 41	16 7	0 12	21 12	2 2	21 5	21 15	20 53	5 24	2 22									
S 8	17 11	16 56	4 8	12 42	1 15	11 26	1 18	21 57	1 45	13 52	0 47	17 57	1 47	1 54	0 41	16 7	0 12	21 12	2 2	21 5	21 15	20 52	5 25	2 22									
S 9	17 27	13 45	4 43	13 30	1 5	11 52	1 16	21 49	1 44	13 50	0 47	17 59	1 47	1 55	0 41	16 7	0 12	21 12	2 1	21 6	21 14	20 51	5 26	2 22									
M10	17 43	9 59	5 7	14 18	0 56	12 18	1 15	21 41	1 44	13 48	0 47	18 1	1 47	1 56	0 41	16 7	0 12	21 12	2 1	21 6	21 14	20 50	5 27	2 22									
T 11	17 58	5 43	5 17	15 5	0 46	12 44	1 13	21 34	1 43	13 46	0 48	18 3	1 46	1 57	0 41	16 7	0 12	21 12	2 1	21 6	21 13	20 49	5 28	2 22									
W12	18 13	1 6	5 11	15 52	0 35	13 9	1 12	21 26	1 42	13 44	0 48	18 4	1 46	1 58	0 41	16 7	0 12	21 12	2 1	21 5	21 12	20 48	5 29	2 22									
T 13	18 28	3s43	4 50	16 39	0 25	13 34	1 10	21 18	1 41	13 43	0 48	18 6	1 46	1 59	0 41	16 7	0 12	21 12	2 1	21 5	21 12	20 47	5 31	2 23									
F 14	18 43	8 30	4 13	17 24	0 15	13 58	1 9	21 9	1 40	13 41	0 48	18 8	1 46	2 0	0 41	16 7	0 12	21 12	2 1	21 5	21 11	20 46	5 32	2 23									
S 15	18 57	13 0	3 19	18 9	0 4	14 23	1 7	21 1	1 40	13 39	0 49	18 10	1 46	2 1	0 41	16 7	0 12	21 12	2 1	21 5	21 11	20 45	5 33	2 23									
S 16	19 11	16 54	2 12	18 52	0n 7	14 47	1 5	20 53	1 39	13 37	0 49	18 11	1 46	2 2	0 42	16 7	0 12	21 12	2 1	21 4	21 10	20 44	5 34	2 23									
M17	19 24	19 49	0 55	19 34	0 17	15 10	1 4	20 44	1 38	13 36	0 49	18 13	1 46	2 3	0 42	16 7	0 12	21 12	2 1	21 4	21 10	20 43	5 35	2 23									
T 18	19 38	21 27	0n27	20 15	0 27	15 33	1 2	20 35	1 37	13 34	0 49	18 15	1 46	2 4	0 42	16 7	0 12	21 12	2 1	21 4	21 9	20 42	5 36	2 23									
W19	19 51	21 34	1 48	20 53	0 38	15 56	1 0	20 27	1 36	13 33	0 50	18 17	1 46	2 5	0 42	16 7	0 12	21 12	2 1	21 4	21 8	20 41	5 37	2 23									
T 20	20 3	20 9	3 1	21 30	0 48	16 19	0 58	20 18	1 36	13 31	0 50	18 18	1 46	2 6	0 42	16 7	0 12	21 12	2 0	21 4	21 8	20 40	5 38	2 23									
F 21	20 16	17 23	4 2	22 4	0 57	16 41	0 56	20 9	1 35	13 30	0 50	18 20	1 46	2 7	0 42	16 7	0 12	21 12	2 0	21 5	21 7	20 39	5 39	2 23									
S 22	20 27	13 36	4 45	22 36	1 6	17 2	0 54	19 59	1 34	13 28	0 51	18 22	1 46	2 8	0 42	16 7	0 12	21 12	2 0	21 5	21 7	20 38	5 40	2 23									
S 23	20 39	9 7	5 11	23 5	1 15	17 23	0 52	19 50	1 33	13 27	0 51	18 24	1 46	2 9	0 42	16 7	0 12	21 12	2 0	21 5	21 6	20 37	5 41	2 23									
M24	20 50	4 16	5 17	23 32	1 23	17 44	0 50	19 41	1 33	13 26	0 51	18 25	1 46	2 10	0 42	16 7	0 12	21 12	2 0	21 5	21 6	20 36	5 42	2 23									
T 25	21 1	0n41	5 6	23 56	1 30	18 4	0 48	19 31	1 32	13 25	0 51	18 27	1 46	2 11	0 42	16 7	0 12	21 12	2 0	21 5	21 5	20 35	5 43	2 23									
W26	21 12	5 28	4 39	24 18	1 37	18 24	0 46	19 22	1 31	13 24	0 52	18 29	1 46	2 12	0 42	16 7	0 12	21 12	2 0	21 5	21 4	20 34	5 44	2 23									
T 27	21 22	9 56	3 59	24 36	1 43	18 44	0 44	19 12	1 30	13 23	0 52	18 30	1 46	2 12	0 42	16 7	0 12	21 12	2 0	21 5	21 4	20 32	5 45	2 23									
F 28	21 32	13 52	3 7	24 52	1 49	19 2	0 42	19 2	1 29	13 22	0 52	18 32	1 46	2 13	0 42	16 7	0 12	21 12	2 0	21 5	21 3	20 31	5 46	2 23									
S 29	21 41	17 9	2 7	25 6	1 54	19 21	0 39	18 52	1 29	13 21	0 52	18 34	1 45	2 14	0 42	16 8	0 12	21 12	2 0	21 5	21 3	20 30	5 47	2 23									
S 30	21 50	19 36	1 3	25 17	1 58	19 39	0 37	18 42	1 28	13 20	0 53	18 35	1 45	2 15	0 42	16 8	0 12	21 12	2 0	21 5	21 2	20 29	5 48	2 23									
M31	21n59	21n 8	0s 4	25n25	2n 1	19n56	0s35	18n32	1n27	13s19	0s53	18n37	1s45	2n15	0s42	16s 8	0s12	21n12	2s 0	21s 5	21s 1	20n28	5n49	2n23									

ASTRODIENST EPHEMERIS for the year 1677

geocentric

JUNE 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 40 4	10 ^{II} 53'35	17 ^{II} 8	27 ^{II} 16	2 ^{II} 46	12 ^{II} 52	27 ^{II} 10	0 ^{II} 50	7 ^{II} 20	16 ^R 26	8 ^{II} 43	4 ^R 31	4 ^{II} 10	7 ^{II} 25	9 ^{II} 10	T 1
W 2	16 44 1	11°51'00	29° 0	29° 5	4° 0	13°26	27°13	0°58	7°21	16 ^{II} 26	8°44	4 ^{II} 30	4° 7	7°32	9°12	W 2
T 3	16 47 57	12°48'23	10 ^{II} 49	0 ^{II} 53	5°13	14° 0	27°16	1° 5	7°23	16°25	8°45	4°30	4° 3	7°38	9°14	T 3
F 4	16 51 54	13°45'45	22°38	2°37	6°27	14°34	27°18	1°13	7°25	16°25	8°47	4°28	4° 0	7°45	9°16	F 4
S 5	16 55 50	14°43'07	4 ^{II} 29	4°19	7°41	15° 8	27°20	1°21	7°27	16°24	8°48	4°27	3°57	7°52	9°18	S 5
S 6	16 59 47	15°40'27	16°26	5°59	8°54	15°42	27°22	1°29	7°29	16°24	8°50	4°26	3°54	7°58	9°20	S 6
M 7	17 3 44	16°37'47	28°33	7°35	10° 8	16°16	27°24	1°36	7°30	16°23	8°51	4°25	3°51	8° 5	9°22	M 7
T 8	17 7 40	17°35'05	10 ^{II} 54	9°10	11°21	16°50	27°25	1°44	7°32	16°23	8°52	4°24	3°48	8°12	9°23	T 8
W 9	17 11 37	18°32'23	23°33	10°41	12°35	17°24	27°26	1°51	7°34	16°22	8°54	4°D24	3°44	8°18	9°25	W 9
T 10	17 15 33	19°29'40	6 ^{II} 33	12°10	13°49	17°59	27°28	1°59	7°35	16°21	8°55	4°24	3°41	8°25	9°27	T 10
F 11	17 19 30	20°26'56	19°57	13°36	15° 2	18°33	27°29	2° 7	7°37	16°21	8°57	4°25	3°38	8°32	9°29	F 11
S 12	17 23 26	21°24'11	3 ^{II} 48	14°59	16°16	19° 8	27°29	2°14	7°38	16°20	8°58	4°27	3°35	8°38	9°30	S 12
S 13	17 27 23	22°21'25	18° 6	16°20	17°29	19°42	27°30	2°22	7°40	16°19	9° 0	4°28	3°32	8°45	9°32	S 13
M14	17 31 19	23°18'38	2 ^{II} 47	17°37	18°43	20°17	27°30	2°29	7°41	16°18	9° 1	4°R28	3°28	8°52	9°33	M14
T 15	17 35 16	24°15'52	17°47	18°52	19°57	20°52	27°31	2°37	7°42	16°17	9° 3	4°28	3°25	8°58	9°35	T 15
W16	17 39 13	25°13'04	2 ^{II} 57	20° 4	21°10	21°26	27°R31	2°44	7°44	16°17	9° 4	4°26	3°22	9° 5	9°36	W16
T 17	17 43 9	26°10'16	18° 8	21°13	22°24	22° 1	27°30	2°51	7°45	16°16	9° 6	4°24	3°19	9°12	9°38	T 17
F 18	17 47 6	27° 7'28	3 ^{II} 11	22°19	23°37	22°36	27°30	2°59	7°46	16°15	9° 7	4°21	3°16	9°18	9°39	F 18
S 19	17 51 2	28° 4'40	17°56	23°22	24°51	23°11	27°30	3° 6	7°47	16°14	9° 9	4°18	3°13	9°25	9°40	S 19
S 20	17 54 59	29° 1'52	2 ^{II} 19	24°22	26° 5	23°46	27°29	3°13	7°48	16°13	9°10	4°16	3° 9	9°32	9°41	S 20
M21	17 58 55	29°59'03	16°16	25°18	27°18	24°21	27°28	3°21	7°50	16°12	9°12	4°14	3° 6	9°38	9°43	M21
T 22	18 2 52	0 ^{II} 56'15	29°46	26°11	28°32	24°56	27°27	3°28	7°51	16°11	9°13	4°D13	3° 3	9°45	9°44	T 22
W23	18 6 48	1°53'27	12 ^{II} 52	27° 0	29°46	25°32	27°25	3°35	7°52	16°10	9°15	4°14	3° 0	9°52	9°45	W23
T 24	18 10 45	2°50'38	25°36	27°46	1 ^{II} 0	26° 7	27°24	3°42	7°52	16° 9	9°16	4°15	2°57	9°58	9°46	T 24
F 25	18 14 42	3°47'50	8 ^{II} 2	28°28	2°13	26°42	27°22	3°49	7°53	16° 8	9°18	4°17	2°53	10° 5	9°47	F 25
S 26	18 18 38	4°45'02	20°14	29° 6	3°27	27°18	27°20	3°57	7°54	16° 7	9°19	4°18	2°50	10°12	9°48	S 26
S 27	18 22 35	5°42'15	2 ^{II} 15	29°41	4°41	27°53	27°18	4° 4	7°55	16° 6	9°21	4°R19	2°47	10°18	9°49	S 27
M28	18 26 31	6°39'27	14°10	0 ^{II} 11	5°54	28°29	27°16	4°11	7°56	16° 4	9°22	4°19	2°44	10°25	9°49	M28
T 29	18 30 28	7°36'39	26° 0	0°37	7° 8	29° 4	27°13	4°18	7°56	16° 3	9°24	4°17	2°41	10°32	9°50	T 29
W30	18 34 24	8°33'52	7 ^{II} 49	0 ^{II} 58	8°22	29°II40	27°11	4°II25	7°II57	16° 2	9°25	4°II13	2°II38	10°38	9°II51	W30

