



Astrodienst Ephemeris Tables for the year 1681

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 1681

geocentric

JANUARY 1681 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	6 44 51	11°20'23	23°8'29	16°R55	9°55'56	21°11'26	7°R52	19°R44	16°Y 9	21°22'22	13°R44	24°R 7	24°11'47	3°27'23	16°Y42	W 1
T 2	6 48 47	12°21'33	8°11'22	15°34'41	11°10'10	21°41'41	7°11'46	19°34'40	16° 9	21°24'24	13°34'43	23°11'59	24°44'44	3°29'29	16°42'42	T 2
F 3	6 52 44	13°22'41	23°24'24	14°22'24	12°24'24	21°55'55	7°41'41	19°35'35	16°10'10	21°26'26	13°41'41	23°49'49	24°41'41	3°36'36	16°42'42	F 3
S 4	6 56 40	14°23'50	8°22'27	13° 2	13°39'39	22° 8	7°36'36	19°30'30	16°10'10	21°27'27	13°40'40	23°38'38	24°38'38	3°43'43	16°43'43	S 4
S 5	7 0 37	15°24'58	23°20'20	11°43'43	14°53'53	22°21'21	7°31'31	19°25'25	16°11'11	21°29'29	13°39'39	23°27'27	24°35'35	3°50'50	16°43'43	S 5
M 6	7 4 34	16°26'05	7°12'55	10°26'26	16° 7	22°33'33	7°26'26	19°20'20	16°11'11	21°31'31	13°37'37	23°18'18	24°31'31	3°56'56	16°44'44	M 6
T 7	7 8 30	17°27'13	22° 5	9°15'15	17°21'21	22°45'45	7°21'21	19°15'15	16°12'12	21°33'33	13°36'36	23°12'12	24°28'28	4° 3	16°45'45	T 7
W 8	7 12 27	18°28'20	5°11'46	8°12'12	18°35'35	22°57'57	7°17'17	19°10'10	16°13'13	21°35'35	13°35'35	23° 8	24°25'25	4°10'10	16°45'45	W 8
T 9	7 16 23	19°29'27	19° 0	7°16'16	19°50'50	23° 7	7°12'12	19° 5	16°14'14	21°37'37	13°34'34	23°D 7	24°22'22	4°16'16	16°46'46	T 9
F 10	7 20 20	20°30'34	1°47'47	6°30'30	21° 4	23°18'18	7° 8	19° 0	16°14'14	21°39'39	13°32'32	23° 7	24°19'19	4°23'23	16°47'47	F 10
S 11	7 24 16	21°31'41	14°13'13	5°53'53	22°18'18	23°27'27	7° 4	18°55'55	16°15'15	21°41'41	13°31'31	23° 7	24°16'16	4°30'30	16°48'48	S 11
S 12	7 28 13	22°32'47	26°22'22	5°26'26	23°32'32	23°36'36	7° 0	18°50'50	16°16'16	21°43'43	13°30'30	23°R 8	24°12'12	4°37'37	16°49'49	S 12
M13	7 32 9	23°33'53	8°11'19	5° 8	24°46'46	23°45'45	6°57'57	18°45'45	16°17'17	21°45'45	13°29'29	23° 6	24° 9	4°43'43	16°50'50	M13
T14	7 36 6	24°34'59	20°11'11	4°59'59	25°59'59	23°52'52	6°54'54	18°40'40	16°18'18	21°47'47	13°27'27	23° 3	24° 6	4°50'50	16°51'51	T14
W15	7 40 3	25°36'04	2°11'11	4°D59'59	27°13'13	23°59'59	6°50'50	18°35'35	16°19'19	21°50'50	13°26'26	22°57'57	24° 3	4°57'57	16°52'52	W15
T16	7 43 59	26°37'09	13°53'53	5° 7	28°27'27	24° 6	6°47'47	18°31'31	16°20'20	21°52'52	13°25'25	22°48'48	24° 0	5° 3	16°53'53	T16
F17	7 47 56	27°38'14	25°51'51	5°22'22	29°41'41	24°12'12	6°45'45	18°26'26	16°22'22	21°54'54	13°24'24	22°38'38	23°56'56	5°10'10	16°54'54	F17
S18	7 51 52	28°39'17	7°35'58	5°44'44	0°11'55	24°17'17	6°42'42	18°21'21	16°23'23	21°56'56	13°22'22	22°27'27	23°53'53	5°17'17	16°55'55	S18
S19	7 55 49	29°40'21	20°14'14	6°12'12	2° 8	24°21'21	6°40'40	18°16'16	16°24'24	21°58'58	13°21'21	22°17'17	23°50'50	5°24'24	16°57'57	S19
M20	7 59 45	0°41'25	2°44'44	6°45'45	3°22'22	24°25'25	6°37'37	18°11'11	16°25'25	22° 0	13°20'20	22° 7	23°47'47	5°30'30	16°58'58	M20
T21	8 3 42	1°42'25	15°18'18	7°24'24	4°36'36	24°28'28	6°35'35	18° 6	16°27'27	22° 2	13°19'19	21°59'59	23°44'44	5°37'37	16°59'59	T21
W22	8 7 38	2°43'25	28° 7	8° 8	5°49'49	24°30'30	6°34'34	18° 2	16°28'28	22° 4	13°18'18	21°54'54	23°41'41	5°44'44	17° 1	W22
T23	8 11 35	3°44'24	11°11'11	8°55'55	7° 3	24°32'32	6°32'32	17°57'57	16°30'30	22° 7	13°16'16	21°51'51	23°37'37	5°50'50	17° 2	T23
F24	8 15 32	4°45'23	24°17'17	9°47'47	8°16'16	24°33'33	6°31'31	17°52'52	16°31'31	22° 9	13°15'15	21°D51'51	23°34'34	5°57'57	17° 4	F24
S25	8 19 28	5°46'20	7°11'41	10°42'42	9°30'30	24°R33'33	6°30'30	17°48'48	16°33'33	22°11'11	13°14'14	21°52'52	23°31'31	6° 4	17° 6	S25
S26	8 23 25	6°47'16	21°17'17	11°40'40	10°43'43	24°32'32	6°29'29	17°43'43	16°34'34	22°13'13	13°13'13	21°53'53	23°28'28	6°11'11	17° 7	S26
M27	8 27 21	7°48'10	5°11'11	12°40'40	11°56'56	24°31'31	6°28'28	17°39'39	16°36'36	22°15'15	13°12'12	21°R54'54	23°25'25	6°17'17	17° 9	M27
T28	8 31 18	8°49'03	19°12'12	13°44'44	13° 9	24°29'29	6°27'27	17°34'34	16°38'38	22°18'18	13°11'11	21°53'53	23°21'21	6°24'24	17°11'11	T28
W29	8 35 14	9°49'55	3°11'11	14°50'50	14°22'22	24°26'26	6°27'27	17°30'30	16°40'40	22°20'20	13° 9	21°51'51	23°18'18	6°31'31	17°13'13	W29
T30	8 39 11	10°50'45	17°58'58	15°58'58	15°36'36	24°22'22	6°D27'27	17°26'26	16°41'41	22°22'22	13° 8	21°47'47	23°15'15	6°37'37	17°15'15	T30
F31	8 43 7	11°51'34	2°33'33	17°38'38	16°11'49	24°17'17	6°11'27	17°21'21	16°Y43'43	22°22'22	13°24'24	21°11'41	23°12'12	6°44'44	17°Y17'17	F31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	decl	decl	lat
W 1	23s 0	14n28	4s20	20s13	2n13	19s27	1s44	6n 6	2n56	21n 2	0s37	21n55	0s 6	5n47	0s37	14s49	0s26	22n 2	0s44	2n21	2n 4	16s10	7n21	0n51		
T 2	22 54	16 57	4 51	20 5	2 29	19 7	1 44	6 2	2 58	21 2	0 37	21 56	0 6	5 47	0 37	14 48	0 26	22 2	0 44	2 24	2 6	16 10	7 21	0 51		
F 3	22 48	18 17	5 2	19 59	2 44	18 46	1 44	5 58	3 0	21 1	0 37	21 57	0 6	5 48	0 37	14 48	0 26	22 2	0 44	2 28	2 7	16 11	7 21	0 50		
S 4	22 42	18 21	4 52	19 54	2 57	18 24	1 43	5 54	3 1	21 0	0 37	21 58	0 6	5 48	0 37	14 47	0 26	22 3	0 44	2 32	2 8	16 12	7 21	0 50		
S 5	22 35	17 9	4 22	19 51	3 7	18 2	1 43	5 50	3 3	21 0	0 37	21 59	0 6	5 48	0 37	14 46	0 26	22 3	0 44	2 36	2 9	16 13	7 21	0 50		
M 6	22 28	14 50	3 36	19 50	3 15	17 40	1 43	5 47	3 4	20 59	0 36	21 59	0 6	5 48	0 37	14 46	0 26	22 3	0 44	2 40	2 11	16 14	7 21	0 50		
T 7	22 20	11 42	2 37	19 50	3 20	17 17	1 42	5 44	3 6	20 59	0 36	22 0	0 5	5 49	0 37	14 45	0 26	22 3	0 44	2 42	2 12	16 15	7 22	0 50		
W 8	22 12	8 0	1 31	19 51	3 23	16 54	1 42	5 41	3 8	20 58	0 36	22 1	0 5	5 49	0 37	14 45	0 26	22 3	0 44	2 44	2 13	16 16	7 22	0 50		
T 9	22 4	4 2	0 22	19 53	3 24	16 30	1 41	5 38	3 9	20 58	0 36	22 2	0 5	5 49	0 37	14 44	0 26	22 4	0 44	2 44	2 15	16 17	7 22	0 50		
F 10	21 55	0s 0	0n46	19 57	3 22	16 5	1 41	5 35	3 11	20 57	0 35	22 3	0 5	5 50	0 37	14 43	0 26	22 4	0 44	2 44	2 16	16 18	7 22	0 50		
S 11	21 45	3 55	1 50	20 2	3 19	15 41	1 40	5 33	3 13	20 57	0 35	22 3	0 5	5 50	0 37	14 43	0 26	22 4	0 44	2 44	2 17	16 19	7 22	0 49		
S 12	21 35	7 35	2 48	20 8	3 14	15 15	1 39	5 31	3 14	20 56	0 35	22 4	0 5	5 50	0 37	14 42	0 26	22 4	0 44	2 44	2 18	16 20	7 23	0 49		
M13	21 25	10 52	3 37	20 15	3 8	14 50	1 38	5 29	3 16	20 56	0 35	22 5	0 5	5 51	0 37	14 41	0 26	22 4	0 43	2 45	2 20	16 20	7 23	0 49		
T14	21 14	13 42	4 17	20 23	3 0	14 24	1 37	5 27	3 17	20 56	0 35	22 6	0 5	5 51	0 37	14 41	0 26	22 5	0 43	2 46	2 21	16 21	7 23	0 49		
W15	21 3	15 56	4 45	20 31	2 52	13 57	1 36	5 26	3 19	20 55	0 34	22 7	0 5	5 52	0 37	14 40	0 26	22 5	0 43	2 48	2 22	16 22	7 23	0 49		
T16	20 52	17 31	5 1	20 40	2 43	13 31	1 35	5 25	3 21	20 55	0 34	22 7	0 4	5 52	0 37	14 39	0 26	22 5	0 43	2 52	2 23	16 23	7 24	0 49		
F17	20 40	18 21	5 4	20 48	2 34	13 4	1 34	5 24	3 22	20 55	0 34	22 8	0 4	5 53	0 37	14 39	0 26	22 5	0 43	2 56	2 25	16 24	7 24	0 49		
S18	20 28	18 21	4 54	20 57	2 24	12 36	1 32	5 24	3 24	20 55	0 34	22 9	0 4	5 53	0 37	14 38	0 26	22 5	0 43	3 0	2 26	16 25	7 24	0 49		
S 19	20 15	17 30	4 30	21 6	2 14	12 9	1 31	5 24	3 26	20 54	0 33	22 10	0 4	5 54	0 37	14 37	0 26	22 6	0 43	3 4	2 27	16 26	7 25	0 48		
M20	20 2	15 49	3 53	21 15	2 4	11 41	1 29	5 24	3 27	20 54	0 33	22 10	0 4	5 54	0 37	14 37	0 26	22 6	0 43	3 8	2 28	16 27	7 25	0 48		
T21	19 49	13 21	3 4	21 23	1 53	11 12	1 28	5 24	3 29	20 54	0 33	22 11	0 4	5 55	0 37	14 36	0 26	22 6	0 43	3 11	2 30	16 28	7 26	0 48		
W22	19 35	10 12	2 4	21 31	1 43	10 44	1 26	5 25	3 31	20 54	0 33	22 12	0 4	5 55	0 37	14 35	0 26	22 6	0 43	3 13	2 31	16 28	7 26	0 48		
T23	19 21	6 31	0 58	21 39	1 32	10 15	1 25	5 25	3 32	20 54	0 33	22 13	0 4	5 56	0 37	14 34	0 26	22 6	0 43	3 14	2 32	16 29	7 27	0 48		
F24	19 6	2 28	0s13	21 45	1 22	9 46	1 23	5 27	3 34	20 54	0 32	22 13	0 4	5 57	0 37	14 34	0 26	22 6	0 43	3 14	2 33	16 30	7 27	0 48		
S25	18 52	1n45	1 25	21 52	1 11	9 16	1 21	5 28	3 36	20 54	0 32	22 14	0 3	5 57	0 36	14 33	0 26	22 7	0 43	3 14	2 35	16 31	7 28	0 48		
S 26	18 36	5 58	2 32	21 57	1 1	8 47	1 19	5 30	3 37	20 54	0 32	22 15	0 3	5 58	0 36	14 32	0 26	22 7	0 43	3 13	2 36	16 32	7 28	0 48		
M27	18 21	9 55	3 32	22 1	0 51	8 17	1 17	5 32	3 39	20 54	0 32	22 15	0 3	5 59	0 36	14 32	0 26	22 7	0 43	3 13	2 37	16 33	7 29	0 48		
T28	18 5	13 22	4 21	22 5	0 41	7 47	1 15	5 34	3 40	20 54	0 31	22 16	0 3	5 59	0 36	14 31	0 26	22 7	0 42	3 13	2 38	16 34	7 29	0 47		
W29	17 49	16 4	4 54	22 8	0 32	7 17	1 13	5 37	3 42	20 54	0 31	22 17	0 3	6 0	0 36	14 30	0 26	22 7	0 42	3 14	2 40	16 34	7 30	0 47		
T30	17 32	17 48	5 9	22 9	0 22	6 46	1 10	5 39	3 43	20 55	0 31	22 18	0 3	6 1	0 36	14 29	0 26	22 8	0 42	3 16	2 41	16 35	7 31	0 47		
F 31	17s16	18n23	5s 4	22s10	0n13	6s16	1s 8	5n43	3n45	20n55	0s31	22n18	0s 3	6n 1	0s36	14s29	0s26	22n 8	0s42	3n18	2n42	16s36	7n31	0n47		

