



# Astrodienst Ephemeris Tables for the year 1417

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 1417

## geocentric

JANUARY 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	7 16 12	19°36'04	15°11'39	3°R 5	0°47	11°K 9	24°15	3°R49	26°53	13°R44	21°R14	2°R 4	0°26	2°2	24°16	F 1
S 2	7 20 9	20°37'09	0°28	2°36	2° 2	11°54	24°28	3°45	26°56	13°42	21°13	2°2	0°23	2° 9	24°22	S 2
S 3	7 24 6	21°38'13	15°37	1°55	3°17	12°40	24°41	3°40	26°59	13°41	21°12	1°56	0°20	2°16	24°28	S 3
M 4	7 28 2	22°39'16	0°256	1° 4	4°32	13°25	24°55	3°35	27° 2	13°39	21°11	1°49	0°16	2°23	24°34	M 4
T 5	7 31 59	23°40'18	16°14	0° 4	5°48	14°10	25° 8	3°30	27° 5	13°37	21°10	1°41	0°13	2°29	24°40	T 5
W 6	7 35 55	24°41'20	1°19	28°56	7° 3	14°55	25°21	3°26	27° 8	13°36	21° 9	1°33	0°10	2°36	24°46	W 6
T 7	7 39 52	25°42'21	16° 4	27°44	8°18	15°40	25°35	3°21	27°11	13°34	21° 8	1°26	0° 7	2°43	24°52	T 7
F 8	7 43 48	26°43'21	0°21	26°28	9°33	16°26	25°48	3°16	27°14	13°32	21° 7	1°20	0° 4	2°49	24°58	F 8
S 9	7 47 45	27°44'21	14°10	25°12	10°48	17°11	26° 2	3°11	27°18	13°31	21° 6	1°17	0° 0	2°56	25° 3	S 9
S 10	7 51 41	28°45'20	27°30	23°57	12° 4	17°56	26°16	3° 6	27°21	13°29	21° 5	1°D16	29°57	3° 3	25° 9	S 10
M 11	7 55 38	29°46'19	10°26	22°46	13°19	18°41	26°29	3° 1	27°24	13°27	21° 4	1°17	29°54	3° 9	25°15	M 11
T 12	7 59 35	0°47'16	23° 0	21°41	14°34	19°26	26°43	2°56	27°27	13°26	21° 3	1°18	29°51	3°16	25°20	T 12
W 13	8 3 31	1°48'14	5°18	20°41	15°49	20°11	26°57	2°51	27°30	13°24	21° 2	1°R18	29°48	3°23	25°26	W 13
T 14	8 7 28	2°49'10	17°24	19°50	17° 4	20°56	27°11	2°46	27°33	13°23	21° 1	1°16	29°45	3°30	25°31	T 14
F 15	8 11 24	3°50'06	29°22	19° 6	18°19	21°41	27°25	2°41	27°37	13°21	21° 1	1°12	29°41	3°36	25°37	F 15
S 16	8 15 21	4°51'00	11°36	18°31	19°34	22°26	27°38	2°37	27°40	13°19	21° 0	1° 6	29°38	3°43	25°42	S 16
S 17	8 19 17	5°51'54	23° 7	18° 5	20°49	23°10	27°52	2°32	27°43	13°18	20°59	0°56	29°35	3°50	25°48	S 17
M 18	8 23 14	6°52'46	4°58	17°47	22° 4	23°55	28° 6	2°27	27°46	13°16	20°58	0°44	29°32	3°56	25°53	M 18
T 19	8 27 11	7°53'38	16°50	17°38	23°19	24°40	28°20	2°22	27°50	13°15	20°57	0°31	29°29	4° 3	25°58	T 19
W 20	8 31 7	8°54'27	28°44	17°D36	24°34	25°25	28°34	2°17	27°53	13°13	20°57	0°17	29°26	4°10	26° 4	W 20
T 21	8 35 4	9°55'16	10°43	17°42	25°49	26°10	28°49	2°12	27°56	13°12	20°56	0° 4	29°22	4°17	26° 9	T 21
F 22	8 39 0	10°56'03	22°47	17°54	27° 4	26°54	29° 3	2° 7	28° 0	13°10	20°55	29°53	29°19	4°23	26°14	F 22
S 23	8 42 57	11°56'49	4°59	18°13	28°19	27°39	29°17	2° 2	28° 3	13° 9	20°54	29°45	29°16	4°30	26°19	S 23
S 24	8 46 53	12°57'33	17°21	18°37	29°34	28°24	29°31	1°58	28° 6	13° 8	20°54	29°39	29°13	4°37	26°24	S 24
M 25	8 50 50	13°58'15	29°59	19° 7	0°49	29° 8	29°45	1°53	28°10	13° 6	20°53	29°37	29°10	4°43	26°29	M 25
T 26	8 54 46	14°58'56	12°54	19°42	2° 4	29°53	29°59	1°48	28°13	13° 5	20°52	29°D36	29° 6	4°50	26°34	T 26
W 27	8 58 43	15°59'35	26°11	20°22	3°19	0°Y37	0°K14	1°43	28°16	13° 3	20°52	29°R36	29° 3	4°57	26°39	W 27
T 28	9 2 39	17° 0'12	9°II54	21° 5	4°33	1°22	0°28	1°39	28°20	13° 2	20°51	29°36	29° 0	5° 4	26°44	T 28
F 29	9 6 36	18° 0'48	24° 3	21°53	5°48	2° 6	0°42	1°34	28°23	13° 1	20°51	29°34	28°57	5°10	26°49	F 29
S 30	9 10 33	19° 1'22	8°40	22°44	7° 3	2°51	0°57	1°29	28°27	12°59	20°50	29°30	28°54	5°17	26°53	S 30
S 31	9 14 29	20° 1'54	23°39	23°38	8°K18	3°Y35	1°K11	1°D25	28°30	12°58	20°II49	29°M22	28°M51	5°24	26°58	S 31

Day	☉	☽		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	22s 5	21n32	1s13	18s 0	1n35	21s21	1s20	8s 6	0s45	14s23	0s58	20n 0	0n40	13s16	0s43	22n 7	0s41	16n54	6s20	20s38	20s18	15s21	18s 1	5n22	
S 2	21 56	21 4	2 27	17 48	1 53	21 5	1 21	7 48	0 44	14 19	0 58	20 2	0 40	13 15	0 43	22 7	0 41	16 54	6 20	20 38	20 18	15 19	18 1	5 22	
S 3	21 46	19 5	3 32	17 40	2 11	20 49	1 22	7 30	0 43	14 14	0 58	20 3	0 40	13 14	0 43	22 7	0 41	16 54	6 20	20 37	20 17	15 17	18 1	5 23	
M 4	21 36	15 44	4 23	17 34	2 28	20 32	1 23	7 12	0 43	14 10	0 57	20 4	0 40	13 13	0 43	22 8	0 41	16 54	6 20	20 35	20 16	15 15	18 1	5 23	
T 5	21 26	11 19	4 55	17 31	2 44	20 15	1 24	6 53	0 42	14 5	0 57	20 5	0 41	13 12	0 43	22 8	0 41	16 54	6 20	20 34	20 16	15 14	18 1	5 23	
W 6	21 15	6 16	5 6	17 31	2 58	19 56	1 25	6 35	0 41	14 1	0 57	20 7	0 41	13 11	0 43	22 8	0 41	16 54	6 19	20 32	20 15	15 12	18 1	5 24	
T 7	21 4	0 58	4 56	17 34	3 11	19 38	1 26	6 17	0 40	13 56	0 57	20 8	0 41	13 10	0 43	22 8	0 41	16 54	6 19	20 31	20 14	15 10	18 1	5 24	
F 8	20 53	4s14	4 28	17 38	3 21	19 18	1 27	5 58	0 39	13 51	0 57	20 9	0 41	13 9	0 43	22 8	0 41	16 55	6 19	20 30	20 14	15 8	18 1	5 24	
S 9	20 41	9 3	3 45	17 45	3 28	18 59	1 27	5 40	0 38	13 47	0 57	20 10	0 41	13 8	0 43	22 8	0 41	16 55	6 19	20 29	20 13	15 6	18 1	5 25	
S 10	20 28	13 16	2 51	17 53	3 33	18 38	1 28	5 21	0 37	13 42	0 57	20 12	0 41	13 7	0 43	22 9	0 41	16 55	6 19	20 29	20 12	15 4	18 1	5 25	
M11	20 16	16 44	1 49	18 2	3 36	18 17	1 29	5 3	0 36	13 37	0 57	20 13	0 41	13 5	0 43	22 9	0 41	16 55	6 19	20 29	20 12	15 2	18 0	5 25	
T 12	20 3	19 18	0 44	18 13	3 36	17 56	1 29	4 44	0 35	13 33	0 57	20 14	0 41	13 4	0 43	22 9	0 41	16 55	6 19	20 29	20 11	15 0	18 0	5 26	
W13	19 49	20 54	0n21	18 23	3 34	17 34	1 29	4 26	0 34	13 28	0 57	20 15	0 42	13 3	0 43	22 9	0 41	16 55	6 18	20 29	20 10	14 58	18 0	5 26	
T 14	19 35	21 30	1 25	18 35	3 30	17 12	1 30	4 7	0 34	13 23	0 57	20 17	0 42	13 2	0 43	22 9	0 41	16 55	6 18	20 29	20 10	14 56	18 0	5 27	
F 15	19 21	21 7	2 24	18 47	3 24	16 49	1 30	3 49	0 33	13 18	0 57	20 18	0 42	13 1	0 43	22 10	0 41	16 55	6 18	20 28	20 9	14 55	18 0	5 27	
S 16	19 7	19 47	3 16	18 58	3 17	16 25	1 30	3 30	0 32	13 14	0 57	20 19	0 42	13 0	0 43	22 10	0 41	16 55	6 18	20 27	20 8	14 53	17 59	5 27	
S 17	18 52	17 36	3 59	19 10	3 9	16 2	1 31	3 11	0 31	13 9	0 57	20 20	0 42	12 59	0 43	22 10	0 41	16 55	6 18	20 25	20 7	14 51	17 59	5 28	
M18	18 37	14 41	4 32	19 22	2 59	15 37	1 31	2 53	0 30	13 4	0 57	20 21	0 42	12 58	0 43	22 10	0 41	16 55	6 18	20 22	20 7	14 49	17 59	5 28	
T 19	18 21	11 11	4 53	19 33	2 49	15 13	1 31	2 34	0 29	12 59	0 57	20 23	0 42	12 56	0 43	22 10	0 41	16 56	6 18	20 19	20 6	14 47	17 59	5 29	
W20	18 5	7 14	5 1	19 44	2 39	14 48	1 31	2 16	0 28	12 54	0 57	20 24	0 42	12 55	0 43	22 10	0 41	16 56	6 17	20 16	20 5	14 45	17 58	5 29	
T 21	17 49	3 0	4 56	19 54	2 27	14 22	1 31	1 57	0 27	12 49	0 57	20 25	0 42	12 54	0 43	22 11	0 41	16 56	6 17	20 14	20 5	14 43	17 58	5 29	
F 22	17 33	1n23	4 38	20 4	2 16	13 56	1 30	1 38	0 27	12 44	0 57	20 26	0 42	12 53	0 43	22 11	0 41	16 56	6 17	20 11	20 4	14 41	17 58	5 30	
S 23	17 16	5 46	4 7	20 13	2 5	13 30	1 30	1 20	0 26	12 39	0 57	20 27	0 43	12 52	0 43	22 11	0 41	16 56	6 17	20 10	20 3	14 39	17 58	5 30	
S 24	16 59	9 58	3 24	20 21	1 53	13 4	1 30	1 1	0 25	12 34	0 57	20 29	0 43	12 51	0 43	22 11	0 41	16 56	6 17	20 8	20 3	14 37	17 57	5 31	
M25	16 41	13 50	2 30	20 29	1 41	12 37	1 29	0 43	0 24	12 29	0 57	20 30	0 43	12 49	0 43	22 11	0 41	16 56	6 17	20 8	20 2	14 35	17 57	5 31	
T 26	16 24	17 9	1 27	20 35	1 30	12 9	1 29	0 24	0 23	12 24	0 57	20 31	0 43	12 48	0 43	22 11	0 41	16 56	6 16	20 8	20 1	14 33	17 57	5 32	
W27	16 6	19 39	0 18	20 41	1 18	11 42	1 28	0 6	0 22	12 19	0 57	20 32	0 43	12 47	0 43	22 12	0 41	16 56	6 16	20 8	20 1	14 32	17 56	5 32	
T 28	15 47	21 7	0s54	20 45	1 7	11 14	1 28	0n13	0 21	12 14	0 57	20 33	0 43	12 46	0 43	22 12	0 41	16 57	6 16	20 8	20 0	14 30	17 56	5 32	
F 29	15 29	21 17	2 6	20 49	0 56	10 46	1 27	0 31	0 21	12 9	0 57	20 34	0 43	12 45	0 43	22 12	0 41	16 57	6 16	20 7	19 59	14 28	17 56	5 33	
S 30	15 10	20 3	3 11	20 51	0 45	10 17	1 27	0 50	0 20	12 4	0 57	20 35	0 43	12 43	0 43	22 12	0 41	16 57	6 16	20 6	19 58	14 26	17 55	5 33	
S 31	14s51	17n25	4s 5	20s53	0n34	9s49	1s26	1n 8	0s19	11s59	0s57	20n36	0n43	12s42	0s43	22n12	0s41	16n57	6s16	20s 5	19s58	14s24	17s55	5n34	

# ASTRODIENST EPHEMERIS for the year 1417

## geocentric

FEBRUARY 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	9 18 26	21° 2' 24"	8° 54'	24° 36'	9° 32'	4° 20'	1° 26'	1° 20'	28° 33'	12° 57'	20° 49'	29° 13'	28° 47'	5° 30'	27° 2'	M 1
T 2	9 22 22	22° 2' 52"	24° 13'	25° 36'	10° 47'	5° 4'	1° 40'	1° 16'	28° 37'	12° 56'	20° 48'	29° 11'	28° 44'	5° 37'	27° 7'	T 2
W 3	9 26 19	23° 3' 19"	9° 26'	26° 39'	12° 2'	5° 48'	1° 54'	1° 12'	28° 40'	12° 54'	20° 48'	28° 50'	28° 41'	5° 44'	27° 11'	W 3
T 4	9 30 15	24° 3' 45"	24° 21'	27° 44'	13° 16'	6° 32'	2° 9'	1° 7'	28° 44'	12° 53'	20° 48'	28° 39'	28° 38'	5° 51'	27° 16'	T 4
F 5	9 34 12	25° 4' 08"	8° 51'	28° 51'	14° 31'	7° 17'	2° 23'	1° 3'	28° 47'	12° 52'	20° 47'	28° 31'	28° 35'	5° 57'	27° 20'	F 5
S 6	9 38 8	26° 4' 31"	22° 51'	0° 1'	15° 45'	8° 1'	2° 38'	0° 59'	28° 51'	12° 51'	20° 47'	28° 26'	28° 32'	6° 4'	27° 24'	S 6
S 7	9 42 5	27° 4' 52"	6° 20'	1° 12'	17° 0'	8° 45'	2° 52'	0° 55'	28° 54'	12° 50'	20° 46'	28° 23'	28° 28'	6° 11'	27° 29'	S 7
M 8	9 46 2	28° 5' 11"	19° 22'	2° 25'	18° 14'	9° 29'	3° 7'	0° 50'	28° 58'	12° 49'	20° 46'	28° 22'	28° 25'	6° 17'	27° 33'	M 8
T 9	9 49 58	29° 5' 29"	1° 58'	3° 40'	19° 29'	10° 13'	3° 21'	0° 46'	29° 1'	12° 47'	20° 46'	28° 22'	28° 22'	6° 24'	27° 37'	T 9
W10	9 53 55	0° 5' 46"	14° 16'	4° 57'	20° 43'	10° 57'	3° 36'	0° 42'	29° 5'	12° 46'	20° 45'	28° 21'	28° 19'	6° 31'	27° 41'	W10
T 11	9 57 51	1° 6' 01"	26° 20'	6° 15'	21° 58'	11° 41'	3° 50'	0° 39'	29° 8'	12° 45'	20° 45'	28° 19'	28° 16'	6° 38'	27° 45'	T 11
F 12	10 1 48	2° 6' 15"	8° 15'	7° 35'	23° 12'	12° 25'	4° 5'	0° 35'	29° 11'	12° 44'	20° 45'	28° 15'	28° 12'	6° 44'	27° 48'	F 12
S 13	10 5 44	3° 6' 27"	20° 5'	8° 57'	24° 26'	13° 9'	4° 19'	0° 31'	29° 15'	12° 43'	20° 44'	28° 8'	28° 9'	6° 51'	27° 52'	S 13
S 14	10 9 41	4° 6' 37"	1° 54'	10° 19'	25° 41'	13° 53'	4° 34'	0° 27'	29° 18'	12° 42'	20° 44'	27° 58'	28° 6'	6° 58'	27° 56'	S 14
M15	10 13 37	5° 6' 46"	13° 54'	11° 43'	26° 55'	14° 36'	4° 48'	0° 24'	29° 22'	12° 42'	20° 44'	27° 45'	28° 3'	7° 4'	28° 0'	M15
T 16	10 17 34	6° 6' 52"	25° 41'	13° 9'	28° 9'	15° 20'	5° 3'	0° 20'	29° 25'	12° 41'	20° 44'	27° 31'	28° 0'	7° 11'	28° 3'	T 16
W17	10 21 31	7° 6' 57"	7° 42'	14° 35'	29° 23'	16° 4'	5° 17'	0° 17'	29° 29'	12° 40'	20° 43'	27° 16'	27° 57'	7° 18'	28° 7'	W17
T 18	10 25 27	8° 7' 00"	19° 49'	16° 3'	0° 38'	16° 47'	5° 32'	0° 13'	29° 32'	12° 39'	20° 43'	27° 2'	27° 53'	7° 25'	28° 10'	T 18
F 19	10 29 24	9° 7' 01"	2° 4'	17° 32'	1° 52'	17° 31'	5° 46'	0° 10'	29° 35'	12° 38'	20° 43'	26° 50'	27° 50'	7° 31'	28° 13'	F 19
S 20	10 33 20	10° 7' 00"	14° 28'	19° 3'	3° 6'	18° 15'	6° 1'	0° 7'	29° 39'	12° 37'	20° 43'	26° 41'	27° 47'	7° 38'	28° 17'	S 20
S 21	10 37 17	11° 6' 57"	27° 1'	20° 34'	4° 20'	18° 58'	6° 15'	0° 4'	29° 42'	12° 37'	20° 43'	26° 35'	27° 44'	7° 45'	28° 20'	S 21
M22	10 41 13	12° 6' 52"	9° 46'	22° 7'	5° 34'	19° 42'	6° 29'	0° 1'	29° 46'	12° 36'	20° 43'	26° 32'	27° 41'	7° 51'	28° 23'	M22
T 23	10 45 10	13° 6' 44"	22° 45'	23° 41'	6° 48'	20° 25'	6° 44'	29° 58'	29° 49'	12° 35'	20° 43'	26° D30	27° 38'	7° 58'	28° 26'	T 23
W24	10 49 6	14° 6' 34"	6° 2'	25° 16'	8° 2'	21° 9'	6° 58'	29° 55'	29° 52'	12° 35'	20° D43	26° 31'	27° 34'	8° 5'	28° 29'	W24
T 25	10 53 3	15° 6' 23"	19° 38'	26° 53'	9° 16'	21° 52'	7° 13'	29° 52'	29° 56'	12° 34'	20° 43'	26° R31	27° 31'	8° 12'	28° 32'	T 25
F 26	10 57 0	16° 6' 08"	3° 36'	28° 30'	10° 30'	22° 35'	7° 27'	29° 50'	29° 59'	12° 33'	20° 43'	26° 29'	27° 28'	8° 18'	28° 34'	F 26
S 27	11 0 56	17° 5' 52"	17° 55'	0° 9'	11° 43'	23° 19'	7° 42'	29° 47'	0° 3'	12° 33'	20° 43'	26° 26'	27° 25'	8° 25'	28° 37'	S 27
S 28	11 4 53	18° 5' 33"	2° 35'	1° 49'	12° 57'	24° 2'	7° 56'	29° 45'	0° 6'	12° 32'	20° 43'	26° 20'	27° 22'	8° 32'	28° 40'	S 28