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	
T 1	22n 7	21n42	1 s 9	25n30	2n 3	20n13	0s33	18n22	1n26	13s18	0s53	18n38	1 s45	2n16	0s42	16s 8
W 2	22 15	21 17	2 12	25 34	2 5	20 29	0 31	18 11	1 26	13 18	0 53	18 40	1 45	2 17	0 42	16 8
T 3	22 22	19 55	3 8	25 35	2 6	20 45	0 28	18 1	1 25	13 17	0 54	18 42	1 45	2 18	0 42	16 8
F 4	22 29	17 41	3 56	25 33	2 6	21 0	0 26	17 50	1 24	13 17	0 54	18 43	1 45	2 18	0 42	16 8
S 5	22 36	14 44	4 35	25 30	2 6	21 14	0 24	17 39	1 24	13 16	0 54	18 45	1 45	2 19	0 42	16 9
S 6	22 42	11 8	5 1	25 25	2 4	21 28	0 21	17 29	1 23	13 16	0 55	18 46	1 45	2 20	0 42	16 9
M 7	22 48	7 4	5 15	25 18	2 2	21 42	0 19	17 18	1 22	13 15	0 55	18 48	1 45	2 20	0 42	16 9
T 8	22 54	2 38	5 15	25 9	1 59	21 54	0 17	17 7	1 21	13 15	0 55	18 49	1 45	2 21	0 42	16 9
W 9	22 59	2s 1	4 59	24 58	1 56	22 7	0 14	16 55	1 21	13 15	0 55	18 51	1 45	2 22	0 42	16 9
T 10	23 4	6 42	4 28	24 47	1 52	22 18	0 12	16 44	1 20	13 15	0 56	18 52	1 45	2 22	0 42	16 10
F 11	23 8	11 14	3 42	24 33	1 47	22 29	0 9	16 33	1 19	13 15	0 56	18 54	1 45	2 23	0 42	16 10
S 12	23 12	15 20	2 42	24 19	1 41	22 39	0 7	16 21	1 18	13 15	0 56	18 55	1 45	2 23	0 42	16 10
S 13	23 16	18 41	1 29	24 3	1 35	22 49	0 5	16 10	1 18	13 15	0 56	18 57	1 45	2 24	0 42	16 10
M14	23 19	20 54	0 9	23 46	1 28	22 58	0 2	15 58	1 17	13 15	0 57	18 58	1 45	2 24	0 42	16 11
T 15	23 21	21 42	1n13	23 29	1 20	23 6	0n 0	15 46	1 16	13 15	0 57	19 0	1 45	2 25	0 42	16 11
W16	23 24	20 56	2 31	23 10	1 12	23 14	0 2	15 34	1 16	13 15	0 57	19 1	1 45	2 25	0 42	16 11
T 17	23 25	18 39	3 38	22 51	1 3	23 21	0 5	15 22	1 15	13 16	0 58	19 3	1 45	2 26	0 42	16 11
F 18	23 27	15 6	4 30	22 31	0 54	23 27	0 7	15 10	1 14	13 16	0 58	19 4	1 45	2 26	0 42	16 12
S 19	23 28	10 41	5 2	22 11	0 44	23 32	0 10	14 58	1 14	13 16	0 58	19 5	1 45	2 27	0 42	16 12
S 20	23 29	5 46	5 14	21 50	0 33	23 37	0 12	14 46	1 13	13 17	0 58	19 7	1 45	2 27	0 42	16 12
M21	23 29	0 42	5 8	21 29	0 22	23 41	0 14	14 34	1 12	13 18	0 59	19 8	1 45	2 28	0 43	16 13
T 22	23 29	4n15	4 44	21 8	0 11	23 45	0 17	14 21	1 11	13 18	0 59	19 10	1 45	2 28	0 43	16 13
W23	23 28	8 52	4 6	20 46	0s 1	23 48	0 19	14 9	1 11	13 19	0 59	19 11	1 45	2 28	0 43	16 13
T 24	23 27	12 58	3 17	20 25	0 14	23 50	0 21	13 56	1 10	13 20	1 0	19 12	1 45	2 29	0 43	16 14
F 25	23 26	16 24	2 19	20 3	0 27	23 51	0 24	13 43	1 9	13 21	1 0	19 13	1 45	2 29	0 43	16 14
S 26	23 24	19 4	1 17	19 42	0 41	23 52	0 26	13 30	1 9	13 21	1 0	19 15	1 45	2 29	0 43	16 14
S 27	23 21	20 50	0 11	19 22	0 55	23 52	0 28	13 18	1 8	13 22	1 0	19 16	1 45	2 30	0 43	16 15
M28	23 19	21 39	0s54	19 1	1 9	23 51	0 30	13 5	1 7	13 23	1 1	19 17	1 46	2 30	0 43	16 15
T 29	23 16	21 29	1 56	18 42	1 24	23 50	0 33	12 51	1 7	13 25	1 1	19 19	1 46	2 30	0 43	16 15
W30	23n12	20n23	2s53	18n22	1s38	23n48	0n35	12n38	1n 6	13s26	1s 1	19n20	1s46	2n30	0s43	16s16

Julian Day Number = 2333723.5, Delta T = 25.16 sec

Ecliptic obliquity = 23°28'48, Nutation = 0°00'15, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°14'15, Lahiri = 19°21'15Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1677

