



Astrodienst Ephemeris Tables for the year 1420

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 1420

geocentric

JANUARY 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	7 13 20	18°51'34	15°56'56	3°13'13	11°13'16	28°16'51	1°16'16	16°16'19	8°16'15	20°16'37	24°16'32	1°16'33	2°16'27	4°16'2	17°16'19	M 1
T 2	7 17 16	19°52'39	28°18'18	4°43'12	12°31'31	29°32'11	1°11'13	16°11'17	8°11'18	20°11'35	24°11'31	1°11'20	2°11'23	4°11'8	17°11'24	T 2
W 3	7 21 13	20°53'43	10°12'49	6°14'14	13°47'13	0°12'12	1°10'10	16°10'16	8°10'20	20°10'34	24°10'29	1°10'9	2°10'20	4°10'15	17°10'29	W 3
T 4	7 25 9	21°54'47	23°31'17	7°46'15	15°2'2	0°53'10	1°7'7	16°14'16	8°14'23	20°14'32	24°14'28	1°14'0	2°14'17	4°14'22	17°14'35	T 4
F 5	7 29 6	22°55'49	6°17'23	9°17'16	16°18'13	1°33'10	1°4'4	16°12'16	8°12'26	20°12'30	24°12'27	0°12'55	2°12'14	4°12'28	17°12'40	F 5
S 6	7 33 2	23°56'52	19°27'10	10°50'17	17°33'29	2°14'10	1°2'2	16°10'16	8°10'28	20°10'28	24°10'26	0°10'52	2°10'11	4°10'35	17°10'45	S 6
S 7	7 36 59	24°57'54	2°44'12	12°23'18	18°48'25	2°54'10	1°0'0	16°8'16	8°8'31	20°8'27	24°8'25	0°8'52	2°8'8	4°8'42	17°8'51	S 7
M 8	7 40 56	25°58'55	16°15'13	13°57'20	20°4'35	3°35'10	0°58'16	16°6'16	8°6'34	20°6'25	24°6'24	0°6'52	2°6'4	4°6'49	17°6'56	M 8
T 9	7 44 52	26°59'56	0°12'15	15°31'21	21°19'45	4°15'10	0°56'16	16°4'16	8°4'36	20°4'23	24°4'23	0°4'52	2°4'1	4°4'55	18°4'1	T 9
W10	7 48 49	28°0'56	14°7'17	17°6'22	23°34'45	5°6'10	0°54'16	16°2'16	8°2'39	20°2'22	24°2'22	0°2'51	1°58'5	5°2'18	17°58'7	W10
T11	7 52 45	29°1'56	28°28'18	18°42'23	23°50'53	6°17'10	0°53'15	15°59'8	8°42'20	20°42'20	24°42'21	0°42'48	1°55'5	5°9'18	18°12'11	T11
F12	7 56 42	0°2'55	13°3'20	20°18'25	25°5'6	6°17'10	0°52'15	15°57'8	8°45'20	20°45'18	24°45'20	0°45'42	1°52'5	5°15'18	18°15'17	F12
S13	8 0 38	1°3'53	27°47'21	21°55'26	26°20'6	6°58'10	0°51'15	15°54'8	8°48'20	20°48'17	24°48'19	0°48'34	1°48'5	5°22'18	18°22'13	S13
S14	8 4 35	2°4'51	12°33'23	23°32'27	27°36'7	7°38'10	0°50'15	15°51'8	8°51'20	20°51'15	24°51'18	0°51'24	1°45'5	5°29'18	18°29'14	S14
M15	8 8 31	3°5'47	27°13'25	25°11'28	28°51'8	8°19'10	0°49'15	15°49'8	8°54'20	20°54'13	24°54'18	0°54'15	1°42'5	5°36'18	18°36'15	M15
T16	8 12 28	4°6'43	11°40'26	26°50'0	0°6'8	8°59'10	0°49'15	15°46'8	8°57'20	20°57'12	24°57'17	0°57'6	1°39'5	5°42'18	18°42'16	T16
W17	8 16 25	5°7'37	25°46'28	28°29'1	1°22'9	9°40'10	0°49'15	15°43'8	9°0'20	20°10'20	24°10'16	29°10'59	1°36'5	5°49'18	18°49'17	W17
T18	8 20 21	6°8'30	9°28'0	10°21'10	2°37'10	10°21'10	0°49'15	15°40'8	9°3'20	20°9'20	24°9'15	29°9'55	1°33'5	5°56'18	18°56'18	T18
F19	8 24 18	7°9'21	22°44'1	1°51'3	3°52'11	1°1'10	0°49'15	15°37'8	9°6'20	20°7'20	24°7'14	29°7'53	1°29'5	6°2'18	18°54'19	F19
S20	8 28 14	8°10'11	5°35'3	3°33'5	5°7'11	1°42'10	0°50'15	15°33'8	9°9'20	20°5'20	24°5'13	29°5'52	1°26'5	6°9'18	18°59'13	S20
S21	8 32 11	9°11'00	18°5'5	5°15'6	6°23'12	2°23'10	0°50'15	15°30'8	9°12'20	20°4'20	24°4'12	29°4'54	1°23'5	6°16'19	19°4'4	S21
M22	8 36 7	10°11'47	0°17'6	6°59'7	7°38'13	3°4'10	0°51'15	15°27'8	9°15'20	20°2'20	24°2'12	29°2'55	1°20'5	6°22'19	19°2'9	M22
T23	8 40 4	11°12'33	12°17'8	8°43'8	8°53'13	4°44'10	0°52'15	15°23'8	9°18'20	20°1'20	24°1'11	29°1'55	1°17'5	6°29'19	19°14'23	T23
W24	8 44 0	12°13'17	24°9'10	10°28'10	8°14'25	5°37'10	0°53'15	15°20'8	9°21'20	20°9'20	24°10'10	29°10'54	1°13'5	6°36'19	19°16'24	W24
T25	8 47 57	13°13'59	6°11'0	12°14'11	11°24'15	6°56'10	0°55'15	15°16'8	9°24'20	20°15'20	24°9'15	29°15'51	1°10'5	6°43'19	19°24'25	T25
F26	8 51 54	14°14'40	17°53'14	14°0'12	12°39'15	7°47'10	0°57'15	15°13'8	9°27'20	20°15'56	24°9'15	29°15'46	1°7'5	6°49'19	19°29'26	F26
S27	8 55 50	15°15'19	29°53'15	15°48'13	13°54'16	8°27'10	0°58'15	15°9'8	9°31'20	20°15'54	24°8'15	29°15'40	1°4'5	6°56'19	19°34'31	S27
S28	8 59 47	16°15'56	12°3'17	17°36'15	15°9'17	8°17'10	1°0'15	15°5'8	9°34'20	20°15'53	24°7'15	29°15'32	1°1'5	7°3'19	19°39'28	S28
M29	9 3 43	17°16'32	24°24'19	19°25'16	16°24'17	9°49'10	1°3'15	15°1'8	9°37'20	20°15'51	24°7'15	29°15'24	0°58'5	7°9'19	19°44'29	M29
T30	9 7 40	18°17'07	7°12'0	21°14'17	17°39'18	10°30'10	1°5'14	15°57'8	9°40'20	20°15'50	24°6'15	29°15'16	0°54'5	7°16'19	19°49'30	T30
W31	9 11 36	19°17'39	19°12'49	23°5'23	18°55'19	11°11'10	1°11'18	14°53'14	9°44'20	19°50'49	24°11'5	29°15'9	0°51'5	7°23'19	19°54'31	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	
M 1	22s11	17n44	4s51	24s11	0s43	23s31	0s29	19s36	0n22	19n50	0s40	7n22	2n8	9s11	0s45	21n27
T 2	22 2	16 11	4 29	24 15	0 50	23 27	0 32	19 46	0 22	19 49	0 39	7 23	2 8	9 10	0 45	21 27
W 3	21 53	13 50	3 53	24 18	0 56	23 21	0 34	19 55	0 21	19 49	0 39	7 24	2 8	9 10	0 45	21 27
T 4	21 43	10 49	3 4	24 19	1 2	23 15	0 36	20 4	0 20	19 49	0 39	7 25	2 8	9 9	0 45	21 28
F 5	21 33	7 14	2 6	24 19	1 8	23 9	0 38	20 13	0 20	19 48	0 39	7 26	2 9	9 7	0 45	21 28
S 6	21 23	3 16	1 0	24 17	1 13	23 1	0 40	20 22	0 19	19 48	0 38	7 27	2 9	9 6	0 45	21 28
S 7	21 12	0s56	0n10	24 14	1 19	22 53	0 42	20 30	0 18	19 48	0 38	7 28	2 9	9 5	0 45	21 28
M 8	21 1	5 10	1 21	24 10	1 24	22 44	0 44	20 39	0 18	19 48	0 38	7 29	2 9	9 4	0 45	21 29
T 9	20 49	9 12	2 29	24 4	1 29	22 35	0 46	20 47	0 17	19 48	0 38	7 30	2 10	9 3	0 45	21 29
W10	20 37	12 47	3 29	23 57	1 33	22 25	0 48	20 55	0 16	19 47	0 37	7 31	2 10	9 2	0 45	21 29
T11	20 25	15 41	4 18	23 49	1 38	22 14	0 50	21 3	0 15	19 47	0 37	7 32	2 10	9 1	0 45	21 29
F12	20 12	17 38	4 50	23 39	1 42	22 2	0 52	21 11	0 15	19 47	0 37	7 34	2 10	9 0	0 45	21 30
S13	19 59	18 26	5 4	23 27	1 45	21 50	0 54	21 18	0 14	19 47	0 37	7 35	2 11	8 59	0 44	21 30
S14	19 45	17 59	4 58	23 14	1 49	21 37	0 56	21 26	0 13	19 48	0 36	7 36	2 11	8 58	0 44	21 30
M15	19 31	16 20	4 32	23 0	1 52	21 24	0 58	21 33	0 13	19 48	0 36	7 37	2 11	8 57	0 44	21 31
T16	19 17	13 41	3 49	22 44	1 55	21 9	0 59	21 40	0 12	19 48	0 36	7 39	2 11	8 56	0 44	21 31
W17	19 3	10 16	2 52	22 26	1 57	20 55	1 1	21 47	0 11	19 48	0 36	7 40	2 12	8 54	0 44	21 31
T18	18 48	6 23	1 47	22 7	1 59	20 39	1 3	21 54	0 10	19 48	0 36	7 42	2 12	8 53	0 44	21 31
F19	18 32	2 18	0 38	21 47	2 1	20 23	1 4	22 0	0 10	19 48	0 35	7 43	2 12	8 52	0 44	21 32
S20	18 17	1n45	0s31	21 24	2 3	20 7	1 6	22 7	0 9	19 49	0 35	7 44	2 12	8 51	0 44	21 32
S21	18 1	5 37	1 36	21 1	2 4	19 49	1 7	22 13	0 8	19 49	0 35	7 46	2 12	8 50	0 44	21 32
M22	17 45	9 10	2 36	20 35	2 4	19 32	1 9	22 19	0 7	19 50	0 35	7 47	2 13	8 49	0 44	21 32
T23	17 28	12 16	3 28	20 8	2 4	19 13	1 10	22 25	0 6	19 50	0 34	7 49	2 13	8 47	0 44	21 33
W24	17 11	14 49	4 11	19 39	2 4	18 54	1 12	22 30	0 6	19 51	0 34	7 50	2 13	8 46	0 44	21 33
T25	16 54	16 44	4 42	19 9	2 3	18 35	1 13	22 36	0 5	19 51	0 34	7 52	2 13	8 45	0 44	21 33
F26	16 36	17 57	5 2	18 37	2 2	18 15	1 14	22 41	0 4	19 52	0 34	7 54	2 13	8 44	0 44	21 33
S27	16 19	18 22	5 8	18 4	2 0	17 54	1 15	22 46	0 3	19 52	0 33	7 55	2 14	8 43	0 44	21 34
S28	16 1	17 58	5 1	17 29	1 58	17 33	1 16	22 51	0 2	19 53	0 33	7 57	2 14	8 41	0 44	21 34
M29	15 42	16 43	4 40	16 52	1 56	17 12	1 17	22 56	0 1	19 54	0 33	7 59	2 14	8 40	0 44	21 34
T30	15 24	14 38	4 5	16 14	1 52	16 50	1 18	23 0	0 1	19 54	0 33	8 0	2 14	8 39	0 44	21 34
W31	15s5	11n48	3s17	15s34	1s49	16s27	1s19	23s4	0s0	19n55	0s33	8n2	2n14	8s38	0s44	21n34

Julian Day Number = 2239712.5, Delta T = 07m21s

Ecliptic obliquity = 23°30'43", Nutation = 0°00'02", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°38'57", Lahiri = 15°45'57" Julian Calendar 1 Jan. 1420 == Greg. Calendar 10 Jan. 1420