ASTRODIENST EPHEMERIS for the year 1681
geocentric

MARCH 1681 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 37 27	11♈ 4'59	26♌53	0♈19	21♍30	16°R54	7♏54	15°R51	17♍54	23♎30	12°R42	21°R 2	21♎40	9♎59	18♍32	S 1
S 2	10 41 24	12° 5'01	10♌52	2° 4	22°40	16♎31	7°59	15♌50	17°56	23°32	12♌42	21♎ 1	21°37	10° 6	18°35	S 2
M 3	10 45 21	13° 5'00	24°40	3°51	23°50	16° 8	8° 5	15°48	17°59	23°34	12°41	21° 0	21°33	10°12	18°38	M 3
T 4	10 49 17	14° 4'56	8♎14	5°38	25° 0	15°44	8°11	15°47	18° 2	23°36	12°41	20°59	21°30	10°19	18°42	T 4
W 5	10 53 14	15° 4'51	21°33	7°27	26°10	15°21	8°17	15°45	18° 5	23°39	12°40	20°D59	21°27	10°26	18°45	W 5
T 6	10 57 10	16° 4'44	4♌34	9°17	27°19	14°57	8°24	15°44	18° 8	23°41	12°40	20°59	21°24	10°33	18°48	T 6
F 7	11 1 7	17° 4'36	17°18	11° 8	28°29	14°33	8°30	15°43	18°11	23°43	12°39	20°59	21°21	10°39	18°51	F 7
S 8	11 5 3	18° 4'25	29°46	13° 0	29°38	14°10	8°37	15°42	18°15	23°45	12°39	21° 0	21°18	10°46	18°55	S 8
S 9	11 9 0	19° 4'13	12♎ 0	14°53	0♈47	13°46	8°44	15°41	18°18	23°47	12°38	21° 0	21°14	10°53	18°58	S 9
M10	11 12 56	20° 3'59	24° 3	16°47	1°56	13°23	8°51	15°40	18°21	23°49	12°38	21° 0	21°11	11° 0	19° 1	M10
T 11	11 16 53	21° 3'43	5♎59	18°43	3° 5	13° 0	8°58	15°39	18°24	23°51	12°38	21°R 0	21° 8	11° 6	19° 5	T 11
W12	11 20 50	22° 3'25	17°52	20°39	4°14	12°37	9° 5	15°39	18°27	23°53	12°37	21°D 0	21° 5	11°13	19° 8	W12
T 13	11 24 46	23° 3'06	29°46	22°37	5°23	12°14	9°13	15°38	18°30	23°55	12°37	21° 0	21° 2	11°20	19°12	T 13
F 14	11 28 43	24° 2'45	11♌47	24°35	6°31	11°52	9°20	15°38	18°33	23°57	12°37	21° 0	20°58	11°26	19°15	F 14
S 15	11 32 39	25° 2'22	23°59	26°35	7°39	11°29	9°28	15°38	18°37	24° 0	12°36	21° 1	20°55	11°33	19°19	S 15
S 16	11 36 36	26° 1'57	6♎26	28°35	8°47	11° 8	9°36	15°38	18°40	24° 2	12°36	21° 1	20°52	11°40	19°22	S 16
M17	11 40 32	27° 1'31	19°10	0♍35	9°55	10°46	9°44	15°D38	18°43	24° 4	12°36	21° 2	20°49	11°47	19°26	M17
T 18	11 44 29	28° 1'02	2♈15	2°36	11° 3	10°25	9°52	15°38	18°46	24° 5	12°36	21° 2	20°46	11°53	19°29	T 18
W19	11 48 25	29° 0'32	15°41	4°38	12°10	10° 5	10° 0	15°38	18°50	24° 7	12°35	21°R 3	20°43	12° 0	19°33	W19
T 20	11 52 22	0♍ 0'00	29°27	6°39	13°18	9°45	10° 8	15°38	18°53	24° 9	12°35	21° 3	20°39	12° 7	19°36	T 20
F 21	11 56 18	0°59'25	13♍30	8°41	14°25	9°26	10°17	15°39	18°56	24°11	12°35	21° 2	20°36	12°13	19°40	F 21
S 22	12 0 15	1°58'49	27°46	10°42	15°32	9° 7	10°26	15°39	18°59	24°13	12°35	21° 1	20°33	12°20	19°44	S 22
S 23	12 4 12	2°58'10	12♌11	12°42	16°39	8°49	10°34	15°40	19° 3	24°15	12°35	21° 0	20°30	12°27	19°47	S 23
M24	12 8 8	3°57'29	26°39	14°41	17°45	8°32	10°43	15°41	19° 6	24°17	12°35	20°58	20°27	12°34	19°51	M24
T 25	12 12 5	4°56'46	11♏ 5	16°39	18°52	8°15	10°52	15°41	19°10	24°19	12°35	20°57	20°24	12°40	19°55	T 25
W26	12 16 1	5°56'01	25°24	18°34	19°58	7°59	11° 1	15°42	19°13	24°21	12°D35	20°56	20°20	12°47	19°58	W26
T 27	12 19 58	6°55'13	9♌35	20°28	21° 4	7°43	11°11	15°43	19°16	24°22	12°35	20°D56	20°17	12°54	20° 2	T 27
F 28	12 23 54	7°54'23	23°34	22°19	22° 9	7°28	11°20	15°45	19°20	24°24	12°35	20°56	20°14	13° 1	20° 6	F 28
S 29	12 27 51	8°53'30	7♌20	24° 7	23°15	7°15	11°29	15°46	19°23	24°26	12°35	20°57	20°11	13° 7	20° 9	S 29
S 30	12 31 47	9°52'35	20°54	25°52	24°20	7° 1	11°39	15°47	19°26	24°28	12°35	20°59	20° 8	13°14	20°13	S 30
M31	12 35 44	10♍51'38	4♎15	27♍32	25♌25	6♎49	11♏49	15♌49	19♍30	24♎29	12♌35	21♎ 0	20♎ 4	13♎21	20♍17	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	7s25	16n37	4s17	13s24	2s 9	8n48	0n26	8n58	4n 6	21n15	0s25	22n32	0n 0	6n29	0s35	14s 8
S 2	7 2	14 15	3 24	12 45	2 9	9 18	0 30	9 6	4 6	21 16	0 25	22 33	0 0	6 30	0 35	14 7
M 3	6 39	11 6	2 21	12 6	2 8	9 47	0 34	9 15	4 5	21 17	0 24	22 33	0 1	6 31	0 35	14 6
T 4	6 16	7 25	1 10	11 25	2 6	10 17	0 38	9 23	4 5	21 19	0 24	22 33	0 1	6 33	0 35	14 5
W 5	5 53	3 24	0n 3	10 42	2 4	10 46	0 42	9 32	4 4	21 20	0 24	22 34	0 1	6 34	0 35	14 5
T 6	5 30	0s41	1 15	9 59	2 1	11 15	0 46	9 40	4 3	21 21	0 24	22 34	0 1	6 35	0 35	14 4
F 7	5 7	4 38	2 21	9 14	1 58	11 44	0 50	9 49	4 2	21 22	0 24	22 34	0 1	6 36	0 35	14 3
S 8	4 43	8 18	3 19	8 28	1 55	12 12	0 54	9 57	4 1	21 23	0 23	22 34	0 1	6 37	0 35	14 3
S 9	4 20	11 33	4 7	7 40	1 51	12 41	0 58	10 5	4 0	21 25	0 23	22 34	0 1	6 38	0 35	14 2
M10	3 56	14 15	4 43	6 51	1 46	13 8	1 2	10 13	3 59	21 26	0 23	22 35	0 1	6 40	0 35	14 1
T 11	3 33	16 19	5 6	6 1	1 41	13 36	1 6	10 20	3 57	21 27	0 23	22 35	0 1	6 41	0 35	14 1
W12	3 9	17 40	5 17	5 10	1 35	14 3	1 11	10 28	3 56	21 28	0 23	22 35	0 1	6 42	0 35	14 0
T 13	2 46	18 15	5 14	4 18	1 29	14 30	1 15	10 35	3 54	21 30	0 23	22 35	0 2	6 43	0 35	13 59
F 14	2 22	18 2	4 57	3 25	1 23	14 57	1 19	10 43	3 53	21 31	0 22	22 35	0 2	6 44	0 35	13 59
S 15	1 58	16 58	4 26	2 31	1 15	15 24	1 23	10 50	3 51	21 32	0 22	22 35	0 2	6 46	0 35	13 58
S 16	1 35	15 6	3 43	1 36	1 7	15 50	1 27	10 56	3 49	21 34	0 22	22 36	0 2	6 47	0 35	13 57
M17	1 11	12 26	2 48	0 40	0 59	16 15	1 31	11 3	3 48	21 35	0 22	22 36	0 2	6 48	0 35	13 57
T 18	0 47	9 6	1 42	0n16	0 50	16 40	1 35	11 9	3 46	21 36	0 22	22 36	0 2	6 49	0 35	13 56
W19	0 24	5 12	0 30	1 13	0 41	17 5	1 39	11 15	3 44	21 38	0 22	22 36	0 2	6 51	0 35	13 55
T 20	0n 0	0 56	0s46	2 11	0 31	17 30	1 43	11 21	3 42	21 39	0 21	22 36	0 2	6 52	0 35	13 55
F 21	0 24	3n28	2 1	3 8	0 20	17 54	1 47	11 26	3 39	21 41	0 21	22 36	0 2	6 53	0 35	13 54
S 22	0 47	7 45	3 10	4 5	0 10	18 18	1 51	11 31	3 37	21 42	0 21	22 36	0 2	6 55	0 35	13 54
S 23	1 11	11 36	4 7	5 3	0n 1	18 41	1 55	11 36	3 35	21 43	0 21	22 36	0 3	6 56	0 35	13 53
M24	1 35	14 46	4 48	5 59	0 13	19 4	1 59	11 40	3 33	21 45	0 21	22 36	0 3	6 57	0 35	13 52
T 25	1 58	17 0	5 11	6 56	0 24	19 26	2 3	11 45	3 30	21 46	0 21	22 36	0 3	6 58	0 35	13 52
W26	2 22	18 9	5 15	7 51	0 36	19 48	2 7	11 48	3 28	21 48	0 20	22 36	0 3	7 0	0 35	13 51
T 27	2 45	18 9	5 0	8 45	0 48	20 10	2 11	11 52	3 26	21 49	0 20	22 36	0 3	7 1	0 35	13 51
F 28	3 8	17 3	4 26	9 37	1 0	20 31	2 15	11 55	3 23	21 51	0 20	22 36	0 3	7 2	0 35	13 50
S 29	3 32	14 57	3 38	10 28	1 11	20 51	2 19	11 58	3 21	21 52	0 20	22 36	0 3	7 4	0 35	13 49
S 30	3 55	12 3	2 39	11 18	1 23	21 11	2 23	12 1	3 18	21 54	0 20	22 36	0 3	7 5	0 35	13 49
M31	4n18	8n33	1s31	12n 5	1n34	21n31	2n27	12n 3	3n16	21n55	0s20	22n36	0n 3	7n 6	0s35	13s48