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	
M 1	14s32	13n33	4s42	20s53	0n23	9s20	1s25	1n27	0s18	11s54	0s57	20n38	0n43	12s41	0s43	22n12
T 2	14 12	8 47	4 59	20 52	0 13	8 50	1 24	1 45	0 17	11 49	0 57	20 39	0 43	12 40	0 43	22 12
W 3	13 52	3 30	4 55	20 50	0 3	8 21	1 23	2 4	0 17	11 43	0 58	20 40	0 43	12 39	0 43	22 13
T 4	13 33	1s54	4 31	20 47	0s 6	7 51	1 22	2 22	0 16	11 38	0 58	20 41	0 43	12 37	0 43	22 13
F 5	13 12	7 2	3 50	20 43	0 16	7 21	1 21	2 40	0 15	11 33	0 58	20 42	0 44	12 36	0 43	22 13
S 6	12 52	11 38	2 56	20 37	0 25	6 51	1 20	2 58	0 14	11 28	0 58	20 43	0 44	12 35	0 43	22 13
S 7	12 31	15 28	1 54	20 30	0 33	6 21	1 18	3 17	0 13	11 23	0 58	20 44	0 44	12 34	0 43	22 13
M 8	12 11	18 23	0 47	20 21	0 42	5 51	1 17	3 35	0 12	11 18	0 58	20 45	0 44	12 33	0 43	22 13
T 9	11 50	20 19	0n19	20 12	0 50	5 20	1 16	3 53	0 12	11 12	0 58	20 46	0 44	12 31	0 43	22 13
W10	11 28	21 12	1 23	20 1	0 57	4 50	1 14	4 11	0 11	11 7	0 58	20 46	0 44	12 30	0 43	22 14
T 11	11 7	21 6	2 22	19 49	1 5	4 19	1 13	4 29	0 10	11 2	0 58	20 47	0 44	12 29	0 43	22 14
F 12	10 45	20 2	3 14	19 35	1 12	3 48	1 11	4 47	0 9	10 57	0 58	20 48	0 44	12 28	0 43	22 14
S 13	10 24	18 6	3 57	19 20	1 19	3 17	1 10	5 4	0 9	10 51	0 58	20 49	0 44	12 27	0 43	22 14
S 14	10 2	15 25	4 30	19 4	1 25	2 46	1 8	5 22	0 8	10 46	0 58	20 50	0 44	12 25	0 43	22 14
M15	9 40	12 6	4 51	18 47	1 31	2 14	1 6	5 40	0 7	10 41	0 58	20 51	0 44	12 24	0 43	22 14
T 16	9 18	8 18	4 59	18 28	1 36	1 43	1 4	5 58	0 6	10 35	0 58	20 52	0 44	12 23	0 43	22 14
W17	8 56	4 9	4 55	18 8	1 42	1 12	1 2	6 15	0 5	10 30	0 58	20 52	0 44	12 22	0 43	22 14
T 18	8 33	0n12	4 37	17 46	1 47	0 41	1 1	6 33	0 5	10 25	0 58	20 53	0 44	12 21	0 43	22 14
F 19	8 11	4 35	4 6	17 23	1 51	0 9	0 59	6 50	0 4	10 20	0 58	20 54	0 44	12 19	0 43	22 15
S 20	7 48	8 50	3 23	16 59	1 55	0n22	0 57	7 8	0 3	10 14	0 58	20 55	0 44	12 18	0 43	22 15
S 21	7 25	12 46	2 29	16 33	1 59	0 54	0 55	7 25	0 2	10 9	0 58	20 55	0 44	12 17	0 43	22 15
M22	7 2	16 10	1 28	16 6	2 2	1 25	0 52	7 42	0 2	10 4	0 58	20 56	0 44	12 16	0 43	22 15
T 23	6 39	18 50	0 20	15 38	2 5	1 56	0 50	7 59	0 1	9 58	0 58	20 57	0 45	12 15	0 43	22 15
W24	6 16	20 33	0s50	15 8	2 8	2 28	0 48	8 16	0 0	9 53	0 59	20 57	0 45	12 13	0 43	22 15
T 25	5 53	21 7	1 59	14 37	2 10	2 59	0 46	8 33	0n1	9 48	0 59	20 58	0 45	12 12	0 43	22 15
F 26	5 30	20 25	3 3	14 5	2 11	3 30	0 43	8 50	0 1	9 42	0 59	20 59	0 45	12 11	0 43	22 15
S 27	5 7	18 23	3 57	13 31	2 13	4 1	0 41	9 7	0 2	9 37	0 59	20 59	0 45	12 10	0 43	22 15
S 28	4s43	15n 8	4s37	12s56	2s14	4n32	0s39	9n24	0n 3	9s32	0s59	21n 0	0n45	12s 9	0s43	22n15

Julian Day Number = 2238648.5, Delta T = 07m26s

Ecliptic obliquity = 23°30'49", Nutation = 0°00'16", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°36'31", Lahiri = 15°43'31" Julian Calendar 1 Feb. 1417 == Greg. Calendar 10 Feb. 1417

# ASTRODIENST EPHEMERIS for the year 1417

## geocentric

MARCH 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	11 8 49	19°51'2	17°30	3°30	14°11	24°45	8°10	29°42	0°9	12°32	20°43	26°12	27°18	8°38	28°42	M 1
T 2	11 12 46	20°4'48	2°32	5°13	15°24	25°28	8°25	29°40	0°13	12°31	20°43	26°12	27°15	8°45	28°45	T 2
W 3	11 16 42	21°4'23	17°32	6°57	16°38	26°11	8°39	29°38	0°16	12°31	20°43	25°52	27°12	8°52	28°47	W 3
T 4	11 20 39	22°3'55	2°20	8°42	17°52	26°54	8°53	29°36	0°19	12°31	20°44	25°43	27°9	8°59	28°49	T 4
F 5	11 24 35	23°3'25	16°48	10°28	19°5	27°37	9°8	29°34	0°22	12°30	20°44	25°36	27°6	9°5	28°51	F 5
S 6	11 28 32	24°2'54	0°51	12°15	20°19	28°20	9°22	29°32	0°26	12°30	20°44	25°31	27°3	9°12	28°54	S 6
S 7	11 32 29	25°2'20	14°25	14°4	21°32	29°3	9°36	29°30	0°29	12°30	20°44	25°28	26°59	9°19	28°56	S 7
M 8	11 36 25	26°1'45	27°32	15°54	22°45	29°46	9°50	29°29	0°32	12°29	20°44	25°D27	26°56	9°25	28°57	M 8
T 9	11 40 22	27°1'08	10°15	17°46	23°59	0°29	10°5	29°27	0°35	12°29	20°45	25°28	26°53	9°32	28°59	T 9
W10	11 44 18	28°0'29	22°37	19°38	25°12	1°12	10°19	29°26	0°38	12°29	20°45	25°R29	26°50	9°39	29°1	W10
T 11	11 48 15	28°59'48	4°44	21°33	26°25	1°54	10°33	29°24	0°41	12°29	20°45	25°29	26°47	9°46	29°3	T 11
F 12	11 52 11	29°59'06	16°41	23°28	27°38	2°37	10°47	29°23	0°45	12°29	20°46	25°27	26°43	9°52	29°4	F 12
S 13	11 56 8	0°58'22	28°32	25°25	28°52	3°20	11°1	29°22	0°48	12°29	20°46	25°23	26°40	9°59	29°6	S 13
S 14	12 0 4	1°57'36	10°23	27°22	0°8	4°2	11°15	29°21	0°51	12°29	20°46	25°17	26°37	10°6	29°7	S 14
M15	12 4 1	2°56'48	22°16	29°22	1°18	4°45	11°29	29°20	0°54	12°D29	20°47	25°9	26°34	10°12	29°9	M15
T 16	12 7 57	3°55'58	4°16	1°22	2°31	5°27	11°43	29°19	0°57	12°29	20°47	25°0	26°31	10°19	29°10	T 16
W17	12 11 54	4°55'06	16°24	3°23	3°44	6°10	11°57	29°19	1°0	12°29	20°48	24°50	26°28	10°26	29°11	W17
T 18	12 15 51	5°54'12	28°42	5°26	4°56	6°52	12°11	29°18	1°3	12°29	20°48	24°41	26°24	10°33	29°12	T 18
F 19	12 19 47	6°53'16	11°11	7°29	6°9	7°35	12°25	29°18	1°6	12°29	20°49	24°33	26°21	10°39	29°13	F 19
S 20	12 23 44	7°52'18	23°51	9°33	7°22	8°17	12°39	29°17	1°9	12°29	20°49	24°27	26°18	10°46	29°14	S 20
S 21	12 27 40	8°51'18	6°43	11°38	8°35	8°59	12°52	29°17	1°12	12°29	20°50	24°23	26°15	10°53	29°15	S 21
M22	12 31 37	9°50'15	19°46	13°43	9°47	9°42	13°6	29°17	1°15	12°29	20°50	24°D22	26°12	10°59	29°15	M22
T 23	12 35 33	10°49'11	3°11	15°48	11°0	10°24	13°20	29°D17	1°17	12°30	20°51	24°22	26°9	11°6	29°16	T 23
W24	12 39 30	11°48'04	16°29	17°54	12°13	11°6	13°33	29°17	1°20	12°30	20°52	24°23	26°5	11°13	29°17	W24
T 25	12 43 26	12°46'55	0°51	19°59	13°25	11°48	13°47	29°17	1°23	12°30	20°52	24°24	26°2	11°20	29°17	T 25
F 26	12 47 23	13°45'44	14°7	22°3	14°37	12°30	14°1	29°17	1°26	12°31	20°53	24°R25	25°59	11°26	29°17	F 26
S 27	12 51 20	14°44'30	28°17	24°7	15°50	13°12	14°14	29°18	1°29	12°31	20°53	24°24	25°56	11°33	29°18	S 27
S 28	12 55 16	15°43'14	12°39	26°9	17°2	13°54	14°27	29°18	1°31	12°31	20°54	24°22	25°53	11°40	29°18	S 28
M29	12 59 13	16°41'56	27°10	28°9	18°14	14°36	14°41	29°19	1°34	12°32	20°55	24°18	25°49	11°46	29°18	M29
T 30	13 3 9	17°40'35	11°46	0°8	8	19°26	15°18	29°20	1°37	12°32	20°56	24°12	25°46	11°53	29°R18	T 30
W31	13 7 6	18°39'12	26°20	2°8	4	20°39	16°8	0	15°7	12°33	20°56	24°11	25°45	12°0	29°18	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	4s20	10n53	4s59	12s20	2s14	5n 3	0s36	9n40	0n 3	9s26	0s59	21n 0	0n45	12s 8	0s43	22n15
T 2	3 56	5 56	5 1	11 42	2 14	5 34	0 34	9 57	0 4	9 21	0 59	21 1	0 45	12 6	0 43	22 16
W 3	3 33	0 37	4 42	11 3	2 13	6 5	0 31	10 13	0 5	9 16	0 59	21 1	0 45	12 5	0 43	22 16
T 4	3 9	4s39	4 4	10 23	2 12	6 35	0 29	10 29	0 6	9 10	0 59	21 2	0 45	12 4	0 43	22 16
F 5	2 46	9 33	3 11	9 41	2 11	7 6	0 26	10 45	0 6	9 5	0 59	21 2	0 45	12 3	0 43	22 16
S 6	2 22	13 47	2 7	8 58	2 9	7 36	0 23	11 1	0 7	9 0	0 59	21 3	0 45	12 2	0 43	22 16
S 7	1 59	17 9	0 59	8 14	2 6	8 6	0 21	11 17	0 8	8 55	0 59	21 3	0 45	12 1	0 43	22 16
M 8	1 35	19 29	0n11	7 28	2 3	8 36	0 18	11 33	0 8	8 49	0 59	21 3	0 45	12 0	0 43	22 16
T 9	1 11	20 46	1 18	6 41	2 0	9 6	0 15	11 49	0 9	8 44	1 0	21 4	0 45	11 58	0 43	22 16
W10	0 48	20 59	2 20	5 53	1 56	9 35	0 12	12 5	0 10	8 39	1 0	21 4	0 45	11 57	0 43	22 16
T 11	0 24	20 12	3 14	5 4	1 51	10 5	0 10	12 20	0 10	8 33	1 0	21 4	0 45	11 56	0 43	22 16
F 12	0 0	18 31	3 59	4 14	1 46	10 34	0 7	12 35	0 11	8 28	1 0	21 5	0 45	11 55	0 43	22 16
S 13	0n23	16 3	4 33	3 22	1 41	11 3	0 4	12 51	0 12	8 23	1 0	21 5	0 45	11 54	0 43	22 16
S 14	0 47	12 57	4 56	2 29	1 35	11 31	0 1	13 6	0 12	8 18	1 0	21 5	0 45	11 53	0 43	22 16
M15	1 11	9 19	5 5	1 36	1 28	11 59	0n 2	13 21	0 13	8 12	1 0	21 5	0 45	11 52	0 43	22 16
T 16	1 34	5 17	5 2	0 41	1 21	12 27	0 5	13 36	0 14	8 7	1 0	21 6	0 45	11 51	0 43	22 16
W17	1 58	1 0	4 45	0n14	1 13	12 55	0 8	13 51	0 14	8 2	1 0	21 6	0 45	11 50	0 43	22 16
T 18	2 21	3n22	4 14	1 10	1 5	13 23	0 11	14 5	0 15	7 57	1 0	21 6	0 45	11 49	0 43	22 16
F 19	2 45	7 41	3 31	2 7	0 56	13 50	0 14	14 20	0 16	7 51	1 1	21 6	0 45	11 48	0 44	22 16
S 20	3 8	11 43	2 37	3 4	0 47	14 17	0 17	14 34	0 16	7 46	1 1	21 6	0 45	11 47	0 44	22 16
S 21	3 31	15 17	1 34	4 2	0 38	14 43	0 20	14 48	0 17	7 41	1 1	21 6	0 45	11 46	0 44	22 16
M22	3 55	18 8	0 25	5 0	0 28	15 9	0 23	15 2	0 18	7 36	1 1	21 6	0 45	11 45	0 44	22 16
T 23	4 18	20 4	0s47	5 58	0 17	15 35	0 26	15 16	0 18	7 31	1 1	21 6	0 45	11 44	0 44	22 16
W24	4 41	20 53	1 57	6 56	0 7	16 0	0 29	15 30	0 19	7 25	1 1	21 6	0 45	11 43	0 44	22 16
T 25	5 4	20 29	3 2	7 54	0n 4	16 25	0 32	15 44	0 19	7 20	1 1	21 6	0 45	11 42	0 44	22 16
F 26	5 27	18 50	3 57	8 51	0 15	16 50	0 35	15 57	0 20	7 15	1 1	21 6	0 45	11 41	0 44	22 16
S 27	5 50	16 1	4 39	9 47	0 26	17 14	0 38	16 11	0 21	7 10	1 2	21 6	0 45	11 40	0 44	22 16
S 28	6 12	12 12	5 4	10 42	0 37	17 38	0 41	16 24	0 21	7 5	1 2	21 6	0 45	11 39	0 44	22 16
M29	6 35	7 38	5 10	11 37	0 49	18 1	0 44	16 37	0 22	7 0	1 2	21 6	0 45	11 38	0 44	22 16
T 30	6 57	2 36	4 56	12 29	1 0	18 24	0 47	16 50	0 22	6 55	1 2	21 6	0 45	11 37	0 44	22 16
W31	7n20	2s33	4s23	13n20	1n11	18n46	0n50	17n 3	0n23	6s50	1s 2	21n 5	0n45	11s36	0s44	22n16

