



Astrodienst Ephemeris Tables for the year 2019

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 2019
geocentric

JANUARY 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 41 26	10°15'24	12°12'22	23°15'51	23°13'30	29°15'56	11°14'46	11°13'23	28°13'37	14°14'5	20°13'36	26°15'52	27°13'34	16°15'22	28°14'8	T 1
W 2	6 45 22	11°16'34	25°15'15	25°19'19	24°29'29	0°13'36	11°59'11	11°30'30	28°13'37	14°14'6	20°13'38	26°15'50	27°13'31	16°15'28	28°14'9	W 2
T 3	6 49 19	12°17'45	7°15'53	26°48'26	25°28'28	1°17'17	12°11'11	11°37'37	28°13'36	14°14'7	20°14'0	26°15'48	27°12'28	16°15'35	28°14'11	T 3
F 4	6 53 15	13°18'55	20°20'20	28°17'17	26°28'28	1°57'57	12°24'24	11°44'44	28°13'36	14°14'9	20°14'2	26°15'46	27°12'25	16°15'42	28°14'12	F 4
S 5	6 57 12	14°20'06	2°13'35	29°46'46	27°29'29	2°38'38	12°36'36	11°51'51	28°13'36	14°14'10	20°14'4	26°15'44	27°12'21	16°15'48	28°14'13	S 5
S 6	7 1 8	15°21'17	14°41'41	1°13'16	28°30'30	3°18'18	12°49'49	11°58'58	28°13'36	14°14'11	20°14'6	26°15'43	27°12'18	16°15'55	28°14'15	S 6
M 7	7 5 5	16°22'28	26°39'39	2°47'47	29°31'31	3°58'58	13°1'1	12°5'5	28°13'36	14°14'13	20°14'8	26°15'43	27°12'15	17°1'2	28°14'16	M 7
T 8	7 9 2	17°23'39	8°13'31	4°18'18	0°13'33	4°39'39	13°13'13	12°12'12	28°13'36	14°14'14	20°15'0	26°15'43	27°12'12	17°1'8	28°14'18	T 8
W 9	7 12 58	18°24'49	20°19'19	5°49'49	1°35'35	5°19'19	13°25'25	12°19'19	28°13'36	14°14'16	20°15'2	26°15'44	27°12'9	17°1'15	28°14'19	W 9
T 10	7 16 55	19°25'59	2°13'6	7°21'21	2°37'37	6°0'0	13°37'37	12°26'26	28°13'36	14°14'17	20°15'4	26°15'45	27°12'5	17°1'22	28°14'21	T 10
F 11	7 20 51	20°27'09	13°55'55	8°53'53	3°40'40	6°41'41	13°50'50	12°33'33	28°13'36	14°14'19	20°15'6	26°15'45	27°12'2	17°1'28	28°14'23	F 11
S 12	7 24 48	21°28'18	25°51'51	10°26'26	4°43'43	7°21'21	14°2'2	12°40'40	28°13'37	14°14'20	20°15'8	26°15'46	27°12'59	17°1'35	28°14'25	S 12
S 13	7 28 44	22°29'26	7°15'56	11°59'59	5°46'46	8°2'2	14°14'14	12°47'47	28°13'37	14°14'22	21°0'0	26°15'46	27°12'56	17°1'42	28°14'27	S 13
M14	7 32 41	23°30'34	20°16'16	13°32'32	6°50'50	8°42'42	14°25'25	12°55'55	28°13'37	14°14'23	21°0'2	26°15'47	27°12'53	17°1'48	28°14'28	M14
T 15	7 36 37	24°31'42	2°15'55	15°6'6	7°54'54	9°23'23	14°37'37	13°2'2	28°13'38	14°14'25	21°0'4	26°15'47	27°12'50	17°1'55	28°14'30	T 15
W16	7 40 34	25°32'48	15°57'57	16°41'41	8°58'58	10°3'3	14°49'49	13°9'9	28°13'38	14°14'26	21°0'6	26°15'46	27°12'46	18°2'2	28°14'32	W16
T 17	7 44 31	26°33'54	29°26'26	18°16'16	10°3'3	10°44'44	15°1'1	13°15'15	28°13'39	14°14'28	21°0'8	26°15'46	27°12'43	18°2'8	28°14'34	T 17
F 18	7 48 27	27°34'59	13°11'21	19°51'51	11°8'8	11°25'25	15°12'12	13°22'22	28°13'39	14°14'30	21°10'0	26°15'46	27°12'40	18°2'15	28°14'36	F 18
S 19	7 52 24	28°36'04	27°44'44	21°28'28	12°13'13	12°5'5	15°24'24	13°29'29	28°14'0	14°14'32	21°12'2	26°15'47	27°12'37	18°2'22	28°14'38	S 19
S 20	7 56 20	29°37'07	12°12'29	23°4'4	13°18'18	12°46'46	15°35'35	13°36'36	28°14'1	14°14'33	21°14'4	26°15'47	27°12'34	18°2'28	28°14'41	S 20
M21	8 0 17	0°13'38'10	27°32'32	24°41'41	14°24'24	13°27'27	15°47'47	13°43'43	28°14'1	14°14'35	21°16'6	26°15'47	27°12'31	18°2'35	28°14'43	M21
T 22	8 4 13	1°39'13	12°12'43	26°19'19	15°29'29	14°7'7	15°58'58	13°50'50	28°14'2	14°14'37	21°18'8	26°15'47	27°12'27	18°2'42	28°14'45	T 22
W23	8 8 10	2°40'14	27°53'53	27°57'57	16°36'36	14°48'48	16°9'9	13°57'57	28°14'3	14°14'39	21°20'0	26°15'46	27°12'24	18°2'48	28°14'47	W23
T 24	8 12 6	3°41'16	12°12'52	29°36'36	17°42'42	15°29'29	16°20'20	14°4'4	28°14'4	14°14'40	21°22'2	26°15'46	27°12'21	18°2'55	28°14'49	T 24
F 25	8 16 3	4°42'16	27°34'34	1°15'15	18°48'48	16°9'9	16°31'31	14°11'11	28°14'5	14°14'42	21°24'4	26°15'45	27°12'18	19°1'1	28°14'52	F 25
S 26	8 20 0	5°43'16	11°12'52	2°55'55	19°55'55	16°50'50	16°42'42	14°17'17	28°14'6	14°14'44	21°26'6	26°15'44	27°12'15	19°1'8	28°14'54	S 26
S 27	8 23 56	6°44'15	25°45'45	4°36'36	21°2'2	17°30'30	16°53'53	14°24'24	28°14'7	14°14'46	21°28'8	26°15'43	27°12'11	19°1'15	28°14'57	S 27
M28	8 27 53	7°45'14	9°12'12	6°17'17	22°9'9	18°11'11	17°4'4	14°31'31	28°14'8	14°14'48	21°30'0	26°15'43	27°12'8	19°1'21	28°14'59	M28
T 29	8 31 49	8°46'12	22°15'15	7°59'59	23°17'17	18°52'52	17°15'15	14°38'38	28°14'9	14°14'50	21°32'2	26°15'43	27°12'5	19°1'28	29°1'2	T 29
W30	8 35 46	9°47'10	4°15'58	9°42'42	24°24'24	19°32'32	17°25'25	14°44'44	28°15'0	14°14'52	21°34'4	26°15'44	27°12'2	19°1'35	29°1'4	W30
T 31	8 39 42	10°48'07	17°12'24	11°12'25	25°12'32	20°13'13	17°12'36	14°12'51	28°15'1	14°14'54	21°36'6	26°15'45	27°12'59	19°1'41	29°1'7	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	23s 2	10s 42	5n 5	23s 10	0n 7	15s 19	3n 26	0s 18	0s 18	21s 34	0n 38	22s 28	0n 29	10n 29	0s 32	7s 9
W 2	22 57	14 34	4 38	23 21	0s 0	15 33	3 27	0 1	0 17	21 36	0 38	22 27	0 29	10 29	0 32	7 9
T 3	22 52	17 42	3 59	23 31	0 7	15 47	3 27	0n 17	0 15	21 38	0 38	22 27	0 29	10 29	0 32	7 8
F 4	22 46	19 57	3 8	23 40	0 15	16 0	3 27	0 34	0 14	21 39	0 38	22 26	0 29	10 29	0 32	7 8
S 5	22 40	21 15	2 10	23 48	0 22	16 14	3 27	0 51	0 13	21 41	0 38	22 26	0 29	10 29	0 32	7 7
S 6	22 33	21 32	1 6	23 54	0 29	16 28	3 27	1 8	0 11	21 43	0 38	22 25	0 29	10 29	0 32	7 7
M 7	22 26	20 49	0 0	24 0	0 35	16 41	3 26	1 26	0 10	21 44	0 38	22 25	0 29	10 29	0 32	7 6
T 8	22 18	19 11	1s 5	24 4	0 42	16 55	3 25	1 43	0 9	21 46	0 38	22 24	0 29	10 29	0 32	7 6
W 9	22 10	16 44	2 7	24 7	0 48	17 8	3 25	2 0	0 7	21 47	0 37	22 24	0 28	10 29	0 32	7 5
T 10	22 2	13 36	3 4	24 8	0 55	17 21	3 24	2 17	0 6	21 49	0 37	22 23	0 28	10 29	0 32	7 5
F 11	21 53	9 55	3 54	24 9	1 1	17 34	3 23	2 34	0 5	21 50	0 37	22 22	0 28	10 29	0 32	7 4
S 12	21 43	5 50	4 33	24 8	1 6	17 46	3 22	2 52	0 4	21 52	0 37	22 22	0 28	10 29	0 32	7 3
S 13	21 34	1 28	5 1	24 6	1 12	17 59	3 20	3 9	0 3	21 53	0 37	22 21	0 28	10 29	0 32	7 3
M14	21 23	3n 2	5 16	24 2	1 17	18 11	3 19	3 26	0 1	21 54	0 37	22 21	0 28	10 29	0 32	7 2
T 15	21 13	7 31	5 16	23 57	1 23	18 23	3 17	3 43	0 0	21 56	0 37	22 20	0 28	10 30	0 32	7 2
W16	21 2	11 49	5 1	23 50	1 27	18 34	3 16	4 0	0n 1	21 57	0 37	22 19	0 28	10 30	0 31	7 1
T 17	20 50	15 40	4 28	23 43	1 32	18 45	3 14	4 17	0 2	21 58	0 37	22 19	0 28	10 30	0 31	7 0
F 18	20 38	18 47	3 39	23 33	1 36	18 56	3 12	4 34	0 3	22 0	0 37	22 18	0 28	10 30	0 31	7 0
S 19	20 26	20 50	2 35	23 23	1 41	19 7	3 10	4 51	0 4	22 1	0 37	22 17	0 28	10 31	0 31	6 59
S 20	20 14	21 33	1 19	23 11	1 44	19 17	3 8	5 7	0 5	22 2	0 37	22 17	0 28	10 31	0 31	6 58
M21	20 1	20 43	0n 4	22 57	1 48	19 27	3 5	5 24	0 6	22 3	0 37	22 16	0 28	10 31	0 31	6 58
T 22	19 47	18 23	1 28	22 42	1 51	19 37	3 3	5 41	0 8	22 5	0 37	22 16	0 28	10 31	0 31	6 57
W23	19 34	14 47	2 45	22 26	1 54	19 46	3 1	5 58	0 9	22 6	0 37	22 15	0 28	10 32	0 31	6 56
T 24	19 20	10 15	3 49	22 8	1 57	19 55	2 58	6 14	0 10	22 7	0 37	22 14	0 28	10 32	0 31	6 55
F 25	19 5	5 13	4 38	21 49	1 59	20 3	2 55	6 31	0 11	22 8	0 37	22 14	0 27	10 32	0 31	6 55
S 26	18 50	0 1	5 7	21 28	2 1	20 11	2 53	6 48	0 12	22 9	0 37	22 13	0 27	10 33	0 31	6 54
S 27	18 35	5s 1	5 18	21 6	2 3	20 18	2 50	7 4	0 13	22 10	0 37	22 12	0 27	10 33	0 31	6 53
M28	18 20	9 39	5 10	20 42	2 4	20 25	2 47	7 20	0 14	22 11	0 37	22 12	0 27	10 34	0 31	6 52
T 29	18 4	13 42	4 47	20 16	2 5	20 32	2 44	7 37	0 15	22 12	0 37	22 11	0 27	10 34	0 31	6 52
W30	17 48	17 2	4 10	19 49	2 5	20 38	2 41	7 53	0 16	22 13	0 37	22 10	0 27	10 34	0 31	6 51
T 31	17s 31	19s 30	3n 22	19s 21	2s 5	20s 44	2n 38	8n 9	0n 17	22s 14	0n 37	22s 10	0n 27	10n 35	0s 31	6s 50

Julian Day Number = 2458484.5, Delta T = 69.22 sec
Ecliptic obliquity = 23°26'08", Nutation = - 0°00'15", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 25°00'21", Lahiri = 24°07'21"

ASTRODIENST EPHEMERIS for the year 2019

geocentric

FEBRUARY 2019

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	8 43 39	11°49'04"	29°36'	13°8'	26°40'	20°54'	17°46'	14°57'	28°52'	14°56'	21°38'	26°47'	25°56'	19°48'	29°9'	F 1
S 2	8 47 35	12°49'59"	11°38'	14°54'	27°48'	21°34'	17°56'	15°4'	28°54'	14°58'	21°40'	26°48'	25°52'	19°55'	29°12'	S 2
S 3	8 51 32	13°50'54"	23°33'	16°39'	28°56'	22°15'	18°7'	15°11'	28°55'	15°0'	21°42'	26°R49	25°49'	20°1'	29°15'	S 3
M 4	8 55 29	14°51'47"	5°24'	18°25'	0°3'	22°56'	18°17'	15°17'	28°57'	15°2'	21°43'	26°48'	25°46'	20°8'	29°17'	M 4
T 5	8 59 25	15°52'39"	17°12'	20°12'	1°13'	23°36'	18°27'	15°24'	28°58'	15°4'	21°45'	26°47'	25°43'	20°15'	29°20'	T 5
W 6	9 3 22	16°53'31"	29°0'	21°59'	2°21'	24°17'	18°37'	15°30'	28°59'	15°6'	21°47'	26°45'	25°40'	20°21'	29°23'	W 6
T 7	9 7 18	17°54'21"	10°50'	23°46'	3°30'	24°57'	18°47'	15°36'	29°1'	15°8'	21°49'	26°42'	25°37'	20°28'	29°26'	T 7
F 8	9 11 15	18°55'09"	22°44'	25°34'	4°39'	25°38'	18°56'	15°43'	29°3'	15°10'	21°51'	26°38'	25°33'	20°35'	29°29'	F 8
S 9	9 15 11	19°55'56"	4°44'	27°22'	5°48'	26°19'	19°6'	15°49'	29°4'	15°12'	21°53'	26°34'	25°30'	20°41'	29°32'	S 9
S 10	9 19 8	20°56'42"	16°53'	29°11'	6°57'	26°59'	19°15'	15°55'	29°6'	15°14'	21°55'	26°30'	25°27'	20°48'	29°34'	S 10
M 11	9 23 4	21°57'26"	29°14'	1°8'	8°7'	27°40'	19°25'	16°1'	29°8'	15°16'	21°56'	26°27'	25°24'	20°55'	29°37'	M 11
T 12	9 27 1	22°58'09"	11°51'	2°48'	9°16'	28°21'	19°34'	16°8'	29°9'	15°18'	21°58'	26°25'	25°21'	21°1'	29°40'	T 12
W 13	9 30 58	23°58'50"	24°46'	4°36'	10°25'	29°1'	19°43'	16°14'	29°11'	15°20'	22°0'	26°D25	25°17'	21°8'	29°43'	W 13
T 14	9 34 54	24°59'30"	8°11'	6°24'	11°35'	29°42'	19°52'	16°20'	29°13'	15°23'	22°2'	26°25'	25°14'	21°15'	29°46'	T 14
F 15	9 38 51	26°0'07"	21°46'	8°12'	12°45'	0°8'	20°1'	16°26'	29°15'	15°25'	22°4'	26°27'	25°11'	21°21'	29°49'	F 15
S 16	9 42 47	27°0'43"	5°55'	9°58'	13°55'	1°3'	20°10'	16°32'	29°17'	15°27'	22°5'	26°28'	25°8'	21°28'	29°53'	S 16
S 17	9 46 44	28°1'18"	20°29'	11°43'	15°4'	1°43'	20°19'	16°38'	29°19'	15°29'	22°7'	26°R29	25°5'	21°35'	29°56'	S 17
M 18	9 50 40	29°1'50"	5°25'	13°26'	16°14'	2°24'	20°27'	16°44'	29°21'	15°31'	22°9'	26°29'	25°2'	21°41'	29°59'	M 18
T 19	9 54 37	0°2'21"	20°36'	15°7'	17°25'	3°4'	20°35'	16°49'	29°23'	15°34'	22°10'	26°27'	24°58'	21°48'	0°2'	T 19
W 20	9 58 33	1°2'51"	5°12'	16°45'	18°35'	3°45'	20°44'	16°55'	29°25'	15°36'	22°12'	26°24'	24°55'	21°55'	0°5'	W 20
T 21	10 2 30	2°3'18"	21°4'	18°20'	19°45'	4°25'	20°52'	17°1'	29°27'	15°38'	22°14'	26°19'	24°52'	22°1'	0°8'	T 21
F 22	10 6 27	3°3'44"	6°1'	19°52'	20°55'	5°6'	21°0'	17°6'	29°30'	15°40'	22°15'	26°14'	24°49'	22°8'	0°12'	F 22
S 23	10 10 23	4°4'09"	20°35'	21°19'	22°6'	5°46'	21°8'	17°12'	29°32'	15°42'	22°17'	26°8'	24°46'	22°15'	0°15'	S 23
S 24	10 14 20	5°4'33"	4°11'	22°41'	23°16'	6°26'	21°16'	17°18'	29°34'	15°45'	22°19'	26°3'	24°42'	22°21'	0°18'	S 24
M 25	10 18 16	6°4'55"	18°18'	23°57'	24°27'	7°7'	21°23'	17°23'	29°37'	15°47'	22°20'	26°0'	24°39'	22°28'	0°21'	M 25
T 26	10 22 13	7°5'15"	1°27'	25°7'	25°38'	7°47'	21°31'	17°29'	29°39'	15°49'	22°22'	25°D58	24°36'	22°35'	0°25'	T 26
W 27	10 26 9	8°5'34"	14°10'	26°10'	26°49'	8°28'	21°38'	17°34'	29°41'	15°51'	22°23'	25°58'	24°33'	22°41'	0°28'	W 27
T 28	10 30 6	9°5'52"	26°33'	27°6'	27°59'	9°8'	21°45'	17°39'	29°44'	15°54'	22°25'	25°59'	24°30'	22°48'	0°31'	T 28