ASTRODIENST EPHEMERIS for the year 1420

geocentric

MARCH 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	11 9 53	19°12'03	25°19' 9	2°R51	26°12'22	9°12'40	3°12'49	12°R36	11°12'25	19°R16	23°12'56	28°D38	29°12'16	10°12'44	22°12'0	F 1
S 2	11 13 49	20°20'38	9°12' 2	2°Y39	27°36	10°21	3°57	12°12'32	11°29	19°12'16	23°12'56	28°12'38	29°12'13	10°12'51	22°12'4	S 2
S 3	11 17 46	21°20'12	23° 7	2°18	28°51	11° 3	4° 5	12°27	11°32	19°15	23°56	28°39	29°10	10°58	22° 7	S 3
M 4	11 21 43	22°19'44	7°12'30	1°51	0°Y 5	11°44	4°13	12°22	11°36	19°14	23°57	28°39	29° 6	11° 4	22°11	M 4
T 5	11 25 39	23°19'14	21°37	1°18	1°20	12°25	4°22	12°18	11°39	19°14	23°57	28°40	29° 3	11°11	22°14	T 5
W 6	11 29 36	24°18'42	5°12'56	0°39	2°34	13° 6	4°30	12°13	11°42	19°13	23°57	28°40	29° 0	11°18	22°17	W 6
T 7	11 33 32	25°18'08	20°11	29°12'55	3°49	13°47	4°38	12° 9	11°46	19°13	23°57	28°R40	28°57	11°25	22°20	T 7
F 8	11 37 29	26°17'33	4°12'31	29° 8	5° 3	14°28	4°47	12° 4	11°49	19°12	23°57	28°40	28°54	11°31	22°23	F 8
S 9	11 41 25	27°16'56	18°24	28°18	6°18	15° 9	4°56	11°59	11°53	19°12	23°57	28°40	28°50	11°38	22°27	S 9
S 10	11 45 22	28°16'17	2°12'18	27°27	7°32	15°50	5° 5	11°55	11°56	19°11	23°58	28°D40	28°47	11°45	22°29	S 10
M 11	11 49 18	29°15'37	16° 2	26°35	8°47	16°31	5°14	11°51	11°59	19°11	23°58	28°40	28°44	11°51	22°32	M 11
T 12	11 53 15	0°Y14'54	29°33	25°44	10° 1	17°12	5°23	11°46	12° 3	19°11	23°58	28°40	28°41	11°58	22°35	T 12
W 13	11 57 12	1°14'10	12°12'52	24°54	11°16	17°54	5°32	11°42	12° 6	19°10	23°59	28°41	28°38	12° 5	22°38	W 13
T 14	12 1 8	2°13'23	25°56	24° 7	12°30	18°35	5°42	11°37	12° 9	19°10	23°59	28°R41	28°35	12°12	22°41	T 14
F 15	12 5 5	3°12'35	8°Y47	23°23	13°44	19°16	5°51	11°33	12°12	19°10	23°59	28°41	28°31	12°18	22°43	F 15
S 16	12 9 1	4°11'44	21°23	22°43	14°59	19°57	6° 1	11°29	12°16	19°10	24° 0	28°40	28°28	12°25	22°46	S 16
S 17	12 12 58	5°10'52	3°12'45	22° 8	16°13	20°38	6°10	11°25	12°19	19°10	24° 0	28°40	28°25	12°32	22°49	S 17
M 18	12 16 54	6° 9'57	15°56	21°37	17°27	21°19	6°20	11°21	12°22	19° 9	24° 0	28°39	28°22	12°38	22°51	M 18
T 19	12 20 51	7° 9'00	27°57	21°11	18°41	22° 0	6°30	11°17	12°25	19° 9	24° 1	28°38	28°19	12°45	22°53	T 19
W 20	12 24 47	8° 8'00	9°12'52	20°51	19°56	22°41	6°40	11°13	12°28	19° 9	24° 1	28°36	28°16	12°52	22°56	W 20
T 21	12 28 44	9° 6'59	21°45	20°36	21°10	23°22	6°50	11° 9	12°32	19° 9	24° 2	28°35	28°12	12°59	22°58	T 21
F 22	12 32 41	10° 5'55	3°12'39	20°27	22°24	24° 3	7° 0	11° 5	12°35	19°D 9	24° 2	28°35	28° 9	13° 5	23° 0	F 22
S 23	12 36 37	11° 4'49	15°38	20°D23	23°38	24°44	7°11	11° 1	12°38	19° 9	24° 3	28°D35	28° 6	13°12	23° 2	S 23
S 24	12 40 34	12° 3'40	27°49	20°25	24°52	25°25	7°21	10°57	12°41	19° 9	24° 3	28°35	28° 3	13°19	23° 4	S 24
M 25	12 44 30	13° 2'29	10°12'51	20°31	26° 6	26° 6	7°32	10°54	12°44	19° 9	24° 4	28°36	28° 0	13°25	23° 6	M 25
T 26	12 48 27	14° 1'16	22°59	20°43	27°20	26°47	7°42	10°50	12°47	19°10	24° 5	28°38	27°56	13°32	23° 8	T 26
W 27	12 52 23	15° 0'01	6°12' 6	21° 0	28°34	27°28	7°53	10°47	12°50	19°10	24° 5	28°39	27°53	13°39	23°10	W 27
T 28	12 56 20	15°58'43	19°37	21°22	29°48	28° 9	8° 4	10°43	12°53	19°10	24° 6	28°40	27°50	13°46	23°12	T 28
F 29	13 0 16	16°57'24	3°12'40	21°48	1°12	28°50	8°15	10°40	12°56	19°10	24° 6	28°R40	27°47	13°52	23°14	F 29
S 30	13 4 13	17°56'02	17°45	22°18	2°16	29°30	8°26	10°36	12°59	19°10	24° 7	28°39	27°44	13°59	23°15	S 30
S 31	13 8 9	18°Y54'38	2°12'17	22°12'53	3°12'30	0°12'11	8°12'37	10°12'33	13°12' 2	19°12'11	24°12' 8	28°12'37	27°12'41	14°12' 6	23°12'17	S 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂	♂	♂	♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
F 1	4s14	1n38	0s19	4n14	3n22	2s39	1s19	23s40	0s30	20n33	0s26	8n58	2n18	7s59	0s44	21n40	0s28	18n 8	5s15	0n33	0n18	17n18	15s11	6n36
S 2	3 50	2s43	0n57	4 14	3 28	2 9	1 18	23 38	0 31	20 34	0 26	9 0	2 18	7 57	0 44	21 40	0 28	18 8	5 15	0 33	0 19	17 18	15 10	6 36
S 3	3 27	6 58	2 12	4 9	3 31	1 38	1 17	23 36	0 33	20 36	0 26	9 2	2 18	7 56	0 44	21 40	0 28	18 8	5 15	0 32	0 20	17 19	15 9	6 37
M 4	3 3	10 52	3 19	4 0	3 33	1 7	1 16	23 33	0 34	20 38	0 26	9 3	2 18	7 55	0 44	21 40	0 28	18 8	5 15	0 32	0 21	17 19	15 9	6 37
T 5	2 40	14 9	4 13	3 47	3 33	0 36	1 14	23 31	0 35	20 40	0 26	9 5	2 18	7 54	0 44	21 40	0 28	18 8	5 14	0 32	0 23	17 20	15 8	6 38
W 6	2 16	16 33	4 53	3 30	3 32	0 6	1 13	23 28	0 36	20 41	0 25	9 7	2 18	7 52	0 44	21 40	0 28	18 9	5 14	0 32	0 24	17 21	15 7	6 38
T 7	1 52	17 56	5 14	3 9	3 28	0n25	1 12	23 25	0 37	20 43	0 25	9 9	2 18	7 51	0 44	21 40	0 28	18 9	5 14	0 32	0 25	17 21	15 6	6 39
F 8	1 29	18 11	5 16	2 45	3 23	0 56	1 11	23 22	0 38	20 45	0 25	9 10	2 18	7 50	0 44	21 41	0 28	18 9	5 14	0 32	0 26	17 22	15 5	6 39
S 9	1 5	17 19	4 59	2 19	3 16	1 27	1 9	23 18	0 40	20 47	0 25	9 12	2 18	7 48	0 44	21 41	0 28	18 9	5 14	0 32	0 28	17 23	15 4	6 40
S 10	0 41	15 25	4 24	1 51	3 7	1 58	1 8	23 15	0 41	20 48	0 25	9 14	2 18	7 47	0 44	21 41	0 28	18 9	5 13	0 32	0 29	17 23	15 3	6 40
M 11	0 18	12 39	3 35	1 20	2 57	2 29	1 6	23 11	0 42	20 50	0 25	9 16	2 18	7 46	0 44	21 41	0 28	18 9	5 13	0 32	0 30	17 24	15 2	6 41
T 12	0n 6	9 15	2 35	0 49	2 45	2 59	1 5	23 7	0 43	20 52	0 24	9 17	2 18	7 45	0 44	21 41	0 28	18 10	5 13	0 32	0 32	17 24	15 1	6 41
W 13	0 30	5 25	1 27	0 18	2 32	3 30	1 3	23 3	0 45	20 54	0 24	9 19	2 18	7 43	0 44	21 41	0 28	18 10	5 13	0 32	0 33	17 25	15 0	6 41
T 14	0 53	1 23	0 15	0s13	2 19	4 1	1 1	22 59	0 46	20 55	0 24	9 21	2 17	7 42	0 44	21 41	0 28	18 10	5 13	0 32	0 34	17 26	14 59	6 42
F 15	1 17	2n38	0s56	0 44	2 4	4 31	1 0	22 54	0 47	20 57	0 24	9 22	2 17	7 41	0 44	21 41	0 27	18 10	5 13	0 32	0 35	17 26	14 58	6 42
S 16	1 40	6 28	2 3	1 14	1 49	5 2	0 58	22 49	0 48	20 59	0 24	9 24	2 17	7 40	0 44	21 41	0 27	18 10	5 12	0 32	0 37	17 27	14 57	6 43
S 17	2 4	9 57	3 2	1 43	1 33	5 32	0 56	22 44	0 50	21 1	0 24	9 25	2 17	7 38	0 44	21 41	0 27	18 11	5 12	0 32	0 38	17 27	14 57	6 43
M 18	2 27	12 56	3 53	2 9	1 17	6 2	0 54	22 39	0 51	21 3	0 23	9 27	2 17	7 37	0 44	21 41	0 27	18 11	5 12	0 32	0 39	17 28	14 56	6 44
T 19	2 51	15 20	4 33	2 34	1 1	6 32	0 52	22 34	0 52	21 5	0 23	9 28	2 17	7 36	0 44	21 41	0 27	18 11	5 12	0 33	0 40	17 29	14 55	6 44
W 20	3 14	17 3	5 0	2 57	0 45	7 2	0 51	22 29	0 54	21 7	0 23	9 30	2 17	7 35	0 44	21 41	0 27	18 11	5 12	0 33	0 42	17 29	14 54	6 45
T 21	3 37	18 2	5 14	3 17	0 29	7 32	0 49	22 23	0 55	21 8	0 23	9 31	2 17	7 34	0 44	21 41	0 27	18 11	5 12	0 34	0 43	17 30	14 53	6 45
F 22	4 1	18 13	5 15	3 35	0 14	8 1	0 47	22 17	0 56	21 10	0 23	9 33	2 17	7 32	0 44	21 41	0 27	18 12	5 11	0 34	0 44	17 30	14 52	6 46
S 23	4 24	17 35	5 3	3 50	0s 1	8 31	0 44	22 11	0 58	21 12	0 23	9 34	2 17	7 31	0 44	21 41	0 27	18 12	5 11	0 34	0 45	17 31	14 51	6 46
S 24	4 47	16 9	4 36	4 3	0 15	9 0	0 42	22 5	0 59	21 14	0 22	9 35	2 17	7 30	0 44	21 41	0 27	18 12	5 11	0 34	0 47	17 32	14 51	6 47
M 25	5 10	13 56	3 57	4 13	0 29	9 29	0 40	21 59	1 0	21 16	0 22	9 37	2 17	7 29	0 44	21 41	0 27	18 12	5 11	0 33	0 48	17 32	14 50	6 47
T 26	5 33	10 59	3 5	4 21	0 43	9 58	0 38	21 52	1 2	21 18	0 22	9 38	2 17	7 28	0 44	21 41	0 27	18 12	5 11	0 33	0 49	17 33	14 49	6 48
W 27	5 56	7 25	2 1	4 26	0 56	10 26	0 36	21 46	1 3	21 20	0 22	9 39	2 17	7 27	0 44	21 41	0 27	18 12	5 11	0 32	0 51	17 33	14 48	6 48
T 28	6 18	3 22	0 50	4 28	1 8	10 55	0 34	21 39	1 5	21 22	0 22	9 40	2 17	7 25	0 44	21 41	0 27	18 13	5 10	0 32	0 52	17 34	14 47	6 49
F 29	6 41	0s59	0n27	4 29	1 19	11 23	0 31	21 32	1 6	21 23	0 22	9 42	2 16	7 24	0 44	21 41	0 27	18 13	5 10	0 32	0 53	17 34	14 46	6 50
S 30	7 3	5 24	1 43	4 27	1 30	11 51	0 29	21 25	1 7	21 25	0 22	9 43	2 16	7 23	0 44	21 41	0 27	18 13	5 10	0 32	0 54	17 35	14 46	6 50
S 31	7n26	9s34	2n55	4s22	1s40	12n18	0s27	21s17	1s 9	21n27	0s21	9n44	2n16	7s22	0s44	21n41	0s27	18n13	5s10	0n33	0n56	17n36	14s45	6n51

ASTRODIENST EPHEMERIS for the year 1420

geocentric

APRIL 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	13 12 6	19°53'13	16°59	23°31	4°44	0°52	8°48	10°R30	13°5	19°511	24°II 8	28°R35	27°37	14°II13	23°318	M 1
T 2	13 16 3	20°51'45	1°44	24°13	5°58	1°33	8°59	10°27	13° 8	19°11	24° 9	28°32	27°34	14°19	23°20	T 2
W 3	13 19 59	21°50'16	16°25	24°59	7°12	2°14	9°11	10°24	13°11	19°12	24°10	28°29	27°31	14°26	23°21	W 3
T 4	13 23 56	22°48'46	0°56	25°49	8°25	2°55	9°22	10°21	13°14	19°12	24°11	28°27	27°28	14°33	23°22	T 4
F 5	13 27 52	23°47'14	15°13	26°41	9°39	3°35	9°33	10°18	13°17	19°13	24°12	28°25	27°25	14°39	23°23	F 5
S 6	13 31 49	24°45'40	29°13	27°37	10°53	4°16	9°45	10°16	13°19	19°13	24°12	28°D25	27°21	14°46	23°25	S 6
S 7	13 35 45	25°44'04	12°55	28°36	12° 7	4°57	9°57	10°13	13°22	19°14	24°13	28°26	27°18	14°53	23°26	S 7
M 8	13 39 42	26°42'27	26°21	29°37	13°20	5°38	10° 8	10°11	13°25	19°14	24°14	28°27	27°15	15° 0	23°27	M 8
T 9	13 43 38	27°40'49	9°30	0°42	14°34	6°18	10°20	10° 8	13°27	19°15	24°15	28°29	27°12	15° 6	23°27	T 9
W10	13 47 35	28°39'08	22°26	1°49	15°48	6°59	10°32	10° 6	13°30	19°16	24°16	28°R30	27° 9	15°13	23°28	W10
T 11	13 51 32	29°37'26	5°8	2°58	17° 1	7°40	10°44	10° 3	13°33	19°16	24°17	28°30	27° 6	15°20	23°29	T 11
F 12	13 55 28	0°35'43	17°39	4°10	18°15	8°20	10°56	10° 1	13°35	19°17	24°18	28°28	27° 2	15°26	23°30	F 12
S 13	13 59 25	1°33'57	0°8	5°25	19°29	9° 1	11° 8	9°59	13°38	19°18	24°19	28°25	26°59	15°33	23°30	S 13
S 14	14 3 21	2°32'10	12°12	6°42	20°42	9°41	11°20	9°57	13°41	19°18	24°20	28°21	26°56	15°40	23°31	S 14
M15	14 7 18	3°30'21	24°16	8° 1	21°56	10°22	11°32	9°55	13°43	19°19	24°20	28°15	26°53	15°47	23°31	M15
T 16	14 11 14	4°28'31	6°II14	9°22	23° 9	11° 2	11°45	9°54	13°45	19°20	24°21	28° 8	26°50	15°53	23°32	T 16
W17	14 15 11	5°26'38	18° 7	10°45	24°23	11°43	11°57	9°52	13°48	19°21	24°22	28° 1	26°47	16° 0	23°32	W17
T 18	14 19 7	6°24'44	29°58	12°11	25°36	12°23	12° 9	9°50	13°50	19°22	24°24	27°56	26°43	16° 7	23°32	T 18
F 19	14 23 4	7°22'48	11°58	13°39	26°50	13° 3	12°22	9°49	13°53	19°23	24°25	27°51	26°40	16°13	23°32	F 19
S 20	14 27 1	8°20'50	23°50	15° 8	28° 3	13°43	12°34	9°47	13°55	19°24	24°26	27°48	26°37	16°20	23°R32	S 20
S 21	14 30 57	9°18'49	5°58	16°40	29°16	14°24	12°47	9°46	13°57	19°25	24°27	27°D47	26°34	16°27	23°32	S 21
M22	14 34 54	10°16'48	18°20	18°14	0°II30	15° 4	12°59	9°45	14° 0	19°26	24°28	27°47	26°31	16°34	23°32	M22
T 23	14 38 50	11°14'44	1°11	19°50	1°43	15°44	13°12	9°44	14° 2	19°27	24°29	27°48	26°27	16°40	23°32	T 23
W24	14 42 47	12°12'38	14° 5	21°28	2°56	16°24	13°25	9°43	14° 4	19°28	24°30	27°50	26°24	16°47	23°32	W24
T 25	14 46 43	13°10'30	27°36	23° 8	4° 9	17° 4	13°37	9°42	14° 6	19°29	24°31	27°R50	26°21	16°54	23°32	T 25
F 26	14 50 40	14° 8'21	11°53	24°50	5°22	17°44	13°50	9°41	14° 8	19°30	24°32	27°49	26°18	17° 1	23°31	F 26
S 27	14 54 36	15° 6'10	25°59	26°34	6°36	18°24	14° 3	9°40	14°10	19°31	24°33	27°47	26°15	17° 7	23°31	S 27
S 28	14 58 33	16° 3'58	10°46	28°20	7°49	19° 3	14°16	9°40	14°12	19°32	24°35	27°42	26°12	17°14	23°30	S 28
M29	15 2 30	17° 1'44	25°49	0°8	9° 2	19°43	14°29	9°39	14°14	19°33	24°36	27°35	26° 8	17°21	23°30	M29
T 30	15 6 26	17°59'29	10°57	18°58	10°II15	20°23	14°II42	9°39	14°16	19°35	24°II37	27°28	26° 5	17°II27	23°329	T 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
M 1	7n48	13s11	3n56	4s15	1s50	12n45	0s24	21s10	1s10	21n29	0s21	9n45	2n16	7s21	0s44	21n41
T 2	8 10	15 59	4 41	4 7	1 58	13 12	0 22	21 2	1 12	21 31	0 21	9 46	2 16	7 20	0 44	21 41
W 3	8 32	17 43	5 7	3 56	2 6	13 39	0 20	20 55	1 13	21 33	0 21	9 47	2 16	7 19	0 44	21 41
T 4	8 54	18 17	5 14	3 43	2 14	14 5	0 17	20 47	1 15	21 35	0 21	9 48	2 16	7 18	0 45	21 41
F 5	9 16	17 39	5 1	3 28	2 21	14 31	0 15	20 39	1 16	21 37	0 21	9 49	2 16	7 17	0 45	21 41
S 6	9 37	15 58	4 30	3 11	2 27	14 57	0 12	20 30	1 18	21 38	0 21	9 50	2 16	7 16	0 45	21 41
S 7	9 59	13 24	3 44	2 53	2 32	15 22	0 10	20 22	1 19	21 40	0 20	9 51	2 15	7 15	0 45	21 41
M 8	10 20	10 9	2 47	2 33	2 37	15 47	0 7	20 13	1 21	21 42	0 20	9 52	2 15	7 14	0 45	21 41
T 9	10 41	6 27	1 42	2 11	2 41	16 11	0 5	20 5	1 22	21 44	0 20	9 53	2 15	7 12	0 45	21 41
W10	11 2	2 30	0 33	1 47	2 44	16 35	0 2	19 56	1 24	21 46	0 20	9 53	2 15	7 11	0 45	21 41
T 11	11 22	1n30	0s36	1 22	2 47	16 59	0n 0	19 47	1 25	21 48	0 20	9 54	2 15	7 10	0 45	21 41
F 12	11 43	5 22	1 43	0 55	2 49	17 22	0 3	19 38	1 27	21 50	0 20	9 55	2 15	7 10	0 45	21 41
S 13	12 3	8 57	2 44	0 27	2 51	17 45	0 6	19 29	1 28	21 51	0 20	9 55	2 15	7 9	0 45	21 41
S 14	12 23	12 7	3 36	0n 2	2 52	18 7	0 8	19 19	1 30	21 53	0 19	9 56	2 15	7 8	0 45	21 41
M15	12 43	14 44	4 18	0 33	2 52	18 29	0 11	19 10	1 31	21 55	0 19	9 57	2 14	7 7	0 45	21 41
T 16	13 3	16 41	4 48	1 5	2 52	18 50	0 13	19 0	1 33	21 57	0 19	9 57	2 14	7 6	0 45	21 40
W17	13 23	17 54	5 6	1 39	2 51	19 11	0 16	18 50	1 35	21 59	0 19	9 58	2 14	7 5	0 45	21 40
T 18	13 42	18 21	5 10	2 14	2 50	19 31	0 18	18 41	1 36	22 0	0 19	9 58	2 14	7 4	0 45	21 40
F 19	14 1	17 59	5 1	2 50	2 48	19 51	0 21	18 31	1 38	22 2	0 19	9 59	2 14	7 3	0 45	21 40
S 20	14 20	16 49	4 39	3 27	2 45	20 10	0 24	18 21	1 39	22 4	0 19	9 59	2 14	7 2	0 45	21 40
S 21	14 38	14 54	4 4	4 5	2 42	20 29	0 26	18 10	1 41	22 6	0 19	9 59	2 13	7 1	0 45	21 40
M22	14 57	12 15	3 17	4 44	2 38	20 47	0 29	18 0	1 43	22 7	0 18	10 0	2 13	7 0	0 45	21 40
T 23	15 15	8 58	2 20	5 24	2 34	21 5	0 31	17 50	1 44	22 9	0 18	10 0	2 13	7 0	0 45	21 40
W24	15 33	5 9	1 14	6 5	2 29	21 22	0 34	17 39	1 46	22 11	0 18	10 0	2 13	6 59	0 45	21 40
T 25	15 50	0 56	0 1	6 47	2 24	21 38	0 36	17 29	1 48	22 12	0 18	10 0	2 13	6 58	0 45	21 39
F 26	16 8	3s28	1n14	7 30	2 18	21 54	0 39	17 18	1 49	22 14	0 18	10 0	2 13	6 57	0 45	21 39
S 27	16 25	7 48	2 26	8 14	2 12	22 9	0 41	17 7	1 51	22 16	0 18	10 1	2 12	6 56	0 45	21 39
S 28	16 42	11 46	3 30	8 58	2 5	22 24	0 44	16 56	1 53	22 17	0 18	10 1	2 12	6 56	0 45	21 39
M29	16 58	15 2	4 21	9 43	1 58	22 38	0 46	16 45	1 54	22 19	0 18	10 1	2 12	6 55	0 45	21 39
T 30	17n15	17s18	4n54	10n29	1s50	22n52	0n49	16s34	1s56	22n21	0s17	10n 1	2n12	6s54	0s45	21n39

