



Astrodienst Ephemeris Tables for the year 1519

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 1519

geocentric

JANUARY 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	7 17 19	19 ³⁵ 0'08	15 ³ 13	8 ³ 5	1 ³ 16	22°R40	20 ² 43	13 ³ 57	8°R28	25 ² 18	6 ³ 8	9°R17	7 ² 37	12 ² 29	2 ² 2	S 1
S 2	7 21 16	20°51'16	0 ² 24	9°38	2°31	22 ² 27	20°48	14° 4	8 ³ 28	25°20	6°10	9 ² 11	7°33	12°36	2° 7	S 2
M 3	7 25 13	21°52'23	15°37	11°12	3°46	22°14	20°52	14°11	8°28	25°22	6°12	9° 5	7°30	12°43	2°11	M 3
T 4	7 29 9	22°53'29	0 ² 43	12°46	5° 1	22° 2	20°56	14°18	8°27	25°24	6°14	8°58	7°27	12°49	2°16	T 4
W 5	7 33 6	23°54'35	15°30	14°21	6°16	21°51	21° 1	14°25	8°27	25°26	6°16	8°52	7°24	12°56	2°21	W 5
T 6	7 37 2	24°55'39	29°55	15°57	7°31	21°41	21° 5	14°32	8°27	25°28	6°18	8°47	7°21	13° 3	2°26	T 6
F 7	7 40 59	25°56'42	13 ² 53	17°33	8°47	21°31	21° 8	14°39	8°D27	25°30	6°20	8°44	7°17	13°10	2°31	F 7
S 8	7 44 55	26°57'45	27°25	19°10	10° 2	21°22	21°12	14°46	8°27	25°32	6°22	8°D44	7°14	13°16	2°36	S 8
S 9	7 48 52	27°58'46	10 ² 32	20°47	11°17	21°14	21°15	14°53	8°27	25°34	6°24	8°44	7°11	13°23	2°41	S 9
M10	7 52 48	28°59'46	23°18	22°25	12°32	21° 7	21°19	15° 0	8°27	25°36	6°26	8°46	7° 8	13°30	2°46	M10
T 11	7 56 45	0 ² 45	5 ² 48	24° 4	13°47	21° 1	21°22	15° 7	8°28	25°38	6°28	8°R46	7° 5	13°36	2°50	T 11
W12	8 0 42	1° 1'42	18° 4	25°43	15° 2	20°56	21°25	15°13	8°28	25°41	6°30	8°46	7° 2	13°43	2°55	W12
T 13	8 4 38	2° 2'39	0 ² 11	27°23	16°17	20°51	21°28	15°20	8°28	25°43	6°32	8°43	6°58	13°50	3° 0	T 13
F 14	8 8 35	3° 3'35	12°11	29° 4	17°32	20°47	21°30	15°27	8°28	25°45	6°34	8°38	6°55	13°57	3° 5	F 14
S 15	8 12 31	4° 4'29	24° 7	0 ² 45	18°48	20°44	21°33	15°34	8°29	25°47	6°36	8°31	6°52	14° 3	3°10	S 15
S 16	8 16 28	5° 5'22	6 ² 0	2°27	20° 3	20°42	21°35	15°41	8°29	25°49	6°38	8°21	6°49	14°10	3°15	S 16
M17	8 20 24	6° 6'14	17°52	4°10	21°18	20°40	21°37	15°48	8°30	25°51	6°40	8° 9	6°46	14°17	3°20	M17
T 18	8 24 21	7° 7'05	29°44	5°53	22°33	20°D39	21°39	15°54	8°30	25°53	6°42	7°57	6°43	14°23	3°25	T 18
W19	8 28 17	8° 7'55	11 ² 39	7°37	23°48	20°39	21°40	16° 1	8°31	25°56	6°43	7°46	6°39	14°30	3°30	W19
T 20	8 32 14	9° 8'44	23°37	9°22	25° 3	20°40	21°42	16° 8	8°31	25°58	6°45	7°36	6°36	14°37	3°35	T 20
F 21	8 36 11	10° 9'32	5 ² 41	11° 8	26°18	20°42	21°43	16°15	8°32	26° 0	6°47	7°28	6°33	14°44	3°39	F 21
S 22	8 40 7	11°10'18	17°55	12°54	27°33	20°44	21°44	16°21	8°33	26° 2	6°49	7°22	6°30	14°50	3°44	S 22
S 23	8 44 4	12°11'04	0 ² 23	14°41	28°48	20°47	21°45	16°28	8°34	26° 4	6°51	7°20	6°27	14°57	3°49	S 23
M24	8 48 0	13°11'49	13° 8	16°28	0 ² 3	20°51	21°46	16°34	8°35	26° 7	6°53	7°D19	6°23	15° 4	3°54	M24
T 25	8 51 57	14°12'33	26°15	18°17	1°18	20°55	21°46	16°41	8°35	26° 9	6°54	7°19	6°20	15°10	3°59	T 25
W26	8 55 53	15°13'15	9 ² 47	20° 6	2°34	21° 0	21°47	16°48	8°36	26°11	6°56	7°R19	6°17	15°17	4° 4	W26
T 27	8 59 50	16°13'57	23°48	21°55	3°49	21° 6	21°R47	16°54	8°37	26°13	6°58	7°18	6°14	15°24	4° 9	T 27
F 28	9 3 46	17°14'38	8 ² 16	23°45	5° 4	21°12	21°47	17° 1	8°38	26°16	6°59	7°15	6°11	15°31	4°13	F 28
S 29	9 7 43	18°15'17	23°10	25°35	6°19	21°19	21°46	17° 7	8°40	26°18	7° 1	7° 9	6° 8	15°37	4°18	S 29
S 30	9 11 40	19°15'55	8 ² 23	27°25	7°34	21°27	21°46	17°13	8°41	26°20	7° 3	7° 0	6° 4	15°44	4°23	S 30
M31	9 15 36	20 ² 16'31	23 ² 44	29 ² 16	8 ² 49	21 ² 35	21 ² 45	17 ² 30	8 ² 42	26 ² 22	7 ² 4	6 ² 50	6 ² 1	15 ² 51	4 ² 28	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	22s 2	25s39	3s 2	24s26	1s11	23s19	0n11	26n51	3n33	6s52	1n21	22s32	0n14	13n59	0s24	13s41	0s36
S 2	21 53	24 3	4 1	24 25	1 16	23 21	0 8	26 50	3 33	6 53	1 21	22 31	0 14	13 59	0 24	13 41	0 36
M 3	21 43	20 42	4 43	24 23	1 22	23 21	0 6	26 49	3 33	6 55	1 21	22 31	0 14	13 59	0 24	13 40	0 36
T 4	21 33	16 0	5 5	24 19	1 26	23 21	0 3	26 48	3 32	6 56	1 21	22 30	0 14	13 59	0 24	13 39	0 36
W 5	21 23	10 26	5 7	24 14	1 31	23 21	0 0	26 46	3 32	6 58	1 21	22 29	0 14	13 59	0 24	13 39	0 36
T 6	21 12	4 26	4 48	24 8	1 36	23 19	0s 2	26 45	3 31	6 59	1 22	22 28	0 14	13 59	0 24	13 38	0 36
F 7	21 1	1n36	4 13	24 0	1 40	23 17	0 5	26 44	3 31	7 0	1 22	22 28	0 14	13 59	0 24	13 37	0 36
S 8	20 49	7 24	3 24	23 50	1 44	23 14	0 7	26 43	3 30	7 1	1 22	22 27	0 14	13 59	0 24	13 37	0 36
S 9	20 37	12 42	2 26	23 39	1 47	23 11	0 10	26 42	3 29	7 2	1 22	22 26	0 14	13 59	0 24	13 36	0 36
M10	20 25	17 19	1 22	23 27	1 50	23 7	0 12	26 41	3 29	7 3	1 23	22 26	0 14	13 59	0 23	13 35	0 36
T 11	20 12	21 4	0 16	23 13	1 53	23 2	0 15	26 39	3 28	7 4	1 23	22 25	0 14	13 59	0 23	13 34	0 36
W12	19 59	23 48	0n50	22 57	1 56	22 56	0 17	26 38	3 27	7 5	1 23	22 24	0 14	14 0	0 23	13 34	0 36
T 13	19 45	25 23	1 52	22 40	1 58	22 50	0 20	26 37	3 27	7 6	1 23	22 24	0 14	14 0	0 23	13 33	0 36
F 14	19 32	25 45	2 49	22 22	2 0	22 43	0 22	26 36	3 26	7 7	1 24	22 23	0 14	14 0	0 23	13 32	0 36
S 15	19 17	24 55	3 38	22 2	2 2	22 35	0 24	26 35	3 25	7 7	1 24	22 22	0 14	14 0	0 23	13 32	0 36
S 16	19 3	22 58	4 17	21 40	2 3	22 27	0 27	26 34	3 24	7 8	1 24	22 21	0 13	14 0	0 23	13 31	0 36
M17	18 48	20 2	4 45	21 16	2 4	22 17	0 29	26 33	3 23	7 9	1 24	22 21	0 13	14 0	0 23	13 30	0 36
T 18	18 32	16 16	5 0	20 51	2 4	22 8	0 31	26 32	3 22	7 9	1 25	22 20	0 13	14 1	0 23	13 29	0 36
W19	18 17	11 52	5 3	20 25	2 4	21 57	0 34	26 31	3 21	7 9	1 25	22 19	0 13	14 1	0 23	13 29	0 36
T 20	18 1	7 0	4 52	19 57	2 4	21 46	0 36	26 30	3 20	7 10	1 25	22 18	0 13	14 1	0 23	13 28	0 36
F 21	17 45	1 50	4 28	19 27	2 3	21 34	0 38	26 29	3 19	7 10	1 25	22 18	0 13	14 1	0 23	13 27	0 36
S 22	17 28	3s29	3 51	18 56	2 1	21 22	0 40	26 28	3 18	7 10	1 26	22 17	0 13	14 1	0 23	13 26	0 36
S 23	17 11	8 46	3 3	18 23	1 59	21 9	0 42	26 27	3 17	7 10	1 26	22 16	0 13	14 2	0 23	13 26	0 36
M24	16 54	13 50	2 5	17 48	1 57	20 55	0 44	26 27	3 16	7 10	1 26	22 15	0 13	14 2	0 23	13 25	0 36
T 25	16 37	18 25	0 59	17 12	1 54	20 41	0 47	26 26	3 15	7 10	1 26	22 15	0 13	14 2	0 23	13 24	0 36
W26	16 19	22 12	0s13	16 34	1 51	20 26	0 49	26 25	3 14	7 10	1 27	22 14	0 13	14 3	0 23	13 23	0 36
T 27	16 1	24 48	1 26	15 55	1 47	20 10	0 51	26 24	3 13	7 10	1 27	22 13	0 13	14 3	0 23	13 23	0 36
F 28	15 42	25 51	2 36	15 14	1 42	19 54	0 52	26 24	3 12	7 10	1 27	22 12	0 13	14 3	0 23	13 22	0 36
S 29	15 24	25 5	3 38	14 32	1 37	19 37	0 54	26 23	3 11	7 9	1 27	22 12	0 13	14 4	0 23	13 21	0 36
S 30	15 5	22 28	4 25	13 49	1 31	19 20	0 56	26 23	3 9	7 9	1 28	22 11	0 13	14 4	0 23	13 20	0 36
M31	14s46	18s15	4s53	13s 4	1s24	19s 2	0s58	26n22	3n 8	7s 9	1n28	22s10	0n13	14n 5	0s23	13s20	0s36

Julian Day Number = 2275872.5, Delta T = 249.42 sec

Ecliptic obliquity = 23°30'09, Nutation = - 0°00'15, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 18°01'44, Lahiri = 17°08'44 Julian Calendar 1 Jan. 1519 == Greg. Calendar 11 Jan. 1519

ASTRODIENST EPHEMERIS for the year 1519

geocentric

FEBRUARY 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	9 19 33	21°17'06	9°2' 1	1°1' 6	10°1' 4	21°11'44	21°R45	17°3'26	8°4'43	26°2'25	7°3' 6	6°R39	5°11'58	15°1'57	4°1'32	T 1
W 2	9 23 29	22°17'39	24° 5	2°56	11°19	21°53	21°14	17°32	8°44	26°27	7° 8	6°11'28	5°55	16° 4	4°37	W 2
T 3	9 27 26	23°18'10	8°4'5	4°46	12°34	22° 3	21°42	17°38	8°46	26°29	7° 9	6°20	5°52	16°11	4°42	T 3
F 4	9 31 22	24°18'40	22°56	6°34	13°49	22°14	21°41	17°45	8°47	26°32	7°11	6°14	5°48	16°18	4°47	F 4
S 5	9 35 19	25°19'07	6°3'37	8°22	15° 4	22°25	21°39	17°51	8°49	26°34	7°12	6°11	5°45	16°24	4°51	S 5
S 6	9 39 15	26°19'33	19°49	10° 7	16°19	22°37	21°38	17°57	8°50	26°36	7°14	6°10	5°42	16°31	4°56	S 6
M 7	9 43 12	27°19'57	2°11'36	11°51	17°34	22°50	21°36	18° 3	8°52	26°38	7°15	6° 9	5°39	16°38	5° 0	M 7
T 8	9 47 9	28°20'19	15° 2	13°33	18°49	23° 3	21°34	18° 9	8°53	26°41	7°17	6° 9	5°36	16°44	5° 5	T 8
W 9	9 51 5	29°20'39	27°14	15°11	20° 4	23°16	21°31	18°15	8°55	26°43	7°18	6° 8	5°33	16°51	5°10	W 9
T 10	9 55 2	0°11'20'56	9°2'14	16°46	21°19	23°30	21°29	18°21	8°57	26°45	7°20	6° 4	5°29	16°58	5°14	T 10
F 11	9 58 58	1°21'12	21° 8	18°17	22°34	23°44	21°26	18°26	8°58	26°47	7°21	5°57	5°26	17° 5	5°19	F 11
S 12	10 2 55	2°21'26	2°1'59	19°43	23°49	23°59	21°23	18°32	9° 0	26°50	7°23	5°48	5°23	17°11	5°23	S 12
S 13	10 6 51	3°21'38	14°50	21° 4	25° 3	24°15	21°20	18°38	9° 2	26°52	7°24	5°35	5°20	17°18	5°28	S 13
M14	10 10 48	4°21'48	26°43	22°19	26°18	24°30	21°17	18°44	9° 4	26°54	7°25	5°21	5°17	17°25	5°32	M14
T 15	10 14 44	5°21'57	8°11'39	23°27	27°33	24°47	21°14	18°49	9° 6	26°57	7°27	5° 6	5°14	17°31	5°37	T 15
W16	10 18 41	6°22'03	20°39	24°29	28°48	25° 3	21°10	18°55	9° 8	26°59	7°28	4°52	5°10	17°38	5°41	W16
T 17	10 22 38	7°22'07	2°1'45	25°23	0°1' 3	25°20	21° 6	19° 0	9°10	27° 1	7°29	4°39	5° 7	17°45	5°45	T 17
F 18	10 26 34	8°22'10	14°58	26° 9	1°18	25°38	21° 3	19° 6	9°12	27° 3	7°30	4°29	5° 4	17°52	5°50	F 18
S 19	10 30 31	9°22'11	27°20	26°47	2°33	25°56	20°59	19°11	9°14	27° 6	7°32	4°22	5° 1	17°58	5°54	S 19
S 20	10 34 27	10°22'10	9°11'53	27°15	3°47	26°14	20°54	19°16	9°16	27° 8	7°33	4°17	4°58	18° 5	5°58	S 20
M21	10 38 24	11°22'08	22°40	27°36	5° 2	26°33	20°50	19°22	9°18	27°10	7°34	4°15	4°54	18°12	6° 2	M21
T 22	10 42 20	12°22'04	5°1'44	27°47	6°17	26°52	20°45	19°27	9°20	27°12	7°35	4°15	4°51	18°18	6° 7	T 22
W23	10 46 17	13°21'59	19°10	27°R49	7°32	27°11	20°41	19°32	9°23	27°14	7°36	4°15	4°48	18°25	6°11	W23
T 24	10 50 13	14°21'52	2°1'59	27°43	8°47	27°31	20°36	19°37	9°25	27°17	7°37	4°14	4°45	18°32	6°15	T 24
F 25	10 54 10	15°21'43	17°13	27°28	10° 1	27°52	20°31	19°42	9°27	27°19	7°38	4°11	4°42	18°39	6°19	F 25
S 26	10 58 7	16°21'32	1°1'50	27° 5	11°16	28°12	20°26	19°47	9°29	27°21	7°39	4° 5	4°39	18°45	6°23	S 26
S 27	11 2 3	17°21'20	16°47	26°34	12°31	28°33	20°20	19°52	9°32	27°23	7°40	3°57	4°35	18°52	6°27	S 27
M28	11 6 0	18°11'06	1°1'56	25°1'57	13°1'46	28°11'54	20°1'15	19°1'56	9°1'34	27°1'25	7°1'41	3°1'47	4°1'32	18°1'59	6°1'31	M28