Julian Day Number = 2238676.5, Delta T = 07m25s

Ecliptic obliquity = 23°30'50, Nutation = 0°00'15, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°36'35, Lahiri = 15°43'35 Julian Calendar 1 March 1417 == Greg. Calendar 10 March 1417



# ASTRODIENST EPHEMERIS for the year 1417

## geocentric

MAY 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	15 9 19	18°42'02	17°13	27°R20	27°II16	7°II18	21°H24	0°Ω38	2°H42	13°Ω 4	21°II28	23°D40	24°M 5	15°Ω28	28°R34	S 1
S 2	15 13 15	19°39'44	0°X26	26°B55	28°25	7°58	21°35	0°42	2°43	13° 6	21°29	23°M40	24° 1	15°35	28°X31	S 2
M 3	15 17 12	20°37'25	13°22	26°27	29°34	8°39	21°46	0°46	2°45	13° 7	21°30	23°40	23°58	15°42	28°29	M 3
T 4	15 21 9	21°35'05	26° 1	25°56	0°Ω43	9°19	21°56	0°50	2°46	13° 9	21°32	23°41	23°55	15°48	28°26	T 4
W 5	15 25 5	22°32'44	8°Z24	25°24	1°53	10° 0	22° 7	0°55	2°47	13°10	21°33	23°41	23°52	15°55	28°23	W 5
T 6	15 29 2	23°30'21	20°34	24°51	3° 2	10°40	22°17	0°59	2°48	13°12	21°34	23°R41	23°49	16° 2	28°20	T 6
F 7	15 32 58	24°27'58	2°Ω35	24°16	4°10	11°21	22°27	1° 3	2°49	13°13	21°36	23°41	23°46	16° 9	28°18	F 7
S 8	15 36 55	25°25'33	14°30	23°42	5°19	12° 1	22°37	1° 8	2°50	13°15	21°37	23°41	23°42	16°15	28°15	S 8
S 9	15 40 51	26°23'07	26°24	23° 9	6°28	12°41	22°47	1°12	2°51	13°17	21°38	23°D41	23°39	16°22	28°12	S 9
M10	15 44 48	27°20'41	8°H20	22°36	7°36	13°22	22°57	1°17	2°52	13°18	21°39	23°41	23°36	16°29	28° 8	M10
T 11	15 48 44	28°18'13	20°24	22° 5	8°45	14° 2	23° 7	1°22	2°53	13°20	21°41	23°41	23°33	16°35	28° 5	T 11
W12	15 52 41	29°15'45	2°Y41	21°36	9°53	14°42	23°17	1°27	2°54	13°22	21°42	23°42	23°30	16°42	28° 2	W12
T 13	15 56 38	0°II13'16	15°12	21°10	11° 1	15°22	23°26	1°32	2°55	13°23	21°43	23°42	23°26	16°49	27°59	T 13
F 14	16 0 34	1°10'46	28° 3	20°47	12° 9	16° 2	23°36	1°37	2°56	13°25	21°45	23°43	23°23	16°56	27°56	F 14
S 15	16 4 31	2° 8'15	11°B13	20°28	13°17	16°42	23°45	1°42	2°57	13°27	21°46	23°43	23°20	17° 2	27°52	S 15
S 16	16 8 27	3° 5'43	24°44	20°12	14°25	17°23	23°54	1°47	2°57	13°29	21°48	23°R44	23°17	17° 9	27°49	S 16
M17	16 12 24	4° 3'10	8°II34	20° 0	15°32	18° 3	24° 3	1°52	2°58	13°30	21°49	23°43	23°14	17°16	27°46	M17
T 18	16 16 20	5° 0'37	22°40	19°52	16°40	18°43	24°12	1°57	2°59	13°32	21°50	23°42	23°11	17°23	27°42	T 18
W19	16 20 17	5°58'02	6°Ω59	19°D48	17°47	19°23	24°21	2° 3	2°59	13°34	21°52	23°41	23° 7	17°29	27°39	W19
T 20	16 24 13	6°55'26	21°24	19°49	18°54	20° 3	24°30	2° 8	3° 0	13°36	21°53	23°40	23° 4	17°36	27°35	T 20
F 21	16 28 10	7°52'49	5°Ω51	19°55	20° 1	20°43	24°38	2°14	3° 0	13°38	21°55	23°38	23° 1	17°43	27°31	F 21
S 22	16 32 7	8°50'11	20°16	20° 4	21° 8	21°22	24°47	2°19	3° 1	13°40	21°56	23°37	22°58	17°49	27°28	S 22
S 23	16 36 3	9°47'32	4°M33	20°19	22°14	22° 2	24°55	2°25	3° 1	13°41	21°57	23°D36	22°55	17°56	27°24	S 23
M24	16 40 0	10°44'52	18°41	20°38	23°21	22°42	25° 3	2°30	3° 1	13°43	21°59	23°36	22°52	18° 3	27°21	M24
T 25	16 43 56	11°42'10	2°Ω38	21° 1	24°27	23°22	25°11	2°36	3° 1	13°45	22° 0	23°37	22°48	18°10	27°17	T 25
W26	16 47 53	12°39'28	16°22	21°29	25°33	24° 2	25°19	2°42	3° 2	13°47	22° 2	23°38	22°45	18°16	27°13	W26
T 27	16 51 49	13°36'45	29°54	22° 1	26°39	24°41	25°27	2°48	3° 2	13°49	22° 3	23°40	22°42	18°23	27° 9	T 27
F 28	16 55 46	14°34'01	13°M12	22°37	27°45	25°21	25°35	2°54	3° 2	13°51	22° 5	23°41	22°39	18°30	27° 6	F 28
S 29	16 59 42	15°31'16	26°17	23°17	28°51	26° 1	25°42	3° 0	3° 2	13°53	22° 6	23°R41	22°36	18°37	27° 2	S 29
S 30	17 3 39	16°28'30	9°X10	24° 2	29°56	26°40	25°49	3° 6	3°R 2	13°55	22° 7	23°40	22°32	18°43	26°58	S 30
M31	17 7 36	17°II25'44	21°X50	24°B50	1°Ω 1	27°II20	25°H57	3°Ω12	3°H 2	13°Ω57	22°II 9	23°M38	22°M29	18°Ω50	26°X54	M31

Day	☉	☽		♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	17n26	17s36	0s36	19n59	0n22	25n35	2n 6	22n14	0n39	4s27	1 s 7	20n49	0n46	11s14	0s45	22n14	0s38	17n15	6s 0	18s45	18s51	11s23	17s 4	6n26	
S 2	17 42	19 42	0n37	19 37	0 5	25 37	2 7	22 22	0 40	4 23	1 8	20 48	0 46	11 14	0 45	22 14	0 38	17 15	6 0	18 45	18 50	11 21	17 3	6 27	
M 3	17 58	20 42	1 47	19 14	0s12	25 40	2 9	22 28	0 40	4 19	1 8	20 48	0 46	11 14	0 45	22 14	0 38	17 15	6 0	18 45	18 49	11 19	17 3	6 27	
T 4	18 13	20 37	2 50	18 50	0 29	25 41	2 10	22 35	0 41	4 15	1 8	20 47	0 46	11 13	0 45	22 14	0 38	17 16	6 0	18 45	18 49	11 17	17 2	6 28	
W 5	18 28	19 32	3 43	18 25	0 47	25 41	2 11	22 42	0 41	4 11	1 8	20 46	0 46	11 13	0 45	22 14	0 38	17 16	6 0	18 45	18 48	11 15	17 2	6 28	
T 6	18 42	17 33	4 26	18 0	1 4	25 41	2 13	22 48	0 42	4 7	1 8	20 45	0 46	11 12	0 45	22 14	0 38	17 16	5 59	18 45	18 47	11 13	17 1	6 29	
F 7	18 57	14 50	4 56	17 35	1 21	25 41	2 14	22 54	0 42	4 3	1 9	20 44	0 46	11 12	0 45	22 14	0 38	17 16	5 59	18 45	18 46	11 11	17 1	6 29	
S 8	19 11	11 32	5 13	17 10	1 38	25 39	2 15	23 0	0 42	3 59	1 9	20 43	0 46	11 12	0 45	22 13	0 38	17 16	5 59	18 45	18 45	11 8	17 0	6 30	
S 9	19 24	7 47	5 17	16 46	1 55	25 37	2 16	23 6	0 43	3 56	1 9	20 42	0 46	11 11	0 45	22 13	0 38	17 17	5 59	18 45	18 45	11 6	17 0	6 30	
M10	19 38	3 44	5 7	16 22	2 11	25 34	2 17	23 11	0 43	3 52	1 9	20 41	0 46	11 11	0 45	22 13	0 38	17 17	5 59	18 45	18 44	11 4	17 0	6 30	
T 11	19 51	0n32	4 43	16 0	2 26	25 31	2 18	23 17	0 44	3 48	1 9	20 40	0 46	11 11	0 45	22 13	0 38	17 17	5 59	18 45	18 43	11 2	16 59	6 31	
W12	20 3	4 50	4 7	15 39	2 40	25 26	2 18	23 22	0 44	3 45	1 10	20 39	0 46	11 10	0 45	22 13	0 38	17 17	5 59	18 45	18 42	11 0	16 59	6 31	
T 13	20 16	9 2	3 18	15 20	2 53	25 22	2 19	23 27	0 45	3 41	1 10	20 38	0 46	11 10	0 45	22 13	0 38	17 17	5 59	18 45	18 41	10 58	16 58	6 32	
F 14	20 28	12 57	2 18	15 2	3 5	25 16	2 19	23 31	0 45	3 37	1 10	20 37	0 46	11 10	0 45	22 13	0 38	17 17	5 59	18 46	18 41	10 56	16 58	6 32	
S 15	20 39	16 20	1 9	14 46	3 16	25 10	2 20	23 36	0 45	3 34	1 10	20 35	0 46	11 10	0 45	22 12	0 38	17 18	5 58	18 46	18 40	10 54	16 57	6 32	
S 16	20 50	18 55	0s 6	14 33	3 25	25 3	2 20	23 40	0 46	3 30	1 11	20 34	0 46	11 9	0 45	22 12	0 38	17 18	5 58	18 46	18 39	10 52	16 57	6 33	
M17	21 1	20 28	1 21	14 21	3 34	24 56	2 20	23 44	0 46	3 27	1 11	20 33	0 46	11 9	0 45	22 12	0 38	17 18	5 58	18 46	18 38	10 50	16 57	6 33	
T 18	21 12	20 45	2 33	14 12	3 41	24 47	2 20	23 48	0 47	3 24	1 11	20 32	0 46	11 9	0 45	22 12	0 38	17 18	5 58	18 45	18 37	10 48	16 56	6 33	
W19	21 22	19 43	3 37	14 5	3 47	24 39	2 20	23 52	0 47	3 20	1 11	20 31	0 46	11 9	0 46	22 12	0 38	17 18	5 58	18 45	18 37	10 46	16 56	6 34	
T 20	21 32	17 24	4 27	14 1	3 52	24 29	2 20	23 56	0 47	3 17	1 12	20 30	0 46	11 9	0 46	22 12	0 38	17 18	5 58	18 45	18 36	10 43	16 55	6 34	
F 21	21 41	14 0	5 1	13 59	3 56	24 19	2 20	23 59	0 48	3 14	1 12	20 28	0 46	11 9	0 46	22 11	0 38	17 19	5 58	18 44	18 35	10 41	16 55	6 34	
S 22	21 51	9 47	5 15	13 59	3 59	24 9	2 20	24 2	0 48	3 11	1 12	20 27	0 46	11 8	0 46	22 11	0 37	17 19	5 58	18 44	18 34	10 39	16 55	6 35	
S 23	21 59	5 3	5 10	14 1	4 0	23 57	2 19	24 5	0 49	3 8	1 12	20 26	0 46	11 8	0 46	22 11	0 37	17 19	5 58	18 44	18 33	10 37	16 54	6 35	
M24	22 8	0 6	4 46	14 6	4 1	23 46	2 18	24 8	0 49	3 5	1 13	20 25	0 46	11 8	0 46	22 11	0 37	17 19	5 58	18 44	18 33	10 35	16 54	6 35	
T 25	22 16	4s48	4 6	14 12	4 0	23 33	2 18	24 10	0 49	3 2	1 13	20 23	0 46	11 8	0 46	22 11	0 37	17 19	5 58	18 44	18 32	10 33	16 54	6 36	
W26	22 23	9 24	3 11	14 21	3 59	23 20	2 17	24 12	0 50	2 59	1 13	20 22	0 46	11 8	0 46	22 11	0 37	17 19	5 58	18 44	18 31	10 31	16 53	6 36	
T 27	22 30	13 27	2 7	14 31	3 56	23 7	2 16	24 14	0 50	2 56	1 13	20 21	0 46	11 8	0 46	22 10	0 37	17 20	5 58	18 45	18 30	10 29	16 53	6 36	
F 28	22 37	16 46	0 57	14 44	3 53	22 53	2 15	24 16	0 50	2 53	1 14	20 19	0 46	11 8	0 46	22 10	0 37	17 20	5 57	18 45	18 29	10 27	16 53	6 36	
S 29	22 43	19 9	0n14	14 58	3 48	22 38	2 14	24 18	0 51	2 51	1 14	20 18	0 46	11 8	0 46	22 10	0 37	17 20	5 57	18 45	18 29	10 25	16 52	6 37	
S 30	22 49	20 30	1 24	15 14	3 43	22 28	2 13	24 19	0 51	2 48	1 14	20 17	0 46	11 8	0 46	22 10	0 37	17 20	5 57	18 45	18 28	10 23	16 52	6 37	
M31	22n55	20s47	2n29	15n31	3s38	22n 7	2n11	24n21	0n52	2s45	1s14	20n15	0n46	11s 8	0s46	22n10	0s37	17n20	5s57	18s44	18s27	10s20	16s52	6n37	