Julian Day Number = 2239803.5, Delta T = 07m20s

Ecliptic obliquity = 23°30'44, Nutation = - 0°00'02, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°39'09, Lahiri = 15°46'10 Julian Calendar 1 Apr. 1420 == Greg. Calendar 10 Apr. 1420

ASTRODIENST EPHEMERIS for the year 1420

geocentric

MAY 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	15 10 23	18°57'12	26°2' 2	3°50	11°12'28	21°33' 3	14°15'55	9°R39	14°18'18	19°36'36	24°11'38	27°R21	26°11' 2	17°11'34	23°R28	W 1
T 2	15 14 19	19°54'54	10°35'53	5°44	12°41	21°42	15° 8	9°11'39	14°20	19°37	24°39	27°11'14	25°59	17°41	23°35'28	T 2
F 3	15 18 16	20°52'36	25°24	7°40	13°54	22°22	15°21	9°D39	14°22	19°38	24°41	27°10	25°56	17°48	23°27	F 3
S 4	15 22 12	21°50'16	9°33'31	9°38	15° 7	23° 1	15°34	9°39	14°24	19°40	24°42	27° 7	25°53	17°54	23°26	S 4
S 5	15 26 9	22°47'55	23°13	11°38	16°20	23°41	15°47	9°39	14°25	19°41	24°43	27°D 6	25°49	18° 1	23°25	S 5
M 6	15 30 5	23°45'33	6°32'32	13°40	17°33	24°20	16° 1	9°39	14°27	19°43	24°44	27° 7	25°46	18° 8	23°24	M 6
T 7	15 34 2	24°43'10	19°30	15°44	18°45	24°59	16°14	9°39	14°29	19°44	24°46	27° 8	25°43	18°14	23°22	T 7
W 8	15 37 59	25°40'46	2°19'12	17°49	19°58	25°38	16°27	9°40	14°30	19°45	24°47	27°R 8	25°40	18°21	23°21	W 8
T 9	15 41 55	26°38'21	14°39	19°56	21°11	26°17	16°40	9°40	14°32	19°47	24°48	27° 6	25°37	18°28	23°20	T 9
F 10	15 45 52	27°35'55	26°55	22° 4	22°24	26°56	16°54	9°41	14°33	19°48	24°50	27° 2	25°33	18°35	23°19	F 10
S 11	15 49 48	28°33'28	9°3' 3	24°13	23°37	27°35	17° 7	9°42	14°35	19°50	24°51	26°56	25°30	18°41	23°17	S 11
S 12	15 53 45	29°31'00	21° 5	26°24	24°49	28°14	17°20	9°43	14°36	19°51	24°52	26°47	25°27	18°48	23°16	S 12
M13	15 57 41	0°11'28'32	3°11' 1	28°35	26° 2	28°52	17°34	9°44	14°38	19°53	24°54	26°36	25°24	18°55	23°14	M13
T 14	16 1 38	1°26'02	14°55	0°11'46	27°15	29°31	17°47	9°45	14°39	19°55	24°55	26°24	25°21	19° 2	23°12	T 14
W15	16 5 34	2°23'31	26°47	2°58	28°27	0°11' 9	18° 1	9°46	14°40	19°56	24°56	26°12	25°18	19° 8	23°11	W15
T 16	16 9 31	3°20'58	8°39	5°10	29°40	0°48	18°14	9°47	14°42	19°58	24°58	26° 1	25°14	19°15	23° 9	T 16
F 17	16 13 28	4°18'25	20°33	7°22	0°52'52	1°26	18°28	9°48	14°43	19°59	24°59	25°51	25°11	19°22	23° 7	F 17
S 18	16 17 24	5°15'51	2°13'32	9°33	2° 5	2° 4	18°41	9°50	14°44	20° 1	25° 0	25°44	25° 8	19°28	23° 5	S 18
S 19	16 21 21	6°13'15	14°39	11°44	3°17	2°42	18°55	9°51	14°45	20° 3	25° 2	25°40	25° 5	19°35	23° 3	S 19
M20	16 25 17	7°10'39	26°59	13°53	4°30	3°20	19° 8	9°53	14°46	20° 5	25° 3	25°38	25° 2	19°42	23° 1	M20
T 21	16 29 14	8° 8'01	9°11'36	16° 1	5°42	3°58	19°22	9°55	14°47	20° 6	25° 5	25°D38	24°59	19°49	22°59	T 21
W22	16 33 10	9° 5'22	22°35	18° 7	6°54	4°35	19°36	9°57	14°48	20° 8	25° 6	25°R38	24°55	19°55	22°57	W22
T 23	16 37 7	10° 2'42	6°15' 0	20°12	8° 7	5°13	19°49	9°59	14°49	20°10	25° 8	25°38	24°52	20° 2	22°55	T 23
F 24	16 41 3	11° 0'00	19°54	22°15	9°19	5°50	20° 3	10° 1	14°50	20°12	25° 9	25°36	24°49	20° 9	22°53	F 24
S 25	16 45 0	11°57'18	4°11'16	24°16	10°31	6°27	20°16	10° 3	14°51	20°13	25°10	25°32	24°46	20°15	22°50	S 25
S 26	16 48 57	12°54'35	19° 5	26°16	11°43	7° 4	20°30	10° 5	14°52	20°15	25°12	25°25	24°43	20°22	22°48	S 26
M27	16 52 53	13°51'52	4°11'13	28°12	12°55	7°41	20°44	10° 8	14°52	20°17	25°13	25°16	24°39	20°29	22°46	M27
T 28	16 56 50	14°49'07	19°32	0°52' 7	14° 8	8°18	20°57	10°10	14°53	20°19	25°15	25° 6	24°36	20°36	22°43	T 28
W29	17 0 46	15°46'22	4°35'50	1°59	15°20	8°55	21°11	10°13	14°54	20°21	25°16	24°55	24°33	20°42	22°41	W29
T 30	17 4 43	16°43'37	19°56	3°50	16°32	9°31	21°25	10°15	14°54	20°23	25°18	24°46	24°30	20°49	22°38	T 30
F 31	17 8 39	17°11'40'51	4°33'41	5°52'37	17°52'44	10°11' 8	21°11'38	10°11'18	14°55	20°25	25°19	24°11'39	24°11'27	20°11'56	22°33'36	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
W 1	17n31	18s21	5n 7	11n14	1s42	23n 4	0n51	16s23	1s58	22n22	0s17	10n 1	2n12	6s54	0s45	21n39
T 2	17 46	18 7	4 58	12 1	1 33	23 16	0 54	16 12	2 0	22 24	0 17	10 0	2 12	6 53	0 45	21 38
F 3	18 2	16 41	4 30	12 47	1 24	23 28	0 56	16 1	2 1	22 25	0 17	10 0	2 11	6 52	0 45	21 38
S 4	18 17	14 17	3 47	13 34	1 15	23 39	0 58	15 49	2 3	22 27	0 17	10 0	2 11	6 51	0 45	21 38
S 5	18 32	11 7	2 52	14 20	1 5	23 49	1 1	15 38	2 5	22 28	0 17	10 0	2 11	6 51	0 45	21 38
M 6	18 46	7 28	1 48	15 7	0 55	23 58	1 3	15 26	2 7	22 30	0 17	10 0	2 11	6 50	0 45	21 38
T 7	19 0	3 32	0 41	15 53	0 45	24 7	1 5	15 15	2 8	22 31	0 17	9 59	2 11	6 50	0 45	21 38
W 8	19 14	0n28	0s27	16 39	0 34	24 15	1 7	15 3	2 10	22 33	0 17	9 59	2 11	6 49	0 46	21 37
T 9	19 28	4 22	1 32	17 24	0 24	24 22	1 9	14 52	2 12	22 34	0 16	9 59	2 10	6 48	0 46	21 37
F 10	19 41	8 2	2 32	18 8	0 13	24 29	1 12	14 40	2 14	22 36	0 16	9 58	2 10	6 48	0 46	21 37
S 11	19 54	11 20	3 24	18 51	0 2	24 35	1 14	14 28	2 16	22 37	0 16	9 58	2 10	6 47	0 46	21 37
S 12	20 6	14 7	4 6	19 32	0n 8	24 40	1 16	14 16	2 17	22 38	0 16	9 57	2 10	6 47	0 46	21 37
M13	20 19	16 17	4 38	20 12	0 19	24 45	1 18	14 5	2 19	22 40	0 16	9 57	2 10	6 46	0 46	21 36
T 14	20 31	17 45	4 56	20 51	0 29	24 49	1 20	13 53	2 21	22 41	0 16	9 56	2 10	6 46	0 46	21 36
W15	20 42	18 26	5 2	21 27	0 39	24 52	1 22	13 41	2 23	22 42	0 16	9 56	2 9	6 45	0 46	21 36
T 16	20 53	18 19	4 55	22 2	0 49	24 54	1 23	13 29	2 25	22 44	0 16	9 55	2 9	6 45	0 46	21 36
F 17	21 4	17 24	4 35	22 34	0 58	24 56	1 25	13 17	2 27	22 45	0 16	9 54	2 9	6 44	0 46	21 35
S 18	21 15	15 43	4 3	23 3	1 7	24 57	1 27	13 5	2 29	22 46	0 15	9 54	2 9	6 44	0 46	21 35
S 19	21 25	13 18	3 19	23 30	1 15	24 57	1 29	12 53	2 30	22 48	0 15	9 53	2 9	6 44	0 46	21 35
M20	21 34	10 16	2 26	23 54	1 23	24 56	1 30	12 41	2 32	22 49	0 15	9 52	2 8	6 43	0 46	21 35
T 21	21 44	6 42	1 24	24 16	1 30	24 55	1 32	12 29	2 34	22 50	0 15	9 51	2 8	6 43	0 46	21 35
W22	21 53	2 42	0 16	24 35	1 36	24 53	1 33	12 17	2 36	22 51	0 15	9 50	2 8	6 43	0 46	21 34
T 23	22 1	1s33	0n55	24 51	1 42	24 50	1 35	12 5	2 38	22 52	0 15	9 49	2 8	6 42	0 46	21 34
F 24	22 10	5 53	2 5	25 4	1 47	24 47	1 36	11 52	2 40	22 53	0 15	9 48	2 8	6 42	0 46	21 34
S 25	22 17	10 1	3 9	25 15	1 52	24 43	1 38	11 40	2 42	22 55	0 15	9 47	2 8	6 42	0 46	21 34
S 26	22 25	13 39	4 3	25 23	1 55	24 38	1 39	11 28	2 44	22 56	0 15	9 46	2 7	6 41	0 46	21 33
M27	22 32	16 27	4 41	25 28	1 58	24 33	1 40	11 16	2 46	22 57	0 14	9 45	2 7	6 41	0 46	21 33
T 28	22 39	18 7	4 59	25 31	2 0	24 26	1 41	11 4	2 48	22 58	0 14	9 44	2 7	6 41	0 46	21 33
W29	22 45	18 29	4 56	25 31	2 2	24 19	1 42	10 52	2 50	22 59	0 14	9 43	2 7	6 41	0 46	21 33
T 30	22 51	17 32	4 33	25 29	2 2	24 12	1 43	10 40	2 51	23 0	0 14	9 42	2 7	6 40	0 46	21 32
F 31	22n56	15s25	3n51	25n25	2n 2	24n 3	1n44	10s28	2s53	23n 1	0s14	9n41	2n 7	6s40	0s46	21n32

Julian Day Number = 2239833.5, Delta T = 07m20s

Ecliptic obliquity = 23°30'43", Nutation = - 0°00'02", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°39'14", Lahiri = 15°46'14" Julian Calendar 1 May 1420 == Greg. Calendar 10 May 1420