Julian Day Number = 2335092.5, Delta T = 23.00 sec
Ecliptic obliquity = 23°28'42, Nutation = - 0°00'01, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°17'23, Lahiri = 19°24'23Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1681

geocentric

MAY 1681 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 37 57	11♌ 6'18	22♌ 4	6°R51	26♊ 3	6♉38	17♊35	17♊26	21♊15	25♊10	12♊51	20°R 1	18♉26	16♉49	22♊12	T 1
F 2	14 41 54	12° 4'20	4♈21	6♌15	26°54	6°48	17°48	17°31	21°19	25°11	12°51	19♈54	18°23	16°56	22°16	F 2
S 3	14 45 50	13° 2'20	16°29	5°41	27°45	7° 0	18° 0	17°35	21°22	25°12	12°52	19°46	18°20	17° 3	22°19	S 3
S 4	14 49 47	14° 0'18	28°32	5° 9	28°35	7°11	18°13	17°40	21°25	25°12	12°53	19°36	18°16	17° 9	22°23	S 4
M 5	14 53 43	14°58'16	10♌29	4°41	29°24	7°24	18°25	17°45	21°28	25°13	12°54	19°25	18°13	17°16	22°27	M 5
T 6	14 57 40	15°56'11	22°22	4°16	0♌12	7°36	18°38	17°50	21°32	25°14	12°55	19°15	18°10	17°23	22°30	T 6
W 7	15 1 36	16°54'05	4♌14	3°54	1° 0	7°50	18°50	17°55	21°35	25°15	12°56	19° 6	18° 7	17°29	22°34	W 7
T 8	15 5 33	17°51'58	16° 7	3°37	1°47	8° 4	19° 3	18° 0	21°38	25°15	12°57	19° 0	18° 4	17°36	22°37	T 8
F 9	15 9 30	18°49'50	28° 6	3°24	2°33	8°18	19°16	18° 5	21°41	25°16	12°58	18°55	18° 1	17°43	22°41	F 9
S 10	15 13 26	19°47'40	10♌13	3°15	3°18	8°33	19°29	18°10	21°44	25°16	12°59	18°53	17°57	17°50	22°44	S 10
S 11	15 17 23	20°45'29	22°35	3°D11	4° 2	8°48	19°41	18°15	21°47	25°17	13° 0	18°D52	17°54	17°56	22°48	S 11
M12	15 21 19	21°43'17	5♈15	3°11	4°45	9° 4	19°54	18°21	21°50	25°18	13° 1	18°53	17°51	18° 3	22°51	M12
T 13	15 25 16	22°41'04	18°18	3°16	5°27	9°21	20° 7	18°26	21°53	25°18	13° 2	18°R53	17°48	18°10	22°54	T 13
W14	15 29 12	23°38'49	1°Y49	3°25	6° 8	9°38	20°20	18°32	21°57	25°19	13° 3	18°53	17°45	18°17	22°58	W14
T 15	15 33 9	24°36'34	15°48	3°39	6°48	9°55	20°33	18°37	22° 0	25°19	13° 4	18°50	17°41	18°23	23° 1	T 15
F 16	15 37 5	25°34'17	0♌15	3°58	7°27	10°13	20°46	18°43	22° 3	25°19	13° 5	18°45	17°38	18°30	23° 4	F 16
S 17	15 41 2	26°31'59	15° 6	4°21	8° 5	10°31	20°59	18°49	22° 6	25°20	13° 6	18°37	17°35	18°37	23° 8	S 17
S 18	15 44 59	27°29'40	0♈13	4°48	8°42	10°49	21°13	18°54	22° 9	25°20	13° 8	18°28	17°32	18°43	23°11	S 18
M19	15 48 55	28°27'20	15°27	5°19	9°17	11° 8	21°26	19° 0	22°11	25°20	13° 9	18°18	17°29	18°50	23°14	M19
T 20	15 52 52	29°24'58	0♌37	5°54	9°51	11°28	21°39	19° 6	22°14	25°21	13°10	18° 9	17°26	18°57	23°17	T 20
W21	15 56 48	0♈22'35	15°32	6°33	10°23	11°48	21°52	19°12	22°17	25°21	13°11	18° 1	17°22	19° 4	23°21	W21
T 22	16 0 45	1°20'11	0♈ 5	7°17	10°55	12° 8	22° 5	19°18	22°20	25°21	13°12	17°55	17°19	19°10	23°24	T 22
F 23	16 4 41	2°17'45	14°13	8° 3	11°24	12°28	22°19	19°24	22°23	25°21	13°13	17°52	17°16	19°17	23°27	F 23
S 24	16 8 38	3°15'18	27°55	8°54	11°53	12°50	22°32	19°30	22°26	25°21	13°15	17°51	17°13	19°24	23°30	S 24
S 25	16 12 34	4°12'49	11♈12	9°48	12°19	13°11	22°45	19°37	22°29	25°21	13°16	17°51	17°10	19°30	23°33	S 25
M26	16 16 31	5°10'19	24° 7	10°45	12°44	13°33	22°59	19°43	22°31	25°22	13°17	17°51	17° 7	19°37	23°36	M26
T 27	16 20 28	6° 7'47	6♌45	11°45	13° 8	13°55	23°12	19°49	22°34	25°22	13°19	17°50	17° 3	19°44	23°39	T 27
W28	16 24 24	7° 5'14	19° 9	12°49	13°29	14°17	23°26	19°56	22°37	25°R22	13°20	17°46	17° 0	19°51	23°42	W28
T 29	16 28 21	8° 2'41	1♈22	13°56	13°49	14°40	23°39	20° 2	22°39	25°22	13°21	17°40	16°57	19°57	23°45	T 29
F 30	16 32 17	9° 0'05	13°27	15° 7	14° 7	15° 3	23°53	20° 8	22°42	25°21	13°22	17°31	16°54	20° 4	23°48	F 30
S 31	16 36 14	9♈57'29	25♈27	16♌20	14♌23	15♈27	24♈ 6	20♌15	22°Y45	25°22	13°24	17°20	16♈51	20♌11	23°Y51	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	15n11	6s 5	2n43	13n39	0s11	27n 8	3n43	10n55	1n58	22n39	0s15	22n26	0n 6	7n46	0s35	13s35
F 2	15 29	9 37	3 35	13 11	0 28	27 10	3 44	10 49	1 55	22 40	0 15	22 26	0 6	7 47	0 35	13 35
S 3	15 47	12 43	4 16	12 44	0 45	27 11	3 44	10 42	1 53	22 41	0 15	22 25	0 6	7 48	0 35	13 35
S 4	16 4	15 14	4 45	12 18	1 2	27 12	3 44	10 36	1 51	22 42	0 15	22 25	0 6	7 50	0 35	13 35
M 5	16 21	17 5	5 1	11 53	1 18	27 13	3 44	10 29	1 49	22 44	0 15	22 24	0 6	7 51	0 35	13 34
T 6	16 38	18 12	5 4	11 30	1 33	27 13	3 44	10 23	1 46	22 45	0 15	22 24	0 6	7 52	0 35	13 34
W 7	16 55	18 31	4 54	11 9	1 48	27 12	3 44	10 16	1 44	22 46	0 15	22 23	0 7	7 53	0 35	13 34
T 8	17 11	18 0	4 32	10 50	2 2	27 11	3 43	10 8	1 42	22 47	0 14	22 22	0 7	7 54	0 35	13 34
F 9	17 27	16 42	3 57	10 33	2 15	27 9	3 42	10 1	1 40	22 48	0 14	22 22	0 7	7 56	0 35	13 34
S 10	17 43	14 38	3 11	10 18	2 27	27 7	3 41	9 53	1 38	22 49	0 14	22 21	0 7	7 57	0 35	13 33
S 11	17 58	11 52	2 16	10 7	2 38	27 5	3 40	9 46	1 36	22 51	0 14	22 21	0 7	7 58	0 35	13 33
M12	18 13	8 29	1 12	9 57	2 49	27 2	3 39	9 38	1 34	22 52	0 14	22 20	0 7	7 59	0 35	13 33
T 13	18 28	4 35	0 3	9 50	2 58	26 59	3 37	9 30	1 32	22 53	0 14	22 19	0 7	8 0	0 35	13 33
W14	18 43	0 19	1s 8	9 46	3 6	26 55	3 35	9 22	1 30	22 54	0 14	22 19	0 7	8 1	0 35	13 33
T 15	18 57	4n 6	2 18	9 44	3 13	26 51	3 33	9 13	1 28	22 55	0 14	22 18	0 7	8 2	0 35	13 33
F 16	19 11	8 26	3 21	9 44	3 19	26 46	3 30	9 5	1 26	22 56	0 14	22 17	0 7	8 4	0 35	13 33
S 17	19 25	12 22	4 13	9 47	3 24	26 41	3 28	8 56	1 24	22 57	0 13	22 17	0 7	8 5	0 35	13 33
S 18	19 38	15 33	4 47	9 52	3 28	26 36	3 25	8 47	1 22	22 58	0 13	22 16	0 7	8 6	0 35	13 32
M19	19 51	17 41	5 2	9 59	3 32	26 30	3 22	8 38	1 20	22 59	0 13	22 15	0 7	8 7	0 35	13 32
T 20	20 3	18 34	4 55	10 9	3 34	26 24	3 18	8 29	1 18	23 0	0 13	22 14	0 8	8 8	0 35	13 32
W21	20 16	18 8	4 28	10 20	3 35	26 18	3 14	8 20	1 17	23 1	0 13	22 14	0 8	8 9	0 35	13 32
T 22	20 28	16 30	3 45	10 34	3 36	26 11	3 10	8 10	1 15	23 2	0 13	22 13	0 8	8 10	0 35	13 32
F 23	20 39	13 54	2 48	10 49	3 36	26 5	3 6	8 1	1 13	23 3	0 13	22 12	0 8	8 11	0 35	13 32
S 24	20 50	10 36	1 44	11 6	3 34	25 57	3 1	7 51	1 11	23 3	0 13	22 11	0 8	8 12	0 35	13 32
S 25	21 1	6 50	0 35	11 24	3 33	25 50	2 56	7 41	1 9	23 4	0 13	22 10	0 8	8 13	0 35	13 32
M26	21 12	2 51	0n33	11 45	3 30	25 42	2 51	7 31	1 8	23 5	0 12	22 10	0 8	8 14	0 35	13 32
T 27	21 22	1s11	1 38	12 6	3 27	25 34	2 45	7 21	1 6	23 6	0 12	22 9	0 8	8 15	0 35	13 32
W28	21 32	5 5	2 37	12 29	3 23	25 26	2 39	7 11	1 4	23 7	0 12	22 8	0 8	8 16	0 35	13 32
T 29	21 41	8 43	3 28	12 54	3 18	25 17	2 33	7 1	1 3	23 7	0 12	22 7	0 8	8 17	0 35	13 32
F 30	21 50	11 56	4 9	13 19	3 13	25 9	2 26	6 50	1 1	23 8	0 12	22 6	0 8	8 18	0 35	13 32
S 31	21n59	14s39	4n39	13n46	3s 7	25n 0	2n19	6n40	0n59	23n 9	0s12	22n 5	0n 8	8n19	0s35	13s32

Julian Day Number = 2335153.5, Delta T = 22.91 sec
 Ecliptic obliquity = 23°28'42", Nutation = - 0°00'05", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°17'31", Lahiri = 19°24'32"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1681
geocentric