geocentric

JULY 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	18 38 21	9 ⁵³ 31'04	19 ⁵³ 38	1 ⁰ 16	9 ⁵³ 36	0 ⁰ 16	27°R 8	4 ⁰ 32	7 ⁰ 58	16°R 1	9 ⁵³ 27	4°R 8	2 ⁰ 34	10 ⁵³ 45	9 ⁰ 52	T 1
F 2	18 42 17	10°28'17	1 ⁰ 29	1°28	10°49	0°51	27 ⁵³ 5	4°38	7°58	16 ⁵³ 0	9°28	4 ⁰ 2	2°31	10°52	9°52	F 2
S 3	18 46 14	11°25'29	13°25	1°36	12° 3	1°27	27° 2	4°45	7°59	15°58	9°30	3°55	2°28	10°58	9°53	S 3
S 4	18 50 11	12°22'42	25°27	1°R39	13°17	2° 3	26°58	4°52	7°59	15°57	9°31	3°48	2°25	11° 5	9°53	S 4
M 5	18 54 7	13°19'54	7 ⁰ 38	1°38	14°31	2°39	26°55	4°59	8° 0	15°56	9°33	3°43	2°22	11°12	9°54	M 5
T 6	18 58 4	14°17'06	20° 1	1°32	15°45	3°15	26°51	5° 5	8° 0	15°54	9°34	3°38	2°19	11°18	9°54	T 6
W 7	19 2 0	15°14'19	2 ⁰ 39	1°21	16°58	3°51	26°47	5°12	8° 0	15°53	9°36	3°36	2°15	11°25	9°54	W 7
T 8	19 5 57	16°11'31	15°35	1° 5	18°12	4°27	26°43	5°19	8° 1	15°52	9°38	3°D35	2°12	11°32	9°55	T 8
F 9	19 9 53	17° 8'44	28°52	0°45	19°26	5° 3	26°39	5°25	8° 1	15°50	9°39	3°36	2° 9	11°38	9°55	F 9
S 10	19 13 50	18° 5'56	12 ⁰ 34	0°21	20°40	5°40	26°34	5°32	8° 1	15°49	9°41	3°37	2° 6	11°45	9°55	S 10
S 11	19 17 46	19° 3'09	26°42	29 ⁵³ 53	21°54	6°16	26°30	5°38	8° 1	15°48	9°42	3°R38	2° 3	11°52	9°55	S 11
M12	19 21 43	20° 0'22	11 ⁰ 15	29°21	23° 8	6°52	26°25	5°44	8° 1	15°46	9°44	3°38	1°59	11°58	9°55	M12
T 13	19 25 40	20°57'35	26° 9	28°46	24°22	7°29	26°20	5°51	8°R 1	15°45	9°45	3°36	1°56	12° 5	9°R55	T 13
W14	19 29 36	21°54'48	11 ⁰ 18	28° 8	25°35	8° 5	26°15	5°57	8° 1	15°43	9°47	3°32	1°53	12°12	9°55	W14
T 15	19 33 33	22°52'02	26°34	27°29	26°49	8°42	26°10	6° 3	8° 1	15°42	9°48	3°26	1°50	12°19	9°55	T 15
F 16	19 37 29	23°49'16	11 ⁰ 45	26°48	28° 3	9°18	26° 4	6° 9	8° 1	15°40	9°50	3°19	1°47	12°25	9°55	F 16
S 17	19 41 26	24°46'31	26°41	26° 6	29°17	9°55	25°59	6°15	8° 1	15°39	9°51	3°12	1°44	12°32	9°55	S 17
S 18	19 45 22	25°43'46	11 ⁰ 15	25°24	0 ⁰ 31	10°32	25°53	6°21	8° 0	15°37	9°53	3° 5	1°40	12°39	9°55	S 18
M19	19 49 19	26°41'03	25°20	24°43	1°45	11° 8	25°47	6°27	8° 0	15°36	9°54	2°59	1°37	12°45	9°54	M19
T 20	19 53 15	27°38'20	8 ⁰ 56	24° 3	2°59	11°45	25°41	6°33	8° 0	15°34	9°56	2°55	1°34	12°52	9°54	T 20
W21	19 57 12	28°35'38	22° 4	23°26	4°13	12°22	25°35	6°39	7°59	15°33	9°57	2°54	1°31	12°59	9°53	W21
T 22	20 1 9	29°32'58	4 ⁰ 47	22°51	5°27	12°59	25°29	6°45	7°59	15°31	9°58	2°D54	1°28	13° 5	9°53	T 22
F 23	20 5 5	0 ⁰ 30'18	17°10	22°20	6°41	13°36	25°23	6°50	7°59	15°30	10° 0	2°54	1°25	13°12	9°52	F 23
S 24	20 9 2	1°27'40	29°17	21°54	7°54	14°13	25°16	6°56	7°58	15°28	10° 1	2°R55	1°21	13°19	9°52	S 24
S 25	20 12 58	2°25'02	11 ⁰ 13	21°31	9° 8	14°50	25°10	7° 2	7°58	15°27	10° 3	2°55	1°18	13°25	9°51	S 25
M26	20 16 55	3°22'26	23° 3	21°15	10°22	15°27	25° 3	7° 7	7°57	15°25	10° 4	2°53	1°15	13°32	9°51	M26
T 27	20 20 51	4°19'50	4 ⁰ 51	21° 3	11°36	16° 4	24°56	7°13	7°56	15°23	10° 6	2°48	1°12	13°39	9°50	T 27
W28	20 24 48	5°17'16	16°40	20°D58	12°50	16°42	24°49	7°18	7°56	15°22	10° 7	2°41	1° 9	13°45	9°49	W28
T 29	20 28 44	6°14'42	28°32	20°59	14° 4	17°19	24°42	7°23	7°55	15°20	10° 8	2°32	1° 5	13°52	9°48	T 29
F 30	20 32 41	7°12'10	10 ⁰ 29	21° 6	15°18	17°56	24°35	7°28	7°54	15°19	10°10	2°21	1° 2	13°59	9°47	F 30
S 31	20 36 38	8 ⁰ 9'38	22 ⁰ 33	21 ⁰ 20	16 ⁰ 32	18 ⁰ 34	24 ⁵³ 28	7 ⁰ 34	7 ⁰ 53	15 ⁵³ 17	10 ⁵³ 11	2 ⁰ 9	0 ⁰ 59	14 ⁵³ 5	9 ⁰ 46	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	23n 8	18n23	3s42	18n 4	1s53	23n45	0n37	12n25	1n 5	13s27	1s 1	19n21	1s46	2n30	0s43	16s16
F 2	23 4	15 36	4 22	17 47	2 8	23 41	0 39	12 12	1 5	13 28	1 2	19 22	1 46	2 31	0 43	16 16
S 3	22 59	12 11	4 51	17 30	2 24	23 37	0 41	11 58	1 4	13 30	1 2	19 23	1 46	2 31	0 43	16 17
S 4	22 54	8 14	5 7	17 15	2 39	23 32	0 43	11 45	1 3	13 31	1 2	19 25	1 46	2 31	0 43	16 17
M 5	22 49	3 56	5 9	17 0	2 54	23 26	0 45	11 31	1 3	13 33	1 3	19 26	1 46	2 31	0 43	16 18
T 6	22 43	0s36	4 58	16 47	3 8	23 20	0 47	11 17	1 2	13 34	1 3	19 27	1 46	2 31	0 43	16 18
W 7	22 36	5 12	4 31	16 36	3 23	23 13	0 49	11 4	1 1	13 36	1 3	19 28	1 46	2 31	0 43	16 18
T 8	22 30	9 41	3 51	16 26	3 36	23 5	0 51	10 50	1 1	13 37	1 3	19 29	1 46	2 31	0 43	16 19
F 9	22 23	13 51	2 57	16 17	3 50	22 57	0 53	10 36	1 0	13 39	1 4	19 30	1 46	2 31	0 43	16 19
S 10	22 15	17 24	1 52	16 10	4 2	22 47	0 55	10 22	0 59	13 41	1 4	19 31	1 46	2 31	0 43	16 20
S 11	22 7 20	4 03	16 5	4 13	22 38	0 57	10 8	0 59	13 43	1 4	19 32	1 46	2 31	0 43	16 20	0 13
M12	21 59	21 29	0n41	16 1	4 24	22 27	0 58	9 54	0 58	13 44	1 4	19 33	1 46	2 31	0 43	16 21
T 13	21 51	21 27	1 59	15 59	4 33	22 16	1 0	9 40	0 57	13 46	1 5	19 34	1 46	2 31	0 43	16 21
W14	21 42	19 52	3 9	15 59	4 41	22 4	1 2	9 25	0 57	13 48	1 5	19 35	1 46	2 31	0 43	16 21
T 15	21 32	16 51	4 6	16 1	4 47	21 52	1 4	9 11	0 56	13 50	1 5	19 36	1 46	2 31	0 43	16 22
F 16	21 23	12 43	4 46	16 4	4 52	21 39	1 5	8 57	0 55	13 52	1 5	19 37	1 47	2 31	0 43	16 22
S 17	21 12	7 51	5 5	16 8	4 55	21 25	1 7	8 42	0 55	13 54	1 6	19 38	1 47	2 31	0 43	16 23
S 18	21 2	2 40	5 4	16 15	4 56	21 11	1 8	8 28	0 54	13 57	1 6	19 39	1 47	2 31	0 43	16 23
M19	20 51	2n29	4 44	16 22	4 56	20 56	1 10	8 13	0 53	13 59	1 6	19 40	1 47	2 31	0 43	16 24
T 20	20 40	7 21	4 9	16 31	4 53	20 41	1 11	7 59	0 53	14 1	1 6	19 41	1 47	2 31	0 43	16 24
W21	20 29	11 43	3 21	16 41	4 50	20 25	1 12	7 44	0 52	14 3	1 6	19 42	1 47	2 31	0 43	16 25
T 22	20 17	15 25	2 25	16 52	4 44	20 8	1 14	7 29	0 51	14 6	1 7	19 43	1 47	2 30	0 43	16 25
F 23	20 5	18 19	1 24	17 4	4 37	19 51	1 15	7 14	0 51	14 8	1 7	19 44	1 47	2 30	0 44	16 26
S 24	19 52	20 21	0 20	17 17	4 28	19 33	1 16	6 59	0 50	14 10	1 7	19 45	1 47	2 30	0 44	16 26
S 25	19 39	21 26	0s44	17 30	4 18	19 14	1 17	6 44	0 49	14 13	1 7	19 45	1 47	2 30	0 44	16 27
M26	19 26	21 32	1 46	17 44	4 7	18 55	1 18	6 29	0 49	14 15	1 8	19 46	1 47	2 29	0 44	16 27
T 27	19 13	20 42	2 42	17 58	3 55	18 36	1 19	6 14	0 48	14 18	1 8	19 47	1 47	2 29	0 44	16 28
W28	18 59	18 57	3 31	18 12	3 42	18 16	1 20	5 59	0 47	14 20	1 8	19 48	1 48	2 29	0 44	16 28
T 29	18 45	16 23	4 12	18 25	3 27	17 56	1 21	5 44	0 47	14 23	1 8	19 49	1 48	2 29	0 44	16 28
F 30	18 30	13 8	4 41	18 39	3 13	17 35	1 22	5 29	0 46	14 25	1 8	19 49	1 48	2 28	0 44	16 29
S 31	18n15	9n19	4s58	18n52	2s57	17n13	1n23	5n14	0n45	14s28	1s 8	19n50	1s48	2n28	0s44	16s29