ASTRODIENST EPHEMERIS for the year 1420

geocentric

JUNE 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	17 12 36	18II38'05	18♊59	7♊23	18♊55	10♊44	21II52	10♊21	14♊55	20♊27	25II20	24°R34	24♊24	21II 3	22°R33	S 1
S 2	17 16 32	19°35'19	2♊48	9° 6	20° 7	11°20	22° 6	10°24	14°56	20°29	25°22	24♊32	24°20	21° 9	22♊30	S 2
M 3	17 20 29	20°32'32	16°10	10°46	21°19	11°56	22°19	10°27	14°56	20°31	25°23	24°31	24°17	21°16	22°27	M 3
T 4	17 24 26	21°29'45	29° 6	12°25	22°31	12°31	22°33	10°30	14°57	20°33	25°25	24°31	24°14	21°23	22°25	T 4
W 5	17 28 22	22°26'58	11°V43	14° 0	23°43	13° 7	22°47	10°33	14°57	20°35	25°26	24°31	24°11	21°29	22°22	W 5
T 6	17 32 19	23°24'11	24° 3	15°34	24°54	13°42	23° 1	10°36	14°57	20°37	25°28	24°28	24° 8	21°36	22°19	T 6
F 7	17 36 15	24°21'24	6♊11	17° 5	26° 6	14°17	23°14	10°40	14°57	20°39	25°29	24°23	24° 4	21°43	22°16	F 7
S 8	17 40 12	25°18'37	18°11	18°33	27°18	14°52	23°28	10°43	14°58	20°41	25°31	24°16	24° 1	21°50	22°13	S 8
S 9	17 44 8	26°15'50	0II 6	19°59	28°29	15°27	23°42	10°47	14°58	20°43	25°32	24° 6	23°58	21°56	22°10	S 9
M10	17 48 5	27°13'03	11°59	21°23	29°41	16° 1	23°55	10°50	14°58	20°45	25°34	23°53	23°55	22° 3	22° 7	M10
T 11	17 52 1	28°10'15	23°50	22°44	0♊52	16°35	24° 9	10°54	14°R58	20°47	25°35	23°39	23°52	22°10	22° 4	T 11
W12	17 55 58	29° 7'28	5♊43	24° 2	2° 4	17° 9	24°23	10°58	14°58	20°49	25°37	23°26	23°49	22°17	22° 1	W12
T 13	17 59 55	0♊40	17°38	25°18	3°15	17°43	24°36	11° 2	14°58	20°51	25°38	23°13	23°45	22°23	21°58	T 13
F 14	18 3 51	1° 1'52	29°36	26°31	4°26	18°17	24°50	11° 6	14°58	20°53	25°39	23° 2	23°42	22°30	21°55	F 14
S 15	18 7 48	1°59'04	11♊40	27°42	5°38	18°50	25° 4	11°10	14°57	20°55	25°41	22°53	23°39	22°37	21°51	S 15
S 16	18 11 44	2°56'16	23°52	28°49	6°49	19°23	25°17	11°14	14°57	20°57	25°42	22°48	23°36	22°43	21°48	S 16
M17	18 15 41	3°53'28	6♊16	29°54	8° 0	19°55	25°31	11°18	14°57	21° 0	25°44	22°45	23°33	22°50	21°45	M17
T 18	18 19 37	4°50'39	18°54	0♊56	9°11	20°28	25°44	11°22	14°57	21° 2	25°45	22°D44	23°30	22°57	21°42	T 18
W19	18 23 34	5°47'50	1♊51	1°54	10°22	21° 0	25°58	11°27	14°56	21° 4	25°47	22°R44	23°26	23° 4	21°38	W19
T 20	18 27 30	6°45'01	15°11	2°50	11°33	21°32	26°12	11°31	14°56	21° 6	25°48	22°44	23°23	23°10	21°35	T 20
F 21	18 31 27	7°42'11	28°56	3°42	12°44	22° 4	26°25	11°36	14°55	21° 8	25°50	22°43	23°20	23°17	21°32	F 21
S 22	18 35 24	8°39'22	13♊ 9	4°30	13°55	22°35	26°39	11°40	14°55	21°10	25°51	22°39	23°17	23°24	21°28	S 22
S 23	18 39 20	9°36'32	27°47	5°16	15° 6	23° 6	26°52	11°45	14°54	21°13	25°52	22°33	23°14	23°31	21°25	S 23
M24	18 43 17	10°33'43	12♊47	5°57	16°17	23°37	27° 6	11°50	14°54	21°15	25°54	22°25	23°10	23°37	21°21	M24
T 25	18 47 13	11°30'54	28° 0	6°35	17°27	24° 7	27°19	11°54	14°53	21°17	25°55	22°15	23° 7	23°44	21°18	T 25
W26	18 51 10	12°28'05	13♊16	7° 9	18°38	24°37	27°33	11°59	14°52	21°19	25°57	22° 5	23° 4	23°51	21°14	W26
T 27	18 55 6	13°25'16	28°24	7°38	19°49	25° 7	27°46	12° 4	14°52	21°21	25°58	21°56	23° 1	23°57	21°11	T 27
F 28	18 59 3	14°22'28	13♊14	8° 4	20°59	25°37	27°59	12° 9	14°51	21°24	26° 0	21°50	22°58	24° 4	21° 8	F 28
S 29	19 2 59	15°19'40	27°38	8°25	22° 9	26° 6	28°13	12°14	14°50	21°26	26° 1	21°45	22°55	24°11	21° 4	S 29
S 30	19 6 56	16♊16'52	11♊35	8♊41	23♊20	26♊34	28II26	12♊20	14♊49	21♊28	26II 2	21♊43	22♊51	24II18	21♊ 1	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	decl lat	decl lat
S 1	23n 1	12s23	2n56	25n19	2n 1	23n54	1n45	10s16	2s55	23n 2	0s14	9n40	2n 6	6s40	0s46	21n32
S 2	23 6	8 46	1 52	25 11	2 0	23 45	1 46	10 4	2 57	23 3	0 14	9 38	2 6	6 40	0 46	21 31
M 3	23 10	4 48	0 44	25 1	1 57	23 34	1 47	9 52	2 59	23 4	0 14	9 37	2 6	6 40	0 46	21 31
T 4	23 14	0 44	0s24	24 50	1 55	23 23	1 47	9 40	3 1	23 4	0 14	9 36	2 6	6 40	0 47	21 31
W 5	23 18	3n16	1 30	24 37	1 51	23 12	1 48	9 28	3 3	23 5	0 14	9 34	2 6	6 40	0 47	21 31
T 6	23 21	7 3	2 29	24 22	1 47	22 59	1 48	9 17	3 5	23 6	0 13	9 33	2 6	6 40	0 47	21 30
F 7	23 23	10 28	3 21	24 6	1 42	22 46	1 49	9 5	3 7	23 7	0 13	9 32	2 5	6 40	0 47	21 30
S 8	23 26	13 24	4 3	23 49	1 36	22 33	1 49	8 53	3 9	23 8	0 13	9 30	2 5	6 40	0 47	21 30
S 9	23 28	15 46	4 34	23 30	1 30	22 18	1 49	8 41	3 11	23 8	0 13	9 29	2 5	6 40	0 47	21 29
M10	23 29	17 27	4 53	23 11	1 24	22 4	1 49	8 30	3 13	23 9	0 13	9 27	2 5	6 40	0 47	21 29
T 11	23 30	18 23	5 0	22 50	1 16	21 48	1 49	8 18	3 15	23 10	0 13	9 25	2 5	6 40	0 47	21 29
W12	23 31	18 31	4 53	22 29	1 8	21 32	1 49	8 7	3 17	23 11	0 13	9 24	2 5	6 40	0 47	21 29
T 13	23 31	17 50	4 33	22 7	1 0	21 16	1 49	7 55	3 19	23 11	0 13	9 22	2 5	6 40	0 47	21 28
F 14	23 30	16 21	4 2	21 45	0 51	20 58	1 49	7 44	3 21	23 12	0 13	9 21	2 4	6 40	0 47	21 28
S 15	23 30	14 9	3 19	21 22	0 42	20 41	1 49	7 33	3 23	23 13	0 13	9 19	2 4	6 40	0 47	21 28
S 16	23 29	11 18	2 26	20 58	0 32	20 23	1 49	7 22	3 25	23 13	0 13	9 17	2 4	6 40	0 47	21 27
M17	23 27	7 55	1 26	20 35	0 21	20 4	1 48	7 11	3 27	23 14	0 12	9 15	2 4	6 40	0 47	21 27
T 18	23 25	4 6	0 20	20 11	0 10	19 44	1 48	7 0	3 29	23 14	0 12	9 14	2 4	6 40	0 47	21 27
W19	23 23	0s 0	0n48	19 47	0s 1	19 25	1 47	6 49	3 31	23 15	0 12	9 12	2 4	6 40	0 47	21 26
T 20	23 20	4 13	1 56	19 23	0 13	19 4	1 46	6 38	3 33	23 15	0 12	9 10	2 3	6 41	0 47	21 26
F 21	23 17	8 20	2 59	18 59	0 25	18 43	1 46	6 27	3 35	23 16	0 12	9 8	2 3	6 41	0 47	21 26
S 22	23 14	12 7	3 54	18 35	0 38	18 22	1 45	6 17	3 37	23 16	0 12	9 6	2 3	6 41	0 47	21 25
S 23	23 10	15 16	4 35	18 12	0 51	18 0	1 44	6 6	3 40	23 17	0 12	9 4	2 3	6 41	0 47	21 25
M24	23 5	17 29	4 58	17 49	1 4	17 38	1 43	5 56	3 42	23 17	0 12	9 2	2 3	6 42	0 47	21 25
T 25	23 1	18 29	5 1	17 26	1 17	17 16	1 41	5 46	3 44	23 17	0 12	9 0	2 3	6 42	0 47	21 24
W26	22 56	18 10	4 42	17 4	1 31	16 52	1 40	5 36	3 46	23 18	0 12	8 58	2 3	6 42	0 47	21 24
T 27	22 50	16 34	4 4	16 43	1 45	16 29	1 39	5 26	3 48	23 18	0 12	8 56	2 3	6 43	0 47	21 24
F 28	22 44	13 52	3 9	16 23	1 59	16 5	1 38	5 16	3 50	23 18	0 11	8 54	2 2	6 43	0 47	21 23
S 29	22 38	10 23	2 4	16 4	2 13	15 41	1 36	5 6	3 52	23 19	0 11	8 52	2 2	6 43	0 47	21 23
S 30	22n31	6s25	0n54	15n46	2s28	15n16	1n34	4s56	3s54	23n19	0s11	8n50	2n 2	6s44	0s47	21n23

Julian Day Number = 2239864.5, Delta T = 07m20s

Ecliptic obliquity = 23°30'43", Nutation = - 0°00'02", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°39'18", Lahiri = 15°46'18" Julian Calendar 1 June 1420 == Greg. Calendar 10 June 1420

ASTRODIENST EPHEMERIS for the year 1420

geocentric

JULY 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	19 10 53	17°51'40"	25°58'2"	8°53'53"	24°53'0"	27°58'3"	28°53'3"	12°52'25"	14°48'48"	21°53'30"	26°52'4"	21°43'43"	22°45'48"	24°52'24"	20°57'57"	M 1
T 2	19 14 49	18°11'20"	8°58'3"	9°0'0"	25°40'0"	27°31'0"	28°53'0"	12°30'0"	14°47'47"	21°33'0"	26°5'0"	21°43'43"	22°45'48"	24°31'0"	20°54'54"	T 2
W 3	19 18 46	19°8'35"	20°41'0"	9°2'0"	26°50'0"	27°58'0"	29°6'0"	12°35'0"	14°46'0"	21°35'0"	26°6'0"	21°43'43"	22°42'0"	24°38'0"	20°50'0"	W 3
T 4	19 22 42	20°5'51"	3°58'1"	9°0'0"	28°0'0"	28°26'0"	29°19'0"	12°41'0"	14°45'0"	21°37'0"	26°8'0"	21°43'43"	22°39'0"	24°44'0"	20°47'0"	T 4
F 5	19 26 39	21°3'07"	15°7'0"	8°52'0"	29°10'0"	28°52'0"	29°32'0"	12°46'0"	14°44'0"	21°39'0"	26°9'0"	21°40'0"	22°36'0"	24°51'0"	20°43'0"	F 5
S 6	19 30 35	22°0'25"	27°5'0"	8°39'0"	0°52'20"	29°19'0"	29°45'0"	12°52'0"	14°43'0"	21°41'0"	26°11'0"	21°35'0"	22°32'0"	24°58'0"	20°40'0"	S 6
S 7	19 34 32	22°57'43"	8°58'58"	8°22'0"	1°30'0"	29°45'0"	29°58'0"	12°57'0"	14°42'0"	21°44'0"	26°12'0"	21°27'0"	22°29'0"	25°5'0"	20°36'0"	S 7
M 8	19 38 28	23°55'03"	20°49'0"	8°0'0"	2°40'0"	0°58'10"	0°58'12"	13°3'0"	14°40'0"	21°46'0"	26°13'0"	21°18'0"	22°26'0"	25°11'0"	20°33'0"	M 8
T 9	19 42 25	24°52'23"	2°52'42"	7°33'0"	3°50'0"	0°35'0"	0°25'0"	13°9'0"	14°39'0"	21°48'0"	26°15'0"	21°8'0"	22°23'0"	25°18'0"	20°29'0"	T 9
W10	19 46 22	25°49'44"	14°37'0"	7°2'0"	4°59'0"	1°0'0"	0°38'0"	13°15'0"	14°38'0"	21°50'0"	26°16'0"	20°57'0"	22°20'0"	25°25'0"	20°26'0"	W10
T 11	19 50 18	26°47'06"	26°38'0"	6°28'0"	6°9'0"	1°24'0"	0°50'0"	13°21'0"	14°37'0"	21°53'0"	26°17'0"	20°47'0"	22°16'0"	25°32'0"	20°22'0"	T 11
F 12	19 54 15	27°44'28"	8°54'45"	5°50'0"	7°18'0"	1°47'0"	1°3'0"	13°26'0"	14°35'0"	21°55'0"	26°18'0"	20°39'0"	22°13'0"	25°38'0"	20°19'0"	F 12
S 13	19 58 11	28°41'51"	21°0'0"	5°9'0"	8°28'0"	2°10'0"	1°16'0"	13°32'0"	14°34'0"	21°57'0"	26°20'0"	20°33'0"	22°10'0"	25°45'0"	20°15'0"	S 13
S 14	20 2 8	29°39'15"	3°52'33"	4°25'0"	9°37'0"	2°33'0"	1°29'0"	13°38'0"	14°32'0"	21°59'0"	26°21'0"	20°29'0"	22°7'0"	25°52'0"	20°12'0"	S 14
M15	20 6 4	0°53'6"40	15°58'0"	3°40'0"	10°46'0"	2°55'0"	1°42'0"	13°45'0"	14°31'0"	22°1'0"	26°22'0"	20°28'0"	22°4'0"	25°58'0"	20°8'0"	M15
T 16	20 10 1	1°34'06"	28°45'0"	2°55'0"	11°55'0"	3°17'0"	1°55'0"	13°51'0"	14°29'0"	22°4'0"	26°23'0"	20°28'0"	22°1'0"	26°5'0"	20°5'0"	T 16
W17	20 13 57	2°31'32"	11°52'48"	2°9'0"	13°4'0"	3°37'0"	2°7'0"	13°57'0"	14°28'0"	22°6'0"	26°25'0"	20°29'0"	21°57'0"	26°12'0"	20°2'0"	W17
T 18	20 17 54	3°28'59"	25°9'0"	1°25'0"	14°13'0"	3°58'0"	2°20'0"	14°3'0"	14°26'0"	22°8'0"	26°26'0"	20°30'0"	21°54'0"	26°19'0"	19°58'0"	T 18
F 19	20 21 51	4°26'26"	8°51'51"	0°42'0"	15°22'0"	4°18'0"	2°32'0"	14°9'0"	14°24'0"	22°10'0"	26°27'0"	20°R30'0"	21°51'0"	26°25'0"	19°55'0"	F 19
S 20	20 25 47	5°23'55"	22°54'0"	0°1'0"	16°30'0"	4°37'0"	2°45'0"	14°16'0"	14°23'0"	22°12'0"	26°28'0"	20°29'0"	21°48'0"	26°32'0"	19°52'0"	S 20
S 21	20 29 44	6°21'24"	7°58'18"	29°52'24"	17°39'0"	4°56'0"	2°57'0"	14°22'0"	14°21'0"	22°15'0"	26°29'0"	20°26'0"	21°45'0"	26°39'0"	19°48'0"	S 21
M22	20 33 40	7°18'54"	22°0'0"	28°51'0"	18°47'0"	5°14'0"	3°10'0"	14°28'0"	14°19'0"	22°17'0"	26°31'0"	20°21'0"	21°42'0"	26°46'0"	19°45'0"	M22
T 23	20 37 37	8°16'25"	6°53'48"	28°23'0"	19°56'0"	5°31'0"	3°22'0"	14°35'0"	14°18'0"	22°19'0"	26°32'0"	20°15'0"	21°38'0"	26°52'0"	19°42'0"	T 23
W24	20 41 33	9°13'56"	21°52'0"	28°1'0"	21°4'0"	5°48'0"	3°34'0"	14°41'0"	14°16'0"	22°21'0"	26°33'0"	20°9'0"	21°35'0"	26°59'0"	19°39'0"	W24
T 25	20 45 30	10°11'29"	6°54'47"	27°44'0"	22°12'0"	6°4'0"	3°46'0"	14°48'0"	14°14'0"	22°23'0"	26°34'0"	20°4'0"	21°32'0"	27°6'0"	19°35'0"	T 25
F 26	20 49 26	11°9'03"	21°28'0"	27°33'0"	23°20'0"	6°20'0"	3°59'0"	14°55'0"	14°12'0"	22°25'0"	26°35'0"	19°59'0"	21°29'0"	27°12'0"	19°32'0"	F 26
S 27	20 53 23	12°6'39"	5°58'49"	27°D30'0"	24°28'0"	6°34'0"	4°11'0"	15°1'0"	14°10'0"	22°28'0"	26°36'0"	19°57'0"	21°26'0"	27°19'0"	19°29'0"	S 27
S 28	20 57 20	13°4'15"	19°45'0"	27°33'0"	25°36'0"	6°49'0"	4°23'0"	15°8'0"	14°8'0"	22°30'0"	26°37'0"	19°D56'0"	21°22'0"	27°26'0"	19°26'0"	S 28
M29	21 1 16	14°1'53"	3°58'16"	27°44'0"	26°43'0"	7°2'0"	4°35'0"	15°15'0"	14°6'0"	22°32'0"	26°38'0"	19°57'0"	21°19'0"	27°33'0"	19°23'0"	M29
T 30	21 5 13	14°59'33"	16°21'0"	28°1'0"	27°51'0"	7°15'0"	4°47'0"	15°21'0"	14°4'0"	22°34'0"	26°39'0"	19°58'0"	21°16'0"	27°39'0"	19°20'0"	T 30
W31	21 9 9	15°57'14"	29°58'3"	28°52'7"	28°58'0"	7°58'27"	4°58'0"	15°58'28"	14°58'2"	22°36'0"	26°40'0"	20°58'0"	21°13'0"	27°46'0"	19°17'0"	W31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	22n24	2s15	0s18	15n29	2s42	14n51	1n33	4s47	3s56	23n19	0s11	8n48	2n2	6s44	0s48	21n22
T 2	22 16	1n53	1 26	15 14	2 56	14 26	1 31	4 38	3 58	23 19	0 11	8 46	2 2	6 44	0 48	21 22
W 3	22 8	5 49	2 28	15 0	3 10	14 0	1 29	4 28	4 0	23 20	0 11	8 44	2 2	6 45	0 48	21 22
T 4	22 0	9 24	3 22	14 48	3 23	13 34	1 27	4 19	4 2	23 20	0 11	8 42	2 2	6 45	0 48	21 21
F 5	21 51	12 31	4 5	14 37	3 36	13 7	1 25	4 11	4 4	23 20	0 11	8 39	2 2	6 46	0 48	21 21
S 6	21 42	15 4	4 37	14 28	3 49	12 41	1 23	4 2	4 6	23 20	0 11	8 37	2 1	6 46	0 48	21 21
S 7	21 33	16 58	4 57	14 21	4 1	12 14	1 21	3 53	4 8	23 20	0 11	8 35	2 1	6 47	0 48	21 20
M 8	21 23	18 8	5 4	14 16	4 12	11 46	1 18	3 45	4 10	23 20	0 11	8 33	2 1	6 47	0 48	21 20
T 9	21 13	18 31	4 58	14 13	4 22	11 19	1 16	3 37	4 12	23 20	0 10	8 30	2 1	6 48	0 48	21 20
W10	21 3	18 5	4 39	14 12	4 31	10 51	1 13	3 29	4 14	23 20	0 10	8 28	2 1	6 48	0 48	21 19
T 11	20 52	16 50	4 8	14 13	4 38	10 23	1 11	3 21	4 16	23 20	0 10	8 26	2 1	6 49	0 48	21 19
F 12	20 41	14 50	3 25	14 16	4 45	9 55	1 8	3 13	4 18	23 20	0 10	8 23	2 1	6 49	0 48	21 19
S 13	20 29	12 9	2 32	14 21	4 49	9 26	1 5	3 6	4 20	23 20	0 10	8 21	2 1	6 50	0 48	21 18
S 14	20 17	8 53	1 31	14 29	4 52	8 57	1 3	2 59	4 22	23 20	0 10	8 18	2 1	6 51	0 48	21 18
M15	20 5	5 11	0 24	14 38	4 54	8 28	1 0	2 52	4 23	23 20	0 10	8 16	2 1	6 51	0 48	21 18
T 16	19 52	1 11	0n45	14 48	4 53	7 59	0 57	2 45	4 25	23 20	0 10	8 14	2 1	6 52	0 48	21 17
W17	19 39	2s57	1 53	15 0	4 51	7 30	0 53	2 38	4 27	23 20	0 10	8 11	2 0	6 52	0 48	21 17
T 18	19 26	7 2	2 56	15 14	4 47	7 0	0 50	2 32	4 29	23 20	0 10	8 9	2 0	6 53	0 48	21 17
F 19	19 13	10 50	3 51	15 29	4 41	6 30	0 47	2 26	4 31	23 20	0 10	8 6	2 0	6 54	0 48	21 16
S 20	18 59	14 8	4 34	15 45	4 34	6 1	0 44	2 20	4 33	23 19	0 10	8 4	2 0	6 54	0 48	21 16
S 21	18 44	16 39	5 1	16 1	4 25	5 31	0 40	2 14	4 35	23 19	0 9	8 1	2 0	6 55	0 48	21 16
M22	18 30	18 8	5 9	16 18	4 14	5 1	0 37	2 9	4 36	23 19	0 9	7 58	2 0	6 56	0 48	21 15
T 23	18 15	18 24	4 56	16 36	4 2	4 30	0 33	2 3	4 38	23 19	0 9	7 56	2 0	6 56	0 48	21 15
W24	18 0	17 24	4 23	16 53	3 49	4 0	0 29	1 58	4 40	23 19	0 9	7 53	2 0	6 57	0 48	21 15
T 25	17 45	15 12	3 33	17 11	3 34	3 30	0 26	1 53	4 42	23 18	0 9	7 51	2 0	6 58	0 48	21 14
F 26	17 29	12 3	2 28	17 27	3 19	2 59	0 22	1 49	4 43	23 18	0 9	7 48	2 0	6 59	0 48	21 14
S 27	17 13	8 14	1 16	17 44	3 3	2 29	0 18	1 45	4 45	23 18	0 9	7 45	2 0	6 59	0 48	21 13
S 28	16 57	4 3	0 1	17 59	2 47	1 58	0 14	1 40	4 47	23 18	0 9	7 43	2 0	7 0	0 48	21 13
M29	16 40	0n12	1s12	18 14	2 30	1 27	0 10	1 37	4 48	23 17	0 9	7 40	2 0	7 1	0 48	21 13
T 30	16 23	4 18	2 19	18 27	2 13	0 57	0 6	1 33	4 50	23 17	0 9	7 37	2 0	7 2	0 48	21 12
W31	16n 6	8n 6	3s17	18n39	1s56	0n26	0n 2	1s30	4s51	23n17	0s 9	7n35	1n59	7s 3	0s48	21n12