JULY 1681 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	18 38 27	9 ⁵² 32'28	10 ²⁸ 5 5	14 ⁵⁶ 16	5°R24	29 ¹⁷ 48	1 ⁵⁶ 9	23 ⁵⁷ 57	23 ⁴⁷ 47	25°R 3	14 ⁵¹ 10	13°R57	15 ¹² 12	23 ³⁷ 39	25 ¹⁷ 0	T 1
W 2	18 42 24	10°29'39	22° 3	16°23	4 ⁵⁶ 48	0 ⁵² 20	1°23	24° 5	23°48	25 ²² 2	14°11	13 ¹⁷ 46	15° 9	23°46	25° 1	W 2
T 3	18 46 20	11°26'49	4 ⁵⁶ 4	18°28	4°12	0°51	1°36	24°13	23°49	25° 1	14°13	13°38	15° 6	23°53	25° 3	T 3
F 4	18 50 17	12°24'00	16°12	20°32	3°38	1°23	1°50	24°20	23°51	25° 0	14°14	13°32	15° 3	23°59	25° 4	F 4
S 5	18 54 13	13°21'11	28°29	22°34	3° 4	1°55	2° 3	24°28	23°52	24°59	14°16	13°29	14°59	24° 6	25° 5	S 5
S 6	18 58 10	14°18'22	10 ²⁸ 57	24°34	2°33	2°27	2°17	24°36	23°53	24°58	14°17	13°D28	14°56	24°13	25° 7	S 6
M 7	19 2 6	15°15'33	23°39	26°33	2° 2	3° 0	2°30	24°43	23°54	24°57	14°19	13°28	14°53	24°20	25° 8	M 7
T 8	19 6 3	16°12'46	6 ⁵⁷ 39	28°30	1°34	3°32	2°44	24°51	23°55	24°56	14°21	13°29	14°50	24°26	25° 9	T 8
W 9	19 9 59	17° 9'58	20° 1	0 ⁵² 25	1° 8	4° 5	2°57	24°59	23°56	24°54	14°22	13°R29	14°47	24°33	25°10	W 9
T 10	19 13 56	18° 7'12	3 ⁵⁸ 46	2°18	0°43	4°37	3°11	25° 6	23°57	24°53	14°24	13°28	14°44	24°40	25°11	T 10
F 11	19 17 53	19° 4'26	17°57	4° 9	0°21	5°10	3°24	25°14	23°58	24°52	14°25	13°25	14°40	24°46	25°12	F 11
S 12	19 21 49	20° 1'41	2 ¹¹ 31	5°59	0° 1	5°44	3°37	25°22	23°59	24°51	14°27	13°20	14°37	24°53	25°13	S 12
S 13	19 25 46	20°58'56	17°25	7°47	29 ¹¹ 43	6°17	3°51	25°30	24° 0	24°49	14°28	13°13	14°34	25° 0	25°14	S 13
M14	19 29 42	21°56'13	2 ⁵² 32	9°33	29°28	6°50	4° 4	25°37	24° 1	24°48	14°30	13° 5	14°31	25° 7	25°15	M14
T 15	19 33 39	22°53'30	17°40	11°17	29°15	7°24	4°17	25°45	24° 1	24°47	14°31	12°58	14°28	25°13	25°16	T 15
W16	19 37 35	23°50'47	2 ⁵² 42	12°59	29° 4	7°58	4°31	25°53	24° 2	24°46	14°33	12°52	14°24	25°20	25°17	W16
T 17	19 41 32	24°48'05	17°27	14°39	28°56	8°32	4°44	26° 1	24° 3	24°44	14°35	12°47	14°21	25°27	25°17	T 17
F 18	19 45 29	25°45'23	1 ¹⁷ 48	16°18	28°50	9° 6	4°57	26° 9	24° 3	24°43	14°36	12°45	14°18	25°34	25°18	F 18
S 19	19 49 25	26°42'42	15°42	17°54	28°46	9°40	5°10	26°16	24° 4	24°41	14°38	12°D45	14°15	25°40	25°19	S 19
S 20	19 53 22	27°40'01	29° 9	19°29	28°D45	10°15	5°23	26°24	24° 4	24°40	14°39	12°45	14°12	25°47	25°19	S 20
M21	19 57 18	28°37'20	12 ⁵² 11	21° 2	28°46	10°49	5°37	26°32	24° 5	24°39	14°41	12°47	14° 9	25°54	25°20	M21
T 22	20 1 15	29°34'40	24°49	22°33	28°50	11°24	5°50	26°40	24° 5	24°37	14°42	12°R48	14° 5	26° 0	25°20	T 22
W23	20 5 11	0 ⁵² 32'00	7 ¹⁶ 10	24° 3	28°55	11°59	6° 3	26°47	24° 5	24°36	14°44	12°48	14° 2	26° 7	25°20	W23
T 24	20 9 8	1°29'21	19°17	25°30	29° 3	12°34	6°16	26°55	24° 6	24°34	14°45	12°46	13°59	26°14	25°21	T 24
F 25	20 13 4	2°26'43	1 ¹⁷ 16	26°56	29°13	13° 9	6°28	27° 3	24° 6	24°33	14°47	12°42	13°56	26°21	25°21	F 25
S 26	20 17 1	3°24'05	13° 9	28°19	29°25	13°44	6°41	27°11	24° 6	24°31	14°48	12°37	13°53	26°27	25°21	S 26
S 27	20 20 58	4°21'27	25° 1	29°41	29°39	14°20	6°54	27°18	24° 6	24°30	14°50	12°31	13°50	26°34	25°21	S 27
M28	20 24 54	5°18'51	6 ⁵⁸ 55	1 ¹⁷ 1	29°55	14°55	7° 7	27°26	24° 6	24°28	14°51	12°25	13°46	26°41	25°21	M28
T 29	20 28 51	6°16'15	18°53	2°18	0 ⁵² 12	15°31	7°20	27°34	24°R 6	24°27	14°53	12°18	13°43	26°47	25°R21	T 29
W30	20 32 47	7°13'40	0 ⁵⁸ 57	3°34	0°32	16° 7	7°32	27°42	24° 6	24°25	14°54	12°12	13°40	26°54	25°21	W30
T 31	20 36 44	8 ⁵² 11'06	13 ²² 9	4 ¹⁷ 47	0 ⁵⁸ 54	16 ⁵² 43	7 ⁵² 45	27 ⁵² 49	24 ¹⁷ 6	24 ²² 24	14 ⁵⁶ 56	12 ¹⁷ 8	13 ¹⁷ 37	27 ³⁷ 1	25 ¹⁷ 21	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	
T 1	23n 8	18s35 4n32 24n21	1n39 19n28 3s54	0n20 0n16 23n20	0s 9 21n32 0n11	8n41 0s36 13s39	0s29 22n12 0s31	6n20 5n50 18s14	10n15 0n36						
W 2	23 4	17 45 3 58 24 11	1 43 19 18 4 6 0 6	0 15 23 20 0 9	21 31 0 11 8 42	0 36 13 39 0 29	22 12 0 31 6 24	5 52 18 15 10 15	0 36						
T 3	22 59	16 8 3 14 23 57	1 46 19 8 4 17 0s 8	0 14 23 19 0 9	21 29 0 11 8 42	0 36 13 40 0 29	22 12 0 31 6 27	5 53 18 15 10 16	0 36						
F 4	22 54	13 47 2 20 23 42	1 48 18 58 4 28 0 21	0 13 23 19 0 9	21 28 0 11 8 43	0 36 13 40 0 29	22 12 0 31 6 29	5 54 18 16 10 16	0 36						
S 5	22 48	10 47 1 19 23 24	1 50 18 49 4 38 0 35	0 12 23 19 0 8	21 27 0 11 8 43	0 36 13 41 0 29	22 12 0 31 6 30	5 55 18 16 10 17	0 36						
S 6	22 43	7 16 0 13 23 4	1 51 18 40 4 47 0 49	0 10 23 19 0 8	21 26 0 11 8 44	0 36 13 41 0 29	22 12 0 31 6 31	5 57 18 17 10 17	0 35						
M 7	22 36	3 21 0s54 22 42	1 51 18 32 4 56 1 3	0 9 23 19 0 8	21 24 0 11 8 44	0 36 13 41 0 29	22 12 0 31 6 31	5 58 18 17 10 17	0 35						
T 8	22 30	0n48 2 1 22 18	1 51 18 25 5 4 1 17	0 8 23 19 0 8	21 23 0 12 8 44	0 36 13 42 0 30	22 12 0 31 6 30	5 59 18 18 10 18	0 35						
W 9	22 22	5 1 3 3 21 53	1 49 18 17 5 11 1 31	0 7 23 19 0 8	21 22 0 12 8 45	0 36 13 42 0 30	22 11 0 31 6 30	6 0 18 18 10 18	0 35						
T 10	22 15	9 5 3 56 21 26	1 48 18 11 5 18 1 45	0 6 23 18 0 8	21 20 0 12 8 45	0 36 13 43 0 30	22 11 0 31 6 31	6 1 18 18 10 19	0 35						
F 11	22 7	12 46 4 37 20 57	1 45 18 5 5 24 1 59	0 5 23 18 0 8	21 19 0 12 8 45	0 36 13 43 0 30	22 11 0 31 6 32	6 3 18 19 10 19	0 35						
S 12	21 59	15 47 5 1 20 28	1 42 17 59 5 29 2 13	0 4 23 18 0 8	21 18 0 12 8 46	0 36 13 44 0 30	22 11 0 31 6 34	6 4 18 19 10 19	0 35						
S 13	21 50	17 49 5 6 19 57	1 39 17 54 5 34 2 27	0 3 23 18 0 8	21 16 0 12 8 46	0 36 13 44 0 30	22 11 0 31 6 36	6 5 18 20 10 20	0 35						
M14	21 41	18 38 4 49 19 25	1 35 17 50 5 39 2 42	0 2 23 17 0 8	21 15 0 12 8 46	0 36 13 44 0 30	22 11 0 31 6 39	6 6 18 20 10 20	0 35						
T 15	21 32	18 8 4 12 18 52	1 30 17 46 5 42 2 56	0 1 23 17 0 8	21 14 0 12 8 46	0 36 13 45 0 30	22 11 0 30 6 42	6 8 18 20 10 20	0 35						
W16	21 22	16 22 3 19 18 18	1 25 17 43 5 45 3 10	0s 0 23 17 0 7	21 12 0 12 8 47	0 36 13 45 0 30	22 11 0 30 6 44	6 9 18 21 10 20	0 35						
T 17	21 12	13 32 2 12 17 44	1 20 17 40 5 48 3 25	0 1 23 16 0 7	21 11 0 12 8 47	0 36 13 46 0 30	22 11 0 30 6 46	6 10 18 21 10 20	0 35						
F 18	21 2	9 56 0 59 17 9	1 14 17 38 5 50 3 39	0 2 23 16 0 7	21 10 0 12 8 47	0 36 13 46 0 30	22 11 0 30 6 47	6 11 18 22 10 21	0 35						
S 19	20 51	5 53 0n16 16 33	1 7 17 37 5 52 3 53	0 3 23 15 0 7	21 8 0 13 8 47	0 36 13 47 0 30	22 10 0 30 6 47	6 13 18 22 10 21	0 35						
S 20	20 40	1 41 1 28 15 57	1 1 17 35 5 53 4 8	0 4 23 15 0 7	21 7 0 13 8 47	0 36 13 47 0 30	22 10 0 30 6 47	6 14 18 22 10 21	0 35						
M21	20 28	2s29 2 32 15 21	0 53 17 35 5 54 4 22	0 5 23 15 0 7	21 5 0 13 8 48	0 36 13 48 0 30	22 10 0 30 6 46	6 15 18 23 10 21	0 35						
T 22	20 16	6 24 3 28 14 44	0 46 17 35 5 54 4 37	0 6 23 14 0 7	21 4 0 13 8 48	0 36 13 48 0 30	22 10 0 30 6 46	6 16 18 23 10 21	0 35						
W23	20 4	9 57 4 12 14 7	0 38 17 35 5 54 4 51	0 7 23 14 0 7	21 3 0 13 8 48	0 36 13 49 0 30	22 10 0 30 6 46	6 17 18 23 10 21	0 35						
T 24	19 52	13 1 4 44 13 30	0 30 17 35 5 53 5 6	0 8 23 13 0 7	21 1 0 13 8 48	0 36 13 49 0 30	22 10 0 30 6 47	6 19 18 24 10 21	0 35						
F 25	19 39	15 29 5 4 12 53	0 21 17 36 5 52 5 21	0 9 23 13 0 7	21 0 0 13 8 48	0 36 13 50 0 30	22 10 0 30 6 48	6 20 18 24 10 21	0 35						
S 26	19 26	17 17 5 10 12 16	0 12 17 38 5 51 5 35	0 10 23 12 0 7	20 58 0 13 8 48	0 36 13 50 0 30	22 10 0 30 6 50	6 21 18 25 10 21	0 35						
S 27	19 12	18 21 5 3 11 39	0 3 17 39 5 49 5 50	0 11 23 11 0 6	20 57 0 13 8 48	0 36 13 51 0 30	22 10 0 30 6 52	6 22 18 25 10 22	0 35						
M28	18 58	18 36 4 42 11 2	0s 6 17 41 5 47 6 5	0 12 23 11 0 6	20 55 0 13 8 48	0 36 13 51 0 30	22 9 0 30 6 55	6 24 18 25 10 21	0 34						
T 29	18 44	18 2 4 9 10 26	0 16 17 44 5 45 6 19	0 13 23 10 0 6	20 54 0 13 8 48	0 36 13 52 0 30	22 9 0 30 6 57	6 25 18 26 10 21	0 34						
W30	18 30	16 38 3 25 9 49	0 26 17 46 5 43 6 34	0 14 23 10 0 6	20 53 0 13 8 48	0 36 13 52 0 30	22 9 0 30 7 0	6 26 18 26 10 21	0 34						
T 31	18n15	14s29 2n31 9n13	0s36 17n49 5s40 6s49	0s15 23n 9 0s 6	20n51 0n14 8n48	0s37 13s53 0s30	22n 9 0s30 7n 1	6n27 18s26 10n21 0n34							