Julian Day Number = 2333753.5, Delta T = 25.11 sec
 Ecliptic obliquity = 23°28'48, Nutation = 0°00'16, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°14'19, Lahiri = 19°21'19Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1677

geocentric

AUGUST 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 40 34	9♌7°08	4♍45	21♌40	17♌47	19♍11	24°R21	7♍39	7°R52	15°R15	10♌13	1°R57	0♌56	14♌12	9°R45	S 1
M 2	20 44 31	10° 4'38	17° 6	22° 7	19° 1	19°49	24♌13	7°44	7°Y51	15♌14	10°14	1♌46	0°53	14°19	9°Y44	M 2
T 3	20 48 27	11° 2'09	29°38	22°41	20°15	20°26	24° 6	7°48	7°50	15°12	10°15	1°38	0°50	14°25	9°43	T 3
W 4	20 52 24	11°59'41	12♌22	23°21	21°29	21° 4	23°58	7°53	7°49	15°10	10°17	1°32	0°46	14°32	9°42	W 4
T 5	20 56 20	12°57'14	25°20	24° 8	22°43	21°42	23°51	7°58	7°48	15° 9	10°18	1°28	0°43	14°39	9°41	T 5
F 6	21 0 17	13°54'48	8♍35	25° 1	23°57	22°20	23°43	8° 3	7°47	15° 7	10°19	1°D27	0°40	14°45	9°40	F 6
S 7	21 4 13	14°52'23	22°10	26° 1	25°11	22°57	23°35	8° 7	7°46	15° 6	10°21	1°27	0°37	14°52	9°38	S 7
S 8	21 8 10	15°49'58	6♌7	27° 7	26°25	23°35	23°28	8°12	7°45	15° 4	10°22	1°R27	0°34	14°59	9°37	S 8
M 9	21 12 7	16°47'35	20°25	28°19	27°39	24°13	23°20	8°16	7°44	15° 2	10°23	1°26	0°31	15° 6	9°36	M 9
T 10	21 16 3	17°45'13	5♌4	29°36	28°53	24°51	23°12	8°21	7°42	15° 1	10°24	1°23	0°27	15°12	9°34	T 10
W11	21 20 0	18°42'51	19°59	0♌59	0♍7	25°29	23° 4	8°25	7°41	14°59	10°26	1°17	0°24	15°19	9°33	W11
T 12	21 23 56	19°40'31	5♌3	2°27	1°21	26° 7	22°57	8°29	7°40	14°57	10°27	1° 9	0°21	15°26	9°31	T 12
F 13	21 27 53	20°38'12	20° 3	3°59	2°35	26°45	22°49	8°33	7°38	14°56	10°28	0°58	0°18	15°32	9°30	F 13
S 14	21 31 49	21°35'55	5♌0	5°36	3°49	27°24	22°41	8°37	7°37	14°54	10°29	0°47	0°15	15°39	9°28	S 14
S 15	21 35 46	22°33'38	19°34	7°17	5° 3	28° 2	22°33	8°41	7°35	14°53	10°31	0°37	0°11	15°46	9°26	S 15
M16	21 39 42	23°31'24	3°Y43	9° 2	6°17	28°40	22°25	8°45	7°34	14°51	10°32	0°28	0° 8	15°52	9°25	M16
T 17	21 43 39	24°29'11	17°23	10°50	7°31	29°18	22°17	8°48	7°32	14°49	10°33	0°22	0° 5	15°59	9°23	T 17
W18	21 47 36	25°26'59	0♌35	12°40	8°45	29°57	22° 9	8°52	7°31	14°48	10°34	0°18	0° 2	16° 6	9°21	W18
T 19	21 51 32	26°24'50	13°21	14°33	9°59	0♌35	22° 2	8°56	7°29	14°46	10°35	0°16	29♍59	16°12	9°19	T 19
F 20	21 55 29	27°22'42	25°45	16°28	11°14	1°14	21°54	8°59	7°28	14°45	10°36	0°16	29°56	16°19	9°17	F 20
S 21	21 59 25	28°20'36	7♍52	18°24	12°28	1°52	21°46	9° 2	7°26	14°43	10°38	0°16	29°52	16°26	9°16	S 21
S 22	22 3 22	29°18'32	19°48	20°21	13°42	2°31	21°38	9° 6	7°24	14°41	10°39	0°15	29°49	16°32	9°14	S 22
M23	22 7 18	0♍16'30	1♌37	22°19	14°56	3°10	21°30	9° 9	7°22	14°40	10°40	0°12	29°46	16°39	9°12	M23
T 24	22 11 15	1°14'29	13°26	24°17	16°10	3°48	21°23	9°12	7°21	14°38	10°41	0° 7	29°43	16°46	9°10	T 24
W25	22 15 11	2°12'30	25°17	26°15	17°24	4°27	21°15	9°15	7°19	14°37	10°42	29♍59	29°40	16°53	9° 7	W25
T 26	22 19 8	3°10'34	7♌14	28°14	18°38	5° 6	21° 8	9°18	7°17	14°35	10°43	29°48	29°37	16°59	9° 5	T 26
F 27	22 23 5	4° 8'38	19°20	0♍12	19°52	5°45	21° 0	9°20	7°15	14°34	10°44	29°36	29°33	17° 6	9° 3	F 27
S 28	22 27 1	5° 6'45	1♍35	2° 9	21° 6	6°24	20°53	9°23	7°13	14°32	10°45	29°22	29°30	17°13	9° 1	S 28
S 29	22 30 58	6° 4'53	14° 1	4° 6	22°20	7° 3	20°45	9°26	7°11	14°31	10°46	29° 8	29°27	17°19	8°59	S 29
M30	22 34 54	7° 3'03	26°37	6° 2	23°35	7°42	20°38	9°28	7° 9	14°29	10°47	28°56	29°24	17°26	8°57	M30
T 31	22 38 51	8♍1'14	9♌25	7♍58	24♍49	8♌21	20♌31	9♍31	7°Y 7	14♌28	10♌48	28♍46	29♍21	17♌33	8°Y54	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	18n 0	5n 6	5s 2	19n 5	2s41	16n51	1n23	4n58	0n45	14s31	1s 9	19n51	1s48	2n27	0s44	16s30
M 2	17 45	0 37	4 52	19 16	2 25	16 29	1 24	4 43	0 44	14 33	1 9	19 52	1 48	2 27	0 44	16 30
T 3	17 29	3s56	4 28	19 27	2 9	16 6	1 25	4 28	0 43	14 36	1 9	19 52	1 48	2 27	0 44	16 31
W 4	17 13	8 25	3 50	19 36	1 52	15 43	1 25	4 12	0 43	14 38	1 9	19 53	1 48	2 26	0 44	16 31
T 5	16 57	12 36	2 59	19 45	1 36	15 19	1 26	3 57	0 42	14 41	1 9	19 54	1 48	2 26	0 44	16 32
F 6	16 41	16 15	1 58	19 51	1 20	14 55	1 26	3 41	0 41	14 44	1 9	19 54	1 48	2 25	0 44	16 32
S 7	16 24	19 8	0 49	19 56	1 4	14 30	1 26	3 26	0 41	14 46	1 10	19 55	1 49	2 25	0 44	16 33
S 8	16 7	20 58	0n25	19 59	0 48	14 5	1 26	3 10	0 40	14 49	1 10	19 55	1 49	2 24	0 44	16 33
M 9	15 50	21 29	1 39	19 59	0 33	13 40	1 27	2 54	0 40	14 52	1 10	19 56	1 49	2 24	0 44	16 34
T 10	15 32	20 35	2 48	19 58	0 19	13 14	1 27	2 39	0 39	14 55	1 10	19 56	1 49	2 23	0 44	16 34
W11	15 15	18 15	3 47	19 54	0 5	12 48	1 27	2 23	0 38	14 57	1 10	19 57	1 49	2 23	0 44	16 35
T 12	14 56	14 39	4 31	19 47	0n 9	12 22	1 27	2 7	0 38	15 0	1 10	19 58	1 49	2 22	0 44	16 35
F 13	14 38	10 7	4 56	19 38	0 21	11 55	1 27	1 51	0 37	15 3	1 10	19 58	1 49	2 22	0 44	16 36
S 14	14 20	5 2	5 0	19 26	0 33	11 28	1 27	1 36	0 36	15 5	1 11	19 59	1 49	2 21	0 44	16 36
S 15	14 1	0n14	4 45	19 12	0 44	11 1	1 26	1 20	0 36	15 8	1 11	19 59	1 50	2 20	0 44	16 37
M16	13 42	5 20	4 12	18 54	0 54	10 33	1 26	1 4	0 35	15 11	1 11	20 0	1 50	2 20	0 44	16 37
T 17	13 23	10 1	3 26	18 34	1 4	10 3	1 26	0 48	0 34	15 13	1 11	20 0	1 50	2 19	0 44	16 38
W18	13 4	14 2	2 30	18 11	1 12	9 37	1 25	0 32	0 34	15 16	1 11	20 0	1 50	2 19	0 44	16 38
T 19	12 44	17 16	1 28	17 46	1 19	9 9	1 25	0 16	0 33	15 19	1 11	20 1	1 50	2 18	0 44	16 39
F 20	12 24	19 37	0 24	17 18	1 26	8 40	1 24	0 0	0 33	15 21	1 11	20 1	1 50	2 17	0 44	16 39
S 21	12 4	21 0	0s40	16 47	1 31	8 11	1 24	0s16	0 32	15 24	1 11	20 2	1 50	2 17	0 44	16 40
S 22	11 44	21 24	1 41	16 15	1 36	7 42	1 23	0 32	0 31	15 26	1 11	20 2	1 50	2 16	0 44	16 40
M23	11 24	20 50	2 38	15 40	1 40	7 13	1 22	0 47	0 31	15 29	1 11	20 2	1 51	2 15	0 44	16 41
T 24	11 3	19 22	3 27	15 4	1 43	6 43	1 22	1 3	0 30	15 32	1 11	20 3	1 51	2 14	0 44	16 41
W25	10 42	17 3	4 8	14 26	1 45	6 13	1 21	1 19	0 29	15 34	1 11	20 3	1 51	2 14	0 44	16 42
T 26	10 21	14 1	4 37	13 46	1 46	5 44	1 20	1 36	0 29	15 37	1 11	20 3	1 51	2 13	0 44	16 42
F 27	10 0	10 22	4 55	13 5	1 47	5 14	1 19	1 52	0 28	15 39	1 12	20 4	1 51	2 12	0 44	16 42
S 28	9 39	6 16	5 0	12 23	1 47	4 43	1 18	2 8	0 27	15 41	1 12	20 4	1 51	2 11	0 44	16 43
S 29	9 18	1 50	4 50	11 40	1 46	4 13	1 17	2 24	0 27	15 44	1 12	20 4	1 51	2 11	0 44	16 43
M30	8 56	2s44	4 26	10 56	1 44	3 43	1 15	2 40	0 26	15 46	1 12	20 4	1 51	2 10	0 44	16 44
T 31	8n35	7s14	3s49	10n11	1n42	3n12	1n14	2s56	0n26	15s48	1s12	20n 5	1s52	2n 9	0s44	16s44

