



Astrodienst Ephemeris Tables for the year 2119

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 2119

geocentric

JANUARY 2119

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 40 35	9°38'40	24°46	8°3	4°1	16°R47	10°R22	29°R38	9°R43	28°33	20°R40	11°R59	13°30	5°18	27°36	S 1	
M 2	6 44 32	10°59'47	7°31	9°39	5°16	16°23	10°21	29°35	9°38	28°34	20°39	11°D57	13°26	5°24	27°37	M 2	
T 3	6 48 28	12° 0'55	20°31	11°15	6°31	15°59	10°21	29°32	9°38	28°35	20°39	11°57	13°23	5°31	27°38	T 3	
W 4	6 52 25	13° 2'04	3°48	12°51	7°45	15°35	10°20	29°29	9°35	28°36	20°38	11°58	13°20	5°38	27°40	W 4	
T 5	6 56 21	14° 3'13	17°24	14°28	9° 0	15°11	10°D20	29°26	9°33	28°37	20°38	11°R58	13°17	5°45	27°41	T 5	
F 6	7 0 18	15° 4'22	1°22	16° 5	10°15	14°47	10°20	29°23	9°30	28°38	20°37	11°57	13°14	5°51	27°43	F 6	
S 7	7 4 14	16° 5'32	15°41	17°42	11°29	14°24	10°21	29°21	9°27	28°39	20°36	11°53	13°11	5°58	27°44	S 7	
S 8	7 8 11	17° 6'42	0°19	19°20	12°44	14° 0	10°21	29°18	9°25	28°39	20°36	11°48	13° 7	6° 5	27°46	S 8	
M 9	7 12 8	18° 7'52	15°12	20°58	13°59	13°36	10°22	29°16	9°22	28°40	20°35	11°40	13° 4	6°11	27°47	M 9	
T 10	7 16 4	19° 9'02	0°11	22°37	15°13	13°13	10°23	29°14	9°20	28°41	20°35	11°31	13° 1	6°18	27°49	T 10	
W 11	7 20 1	20°10'12	15° 8	24°16	16°28	12°50	10°24	29°11	9°17	28°42	20°34	11°23	12°58	6°25	27°51	W 11	
T 12	7 23 57	21°11'22	29°54	25°55	17°43	12°27	10°25	29° 9	9°15	28°42	20°34	11°16	12°55	6°32	27°53	T 12	
F 13	7 27 54	22°12'32	14°20	27°34	18°57	12° 5	10°27	29° 7	9°12	28°43	20°33	11°10	12°51	6°38	27°55	F 13	
S 14	7 31 50	23°13'41	28°20	29°15	20°12	11°43	10°29	29° 5	9°10	28°43	20°33	11° 8	12°48	6°45	27°57	S 14	
S 15	7 35 47	24°14'50	11°54	0°55	21°26	11°22	10°31	29° 4	9° 7	28°44	20°32	11°D 7	12°45	6°52	27°59	S 15	
M 16	7 39 43	25°15'58	25° 1	2°36	22°41	11° 1	10°33	29° 2	9° 5	28°44	20°32	11° 7	12°42	6°59	28° 1	M 16	
T 17	7 43 40	26°17'05	7°47	4°17	23°55	10°40	10°35	29° 0	9° 2	28°45	20°32	11° 9	12°39	7° 5	28° 3	T 17	
W 18	7 47 37	27°18'12	20° 7	5°58	25° 9	10°21	10°38	28°59	9° 0	28°45	20°31	11°10	12°36	7°12	28° 5	W 18	
T 19	7 51 33	28°19'18	2°14	7°39	26°24	10° 1	10°41	28°58	8°58	28°46	20°31	11°R10	12°32	7°19	28° 7	T 19	
F 20	7 55 30	29°20'23	14°11	9°21	27°38	9°43	10°44	28°56	8°55	28°46	20°31	11° 9	12°29	7°25	28° 9	F 20	
S 21	7 59 26	0°21'28	26° 4	11° 2	28°52	9°25	10°47	28°55	8°53	28°46	20°30	11° 6	12°26	7°32	28°11	S 21	
S 22	8 3 23	1°22'31	7°55	12°43	0°8	9° 7	10°50	28°54	8°50	28°47	20°30	11° 0	12°23	7°39	28°14	S 22	
M 23	8 7 19	2°23'34	19°49	14°25	1°21	8°51	10°54	28°54	8°48	28°47	20°30	10°54	12°20	7°46	28°16	M 23	
T 24	8 11 16	3°24'37	1°50	16° 5	2°35	8°35	10°58	28°53	8°46	28°47	20°30	10°47	12°17	7°52	28°18	T 24	
W 25	8 15 13	4°25'38	13°59	17°46	3°49	8°20	11° 2	28°52	8°44	28°47	20°29	10°40	12°13	7°59	28°21	W 25	
T 26	8 19 9	5°26'39	26°18	19°25	5° 3	8° 5	11° 6	28°52	8°41	28°48	20°29	10°33	12°10	8° 6	28°23	T 26	
F 27	8 23 6	6°27'38	8°49	21° 3	6°17	7°52	11°10	28°51	8°39	28°48	20°29	10°28	12° 7	8°12	28°26	F 27	
S 28	8 27 2	7°28'37	21°30	22°40	7°32	7°39	11°15	28°51	8°37	28°48	20°29	10°25	12° 4	8°19	28°28	S 28	
S 29	8 30 59	8°29'35	4°24	24°16	8°46	7°27	11°19	28°51	8°35	28°48	20°29	10°D23	12° 1	8°26	28°31	S 29	
M 30	8 34 55	9°30'33	17°29	25°49	9°59	7°16	11°24	28°D50	8°33	28°R48	20°29	10°D23	11°57	8°33	28°33	M 30	
T 31	8 38 52	10°31'29	0°47	27°19	11°13	7°5	11°29	28°50	8°31	28°48	20°28	10°R25	11°54	8°39	28°36	T 31	

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	23s 3	14n41	1n30	24s45	1s34	20s49	1s37	26n 8	3n47	13n50	1s 9	18n 0	2s 7	23n25	0n21	9s24	1n40
M 2	22 58	9 7	0 24	24 43	1 38	20 31	1 38	26 12	3 49	13 50	1 9	18 0	2 6	23 25	0 21	9 24	1 40
T 3	22 53	3 3	0s46	24 39	1 43	20 13	1 38	26 17	3 50	13 50	1 8	17 59	2 6	23 25	0 21	9 24	1 40
W 4	22 47	3s15	1 54	24 34	1 46	19 55	1 39	26 21	3 52	13 50	1 8	17 59	2 6	23 26	0 21	9 24	1 40
T 5	22 41	9 34	2 58	24 28	1 50	19 36	1 39	26 25	3 53	13 50	1 8	17 58	2 6	23 26	0 21	9 25	1 41
F 6	22 34	15 34	3 53	24 20	1 53	19 16	1 40	26 29	3 54	13 51	1 7	17 58	2 5	23 26	0 21	9 25	1 41
S 7	22 27	20 54	4 34	24 10	1 56	18 56	1 40	26 33	3 55	13 51	1 7	17 58	2 5	23 26	0 21	9 25	1 41
S 8	22 20	25 5	4 59	23 59	1 59	18 35	1 40	26 36	3 56	13 52	1 7	17 57	2 5	23 26	0 21	9 25	1 41
M 9	22 12	27 39	5 5	23 47	2 1	18 14	1 41	26 40	3 57	13 52	1 6	17 57	2 5	23 27	0 21	9 26	1 41
T 10	22 4	28 15	4 50	23 33	2 3	17 52	1 41	26 43	3 58	13 53	1 6	17 57	2 4	23 27	0 21	9 26	1 41
W 11	21 55	26 47	4 15	23 18	2 4	17 30	1 41	26 46	3 58	13 53	1 6	17 57	2 4	23 27	0 21	9 26	1 41
T 12	21 45	23 28	3 23	23 1	2 6	17 7	1 41	26 49	3 59	13 54	1 6	17 57	2 4	23 27	0 21	9 26	1 41
F 13	21 36	18 44	2 19	22 42	2 7	16 44	1 41	26 51	3 59	13 55	1 5	17 56	2 4	23 27	0 21	9 26	1 41
S 14	21 26	13 7	1 8	22 22	2 7	16 20	1 40	26 53	4 0	13 56	1 5	17 56	2 3	23 27	0 21	9 26	1 41
S 15	21 15	7 2	0n 4	22 0	2 7	15 56	1 40	26 56	4 0	13 57	1 5	17 56	2 3	23 28	0 21	9 26	1 41
M 16	21 4	0 50	1 14	21 37	2 6	15 31	1 40	26 58	4 0	13 58	1 4	17 56	2 3	23 28	0 21	9 27	1 41
T 17	20 53	5n11	2 19	21 13	2 5	15 6	1 39	26 59	4 0	13 59	1 4	17 56	2 2	23 28	0 21	9 27	1 41
W 18	20 41	10 52	3 15	20 46	2 4	14 41	1 39	27 1	4 0	14 0	1 4	17 56	2 2	23 28	0 21	9 27	1 41
T 19	20 29	16 1	4 1	20 19	2 2	14 15	1 38	27 2	4 0	14 1	1 3	17 56	2 2	23 28	0 21	9 27	1 41
F 20	20 17	20 29	4 36	19 50	2 0	13 49	1 38	27 3	4 0	14 2	1 3	17 56	2 2	23 28	0 21	9 27	1 41
S 21	20 4	24 6	4 59	19 19	1 56	13 23	1 37	27 4	3 59	14 3	1 3	17 56	2 1	23 29	0 21	9 27	1 41
S 22	19 51	26 42	5 9	18 47	1 53	12 56	1 36	27 5	3 59	14 5	1 3	17 56	2 1	23 29	0 21	9 27	1 42
M 23	19 37	28 7	5 6	18 14	1 48	12 28	1 35	27 6	3 59	14 6	1 2	17 56	2 1	23 29	0 21	9 27	1 42
T 24	19 23	28 14	4 49	17 39	1 43	12 1	1 34	27 6	3 58	14 7	1 2	17 56	2 1	23 29	0 21	9 27	1 42
W 25	19 9	26 59	4 19	17 3	1 38	11 33	1 33	27 7	3 57	14 9	1 2	17 56	2 0	23 29	0 21	9 27	1 42
T 26	18 54	24 26	3 37	16 26	1 31	11 5	1 32	27 7	3 57	14 11	1 1	17 56	2 0	23 29	0 21	9 27	1 42
F 27	18 39	20 41	2 44	15 48	1 24	10 37	1 31	27 7	3 56	14 12	1 1	17 57	2 0	23 30	0 21	9 27	1 42
S 28	18 23	15 55	1 41	15 9	1 16	10 8	1 30	27 7	3 55	14 14	1 1	17 57	1 59	23 30	0 21	9 27	1 42
S 29	18 8	10 24	0 33	14 30	1 8	9 39	1 29	27 7	3 54	14 16	1 1	17 57	1 59	23 30	0 21	9 27	1 42
M 30	17 52	4 21	0s39	13 49	0 58	9 10	1 27	27 7	3 53	14 17	1 0	17 57	1 59	23 30	0 21	9 27	1 42
T 31	17s35	1s59	1s49	13s 9	0s48	8s40	1s26	27n 6	3n52	14n19	1s 0	17n58	1s59	23n30	0n21	9s27	1n42

Julian Day Number = 2495008.5, Delta T = 102.72 sec

Ecliptic obliquity = 23°25'34", Nutation = 0°00'05", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 26°24'11", Lahiri = 25°31'11"