# ASTRODIENST EPHEMERIS for the year 1417

## geocentric

JUNE 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	17 11 32	18 <sup>II</sup> 22'58	4 <sup>☾</sup> 17	25 <sup>♂</sup> 43	2 <sup>♂</sup> 6	28 <sup>II</sup> 0	26 <sup>♂</sup> 4	3 <sup>♂</sup> 18	3 <sup>♂</sup> R 2	13 <sup>☾</sup> 59	22 <sup>II</sup> 10	23 <sup>♂</sup> R35	22 <sup>♂</sup> 26	18 <sup>☾</sup> 57	26 <sup>♂</sup> R50	T 1
W 2	17 15 29	19 <sup>°</sup> 20'11	16 <sup>°</sup> 33	26 <sup>°</sup> 40	3 <sup>°</sup> 11	28 <sup>°</sup> 39	26 <sup>°</sup> 10	3 <sup>°</sup> 24	3 <sup>°</sup> 2	14 <sup>°</sup> 1	22 <sup>°</sup> 12	23 <sup>♂</sup> 31	22 <sup>°</sup> 23	19 <sup>°</sup> 3	26 <sup>°</sup> 46	W 2
T 3	17 19 25	20 <sup>°</sup> 17'23	28 <sup>°</sup> 40	27 <sup>°</sup> 40	4 <sup>°</sup> 15	29 <sup>°</sup> 19	26 <sup>°</sup> 17	3 <sup>°</sup> 31	3 <sup>°</sup> 2	14 <sup>°</sup> 3	22 <sup>°</sup> 13	23 <sup>°</sup> 27	22 <sup>°</sup> 20	19 <sup>°</sup> 10	26 <sup>°</sup> 43	T 3
F 4	17 23 22	21 <sup>°</sup> 14'35	10 <sup>☾</sup> 39	28 <sup>°</sup> 44	5 <sup>°</sup> 20	29 <sup>°</sup> 58	26 <sup>°</sup> 24	3 <sup>°</sup> 37	3 <sup>°</sup> 1	14 <sup>°</sup> 6	22 <sup>°</sup> 15	23 <sup>°</sup> 23	22 <sup>°</sup> 17	19 <sup>°</sup> 17	26 <sup>°</sup> 39	F 4
S 5	17 27 18	22 <sup>°</sup> 11'48	22 <sup>°</sup> 33	29 <sup>°</sup> 52	6 <sup>°</sup> 24	0 <sup>☾</sup> 38	26 <sup>°</sup> 30	3 <sup>°</sup> 43	3 <sup>°</sup> 1	14 <sup>°</sup> 8	22 <sup>°</sup> 16	23 <sup>°</sup> 19	22 <sup>°</sup> 13	19 <sup>°</sup> 24	26 <sup>°</sup> 35	S 5
S 6	17 31 15	23 <sup>°</sup> 8'59	4 <sup>☾</sup> 26	1 <sup>II</sup> 3	7 <sup>°</sup> 27	1 <sup>°</sup> 17	26 <sup>°</sup> 36	3 <sup>°</sup> 50	3 <sup>°</sup> 1	14 <sup>°</sup> 10	22 <sup>°</sup> 18	23 <sup>°</sup> 16	22 <sup>°</sup> 10	19 <sup>°</sup> 30	26 <sup>°</sup> 31	S 6
M 7	17 35 12	24 <sup>°</sup> 6'11	16 <sup>°</sup> 21	2 <sup>°</sup> 18	8 <sup>°</sup> 31	1 <sup>°</sup> 56	26 <sup>°</sup> 42	3 <sup>°</sup> 56	3 <sup>°</sup> 0	14 <sup>°</sup> 12	22 <sup>°</sup> 19	23 <sup>°</sup> 14	22 <sup>°</sup> 7	19 <sup>°</sup> 37	26 <sup>°</sup> 27	M 7
T 8	17 39 8	25 <sup>°</sup> 3'23	28 <sup>°</sup> 24	3 <sup>°</sup> 37	9 <sup>°</sup> 34	2 <sup>°</sup> 36	26 <sup>°</sup> 48	4 <sup>°</sup> 3	3 <sup>°</sup> 0	14 <sup>°</sup> 14	22 <sup>°</sup> 20	23 <sup>°</sup> D14	22 <sup>°</sup> 4	19 <sup>°</sup> 44	26 <sup>°</sup> 23	T 8
W 9	17 43 5	26 <sup>°</sup> 0'35	10 <sup>☾</sup> 39	4 <sup>°</sup> 59	10 <sup>°</sup> 37	3 <sup>°</sup> 15	26 <sup>°</sup> 54	4 <sup>°</sup> 9	3 <sup>°</sup> 0	14 <sup>°</sup> 16	22 <sup>°</sup> 22	23 <sup>°</sup> 15	22 <sup>°</sup> 1	19 <sup>°</sup> 50	26 <sup>°</sup> 19	W 9
T 10	17 47 1	26 <sup>°</sup> 57'46	23 <sup>°</sup> 10	6 <sup>°</sup> 24	11 <sup>°</sup> 40	3 <sup>°</sup> 55	27 <sup>°</sup> 0	4 <sup>°</sup> 16	2 <sup>°</sup> 59	14 <sup>°</sup> 18	22 <sup>°</sup> 23	23 <sup>°</sup> 17	21 <sup>°</sup> 58	19 <sup>°</sup> 57	26 <sup>°</sup> 15	T 10
F 11	17 50 58	27 <sup>°</sup> 54'58	6 <sup>☾</sup> 2	7 <sup>°</sup> 53	12 <sup>°</sup> 43	4 <sup>°</sup> 34	27 <sup>°</sup> 5	4 <sup>°</sup> 23	2 <sup>°</sup> 58	14 <sup>°</sup> 20	22 <sup>°</sup> 25	23 <sup>°</sup> 18	21 <sup>°</sup> 54	20 <sup>°</sup> 4	26 <sup>°</sup> 11	F 11
S 12	17 54 54	28 <sup>°</sup> 52'10	19 <sup>°</sup> 18	9 <sup>°</sup> 26	13 <sup>°</sup> 45	5 <sup>°</sup> 13	27 <sup>°</sup> 10	4 <sup>°</sup> 30	2 <sup>°</sup> 58	14 <sup>°</sup> 23	22 <sup>°</sup> 26	23 <sup>°</sup> R19	21 <sup>°</sup> 51	20 <sup>°</sup> 11	26 <sup>°</sup> 7	S 12
S 13	17 58 51	29 <sup>°</sup> 49'22	2 <sup>II</sup> 59	11 <sup>°</sup> 2	14 <sup>°</sup> 47	5 <sup>°</sup> 52	27 <sup>°</sup> 15	4 <sup>°</sup> 36	2 <sup>°</sup> 57	14 <sup>°</sup> 25	22 <sup>°</sup> 28	23 <sup>°</sup> 19	21 <sup>°</sup> 48	20 <sup>°</sup> 17	26 <sup>°</sup> 4	S 13
M14	18 2 47	0 <sup>☾</sup> 46'34	17 <sup>°</sup> 4	12 <sup>°</sup> 41	15 <sup>°</sup> 49	6 <sup>°</sup> 32	27 <sup>°</sup> 20	4 <sup>°</sup> 43	2 <sup>°</sup> 56	14 <sup>°</sup> 27	22 <sup>°</sup> 29	23 <sup>°</sup> 17	21 <sup>°</sup> 45	20 <sup>°</sup> 24	26 <sup>°</sup> 0	M14
T 15	18 6 44	1 <sup>°</sup> 43'47	1 <sup>☾</sup> 32	14 <sup>°</sup> 23	16 <sup>°</sup> 50	7 <sup>°</sup> 11	27 <sup>°</sup> 25	4 <sup>°</sup> 50	2 <sup>°</sup> 56	14 <sup>°</sup> 29	22 <sup>°</sup> 30	23 <sup>°</sup> 13	21 <sup>°</sup> 42	20 <sup>°</sup> 31	25 <sup>°</sup> 56	T 15
W16	18 10 41	2 <sup>°</sup> 40'59	16 <sup>°</sup> 15	16 <sup>°</sup> 9	17 <sup>°</sup> 51	7 <sup>°</sup> 50	27 <sup>°</sup> 30	4 <sup>°</sup> 57	2 <sup>°</sup> 55	14 <sup>°</sup> 31	22 <sup>°</sup> 32	23 <sup>°</sup> 8	21 <sup>°</sup> 38	20 <sup>°</sup> 38	25 <sup>°</sup> 52	W16
T 17	18 14 37	3 <sup>°</sup> 38'11	1 <sup>♂</sup> 7	17 <sup>°</sup> 57	18 <sup>°</sup> 52	8 <sup>°</sup> 29	27 <sup>°</sup> 34	5 <sup>°</sup> 4	2 <sup>°</sup> 54	14 <sup>°</sup> 33	22 <sup>°</sup> 33	23 <sup>°</sup> 2	21 <sup>°</sup> 35	20 <sup>°</sup> 44	25 <sup>°</sup> 48	T 17
F 18	18 18 34	4 <sup>°</sup> 35'22	15 <sup>°</sup> 59	19 <sup>°</sup> 48	19 <sup>°</sup> 53	9 <sup>°</sup> 8	27 <sup>°</sup> 38	5 <sup>°</sup> 11	2 <sup>°</sup> 53	14 <sup>°</sup> 36	22 <sup>°</sup> 35	22 <sup>°</sup> 56	21 <sup>°</sup> 32	20 <sup>°</sup> 51	25 <sup>°</sup> 44	F 18
S 19	18 22 30	5 <sup>°</sup> 32'34	0 <sup>☾</sup> 43	21 <sup>°</sup> 43	20 <sup>°</sup> 53	9 <sup>°</sup> 47	27 <sup>°</sup> 42	5 <sup>°</sup> 18	2 <sup>°</sup> 52	14 <sup>°</sup> 38	22 <sup>°</sup> 36	22 <sup>°</sup> 51	21 <sup>°</sup> 29	20 <sup>°</sup> 58	25 <sup>°</sup> 40	S 19
S 20	18 26 27	6 <sup>°</sup> 29'45	15 <sup>°</sup> 13	23 <sup>°</sup> 39	21 <sup>°</sup> 53	10 <sup>°</sup> 26	27 <sup>°</sup> 46	5 <sup>°</sup> 25	2 <sup>°</sup> 51	14 <sup>°</sup> 40	22 <sup>°</sup> 38	22 <sup>°</sup> 48	21 <sup>°</sup> 26	21 <sup>°</sup> 4	25 <sup>°</sup> 37	S 20
M21	18 30 23	7 <sup>°</sup> 26'56	29 <sup>°</sup> 25	25 <sup>°</sup> 39	22 <sup>°</sup> 52	11 <sup>°</sup> 6	27 <sup>°</sup> 50	5 <sup>°</sup> 32	2 <sup>°</sup> 50	14 <sup>°</sup> 42	22 <sup>°</sup> 39	22 <sup>°</sup> 46	21 <sup>°</sup> 23	21 <sup>°</sup> 11	25 <sup>°</sup> 33	M21
T 22	18 34 20	8 <sup>°</sup> 24'07	13 <sup>♂</sup> 18	27 <sup>°</sup> 40	23 <sup>°</sup> 51	11 <sup>°</sup> 45	27 <sup>°</sup> 53	5 <sup>°</sup> 39	2 <sup>°</sup> 49	14 <sup>°</sup> 44	22 <sup>°</sup> 40	22 <sup>°</sup> D46	21 <sup>°</sup> 19	21 <sup>°</sup> 18	25 <sup>°</sup> 29	T 22
W23	18 38 16	9 <sup>°</sup> 21'18	26 <sup>°</sup> 51	29 <sup>°</sup> 43	24 <sup>°</sup> 50	12 <sup>°</sup> 24	27 <sup>°</sup> 57	5 <sup>°</sup> 46	2 <sup>°</sup> 48	14 <sup>°</sup> 47	22 <sup>°</sup> 42	22 <sup>°</sup> 47	21 <sup>°</sup> 16	21 <sup>°</sup> 25	25 <sup>°</sup> 25	W23
T 24	18 42 13	10 <sup>°</sup> 18'29	10 <sup>♂</sup> 5	1 <sup>☾</sup> 48	25 <sup>°</sup> 48	13 <sup>°</sup> 3	28 <sup>°</sup> 0	5 <sup>°</sup> 53	2 <sup>°</sup> 47	14 <sup>°</sup> 49	22 <sup>°</sup> 43	22 <sup>°</sup> 48	21 <sup>°</sup> 13	21 <sup>°</sup> 31	25 <sup>°</sup> 22	T 24
F 25	18 46 10	11 <sup>°</sup> 15'40	23 <sup>°</sup> 4	3 <sup>°</sup> 55	26 <sup>°</sup> 46	13 <sup>°</sup> 42	28 <sup>°</sup> 3	6 <sup>°</sup> 1	2 <sup>°</sup> 46	14 <sup>°</sup> 51	22 <sup>°</sup> 45	22 <sup>°</sup> R48	21 <sup>°</sup> 10	21 <sup>°</sup> 38	25 <sup>°</sup> 18	F 25
S 26	18 50 6	12 <sup>°</sup> 12'51	5 <sup>♂</sup> 50	6 <sup>°</sup> 2	27 <sup>°</sup> 44	14 <sup>°</sup> 20	28 <sup>°</sup> 6	6 <sup>°</sup> 8	2 <sup>°</sup> 45	14 <sup>°</sup> 53	22 <sup>°</sup> 46	22 <sup>°</sup> 48	21 <sup>°</sup> 7	21 <sup>°</sup> 45	25 <sup>°</sup> 14	S 26
S 27	18 54 3	13 <sup>°</sup> 10'02	18 <sup>°</sup> 23	8 <sup>°</sup> 10	28 <sup>°</sup> 41	14 <sup>°</sup> 59	28 <sup>°</sup> 8	6 <sup>°</sup> 15	2 <sup>°</sup> 43	14 <sup>°</sup> 56	22 <sup>°</sup> 47	22 <sup>°</sup> 45	21 <sup>°</sup> 3	21 <sup>°</sup> 52	25 <sup>°</sup> 11	S 27
M28	18 57 59	14 <sup>°</sup> 7'14	0 <sup>☾</sup> 47	10 <sup>°</sup> 19	29 <sup>°</sup> 37	15 <sup>°</sup> 38	28 <sup>°</sup> 11	6 <sup>°</sup> 23	2 <sup>°</sup> 42	14 <sup>°</sup> 58	22 <sup>°</sup> 49	22 <sup>°</sup> 40	21 <sup>°</sup> 0	21 <sup>°</sup> 58	25 <sup>°</sup> 7	M28
T 29	19 1 56	15 <sup>°</sup> 4'26	13 <sup>°</sup> 1	12 <sup>°</sup> 28	0 <sup>☾</sup> 33	16 <sup>°</sup> 17	28 <sup>°</sup> 13	6 <sup>°</sup> 30	2 <sup>°</sup> 41	15 <sup>°</sup> 0	22 <sup>°</sup> 50	22 <sup>°</sup> 32	20 <sup>°</sup> 57	22 <sup>°</sup> 5	25 <sup>°</sup> 4	T 29
W30	19 5 52	16 <sup>☾</sup> 1'38	25 <sup>☾</sup> 8	14 <sup>☾</sup> 36	1 <sup>♂</sup> 29	16 <sup>☾</sup> 56	28 <sup>♂</sup> 15	6 <sup>♂</sup> 37	2 <sup>♂</sup> 39	15 <sup>☾</sup> 2	22 <sup>II</sup> 51	22 <sup>♂</sup> 23	20 <sup>♂</sup> 54	22 <sup>☾</sup> 12	25 <sup>♂</sup> 0	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	23n 0	20s 2	3n25	15n50	3s31	21n51	2n10	24n22	0n52	2s43	1s15	20n14	0n46	11s 8	0s46	22n 9	0s37	17n20	5s57	18s44	18s26	10s18	16s51	6n37			
W 2	23 5	18 20	4 10	16 10	3 24	21 35	2 8	24 23	0 52	2 40	1 15	20 12	0 46	11 8	0 46	22 9	0 37	17 20	5 57	18 43	18 25	10 16	16 51	6 37			
T 3	23 9	15 51	4 44	16 31	3 16	21 18	2 6	24 23	0 53	2 38	1 15	20 11	0 46	11 9	0 46	22 9	0 37	17 21	5 57	18 42	18 25	10 14	16 51	6 38			
F 4	23 13	12 43	5 5	16 53	3 7	21 0	2 4	24 24	0 53	2 36	1 16	20 9	0 46	11 9	0 46	22 9	0 37	17 21	5 57	18 40	18 24	10 12	16 51	6 38			
S 5	23 17	9 7	5 13	17 17	2 58	20 42	2 2	24 24	0 53	2 33	1 16	20 8	0 46	11 9	0 46	22 9	0 37	17 21	5 57	18 40	18 23	10 10	16 50	6 38			
S 6	23 20	5 9	5 7	17 41	2 49	20 24	2 0	24 24	0 54	2 31	1 16	20 6	0 46	11 9	0 46	22 8	0 37	17 21	5 57	18 39	18 22	10 8	16 50	6 38			
M 7	23 23	0 59	4 48	18 5	2 39	20 5	1 58	24 24	0 54	2 29	1 16	20 5	0 47	11 9	0 46	22 8	0 37	17 21	5 57	18 38	18 21	10 6	16 50	6 38			
T 8	23 25	3n16	4 16	18 31	2 29	19 45	1 55	24 24	0 54	2 27	1 17	20 3	0 47	11 9	0 46	22 8	0 37	17 21	5 57	18 38	18 20	10 4	16 50	6 38			
W 9	23 27	7 28	3 32	18 56	2 18	19 26	1 52	24 23	0 55	2 25	1 17	20 2	0 47	11 10	0 46	22 8	0 37	17 21	5 57	18 39	18 20	10 2	16 50	6 38			
T 10	23 29	11 28	2 37	19 22	2 7	19 6	1 50	24 22	0 55	2 23	1 17	20 0	0 47	11 10	0 46	22 8	0 37	17 21	5 57	18 39	18 19	9 59	16 49	6 38			
F 11	23 30	15 2	1 33	19 48	1 55	18 45	1 47	24 21	0 55	2 21	1 17	19 59	0 47	11 10	0 46	22 7	0 37	17 22	5 57	18 39	18 18	9 57	16 49	6 38			
S 12	23 31	17 57	0 22	20 14	1 43	18 24	1 44	24 20	0 56	2 19	1 18	19 57	0 47	11 10	0 46	22 7	0 37	17 22	5 57	18 40	18 17	9 55	16 49	6 39			
S 13	23 31	19 58	0s22	20 39	1 31	18 3	1 41	24 19	0 56	2 17	1 18	19 56	0 47	11 10	0 47	22 7	0 37	17 22	5 57	18 39	18 16	9 53	16 49	6 39			
M14	23 31	20 48	2 6	21 5	1 19	17 41	1 37	24 17	0 56	2 16	1 18	19 54	0 47	11 11	0 47	22 7	0 37	17 22	5 57	18 39	18 15	9 51	16 49	6 39			
T 15	23 30	20 18	3 13	21 29	1 7	17 20	1 34	24 15	0 56	2 14	1 19	19 52	0 47	11 11	0 47	22 7	0 37	17 22	5 57	18 38	18 15	9 49	16 49	6 39			
W16	23 29	18 25	4 8	21 53	0 55	16 57	1 30	24 14	0 57	2 12	1 19	19 51	0 47	11 11	0 47	22 6	0 37	17 22	5 57	18 37	18 14	9 47	16 48	6 39			
T 17	23 28	15 18	4 47	22 15	0 43	16 35	1 26	24 11	0 57	2 11	1 19	19 49	0 47	11 12	0 47	22 6	0 37	17 22	5 57	18 35	18 13	9 45	16 48	6 39			
F 18	23 26	11 12	5 7	22 37	0 31	16 12	1 22	24 9	0 57	2 9	1 20	19 47	0 47	11 12	0 47	22 6	0 37	17 22	5 57	18 34	18 12	9 43	16 48	6 39			
S 19	23 24	6 28	5 6	22 57	0 19	15 49	1 18	24 7	0 58	2 8	1 20	19 46	0 47	11 12	0 47	22 6	0 37	17 22	5 56	18 33	18 11	9 40	16 48	6 39			
S 20	23 21	1 27	4 46	23 15	0 7	15 26	1 14	24 4	0 58	2 7	1 20	19 44	0 47	11 13	0 47	22 5	0 37	17 23	5 56	18 32	18 11	9 38	16 48	6 39			
M21	23 18	3s34	4 8	23 31	0n 5	15 2	1 10	24 1	0 58	2 6	1 20	19 42	0 47	11 13	0 47	22 5	0 37	17 23	5 56	18 31	18 10	9 36	16 48	6 39			
T 22	23 15	8 17	3 17	23 45	0 16	14 38	1 5	23 58	0 59	2 5	1 21	19 41	0 47	11 14	0 47	22 5	0 37	17 23	5 56	18 31	18 9	9 34	16 48	6 39			
W23	23 11	12 29	2 16	23 57	0 26	14 14	1 1	23 55	0 59	2 3	1 21	19 39	0 47	11 14	0 47	22 5	0 37	17 23	5 56	18 31	18 8	9 32	16 48	6 39			
T 24	23 7	15 58	1 8	24 7	0 37	13 50	0 56	23 51	0 59	2 2	1 21	19 37	0 47	11 15	0 47	22 5	0 37	17 23	5 56	18 32	18 7	9 30	16 48	6 38			
F 25	23 2	18 35	0n 1	24 14	0 46	13 26	0 51	23 47	0 59	2 2	1 22	19 35	0 47	11 15	0 47	22 4	0 37	17 23	5 56	18 32	18 6	9 28	16 48	6 38			
S 26	22 57	20 12	1 10	24 18	0 55	13 1	0 46	23 44	1 0	2 1	1 22	19 34	0 47	11 15	0 47	22 4	0 37	17 23	5 56	18 32	18 5	9 26	16 48	6 38			
S 27	22 52	20 48	2 13	24 19	1 4	12 36	0 41	23 40	1 0	2 0	1 22	19 32	0 47	11 16	0 47	22 4	0 37	17 23	5 56	18 31	18 5	9 23	16 48	6 38			
M28	22 46	20 21	3 9	24 18	1 12	12 11	0 35	23 35	1 0	1 59	1 23	19 30	0 47	11 16	0 47	22 4	0 37	17 23	5 56	18 30	18 4	9 21	16 48	6 38			
T 29	22 40	18 57	3 56	24 14	1 19	11 46	0 30	23 31	1 0	1 51	1 23	19 28	0 47	11 17	0 47	22 3	0 37	17 23	5 56	18 28	18 3	9 19	16 47	6 38			
W30	22n33	16s43	4n31	24n 7	1n25	11n21	0n24	23n26	1n 1	1s58	1s23	19n26	0n48	11s17	0s47	22n 3	0s37	17n23	5s56	18s25	18s 2	9s17	16s48	6n38			