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	
F 1	17s15	21s 1	2n25	18s51	2s 5	20s49	2n35	8n25	0n17	22s15	0n37	22s 9	0n27	10n35	0s31	F 1
S 2	16 57	21 33	1 23	18 20	2 4	20 54	2 31	8 42	0 18	22 16	0 37	22 8	0 27	10 36	0 31	S 2
S 3	16 40	21 5	0 18	17 47	2 2	20 58	2 28	8 58	0 19	22 17	0 37	22 8	0 27	10 36	0 31	S 3
M 4	16 22	19 41	0s47	17 13	2 0	21 1	2 25	9 14	0 20	22 18	0 37	22 7	0 27	10 37	0 31	M 4
T 5	16 4	17 26	1 50	16 37	1 58	21 4	2 21	9 29	0 21	22 19	0 37	22 6	0 27	10 37	0 31	T 5
W 6	15 46	14 27	2 49	16 0	1 55	21 7	2 18	9 45	0 22	22 20	0 37	22 5	0 27	10 38	0 31	W 6
T 7	15 28	10 53	3 40	15 21	1 52	21 9	2 14	10 1	0 23	22 21	0 37	22 5	0 27	10 39	0 31	T 7
F 8	15 9	6 53	4 21	14 41	1 47	21 10	2 11	10 17	0 24	22 21	0 37	22 4	0 27	10 39	0 31	F 8
S 9	14 50	2 35	4 52	13 59	1 43	21 11	2 7	10 32	0 25	22 22	0 37	22 3	0 27	10 40	0 31	S 9
S 10	14 31	1n51	5 10	13 17	1 38	21 12	2 4	10 48	0 26	22 23	0 37	22 3	0 27	10 40	0 31	S 10
M 11	14 11	6 18	5 14	12 33	1 32	21 12	2 0	11 3	0 26	22 24	0 37	22 2	0 27	10 41	0 31	M 11
T 12	13 52	10 34	5 3	11 48	1 25	21 11	1 56	11 18	0 27	22 24	0 37	22 1	0 27	10 42	0 31	T 12
W 13	13 32	14 29	4 37	11 2	1 18	21 10	1 52	11 33	0 28	22 25	0 37	22 1	0 27	10 42	0 31	W 13
T 14	13 11	17 47	3 55	10 15	1 10	21 8	1 49	11 49	0 29	22 26	0 37	22 0	0 26	10 43	0 31	T 14
F 15	12 51	20 12	2 59	9 27	1 1	21 5	1 45	12 4	0 29	22 26	0 37	21 59	0 26	10 44	0 31	F 15
S 16	12 30	21 28	1 50	8 38	0 52	21 2	1 41	12 18	0 30	22 27	0 37	21 59	0 26	10 45	0 30	S 16
S 17	12 10	21 20	0 33	7 49	0 42	20 59	1 37	12 33	0 31	22 28	0 37	21 58	0 26	10 45	0 30	S 17
M 18	11 49	19 42	0n49	7 0	0 32	20 54	1 33	12 48	0 32	22 28	0 37	21 57	0 26	10 46	0 30	M 18
T 19	11 27	16 39	2 8	6 11	0 20	20 50	1 29	13 3	0 32	22 29	0 37	21 57	0 26	10 47	0 30	T 19
W 20	11 6	12 26	3 19	5 22	0 8	20 44	1 25	13 17	0 33	22 29	0 37	21 56	0 26	10 48	0 30	W 20
T 21	10 44	7 27	4 15	4 33	0n 4	20 38	1 22	13 31	0 34	22 30	0 37	21 55	0 26	10 48	0 30	T 21
F 22	10 23	2 5	4 52	3 45	0 17	20 32	1 18	13 46	0 35	22 31	0 37	21 55	0 26	10 49	0 30	F 22
S 23	10 1	3s15	5 10	2 58	0 31	20 25	1 14	14 0	0 35	22 31	0 37	21 54	0 26	10 50	0 30	S 23
S 24	9 39	8 15	5 8	2 13	0 45	20 17	1 10	14 14	0 36	22 32	0 37	21 53	0 26	10 51	0 30	S 24
M 25	9 17	12 39	4 48	1 30	0 59	20 9	1 6	14 28	0 37	22 32	0 37	21 53	0 26	10 52	0 30	M 25
T 26	8 54	16 18	4 14	0 48	1 14	20 0	1 2	14 42	0 37	22 33	0 37	21 52	0 26	10 53	0 30	T 26
W 27	8 32	19 3	3 28	0 10	1 29	19 51	0 58	14 55	0 38	22 33	0 37	21 51	0 26	10 53	0 30	W 27
T 28	8s 9	20s50	2n33	0n26	1n43	19s41	0n54	15n 9	0n39	22s33	0n37	21s51	0n26	10n54	0s30	T 28

Julian Day Number = 2458515.5, Delta T = 69.24 sec

Ecliptic obliquity = 23°26'08", Nutation = - 0°00'14", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°00'25", Lahiri = 24°07'25"

ASTRODIENST EPHEMERIS for the year 2019

geocentric

MARCH 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	10 34 2	10 ^h 09'	8 ^h 39'	27 ^h 54'	29 ^h 10'	9 ^h 48'	21 ^h 52'	17 ^h 44'	29 ^h 46'	15 ^h 56'	22 ^h 26'	26 ^h 01'	24 ^h 27'	22 ^h 55'	0 ^h 35'	F 1
S 2	10 37 59	11° 6'24	20° 35'	28° 33'	0 ^h 21'	10° 29'	21° 59'	17° 50'	29° 49'	15° 58'	22° 28'	26° R 2	24° 23'	23° 1'	0° 38'	S 2
S 3	10 41 56	12° 6'37	2 ^h 24'	29° 3'	1° 33'	11° 9'	22° 6'	17° 55'	29° 51'	16° 1'	22° 29'	26° 2'	24° 20'	23° 8'	0° 42'	S 3
M 4	10 45 52	13° 6'49	14° 11'	29° 24'	2° 44'	11° 49'	22° 13'	18° 0'	29° 54'	16° 3'	22° 31'	26° 0'	24° 17'	23° 15'	0° 45'	M 4
T 5	10 49 49	14° 6'58	25° 58'	29° 36'	3° 55'	12° 30'	22° 19'	18° 5'	29° 56'	16° 5'	22° 32'	25° 56'	24° 14'	23° 21'	0° 48'	T 5
W 6	10 53 45	15° 7'07	7 ^h 49'	29° R39	5° 6'	13° 10'	22° 25'	18° 10'	29° 59'	16° 7'	22° 33'	25° 49'	24° 11'	23° 28'	0° 52'	W 6
T 7	10 57 42	16° 7'13	19° 45'	29° 32'	6° 17'	13° 50'	22° 32'	18° 14'	0 ^h 2'	16° 10'	22° 35'	25° 41'	24° 8'	23° 35'	0° 55'	T 7
F 8	11 1 38	17° 7'17	1 ^h 47'	29° 16'	7° 29'	14° 30'	22° 38'	18° 19'	0° 4'	16° 12'	22° 36'	25° 31'	24° 4'	23° 41'	0° 59'	F 8
S 9	11 5 35	18° 7'20	13° 58'	28° 52'	8° 40'	15° 10'	22° 44'	18° 24'	0° 7'	16° 14'	22° 38'	25° 20'	24° 1'	23° 48'	1° 2'	S 9
S 10	11 9 31	19° 7'20	26° 17'	28° 20'	9° 52'	15° 51'	22° 49'	18° 28'	0° 10'	16° 16'	22° 39'	25° 11'	23° 58'	23° 55'	1° 6'	S 10
M 11	11 13 28	20° 7'18	8 ^h 48'	27° 41'	11° 3'	16° 31'	22° 55'	18° 33'	0° 13'	16° 19'	22° 40'	25° 2'	23° 55'	24° 1'	1° 9'	M 11
T 12	11 17 24	21° 7'15	21° 30'	26° 56'	12° 15'	17° 11'	23° 0'	18° 38'	0° 16'	16° 21'	22° 41'	24° 56'	23° 52'	24° 8'	1° 13'	T 12
W 13	11 21 21	22° 7'09	4 ^h 12'	26° 6'	13° 26'	17° 51'	23° 5'	18° 42'	0° 18'	16° 23'	22° 43'	24° 52'	23° 48'	24° 15'	1° 16'	W 13
T 14	11 25 18	23° 7'01	17° 41'	25° 12'	14° 38'	18° 31'	23° 10'	18° 46'	0° 21'	16° 26'	22° 44'	24° D50	23° 45'	24° 21'	1° 20'	T 14
F 15	11 29 14	24° 6'51	1 ^h 15'	24° 16'	15° 50'	19° 11'	23° 15'	18° 50'	0° 24'	16° 28'	22° 45'	24° 50'	23° 42'	24° 28'	1° 23'	F 15
S 16	11 33 11	25° 6'38	15° 9'	23° 18'	17° 1'	19° 51'	23° 20'	18° 55'	0° 27'	16° 30'	22° 46'	24° 51'	23° 39'	24° 35'	1° 27'	S 16
S 17	11 37 7	26° 6'23	29° 26'	22° 21'	18° 13'	20° 31'	23° 25'	18° 59'	0° 30'	16° 32'	22° 47'	24° R51	23° 36'	24° 41'	1° 30'	S 17
M 18	11 41 4	27° 6'06	14 ^h 03'	21° 25'	19° 25'	21° 11'	23° 29'	19° 3'	0° 33'	16° 35'	22° 48'	24° 50'	23° 33'	24° 48'	1° 34'	M 18
T 19	11 45 0	28° 5'47	28° 57'	20° 31'	20° 37'	21° 51'	23° 33'	19° 7'	0° 36'	16° 37'	22° 49'	24° 46'	23° 29'	24° 55'	1° 37'	T 19
W 20	11 48 57	29° 5'26	14 ^h 10'	19° 41'	21° 49'	22° 31'	23° 37'	19° 11'	0° 39'	16° 39'	22° 50'	24° 40'	23° 26'	25° 1'	1° 41'	W 20
T 21	11 52 53	0 ^h 5'02	29° 5'	18° 55'	23° 1'	23° 11'	23° 41'	19° 14'	0° 42'	16° 41'	22° 51'	24° 31'	23° 23'	25° 8'	1° 45'	T 21
F 22	11 56 50	1° 4'36	14 ^h 1'	18° 14'	24° 13'	23° 51'	23° 45'	19° 18'	0° 45'	16° 44'	22° 52'	24° 21'	23° 20'	25° 14'	1° 48'	F 22
S 23	12 0 47	2° 4'09	28° 38'	17° 38'	25° 25'	24° 31'	23° 48'	19° 22'	0° 48'	16° 46'	22° 53'	24° 10'	23° 17'	25° 21'	1° 52'	S 23
S 24	12 4 43	3° 3'39	12 ^h 51'	17° 8'	26° 37'	25° 11'	23° 52'	19° 25'	0° 52'	16° 48'	22° 54'	24° 1'	23° 14'	25° 28'	1° 55'	S 24
M 25	12 8 40	4° 3'08	26° 35'	16° 44'	27° 49'	25° 51'	23° 55'	19° 29'	0° 55'	16° 50'	22° 55'	23° 53'	23° 10'	25° 34'	1° 59'	M 25
T 26	12 12 36	5° 2'35	9 ^h 50'	16° 25'	29° 1'	26° 31'	23° 58'	19° 32'	0° 58'	16° 52'	22° 56'	23° 48'	23° 7'	25° 41'	2° 2'	T 26
W 27	12 16 33	6° 2'00	22° 39'	16° 13'	0 ^h 13'	27° 11'	24° 1'	19° 35'	1° 1'	16° 55'	22° 57'	23° 46'	23° 4'	25° 48'	2° 6'	W 27
T 28	12 20 29	7° 1'24	5 ^h 4'	16° 7'	1° 25'	27° 50'	24° 3'	19° 38'	1° 4'	16° 57'	22° 58'	23° D45	23° 1'	25° 54'	2° 9'	T 28
F 29	12 24 26	8° 0'45	17° 12'	16° D 6'	2° 37'	28° 30'	24° 6'	19° 41'	1° 7'	16° 59'	22° 59'	23° R45	22° 58'	26° 1'	2° 13'	F 29
S 30	12 28 22	9° 0'05	29° 8'	16° 11'	3° 49'	29° 10'	24° 8'	19° 44'	1° 11'	17° 1'	22° 59'	23° 45'	22° 54'	26° 8'	2° 16'	S 30
S 31	12 32 19	9 ^h 59'23	10 ^h 56'	16 ^h 22'	5 ^h 2'	29 ^h 50'	24 ^h 10'	19 ^h 47'	1 ^h 14'	17 ^h 3'	23 ^h 0'	23 ^h 44'	22 ^h 51'	26 ^h 15'	2 ^h 20'	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	7s47	21s36	1n33	0n58	1n58	19s30	0n50	15n22	0n39	22s34	0n37	21s50	0n26	10n55	0s30	6s26	F 1
S 2	7 24	21 22	0 30	1 27	2 12	19 19	0 46	15 36	0 40	22 34	0 37	21 49	0 26	10 56	0 30	6 25	S 2
S 3	7 1 20	11 03	1 51	2 26	19 7	0 42	15 49	0 41	22 35	0 37	21 49	0 26	10 57	0 30	6 24	0 58	S 3
M 4	6 38	18 7	1 37	2 12	2 39	18 55	0 39	16 2	0 41	22 35	0 37	21 48	0 26	10 58	0 30	6 23	M 4
T 5	6 15	15 17	2 35	2 28	2 51	18 43	0 35	16 15	0 42	22 35	0 38	21 48	0 26	10 59	0 30	6 22	T 5
W 6	5 52	11 49	3 26	2 39	3 3	18 29	0 31	16 28	0 42	22 36	0 38	21 47	0 26	11 0	0 30	6 22	W 6
T 7	5 28	7 52	4 8	2 45	3 12	18 16	0 27	16 40	0 43	22 36	0 38	21 46	0 26	11 1	0 30	6 21	T 7
F 8	5 5	3 35	4 40	2 47	3 21	18 1	0 23	16 53	0 44	22 36	0 38	21 46	0 26	11 2	0 30	6 20	F 8
S 9	4 42	0n54	5 0	2 44	3 28	17 47	0 20	17 5	0 44	22 37	0 38	21 45	0 25	11 3	0 30	6 19	S 9
S 10	4 18	5 24	5 6	2 36	3 33	17 31	0 16	17 18	0 45	22 37	0 38	21 45	0 25	11 4	0 30	6 18	S 10
M 11	3 55	9 44	4 57	2 23	3 37	17 15	0 12	17 30	0 45	22 37	0 38	21 44	0 25	11 5	0 30	6 17	M 11
T 12	3 31	13 44	4 34	2 7	3 38	16 59	0 9	17 42	0 46	22 37	0 38	21 43	0 25	11 6	0 30	6 16	T 12
W 13	3 8	17 9	3 56	1 46	3 37	16 42	0 5	17 53	0 46	22 38	0 38	21 43	0 25	11 7	0 30	6 15	W 13
T 14	2 44	19 47	3 5	1 23	3 35	16 25	0 1	18 5	0 47	22 38	0 38	21 42	0 25	11 8	0 30	6 15	T 14
F 15	2 20	21 23	2 3	0 56	3 30	16 7	0s 2	18 17	0 47	22 38	0 38	21 42	0 25	11 9	0 30	6 14	F 15
S 16	1 57	21 43	0 52	0 28	3 24	15 49	0 6	18 28	0 48	22 38	0 38	21 41	0 25	11 10	0 30	6 13	S 16
S 17	1 33	20 40	0n24	0s 3	3 15	15 31	0 9	18 39	0 48	22 39	0 38	21 41	0 25	11 11	0 30	6 12	S 17
M 18	1 9	18 13	1 41	0 34	3 5	15 12	0 12	18 50	0 49	22 39	0 38	21 40	0 25	11 12	0 30	6 11	M 18
T 19	0 45	14 31	2 51	1 5	2 54	14 52	0 16	19 1	0 49	22 39	0 38	21 40	0 25	11 13	0 30	6 10	T 19
W 20	0 22	9 50	3 51	1 36	2 42	14 32	0 19	19 12	0 50	22 39	0 38	21 39	0 25	11 14	0 30	6 9	W 20
T 21	0n 2	4 33	4 34	2 7	2 28	14 12	0 22	19 23	0 50	22 39	0 38	21 39	0 25	11 15	0 30	6 9	T 21
F 22	0 26	0s57	4 58	2 36	2 14	13 51	0 26	19 33	0 51	22 40	0 38	21 38	0 25	11 16	0 30	6 8	F 22
S 23	0 49	6 17	5 2	3 4	1 59	13 30	0 29	19 44	0 51	22 40	0 38	21 38	0 25	11 17	0 30	6 7	S 23
S 24	1 13	11 8	4 47	3 29	1 44	13 9	0 32	19 54	0 52	22 40	0 38	21 37	0 25	11 18	0 30	6 6	S 24
M 25	1 37	15 15	4 16	3 53	1 29	12 47	0 35	20 4	0 52	22 40	0 38	21 37	0 25	11 20	0 30	6 5	M 25
T 26	2 0	18 26	3 31	4 14	1 13	12 24	0 38	20 14	0 53	22 40	0 38	21 36	0 25	11 21	0 30	6 4	T 26
W 27	2 24	20 37	2 37	4 33	0 58	12 2	0 41	20 23	0 53	22 40	0 38	21 36	0 25	11 22	0 30	6 4	W 27
T 28	2 47	21 43	1 38	4 49	0 43	11 39	0 44	20 33	0 53	22 40	0 38	21 35	0 25	11 23	0 30	6 3	T 28
F 29	3 11	21 45	0 35	5 3	0 28	11 16	0 46	20 42	0 54	22 40	0 38	21 35	0 25	11 24	0 30	6 2	F 29
S 30	3 34	20 48	0s29	5 15	0 13	10 52	0 49	20 51	0 54	22 40	0 38	21 35	0 25	11 25	0 30	6 1	S 30
S 31	3n57	18s56	1s30	5s23	0s 1	10s28	0s52	21n 0	0n55	22s41	0n38	21s34	0n25	11n26	0s30	6s 0	S 31

Julian Day Number = 2458543.5, Delta T = 69.25 sec

Ecliptic obliquity = 23°26'09, Nutation = -0°00'15, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°00'29, Lahiri = 24°07'29