Julian Day Number = 2239894.5, Delta T = 07m20s

Ecliptic obliquity = 23°30'43", Nutation = - 0°00'01", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°39'22", Lahiri = 15°46'22" Julian Calendar 1 July 1420 == Greg. Calendar 10 July 1420

ASTRODIENST EPHEMERIS for the year 1420

geocentric

AUGUST 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	21 13 6	16 ⁵⁴ 57	11 ⁸ 26	28 ⁵⁹ 59	0 ⁵ 5	7 ³⁸ 38	5 ¹⁰ 10	15 ³⁵ 35	14 ^R 0	22 ³⁸ 38	26 ⁴¹ 41	20 ^R 1	21 ¹⁰ 10	27 ⁵³ 53	19 ^R 14	T 1
F 2	21 17 2	17 ⁵² 41	23 ³⁴ 34	29 ³⁹ 39	1 ¹³ 13	7 ⁴⁹ 49	5 ²² 22	15 ⁴² 42	13 ⁵⁸ 58	22 ⁴⁰ 40	26 ⁴² 42	20 ¹ 1	21 ⁷ 7	27 ⁵⁹ 59	19 ¹¹ 11	F 2
S 3	21 20 59	18 ⁵⁰ 28	5 ³³ 33	0 ²⁶ 26	2 ¹⁹ 19	7 ⁵⁸ 58	5 ³⁴ 34	15 ⁴⁹ 49	13 ⁵⁶ 56	22 ⁴² 42	26 ⁴³ 43	19 ⁵⁹ 59	21 ³ 3	28 ⁶ 6	19 ⁸ 8	S 3
S 4	21 24 55	19 ⁴⁸ 16	17 ²⁶ 26	1 ²⁰ 20	3 ²⁶ 26	8 ⁷ 7	5 ⁴⁵ 45	15 ⁵⁶ 56	13 ⁵⁴ 54	22 ⁴⁴ 44	26 ⁴⁴ 44	19 ⁵⁷ 57	21 ⁰ 0	28 ¹³ 13	19 ⁶ 6	S 4
M 5	21 28 52	20 ⁴⁶ 05	29 ¹⁸ 18	2 ²¹ 21	4 ³³ 33	8 ¹⁵ 15	5 ⁵⁷ 57	16 ³ 3	13 ⁵² 52	22 ⁴⁶ 46	26 ⁴⁵ 45	19 ⁵³ 53	20 ⁵⁷ 57	28 ²⁰ 20	19 ³ 3	M 5
T 6	21 32 49	21 ⁴³ 56	11 ³³ 33	3 ²⁸ 28	5 ⁴⁰ 40	8 ²³ 23	6 ⁸ 8	16 ¹⁰ 10	13 ⁵⁰ 50	22 ⁴⁸ 48	26 ⁴⁶ 46	19 ⁴⁸ 48	20 ⁵⁴ 54	28 ²⁶ 26	19 ⁰ 0	T 6
W 7	21 36 45	22 ⁴¹ 49	23 ¹³ 13	4 ⁴² 42	6 ⁴⁶ 46	8 ²⁹ 29	6 ¹⁹ 19	16 ¹⁷ 17	13 ⁴⁷ 47	22 ⁵⁰ 50	26 ⁴⁷ 47	19 ⁴⁴ 44	20 ⁵¹ 51	28 ³³ 33	18 ⁵⁷ 57	W 7
T 8	21 40 42	23 ³⁹ 44	5 ²² 22	6 ¹ 1	7 ⁵² 52	8 ³⁵ 35	6 ³⁰ 30	16 ²⁴ 24	13 ⁴⁵ 45	22 ⁵² 52	26 ⁴⁸ 48	19 ³⁹ 39	20 ⁴⁸ 48	28 ⁴⁰ 40	18 ⁵⁵ 55	T 8
F 9	21 44 38	24 ³⁷ 40	17 ⁴⁰ 40	7 ²⁶ 26	8 ⁵⁸ 58	8 ⁴⁰ 40	6 ⁴² 42	16 ³¹ 31	13 ⁴³ 43	22 ⁵⁴ 54	26 ⁴⁹ 49	19 ³⁶ 36	20 ⁴⁴ 44	28 ⁴⁷ 47	18 ⁵² 52	F 9
S 10	21 48 35	25 ³⁵ 38	0 ¹⁰ 10	8 ⁵⁶ 56	10 ⁴ 4	8 ⁴⁴ 44	6 ⁵³ 53	16 ³⁸ 38	13 ⁴¹ 41	22 ⁵⁶ 56	26 ⁵⁰ 50	19 ³³ 33	20 ⁴¹ 41	28 ⁵³ 53	18 ⁵⁰ 50	S 10
S 11	21 52 31	26 ³³ 37	12 ⁴⁹ 49	10 ³⁰ 30	11 ¹⁰ 10	8 ⁴⁷ 47	7 ⁴ 4	16 ⁴⁵ 45	13 ³⁹ 39	22 ⁵⁸ 58	26 ⁵¹ 51	19 ³² 32	20 ³⁸ 38	29 ⁰ 0	18 ⁴⁷ 47	S 11
M12	21 56 28	27 ³¹ 38	25 ⁴² 42	12 ⁹ 9	12 ¹⁵ 15	8 ⁴⁹ 49	7 ¹⁵ 15	16 ⁵² 52	13 ³⁶ 36	23 ⁰ 0	26 ⁵¹ 51	19 ^{D32} 32	20 ³⁵ 35	29 ⁷ 7	18 ⁴⁵ 45	M12
T 13	22 0 24	28 ²⁹ 40	8 ⁴⁸ 48	13 ⁵¹ 51	13 ²¹ 21	8 ⁵¹ 51	7 ²⁵ 25	16 ⁵⁹ 59	13 ³⁴ 34	23 ² 2	26 ⁵² 52	19 ³³ 33	20 ³² 32	29 ¹³ 13	18 ⁴³ 43	T 13
W14	22 4 21	29 ²⁷ 44	22 ⁸ 8	15 ³⁶ 36	14 ²⁶ 26	8 ^{R51} 51	7 ³⁶ 36	17 ⁷ 7	13 ³² 32	23 ⁴ 4	26 ⁵³ 53	19 ³⁴ 34	20 ²⁸ 28	29 ²⁰ 20	18 ⁴⁰ 40	W14
T 15	22 8 18	0 ¹⁰ 25	5 ¹⁴ 41	17 ²⁴ 24	15 ³¹ 31	8 ⁵¹ 51	7 ⁴⁷ 47	17 ¹⁴ 14	13 ²⁹ 29	23 ⁶ 6	26 ⁵⁴ 54	19 ³⁵ 35	20 ²⁵ 25	29 ²⁷ 27	18 ³⁸ 38	T 15
F 16	22 12 14	1 ²³ 56	19 ²⁸ 28	19 ¹⁵ 15	16 ³⁶ 36	8 ⁵⁰ 50	7 ⁵⁷ 57	17 ²¹ 21	13 ²⁷ 27	23 ⁷ 7	26 ⁵⁵ 55	19 ³⁶ 36	20 ²² 22	29 ³⁴ 34	18 ³⁶ 36	F 16
S 17	22 16 11	2 ²² 04	3 ²⁸ 28	21 ⁷ 7	17 ⁴¹ 41	8 ⁴⁸ 48	8 ⁸ 8	17 ²⁸ 28	13 ²⁵ 25	23 ⁹ 9	26 ⁵⁵ 55	19 ^{R37} 37	20 ¹⁹ 19	29 ⁴⁰ 40	18 ³⁴ 34	S 17
S 18	22 20 7	3 ²⁰ 14	17 ⁴² 42	23 ⁰ 0	18 ⁴⁵ 45	8 ⁴⁵ 45	8 ¹⁸ 18	17 ³⁶ 36	13 ²² 22	23 ¹¹ 11	26 ⁵⁶ 56	19 ³⁶ 36	20 ¹⁶ 16	29 ⁴⁷ 47	18 ³² 32	S 18
M19	22 24 4	4 ¹⁸ 25	2 ³ 5	24 ⁵⁵ 55	19 ⁴⁹ 49	8 ⁴¹ 41	8 ²⁸ 28	17 ⁴³ 43	13 ²⁰ 20	23 ¹³ 13	26 ⁵⁷ 57	19 ³⁵ 35	20 ¹³ 13	29 ⁵⁴ 54	18 ³⁰ 30	M19
T 20	22 28 0	5 ¹⁶ 37	16 ³⁶ 36	26 ⁵⁰ 50	20 ⁵³ 53	8 ³⁷ 37	8 ³⁸ 38	17 ⁵⁰ 50	13 ¹⁸ 18	23 ¹⁵ 15	26 ⁵⁷ 57	19 ³⁴ 34	20 ⁹ 9	0 ⁵ 0	18 ²⁸ 28	T 20
W21	22 31 57	6 ¹⁴ 51	1 ⁸ 8	28 ⁴⁵ 45	21 ⁵⁷ 57	8 ³¹ 31	8 ⁴⁸ 48	17 ⁵⁸ 58	13 ¹⁵ 15	23 ¹⁶ 16	26 ⁵⁸ 58	19 ³² 32	20 ⁶ 6	0 ⁷ 7	18 ²⁶ 26	W21
T 22	22 35 53	7 ¹³ 07	15 ³⁷ 37	0 ¹⁰ 41	23 ¹ 1	8 ²⁵ 25	8 ⁵⁸ 58	18 ⁵ 5	13 ¹³ 13	23 ¹⁸ 18	26 ⁵⁹ 59	19 ³⁰ 30	20 ³ 3	0 ¹⁴ 14	18 ²⁴ 24	T 22
F 23	22 39 50	8 ¹¹ 24	29 ⁵⁶ 56	2 ³⁷ 37	24 ⁴ 4	8 ¹⁸ 18	9 ⁸ 8	18 ¹² 12	13 ¹⁰ 10	23 ²⁰ 20	26 ⁵⁹ 59	19 ²⁹ 29	20 ⁰ 0	0 ²¹ 21	18 ²² 22	F 23
S 24	22 43 47	9 ⁹ 43	14 ¹ 1	4 ³² 32	25 ⁷ 7	8 ¹⁰ 10	9 ¹⁸ 18	18 ²⁰ 20	13 ⁸ 8	23 ²¹ 21	27 ⁰ 0	19 ^{D29} 29	19 ⁵⁷ 57	0 ²⁷ 27	18 ²¹ 21	S 24
S 25	22 47 43	10 ⁸ 04	27 ⁴⁷ 47	6 ²⁷ 27	26 ¹⁰ 10	8 ² 2	9 ²⁸ 28	18 ²⁷ 27	13 ⁶ 6	23 ²³ 23	27 ⁰ 0	19 ²⁹ 29	19 ⁵³ 53	0 ³⁴ 34	18 ¹⁹ 19	S 25
M26	22 51 40	11 ⁶ 27	11 ¹³ 13	8 ²¹ 21	27 ¹² 12	7 ⁵² 52	9 ³⁷ 37	18 ³⁴ 34	13 ³ 3	23 ²⁵ 25	27 ¹ 1	19 ²⁹ 29	19 ⁵⁰ 50	0 ⁴¹ 41	18 ¹⁷ 17	M26
T 27	22 55 36	12 ⁴ 52	24 ¹⁶ 16	10 ¹⁴ 14	28 ¹⁴ 14	7 ⁴² 42	9 ⁴⁶ 46	18 ⁴² 42	13 ¹ 1	23 ²⁶ 26	27 ¹ 1	19 ³⁰ 30	19 ⁴⁷ 47	0 ⁴⁸ 48	18 ¹⁶ 16	T 27
W28	22 59 33	13 ³ 19	7 ⁸ 0	12 ⁷ 7	29 ¹⁶ 16	7 ³¹ 31	9 ⁵⁶ 56	18 ⁴⁹ 49	12 ⁵⁸ 58	23 ²⁸ 28	27 ² 2	19 ³¹ 31	19 ⁴⁴ 44	0 ⁵⁴ 54	18 ¹⁴ 14	W28
T 29	23 3 29	14 ¹ 48	19 ²⁵ 25	13 ⁵⁹ 59	0 ¹⁸ 18	7 ¹⁹ 19	10 ⁵ 5	18 ⁵⁷ 57	12 ⁵⁶ 56	23 ³⁰ 30	27 ² 2	19 ³¹ 31	19 ⁴¹ 41	1 ¹ 1	18 ¹³ 13	T 29
F 30	23 7 26	15 ⁰ 19	1 ¹¹ 36	15 ⁵⁰ 50	1 ¹⁹ 19	7 ⁷ 7	10 ¹⁴ 14	19 ⁴ 4	12 ⁵⁴ 54	23 ³¹ 31	27 ³ 3	19 ³² 32	19 ³⁸ 38	1 ⁸ 8	18 ¹² 12	F 30
S 31	23 11 22	15 ¹⁰ 58	13 ³⁶ 36	17 ⁴⁰ 40	2 ¹⁰ 20	6 ⁵⁴ 54	10 ²³ 23	19 ¹² 12	12 ⁵¹ 51	23 ³³ 33	27 ³ 3	19 ^{R32} 32	19 ³⁴ 34	1 ¹⁴ 14	18 ¹⁰ 10	S 31