# ASTRODIENST EPHEMERIS for the year 1417

## geocentric

JULY 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	19 9 49	16°58'50	7° 9	16°45	2°24	17°35	28°17	6°45	2°R38	15° 5	22°53	22°R13	20°M51	22°18	24°R57	T 1
F 2	19 13 45	17°56'03	19° 4	18°52	3°18	18°14	28°18	6°52	2°H37	15° 7	22°54	22°M 3	20°48	22°25	24°R53	F 2
S 3	19 17 42	18°53'17	0°H57	20°59	4°13	18°52	28°20	7° 0	2°35	15° 9	22°55	21°54	20°44	22°32	24°50	S 3
S 4	19 21 39	19°50'32	12°49	23° 5	5° 6	19°31	28°21	7° 7	2°34	15°11	22°57	21°46	20°41	22°39	24°46	S 4
M 5	19 25 35	20°47'47	24°43	25°10	5°59	20°10	28°22	7°14	2°32	15°13	22°58	21°40	20°38	22°45	24°43	M 5
T 6	19 29 32	21°45'03	6°V44	27°13	6°51	20°49	28°23	7°22	2°30	15°16	22°59	21°37	20°35	22°52	24°40	T 6
W 7	19 33 28	22°42'20	18°56	29°16	7°43	21°27	28°24	7°30	2°29	15°18	23° 1	21°D36	20°32	22°59	24°37	W 7
T 8	19 37 25	23°39'38	1°B24	1°N16	8°34	22° 6	28°24	7°37	2°27	15°20	23° 2	21°36	20°29	23° 5	24°33	T 8
F 9	19 41 21	24°36'56	14°13	3°15	9°24	22°45	28°24	7°45	2°25	15°22	23° 3	21°37	20°25	23°12	24°30	F 9
S 10	19 45 18	25°34'16	27°26	5°13	10°14	23°23	28°R24	7°52	2°24	15°24	23° 4	21°R37	20°22	23°19	24°27	S 10
S 11	19 49 14	26°31'37	11°II 8	7° 9	11° 3	24° 2	28°24	8° 0	2°22	15°27	23° 6	21°35	20°19	23°26	24°24	S 11
M12	19 53 11	27°28'59	25°18	9° 3	11°52	24°41	28°24	8° 7	2°20	15°29	23° 7	21°31	20°16	23°32	24°21	M12
T 13	19 57 8	28°26'22	9°B55	10°56	12°39	25°19	28°23	8°15	2°18	15°31	23° 8	21°25	20°13	23°39	24°19	T 13
W14	20 1 4	29°23'46	24°53	12°47	13°26	25°58	28°23	8°23	2°16	15°33	23° 9	21°17	20° 9	23°46	24°16	W14
T 15	20 5 1	0°N21'11	10°N 3	14°37	14°12	26°36	28°22	8°30	2°14	15°35	23°11	21° 7	20° 6	23°53	24°13	T 15
F 16	20 8 57	1°18'37	25°15	16°25	14°57	27°15	28°21	8°38	2°12	15°38	23°12	20°57	20° 3	23°59	24°10	F 16
S 17	20 12 54	2°16'03	10°M19	18°11	15°41	27°54	28°19	8°46	2°11	15°40	23°13	20°48	20° 0	24° 6	24° 8	S 17
S 18	20 16 50	3°13'30	25° 5	19°55	16°25	28°32	28°18	8°53	2° 9	15°42	23°14	20°42	19°57	24°13	24° 5	S 18
M19	20 20 47	4°10'58	9°B28	21°38	17° 7	29°11	28°16	9° 1	2° 7	15°44	23°15	20°37	19°54	24°19	24° 2	M19
T 20	20 24 43	5° 8'27	23°25	23°20	17°48	29°49	28°14	9° 9	2° 4	15°46	23°16	20°35	19°50	24°26	24° 0	T 20
W21	20 28 40	6° 5'56	6°M57	24°59	18°29	0°N28	28°12	9°16	2° 2	15°48	23°17	20°D35	19°47	24°33	23°58	W21
T 22	20 32 37	7° 3'27	20° 6	26°37	19° 8	1° 6	28°10	9°24	2° 0	15°50	23°19	20°R35	19°44	24°40	23°55	T 22
F 23	20 36 33	8° 0'58	2°H55	28°14	19°46	1°44	28° 7	9°32	1°58	15°53	23°20	20°34	19°41	24°46	23°53	F 23
S 24	20 40 30	8°58'30	15°28	29°49	20°23	2°23	28° 5	9°40	1°56	15°55	23°21	20°32	19°38	24°53	23°51	S 24
S 25	20 44 26	9°56'03	27°48	1°M22	20°59	3° 1	28° 2	9°47	1°54	15°57	23°22	20°28	19°35	25° 0	23°49	S 25
M26	20 48 23	10°53'37	10°H 0	2°54	21°33	3°40	27°59	9°55	1°52	15°59	23°23	20°20	19°31	25° 7	23°47	M26
T 27	20 52 19	11°51'12	22° 4	4°24	22° 7	4°18	27°55	10° 3	1°50	16° 1	23°24	20°10	19°28	25°13	23°45	T 27
W28	20 56 16	12°48'48	4°H 3	5°53	22°38	4°56	27°52	10°10	1°47	16° 3	23°25	19°58	19°25	25°20	23°43	W28
T 29	21 0 12	13°46'25	15°58	7°20	23° 9	5°35	27°48	10°18	1°45	16° 5	23°26	19°44	19°22	25°27	23°41	T 29
F 30	21 4 9	14°44'04	27°51	8°45	23°38	6°13	27°45	10°26	1°43	16° 7	23°27	19°30	19°19	25°33	23°39	F 30
S 31	21 8 6	15°N41'44	9°H43	10°M 9	24°M 5	6°N51	27°H41	10°N33	1°H41	16° 9	23°H28	19°M17	19°M15	25°H40	23°H38	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	22n26	13s48	4n54	23n57	1n31	10n56	0n18	23n22	1n 1	1s58	1s23	19n25	0n48	11s18	0s47	22n 3
F 2	22 18	10 20	5 4	23 45	1 35	10 30	0 12	23 17	1 1	1 57	1 24	19 23	0 48	11 19	0 47	22 3
S 3	22 11	6 29	5 1	23 30	1 39	10 5	0 6	23 12	1 2	1 57	1 24	19 21	0 48	11 19	0 47	22 2
S 4	22 2	2 23	4 45	23 13	1 43	9 39	0s 1	23 6	1 2	1 57	1 24	19 19	0 48	11 20	0 47	22 2
M 5	21 54	1n49	4 16	22 53	1 45	9 14	0 7	23 1	1 2	1 57	1 25	19 17	0 48	11 20	0 47	22 2
T 6	21 45	5 59	3 36	22 32	1 47	8 48	0 14	22 55	1 2	1 57	1 25	19 15	0 48	11 21	0 47	22 2
W 7	21 36	9 59	2 45	22 8	1 48	8 23	0 21	22 50	1 3	1 57	1 25	19 14	0 48	11 22	0 47	22 1
T 8	21 26	13 39	1 46	21 42	1 48	7 57	0 28	22 44	1 3	1 57	1 26	19 12	0 48	11 22	0 47	22 1
F 9	21 16	16 47	0 39	21 14	1 48	7 31	0 35	22 37	1 3	1 57	1 26	19 10	0 48	11 23	0 47	22 1
S 10	21 6	19 9	0s31	20 45	1 47	7 6	0 43	22 31	1 3	1 57	1 26	19 8	0 48	11 23	0 47	22 1
S 11	20 55	20 30	1 42	20 15	1 46	6 40	0 50	22 25	1 3	1 58	1 27	19 6	0 48	11 24	0 47	22 0
M12	20 44	20 37	2 49	19 43	1 44	6 15	0 58	22 18	1 4	1 58	1 27	19 4	0 48	11 25	0 47	22 0
T 13	20 32	19 22	3 47	19 9	1 41	5 49	1 6	22 11	1 4	1 58	1 27	19 2	0 48	11 25	0 47	22 0
W14	20 20	16 46	4 31	18 35	1 38	5 24	1 14	22 4	1 4	1 59	1 27	19 0	0 48	11 26	0 47	22 0
T 15	20 8	13 1	4 57	18 0	1 34	4 58	1 22	21 57	1 4	2 0	1 28	18 58	0 48	11 27	0 48	21 59
F 16	19 56	8 25	5 1	17 24	1 30	4 33	1 31	21 50	1 5	2 0	1 28	18 56	0 49	11 28	0 48	21 59
S 17	19 43	3 19	4 45	16 47	1 25	4 8	1 39	21 42	1 5	2 1	1 28	18 54	0 49	11 28	0 48	21 59
S 18	19 30	1s52	4 10	16 9	1 20	3 43	1 48	21 35	1 5	2 2	1 29	18 52	0 49	11 29	0 48	21 59
M19	19 16	6 49	3 20	15 31	1 15	3 19	1 57	21 27	1 5	2 3	1 29	18 50	0 49	11 30	0 48	21 58
T 20	19 2	11 16	2 19	14 52	1 9	2 54	2 6	21 19	1 5	2 4	1 29	18 48	0 49	11 31	0 48	21 58
W21	18 48	15 0	1 12	14 13	1 3	2 30	2 15	21 11	1 6	2 5	1 30	18 47	0 49	11 31	0 48	21 58
T 22	18 34	17 52	0 3	13 33	0 56	2 6	2 24	21 3	1 6	2 6	1 30	18 45	0 49	11 32	0 48	21 58
F 23	18 19	19 45	1n 5	12 54	0 49	1 42	2 34	20 54	1 6	2 8	1 30	18 43	0 49	11 33	0 48	21 58
S 24	18 4	20 36	2 8	12 14	0 42	1 19	2 44	20 46	1 6	2 9	1 30	18 41	0 49	11 34	0 48	21 57
S 25	17 49	20 27	3 3	11 34	0 35	0 56	2 54	20 37	1 6	2 10	1 31	18 39	0 49	11 34	0 48	21 57
M26	17 33	19 19	3 50	10 53	0 27	0 33	3 4	20 28	1 7	2 12	1 31	18 37	0 49	11 35	0 48	21 57
T 27	17 17	17 20	4 25	10 13	0 19	0 10	3 14	20 19	1 7	2 13	1 31	18 35	0 49	11 36	0 48	21 57
W28	17 1	14 38	4 48	9 33	0 11	0s12	3 24	20 10	1 7	2 15	1 32	18 33	0 49	11 37	0 48	21 56
T 29	16 45	11 20	4 59	8 53	0 2	0 33	3 35	20 1	1 7	2 17	1 32	18 31	0 50	11 38	0 48	21 56
F 30	16 28	7 37	4 57	8 13	0s 6	0 54	3 45	19 52	1 7	2 18	1 32	18 29	0 50	11 38	0 48	21 56
S 31	16n11	3s36	4n41	7n33	0s15	1s15	3s56	19n42	1n 8	2s20	1s32	18n27	0n50	11s39	0s48	21n56

Julian Day Number = 2238798.5, Delta T = 07m25s

Ecliptic obliquity = 23°30'48", Nutation = 0°00'14", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°36'51", Lahiri = 15°43'52" Julian Calendar 1 July 1417 == Greg. Calendar 10 July 1417