Julian Day Number = 2335214.5, Delta T = 22

ASTRODIENST EPHEMERIS for the year 1681
geocentric

AUGUST 1681 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	20 40 40	9♌ 8'34	25♊30	5♍59	1♉17	17♏19	7♄58	27♄57	24°R 6	24°R22	14♄57	12°R 5	13♍34	27♏8	25°R21	F 1
S 2	20 44 37	10° 6'02	8♋0	7° 7	1°42	17°55	8°10	28° 5	24°Y 6	24°R20	14°59	12°D 4	13°30	27°14	25°Y21	S 2
S 3	20 48 33	11° 3'31	20°43	8°14	2° 8	18°32	8°23	28°12	24° 6	24°19	15° 0	12♍4	13°27	27°21	25°21	S 3
M 4	20 52 30	12° 1'02	3°Y38	9°18	2°36	19° 8	8°35	28°20	24° 6	24°17	15° 1	12° 5	13°24	27°28	25°20	M 4
T 5	20 56 26	12°58'33	16°48	10°20	3° 6	19°45	8°48	28°28	24° 5	24°16	15° 3	12° 7	13°21	27°34	25°20	T 5
W 6	21 0 23	13°56'07	0♈15	11°18	3°37	20°21	9° 0	28°35	24° 5	24°14	15° 4	12° 8	13°18	27°41	25°20	W 6
T 7	21 4 20	14°53'42	14° 0	12°14	4°10	20°58	9°12	28°43	24° 5	24°12	15° 6	12°R 9	13°15	27°48	25°19	T 7
F 8	21 8 16	15°51'18	28° 3	13° 8	4°43	21°35	9°24	28°50	24° 4	24°11	15° 7	12° 8	13°11	27°55	25°19	F 8
S 9	21 12 13	16°48'56	12♊23	13°58	5°19	22°12	9°37	28°58	24° 4	24° 9	15° 8	12° 7	13° 8	28° 1	25°18	S 9
S 10	21 16 9	17°46'35	26°58	14°44	5°55	22°50	9°49	29° 5	24° 3	24° 8	15°10	12° 4	13° 5	28° 8	25°17	S 10
M 11	21 20 6	18°44'16	11♄42	15°28	6°32	23°27	10° 1	29°13	24° 3	24° 6	15°11	12° 1	13° 2	28°15	25°17	M 11
T 12	21 24 2	19°41'59	26°29	16° 7	7°11	24° 5	10°13	29°20	24° 2	24° 4	15°13	11°58	12°59	28°22	25°16	T 12
W 13	21 27 59	20°39'43	11♌12	16°43	7°51	24°42	10°25	29°28	24° 1	24° 3	15°14	11°55	12°56	28°28	25°15	W 13
T 14	21 31 56	21°37'28	25°43	17°15	8°32	25°20	10°36	29°35	24° 1	24° 1	15°15	11°54	12°52	28°35	25°14	T 14
F 15	21 35 52	22°35'15	9♍56	17°42	9°14	25°58	10°48	29°43	24° 0	23°59	15°16	11°D53	12°49	28°42	25°13	F 15
S 16	21 39 49	23°33'03	23°47	18° 5	9°57	26°36	11° 0	29°50	23°59	23°58	15°18	11°53	12°46	28°48	25°13	S 16
S 17	21 43 45	24°30'52	7♏15	18°23	10°41	27°14	11°11	29°57	23°58	23°56	15°19	11°54	12°43	28°55	25°11	S 17
M 18	21 47 42	25°28'43	20°19	18°37	11°25	27°52	11°23	0♌5	23°57	23°55	15°20	11°56	12°40	29° 2	25°10	M 18
T 19	21 51 38	26°26'34	3♍1	18°44	12°11	28°30	11°34	0°12	23°56	23°53	15°22	11°57	12°36	29° 9	25° 9	T 19
W 20	21 55 35	27°24'27	15°25	18°R47	12°58	29° 9	11°46	0°19	23°55	23°51	15°23	11°58	12°33	29°15	25° 8	W 20
T 21	21 59 31	28°22'22	27°34	18°43	13°45	29°47	11°57	0°26	23°54	23°50	15°24	11°R58	12°30	29°22	25° 7	T 21
F 22	22 3 28	29°20'17	9♏33	18°34	14°33	0♍26	12° 8	0°34	23°53	23°48	15°25	11°58	12°27	29°29	25° 6	F 22
S 23	22 7 24	0♍18'14	21°27	18°19	15°22	1° 5	12°19	0°41	23°52	23°46	15°26	11°57	12°24	29°35	25° 4	S 23
S 24	22 11 21	1°16'12	3♄20	17°57	16°12	1°44	12°30	0°48	23°51	23°45	15°28	11°56	12°21	29°42	25° 3	S 24
M 25	22 15 18	2°14'12	15°16	17°30	17° 2	2°23	12°41	0°55	23°50	23°43	15°29	11°55	12°17	29°49	25° 2	M 25
T 26	22 19 14	3°12'13	27°18	16°57	17°53	3° 2	12°52	1° 2	23°48	23°41	15°30	11°53	12°14	29°56	25° 0	T 26
W 27	22 23 11	4°10'16	9♊30	16°18	18°45	3°41	13° 3	1° 9	23°47	23°40	15°31	11°52	12°11	0♈2	24°59	W 27
T 28	22 27 7	5° 8'20	21°53	15°33	19°37	4°20	13°14	1°16	23°46	23°38	15°32	11°52	12° 8	0° 9	24°57	T 28
F 29	22 31 4	6° 6'25	4♋29	14°44	20°30	5° 0	13°24	1°23	23°44	23°37	15°33	11°51	12° 5	0°16	24°55	F 29
S 30	22 35 0	7° 4'33	17°18	13°51	21°24	5°39	13°35	1°29	23°43	23°35	15°34	11°D51	12° 2	0°22	24°54	S 30
S 31	22 38 57	8♍2'42	0°Y22	12♍55	22♄18	6♍19	13♄45	1♌36	23°Y41	23°R33	15°D35	11♍51	11♍58	0♈29	24°Y52	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
F 1	18n 0	11s38	1n29	8n37	0s46	17n51	5s37	7s 3	0s16	23n 8	0s 6	20n50	0n14	8n48	0s37	13s54	0s30	22n 9	0s29	7n 2	6n28	18s27	10n21	0n34	
S 2	17 45	8 14	0 22	8 2	0 56	17 54	5 34	7 18	0 17	23 8	0 6	20 48	0 14	8 48	0 37	13 54	0 30	22 9	0 29	7 3	6 30	18 27	10 21	0 34	
S 3	17 29	4 25	0s47	7 28	1 7	17 57	5 30	7 33	0 18	23 7	0 6	20 47	0 14	8 48	0 37	13 55	0 30	22 9	0 29	7 3	6 31	18 27	10 21	0 34	
M 4	17 13	0 19	1 55	6 54	1 17	18 0	5 27	7 47	0 18	23 6	0 6	20 45	0 14	8 48	0 37	13 55	0 30	22 9	0 29	7 2	6 32	18 28	10 21	0 34	
T 5	16 57	3n52	2 59	6 21	1 28	18 4	5 23	8 2	0 19	23 6	0 6	20 44	0 14	8 47	0 37	13 56	0 30	22 9	0 29	7 2	6 33	18 28	10 21	0 34	
W 6	16 40	7 55	3 54	5 48	1 39	18 7	5 19	8 17	0 20	23 5	0 6	20 42	0 14	8 47	0 37	13 56	0 30	22 8	0 29	7 1	6 35	18 28	10 20	0 34	
T 7	16 24	11 39	4 37	5 17	1 50	18 10	5 15	8 31	0 21	23 4	0 5	20 41	0 14	8 47	0 37	13 57	0 30	22 8	0 29	7 1	6 36	18 29	10 20	0 34	
F 8	16 7	14 48	5 5	4 46	2 1	18 13	5 11	8 46	0 22	23 3	0 5	20 40	0 14	8 47	0 37	13 57	0 30	22 8	0 29	7 1	6 37	18 29	10 20	0 34	
S 9	15 49	17 8	5 14	4 17	2 12	18 16	5 6	9 1	0 23	23 3	0 5	20 38	0 14	8 47	0 37	13 58	0 30	22 8	0 29	7 2	6 38	18 29	10 20	0 34	
S 10	15 32	18 23	5 3	3 49	2 23	18 19	5 2	9 15	0 24	23 2	0 5	20 37	0 15	8 47	0 37	13 58	0 30	22 8	0 29	7 3	6 39	18 30	10 19	0 34	
M 11	15 14	18 26	4 33	3 22	2 34	18 22	4 57	9 30	0 24	23 1	0 5	20 35	0 15	8 46	0 37	13 59	0 30	22 8	0 29	7 4	6 41	18 30	10 19	0 34	
T 12	14 56	17 13	3 44	2 57	2 45	18 25	4 52	9 45	0 25	23 0	0 5	20 34	0 15	8 46	0 37	14 0	0 30	22 8	0 29	7 5	6 42	18 30	10 19	0 34	
W 13	14 38	14 52	2 41	2 33	2 56	18 28	4 47	9 59	0 26	22 59	0 5	20 32	0 15	8 46	0 37	14 0	0 30	22 8	0 29	7 6	6 43	18 31	10 18	0 34	
T 14	14 19	11 35	1 28	2 11	3 6	18 30	4 42	10 14	0 27	22 58	0 5	20 31	0 15	8 45	0 37	14 1	0 30	22 8	0 29	7 7	6 44	18 31	10 18	0 34	
F 15	14 0	7 41	0 11	1 51	3 16	18 33	4 37	10 28	0 28	22 58	0 5	20 29	0 15	8 45	0 37	14 1	0 30	22 8	0 29	7 7	6 45	18 31	10 18	0 34	
S 16	13 41	3 28	1n 5	1 33	3 26	18 35	4 32	10 43	0 28	22 57	0 5	20 28	0 15	8 45	0 37	14 2	0 30	22 7	0 29	7 7	6 47	18 32	10 17	0 34	
S 17	13 22	0s48	2 16	1 17	3 36	18 37	4 27	10 57	0 29	22 56	0 5	20 26	0 15	8 45	0 37	14 2	0 30	22 7	0 29	7 6	6 48	18 32	10 17	0 33	
M 18	13 3	4 55	3 17	1 4	3 45	18 38	4 22	11 12	0 30	22 55	0 4	20 25	0 15	8 44	0 37	14 3	0 30	22 7	0 29	7 6	6 49	18 32	10 16	0 33	
T 19	12 43	8 41	4 6	0 53	3 54	18 40	4 16	11 26	0 31	22 54	0 4	20 23	0 15	8 44	0 37	14 3	0 30	22 7	0 29	7 5	6 50	18 33	10 16	0 33	
W 20	12 24	11 58	4 43	0 45	4 2	18 41	4 11	11 41	0 31	22 53	0 4	20 22	0 15	8 43	0 37	14 4	0 30	22 7	0 28	7 5	6 52	18 33	10 16	0 33	
T 21	12 4	14 40	5 6	0 39	4 9	18 42	4 5	11 55	0 32	22 52	0 4	20 21	0 16	8 43	0 37	14 5	0 30	22 7	0 28	7 5	6 53	18 33	10 15	0 33	
F 22	11 43	16 43	5 16	0 37	4 15	18 43	4 0	12 9	0 33	22 51	0 4	20 19	0 16	8 43	0 37	14 5	0 30	22 7	0 28	7 5	6 54	18 33	10 15	0 33	
S 23	11 23	18 1	5 12	0 38	4 20	18 43	3 54	12 24	0 34	22 50	0 4	20 18	0 16	8 42	0 37	14 6	0 30	22 7	0 28	7 5	6 55	18 34	10 14	0 33	
S 24	11 2	18 32	4 55	0 43	4 24	18 43	3 49	12 38	0 34	22 50	0 4	20 16	0 16	8 42	0 37	14 6	0 30	22 7	0 28	7 6	6 56	18 34	10 13	0 33	
M 25	10 42	18 13	4 24	0 51	4 27	18 42	3 43	12 52	0 35	22 49	0 4	20 15	0 16	8 41	0 37	14 7	0 30	22 7	0 28	7 6	6 58	18 34	10 13	0 33	
T 26	10 21	17 6	3 42	1 3	4 28	18 42	3 37	13 6	0 36	22 48	0 4	20 13	0 16	8 41	0 37	14 7	0 30	22 7	0 28	7 7	6 59	18 34	10 12	0 33	
W 27	10 0	15 10	2 50	1 18	4 28	18 40	3 31	13 20	0 37	22 47	0 4	20 12	0 16	8 40	0 37	14 8	0 30	22 7	0 28	7 7	7 0	18 35	10 12	0 33	
T 28	9 39	12 32	1 48	1 37	4 26	18 39	3 26	13 34	0 37	22 46	0 3	20 11	0 16	8 40	0 37	14 8	0 30	22 6	0 28	7 8	7 1	18 35	10 11	0 33	
F 29	9 17	9 15	0 41	1 59	4 22	18 37	3 20	13 48	0 38	22 45	0 3	20 9	0 16	8 39	0 37	14 9	0 30	22 6	0 28	7 8	7 3	18 35	10 10	0 33	
S 30	8 56	5 29	0s30	2 25	4 16	18 35	3 14	14 2	0 39	22 44	0 3	20 8	0 17	8 39	0 37	14 9	0 30	22 6	0 28	7 8	7 4	18 36	10 10	0 33	
S 31	8n34	1s24	1s41	2n53	4s 9	18n32	3s 8	14s16	0s39	22n43	0s 3	20n 6	0n17	8n38	0s37	14s10	0s30	22n 6	0s28	7n 8	7n 5	18s36	10n 9	0n33	