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	14s27	12s51	5s 1	12s18	1s17	18s44	1s 0	26n21	3n 7	7s 8	1n28	22s 9	0n12	14n 5	0s23	13s19	0s36	20s56	2n23	21n29	21n22	20n42	12s54	6n28			
W 2	14 7	6 45	4 47	11 31	1 9	18 25	1 1	26 21	3 6	7 7	1 28	22 9	0 12	14 5	0 23	13 18	0 36	20 56	2 23	21 27	21 21	20 41	12 52	6 28			
T 3	13 47	0 26	4 15	10 44	1 0	18 5	1 3	26 20	3 5	7 7	1 29	22 8	0 12	14 6	0 23	13 17	0 36	20 56	2 23	21 25	21 20	20 39	12 51	6 28			
F 4	13 27	5n44	3 27	9 55	0 51	17 45	1 5	26 20	3 4	7 6	1 29	22 7	0 12	14 6	0 23	13 16	0 36	20 56	2 23	21 24	21 20	20 37	12 50	6 28			
S 5	13 7	11 24	2 30	9 6	0 41	17 25	1 6	26 19	3 3	7 5	1 29	22 6	0 12	14 7	0 23	13 16	0 36	20 56	2 23	21 24	21 19	20 35	12 49	6 28			
S 6	12 46	16 22	1 25	8 16	0 31	17 4	1 8	26 19	3 1	7 4	1 29	22 6	0 12	14 7	0 23	13 15	0 36	20 56	2 23	21 24	21 19	20 33	12 48	6 28			
M 7	12 26	20 26	0 19	7 26	0 19	16 43	1 9	26 19	3 0	7 3	1 29	22 5	0 12	14 8	0 23	13 14	0 36	20 56	2 23	21 24	21 18	20 32	12 46	6 29			
T 8	12 5	23 26	0n47	6 36	0 7	16 21	1 11	26 18	2 59	7 2	1 30	22 4	0 12	14 8	0 23	13 13	0 36	20 56	2 23	21 24	21 18	20 30	12 45	6 29			
W 9	11 44	25 17	1 49	5 47	0n 5	15 58	1 12	26 18	2 58	7 1	1 30	22 4	0 12	14 9	0 23	13 13	0 36	20 56	2 23	21 23	21 17	20 28	12 44	6 29			
T 10	11 23	25 56	2 45	4 58	0 18	15 35	1 13	26 17	2 57	7 0	1 30	22 3	0 12	14 10	0 23	13 12	0 36	20 56	2 23	21 23	21 17	20 26	12 43	6 29			
F 11	11 1	25 21	3 34	4 10	0 31	15 12	1 14	26 17	2 56	6 59	1 30	22 2	0 12	14 10	0 23	13 11	0 36	20 56	2 23	21 21	21 16	20 24	12 42	6 29			
S 12	10 40	23 38	4 12	3 23	0 45	14 49	1 16	26 16	2 55	6 58	1 31	22 1	0 12	14 11	0 23	13 10	0 36	20 55	2 23	21 20	21 15	20 23	12 40	6 29			
S 13	10 18	20 53	4 40	2 39	0 59	14 24	1 17	26 16	2 54	6 56	1 31	22 1	0 12	14 11	0 23	13 10	0 36	20 55	2 23	21 18	21 15	20 21	12 39	6 30			
M14	9 56	17 16	4 56	1 56	1 14	14 0	1 18	26 16	2 52	6 55	1 31	22 0	0 12	14 12	0 23	13 9	0 36	20 55	2 22	21 15	21 14	20 19	12 38	6 30			
T 15	9 34	12 57	4 58	1 15	1 28	13 35	1 19	26 15	2 51	6 54	1 31	21 59	0 12	14 13	0 22	13 8	0 36	20 55	2 22	21 12	21 14	20 17	12 37	6 30			
W16	9 12	8 7	4 48	0 38	1 43	13 10	1 20	26 15	2 50	6 52	1 31	21 58	0 12	14 13	0 22	13 7	0 36	20 55	2 22	21 10	21 13	20 15	12 35	6 30			
T 17	8 50	2 57	4 25	0 3	1 57	12 44	1 21	26 14	2 49	6 50	1 32	21 58	0 11	14 14	0 22	13 7	0 36	20 55	2 22	21 8	21 13	20 13	12 34	6 30			
F 18	8 27	2s24	3 49	0n28	2 11	12 19	1 21	26 14	2 48	6 49	1 32	21 57	0 11	14 15	0 22	13 6	0 36	20 55	2 22	21 6	21 12	20 12	12 33	6 31			
S 19	8 5	7 44	3 2	0 55	2 24	11 52	1 22	26 13	2 47	6 47	1 32	21 56	0 11	14 15	0 22	13 5	0 36	20 55	2 22	21 4	21 11	20 10	12 32	6 31			
S 20	7 42	12 50	2 5	1 18	2 37	11 26	1 23	26 13	2 46	6 45	1 32	21 56	0 11	14 16	0 22	13 4	0 36	20 55	2 22	21 3	21 11	20 8	12 30	6 31			
M21	7 19	17 30	1 1	1 37	2 49	10 59	1 23	26 12	2 45	6 44	1 32	21 55	0 11	14 17	0 22	13 4	0 36	20 55	2 22	21 3	21 10	20 6	12 29	6 31			
T 22	6 56	21 27	0s 8	1 52	3 0	10 32	1 24	26 11	2 43	6 42	1 33	21 54	0 11	14 17	0 22	13 3	0 36	20 55	2 22	21 3	21 10	20 4	12 28	6 32			
W23	6 33	24 21	1 18	2 2	3 10	10 4	1 24	26 11	2 42	6 40	1 33	21 54	0 11	14 18	0 22	13 2	0 36	20 55	2 22	21 3	21 9	20 2	12 27	6 32			
T 24	6 10	25 54	2 26	2 7	3 19	9 37	1 25	26 10	2 41	6 38	1 33	21 53	0 11	14 19	0 22	13 1	0 37	20 55	2 22	21 3	21 9	20 0	12 26	6 32			
F 25	5 47	25 48	3 26	2 8	3 26	9 9	1 25	26 9	2 40	6 36	1 33	21 52	0 11	14 20	0 22	13 1	0 37	20 55	2 22	21 2	21 8	19 58	12 24	6 32			
S 26	5 24	23 57	4 15	2 4	3 31	8 41	1 26	26 9	2 39	6 34	1 33	21 52	0 11	14 20	0 22	13 0	0 37	20 55	2 22	21 1	21 7	19 56	12 23	6 33			
S 27	5 0	20 25	4 48	1 55	3 35	8 12	1 26	26 8	2 38	6 31	1 33	21 51	0 11	14 21	0 22	12 59	0 37	20 55	2 22	21 0	21 7	19 55	12 22	6 33			
M28	4s37	15s29	5s 1	1n43	3n37	7s44	1s26	26n 7	2n37	6s29	1n34	21s50	0n11	14n22	0s22	12s58	0s37	20s55	2n22	20n58	21n 6	19n53	12s21	6n33			

Julian Day Number = 2275903.5, Delta T = 249.23 sec

Ecliptic obliquity = 23°30'10, Nutation = - 0°00'14, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 18°01'48, Lahiri = 17°08'49 Julian Calendar 1 Feb. 1519 == Greg. Calendar 11 Feb. 1519

ASTRODIENST EPHEMERIS for the year 1519

geocentric

MARCH 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	11 9 56	19°20'50	17°16' 6	25°15'15	15°16' 0	29°11'16	20°18' 9	20°20' 1	9°37'37	27°28'28	7°34'42	3°18'36	4°11'29	19°18' 5	6°33'35	T 1
W 2	11 13 53	20°20'31	2°17' 8	24°16'27	16°16'15	29°38'20	20°20' 4	20°20' 6	9°39'27	27°30'30	7°43'31	3°11'25	4°26'19	19°12'12	6°39'39	W 2
T 3	11 17 49	21°20'11	16°51' 8	23°36'17	17°30'30	29°59'19	20°19'58	20°10'10	9°42'27	27°32'32	7°44'30	3°16'42	4°23'19	19°19'19	6°42'42	T 3
F 4	11 21 46	22°19'49	18°51' 8	22°43'18	18°44'44	0°52'22	19°52'20	20°15'15	9°44'27	27°34'34	7°45'30	3°10'42	4°20'19	19°26'26	6°46'46	F 4
S 5	11 25 42	23°19'24	14°56'21	21°48'19	19°59'04	19°46'20	20°19'19	20°19'19	9°47'27	27°36'36	7°46'30	3°6'44	4°16'19	19°32'32	6°50'50	S 5
S 6	11 29 39	24°18'57	28°16'20	20°54'21	1°14' 8	19°39'20	20°24'24	20°24'24	9°50'27	27°38'38	7°46'30	3°5'40	4°13'19	19°39'39	6°54'54	S 6
M 7	11 33 36	25°18'28	11°11' 9	20°0'22	2°28'13	19°33'20	20°28'28	20°28'28	9°52'27	27°40'40	7°47'30	3°5'40	4°10'19	19°46'46	6°57'57	M 7
T 8	11 37 32	26°17'56	23°39'19	9°9'23	3°43'15	19°26'20	20°32'32	20°32'32	9°55'27	27°42'42	7°48'30	3°6'40	4°7'19	19°52'52	7°1'1	T 8
W 9	11 41 29	27°17'22	5°53'18	20°24'58	2°19'21	19°20'20	20°36'36	20°36'36	9°58'27	27°44'44	7°49'30	3°5'40	4°4'19	19°59'59	7°5'5	W 9
T 10	11 45 25	28°16'46	17°53'17	17°35'26	2°12'24	19°13'19	20°40'40	20°40'40	10°1'27	27°46'46	7°49'30	3°3'40	4°0'20	20°6'6	7°8'8	T 10
F 11	11 49 22	29°16'08	29°47'16	16°55'27	2°27'3	19°6'19	20°44'44	20°44'44	10°3'27	27°48'48	7°50'30	2°59'30	3°57'20	20°13'13	7°12'12	F 11
S 12	11 53 18	0°15'27	11°12'37	16°19'28	2°41'3	3°32'19	20°48'48	20°48'48	10°6'27	27°50'50	7°50'30	2°52'30	3°54'20	20°19'19	7°15'15	S 12
S 13	11 57 15	1°14'44	23°29'15	15°49'29	2°56'3	3°57'18	20°52'52	20°52'52	10°9'27	27°52'52	7°51'30	2°43'30	3°51'20	20°26'26	7°18'18	S 13
M14	12 1 11	2°13'58	5°11'29	15°25'15	1°10'1	4°22'18	20°56'56	20°56'56	10°12'27	27°54'54	7°52'30	2°32'30	3°48'20	20°33'33	7°22'22	M14
T 15	12 5 8	3°13'11	17°25'15	15°6'2	2°25'4	4°48'18	20°59'59	20°59'59	10°15'27	27°56'56	7°52'30	2°20'30	3°45'20	20°40'40	7°25'25	T 15
W16	12 9 4	4°12'21	29°34'14	5°53'3	3°39'5	5°13'18	21°3'3	21°3'3	10°18'27	27°58'58	7°53'30	2°9'30	3°41'20	20°46'46	7°28'28	W16
T 17	12 13 1	5°11'29	11°12'37	14°45'4	4°54'5	5°39'18	21°6'6	21°6'6	10°21'28	28°0'0	7°53'30	1°59'30	3°38'20	20°53'53	7°31'31	T 17
F 18	12 16 58	6°10'35	24°18'14	14°44'6	6°8'6	6°5'18	21°10'10	21°10'10	10°24'28	28°2'2	7°53'30	1°52'30	3°35'21	21°0'0	7°34'34	F 18
S 19	12 20 54	7°9'40	6°11'55	14°47'7	7°23'3	6°32'18	21°13'13	21°13'13	10°27'28	28°4'4	7°54'30	1°46'30	3°32'21	21°6'6	7°37'37	S 19
S 20	12 24 51	8°8'42	19°43'14	14°57'8	8°37'6	6°58'18	21°16'16	21°16'16	10°30'28	28°6'6	7°54'30	1°43'30	3°29'21	21°13'13	7°40'40	S 20
M21	12 28 47	9°7'42	2°17'42	15°11'9	9°51'5	7°25'17	21°19'19	21°19'19	10°33'28	28°8'8	7°55'30	1°43'30	3°25'21	21°20'20	7°43'43	M21
T 22	12 32 44	10°6'41	15°56'15	15°30'11	6'6	7°52'17	21°22'22	21°22'22	10°36'28	28°9'9	7°55'30	1°43'30	3°22'21	21°27'27	7°46'46	T 22
W23	12 36 40	11°5'38	29°25'15	15°54'12	20'8	8°19'17	21°25'25	21°25'25	10°39'28	28°11'11	7°55'30	1°44'30	3°19'21	21°33'33	7°49'49	W23
T 24	12 40 37	12°4'33	13°12'13	16°22'13	3°34'8	8°46'17	21°28'28	21°28'28	10°42'28	28°13'13	7°55'30	1°44'30	3°16'21	21°40'40	7°52'52	T 24
F 25	12 44 33	13°3'27	27°16'16	16°55'14	4°49'9	9°13'17	21°31'31	21°31'31	10°45'28	28°15'15	7°56'30	1°44'30	3°13'21	21°47'47	7°55'55	F 25
S 26	12 48 30	14°2'19	11°18'38	17°32'16	3'3	9°41'17	21°34'34	21°34'34	10°49'28	28°16'16	7°56'30	1°41'30	3°10'21	21°53'53	7°57'57	S 26
S 27	12 52 27	15°1'09	26°13'18	18°13'17	1°17'10	10°9'17	21°36'36	21°36'36	10°52'28	28°18'18	7°56'30	1°36'30	3°6'22	22°0'0	8°0'0	S 27
M28	12 56 23	15°59'57	10°18'58	18°57'18	3°32'10	10°37'17	21°39'39	21°39'39	10°55'28	28°20'20	7°56'30	1°30'30	3°3'22	22°7'7	8°2'2	M28
T 29	13 0 20	16°58'43	25°46'19	19°45'19	4°46'11	11°5'16	21°41'41	21°41'41	10°58'28	28°22'22	7°56'30	1°23'30	3°0'22	22°14'14	8°5'5	T 29
W30	13 4 16	17°57'27	10°17'28	20°36'21	0'0	11°33'16	21°43'43	21°43'43	11°1'28	28°23'23	7°56'30	1°16'30	2°57'22	22°20'20	8°7'7	W30
T 31	13 8 13	18°56'10	24°15'57	21°18'31	22°14'14	12°2'2	21°46'46	21°46'46	11°5'28	28°25'25	7°56'30	1°11'30	2°52'22	22°27'27	8°10'10	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	4s14	9s36	4s53	1n26	3n37	7s15	1s26	26n 6	2n36	6s27	1n34	21s50	0n11	14n23	0s22	12s58
W 2	3 50	3 12	4 24	1 5	3 35	6 46	1 26	26 5	2 35	6 25	1 34	21 49	0 11	14 24	0 22	12 57
T 3	3 27	3n16	3 39	0 42	3 32	6 16	1 26	26 4	2 34	6 22	1 34	21 48	0 11	14 24	0 22	12 56
F 4	3 3	9 23	2 41	0 15	3 26	5 47	1 26	26 3	2 33	6 20	1 34	21 48	0 11	14 25	0 22	12 55
S 5	2 39	14 51	1 35	0s13	3 18	5 18	1 26	26 2	2 32	6 18	1 34	21 47	0 10	14 26	0 22	12 54
S 6	2 16	19 25	0 26	0 43	3 9	4 48	1 26	26 1	2 31	6 15	1 35	21 47	0 10	14 27	0 22	12 54
M 7	1 52	22 53	0n43	1 14	2 59	4 18	1 25	25 59	2 30	6 13	1 35	21 46	0 10	14 28	0 22	12 53
T 8	1 29	25 8	1 47	1 45	2 47	3 48	1 25	25 58	2 29	6 10	1 35	21 46	0 10	14 29	0 22	12 53
W 9	1 5	26 7	2 45	2 16	2 34	3 18	1 25	25 57	2 28	6 7	1 35	21 45	0 10	14 30	0 22	12 52
T 10	0 41	25 51	3 35	2 46	2 20	2 48	1 24	25 55	2 27	6 5	1 35	21 44	0 10	14 31	0 22	12 51
F 11	0 17	24 24	4 14	3 16	2 5	2 18	1 24	25 54	2 26	6 2	1 35	21 44	0 10	14 31	0 22	12 51
S 12	0n 6	21 52	4 43	3 43	1 50	1 48	1 23	25 52	2 25	5 59	1 35	21 43	0 10	14 32	0 22	12 50
S 13	0 30	18 26	4 59	4 9	1 34	1 17	1 22	25 50	2 24	5 57	1 35	21 43	0 10	14 33	0 22	12 49
M14	0 53	14 15	5 3	4 33	1 19	0 47	1 22	25 49	2 23	5 54	1 35	21 42	0 10	14 34	0 22	12 49
T 15	1 17	9 28	4 53	4 55	1 3	0 17	1 21	25 47	2 22	5 51	1 35	21 42	0 10	14 35	0 22	12 48
W16	1 41	4 18	4 30	5 14	0 48	0n14	1 20	25 45	2 21	5 48	1 35	21 41	0 10	14 36	0 22	12 47
T 17	2 4	1s 7	3 54	5 31	0 32	0 44	1 19	25 43	2 20	5 46	1 36	21 41	0 10	14 37	0 22	12 47
F 18	2 28	6 34	3 6	5 46	0 18	1 15	1 18	25 41	2 19	5 43	1 36	21 40	0 10	14 38	0 22	12 46
S 19	2 51	11 50	2 9	5 58	0 3	1 45	1 17	25 38	2 18	5 40	1 36	21 40	0 10	14 39	0 22	12 45
S 20	3 14	16 41	4 4	6 7	0s11	2 15	1 16	25 36	2 17	5 37	1 36	21 40	0 10	14 40	0 22	12 45
M21	3 38	20 51	0s 5	6 14	0 24	2 46	1 15	25 34	2 16	5 34	1 36	21 39	0 10	14 41	0 22	12 44
T 22	4 1	24 1	1 16	6 18	0 37	3 16	1 14	25 31	2 15	5 31	1 36	21 39	0 9	14 42	0 22	12 44
W23	4 24	25 53	2 23	6 20	0 50	3 46	1 13	25 29	2 14	5 28	1 36	21 38	0 9	14 43	0 22	12 43
T 24	4 47	26 14	3 24	6 20	1 2	4 16	1 11	25 26	2 13	5 25	1 36	21 38	0 9	14 44	0 22	12 42
F 25	5 10	24 55	4 14	6 18	1 13	4 46	1 10	25 23	2 13	5 22	1 36	21 38	0 9	14 45	0 22	12 42
S 26	5 33	21 58	4 49	6 13	1 23	5 16	1 9	25 20	2 12	5 20	1 36	21 37	0 9	14 46	0 22	12 41
S 27	5 56	17 36	5 6	6 6	1 33	5 46	1 7	25 17	2 11	5 17	1 36	21 37	0 9	14 47	0 22	12 41
M28	6 19	12 9	5 4	5 57	1 42	6 16	1 6	25 14	2 10	5 14	1 36	21 36	0 9	14 48	0 22	12 40
T 29	6 41	5 59	4 41	5 46	1 51	6 46	1 4	25 11	2 9	5 11	1 36	21 36	0 9	14 49	0 22	12 39
W30	7 4	0n29	3 59	5 33	1 59	7 15	1 3	25 7	2 8	5 8	1 36	21 36	0 9	14 50	0 22	12 39
T 31	7n26	6n51	3s 3	5s18	2s 6	7n44	1s 1	25n 4	2n 7	5s 5	1n36	21s36	0n 9	14n51	0s22	12s38