ASTRODIENST EPHEMERIS for the year 2019

geocentric

APRIL 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	12 36 16	10°58'40	22°43	16°38	6°14	0°29	24°12	19°50	18°17	17°5	23°1	23°R40	22°48	26°21	2°23	M 1
T 2	12 40 12	11°57'54	4°32	16°59	7°26	1°9	24°14	19°53	1°20	17°7	23°1	23°34	22°45	26°28	2°27	T 2
W 3	12 44 9	12°57'06	16°27	17°24	8°39	1°49	24°15	19°56	1°24	17°10	23°2	23°25	22°42	26°35	2°31	W 3
T 4	12 48 5	13°56'17	28°31	17°54	9°51	2°28	24°17	19°58	1°27	17°12	23°3	23°14	22°39	26°41	2°34	T 4
F 5	12 52 2	14°55'25	10°44	18°28	11°3	3°8	24°18	20°1	1°30	17°14	23°3	23°1	22°35	26°48	2°37	F 5
S 6	12 55 58	15°54'32	23°9	19°7	12°16	3°48	24°19	20°3	1°34	17°16	23°4	22°47	22°32	26°55	2°41	S 6
S 7	12 59 55	16°53'36	5°44	19°49	13°28	4°27	24°20	20°5	1°37	17°18	23°4	22°33	22°29	27°1	2°44	S 7
M 8	13 3 51	17°52'39	18°31	20°35	14°41	5°7	24°20	20°7	1°40	17°20	23°5	22°22	22°26	27°8	2°48	M 8
T 9	13 7 48	18°51'39	1°30	21°24	15°53	5°46	24°21	20°9	1°44	17°22	23°5	22°13	22°23	27°15	2°51	T 9
W10	13 11 44	19°50'37	14°39	22°16	17°6	6°26	24°21	20°11	1°47	17°24	23°6	22°7	22°19	27°21	2°55	W10
T 11	13 15 41	20°49'33	28°1	23°12	18°18	7°6	24°R21	20°13	1°51	17°26	23°6	22°3	22°16	27°28	2°58	T 11
F 12	13 19 38	21°48'27	11°36	24°10	19°31	7°45	24°21	20°15	1°54	17°28	23°7	22°2	22°13	27°35	3°2	F 12
S 13	13 23 34	22°47'18	25°26	25°11	20°43	8°25	24°21	20°17	1°57	17°30	23°7	22°2	22°10	27°41	3°5	S 13
S 14	13 27 31	23°46'07	9°30	26°15	21°56	9°4	24°20	20°19	2°1	17°32	23°7	22°2	22°7	27°48	3°8	S 14
M15	13 31 27	24°44'54	23°50	27°22	23°8	9°43	24°19	20°20	2°4	17°34	23°8	22°0	22°4	27°55	3°12	M15
T 16	13 35 24	25°43'38	8°22	28°31	24°21	10°23	24°18	20°21	2°8	17°35	23°8	21°55	22°0	28°1	3°15	T 16
W17	13 39 20	26°42'20	23°2	29°42	25°33	11°2	24°17	20°23	2°11	17°37	23°8	21°48	21°57	28°8	3°18	W17
T 18	13 43 17	27°41'00	7°44	0°55	26°46	11°41	24°16	20°24	2°15	17°39	23°8	21°38	21°54	28°15	3°22	T 18
F 19	13 47 13	28°39'38	22°22	2°11	27°58	12°21	24°15	20°25	2°18	17°41	23°9	21°27	21°51	28°21	3°25	F 19
S 20	13 51 10	29°38'14	6°46	3°29	29°11	13°0	24°13	20°26	2°21	17°43	23°9	21°16	21°48	28°28	3°28	S 20
S 21	13 55 7	0°36'48	20°50	4°49	0°24	13°39	24°11	20°27	2°25	17°45	23°9	21°5	21°45	28°35	3°32	S 21
M22	13 59 3	1°35'20	4°31	6°11	1°36	14°19	24°9	20°28	2°28	17°46	23°9	20°56	21°41	28°41	3°35	M22
T 23	14 3 0	2°33'50	17°46	7°35	2°49	14°58	24°7	20°29	2°32	17°48	23°9	20°50	21°38	28°48	3°38	T 23
W24	14 6 56	3°32'19	0°37	9°1	4°2	15°37	24°5	20°29	2°35	17°50	23°9	20°46	21°35	28°55	3°41	W24
T 25	14 10 53	4°30'47	13°5	10°28	5°14	16°16	24°2	20°30	2°39	17°52	23°R 9	20°45	21°32	29°1	3°44	T 25
F 26	14 14 49	5°29'12	25°16	11°58	6°27	16°55	23°59	20°30	2°42	17°53	23°9	20°D44	21°29	29°8	3°47	F 26
S 27	14 18 46	6°27'36	7°44	13°30	7°40	17°35	23°56	20°31	2°46	17°55	23°9	20°R45	21°25	29°15	3°51	S 27
S 28	14 22 42	7°25'59	19°5	15°3	8°53	18°14	23°53	20°31	2°49	17°57	23°9	20°44	21°22	29°21	3°54	S 28
M29	14 26 39	8°24'19	0°54	16°38	10°5	18°53	23°50	20°31	2°52	17°58	23°9	20°42	21°19	29°28	3°57	M29
T 30	14 30 36	9°22'39	12°46	18°15	11°18	19°32	23°47	20°R31	2°56	18°0	23°9	20°37	21°16	29°35	4°0	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
M 1	4n21	16s15	2s27	5s30	0s14	10s 4	0s54	21n 9	0n55	22s41	0n38	21s34	0n25	11n28	0s29	5s59	0s58	21s43	0s15	21n22	21n31	15s25	3n46	3n 4			
T 2	4 44	12 55	3 18	5 34	0 27	9 40	0 57	21 18	0 56	22 41	0 38	21 33	0 25	11 29	0 29	5 59	0 58	21 43	0 15	21 23	21 31	15 23	3 47	3 4			
W 3	5 7	9 2	4 1	5 35	0 40	9 15	0 59	21 26	0 56	22 41	0 38	21 33	0 25	11 30	0 29	5 58	0 58	21 43	0 15	21 24	21 32	15 21	3 48	3 4			
T 4	5 30	4 46	4 33	5 34	0 51	8 50	1 2	21 34	0 56	22 41	0 38	21 33	0 25	11 31	0 29	5 57	0 58	21 43	0 15	21 26	21 32	15 20	3 50	3 4			
F 5	5 53	0 15	4 53	5 31	1 3	8 25	1 4	21 42	0 57	22 41	0 38	21 32	0 24	11 32	0 29	5 56	0 58	21 43	0 15	21 28	21 33	15 18	3 51	3 4			
S 6	6 16	4n21	5 0	5 26	1 13	7 59	1 7	21 50	0 57	22 41	0 38	21 32	0 24	11 33	0 29	5 55	0 58	21 43	0 15	21 31	21 33	15 16	3 52	3 4			
S 7	6 38	8 50	4 52	5 19	1 24	7 33	1 9	21 58	0 57	22 41	0 38	21 32	0 24	11 35	0 29	5 55	0 58	21 43	0 15	21 33	21 34	15 15	3 54	3 4			
M 8	7 1	13 1	4 30	5 10	1 33	7 7	1 11	22 6	0 58	22 41	0 38	21 32	0 24	11 36	0 29	5 54	0 58	21 43	0 15	21 35	21 34	15 13	3 55	3 4			
T 9	7 23	16 39	3 53	4 58	1 42	6 41	1 13	22 13	0 58	22 41	0 38	21 31	0 24	11 37	0 29	5 53	0 58	21 43	0 16	21 36	21 35	15 12	3 57	3 4			
W10	7 46	19 31	3 4	4 45	1 50	6 15	1 15	22 20	0 58	22 41	0 38	21 31	0 24	11 38	0 29	5 52	0 58	21 43	0 16	21 37	21 35	15 10	3 58	3 4			
T 11	8 8	21 22	2 3	4 30	1 58	5 48	1 17	22 27	0 59	22 41	0 38	21 31	0 24	11 39	0 29	5 52	0 58	21 43	0 16	21 38	21 36	15 8	3 59	3 4			
F 12	8 30	22 1	0 55	4 14	2 5	5 22	1 19	22 34	0 59	22 41	0 38	21 31	0 24	11 40	0 29	5 51	0 58	21 43	0 16	21 38	21 36	15 7	4 1	3 4			
S 13	8 52	21 21	0n18	3 55	2 11	4 55	1 20	22 41	0 59	22 41	0 38	21 30	0 24	11 42	0 29	5 50	0 58	21 43	0 16	21 38	21 37	15 5	4 2	3 4			
S 14	9 13	19 20	1 31	3 35	2 17	4 28	1 22	22 47	1 0	22 41	0 38	21 30	0 24	11 43	0 29	5 49	0 58	21 43	0 16	21 38	21 37	15 3	4 3	3 4			
M15	9 35	16 5	2 40	3 14	2 22	4 0	1 24	22 54	1 0	22 41	0 38	21 30	0 24	11 44	0 29	5 49	0 58	21 43	0 16	21 38	21 38	15 2	4 5	3 4			
T 16	9 57	11 49	3 39	2 50	2 27	3 33	1 25	23 0	1 0	22 41	0 38	21 30	0 24	11 45	0 29	5 48	0 58	21 43	0 16	21 39	21 38	15 0	4 6	3 4			
W17	10 18	6 48	4 24	2 26	2 31	3 6	1 27	23 6	1 1	22 41	0 38	21 30	0 24	11 46	0 29	5 47	0 58	21 43	0 16	21 40	21 39	14 58	4 7	3 4			
T 18	10 39	1 24	4 52	2 0	2 35	2 38	1 28	23 12	1 1	22 41	0 38	21 29	0 24	11 48	0 29	5 47	0 59	21 43	0 16	21 42	21 39	14 57	4 9	3 4			
F 19	11 0	4s 3	5 0	1 32	2 38	2 10	1 29	23 17	1 1	22 41	0 38	21 29	0 24	11 49	0 29	5 46	0 59	21 43	0 17	21 44	21 40	14 55	4 10	3 4			
S 20	11 21	9 12	4 50	1 4	2 40	1 43	1 31	23 22	1 2	22 41	0 38	21 29	0 24	11 50	0 29	5 45	0 59	21 43	0 17	21 45	21 40	14 53	4 11	3 4			
S 21	11 41	13 45	4 22	0 34	2 42	1 15	1 32	23 28	1 2	22 40	0 38	21 29	0 24	11 51	0 29	5 45	0 59	21 44	0 17	21 47	21 41	14 52	4 12	3 4			
M22	12 1	17 27	3 39	0 2	2 43	0 47	1 33	23 33	1 2	22 40	0 38	21 29	0 24	11 52	0 29	5 44	0 59	21 44	0 17	21 48	21 41	14 50	4 14	3 4			
T 23	12 22	20 8	2 45	0n30	2 44	0 19	1 34	23 37	1 2	22 40	0 38	21 29	0 24	11 53	0 29	5 43	0 59	21 44	0 17	21 49	21 42	14 48	4 15	3 4			
W24	12 42	21 41	1 45	1 4	2 44	0n 9	1 35	23 42	1 3	22 40	0 38	21 29	0 24	11 55	0 29	5 43	0 59	21 44	0 17	21 50	21 42	14 47	4 16	3 4			
T 25	13 1	22 7	0 41	1 38	2 43	0 37	1 36	23 46	1 3	22 40	0 38	21 29	0 24	11 56	0 29	5 42	0 59	21 44	0 17	21 50	21 43	14 45	4 18	3 4			
F 26	13 21	21 28	0s24	2 14	2 42	1 5	1 36	23 51	1 3	22 40	0 38	21 29	0 24	11 57	0 29	5 41	0 59	21 44	0 17	21 50	21 43	14 43	4 19	3 4			
S 27	13 40	19 51	1 26	2 51	2 41	1 33	1 37	23 55	1 3	22 40	0 38	21 29	0 24	11 58	0 29	5 41	0 59	21 44	0 17	21 50	21 44	14 42	4 20	3 4			
S 28	13 59	17 23	2 25	3 29	2 39	2 1	1 38	23 58	1 4	22 40	0 38	21 29	0 24	11 59	0 29	5 40	0 59	21 44	0 17	21 50	21 44	14 40	4 21	3 4			
M29	14 18	14 13	3 16	4 8	2 36	2 29	1 38	24 2	1 4	22 40	0 38	21 29	0 24	12 1	0 29	5 39	0 59	21 44	0 18	21 51	21 45	14 38	4 23	3 4			
T 30	14n37	10s27	4s 0	4n48	2s33	2n57	1s39	24n 5	1n 4	22s39	0n38	21s29	0n24	12n 2	0s29	5s39	0s59	21s44	0s18	21n51	21n45	14s37	4n24	3n 4			

