



# Astrodienst Ephemeris Tables for the year 1716

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 1716  
geocentric

JANUARY 1716

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	6 39 2	9°34'56	22°31'3	20°27'0	22°23'29	27°28'13	16°18'37	6°25'54	26°26'5	8°28'48	10°20'24	8°28'59	7°17'56	17°17'24	26°26'43	W 1
T 2	6 42 59	10°50'07	5°57'43	21°22'22	23°44'0	28°28'0	16°16'35	6°6'56	26°26'5	8°28'47	10°20'24	8°28'57	7°53'17	17°31'31	26°26'46	T 2
F 3	6 46 55	11°51'16	19°37'3	22°45'25	25°0'28	28°46'28	16°16'33	6°6'57	26°26'5	8°28'47	10°20'23	8°28'57	7°50'17	17°38'38	26°26'49	F 3
S 4	6 50 52	12°52'26	3°38'45	24°10'26	26°15'29	29°33'16	16°16'32	6°6'59	26°26'4	8°28'46	10°20'23	8°28'58	7°46'17	17°44'44	26°26'52	S 4
S 5	6 54 48	13°53'35	18°7'25	25°35'27	27°30'0	30°19'16	16°16'30	7°0'26	26°4'8	8°28'46	10°22'8	8°57'57	7°43'17	17°51'51	26°26'55	S 5
M 6	6 58 45	14°54'43	2°11'39	27°1'28	28°45'1	29°45'1	16°16'29	7°1'26	26°4'8	8°28'45	10°21'8	8°55'55	7°40'17	17°57'57	26°26'59	M 6
T 7	7 2 41	15°55'51	17°18'28	28°27'0	29°54'1	30°54'1	16°16'28	7°2'26	26°4'8	8°28'45	10°20'8	8°50'50	7°37'18	18°4'27	27°2'2	T 7
W 8	7 6 38	16°56'59	1°25'58	29°54'1	30°54'1	31°54'1	16°16'27	7°3'26	26°3'8	8°28'44	10°20'8	8°43'43	7°34'18	18°11'27	27°5'8	W 8
T 9	7 10 34	17°58'06	16°31'13	30°54'1	31°54'1	32°54'1	16°16'26	7°4'26	26°3'8	8°28'44	10°19'8	8°33'43	7°31'18	18°17'27	27°9'9	T 9
F 10	7 14 31	18°59'13	0°25'50	31°54'1	32°54'1	33°54'1	16°16'26	7°5'26	26°2'8	8°28'44	10°18'8	8°21'43	7°27'18	18°24'27	27°12'10	F 10
S 11	7 18 28	19°59'20	14°50'4	32°54'1	33°54'1	34°54'1	16°16'26	7°6'26	26°2'8	8°28'43	10°17'8	8°10'43	7°24'18	18°31'27	27°16'11	S 11
S 12	7 22 24	20°59'27	28°25'5	33°54'1	34°54'1	35°54'1	16°16'26	7°7'26	26°1'8	8°28'43	10°16'8	7°59'43	7°21'18	18°37'27	27°19'11	S 12
M13	7 26 21	21°59'34	11°35'7	34°54'1	35°54'1	36°54'1	16°16'26	7°8'26	26°1'8	8°28'43	10°15'8	7°50'43	7°18'18	18°44'27	27°23'11	M13
T 14	7 30 17	22°59'41	23°3'36	35°54'1	36°54'1	37°54'1	16°16'27	7°9'26	26°0'8	8°28'43	10°14'8	7°44'43	7°15'18	18°51'27	27°26'11	T 14
W15	7 34 14	23°59'48	24°4'41	36°54'1	37°54'1	38°54'1	16°16'27	7°10'26	25°59'8	8°28'42	10°13'8	7°41'43	7°11'18	18°57'27	27°30'11	W15
T 16	7 38 10	24°59'55	18°49'11	37°54'1	38°54'1	39°54'1	16°16'28	7°11'26	25°58'8	8°28'42	10°13'8	7°40'43	7°8'19	19°4'27	27°33'11	T 16
F 17	7 42 7	25°59'62	0°13'43	38°54'1	39°54'1	40°54'1	16°16'29	7°12'26	25°58'8	8°28'42	10°12'8	7°39'43	7°5'19	19°11'27	27°37'11	F 17
S 18	7 46 3	26°59'69	12°31'15	39°54'1	40°54'1	41°54'1	16°16'30	7°13'26	25°57'8	8°28'42	10°10'8	7°38'43	7°2'19	19°17'27	27°41'11	S 18
S 19	7 50 0	27°59'76	24°18'16	40°54'1	41°54'1	42°54'1	16°16'32	7°14'26	25°56'8	8°28'42	10°9'8	7°38'43	6°59'19	19°24'27	27°44'11	S 19
M20	7 53 57	28°59'83	29°10'16	41°54'1	42°54'1	43°54'1	16°16'34	7°15'26	25°55'8	8°28'42	10°8'8	7°35'43	6°56'19	19°31'27	27°48'11	M20
T 21	7 57 53	29°59'90	0°11'04	42°54'1	43°54'1	44°54'1	16°16'35	7°16'26	25°54'8	8°28'42	10°7'8	7°29'43	6°52'19	19°37'27	27°52'11	T 21
W22	8 1 50	30°59'97	1°12'06	43°54'1	44°54'1	45°54'1	16°16'37	7°17'26	25°52'8	8°28'42	10°6'8	7°21'43	6°49'19	19°44'27	27°56'11	W22
T 23	8 5 46	31°59'104	2°13'07	44°54'1	45°54'1	46°54'1	16°16'40	7°18'26	25°51'8	8°28'42	10°5'8	7°9'43	6°46'19	19°51'27	28°0'11	T 23
F 24	8 9 43	32°59'111	3°14'08	45°54'1	46°54'1	47°54'1	16°16'42	7°19'26	25°50'8	8°28'42	10°4'8	6°56'43	6°43'19	19°57'27	28°3'11	F 24
S 25	8 13 39	33°59'118	4°15'07	46°54'1	47°54'1	48°54'1	16°16'45	7°20'26	25°49'8	8°28'43	10°3'8	6°42'43	6°40'20	20°4'27	28°7'11	S 25
S 26	8 17 36	34°59'125	5°16'06	47°54'1	48°54'1	49°54'1	16°16'48	7°21'26	25°48'8	8°28'43	10°2'8	6°29'43	6°37'20	20°10'27	28°11'11	S 26
M27	8 21 32	35°59'132	6°17'03	48°54'1	49°54'1	50°54'1	16°16'51	7°22'26	25°46'8	8°28'43	10°1'8	6°17'43	6°33'20	20°17'27	28°15'11	M27
T 28	8 25 29	36°59'139	7°17'59	49°54'1	50°54'1	51°54'1	16°16'54	7°23'26	25°45'8	8°28'43	9°59'43	6°8'43	6°30'20	20°24'27	28°19'11	T 28
W29	8 29 26	37°59'146	8°18'54	50°54'1	51°54'1	52°54'1	16°16'57	7°24'26	25°43'8	8°28'44	9°58'43	6°2'43	6°27'20	20°30'27	28°23'11	W29
T 30	8 33 22	38°59'153	9°19'48	51°54'1	52°54'1	53°54'1	16°17'0	7°25'26	25°42'8	8°28'44	9°56'43	5°59'43	6°24'20	20°37'27	28°27'11	T 30
F 31	8 37 19	39°59'160	10°20'40	52°54'1	53°54'1	54°54'1	16°17'3	7°26'26	25°41'8	8°28'44	9°55'43	5°58'43	6°23'20	20°44'27	28°31'11	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	decl	lat	decl	lat
W 1	23s 7	0n16	3n43	22s27	0n39	22s49	1s14	13s26	1s 3	15n52	1s 1	0s34	2n22	2n16	0n46	12n43	1s50	20n32	13n57	14s31	14s10	16s14	7s14	5n45					
T 2	23 2	4 51	2 48	22 41	0 31	22 37	1 15	13 10	1 2	15 51	1 0	0 34	2 23	2 16	0 46	12 43	1 49	20 33	13 57	14 30	14 9	16 15	7 13	5 44					
F 3	22 57	9 15	1 41	22 54	0 23	22 25	1 17	12 53	1 1	15 51	1 0	0 35	2 23	2 16	0 46	12 43	1 49	20 33	13 58	14 30	14 8	16 16	7 12	5 44					
S 4	22 51	13 13	0 28	23 6	0 15	22 13	1 18	12 36	1 1	15 51	1 0	0 35	2 23	2 16	0 46	12 43	1 49	20 34	13 58	14 30	14 7	16 17	7 11	5 44					
S 5	22 45	16 28	0s49	23 17	0 7	21 59	1 19	12 19	1 0	15 51	1 0	0 35	2 23	2 16	0 46	12 43	1 49	20 35	13 59	14 30	14 6	16 18	7 10	5 43					
M 6	22 38	18 43	2 3	23 27	0s 1	21 45	1 21	12 1	0 59	15 51	0 59	0 35	2 24	2 17	0 46	12 43	1 49	20 35	13 59	14 30	14 5	16 19	7 10	5 43					
T 7	22 31	19 44	3 9	23 36	0 8	21 31	1 22	11 44	0 58	15 51	0 59	0 36	2 24	2 17	0 46	12 43	1 49	20 36	14 0	14 28	14 4	16 20	7 9	5 43					
W 8	22 24	19 25	4 3	23 44	0 15	21 15	1 23	11 27	0 58	15 51	0 59	0 36	2 24	2 17	0 46	12 43	1 49	20 37	14 0	14 26	14 3	16 21	7 8	5 43					
T 9	22 16	17 49	4 40	23 51	0 23	20 59	1 24	11 9	0 57	15 51	0 58	0 36	2 25	2 17	0 47	12 43	1 49	20 37	14 0	14 22	14 2	16 22	7 7	5 42					
F 10	22 8	15 7	5 0	23 56	0 30	20 43	1 25	10 52	0 56	15 51	0 58	0 36	2 25	2 17	0 47	12 43	1 49	20 38	14 1	14 19	14 1	16 23	7 6	5 42					
S 11	21 59	11 37	5 0	24 1	0 37	20 26	1 26	10 34	0 55	15 51	0 58	0 36	2 25	2 18	0 47	12 43	1 49	20 39	14 1	14 15	14 0	16 24	7 5	5 42					
S 12	21 50	7 36	4 43	24 4	0 43	20 8	1 27	10 16	0 54	15 51	0 58	0 36	2 25	2 18	0 47	12 42	1 49	20 39	14 2	14 11	13 59	16 25	7 4	5 41					
M13	21 40	3 21	4 12	24 6	0 50	19 50	1 28	9 58	0 54	15 52	0 57	0 36	2 26	2 18	0 47	12 42	1 49	20 40	14 2	14 9	13 58	16 26	7 3	5 41					
T 14	21 30	0s56	3 29	24 7	0 56	19 31	1 29	9 40	0 53	15 52	0 57	0 36	2 26	2 18	0 47	12 42	1 49	20 41	14 2	14 7	13 57	16 27	7 2	5 41					
W15	21 20	5 4	2 37	24 6	1 2	19 11	1 29	9 22	0 52	15 53	0 57	0 36	2 26	2 19	0 47	12 42	1 49	20 42	14 3	14 6	13 56	16 28	7 1	5 41					
T 16	21 9	8 54	1 38	24 4	1 8	18 51	1 30	9 4	0 51	15 53	0 56	0 35	2 27	2 19	0 47	12 42	1 49	20 42	14 3	14 5	13 55	16 29	7 0	5 41					
F 17	20 57	12 19	0 37	24 1	1 13	18 31	1 30	8 46	0 51	15 54	0 56	0 35	2 27	2 19	0 47	12 43	1 49	20 43	14 4	14 5	13 54	16 30	6 59	5 40					
S 18	20 46	15 12	0n26	23 56	1 19	18 10	1 31	8 28	0 50	15 54	0 56	0 35	2 27	2 20	0 47	12 43	1 48	20 44	14 4	14 5	13 53	16 31	6 58	5 40					
S 19	20 34	17 28	1 27	23 50	1 24	17 48	1 31	8 10	0 49	15 55	0 56	0 34	2 27	2 20	0 47	12 43	1 48	20 45	14 4	14 5	13 52	16 32	6 57	5 40					
M20	20 21	18 59	2 25	23 43	1 29	17 26	1 32	7 51	0 48	15 56	0 55	0 34	2 28	2 21	0 47	12 43	1 48	20 45	14 5	14 4	13 51	16 33	6 56	5 40					
T 21	20 8	19 41	3 17	23 34	1 33	17 4	1 32	7 33	0 47	15 56	0 55	0 34	2 28	2 21	0 47	12 43	1 48	20 46	14 5	14 2	13 50	16 34	6 55	5 39					
W22	19 55	19 28	4 1	23 24	1 38	16 41	1 32	7 14	0 47	15 57	0 55	0 33	2 28	2 22	0 47	12 43	1 48	20 47	14 5	13 59	13 49	16 35	6 54	5 39					
T 23	19 42	18 18	4 34	23 12	1 42	16 17	1 33	6 56	0 46	15 58	0 54	0 33	2 29	2 22	0 47	12 43	1 48	20 48	14 6	13 55	13 48	16 36	6 53	5 39					
F 24	19 28	16 14	4 54	22 59	1 46	15 53	1 33	6 37	0 45	15 59	0 54	0 32	2 29	2 23	0 47	12 43	1 48	20 48	14 6	13 51	13 47	16 37	6 52	5 39					
S 25	19 13	13 19	5 0	22 44	1 49	15 29	1 33	6 19	0 44	16 0	0 54	0 32	2 29	2 23	0 47	12 43	1 48	20 49	14 6	13 46	13 46	16 38	6 51	5 39					
S 26	18 59	9 41	4 50	22 28	1 52	15 4	1 33	6 0	0 43	16 1	0 54	0 31	2 29	2 24	0 47	12 43	1 48	20 50	14 7	13 42	13 44	16 39	6 49	5 39					
M27	18 44	5 30	4 23	22 11	1 55	14 39	1 33	5 42	0 43	16 2	0 53	0 30	2 30	2 24	0 47	12 43	1 48	20 51	14 7	13 38	13 43	16 40	6 48	5 38					
T 28	18 28	1 0	3 41	21 51	1 57	14 13	1 32	5 23	0 42	16 4	0 53	0 30	2 30	2 25	0 47	12 44	1 48	20 51	14 7	13 35	13 42	16 41	6 47	5 38					
W29	18 13	3n36	2 46	21 31	2 0	13 47	1 32	5 4	0 41	16 5	0 53	0 29	2 30	2 26	0 47	12 44	1 48	20 52	14 8	13 33	13 41	16 42	6 46	5 38					
T 30	17 57	8 3	1 41	21 9	2 2	13 21	1 32	4 45	0 40	16 6	0 53	0 28	2 31	2 26	0 47	12 44	1 48	20 53	14 8	13 32	13 40	16 43	6 45	5 38					
F 31	17s40	12n 6	0n29	20s45	2s 3	12s54	1s31	4s27	0s40	16n 8	0s52	0s27	2n31	2n27	0n47	12n44	1s48	20n54	14n 8	13s32	13s39	16s44	6s43	5n38					