Julian Day Number = 2275931.5, Delta T = 249.06 sec

Ecliptic obliquity = 23°30'11", Nutation = - 0°00'14", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 18°01'52", Lahiri = 17°08'52" Julian Calendar 1 March 1519 == Greg. Calendar 11 March 1519

ASTRODIENST EPHEMERIS for the year 1519

geocentric

APRIL 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	13 12 9	19°54'50	9°8'6	22°28'28	23°29'29	12°30'30	16°R30	21°34'48	11°8'8	28°28'26	7°R56	1°R 7	2°II 51	22°23'34	8°28'12	F 1
S 2	13 16 6	20°53'29	22°52'22	23°28'23	24°43'24	12°59'12	16°23'23	21°50'21	11°11'11	28°28'28	7°56'56	1°II 5	2°47'22	22°40'22	8°14'8	S 2
S 3	13 20 2	21°52'05	6°II 12	24°31'24	25°57'25	13°28'13	16°15'16	21°52'21	11°15'11	28°29'28	7°56'56	1°D 5	2°44'22	22°47'22	8°16'8	S 3
M 4	13 23 59	22°50'40	19°8'19	25°37'25	27°11'27	13°57'13	16°7'16	21°54'21	11°18'11	28°31'28	7°56'56	1°6'6	2°41'22	22°54'22	8°19'8	M 4
T 5	13 27 56	23°49'12	1°33'3	26°45'26	28°25'28	14°27'14	16°0'16	21°55'21	11°21'11	28°33'28	7°56'56	1°7'7	2°38'23	23°1'23	8°21'8	T 5
W 6	13 31 52	24°47'42	14°0'14	27°56'27	29°39'29	14°56'14	15°52'15	21°57'21	11°25'11	28°34'28	7°56'56	1°9'9	2°35'23	23°7'23	8°23'8	W 6
T 7	13 35 49	25°46'09	26°4'26	29°9'29	0°54'54	15°26'15	15°45'15	21°59'21	11°28'11	28°35'28	7°56'56	1°R 9	2°31'23	23°14'23	8°25'8	T 7
F 8	13 39 45	26°44'35	8°2'0	0°24'24	2°8'2	15°55'15	15°37'15	22°0'22	11°31'11	28°37'28	7°55'55	1°9'9	2°28'23	23°21'23	8°26'8	F 8
S 9	13 43 42	27°42'58	19°52'19	1°42'1	3°22'3	16°25'16	15°30'15	22°2'22	11°35'11	28°38'28	7°55'55	1°6'6	2°25'23	23°28'23	8°28'8	S 9
S 10	13 47 38	28°41'20	1°10'45	3°1'3	4°36'4	16°55'16	15°23'15	22°3'22	11°38'11	28°40'28	7°55'55	1°3'3	2°22'23	23°34'23	8°30'8	S 10
M 11	13 51 35	29°39'39	13°43'13	4°23'4	5°50'5	17°25'17	15°15'15	22°4'22	11°42'11	28°41'28	7°55'55	0°58'0	2°19'23	23°41'23	8°32'8	M 11
T 12	13 55 31	0°37'56	25°50'25	5°47'7	7°4'4	17°55'17	15°8'15	22°5'22	11°45'11	28°42'28	7°54'54	0°53'0	2°16'23	23°48'23	8°33'8	T 12
W 13	13 59 28	1°36'11	8°2'7	7°13'7	8°18'8	18°26'18	15°1'15	22°6'22	11°49'11	28°44'28	7°54'54	0°48'0	2°12'23	23°54'23	8°35'8	W 13
T 14	14 3 25	2°34'24	20°36'20	8°41'8	9°32'9	18°56'18	14°54'14	22°7'22	11°52'11	28°45'28	7°53'53	0°43'0	2°9'24	24°1'24	8°36'8	T 14
F 15	14 7 21	3°32'36	3°19'19	10°10'10	10°46'10	19°27'19	14°47'14	22°8'22	11°55'11	28°46'28	7°53'53	0°40'0	2°6'24	24°8'24	8°38'8	F 15
S 16	14 11 18	4°30'45	16°15'16	11°42'12	12°0'12	19°58'19	14°40'14	22°9'22	11°59'11	28°47'28	7°53'53	0°38'0	2°3'24	24°15'24	8°39'8	S 16
S 17	14 15 14	5°28'54	29°24'29	13°16'13	13°14'13	20°28'20	14°33'14	22°9'22	12°2'12	28°48'28	7°52'52	0°D 37	2°0'24	24°21'24	8°40'8	S 17
M 18	14 19 11	6°27'00	12°46'12	14°52'14	14°27'14	20°59'20	14°26'14	22°10'22	12°6'12	28°49'28	7°52'52	0°38'0	1°57'24	24°28'24	8°41'8	M 18
T 19	14 23 7	7°25'05	26°19'26	16°29'16	15°41'15	21°31'21	14°20'14	22°10'22	12°9'12	28°51'28	7°51'51	0°39'0	1°53'24	24°35'24	8°43'8	T 19
W 20	14 27 4	8°23'09	10°3'10	18°9'18	16°55'16	22°2'22	14°13'14	22°10'22	12°13'12	28°52'28	7°51'51	0°40'0	1°50'24	24°42'24	8°44'8	W 20
T 21	14 31 0	9°21'11	24°1'24	19°50'19	18°9'18	22°33'22	14°7'14	22°11'22	12°16'12	28°53'28	7°50'50	0°41'0	1°47'24	24°48'24	8°45'8	T 21
F 22	14 34 57	10°19'12	8°6'8	21°33'21	19°23'19	23°4'23	14°1'14	22°11'22	12°20'12	28°54'28	7°49'49	0°R 42	1°44'24	24°55'24	8°46'8	F 22
S 23	14 38 54	11°17'11	22°20'22	23°19'23	20°37'20	23°36'23	13°54'13	22°R 11	12°23'12	28°55'28	7°49'49	0°42'0	1°41'25	25°2'25	8°47'8	S 23
S 24	14 42 50	12°15'09	6°39'6	25°6'25	21°51'21	24°7'24	13°48'13	22°11'22	12°27'12	28°56'28	7°48'48	0°40'0	1°37'25	25°8'25	8°47'8	S 24
M 25	14 46 47	13°13'06	21°1'21	26°55'26	23°4'23	24°39'24	13°42'13	22°11'22	12°30'12	28°57'28	7°47'47	0°39'0	1°34'25	25°15'25	8°48'8	M 25
T 26	14 50 43	14°11'01	5°21'5	28°46'28	24°18'24	25°11'25	13°37'13	22°10'22	12°34'12	28°58'28	7°47'47	0°37'0	1°31'25	25°22'25	8°49'8	T 26
W 27	14 54 40	15°8'55	19°35'19	0°39'3	25°32'25	25°43'25	13°31'13	22°10'22	12°37'12	28°58'28	7°46'46	0°34'0	1°28'25	25°29'25	8°49'8	W 27
T 28	14 58 36	16°6'48	3°38'3	2°34'2	26°46'26	26°15'26	13°25'13	22°9'22	12°41'12	28°59'28	7°45'45	0°33'0	1°25'25	25°35'25	8°50'8	T 28
F 29	15 2 33	17°4'39	17°27'17	4°30'4	27°59'27	26°47'26	13°20'13	22°9'22	12°44'12	29°0'29	7°44'44	0°32'0	1°22'25	25°42'25	8°50'8	F 29
S 30	15 6 29	18°2'29	0°II 58	6°29'6	29°13'29	27°19'27	13°15'13	22°8'22	12°47'12	29°1'29	7°44'44	0°D 32	1°II 18	25°49'25	8°51'8	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	7n48	12n44	1s56	5s 2	2s13	8n13	0s59	25n 1	2n 6	5s 2	1n36	21s35	0n 9	14n52	0s22	12s38	0s37	20s55	2n21	20n26	20n47	18n49	11s45	6n44			
S 2	8 11	17 49	0 44	4 43	2 19	8 42	0 58	24 57	2 5	4 59	1 36	21 35	0 9	14 53	0 22	12 37	0 37	20 55	2 21	20 26	20 46	18 46	11 44	6 45			
S 3	8 33	21 51	0n28	4 23	2 24	9 11	0 56	24 53	2 5	4 56	1 36	21 35	0 9	14 54	0 22	12 37	0 37	20 55	2 21	20 26	20 46	18 44	11 43	6 45			
M 4	8 54	24 40	1 37	4 2	2 29	9 40	0 54	24 49	2 4	4 53	1 36	21 35	0 9	14 55	0 22	12 36	0 37	20 55	2 21	20 26	20 45	18 42	11 42	6 46			
T 5	9 16	26 8	2 39	3 38	2 33	10 8	0 52	24 45	2 3	4 50	1 35	21 34	0 9	14 56	0 22	12 36	0 37	20 55	2 21	20 26	20 45	18 40	11 41	6 46			
W 6	9 38	26 17	3 32	3 14	2 37	10 36	0 50	24 41	2 2	4 48	1 35	21 34	0 8	14 57	0 22	12 35	0 37	20 55	2 21	20 27	20 44	18 38	11 40	6 47			
T 7	9 59	25 10	4 15	2 47	2 40	11 4	0 48	24 37	2 1	4 45	1 35	21 34	0 8	14 58	0 22	12 35	0 37	20 55	2 21	20 27	20 43	18 36	11 39	6 47			
F 8	10 20	22 56	4 47	2 19	2 43	11 31	0 46	24 33	2 0	4 42	1 35	21 34	0 8	14 59	0 22	12 34	0 37	20 55	2 21	20 27	20 43	18 34	11 38	6 47			
S 9	10 41	19 43	5 6	1 50	2 44	11 59	0 44	24 28	1 59	4 39	1 35	21 34	0 8	15 0	0 21	12 34	0 38	20 55	2 21	20 26	20 42	18 32	11 37	6 48			
S 10	11 2	15 43	5 11	1 20	2 46	12 25	0 42	24 23	1 59	4 36	1 35	21 33	0 8	15 1	0 21	12 33	0 38	20 55	2 21	20 25	20 41	18 29	11 37	6 48			
M11	11 23	11 5	5 4	0 48	2 46	12 52	0 40	24 19	1 58	4 34	1 35	21 33	0 8	15 3	0 21	12 33	0 38	20 55	2 21	20 24	20 41	18 27	11 36	6 49			
T 12	11 43	5 59	4 43	0 15	2 46	13 19	0 38	24 14	1 57	4 31	1 35	21 33	0 8	15 4	0 21	12 33	0 38	20 55	2 21	20 23	20 40	18 25	11 35	6 49			
W13	12 4	0 35	4 8	0n20	2 46	13 45	0 36	24 9	1 56	4 28	1 35	21 33	0 8	15 5	0 21	12 32	0 38	20 55	2 21	20 22	20 39	18 23	11 34	6 50			
T 14	12 24	4s57	3 22	0 55	2 45	14 10	0 34	24 4	1 55	4 26	1 35	21 33	0 8	15 6	0 21	12 32	0 38	20 55	2 21	20 21	20 39	18 21	11 33	6 50			
F 15	12 44	10 24	2 24	1 32	2 43	14 36	0 31	23 59	1 55	4 23	1 35	21 33	0 8	15 7	0 21	12 31	0 38	20 55	2 21	20 21	20 38	18 19	11 32	6 51			
S 16	13 4	15 30	1 18	2 10	2 41	15 1	0 29	23 53	1 54	4 21	1 34	21 33	0 8	15 8	0 21	12 31	0 38	20 56	2 21	20 20	20 38	18 17	11 32	6 51			
S 17	13 23	19 58	0 7	2 49	2 39	15 25	0 27	23 48	1 53	4 18	1 34	21 33	0 8	15 9	0 21	12 31	0 38	20 56	2 21	20 20	20 37	18 14	11 31	6 52			
M18	13 42	23 29	1s 6	3 29	2 35	15 50	0 25	23 42	1 52	4 16	1 34	21 33	0 8	15 10	0 21	12 30	0 38	20 56	2 21	20 20	20 36	18 12	11 30	6 52			
T 19	14 1	25 44	2 17	4 10	2 31	16 13	0 22	23 37	1 51	4 13	1 34	21 33	0 8	15 11	0 21	12 30	0 38	20 56	2 21	20 20	20 36	18 10	11 29	6 52			
W20	14 20	26 27	3 20	4 52	2 27	16 37	0 20	23 31	1 51	4 11	1 34	21 33	0 8	15 12	0 21	12 30	0 38	20 56	2 21	20 21	20 35	18 8	11 29	6 53			
T 21	14 39	25 31	4 13	5 35	2 22	17 0	0 18	23 25	1 50	4 9	1 34	21 33	0 7	15 13	0 21	12 29	0 38	20 56	2 21	20 21	20 34	18 6	11 28	6 53			
F 22	14 57	22 58	4 51	6 19	2 17	17 22	0 15	23 19	1 49	4 6	1 33	21 33	0 7	15 14	0 21	12 29	0 38	20 56	2 21	20 21	20 34	18 3	11 27	6 54			
S 23	15 15	19 0	5 12	7 3	2 11	17 45	0 13	23 13	1 48	4 4	1 33	21 33	0 7	15 15	0 21	12 29	0 38	20 56	2 21	20 21	20 33	18 1	11 27	6 54			
S 24	15 33	13 56	5 13	7 48	2 5	18 6	0 11	23 6	1 47	4 2	1 33	21 33	0 7	15 16	0 21	12 28	0 38	20 56	2 21	20 21	20 32	17 59	11 26	6 55			
M25	15 51	8 5	4 55	8 34	1 58	18 28	0 8	23 0	1 47	4 0	1 33	21 33	0 7	15 18	0 21	12 28	0 38	20 56	2 20	20 20	20 32	17 57	11 25	6 55			
T 26	16 8	1 50	4 19	9 21	1 50	18 48	0 6	22 53	1 46	3 58	1 33	21 33	0 7	15 19	0 21	12 28	0 38	20 56	2 20	20 20	20 31	17 55	11 25	6 56			
W27	16 25	4n29	3 27	10 8	1 43	19 9	0 3	22 47	1 45	3 56	1 33	21 33	0 7	15 20	0 21	12 27	0 38	20 56	2 20	20 20	20 31	17 52	11 24	6 56			
T 28	16 42	10 31	2 23	10 55	1 34	19 28	0 1	22 40	1 44	3 54	1 32	21 34	0 7	15 21	0 21	12 27	0 38	20 56	2 20	20 19	20 30	17 50	11 24	6 57			
F 29	16 59	15 36	1 12	11 43	1 26	19 47	0n 2	22 33	1 44	3 52	1 32	21 34	0 7	15 22	0 21	12 27	0 38	20 57	2 20	20 19	20 29	17 48	11 23	6 57			
S 30	17n15	20n27	0n 2	12n30	1s17	20n 6	0n 4	22n26	1n43	3s50	1n32	21s34	0n 7	15n23	0s21	12s27	0s38	20s57	2n20	20n19	20m29	17n46	11s22	6n58			