# ASTRODIENST EPHEMERIS for the year 1417

## geocentric

SEPTEMBER 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	23 14 15	16 <sup>11</sup> 41'38	7 <sup>8</sup> 8	29°R56	21°R 5	27 <sup>12</sup> 12	24°R17	14 <sup>12</sup> 30	0°R25	17 <sup>12</sup> 3	23 <sup>11</sup> 49	16°R 7	17 <sup>11</sup> 34	29 <sup>11</sup> 15	23 <sup>12</sup> 27	W 1
T 2	23 18 12	17°40'14	19°39	29 <sup>11</sup> 11	20 <sup>11</sup> 29	27°50	24 <sup>11</sup> 10	14°37	0°R23	17° 4	23°49	16°D 7	17°31	29°22	23°29	T 2
F 3	23 22 8	18°38'53	2 <sup>11</sup> 26	28°19	19°52	28°28	24° 2	14°44	0°21	17° 5	23°49	16 <sup>11</sup> 7	17°27	29°29	23°30	F 3
S 4	23 26 5	19°37'34	15°32	27°23	19°15	29° 6	23°54	14°51	0°19	17° 7	23°50	16°R 8	17°24	29°35	23°31	S 4
S 5	23 30 1	20°36'17	29° 1	26°23	18°38	29°44	23°46	14°57	0°16	17° 8	23°50	16° 8	17°21	29°42	23°32	S 5
M 6	23 33 58	21°35'03	12 <sup>12</sup> 55	25°19	18° 2	0 <sup>11</sup> 22	23°38	15° 4	0°14	17° 9	23°50	16° 6	17°18	29°49	23°34	M 6
T 7	23 37 55	22°33'51	27°15	24°13	17°25	1° 0	23°30	15°11	0°12	17°10	23°50	16° 2	17°15	29°56	23°35	T 7
W 8	23 41 51	23°32'41	11 <sup>12</sup> 58	23° 7	16°50	1°38	23°22	15°17	0°10	17°11	23°51	15°56	17°12	0°R 2	23°37	W 8
T 9	23 45 48	24°31'33	26°59	22° 3	16°16	2°16	23°13	15°24	0° 8	17°12	23°51	15°48	17° 8	0° 9	23°38	T 9
F 10	23 49 44	25°30'28	12 <sup>11</sup> 9	21° 1	15°42	2°54	23° 5	15°30	0° 6	17°13	23°51	15°40	17° 5	0°16	23°40	F 10
S 11	23 53 41	26°29'24	27°18	20° 4	15°10	3°32	22°57	15°37	0° 4	17°15	23°51	15°33	17° 2	0°22	23°42	S 11
S 12	23 57 37	27°28'23	12 <sup>12</sup> 16	19°14	14°40	4°10	22°49	15°43	0° 1	17°16	23°51	15°28	16°59	0°29	23°44	S 12
M13	0 1 34	28°27'23	26°54	18°31	14°11	4°48	22°41	15°50	29 <sup>11</sup> 59	17°16	23°51	15°24	16°56	0°36	23°46	M13
T 14	0 5 30	29°26'26	11 <sup>11</sup> 7	17°57	13°45	5°26	22°34	15°56	29°57	17°17	23°51	15°D23	16°52	0°43	23°48	T 14
W15	0 9 27	0 <sup>12</sup> 25'30	24°53	17°32	13°20	6° 4	22°26	16° 2	29°56	17°18	23°R51	15°23	16°49	0°49	23°50	W15
T 16	0 13 24	1°24'36	8 <sup>12</sup> 10	17°18	12°57	6°41	22°18	16° 8	29°54	17°19	23°51	15°24	16°46	0°56	23°52	T 16
F 17	0 17 20	2°23'45	21° 3	17°D14	12°37	7°19	22°10	16°15	29°52	17°20	23°51	15°25	16°43	1° 3	23°55	F 17
S 18	0 21 17	3°22'54	3 <sup>13</sup> 35	17°21	12°19	7°57	22° 2	16°21	29°50	17°21	23°51	15°R26	16°40	1° 9	23°57	S 18
S 19	0 25 13	4°22'06	15°50	17°38	12° 3	8°35	21°55	16°27	29°48	17°22	23°51	15°25	16°37	1°16	23°59	S 19
M20	0 29 10	5°21'20	27°53	18° 5	11°49	9°13	21°47	16°33	29°46	17°22	23°51	15°23	16°33	1°23	24° 2	M20
T 21	0 33 6	6°20'35	9 <sup>12</sup> 49	18°42	11°38	9°51	21°39	16°39	29°44	17°23	23°51	15°18	16°30	1°30	24° 5	T 21
W22	0 37 3	7°19'52	21°41	19°27	11°30	10°29	21°32	16°44	29°43	17°24	23°51	15°13	16°27	1°36	24° 7	W22
T 23	0 40 59	8°19'11	3 <sup>13</sup> 33	20°21	11°23	11° 7	21°25	16°50	29°41	17°25	23°50	15° 6	16°24	1°43	24°10	T 23
F 24	0 44 56	9°18'32	15°28	21°22	11°20	11°44	21°17	16°56	29°39	17°25	23°50	14°59	16°21	1°50	24°13	F 24
S 25	0 48 52	10°17'54	27°28	22°29	11°D18	12°22	21°10	17° 1	29°38	17°26	23°50	14°53	16°18	1°56	24°16	S 25
S 26	0 52 49	11°17'19	9°Y34	23°43	11°19	13° 0	21° 3	17° 7	29°36	17°26	23°50	14°47	16°14	2° 3	24°19	S 26
M27	0 56 46	12°16'46	21°48	25° 1	11°23	13°38	20°56	17°13	29°34	17°27	23°50	14°44	16°11	2°10	24°22	M27
T 28	1 0 42	13°16'15	4 <sup>13</sup> 11	26°24	11°29	14°16	20°49	17°18	29°33	17°27	23°49	14°42	16° 8	2°17	24°25	T 28
W29	1 4 39	14°15'46	16°44	27°51	11°37	14°54	20°43	17°23	29°31	17°28	23°49	14°D41	16° 5	2°23	24°28	W29
T 30	1 8 35	15 <sup>12</sup> 15'19	29 <sup>13</sup> 29	29 <sup>11</sup> 21	11 <sup>11</sup> 47	15 <sup>11</sup> 31	20 <sup>11</sup> 36	17 <sup>12</sup> 29	29 <sup>11</sup> 30	17 <sup>12</sup> 28	23 <sup>11</sup> 49	14 <sup>11</sup> 42	16 <sup>11</sup> 2	2 <sup>11</sup> 30	24 <sup>11</sup> 31	T 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	5n16	14n41	0n48	3s39	4s 1	4s28	8s43	13n36	1n12	3s47	1s38	17n23	0n53	12s 6	0s48	21n49	0s37	17n23	6s 0	16s43	17s 7	7s 3	17s 6	6n15					
T 2	4 53	17 24	0s19	3 16	3 56	4 14	8 43	13 23	1 12	3 50	1 38	17 21	0 53	12 7	0 48	21 49	0 37	17 23	6 0	16 43	17 7	7 0	17 7	6 15					
F 3	4 30	19 18	1 26	2 50	3 49	3 59	8 43	13 10	1 12	3 53	1 38	17 19	0 53	12 8	0 48	21 49	0 37	17 23	6 0	16 43	17 6	6 58	17 7	6 14					
S 4	4 7	20 13	2 31	2 19	3 40	3 44	8 42	12 57	1 12	3 56	1 38	17 17	0 54	12 9	0 48	21 48	0 37	17 23	6 0	16 43	17 5	6 56	17 8	6 14					
S 5	3 44	20 1	3 29	1 45	3 29	3 27	8 39	12 44	1 12	3 59	1 38	17 15	0 54	12 9	0 48	21 48	0 37	17 22	6 0	16 43	17 4	6 54	17 8	6 14					
M 6	3 21	18 37	4 17	1 8	3 16	3 10	8 36	12 30	1 12	4 3	1 38	17 13	0 54	12 10	0 48	21 48	0 37	17 22	6 0	16 42	17 3	6 52	17 9	6 13					
T 7	2 58	16 2	4 50	0 28	3 2	2 52	8 32	12 17	1 12	4 6	1 38	17 12	0 54	12 11	0 48	21 48	0 37	17 22	6 0	16 41	17 2	6 50	17 9	6 13					
W 8	2 34	12 21	5 6	0n13	2 45	2 34	8 26	12 3	1 12	4 9	1 38	17 10	0 54	12 12	0 48	21 48	0 37	17 22	6 0	16 39	17 1	6 48	17 10	6 12					
T 9	2 11	7 51	5 1	0 54	2 28	2 15	8 20	11 50	1 12	4 12	1 39	17 8	0 54	12 12	0 48	21 48	0 37	17 22	6 0	16 37	17 0	6 45	17 10	6 12					
F 10	1 47	2 48	4 35	1 36	2 9	1 56	8 13	11 36	1 13	4 15	1 39	17 6	0 54	12 13	0 48	21 47	0 37	17 22	6 1	16 35	16 59	6 43	17 11	6 11					
S 11	1 24	2s26	3 49	2 16	1 49	1 37	8 6	11 22	1 13	4 19	1 39	17 4	0 55	12 14	0 48	21 47	0 37	17 22	6 1	16 33	16 58	6 41	17 11	6 11					
S 12	1 0	7 27	2 49	2 55	1 29	1 17	7 58	11 8	1 13	4 22	1 39	17 3	0 55	12 14	0 48	21 47	0 37	17 22	6 1	16 31	16 58	6 39	17 12	6 10					
M13	0 37	11 56	1 38	3 30	1 9	0 58	7 49	10 55	1 13	4 25	1 39	17 1	0 55	12 15	0 48	21 47	0 37	17 22	6 1	16 30	16 57	6 37	17 12	6 10					
T 14	0 13	15 35	0 23	4 2	0 49	0 39	7 39	10 41	1 13	4 28	1 38	16 59	0 55	12 16	0 48	21 47	0 37	17 22	6 1	16 30	16 56	6 35	17 13	6 9					
W15	0s10	18 13	0n51	4 29	0 29	0 20	7 29	10 27	1 13	4 31	1 38	16 57	0 55	12 17	0 48	21 47	0 37	17 22	6 1	16 30	16 55	6 33	17 13	6 9					
T 16	0 34	19 46	2 0	4 52	0 10	0 2	7 18	10 13	1 13	4 34	1 38	16 56	0 55	12 17	0 48	21 47	0 37	17 22	6 1	16 30	16 54	6 30	17 14	6 9					
F 17	0 57	20 12	3 1	5 10	0n 8	0n16	7 7	9 59	1 13	4 37	1 38	16 54	0 55	12 18	0 48	21 47	0 37	17 21	6 1	16 31	16 53	6 28	17 15	6 8					
S 18	1 21	19 37	3 51	5 23	0 24	0 34	6 55	9 44	1 13	4 40	1 38	16 52	0 56	12 18	0 48	21 46	0 37	17 21	6 1	16 31	16 52	6 26	17 15	6 8					
S 19	1 44	18 6	4 30	5 31	0 40	0 51	6 43	9 30	1 13	4 43	1 38	16 50	0 56	12 19	0 48	21 46	0 37	17 21	6 1	16 31	16 51	6 24	17 16	6 7					
M20	2 8	15 49	4 56	5 33	0 54	1 7	6 31	9 16	1 13	4 46	1 38	16 49	0 56	12 20	0 47	21 46	0 37	17 21	6 1	16 30	16 50	6 22	17 16	6 7					
T 21	2 32	12 53	5 9	5 30	1 7	1 23	6 19	9 2	1 13	4 49	1 38	16 47	0 56	12 20	0 47	21 46	0 37	17 21	6 1	16 29	16 49	6 20	17 17	6 6					
W22	2 55	9 27	5 8	5 23	1 18	1 38	6 6	8 47	1 13	4 52	1 38	16 46	0 56	12 21	0 47	21 46	0 37	17 21	6 2	16 27	16 48	6 18	17 17	6 6					
T 23	3 19	5 39	4 54	5 11	1 28	1 52	5 53	8 33	1 13	4 55	1 38	16 44	0 56	12 22	0 47	21 46	0 37	17 21	6 2	16 25	16 48	6 15	17 18	6 6					
F 24	3 42	1 38	4 28	4 54	1 36	2 5	5 40	8 19	1 13	4 58	1 38	16 42	0 56	12 22	0 47	21 46	0 37	17 21	6 2	16 23	16 47	6 13	17 18	6 5					
S 25	4 5	2n30	3 49	4 34	1 43	2 18	5 27	8 4	1 13	5 0	1 38	16 41	0 57	12 23	0 47	21 46	0 37	17 21	6 2	16 21	16 46	6 11	17 19	6 5					
S 26	4 29	6 33	3 0	4 10	1 49	2 30	5 14	7 50	1 13	5 3	1 38	16 39	0 57	12 23	0 47	21 46	0 37	17 21	6 2	16 19	16 45	6 9	17 19	6 4					
M27	4 52	10 24	2 2	3 43	1 53	2 40	5 1	7 35	1 13	5 6	1 38	16 38	0 57	12 24	0 47	21 46	0 37	17 21	6 2	16 18	16 44	6 7	17 20	6 4					
T 28	5 15	13 51	0 57	3 13	1 57	2 50	4 48	7 20	1 13	5 8	1 37	16 36	0 57	12 24	0 47	21 45	0 37	17 20	6 2	16 18	16 43	6 5	17 20	6 4					
W29	5 38	16 42	0s11	2 41	1 59	2 59	4 35	7 6	1 13	5 11	1 37	16 35	0 57	12 25	0 47	21 45	0 37	17 20	6 2	16 18	16 42	6 3	17 21	6 3					
T 30	6s 2	18n48	1s20	2n 6	2n 0	3n 7	4s23	6n51	1n13	5s13	1s37	16n33	0n57	12s25	0s47	21n45	0s37	17n20	6s 2	16s18	16s41	6s 0	17s22	6n					