ASTRODIENST EPHEMERIS for the year 1681

geocentric

OCTOBER 1681 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	0 41 10	8♂21'41	21♂20	26♂50	23♂53	27♂35	18♂12	4♂38	22♂40	22♂52	15♂58	11♂39	10♂20	3♂57	23♂40	W 1
T 2	0 45 7	9°20'53	5♂35	28°35	24°59	28°17	18°19	4°43	22♂38	22♂51	15°58	11♂35	10°17	4° 4	23♂37	T 2
F 3	0 49 3	10°20'07	19°51	0♂20	26° 6	29° 0	18°25	4°47	22°35	22°50	15°58	11°33	10°13	4°11	23°34	F 3
S 4	0 53 0	11°19'23	4♂ 6	2° 6	27°13	29°43	18°31	4°52	22°33	22°49	15°59	11°31	10°10	4°17	23°31	S 4
S 5	0 56 56	12°18'42	18°17	3°52	28°19	0♂25	18°37	4°57	22°30	22°48	15°59	11°D31	10° 7	4°24	23°29	S 5
M 6	1 0 53	13°18'04	2♂22	5°38	29°27	1° 8	18°43	5° 1	22°28	22°47	15°59	11°32	10° 4	4°31	23°26	M 6
T 7	1 4 49	14°17'27	16°19	7°23	0♂34	1°51	18°49	5° 5	22°26	22°46	15°59	11°34	10° 1	4°38	23°23	T 7
W 8	1 8 46	15°16'53	0♂ 8	9° 8	1°41	2°34	18°54	5°10	22°23	22°45	16° 0	11°35	9°58	4°44	23°20	W 8
T 9	1 12 42	16°16'21	13°47	10°53	2°49	3°18	19° 0	5°14	22°21	22°44	16° 0	11°R35	9°54	4°51	23°17	T 9
F 10	1 16 39	17°15'52	27°15	12°38	3°57	4° 1	19° 5	5°18	22°18	22°44	16° 0	11°34	9°51	4°58	23°14	F 10
S 11	1 20 36	18°15'24	10♂31	14°22	5° 5	4°44	19°10	5°22	22°16	22°43	16° 0	11°31	9°48	5° 4	23°11	S 11
S 12	1 24 32	19°14'58	23°34	16° 5	6°14	5°28	19°15	5°26	22°13	22°42	16° 0	11°27	9°45	5°11	23° 8	S 12
M13	1 28 29	20°14'35	6♂23	17°48	7°22	6°11	19°19	5°29	22°11	22°41	16° 0	11°20	9°42	5°18	23° 6	M13
T 14	1 32 25	21°14'14	18°57	19°30	8°31	6°55	19°24	5°33	22° 8	22°41	16° 0	11°13	9°38	5°24	23° 3	T 14
W15	1 36 22	22°13'54	1♂17	21°11	9°40	7°38	19°28	5°37	22° 6	22°40	16° 0	11° 6	9°35	5°31	23° 0	W15
T 16	1 40 18	23°13'36	13°26	22°52	10°49	8°22	19°33	5°40	22° 4	22°39	16°R 0	10°59	9°32	5°38	22°57	T 16
F 17	1 44 15	24°13'21	25°24	24°33	11°58	9° 6	19°37	5°44	22° 1	22°39	16° 0	10°53	9°29	5°45	22°54	F 17
S 18	1 48 11	25°13'07	7♂17	26°13	13° 7	9°50	19°40	5°47	21°59	22°38	16° 0	10°49	9°26	5°51	22°51	S 18
S 19	1 52 8	26°12'54	19° 8	27°52	14°17	10°34	19°44	5°50	21°56	22°38	16° 0	10°47	9°23	5°58	22°48	S 19
M20	1 56 4	27°12'44	1♂ 2	29°31	15°26	11°18	19°47	5°53	21°54	22°37	16° 0	10°D47	9°19	6° 5	22°45	M20
T 21	2 0 1	28°12'35	13° 4	1♂ 9	16°36	12° 2	19°51	5°56	21°51	22°37	16° 0	10°48	9°16	6°11	22°42	T 21
W22	2 3 58	29°12'27	25°19	2°46	17°46	12°46	19°54	5°59	21°49	22°36	16° 0	10°49	9°13	6°18	22°39	W22
T 23	2 7 54	0♂12'22	7♂52	4°23	18°56	13°30	19°57	6° 2	21°46	22°36	16° 0	10°R50	9°10	6°25	22°37	T 23
F 24	2 11 51	1°12'18	20°48	6° 0	20° 6	14°15	19°59	6° 5	21°44	22°36	16° 0	10°50	9° 7	6°32	22°34	F 24
S 25	2 15 47	2°12'16	4♂ 7	7°36	21°17	14°59	20° 2	6° 7	21°42	22°35	16° 0	10°47	9° 4	6°38	22°31	S 25
S 26	2 19 44	3°12'15	17°52	9°11	22°27	15°43	20° 4	6°10	21°39	22°35	15°59	10°43	9° 0	6°45	22°28	S 26
M27	2 23 40	4°12'17	1♂59	10°46	23°38	16°28	20° 6	6°12	21°37	22°35	15°59	10°36	8°57	6°52	22°25	M27
T 28	2 27 37	5°12'20	16°25	12°21	24°49	17°12	20° 8	6°14	21°35	22°35	15°59	10°27	8°54	6°58	22°22	T 28
W29	2 31 33	6°12'25	1♂ 3	13°55	26° 0	17°57	20°10	6°16	21°32	22°34	15°58	10°18	8°51	7° 5	22°20	W29
T 30	2 35 30	7°12'33	15°46	15°29	27°11	18°42	20°12	6°19	21°30	22°34	15°58	10°10	8°48	7°12	22°17	T 30
F 31	2 39 27	8♂12'42	0♂25	17♂ 2	28♂22	19♂26	20♂13	6♂21	21♂27	22♂34	15♂58	10♂ 2	8♂44	7♂18	22♂14	F 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
W 1	3s19	13n24	4s54	3n 0	1n54	13n18	0s18	20s35	0s57	22n14	0n 0	19n28	0n20	8n15	0s38	14s24
T 2	3 43	16 10	5 11	2 17	1 53	13 0	0 13	20 45	0 58	22 14	0 0	19 27	0 20	8 14	0 38	14 24
F 3	4 6	17 56	5 10	1 33	1 51	12 42	0 9	20 55	0 58	22 13	0 0	19 26	0 20	8 13	0 38	14 24
S 4	4 29	18 36	4 49	0 49	1 48	12 24	0 4	21 4	0 58	22 12	0 0	19 25	0 21	8 12	0 38	14 25
S 5	4 52	18 5	4 11	0 4	1 45	12 5	0n 1	21 14	0 59	22 11	0 1	19 24	0 21	8 12	0 38	14 25
M 6	5 16	16 27	3 18	0s41	1 42	11 46	0 5	21 23	0 59	22 11	0 1	19 23	0 21	8 11	0 38	14 25
T 7	5 39	13 51	2 14	1 27	1 38	11 26	0 10	21 33	1 0	22 10	0 1	19 22	0 21	8 10	0 38	14 26
W 8	6 2	10 29	1 2	2 12	1 33	11 6	0 14	21 42	1 0	22 9	0 1	19 21	0 21	8 9	0 38	14 26
T 9	6 25	6 34	0n12	2 58	1 28	10 46	0 18	21 50	1 1	22 9	0 1	19 20	0 21	8 8	0 37	14 26
F 10	6 47	2 23	1 24	3 43	1 23	10 25	0 22	21 59	1 1	22 8	0 1	19 19	0 21	8 7	0 37	14 26
S 11	7 10	1s51	2 31	4 48	1 18	10 4	0 26	22 8	1 1	22 8	0 1	19 18	0 21	8 6	0 37	14 27
S 12	7 33	5 56	3 28	5 13	1 13	9 43	0 30	22 16	1 2	22 7	0 1	19 18	0 22	8 5	0 37	14 27
M13	7 55	9 40	4 14	5 58	1 7	9 21	0 34	22 24	1 2	22 7	0 2	19 17	0 22	8 4	0 37	14 27
T 14	8 18	12 54	4 46	6 42	1 1	8 59	0 38	22 32	1 3	22 6	0 2	19 16	0 22	8 3	0 37	14 27
W15	8 40	15 29	5 5	7 26	0 55	8 36	0 42	22 39	1 3	22 6	0 2	19 15	0 22	8 2	0 37	14 28
T 16	9 2	17 20	5 9	8 10	0 48	8 14	0 46	22 47	1 3	22 5	0 2	19 14	0 22	8 2	0 37	14 28
F 17	9 24	18 25	4 59	8 53	0 42	7 51	0 49	22 54	1 4	22 5	0 2	19 14	0 22	8 1	0 37	14 28
S 18	9 46	18 40	4 37	9 35	0 36	7 27	0 53	23 1	1 4	22 4	0 2	19 13	0 22	8 0	0 37	14 28
S 19	10 8	18 6	4 3	10 17	0 29	7 4	0 56	23 8	1 4	22 4	0 2	19 12	0 22	7 59	0 37	14 28
M20	10 30	16 44	3 18	10 58	0 22	6 40	0 59	23 14	1 5	22 3	0 2	19 12	0 23	7 58	0 37	14 28
T 21	10 51	14 37	2 24	11 39	0 16	6 16	1 3	23 21	1 5	22 3	0 3	19 11	0 23	7 57	0 37	14 29
W22	11 13	11 48	1 23	12 19	0 9	5 51	1 6	23 27	1 5	22 3	0 3	19 11	0 23	7 56	0 37	14 29
T 23	11 34	8 23	0 16	12 58	0 2	5 26	1 9	23 33	1 6	22 2	0 3	19 10	0 23	7 55	0 37	14 29
F 24	11 55	4 28	0s53	13 37	0s 5	5 2	1 12	23 38	1 6	22 2	0 3	19 9	0 23	7 54	0 37	14 29
S 25	12 16	0 13	2 2	14 15	0 11	4 36	1 15	23 44	1 6	22 2	0 3	19 9	0 23	7 53	0 37	14 29
S 26	12 36	4n10	3 5	14 52	0 18	4 11	1 17	23 49	1 7	22 2	0 3	19 8	0 23	7 53	0 37	14 29
M27	12 57	8 27	3 59	15 28	0 25	3 46	1 20	23 54	1 7	22 2	0 3	19 8	0 24	7 52	0 37	14 29
T 28	13 17	12 19	4 39	16 4	0 31	3 20	1 23	23 59	1 7	22 1	0 3	19 8	0 24	7 51	0 37	14 29
W29	13 37	15 29	5 1	16 39	0 38	2 54	1 25	24 3	1 7	22 1	0 4	19 7	0 24	7 50	0 37	14 29
T 30	13 56	17 41	5 3	17 13	0 44	2 28	1 28	24 7	1 8	22 1	0 4	19 7	0 24	7 49	0 37	14 29
F 31	14s16	18n43	4s46	17s46	0s51	2n 2	1n30	24s11	1s 8	22n 1	0n 4	19n 6	0n24	7n48	0s37	14s29