ASTRODIENST EPHEMERIS for the year 1519

geocentric

MAY 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	15 10 26	19°08'18"	14°11'09"	8°29'00"	0°22'27"	27°52'13"	13°09'22"	22°07'12"	8°51'29"	29°02'7"	7°43'00"	0°32'11"	1°15'25"	0°55'8"	8°51'51"	S 1
M 2	15 14 23	19°58'05"	27°01'10"	10°32'14"	1°41'28"	28°24'13"	13°05'22"	22°07'12"	12°54'29"	29°02'7"	7°42'00"	0°33'1°12'	1°02'26°2'	26°02'8°51'	8°51'51"	M 2
T 3	15 18 19	20°55'50"	9°53'12"	12°35'25"	2°54'28"	28°57'13"	0°22'6"	12°58'29"	13°01'29"	29°03'4'	7°41'00"	0°34'1°0'	1°06'26°16'	26°02'8°51'	8°51'51"	T 3
W 4	15 22 16	21°53'34"	21°53'14"	14°41'4°8'	29°29'12°55'	22°05'13°1'	29°04'7°40'	0°34'1°0'	1°06'26°16'	26°02'8°51'	8°51'51"	0°34'1°0'	1°06'26°16'	26°02'8°51'	8°51'51"	W 4
T 5	15 26 12	22°51'16"	3°02'59"	16°48'5°22'	0°02'12°50'	22°04'13°5'	29°04'7°39'	0°35'1°0'	1°03'26°22'	8°51'51"	8°51'51"	0°35'1°0'	1°03'26°22'	8°51'51"	8°51'51"	T 5
F 6	15 30 9	23°48'56"	15°56'18°56'	6°35'0°35'	12°46'22°02'	13°08'29°05'	7°38'0°35'	0°59'26°29'	8°51'51"	8°51'51"	8°51'51"	0°35'0°59'	26°29'8°51'	8°51'51"	8°51'51"	F 6
S 7	15 34 5	24°46'35"	27°50'21°5'	7°49'1°07'	12°42'22°01'	13°12'29°05'	7°37'0°36'	0°56'26°36'	8°51'51"	8°51'51"	8°51'51"	0°36'0°56'	26°36'8°51'	8°51'51"	8°51'51"	S 7
S 8	15 38 2	25°44'12"	9°44'23°16'	9°02'1°40'	12°38'22°00'	13°15'29°06'	7°36'0°35'	0°53'26°43'	8°51'51"	8°51'51"	8°51'51"	0°35'0°53'	26°43'8°51'	8°51'51"	8°51'51"	S 8
M 9	15 41 58	26°41'58"	21°44'25°27'	10°16'2°13'	12°34'21°58'	13°18'29°06'	7°35'0°35'	0°50'26°49'	8°51'51"	8°51'51"	8°51'51"	0°35'0°50'	26°49'8°51'	8°51'51"	8°51'51"	M 9
T 10	15 45 55	27°39'23"	3°53'27°38'	11°29'2°47'	12°30'21°56'	13°22'29°07'	7°34'0°35'	0°47'26°56'	8°51'51"	8°51'51"	8°51'51"	0°35'0°47'	26°56'8°51'	8°51'51"	8°51'51"	T 10
W 11	15 49 52	28°36'56"	16°15'29°50'	12°43'3°20'	12°27'21°55'	13°25'29°07'	7°33'0°34'	0°43'27°03'	8°51'51"	8°51'51"	8°51'51"	0°34'0°43'	27°03'8°50'	8°51'51"	8°51'51"	W 11
T 12	15 53 48	29°34'27"	28°53'2°11'	13°56'3°53'	12°23'21°53'	13°29'29°08'	7°32'0°34'	0°40'27°09'	8°51'51"	8°51'51"	8°51'51"	0°34'0°40'	27°09'8°50'	8°51'51"	8°51'51"	T 12
F 13	15 57 45	0°13'15"	11°49'4°13'	15°10'4°26'	12°20'21°51'	13°32'29°08'	7°31'0°34'	0°37'27°16'	8°49'51"	8°49'51"	8°49'51"	0°34'0°37'	27°16'8°49'	8°49'51"	8°49'51"	F 13
S 14	16 1 141	1°29'27"	25°03'6°24'	16°23'5°00'	12°17'21°49'	13°35'29°08'	7°30'0°34'	0°34'27°23'	8°49'51"	8°49'51"	8°49'51"	0°34'0°34'	27°23'8°49'	8°49'51"	8°49'51"	S 14
S 15	16 5 38	2°26'55"	8°34'8°34'	17°37'5°33'	12°14'21°47'	13°39'29°09'	7°29'0°34'	0°31'27°30'	8°48'51"	8°48'51"	8°48'51"	0°34'0°31'	27°30'8°48'	8°48'51"	8°48'51"	S 15
M 16	16 9 34	3°24'22"	22°22'10°43'	18°50'6°07'	12°11'21°45'	13°42'29°09'	7°27'0°34'	0°28'27°36'	8°48'51"	8°48'51"	8°48'51"	0°34'0°28'	27°36'8°48'	8°48'51"	8°48'51"	M 16
T 17	16 13 31	4°21'48"	6°33'12°51'	20°04'6°40'	12°09'21°43'	13°45'29°09'	7°26'0°34'	0°24'27°43'	8°47'51"	8°47'51"	8°47'51"	0°34'0°24'	27°43'8°47'	8°47'51"	8°47'51"	T 17
W 18	16 17 27	5°19'14"	20°33'14°57'	21°17'7°14'	12°06'21°41'	13°49'29°09'	7°25'0°33'	0°21'27°50'	8°46'51"	8°46'51"	8°46'51"	0°33'0°21'	27°50'8°46'	8°46'51"	8°46'51"	W 18
T 19	16 21 24	6°16'38"	4°49'17°01'	22°31'7°48'	12°04'21°38'	13°52'29°09'	7°24'0°33'	0°18'27°57'	8°45'51"	8°45'51"	8°45'51"	0°33'0°18'	27°57'8°45'	8°45'51"	8°45'51"	T 19
F 20	16 25 21	7°14'02"	19°08'19°04'	23°44'8°22'	12°02'21°36'	13°55'29°10'	7°23'0°32'	0°15'28°03'	8°44'51"	8°44'51"	8°44'51"	0°32'0°15'	28°03'8°44'	8°44'51"	8°44'51"	F 20
S 21	16 29 17	8°11'26"	3°25'21°04'	24°57'8°56'	12°00'21°33'	13°58'29°10'	7°21'0°32'	0°12'28°10'	8°43'51"	8°43'51"	8°43'51"	0°32'0°12'	28°10'8°43'	8°43'51"	8°43'51"	S 21
S 22	16 33 14	9°08'48"	17°37'23°02'	26°11'9°30'	11°59'21°31'	14°02'29°10'	7°20'0°32'	0°09'28°17'	8°42'51"	8°42'51"	8°42'51"	0°32'0°09'	28°17'8°42'	8°42'51"	8°42'51"	S 22
M 23	16 37 10	10°06'10"	1°44'24°58'	27°24'10°04'	11°57'21°28'	14°05'29°10'	7°19'0°32'	0°05'28°23'	8°41'51"	8°41'51"	8°41'51"	0°32'0°05'	28°23'8°41'	8°41'51"	8°41'51"	M 23
T 24	16 41 7	11°03'32"	15°41'26°52'	28°37'10°38'	11°56'21°25'	14°08'29°10'	7°18'0°33'	0°02'28°30'	8°40'51"	8°40'51"	8°40'51"	0°33'0°02'	28°30'8°40'	8°40'51"	8°40'51"	T 24
W 25	16 45 3	12°05'32"	29°29'28°43'	29°51'11°12'	11°55'21°22'	14°11'29°10'	7°16'0°34'	29°59'28°37'	8°38'51"	8°38'51"	8°38'51"	0°34'29°59'	28°37'8°38'	8°38'51"	8°38'51"	W 25
T 26	16 49 0	12°58'13"	13°04'09°32'	1°04'11°46'	11°54'21°20'	14°14'29°10'	7°15'0°35'	29°56'28°44'	8°37'51"	8°37'51"	8°37'51"	0°35'29°56'	28°44'8°37'	8°37'51"	8°37'51"	T 26
F 27	16 52 56	13°55'33"	26°27'2°18'	2°17'12°21'	11°53'21°17'	14°18'29°10'	7°14'0°35'	29°53'28°50'	8°36'51"	8°36'51"	8°36'51"	0°35'29°53'	28°50'8°36'	8°36'51"	8°36'51"	F 27
S 28	16 56 53	14°52'53"	9°36'4°02'	3°30'12°55'	11°53'21°13'	14°21'29°09'	7°12'0°35'	29°49'28°57'	8°34'51"	8°34'51"	8°34'51"	0°35'29°49'	28°57'8°34'	8°34'51"	8°34'51"	S 28
S 29	17 0 50	15°50'12"	22°31'5°43'	4°44'13°30'	11°52'21°10'	14°24'29°09'	7°11'0°34'	29°46'29°04'	8°33'51"	8°33'51"	8°33'51"	0°34'29°46'	29°04'8°33'	8°33'51"	8°33'51"	S 29
M 30	17 4 46	16°47'30"	5°31'7°22'	5°57'14°04'	11°52'21°07'	14°27'29°09'	7°09'0°33'	29°43'29°10'	8°31'51"	8°31'51"	8°31'51"	0°33'29°43'	29°10'8°31'	8°31'51"	8°31'51"	M 30
T 31	17 8 43	17°44'47"	17°38'8°59'	7°51'14°03'	11°52'21°07'	14°27'29°09'	7°09'0°33'	29°43'29°10'	8°31'51"	8°31'51"	8°31'51"	0°33'29°43'	29°10'8°31'	8°31'51"	8°31'51"	T 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
S 1	17n31	23n48	1n15	13n18	1s 7	20n24	0n 7	22n19	1n42	3s48	1n32	21s34	0n 7	15n24	0s21	12s26	0s38	20s57	2n20	20n19	20n28	17n43	11s22	6n58					
M 2	17 47	25 49	2 21	14 6	0 58	20 42	0 9	22 11	1 41	3 46	1 32	21 34	0 7	15 25	0 21	12 26	0 38	20 57	2 20	20 19	20 27	17 41	11 21	6 58					
T 3	18 2	26 28	3 20	14 54	0 48	20 59	0 11	22 4	1 41	3 45	1 31	21 35	0 7	15 26	0 21	12 26	0 38	20 57	2 20	20 19	20 27	17 39	11 21	6 59					
W 4	18 17	25 47	4 7	15 41	0 38	21 15	0 14	21 56	1 40	3 43	1 31	21 35	0 7	15 27	0 21	12 26	0 38	20 57	2 20	20 20	20 26	17 37	11 20	6 59					
T 5	18 32	23 54	4 43	16 28	0 27	21 31	0 16	21 49	1 39	3 41	1 31	21 35	0 6	15 28	0 21	12 26	0 38	20 57	2 20	20 20	20 25	17 34	11 20	7 0					
F 6	18 47	20 58	5 6	17 14	0 17	21 46	0 19	21 41	1 38	3 40	1 31	21 35	0 6	15 29	0 21	12 25	0 38	20 57	2 20	20 20	20 25	17 32	11 19	7 0					
S 7	19 1	17 12	5 16	17 59	0 6	22 1	0 21	21 33	1 38	3 38	1 30	21 36	0 6	15 30	0 21	12 25	0 38	20 57	2 20	20 20	20 24	17 30	11 19	7 1					
S 8	19 15	12 46	5 13	18 43	0n 5	22 15	0 24	21 25	1 37	3 37	1 30	21 36	0 6	15 31	0 21	12 25	0 38	20 57	2 20	20 20	20 23	17 28	11 19	7 1					
M 9	19 28	7 49	4 55	19 25	0 15	22 29	0 26	21 17	1 36	3 36	1 30	21 36	0 6	15 32	0 21	12 25	0 38	20 57	2 20	20 20	20 23	17 25	11 18	7 2					
T 10	19 41	2 30	4 25	20 6	0 25	22 41	0 28	21 8	1 36	3 35	1 30	21 37	0 6	15 33	0 21	12 25	0 38	20 58	2 20	20 20	20 22	17 23	11 18	7 2					
W 11	19 54	3s 0	3 42	20 45	0 36	22 54	0 31	21 0	1 35	3 33	1 29	21 37	0 6	15 34	0 21	12 25	0 38	20 58	2 20	20 19	20 21	17 21	11 18	7 3					
T 12	20 7	8 30	2 47	21 22	0 46	23 5	0 33	20 52	1 34	3 32	1 29	21 37	0 6	15 35	0 21	12 25	0 39	20 58	2 20	20 19	20 21	17 18	11 17	7 3					
F 13	20 19	13 48	1 42	21 57	0 55	23 16	0 36	20 43	1 33	3 31	1 29	21 38	0 6	15 36	0 21	12 24	0 39	20 58	2 20	20 19	20 20	17 16	11 17	7 4					
S 14	20 31	18 35	0 31	22 29	1 4	23 26	0 38	20 34	1 33	3 30	1 29	21 38	0 6	15 37	0 21	12 24	0 39	20 58	2 20	20 19	20 19	17 14	11 17	7 4					
S 15	20 42	22 31	0s44	22 59	1 13	23 36	0 40	20 25	1 32	3 29	1 28	21 38	0 6	15 38	0 21	12 24	0 39	20 58	2 20	20 19	20 19	17 12	11 16	7 4					
M 16	20 54	25 15	1 58	23 27	1 21	23 44	0 43	20 16	1 31	3 29	1 28	21 39	0 6	15 39	0 21	12 24	0 39	20 58	2 19	20 19	20 18	17 9	11 16	7 5					
T 17	21 4	26 26	3 6	23 52	1 28	23 52	0 45	20 7	1 31	3 28	1 28	21 39	0 6	15 40	0 21	12 24	0 39	20 58	2 19	20 19	20 17	17 7	11 16	7 5					
W 18	21 15	25 55	4 3	24 14	1 35	24 0	0 47	19 58	1 30	3 27	1 28	21 40	0 5	15 41	0 21	12 24	0 39	20 59	2 19	20 19	20 17	17 5	11 16	7 6					
T 19	21 25	23 43	4 45	24 33	1 41	24 7	0 49	19 48	1 29	3 27	1 27	21 40	0 5	15 42	0 21	12 24	0 39	20 59	2 19	20 19	20 16	17 2	11 16	7 6					
F 20	21 35	20 2	5 10	24 50	1 47	24 13	0 51	19 39	1 28	3 26	1 27	21 41	0 5	15 43	0 21	12 24	0 39	20 59	2 19	20 19	20 15	17 0	11 15	7 7					
S 21	21 44	15 11	5 16	25 4	1 52	24 18	0 54	19 29	1 28	3 26	1 27	21 41	0 5	15 44	0 21	12 24	0 39	20 59	2 19	20 19	20 15	16 58	11 15	7 7					
S 22	21 53	9 32	5 3	25 15	1 56	24 23	0 56	19 19	1 27	3 25	1 27	21 42	0 5	15 45	0 21	12 24	0 39	20 59	2 19	20 19	20 14	16 55	11 15	7 7					
M 23	22 1	3 27	4 31	25 23	1 59	24 26	0 58	19 9	1 26	3 25	1 26	21 42	0 5	15 46	0 21	12 24	0 39	20 59	2 19	20 19	20 13	16 53	11 15	7 8					
T 24	22 10	2n45	3 44	25 30	2 2	24 30	1 0	18 59	1 26	3 25	1 26	21 43	0 5	15 47	0 21	12 24	0 39	20 59	2 19	20 19	20 13	16 51	11 15	7 8					
W 25	22 17	8 46	2 44	25 33	2 3	24 32	1 2	18 49	1 25	3 24	1 26	21 43	0 5	15 48	0 21	12 24	0 39	20 59	2 19	20 19	20 12	16 48	11 15	7 9					
T 26	22 25	14 17	1 35	25 35	2 5	24 34	1 4	18 39	1 24	3 24	1 26	21 44	0 5	15 49	0 21	12 24	0 39	21 0	2 19	20 20	20 11	16 46	11 15	7 9					
F 27	22 32	19 3	0 23	25 34	2 5	24 35	1 6	18 29	1 24	3 24	1 25	21 44	0 5	15 50	0 21	12 24	0 39	21 0	2 19	20 20	20 11	16 43	11 15	7 9					
S 28	22 39	22 46	0n50	25 31	2 4	24 35	1 8	18 18	1 23	3 24	1 25	21 45	0 5	15 51	0 21	12 24	0 39	21 0	2 19	20 20	20 10	16 41	11 15	7 10					
S 29	22 45	25 15	1 58	25 26	2 3	24 35	1 10	18 8	1 22	3 24	1 25	21 45	0 5	15 52	0 21	12 25	0 39	21 0	2 19	20 20	20 9	16 39	11 15	7 10					
M 30	22 51	26 23	2 59	25 19	2 1	24 34	1 11	17 57	1 22	3 24	1 25	21 46	0 5	15 53	0 21	12 25	0 39	21 0	2 19	20 19	20 9	16 36	11 15	7 11					
T 31	22n56	26n 9	3n51	25n10	1n59	24n32	1n13	17n46	1n21	3s25	1n24	21s46	0n 4	15n54	0s21	12s25	0s39	21s 0	2n18	20n19	20n 8	16n34	11s15	7n11					