# ASTRODIENST EPHEMERIS for the year 1417

## geocentric

OCTOBER 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	1 12 32	16♌14'55	12♏27	0♌53	11♏59	16♏9	20°R29	17♏34	29°R28	17♏29	23°R48	14♏43	15♏58	2♏37	24♏35	F 1
S 2	1 16 28	17°14'33	25°41	2°28	12°14	16°47	20°H23	17°39	29°H27	17°29	23°H48	14°45	15°55	2°44	24°38	S 2
S 3	1 20 25	18°14'13	9♏11	4° 4	12°31	17°25	20°17	17°44	29°26	17°29	23°48	14°46	15°52	2°50	24°42	S 3
M 4	1 24 21	19°13'56	23° 0	5°42	12°49	18° 3	20°11	17°49	29°24	17°30	23°47	14°R46	15°49	2°57	24°45	M 4
T 5	1 28 18	20°13'41	7♏8	7°21	13°10	18°40	20° 5	17°54	29°23	17°30	23°47	14°45	15°46	3° 4	24°49	T 5
W 6	1 32 15	21°13'28	21°33	9° 0	13°32	19°18	19°59	17°59	29°22	17°30	23°46	14°43	15°43	3°10	24°53	W 6
T 7	1 36 11	22°13'18	6♏11	10°41	13°57	19°56	19°53	18° 3	29°21	17°30	23°46	14°41	15°39	3°17	24°56	T 7
F 8	1 40 8	23°13'09	20°57	12°21	14°23	20°34	19°48	18° 8	29°20	17°30	23°45	14°38	15°36	3°24	25° 0	F 8
S 9	1 44 4	24°13'03	5♏45	14° 2	14°50	21°12	19°43	18°13	29°19	17°31	23°45	14°35	15°33	3°31	25° 4	S 9
S 10	1 48 1	25°12'59	20°27	15°43	15°20	21°49	19°37	18°17	29°18	17°31	23°44	14°33	15°30	3°37	25° 8	S 10
M 11	1 51 57	26°12'57	4♏54	17°23	15°51	22°27	19°32	18°21	29°17	17°31	23°44	14°32	15°27	3°44	25°12	M 11
T 12	1 55 54	27°12'56	19° 3	19° 4	16°23	23° 5	19°28	18°26	29°16	17°R31	23°43	14°D31	15°23	3°51	25°16	T 12
W 13	1 59 50	28°12'58	2♏49	20°45	16°57	23°43	19°23	18°30	29°15	17°31	23°43	14°32	15°20	3°57	25°20	W 13
T 14	2 3 47	29°13'01	16°10	22°25	17°32	24°20	19°18	18°34	29°14	17°31	23°42	14°33	15°17	4° 4	25°25	T 14
F 15	2 7 44	0♏13'07	29° 7	24° 5	18° 9	24°58	19°14	18°38	29°13	17°31	23°41	14°35	15°14	4°11	25°29	F 15
S 16	2 11 40	1°13'13	11♏44	25°44	18°47	25°36	19°10	18°42	29°12	17°30	23°41	14°36	15°11	4°18	25°33	S 16
S 17	2 15 37	2°13'22	24° 2	27°23	19°26	26°14	19° 6	18°46	29°12	17°30	23°40	14°36	15° 8	4°24	25°37	S 17
M 18	2 19 33	3°13'32	6♏7	29° 2	20° 6	26°51	19° 2	18°50	29°11	17°30	23°39	14°R36	15° 4	4°31	25°42	M 18
T 19	2 23 30	4°13'43	18° 4	0♏41	20°47	27°29	18°59	18°53	29°10	17°30	23°39	14°36	15° 1	4°38	25°46	T 19
W 20	2 27 26	5°13'56	29°56	2°19	21°30	28° 7	18°55	18°57	29°10	17°30	23°38	14°35	14°58	4°44	25°51	W 20
T 21	2 31 23	6°14'10	11♏49	3°57	22°14	28°44	18°52	19° 0	29° 9	17°29	23°37	14°34	14°55	4°51	25°56	T 21
F 22	2 35 19	7°14'26	23°46	5°34	22°58	29°22	18°49	19° 4	29° 9	17°29	23°36	14°33	14°52	4°58	26° 0	F 22
S 23	2 39 16	8°14'44	5♏50	7°11	23°44	29°59	18°47	19° 7	29° 8	17°29	23°36	14°32	14°49	5° 5	26° 5	S 23
S 24	2 43 13	9°15'03	18° 5	8°48	24°31	0♏37	18°44	19°10	29° 8	17°28	23°35	14°31	14°45	5°11	26°10	S 24
M 25	2 47 9	10°15'24	0♏31	10°24	25°18	1°15	18°42	19°13	29° 8	17°28	23°34	14°31	14°42	5°18	26°15	M 25
T 26	2 51 6	11°15'47	13°11	12° 0	26° 7	1°53	18°40	19°16	29° 7	17°27	23°33	14°D31	14°39	5°25	26°19	T 26
W 27	2 55 2	12°16'11	26° 5	13°35	26°56	2°30	18°38	19°19	29° 7	17°27	23°32	14°31	14°36	5°31	26°24	W 27
T 28	2 58 59	13°16'37	9♏13	15°11	27°46	3° 8	18°36	19°22	29° 7	17°26	23°31	14°31	14°33	5°38	26°29	T 28
F 29	3 2 55	14°17'05	22°34	16°46	28°37	3°46	18°34	19°25	29° 7	17°26	23°31	14°R31	14°29	5°45	26°34	F 29
S 30	3 6 52	15°17'34	6♏7	18°20	29°29	4°23	18°33	19°27	29° 7	17°25	23°30	14°31	14°26	5°52	26°39	S 30
S 31	3 10 48	16♏18'06	19♏52	19♏55	0♏22	5♏1	18°H32	19♏30	29°D 7	17♏25	23°H29	14♏31	14♏23	5♏58	26♏44	S 31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	6s25	19n56	2s26	1n29	2n 1	3n14	4s10	6n36	1n13	5s16	1s37	16n32	0n58	12s26	0s47	21n45	0s37	17n20	6s 2	16s18	16s40	5s58	17s22	6n 2			
S 2	6 47	20 0	3 26	0 51	2 0	3 20	3 57	6 22	1 13	5 18	1 37	16 30	0 58	12 26	0 47	21 45	0 37	17 20	6 2	16 19	16 39	5 56	17 23	6 2			
S 3	7 10	18 56	4 16	0 12	1 59	3 25	3 45	6 7	1 13	5 21	1 37	16 29	0 58	12 27	0 47	21 45	0 37	17 20	6 2	16 19	16 38	5 54	17 23	6 2			
M 4	7 33	16 45	4 52	0s29	1 57	3 30	3 32	5 52	1 13	5 23	1 37	16 28	0 58	12 27	0 47	21 45	0 37	17 20	6 3	16 19	16 37	5 52	17 24	6 1			
T 5	7 56	13 31	5 12	1 10	1 55	3 33	3 20	5 37	1 13	5 25	1 36	16 26	0 58	12 27	0 47	21 45	0 37	17 20	6 3	16 19	16 37	5 50	17 24	6 1			
W 6	8 18	9 26	5 12	1 52	1 52	3 36	3 8	5 22	1 14	5 27	1 36	16 25	0 58	12 28	0 47	21 45	0 37	17 20	6 3	16 18	16 36	5 48	17 25	6 0			
T 7	8 41	4 44	4 53	2 35	1 48	3 37	2 57	5 7	1 14	5 29	1 36	16 24	0 59	12 28	0 47	21 45	0 37	17 20	6 3	16 17	16 35	5 45	17 25	6 0			
F 8	9 3	0s17	4 14	3 18	1 44	3 38	2 45	4 53	1 14	5 31	1 36	16 22	0 59	12 29	0 47	21 45	0 37	17 20	6 3	16 17	16 34	5 43	17 26	6 0			
S 9	9 25	5 19	3 18	4 1	1 40	3 38	2 33	4 38	1 13	5 33	1 36	16 21	0 59	12 29	0 47	21 45	0 37	17 19	6 3	16 16	16 33	5 41	17 26	5 59			
S 10	9 47	10 0	2 9	4 45	1 35	3 37	2 22	4 23	1 13	5 35	1 35	16 20	0 59	12 29	0 47	21 45	0 37	17 19	6 3	16 15	16 32	5 39	17 27	5 59			
M11	10 9	14 2	0 53	5 28	1 30	3 35	2 11	4 8	1 13	5 37	1 35	16 19	0 59	12 30	0 47	21 45	0 37	17 19	6 3	16 15	16 31	5 37	17 27	5 59			
T 12	10 31	17 8	0n25	6 11	1 24	3 32	2 0	3 53	1 13	5 39	1 35	16 18	1 0	12 30	0 47	21 45	0 37	17 19	6 3	16 15	16 30	5 35	17 28	5 58			
W13	10 52	19 10	1 39	6 54	1 19	3 29	1 50	3 38	1 13	5 40	1 35	16 17	1 0	12 30	0 47	21 45	0 37	17 19	6 3	16 15	16 29	5 32	17 28	5 58			
T 14	11 14	20 2	2 46	7 37	1 13	3 25	1 39	3 23	1 13	5 42	1 35	16 15	1 0	12 30	0 47	21 45	0 37	17 19	6 3	16 15	16 28	5 30	17 29	5 58			
F 15	11 35	19 48	3 42	8 20	1 7	3 20	1 29	3 8	1 13	5 43	1 34	16 14	1 0	12 31	0 47	21 45	0 37	17 19	6 3	16 16	16 27	5 28	17 29	5 57			
S 16	11 56	18 34	4 26	9 2	1 1	3 14	1 19	2 53	1 13	5 45	1 34	16 13	1 0	12 31	0 47	21 45	0 37	17 19	6 3	16 16	16 26	5 26	17 30	5 57			
S 17	12 17	16 30	4 57	9 44	0 55	3 8	1 10	2 38	1 13	5 46	1 34	16 12	1 0	12 31	0 47	21 45	0 37	17 19	6 3	16 16	16 25	5 24	17 30	5 57			
M18	12 38	13 44	5 13	10 25	0 48	3 1	1 0	2 22	1 13	5 47	1 34	16 11	1 1	12 31	0 47	21 45	0 37	17 19	6 3	16 16	16 24	5 22	17 30	5 56			
T 19	12 58	10 27	5 16	11 6	0 42	2 53	0 51	2 7	1 13	5 48	1 34	16 10	1 1	12 32	0 47	21 45	0 37	17 18	6 4	16 16	16 24	5 20	17 31	5 56			
W20	13 18	6 46	5 5	11 46	0 35	2 44	0 42	1 52	1 13	5 50	1 33	16 9	1 1	12 32	0 47	21 45	0 37	17 18	6 4	16 16	16 23	5 17	17 31	5 56			
T 21	13 38	2 49	4 42	12 26	0 28	2 35	0 33	1 37	1 13	5 51	1 33	16 8	1 1	12 32	0 47	21 45	0 37	17 18	6 4	16 16	16 22	5 15	17 32	5 55			
F 22	13 58	1n17	4 6	13 5	0 22	2 25	0 25	1 22	1 13	5 51	1 33	16 8	1 1	12 32	0 47	21 45	0 37	17 18	6 4	16 15	16 21	5 13	17 32	5 55			
S 23	14 18	5 22	3 18	13 43	0 15	2 15	0 16	1 7	1 13	5 52	1 33	16 7	1 2	12 32	0 46	21 45	0 37	17 18	6 4	16 15	16 20	5 11	17 33	5 55			
S 24	14 37	9 17	2 21	14 21	0 8	2 4	0 8	0 52	1 13	5 53	1 32	16 6	1 2	12 32	0 46	21 45	0 37	17 18	6 4	16 15	16 19	5 9	17 33	5 55			
M25	14 56	12 53	1 17	14 57	0 2	2 15	0 0	0 37	1 13	5 54	1 32	16 5	1 2	12 32	0 46	21 45	0 37	17 18	6 4	16 15	16 18	5 7	17 33	5 54			
T 26	15 15	15 58	0 7	15 34	0s 5	1 40	0n 8	0 22	1 13	5 54	1 32	16 4	1 2	12 32	0 46	21 45	0 37	17 18	6 4	16 15	16 17	5 5	17 34	5 54			
W27	15 34	18 18	1s 4	16 9	0 12	1 27	0 15	0 7	1 13	5 55	1 32	16 4	1 2	12 32	0 46	21 45	0 37	17 18	6 4	16 15	16 16	5 2	17 34	5 54			
T 28	15 52	19 43	2 13	16 44	0 18	1 14	0 22	0s 8	1 13	5 55	1 31	16 3	1 3	12 32	0 46	21 45	0 37	17 18	6 4	16 15	16 15	5 0	17 35	5 54			
F 29	16 10	20 3	3 16	17 18	0 25	1 0	0 29	0 23	1 13	5 56	1 31	16 2	1 3	12 32	0 46	21 45	0 37	17 18	6 4	16 15	16 14	4 58	17 35	5 53			
S 30	16 28	19 14	4 9	17 51	0 31	0 46	0 36	0 38	1 13	5 56	1 31	16 2	1 3	12 32	0 46	21 45	0 37	17 18	6 4	16 15	16 13	4 56	17 35	5 53			
S 31	16s46	17n17	4s48	18s23	0s38	0n31	0n43	0s53	1n13	5s56	1s31	16n 1	1n 3	12s32	0s46	21n45	0s37	17n17	6s 4	16s15	16s12	4s54	17s36	5n53			

# ASTRODIENST EPHEMERIS for the year 1417

## geocentric

NOVEMBER 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	3 14 45	17 <sup>11</sup> 18'39	3 <sup>0</sup> 47	21 <sup>11</sup> 29	1 <sup>11</sup> 15	5 <sup>11</sup> 39	18 <sup>11</sup> R31	19 <sup>11</sup> 32	29 <sup>11</sup> 7	17 <sup>11</sup> R24	23 <sup>11</sup> R28	14 <sup>11</sup> R31	14 <sup>11</sup> M20	6 <sup>11</sup> 5	26 <sup>11</sup> 50	M 1
T 2	3 18 42	18°19'14	17°52	23° 3	2° 9	6°16	18 <sup>11</sup> 30	19°35	29° 7	17 <sup>11</sup> 23	23 <sup>11</sup> 27	14°D31	14°17	6°12	26°55	T 2
W 3	3 22 38	19°19'51	2 <sup>11</sup> 4	24°37	3° 4	6°54	18°30	19°37	29° 7	17°23	23°26	14 <sup>11</sup> M31	14°14	6°18	27° 0	W 3
T 4	3 26 35	20°20'29	16°21	26°11	3°59	7°31	18°29	19°39	29° 7	17°22	23°25	14°31	14°10	6°25	27° 5	T 4
F 5	3 30 31	21°21'10	0 <sup>11</sup> 41	27°44	4°55	8° 9	18°D29	19°41	29° 8	17°21	23°24	14°32	14° 7	6°32	27°11	F 5
S 6	3 34 28	22°21'52	14°59	29°17	5°51	8°47	18°29	19°43	29° 8	17°20	23°23	14°32	14° 4	6°39	27°16	S 6
S 7	3 38 24	23°22'35	29°13	0 <sup>11</sup> 50	6°48	9°24	18°30	19°44	29° 8	17°20	23°22	14°33	14° 1	6°45	27°21	S 7
M 8	3 42 21	24°23'20	13 <sup>11</sup> M17	2°23	7°46	10° 2	18°30	19°46	29° 9	17°19	23°21	14°R33	13°58	6°52	27°27	M 8
T 9	3 46 17	25°24'07	27° 8	3°56	8°44	10°39	18°31	19°48	29° 9	17°18	23°20	14°33	13°55	6°59	27°32	T 9
W10	3 50 14	26°24'55	10 <sup>11</sup> 42	5°29	9°43	11°17	18°32	19°49	29°10	17°17	23°19	14°32	13°51	7° 5	27°38	W10
T 11	3 54 11	27°25'44	23°58	7° 2	10°42	11°54	18°33	19°50	29°10	17°16	23°18	14°31	13°48	7°12	27°43	T 11
F 12	3 58 7	28°26'34	6 <sup>11</sup> 54	8°34	11°42	12°32	18°34	19°51	29°11	17°15	23°17	14°29	13°45	7°19	27°49	F 12
S 13	4 2 4	29°27'26	19°31	10° 6	12°42	13°10	18°36	19°52	29°11	17°14	23°16	14°27	13°42	7°26	27°54	S 13
S 14	4 6 0	0 <sup>11</sup> 28'18	1 <sup>11</sup> 52	11°39	13°42	13°47	18°38	19°53	29°12	17°13	23°15	14°24	13°39	7°32	28° 0	S 14
M15	4 9 57	1°29'11	13°59	13°11	14°43	14°25	18°40	19°54	29°13	17°12	23°14	14°23	13°35	7°39	28° 6	M15
T 16	4 13 53	2°30'05	25°56	14°42	15°44	15° 2	18°42	19°55	29°14	17°11	23°12	14°22	13°32	7°46	28°11	T 16
W17	4 17 50	3°31'00	7 <sup>11</sup> 49	16°14	16°46	15°39	18°44	19°56	29°15	17°10	23°11	14°D22	13°29	7°52	28°17	W17
T 18	4 21 46	4°31'56	19°41	17°46	17°48	16°17	18°47	19°56	29°15	17° 9	23°10	14°23	13°26	7°59	28°23	T 18
F 19	4 25 43	5°32'52	1 <sup>11</sup> Y38	19°17	18°51	16°54	18°49	19°57	29°16	17° 7	23° 9	14°24	13°23	8° 6	28°29	F 19
S 20	4 29 40	6°33'49	13°44	20°48	19°54	17°32	18°52	19°57	29°17	17° 6	23° 8	14°26	13°20	8°12	28°34	S 20
S 21	4 33 36	7°34'47	26° 3	22°19	20°57	18° 9	18°56	19°57	29°18	17° 5	23° 7	14°27	13°16	8°19	28°40	S 21
M22	4 37 33	8°35'46	8 <sup>11</sup> 39	23°49	22° 1	18°47	18°59	19°R57	29°20	17° 4	23° 6	14°R28	13°13	8°26	28°46	M22
T 23	4 41 29	9°36'45	21°33	25°19	23° 5	19°24	19° 3	19°57	29°21	17° 3	23° 4	14°28	13°10	8°33	28°52	T 23
W24	4 45 26	10°37'45	4 <sup>11</sup> 17	26°48	24° 9	20° 1	19° 6	19°57	29°22	17° 1	23° 3	14°27	13° 7	8°39	28°58	W24
T 25	4 49 22	11°38'46	18°20	28°16	25°13	20°39	19°10	19°57	29°23	17° 0	23° 2	14°24	13° 4	8°46	29° 4	T 25
F 26	4 53 19	12°39'48	2 <sup>11</sup> 9	29°44	26°18	21°16	19°14	19°56	29°25	16°59	23° 1	14°20	13° 1	8°53	29°10	F 26
S 27	4 57 15	13°40'51	16°12	1 <sup>11</sup> 31	27°23	21°53	19°19	19°56	29°26	16°57	23° 0	14°16	12°57	8°59	29°15	S 27
S 28	5 1 12	14°41'55	0 <sup>11</sup> 23	2°36	28°29	22°31	19°23	19°55	29°27	16°56	22°59	14°11	12°54	9° 6	29°21	S 28
M29	5 5 9	15°42'59	14°38	4° 1	29°35	23° 8	19°28	19°55	29°29	16°55	22°57	14° 7	12°51	9°13	29°27	M29
T 30	5 9 5	16°44'05	28 <sup>11</sup> 53	5 <sup>11</sup> 23	0 <sup>11</sup> M41	23 <sup>11</sup> 45	19 <sup>11</sup> 33	19 <sup>11</sup> 54	29°30	16°55	22 <sup>11</sup> 56	14 <sup>11</sup> M 4	12 <sup>11</sup> M48	9 <sup>11</sup> 10	29°33	T 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	17s 3	14n19	5s12	18s54	0s44	0n15	0n49	1s 8	1n13	5s56	1s30	16n 0	1n 3	12s32	0s46	21n46	0s37	17n17	6s 4	16s15	16s11	4s52	17s36	5n53									
T 2	17 20	10 30	5 17	19 24	0 50	0s 0	0 56	1 23	1 12	5 56	1 30	16 0	1 4	12 32	0 46	21 46	0 37	17 17	6 4	16 15	16 10	4 50	17 36	5 52									
W 3	17 37	6 4	5 3	19 54	0 56	0 17	1 2	1 38	1 12	5 56	1 30	15 59	1 4	12 32	0 46	21 46	0 37	17 17	6 4	16 15	16 9	4 47	17 37	5 52									
T 4	17 53	1 16	4 30	20 22	1 2	0 33	1 8	1 53	1 12	5 56	1 29	15 59	1 4	12 32	0 46	21 46	0 37	17 17	6 4	16 15	16 8	4 45	17 37	5 52									
F 5	18 9	3s38	3 40	20 50	1 8	0 50	1 13	2 8	1 12	5 56	1 29	15 59	1 4	12 32	0 46	21 46	0 37	17 17	6 4	16 15	16 8	4 43	17 37	5 52									
S 6	18 25	8 20	2 37	21 16	1 14	1 8	1 19	2 23	1 12	5 56	1 29	15 58	1 4	12 32	0 46	21 46	0 37	17 17	6 4	16 15	16 7	4 41	17 38	5 52									
S 7	18 40	12 32	1 24	21 41	1 20	1 25	1 24	2 38	1 12	5 55	1 29	15 58	1 5	12 32	0 46	21 46	0 37	17 17	6 4	16 15	16 6	4 39	17 38	5 51									
M 8	18 56	15 59	0 7	22 6	1 25	1 44	1 29	2 53	1 12	5 55	1 28	15 58	1 5	12 31	0 46	21 46	0 37	17 17	6 4	16 15	16 5	4 37	17 38	5 51									
T 9	19 10	18 27	1n 9	22 29	1 30	2 2	1 34	3 8	1 12	5 54	1 28	15 57	1 5	12 31	0 46	21 46	0 37	17 17	6 4	16 15	16 4	4 35	17 38	5 51									
W10	19 25	19 49	2 20	22 51	1 35	2 21	1 39	3 23	1 12	5 54	1 28	15 57	1 5	12 31	0 46	21 46	0 37	17 17	6 4	16 15	16 3	4 32	17 39	5 51									
T 11	19 39	20 1	3 21	23 12	1 40	2 40	1 43	3 37	1 12	5 53	1 28	15 57	1 5	12 31	0 46	21 47	0 37	17 17	6 4	16 15	16 2	4 30	17 39	5 51									
F 12	19 52	19 10	4 11	23 32	1 45	2 59	1 48	3 52	1 11	5 52	1 27	15 57	1 6	12 31	0 46	21 47	0 37	17 17	6 4	16 14	16 1	4 28	17 39	5 50									
S 13	20 6	17 22	4 47	23 50	1 49	3 19	1 52	4 7	1 11	5 51	1 27	15 56	1 6	12 30	0 46	21 47	0 37	17 17	6 4	16 13	16 0	4 26	17 40	5 50									
S 14	20 19	14 48	5 8	24 7	1 54	3 39	1 56	4 22	1 11	5 51	1 27	15 56	1 6	12 30	0 46	21 47	0 37	17 17	6 4	16 13	15 59	4 24	17 40	5 50									
M15	20 31	11 38	5 16	24 24	1 57	3 59	1 59	4 36	1 11	5 49	1 26	15 56	1 6	12 30	0 46	21 47	0 37	17 16	6 4	16 12	15 58	4 22	17 40	5 50									
T 16	20 43	8 3	5 9	24 38	2 1	4 19	2 3	4 51	1 11	5 48	1 26	15 56	1 7	12 29	0 46	21 47	0 37	17 16	6 4	16 12	15 57	4 20	17 40	5 50									
W17	20 55	4 11	4 50	24 52	2 4	4 40	2 6	5 6	1 11	5 47	1 26	15 56	1 7	12 29	0 46	21 47	0 37	17 16	6 4	16 12	15 56	4 17	17 40	5 50									
T 18	21 7	0 9	4 18	25 4	2 7	5 1	2 10	5 20	1 11	5 46	1 26	15 56	1 7	12 29	0 45	21 47	0 37	17 16	6 4	16 12	15 55	4 15	17 41	5 50									
F 19	21 18	3n56	3 35	25 14	2 10	5 21	2 13	5 35	1 11	5 45	1 25	15 56	1 7	12 28	0 45	21 48	0 37	17 16	6 4	16 12	15 54	4 13	17 41	5 50									
S 20	21 28	7 54	2 41	25 24	2 13	5 43	2 16	5 49	1 10	5 43	1 25	15 56	1 7	12 28	0 45	21 48	0 37	17 16	6 4	16 13	15 53	4 11	17 41	5 49									
S 21	21 38	11 38	1 40	25 32	2 15	6 4	2 18	6 3	1 10	5 42	1 25	15 57	1 8	12 27	0 45	21 48	0 37	17 16	6 4	16 13	15 52	4 9	17 41	5 49									
M22	21 48	14 56	0 32	25 38	2 16	6 25	2 21	6 18	1 10	5 40	1 25	15 57	1 8	12 27	0 45	21 48	0 37	17 16	6 4	16 14	15 51	4 7	17 41	5 49									
T 23	21 58	17 35	0s39	25 43	2 17	6 47	2 23	6 32	1 10	5 38	1 24	15 57	1 8	12 27	0 45	21 48	0 37	17 16	6 4	16 14	15 50	4 5	17 41	5 49									
W24	22 7	19 22	1 49	25 46	2 18	7 8	2 26	6 46	1 10	5 37	1 24	15 57	1 8	12 26	0 45	21 48	0 38	17 16	6 4	16 13	15 49	4 2	17 41	5 49									
T 25	22 15	20 5	2 55	25 48	2 18	7 30	2 28	7 1	1 10	5 35	1 24	15 57	1 8	12 26	0 45	21 48	0 38	17 16	6 4	16 13	15 48	4 0	17 42	5 49									
F 26	22 23	19 38	3 52	25 49	2 18	7 51	2 30	7 15	1 9	5 33	1 23	15 58	1 9	12 25	0 45	21 49	0 38	17 16	6 4	16 11	15 47	3 58	17 42	5 49									
S 27	22 31	17 58	4 36	25 47	2 17	8 13	2 32	7 29	1 9	5 31	1 23	15 58	1 9	12 25	0 45	21 49	0 38	17 16	6 4	16 10	15 46	3 56	17 42	5 49									
S 28	22 38	15 11	5 3	25 45	2 16	8 35	2 33	7 43	1 9	5 29	1 23	15 59	1 9	12 24	0 45	21 49	0 38	17 16	6 4	16 9	15 46	3 54	17 42	5 49									
M29	22 45	11 31	5 12	25 41	2 13	8 57	2 35	7 57	1 9	5 27	1 23	15 59	1 9	12 24	0 45	21 49	0 38	17 16	6 4	16 7	15 45	3 52	17 42	5 49									
T 30	22s51	7n10	5s 2	25s35	2s11	9s18	2n36	8s11	1n 9	5s25	1s22	15n59	1n 9	12s23	0s45	21n49	0s38	17n16	6s 4	16s 7	15s44	3s50	17s42	5n49									