# ASTRODIENST EPHEMERIS for the year 1716

## geocentric

MARCH 1716

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 35 35	10♈35'42	9♊36	28♈25	7♊13	13♊1	20♈19	5°R30	24°R37	9♈11	9°R10	3°R19	4♊45	24♊3	0♈33	S 1
M 2	10 39 32	11°35'46	23°38	29°38	8°27	13°45	20°28	5♈26	24°35	9°13	9°9	3♊19	4°42	24°10	0°37	M 2
T 3	10 43 28	12°35'48	7♋34	0♊45	9°40	14°30	20°37	5°22	24°32	9°14	9°7	3°16	4°39	24°17	0°41	T 3
W 4	10 47 25	13°35'48	21°23	1°44	10°54	15°15	20°46	5°18	24°29	9°15	9°6	3°11	4°36	24°23	0°45	W 4
T 5	10 51 21	14°35'45	5♌3	2°36	12°8	15°59	20°55	5°14	24°27	9°17	9°4	3°4	4°33	24°30	0°49	T 5
F 6	10 55 18	15°35'41	18°31	3°20	13°21	16°44	21°4	5°10	24°24	9°18	9°2	2°56	4°29	24°37	0°53	F 6
S 7	10 59 15	16°35'34	1♍47	3°55	14°35	17°28	21°14	5°5	24°22	9°20	9°1	2°48	4°26	24°43	0°57	S 7
S 8	11 3 11	17°35'25	14°49	4°22	15°48	18°13	21°23	5°1	24°19	9°21	8°59	2°40	4°23	24°50	1°1	S 8
M 9	11 7 8	18°35'15	27°35	4°41	17°2	18°57	21°33	4°57	24°17	9°23	8°58	2°34	4°20	24°56	1°5	M 9
T 10	11 11 4	19°35'02	10♎5	4°50	18°15	19°42	21°43	4°52	24°14	9°25	8°56	2°29	4°17	25°3	1°9	T 10
W 11	11 15 1	20°34'47	22°22	4°R51	19°28	20°26	21°53	4°48	24°11	9°26	8°55	2°27	4°13	25°10	1°13	W 11
T 12	11 18 57	21°34'31	4♏26	4°44	20°42	21°10	22°3	4°43	24°9	9°28	8°53	2°D26	4°10	25°16	1°17	T 12
F 13	11 22 54	22°34'13	16°20	4°29	21°55	21°55	22°13	4°39	24°6	9°29	8°52	2°27	4°7	25°23	1°21	F 13
S 14	11 26 50	23°33'53	28°10	4°6	23°8	22°39	22°23	4°34	24°4	9°31	8°50	2°29	4°4	25°30	1°25	S 14
S 15	11 30 47	24°33'32	9♐59	3°36	24°21	23°23	22°33	4°30	24°1	9°33	8°49	2°30	4°1	25°36	1°29	S 15
M 16	11 34 44	25°33'08	21°52	2°59	25°34	24°7	22°44	4°25	23°58	9°34	8°47	2°R31	3°58	25°43	1°33	M 16
T 17	11 38 40	26°32'43	3♑54	2°18	26°47	24°51	22°54	4°20	23°56	9°36	8°46	2°31	3°54	25°50	1°37	T 17
W 18	11 42 37	27°32'16	16°11	1°32	28°0	25°35	23°5	4°16	23°53	9°38	8°44	2°29	3°51	25°56	1°40	W 18
T 19	11 46 33	28°31'48	28°47	0°42	29°13	26°19	23°16	4°11	23°51	9°40	8°43	2°26	3°48	26°3	1°44	T 19
F 20	11 50 30	29°31'17	11♒44	29♈51	0♉26	27°3	23°27	4°6	23°48	9°42	8°41	2°22	3°45	26°10	1°48	F 20
S 21	11 54 26	0♊30'45	25°6	28°58	1°38	27°47	23°38	4°2	23°45	9°43	8°40	2°17	3°42	26°16	1°52	S 21
S 22	11 58 23	1°30'10	8♈52	28°5	2°51	28°31	23°49	3°57	23°43	9°45	8°38	2°12	3°39	26°23	1°55	S 22
M 23	12 2 19	2°29'34	22°59	27°13	4°4	29°15	24°0	3°52	23°40	9°47	8°37	2°7	3°35	26°30	1°59	M 23
T 24	12 6 16	3°28'56	7♊24	26°23	5°16	29°58	24°11	3°48	23°38	9°49	8°35	2°4	3°32	26°36	2°3	T 24
W 25	12 10 13	4°28'16	22°1	25°36	6°29	0♉42	24°22	3°43	23°35	9°51	8°34	2°3	3°29	26°43	2°6	W 25
T 26	12 14 9	5°27'33	6♌43	24°53	7°41	1°26	24°34	3°38	23°32	9°53	8°33	2°D2	3°26	26°50	2°10	T 26
F 27	12 18 6	6°26'49	21°23	24°14	8°53	2°9	24°45	3°34	23°30	9°55	8°31	2°3	3°23	26°56	2°13	F 27
S 28	12 22 2	7°26'02	5♊56	23°40	10°6	2°53	24°57	3°29	23°27	9°57	8°30	2°5	3°19	27°3	2°17	S 28
S 29	12 25 59	8°25'13	20°18	23°10	11°18	3°36	25°8	3°24	23°25	9°59	8°29	2°6	3°16	27°10	2°20	S 29
M 30	12 29 55	9°24'22	4♋25	22°46	12°30	4°20	25°20	3°20	23°22	10°1	8°27	2°R7	3°13	27°16	2°24	M 30
T 31	12 33 52	10°23'28	18♌18	22♈28	13♉42	5♉3	25♉32	3♊15	23°20	10♉3	8°26	2♊7	3♊10	27°23	2♈27	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	7s36	18n55	3s 2	0n31	1n15	2n 7	0s49	4n54	0s16	17n 8	0s45	0n13	2n37	2n53	0n48	12n54
M 2	7 13	19 22	3 57	1 13	1 29	2 38	0 47	5 12	0 16	17 10	0 45	0 15	2 38	2 54	0 48	12 55
T 3	6 51	18 39	4 37	1 52	1 43	3 10	0 44	5 30	0 15	17 13	0 44	0 17	2 38	2 55	0 48	12 55
W 4	6 28	16 49	5 1	2 28	1 57	3 41	0 42	5 48	0 14	17 16	0 44	0 18	2 38	2 56	0 48	12 56
T 5	6 4	14 4	5 7	3 1	2 10	4 12	0 39	6 6	0 13	17 18	0 44	0 20	2 38	2 57	0 48	12 56
F 6	5 41	10 36	4 56	3 31	2 23	4 43	0 37	6 23	0 13	17 21	0 44	0 22	2 38	2 58	0 48	12 57
S 7	5 18	6 39	4 29	3 56	2 35	5 14	0 34	6 41	0 12	17 24	0 44	0 24	2 38	2 59	0 48	12 57
S 8	4 55	2 28	3 49	4 18	2 47	5 45	0 31	6 59	0 11	17 26	0 43	0 26	2 38	3 0	0 48	12 58
M 9	4 31	1s45	2 57	4 35	2 58	6 15	0 29	7 16	0 10	17 29	0 43	0 28	2 39	3 1	0 48	12 58
T 10	4 8	5 49	1 58	4 47	3 7	6 46	0 26	7 34	0 10	17 32	0 43	0 29	2 39	3 2	0 48	12 59
W 11	3 44	9 34	0 55	4 55	3 15	7 16	0 23	7 51	0 9	17 34	0 43	0 31	2 39	3 3	0 48	12 59
T 12	3 21	12 51	0n11	4 59	3 22	7 47	0 20	8 9	0 8	17 37	0 43	0 33	2 39	3 4	0 48	13 0
F 13	2 57	15 33	1 15	4 58	3 28	8 17	0 18	8 26	0 8	17 40	0 42	0 35	2 39	3 5	0 48	13 1
S 14	2 34	17 35	2 16	4 52	3 31	8 46	0 15	8 43	0 7	17 43	0 42	0 37	2 39	3 6	0 48	13 1
S 15	2 10	18 50	3 10	4 42	3 33	9 16	0 12	9 0	0 6	17 46	0 42	0 39	2 39	3 7	0 48	13 2
M 16	1 46	19 17	3 57	4 27	3 34	9 46	0 9	9 17	0 5	17 48	0 42	0 41	2 39	3 8	0 48	13 2
T 17	1 23	18 51	4 35	4 9	3 32	10 15	0 6	9 34	0 5	17 51	0 42	0 43	2 39	3 9	0 48	13 3
W 18	0 59	17 32	5 0	3 48	3 28	10 44	0 3	9 51	0 4	17 54	0 41	0 45	2 39	3 10	0 48	13 3
T 19	0 35	15 21	5 12	3 23	3 23	11 13	0n 0	10 7	0 3	17 57	0 41	0 46	2 40	3 11	0 48	13 4
F 20	0 11	12 21	5 8	2 56	3 16	11 41	0 3	10 24	0 3	18 0	0 41	0 48	2 40	3 12	0 48	13 5
S 21	0n12	8 39	4 48	2 26	3 7	12 9	0 6	10 40	0 2	18 3	0 41	0 50	2 40	3 13	0 48	13 5
S 22	0 36	4 23	4 11	1 56	2 56	12 37	0 9	10 57	0 1	18 6	0 41	0 52	2 40	3 14	0 48	13 6
M 23	1 0	0n15	3 18	1 24	2 44	13 5	0 12	11 13	0 1	18 9	0 40	0 54	2 40	3 15	0 48	13 7
T 24	1 23	4 57	2 11	0 53	2 31	13 32	0 15	11 29	0n 0	18 12	0 40	0 56	2 40	3 16	0 48	13 7
W 25	1 47	9 26	0 55	0 21	2 17	13 59	0 19	11 45	0 1	18 15	0 40	0 58	2 40	3 17	0 48	13 8
T 26	2 10	13 22	0s26	0s 9	2 3	14 26	0 22	12 1	0 2	18 18	0 40	1 0	2 40	3 18	0 48	13 8
F 27	2 34	16 27	1 44	0 39	1 47	14 52	0 25	12 16	0 2	18 20	0 40	1 2	2 40	3 19	0 48	13 9
S 28	2 57	18 26	2 56	1 7	1 32	15 18	0 28	12 32	0 3	18 23	0 40	1 4	2 40	3 20	0 48	13 10
S 29	3 21	19 12	3 55	1 33	1 16	15 44	0 31	12 48	0 4	18 26	0 39	1 5	2 40	3 21	0 48	13 10
M 30	3 44	18 45	4 39	1 57	1 0	16 9	0 34	13 3	0 4	18 29	0 39	1 7	2 40	3 22	0 48	13 11
T 31	4n 7	17n10	5s 6	2s19	0n44	16n34	0n37	13n18	0n 5	18n32	0s39	1n 9	2n40	3n23	0n48	13n12

Julian Day Number = 2347875.5, Delta T = 10.68 sec  
 Ecliptic obliquity = 23°28'27", Nutation = 0°00'11", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 20°46'41", Lahiri = 19°53'41"Greg. Calendar



ASTRODIENST EPHEMERIS for the year 1716  
geocentric

MAY 1716

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
F 1	14 36 5	10♈39'20	8♍18	17♊30	20♋14	27♌6	2♏9	1°R11	22°R17	11♈10	7°R57	1♎55	1♏31	0♌49	3♈55	F 1
S 2	14 40 2	11°37'24	20°56	19° 2	21°23	27°48	2°22	1♌8	22♍16	11°12	7♎56	1°55	1°28	0°56	3°57	S 2
S 3	14 43 58	12°35'27	3♌19	20°36	22°32	28°29	2°36	1° 5	22°15	11°15	7°56	1°56	1°25	1° 3	3°59	S 3
M 4	14 47 55	13°33'27	15°30	22°12	23°41	29°11	2°49	1° 2	22°13	11°17	7°55	1°57	1°22	1° 9	4° 1	M 4
T 5	14 51 51	14°31'26	27°33	23°51	24°50	29°53	3° 3	0°59	22°12	11°19	7°55	1°R58	1°19	1°16	4° 3	T 5
W 6	14 55 48	15°29'24	9♎29	25°31	25°58	0♏35	3°17	0°57	22°11	11°21	7°54	1°58	1°16	1°23	4° 5	W 6
T 7	14 59 44	16°27'20	21°20	27°13	27° 7	1°16	3°30	0°54	22°10	11°24	7°54	1°57	1°12	1°29	4° 7	T 7
F 8	15 3 41	17°25'14	3♌10	28°57	28°15	1°58	3°44	0°52	22° 8	11°26	7°54	1°55	1° 9	1°36	4° 8	F 8
S 9	15 7 37	18°23'07	14°59	0♌43	29°23	2°40	3°58	0°49	22° 7	11°28	7°53	1°53	1° 6	1°43	4°10	S 9
S 10	15 11 34	19°20'58	26°51	2°32	0♏31	3°21	4°12	0°47	22° 6	11°30	7°53	1°50	1° 3	1°49	4°12	S 10
M 11	15 15 31	20°18'48	8♌47	4°22	1°39	4° 3	4°25	0°45	22° 5	11°33	7°53	1°48	1° 0	1°56	4°13	M 11
T 12	15 19 27	21°16'37	20°52	6°14	2°47	4°44	4°39	0°42	22° 4	11°35	7°53	1°45	0°56	2° 3	4°15	T 12
W 13	15 23 24	22°14'25	3♌8	8° 8	3°54	5°26	4°53	0°40	22° 3	11°37	7°52	1°43	0°53	2° 9	4°16	W 13
T 14	15 27 20	23°12'11	15°39	10° 4	5° 1	6° 7	5° 7	0°38	22° 3	11°39	7°52	1°42	0°50	2°16	4°18	T 14
F 15	15 31 17	24° 9'56	28°29	12° 2	6° 9	6°48	5°21	0°37	22° 2	11°42	7°52	1°D42	0°47	2°23	4°19	F 15
S 16	15 35 13	25° 7'40	11♋42	14° 2	7°16	7°30	5°35	0°35	22° 1	11°44	7°52	1°43	0°44	2°29	4°21	S 16
S 17	15 39 10	26° 5'23	25°19	16° 3	8°23	8°11	5°48	0°33	22° 0	11°46	7°52	1°44	0°41	2°36	4°22	S 17
M 18	15 43 6	27° 3'05	9♊22	18° 7	9°29	8°52	6° 2	0°32	22° 0	11°48	7°52	1°45	0°37	2°43	4°23	M 18
T 19	15 47 3	28° 0'46	23°51	20°12	10°36	9°33	6°16	0°30	21°59	11°50	7°D52	1°46	0°34	2°49	4°24	T 19
W 20	15 50 59	28°58'26	8♌42	22°19	11°42	10°14	6°30	0°29	21°58	11°53	7°52	1°R46	0°31	2°56	4°25	W 20
T 21	15 54 56	29°56'05	23°49	24°27	12°49	10°55	6°44	0°27	21°58	11°55	7°52	1°45	0°28	3° 3	4°27	T 21
F 22	15 58 53	0♏53'43	9♋2	26°36	13°55	11°36	6°58	0°26	21°58	11°57	7°52	1°43	0°25	3° 9	4°28	F 22
S 23	16 2 49	1°51'19	24°13	28°46	15° 0	12°17	7°12	0°25	21°57	11°59	7°52	1°39	0°22	3°16	4°28	S 23
S 24	16 6 46	2°48'55	9♌10	0♏57	16° 6	12°58	7°26	0°24	21°57	12° 1	7°52	1°35	0°18	3°23	4°29	S 24
M 25	16 10 42	3°46'28	23°47	3° 9	17°12	13°39	7°40	0°23	21°57	12° 3	7°52	1°30	0°15	3°29	4°30	M 25
T 26	16 14 39	4°44'01	7♎59	5°21	18°17	14°20	7°54	0°22	21°56	12° 5	7°53	1°27	0°12	3°36	4°31	T 26
W 27	16 18 35	5°41'32	21°42	7°33	19°22	15° 1	8° 8	0°22	21°56	12° 8	7°53	1°25	0° 9	3°43	4°32	W 27
T 28	16 22 32	6°39'02	4♍58	9°45	20°27	15°42	8°22	0°21	21°56	12°10	7°53	1°D24	0° 6	3°49	4°32	T 28
F 29	16 26 29	7°36'30	17°50	11°56	21°31	16°23	8°36	0°21	21°56	12°12	7°53	1°24	0° 2	3°56	4°33	F 29
S 30	16 30 25	8°33'57	0♌21	14° 6	22°36	17° 3	8°50	0°20	21°D56	12°14	7°54	1°25	29♏59	4° 3	4°33	S 30
S 31	16 34 22	9♏31'23	12♌35	16♋16	23♌40	17♋44	9♏4	0♌20	21♍56	12♌16	7♍54	1♎27	29♏56	4♌9	4♋34	S 31