ASTRODIENST EPHEMERIS for the year 1519

geocentric

JUNE 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	17 12 39	18II42'04	29☾53	10☾32	8☾23	15♂13	11♂52	21°R 1	14♂33	29°R 9	7°R 7	0°R28	29♂37	29♂24	8°R28	W 1
T 2	17 16 36	19°39'20	11♂57	12° 3	9°36	15°48	11°52	20☾57	14°36	29°R 8	7° 5	0II25	29°34	29°31	8°26	T 2
F 3	17 20 32	20°36'35	23°54	13°32	10°50	16°23	11°53	20°54	14°39	29° 8	7° 4	0°23	29°30	29°37	8°24	F 3
S 4	17 24 29	21°33'50	5♂47	14°58	12° 3	16°58	11°54	20°50	14°42	29° 8	7° 2	0°21	29°27	29°44	8°22	S 4
S 5	17 28 26	22°31'03	17°40	16°21	13°16	17°33	11°55	20°47	14°45	29° 7	7° 1	0°D20	29°24	29°51	8°20	S 5
M 6	17 32 22	23°28'16	29°39	17°42	14°29	18° 8	11°56	20°43	14°48	29° 7	7° 0	0°20	29°21	29°58	8°18	M 6
T 7	17 36 19	24°25'29	11♂47	18°59	15°42	18°43	11°57	20°39	14°51	29° 6	6°58	0°21	29°18	0♂4	8°16	T 7
W 8	17 40 15	25°22'41	24°10	20°14	16°55	19°18	11°58	20°36	14°53	29° 6	6°57	0°22	29°15	0°11	8°14	W 8
T 9	17 44 12	26°19'52	6♂51	21°27	18° 8	19°53	12° 0	20°32	14°56	29° 5	6°55	0°24	29°11	0°18	8°12	T 9
F 10	17 48 8	27°17'03	19°54	22°36	19°21	20°28	12° 2	20°28	14°59	29° 5	6°54	0°25	29° 8	0°24	8°10	F 10
S 11	17 52 5	28°14'13	3♂19	23°42	20°34	21° 4	12° 3	20°24	15° 2	29° 4	6°52	0°R25	29° 5	0°31	8° 7	S 11
S 12	17 56 1	29°11'24	17° 9	24°46	21°47	21°39	12° 6	20°20	15° 5	29° 4	6°51	0°24	29° 2	0°38	8° 5	S 12
M13	17 59 58	0☾8'33	1☾19	25°46	23° 0	22°15	12° 8	20°16	15° 7	29° 3	6°49	0°22	28°59	0°45	8° 3	M13
T 14	18 3 55	1° 5'43	15°46	26°43	24°13	22°50	12°10	20°12	15°10	29° 2	6°48	0°19	28°55	0°51	8° 0	T 14
W15	18 7 51	2° 2'53	0☾25	27°36	25°26	23°26	12°13	20° 8	15°13	29° 2	6°46	0°14	28°52	0°58	7°58	W15
T 16	18 11 48	3° 0'03	15° 7	28°26	26°39	24° 1	12°16	20° 4	15°15	29° 1	6°45	0°10	28°49	1° 5	7°56	T 16
F 17	18 15 44	3°57'13	29°46	29°13	27°52	24°37	12°19	20° 0	15°18	29° 0	6°43	0° 6	28°46	1°12	7°53	F 17
S 18	18 19 41	4°54'23	14♂16	29°56	29° 4	25°12	12°22	19°56	15°20	28°59	6°42	0° 3	28°43	1°18	7°50	S 18
S 19	18 23 37	5°51'33	28°33	0♂35	0♂17	25°48	12°25	19°51	15°23	28°59	6°40	0° 1	28°40	1°25	7°48	S 19
M20	18 27 34	6°48'44	12°Y34	1°10	1°30	26°24	12°28	19°47	15°25	28°58	6°39	0°D 1	28°36	1°32	7°45	M20
T 21	18 31 30	7°45'55	2°49	1°42	2°43	27° 0	12°32	19°43	15°28	28°57	6°37	0° 2	28°33	1°38	7°42	T 21
W22	18 35 27	8°43'06	9♂48	2° 9	3°56	27°36	12°36	19°39	15°30	28°56	6°36	0° 4	28°30	1°45	7°40	W22
T 23	18 39 24	9°40'18	23° 1	2°31	5° 8	28°12	12°40	19°34	15°32	28°55	6°34	0° 5	28°27	1°52	7°37	T 23
F 24	18 43 20	10°37'31	6♂2	2°50	6°21	28°48	12°44	19°30	15°35	28°54	6°33	0°R 5	28°24	1°59	7°34	F 24
S 25	18 47 17	11°34'44	18°49	3° 3	7°34	29°24	12°48	19°26	15°37	28°53	6°31	0° 3	28°21	2° 5	7°31	S 25
S 26	18 51 13	12°31'57	1☾26	3°12	8°46	0♂0	12°53	19°21	15°39	28°52	6°30	29♂59	28°17	2°12	7°28	S 26
M27	18 55 10	13°29'10	13°51	3°R17	9°59	0°36	12°57	19°17	15°42	28°51	6°28	29°54	28°14	2°19	7°25	M27
T 28	18 59 6	14°26'24	26° 7	3°16	11°12	1°13	13° 2	19°13	15°44	28°50	6°27	29°47	28°11	2°25	7°22	T 28
W29	19 3 3	15°23'38	8♂14	3°11	12°24	1°49	13° 7	19° 8	15°46	28°49	6°26	29°38	28° 8	2°32	7°19	W29
T 30	19 6 59	16°20'52	20♂14	3♂1	13♂37	2♂25	13♂12	19☾4	15♂48	28°48	6☾24	29♂30	28♂5	2♂39	7°16	T 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	23n 1	24n38	4n31	25n 0	1n55	24n29	1n15	17n35	1n20	3s25	1n24	21s47	0n 4	15n54	0s21	12s25
T 2	23 6	22 1	4 58	24 48	1 51	24 26	1 17	17 24	1 20	3 25	1 24	21 48	0 4	15 55	0 21	12 25
F 3	23 10	18 32	5 12	24 35	1 47	24 22	1 18	17 13	1 19	3 26	1 23	21 48	0 4	15 56	0 21	12 25
S 4	23 14	14 16	5 13	24 20	1 41	24 17	1 20	17 2	1 18	3 26	1 23	21 49	0 4	15 57	0 21	12 25
S 5	23 17	9 29	5 0	24 4	1 35	24 11	1 21	16 51	1 18	3 27	1 23	21 50	0 4	15 58	0 21	12 25
M 6	23 20	4 20	4 34	23 48	1 29	24 5	1 23	16 39	1 17	3 28	1 23	21 50	0 4	15 59	0 21	12 26
T 7	23 23	1s 3	3 56	23 30	1 21	23 58	1 24	16 28	1 16	3 28	1 22	21 51	0 4	16 0	0 21	12 26
W 8	23 25	6 31	3 6	23 11	1 13	23 51	1 26	16 16	1 16	3 29	1 22	21 51	0 4	16 1	0 21	12 26
T 9	23 27	11 52	2 6	22 51	1 5	23 42	1 27	16 4	1 15	3 30	1 22	21 52	0 4	16 1	0 21	12 26
F 10	23 28	16 50	0 57	22 31	0 56	23 33	1 28	15 53	1 14	3 31	1 22	21 53	0 4	16 2	0 21	12 26
S 11	23 29	21 8	0s16	22 10	0 46	23 24	1 29	15 41	1 14	3 32	1 21	21 53	0 4	16 3	0 21	12 27
S 12	23 30	24 23	1 30	21 49	0 36	23 13	1 30	15 29	1 13	3 33	1 21	21 54	0 3	16 4	0 21	12 27
M13	23 30	26 11	2 41	21 28	0 25	23 2	1 31	15 16	1 12	3 34	1 21	21 55	0 3	16 5	0 21	12 27
T 14	23 30	26 15	3 43	21 6	0 14	22 51	1 32	15 4	1 12	3 35	1 20	21 55	0 3	16 5	0 21	12 27
W15	23 29	24 31	4 30	20 44	0 2	22 38	1 33	14 52	1 11	3 37	1 20	21 56	0 3	16 6	0 21	12 28
T 16	23 28	21 8	5 1	20 22	0s10	22 25	1 34	14 39	1 10	3 38	1 20	21 57	0 3	16 7	0 21	12 28
F 17	23 27	16 26	5 11	20 0	0 23	22 12	1 35	14 27	1 10	3 39	1 20	21 58	0 3	16 8	0 21	12 28
S 18	23 25	10 51	5 2	19 38	0 36	21 58	1 36	14 14	1 9	3 41	1 19	21 58	0 3	16 8	0 21	12 29
S 19	23 22	4 46	4 34	19 17	0 49	21 43	1 36	14 1	1 8	3 42	1 19	21 59	0 3	16 9	0 21	12 29
M20	23 20	1n27	3 50	18 56	1 3	21 27	1 37	13 49	1 8	3 44	1 19	22 0	0 3	16 10	0 21	12 29
T 21	23 16	7 30	2 53	18 35	1 17	21 11	1 37	13 36	1 7	3 46	1 19	22 0	0 3	16 10	0 21	12 29
W22	23 13	13 5	1 48	18 15	1 32	20 55	1 38	13 23	1 6	3 47	1 18	22 1	0 3	16 11	0 21	12 30
T 23	23 9	17 58	0 38	17 56	1 46	20 37	1 38	13 10	1 6	3 49	1 18	22 2	0 2	16 12	0 21	12 30
F 24	23 5	21 54	0n32	17 37	2 1	20 20	1 39	12 56	1 5	3 51	1 18	22 2	0 2	16 13	0 21	12 31
S 25	23 0	24 41	1 40	17 20	2 16	20 1	1 39	12 43	1 4	3 53	1 17	22 3	0 2	16 13	0 21	12 31
S 26	22 55	26 11	2 41	17 3	2 31	19 42	1 39	12 30	1 4	3 55	1 17	22 4	0 2	16 14	0 21	12 31
M27	22 49	26 20	3 34	16 48	2 45	19 23	1 39	12 16	1 3	3 57	1 17	22 5	0 2	16 14	0 21	12 32
T 28	22 43	25 10	4 16	16 34	3 0	19 3	1 39	12 3	1 3	3 59	1 17	22 5	0 2	16 15	0 21	12 32
W29	22 37	22 51	4 46	16 21	3 14	18 42	1 39	11 49	1 2	4 1	1 16	22 6	0 2	16 16	0 21	12 32
T 30	22n30	19n34	5n 3	16n10	3s28	18n21	1n39	11n35	1n 1	4s 3	1n16	22s 7	0n 2	16n16	0s21	12s33

Julian Day Number = 2276023.5, Delta T = 248.49 sec

Ecliptic obliquity = 23°30'10, Nutation = - 0°00'15, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 18°02'05, Lahiri = 17°09'05 Julian Calendar 1 June 1519 == Greg. Calendar 11 June 1519

ASTRODIENST EPHEMERIS for the year 1519

geocentric

JULY 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	19 10 56	17°18'07	2°18' 8	2°R46	14°149	3°18 2	13°17	18°R59	15°150	28°R47	6°R23	29°R22	28°1	2°18 46	7°R13	F 1
S 2	19 14 53	18°15'21	14° 0	2°18 27	16° 2	3°38	13°22	18°155	15°52	28°46	6°21	29°15	27°58	2°52	7°10	S 2
S 3	19 18 49	19°12'36	25°52	2° 3	17°14	4°15	13°28	18°50	15°54	28°45	6°20	29°11	27°55	2°59	7° 7	S 3
M 4	19 22 46	20° 9'51	7°48	1°35	18°27	4°52	13°34	18°46	15°56	28°44	6°18	29° 8	27°52	3° 6	7° 4	M 4
T 5	19 26 42	21° 7'07	19°54	1° 4	19°39	5°28	13°39	18°42	15°58	28°42	6°17	29°D 7	27°49	3°13	7° 1	T 5
W 6	19 30 39	22° 4'22	2°14	0°29	20°52	6° 5	13°45	18°37	16° 0	28°41	6°15	29° 7	27°46	3°19	6°58	W 6
T 7	19 34 35	23° 1'38	14°53	29°51	22° 4	6°42	13°51	18°33	16° 2	28°40	6°14	29° 8	27°42	3°26	6°55	T 7
F 8	19 38 32	23°58'55	27°55	29°10	23°16	7°18	13°58	18°28	16° 3	28°39	6°13	29°R 9	27°39	3°33	6°51	F 8
S 9	19 42 28	24°56'12	11°23	28°28	24°29	7°55	14° 4	18°24	16° 5	28°37	6°11	29° 8	27°36	3°39	6°48	S 9
S 10	19 46 25	25°53'29	25°19	27°45	25°41	8°32	14°10	18°20	16° 7	28°36	6°10	29° 6	27°33	3°46	6°45	S 10
M 11	19 50 22	26°50'47	9°43	27° 2	26°53	9° 9	14°17	18°15	16° 8	28°35	6° 8	29° 1	27°30	3°53	6°42	M 11
T 12	19 54 18	27°48'06	24°28	26°19	28° 5	9°46	14°24	18°11	16°10	28°33	6° 7	28°54	27°27	4° 0	6°38	T 12
W 13	19 58 15	28°45'25	9°29	25°38	29°18	10°23	14°31	18° 7	16°12	28°32	6° 6	28°45	27°23	4° 6	6°35	W 13
T 14	20 2 11	29°42'46	24°35	24°59	0°130	11° 0	14°38	18° 2	16°13	28°31	6° 4	28°36	27°20	4°13	6°32	T 14
F 15	20 6 8	0°40'07	9°36	24°22	1°42	11°38	14°45	17°58	16°14	28°29	6° 3	28°28	27°17	4°20	6°29	F 15
S 16	20 10 4	1°37'29	24°25	23°49	2°54	12°15	14°52	17°54	16°16	28°28	6° 2	28°22	27°14	4°27	6°25	S 16
S 17	20 14 1	2°34'52	8°54	23°21	4° 6	12°52	15° 0	17°50	16°17	28°26	6° 0	28°17	27°11	4°33	6°22	S 17
M 18	20 17 57	3°32'17	23° 0	22°57	5°18	13°30	15° 7	17°45	16°19	28°25	5°59	28°15	27° 7	4°40	6°19	M 18
T 19	20 21 54	4°29'42	6°43	22°38	6°30	14° 7	15°15	17°41	16°20	28°23	5°58	28°D15	27° 4	4°47	6°15	T 19
W 20	20 25 51	5°27'10	20° 3	22°25	7°42	14°44	15°23	17°37	16°21	28°22	5°57	28°15	27° 1	4°53	6°12	W 20
T 21	20 29 47	6°24'38	3°11 5	22°18	8°54	15°22	15°31	17°33	16°22	28°21	5°55	28°R15	26°58	5° 0	6° 9	T 21
F 22	20 33 44	7°22'08	15°49	22°D18	10° 6	15°59	15°39	17°29	16°23	28°19	5°54	28°14	26°55	5° 7	6° 5	F 22
S 23	20 37 40	8°19'39	28°21	22°24	11°17	16°37	15°47	17°25	16°25	28°18	5°53	28°10	26°52	5°14	6° 2	S 23
S 24	20 41 37	9°17'11	10°42	22°37	12°29	17°15	15°55	17°21	16°26	28°16	5°52	28° 4	26°48	5°20	5°59	S 24
M 25	20 45 33	10°14'45	22°54	22°57	13°41	17°52	16° 3	17°17	16°27	28°14	5°50	27°55	26°45	5°27	5°55	M 25
T 26	20 49 30	11°12'20	4°59	23°24	14°53	18°30	16°12	17°13	16°28	28°13	5°49	27°44	26°42	5°34	5°52	T 26
W 27	20 53 27	12° 9'56	16°59	23°58	16° 4	19° 8	16°21	17° 9	16°28	28°11	5°48	27°31	26°39	5°40	5°49	W 27
T 28	20 57 23	13° 7'33	28°54	24°38	17°16	19°46	16°29	17° 6	16°29	28°10	5°47	27°17	26°36	5°47	5°46	T 28
F 29	21 1 20	14° 5'11	10°46	25°25	18°27	20°24	16°38	17° 2	16°30	28° 8	5°46	27° 4	26°32	5°54	5°42	F 29
S 30	21 5 16	15° 2'51	22°36	26°19	19°39	21° 2	16°47	16°58	16°31	28° 7	5°45	26°53	26°29	6° 1	5°39	S 30
S 31	21 9 13	16°18 0'31	4°28	27°20	20°50	21°40	16°56	16°55	16°31	28° 5	5°44	26°45	26°26	6° 7	5°36	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	22n23	15n30	5n 7	16n 0	3s41	18n 0	1n39	11n22	1n 1	4s 6	1n16	22s 7	0n 2	16n17	0s21	12s33	0s40	21s 6	2n15	20n 4	19n46	15n18	11s25	7n20	
S 2	22 15	10 53	4 57	15 52	3 54	17 38	1 38	11 8	1 0	4 8	1 16	22 8	0 2	16 17	0 21	12 34	0 40	21 6	2 15	20 3	19 46	15 15	11 26	7 20	
S 3	22 7	5 51	4 35	15 46	4 6	17 16	1 38	10 54	0 59	4 10	1 15	22 9	0 2	16 18	0 21	12 34	0 40	21 6	2 15	20 2	19 45	15 13	11 26	7 20	
M 4	21 59	0 34	4 0	15 41	4 17	16 53	1 37	10 40	0 59	4 13	1 15	22 10	0 2	16 19	0 21	12 35	0 40	21 6	2 15	20 1	19 44	15 10	11 27	7 20	
T 5	21 50	4s48	3 15	15 38	4 27	16 30	1 37	10 26	0 58	4 15	1 15	22 10	0 1	16 19	0 21	12 35	0 40	21 6	2 15	20 1	19 43	15 7	11 28	7 20	
W 6	21 41	10 6	2 19	15 37	4 35	16 6	1 36	10 12	0 57	4 18	1 15	22 11	0 1	16 20	0 21	12 35	0 40	21 7	2 15	20 1	19 43	15 5	11 28	7 20	
T 7	21 32	15 8	1 16	15 38	4 42	15 42	1 36	9 57	0 57	4 20	1 14	22 12	0 1	16 20	0 21	12 36	0 40	21 7	2 15	20 1	19 42	15 2	11 29	7 20	
F 8	21 22	19 38	0 7	15 41	4 48	15 17	1 35	9 43	0 56	4 23	1 14	22 12	0 1	16 21	0 21	12 36	0 40	21 7	2 15	20 1	19 41	15 0	11 30	7 21	
S 9	21 12	23 17	1s 5	15 45	4 52	14 52	1 34	9 29	0 56	4 26	1 14	22 13	0 1	16 21	0 21	12 37	0 40	21 7	2 15	20 1	19 41	14 57	11 30	7 21	
S 10	21 1	25 40	2 15	15 51	4 55	14 27	1 33	9 14	0 55	4 28	1 14	22 14	0 1	16 22	0 21	12 37	0 40	21 7	2 14	20 1	19 40	14 55	11 31	7 21	
M11	20 51	26 27	3 19	15 59	4 55	14 1	1 32	9 0	0 54	4 31	1 14	22 14	0 1	16 22	0 21	12 38	0 40	21 7	2 14	19 59	19 39	14 52	11 32	7 21	
T 12	20 39	25 24	4 11	16 8	4 54	13 35	1 31	8 45	0 54	4 34	1 13	22 15	0 1	16 23	0 21	12 38	0 40	21 8	2 14	19 58	19 38	14 50	11 33	7 21	
W13	20 28	22 32	4 47	16 18	4 51	13 9	1 30	8 31	0 53	4 37	1 13	22 16	0 1	16 23	0 21	12 39	0 40	21 8	2 14	19 56	19 38	14 47	11 33	7 21	
T 14	20 16	18 7	5 3	16 29	4 47	12 42	1 28	8 16	0 52	4 40	1 13	22 16	0 1	16 23	0 22	12 39	0 40	21 8	2 14	19 54	19 37	14 44	11 34	7 21	
F 15	20 4	12 35	4 58	16 42	4 40	12 15	1 27	8 1	0 52	4 43	1 13	22 17	0 1	16 24	0 22	12 40	0 40	21 8	2 14	19 52	19 36	14 42	11 35	7 21	
S 16	19 51	6 24	4 33	16 55	4 33	11 48	1 26	7 46	0 51	4 46	1 12	22 18	0 0	16 24	0 22	12 40	0 40	21 8	2 14	19 51	19 36	14 39	11 36	7 21	
S 17	19 38	0 0	3 51	17 9	4 23	11 20	1 24	7 31	0 51	4 49	1 12	22 18	0 0	16 25	0 22	12 41	0 40	21 9	2 13	19 50	19 35	14 37	11 36	7 21	
M18	19 25	6n14	2 56	17 24	4 12	10 52	1 23	7 16	0 50	4 52	1 12	22 19	0 0	16 25	0 22	12 41	0 40	21 9	2 13	19 49	19 34	14 34	11 37	7 21	
T 19	19 11	12 2	1 52	17 39	4 1	10 24	1 21	7 1	0 49	4 55	1 12	22 20	0 0	16 25	0 22	12 42	0 40	21 9	2 13	19 49	19 33	14 31	11 38	7 21	
W20	18 57	17 6	0 43	17 54	3 47	9 56	1 19	6 46	0 49	4 58	1 11	22 20	0 0	16 26	0 22	12 42	0 40	21 9	2 13	19 49	19 33	14 29	11 39	7 21	
T 21	18 43	21 15	0n26	18 8	3 33	9 27	1 17	6 31	0 48	5 2	1 11	22 21	0 0	16 26	0 22	12 43	0 41	21 9	2 13	19 49	19 32	14 26	11 40	7 21	
F 22	18 29	24 16	1 32	18 23	3 19	8 58	1 16	6 16	0 47	5 5	1 11	22 21	0s 0	16 26	0 22	12 43	0 41	21 10	2 13	19 49	19 31	14 24	11 40	7 21	
S 23	18 14	26 2	2 32	18 37	3 3	8 29	1 14	6 1	0 47	5 8	1 11	22 22	0 0	16 27	0 22	12 44	0 41	21 10	2 13	19 48	19 30	14 21	11 41	7 21	
S 24	17 59	26 28	3 25	18 51	2 47	8 0	1 12	5 46	0 46	5 12	1 11	22 23	0 0	16 27	0 22	12 45	0 41	21 10	2 13	19 47	19 30	14 18	11 42	7 21	
M25	17 43	25 37	4 7	19 4	2 31	7 30	1 10	5 30	0 46	5 15	1 10	22 23	0 0	16 27	0 22	12 45	0 41	21 10	2 12	19 45	19 29	14 16	11 43	7 21	
T 26	17 28	23 33	4 37	19 16	2 14	7 0	1 7	5 15	0 45	5 18	1 10	22 24	0 0	16 27	0 22	12 46	0 41	21 10	2 12	19 42	19 28	14 13	11 44	7 21	
W27	17 12	20 28	4 55	19 27	1 58	6 31	1 5	4 59	0 44	5 22	1 10	22 24	0 0	16 28	0 22	12 46	0 41	21 11	2 12	19 39	19 27	14 10	11 45	7 21	
T 28	16 55	16 34	5 0	19 36	1 41	6 0	1 3	4 44	0 44	5 26	1 10	22 25	0 1	16 28	0 22	12 47	0 41	21 11	2 12	19 36	19 27	14 8	11 46	7 20	
F 29	16 39	12 3	4 52	19 44	1 24	5 30	1 0	4 28	0 43	5 29	1 10	22 26	0 1	16 28	0 22	12 47	0 41	21 11	2 12	19 33	19 26	14 5	11 46	7 20	
S 30	16 22	7 5	4 31	19 50	1 8	5 0	0 58	4 13	0 42	5 33	1 9	22 26	0 1	16 28	0 22	12 48	0 41	21 11	2 12	19 31	19 25	14 2	11 47	7 20	
S 31	16n 5	1n52	3n58	19n54	0s52	4n29	0n55	3n57	0n42	5s36	1n 9	22s27	0s 1	16n29	0s22	12s48	0s41	21s11	2n12	19n29	19n25	14n 0	11s48	7n20	