ASTRODIENST EPHEMERIS for the year 2019
geocentric

MAY 2019

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	14 34 32	10 ⁸ 20'56	24 ⁴ 45	19 ⁴ 54	12 ⁴ 31	20 ¹¹ 11	23 ⁰ R43	20 ⁰ R31	2 ⁸ 59	18 ¹ 1	23 ⁰ R 9	20 ⁰ R30	21 ⁰ 13	29 ⁰ 41	4 ⁴ 3	W 1
T 2	14 38 29	11 ⁰ 19'12	6 ⁴ 56	21 ⁰ 35	13 ⁰ 44	20 ⁰ 50	23 ⁰ 39	20 ⁰ 31	3 ⁰ 3	18 ⁰ 3	23 ⁰ 8	20 ⁰ 20	21 ⁰ 10	29 ⁰ 48	4 ⁰ 6	T 2
F 3	14 42 25	12 ⁰ 17'27	19 ⁰ 19	23 ⁰ 17	14 ⁰ 56	21 ⁰ 29	23 ⁰ 35	20 ⁰ 31	3 ⁰ 6	18 ⁰ 4	23 ⁰ 8	20 ⁰ 9	21 ⁰ 6	29 ⁰ 55	4 ⁰ 9	F 3
S 4	14 46 22	13 ⁰ 15'39	1 ⁸ 58	25 ⁰ 2	16 ⁰ 9	22 ⁰ 8	23 ⁰ 31	20 ⁰ 30	3 ⁰ 10	18 ⁰ 6	23 ⁰ 8	19 ⁰ 57	21 ⁰ 3	0 ⁰ 1	4 ⁰ 12	S 4
S 5	14 50 18	14 ⁰ 13'51	14 ⁰ 51	26 ⁰ 48	17 ⁰ 22	22 ⁰ 47	23 ⁰ 27	20 ⁰ 30	3 ⁰ 13	18 ⁰ 7	23 ⁰ 8	19 ⁰ 46	21 ⁰ 0	0 ⁰ 8	4 ⁰ 15	S 5
M 6	14 54 15	15 ⁰ 12'00	27 ⁰ 59	28 ⁰ 36	18 ⁰ 35	23 ⁰ 26	23 ⁰ 22	20 ⁰ 29	3 ⁰ 16	18 ⁰ 9	23 ⁰ 7	19 ⁰ 36	20 ⁰ 57	0 ⁰ 15	4 ⁰ 17	M 6
T 7	14 58 11	16 ⁰ 10'08	11 ¹¹ 19	0 ⁸ 26	19 ⁰ 48	24 ⁰ 5	23 ⁰ 18	20 ⁰ 29	3 ⁰ 20	18 ⁰ 10	23 ⁰ 7	19 ⁰ 28	20 ⁰ 54	0 ⁰ 21	4 ⁰ 20	T 7
W 8	15 2 8	17 ⁰ 8'14	24 ⁰ 50	2 ⁰ 17	21 ⁰ 0	24 ⁰ 44	23 ⁰ 13	20 ⁰ 28	3 ⁰ 23	18 ⁰ 12	23 ⁰ 7	19 ⁰ 23	20 ⁰ 51	0 ⁰ 28	4 ⁰ 23	W 8
T 9	15 6 5	18 ⁰ 6'18	8 ⁰ 30	4 ⁰ 11	22 ⁰ 13	25 ⁰ 23	23 ⁰ 8	20 ⁰ 27	3 ⁰ 27	18 ⁰ 13	23 ⁰ 6	19 ⁰ 21	20 ⁰ 47	0 ⁰ 35	4 ⁰ 26	T 9
F 10	15 10 1	19 ⁰ 4'21	22 ⁰ 20	6 ⁰ 6	23 ⁰ 26	26 ⁰ 2	23 ⁰ 3	20 ⁰ 26	3 ⁰ 30	18 ⁰ 14	23 ⁰ 6	19 ⁰ D20	20 ⁰ 44	0 ⁰ 41	4 ⁰ 29	F 10
S 11	15 13 58	20 ⁰ 2'21	6 ⁰ 17	8 ⁰ 3	24 ⁰ 39	26 ⁰ 41	22 ⁰ 58	20 ⁰ 25	3 ⁰ 33	18 ⁰ 16	23 ⁰ 5	19 ⁰ 21	20 ⁰ 41	0 ⁰ 48	4 ⁰ 31	S 11
S 12	15 17 54	21 ⁰ 0'20	20 ⁰ 21	10 ⁰ 2	25 ⁰ 52	27 ⁰ 20	22 ⁰ 53	20 ⁰ 24	3 ⁰ 37	18 ⁰ 17	23 ⁰ 5	19 ⁰ R21	20 ⁰ 38	0 ⁰ 55	4 ⁰ 34	S 12
M13	15 21 51	21 ⁰ 58'16	4 ⁰ 31	12 ⁰ 3	27 ⁰ 5	27 ⁰ 58	22 ⁰ 47	20 ⁰ 23	3 ⁰ 40	18 ⁰ 18	23 ⁰ 4	19 ⁰ 21	20 ⁰ 35	1 ⁰ 1	4 ⁰ 37	M13
T 14	15 25 47	22 ⁰ 56'11	18 ⁰ 47	14 ⁰ 5	28 ⁰ 17	28 ⁰ 37	22 ⁰ 41	20 ⁰ 22	3 ⁰ 43	18 ⁰ 20	23 ⁰ 4	19 ⁰ 18	20 ⁰ 31	1 ⁰ 8	4 ⁰ 39	T 14
W15	15 29 44	23 ⁰ 54'04	3 ⁰ 4	16 ⁰ 9	29 ⁰ 30	29 ⁰ 16	22 ⁰ 36	20 ⁰ 20	3 ⁰ 46	18 ⁰ 21	23 ⁰ 3	19 ⁰ 13	20 ⁰ 28	1 ⁰ 15	4 ⁰ 42	W15
T 16	15 33 40	24 ⁰ 51'55	17 ⁰ 20	18 ⁰ 15	0 ⁸ 43	29 ⁰ 55	22 ⁰ 30	20 ⁰ 19	3 ⁰ 50	18 ⁰ 22	23 ⁰ 3	19 ⁰ 7	20 ⁰ 25	1 ⁰ 21	4 ⁰ 44	T 16
F 17	15 37 37	25 ⁰ 49'44	1 ⁰ 31	20 ⁰ 22	1 ⁰ 56	0 ⁰ 34	22 ⁰ 24	20 ⁰ 17	3 ⁰ 53	18 ⁰ 23	23 ⁰ 2	18 ⁰ 58	20 ⁰ 22	1 ⁰ 28	4 ⁰ 47	F 17
S 18	15 41 34	26 ⁰ 47'32	15 ⁰ 30	22 ⁰ 30	3 ⁰ 9	1 ⁰ 12	22 ⁰ 18	20 ⁰ 16	3 ⁰ 56	18 ⁰ 24	23 ⁰ 1	18 ⁰ 50	20 ⁰ 19	1 ⁰ 35	4 ⁰ 49	S 18
S 19	15 45 30	27 ⁰ 45'19	29 ⁰ 14	24 ⁰ 39	4 ⁰ 22	1 ⁰ 51	22 ⁰ 12	20 ⁰ 14	3 ⁰ 59	18 ⁰ 25	23 ⁰ 1	18 ⁰ 42	20 ⁰ 16	1 ⁰ 42	4 ⁰ 52	S 19
M20	15 49 27	28 ⁰ 43'04	12 ⁰ 40	26 ⁰ 50	5 ⁰ 35	2 ⁰ 30	22 ⁰ 5	20 ⁰ 12	4 ⁰ 3	18 ⁰ 26	23 ⁰ 0	18 ⁰ 36	20 ⁰ 12	1 ⁰ 48	4 ⁰ 54	M20
T 21	15 53 23	29 ⁰ 40'48	25 ⁰ 45	29 ⁰ 1	6 ⁰ 48	3 ⁰ 9	21 ⁰ 59	20 ⁰ 10	4 ⁰ 6	18 ⁰ 27	22 ⁰ 59	18 ⁰ 31	20 ⁰ 9	1 ⁰ 55	4 ⁰ 56	T 21
W22	15 57 20	0 ¹¹ 38'30	8 ⁰ 30	1 ¹¹ 12	8 ⁰ 1	3 ⁰ 47	21 ⁰ 52	20 ⁰ 8	4 ⁰ 9	18 ⁰ 28	22 ⁰ 59	18 ⁰ 29	20 ⁰ 6	2 ⁰ 2	4 ⁰ 59	W22
T 23	16 1 16	1 ⁰ 36'12	20 ⁰ 56	3 ⁰ 24	9 ⁰ 14	4 ⁰ 26	21 ⁰ 46	20 ⁰ 6	4 ⁰ 12	18 ⁰ 29	22 ⁰ 58	18 ⁰ D28	20 ⁰ 3	2 ⁰ 8	5 ⁰ 1	T 23
F 24	16 5 13	2 ⁰ 33'52	3 ⁰ 7	5 ⁰ 35	10 ⁰ 27	5 ⁰ 5	21 ⁰ 39	20 ⁰ 4	4 ⁰ 15	18 ⁰ 30	22 ⁰ 57	18 ⁰ 29	20 ⁰ 0	2 ⁰ 15	5 ⁰ 3	F 24
S 25	16 9 9	3 ⁰ 31'31	1 ⁰ 6	7 ⁰ 46	11 ⁰ 39	5 ⁰ 43	21 ⁰ 32	20 ⁰ 2	4 ⁰ 18	18 ⁰ 31	22 ⁰ 56	18 ⁰ 30	19 ⁰ 57	2 ⁰ 22	5 ⁰ 5	S 25
S 26	16 13 6	4 ⁰ 29'10	26 ⁰ 59	9 ⁰ 57	12 ⁰ 52	6 ⁰ 22	21 ⁰ 25	19 ⁰ 59	4 ⁰ 22	18 ⁰ 32	22 ⁰ 55	18 ⁰ 32	19 ⁰ 53	2 ⁰ 28	5 ⁰ 8	S 26
M27	16 17 3	5 ⁰ 26'47	8 ⁰ 49	12 ⁰ 7	14 ⁰ 5	7 ⁰ 0	21 ⁰ 18	19 ⁰ 57	4 ⁰ 25	18 ⁰ 33	22 ⁰ 55	18 ⁰ R32	19 ⁰ 50	2 ⁰ 35	5 ⁰ 10	M27
T 28	16 20 59	6 ⁰ 24'23	20 ⁰ 43	14 ⁰ 15	15 ⁰ 18	7 ⁰ 39	21 ⁰ 11	19 ⁰ 54	4 ⁰ 28	18 ⁰ 34	22 ⁰ 54	18 ⁰ 31	19 ⁰ 47	2 ⁰ 42	5 ⁰ 12	T 28
W29	16 24 56	7 ⁰ 21'58	2 ⁰ 46	16 ⁰ 23	16 ⁰ 31	8 ⁰ 17	21 ⁰ 4	19 ⁰ 52	4 ⁰ 31	18 ⁰ 34	22 ⁰ 53	18 ⁰ 28	19 ⁰ 44	2 ⁰ 48	5 ⁰ 14	W29
T 30	16 28 52	8 ⁰ 19'33	1 ⁰ 0	18 ⁰ 28	17 ⁰ 44	8 ⁰ 56	20 ⁰ 56	19 ⁰ 49	4 ⁰ 34	18 ⁰ 35	22 ⁰ 52	18 ⁰ 23	19 ⁰ 41	2 ⁰ 55	5 ⁰ 16	T 30
F 31	16 32 49	9 ⁰ 11'06	27 ⁰ 31	20 ⁰ 32	18 ⁰ 57	9 ⁰ 35	20 ⁰ 49	19 ⁰ 46	4 ⁰ 37	18 ⁰ 36	22 ⁰ 51	18 ⁰ 17	19 ⁰ 37	3 ⁰ 2	5 ⁰ 18	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
W 1	14n55	6s15	4s33	5n28	2s30	3n25	1s39	24n 9	1n 4	22s39	0n38	21s29	0n23	12n 3	0s29	5s38	0s59	21s45	0s18	21n52	21n46	14s35	4n25	3n 4			
T 2	15 13	1 45	4 54	6 10	2 25	3 53	1 40	24 12	1 5	22 39	0 38	21 29	0 23	12 4	0 29	5 38	0 59	21 45	0 18	21 54	21 46	14 33	4 26	3 4			
F 3	15 31	2n54	5 2	6 52	2 21	4 21	1 40	24 14	1 5	22 39	0 38	21 29	0 23	12 5	0 29	5 37	0 59	21 45	0 18	21 55	21 47	14 31	4 28	3 4			
S 4	15 49	7 31	4 56	7 35	2 15	4 49	1 40	24 17	1 5	22 39	0 38	21 29	0 23	12 6	0 29	5 37	0 59	21 45	0 18	21 57	21 47	14 30	4 29	3 4			
S 5	16 6	11 55	4 34	8 19	2 10	5 17	1 40	24 20	1 5	22 39	0 38	21 29	0 23	12 8	0 29	5 36	0 59	21 45	0 18	21 59	21 48	14 28	4 30	3 4			
M 6	16 24	15 50	3 58	9 3	2 4	5 44	1 40	24 22	1 6	22 38	0 38	21 29	0 23	12 9	0 29	5 36	0 59	21 45	0 18	22 0	21 48	14 26	4 31	3 4			
T 7	16 40	19 2	3 8	9 48	1 57	6 12	1 40	24 24	1 6	22 38	0 38	21 30	0 23	12 10	0 29	5 35	0 59	21 45	0 18	22 1	21 49	14 24	4 32	3 4			
W 8	16 57	21 13	2 7	10 33	1 50	6 39	1 40	24 26	1 6	22 38	0 38	21 30	0 23	12 11	0 29	5 34	0 59	21 46	0 18	22 2	21 49	14 23	4 33	3 4			
T 9	17 13	22 12	0 58	11 19	1 42	7 7	1 40	24 27	1 6	22 38	0 38	21 30	0 23	12 12	0 29	5 34	0 59	21 46	0 19	22 2	21 50	14 21	4 35	3 4			
F 10	17 29	21 51	0n16	12 4	1 34	7 34	1 39	24 29	1 6	22 38	0 38	21 30	0 23	12 13	0 29	5 34	0 59	21 46	0 19	22 2	21 50	14 19	4 36	3 4			
S 11	17 45	20 9	1 29	12 50	1 26	8 1	1 39	24 30	1 6	22 37	0 38	21 30	0 23	12 14	0 29	5 33	0 59	21 46	0 19	22 2	21 51	14 17	4 37	3 4			
S 12	18 0	17 12	2 38	13 37	1 17	8 28	1 39	24 31	1 7	22 37	0 38	21 30	0 23	12 16	0 29	5 33	0 59	21 46	0 19	22 2	21 51	14 16	4 38	3 4			
M13	18 15	13 13	3 37	14 23	1 8	8 54	1 38	24 32	1 7	22 37	0 37	21 31	0 23	12 17	0 29	5 32	0 59	21 47	0 19	22 2	21 52	14 14	4 39	3 4			
T 14	18 30	8 29	4 24	15 9	0 58	9 21	1 37	24 33	1 7	22 37	0 37	21 31	0 23	12 18	0 29	5 32	0 59	21 47	0 19	22 3	21 52	14 12	4 40	3 4			
W15	18 45	3 16	4 54	15 54	0 48	9 47	1 37	24 33	1 7	22 36	0 37	21 31	0 23	12 19	0 29	5 31	0 59	21 47	0 19	22 3	21 53	14 10	4 41	3 4			
T 16	18 59	2s 6	5 16	16 39	0 38	10 13	1 36	24 33	1 7	22 36	0 37	21 31	0 23	12 20	0 29	5 31	0 59	21 47	0 19	22 4	21 53	14 9	4 42	3 4			
F 17	19 13	7 20	4 59	17 23	0 28	10 39	1 35	24 34	1 8	22 36	0 37	21 32	0 23	12 21	0 29	5 30	1 0	21 47	0 19	22 6	21 54	14 7	4 43	3 5			
S 18	19 26	12 7	4 34	18 7	0 17	11 5	1 35	24 33	1 8	22 36	0 37	21 32	0 23	12 22	0 29	5 30	1 0	21 48	0 20	22 7	21 54	14 5	4 44	3 5			
S 19	19 39	16 11	3 53	18 49	0 7	11 30	1 34	24 33	1 8	22 35	0 37	21 32	0 23	12 23	0 29	5 30	1 0	21 48	0 20	22 8	21 54	14 3	4 45	3 5			
M20	19 52	19 20	3 1	19 30	0n 4	11 55	1 33	24 33	1 8	22 35	0 37	21 33	0 23	12 24	0 29	5 29	1 0	21 48	0 20	22 9	21 55	14 1	4 46	3 5			
T 21	20 5	21 23	1 59	20 10	0 14	12 20	1 32	24 32	1 8	22 35	0 37	21 33	0 23	12 26	0 29	5 29	1 0	21 48	0 20	22 9	21 55	14 0	4 47	3 5			
W22	20 17	22 16	0 54	20 48	0 25	12 45	1 31	24 31	1 8	22 34	0 37	21 33	0 22	12 27	0 29	5 29	1 0	21 48	0 20	22 10	21 56	13 58	4 48	3 5			
T 23	20 29	22 2	0s13	21 24	0 35	13 9	1 29	24 30	1 8	22 34	0 37	21 34	0 22	12 28	0 29	5 28	1 0	21 49	0 20	22 10	21 56	13 56	4 49	3 5			
F 24	20 40	20 44	1 18	21 58	0 45	13 33	1 28	24 29	1 8	22 34	0 37	21 34	0 22	12 29	0 29	5 28	1 0	21 49	0 20	22 10	21 57	13 54	4 50	3 5			
S 25	20 51	18 31	2 19	22 30	0 55	13 57	1 27	24 27	1 9	22 33	0 37	21 34	0 22	12 30	0 29	5 28	1 0	21 49	0 20	22 9	21 57	13 52	4 51	3 5			
S 26	21 2	15 33	3 13	22 59	1 4	14 20	1 26	24 26	1 9	22 33	0 37	21 35	0 22	12 31	0 29	5 27	1 0	21 49	0 20	22 9	21 58	13 51	4 52	3 5			
M27	21 12	11 57	3 59	23 26	1 13	14 43	1 24	24 24	1 9	22 33	0 37	21 35	0 22	12 32	0 29	5 27	1 0	21 50	0 20	22 9	21 58	13 49	4 53	3 5			
T 28	21 23	7 53	4 35	23 51	1 21	15 6	1 23	24 22	1 9	22 32	0 36	21 36	0 22	12 33	0 29	5 27	1 0	21 50	0 21	22 9	21 59	13 47	4 54	3 5			
W29	21 32	3 28	4 59	24 12	1 28	15 29	1 21	24 20	1 9	22 32	0 36	21 36	0 22	12 34	0 29	5 26	1 0	21 50	0 21	22 10	21 59	13 45	4 55	3 5			
T 30	21 41	1n 9	5 9	24 31	1 35	15 51	1 20	24 17	1 9	22 31	0 36	21 37	0 22	12 35	0 29	5 26	1 0	21 50	0 21	22 10	22 0	13 43	4 56	3 5			
F 31	21n50	5n49	5s 6	24n47	1n42	16n12	1s18	24n15	1n 9	22s31	0n36	21s37	0n22	12n36	0s29	5s26	1s 0	21s51	0s21	22n11	22n 0	13s42	4n57	3n 6			