Julian Day Number = 2335306.5, Delta T = 22.67 sec
 Ecliptic obliquity = 23°28'42", Nutation = - 0°00'07", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°17'52", Lahiri = 19°24'53"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1681
geocentric

NOVEMBER 1681 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 43 23	9♍12°53	14♌55	18♍35	29♍33	20♌11	20♌14	6♌22	21°R25	22°R34	15°R57	9°R58	8♍41	7♌25	22°R11	S 1
S 2	2 47 20	10°13'07	29°11	20° 8	0♌44	20°56	20°15	6°24	21°V23	22°≈34	15°57	9♍55	8°38	7°32	22°V 8	S 2
M 3	2 51 16	11°13'23	13♌13	21°40	1°56	21°41	20°16	6°26	21°21	22°D34	15°57	9°D55	8°35	7°39	22° 6	M 3
T 4	2 55 13	12°13'40	26°58	23°12	3° 8	22°26	20°16	6°27	21°18	22°34	15°56	9°55	8°32	7°45	22° 3	T 4
W 5	2 59 9	13°14'00	10♍29	24°43	4°19	23°11	20°17	6°29	21°16	22°34	15°56	9°R56	8°29	7°52	22° 0	W 5
T 6	3 3 6	14°14'21	23°46	26°14	5°31	23°56	20°R17	6°30	21°14	22°34	15°55	9°55	8°25	7°59	21°58	T 6
F 7	3 7 2	15°14'45	6♌51	27°45	6°43	24°42	20°17	6°31	21°12	22°34	15°55	9°52	8°22	8° 5	21°55	F 7
S 8	3 10 59	16°15'10	19°45	29°16	7°55	25°27	20°17	6°32	21°10	22°34	15°54	9°46	8°19	8°12	21°53	S 8
S 9	3 14 56	17°15'37	2♍28	0♌46	9° 7	26°12	20°16	6°33	21° 7	22°34	15°54	9°37	8°16	8°19	21°50	S 9
M10	3 18 52	18°16'06	15° 0	2°16	10°20	26°58	20°16	6°34	21° 5	22°35	15°53	9°25	8°13	8°26	21°47	M10
T 11	3 22 49	19°16'37	27°23	3°45	11°32	27°43	20°15	6°35	21° 3	22°35	15°52	9°12	8°10	8°32	21°45	T 11
W12	3 26 45	20°17'09	9♌35	5°14	12°44	28°29	20°14	6°36	21° 1	22°35	15°52	8°59	8° 6	8°39	21°42	W12
T 13	3 30 42	21°17'43	21°38	6°43	13°57	29°14	20°13	6°36	20°59	22°36	15°51	8°46	8° 3	8°46	21°40	T 13
F 14	3 34 38	22°18'18	3♌33	8°11	15°10	29°59	20°11	6°36	20°57	22°36	15°51	8°35	8° 0	8°52	21°38	F 14
S 15	3 38 35	23°18'54	15°24	9°39	16°22	0♌45	20°10	6°37	20°55	22°36	15°50	8°26	7°57	8°59	21°35	S 15
S 16	3 42 31	24°19'32	27°12	11° 6	17°35	1°31	20° 8	6°37	20°53	22°37	15°49	8°20	7°54	9° 6	21°33	S 16
M17	3 46 28	25°20'11	9♌ 3	12°32	18°48	2°17	20° 6	6°R37	20°51	22°37	15°48	8°17	7°50	9°12	21°31	M17
T 18	3 50 25	26°20'51	21° 2	13°58	20° 1	3° 3	20° 4	6°37	20°49	22°38	15°48	8°16	7°47	9°19	21°28	T 18
W19	3 54 21	27°21'32	3♌13	15°23	21°14	3°49	20° 1	6°37	20°48	22°38	15°47	8°16	7°44	9°26	21°26	W19
T 20	3 58 18	28°22'14	15°42	16°48	22°27	4°35	19°59	6°37	20°46	22°39	15°46	8°16	7°41	9°33	21°24	T 20
F 21	4 2 14	29°22'57	28°35	18°11	23°40	5°21	19°56	6°36	20°44	22°39	15°45	8°14	7°38	9°39	21°22	F 21
S 22	4 6 11	0♌23'42	11°V54	19°34	24°53	6° 7	19°53	6°36	20°42	22°40	15°44	8°11	7°35	9°46	21°20	S 22
S 23	4 10 7	1°24'27	25°43	20°55	26° 6	6°53	19°50	6°35	20°41	22°41	15°44	8° 4	7°31	9°53	21°18	S 23
M24	4 14 4	2°25'13	10♌ 1	22°14	27°20	7°39	19°46	6°34	20°39	22°41	15°43	7°55	7°28	9°59	21°16	M24
T 25	4 18 0	3°26'01	24°44	23°33	28°33	8°25	19°43	6°34	20°37	22°42	15°42	7°44	7°25	10° 6	21°14	T 25
W26	4 21 57	4°26'50	9♌43	24°49	29°46	9°11	19°39	6°33	20°36	22°43	15°41	7°32	7°22	10°13	21°12	W26
T 27	4 25 54	5°27'40	24°51	26° 3	1♍ 0	9°57	19°35	6°32	20°34	22°44	15°40	7°21	7°19	10°19	21°10	T 27
F 28	4 29 50	6°28'31	9♌56	27°15	2°14	10°44	19°31	6°30	20°33	22°44	15°39	7°11	7°15	10°26	21° 8	F 28
S 29	4 33 47	7°29'24	24°48	28°24	3°27	11°30	19°27	6°29	20°31	22°45	15°38	7° 4	7°12	10°33	21° 6	S 29
S 30	4 37 43	8♌30'18	9♌22	29♌30	4♍41	12♌16	19°22	6♌28	20°V30	22°≈46	15°37	7♍ 0	7♍ 9	10♌40	21°V 4	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	14s35	18n30	4s10	18s18	0s57	1n35	1n32	24s15	1 s 8	22n 1	0n 4	19n 6	0n24	7n47	0s37	14s29	0s30	22n 7	0s25	7n51	8n20	18s46	9n 5	0n28			
S 2	14 54	17 6	3 20	18 49	1 3	1 9	1 34	24 18	1 8	22 1	0 4	19 6	0 24	7 47	0 37	14 29	0 30	22 7	0 25	7 52	8 21	18 46	9 4	0 28			
M 3	15 13	14 41	2 18	19 20	1 10	0 42	1 36	24 22	1 9	22 1	0 4	19 6	0 25	7 46	0 37	14 29	0 30	22 7	0 25	7 52	8 22	18 46	9 3	0 28			
T 4	15 32	11 28	1 9	19 49	1 16	0 15	1 38	24 25	1 9	22 1	0 4	19 5	0 25	7 45	0 37	14 29	0 30	22 7	0 25	7 52	8 23	18 46	9 2	0 28			
W 5	15 50	7 42	0n 3	20 18	1 21	0s12	1 40	24 27	1 9	22 1	0 5	19 5	0 25	7 44	0 37	14 29	0 30	22 7	0 24	7 52	8 24	18 46	9 1	0 28			
T 6	16 8	3 36	1 13	20 45	1 27	0 39	1 42	24 30	1 9	22 1	0 5	19 5	0 25	7 43	0 37	14 29	0 30	22 7	0 24	7 52	8 25	18 46	9 0	0 27			
F 7	16 26	0s37	2 18	21 12	1 33	1 6	1 43	24 32	1 10	22 1	0 5	19 5	0 25	7 42	0 37	14 29	0 30	22 7	0 24	7 53	8 27	18 46	8 59	0 27			
S 8	16 44	4 44	3 15	21 37	1 38	1 33	1 45	24 34	1 10	22 2	0 5	19 5	0 25	7 42	0 37	14 29	0 30	22 8	0 24	7 55	8 28	18 46	8 57	0 27			
S 9	17 1	8 34	4 1	22 2	1 43	2 0	1 46	24 35	1 10	22 2	0 5	19 5	0 25	7 41	0 37	14 29	0 30	22 8	0 24	7 59	8 29	18 46	8 56	0 27			
M10	17 18	11 59	4 35	22 25	1 48	2 27	1 47	24 37	1 10	22 2	0 5	19 4	0 26	7 40	0 37	14 29	0 30	22 8	0 24	8 3	8 30	18 46	8 55	0 27			
T 11	17 34	14 49	4 55	22 47	1 53	2 54	1 49	24 38	1 10	22 2	0 5	19 4	0 26	7 39	0 37	14 29	0 30	22 8	0 24	8 8	8 31	18 46	8 54	0 27			
W12	17 51	16 58	5 1	23 8	1 58	3 21	1 50	24 39	1 10	22 3	0 6	19 4	0 26	7 39	0 37	14 29	0 30	22 8	0 24	8 13	8 33	18 46	8 53	0 27			
T 13	18 7	18 20	4 54	23 28	2 2	3 49	1 51	24 39	1 11	22 3	0 6	19 4	0 26	7 38	0 37	14 29	0 30	22 8	0 24	8 18	8 34	18 46	8 52	0 27			
F 14	18 23	18 52	4 33	23 47	2 6	4 16	1 52	24 39	1 11	22 3	0 6	19 4	0 26	7 37	0 37	14 29	0 30	22 8	0 24	8 22	8 35	18 46	8 51	0 27			
S 15	18 38	18 35	4 2	24 4	2 10	4 43	1 53	24 39	1 11	22 4	0 6	19 4	0 26	7 36	0 37	14 29	0 30	22 8	0 24	8 25	8 36	18 46	8 50	0 27			
S 16	18 53	17 30	3 19	24 20	2 13	5 10	1 53	24 39	1 11	22 4	0 6	19 5	0 26	7 36	0 37	14 28	0 30	22 9	0 24	8 27	8 37	18 46	8 49	0 26			
M17	19 8	15 38	2 28	24 35	2 16	5 37	1 54	24 39	1 11	22 5	0 6	19 5	0 27	7 35	0 37	14 28	0 30	22 9	0 24	8 29	8 39	18 46	8 48	0 26			
T 18	19 22	13 5	1 30	24 49	2 19	6 4	1 54	24 38	1 11	22 5	0 6	19 5	0 27	7 34	0 37	14 28	0 30	22 9	0 24	8 29	8 40	18 46	8 47	0 26			
W19	19 36	9 56	0 27	25 1	2 22	6 31	1 55	24 37	1 11	22 5	0 7	19 5	0 27	7 34	0 37	14 28	0 30	22 9	0 24	8 29	8 41	18 46	8 47	0 26			
T 20	19 50	6 15	0s39	25 12	2 24	6 58	1 55	24 35	1 12	22 6	0 7	19 5	0 27	7 33	0 37	14 28	0 30	22 9	0 24	8 29	8 42	18 46	8 46	0 26			
F 21	20 3	2 11	1 45	25 22	2 25	7 25	1 56	24 34	1 12	22 7	0 7	19 5	0 27	7 32	0 37	14 28	0 30	22 9	0 24	8 30	8 43	18 46	8 45	0 26			
S 22	20 16	2n 8	2 48	25 30	2 26	7 51	1 56	24 32	1 12	22 7	0 7	19 6	0 27	7 32	0 37	14 27	0 30	22 10	0 24	8 31	8 44	18 46	8 44	0 26			
S 23	20 29	6 30	3 43	25 36	2 27	8 18	1 56	24 30	1 12	22 8	0 7	19 6	0 27	7 31	0 37	14 27	0 30	22 10	0 23	8 33	8 46	18 46	8 43	0 26			
M24	20 41	10 38	4 26	25 42	2 27	8 44	1 56	24 27	1 12	22 8	0 7	19 6	0 28	7 31	0 37	14 27	0 30	22 10	0 23	8 37	8 47	18 46	8 42	0 26			
T 25	20 53	14 15	4 53	25 45	2 26	9 10	1 56	24 24	1 12	22 9	0 7	19 7	0 28	7 30	0 37	14 27	0 30	22 10	0 23	8 41	8 48	18 46	8 41	0 26			
W26	21 4	17 0	5 0	25 48	2 25	9 36	1 56	24 21	1 12	22 10	0 8	19 7	0 28	7 29	0 37	14 26	0 30	22 10	0 23	8 45	8 49	18 46	8 40	0 25			
T 27	21 15	18 36	4 46	25 49	2 23	10 2	1 55	24 18	1 12	22 10	0 8	19 8	0 28	7 29	0 37	14 26	0 30	22 10	0 23	8 50	8 50	18 46	8 40	0 25			
F 28	21 26	18 54	4 13	25 48	2 21	10 28	1 55	24 15	1 12	22 11	0 8	19 8	0 28	7 28	0 37	14 26	0 30	22 10	0 23	8 53	8 52	18 46	8 39	0 25			
S 29	21 36	17 52	3 23	25 46	2 18	10 53	1 55	24 11	1 12	22 12	0 8	19 8	0 28	7 28	0 37	14 26	0 30	22 11	0 23	8 56	8 53	18 46	8 38	0 25			
S 30	21s46	15n41	2s20	25s42	2s14	11s19	1n54	24s 7	1s12	22n13	0n 8	19n 9	0n29	7n27	0s37	14s25	0s30	22n11	0s23	8n57	8n54	18s46	8n37	0n25			