Julian Day Number = 2333784.5, Delta T = 25.06 sec
 Ecliptic obliquity = 23°28'48, Nutation = 0°00'16, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°14'23, Lahiri = 19°21'24Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1677

geocentric

OCTOBER 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	0 41 4	8♂20°16	29♂27	29♂ 0	3♂ 3	29♂ 2	17°R54	9°R51	5°R56	13°R52	11♂ 6	26°D16	27♂42	21♂ 0	7°R32	F 1
S 2	0 45 0	9°19'29	13♂17	0♂23	4°17	29°43	17♂52	9♂50	5°Y54	13♂51	11° 6	26♂17	27°39	21° 7	7°Y30	S 2
S 3	0 48 57	10°18'44	27°15	1°46	5°31	0♂24	17°50	9°48	5°51	13°50	11° 7	26°18	27°36	21°13	7°27	S 3
M 4	0 52 54	11°18'01	11♂20	3° 7	6°45	1° 5	17°48	9°47	5°49	13°50	11° 7	26°R19	27°33	21°20	7°24	M 4
T 5	0 56 50	12°17'20	25°32	4°27	7°59	1°46	17°46	9°46	5°46	13°49	11° 7	26°18	27°29	21°27	7°21	T 5
W 6	1 0 47	13°16'41	9♂48	5°46	9°13	2°28	17°44	9°44	5°44	13°48	11° 7	26°16	27°26	21°34	7°18	W 6
T 7	1 4 43	14°16'03	24° 5	7° 4	10°26	3° 9	17°43	9°42	5°41	13°48	11° 7	26°11	27°23	21°40	7°16	T 7
F 8	1 8 40	15°15'27	8♂20	8°20	11°40	3°50	17°42	9°41	5°39	13°47	11° 7	26° 5	27°20	21°47	7°13	F 8
S 9	1 12 36	16°14'52	22°28	9°35	12°54	4°31	17°41	9°39	5°37	13°47	11° 7	25°59	27°17	21°54	7°10	S 9
S 10	1 16 33	17°14'20	6°Y24	10°49	14° 8	5°13	17°40	9°37	5°34	13°46	11° 7	25°52	27°14	22° 0	7° 7	S 10
M 11	1 20 29	18°13'50	20° 5	12° 1	15°22	5°54	17°40	9°35	5°32	13°46	11°R 7	25°47	27°10	22° 7	7° 4	M 11
T 12	1 24 26	19°13'22	3♂27	13°11	16°35	6°36	17°39	9°33	5°30	13°45	11° 7	25°43	27° 7	22°14	7° 2	T 12
W 13	1 28 23	20°12'55	16°29	14°19	17°49	7°17	17°D39	9°30	5°27	13°45	11° 7	25°41	27° 4	22°20	6°59	W 13
T 14	1 32 19	21°12'32	29°12	15°25	19° 3	7°59	17°39	9°28	5°25	13°44	11° 7	25°D41	27° 1	22°27	6°56	T 14
F 15	1 36 16	22°12'10	11♂37	16°29	20°17	8°41	17°40	9°26	5°23	13°44	11° 7	25°42	26°58	22°34	6°54	F 15
S 16	1 40 12	23°11'50	23°46	17°30	21°31	9°22	17°40	9°23	5°20	13°44	11° 7	25°44	26°54	22°41	6°51	S 16
S 17	1 44 9	24°11'33	5♂45	18°29	22°44	10° 4	17°41	9°20	5°18	13°43	11° 7	25°45	26°51	22°47	6°48	S 17
M 18	1 48 5	25°11'18	17°38	19°25	23°58	10°46	17°42	9°18	5°16	13°43	11° 7	25°47	26°48	22°54	6°46	M 18
T 19	1 52 2	26°11'06	29°29	20°17	25°12	11°28	17°43	9°15	5°14	13°43	11° 7	25°R47	26°45	23° 1	6°43	T 19
W 20	1 55 58	27°10'55	11♂24	21° 6	26°25	12°10	17°44	9°12	5°12	13°43	11° 6	25°46	26°42	23° 7	6°40	W 20
T 21	1 59 55	28°10'47	23°27	21°50	27°39	12°52	17°45	9° 9	5° 9	13°42	11° 6	25°44	26°39	23°14	6°38	T 21
F 22	2 3 51	29°10'41	5♂42	22°30	28°53	13°34	17°47	9° 6	5° 7	13°42	11° 6	25°40	26°35	23°21	6°35	F 22
S 23	2 7 48	0♂13'37	18°14	23° 5	0♂ 6	14°16	17°49	9° 3	5° 5	13°42	11° 6	25°36	26°32	23°27	6°33	S 23
S 24	2 11 45	1°10'35	1♂ 4	23°34	1°20	14°58	17°51	8°59	5° 3	13°42	11° 5	25°32	26°29	23°34	6°30	S 24
M 25	2 15 41	2°10'35	14°13	23°57	2°34	15°41	17°53	8°56	5° 1	13°D42	11° 5	25°28	26°26	23°41	6°28	M 25
T 26	2 19 38	3°10'37	27°40	24°14	3°47	16°23	17°56	8°52	4°59	13°42	11° 5	25°25	26°23	23°48	6°25	T 26
W 27	2 23 34	4°10'42	11♂25	24°23	5° 1	17° 5	17°58	8°49	4°57	13°42	11° 4	25°24	26°19	23°54	6°23	W 27
T 28	2 27 31	5°10'48	25°23	24°R24	6°15	17°48	18° 1	8°45	4°55	13°42	11° 4	25°D23	26°16	24° 1	6°21	T 28
F 29	2 31 27	6°10'56	9♂32	24°16	7°28	18°30	18° 4	8°42	4°53	13°42	11° 4	25°24	26°13	24° 8	6°18	F 29
S 30	2 35 24	7°11'05	23°47	23°59	8°42	19°13	18° 7	8°38	4°51	13°42	11° 3	25°25	26°10	24°14	6°16	S 30
S 31	2 39 20	8♂11'16	8♂ 4	23♂33	9♂55	19♂56	18♂11	8♂34	4°Y49	13♂43	11♂ 3	25♂26	26♂ 7	24♂21	6°Y14	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	3s19	19s47	0n17	12s31	1s28	12s24	0n10	11s 3	0n 6	16s36	1s10	20n 3	1s56	1n41	0s45	F 1
S 2	3 42	20 56	1 31	13 7	1 35	12 52	0 7	11 19	0 5	16 37	1 10	20 3	1 56	1 40	0 45	S 2
S 3	4 5	20 48	2 39	13 42	1 42	13 19	0 4	11 34	0 5	16 37	1 10	20 3	1 56	1 39	0 45	S 3
M 4	4 29	19 21	3 39	14 16	1 49	13 46	0 1	11 48	0 4	16 38	1 10	20 2	1 56	1 38	0 45	M 4
T 5	4 52	16 43	4 26	14 50	1 55	14 13	0s 1	12 3	0 4	16 38	1 10	20 2	1 56	1 37	0 45	T 5
W 6	5 15	13 3	4 57	15 23	2 2	14 39	0 4	12 18	0 3	16 39	1 10	20 2	1 56	1 36	0 45	W 6
T 7	5 38	8 39	5 9	15 55	2 8	15 5	0 7	12 33	0 2	16 39	1 9	20 1	1 57	1 35	0 45	T 7
F 8	6 1	3 47	5 2	16 25	2 14	15 31	0 10	12 47	0 2	16 39	1 9	20 1	1 57	1 34	0 45	F 8
S 9	6 24	1n15	4 37	16 55	2 20	15 56	0 13	13 2	0 1	16 39	1 9	20 1	1 57	1 33	0 45	S 9
S 10	6 47	6 9	3 56	17 24	2 25	16 21	0 15	13 17	0 0	16 39	1 9	20 0	1 57	1 32	0 45	S 10
M 11	7 10	10 40	3 2	17 51	2 31	16 46	0 18	13 31	0s 0	16 40	1 9	20 0	1 57	1 31	0 45	M 11
T 12	7 32	14 32	1 58	18 18	2 36	17 10	0 21	13 45	0 1	16 40	1 9	19 59	1 57	1 30	0 45	T 12
W 13	7 55	17 36	0 50	18 43	2 41	17 33	0 24	13 59	0 1	16 39	1 9	19 59	1 57	1 29	0 45	W 13
T 14	8 17	19 42	0s19	19 7	2 45	17 56	0 27	14 14	0 2	16 39	1 9	19 58	1 57	1 29	0 44	T 14
F 15	8 40	20 48	1 26	19 29	2 49	18 19	0 30	14 28	0 3	16 39	1 8	19 58	1 57	1 28	0 44	F 15
S 16	9 2	20 53	2 28	19 50	2 52	18 41	0 32	14 42	0 3	16 39	1 8	19 58	1 57	1 27	0 44	S 16
S 17	9 24	20 0	3 22	20 10	2 55	19 3	0 35	14 55	0 4	16 38	1 8	19 57	1 58	1 26	0 44	S 17
M 18	9 46	18 14	4 7	20 28	2 58	19 25	0 38	15 9	0 4	16 38	1 8	19 57	1 58	1 25	0 44	M 18
T 19	10 8	15 42	4 41	20 44	3 0	19 45	0 41	15 23	0 5	16 38	1 8	19 56	1 58	1 24	0 44	T 19
W 20	10 29	12 31	5 4	20 58	3 1	20 6	0 44	15 36	0 6	16 37	1 8	19 56	1 58	1 23	0 44	W 20
T 21	10 51	8 47	5 13	21 11	3 2	20 25	0 46	15 50	0 6	16 37	1 8	19 55	1 58	1 22	0 44	T 21
F 22	11 12	4 39	5 9	21 21	3 2	20 45	0 49	16 3	0 7	16 36	1 7	19 54	1 58	1 22	0 44	F 22
S 23	11 33	0 13	4 50	21 29	3 1	21 3	0 52	16 16	0 8	16 35	1 7	19 54	1 58	1 21	0 44	S 23
S 24	11 54	4s20	4 16	21 35	2 59	21 21	0 55	16 29	0 8	16 34	1 7	19 53	1 58	1 20	0 44	S 24
M 25	12 15	8 48	3 28	21 37	2 55	21 39	0 57	16 42	0 9	16 34	1 7	19 53	1 58	1 19	0 44	M 25
T 26	12 36	12 57	2 27	21 38	2 51	21 56	1 0	16 55	0 9	16 33	1 7	19 52	1 58	1 18	0 44	T 26
W 27	12 56	16 29	1 16	21 34	2 46	22 12	1 3	17 8	0 10	16 32	1 7	19 52	1 58	1 18	0 44	W 27
T 28	13 16	19 8	0 0	21 28	2 39	22 28	1 6	17 20	0 11	16 31	1 7	19 51	1 58	1 17	0 44	T 28
F 29	13 36	20 39	1n17	21 18	2 31	22 43	1 8	17 33	0 11	16 30	1 7	19 50	1 58	1 16	0 44	F 29
S 30	13 56	20 50	2 30	21 4	2 21	22 57	1 11	17 45	0 12	16 29	1 6	19 50	1 59	1 15	0 44	S 30
S 31	14s16	19s40	3n35	20s46	2s 9	23s11	1s13	17s57	0s12	16s27	1s 6	19n49	1s59	1n15	0s44	S 31