ASTRODIENST EPHEMERIS for the year 2119
geocentric

MARCH 2119

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	10 33 12	9♂50'40	24♂41	24♂R29	16♂Y32	7♂33	15♂ 6	29♂39	7♂R47	28♂R33	20♂35	10♂R12	10♂X22	11♂II54	0♂Y 6	W 1
T 2	10 37 8	10°50'56	8♂45	23♂58	17°44	7°44	15°16	29°43	7♂47	28♂32	20°36	10♂12	10°19	12° 1	0°10	T 2
F 3	10 41 5	11°51'11	22°53	23°33	18°56	7°56	15°26	29°46	7°46	28°31	20°36	10°12	10°16	12° 8	0°13	F 3
S 4	10 45 2	12°51'25	7♂ 5	23°17	20° 8	8° 8	15°36	29°49	7°45	28°30	20°37	10°D12	10°13	12°15	0°17	S 4
S 5	10 48 58	13°51'37	21°18	23° 7	21°20	8°21	15°46	29°53	7°44	28°29	20°38	10°12	10° 9	12°21	0°20	S 5
M 6	10 52 55	14°51'48	5♂28	23°D 3	22°31	8°34	15°56	29°57	7°44	28°28	20°38	10°12	10° 6	12°28	0°24	M 6
T 7	10 56 51	15°51'57	19°34	23° 7	23°43	8°47	16° 6	0♂II 0	7°43	28°27	20°39	10°12	10° 3	12°35	0°27	T 7
W 8	11 0 48	16°52'05	3♂34	23°16	24°54	9° 2	16°16	0° 4	7°43	28°26	20°40	10°13	10° 0	12°41	0°31	W 8
T 9	11 4 44	17°52'11	17°25	23°32	26° 6	9°16	16°26	0° 8	7°42	28°25	20°40	10°13	9°57	12°48	0°34	T 9
F 10	11 8 41	18°52'15	1♂ 5	23°52	27°17	9°31	16°37	0°12	7°42	28°24	20°41	10°14	9°54	12°55	0°38	F 10
S 11	11 12 38	19°52'18	14°31	24°18	28°28	9°47	16°48	0°16	7°42	28°23	20°42	10°R14	9°50	13° 2	0°41	S 11
S 12	11 16 34	20°52'18	27°43	24°49	29°39	10° 3	16°58	0°21	7°42	28°21	20°42	10°14	9°47	13° 8	0°45	S 12
M13	11 20 31	21°52'17	10♂Y38	25°24	0♂50	10°20	17° 9	0°25	7°41	28°20	20°43	10°12	9°44	13°15	0°49	M13
T 14	11 24 27	22°52'14	23°18	26° 3	2° 1	10°36	17°20	0°29	7°41	28°19	20°44	10°11	9°41	13°22	0°52	T 14
W15	11 28 24	23°52'08	5♂42	26°47	3°12	10°54	17°31	0°34	7°41	28°18	20°45	10° 9	9°38	13°29	0°56	W15
T 16	11 32 20	24°52'01	17°54	27°34	4°22	11°12	17°42	0°38	7°D41	28°16	20°46	10° 7	9°34	13°35	0°59	T 16
F 17	11 36 17	25°51'51	29°55	28°24	5°33	11°30	17°53	0°43	7°41	28°15	20°46	10° 5	9°31	13°42	1° 3	F 17
S 18	11 40 13	26°51'39	11♂II50	29°17	6°43	11°48	18° 5	0°48	7°41	28°14	20°47	10° 3	9°28	13°49	1° 7	S 18
S 19	11 44 10	27°51'25	23°42	0♂X14	7°53	12° 7	18°16	0°53	7°41	28°12	20°48	10°D 3	9°25	13°55	1°10	S 19
M20	11 48 6	28°51'09	5♂37	1°13	9° 4	12°27	18°28	0°58	7°41	28°11	20°49	10° 3	9°22	14° 2	1°14	M20
T 21	11 52 3	29°50'51	17°39	2°15	10°13	12°46	18°39	1° 2	7°42	28°10	20°50	10° 4	9°19	14° 9	1°18	T 21
W22	11 56 0	0♂Y50'30	29°53	3°20	11°23	13° 6	18°51	1° 8	7°42	28° 8	20°51	10° 5	9°15	14°16	1°21	W22
T 23	11 59 56	1°50'07	12♂II22	4°26	12°33	13°27	19° 3	1°13	7°42	28° 7	20°52	10° 7	9°12	14°22	1°25	T 23
F 24	12 3 53	2°49'42	25°11	5°36	13°43	13°48	19°15	1°18	7°43	28° 5	20°53	10° 8	9° 9	14°29	1°28	F 24
S 25	12 7 49	3°49'15	8♂22	6°47	14°52	14° 9	19°26	1°23	7°43	28° 4	20°54	10°R 9	9° 6	14°36	1°32	S 25
S 26	12 11 46	4°48'45	21°55	8° 0	16° 1	14°30	19°38	1°29	7°43	28° 2	20°55	10° 8	9° 3	14°42	1°36	S 26
M27	12 15 42	5°48'13	5♂49	9°15	17°10	14°52	19°51	1°34	7°44	28° 1	20°56	10° 6	9° 0	14°49	1°39	M27
T 28	12 19 39	6°47'40	20° 1	10°32	18°19	15°14	20° 3	1°39	7°45	27°59	20°57	10° 4	8°56	14°56	1°43	T 28
W29	12 23 35	7°47'04	4♂26	11°51	19°28	15°36	20°15	1°45	7°45	27°58	20°58	10° 0	8°53	15° 3	1°47	W29
T 30	12 27 32	8°46'27	18°58	13°12	20°37	15°59	20°27	1°51	7°46	27°56	20°59	9°56	8°50	15° 9	1°50	T 30
F 31	12 31 29	9♂Y45'47	3♂31	14♂X34	21♂845	16♂22	20♂840	1♂II56	7♂47	27♂55	21♂ 0	9♂X52	8♂X47	15♂II16	1♂Y54	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
W 1	7s52	13s 0	3s42	10s39	2n52	6n18	0s13	26n25	3n12	15n31	0s53	18n16	1s51	23n33	0n21	9s20
T 2	7 30	18 40	4 31	11 1	2 39	6 49	0 10	26 23	3 11	15 34	0 53	18 17	1 50	23 33	0 21	9 20
F 3	7 7	23 22	5 3	11 21	2 26	7 19	0 6	26 20	3 9	15 37	0 52	18 18	1 50	23 33	0 21	9 20
S 4	6 44	26 41	5 16	11 40	2 13	7 50	0 3	26 18	3 8	15 40	0 52	18 19	1 50	23 33	0 21	9 19
S 5	6 21	28 19	5 11	11 56	1 59	8 20	0n 1	26 16	3 6	15 43	0 52	18 20	1 50	23 33	0 21	9 19
M 6	5 58	28 5	4 47	12 10	1 45	8 50	0 4	26 14	3 5	15 46	0 52	18 21	1 49	23 33	0 21	9 18
T 7	5 34	26 3	4 5	12 22	1 32	9 19	0 8	26 11	3 4	15 49	0 51	18 22	1 49	23 33	0 21	9 18
W 8	5 11	22 25	3 9	12 32	1 18	9 49	0 12	26 9	3 2	15 53	0 51	18 23	1 49	23 33	0 21	9 17
T 9	4 48	17 33	2 3	12 39	1 4	10 18	0 15	26 6	3 1	15 56	0 51	18 24	1 49	23 33	0 21	9 17
F 10	4 24	11 52	0 50	12 45	0 51	10 48	0 19	26 4	2 59	15 59	0 51	18 25	1 48	23 33	0 21	9 17
S 11	4 1	5 44	0n24	12 49	0 38	11 16	0 22	26 1	2 58	16 2	0 51	18 26	1 48	23 33	0 21	9 16
S 12	3 37	0n33	1 35	12 51	0 25	11 45	0 26	25 59	2 56	16 5	0 50	18 27	1 48	23 33	0 21	9 16
M13	3 13	6 40	2 40	12 50	0 13	12 14	0 30	25 56	2 55	16 9	0 50	18 28	1 48	23 33	0 21	9 15
T 14	2 50	12 23	3 36	12 48	0 1	12 42	0 34	25 53	2 54	16 12	0 50	18 29	1 47	23 33	0 21	9 15
W15	2 26	17 30	4 20	12 44	0s10	13 9	0 37	25 50	2 52	16 15	0 50	18 31	1 47	23 33	0 21	9 14
T 16	2 2	21 50	4 52	12 39	0 21	13 37	0 41	25 47	2 51	16 18	0 50	18 32	1 47	23 33	0 21	9 14
F 17	1 39	25 10	5 11	12 31	0 32	14 4	0 45	25 45	2 49	16 22	0 49	18 33	1 47	23 33	0 21	9 13
S 18	1 15	27 24	5 15	12 22	0 42	14 31	0 49	25 42	2 48	16 25	0 49	18 34	1 46	23 33	0 21	9 13
S 19	0 51	28 23	5 7	12 11	0 52	14 58	0 53	25 38	2 47	16 28	0 49	18 35	1 46	23 33	0 21	9 12
M20	0 27	28 3	4 45	11 59	1 1	15 24	0 56	25 35	2 45	16 32	0 49	18 37	1 46	23 33	0 21	9 12
T 21	0 4	26 24	4 10	11 45	1 10	15 50	1 0	25 32	2 44	16 35	0 49	18 38	1 46	23 33	0 21	9 11
W22	0n20	23 29	3 24	11 30	1 18	16 15	1 4	25 29	2 43	16 38	0 49	18 39	1 46	23 33	0 21	9 11
T 23	0 44	19 26	2 27	11 13	1 26	16 40	1 8	25 25	2 41	16 42	0 48	18 40	1 45	23 33	0 21	9 10
F 24	1 7	14 24	1 21	10 54	1 33	17 5	1 12	25 22	2 40	16 45	0 48	18 42	1 45	23 33	0 21	9 10
S 25	1 31	8 35	0 10	10 34	1 40	17 30	1 16	25 18	2 39	16 49	0 48	18 43	1 45	23 33	0 21	9 9
S 26	1 55	2 13	1s 4	10 13	1 47	17 53	1 19	25 15	2 37	16 52	0 48	18 44	1 45	23 33	0 21	9 8
M27	2 18	4s24	2 16	9 50	1 53	18 17	1 23	25 11	2 36	16 55	0 48	18 45	1 44	23 33	0 21	9 8
T 28	2 42	10 56	3 21	9 26	1 58	18 40	1 27	25 7	2 35	16 59	0 47	18 47	1 44	23 33	0 21	9 7
W29	3 5	16 59	4 15	9 1	2 3	19 3	1 31	25 4	2 34	17 2	0 47	18 48	1 44	23 32	0 21	9 7
T 30	3 29	22 8	4 52	8 34	2 8	19 25	1 35	25 0	2 32	17 6	0 47	18 49	1 44	23 32	0 21	9 6
F 31	3n52	25s55	5s10	8s 6	2s12	19n47	1n38	24n56	2n31	17n 9	0s47	18n51	1s44	23n32	0n21	9s 6

Julian Day Number = 2495067.5, Delta T = 102.81 sec
Ecliptic obliquity = 23°25'35", Nutation = 0°00'06", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 26°24'19", Lahiri = 25°31'19"

ASTRODIENST EPHEMERIS for the year 2119

geocentric

APRIL 2119

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 35 25	10°45'07	17°59	15°58	22°54	16°45	20°52	2°11	2	7°47	27°R53	21°8	9°R49	8°44	15°23	1°57	S 1
S 2	12 39 22	11°44'24	2°38	17°24	24° 2	17° 8	21° 4	2° 8	7°48	27°452	21° 2	9°47	8°40	15°30	2° 1	S 2	
M 3	12 43 18	12°43'40	16°25	18°51	25°10	17°32	21°17	2°14	7°49	27°50	21° 3	9°D47	8°37	15°36	2° 5	M 3	
T 4	12 47 15	13°42'53	0°38	20°20	26°18	17°56	21°30	2°20	7°50	27°49	21° 4	9°47	8°34	15°43	2° 8	T 4	
W 5	12 51 11	14°42'06	13°58	21°51	27°26	18°20	21°42	2°26	7°51	27°47	21° 5	9°49	8°31	15°50	2°12	W 5	
T 6	12 55 8	15°41'16	27°25	23°23	28°33	18°45	21°55	2°32	7°52	27°45	21° 6	9°50	8°28	15°56	2°15	T 6	
F 7	12 59 4	16°40'24	10°39	24°56	29°40	19° 9	22° 8	2°38	7°53	27°44	21° 8	9°R51	8°25	16° 3	2°19	F 7	
S 8	13 3 1	17°39'31	23°41	26°31	0°48	19°34	22°21	2°44	7°55	27°42	21° 9	9°50	8°21	16°10	2°22	S 8	
S 9	13 6 58	18°38'35	6°31	28° 7	1°55	20° 0	22°34	2°51	7°56	27°41	21°10	9°47	8°18	16°17	2°26	S 9	
M10	13 10 54	19°37'38	19° 9	29°45	3° 1	20°25	22°47	2°57	7°57	27°39	21°11	9°42	8°15	16°23	2°29	M10	
T 11	13 14 51	20°36'39	1°36	1°Y25	4° 8	20°51	23° 0	3° 4	7°58	27°37	21°12	9°36	8°12	16°30	2°33	T 11	
W12	13 18 47	21°35'37	13°53	3° 6	5°14	21°17	23°13	3°10	8° 0	27°36	21°13	9°28	8° 9	16°37	2°36	W12	
T 13	13 22 44	22°34'34	25°59	4°48	6°20	21°43	23°26	3°16	8° 1	27°34	21°15	9°20	8° 5	16°43	2°40	T 13	
F 14	13 26 40	23°33'28	7°15	6°32	7°26	22° 9	23°39	3°23	8° 3	27°32	21°16	9°12	8° 2	16°50	2°43	F 14	
S 15	13 30 37	24°32'20	19°52	8°17	8°32	22°36	23°52	3°30	8° 4	27°31	21°17	9° 6	7°59	16°57	2°47	S 15	
S 16	13 34 33	25°31'11	1°43	10° 4	9°38	23° 3	24° 6	3°36	8° 6	27°29	21°18	9° 1	7°56	17° 4	2°50	S 16	
M17	13 38 30	26°29'58	13°36	11°53	10°43	23°30	24°19	3°43	8° 7	27°28	21°19	8°58	7°53	17°10	2°53	M17	
T 18	13 42 27	27°28'44	25°36	13°43	11°48	23°57	24°33	3°50	8° 9	27°26	21°21	8°D57	7°50	17°17	2°57	T 18	
W19	13 46 23	28°27'28	7°14	15°35	12°53	24°24	24°46	3°57	8°11	27°24	21°22	8°57	7°46	17°24	3° 0	W19	
T 20	13 50 20	29°26'09	20°14	17°28	13°57	24°52	24°59	4° 4	8°12	27°23	21°23	8°58	7°43	17°31	3° 4	T 20	
F 21	13 54 16	0°24'47	3°19	19°23	15° 1	25°19	25°13	4°10	8°14	27°21	21°25	8°R59	7°40	17°37	3° 7	F 21	
S 22	13 58 13	1°23'24	16°15	21°19	16° 5	25°47	25°26	4°17	8°16	27°19	21°26	8°59	7°37	17°44	3°10	S 22	
S 23	14 2 9	2°21'59	29°55	23°17	17° 9	26°15	25°40	4°24	8°18	27°18	21°27	8°57	7°34	17°51	3°13	S 23	
M24	14 6 6	3°20'31	14°2	25°16	18°12	26°44	25°54	4°31	8°20	27°16	21°28	8°53	7°31	17°57	3°17	M24	
T 25	14 10 2	4°19'01	28°32	27°17	19°15	27°12	26° 7	4°38	8°22	27°14	21°30	8°47	7°27	18° 4	3°20	T 25	
W26	14 13 59	5°17'30	13°11	29°19	20°18	27°40	26°21	4°46	8°24	27°13	21°31	8°39	7°24	18°11	3°23	W26	
T 27	14 17 56	6°15'57	28°20	1°23	21°21	28° 9	26°35	4°53	8°26	27°11	21°32	8°30	7°21	18°18	3°26	T 27	
F 28	14 21 52	7°14'22	13°19	3°28	22°23	28°38	26°49	5° 0	8°28	27°10	21°34	8°22	7°18	18°24	3°29	F 28	
S 29	14 25 49	8°12'46	28° 9	5°34	23°25	29° 7	27° 2	5° 7	8°30	27° 8	21°35	8°15	7°15	18°31	3°33	S 29	
S 30	14 29 45	9°11'08	12°34	7°41	24°26	29°36	27°16	5°11	8°32	27° 6	21°36	8°10	7°11	18°38	3°36	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
S 1	4n15	28 s 1	5 s 9	7s37	2s16	20n 8	1n42	24n51	2n30	17n13	0s47	18n52	1s43	23n32	0n20	9s 5	1n45	3n45	14s44	7s53	8s18	27n42	3n43	3n12	
S 2	4 38	28 13	4 49	7 6	2 19	20 29	1 46	24 47	2 29	17 16	0 47	18 53	1 43	23 32	0 20	9 4	1 45	3 45	14 44	7 54	8 19	27 43	3 45	3 12	
M 3	5 1	26 34	4 11	6 34	2 21	20 49	1 49	24 43	2 28	17 19	0 47	18 55	1 43	23 32	0 20	9 4	1 45	3 46	14 44	7 54	8 20	27 44	3 46	3 12	
T 4	5 25	23 19	3 19	6 2	2 24	21 9	1 53	24 39	2 26	17 23	0 46	18 56	1 43	23 32	0 20	9 3	1 45	3 46	14 44	7 54	8 21	27 44	3 47	3 12	
W 5	5 47	18 48	2 16	5 27	2 25	21 28	1 57	24 34	2 25	17 26	0 46	18 58	1 43	23 32	0 20	9 3	1 45	3 47	14 44	7 53	8 22	27 45	3 49	3 12	
T 6	6 10	13 25	1 7	4 52	2 27	21 47	2 0	24 30	2 24	17 30	0 46	18 59	1 42	23 32	0 20	9 2	1 45	3 47	14 43	7 53	8 24	27 45	3 50	3 12	
F 7	6 33	7 30	0n 4	4 16	2 27	22 5	2 4	24 25	2 23	17 33	0 46	19 0	1 42	23 32	0 20	9 2	1 45	3 48	14 43	7 52	8 25	27 46	3 52	3 12	
S 8	6 56	1 22	1 15	3 38	2 28	22 23	2 7	24 20	2 22	17 37	0 46	19 2	1 42	23 32	0 20	9 1	1 45	3 48	14 43	7 53	8 26	27 47	3 53	3 12	
S 9	7 18	4n43	2 20	3 0	2 27	22 40	2 11	24 15	2 21	17 40	0 46	19 3	1 42	23 32	0 20	9 0	1 45	3 49	14 43	7 54	8 27	27 47	3 54	3 12	
M10	7 40	10 32	3 17	2 20	2 27	22 57	2 14	24 10	2 19	17 43	0 45	19 4	1 42	23 32	0 20	9 0	1 45	3 49	14 43	7 56	8 28	27 48	3 56	3 12	
T 11	8 3	15 50	4 4	1 40	2 25	23 13	2 17	24 5	2 18	17 47	0 45	19 6	1 42	23 32	0 20	8 59	1 45	3 50	14 42	7 58	8 29	27 48	3 57	3 12	
W12	8 25	20 25	4 38	0 58	2 24	23 28	2 21	24 0	2 17	17 50	0 45	19 7	1 41	23 31	0 20	8 59	1 45	3 50	14 42	8 1	8 31	27 49	3 59	3 12	
T 13	8 47	24 6	5 0	0 15	2 21	23 43	2 24	23 55	2 16	17 54	0 45	19 9	1 41	23 31	0 20	8 58	1 45	3 51	14 42	8 4	8 32	27 50	4 0	3 12	
F 14	9 9	26 41	5 8	0n28	2 19	23 58	2 27	23 49	2 15	17 57	0 45	19 10	1 41	23 31	0 20	8 57	1 45	3 51	14 42	8 7	8 33	27 50	4 1	3 12	
S 15	9 30	28 4	5 3	1 13	2 16	24 11	2 30	23 44	2 14	18 1	0 45	19 11	1 41	23 31	0 20	8 57	1 45	3 51	14 42	8 9	8 34	27 51	4 3	3 12	
S 16	9 52	28 9	4 44	1 58	2 12	24 25	2 33	23 38	2 13	18 4	0 45	19 13	1 41	23 31	0 20	8 56	1 45	3 52	14 42	8 11	8 35	27 51	4 4	3 12	
M17	10 13	26 56	4 14	2 44	2 8	24 37	2 36	23 33	2 12	18 7	0 44	19 14	1 41	23 31	0 20	8 56	1 45	3 52	14 41	8 12	8 37	27 52	4 5	3 12	
T 18	10 34	24 29	3 32	3 31	2 3	24 49	2 39	23 27	2 11	18 11	0 44	19 16	1 40	23 31	0 20	8 55	1 45	3 53	14 41	8 13	8 38	27 52	4 7	3 12	
W19	10 55	20 53	2 40	4 19	1 58	25 1	2 42	23 21	2 9	18 14	0 44	19 17	1 40	23 31	0 20	8 54	1 45	3 53	14 41	8 12	8 39	27 53	4 8	3 12	
T 20	11 16	16 18	1 39	5 8	1 52	25 12	2 45	23 15	2 8	18 17	0 44	19 19	1 40	23 31	0 20	8 54	1 45	3 54	14 41	8 12	8 40	27 53	4 9	3 12	
F 21	11 37	10 53	0 32	5 57	1 46	25 22	2 48	23 9	2 7	18 21	0 44	19 20	1 40	23 30	0 20	8 53	1 45	3 54	14 41	8 12	8 41	27 54	4 11	3 12	
S 22	11 57	4 49	0s39	6 47	1 39	25 31	2 50	23 3	2 6	18 24	0 44	19 21	1 40	23 30	0 20	8 53	1 45	3 55	14 41	8 12	8 43	27 54	4 12	3 12	
S 23	12 17	1s39	1 50	7 37	1 32	25 41	2 53	22 56	2 5	18 27	0 44	19 23	1 40	23 30	0 20	8 52	1 45	3 55	14 41	8 12	8 44	27 55	4 13	3 12	
M24	12 37	8 14	2 56	8 28	1 24	25 49	2 55	22 50	2 4	18 31	0 44	19 24	1 39	23 30	0 20	8 52	1 45	3 55	14 41	8 14	8 45	27 55	4 15	3 12	
T 25	12 57	14 35	3 53	9 19	1 16	25 57	2 58	22 43	2 3	18 34	0 43	19 26	1 39	23 30	0 20	8 51	1 45	3 56	14 40	8 16	8 46	27 56	4 16	3 12	
W26	13 17	20 13	4 36	10 10	1 8	26 4	3 0	22 37	2 2	18 37	0 43	19 27	1 39	23 30	0 20	8 50	1 45	3 56	14 40	8 19	8 47	27 56	4 17	3 12	
T 27	13 36	24 39	5 0	11 2	0 59	26 10	3 2	22 30	2 1	18 41	0 43	19 28	1 39	23 30	0 20	8 50	1 45	3 57	14 40	8 23	8 48	27 57	4 19	3 12	
F 28	13 55	27 24	5 3	11 53	0 49	26 16	3 4	22 23	2 0	18 44	0 43	19 30	1 39	23 30	0 20	8 49	1 45	3 57	14 40	8 26	8 50	27 57	4 20	3 12	
S 29	14 14	28 11	4 46	12 45	0 40	26 22	3 6	22 16	1 59	18 47	0 43	19 31	1 39	23 29	0 20	8 49	1 45	3 57	14 40	8 28	8 51	27 57	4 21	3 12	
S 30	14n33	26 s59	4s11	13n36	0s30	26n27	3n 8	22n 9	1n58	18n51	0s43	19n33	1s39	23n29	0n20	8s48	1n45	3n58	14s40	8s30	8s52	27n58	4n22	3n13	