ASTRODIENST EPHEMERIS for the year 1681

geocentric

DECEMBER 1681 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	4 41 40	9°31'13	23°33	0°32	5°55	13°3	19°R17	6°R26	20°R29	22°47	15°R36	6°R58	7°6	10°346	21°R 3	M 1
T 2	4 45 36	10°32'10	7°21	1°30	7° 8	13°49	19°13	6°25	20°Y27	22°48	15°35	6°58	7° 3	10°53	21°Y 1	T 2
W 3	4 49 33	11°33'07	20°47	2°23	8°22	14°36	19° 8	6°23	20°26	22°49	15°34	6°58	7° 0	11° 0	20°59	W 3
T 4	4 53 29	12°34'06	3°54	3°10	9°36	15°22	19° 3	6°21	20°25	22°50	15°33	6°56	6°56	11° 6	20°58	T 4
F 5	4 57 26	13°35'06	16°45	3°51	10°50	16° 9	18°57	6°19	20°23	22°51	15°32	6°53	6°53	11°13	20°56	F 5
S 6	5 1 23	14°36'08	29°22	4°25	12° 4	16°56	18°52	6°17	20°22	22°52	15°31	6°46	6°50	11°20	20°55	S 6
S 7	5 5 19	15°37'10	11°48	4°51	13°18	17°42	18°46	6°15	20°21	22°53	15°30	6°37	6°47	11°26	20°53	S 7
M 8	5 9 16	16°38'13	24° 5	5° 8	14°32	18°29	18°40	6°13	20°20	22°54	15°29	6°24	6°44	11°33	20°52	M 8
T 9	5 13 12	17°39'18	6°14	5°R16	15°46	19°16	18°34	6°11	20°19	22°56	15°28	6°10	6°41	11°40	20°51	T 9
W10	5 17 9	18°40'23	18°17	5°13	17° 0	20° 2	18°28	6° 8	20°18	22°57	15°27	5°55	6°37	11°47	20°50	W10
T 11	5 21 5	19°41'28	0°34	4°58	18°15	20°49	18°22	6° 6	20°17	22°58	15°26	5°41	6°34	11°53	20°48	T 11
F 12	5 25 2	20°42'35	12° 6	4°33	19°29	21°36	18°16	6° 3	20°16	22°59	15°25	5°29	6°31	12° 0	20°47	F 12
S 13	5 28 58	21°43'42	23°55	3°55	20°43	22°23	18° 9	6° 0	20°16	23° 1	15°23	5°19	6°28	12° 7	20°46	S 13
S 14	5 32 55	22°44'49	5°43	3° 6	21°57	23°10	18° 3	5°57	20°15	23° 2	15°22	5°12	6°25	12°13	20°45	S 14
M15	5 36 52	23°45'57	17°34	2° 7	23°12	23°57	17°56	5°54	20°14	23° 3	15°21	5° 8	6°21	12°20	20°44	M15
T 16	5 40 48	24°47'04	29°31	0°59	24°26	24°44	17°49	5°51	20°13	23° 5	15°20	5° 7	6°18	12°27	20°43	T 16
W17	5 44 45	25°48'13	11°40	29°43	25°40	25°31	17°42	5°48	20°13	23° 6	15°19	5°D 7	6°15	12°33	20°42	W17
T 18	5 48 41	26°49'21	24° 5	28°23	26°55	26°18	17°35	5°45	20°12	23° 7	15°17	5°R 7	6°12	12°40	20°42	T 18
F 19	5 52 38	27°50'29	6°51	27° 1	28° 9	27° 5	17°28	5°42	20°12	23° 9	15°16	5° 7	6° 9	12°47	20°41	F 19
S 20	5 56 34	28°51'38	20° 3	25°39	29°24	27°52	17°20	5°39	20°11	23°10	15°15	5° 5	6° 6	12°54	20°40	S 20
S 21	6 0 31	29°52'46	3°45	24°20	0°38	28°39	17°13	5°35	20°11	23°12	15°14	5° 0	6° 2	13° 0	20°40	S 21
M22	6 4 27	0°53'55	17°57	23° 8	1°53	29°26	17° 6	5°32	20°10	23°13	15°13	4°53	5°59	13° 7	20°39	M22
T 23	6 8 24	1°55'03	2°11	22° 2	3° 7	0°13	16°58	5°28	20°10	23°15	15°11	4°44	5°56	13°14	20°39	T 23
W24	6 12 21	2°56'12	17°41	21° 6	4°22	1° 0	16°50	5°24	20°10	23°17	15°10	4°35	5°53	13°20	20°38	W24
T 25	6 16 17	3°57'21	2°59	20°20	5°36	1°48	16°43	5°21	20°10	23°18	15° 9	4°25	5°50	13°27	20°38	T 25
F 26	6 20 14	4°58'30	18°18	19°44	6°51	2°35	16°35	5°17	20° 9	23°20	15° 8	4°17	5°47	13°34	20°37	F 26
S 27	6 24 10	5°59'39	3°29	19°19	8° 5	3°22	16°27	5°13	20° 9	23°22	15° 6	4°11	5°43	13°40	20°37	S 27
S 28	6 28 7	7° 0'48	18°22	19° 3	9°20	4° 9	16°19	5° 9	20° 9	23°23	15° 5	4° 7	5°40	13°47	20°37	S 28
M29	6 32 3	8° 1'58	2°10	18°D58	10°35	4°56	16°11	5° 5	20°D 9	23°25	15° 4	4°D 6	5°37	13°54	20°37	M29
T 30	6 36 0	9° 3'07	19° 2	11°49	5°44	16° 3	5° 1	20° 9	23°27	15° 3	4° 7	5°34	14° 1	20°37	T 30	
W31	6 39 57	10°3'41	0°25	19°14	13°4	6°31	15°55	4°56	20°Y 9	23°28	15° 1	4°10	5°31	14°3	20°D37	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	21s55	12n35	1s10	25s37	2s 8	11s44	1n53	24s 2	1s12	22n14	0n 8	19n 9	0n29	7n27	0s37	14s25
T 2	22 4	8 51	0n 2	25 31	2 2	12 8	1 53	23 57	1 12	22 14	0 9	19 10	0 29	7 26	0 37	14 25
W 3	22 12	4 46	1 12	25 23	1 55	12 33	1 52	23 52	1 12	22 15	0 9	19 11	0 29	7 26	0 36	14 24
T 4	22 20	0 33	2 17	25 14	1 47	12 57	1 51	23 47	1 12	22 16	0 9	19 11	0 29	7 25	0 36	14 24
F 5	22 28	3s37	3 14	25 3	1 38	13 21	1 50	23 42	1 12	22 17	0 9	19 12	0 29	7 25	0 36	14 24
S 6	22 35	7 32	3 59	24 51	1 27	13 45	1 49	23 36	1 12	22 18	0 9	19 12	0 29	7 25	0 36	14 23
S 7	22 42	11 4	4 33	24 39	1 15	14 8	1 48	23 30	1 12	22 19	0 9	19 13	0 30	7 24	0 36	14 23
M 8	22 48	14 5	4 53	24 25	1 2	14 31	1 47	23 24	1 12	22 20	0 10	19 14	0 30	7 24	0 36	14 23
T 9	22 54	16 27	5 0	24 10	0 47	14 54	1 46	23 17	1 12	22 21	0 10	19 14	0 30	7 23	0 36	14 22
W10	23 0	18 6	4 53	23 54	0 31	15 16	1 45	23 10	1 12	22 22	0 10	19 15	0 30	7 23	0 36	14 22
T 11	23 5	18 55	4 33	23 37	0 14	15 38	1 43	23 3	1 12	22 23	0 10	19 16	0 30	7 23	0 36	14 21
F 12	23 9	18 55	4 2	23 20	0n 4	16 0	1 42	22 56	1 12	22 24	0 10	19 17	0 30	7 23	0 36	14 21
S 13	23 13	18 4	3 20	23 2	0 23	16 21	1 40	22 48	1 12	22 25	0 10	19 18	0 30	7 22	0 36	14 20
S 14	23 17	16 28	2 29	22 43	0 43	16 42	1 39	22 40	1 12	22 26	0 10	19 18	0 31	7 22	0 36	14 20
M15	23 20	14 8	1 32	22 25	1 3	17 2	1 37	22 32	1 12	22 27	0 11	19 19	0 31	7 22	0 36	14 20
T 16	23 23	11 12	0 30	22 6	1 23	17 22	1 35	22 23	1 12	22 28	0 11	19 20	0 31	7 22	0 36	14 19
W17	23 25	7 44	0s35	21 47	1 42	17 42	1 34	22 15	1 12	22 29	0 11	19 21	0 31	7 21	0 36	14 19
T 18	23 26	3 52	1 39	21 28	2 0	18 1	1 32	22 6	1 11	22 30	0 11	19 22	0 31	7 21	0 36	14 18
F 19	23 28	0n16	2 41	21 10	2 17	18 19	1 30	21 57	1 11	22 31	0 11	19 23	0 31	7 21	0 36	14 18
S 20	23 28	4 31	3 35	20 53	2 31	18 37	1 28	21 47	1 11	22 32	0 11	19 24	0 31	7 21	0 36	14 17
S 21	23 29	8 42	4 20	20 38	2 43	18 55	1 26	21 37	1 11	22 33	0 11	19 25	0 32	7 21	0 36	14 17
M22	23 29	12 33	4 51	20 25	2 53	19 12	1 24	21 28	1 11	22 35	0 12	19 26	0 32	7 21	0 36	14 16
T 23	23 28	15 45	5 4	20 14	3 1	19 28	1 22	21 17	1 11	22 36	0 12	19 27	0 32	7 21	0 36	14 16
W24	23 27	18 0	4 56	20 6	3 6	19 44	1 20	21 7	1 11	22 37	0 12	19 28	0 32	7 20	0 36	14 15
T 25	23 25	18 59	4 27	20 0	3 8	20 0	1 18	20 56	1 11	22 38	0 12	19 29	0 32	7 20	0 36	14 15
F 26	23 23	18 36	3 39	19 57	3 9	20 15	1 16	20 45	1 10	22 39	0 12	19 30	0 32	7 20	0 36	14 14
S 27	23 21	16 52	2 36	19 56	3 8	20 29	1 13	20 34	1 10	22 40	0 12	19 31	0 32	7 20	0 36	14 14
S 28	23 18	14 2	1 23	19 57	3 5	20 43	1 11	20 23	1 10	22 41	0 13	19 32	0 33	7 20	0 36	14 13
M29	23 14	10 22	0 7	20 1	3 1	20 56	1 9	20 11	1 10	22 42	0 13	19 33	0 33	7 20	0 36	14 12
T 30	23 10	6 15	1n 8	20 7	2 55	21 9	1 6	20 0	1 10	22 43	0 13	19 35	0 33	7 20	0 36	14 12
W31	23s 6	1n55	2n16	20s14	2n49	21s21	1n 4	19s48	1s 9	22n44	0n13	19n36	0n33	7n21	0s36	14s11

Julian Day Number = 2335367.5, Delta T = 22.58 sec

Ecliptic obliquity = 23°28'41", Nutation = - 0°00'08", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°18'01", Lahiri = 19°25'01"Greg. Calendar