Day	☉	☾		♀		♀		♂		♂		♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	♂
T 1	15n49	11n26	4s 5	18n49	1s38	0s 5	0s 3	1s27	4s53	23n16	0s 8	7n32	1n59	7s 3	0s48	21n12	0s25	18n26	5s 2	3n58
F 2	15 31	14 12	4 40	18 58	1 21	0 35	0 7	1 24	4 54	23 16	0 8	7 29	1 59	7 4	0 48	21 11	0 25	18 26	5 2	3 58
S 3	15 13	16 20	5 3	19 4	1 5	1 6	0 11	1 21	4 56	23 15	0 8	7 27	1 59	7 5	0 48	21 11	0 25	18 26	5 2	3 59
S 4	14 55	17 44	5 12	19 8	0 48	1 37	0 16	1 19	4 57	23 15	0 8	7 24	1 59	7 6	0 48	21 11	0 25	18 26	5 2	4 0
M 5	14 37	18 22	5 8	19 10	0 33	2 8	0 20	1 17	4 58	23 15	0 8	7 21	1 59	7 7	0 48	21 10	0 25	18 26	5 2	4 1
T 6	14 18	18 12	4 51	19 9	0 17	2 38	0 25	1 15	4 59	23 14	0 8	7 18	1 59	7 7	0 48	21 10	0 25	18 26	5 2	4 3
W 7	13 59	17 13	4 21	19 6	0 3	3 9	0 30	1 14	5 1	23 14	0 8	7 16	1 59	7 8	0 48	21 10	0 25	18 26	5 2	4 5
T 8	13 40	15 27	3 39	19 0	0n11	3 39	0 34	1 12	5 2	23 13	0 8	7 13	1 59	7 9	0 48	21 9	0 25	18 26	5 2	4 7
F 9	13 21	12 57	2 46	18 51	0 24	4 10	0 39	1 11	5 3	23 13	0 8	7 10	1 59	7 10	0 48	21 9	0 25	18 26	5 2	4 8
S 10	13 2	9 49	1 45	18 40	0 36	4 40	0 44	1 11	5 4	23 12	0 8	7 7	1 59	7 11	0 49	21 9	0 25	18 26	5 2	4 9
S 11	12 42	6 12	0 37	18 25	0 47	5 11	0 49	1 10	5 5	23 12	0 8	7 4	1 59	7 12	0 49	21 9	0 25	18 26	5 2	4 9
M12	12 22	2 14	0n34	18 8	0 58	5 41	0 54	1 10	5 5	23 11	0 7	7 2	1 59	7 13	0 49	21 8	0 25	18 26	5 3	4 9
T 13	12 2	1s54	1 44	17 47	1 7	6 11	0 59	1 10	5 6	23 11	0 7	6 59	1 59	7 14	0 49	21 8	0 25	18 26	5 3	4 9
W14	11 42	6 1	2 50	17 24	1 15	6 41	1 4	1 11	5 7	23 10	0 7	6 56	1 59	7 15	0 49	21 8	0 25	18 26	5 3	4 9
T 15	11 21	9 52	3 48	16 58	1 22	7 11	1 9	1 11	5 8	23 10	0 7	6 53	1 59	7 15	0 49	21 7	0 25	18 26	5 3	4 8
F 16	11 1	13 16	4 33	16 30	1 29	7 41	1 14	1 12	5 8	23 9	0 7	6 50	1 59	7 16	0 49	21 7	0 25	18 26	5 3	4 8
S 17	10 40	15 57	5 3	15 59	1 34	8 10	1 19	1 14	5 8	23 9	0 7	6 47	1 59	7 17	0 49	21 7	0 25	18 26	5 3	4 8
S 18	10 19	17 42	5 16	15 26	1 38	8 40	1 24	1 15	5 9	23 8	0 7	6 45	1 59	7 18	0 49	21 6	0 25	18 26	5 3	4 8
M19	9 58	18 21	5 8	14 52	1 42	9 9	1 29	1 17	5 9	23 8	0 7	6 42	1 59	7 19	0 49	21 6	0 25	18 26	5 3	4 8
T 20	9 36	17 49	4 41	14 15	1 45	9 38	1 34	1 18	5 9	23 7	0 7	6 39	1 59	7 20	0 49	21 6	0 25	18 26	5 3	4 9
W21	9 15	16 7	3 57	13 36	1 47	10 7	1 40	1 21	5 9	23 6	0 7	6 36	1 59	7 21	0 49	21 5	0 25	18 26	5 3	4 9
T 22	8 53	13 24	2 57	12 56	1 48	10 36	1 45	1 23	5 9	23 6	0 7	6 33	1 59	7 22	0 49	21 5	0 25	18 26	5 3	4 10
F 23	8 31	9 52	1 46	12 15	1 48	11 4	1 50	1 26	5 9	23 5	0 6	6 30	1 59	7 23	0 49	21 5	0 25	18 26	5 3	4 10
S 24	8 10	5 51	0 30	11 33	1 48	11 32	1 55	1 28	5 8	23 5	0 6	6 27	1 59	7 24	0 49	21 5	0 25	18 26	5 3	4 11
S 25	7 47	1 35	0s46	10 49	1 47	12 0	2 1	1 31	5 8	23 4	0 6	6 24	1 59	7 25	0 49	21 4	0 25	18 26	5 3	4 11
M26	7 25	2n39	1 58	10 5	1 45	12 28	2 6	1 34	5 7	23 4	0 6	6 21	1 59	7 26	0 49	21 4	0 25	18 25	5 3	4 10
T 27	7 3	6 38	3 1	9 20	1 43	12 56	2 11	1 38	5 7	23 3	0 6	6 19	1 59	7 26	0 49	21 4	0 25	18 25	5 3	4 10
W28	6 41	10 12	3 54	8 35	1 40	13 23	2 17	1 41	5 6	23 2	0 6	6 16	1 59	7 27	0 49	21 3	0 25	18 25	5 3	4 10
T 29	6 18	13 14	4 35	7 49	1 37	13 50	2 22	1 45	5 5	23 2	0 6	6 13	1 59	7 28	0 49	21 3	0 25	18 25	5 3	4 10
F 30	5 55	15 37	5 2	7 2	1 33	14 16	2 28	1 49	5 4	23 1	0 6	6 10	1 59	7 29	0 49	21 3	0 25	18 25	5 4	4 9
S 31	5n33	17n17	5s15	6n15	1n29	14s43	2s33	1s53	5s 3	23n 1	0s 6	6n 7	1n59	7s30	0s49	21n 3	0s25	18n25	5s 4	4n 9

ASTRODIENST EPHEMERIS for the year 1420

geocentric

SEPTEMBER 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	23 15 19	16 ¹⁷ 57'29	25 ¹¹ 30	19 ¹⁷ 29	3 ¹¹ 21	6°R40	10 ⁵ 32	19 ¹⁷ 19	12°R49	23 ⁵ 34	27 ¹¹ 4	19°R32	19 ¹⁷ 31	1 ⁵ 21	18°R 9	S 1
M 2	23 19 15	17°56'07	7 ⁵ 23	21°17	4°22	6°Y26	10°40	19°27	12°K46	23°36	27° 4	19 ¹⁷ 32	19°28	1°28	18°R 8	M 2
T 3	23 23 12	18°54'47	19°19	23° 4	5°22	6°11	10°49	19°34	12°44	23°37	27° 4	19°32	19°25	1°35	18° 7	T 3
W 4	23 27 9	19°53'30	1 ¹² 22	24°50	6°22	5°55	10°57	19°41	12°42	23°38	27° 5	19°D32	19°22	1°41	18° 6	W 4
T 5	23 31 5	20°52'14	13°36	26°35	7°21	5°39	11° 6	19°49	12°39	23°40	27° 5	19°32	19°19	1°48	18° 5	T 5
F 6	23 35 2	21°51'01	26° 4	28°19	8°20	5°23	11°14	19°56	12°37	23°41	27° 5	19°32	19°15	1°55	18° 5	F 6
S 7	23 38 58	22°49'50	8 ¹⁷ 47	0 ¹² 2	9°19	5° 6	11°22	20° 4	12°34	23°43	27° 6	19°32	19°12	2° 1	18° 4	S 7
S 8	23 42 55	23°48'41	21°47	1°45	10°17	4°49	11°30	20°11	12°32	23°44	27° 6	19°R32	19° 9	2° 8	18° 3	S 8
M 9	23 46 51	24°47'33	5 ¹² 3	3°26	11°15	4°31	11°38	20°19	12°30	23°45	27° 6	19°32	19° 6	2°15	18° 3	M 9
T 10	23 50 48	25°46'28	18°35	5° 6	12°13	4°13	11°45	20°26	12°27	23°46	27° 6	19°31	19° 3	2°22	18° 2	T 10
W11	23 54 44	26°45'25	2 ¹¹ 19	6°45	13°10	3°55	11°53	20°33	12°25	23°48	27° 6	19°31	18°59	2°28	18° 2	W11
T 12	23 58 41	27°44'24	16°15	8°24	14° 6	3°37	12° 0	20°41	12°23	23°49	27° 7	19°30	18°56	2°35	18° 1	T 12
F 13	0 2 38	28°43'25	0 ¹⁷ 19	10° 2	15° 2	3°19	12° 8	20°48	12°21	23°50	27° 7	19°29	18°53	2°42	18° 1	F 13
S 14	0 6 34	29°42'27	14°28	11°38	15°58	3° 0	12°15	20°56	12°18	23°51	27° 7	19°28	18°50	2°48	18° 1	S 14
S 15	0 10 31	0 ¹² 41'31	28°41	13°14	16°53	2°42	12°22	21° 3	12°16	23°52	27° 7	19°D28	18°47	2°55	18° 0	S 15
M16	0 14 27	1°40'37	12 ⁵ 53	14°49	17°48	2°23	12°28	21°10	12°14	23°53	27° 7	19°28	18°44	3° 2	18° 0	M16
T 17	0 18 24	2°39'45	27° 4	16°23	18°42	2° 5	12°35	21°18	12°12	23°54	27° 7	19°29	18°40	3° 9	18°D 0	T 17
W18	0 22 20	3°38'54	11 ¹¹ 11	17°57	19°35	1°47	12°41	21°25	12° 9	23°55	27°R 7	19°30	18°37	3°15	18° 0	W18
T 19	0 26 17	4°38'05	25°11	19°29	20°28	1°29	12°48	21°33	12° 7	23°56	27° 7	19°31	18°34	3°22	18° 1	T 19
F 20	0 30 13	5°37'18	9 ¹¹ 3	21° 1	21°20	1°11	12°54	21°40	12° 5	23°57	27° 7	19°32	18°31	3°29	18° 1	F 20
S 21	0 34 10	6°36'33	22°43	22°32	22°12	0°53	13° 0	21°47	12° 3	23°58	27° 7	19°R32	18°28	3°35	18° 1	S 21
S 22	0 38 7	7°35'50	6°Y 9	24° 3	23° 3	0°36	13° 6	21°54	12° 1	23°59	27° 7	19°31	18°24	3°42	18° 1	S 22
M23	0 42 3	8°35'09	19°20	25°32	23°53	0°19	13°12	22° 2	11°59	24° 0	27° 7	19°30	18°21	3°49	18° 2	M23
T 24	0 46 0	9°34'30	2 ¹⁸ 15	27° 1	24°42	0° 3	13°17	22° 9	11°57	24° 1	27° 7	19°27	18°18	3°56	18° 2	T 24
W25	0 49 56	10°33'54	14°54	28°29	25°31	29°K46	13°23	22°16	11°55	24° 2	27° 7	19°24	18°15	4° 2	18° 3	W25
T 26	0 53 53	11°33'19	27°17	29°56	26°19	29°31	13°28	22°23	11°53	24° 2	27° 6	19°20	18°12	4° 9	18° 4	T 26
F 27	0 57 49	12°32'47	9 ¹¹ 27	1 ¹¹ 22	27° 6	29°16	13°33	22°30	11°51	24° 3	27° 6	19°17	18° 9	4°16	18° 4	F 27
S 28	1 1 46	13°32'17	21°28	2°48	27°53	29° 1	13°38	22°38	11°49	24° 4	27° 6	19°14	18° 5	4°23	18° 5	S 28
S 29	1 5 42	14°31'50	3 ⁵ 22	4°13	28°38	28°47	13°42	22°45	11°47	24° 5	27° 6	19°12	18° 2	4°29	18° 6	S 29
M30	1 9 39	15°31'25	15 ⁵ 14	5 ¹¹ 36	29°M23	28°K34	13°547	22°M52	11°K45	24° 5	27°II 6	19°D12	17°M59	4°236	18°R 7	M30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	5n10	18n11	5s15	5n29	1n25	15s 9	2s38	1s57	5s 1	23n 0	0s 6	6n 4	1n59	7s31	0s49	21n 2
M 2	4 47	18 17	5 2	4 42	1 20	15 35	2 44	2 1	5 0	22 59	0 6	6 1	1 59	7 32	0 49	21 2
T 3	4 24	17 34	4 35	3 55	1 15	16 0	2 49	2 6	4 58	22 59	0 5	5 58	1 59	7 33	0 49	21 2
W 4	4 1	16 4	3 57	3 8	1 10	16 25	2 54	2 10	4 56	22 58	0 5	5 55	1 59	7 34	0 49	21 2
T 5	3 38	13 49	3 6	2 21	1 4	16 50	3 0	2 15	4 54	22 58	0 5	5 52	1 59	7 35	0 49	21 1
F 6	3 15	10 53	2 7	1 34	0 58	17 15	3 5	2 19	4 52	22 57	0 5	5 50	1 59	7 36	0 49	21 1
S 7	2 51	7 23	0 59	0 47	0 52	17 39	3 10	2 24	4 50	22 56	0 5	5 47	1 59	7 37	0 49	21 1
S 8	2 28	3 28	0n12	0 1	0 46	18 3	3 16	2 29	4 48	22 56	0 5	5 44	2 0	7 37	0 49	21 1
M 9	2 5	0s43	1 25	0s46	0 40	18 26	3 21	2 33	4 45	22 55	0 5	5 41	2 0	7 38	0 49	21 1
T 10	1 41	4 56	2 34	1 31	0 33	18 49	3 26	2 38	4 42	22 55	0 5	5 38	2 0	7 39	0 49	21 0
W11	1 18	8 57	3 35	2 17	0 27	19 11	3 31	2 43	4 40	22 54	0 5	5 35	2 0	7 40	0 49	21 0
T 12	0 54	12 31	4 25	3 2	0 20	19 34	3 37	2 47	4 37	22 54	0 5	5 32	2 0	7 41	0 49	21 0
F 13	0 31	15 24	4 59	3 47	0 13	19 55	3 42	2 52	4 34	22 53	0 4	5 29	2 0	7 42	0 48	21 0
S 14	0 7	17 23	5 15	4 31	0 6	20 17	3 47	2 56	4 30	22 52	0 4	5 27	2 0	7 43	0 48	21 0
S 15	0s17	18 18	5 12	5 15	0s 1	20 38	3 52	3 0	4 27	22 52	0 4	5 24	2 0	7 44	0 48	20 59
M16	0 40	18 4	4 51	5 59	0 8	20 58	3 57	3 5	4 24	22 51	0 4	5 21	2 0	7 44	0 48	20 59
T 17	1 4	16 42	4 11	6 42	0 15	21 18	4 2	3 9	4 20	22 51	0 4	5 18	2 0	7 45	0 48	20 59
W18	1 27	14 19	3 16	7 24	0 22	21 38	4 6	3 13	4 16	22 50	0 4	5 15	2 0	7 46	0 48	20 59
T 19	1 51	11 7	2 11	8 6	0 29	21 57	4 11	3 16	4 13	22 50	0 4	5 12	2 0	7 47	0 48	20 59
F 20	2 14	7 19	0 58	8 47	0 36	22 16	4 16	3 20	4 9	22 49	0 4	5 9	2 0	7 48	0 48	20 58
S 21	2 38	3 10	0s18	9 28	0 43	22 34	4 20	3 23	4 5	22 49	0 4	5 7	2 0	7 48	0 48	20 58
S 22	3 1	1n 4	1 30	10 8	0 51	22 51	4 25	3 26	4 1	22 48	0 4	5 4	2 1	7 49	0 48	20 58
M23	3 25	5 10	2 37	10 48	0 58	23 9	4 29	3 29	3 57	22 48	0 3	5 1	2 1	7 50	0 48	20 58
T 24	3 48	8 56	3 34	11 27	1 5	23 25	4 34	3 32	3 53	22 47	0 3	4 58	2 1	7 51	0 48	20 58
W25	4 12	12 13	4 19	12 5	1 11	23 41	4 38	3 35	3 48	22 47	0 3	4 56	2 1	7 52	0 48	20 58
T 26	4 35	14 53	4 51	12 42	1 18	23 57	4 42	3 37	3 44	22 47	0 3	4 53	2 1	7 52	0 48	20 58
F 27	4 58	16 50	5 10	13 19	1 25	24 12	4 46	3 39	3 40	22 46	0 3	4 50	2 1	7 53	0 48	20 57
S 28	5 22	18 1	5 14	13 55	1 32	24 27	4 50	3 41	3 35	22 46	0 3	4 47	2 1	7 54	0 48	20 57
S 29	5 45	18 24	5 5	14 30	1 38	24 41	4 53	3 42	3 31	22 45	0 3	4 45	2 1	7 54	0 48	20 57
M30	6s 8	17n58	4s42	15s 4	1s45	24s54	4s57	3s44	3s26	22n45	0s 3	4n42	2n 1	7s55	0s48	20n57

Julian Day Number = 2239956.5, Delta T = 07m20s

Ecliptic obliquity = 23°30'44, Nutation = - 0°00'03, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°39'30, Lahiri = 15°46'31 Julian Calendar 1 Sept. 1420 == Greg. Calendar 10 Sept. 1420