ASTRODIENST EPHEMERIS for the year 1519

geocentric

AUGUST 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	21 13 9	16°58'13	16°24	28°26	22°18	22°18	17°15	16°R51	16°32	28°R 3	5°R43	26°R39	26°23	6°14	5°R33	M 1
T 2	21 17 6	17°55'56	28°29	29°39	23°13	22°56	17°15	16°348	16°33	28°2	5°42	26°35	26°20	6°21	5°29	T 2
W 3	21 21 2	18°53'40	10°46	0°58	24°25	23°34	17°24	16°44	16°33	28° 0	5°41	26°34	26°17	6°28	5°26	W 3
T 4	21 24 59	19°51'25	23°20	2°21	25°36	24°13	17°33	16°41	16°34	27°59	5°40	26°34	26°13	6°34	5°23	T 4
F 5	21 28 55	20°49'11	6°18	3°50	26°47	24°51	17°43	16°38	16°34	27°57	5°39	26°34	26°10	6°41	5°20	F 5
S 6	21 32 52	21°46'59	19°41	5°24	27°58	25°29	17°53	16°35	16°35	27°55	5°38	26°33	26° 7	6°48	5°17	S 6
S 7	21 36 49	22°44'48	3°34	7° 2	29°10	26° 8	18° 2	16°31	16°35	27°54	5°37	26°29	26° 4	6°54	5°14	S 7
M 8	21 40 45	23°42'38	17°57	8°44	0°21	26°46	18°12	16°28	16°35	27°52	5°36	26°23	26° 1	7° 1	5°11	M 8
T 9	21 44 42	24°40'29	2°47	10°29	1°32	27°25	18°22	16°25	16°36	27°50	5°35	26°15	25°58	7° 8	5° 7	T 9
W10	21 48 38	25°38'21	17°56	12°17	2°43	28° 3	18°32	16°22	16°36	27°49	5°34	26° 4	25°54	7°15	5° 4	W10
T 11	21 52 35	26°36'16	3°15	14° 8	3°54	28°42	18°42	16°20	16°36	27°47	5°34	25°53	25°51	7°21	5° 1	T 11
F 12	21 56 31	27°34'11	18°32	16° 0	5° 4	29°21	18°53	16°17	16°36	27°45	5°33	25°43	25°48	7°28	4°59	F 12
S 13	22 0 28	28°32'08	3°37	17°55	6°15	29°59	19° 3	16°14	16°R36	27°44	5°32	25°35	25°45	7°35	4°56	S 13
S 14	22 4 24	29°30'08	18°20	19°50	7°26	0°38	19°13	16°11	16°36	27°42	5°31	25°29	25°42	7°41	4°53	S 14
M15	22 8 21	0°28'09	2°37	21°47	8°37	1°17	19°24	16° 9	16°36	27°41	5°31	25°25	25°38	7°48	4°50	M15
T 16	22 12 18	1°26'12	16°26	23°44	9°47	1°56	19°34	16° 6	16°36	27°39	5°30	25°24	25°35	7°55	4°47	T 16
W17	22 16 14	2°24'17	29°49	25°42	10°58	2°35	19°45	16° 4	16°36	27°37	5°29	25°24	25°32	8° 2	4°44	W17
T 18	22 20 11	3°22'24	12°47	27°39	12° 8	3°14	19°56	16° 2	16°36	27°36	5°29	25°24	25°29	8° 8	4°41	T 18
F 19	22 24 7	4°20'33	25°26	29°36	13°19	3°53	20° 7	16° 0	16°35	27°34	5°28	25°22	25°26	8°15	4°39	F 19
S 20	22 28 4	5°18'44	7°49	1°33	14°29	4°32	20°17	15°57	16°35	27°32	5°27	25°19	25°23	8°22	4°36	S 20
S 21	22 32 0	6°16'57	20° 1	3°29	15°40	5°11	20°28	15°55	16°35	27°31	5°27	25°12	25°19	8°29	4°33	S 21
M22	22 35 57	7°15'12	2°4	5°25	16°50	5°50	20°39	15°53	16°34	27°29	5°26	25° 3	25°16	8°35	4°31	M22
T 23	22 39 53	8°13'29	14° 1	7°20	18° 0	6°30	20°51	15°52	16°34	27°28	5°26	24°51	25°13	8°42	4°28	T 23
W24	22 43 50	9°11'48	25°55	9°14	19°10	7° 9	21° 2	15°50	16°33	27°26	5°25	24°38	25°10	8°49	4°26	W24
T 25	22 47 47	10°10'09	7°47	11° 7	20°20	7°48	21°13	15°48	16°33	27°24	5°25	24°24	25° 7	8°55	4°23	T 25
F 26	22 51 43	11° 8'31	19°39	12°59	21°30	8°28	21°24	15°47	16°32	27°23	5°25	24°11	25° 4	9° 2	4°21	F 26
S 27	22 55 40	12° 6'56	1°32	14°50	22°40	9° 7	21°36	15°45	16°31	27°21	5°24	24° 0	25° 0	9° 9	4°18	S 27
S 28	22 59 36	13° 5'22	13°27	16°40	23°50	9°47	21°47	15°44	16°31	27°20	5°24	23°51	24°57	9°16	4°16	S 28
M29	23 3 33	14° 3'50	25°27	18°29	25° 0	10°27	21°59	15°42	16°30	27°18	5°23	23°45	24°54	9°22	4°14	M29
T 30	23 7 29	15° 2'19	7°35	20°17	26°10	11° 6	22°10	15°41	16°29	27°16	5°23	23°41	24°51	9°29	4°12	T 30
W31	23 11 26	16° 0'51	19°54	22°14	27°19	11°46	22°22	15°40	16°28	27°15	5°23	23°D40	24°48	9°36	4°10	W31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	15n47	3s28	3n15	19n56	0s37	3n59	0n53	3n42	0n41	5s40	1n 9	22s27	0s 1	16n29	0s22	12s49
T 2	15 30	8 44	2 23	19 55	0 22	3 28	0 50	3 26	0 41	5 44	1 9	22 28	0 1	16 29	0 22	12 50
W 3	15 12	13 47	1 23	19 53	0 7	2 57	0 48	3 10	0 40	5 48	1 9	22 28	0 1	16 29	0 22	12 50
T 4	14 54	18 23	0 17	19 47	0n 6	2 26	0 45	2 54	0 39	5 51	1 8	22 29	0 1	16 29	0 22	12 51
F 5	14 36	22 15	0s51	19 39	0 19	1 55	0 42	2 39	0 39	5 55	1 8	22 29	0 1	16 29	0 22	12 51
S 6	14 17	25 5	1 59	19 29	0 31	1 24	0 39	2 23	0 38	5 59	1 8	22 30	0 1	16 29	0 22	12 52
S 7	13 58	26 29	3 2	19 15	0 43	0 53	0 36	2 7	0 37	6 3	1 8	22 30	0 1	16 29	0 22	12 52
M 8	13 39	26 11	3 56	18 59	0 53	0 22	0 33	1 51	0 37	6 7	1 8	22 31	0 2	16 30	0 22	12 53
T 9	13 20	24 4	4 36	18 40	1 3	0s 9	0 30	1 35	0 36	6 11	1 8	22 31	0 2	16 30	0 22	12 54
W10	13 0	20 12	4 57	18 18	1 11	0 40	0 27	1 19	0 36	6 15	1 7	22 31	0 2	16 30	0 22	12 54
T 11	12 41	14 58	4 58	17 53	1 19	1 12	0 23	1 3	0 35	6 19	1 7	22 32	0 2	16 30	0 22	12 55
F 12	12 21	8 47	4 37	17 26	1 25	1 43	0 20	0 47	0 34	6 23	1 7	22 32	0 2	16 30	0 22	12 55
S 13	12 1	2 11	3 57	16 57	1 31	2 14	0 17	0 31	0 34	6 27	1 7	22 33	0 2	16 30	0 22	12 56
S 14	11 41	4n24	3 2	16 25	1 36	2 45	0 14	0 15	0 33	6 31	1 7	22 33	0 2	16 30	0 22	12 57
M15	11 20	10 35	1 57	15 51	1 40	3 16	0 10	0s 1	0 32	6 35	1 7	22 34	0 2	16 30	0 22	12 57
T 16	11 0	16 3	0 47	15 16	1 43	3 47	0 7	0 17	0 32	6 39	1 6	22 34	0 2	16 30	0 22	12 58
W17	10 39	20 33	0n23	14 38	1 45	4 18	0 3	0 33	0 31	6 43	1 6	22 34	0 2	16 30	0 22	12 58
T 18	10 18	23 53	1 31	13 59	1 46	4 49	0s 0	0 49	0 31	6 48	1 6	22 35	0 2	16 30	0 22	12 59
F 19	9 57	25 57	2 32	13 19	1 47	5 20	0 4	1 5	0 30	6 52	1 6	22 35	0 2	16 29	0 22	12 59
S 20	9 35	26 40	3 24	12 37	1 47	5 51	0 8	1 21	0 29	6 56	1 6	22 35	0 3	16 29	0 22	13 0
S 21	9 14	26 4	4 6	11 54	1 46	6 21	0 11	1 38	0 29	7 0	1 6	22 36	0 3	16 29	0 22	13 1
M22	8 52	24 15	4 57	11 11	1 45	6 52	0 15	1 54	0 28	7 5	1 5	22 36	0 3	16 29	0 22	13 1
T 23	8 30	21 22	4 55	10 26	1 43	7 22	0 19	2 10	0 27	7 9	1 5	22 36	0 3	16 29	0 22	13 2
W24	8 9	17 37	5 0	9 41	1 41	7 52	0 23	2 26	0 27	7 13	1 5	22 37	0 3	16 29	0 22	13 2
T 25	7 47	13 11	4 52	8 55	1 38	8 22	0 26	2 42	0 26	7 18	1 5	22 37	0 3	16 29	0 22	13 3
F 26	7 24	8 16	4 32	8 9	1 34	8 52	0 30	2 58	0 26	7 22	1 5	22 37	0 3	16 28	0 22	13 3
S 27	7 2	3 3	3 59	7 23	1 31	9 22	0 34	3 15	0 25	7 26	1 5	22 37	0 3	16 28	0 22	13 4
S 28	6 40	2s19	3 16	6 36	1 26	9 52	0 38	3 31	0 24	7 31	1 5	22 38	0 3	16 28	0 22	13 4
M29	6 17	7 38	2 24	5 49	1 22	10 21	0 42	3 47	0 24	7 35	1 4	22 38	0 3	16 28	0 22	13 5
T 30	5 55	12 45	1 24	5 2	1 17	10 50	0 46	4 3	0 23	7 40	1 4	22 38	0 3	16 28	0 22	13 6
W31	5n32	17s26	0n20	4n15	1n12	11s19	0s50	4s19	0n22	7s44	1n 4	22s38	0s 3	16n27	0s22	13s 6

Julian Day Number = 2276084.5, Delta T = 248.11 sec

Ecliptic obliquity = 23°30'11", Nutation = - 0°00'13", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 18°02'13", Lahiri = 17°09'13" Julian Calendar 1 Aug. 1519 == Greg. Calendar 11 Aug. 1519