ASTRODIENST EPHEMERIS for the year 2019

geocentric

JUNE 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 36 45	10 ^{II} 14'39	10 ^{III} 19	22 ^{II} 34	20 ^{III} 10	10 ^{III} 13	20°R42	19°R43	4 ^{III} 40	18 ^{III} 37	22°R50	18°R11	19 ^{III} 34	3 ^{III} 8	5 ^{III} 20	S 1
S 2	16 40 42	11°12'11	23°26	24°33	21°24	10°52	20 ^{III} 34	19 ^{III} 41	4°43	18°37	22 ^{III} 49	18 ^{III} 5	19°31	3°15	5°22	S 2
M 3	16 44 38	12° 9'42	6 ^{III} 52	26°31	22°37	11°30	20°27	19°38	4°46	18°38	22°48	18° 0	19°28	3°22	5°23	M 3
T 4	16 48 35	13° 7'12	20°34	28°26	23°50	12° 9	20°19	19°34	4°48	18°38	22°47	17°56	19°25	3°28	5°25	T 4
W 5	16 52 32	14° 4'40	4 ^{III} 30	0 ^{III} 18	25° 3	12°47	20°12	19°31	4°51	18°39	22°46	17°53	19°22	3°35	5°27	W 5
T 6	16 56 28	15° 2'08	18°36	2° 8	26°16	13°26	20° 4	19°28	4°54	18°39	22°45	17°D53	19°18	3°42	5°29	T 6
F 7	17 0 25	15°59'35	2 ^{III} 49	3°56	27°29	14° 4	19°57	19°25	4°57	18°40	22°44	17°53	19°15	3°48	5°30	F 7
S 8	17 4 21	16°57'01	17° 4	5°41	28°42	14°42	19°49	19°22	5° 0	18°40	22°43	17°55	19°12	3°55	5°32	S 8
S 9	17 8 18	17°54'25	1 ^{III} 20	7°23	29°55	15°21	19°41	19°18	5° 2	18°41	22°42	17°56	19° 9	4° 2	5°33	S 9
M10	17 12 14	18°51'48	15°34	9° 3	1 ^{III} 8	15°59	19°34	19°15	5° 5	18°41	22°40	17°R57	19° 6	4° 9	5°35	M10
T 11	17 16 11	19°49'10	29°43	10°40	2°21	16°38	19°26	19°11	5° 8	18°42	22°39	17°56	19° 3	4°15	5°36	T 11
W12	17 20 7	20°46'31	13 ^{III} 46	12°14	3°34	17°16	19°18	19° 8	5°10	18°42	22°38	17°55	18°59	4°22	5°38	W12
T 13	17 24 4	21°43'51	27°40	13°45	4°48	17°54	19°11	19° 4	5°13	18°42	22°37	17°52	18°56	4°29	5°39	T 13
F 14	17 28 1	22°41'10	11 ^{III} 25	15°14	6° 1	18°33	19° 3	19° 0	5°16	18°43	22°36	17°49	18°53	4°35	5°40	F 14
S 15	17 31 57	23°38'28	24°57	16°40	7°14	19°11	18°55	18°57	5°18	18°43	22°34	17°45	18°50	4°42	5°41	S 15
S 16	17 35 54	24°35'46	8 ^{III} 16	18° 3	8°27	19°49	18°48	18°53	5°21	18°43	22°33	17°42	18°47	4°49	5°43	S 16
M17	17 39 50	25°33'02	21°19	19°24	9°40	20°28	18°40	18°49	5°23	18°43	22°32	17°39	18°43	4°55	5°44	M17
T 18	17 43 47	26°30'19	4 ^{III} 7	20°41	10°53	21° 6	18°33	18°45	5°26	18°43	22°31	17°38	18°40	5° 2	5°45	T 18
W19	17 47 43	27°27'34	16°40	21°56	12° 7	21°44	18°25	18°41	5°28	18°43	22°29	17°D37	18°37	5° 9	5°46	W19
T 20	17 51 40	28°24'49	28°59	23° 7	13°20	22°22	18°18	18°37	5°31	18°43	22°28	17°38	18°34	5°15	5°47	T 20
F 21	17 55 37	29°22'04	11 ^{III} 8	24°16	14°33	23° 1	18°10	18°33	5°33	18°43	22°27	17°39	18°31	5°22	5°48	F 21
S 22	17 59 33	0 ^{III} 19'18	23° 3	25°21	15°46	23°39	18° 3	18°29	5°35	18°R43	22°26	17°40	18°28	5°29	5°49	S 22
S 23	18 3 30	1°16'33	4 ^{III} 56	26°24	17° 0	24°17	17°56	18°25	5°37	18°43	22°24	17°41	18°24	5°35	5°50	S 23
M24	18 7 26	2°13'47	16°47	27°23	18°13	24°55	17°49	18°21	5°40	18°43	22°23	17°43	18°21	5°42	5°51	M24
T 25	18 11 23	3°11'00	28°41	28°18	19°26	25°34	17°41	18°17	5°42	18°43	22°22	17°R43	18°18	5°49	5°51	T 25
W26	18 15 19	4° 8'14	10 ^{III} 44	29°11	20°39	26°12	17°34	18°13	5°44	18°43	22°20	17°43	18°15	5°56	5°52	W26
T 27	18 19 16	5° 5'28	22°59	29°59	21°53	26°50	17°27	18° 8	5°46	18°43	22°19	17°42	18°12	6° 2	5°53	T 27
F 28	18 23 12	6° 2'42	5 ^{III} 30	0 ^{III} 44	23° 6	27°28	17°20	18° 4	5°48	18°43	22°17	17°41	18° 8	6° 9	5°53	F 28
S 29	18 27 9	6°59'55	18°22	1°26	24°20	28° 7	17°13	18° 0	5°50	18°43	22°16	17°40	18° 5	6°16	5°54	S 29
S 30	18 31 5	7°57'09	1 ^{III} 36	2 ^{III} 3	25 ^{III} 33	28°45	17°7 7	17°56	5°52	18°42	22°15	17°59	18°52	6°22	5°54	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	21n59	10n21	4s47	25n 1	1n48	16n33	1s17	24n12	1n 9	22s31	0n36	21s38	0n22	12n37	0s29	5s26	1s 0	21s51	0s21	22n12	22n 1	13s40	4n57	3n 6			
S 2	22 7	14 32	4 13	25 12	1 52	16 54	1 15	24 9	1 9	22 30	0 36	21 38	0 22	12 38	0 29	5 25	1 0	21 51	0 21	22 13	22 1	13 38	4 58	3 6			
M 3	22 15	18 5	3 25	25 20	1 57	17 15	1 13	24 6	1 10	22 30	0 36	21 38	0 22	12 39	0 29	5 25	1 0	21 51	0 21	22 14	22 1	13 36	4 59	3 6			
T 4	22 22	20 43	2 23	25 26	2 0	17 34	1 11	24 2	1 10	22 29	0 36	21 39	0 22	12 40	0 29	5 25	1 0	21 52	0 21	22 14	22 2	13 34	5 0	3 6			
W 5	22 29	22 9	1 12	25 29	2 3	17 54	1 9	23 59	1 10	22 29	0 36	21 39	0 22	12 41	0 29	5 25	1 0	21 52	0 21	22 14	22 2	13 32	5 1	3 6			
T 6	22 36	22 13	0n 4	25 30	2 5	18 13	1 8	23 55	1 10	22 28	0 36	21 40	0 22	12 42	0 29	5 25	1 0	21 52	0 21	22 15	22 3	13 30	5 1	3 6			
F 7	22 42	20 50	1 21	25 28	2 6	18 32	1 6	23 51	1 10	22 28	0 35	21 41	0 22	12 43	0 29	5 25	1 0	21 52	0 22	22 14	22 3	13 29	5 2	3 6			
S 8	22 48	18 9	2 33	25 25	2 6	18 50	1 4	23 47	1 10	22 28	0 35	21 41	0 21	12 43	0 29	5 24	1 0	21 53	0 22	22 14	22 4	13 27	5 3	3 6			
S 9	22 53	14 21	3 36	25 19	2 6	19 7	1 2	23 43	1 10	22 27	0 35	21 42	0 21	12 44	0 29	5 24	1 0	21 53	0 22	22 14	22 4	13 25	5 3	3 6			
M10	22 58	9 46	4 25	25 12	2 5	19 25	1 0	23 38	1 10	22 27	0 35	21 42	0 21	12 45	0 29	5 24	1 1	21 53	0 22	22 14	22 5	13 23	5 4	3 6			
T 11	23 3	4 40	4 58	25 3	2 3	19 41	0 58	23 34	1 10	22 26	0 35	21 43	0 21	12 46	0 29	5 24	1 1	21 54	0 22	22 14	22 5	13 21	5 5	3 7			
W12	23 7	0s37	5 13	24 52	2 0	19 57	0 56	23 29	1 10	22 26	0 35	21 43	0 21	12 47	0 29	5 24	1 1	21 54	0 22	22 14	22 5	13 19	5 5	3 7			
T 13	23 11	5 50	5 9	24 40	1 57	20 13	0 53	23 24	1 10	22 25	0 35	21 44	0 21	12 48	0 29	5 24	1 1	21 54	0 22	22 15	22 6	13 17	5 6	3 7			
F 14	23 14	10 42	4 47	24 26	1 53	20 28	0 51	23 19	1 10	22 25	0 35	21 44	0 21	12 49	0 29	5 24	1 1	21 55	0 22	22 15	22 6	13 15	5 7	3 7			
S 15	23 17	14 57	4 10	24 11	1 48	20 42	0 49	23 14	1 10	22 24	0 34	21 45	0 21	12 50	0 29	5 24	1 1	21 55	0 22	22 15	22 7	13 14	5 7	3 7			
S 16	23 20	18 23	3 20	23 54	1 42	20 56	0 47	23 8	1 10	22 24	0 34	21 46	0 21	12 50	0 29	5 24	1 1	21 55	0 22	22 16	22 7	13 12	5 8	3 7			
M17	23 22	20 50	2 20	23 37	1 36	21 10	0 45	23 2	1 11	22 23	0 34	21 46	0 21	12 51	0 29	5 24	1 1	21 55	0 23	22 16	22 8	13 10	5 8	3 7			
T 18	23 23	22 9	1 14	23 19	1 29	21 23	0 42	22 57	1 11	22 23	0 34	21 47	0 21	12 52	0 29	5 24	1 1	21 56	0 23	22 16	22 8	13 8	5 9	3 7			
W19	23 25	22 19	0 5	22 59	1 22	21 35	0 40	22 51	1 11	22 22	0 34	21 47	0 21	12 53	0 29	5 24	1 1	21 56	0 23	22 17	22 9	13 6	5 9	3 7			
T 20	23 26	21 23	1s 2	22 40	1 13	21 46	0 38	22 44	1 11	22 22	0 34	21 48	0 21	12 54	0 29	5 24	1 1	21 56	0 23	22 16	22 9	13 4	5 10	3 7			
F 21	23 26	19 28	2 6	22 19	1 4	21 57	0 35	22 38	1 11	22 21	0 34	21 49	0 21	12 54	0 29	5 24	1 1	21 57	0 23	22 16	22 9	13 2	5 10	3 8			
S 22	23 26	16 43	3 3	21 58	0 55	22 8	0 33	22 32	1 11	22 21	0 33	21 49	0 21	12 55	0 29	5 24	1 1	21 57	0 23	22 16	22 10	13 0	5 11	3 8			
S 23	23 26	13 18	3 53	21 36	0 45	22 18	0 31	22 25	1 11	22 20	0 33	21 50	0 20	12 56	0 29	5 24	1 1	21 57	0 23	22 16	22 10	12 58	5 11	3 8			
M24	23 25	9 23	4 32	21 14	0 34	22 27	0 28	22 18	1 11	22 20	0 33	21 51	0 20	12 57	0 30	5 24	1 1	21 58	0 23	22 16	22 11	12 56	5 12	3 8			
T 25	23 24	5 6	4 59	20 52	0 23	22 35	0 26	22 11	1 11	22 19	0 33	21 51	0 20	12 57	0 30	5 24	1 1	21 58	0 23	22 16	22 11	12 54	5 12	3 8			
W26	23 22	0 34	5 14	20 30	0 11	22 43	0 23	22 4	1 11	22 19	0 33	21 52	0 20	12 58	0 30	5 24	1 1	21 58	0 23	22 16	22 12	12 53	5 12	3 8			
T 27	23 20	4n 3	5 15	20 8	0s 1	22 50	0 21	21 57	1 11	22 18	0 33	21 52	0 20	12 59	0 30	5 24	1 1	21 59	0 24	22 16	22 12	12 51	5 13	3 8			
F 28	23 18	8 37	5 1	19 46	0 14	22 57	0 18	21 49	1 11	22 18	0 32	21 53	0 20	12 59	0 30	5 24	1 1	21 59	0 24	22 16	22 12	12 49	5 13	3 8			
S 29	23 15	12 56	4 32	19 24	0 27	23 3	0 16	21 42	1 11	22 17	0 32	21 54	0 20	13 0	0 30	5 24	1 1	21 59	0 24	22 16	22 13	12 47	5 13	3 8			
S 30	23n12	16n45	3s48	19n 2	0s41	23n 8	0s14	21n34	1n11	22s17	0n32	21s54	0n20	13n 1	0s30	5s25	1s 1	22s 0	0s24	22n16	22n13	12s45	5n14	3n 9			

Julian Day Number = 2458635.5, Delta T = 69.29 sec

Ecliptic obliquity = 23°26'09, Nutation = - 0°00'17, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°00'41, Lahiri = 24°07'42

ASTRODIENST EPHEMERIS for the year 2019

geocentric

JULY 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	18 35 2	8°54'23	15°11'12	2°03'36	26°11'46	29°52'23	17°R 0	17°R51	5°54	18°R42	22°R13	17°R38	17°59	6°29	5°55	M 1	
T 2	18 38 59	9°51'37	29°11	3° 6	28° 0	0°01	16°53	17°347	5°56	18°42	22°12	17°37	17°56	6°36	5°55	T 2	
W 3	18 42 55	10°48'50	13°58	3°31	29°13	0°39	16°47	17°43	5°58	18°41	22°10	17°D37	17°53	6°42	5°55	W 3	
T 4	18 46 52	11°46'04	27°59	3°51	0°527	1°17	16°41	17°38	6° 0	18°41	22° 9	17°37	17°49	6°49	5°56	T 4	
F 5	18 50 48	12°43'18	12°038	4° 7	1°40	1°56	16°34	17°34	6° 2	18°41	22° 8	17°37	17°46	6°56	5°56	F 5	
S 6	18 54 45	13°40'31	27°18	4°19	2°54	2°34	16°28	17°29	6° 4	18°40	22° 6	17°37	17°43	7° 2	5°56	S 6	
S 7	18 58 41	14°37'44	11°054	4°26	4° 7	3°12	16°22	17°25	6° 5	18°40	22° 5	17°38	17°40	7° 9	5°56	S 7	
M 8	19 2 38	15°34'56	26°21	4°R28	5°21	3°50	16°16	17°21	6° 7	18°39	22° 3	17°38	17°37	7°16	5°56	M 8	
T 9	19 6 35	16°32'09	10°235	4°25	6°34	4°28	16°11	17°16	6° 9	18°39	22° 2	17°38	17°34	7°22	5°R56	T 9	
W10	19 10 31	17°29'21	24°33	4°18	7°48	5° 6	16° 5	17°12	6°10	18°38	22° 0	17°38	17°30	7°29	5°56	W10	
T 11	19 14 28	18°26'33	8°16	4° 6	9° 1	5°44	16° 0	17° 7	6°12	18°37	21°59	17°38	17°27	7°36	5°56	T 11	
F 12	19 18 24	19°23'45	21°42	3°50	10°15	6°23	15°54	17° 3	6°13	18°37	21°57	17°38	17°24	7°43	5°56	F 12	
S 13	19 22 21	20°20'58	4°52	3°29	11°28	7° 1	15°49	16°58	6°15	18°36	21°56	17°38	17°21	7°49	5°56	S 13	
S 14	19 26 17	21°18'10	17°47	3° 4	12°42	7°39	15°44	16°54	6°16	18°35	21°54	17°39	17°18	7°56	5°56	S 14	
M15	19 30 14	22°15'22	0°29	2°36	13°56	8°17	15°39	16°50	6°18	18°35	21°53	17°39	17°14	8° 3	5°55	M15	
T 16	19 34 10	23°12'34	12°58	2° 4	15° 9	8°55	15°34	16°45	6°19	18°34	21°52	17°R39	17°11	8° 9	5°55	T 16	
W17	19 38 7	24° 9'47	25°16	1°29	16°23	9°33	15°30	16°41	6°20	18°33	21°50	17°39	17° 8	8°16	5°55	W17	
T 18	19 42 4	25° 7'00	7°25	0°51	17°36	10°11	15°25	16°37	6°21	18°32	21°49	17°39	17° 5	8°23	5°54	T 18	
F 19	19 46 0	26° 4'14	19°25	0°12	18°50	10°49	15°21	16°32	6°23	18°32	21°47	17°38	17° 2	8°29	5°54	F 19	
S 20	19 49 57	27° 1'28	1°20	29°31	20° 4	11°27	15°17	16°28	6°24	18°31	21°46	17°37	16°59	8°36	5°53	S 20	
S 21	19 53 53	27°58'42	13°11	28°50	21°18	12° 5	15°13	16°24	6°25	18°30	21°44	17°35	16°55	8°43	5°53	S 21	
M22	19 57 50	28°55'57	25° 2	28° 9	22°31	12°43	15° 9	16°19	6°26	18°29	21°43	17°34	16°52	8°49	5°52	M22	
T 23	20 1 46	29°53'13	6°56	27°29	23°45	13°21	15° 6	16°15	6°27	18°28	21°41	17°33	16°49	8°56	5°51	T 23	
W24	20 5 43	0°50'30	18°58	26°51	24°59	13°59	15° 2	16°11	6°28	18°27	21°40	17°32	16°46	9° 3	5°51	W24	
T 25	20 9 39	1°47'48	1°11	26°15	26°13	14°38	14°59	16° 7	6°29	18°26	21°39	17°D31	16°43	9°10	5°50	T 25	
F 26	20 13 36	2°45'06	13°40	25°41	27°26	15°16	14°56	16° 3	6°30	18°25	21°37	17°32	16°40	9°16	5°49	F 26	
S 27	20 17 33	3°42'26	26°28	25°12	28°40	15°54	14°53	15°58	6°31	18°24	21°36	17°33	16°36	9°23	5°48	S 27	
S 28	20 21 29	4°39'46	9°11	24°47	29°54	16°32	14°50	15°54	6°31	18°23	21°34	17°34	16°33	9°30	5°47	S 28	
M29	20 25 26	5°37'08	23°18	24°26	1°08	17°10	14°47	15°50	6°32	18°22	21°33	17°35	16°30	9°36	5°46	M29	
T 30	20 29 22	6°34'30	7°22	24°11	2°22	17°48	14°45	15°46	6°33	18°21	21°31	17°36	16°27	9°43	5°45	T 30	
W31	20 33 19	7°03'53	21°50	24°51	3°03	18°02	14°43	15°42	6°33	18°20	21°30	17°R36	16°24	9°50	5°Y44	W31	

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	23n 8	19n48	2s50	18n41	0s55	23n13	0s11	21n26	1n11	22s16	0n32	21s55	0n20	13n 1	0s30	5s25	1s 1
T 2	23 4	21 46	1 40	18 20	1 9	23 17	0 9	21 18	1 11	22 16	0 32	21 56	0 20	13 2	0 30	5 25	1 1
W 3	23 0	22 22	0 23	18 0	1 24	23 20	0 6	21 10	1 11	22 15	0 32	21 56	0 20	13 3	0 30	5 25	1 2
T 4	22 55	21 30	0n57	17 41	1 39	23 22	0 4	21 1	1 11	22 15	0 31	21 57	0 20	13 3	0 30	5 25	1 2
F 5	22 50	19 10	2 14	17 23	1 54	23 24	0 1	20 53	1 11	22 14	0 31	21 58	0 19	13 4	0 30	5 25	1 2
S 6	22 44	15 35	3 23	17 5	2 9	23 25	0n 1	20 44	1 11	22 14	0 31	21 58	0 19	13 4	0 30	5 26	1 2
S 7	22 38	11 4	4 18	16 49	2 25	23 26	0 4	20 35	1 11	22 14	0 31	21 59	0 19	13 5	0 30	5 26	1 2
M 8	22 32	5 58	4 56	16 33	2 40	23 26	0 6	20 26	1 11	22 13	0 31	22 0	0 19	13 5	0 30	5 26	1 2
T 9	22 25	0 38	5 15	16 19	2 55	23 25	0 8	20 17	1 11	22 13	0 31	22 0	0 19	13 6	0 30	5 26	1 2
W10	22 18	4s38	5 15	16 6	3 10	23 23	0 11	20 8	1 11	22 12	0 30	22 1	0 19	13 6	0 30	5 27	1 2
T 11	22 10	9 34	4 57	15 55	3 24	23 21	0 13	19 58	1 11	22 12	0 30	22 2	0 19	13 7	0 30	5 27	1 2
F 12	22 2	13 57	4 23	15 45	3 38	23 18	0 16	19 49	1 11	22 12	0 30	22 2	0 19	13 7	0 30	5 27	1 2
S 13	21 54	17 34	3 36	15 37	3 51	23 14	0 18	19 39	1 11	22 11	0 30	22 3	0 19	13 8	0 30	5 27	1 2
S 14	21 45	20 15	2 38	15 31	4 4	23 10	0 20	19 29	1 10	22 11	0 30	22 3	0 19	13 8	0 30	5 28	1 2
M15	21 36	21 52	1 34	15 26	4 15	23 5	0 23	19 20	1 10	22 10	0 29	22 4	0 19	13 9	0 30	5 28	1 2
T 16	21 26	22 22	0 26	15 23	4 36	22 59	0 25	19 9	1 10	22 10	0 29	22 5	0 19	13 9	0 30	5 28	1 2
W17	21 17	21 46	0s42	15 21	4 25	22 53	0 27	18 59	1 10	22 10	0 29	22 5	0 18	13 10	0 30	5 29	1 2
T 18	21 6	20 9	1 47	15 22	4 43	22 46	0 29	18 49	1 10	22 10	0 29	22 6	0 18	13 10	0 30	5 29	1 2
F 19	20 56	17 38	2 47	15 24	4 49	22 38	0 32	18 39	1 10	22 9	0 29	22 7	0 18	13 10	0 30	5 29	1 2
S 20	20 45	14 25	3 39	15 28	4 54	22 30	0 34	18 28	1 10	22 9	0 29	22 7	0 18	13 11	0 30	5 30	1 2
S 21	20 34	10 38	4 21	15 33	4 57	22 21	0 36	18 17	1 10	22 9	0 28	22 8	0 18	13 11	0 30	5 30	1 2
M22	20 22	6 27	4 52	15 40	4 58	22 11	0 38	18 7	1 10	22 9	0 28	22 8	0 18	13 11	0 30	5 31	1 2
T 23	20 10	2 0	5 11	15 48	4 58	22 1	0 40	17 56	1 10	22 8	0 28	22 9	0 18	13 12	0 30	5 31	1 2
W24	19 58	2n33	5 16	15 57	4 56	21 50	0 42	17 45	1 10	22 8	0 28	22 10	0 18	13 12	0 30	5 31	1 2
T 25	19 45	7 5	5 7	16 7	4 52	21 38	0 44	17 33	1 10	22 8	0 28	22 10	0 18	13 12	0 30	5 32	1 2
F 26	19 32	11 25	4 44	16 19	4 46	21 26	0 46	17 22	1 10	22 8	0 27	22 11	0 18	13 13	0 30	5 32	1 2
S 27	19 19	15 22	4 6	16 31	4 39	21 13	0 48	17 11	1 10	22 8	0 27	22 11	0 17	13 13	0 30	5 33	1 2
S 28	19 6	18 42	3 14	16 44	4 31	20 59	0 50	16 59	1 10	22 8	0 27	22 12	0 17	13 13	0 30	5 33	1 2
M29	18 52	21 6	2 10	16 57	4 21	20 45	0 52	16 48	1 10	22 7	0 27	22 13	0 17	13 13	0 30	5 34	1 3
T 30	18 38	22 18	0 56	17 10	4 10	20 30	0 54	16 36	1 9	22 7	0 27	22 13	0 17	13 14	0 30	5 34	1 3
W31	18n23	22n 3	0n23	17n24	3s58	20n15	0n56	16n24	1n 9	22s 7	0n26	22s14	0n17	13n14	0s30	5s35	1s 3