# ASTRODIENST EPHEMERIS for the year 1417

## geocentric

DECEMBER 1417 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	5 13 2	17°45'11	13°11'6	6°34'44	11°47'11	24°23'23	19°38'38	19°53'53	29°32'32	16°52'52	22°55'55	14°D 3	12°45'45	9°26'26	29°39'39	W 1
T 2	5 16 58	18°46'18	27°14'14	8°3'3	2°53'53	25°0'0	19°43'43	19°52'52	29°33'33	16°50'50	22°54'54	14°M 3	12°41'41	9°33'33	29°45'45	T 2
F 3	5 20 55	19°47'26	11°15'15	9°19'19	4°0'0	25°37'37	19°49'49	19°51'51	29°35'35	16°49'49	22°53'53	14°4'4	12°38'38	9°40'40	29°51'51	F 3
S 4	5 24 51	20°48'35	25°8'8	10°32'32	5°7'7	26°14'14	19°54'54	19°49'49	29°37'37	16°47'47	22°51'51	14°6'6	12°35'35	9°46'46	29°57'57	S 4
S 5	5 28 48	21°49'44	8°11'53	11°41'41	6°14'14	26°52'52	20°0'0	19°48'48	29°38'38	16°46'46	22°50'50	14°R 7	12°32'32	9°53'53	0°3'3	S 5
M 6	5 32 44	22°50'55	22°29'29	12°46'46	7°22'22	27°29'29	20°6'6	19°46'46	29°40'40	16°44'44	22°49'49	14°7'7	12°29'29	10°0'0	0°9'9	M 6
T 7	5 36 41	23°52'06	5°13'54	13°47'47	8°29'29	28°6'6	20°12'12	19°45'45	29°42'42	16°43'43	22°48'48	14°5'5	12°26'26	10°7'7	0°16'16	T 7
W 8	5 40 38	24°53'17	19°7'7	14°42'42	9°37'37	28°43'43	20°18'18	19°43'43	29°44'44	16°41'41	22°47'47	14°0'0	12°22'22	10°13'13	0°22'22	W 8
T 9	5 44 34	25°54'28	2°3'7	15°30'30	10°45'45	29°20'20	20°25'25	19°41'41	29°46'46	16°40'40	22°45'45	13°54'54	12°19'19	10°20'20	0°28'28	T 9
F 10	5 48 31	26°55'40	14°53'53	16°12'12	11°53'53	29°58'58	20°32'32	19°39'39	29°48'48	16°38'38	22°44'44	13°46'46	12°16'16	10°27'27	0°34'34	F 10
S 11	5 52 27	27°56'52	27°25'25	16°45'45	13°2'2	0°13'5	20°38'38	19°37'37	29°50'50	16°37'37	22°43'43	13°38'38	12°13'13	10°33'33	0°40'40	S 11
S 12	5 56 24	28°58'04	9°43'43	17°10'10	14°10'10	1°12'12	20°45'45	19°35'35	29°52'52	16°35'35	22°42'42	13°29'29	12°10'10	10°40'40	0°46'46	S 12
M13	6 0 20	29°59'16	21°49'49	17°24'24	15°19'19	1°49'49	20°52'52	19°33'33	29°54'54	16°33'33	22°41'41	13°22'22	12°7'7	10°47'47	0°52'52	M13
T 14	6 4 17	1°0'28	3°45'45	17°28'28	16°28'28	2°26'26	21°0'0	19°31'31	29°56'56	16°32'32	22°40'40	13°16'16	12°3'3	10°54'54	0°58'58	T 14
W15	6 8 13	2°1'40	15°37'37	17°21'21	17°37'37	3°3'3	21°7'7	19°28'28	29°58'58	16°30'30	22°38'38	13°12'12	12°0'0	11°0'0	1°4'4	W15
T 16	6 12 10	3°2'51	27°27'27	17°2'2	18°46'46	3°40'40	21°15'15	19°26'26	0°0'0	16°29'29	22°37'37	13°10'10	11°57'57	11°7'7	1°10'10	T 16
F 17	6 16 7	4°4'02	9°21'21	16°31'31	19°55'55	4°17'17	21°23'23	19°23'23	0°3'3	16°27'27	22°36'36	13°D10	11°54'54	11°14'14	1°16'16	F 17
S 18	6 20 3	5°5'13	21°25'25	15°48'48	21°5'5	4°54'54	21°31'31	19°21'21	0°5'5	16°25'25	22°35'35	13°11'11	11°51'51	11°20'20	1°22'22	S 18
S 19	6 24 0	6°6'23	3°43'43	14°55'55	22°14'14	5°31'31	21°39'39	19°18'18	0°7'7	16°24'24	22°34'34	13°12'12	11°47'47	11°27'27	1°28'28	S 19
M20	6 27 56	7°7'34	16°21'21	13°52'52	23°24'24	6°8'8	21°47'47	19°15'15	0°10'10	16°22'22	22°32'32	13°R13	11°44'44	11°34'34	1°34'34	M20
T 21	6 31 53	8°8'43	29°21'21	12°41'41	24°34'34	6°45'45	21°55'55	19°12'12	0°12'12	16°20'20	22°31'31	13°11'11	11°41'41	11°40'40	1°40'40	T 21
W22	6 35 49	9°9'53	12°47'47	11°25'25	25°44'44	7°21'21	22°4'4	19°9'9	0°14'14	16°19'19	22°30'30	13°8'8	11°38'38	11°47'47	1°46'46	W22
T 23	6 39 46	10°11'02	26°38'38	10°5'5	26°54'54	7°58'58	22°12'12	19°6'6	0°17'17	16°17'17	22°29'29	13°1'1	11°35'35	11°54'54	1°52'52	T 23
F 24	6 43 43	11°12'11	10°51'51	8°45'45	28°4'4	8°35'35	22°21'21	19°2'2	0°19'19	16°15'15	22°28'28	12°53'53	11°32'32	12°1'1	1°58'58	F 24
S 25	6 47 39	12°13'19	25°22'22	7°27'27	29°15'15	9°12'12	22°30'30	18°59'59	0°22'22	16°13'13	22°27'27	12°43'43	11°28'28	12°7'7	2°4'4	S 25
S 26	6 51 36	13°14'27	10°13'13	6°13'13	0°25'5	9°49'49	22°39'39	18°56'56	0°24'24	16°12'12	22°26'26	12°33'33	11°25'25	12°14'14	2°10'10	S 26
M27	6 55 32	14°15'35	24°47'47	5°5'5	1°36'36	10°25'25	22°48'48	18°52'52	0°27'27	16°10'10	22°25'25	12°24'24	11°22'22	12°21'21	2°16'16	M27
T 28	6 59 29	15°16'43	9°11'26	4°5'5	2°47'47	11°2'2	22°58'58	18°49'49	0°30'30	16°8'8	22°23'23	12°17'17	11°19'19	12°27'27	2°22'22	T 28
W29	7 3 25	16°17'50	23°53'53	3°14'14	3°57'57	11°39'39	23°7'7	18°45'45	0°32'32	16°7'7	22°22'22	12°13'13	11°16'16	12°34'34	2°28'28	W29
T 30	7 7 22	17°18'58	8°6'6	2°32'32	5°8'8	12°15'15	23°17'17	18°41'41	0°35'35	16°5'5	22°21'21	12°11'11	11°12'12	12°41'41	2°34'34	T 30
F 31	7 11 18	18°20'05	22°13'13	1°35'59	6°19'19	12°15'52	23°17'27	18°41'37	0°38'38	16°5'3	22°21'20	12°D10	11°11'9	12°47'47	2°40'40	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
W 1	22s57	2n27	4s33	25s27	2s 7	9s40	2n37	8s25	1n 8	5s23	1s22	16n 0	1n10	12s22	0s45	21n50
T 2	23 2	2s23	3 48	25 19	2 3	10 2	2 38	8 39	1 8	5 20	1 22	16 0	1 10	12 22	0 45	21 50
F 3	23 7	7 4	2 50	25 9	1 58	10 24	2 39	8 53	1 8	5 18	1 22	16 1	1 10	12 21	0 45	21 50
S 4	23 12	11 20	1 42	24 57	1 52	10 45	2 40	9 6	1 8	5 15	1 21	16 2	1 10	12 21	0 45	21 50
S 5	23 16	14 57	0 28	24 44	1 45	11 7	2 41	9 20	1 8	5 13	1 21	16 2	1 11	12 20	0 45	21 50
M 6	23 19	17 43	0n45	24 30	1 37	11 28	2 41	9 34	1 7	5 10	1 21	16 3	1 11	12 19	0 45	21 50
T 7	23 22	19 28	1 56	24 15	1 28	11 50	2 41	9 47	1 7	5 8	1 21	16 4	1 11	12 19	0 45	21 51
W 8	23 25	20 6	2 58	23 59	1 18	12 11	2 42	10 1	1 7	5 5	1 20	16 4	1 11	12 18	0 45	21 51
T 9	23 27	19 39	3 51	23 42	1 6	12 32	2 42	10 14	1 7	5 2	1 20	16 5	1 11	12 17	0 45	21 51
F 10	23 29	18 12	4 30	23 25	0 54	12 53	2 42	10 27	1 6	4 59	1 20	16 6	1 12	12 17	0 45	21 51
S 11	23 30	15 54	4 56	23 7	0 40	13 14	2 42	10 41	1 6	4 56	1 20	16 7	1 12	12 16	0 45	21 51
S 12	23 31	12 56	5 7	22 49	0 25	13 34	2 41	10 54	1 6	4 53	1 19	16 8	1 12	12 15	0 45	21 52
M13	23 31	9 28	5 5	22 31	0 9	13 55	2 41	11 7	1 6	4 50	1 19	16 9	1 12	12 14	0 45	21 52
T 14	23 31	5 41	4 49	22 14	0n 8	14 15	2 40	11 20	1 5	4 47	1 19	16 9	1 12	12 14	0 45	21 52
W15	23 30	1 41	4 20	21 57	0 26	14 35	2 40	11 33	1 5	4 44	1 19	16 10	1 13	12 13	0 45	21 52
T 16	23 29	2n22	3 41	21 41	0 45	14 55	2 39	11 46	1 5	4 41	1 18	16 11	1 13	12 12	0 45	21 52
F 17	23 27	6 21	2 52	21 25	1 5	15 14	2 38	11 58	1 5	4 38	1 18	16 12	1 13	12 11	0 44	21 53
S 18	23 25	10 9	1 55	21 11	1 24	15 33	2 37	12 11	1 4	4 34	1 18	16 13	1 13	12 10	0 44	21 53
S 19	23 22	13 36	0 51	20 58	1 43	15 52	2 36	12 24	1 4	4 31	1 18	16 14	1 13	12 9	0 44	21 53
M20	23 19	16 31	0s17	20 46	2 2	16 11	2 35	12 36	1 4	4 27	1 17	16 16	1 14	12 9	0 44	21 53
T 21	23 16	18 41	1 26	20 35	2 19	16 29	2 34	12 49	1 3	4 24	1 17	16 17	1 14	12 8	0 44	21 53
W22	23 12	19 54	2 32	20 26	2 35	16 47	2 32	13 1	1 3	4 20	1 17	16 18	1 14	12 7	0 44	21 54
T 23	23 7	19 58	3 31	20 19	2 49	17 5	2 31	13 13	1 3	4 17	1 17	16 19	1 14	12 6	0 44	21 54
F 24	23 2	18 47	4 18	20 12	3 1	17 22	2 29	13 25	1 2	4 13	1 17	16 20	1 14	12 5	0 44	21 54
S 25	22 57	16 22	4 50	20 8	3 11	17 39	2 28	13 37	1 2	4 9	1 16	16 21	1 14	12 4	0 44	21 54
S 26	22 51	12 54	5 4	20 5	3 17	17 55	2 26	13 49	1 2	4 5	1 16	16 23	1 15	12 3	0 44	21 55
M27	22 45	8 38	4 57	20 3	3 22	18 12	2 24	14 1	1 1	4 1	1 16	16 24	1 15	12 2	0 44	21 55
T 28	22 38	3 53	4 31	20 3	3 24	18 27	2 22	14 13	1 1	3 58	1 16	16 25	1 15	12 1	0 44	21 55
W29	22 31	1s 3	3 48	20 5	3 23	18 43	2 20	14 25	1 1	3 54	1 15	16 27	1 15	12 0	0 44	21 55
T 30	22 23	5 50	2 51	20 8	3 21	18 58	2 18	14 36	1 0	3 50	1 15	16 28	1 15	11 59	0 44	21 55
F 31	22s15	10s14	1s45	20s13	3n17	19s12	2n16	14s48	1n 0	3s46	1s15	16n29	1n16	11s58	0s44	21n56

Julian Day Number = 2238951.5, Delta T = 07m24s

Ecliptic obliquity = 23°30'46", Nutation = 0°00'11", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°37'12", Lahiri = 15°44'13" Julian Calendar 1 Dec. 1417 == Greg. Calendar 10 Dec. 1417