Day	☉	☽		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
F 1	15n 2	4n31	4s16	4n21	2s44	25n12	2n 5	19n56	0n24	20n 3	0s35	1n56	2n37	3n47	0n47	13n33	1s44	21n35	14n 4	12s 9	12s 1	17s53	4s44	5n45
S 2	15 21	0 24	3 29	4 58	2 41	25 18	2 7	20 6	0 25	20 6	0 35	1 57	2 37	3 48	0 47	13 34	1 44	21 35	14 4	12 10	12 0	17 54	4 43	5 45
S 3	15 38	3s39	2 32	5 37	2 38	25 25	2 9	20 16	0 25	20 9	0 34	1 58	2 37	3 48	0 47	13 34	1 44	21 35	14 3	12 10	11 59	17 54	4 42	5 45
M 4	15 56	7 30	1 30	6 17	2 34	25 30	2 11	20 25	0 26	20 12	0 34	1 59	2 37	3 49	0 47	13 35	1 44	21 35	14 3	12 10	11 58	17 55	4 41	5 45
T 5	16 13	11 0	0 24	6 57	2 29	25 35	2 13	20 35	0 26	20 14	0 34	2 0	2 37	3 49	0 47	13 36	1 44	21 35	14 3	12 10	11 57	17 55	4 40	5 46
W 6	16 30	14 1	0n42	7 39	2 24	25 39	2 15	20 44	0 27	20 17	0 34	2 1	2 36	3 50	0 47	13 37	1 44	21 35	14 2	12 10	11 56	17 56	4 39	5 46
T 7	16 47	16 26	1 45	8 21	2 18	25 43	2 17	20 54	0 27	20 20	0 34	2 2	2 36	3 50	0 47	13 37	1 44	21 35	14 2	12 10	11 55	17 57	4 38	5 46
F 8	17 3	18 8	2 44	9 4	2 12	25 46	2 18	21 3	0 28	20 23	0 34	2 3	2 36	3 50	0 47	13 38	1 44	21 35	14 2	12 10	11 54	17 57	4 37	5 46
S 9	17 20	19 3	3 36	9 47	2 5	25 48	2 20	21 11	0 29	20 25	0 34	2 3	2 36	3 51	0 47	13 39	1 44	21 34	14 1	12 9	11 52	17 58	4 36	5 47
S 10	17 35	19 7	4 19	10 31	1 58	25 50	2 21	21 20	0 29	20 28	0 34	2 4	2 36	3 51	0 47	13 39	1 44	21 34	14 1	12 8	11 51	17 58	4 36	5 47
M 11	17 51	18 21	4 51	11 15	1 50	25 50	2 23	21 28	0 30	20 30	0 33	2 5	2 35	3 52	0 47	13 40	1 44	21 34	14 1	12 7	11 50	17 59	4 35	5 47
T 12	18 6	16 45	5 10	12 0	1 42	25 51	2 24	21 36	0 30	20 33	0 33	2 6	2 35	3 52	0 47	13 41	1 44	21 34	14 0	12 6	11 49	17 59	4 34	5 48
W 13	18 21	14 22	5 15	12 45	1 34	25 50	2 25	21 44	0 31	20 36	0 33	2 6	2 35	3 52	0 47	13 41	1 44	21 33	14 0	12 5	11 48	18 0	4 33	5 48
T 14	18 36	11 17	5 6	13 31	1 25	25 49	2 26	21 52	0 31	20 38	0 33	2 7	2 35	3 52	0 47	13 42	1 44	21 33	13 59	12 5	11 47	18 1	4 32	5 48
F 15	18 50	7 37	4 42	14 16	1 16	25 47	2 27	22 0	0 32	20 41	0 33	2 7	2 35	3 53	0 47	13 43	1 44	21 33	13 59	12 5	11 46	18 1	4 32	5 48
S 16	19 5	3 27	4 2	15 1	1 6	25 44	2 28	22 7	0 32	20 43	0 33	2 8	2 34	3 53	0 46	13 43	1 44	21 33	13 59	12 5	11 45	18 2	4 31	5 49
S 17	19 18	1n 0	3 8	15 46	0 56	25 41	2 29	22 14	0 33	20 46	0 33	2 8	2 34	3 53	0 46	13 44	1 44	21 32	13 58	12 6	11 44	18 2	4 30	5 49
M 18	19 32	5 34	2 0	16 31	0 46	25 37	2 30	22 21	0 33	20 49	0 33	2 9	2 34	3 53	0 46	13 45	1 44	21 32	13 58	12 6	11 42	18 3	4 29	5 49
T 19	19 45	9 57	0 43	17 15	0 36	25 33	2 30	22 28	0 34	20 51	0 33	2 9	2 34	3 54	0 46	13 45	1 44	21 32	13 58	12 6	11 41	18 3	4 29	5 50
W 20	19 58	13 49	0s38	17 58	0 25	25 28	2 31	22 35	0 34	20 53	0 33	2 9	2 34	3 54	0 46	13 46	1 44	21 31	13 57	12 6	11 40	18 4	4 28	5 50
T 21	20 10	16 51	1 58	18 40	0 15	25 22	2 31	22 41	0 35	20 56	0 32	2 10	2 33	3 54	0 46	13 47	1 44	21 31	13 57	12 6	11 39	18 4	4 27	5 50
F 22	20 22	18 42	3 10	19 21	0 4	25 15	2 31	22 47	0 35	20 58	0 32	2 10	2 33	3 54	0 46	13 47	1 44	21 31	13 57	12 5	11 38	18 5	4 27	5 51
S 23	20 34	19 12	4 9	20 1	0n 7	25 8	2 32	22 53	0 36	21 1	0 32	2 10	2 33	3 54	0 46	13 48	1 44	21 30	13 56	12 4	11 37	18 5	4 26	5 51
S 24	20 45	18 21	4 49	20 39	0 17	25 1	2 32	22 59	0 36	21 3	0 32	2 11	2 33	3 54	0 46	13 49	1 44	21 30	13 56	12 2	11 36	18 6	4 25	5 51
M 25	20 56	16 17	5 10	21 16	0 27	24 52	2 32	23 5	0 37	21 6	0 32	2 11	2 33	3 54	0 46	13 49	1 44	21 29	13 55	12 1	11 35	18 6	4 25	5 51
T 26	21 7	13 17	5 11	21 50	0 37	24 43	2 31	23 10	0 37	21 8	0 32	2 11	2 32	3 54	0 46	13 50	1 44	21 29	13 55	12 0	11 34	18 7	4 24	5 52
W 27	21 17	9 39	4 53	22 23	0 47	24 34	2 31	23 15	0 38	21 10	0 32	2 11	2 32	3 54	0 46	13 50	1 44	21 29	13 55	11 59	11 32	18 7	4 24	5 52
T 28	21 27	5 39	4 21	22 53	0 57	24 24	2 31	23 20	0 38	21 13	0 32	2 11	2 32	3 55	0 46	13 51	1 44	21 28	13 54	11 59	11 31	18 8	4 23	5 52
F 29	21 37	1 30	3 36	23 20	1 6	24 13	2 30	23 25	0 39	21 15	0 32	2 11	2 32	3 54	0 46	13 52	1 44	21 28	13 54	11 59	11 30	18 8	4 23	5 53
S 30	21 46	2s37	2 42	23 45	1 14	24 2	2 30	23 30	0 39	21 17	0 32	2 11	2 31	3 54	0 46	13 52	1 44	21 27	13 54	11 59	11 29	18 9	4 22	5 53
S 31	21n55	6s32	1s41	24n 7	1n22	23n50	2n29	23n34	0n40	21n19	0s32	2n11	2n31	3n54	0n46	13n53	1s44	21n27	13n53	12s 0	11s28	18s 9	4s22	5n53

# ASTRODIENST EPHEMERIS for the year 1716

## geocentric

JUNE 1716

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 38 18	10 <sup>II</sup> 28'47	24 <sup>♂</sup> 38	18 <sup>II</sup> 24	24 <sup>♂</sup> 44	18 <sup>II</sup> 25	9 <sup>II</sup> 18	0°R20	21 <sup>♂</sup> 56	12 <sup>♂</sup> 18	7 <sup>♂</sup> 54	1 <sup>♂</sup> 28	29 <sup>♂</sup> 53	4 <sup>♂</sup> 16	4 <sup>♂</sup> 34	M 1
T 2	16 42 15	11°26'11	6 <sup>♂</sup> 32	20°31	25°47	19° 5	9°32	0°D20	21°56	12°20	7°55	1°R28	29°50	4°23	4°35	T 2
W 3	16 46 11	12°23'33	18°22	22°36	26°51	19°46	9°45	0 <sup>♂</sup> 20	21°56	12°22	7°55	1°27	29°47	4°29	4°35	W 3
T 4	16 50 8	13°20'55	0 <sup>♂</sup> 11	24°39	27°54	20°26	9°59	0°20	21°57	12°24	7°56	1°23	29°43	4°36	4°35	T 4
F 5	16 54 4	14°18'16	12° 0	26°40	28°56	21° 7	10°13	0°20	21°57	12°26	7°56	1°18	29°40	4°43	4°35	F 5
S 6	16 58 1	15°15'36	23°53	28°39	29°59	21°47	10°27	0°21	21°57	12°28	7°57	1°11	29°37	4°49	4°36	S 6
S 7	17 1 58	16°12'55	5 <sup>♂</sup> 50	0 <sup>♂</sup> 36	1 <sup>♂</sup> 1	22°28	10°41	0°21	21°58	12°30	7°57	1° 3	29°34	4°56	4°36	S 7
M 8	17 5 54	17°10'14	17°54	2°31	2° 3	23° 8	10°55	0°21	21°58	12°32	7°58	0°55	29°31	5° 3	4°R36	M 8
T 9	17 9 51	18° 7'32	0 <sup>♂</sup> 6	4°23	3° 5	23°48	11° 9	0°22	21°59	12°34	7°59	0°47	29°28	5° 9	4°36	T 9
W10	17 13 47	19° 4'49	12°28	6°13	4° 6	24°29	11°23	0°23	21°59	12°36	7°59	0°40	29°24	5°16	4°35	W10
T11	17 17 44	20° 2'07	25° 3	8° 1	5° 7	25° 9	11°37	0°24	22° 0	12°38	8° 0	0°35	29°21	5°23	4°35	T11
F12	17 21 40	20°59'23	7 <sup>♂</sup> 54	9°46	6° 8	25°49	11°51	0°25	22° 0	12°39	8° 1	0°32	29°18	5°29	4°35	F12
S13	17 25 37	21°56'40	21° 2	11°29	7° 8	26°29	12° 4	0°26	22° 1	12°41	8° 1	0°D31	29°15	5°36	4°35	S13
S14	17 29 33	22°53'56	4 <sup>♂</sup> 32	13° 9	8° 8	27° 9	12°18	0°27	22° 2	12°43	8° 2	0°32	29°12	5°43	4°34	S14
M15	17 33 30	23°51'12	18°25	14°47	9° 8	27°50	12°32	0°28	22° 3	12°45	8° 3	0°33	29° 8	5°49	4°34	M15
T16	17 37 27	24°48'27	2 <sup>♂</sup> 41	16°23	10° 7	28°30	12°46	0°29	22° 4	12°47	8° 4	0°R33	29° 5	5°56	4°33	T16
W17	17 41 23	25°45'43	17°20	17°56	11° 6	29°10	13° 0	0°31	22° 5	12°48	8° 5	0°32	29° 2	6° 3	4°33	W17
T18	17 45 20	26°42'58	2 <sup>II</sup> 18	19°27	12° 4	29°50	13°13	0°32	22° 6	12°50	8° 6	0°29	28°59	6° 9	4°32	T18
F19	17 49 16	27°40'14	17°26	20°55	13° 3	0 <sup>♂</sup> 30	13°27	0°34	22° 7	12°52	8° 7	0°23	28°56	6°16	4°32	F19
S20	17 53 13	28°37'29	2 <sup>♂</sup> 36	22°20	14° 0	1°10	13°41	0°36	22° 8	12°54	8° 7	0°16	28°53	6°23	4°31	S20
S21	17 57 9	29°34'43	17°37	23°43	14°58	1°50	13°54	0°37	22° 9	12°55	8° 8	0° 7	28°49	6°29	4°30	S21
M22	18 1 6	0 <sup>♂</sup> 31'57	2 <sup>♂</sup> 21	25° 3	15°54	2°29	14° 8	0°39	22°10	12°57	8° 9	29 <sup>♂</sup> 58	28°46	6°36	4°29	M22
T23	18 5 2	1°29'11	16°39	26°21	16°51	3° 9	14°22	0°41	22°11	12°59	8°10	29°50	28°43	6°43	4°29	T23
W24	18 8 59	2°26'24	0 <sup>♂</sup> 29	27°36	17°47	3°49	14°35	0°44	22°13	13° 0	8°12	29°44	28°40	6°49	4°28	W24
T25	18 12 56	3°23'37	13°50	28°48	18°42	4°29	14°49	0°46	22°14	13° 2	8°13	29°40	28°37	6°56	4°27	T25
F26	18 16 52	4°20'49	26°44	29°57	19°37	5° 9	15° 2	0°48	22°15	13° 3	8°14	29°39	28°34	7° 3	4°26	F26
S27	18 20 49	5°18'01	9 <sup>♂</sup> 14	1 <sup>♂</sup> 4	20°31	5°48	15°16	0°50	22°17	13° 5	8°15	29°D38	28°30	7°10	4°25	S27
S28	18 24 45	6°15'12	21°27	2° 7	21°25	6°28	15°29	0°53	22°18	13° 7	8°16	29°39	28°27	7°16	4°23	S28
M29	18 28 42	7°12'23	3 <sup>♂</sup> 17	3° 8	22°18	7° 8	15°43	0°56	22°20	13° 8	8°17	29°R39	28°24	7°23	4°22	M29
T30	18 32 38	8 <sup>♂</sup> 9'34	15 <sup>♂</sup> 18	4 <sup>♂</sup> 5	23 <sup>♂</sup> 11	7 <sup>♂</sup> 47	15 <sup>II</sup> 56	0 <sup>♂</sup> 58	22 <sup>♂</sup> 21	13 <sup>♂</sup> 9	8 <sup>♂</sup> 18	29 <sup>♂</sup> 38	28 <sup>♂</sup> 21	7 <sup>♂</sup> 30	4 <sup>♂</sup> 21	T30