Julian Day Number = 2458665.5, Delta T = 69.31 sec

Ecliptic obliquity = 23°26'09, Nutation = - 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°00'45, Lahiri = 24°07'46

ASTRODIENST EPHEMERIS for the year 2019

geocentric

AUGUST 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 37 15	8♂29°18	6♂38	23°D57	4♂50	19♂4	14°R41	15°R38	6♂34	18°R19	21°R29	17°R35	16♂20	9♂56	5°R43	T 1
F 2	20 41 12	9°26'43	21°38	23♂59	6°4	19°42	14♂39	15♂35	6°34	18♂17	21♂27	17♂33	16°17	10°3	5°Y42	F 2
S 3	20 45 8	10°24'08	6♂41	24°7	7°18	20°20	14°37	15°31	6°35	18°16	21°26	17°31	16°14	10°10	5°40	S 3
S 4	20 49 5	11°21'35	21°40	24°22	8°32	20°58	14°36	15°27	6°35	18°15	21°25	17°28	16°11	10°17	5°39	S 4
M 5	20 53 2	12°19'02	6♂25	24°43	9°46	21°36	14°34	15°23	6°36	18°14	21°23	17°25	16°8	10°23	5°38	M 5
T 6	20 56 58	13°16'30	20°52	25°11	11°0	22°14	14°33	15°20	6°36	18°12	21°22	17°22	16°5	10°30	5°37	T 6
W 7	21 0 55	14°13'58	4♂55	25°45	12°14	22°53	14°32	15°16	6°36	18°11	21°21	17°21	16°1	10°37	5°35	W 7
T 8	21 4 51	15°11'27	18°35	26°26	13°28	23°31	14°31	15°12	6°36	18°10	21°19	17°D21	15°58	10°43	5°34	T 8
F 9	21 8 48	16°8'57	1♂52	27°13	14°42	24°9	14°31	15°9	6°37	18°9	21°18	17°21	15°55	10°50	5°32	F 9
S 10	21 12 44	17°6'28	14°49	28°7	15°56	24°47	14°31	15°6	6°37	18°7	21°17	17°23	15°52	10°57	5°31	S 10
S 11	21 16 41	18°4'00	27°29	29°6	17°10	25°25	14°30	15°2	6°37	18°6	21°15	17°25	15°49	11°3	5°29	S 11
M12	21 20 37	19°1'33	9♂54	0♂12	18°24	26°3	14°D30	14°59	6°R37	18°4	21°14	17°26	15°46	11°10	5°27	M12
T 13	21 24 34	19°59'06	22°8	1°24	19°38	26°41	14°30	14°56	6°37	18°3	21°13	17°R26	15°42	11°17	5°26	T 13
W14	21 28 31	20°56'41	4♂31	2°41	20°52	27°19	14°31	14°53	6°37	18°2	21°12	17°25	15°39	11°23	5°24	W14
T 15	21 32 27	21°54'16	16°12	4°3	22°7	27°57	14°31	14°50	6°37	18°0	21°10	17°22	15°36	11°30	5°22	T 15
F 16	21 36 24	22°51'53	28°6	5°31	23°21	28°35	14°32	14°47	6°37	17°59	21°9	17°17	15°33	11°37	5°20	F 16
S 17	21 40 20	23°49'31	9♂58	7°3	24°35	29°13	14°33	14°44	6°36	17°57	21°8	17°11	15°30	11°44	5°19	S 17
S 18	21 44 17	24°47'11	21°49	8°40	25°49	29°52	14°34	14°41	6°36	17°56	21°7	17°4	15°26	11°50	5°17	S 18
M19	21 48 13	25°44'51	3°Y42	10°21	27°3	0♂30	14°35	14°38	6°36	17°54	21°6	16°57	15°23	11°57	5°15	M19
T 20	21 52 10	26°42'34	15°37	12°5	28°18	1°8	14°37	14°35	6°35	17°53	21°5	16°51	15°20	12°4	5°13	T 20
W21	21 56 6	27°40'17	27°40	13°53	29°32	1°46	14°38	14°33	6°35	17°51	21°4	16°46	15°17	12°10	5°11	W21
T 22	22 0 3	28°38'03	9♂52	15°44	0♂46	2°24	14°40	14°30	6°34	17°50	21°2	16°42	15°14	12°17	5°9	T 22
F 23	22 4 0	29°35'50	22°19	17°37	2°0	3°2	14°42	14°28	6°34	17°48	21°1	16°40	15°11	12°24	5°7	F 23
S 24	22 7 56	0♂33'39	5♂11	19°31	3°15	3°40	14°45	14°25	6°33	17°47	21°0	16°D40	15°7	12°30	5°5	S 24
S 25	22 11 53	1°31'30	18°9	21°28	4°29	4°19	14°47	14°23	6°33	17°45	20°59	16°41	15°4	12°37	5°3	S 25
M26	22 15 49	2°29'22	1♂40	23°25	5°43	4°57	14°49	14°21	6°32	17°44	20°58	16°42	15°1	12°44	5°0	M26
T 27	22 19 46	3°27'16	15°38	25°24	6°58	5°35	14°52	14°19	6°31	17°42	20°57	16°R43	14°58	12°51	4°58	T 27
W28	22 23 42	4°25'12	0♂4	27°22	8°12	6°13	14°55	14°16	6°31	17°40	20°56	16°42	14°55	12°57	4°56	W28
T 29	22 27 39	5°23'10	14°54	29°21	9°26	6°51	14°58	14°14	6°30	17°39	20°55	16°39	14°52	13°4	4°54	T 29
F 30	22 31 35	6°21'09	0♂2	1♂20	10°41	7°29	15°1	14°13	6°29	17°37	20°54	16°35	14°48	13°11	4°51	F 30
S 31	22 35 32	7♂19'10	15♂18	3♂19	11♂55	8♂8	15♂5	14♂11	6♂28	17♂36	20♂54	16♂28	14♂45	13♂17	4♂49	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	18n 8	20n17	1n43	17n38	3s44	19n59	0n58	16n12	1n 9	22s 7	0n26	22s14	0n17	13n14	0s30	T 1
F 2	17 53	17 5	2 57	17 51	3 30	19 43	0 59	16 0	1 9	22 7	0 26	22 15	0 17	13 14	0 30	F 2
S 3	17 38	12 44	3 58	18 4	3 16	19 26	1 1	15 48	1 9	22 7	0 26	22 15	0 17	13 14	0 30	S 3
S 4	17 22	7 38	4 43	18 17	3 0	19 8	1 3	15 36	1 9	22 7	0 26	22 16	0 17	13 14	0 30	S 4
M 5	17 6	2 10	5 8	18 29	2 45	18 50	1 4	15 23	1 9	22 7	0 25	22 16	0 17	13 14	0 30	M 5
T 6	16 50	3s18	5 13	18 39	2 29	18 31	1 6	15 11	1 9	22 7	0 25	22 17	0 17	13 14	0 30	T 6
W 7	16 33	8 27	4 59	18 49	2 13	18 12	1 7	14 58	1 9	22 7	0 25	22 17	0 16	13 15	0 30	W 7
T 8	16 17	13 3	4 29	18 58	1 56	17 52	1 9	14 46	1 9	22 8	0 25	22 18	0 16	13 15	0 30	T 8
F 9	16 0	16 52	3 44	19 5	1 40	17 32	1 10	14 33	1 8	22 8	0 25	22 18	0 16	13 15	0 30	F 9
S 10	15 42	19 46	2 49	19 10	1 24	17 11	1 11	14 20	1 8	22 8	0 25	22 19	0 16	13 15	0 30	S 10
S 11	15 25	21 38	1 47	19 14	1 8	16 50	1 12	14 7	1 8	22 8	0 24	22 19	0 16	13 15	0 30	S 11
M12	15 7	22 23	0 41	19 15	0 52	16 29	1 14	13 54	1 8	22 8	0 24	22 20	0 16	13 15	0 30	M12
T 13	14 49	22 2	0s26	19 15	0 37	16 7	1 15	13 41	1 8	22 8	0 24	22 20	0 16	13 15	0 30	T 13
W14	14 31	20 40	1 30	19 12	0 22	15 44	1 16	13 28	1 8	22 9	0 24	22 21	0 16	13 15	0 30	W14
T 15	14 12	18 22	2 30	19 6	0 8	15 21	1 17	13 15	1 8	22 9	0 24	22 21	0 16	13 15	0 30	T 15
F 16	13 54	15 19	3 23	18 58	0n 5	14 58	1 18	13 1	1 8	22 9	0 23	22 22	0 15	13 14	0 30	F 16
S 17	13 35	11 39	4 7	18 48	0 18	14 34	1 19	12 48	1 7	22 9	0 23	22 22	0 15	13 14	0 30	S 17
S 18	13 15	7 32	4 40	18 34	0 30	14 10	1 20	12 34	1 7	22 10	0 23	22 22	0 15	13 14	0 30	S 18
M19	12 56	3 9	5 1	18 18	0 41	13 45	1 20	12 21	1 7	22 10	0 23	22 23	0 15	13 14	0 30	M19
T 20	12 37	1n23	5 9	18 0	0 52	13 20	1 21	12 7	1 7	22 10	0 23	22 23	0 15	13 14	0 31	T 20
W21	12 17	5 54	5 4	17 38	1 1	12 55	1 22	11 53	1 7	22 11	0 22	22 24	0 15	13 14	0 31	W21
T 22	11 57	10 16	4 45	17 14	1 10	12 29	1 22	11 39	1 7	22 11	0 22	22 24	0 15	13 14	0 31	T 22
F 23	11 37	14 17	4 12	16 47	1 17	12 3	1 23	11 26	1 7	22 12	0 22	22 24	0 15	13 14	0 31	F 23
S 24	11 16	17 45	3 26	16 18	1 24	11 37	1 24	11 12	1 6	22 12	0 22	22 25	0 15	13 13	0 31	S 24
S 25	10 56	20 27	2 28	15 46	1 30	11 10	1 24	10 57	1 6	22 12	0 22	22 25	0 15	13 13	0 31	S 25
M26	10 35	22 5	1 20	15 12	1 35	10 43	1 24	10 43	1 6	22 13	0 22	22 25	0 14	13 13	0 31	M26
T 27	10 14	22 25	0 6	14 36	1 39	10 16	1 25	10 29	1 6	22 13	0 21	22 26	0 14	13 13	0 31	T 27
W28	9 53	21 18	1n11	13 59	1 42	9 48	1 25	10 15	1 6	22 14	0 21	22 26	0 14	13 12	0 31	W28
T 29	9 32	18 41	2 26	13 19	1 44	9 20	1 25	10 1	1 6	22 14	0 21	22 26	0 14	13 12	0 31	T 29
F 30	9 11	14 45	3 32	12 39	1 46	8 52	1 25	9 46	1 6	22 15	0 21	22 27	0 14	13 12	0 31	F 30
S 31	8n49	9n49	4n23	11n56	1n46	8n24	1n25	9n32	1n 5	22s16	0n21	22s27	0n14	13n12	0s31	S 31

Julian Day Number = 2458696.5, Delta T = 69.32 sec

Ecliptic obliquity = 23°26'10, Nutation = - 0°00'15, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°00'50, Lahiri = 24°07'50

ASTRODIENST EPHEMERIS for the year 2019

geocentric

SEPTEMBER 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 39 29	8♎17°12	0♊33	5♎17	13♎10	8♎46	15♊8	14°R 9	6°R27	17°R34	20°R53	16°R20	14♎42	13♎24	4°R47	S 1
M 2	22 43 25	9°15'16	15°35	7°15	14°24	9°24	15°12	14♎8	6♎26	17°R32	20°R52	16♎13	14°39	13°31	4°Y44	M 2
T 3	22 47 22	10°13'22	0♎15	9°12	15°38	10°2	15°16	14°6	6°25	17°31	20°51	16°6	14°36	13°38	4°42	T 3
W 4	22 51 18	11°11'28	14°29	11°7	16°53	10°41	15°20	14°5	6°24	17°29	20°50	16°1	14°32	13°44	4°40	W 4
T 5	22 55 15	12°9'37	28°14	13°2	18°7	11°19	15°25	14°3	6°23	17°27	20°49	15°58	14°29	13°51	4°37	T 5
F 6	22 59 11	13°7'46	11♎32	14°56	19°22	11°57	15°29	14°2	6°22	17°26	20°49	15°D57	14°26	13°58	4°35	F 6
S 7	23 3 8	14°5'58	24°25	16°49	20°36	12°35	15°34	14°1	6°21	17°24	20°48	15°57	14°23	14°4	4°32	S 7
S 8	23 7 4	15°4'10	6♎57	18°41	21°51	13°14	15°38	14°0	6°19	17°22	20°47	15°58	14°20	14°11	4°30	S 8
M 9	23 11 1	16°2'24	19°14	20°32	23°5	13°52	15°43	13°59	6°18	17°21	20°46	15°R58	14°17	14°18	4°27	M 9
T 10	23 14 57	17°0'40	1♎18	22°22	24°19	14°30	15°49	13°58	6°17	17°19	20°46	15°57	14°13	14°24	4°25	T 10
W11	23 18 54	17°58'57	13°15	24°10	25°34	15°9	15°54	13°57	6°16	17°17	20°45	15°54	14°10	14°31	4°22	W11
T 12	23 22 51	18°57'16	25°8	25°57	26°48	15°47	15°59	13°57	6°14	17°16	20°45	15°47	14°7	14°38	4°20	T 12
F 13	23 26 47	19°55'37	6♎58	27°43	28°3	16°25	16°5	13°56	6°13	17°14	20°44	15°39	14°4	14°45	4°17	F 13
S 14	23 30 44	20°53'59	18°50	29°29	29°17	17°3	16°11	13°56	6°11	17°13	20°43	15°28	14°1	14°51	4°14	S 14
S 15	23 34 40	21°52'23	0♎43	1♎12	0♎32	17°42	16°17	13°55	6°10	17°11	20°43	15°16	13°57	14°58	4°12	S 15
M16	23 38 37	22°50'49	12°40	2°55	1°46	18°20	16°23	13°55	6°8	17°9	20°42	15°3	13°54	15°5	4°9	M16
T 17	23 42 33	23°49'17	24°42	4°37	3°1	18°59	16°29	13°55	6°6	17°8	20°42	14°51	13°51	15°11	4°6	T 17
W18	23 46 30	24°47'47	6♎58	6°18	4°15	19°37	16°35	13°D55	6°5	17°6	20°41	14°41	13°48	15°18	4°4	W18
T 19	23 50 26	25°46'19	19°7	7°57	5°30	20°15	16°42	13°55	6°3	17°4	20°41	14°33	13°45	15°25	4°1	T 19
F 20	23 54 23	26°44'53	1♎36	9°36	6°44	20°54	16°48	13°55	6°1	17°3	20°41	14°28	13°42	15°31	3°58	F 20
S 21	23 58 20	27°43'30	14°19	11°14	7°59	21°32	16°55	13°55	6°0	17°1	20°40	14°25	13°38	15°38	3°56	S 21
S 22	0 2 16	28°42'09	27°20	12°50	9°14	22°11	17°2	13°55	5°58	16°59	20°40	14°D25	13°35	15°45	3°53	S 22
M23	0 6 13	29°40'50	10♎43	14°26	10°28	22°49	17°9	13°56	5°56	16°58	20°40	14°R25	13°32	15°52	3°50	M23
T 24	0 10 9	0♎39'33	24°31	16°1	11°43	23°28	17°16	13°56	5°54	16°56	20°39	14°25	13°29	15°58	3°48	T 24
W25	0 14 6	1°38'19	8♎45	17°34	12°57	24°6	17°24	13°57	5°52	16°55	20°39	14°23	13°26	16°5	3°45	W25
T 26	0 18 2	2°37'07	23°24	19°7	14°12	24°44	17°31	13°57	5°50	16°53	20°39	14°19	13°23	16°12	3°42	T 26
F 27	0 21 59	3°35'56	8♎24	20°39	15°26	25°23	17°39	13°58	5°48	16°52	20°39	14°12	13°19	16°18	3°39	F 27
S 28	0 25 55	4°34'49	23°37	22°10	16°41	26°2	17°47	13°59	5°46	16°50	20°38	14°2	13°16	16°25	3°37	S 28
S 29	0 29 52	5°33'43	8♎52	23°40	17°56	26°40	17°55	14°0	5°44	16°48	20°38	13°51	13°13	16°32	3°34	S 29
M30	0 33 49	6♎32'39	23♎58	25♎9	19♎10	27♎19	18♎3	14♎1	5♎42	16♎47	20♎38	13♎40	13♎10	16♎39	3°Y31	M30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	8n28	4n17	4n55	11n13	1n46	7n56	1n25	9n17	1n5	22s16	0n21	22s27	0n14	13n11	0s31	5s53
M 2	8 6	1s25	5 6	10 29	1 46	7 27	1 25	9 3	1 5	22 17	0 20	22 28	0 14	13 11	0 31	5 54
T 3	7 44	6 55	4 57	9 44	1 44	6 58	1 25	8 48	1 5	22 17	0 20	22 28	0 14	13 10	0 31	5 54
W 4	7 22	11 53	4 30	8 58	1 43	6 29	1 25	8 34	1 5	22 18	0 20	22 28	0 14	13 10	0 31	5 55
T 5	7 0	16 4	3 47	8 12	1 40	5 59	1 24	8 19	1 4	22 19	0 20	22 28	0 13	13 10	0 31	5 56
F 6	6 38	19 18	2 54	7 26	1 37	5 30	1 24	8 4	1 4	22 19	0 20	22 29	0 13	13 9	0 31	5 56
S 7	6 15	21 26	1 53	6 39	1 34	5 0	1 23	7 49	1 4	22 20	0 19	22 29	0 13	13 9	0 31	5 57
S 8	5 53	22 27	0 48	5 51	1 30	4 30	1 23	7 34	1 4	22 21	0 19	22 29	0 13	13 9	0 31	5 58
M 9	5 30	22 21	0s17	5 4	1 26	4 0	1 22	7 20	1 4	22 21	0 19	22 29	0 13	13 8	0 31	5 58
T 10	5 8	21 11	1 21	4 16	1 21	3 30	1 22	7 5	1 4	22 22	0 19	22 29	0 13	13 8	0 31	5 59
W11	4 45	19 5	2 20	3 29	1 16	3 0	1 21	6 50	1 3	22 23	0 19	22 30	0 13	13 7	0 31	6 0
T 12	4 22	16 10	3 13	2 42	1 11	2 30	1 20	6 35	1 3	22 23	0 19	22 30	0 13	13 7	0 31	6 0
F 13	3 59	12 37	3 57	1 54	1 5	2 0	1 20	6 20	1 3	22 24	0 18	22 30	0 13	13 6	0 31	6 1
S 14	3 36	8 34	4 30	1 7	1 0	1 29	1 19	6 4	1 3	22 25	0 18	22 30	0 13	13 6	0 31	6 2
S 15	3 13	4 11	4 52	0 20	0 54	0 59	1 18	5 49	1 3	22 26	0 18	22 30	0 12	13 5	0 31	6 2
M16	2 50	0n23	5 1	0s26	0 47	0 28	1 17	5 34	1 2	22 26	0 18	22 30	0 12	13 5	0 31	6 3
T 17	2 27	4 57	4 57	1 13	0 41	0s 2	1 16	5 19	1 2	22 27	0 18	22 30	0 12	13 4	0 31	6 4
W18	2 4	9 23	4 40	1 59	0 34	0 33	1 15	5 4	1 2	22 28	0 18	22 31	0 12	13 4	0 31	6 4
T 19	1 41	13 30	4 9	2 44	0 27	1 4	1 13	4 48	1 2	22 29	0 18	22 31	0 12	13 3	0 31	6 5
F 20	1 18	17 6	3 26	3 29	0 21	1 34	1 12	4 33	1 1	22 30	0 17	22 31	0 12	13 2	0 31	6 5
S 21	0 54	20 0	2 32	4 14	0 14	2 5	1 11	4 18	1 1	22 30	0 17	22 31	0 12	13 2	0 31	6 6
S 22	0 31	21 55	1 29	4 58	0 6	2 35	1 10	4 2	1 1	22 31	0 17	22 31	0 12	13 1	0 31	6 7
M23	0 8	22 41	0 20	5 42	0s 1	3 6	1 8	3 47	1 1	22 32	0 17	22 31	0 12	13 1	0 31	6 7
T 24	0s16	22 5	0n53	6 25	0 8	3 36	1 7	3 31	1 1	22 33	0 17	22 31	0 12	13 0	0 31	6 8
W25	0 39	20 5	2 5	7 8	0 15	4 7	1 5	3 16	1 0	22 34	0 17	22 31	0 11	12 59	0 31	6 9
T 26	1 2	16 43	3 11	7 50	0 23	4 37	1 4	3 1	1 0	22 35	0 16	22 31	0 11	12 59	0 31	6 9
F 27	1 26	12 12	4 4	8 32	0 30	5 7	1 2	2 45	1 0	22 36	0 16	22 31	0 11	12 58	0 31	6 10
S 28	1 49	6 51	4 42	9 13	0 38	5 38	1 0	2 30	1 0	22 36	0 16	22 31	0 11	12 57	0 31	6 10
S 29	2 13	1 4	4 59	9 53	0 45	6 8	0 59	2 14	0 59	22 37	0 16	22 31	0 11	12 57	0 31	6 11
M30	2s36	4s43	4n56	10s33	0s52	6s38	0n57	1n58	0n59	22s38	0n16	22s31	0n11	12n56	0s31	6s12