ASTRODIENST EPHEMERIS for the year 2119

geocentric

MAY 2119

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	14 33 42	10♈ 9'28	26♈59	9♈49	25♈27	0♈ 6	27♈30	5♈22	8♈35	27°R 5	21♈38	8°R 7	7♈ 8	18♈44	3♈39	M 1
T 2	14 37 38	11° 7'47	10♈53	11°58	26°28	0°35	27°44	5°29	8°37	27° 3	21°39	8°D 6	7° 5	18°51	3°42	T 2
W 3	14 41 35	12° 6'04	24°25	14° 7	27°29	1° 5	27°58	5°36	8°39	27° 2	21°40	8° 7	7° 2	18°58	3°45	W 3
T 4	14 45 31	13° 4'20	7♈39	16°16	28°29	1°34	28°12	5°44	8°42	27° 0	21°42	8°R 7	6°59	19° 5	3°48	T 4
F 5	14 49 28	14° 2'34	20°36	18°26	29°28	2° 4	28°26	5°51	8°44	26°58	21°43	8° 6	6°56	19°11	3°51	F 5
S 6	14 53 25	15° 0'47	3♈19	20°35	0♈28	2°34	28°40	5°59	8°46	26°57	21°44	8° 4	6°52	19°18	3°54	S 6
S 7	14 57 21	15°58'58	15°51	22°43	1°26	3° 4	28°53	6° 6	8°49	26°55	21°46	7°58	6°49	19°25	3°56	S 7
M 8	15 1 18	16°57'08	28°13	24°51	2°25	3°35	29° 7	6°13	8°51	26°54	21°47	7°50	6°46	19°32	3°59	M 8
T 9	15 5 14	17°55'16	10♈27	26°58	3°23	4° 5	29°22	6°21	8°54	26°52	21°48	7°39	6°43	19°38	4° 2	T 9
W10	15 9 11	18°53'22	22°33	29° 3	4°20	4°36	29°36	6°29	8°56	26°51	21°50	7°27	6°40	19°45	4° 5	W10
T 11	15 13 7	19°51'27	4♈33	1♈ 6	5°17	5° 6	29°50	6°36	8°59	26°49	21°51	7°14	6°37	19°52	4° 8	T 11
F 12	15 17 4	20°49'30	16°28	3° 8	6°14	5°37	0♈ 4	6°44	9° 2	26°48	21°52	7° 1	6°33	19°58	4°10	F 12
S 13	15 21 0	21°47'32	28°19	5° 7	7°10	6° 8	0°18	6°51	9° 4	26°46	21°54	6°50	6°30	20° 5	4°13	S 13
S 14	15 24 57	22°45'32	10♈10	7° 4	8° 6	6°39	0°32	6°59	9° 7	26°45	21°55	6°40	6°27	20°12	4°16	S 14
M15	15 28 54	23°43'30	22° 2	8°58	9° 1	7°10	0°46	7° 7	9°10	26°43	21°56	6°34	6°24	20°19	4°18	M15
T 16	15 32 50	24°41'26	4♈ 1	10°49	9°55	7°42	1° 0	7°14	9°13	26°42	21°58	6°30	6°21	20°25	4°21	T 16
W17	15 36 47	25°39'20	16° 9	12°37	10°49	8°13	1°14	7°22	9°16	26°41	21°59	6°28	6°17	20°32	4°24	W17
T 18	15 40 43	26°37'13	28°33	14°23	11°42	8°44	1°28	7°30	9°18	26°39	22° 1	6°D28	6°14	20°39	4°26	T 18
F 19	15 44 40	27°35'04	11♈17	16° 5	12°35	9°16	1°42	7°37	9°21	26°38	22° 2	6°R28	6°11	20°45	4°29	F 19
S 20	15 48 36	28°32'53	24°26	17°44	13°27	9°48	1°56	7°45	9°24	26°37	22° 3	6°27	6° 8	20°52	4°31	S 20
S 21	15 52 33	29°30'40	8♈ 3	19°19	14°19	10°20	2°11	7°53	9°27	26°35	22° 5	6°25	6° 5	20°59	4°33	S 21
M22	15 56 29	0♈28'26	22°11	20°52	15° 9	10°51	2°25	8° 0	9°30	26°34	22° 6	6°19	6° 2	21° 6	4°36	M22
T 23	16 0 26	1°26'10	6♈46	22°20	15°59	11°23	2°39	8° 8	9°33	26°33	22° 7	6°11	5°58	21°12	4°38	T 23
W24	16 4 23	2°23'53	21°44	23°46	16°48	11°55	2°53	8°16	9°36	26°31	22° 9	6° 2	5°55	21°19	4°40	W24
T 25	16 8 19	3°21'34	6♈57	25° 8	17°37	12°28	3° 7	8°24	9°39	26°30	22°10	5°51	5°52	21°26	4°43	T 25
F 26	16 12 16	4°19'15	22°14	26°26	18°24	13° 0	3°21	8°31	9°42	26°29	22°11	5°40	5°49	21°32	4°45	F 26
S 27	16 16 12	5°16'54	7♈23	27°41	19°11	13°32	3°35	8°39	9°45	26°28	22°13	5°31	5°46	21°39	4°47	S 27
S 28	16 20 9	6°14'32	22°15	28°52	19°57	14° 5	3°50	8°47	9°49	26°27	22°14	5°24	5°43	21°46	4°49	S 28
M29	16 24 5	7°12'09	6♈44	29°59	20°42	14°37	4° 4	8°55	9°52	26°25	22°15	5°20	5°39	21°53	4°51	M29
T 30	16 28 2	8° 9'45	20°46	1♈ 3	21°26	15°10	4°18	9° 3	9°55	26°24	22°17	5°18	5°36	21°59	4°53	T 30
W31	16 31 58	9♈ 7'20	4♈22	2♈ 2	22° 9	15♈43	4♈32	9♈10	9♈58	26°23	22°18	5♈18	5♈33	22° 6	4♈55	W31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	14n51	24s 2	3s21	14n26	0s19	26n31	3n10	22n 2	1n57	18n54	0s43	19n34	1s38	23n29	0n20	8s48
T 2	15 10	19 44	2 20	15 16	0 9	26 34	3 12	21 54	1 56	18 57	0 43	19 36	1 38	23 29	0 20	8 47
W 3	15 28	14 31	1 12	16 5	0n 1	26 37	3 13	21 47	1 55	19 0	0 43	19 37	1 38	23 29	0 20	8 46
T 4	15 45	8 44	0 2	16 53	0 12	26 40	3 15	21 39	1 54	19 3	0 42	19 38	1 38	23 29	0 20	8 46
F 5	16 3	2 43	1n 6	17 40	0 23	26 41	3 16	21 32	1 53	19 7	0 42	19 40	1 38	23 28	0 20	8 45
S 6	16 20	3n18	2 10	18 25	0 33	26 43	3 17	21 24	1 52	19 10	0 42	19 41	1 38	23 28	0 20	8 45
S 7	16 37	9 6	3 6	19 9	0 44	26 43	3 18	21 16	1 51	19 13	0 42	19 43	1 38	23 28	0 20	8 44
M 8	16 53	14 27	3 53	19 51	0 54	26 43	3 19	21 8	1 51	19 16	0 42	19 44	1 38	23 28	0 20	8 44
T 9	17 10	19 11	4 28	20 30	1 4	26 43	3 20	21 0	1 50	19 19	0 42	19 45	1 37	23 28	0 20	8 43
W10	17 26	23 5	4 51	21 8	1 13	26 42	3 20	20 52	1 49	19 22	0 42	19 47	1 37	23 28	0 20	8 43
T 11	17 42	25 57	5 0	21 43	1 23	26 40	3 21	20 43	1 48	19 25	0 42	19 48	1 37	23 27	0 20	8 42
F 12	17 57	27 39	4 57	22 16	1 31	26 38	3 21	20 35	1 47	19 28	0 42	19 50	1 37	23 27	0 20	8 42
S 13	18 12	28 5	4 40	22 46	1 39	26 35	3 21	20 26	1 46	19 31	0 42	19 51	1 37	23 27	0 20	8 41
S 14	18 27	27 13	4 12	23 14	1 47	26 32	3 21	20 18	1 45	19 35	0 41	19 52	1 37	23 27	0 20	8 41
M15	18 42	25 7	3 32	23 39	1 53	26 28	3 21	20 9	1 44	19 38	0 41	19 54	1 37	23 27	0 20	8 40
T 16	18 56	21 53	2 43	24 2	1 59	26 24	3 21	20 0	1 43	19 41	0 41	19 55	1 37	23 26	0 20	8 40
W17	19 10	17 40	1 45	24 22	2 5	26 19	3 21	19 51	1 42	19 43	0 41	19 56	1 37	23 26	0 20	8 39
T 18	19 23	12 38	0 42	24 39	2 9	26 14	3 20	19 42	1 41	19 46	0 41	19 58	1 37	23 26	0 20	8 39
F 19	19 37	6 56	0s25	24 54	2 13	26 8	3 19	19 33	1 41	19 49	0 41	19 59	1 36	23 26	0 20	8 38
S 20	19 50	0 47	1 33	25 7	2 16	26 2	3 18	19 23	1 40	19 52	0 41	20 0	1 36	23 26	0 20	8 38
S 21	20 2	5s37	2 39	25 18	2 18	25 55	3 17	19 14	1 39	19 55	0 41	20 2	1 36	23 25	0 20	8 37
M22	20 14	11 58	3 36	25 26	2 19	25 48	3 15	19 4	1 38	19 58	0 41	20 3	1 36	23 25	0 20	8 37
T 23	20 26	17 53	4 22	25 32	2 20	25 41	3 14	18 55	1 37	20 1	0 41	20 4	1 36	23 25	0 20	8 36
W24	20 38	22 52	4 51	25 36	2 19	25 33	3 12	18 45	1 36	20 4	0 41	20 6	1 36	23 25	0 20	8 36
T 25	20 49	26 23	5 0	25 38	2 18	25 25	3 10	18 35	1 35	20 6	0 40	20 7	1 36	23 25	0 20	8 36
F 26	21 0	27 59	4 48	25 38	2 16	25 16	3 8	18 25	1 35	20 9	0 40	20 8	1 36	23 24	0 20	8 35
S 27	21 10	27 28	4 15	25 37	2 13	25 7	3 5	18 15	1 34	20 12	0 40	20 9	1 36	23 24	0 20	8 35
S 28	21 20	24 59	3 26	25 34	2 9	24 57	3 3	18 5	1 33	20 15	0 40	20 11	1 36	23 24	0 20	8 34
M29	21 30	20 55	2 25	25 30	2 4	24 48	3 0	17 54	1 32	20 17	0 40	20 12	1 36	23 24	0 20	8 34
T 30	21 39	15 46	1 16	25 24	1 58	24 38	2 57	17 44	1 31	20 20	0 40	20 13	1 36	23 23	0 20	8 34
W31	21n48	9s59	0s 5	25n16	1n52	24n27	2n53	17n33	1n30	20n23	0s40	20n14	1s36	23n23	0n20	8s33

Julian Day Number = 2495128.5, Delta T = 102.90 sec

Ecliptic obliquity = 23°25'34", Nutation = 0°00'06", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 26°24'27", Lahiri = 25°31'28"