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	22n 3	10s 8	0s37	24n27	1n29	23n38	2n28	23n38	0n40	21n21	0s31	2n11	2n31	3n54	0n46	13n53	1s45	21n26	13n53	12s 0	11s27	18s10	4s21	5n54	
T 2	22 11	13 17	0n28	24 43	1 36	23 25	2 27	23 42	0 41	21 24	0 31	2 10	2 31	3 54	0 46	13 54	1 45	21 26	13 53	12 0	11 26	18 10	4 21	5 54	
W 3	22 19	15 52	1 31	24 57	1 42	23 12	2 26	23 46	0 41	21 26	0 31	2 10	2 31	3 54	0 46	13 55	1 45	21 25	13 52	12 0	11 25	18 11	4 21	5 54	
T 4	22 26	17 47	2 30	25 9	1 47	22 58	2 24	23 49	0 41	21 28	0 31	2 10	2 30	3 54	0 46	13 55	1 45	21 25	13 52	11 58	11 23	18 11	4 20	5 55	
F 5	22 33	18 56	3 22	25 17	1 51	22 44	2 23	23 52	0 42	21 30	0 31	2 10	2 30	3 54	0 46	13 56	1 45	21 24	13 51	11 57	11 22	18 12	4 20	5 55	
S 6	22 39	19 15	4 6	25 23	1 55	22 29	2 21	23 55	0 42	21 32	0 31	2 9	2 30	3 54	0 46	13 56	1 45	21 24	13 51	11 54	11 21	18 12	4 19	5 55	
S 7	22 46	18 42	4 39	25 26	1 58	22 14	2 19	23 58	0 43	21 34	0 31	2 9	2 30	3 53	0 46	13 57	1 45	21 23	13 51	11 51	11 20	18 13	4 19	5 55	
M 8	22 51	17 19	5 0	25 27	2 0	21 58	2 18	24 1	0 43	21 36	0 31	2 8	2 29	3 53	0 46	13 57	1 45	21 23	13 50	11 48	11 19	18 13	4 19	5 56	
T 9	22 57	15 9	5 8	25 26	2 2	21 42	2 15	24 3	0 44	21 38	0 31	2 8	2 29	3 53	0 45	13 58	1 45	21 22	13 50	11 46	11 18	18 14	4 19	5 56	
W10	23 1	12 16	5 1	25 22	2 2	21 25	2 13	24 6	0 44	21 40	0 31	2 7	2 29	3 53	0 45	13 59	1 45	21 21	13 50	11 43	11 17	18 14	4 18	5 56	
T11	23 6	8 47	4 40	25 16	2 2	21 8	2 11	24 8	0 45	21 42	0 31	2 7	2 29	3 52	0 45	13 59	1 45	21 21	13 49	11 42	11 16	18 15	4 18	5 57	
F12	23 10	4 50	4 5	25 8	2 2	20 50	2 8	24 9	0 45	21 44	0 31	2 6	2 28	3 52	0 45	14 0	1 45	21 20	13 49	11 41	11 14	18 15	4 18	5 57	
S13	23 14	0 33	3 16	24 58	2 0	20 33	2 6	24 11	0 45	21 46	0 30	2 6	2 28	3 52	0 45	14 0	1 45	21 20	13 49	11 40	11 13	18 16	4 18	5 57	
S14	23 17	3n52	2 15	24 47	1 58	20 14	2 3	24 12	0 46	21 48	0 30	2 5	2 28	3 51	0 45	14 1	1 45	21 19	13 48	11 40	11 12	18 16	4 18	5 58	
M15	23 20	8 14	1 5	24 34	1 55	19 56	2 0	24 14	0 46	21 50	0 30	2 4	2 28	3 51	0 45	14 1	1 45	21 18	13 48	11 41	11 11	18 17	4 18	5 58	
T16	23 22	12 15	0s11	24 19	1 52	19 37	1 57	24 15	0 47	21 52	0 30	2 4	2 28	3 51	0 45	14 2	1 45	21 18	13 48	11 41	11 10	18 17	4 17	5 58	
W17	23 24	15 37	1 29	24 3	1 47	19 17	1 54	24 15	0 47	21 53	0 30	2 3	2 27	3 50	0 45	14 2	1 45	21 17	13 47	11 41	11 9	18 17	4 17	5 58	
T18	23 26	18 0	2 42	23 45	1 43	18 58	1 50	24 16	0 47	21 55	0 30	2 2	2 27	3 50	0 45	14 3	1 45	21 17	13 47	11 39	11 8	18 18	4 17	5 59	
F19	23 27	19 10	3 44	23 27	1 37	18 38	1 47	24 16	0 48	21 57	0 30	2 1	2 27	3 49	0 45	14 3	1 45	21 16	13 47	11 37	11 7	18 18	4 17	5 59	
S20	23 28	18 57	4 30	23 7	1 31	18 17	1 43	24 16	0 48	21 59	0 30	2 0	2 27	3 49	0 45	14 4	1 45	21 15	13 46	11 35	11 5	18 19	4 17	5 59	
S21	23 28	17 23	4 58	22 46	1 24	17 57	1 39	24 16	0 49	22 0	0 30	1 59	2 26	3 48	0 45	14 4	1 45	21 15	13 46	11 32	11 4	18 19	4 17	6 0	
M22	23 28	14 43	5 5	22 25	1 17	17 36	1 35	24 16	0 49	22 2	0 30	1 58	2 26	3 48	0 45	14 5	1 45	21 14	13 46	11 29	11 3	18 20	4 17	6 0	
T23	23 28	11 13	4 52	22 2	1 9	17 15	1 30	24 16	0 49	22 4	0 30	1 57	2 26	3 47	0 45	14 5	1 45	21 13	13 45	11 26	11 2	18 20	4 17	6 0	
W24	23 27	7 13	4 22	21 39	1 0	16 53	1 26	24 15	0 50	22 5	0 30	1 56	2 26	3 47	0 45	14 5	1 45	21 12	13 45	11 24	11 1	18 20	4 17	6 0	
T25	23 26	3 0	3 39	21 16	0 51	16 32	1 21	24 14	0 50	22 7	0 30	1 55	2 25	3 46	0 45	14 6	1 45	21 12	13 45	11 22	11 0	18 21	4 17	6 1	
F26	23 24	1s14	2 46	20 52	0 42	16 10	1 17	24 13	0 51	22 9	0 30	1 54	2 25	3 46	0 45	14 6	1 45	21 11	13 44	11 22	10 59	18 21	4 18	6 1	
S27	23 22	5 18	1 47	20 28	0 32	15 48	1 12	24 12	0 51	22 10	0 29	1 53	2 25	3 45	0 45	14 7	1 45	21 10	13 44	11 22	10 58	18 22	4 18	6 1	
S28	23 20	9 3	0 44	20 3	0 21	15 26	1 6	24 10	0 51	22 12	0 29	1 52	2 25	3 44	0 45	14 7	1 45	21 10	13 44	11 22	10 56	18 22	4 18	6 2	
M29	23 17	12 22	0n20	20 19	3 0	10 15	4	1	1	24 9	0 52	22 13	0 29	1 50	2 25	3 44	1 46	21 9	13 43	11 22	10 55	18 22	4 18	6 2	
T30	23n13	15s 8	1n22	19n14	0s 2	14n41	0n55	24n 7	0n52	22n15	0s29	1n49	2n24	3n43	0n45	14n 8	1s46	21n 8	13n43	11s22	10s54	18s23	4s18	6n 2	