Julian Day Number = 2333845.5, Delta T = 24.97 sec
 Ecliptic obliquity = 23°28'48, Nutation = 0°00'14, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°14'32, Lahiri = 19°21'32Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1677
geocentric

NOVEMBER 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	2 43 17	9♍11'29	22♈21	22°R57	11♌9	20♍38	18♌15	8°R30	4°R47	13♌43	11°R 2	25♍27	26♍4	24♈28	6°R11	M 1
T 2	2 47 14	10°11'43	6♌34	22♍11	12°22	21°21	18°18	8♍26	4°Y45	13°43	11♈2	25°R28	26° 0	24°34	6°Y 9	T 2
W 3	2 51 10	11°11'59	20°42	21°16	13°36	22° 4	18°22	8°22	4°43	13°43	11° 1	25°28	25°57	24°41	6° 7	W 3
T 4	2 55 7	12°12'16	4♌42	20°12	14°49	22°46	18°27	8°18	4°42	13°44	11° 1	25°27	25°54	24°48	6° 5	T 4
F 5	2 59 3	13°12'34	18°33	19° 1	16° 3	23°29	18°31	8°14	4°40	13°44	11° 0	25°25	25°51	24°55	6° 3	F 5
S 6	3 3 0	14°12'54	2°Y13	17°45	17°16	24°12	18°36	8° 9	4°38	13°44	10°59	25°24	25°48	25° 1	6° 1	S 6
S 7	3 6 56	15°13'16	15°42	16°25	18°30	24°55	18°40	8° 5	4°36	13°45	10°59	25°22	25°45	25° 8	5°59	S 7
M 8	3 10 53	16°13'39	28°56	15° 5	19°43	25°38	18°45	8° 1	4°35	13°45	10°58	25°21	25°41	25°15	5°57	M 8
T 9	3 14 49	17°14'03	11♌57	13°47	20°56	26°21	18°50	7°56	4°33	13°46	10°58	25°21	25°38	25°21	5°55	T 9
W10	3 18 46	18°14'30	24°43	12°33	22°10	27° 5	18°56	7°52	4°32	13°46	10°57	25°D20	25°35	25°28	5°53	W10
T 11	3 22 43	19°14'57	7♍14	11°25	23°23	27°48	19° 1	7°47	4°30	13°47	10°56	25°21	25°32	25°35	5°51	T 11
F 12	3 26 39	20°15'27	19°33	10°27	24°36	28°31	19° 7	7°43	4°29	13°47	10°55	25°21	25°29	25°41	5°49	F 12
S 13	3 30 36	21°15'58	1♈39	9°39	25°49	29°14	19°12	7°38	4°27	13°48	10°55	25°21	25°25	25°48	5°47	S 13
S 14	3 34 32	22°16'31	13°37	9° 2	27° 3	29°58	19°18	7°34	4°26	13°49	10°54	25°22	25°22	25°55	5°46	S 14
M15	3 38 29	23°17'06	25°30	8°36	28°16	0♌41	19°25	7°29	4°24	13°49	10°53	25°22	25°19	26° 2	5°44	M15
T 16	3 42 25	24°17'42	7♍21	8°23	29°29	1°25	19°31	7°24	4°23	13°50	10°52	25°22	25°16	26° 8	5°42	T 16
W17	3 46 22	25°18'21	19°15	8°D20	0♌42	2° 8	19°37	7°19	4°22	13°51	10°52	25°22	25°13	26°15	5°41	W17
T 18	3 50 18	26°19'00	1♍16	8°29	1°55	2°52	19°44	7°15	4°21	13°52	10°51	25°22	25°10	26°22	5°39	T 18
F 19	3 54 15	27°19'42	13°30	8°47	3° 8	3°35	19°51	7°10	4°19	13°52	10°50	25°22	25° 6	26°28	5°38	F 19
S 20	3 58 12	28°20'25	26° 0	9°15	4°21	4°19	19°58	7° 5	4°18	13°53	10°49	25°23	25° 3	26°35	5°36	S 20
S 21	4 2 8	29°21'09	8♌50	9°51	5°34	5° 3	20° 5	7° 0	4°17	13°54	10°48	25°23	25° 0	26°42	5°35	S 21
M22	4 6 5	0♌21'56	22° 4	10°34	6°47	5°47	20°12	6°55	4°16	13°55	10°47	25°24	24°57	26°49	5°33	M22
T 23	4 10 1	1°22'43	5♍41	11°24	8° 0	6°31	20°20	6°50	4°15	13°56	10°46	25°24	24°54	26°55	5°32	T 23
W24	4 13 58	2°23'32	19°42	12°19	9°13	7°15	20°27	6°45	4°14	13°57	10°45	25°R24	24°51	27° 2	5°31	W24
T 25	4 17 54	3°24'23	4♌3	13°20	10°26	7°59	20°35	6°40	4°13	13°58	10°45	25°24	24°47	27° 9	5°30	T 25
F 26	4 21 51	4°25'15	18°39	14°25	11°39	8°43	20°43	6°35	4°12	13°59	10°44	25°24	24°44	27°15	5°29	F 26
S 27	4 25 47	5°26'08	3♈23	15°34	12°52	9°27	20°51	6°31	4°12	14° 0	10°43	25°23	24°41	27°22	5°28	S 27
S 28	4 29 44	6°27'02	18° 9	16°46	14° 4	10°11	20°59	6°26	4°11	14° 1	10°42	25°22	24°38	27°29	5°27	S 28
M29	4 33 41	7°27'56	2♌49	18° 1	15°17	10°55	21° 8	6°21	4°10	14° 2	10°41	25°20	24°35	27°35	5°26	M29
T 30	4 37 37	8♌28'52	17♌18	19♍18	16♈30	11♌39	21♌16	6♍16	4°Y 9	14♌4	10♈40	25♍19	24♍31	27♈42	5°Y25	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	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
M 1	14s35	17s16	4n25	20s24	1s56	23s24	1s16	18s 9	0s13	16s26	1s 6	19n48	1s59	1n14	0s44	16s58	0s14	21n 7	1s54	19s 9	19s18	16n57	4n39	2n23
T 2	14 54	13 50	4 59	19 58	1 41	23 37	1 18	18 21	0 14	16 25	1 6	19 48	1 59	1 13	0 44	16 57	0 14	21 7	1 54	19 10	19 17	16 55	4 38	2 23
W 3	15 13	9 38	5 15	19 28	1 24	23 48	1 21	18 33	0 14	16 23	1 6	19 47	1 59	1 12	0 44	16 57	0 14	21 7	1 54	19 10	19 17	16 53	4 37	2 22
T 4	15 31	4 57	5 12	18 53	1 6	24 0	1 23	18 44	0 15	16 22	1 6	19 46	1 59	1 12	0 44	16 57	0 14	21 8	1 54	19 9	19 16	16 52	4 36	2 22
F 5	15 50	0 4	4 51	18 16	0 47	24 10	1 26	18 56	0 15	16 20	1 6	19 46	1 59	1 11	0 44	16 57	0 14	21 8	1 54	19 9	19 15	16 50	4 35	2 22
S 6	16 8	4n46	4 14	17 35	0 27	24 20	1 28	19 7	0 16	16 19	1 5	19 45	1 59	1 10	0 44	16 57	0 14	21 8	1 54	19 9	19 14	16 49	4 34	2 22
S 7	16 26	9 18	3 22	16 53	0 6	24 29	1 30	19 18	0 17	16 17	1 5	19 44	1 59	1 10	0 44	16 57	0 14	21 8	1 54	19 8	19 14	16 47	4 33	2 22
M 8	16 43	13 19	2 21	16 10	0n14	24 37	1 32	19 29	0 17	16 16	1 5	19 44	1 59	1 9	0 44	16 57	0 14	21 8	1 54	19 8	19 13	16 45	4 32	2 22
T 9	17 0	16 37	1 14	15 27	0 34	24 45	1 35	19 40	0 18	16 14	1 5	19 43	1 59	1 8	0 44	16 57	0 14	21 8	1 54	19 8	19 12	16 44	4 31	2 21
W10	17 17	19 2	0 3	14 46	0 54	24 51	1 37	19 50	0 18	16 12	1 5	19 42	1 59	1 8	0 44	16 57	0 14	21 8	1 54	19 8	19 11	16 42	4 30	2 21
T 11	17 34	20 29	1s 6	14 9	1 12	24 58	1 39	20 1	0 19	16 10	1 5	19 41	1 59	1 7	0 44	16 56	0 14	21 8	1 54	19 8	19 11	16 40	4 29	2 21
F 12	17 50	20 54	2 10	13 35	1 28	25 3	1 41	20 11	0 20	16 8	1 5	19 41	1 59	1 7	0 44	16 56	0 14	21 8	1 54	19 8	19 10	16 39	4 28	2 21
S 13	18 6	20 20	3 8	13 6	1 43	25 8	1 43	20 21	0 20	16 6	1 4	19 40	1 59	1 6	0 44	16 56	0 14	21 8	1 54	19 8	19 9	16 37	4 27	2 21
S 14	18 22	18 51	3 57	12 43	1 55	25 12	1 45	20 31	0 21	16 4	1 4	19 39	1 59	1 6	0 44	16 56	0 14	21 8	1 54	19 8	19 8	16 36	4 26	2 21
M15	18 38	16 34	4 35	12 25	2 6	25 15	1 47	20 41	0 21	16 2	1 4	19 39	1 59	1 5	0 44	16 56	0 14	21 8	1 54	19 8	19 8	16 34	4 26	2 20
T 16	18 53	13 36	5 2	12 12	2 14	25 17	1 48	20 50	0 22	16 0	1 4	19 38	1 59	1 5	0 44	16 55	0 14	21 8	1 54	19 8	19 7	16 32	4 25	2 20
W17	19 7	10 4	5 16	12 5	2 21	25 19	1 50	21 0	0 23	15 58	1 4	19 37	1 59	1 4	0 44	16 55	0 14	21 9	1 54	19 8	19 6	16 31	4 24	2 20
T 18	19 22	6 7	5 16	12 4	2 25	25 20	1 52	21 9	0 23	15 56	1 4	19 36	1 59	1 4	0 44	16 55	0 14	21 9	1 54	19 8	19 5	16 29	4 23	2 20
F 19	19 36	1 51	5 2	12 7	2 28	25 20	1 53	21 18	0 24	15 54	1 4	19 36	1 59	1 3	0 44	16 55	0 14	21 9	1 54	19 8	19 4	16 27	4 23	2 20
S 20	19 49	2s35	4 33	12 14	2 30	25 19	1 55	21 26	0 24	15 51	1 4	19 35	1 59	1 3	0 44	16 55	0 14	21 9	1 54	19 8	19 4	16 26	4 22	2 19
S 21	20 3	7 3	3 51	12 25	2 30	25 18	1 56	21 35	0 25	15 49	1 3	19 34	1 59	1 2	0 43	16 54	0 14	21 9	1 54	19 8	19 3	16 24	4 21	2 19
M22	20 16	11 18	2 55	12 39	2 29	25 16	1 58	21 43	0 25	15 47	1 3	19 33	1 58	1 2	0 43	16 54	0 14	21 9	1 54	19 9	19 2	16 22	4 20	2 19
T 23	20 28	15 8	1 47	12 56	2 27	25 13	1 59	21 52	0 26	15 44	1 3	19 33	1 58	1 2	0 43	16 54	0 14	21 9	1 54	19 9	19 1	16 21	4 20	2 19
W24	20 40	18 12	0 32	13 16	2 25	25 9	2 0	22 0	0 27	15 41	1 3	19 32	1 58	1 1	0 43	16 53	0 14	21 9	1 54	19 9	19 1	16 19	4 19	2 19
T 25	20 52	20 13	0n48	13 38	2 21	25 5	2 1	22 7	0 27	15 39	1 3	19 31	1 58	1 1	0 43	16 53	0 14	21 9	1 54	19 9	19 0	16 17	4 18	2 19
F 26	21 4	20 55	2 5	14 1	2 17	25 0	2 2	22 15	0 28	15 36	1 3	19 30	1 58	1 1	0 43	16 53	0 14	21 9	1 54	19 9	18 59	16 16	4 18	2 18
S 27	21 15	20 11	3 15	14 26	2 12	24 54	2 3	22 22	0 28	15 34	1 3	19 29	1 58	1 0	0 43	16 53	0 14	21 10	1 54	19 8	18 58	16 14	4 17	2 18
S 28	21 25	18 5	4 12	14 51	2 6	24 48	2 4	22 29	0 29	15 31	1 3	19 29	1 58	1 0	0 43	16 52	0 14	21 10	1 54	19 8	18 58	16 12	4 17	2 18
M29	21 36	14 49	4 53	15 18	2 0	24 40	2 5	22 36	0 29	15 28	1 2	19 28	1 58	1 0	0 43	16 52	0 14	21 10	1 54	19 8	18 57	16 11	4 16	2 18
T 30	21s45	10s42	5n13	15s45	1n54	24s32	2s 6	22s43	0s30	15s25	1s 2	19n27	1s58	1n 0	0s43	16s52	0s14	21n10	1s53	19s 7	18s56	16n 9	4n15	2n18