ASTRODIENST EPHEMERIS for the year 2119

geocentric

JUNE 2119

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 35 55	10 ^{II} 4'54	17 ^{II} 34	22 ^{II} 58	22 ^{II} 51	16 ^{II} 16	4 ^{II} 46	9 ^{II} 18	10 ^{II} 1	26 ^{II} R22	22 ^{II} 19	5 ^{II} R18	5 ^{II} 30	22 ^{II} 13	4 ^{II} 57	T 1
F 2	16 39 52	11° 2'27	0 ^{II} 25	3°50	23°33	16°49	5° 0	9°26	10° 5	26 ^{II} 21	22°20	5 ^{II} 17	5°27	22°19	4°59	F 2
S 3	16 43 48	12° 0'00	12°59	4°38	24°13	17°22	5°14	9°34	10° 8	26°20	22°22	5°14	5°23	22°26	5° 1	S 3
S 4	16 47 45	12°57'31	25°20	5°22	24°52	17°55	5°28	9°42	10°11	26°19	22°23	5° 8	5°20	22°33	5° 3	S 4
M 5	16 51 41	13°55'02	7 ^{II} 30	6° 1	25°29	18°28	5°42	9°49	10°14	26°18	22°24	5° 0	5°17	22°40	5° 4	M 5
T 6	16 55 38	14°52'32	19°34	6°37	26° 6	19° 1	5°56	9°57	10°18	26°17	22°26	4°49	5°14	22°46	5° 6	T 6
W 7	16 59 34	15°50'01	1 ^{II} 32	7° 7	26°42	19°34	6°10	10° 5	10°21	26°16	22°27	4°36	5°11	22°53	5° 8	W 7
T 8	17 3 31	16°47'30	13°26	7°34	27°16	20° 8	6°24	10°13	10°25	26°15	22°28	4°23	5° 8	23° 0	5° 9	T 8
F 9	17 7 27	17°44'57	25°18	7°56	27°48	20°41	6°38	10°20	10°28	26°14	22°29	4° 9	5° 4	23° 7	5°11	F 9
S 10	17 11 24	18°42'24	7 ^{II} 9	8°13	28°20	21°15	6°52	10°28	10°31	26°13	22°31	3°57	5° 1	23°13	5°12	S 10
S 11	17 15 21	19°39'49	19° 0	8°26	28°50	21°49	7° 6	10°36	10°35	26°12	22°32	3°48	4°58	23°20	5°14	S 11
M12	17 19 17	20°37'14	0 ^{II} 55	8°34	29°18	22°22	7°20	10°44	10°38	26°12	22°33	3°41	4°55	23°27	5°15	M12
T 13	17 23 14	21°34'37	12°56	8°R38	29°45	22°56	7°34	10°51	10°42	26°11	22°34	3°37	4°52	23°33	5°17	T 13
W14	17 27 10	22°32'00	25° 7	8°37	0 ^{II} 10	23°30	7°48	10°59	10°45	26°10	22°36	3°35	4°49	23°40	5°18	W14
T 15	17 31 7	23°29'21	7 ^{II} 31	8°32	0°34	24° 4	8° 2	11° 7	10°49	26° 9	22°37	3°D35	4°45	23°47	5°19	T 15
F 16	17 35 3	24°26'42	20°13	8°22	0°56	24°38	8°15	11°14	10°52	26° 9	22°38	3°R35	4°42	23°54	5°21	F 16
S 17	17 39 0	25°24'01	3 ^{II} 18	8° 9	1°16	25°12	8°29	11°22	10°56	26° 8	22°39	3°35	4°39	24° 0	5°22	S 17
S 18	17 42 57	26°21'20	16°49	7°51	1°34	25°46	8°43	11°30	10°59	26° 7	22°40	3°33	4°36	24° 7	5°23	S 18
M19	17 46 53	27°18'38	0 ^{II} 49	7°30	1°50	26°21	8°57	11°37	11° 3	26° 7	22°41	3°29	4°33	24°14	5°24	M19
T 20	17 50 50	28°15'55	15°17	7° 5	2° 4	26°55	9°10	11°45	11° 6	26° 6	22°43	3°23	4°29	24°20	5°25	T 20
W21	17 54 46	29°13'11	0 ^{II} 10	6°37	2°17	27°30	9°24	11°52	11°10	26° 6	22°44	3°15	4°26	24°27	5°26	W21
T 22	17 58 43	0 ^{II} 10'26	15°21	6° 7	2°27	28° 4	9°38	12° 0	11°13	26° 5	22°45	3° 6	4°23	24°34	5°27	T 22
F 23	18 2 39	1° 7'41	0 ^{II} 30	5°35	2°35	28°39	9°51	12° 7	11°17	26° 5	22°46	2°57	4°20	24°41	5°28	F 23
S 24	18 6 36	2° 4'56	15°55	5° 1	2°40	29°13	10° 5	12°15	11°21	26° 4	22°47	2°50	4°17	24°47	5°29	S 24
S 25	18 10 32	3° 2'10	0 ^{II} 57	4°27	2°44	29°48	10°18	12°22	11°24	26° 4	22°48	2°44	4°14	24°54	5°29	S 25
M26	18 14 29	3°59'24	15°36	3°52	2°R45	0 ^{II} 23	10°32	12°30	11°28	26° 3	22°49	2°41	4°10	25° 1	5°30	M26
T 27	18 18 26	4°56'37	29°48	3°17	2°44	0°57	10°45	12°37	11°31	26° 3	22°50	2°D39	4° 7	25° 7	5°31	T 27
W28	18 22 22	5°53'51	13 ^{II} 32	2°44	2°40	1°32	10°59	12°45	11°35	26° 3	22°51	2°40	4° 4	25°14	5°31	W28
T 29	18 26 19	6°51'04	26°49	2°11	2°35	2° 7	11°12	12°52	11°38	26° 2	22°52	2°41	4° 1	25°21	5°32	T 29
F 30	18 30 15	7 ^{II} 48'18	9 ^{II} 42	1 ^{II} 41	2 ^{II} 26	2 ^{II} 42	11 ^{II} 25	12 ^{II} 59	11 ^{II} 42	26 ^{II} 2	22 ^{II} 53	2°R41	3 ^{II} 58	25 ^{II} 28	5 ^{II} 32	F 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	
T 1	21n57	3s55	1n 4	25n 8	1n44	24n17	2n50	17n23	1n30	20n25	0s40	20n16	1s35	23n23	0n20	T 1
F 2	22 5	2n 8	2 8	24 58	1 36	24 6	2 46	17 12	1 29	20 28	0 40	20 17	1 35	23 23	0 20	F 2
S 3	22 13	7 58	3 5	24 48	1 27	23 55	2 42	17 1	1 28	20 31	0 40	20 18	1 35	23 22	0 20	S 3
S 4	22 20	13 23	3 51	24 36	1 17	23 44	2 37	16 50	1 27	20 33	0 40	20 19	1 35	23 22	0 20	S 4
M 5	22 27	18 12	4 27	24 24	1 6	23 32	2 33	16 39	1 26	20 36	0 40	20 20	1 35	23 22	0 20	M 5
T 6	22 34	22 15	4 50	24 10	0 55	23 20	2 28	16 28	1 26	20 38	0 40	20 22	1 35	23 22	0 20	T 6
W 7	22 40	25 20	5 0	23 56	0 42	23 8	2 23	16 17	1 25	20 41	0 40	20 23	1 35	23 21	0 20	W 7
T 8	22 46	27 18	4 56	23 42	0 29	22 56	2 17	16 6	1 24	20 43	0 39	20 24	1 35	23 21	0 20	T 8
F 9	22 52	28 1	4 40	23 27	0 16	22 44	2 11	15 54	1 23	20 45	0 39	20 25	1 35	23 21	0 20	F 9
S 10	22 57	27 26	4 12	23 11	0 1	22 32	2 5	15 43	1 22	20 48	0 39	20 26	1 35	23 21	0 20	S 10
S 11	23 1	25 35	3 33	22 56	0s14	22 19	1 59	15 31	1 22	20 50	0 39	20 27	1 35	23 20	0 20	S 11
M12	23 6	22 36	2 44	22 40	0 29	22 7	1 52	15 19	1 21	20 53	0 39	20 29	1 35	23 20	0 20	M12
T 13	23 10	18 38	1 47	22 23	0 46	21 54	1 45	15 7	1 20	20 55	0 39	20 30	1 35	23 20	0 20	T 13
W14	23 13	13 51	0 45	22 7	1 2	21 41	1 37	14 55	1 19	20 57	0 39	20 31	1 35	23 20	0 20	W14
T 15	23 16	8 25	0s21	21 51	1 19	21 29	1 30	14 43	1 18	20 59	0 39	20 32	1 35	23 19	0 20	T 15
F 16	23 19	2 32	1 27	21 34	1 36	21 16	1 21	14 31	1 18	21 2	0 39	20 33	1 35	23 19	0 20	F 16
S 17	23 21	3s37	2 31	21 18	1 53	21 3	1 13	14 19	1 17	21 4	0 39	20 34	1 35	23 19	0 20	S 17
S 18	23 23	9 49	3 29	21 2	2 9	20 51	1 4	14 7	1 16	21 6	0 39	20 35	1 35	23 18	0 20	S 18
M19	23 24	15 45	4 16	20 47	2 26	20 38	0 55	13 55	1 15	21 8	0 39	20 36	1 35	23 18	0 20	M19
T 20	23 25	21 0	4 49	20 32	2 43	20 25	0 45	13 42	1 15	21 10	0 39	20 37	1 35	23 18	0 20	T 20
W21	23 25	25 6	5 3	20 17	2 58	20 13	0 35	13 30	1 14	21 13	0 39	20 38	1 35	23 18	0 20	W21
T 22	23 26	27 32	4 57	20 4	3 14	20 1	0 25	13 17	1 13	21 15	0 39	20 39	1 35	23 17	0 20	T 22
F 23	23 25	27 54	4 29	19 51	3 28	19 49	0 15	13 4	1 12	21 17	0 39	20 40	1 35	23 17	0 20	F 23
S 24	23 25	26 9	3 42	19 39	3 41	19 37	0 4	12 51	1 12	21 19	0 39	20 41	1 35	23 17	0 20	S 24
S 25	23 23	22 33	2 41	19 27	3 54	19 25	0s 8	12 39	1 11	21 21	0 39	20 42	1 35	23 16	0 20	S 25
M26	23 22	17 35	1 30	19 17	4 5	19 13	0 20	12 26	1 10	21 23	0 39	20 43	1 35	23 16	0 20	M26
T 27	23 20	11 46	0 15	19 8	4 15	19 2	0 32	12 13	1 9	21 25	0 38	20 44	1 35	23 16	0 20	T 27
W28	23 18	5 35	0n58	19 1	4 23	18 50	0 44	11 59	1 9	21 27	0 38	20 45	1 35	23 15	0 20	W28
T 29	23 15	0n40	2 6	18 54	4 30	18 39	0 57	11 46	1 8	21 28	0 38	20 46	1 35	23 15	0 20	T 29
F 30	23n12	6n41	3n 5	18n49	4s36	18n29	1s10	11n33	1n 7	21n30	0s38	20n47	1s35	23n15	0n20	F 30

Julian Day Number = 2495159.5, Delta T = 102.95 sec

Ecliptic obliquity = 23°25'33, Nutation = 0°00'06, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 26°24'32, Lahiri = 25°31'32

ASTRODIENST EPHEMERIS for the year 2119
geocentric

JULY 2119

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	18 34 12	8♌45°31	22♍15	1°R13	2°R16	3♎17	11♏39	13♐ 7	11♌46	26°R 2	22♎54	2°R40	3♈55	25♐34	5♍33	S 1
S 2	18 38 8	9°42'45	4♋32	0♌48	2♌ 3	3°52	11°52	13°14	11°49	26♌ 2	22°55	2♈37	3°51	25°41	5°33	S 2
M 3	18 42 5	10°39'58	16°38	0°27	1°47	4°28	12° 5	13°21	11°53	26° 1	22°56	2°32	3°48	25°48	5°34	M 3
T 4	18 46 1	11°37'12	28°36	0°10	1°30	5° 3	12°18	13°28	11°57	26° 1	22°57	2°25	3°45	25°54	5°34	T 4
W 5	18 49 58	12°34'26	10♏29	29♏56	1°10	5°38	12°31	13°36	12° 0	26° 1	22°58	2°16	3°42	26° 1	5°34	W 5
T 6	18 53 55	13°31'40	22°21	29°48	0°47	6°14	12°44	13°43	12° 4	26° 1	22°59	2° 7	3°39	26° 8	5°34	T 6
F 7	18 57 51	14°28'54	4♌12	29°D43	0°23	6°49	12°57	13°50	12° 7	26° 1	23° 0	1°58	3°35	26°15	5°34	F 7
S 8	19 1 48	15°26'07	16° 5	29°44	29♌57	7°25	13°10	13°57	12°11	26°D 1	23° 1	1°50	3°32	26°21	5°34	S 8
S 9	19 5 44	16°23'21	28° 2	29°49	29°29	8° 0	13°23	14° 4	12°15	26° 1	23° 2	1°44	3°29	26°28	5°R35	S 9
M10	19 9 41	17°20'35	10♌ 4	0♌ 0	28°59	8°36	13°36	14°11	12°18	26° 1	23° 3	1°39	3°26	26°35	5°35	M10
T 11	19 13 37	18°17'49	22°14	0°16	28°27	9°12	13°49	14°18	12°22	26° 1	23° 4	1°37	3°23	26°41	5°34	T 11
W12	19 17 34	19°15'03	4♎33	0°37	27°54	9°47	14° 2	14°25	12°26	26° 1	23° 4	1°D37	3°20	26°48	5°34	W12
T 13	19 21 30	20°12'16	17° 4	1° 3	27°19	10°23	14°14	14°31	12°29	26° 1	23° 5	1°37	3°16	26°55	5°34	T 13
F 14	19 25 27	21° 9'30	29°51	1°34	26°44	10°59	14°27	14°38	12°33	26° 2	23° 6	1°39	3°13	27° 2	5°34	F 14
S 15	19 29 24	22° 6'44	12♌57	2°11	26° 8	11°35	14°39	14°45	12°36	26° 2	23° 7	1°40	3°10	27° 8	5°34	S 15
S 16	19 33 20	23° 3'57	26°26	2°52	25°31	12°11	14°52	14°52	12°40	26° 2	23° 8	1°R40	3° 7	27°15	5°33	S 16
M17	19 37 17	24° 1'11	10♎18	3°39	24°53	12°47	15° 4	14°58	12°43	26° 2	23° 8	1°39	3° 4	27°22	5°33	M17
T 18	19 41 13	24°58'24	24°34	4°30	24°16	13°23	15°17	15° 5	12°47	26° 3	23° 9	1°37	3° 1	27°28	5°32	T 18
W19	19 45 10	25°55'38	9♌12	5°27	23°38	13°59	15°29	15°12	12°51	26° 3	23°10	1°33	2°57	27°35	5°32	W19
T 20	19 49 6	26°52'52	24° 7	6°28	23° 1	14°36	15°41	15°18	12°54	26° 3	23°10	1°28	2°54	27°42	5°31	T 20
F 21	19 53 3	27°50'06	9♌12	7°35	22°25	15°12	15°53	15°25	12°58	26° 4	23°11	1°23	2°51	27°49	5°31	F 21
S 22	19 57 0	28°47'20	24°18	8°46	21°49	15°48	16° 5	15°31	13° 1	26° 4	23°12	1°19	2°48	27°55	5°30	S 22
S 23	20 0 56	29°44'35	9♌14	10° 1	21°14	16°25	16°17	15°37	13° 5	26° 5	23°12	1°16	2°45	28° 2	5°29	S 23
M24	20 4 53	0♌41'50	23°53	11°22	20°40	17° 1	16°29	15°44	13° 8	26° 5	23°13	1°15	2°41	28° 9	5°29	M24
T 25	20 8 49	1°39'06	8♈ 9	12°47	20° 8	17°38	16°41	15°50	13°12	26° 6	23°14	1°D15	2°38	28°15	5°28	T 25
W26	20 12 46	2°36'22	21°58	14°16	19°38	18°14	16°53	15°56	13°15	26° 6	23°14	1°16	2°35	28°22	5°27	W26
T 27	20 16 42	3°33'40	5♍21	15°49	19° 9	18°51	17° 4	16° 2	13°19	26° 7	23°15	1°17	2°32	28°29	5°26	T 27
F 28	20 20 39	4°30'58	18°19	17°26	18°42	19°28	17°16	16° 8	13°22	26° 7	23°15	1°19	2°29	28°35	5°25	F 28
S 29	20 24 35	5°28'17	0♋56	19° 8	18°17	20° 4	17°28	16°14	13°25	26° 8	23°16	1°R20	2°26	28°42	5°24	S 29
S 30	20 28 32	6°25'37	13°15	20°53	17°55	20°41	17°39	16°20	13°29	26° 9	23°16	1°19	2°22	28°49	5°23	S 30
M31	20 32 29	7♌22'58	25♌21	22♌41	17♌34	21♎18	17♏50	16♏26	13♌32	26♌ 9	23♌17	1♈18	2♈19	28♏56	5♍22	M31

Day	☉	☽		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat	decl	decl	decl	decl	decl	decl	decl	decl	decl	lat
S 1	23n 8	12n16	3n54	18n46	4s40	18n18	1s23	11n20	1n 6	21n32	0s38	20n48	1s35	23n14	0n20	8s27	1n43	4n13	14s43	10s31	10s 4	28n 8	5n14	3n18										
S 2	23 4	17 16	4 31	18 43	4 42	18 8	1 36	11 6	1 6	21 34	0 38	20 49	1 35	23 14	0 20	8 27	1 43	4 13	14 44	10 32	10 5	28 8	5 14	3 18										
M 3	23 0	21 30	4 55	18 42	4 43	17 58	1 50	10 53	1 5	21 36	0 38	20 49	1 35	23 14	0 20	8 27	1 43	4 13	14 44	10 34	10 6	28 8	5 14	3 18										
T 4	22 55	24 48	5 5	18 43	4 43	17 48	2 4	10 39	1 4	21 37	0 38	20 50	1 35	23 14	0 20	8 27	1 43	4 13	14 44	10 37	10 8	28 8	5 15	3 18										
W 5	22 50	27 0	5 3	18 45	4 41	17 39	2 18	10 25	1 4	21 39	0 38	20 51	1 35	23 13	0 20	8 27	1 43	4 13	14 44	10 40	10 9	28 8	5 15	3 18										
T 6	22 44	27 59	4 48	18 48	4 37	17 30	2 32	10 12	1 3	21 41	0 38	20 52	1 35	23 13	0 20	8 27	1 43	4 13	14 44	10 43	10 10	28 7	5 15	3 19										
F 7	22 38	27 41	4 20	18 53	4 33	17 21	2 46	9 58	1 2	21 43	0 38	20 53	1 35	23 13	0 20	8 27	1 43	4 13	14 45	10 46	10 11	28 7	5 15	3 19										
S 8	22 32	26 6	3 40	18 58	4 27	17 12	3 1	9 44	1 1	21 44	0 38	20 54	1 35	23 12	0 20	8 27	1 43	4 13	14 45	10 49	10 12	28 7	5 15	3 19										
S 9	22 25	23 20	2 51	19 5	4 20	17 4	3 15	9 30	1 1	21 46	0 38	20 54	1 35	23 12	0 20	8 27	1 42	4 13	14 45	10 51	10 13	28 7	5 15	3 19										
M10	22 18	19 32	1 54	19 13	4 12	16 57	3 29	9 16	1 0	21 47	0 38	20 55	1 35	23 12	0 20	8 27	1 42	4 13	14 45	10 53	10 15	28 7	5 15	3 19										
T 11	22 11	14 54	0 51	19 22	4 4	16 49	3 43	9 2	0 59	21 49	0 38	20 56	1 35	23 11	0 20	8 27	1 42	4 13	14 45	10 54	10 16	28 7	5 16	3 19										
W12	22 3	9 36	0s16	19 32	3 54	16 42	3 57	8 48	0 59	21 51	0 38	20 57	1 35	23 11	0 20	8 27	1 42	4 13	14 46	10 54	10 17	28 6	5 16	3 19										
T 13	21 54	3 50	1 23	19 42	3 43	16 36	4 10	8 34	0 58	21 52	0 38	20 58	1 35	23 11	0 20	8 27	1 42	4 13	14 46	10 53	10 18	28 6	5 16	3 19										
F 14	21 46	2s12	2 27	19 53	3 32	16 29	4 23	8 19	0 57	21 54	0 38	20 58	1 35	23 10	0 20	8 27	1 42	4 13	14 46	10 53	10 19	28 6	5 16	3 19										
S 15	21 37	8 16	3 26	20 4	3 20	16 23	4 36	8 5	0 56	21 55	0 38	20 59	1 35	23 10	0 20	8 28	1 42	4 13	14 46	10 53	10 20	28 6	5 16	3 20										
S 16	21 27	14 8	4 14	20 16	3 8	16 18	4 49	7 51	0 56	21 56	0 38	21 0	1 35	23 10	0 20	8 28	1 42	4 13	14 47	10 52	10 21	28 6	5 16	3 20										
M17	21 18	19 29	4 50	20 28	2 55	16 13	5 0	7 36	0 55	21 58	0 38	21 0	1 35	23 9	0 20	8 28	1 42	4 13	14 47	10 53	10 23	28 5	5 16	3 20										
T 18	21 7	23 53	5 9	20 39	2 42	16 8	5 12	7 22	0 54	21 59	0 38	21 1	1 35	23 9	0 20	8 28	1 42	4 13	14 47	10 54	10 24	28 5	5 15	3 20										
W19	20 57	26 54	5 8	20 51	2 28	16 4	5 23	7 7	0 54	22 1	0 38	21 2	1 35	23 9	0 20	8 28	1 42	4 13	14 47	10 55	10 25	28 5	5 15	3 20										
T 20	20 46	28 5	4 47	21 2	2 15	16 0	5 33	6 53	0 53	22 2	0 38	21 2	1 35	23 8	0 20	8 28	1 42	4 13	14 48	10 57	10 26	28 5	5 15	3 20										
F 21	20 35	27 12	4 6	21 12	2 1	15 56	5 42	6 38	0 52	22 3	0 38	21 3	1 35	23 8	0 20	8 29	1 42	4 13	14 48	10 59	10 27	28 4	5 15	3 20										
S 22	20 23	24 20	3 8	21 22	1 46	15 53	5 51	6 23	0 52	22 4	0 38	21 4	1 35	23 8	0 20	8 29	1 42	4 12	14 48	11 0	10 28	28 4	5 15	3 20										
S 23	20 12	19 49	1 57	21 31	1 32	15 50	5 59	6 8	0 51	22 6	0 38	21 4	1 35	23 7	0 20	8 29	1 42	4 12	14 48	11 1	10 29	28 4	5 15	3 20										
M24	19 59	14 11	0 40	21 39	1 18	15 48	6 7	5 54	0 50	22 7	0 38	21 5	1 35	23 7	0 20	8 29	1 42	4 12	14 49	11 2	10 31	28 4	5 15	3 21										
T 25	19 47	7 56	0n38	21 45	1 4	15 46	6 13	5 39	0 50	22 8	0 38	21 6	1 35	23 7	0 20	8 30	1 42	4 12	14 49	11 2	10 32	28 3	5 14	3 21										
W26	19 34	1 29	1 51	21 50	0 50	15 44	6 19	5 24	0 49	22 9	0 38	21 6	1 35	23 6	0 21	8 30	1 42	4 12	14 49	11 1	10 33	28 3	5 14	3 21										
T 27	19 21	4n49	2 56	21 53	0 37	15 43	6 24	5 9	0 48	22 10	0 38	21 7	1 35	23 6	0 21	8 30	1 42	4 12	14 49	11 1	10 34	28 3	5 14	3 21										
F 28	19 7	10 43	3 50	21 54	0 23	15 42	6 29	4 54	0 47	22 12	0 38	21 7	1 35	23 6	0 21	8 30	1 41	4 12	14 50	11 0	10 35	28 2	5 14	3 21										
S 29	18 53	16 1	4 31	21 53	0 10	15 41	6 33	4 39	0 47	22 13	0 38	21 8	1 35	23 5	0 21	8 31	1 41	4 12	14 50	11 0	10 36	28 2	5 13	3 21										
S 30	18 39	20 33	4 59	21 50	0n 2	15 41	6 36	4 24	0 46	22 14	0 38	21 8	1 36	23 5	0 21	8 31	1 41	4 12	14 50	11 0	10 37	28 2	5 13	3 21										
M31	18n25	24n 8	5n12	21n45	0n14	15n41	6s38	4n 9	0n45	22n15	0s38	21n 9	1s36	23n 5	0n21	8s31	1n41	4n11	14s50	11s 0	10s39	28n 1	5n13	3n21										