ASTRODIENST EPHEMERIS for the year 1716  
geocentric

JULY 1716

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	18 36 35	9 <sup>55</sup> 6'45	27 <sup>11</sup> 7	4 <sup>59</sup> 59	24 <sup>18</sup> 3	8 <sup>52</sup> 27	16 <sup>11</sup> 9	1 <sup>12</sup> 1	22 <sup>17</sup> 23	13 <sup>18</sup> 11	8 <sup>17</sup> 20	29 <sup>19</sup> 35	28 <sup>12</sup> 18	7 <sup>17</sup> 36	4 <sup>18</sup> 20	W 1
T 2	18 40 31	10 <sup>5</sup> 3'56	8 <sup>17</sup> 55	5 <sup>50</sup> 50	24 <sup>54</sup> 5	9 <sup>5</sup> 6	16 <sup>23</sup> 16	1 <sup>4</sup> 4	22 <sup>25</sup> 13	13 <sup>12</sup> 12	8 <sup>21</sup> 29	29 <sup>12</sup> 29	28 <sup>14</sup> 14	7 <sup>43</sup> 41	4 <sup>18</sup> 18	T 2
F 3	18 44 28	11 <sup>0</sup> 1'06	20 <sup>48</sup> 48	6 <sup>37</sup> 37	25 <sup>45</sup> 4	9 <sup>46</sup> 4	16 <sup>36</sup> 16	1 <sup>7</sup> 7	22 <sup>26</sup> 13	13 <sup>14</sup> 14	8 <sup>22</sup> 29	29 <sup>20</sup> 20	28 <sup>11</sup> 11	7 <sup>50</sup> 47	4 <sup>17</sup> 17	F 3
S 4	18 48 25	11 <sup>58</sup> 17	2 <sup>34</sup> 47	7 <sup>20</sup> 20	26 <sup>35</sup> 3	10 <sup>25</sup> 2	16 <sup>49</sup> 16	1 <sup>10</sup> 10	22 <sup>28</sup> 13	13 <sup>15</sup> 15	8 <sup>23</sup> 29	29 <sup>10</sup> 10	28 <sup>8</sup> 8	7 <sup>56</sup> 54	4 <sup>15</sup> 15	S 4
S 5	18 52 21	12 <sup>55</sup> 28	14 <sup>53</sup> 3	8 <sup>0</sup> 0	27 <sup>24</sup> 2	11 <sup>5</sup> 5	17 <sup>2</sup> 2	1 <sup>13</sup> 13	22 <sup>30</sup> 13	13 <sup>16</sup> 16	8 <sup>25</sup> 28	28 <sup>57</sup> 57	28 <sup>5</sup> 5	8 <sup>3</sup> 3	4 <sup>14</sup> 14	S 5
M 6	18 56 18	13 <sup>52</sup> 38	27 <sup>8</sup> 8	8 <sup>36</sup> 36	28 <sup>12</sup> 1	11 <sup>44</sup> 4	17 <sup>16</sup> 16	1 <sup>16</sup> 16	22 <sup>32</sup> 13	13 <sup>18</sup> 18	8 <sup>26</sup> 28	28 <sup>45</sup> 45	28 <sup>2</sup> 2	8 <sup>10</sup> 10	4 <sup>12</sup> 12	M 6
T 7	19 0 14	14 <sup>49</sup> 49	9 <sup>33</sup> 33	9 <sup>8</sup> 8	29 <sup>0</sup> 0	12 <sup>24</sup> 2	17 <sup>29</sup> 29	1 <sup>19</sup> 19	22 <sup>34</sup> 13	13 <sup>19</sup> 19	8 <sup>28</sup> 28	28 <sup>33</sup> 33	27 <sup>59</sup> 59	8 <sup>16</sup> 16	4 <sup>11</sup> 11	T 7
W 8	19 4 11	15 <sup>47</sup> 01	22 <sup>8</sup> 8	9 <sup>36</sup> 36	29 <sup>47</sup> 4	13 <sup>3</sup> 3	17 <sup>42</sup> 4	1 <sup>23</sup> 23	22 <sup>36</sup> 13	13 <sup>20</sup> 20	8 <sup>29</sup> 28	28 <sup>22</sup> 22	27 <sup>55</sup> 55	8 <sup>23</sup> 23	4 <sup>9</sup> 9	W 8
T 9	19 8 7	16 <sup>44</sup> 12	4 <sup>54</sup> 54	9 <sup>59</sup> 59	0 <sup>17</sup> 33	13 <sup>42</sup> 4	17 <sup>55</sup> 5	1 <sup>26</sup> 26	22 <sup>38</sup> 13	13 <sup>22</sup> 22	8 <sup>30</sup> 28	28 <sup>14</sup> 14	27 <sup>52</sup> 52	8 <sup>30</sup> 30	4 <sup>7</sup> 7	T 9
F 10	19 12 4	17 <sup>41</sup> 25	17 <sup>53</sup> 3	10 <sup>18</sup> 18	1 <sup>19</sup> 19	14 <sup>22</sup> 2	18 <sup>8</sup> 8	1 <sup>30</sup> 30	22 <sup>40</sup> 13	13 <sup>23</sup> 23	8 <sup>32</sup> 28	28 <sup>9</sup> 9	27 <sup>49</sup> 49	8 <sup>36</sup> 36	4 <sup>6</sup> 6	F 10
S 11	19 16 0	18 <sup>38</sup> 37	1 <sup>17</sup> 6	10 <sup>33</sup> 33	2 <sup>3</sup> 3	15 <sup>1</sup> 1	18 <sup>21</sup> 2	1 <sup>34</sup> 34	22 <sup>42</sup> 13	13 <sup>24</sup> 24	8 <sup>33</sup> 28	28 <sup>6</sup> 6	27 <sup>46</sup> 46	8 <sup>43</sup> 43	4 <sup>4</sup> 4	S 11
S 12	19 19 57	19 <sup>35</sup> 51	14 <sup>35</sup> 5	10 <sup>42</sup> 42	2 <sup>46</sup> 4	15 <sup>40</sup> 4	18 <sup>33</sup> 3	1 <sup>37</sup> 37	22 <sup>44</sup> 13	13 <sup>25</sup> 25	8 <sup>35</sup> 28	28 <sup>5</sup> 5	27 <sup>43</sup> 43	8 <sup>50</sup> 50	4 <sup>2</sup> 2	S 12
M13	19 23 54	20 <sup>33</sup> 05	28 <sup>21</sup> 1	10 <sup>47</sup> 47	3 <sup>29</sup> 3	16 <sup>19</sup> 1	18 <sup>46</sup> 4	1 <sup>41</sup> 41	22 <sup>46</sup> 13	13 <sup>26</sup> 26	8 <sup>36</sup> 28	28 <sup>5</sup> 5	27 <sup>39</sup> 39	8 <sup>56</sup> 56	4 <sup>0</sup> 0	M13
T 14	19 27 50	21 <sup>30</sup> 20	12 <sup>18</sup> 26	10 <sup>47</sup> 47	4 <sup>11</sup> 4	16 <sup>58</sup> 5	18 <sup>59</sup> 9	1 <sup>45</sup> 45	22 <sup>49</sup> 13	13 <sup>27</sup> 27	8 <sup>38</sup> 28	28 <sup>4</sup> 4	27 <sup>36</sup> 36	9 <sup>3</sup> 3	3 <sup>58</sup> 58	T 14
W15	19 31 47	22 <sup>27</sup> 35	26 <sup>49</sup> 9	10 <sup>43</sup> 43	4 <sup>51</sup> 4	17 <sup>38</sup> 8	19 <sup>12</sup> 1	1 <sup>49</sup> 49	22 <sup>51</sup> 13	13 <sup>28</sup> 28	8 <sup>39</sup> 28	28 <sup>2</sup> 2	27 <sup>33</sup> 33	9 <sup>10</sup> 10	3 <sup>56</sup> 56	W15
T 16	19 35 43	23 <sup>24</sup> 52	11 <sup>11</sup> 29	10 <sup>33</sup> 33	5 <sup>31</sup> 5	18 <sup>17</sup> 1	19 <sup>24</sup> 2	1 <sup>53</sup> 53	22 <sup>53</sup> 13	13 <sup>29</sup> 29	8 <sup>41</sup> 27	27 <sup>58</sup> 58	27 <sup>30</sup> 30	9 <sup>16</sup> 16	3 <sup>54</sup> 54	T 16
F 17	19 39 40	24 <sup>22</sup> 09	26 <sup>19</sup> 9	10 <sup>19</sup> 19	6 <sup>9</sup> 6	18 <sup>56</sup> 5	19 <sup>37</sup> 7	1 <sup>57</sup> 57	22 <sup>55</sup> 13	13 <sup>31</sup> 31	8 <sup>43</sup> 27	27 <sup>51</sup> 51	27 <sup>27</sup> 27	9 <sup>23</sup> 23	3 <sup>52</sup> 52	F 17
S 18	19 43 36	25 <sup>19</sup> 27	11 <sup>15</sup> 14	10 <sup>0</sup> 0	6 <sup>46</sup> 6	19 <sup>35</sup> 5	19 <sup>50</sup> 10	2 <sup>1</sup> 1	22 <sup>58</sup> 13	13 <sup>31</sup> 31	8 <sup>44</sup> 27	27 <sup>41</sup> 41	27 <sup>24</sup> 24	9 <sup>30</sup> 30	3 <sup>50</sup> 50	S 18
S 19	19 47 33	26 <sup>16</sup> 46	26 <sup>3</sup> 3	9 <sup>36</sup> 36	7 <sup>22</sup> 7	20 <sup>14</sup> 2	20 <sup>2</sup> 2	2 <sup>6</sup> 6	23 <sup>0</sup> 13	13 <sup>32</sup> 32	8 <sup>46</sup> 27	27 <sup>30</sup> 30	27 <sup>20</sup> 20	9 <sup>36</sup> 36	3 <sup>48</sup> 48	S 19
M20	19 51 29	27 <sup>14</sup> 05	10 <sup>13</sup> 39	9 <sup>8</sup> 8	7 <sup>57</sup> 7	20 <sup>53</sup> 2	20 <sup>14</sup> 2	2 <sup>10</sup> 10	23 <sup>3</sup> 13	13 <sup>33</sup> 33	8 <sup>48</sup> 27	27 <sup>19</sup> 19	27 <sup>17</sup> 17	9 <sup>43</sup> 43	3 <sup>46</sup> 46	M20
T 21	19 55 26	28 <sup>11</sup> 24	24 <sup>54</sup> 4	8 <sup>36</sup> 36	8 <sup>31</sup> 8	21 <sup>32</sup> 2	20 <sup>27</sup> 2	2 <sup>14</sup> 14	23 <sup>5</sup> 13	13 <sup>34</sup> 34	8 <sup>49</sup> 27	27 <sup>9</sup> 9	27 <sup>14</sup> 14	9 <sup>50</sup> 50	3 <sup>43</sup> 43	T 21
W22	19 59 23	29 <sup>8</sup> 44	8 <sup>17</sup> 44	8 <sup>0</sup> 0	9 <sup>3</sup> 3	22 <sup>11</sup> 2	20 <sup>39</sup> 2	2 <sup>19</sup> 19	23 <sup>8</sup> 13	13 <sup>35</sup> 35	8 <sup>51</sup> 27	27 <sup>1</sup> 1	27 <sup>11</sup> 11	9 <sup>56</sup> 56	3 <sup>41</sup> 41	W22
T 23	20 3 19	0 <sup>12</sup> 6'05	22 <sup>6</sup> 6	7 <sup>22</sup> 7	9 <sup>34</sup> 9	22 <sup>50</sup> 2	20 <sup>51</sup> 2	2 <sup>24</sup> 24	23 <sup>10</sup> 13	13 <sup>36</sup> 36	8 <sup>53</sup> 26	26 <sup>55</sup> 55	27 <sup>8</sup> 8	10 <sup>3</sup> 3	3 <sup>39</sup> 39	T 23
F 24	20 7 16	1 <sup>3</sup> 3'26	5 <sup>12</sup> 2	6 <sup>40</sup> 4	10 <sup>3</sup> 3	23 <sup>29</sup> 2	21 <sup>3</sup> 3	2 <sup>28</sup> 28	23 <sup>13</sup> 13	13 <sup>37</sup> 37	8 <sup>54</sup> 26	26 <sup>52</sup> 52	27 <sup>5</sup> 5	10 <sup>10</sup> 10	3 <sup>36</sup> 36	F 24
S 25	20 11 12	2 <sup>0</sup> 4'48	17 <sup>35</sup> 5	5 <sup>57</sup> 5	10 <sup>31</sup> 3	24 <sup>8</sup> 2	21 <sup>16</sup> 2	2 <sup>33</sup> 33	23 <sup>16</sup> 13	13 <sup>37</sup> 37	8 <sup>56</sup> 26	26 <sup>50</sup> 50	27 <sup>1</sup> 1	10 <sup>17</sup> 17	3 <sup>34</sup> 34	S 25
S 26	20 15 9	2 <sup>58</sup> 10	29 <sup>49</sup> 9	5 <sup>13</sup> 13	10 <sup>58</sup> 10	24 <sup>47</sup> 2	21 <sup>28</sup> 2	2 <sup>38</sup> 38	23 <sup>18</sup> 13	13 <sup>38</sup> 38	8 <sup>58</sup> 26	26 <sup>50</sup> 50	26 <sup>58</sup> 58	10 <sup>23</sup> 23	3 <sup>32</sup> 32	S 26
M27	20 19 5	3 <sup>55</sup> 32	11 <sup>11</sup> 49	4 <sup>28</sup> 4	11 <sup>22</sup> 1	25 <sup>26</sup> 2	21 <sup>39</sup> 2	2 <sup>43</sup> 43	23 <sup>21</sup> 13	13 <sup>39</sup> 39	9 <sup>0</sup> 26	26 <sup>50</sup> 50	26 <sup>55</sup> 55	10 <sup>30</sup> 30	3 <sup>29</sup> 29	M27
T 28	20 23 2	4 <sup>52</sup> 56	23 <sup>41</sup> 4	3 <sup>44</sup> 3	11 <sup>46</sup> 1	26 <sup>4</sup> 4	21 <sup>51</sup> 2	2 <sup>48</sup> 48	23 <sup>24</sup> 13	13 <sup>40</sup> 40	9 <sup>2</sup> 26	26 <sup>49</sup> 49	26 <sup>52</sup> 52	10 <sup>37</sup> 37	3 <sup>27</sup> 27	T 28
W29	20 26 58	5 <sup>50</sup> 20	5 <sup>17</sup> 30	3 <sup>1</sup> 1	12 <sup>7</sup> 7	26 <sup>43</sup> 2	22 <sup>3</sup> 3	2 <sup>53</sup> 53	23 <sup>27</sup> 13	13 <sup>40</sup> 40	9 <sup>3</sup> 26	26 <sup>46</sup> 46	26 <sup>49</sup> 49	10 <sup>43</sup> 43	3 <sup>24</sup> 24	W29
T 30	20 30 55	6 <sup>47</sup> 44	17 <sup>21</sup> 3	2 <sup>20</sup> 2	12 <sup>26</sup> 2	27 <sup>22</sup> 2	22 <sup>15</sup> 2	2 <sup>58</sup> 58	23 <sup>30</sup> 13	13 <sup>41</sup> 41	9 <sup>5</sup> 26	26 <sup>40</sup> 40	26 <sup>45</sup> 45	10 <sup>50</sup> 50	3 <sup>21</sup> 21	T 30
F 31	20 34 52	7 <sup>12</sup> 45'10	29 <sup>17</sup> 18	1 <sup>12</sup> 42	12 <sup>17</sup> 44	28 <sup>15</sup> 1	22 <sup>11</sup> 27	3 <sup>12</sup> 3	23 <sup>17</sup> 33	13 <sup>41</sup> 41	9 <sup>17</sup> 26	26 <sup>42</sup> 42	26 <sup>42</sup> 42	10 <sup>57</sup> 57	3 <sup>19</sup> 19	F 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	lat
W 1	23n10	17s15	2n21	18n50	0s14	14n18	0n50	24n 5	0n53	22n16	0s29	1n48	2n24	3n42	0n45	14n 8	1s46	21n 7	13n43	11s20	10s53	18s23	4s18	6n 2										
T 2	23 5	18 39	3 13	18 25	0 26	13 56	0 44	24 2	0 53	22 18	0 29	1 47	2 24	3 42	0 44	14 9	1 46	21 7	13 42	11 18	10 52	18 24	4 19	6 3										
F 3	23 1	19 13	3 57	18 1	0 39	13 33	0 38	24 0	0 53	22 19	0 29	1 45	2 24	3 41	0 44	14 9	1 46	21 6	13 42	11 15	10 51	18 24	4 19	6 3										
S 4	22 56	18 56	4 30	17 38	0 52	13 10	0 31	23 57	0 54	22 20	0 29	1 44	2 23	3 40	0 44	14 9	1 46	21 5	13 42	11 11	10 50	18 24	4 19	6 3										
S 5	22 51	17 48	4 52	17 14	1 5	12 47	0 25	23 54	0 54	22 22	0 29	1 42	2 23	3 40	0 44	14 10	1 46	21 4	13 42	11 7	10 48	18 25	4 20	6 3										
M 6	22 45	15 50	5 1	16 52	1 19	12 24	0 18	23 51	0 54	22 23	0 29	1 41	2 23	3 39	0 44	14 10	1 46	21 3	13 41	11 3	10 47	18 25	4 20	6 4										
T 7	22 39	13 8	4 56	16 30	1 33	12 1	0 11	23 48	0 55	22 24	0 29	1 39	2 23	3 38	0 44	14 11	1 46	21 3	13 41	10 58	10 46	18 26	4 20	6 4										
W 8	22 32	9 48	4 36	16 9	1 47	11 38	0 4	23 45	0 55	22 26	0 29	1 38	2 23	3 37	0 44	14 11	1 46	21 2	13 41	10 55	10 45	18 26	4 21	6 4										
T 9	22 25	5 58	4 2	15 49	2 2	11 14	0s 3	23 41	0 55	22 27	0 29	1 36	2 22	3 36	0 44	14 11	1 46	21 1	13 41	10 52	10 44	18 26	4 21	6 4										
F 10	22 18	1 48	3 16	15 30	2 16	10 51	0 11	23 37	0 56	22 28	0 29	1 35	2 22	3 35	0 44	14 11	1 46	21 0	13 40	10 50	10 43	18 27	4 21	6 4										
S 11	22 10	2n33	2 18	15 12	2 31	10 28	0 19	23 33	0 56	22 29	0 29	1 33	2 22	3 35	0 44	14 12	1 46	20 59	13 40	10 49	10 42	18 27	4 22	6 5										
S 12	22 2	6 51	1 11	14 56	2 45	10 5	0 27	23 29	0 56	22 30	0 29	1 31	2 22	3 34	0 44	14 12	1 46	20 59	13 40	10 48	10 40	18 27	4 22	6 5										
M13	21 54	10 53	0s 1	14 41	2 59	9 42	0 35	23 25	0 57	22 31	0 29	1 30	2 22	3 33	0 44	14 12	1 46	20 58	13 40	10 48	10 39	18 28	4 23	6 5										
T 14	21 45	14 24	1 15	14 27	3 13	9 19	0 43	23 20	0 57	22 33	0 28	1 28	2 21	3 32	0 44	14 13	1 46	20 57	13 39	10 48	10 38	18 28	4 23	6 5										
W15	21 36	17 7	2 26	14 15	3 27	8 56	0 52	23 16	0 57	22 34	0 28	1 26	2 21	3 31	0 44	14 13	1 46	20 56	13 39	10 48	10 37	18 28	4 24	6 6										
T 16	21 26	18 45	3 28	14 5	3 40	8 34	1 1	23 11	0 58	22 35	0 28	1 24	2 21	3 30	0 44	14 13	1 46	20 55	13 39	10 46	10 36	18 29	4 24	6 6										
F 17	21 16	19 9	4 17	13 57	3 52	8 11	1 10	23 6	0 58	22 36	0 28	1 22	2 21	3 29	0 44	14 13	1 46	20 55	13 39	10 43	10 35	18 29	4 25	6 6										
S 18	21 6	18 12	4 48	13 51	4 4	7 49	1 19	23 0	0 58	22 37	0 28	1 21	2 21	3 28	0 44	14 14	1 47	20 54	13 38	10 40	10 34	18 29	4 26	6 6										
S 19	20 56	16 3	5 1	13 46	4 15	7 27	1 28	22 55	0 59	22 38	0 28	1 19	2 20	3 27	0 44	14 14	1 47	20 53	13 38	10 36	10 32	18 30	4 26	6 6										
M20	20 45	12 54	4 53	13 44	4 25	7 5	1 38	22 49	0 59	22 39	0 28	1 17	2 20	3 26	0 44	14 14	1 47	20 52	13 38	10 32	10 31	18 30	4 27	6 6										
T 21	20 33	9 3	4 27	13 44	4 34	6 43	1 48	22 44	0 59	22 40	0 28	1 15	2 20	3 25	0 44	14 14	1 47	20 51	13 38	10 28	10 30	18 30	4 27	6 7										
W22	20 22	4 50	3 45	13 45	4 42	6 22	1 58	22 38	1 0	22 41	0 28	1 13	2 20	3 24	0 44	14 14	1 47	20 50	13 37	10 25	10 29	18 31	4 28	6 7										
T 23	20 9	0 30	2 53	13 49	4 48	6 1	2 8	22 31	1 0	22 42	0 28	1 11	2 20	3 23	0 44	14 15	1 47	20 50	13 37	10 23	10 28	18 31	4 29	6 7										
F 24	19 57	3s44	1 53	13 55	4 52	5 40	2 19	22 25	1 0	22 42	0 28	1 9	2 19	3 22	0 44	14 15	1 47	20 49	13 37	10 22	10 27	18 31	4 29	6 7										
S 25	19 44	7 40	0 49	14 3	4 55	5 19	2 30	22 19	1 1	22 43	0 28	1 7	2 19	3 21	0 44	14 15	1 47	20 48	13 37	10 22	10 26	18 32	4 30	6 7										
S 26	19 31	11 10	0n16	14 12	4 56	4 59	2 41	22 12	1 1	22 44	0 28	1 5	2 19	3 20	0 44	14 15	1 47	20 47	13 37	10 22	10 24	18 32	4 31	6 7										
M27	19 18	14 9	1 19	14 23	4 55	4 40	2 52	22 5	1 1	22 45	0 28	1 3	2 19	3 19	0 44	14 15	1 47	20 46	13 37	10 21	10 23	18 32	4 32	6 8										
T 28	19 4	16 30	2 17	14 36	4 53	4 20	3 3	21 58	1 2	22 46	0 28	1 1	2 19	3 17	0 44	14 15	1 47	20 45	13 36	10 21	10 22	18 33	4 32	6 8										
W29	18 50	18 9	3 10	14 50	4 49	4 2	3 15	21 51	1 2	22 46	0 28	0 58	2 19	3 16	0 44	14 16	1 47	20 44	13 36	10 20	10 21	18 33	4 33	6 8										
T 30	18 36	18 59	3 54	15 5	4 43	4 23	3 27	21 44	1 2	22 47	0 28	0 56	2 18	3 15	0 43	14 16	1 47	20 44	13 36	10 18	10 20	18 33	4 34	6 8										
F 31	18n21	19s 0	4n28	15n20	4s35	3n26	3s38	21n36	1n 2	22n48	0s28	0n54	2n18	3n14	0n43	14n16	1s47	20n43	13n36	10s15	10s19	18s33	4s35	6n 8										