Julian Day Number = 2458727.5, Delta T = 69.33 sec

Ecliptic obliquity = 23°26'10, Nutation = - 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°00'54, Lahiri = 24°07'54

ASTRODIENST EPHEMERIS for the year 2019

geocentric

OCTOBER 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 37 45	7♏31'37	8♏47	26♏37	20♏25	27♏57	18♏11	14♏2	5°R40	16°R45	20°R38	13°R30	13♏7	16♏45	3°R29	T 1
W 2	0 41 42	8°30'37	23° 9	28° 4	21°39	28°36	18°19	14° 4	5♏38	16♏44	20♏38	13♏22	13° 3	16°52	3♏26	W 2
T 3	0 45 38	9°29'38	7♏2	29°31	22°54	29°14	18°28	14° 5	5°36	16°42	20°D38	13°17	13° 0	16°59	3°23	T 3
F 4	0 49 35	10°28'42	20°25	0♏56	24° 9	29°53	18°36	14° 7	5°34	16°41	20°38	13°14	12°57	17° 5	3°20	F 4
S 5	0 53 31	11°27'47	3♏21	2°20	25°23	0♏32	18°45	14° 8	5°32	16°39	20°38	13°13	12°54	17°12	3°18	S 5
S 6	0 57 28	12°26'55	15°53	3°43	26°38	1°10	18°54	14°10	5°30	16°38	20°38	13°13	12°51	17°19	3°15	S 6
M 7	1 1 24	13°26'03	28° 8	5° 6	27°52	1°49	19° 3	14°12	5°27	16°36	20°38	13°12	12°48	17°25	3°12	M 7
T 8	1 5 21	14°25'14	10♏10	6°27	29° 7	2°28	19°12	14°14	5°25	16°35	20°38	13°10	12°44	17°32	3°10	T 8
W 9	1 9 18	15°24'27	22° 4	7°46	0♏21	3° 6	19°21	14°16	5°23	16°34	20°39	13° 6	12°41	17°39	3° 7	W 9
T 10	1 13 14	16°23'41	3♏54	9° 5	1°36	3°45	19°30	14°18	5°21	16°32	20°39	12°59	12°38	17°46	3° 5	T 10
F 11	1 17 11	17°22'57	15°45	10°23	2°51	4°24	19°40	14°20	5°18	16°31	20°39	12°49	12°35	17°52	3° 2	F 11
S 12	1 21 7	18°22'15	27°38	11°39	4° 5	5° 2	19°49	14°22	5°16	16°30	20°39	12°37	12°32	17°59	2°59	S 12
S 13	1 25 4	19°21'35	9♏36	12°54	5°20	5°41	19°59	14°24	5°14	16°28	20°39	12°23	12°29	18° 6	2°57	S 13
M14	1 29 0	20°20'56	21°41	14° 7	6°34	6°20	20° 9	14°27	5°11	16°27	20°40	12° 9	12°25	18°12	2°54	M14
T 15	1 32 57	21°20'20	3♏53	15°18	7°49	6°59	20°18	14°29	5° 9	16°26	20°40	11°56	12°22	18°19	2°52	T 15
W16	1 36 53	22°19'47	16°13	16°28	9° 3	7°37	20°28	14°32	5° 7	16°24	20°40	11°44	12°19	18°26	2°49	W16
T 17	1 40 50	23°19'15	28°41	17°36	10°18	8°16	20°38	14°35	5° 4	16°23	20°41	11°35	12°16	18°33	2°47	T 17
F 18	1 44 46	24°18'45	11♏10	18°42	11°33	8°55	20°49	14°37	5° 2	16°22	20°41	11°29	12°13	18°39	2°44	F 18
S 19	1 48 43	25°18'18	24°11	19°45	12°47	9°34	20°59	14°40	4°59	16°21	20°42	11°25	12° 9	18°46	2°42	S 19
S 20	1 52 40	26°17'53	7♏17	20°46	14° 2	10°13	21° 9	14°43	4°57	16°19	20°42	11°D24	12° 6	18°53	2°39	S 20
M21	1 56 36	27°17'31	20°39	21°45	15°16	10°52	21°20	14°46	4°55	16°18	20°43	11°R24	12° 3	18°59	2°37	M21
T 22	2 0 33	28°17'10	4♏20	22°40	16°31	11°31	21°30	14°50	4°52	16°17	20°43	11°24	12° 0	19° 6	2°34	T 22
W23	2 4 29	29°16'52	18°21	23°32	17°45	12° 9	21°41	14°53	4°50	16°16	20°44	11°23	11°57	19°13	2°32	W23
T 24	2 8 26	0♏16'36	2♏43	24°20	19° 0	12°48	21°52	14°56	4°47	16°15	20°44	11°20	11°54	19°20	2°30	T 24
F 25	2 12 22	1°16'23	17°24	25° 4	20°15	13°27	22° 3	15° 0	4°45	16°14	20°45	11°13	11°50	19°26	2°27	F 25
S 26	2 16 19	2°16'12	2♏17	25°44	21°29	14° 6	22°14	15° 3	4°42	16°13	20°46	11° 5	11°47	19°33	2°25	S 26
S 27	2 20 15	3°16'02	17°16	26°19	22°44	14°45	22°25	15° 7	4°40	16°12	20°46	10°55	11°44	19°40	2°23	S 27
M28	2 24 12	4°15'55	2♏10	26°48	23°58	15°24	22°36	15°10	4°37	16°11	20°47	10°44	11°41	19°46	2°21	M28
T 29	2 28 9	5°15'50	16°51	27°11	25°13	16° 3	22°47	15°14	4°35	16°10	20°48	10°35	11°38	19°53	2°19	T 29
W30	2 32 5	6°15'47	1♏12	27°27	26°27	16°42	22°58	15°18	4°32	16° 9	20°49	10°27	11°34	20° 0	2°16	W30
T 31	2 36 2	7♏15'45	15♏6	27♏37	27♏42	17♏22	23♏10	15♏22	4♏30	16♏8	20♏49	10♏22	11♏31	20♏7	2♏14	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	2s59	10s 7	4n32	11s12	1s 0	7s 7	0n55	1n43	0n59	22s39	0n16	22s31	0n11	12n55	0s31	6s12	1s 4
W 2	3 22	14 49	3 52	11 50	1 7	7 37	0 53	1 27	0 59	22 40	0 16	22 31	0 11	12 55	0 31	6 13	1 4
T 3	3 46	18 33	2 59	12 27	1 14	8 7	0 51	1 12	0 58	22 41	0 15	22 31	0 11	12 54	0 31	6 13	1 4
F 4	4 9	21 8	1 57	13 4	1 21	8 36	0 49	0 56	0 58	22 42	0 15	22 31	0 11	12 53	0 31	6 14	1 4
S 5	4 32	22 32	0 52	13 40	1 29	9 5	0 47	0 41	0 58	22 43	0 15	22 31	0 10	12 53	0 31	6 15	1 4
S 6	4 55	22 44	0s14	14 15	1 36	9 34	0 45	0 25	0 58	22 43	0 15	22 31	0 10	12 52	0 31	6 15	1 4
M 7	5 18	21 48	1 18	14 50	1 42	10 3	0 43	0 9	0 57	22 44	0 15	22 31	0 10	12 51	0 31	6 16	1 3
T 8	5 41	19 54	2 17	15 23	1 49	10 31	0 41	0s 6	0 57	22 45	0 15	22 31	0 10	12 50	0 31	6 16	1 3
W 9	6 4	17 9	3 10	15 56	1 56	10 59	0 39	0 22	0 57	22 46	0 15	22 30	0 10	12 50	0 31	6 17	1 3
T 10	6 27	13 42	3 54	16 27	2 2	11 27	0 37	0 38	0 57	22 47	0 14	22 30	0 10	12 49	0 31	6 17	1 3
F 11	6 49	9 44	4 27	16 58	2 9	11 55	0 34	0 53	0 56	22 48	0 14	22 30	0 10	12 48	0 31	6 18	1 3
S 12	7 12	5 22	4 50	17 28	2 15	12 22	0 32	1 9	0 56	22 49	0 14	22 30	0 10	12 47	0 31	6 18	1 3
S 13	7 35	0 47	4 59	17 56	2 21	12 50	0 30	1 24	0 56	22 49	0 14	22 30	0 10	12 46	0 31	6 19	1 3
M14	7 57	3n53	4 56	18 24	2 26	13 16	0 28	1 40	0 55	22 50	0 14	22 30	0 10	12 46	0 31	6 19	1 3
T 15	8 19	8 26	4 38	18 50	2 32	13 43	0 25	1 56	0 55	22 51	0 14	22 30	0 9	12 45	0 31	6 20	1 3
W16	8 41	12 43	4 8	19 16	2 37	14 9	0 23	2 11	0 55	22 52	0 14	22 29	0 9	12 44	0 31	6 20	1 3
T 17	9 4	16 32	3 25	19 40	2 42	14 35	0 20	2 27	0 54	22 53	0 14	22 29	0 9	12 43	0 31	6 21	1 3
F 18	9 25	19 38	2 32	20 3	2 46	15 1	0 18	2 42	0 54	22 54	0 13	22 29	0 9	12 43	0 31	6 21	1 3
S 19	9 47	21 49	1 30	20 24	2 50	15 26	0 15	2 58	0 54	22 55	0 13	22 29	0 9	12 42	0 31	6 22	1 3
S 20	10 9	22 52	0 22	20 44	2 54	15 50	0 13	3 13	0 54	22 55	0 13	22 28	0 9	12 41	0 31	6 22	1 3
M21	10 30	22 39	0n49	21 3	2 57	16 15	0 10	3 29	0 53	22 56	0 13	22 28	0 9	12 40	0 31	6 23	1 3
T 22	10 52	21 5	1 58	21 20	3 0	16 39	0 8	3 44	0 53	22 57	0 13	22 28	0 9	12 39	0 31	6 23	1 3
W23	11 13	18 13	3 3	21 35	3 2	17 2	0 5	4 0	0 53	22 58	0 13	22 28	0 9	12 38	0 31	6 23	1 3
T 24	11 34	14 11	3 57	21 48	3 3	17 25	0 3	4 15	0 52	22 59	0 13	22 27	0 9	12 38	0 31	6 24	1 3
F 25	11 55	9 13	4 37	22 0	3 4	17 48	0 0	4 31	0 52	22 59	0 12	22 27	0 9	12 37	0 31	6 24	1 3
S 26	12 16	3 40	4 59	22 10	3 4	18 10	0s 2	4 46	0 52	23 0	0 12	22 27	0 8	12 36	0 31	6 25	1 3
S 27	12 36	2s 9	5 0	22 17	3 3	18 32	0 5	5 1	0 51	23 1	0 12	22 26	0 8	12 35	0 31	6 25	1 3
M28	12 56	7 49	4 42	22 22	3 1	18 53	0 8	5 17	0 51	23 2	0 12	22 26	0 8	12 34	0 31	6 25	1 3
T 29	13 16	12 58	4 4	22 25	2 58	19 14	0 10	5 32	0 51	23 2	0 12	22 26	0 8	12 34	0 31	6 26	1 3
W30	13 36	17 15	3 12	22 25	2 54	19 34	0 13	5 47	0 50	23 3	0 12	22 25	0 8	12 33	0 31	6 26	1 3
T 31	13s56	20s27	2n10	22s22	2s49	19s54	0s15	6s 3	0n50	23s 4	0n12	22s25	0n 8	12n32	0s31	6s26	1s 3

Julian Day Number = 2458757.5, Delta T = 69.34 sec

Ecliptic obliquity = 23°26'11", Nutation = - 0°00'18", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°00'58", Lahiri = 24°07'59"