ASTRODIENST EPHEMERIS for the year 2119
geocentric

AUGUST 2119

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	20 36 25	8♌20'20	7♊18	24♊32	17°R16	21♍55	18♊2	16♊32	13♊36	26♌10	23♊17	1°R16	2♋16	29♊2	5°R21	T 1
W 2	20 40 22	9°17'43	19°10	26°27	17♌0	22°32	18°13	16°38	13°39	26°11	23°18	1♋13	2°13	29°9	5°Y20	W 2
T 3	20 44 18	10°15'08	1♌1	28°23	16°47	23°9	18°24	16°43	13°42	26°12	23°18	1°10	2°10	29°16	5°18	T 3
F 4	20 48 15	11°12'33	12°54	0♌22	16°36	23°46	18°35	16°49	13°46	26°13	23°19	1°6	2°7	29°22	5°17	F 4
S 5	20 52 11	12°9'59	24°52	2°23	16°27	24°23	18°46	16°55	13°49	26°14	23°19	1°4	2°3	29°29	5°16	S 5
S 6	20 56 8	13°7'26	6♌57	4°25	16°21	25°1	18°57	17°0	13°52	26°14	23°20	1°1	2°0	29°36	5°14	S 6
M 7	21 0 4	14°4'54	19°10	6°28	16°17	25°38	19°7	17°5	13°56	26°15	23°20	1°0	1°57	29°43	5°13	M 7
T 8	21 4 1	15°2'23	1♍33	8°32	16°D15	26°15	19°18	17°11	13°59	26°16	23°20	1°D0	1°54	29°49	5°11	T 8
W 9	21 7 58	15°59'52	14°8	10°36	16°16	26°53	19°29	17°16	14°2	26°17	23°21	1°0	1°51	29°56	5°10	W 9
T 10	21 11 54	16°57'23	26°55	12°41	16°19	27°30	19°39	17°21	14°5	26°18	23°21	1°1	1°47	0♌3	5°8	T 10
F 11	21 15 51	17°54'54	9♌56	14°45	16°24	28°8	19°49	17°26	14°8	26°19	23°21	1°2	1°44	0°9	5°7	F 11
S 12	21 19 47	18°52'27	23°13	16°49	16°32	28°45	20°0	17°31	14°11	26°20	23°21	1°3	1°41	0°16	5°5	S 12
S 13	21 23 44	19°50'00	6♍46	18°53	16°41	29°23	20°10	17°36	14°15	26°22	23°22	1°4	1°38	0°23	5°3	S 13
M14	21 27 40	20°47'34	20°36	20°56	16°53	0♌0	20°20	17°41	14°18	26°23	23°22	1°R4	1°35	0°29	5°1	M14
T 15	21 31 37	21°45'09	4♌43	22°57	17°7	0°38	20°30	17°46	14°21	26°24	23°22	1°4	1°32	0°36	5°0	T 15
W16	21 35 33	22°42'44	19°5	24°58	17°22	1°16	20°39	17°51	14°24	26°25	23°22	1°3	1°28	0°43	4°58	W16
T 17	21 39 30	23°40'21	3♌40	26°58	17°40	1°54	20°49	17°56	14°27	26°26	23°22	1°3	1°25	0°50	4°56	T 17
F 18	21 43 27	24°37'59	18°21	28°56	17°59	2°32	20°59	18°0	14°30	26°28	23°22	1°2	1°22	0°56	4°54	F 18
S 19	21 47 23	25°35'37	3♌4	0♍53	18°20	3°10	21°8	18°5	14°33	26°29	23°23	1°1	1°19	1°3	4°52	S 19
S 20	21 51 20	26°33'17	17°41	2°49	18°43	3°48	21°17	18°9	14°36	26°30	23°23	1°1	1°16	1°10	4°50	S 20
M21	21 55 16	27°30'58	2♋6	4°44	19°8	4°26	21°27	18°13	14°39	26°31	23°23	1°D1	1°13	1°16	4°48	M21
T 22	21 59 13	28°28'40	16°14	6°37	19°34	5°4	21°36	18°18	14°41	26°33	23°23	1°1	1°9	1°23	4°46	T 22
W23	22 3 9	29°26'24	0°Y1	8°29	20°2	5°42	21°45	18°22	14°44	26°34	23°23	1°1	1°6	1°30	4°44	W23
T 24	22 7 6	0♍24'09	13°25	10°19	20°32	6°20	21°54	18°26	14°47	26°36	23°R23	1°1	1°3	1°37	4°42	T 24
F 25	22 11 2	1°21'56	26°26	12°8	21°3	6°58	22°2	18°30	14°50	26°37	23°23	1°R1	1°0	1°43	4°40	F 25
S 26	22 14 59	2°19'45	9♌5	13°56	21°35	7°37	22°11	18°34	14°52	26°38	23°23	1°1	0°57	1°50	4°37	S 26
S 27	22 18 56	3°17'35	21°27	15°42	22°9	8°15	22°19	18°38	14°55	26°40	23°23	1°1	0°53	1°57	4°35	S 27
M28	22 22 52	4°15'27	3♊35	17°27	22°44	8°54	22°28	18°41	14°58	26°41	23°23	1°D1	0°50	2°3	4°33	M28
T 29	22 26 49	5°13'21	15°32	19°10	23°20	9°32	22°36	18°45	15°0	26°43	23°23	1°1	0°47	2°10	4°31	T 29
W30	22 30 45	6°11'16	27°25	20°52	23°58	10°11	22°44	18°48	15°3	26°44	23°22	1°1	0°44	2°17	4°28	W30
T 31	22 34 42	7♍9'14	9♌17	22♍33	24♌36	10♌49	22♊52	18♊52	15♌6	26♌46	23♊22	1♋2	0♋41	2♌23	4°Y26	T 31

Day	☉	☽		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl
T 1	18n10	26n39	5n12	21n37	0n26	15n42	6s40	3n53	0n45	22n16	0s38	21n10	1s36	23n 4	0n21	8s32	1n41	4n11	14s51	11s 1	10s40	28n 1	5n12	3n21										
W 2	17 55	27 57	4 59	21 27	0 36	15 42	6 41	3 38	0 44	22 17	0 38	21 10	1 36	23 4	0 21	8 32	1 41	4 11	14 51	11 2	10 41	28 1	5 12	3 21										
T 3	17 40	27 58	4 33	21 14	0 46	15 43	6 42	3 23	0 43	22 18	0 38	21 11	1 36	23 4	0 21	8 32	1 41	4 11	14 51	11 3	10 42	28 0	5 11	3 22										
F 4	17 24	26 42	3 55	20 58	0 56	15 45	6 42	3 8	0 43	22 19	0 38	21 11	1 36	23 3	0 21	8 33	1 41	4 11	14 51	11 4	10 43	28 0	5 11	3 22										
S 5	17 8	24 12	3 6	20 40	1 4	15 46	6 42	2 52	0 42	22 20	0 38	21 11	1 36	23 3	0 21	8 33	1 41	4 11	14 52	11 6	10 44	28 0	5 10	3 22										
S 6	16 52	20 36	2 9	20 19	1 12	15 48	6 41	2 37	0 41	22 21	0 38	21 12	1 36	23 3	0 21	8 33	1 41	4 10	14 52	11 6	10 45	27 59	5 10	3 22										
M 7	16 36	16 6	1 5	19 55	1 19	15 50	6 39	2 21	0 41	22 21	0 38	21 12	1 36	23 2	0 21	8 34	1 41	4 10	14 52	11 7	10 46	27 59	5 10	3 22										
T 8	16 19	10 52	0s 3	19 29	1 25	15 52	6 37	2 6	0 40	22 22	0 38	21 13	1 36	23 2	0 21	8 34	1 41	4 10	14 53	11 7	10 48	27 58	5 9	3 22										
W 9	16 2	5 8	1 12	19 1	1 31	15 54	6 35	1 51	0 39	22 23	0 38	21 13	1 36	23 2	0 21	8 34	1 41	4 10	14 53	11 7	10 49	27 58	5 8	3 22										
T 10	15 45	0s54	2 18	18 31	1 35	15 56	6 32	1 35	0 39	22 24	0 38	21 14	1 36	23 2	0 21	8 35	1 41	4 10	14 53	11 6	10 50	27 58	5 8	3 22										
F 11	15 27	6 59	3 19	17 58	1 39	15 59	6 29	1 20	0 38	22 25	0 38	21 14	1 36	23 1	0 21	8 35	1 41	4 9	14 53	11 6	10 51	27 57	5 7	3 22										
S 12	15 9	12 53	4 10	17 24	1 42	16 1	6 26	1 4	0 37	22 26	0 38	21 14	1 36	23 1	0 21	8 36	1 41	4 9	14 54	11 6	10 52	27 57	5 7	3 22										
S 13	14 52	18 18	4 49	16 48	1 44	16 4	6 22	0 48	0 37	22 26	0 38	21 15	1 37	23 1	0 21	8 36	1 41	4 9	14 54	11 5	10 53	27 56	5 6	3 22										
M14	14 33	22 53	5 11	16 10	1 45	16 7	6 18	0 33	0 36	22 27	0 38	21 15	1 37	23 0	0 21	8 37	1 41	4 9	14 54	11 5	10 54	27 56	5 5	3 22										
T 15	14 15	26 15	5 16	15 31	1 46	16 9	6 14	0 17	0 35	22 28	0 38	21 16	1 37	23 0	0 21	8 37	1 41	4 9	14 54	11 5	10 56	27 55	5 5	3 22										
W16	13 56	27 59	5 1	14 51	1 46	16 12	6 9	0 2	0 35	22 28	0 38	21 16	1 37	23 0	0 21	8 38	1 41	4 8	14 55	11 6	10 57	27 55	5 4	3 23										
T 17	13 37	27 49	4 27	14 10	1 45	16 14	6 4	0s14	0 34	22 29	0 38	21 16	1 37	22 59	0 21	8 38	1 40	4 8	14 55	11 6	10 58	27 55	5 3	3 23										
F 18	13 18	25 43	3 35	13 27	1 43	16 17	5 59	0 30	0 33	22 30	0 38	21 17	1 37	22 59	0 21	8 39	1 40	4 8	14 55	11 6	10 59	27 54	5 3	3 23										
S 19	12 59	21 53	2 29	12 44	1 42	16 19	5 54	0 45	0 33	22 30	0 38	21 17	1 37	22 59	0 21	8 39	1 40	4 8	14 56	11 6	11 0	27 54	5 2	3 23										
S 20	12 39	16 41	1 13	12 0	1 39	16 22	5 49	1 1	0 32	22 31	0 38	21 17	1 37	22 58	0 21	8 40	1 40	4 7	14 56	11 6	11 1	27 53	5 1	3 23										
M21	12 20	10 38	0n 6	11 16	1 36	16 24	5 43	1 17	0 31	22 32	0 38	21 17	1 37	22 58	0 21	8 40	1 40	4 7	14 56	11 6	11 2	27 53	5 1	3 23										
T 22	12 0	4 9	1 23	10 31	1 33	16 26	5 38	1 32	0 31	22 32	0 38	21 18	1 37	22 58	0 21	8 41	1 40	4 7	14 56	11 6	11 3	27 52	5 0	3 23										
W23	11 40	2n22	2 34	9 45	1 29	16 28	5 32	1 48	0 30	22 33	0 38	21 18	1 37	22 58	0 21	8 41	1 40	4 7	14 57	11 6	11 5	27 52	4 59	3 23										
T 24	11 19	8 35	3 34	9 0	1 24	16 29	5 26	2 4	0 29	22 33	0 38	21 18	1 37	22 57	0 21	8 42	1 40	4 6	14 57	11 6	11 6	27 51	4 58	3 23										
F 25	10 59	14 15	4 21	8 14	1 19	16 31	5 20	2 20	0 29	22 34	0 38	21 18	1 38	22 57	0 21	8 42	1 40	4 6	14 57	11 6	11 7	27 50	4 57	3 23										
S 26	10 38	19 10	4 54	7 28	1 14	16 32	5 14	2 35	0 28	22 34	0 38	21 19	1 38	22 57	0 21	8 43	1 40	4 6	14 58	11 6	11 8	27 50	4 57	3 23										
S 27	10 18	23 8	5 13	6 42	1 9	16 33	5 7	2 51	0 28	22 35	0 38	21 19	1 38	22 56	0 21	8 43	1 40	4 5	14 58	11 6	11 9	27 49	4 56	3 23										
M28	9 57	26 2	5 17	5 56	1 3	16 34	5 1	3 7	0 27	22 35	0 38	21 19	1 38	22 56	0 21	8 44	1 40	4 5	14 58	11 6	11 10	27 49	4 55	3 23										
T 29	9 35	27 44	5 7	5 9	0 57	16 34	4 55	3 22	0 26	22 36	0 38	21 19	1 38	22 56	0 21	8 44	1 40	4 5	14 58	11 6	11 11	27 48	4 54	3 23										
W30	9 14	28 8	4 44	4 24	0 51	16 34	4 48	3 38	0 26	22 36	0 38	21 20	1 38	22 56	0 21	8 45	1 40	4 5	14 59	11 6	11 12	27 48	4 53	3 23										
T 31	8n53	27n15	4n 9	3n38	0n44	16n34	4s42	3s54	0n25	22n37	0s38	21n20	1s38	22n55	0n21	8s46	1n40	4n 4	14s59	11s 6	11s14	27n47	4n52	3n23										