ASTRODIENST EPHEMERIS for the year 1677
geocentric

DECEMBER 1677 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	4 41 34	9♌29'48	1♋31	20♊37	17♎42	12♌24	21♎25	6°R11	4°R 9	14♋ 5	10°R39	25°R18	24♊28	27♎49	5°R24	W 1
T 2	4 45 30	10°30'45	15°27	21°58	18°55	13° 8	21°34	6II 6	4°Y 8	14° 6	10♎37	25°D18	24°25	27°56	5°Y23	T 2
F 3	4 49 27	11°31'42	29° 6	23°21	20° 7	13°52	21°42	6° 1	4° 8	14° 7	10°36	25♊19	24°22	28° 2	5°22	F 3
S 4	4 53 23	12°32'40	12°Y27	24°45	21°20	14°37	21°51	5°56	4° 7	14° 9	10°35	25°20	24°19	28° 9	5°21	S 4
S 5	4 57 20	13°33'39	25°32	26°10	22°32	15°21	22° 1	5°51	4° 7	14°10	10°34	25°21	24°16	28°16	5°21	S 5
M 6	5 1 16	14°34'39	8♎23	27°36	23°45	16° 6	22°10	5°46	4° 6	14°11	10°33	25°23	24°12	28°22	5°20	M 6
T 7	5 5 13	15°35'39	21° 1	29° 3	24°57	16°50	22°19	5°41	4° 6	14°13	10°32	25°R23	24° 9	28°29	5°20	T 7
W 8	5 9 10	16°36'40	3II28	0♌30	26° 9	17°35	22°29	5°37	4° 6	14°14	10°31	25°23	24° 6	28°36	5°19	W 8
T 9	5 13 6	17°37'42	15°45	1°59	27°21	18°20	22°39	5°32	4° 6	14°15	10°30	25°22	24° 3	28°43	5°19	T 9
F 10	5 17 3	18°38'44	27°54	3°27	28°33	19° 4	22°49	5°27	4° 5	14°17	10°29	25°19	24° 0	28°49	5°18	F 10
S 11	5 20 59	19°39'47	9♎55	4°57	29°45	19°49	22°59	5°22	4° 5	14°18	10°27	25°16	23°57	28°56	5°18	S 11
S 12	5 24 56	20°40'51	21°50	6°26	0♎57	20°34	23° 9	5°18	4° 5	14°20	10°26	25°11	23°53	29° 3	5°18	S 12
M13	5 28 52	21°41'56	3♊42	7°57	2° 9	21°19	23°19	5°13	4°D 5	14°21	10°25	25° 6	23°50	29° 9	5°18	M13
T 14	5 32 49	22°43'01	15°33	9°27	3°21	22° 4	23°29	5° 8	4° 5	14°23	10°24	25° 2	23°47	29°16	5°18	T 14
W15	5 36 46	23°44'07	27°26	10°58	4°32	22°49	23°39	5° 4	4° 5	14°25	10°23	24°58	23°44	29°23	5°17	W15
T 16	5 40 42	24°45'14	9♊25	12°29	5°44	23°34	23°50	4°59	4° 6	14°26	10°22	24°55	23°41	29°30	5°D17	T 16
F 17	5 44 39	25°46'21	21°35	14° 0	6°56	24°19	24° 1	4°55	4° 6	14°28	10°20	24°D54	23°37	29°36	5°17	F 17
S 18	5 48 35	26°47'30	4♊ 0	15°32	8° 7	25° 4	24°11	4°50	4° 6	14°29	10°19	24°54	23°34	29°43	5°18	S 18
S 19	5 52 32	27°48'38	16°44	17° 4	9°19	25°49	24°22	4°46	4° 6	14°31	10°18	24°55	23°31	29°50	5°18	S 19
M20	5 56 28	28°49'48	29°52	18°36	10°30	26°34	24°33	4°42	4° 7	14°33	10°17	24°57	23°28	29°56	5°18	M20
T 21	6 0 25	29°50'58	13♊26	20° 8	11°41	27°20	24°44	4°38	4° 7	14°35	10°15	24°59	23°25	0♊ 3	5°18	T 21
W22	6 4 21	0♎52'09	27°29	21°41	12°52	28° 5	24°56	4°33	4° 7	14°36	10°14	24°R59	23°22	0°10	5°19	W22
T 23	6 8 18	1°53'20	11♌58	23°14	14° 3	28°50	25° 7	4°29	4° 8	14°38	10°13	24°58	23°18	0°17	5°19	T 23
F 24	6 12 15	2°54'32	26°49	24°47	15°14	29°36	25°18	4°25	4° 9	14°40	10°12	24°55	23°15	0°23	5°19	F 24
S 25	6 16 11	3°55'44	11♎55	26°21	16°25	0♎21	25°30	4°21	4° 9	14°42	10°10	24°50	23°12	0°30	5°20	S 25
S 26	6 20 8	4°56'56	27° 6	27°55	17°36	1° 7	25°41	4°17	4°10	14°44	10° 9	24°44	23° 9	0°37	5°20	S 26
M27	6 24 4	5°58'08	12♎12	29°29	18°46	1°52	25°53	4°14	4°11	14°45	10° 8	24°37	23° 6	0°43	5°21	M27
T 28	6 28 1	6°59'19	27° 3	1♎ 3	19°57	2°38	26° 5	4°10	4°11	14°47	10° 7	24°31	23° 3	0°50	5°22	T 28
W29	6 31 57	8° 0'31	11♋33	2°38	21° 7	3°23	26°17	4° 6	4°12	14°49	10° 5	24°27	22°59	0°57	5°22	W29
T 30	6 35 54	9° 1'42	25°38	4°13	22°17	4° 9	26°29	4° 3	4°13	14°51	10° 4	24°24	22°56	1° 4	5°23	T 30
F 31	6 39 50	10♎ 2'52	9°Y18	5♎49	23♎28	4♎55	26♎41	3II59	4°Y14	14♎53	10♎ 3	24°D23	22♊53	1♊10	5°Y24	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	21s55	6s 3	5n15	16s12	1n48	24s24	2s 6	22s49	0s31	15s22	1s 2	19n26	1s58	0n59	0s43	16s51	0s14	21n10	1s53	19s 7	18s55	16n 7	4n15	2n17	
T 2	22 4	1 10	4 57	16 40	1 41	24 14	2 7	22 56	0 31	15 19	1 2	19 26	1 58	0 59	0 43	16 51	0 14	21 10	1 53	19 7	18 54	16 6	4 14	2 17	
F 3	22 12	3n40	4 23	17 7	1 34	24 4	2 7	23 2	0 32	15 16	1 2	19 25	1 58	0 59	0 43	16 51	0 14	21 10	1 53	19 7	18 54	16 4	4 14	2 17	
S 4	22 20	8 14	3 36	17 35	1 27	23 53	2 8	23 7	0 32	15 13	1 2	19 24	1 58	0 59	0 43	16 50	0 14	21 10	1 53	19 8	18 53	16 2	4 13	2 17	