# ASTRODIENST EPHEMERIS for the year 1716

## geocentric

AUGUST 1716

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 38 48	8♂42'36	11♂24	1°R 7	13♂0	28♂39	22♂38	3♂8	23♂35	13♂42	9♂9	26°R21	26♂39	11♂3	3°R16	S 1
S 2	20 42 45	9°40'03	23°40	0♂37	13°14	29°18	22°50	3°13	23°38	13°42	9°11	26♂9	26°36	11°10	3♂14	S 2
M 3	20 46 41	10°37'31	6♂9	0°11	13°25	29°57	23°1	3°19	23°41	13°43	9°13	25°56	26°33	11°17	3°11	M 3
T 4	20 50 38	11°35'00	18°50	29♂51	13°35	0♂35	23°12	3°24	23°44	13°43	9°15	25°44	26°30	11°23	3°8	T 4
W 5	20 54 34	12°32'30	1♂44	29°37	13°42	1°14	23°24	3°30	23°47	13°44	9°16	25°34	26°26	11°30	3°6	W 5
T 6	20 58 31	13°30'02	14°48	29°30	13°48	1°53	23°35	3°35	23°50	13°44	9°18	25°26	26°23	11°37	3°3	T 6
F 7	21 2 27	14°27'34	28°5	29°D29	13°51	2°31	23°46	3°41	23°54	13°45	9°20	25°20	26°20	11°43	3°0	F 7
S 8	21 6 24	15°25'08	11°V32	29°35	13°R52	3°10	23°57	3°46	23°57	13°45	9°22	25°18	26°17	11°50	2°57	S 8
S 9	21 10 21	16°22'43	25°9	29°48	13°50	3°48	24°8	3°52	24°0	13°45	9°24	25°D17	26°14	11°57	2°54	S 9
M10	21 14 17	17°20'20	8♂59	0♂8	13°46	4°27	24°18	3°58	24°3	13°45	9°26	25°17	26°11	12°3	2°52	M10
T 11	21 18 14	18°17'59	22°59	0°35	13°40	5°5	24°29	4°4	24°6	13°46	9°28	25°R17	26°7	12°10	2°49	T 11
W12	21 22 10	19°15'39	7♂12	1°10	13°32	5°44	24°40	4°10	24°10	13°46	9°30	25°16	26°4	12°17	2°46	W12
T 13	21 26 7	20°13'21	21°33	1°51	13°21	6°22	24°50	4°16	24°13	13°46	9°32	25°13	26°1	12°24	2°43	T 13
F 14	21 30 3	21°11'04	6♂8	2°40	13°7	7°1	25°1	4°22	24°16	13°46	9°34	25°7	25°58	12°30	2°40	F 14
S 15	21 34 0	22°8'49	20°32	3°35	12°52	7°39	25°11	4°28	24°19	13°46	9°36	24°59	25°55	12°37	2°37	S 15
S 16	21 37 56	23°6'35	4♂58	4°37	12°34	8°18	25°21	4°34	24°23	13°46	9°38	24°50	25°51	12°44	2°34	S 16
M17	21 41 53	24°4'23	19°13	5°45	12°14	8°56	25°31	4°40	24°26	13°R46	9°40	24°40	25°48	12°50	2°31	M17
T 18	21 45 50	25°2'13	3♂13	7°0	11°51	9°34	25°41	4°46	24°30	13°46	9°42	24°31	25°45	12°57	2°28	T 18
W19	21 49 46	26°0'03	16°51	8°20	11°27	10°13	25°51	4°52	24°33	13°46	9°45	24°24	25°42	13°4	2°25	W19
T 20	21 53 43	26°57'55	0♂7	9°46	11°0	10°51	26°1	4°59	24°36	13°46	9°47	24°19	25°39	13°10	2°22	T 20
F 21	21 57 39	27°55'49	13°0	11°16	10°32	11°29	26°11	5°5	24°40	13°46	9°49	24°16	25°36	13°17	2°19	F 21
S 22	22 1 36	28°53'43	25°32	12°51	10°2	12°7	26°20	5°11	24°43	13°46	9°51	24°D16	25°32	13°24	2°16	S 22
S 23	22 5 32	29°51'39	7♂47	14°30	9°30	12°46	26°30	5°18	24°47	13°46	9°53	24°16	25°29	13°30	2°13	S 23
M24	22 9 29	0♂49'37	19°49	16°13	8°57	13°24	26°39	5°24	24°50	13°45	9°55	24°17	25°26	13°37	2°11	M24
T 25	22 13 25	1°47'35	1♂42	17°59	8°23	14°2	26°48	5°31	24°54	13°45	9°57	24°R18	25°23	13°44	2°8	T 25
W26	22 17 22	2°45'35	13°33	19°48	7°47	14°40	26°57	5°37	24°58	13°45	9°59	24°17	25°20	13°50	2°5	W26
T 27	22 21 19	3°43'37	25°26	21°39	7°11	15°19	27°6	5°44	25°1	13°44	10°1	24°15	25°17	13°57	2°2	T 27
F 28	22 25 15	4°41'40	7♂26	23°32	6°34	15°57	27°15	5°51	25°5	13°44	10°3	24°10	25°13	14°4	1°59	F 28
S 29	22 29 12	5°39'44	19°36	25°26	5°57	16°35	27°24	5°57	25°8	13°44	10°5	24°4	25°10	14°11	1°56	S 29
S 30	22 33 8	6°37'50	2♂1	27°21	5°20	17°13	27°33	6°4	25°12	13°43	10°8	23°56	25°7	14°17	1°53	S 30
M31	22 37 5	7♂35'57	14♂41	29♂17	4♂43	17♂51	27♂41	6♂11	25♂16	13♂43	10♂10	23♂48	25♂4	14♂24	1♂50	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	18n 7	18s 9	4n51	15n37	4s26	3n 8	3s50	21n29	1n 3	22n49	0s28	0n52	2n18	3n13	0n43	14n16
S 2	17 51	16 27	5 1	15 54	4 15	2 52	4 3	21 21	1 3	22 49	0 28	0 50	2 18	3 12	0 43	14 16
M 3	17 36	13 58	4 56	16 11	4 3	2 36	4 15	21 13	1 3	22 50	0 28	0 47	2 18	3 10	0 43	14 16
T 4	17 20	10 48	4 37	16 28	3 50	2 21	4 27	21 5	1 4	22 51	0 27	0 45	2 18	3 9	0 43	14 16
W 5	17 4	7 5	4 4	16 45	3 35	2 6	4 40	20 57	1 4	22 51	0 27	0 43	2 17	3 8	0 43	14 16
T 6	16 48	2 57	3 17	17 1	3 20	1 53	4 53	20 49	1 4	22 52	0 27	0 40	2 17	3 7	0 43	14 16
F 7	16 31	1n22	2 19	17 17	3 4	1 40	5 5	20 40	1 4	22 52	0 27	0 38	2 17	3 5	0 43	14 16
S 8	16 14	5 41	1 13	17 32	2 48	1 28	5 18	20 32	1 5	22 53	0 27	0 36	2 17	3 4	0 43	14 16
S 9	15 57	9 46	0 1	17 45	2 31	1 17	5 31	20 23	1 5	22 53	0 27	0 33	2 17	3 3	0 43	14 16
M10	15 40	13 22	1s12	17 58	2 14	1 6	5 43	20 14	1 5	22 54	0 27	0 31	2 17	3 2	0 43	14 16
T 11	15 22	16 16	2 22	18 9	1 57	0 57	5 56	20 5	1 5	22 54	0 27	0 28	2 17	3 0	0 43	14 16
W12	15 4	18 12	3 24	18 18	1 40	0 49	6 8	19 56	1 6	22 55	0 27	0 26	2 16	2 59	0 43	14 16
T 13	14 46	18 59	4 13	18 25	1 23	0 42	6 21	19 46	1 6	22 55	0 27	0 23	2 16	2 58	0 43	14 16
F 14	14 28	18 33	4 47	18 31	1 7	0 36	6 33	19 37	1 6	22 56	0 27	0 21	2 16	2 56	0 43	14 16
S 15	14 9	16 55	5 3	18 34	0 50	0 30	6 45	19 27	1 6	22 56	0 27	0 18	2 16	2 55	0 43	14 16
S 16	13 50	14 13	4 59	18 34	0 35	0 27	6 56	19 17	1 7	22 57	0 27	0 16	2 16	2 54	0 43	14 16
M17	13 31	10 42	4 37	18 33	0 20	0 24	7 7	19 8	1 7	22 57	0 27	0 13	2 16	2 52	0 43	14 16
T 18	13 12	6 39	3 58	18 28	0 5	0 22	7 18	18 58	1 7	22 57	0 27	0 11	2 16	2 51	0 43	14 16
W19	12 52	2 20	3 6	18 21	0n 9	0 22	7 28	18 47	1 7	22 58	0 27	0 8	2 16	2 50	0 43	14 16
T 20	12 32	1s58	2 6	18 11	0 22	0 23	7 38	18 37	1 8	22 58	0 27	0 6	2 15	2 48	0 43	14 16
F 21	12 13	6 4	1 0	17 58	0 34	0 25	7 47	18 27	1 8	22 58	0 27	0 3	2 15	2 47	0 43	14 16
S 22	11 53	9 47	0n 7	17 42	0 45	0 28	7 56	18 16	1 8	22 59	0 27	0 0	2 15	2 45	0 43	14 16
S 23	11 32	12 59	1 12	17 23	0 56	0 32	8 4	18 6	1 8	22 59	0 27	0s 2	2 15	2 44	0 43	14 16
M24	11 12	15 35	2 13	17 2	1 5	0 38	8 11	17 55	1 9	22 59	0 27	0 5	2 15	2 43	0 43	14 16
T 25	10 51	17 28	3 7	16 38	1 14	0 45	8 17	17 44	1 9	22 59	0 27	0 8	2 15	2 41	0 43	14 16
W26	10 30	18 36	3 54	16 11	1 21	0 52	8 23	17 33	1 9	23 0	0 27	0 10	2 15	2 40	0 43	14 15
T 27	10 9	18 54	4 30	15 41	1 27	1 1	8 28	17 22	1 9	23 0	0 27	0 13	2 15	2 38	0 43	14 15
F 28	9 48	18 22	4 55	15 10	1 33	1 11	8 32	17 11	1 9	23 0	0 27	0 16	2 15	2 37	0 43	14 15
S 29	9 27	16 59	5 7	14 36	1 38	1 22	8 34	17 0	1 10	23 0	0 27	0 19	2 15	2 35	0 43	14 15
S 30	9 5	14 47	5 5	14 0	1 41	1 33	8 36	16 48	1 10	23 1	0 26	0 21	2 15	2 34	0 43	14 15
M31	8n44	11s52	4n48	13n22	1n44	1n45	8s38	16n37	1n10	23n 1	0s26	0s24	2n14	2n32	0n43	14n15

Julian Day Number = 2348028.5, Delta T = 10.64 sec  
 Ecliptic obliquity = 23°28'26, Nutation = 0°00'09, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 20°47'02, Lahiri = 19°54'02Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1716  
geocentric