ASTRODIENST EPHEMERIS for the year 2119

geocentric

SEPTEMBER 2119

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	22 38 38	8 ^h 7'13"	21 ^h 12'	24 ^h 13'	25 ^h 16'	11 ^h 28'	23 ^h 11'	18 ^h 55'	15 ^h 08'	26 ^h 48'	23 ^h R22	1 ^h 2'	0 ^h 38'	2 ^h 30'	4 ^h R24	F 1
S 2	22 42 35	9° 5'14"	3 ^h 15'	25° 51'	25° 57'	12° 7'	23° 7'	18° 58'	15° 11'	26° 49'	23 ^h 22'	1° 3'	0° 34'	2° 37'	4 ^h 21'	S 2
S 3	22 46 31	10° 3'16"	15° 28'	27° 28'	26° 39'	12° 46'	23° 15'	19° 2'	15° 13'	26° 51'	23° 22'	1° 4'	0° 31'	2° 44'	4° 19'	S 3
M 4	22 50 28	11° 1'21"	27° 53'	29° 4'	27° 22'	13° 24'	23° 22'	19° 5'	15° 15'	26° 53'	23° 22'	1° R 4'	0° 28'	2° 50'	4° 16'	M 4
T 5	22 54 25	11° 59'27"	10 ^h 33'	0 ^h 38'	28° 6'	14° 3'	23° 30'	19° 8'	15° 18'	26° 54'	23° 21'	1° 4'	0° 25'	2° 57'	4° 14'	T 5
W 6	22 58 21	12° 57'34"	23° 28'	2° 12'	28° 51'	14° 42'	23° 37'	19° 10'	15° 20'	26° 56'	23° 21'	1° 3'	0° 22'	3° 4'	4° 11'	W 6
T 7	23 2 18	13° 55'43"	6 ^h 38'	3° 44'	29° 36'	15° 21'	23° 44'	19° 13'	15° 22'	26° 58'	23° 21'	1° 2'	0° 19'	3° 10'	4° 9'	T 7
F 8	23 6 14	14° 53'54"	20° 3'	5° 14'	0 ^h 23'	16° 0'	23° 50'	19° 16'	15° 25'	26° 59'	23° 20'	1° 0'	0° 15'	3° 17'	4° 6'	F 8
S 9	23 10 11	15° 52'07"	3 ^h 44'	6° 44'	1° 10'	16° 40'	23° 57'	19° 18'	15° 27'	27° 1'	23° 20'	0° 58'	0° 12'	3° 24'	4° 4'	S 9
S 10	23 14 7	16° 50'21"	17° 29'	8° 12'	1° 59'	17° 19'	24° 3'	19° 21'	15° 29'	27° 3'	23° 20'	0° 57'	0° 9'	3° 30'	4° 1'	S 10
M 11	23 18 4	17° 48'36"	1 ^h 27'	9° 39'	2° 48'	17° 58'	24° 10'	19° 23'	15° 31'	27° 5'	23° 19'	0° 55'	0° 6'	3° 37'	3° 58'	M 11
T 12	23 22 0	18° 46'53"	15° 34'	11° 5'	3° 38'	18° 37'	24° 16'	19° 26'	15° 33'	27° 7'	23° 19'	0° D55'	0° 3'	3° 44'	3° 56'	T 12
W 13	23 25 57	19° 45'12"	29° 46'	12° 29'	4° 28'	19° 17'	24° 22'	19° 28'	15° 35'	27° 9'	23° 19'	0° 55'	29° 59'	3° 51'	3° 53'	W 13
T 14	23 29 53	20° 43'32"	14 ^h 3'	13° 53'	5° 19'	19° 56'	24° 28'	19° 30'	15° 37'	27° 10'	23° 18'	0° 56'	29° 56'	3° 57'	3° 51'	T 14
F 15	23 33 50	21° 41'54"	28° 19'	15° 14'	6° 11'	20° 36'	24° 33'	19° 32'	15° 39'	27° 12'	23° 18'	0° 57'	29° 53'	4° 4'	3° 48'	F 15
S 16	23 37 47	22° 40'17"	12 ^h 35'	16° 35'	7° 4'	21° 15'	24° 39'	19° 34'	15° 41'	27° 14'	23° 17'	0° 58'	29° 50'	4° 11'	3° 45'	S 16
S 17	23 41 43	23° 38'41"	26° 45'	17° 54'	7° 57'	21° 55'	24° 44'	19° 35'	15° 43'	27° 16'	23° 17'	0° R59'	29° 47'	4° 17'	3° 43'	S 17
M 18	23 45 40	24° 37'08"	10 ^h 46'	19° 11'	8° 51'	22° 34'	24° 49'	19° 37'	15° 45'	27° 18'	23° 16'	0° 59'	29° 44'	4° 24'	3° 40'	M 18
T 19	23 49 36	25° 35'36"	24° 35'	20° 27'	9° 45'	23° 14'	24° 54'	19° 38'	15° 46'	27° 20'	23° 16'	0° 57'	29° 40'	4° 31'	3° 37'	T 19
W 20	23 53 33	26° 34'06"	8 ^h 9'	21° 41'	10° 40'	23° 54'	24° 59'	19° 40'	15° 48'	27° 22'	23° 15'	0° 55'	29° 37'	4° 37'	3° 34'	W 20
T 21	23 57 29	27° 32'37"	21° 24'	22° 54'	11° 36'	24° 34'	25° 4'	19° 41'	15° 50'	27° 24'	23° 15'	0° 51'	29° 34'	4° 44'	3° 32'	T 21
F 22	0 1 26	28° 31'11"	4 ^h 22'	24° 5'	12° 32'	25° 13'	25° 8'	19° 42'	15° 51'	27° 26'	23° 14'	0° 47'	29° 31'	4° 51'	3° 29'	F 22
S 23	0 5 22	29° 29'48"	17° 0'	25° 14'	13° 28'	25° 53'	25° 13'	19° 43'	15° 53'	27° 28'	23° 14'	0° 42'	29° 28'	4° 58'	3° 26'	S 23
S 24	0 9 19	0 ^h 28'26"	29° 22'	26° 21'	14° 26'	26° 33'	25° 17'	19° 44'	15° 55'	27° 30'	23° 13'	0° 38'	29° 24'	5° 4'	3° 23'	S 24
M 25	0 13 16	1° 27'06"	11 ^h 30'	27° 26'	15° 23'	27° 13'	25° 21'	19° 45'	15° 56'	27° 32'	23° 12'	0° 35'	29° 21'	5° 11'	3° 21'	M 25
T 26	0 17 12	2° 25'49"	23° 28'	28° 29'	16° 21'	27° 53'	25° 25'	19° 46'	15° 58'	27° 34'	23° 12'	0° 33'	29° 18'	5° 18'	3° 18'	T 26
W 27	0 21 9	3° 24'34"	5 ^h 20'	29° 29'	17° 20'	28° 34'	25° 28'	19° 47'	15° 59'	27° 36'	23° 11'	0° D33'	29° 15'	5° 24'	3° 15'	W 27
T 28	0 25 5	4° 23'21"	17° 12'	0 ^h 27'	18° 19'	29° 14'	25° 32'	19° 47'	16° 0'	27° 38'	23° 10'	0° 34'	29° 12'	5° 31'	3° 12'	T 28
F 29	0 29 2	5° 22'11"	29° 8'	1° 22'	19° 18'	29° 54'	25° 35'	19° 48'	16° 2'	27° 40'	23° 10'	0° 35'	29° 9'	5° 38'	3° 10'	F 29
S 30	0 32 58	6 ^h 21'03"	11 ^h 12'	2 ^h 14'	20° 18'	0 ^h 34'	25° 38'	19° 48'	16° 3'	27° 42'	23 ^h 9'	0 ^h 37'	29° 5'	5° 44'	3° 7'	S 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
F 1	8n31	25n 6	3n23	2n52	0n37	16n34	4s35	4s10	0n24	22n37	0s38	21n20	1s38	22n55	0n21	8s46
S 2	8 10	21 49	2 28	2 7	0 30	16 33	4 28	4 25	0 24	22 37	0 38	21 20	1 38	22 55	0 21	8 47
S 3	7 48	17 33	1 25	1 21	0 23	16 32	4 22	4 41	0 23	22 38	0 38	21 20	1 38	22 55	0 21	8 48
M 4	7 26	12 29	0 18	0 37	0 16	16 30	4 15	4 57	0 22	22 38	0 38	21 20	1 39	22 54	0 21	8 48
T 5	7 4	6 48	0s52	0s 8	0 8	16 28	4 8	5 12	0 22	22 38	0 38	21 21	1 39	22 54	0 21	8 49
W 6	6 41	0 44	2 1	0 52	0 0	16 26	4 2	5 28	0 21	22 39	0 38	21 21	1 39	22 54	0 21	8 49
T 7	6 19	5s27	3 4	1 36	0s 7	16 23	3 55	5 44	0 20	22 39	0 38	21 21	1 39	22 54	0 21	8 50
F 8	5 57	11 31	3 59	2 19	0 15	16 20	3 48	5 59	0 20	22 39	0 38	21 21	1 39	22 53	0 21	8 51
S 9	5 34	17 7	4 41	3 2	0 23	16 17	3 41	6 15	0 19	22 40	0 38	21 21	1 39	22 53	0 21	8 51
S 10	5 12	21 56	5 7	3 44	0 31	16 13	3 35	6 31	0 18	22 40	0 38	21 21	1 39	22 53	0 21	8 52
M 11	4 49	25 35	5 15	4 26	0 39	16 9	3 28	6 46	0 18	22 40	0 38	21 21	1 39	22 53	0 21	8 53
T 12	4 26	27 42	5 5	5 7	0 48	16 4	3 21	7 2	0 17	22 40	0 38	21 21	1 39	22 53	0 21	8 53
W 13	4 3	28 2	4 36	5 47	0 56	15 59	3 15	7 17	0 17	22 41	0 38	21 21	1 40	22 52	0 21	8 54
T 14	3 40	26 30	3 51	6 27	1 4	15 53	3 8	7 33	0 16	22 41	0 38	21 21	1 40	22 52	0 22	8 55
F 15	3 17	23 16	2 50	7 7	1 12	15 47	3 1	7 48	0 15	22 41	0 38	21 21	1 40	22 52	0 22	8 56
S 16	2 54	18 37	1 40	7 45	1 20	15 41	2 54	8 3	0 15	22 41	0 38	21 21	1 40	22 52	0 22	8 56
S 17	2 31	12 57	0 23	8 23	1 29	15 34	2 48	8 19	0 14	22 42	0 38	21 21	1 40	22 52	0 22	8 57
M 18	2 8	6 42	0n54	9 0	1 37	15 27	2 41	8 34	0 13	22 42	0 38	21 21	1 40	22 51	0 22	8 58
T 19	1 45	0 13	2 6	9 36	1 45	15 19	2 35	8 49	0 13	22 42	0 38	21 21	1 40	22 51	0 22	8 58
W 20	1 22	6n 8	3 10	10 11	1 53	15 11	2 28	9 5	0 12	22 42	0 38	21 21	1 40	22 51	0 22	8 59
T 21	0 59	12 5	4 2	10 46	2 1	15 2	2 22	9 20	0 12	22 42	0 38	21 21	1 40	22 51	0 22	9 0
F 22	0 35	17 22	4 40	11 19	2 8	14 53	2 15	9 35	0 11	22 42	0 38	21 21	1 41	22 51	0 22	9 1
S 23	0 12	21 45	5 4	11 52	2 16	14 43	2 9	9 50	0 10	22 43	0 38	21 21	1 41	22 50	0 22	9 1
S 24	0s11	25 5	5 12	12 24	2 23	14 33	2 2	10 5	0 10	22 43	0 38	21 21	1 41	22 50	0 22	9 2
M 25	0 35	27 13	5 7	12 54	2 31	14 22	1 56	10 20	0 9	22 43	0 38	21 21	1 41	22 50	0 22	9 3
T 26	0 58	28 4	4 48	13 23	2 38	14 11	1 50	10 35	0 8	22 43	0 38	21 21	1 41	22 50	0 22	9 4
W 27	1 21	27 36	4 17	13 51	2 45	13 59	1 43	10 50	0 8	22 43	0 38	21 21	1 41	22 50	0 22	9 4
T 28	1 45	25 52	3 35	14 18	2 51	13 47	1 37	11 5	0 7	22 43	0 38	21 21	1 41	22 50	0 22	9 5
F 29	2 8	22 59	2 43	14 43	2 57	13 35	1 31	11 20	0 6	22 43	0 38	21 21	1 41	22 50	0 22	9 6
S 30	2s31	19n 4	1n44	15s 7	3s 3	13n22	1s25	11s34	0n 6	22n43	0s38	21n21	1s41	22n50	0n22	9s 7

Julian Day Number = 2495251.5, Delta T = 103.08 sec

Ecliptic obliquity = 23°25'34", Nutation = 0°00'09", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 26°24'44", Lahiri = 25°31'45"