ASTRODIENST EPHEMERIS for the year 1420
geocentric

OCTOBER 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	1 13 35	16♌31'02	27♏ 9	6♍59	0♈ 6	28°R21	13♎51	22♏59	11°R43	24♎ 6	27°R 5	19♏12	17♏56	4♎43	18♏ 8	T 1
W 2	1 17 32	17°30'41	9♏12	8°21	0°49	28°K 9	13°56	23° 6	11°K41	24° 6	27°II 5	19°14	17°53	4°49	18° 9	W 2
T 3	1 21 29	18°30'23	21°27	9°42	1°30	27°58	14° 0	23°13	11°39	24° 7	27° 5	19°15	17°50	4°56	18°10	T 3
F 4	1 25 25	19°30'06	3♏59	11° 2	2°11	27°47	14° 3	23°20	11°38	24° 8	27° 4	19°17	17°46	5° 3	18°12	F 4
S 5	1 29 22	20°29'52	16°51	12°21	2°50	27°37	14° 7	23°27	11°36	24° 8	27° 4	19°R18	17°43	5°10	18°13	S 5
S 6	1 33 18	21°29'40	0♌ 5	13°38	3°28	27°28	14°11	23°34	11°34	24° 8	27° 4	19°17	17°40	5°16	18°14	S 6
M 7	1 37 15	22°29'31	13°41	14°55	4° 5	27°19	14°14	23°41	11°33	24° 9	27° 3	19°15	17°37	5°23	18°16	M 7
T 8	1 41 11	23°29'23	27°38	16°10	4°41	27°11	14°17	23°47	11°31	24° 9	27° 3	19°12	17°34	5°30	18°17	T 8
W 9	1 45 8	24°29'17	11♍51	17°23	5°16	27° 5	14°20	23°54	11°29	24°10	27° 2	19° 7	17°30	5°36	18°19	W 9
T 10	1 49 4	25°29'14	26°16	18°34	5°49	26°58	14°23	24° 1	11°28	24°10	27° 2	19° 1	17°27	5°43	18°21	T 10
F 11	1 53 1	26°29'12	10♌46	19°44	6°21	26°53	14°25	24° 8	11°26	24°10	27° 1	18°55	17°24	5°50	18°22	F 11
S 12	1 56 58	27°29'11	25°16	20°52	6°51	26°49	14°27	24°14	11°25	24°10	27° 1	18°50	17°21	5°57	18°24	S 12
S 13	2 0 54	28°29'13	9♎30	21°57	7°20	26°45	14°30	24°21	11°24	24°11	27° 0	18°47	17°18	6° 3	18°26	S 13
M14	2 4 51	29°29'16	23°54	23° 0	7°47	26°42	14°32	24°27	11°22	24°11	27° 0	18°D46	17°15	6°10	18°28	M14
T 15	2 8 47	0♍29'20	7♎57	24° 0	8°12	26°40	14°33	24°34	11°21	24°11	26°59	18°46	17°11	6°17	18°30	T 15
W16	2 12 44	1°29'27	21°48	24°57	8°36	26°39	14°35	24°40	11°20	24°11	26°59	18°47	17° 8	6°23	18°32	W16
T 17	2 16 40	2°29'34	5♏25	25°51	8°58	26°D38	14°36	24°47	11°18	24°11	26°58	18°48	17° 5	6°30	18°34	T 17
F 18	2 20 37	3°29'43	18°51	26°41	9°18	26°39	14°37	24°53	11°17	24°R11	26°57	18°R49	17° 2	6°37	18°37	F 18
S 19	2 24 33	4°29'54	2°Y 5	27°26	9°36	26°40	14°38	25° 0	11°16	24°11	26°57	18°48	16°59	6°44	18°39	S 19
S 20	2 28 30	5°30'07	15° 8	28° 6	9°52	26°42	14°39	25° 6	11°15	24°11	26°56	18°45	16°56	6°50	18°41	S 20
M21	2 32 27	6°30'21	27°59	28°41	10° 6	26°45	14°40	25°12	11°14	24°11	26°55	18°40	16°52	6°57	18°44	M21
T 22	2 36 23	7°30'37	10♎39	29°10	10°18	26°48	14°40	25°18	11°13	24°11	26°55	18°32	16°49	7° 4	18°46	T 22
W23	2 40 20	8°30'54	23° 7	29°32	10°28	26°53	14°40	25°24	11°12	24°11	26°54	18°23	16°46	7°10	18°49	W23
T 24	2 44 16	9°31'14	5♏24	29°47	10°35	26°58	14°R40	25°30	11°11	24°11	26°53	18°13	16°43	7°17	18°51	T 24
F 25	2 48 13	10°31'35	17°30	29°R54	10°40	27° 3	14°40	25°36	11°10	24°10	26°52	18° 3	16°40	7°24	18°54	F 25
S 26	2 52 9	11°31'59	29°28	29°52	10°43	27°10	14°40	25°42	11° 9	24°10	26°52	17°54	16°36	7°31	18°57	S 26
S 27	2 56 6	12°32'24	11♎21	29°41	10°R44	27°17	14°39	25°48	11° 8	24°10	26°51	17°47	16°33	7°37	19° 0	S 27
M28	3 0 2	13°32'51	23°11	29°20	10°42	27°25	14°38	25°54	11° 8	24°10	26°50	17°42	16°30	7°44	19° 2	M28
T 29	3 3 59	14°33'20	5♏ 3	28°48	10°38	27°34	14°38	26° 0	11° 7	24° 9	26°49	17°40	16°27	7°51	19° 5	T 29
W30	3 7 56	15°33'50	17° 3	28° 6	10°31	27°43	14°36	26° 6	11° 6	24° 9	26°48	17°D39	16°24	7°57	19° 8	W30
T 31	3 11 52	16♍34'23	29♏15	27♍14	10♌22	27°K53	14♎35	26♏11	11°K 6	24♎ 8	26°II47	17♏40	16♏21	8♎ 4	19♏11	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
T 1	6s31	16n44	4s 8	15s38	1s51	25s 7	5s 0	3s45	3s22	22n45	0s 3	4n39	2n 2	7s56	0s48	20n57
W 2	6 54	14 45	3 22	16 11	1 57	25 20	5 4	3 45	3 17	22 44	0 2	4 37	2 2	7 57	0 48	20 57
T 3	7 16	12 5	2 27	16 42	2 3	25 32	5 7	3 46	3 13	22 44	0 2	4 34	2 2	7 57	0 48	20 57
F 4	7 39	8 47	1 23	17 13	2 8	25 43	5 10	3 46	3 8	22 44	0 2	4 31	2 2	7 58	0 48	20 57
S 5	8 2	5 0	0 13	17 43	2 14	25 54	5 13	3 46	3 4	22 44	0 2	4 29	2 2	7 58	0 48	20 57
S 6	8 24	0 52	0n59	18 12	2 19	26 4	5 15	3 45	2 59	22 43	0 2	4 26	2 2	7 59	0 48	20 56
M 7	8 47	3s26	2 9	18 39	2 24	26 13	5 17	3 44	2 55	22 43	0 2	4 23	2 2	8 0	0 48	20 56
T 8	9 9	7 39	3 14	19 6	2 29	26 22	5 20	3 43	2 50	22 43	0 2	4 21	2 2	8 0	0 48	20 56
W 9	9 31	11 30	4 8	19 31	2 33	26 31	5 22	3 42	2 46	22 43	0 2	4 18	2 3	8 1	0 48	20 56
T 10	9 53	14 44	4 46	19 55	2 37	26 38	5 23	3 40	2 41	22 43	0 2	4 16	2 3	8 1	0 48	20 56
F 11	10 15	17 4	5 7	20 18	2 41	26 46	5 25	3 38	2 37	22 42	0 1	4 13	2 3	8 2	0 48	20 56
S 12	10 37	18 17	5 8	20 39	2 44	26 52	5 26	3 36	2 32	22 42	0 1	4 11	2 3	8 2	0 48	20 56
S 13	10 58	18 20	4 50	21 0	2 47	26 58	5 27	3 33	2 28	22 42	0 1	4 8	2 3	8 3	0 48	20 56
M14	11 19	17 13	4 14	21 18	2 49	27 3	5 27	3 30	2 23	22 42	0 1	4 6	2 3	8 3	0 48	20 56
T 15	11 41	15 4	3 23	21 35	2 51	27 8	5 28	3 27	2 19	22 42	0 1	4 3	2 3	8 4	0 48	20 56
W16	12 2	12 4	2 21	21 50	2 52	27 12	5 28	3 24	2 15	22 42	0 1	4 1	2 4	8 4	0 48	20 56
T 17	12 12	8 26	1 12	22 4	2 52	27 15	5 27	3 20	2 11	22 42	0 1	3 58	2 4	8 5	0 48	20 56
F 18	12 43	4 26	0s 0	22 15	2 52	27 17	5 27	3 16	2 6	22 42	0 1	3 56	2 4	8 5	0 48	20 56
S 19	13 4	0 15	1 11	22 25	2 51	27 19	5 25	3 12	2 2	22 42	0 0	3 54	2 4	8 6	0 48	20 56
S 20	13 24	3n52	2 17	22 32	2 49	27 20	5 24	3 7	1 58	22 42	0 0	3 51	2 4	8 6	0 48	20 56
M21	13 44	7 45	3 15	22 37	2 46	27 20	5 22	3 2	1 54	22 42	0 0	3 49	2 4	8 6	0 48	20 56
T 22	14 4	11 14	4 2	22 40	2 41	27 20	5 20	2 57	1 50	22 42	0 0	3 47	2 5	8 7	0 47	20 56
W23	14 23	14 8	4 37	22 39	2 36	27 19	5 17	2 52	1 46	22 42	0n 0	3 44	2 5	8 7	0 47	20 56
T 24	14 42	16 22	4 58	22 36	2 30	27 17	5 14	2 47	1 42	22 42	0 0	3 42	2 5	8 8	0 47	20 56
F 25	15 1	17 51	5 6	22 30	2 22	27 14	5 10	2 41	1 38	22 42	0 0	3 40	2 5	8 8	0 47	20 56
S 26	15 20	18 31	5 0	22 20	2 12	27 10	5 6	2 35	1 35	22 43	0 0	3 38	2 5	8 8	0 47	20 56
S 27	15 39	18 22	4 41	22 7	2 2	27 5	5 1	2 28	1 31	22 43	0 1	3 36	2 6	8 8	0 47	20 56
M28	15 57	17 25	4 10	21 50	1 49	27 0	4 56	2 22	1 27	22 43	0 1	3 33	2 6	8 9	0 47	20 56
T 29	16 15	15 42	3 28	21 30	1 35	26 53	4 50	2 15	1 24	22 43	0 1	3 31	2 6	8 9	0 47	20 56
W30	16 33	13 17	2 36	21 5	1 19	26 46	4 43	2 8	1 20	22 44	0 1	3 29	2 6	8 9	0 47	20 56
T 31	16s51	10n15	1s37	20s36	1s 2	26s38	4s36	2s 1	1s17	22n44	0n 1	3n27	2n 6	8s 9	0s47	20n56

Julian Day Number = 2239986.5, Delta T = 07m20s
Ecliptic obliquity = 23°30'44, Nutation = - 0°00'04, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 16°39'35, Lahiri = 15°46'35 Julian Calendar 1 Oct. 1420 == Greg. Calendar 10 Oct. 1420

ASTRODIENST EPHEMERIS for the year 1420

geocentric

NOVEMBER 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	3 15 49	17 ^h 34 ^m 57 ^s	11 ^h 44 ^m	26°R13	10°R11	28 ^h 4 ^m	14°R33	26 ^h 17 ^m	11°R 5	24°R 8	26°R46	17°R41	16 ^h 17 ^m	8 ^h 11 ^m	19 ^h 15 ^m	F 1
S 2	3 19 45	18°35'33"	24°36'	25 ^h 4 ^m	9 ^h 57 ^m	28°15'	14 ^h 32 ^m	26°22'	11 ^h 5 ^m	24 ^h 8 ^m	26 ^h 46 ^m	17 ^h 41 ^m	16°14'	8°18'	19°18'	S 2
S 3	3 23 42	19°36'11"	7 ^h 54 ^m	23°48'	9°40'	28°27'	14°30'	26°28'	11° 4	24° 7	26°45'	17°39'	16°11'	8°24'	19°21'	S 3
M 4	3 27 38	20°36'51"	21°39'	22°28'	9°22'	28°39'	14°27'	26°33'	11° 4	24° 7	26°44'	17°34'	16° 8	8°31'	19°24'	M 4
T 5	3 31 35	21°37'32"	5 ^h 51 ^m	21° 6	9° 1	28°52'	14°25'	26°38'	11° 3	24° 6	26°43'	17°27'	16° 5	8°38'	19°28'	T 5
W 6	3 35 31	22°38'14"	20°27'	19°46'	8°38'	29° 6	14°22'	26°44'	11° 3	24° 5	26°42'	17°18'	16° 1	8°44'	19°31'	W 6
T 7	3 39 28	23°38'59"	5 ^h 18 ^m	18°29'	8°12'	29°21'	14°20'	26°49'	11° 3	24° 5	26°41'	17° 8	15°58'	8°51'	19°34'	T 7
F 8	3 43 24	24°39'44"	20°16'	17°18'	7°45'	29°36'	14°17'	26°54'	11° 3	24° 4	26°40'	16°57'	15°55'	8°58'	19°38'	F 8
S 9	3 47 21	25°40'31"	5 ^h 12 ^m	16°15'	7°16'	29°51'	14°13'	26°59'	11° 2	24° 3	26°39'	16°48'	15°52'	9° 5	19°41'	S 9
S 10	3 51 18	26°41'19"	19°58'	15°22'	6°45'	0 ^h 7 ^m	14°10'	27° 4	11° 2	24° 3	26°38'	16°41'	15°49'	9°11'	19°45'	S 10
M 11	3 55 14	27°42'08"	4 ^h 26 ^m	14°41'	6°13'	0°24'	14° 7	27° 9	11°D 2	24° 2	26°37'	16°36'	15°46'	9°18'	19°49'	M 11
T 12	3 59 11	28°42'57"	18°35'	14°10'	5°40'	0°41'	14° 3	27°14'	11° 2	24° 1	26°36'	16°34'	15°42'	9°25'	19°52'	T 12
W 13	4 3 7	29°43'48"	2 ^h 22 ^m	13°52'	5° 5	0°59'	13°59'	27°18'	11° 2	24° 0	26°35'	16°D34'	15°39'	9°31'	19°56'	W 13
T 14	4 7 4	0 ^h 44'39"	15°50'	13°D44'	4°30'	1°17'	13°55'	27°23'	11° 2	23°59'	26°34'	16°R34'	15°36'	9°38'	20° 0	T 14
F 15	4 11 0	1°45'31"	29° 0	13°48'	3°54'	1°36'	13°51'	27°27'	11° 3	23°59'	26°33'	16°33'	15°33'	9°45'	20° 4	F 15
S 16	4 14 57	2°46'25"	11 ^h 56 ^m	14° 1	3°17'	1°55'	13°46'	27°32'	11° 3	23°58'	26°31'	16°31'	15°30'	9°52'	20° 8	S 16
S 17	4 18 54	3°47'19"	24°39'	14°23'	2°41'	2°15'	13°41'	27°36'	11° 3	23°57'	26°30'	16°26'	15°27'	9°58'	20°12'	S 17
M 18	4 22 50	4°48'13"	7 ^h 11 ^m	14°54'	2° 4	2°35'	13°37'	27°41'	11° 3	23°56'	26°29'	16°17'	15°23'	10° 5	20°16'	M 18
T 19	4 26 47	5°49'09"	19°34'	15°33'	1°28'	2°55'	13°32'	27°45'	11° 4	23°55'	26°28'	16° 6	15°20'	10°12'	20°20'	T 19
W 20	4 30 43	6°50'06"	1 ^h 49 ^m	16°18'	0°53'	3°16'	13°27'	27°49'	11° 4	23°54'	26°27'	15°53'	15°17'	10°18'	20°24'	W 20
T 21	4 34 40	7°51'04"	13°56'	17° 8	0°19'	3°38'	13°21'	27°53'	11° 5	23°53'	26°26'	15°38'	15°14'	10°25'	20°28'	T 21
F 22	4 38 36	8°52'03"	25°57'	18° 4	29 ^h 46 ^m	3°59'	13°16'	27°57'	11° 5	23°52'	26°25'	15°23'	15°11'	10°32'	20°32'	F 22
S 23	4 42 33	9°53'02"	7 ^h 51 ^m	19° 5	29°14'	4°22'	13°10'	28° 1	11° 6	23°51'	26°24'	15°10'	15° 7	10°38'	20°36'	S 23
S 24	4 46 29	10°54'03"	19°42'	20° 9	28°43'	4°44'	13° 4	28° 5	11° 6	23°49'	26°22'	14°59'	15° 4	10°45'	20°41'	S 24
M 25	4 50 26	11°55'04"	1 ^h 21 ^m	21°17'	28°15'	5° 7	12°59'	28° 8	11° 7	23°48'	26°21'	14°50'	15° 1	10°52'	20°45'	M 25
T 26	4 54 23	12°56'07"	13°22'	22°28'	27°48'	5°31'	12°52'	28°12'	11° 8	23°47'	26°20'	14°45'	14°58'	10°59'	20°49'	T 26
W 27	4 58 19	13°57'11"	25°20'	23°41'	27°24'	5°54'	12°46'	28°15'	11° 8	23°46'	26°19'	14°42'	14°55'	11° 5	20°54'	W 27
T 28	5 2 16	14°58'15"	7 ^h 28 ^m	24°57'	27° 1	6°18'	12°40'	28°19'	11° 9	23°45'	26°18'	14°41'	14°52'	11°12'	20°58'	T 28
F 29	5 6 12	15°59'20"	19°52'	26°14'	26°41'	6°43'	12°33'	28°22'	11°10'	23°43'	26°17'	14°41'	14°48'	11°19'	21° 2	F 29
S 30	5 10 9	17 ^h 0'27"	2 ^h 38 ^m	27 ^h 34 ^m	26 ^h 23 ^m	7 ^h 7 ^m	12 ^h 27 ^m	28 ^h 25 ^m	11 ^h 11 ^m	23 ^h 42 ^m	26 ^h 15 ^m	14 ^h 41 ^m	14 ^h 45 ^m	11 ^h 25 ^m	21 ^h 7 ^m	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
F 1	17s 8	6n42	0s32	20s 4	0s43	26s28	4s29	1s54	1s13	22n44	0n 1	3n25	2n 7	8s 9	0s47	20n56	0s25	18n21	5s 7	4n53	5n26	18n29	15s30	6n41	
S 2	17 25	2 43	0n37	19 28	0 24	26 18	4 20	1 46	1 10	22 44	0 1	3 23	2 7	8 10	0 47	20 57	0 25	18 21	5 7	4 53	5 27	18 29	15 30	6 41	
S 3	17 41	1s31	1 46	18 50	0 3	26 7	4 12	1 38	1 7	22 45	0 2	3 21	2 7	8 10	0 47	20 57	0 25	18 21	5 7	4 54	5 28	18 29	15 30	6 40	
M 4	17 58	5 50	2 51	18 10	0n17	25 54	4 2	1 30	1 4	22 45	0 2	3 19	2 7	8 10	0 47	20 57	0 25	18 21	5 7	4 55	5 29	18 29	15 30	6 40	
T 5	18 14	9 57	3 47	17 29	0 38	25 41	3 52	1 22	1 0	22 46	0 2	3 17	2 7	8 10	0 47	20 57	0 25	18 21	5 7	4 58	5 30	18 29	15 30	6 39	
W 6	18 29	13 34	4 30	16 48	0 57	25 27	3 41	1 14	0 57	22 46	0 2	3 15	2 8	8 10	0 47	20 57	0 25	18 21	5 7	5 2	5 32	18 29	15 30	6 39	
T 7	18 45	16 24	4 56	16 10	1 16	25 12	3 30	1 5	0 54	22 46	0 2	3 13	2 8	8 10	0 47	20 57	0 25	18 21	5 7	5 6	5 33	18 29	15 30	6 39	
F 8	19 0	18 8	5 2	15 34	1 33	24 55	3 18	0 57	0 51	22 47	0 2	3 12	2 8	8 10	0 47	20 57	0 25	18 21	5 7	5 10	5 34	18 29	15 30	6 38	
S 9	19 14	18 38	4 47	15 1	1 48	24 38	3 5	0 48	0 48	22 47	0 2	3 10	2 8	8 10	0 47	20 57	0 25	18 21	5 7	5 14	5 35	18 29	15 30	6 38	
S 10	19 28	17 51	4 13	14 33	2 1	24 20	2 52	0 39	0 45	22 48	0 3	3 8	2 8	8 10	0 47	20 57	0 25	18 21	5 7	5 16	5 37	18 29	15 30	6 37	
M11	19 42	15 55	3 24	14 11	2 13	24 1	2 39	0 29	0 43	22 48	0 3	3 6	2 9	8 10	0 47	20 57	0 25	18 21	5 7	5 18	5 38	18 29	15 30	6 37	
T 12	19 56	13 3	2 23	13 53	2 21	23 42	2 25	0 20	0 40	22 49	0 3	3 5	2 9	8 10	0 47	20 58	0 25	18 21	5 7	5 19	5 39	18 29	15 29	6 37	
W13	20 9	9 30	1 15	13 41	2 28	23 21	2 11	0 11	0 37	22 49	0 3	3 3	2 9	8 10	0 47	20 58	0 25	18 21	5 7	5 19	5 40	18 28	15 29	6 36	
T 14	20 22	5 33	0 4	13 34	2 33	23 0	1 56	0 1	0 34	22 50	0 3	3 1	2 9	8 10	0 47	20 58	0 25	18 21	5 7	5 19	5 42	18 28	15 29	6 36	
F 15	20 35	1 24	1s 5	13 32	2 36	22 39	1 41	0n 9	0 32	22 51	0 3	3 0	2 10	8 10	0 47	20 58	0 25	18 21	5 7	5 19	5 43	18 28	15 29	6 36	
S 16	20 47	2n44	2 10	13 35	2 38	22 17	1 26	0 19	0 29	22 51	0 3	2 58	2 10	8 10	0 47	20 58	0 25	18 21	5 7	5 20	5 44	18 28	15 29	6 35	
S 17	20 58	6 41	3 7	13 41	2 38	21 54	1 10	0 29	0 27	22 52	0 4	2 57	2 10	8 10	0 46	20 58	0 25	18 21	5 7	5 22	5 45	18 28	15 28	6 35	
M18	21 10	10 16	3 54	13 51	2 37	21 32	0 55	0 39	0 24	22 52	0 4	2 55	2 10	8 9	0 46	20 59	0 25	18 21	5 7	5 26	5 47	18 28	15 28	6 35	
T 19	21 21	13 22	4 29	14 5	2 35	21 9	0 39	0 50	0 22	22 53	0 4	2 54	2 11	8 9	0 46	20 59	0 25	18 21	5 7	5 30	5 48	18 28	15 28	6 34	
W20	21 31	15 50	4 51	14 21	2 31	20 47	0 23	1 0	0 20	22 54	0 4	2 52	2 11	8 9	0 46	20 59	0 25	18 21	5 7	5 35	5 49	18 28	15 28	6 34	
T 21	21 41	17 35	4 59	14 39	2 27	20 24	0 8	1 11	0 17	22 54	0 4	2 51	2 11	8 9	0 46	20 59	0 25	18 21	5 7	5 41	5 50	18 27	15 27	6 34	
F 22	21 51	18 33	4 55	14 59	2 23	20 2	0n 7	1 22	0 15	22 55	0 4	2 50	2 11	8 9	0 46	20 59	0 25	18 21	5 7	5 47	5 51	18 27	15 27	6 33	
S 23	22 0	18 40	4 37	15 20	2 17	19 41	0 23	1 33	0 13	22 56	0 4	2 48	2 12	8 8	0 46	20 59	0 25	18 21	5 7	5 52	5 53	18 27	15 27	6 33	
S 24	22 9	17 59	4 7	15 43	2 12	19 19	0 38	1 44	0 11	22 57	0 5	2 47	2 12	8 8	0 46	21 0	0 25	18 21	5 7	5 56	5 54	18 27	15 26	6 33	
M25	22 17	16 31	3 27	16 7	2 5	18 59	0 52	1 55	0 8	22 57	0 5	2 46	2 12	8 8	0 46	21 0	0 25	18 21	5 7	5 59	5 55	18 27	15 26	6 33	
T 26	22 25	14 21	2 37	16 32	1 59	18 39	1 7	2 6	0 6	22 58	0 5	2 45	2 12	8 7	0 46	21 0	0 25	18 21	5 7	6 1	5 56	18 27	15 26	6 32	
W27	22 33	11 32	1 41	16 57	1 52	18 20	1 20	2 17	0 4	22 59	0 5	2 43	2 13	8 7	0 46	21 0	0 25	18 21	5 7	6 2	5 58	18 27	15 25	6 32	
T 28	22 40	8 12	0 38	17 22	1 45	18 2	1 34	2 29	0 2	23 0	0 5	2 42	2 13	8 7	0 46	21 0	0 25	18 21	5 7	6 3	5 59	18 26	15 25	6 32	
F 29	22 46	4 27	0n27	17 47	1 37	17 44	1 47	2 40	0 0	23 0	0 5	2 41	2 13	8 6	0 46	21 1	0 25	18 21	5 7	6 3	6 0	18 26	15 25	6 31	
S 30	22s53	0n23	1n33	18s13	1n30	17s28	1n59	2n52	0n 2	23n 1	0n 5	2n40	2n13	8s 6	0s46	21n 1	0s25	18n21	5s 7	6n 3	6n 1	18n26	15s24	6n31	