ASTRODIENST EPHEMERIS for the year 1519

geocentric

SEPTEMBER 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	23 15 22	16 ¹¹ 59'24	2 ²⁷ 29	23 ¹¹ 49	28 ¹¹ 29	12 ¹¹ 26	22 ¹¹ 34	15°R39	16°R27	27°R13	5°R23	23 ¹¹ 40	24 ¹¹ 44	9 ¹¹ 42	4°R 7	T 1
F 2	23 19 19	17°57'59	15°23	25°34	29°38	13° 6	22°45	15°38	16°27	27°12	5°22	23°R41	24°41	9°49	4° 5	F 2
S 3	23 23 16	18°56'35	28°40	27°18	0 ¹¹ 48	13°45	22°57	15°37	16°26	27°10	5°22	23°40	24°38	9°56	4° 3	S 3
S 4	23 27 12	19°55'13	12 ¹¹ 35	29° 0	1°57	14°25	23° 9	15°36	16°25	27° 9	5°22	23°38	24°35	10° 3	4° 1	S 4
M 5	23 31 9	20°53'53	26°37	0 ¹¹ 42	3° 6	15° 5	23°21	15°36	16°23	27° 7	5°22	23°34	24°32	10° 9	4° 0	M 5
T 6	23 35 5	21°52'35	11 ¹¹ 46	2°22	4°15	15°45	23°33	15°35	16°22	27° 6	5°22	23°27	24°29	10°16	3°58	T 6
W 7	23 39 2	22°51'18	26°18	4° 2	5°24	16°26	23°45	15°35	16°21	27° 4	5°22	23°19	24°25	10°23	3°56	W 7
T 8	23 42 58	23°50'03	11 ¹¹ 32	5°40	6°33	17° 6	23°57	15°34	16°20	27° 3	5°D22	23°10	24°22	10°29	3°54	T 8
F 9	23 46 55	24°48'50	26°50	7°18	7°42	17°46	24° 9	15°34	16°19	27° 2	5°22	23° 1	24°19	10°36	3°53	F 9
S 10	23 50 51	25°47'39	12 ¹¹ 0	8°55	8°51	18°26	24°22	15°34	16°17	27° 0	5°22	22°54	24°16	10°43	3°51	S 10
S 11	23 54 48	26°46'30	26°51	10°30	9°59	19° 6	24°34	15°D34	16°16	26°59	5°22	22°49	24°13	10°50	3°49	S 11
M12	23 58 45	27°45'23	11 ¹¹ 18	12° 5	11° 8	19°47	24°46	15°34	16°15	26°57	5°22	22°47	24°10	10°56	3°48	M12
T 13	0 2 41	28°44'19	25°16	13°39	12°16	20°27	24°59	15°34	16°13	26°56	5°22	22°D46	24° 6	11° 3	3°47	T 13
W14	0 6 38	29°43'17	8 ¹¹ 16	15°12	13°24	21° 8	25°11	15°34	16°12	26°55	5°22	22°47	24° 3	11°10	3°45	W14
T 15	0 10 34	0 ¹¹ 42'18	21°49	16°45	14°32	21°48	25°23	15°35	16°10	26°54	5°23	22°48	24° 0	11°16	3°44	T 15
F 16	0 14 31	1°41'20	4 ¹¹ 30	18°16	15°41	22°29	25°36	15°35	16° 9	26°52	5°23	22°R48	23°57	11°23	3°43	F 16
S 17	0 18 27	2°40'25	16°52	19°47	16°48	23°10	25°48	15°36	16° 7	26°51	5°23	22°47	23°54	11°30	3°42	S 17
S 18	0 22 24	3°39'33	29° 1	21°16	17°56	23°50	26° 1	15°36	16° 6	26°50	5°23	22°44	23°50	11°37	3°41	S 18
M19	0 26 20	4°38'42	11 ¹¹ 0	22°45	19° 4	24°31	26°14	15°37	16° 4	26°49	5°24	22°38	23°47	11°43	3°39	M19
T 20	0 30 17	5°37'54	22°54	24°13	20°11	25°12	26°26	15°38	16° 2	26°47	5°24	22°31	23°44	11°50	3°39	T 20
W21	0 34 14	6°37'08	4 ¹¹ 46	25°40	21°19	25°53	26°39	15°39	16° 0	26°46	5°24	22°23	23°41	11°57	3°38	W21
T 22	0 38 10	7°36'25	16°37	27° 6	22°26	26°34	26°52	15°40	15°59	26°45	5°25	22°14	23°38	12° 3	3°37	T 22
F 23	0 42 7	8°35'43	28°31	28°32	23°33	27°15	27° 4	15°41	15°57	26°44	5°25	22° 5	23°35	12°10	3°36	F 23
S 24	0 46 3	9°35'03	10 ¹¹ 29	29°56	24°40	27°56	27°17	15°42	15°55	26°43	5°26	21°58	23°31	12°17	3°35	S 24
S 25	0 50 0	10°34'26	22°32	1 ¹¹ 20	25°47	28°37	27°30	15°44	15°53	26°42	5°26	21°52	23°28	12°24	3°35	S 25
M26	0 53 56	11°33'51	4 ¹¹ 43	2°42	26°54	29°18	27°43	15°45	15°51	26°41	5°27	21°49	23°25	12°30	3°34	M26
T 27	0 57 53	12°33'17	17° 2	4° 3	28° 0	29°59	27°56	15°47	15°49	26°40	5°27	21°D47	23°22	12°37	3°34	T 27
W28	1 1 49	13°32'46	29°31	5°24	29° 7	0 ¹¹ 41	28° 8	15°48	15°47	26°39	5°28	21°47	23°19	12°44	3°33	W28
T 29	1 5 46	14°32'16	12 ¹¹ 14	6°43	0 ¹¹ 13	1°22	28°21	15°50	15°45	26°38	5°28	21°49	23°15	12°50	3°33	T 29
F 30	1 9 42	15°31'49	25 ¹¹ 13	8 ¹¹ 1	1°19	2 ¹¹ 3	28°34	15°52	15°43	26°37	5°29	21°50	23°12	12°57	3°33	F 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
T 1	5n 9	21s29	0s47	3n28	1n 6	11s48	0s54	4s35	0n22	7s49	1n 4	22s38	0s 3	16n27	0s22	13s 7	0s41	21s17	2n 7	18n44	19n 0	12n33	12s17	7n12			
F 2	4 46	24 34	1 53	2 42	1 1	12 17	0 58	4 51	0 21	7 53	1 4	22 39	0 4	16 27	0 22	13 7	0 41	21 17	2 6	18 45	18 59	12 30	12 18	7 11			
S 3	4 23	26 25	2 55	1 55	0 55	12 45	1 2	5 8	0 21	7 58	1 4	22 39	0 4	16 27	0 22	13 8	0 41	21 17	2 6	18 44	18 59	12 27	12 19	7 11			
S 4	4 0	26 44	3 49	1 8	0 48	13 13	1 6	5 24	0 20	8 2	1 4	22 39	0 4	16 26	0 22	13 8	0 41	21 18	2 6	18 44	18 58	12 25	12 19	7 10			
M 5	3 37	25 19	4 31	0 22	0 42	13 40	1 10	5 40	0 19	8 7	1 4	22 39	0 4	16 26	0 22	13 9	0 41	21 18	2 6	18 43	18 57	12 22	12 20	7 10			
T 6	3 14	22 12	4 57	0s24	0 36	14 8	1 14	5 56	0 19	8 11	1 3	22 39	0 4	16 26	0 22	13 9	0 41	21 18	2 6	18 41	18 56	12 19	12 21	7 9			
W 7	2 51	17 32	5 4	1 10	0 29	14 35	1 18	6 12	0 18	8 16	1 3	22 39	0 4	16 25	0 22	13 10	0 41	21 18	2 6	18 39	18 56	12 16	12 22	7 9			
T 8	2 27	11 42	4 49	1 55	0 22	15 2	1 22	6 28	0 18	8 20	1 3	22 39	0 4	16 25	0 22	13 10	0 41	21 18	2 5	18 37	18 55	12 13	12 23	7 9			
F 9	2 4	5 8	4 13	2 40	0 15	15 28	1 26	6 44	0 17	8 25	1 3	22 40	0 4	16 25	0 22	13 11	0 41	21 18	2 5	18 35	18 54	12 11	12 24	7 8			
S 10	1 41	1n41	3 20	3 25	0 8	15 54	1 30	7 0	0 16	8 30	1 3	22 40	0 4	16 24	0 22	13 11	0 41	21 19	2 5	18 33	18 53	12 8	12 24	7 8			
S 11	1 17	8 18	2 14	4 9	0 1	16 20	1 34	7 16	0 16	8 34	1 3	22 40	0 4	16 24	0 22	13 12	0 41	21 19	2 5	18 32	18 52	12 5	12 25	7 7			
M12	0 54	14 17	1 1	4 53	0s 6	16 46	1 38	7 31	0 15	8 39	1 3	22 40	0 4	16 23	0 22	13 12	0 41	21 19	2 5	18 31	18 52	12 2	12 26	7 7			
T 13	0 30	19 21	0n13	5 36	0 13	17 11	1 42	7 47	0 14	8 43	1 3	22 40	0 4	16 23	0 22	13 13	0 41	21 19	2 5	18 31	18 51	11 59	12 27	7 6			
W14	0 7	23 13	1 25	6 19	0 20	17 35	1 46	8 3	0 14	8 48	1 3	22 40	0 4	16 23	0 22	13 13	0 41	21 19	2 4	18 31	18 50	11 57	12 27	7 6			
T 15	0s17	25 44	2 30	7 1	0 28	18 0	1 50	8 19	0 13	8 53	1 2	22 40	0 5	16 22	0 22	13 13	0 41	21 19	2 4	18 31	18 49	11 54	12 28	7 6			
F 16	0 40	26 50	3 25	7 43	0 35	18 24	1 54	8 35	0 13	8 57	1 2	22 40	0 5	16 22	0 22	13 14	0 41	21 20	2 4	18 31	18 49	11 51	12 29	7 5			
S 17	1 4	26 33	4 9	8 24	0 42	18 47	1 58	8 50	0 12	9 2	1 2	22 40	0 5	16 21	0 22	13 14	0 41	21 20	2 4	18 31	18 48	11 48	12 30	7 5			
S 18	1 27	25 0	4 42	9 5	0 49	19 10	2 2	9 6	0 11	9 7	1 2	22 40	0 5	16 21	0 22	13 15	0 41	21 20	2 4	18 30	18 47	11 45	12 30	7 4			
M19	1 51	22 20	5 1	9 45	0 57	19 33	2 6	9 22	0 11	9 11	1 2	22 40	0 5	16 20	0 22	13 15	0 41	21 20	2 4	18 29	18 46	11 42	12 31	7 4			
T 20	2 15	18 45	5 7	10 24	1 4	19 55	2 9	9 37	0 10	9 16	1 2	22 40	0 5	16 20	0 22	13 16	0 41	21 20	2 3	18 27	18 45	11 40	12 32	7 3			
W21	2 38	14 26	5 0	11 3	1 11	20 17	2 13	9 53	0 9	9 21	1 2	22 40	0 5	16 19	0 22	13 16	0 41	21 20	2 3	18 25	18 45	11 37	12 32	7 3			
T 22	3 2	9 36	4 40	11 41	1 18	20 38	2 17	10 8	0 9	9 25	1 2	22 40	0 5	16 19	0 22	13 16	0 41	21 20	2 3	18 23	18 44	11 34	12 33	7 2			
F 23	3 25	4 23	4 8	12 18	1 25	20 59	2 21	10 23	0 8	9 30	1 2	22 40	0 5	16 18	0 22	13 17	0 41	21 21	2 3	18 20	18 43	11 31	12 34	7 2			
S 24	3 48	1s 1	3 25	12 55	1 32	21 19	2 24	10 39	0 8	9 35	1 2	22 40	0 5	16 18	0 22	13 17	0 41	21 21	2 3	18 18	18 42	11 28	12 34	7 1			
S 25	4 12	6 27	2 32	13 30	1 39	21 39	2 28	10 54	0 7	9 39	1 2	22 40	0 5	16 17	0 22	13 17	0 41	21 21	2 3	18 17	18 41	11 25	12 35	7 1			
M26	4 35	11 41	1 31	14 5	1 45	21 58	2 32	11 9	0 6	9 44	1 1	22 40	0 5	16 17	0 22	13 18	0 41	21 21	2 3	18 16	18 41	11 22	12 35	7 0			
T 27	4 58	16 33	0 26	14 39	1 52	22 17	2 35	11 24	0 6	9 49	1 1	22 39	0 5	16 16	0 22	13 18	0 41	21 21	2 2	18 16	18 40	11 20	12 36	7 0			
W28	5 22	20 47	0s42	15 13	1 58	22 36	2 39	11 40	0 5	9 53	1 1	22 39	0 5	16 15	0 22	13 18	0 41	21 21	2 2	18 16	18 39	11 17	12 37	6 59			
T 29	5 45	24 7	1 49	15 45	2 4	22 53	2 42	11 55	0 5	9 58	1 1	22 39	0 6	16 15	0 22	13 19	0 41	21 21	2 2	18 16	18 38	11 14	12 37	6 59			
F 30	6s 8	26s17	2s52	16s16	2s10	23s11	2s45	12s 9	0n 4	10s 3	1n 1	22s39	0s 6	16n14	0s22	13s19	0s41	21s22	2n 2	18n16	18n37	11n11	12s38	6n58			

ASTRODIENST EPHEMERIS for the year 1519
geocentric

OCTOBER 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	1 13 39	16 ²³ 13'23	8 ³⁰	9 ¹⁸	2 ²⁷ 25	2 ¹⁴ 45	28 ⁴⁷	15 ⁵⁴	15 ^{R41}	26 ^{R36}	5 ³⁰	21 ⁸⁵¹	23 ⁸ 9	13 ¹⁷ 4	3 ^{R32}	S 1
S 2	1 17 36	17 ³⁰ 59	22° 9	10°33	3°31	3°26	29° 0	15°56	15 ⁸³⁹	26 ³⁵	5°30	21 ^{R52}	23° 6	13°11	3 ³²	S 2
M 3	1 21 32	18°30'36	6 ⁹	11°47	4°36	4° 8	29°13	15°58	15°37	26°34	5°31	21°50	23° 3	13°17	3 ^{D32}	M 3
T 4	1 25 29	19°30'15	20°32	12°59	5°41	4°49	29°26	16° 0	15°35	26°33	5°32	21°48	23° 0	13°24	3°32	T 4
W 5	1 29 25	20°29'56	5 ¹³	14°10	6°47	5°31	29°39	16° 2	15°33	26°32	5°33	21°44	22°56	13°31	3°32	W 5
T 6	1 33 22	21°29'39	20° 8	15°18	7°51	6°13	29°52	16° 5	15°30	26°32	5°33	21°39	22°53	13°37	3°32	T 6
F 7	1 37 18	22°29'23	5 ⁹	16°25	8°56	6°55	0 ¹⁶ 6	16° 7	15°28	26°31	5°34	21°35	22°50	13°44	3°33	F 7
S 8	1 41 15	23°29'10	20° 6	17°29	10° 0	7°36	0°19	16°10	15°26	26°30	5°35	21°32	22°47	13°51	3°33	S 8
S 9	1 45 11	24°28'58	4 ⁸⁵¹	18°31	11° 5	8°18	0°32	16°12	15°24	26°29	5°36	21°29	22°44	13°58	3°33	S 9
M10	1 49 8	25°28'49	19°18	19°30	12° 9	9° 0	0°45	16°15	15°21	26°29	5°37	21°D29	22°41	14° 4	3°34	M10
T 11	1 53 5	26°28'41	3 ¹¹ 20	20°26	13°12	9°42	0°58	16°18	15°19	26°28	5°38	21°29	22°37	14°11	3°34	T 11
W12	1 57 1	27°28'36	16°55	21°18	14°16	10°24	1°11	16°21	15°17	26°27	5°39	21°30	22°34	14°18	3°35	W12
T 13	2 0 58	28°28'33	0 ⁵	22° 7	15°19	11° 6	1°24	16°24	15°14	26°27	5°40	21°32	22°31	14°24	3°35	T 13
F 14	2 4 54	29°28'32	12°52	22°51	16°22	11°49	1°37	16°27	15°12	26°26	5°41	21°33	22°28	14°31	3°36	F 14
S 15	2 8 51	0 ¹⁶ 28'33	25°18	23°31	17°24	12°31	1°51	16°30	15°10	26°26	5°42	21°R34	22°25	14°38	3°37	S 15
S 16	2 12 47	1°28'37	7 ¹² 29	24° 6	18°27	13°13	2° 4	16°34	15° 7	26°25	5°43	21°34	22°21	14°45	3°38	S 16
M17	2 16 44	2°28'43	19°29	24°35	19°29	13°55	2°17	16°37	15° 5	26°25	5°44	21°33	22°18	14°51	3°39	M17
T 18	2 20 40	3°28'50	1 ¹⁷ 22	24°57	20°30	14°38	2°30	16°40	15° 2	26°24	5°46	21°31	22°15	14°58	3°40	T 18
W19	2 24 37	4°29'00	13°13	25°12	21°32	15°20	2°43	16°44	15° 0	26°24	5°47	21°29	22°12	15° 5	3°41	W19
T 20	2 28 34	5°29'12	25° 6	25°R20	22°33	16° 3	2°56	16°48	14°57	26°24	5°48	21°26	22° 9	15°11	3°42	T 20
F 21	2 32 30	6°29'25	7 ⁴ 4	25°20	23°33	16°45	3° 9	16°51	14°55	26°23	5°49	21°24	22° 6	15°18	3°43	F 21
S 22	2 36 27	7°29'41	19° 8	25°10	24°34	17°28	3°23	16°55	14°52	26°23	5°50	21°22	22° 2	15°25	3°44	S 22
S 23	2 40 23	8°29'58	1 ¹¹ 22	24°51	25°33	18°11	3°36	16°59	14°50	26°23	5°52	21°20	21°59	15°32	3°45	S 23
M24	2 44 20	9°30'18	13°47	24°22	26°33	18°53	3°49	17° 3	14°47	26°23	5°53	21°19	21°56	15°38	3°47	M24
T 25	2 48 16	10°30'39	26°23	23°44	27°32	19°36	4° 2	17° 7	14°45	26°23	5°54	21°D19	21°53	15°45	3°48	T 25
W26	2 52 13	11°31'02	9 ¹²	22°55	28°31	20°19	4°15	17°11	14°43	26°22	5°56	21°20	21°50	15°52	3°50	W26
T 27	2 56 9	12°31'26	22°14	21°57	29°29	21° 2	4°28	17°15	14°40	26°22	5°57	21°21	21°47	15°58	3°51	T 27
F 28	3 0 6	13°31'52	5 ²⁹	20°51	0 ²⁷	21°45	4°41	17°20	14°38	26°22	5°59	21°21	21°43	16° 5	3°53	F 28
S 29	3 4 3	14°32'20	18°58	19°38	1°24	22°28	4°55	17°24	14°35	26°22	6° 0	21°22	21°40	16°12	3°55	S 29
S 30	3 7 59	15°32'48	2 ⁴¹	18°20	2°21	23°11	5° 8	17°28	14°32	26°D22	6° 1	21°22	21°37	16°19	3°56	S 30
M31	3 11 56	16°33'18	16 ³⁸	16°59	3 ¹⁷	23°15	5°11	17°33	14°30	26 ²²	6 ³ 3	21°R23	21°34	16°25	3 ⁵⁸	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	6s31	27s 1	3s47	16s47	2s16	23s27	2s49	12s24	0n 3	10s 7	1n 1	22s39	0s 6	16n14	0s22	13s19	0s41	21s22	2n 2	18n17	18n37	11n 8	12s38	6n58	
S 2	6 54	26 8	4 31	17 16	2 22	23 43	2 52	12 39	0 3	10 12	1 1	22 39	0 6	16 13	0 22	13 20	0 41	21 22	2 2	18 17	18 36	11 5	12 39	6 57	
M 3	7 16	23 38	5 1	17 44	2 27	23 59	2 55	12 54	0 2	10 17	1 1	22 39	0 6	16 12	0 22	13 20	0 41	21 22	2 1	18 16	18 35	11 2	12 39	6 57	
T 4	7 39	19 36	5 12	18 11	2 32	24 14	2 58	13 8	0 1	10 21	1 1	22 38	0 6	16 12	0 22	13 20	0 41	21 22	2 1	18 16	18 34	10 59	12 40	6 56	
W 5	8 2	14 19	5 4	18 37	2 37	24 28	3 1	13 23	0 1	10 26	1 1	22 38	0 6	16 11	0 22	13 21	0 41	21 22	2 1	18 15	18 33	10 57	12 40	6 56	
T 6	8 24	8 7	4 35	19 2	2 41	24 42	3 4	13 37	0 0	10 31	1 1	22 38	0 6	16 10	0 22	13 21	0 41	21 22	2 1	18 14	18 33	10 54	12 41	6 55	
F 7	8 46	1 25	3 47	19 25	2 45	24 55	3 7	13 52	0s 0	10 35	1 1	22 38	0 6	16 10	0 22	13 21	0 41	21 22	2 1	18 13	18 32	10 51	12 41	6 55	
S 8	9 9	5n21	2 44	19 47	2 48	25 8	3 9	14 6	0 1	10 40	1 1	22 37	0 6	16 9	0 22	13 21	0 41	21 23	2 1	18 12	18 31	10 48	12 42	6 54	
S 9	9 31	11 46	1 30	20 8	2 51	25 20	3 12	14 20	0 2	10 45	1 1	22 37	0 6	16 8	0 22	13 22	0 41	21 23	2 0	18 11	18 30	10 45	12 42	6 54	
M10	9 53	17 24	0 12	20 26	2 54	25 31	3 15	14 34	0 2	10 49	1 1	22 37	0 6	16 8	0 22	13 22	0 41	21 23	2 0	18 11	18 29	10 42	12 42	6 53	
T 11	10 15	21 56	1n 5	20 44	2 56	25 42	3 17	14 48	0 3	10 54	1 0	22 37	0 6	16 7	0 22	13 22	0 41	21 23	2 0	18 11	18 29	10 39	12 43	6 53	
W12	10 36	25 6	2 15	20 59	2 57	25 52	3 19	15 2	0 3	10 58	1 0	22 36	0 6	16 6	0 22	13 22	0 41	21 23	2 0	18 11	18 28	10 36	12 43	6 52	
T 13	10 58	26 47	3 17	21 13	2 58	26 2	3 22	15 16	0 4	11 3	1 0	22 36	0 7	16 6	0 22	13 22	0 41	21 23	2 0	18 12	18 27	10 33	12 43	6 52	
F 14	11 19	26 58	4 6	21 24	2 58	26 11	3 24	15 30	0 5	11 8	1 0	22 36	0 7	16 5	0 22	13 23	0 41	21 23	2 0	18 12	18 26	10 30	12 44	6 51	
S 15	11 40	25 46	4 43	21 34	2 57	26 19	3 26	15 43	0 5	11 12	1 0	22 35	0 7	16 4	0 22	13 23	0 41	21 23	2 0	18 12	18 25	10 27	12 44	6 51	
S 16	12 1	23 22	5 6	21 41	2 56	26 27	3 28	15 57	0 6	11 17	1 0	22 35	0 7	16 4	0 22	13 23	0 41	21 23	1 59	18 12	18 25	10 25	12 44	6 50	
M17	12 22	20 0	5 15	21 45	2 53	26 34	3 30	16 10	0 7	11 21	1 0	22 35	0 7	16 3	0 22	13 23	0 41	21 24	1 59	18 12	18 24	10 22	12 45	6 50	
T 18	12 43	15 51	5 11	21 47	2 49	26 40	3 31	16 23	0 7	11 26	1 0	22 34	0 7	16 2	0 22	13 23	0 41	21 24	1 59	18 11	18 23	10 19	12 45	6 49	
W19	13 3	11 7	4 53	21 46	2 44	26 46	3 33	16 36	0 8	11 30	1 0	22 34	0 7	16 2	0 22	13 23	0 41	21 24	1 59	18 11	18 22	10 16	12 45	6 49	
T 20	13 23	5 58	4 23	21 42	2 37	26 51	3 34	16 49	0 8	11 35	1 0	22 34	0 7	16 1	0 22	13 23	0 41	21 24	1 59	18 10	18 21	10 13	12 45	6 48	
F 21	13 43	0 34	3 41	21 34	2 30	26 56	3 35	17 2	0 9	11 39	1 0	22 33	0 7	16 0	0 22	13 23	0 41	21 24	1 59	18 10	18 20	10 10	12 46	6 48	
S 22	14 3	4s55	2 49	21 23	2 20	27 0	3 36	17 15	0 10	11 44	1 0	22 33	0 7	15 59	0 22	13 24	0 41	21 24	1 58	18 9	18 20	10 7	12 46	6 47	
S 23	14 22	10 18	1 48	21 7	2 9	27 3	3 37	17 27	0 10	11 48	1 0	22 32	0 7	15 59	0 22	13 24	0 41	21 24	1 58	18 9	18 19	10 4	12 46	6 47	
M24	14 42	15 21	0 42	20 48	1 57	27 6	3 38	17 40	0 11	11 53	1 0	22 32	0 7	15 58	0 22	13 24	0 41	21 24	1 58	18 8	18 18	10 1	12 46	6 46	
T 25	15 1	19 51	0s28	20 25	1 43	27 8	3 39	17 52	0 11	11 57	1 0	22 32	0 7	15 57	0 22	13 24	0 41	21 24	1 58	18 8	18 17	9 58	12 46	6 46	
W26	15 20	23 30	1 37	19 57	1 27	27 9	3 39	18 4	0 12	12 2	1 0	22 31	0 7	15 57	0 22	13 24	0 41	21 24	1 58	18 8	18 16	9 55	12 47	6 45	
T 27	15 38	25 59	2 43	19 25	1 9	27 10	3 40	18 16	0 13	12 6	1 0	22 31	0 7	15 56	0 22	13 24	0 41	21 25	1 58	18 9	18 15	9 52	12 47	6 45	
F 28	15 57	27 4	3 41	18 50	0 51	27 10	3 40	18 28	0 13	12 11	1 0	22 30	0 8	15 55	0 22	13 24	0 41	21 25	1 58	18 9	18 15	9 49	12 47	6 44	
S 29	16 15	26 35	4 28	18 11	0 31	27 10	3 40	18 40	0 14	12 15	1 0	22 30	0 8	15 54	0 22	13 24	0 41	21 25	1 57	18 9	18 14	9 46	12 47	6 44	
S 30	16 32	24 29	5 0	17 30	0 11	27 9	3 40	18 51	0 14	12 19	1 0	22 29	0 8	15 54	0 22	13 24	0 41	21 25	1 57	18 9	18 13	9 43	12 47	6 43	
M31	16s50	20s55	5s16	16s47	0n10	27s 7	3s40	19s 2	0s15	12s24	1n 0	22s29	0s 8	15n53	0s22	13s24	0s41	21s25	1n57	18n 9	18n12	9n40	12s47	6n43	