ASTRODIENST EPHEMERIS for the year 2119
geocentric

OCTOBER 2119

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 36 55	7♏19'56	23♏31	3♏ 3	21♏19	1♏15	25♏41	19♏48	16♏ 4	27♏45	23♏ 8	0♏38	29♏ 2	5♏51	3♏ 4	S 1
M 2	0 40 51	8°18'52	6♏ 6	3°49	22°19	1°55	25°43	19°R48	16° 5	27°47	23♏ 8	0°R38	28°59	5°58	3♏ 1	M 2
T 3	0 44 48	9°17'50	19° 0	4°30	23°20	2°36	25°46	19°48	16° 6	27°49	23° 7	0°37	28°56	6° 4	2°59	T 3
W 4	0 48 45	10°16'51	2♏15	5° 7	24°22	3°16	25°48	19°48	16° 7	27°51	23° 6	0°33	28°53	6°11	2°56	W 4
T 5	0 52 41	11°15'53	15°49	5°40	25°24	3°57	25°50	19°48	16° 8	27°53	23° 5	0°28	28°50	6°18	2°53	T 5
F 6	0 56 38	12°14'57	29°41	6° 8	26°26	4°38	25°52	19°48	16° 9	27°55	23° 4	0°22	28°46	6°25	2°50	F 6
S 7	1 0 34	13°14'04	13♏46	6°31	27°28	5°18	25°54	19°47	16°10	27°58	23° 4	0°15	28°43	6°31	2°48	S 7
S 8	1 4 31	14°13'12	28° 0	6°48	28°31	5°59	25°55	19°47	16°11	28° 0	23° 3	0° 8	28°40	6°38	2°45	S 8
M 9	1 8 27	15°12'22	12♏18	6°58	29°34	6°40	25°56	19°46	16°12	28° 2	23° 2	0° 2	28°37	6°45	2°42	M 9
T 10	1 12 24	16°11'34	26°35	7°R 2	0♏38	7°21	25°58	19°45	16°12	28° 4	23° 1	29♏59	28°34	6°51	2°40	T 10
W11	1 16 20	17°10'48	10♏49	6°59	1°42	8° 2	25°58	19°44	16°13	28° 6	23° 0	29°D57	28°30	6°58	2°37	W11
T 12	1 20 17	18°10'03	24°57	6°48	2°46	8°43	25°59	19°44	16°13	28° 8	22°59	29°57	28°27	7° 5	2°34	T 12
F 13	1 24 14	19° 9'20	8♏57	6°30	3°50	9°24	26° 0	19°42	16°14	28°11	22°58	29°58	28°24	7°11	2°32	F 13
S 14	1 28 10	20° 8'39	22°50	6° 3	4°55	10° 5	26° 0	19°41	16°15	28°13	22°57	29°R59	28°21	7°18	2°29	S 14
S 15	1 32 7	21° 7'59	6♏34	5°27	6° 0	10°46	26°R 0	19°40	16°15	28°15	22°57	29°59	28°18	7°25	2°27	S 15
M16	1 36 3	22° 7'22	20° 9	4°44	7° 5	11°27	26° 0	19°38	16°15	28°17	22°56	29°57	28°15	7°32	2°24	M16
T 17	1 40 0	23° 6'46	3♏33	3°53	8°11	12° 9	26° 0	19°37	16°16	28°20	22°55	29°53	28°11	7°38	2°22	T 17
W18	1 43 56	24° 6'12	16°46	2°54	9°16	12°50	25°59	19°35	16°16	28°22	22°54	29°46	28° 8	7°45	2°19	W18
T 19	1 47 53	25° 5'40	29°46	1°50	10°22	13°32	25°58	19°34	16°16	28°24	22°53	29°37	28° 5	7°52	2°17	T 19
F 20	1 51 49	26° 5'10	12♏31	0°40	11°28	14°13	25°57	19°32	16°16	28°26	22°52	29°27	28° 2	7°58	2°14	F 20
S 21	1 55 46	27° 4'43	25° 3	29♏27	12°35	14°54	25°56	19°30	16°17	28°29	22°51	29°16	27°59	8° 5	2°12	S 21
S 22	1 59 43	28° 4'17	7♏20	28°13	13°42	15°36	25°55	19°28	16°17	28°31	22°50	29° 6	27°56	8°12	2° 9	S 22
M23	2 3 39	29° 3'54	19°26	26°59	14°49	16°18	25°54	19°26	16°R17	28°33	22°49	28°58	27°52	8°18	2° 7	M23
T 24	2 7 36	0♏ 3'33	1♏22	25°49	15°56	16°59	25°52	19°23	16°17	28°35	22°48	28°51	27°49	8°25	2° 5	T 24
W25	2 11 32	1° 3'14	13°13	24°43	17° 3	17°41	25°50	19°21	16°17	28°37	22°47	28°47	27°46	8°32	2° 2	W25
T 26	2 15 29	2° 2'57	25° 3	23°45	18°11	18°23	25°48	19°19	16°16	28°40	22°46	28°45	27°43	8°38	2° 0	T 26
F 27	2 19 25	3° 2'43	6♏56	22°56	19°19	19° 5	25°46	19°16	16°16	28°42	22°45	28°D45	27°40	8°45	1°58	F 27
S 28	2 23 22	4° 2'31	19° 0	22°16	20°27	19°47	25°43	19°13	16°16	28°44	22°44	28°46	27°36	8°52	1°55	S 28
S 29	2 27 18	5° 2'21	1♏18	21°47	21°35	20°29	25°40	19°11	16°16	28°46	22°43	28°R46	27°33	8°58	1°53	S 29
M30	2 31 15	6° 2'13	13°55	21°30	22°43	21°11	25°37	19° 8	16°15	28°49	22°41	28°45	27°30	9° 5	1°51	M30
T 31	2 35 12	7♏ 2'07	26♏56	21°D24	23♏52	21♏53	25♏34	19♏ 5	16♏15	28♏51	22♏40	28♏41	27♏27	9♏12	1♏49	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	decl lat
S 1	2s55	14n17	0n39	15s29	3s 9	13n 9	1s19	11s49	0n 5	22n43	0s38	21n21	1s41	22n49	0n22	9s 7
M 2	3 18	8 49	0s30	15 49	3 14	12 55	1 13	12 4	0 5	22 44	0 38	21 21	1 42	22 49	0 22	9 8
T 3	3 41	2 51	1 38	16 8	3 18	12 40	1 7	12 18	0 4	22 44	0 38	21 21	1 42	22 49	0 22	9 9
W 4	4 4	3s23	2 43	16 24	3 22	12 26	1 1	12 33	0 3	22 44	0 38	21 21	1 42	22 49	0 22	9 10
T 5	4 27	9 36	3 40	16 38	3 26	12 11	0 56	12 47	0 3	22 44	0 38	21 20	1 42	22 49	0 22	9 11
F 6	4 50	15 30	4 26	16 50	3 29	11 55	0 50	13 1	0 2	22 44	0 38	21 20	1 42	22 49	0 22	9 11
S 7	5 13	20 40	4 56	17 0	3 30	11 39	0 44	13 16	0 2	22 44	0 38	21 20	1 42	22 49	0 22	9 12
S 8	5 36	24 42	5 8	17 6	3 32	11 22	0 39	13 30	0 1	22 44	0 38	21 20	1 42	22 49	0 22	9 13
M 9	5 59	27 14	5 1	17 10	3 32	11 6	0 33	13 44	0 0	22 44	0 38	21 20	1 42	22 49	0 22	9 14
T 10	6 22	27 59	4 36	17 10	3 31	10 48	0 28	13 58	0s 0	22 44	0 38	21 20	1 42	22 49	0 22	9 14
W11	6 45	26 52	3 54	17 7	3 28	10 31	0 23	14 12	0 1	22 44	0 38	21 20	1 43	22 49	0 22	9 15
T 12	7 7	24 2	2 57	17 0	3 25	10 13	0 17	14 25	0 2	22 44	0 38	21 19	1 43	22 49	0 22	9 16
F 13	7 30	19 47	1 51	16 49	3 20	9 54	0 12	14 39	0 2	22 44	0 38	21 19	1 43	22 49	0 22	9 17
S 14	7 52	14 30	0 38	16 34	3 13	9 35	0 7	14 53	0 3	22 44	0 38	21 19	1 43	22 49	0 22	9 18
S 15	8 14	8 33	0n35	16 14	3 5	9 16	0 2	15 6	0 3	22 44	0 38	21 19	1 43	22 48	0 22	9 18
M16	8 37	2 16	1 46	15 50	2 44	8 57	0n 3	15 19	0 4	22 44	0 38	21 19	1 43	22 48	0 22	9 19
T 17	8 59	4n 1	2 50	15 21	2 42	8 37	0 7	15 33	0 5	22 44	0 38	21 18	1 43	22 48	0 22	9 20
W18	9 21	10 1	3 44	14 48	2 29	8 17	0 12	15 46	0 5	22 44	0 38	21 18	1 43	22 48	0 22	9 21
T 19	9 42	15 30	4 24	14 11	2 13	7 56	0 17	15 59	0 6	22 44	0 38	21 18	1 43	22 48	0 22	9 22
F 20	10 4	20 12	4 51	13 30	1 56	7 35	0 21	16 12	0 6	22 44	0 38	21 18	1 43	22 48	0 23	9 22
S 21	10 26	23 55	5 3	12 47	1 37	7 14	0 26	16 25	0 7	22 44	0 38	21 18	1 43	22 48	0 23	9 23
S 22	10 47	26 28	5 1	12 3	1 18	6 52	0 30	16 37	0 8	22 44	0 38	21 17	1 43	22 48	0 23	9 24
M23	11 8	27 45	4 45	11 17	0 57	6 30	0 34	16 50	0 8	22 44	0 38	21 17	1 44	22 49	0 23	9 25
T 24	11 29	27 42	4 17	10 32	0 37	6 8	0 39	17 3	0 9	22 44	0 38	21 17	1 44	22 49	0 23	9 26
W25	11 50	26 23	3 38	9 49	0 16	5 46	0 43	17 15	0 10	22 44	0 38	21 17	1 44	22 49	0 23	9 26
T 26	12 11	23 54	2 50	9 9	0n 4	5 23	0 47	17 27	0 10	22 44	0 38	21 16	1 44	22 49	0 23	9 27
F 27	12 31	20 22	1 54	8 33	0 23	5 0	0 50	17 39	0 11	22 44	0 38	21 16	1 44	22 49	0 23	9 28
S 28	12 52	15 57	0 52	8 2	0 41	4 37	0 54	17 51	0 11	22 44	0 38	21 16	1 44	22 49	0 23	9 29
S 29	13 12	10 48	0s13	7 36	0 58	4 13	0 58	18 3	0 12	22 44	0 38	21 15	1 44	22 49	0 23	9 29
M30	13 32	5 6	1 20	7 15	1 13	3 50	1 1	18 15	0 13	22 43	0 38	21 15	1 44	22 49	0 23	9 30
T 31	13s51	0s59	2s24	7s 1	1n26	3n26	1n 5	18s26	0s13	22n43	0s38	21n15	1s44	22n49	0n23	9s31

Julian Day Number = 2495281.5, Delta T = 103.13 sec
Ecliptic obliquity = 23°25'34", Nutation = 0°00'08", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 26°24'48", Lahiri = 25°31'49"

ASTRODIENST EPHEMERIS for the year 2119

geocentric

NOVEMBER 2119

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	2 39 8	8♈ 2'03	10♏23	21♈30	25♈1	22♈35	25°R31	19°R 2	16°R14	28♈53	22°R39	28°R36	27♈24	9♈19	1°R47	W 1
T 2	2 43 5	9° 2'02	24°15	21°46	26°10	23°17	25♈27	18♈59	16♈14	28°55	22♈38	28°27	27°21	9°25	1°Y45	T 2
F 3	2 47 1	10° 2'02	8♈30	22°12	27°19	24° 0	25°24	18°56	16°13	28°58	22°37	28°17	27°17	9°32	1°43	F 3
S 4	2 50 58	11° 2'05	23° 2	22°48	28°28	24°42	25°20	18°52	16°13	29° 0	22°36	28° 5	27°14	9°39	1°41	S 4
S 5	2 54 54	12° 2'09	7♈44	23°32	29°37	25°24	25°16	18°49	16°12	29° 2	22°35	27°54	27°11	9°45	1°39	S 5
M 6	2 58 51	13° 2'15	22°28	24°24	0♈47	26° 7	25°12	18°45	16°11	29° 4	22°34	27°45	27° 8	9°52	1°37	M 6
T 7	3 2 47	14° 2'23	7♈7	25°22	1°57	26°49	25° 7	18°42	16°11	29° 6	22°33	27°38	27° 5	9°59	1°35	T 7
W 8	3 6 44	15° 2'32	21°35	26°27	3° 7	27°32	25° 3	18°38	16°10	29° 9	22°32	27°34	27° 2	10° 5	1°33	W 8
T 9	3 10 41	16° 2'43	5♈47	27°36	4°17	28°15	24°58	18°35	16° 9	29°11	22°31	27°32	26°58	10°12	1°31	T 9
F 10	3 14 37	17° 2'55	19°44	28°50	5°27	28°57	24°53	18°31	16° 8	29°13	22°29	27°32	26°55	10°19	1°30	F 10
S 11	3 18 34	18° 3'09	3♈26	0♈8	6°37	29°40	24°48	18°27	16° 7	29°15	22°28	27°32	26°52	10°25	1°28	S 11
S 12	3 22 30	19° 3'24	16°53	1°28	7°48	0♈23	24°43	18°23	16° 6	29°17	22°27	27°30	26°49	10°32	1°26	S 12
M13	3 26 27	20° 3'40	0♈6	2°52	8°58	1° 6	24°37	18°19	16° 5	29°19	22°26	27°27	26°46	10°39	1°25	M13
T 14	3 30 23	21° 3'58	13° 8	4°18	10° 9	1°49	24°32	18°15	16° 4	29°21	22°25	27°21	26°42	10°45	1°23	T 14
W15	3 34 20	22° 4'18	25°59	5°46	11°20	2°32	24°26	18°11	16° 3	29°23	22°24	27°12	26°39	10°52	1°22	W15
T 16	3 38 16	23° 4'39	8♈40	7°15	12°31	3°15	24°20	18° 7	16° 1	29°26	22°23	27° 0	26°36	10°59	1°20	T 16
F 17	3 42 13	24° 5'02	21°10	8°45	13°42	3°58	24°14	18° 3	16° 0	29°28	22°22	26°46	26°33	11° 6	1°19	F 17
S 18	3 46 10	25° 5'26	3♈29	10°17	14°53	4°41	24° 8	17°58	15°59	29°30	22°20	26°31	26°30	11°12	1°18	S 18
S 19	3 50 6	26° 5'52	15°39	11°49	16° 5	5°24	24° 1	17°54	15°57	29°32	22°19	26°17	26°27	11°19	1°16	S 19
M20	3 54 3	27° 6'20	27°39	13°22	17°16	6° 7	23°55	17°50	15°56	29°34	22°18	26° 5	26°23	11°26	1°15	M20
T 21	3 57 59	28° 6'49	9♈32	14°56	18°28	6°51	23°48	17°45	15°54	29°36	22°17	25°55	26°20	11°32	1°14	T 21
W22	4 1 56	29° 7'20	21°21	16°30	19°39	7°34	23°41	17°41	15°53	29°38	22°16	25°49	26°17	11°39	1°13	W22
T 23	4 5 52	0♈753	3♈9	18° 4	20°51	8°17	23°35	17°36	15°51	29°40	22°15	25°45	26°14	11°46	1°11	T 23
F 24	4 9 49	1° 8'28	15° 0	19°38	22° 3	9° 1	23°28	17°31	15°50	29°42	22°14	25°43	26°11	11°52	1°10	F 24
S 25	4 13 45	2° 9'04	27° 0	21°13	23°15	9°44	23°20	17°27	15°48	29°44	22°13	25°43	26° 7	11°59	1° 9	S 25
S 26	4 17 42	3° 9'42	9♈15	22°48	24°27	10°28	23°13	17°22	15°47	29°46	22°12	25°43	26° 4	12° 6	1° 8	S 26
M27	4 21 39	4°10'21	21°49	24°22	25°39	11°12	23° 6	17°17	15°45	29°48	22°10	25°42	26° 1	12°12	1° 8	M27
T 28	4 25 35	5°11'03	4♈47	25°57	26°52	11°55	22°59	17°13	15°43	29°50	22° 9	25°39	25°58	12°19	1° 7	T 28
W29	4 29 32	6°11'45	18°14	27°32	28° 4	12°39	22°51	17° 8	15°41	29°52	22° 8	25°33	25°55	12°26	1° 6	W29
T 30	4 33 28	7♈12'30	2♈10	29♈6	29♈17	13♈23	22♈43	17♈3	15♈39	29♈53	22♈7	25♈25	25♈52	12♈32	1°Y 5	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	14s11	7s12	3s22	6s52	1n38	3n 2	1n 8	18s38	0s14	22n43	0s38	21n15	1s44	22n49	0n23	9s32	1n39	3n43	15s11	11s57	12s22	26n55	3n44	3n18					
T 2	14 30	13 16	4 10	6 49	1 47	2 37	1 12	18 49	0 14	22 43	0 38	21 14	1 44	22 49	0 23	9 33	1 39	3 43	15 11	12 0	12 23	26 54	3 43	3 18					
F 3	14 49	18 48	4 44	6 51	1 55	2 13	1 15	19 0	0 15	22 43	0 38	21 14	1 44	22 49	0 23	9 33	1 39	3 42	15 11	12 4	12 24	26 53	3 42	3 18					
S 4	15 8	23 21	5 0	6 59	2 2	1 48	1 18	19 11	0 15	22 43	0 38	21 14	1 44	22 49	0 23	9 34	1 39	3 42	15 11	12 8	12 25	26 52	3 41	3 17					
S 5	15 26	26 28	4 57	7 10	2 7	1 23	1 21	19 22	0 16	22 43	0 38	21 13	1 44	22 49	0 23	9 35	1 39	3 42	15 11	12 12	12 27	26 51	3 40	3 17					
M 6	15 45	27 46	4 34	7 26	2 10	0 58	1 24	19 32	0 17	22 43	0 38	21 13	1 44	22 50	0 23	9 36	1 39	3 41	15 11	12 15	12 28	26 50	3 39	3 17					
T 7	16 3	27 7	3 53	7 45	2 12	0 33	1 26	19 43	0 17	22 43	0 38	21 13	1 44	22 50	0 23	9 36	1 39	3 41	15 11	12 17	12 29	26 49	3 38	3 17					
W 8	16 20	24 37	2 58	8 7	2 13	0 7	1 29	19 53	0 18	22 43	0 37	21 12	1 44	22 50	0 23	9 37	1 39	3 41	15 11	12 19	12 30	26 48	3 37	3 17					
T 9	16 38	20 38	1 52	8 32	2 13	0s18	1 32	20 3	0 18	22 42	0 37	21 12	1 45	22 50	0 23	9 38	1 39	3 41	15 11	12 19	12 31	26 47	3 37	3 16					
F 10	16 55	15 32	0 41	8 59	2 12	0 44	1 34	20 13	0 19	22 42	0 37	21 12	1 45	22 50	0 23	9 39	1 39	3 40	15 11	12 19	12 32	26 45	3 36	3 16					
S 11	17 12	9 46	0n31	9 28	2 11	1 9	1 36	20 23	0 20	22 42	0 37	21 11	1 45	22 50	0 23	9 39	1 39	3 40	15 11	12 19	12 33	26 44	3 35	3 16					
S 12	17 29	3 38	1 40	9 59	2 8	1 35	1 39	20 33	0 20	22 42	0 37	21 11	1 45	22 50	0 23	9 40	1 39	3 40	15 11	12 20	12 34	26 43	3 34	3 16					
M13	17 45	2n32	2 43	10 30	2 5	2 1	1 41	20 42	0 21	22 42	0 37	21 11	1 45	22 51	0 23	9 41	1 39	3 40	15 11	12 21	12 35	26 42	3 33	3 16					
T 14	18 1	8 30	3 36	11 3	2 1	2 27	1 43	20 52	0 21	22 42	0 37	21 10	1 45	22 51	0 23	9 41	1 39	3 39	15 11	12 23	12 36	26 41	3 32	3 15					
W15	18 17	14 1	4 17	11 36	1 56	2 53	1 45	21 1	0 22	22 41	0 37	21 10	1 45	22 51	0 23	9 42	1 39	3 39	15 11	12 26	12 37	26 40	3 32	3 15					
T 16	18 32	18 52	4 45	12 10	1 52	3 19	1 46	21 10	0 22	22 41	0 37	21 9	1 45	22 51	0 23	9 43	1 39	3 39	15 11	12 30	12 38	26 38	3 31	3 15					
F 17	18 47	22 50	4 58	12 44	1 46	3 45	1 48	21 18	0 23	22 41	0 37	21 9	1 45	22 51	0 23	9 44	1 39	3 39	15 11	12 35	12 40	26 37	3 30	3 15					
S 18	19 2	25 42	4 57	13 18	1 41	4 11	1 50	21 27	0 24	22 41	0 37	21 9	1 45	22 51	0 23	9 44	1 39	3 38	15 11	12 40	12 41	26 36	3 29	3 15					
S 19	19 16	27 20	4 43	13 52	1 35	4 37	1 51	21 35	0 24	22 41	0 37	21 8	1 45	22 52	0 23	9 45	1 39	3 38	15 11	12 45	12 42	26 35	3 29	3 14					
M20	19 30	27 40	4 16	14 26	1 29	5 3	1 53	21 43	0 25	22 40	0 37	21 8	1 45	22 52	0 23	9 46	1 39	3 38	15 11	12 49	12 43	26 34	3 28	3 14					
T 21	19 44	26 42	3 38	14 59	1 23	5 29	1 54	21 51	0 25	22 40	0 37	21 8	1 45	22 52	0 23	9 46	1 39	3 38	15 11	12 52	12 44	26 32	3 27	3 14					
W22	19 57	24 33	2 51	15 33	1 16	5 55	1 55	21 59	0 26	22 40	0 37	21 7	1 45	22 52	0 23	9 47	1 39	3 37	15 11	12 55	12 45	26 31	3 27	3 14					
T 23	20 10	21 20	1 56	16 5	1 9	6 20	1 56	22 7	0 26	22 40	0 37	21 7	1 45	22 52	0 23	9 48	1 39	3 37	15 11	12 56	12 46	26 30	3 26	3 13					
F 24	20 23	17 13	0 56	16 38	1 3	6 46	1 57	22 14	0 27	22 39	0 37	21 6	1 45	22 53	0 23	9 48	1 39	3 37	15 11	12 56	12 47	26 29	3 25	3 13					
S 25	20 35	12 24	0s 7	17 9	0 56	7 12	1 58	22 21	0 28	22 39	0 36	21 6	1 45	22 53	0 24	9 49	1 40	3 37	15 10	12 57	12 48	26 28	3 25	3 13					
S 26	20 47	7 0	1 11	17 40	0 49	7 38	1 59	22 28	0 28	22 39	0 36	21 6	1 44	22 53	0 24	9 50	1 40	3 37	15 10	12 57	12 49	26 26	3 24	3 13					
M27	20 58	1 12	2 13	18 11	0 42	8 3	2 0	22 35	0 29	22 39	0 36	21 5	1 44	22 53	0 24	9 50	1 40	3 37	15 10	12 57	12 50	26 25	3 23	3 13					
T 28	21 9	4s49	3 11	18 40	0 35	8 29	2 0	22 41	0 29	22 38	0 36	21 5	1 44	22 53	0 24	9 51	1 40	3 36	15 10	12 58	12 51	26 24	3 23	3 12					
W29	21 20	10 51	4 0	19 9	0 38	8 54	2 1	22 48	0 30	22 38	0 36	21 4	1 44	22 54	0 24	9 52	1 40	3 36	15 10	13 0	12 52	26 23	3 22	3 12					
T 30	21s30	16s33	4s37	19s36	0n21	9s19	2n 1	22s54	0s30	22n38	0s36	21n 4	1s44	22n54	0n24	9s52	1n40	3n36	15s10	13s 3	12s54	26n21	3n22	3n12					