SEPTEMBER 1716

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 41 1	8♍34'06	27♊38	1♍13	4♍6	18♏29	27♏50	6♊18	25♍19	13♍42	10♍12	23♍40	25♊1	14♊31	1♍47	T 1
W 2	22 44 58	9°32'16	10♋51	3°9	3♍30	19°7	27°58	6°24	25°23	13♋42	10°14	23♊33	24°57	14°37	1♋44	W 2
T 3	22 48 54	10°30'28	24°18	5°6	2°55	19°45	28°6	6°31	25°27	13°41	10°16	23°28	24°54	14°44	1°41	T 3
F 4	22 52 51	11°28'42	7°Y58	7°1	2°21	20°23	28°14	6°38	25°30	13°41	10°18	23°25	24°51	14°51	1°38	F 4
S 5	22 56 47	12°26'58	21°49	8°57	1°48	21°1	28°22	6°45	25°34	13°40	10°20	23°D24	24°48	14°57	1°35	S 5
S 6	23 0 44	13°25'17	5♋47	10°52	1°17	21°39	28°29	6°52	25°38	13°40	10°22	23°24	24°45	15°4	1°32	S 6
M 7	23 4 41	14°23'37	19°50	12°46	0°47	22°17	28°37	6°59	25°41	13°39	10°25	23°26	24°42	15°11	1°29	M 7
T 8	23 8 37	15°21'59	3♏58	14°39	0°19	22°55	28°44	7°6	25°45	13°38	10°27	23°27	24°38	15°17	1°26	T 8
W 9	23 12 34	16°20'24	18°9	16°32	29♏53	23°33	28°52	7°13	25°49	13°38	10°29	23°R27	24°35	15°24	1°24	W 9
T 10	23 16 30	17°18'50	2♊20	18°23	29°29	24°11	28°59	7°20	25°53	13°37	10°31	23°27	24°32	15°31	1°21	T 10
F 11	23 20 27	18°17'19	16°30	20°14	29°8	24°49	29°6	7°27	25°56	13°36	10°33	23°24	24°29	15°37	1°18	F 11
S 12	23 24 23	19°15'50	0♏36	22°3	28°48	25°27	29°13	7°34	26°0	13°35	10°35	23°20	24°26	15°44	1°15	S 12
S 13	23 28 20	20°14'24	14°34	23°52	28°31	26°5	29°19	7°41	26°4	13°34	10°37	23°15	24°22	15°51	1°12	S 13
M14	23 32 16	21°12'59	28°23	25°40	28°17	26°43	29°26	7°49	26°8	13°34	10°39	23°10	24°19	15°58	1°10	M14
T 15	23 36 13	22°11'36	11♍57	27°26	28°4	27°21	29°32	7°56	26°11	13°33	10°41	23°5	24°16	16°4	1°7	T 15
W16	23 40 10	23°10'15	25°16	29°12	27°54	27°58	29°38	8°3	26°15	13°32	10°43	23°2	24°13	16°11	1°4	W16
T 17	23 44 6	24°8'57	8♊17	0♊56	27°47	28°36	29°44	8°10	26°19	13°31	10°46	22°59	24°10	16°18	1°1	T 17
F 18	23 48 3	25°7'40	21°1	2°40	27°42	29°14	29°50	8°17	26°23	13°30	10°48	22°D58	24°7	16°24	0°59	F 18
S 19	23 51 59	26°6'25	3♏27	4°22	27°39	29°52	29°56	8°25	26°27	13°29	10°50	22°59	24°3	16°31	0°56	S 19
S 20	23 55 56	27°5'12	15°40	6°3	27°D39	0♍30	0♊2	8°32	26°30	13°28	10°52	23°0	24°0	16°38	0°54	S 20
M21	23 59 52	28°4'00	27°41	7°44	27°41	1°7	0°7	8°39	26°34	13°27	10°54	23°2	23°57	16°44	0°51	M21
T 22	0 3 49	29°2'51	9♊34	9°24	27°46	1°45	0°12	8°47	26°38	13°26	10°56	23°4	23°54	16°51	0°49	T 22
W23	0 7 45	0♊143	21°25	11°2	27°52	2°23	0°17	8°54	26°42	13°24	10°58	23°5	23°51	16°58	0°46	W23
T 24	0 11 42	1°0'37	3♊18	12°40	28°1	3°0	0°22	9°1	26°45	13°23	11°0	23°R5	23°48	17°5	0°44	T 24
F 25	0 15 39	1°59'33	15°18	14°17	28°12	3°38	0°27	9°8	26°49	13°22	11°2	23°4	23°44	17°11	0°41	F 25
S 26	0 19 35	2°58'30	27°30	15°53	28°25	4°16	0°31	9°16	26°53	13°21	11°4	23°3	23°41	17°18	0°39	S 26
S 27	0 23 32	3°57'30	9♊57	17°28	28°40	4°53	0°36	9°23	26°57	13°20	11°6	23°0	23°38	17°25	0°36	S 27
M28	0 27 28	4°56'31	22°42	19°2	28°57	5°31	0°40	9°31	27°1	13°19	11°8	22°58	23°35	17°31	0°34	M28
T 29	0 31 25	5°55'34	5♋49	20°36	29°17	6°9	0°44	9°38	27°4	13°17	11°10	22°55	23°32	17°38	0°32	T 29
W30	0 35 21	6♊54'39	19♋16	22♊8	29♏38	6♍46	0♊48	9♊45	27♍8	13♋16	11♍12	22♊53	23♊28	17♊45	0♋30	W30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	8n22	8s18	4n16	12n42	1n46	1n58	8s38	16n25	1n10	23n 1	0s26	0s27	2n14	2n31	0n43	14n14	1s49	20n16	13n34	9s12	9s42	18s41	5s 7	6n 8			
W 2	8 0	4 16	3 30	12 2	1 47	2 12	8 37	16 14	1 10	23 1	0 26	0 30	2 14	2 30	0 43	14 14	1 49	20 15	13 34	9 9	9 41	18 41	5 8	6 8			
T 3	7 38	0n 3	2 31	11 19	1 48	2 26	8 35	16 2	1 11	23 1	0 26	0 32	2 14	2 28	0 43	14 14	1 49	20 14	13 34	9 8	9 39	18 41	5 9	6 8			
F 4	7 16	4 26	1 23	10 36	1 47	2 40	8 33	15 50	1 11	23 1	0 26	0 35	2 14	2 27	0 43	14 14	1 49	20 14	13 34	9 7	9 38	18 41	5 11	6 8			
S 5	6 54	8 39	0 9	9 52	1 46	2 55	8 29	15 38	1 11	23 2	0 26	0 38	2 14	2 25	0 43	14 14	1 49	20 13	13 34	9 6	9 37	18 42	5 12	6 8			
S 6	6 32	12 25	1s 7	9 7	1 45	3 10	8 25	15 26	1 11	23 2	0 26	0 41	2 14	2 24	0 43	14 13	1 49	20 12	13 35	9 6	9 36	18 42	5 13	6 8			
M 7	6 9	15 30	2 19	8 21	1 43	3 25	8 20	15 14	1 11	23 2	0 26	0 44	2 14	2 22	0 43	14 13	1 49	20 11	13 35	9 7	9 35	18 42	5 14	6 7			
T 8	5 47	17 39	3 23	7 35	1 40	3 40	8 14	15 1	1 12	23 2	0 26	0 46	2 14	2 21	0 43	14 13	1 50	20 11	13 35	9 7	9 34	18 42	5 15	6 7			
W 9	5 24	18 43	4 15	6 49	1 37	3 55	8 8	14 49	1 12	23 2	0 26	0 49	2 14	2 19	0 43	14 12	1 50	20 10	13 35	9 7	9 32	18 42	5 16	6 7			
T 10	5 1	18 36	4 51	6 2	1 33	4 9	8 0	14 37	1 12	23 2	0 26	0 52	2 14	2 18	0 43	14 12	1 50	20 9	13 35	9 7	9 31	18 42	5 17	6 7			
F 11	4 38	17 20	5 9	5 15	1 29	4 24	7 53	14 24	1 12	23 2	0 26	0 55	2 14	2 16	0 43	14 12	1 50	20 9	13 35	9 6	9 30	18 43	5 19	6 7			
S 12	4 15	15 1	5 9	4 27	1 25	4 38	7 44	14 12	1 12	23 2	0 26	0 58	2 14	2 15	0 43	14 12	1 50	20 8	13 35	9 5	9 29	18 43	5 20	6 7			
S 13	3 52	11 51	4 50	3 40	1 20	4 52	7 36	13 59	1 13	23 2	0 26	1 1	2 14	2 13	0 43	14 11	1 50	20 7	13 35	9 3	9 28	18 43	5 21	6 6			
M14	3 29	8 4	4 15	2 53	1 15	5 6	7 27	13 46	1 13	23 2	0 26	1 3	2 14	2 12	0 43	14 11	1 50	20 6	13 35	9 1	9 27	18 43	5 22	6 6			
T 15	3 6	3 55	3 26	2 5	1 10	5 19	7 17	13 33	1 13	23 2	0 26	1 6	2 14	2 10	0 43	14 11	1 50	20 6	13 36	8 59	9 25	18 43	5 23	6 6			
W16	2 43	0s21	2 26	1 18	1 4	5 32	7 7	13 20	1 13	23 2	0 26	1 9	2 13	2 9	0 43	14 10	1 50	20 5	13 36	8 58	9 24	18 43	5 24	6 6			
T 17	2 20	4 31	1 20	0 31	0 58	5 44	6 57	13 7	1 13	23 3	0 26	1 12	2 13	2 7	0 43	14 10	1 50	20 4	13 36	8 57	9 23	18 43	5 25	6 6			
F 18	1 56	8 23	0 11	0s15	0 52	5 56	6 46	12 54	1 13	23 3	0 26	1 15	2 13	2 6	0 43	14 10	1 50	20 4	13 36	8 57	9 22	18 43	5 26	6 5			
S 19	1 33	11 47	0n57	1 2	0 46	6 7	6 35	12 41	1 14	23 3	0 26	1 18	2 13	2 4	0 43	14 9	1 50	20 3	13 36	8 57	9 21	18 44	5 28	6 5			
S 20	1 10	14 37	2 2	1 48	0 40	6 17	6 25	12 28	1 14	23 3	0 26	1 21	2 13	2 3	0 43	14 9	1 50	20 2	13 36	8 57	9 20	18 44	5 29	6 5			
M21	0 46	16 45	2 59	2 34	0 33	6 27	6 13	12 15	1 14	23 3	0 26	1 24	2 13	2 1	0 43	14 9	1 50	20 2	13 36	8 58	9 18	18 44	5 30	6 5			
T 22	0 23	18 9	3 49	3 19	0 27	6 36	6 2	12 1	1 14	23 3	0 26	1 26	2 13	2 0	0 43	14 8	1 50	20 1	13 37	8 59	9 17	18 44	5 31	6 4			
W23	0s 1	18 44	4 29	4 4	0 20	6 44	5 51	11 48	1 14	23 3	0 26	1 29	2 13	1 58	0 43	14 8	1 50	20 1	13 37	8 59	9 16	18 44	5 32	6 4			
T 24	0 24	18 29	4 57	4 49	0 13	6 52	5 40	11 34	1 14	23 3	0 26	1 32	2 13	1 57	0 43	14 8	1 50	20 0	13 37	8 59	9 15	18 44	5 33	6 4			
F 25	0 48	17 25	5 12	5 33	0 6	6 59	5 28	11 21	1 15	23 3	0 26	1 35	2 13	1 55	0 43	14 7	1 50	19 59	13 37	8 59	9 14	18 44	5 34	6 4			
S 26	1 11	15 33	5 14	6 17	0s 1	7 5	5 17	11 7	1 15	23 3	0 26	1 38	2 13	1 54	0 43	14 7	1 50	19 59	13 37	8 58	9 12	18 44	5 35	6 3			
S 27	1 35	12 56	5 2	7 0	0 8	7 10	5 6	10 54	1 15	23 3	0 26	1 41	2 13	1 52	0 43	14 6	1 50	19 58	13 38	8 57	9 11	18 44	5 36	6 3			
M28	1 58	9 39	4 34	7 42	0 15	7 15	4 54	10 40	1 15	23 3	0 26	1 44	2 13	1 51	0 43	14 6	1 50	19 58	13 38	8 56	9 10	18 44	5 37	6 3			
T 29	2 21	5 48	3 52	8 24	0 23	7 19	4 43	10 26	1 15	23 3	0 25	1 47	2 13	1 49	0 43	14 6	1 51	19 57	13 38	8 55	9 9	18 45	5 38	6 3			
W30	2s45	1s34	2n55	9s 6	0s30	7n22	4s32	10n12	1n15	23n 3	0s25	1s50	2n13	1n48	0n43	14n 5	1s51	19n57	13n38	8s55	9s 8	18s45	5s39	6n 2			

Julian Day Number = 2348059.5, Delta T = 10.63 sec  
Ecliptic obliquity = 23°28'26, Nutation = 0°00'08, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 20°47'06, Lahiri = 19°54'06Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1716  
geocentric

OCTOBER 1716

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 39 18	7♂53'45	3♂ 3	23♂40	0♂ 0	7♂24	0♂52	9♂53	27♂12	13♂R15	11♂14	22♂R51	23♂25	17♂51	0♂R27	T 1
F 2	0 43 14	8°52'54	17° 8	25°11	0°25	8° 1	0°55	10° 0	27°16	13♂13	11°16	22°D51	23°22	17°58	0♂25	F 2
S 3	0 47 11	9°52'05	1♂25	26°41	0°51	8°39	0°58	10° 7	27°19	13°12	11°18	22♂51	23°19	18° 5	0°23	S 3
S 4	0 51 7	10°51'18	15°51	28°11	1°19	9°16	1° 1	10°15	27°23	13°11	11°19	22°51	23°16	18°11	0°21	S 4
M 5	0 55 4	11°50'34	0♂19	29°39	1°49	9°54	1° 4	10°22	27°27	13° 9	11°21	22°52	23°13	18°18	0°19	M 5
T 6	0 59 1	12°49'52	14°46	1♂ 7	2°20	10°31	1° 7	10°29	27°30	13° 8	11°23	22°53	23° 9	18°25	0°17	T 6
W 7	1 2 57	13°49'12	29° 7	2°34	2°53	11° 9	1°10	10°37	27°34	13° 7	11°25	22°54	23° 6	18°32	0°15	W 7
T 8	1 6 54	14°48'34	13♂20	4° 0	3°27	11°46	1°12	10°44	27°38	13° 5	11°27	22°R54	23° 3	18°38	0°13	T 8
F 9	1 10 50	15°47'59	27°21	5°25	4° 2	12°24	1°14	10°51	27°41	13° 4	11°29	22°54	23° 0	18°45	0°12	F 9
S 10	1 14 47	16°47'26	11♂10	6°49	4°39	13° 1	1°16	10°59	27°45	13° 2	11°31	22°54	22°57	18°52	0°10	S 10
S 11	1 18 43	17°46'56	24°46	8°13	5°17	13°39	1°18	11° 6	27°49	13° 1	11°32	22°53	22°53	18°58	0° 8	S 11
M12	1 22 40	18°46'28	8♂ 8	9°35	5°56	14°16	1°19	11°14	27°52	12°59	11°34	22°52	22°50	19° 5	0° 6	M12
T 13	1 26 36	19°46'01	21°17	10°57	6°36	14°54	1°21	11°21	27°56	12°58	11°36	22°52	22°47	19°12	0° 5	T 13
W14	1 30 33	20°45'38	4♂12	12°17	7°18	15°31	1°22	11°28	27°59	12°56	11°38	22°52	22°44	19°18	0° 3	W14
T 15	1 34 30	21°45'16	16°53	13°37	8° 1	16° 8	1°23	11°35	28° 3	12°55	11°39	22°52	22°41	19°25	0° 2	T 15
F 16	1 38 26	22°44'56	29°22	14°55	8°44	16°46	1°24	11°43	28° 7	12°53	11°41	22°52	22°38	19°32	0° 0	F 16
S 17	1 42 23	23°44'38	11♂39	16°12	9°29	17°23	1°24	11°50	28°10	12°52	11°43	22°52	22°34	19°39	29♂59	S 17
S 18	1 46 19	24°44'23	23°45	17°27	10°15	18° 0	1°25	11°57	28°14	12°50	11°44	22°52	22°31	19°45	29°57	S 18
M19	1 50 16	25°44'09	5♂43	18°41	11° 1	18°38	1°R25	12° 5	28°17	12°48	11°46	22°51	22°28	19°52	29°56	M19
T 20	1 54 12	26°43'57	17°36	19°54	11°49	19°15	1°25	12°12	28°20	12°47	11°48	22°51	22°25	19°59	29°55	T 20
W21	1 58 9	27°43'47	29°26	21° 5	12°37	19°52	1°25	12°19	28°24	12°45	11°49	22°50	22°22	20° 5	29°54	W21
T 22	2 2 5	28°43'38	11♂18	22°14	13°27	20°29	1°24	12°26	28°27	12°44	11°51	22°50	22°19	20°12	29°52	T 22
F 23	2 6 2	29°43'31	23°16	23°20	14°17	21° 7	1°24	12°33	28°31	12°42	11°53	22°49	22°15	20°19	29°51	F 23
S 24	2 9 59	0♂43'26	5♂24	24°25	15° 7	21°44	1°23	12°40	28°34	12°40	11°54	22°D49	22°12	20°25	29°50	S 24
S 25	2 13 55	1°43'23	17°48	25°27	15°59	22°21	1°22	12°48	28°37	12°39	11°56	22°50	22° 9	20°32	29°49	S 25
M26	2 17 52	2°43'21	0♂31	26°26	16°51	22°58	1°21	12°55	28°41	12°37	11°57	22°50	22° 6	20°39	29°49	M26
T 27	2 21 48	3°43'21	13°37	27°22	17°44	23°35	1°19	13° 2	28°44	12°35	11°59	22°51	22° 3	20°46	29°48	T 27
W28	2 25 45	4°43'22	27° 8	28°14	18°38	24°12	1°18	13° 9	28°47	12°34	12° 0	22°52	21°59	20°52	29°47	W28
T 29	2 29 41	5°43'25	11♂4	29° 2	19°32	24°49	1°16	13°16	28°50	12°32	12° 1	22°53	21°56	20°59	29°46	T 29
F 30	2 33 38	6°43'30	25°24	29°46	20°27	25°27	1°14	13°23	28°54	12°30	12° 3	22°R53	21°53	21° 6	29°45	F 30
S 31	2 37 34	7♂43'37	10♂ 4	0♂25	21♂23	26♂ 4	1♂11	13♂30	28♂57	12♂29	12♂ 4	22♂53	21♂50	21♂12	29♂45	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
T 1	3s 8	2n51	1n47	9s46	0s37	7n25	4s21	9n58	1n15	23n 3	0s25	1s52	2n13	1n46	0n43	14n 5
F 2	3 32	7 13	0 32	10 27	0 44	7 27	4 10	9 45	1 16	23 3	0 25	1 55	2 13	1 45	0 43	14 4
S 3	3 55	11 15	0s47	11 6	0 51	7 28	3 59	9 31	1 16	23 3	0 25	1 58	2 13	1 43	0 43	14 4
S 4	4 18	14 38	2 4	11 45	0 58	7 28	3 48	9 17	1 16	23 3	0 25	2 1	2 13	1 42	0 43	14 3
M 5	4 41	17 6	3 13	12 23	1 5	7 28	3 37	9 2	1 16	23 3	0 25	2 4	2 13	1 40	0 43	14 3
T 6	5 5	18 28	4 10	13 0	1 12	7 27	3 26	8 48	1 16	23 3	0 25	2 7	2 13	1 39	0 43	14 3
W 7	5 28	18 38	4 50	13 37	1 19	7 25	3 16	8 34	1 16	23 3	0 25	2 10	2 13	1 37	0 43	14 2
T 8	5 51	17 37	5 13	14 13	1 26	7 22	3 6	8 20	1 16	23 3	0 25	2 13	2 13	1 36	0 43	14 2
F 9	6 14	15 33	5 16	14 48	1 33	7 19	2 55	8 6	1 17	23 3	0 25	2 15	2 14	1 34	0 43	14 1
S 10	6 36	12 37	5 1	15 22	1 39	7 15	2 45	7 52	1 17	23 3	0 25	2 18	2 14	1 33	0 43	14 1
S 11	6 59	9 3	4 30	15 56	1 46	7 11	2 35	7 37	1 17	23 3	0 25	2 21	2 14	1 32	0 43	14 0
M12	7 22	5 4	3 44	16 28	1 52	7 5	2 26	7 23	1 17	23 3	0 25	2 24	2 14	1 30	0 43	14 0
T 13	7 45	0 55	2 47	17 0	1 58	7 0	2 16	7 9	1 17	23 3	0 25	2 27	2 14	1 29	0 43	13 59
W14	8 7	3s14	1 42	17 31	2 4	6 53	2 7	6 54	1 17	23 3	0 25	2 29	2 14	1 27	0 43	13 59
T 15	8 29	7 9	0 33	18 1	2 10	6 46	1 57	6 40	1 17	23 3	0 25	2 32	2 14	1 26	0 43	13 58
F 16	8 52	10 42	0n36	18 29	2 15	6 38	1 49	6 25	1 17	23 3	0 25	2 35	2 14	1 24	0 43	13 58
S 17	9 14	13 44	1 42	18 57	2 21	6 30	1 38	6 11	1 17	23 3	0 25	2 38	2 14	1 23	0 43	13 57
S 18	9 36	16 6	2 43	19 24	2 26	6 20	1 30	5 56	1 18	23 3	0 25	2 41	2 14	1 22	0 43	13 57
M19	9 58	17 45	3 36	19 49	2 30	6 11	1 22	5 42	1 18	23 3	0 25	2 43	2 14	1 20	0 43	13 56
T 20	10 19	18 35	4 19	20 13	2 35	6 1	1 13	5 27	1 18	23 3	0 25	2 46	2 14	1 19	0 43	13 56
W21	10 41	18 37	4 51	20 36	2 39	5 50	1 5	5 13	1 18	23 3	0 25	2 49	2 14	1 18	0 43	13 55
T 22	11 2	17 50	5 11	20 58	2 42	5 39	0 57	4 58	1 18	23 4	0 24	2 52	2 14	1 16	0 43	13 55
F 23	11 23	16 15	5 17	21 18	2 46	5 27	0 49	4 43	1 18	23 4	0 24	2 54	2 14	1 15	0 43	13 54
S 24	11 45	13 56	5 10	21 37	2 49	5 14	0 41	4 29	1 18	23 4	0 24	2 57	2 14	1 14	0 43	13 54
S 25	12 5	10 57	4 48	21 55	2 51	5 1	0 34	4 14	1 18	23 4	0 24	3 0	2 15	1 12	0 43	13 53
M26	12 26	7 23	4 11	22 11	2 53	4 48	0 26	4 0	1 18	23 4	0 24	3 2	2 15	1 11	0 43	13 53
T 27	12 47	3 22	3 21	22 25	2 54	4 34	0 19	3 45	1 18	23 4	0 24	3 5	2 15	1 10	0 43	13 52
W28	13 7	0n58	2 18	22 37	2 54	4 19	0 12	3 30	1 18	23 4	0 24	3 8	2 15	1 8	0 43	13 52
T 29	13 27	5 23	1 5	22 48	2 54	4 5	0 5	3 16	1 18	23 4	0 24	3 10	2 15	1 7	0 43	13 51
F 30	13 47	9 37	0s14	22 57	2 53	3 49	0n 2	3 1	1 19	23 4	0 24	3 13	2 15	1 6	0 43	13 51
S 31	14s 6	13n22	1s34	23s 3	2s51	3n33	0n 9	2n46	1n19	23n 4	0s24	3s16	2n15	1n 5	0n43	13n50