ASTRODIENST EPHEMERIS for the year 1519
geocentric

DECEMBER 1519 JC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	5 14 9	17 ^h 59'32	10 ^h 4' 4	1 ^h 32	25 ^h 325	16 ^h 37	11 ^h 50	20 ^h 325	13 ^h R19	26 ^h 40	6 ^h 58	21 ^h 8 9	19 ^h 55	19 ^h 53	5 ^h 25	T 1
F 2	5 18 6	19° 0'37	24°10	3° 0	25°47	17°22	12° 2	20°31	13 ^h 17	26°41	7° 0	21°10	19°52	20° 0	5°28	F 2
S 3	5 22 2	20° 1'43	8 ^h 11	4°28	26° 7	18° 7	12°14	20°38	13°15	26°42	7° 2	21°12	19°49	20° 7	5°32	S 3
S 4	5 25 59	21° 2'49	22° 6	5°57	26°25	18°51	12°25	20°44	13°13	26°43	7° 4	21°R12	19°46	20°13	5°36	S 4
M 5	5 29 55	22° 3'55	5 ^h 150	7°26	26°41	19°36	12°37	20°51	13°11	26°44	7° 6	21°11	19°43	20°20	5°39	M 5
T 6	5 33 52	23° 5'02	19°23	8°56	26°55	20°21	12°49	20°57	13°10	26°46	7° 8	21° 9	19°39	20°27	5°43	T 6
W 7	5 37 48	24° 6'10	2 ^h 42	10°26	27° 7	21° 6	13° 0	21° 4	13° 8	26°47	7°10	21° 5	19°36	20°33	5°47	W 7
T 8	5 41 45	25° 7'17	15°44	11°56	27°16	21°51	13°11	21°10	13° 6	26°48	7°12	20°59	19°33	20°40	5°51	T 8
F 9	5 45 41	26° 8'26	28°29	13°27	27°23	22°36	13°23	21°17	13° 5	26°49	7°14	20°53	19°30	20°47	5°55	F 9
S 10	5 49 38	27° 9'34	10 ^h 59	14°58	27°28	23°22	13°34	21°24	13° 3	26°51	7°16	20°46	19°27	20°54	5°59	S 10
S 11	5 53 35	28°10'44	23°13	16°29	27°R30	24° 7	13°45	21°30	13° 1	26°52	7°18	20°40	19°24	21° 0	6° 3	S 11
M12	5 57 31	29°11'53	5 ^h 16	18° 1	27°30	24°52	13°56	21°37	13° 0	26°54	7°20	20°36	19°20	21° 7	6° 7	M12
T 13	6 1 28	0 ^h 13'03	17°10	19°33	27°28	25°37	14° 7	21°44	12°58	26°55	7°22	20°33	19°17	21°14	6°11	T 13
W14	6 5 24	1°14'13	29° 1	21° 5	27°23	26°23	14°18	21°51	12°57	26°56	7°24	20°D32	19°14	21°20	6°15	W14
T 15	6 9 21	2°15'24	10 ^h 53	22°38	27°15	27° 8	14°29	21°57	12°56	26°58	7°27	20°32	19°11	21°27	6°19	T 15
F 16	6 13 17	3°16'35	22°51	24°11	27° 5	27°53	14°40	22° 4	12°54	26°59	7°29	20°34	19° 8	21°34	6°23	F 16
S 17	6 17 14	4°17'47	5 ^h 1	25°44	26°53	28°39	14°51	22°11	12°53	27° 1	7°31	20°35	19° 5	21°40	6°27	S 17
S 18	6 21 10	5°18'58	17°28	27°18	26°38	29°24	15° 1	22°18	12°52	27° 3	7°33	20°R36	19° 1	21°47	6°31	S 18
M19	6 25 7	6°20'10	0 ^h 14	28°52	26°20	0 ^h 10	15°12	22°25	12°50	27° 4	7°35	20°36	18°58	21°54	6°35	M19
T 20	6 29 4	7°21'22	13°22	0 ^h 26	26° 0	0°55	15°22	22°32	12°49	27° 6	7°37	20°33	18°55	22° 1	6°40	T 20
W21	6 33 0	8°22'34	26°54	2° 1	25°38	1°41	15°32	22°39	12°48	27° 7	7°39	20°28	18°52	22° 7	6°44	W21
T 22	6 36 57	9°23'47	10 ^h 47	3°36	25°14	2°27	15°43	22°46	12°47	27° 9	7°41	20°22	18°49	22°14	6°48	T 22
F 23	6 40 53	10°24'58	24°57	5°11	24°48	3°13	15°53	22°53	12°46	27°11	7°43	20°13	18°45	22°21	6°53	F 23
S 24	6 44 50	11°26'10	9 ^h 20	6°47	24°19	3°58	16° 3	23° 0	12°45	27°12	7°45	20° 5	18°42	22°27	6°57	S 24
S 25	6 48 46	12°27'21	23°49	8°24	23°49	4°44	16°13	23° 7	12°44	27°14	7°47	19°56	18°39	22°34	7° 1	S 25
M26	6 52 43	13°28'32	8 ^h 18	10° 0	23°18	5°30	16°23	23°14	12°43	27°16	7°49	19°50	18°36	22°41	7° 6	M26
T 27	6 56 40	14°29'41	22°41	11°37	22°45	6°16	16°32	23°21	12°42	27°18	7°52	19°45	18°33	22°48	7°10	T 27
W28	7 0 36	15°30'51	6 ^h 55	13°15	22°10	7° 2	16°42	23°28	12°42	27°19	7°54	19°43	18°30	22°54	7°15	W28
T 29	7 4 33	16°31'59	20°58	14°53	21°35	7°48	16°51	23°35	12°41	27°21	7°56	19°D43	18°26	23° 1	7°19	T 29
F 30	7 8 29	17°33'07	4 ^h 50	16°32	20°59	8°33	17° 1	23°42	12°40	27°23	7°58	19°44	18°23	23° 8	7°24	F 30
S 31	7 12 26	18°34'14	18 ^h 30	18°31	20°32	9°39	17 ^h 10	23°49	12°40	27°25	8° 0	19°R44	18°20	23 ^h 14	7°28	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	lat	lat
T 1	22s58	0n50	3s27	19s40	0n53	22s32	1s27	23s23	0s33	14s28	1n 0	22s 6	0s10	15n32	0s22	13s17	0s40	21s26	1n53	18n 6	17n46	8n 7	12s40	6n30
F 2	23 3	7 11	2 23	20 4	0 45	22 19	1 18	23 28	0 34	14 32	1 0	22 6	0 10	15 31	0 22	13 17	0 40	21 26	1 53	18 6	17 45	8 4	12 39	6 30
S 3	23 8	13 10	1 11	20 28	0 38	22 5	1 8	23 32	0 34	14 35	1 1	22 5	0 10	15 31	0 22	13 17	0 40	21 26	1 53	18 6	17 44	8 1	12 38	6 29
S 4	23 12	18 25	0n 5	20 52	0 30	21 52	0 58	23 37	0 35	14 39	1 1	22 4	0 10	15 30	0 22	13 16	0 40	21 26	1 53	18 7	17 43	7 58	12 38	6 29
M 5	23 16	22 38	1 19	21 14	0 23	21 39	0 47	23 41	0 35	14 42	1 1	22 3	0 10	15 30	0 21	13 16	0 40	21 26	1 53	18 6	17 43	7 55	12 37	6 29
T 6	23 19	25 32	2 28	21 36	0 15	21 25	0 36	23 45	0 36	14 46	1 1	22 2	0 10	15 29	0 21	13 15	0 40	21 26	1 53	18 6	17 42	7 51	12 37	6 28
W 7	23 22	26 56	3 27	21 56	0 8	21 12	0 24	23 49	0 36	14 49	1 1	22 1	0 10	15 29	0 21	13 15	0 40	21 26	1 53	18 5	17 41	7 48	12 36	6 28
T 8	23 25	26 47	4 14	22 16	0 1	20 58	0 13	23 52	0 37	14 52	1 1	22 0	0 10	15 28	0 21	13 14	0 40	21 26	1 52	18 3	17 40	7 45	12 36	6 28
F 9	23 27	25 12	4 47	22 35	0s 6	20 45	0 0	23 55	0 38	14 56	1 1	21 59	0 10	15 28	0 21	13 14	0 40	21 26	1 52	18 1	17 39	7 42	12 35	6 27
S 10	23 28	22 25	5 6	22 52	0 13	20 31	0n12	23 58	0 38	14 59	1 1	21 58	0 10	15 27	0 21	13 14	0 40	21 26	1 52	18 0	17 38	7 39	12 34	6 27
S 11	23 29	18 41	5 10	23 9	0 20	20 18	0 25	24 1	0 39	15 2	1 1	21 57	0 10	15 27	0 21	13 13	0 40	21 26	1 52	17 58	17 37	7 36	12 34	6 27
M12	23 30	14 16	5 0	23 24	0 27	20 5	0 39	24 3	0 39	15 6	1 1	21 56	0 10	15 27	0 21	13 13	0 40	21 26	1 52	17 57	17 37	7 33	12 33	6 27
T 13	23 30	9 20	4 38	23 39	0 33	19 52	0 52	24 6	0 40	15 9	1 1	21 55	0 11	15 26	0 21	13 12	0 40	21 26	1 52	17 56	17 36	7 30	12 32	6 26
W14	23 30	4 7	4 3	23 52	0 40	19 39	1 6	24 7	0 40	15 12	1 1	21 54	0 11	15 26	0 21	13 12	0 40	21 26	1 52	17 56	17 35	7 27	12 31	6 26
T 15	23 29	1s16	3 19	24 4	0 46	19 27	1 21	24 9	0 41	15 15	1 1	21 53	0 11	15 25	0 21	13 11	0 40	21 26	1 52	17 56	17 34	7 24	12 31	6 26
F 16	23 28	6 40	2 25	24 15	0 52	19 14	1 35	24 10	0 41	15 18	1 1	21 52	0 11	15 25	0 21	13 11	0 40	21 26	1 52	17 56	17 33	7 21	12 30	6 25
S 17	23 26	11 55	1 23	24 24	0 58	19 2	1 50	24 12	0 42	15 21	1 1	21 51	0 11	15 25	0 21	13 10	0 40	21 26	1 52	17 57	17 32	7 18	12 29	6 25
S 18	23 24	16 49	0 17	24 33	1 4	18 50	2 6	24 12	0 42	15 24	1 1	21 50	0 11	15 24	0 21	13 9	0 40	21 26	1 51	17 57	17 31	7 14	12 28	6 25
M19	23 21	21 6	0s52	24 40	1 10	18 38	2 21	24 13	0 43	15 27	1 2	21 49	0 11	15 24	0 21	13 9	0 40	21 26	1 51	17 57	17 30	7 11	12 28	6 25
T 20	23 18	24 27	2 0	24 45	1 15	18 27	2 36	24 13	0 43	15 30	1 2	21 48	0 11	15 24	0 21	13 8	0 40	21 26	1 51	17 56	17 30	7 8	12 27	6 24
W21	23 14	26 31	3 3	24 49	1 20	18 15	2 52	24 13	0 44	15 33	1 2	21 47	0 11	15 23	0 21	13 8	0 40	21 26	1 51	17 55	17 29	7 5	12 26	6 24
T 22	23 10	27 0	3 57	24 52	1 25	18 4	3 7	24 13	0 44	15 36	1 2	21 46	0 11	15 23	0 21	13 7	0 40	21 26	1 51	17 53	17 28	7 2	12 25	6 24
F 23	23 6	25 44	4 37	24 54	1 30	17 54	3 23	24 13	0 45	15 39	1 2	21 44	0 11	15 23	0 21	13 7	0 40	21 26	1 51	17 51	17 27	6 59	12 24	6 24
S 24	23 1	22 47	5 1	24 54	1 34	17 43	3 39	24 12	0 45	15 42	1 2	21 43	0 11	15 22	0 21	13 6	0 40	21 26	1 51	17 49	17 26	6 56	12 24	6 24
S 25	22 55	18 25	5 5	24 53	1 39	17 33	3 54	24 11	0 46	15 44	1 2	21 42	0 11	15 22	0 21	13 5	0 40	21 26	1 51	17 46	17 25	6 53	12 23	6 23
M26	22 49	12 58	4 50	24 50	1 42	17 24	4 9	24 10	0 46	15 47	1 2	21 41	0 11	15 22	0 21	13 5	0 40	21 26	1 51	17 45	17 24	6 50	12 22	6 23
T 27	22 43	6 51	4 17	24 45	1 46	17 15	4 24	24 8	0 47	15 50	1 2	21 40	0 11	15 22	0 21	13 4	0 40	21 26	1 51	17 43	17 23	6 47	12 21	6 23
W28	22 36	0 26	3 28	24 39	1 50	17 6	4 38	24 6	0 47	15 53	1 2	21 39	0 12	15 21	0 21	13 4	0 40	21 26	1 50	17 43	17 23	6 43	12 20	6 23
T 29	22 29	5n56	2 28	24 32	1 53	16 57	4 52	24 4	0 48	15 55	1 2	21 38	0 12	15 21	0 21	13 3	0 40	21 26	1 50	17 43	17 22	6 40	12 19	6 23
F 30	22 21	11 56	1 19	24 23	1 55	16 49	5 6	24 2	0 48	15 58	1 3	21 37	0 12	15 21	0 21	13 2	0 40	21 26	1 50	17 43	17 21	6 37	12 18	6 23
S 31	22s13	17n16	0s 7	24s13	1s58	16s42	5n19	23s59	0s49	16s 0	1n 3	21s35	0s12	15n21	0s21	13s 2	0s40	21s26	1n50	17n43	17n20	6n34	12s17	6n22