ASTRODIENST EPHEMERIS for the year 2119

geocentric

DECEMBER 2119

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	4 37 25	8♂13'16	16♂35	0♂41	0♂29	14♂7	22°R36	16°R58	15°R38	29♂55	22°R 6	25°R14	25♂48	12♂39	1°R 4	F 1
S 2	4 41 21	9°14'03	1♂22	2°15	1°42	14°51	22II28	16II53	15♂36	29°57	22♂ 5	25≈ 3	25°45	12°46	1°Y 4	S 2
S 3	4 45 18	10°14'52	16°25	3°50	2°54	15°35	22°20	16°48	15°34	29°59	22° 4	24°51	25°42	12°52	1° 3	S 3
M 4	4 49 14	11°15'42	1♂33	5°24	4° 7	16°19	22°12	16°44	15°32	0♂1	22° 3	24°42	25°39	12°59	1° 3	M 4
T 5	4 53 11	12°16'33	16°36	6°59	5°20	17° 3	22° 4	16°39	15°30	0° 3	22° 2	24°34	25°36	13° 6	1° 2	T 5
W 6	4 57 8	13°17'25	1♂24	8°33	6°33	17°47	21°56	16°34	15°28	0° 4	22° 1	24°30	25°33	13°13	1° 2	W 6
T 7	5 1 4	14°18'18	15°54	10° 7	7°46	18°31	21°48	16°29	15°26	0° 6	22° 0	24°28	25°29	13°19	1° 2	T 7
F 8	5 5 1	15°19'11	0♂0	11°41	8°59	19°15	21°40	16°24	15°24	0° 8	21°59	24°D28	25°26	13°26	1° 1	F 8
S 9	5 8 57	16°20'05	13°44	13°16	10°12	20° 0	21°32	16°19	15°21	0° 9	21°58	24°R28	25°23	13°33	1° 1	S 9
S 10	5 12 54	17°21'00	27° 7	14°50	11°25	20°44	21°24	16°14	15°19	0°11	21°57	24°28	25°20	13°39	1° 1	S 10
M11	5 16 50	18°21'56	10°Y11	16°24	12°39	21°28	21°16	16° 9	15°17	0°13	21°56	24°25	25°17	13°46	1° 1	M11
T 12	5 20 47	19°22'52	22°59	17°58	13°52	22°13	21° 8	16° 4	15°15	0°14	21°55	24°21	25°13	13°53	1° 1	T 12
W13	5 24 43	20°23'49	5♂34	19°32	15° 5	22°57	21° 0	15°59	15°13	0°16	21°54	24°13	25°10	13°59	1°D 1	W13
T 14	5 28 40	21°24'47	17°58	21° 7	16°19	23°42	20°51	15°54	15°10	0°18	21°53	24° 3	25° 7	14° 6	1° 1	T 14
F 15	5 32 37	22°25'45	0II13	22°41	17°32	24°26	20°43	15°49	15° 8	0°19	21°52	23°52	25° 4	14°13	1° 1	F 15
S 16	5 36 33	23°26'44	12°20	24°15	18°46	25°11	20°35	15°45	15° 6	0°21	21°51	23°39	25° 1	14°19	1° 1	S 16
S 17	5 40 30	24°27'44	24°20	25°50	19°59	25°56	20°27	15°40	15° 3	0°22	21°50	23°28	24°58	14°26	1° 1	S 17
M18	5 44 26	25°28'45	6♂15	27°24	21°13	26°40	20°19	15°35	15° 1	0°24	21°49	23°17	24°54	14°33	1° 1	M18
T 19	5 48 23	26°29'47	18° 5	28°59	22°26	27°25	20°11	15°30	14°58	0°25	21°48	23° 9	24°51	14°39	1° 2	T 19
W 20	5 52 19	27°30'49	29°53	0♂34	23°40	28°10	20° 3	15°25	14°56	0°26	21°47	23° 3	24°48	14°46	1° 2	W 20
T 21	5 56 16	28°31'52	11♂41	2° 9	24°54	28°55	19°55	15°21	14°54	0°28	21°46	23° 1	24°45	14°53	1° 2	T 21
F 22	6 0 13	29°32'55	23°34	3°44	26° 8	29°40	19°47	15°16	14°51	0°29	21°46	23°D 0	24°42	14°59	1° 3	F 22
S 23	6 4 9	0♂34'00	5♂34	5°20	27°22	0♂25	19°39	15°11	14°49	0°31	21°45	23° 0	24°39	15° 6	1° 3	S 23
S 24	6 8 6	1°35'05	17°46	6°55	28°36	1°10	19°31	15° 7	14°46	0°32	21°44	23° 2	24°35	15°13	1° 4	S 24
M25	6 12 2	2°36'11	0♂17	8°31	29°50	1°55	19°23	15° 2	14°44	0°33	21°43	23°R 2	24°32	15°19	1° 5	M25
T 26	6 15 59	3°37'18	13° 9	10° 7	1♂4	2°40	19°15	14°57	14°41	0°34	21°42	23° 2	24°29	15°26	1° 5	T 26
W27	6 19 55	4°38'25	26°28	11°43	2°18	3°25	19° 8	14°53	14°39	0°36	21°41	23° 0	24°26	15°33	1° 6	W27
T 28	6 23 52	5°39'33	10♂16	13°19	3°32	4°10	19° 0	14°48	14°36	0°37	21°41	22°55	24°23	15°39	1° 7	T 28
F 29	6 27 48	6°40'42	24°34	14°55	4°46	4°55	18°53	14°44	14°33	0°38	21°40	22°49	24°19	15°46	1° 8	F 29
S 30	6 31 45	7°41'51	9♂19	16°32	6° 0	5°41	18°45	14°40	14°31	0°39	21°39	22°42	24°16	15°53	1° 9	S 30
S 31	6 35 42	8♂43'01	24♂24	18♂ 9	7♂14	6♂26	18II38	14II35	14♂28	0♂40	21♂38	22≈35	24≈13	15♂59	1°Y10	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	21s40	21s32	4s58	20s 3	0n14	9s44	2n 1	23s 0	0s31	22n37	0s36	21n 3	1s44	22n54	0n24	9s53	1n40	3n36	15s10	13s 6	12s55	26n20	3n21	3n12			
S 2	21 49	25 18	4 59	20 29	0 7	10 9	2 1	23 5	0 31	22 37	0 36	21 3	1 44	22 54	0 24	9 53	1 40	3 36	15 10	13 10	12 56	26 19	3 21	3 11			
S 3	21 58	27 23	4 40	20 54	0 0	10 34	2 2	23 11	0 32	22 37	0 36	21 3	1 44	22 55	0 24	9 54	1 40	3 36	15 10	13 14	12 57	26 17	3 20	3 11			
M 4	22 7	27 27	4 2	21 18	0s 7	10 59	2 2	23 16	0 33	22 36	0 36	21 2	1 44	22 55	0 24	9 55	1 40	3 36	15 9	13 17	12 58	26 16	3 20	3 11			
T 5	22 15	25 29	3 6	21 41	0 13	11 23	2 1	23 21	0 33	22 36	0 35	21 2	1 44	22 55	0 24	9 55	1 40	3 35	15 9	13 19	12 59	26 15	3 20	3 11			
W 6	22 23	21 46	1 59	22 3	0 20	11 47	2 1	23 25	0 34	22 36	0 35	21 1	1 44	22 55	0 24	9 56	1 40	3 35	15 9	13 21	13 0	26 13	3 19	3 10			
T 7	22 30	16 47	0 45	22 24	0 27	12 11	2 1	23 30	0 34	22 35	0 35	21 1	1 44	22 56	0 24	9 56	1 40	3 35	15 9	13 22	13 1	26 12	3 19	3 10			
F 8	22 37	11 0	0n29	22 43	0 33	12 35	2 1	23 34	0 35	22 35	0 35	21 1	1 44	22 56	0 24	9 57	1 40	3 35	15 9	13 22	13 2	26 11	3 19	3 10			
S 9	22 43	4 51	1 41	23 2	0 40	12 58	2 0	23 38	0 35	22 34	0 35	21 0	1 44	22 56	0 24	9 58	1 40	3 35	15 9	13 22	13 3	26 9	3 18	3 10			
S 10	22 49	1n22	2 44	23 19	0 46	13 21	2 0	23 42	0 36	22 34	0 35	21 0	1 44	22 56	0 24	9 58	1 40	3 35	15 9	13 22	13 4	26 8	3 18	3 9			
M 11	22 55	7 22	3 38	23 35	0 52	13 44	1 59	23 45	0 36	22 34	0 35	20 59	1 44	22 57	0 24	9 59	1 40	3 35	15 8	13 22	13 5	26 7	3 18	3 9			
T 12	23 0	12 57	4 19	23 50	0 58	14 6	1 58	23 49	0 37	22 33	0 35	20 59	1 43	22 57	0 24	9 59	1 40	3 35	15 8	13 24	13 6	26 5	3 17	3 9			
W 13	23 5	17 53	4 47	24 4	1 4	14 29	1 58	23 52	0 37	22 33	0 34	20 59	1 43	22 57	0 24	10 0	1 40	3 35	15 8	13 26	13 7	26 4	3 17	3 9			
T 14	23 9	22 0	5 1	24 17	1 9	14 51	1 57	23 54	0 38	22 32	0 34	20 58	1 43	22 58	0 24	10 0	1 40	3 35	15 8	13 30	13 8	26 3	3 17	3 8			
F 15	23 13	25 5	5 1	24 28	1 15	15 12	1 56	23 57	0 38	22 32	0 34	20 58	1 43	22 58	0 24	10 1	1 40	3 35	15 8	13 34	13 10	26 1	3 17	3 8			
S 16	23 16	27 0	4 47	24 38	1 20	15 33	1 55	23 59	0 39	22 32	0 34	20 57	1 43	22 58	0 24	10 1	1 40	3 35	15 8	13 38	13 11	26 0	3 17	3 8			
S 17	23 19	27 39	4 21	24 47	1 25	15 54	1 54	24 1	0 39	22 31	0 34	20 57	1 43	22 58	0 24	10 2	1 40	3 35	15 7	13 42	13 12	25 58	3 17	3 8			
M 18	23 21	27 0	3 43	24 54	1 30	16 15	1 52	24 3	0 40	22 31	0 34	20 57	1 43	22 59	0 24	10 2	1 40	3 34	15 7	13 45	13 13	25 57	3 16	3 8			
T 19	23 23	25 6	2 56	25 0	1 35	16 35	1 51	24 4	0 40	22 30	0 34	20 56	1 43	22 59	0 24	10 3	1 41	3 34	15 7	13 48	13 14	25 56	3 16	3 7			
W 20	23 24	22 8	2 1	25 5	1 39	16 54	1 50	24 6	0 41	22 30	0 33	20 56	1 43	22 59	0 24	10 3	1 41	3 34	15 7	13 49	13 15	25 54	3 16	3 7			
T 21	23 25	18 14	1 0	25 8	1 43	17 14	1 48	24 7	0 41	22 29	0 33	20 55	1 42	23 0	0 24	10 3	1 41	3 34	15 7	13 50	13 16	25 53	3 16	3 7			
F 22	23 25	13 37	0s 3	25 10	1 47	17 33	1 47	24 7	0 42	22 29	0 33	20 55	1 42	23 0	0 24	10 4	1 41	3 34	15 6	13 51	13 17	25 51	3 16	3 7			
S 23	23 25	8 25	1 7	25 10	1 51	17 51	1 45	24 8	0 42	22 29	0 33	20 55	1 42	23 0	0 24	10 4	1 41	3 34	15 6	13 50	13 18	25 50	3 16	3 6			
S 24	23 25	2 50	2 10	25 9	1 54	18 9	1 44	24 8	0 43	22 28	0 33	20 54	1 42	23 0	0 24	10 5	1 41	3 35	15 6	13 50	13 19	25 48	3 16	3 6			
M 25	23 24	2s58	3 7	25 6	1 58	18 26	1 42	24 8	0 43	22 28	0 33	20 54	1 42	23 1	0 24	10 5	1 41	3 35	15 6	13 50	13 20	25 47	3 16	3 6			
T 26	23 23	8 50	3 57	25 3	2 0	18 43	1 40	24 8	0 44	22 27	0 32	20 54	1 42	23 1	0 24	10 5	1 41	3 35	15 5	13 50	13 21	25 45	3 16	3 6			
W 27	23 21	14 30	4 36	24 57	2 3	19 0	1 38	24 7	0 44	22 27	0 32	20 53	1 42	23 1	0 24	10 6	1 41	3 35	15 5	13 51	13 22	25 44	3 16	3 5			
T 28	23 18	19 39	5 1	24 50	2 5	19 16	1 37	24 6	0 45	22 26	0 32	20 53	1 41	23 2	0 24	10 6	1 41	3 35	15 5	13 52	13 23	25 43	3 17	3 5			
F 29	23 15	23 53	5 8	24 42	2 7	19 31	1 35	24 5	0 45	22 26	0 32	20 53	1 41	23 2	0 24	10 7	1 41	3 35	15 5	13 54	13 24	25 41	3 17	3 5			
S 30	23 12	26 42	4 56	24 32	2 8	19 46	1 33	24 4	0 46	22 25	0 32	20 52	1 41	23 2	0 24	10 7	1 41	3 35	15 4	13 56	13 25	25 40	3 17	3 5			
S 31	23s 8	27s41	4s23	24s20	2s 9	20s 1	1n31	24s 2	0s46	22n25	0s32	20n52	1s41	23n 2	0n24	10s 7	1n41	3n35	15s 4	13s59	13s26	25n38	3n17	3n			