S 5	22 28	12 20	2 38	18 2	1 20	23 42	2 8	23 13	0 33	15 10	1 2	19 23	1 57	0 59	0 43	16 50	0 14	21 11	1 53	19 8	18 52	16 1	4 13	2 17	
M 6	22 35	15 47	1 33	18 29	1 12	23 30	2 8	23 18	0 33	15 7	1 2	19 23	1 57	0 59	0 43	16 49	0 14	21 11	1 53	19 8	18 51	15 59	4 13	2 16	
T 7	22 42	18 26	0 24	18 55	1 5	23 17	2 8	23 23	0 34	15 4	1 2	19 22	1 57	0 59	0 43	16 49	0 14	21 11	1 53	19 9	18 51	15 57	4 12	2 16	
W 8	22 48	20 9	0s44	19 21	0 58	23 3	2 8	23 28	0 34	15 1	1 2	19 21	1 57	0 59	0 43	16 49	0 14	21 11	1 53	19 9	18 50	15 55	4 12	2 16	
T 9	22 54	20 54	1 50	19 46	0 50	22 49	2 8	23 33	0 35	14 57	1 1	19 21	1 57	0 59	0 43	16 48	0 14	21 11	1 53	19 8	18 49	15 54	4 11	2 16	
F 10	23 0	20 38	2 49	20 11	0 43	22 35	2 8	23 37	0 36	14 54	1 1	19 20	1 57	0 58	0 43	16 48	0 14	21 11	1 53	19 8	18 48	15 52	4 11	2 16	
S 11	23 5	19 26	3 41	20 35	0 35	22 19	2 8	23 41	0 36	14 51	1 1	19 19	1 57	0 58	0 43	16 47	0 14	21 11	1 53	19 7	18 47	15 50	4 11	2 15	
S 12	23 9	17 24	4 22	20 58	0 28	22 3	2 7	23 45	0 37	14 47	1 1	19 19	1 57	0 58	0 43	16 47	0 14	21 11	1 53	19 6	18 47	15 49	4 11	2 15	
M13	23 13	14 38	4 52	21 20	0 20	21 46	2 7	23 49	0 37	14 44	1 1	19 18	1 56	0 59	0 43	16 47	0 14	21 12	1 53	19 4	18 46	15 47	4 10	2 15	
T 14	23 17	11 17	5 9	21 41	0 13	21 29	2 6	23 52	0 38	14 40	1 1	19 17	1 56	0 59	0 43	16 46	0 14	21 12	1 53	19 3	18 45	15 45	4 10	2 15	
W15	23 20	7 29	5 13	22 2	0 6	21 11	2 6	23 55	0 38	14 37	1 1	19 17	1 56	0 59	0 43	16 46	0 14	21 12	1 53	19 2	18 44	15 44	4 10	2 15	
T 16	23 23	3 22	5 3	22 21	0s 1	20 53	2 5	23 58	0 39	14 33	1 1	19 16	1 56	0 59	0 43	16 45	0 14	21 12	1 53	19 2	18 43	15 42	4 10	2 14	
F 17	23 25	0s57	4 40	22 39	0 8	20 34	2 4	24 1	0 39	14 30	1 1	19 15	1 56	0 59	0 42	16 45	0 14	21 12	1 53	19 1	18 43	15 40	4 9	2 14	
S 18	23 26	5 19	4 3	22 57	0 15	20 15	2 3	24 3	0 40	14 26	1 1	19 15	1 56	0 59	0 42	16 44	0 14	21 12	1 53	19 2	18 42	15 38	4 9	2 14	
S 19	23 28	9 34	3 14	23 13	0 22	19 55	2 2	24 5	0 40	14 22	1 0	19 14	1 55	0 59	0 42	16 44	0 14	21 12	1 53	19 2	18 41	15 37	4 9	2 14	
M20	23 28	13 31	2 13	23 28	0 29	19 34	2 1	24 7	0 41	14 18	1 0	19 13	1 55	0 59	0 42	16 43	0 14	21 13	1 53	19 2	18 40	15 35	4 9	2 14	
T 21	23 29	16 54	1 3	23 42	0 35	19 13	1 59	24 8	0 41	14 15	1 0	19 13	1 55	1 0	0 42	16 43	0 14	21 13	1 53	19 3	18 39	15 33	4 9	2 13	
W22	23 29	19 25	0n14	23 55	0 42	18 52	1 58	24 10	0 42	14 11	1 0	19 12	1 55	1 0	0 42	16 42	0 14	21 13	1 53	19 3	18 39	15 31	4 9	2 13	
T 23	23 28	20 45	1 31	24 6	0 48	18 30	1 56	24 11	0 42	14 7	1 0	19 12	1 55	1 0	0 42	16 42	0 14	21 13	1 52	19 2	18 38	15 30	4 9	2 13	
F 24	23 27	20 42	2 44	24 17	0 54	18 7	1 55	24 12	0 43	14 3	1 0	19 11	1 55	1 0	0 42	16 41	0 14	21 13	1 52	19 2	18 37	15 28	4 9	2 13	
S 25	23 25	19 10	3 47	24 26	1 0	17 44	1 53	24 12	0 43	13 59	1 0	19 11	1 54	1 1	0 42	16 41	0 14	21 13	1 52	19 0	18 36	15 26	4 9	2 13	
S 26	23 23	16 17	4 35	24 33	1 6	17 21	1 51	24 12	0 44	13 55	1 0	19 10	1 54	1 1	0 42	16 40	0 14	21 13	1 52	18 59	18 35	15 25	4 9	2 12	
M27	23 21	12 20	5 2	24 40	1 11	16 57	1 49	24 12	0 44	13 51	1 0	19 10	1 54	1 1	0 42	16 40	0 14	21 14	1 52	18 57	18 35	15 23	4 9	2 12	
T 28	23 18	7 40	5 9	24 45	1 16	16 33	1 47	24 12	0 45	13 47	1 0	19 9	1 54	1 1	0 42	16 39	0 14	21 14	1 52	18 56	18 34	15 21	4 9	2 12	
W29	23 14	2 41	4 56	24 49	1 22	16 8	1 45	24 11	0 45	13 43	1 0	19 9	1 53	1 2	0 42	16 38	0 14	21 14	1 52	18 55	18 33	15 19	4 9	2 12	
T 30	23 10	2n19	4 25	24 51	1 26	15 43	1 42	24 11	0 46	13 39	1 0	19 8	1 53	1 2	0 42	16 38	0 14	21 14	1 52	18 54	18 32	15 18	4 9	2 12	
F 31	23s 6	7n 3	3n40	24s52	1s31	15s18	1s40	24s10	0s46	13s35	1s 0	19n 8	1s53	1n 3	0s42	16s37	0s14	21n14	1s52	18s54	18s31	15n16	4n10	2n11	

Julian Day Number = 2333906.5, Delta T = 24.87 sec
Ecliptic obliquity = 23°28'46", Nutation = 0°00'13", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°14'40", Lahiri = 19°21'40"Greg. Calendar