ASTRODIENST EPHEMERIS for the year 1420

geocentric

DECEMBER 1420 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	5 14 5	18°13'4	15°50	28°55	26°R 8	7°32	12°R20	28°28	11°12	23°R41	26°R14	14°R39	14°42	11°32	21°11	S 1
M 2	5 18 2	19°242	29°32	0°17	25°55	7°58	12°13	28°31	11°13	23°40	26°13	14°34	14°39	11°39	21°16	M 2
T 3	5 21 58	20°3'51	13°44	1°40	25°44	8°24	12°6	28°34	11°14	23°38	26°12	14°27	14°36	11°46	21°20	T 3
W 4	5 25 55	21°5'01	28°24	3°4	25°36	8°50	11°59	28°37	11°15	23°37	26°11	14°17	14°33	11°52	21°25	W 4
T 5	5 29 52	22°6'11	13°27	4°29	25°31	9°16	11°52	28°40	11°16	23°36	26°9	14°5	14°29	11°59	21°30	T 5
F 6	5 33 48	23°7'22	28°42	5°55	25°28	9°42	11°45	28°43	11°18	23°34	26°8	13°53	14°26	12°6	21°34	F 6
S 7	5 37 45	24°8'33	13°58	7°22	25°D27	10°9	11°37	28°45	11°19	23°33	26°7	13°43	14°23	12°12	21°39	S 7
S 8	5 41 41	25°9'44	29°5	8°49	25°29	10°36	11°30	28°48	11°20	23°31	26°6	13°34	14°20	12°19	21°44	S 8
M 9	5 45 38	26°10'55	13°54	10°17	25°34	11°4	11°22	28°50	11°22	23°30	26°5	13°29	14°17	12°26	21°49	M 9
T 10	5 49 34	27°12'07	28°18	11°46	25°40	11°32	11°15	28°52	11°23	23°28	26°3	13°26	14°13	12°33	21°53	T 10
W11	5 53 31	28°13'18	12°15	13°15	25°49	12°0	11°7	28°54	11°25	23°27	26°2	13°D25	14°10	12°39	21°58	W11
T 12	5 57 27	29°14'29	25°47	14°44	26°0	12°28	10°59	28°56	11°26	23°25	26°1	13°R25	14°7	12°46	22°3	T 12
F 13	6 1 24	0°15'40	8°55	16°14	26°14	12°56	10°51	28°58	11°28	23°24	26°0	13°25	14°4	12°53	22°8	F 13
S 14	6 5 21	1°16'51	21°43	17°44	26°29	13°25	10°44	29°0	11°29	23°22	25°59	13°23	14°1	12°59	22°13	S 14
S 15	6 9 17	2°18'01	4°16	19°15	26°46	13°54	10°36	29°2	11°31	23°21	25°57	13°19	13°58	13°6	22°17	S 15
M16	6 13 14	3°19'12	16°36	20°46	27°6	14°23	10°28	29°3	11°33	23°19	25°56	13°12	13°54	13°13	22°22	M16
T 17	6 17 10	4°20'22	28°47	22°17	27°27	14°52	10°20	29°5	11°34	23°18	25°55	13°2	13°51	13°19	22°27	T 17
W18	6 21 7	5°21'32	10°15	23°49	27°51	15°22	10°12	29°6	11°36	23°16	25°54	12°50	13°48	13°26	22°32	W18
T 19	6 25 3	6°22'42	22°48	25°21	28°16	15°52	10°4	29°7	11°38	23°14	25°53	12°37	13°45	13°33	22°37	T 19
F 20	6 29 0	7°23'51	4°43	26°54	28°43	16°22	9°55	29°9	11°40	23°13	25°51	12°23	13°42	13°40	22°42	F 20
S 21	6 32 56	8°25'01	16°35	28°27	29°11	16°52	9°47	29°10	11°42	23°11	25°50	12°11	13°39	13°46	22°47	S 21
S 22	6 36 53	9°26'10	28°25	0°3	29°41	17°22	9°39	29°11	11°44	23°10	25°49	12°1	13°35	13°53	22°52	S 22
M23	6 40 50	10°27'19	10°17	1°34	0°13	17°52	9°31	29°11	11°46	23°8	25°48	11°53	13°32	14°0	22°57	M23
T 24	6 44 46	11°28'28	22°11	3°8	0°46	18°23	9°23	29°12	11°48	23°6	25°47	11°49	13°29	14°6	23°2	T 24
W25	6 48 43	12°29'37	4°11	4°43	1°21	18°54	9°15	29°13	11°50	23°5	25°45	11°46	13°26	14°13	23°7	W25
T 26	6 52 39	13°30'46	16°21	6°18	1°57	19°25	9°7	29°13	11°52	23°3	25°44	11°D46	13°23	14°20	23°12	T 26
F 27	6 56 36	14°31'54	28°44	7°53	2°35	19°56	8°59	29°14	11°54	23°1	25°43	11°47	13°19	14°27	23°17	F 27
S 28	7 0 32	15°33'02	11°26	9°29	3°13	20°27	8°51	29°14	11°56	23°0	25°42	11°R48	13°16	14°33	23°22	S 28
S 29	7 4 29	16°34'11	24°31	11°6	3°53	20°59	8°43	29°14	11°59	22°58	25°41	11°48	13°13	14°40	23°27	S 29
M30	7 8 25	17°35'18	8°13	12°43	4°34	21°31	8°35	29°R14	12°1	22°56	25°40	11°46	13°10	14°47	23°33	M30
T 31	7 12 22	18°36'26	22°14	14°21	5°17	22°10	8°27	29°14	12°3	22°55	25°39	11°41	13°10	14°53	23°38	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	22s58	3s50	2n37	18s38	1n22	17s13	2n12	3n 3	0n 3	23n 2	0n 6	2n39	2n14	8s 6	0s46	21n 1
M 2	23 3	8 1	3 33	19 3	1 15	16 59	2 23	3 15	0 5	23 3	0 6	2 38	2 14	8 5	0 46	21 1
T 3	23 8	11 53	4 19	19 28	1 7	16 45	2 34	3 27	0 7	23 3	0 6	2 37	2 14	8 5	0 46	21 2
W 4	23 13	15 10	4 49	19 52	0 59	16 33	2 45	3 39	0 9	23 4	0 6	2 36	2 15	8 4	0 46	21 2
T 5	23 17	17 31	5 0	20 15	0 52	16 22	2 55	3 51	0 11	23 5	0 6	2 36	2 15	8 4	0 46	21 2
F 6	23 20	18 40	4 51	20 38	0 44	16 12	3 4	4 3	0 12	23 6	0 6	2 35	2 15	8 3	0 46	21 2
S 7	23 23	18 28	4 20	21 1	0 36	16 4	3 13	4 15	0 14	23 7	0 6	2 34	2 15	8 3	0 46	21 3
S 8	23 25	16 57	3 32	21 22	0 29	15 56	3 21	4 27	0 16	23 7	0 7	2 33	2 16	8 2	0 46	21 3
M 9	23 27	14 19	2 29	21 43	0 21	15 49	3 29	4 39	0 17	23 8	0 7	2 33	2 16	8 2	0 46	21 3
T 10	23 29	10 52	1 19	22 2	0 14	15 44	3 36	4 52	0 19	23 9	0 7	2 32	2 16	8 1	0 46	21 3
W11	23 30	6 53	0 6	22 21	0 6	15 39	3 43	5 4	0 20	23 10	0 7	2 31	2 16	8 0	0 46	21 4
T 12	23 31	2 41	1s 5	22 39	0s 1	15 36	3 50	5 16	0 22	23 11	0 7	2 31	2 17	8 0	0 46	21 4
F 13	23 31	1n32	2 11	22 56	0 8	15 33	3 56	5 29	0 23	23 11	0 7	2 30	2 17	7 59	0 45	21 4
S 14	23 30	5 35	3 8	23 12	0 15	15 31	4 1	5 41	0 25	23 12	0 8	2 30	2 17	7 59	0 45	21 4
S 15	23 30	9 17	3 55	23 27	0 22	15 30	4 6	5 54	0 26	23 13	0 8	2 29	2 18	7 58	0 45	21 5
M16	23 28	12 32	4 30	23 40	0 29	15 30	4 11	6 6	0 27	23 14	0 8	2 29	2 18	7 57	0 45	21 5
T 17	23 26	15 11	4 53	23 53	0 36	15 31	4 15	6 19	0 29	23 14	0 8	2 29	2 18	7 57	0 45	21 5
W18	23 24	17 10	5 2	24 4	0 42	15 32	4 19	6 32	0 30	23 15	0 8	2 28	2 18	7 56	0 45	21 5
T 19	23 21	18 22	4 57	24 14	0 48	15 34	4 22	6 44	0 31	23 16	0 8	2 28	2 19	7 55	0 45	21 6
F 20	23 18	18 46	4 40	24 23	0 55	15 37	4 25	6 57	0 32	23 17	0 8	2 28	2 19	7 54	0 45	21 6
S 21	23 15	18 21	4 10	24 31	1 0	15 41	4 28	7 10	0 34	23 17	0 9	2 28	2 19	7 54	0 45	21 6
S 22	23 11	17 7	3 30	24 37	1 6	15 45	4 30	7 23	0 35	23 18	0 9	2 28	2 20	7 53	0 45	21 7
M23	23 6	15 9	2 40	24 42	1 12	15 50	4 32	7 35	0 36	23 19	0 9	2 28	2 20	7 52	0 45	21 7
T 24	23 1	12 32	1 43	24 45	1 17	15 55	4 34	7 48	0 37	23 20	0 9	2 28	2 20	7 51	0 45	21 7
W25	22 55	9 23	0 41	24 48	1 22	16 0	4 35	8 1	0 38	23 20	0 9	2 28	2 20	7 50	0 45	21 7
T 26	22 49	5 47	0n25	24 49	1 27	16 6	4 36	8 14	0 39	23 21	0 9	2 28	2 21	7 50	0 45	21 8
F 27	22 43	1 53	1 30	24 48	1 32	16 13	4 37	8 27	0 41	23 22	0 9	2 28	2 21	7 49	0 45	21 8
S 28	22 36	2s12	2 32	24 46	1 36	16 20	4 37	8 39	0 42	23 22	0 10	2 28	2 21	7 48	0 45	21 8
S 29	22 29	6 18	3 29	24 42	1 40	16 27	4 37	8 52	0 43	23 23	0 10	2 28	2 22	7 47	0 45	21 9
M30	22 21	10 12	4 16	24 37	1 44	16 34	4 37	9 5	0 44	23 24	0 10	2 28	2 22	7 46	0 45	21 9
T 31	22s13	13s41	4n49	24s31	1s47	16s42	4n37	9n18	0n45	23n24	0n10	2n29	2n22	7s45	0s45	21n 9

Julian Day Number = 2240047.5, Delta T = 07m19s

Ecliptic obliquity = 23°30'43", Nutation = - 0°00'05", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°39'43", Lahiri = 15°46'43" Julian Calendar 1 Dec. 1420 == Greg. Calendar 10 Dec. 1420