ASTRODIENST EPHEMERIS for the year 2019

geocentric

NOVEMBER 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	2 39 58	8♈15'46	28♈33	27°R38	28♈57	18♈1	23♈21	15♈26	4°R28	16°R 7	20♈50	10°R19	11♈28	20♈13	2°R12	F 1
S 2	2 43 55	9°15'48	11♈33	27♈31	0♈11	18°40	23°33	15°30	4♈25	16°R 6	20°51	10°D18	11°25	20°20	2°Y10	S 2
S 3	2 47 51	10°15'51	24°10	27°14	1°26	19°19	23°44	15°34	4°23	16° 6	20°52	10♈19	11°22	20°27	2° 8	S 3
M 4	2 51 48	11°15'56	6♈27	26°49	2°40	19°58	23°56	15°38	4°20	16° 5	20°53	10°R19	11°19	20°33	2° 6	M 4
T 5	2 55 44	12°16'03	18°31	26°13	3°55	20°37	24° 8	15°43	4°18	16° 4	20°54	10°19	11°15	20°40	2° 4	T 5
W 6	2 59 41	13°16'11	0♈26	25°28	5° 9	21°16	24°20	15°47	4°15	16° 3	20°55	10°18	11°12	20°47	2° 2	W 6
T 7	3 3 38	14°16'21	12°17	24°34	6°24	21°56	24°32	15°52	4°13	16° 3	20°56	10°13	11° 9	20°54	2° 1	T 7
F 8	3 7 34	15°16'32	24° 8	23°31	7°38	22°35	24°44	15°56	4°10	16° 2	20°57	10° 7	11° 6	21° 0	1°59	F 8
S 9	3 11 31	16°16'45	6♈5	22°21	8°53	23°14	24°56	16° 1	4° 8	16° 1	20°58	9°59	11° 3	21° 7	1°57	S 9
S 10	3 15 27	17°17'00	18° 8	21° 6	10° 7	23°53	25° 8	16° 5	4° 6	16° 1	20°59	9°49	11° 0	21°14	1°55	S 10
M 11	3 19 24	18°17'16	0♈22	19°47	11°22	24°32	25°20	16°10	4° 3	16° 0	21° 0	9°39	10°56	21°20	1°54	M 11
T 12	3 23 20	19°17'34	12°46	18°27	12°36	25°12	25°32	16°15	4° 1	16° 0	21° 1	9°29	10°53	21°27	1°52	T 12
W 13	3 27 17	20°17'53	25°21	17° 9	13°51	25°51	25°45	16°20	3°59	15°59	21° 2	9°21	10°50	21°34	1°50	W 13
T 14	3 31 13	21°18'14	8♈8	15°54	15° 5	26°30	25°57	16°25	3°56	15°59	21° 3	9°15	10°47	21°41	1°49	T 14
F 15	3 35 10	22°18'37	21° 7	14°47	16°20	27°10	26°10	16°30	3°54	15°58	21° 5	9°11	10°44	21°47	1°47	F 15
S 16	3 39 7	23°19'02	4♈16	13°47	17°34	27°49	26°22	16°35	3°52	15°58	21° 6	9°D 9	10°40	21°54	1°46	S 16
S 17	3 43 3	24°19'29	17°37	12°58	18°49	28°29	26°35	16°40	3°49	15°57	21° 7	9° 9	10°37	22° 1	1°45	S 17
M 18	3 47 0	25°19'57	1♈10	12°20	20° 3	29° 8	26°47	16°45	3°47	15°57	21° 8	9°10	10°34	22° 7	1°43	M 18
T 19	3 50 56	26°20'28	14°55	11°54	21°18	29°47	27° 0	16°51	3°45	15°57	21°10	9°12	10°31	22°14	1°42	T 19
W 20	3 54 53	27°21'00	28°53	11°39	22°32	0♈27	27°13	16°56	3°43	15°57	21°11	9°R12	10°28	22°21	1°41	W 20
T 21	3 58 49	28°21'34	13♈3	11°D35	23°46	1° 6	27°26	17° 2	3°41	15°56	21°12	9°11	10°25	22°28	1°39	T 21
F 22	4 2 46	29°22'10	27°24	11°43	25° 1	1°46	27°39	17° 7	3°38	15°56	21°14	9° 8	10°21	22°34	1°38	F 22
S 23	4 6 42	0♈22'47	11♈52	12° 1	26°15	2°25	27°51	17°13	3°36	15°56	21°15	9° 4	10°18	22°41	1°37	S 23
S 24	4 10 39	1°23'26	26°24	12°28	27°30	3° 5	28° 4	17°18	3°34	15°56	21°17	8°58	10°15	22°48	1°36	S 24
M 25	4 14 36	2°24'07	10♈52	13° 3	28°44	3°44	28°17	17°24	3°32	15°56	21°18	8°52	10°12	22°54	1°35	M 25
T 26	4 18 32	3°24'49	25°10	13°46	29°59	4°24	28°30	17°30	3°30	15°56	21°19	8°47	10° 9	23° 1	1°34	T 26
W 27	4 22 29	4°25'33	9♈14	14°36	1♈13	5° 4	28°44	17°35	3°28	15°56	21°21	8°42	10° 6	23° 8	1°33	W 27
T 28	4 26 25	5°26'18	22°58	15°31	2°27	5°43	28°57	17°41	3°26	15°D56	21°22	8°39	10° 2	23°15	1°32	T 28
F 29	4 30 22	6°27'05	6♈20	16°32	3°42	6°23	29°10	17°47	3°24	15°56	21°24	8°D38	9°59	23°21	1°32	F 29
S 30	4 34 18	7♈27'52	19♈20	17♈37	4♈56	7♈3	29♈23	17♈53	3♈22	15♈56	21♈25	8♈39	9♈56	23♈28	1♈31	S 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	14s16	22s23	1n 2	22s16	2s42	20s13	0s18	6s18	0n50	23s 5	0n12	22s25	0n 8	12n31	0s31	F 1
S 2	14 35	23 3	0s 7	22 6	2 34	20 31	0 21	6 33	0 49	23 5	0 12	22 24	0 8	12 30	0 31	S 2
S 3	14 54	22 29	1 13	21 53	2 24	20 49	0 23	6 48	0 49	23 6	0 11	22 24	0 8	12 29	0 31	S 3
M 4	15 12	20 50	2 15	21 36	2 13	21 7	0 26	7 3	0 49	23 7	0 11	22 24	0 8	12 29	0 31	M 4
T 5	15 31	18 17	3 10	21 15	2 0	21 24	0 28	7 18	0 48	23 7	0 11	22 23	0 8	12 28	0 31	T 5
W 6	15 49	14 59	3 55	20 50	1 46	21 40	0 31	7 33	0 48	23 8	0 11	22 23	0 7	12 27	0 31	W 6
T 7	16 7	11 7	4 30	20 21	1 29	21 56	0 34	7 48	0 48	23 8	0 11	22 22	0 7	12 26	0 31	T 7
F 8	16 25	6 49	4 54	19 48	1 11	22 11	0 36	8 3	0 47	23 9	0 11	22 22	0 7	12 25	0 31	F 8
S 9	16 42	2 15	5 5	19 12	0 52	22 25	0 39	8 18	0 47	23 10	0 11	22 21	0 7	12 25	0 31	S 9
S 10	16 59	2n27	5 2	18 33	0 33	22 39	0 41	8 33	0 46	23 10	0 11	22 21	0 7	12 24	0 31	S 10
M 11	17 16	7 8	4 46	17 52	0 12	22 52	0 44	8 48	0 46	23 11	0 10	22 20	0 7	12 23	0 31	M 11
T 12	17 33	11 36	4 16	17 11	0n 9	23 4	0 46	9 2	0 46	23 11	0 10	22 20	0 7	12 22	0 31	T 12
W 13	17 49	15 39	3 33	16 29	0 29	23 16	0 49	9 17	0 45	23 12	0 10	22 19	0 7	12 22	0 31	W 13
T 14	18 5	19 3	2 39	15 49	0 49	23 27	0 51	9 32	0 45	23 12	0 10	22 19	0 7	12 21	0 31	T 14
F 15	18 21	21 33	1 36	15 12	1 7	23 37	0 54	9 46	0 45	23 13	0 10	22 18	0 7	12 20	0 31	F 15
S 16	18 36	22 56	0 26	14 39	1 24	23 47	0 56	10 1	0 44	23 13	0 10	22 18	0 7	12 19	0 31	S 16
S 17	18 51	23 2	0n46	14 10	1 38	23 56	0 58	10 15	0 44	23 14	0 10	22 17	0 7	12 18	0 31	S 17
M 18	19 6	21 47	1 56	13 46	1 51	24 4	1 1	10 29	0 43	23 14	0 10	22 17	0 6	12 18	0 31	M 18
T 19	19 20	19 15	3 1	13 28	2 2	24 12	1 3	10 44	0 43	23 15	0 10	22 16	0 6	12 17	0 31	T 19
W 20	19 34	15 33	3 57	13 15	2 11	24 19	1 5	10 58	0 43	23 15	0 9	22 16	0 6	12 16	0 31	W 20
T 21	19 48	10 57	4 39	13 7	2 18	24 25	1 8	11 12	0 42	23 15	0 9	22 15	0 6	12 16	0 31	T 21
F 22	20 1	5 41	5 4	13 4	2 23	24 30	1 10	11 26	0 42	23 16	0 9	22 14	0 6	12 15	0 31	F 22
S 23	20 14	0 4	5 10	13 7	2 27	24 35	1 12	11 40	0 41	23 16	0 9	22 14	0 6	12 14	0 31	S 23
S 24	20 26	5s35	4 56	13 13	2 29	24 39	1 14	11 54	0 41	23 16	0 9	22 13	0 6	12 13	0 31	S 24
M 25	20 38	10 54	4 23	13 23	2 29	24 42	1 16	12 8	0 40	23 17	0 9	22 12	0 6	12 13	0 31	M 25
T 26	20 50	15 35	3 35	13 36	2 29	24 44	1 18	12 21	0 40	23 17	0 9	22 12	0 6	12 12	0 31	T 26
W 27	21 1	19 18	2 33	13 53	2 27	24 46	1 20	12 35	0 40	23 17	0 9	22 11	0 6	12 11	0 31	W 27
T 28	21 12	21 51	1 25	14 11	2 24	24 47	1 22	12 49	0 39	23 17	0 9	22 10	0 6	12 11	0 31	T 28
F 29	21 23	23 4	0 13	14 32	2 21	24 47	1 24	13 2	0 39	23 17	0 9	22 10	0 6	12 10	0 31	F 29
S 30	21s33	23s 0	0s58	14s54	2n16	24s47	1s26	13s16	0n38	23s18	0n 8	22s 9	0n 6	12n 9	0s31	S 30

Julian Day Number = 2458788.5, Delta T = 69.35 sec

Ecliptic obliquity = 23°26'10, Nutation = - 0°00'18, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°01'02, Lahiri = 24°08'03

ASTRODIENST EPHEMERIS for the year 2019

geocentric

DECEMBER 2019

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 38 15	8°28'41	1°58	18°46	6°10	7°42	29°36	17°59	3°R20	15°56	21°27	8°40	9°53	23°35	1°R30	S 1
M 2	4 42 11	9°29'30	14°19	19°58	7°25	8°22	29°50	18° 5	3°B18	15°56	21°29	8°42	9°50	23°41	1°Y29	M 2
T 3	4 46 8	10°30'21	26°25	21°13	8°39	9° 2	0°3	18°11	3°17	15°56	21°30	8°44	9°46	23°48	1°29	T 3
W 4	4 50 5	11°31'12	8°22	22°31	9°53	9°42	0°17	18°17	3°15	15°56	21°32	8°R45	9°43	23°55	1°28	W 4
T 5	4 54 1	12°32'04	20°14	23°51	11° 8	10°21	0°30	18°23	3°13	15°57	21°33	8°44	9°40	24° 2	1°28	T 5
F 6	4 57 58	13°32'57	2°Y 7	25°12	12°22	11° 1	0°43	18°30	3°11	15°57	21°35	8°43	9°37	24° 8	1°27	F 6
S 7	5 1 54	14°33'51	14° 4	26°35	13°36	11°41	0°57	18°36	3°10	15°57	21°37	8°40	9°34	24°15	1°27	S 7
S 8	5 5 51	15°34'45	26°11	28° 0	14°50	12°21	1°10	18°42	3° 8	15°57	21°39	8°37	9°31	24°22	1°27	S 8
M 9	5 9 47	16°35'40	8°B30	29°25	16° 5	13° 1	1°24	18°49	3° 6	15°58	21°40	8°33	9°27	24°28	1°27	M 9
T 10	5 13 44	17°36'37	21° 4	0°A52	17°19	13°40	1°38	18°55	3° 5	15°58	21°42	8°30	9°24	24°35	1°26	T 10
W11	5 17 40	18°37'34	3°II53	2°19	18°33	14°20	1°51	19° 1	3° 3	15°59	21°44	8°26	9°21	24°42	1°26	W11
T 12	5 21 37	19°38'31	16°59	3°47	19°47	15° 0	2° 5	19° 8	3° 2	15°59	21°45	8°24	9°18	24°49	1°26	T 12
F 13	5 25 34	20°39'30	0°E21	5°16	21° 1	15°40	2°18	19°14	3° 0	16° 0	21°47	8°23	9°15	24°55	1°D26	F 13
S 14	5 29 30	21°40'30	13°56	6°45	22°15	16°20	2°32	19°21	2°59	16° 0	21°49	8°D23	9°12	25° 2	1°26	S 14
S 15	5 33 27	22°41'30	27°43	8°14	23°29	17° 0	2°46	19°27	2°58	16° 1	21°51	8°24	9° 8	25° 9	1°26	S 15
M16	5 37 23	23°42'32	11°L40	9°44	24°43	17°40	2°59	19°34	2°56	16° 1	21°53	8°25	9° 5	25°16	1°26	M16
T 17	5 41 20	24°43'34	25°44	11°15	25°57	18°20	3°13	19°41	2°55	16° 2	21°54	8°26	9° 2	25°22	1°26	T 17
W18	5 45 16	25°44'37	9°II52	12°46	27°11	19° 0	3°27	19°47	2°54	16° 3	21°56	8°27	8°59	25°29	1°27	W18
T 19	5 49 13	26°45'41	24° 3	14°17	28°25	19°40	3°41	19°54	2°53	16° 4	21°58	8°R28	8°56	25°36	1°27	T 19
F 20	5 53 10	27°46'47	8°L14	15°48	29°39	20°20	3°54	20° 1	2°51	16° 4	22° 0	8°27	8°52	25°42	1°27	F 20
S 21	5 57 6	28°47'52	22°23	17°20	0°A53	21° 0	4° 8	20° 8	2°50	16° 5	22° 2	8°27	8°49	25°49	1°28	S 21
S 22	6 1 3	29°48'59	6°II28	18°51	2° 7	21°41	4°22	20°14	2°49	16° 6	22° 4	8°26	8°46	25°56	1°28	S 22
M23	6 4 59	0°S50'07	20°27	20°23	3°21	22°21	4°36	20°21	2°48	16° 7	22° 6	8°25	8°43	26° 3	1°29	M23
T 24	6 8 56	1°51'15	4°A15	21°56	4°35	23° 1	4°50	20°28	2°47	16° 8	22° 8	8°24	8°40	26° 9	1°29	T 24
W25	6 12 52	2°52'24	17°52	23°28	5°49	23°41	5° 3	20°35	2°47	16° 9	22° 9	8°23	8°37	26°16	1°30	W25
T 26	6 16 49	3°53'34	1°B14	25° 1	7° 3	24°21	5°17	20°42	2°46	16° 9	22°11	8°23	8°33	26°23	1°31	T 26
F 27	6 20 45	4°54'43	14°21	26°34	8°16	25° 2	5°31	20°49	2°45	16°10	22°13	8°D23	8°30	26°29	1°31	F 27
S 28	6 24 42	5°55'54	27°11	28° 7	9°30	25°42	5°45	20°56	2°44	16°11	22°15	8°23	8°27	26°36	1°32	S 28
S 29	6 28 39	6°57'04	9°A45	29°41	10°44	26°22	5°59	21° 3	2°43	16°13	22°17	8°23	8°24	26°43	1°33	S 29
M30	6 32 35	7°58'14	22° 4	1°B15	11°57	27° 2	6°13	21°10	2°43	16°14	22°19	8°R23	8°21	26°50	1°34	M30
T 31	6 36 32	8°59'24	4°A10	2°B49	13°A11	27°II43	6°B26	21°B17	2°B42	16°A15	22°B21	8°E23	8°E18	26°A56	1°Y35	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	21s43	21s44	2s 4	15s18	2n12	24s45	1s28	13s29	0n38	23s18	0n 8	22s 8	0n 5	12n 9	0s30	6s30
M 2	21 52	19 27	3 3	15 42	2 6	24 43	1 30	13 42	0 37	23 18	0 8	22 8	0 5	12 8	0 30	6 30
T 3	22 1	16 21	3 52	16 7	2 1	24 40	1 31	13 55	0 37	23 18	0 8	22 7	0 5	12 8	0 30	6 30
W 4	22 10	12 37	4 31	16 33	1 54	24 37	1 33	14 8	0 36	23 18	0 8	22 6	0 5	12 7	0 30	6 30
T 5	22 18	8 26	4 58	16 59	1 48	24 32	1 34	14 21	0 36	23 18	0 8	22 5	0 5	12 6	0 30	6 30
F 6	22 25	3 56	5 12	17 25	1 41	24 27	1 36	14 34	0 36	23 18	0 8	22 5	0 5	12 6	0 30	6 30
S 7	22 33	0n45	5 13	17 52	1 34	24 21	1 37	14 47	0 35	23 18	0 8	22 4	0 5	12 5	0 30	6 30
S 8	22 39	5 27	4 59	18 18	1 27	24 15	1 39	14 59	0 35	23 18	0 8	22 3	0 5	12 5	0 30	6 30
M 9	22 46	10 2	4 32	18 43	1 20	24 8	1 40	15 12	0 34	23 18	0 8	22 2	0 5	12 4	0 30	6 29
T 10	22 52	14 17	3 52	19 8	1 13	24 0	1 41	15 24	0 34	23 18	0 7	22 1	0 5	12 4	0 30	6 29
W11	22 57	18 0	2 59	19 33	1 5	23 51	1 43	15 37	0 33	23 18	0 7	22 1	0 5	12 3	0 30	6 29
T 12	23 2	20 53	1 55	19 57	0 58	23 41	1 44	15 49	0 33	23 18	0 7	22 0	0 5	12 3	0 30	6 29
F 13	23 6	22 42	0 44	20 21	0 50	23 31	1 45	16 1	0 32	23 18	0 7	21 59	0 5	12 2	0 30	6 29
S 14	23 10	23 13	0n31	20 44	0 43	23 20	1 46	16 13	0 32	23 18	0 7	21 58	0 4	12 2	0 30	6 28
S 15	23 14	22 20	1 45	21 6	0 36	23 9	1 47	16 25	0 31	23 18	0 7	21 57	0 4	12 1	0 30	6 28
M16	23 17	20 4	2 54	21 27	0 28	22 57	1 48	16 37	0 31	23 17	0 7	21 56	0 4	12 1	0 30	6 28
T 17	23 20	16 36	3 53	21 47	0 21	22 44	1 48	16 48	0 30	23 17	0 7	21 55	0 4	12 1	0 30	6 28
W18	23 22	12 9	4 38	22 6	0 13	22 30	1 49	17 0	0 30	23 17	0 7	21 55	0 4	12 0	0 30	6 27
T 19	23 24	7 3	5 7	22 24	0 6	22 16	1 50	17 11	0 29	23 17	0 7	21 54	0 4	12 0	0 30	6 27
F 20	23 25	1 35	5 17	22 42	0s 1	22 1	1 50	17 22	0 28	23 16	0 6	21 53	0 4	12 0	0 30	6 27
S 21	23 26	3s57	5 7	22 58	0 8	21 45	1 51	17 33	0 28	23 16	0 6	21 52	0 4	11 59	0 30	6 26
S 22	23 26	9 16	4 40	23 13	0 15	21 29	1 51	17 44	0 27	23 16	0 6	21 51	0 4	11 59	0 30	6 26
M23	23 26	14 4	3 55	23 27	0 22	21 13	1 51	17 55	0 27	23 15	0 6	21 50	0 4	11 59	0 30	6 26
T 24	23 25	18 4	2 58	23 40	0 28	20 55	1 52	18 6	0 26	23 15	0 6	21 49	0 4	11 58	0 30	6 25
W25	23 24	21 2	1 51	23 52	0 35	20 37	1 52	18 17	0 26	23 14	0 6	21 48	0 4	11 58	0 30	6 25
T 26	23 23	22 46	0 40	24 2	0 41	20 19	1 52	18 27	0 25	23 14	0 6	21 47	0 4	11 58	0 30	6 25
F 27	23 21	23 13	0s33	24 11	0 48	20 0	1 52	18 37	0 25	23 13	0 6	21 46	0 3	11 57	0 30	6 24
S 28	23 18	22 24	1 42	24 19	0 54	19 40	1 52	18 48	0 24	23 13	0 6	21 45	0 3	11 57	0 30	6 24
S 29	23 15	20 28	2 45	24 26	1 0	19 20	1 51	18 58	0 23	23 12	0 6	21 44	0 3	11 57	0 30	6 23
M30	23 12	17 37	3 39	24 31	1 5	18 59	1 51	19 7	0 23	23 12	0 6	21 43	0 3	11 57	0 30	6 23
T 31	23s 8	14s 3	4s22	24s35	1s11	18s38	1s51	19s17	0n22	23s11	0n 5	21s42	0n 3	11n57	0s30	6s22

Julian Day Number = 2458818.5, Delta T = 69.35 sec
 Ecliptic obliquity = 23°26'10, Nutation = - 0°00'18, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 25°01'07, Lahiri = 24°08'07