Julian Day Number = 2348089.5, Delta T = 10.63 sec  
Ecliptic obliquity = 23°28'26", Nutation = 0°00'06", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 20°47'10", Lahiri = 19°54'11"Greg. Calendar



## ASTRODIENST EPHEMERIS for the year 1716

geocentric

DECEMBER 1716

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4 39 48	9♂ 1'15	3♂37	18♂37	23♂45	15♂ 2	28°R35	16♂44	0♂17	11°R38	12♂33	21°R51	20♂11	24♂40	29♂56	T 1
W 2	4 43 44	10° 2'10	18°42	19°29	24°53	15°38	28♂27	16°49	0°19	11♂37	12°33	21♂43	20° 8	24°47	29°57	W 2
T 3	4 47 41	11° 3'05	3♂27	20°27	26° 0	16°14	28°20	16°55	0°21	11°35	12°34	21°37	20° 5	24°54	29°59	T 3
F 4	4 51 37	12° 4'02	17°46	21°28	27° 8	16°51	28°12	17° 0	0°22	11°34	12°34	21°32	20° 2	25° 0	0♂ 0	F 4
S 5	4 55 34	13° 5'00	1♂37	22°34	28°16	17°27	28° 5	17° 5	0°24	11°33	12°34	21°29	19°59	25° 7	0° 2	S 5
S 6	4 59 30	14° 6'00	15° 2	23°42	29°25	18° 3	27°57	17°10	0°26	11°31	12°35	21°D29	19°56	25°14	0° 3	S 6
M 7	5 3 27	15° 7'00	28° 1	24°54	0♂33	18°39	27°49	17°15	0°27	11°30	12°35	21°29	19°52	25°21	0° 5	M 7
T 8	5 7 24	16° 8'01	10♂40	26° 9	1°42	19°15	27°42	17°20	0°29	11°28	12°35	21°30	19°49	25°27	0° 7	T 8
W 9	5 11 20	17° 9'04	23° 3	27°25	2°51	19°51	27°34	17°25	0°30	11°27	12°35	21°R31	19°46	25°34	0° 8	W 9
T 10	5 15 17	18°10'08	5♂13	28°44	4° 0	20°27	27°26	17°30	0°32	11°26	12°36	21°30	19°43	25°41	0°10	T 10
F 11	5 19 13	19°11'12	17°15	0♂ 4	5° 9	21° 3	27°18	17°35	0°33	11°25	12°36	21°26	19°40	25°47	0°12	F 11
S 12	5 23 10	20°12'18	29°11	1°25	6°19	21°39	27°10	17°39	0°35	11°23	12°36	21°20	19°36	25°54	0°14	S 12
S 13	5 27 6	21°13'24	11♂ 3	2°48	7°28	22°15	27° 2	17°44	0°36	11°22	12°36	21°11	19°33	26° 1	0°16	S 13
M14	5 31 3	22°14'31	22°55	4°12	8°38	22°51	26°53	17°48	0°37	11°21	12°36	21° 0	19°30	26° 8	0°18	M14
T 15	5 34 59	23°15'38	4♂46	5°37	9°48	23°27	26°45	17°53	0°39	11°20	12°R36	20°47	19°27	26°14	0°20	T 15
W16	5 38 56	24°16'46	16°39	7° 3	10°58	24° 3	26°37	17°57	0°40	11°19	12°36	20°34	19°24	26°21	0°22	W16
T 17	5 42 53	25°17'55	28°35	8°29	12° 8	24°39	26°29	18° 1	0°41	11°18	12°36	20°22	19°21	26°28	0°24	T 17
F 18	5 46 49	26°19'03	10♂35	9°57	13°19	25°15	26°21	18° 5	0°42	11°16	12°36	20°11	19°17	26°34	0°26	F 18
S 19	5 50 46	27°20'12	22°43	11°25	14°29	25°50	26°13	18°10	0°43	11°15	12°36	20° 3	19°14	26°41	0°29	S 19
S 20	5 54 42	28°21'21	5♂ 2	12°53	15°39	26°26	26° 5	18°14	0°44	11°14	12°36	19°58	19°11	26°48	0°31	S 20
M21	5 58 39	29°22'31	17°34	14°22	16°50	27° 2	25°56	18°17	0°45	11°13	12°35	19°56	19° 8	26°55	0°33	M21
T 22	6 2 35	0♂23'40	0♂25	15°51	18° 1	27°37	25°48	18°21	0°45	11°12	12°35	19°D55	19° 5	27° 1	0°36	T 22
W23	6 6 32	1°24'49	13°39	17°21	19°12	28°13	25°40	18°25	0°46	11°11	12°35	19°R55	19° 2	27° 8	0°38	W23
T 24	6 10 28	2°25'58	27°18	18°51	20°23	28°48	25°32	18°29	0°47	11°10	12°35	19°55	18°58	27°15	0°41	T 24
F 25	6 14 25	3°27'07	11♂26	20°21	21°34	29°24	25°24	18°32	0°48	11°10	12°34	19°53	18°55	27°21	0°43	F 25
S 26	6 18 22	4°28'16	26° 1	21°52	22°45	29°59	25°16	18°36	0°48	11° 9	12°34	19°49	18°52	27°28	0°46	S 26
S 27	6 22 18	5°29'25	11♂ 1	23°23	23°56	0♂34	25° 8	18°39	0°49	11° 8	12°34	19°42	18°49	27°35	0°48	S 27
M28	6 26 15	6°30'34	26°17	24°55	25° 8	1°10	25° 0	18°42	0°49	11° 7	12°33	19°33	18°46	27°42	0°51	M28
T 29	6 30 11	7°31'43	11♂38	26°27	26°19	1°45	24°53	18°45	0°50	11° 6	12°33	19°22	18°42	27°48	0°54	T 29
W30	6 34 8	8°32'53	26°54	27°59	27°31	2°20	24°45	18°48	0°50	11° 5	12°32	19°10	18°39	27°55	0°57	W30
T 31	6 38 4	9♂34'02	11♂53	29♂32	28♂42	2♂55	24♂37	18♂51	0♂50	11♂ 5	12♂32	19♂ 0	18♂36	28♂ 2	0♂59	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	21s50	18n33	4s52	14s59	2n30	7s 8	2n16	4s43	1n19	23n 7	0s21	4s26	2n20	0n34	0n44	13n35	1s51
W 2	21 59	17 6	5 7	15 17	2 26	7 31	2 18	4 57	1 19	23 7	0 21	4 28	2 20	0 33	0 44	13 35	1 51
T 3	22 8	14 32	5 1	15 36	2 22	7 54	2 19	5 11	1 19	23 7	0 21	4 30	2 20	0 32	0 44	13 35	1 51
F 4	22 16	11 9	4 36	15 58	2 16	8 17	2 21	5 25	1 19	23 7	0 21	4 32	2 20	0 32	0 44	13 34	1 51
S 5	22 24	7 14	3 56	16 20	2 11	8 40	2 22	5 38	1 19	23 7	0 21	4 33	2 21	0 31	0 44	13 34	1 51
S 6	22 32	3 5	3 3	16 43	2 5	9 3	2 23	5 52	1 19	23 7	0 21	4 35	2 21	0 30	0 44	13 33	1 51
M 7	22 38	1s 5	2 3	17 7	1 58	9 26	2 24	6 6	1 19	23 7	0 20	4 37	2 21	0 30	0 44	13 33	1 51
T 8	22 45	5 7	0 58	17 31	1 51	9 49	2 25	6 20	1 19	23 7	0 20	4 38	2 21	0 29	0 44	13 33	1 51
W 9	22 51	8 51	0n 8	17 55	1 44	10 12	2 26	6 33	1 19	23 7	0 20	4 40	2 21	0 28	0 44	13 32	1 50
T 10	22 57	12 8	1 13	18 20	1 37	10 34	2 27	6 47	1 19	23 7	0 20	4 42	2 22	0 28	0 44	13 32	1 50
F 11	23 2	14 52	2 13	18 44	1 29	10 57	2 27	7 1	1 19	23 7	0 20	4 43	2 22	0 27	0 44	13 32	1 50
S 12	23 7	16 57	3 7	19 8	1 22	11 19	2 28	7 14	1 19	23 7	0 20	4 45	2 22	0 27	0 44	13 31	1 50
S 13	23 11	18 18	3 52	19 32	1 14	11 42	2 28	7 28	1 19	23 7	0 20	4 46	2 22	0 26	0 44	13 31	1 50
M14	23 15	18 50	4 28	19 55	1 7	12 4	2 28	7 41	1 19	23 7	0 20	4 48	2 23	0 26	0 44	13 31	1 50
T 15	23 18	18 32	4 51	20 18	0 59	12 26	2 28	7 54	1 19	23 7	0 19	4 49	2 23	0 25	0 45	13 30	1 50
W16	23 21	17 27	5 2	20 41	0 51	12 47	2 28	8 8	1 18	23 7	0 19	4 51	2 23	0 25	0 45	13 30	1 50
T 17	23 23	15 35	4 59	21 2	0 44	13 9	2 28	8 21	1 18	23 6	0 19	4 52	2 23	0 25	0 45	13 30	1 50
F 18	23 25	13 3	4 44	21 23	0 36	13 30	2 28	8 34	1 18	23 6	0 19	4 54	2 24	0 24	0 45	13 29	1 50
S 19	23 27	9 56	4 15	21 43	0 28	13 52	2 27	8 47	1 18	23 6	0 19	4 55	2 24	0 24	0 45	13 29	1 50
S 20	23 28	6 21	3 35	22 2	0 21	14 12	2 27	9 0	1 18	23 6	0 19	4 56	2 24	0 24	0 45	13 29	1 50
M21	23 28	2 25	2 43	22 20	0 13	14 33	2 26	9 13	1 18	23 6	0 19	4 57	2 24	0 23	0 45	13 28	1 50
T 22	23 28	1n43	1 42	22 37	0 6	14 53	2 26	9 26	1 18	23 6	0 18	4 59	2 24	0 23	0 45	13 28	1 50
W23	23 28	5 54	0 33	22 54	0s 1	15 14	2 25	9 39	1 18	23 6	0 18	5 0	2 25	0 23	0 45	13 28	1 50
T 24	23 27	9 55	0s39	23 9	0 9	15 33	2 24	9 51	1 18	23 6	0 18	5 1	2 25	0 22	0 45	13 28	1 50
F 25	23 26	13 31	1 51	23 23	0 16	15 53	2 23	10 4	1 18	23 6	0 18	5 2	2 25	0 22	0 45	13 28	1 50
S 26	23 24	16 23	2 59	23 36	0 23	16 12	2 22	10 16	1 17	23 6	0 18	5 3	2 26	0 22	0 45	13 27	1 50
S 27	23 22	18 14	3 56	23 48	0 29	16 31	2 21	10 29	1 17	23 5	0 18	5 4	2 26	0 22	0 45	13 27	1 50
M28	23 19	18 49	4 37	23 58	0 36	16 49	2 19	10 41	1 17	23 5	0 18	5 5	2 26	0 22	0 45	13 27	1 50
T 29	23 16	18 1	4 58	24 8	0 42	17 7	2 18	10 54	1 17	23 5	0 17	5 6	2 26	0 22	0 45	13 27	1 50
W30	23 12	15 56	4 58	24 16	0 49	17 25	2 17	11 6	1 17	23 5	0 17	5 7	2 27	0 21	0 45	13 27	1 49
T 31	23s 8	12n48	4s37	24s23	0s55	17s42	2n15	11s18	1n17	23n 5	0s17	5s 8	2n27	0n21	0n45	13n26	1s49

Julian Day Number = 2348150.5, Delta T = 10.62 sec

Ecliptic obliquity = 23°28'25", Nutation = 0°00'05", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°47'18", Lahiri = 19°54'19"Greg. Calendar